

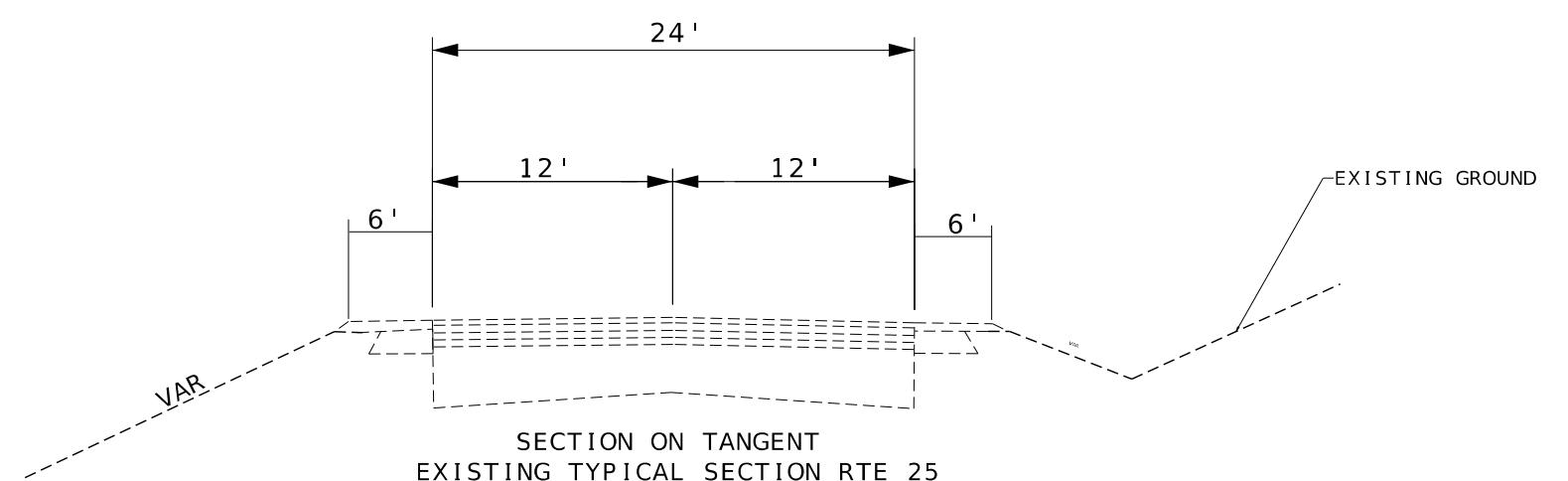
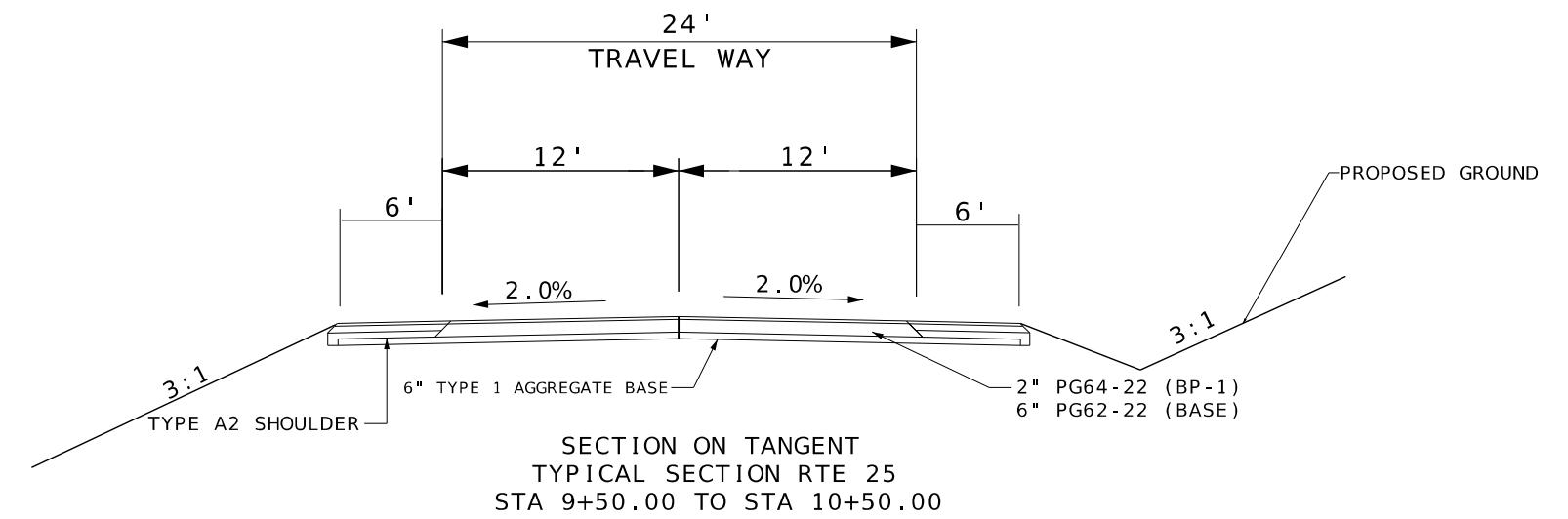
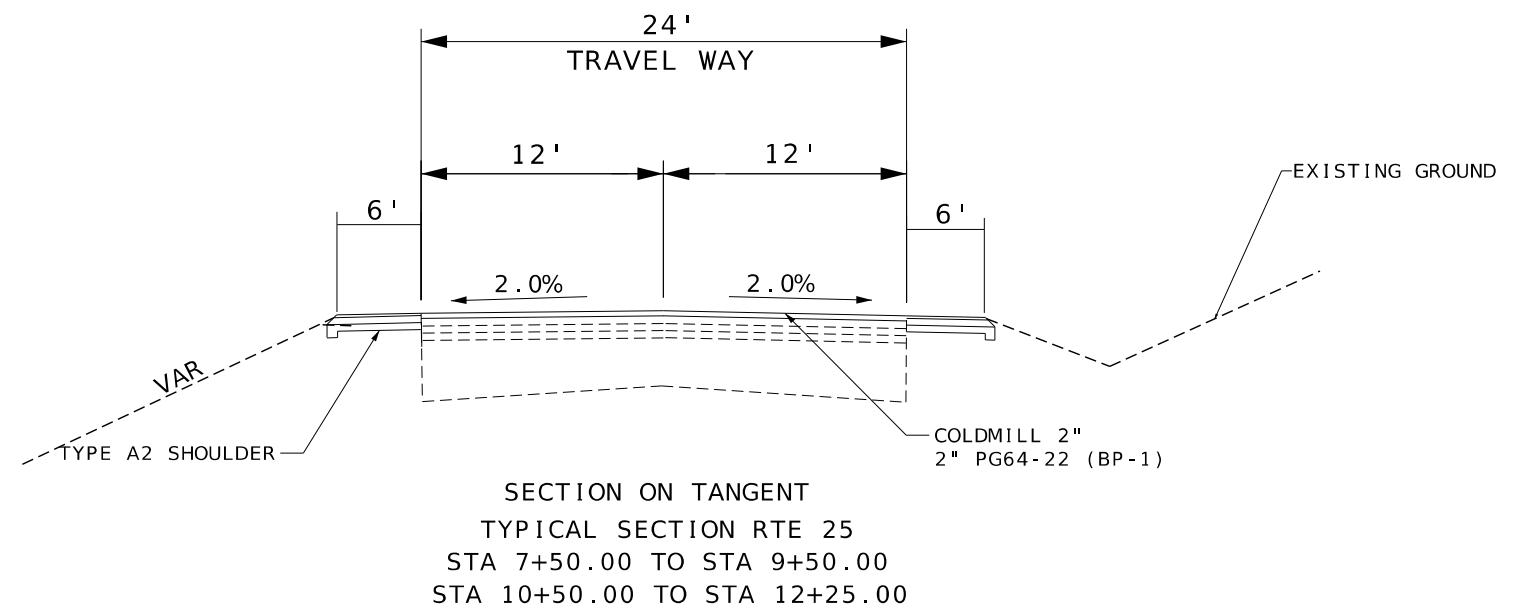


DATE PREPARED  
10/17/2025  
ROUTE 25 STATE MO  
DISTRICT SE SHEET NO. 2  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9731

SECTION ON TANGENT	EXISTING GROUND	PROPOSED GROUND	DESCRIPTION
SECTION ON TANGENT	EXISTING GROUND	PROPOSED GROUND	
TYPICAL SECTION RTE 25			
STA 7+50.00 TO STA 9+50.00			
STA 10+50.00 TO STA 12+25.00			



Cape Girardeau, MO Office  
3437 William St. Cape Girardeau, MO 63701  
Certificate of Authority F2067028644  
Phone: 573-222-5637 / BFWEngineers.com  
Copyright © Balfour Beatty Mid-Continent Engineering & Testing, Inc.



TYPICAL SECTION  
SHEET 1 OF 1

REMOVAL OF IMPROVEMENTS			
STATION	STATION	LOCATION	DESCRIPTION
7+50	9+48	RT	1138 SF SHOULDER REMOVAL
7+50	9+76	LT	1342 SF SHOULDER REMOVAL
10+16	12+25	RT	1255 SF SHOULDER REMOVAL
10+45	12+25	LT	1043 SF SHOULDER REMOVAL
7+22	12+38	RT	GUARDRAIL REMOVAL
7+54	12+68	LT	GUARDRAIL REMOVAL
LOCATIONS AND QUANTITIES ARE APPROXIMATE FOLLOW SEC 202.30 NO DIRECT PAYMENT WILL BE MADE FOR SAW CUTS REQUIRED FOR REMOVAL			
LUMP SUM - 1			

BASE AND PAVEMENT											
SHEET	STA	STA	LOC	COLD MILLING BIT PVMT 3" THICK OR LESS (SY)	TYPE 1 AGG. BASE (6" THICK) (SY)	TACK COAT (GAL)	2" BITUMINOUS PAVEMENT PG64-22 (BP-1) (TON)	6" BITUMINOUS PAVEMENT PG64-22 (BASE) (TON)	A2 SHOULDER (SY)	BIT. SHOULDER RUMBLE STRIP (STA)	REMARKS
4	7+50	9+50	CL	533.3		53.3					
4	7+50	12+25	CL				137.1				
4	7+50	12+25	RT AND LT						633.3	9.5	
4	9+50	10+50	CL		266.7			86.4			
4	10+50	12+25	CL	466.7		46.7					
SUBTOTAL				1000	266.7	100	137.1	86.4	633.3	9.5	
PAY TOTAL				1000	267	100	137.1	86.4	633.3	9.5	

\*BP-1 - 1.948 Ton/cy

\*Base - 1.943 Ton/cy

MOBILIZATION	
LUMP SUM -1	

CONTRACTOR FURNISHED SURVEYING AND STAKING	
LUMP SUM -1	

EARTHWORK						
SHEET	BEGIN STATION	END STATION	CLASS A EXCAVATION CY	COMPACTING EMBANKMENT CY	EMBANKMENT IN PLACE CY	REMARKS
4	7+50	12+25	75	60	260	
4	7+50	12+25			50	GUARDRAIL WIDENING
TOTAL			75	60	310	

POROUS BACKFILL							
SHEET	STA	STA	DEPTH (FT)	LENGTH FROM CULVERT (FT)	WIDTH (FT)	POROUS BACKFILL (CY)	REMARKS
9	9+35.66	10+29.22	10	5	67.41	225.3	WEST
9	9+75.62	10+70.41	10	5	67.41	228.3	EAST
SUBTOTAL				453.6			
PAY TOTAL				454.0			

DRAINAGE STRUCTURES											
SHEET	STA	STA	LOC	24" GROUP C PIPE (FT)	30" GROUP C PIPE (FT)	24 IN. OR ALLOWED SUBSTITUTE GROUP C FLARED END SECTION (EACH)	30 IN. OR ALLOWED SUBSTITUTE GROUP C FLARED END SECTION (EACH)	24 IN. OR 600 MM AUTO FLOODGATE (TYPE 1) (EACH)	30 IN. OR 750 MM AUTO FLOODGATE (TYPE 1) (EACH)	MODIFIED LINEAR GRADING TYPE 2 (STA)	REMARKS
4	8+49		RT			1					
4	8+49	9+41	RT	91.8						0.5	
4	9+41		RT								
4	9+80		RT								
4	9+80	10+73	RT	92.9						0.5	
4	10+73		RT			1					
4	9+60		LT								
4	9+60	10+29	LT		69.6					0.5	
4	10+29		LT							1	
4	10+75		LT							1	
4	10+75	11+23	LT		49.3					0.5	
4	11+23		LT				1				
TOTALS				184.7	118.9	2	2	2	2	2	
PAY TOTALS				185	119	2	2	2	2	2	

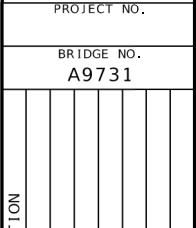
GUARDRAIL						
SHEET	STA	STA	LOC	MGS GUARDRAIL LF	TYPE A CRASHWORTHY END TERMINAL (MASH) (EACH)	REMARKS
4	8+01.84	10+66.50	RT	143.72	2	
4	9+31.52	11+97.83	LT	145.41	2	
				TOTAL	290	4

SUMMARY OF QUANTITIES  
SHEET 1 OF 3

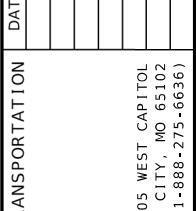


DATE PREPARED  
10/17/2025  
ROUTE 25 STATE MO  
DISTRICT SE SHEET NO. 3  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772  
CONTRACT ID.  
PROJECT NO.

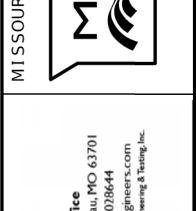
BRIDGE NO.  
A9731  
MODOT HIGHWAYS AND TRANSPORTATION COMMISSION DATE  
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION DATE  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



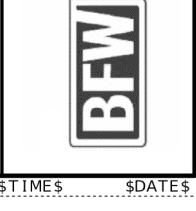
Cape Girardeau, MO Office  
3437 William St. Cape Girardeau, MO 63701  
Certificate of Authority F-2007028644  
Phone: 573-222-5632 / BFWengineering.com  
Copyright © Bacon Farmer Wickham Engineering & Testing, Inc.



3437 William St. Cape Girardeau, MO 63701  
Phone: 573-222-5632 / BFWengineering.com  
Copyright © Bacon Farmer Wickham Engineering & Testing, Inc.



3437 William St. Cape Girardeau, MO 63701  
Phone: 573-222-5632 / BFWengineering.com  
Copyright © Bacon Farmer Wickham Engineering & Testing, Inc.



\$FILE\$ \$TIME\$ \$DATE\$ REV.



DATE PREPARED  
10/17/2025  
ROUTE 25 STATE MO  
DISTRICT SE SHEET NO. 3  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9731

TYPE 1 ROCK DITCH LINER								
SHEET	STA	STA	LOC	THICKNESS (AVG) (FT)	SLOPE	FURNISHING	PLACING	DESCRIPTION
9	9+53.98	9+77.10	RT	1	VAR	3.5	3.5	
9	10+00.00	10+42.42	LT	1	VAR	2.2	2.2	
				TOTAL		5.7	5.7	
				PAYTOTAL		6.0	6.0	

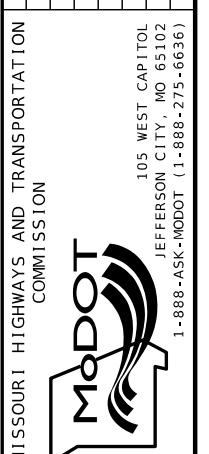
SEE SHEET 1 OF BRIDGE DRAWINGS FOR DETAILS

PAVEMENT MARKING						
SHEET	BEGIN STATION	END STATION	PAVEMENT MARKING LOCATION	4 IN. YELLOW CLASS 2 PAVEMENT MARKING PAINT (25-MIL, TYPE L BEADS) (LF)	6 IN. WHITE CLASS 2 PAVEMENT MARKING PAINT (25-MIL, TYPE L BEADS) (LF)	REMARKS
4	7+50.00	12+25.00	LT	0	875	
4	7+50.00	12+25.00	RT	0	875	
4	7+50.00	12+25.00	CL	875	0	
			TOTAL	875	1750	
			PAY TOTAL	875	1750	

EROSION CONTROL							
SHEET	STA	STA	LOCATION	SILT FENCE (LF)	SEDIMENT REMOVAL (CY)	ROCK DITCH CHECK (LF)	DESCRIPTION
10	7+50.00	12+25.00	RT	347	10	50	
10	7+50.00	12+25.00	LT	344	10	50	
			TOTAL	691	20	100	

TYPE 1 ROCK BLANKET & GEOTEXTILE MATERIAL							
SHEET	STA	STA	THICKNESS (FT)	FURNISHING	PLACING	PERMANENT EROSION CONTROL GEOTEXTILE (SY)	DESCRIPTION
9	8+97.89	9+75.65	2	100.53	100.53	150.8	
9	10+29.22	10+71.05	2	70.41	70.41	105.61	
			TOTAL		170.94	170.94	256.41
			PAYTOTAL		171	171	257

SEEDING							
SHEET	STA	STA	LOCATION	SEEDING (ACRE)	MULCH (ACRE)	TEMPORARY SEEDING (ACRE)	DESCRIPTION
4	7+50	12+25	RT AND LT	1	1	0.5	
			TOTAL	1	1	0.5	



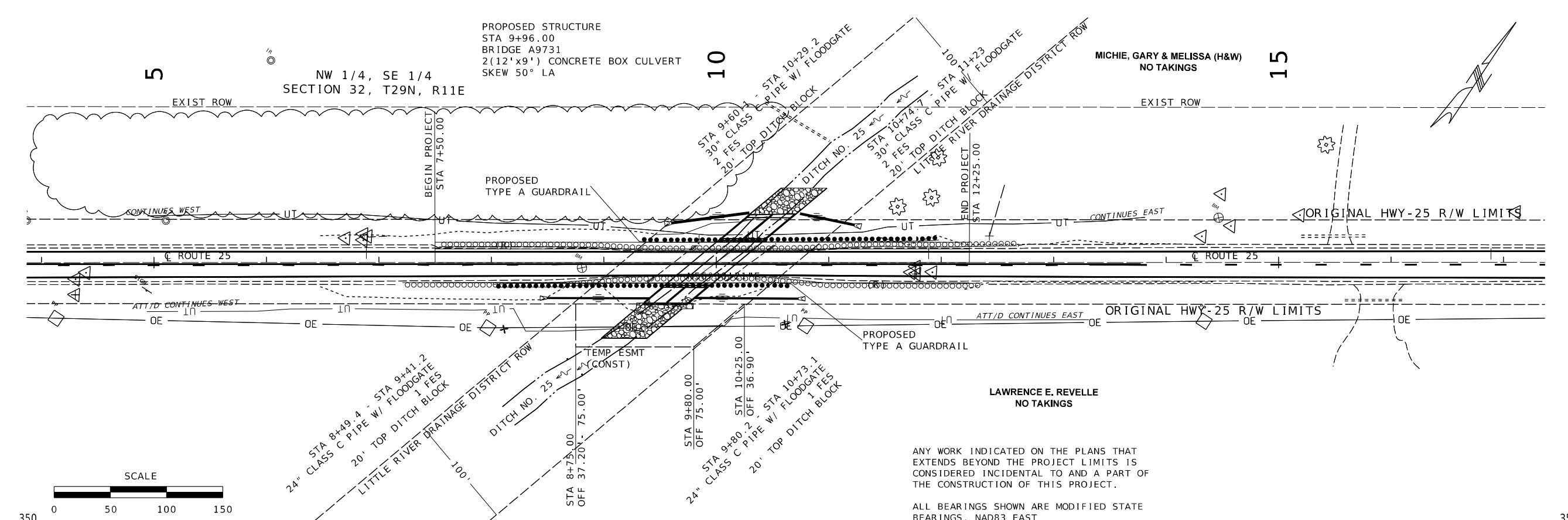
Cape Girardeau, MO Office  
3437 William St. Cape Girardeau, MO 63701  
Certificate of Authority F2007-028644  
Phone: 573-722-5433 / BPA@modot.com  
Copyright © Bacon Farmer Prokhan Engineering & Science, Inc.



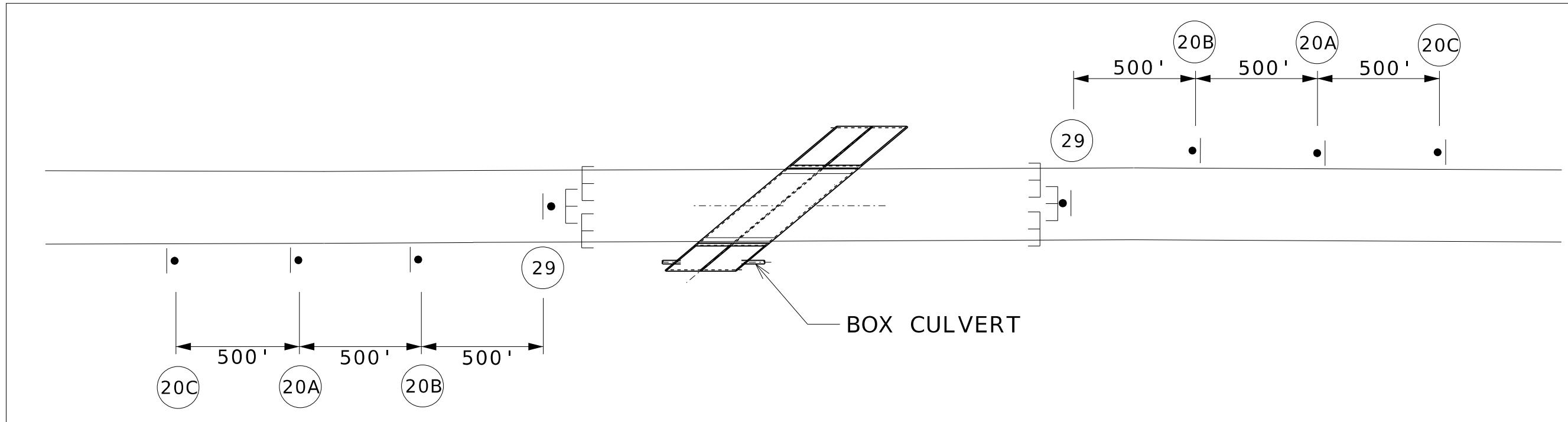
SUMMARY OF QUANTITIES  
SHEET 2 OF 3

\$FILE\$ \$TIME\$ \$DATE\$

SIGN	SIZE	AREA	QTY	TOTAL	QTY	TOTAL	SIGN	DESCRIPTION	SIGN	SIZE	AREA	QTY	TOTAL	QTY	TOTAL	SIGN	DESCRIPTION	ITEM	TOTAL	DESCRIPTION			
WARNING SIGNS								GUIDE SIGNS								DESCRIPTION							
W01-1L	48X48	16.00						TURN (SYMBOL LEFT)	E05-1	36X48	12.00					GORE EXIT	6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)				
W01-1R	48X48	16.00						TURN (SYMBOL RIGHT)	E05-2	48X36	12.00					EXIT OPEN	6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)				
W01-2L	48X48	16.00						CURVE (SYMBOL LEFT)	E05-2a	48X36	12.00					EXIT CLOSED	6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)				
W01-2R	48X48	16.00						CURVE (SYMBOL RIGHT)	G020-1	60X24	10.00					ROAD WORK NEXT XX MILES	6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)				
W01-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)	G020-2	48X24	8.00					END ROAD WORK	6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)				
W01-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)	G020-4	36X18	4.50					PILOT CAR FOLLOW ME	6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)				
W01-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT)	G020-4a	42X30	8.75					PILOT CAR IN USE WAIT & FOLLOW	6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)				
W01-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT)	G020-4a	18X12	1.50					PILOT CAR IN USE WAIT & FOLLOW	6122020		REPLACEMENT SAND BARREL				
W01-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)	G020-5aP	36X24	6.00					WORK ZONE (PLAQUE)	6122030		IMPACT ATTENUATOR (RELOCATION)				
W01-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-8a	24X18	3.00	2	6		52	END DETOUR	6123001		TRUCK MOUNTED ATTENUATOR (TMA)				
W01-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)	MO4-9L	48X36	12.00					DETOUR (LEFT)	6161008		ADVANCED WARNING RAIL SYSTEM				
W01-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-9R	48X36	12.00					DETOUR (RIGHT)	6161012		BOOYS (BOATS KEEP OUT)				
W01-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)	MO4-9P	48X12	4.00					STREET NAME (PLAQUE)	6161013		BOOYS (NO WAKE)				
W01-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)	MO4-10L	48X18	6.00					DETOUR ARROW (LEFT)	6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)				
W01-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)	MO4-10R	48X18	6.00					DETOUR ARROW (RIGHT)	6161025		CHANNELIZER (TRIM LINE)				
W01-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)	REGULATORY SIGNS								6161030	6	TYPE III MOVEABLE BARRICADE				
W01-8	18X24	3.00						CHEVRON (SYMBOL)	R1-1	48X48	13.25					STOP	6161033		DIRECTION INDICATOR BARRICADE				
W01-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)	R1-2	48TRI	6.93					YIELD	6161040		FLASHING ARROW PANEL				
W03-1	48X48	16.00						STOP AHEAD (SYMBOL)	R1-2a	36X36	9.00					TO ONCOMING TRAFFIC (PLAQUE)	6161047		TYPE III OBJECT MARKER				
W03-2	48X48	16.00						YIELD AHEAD (SYMBOL)	R1-3P	30X12	2.50					ALL WAY (PLAQUE)	6161055		SEQUENTIAL FLASHING WARNING LIGHT				
W03-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)	R2-1	36X48	12.00					SPEED LIMIT XX	6161070		TUBULAR MARKER				
W03-4	48X48	16.00						BE PREPARED TO STOP	R3-1	48X48	16.00					NO RIGHT TURN (SYMBOL)	6161095		RADAR SPEED ADVISORY SYSTEM				
W03-5	48X48	16.00						SPEED LIMIT AHEAD	R3-2	48X48	16.00					NO LEFT TURN (SYMBOL)	6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED				
W04-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)	R3-3	36X36	9.00					NO TURNS	6161098A		CHANGEABLE MESSAGE SIGN W/O COMM.				
W04-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)	R3-4	48X48	16.00					NO U-TURN (SYMBOL)	6161099	6	INTERFACE - CONTRACTOR FURNISHED/RETAINED				
W04-1aL	48X48	16.00						MERGE (LEFT)	R3-7L	30X30	6.25					LEFT LANE MUST TURN LEFT	6162000A		INTERFACE - CONTRACTOR FURNISHED/RETAINED				
W04-1aR	48X48	16.00						MERGE (RIGHT)	R3-7R	30X30	6.25					RIGHT LANE MUST TURN RIGHT	6162002		TEMPORARY LONG-TERM RUMBLE STRIPS				
W05-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS	R4-1	36X48	12.00					DO NOT PASS	6173600D		TEMPORARY TRAFFIC BARRIER				
W05-3	48X48	16.00						ONE LANE BRIDGE	R4-2	36X48	12.00					PASS WITH CARE	6173602B		CONTRACTOR FURNISHED/RETAINED				
W05-5	48X48	16.00						NARROW LANES	R4-7a	36X48	12.00					KEEP RIGHT (HORIZONTAL ARROW)	6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION				
W06-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)	R4-8a	36X48	12.00					KEEP LEFT (HORIZONTAL ARROW)	6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER				
W06-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)	R5-1	30X30	6.25					DO NOT ENTER	6176000B		TEMPORARY TRAFFIC BARRIER				
W06-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)	R5-1a	36X24	6.00					WRONG WAY	6177000B		COMMISSION FURNISHED/RETAINED				
W07-3a	30X24	5.00						NEXT XX MILES (PLAQUE)	R6-1L	54X18	6.75					ONE WAY ARROW (LEFT)	6208064A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION				
W08-1	48X48	16.00						BUMP	R6-1R	54X18	6.75					ONE WAY ARROW (RIGHT)	9029400		COMMISSION FURNISHED/RETAINED				
W08-2	48X48	16.00						DIP	R6-2L	24X30	5.00					ONE WAY (LEFT)	9029401		TEMPORARY RAISED PAVEMENT MARKER				
W08-3	48X48	16.00						PAVEMENT ENDS	R6-2R	24X30	5.00					ONE WAY (RIGHT)			TEMPORARY TRAFFIC SIGNALS				
W08-4	48X48	16.00						SOFT SHOULDER	R9-9	24X12	2.00					SIDEWALK CLOSED			TEMPORARY TRAFFIC SIGNALS AND LIGHTING				
W08-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)	R9-11L	24X18	3.00					SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE							
W08-6	48X48	16.00						TRUCK CROSSING	R9-11R	24X18	3.00					SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE							
W08-6c	48X48	16.00						TRUCK ENTRANCE	R10-6	24X36	6.00					STOP HERE ON RED (45 <sup>o</sup> ARROW)							
W08-7	36X36	9.00						LOOSE GRAVEL	R11-2	48X30	10.00	2	20		29	ROAD CLOSED							
W08-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL	R11-3a	60X30	12.50	4	50		20C	ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY							
W08-9	48X48	16.00						LOW SHOULDER	R11-4	60X30	12.50					ROAD CLOSED TO THRU TRAFFIC							
W08-11	48X48	16.00						UNEVEN LANES	CONST-3A	60X48	20.00					FINE SIGN							
W08-12	48X48	16.00						NO CENTER LINE	CONST-3X	56X12	4.67					SPEEDING/PASSING (PLATE)							
W08-15	48X48	16.00			</td																		







DATE PREPARED  
10/17/2025

ROUTE 25 STATE MO  
DISTRICT SE SHEET NO. 6  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9731

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- [ ] BARRICADE



R11-2

(29)



WO20-3

(20A)



WO20-3

(20B)



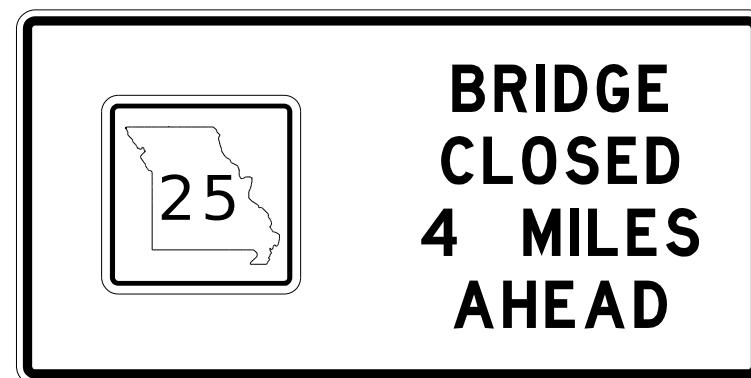
R11-3a

(20C)



SPECIAL

48A



SPECIAL

48B

DRAWING NOT TO SCALE  
USE DIMENSIONS

TRAFFIC CONTROL SHEET  
SHEET 1 OF 3

Cape Girardeau, MO Office  
3437 William St. Cape Girardeau, MO 63701  
Certificate of Authority F20070708644  
Phone: 573-222-5637 / BFWorthington.com  
Copyright © Bacon Fawcett Worthington Engineering & Testing, Inc.



