

STATE	PROJECT NUMBER	SHEET NO.
MISSISSIPPI	MRP-6059-31(019)	1

GENERAL INDEX

INCLUDED THIS PROJECT	BEGIN WITH SHEET
<input checked="" type="checkbox"/> ROADWAY	1
<input type="checkbox"/> PERMANENT SIGNS	1001
<input type="checkbox"/> TRAFFIC SIGNALS	2001
<input type="checkbox"/> ITS COMPONENTS	3001
<input type="checkbox"/> LIGHTING	4001
<input type="checkbox"/> (RESERVED)	5001
<input checked="" type="checkbox"/> ROADWAY STANDARD DWGS	6001
<input type="checkbox"/> BOX CULVERT STD. DRAWINGS (LRFD)	7001
<input type="checkbox"/> BOX CULVERT STD. DRAWINGS (STD. SPEC.)	7501
<input type="checkbox"/> BRIDGE	8001
<input type="checkbox"/> CROSS SECTIONS	9001

BRIDGE STRUCTURES REQ'D.

BOX BRIDGES REQ'D.

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

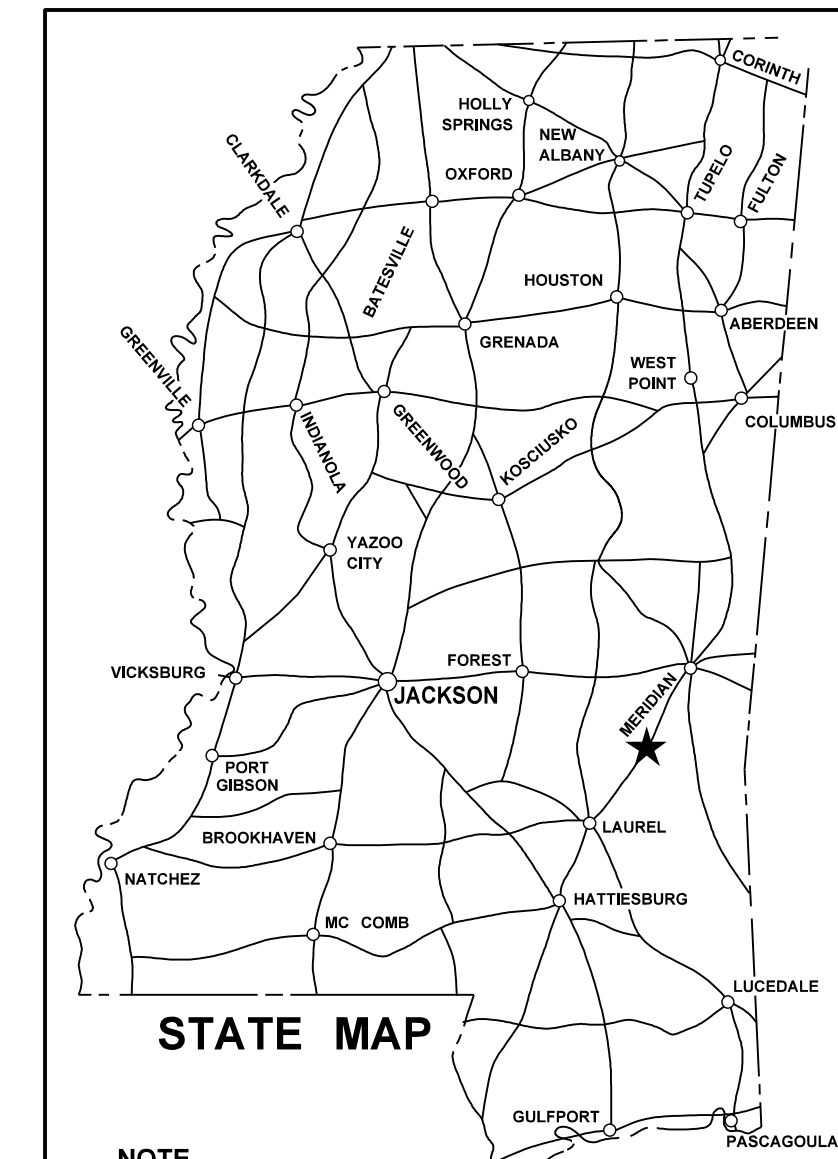
STATE PROJECT NO. MRP-6059-31(019)

**BRIDGE REPAIR, CR-39 over I-59
JASPER**

FMS CON. NO. 307159/ 301000

SCALES

PLAN	1 IN. = 100 FT.
PROFILE {	HOR. 1 IN. = 100 FT.
	VERT. 1 IN. = 10 FT.
LAYOUT	1 IN. = 3200 FT.

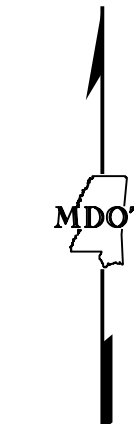
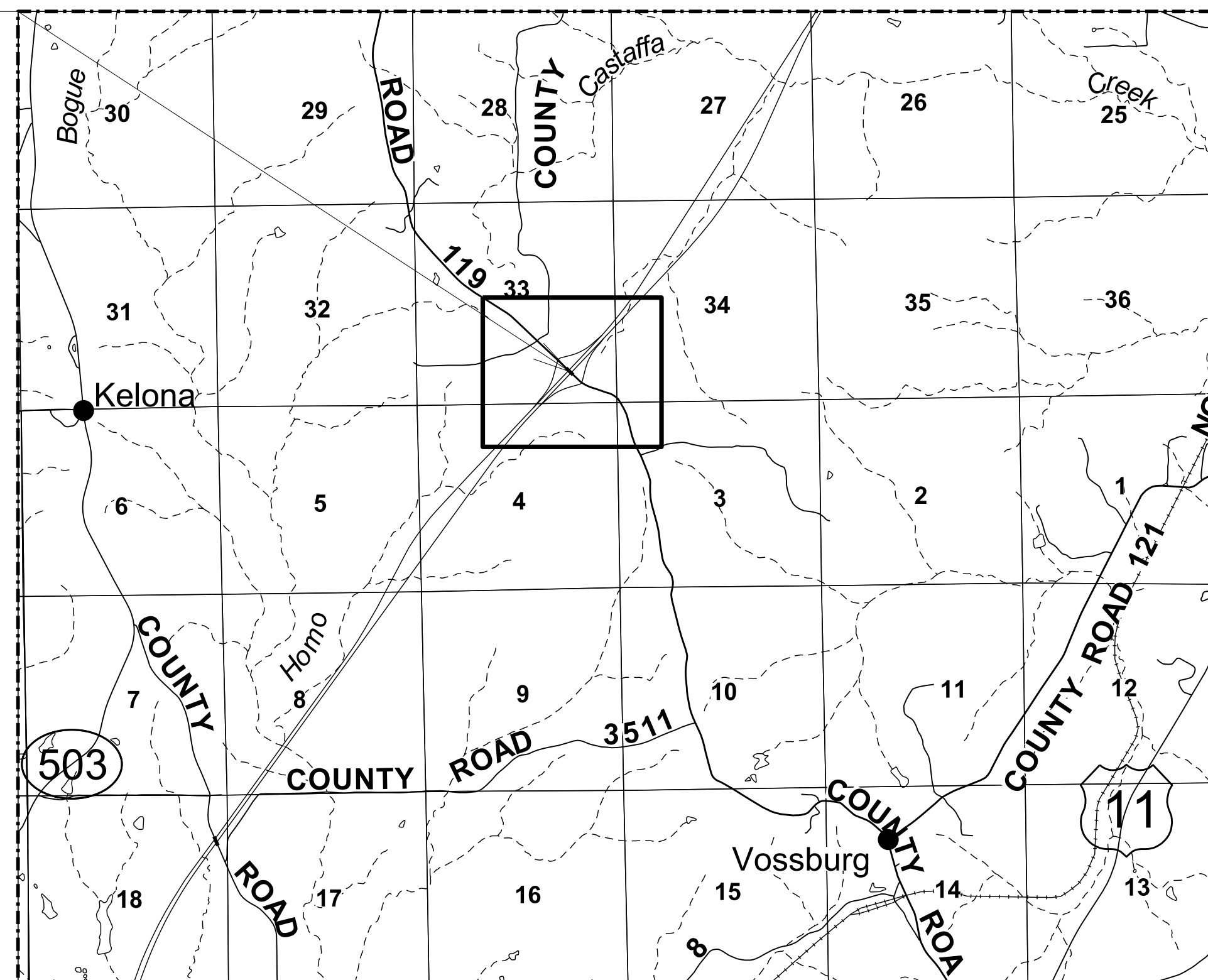


STATE MAP

NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.

LAT. 315752° 21' 36" LONG. -885801° 4' 12"
(APPROX. MIDDLE OF PROJECT)

BR #117.6



DESIGN CONTROL

MPH = V (SPEED DESIGN)

ADT () = : ADT () =

DHV = : D = % T = %

PERMITS ACQUIRED BY MDOT

WETLANDS AND WATERS PERMITS		
	WATERS	WETLANDS
NATIONWIDE #14	<input type="checkbox"/>	<input type="checkbox"/>
NATIONWIDE (OTHER)*	<input type="checkbox"/>	<input type="checkbox"/>
GENERAL*	<input type="checkbox"/>	<input type="checkbox"/>
INDIVIDUAL (404)*	<input type="checkbox"/>	<input type="checkbox"/>

STORMWATER PERMIT

Y REQUIRED, CNDI SUBMITTED BY MDOT (DISTURBED AREA > 5 ACRES)

S REQUIRED, SCNDI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)

N NO STORMWATER PERMIT REQUIRED (<1 ACRE)

APPROVED BY: _____

EQUATIONS

EXCEPTIONS

LENGTH DATA

LENGTH OF ROADWAY	FT.	MI.
LENGTH OF BRIDGES	FT.	MI.
LENGTH OF PROJECT (NET)	FT.	MI.
LENGTH OF EXCEPTIONS	FT.	MI.
LENGTH OF PROJECT (GROSS)	FT.	MI.

CONVENTIONAL SYMBOLS

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

P S & E DATE: 5-18-2020

APPROVED: _____

DEPUTY EXECUTIVE DIRECTOR / CHIEF ENGINEER

EXECUTIVE DIRECTOR

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/27/2020 9:27 AM TITLE.DGN

1st O.REV.

STATE	PROJECT NO.
MISS.	MRP-6059-31(019)

DETAILED INDEX

DESCRIPTION OF SHEETS	WK. NO.	SH. NO.
TITLE SHEET (1)		1
DETAILED INDEX & GENERAL NOTES (2)		
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SUMMARY OF QUANTITIES	SQ-1	4
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DETAIL OF CONSTRUCTION SIGNING	DCS-2	8
TRAFFIC CONTROL	TC-1	9
CR OVER I-59	AR-1	10
LANE CLOSURE DETAILS WITH CONCRETE MEDIAN BARRIER	LCD-1	11
STANDARD DRAWINGS - ROADWAY SHEETS (9)		
PAVEMENT MARKING DETAILS FOR 2-LAND & 4-LANE DIVIDED ROADWAYS	PM-1	6051
TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)	TCP-1	6351
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SHORT DURATION CLOSING OF DIVIDED HIGHWAYS	TCP-7	6357
HIGHWAY SIGN & BARRICADE DETAILS FOR CONSTRUCTION PROJECTS	TCP-8	6358
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TRAFFIC CONTROL DETAILS DRUM PLACEMENT & SHOULDER CLOSURE	TCP-16	6366
TOTAL SHEETS (EXCLUDING BRIDGE SHEETS)		20

5/27/2020 9:27 AM DI & GN.DGN MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PS & E PLANS-DATE: 5-18-2020		
FMS CON. # 307159-301000		
REVISIONS		
DATE	SHEET NO.	BY
5-27-2020	1	HLW

REVISION	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
	DETAILED INDEX	
	PROJ. NO.: MRP-6059-31(019) COUNTY: JASPER	
	FILE NAME: DI&GN.dgn DESIGN TEAM: WEAVER CHECKED: DATE:	
WORKING NUMBER DI-1		
SHEET NUMBER 2		




STATE	PROJECT NO.
MISS.	MRP-6059-31(019)

GENERAL NOTES

- 1 THE LOCATION AND SPACING OF SIGNS, SHOWN ON THE TRAFFIC CONTROL PLANS, ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
- 2 ALL TRAFFIC CONTROL DEVICES ON THIS PROJECT SHALL COMPLY WITH PART VI OF THE MUTCD (LATEST EDITION).
- 3 ALL PLASTIC DRUMS SHALL HAVE A BALLASTING COLLAR MADE FROM RECYCLED TRUCK TIRES OR OTHER SUITABLE MATERIAL.
- 4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING STRUCTURES SUCH AS, BUT NOT LIMITED TO, PIPES, INLETS, APRONS, AND BRIDGES FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. 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.
- 5 FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED ON THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
- 6 THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACTOR FROM ADJACENT PROJECT(S) IN IMPLEMENTING THE TRAFFIC CONTROL PLAN AS DIRECTED BY THE ENGINEER. ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.
- 7 THE CONTRACTOR SHALL COVER ANY TEMPORARY TRAFFIC CONTROL SIGNS SHOWN IN THE TRAFFIC CONTROL PLAN THAT DO NOT APPLY TO THE CURRENT PHASE.
- 8 REMOVAL OF RAISED PAVEMENT MARKERS THAT ARE IN CONFLICT WITH REQUIRED CONSTRUCTION IS NOT CONSIDERED A SEPARATE PAY ITEM. COST TO BE ABSORBED IN OTHER ITEMS BID.
- 9 SEE BRIDGE PLANS FOR DETAILED INDEX SHEET(S), ESTIMATED AND SUMMARY OF QUANTITY SHEETS, AND EROSION CONTROL SHEETS.
- 10 ALL ADDENDA TO THESE PLANS WILL BE POSTED TO WWW.MDOT.MS.GOV UNDER THE PROPOSAL ADDENDA COLUMN. BIDDERS ARE ADVISED THAT HARD COPIES OF ANY ADDENDA FOR THIS PROJECT WILL NOT BE MAILED. IT IS THE BIDDER'S RESPONSIBILITY TO CHECK AND SEE IF ANY ADDENDA HAVE BEEN POSTED FOR THIS PROJECT.
- 11 STORAGE OF FLAMMABLE MATERIALS WILL NOT BE ALLOWED UNDER ANY BRIDGE STRUCTURES.
- 12 ALL EXISTING SIGNS WHICH ARE TO BE REMOVED AS A PART OF THIS PROJECT THAT ARE NOT IN CONFLICT WITH CONSTRUCTION SHALL REMAIN IN PLACE UNTIL NEW SIGNS ARE INSTALLED UNLESS NOTED OR DIRECTED OTHERWISE BY THE PROJECT ENGINEER. ROADWAY SIGNS THAT ARE IN CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND RELOCATED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, THE COST OF WHICH SHALL BE ABSORBED IN OTHER ITEMS BID.
- 13 THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE LONG-TERM CLOSURE UNTIL THE REPAIRS ARE COMPLETE AND HAVE BEEN ACCEPTED BY MDOT.
- 14 THE CONTRACTOR IS ADVISED THAT THE EXISTING MDOT CLOSURE IS TO BE REMOVED WHEN THE CONTRACTOR'S CLOSURE IS INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH MDOT PROJECT ENGINEER.
- 15 THE CONTRACTOR SHALL MAINTAIN TWO NORTHBOUND LANES AT ALL TIMES DURING HURRICANE EVACUATION ORDERS FROM JUNE 1 THROUGH NOVEMBER 1.


5/27/2020 9:27 AM DI & GN.DGN ROADWAY PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

					MISSISSIPPI DEPARTMENT OF TRANSPORTATION GENERAL NOTES	 WORKING NUMBER GN-1 SHEET NUMBER 3
					FILE NAME: <u>DI&GN.dgn</u> DESIGN TEAM <u>WEAVER</u> CHECKED _____ DATE _____	

STATE	PROJECT NO.
MISS	MRP-6059-31(019)

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	JASPER : 307159-301000	
			Prelim	Final
403-D007	9.5-mm, HT, Asphalt Pavement, Polymer Modified	TON	9	
406-A002	Cold Milling of Bituminous Pavement, All Depths	SY	156	
618-A001	Maintenance of Traffic	LS	1	
619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet	SF	32	
619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More	SF	623	
619-F1001	Concrete Median Barrier, Precast	LF	442	
619-F2001	Remove and Reset Concrete Median Barrier, Precast	LF	442	
619-G4005	Barricades, Type III, Single Faced	LF	96	
619-G7001	Warning Lights, Type "B"	EA	12	
620-A001	Mobilization	LS	1	
907-624-A002	6" Inverted Profile Thermoplastic Traffic Stripe, Skip White	LF	100	
907-624-B002	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous White	LF	240	
907-624-D002	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous Yellow	LF	240	
	OR			
628-G001	6" High Performance Cold Plastic Traffic Stripe, Skip White	LF	100	
628-H001	6" High Performance Cold Plastic Traffic Stripe, Continuous White	LF	240	
628-J001	6" High Performance Cold Plastic Traffic Stripe, Continuous Yellow	LF	240	

By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
	SUMMARY OF QUANTITIES	
Revision		Working Number SQ-1
	PROJ NO: MRP-6059-31(019) COUNTY: JASPER	Sheet Number 4
Date	FILENAME: SUMMARY OF QUANTITIES Design Team <u>WEAVER</u>	Checked _____ Date <u>5-18-2020</u>

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			ROAD WORK NEXT X X MILES
G20 - 2	48" X 24"	8.00	4	32	END ROAD WORK
G20 - 4	36" X 18"	4.50			PILOT CAR FOLLOW ME
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			1 OR 2 DIGIT
2 M1 - 4	30" X 24"	5.00			3 DIGIT
3 M1 - 5	24" X 24"	4.00			1 OR 2 DIGIT
3 M1 - 5	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			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			DETOUR- 1 OR 2 DIGIT RTE. MARKER
M4 - 8	30" X 15"	3.13			DETOUR- 3 DIGIT RTE. MARKER
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			↖
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			↑
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" OCTAGON	7.46			STOP ①
R1 - 1	48" OCTAGON	13.25	2	26.5	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	18" X 9"	1.13			3-WAY, 4 WAY ETC. ①
R1 - 3	24" X 12"	2.00			4 WAY ETC. ②
R2 - 1	24" X 30"	5.00			SPEED LIMIT ①
R2 - 1	36" X 48"	12.00			SPEED LIMIT ②
R2 - 1	48" X 60"	20.00			SPEED LIMIT ③
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			① ONLY
R3 - 5R	30" X 36"	7.50			① ONLY
R3 - 6L	30" X 36"	7.50			②
R3 - 6R	30" X 36"	7.50			②
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
R4 - 1	48" X 60"	20.00			DO NOT PASS ②
R4 - 2	24" X 30"	5.00			PASS WITH CARE ①
R4 - 2	48" X 60"	20.00			PASS WITH CARE ②
R4 - 7	48" X 60"	20.00			②
R4 - 8	48" X 60"	20.00			②
R5 - 1	48" X 48"	16.00			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	24" X 30"	5.00			ONE WAY ←
R6 - 2R	24" X 30"	5.00			ONE WAY →
R11 - 2	48" X 30"	10.00	2	20	ROAD CLOSED
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
R16 - 3	36" X 48"	12.00			7 WHEN WORKERS ARE PRESENT SPEEDING FINES DOUBLED
6 7 W1 - 1L	48" X 48"	16.00			① ↗
6 7 W1 - 1R	48" X 48"	16.00			① ↖
W1 - 2L	48" X 48"	16.00			① ↗
W1 - 2R	48" X 48"	16.00			① ↖
W1 - 3L	48" X 48"	16.00			① ↗
W1 - 3R	48" X 48"	16.00			① ↖
W1 - 4aL	48" X 48"	16.00			① ↗
W1 - 4aR	48" X 48"	16.00			① ↖
W1 - 5L	48" X 48"	16.00			① ↗
W1 - 5R	48" X 48"	16.00			① ↖
W1 - 6L	48" X 24"	8.00			① ↑
W1 - 6L	60" X 30"	12.50			② ↑
W1 - 6R	48" X 24"	8.00			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			① ↗
W1 - 9R	48" X 48"	16.00			① ↖
W3 - 1a	48" X 48"	16.00			② ⬆
W3 - 2a	48" X 48"	16.00			② ⬆
W3 - 3	48" X 48"	16.00			② ⬆
W3 - 5	48" X 48"	16.00			SPEED REDUCTION
W4 - 1L	48" X 48"	16.00			② ↑
W4 - 1R	48" X 48"	16.00			② ↑
W4 - 2L	48" X 48"	16.00			② ↑
W4 - 2R	48" X 48"	16.00			② ↓
W5 - 1a	48" X 48"	16.00			PAVEMENT NARROWS
W6 - 1	48" X 48"	16.00			② ↗↘
W6 - 2	48" X 48"	16.00			② ↖↗
W6 - 3	48" X 48"	16.00			② ⬆
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 - 7	48" X 48"	16.00			LOOSE GRAVEL
W8 - 9	48" X 48"	16.00			LOW SHOULDER
W8 - 11	36" X 36"	9.00			UNEVEN LANES
W8 - 12	48" X 48"	16.00			NO CENTER STRIPE
W10 - 1	36" DIA.	7.07			① ⊗
W10 - 1	48" DIA.	12.56			② ⊗
W13 - 1	24" X 24"	4.00			XX MPH
W14 - 3	36" X 48" X 48"	5.56			NO PASSING ZONE ①
W14 - 3	48" X 64" X 64"	9.89			NO PASSING ZONE ②
W16-2	24" X 18"	3.00			XXX FEET
W19 - 2	48" X 48"	16.00			BRIDGE MAY ICE IN COLD WEATHER
W20 - 1	48" X 48"	16.00	24	384	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	12	192	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
W20 - 7a	48" X 48"	16.00			⚠
W21 - 1	36" X 36"	9.00			WORKERS
W21 - 1a	36" X 36"	9.00			⚠

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
W24 - 1L	48" X 48"	16.00			⚡ ↙
W24 - 1R	48" X 48"	16.00			⚡ ↘
W24 - 1AL	48" X 48"	16.00			⚡ ↙ ⚡ ↘
W24 - 1AR	48" X 48"	16.00			⚡ ↙ ⚡ ↘
W24 - 1BL	48" X 48"	16.00			⚡ ↙
W24 - 1BR	48" X 48"	16.00			⚡ ↘
VP - 1L	12" X 36"	3.00			⬆
VP - 1R	12" X 36"	3.00			⬆
OM - 3L	12" X 36"	3.00			⬆
OM - 3R	12" X 36"	3.00			⬆

TOTAL SIGN AREA LESS THAN 10 SQ. FT.				32 SQ. FT.
TOTAL SIGN AREA 10 SQ. FT. OR MORE				622.5 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 W10-1 BACKGROUND SHALL BE YELLOW IN ALL CASES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ESTIMATED QUANTITIES FOR TRAFFIC CONTROL SIGNS	
PROJ. NO.: MRP-6059-31(019) COUNTY: JASPER	
FILE NAME: EQ.dgn	DESIGN TEAM: WEAVER
DATE: 5/27/2020	CHECKED: EQ.DCN
DATE: 9:28 AM	CHECKED: EQ.DCN
DATE: 08-26-13	CHECKED: EQ.DCN

WORKING NUMBER
EQ-1
SHEET NUMBER
5

STATE	PROJECT NO.
MISS.	MRP-6059-31(019)

SUMMARY OF TRAFFIC CONTROL ITEMS REQUIRED

WK. NO.	PHASE OF CONST.	TEMPORARY TRAFFIC STRIPE																CMS	ARROW PANEL TYPE "A"	CONCRETE BARRIER	BARRICADES TYPE III		REFLECTIVE RAISED MARKERS		WARNING LIGHTS TYPE B	FREE STANDING PLASTIC DRUMS	G20-2	R1-1	R11-2	W20-1	W20-3	REMARKS					
		PAINT OR TAPE								TAPE											SINGLE FACED	DOUBLE FACED	2-WAY YELLOW	RED-CLEAR													
		CONTINUOUS		SKIP		DETAIL		LEGEND	CONTINUOUS		SKIP		DETAIL		LEGEND																						
WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW		WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW																							
DCS-1																											4					4					
DCS-2																												48					4			20	
TC-1																												48		12			2	2		12	
UNITS		LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF			EACH	EACH	EACH	EACH	EACH	EACH	EA	EA	EA	EA	EA	EA	EA	EA		
TOTAL																											96	0	0	0	12	0	4	2	2	24	12

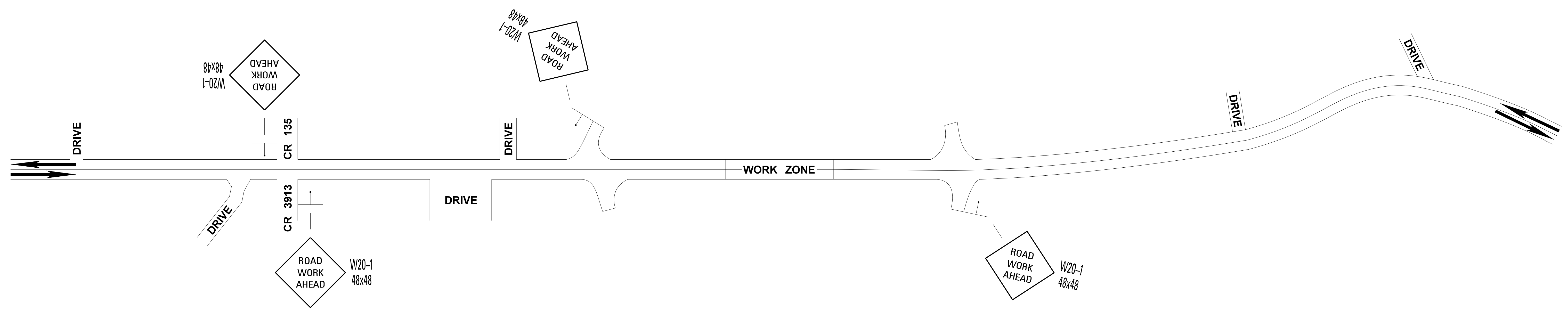
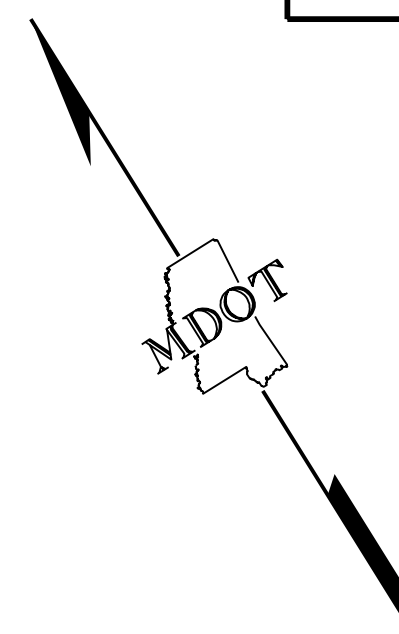
PLAN DIVISION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/27/2020 9:28 AM EQ.DGN

																		MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF TRAFFIC CONTROL																		
																		PROJ. NO.: MRP-6059-31(019) COUNTY: JASPER																		
																		WORKING NUMBER EQ-2																		
																		SHEET NUMBER 6																		

FILE NAME: EQ.dgn
 DESIGN TEAM: WEAVER CHECKED: DATE:

STATE	PROJECT NO.
MISS.	MRP-6059-31(019)

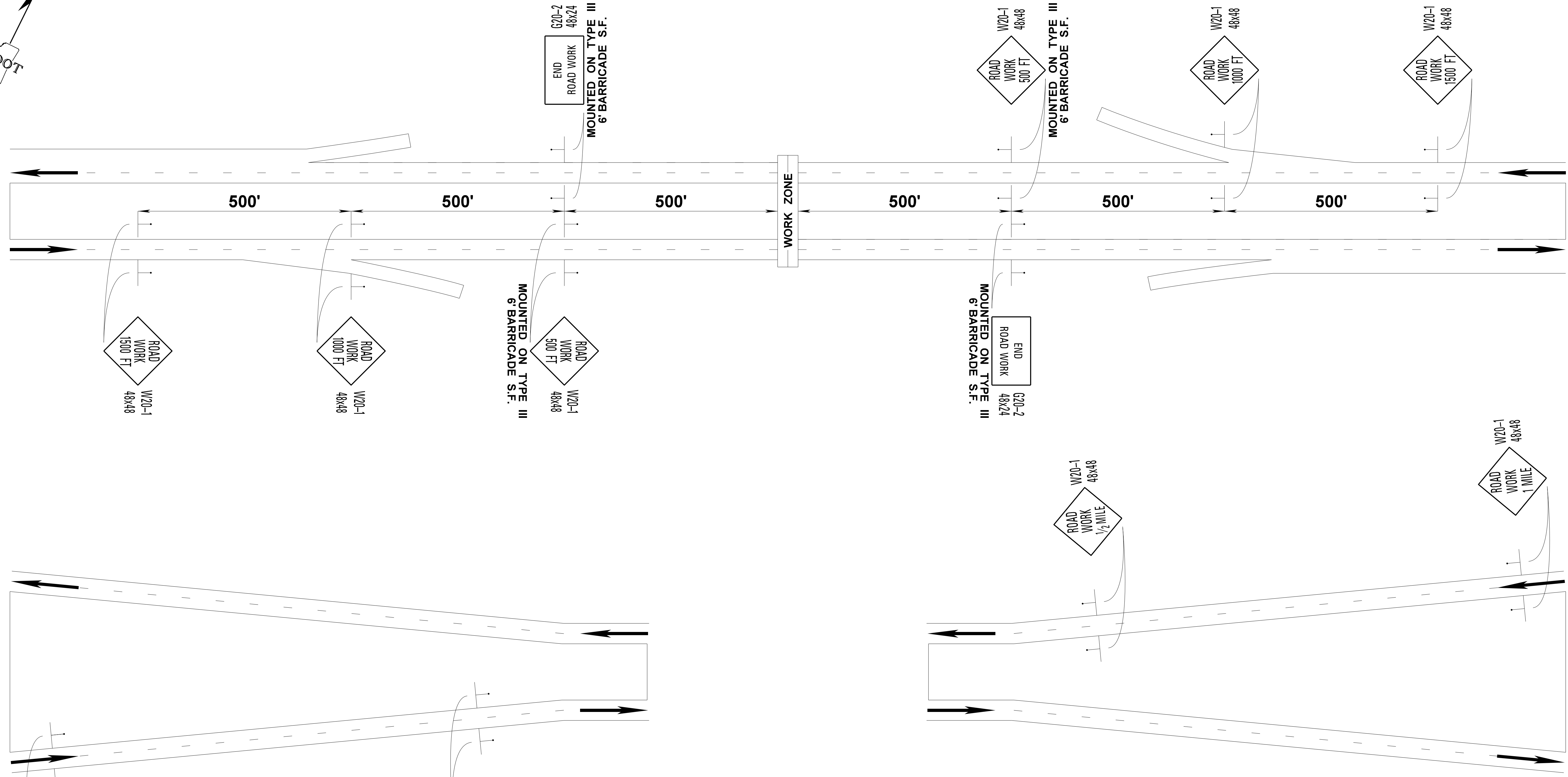
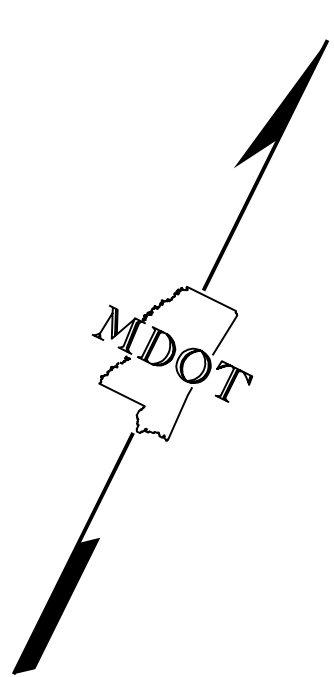


5/27/2020 9:28 AM DCS.dgn

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETAIL OF CONSTRUCTION SIGNING	
COUNTY ROAD	
PROJ. NO.: MRP-6059-31(019)	
COUNTY: JASPER	
FILE NAME: DCS.dgn	WORKING NUMBER
DESIGN TEAM: WEAVER	DCS-1
CHECKED:	SHEET NUMBER
DATE: 4-20-2020	7



STATE	PROJECT NO.
MISS.	MRP-6059-31(019)

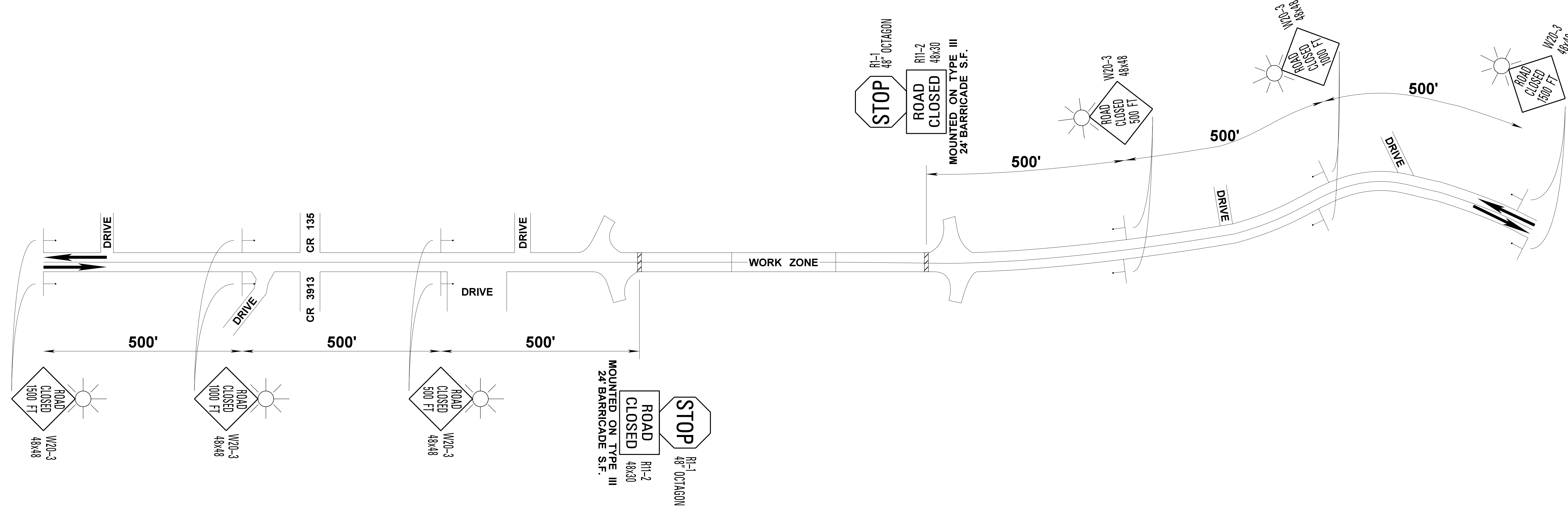
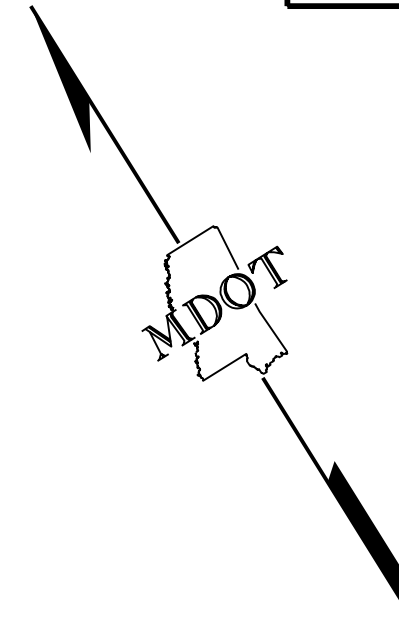


5/27/2020 9:28 AM DCS.dgn PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETAIL OF CONSTRUCTION SIGNING	
REVISION	I-59
BY	
DATE	FILE NAME: DCS.dgn
DESIGN TEAM	WEAVER CHECKED DATE 4-20-2020
WORKING NUMBER	DCS-2
SHEET NUMBER	8



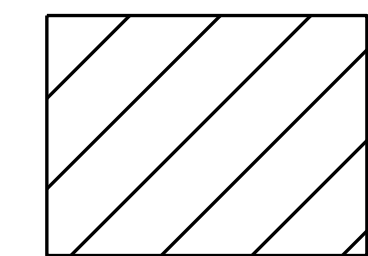
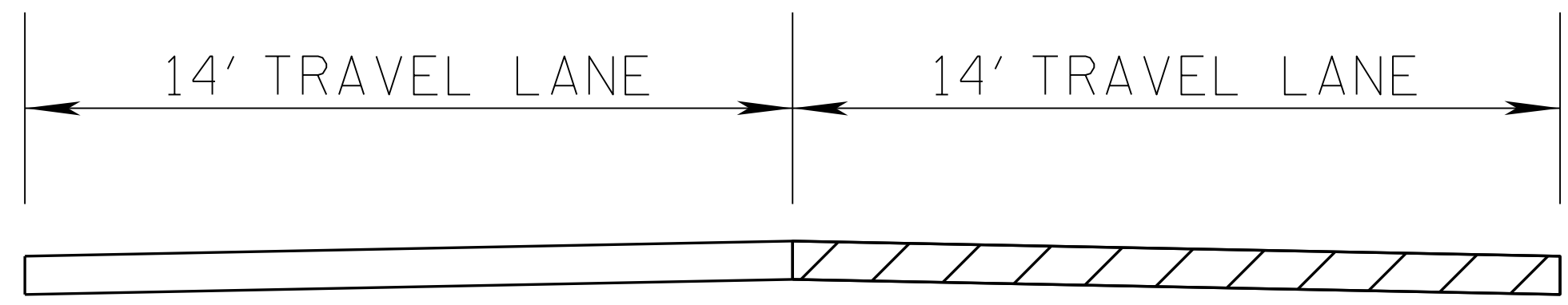
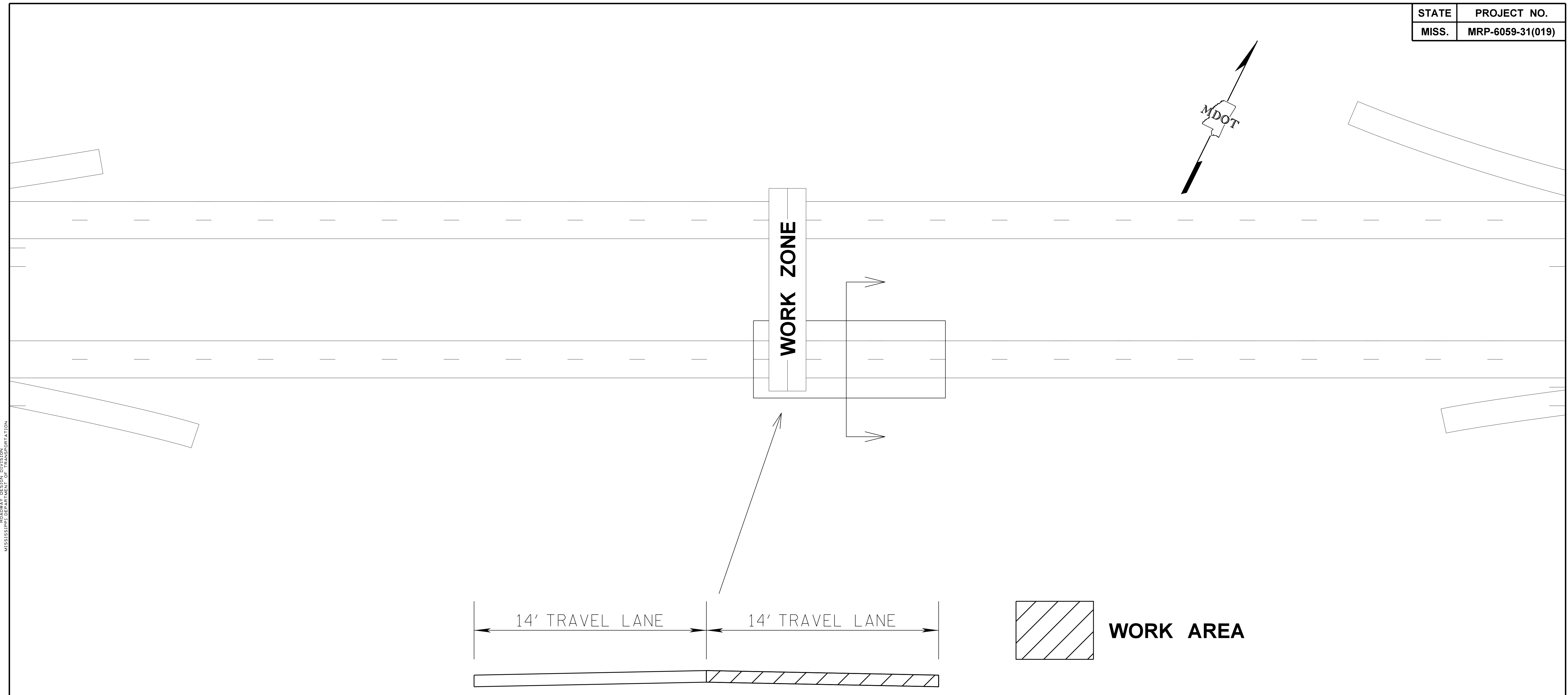
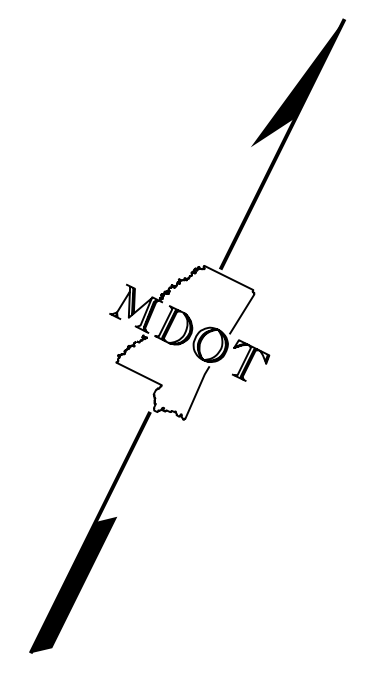
STATE	PROJECT NO.
MISS.	MRP-6059-31(019)



5/27/2020 9:28 AM TC-1.dgn

MISSISSIPPI DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL		 WORKING NUMBER TC-1 SHEET NUMBER 9
COUNTY ROAD PROJ. NO.: MRP-6059-31(019) COUNTY: JASPER		
REVISION	BY	FILE NAME: TC-1.dgn
		DESIGN TEAM: WEAVER CHECKED: DATE:

STATE	PROJECT NO.
MISS.	MRP-6059-31(019)




WORK AREA

**EXTEND 100' FROM SOUTH SIDE OF OVERPASS
 1" (9.5MM) HT POLYMER MODIFIED MIXTURE REQ'D.
 1" COLD MILLING REQ'D.**

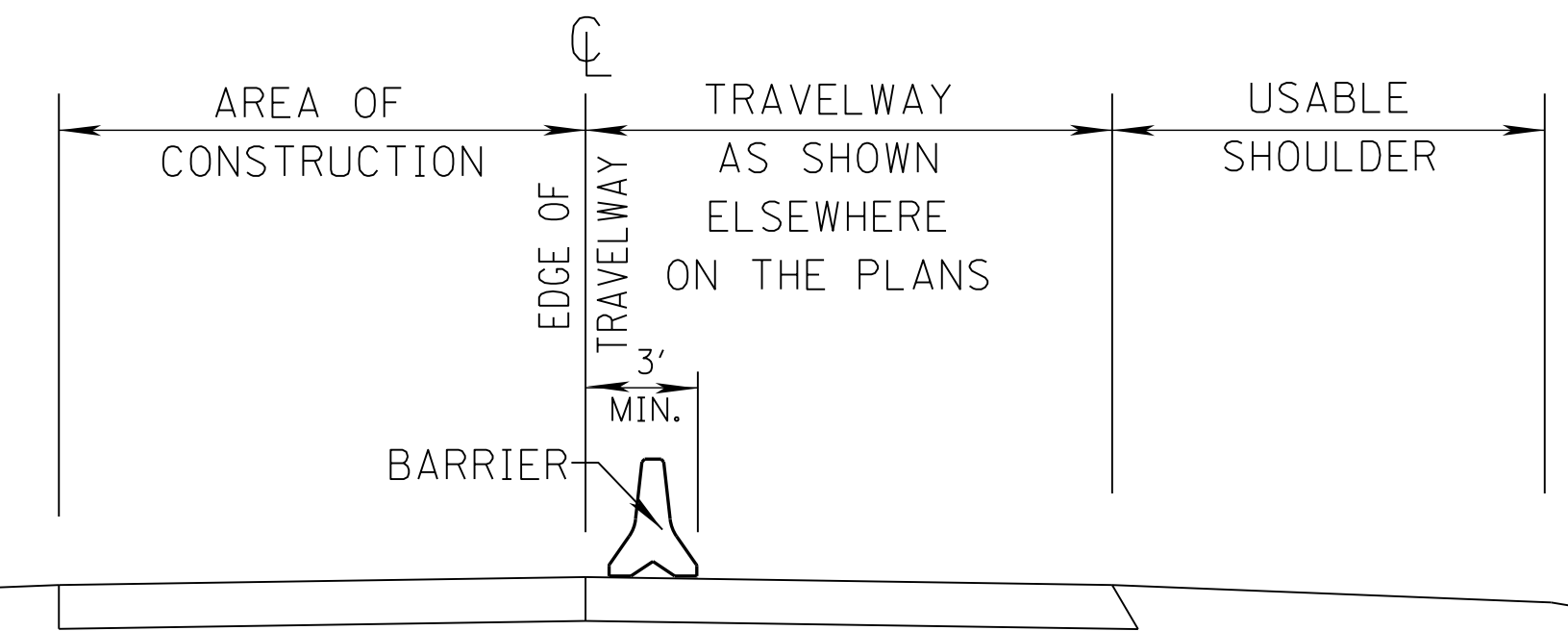
**NOTE: TACK COAT SHALL BE ABSORBED IN PRICE BID
 FOR 9.5 MM HT POLYMER MODIFIED ASPHALT**

5/27/2020 9:28 AM AR-1

PLAN DIVISION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

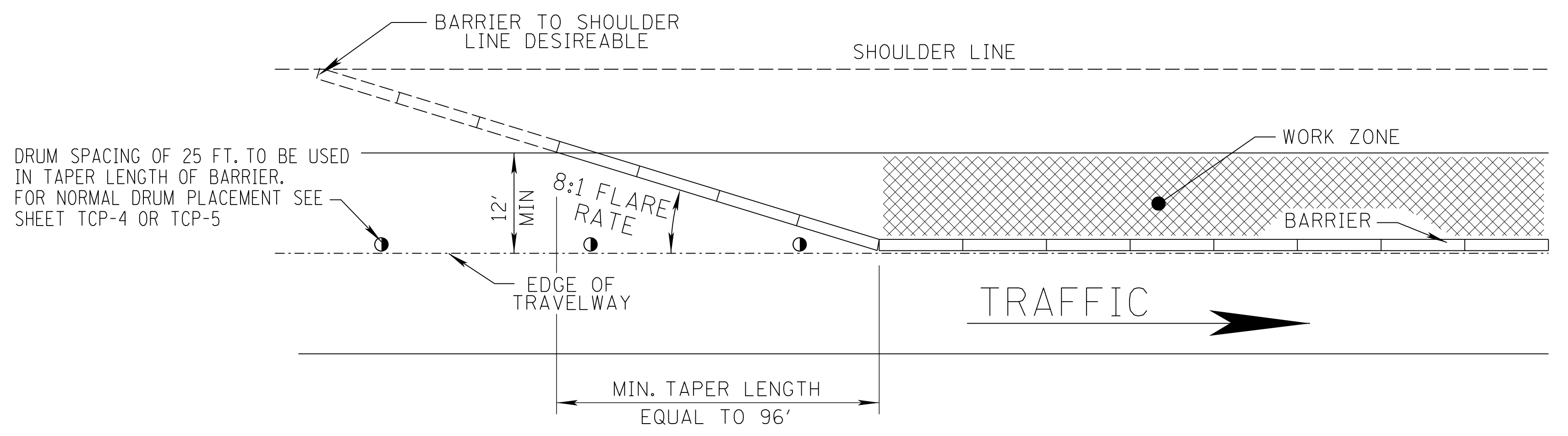
REVISION		BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ASPHALT REPAIR	
DATE		DESIGN TEAM		PROJ. NO.: MRP-6059-31(019) COUNTY: JASPER  WORKING NUMBER AR-1 SHEET NUMBER 10	
FILE NAME: AR-1.dgn		WEAVER		CHECKED	
				DATE	

STATE	PROJECT NO.
MISS.	MRP-6059-31(019)

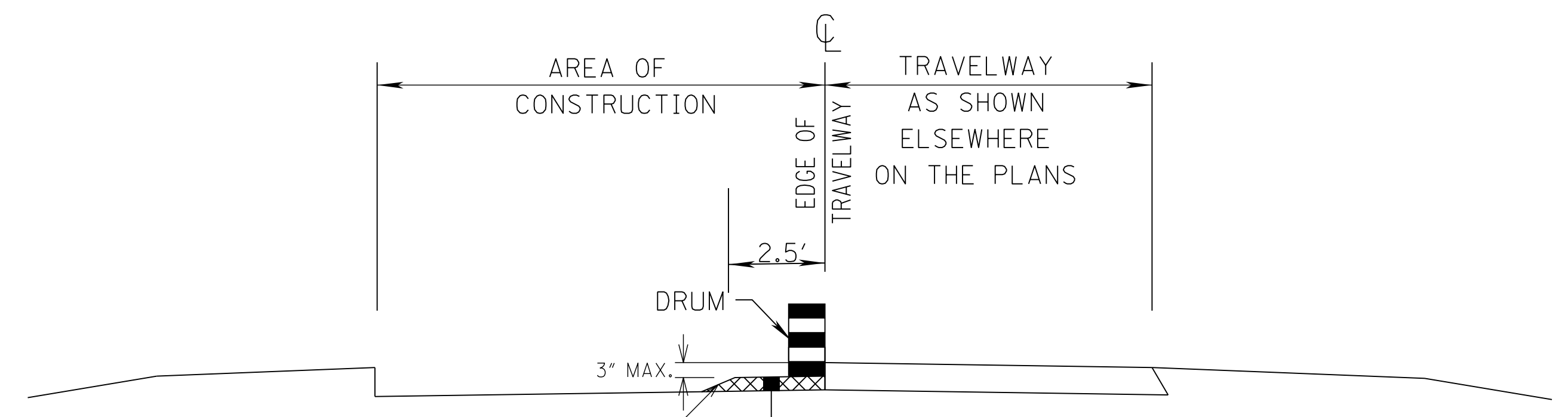


ELEVATION VIEW FOR POSITIVE BARRIER

- ① DELINEATORS REQUIRED ON ALL NON-REFLECTIVE BARRIER, AS SHOWN ON WORKING NO. CMB-3.
- ② MATERIAL USED TO SUPPORT POSITIVE BARRIER MUST BE AT SAME ELEVATION AS PAVEMENT IN ADJACENT TRAVELWAY.



DETAIL OF TAPER FOR POSITIVE BARRIER IN WORK ZONE



ELEVATION VIEW FOR DRUM

- ① WHILE WORK IS BEING PERFORMED WITHIN THE LANE CLOSURE, DROP-OFFS MUST BE PROTECTED, WITH DRUMS, ETC. IN EMERGENCIES EXCAVATED SECTION MAY BE BACKFILLED WITH GRANULAR MATERIAL, STONE OR OTHER APPROVED MATERIAL TO AVOID OVERNIGHT DROP-OFFS.
- ② FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN 3" 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.

ELEVATION VIEW FOR DRUM

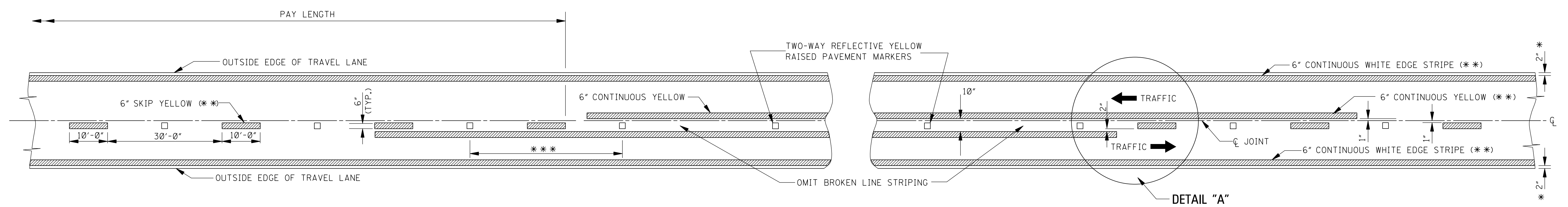
- ① WHILE WORK IS BEING PERFORMED WITHIN THE LANE CLOSURE, DROP-OFFS MUST BE PROTECTED, WITH DRUMS, ETC. IF THERE IS 8' OR MORE DISTANCE BETWEEN THE EDGE OF THE TRAVEL LANE AND THE DROP OFF, THEN DRUMS, PANELS, OR BARRICADES MAY BE USED.
- ② FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN 3" MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS, OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

GENERAL NOTES

- ① ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTAINANCE OF TRAFFIC.
- ② FOR DETAILS OF DRUM PLACEMENT SEE TCP-4 OR TCP-5.

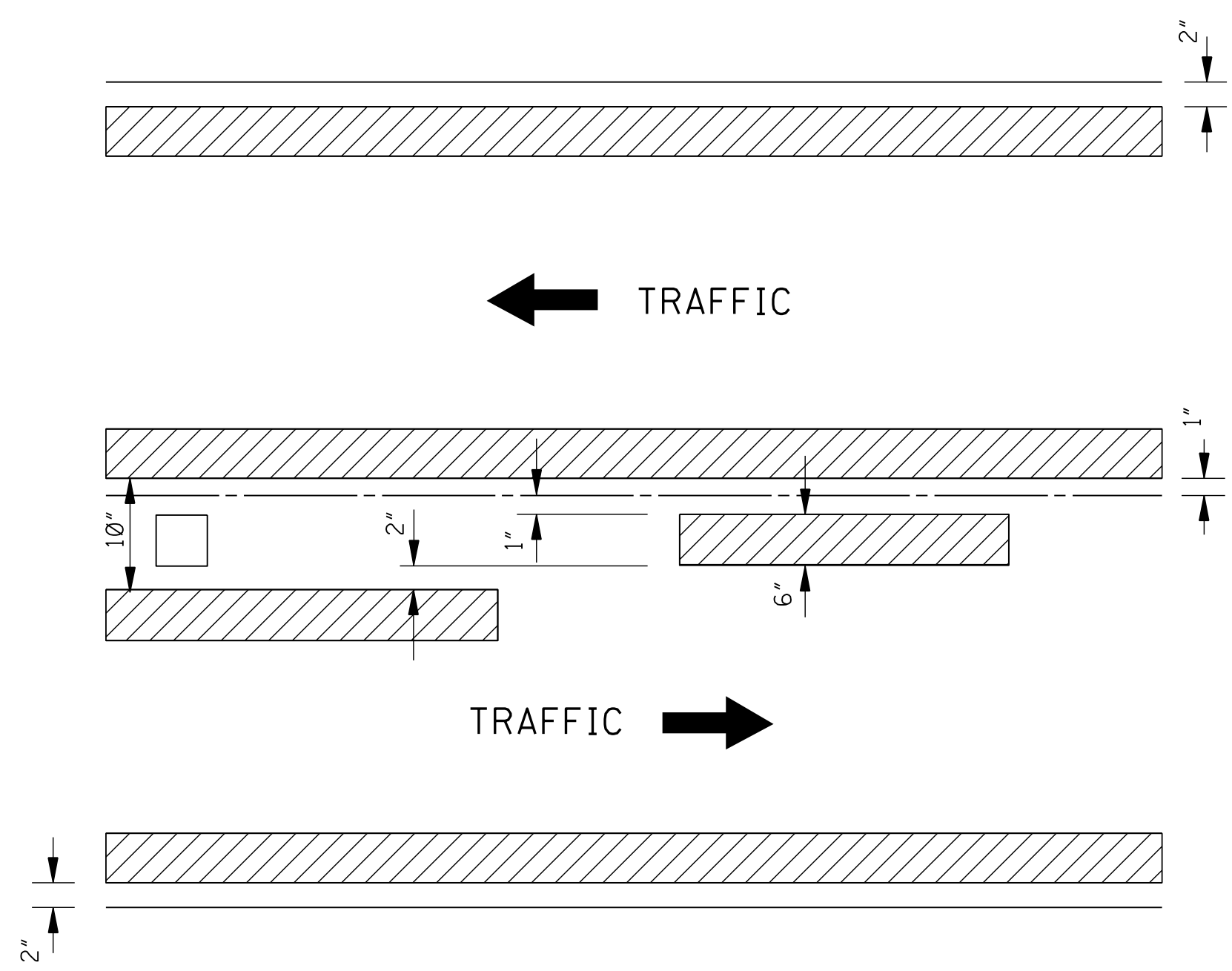
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
LANE CLOSURE DETAILS WITH CONCRETE MEDIAN BARRIER	
PROJ. NO.: MRP-6059-31(019)	
COUNTY: JASPER	
FILE NAME: Lane Closure Details.dgn	WORKING NUMBER
DESIGN TEAM	CHECKED
DATE	DATE
LCD-1	
SHEET NUMBER	
11	

5/27/2020 9:28 AM LANE CLOSURE DETAILS.DGN



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)

NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDT ROADWAY DESIGN MANUAL, SECTION 11-1.01.



DETAIL "A"

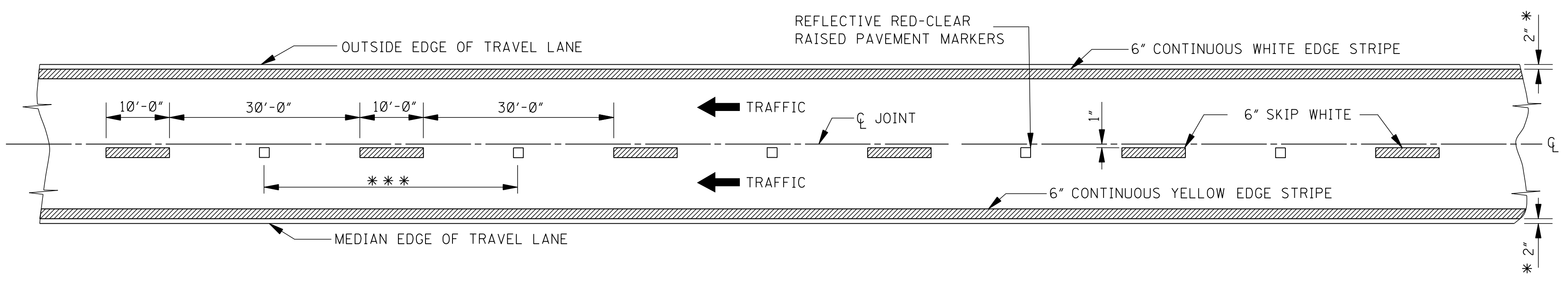
GENERAL NOTES:

- * 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO WK. SHEETS RS-1, RS-2, AND RS-3.
- ** 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 MDT "APPROVED SOURCES OF MATERIALS."

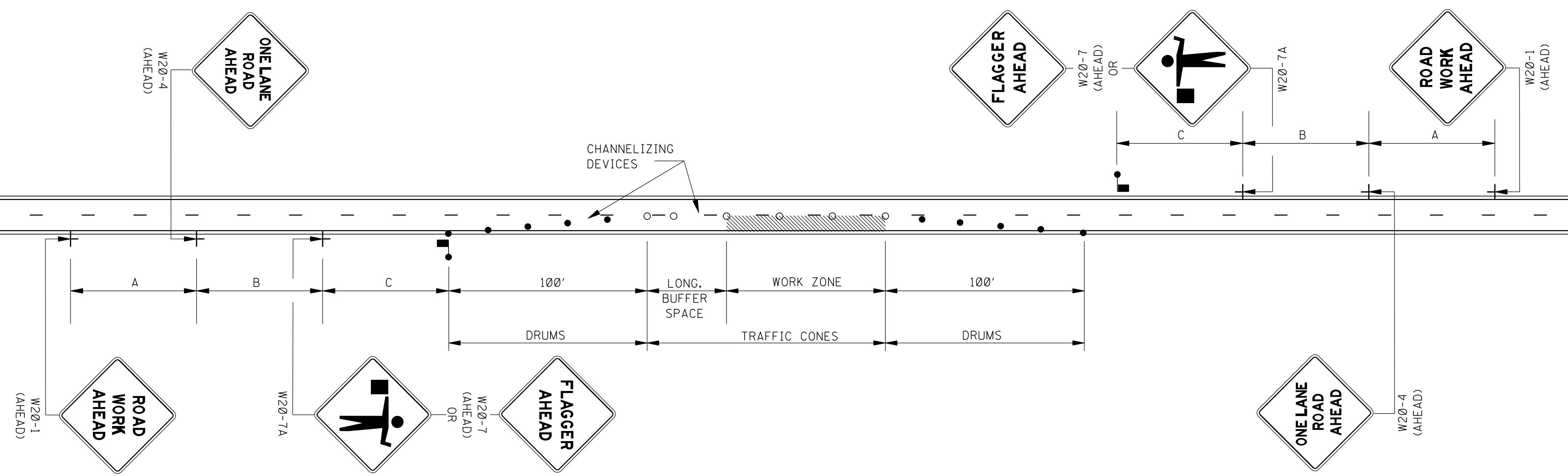


4-LANE WITH ONE-WAY TRAFFIC

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS
DATE	ISSUE DATE: AUGUST 01, 2017



WORKING NUMBER
PM-1
SHEET NUMBER
6051



- LEGEND
- FLAGGER
 - RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
 - TRAFFIC CONES (28" HEIGHT MINIMUM)

GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE. FLAGGER STATIONS SHALL BE LOCATED SUCH THAT APPROACHING VEHICLES WILL HAVE SUFFICIENT DISTANCE TO STOP. VALUES IN STOPPING SIGHT DISTANCE COLUMN MAY BE USED AS A MINIMUM FOR THIS DISTANCE.

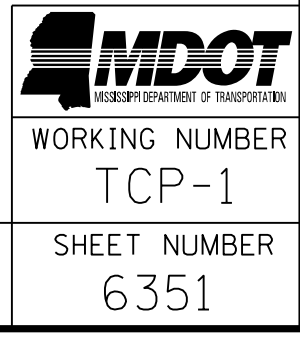
POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft) †	STOPPING SIGHT DISTANCE
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
25	20	50	55	155
30	20	60	85	200
35	20	70	120	250
40	20	80	170	305
45	20	90	220	360
50	20	100	280	425
55	20	110	335	495
60	20	120	415	570
65	20	130	485	645

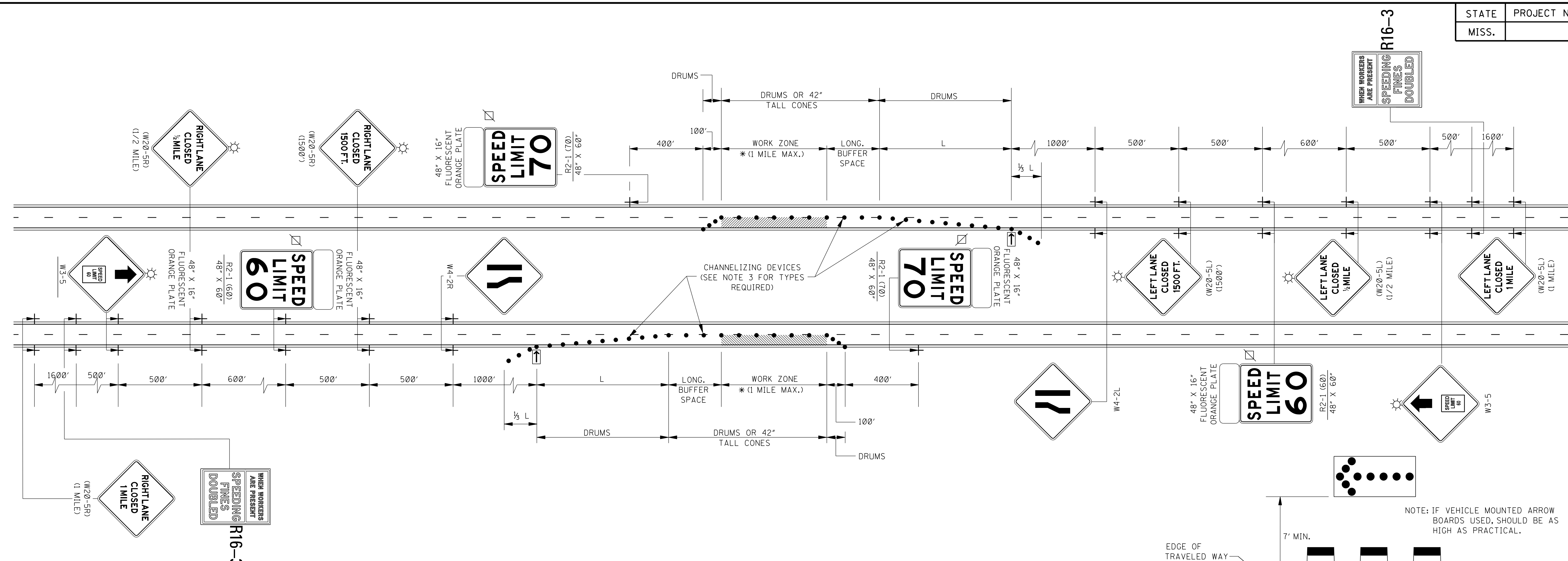
† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
5. ADDITIONAL FLAGGERS MAY BE NEEDED AS DIRECTED BY THE ENGINEER.
6. WHEN WORK IS REQUIRED AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED.
7. CHANNELIZING DEVICE TYPES FOR:
 - A. APPROACH AND EXIT TAPERS- RETROREFLECTIVE PLASTIC DRUMS
 - B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)
8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

ROAD TYPE	A	B	C
URBAN (35 MPH OR LESS)	100 FT.	100 FT.	100 FT.
URBAN (40 - 70 MPH)	350 FT.	350 FT.	350 FT.
RURAL	500 FT.	500 FT.	500 FT.
EXPRESSWAY / FREEWAY	1000 FT.	1500 FT.	2640 FT.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)</p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		TCP-1	
SHEET NUMBER		6351	





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)		LONGITUDINAL BUFFER SPACE (ft)	TAPER RATES
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
≤40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	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

++ NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. FLASHING ARROW PANEL SHOULD 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 IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
- B. CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES.
- C. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
- D. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.

5. 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.

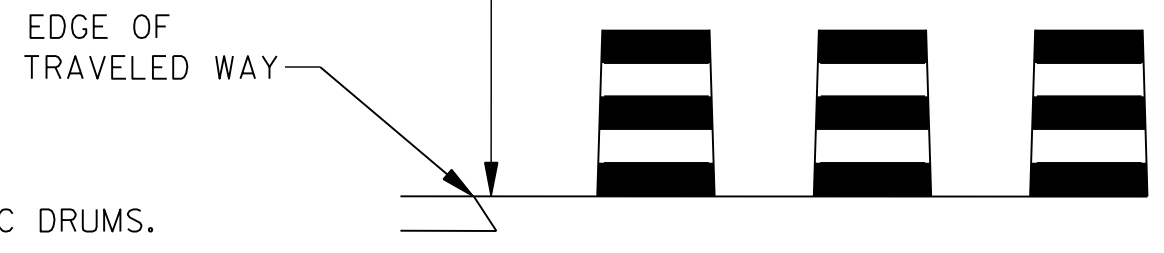
6. ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.

7. 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.

8. 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.

9. A FLUORESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS REQUIRED FOR LANE CLOSURE.

10. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.



NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.

LEGEND

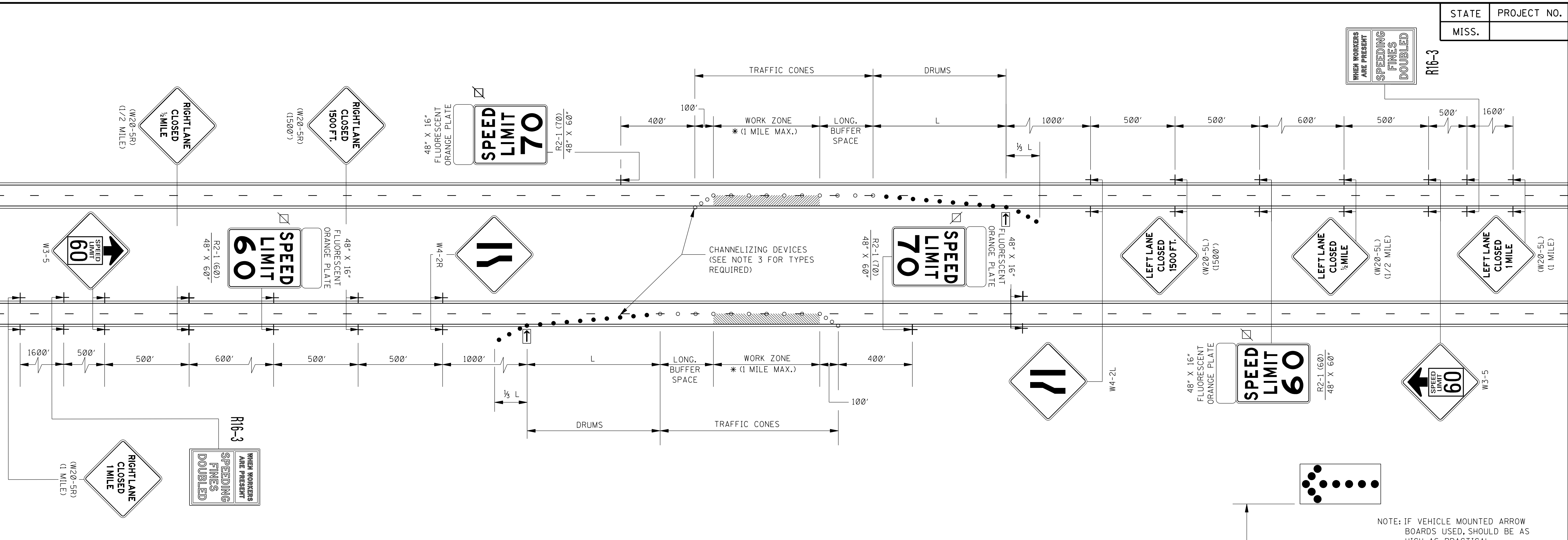
- * OR AS SHOWN ELSEWHERE ON THE PLANS.
- FLASHING ARROW PANEL (TYPE "C")
- BLACK LEGEND AND BORDER ON WHITE BACKGROUND
- ⚠ TYPE "B" WARNING LIGHTS
- RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
REVISION	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) (EXTENDED PERIOD)
DATE	ISSUE DATE: AUGUST 01, 2017

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
TCP-4

SHEET NUMBER
6354



GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

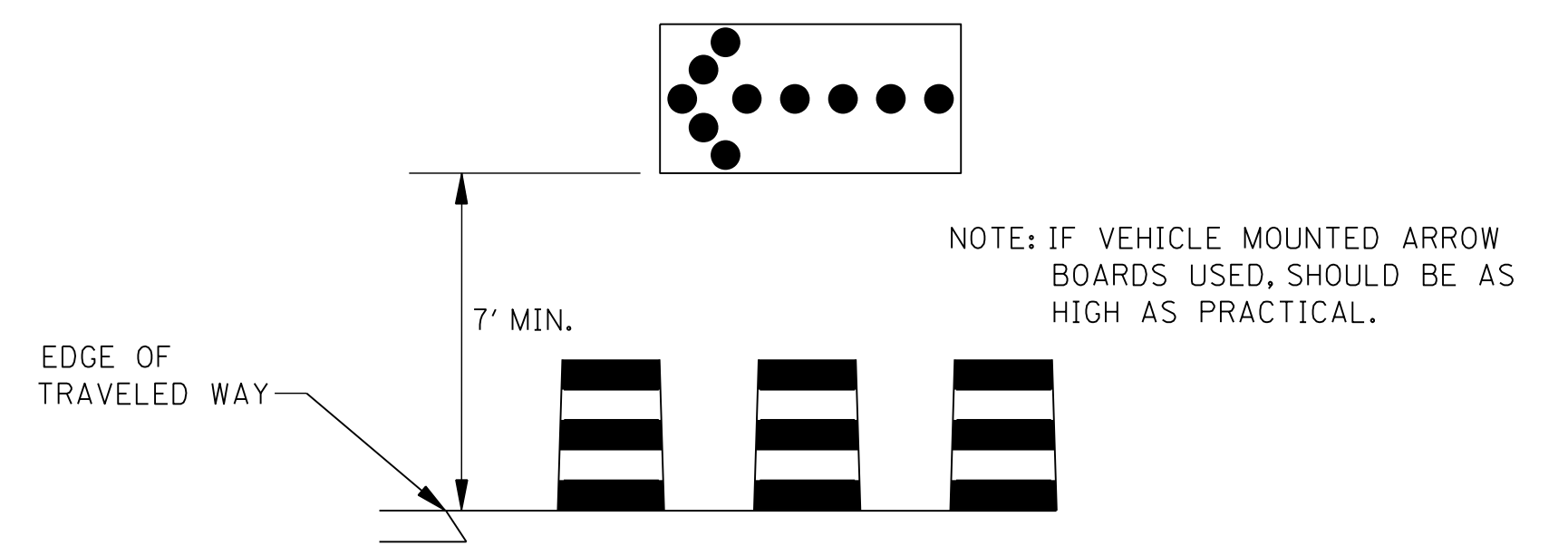
POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft)	TAPER RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	70:1

+ 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

++ NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. FLASHING ARROW PANEL SHOULD 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.

- CHANNELIZING DEVICE TYPES FOR:
 - APPROACH TAPER- RETROREFLECTIVE PLASTIC DRUMS
 - ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT MINIMUM)
 - EXIT TAPER- TRAFFIC CONES (28" HEIGHT MINIMUM)
- WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND THE DRUMS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.
- 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.
- DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48". AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
- 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.
- ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
- 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.
- 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.
- A FLUORESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS AND "REDUCED SPEED AHEAD" SIGNS REQUIRED FOR LANE CLOSURE.
- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

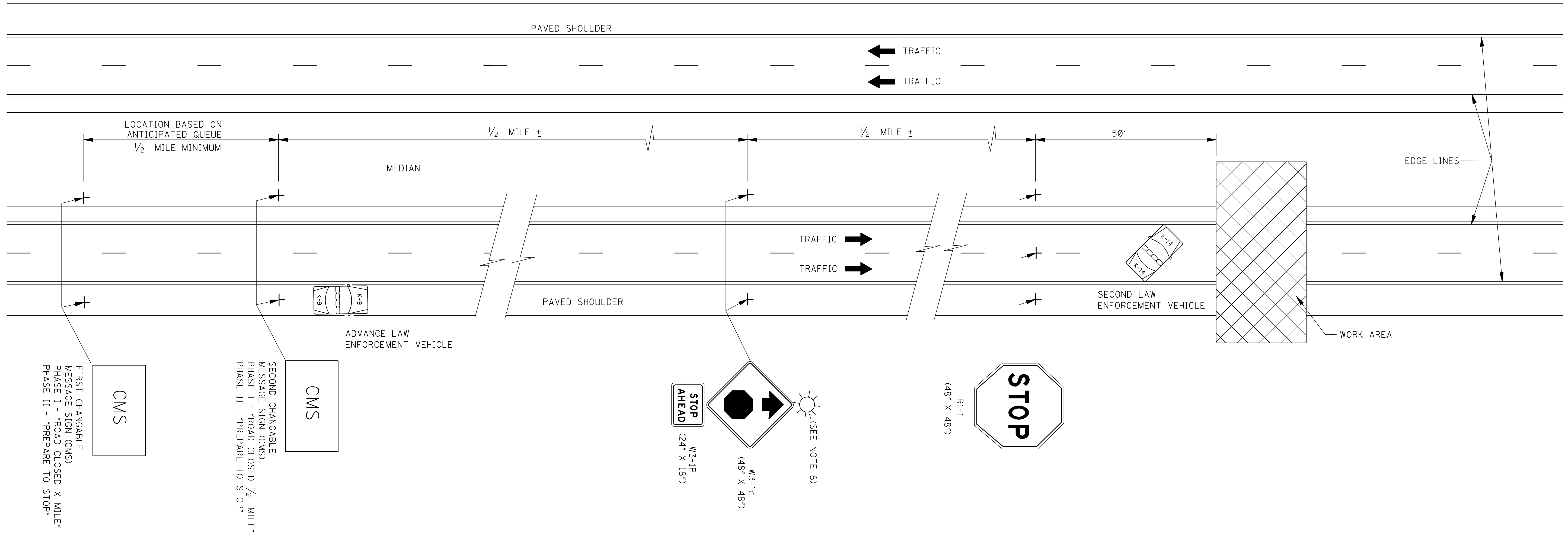


LEGEND

- * OR AS SHOWN ELSEWHERE ON THE PLANS.
- FLASHING ARROW PANEL (TYPE "C")
- BLACK LEGEND AND BORDER ON WHITE BACKGROUND
- RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
- TRAFFIC CONES (28" HEIGHT)

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
REVISION	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)
DATE	ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER TCP-5
 SHEET NUMBER 6355



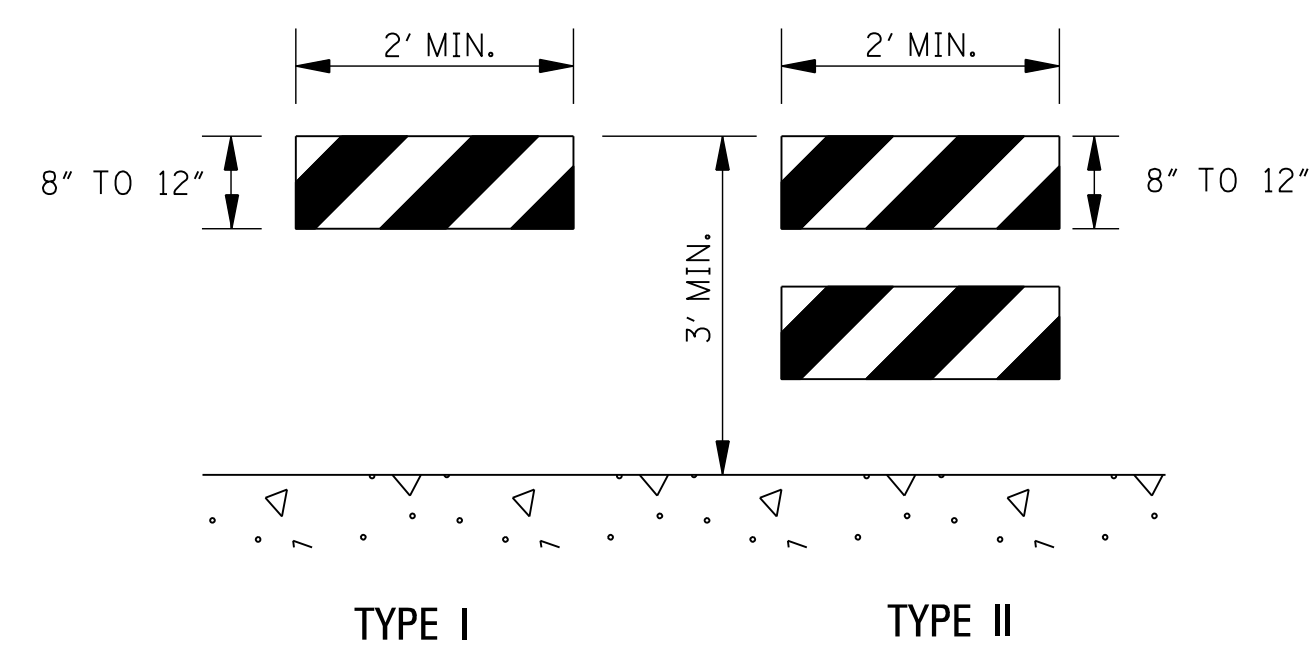
GENERAL NOTES:

1. THIS TYPE OF HIGHWAY CLOSURE SHOULD ONLY BE USED 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 SHOULD ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
2. AT LEAST TWO LAW ENFORCEMENT OFFICERS AND TWO LAW ENFORCEMENT VEHICLES SHOULD BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH LAW ENFORCEMENT VEHICLE SHOULD HAVE A ROOF MOUNTED FLASHING BLUE LIGHT OR LIGHT BAR.
3. RESTRICTIONS ON ROAD CLOSURES ARE SPECIFIED IN THE CONTRACT DOCUMENT.
4. THE ADVANCE LAW ENFORCEMENT VEHICLE SHOULD BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.
5. IF QUEUE EXCEEDS THE FIRST CHANGABLE MESSAGE SIGN (CMS) AT ANYTIME DURING A CLOSURE; THE TRAFFIC CONTROL PLAN SHOULD BE ADJUSTED AS NECESSARY, WITH APPROVAL OF THE ENGINEER.

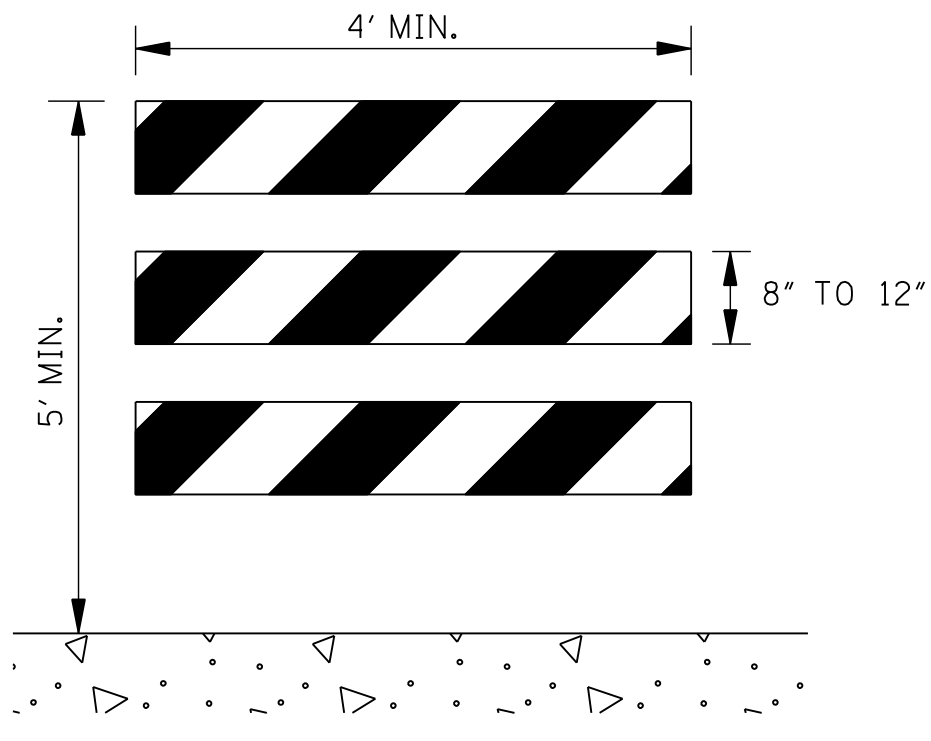
6. TRAFFIC CONTROL FOR THE CLOSURE SHOULD BE ACCOMPLISHED IN THE FOLLOWING ORDER:
 - A. FIRST CHANGABLE MESSAGE SIGN (CMS)
 - B. SECOND CHANGEABLE MESSAGE SIGN (CMS)
 - C. ADVANCE LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
 - D. "W3-1a (48" X 48") AND "W3-1P (24" X 18") SIGNS ERECTED.
 - E. "R1-1 (48" X 48") SIGNS ERECTED TO STOP TRAFFIC. THE ORDER OF ERECTION SHOULD BE TOWARD THE MEDIAN SHOULDER IN THE FOLLOWING ORDER: RIGHT SHOULDER, THEN CENTER, THEN MEDIAN SHOULDER.
 - F. SECOND LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
7. TRAFFIC CONTROL SHOULD 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: MEDIAN, THEN CENTER, THEN SIGN ON THE RIGHT SHOULDER. SECOND LAW ENFORCEMENT VEHICLE LEADS TRAFFIC THROUGH WORK AREA.
 - B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1a (48" X 48") AND "W3-1P (24" X 18") SIGNS SHOULD BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
 - C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGABLE MESSAGE SIGNS TURNED OFF.

8. UNILLUMINATED SECTIONS OF HIGHWAYS SHOULD 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 W3-1a SIGN.
9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND R1-1, THE CMS, "W3-1a (48" X 48")", AND "W3-1P (24" X 18") SIGNS SHOULD ALSO BE ERECTED ON THE RAMP SHOULDER.
10. THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.
11. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING LAW ENFORCEMENT SERVICES.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">SHORT DURATION CLOSING OF DIVIDED HIGHWAYS</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		TCP-7	
SHEET NUMBER		6357	



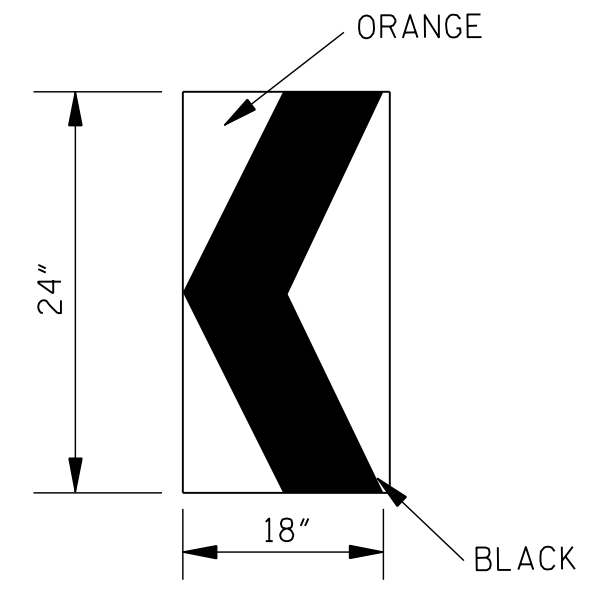
TYPE I TYPE II



TYPE III

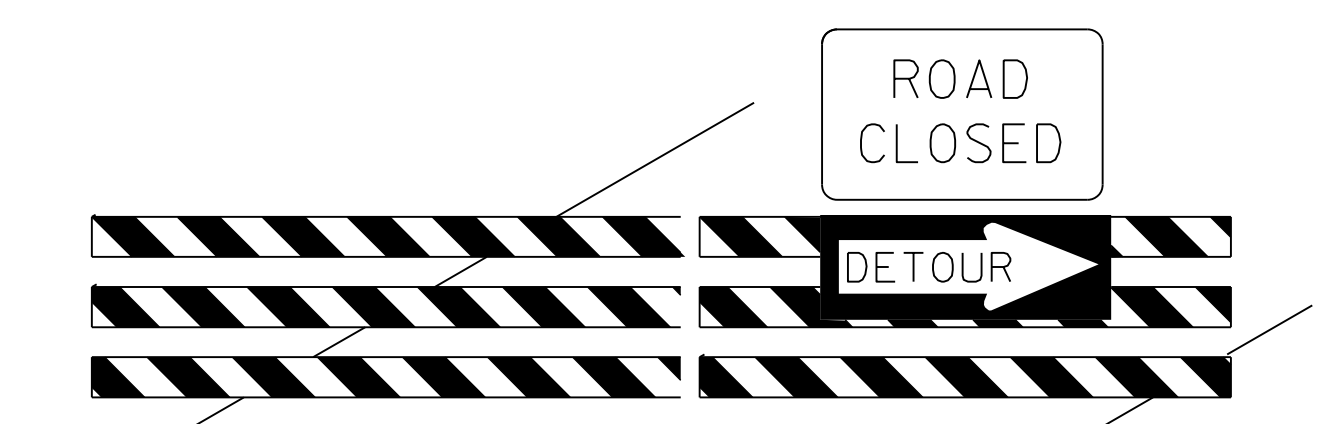
STANDARD BARRICADES

1. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
2. RAIL STRIPE SHOULD BE 6 INCHES, EXCEPT THAT 4-INCH WIDE STRIPES MAY BE USED IF RAIL LENGTHS ARE LESS THAN 36 INCHES.
3. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE:
http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/cat2.cfm



**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 CRASHWORTHY SUPPORT.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHOULD BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.