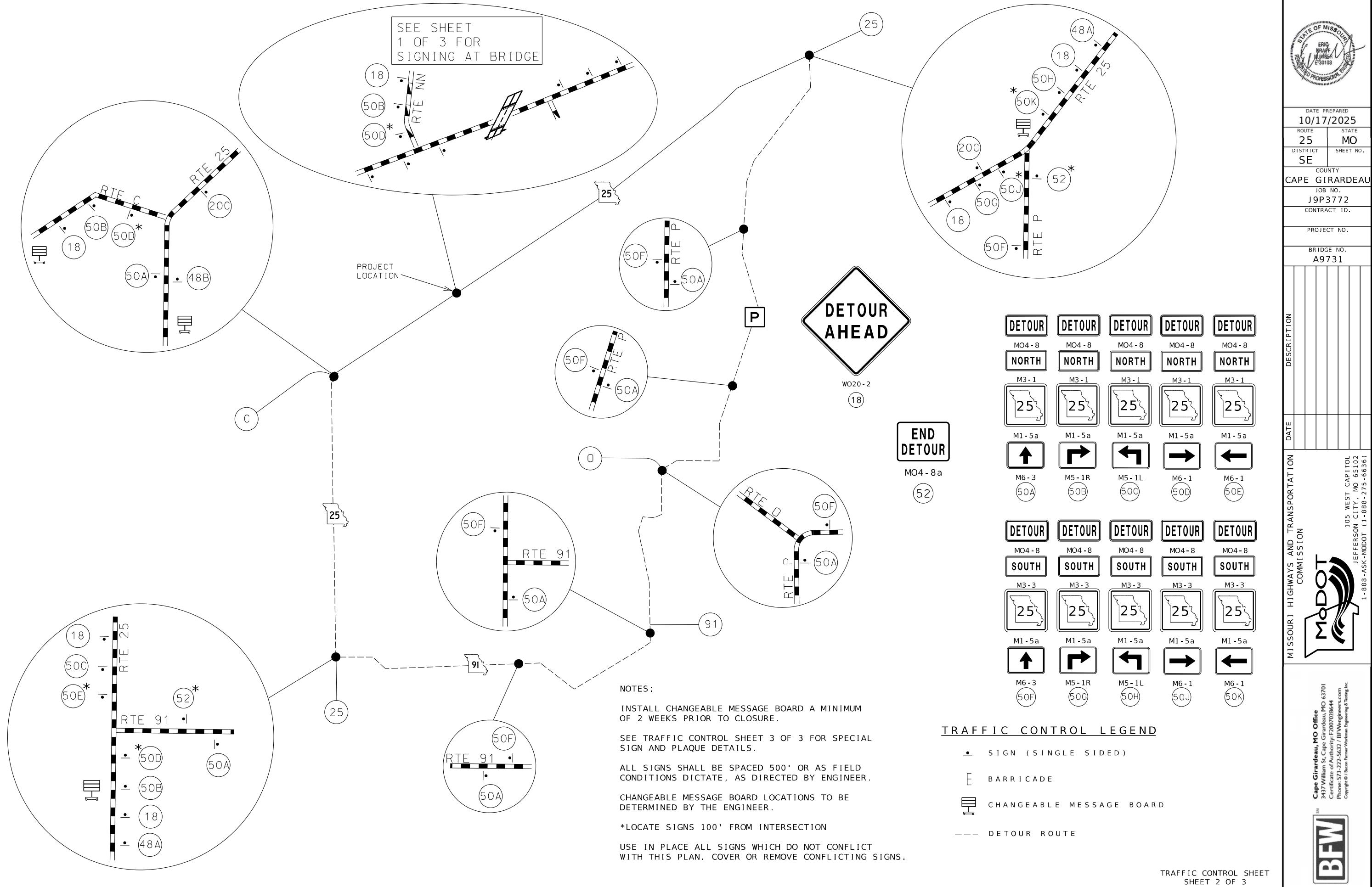


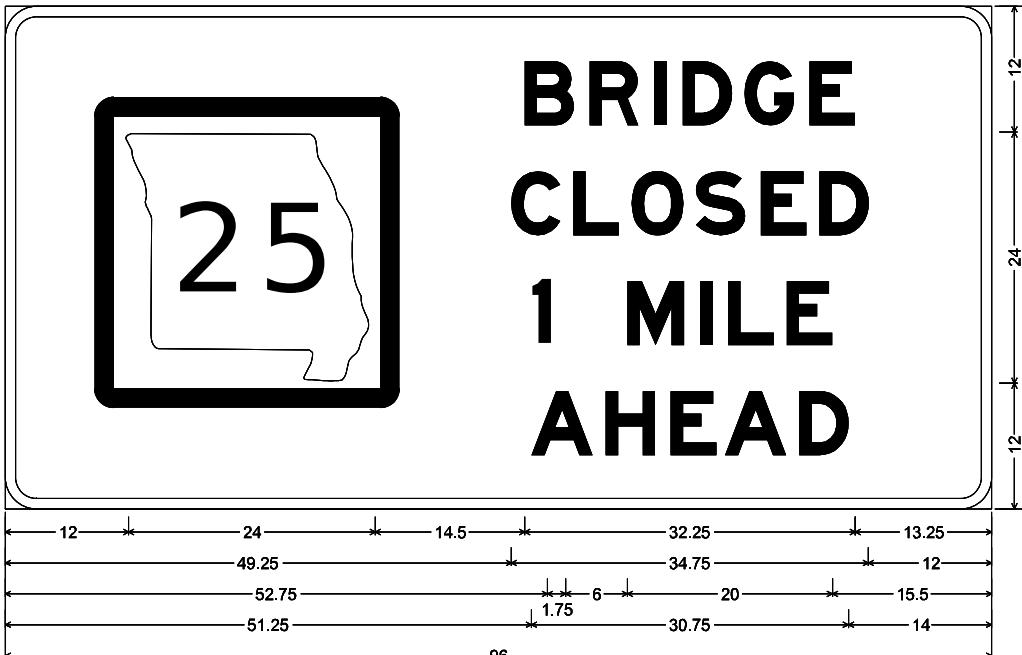
DATE PREPARED  
10/17/2025  
ROUTE 25 STATE MO  
DISTRICT SE SHEET NO.  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772 CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9731

DESCRIPTION	DATE
DETOUR	
MO4-8 NORTH	
M3-1 25	
M1-5a 25	
M6-3 50A	
DETOUR	
MO4-8 NORTH	
M3-1 25	
M1-5a 25	
M6-3 50B	
DETOUR	
MO4-8 NORTH	
M3-1 25	
M1-5a 25	
M6-3 50C	
DETOUR	
MO4-8 NORTH	
M3-1 25	
M1-5a 25	
M6-1 50D	
DETOUR	
MO4-8 NORTH	
M3-1 25	
M1-5a 25	
M6-1 50E	



Cape Girardeau, MO Office  
3437 William St. Cape Girardeau, MO 63701  
Certificate of Authority: F200728644  
Phone: 573.322.5632 / BFWengineering.com  
Copyright © Besser Farmer-Wolman Engineering & Testing, Inc.





MO4-13 SHF-FLAT SHEET FLUORESCENT;  
3.000" Radius, 1.000" Border, Black on, Orange;  
"BRIDGE", E Mod; "CLOSED", E Mod; "1 MILE", E Mod; "AHEAD", E Mod;

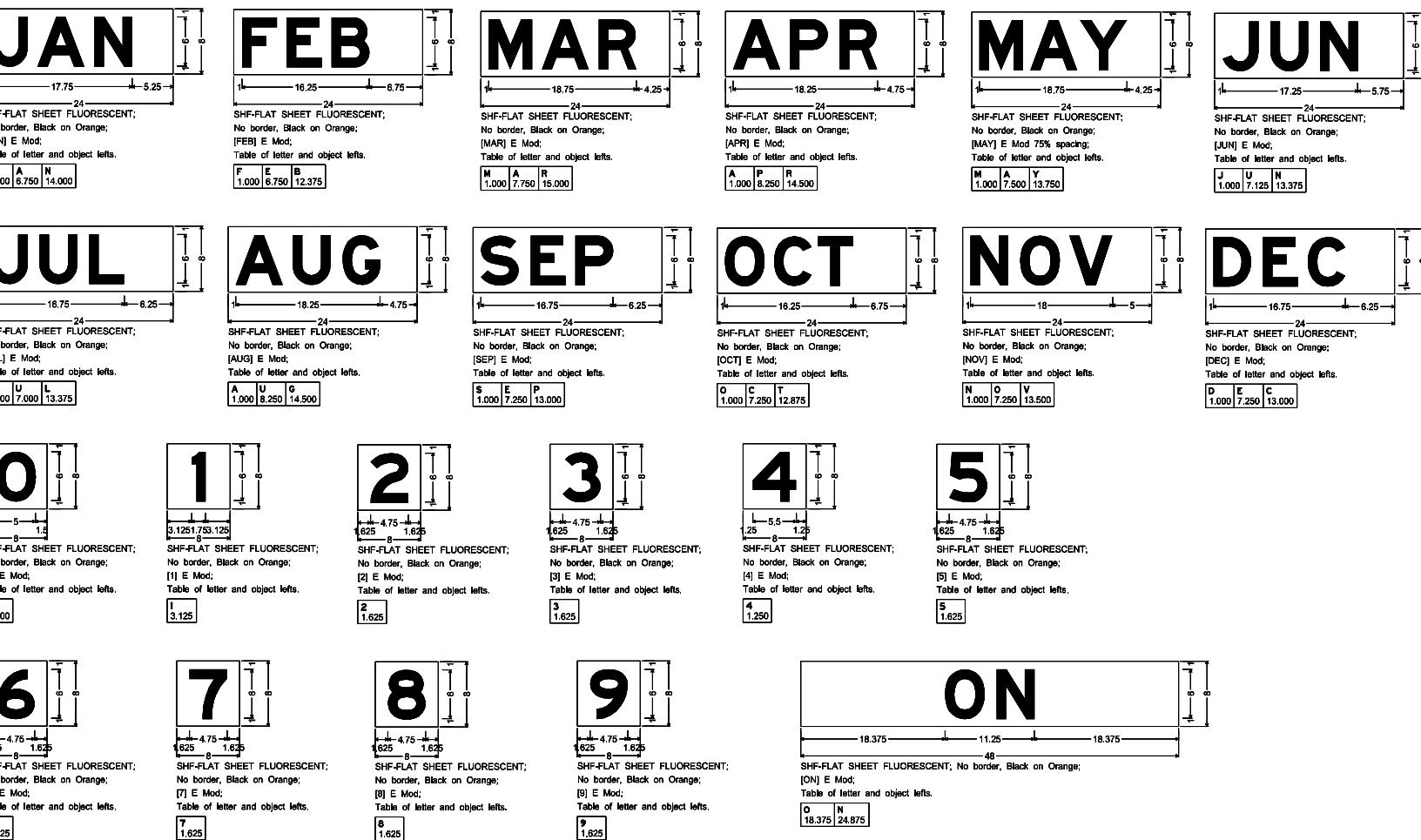
Table of letter and object lefts

25	B	R	I	D	G	E
12.000	50.500	56.875	63.125	65.875	71.875	78.250
C	L	O	S	E	D	
49.250	55.250	61.000	67.250	73.500	79.250	
1	M	I	L	E		
52.750	60.500	67.625	70.375	76.000		
A	H	E	A	D		
51.250	58.375	64.750	70.000	77.250		

48

## SPECIAL SIGN PLAQUES

Dimensions: 24" wide by 48" high. The sign is divided into four quadrants: top-left (12" x 6"), top-right (12" x 6"), bottom-left (6" x 12"), and bottom-right (6" x 12").



DATE PREPARED  
10/17/2025  
ROUTE STATE  
25 MO  
DISTRICT SHEET NO.  
SE 8  
COUNTY  
CAPE GIRARDEAU  
JOB NO.  
J9P3772  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.  
A9731

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



Cape Girardeau, MO Office  
3437 William St. Cape Girardeau, MO 63701  
Certificate of Authority F-0007028644  
Phone 573-222-5637 / BFWengineering.com  
Copyright © Bacon Farmer-Volkman Engineering & Testing, Inc.

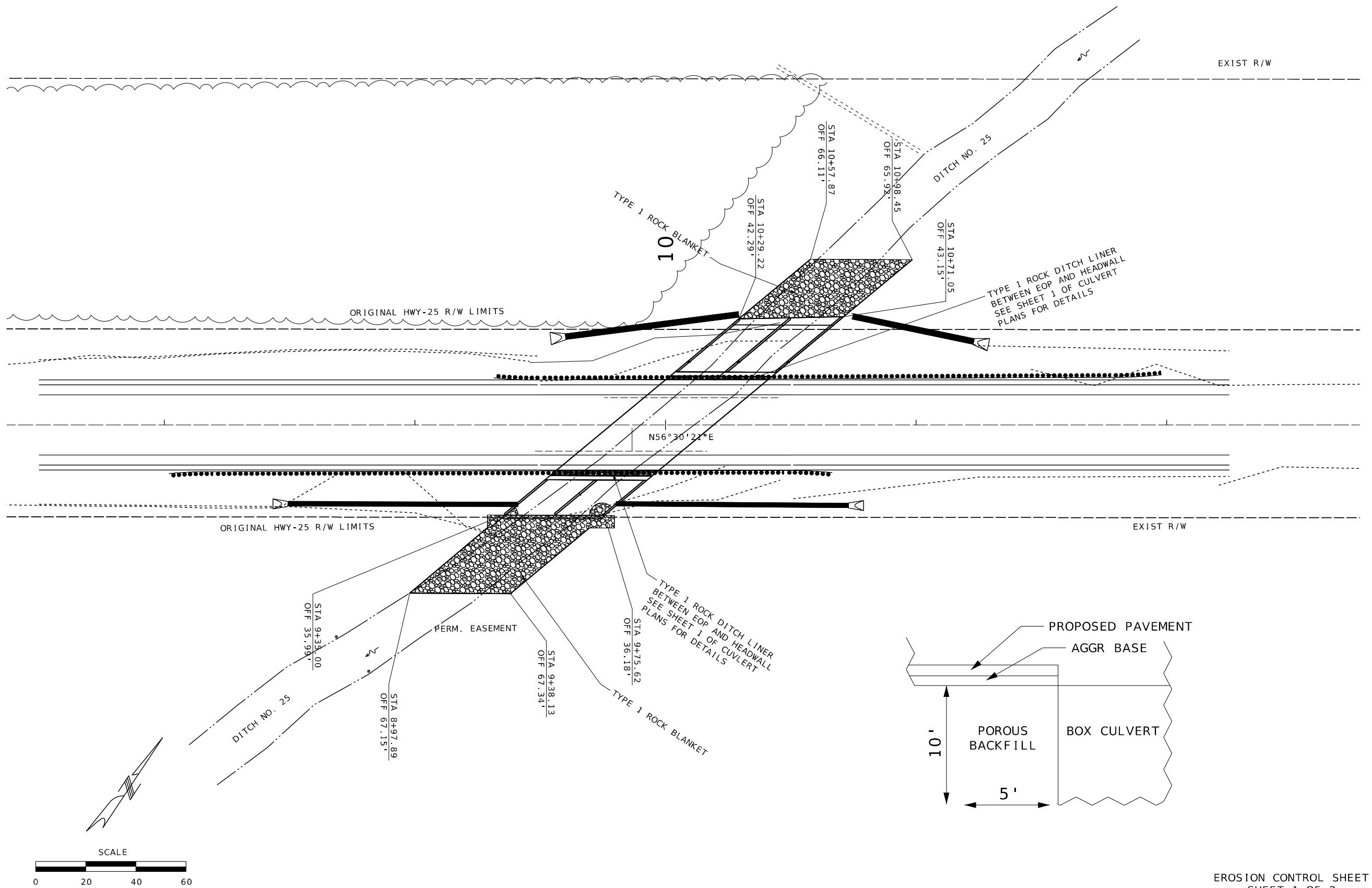




DATE PREPARED  
10/17/2025  
ROUTE 25 STATE MO  
DISTRICT SE SHEET NO. 9  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9731

MISSOURI HIGHWAYS AND TRANSPORTATION DATE DESCRIPTION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



Cape Girardeau, MO Office, MO 63701  
3437 William St, Cape Girardeau, MO 63701  
Certificate of Authority: F000708644  
Phone: 573-322-4632, BFM Engineering & Testing, Inc.  
Copyright © BFM Engineering & Testing, Inc.



DATE PREPARED  
10/17/2025

ROUTE 25 STATE MO

DISTRICT SE SHEET NO. 10

COUNTY CAPE GIRARDEAU

JOB NO. J9P3772

CONTRACT ID.

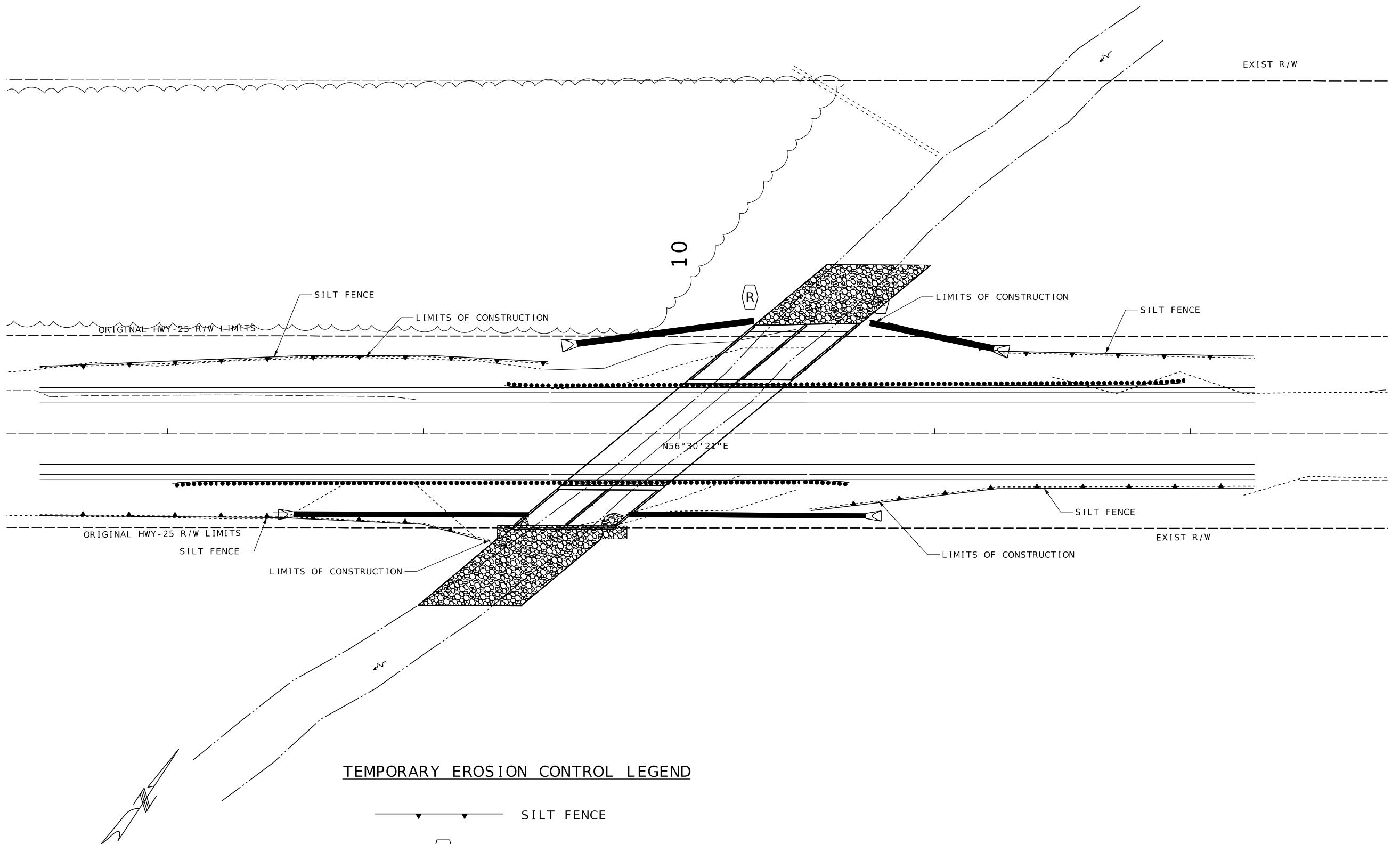
PROJECT NO.

BRIDGE NO. A9731

DESCRIPTION	DATE



Cape Girardeau, MO Office  
333 William St. Cape Girardeau, MO 63701  
Certificate of Authority: F200708644  
Phone: 573-222-5632 BFWEngineers.com  
Copyright © Balfour Beatty Mid-Continent Engineering & Testing, Inc.

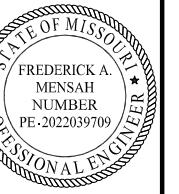


EROSION CONTROL SHEET  
SHEET 2 OF 2

\$FILE\$ \$TIME\$ \$DATE\$



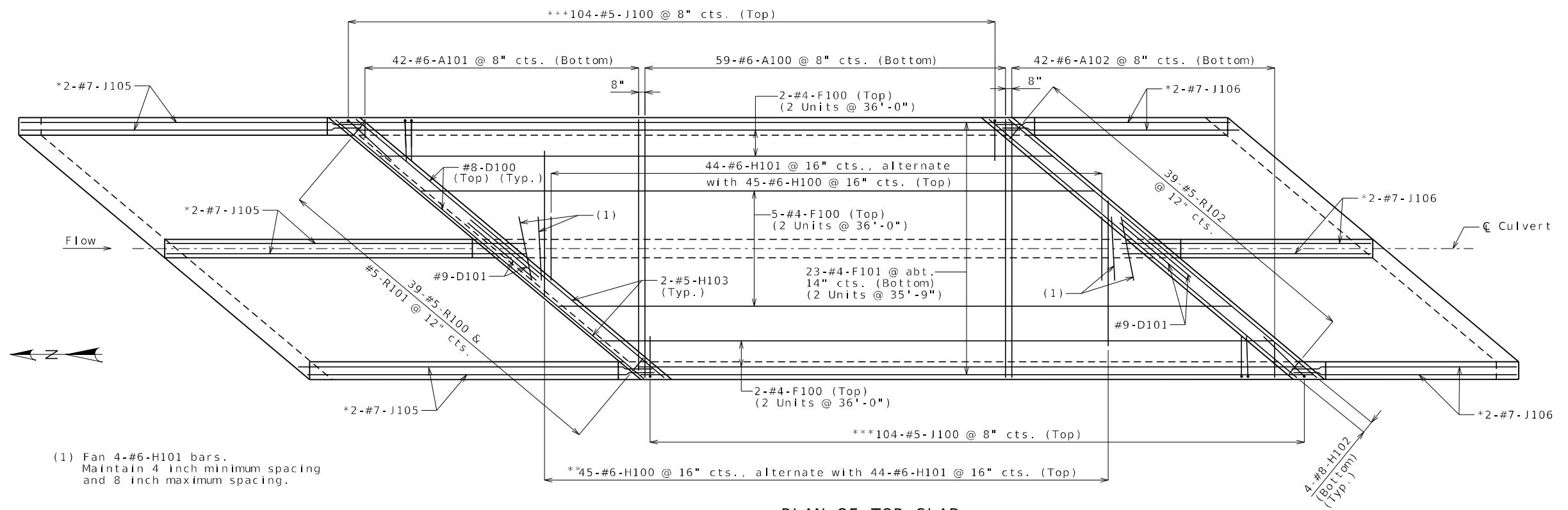




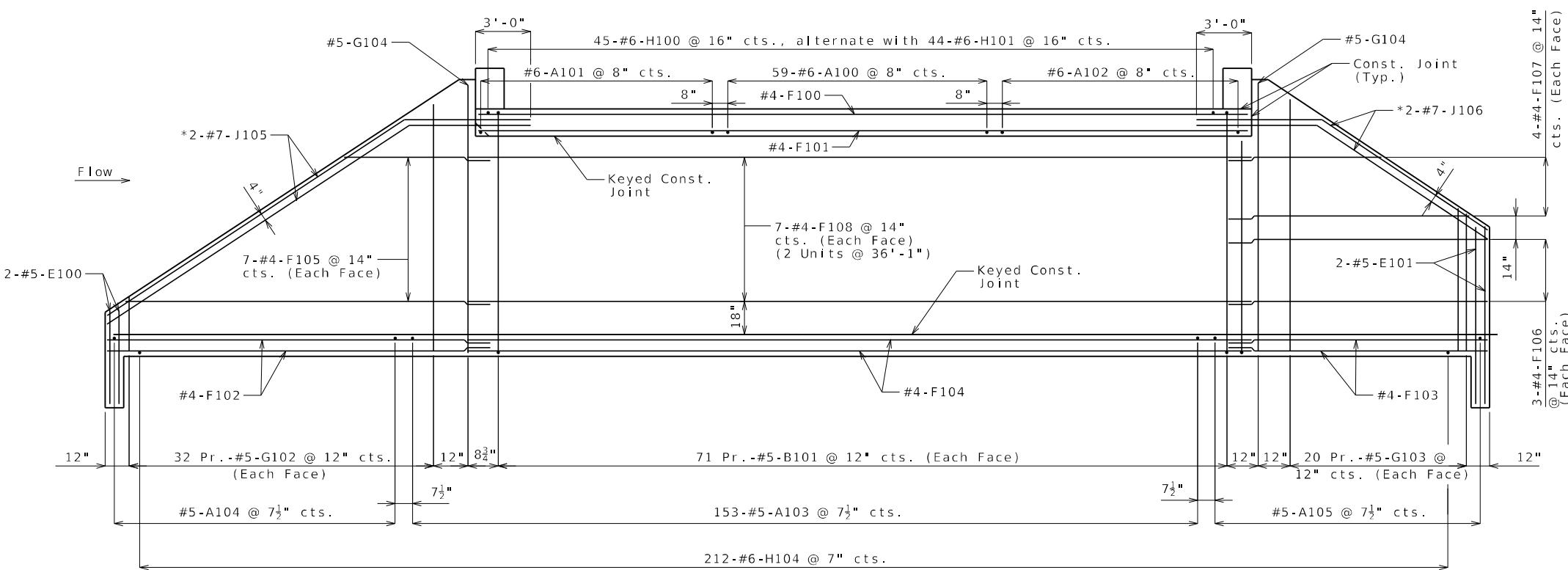
DATE PREPARED  
10/29/2025  
ROUTE 25 STATE MO  
DISTRICT BR SHEET NO. 3  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9731

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
MODOT 105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

© Cape Girardeau, MO Office  
3435 William St., Cape Girardeau, MO 63701  
Certificate of Authority: F200/028644  
Phone: 573-222-5632 BFW Engineering & Testing, Inc.  
Copyright © Bacon Farmer Walker Engineering & Testing, Inc.  
BFW



PLAN OF TOP SLAB  
(Guardrail attachment not shown for clarity)



DEVELOPED ELEVATION OF INTERIOR WALL  
(Guardrail attachment not shown for clarity)

\* May be bent in field or Shop.

\*\* Cut to conform to structure alignment where necessary.

\*\*\* Fan horizontal leg of J bars as necessary to conform to structure alignment. Maintain 4 inch minimum spacing. Cut and bend bars in field where necessary to conform to structure alignment.

#### GENERAL NOTES

For Headwalls details, sections thru Barrel and Wings, see Sheet No. 4 of 8.

For Guardrails attachment details, see Sheet No. 5 of 8.

Construction joint key not shown for clarity in Plan. See Sheet No. 4 of 8 for details.

Minimum clearance to reinforcing steel shall be 1 1/2".

Lap longitudinal bars a minimum of 23" at splices.

Beveled Headwall shall be located upstream end.

#6-H100 and #6-H101 bars shall be centered over the interior wall.