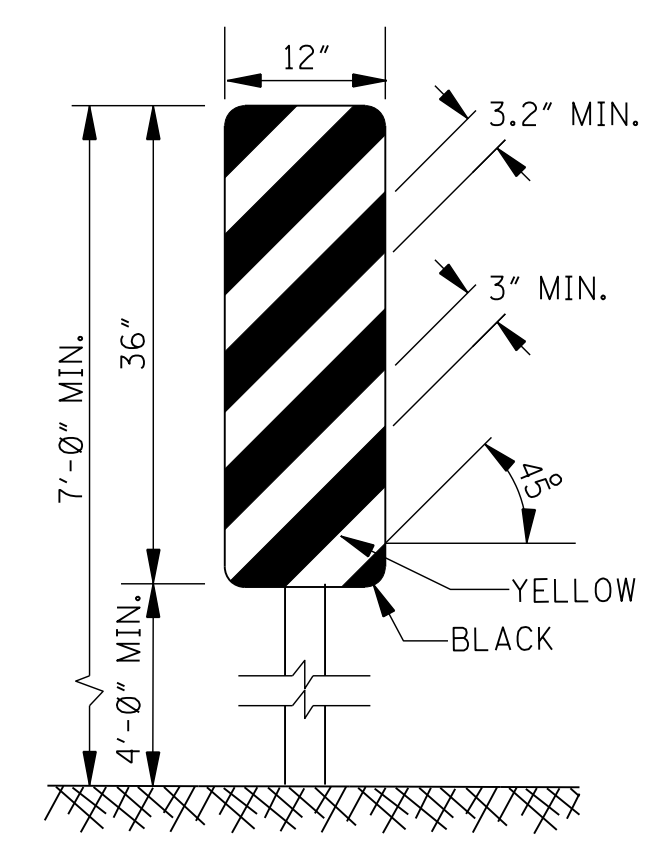


BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

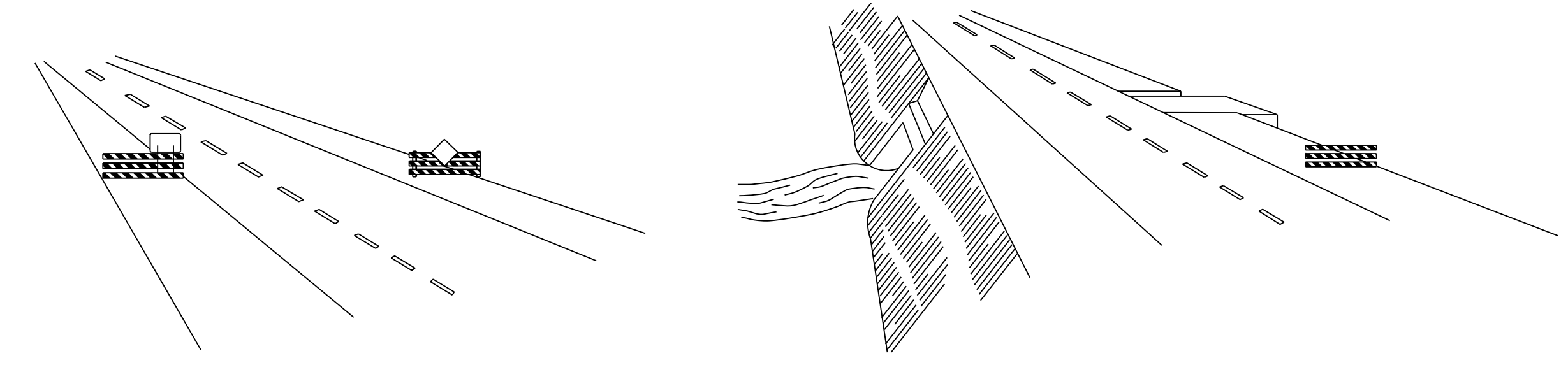
	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

- * 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 in² OF REFLECTIVE AREA FACING TRAFFIC.



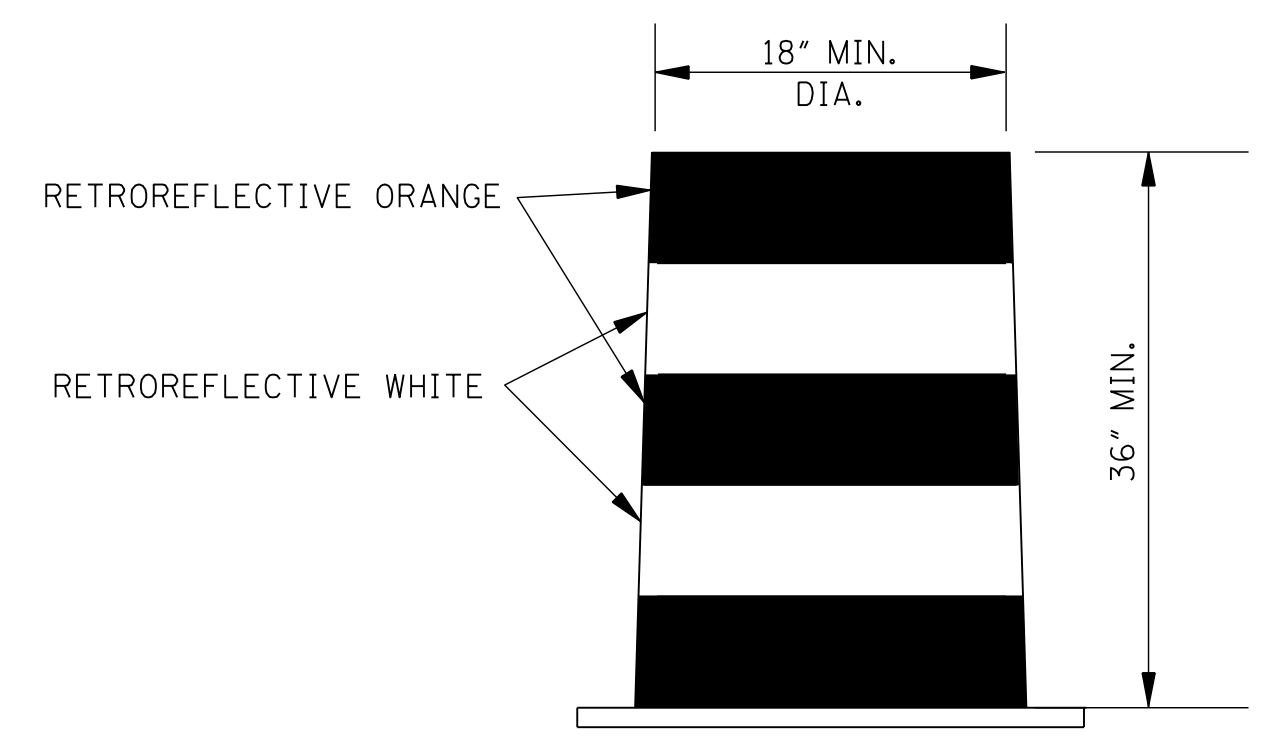
**TYPE 3 OBJECT MARKER
(OM-3R)**

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.



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.



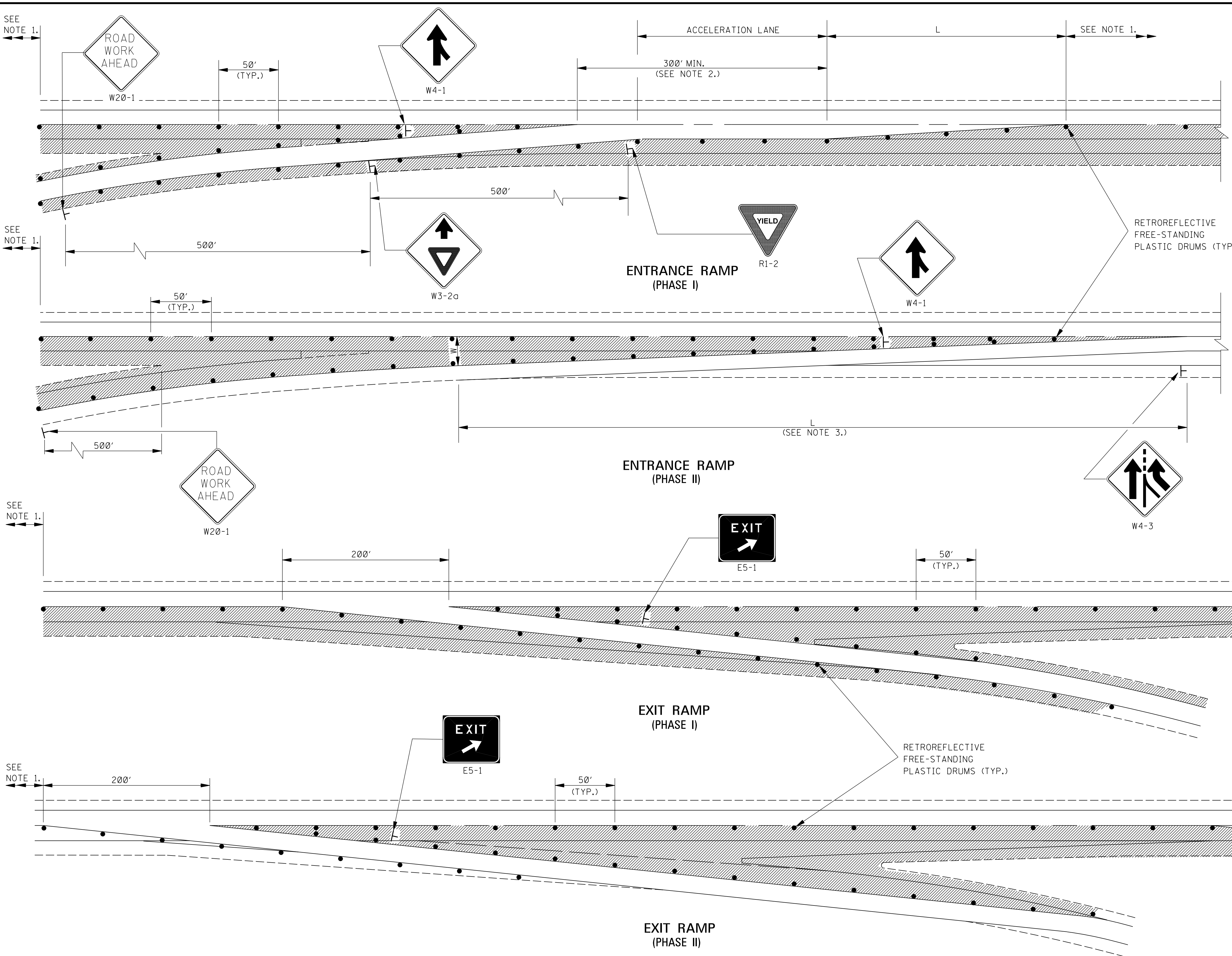
PLASTIC DRUM STRIPING DETAIL

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) RETROREFLECTIVE, 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 SHOULD BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS</p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	




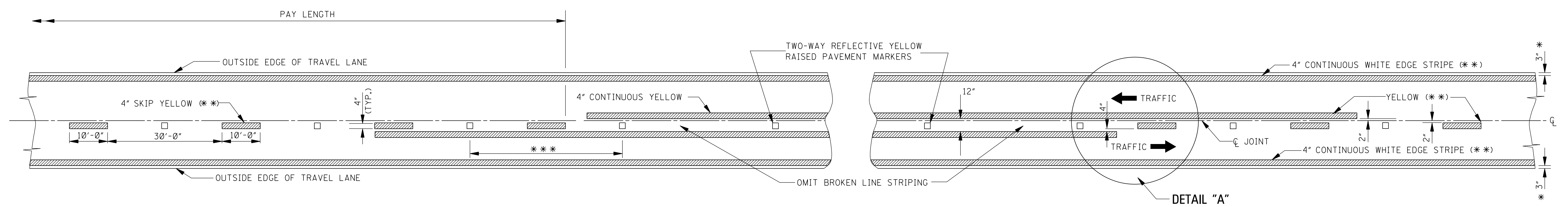
WORKING NUMBER
TCP-8
SHEET NUMBER
6358



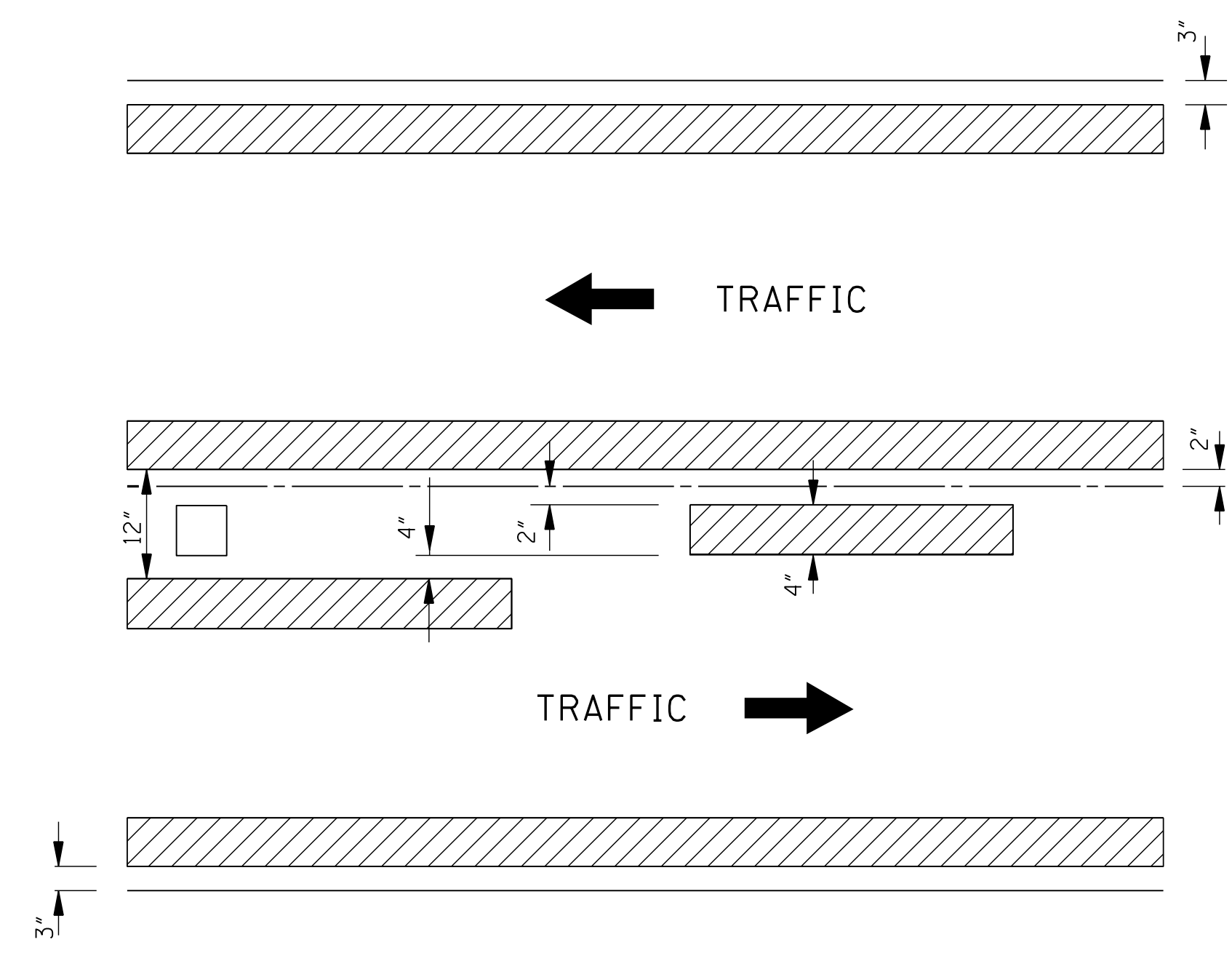
IN PHASE I:
 FOR STOP CONDITION: PLACE CHANGABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING PHASE I "STOP AHEAD" AND PHASE II "NO MERGE AREA".
 FOR YIELD CONDITION: PLACE CHANGABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING MESSAGE "YIELD AHEAD".

- 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 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
 $L = WS^2/60$ 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 SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		DETAILS OF OUTSIDE LANE CLOSURE AT EXIT AND ENTRANCE RAMP	
DATE		ISSUE DATE: AUGUST 01, 2017	
		 WORKING NUMBER TCP-10 SHEET NUMBER 6360	



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



DETAIL "A"



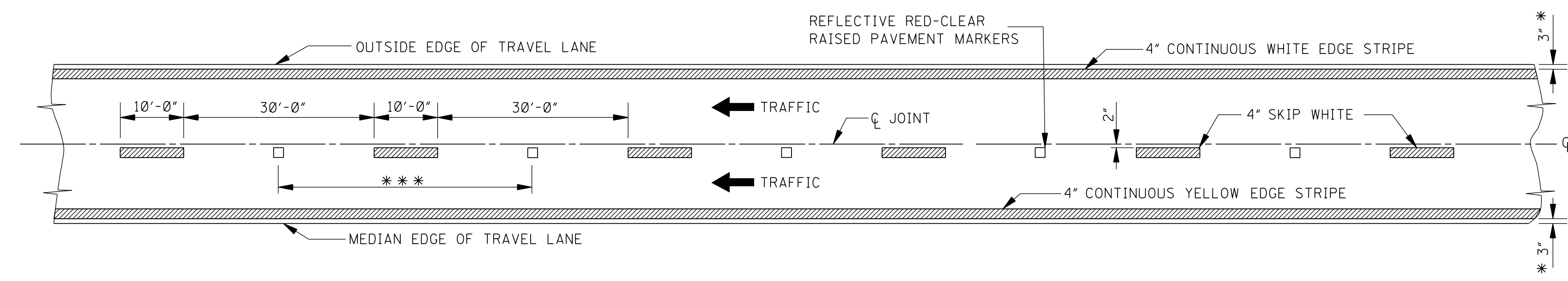
GENERAL NOTES:

- * 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. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
- *** 4. 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.

5. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDT "APPROVED SOURCES OF MATERIALS."

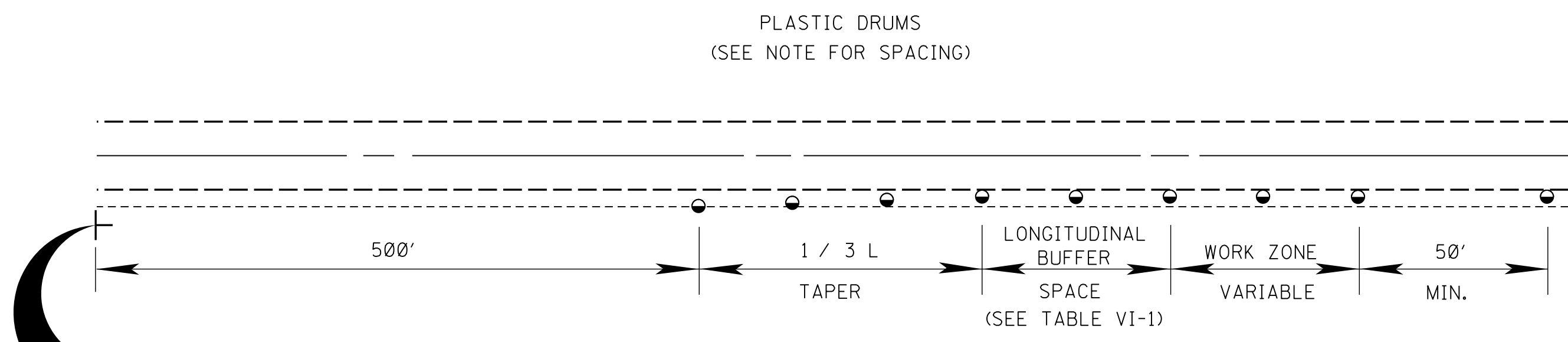


4-LANE WITH ONE-WAY TRAFFIC

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS
DATE	ISSUE DATE: AUGUST 01, 2017

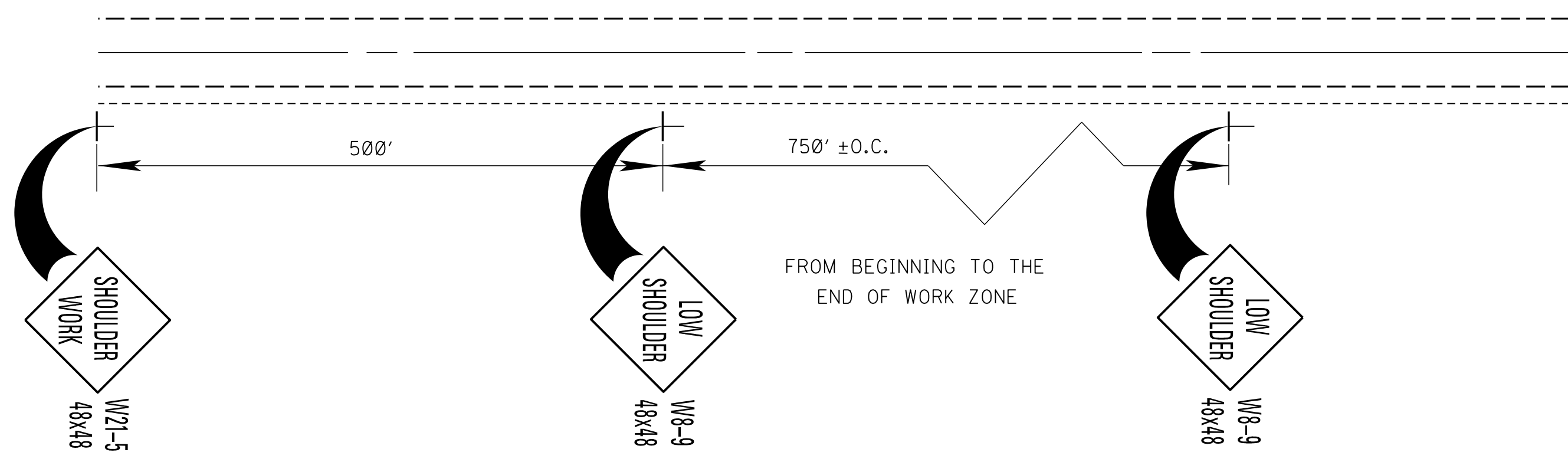
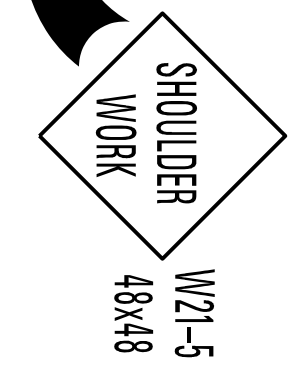


WORKING NUMBER
TCP-13
SHEET NUMBER
6363

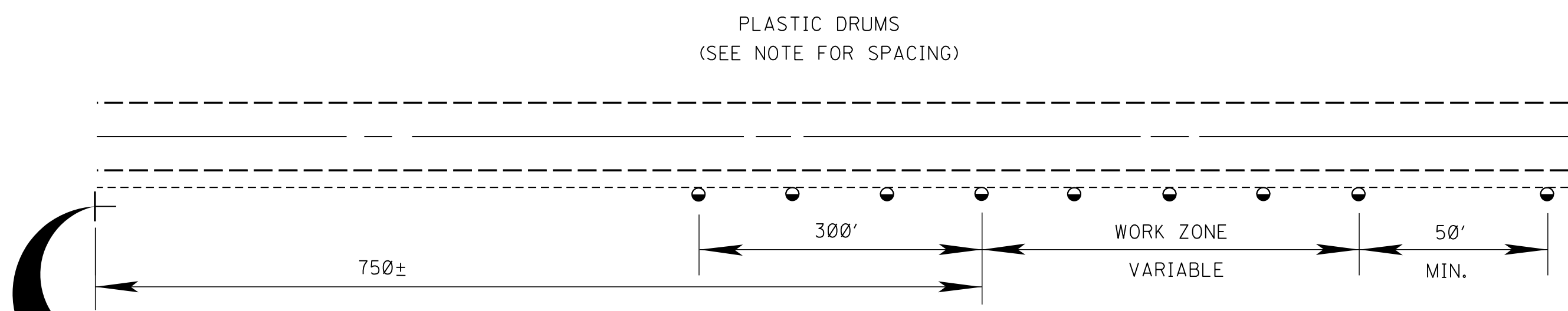
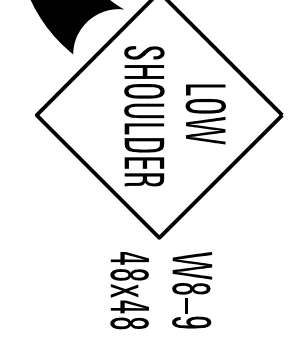
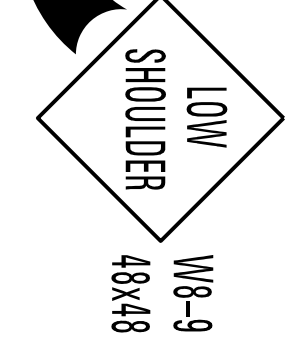


TYPICAL SHOULDER CLOSURE

- (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.

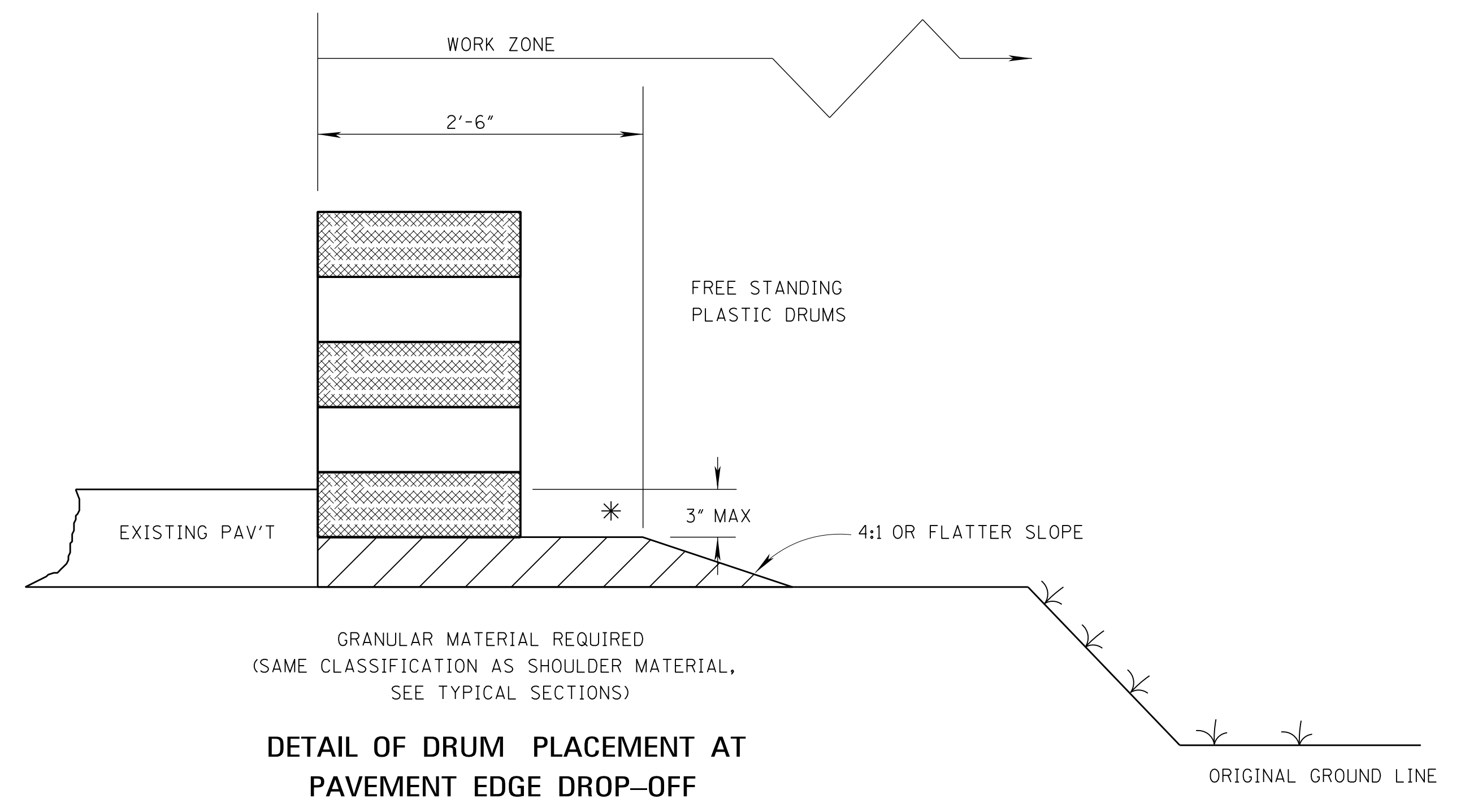
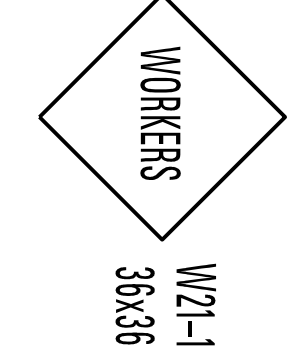
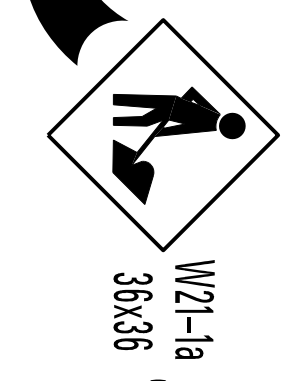


**TYPICAL SHOULDER WORK #1
(SEE NOTE A-1 THIS SHEET)**



TYPICAL SHOULDER WORK #2

NOTE:
WORK OUTSIDE TWO (2) FOOT 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'±0.C.).
 2. TWO AND ONE QUARTER TO THREE 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 THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 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.
 4. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) 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

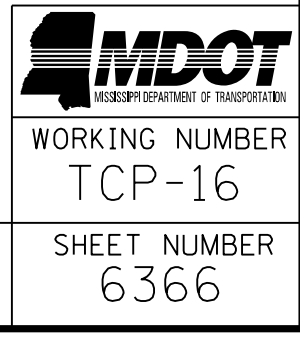
WHERE L = S X W
L = TAPER LENGTH IN FEET
S = SPEED IN MPH (POSTED OR 85 PERCENTILE)
W = WIDTH OF OFFSET IN FEET
- C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

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 ROADWAY DESIGN DIVISION STANDARD PLAN	
TRAFFIC CONTROL DETAILS DRUM PLACEMENT AND SHOULDER CLOSURE	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER	TCP-16
SHEET NUMBER	6366



STATE	PROJECT NO.
MISS.	MRP-6059-31(019)

<i>DESCRIPTION OF SHEETS</i>	<i>WORKING NUMBER</i>	<i>SHEET NUMBER</i>
<i>DETAILED INDEX (BRIDGE)</i>	<i>DI-BR-1</i>	<i>8001</i>
<i>UNDERPASS AT STATION 1770+10.85, CR 39 OVER I-59, BRIDGE REPAIR</i>		
<i>BRIDGE REPAIR LAYOUT, GENERAL NOTES, & ESTIMATED QUANTITIES</i>	<i>1 OF 5</i>	<i>8002</i>
<i>EPOXY REPAIR AND FRP WRAP DETAILS</i>	<i>2 OF 5</i>	<i>8003</i>
<i>70 FT. SPAN 3 DETAILS</i>	<i>3 OF 5</i>	<i>8004</i>
<i>BEAM DETAILS SHEET (TYPE III) SPAN 3</i>	<i>4 OF 5</i>	<i>8005</i>
<i>MISC. SPAN 3 DETAILS</i>	<i>5 OF 5</i>	<i>8006</i>

<i>BRIDGE DIVISION</i>		
<i>REVISIONS</i>		
<i>DATE</i>	<i>SHEET NO.</i>	<i>BY</i>

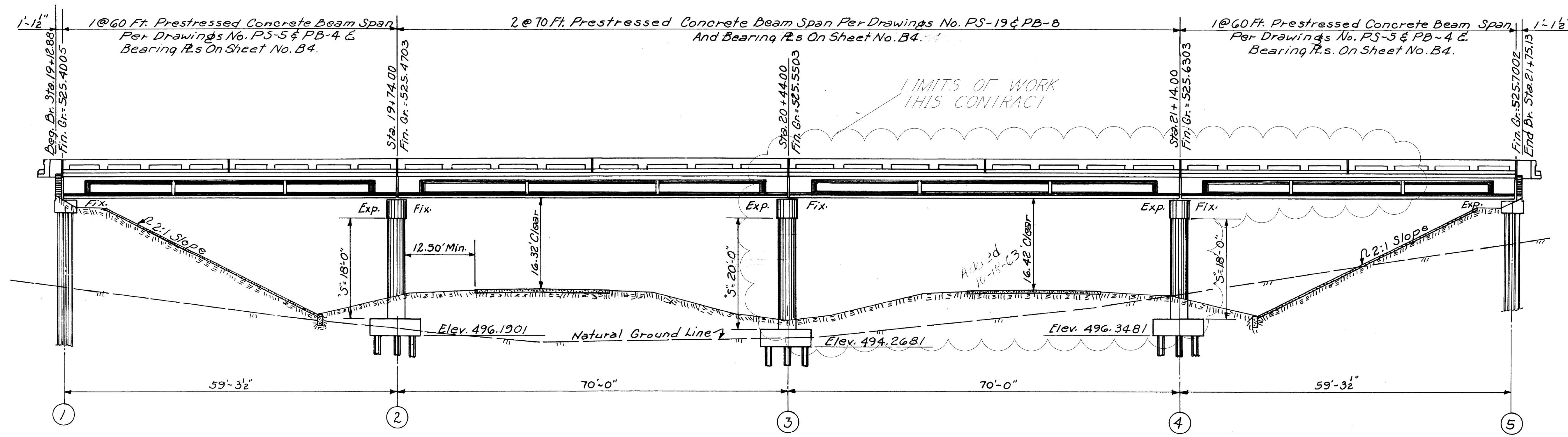
<i>SPECIAL DESIGN SHEETS</i>	<i>WORKING NUMBER</i>	<i>SHEET NUMBER</i>
<i>INFORMATION PLANS</i>		<i>8007</i>
<i>INFORMATION PLANS</i>		<i>8008</i>
<i>INFORMATION PLANS</i>		<i>8009</i>
<i>INFORMATION PLANS</i>		<i>8010</i>
<i>INFORMATION PLANS</i>		<i>8011</i>
<i>INFORMATION PLANS</i>		<i>8012</i>

001: 00 ANPM DGNFILENAME MISSISSIPPI DEPARTMENT OF TRANSPORTATION



REVISION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
	DATE	UNDERPASS AT STA. 1770+10.85
REVISION		DETAILED INDEX (BRIDGE)
DATE		FMS: 307159 / 301000
REVISION		COUNTY: JASPER
DATE		PROJECT NUMBER: MRP-6059-31(019)
REVISION		WORKING NUMBER
DATE		DI-BR-1
REVISION		SHEET NUMBER
DATE		8001

DESIGNER SHANE WRIGHT CHECKER PAUL DEES
 DETAILER SHANE WRIGHT ISSUE DATE 5/12/2020
 DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
 DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.



GENERAL NOTES:

Specifications: Mississippi Standard Specifications For Road and Bridge Construction, 2017.
 No change of plans will be permitted except by the approval of the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustments.
 Prior to the construction, all dimensions of the existing structure shall be field verified by the Contractor.
 The Contractor shall be responsible for adjusting the elements of the repair to ensure proper fit with the existing structure.
 All details are based on the dimensions shown on the original plans for the existing structure.
 Work for which no pay item is provided in the plans will not be paid for directly and shall therefore be considered an absorbed item of work.
 All new concrete shall be class AA.
 All reinforcing steel shall be ASTM A615, grade 60 unless otherwise noted.
 Any damage that occurs to the existing structure during the duration of this project shall be repaired to the satisfaction of the Engineer by the Contractor at no additional cost to the State.
 All material removed from the bridge shall become the property of the Contractor and shall be removed from the construction site.
 During construction, care shall be exercised to ensure that no debris falls onto the travel lanes below the structure.
 Exposed surfaces of new concrete shall receive a class 2 rubbed finish in accordance with specifications.
 Match existing finish, as nearly as possible.
 Chamfer all edges, unless otherwise noted.
 The final surface texture of the new bridge deck portion shall be fine finished according to 501.03.5.5.1 of the specifications.
 Railing expansion joint material shall be bituminous fiber type unless otherwise noted.
 Bar bending details shall be in accordance with "Manual of Standard Practice for Detailing Reinforced Concrete Structure" (ACI 315R-04).
 Reinforcement order list and required placing plans shall be furnished in accordance with Section 805 of the Mississippi Standard Specifications. Partial submittals are not acceptable.
 Shop drawings of prestressed beams, including an erection plan, shall be submitted in duplicate to the Director of Structures, State Bridge Engineer for approval prior to the manufacture of beams.
 The fabricator shall provide camber data at release and immediately prior to shipping.

MAINTENANCE OF TRAFFIC:

Maintain Traffic in accordance with Section 618 2017 Edition of the Standard Specifications For Road and Bridge Construction, the latest edition of the "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART 6" and the Traffic Control Plans included in these plans.

CLEANING NOTES:

Cap and columns at bent 4, diaphragm at bent 4, span 4, and underneath span 4 (including beams and deck) shall be cleaned by pressure washing to where all dirt, dust, soot from fire damage and any other debris is removed to the satisfaction of the Project Engineer. The pressure washer shall be able to maintain 3,500 psi of pressure.

SCOPE OF WORK:

1. Remove and replace span no. 3 in accordance with these plans and the information plans.
2. Clean and remove all dirt, debris, and soot from underneath span no. 4 which includes the bridge deck, beams, diaphragms, and etc... in accordance with "Cleaning Note" on this sheet.
3. Remove all damaged and unsound concrete from cap and columns of bent 4 and end diaphragm of span 4 at bent 4 and repair with epoxy mortar.
4. Install FRP on cap, columns, and diaphragm at bent 4 in accordance with details and notes on sheet no. 8003.

EPOXY BINDER NOTE:

Prior to placing new concrete, all concrete surfaces that will be in contact with the new concrete shall be painted with an approved epoxy binder designed to bond new concrete to old.

SPECIAL PROVISION:

Concrete Bridges and Structures 907-804

ESTIMATED QUANTITIES			
PAY ITEM NO.	DESCRIPTION	QUANTITY	UNIT
907-824-PP003	Bridge Repair, Epoxy Repair	405	SF
907-824-PP003	Bridge Repair, FRP Wrap	687	SF
907-824-PP004	Bridge Repair, Remove and Replace Span No. 3	1	LS
907-824-PP004	Bridge Repair, Cleaning	1	LS

CONTAINMENT NOTES:

Prior to construction, the Contractor shall submit a temporary containment plan for cleaning the designated repair area to the Director of Structures, State Bridge Engineer through the Project Engineer for review and approval. All debris and non-potable water shall be collected and disposed of properly.

DEMOLITION NOTE:

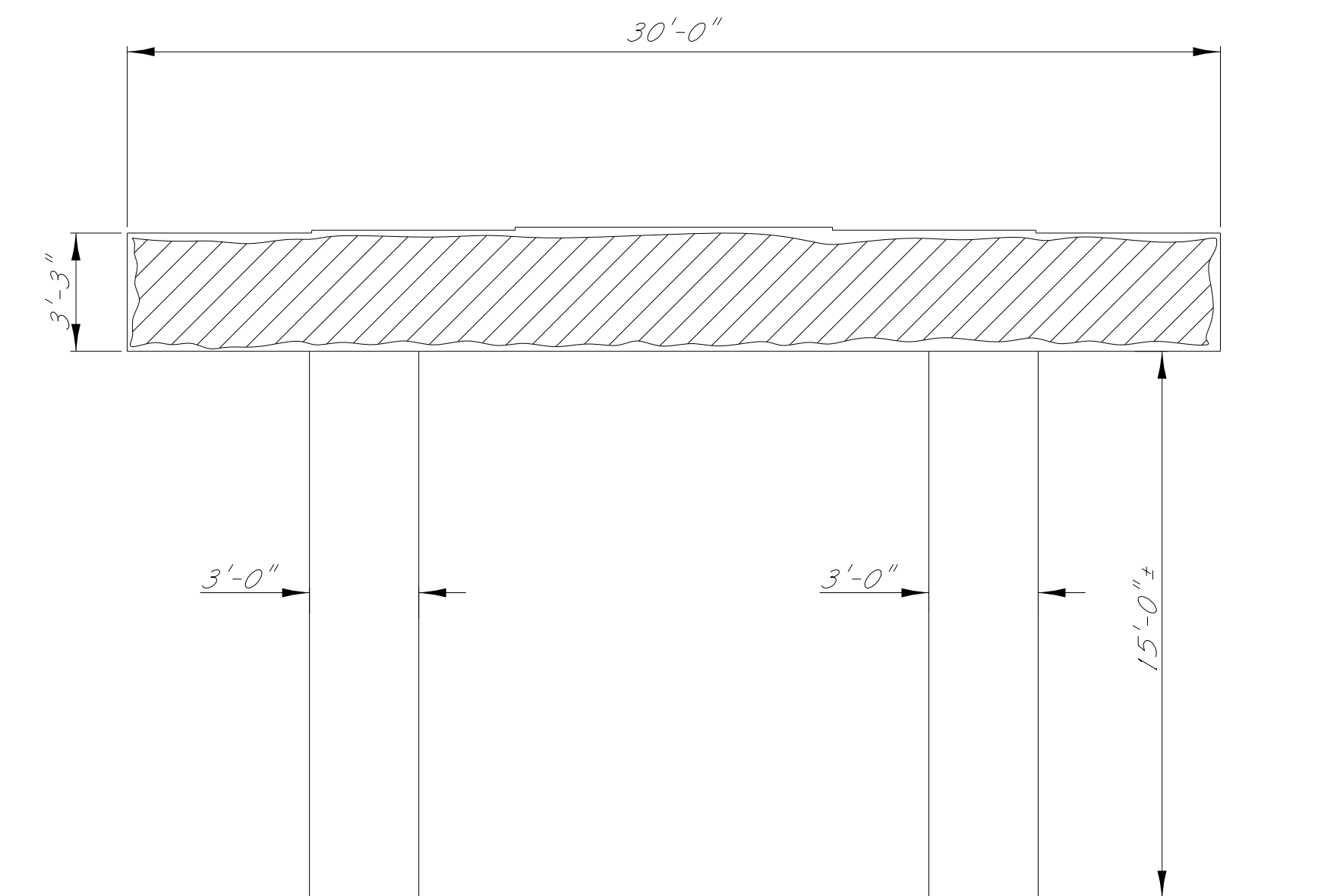
Prior to Construction, the Contractor shall provide a Demolition Plan to the Director of Structures, State Bridge Engineer through the Project Engineer for review and approval.



BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		UNDERPASS AT STA. 1770+10.85	
		BRIDGE REPAIR LAYOUT GENERAL NOTES, & ESTIMATED QUANTITIES	
		FMS: 307159 / 301000	
		COUNTY: JASPER	
		PROJECT NUMBER: MRP-6059-31(019)	
		WORKING NUMBER 1 OF 5	
DATE	DESIGNER SHANE WRIGHT	CHECKER PAUL DEES	SHEET NUMBER 8002
	DETAILER SHANE WRIGHT	ISSUE DATE 5/12/2020	
	DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.		
	DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.		

PROJECT PLAN SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

001: 00 ANPM DGN FILE NAME



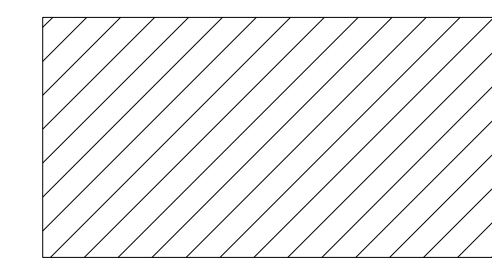
ELEVATION VIEW (Looking East & West)
Showing Epoxy Repair @ Bent 4, Column 1 & 2

Epoxy Mortar Repair Notes:

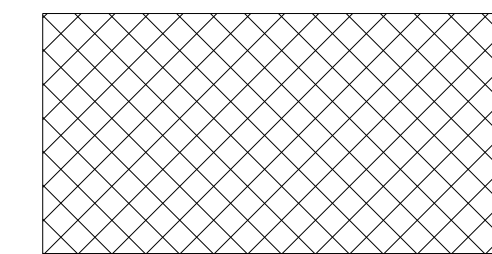
1. Repair all unsound concrete and spalled areas listed on this page along with any additional locations directed by the Project Engineer.
2. Prior to construction, all existing reinforcement shall be located. Care shall be exercised to protect the existing reinforcement from damage. Any reinforcement damaged during the concrete removal shall be repaired by the Contractor by a method approved by the Director of Structures, State Bridge Engineer at no additional cost to the State.
3. After removal of the damaged or unsound concrete, the repair area shall be squared up by saw cut around the perimeter of repair area to prevent feather edges. All residual concrete left in the repair area shall be removed. All pcc rust that has developed around or on reinforcement shall be blasted clean. For the removal of the damaged or unsound concrete, the Contractor is limited to a 30 pound hammer of smaller.
4. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions and details as shown in the information plans, unless noted otherwise.
5. Materials:
 - a. Epoxy Resin: Resin shall be selected from the MDOT approved materials list.
 - b. Silica Sand: Silica sand material shall be bagged general purpose blast cleaning sand.
 - c. Epoxy Mortar Mix: Epoxy mortar mix shall consist of part liquid epoxy and part clean, dry sand mixed in the ratio recommended by the manufacturer.
6. Application:
 - a. A representative of the epoxy manufacturer must be present for sufficient time to ensure the Contractor is properly schooled in the use of the epoxy materials.
 - b. Prior to placement of the mortar mix the prepared surface shall be lightly primed with neat epoxy.
 - c. Curing time shall be in accordance with manufacturer's recommendations.
7. The cost of saw cutting, removing spalled or damaged concrete, cleaning exposed reinforcing steel, patching material, labor and any miscellaneous materials necessary to complete the repairs as shown shall be paid for on a square feet basis as Bridge Repair, Epoxy Repair. This item shall be bid such that this item may be increased, decreased, or eliminated as directed by the Project Engineer.

Locations To Be Repaired:

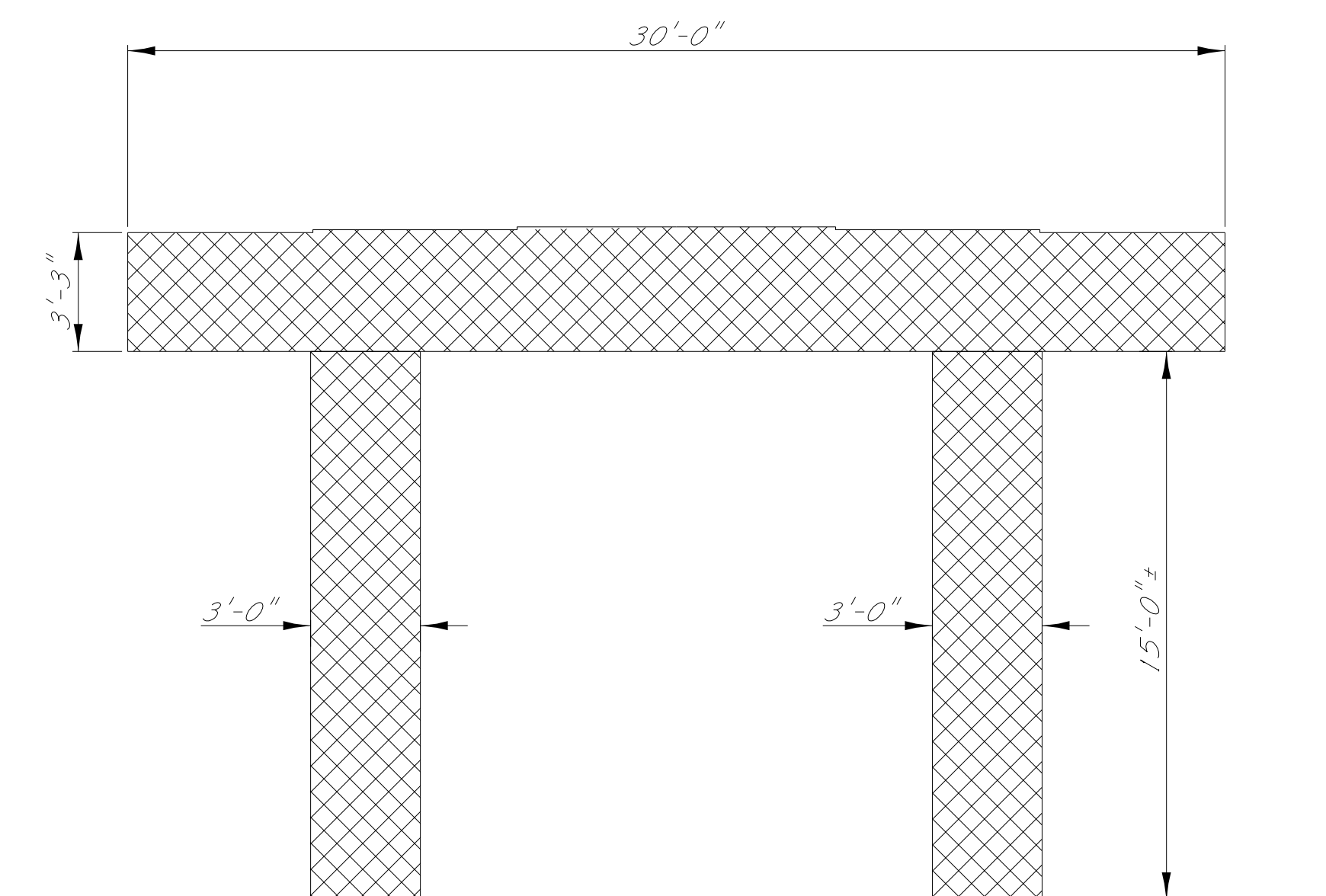
All sides of the Cap at Bent 4 shall be repaired according to the "Epoxy Mortar Repair Notes" on this sheet.
All sides of the Cap and Columns at Bent 4 shall be wrapped with FRP except the bearing locations.
All sides of the end diaphragm at bent 4, span 4 shall be repaired according to the "Epoxy Mortar Repair Notes" on this sheet.
All sides of the end diaphragm at bent 4, span 4 shall be wrapped with FRP.



Denotes areas of existing spalled or damaged concrete to be repaired with epoxy mortar.



Denotes areas of existing spalled or damaged concrete to be wrapped with FRP.



ELEVATION VIEW (Looking East & West)
Showing FRP Wrap @ Bent 4, Column 1 & 2

FRP WRAP NOTES:

1. FRP wrap shall be one of the following products or an approved equal and shall be applied according to the manufacturer's recommendations:
 - a. "FRP Wrap" as manufactured by Fyfe Co. LLC, www.aegion.com/about/our-brands/fyfe
 - b. "FRP Wrap" as manufactured by BASF Building Systems LLC, www.master-builders-solutions.basf.us
 - c. "FRP Wrap" as manufactured by QuakeWrap Inc, www.quakewrap.com
2. The Contractor shall furnish all submittals indicating the materials, tools, equipment, transportation, necessary storage, labor, installation plan and supervision required for the application of the composite or polymer system to the Director of Structures, State Bridge Engineer prior to construction.
3. Products shall be stored according to the manufacturer's requirements and shall avoid contact with moisture, dust and chemical exposure.
4. All FRP composite systems shall be proprietary systems consisting of all associated fiber reinforcement and polymer adhesives/resins. FRP composites consisting of fiber reinforcement and polymers provided by more than one manufacturer are not allowed.
5. The FRP composite system shall utilize carbon fiber reinforcement as the primary fiber material (primary structural component).
6. The FRP system shall be top coated with a coating approved by the FRP system supplier. The coating color shall be selected by the Project Engineer.
7. FRP wraps shall not be installed when the ambient temperature is below 40°F or above 130°F. In cold conditions, auxiliary heat may be applied to raise the ambient temperature to a suitable level. Clean heat sources shall be utilized for this purpose (e.g., electric or propane) that do not contaminate the substrate with carbonation.
8. FRP wraps shall not be installed when surface moisture is present on the substrate or when rainfall or condensation is anticipated in the work areas. If water leakage exists through cracks or concrete joints, water flow shall be stopped prior to FRP installation.
9. Resins (including primers and fillers) shall be mixed according to the FRP system manufacturer's installation instructions. All resin components shall be at a proper temperature and mixed in the manufacturer's prescribed mix ratio until there is a uniform and complete mixing of components. Resin components are often contrasting colors, so full mixing is achieved when color streaks are eliminated. Resins should be mixed for the Manufacturer's prescribed mixing time and visually inspected for uniformity of color.
10. A representative of the FRP wrap manufacturer must be present for sufficient time to assure that the Contractor is properly schooled in the installation of FRP wrap.
11. Prior to installation of FRP wraps, the Contractor shall repair concrete spall areas in accordance with concrete patching details and notes shown on this sheet.
12. All labor, materials, and surface preparation associated with the installation of FRP wraps shall be included in pay item 907-824-PP008, Bridge Repair, FRP Wrap.
13. The fibrous reinforcement system shall have a minimum tensile force of 2.1 kips/in. in the direction of the shear reinforcement.
14. Prior to wrapping the bent cap and column, the bent cap end shall be wrapped parallel to the bent. The direction of the fiber wrap shall be in the direction of the shear reinforcement (vertical for bent caps; horizontal for column).

ADDITIONAL FRP WRAP NOTES:

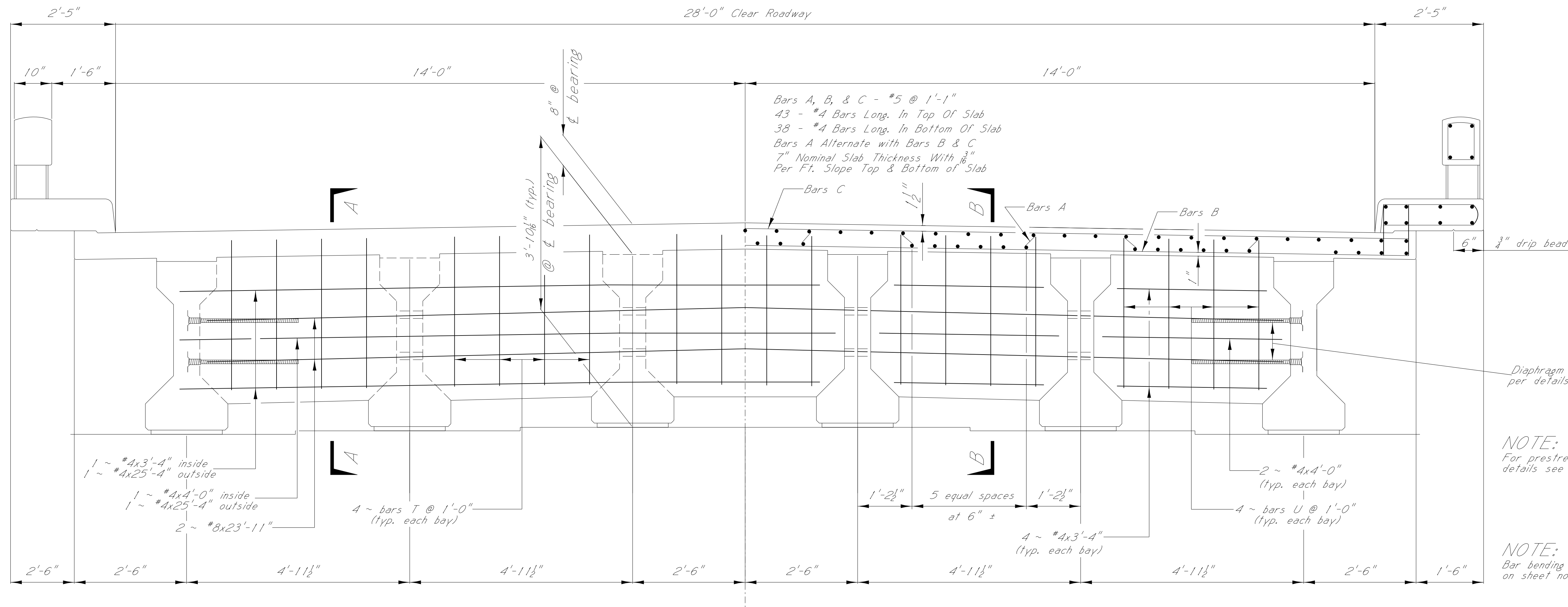
In addition to the Manufacturer's requirements, the Contractor shall ensure the structural integrity and durability of the reinforced fiber wrap system by meeting the following acceptance guidelines:

- Small delaminations, less than 2 in. each, are permissible as long as the delaminated area is less than 5% of the total laminate area and there are no more than 10 such delaminations per 10 ft.
- Large delaminations, greater than 25 in., can affect the performance of the installed system and shall be repaired by selectively cutting away the affected sheet and applying an overlapping sheet patch of equivalent piles; and
- Delaminations less than 25 in. may be repaired by ply replacement.

Before repairing any delaminated areas, the Contractor shall submit a FRP repair procedure to the Director of Structures, State Bridge Engineer for review and approval.



BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		UNDERPASS AT STA. 1770+10.85	
		EPOXY REPAIR & FRP WRAP DETAILS	
		FMS: 307159 / 301000	
		COUNTY: JASPER	
		PROJECT NUMBER: MRP-6059-31(019)	
		WORKING NUMBER	
		2 OF 5	
DATE		DESIGNER SHANE WRIGHT	CHECKER PAUL DEES
		ISSUE DATE 5/12/2020	SHEET NUMBER
		8003	
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E. DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.			



Bars A, B, & C - #5 @ 1'-1"
 43 - #4 Bars Long. In Top Of Slab
 38 - #4 Bars Long. In Bottom Of Slab
 Bars A Alternate with Bars B & C
 7" Nominal Slab Thickness With $\frac{3}{8}$ "
 Per Ft. Slope Top & Bottom of Slab

Diaphragm inserts and lagstuds
 per details on sheet no. 8006

NOTE:
 For prestressed beam details and other
 details see sheet no. 8005 & 8006.

NOTE:
 Bar bending details for A, B, & C bars are located
 on sheet no. 8011 of the information plans.

PART SECTION NEAR END OF SPAN

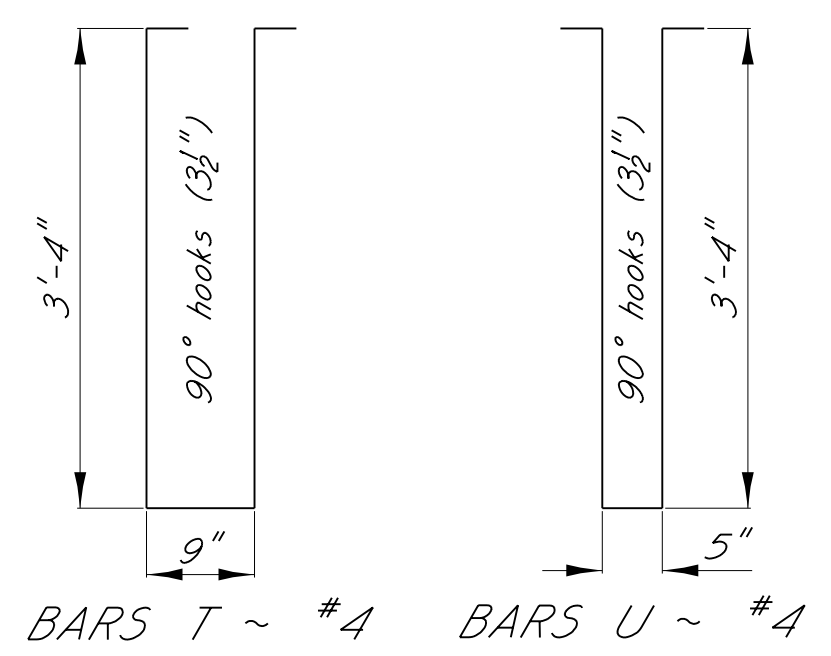
Showing span 3 end diaphragm details

PART SECTION NEAR INTERMEDIATE DIAPHRAGM

Showing span slab reinforcing & int. diaphragm details

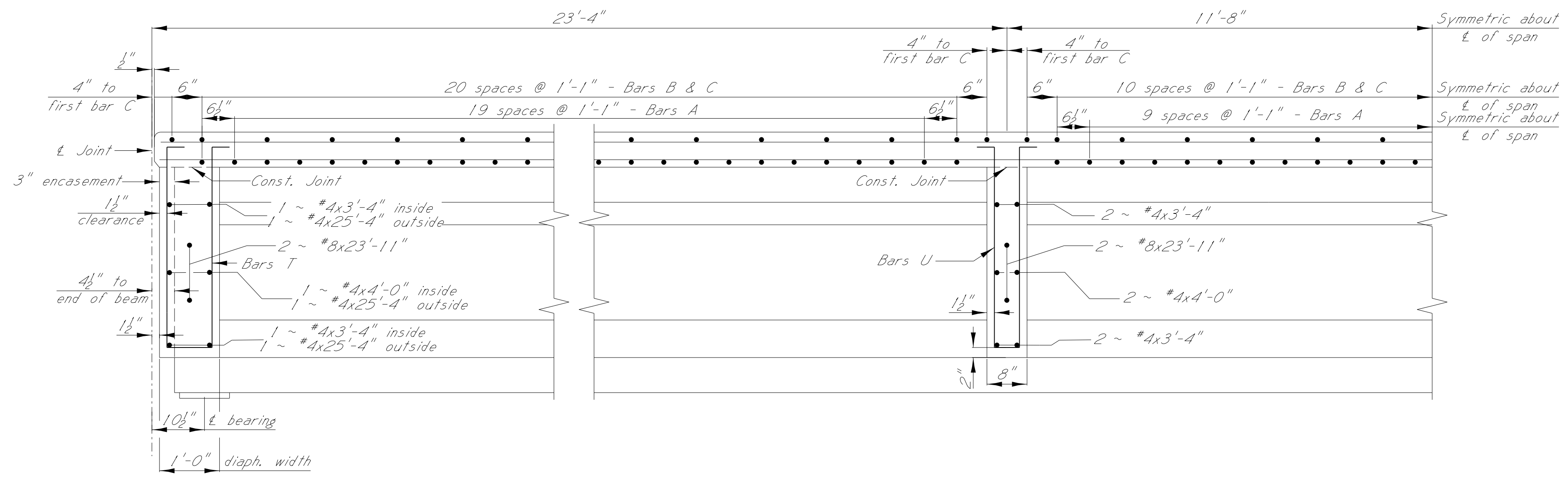
NOTE:
 For all other concrete dimensions, details and reinforcement
 details see in the information plans

NOTE:
 Contractor should be aware of possible
 tilting of exterior beams during construction
 of the superstructure and should take precautionary
 steps to prevent such tilting of beams.



BAR BENDING DETAILS

DESIGN DATA:
 Specifications AASHTO 2002.
 Loading HS 20-44



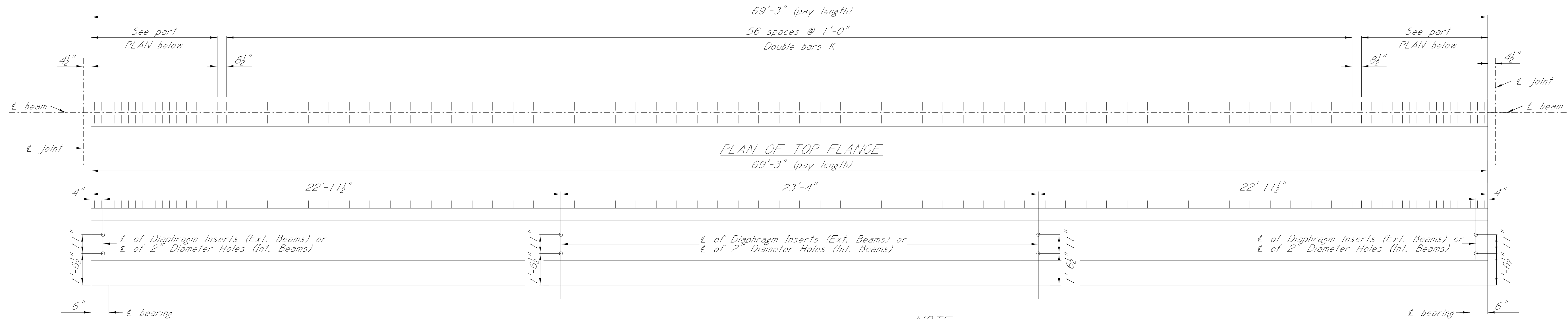
SECTION A-A

SECTION B-B



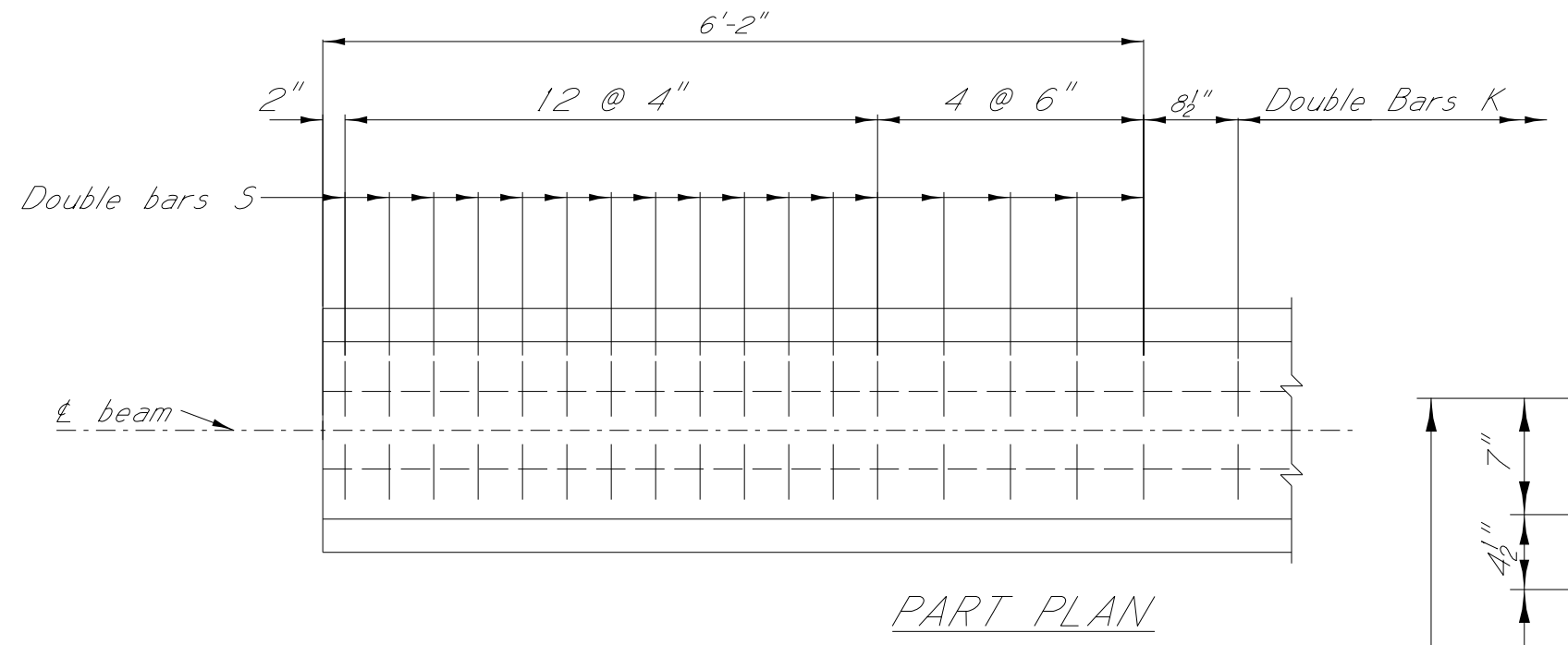
BY MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
UNDERPASS AT STA. 1770+10.85	
70 FT. SPAN 3 DETAILS	
REVISION	FMS: 307159 / 301000
	COUNTY: JASPER
	PROJECT NUMBER: MRP-6059-31(019)
DATE	DESIGNER SHANE WRIGHT
	CHECKER PAUL DEES
	ISSUE DATE 5/12/2020
	DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
	DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.
WORKING NUMBER	3 OF 5
SHEET NUMBER	8004

001: 00 ANPM DGN FILE NAME

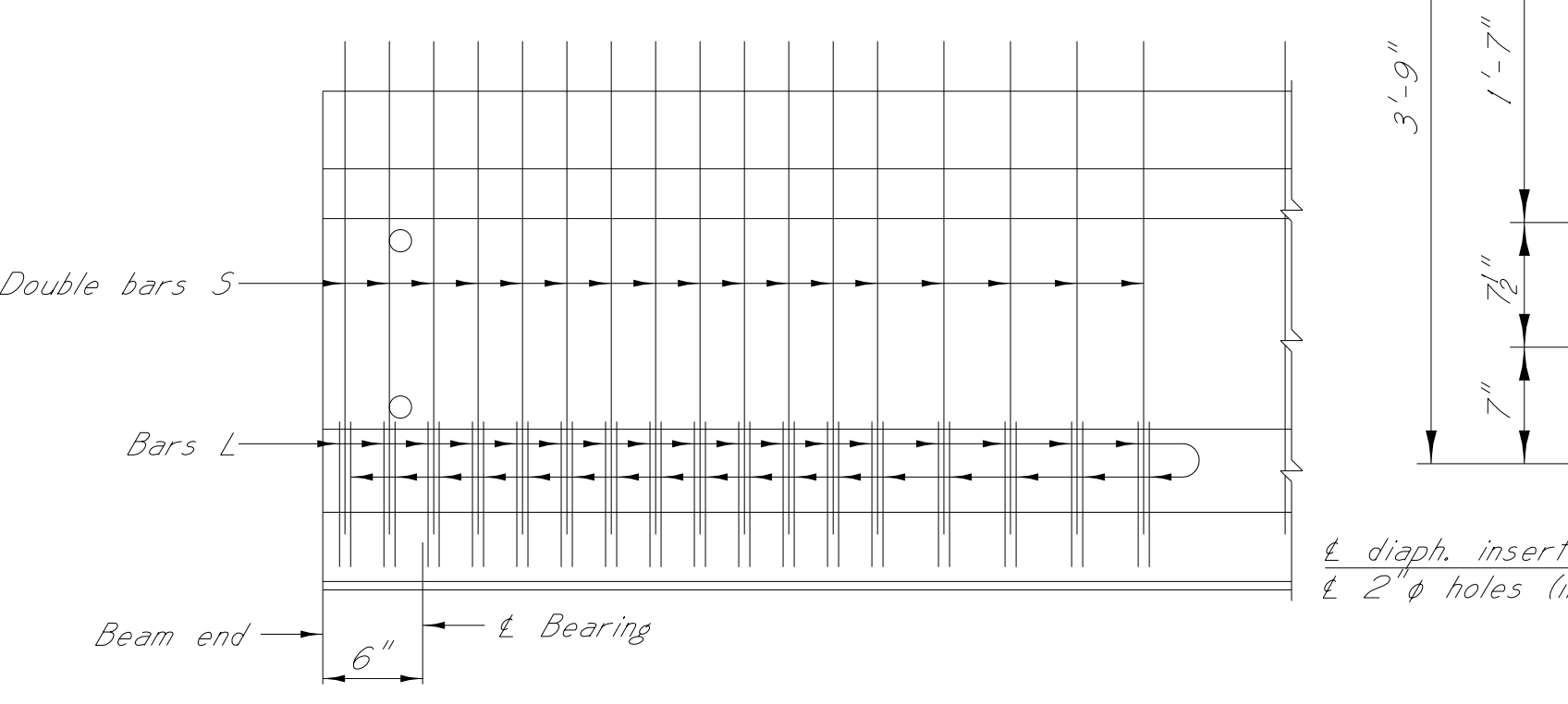


ELEVATION

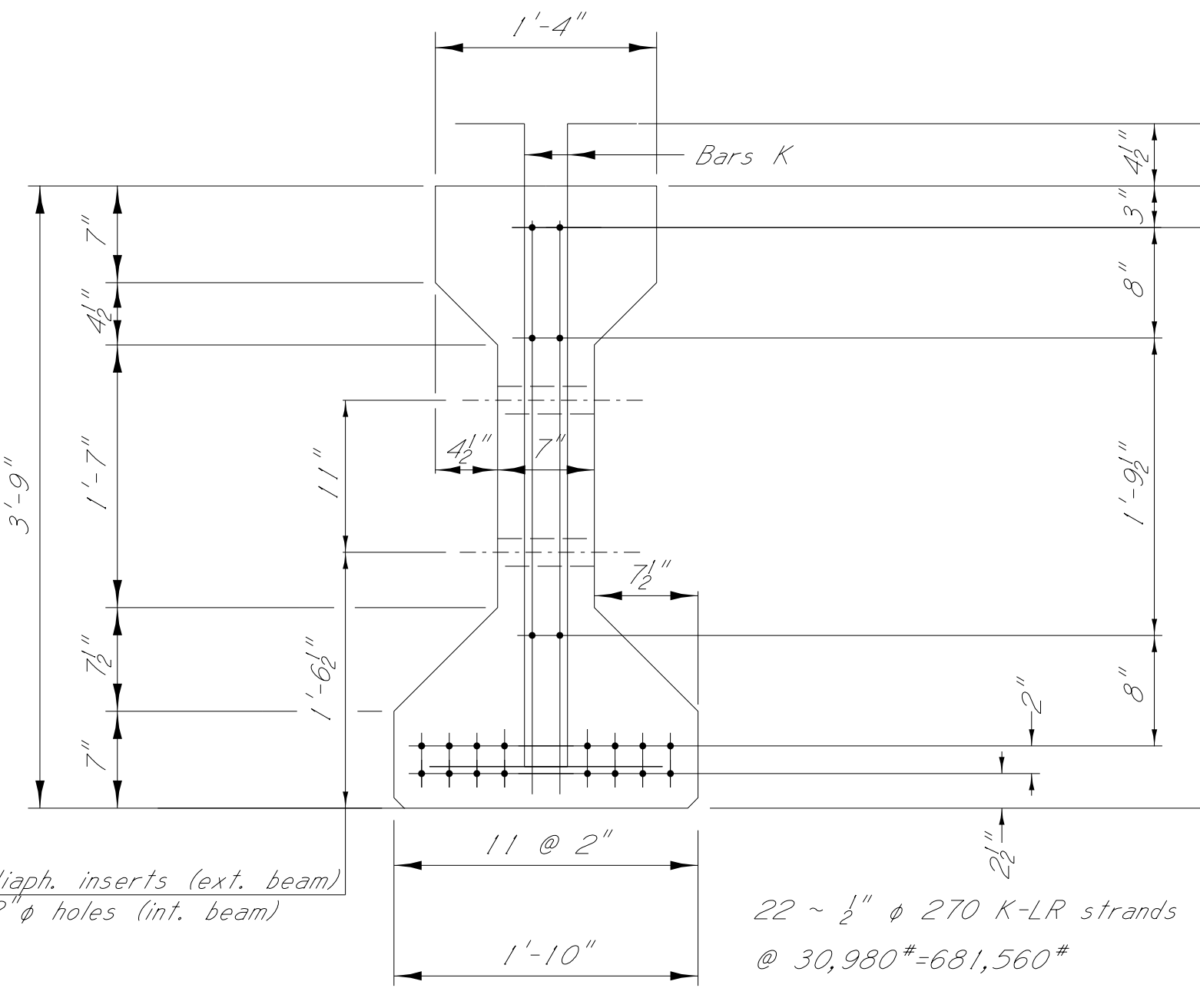
NOTE:
Cut strands flush and weatherproof with limestone colored "Sonolastic" (Sonneborn Building Products), GC-9 Synthacalk (Pecora Corp.), or approved equal, meeting the requirements of Federal Specification No. TT-5-00227E or TT-5-00230G, applied according to to Manufacturer's directions.



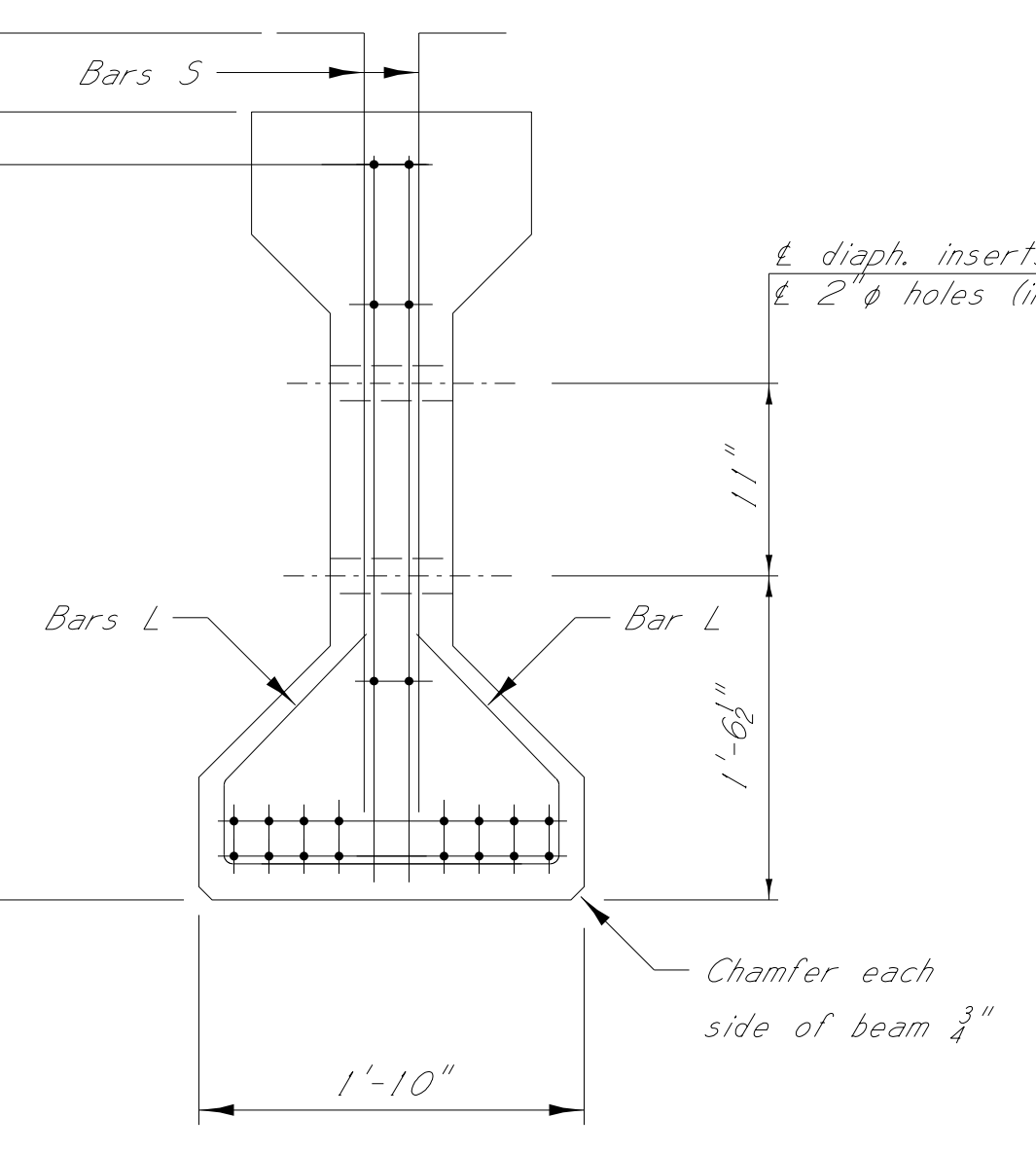
PART PLAN



PART ELEVATION
Strands not shown for clarity



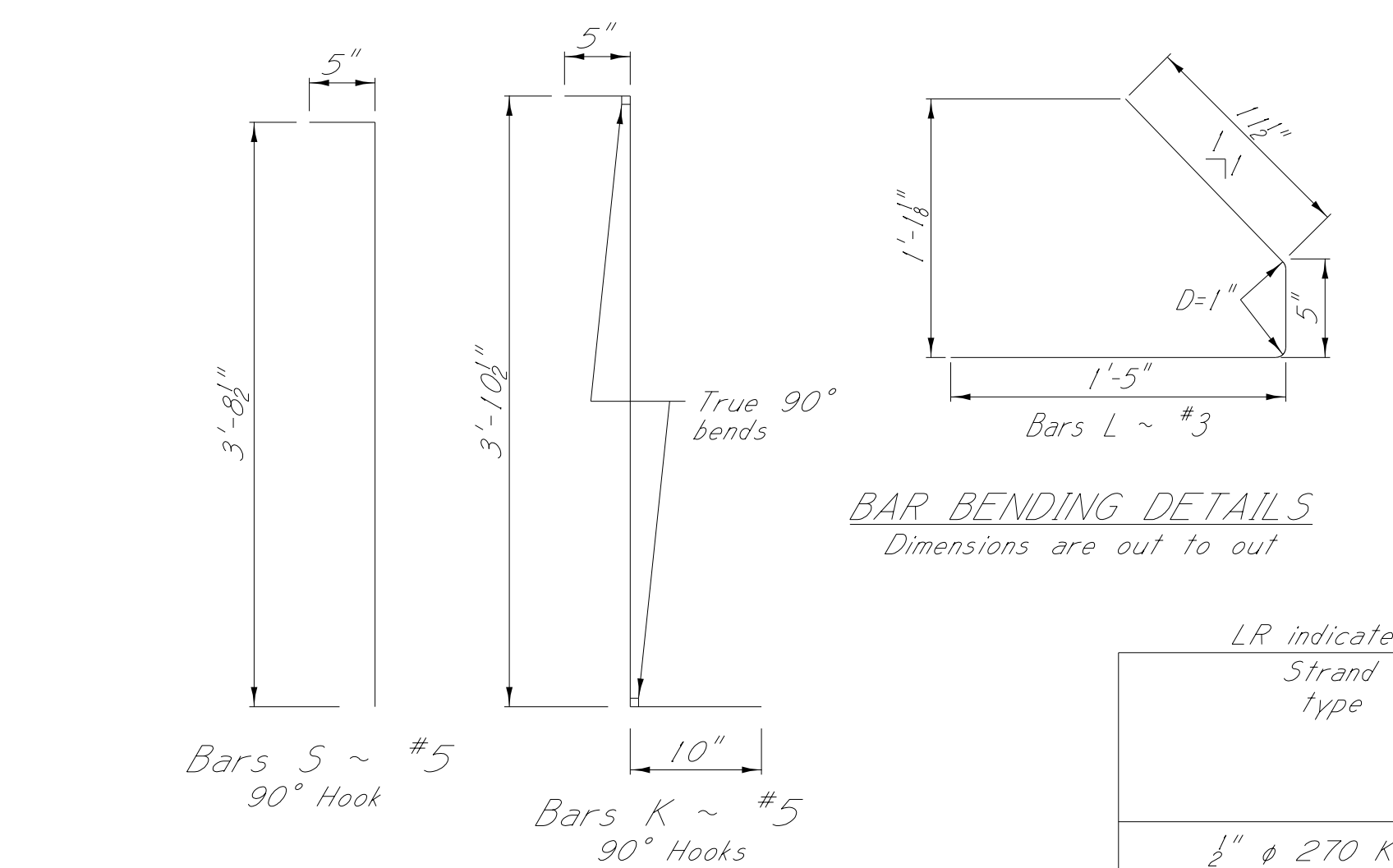
SECTION NEAR & SPAN



END ELEVATION

ADDITIONAL NOTES:

- All prestressed concrete beam shop drawing submittals shall include, but not be limited to, the following:
- Plan views of each span noting bent numbers, beam numbers, beam types, pay lengths and bearing types.
 - Horizontal bed lengths and dimensions.
 - Number of beams per bed including detailed drawings of pour and fabrication sequence.
 - Beam dimensions
 - Bar bending details
 - Bar spacings
 - Strand types, strand patterns, strand paths, Hold up/Hold down (if any) & centroids
 - Diaphragm insert locations and details
 - Handling and storage details
 - Bearing types
 - Locations and details of anchors for Stay-in-Place metal forms
 - Elongation calculations
- Beam Fabricator shall have an adequate number of forms to ensure that they can pour all beams in a single bed in a continuous operation as shown in the detail in the submittal. Forms shall not be removed until all beams in a bed in the indicated pour are cured. Fabricator shall provide notes in the shop drawings to reflect this. The Contractor is responsible for all beams during shipping, handling, storage & erection procedures. The stability of the beams during these processes shall be accounted for by the Contractor to ensure a satisfactory product at the end of construction. In the event that cracking appears after a beam has been cast, all cracking locations shall be noted and it shall be submitted in writing to the Director of Structures, State Bridge Engineer to determine if the beam shall be accepted or rejected.



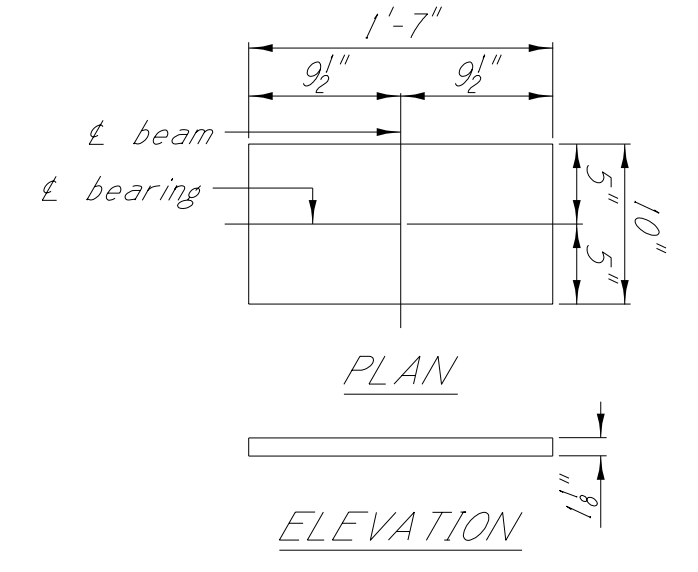
BAR BENDING DETAILS
Dimensions are out to out

GENERAL NOTES:

Beams shall be manufactured in accordance with Mississippi Standard Specifications for Road & Bridge Construction, 2017. 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 1/2" diameter 270 K-LR strands. Shop drawings of prestressed beams shall include the type and location of all strands. The Director of Structures, State Bridge Engineer shall be notified if the camber of the beam is not within the limits shown in table. At transfer of tensioning load, the cylinder strength of the concrete shall be as shown in table.

DESIGN DATA

Unit stresses are in accordance with AASHTO, 2002
Stay-in-Place metal forms 18 psf (between flanges)



NEOPRENE PAD (NP1) DETAILS
In no case shall neoprene pads be field cut. Bearing area on top of cap shall be cast smooth and true to grade.

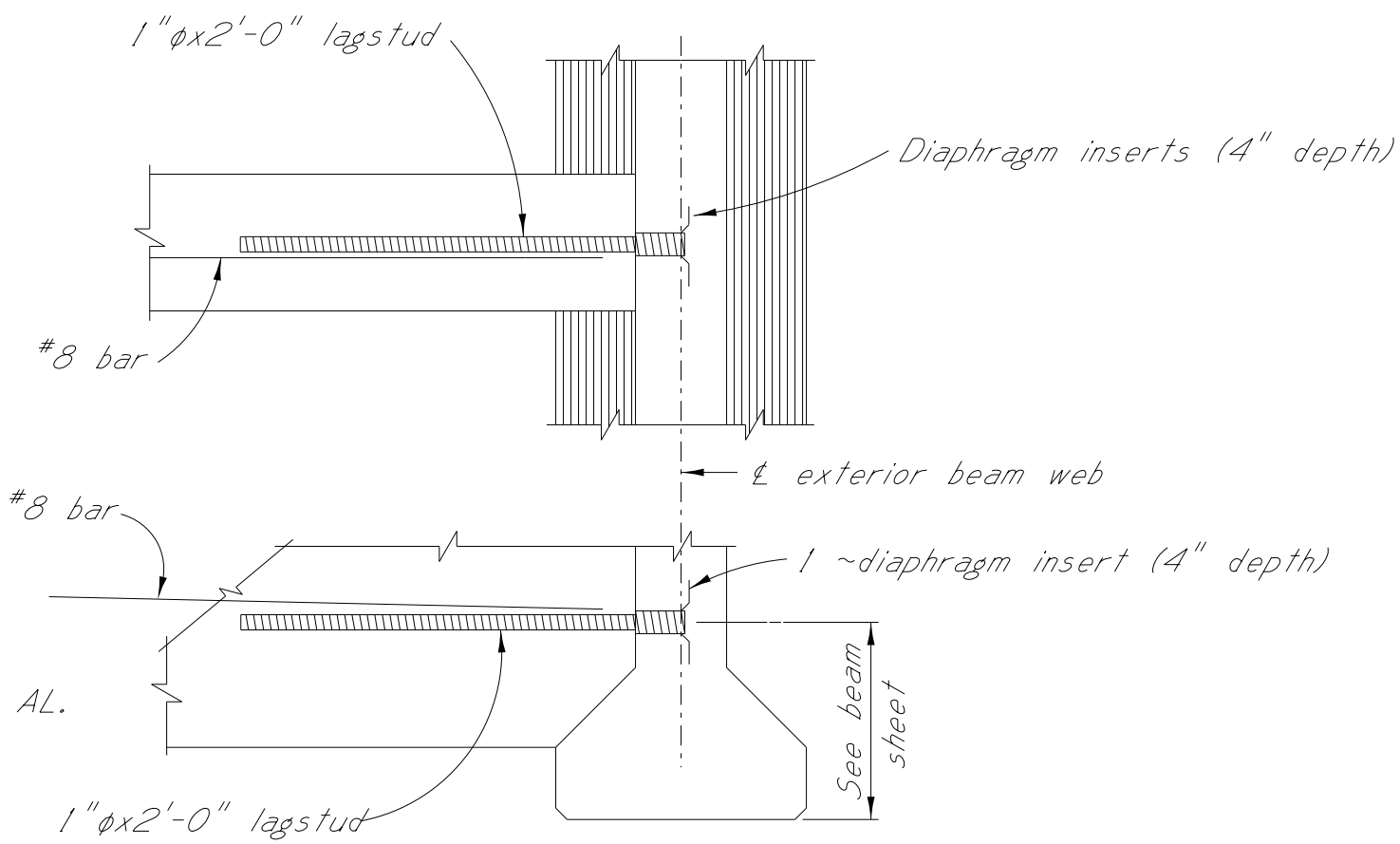
For deflection diagram, see Misc. Span Details per sheet no. 8006.

Strand type	Minimum breaking strength	Initial tension	Required number and location of strands				Centroid for total number of strands		Distance from & span to hold-down point	Camber limits	Deflection diagram			Minimum concrete strength at time of release (psi)	
			Total Number strands	Straight strands		Draped strands		At & span			At beam end	A	B		C
				Number strands	Centroid (in.)	Number strands	Centroid (in.)								
1/2" diameter 270 K-LR	41,300	30,980	22	22	10.59			10.59	10.59	0 to 1"	1/16"	1/16"	1/4"	4200	



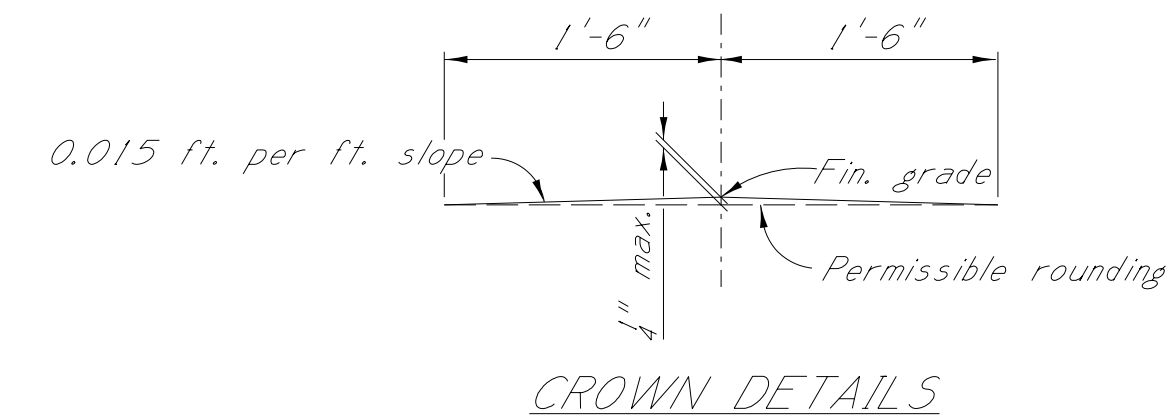
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REVISION	UNDERPASS AT STA. 1770+10.85
	BEAM DETAILS SHEET (TYPE III)
	SPAN 3
DATE	FMS: 307159 / 301000
	COUNTY: JASPER
	PROJECT NUMBER: MRP-6059-31(019)
DESIGNER SHANE WRIGHT	CHECKER PAUL DEES
DETAILER SHANE WRIGHT	ISSUE DATE 5/12/2020
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	

001: 00 ANPM DGN FILE NAME PROJECT PLAN SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

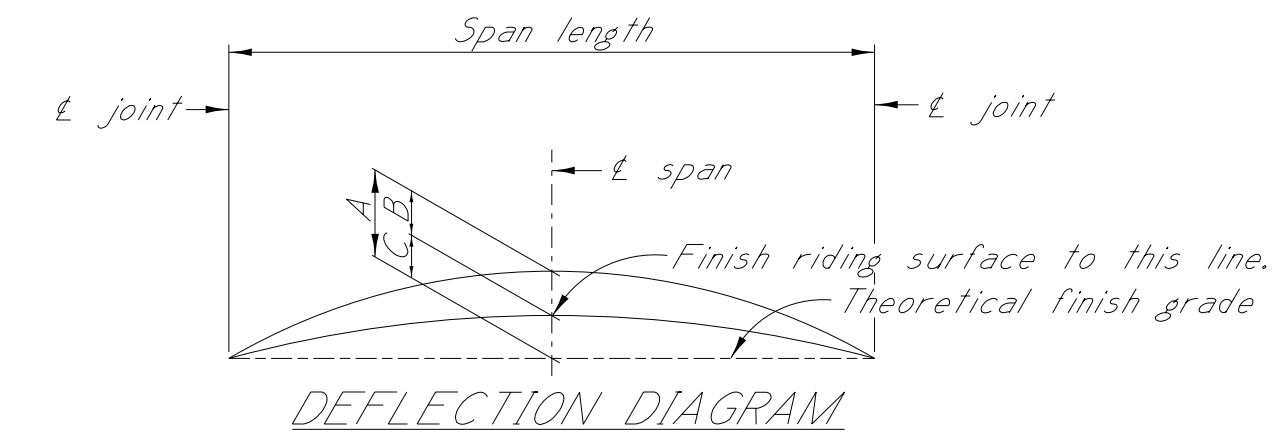


PART SECTION
DIAPHRAGM INSERT AND LAGSTUD DETAILS

NOTE: Continuous threaded lagstuds and diaphragm inserts shall be as manufactured by the Richmond Screw Anchor Co., Inc., Atlanta, GA; By Meadow Steel Products Co., Inc., Birmingham, AL Or Dayton Superior Co., Inc., Birmingham, AL.



CROWN DETAILS



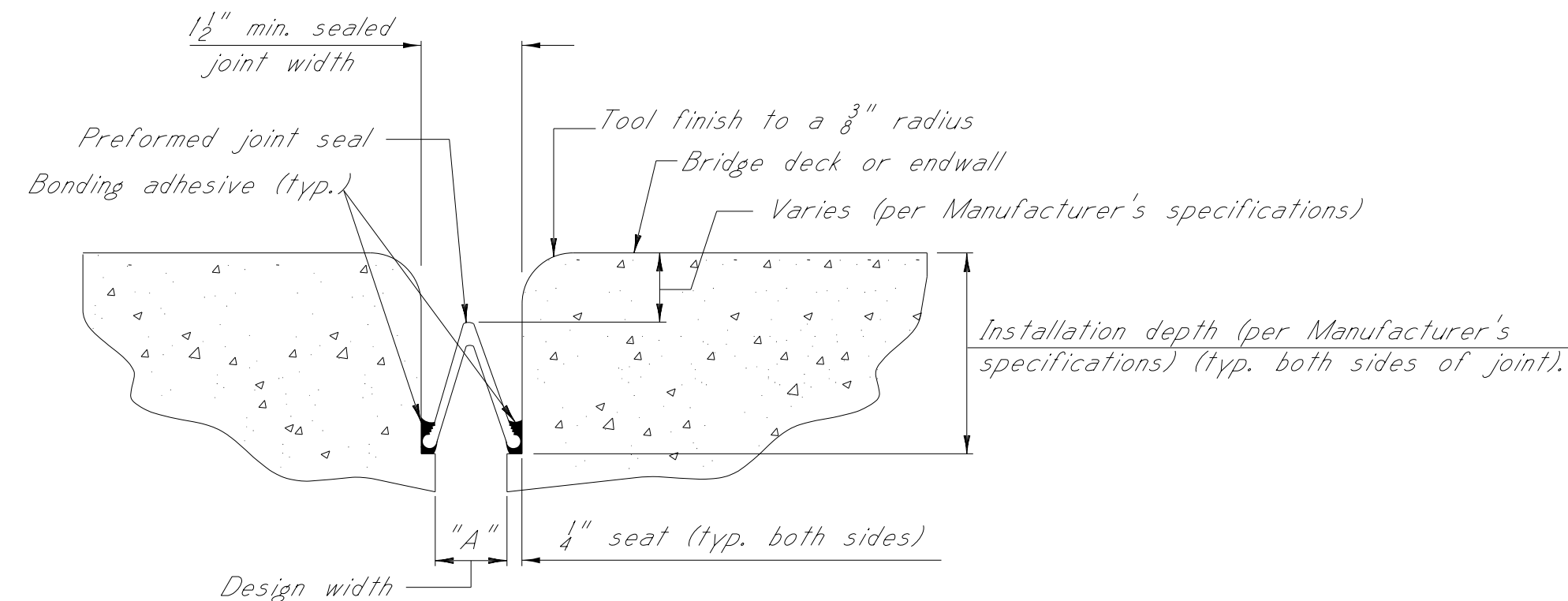
DEFLECTION DIAGRAM

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 or creep.

NOTE: For values of A, B & C, see Beam Detail sheets.

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

NEOPRENE PAD THICKNESS TABLE		
PAD MARK	PAD THICKNESS	COMPRESSED PAD THICKNESS
NP1	1 1/8"	1 1/8"



TYPICAL SECTION PREFORMED JOINT SEAL

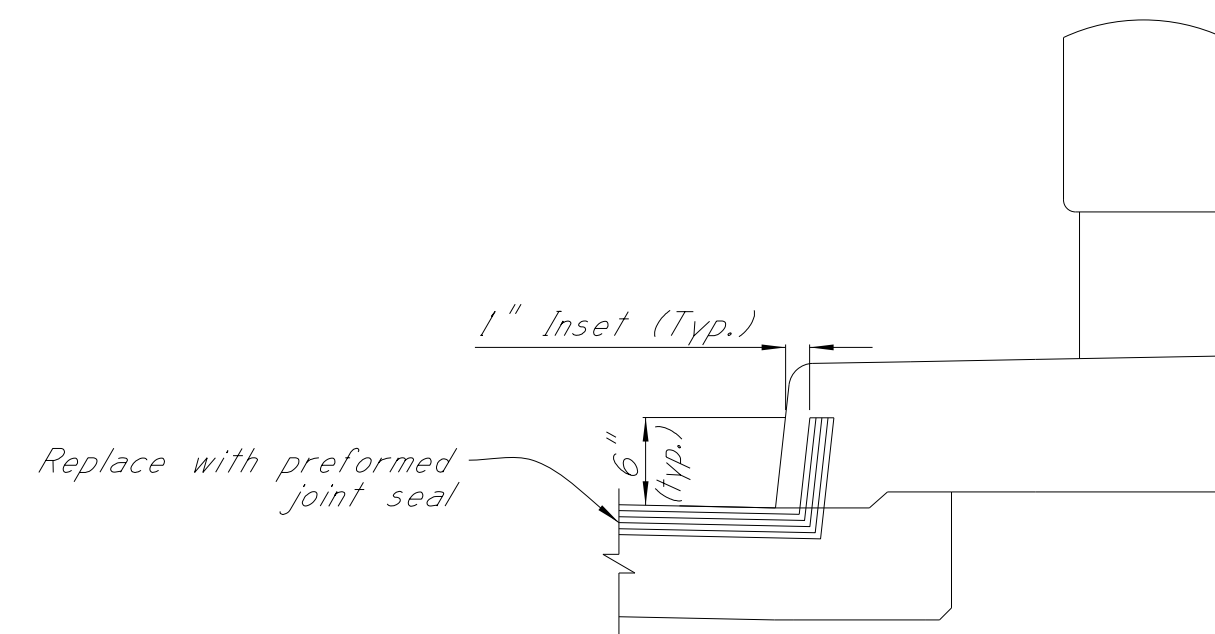
PREFORMED JOINT SEAL NOTE:

A preformed joint seal shall be placed at bent 3 and bent 4 according to the preformed joint seal detail on this sheet. All items of work associated with the preformed joint seal will be considered an absorbed item.

NOTES: 1. Joint installation and sealing on newly constructed bridge decks shall not be paid for directly and shall be considered an absorbed item of work.
2. The preformed joint seal shall be one of the following, installed according to the Manufacturer's specifications:

- A. Silcoflex Joint Sealing System, manufactured by R.J. Watson, Inc. www.rjwatson.com
- B. Wabo SPS Joint System manufactured by Watson Bowman Acme Corporation www.wbcorp.com
- C. Silspec SSS Silicone Strip Seal manufactured by SSI Commercial & Highway Construction Materials www.ssicm.com

3. For estimating purposes, The RJ Watson Silcoflex Joint Sealing System was selected. However, should another supplier be chosen, it is the Contractor's responsibility to ensure that the Manufacturer's recommendations are followed for joint preparation, installation depths and widths, adhesive setting times, and any other variances between the specifications provided by the Manufacturers. A Manufacturer representative shall be present at the time joint sealing begins to ensure that the Contractor is properly schooled in installation of the joint material. All open joints shall be sealed at their design widths, dimension "A", as indicated on the end bent and span details.
4. Dimension "A" is defined as the design width of the joint opening, which does not account for the 1/4" seat required on both sides of the joint. Preformed Joint Seal, Type I, shall be used for design widths less than 2". Preformed Joint Seal, Type II, shall be used for design widths greater than or equal to 2", with the maximum design width being 2 1/2". In cases where design widths are greater than 2 1/2", another type of expansion material shall be required as directed by the Director of Structures, State Bridge Engineer.
5. 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 additional cost to the State.



ELEVATION AT END OF SPAN

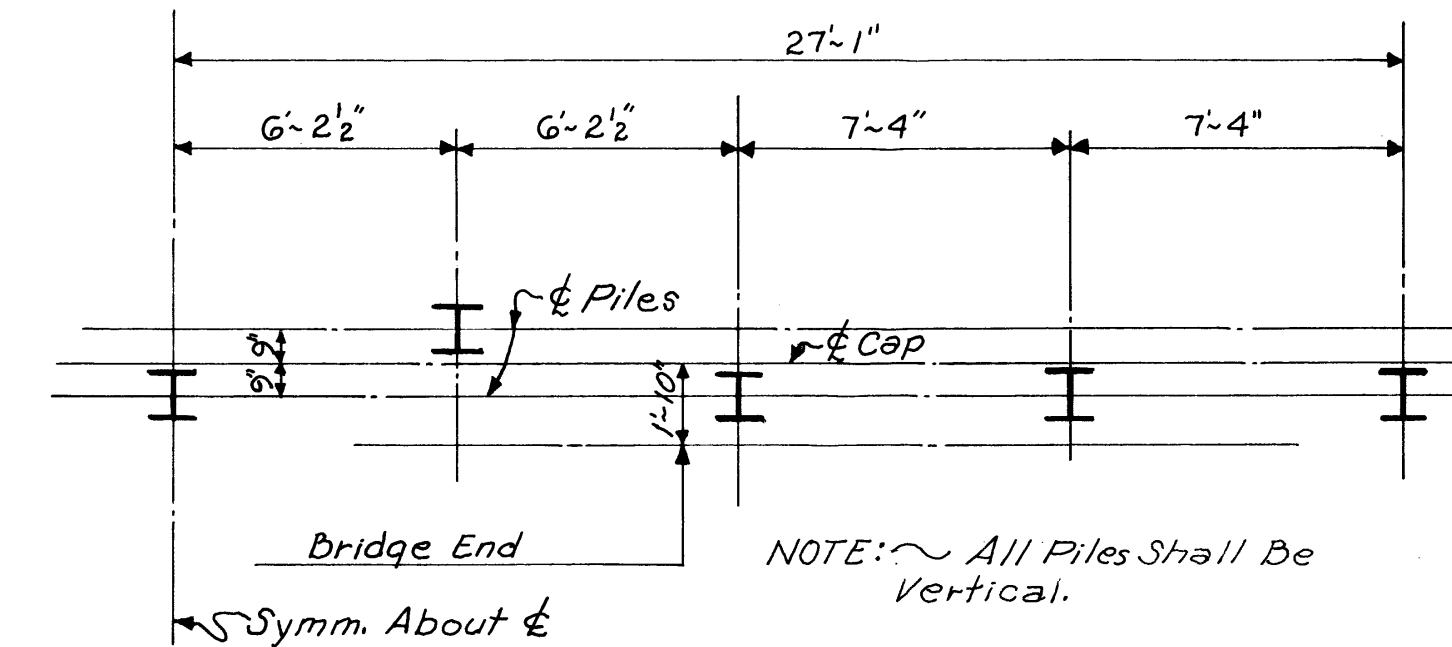
GENERAL NOTES:

All concrete in the span shall be class "AA"
Chamfer all edges 3/8", 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 Director of Structures, State Bridge Engineer shall be notified if the cambers are not within these limits.



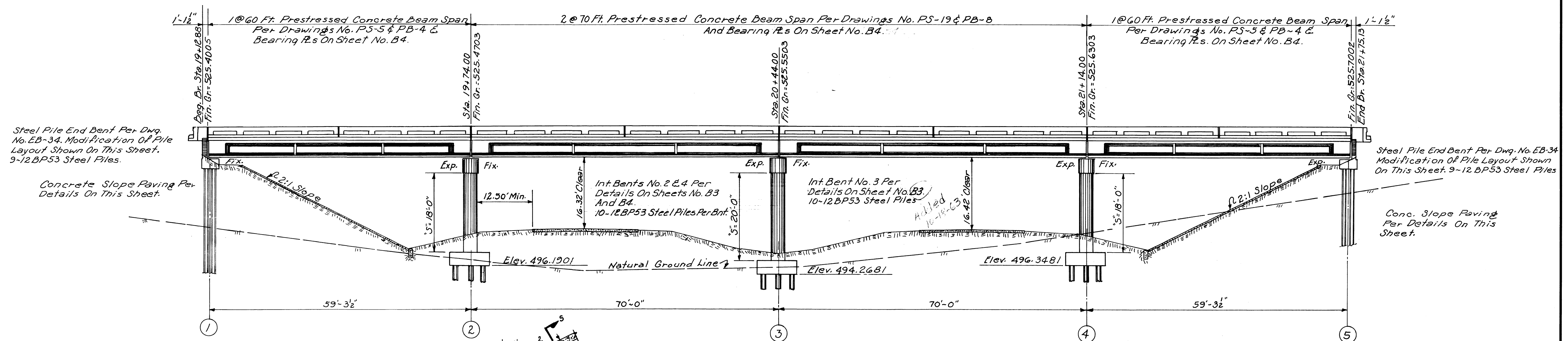
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		UNDERPASS AT STA. 1770+10.85	
		MISC. SPAN 3 DETAILS	
		FMS: 307159 / 301000	
		COUNTY: JASPER	
		PROJECT NUMBER: MRP-6059-31(019)	
		WORKING NUMBER	
		5 OF 5	
DATE		DESIGNER SHANE WRIGHT	CHECKER PAUL DEES
		DETAILER SHANE WRIGHT	ISSUE DATE 5/12/2020
		DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
		DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
		SHEET NUMBER	
		8006	

SPECIAL PAINT NOTES:
 Disregard The Paint Note Shown On Drawings No. PB-4 & PB-8 And Paint As Follows:
 All Surfaces To Be Painted Shall Be Cleaned Per Article 214.05 Of The Specifications.
 All Steel Surfaces Of The Bearing Assembly, Except Anchor Bars And Embedded Portions Of The Anchor Bolts Shall Be Given One Shop Coat Of Red Lead Per Code R-L.
 No Further Painting Will Be Required For Surfaces Which Will Be Covered By Contact With Concrete.
 After Erection Of Spans, All Steel Surfaces Not Excepted Above Shall Be Given Three Field Coats Of Paint As Follows: First Coat Red Lead Per Code R-L; Second And Third Coats Black Graphite Per Code M-B.
 Steel Surfaces To Be Field Painted Which Will Become Inaccessible After Erection Shall Be Field Painted Prior To Placing In Position.



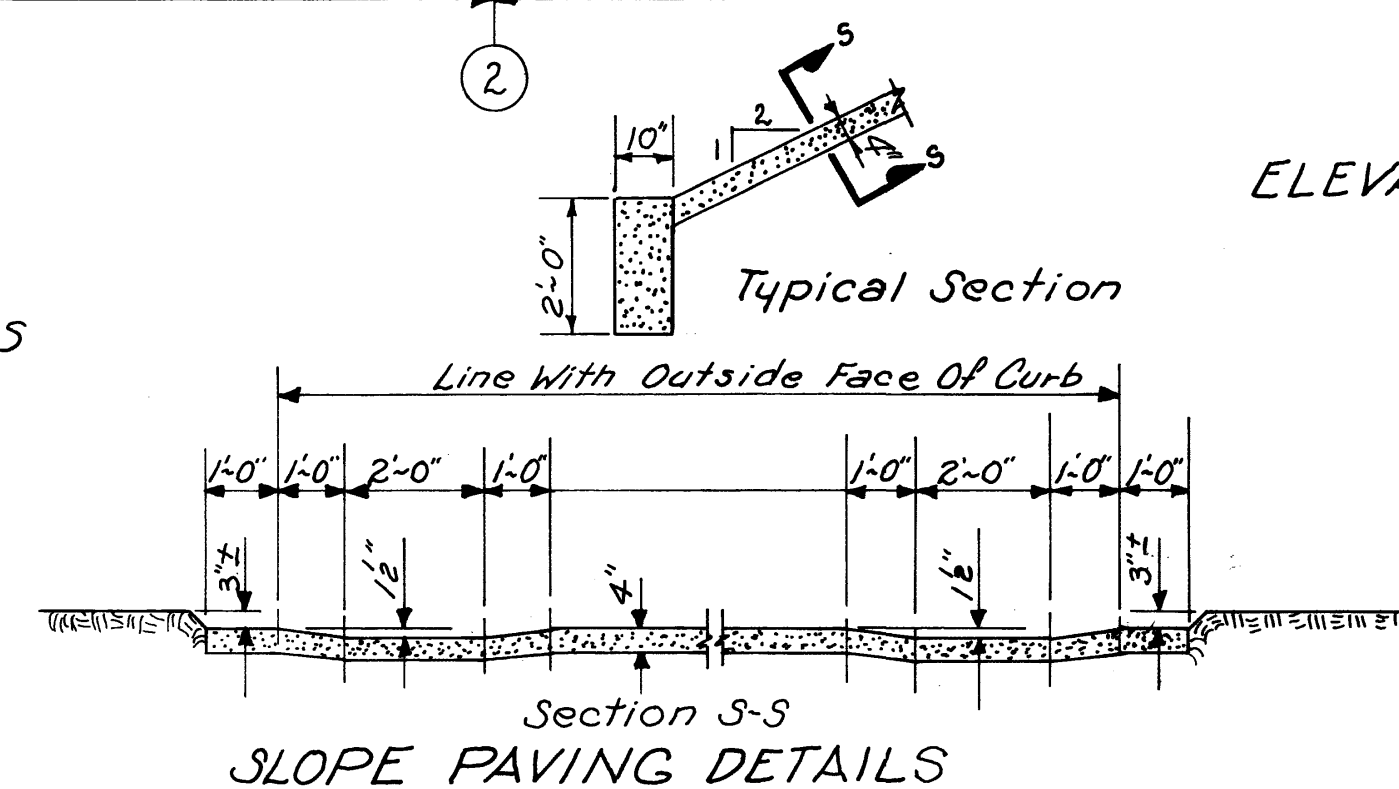
HALF PLAN OF PILE LAYOUT
 Modification Of Pile Layout On Drawing No. EB-34 For Pile Splice Detail, See Sheet No. B3.

TOTAL LENGTH OF BRIDGE - 262'-3"
 +0.11429% Grade



ELEVATION ~ WITH PROFILE ON ROADWAY
 Scale 3/32" = 1'-0"

MINIMUM BEARING CAPACITIES
 End Bents 55 Tons
 Intermediate Bents 55 Tons



DESIGN DATA
 Specifications: A.A.S.H.O., 1961, T2(61)
 Loading: H20-31G-44
 Roadway Width: 28'-0"
 Curb Width: 1'-6"

SPECIAL PROVISION NUMBERS REQ'D:
 Neoprene Pads: No. 216 Revised (7-27-60).
 Prestressed Members: No. 112 Revised (8-15-60).
 Precast Conc. Piles: No. 204.
 Stud Welding: No. 260.

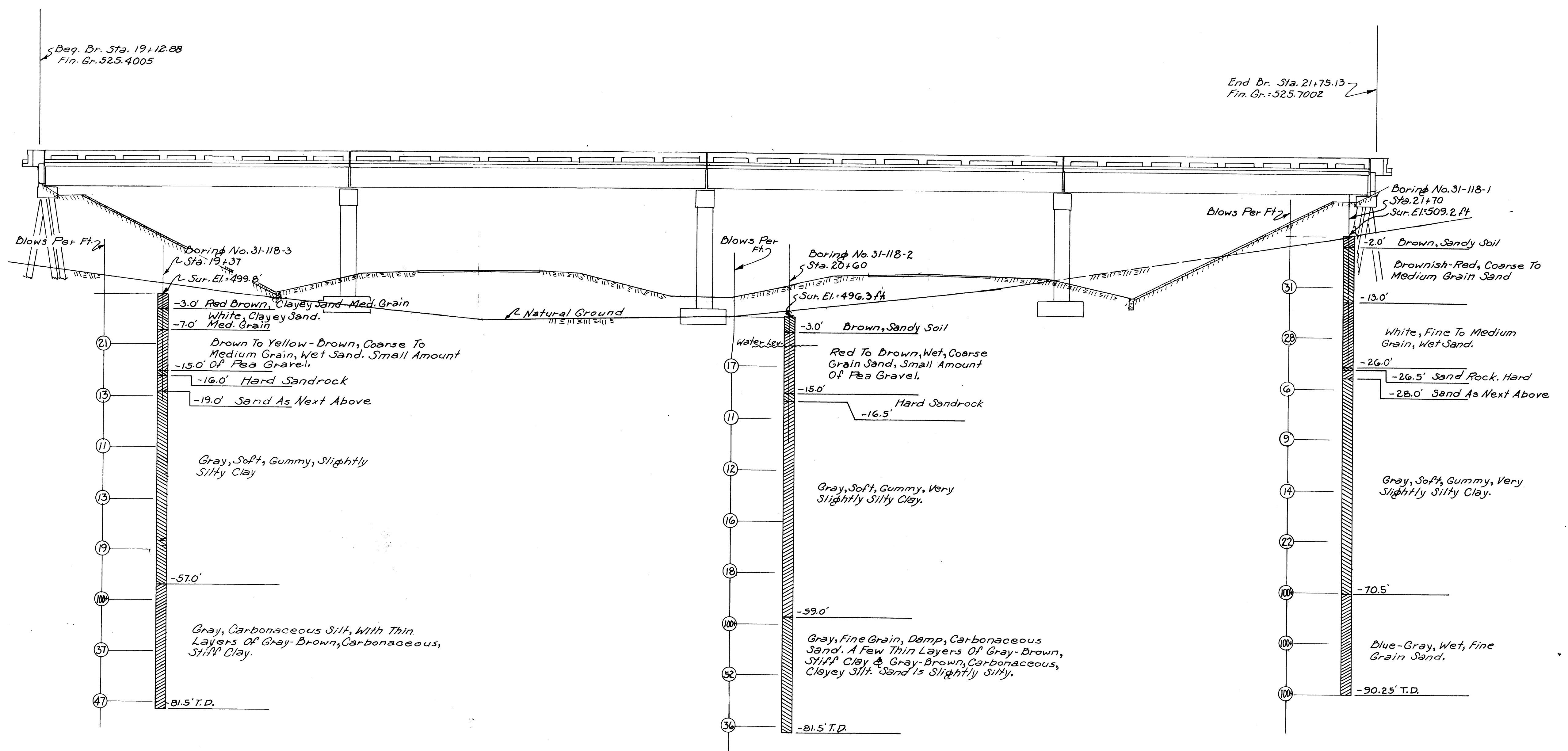
Drawings Req'd: EB-34 (10-1-62); PB-4 (3-15-62);
 PS-5 (3-15-62); PB-8 (3-15-62); PS-19 (3-15-62);
 RF-1 (4-13-59); CP-10 (4-24-58); CP-20 (3-17-61)

GENERAL NOTES:
 Specifications: Mississippi State Highway Department.
 No Unauthorized Change Of Plans Will Be Permitted.
 Expansion Joint Material Shall Be Bituminous Fiber Type.
 Concrete Surfaces Shall Be Finished In Accordance With Article 200.19 Of The Specifications And Drawing No. RF-1.
 All Prestressed Members Are To Be Manufactured In Accordance With Special Provision No. 112-Rev. Neoprene Pads Shall Be In Accordance With Special Provision No. 216-Rev.
 Test Piles Shall Be Driven As Permanent Piles In Bents No. 2 & 4 To A Minimum Bearing Capacity Of 55 Tons And A Minimum Penetration Of 15 Feet And Will Be Paid For As Test Piles Only.
 Test Pile Data And Recommended Pile Lengths Shall Be Submitted To The Bridge Engineer For Approval.
 Steel Piles, Where Practicable, Shall Be Driven Full Length And Shall Not Be Spliced Except By Authority Of The Bridge Engineer.
 Steel Piles Will Be Paid For At Contract Price Per Linear Foot Complete In Place & No Additional Payment Will Be Allowed For Splicing And Welding.
 All Welding Shall Be Done By The Electric Arc Process.
 Bridge Excavation Quantity Is Measured Below Graded Section, Subgrade, Or Natural Ground, Whichever Is Lower. No Payment Will Be Made For Excavation For End Bent Caps.
 All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefor Will Be Considered Included In The Prices And Payments For Bid Items.

ESTIMATED QUANTITIES										
ITEM	Class B Bridge Conc. Cu. Yds.	Reinforcing Steel Lbs.	Concrete Railing Lin. Ft.	60'-0" Prestressed Concrete Beams Lin. Ft.	70'-0" Prestressed Concrete Beams Lin. Ft.	12 BP53 Steel Piling Lin. Ft.	12 BP53 Steel Test Piles Units	Loading Test Units	Bridge Excavation Cu. Yds.	Conc. Slope Paving Cu. Yds.
Spans	226.74	45,780	520	592.50	831.00					
End Bents	53.40	7,984				1,710				
Int. Bents	127.09	22,448				1,960	2			
Totals	407.23	76,212	520	592.50	831.00	3,670	2	1	97	42

MISSISSIPPI STATE HIGHWAY DEPARTMENT			
UNDERPASS AT STA. 1770+10.85			
PROJECT		I-59-2(23)113	
SUBMITTED BY		BRIDGE ENGINEER	
JASPER COUNTY			
DATE	BY	DATE	BY
DETAILED	TRACED	CHECKED	ISSUED
		J.R.R.	J.H.B.
		DATE 8-12-63	DATE 8-12-63
SHEET NUMBER		81 OF 4	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS	I-59-2(23)	18	B2	IV



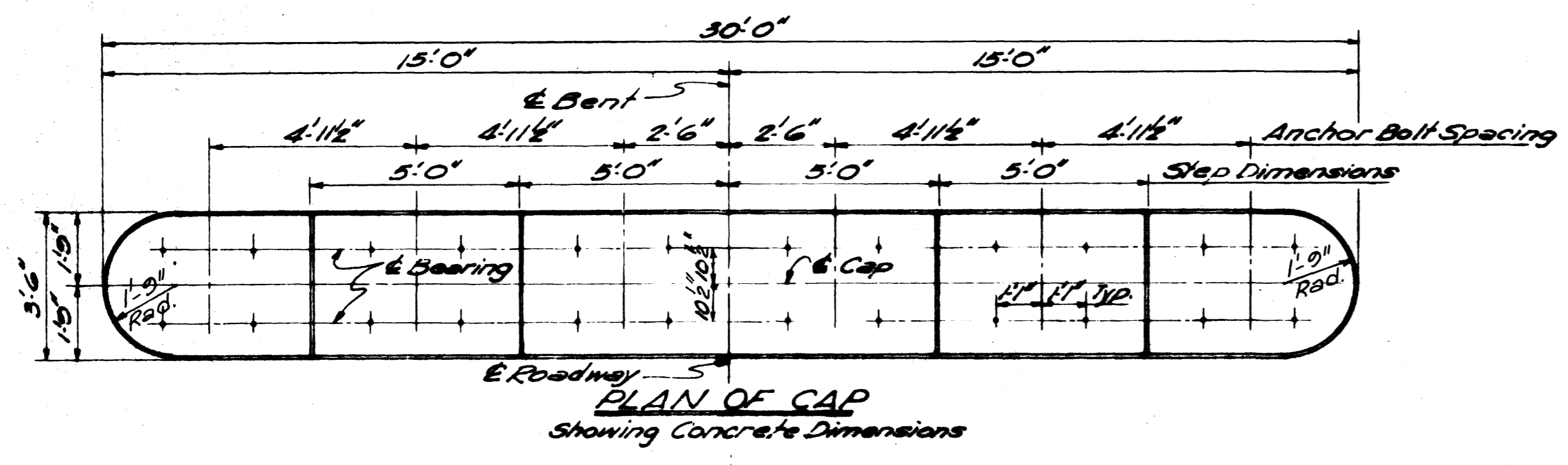
ELEVATION ~ WITH PROFILE ON & ROADWAY
Scale 3/32" = 1'-0"

NOTE: Boring Data Shown Is Supplied For Information Only And Its Accuracy For Construction Purposes Is Not Guaranteed.

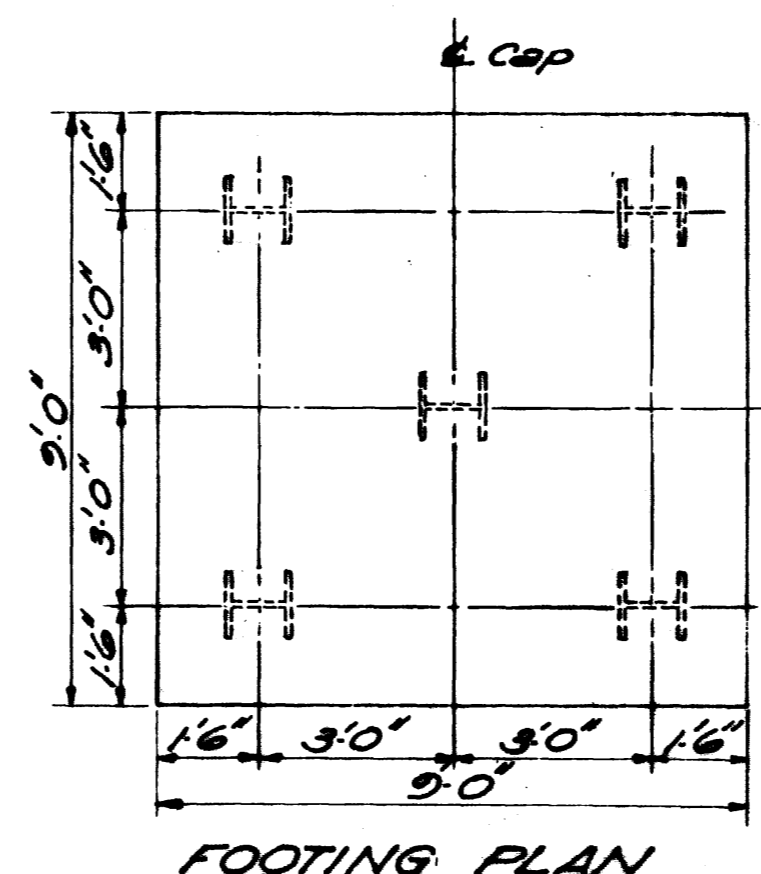
11916

MISSISSIPPI STATE HIGHWAY DEPARTMENT			
UNDERPASS AT STA. 1770+0.85			
BORING DATA			
PROJECT		I-59-2(23)113	
SUBMITTED BY		COUNTY	
JASPER		BRIDGE ENGINEER	
DATE	BY	DATE	BY
REVISIONS			
DETAILED	CHECKED JRR	ISSUED JHB	SHEET NUMBER
TRACED 8.5.	DATE 8-12-63	DATE 8-12-63	B2 OF 4

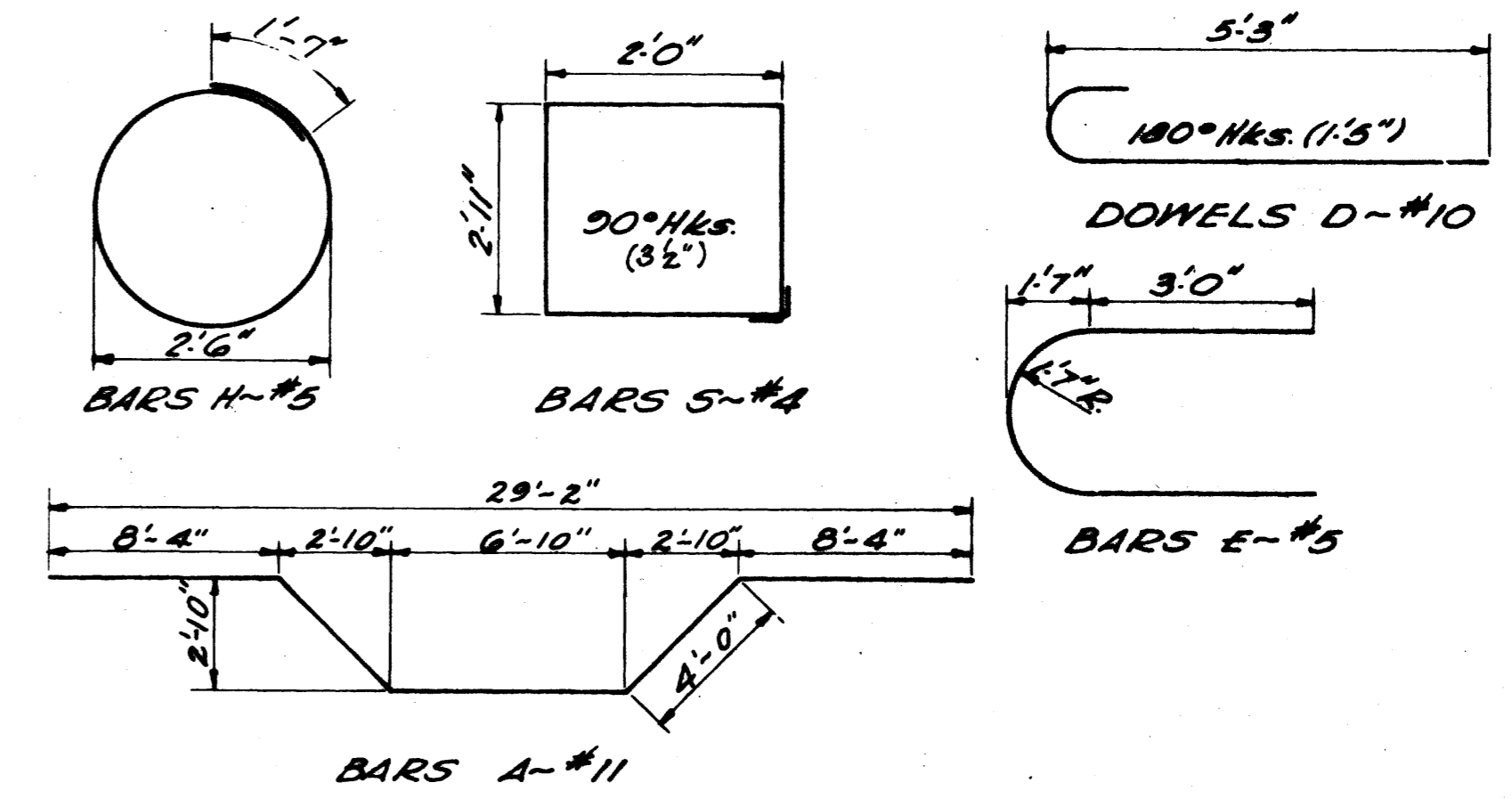
PER. DRAW	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MS	1-59-2(23)113	63	03	04



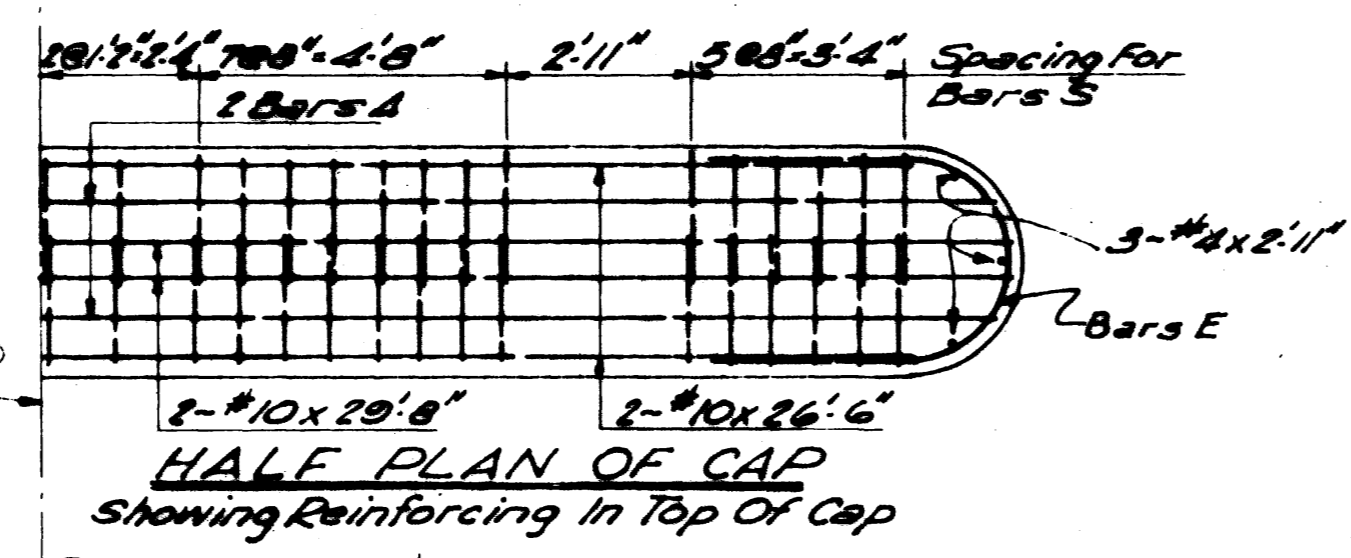
PLAN OF CAP
Showing Concrete Dimensions



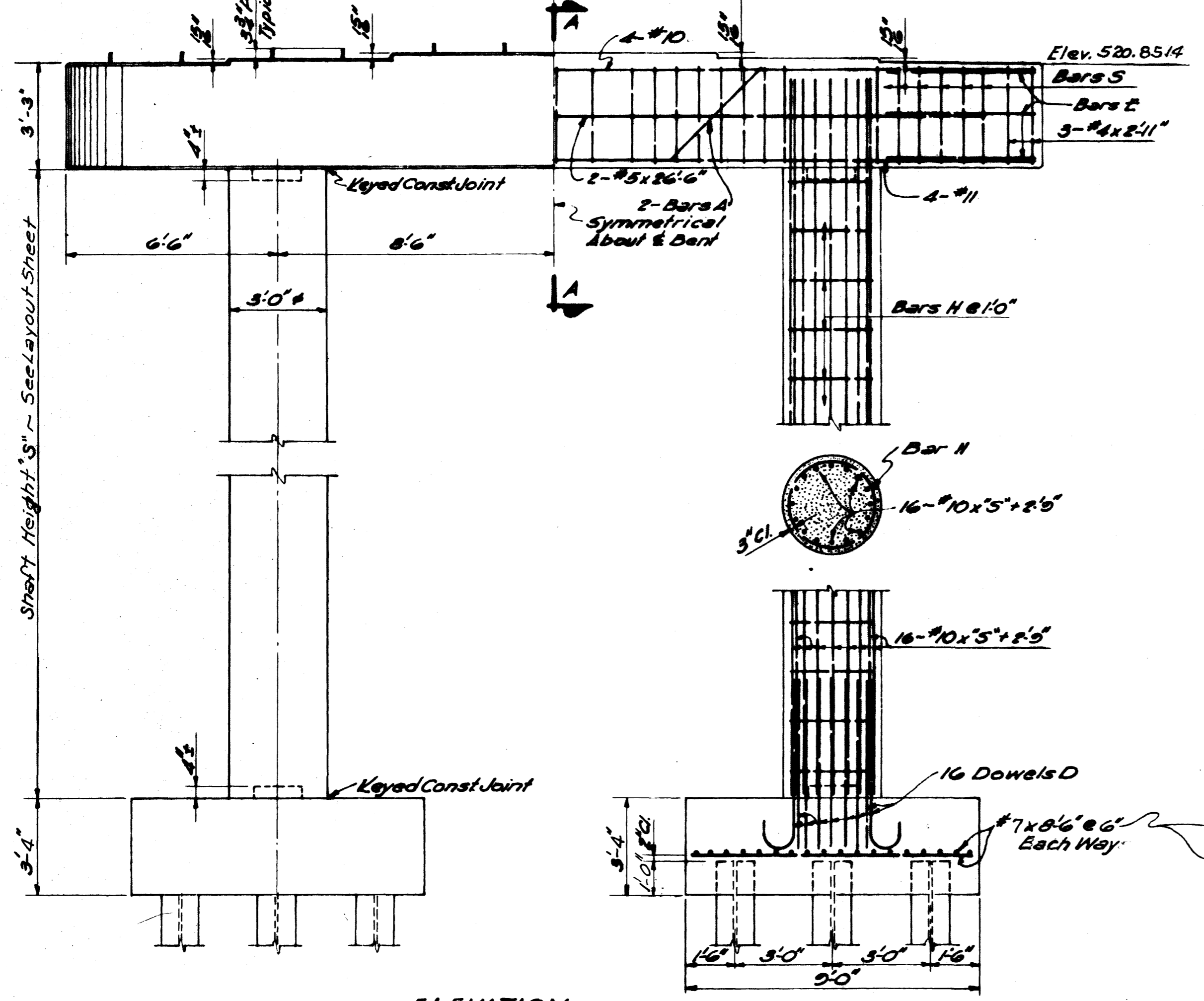
FOOTING PLAN



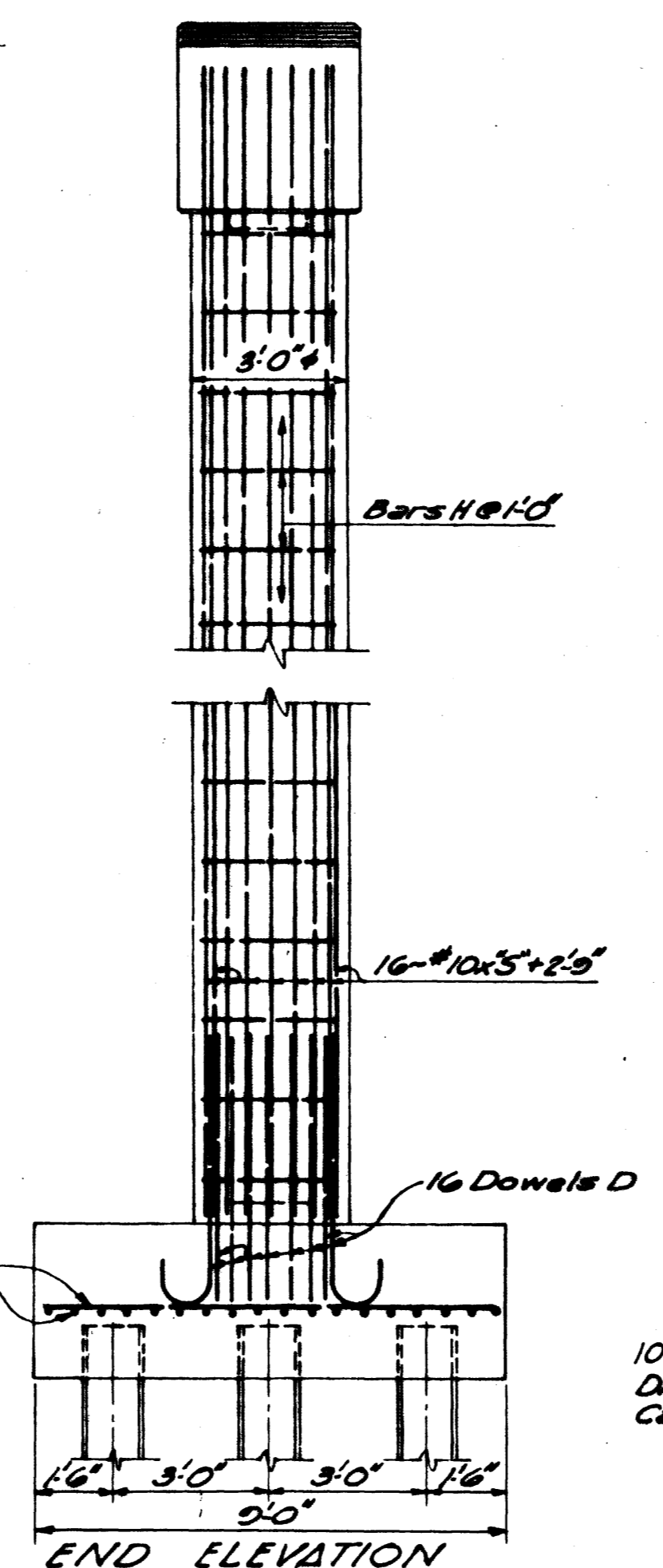
BAR BENDING DETAILS
Dimensions are Out To Out



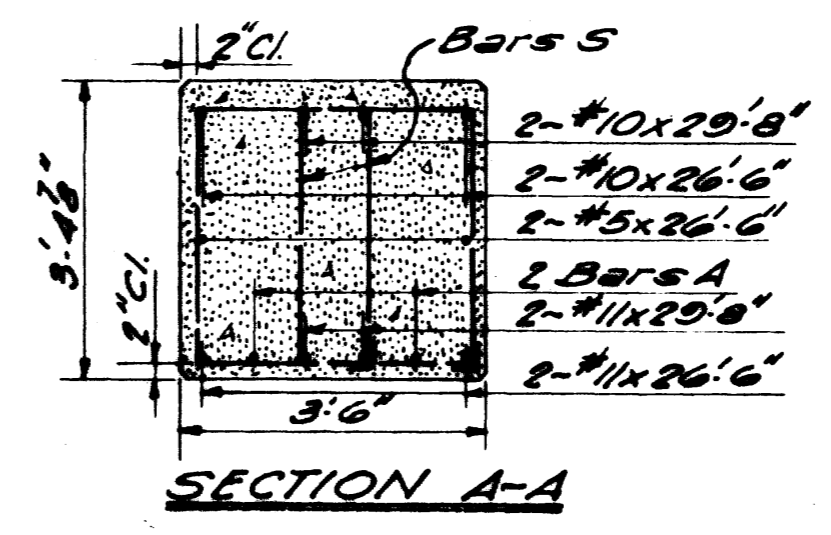
HALF PLAN OF CAP
Showing Reinforcing in Top of Cap



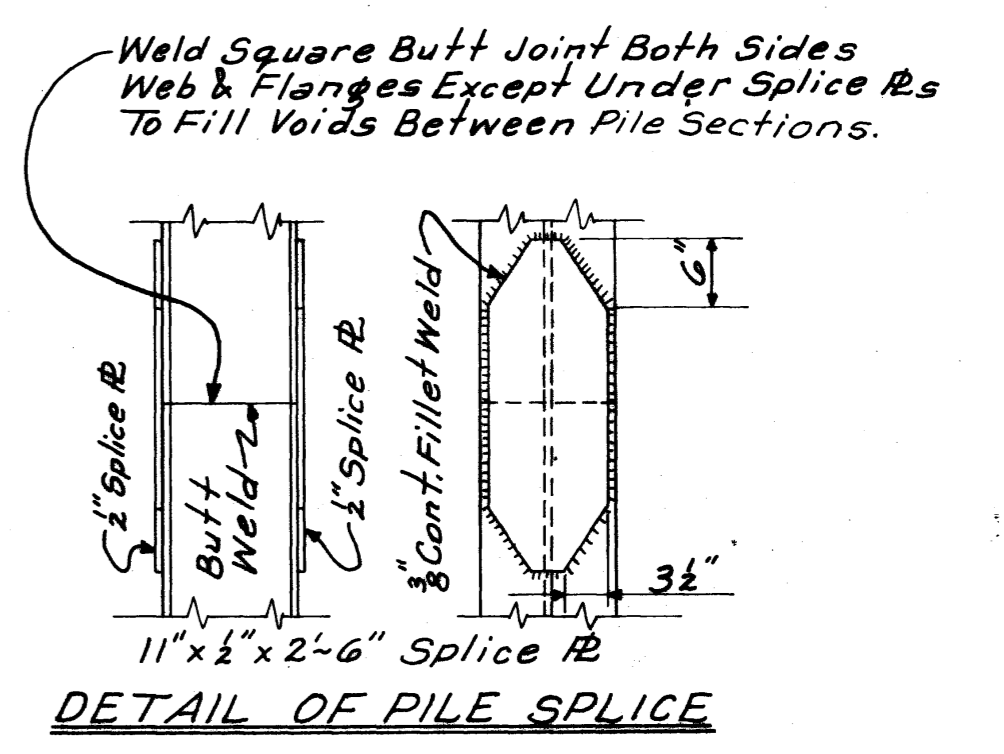
ELEVATION
Drawn For Bent No. 3



END ELEVATION



SECTION A-A



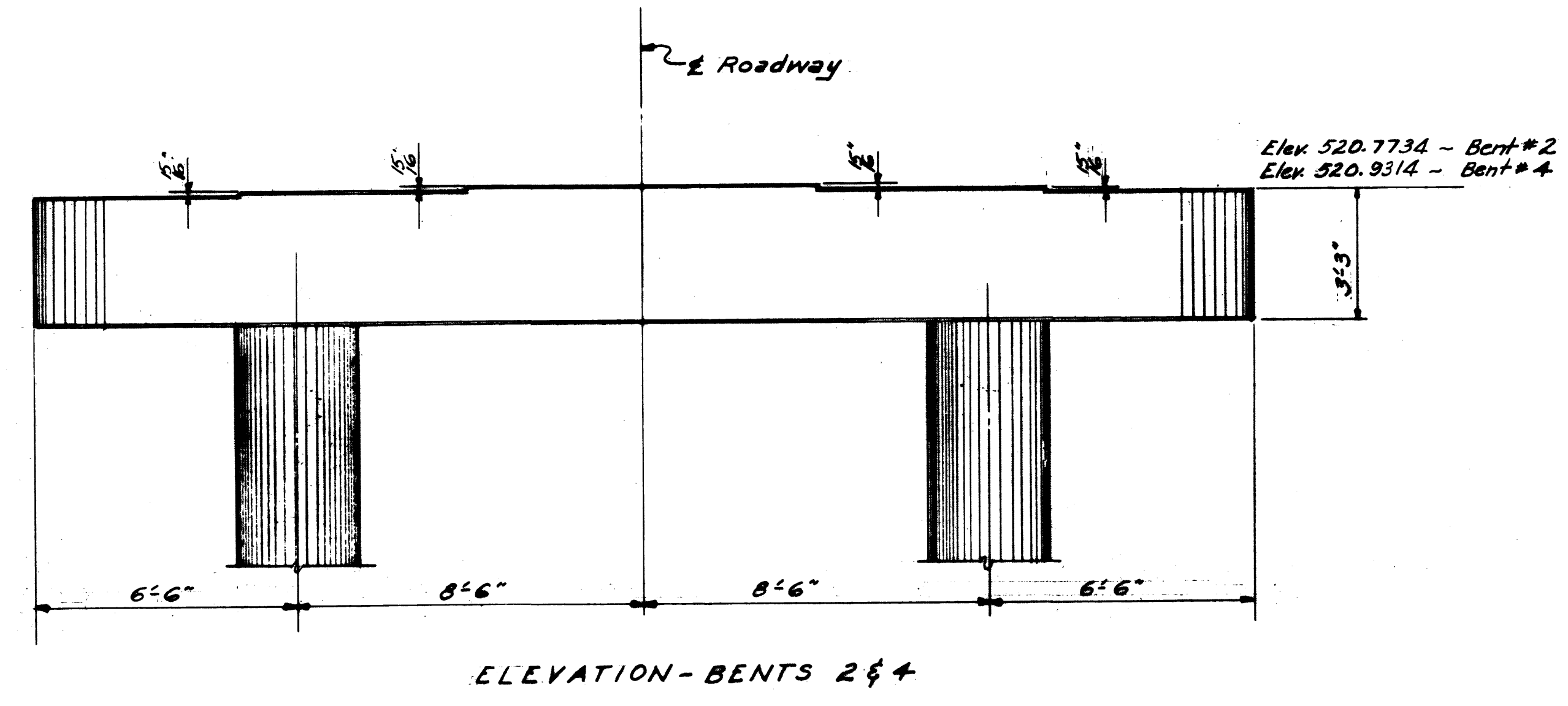
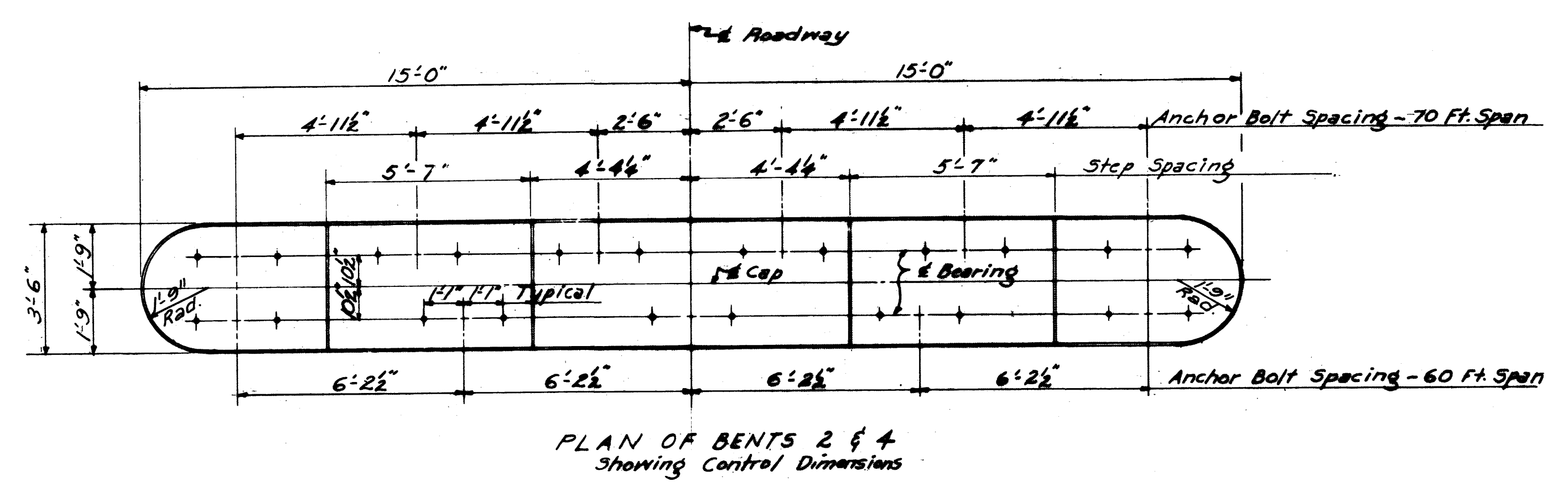
DETAIL OF PILE SPLICE

GENERAL NOTES:
 All Concrete Shall Be Class "B"
 All Exposed Edges Shall Be Chamfered 3/4"
 Construction Joint Permitted Only Where Shown.
 Placing Dimensions For Reinforcing Steel To Concrete Surfaces Are Clear Distances.

10-12 BP53 Steel Piles Per Bent
 Driven To A Minimum Bearing
 Capacity Of 55 Tons.

11916

MISSISSIPPI STATE HIGHWAY DEPARTMENT			
UNDERPASS AT STA. 1770+10.85			
INT. BENT NO. 3			
PROJECT 1-59-2(23)113			
JASPER		COUNTY	
SUBMITTED BY		BRIDGE ENGINEER	
DATE	TRACED BY	ISSUED	SHEET NUMBER
		DATE 8-12-63	03 OF 04



NOTE: -
Details Shown On Sheet No. B3 Shall Apply To Bents 2 & 4.
Unless Otherwise Shown On This Sheet.

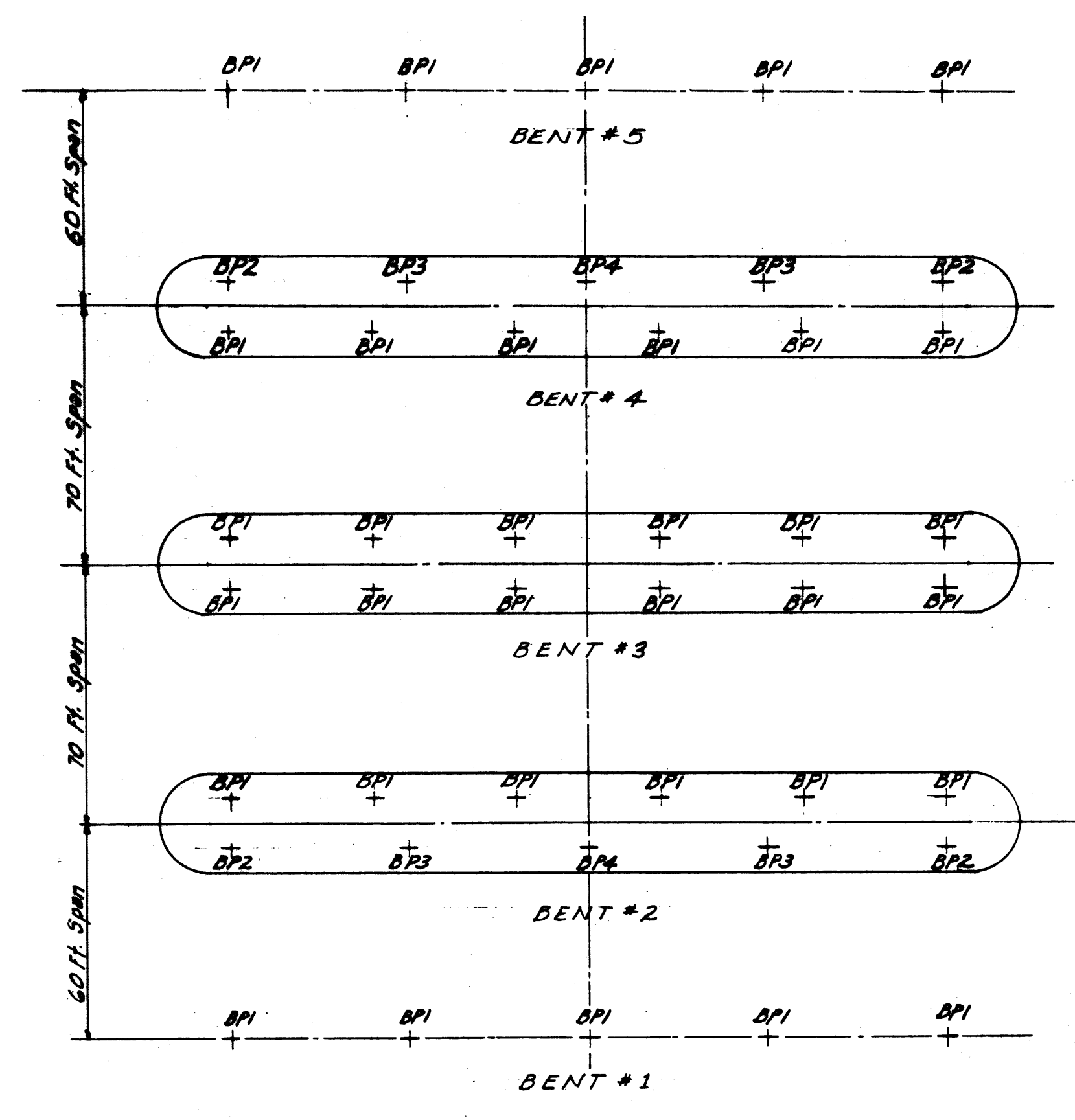
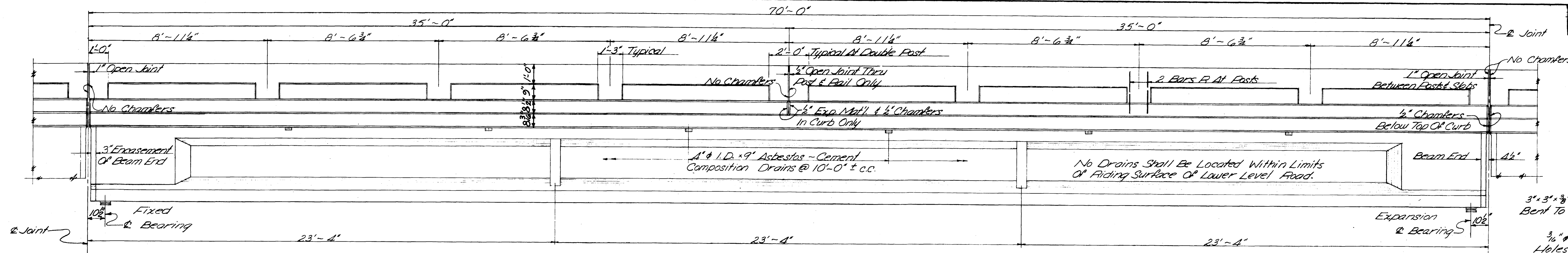


PLATE NO.	THICKNESS	NO. REQD.
BP1	1/2"	34
BP2	1"	4
BP3	1 1/2"	4
BP4	1 1/2"	2

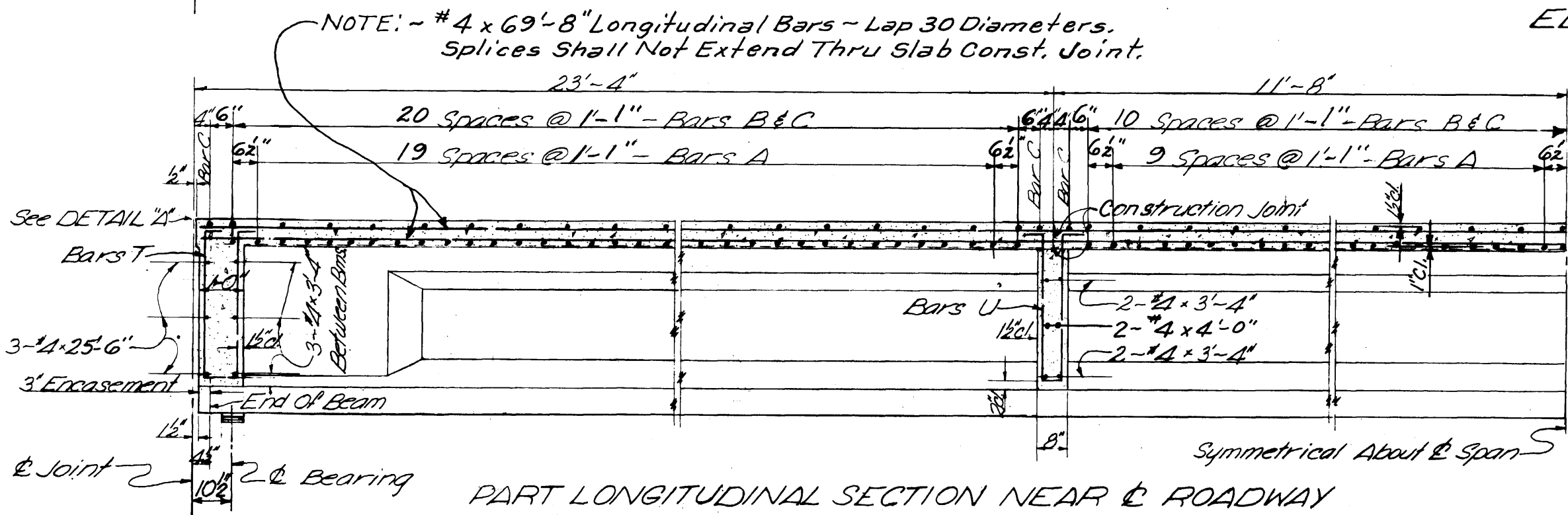
11916

MISSISSIPPI STATE HIGHWAY DEPARTMENT			
UNDERPASS AT STA. 1770+10.85			
INT. BENTS NO. 2 & NO. 4			
PROJECT I-59-2(23)113			
JASPER		COUNTY	
SUBMITTED BY		BRIDGE ENGINEER	
DATE	DETAILED J.H.B.	CHECKED J.R.R.	ISSUED J.H.B.
DATE 8-12-63	DATE 8-12-63	DATE 8-12-63	SHEET NUMBER 22 OF 22

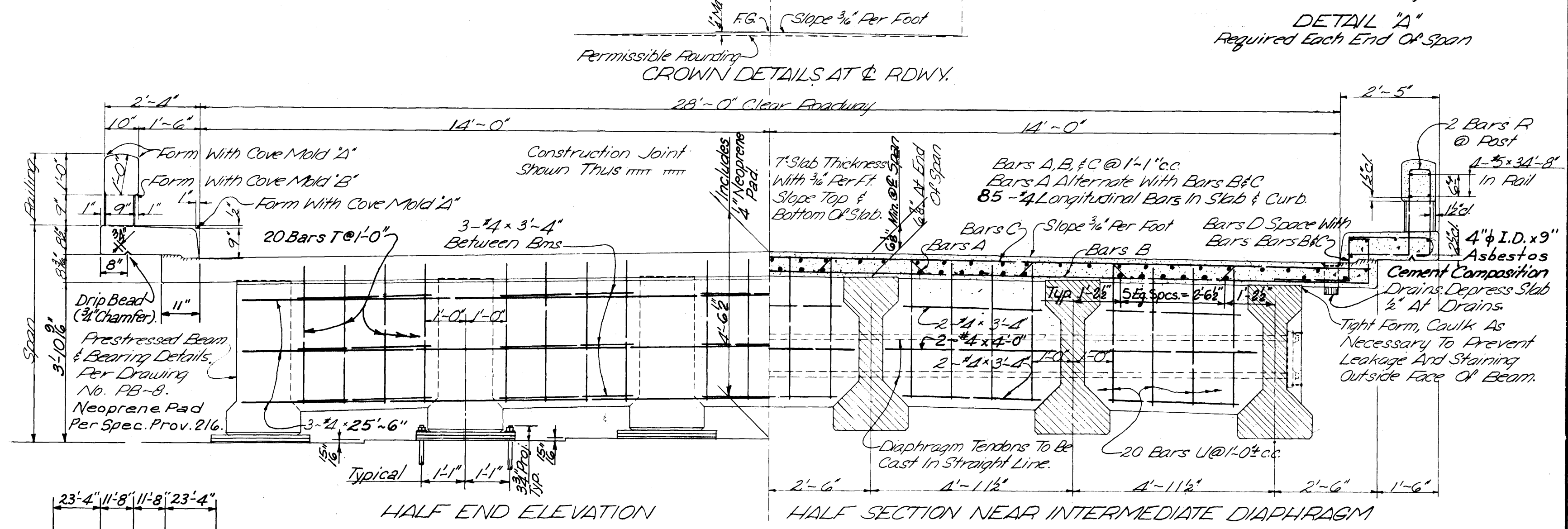
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS



ELEVATION OF SPAN

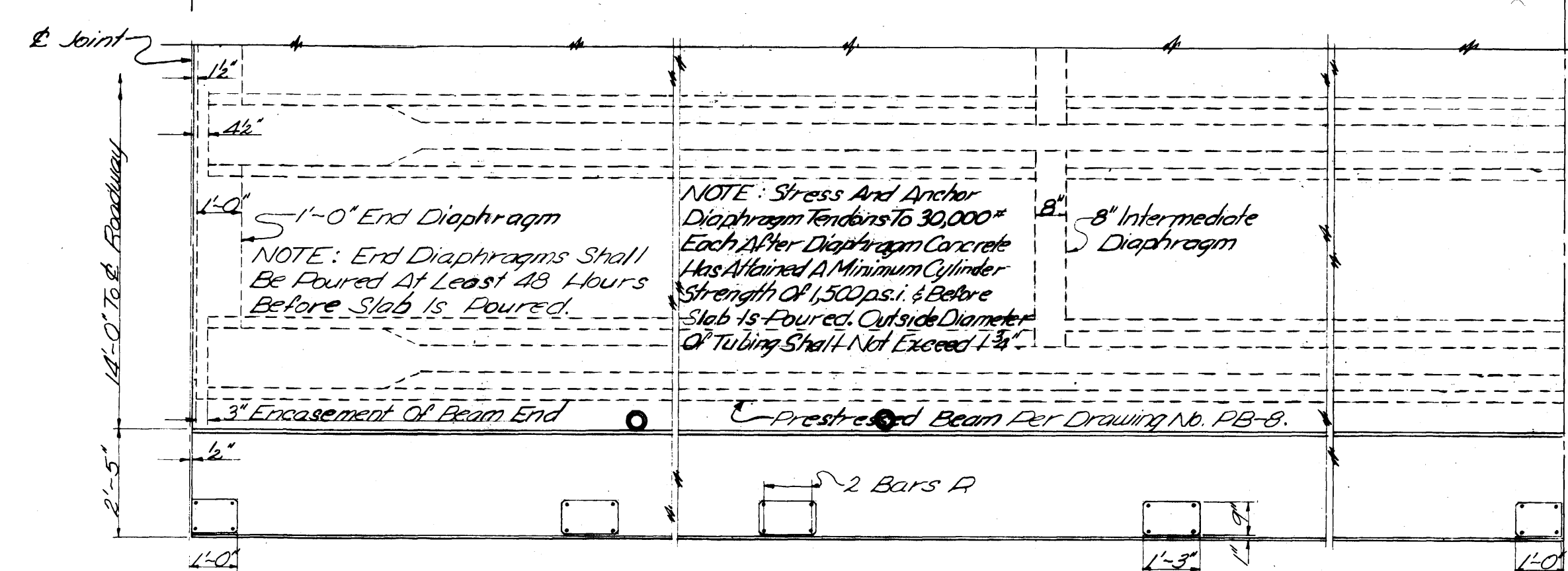


PART LONGITUDINAL SECTION NEAR ROADWAY

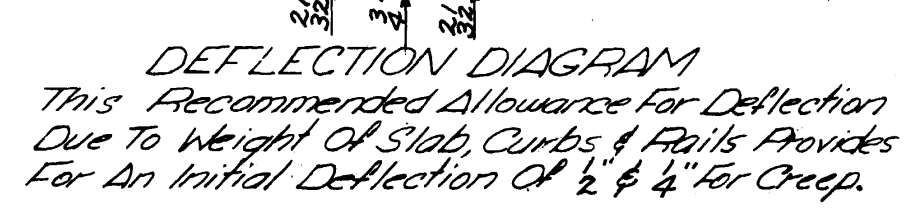


HALF END ELEVATION

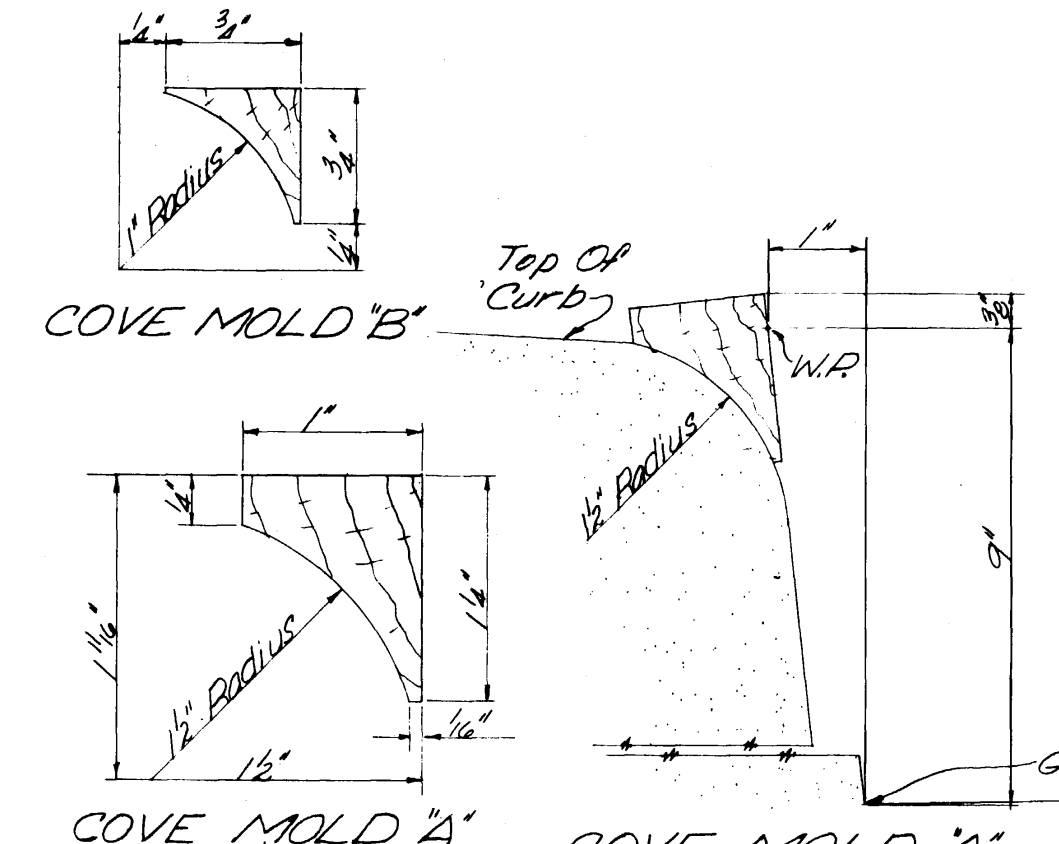
HALF SECTION NEAR INTERMEDIATE DIAPHRAGM



PART PLAN OF SLAB & CURB



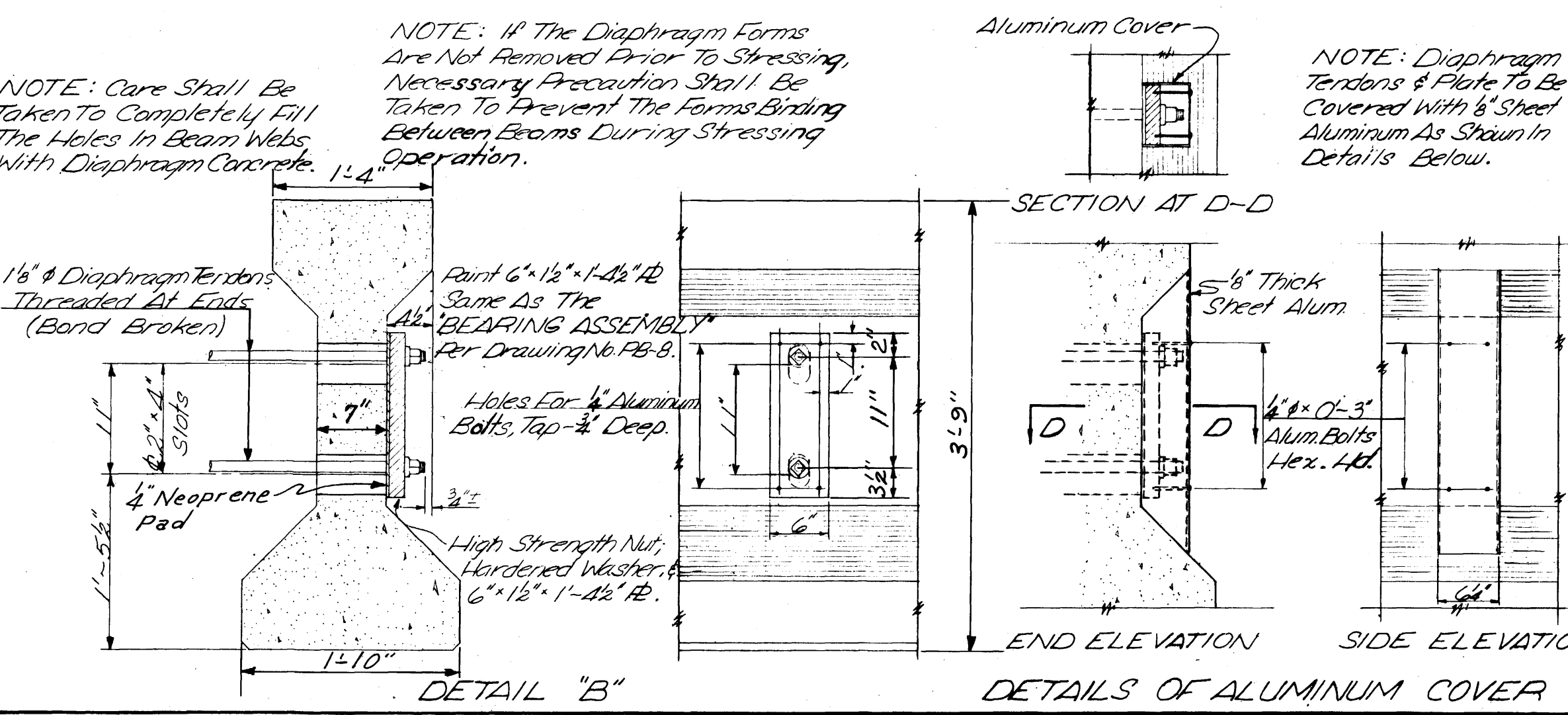
DEFLECTION DIAGRAM



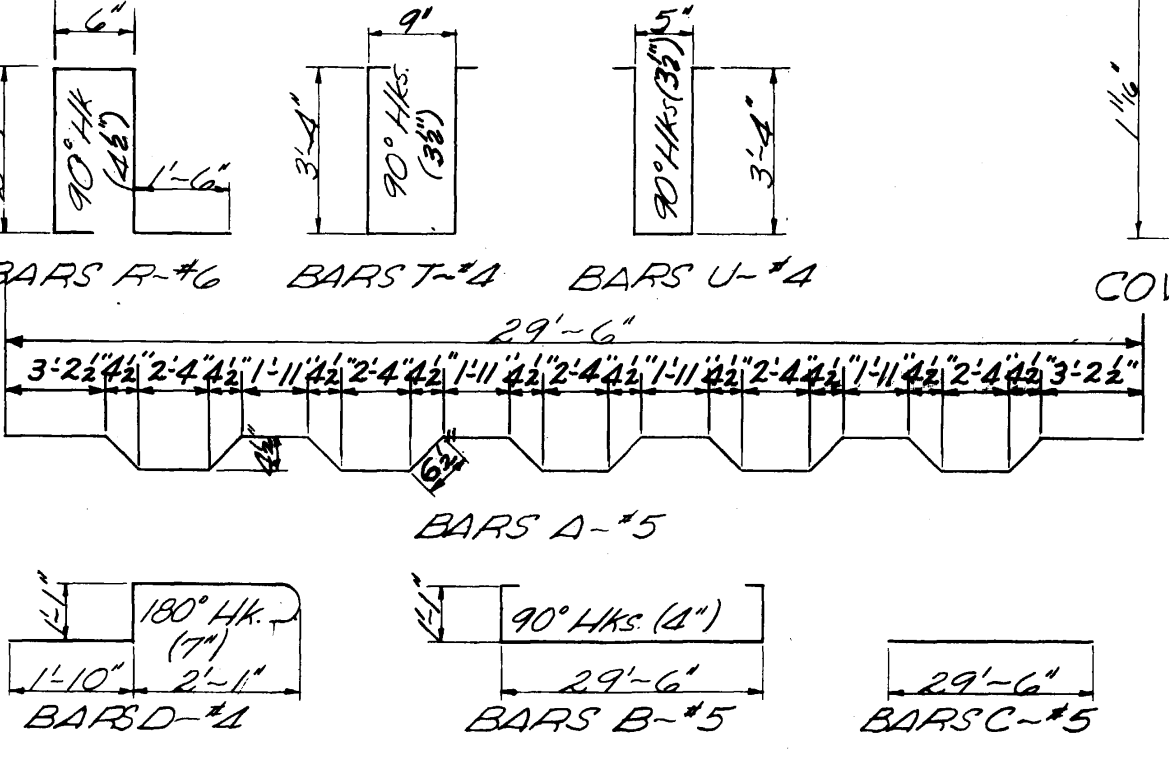
COVE MOLD 'B'

COVE MOLD 'A' INSTALLATION AT CURB

GENERAL NOTES:
 Specifications: Mississippi State Highway Department, 1956, And Special Provisions No. 112 Revised And No. 216.
 Concrete In Reeling Shall Be Class 'A'. All Other Concrete Shall Be Class 'B'.
 All Edges Shall Be Chamfered 1/2" Except Where Otherwise Noted. Finish Concrete Surfaces Per Article 200.19 Of The Specifications, Drwg. RF-1, And Special Provision No. 112 Revised.
 Placing Dimensions For Reinforcing Steel To Concrete Surfaces Are Clear Distances.
 All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefor Will Be Considered Included In The Prices And Payments For Bid Items.
 Neoprene Pads Shall Be In Accordance With Special Provision No. 216.