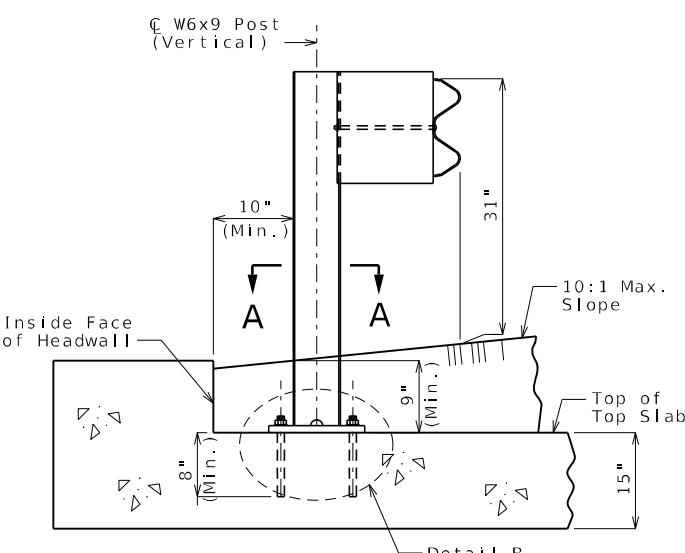
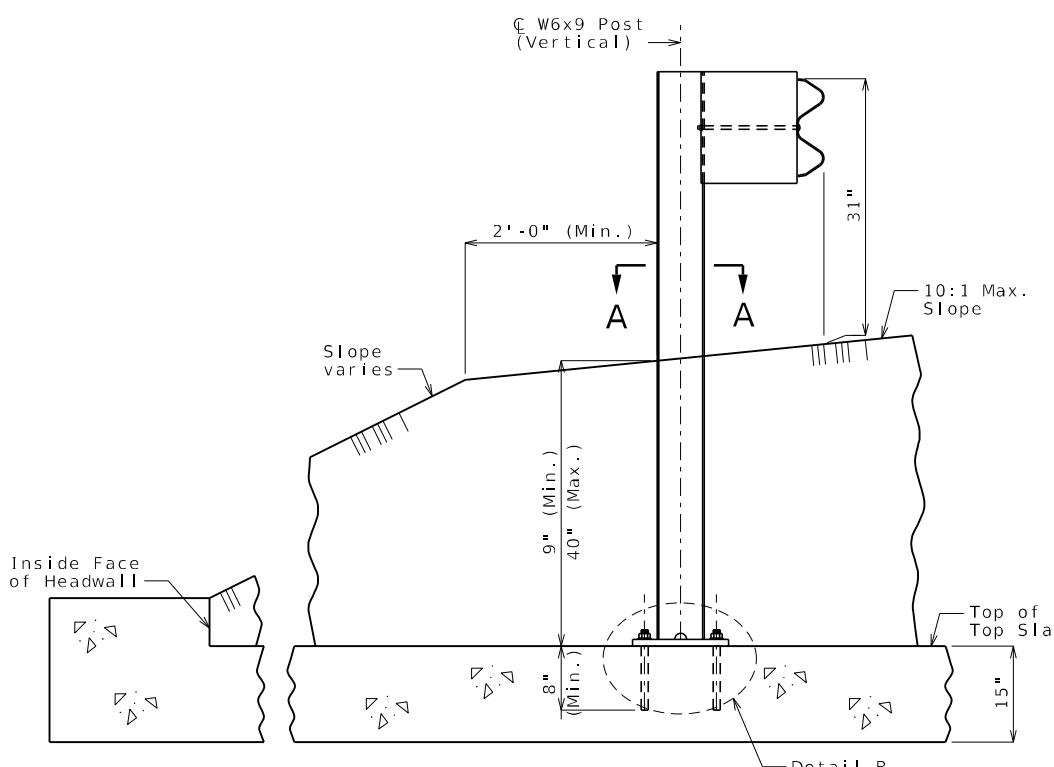
S.F. = Stream Face.

F.F. = Fill Face.

D.S. = Downstream.

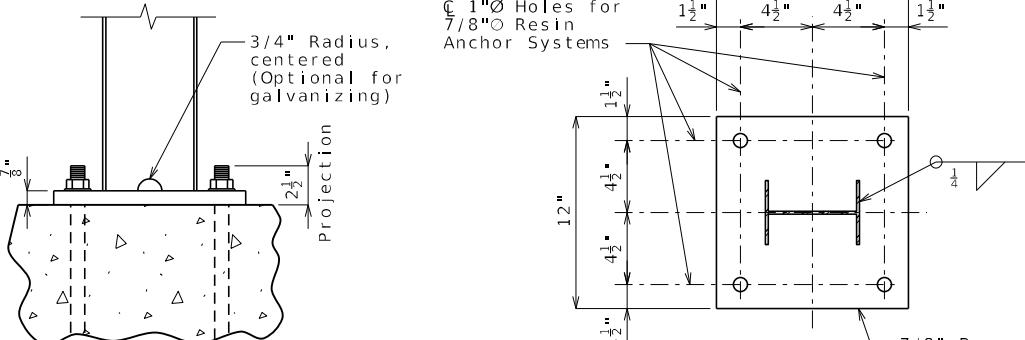
U.S. = Upstream.





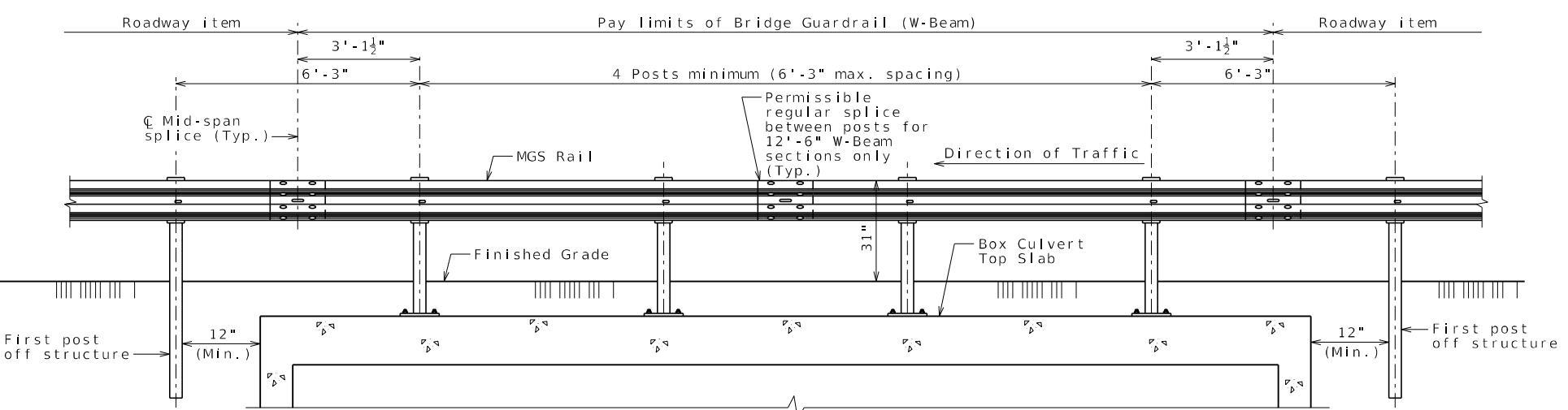
PART SECTION THRU TOP SLAB  
SHOWING RAIL POST ATTACHMENT  
(Close to headwall)

PART SECTION THRU TOP SLAB  
SHOWING RAIL POST ATTACHMENT  
(Far from headwall)



DETAIL B

SECTION A-A



TYPICAL ELEVATION

## MIDWEST GUARDRAIL SYSTEM (MGS) ON BOX CULVERT

Note: This drawing is not to scale. Follow dimensions.

Detailed Sep. 2025  
Checked Sep. 2025

Sheet No. 5 of 8

### General Notes:

Furnishing and installing posts and guardrail on culvert as shown on this sheet will be considered completely covered by the contract unit price for Bridge Guardrail (W-Beam).

Furnishing and installing posts and guardrail on culvert shall be in accordance with Sec 606 except as shown.

Rail posts shall be seated on 1/16-inch elastomeric pads having the same dimensions as the post base plate. Such pads may be any elastomeric material, plain or fibered, having hardness (durometer) of 50 or above, as certified by the manufacturer. Additional pads or half pads may be used in shimming for alignment. Post heights shown will increase by the thickness of the pad.

Posts and base plates shall be fabricated from ASTM A709 Grade 36 steel and galvanized.

Fabrication of structural steel shall be in accordance with Sec 1080.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Guardrail (W-beam).

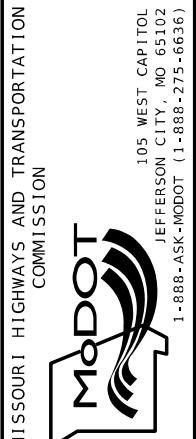
The minimum embedment depth in concrete with  $f'c = 4,000$  psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 8 inches.

See Missouri Standard Plans drawing 606.50 for details not shown.



DATE PREPARED  
10/29/2025  
ROUTE 25 STATE MO  
DISTRICT BR SHEET NO. 5  
COUNTY CAPE GIRARDEAU  
JOB NO. J9P3772  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9731

DESCRIPTION  
DATE  
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



© Cape Girardeau, MO Office  
3435 William St., Cape Girardeau, MO 63701  
Certificate of Authority: F200/028644  
Phone: 573-222-5632, BFW Engineering & Testing, Inc.  
Copyright © Bacon Farmer Workman Engineering & Testing, Inc.



DATE PREPARED  
10/29/2025

ROUTE 25	STATE MO
DISTRICT BR	SHEET NO. 6
COUNTY CAPE GIRARDEAU	
JOB NO. J9P3772	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9731	

**Finished Bend Diameters D and Hook Dimensions**

Size	Case	D	A or G			J
			90°	180°	180°	
#4	1	3"	8"	6"	4"	
#5	1	3 3/4"	10"	7"	5"	
#6	1	4 1/2"	12"	8 1/4"	6"	
#7	2	5 1/4"	14"	9 1/4"	7"	
	3	7"	15"	11 1/2"	8 3/4"	
#8	2	6"	16"	11"	8"	
	3	8"	17"	13 1/4"	10"	
#9	1	9 1/2"	19 1/2"	15 1/2"	11 1/4"	
#10	1	10 3/4"	22"	17 1/2"	13 1/4"	
#11	1	12"	24 1/2"	19 1/2"	14 5/8"	
#14	1	18 1/4"	31 1/4"	27 1/2"	21 5/8"	
#18	1	24"	41 1/2"	36 1/4"	28 1/2"	

**Stirrup Pin Bend Shapes (S)**

Size	Case	D	A or G			H	J
			90°	135°	180°		
#4	2	2"	4 1/4"	4 1/2"	5"	2 7/8"	3"
	3	3"	5"	5 1/4"	6"	3"	4"
#5	2	2 1/2"	5 3/4"	5 3/4"	5 3/4"	3 5/8"	3 1/2"
	3	3 3/4"	6 1/2"	6 1/2"	7"	3 7/8"	5"
#6	1	4 1/2"	12"	7 3/4"	8 1/4"	4 5/8"	6"

Applicable for all grades of steel.  
Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.

**Reinforcing Steel Totals (Pounds)**

By Size	Box Culvert	
	Plain	Epoxy
W5	0	0
4	6552	0
5	14478	0
6	18300	0
7	1549	0
8	1284	0
9	127	0
10	0	0
11	0	0
14	0	0
18	0	0
By Type	42,290	0

**BENDING DIAGRAMS AND REINFORCING STEEL TOTALS**

Note: This drawing is not to scale. Follow dimensions.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
MODOT 105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

Detailed Sep. 2025  
Checked Sep. 2025

© Cape Girardeau, MO Office  
3435 William St., Cape Girardeau, MO 63701  
Certificate of Authority: F200/028644  
Phone: 573-222-5632 BFWEngineering.com  
Copyright © Bacon Farmer Workman Engineering & Testing, Inc.

Bill of Reinforcing Steel																	
No. Req.	Size/ Mark	Location	Dimensions							Nom. Length	Actual Length	Weight					
			C	S	H	V	ft	in.	ft	in.	ft	in.	lb				
		BOX CULVERT															
59	6	A100	TOP SLAB	20	25	9.000					25	9	25.9	2282			
42	6	A101	TOP SLAB	20	V	23.875					2	0	2.0	849			
		INCR. = 6.750 IN.									24	11	24.11				
42	6	A102	TOP SLAB	20	V	2 6.375					2	6	2.6	883			
		INCR. = 6.750 IN.									25	6	25.6				
153	5	A103	BOTTOM SLAB	20	25	9.000					25	9	25.9	4109			
46	5	A104	BOTTOM SLAB	20	V	21.500					22		22	654			
		INCR. = 6.250 IN.									25	5	25.5				
46	5	A105	BOTTOM SLAB	20	V	21.750					22		22	654			
		INCR. = 6.250 IN.									25	5	25.5				
170	5	B100	EXT. WALLS	10			12.000	10	10.000			12	10	12.7	2231		
142	5	B101	INT. WALL	10			12.000	10	10.000			12	10	12.7	1864		
4	8	D100	HEADWALLS	20	40	0.750					40	1	40.1	428			
4	9	D101	HEADWALLS	20		9.4000					9	4	9.4	127			
12	5	E100	EXT. WINGS	20	3	11.000					3	11	3.11	49			
12	5	E101	INT. WINGS	20		7.9.500					7	10	7.10	98			
18	4	F100	TOP SLAB	20	36	0.000					36	0	36.0	433			
46	4	F101	TOP SLAB	20		35.9.000					35	9	35.9	1099			
30	4	F102	U.S. APRON	20		36.3.000					36	3	36.3	726			
30	4	F103	D.S. APRON	20		24.2.000					24	2	24.2	484			
60	4	F104	BOTTOM SLAB	20		36.1.000					36	1	36.1	1446			
28	4	F105	U.S. WINGWALLS	20	V	12.4.500					12	5	12.5	436			
		INCR. = 43.625 IN.									34	2	34.2				
12	4	F106	D.S. WINGWALLS	20		24.2.000					24	2	24.2	194			
16	4	F107	D.S. WINGWALLS	20	V	12.4.125					12	4	12.4	191			
		INCR. = 43.875 IN.									23	4	23.4				
64	4	F108	WALLS	20		36.1.000					36	1	36.1	1543			
78	5	G100	U.S. EXT. WINGS	20	V	22.750					23		23	569			
		INCR. = 3.250 IN.									12	1	12.1				
48	5	G101	D.S. EXT. WINGS	20	V	5.9.250					5	9	5.9	442			
		INCR. = 3.250 IN.									11	11	11.11				
64	5	G102	U.S. INT. WINGS	20	V	22.750					23		23	459			
		INCR. = 3.875 IN.									11	10	11.10				
40	5	G103	D.S. INT. WINGS	20	V	5.9.250					5	9	5.9	367			
		INCR. = 3.875 IN.									11	10	11.10				
8	5	G104	WINGS	20		12.2.000					12	2	12.2	102			
45	6	H100	TOP SLAB	20	20	4.000					20	4	20.4	1374			
52	6	H101	TOP SLAB	20		6.8.000					6	8	6.8	521			
8	8	H102	HEADWALLS	20		40.0.750					40	1	40.1	856			
8	5	H103	HEADWALLS	20		40.0.750					40	1	40.1	334			
212	6	H104	BOTTOM SLAB	20		9.6.000					9	6	9.6	3025			
208	5	J100	TOP SLAB/WALL	19		5.3.000	2	11.000			8	2	8.0	1736			
242	6	J101	BOTTOM SLAB/WALL	19		9.8.000	6	0.000			15	8	15.6	5634			
68	6	J102	D.S. WING/APRON	19	V	5.11.000	6	0.000			11	11	11.9	1515			
		INCR. = 2.250 IN.									18	1	17.11				
108	6	J103	U.S. WING/APRON	19	V	2.1.875	6	0.000			8	2	8.0	2109			
		INCR. = 2.250 IN.									18	2	18.0				
4	6	J104	WINGS	19		12.2.000	6	0.000			18	2	18.0	108			
12	7	J105	U.S. WINGS	15		30.1.875	7	10.000	2	4.750	7	5.500	38.0	37.11	930		
12	7	J106	D.S. WINGS	15		17.6.000	7	10.000	2	4.750	7	5.500	25.4	25.3	619		
39	5	R100	HEADWALLS	27S		17.000	2	5.750	6.000	2	2.500		4.250	4.250	6.7.6.5	261	
39	5	R101	HEADWALLS	10S			10.500	2	10.000				4	7	4.4	176	
39	5	R102	HEADWALLS	13S		17.000	2	10.000	17.000	2	10.000			9	6	9.2	373

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

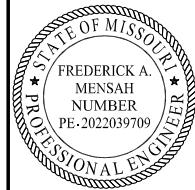
For bending diagrams and steel reinforcing totals, see Sheet No. 6.

Detailed Sep. 2025  
Checked Sep. 2025

All bars shall be ASTM 706 Grade 60.

Note: This drawing is not to scale. Follow dimensions.

Bill of Reinforcing Steel														
No. Req.	Size/ Mark	Location	Dimensions							Nom. Length	Actual Length	Weight		
			C	S	H	V	ft	in.	ft	in.	ft	in.	lb	
		BOX CULVERT												
59	6	A100	TOP SLAB	20	25	9.000					25	9	25.9	2282
42	6	A101	TOP SLAB	20	V	23.875					2	0	2.0	849



DATE PREPARED  
10/29/2025

ROUTE 25 STATE MO

DISTRICT BR SHEET NO. 8

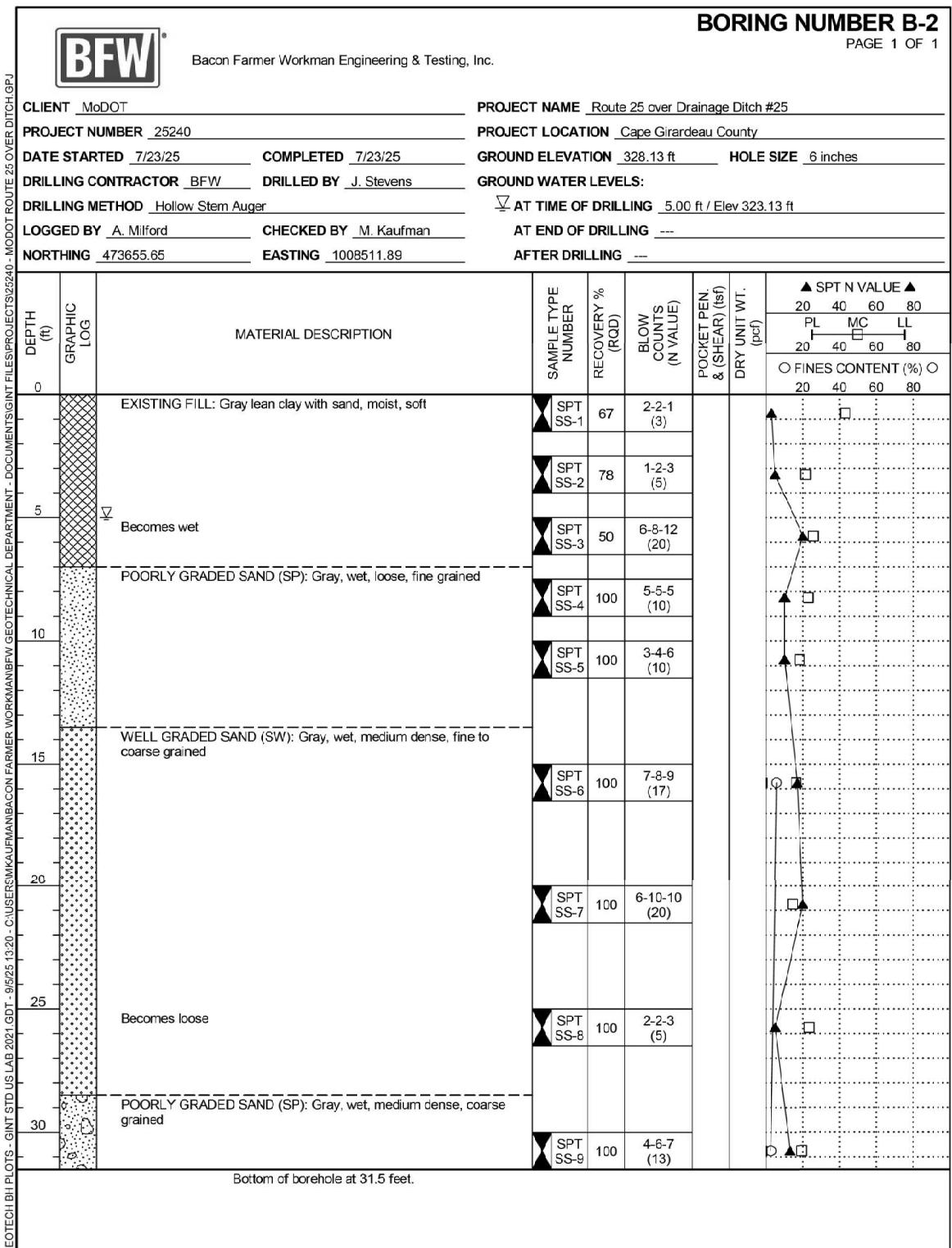
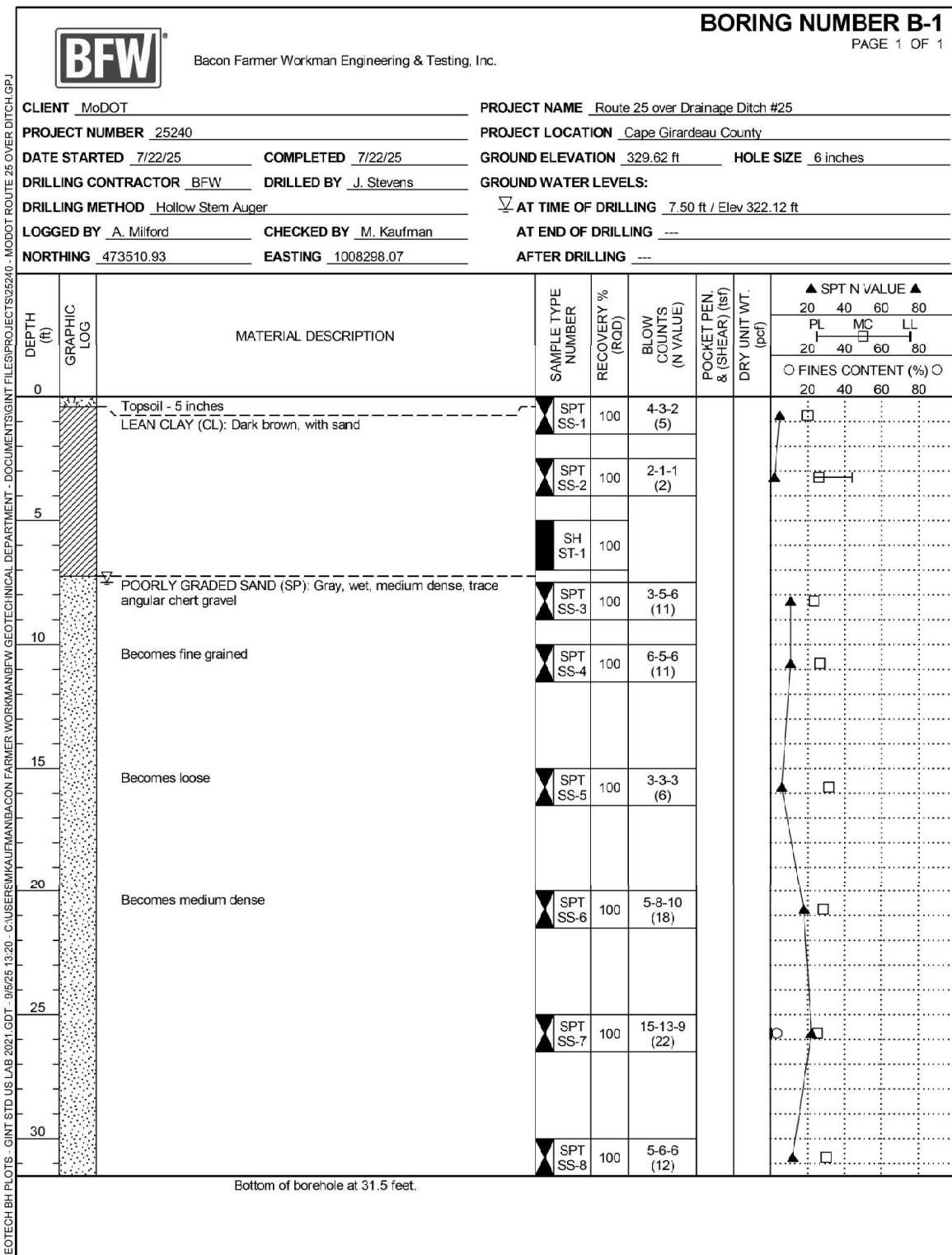
CAPE GIRARDEAU COUNTY

JOB NO. J9P3772

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9731



## BORING DATA

Note: For locations of borings, see Sheet No. 1.

DESIGN DESIGNATION  
 A.A.D.T. - 2024 = 1,592  
 A.A.D.T. - 2027 = 1,649  
 D.H.V. = 9.3%  
 T = 13.7%  
 V = 55 M.P.H.  
 D = 49.1%/50.9%

FUNCTIONAL CLASSIFICATION- MAJOR COLLECTOR

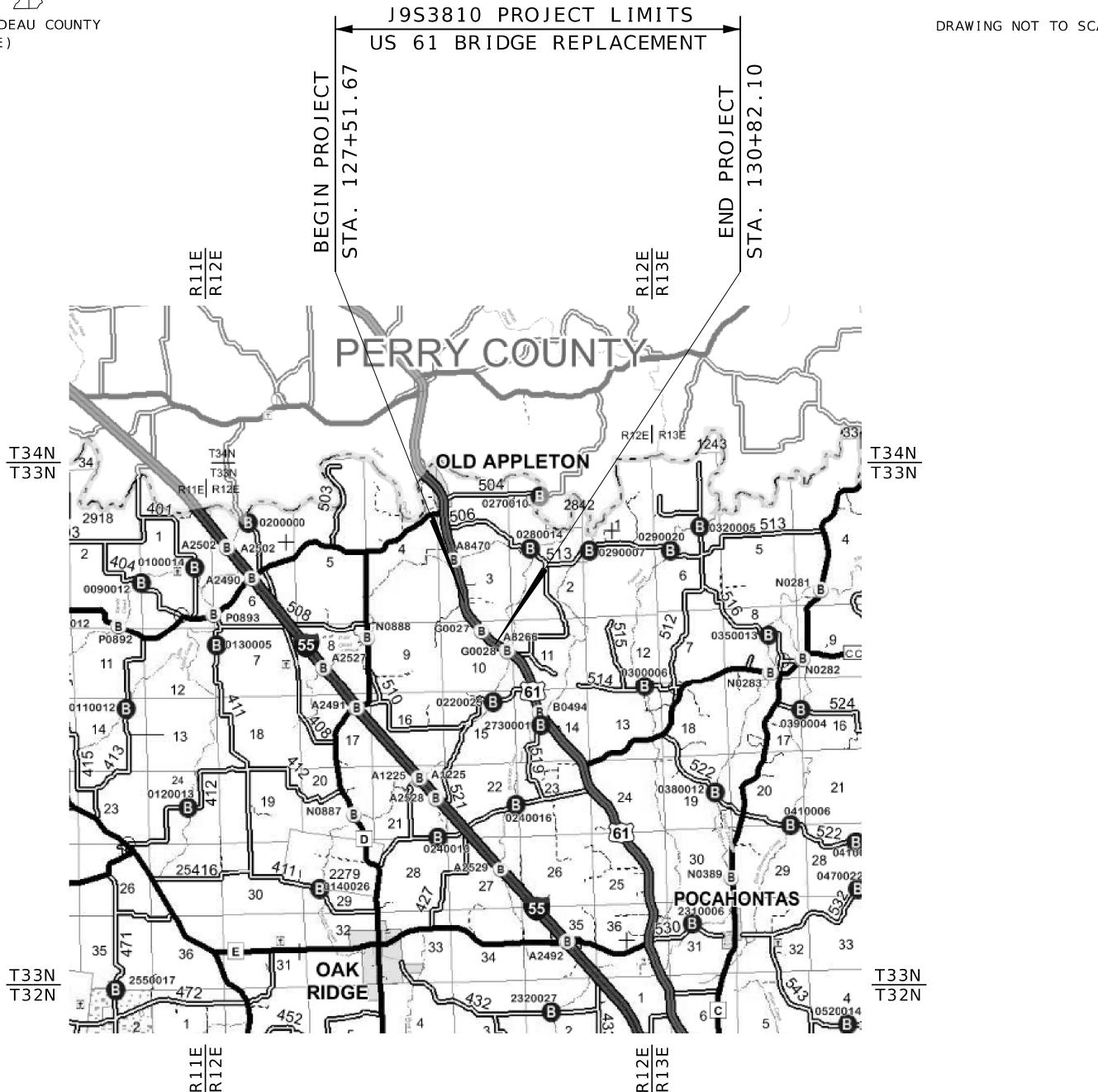
NO RIGHT-OF-WAY TAKINGS

# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION PLANS FOR PROPOSED STATE HIGHWAY



KEY MAP  
LOCATION OF CAPE GIRARDEAU COUNTY  
(NOT TO SCALE)

## CAPE GIRARDEAU



### CONVENTIONAL SYMBOLS (USED IN PLANS)

	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
GUARD CABLE		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	- FO -	- FO -
OVERHEAD CABLE TV	- OTV -	- OTV -
UNDERGROUND CABLE TV	- UTV -	- UTV -
OVERHEAD TELEPHONE	- OT -	- OT -
UNDERGROUND TELEPHONE	- UT -	- UT -
OVERHEAD POWER	- OE -	- OE -
UNDERGROUND POWER	- UE -	- UE -
SANITARY SEWER	- S -	- S -
STORM SEWER	- SS -	- SS -
GAS	- G -	- G -
WATER	- W -	- W -
MANHOLE		
FIRE HYDRANT		
WATER VALVE		
WATER METER		
DROP INLET		
DITCH BLOCK		
GROUND MOUNTED SIGN		
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL		
FENCE		
CHAIN LINK		
WOVEN WIRE		
GATE POST		
BENCHMARK		

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION. IT IS, THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND STATUS OF ANY FACILITY. SUCH VERIFICATION INCLUDES DIRECT CONTACT WITH THE LISTED UTILITIES.

### INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET-----	1
TYPICAL SECTIONS (TS) (2 SHEET)-----	2
QUANTITIES (QU) (2 SHEETS)-----	3
PLAN-PROFILE (PP)-----	4
REFERENCE POINTS (RP)-----	5
COORDINATE POINTS (CP)-----	6
SPECIAL SHEET (SS)-----	7
TRAFFIC CONTROL SHEETS (TC)-----	8-10
BRIDGE DRAWINGS (US-61)	
A9732-----	1-19
CROSS SECTIONS (XS)-----	1-5

DATE PREPARED  
10/28/2025

ROUTE STATE  
US 61 MO

DISTRICT SHEET NO.  
SE 1

COUNTY CAPE GIRARDEAU

JOB NO.  
J9S3810

CONTRACT ID.