DETAILS OF ALUMINUM COVER



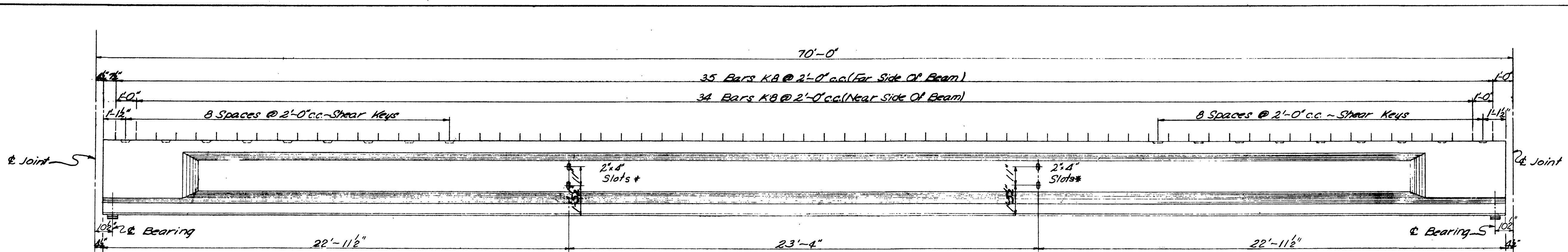
BAR BENDING DETAILS

SPECIAL NOTES:
 The Dimensions Shown From Finish Grade To Caps Are Based On The Assumption That The Original Camber Of The Beam Will Not Be Less Than 1/2" Nor More Than 1/4". The Bridge Engineer Shall Be Notified If The Camber Is Not Within These Limits.
 Procedure For Manufacture, Handling & Hauling Of Prestressed Beams & Construction Of Spans Should Be Approved By The Bridge Engineer. Manufacturers & Contractors Should Request A Copy Of "INFORMATION AND SUGGESTIONS ON PRESTRESSED CONCRETE MANUFACTURE AND CONSTRUCTION" From The Bridge Division.

Specifications: A.A.S.H.O., 1961, & T.2.(61)
 Loading: H20-S16-44 Modified For 2-24,000# Axles.
 Slab Stresses: $f_b = 20,000 \text{ psi}$, $f_c = 1,200 \text{ psi}$, $n = 10$.
 Prestressed Beam Stresses: See Drawing No. PB-9.

MISSISSIPPI STATE HIGHWAY DEPARTMENT			
PRESTRESSED CONCRETE BEAM SPAN			
LENGTH - 70 FT.			
ROADWAY - 28 FT.			
SUBMITTED BY		BRIDGE ENGINEER	
DATE	BY	DATE	BY
7/10/60	W.H.G.	ISSUED	mhb
7/17/60	W.H.G.	CHECKED	J.P.S.
7/17/60	W.H.G.	TRACED	J.P.S.

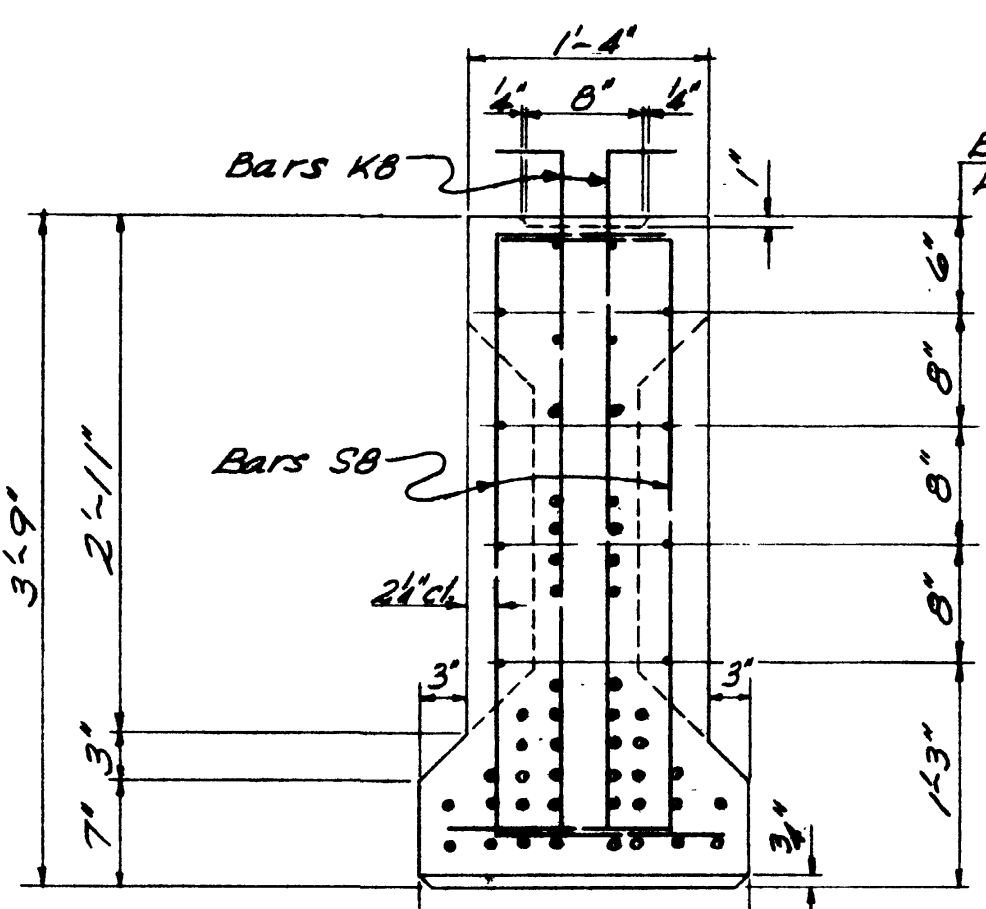
DRAWING NO. PS-19



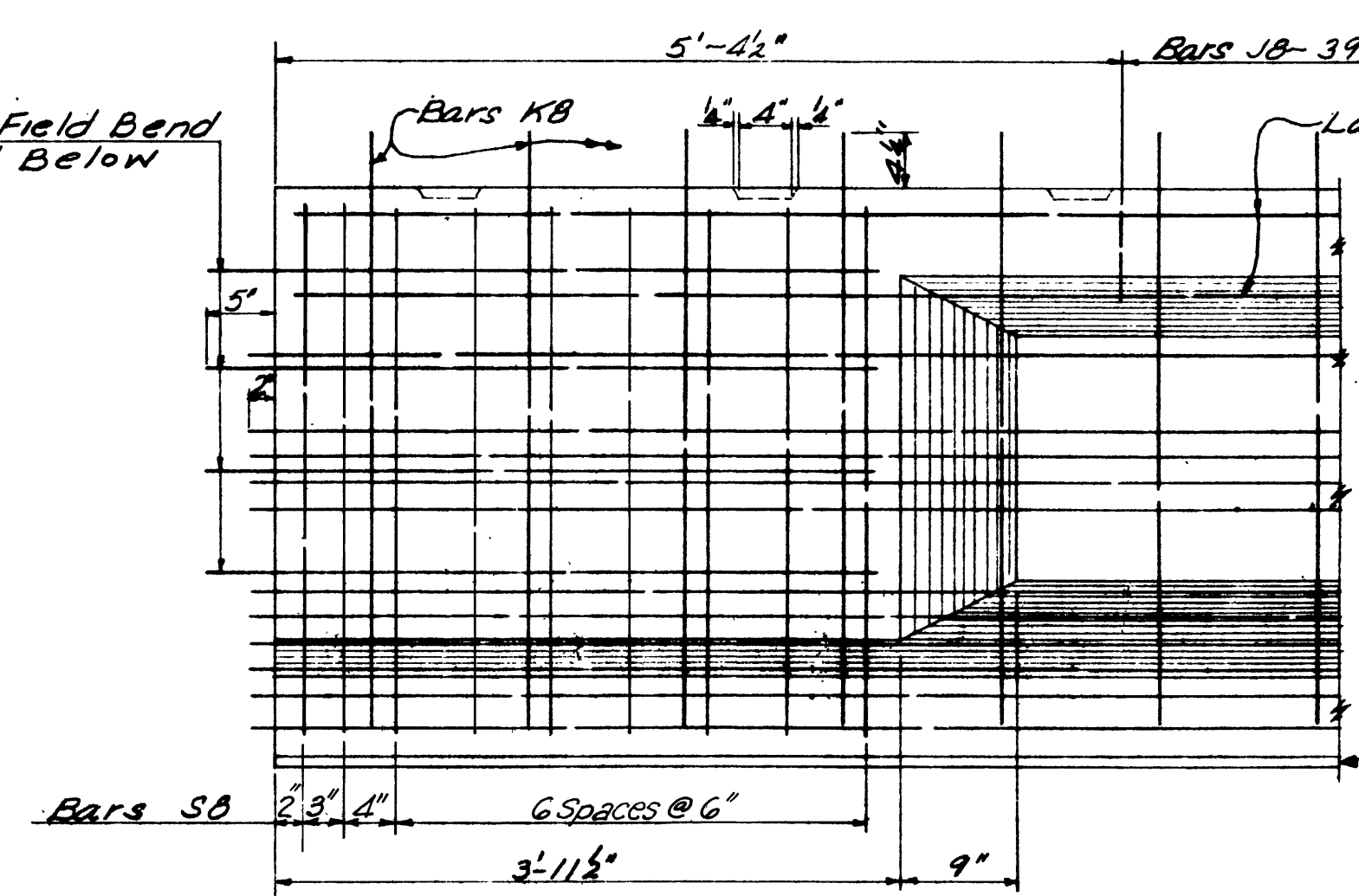
* Diaphragm Tendons Shall Be 1/4" High Tensile Strength Rods With A Minimum Ultimate Strength Of 110,000 psi. The Outside Diameter Of The Tubing Shall Not Exceed 1 1/2". Stress And Anchor Each Rod To 30,000 Lbs.

ELEVATION

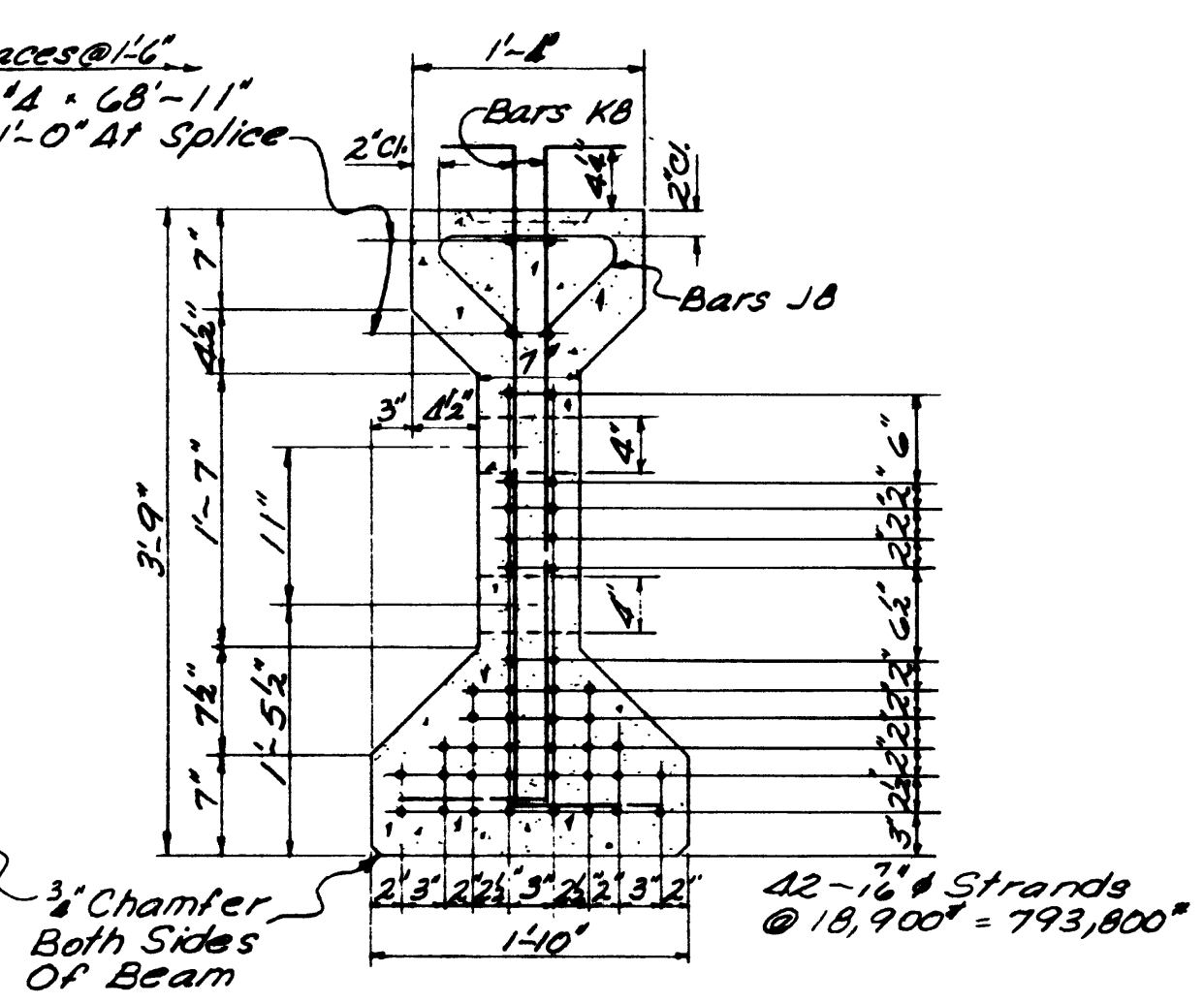
GENERAL NOTES:
 Beams Shall Be Manufactured In Accordance With Mississippi State Highway Department Specifications And Special Provision No. 112 Revised. Concrete Shall Be Class A.
 (a) Shall Have A 28 Day Cylinder Strength Of 5,000 psi.
 (b) At Transfer Of The Tensioning Load, The Cylinder Strength Shall Be 4,300 psi.
 Prestensioned S.R. Strands Shall Have A Minimum Ultimate Strength Of 27,000 Lbs.
 All Beams Shall Be Cast On Concrete Floored Rallies And In Metal Forms.
 Tops Of Beams Shall Be Rough Floated At Approximately The Time Of Initial Set. Entire Top Of Beam 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 Special Provision No. 112 Revised.
 In The Handling Of Beams, Beams Must Be Maintained In An Upright Position At All Times And Must Be Picked Up From Brinks Within The Solid Bearing Blocks At The Beam Ends. **DISREGARD OF THIS REQUIREMENT MAY LEAD TO COLLAPSE OF THE MEMBER.**
 Diaphragm Details Shall Be As Shown On The Span Sheet.
 Prior To Erection Or Embedment In Concrete, All Steel Surfaces Of The Bearing Assembly Except Bar (Or Stud) Anchors & Embedded Portions Of Anchor Bolts Shall Receive Two Coats Of Super-Service Black Bitumastic Coating (Koppers Co. Or Equal) Applied According To Manufacturer's Directions. Allow Ample Drying Time For Each Coat. Exercise Care To Cover Corners. Surfaces To Be Painted Shall Be Cleaned Per Article 214.05 Of The Specifications. Those Areas Where Paint Has Been Damaged During Construction Shall Be Touched Up.



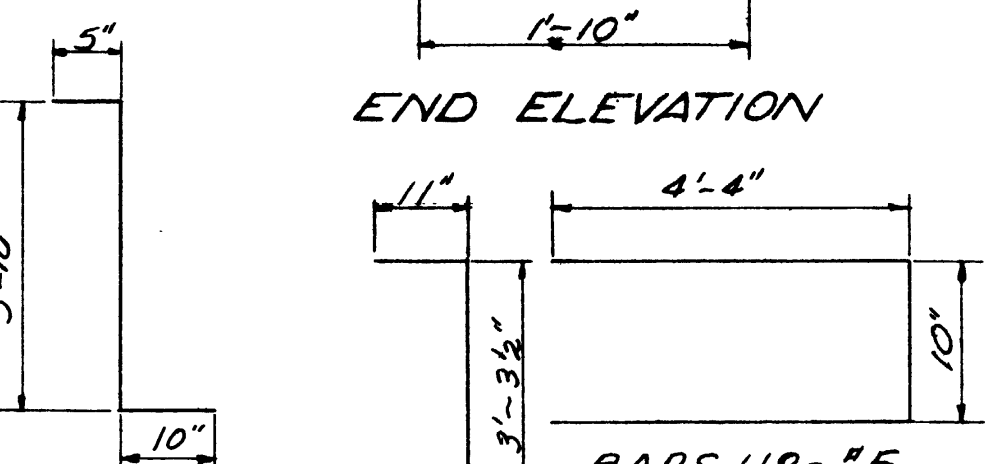
END ELEVATION



PART ELEVATION AT END OF BEAM

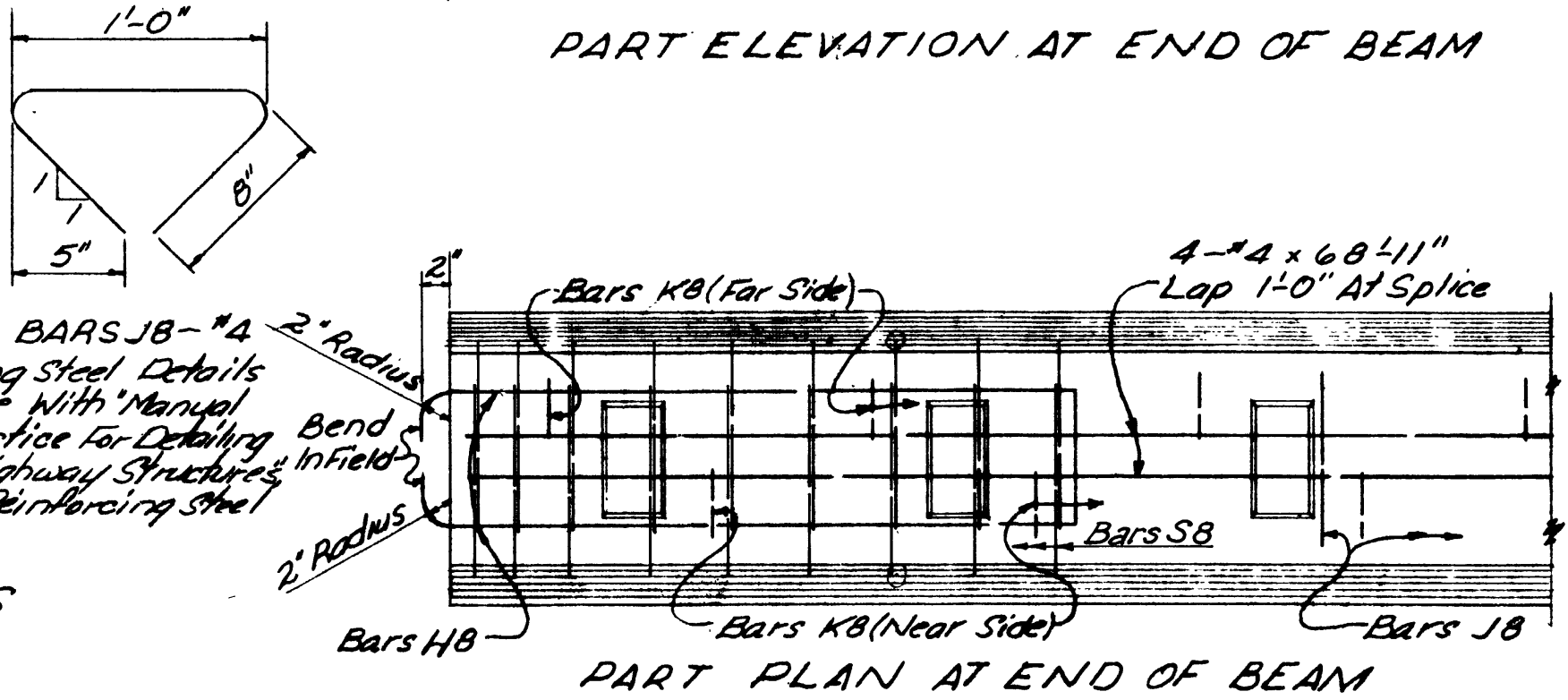


TYPICAL SECTION

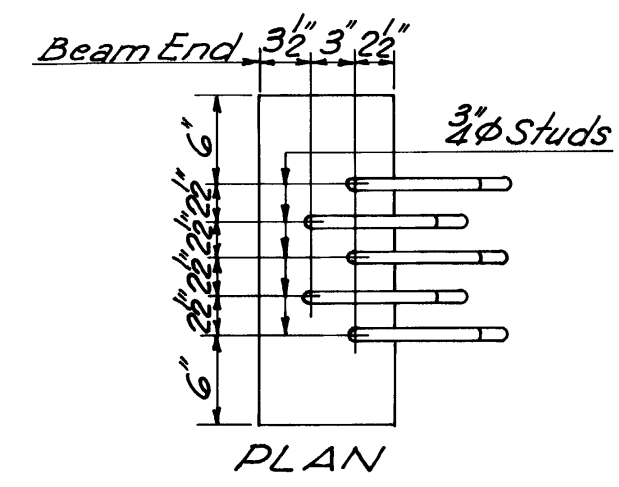


BAR BENDING DETAILS
 Dimensions Are Out To Out

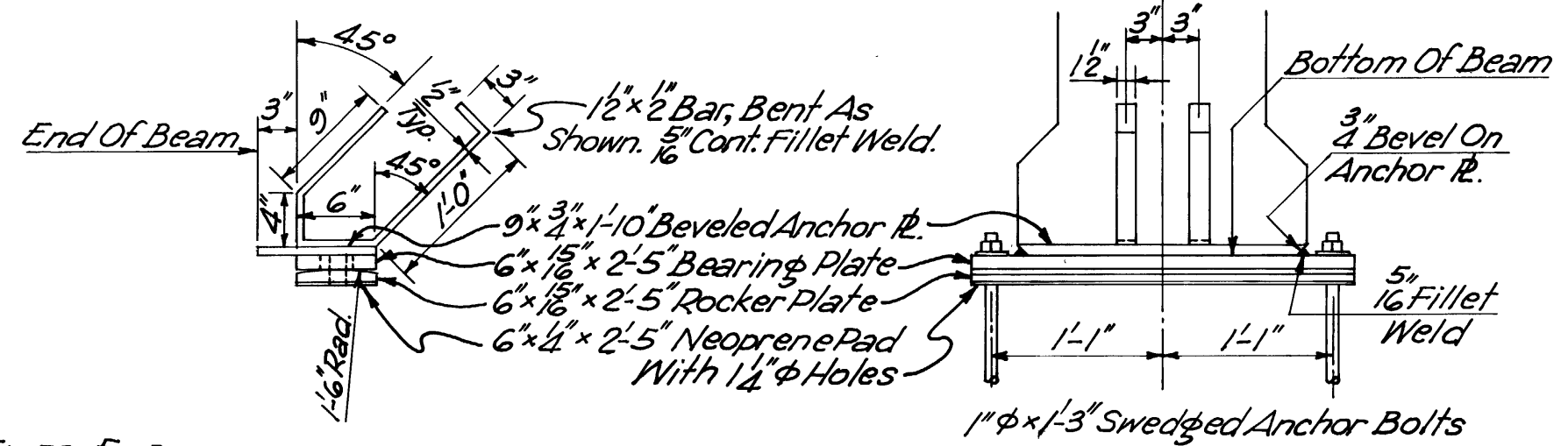
NOTE: All Reinforcing Steel Details Shall Be In Accordance With Manual Of Recommended Practice For Detailing Reinforced Concrete Highway Structures Prepared By Concrete Reinforcing Steel Institute.



PART PLAN AT END OF BEAM



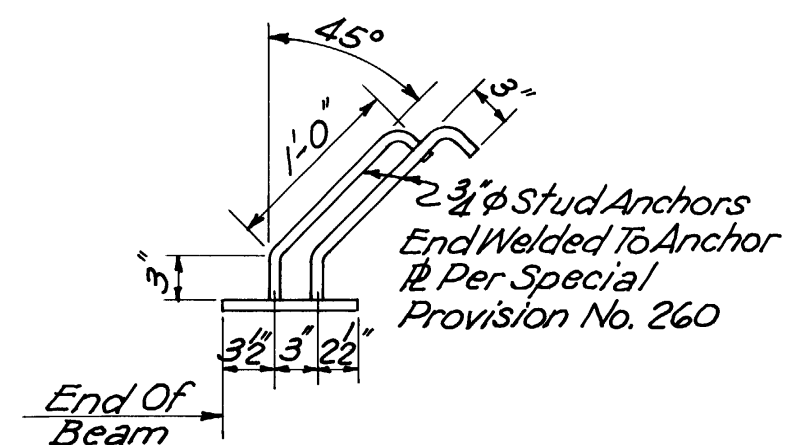
PLAN



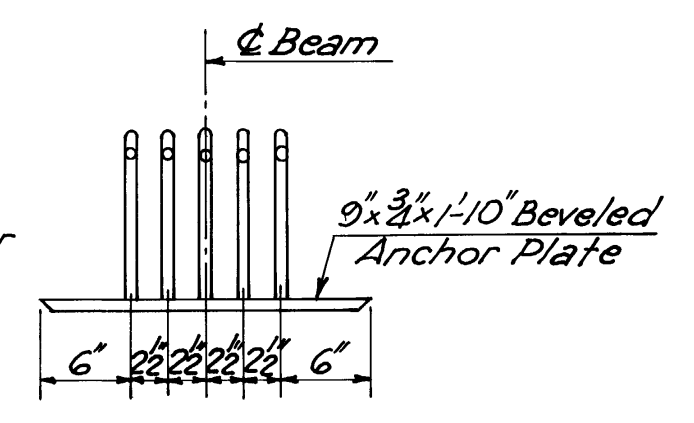
FIXED END:
 1/2" ϕ Holes In Rocker & Bearing; 1/2" Std. Wrought Washers
EXPANSION END:
 1/4" ϕ Holes In Rocker; 1/4" \times 2" Slots In Bearing; 1/4" Plate Washers.

BEARING DETAILS

Set All Bearing Plates On 4" Neoprene Pads Per Special Provision No. 216.



ELEVATION



END ELEVATION

DETAIL OF ANCHOR PLATE SHOWING PERMISSIBLE USE OF STUD ANCHORS

SPECIAL NOTES:
 The Bridge Engineer Shall Be Notified If The Camber Of This Beam Is Not Within The Limits Of From 1/2" To 1 1/2".
 Procedures For Manufacture, Handling And Hauling Of Prestressed Beams And Construction Of Spans Should Be Approved By The Bridge Engineer. Manufacturers And Contractors Should Request A Copy Of INFORMATION AND SUGGESTIONS ON PRESTRESSED CONCRETE MANUFACTURE AND CONSTRUCTION From The Bridge Division.

DESIGN DATA

Unit Stresses Are In Accordance With A S.H.O. 1961.

REVISIONS		BY		DATE	
Diaphragm Location		B.D.V.		7/16/68	
Bearing Details		B.D.V.		7/16/68	
Anchor Details		B.D.V.		7/16/68	
Special Provisions		A.S. W.		7/16/68	
MISSISSIPPI STATE HIGHWAY DEPARTMENT PRESTRESSED CONCRETE BEAM LENGTH — 70 FT. SUBMITTED BY: _____ BRIDGE ENGINEER DETAILED <u>A.B.E.</u> CHECKED <u>B.D.V.</u> ISSUED <u>7/16/68</u> DRAWING NO. <u>PB-8</u> TRACED <u>A.T.</u> DATE <u>2-20-59</u> DATE <u>2-20-59</u>					

STATE	PROJECT NUMBER	SHEET NO.
MISSISSIPPI	MRP-5059-38(230)	1

GENERAL INDEX

INCLUDED THIS PROJECT	BEGIN WITH SHEET
<input checked="" type="checkbox"/> ROADWAY	1
<input type="checkbox"/> PERMANENT SIGNS	1001
<input type="checkbox"/> TRAFFIC SIGNALS	2001
<input type="checkbox"/> ITS COMPONENTS	3001
<input type="checkbox"/> LIGHTING	4001
<input type="checkbox"/> (RESERVED)	5001
<input checked="" type="checkbox"/> ROADWAY STANDARD DWGS	6001
<input type="checkbox"/> BOX CULVERT STD. DRAWINGS (LRFD)	7001
<input type="checkbox"/> BOX CULVERT STD. DRAWINGS (STD. SPEC.)	7501
<input checked="" type="checkbox"/> BRIDGE	8001
<input type="checkbox"/> CROSS SECTIONS	9001

BRIDGE STRUCTURES REQ'D.

BOX BRIDGES REQ'D.

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

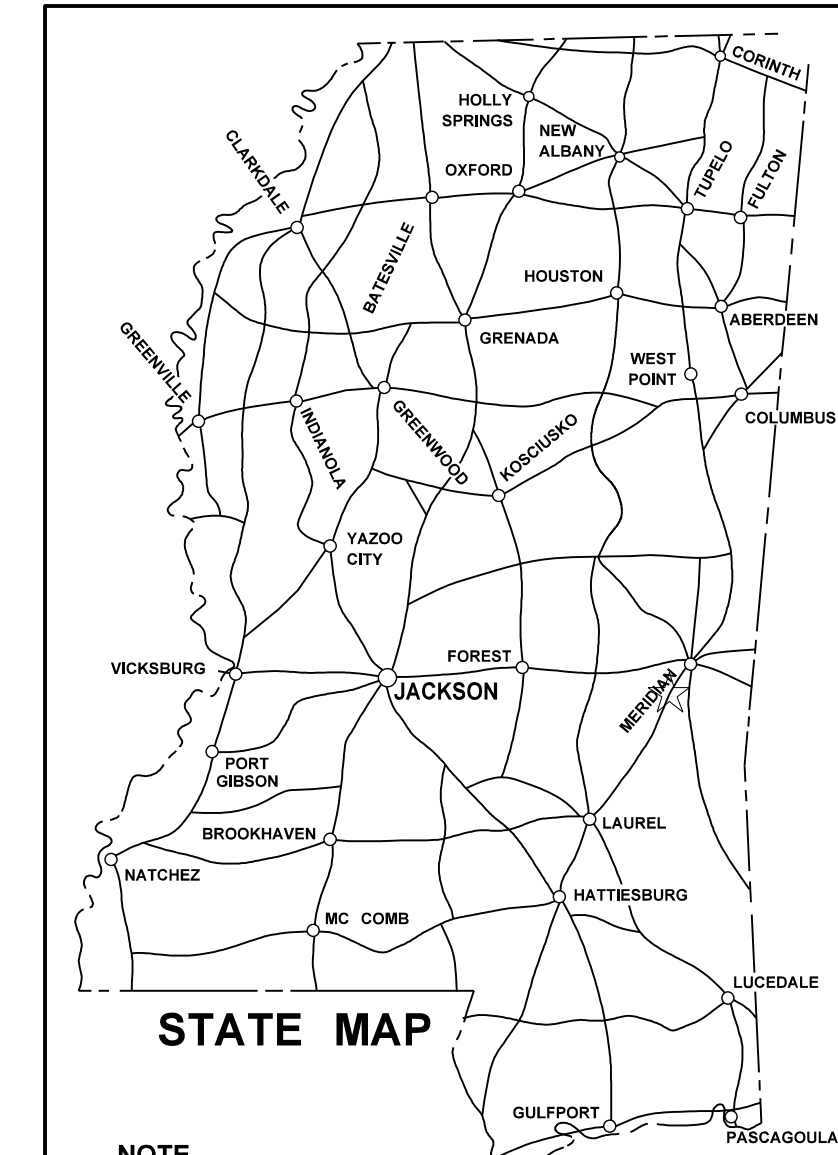
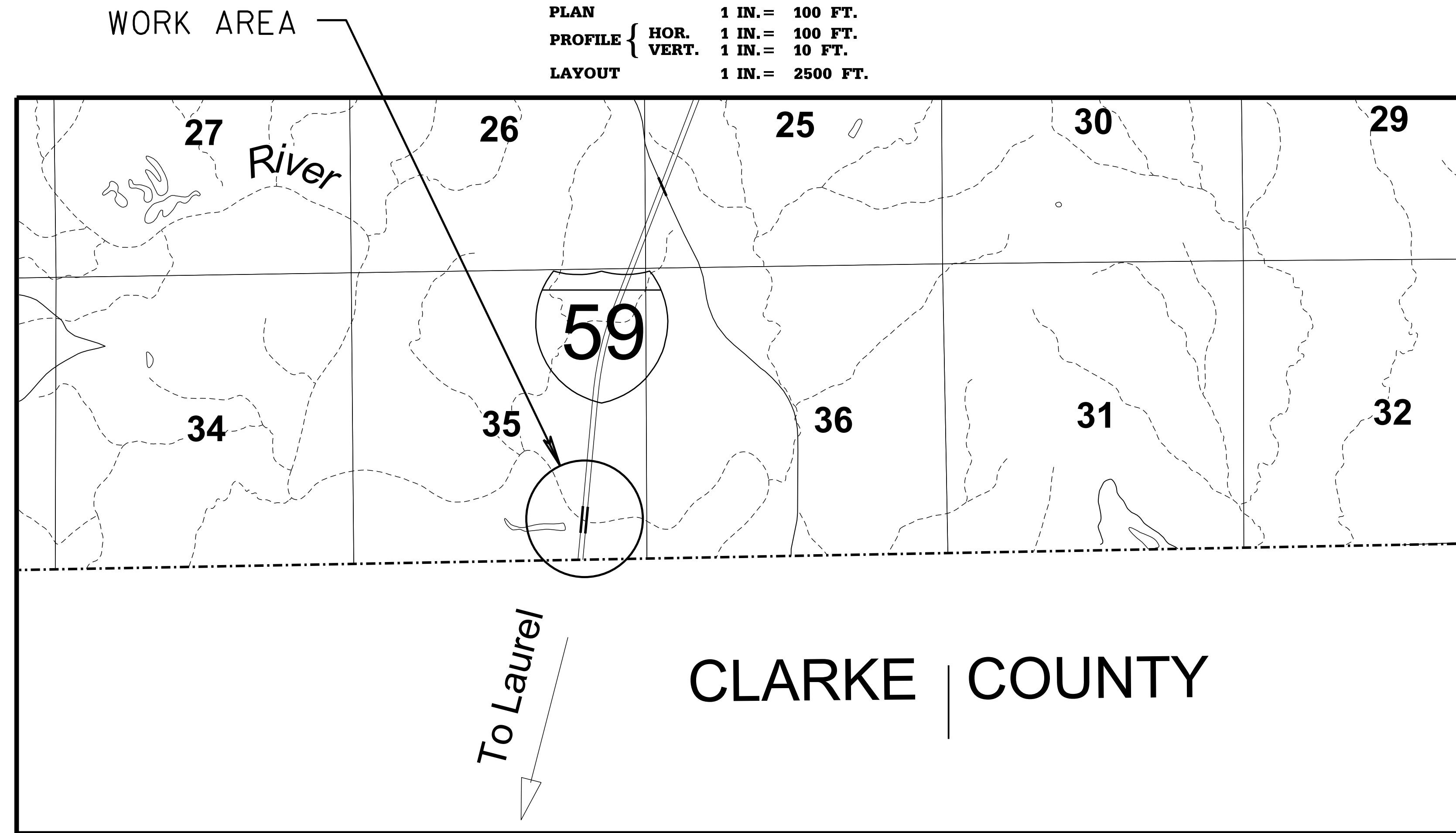
PLAN AND PROFILE OF PROPOSED STATE HIGHWAY
STATE PROJECT NO.: MRP-5059-38(230)

I-59 BRIDGE REPAIR
 0.2 MI. NORTH OF CLARKE CO. LINE
 LAUDERDALE COUNTY

FMS CON. NO.: 307163/301000

SCALES

PLAN	1 IN. = 100 FT.
PROFILE {	HOR. 1 IN. = 100 FT.
	VERT. 1 IN. = 10 FT.
LAYOUT	1 IN. = 2500 FT.



NOTE
 INDICATES APPROXIMATE LOCATION OF PROJECT.
 LAT. 32°13' 36.8N LONG. 88°49' 58.37W
 (APPROX. MIDDLE OF PROJECT)

DESIGN CONTROL

MPH = V (SPEED DESIGN)

ADT () = : ADT () =

DHV = : D = % T = %

PERMITS ACQUIRED BY MDOT

WETLANDS AND WATERS PERMITS		
	WATERS	WETLANDS
NATIONWIDE #14	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
NATIONWIDE (OTHER)*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GENERAL*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
INDIVIDUAL (404)*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

STORMWATER PERMIT

Y REQUIRED, CNDI SUBMITTED BY MDOT (DISTURBED AREA > 5 ACRES)

S REQUIRED, SCNDI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)

N NO STORMWATER PERMIT REQUIRED (<1 ACRE)

APPROVED BY: _____

EQUATIONS

EXCEPTIONS

LENGTH DATA

LENGTH OF ROADWAY	FT.	MI.
LENGTH OF BRIDGES	FT.	MI.
LENGTH OF PROJECT (NET)	FT.	MI.
LENGTH OF EXCEPTIONS	FT.	MI.
LENGTH OF PROJECT (GROSS)	FT.	MI.

CONVENTIONAL SYMBOLS

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

P S & E DATE: 5/12/20

APPROVED: _____
 DEPUTY EXECUTIVE DIRECTOR / CHIEF ENGINEER

EXECUTIVE DIRECTOR _____



5/12/2020 9:12 AM TITLE-59

1st O.REV.


STATE	PROJECT NO.
MISS	MRP-5059-38(230)

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	LAUDERDALE : 307163-301000	
			Prelim	Final
202-B240	Removal of Traffic Stripe	LF	2,412	
403-D007	9.5-mm, HT, Asphalt Pavement, Polymer Modified	TON	9	
406-A002	Cold Milling of Bituminous Pavement, All Depths	SY	156	
618-A001	Maintenance of Traffic	LS	1	
619-A1002	Temporary Traffic Stripe, Continuous White	LF	1,362	
619-A2002	Temporary Traffic Stripe, Continuous Yellow	LF	1,362	
619-A3002	Temporary Traffic Stripe, Skip White	LF	1,362	
619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet	SF	32	
619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More	SF	360	
619-F1001	Concrete Median Barrier, Precast	LF	370	
619-G4005	Barricades, Type III, Single Faced	LF	48	
620-A001	Mobilization	LS	1	
907-624-A002	6" Inverted Profile Thermoplastic Traffic Stripe, Skip White	LF	520	
907-624-B002	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous White	LF	520	
907-624-D002	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous Yellow	LF	520	
	OR			
628-G001	6" High Performance Cold Plastic Traffic Stripe, Skip White	LF	520	
628-H001	6" High Performance Cold Plastic Traffic Stripe, Continuous White	LF	520	
628-J001	6" High Performance Cold Plastic Traffic Stripe, Continuous Yellow	LF	520	
627-K001	Red-Clear Reflective High Performance Raised Markers	EA	7	

① ⚠
① ⚠

⚠ ① THE SOUTHBOUND OUTSIDE LANE WILL BE MILLED 1" AND REPLACED WITH 1" OF 9.5mm HT, POLYMER MODIFIED ASPHALT. THE LOCATION OF THE MILLING / PAVING WILL BE AT THE SOUTH END OF BR. 1382A.TACK COAT SHALL BE ABSORBED IN THE PRICE BID FOR 9.5mm HT, POLYMER MODIFIED ASPHALT.

05/29/2020	Date	ADDED PAY ITEMS AND FOOTNOTE	MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES PROJ NO: MRP-5059-38(230) COUNTY: LAUDERDALE FILENAME: REV59 Design Team WALDON Checked Date 4/29/2020	 Working Number SQ-1 Sheet Number 4
		Revision		
	By	GW		

SIGNS REQUIRED

SIGNS REQUIRED (CONT'D)

SIGNS REQUIRED (CONT'D)

SIGNS REQUIRED (CONT'D)

SIGN NO.	SIZE	UNIT AREA SQ.FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ.FT.	REMARKS
G20 - 1	60" X 24"	10.00	4	40	ROAD WORK NEXT X X MILES
G20 - 2	48" X 24"	8.00	4	32	END ROAD WORK
G20 - 4	36" X 18"	4.50			PILOT CAR FOLLOW ME
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			1 OR 2 DIGIT
2 M1 - 4	30" X 24"	5.00			3 DIGIT
3 M1 - 5	24" X 24"	4.00			1 OR 2 DIGIT
3 M1 - 5	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			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			DETOUR- 1 OR 2 DIGIT RTE. MARKER
M4 - 8	30" X 15"	3.13			DETOUR- 3 DIGIT RTE. MARKER
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			↑
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			↑
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" OCTAGON	7.46			STOP ①
R1 - 1	48" OCTAGON	13.25			STOP ②
R1 - 2	48" X 48" X 48"	6.93			YIELD ①
R1 - 2	60" X 60" X 60"	10.83			YIELD ②

SIGN NO.	SIZE	UNIT AREA SQ.FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ.FT.	REMARKS
R1 - 3	18" X 9"	1.13			3-WAY, ①
R1 - 3	24" X 12"	2.00			4 WAY ETC. ②
R2 - 1	24" X 30"	5.00			①
R2 - 1	36" X 48"	12.00			SPEED LIMIT ②
R2 - 1	48" X 60"	20.00			②
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			ONLY
R3 - 6R	30" X 36"	7.50			ONLY
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
R4 - 1	48" X 60"	20.00			DO NOT PASS ②
R4 - 2	24" X 30"	5.00			PASS WITH CARE ①
R4 - 2	48" X 60"	20.00			PASS WITH CARE ②
R4 - 7	48" X 60"	20.00			DO NOT ENTER
R5 - 1	48" X 48"	16.00			WRONG WAY
R5 - 1a	42" X 30"	8.75			ONE WAY ←
R6 - 1L	36" X 12"	3.00			ONE WAY →
R6 - 1R	36" X 12"	3.00			ONE WAY ←
R6 - 2L	24" X 30"	5.00			ONE WAY →
R6 - 2R	24" X 30"	5.00			ONE WAY ←
R11 - 2	48" X 30"	10.00			ROAD CLOSED
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
R16- 3	36" X 48"	12.00			WHEN WORKERS ARE PRESENT SPEEDING FINES DOUBLED
R16- 3	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			↙ ↘
W1 - 4aR	48" X 48"	16.00			↙ ↘
W1 - 5L	48" X 48"	16.00			↙ ↘
W1 - 5R	48" X 48"	16.00			↙ ↘
W1 - 6L	48" X 24"	8.00			↑ ①
W1 - 6L	60" X 30"	12.50			↑ ②
W1 - 6R	48" X 24"	8.00			↓ ①
W1 - 6R	60" X 30"	12.50			↓ ②
W1 - 7	48" X 24"	8.00			↔ ①

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			↕
W3 - 5	48" X 48"	16.00			SPEED REDUCTION
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 - 7	48" X 48"	16.00			LOOSE GRAVEL
W8 - 9	48" X 48"	16.00			LOW SHOULDER
W8 - 11	36" X 36"	9.00			UNEVEN LANES
W8 - 12	48" X 48"	16.00			NO CENTER STRIPE
W10 - 1	36" DIA.	7.07			⊗ ①
W10 - 1	48" DIA.	12.56			⊗ ②
W13 - 1	24" X 24"	4.00			XX MPH
W14 - 3	36" X 48" X 48"	5.56			NO PASSING ZONE ①
W14 - 3	48" X 64" X 64"	9.89			NO PASSING ZONE ②
W16-2	24" X 18"	3.00			XXX FEET
W19 - 2	48" X 48"	16.00			BRIDGE MAY ICE IN COLD WEATHER
W20 - 1	48" X 48"	16.00	20	320	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
W20 - 7a	48" X 48"	16.00			WORKERS
W21 - 1	36" X 36"	9.00			WORKERS
W21 - 1a	36" X 36"	9.00			WORKERS

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
W24 - 1L	48" X 48"	16.00			↙ ↘
W24 - 1R	48" X 48"	16.00			↙ ↘
W24 - 1AL	48" X 48"	16.00			↙ ↘
W24 - 1AR	48" X 48"	16.00			↙ ↘
W24 - 1BL	48" X 48"	16.00			↙ ↘
W24 - 1BR	48" X 48"	16.00			↙ ↘
VP - 1L	12" X 36"	3.00			↙ ↘
VP - 1R	12" X 36"	3.00			↙ ↘
5 OM - 3L	12" X 36"	3.00			↙ ↘
5 OM - 3R	12" X 36"	3.00			↙ ↘
TOTAL SIGN AREA LESS THAN 10 SQ. FT.					32 SQ. FT.
TOTAL SIGN AREA 10 SQ. FT. OR MORE					360 SQ. FT.
① STANDARD					
② SPECIAL (USE WHERE WARRANTED)					

NOTES

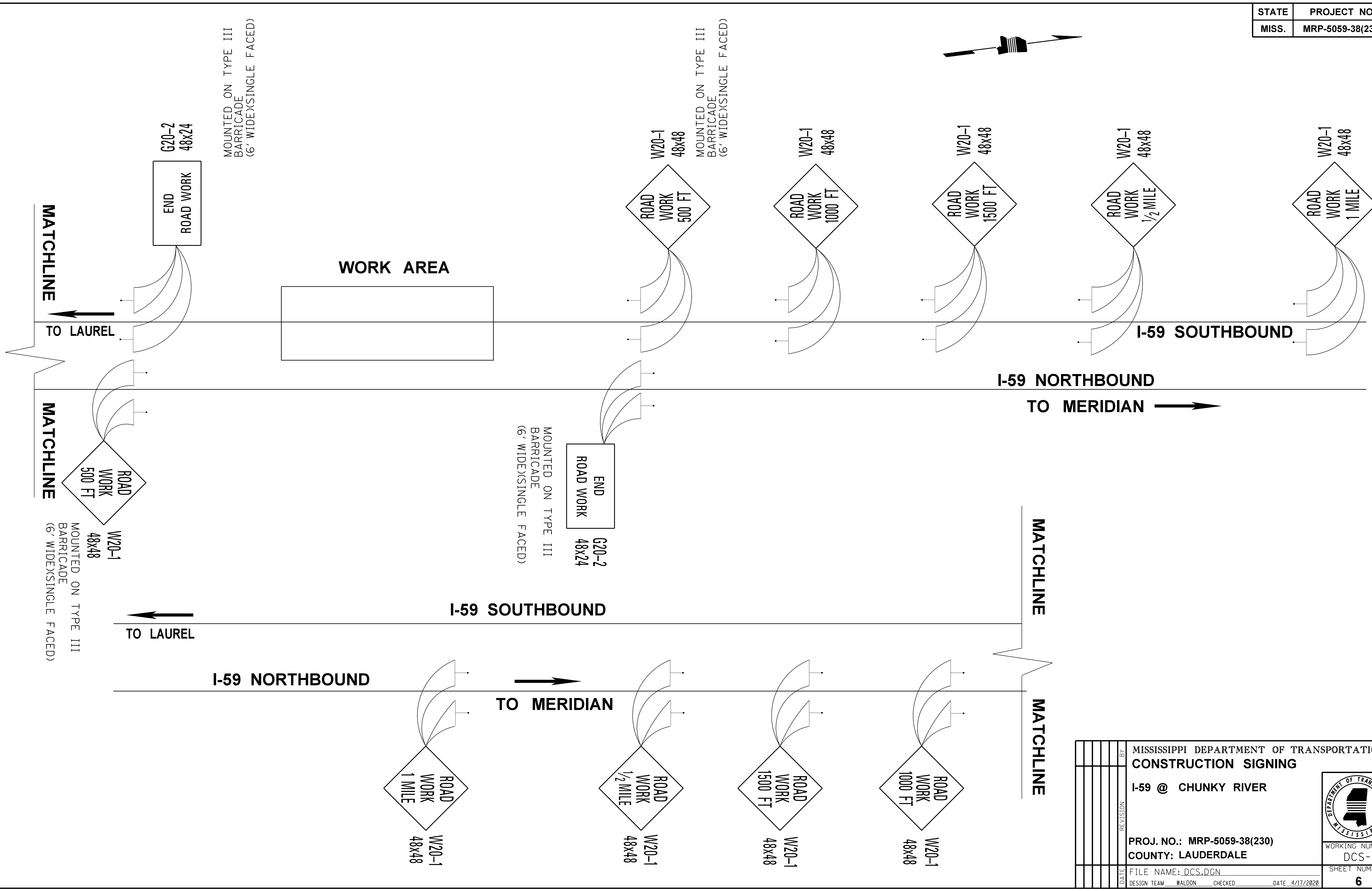
- ① INTERSTATE ROUTE MARKER
- ② UNITED STATES ROUTE MARKER
- ③ STATE ROUTE MARKER
- ④ COLORS OF CARDINAL DIRECTION MARKERS AND DIRECTIONAL ARROWS SHALL BE APPROPRIATE TO MATCH ACCOMPANYING ROUTE MARKERS.
- ⑤ BLACK STRIPES ON YELLOW BACKGROUND
- ⑥ INTERSTATE USE ONLY
- ⑦ TOP OF SIGN - BLACK LETTERING 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 W10-1 BACKGROUND SHALL BE YELLOW IN ALL CASES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ESTIMATED QUANTITIES FOR TRAFFIC CONTROL SIGNS	
PROJ. NO.: MRP-5059-38(230)	
COUNTY: LAUDERDALE	
DATE	FILE NAME: EQ59.dgn
DESIGN TEAM	WALDON
CHECKED	
DATE	
WORKING NUMBER TCP-Q	
SHEET NUMBER 5	

STATE	PROJECT NO.
MISS.	MRP-5059-38(230)

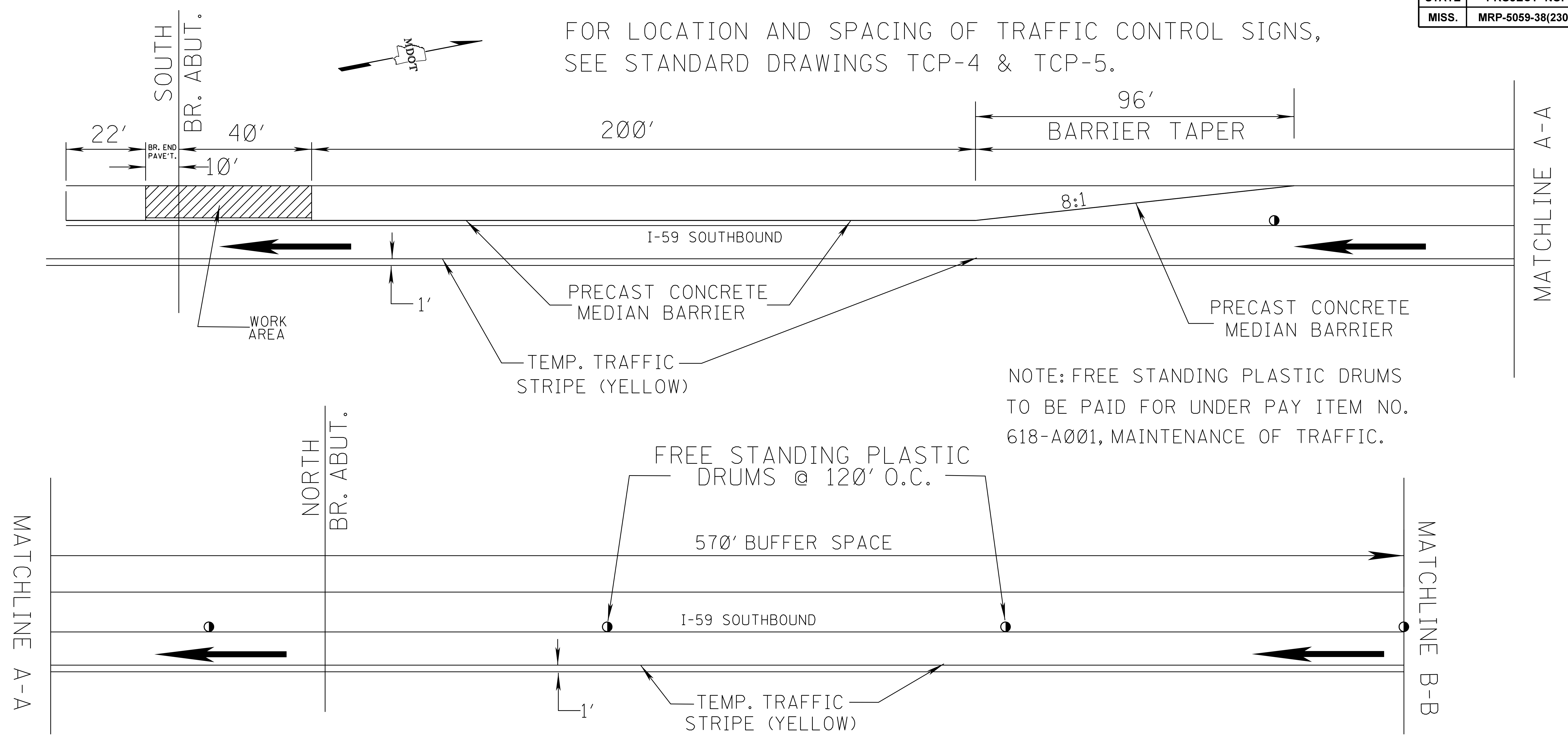
5/12/2020 9:11:21 AM DCS PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION



MISSISSIPPI DEPARTMENT OF TRANSPORTATION CONSTRUCTION SIGNING		 WORKING NUMBER DCS-1 SHEET NUMBER 6
I-59 @ CHUNKY RIVER		
PROJ. NO.:	MRP-5059-38(230)	FILE NAME: DCS.DGN DATE: _____ DESIGN TEAM: WALDON CHECKED: _____ DATE: 4/17/2020
COUNTY:	LAUDERDALE	

STATE	PROJECT NO.
MISS.	MRP-5059-38(230)

FOR LOCATION AND SPACING OF TRAFFIC CONTROL SIGNS,
SEE STANDARD DRAWINGS TCP-4 & TCP-5.



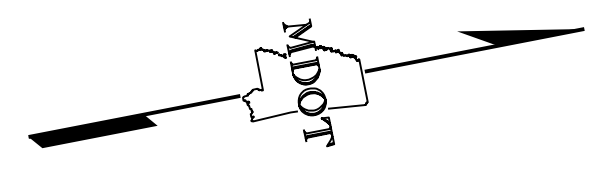
NOTE: FREE STANDING PLASTIC DRUMS
TO BE PAID FOR UNDER PAY ITEM NO.
618-A001, MAINTENANCE OF TRAFFIC.

NOTE: IF THE CONTRACTOR NEEDS ACCESS TO THE 200' BUFFER ZONE NEAR THE TAPER,
AN IMPACT ATTENUATOR MAY BE PLACED AT THE UPSTREAM END OF THE CMB
IN LIEU OF THE TAPERED RAIL. THE CONTRACTOR MUST SUBMIT TO THE PROJECT
ENGINEER A WRITTEN REQUEST TO SUBSTITUTE THE ATTENUATOR. THE REQUEST
MUST INCLUDE TYPE, DESIGN CHARACTERISTICS AND THE MANUFACTURERS DATA
FOR THE ATTENUATOR. THE REQUEST MUST BE APPROVED PRIOR TO IMPLEMENTATION.
IF AN ATTENUATOR IS PLACED, THE COST OF THE ATTENUATOR AND REPLACEMENT
PACKAGES SHALL BE ABSORBED IN OTHER ITEMS BID.

5/12/2020 9:12 AM TCP59

MISSISSIPPI DEPARTMENT OF TRANSPORTATION		
TRAFFIC CONTROL PLAN		
I-59 OVER CHUNKY RIVER		
PROJ. NO.: MRP-5059-38(230)		WORKING NUMBER
COUNTY: LAUDERCALE		TC-1
DATE	FILE NAME: TCP59.DGN	SHEET NUMBER
DESIGN TEAM	WALDON	CHECKED
		DATE
		7

STATE	PROJECT NO.
MISS.	MRP-5059-38(230)



MATCHLINE B-B

MATCHLINE C-C

720' TAPER

I-59 SOUTHBOUND

TEMP. TRAFFIC STRIPE (YELLOW)

FREE STANDING PLASTIC DRUMS @ 60' O.C.

NOTE: FREE STANDING PLASTIC DRUMS TO BE PAID FOR UNDER PAY ITEM NO. 618-A001, MAINTENANCE OF TRAFFIC.

MATCHLINE C-C

240'


SHOULDER CLOSURE

I-59 SOUTHBOUND

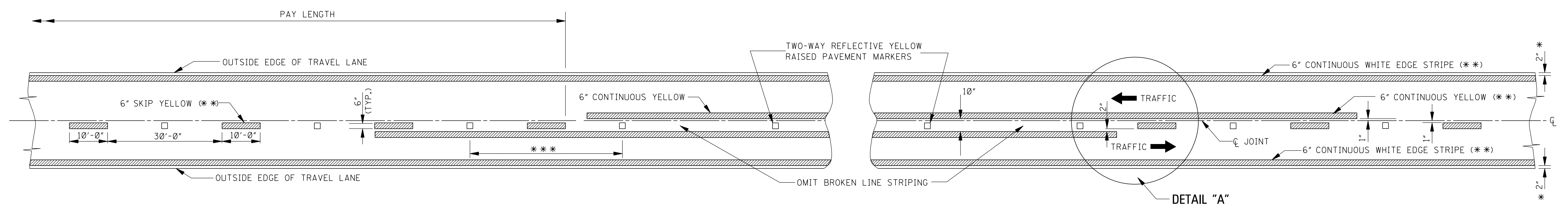
TEMP. TRAFFIC STRIPE (YELLOW)

FREE STANDING PLASTIC DRUMS @ 60' O.C.

FOR LOCATION AND SPACING OF TRAFFIC CONTROL SIGNS, SEE STANDARARD DRAWINGS TCP-4 & TCP-5.

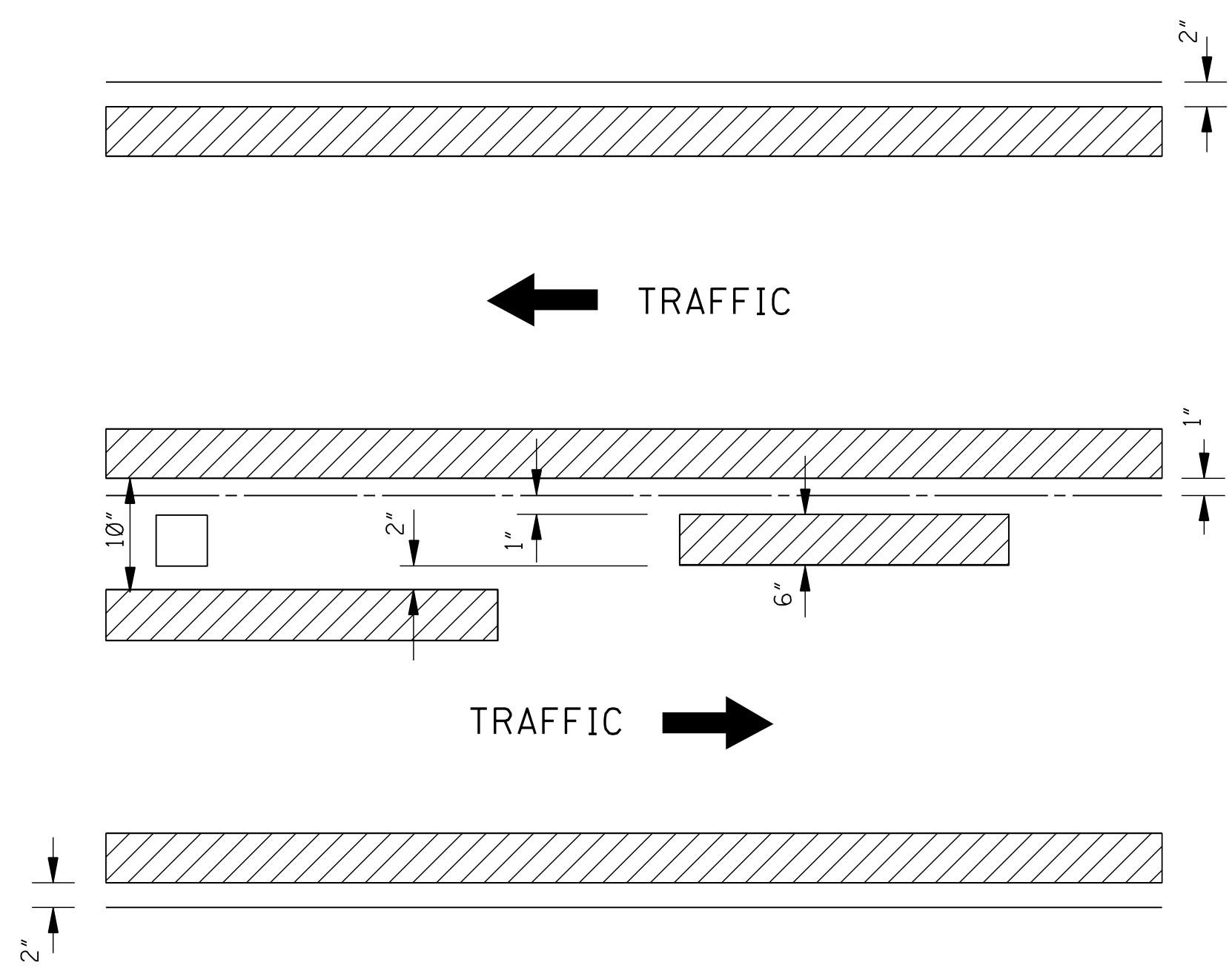
MISSISSIPPI DEPARTMENT OF TRANSPORTATION		
TRAFFIC CONTROL PLAN		
I-59 OVER CHUNKY RIVER		WORKING NUMBER
PROJ. NO.: MRP-5059-38(230)		TC-2
COUNTY: LAUDERDALE		SHEET NUMBER
FILE NAME: TCP59.DGN		8
DESIGN TEAM	WALDON	CHECKED
DATE		DATE

5/12/2020 9:12 AM TCP59



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)

NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDT ROADWAY DESIGN MANUAL, SECTION 11-1.01.



DETAIL "A"

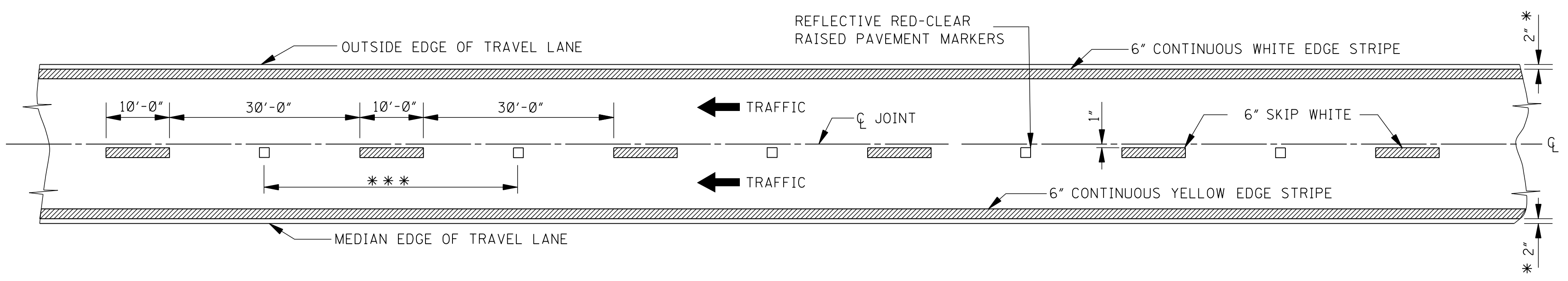
GENERAL NOTES:

- * 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO WK. SHEETS RS-1, RS-2, AND RS-3.
- ** 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 MDT "APPROVED SOURCES OF MATERIALS."

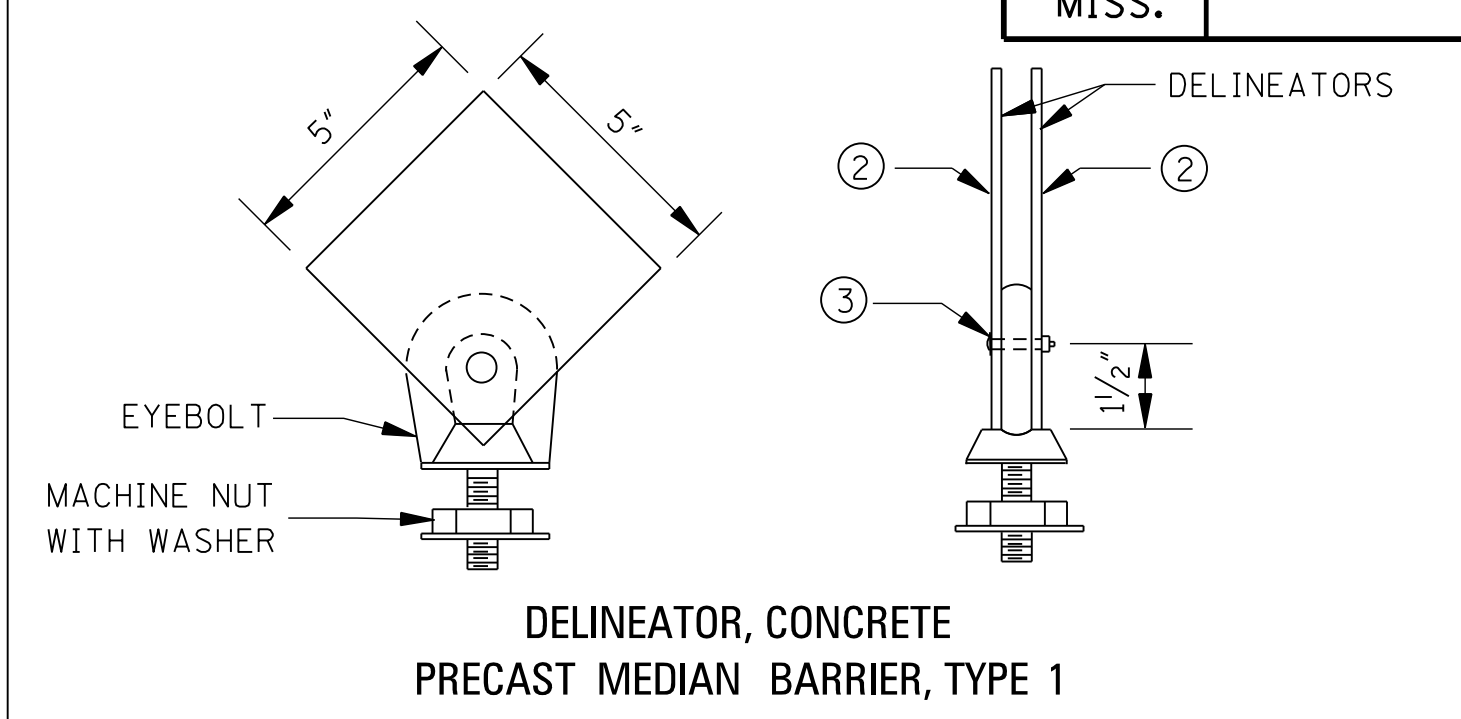
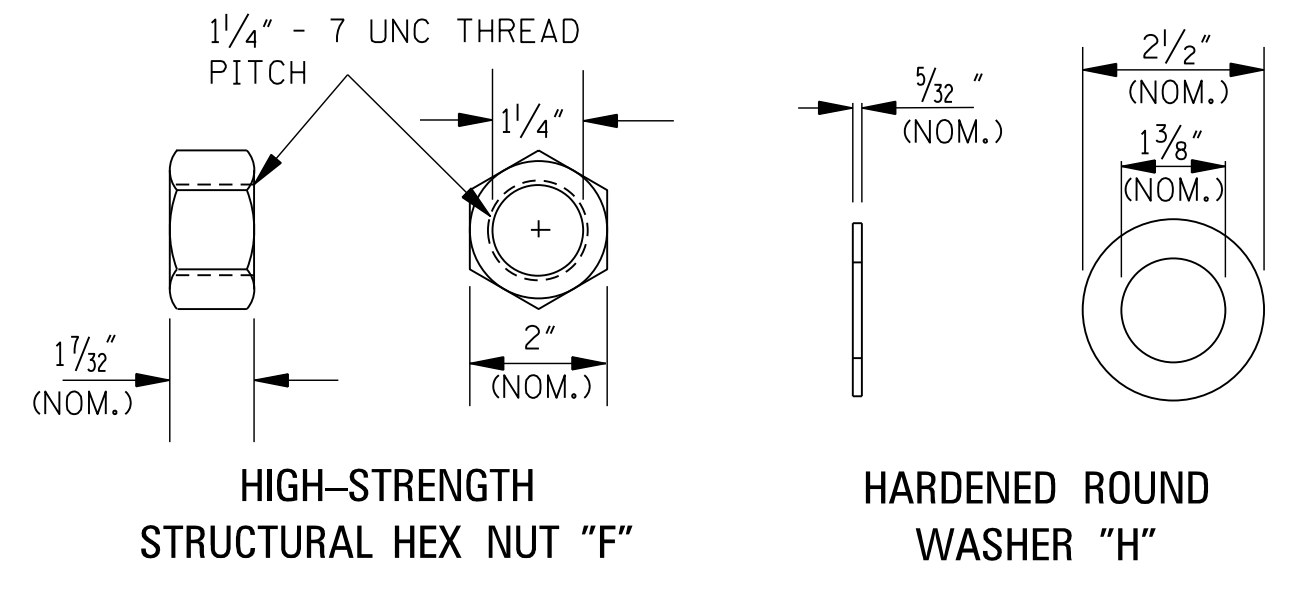
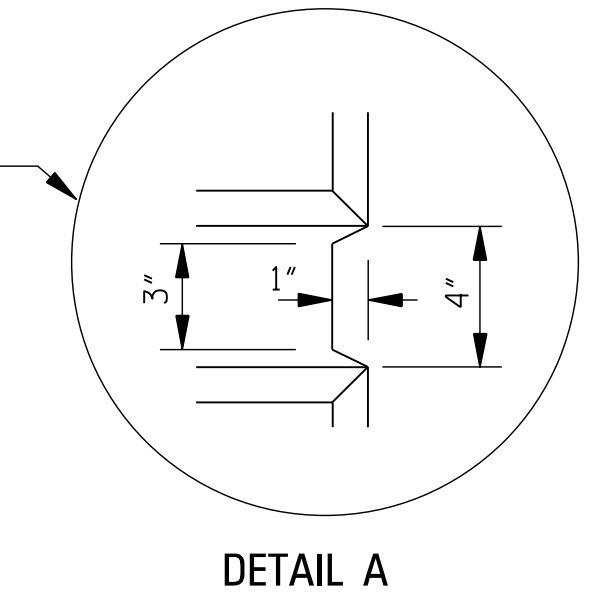
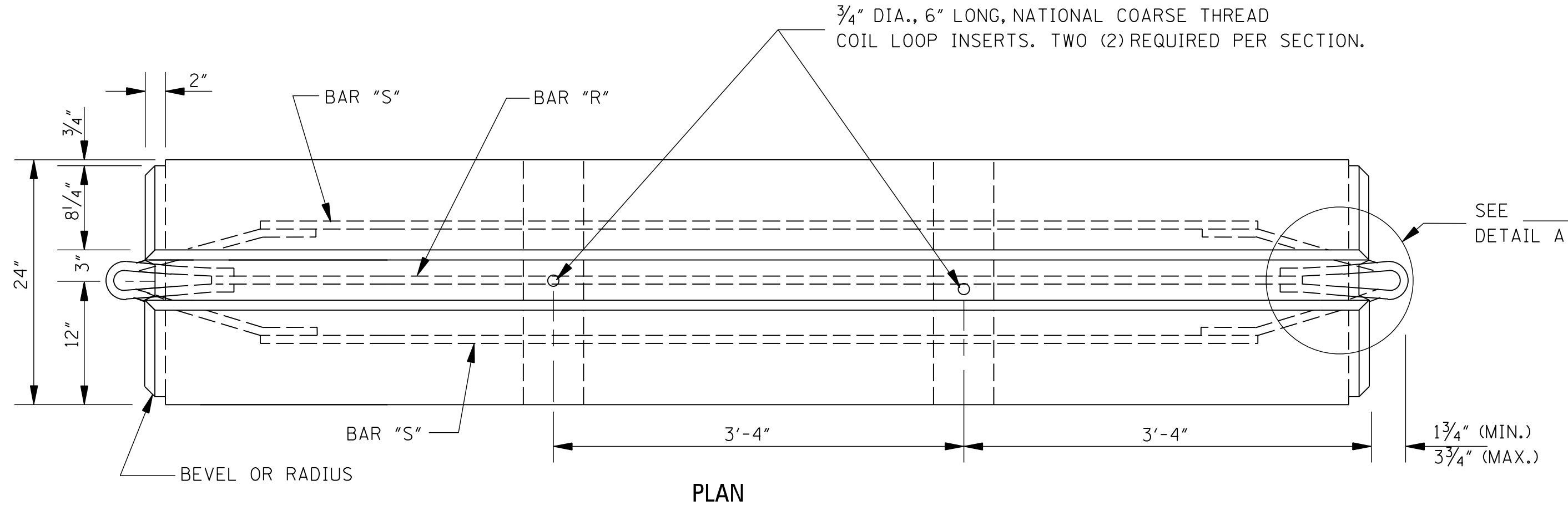


4-LANE WITH ONE-WAY TRAFFIC

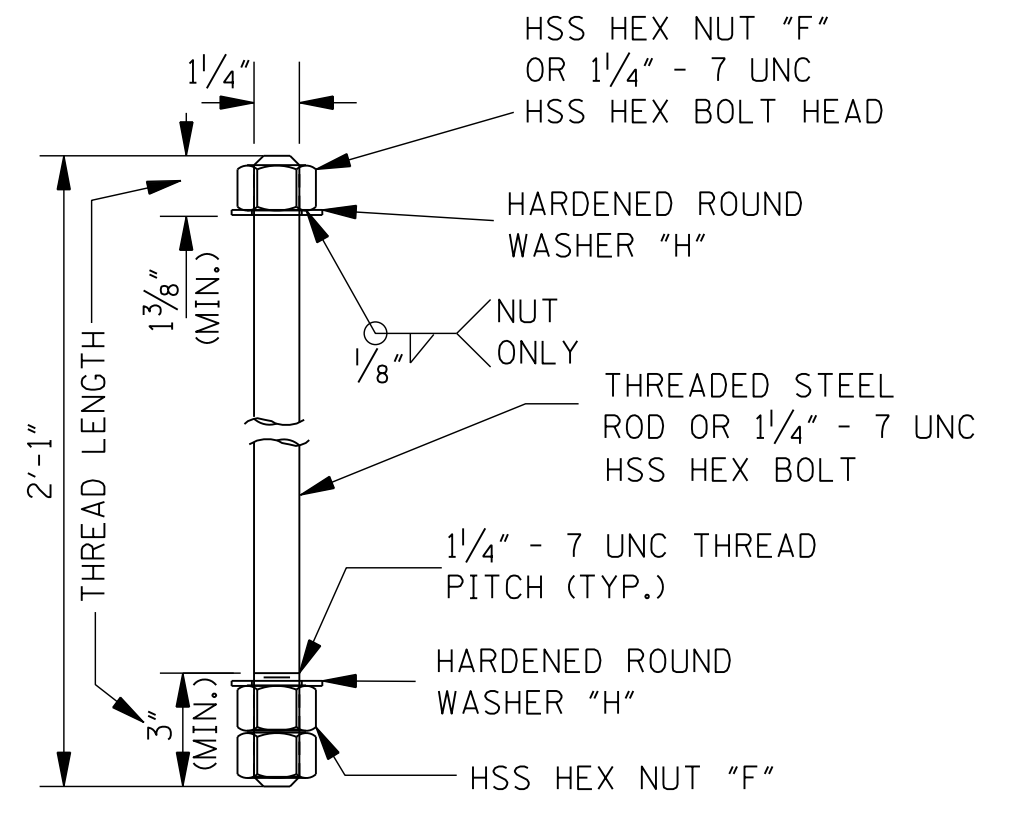
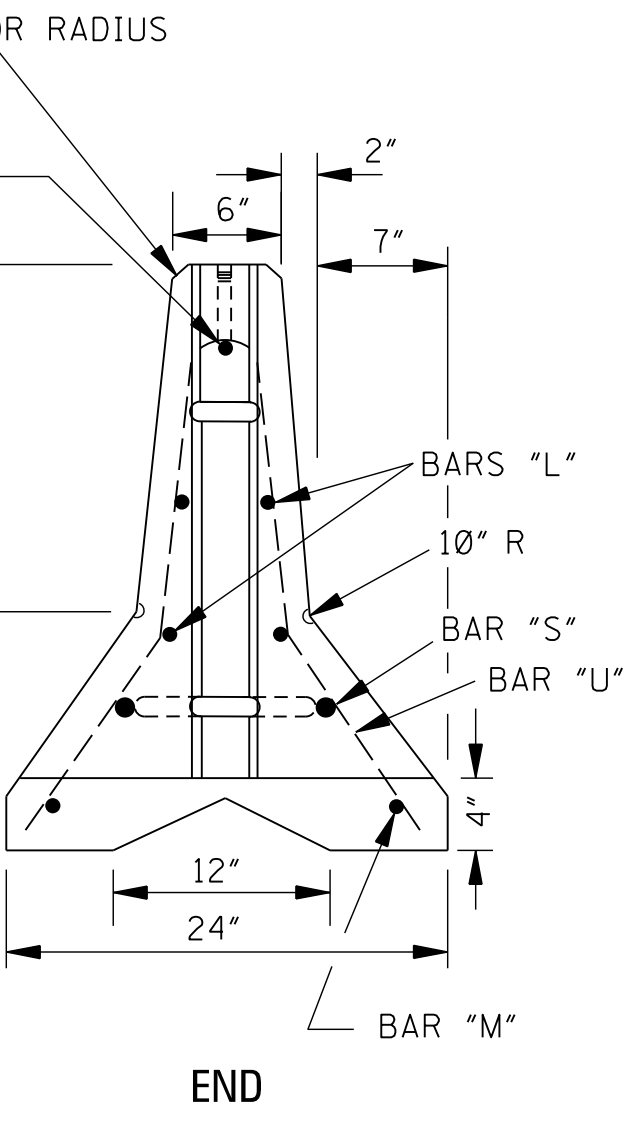
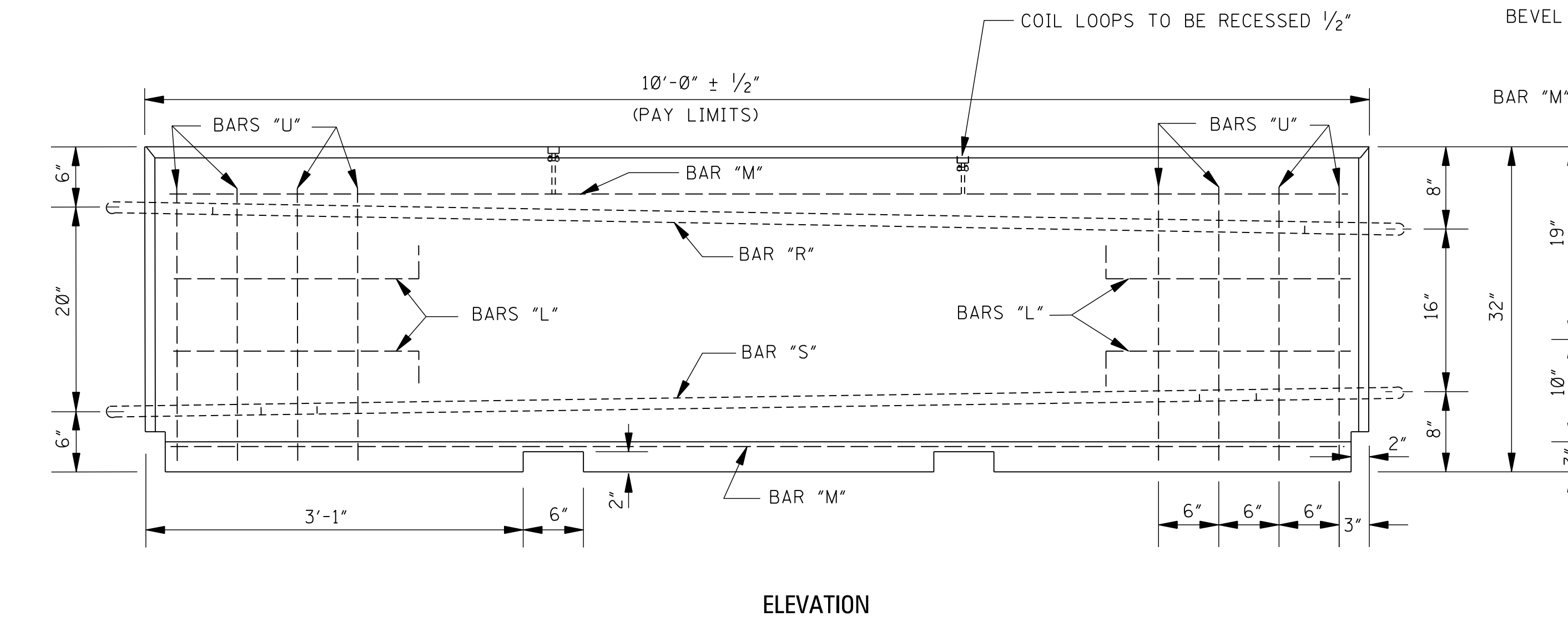
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS
DATE	ISSUE DATE: AUGUST 01, 2017



WORKING NUMBER
PM-1
SHEET NUMBER
6051



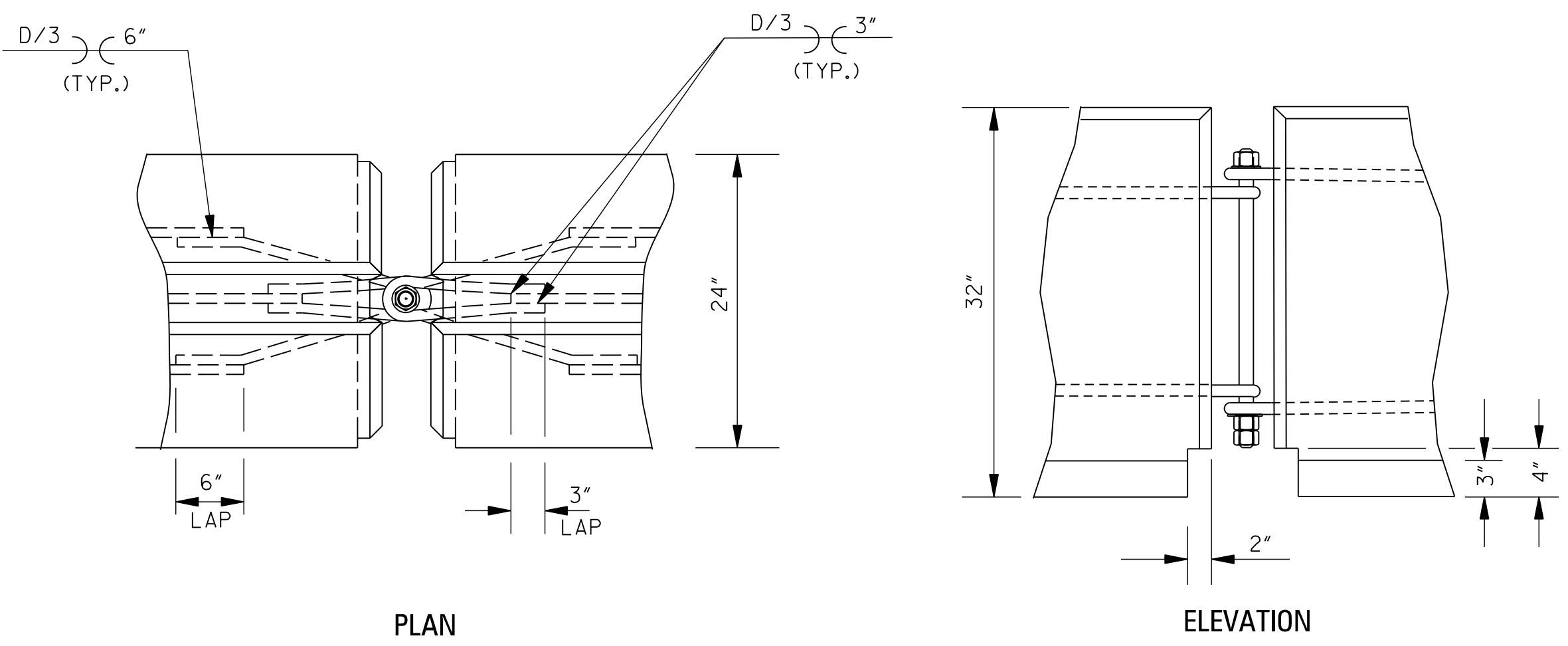
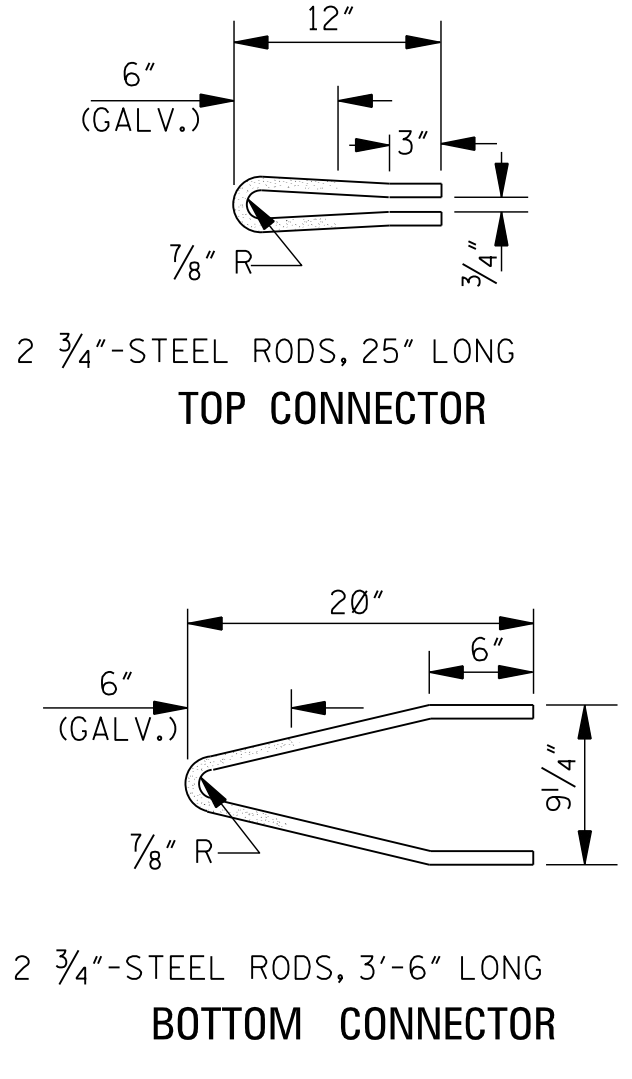
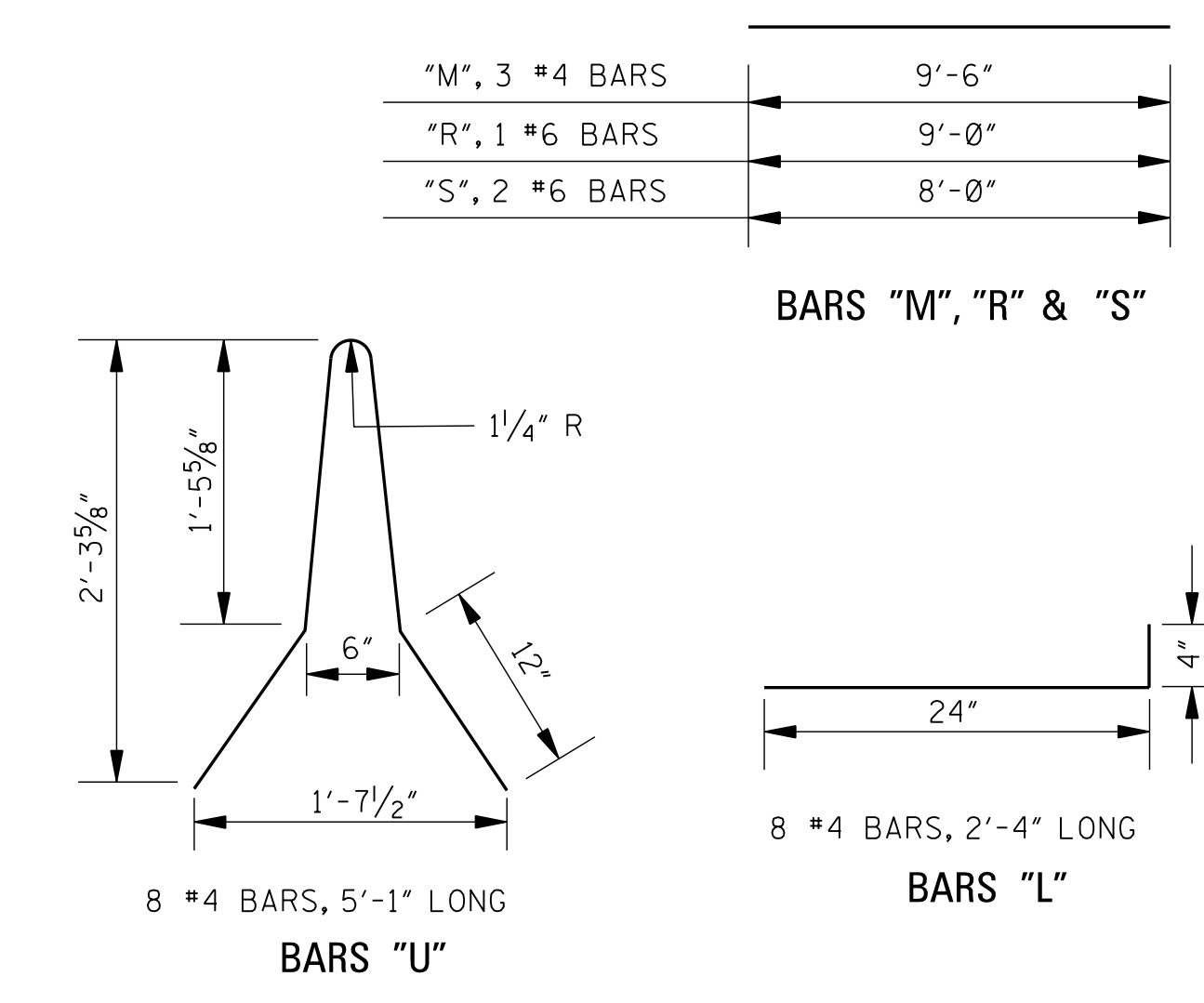
- ① DELINEATORS SHALL BE REQUIRED UNLESS INDICATED OTHERWISE ON THE PLANS. THIS ITEM WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED UNDER PAYMENT FOR PRECAST CONCRETE BARRIER.
- ② DELINEATORS SHALL BE ENCAPSULATED LENS REFLECTIVE SHEETING ON ALUMINUM SHEET, 0.080" THICK, OR SHEET STEEL, 14 GAGE, 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.



ANCHOR STUD CONNECTOR DETAILS
 NOTE: ALTERNATE METHODS OF CONNECTING PRECAST BARRIERS, SUCH AS J-HOOKS, MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.

GENERAL NOTES:

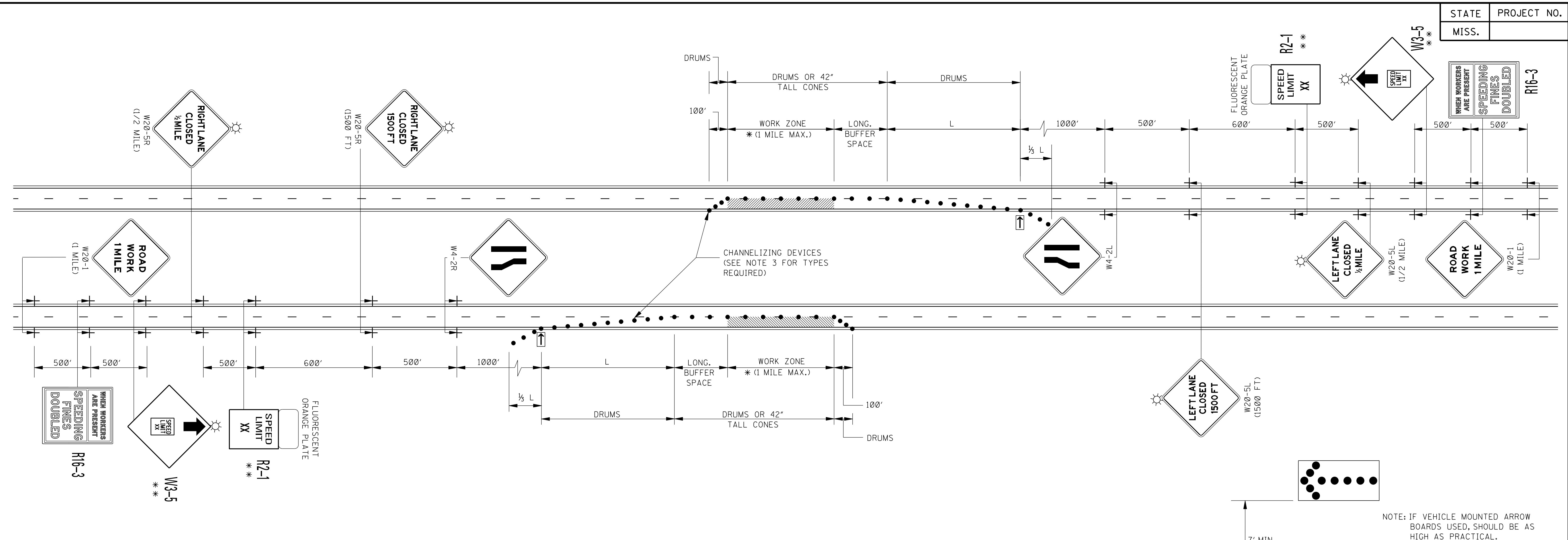
1. LIFTING DEVICES AND ATTACHMENTS TO BARRIER SECTIONS SHALL BE AS APPROVED BY THE ENGINEER.
2. PLACE ALL STEEL REINFORCEMENT 2" MINIMUM FROM OUTSIDE FACE OF WALL, EXCEPT AS OTHERWISE SHOWN.
3. THE ANCHOR STUD CONNECTOR SHALL CONFORM TO AASHTO M 314, GRADE 55. THE HSS HEX NUTS AND THE HARDENED ROUND 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

BAR AND ROD DETAILS
 NOTE: WHERE STEEL ROD GALVANIZATION IS SHOWN ABOVE, GALVANIZE AFTER BENDING.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">CONCRETE MEDIAN BARRIER (PRECAST) (32")</p>	
DATE			
ISSUE DATE: AUGUST 01, 2017			
		WORKING NUMBER CMB-3 SHEET NUMBER 6226	



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)		LONGITUDINAL BUFFER SPACE (ft)	TAPER RATES †
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
mph				
≤40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	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

++ NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. FLASHING ARROW PANEL SHOULD 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.

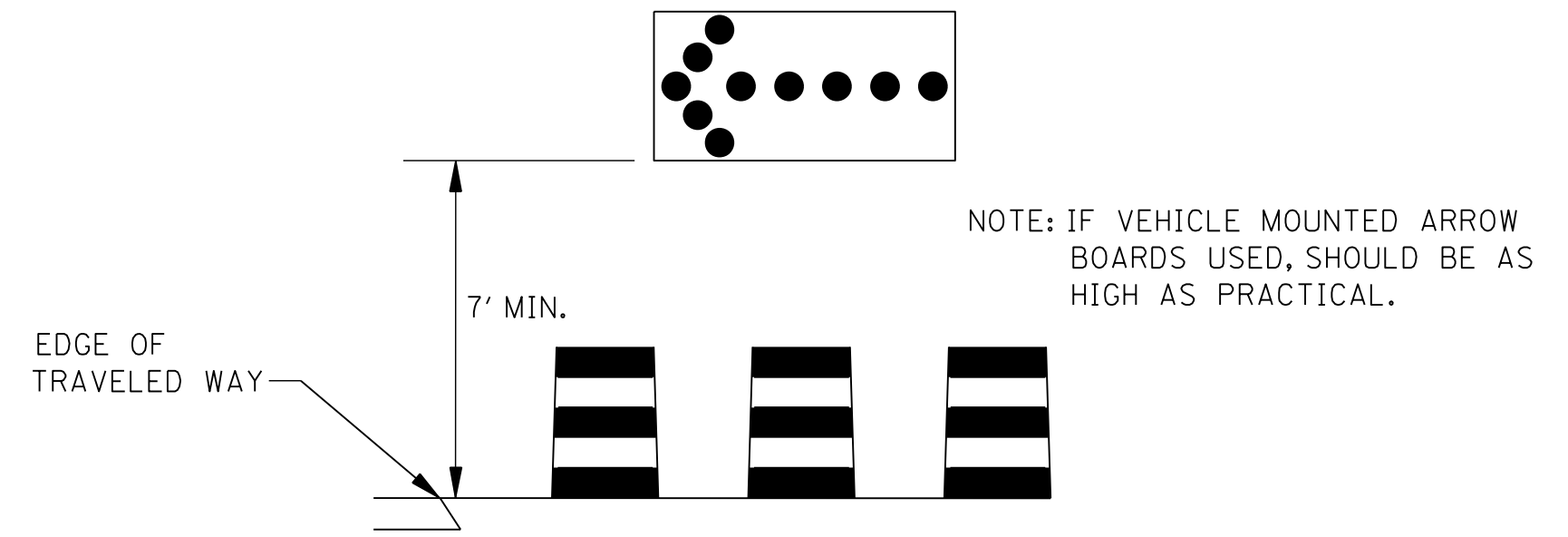
3. CHANNELIZING DEVICES:

- A. ALL CHANNELIZING DEVICES IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
- B. CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES.
- C. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
- D. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

4. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING 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.

5. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48". AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.

6. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.



LEGEND

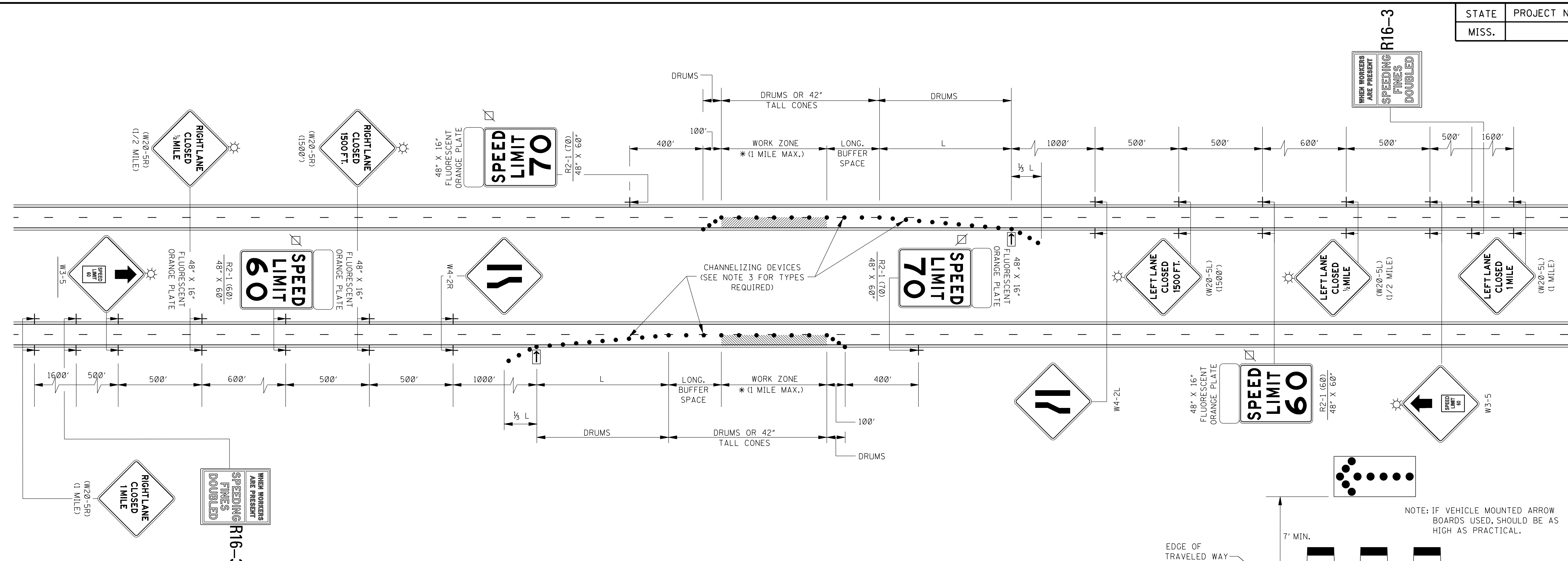
- * OR AS SHOWN ELSEWHERE ON THE PLANS.
- ** THE SPEED ON R2-1 AND W3-5 SIGNS SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.
- ☑ FLASHING ARROW PANEL (TYPE "C")
- RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
- ☼ TYPE "B" WARNING LIGHTS

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT LESS THAN 65 MPH (4-LANE: MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)
DATE	ISSUE DATE: AUGUST 01, 2017

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
TCP-3

SHEET NUMBER
6353



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)		LONGITUDINAL BUFFER SPACE (ft)	TAPER RATES
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
≤40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	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

++ NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. FLASHING ARROW PANEL SHOULD 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 IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
- B. CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES.
- C. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
- D. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.

5. 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.

6. ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.

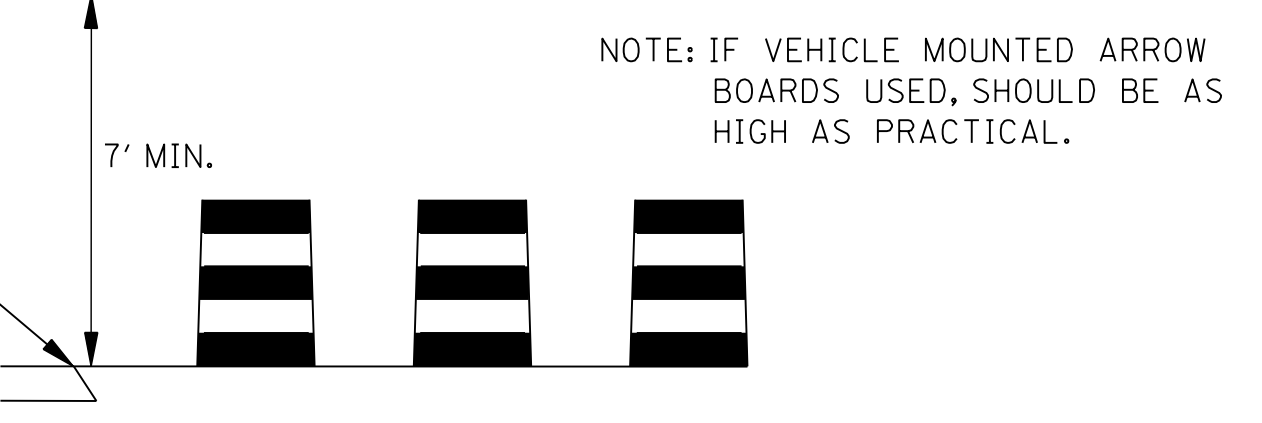
7. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.

8. 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.

9. A FLUORESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS REQUIRED FOR LANE CLOSURE.

10. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

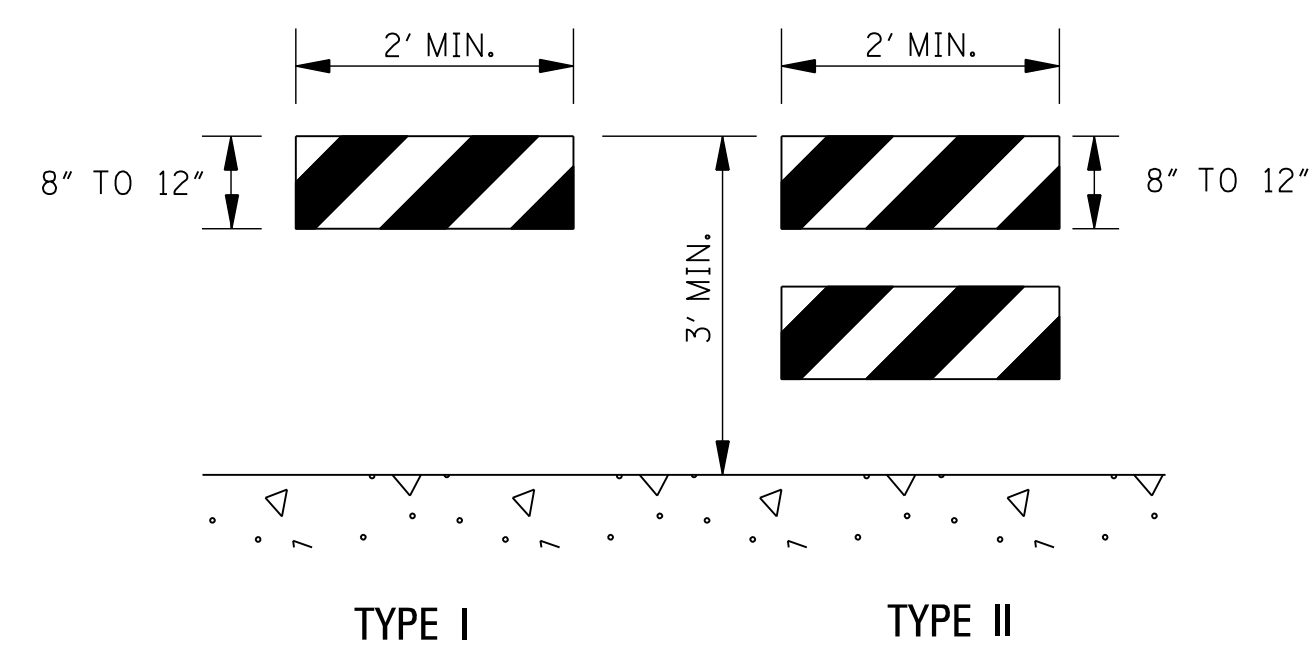
EDGE OF TRAVELED WAY



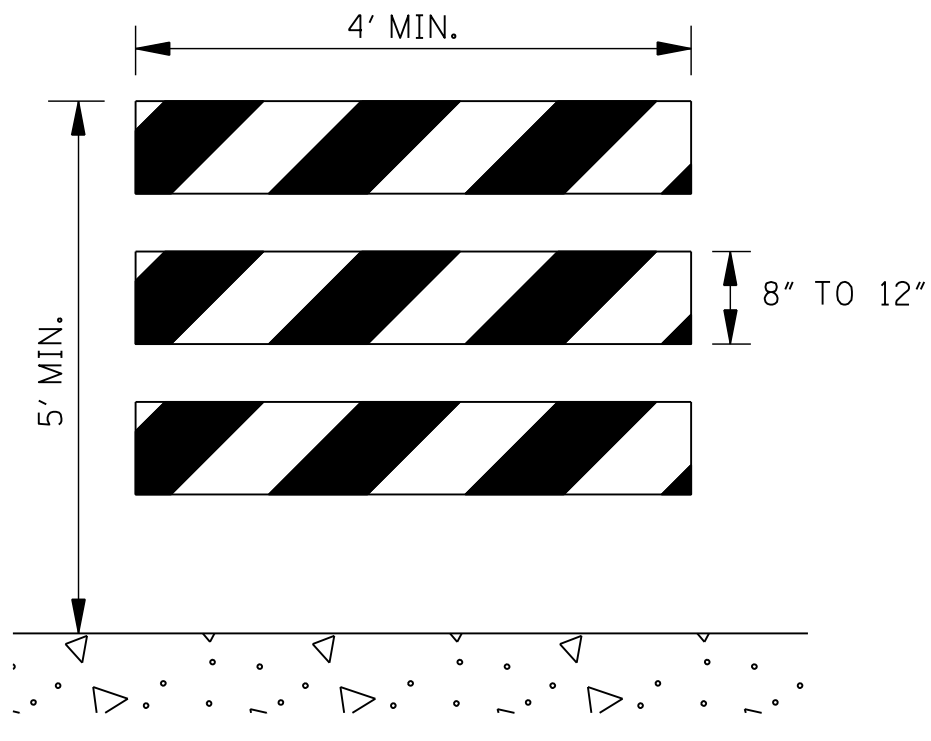
LEGEND

- * OR AS SHOWN ELSEWHERE ON THE PLANS.
- FLASHING ARROW PANEL (TYPE "C")
- BLACK LEGEND AND BORDER ON WHITE BACKGROUND
- ☼ TYPE "B" WARNING LIGHTS
- RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS

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) (EXTENDED PERIOD)	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017
 WORKING NUMBER TCP-4 SHEET NUMBER 6354	



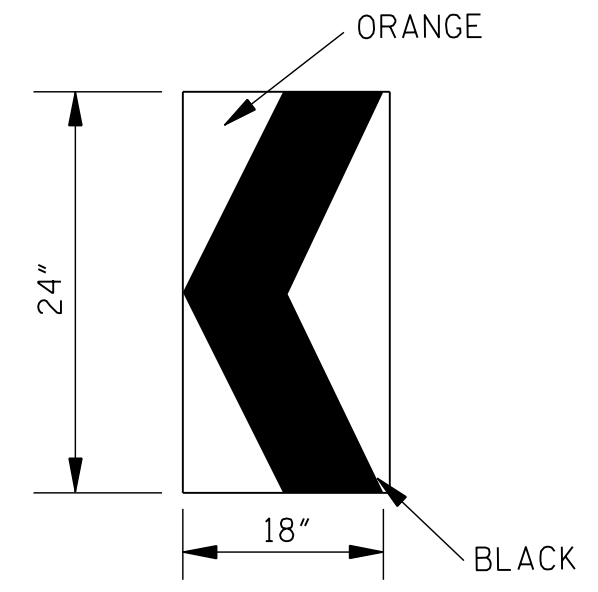
TYPE I TYPE II



TYPE III

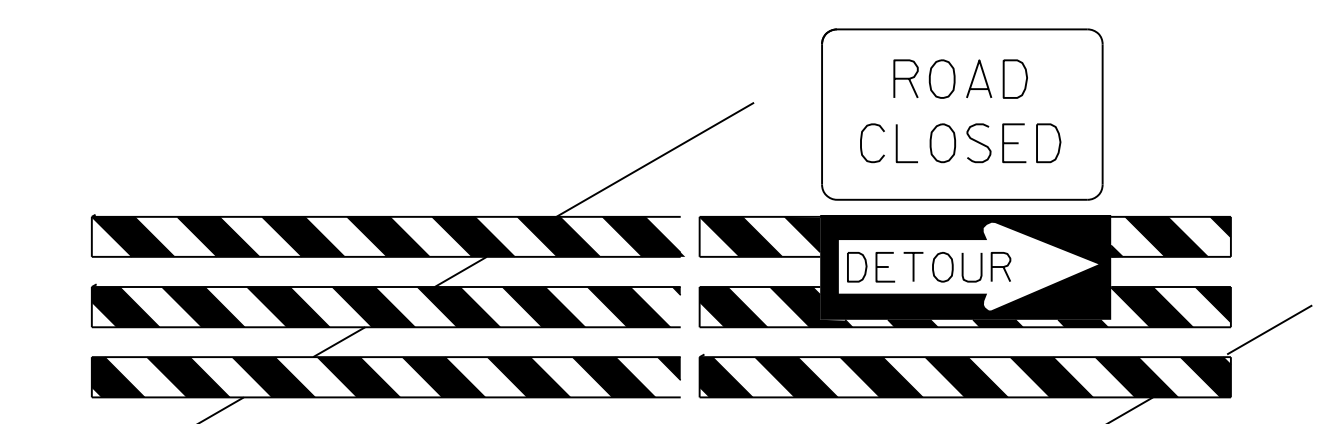
STANDARD BARRICADES

1. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
2. RAIL STRIPE SHOULD BE 6 INCHES, EXCEPT THAT 4-INCH WIDE STRIPES MAY BE USED IF RAIL LENGTHS ARE LESS THAN 36 INCHES.
3. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE:
http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/cat2.cfm



**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 CRASHWORTHY SUPPORT.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHOULD BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.

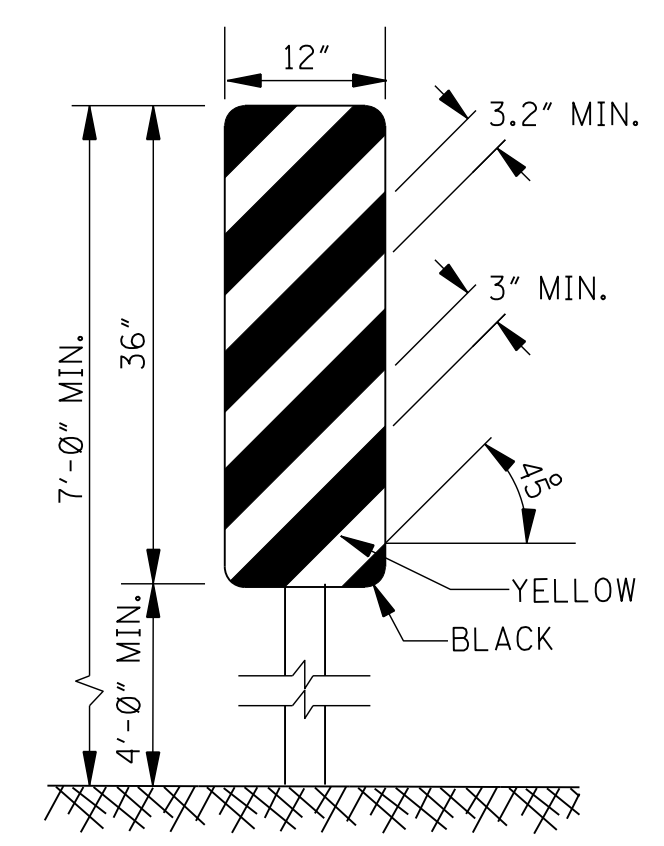


BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

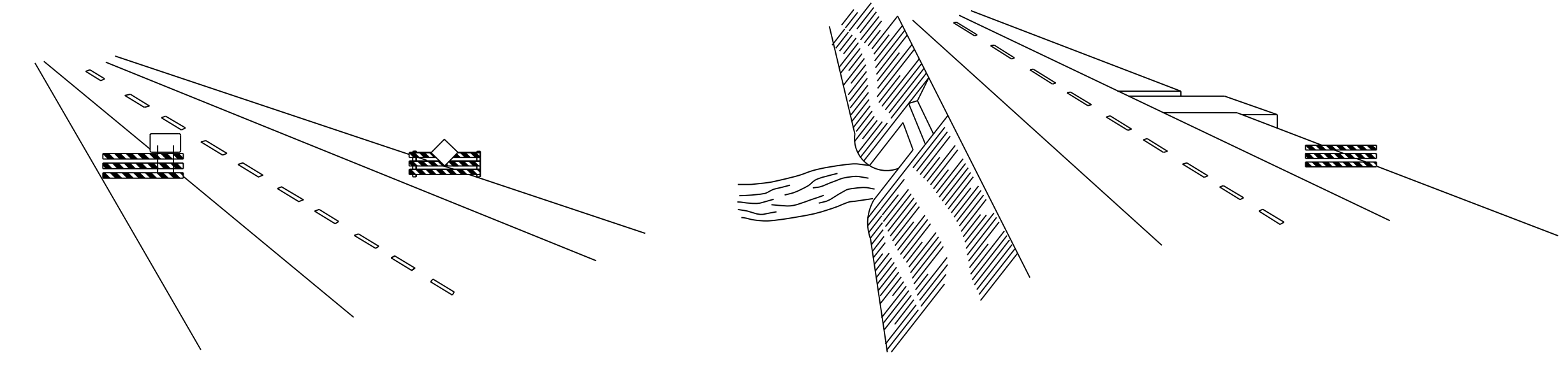
	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

- * 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 in² OF REFLECTIVE AREA FACING TRAFFIC.



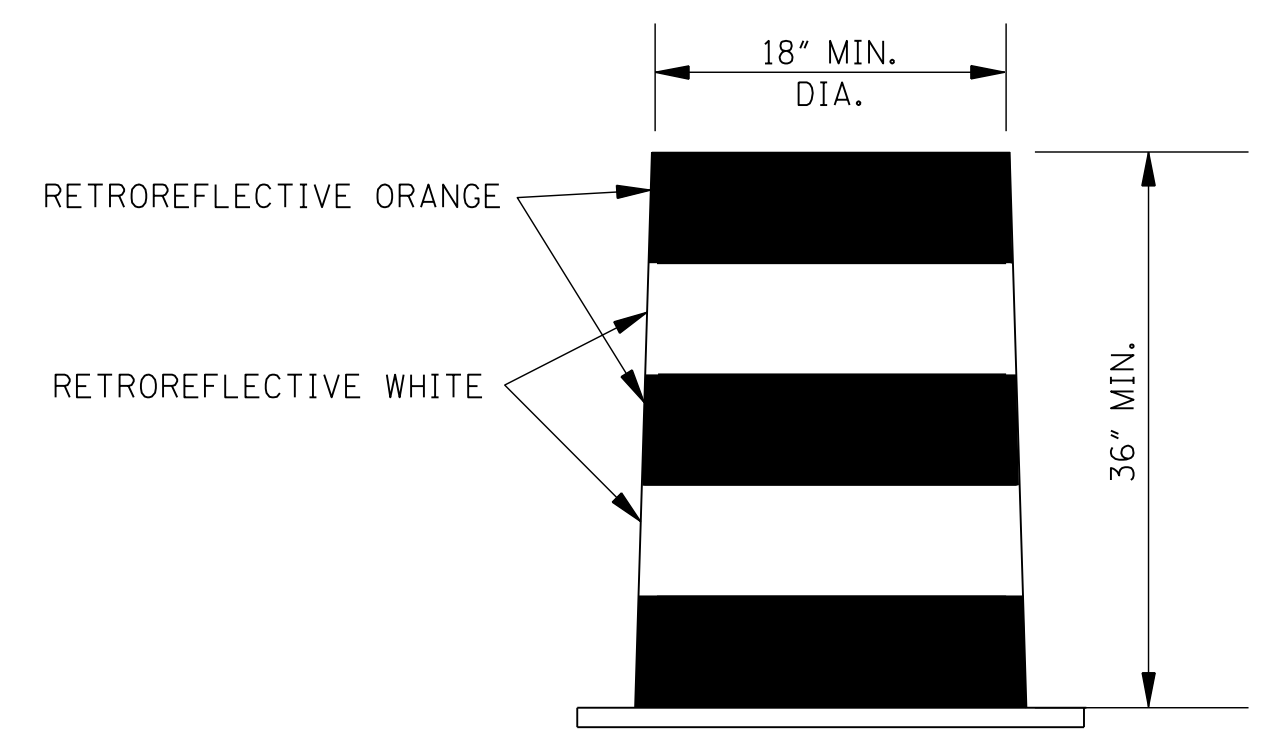
**TYPE 3 OBJECT MARKER
(OM-3R)**

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.



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.



PLASTIC DRUM STRIPING DETAIL

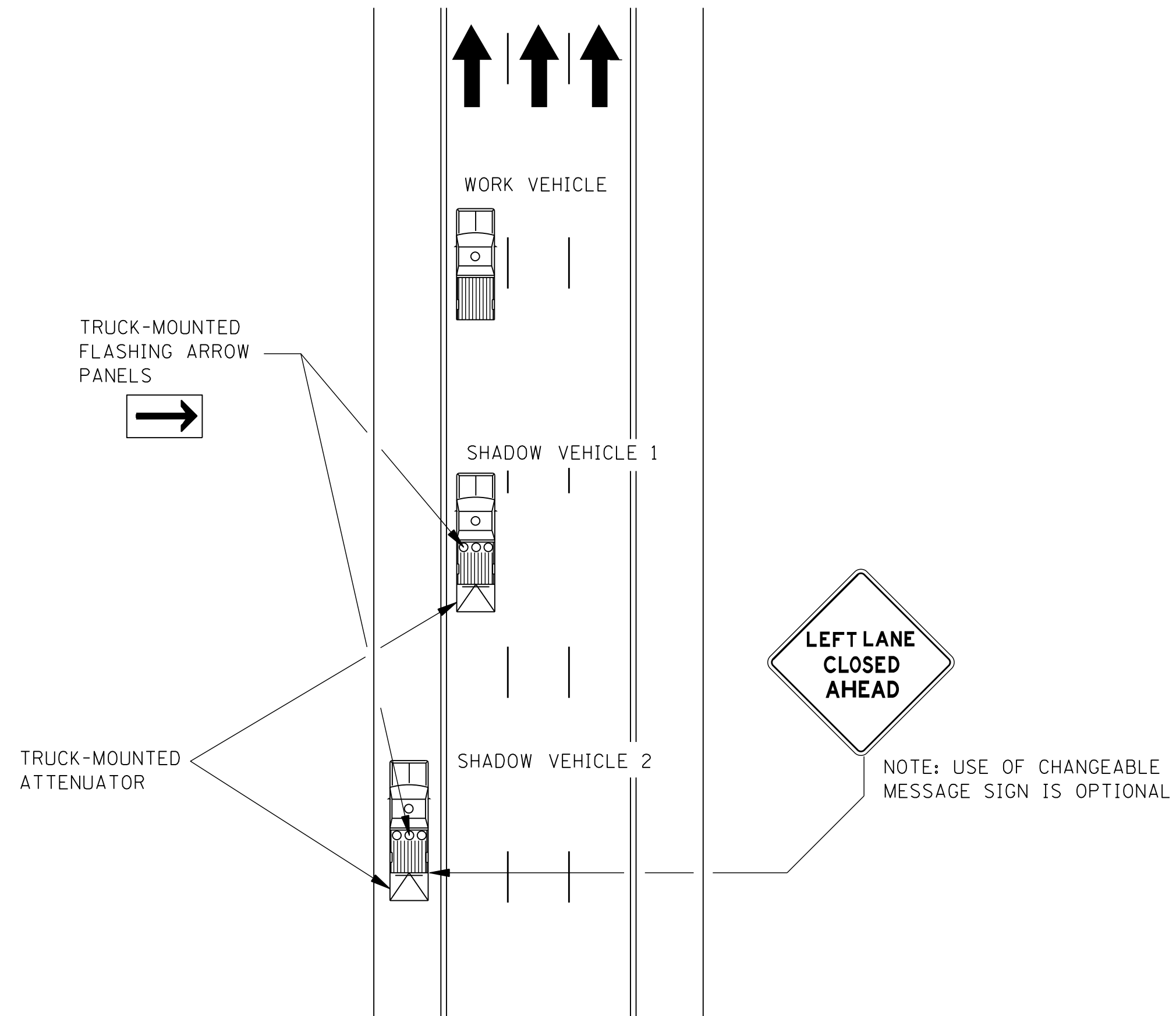
1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHOULD BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS</p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	

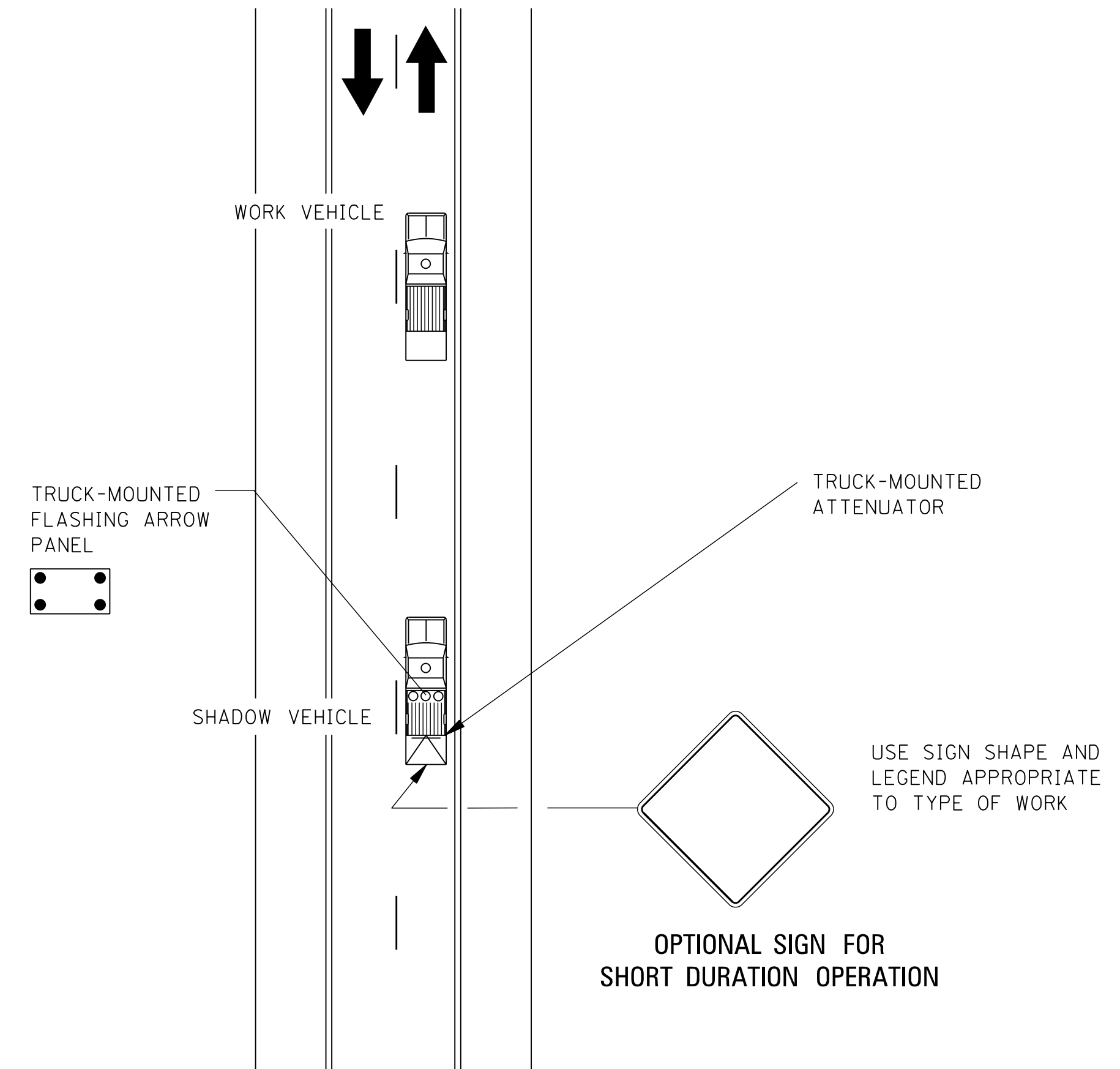


WORKING NUMBER
TCP-8
SHEET NUMBER
6358

MOBILE OPERATIONS ON MULTILANE ROAD



MOBILE OPERATIONS ON TWO-LANE ROAD



MOBILE OPERATIONS ON MULTILANE ROAD

MOBILE OPERATIONS ON TWO-LANE ROAD

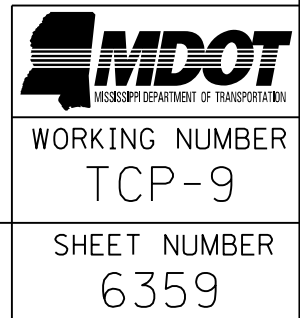
NOTES FOR MULTILANE LANE OPERATION:

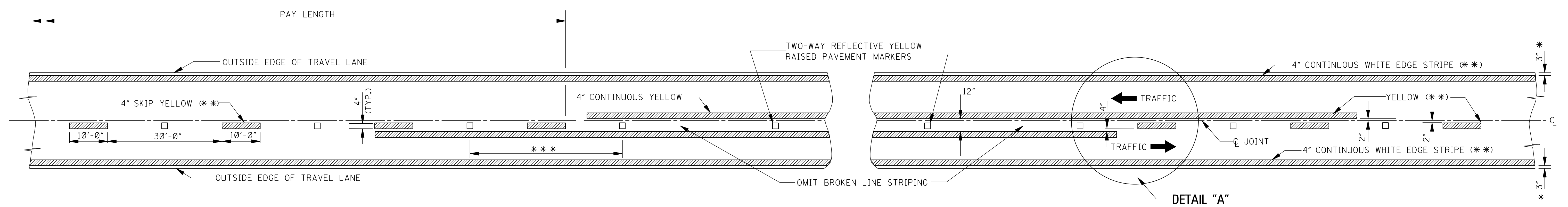
- VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLAGS, SIGNS, OR ARROW PANELS.
- SHADOW VEHICLE 2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK MOUNTED ATTENUATOR (TMA). AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON SHADOW VEHICLE 2 SO AS NOT TO OBSCURE THE ARROW PANEL.
- SHADOW VEHICLE 1 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK-MOUNTED ATTENUATOR (TMA).
- SHADOW VEHICLE 2 SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR TRAFFIC APPROACHING FROM THE REAR.
- WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, SHADOW VEHICLE 2 SHOULD BE ELIMINATED.
- ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE SHOULD BE USED (i.e., VEHICLE 3 ON THE SHOULDER (IF PRACTICAL), VEHICLE 2 IN THE CLOSED LANE, AND VEHICLE 1 IN THE CLOSED LANE).
- ARROW PANELS SHALL BE AS A MINIMUM TYPE B, 60" X 30" IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCD.
- WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.
- VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

NOTES FOR TWO-LANE OPERATION:

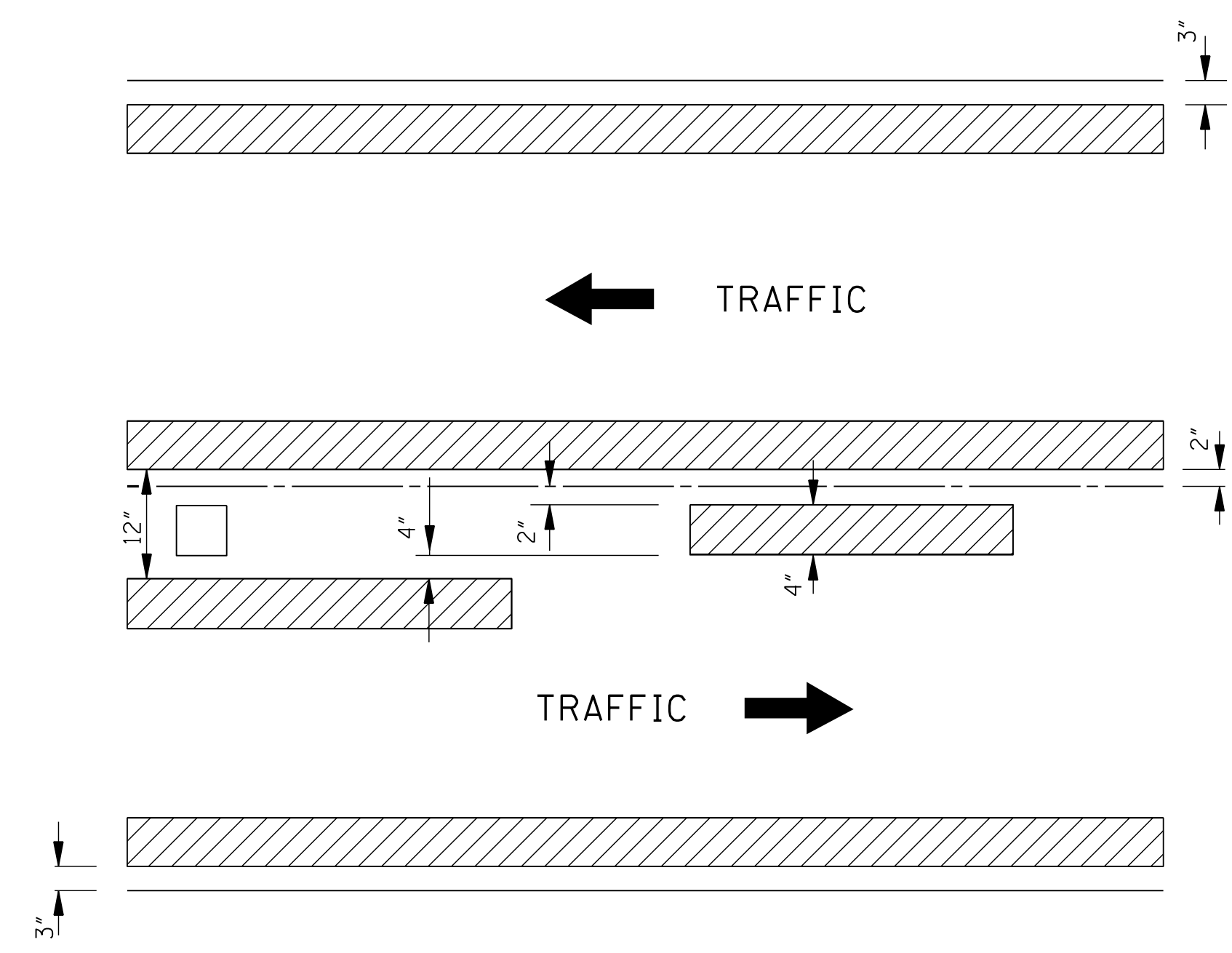
- WHERE PRACTICAL AND WHEN NEEDED, THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS. IF THIS CAN NOT BE DONE FREQUENTLY, AS AN ALTERNATIVE, A "DO NOT PASS" SIGN MAY BE PLACED ON THE REAR OF THE VEHICLE BLOCKING THE LANE.
- THE DISTANCE BETWEEN THE WORK AND SHADOW VEHICLES MAY VARY ACCORDING TO TERRAIN, PAINT DRYING TIME, AND OTHER FACTORS. SHADOW VEHICLES ARE USED TO WARN TRAFFIC OF THE OPERATION AHEAD. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE SHADOW VEHICLE SHOULD MAINTAIN THE MINIMUM DISTANCE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. THE SHADOW VEHICLE SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- ADDITIONAL SHADOW VEHICLES TO WARN AND REDUCE THE SPEED OF ONCOMING OR OPPOSING TRAFFIC MAY BE USED. POLICE PATROL CARS MAY BE USED FOR THIS PURPOSE.
- A TRUCK-MOUNTED ATTENUATOR (TMA) SHOULD BE USED ON THE SHADOW VEHICLE AND MAY BE USED ON THE WORK VEHICLE.
- THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE SHADOW VEHICLES SHALL BE EQUIPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, ADJACENT TO THE SIGN. SHADOW AND WORK VEHICLES SHALL DISPLAY FLASHING OR ROTATING BEACONS BOTH FORWARD AND TO THE REAR.
- VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
- ARROW BOARD TO BE USED IN CAUTION MODE.
- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
TRAFFIC CONTROL PLAN MOBILE OPERATIONS MULTILANE ROADS AND TWO-LANE ROADS	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER	TCP-9
SHEET NUMBER	6359





TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



DETAIL "A"



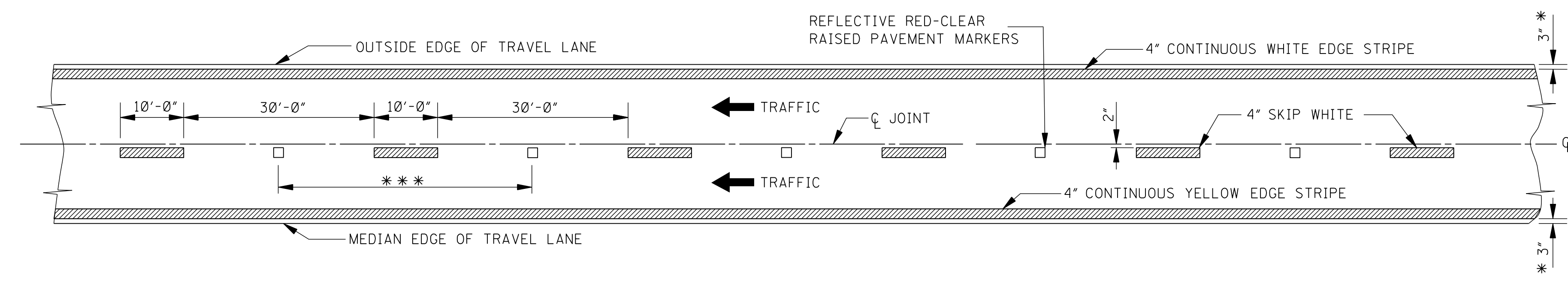
GENERAL NOTES:

- * 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. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
- *** 4. 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.

5. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDT "APPROVED SOURCES OF MATERIALS."

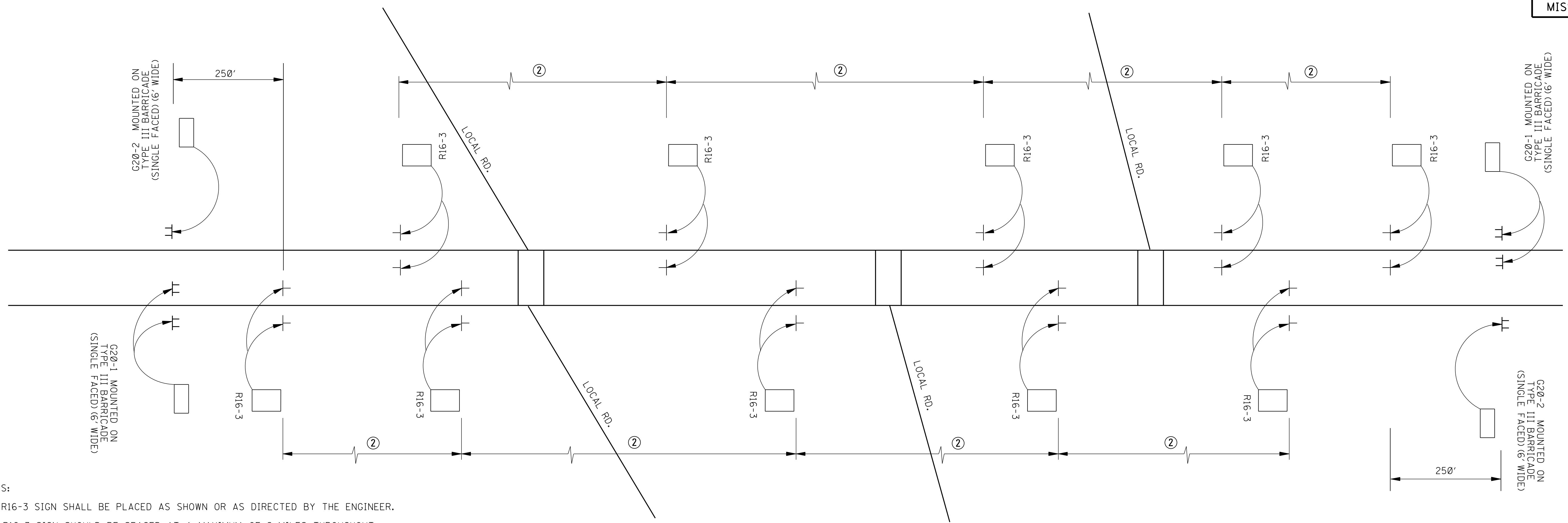


4-LANE WITH ONE-WAY TRAFFIC

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS
DATE	ISSUE DATE: AUGUST 01, 2017



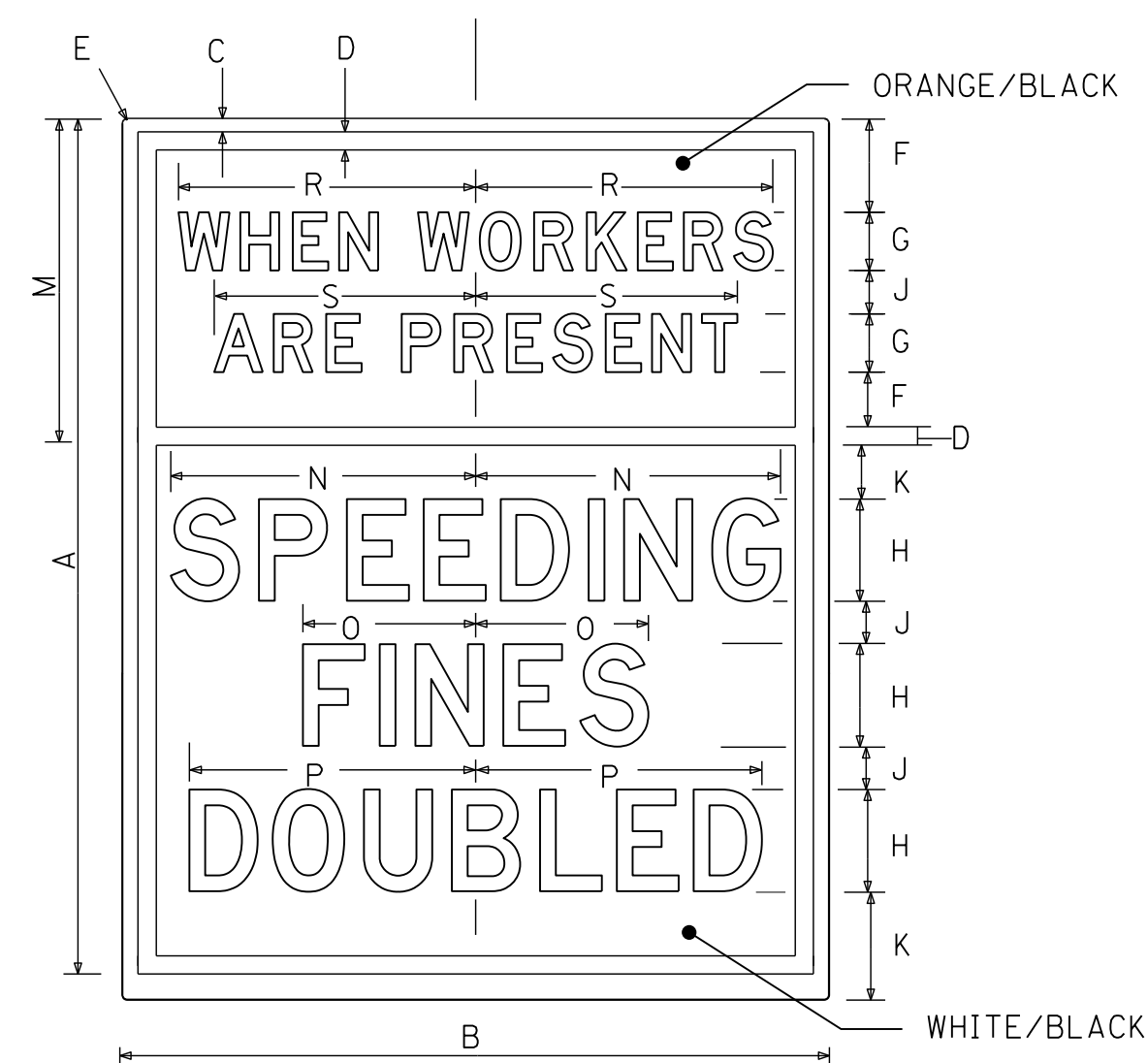
WORKING NUMBER
TCP-13
SHEET NUMBER
6363



NOTES:

1. R16-3 SIGN SHALL BE PLACED AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. R16-3 SIGN SHOULD BE SPACED AT A MAXIMUM OF 2 MILES THROUGHOUT LENGTH OF PROJECT.
3. THIS SHEET WILL ONLY APPLY TO SPEED REDUCTION SECTIONS.

DIVIDED HIGHWAY SHOWN
(2 LANE – 2 WAY ROADWAY SIMILAR)
(PROJECT MORE THAN 1 MILE LENGTH)



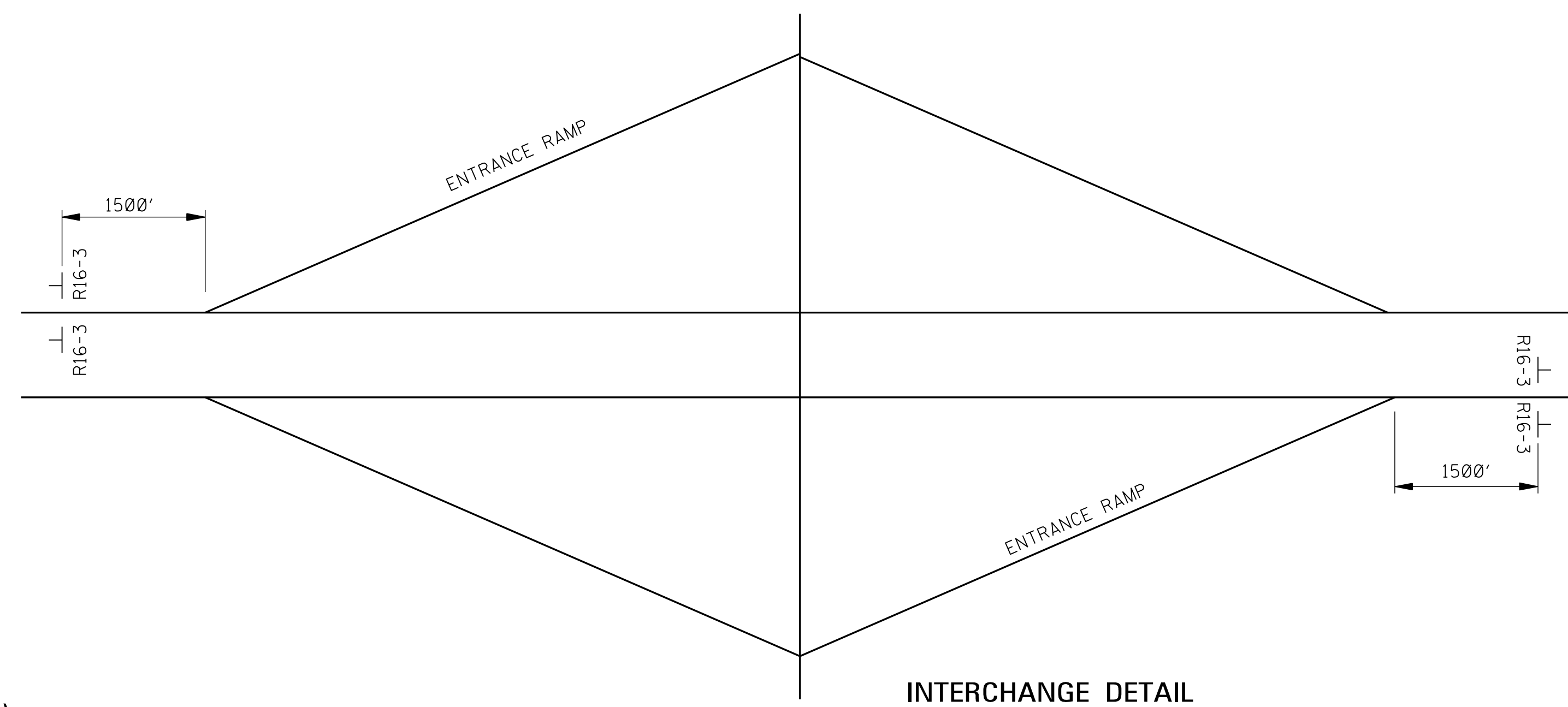
SIGN	DIMENSIONS (INCHES)							
	A	B	C	D	E	F	G	H
STD.	60	48	3/4	1 1/4	3	3 3/4	4 Dm	7 D
STD.	3	6 5/8	22 1/8	21	11 1/8	19 2 1/2	20 5/32	18

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 3/4	3 Dm	6 D
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

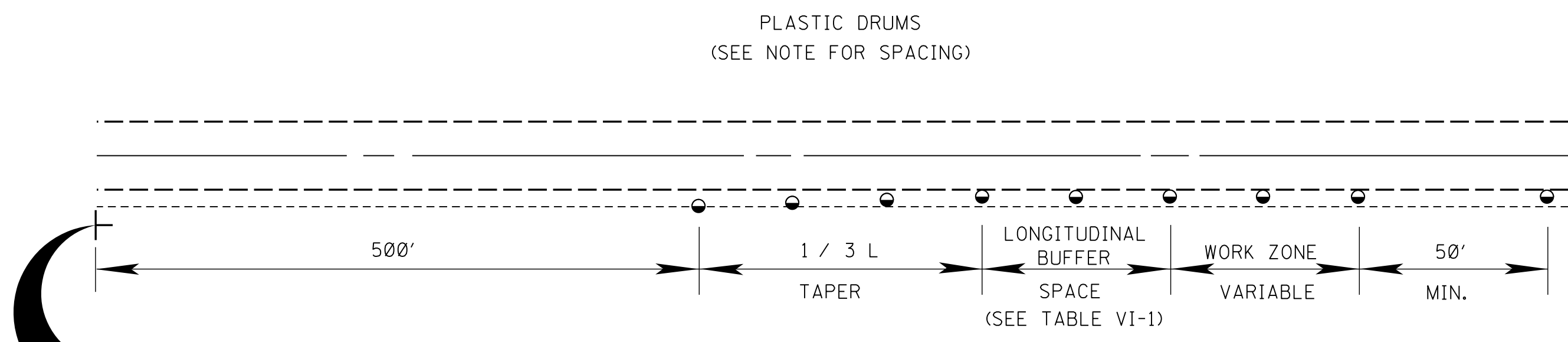


INTERCHANGE DETAIL

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017

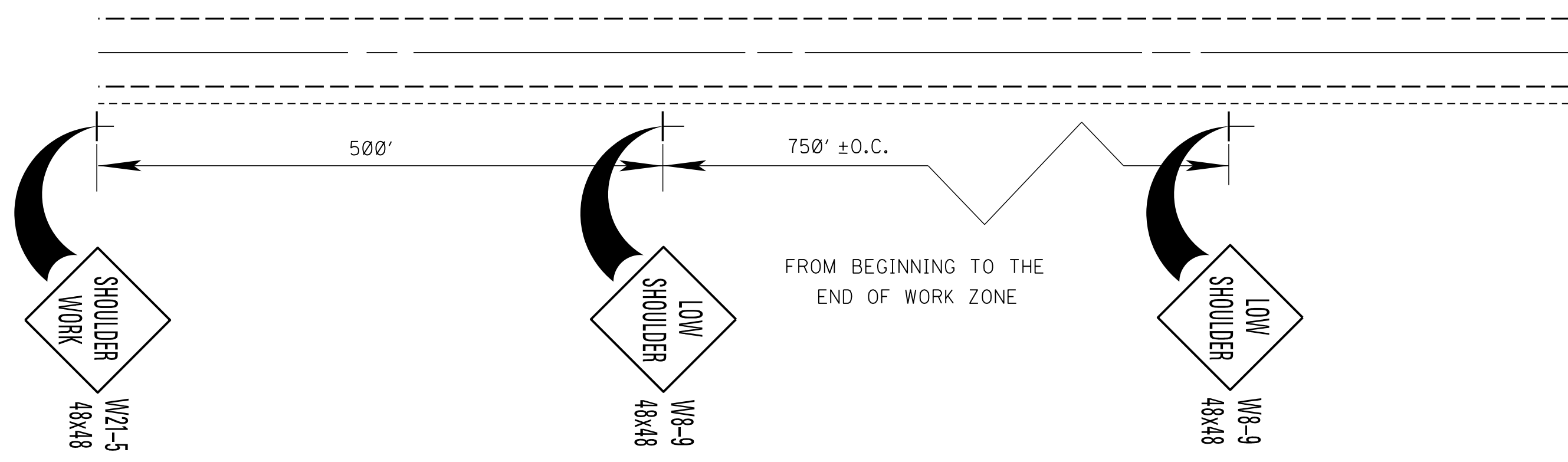
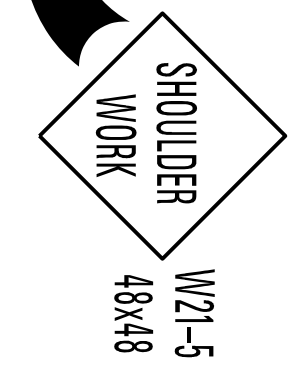
LOCATION OF R16-3 SIGNS (SPEEDING FINES DOUBLED)

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
WORKING NUMBER TCP-15
SHEET NUMBER 6365

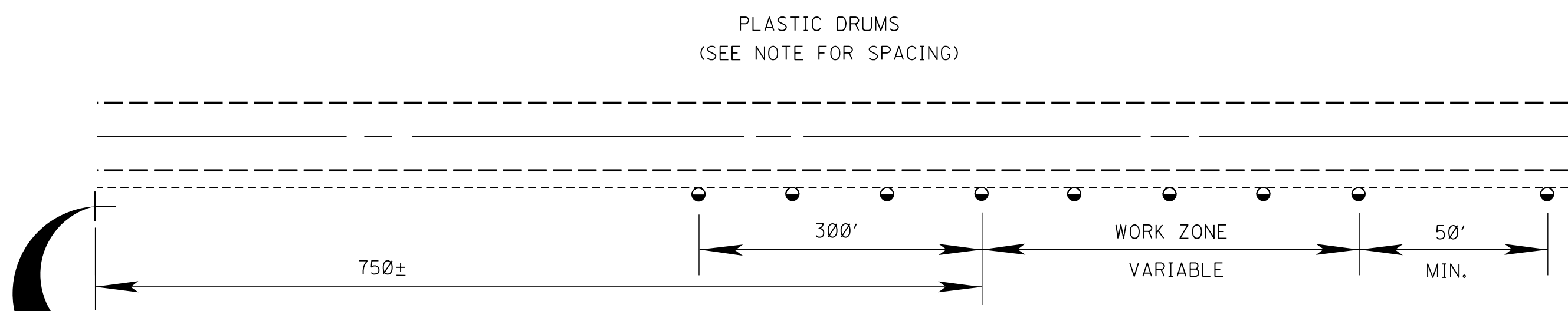
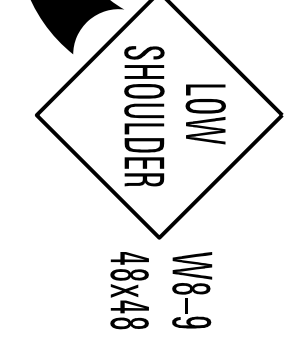
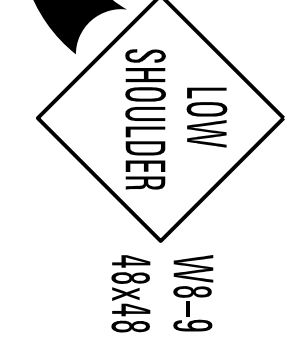


TYPICAL SHOULDER CLOSURE

- (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.

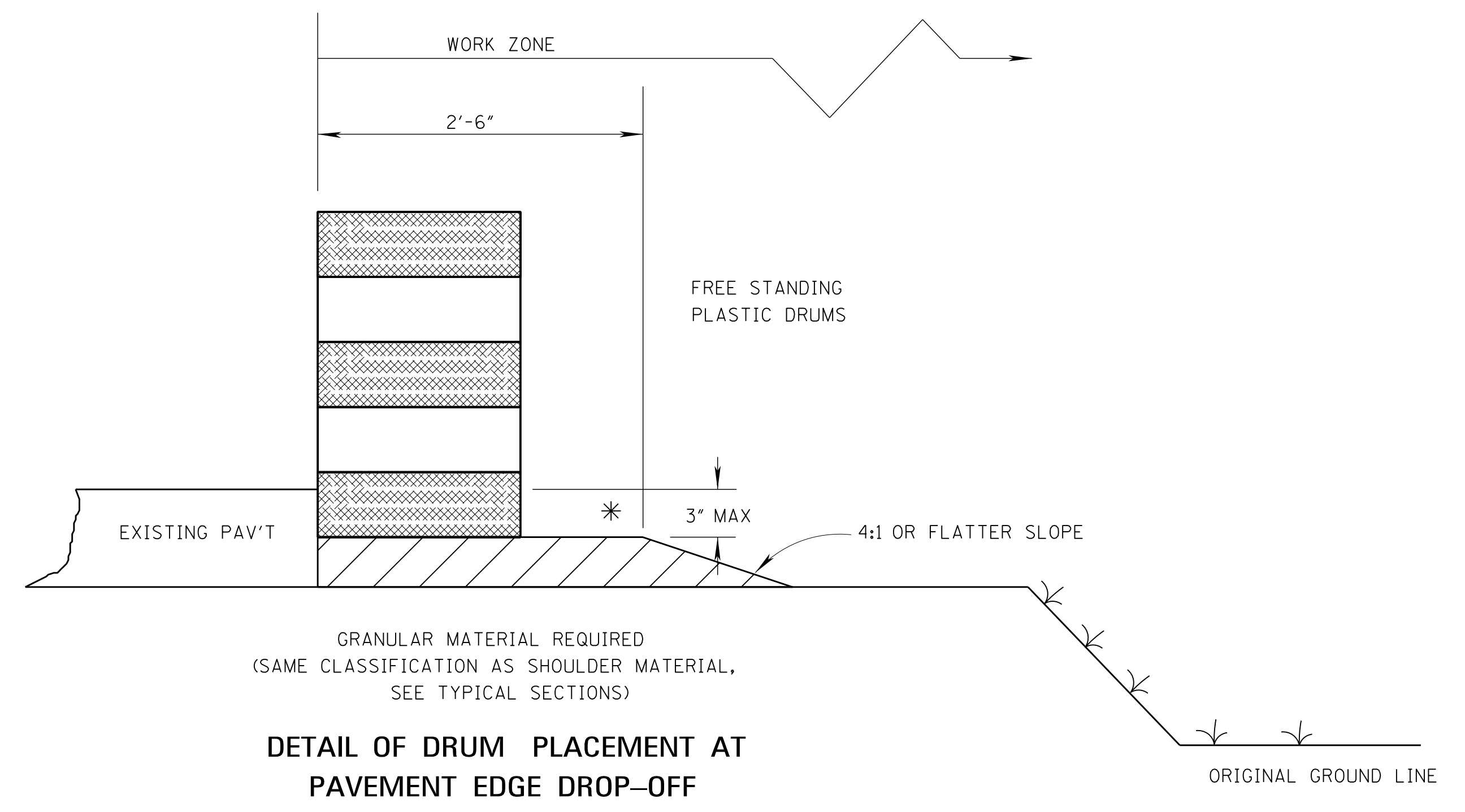
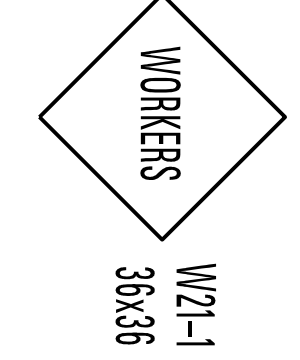


**TYPICAL SHOULDER WORK #1
(SEE NOTE A-1 THIS SHEET)**



TYPICAL SHOULDER WORK #2

NOTE:
WORK OUTSIDE TWO (2) FOOT 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 THREE 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 THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 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.
 4. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) 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 ROADWAY DESIGN DIVISION STANDARD PLAN	
TRAFFIC CONTROL DETAILS DRUM PLACEMENT AND SHOULDER CLOSURE	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER TCP-16 SHEET NUMBER 6366	

STATE	PROJECT NO.
MISS.	MRP-5059-38(230)

*DESCRIPTION OF SHEETS
SPECIAL DESIGN SHEETS ~ BRIDGE DRAWINGS*

<i>DESCRIPTION OF SHEETS SPECIAL DESIGN SHEETS ~ BRIDGE DRAWINGS</i>	<i>WORKING NUMBER</i>	<i>SHEET NUMBER</i>
<i>DETAILED INDEX (BRIDGE)</i>	<i>DI-BR-1</i>	<i>8001</i>
<i>I-59 ACROSS CHUNKY RIVER AT STA. 6+30 LT. LN.</i>		
<i>I-59 ACROSS CHUNKY RIVER LAYOUT, GENERAL NOTES & ESTIMATED QUANTITIES</i>	<i>1 OF 6</i>	<i>8002</i>
<i>SPAN NO. 1L HYDRODEMOLITION & DECK REPAIR DETAILS</i>	<i>2 OF 6</i>	<i>8003</i>
<i>JOINT REPAIR DETAILS</i>	<i>3 OF 6</i>	<i>8004</i>
<i>RAILING & OVERHANG REPAIR DETAILS</i>	<i>4 OF 6</i>	<i>8005</i>
<i>FRP BEAM REPAIR DETAILS</i>	<i>5 OF 6</i>	<i>8006</i>
<i>GENERAL EPOXY REPAIR DETAILS</i>	<i>6 OF 6</i>	<i>8007</i>

*SPECIAL DESIGN SHEETS
INFORMATION PLANS*

<i>SPECIAL DESIGN SHEETS INFORMATION PLANS</i>	<i>WORKING NUMBER</i>	<i>SHEET NUMBER</i>
<i>INFORMATION PLANS ONLY (ORIGINAL PROJECT NO. I-59-3(13)136)</i>		<i>8008 - 8017</i>

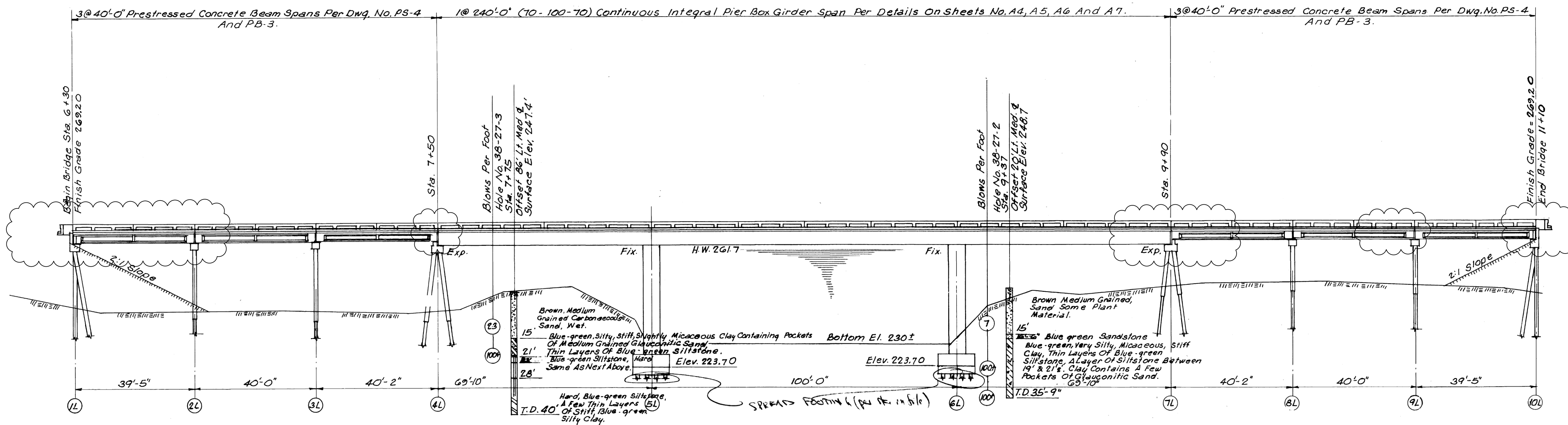
BRIDGE DIVISION		
REVISIONS		
DATE	SHEET NO.	BY

PLAN
DATE: 2020-05-12
DRAWN BY: JLB
CHECKED BY: JLB
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

00: 00 ANPH.DGN\FILENAME



REVISION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
	DATE	BRIDGE AT STA. 6+30 LT. LN.	
		DETAILED INDEX (BRIDGE)	
		FMS: 307163 / 301000	
		COUNTY: LAUDERDALE	
		PROJECT NUMBER: MRP-5059-38(230)	
		DESIGNER Lon_Bur1	CHECKER Paul_Deas
		DETAILER Lon_Bur1	ISSUE DATE 2020-05-12
		DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
		DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
		WORKING NUMBER	DI-BR-1
		SHEET NUMBER	8001



LIMITS OF WORK THIS CONTRACT

GENERAL NOTES:

Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
 No change of plans will be permitted except by the approval of the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment.
 Prior to the construction, all dimensions of the existing structure shall be field verified by the Contractor.
 The Contractor shall be responsible for adjusting the elements of the repair to ensure proper fit with the existing structure.
 Prior to construction, the Contractor shall submit a proposed hydrodemolition plan and a containment plan prior to beginning work to be approved by the Director of Structures, State Bridge Engineer.
 All details are based on the dimensions shown on the original plans for the existing structure.
 Work for which no pay item is provided in the plans will not be paid for directly and compensation therefor will be included in the prices and payments for bid items.
 Any damage that occurs to the existing structure during the duration of this project shall be repaired to the satisfaction of the Engineer by the Contractor at no additional cost to the State.
 Care should be taken to ensure that no debris falls into the hydraulic crossing below.
 All material removed from the bridge shall become the property of the Contractor and shall be removed from the construction site.
 Temporary precast barriers shall be anchored to the bridge deck when there is less than eight (8) feet of bridge deck behind the rail. The Contractor shall submit proposed anchor details, including design calculations stamped by a Mississippi Registered Professional Engineer, prior to beginning work to be approved by the Director of Structures, State Bridge Engineer. After removal of the temporary precast barriers, all anchor holes shall be cleaned and filled with non-shrink "Sure-Grip Grout" (The Dayton Sure-Grip and Shore Co.), "Supreme Grout" (Gifford-Hill & Co., Inc.), or an approved equal, applied according to the Manufacturer's directions.
 Concrete for the bridge railing and overhang repairs shall be Class "AA".
 The Contractor shall submit a proposed demolition plan for both the railing and deck repairs prior to beginning work to be approved by the Director of Structures, State Bridge Engineer.
 Bridge railing shall have a class 2 rubbed finish, this shall be considered an absorbed item of work and will not be paid for directly.
 All transverse reinforcement extending from deck shall remain in place.
 All concrete dimensions and reinforcing steel shall be in accordance with the original plans unless otherwise noted.
 At least one (1) lane of Southbound traffic on I-59 shall remain open at all times.
 Contractor shall replace any fencing that is damaged or removed with in-kind materials and in conformance with the MDOT Standard Drawings. This shall be considered an absorbed item of work.
 Contractor shall re-grass any and all areas that are disturbed to perform the required work at no additional cost to the state.

SCOPE OF WORK:

- Contractor shall set up the containment area for hydrodemolition.
- Perform hydrodemolition in accordance with the details on sheet no. 8003.
- Perform bridge railing and overhang removal in accordance with the details on sheets no. 8003 & 8005. This shall include the railing, overhang and end post for the full length of span no. 1 on the left shoulder, the railing and overhang as noted in the details on span no. 6 on the left shoulder, and the end post at end bent on 10L on the left shoulder.
- Perform bridge deck repairs & bridge railing and overhang replacements in accordance with the details on sheets no. 8003 & 8005.
- Perform bridge deck concrete overlay in accordance with the details on sheet no. 8003.
- Repair damaged concrete areas and other areas that received fire damage with epoxy mortar in accordance with the details on sheet no. 8007.
- Repair Beam No. 1 in Span No. 1 with epoxy mortar and FRP wrap in accordance with the details on sheet no. 8006.
- Perform joint repair on End Bent No. 1, Int. Bent No. 2 and Int. Bent No. 4 in accordance with the details on sheet no. 8004.
- Clean caps, railing, deck and any other bridge and approach members that received fire damage.

MAINTENANCE OF TRAFFIC:

Maintain Traffic in accordance with Section 618 2017 Edition of the Standard Specifications For Road and Bridge Construction, the latest edition of the "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART 6" and the Traffic Control Plans included in these plans.

CONCRETE NOTES:

Bridge deck finish shall match existing texture.
 Bridge deck shall be fine finished in accordance with Sections 501 and 804 of the Specifications.
 All existing concrete surfaces that will be in contact with new concrete shall be painted with a cement slurry specifically designed to bond new concrete to old.
 Concrete for the slab shall be in accordance with Special Provision 907-804. The mix design shall be furnished by the Contractor for approval by the Materials Division.
 Reinforcing steel shall be ASTM A615, Grade 60, unless otherwise noted. Bar Bending Details Shall Be In Accordance With "Manual Of Standard Practice For Detailing Reinforced Concrete Structures (ACI 315R-04).
 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.

WATERPROOFING ADMIXTURE:

The bridge deck concrete will require a waterproofing admixture in accordance with Section 713.02.4 of the Standard Specifications.

BRIDGE CLEANING NOTES:

Bridge cleaning should be performed by removing all large debris by hand and then by pressure washing the areas covered in soot from the fire damage to the satisfaction of the Project Engineer.
 The pressure washer shall be able to maintain 3,500 psi of pressure.

SPECIAL PROVISIONS REQUIRED:

- Removal of Bridge Deck, Hydrodemolition 907-202
- Removal of Approach Slab, Hydrodemolition 907-202
- Bridge Deck Overlay Concrete 907-804
- Joint Repair 907-808
- Preformed Joint Seal 907-823

INFORMATION PLANS

Original project no. I-59-3(13)136, see sheets no. 8008-8017.

CONTRACTOR SUBMITTALS:

Prior to fabrication and construction, the following shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for approval. No work shall begin until all submittals have been authorized by the Director of Structures, State Bridge Engineer.

DEMOLITION PLAN SUBMITTAL:

The Contractor shall submit a proposed demolition plan associated with the work items necessary to perform hydrodemolition and the removal of the overhang, bridge railing sections and railing end posts prior to beginning work and is to be approved by the Director of Structures, State Bridge Engineer.

FRP SUBMITTAL:

The Contractor shall furnish all submittals indicating the materials, tools, equipment, transportation, necessary storage, labor, installation plan, and supervision required for the application of the composite or polymer system to the Director of Structures, State Bridge Engineer prior to construction.

TEMPORARY PRECAST BARRIER SUBMITTAL:

Temporary precast barriers, when required, shall be anchored to the bridge deck. The Contractor shall submit proposed anchor details, including design calculations stamped by a Mississippi registered Professional Engineer prior to beginning work to be approved by the Director of Structures, State Bridge Engineer. After removal of the temporary barriers, all anchor holes shall be cleaned and filled with non-shrink:

"Sure-Grip Grout" (The Dayton Sure-Grip and Shore Co.)
 "Supreme Grout" (Gifford-Hill & Co.)
 or an approved equal, applied according to the Manufacturer's specifications.

REINFORCEMENT SUBMITTAL:

Reinforcement order lists and required placing plans shall be submitted to the Director of Structures, State Bridge Engineer in accordance with Section 805 of the Mississippi Standard Specifications. Partial submittals are not acceptable.

ESTIMATED QUANTITIES

PAY ITEM NO.	DESCRIPTION	QUANTITY	UNIT
907-202-B001	Removal of Bridge Deck, Hydrodemolition	45	SY
907-202-B266	Removal of Approach Slab, Hydrodemolition	24	SY
907-804-0001	Bridge Deck Overlay Concrete	5	CY
907-808-A002	Joint Repair	174	LF
907-823-A001	Preformed Joint Seal, Type I	58	LF
907-823-A002	Preformed Joint Seal, Type II	29	LF
907-823-B001	Saw Cut, Type I	116	LF
907-823-B002	Saw Cut, Type II	58	LF
907-824-PP003	Bridge Repair, Removal of Bridge Deck and Approach Slab	32	SF
907-824-PP003	Bridge Repair, Epoxy Repair	124	SF
907-824-PP003	Bridge Repair, FRP Wrap, Per Plans	44	SF
907-824-PP008	Bridge Repair, Removal of Bridge Railing and Overhang, Per Plans	70	LF
907-824-PP008	Bridge Repair, New Construction of Bridge Railing and Overhang, Per Plans	70	LF



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 BRIDGE AT STA. 6+30 LT. LN.
 I-59 ACROSS CHUNKY RIVER
 LAYOUT, GENERAL NOTES
 & ESTIAMTED QUANTITIES

FMS: 307163 / 301000
 COUNTY: LAUDERDALE
 PROJECT NUMBER: MRP-5059-38(230)

DESIGNER Lon. Bur1
 CHECKER Burl. Doss
 DETAILER Lon. Bur1
 ISSUE DATE 2020-05-12

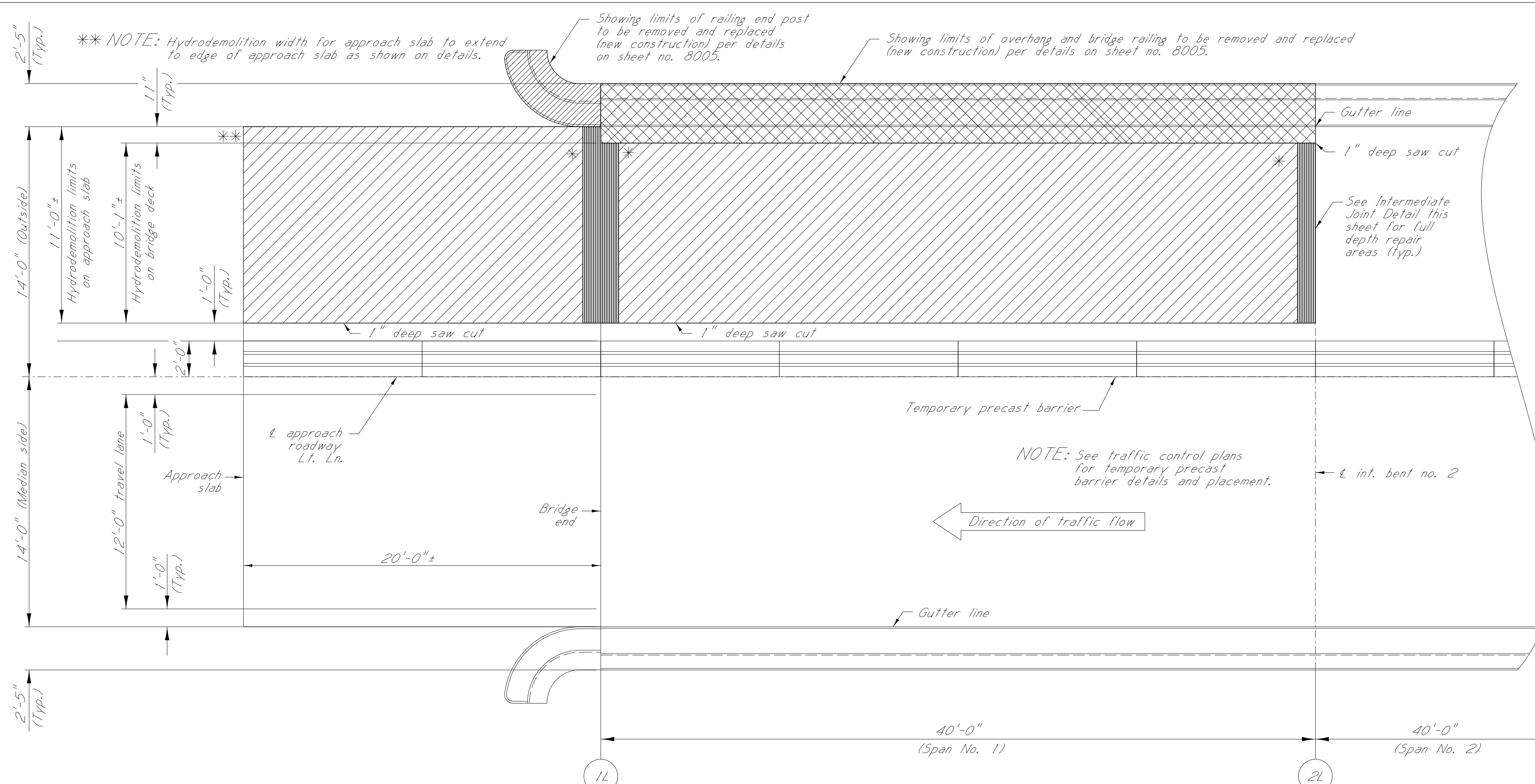
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
 DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

WORKING NUMBER
 1 OF 6
 SHEET NUMBER
 8002

PLAN AND SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

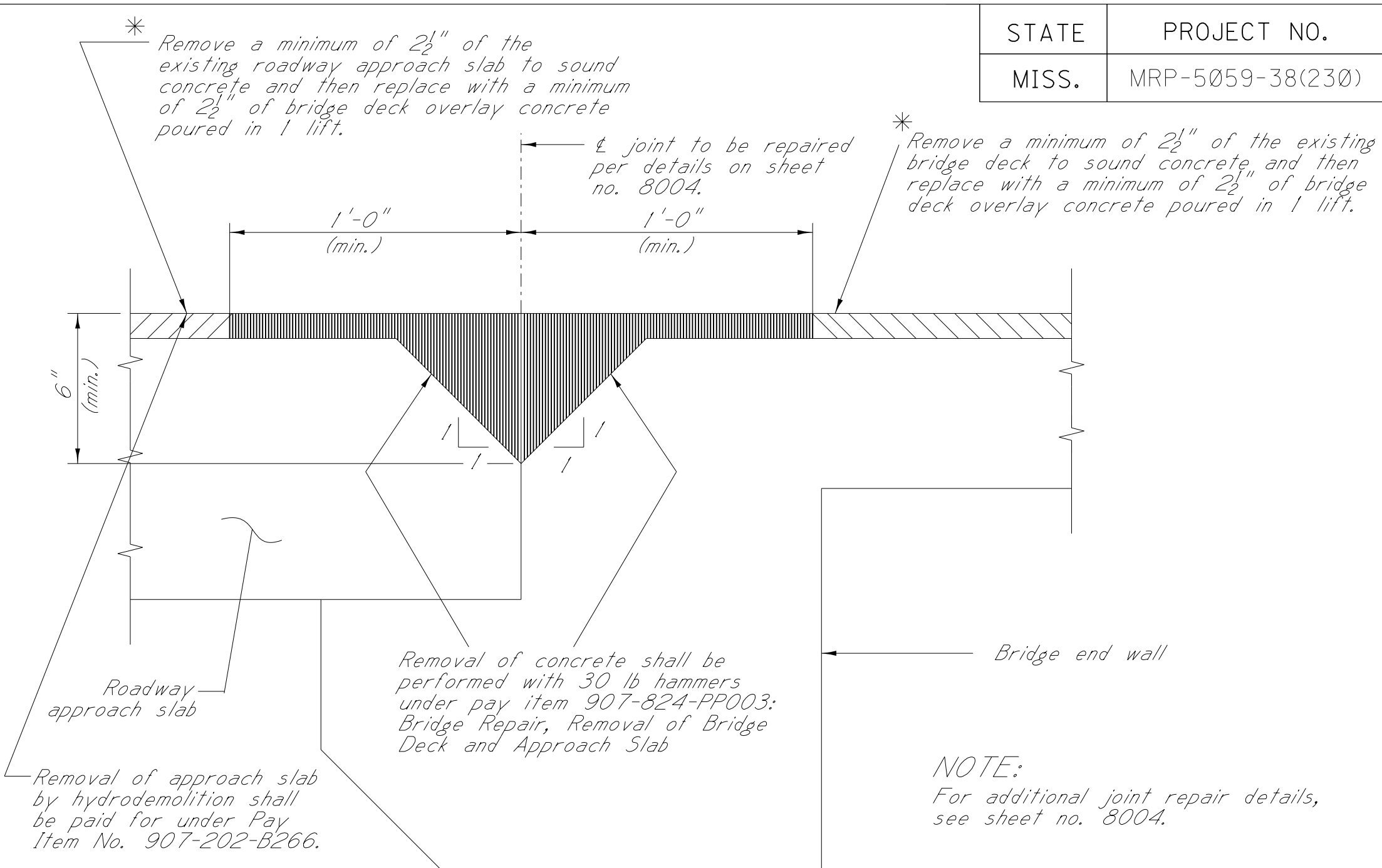
001-000-AMPM DCONFL ENDR

STATE	PROJECT NO.
MISS.	MRP-5059-38(230)



- Denotes full depth repair areas to be removed with 30 lb hammers per the details this sheet
- Denotes area of bridge deck to be removed by hydrodemolition
- Denotes area of bridge deck to be removed and replaced (New Construction). See details on sheet no. 8005.