PROJECT NO.

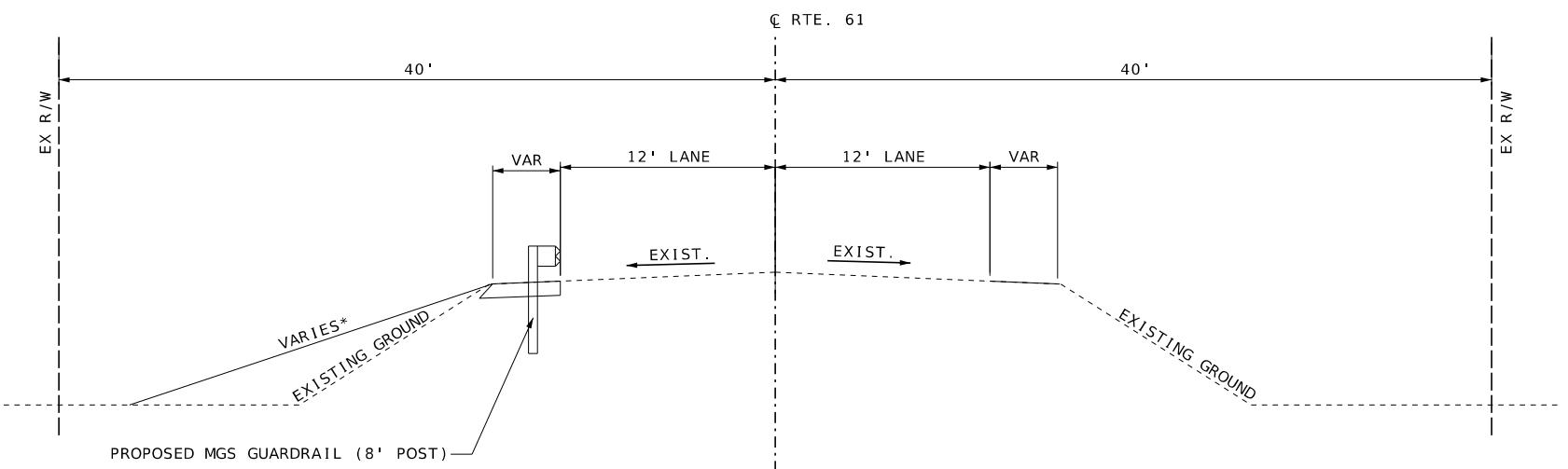
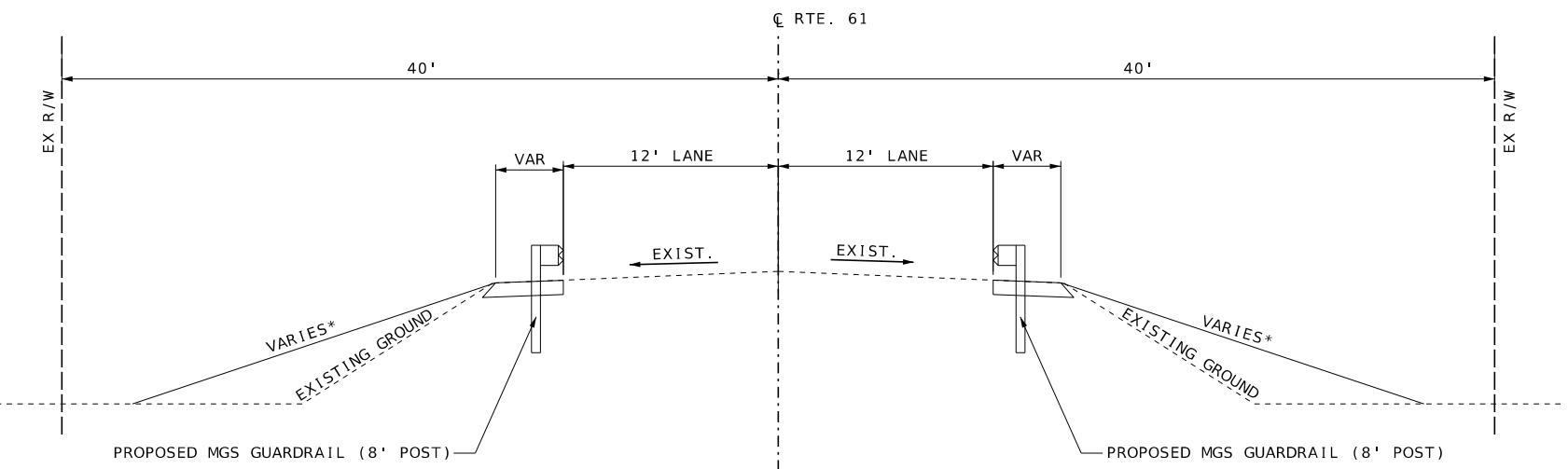
BRIDGE NO.  
A9732

DESCRIPTION

DATE

DESCRIPTION

\*SEE CROSS SECTION SHEETS  
FOR VARIOUS SLOPE CONDITIONS



OPTIONAL PAVEMENT		
LOCATION	HMA DESIGN	PCCP DESIGN
US-61	10.0" HMA 2" BITUMINOUS PAVEMENT MIXTURE PG58-28H (BP-1) OVER 8" BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	8.5" PCCP 15 FT. JOINT SPACING, 1 1/4" DOWELS, EXTENDED SLAB

TYPICAL SECTIONS  
CAPE GIRARDEAU - US-61  
SHEET 1 OF 2

**WILSON**  
&COMPANY  
ENGINEERS & ARCHITECTS

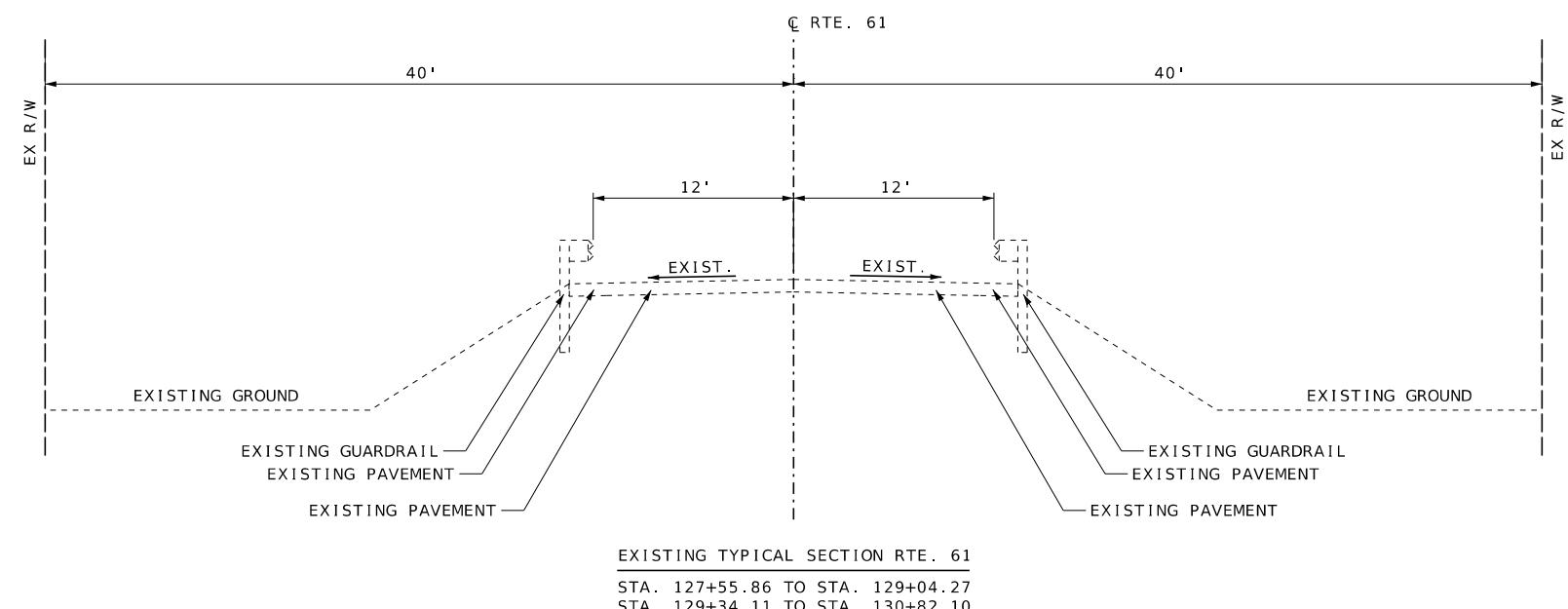
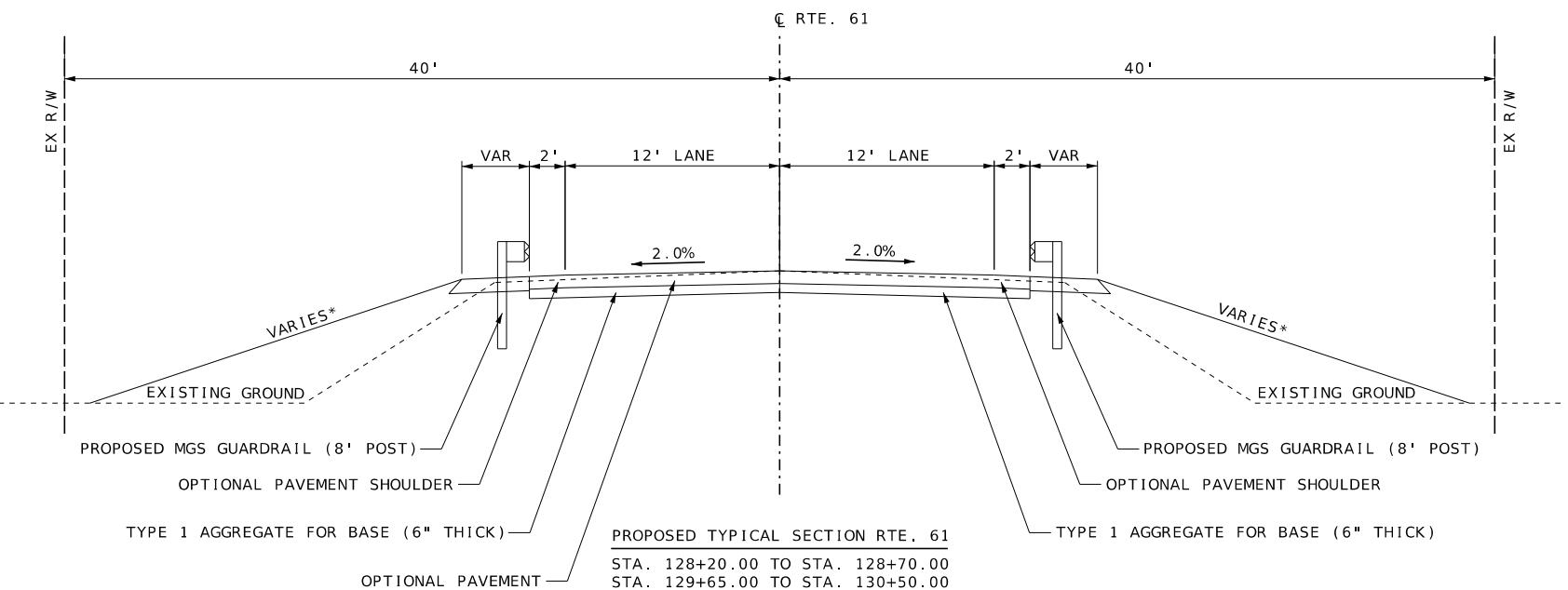
800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of  
Authority #2003007599



MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

DATE PREPARED  
9/18/2025  
ROUTE STATE  
US 61 MO  
DISTRICT SHEET NO.  
SE 2  
COUNTY  
CAPE GIRARDEAU  
JOB NO.  
J953810  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.  
A9732

\*SEE CROSS SECTION SHEETS  
FOR VARIOUS SLOPE CONDITIONS



OPTIONAL PAVEMENT		
LOCATION	HMA DESIGN	PCCP DESIGN
US-61	10.0" HMA 2" BITUMINOUS PAVEMENT MIXTURE PG58-28H (BP-1) OVER 8" BITUMINOUS PAVEMENT MIXTURE PGG64-22 (BASE)	8.5" PCCP 15 FT. JOINT SPACING, 1 $\frac{1}{4}$ " DOWELS, EXTENDED SLAB

TYPICAL SECTIONS  
CAPE GIRARDEAU - US-61  
SHEET 2 OF 2

**WILSON**  
**& COMPANY**  
ENGINEERS & ARCHITECTS

MODOT  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

Missouri Cert. of  
Authority #2003007599

MISSOURI STATE SEAL

DATE PREPARED	
9/18/2025	
ROUTE	STATE
61	MO
TRICT	SHEET NO.
5E	2
COUNTY	
E GIRARDEAU	
JOB NO.	
J953810	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
A9732	

002 TS 01 J953810 I1 002.dgn 6:17:15 PM 9/18/2025

REMOVAL OF IMPROVEMENTS					
BEGIN STATION	END STATION	SIDE	DESCRIPTION	QUANTITY	UNITS
G0027 - ROUTE US 61					
128+26	130+13	RT	GUARDRAIL	188	LF
128+25	130+25	LT	GUARDRAIL	200	LF
128+20	128+90	LT/RT	PAVEMENT	198	SY
129+44	130+50	LT/RT	PAVEMENT	288	SY
128+20		LT/RT	SAWCUT	26	LF
130+50		LT/RT	SAWCUT	26	LF
128+43		LT/RT	OBJECT MARKER	2	EA
128+57		LT/RT	OBJECT MARKER	2	EA
128+71		LT/RT	OBJECT MARKER	2	EA
129+79		RT	OBJECT MARKER	1	EA
129+93		RT	OBJECT MARKER	1	EA
			TOTAL	1	LS
			PAY TOTAL	1	LS

GUARDRAIL					
BEGIN STATION	END STATION	SIDE	MGS GUARDRAIL	MGS BRIDGE APPROACH TRANSITION SECTION (REGULAR/NO CURB)	TYPE A CRASHWORTHY END TERMINAL (MASH)
			(LF)	(EA)	(EA)
G0027 - ROUTE US 61					
128+02	128+90	LT		1	1
127+77	128+90	RT	25.0	1	1
129+44	130+58	LT	25.0	1	1
129+44	130+33	RT		1	1
			TOTAL	50.0	4
			PAY TOTAL	50.0	4

MOBILIZATION			
1 LUMP SUM			
CONTRACTOR FURNISHED SURVEYING & STAKING			
1 LUMP SUM			
SEEDING AND MULCHING			
BEGIN STATION	END STATION	COOL SEASON MIXTURES (AC)	MULCHING (AC)
G0027 - ROUTE US 61			
127+48	130+87	0.1	0.1
		TOTAL	0.1
		PAY TOTAL	0.1

DATE PREPARED	12/4/2025
ROUTE	STATE
US - 61	MO
DISTRICT	Sheet No.
SE	3
CAPE GIRARDEAU	
JOB NO.	J953810
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	A9732
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	DATE
MODOT	DESCRIPTION
105 WEST CAPITOL JEFFERSON CITY, MO 65102	
1-888-ASK-MODOT (1-888-275-6636)	
800 E 101st Terr., Ste. 200 Kansas City, MO 64131	
Phone (816) 701-3100	
Fax (816) 942-3013	
Missouri Cert. of Authority #2003007599	
WILSON & COMPANY	ENGINEERS & ARCHITECTS

PAVEMENT					
BEGIN STATION	END STATION	SIDE	TYPE 1 AGGREGATE BASE (4") (SY)	OPTIONAL PAVEMENT (SY)	GRAVEL (A) OR CRUSHED STONE (B) (SY)
G0027 - ROUTE US 61					
128+20	128+70	LT/RT	244.3	221.5	
129+64	130+50	LT/RT	364.4	337.0	
127+53	128+70	RT			69.6
127+78	128+70	LT			60.0
129+64	130+57	RT			47.4
129+64	130+83	LT			61.4
			TOTAL	608.7	558.5
			PAY TOTAL	609	559
					238

PERMANENT EROSION CONTROL					
BEGIN STATION	END STATION	SIDE	FURNISHING TYPE 2 ROCK BLANKET (CY)	PLACING TYPE 2 ROCK BLANKET (CY)	PERMANENT EROSION CONTROL GEOTEXTILE (SY)
G0027 - ROUTE US 61					
128+71	128+98	LT/RT	66	66	98
129+37	129+64	LT/RT	90	90	135
			TOTAL	156	156
			PAY TOTAL	156	156
					233

EARTHWORK				
BEGIN STATION	END STATION	SIDE	CLASS A EXCAVATION (CY)	EMBANKMENT IN PLACE (CY)
G0027 - ROUTE US 61				
128+20	128+90	LT/RT		
129+44	130+50	LT/RT		
127+56	130+82	LT/RT	4	290
			TOTAL	4
			PAY TOTAL	4
				290

PAVEMENT MARKING				
BEGIN STATION	END STATION	SIDE	PERM. 4" YELLOW CLASS 1 PAVEMENT MARKING PAINT TYPE P BEADS (LF)	PERM. 4" WHITE CLASS 1 PAVEMENT MARKING PAINT TYPE P BEADS (LF)
G0027 - ROUTE US 61				
127+70	131+00	CL	660	
127+70	131+00	LT		330
127+70	131+00	RT		330
			TOTAL	660
			PAY TOTAL	660
				660

TEMPORARY EROSION CONTROL						
BEGIN STATION	END STATION	SIDE	SILT FENCE (LF)	TYPE 2C EROSION CONTROL BLANKET (SY)	TYPE C BERM (LF)	SEDIMENT REMOVAL (CY)
G0027 - ROUTE US 61						
127+42	128+74	RT	132			1.2
127+70	128+75	LT	104			0.9
129+65	130+65	RT	104			1.0
129+64	130+87	LT	124			1.2
127+50	128+71	RT		182		
127+93	128+71	LT		139		
129+64	130+59	RT		51		
129+64	130+84	LT		112		
128+71	129+00	LT/RT		106	10.0	
129+34	129+64	LT/RT		117	10.0	
			TOTAL	464	484	223
			PAY TOTAL	464	484	223
						24

SIGN	SIZE IN.	AREA SQ. FT.	QTY EACH	TOTAL AREA SQ. FT.	QTY RELOC EACH	TOTAL RELOC SQ. FT.	SIGN NUM.	DESCRIPTION	SIGN	SIZE IN.	AREA SQ. FT.	QTY EACH	TOTAL SQ. FT.	QTY RELOC EACH	TOTAL RELOC SQ. FT.	SIGN NUM.	DESCRIPTION	ITEM NUMBER	TOTAL QTY	EFFECTIVE: 07-01-2025				
																				DESCRIPTION				
WARNING SIGNS																								
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)	E05-1	36X48	12.00										6122008	IMPACT ATTENUATOR 40 MPH (SAND BARRELS)		
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)	E05-2	48X36	12.00										6122009	IMPACT ATTENUATOR 45 MPH (SAND BARRELS)		
WO1-2L	48X48	16.00						CURVE (SYMBOL LEFT)	E05-2a	48X36	12.00										6122010	IMPACT ATTENUATOR 50 MPH (SAND BARRELS)		
WO1-2R	48X48	16.00						CURVE (SYMBOL RIGHT)	GO20-1	60X24	10.00										6122012	IMPACT ATTENUATOR 55 MPH (SAND BARRELS)		
WO1-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)	GO20-2	48X24	8.00										6122014	IMPACT ATTENUATOR 60 MPH (SAND BARRELS)		
WO1-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)	GO20-4	36X18	4.50										6122017	IMPACT ATTENUATOR 65 MPH (SAND BARRELS)		
WO1-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT)	GO20-4a	42X30	8.75										6122019	IMPACT ATTENUATOR 70 MPH (SAND BARRELS)		
WO1-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT)	GO20-4a	18X12	1.50										6122020	REPLACEMENT SAND BARREL		
WO1-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)	GO20-5aP	36X24	6.00										6122030	IMPACT ATTENUATOR (RELOCATION)		
WO1-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-8a	24X18	3.00	2	6.00			52					6123001	TRUCK MOUNTED ATTENUATOR (TMA)		
WO1-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)	MO4-9L	48X36	12.00										6161008	ADVANCED WARNING RAIL SYSTEM		
WO1-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-9R	48X36	12.00										6161012	BUOYS (BOATS KEEP OUT)		
WO1-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)	MO4-9P	48X12	4.00										6161013	BUOYS (NO WAKE)		
WO1-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)	MO4-10L	48X18	6.00										6161014	SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)		
WO1-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)	MO4-10R	48X18	6.00										6161025	CHANNELIZER (TRIM LINE)		
WO1-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)												6161030	8 TYPE III MOVEABLE BARRICADE			
WO1-8	18X24	3.00						CHEVRON (SYMBOL)	R1-1	48X48	13.25										6161033	DIRECTION INDICATOR BARRICADE		
WO1-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)	R1-2	48TR1	6.93										6161040	FLASHING ARROW PANEL		
WO3-1	48X48	16.00						STOP AHEAD (SYMBOL)	R1-2a	36X36	9.00										6161047	TYPE III OBJECT MARKER		
WO3-2	48X48	16.00						YIELD AHEAD (SYMBOL)	R1-3P	30X12	2.50										6161055	SEQUENTIAL FLASHING WARNING LIGHT		
WO3-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)	R2-1	36X48	12.00										6161070	TUBULAR MARKER		
WO3-4	48X48	16.00						BE PREPARED TO STOP	R3-1	48X48	16.00										6161095	RADAR SPEED ADVISORY SYSTEM		
WO3-5	48X48	16.00						SPEED LIMIT AHEAD	R3-2	48X48	16.00										6161096	CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED		
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)	R3-3	36X36	9.00										6161098A	CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED		
WO4-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)	R3-4	48X48	16.00										6161099	2 CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED		
WO4-1aL	48X48	16.00						MERGE (LEFT)	R3-7L	30X30	6.25										6162000A	WORK ZONE TRAFFIC SIGNAL SYSTEM		
WO4-1aR	48X48	16.00						MERGE (RIGHT)	R3-7R	30X30	6.25										6162002	TEMPORARY LONG-TERM RUMBLE STRIPS		
WO5-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS	R4-1	36X48	12.00										6173600D	TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/RETAINED		
WO5-3	48X48	16.00						ONE LANE BRIDGE	R4-2	36X48	12.00										6173602B	TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/COMMISSION RETAINED		
WO5-5	48X48	16.00						NARROW LANES	R4-7a	36X48	12.00										6174000A	TEMP. TRAFFIC BARRIER HEIGHT TRANSITION		
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)	R4-8a	36X48	12.00										6175010A	RELOCATING TEMPORARY TRAFFIC BARRIER		
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)	R5-1	30X30	6.25										6176000B	TEMPORARY TRAFFIC BARRIER COMMISSION FURNISHED/RETAINED		
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)	R5-1a	36X24	6.00										6177000B	TEMP. TRAFFIC BARRIER HEIGHT TRANSITION COMMISSION FURNISHED/RETAINED		
WO7-3a	30X24	5.00						NEXT XX MILES (PLAQUE)	R6-1L	54X18	6.75										6208064A	TEMPORARY RAISED PAVEMENT MARKER		
WO8-1	48X48	16.00						BUMP	R6-1R	54X18	6.75										9029400	TEMPORARY TRAFFIC SIGNALS		
WO8-2	48X48	16.00						DIP	R6-2L	24X30	5.00										9029401	TEMPORARY TRAFFIC SIGNALS AND LIGHTING		
WO8-3	48X48	16.00						PAVEMENT ENDS	R6-2R	24X30	5.00													
WO8-4	48X48	16.00						SOFT SHOULDER	R9-9	24X12	2.00													
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)																
WO8-6	48X48	16.00						TRUCK CROSSING	R9-11L	24X18	3.00													
WO8-6c	48X48	16.00						TRUCK ENTRANCE	R9-11R	24X18	3.00													
WO8-7	36X36	9.00						LOOSE GRAVEL	R10-6	24X36	6.00													
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL	R11-2	48X30	10.00	2	20.00			29								
WO8-9	48X48	16.00						LOW SHOULDER	R11-3a	60X30	12.50	2	25.00			61								
WO8-11	48X48	16.00						UNEVEN LANES	R11-4	60X30	12.50	2	25.00			62								
WO8-12	48X48	16.00						NO CENTER LINE	CONST-3A	60X48	20.00	</												

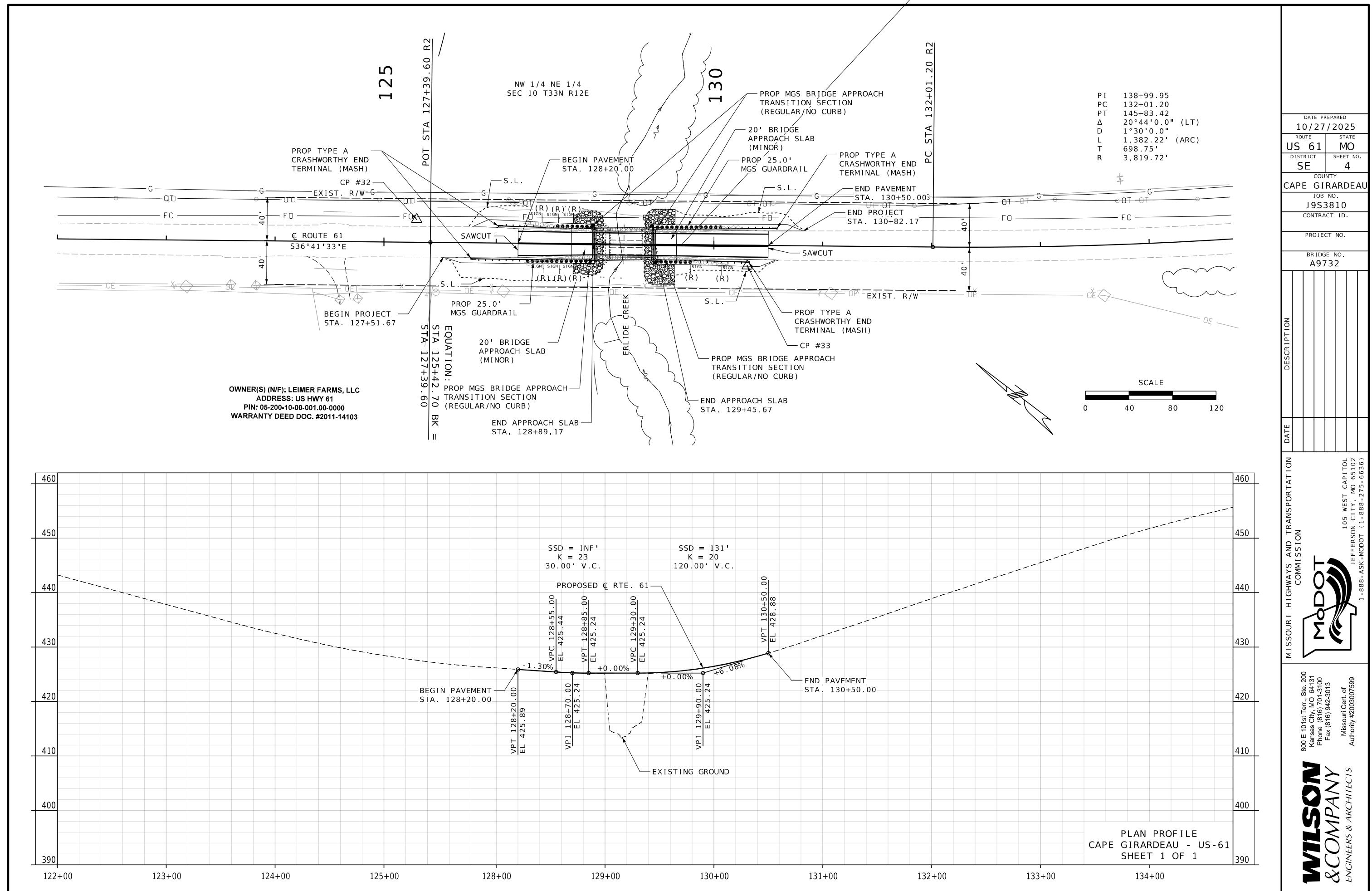
SUMMARY OF QUANTITIES  
SHEET 2 OF 2

**WILSON**  
*& COMPANY*  
ENGINEERS & ARCHITECTS

MISSOURI  
DEPARTMENT OF  
TRANSPORTATION  
**MODOT**  
COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102

COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY MO 65102

The logo for the Ministry of Defence (MOD) of the United Kingdom, featuring a stylized 'MOD' monogram inside a shield shape.