PART PLAN OF SPAN LT. LN.
Showing areas of bridge deck, railing, end post and approach slab to be repaired

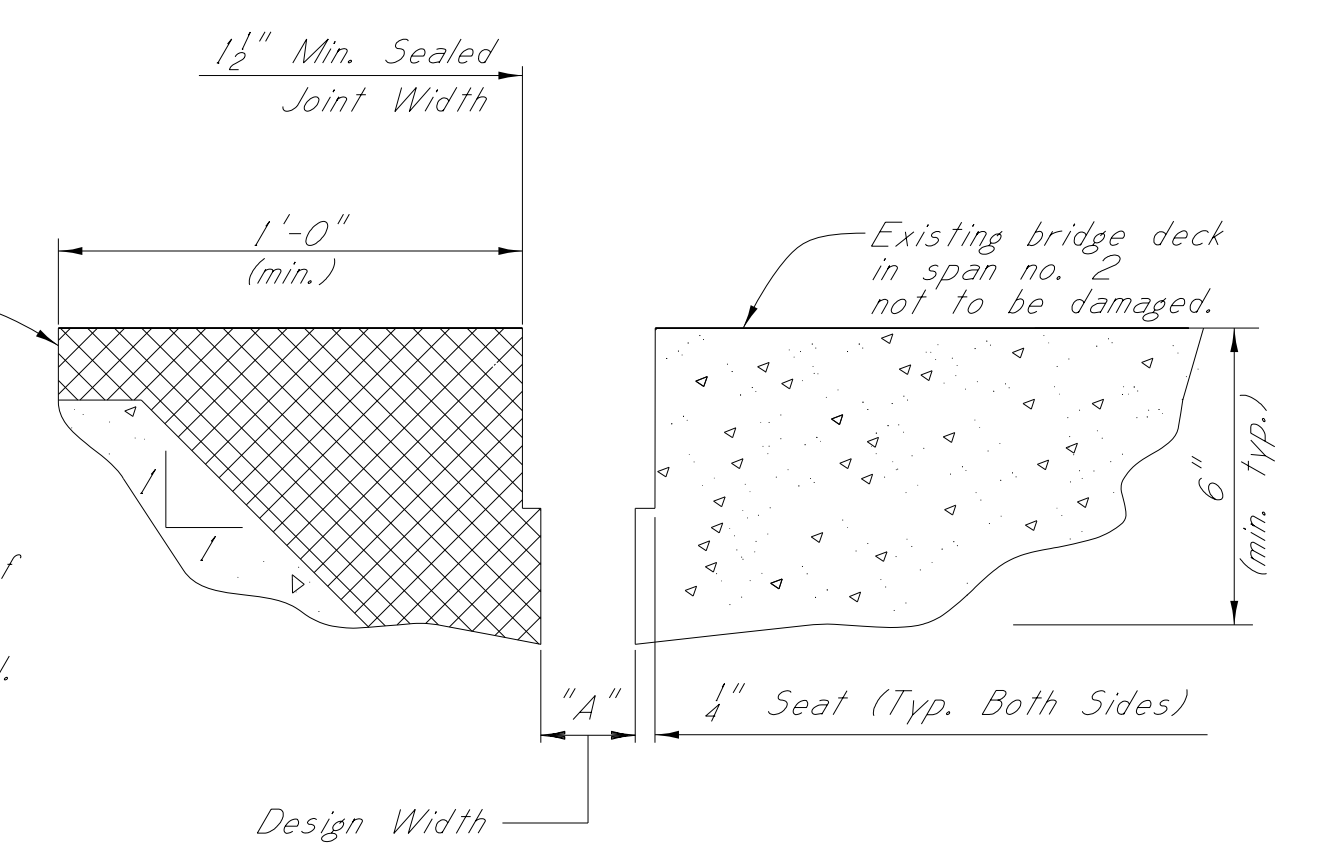


END JOINT DETAIL
End Bent No. 1L

NOTE:
Any damage that occurs to the existing approach roadway outside of the designated repair areas shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the State.

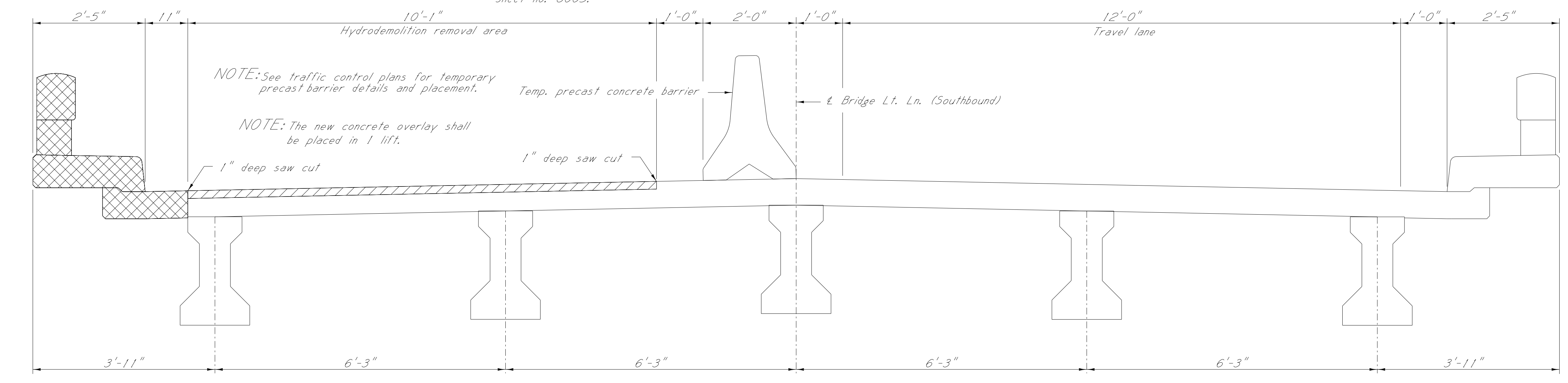
Removal of approach slab by hydrodemolition shall be paid for under Pay Item No. 907-202-8266.

NOTE:
The Contractor shall verify the depth of reinforcing steel before making any saw cuts. The depth of saw cut shall be no more than the depth of reinforcing steel. All 1" saw cuts shall be considered an absorbed item of work.



INTERMEDIATE JOINT DETAIL
Showing area where repairs are to be made at Int. Bent No. 2L

- CONCRETE OVERLAY NOTES:**
- Remove a minimum of 2 1/2" of existing bridge deck or approach slab to sound concrete.
 - If sound concrete is reached at a depth of less than 2 1/2", additional removal to achieve 2 1/2" depth is not required.
 - The new concrete overlay shall be placed in 1 lift. The new finished grades of the bridge deck and approach slab shall be the same as the existing grades.
 - All concrete placed in the bridge deck and approach slab, including full depth repair areas, shall be paid for under pay item no. 907-804-0001, Bridge Deck Overlay Concrete.
 - No additional compensation will be made for placing concrete in areas where removal was greater than 2 1/2" unless specified otherwise in the plans or without previous approval of the Engineer.



TYPICAL SECTION OF BRIDGE DECK REMOVAL AREA
Showing removal area and temporary precast barrier placement on bridge deck



BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		BRIDGE AT STA. 6+30 LT. LN.	
		SPAN NO. 1L HYDRODEMOLITION & DECK REPAIR DETAILS	
		FMS: 307163 / 301000	
		COUNTY: LAUDERDALE	
		PROJECT NUMBER: MRP-5059-38(230)	
DESIGNER	Lon. Bur. I	CHECKER	Paul. Doss
DATE	2020-08-12	ISSUE DATE	2020-08-12
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.		DEP. DIR. OF STRUCTURES, ASS'T. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
WORKING NUMBER		2 OF 6	
SHEET NUMBER		8003	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 PROJECT NO. MRP-5059-38(230)
 SHEET NO. 8003

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-A002 JOINT REPAIR

Description: Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designated in the detail drawings provided. Epoxy mortar shall also be included under this item of work. Removal of existing silicone sealed, compression, AC sealed joint materials and full depth cleaning of the open joint from all dirt and debris will not be paid for directly and shall be considered as absorbed under this item of work. All other requirements shall be in accordance with the applicable provisions of Section 808 of the specifications and any other sections specified therein.

Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline joint.

907-823-B001 SAW CUT, TYPE I & 907-823-B002 SAW CUT, TYPE II

Description: The saw cut depth shall be equivalent to the installation depth required by the manufacturer's specifications. The saw cut type shall be the same as the preformed joint seal selected.

Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline joint. It is the contractor's responsibility to ensure that the proper depth is selected based on the manufacturer's recommendations.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II

Description: Shall include the manufacturer's required joint preparation including sandblasting both sides of the joint and blowing the joint free of debris with compressed air and placement of the new preformed joint seal.

Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the centerline joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

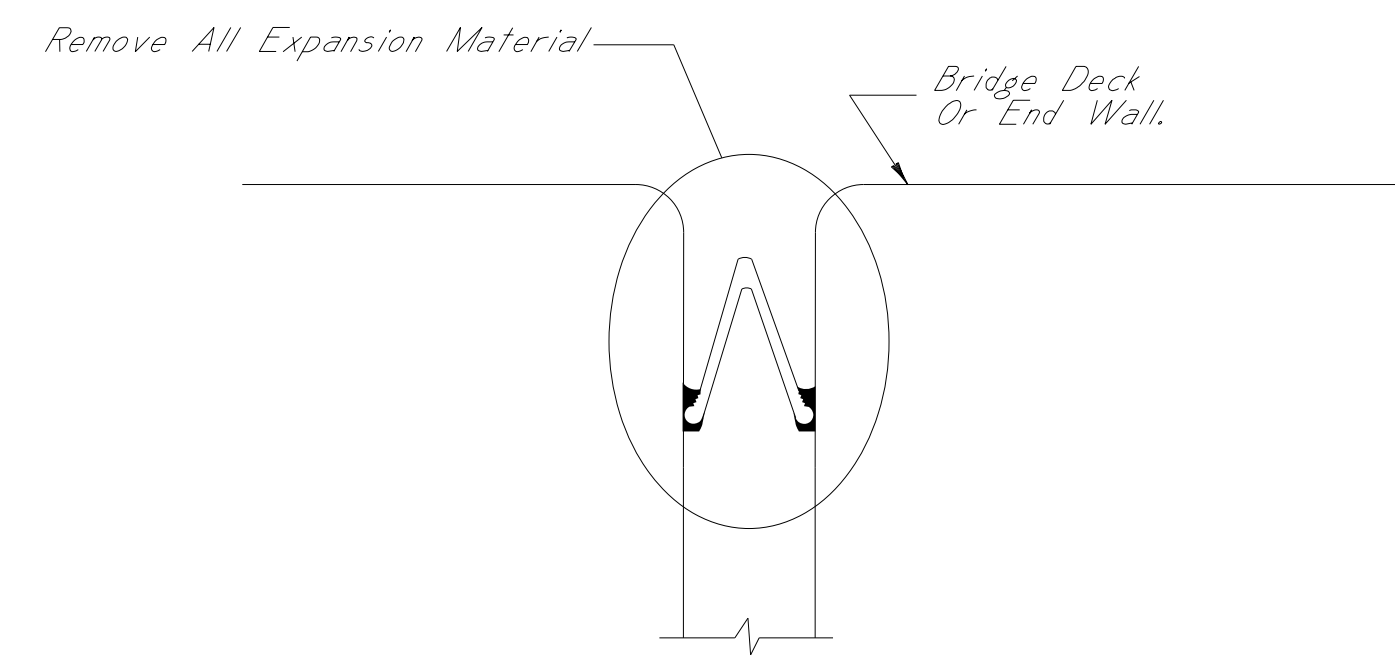
Either epoxy mortar or polymer concrete may be used. Guidelines for selection of materials can be found in Section 808 of the specifications.

GENERAL NOTES:

- Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
- No change of plans will be permitted except by written approval of the Director of Structures, State Bridge Engineer. Minor changes to detail of design or construction procedure may be authorized by the bridge engineer provided such changes will not be cause for contract price adjustment.
- Work for which no pay item is provided in the proposal will not be paid for directly and shall therefore be considered an absorbed item of work.

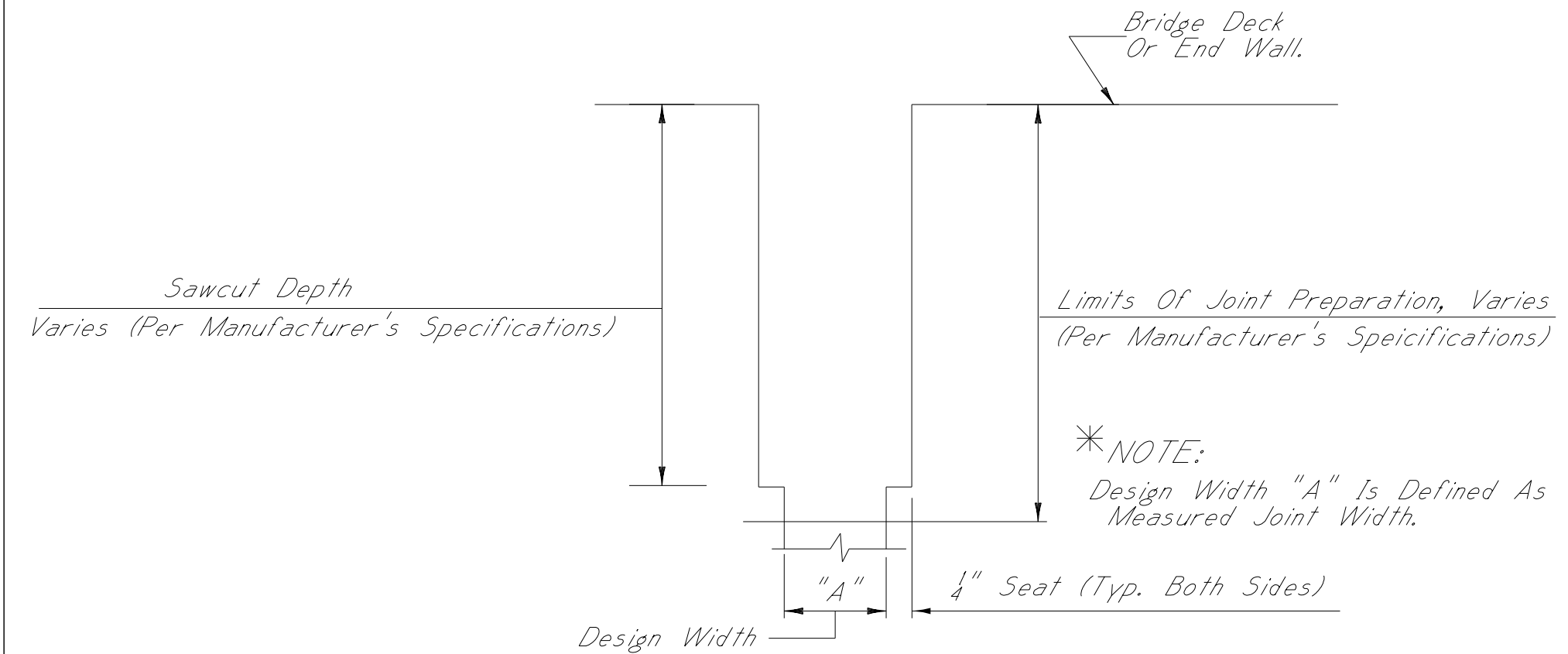


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 6+30 LT. LN.	
JOINT REPAIR DETAILS	
FMS: 307163 / 301000	WORKING NUMBER
COUNTY: LAUDERDALE	3 OF 6
PROJECT NUMBER: MRP-5059-38(230)	SHEET NUMBER
DESIGNER: Lon Burr	CHECKER: Paul Dies
DATE: 2/23/05	ISSUE DATE: 2/23/05
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	



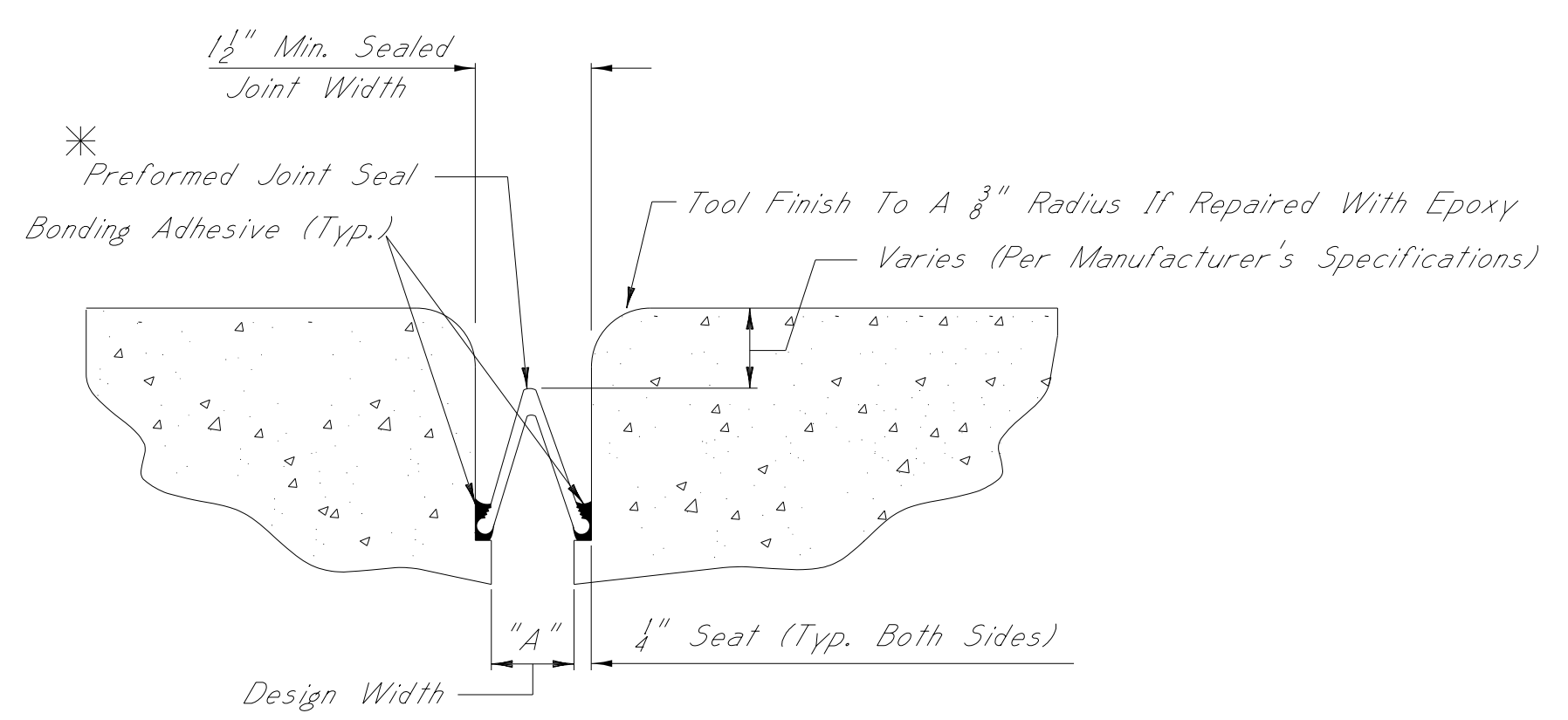
TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Material To Be Removed And Replaced With Preformed Joint Seal



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Sawcut

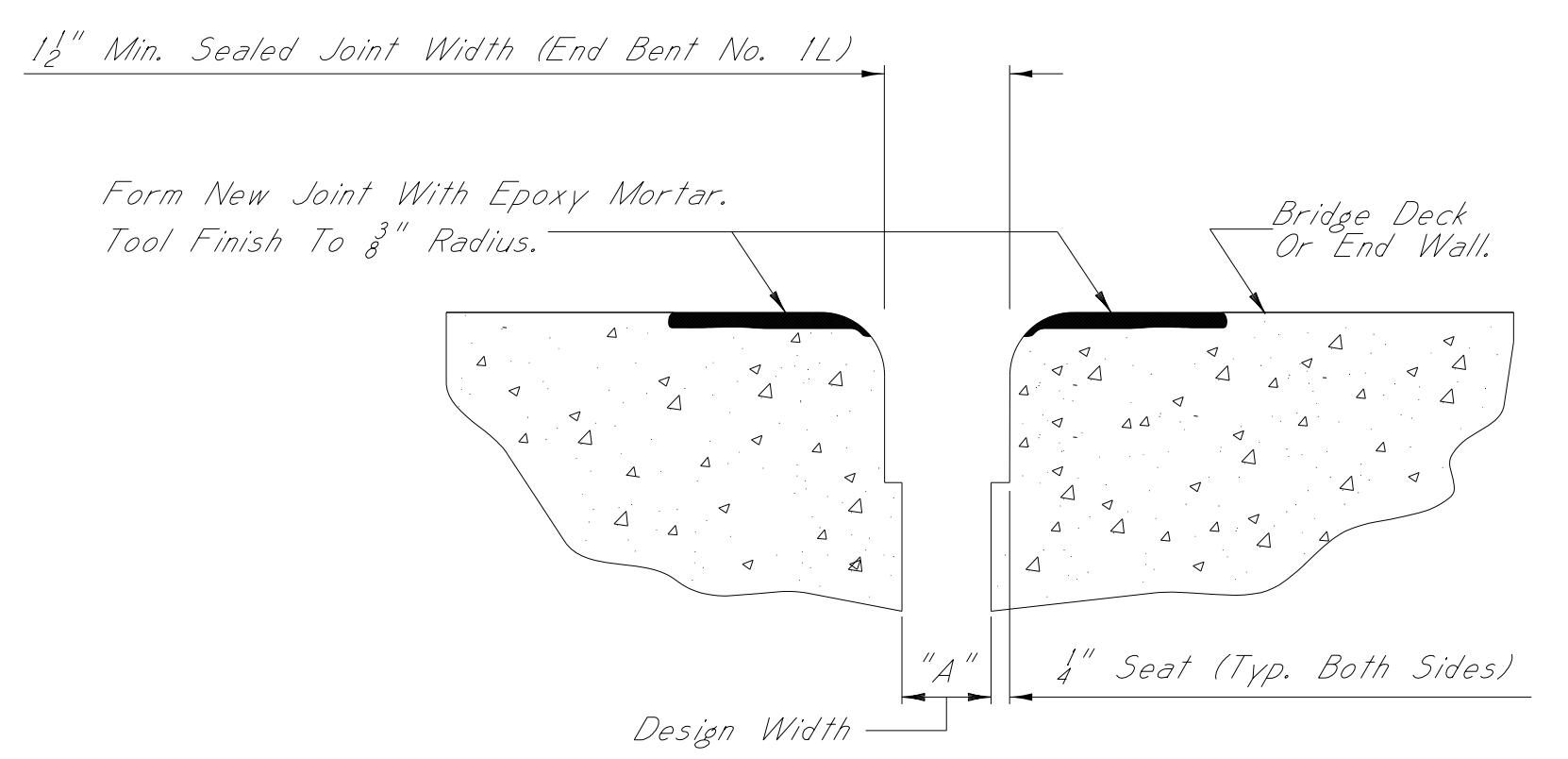


TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

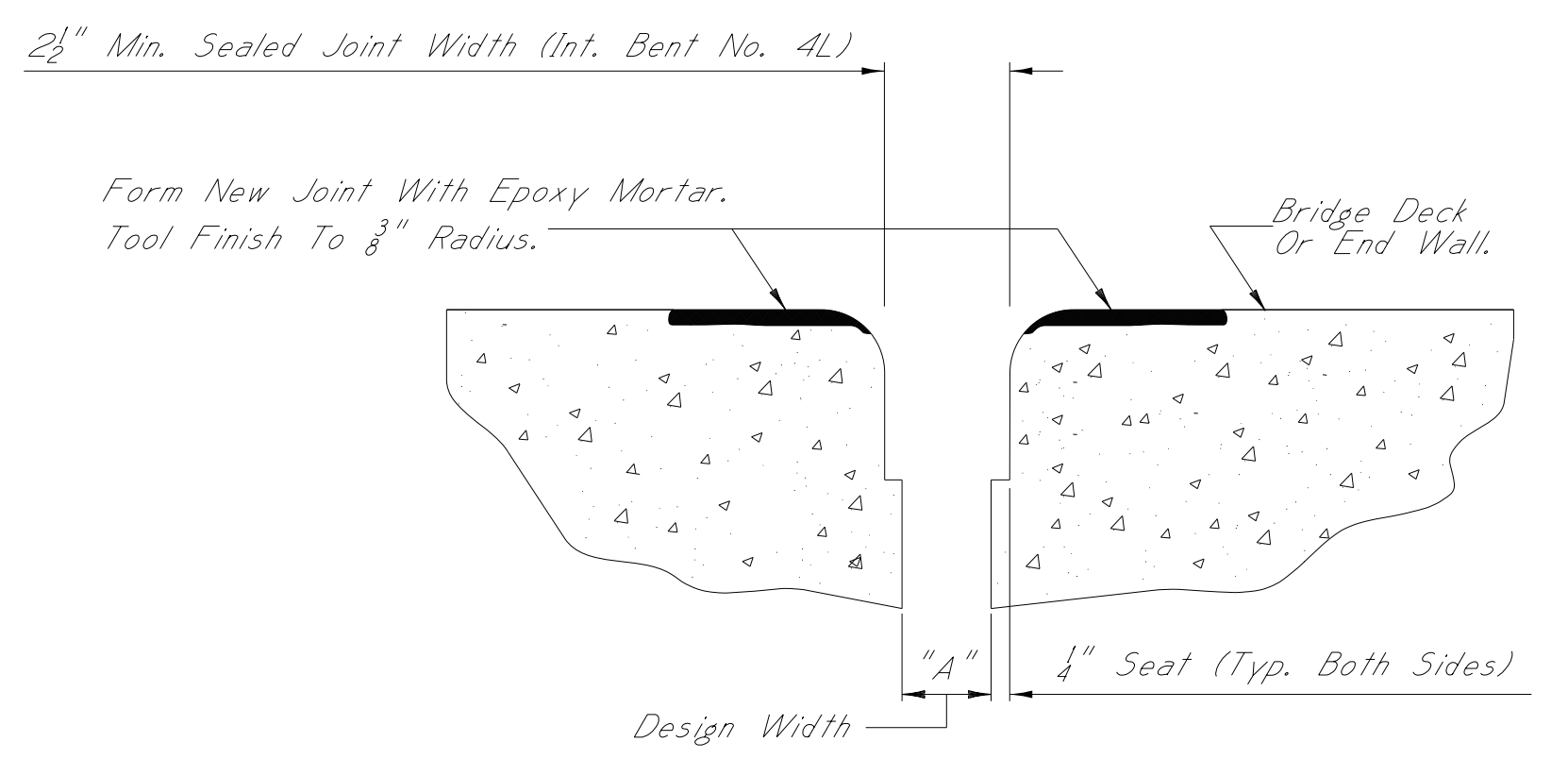
*NOTES:

- The preformed joint seal shall be one of the following, installed according to the manufacturer's specifications:
 - A. Silcoflex Joint Sealing System
Manufactured By R.J. Watson, Inc. In Alden, NY
www.rjwatson.com
 - B. Wabo SPS Joint System
Manufactured By Watson Bowman Acme Corporation In Amherst, NY
www.wbacorp.com
 - C. Silspec SSS Silicone Strip Seal
Manufactured By SSI Commercial & Highway Construction Materials
www.ssicm.com
- For estimating purposes, the RJ Watson Silcoflex Joint Sealing System was selected. However, should another supplier be chosen, it is the contractor's responsibility to ensure that the manufacturer's recommendations are followed for joint preparation, installation depths and widths, adhesive setting times, and any other variances between the specifications provided by the manufacturers. A manufacturer representative shall be present at the time joint sealing begins to ensure that the contractor is properly schooled in installation of the joint material.
- Joints shall be sealed at their design widths, dimension "A", which is defined as, "The actual width of the joint opening. This width does not account for the 1/4" seat required on both sides of the joint. Preformed joint seal, Type I, shall be used for design widths less than 2". Preformed joint seal, Type II, shall be used for design widths greater than or equal to 2", with the maximum design width being 2 1/2". In cases where design widths are greater than 2 1/2", another type of expansion material shall be required as directed by the Director of Structures, State Bridge Engineer. It is the contractor's responsibility to ensure that the size selected is appropriate for the width of the joint.



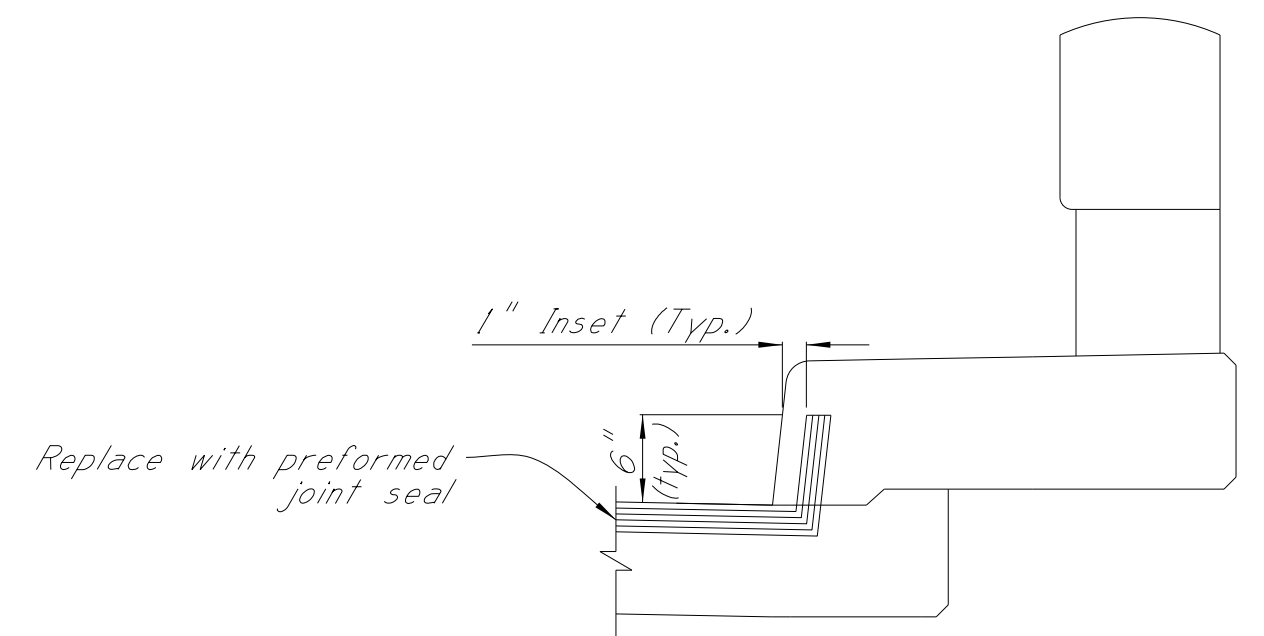
TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut, With Epoxy Mortar Or Approved Equivalent



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

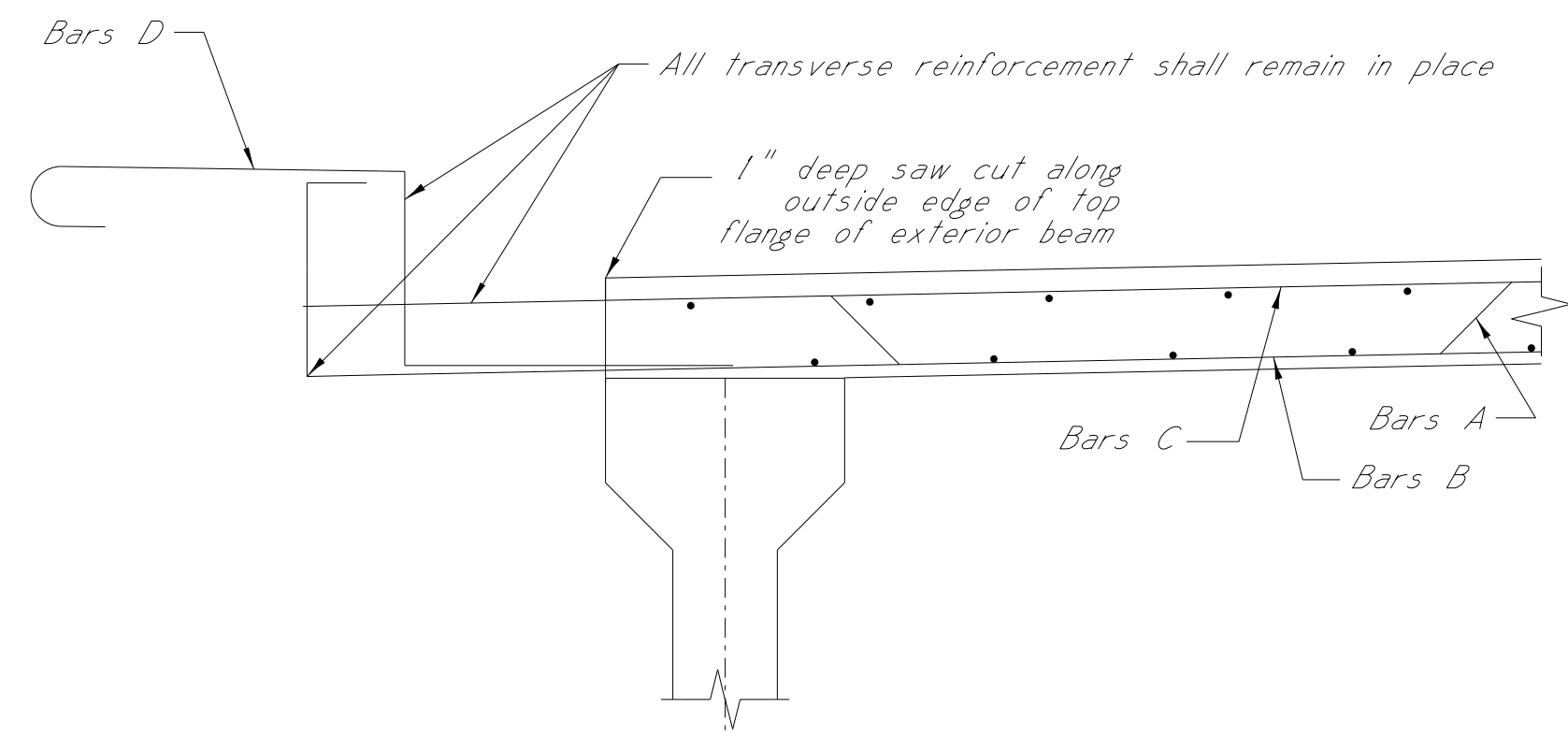
Showing Area Where Repairs Are Made After Sawcut, With Epoxy Mortar Or Approved Equivalent



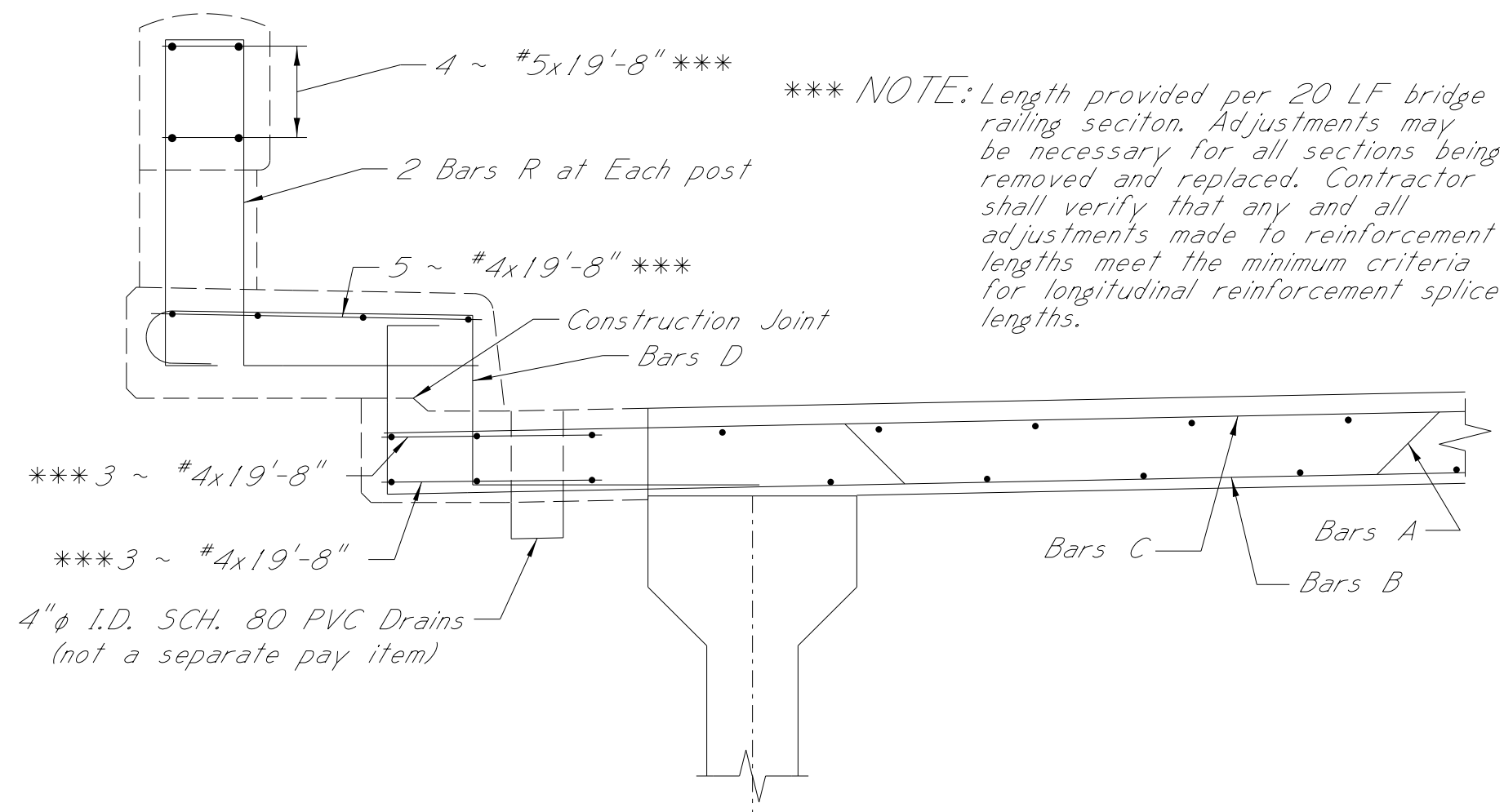
ELEVATION AT END OF SPAN

PROJECT FILE NO. MISSISSIPPI DEPARTMENT OF TRANSPORTATION

001: 00 AMPH DGNFILE NAME



PART SECTION OF RAILING AND OVERHANG REMOVAL AREA
Showing remaining steel after rail removal

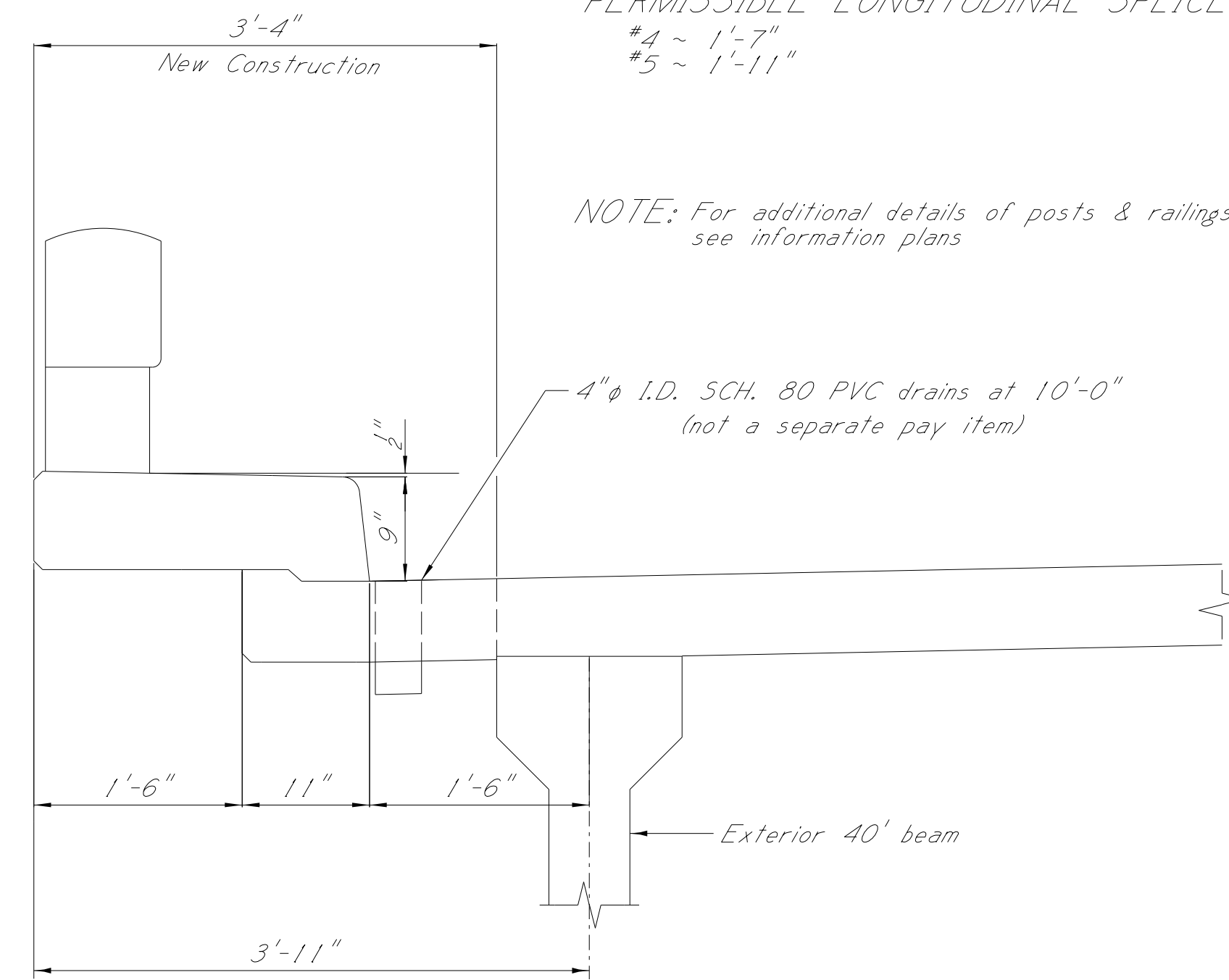


PART SECTION OF RAILING AND OVERHANG REMOVAL AREA
Showing placement of steel before new concrete is poured

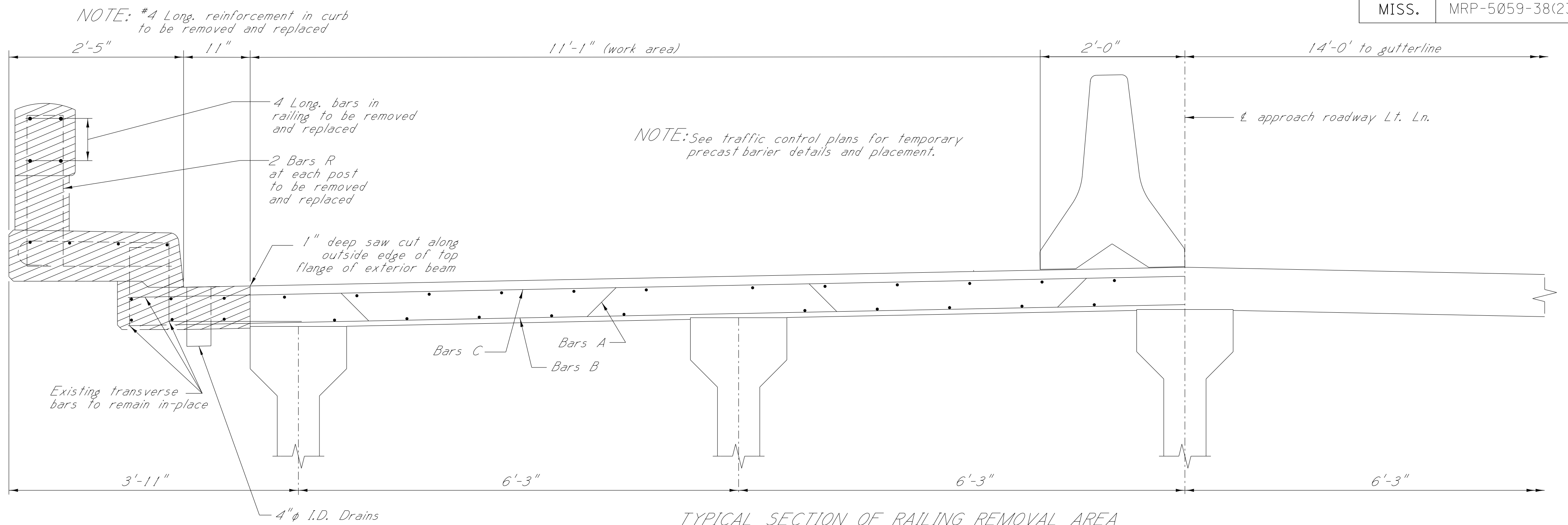
PERMISSIBLE LONGITUDINAL SPLICE LENGTHS

#4 ~ 1'-7"
#5 ~ 1'-11"

NOTE: For additional details of posts & railings see information plans

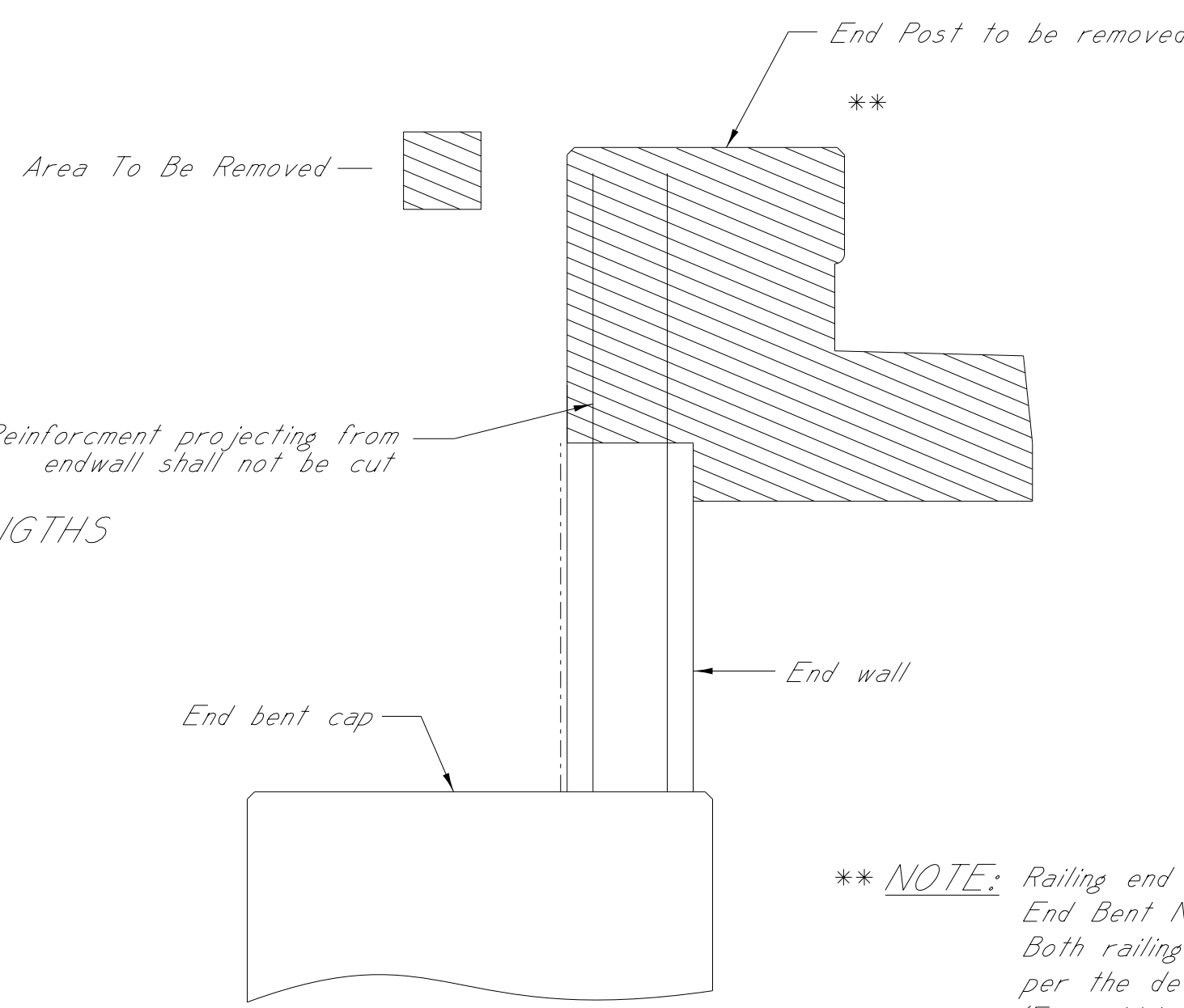


PART SECTION OF RAILING
Showing new railing and bridge deck section



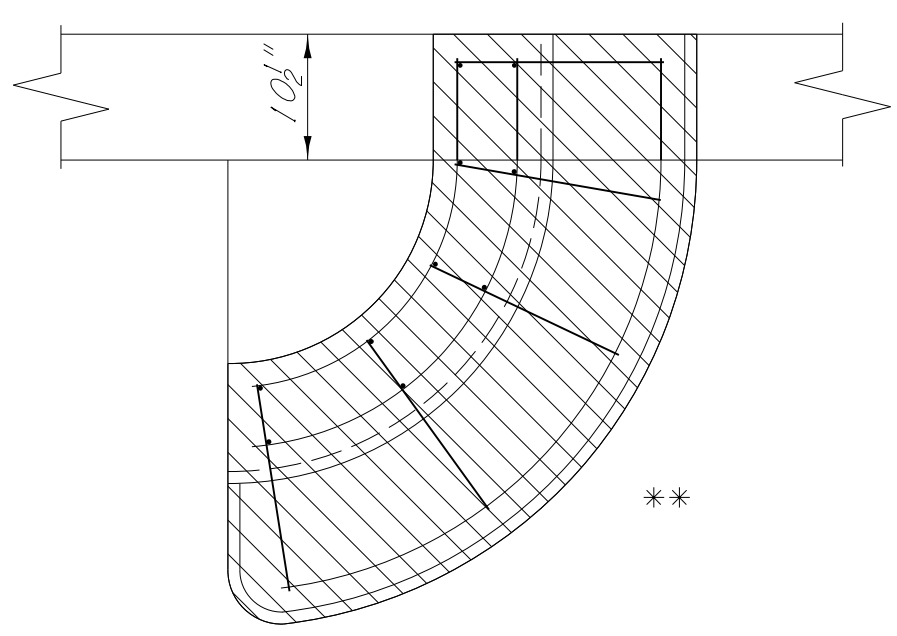
TYPICAL SECTION OF RAILING REMOVAL AREA
Showing removal area and barrier placement (looking upstation)

Limits of Bridge Railing and Overhang Removal and New Construction:
Sta. 6+30 Lt. Ln. - Sta. 6+70 Lt. Ln. (Span 1L) West Railing
Sta. 9+80 Lt. Ln. - Sta. 9+90 Lt. Ln. (Span 6L) West Railing
Sta. 10+55 Lt. Ln. - Sta. 10+65 Lt. Ln. (Span 8L) West Railing

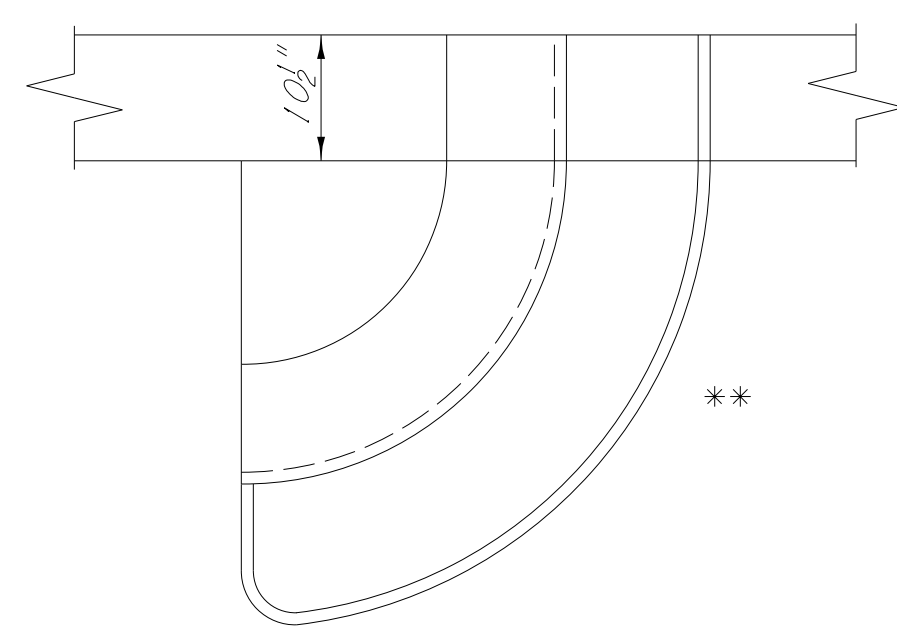


ELEVATION OF END POST

** NOTE: Railing end post drawn for End Bent No. 1L (west side), End Bent No. 10L (west side) similar by orientation. Both railing end posts are to be removed and replaced per the details on this sheet. (For additional details on end post, see information plans)



PART PLAN OF END POST REMOVAL AREA
Showing removal area of concrete railing end post (For additional details on end post, see information plans)



PART PLAN OF NEW RAILING END POST
Showing concrete railing end post

CONCRETE REMOVAL NOTES:

- Concrete removal shall be completed by use of small chipping hammers (30 pound max.) or by other means (subject to the approval of the Engineer) that preserves the existing reinforcing and leaves remaining concrete surfaces in satisfactory condition for full strength bond.
- Any damage to the reinforcing steel or other bridge components, caused by this item of work, shall be repaired by a method approved by the Director of Structures, State Bridge Engineer and at no expense to the State.
- Form and pour the repair sections of the bridge according to the dimensions shown on the information sheets shown in these plans.
- Bond the new concrete to the existing concrete using an epoxy binder that is applied to the old concrete and is still tacky when new concrete is poured.

REMOVAL SEQUENCE:

- Sawcut and remove the concrete from the removal area being careful not to damage steel projecting from curb and parapet, transverse bars projecting from the bridge deck.
- Provide temporary support (as needed) for the portion to be removed.
- Form and pour deck, curb, and parapet as per the information plans and these working drawings.

SAW CUTS NOTE:

The contractor shall verify the depth of reinforcing steel before making any saw cuts. The depth of saw cut shall be no more than the depth of reinforcing steel.

REINFORCEMENT NOTE:

All existing reinforcement shall remain in place unless otherwise noted in the details provided in these plans. Any damage to reinforcing steel shall be repaired to the satisfaction of the Engineer at no additional cost to the State.

DEBRIS NOTE:

All debris, including any material that has accumulated on the bridge caps, shall become the property of the Contractor and shall be removed from the construction site.

RAILING END POSTS NOTES

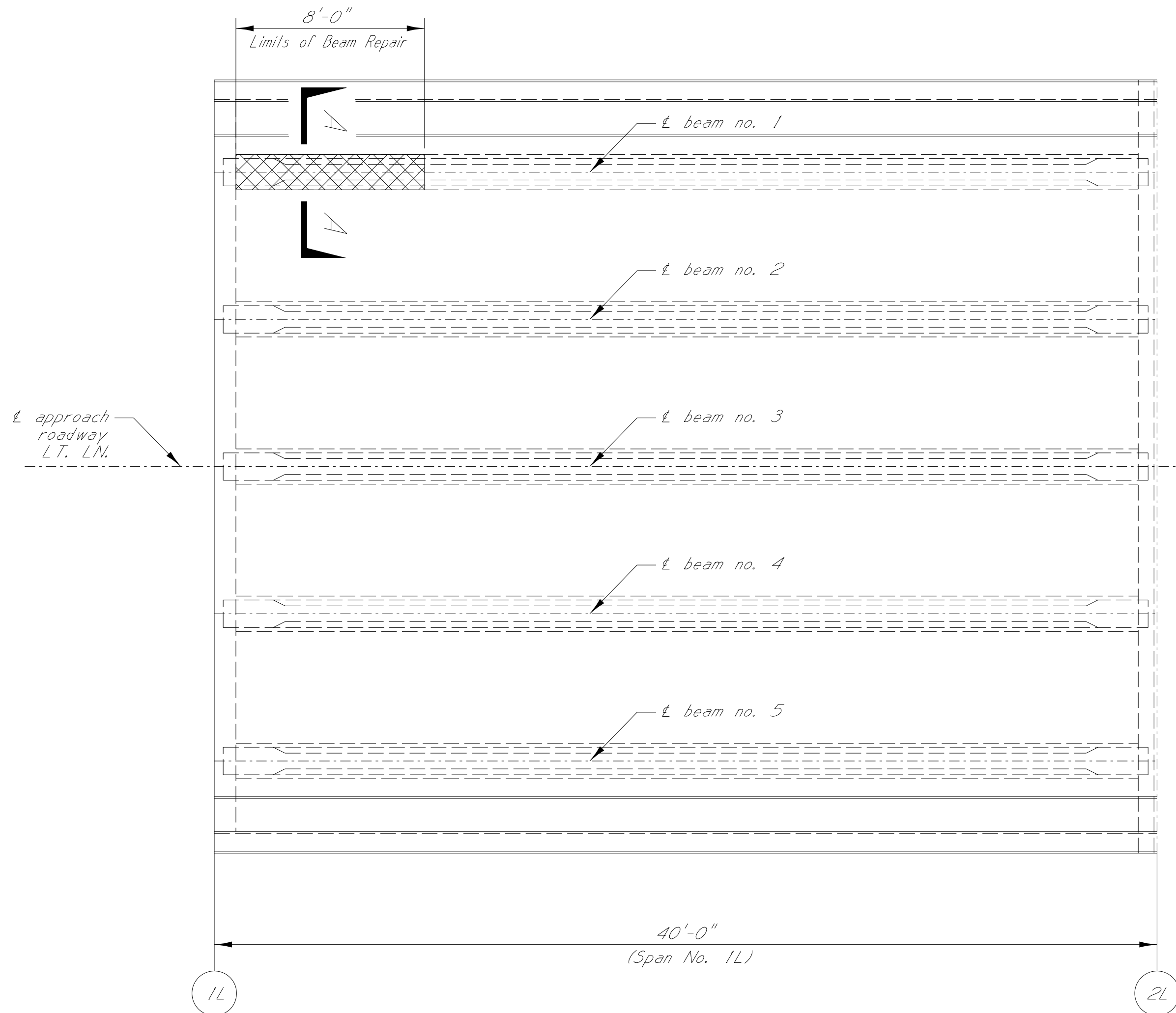
Railing end posts shall removed under Pay Item No. 907-824-PP008, Bridge Repair, Removal of Bridge Railing and Overhang, Per plans and reconstructed under Pay Item No. 907-824-PP008, Bridge Repair, New Construction of Bridge Railing and Overhang, Per Plans with a quantity of 5 LF for each end post. The railing end posts dimensions should be restored to the original dimensions shown in the information plans.



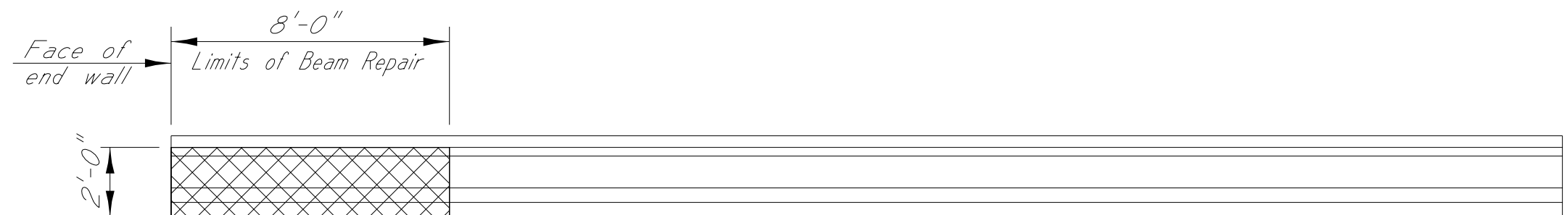
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		BRIDGE AT STA. 6+30 LT. LN.	
		RAILING & OVERHANG REPAIR DETAILS	
		FMS: 307163 / 301000	
		COUNTY: LAUDERDALE	
		PROJECT NUMBER: MRP-5059-38(230)	
		WORKING NUMBER	
		4 OF 6	
DATE		DESIGNER Lon Burd	CHECKER Paul Drees
		ISSUE DATE 2020-05-12	
		DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
		DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
		SHEET NUMBER	
		8005	

PROJECT NO. MISSISSIPPI DEPARTMENT OF TRANSPORTATION

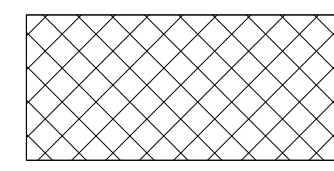
02: 00 AMPH DGN FILE NAME

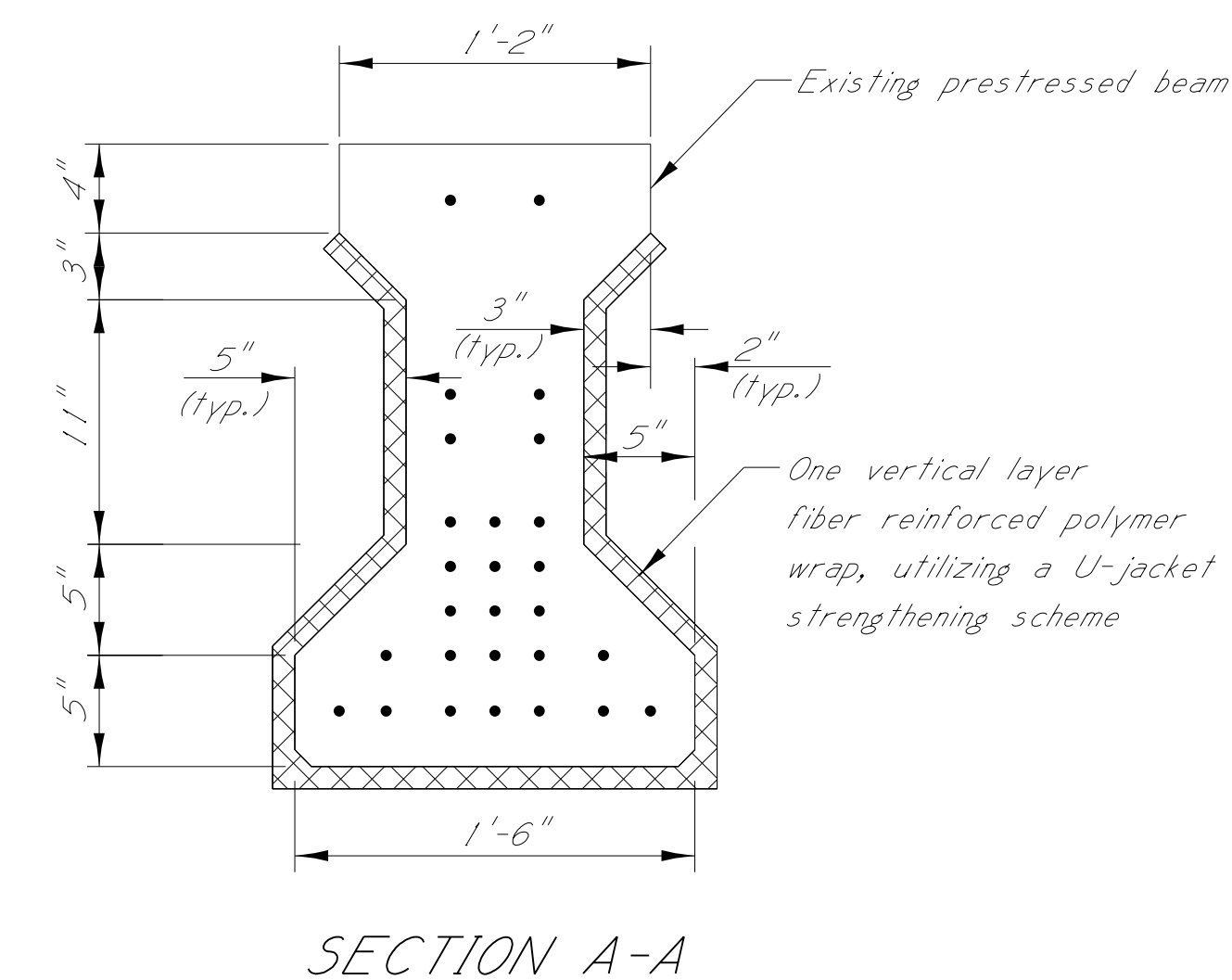
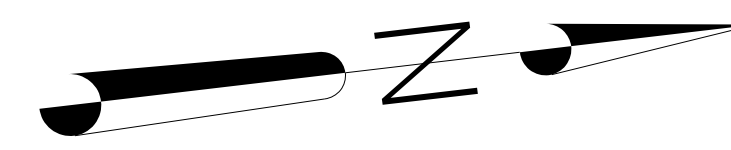


SHOWING PART PLAN VIEW OF SPAN NO. 1
Showing location and limits of beam repair



SHOWING ELEVATION OF SPAN NO. 1, BEAM NO. 1
Showing limits of beam repair

 Denotes areas of existing spalled or damaged concrete to be repaired with epoxy mortar and wrapped with FRP.



FRP WRAP NOTES:

- FRP wrap shall be one of the following products and shall be applied according to the manufacturer's recommendations:
 - "FRP Wrap" as manufactured by Fyfe Co. LLC, www.aegion.com/about/our-brands/fyfe
 - "FRP Wrap" as manufactured by BASF Building Systems LLC, www.master-builders-solutions.basf.us
 - "FRP Wrap" as manufactured by QuakeWrap Inc, www.quakewrap.com
- The Contractor shall furnish all submittals indicating the materials, tools, equipment, transportation, necessary storage, labor, installation plan and supervision required for the application of the composite or polymer system to the Director of Structures, State Bridge Engineer prior to construction.
- Products shall be stored according to the manufacturer's requirements and shall avoid contact with moisture, dust and chemical exposure.
- All FRP composite systems shall be proprietary systems consisting of all associated fiber reinforcement and polymer adhesives/resins. FRP composites consisting of fiber reinforcement and polymers provided by more than one manufacturer are not allowed.
- The FRP composite system shall utilize carbon fiber reinforcement as the primary fiber material (primary structural component).
- The FRP system shall be top coated with a coating approved by the FRP system supplier. The coating color shall be selected by the Project Engineer.
- FRP wraps shall not be installed when the ambient temperature is below 40°F or above 130°F. In cold conditions, auxiliary heat may be applied to raise the ambient temperature to a suitable level. Clean heat sources shall be utilized for this purpose (e.g., electric or propane) that do not contaminate the substrate with carbonation.
- FRP wraps shall not be installed when surface moisture is present on the substrate or when rainfall or condensation is anticipated in the work areas. If water leakage exists through cracks or concrete joints, water flow shall be stopped prior to FRP installation.
- Resins (including primers and fillers) shall be mixed according to the FRP system manufacturer's installation instructions. All resin components shall be at a proper temperature and mixed in the manufacturer's prescribed mix ratio until there is a uniform and complete mixing of components. Resin components are often contrasting colors, so full mixing is achieved when color streaks are eliminated. Resins should be mixed for the Manufacturer's prescribed mixing time and visually inspected for uniformity of color.
- A representative of the FRP wrap manufacturer must be present for sufficient time to assure that the Contractor is properly schooled in the installation of FRP wrap.
- Prior to installation of FRP wraps, the Contractor shall repair concrete spall areas in accordance with the notes shown on this sheet.
- All labor, materials, and surface preparation associated with the installation of FRP wraps, shall be included in pay item 907-824-PP003, Bridge Repair, FRP Wrap.
- The fibrous reinforcement system shall have a minimum tensile force of 2.1 kips/in. in both directions.
- The fiber wrap shall be bi-directional.

ADDITIONAL FRP WRAP NOTES:

In addition to the Manufacturer's requirements, the Contractor shall ensure the structural integrity and durability of the reinforced fiber wrap system by meeting the following acceptance guidelines:

- Small delaminations, less than 2 sq. in. each, are permissible as long as the delaminated area is less than 5% of the total laminate area and there are no more than 10 such delaminations per 10 sq. ft.
- Large delaminations, greater than 25 sq. in., can affect the performance of the installed system and shall be repaired by selectively cutting away the affected sheet and applying an overlapping sheet patch of equivalent plies; and
- Delaminations less than 25 sq. in. may be repaired by ply replacement.

Before repairing any delaminated areas, the Contractor shall submit a FRP repair procedure to the Director of Structures, State Bridge Engineer for review and approval.

BEAM EPOXY MORTAR REPAIR NOTES:

- Repair all damaged concrete and spalled areas listed on this page and as directed by the Project Engineer.
- All damaged or unsound concrete shall be removed from the repair area.
- Damaged or spalled areas where pack rust has developed around or on reinforcement shall be blasted clean. Hammers used to remove damaged concrete shall be limited to 15 pounds on beam.
- All areas where damaged concrete is removed shall be squared up with the 15 pound hammer to prevent feather edges.
- Area of the beam repaired with epoxy mortar shall be restored to the original dimensions and details as shown in the information plans, unless noted otherwise.
- Materials:
 - Epoxy Resin: Resin shall be approved by the Director of Structures, State Bridge Engineer.
 - Silica Sand: Silica sand material shall be bagged general purpose blast cleaning sand.
 - Epoxy Mortar Mix: Epoxy mortar mix shall consist of part liquid epoxy and part clean, dry sand mixed in the ratio recommended by the manufacturer.
- Application:
 - A representative of the epoxy manufacturer must be present for sufficient time to ensure the Contractor is properly schooled in the use of the epoxy materials.
 - Prior to placement of the mortar mix the prepared surface shall be lightly primed with neat epoxy.
 - Curing time shall be in accordance with manufacturer's recommendations.
- The cost of removing spalled or cracked concrete, cleaning exposed reinforcing steel, patching material, labor and any miscellaneous materials necessary to complete the repairs as shown shall be paid for on a square foot basis as Bridge Repair, Epoxy Repair. This item shall be bid such that this item may be increased, decreased, or eliminated as directed by the Project Engineer.

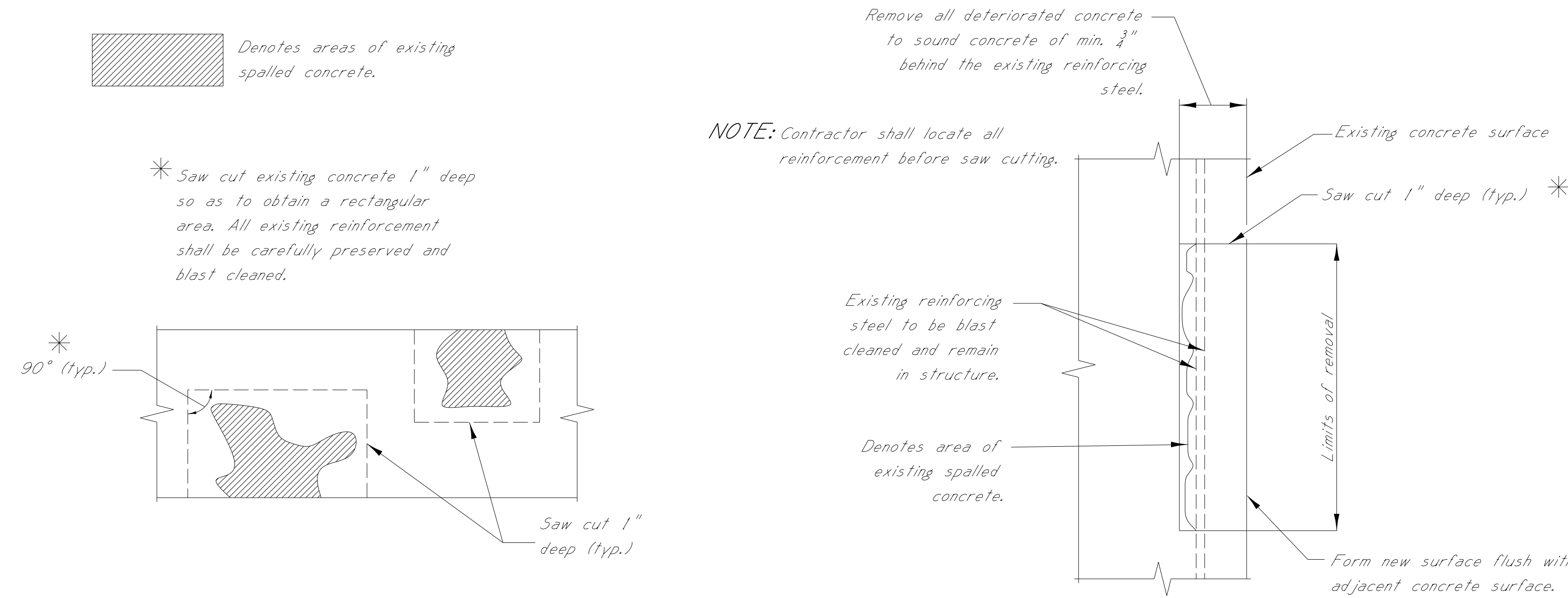
Locations To Be Repaired:
Span No. 1L, Beam No. 1.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 6+30 LT. LN.	
FRP REPAIR DETAILS	
DESIGNER Lon Bur1	CHECKER Paul Dees
DATE	ISSUE DATE 2020-06-12
FMS: 307163/301000	
COUNTY: LAUDERDALE	
PROJECT NUMBER: MRP-5059-38(230)	
WORKING NUMBER	
5 OF 6	
SHEET NUMBER	
8006	

Epoxy Mortar Repair Notes:

1. Repair concrete spalled areas on the bridge as directed by the Project Engineer using epoxy mortar.
2. Repair all concrete spalled areas listed on this page and as directed by the Project Engineer.
3. Repair any additional concrete spalled areas not listed on this page as directed by the Project Engineer.
4. The Contractor shall determine the depth of reinforcement prior to any saw cutting.
5. Spalled areas where pack rust has developed around or on reinforcement shall be blasted clean. Hammers used for removal shall be limited to 30 pounds.
6. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions and details as shown in the information plans, unless noted otherwise.
7. Materials:
 - a. Epoxy Resin: Resin shall be selected from the MDOT approved materials list.
 - b. Silica Sand: Silica sand material shall be bagged general purpose blast cleaning sand.
 - c. Epoxy Mortar Mix: Epoxy mortar mix shall consist of part liquid epoxy and part clean, dry sand mixed in the ratio recommended by the manufacturer.
8. Application:
 - a. A representative of the epoxy manufacturer must be present for sufficient time to ensure the Contractor is properly schooled in the use of the epoxy materials.
 - b. Prior to placement of the mortar mix the prepared surface shall be lightly primed with neat epoxy.
 - c. Curing time shall be in accordance with manufacturer's recommendations.
9. The cost of saw cutting, removing spalled or cracked concrete, cleaning exposed reinforcing steel, patching material, labor and any miscellaneous materials necessary to complete the repairs as shown shall be paid for on a square feet basis as Bridge Repair, Epoxy Repair. This item shall be bid such that this item may be increased, decreased, or eliminated as directed by the Project Engineer.



SPALL REPAIR DETAILS

Details above are for spalled areas where rebar is exposed.

Locations To Be Repaired:

End Bent No. 1 cap and wing wall on the west end of the bridge
 Bridge railing at approximate Sta. 10+00 - Sta. 10+02

PLAN REVISION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

D02: 00 AMPM DGNFILENAME



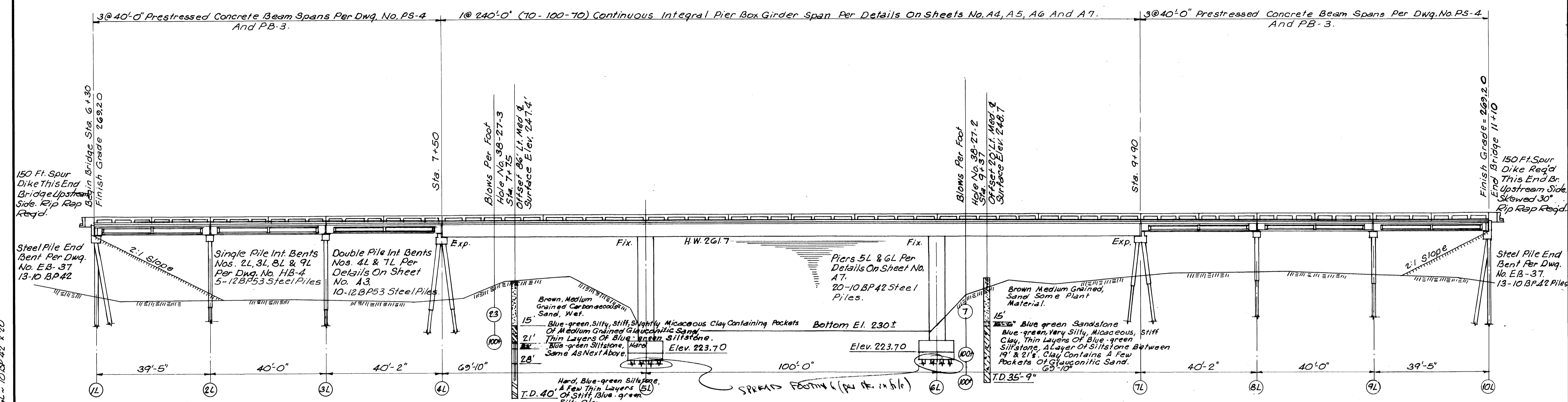
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		BRIDGE AT STA. 6+30 LT. LN.	
		GENERAL EPOXY REPAIR DETAILS	
		FMS: 307163 / 301000	
		COUNTY: LAUDERDALE	
		PROJECT NUMBER: MRP-5059-38(230)	
DATE	DESIGNER Lon Bur1	CHECKER Paul Deas	WORKING NUMBER
	DETAILER Lon Bur1	ISSUE DATE 2023-05-12	6 OF 6
	DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.		SHEET NUMBER
	DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.		8007

STATE	PROJECT NO.
MISS.	

12297-LT.LN. 12298-RT.LN.
12447
12440
12302-LT.LN. 12301-RT.LN.
12441

MISSISSIPPI DEPARTMENT OF TRANSPORTATION				
NO SUMMARY OF QUANTITY NOR RECAP SHEETS				
				WORKING NUMBER
DESIGNED _____		DETAILED _____		TRACED _____
CHECKED _____		ISSUED _____		DATE _____
				SHEET NUMBER

Total Length Of Bridge = 480'-0"
0.00% Grade



MINIMUM PILE BEARING CAPACITIES

End Bents	30 Tons
Single Pile Int. Bents	40 Tons
Double Pile Int. Bents	40 Tons
Piers 5L & 6L	37 Tons

ELEVATION- WITH PROFILE ON & SURVEY- LEFT LANE
Scale 1/4" = 1'-0"

SPECIAL PAINT NOTES:
Disregard The Painting Instructions On Drawing No. PB-3 And Paint As Follows:
All Surfaces To Be Painted Shall Be Cleaned Per Art. 214.05 Of The Specifications.
All Steel Surfaces Of The Bearing Assembly Except Anchor Bars & Anchor Bolts Shall Be Given One Shop Coat Of Red Lead Paint Per Code R.L.
No Further Painting Will Be Required For Surfaces Which Will Be Covered By Contact With Concrete.
After Erection Of Spans, All Exposed Steel Surfaces Shall Be Given Three Field Coats Of Paint As Follows: First Coat Red Lead Paint Per Code R.L. Second & Third Coats Black Graphite Paint Per Code M-B.
Steel Surfaces To Be Field Painted Which Will Become Inaccessible After Erection Shall Be Field Painted Prior To Placing In Position.

Seal Shown For Pier Foundation Is Proportioned For Water Elevation 234.5. If Water Is Above That Elevation At Time Of Pouring Seal, The Thickness Of The Seal Shall Be Increased To 25% Of Distance From Water Level To Bottom Of Seal.

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

DESIGN DATA
Specifications: - A.A.S.H.O., 1961, T. 2. (61).
Loading: - H20-S16-44 Modified For 2-24,000* Axles.
Roadway Width: - 28'-0"
Curb Width: - 1'-6"

GENERAL NOTES:
Specifications: - Mississippi State Highway Department. No Unauthorized Change Of Plans Will Be Permitted. Expansion Joint Material Shall Be Bituminous Fiber Type. Concrete Surfaces Shall Be Finished In Accordance With Article 200.19 Of The Specifications And Drawing No. RF-1.
All Prestressed Members Are To Be Manufactured In Accordance With Special Provision No. 216- Revised.
Test Piles Shall Be Driven As Permanent Piles In Bents No. 2L, 5L, 6L, & 9L, To A Minimum Bearing Capacity Of 40 Tons And A Minimum Penetration Of 20 Feet And Will Be Paid For As Test Piles Only.
Test Pile Data And Recommended Pile Lengths Shall Be Submitted To The Bridge Engineer For Approval.
Steel Piles, Where Practicable Shall Be Driven Full Length And Shall Not Be Spliced Except By Authority Of The Bridge Engineer.
Steel Piles Will Be Paid For At Contract Price Per Linear Foot Complete In Place & No Additional Payment Will Be Allowed For Splicing And Welding. No Paint Required For Piles.
All Welding Shall Be Done By Electric Arc Process.
Bridge Excavation Quantity Is Measured Below Natural Ground For Piers. No Payment Will Be Made For Excavation For End Bent Caps Or Pile Encasements.
All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation There For Will Be Considered Included In The Prices For Bid Items.

DRAINAGE DATA
Drainage Area 501 Sq. Miles
Q50 (U.S.G.S.) 32,400 c.f.s.
Effective Area Provided 8,030 Sq. Ft.

SPECIAL PROVISION NO'S, REQ'D.
Prestressed Conc. Members: - No. 112- Revised (8-15-60).
Neoprene Pads: - No. 216- Rev. (7-27-60).
Self-Lubricating Bronze Plates No. 371.

Drawings Required: EB-37 (11-4-59), PS-4 (3-15-62), HB-4 (10-4-63), ED-1 (12-23-57), RF-1 (4-18-59), PB-3 (3-15-62).