# WILSON & COMPANY

ENGINEERS & ARCHITECTS



MODOT Missouri Department of Transportation

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

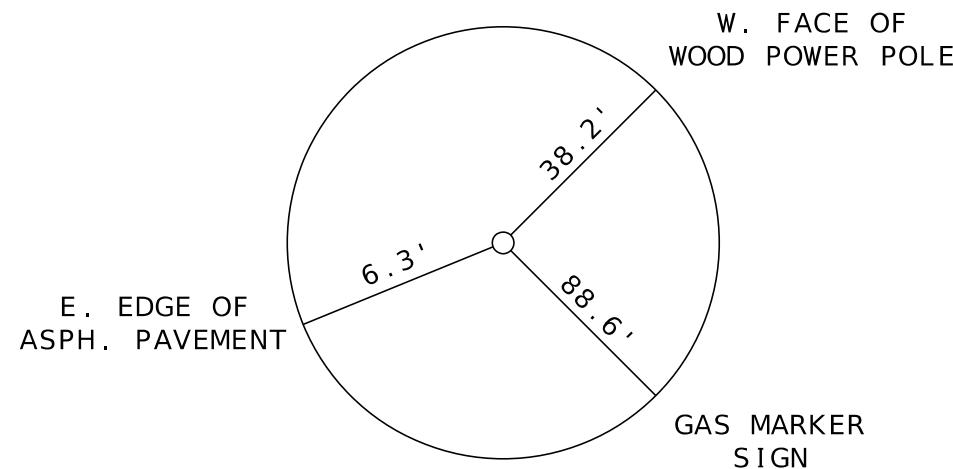
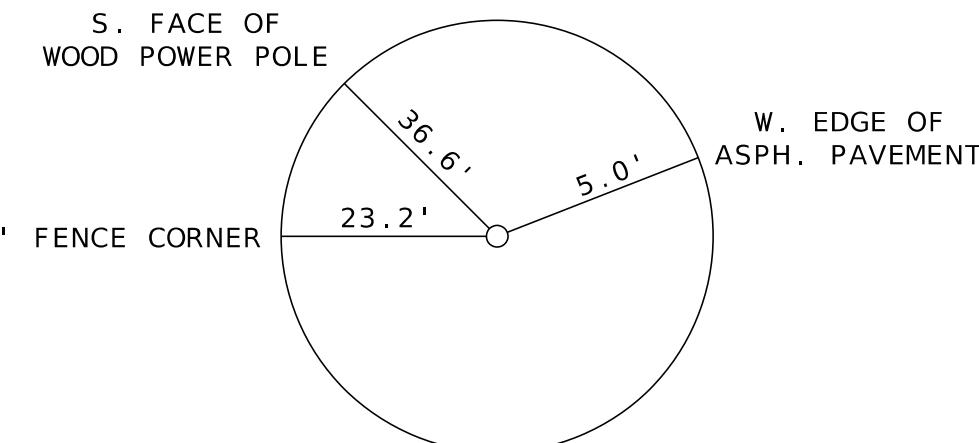
1-888-ASK-MODOT (1-888-275-6636)

Missouri Cert. of  
Authority #2003007599

Kansas City, MO 64131  
Phone: (816) 701-3100  
Fax: (816) 942-3013

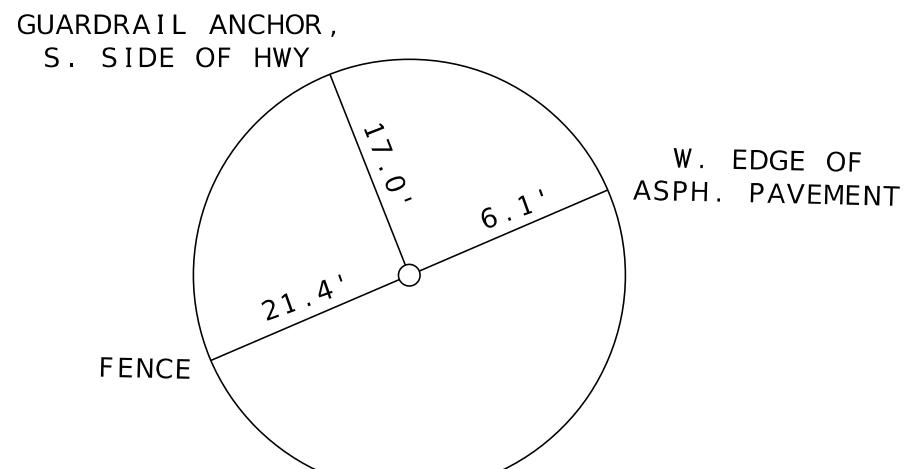
BM#35 ELEV 463.70  
SET RAILROAD SPIKE IN THE E. FACE OF A WOOD UTILITY POLE, APPROX. 36' WNW OF CONTROL POINT #31.

BM#36 ELEV 438.08  
SET RAILROAD SPIKE IN THE W. FACE OF THE 1ST WOOD UTILITY POLE ON THE E. SIDE OF HWY, S. OF THE BRIDGE.

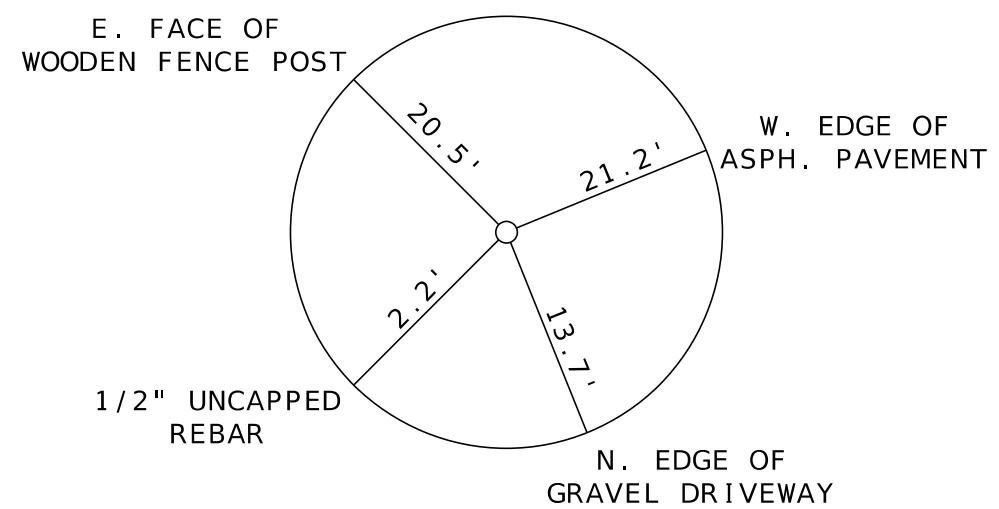


CP #31  
N. 632056.877  
E. 1051196.713  
ELEV. 459.28  
5/8" REBAR W/ CAP

CP #32  
N. 631478.289  
E. 1051677.898  
ELEV. 425.23  
5/8" REBAR W/ CAP



CP #33  
N. 631210.716  
E. 1051827.642  
ELEV. 426.39  
5/8" REBAR W/ CAP



CP #34  
N. 630708.569  
E. 1052213.131  
ELEV. 462.10  
5/8" REBAR W/ CAP

REFERENCE POINT  
SHEET 1 of 1

**WILSON**  
&COMPANY  
ENGINEERS & ARCHITECTS

800 E 101st Ter., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of  
Authority #2003007599

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

DATE PREPARED  
9/22/2025  
ROUTE STATE  
US 61 MO  
DISTRICT SHEET NO.  
SE 5  
COUNTY  
CAPE GIRARDEAU  
JOB NO.  
J953810  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.  
A9732

ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES, MULTIPLY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION

COORDINATE SYSTEM MODIFIED STATE PLANE (GROUND)

HORIZONTAL DATUM NAD-83(2022) EPOCH 2010

VERTICAL DATUM NAVD-88: GNSS DERIVED

GEOID MODEL GEOID-18

ELEVATIONS DETERMINED BY TREKK Design Group, LLC

PROJECT PROJECTION FACTOR 1.0000057253

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM MO COORDINATE SYSTEM OF 1983

CONTROL STATION MODOT CHARLESTON CORS ARP

DESIGNATION MODOT PATTON CORS ARP

CORS\_ID MOPT

PID DR7393

LATITUDE 37°31'27.91539" (N)

LONGITUDE 90°00'47.19032" (W)

NORTHING (M) 187761.6660

EASTING (M) 293036.8440

ZONE 2401 (MO-East)

PROJECT AVERAGE GRID FACTOR 0.99992558

EXAMPLE OF PROJECT COORDINATE TO S.P.C.

PROJECT NORTHING X AVERAGE GRID FACTOR

= STATE PLANE NORTHING

PROJECT EASTING X AVERAGE GRID FACTOR

= STATE PLANE EASTING

EXAMPLE: CONTROL POINT #500

N 632056.88 X 0.99992558 = N 632009.842

E 1051196.71 X 0.99992558 = E 1051118.480

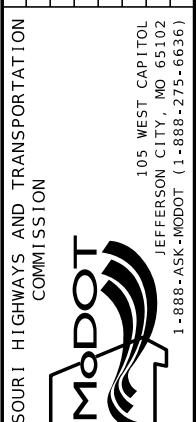
LINEAR UNIT CONVERSION

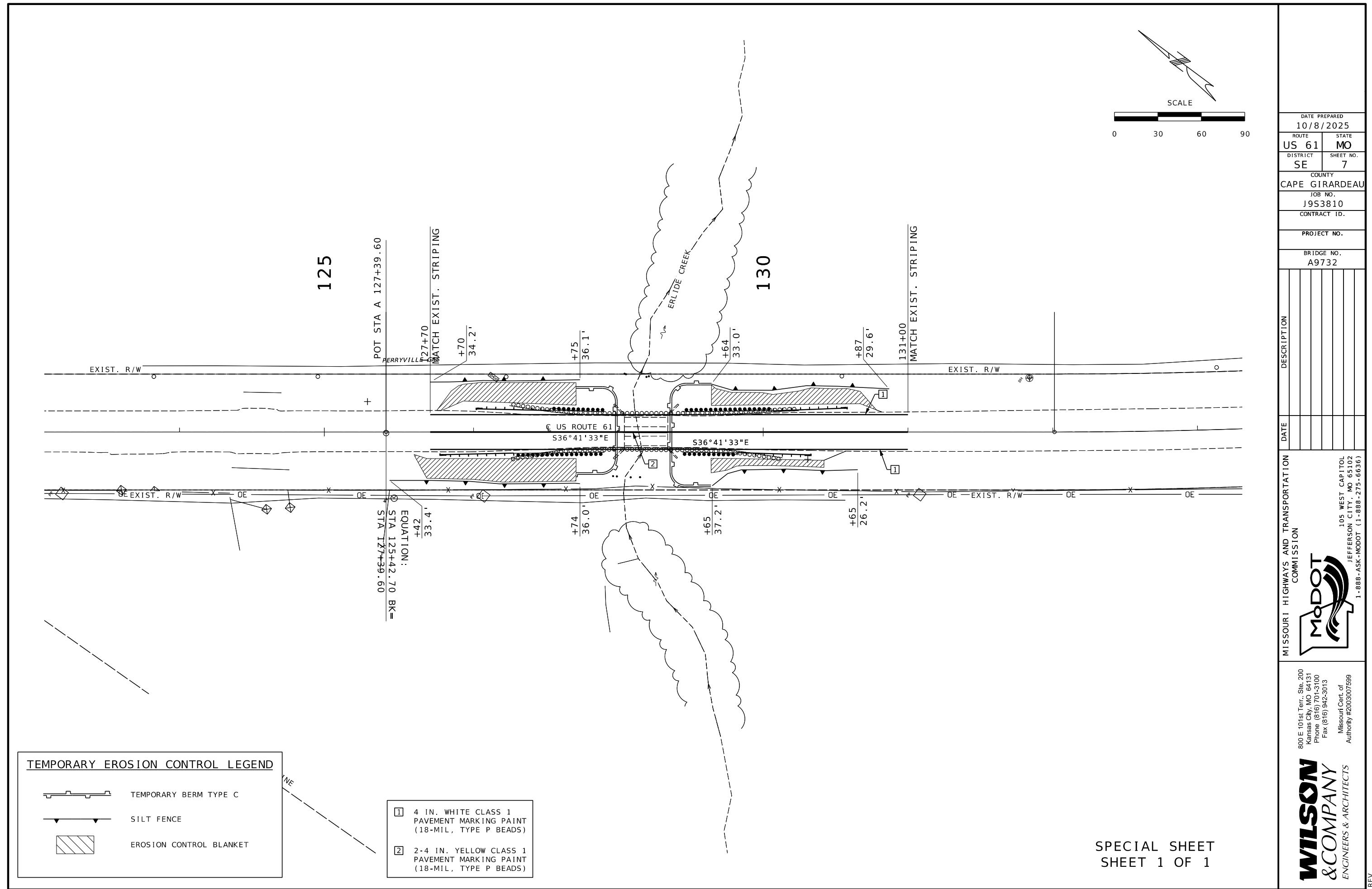
1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING									GPK POINT ID
SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION		GPK POINT ID
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)			
PROJECT CONTROL POINTS									
4	117+77.34	RT	19.31	632056.88	1051196.71	459.28	5/8" REBAR W/ ALUMINUM "TREKK CONTROL" CAP	31	
4	125+29.3	LT	20.97	631478.29	1051677.90	425.23	5/8" REBAR W/ ALUMINUM "TREKK CONTROL" CAP	32	
4	130+30.80	RT	18.85	631210.72	1051827.64	426.39	5/8" REBAR W/ ALUMINUM "TREKK CONTROL" CAP	33	
4	136+60.45	US-61	37.6	630708.57	1052213.13	462.10	5/8" REBAR W/ ALUMINUM "TREKK CONTROL" CAP	34	

ALIGNMENTS							
	97+83.90		0.00	633887.8422	1050548.4715	0.00	BEGINNING OF EXISTING CENTERLINE CHAIN
	101+13.20		0.00	633558.5764	1050553.2182	0.00	P.C.
	107+31.29		0.00	632952.7118	1050661.1092	0.00	P.I.
	113+08.76		0.00	632444.9243	1050931.4525	0.00	P.T.
	132+01.20		0.00	631085.3504	1051944.5737	0.00	P.C.
	138+99.95		0.00	630566.2577	1052410.8722	0.00	P.I.
	145+83.42		0.00	630148.8517	1052950.9298	0.00	P.T.
	159+76.90		0.00	629398.6164	1054125.2098	0.00	P.C.
	164+88.05		0.00	629069.3958	1054514.2207	0.00	P.I.
	169+75.79		0.00	628669.8550	1054791.6541	0.00	END OF EXISTING CENTERLINE CHAIN

DATE PREPARED		9/22/2025
ROUTE	STATE	US 61 MO
DISTRICT	SHEET NO.	SE 6
COUNTY		CAPE GIRARDEAU
JOB NO.	J9S3810	
CONTRACT ID.		
PROJECT NO.		
BRIDGE NO.	A9732	



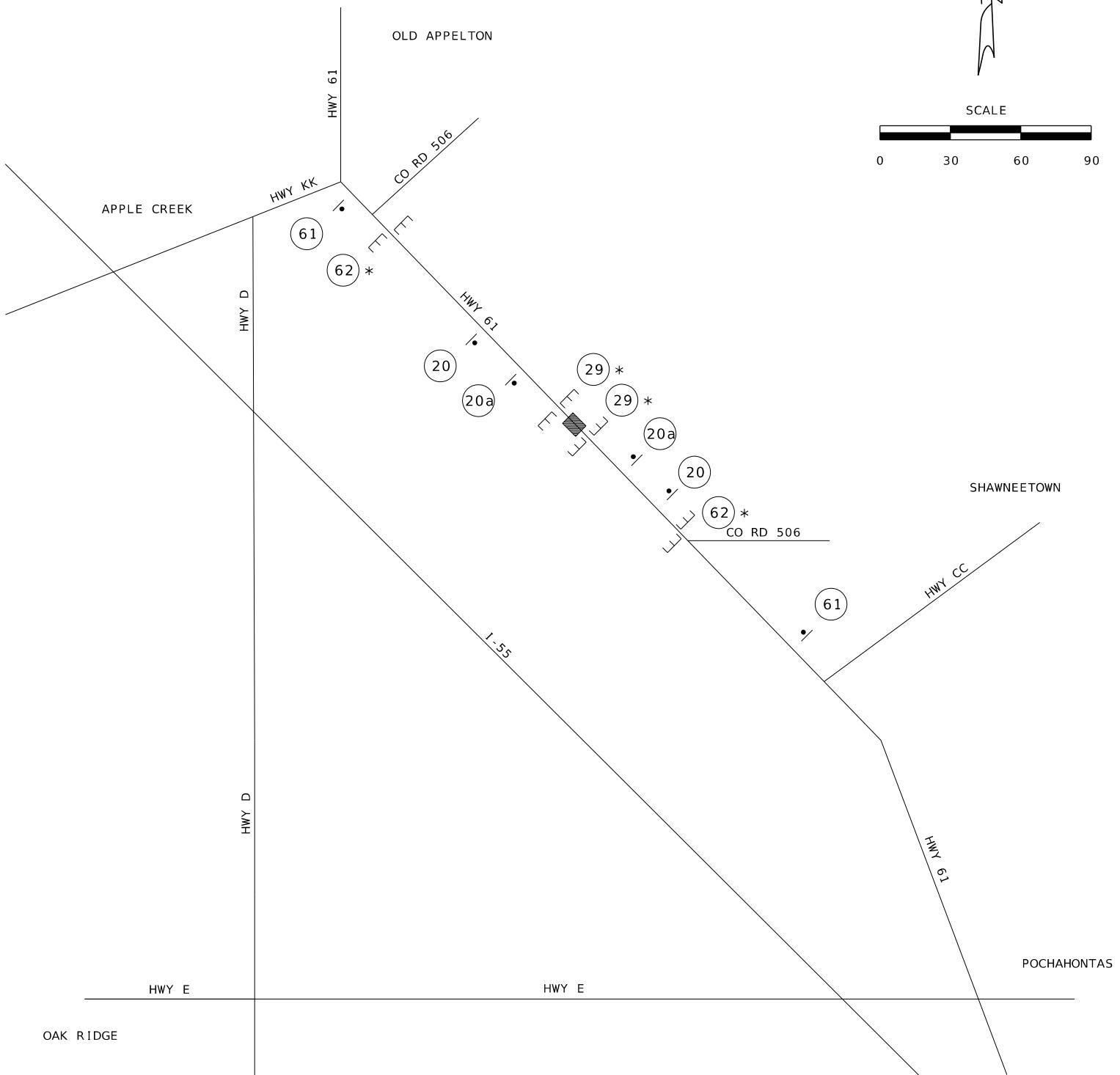
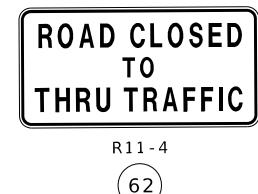
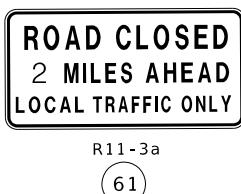


TRAFFIC CONTROL LEGEND

• SIGN (SINGLE SIDED)

— BARRICADE

■ WORK AREA



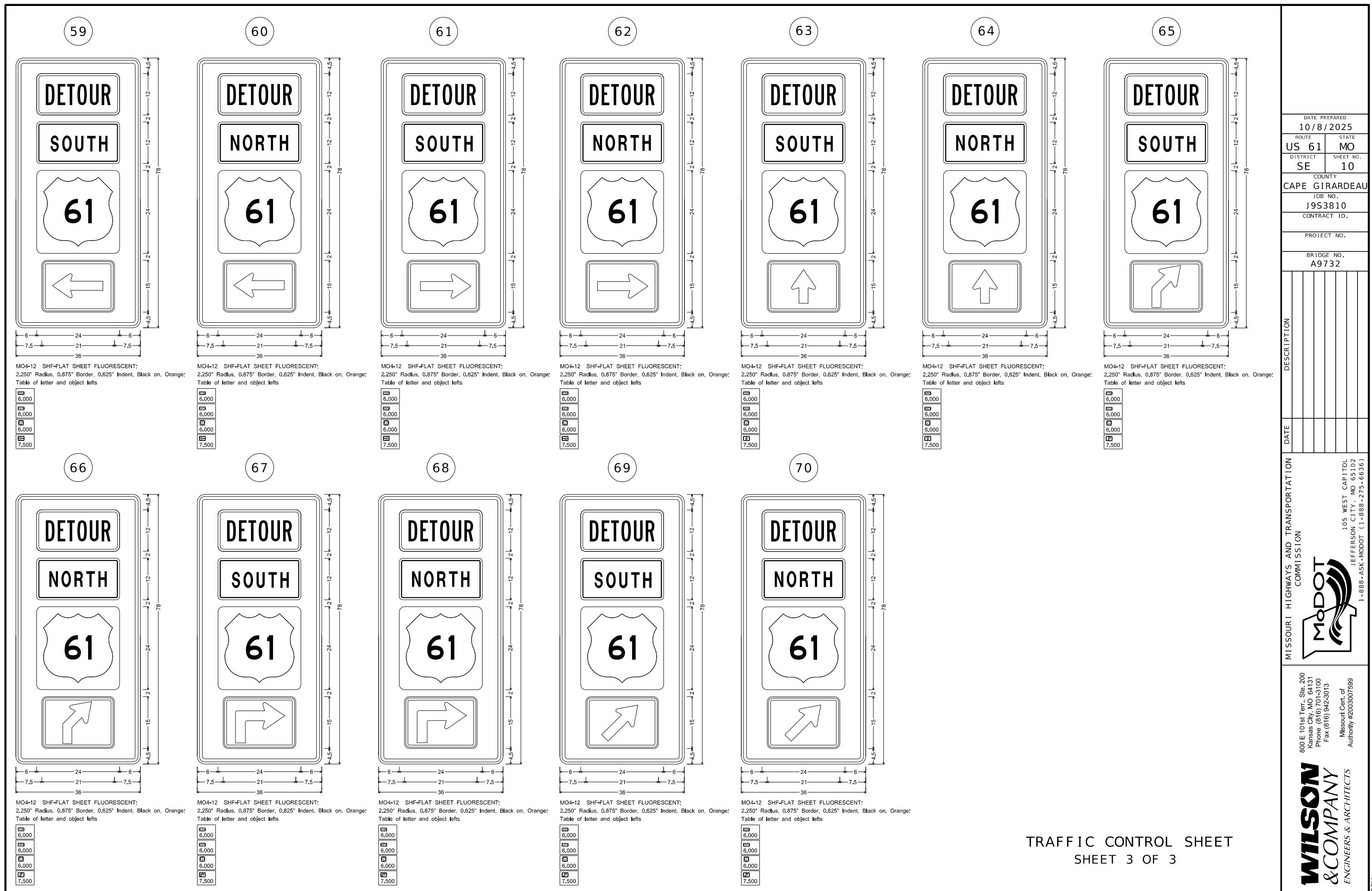
NOTES:

ANY EXISTING SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLAN SHALL BE COVERED

\*SIGN MOUNTED BARRICADE

TRAFFIC CONTROL SHEET  
SHEET 1 OF 3





TRAFFIC CONTROL SHEET  
SHEET 3 OF 3

**WILSON**  
&COMPANY  
ENGINEERS & ARCHITECTS

800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-2013  
Missouri Cert. of  
Authority #200307599

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

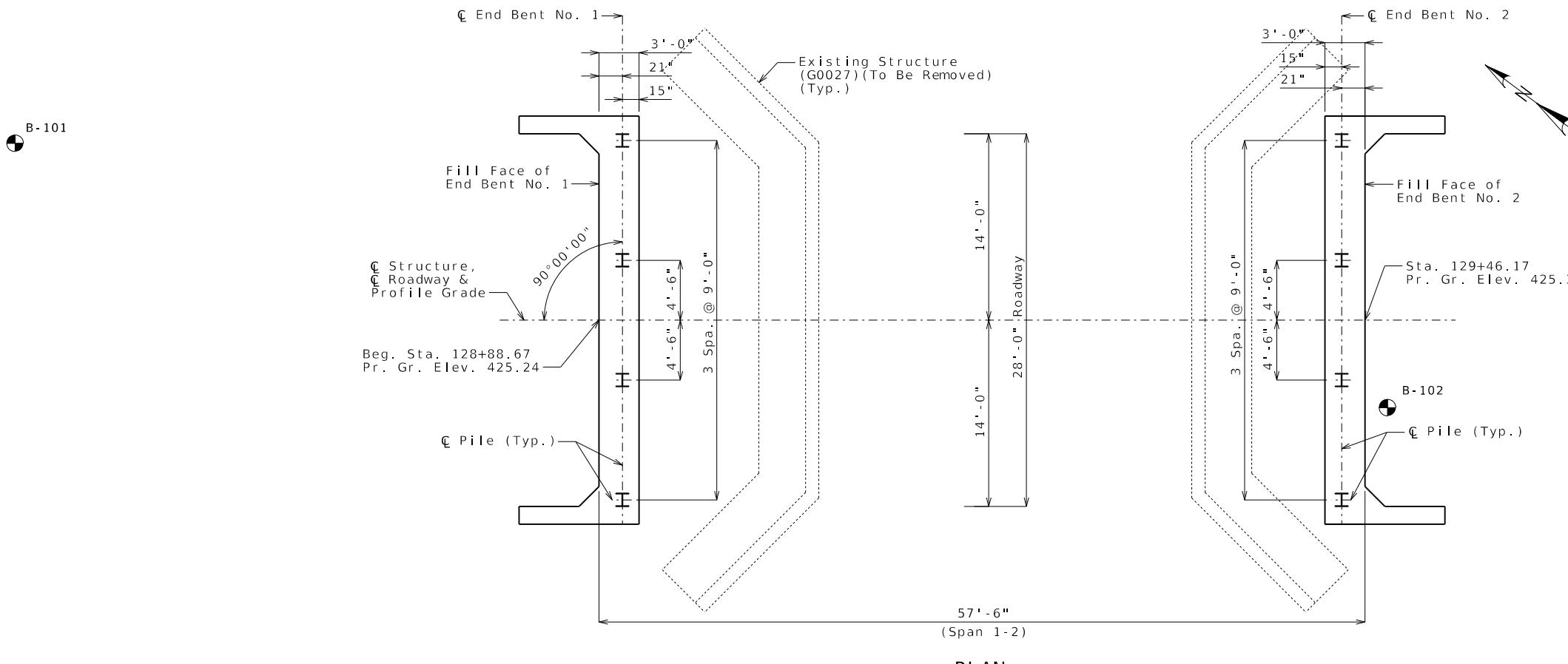
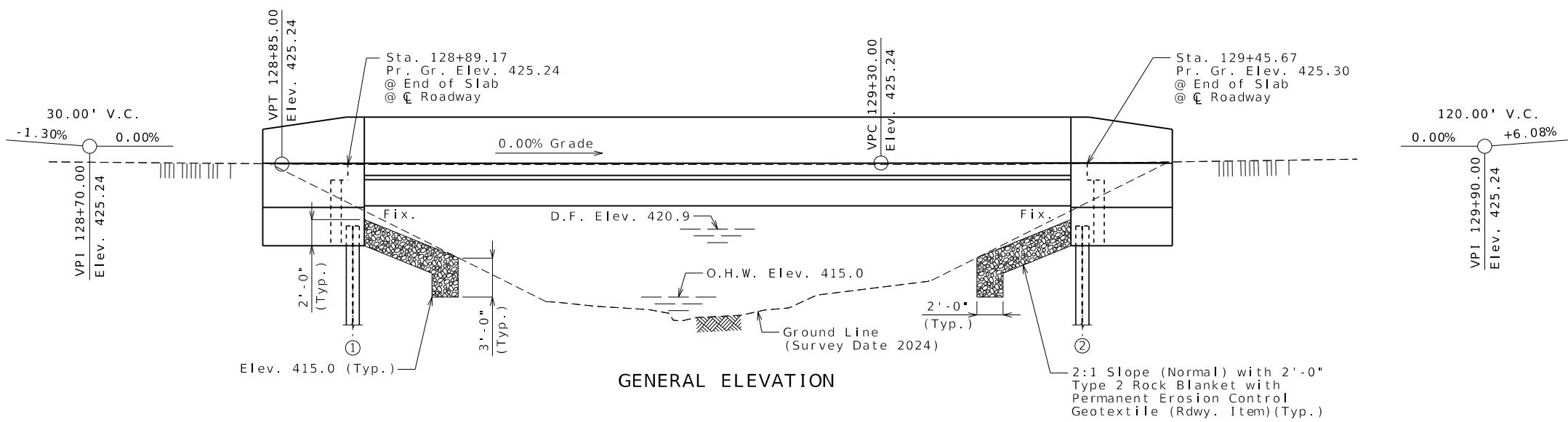
REV.

DATE PREPARED  
10/8/2025  
ROUTE 61 STATE MO  
DISTRICT SE SHEET NO. 10  
COUNTY CAPE GIRARDEAU  
JOB NO. J953810 CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9732

## (54') PRESTRESSED CONCRETE SPREAD BOX BEAM SPAN

SEC/SUR 10 TWP T33N RGE R12E

DATE PREPARED  
11/2/2025  
ROUTE 61 STATE MO  
DISTRICT BR SHEET NO. 1  
CAPE GIRARDEAU COUNTY  
JOB NO. J953810 CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9732



● Indicates location of borings.  
Notice and Disclaimer Regarding Boring Log Data

The locations of all subsurface borings for this structure are shown on the plan sheet(s) for this structure. The boring data for all locations indicated, as well as any other boring logs or other factual records of subsurface data and investigations performed by the department for the design of the project, are shown on Sheet(s) No. 19 and may be included in the Electronic Bridge Deliverables. They will also be available from the Project Contact upon written request. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the district or elsewhere.

The Commission does not represent or warrant that any such boring data accurately depicts the conditions to be encountered in constructing this project. A contractor assumes all risks it may encounter in basing its bid prices, time or schedule of performance on the boring data depicted here or those available from the district, or on any other documentation not expressly warranted, which the contractor may obtain from the Commission.

**WILSON**  
&COMPANY  
ENGINEERS & ARCHITECTS

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)  
MODOT 800 E 101st Ter., Ste. 200 Kansas City, MO 64131 Phone (816) 701-3100 Fax (816) 942-3013 Missouri Cert. of Authority #2003007599

Estimated Quantities				
Item	Substr.	Superstr.	Total	
Class 1 Excavation	cu. yard	60	60	
Removal of Bridge (G0027)	lump sum		1	
Bridge Approach Slab (Minor)	sq. yard	136	136	
Galvanized Structural Steel Piles (12 in.)	linear foot	136	136	
Pre-Bore for Piling	linear foot	120	120	
Pile Point Reinforcement	each	8	8	
Class B Concrete (Substructure)	cu. yard	24.8	24.8	
Type D Barrier	linear foot	139	139	
Slab on Concrete Beam	sq. yard	193	193	
24in., Prestressed Concrete Spread Box Beam	linear foot	164	164	
Slab Drain	each	8	8	
Vertical Drain at End Bents	each		2	
Plain Neoprene Bearing Pad	each		6	6

All concrete above the construction joint in the end bents is included in the Estimated Quantities for Slab on Concrete Beam.

All reinforcement in the end bents is included in the Estimated Quantities for Slab on Concrete Beam.

Cost of 24x4 ASTM A709 Grade 36 HP pile anchors and 3/4-inch diameter ASTM F3125 Grade A325 Type 1 bolts, complete in place, will be considered completely covered by the contract unit price for Galvanized Structural Steel Piles (12 in.).