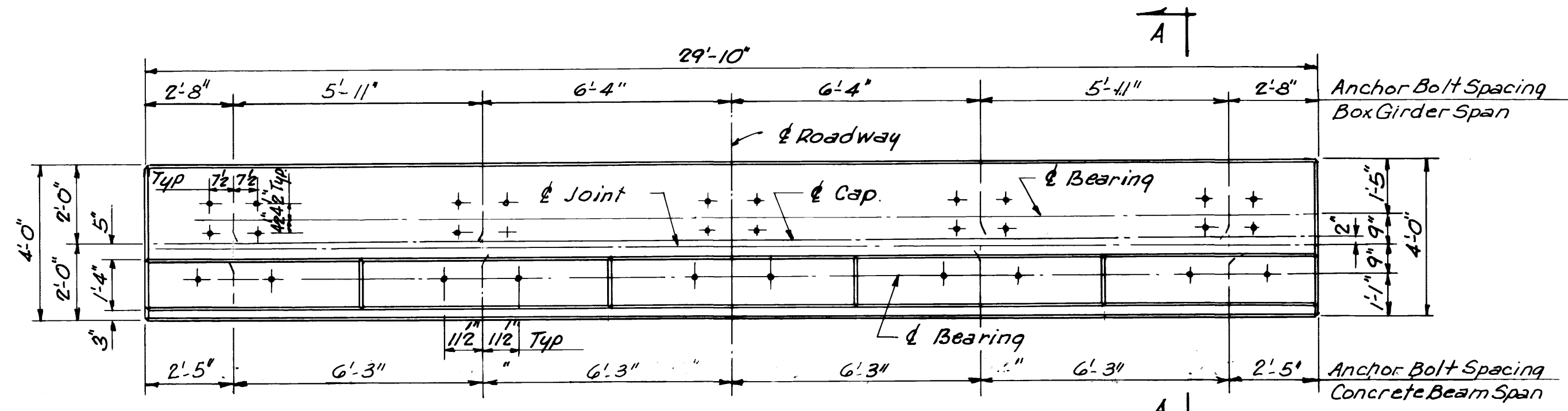
ESTIMATED QUANTITIES - LEFT LANE

Item	Class "B" Bridge Concrete Cu. Yds.	Class "S" Seal Concrete Cu. Yds.	Structural Steel Lbs.	Reinforcing Steel Lbs.	Concrete Railing Lin. Ft.	40' Prest Conc. Beams Lin. Ft.	10 BP 42 Steel Test Pile Units	10 BP 42 Steel Piling Lin. Ft.	Bridge Excavation Cu. Yds.	Loading Tests Units	12 BP 53 Steel Test Pile Units	12 BP 53 Steel Piling Lin. Ft.
Approach Spans	205.00			45,390	480	1,177.50						
240 Ft. Span	516.62		* 4,050	160,104	480							
End Bents	35.56			3,758				1,040				
Spl. Pile Int. Bents	49.57			3,450	3,242						2	720
Dbl. Pile Int. Bents	55.11			1,170	4,816							800
Piers 5L & 6L	116.50	49.68		18,076			2	760	255			
Totals	978.36	49.68	8,670	235,386	960	1,177.50	2	1,800	255	1	2	1,520

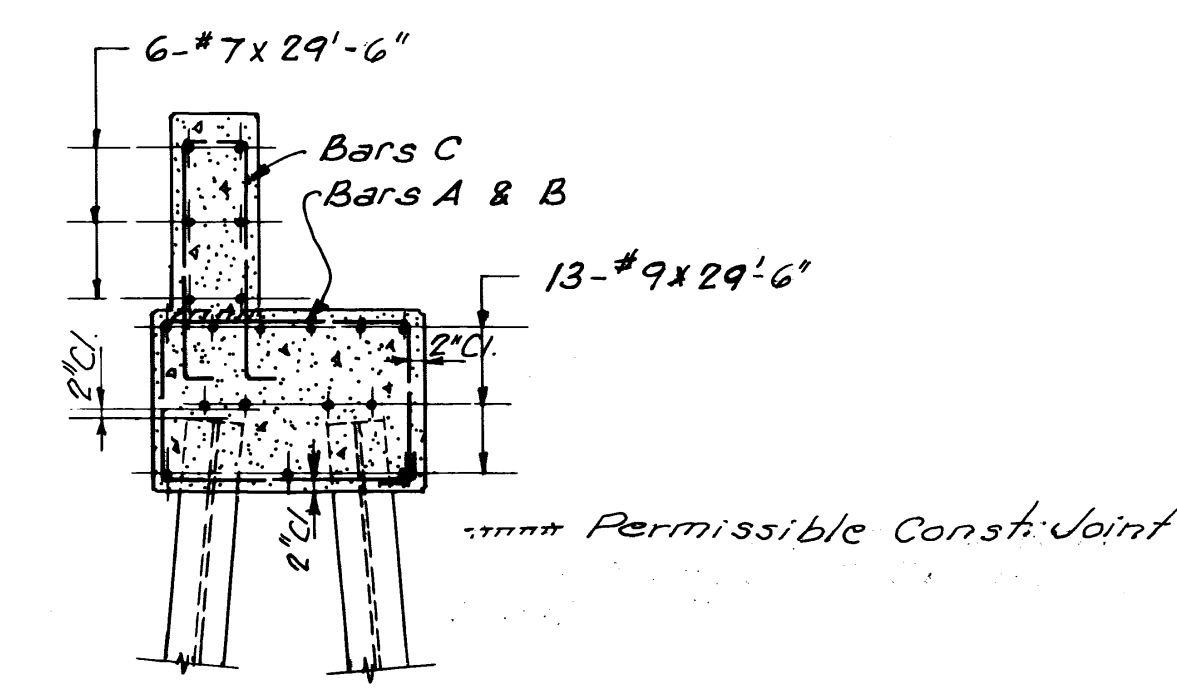
NOTE: Structural Steel Item* Is For Bearing Assemblies And Access Doors, Structural Steel Item† Is For 12 & 20.7 Sway Bracing.

DATE		REVISIONS		BY	
2/11/64		1.20 FT.		J.H.B.	
DESIGNED		DETAILED		TRACED	
J.W.A.		J.W.A.		J.W.A.	
CHECKED		ISSUED		DATE	
J.W.A.		1-11-64		2-11-64	
SUBMITTED BY				BRIDGE ENGINEER	
MISSISSIPPI STATE HIGHWAY DEPARTMENT BRIDGE AT STA. 6+30 LEFT LANE ACROSS CHUNKY CREEK PROJECT I-59-3 (13) 136 LAUDERDALE COUNTY					
SHEET NUMBER				11 OF 7	

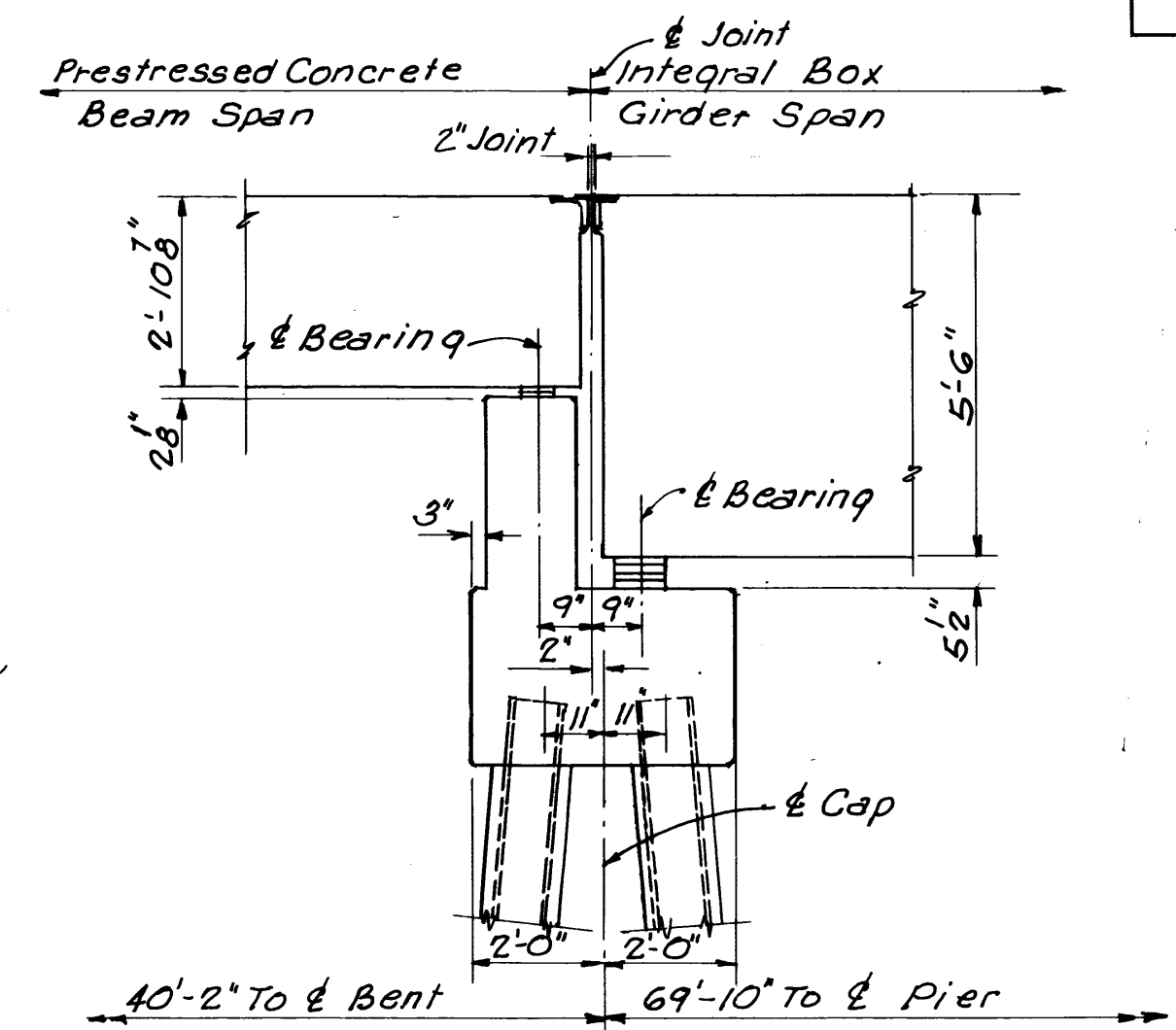
12297-LT.LN.



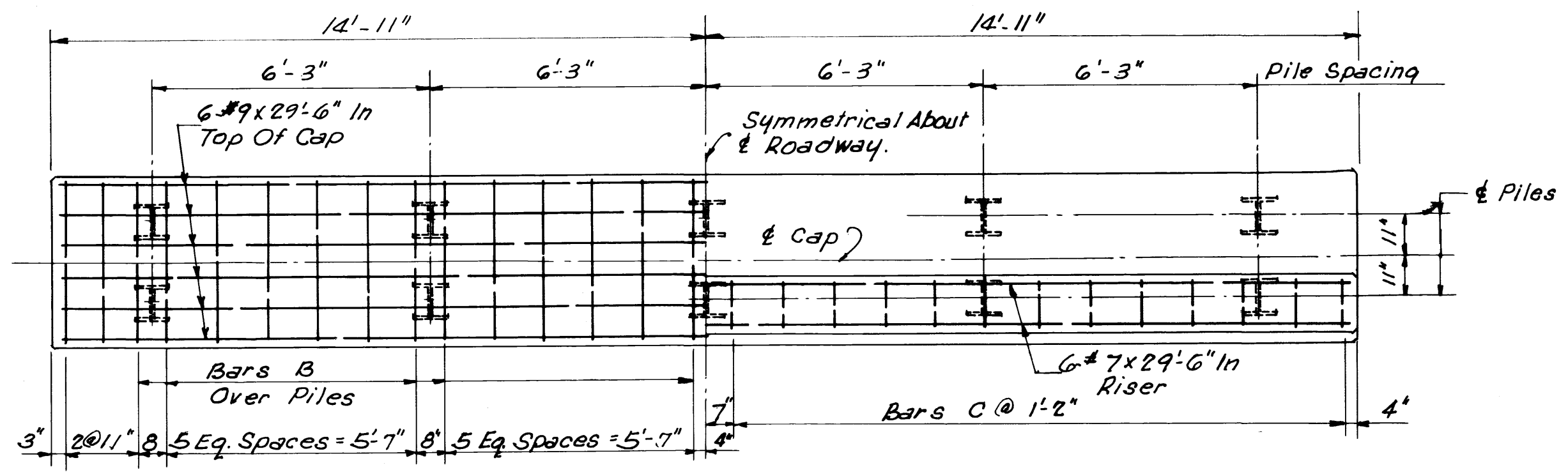
PLAN OF CAP
Showing Concrete Dimensions.



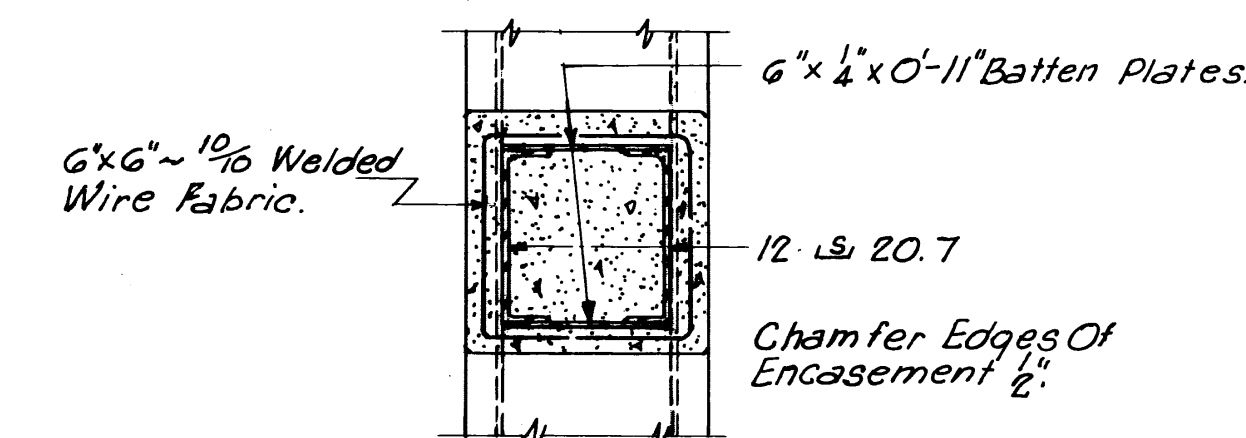
SECTION A-A
Showing Reinforcing.



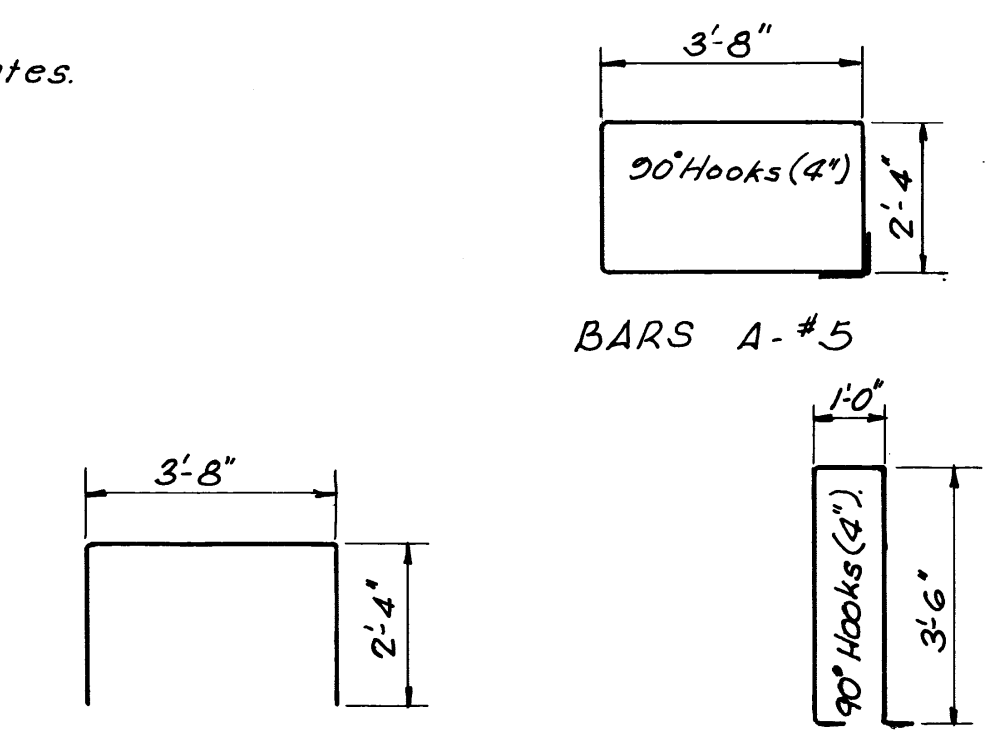
SPAN CONNECTION DETAIL



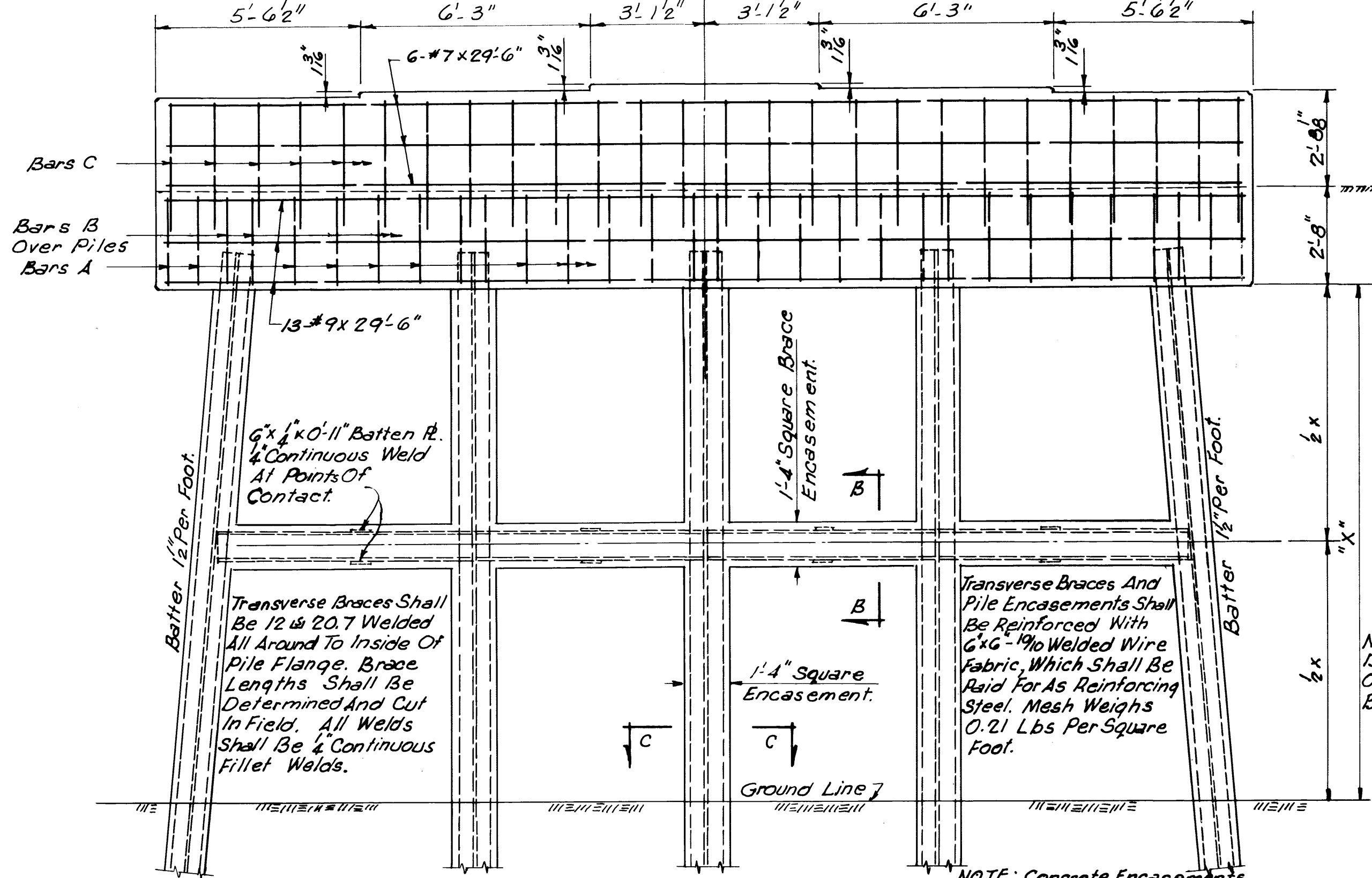
PLAN OF CAP
Showing Reinforcing And Pile Spacing



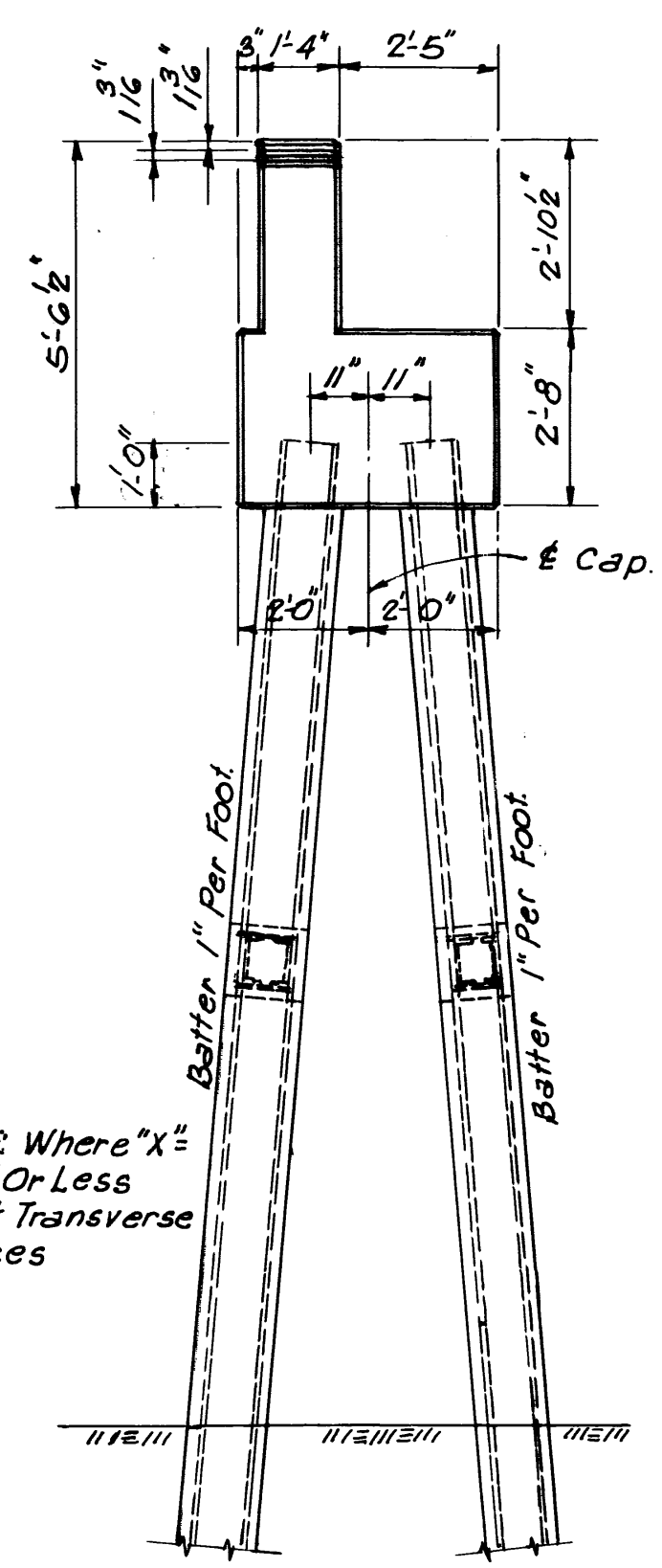
SECTION B-B



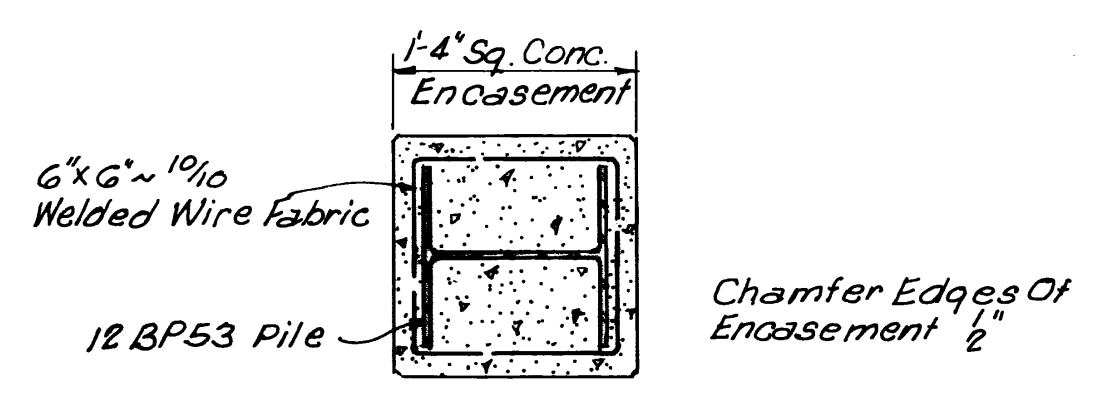
BAR BENDING DETAILS
Dimensions Are Out To Out



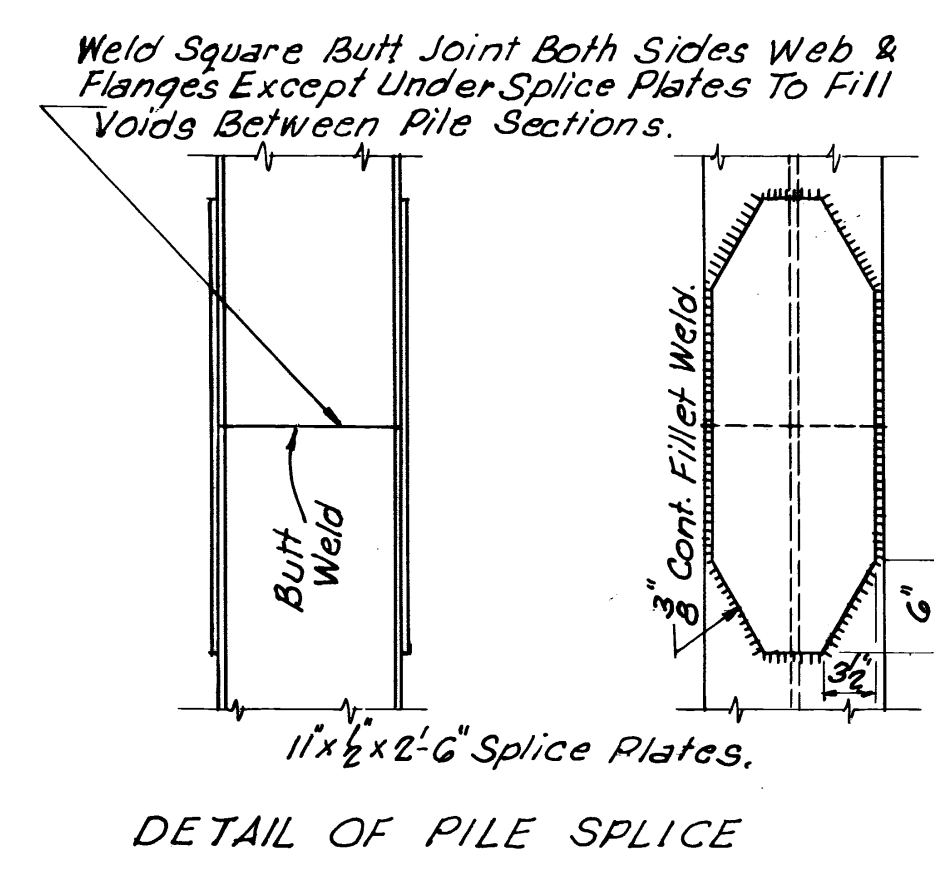
ELEVATION



END ELEVATION



SECTION C-C



DETAIL OF PILE SPLICE

GENERAL NOTES:
All Concrete Shall Be Class "B"
All Edges Shall Be Chamfered 3/4" Except Where Noted.
Placing Dimensions From Concrete Surfaces To Reinforcing Steel Are Clear Distances.
Steel Piling And Bracing Shall Be Shipped Unpainted. After Erection They Shall Be Thoroughly Cleaned Of Rust Prior To Construction Of Concrete Encasements.
Transverse Bracing Will Be Paid For As Structural Steel.

12 BP53 - Piles Shall Be Driven To A Minimum Bearing Capacity Of 40 Tons

NOTE: Concrete Encasements Shall Extend A Minimum Of 3'-0" Into The Ground.

NOTE: Where "X" Is 13'-0" Or Less Omit Transverse Braces

Transverse Braces Shall Be 12 #20.7 Welded All Around To Inside Of Pile Flange. Brace Lengths Shall Be Determined And Cut In Field. All Welds Shall Be 1/4" Continuous Fillet Welds.

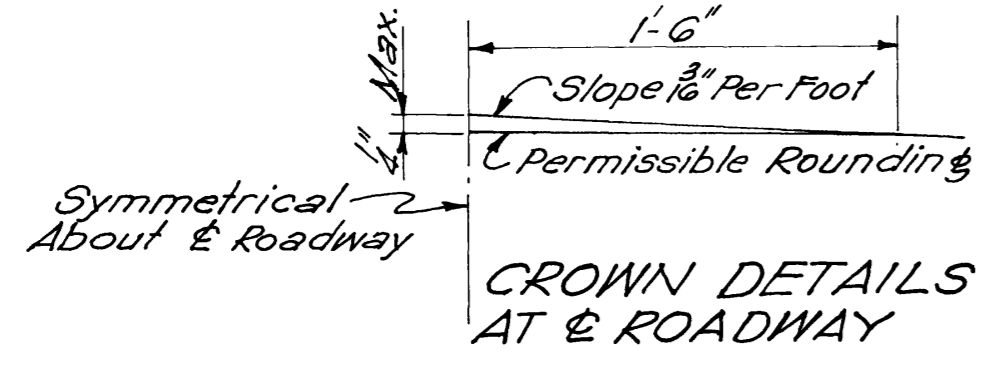
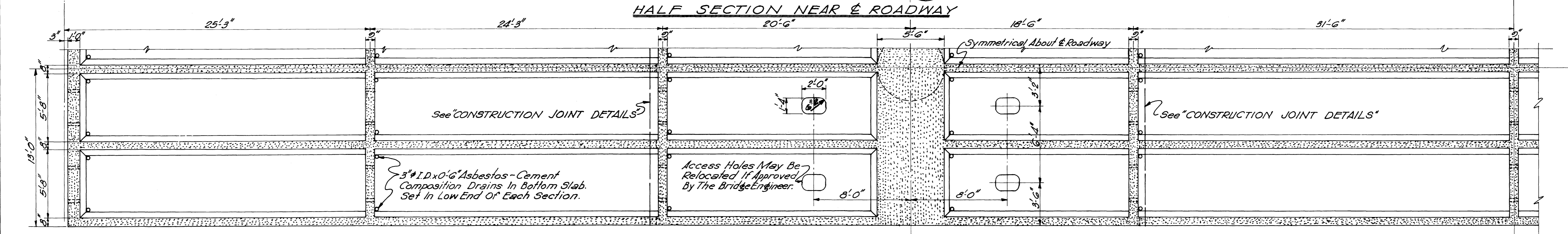
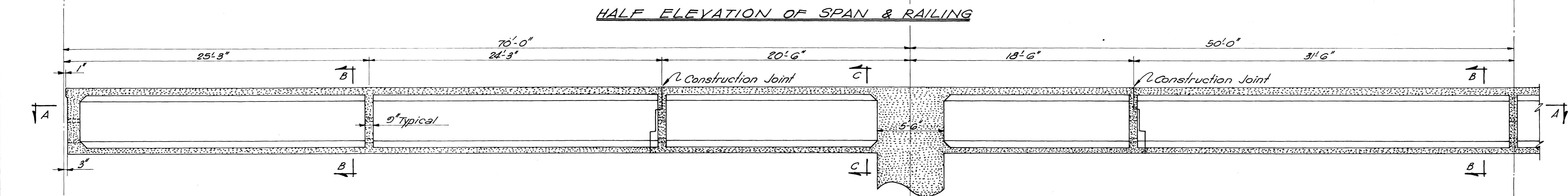
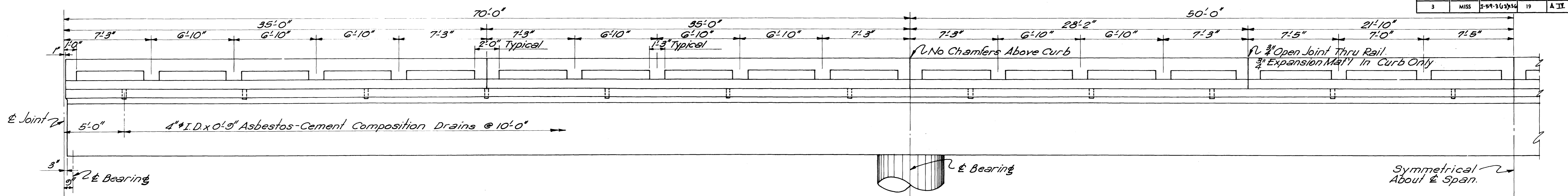
Transverse Braces And Pile Encasements Shall Be Reinforced With 6 #9 x 29'-6" Welded Wire Fabric, Which Shall Be Paid For As Reinforcing Steel. Mesh Weights 0.21 Lbs Per Square Foot.

DESIGNED		CHECKED		DATE	
W.F.M.		M.B.		2-11-64	
TRACED		DATE		SHEET NUMBER	
J.W.A.		2-11-64		A3 OF 7	

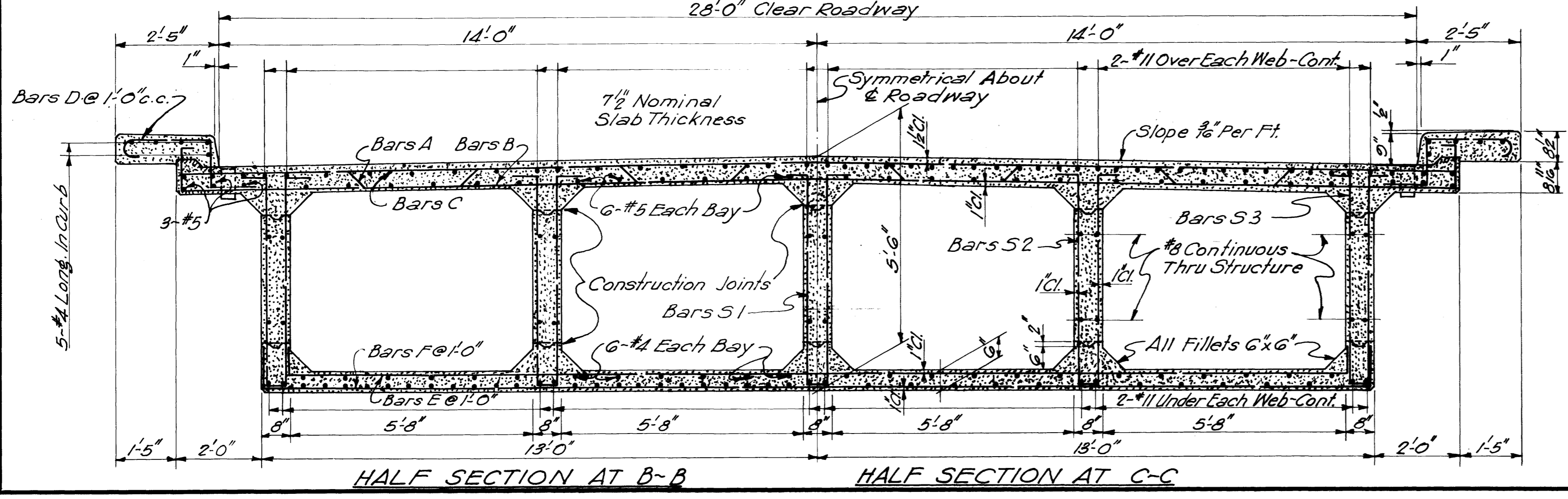
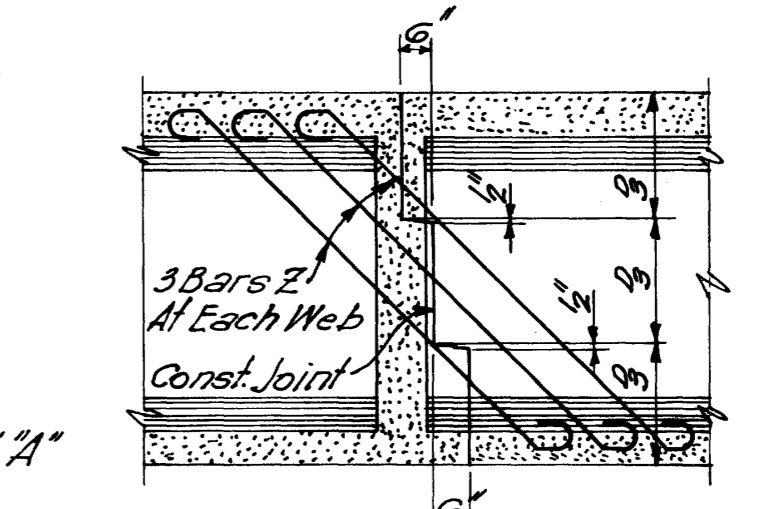
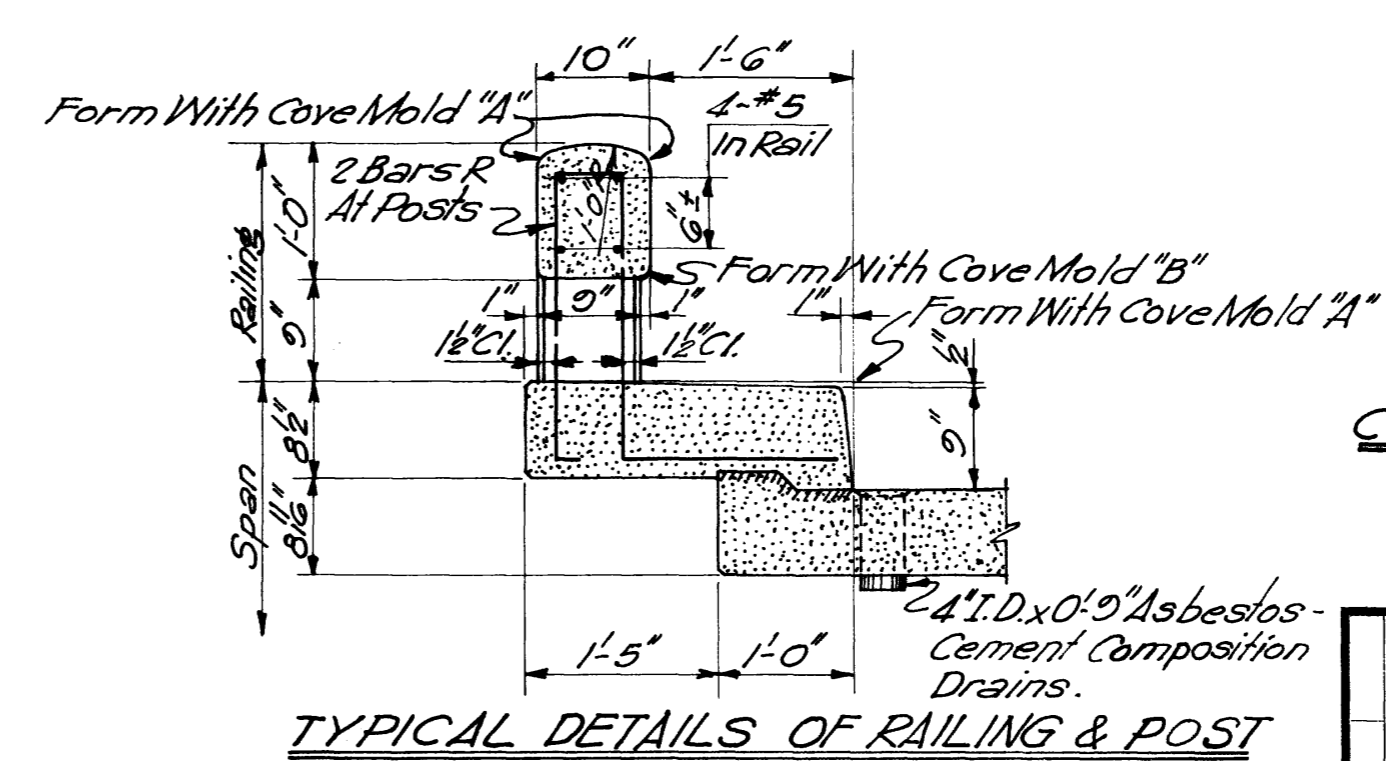
MISSISSIPPI STATE HIGHWAY DEPARTMENT
BRIDGE AT STA. 6+30
DOUBLE PILE INT. BENT
PROJECT I-59-3(13) 136
LAUDERDALE COUNTY

SUBMITTED BY: BRIDGE ENGINEER

12297-LT.LN. 12298-RT.LN.



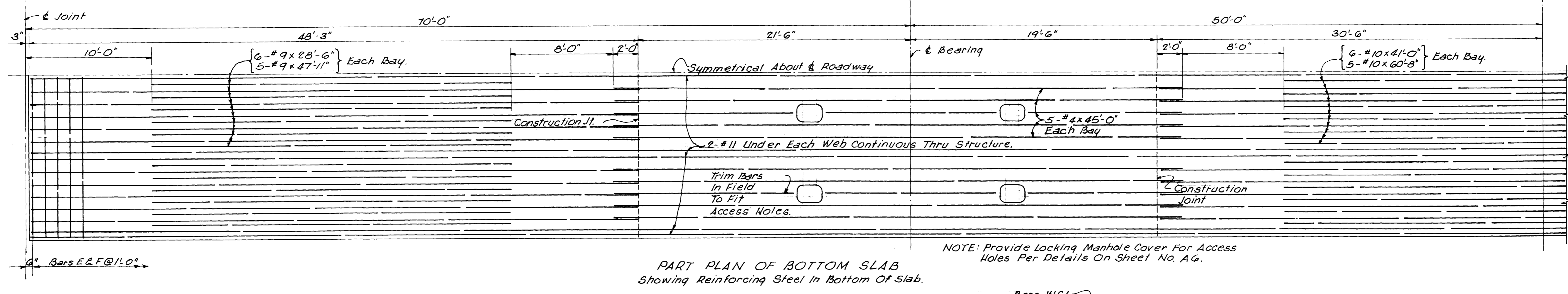
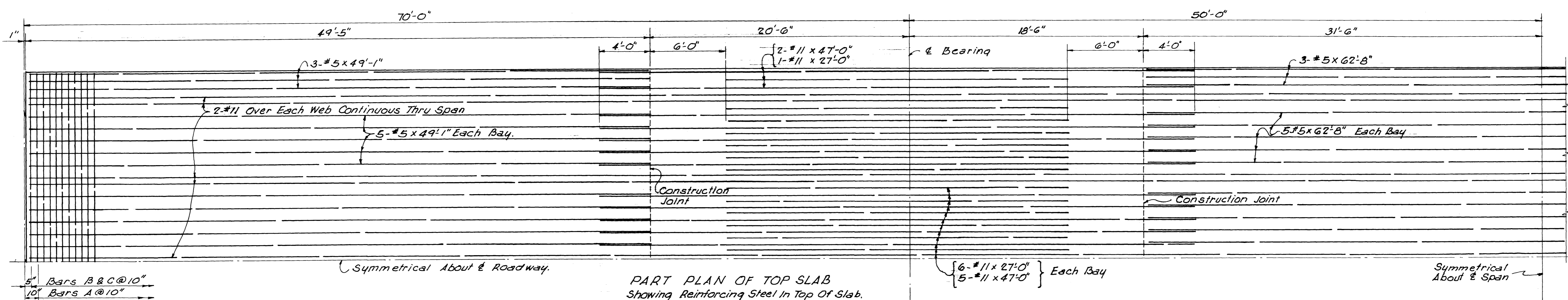
For Longitudinal Reinforcing In Top Of Top Slab And Bottom Of Bottom Slab, See Sheet No. A5.
For Shear Details, See Sheet No. A6.



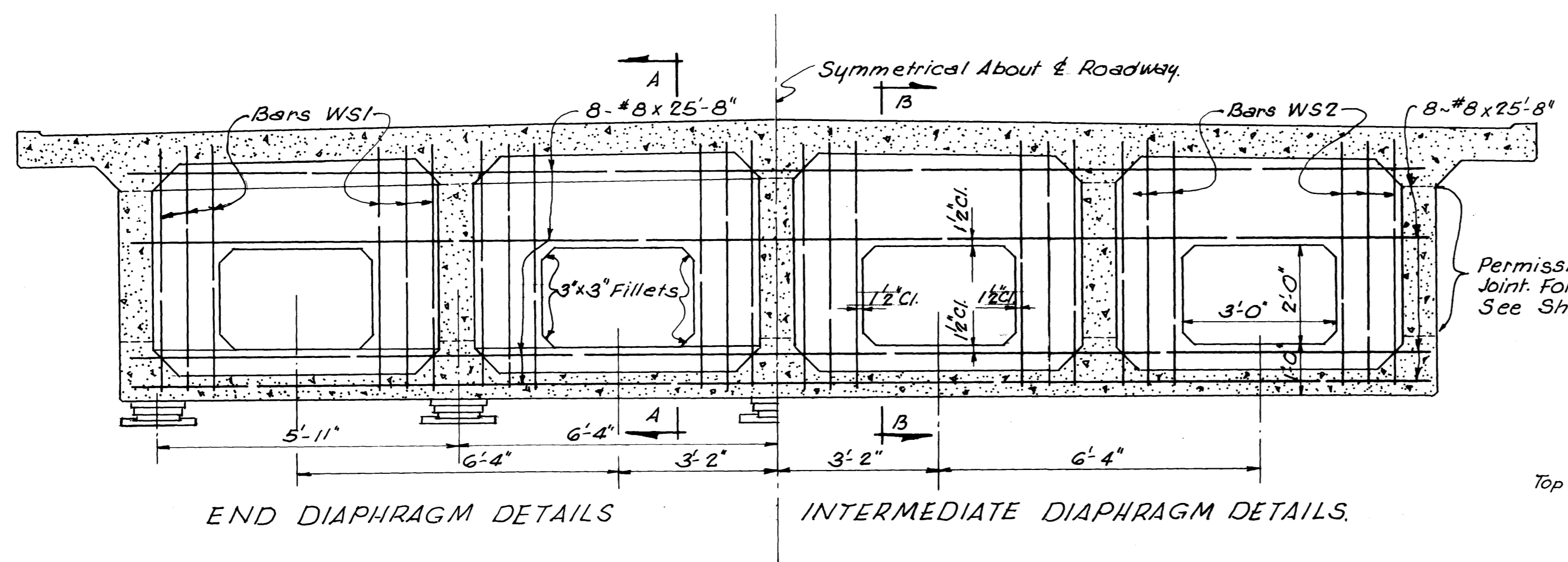
GENERAL NOTES:
Specifications: Mississippi Highway Department.
Concrete In Railing Shall Be Class "A" All Other Concrete Shall Be Class "B".
Exposed Corners, Unless Otherwise Noted, Shall Be Chamfered 3/4".
See Sheet No. A5 For Cove Mold Details.

12297-LT.LN.		12298-RT.LN.	
MISSISSIPPI STATE HIGHWAY DEPARTMENT BRIDGE AT STA. 6 + 30 SPAN DETAILS PROJECT I-59-3 (13)136 LAUDERDALE COUNTY			
DESIGNED: <i>[Signature]</i>		TRACED: <i>B.M.</i>	
CHECKED: <i>[Signature]</i>		ISSUED: <i>[Signature]</i> DATE: 2-11-64	
SUBMITTED BY: _____		BRIDGE ENGINEER	
DATE: _____		SHEET NUMBER: A4 OF 7	

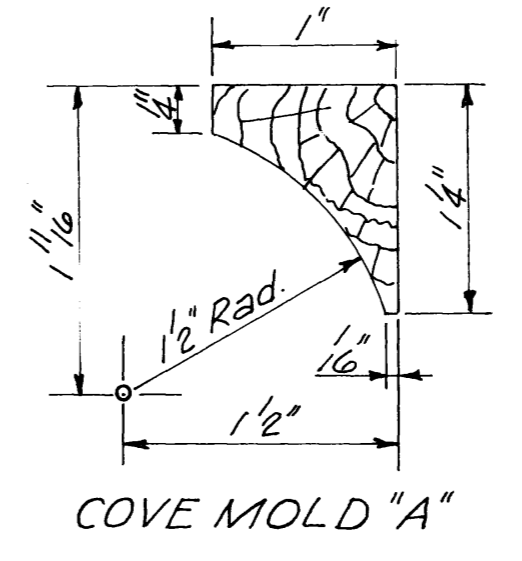
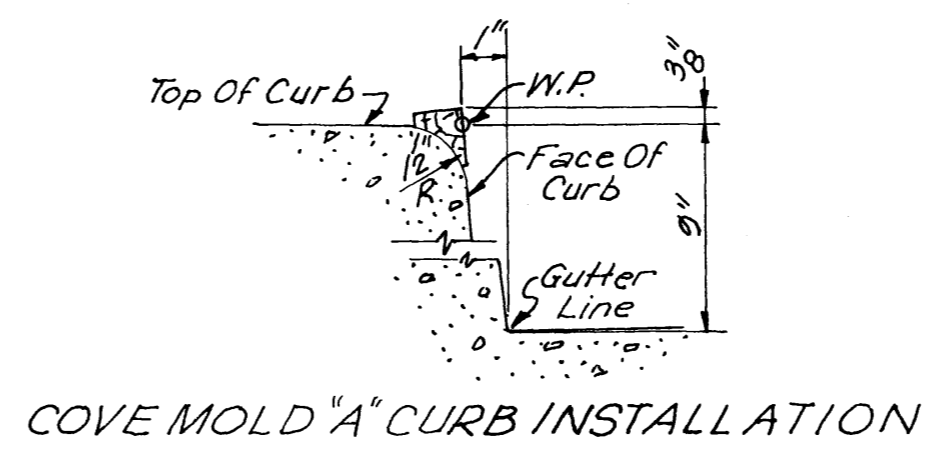
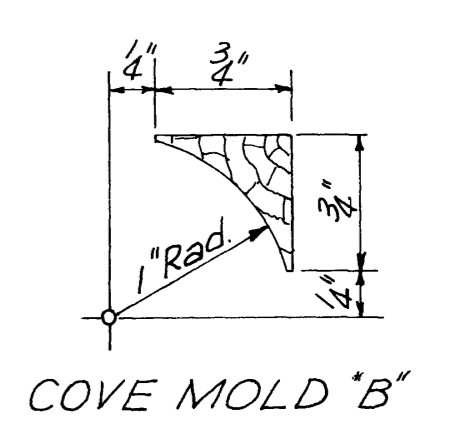
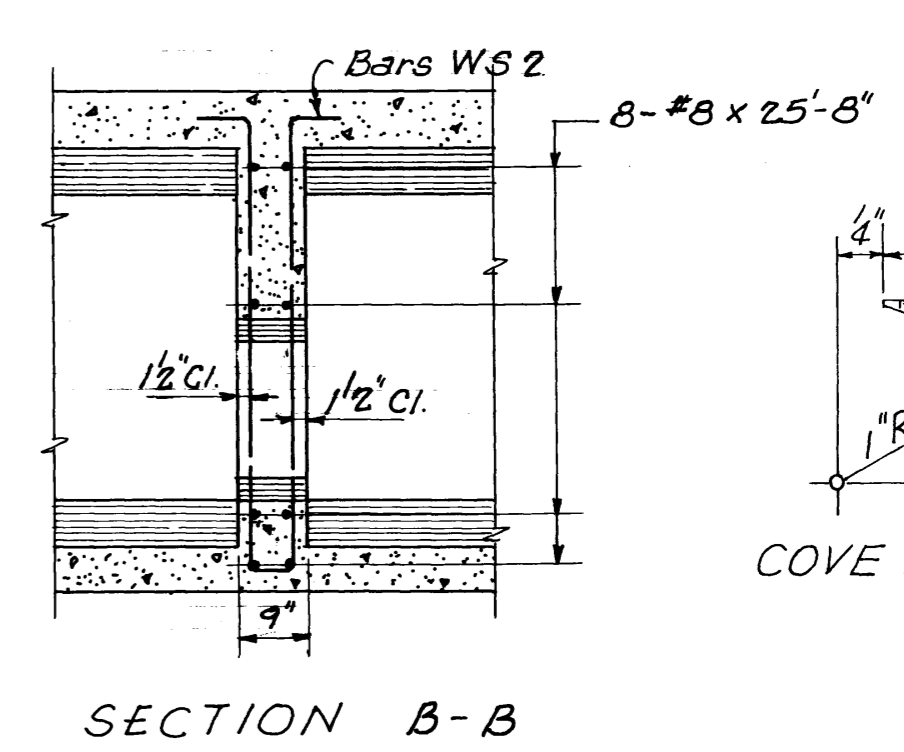
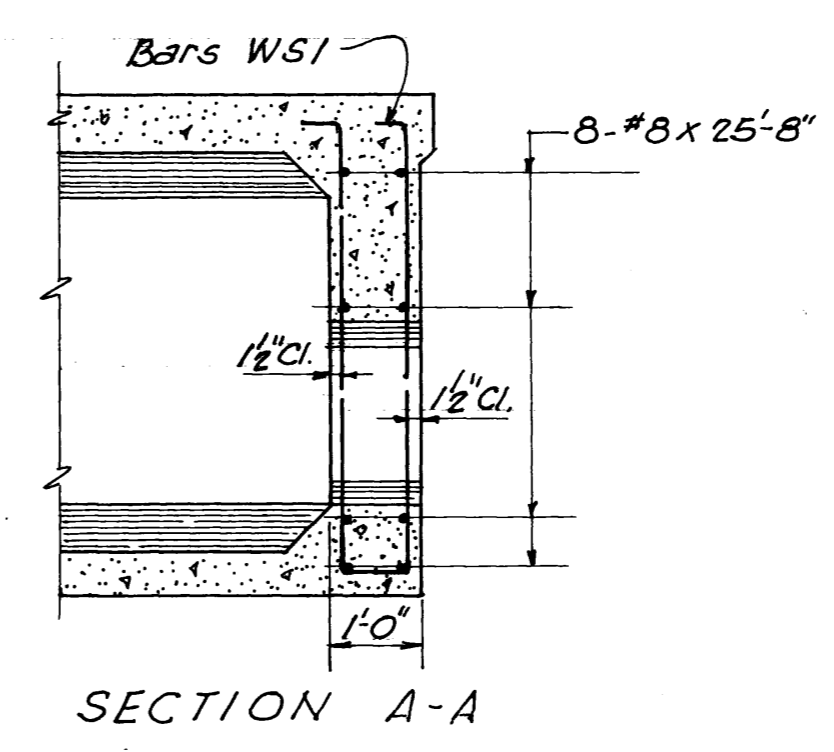
FED. ROAD DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	MISS	2-59-3(13)M	19	45	111



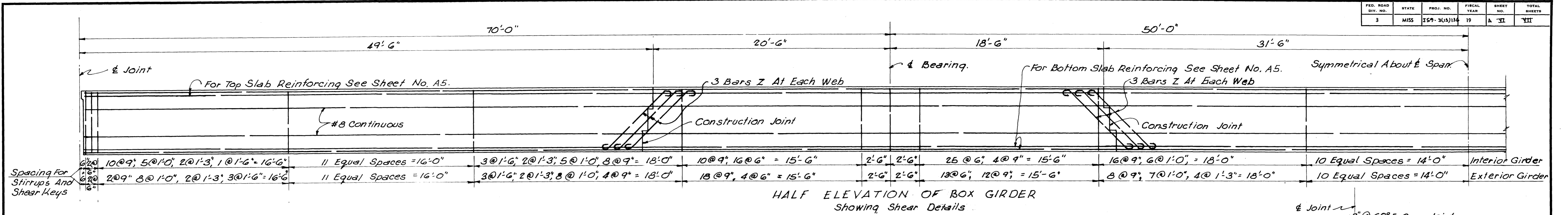
NOTE: Provide Locking Manhole Cover For Access Holes Per Details On Sheet No. AG.



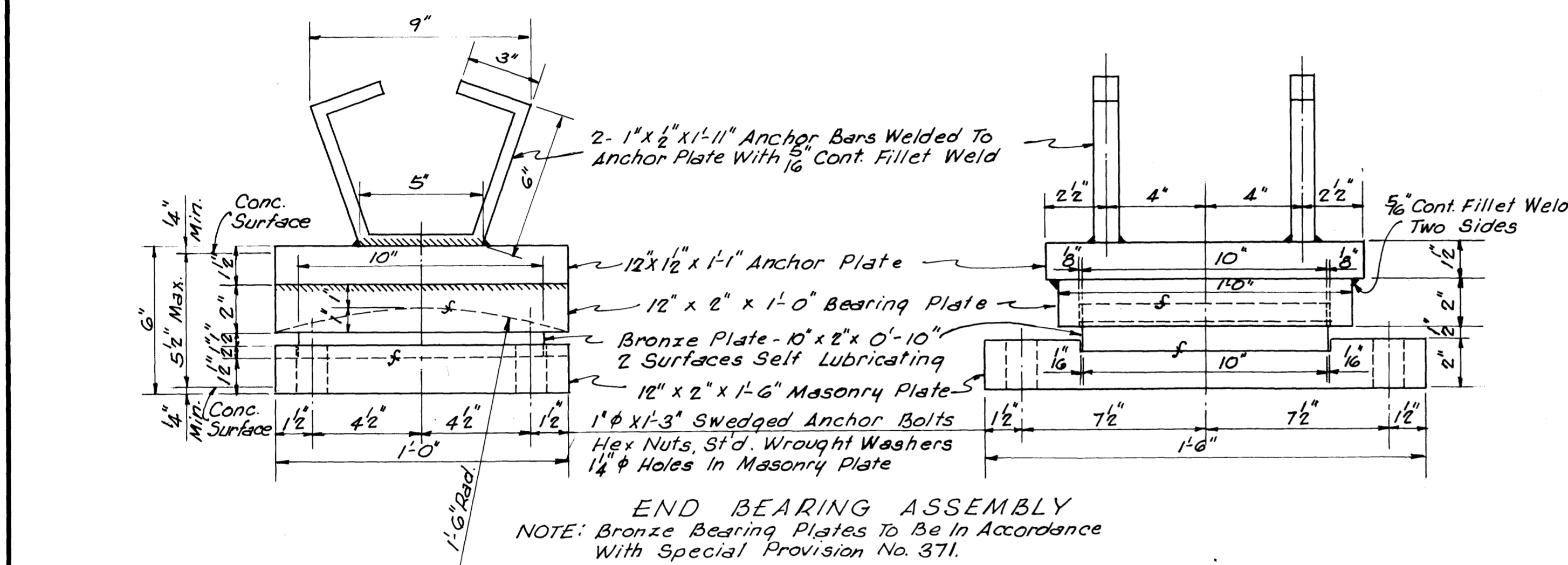
Permissible Construction Joint For Shear Key Details See Sheet No. AG.



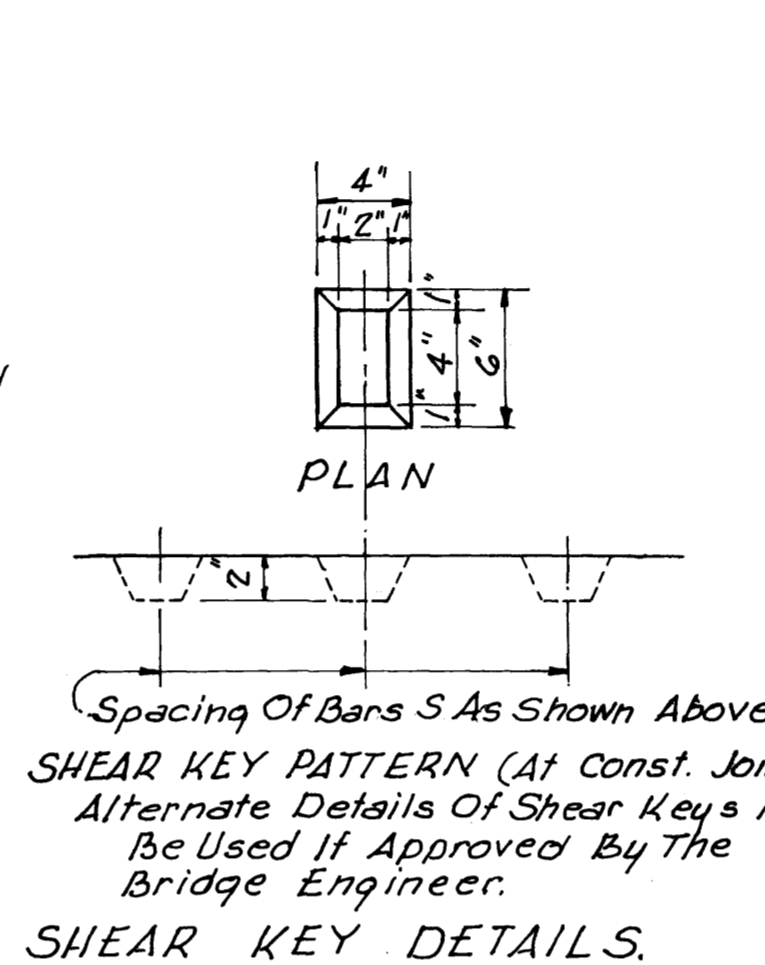
MISSISSIPPI STATE HIGHWAY DEPARTMENT BRIDGE AT STA. 6+30 SPAN DETAILS PROJECT I-59-3 (13)136 LAUDERDALE COUNTY	
DESIGNED: [Signature] CHECKED: [Signature]	TRACED: J.W.A. ISSUED: [Signature] DATE: 2-11-64
SUBMITTED BY: [Signature] BRIDGE ENGINEER	SHEET NUMBER 45 OF 71



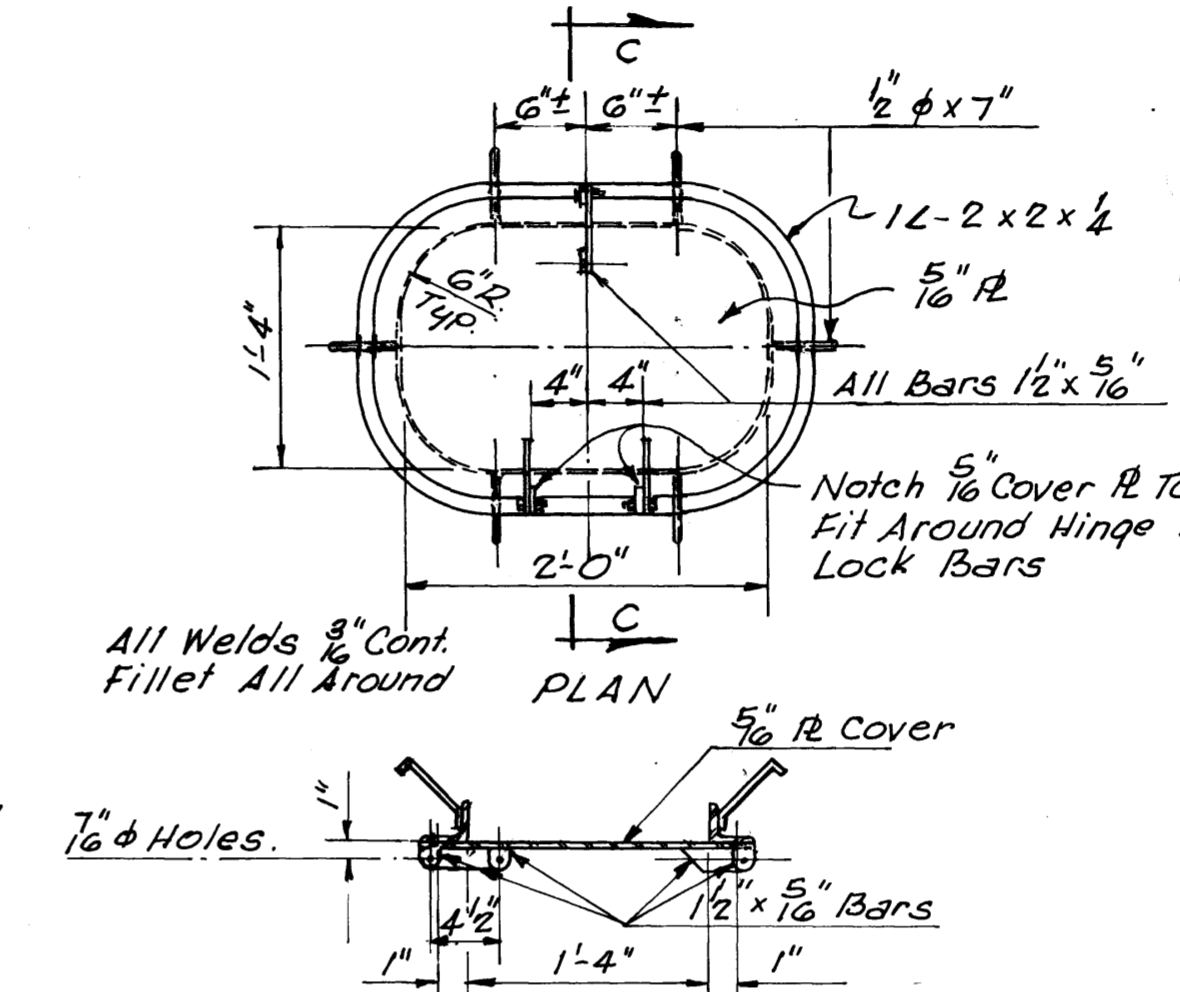
HALF ELEVATION OF BOX GIRDER
Showing Shear Details



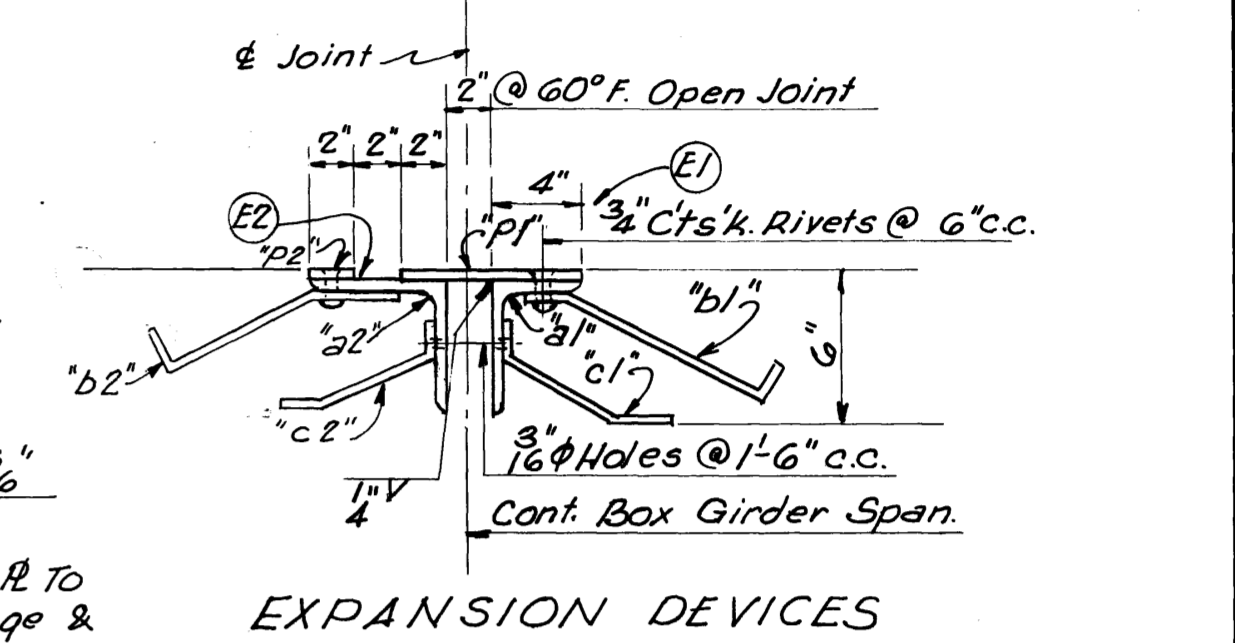
END BEARING ASSEMBLY
NOTE: Bronze Bearing Plates To Be In Accordance With Special Provision No. 371.



SHEAR KEY DETAILS

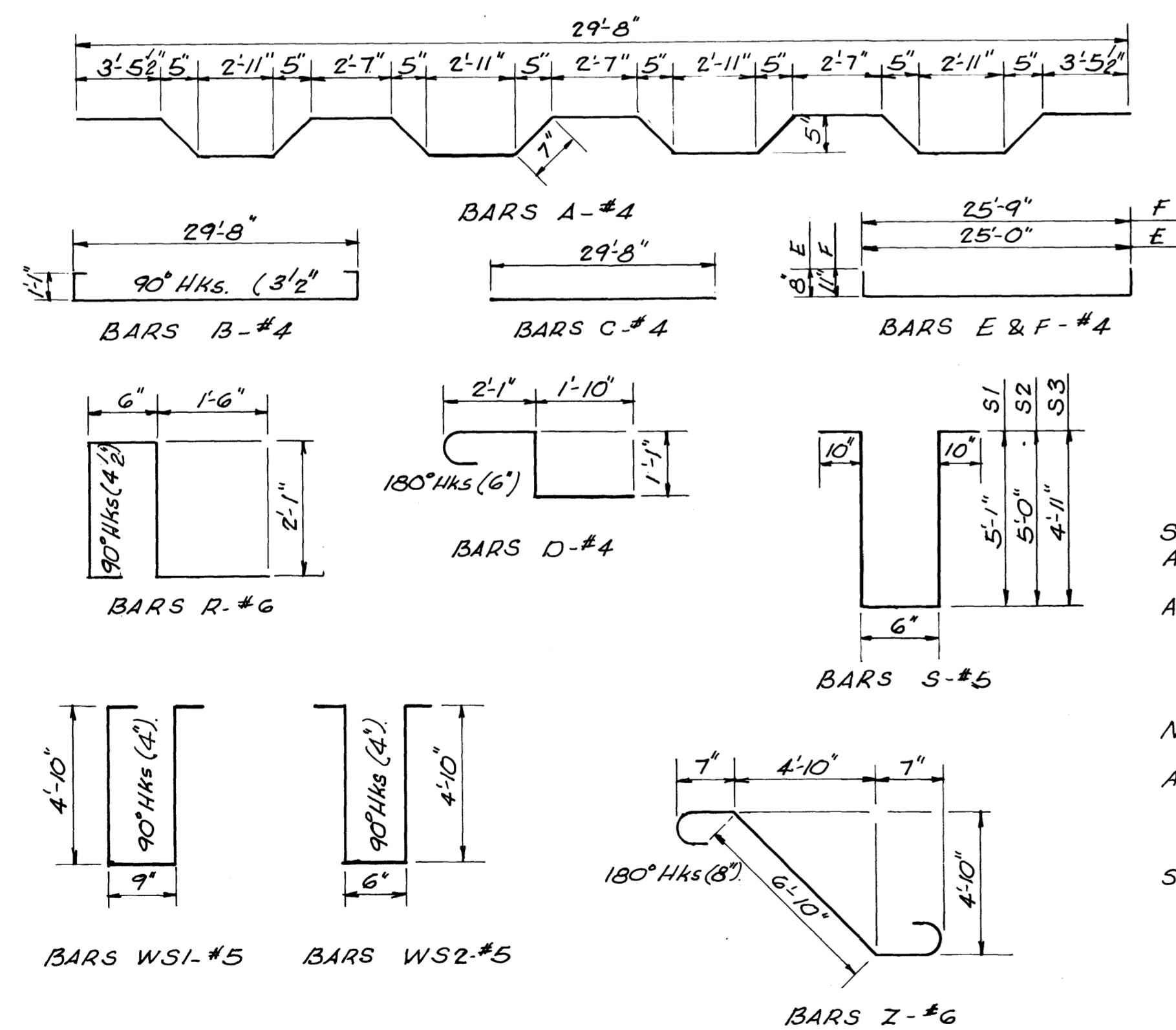


SECTION C-C
DETAILS OF ACCESS DOOR

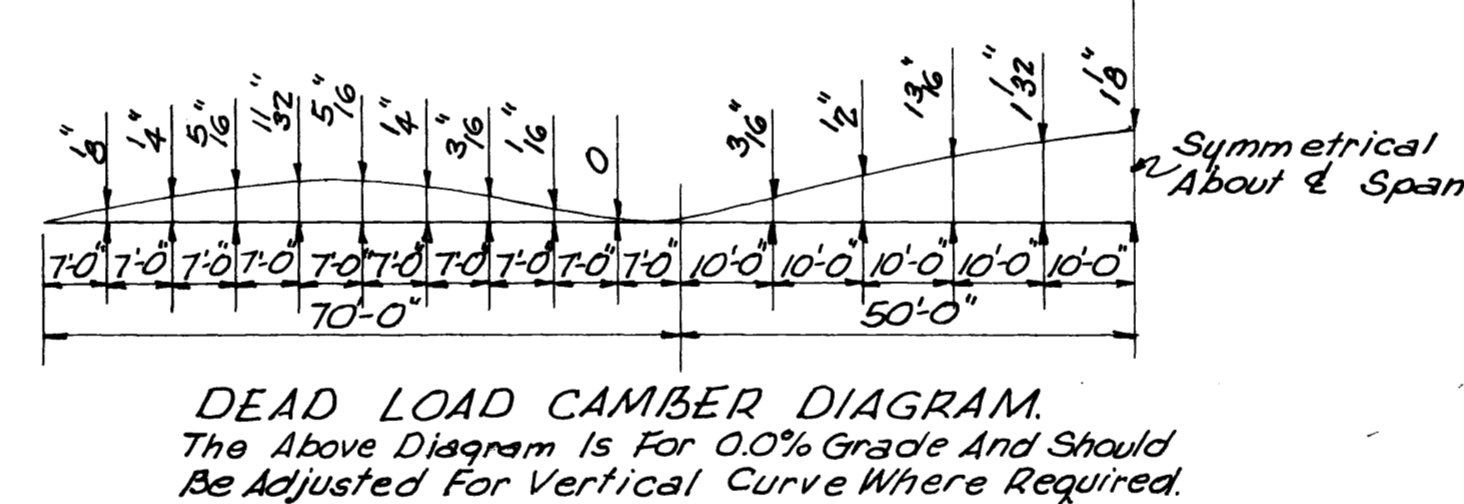


EXPANSION DEVICES

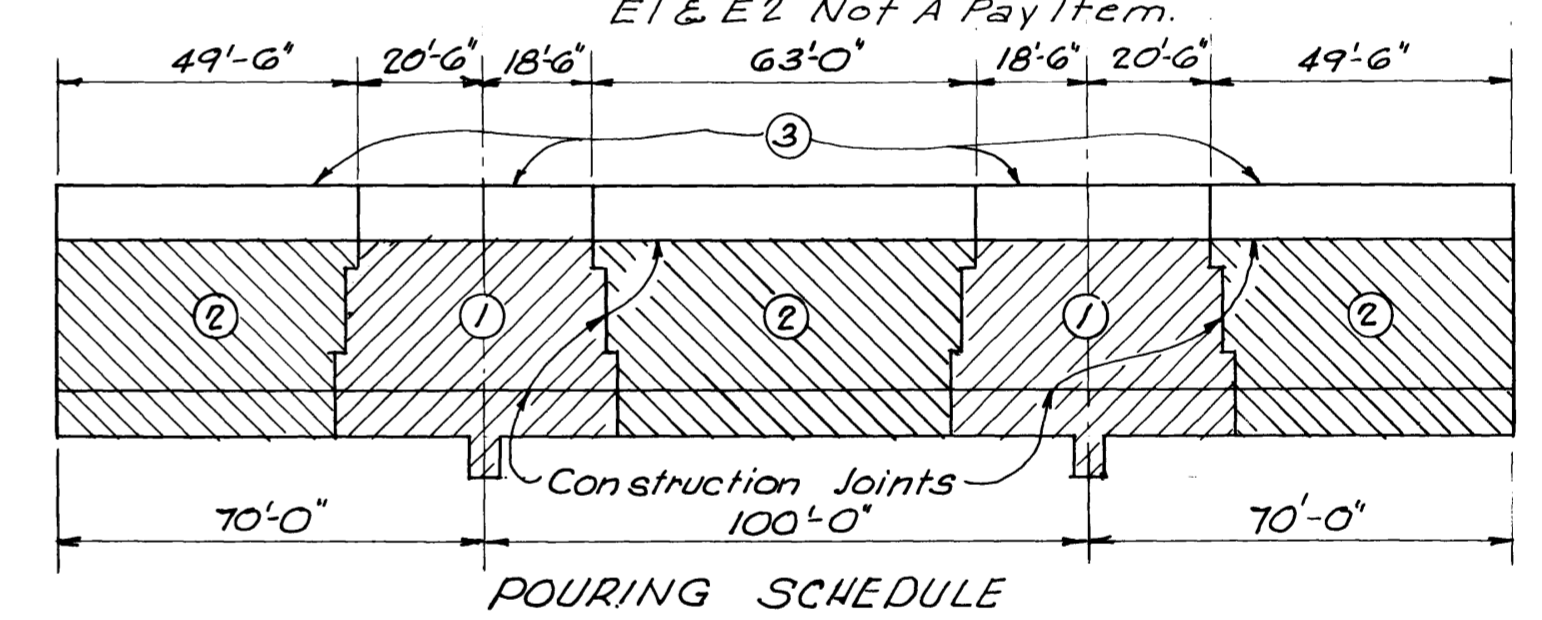
"E2" MATERIAL
1- L 6" x 6" x 1/2" Bent To Crown "a2"
1- Plate 2" x 1/2" Bent To Crown "p2"
Anchors 2" x 1/4" x 1-0" Spaced @ 1-6" c.c. "b2" Riveted.
Anchors 2" x 1/4" x 10" Spaced @ 1-6" c.c. "c2"
3/16" Fillet Weld To "a2"
"E1" MATERIAL
1- L 6" x 4" x 1/2" Bent To Crown "a1"
1- Plate 8" x 1/2" Bent To Crown "p1"
Anchors 2" x 1/4" x 1-0" Spaced @ 1-6" c.c. "b1" Riveted.
Anchors 2" x 1/4" x 10" Spaced @ 1-6" c.c. "c1"
3/16" Fillet Weld To "a1"
Adjust E1 & E2 To Grade By Nailing To Forms Thru 3/16" Holes @ 1-6" c.c.
E1 & E2 Not A Pay Item.



BAR BENDING DETAILS
Dimensions Are Out To Out



DEAD LOAD CAMBER DIAGRAM
The Above Diagram Is For 0.0% Grade And Should Be Adjusted For Vertical Curve Where Required.



POURING SCHEDULE
Numbers 1, 2 & 3 Indicate Pouring Sequence. Top Slab Concrete (3) May Be Placed As Desired.

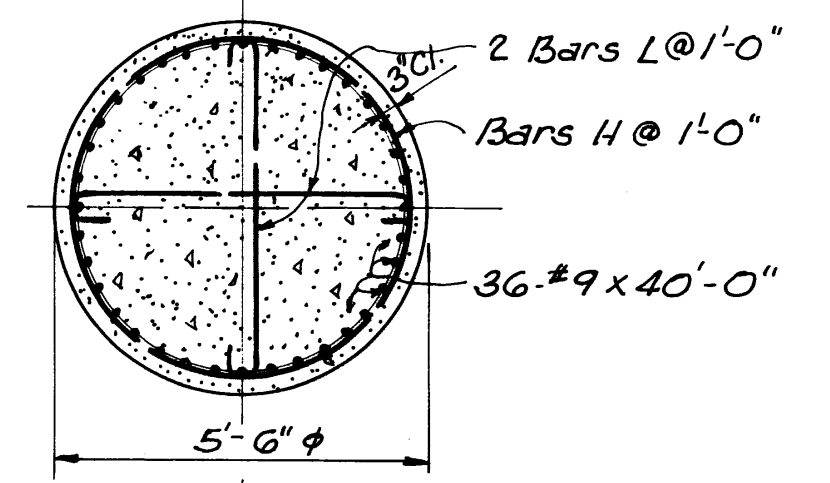
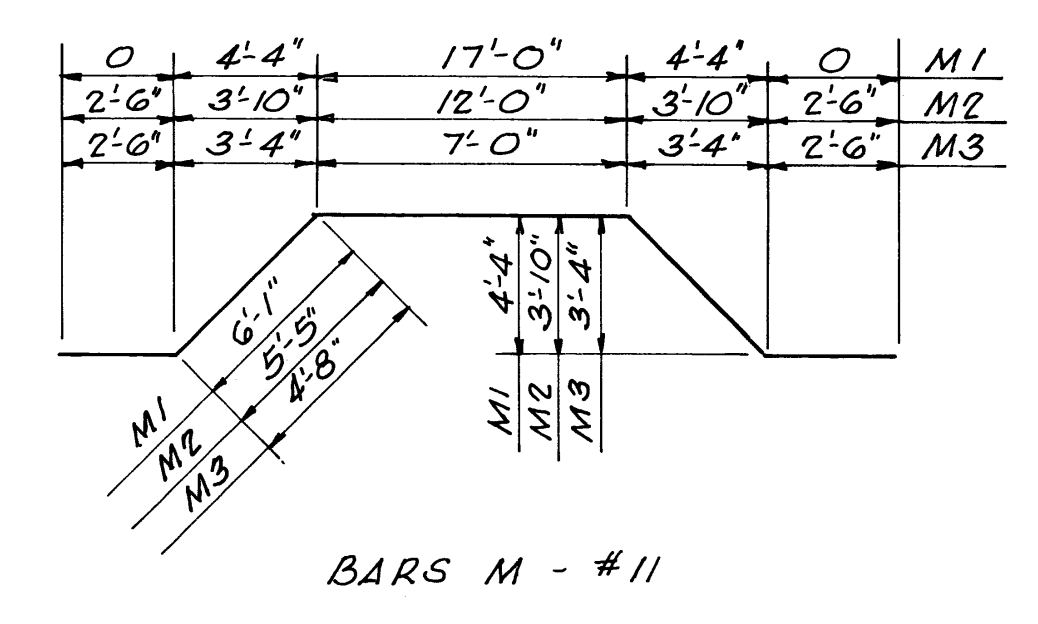
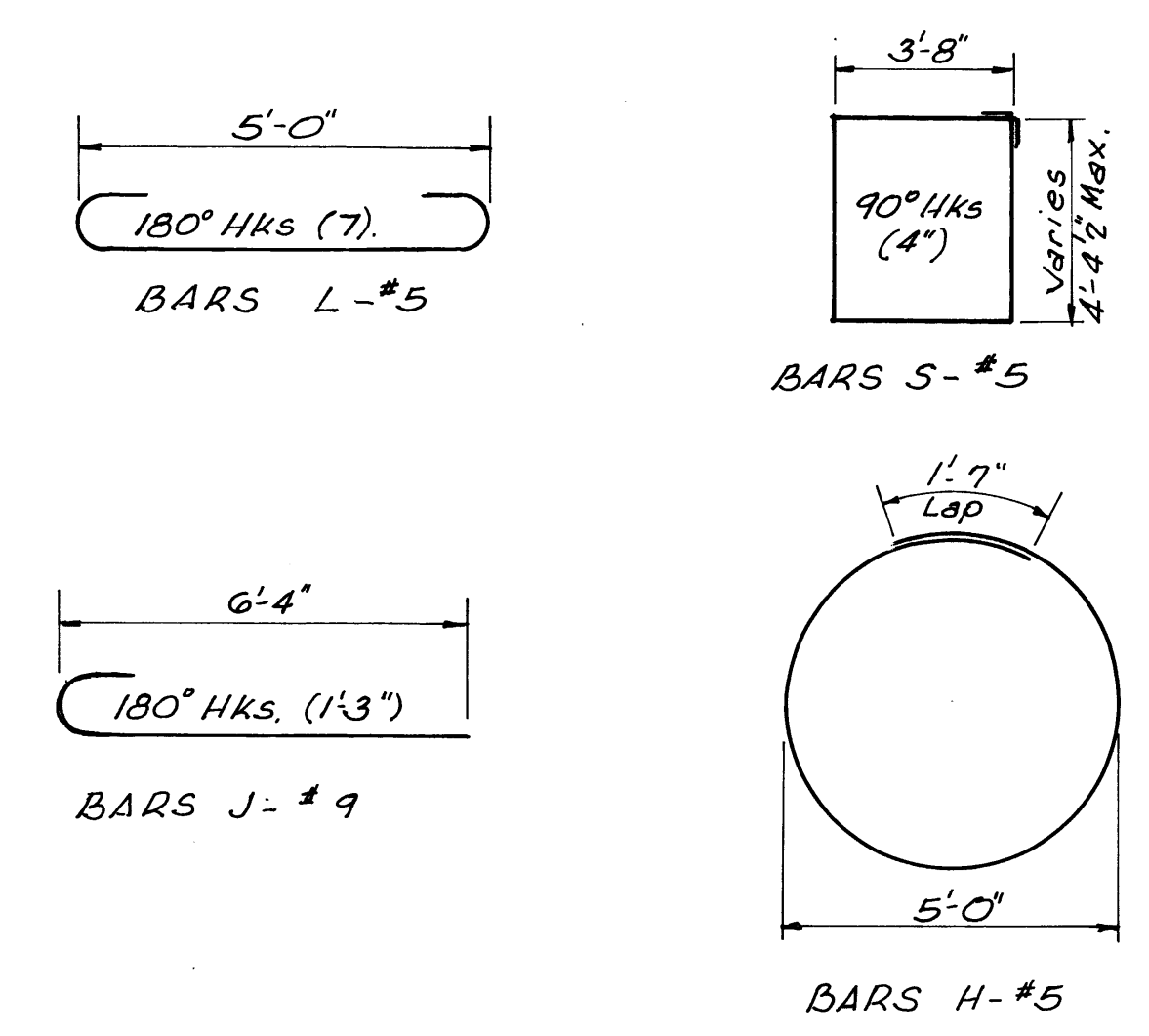
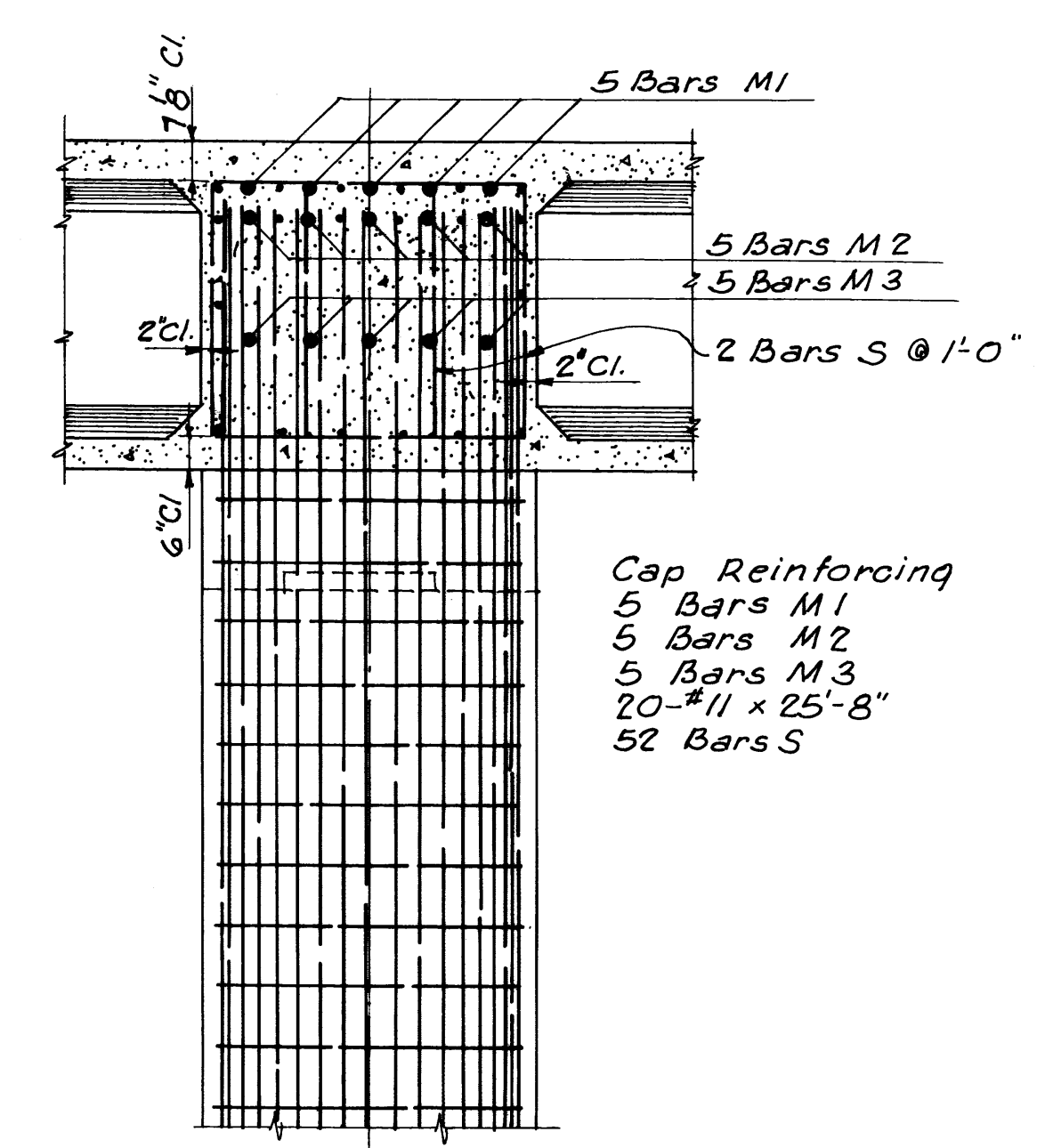
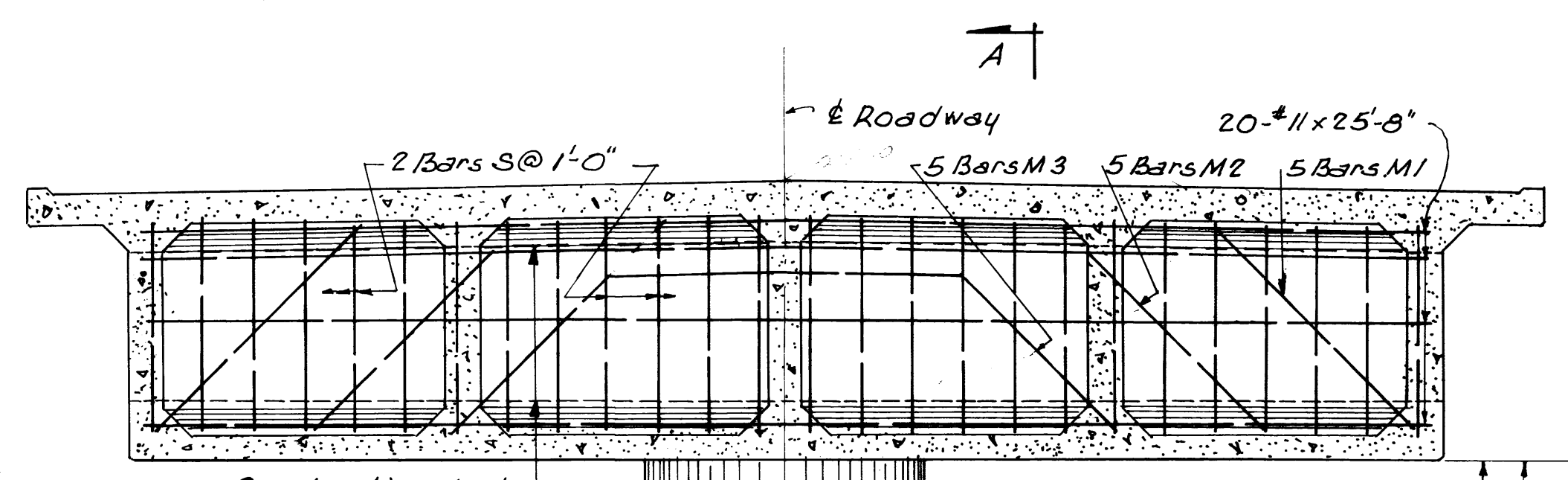
SPECIAL PAINT NOTES:
All Surfaces To Be Painted Shall Be Cleaned Per Article 214.05 Of The Specifications.
All Steel Surfaces, Except Anchor Bars Of Access Doors, Anchor Bars Of Expansion Devices, And Anchor Bars And Anchor Bolts Of Bearing Assemblies, Shall Be Given One Shop Coat Of Red Lead Paint Per Code RL.
No Further Paint Will Be Required For Surfaces Which Will Be Covered By Contact With Concrete.
After Erection Of Spans All Steel Surfaces Shall Be Given Three Field Coats Of Paint As Follows:
First Coat - Red Lead Per Code RL; Second And Third Coats - Black Graphite Per Code M-B.
Steel Surfaces To Be Field Painted Which Will Become Inaccessible After Erection Shall Be Field Painted Prior To Placing In Position.