Foundation Data		
Type	Bent Number	
	1	2
Load Bearing Pile	Pile Type and Size	HP 12x53
	Number	ea
	Approximate Length Per Each	ft
	Pile Point Reinforcement	ea
	Min. Galvanized Penetration (Elev.)	ft
	Minimum Tip Penetration (Elev.)	ft
	Criteria for Min. Tip Penetration	Min. Embed. Min. Embed.
	Pile Driving Verification Method	DF DF
	Resistance Factor	0.4 0.4
	Minimum Nominal Axial Compressive Resistance	kip

Minimum Nominal Axial Compressive Resistance = Maximum Factored Loads  
Resistance Factor

DF = FHWA-modified Gates Dynamic Pile Formula

Prebore for piles at Bents No. 1 and 2 to elevations 403.92 and 403.97, respectively.

All piles shall be galvanized down to the minimum galvanized penetration (elevation).

Pile point reinforcement need not be galvanized. Shop drawings will not be required for pile point reinforcement.

The contractor shall make every effort to achieve the minimum galvanized penetration (elevation) shown on the plans for all piles. Deviations in penetrations less than 5 feet of the minimum will be considered acceptable provided the contractor makes the necessary corrections to ensure the minimum penetration is achieved on subsequent piles.

HP piles are anticipated to be driven to refusal on rock. Review all borings for depth of rock and restrict driving as appropriate to comply with hard rock driving criteria in accordance with Sec 702. When pile refusal on rock occurs, as approved by the engineer, the minimum nominal axial compressive resistance is verified and no additional pile driving verification method is required.

#### Estimated Quantities for Slab on Concrete Beam

Item	Total
Class B-2 Concrete	cu. yard
Reinforcing Steel (Epoxy Coated)	pound

The table of Estimated Quantities for Slab on Concrete Beam represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for prestressed panels, all concrete and epoxy coated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be as shown on the plans and in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness class SC 4 and a finish type I, II or III.

Class B-2 Concrete quantity is based on minimum top flange thickness and minimum joint material thickness.

The prestressed panel quantities are not included in the table of Estimated Quantities for Slab on Concrete Beam.

Hydrologic Data	
Drainage Area	0.9 mi <sup>2</sup>
Design Flood Frequency	50 years
Design Flood Discharge	1,260 cfs
Design Flood (D.F.) Elevation	420.9
Base Flood (100-year)	
Base Flood Elevation	421.5
Base Flood Discharge	1,500 cfs
Estimated Backwater	1.0 ft
Average Velocity thru Opening	8.6 ft/s
Freeboard (50-year)	
Freeboard	1.0 ft
Roadway Overtopping	
Overtopping Flood Discharge	2,600 cfs
Overtopping Flood Frequency	>500 years
Overtopping Flood Elevation	425.1

#### General Notes:

##### Design Specifications:

2020 AASHTO LRFD Bridge Design Specifications (9th Ed.)  
2023 AASHTO Guide Specifications for LRFD Seismic Bridge Design (3rd Ed.)  
Seismic Design Category = B (Seismic Details)  
Design earthquake response spectral acceleration coefficient at 1.0 second period, SD1 = 0.25  
Acceleration Coefficient (effective peak ground acceleration coefficient), AS = 0.40

##### Design Loading:

Vehicular = HL-93  
Future Wearing Surface = 35 lb/sf  
Earth = 120 lb/ft<sup>2</sup>  
Equivalent Fluid Pressure = 45 lb/ft<sup>2</sup>  
Superstructure: Simply-Supported. Non-Composite for dead load.  
Composite for live load.

##### Design Unit Stresses:

Class B concrete (Substructure) f'c = 3,000 psi

Class B-1 Concrete (Barrier) f'c = 4,000 psi

Class B-2 Concrete (Superstructure, except Prestressed Beams and Barrier) f'c = 4,000 psi

Reinforcing Steel (ASTM A706 Grade 60) fy = 60,000 psi

Structural Steel HP Pile (ASTM A709 Grade 50) fy = 50,000 psi

For precast prestressed panel stresses, see Sheet No. 8.

For prestressed box beam stresses, see Sheet No. 7.

Reinforcing Steel:  
Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

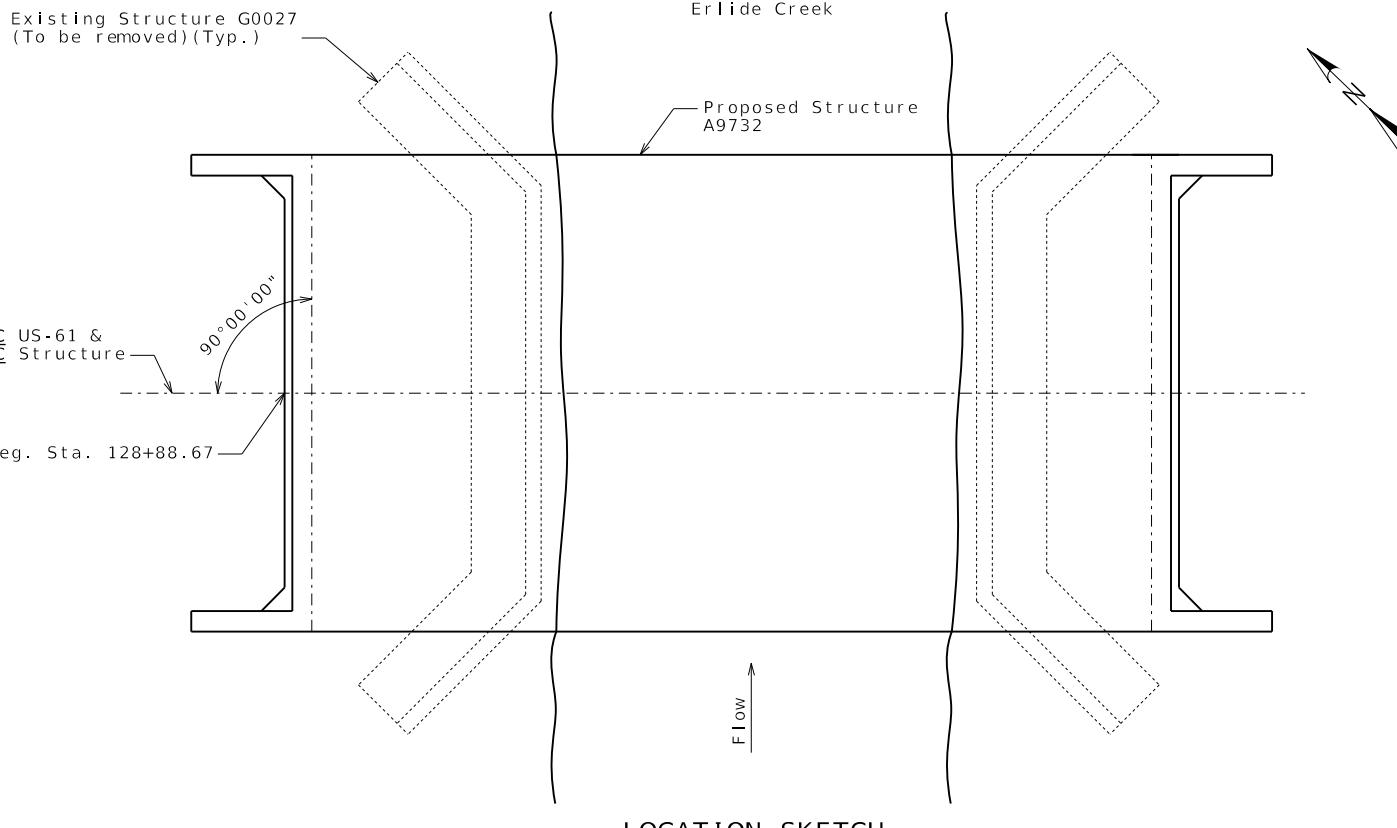
Neoprene Pads:  
Neoprene bearing pads shall be 60 durometer in accordance with Sec 716

Joint Filler:  
All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Traffic Handling:  
Structure to be closed during construction. See roadway plans for traffic control.

Miscellaneous:  
MoDOT Construction personnel will indicate the type of joint filler option used under the precast panels for this structure:  
 Constant Joint Filler  
 Variable Joint Filler

Existing Structure G0027  
(To be removed)(Typ.)



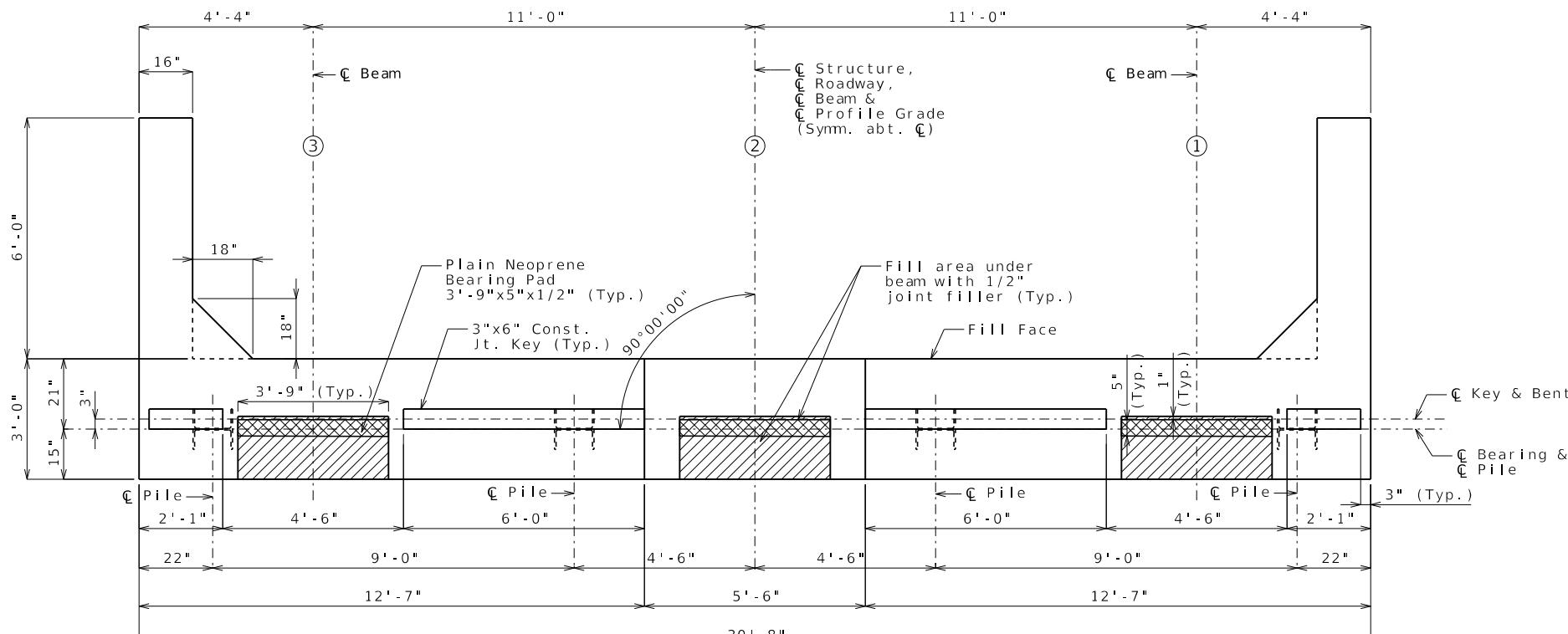
Sheet No. 2 of 19

DATE PREPARED	11/4/2025		
ROUTE	61	STATE	MO
DISTRICT	BR	SHEET NO.	2
CAPE GIRARDEAU			
JOB NO.	J9S3810		
CONTRACT ID.			
PROJECT NO.			
BRIDGE NO.	A9732		
DESCRIPTION			
DATE			

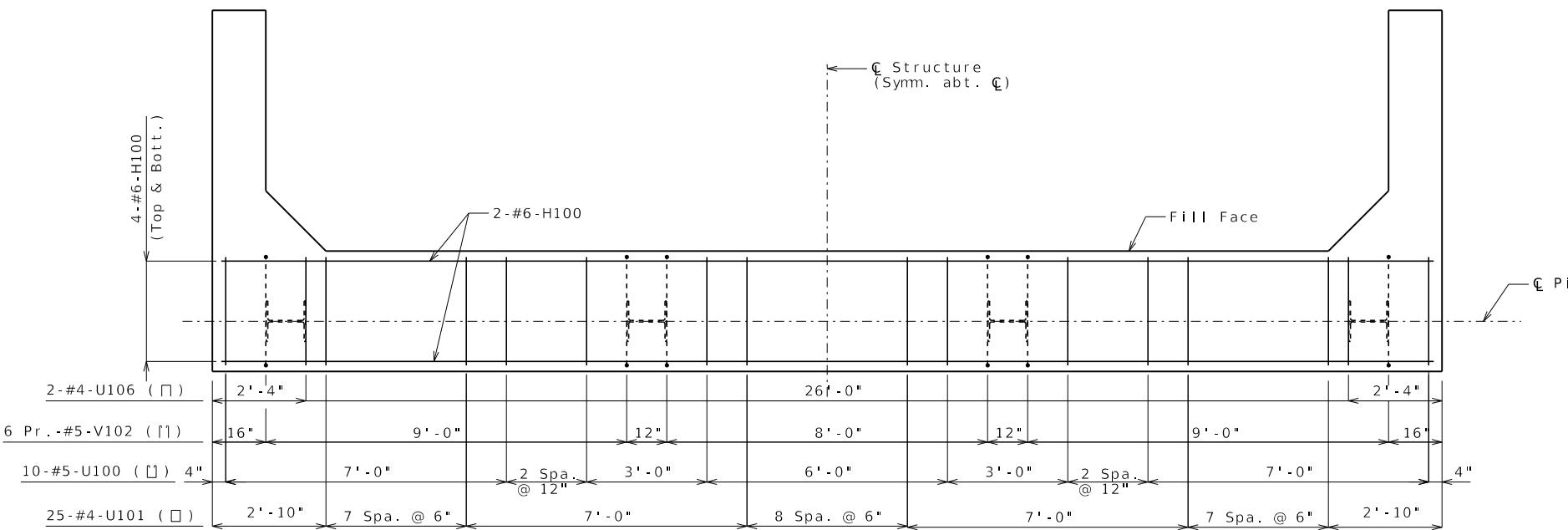
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of Authority #2003007599

DATE PREPARED 11/3/2025	ROUTE 61	STATE MO
DISTRICT BR	SHEET NO. 3	COUNTY CAPE GIRARDEAU
JOB NO. J953810	CONTRACT ID.	PROJECT NO.
BRIDGE NO. A9732		



PLAN OF BEAM



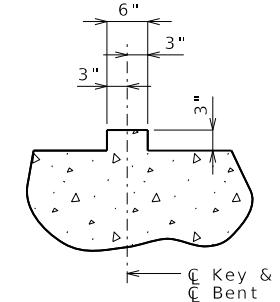
PLAN OF BEAM SHOWING REINFORCING  
(Wing reinforcement, beam steps and keys not shown for clarity)

END BENTS NO. 1 & 2  
(End Bent No. 1 shown, End Bent No. 2 similar)

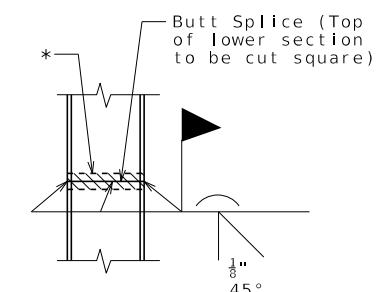
Detailed Aug. 2025  
Checked Sept. 2025

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 3 of 19



SECTION THRU KEY



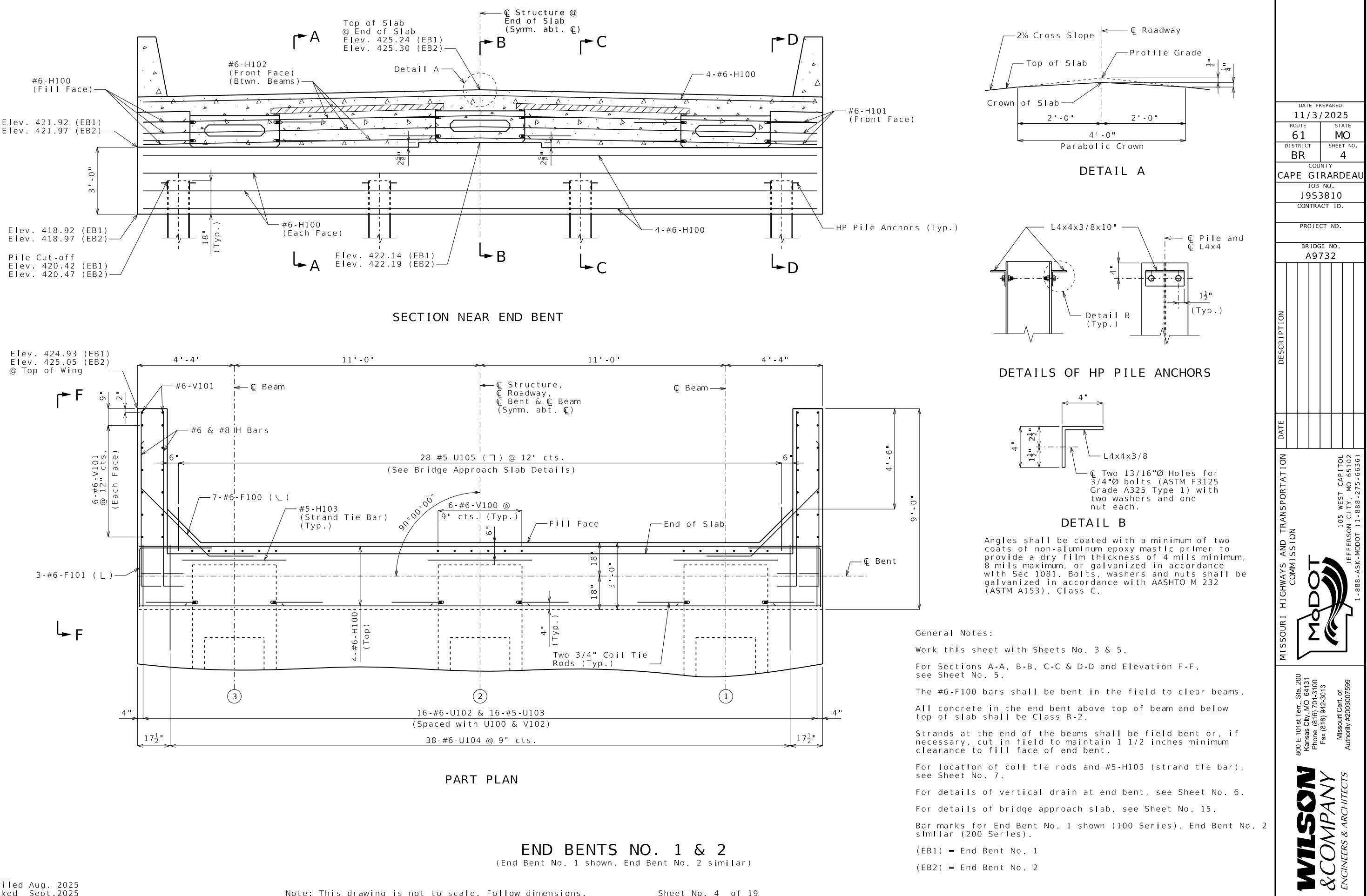
STEEL PILE SPLICING  
(If required)

\* Galvanizing material shall be omitted or removed one inch clear of weld locations in accordance with Sec 702.

Notes:  
Work this sheet with Sheets No. 4 & 5.  
Reinforcing steel shall be shifted to clear piles.  
U bars shall clear piles by at least 1 1/2 inches.  
Bar marks for End Bent No. 1 shown (100 Series), End Bent No. 2 Similar (200 Series).

Substructure Quantity Table for End Bents No. 1 & 2		
Item	Bent No. 1	Bent No. 2
Class 1 Excavation	cu. yard	30
Galvanized Structural Steel Piles (12 in.)	linear foot	68
Pre-Bore for Piling	linear foot	60
Pile Point Reinforcement	each	4
Class B Concrete (Substructure)	cu. yard	12.4

These quantities are included in the Estimated Quantities table on Sheet No. 2.

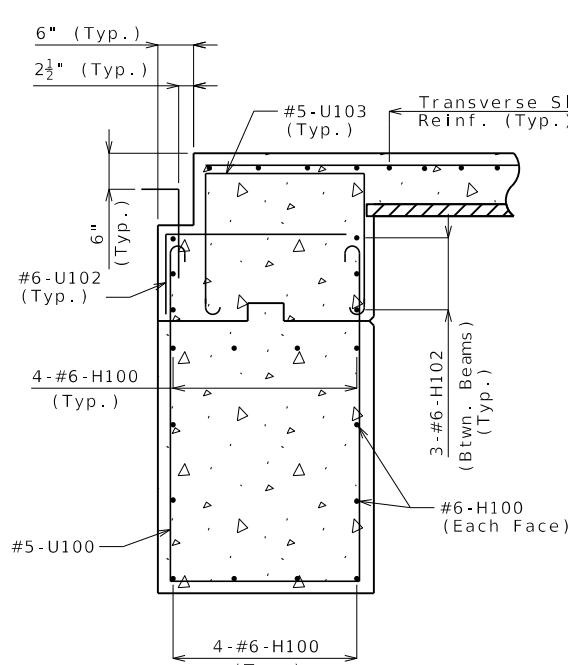


Detailed Aug. 2025  
Checked Sept. 2025

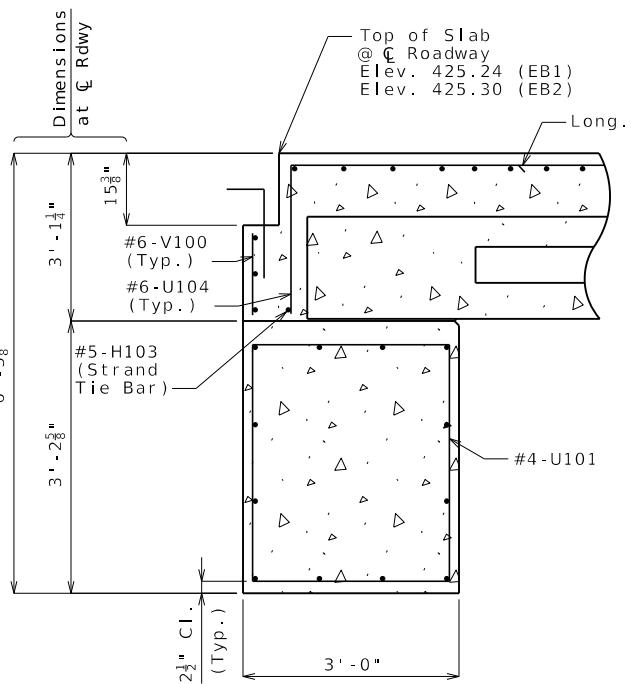
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 4 of 19

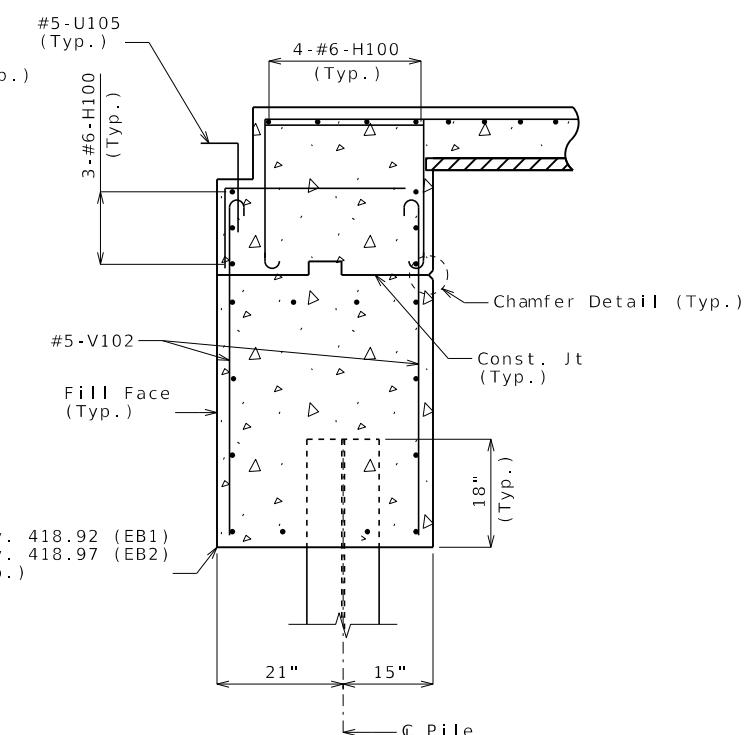
B\_A9732\_004 J9S3810 END BENT 1 & 2.dgn 1:13:43 PM 11/3/2025



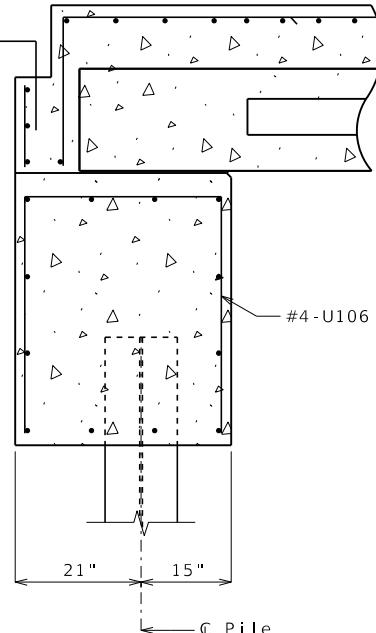
SECTION A-A



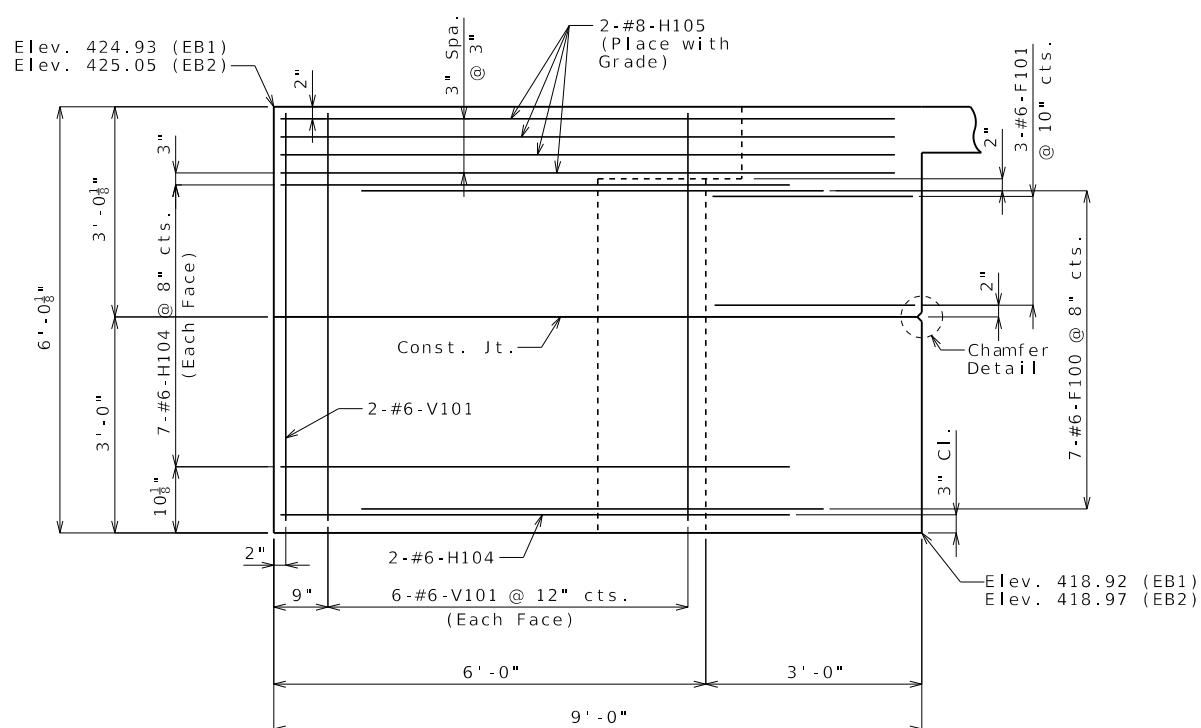
SECTION B-B



SECTION C-C



SECTION D-D



ELEVATION F-F

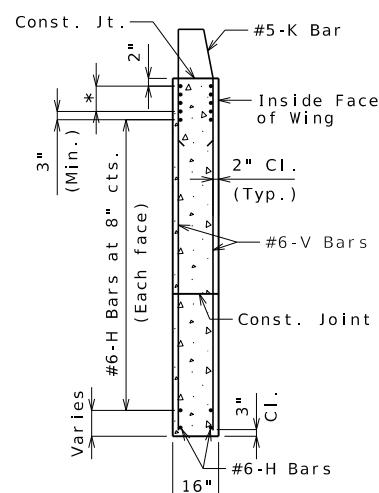
### END BENTS NO. 1 & 2

(End Bent No. 1 shown, End Bent No. 2 similar)

Detailed Aug. 2025  
Checked Sept. 2025

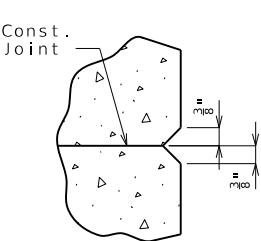
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 5 of 19



TYPICAL SECTION  
THRU WING

\* #8-H Bars at 3" cts.  
(Each face)(Place with grade)



CHAMFER DETAIL

General Notes:

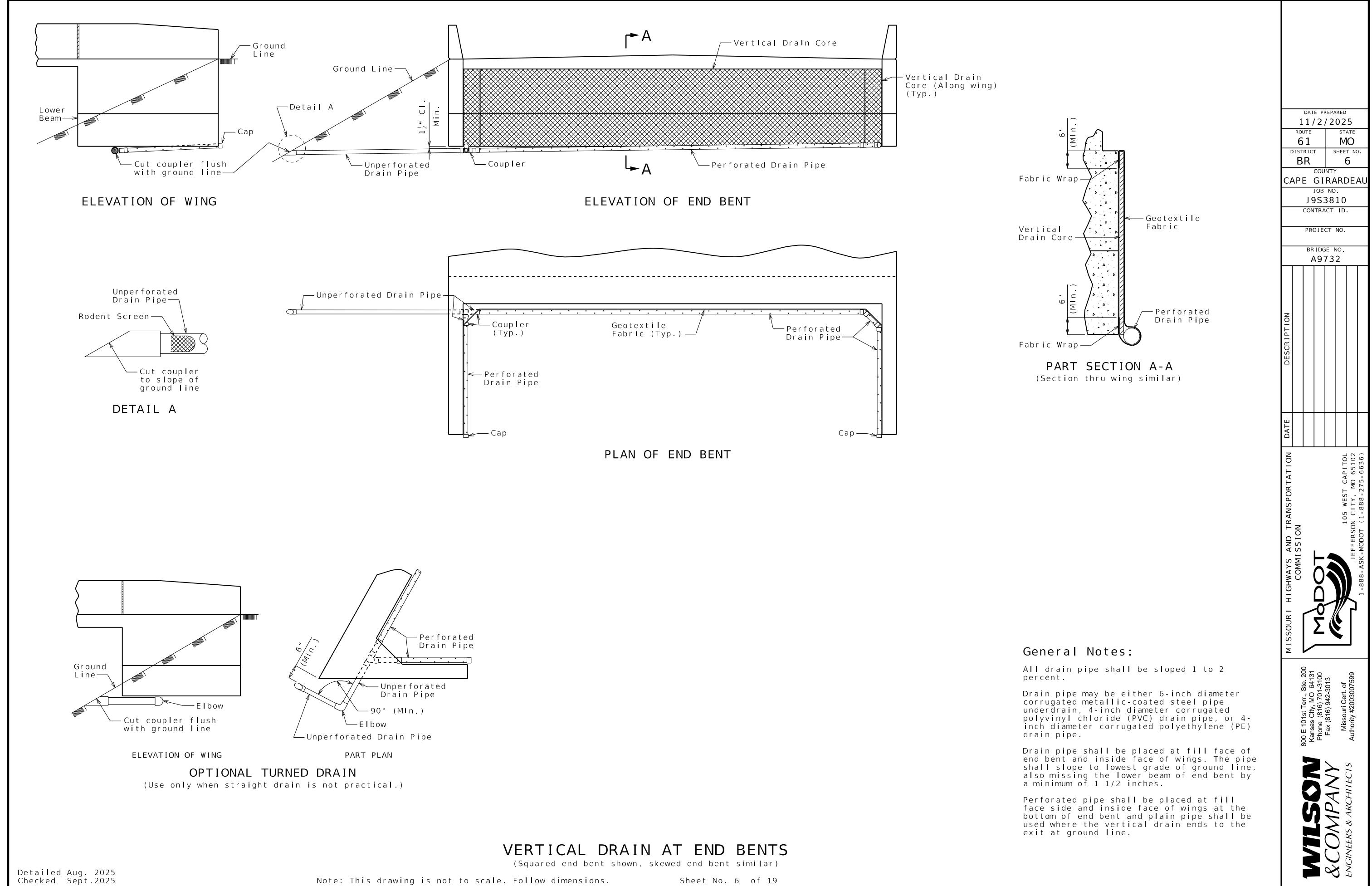
Work this sheet with Sheets No. 3 & 4.