CONSTRUCTION NOTES:
Details Of Falsework Shall Be Submitted To The Bridge Engineer For Approval Before Construction Of Same Is Started.
Curb And Railing Shall Be Poured After Falsework Is Struck; However, Falsework May Be Used To Support Curb.
Concrete In Last Pour Of Continuous Superstructure Shall Have Attained A Compressive Strength Of 2,400 p.s.i., As Determined By Cylinder Test Prior To Striking Any Falsework.
Backwalls Of End Bents Shall Not Be Constructed Until The Span Is Completed And Forms Are Removed.
Pouring Schedule Per This Sheet Shall Be Followed, Unless An Alternate Scheme Is Approved By The Bridge Engineer.
Falsework Shall Be So Constructed And Adjusted Prior To Concrete Placement That Only The Minimum Amount Of Take-Up Will Occur With The Result That The Proper Lines And Grade Of The Structure Are Obtained.
Falsework Shall Include Hardwood Wedges For Adjusting, And As A Provision Against Unforeseen Movement During Concrete Placement. Particular Attention Shall Be Given In Setting And Maintaining Position Of Integral Columns During Construction So That There Will Not Be Excessive Eccentricity Of Loading.

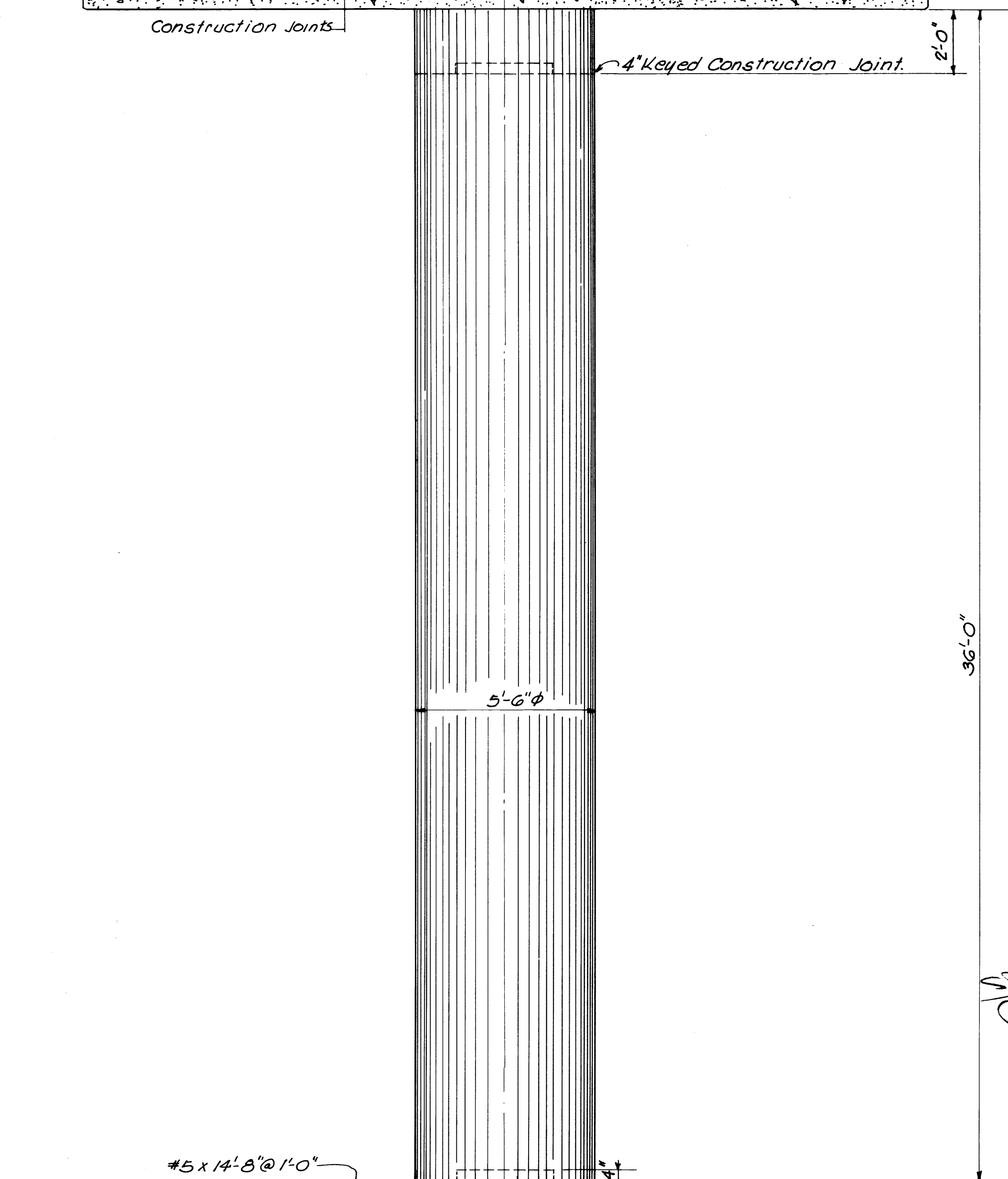
12297-LT.LN. 12298-RT.LN.

MISSISSIPPI STATE HIGHWAY DEPARTMENT			
BRIDGE AT STA. 6+30			
SPAN DETAILS			
PROJECT I-59-3 (13)136			
LAUDERDALE		COUNTY	
SUBMITTED BY		BRIDGE ENGINEER	
DESIGNED	DETAILED	TRACED	SHEET NUMBER
CHECKED	ISSUED	DATE 2-11-64	46 OF 7

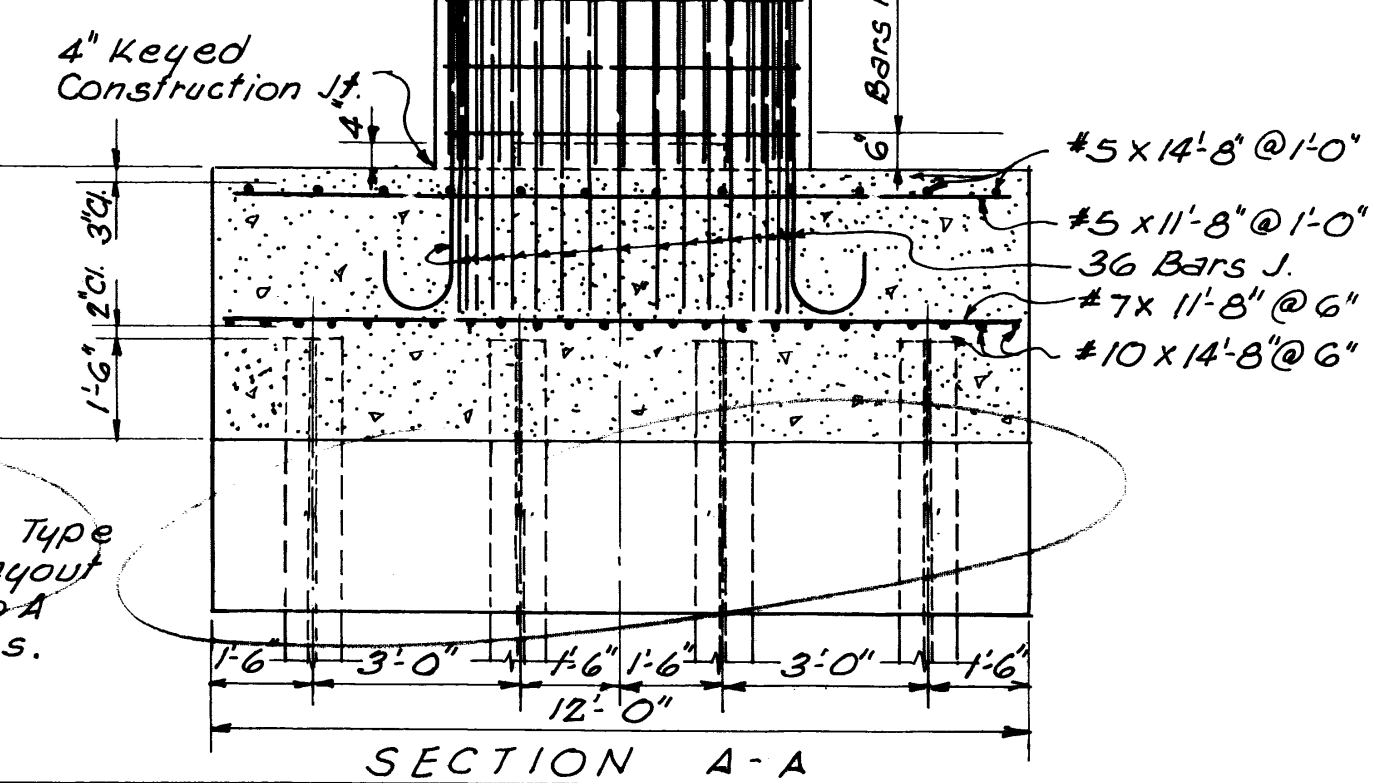
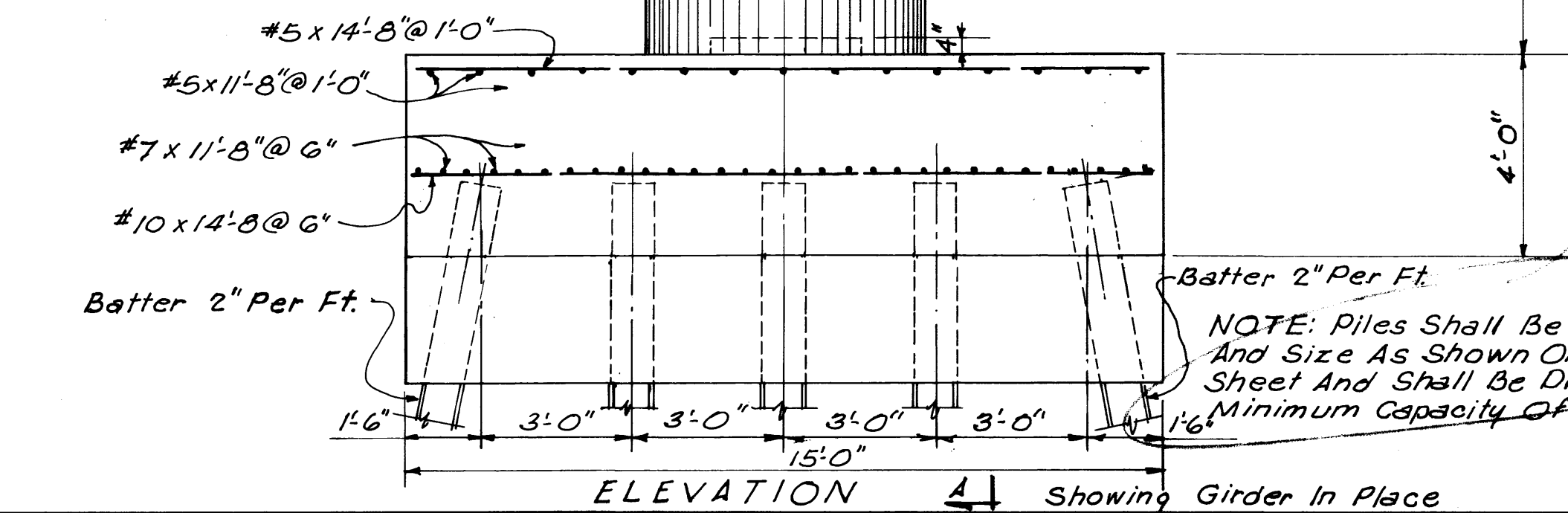
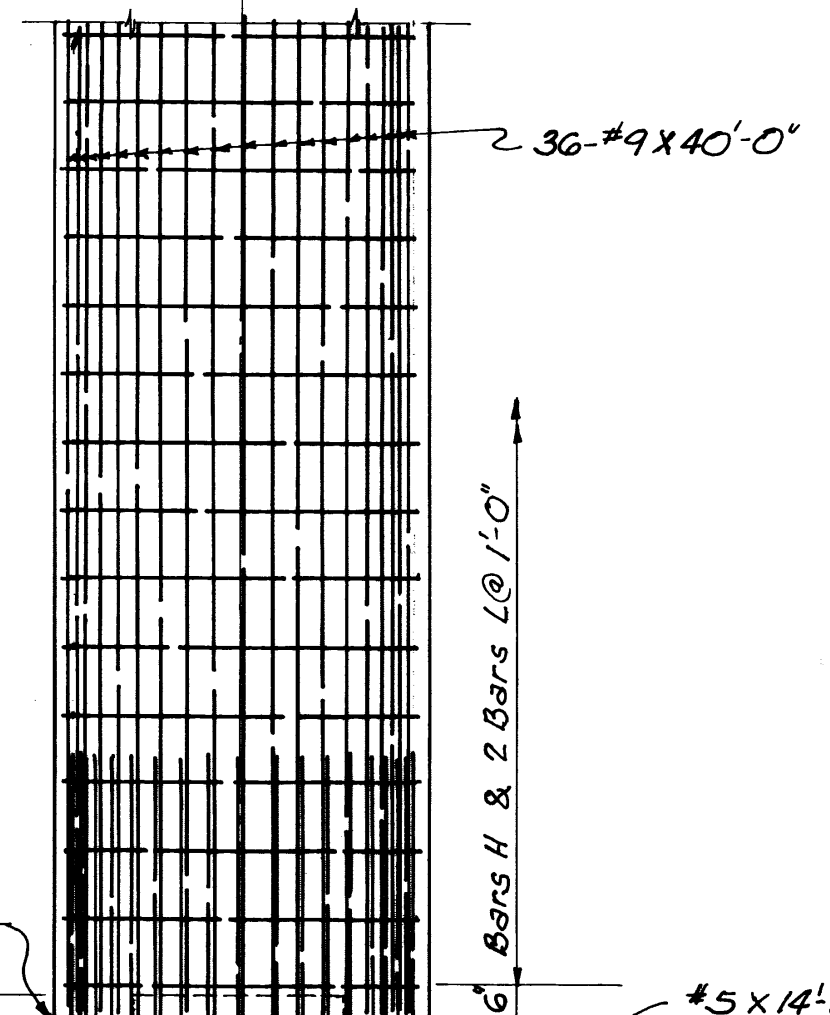
FED. ROAD DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	MISS	I-59-3(13)136	19	A VII	VII



BAR BENDING DETAILS
Dimensions Are Out To Out



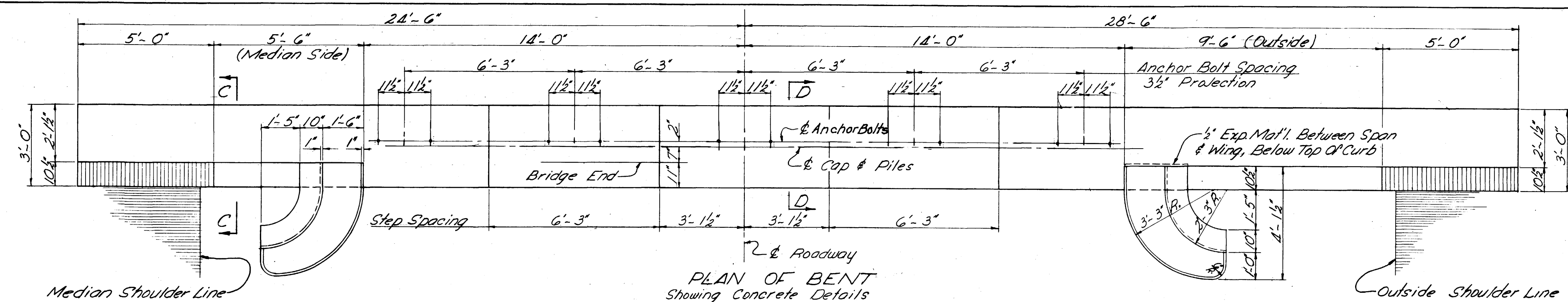
*SPREAD FOOTING
(PW CF. IN FILE)*



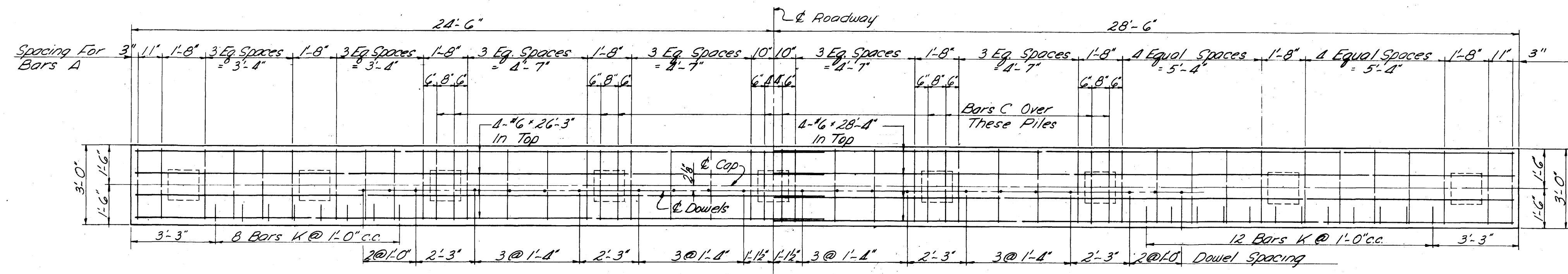
12297-LT.LN. 12298-RT.LN.

BY		MISSISSIPPI STATE HIGHWAY DEPARTMENT	
DATE		BRIDGE AT STA. 6 + 30	
DESIGNED		PIERS 4R, 5R, 5L & 6L	
CHECKED		PROJECT I-59-3 (13) 136	
ISSUED		LAUDERDALE COUNTY	
DATE		SUBMITTED BY	
2-11-64		BRIDGE ENGINEER	
SHEET NUMBER		7	
47 OF 7		DATE	
DESIGNED		TRACED	
JWA		JWA	

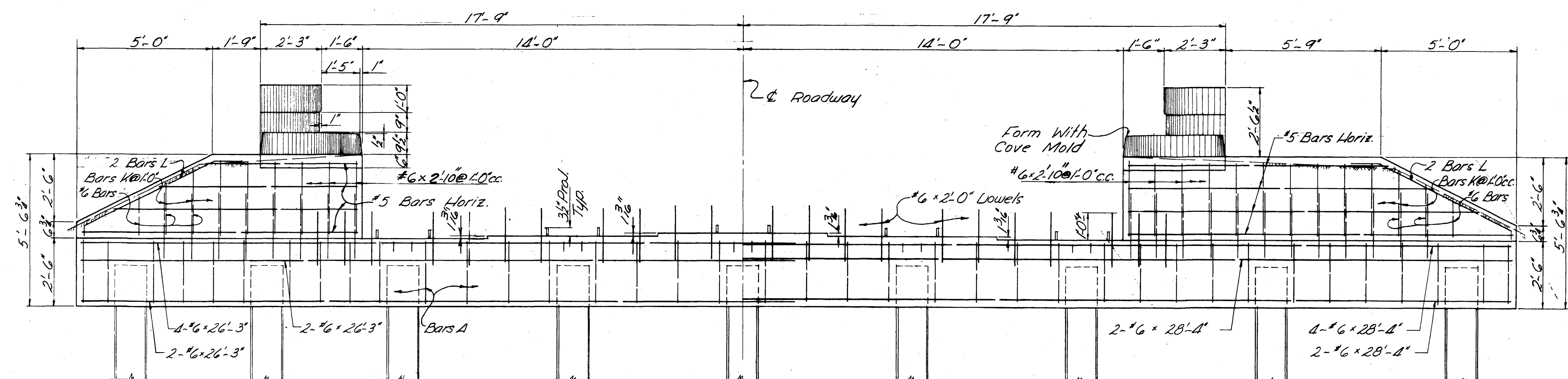
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS		59	19	



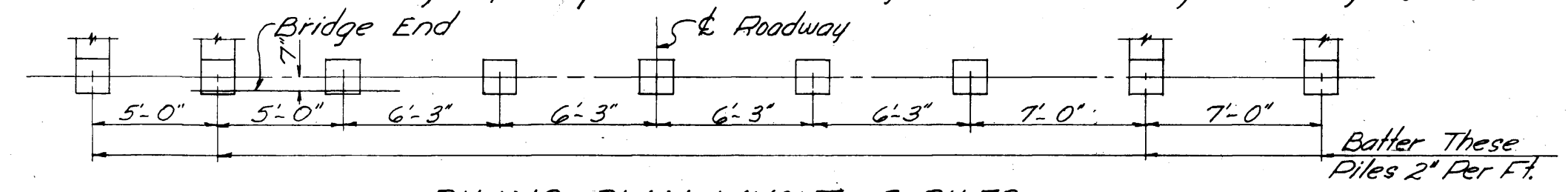
PLAN OF BENT
Showing Concrete Details



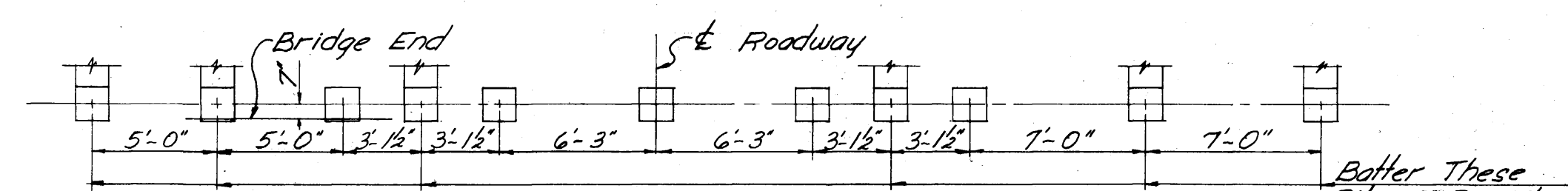
PLAN OF CAP
Showing Cap Reinforcing



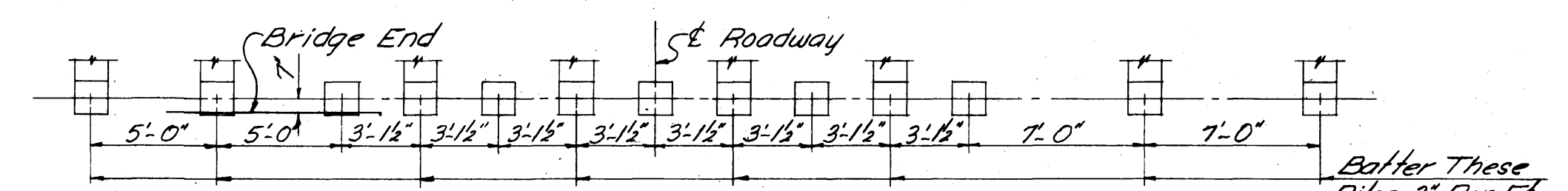
ELEVATION OF BENT
Showing Reinforcing And Concrete Details



PILING PLAN LAYOUT - 9 PILES

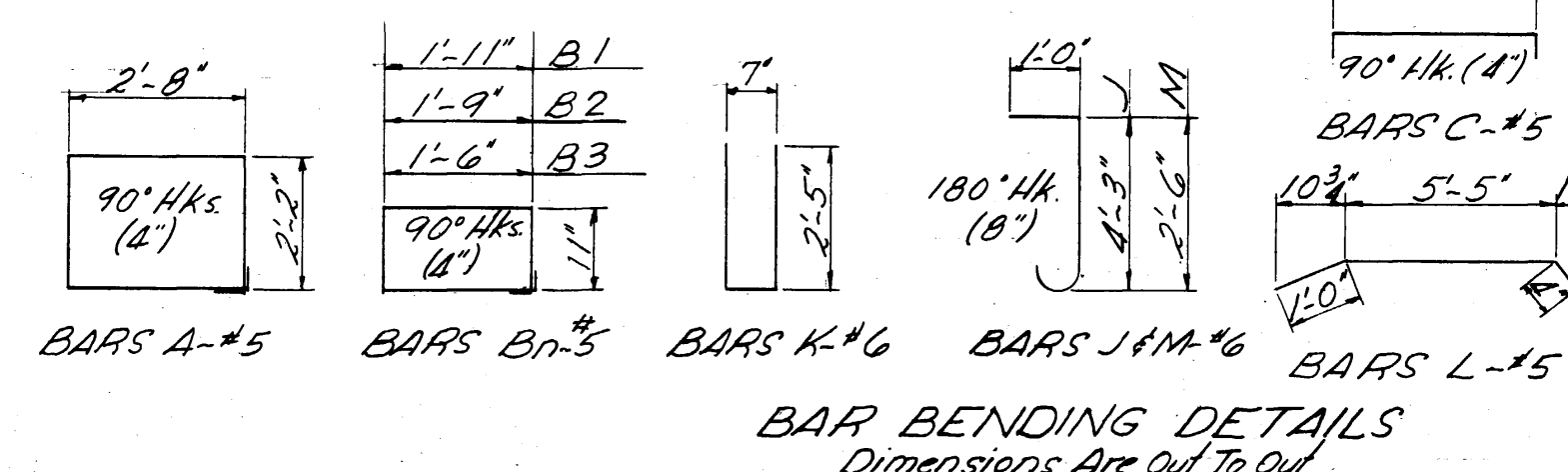


PILING PLAN LAYOUT - 11 PILES



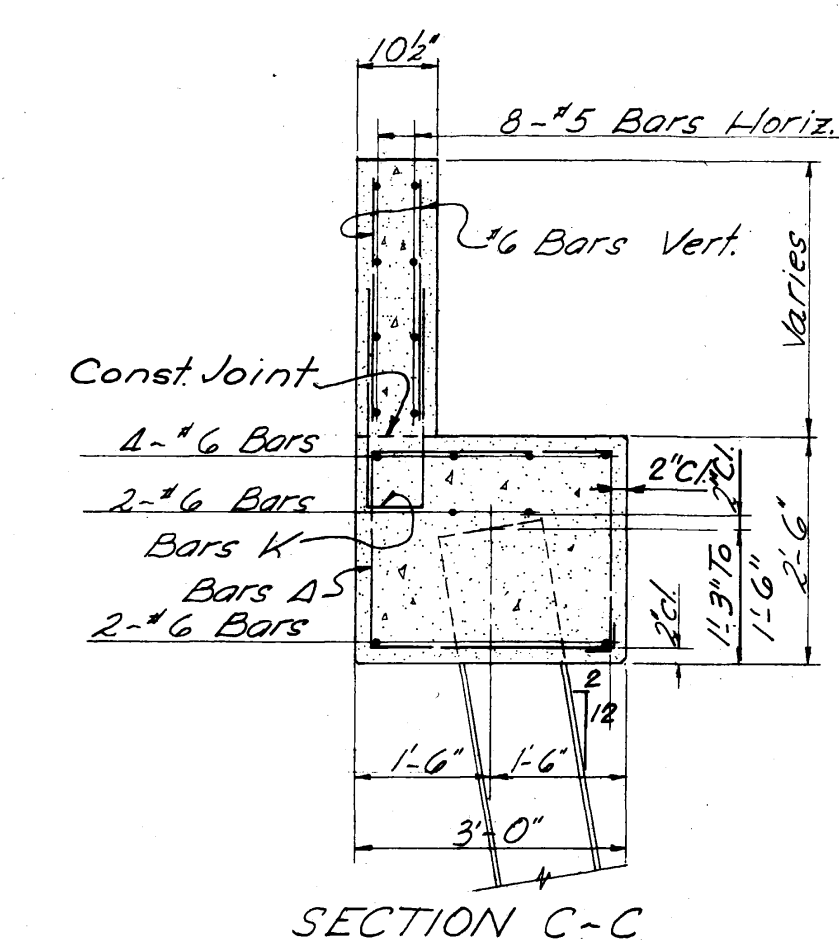
PILING PLAN LAYOUT - 13 PILES

Number of Piles Required Will Be Shown On Bridge Layout Sheet.

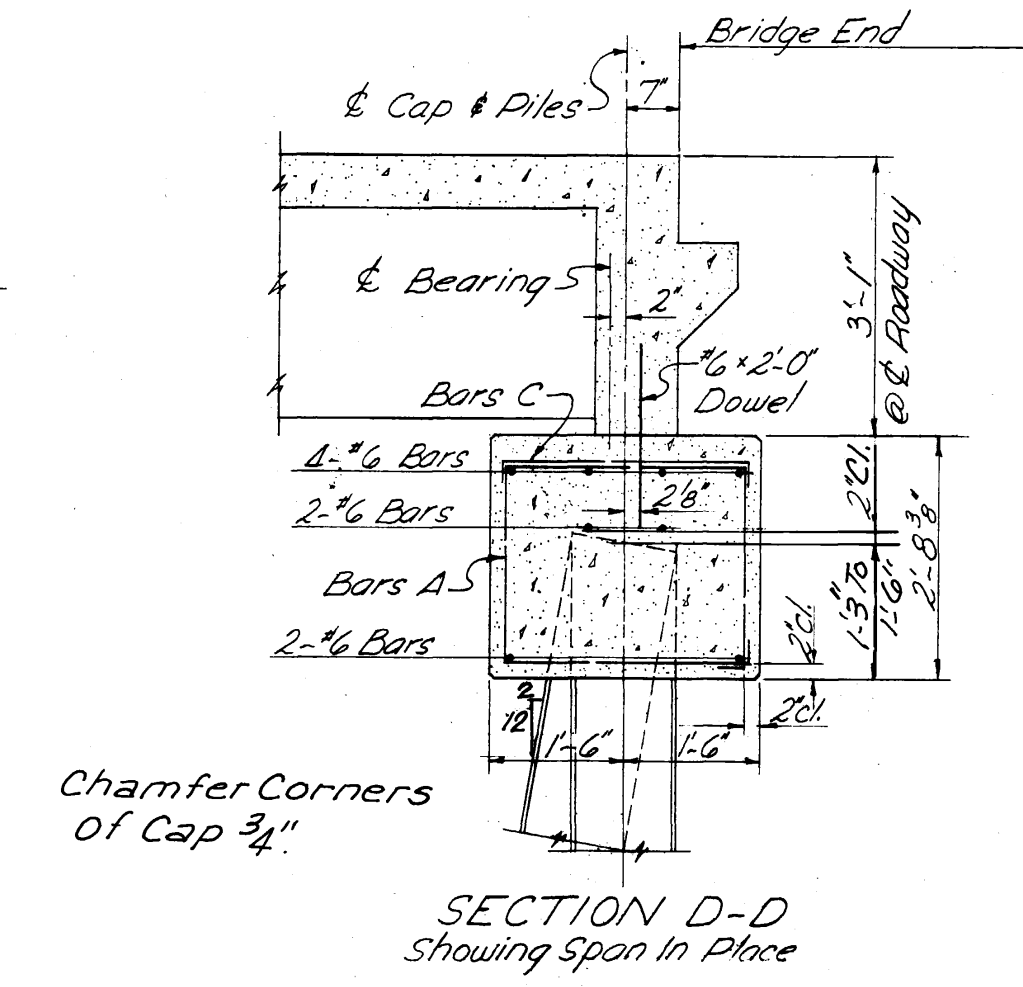


BAR BENDING DETAILS
Dimensions Are Out To Out

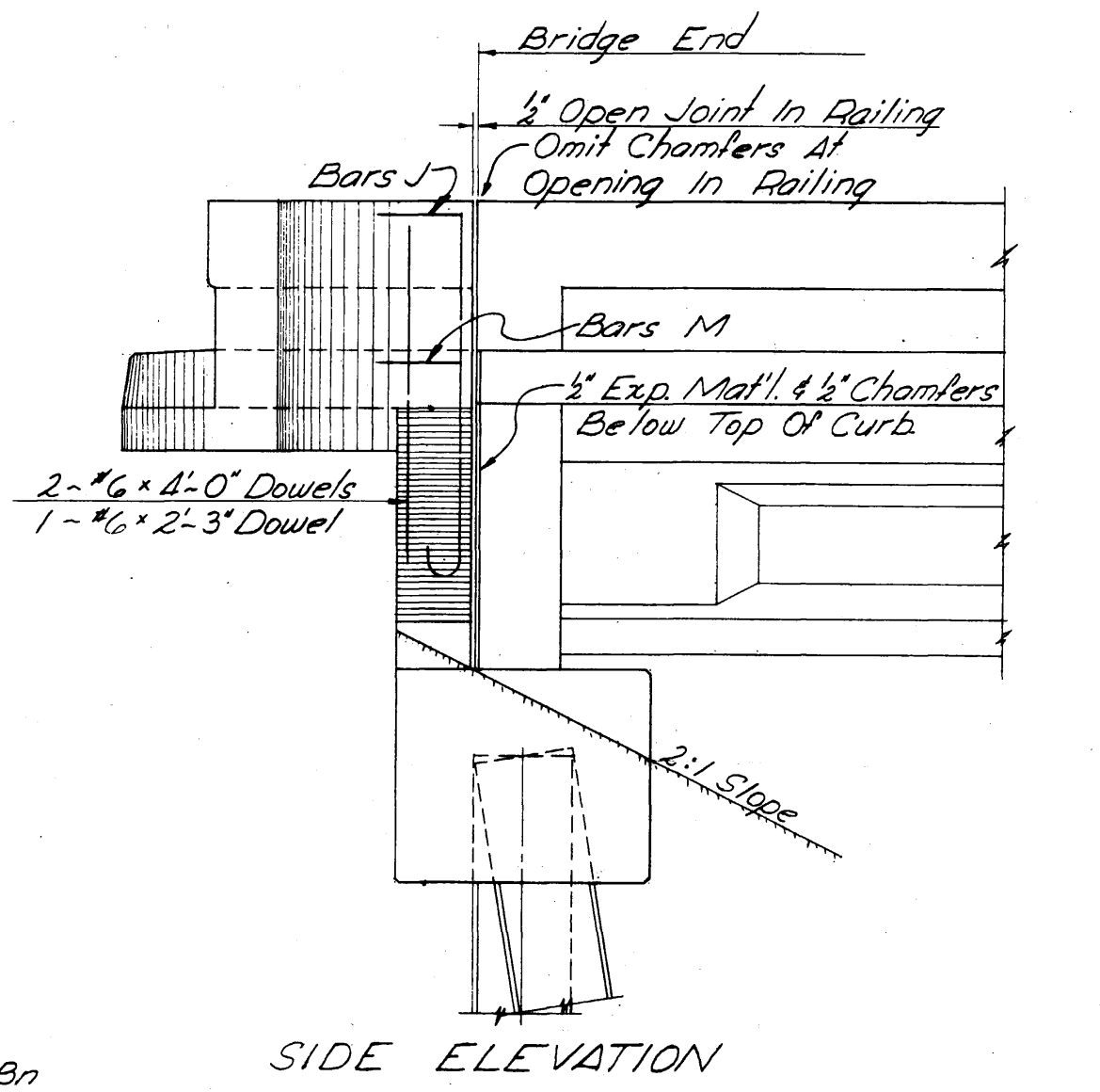
GENERAL NOTES:
 Specifications: Mississippi State Highway Department.
 All concrete in End Bent shall be Class 'B'.
 All edges shall be chamfered, except as noted.
 End Post on End Bent shall not be constructed until Bridge Railing on End Span is in place.
 Piles for End Bent shall not be driven until fill at Bridge Ends has been constructed to grade.
 No payment will be allowed for excavation incidental to construction of the End Bent.
 All work for which no pay items are provided in the proposal will not be paid for directly and compensation therefor will be considered included in the prices and payments for bid items.



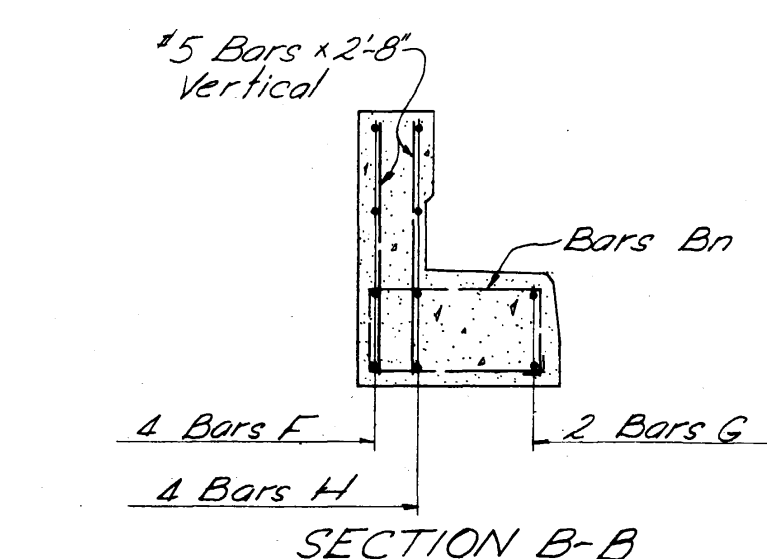
SECTION C-C



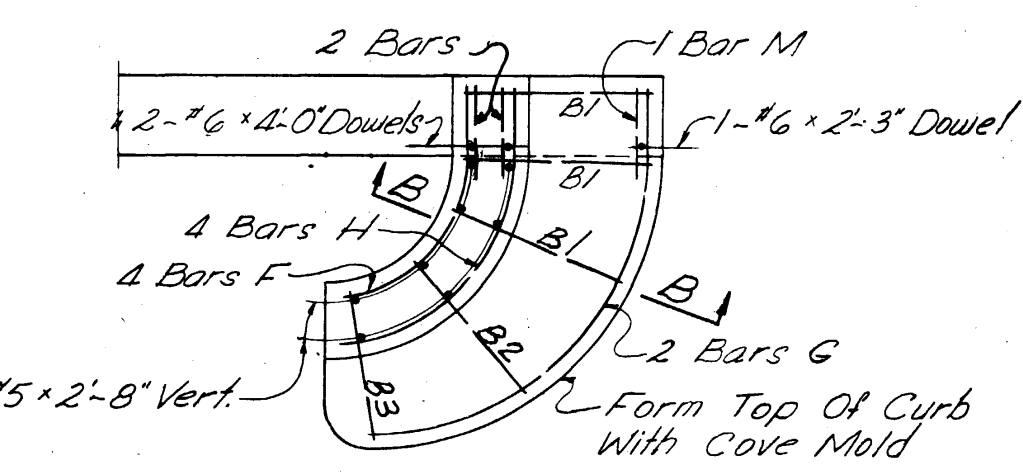
SECTION D-D
Showing Span in Place



SIDE ELEVATION



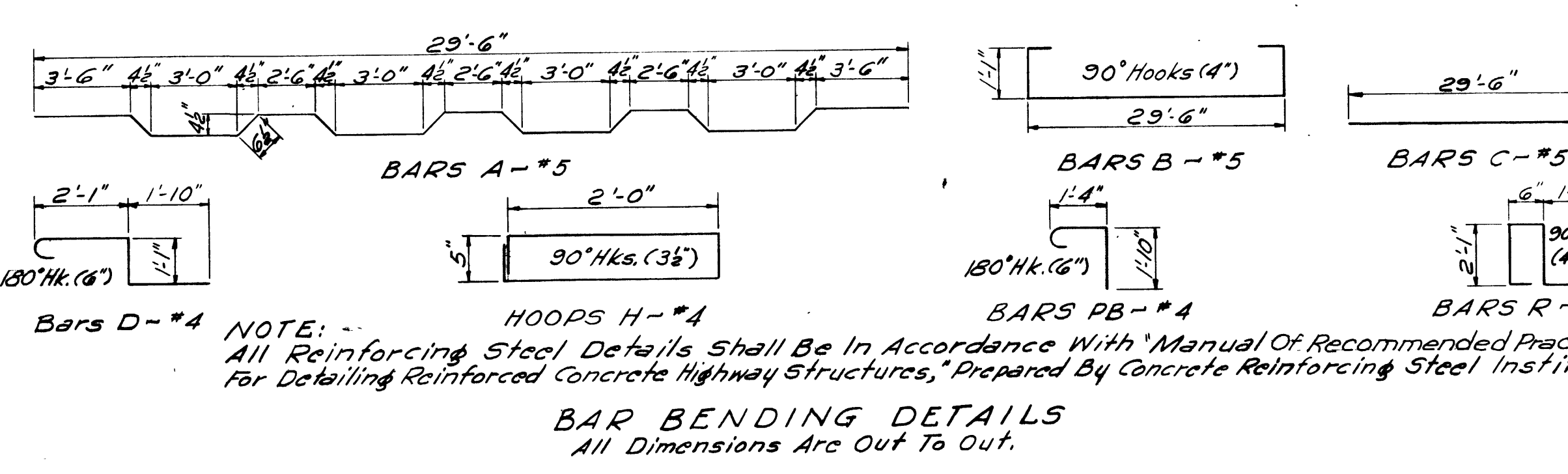
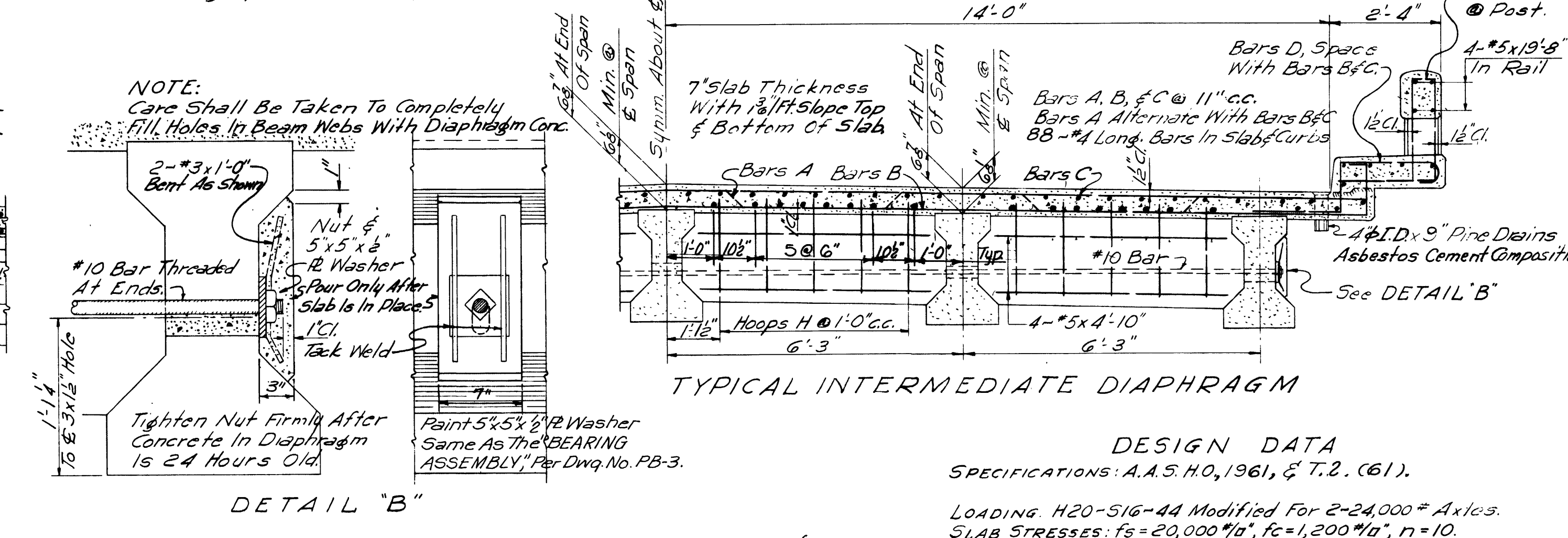
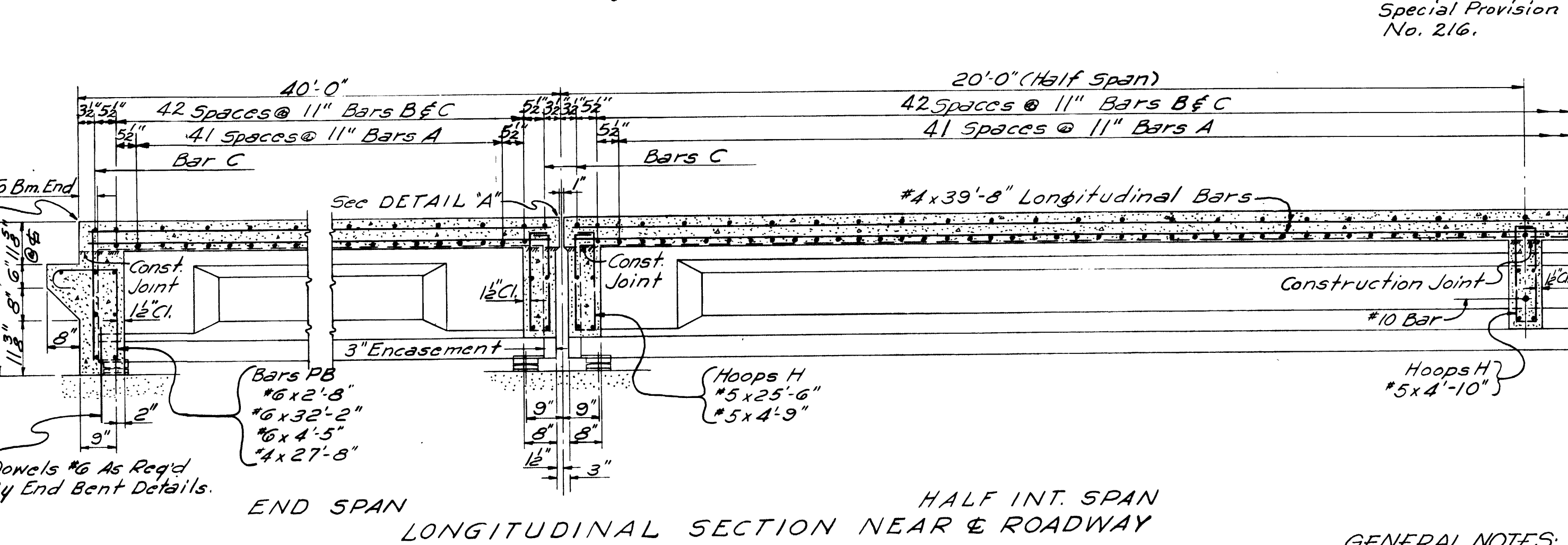
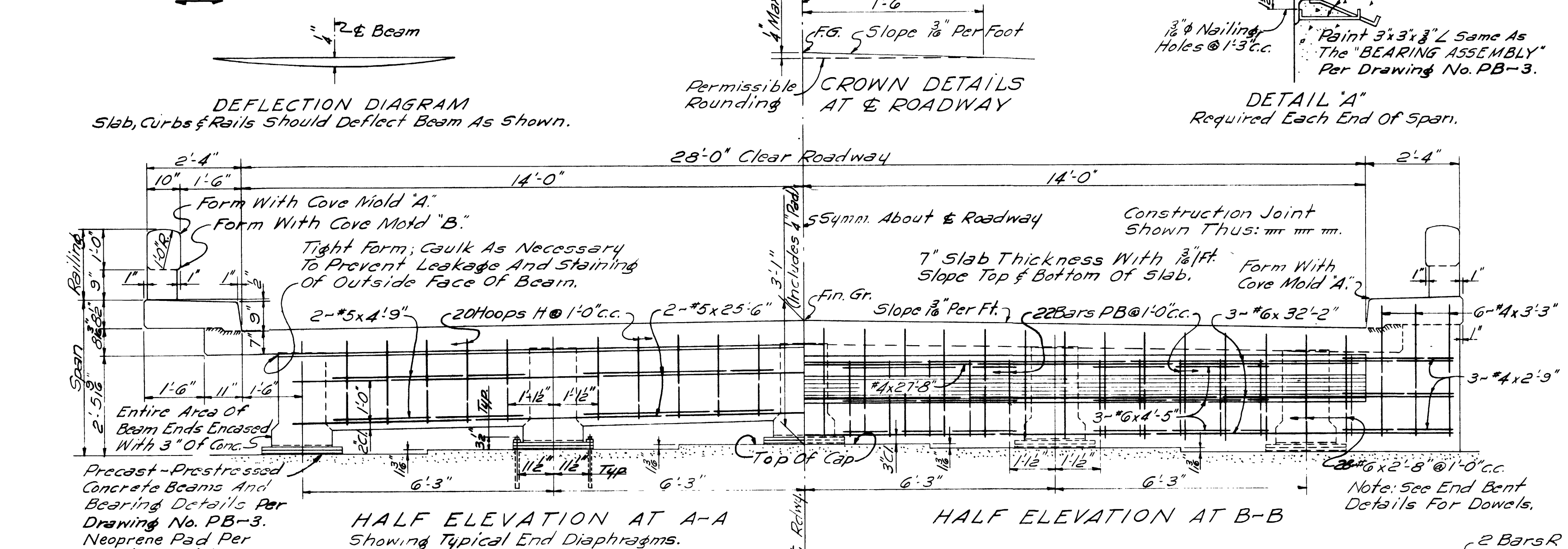
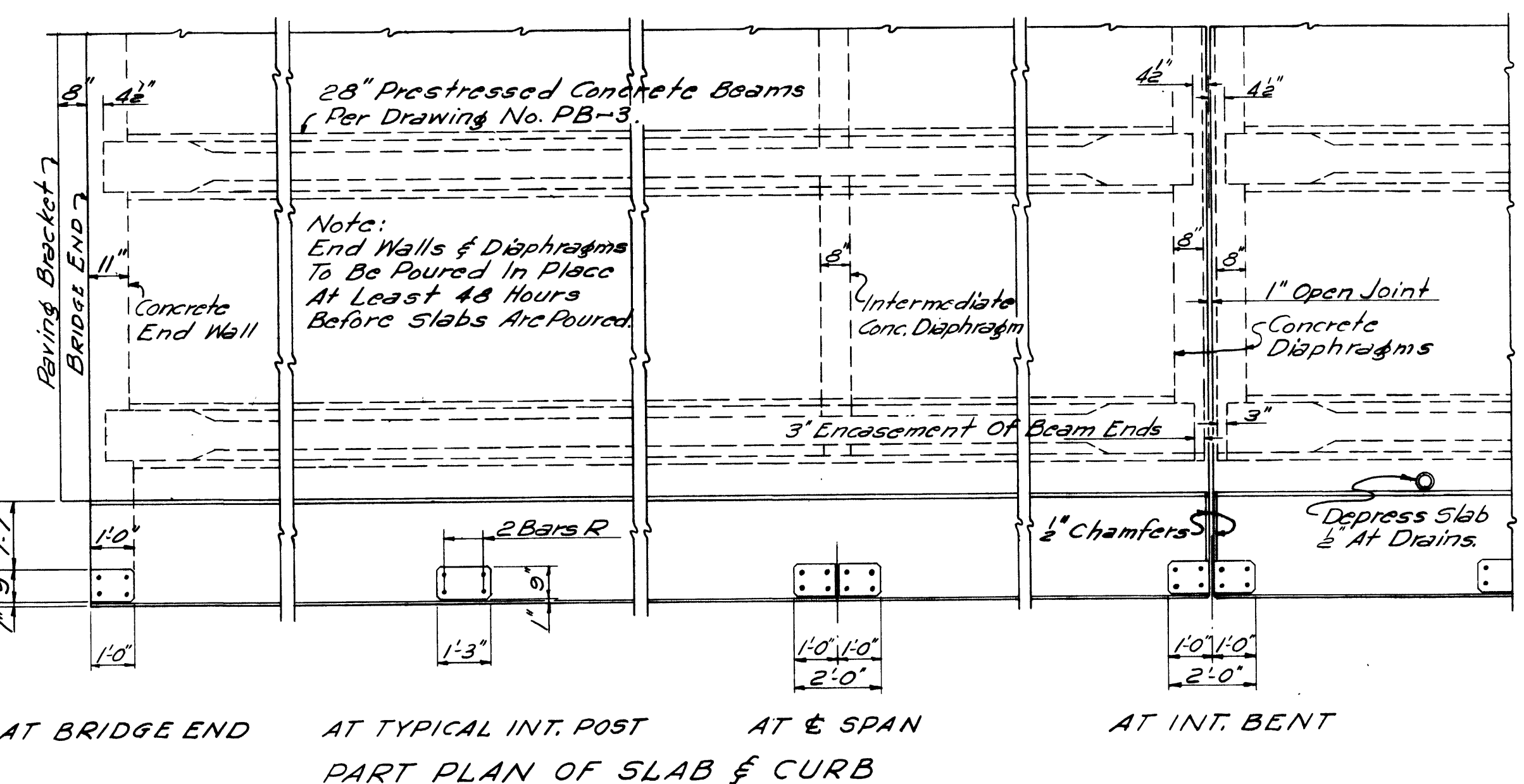
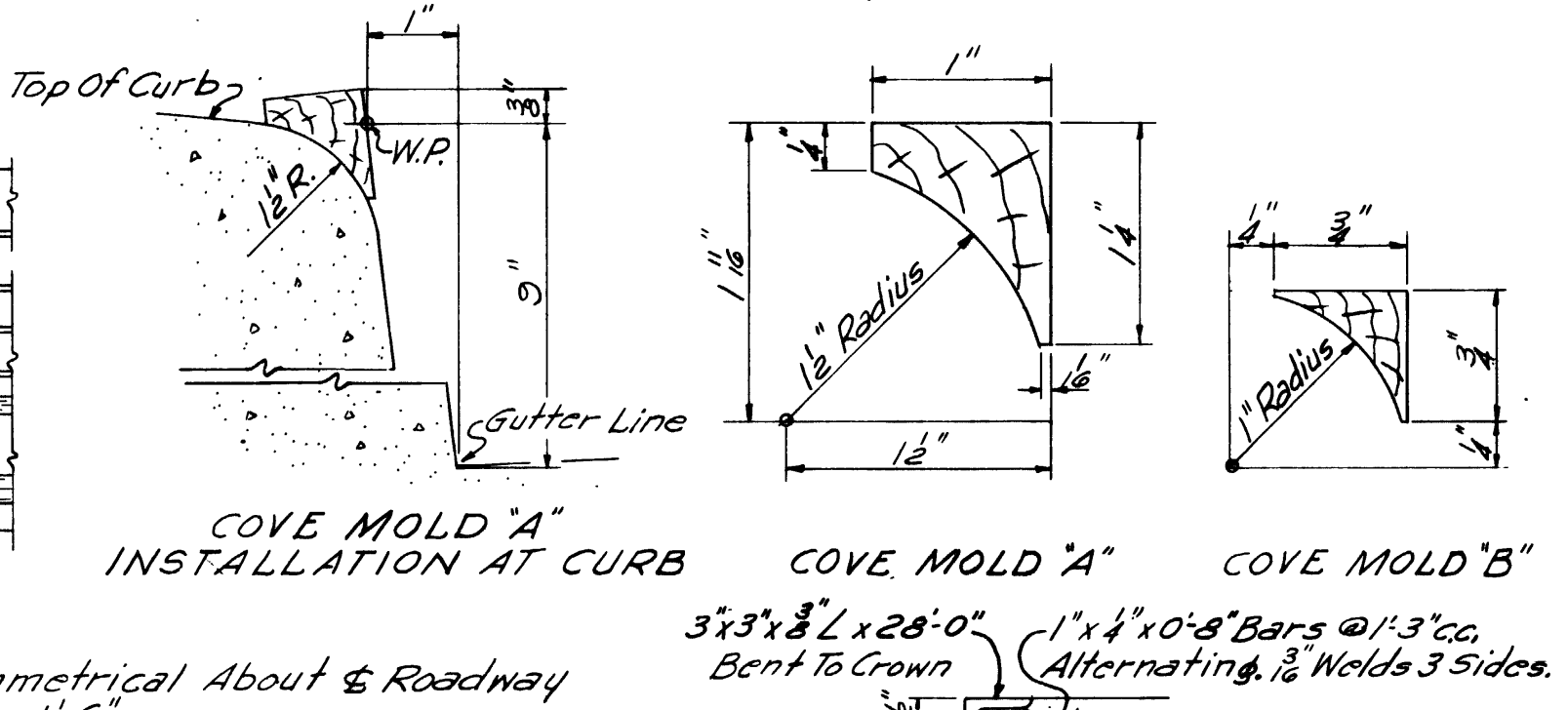
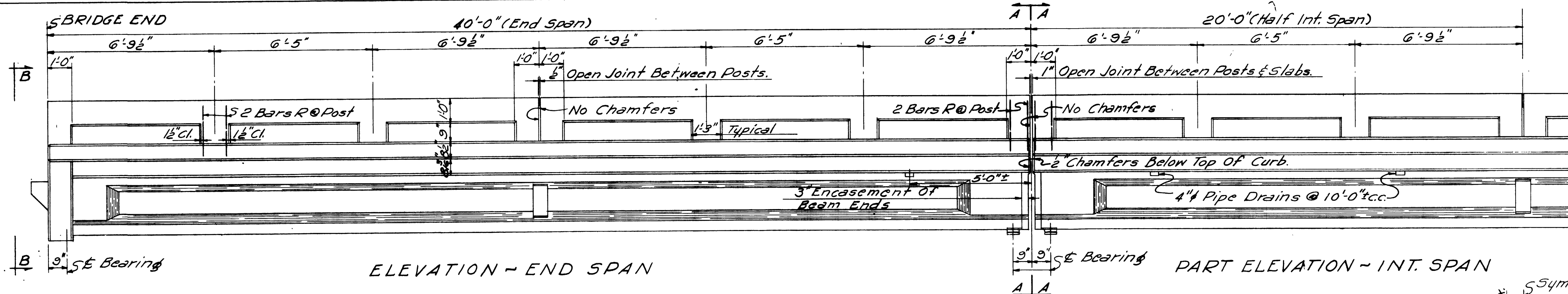
SECTION B-B



PLAN OF END POST
Showing Reinforcing

MISSISSIPPI STATE HIGHWAY DEPARTMENT					
PILE END BENT					
FOR USE WITH					
40 FT PRESTRESSED					
CONCRETE BEAM SPANS					
28 FT ROADWAY					
SUBMITTED BY _____			BRIDGE ENGINEER		
DATE	REVISIONS	DATE	REVISIONS	DATE	REVISIONS
DETAILED B.B.F.		CHECKED J.R.R.		ISSUED M.N.B.	
TRACED R.T.		DATE 11-4-59		DRAWING NO.	
				EB-37	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS	19			



GENERAL NOTES:
 Specifications: Mississippi State Highway Department, 1956 And Special Provision No. 112 R. & No. 216. Concrete In Railing Shall Be Class 'A'. All Other Concrete Shall Be Class 'B'. Finish Concrete Surfaces Per Article 200.19 Of The Specs., Dwg. RF-1, And Special Provision No. 112 Revised. All Edges Shall Be Chamfered 1/2" Except Where Otherwise Noted. Placing Dimensions For Reinforcing Steel To Concrete Surfaces Are Clear Distances. All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefor Will Be Considered Included In The Prices And Payments For Bid Items. Neoprene Pads Shall Be In Accordance With Special Provision No. 216.

SPECIAL NOTES:
 The Dimensions Shown From Finish Grade To Caps Are Based On The Assumption That The Original Camber Of The Beam Will Not Be Less Than 1/4" Nor More Than 1". The Bridge Engineer Shall Be Notified If Camber Is Not Within These Limits. Procedures For Manufacture, Handling & Hauling Of Prestressed Beams And Construction Of Spans Should Be Approved By The Bridge Engineer. Manufacturers And Contractors Should Request A Copy Of "INFORMATION AND SUGGESTIONS ON PRESTRESSED CONCRETE MANUFACTURE AND CONSTRUCTION" From The Bridge Division.

DESIGN DATA
 SPECIFICATIONS: A.A.S.H.O., 1961, & T.2. (61).
 LOADING: H20-516-44 Modified For 2-24,000# Axles.
 SLAB STRESSES: $f_s = 20,000 \text{ psi}$, $f_c = 1,200 \text{ psi}$, $n = 10$.
 For Prestressed Beam Stresses See Drawing No. PB-3.

DATE	BY	REVISIONS
7-18-58	W.L.L.	Final Design
7-18-58	J.B.S.	Check Design
7-18-58	M.H.B.	Check Details
7-18-58	V.H.D.	Check Details

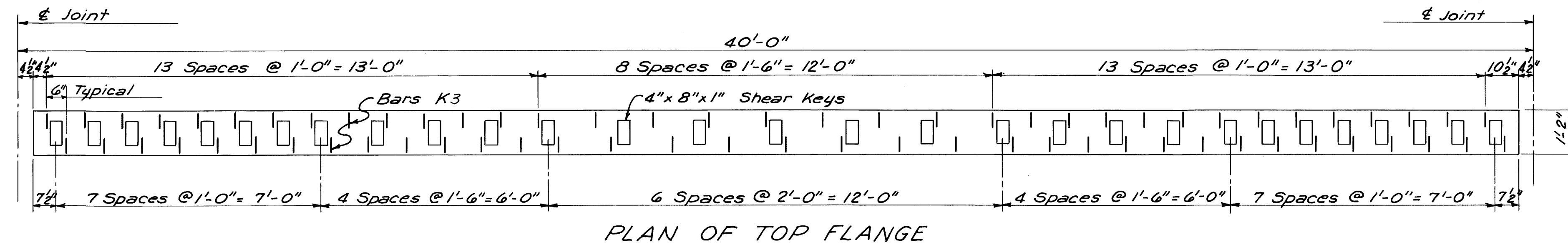
MISSISSIPPI STATE HIGHWAY DEPARTMENT
 PRESTRESSED CONCRETE BEAM SPAN
 LENGTH - 40 FT.
 ROADWAY - 28 FT.

SUBMITTED BY _____ BRIDGE ENGINEER

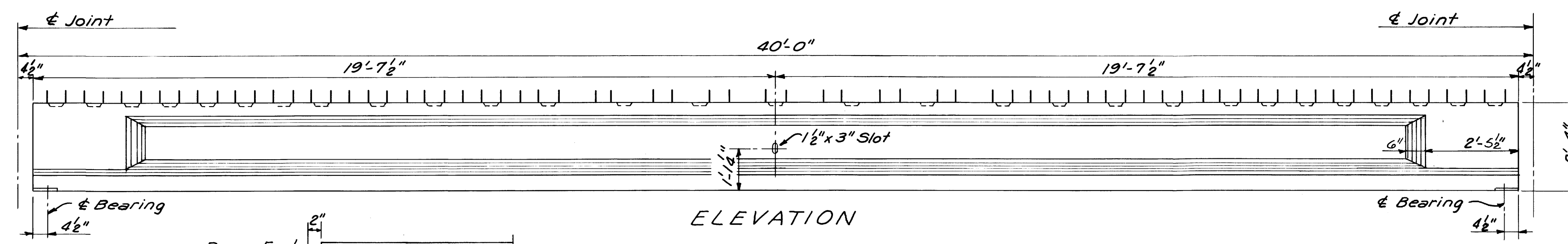
DATE	BY	REVISIONS
5-23-58	R.T.	Detailed
5-23-58	J.R.R.	Checked
5-23-58	M.H.B.	Issued

DRAWING NO. PS-4

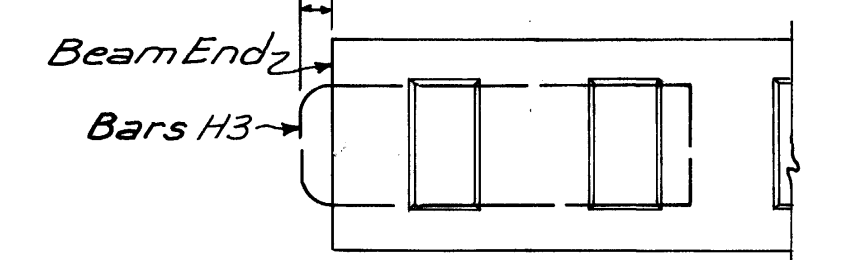
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS		19		



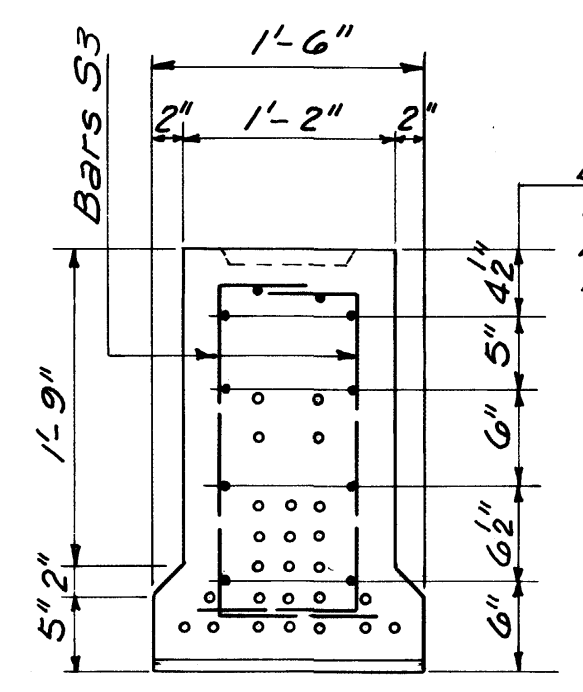
PLAN OF TOP FLANGE



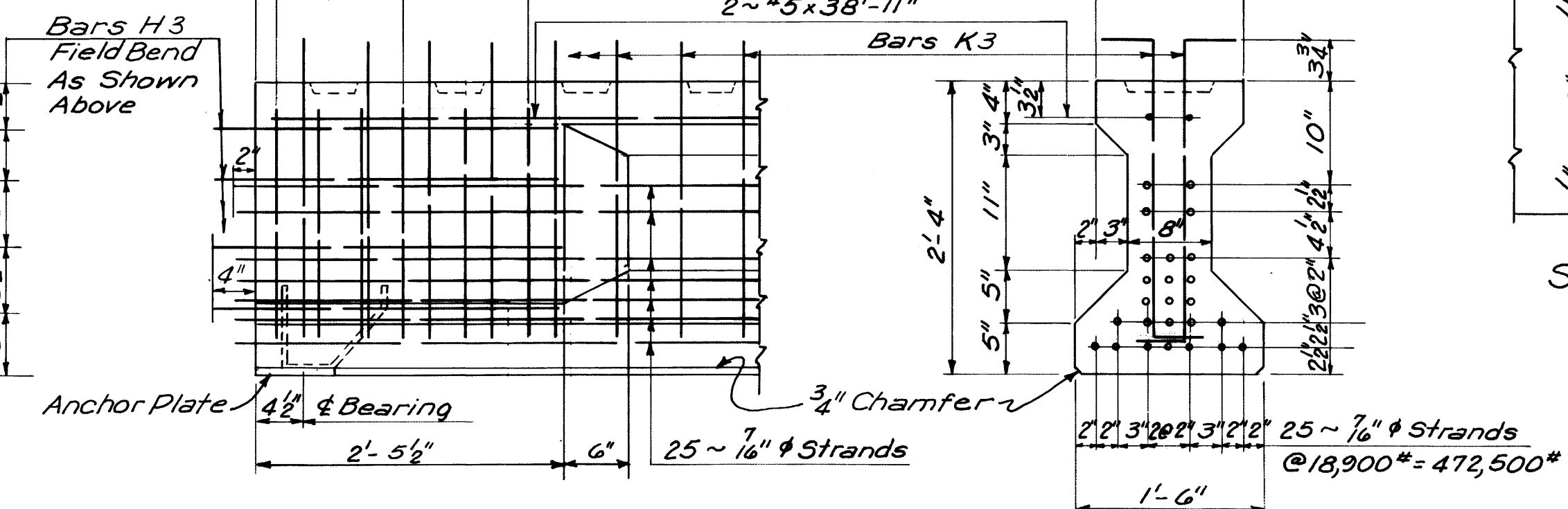
ELEVATION



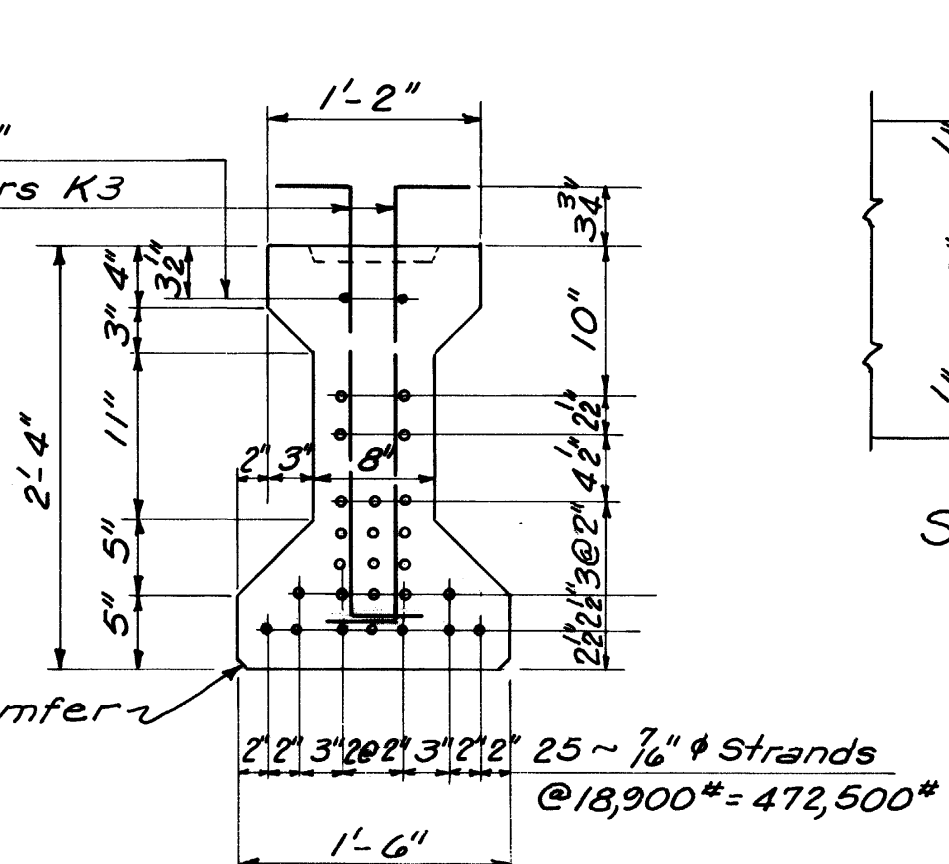
Beam End View
Showing Shear Keys And Field Bend Of Bars H3.



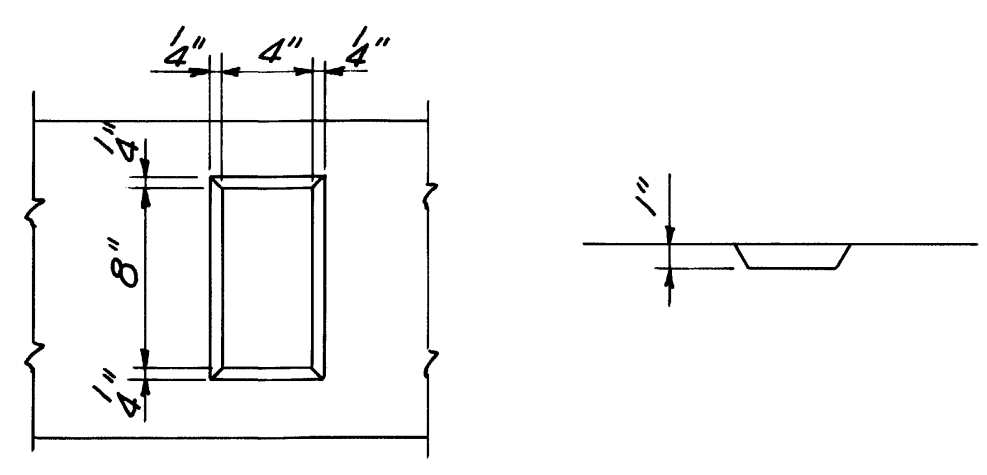
TOP PLAN AT END OF BEAM
(Bars K3 Not Shown)



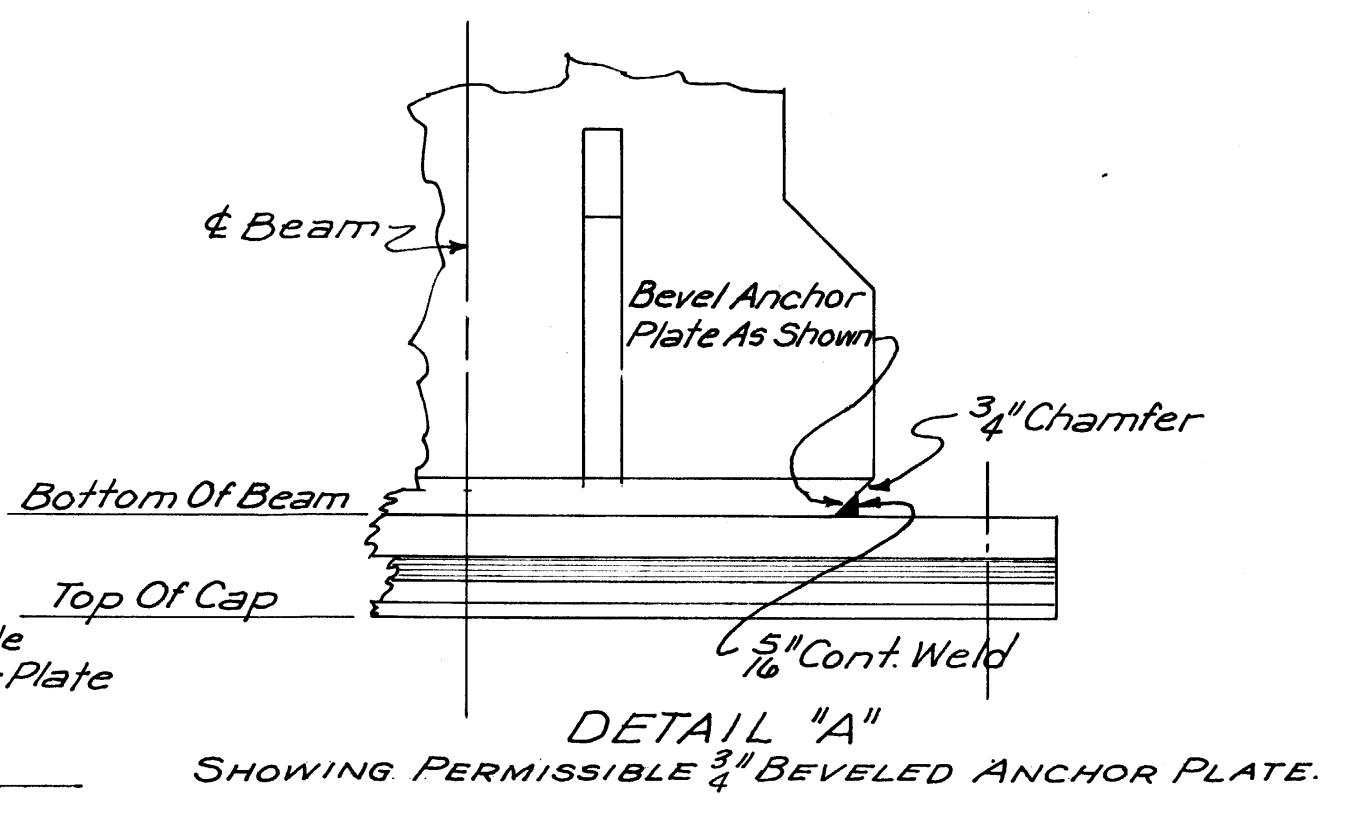
PART ELEVATION
(At End Of Beam)



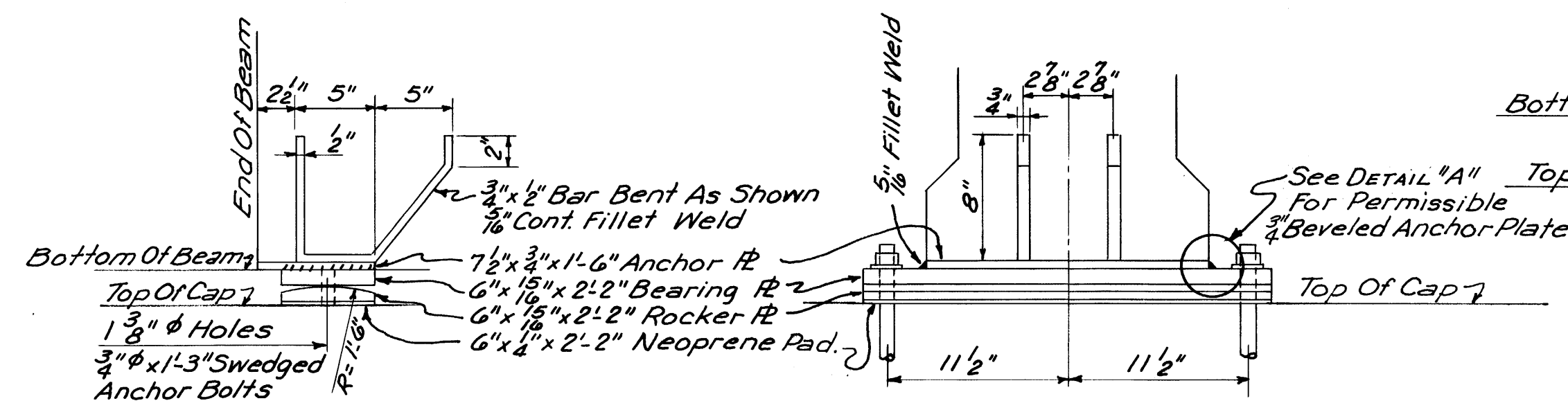
TYPICAL SECTION



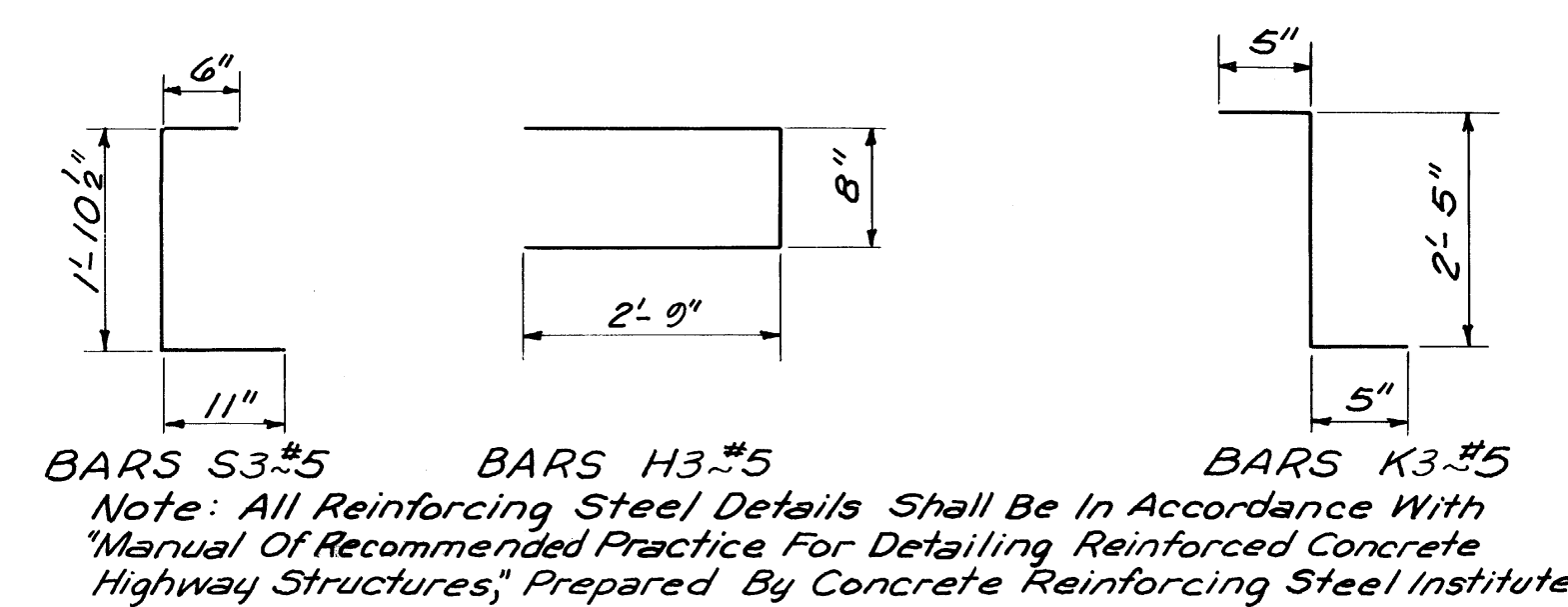
SHEAR KEY DETAIL



DETAIL "A"
SHOWING PERMISSIBLE 3/4" BEVELED ANCHOR PLATE.



BEARING DETAIL
All Rocker Plates To Be Set On 1/4" Neoprene Pads
Per Special Provision No. 216.



BAR BENDING DETAILS
Dimensions Are Out To Out.

SPECIAL NOTES:
The Bridge Engineer Shall Be Notified If The Camber Of This Beam Is Not Within The Limits Of From 1/4" To 1".
Procedures For Manufacture, Handling & Hauling Of Prestressed Beams And Construction Of Spans Should Be Approved By The Bridge Engineer. Manufacturers And Contractors Should Request A Copy Of "INFORMATION AND SUGGESTIONS ON PRESTRESSED CONCRETE MANUFACTURE AND CONSTRUCTION" From The Bridge Division.

GENERAL NOTES:
Beams Shall Be Manufactured In Accordance With "Mississippi State Highway Department Specifications" And "Special Provision No. 112- Revised" Unless Specifically Stated Otherwise Hereon.
Concrete Shall Be Class Ax.
(a) Shall Have A 28 Day Cylinder Strength Of 5,000 p.s.i.
(b) At Transfer Of The Tensioning Load, The Cylinder Strength Of Concrete Shall Be 4,400 p.s.i.
Pretensioned S.R. Strands Shall Have A Minimum Ultimate Strength Of 27,000 Lbs.
All Beams Shall Be Cast On Concrete Floored Pallets And In Metal Forms.
Tops Of Beams Are To Be Rough Floated. At Approximately The Time Of Initial Set, Entire Top Of Beams Shall Be Scrubbed Transversely With Coarse Wire Brush To Remove All Laitance And Produce A Roughened Surface For Bonding Slab. Other Surfaces Finished Per Special Provision 112 Revised.
In The Handling Of Beams, Beams Must Be Maintained In An Upright Position At All Times And Must Be Picked Up From Points Within The Solid Bearing Blocks At The Beam Ends.
DISREGARD OF THIS REQUIREMENT MAY LEAD TO COLLAPSE OF THE MEMBER.
An Alternate Type Shear Key May Be Used Subject To Approval Of The Bridge Engineer.
Diaphragm Details Shall Be As Shown On The Span Sheet.
Prior To Erection Or Embedment In Concrete, All Steel Surfaces Of The Bearing Assembly Except Anchor Bars And Embedded Portions Of Anchor Bolts Shall Receive Two Coatings Of Super-Service Black Bitumastic Coating (Koppers Co. Or Equal) Applied According To Manufacturer's Directions. Ample Drying Time Shall Be Allowed For Each Coat. Care Shall Be Exercised To Cover Corners. Surfaces To Be Painted Shall Be Cleaned Per Article 214.05 Of The Specifications. Those Areas Where Paint Has Been Damaged During Construction Shall Be Touched Up.

DESIGN DATA
Unit Stresses Are In Accordance With A.A.S.H.O. 1961.

BY		MISSISSIPPI STATE HIGHWAY DEPARTMENT	
REVISIONS		PRESTRESSED CONCRETE BEAM	
DATE		LENGTH - 40 FT.	
DATE		SUBMITTED BY _____ BRIDGE ENGINEER	
DATE		DETAILED B.D.V. CHECKED _____ ISSUED _____ DRAWING NO. PB-3	
DATE		TRACED E.H.F. DATE 4-30-58 DATE 4/30/58	