For locations of Sections A-A, B-B, C-C & D-D and Elevation F-F, see Sheet No. 4.

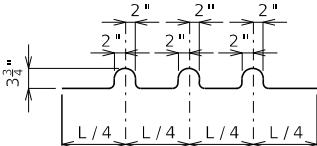
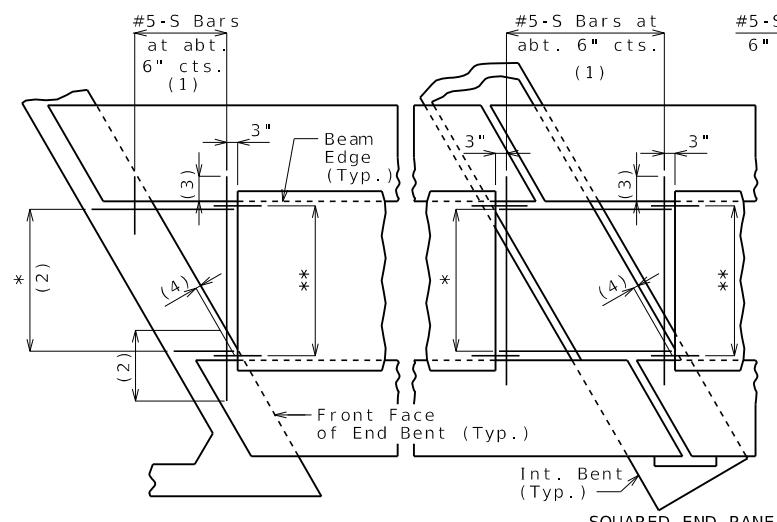
For reinforcement of the barrier, see Sheet No. 14.

(EB1) = End Bent No. 1

(EB2) = End Bent No. 2

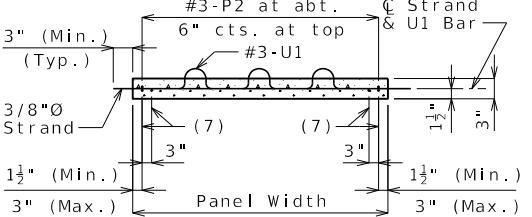






BENDING DIAGRAM FOR U1 BAR

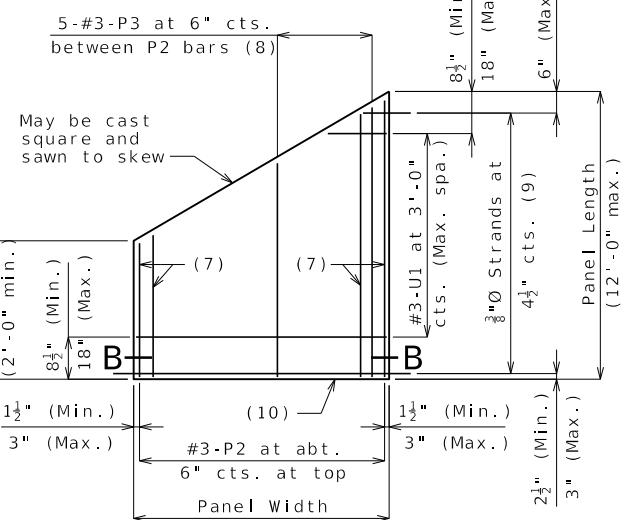
U1 Bars may be oriented at right angles to location and spacing shown. U1 Bars shall be placed between P1 bars.



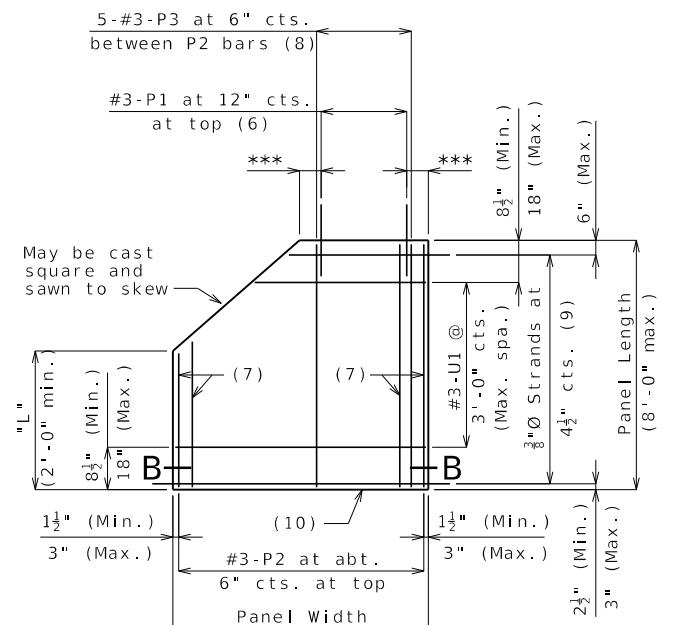
SECTION B-B

## PLAN SHOWING PANEL PLACEMENT

\* #5-S Bars at abt. 9" cts. (1)  
\*\* #3-P1 at 12" cts. (End panels only)



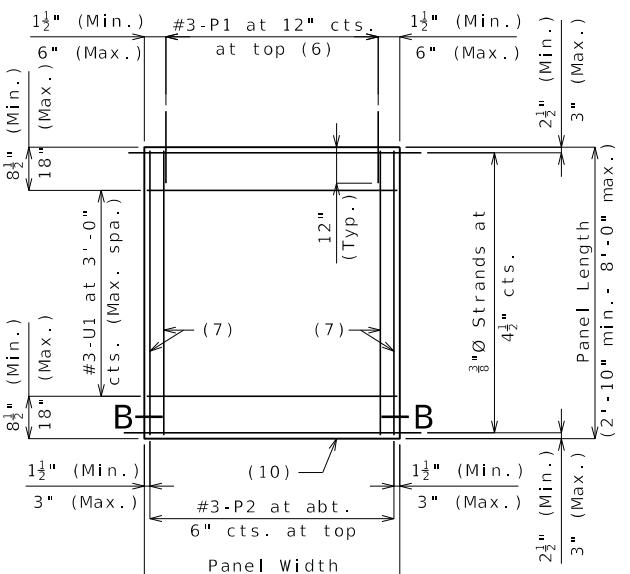
## PLAN OF OPTIONAL SKEWED END PANEL



PLAN OF OPTIONAL TRUNCATED END PANEL

\*\*\* 3" (Min.), 6" (Max.)

Detailed Aug. 2025  
Checked Sept. 2025



PLAN OF SQUARED PANEL

## PRESTRESSED PANELS

Note: This drawing is not to scale. Follow dimensions.

## General Notes:

## Prestressed Panels:

Concrete for prestressed panels shall be Class A-1 with  $f'_c = 6,000$  psi,  $f'_{ci} = 4,000$  psi.

The top surface of all panels shall receive a scored finish with a depth of scoring of 1/8" perpendicular to the prestressing strands in the panels.

Prestressing tendons shall be high-tensile strength, uncoated, seven-wire, low-relaxation strands for prestressed concrete in accordance with AASHTO M 203 Grade 270, with nominal diameter of strand = 3/8" and nominal area = 0.085 sq. in., and minimum ultimate strength = 22.95 kips (270 ksi). Larger strands may be used with the same spacing and initial tension.

Initial prestressing force = 17.2 kips/strand.

The method and sequence of releasing the strands shall be shown on the shop drawings.

Suitable anchorage devices for lifting panels may be cast in panels, provided the devices are shown on the shop drawings and approved by the engineer. Panel lengths shall be determined by the contractor and shown on the shop drawings.

When squared end panels are used at skewed bents, the skewed portion shall be cast full depth. No separate payment will be made for additional concrete and reinforcing required.

Support from diaphragm forms is required under the optional skewed end until cast-in-place concrete has reached 3,000 psi compressive strength.

Prestressed panels shall be brought to saturated surface-dry (SSD) condition just prior to the deck pour. There shall be no free standing water on the panels or in the area to be cast.

The prestressed panel quantities are not included in the table of estimated quantities for the slab.

Reinforcing Steel:  
All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

If U1 bars interfere with placement of slab steel, U1 loops may be bent over, as necessary, to clear slab steel.

Deformed welded wire reinforcement (WWR) providing a minimum area of reinforcing perpendicular to strands of 0.22 sq. in./ft, with spacing parallel to strands sufficient to ensure proper handling, may be used in lieu of the #3-P2 bars shown. Wire diameter shall not be larger than 0.375 inch. The above alternative reinforcement criteria may be used in lieu of the #3-P3 bars, when required, and placed over a width not less than 2 feet.

The following reinforcing steel shall be tied securely to the strands with the following maximum spacing in each direction:  
#3-P2 bars at 16 inches.  
WWR at 24 inches.

The #3-U1 bars shall be tied securely to #3-P2 bars, to WWR or to strands (when placed between P1 bars) at about 3-foot centers.

Minimum reinforcement steel length shall be 2'-0".

All reinforcement other than prestressing strands shall be epoxy coated.

Precast panels may be in contact with stirrup reinforcing in diaphragms.

S-bars are not listed in the bill of reinforcing.

Cost of S-bars will be considered completely covered by the contract unit price for the slab.

## Joint Filler:

Joint filler shall be preformed fiber expansion joint material in accordance with Sec 1057 or expanded or extruded polystyrene bedding material in accordance with Sec 1073.

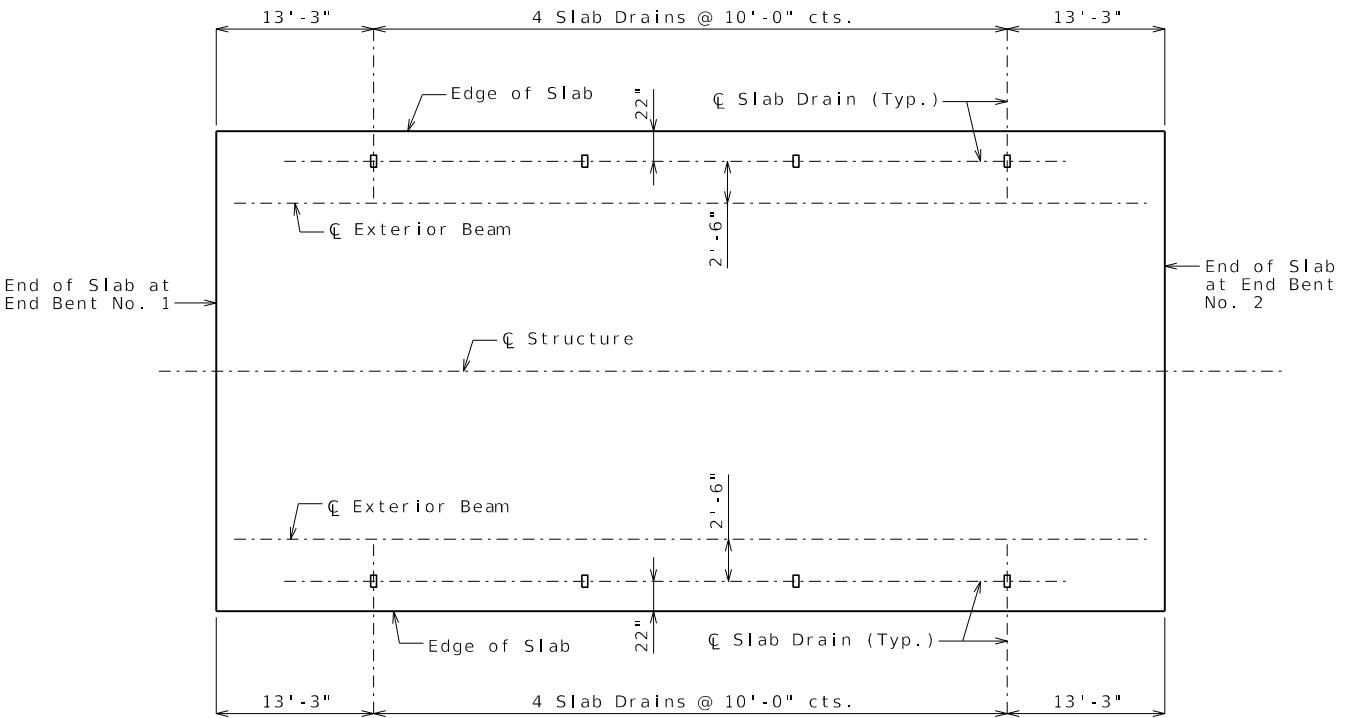
Use Slab Haunching Diagram on Sheet No. 10 for determining thickness of joint filler within the limits noted in the table of Joint Filler Dimensions.

Thicker material may be used on one or both sides of the beam to reduce cast-in-place concrete thickness to within tolerances.

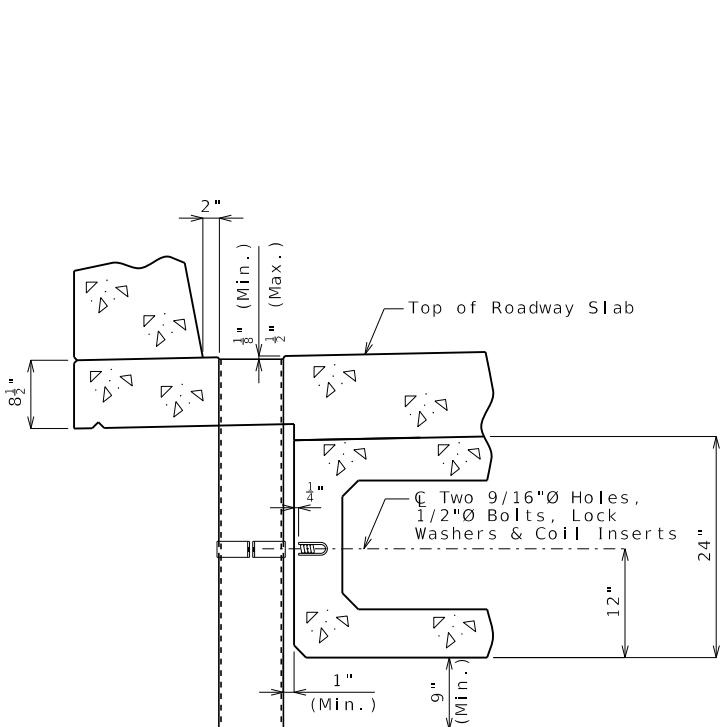
The same thickness of preformed fiber expansion joint material shall be used under any one edge of any panel except at locations where top flange thickness may be stepped. The maximum change in thickness between adjacent panels shall be 1/2 inch. The polystyrene bedding material may be cut with a transition to match haunch height above top of flange.

Joint filler shall be glued to the beam. When thickness exceeds 1 1/2 inches, the joint filler shall be glued top and bottom. The glue used shall be the type recommended by the joint filler manufacturer.

Edges of panels shall be uniformly seated on the joint filler before slab reinforcement is placed.

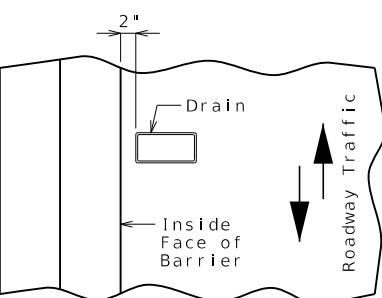


PLAN OF SLAB SHOWING SLAB DRAIN LOCATIONS



PART SECTION NEAR DRAIN

PART SECTION SHOWING BRACKET ASSEMBLY



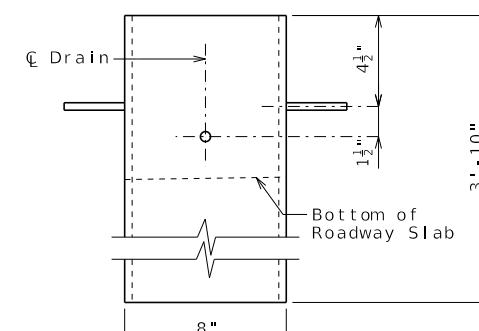
PART PLAN OF SLAB AT DRAIN

## SLAB DRAINS

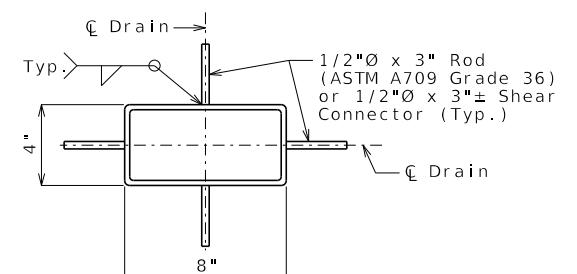
Note: This drawing is not to scale. Follow dimensions.

Detailed Aug. 2025  
Checked Sept. 2025

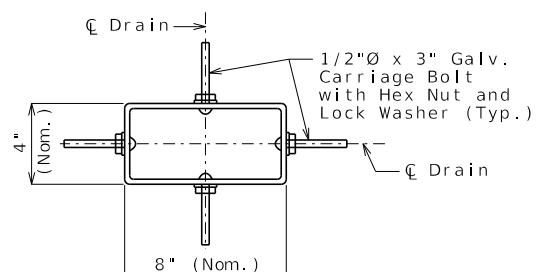
<b>General Notes:</b> Contractor shall have the option to construct either steel or FRP slab drains. All drains shall be of same type. Slab drain bracket assembly shall be ASTM A709 Grade 36 steel. Locate drains in slab by dimensions shown in Part Section Near Drain. Reinforcing steel shall be shifted to clear drains. The coil inserts and bracket assembly shall be galvanized in accordance with ASTM A123. All bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C. All 1/2"Ø bolts shall be ASTM A307. Shop drawings will not be required for the slab drains and the bracket assembly. The coil inserts required for the bracket assembly attachment shall be located on the prestressed beam shop drawings. Coil inserts shall have a concrete pull-out strength (ultimate load) of at least 2,500 pounds in 5,000 psi concrete. The bolts required to attach the slab drain bracket assembly to the prestressed beam shall be supplied by the prestressed beam fabricator.		DATE PREPARED 11/2/2025  ROUTE 61 STATE MO DISTRICT BR SHEET NO. 9  COUNTY CAPE GIRARDEAU JOB NO. J953810 CONTRACT ID.  PROJECT NO.  BRIDGE NO. A9732



ELEVATION OF DRAIN



PLAN OF STEEL DRAIN OPTION



PLAN OF FRP DRAIN OPTION

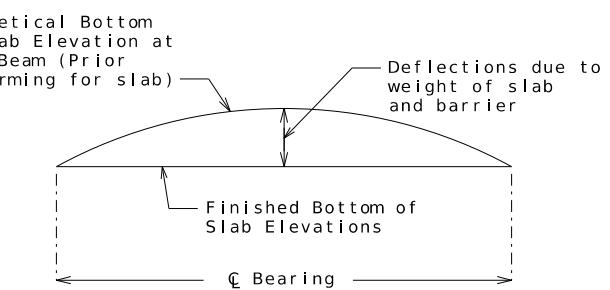
**WILSON**  
**& COMPANY**  
 ENGINEERS & ARCHITECTS

 800 E 101st Ter., Ste. 200  
 Kansas City, MO 64131  
 Phone (816) 701-3100  
 Fax (816) 942-3013  
 Missouri Cert. of  
 Authority #2003007599
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

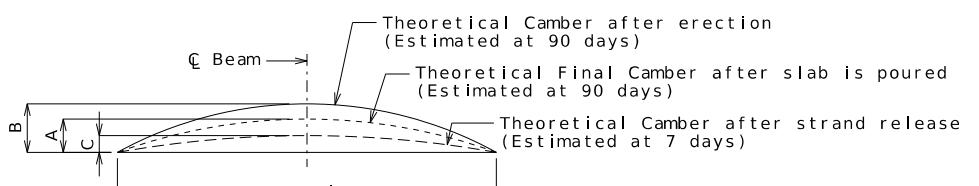
Theoretical Bottom of Slab  
Elevations at Centerline  
of Beam  
(Prior to forming for slab)  
(Estimated at 90 days)

Beam Number	Span (1-2) (54'-0" $\pm$ Brg. - $\pm$ Brg.)				
	$\pm$ Brg.	.25	.50	.75	$\pm$ Brg.
1	424.29	424.37	424.39	424.37	424.34
2	424.51	424.59	424.62	424.59	424.56
3	424.29	424.37	424.39	424.37	424.34

Elevations are based on a constant slab thickness of 8 1/2" and include allowance for theoretical dead load deflections due to weight of slab (including precast panel) and barrier.



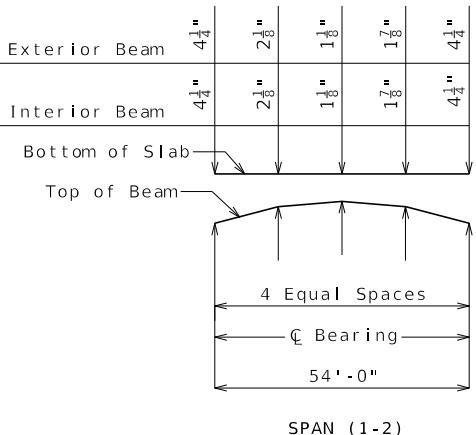
TYPICAL SLAB ELEVATIONS DIAGRAM



GIRDER CAMBER DIAGRAM

Conversion Factors for Beam Camber (Estimated at 90 days):  
0.25 pt. = 0.7125 x 0.5 pt.

Beam	Span (1-2)		
	A	B	C
Exterior	3 1/8"	4 1/8"	2 5/8"
Interior	3"		



THEORETICAL SLAB  
HAUNCHING DIAGRAM  
(ESTIMATED AT 90 DAYS)

If beam camber is different from that shown in the camber diagram, in order to maintain minimum slab thickness, an adjustment of the slab haunches, an increase in slab thickness or a raise in grade uniformly throughout the structure shall be necessary. No payment will be made for additional labor or materials required for variation in haunching, slab thickness or grade adjustment.

Concrete in the slab haunches is included in the Estimated Quantities for Slab on Concrete Beam.

SLAB ELEVATIONS

Detailed Aug. 2025  
Checked Sept. 2025

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 10 of 19

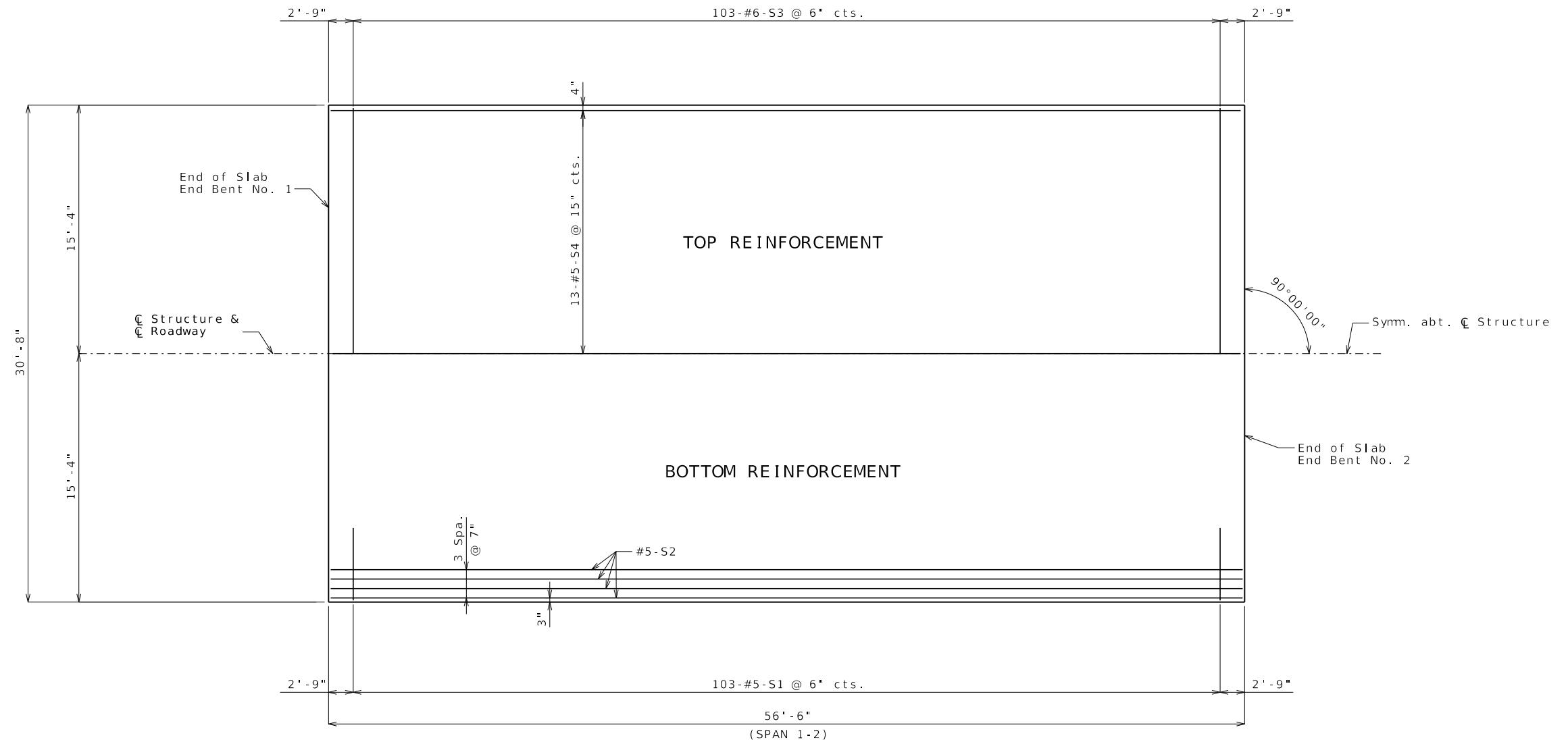
B\_A9732\_010\_J953810\_SLAB ELEVATIONS.dgn 8:00:05 PM 11/2/2025

**WILSON**  
&COMPANY  
ENGINEERS & ARCHITECTS

800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of  
Authority #2003007599

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION  
MODOT  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

DATE PREPARED  
11/2/2025  
ROUTE STATE  
61 MO  
DISTRICT SHEET NO.  
BR 10  
COUNTY  
CAPE GIRARDEAU  
JOB NO.  
J953810  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.  
A9732



### PLAN OF SLAB SHOWING REINFORCEMENT

Detailed Aug. 2025  
Checked Sept. 2025

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 11 of 19

#### Notes:

Longitudinal slab dimensions are measured horizontally.

For Theoretical Bottom of Slab Elevations and Theoretical Slab Hanching Diagram, see Sheet No. 10.

For Details of Precast Prestressed Panels, see Sheet No. 8.

For Section Thru Slab and Slab Pouring Sequence, see Sheet No. 12.

For Details and Reinforcement of Type D Barriers not shown, see Sheets No. 13 & 14.

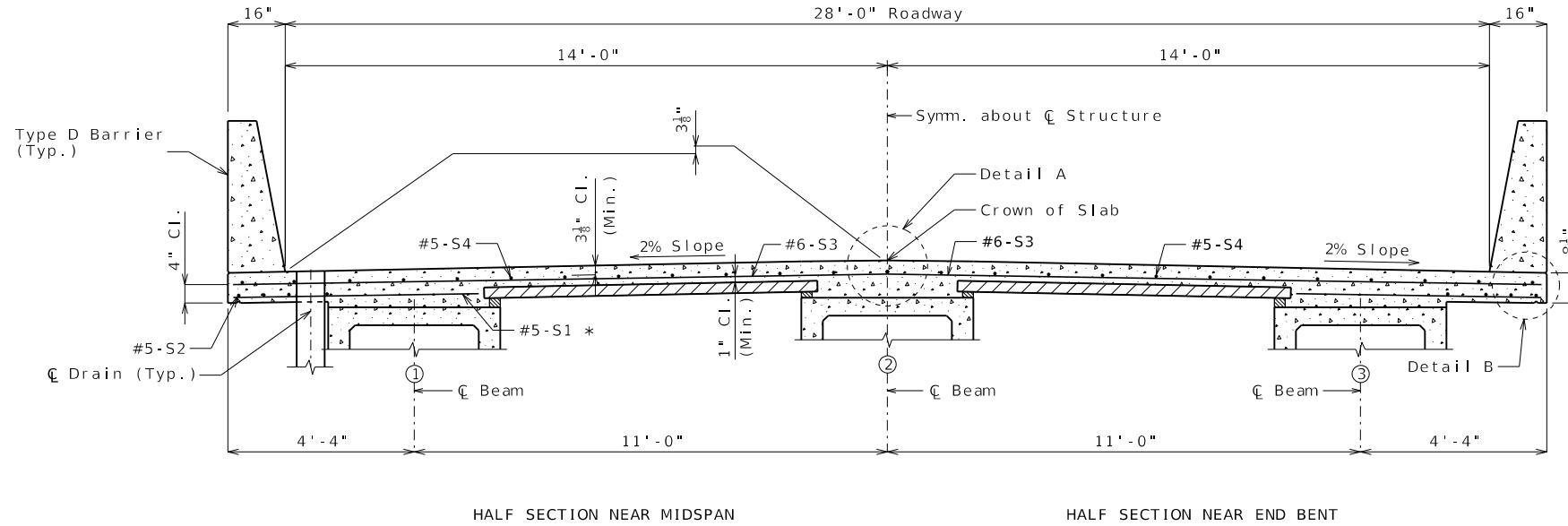
For details and locations of Slab Drains, see Sheet No. 9.

**WILSON**  
&COMPANY  
ENGINEERS & ARCHITECTS

800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of  
Authority #2003007599

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

DATE PREPARED	
11/2/2025	
ROUTE	STATE
61	MO
DISTRICT	SHEET NO.
BR	11
COUNTY	
CAPE GIRARDEAU	
JOB NO.	
J9S3810	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
A9732	

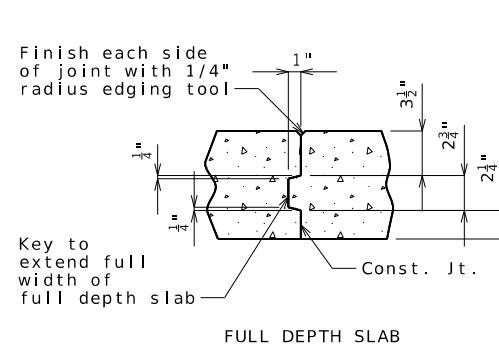


## SECTION THRU SLAB

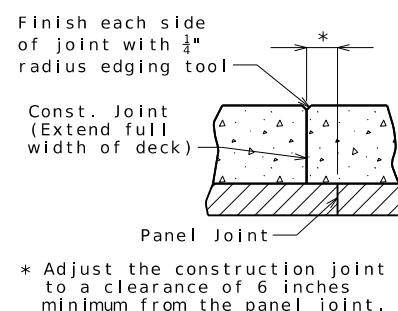
\* Alternate bar shape available, see barrier sheet.

Contractor may shift or swap bars as needed to tie R3 bar in barrier (4" min. bar spacing)

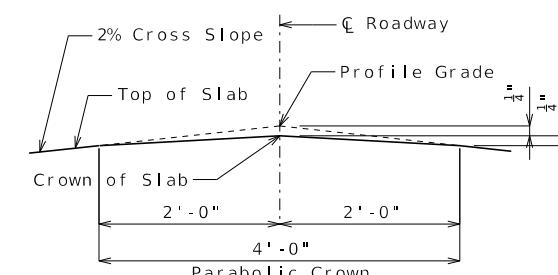
OPTIONAL SHIFTING  
TOP BARS AT BARRIER



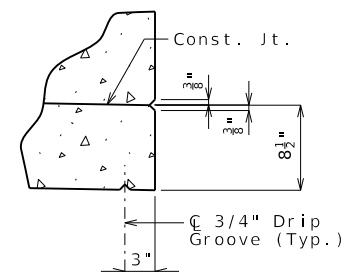
## SLAB CONSTRUCTION JOINT



SIAB ON PANELS



DETAIL A



## DETAIL B

### Notes:

The contractor shall pour up grade and satisfactorily finish the roadway slab at a rate of not less than 25 cubic yards per hour.

The contractor shall furnish an approved retarder to retard the set of the concrete to 2.5 hours, and shall pour and satisfactorily finish the slab pour at the given rate.

For details of precast prestressed panels, see Sheet No. 8.

For reinforcement of barrier not shown, see Sheets No. 13 & 14

For Theoretical Bottom of Slab Elevations and Theoretical Slab Haunching Diagram, see Sheet No. 10.

For Plan of Slab Showing Reinforcement, see Sheet No. 11.

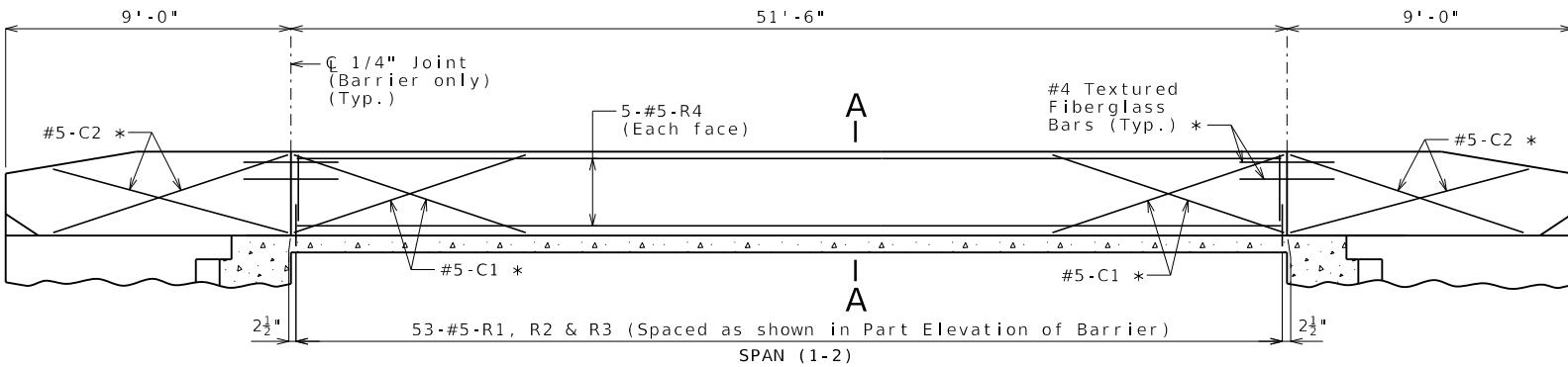
For details and locations of slab drains see Sheet No. 9

## SLAB DETAILS

Detailed Aug. 2025  
Checked Sept. 2025

Note: This drawing is not to scale. Follow dimensions.

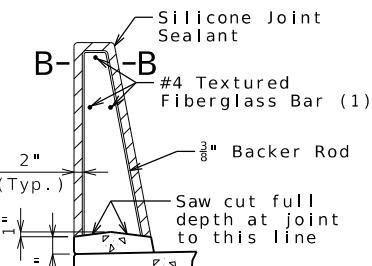
Sheet No. 12 of 19



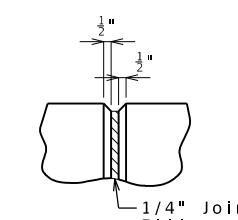
### ELEVATION OF BARRIER

(Left barrier shown, right barrier similar)

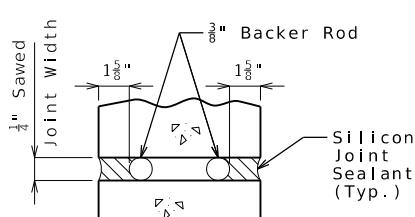
Longitudinal dimensions are horizontal.



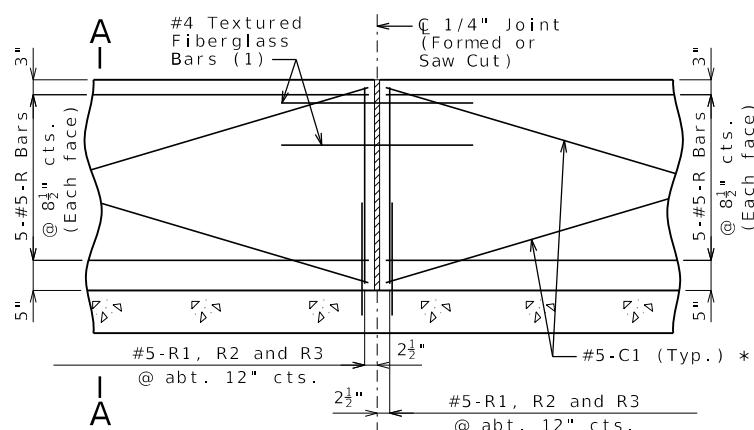
SECTION THRU  
SAW CUT JOINT



PART ELEVATION  
AT FORMED JOINT

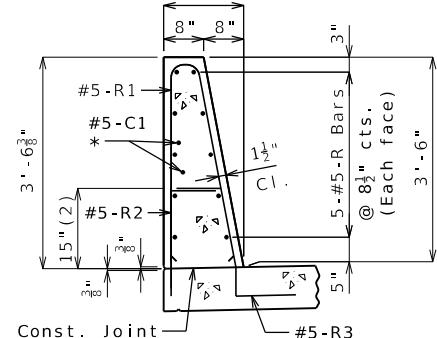


SECTION B-B



PART ELEVATION OF BARRIER

(1) Four feet long, centered on joint, slip-formed option only

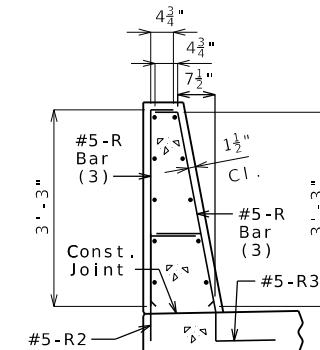


SECTION A-A

Use a minimum lap of 2'-6" for #5 horizontal barrier bars.

The cross-sectional area above the slab is 3.52 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

(3) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)

### General Notes:

\* Slip-formed option only.

Conventional forming or slip forming may be used. Saw cut joints may be used with conventional forming.

Top of barrier shall be built parallel to grade and barrier joints (except at end bents) normal to grade.

All exposed edges of barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Type D Barrier per linear foot.

Concrete in barrier shall be Class B-1.

Measurement of barrier is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

Joint sealant and backer rods shall be in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

For slip-formed option, both sides of barrier shall have a vertically broomed finish and the top shall have a transversely broomed finish.

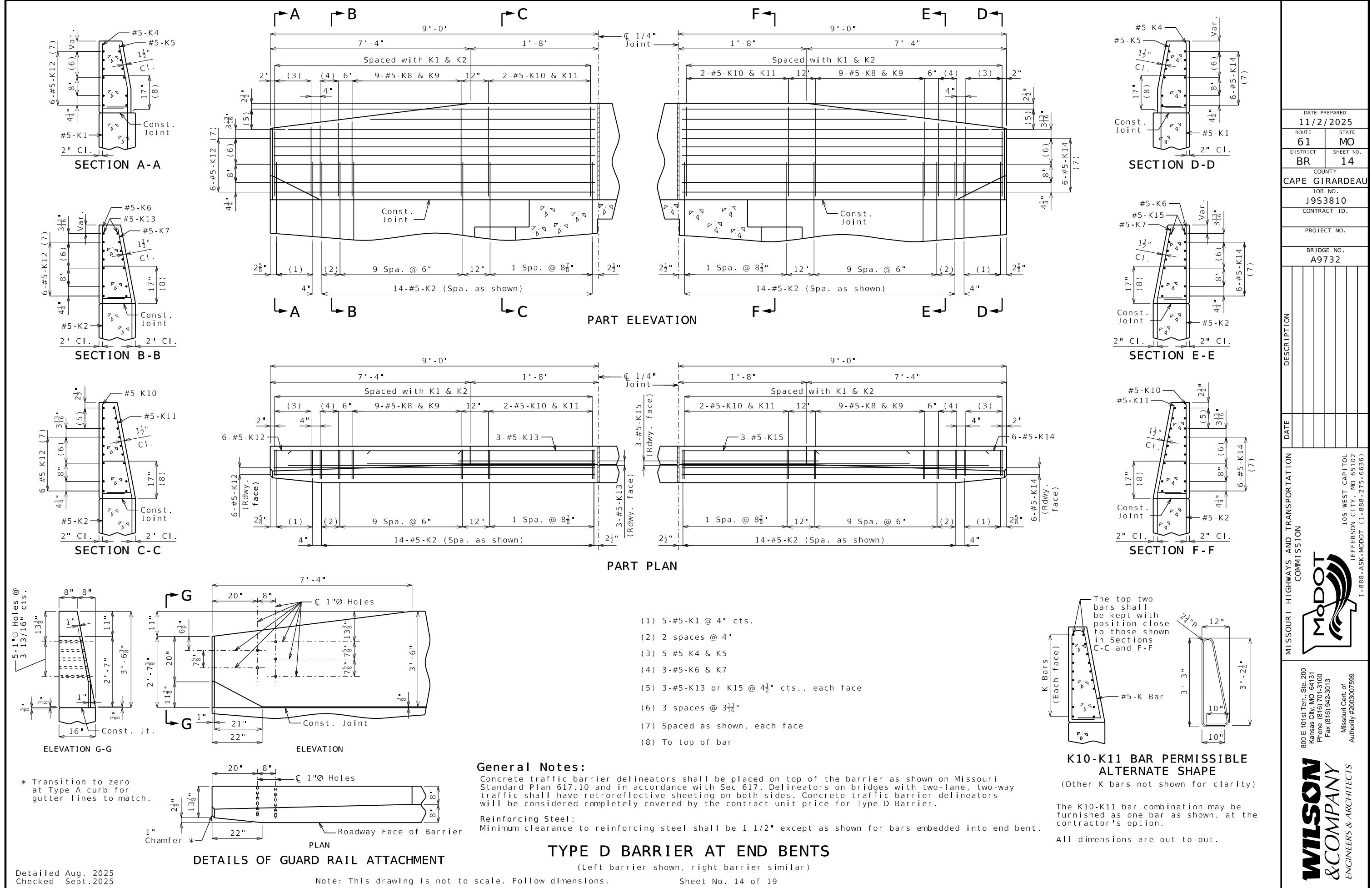
Plastic waterstop shall not be used with saw cut joints.

DATE PREPARED	
11/2/2025	
ROUTE	STATE
61	MO
DISTRICT	SHEET NO.
BR	13
COUNTY	
CAPE GIRARDEAU	
JOB NO.	
J953810	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
A9732	

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	DATE	DESCRIPTION
105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)		

800 101st Ter., Ste. 200 Kansas City, MO 64131 Phone (816) 701-3100 Fax (816) 942-3013	MISSOURI STATE CAPITOL AUTHORITY #2003007599
---	--

**WILSON & COMPANY**  
ENGINEERS & ARCHITECTS





DATE PREPARED  
11/2/2025

ROUTE 61 STATE MO  
DISTRICT BR SHEET NO. 16  
COUNTY CAPE GIRARDEAU  
JOB NO. J9S3810  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A9732

**Finished Bend Diameters D and Hook Dimensions**

Standard Pin Bend Shapes					
Size	Case	D	A or G	J	
			90°	180°	180°
#4	1	3"	8"	6"	4"
#5	1	3 3/4"	10"	7"	5"
#6	1	4 1/2"	12"	8 1/4"	6"
#7	2	5 1/4"	14"	9 3/4"	7"
	3	7"	15"	11 1/2"	8 3/4"
#8	2	6"	16"	11"	8"
	3	8"	17"	13 1/4"	10"
#9	1	9 1/2"	19 1/2"	15 1/2"	11 3/4"
#10	1	10 3/4"	22"	17 1/2"	13 3/4"
#11	1	12"	24 1/2"	19 1/2"	14 5/8"
#14	1	18 1/4"	31 1/4"	27 1/2"	21 5/8"
#18	1	24"	41 1/2"	36 1/4"	28 1/2"

**Stirrup Pin Bend Shapes (S)**

Stirrup Pin Bend Shapes (S)							
Size	Case	D	A or G	H	J		
			90°	135°	180°	135°	180°
#4	2	2"	4 1/2"	4 1/2"	5"	2 7/8"	3"
	3	3"	5"	5 1/2"	6"	3"	4"
#5	2	2 1/2"	5 3/4"	5 3/4"	5 3/4"	3 5/8"	3 3/4"
	3	3 3/4"	6 1/2"	6 1/2"	7"	3 7/8"	5"
#6	1	4 1/2"	12"	7 3/4"	8 1/4"	4 5/8"	6"

Applicable for all grades of steel.  
Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.

**BENDING DIAGRAMS**

**Reinforcing Steel Totals (Pounds)**

Size	Substructure		Superstructure			Entire Bridge		
	Plain	Epoxy	Slab		Barrier	Slip Form	Plain	Epoxy
			Plain	Epoxy				
4	0	0	0	400	0	0	0	400
5	0	0	0	4,046	4,092	156	0	8,294
6	0	0	0	9,438	0	0	0	9,438
8	0	0	0	804	0	0	0	804
By Type	0	0	0	14,688	0	0	0	18,936

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.  
All bars shall be ASTM A706 Grade 60.

Detailed Aug. 2025  
Checked Sept. 2025

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 16 of 19

B\_A9732\_016\_J9S3810\_BENDING DIAGRAMS.dgn 8:00:58 PM 11/2/2025

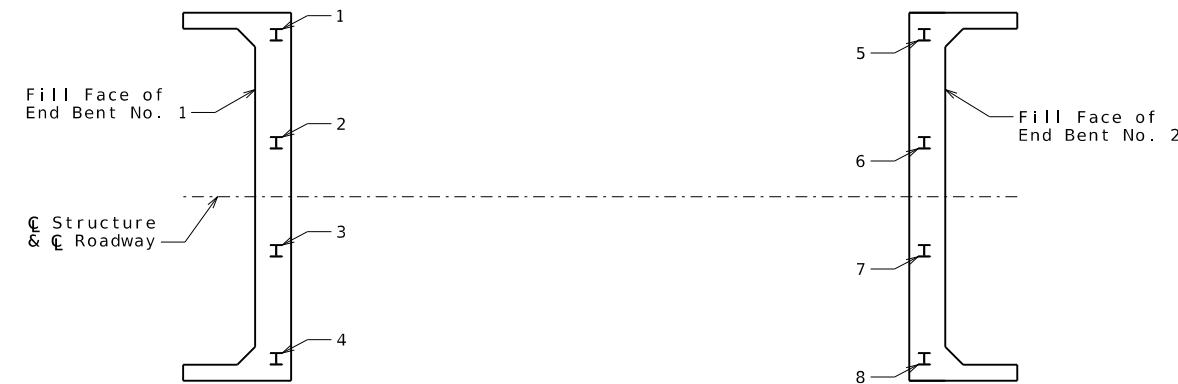
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MODOT 105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of Authority #2003007599

**WILSON & COMPANY**  
ENGINEERS & ARCHITECTS

Bill of Reinforcing Steel																					
No. Req.	Size/ Mark	Location	Dimensions							Nom. Length	Actual Length	Weight									
			C	S	H	V	ft	in.	ft	in.	ft	in.	lb								
		Superstructure																			
		End Bent 1																			
14	6 F100	WING BRACE	E	155	1	8.13	5	3.00	1	8.13	1	2.25	1	2.25	1	2.25	8	7	8	7	180
6	6 F101	DIAPHRAGM	E	6S	7	9.00	2	9.00									10	6	10	2	92
19	6 H100	BM & DIAPH	E	20	30	5.00							30	5	30	5	868				
6	6 H101	DIAPHRAGM	E	20	2	1.00							2	1	2	1	19				
6	6 H102	DIAPHRAGM	E	20	6	9.00							6	9	6	9	61				
3	5 H103	STRAND TIE	E	20	6	6.00							6	6	6	6	20				
32	6 H104	WING	E	6	7	1.00	1	0.00					8	1	7	9	372				
16	8 H105	WING	E	6	8	6.00	1	4.00					9	10	9	5	402				
10	5 U100	BEAM	E	375	4	7.00	2	9.00					12	11	12	8	132				
25	4 U101	BEAM	E	135	2	9.00	2	8.00	2	9.00	2	8.00					11	7	11	4	204
16	6 U102	DIAPHRAGM	E	195	1	9.00	2	9.00					4	6	4	4	104				
16	5 U103	DIAPHRAGM	E	375	2	7.00	2	3.00					8	5	8	2	136				
38	6 U104	DIAPHRAGM	E	195	2	7.00	4	3.00					6	10	6	8	381				
28	5 U105	DIAPHRAGM	E	195	2	0.00	1	3.00					3	3	3	2	92				
2	4 U106	BEAM	E	105			2	8.00	2	9.00			8	1	7	11	11				
18	6 V100	DIAPHRAGM	E	20	1	9.00							1	9	1	9	47				
28	6 V101	WING	E	20	5	9.00							5	9	5	9	242				
12	5 V102	BM & DIAPH	E	17	4	7.00							5	2	5	2	65				
		End Bent 2																			
14	6 F200	WING BRACE	E	155	1	8.13	5	3.00	1	8.13	1	2.25	1	2.25	1	2.25	8	7	8	7	180
6	6 F201	DIAPHRAGM	E	6S	7	9.00	2	9.00					10	6	10	2	92				
19	6 H200	BM & DIAPH	E	20	30	5.00							30	5	30	5	868				
6	6 H201	DIAPHRAGM	E	20	2	1.00							2	1	2	1	19				
6	6 H202	DIAPHRAGM	E	20	6	9.00							6	9	6	9	61				
3	5 H203	STRAND TIE	E	20	6	6.00							6	6	6	6	20				
32	6 H204	WING	E	6	7	1.00	1	0.00					8	1	7	9	372				
16	8 H205	WING	E	6	8	6.00	1	4.00					9	10	9	5	402				
10	5 U200	BEAM	E	375	4	7.00	2	9.00					12	11	12	8	132				
25	4 U201	BEAM	E	135	2	9.00	2	8.00	2	9.00	2	8.00					11	7	11	4	204
16	6 U202	DIAPHRAGM	E	195	1	9.00	2	9.00					4	6	4	4	104				
16	5 U203	DIAPHRAGM	E	375	2	7.00	2	3.00					8	5	8	2	136				
38	6 U204	DIAPHRAGM	E	195	2	7.00	4	3.00					6	10	6	8	381				
28	5 U205	DIAPHRAGM	E	195	2	0.00	1	3.00					3	3	3	2	92				
2	4 U206	BEAM	E	105			2	8.00	2	9.00			8	1	7	11	11				
18	6 V200	DIAPHRAGM	E	20	1	9.00							1	9	1	9	47				
28	6 V201	WING	E	20	5	9.00							5	9	5	9	242				
12	5 V202	BM & DIAPH	E	17	4	7.00							5	2	5	2	65				
		Slab																			
206	5 S1	SLAB	E	20	5	8.00							5	8	5	8	1,218				
8	5 S2	SLAB	E	20	56	3.00							56	3	56	3	469				
103	6 S3	SLAB	E	20	30	5.00							30	5	30	5	4,706				
25	5 S4	SLAB	E	20	56	3.00							56	3	56	3	1,467				
		Barrier																			
		Type D																			
106	5 R1	BARRIER	E	26	3	3.00	5.50	2.25	3	1.38	5.50	3	0.75	6.75	6	10	6	9	746		
106	5 R2	BARRIER	E	195	1	8.50	9.50						2	6	2	5	267				
106	5 R3	BARRIER	E	275			9.50	1	3.25	5.00	1	0.00	1	3.00	3.00	3	6	3	4	369	
20	5 R4	BARRIER	E	20	51	3.00							51	3	51	3	1,069				
20	5 K1	BARRIER	E	275	3	5.00	9.25	5.38	2	11.75			5.25	1.00	7	7	7	5	155		
56	5 K2	BARRIER	E	275	3	5.00	9.25	1	2.50	2	2.75		1	2.25	2.75	7	8	7	5	433	
20	5 K4	BARRIER	E	195 V	2	4.25	10.00						3	2	3	1					
		Incr. = 0.500"			2	6.25	10.00						3	4	3						



PART PLAN SHOWING PILE NUMBERING FOR RECORDING AS-BUILT PILE DATA

As-Built Pile Data			
Pile No.	Length in Place (ft)	Computed Nominal Axial Compressive Resistance (kips)	Remarks
End Bent No. 1			
1			
2			
3			
4			
End Bent No. 2			
5			
6			
7			
8			

Note:  
Indicate in remarks column:  
A. Pile type and grade  
B. Batter  
C. Driven to practical refusal

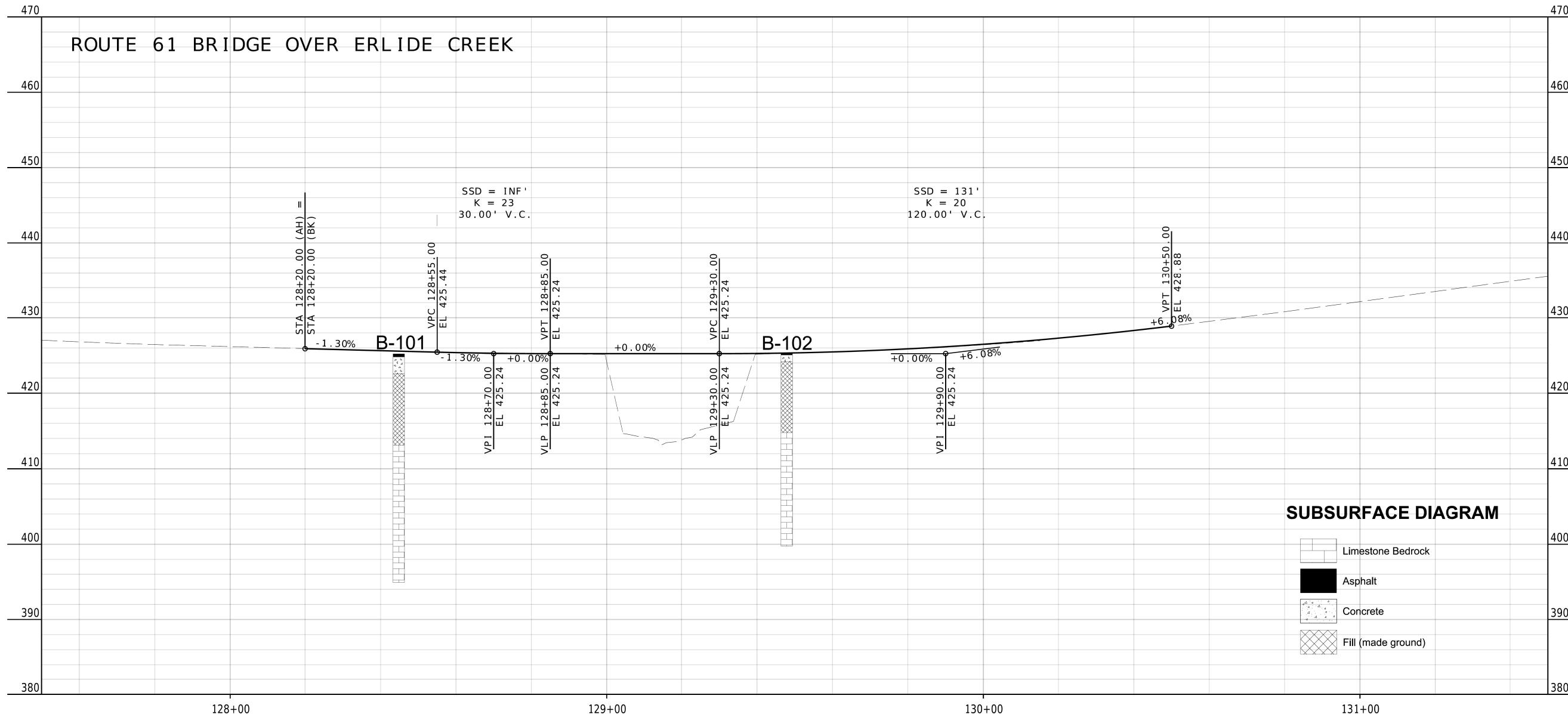
This sheet to be completed by MoDOT construction personnel.

**WILSON**  
&COMPANY  
ENGINEERS & ARCHITECTS

800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of  
Authority #2003007599

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)





### BORING DATA

Note: For locations of borings, see Sheet No. 1

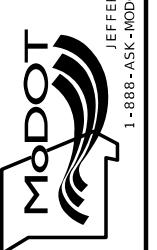


DATE PREPARED  
11/2/2025  
ROUTE STATE  
61 MO  
DISTRICT SHEET NO.  
BR 19  
COUNTY  
CAPE GIRARDEAU  
JOB NO.  
J9S3810  
CONTRACT ID.  
PROJECT NO.

BRIDGE NO.  
A9732

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



800 E 101st Terr., Ste. 200  
Kansas City, MO 64131  
Phone (816) 701-3100  
Fax (816) 942-3013  
Missouri Cert. of  
Authority #2003007599

DATE PREPARED  
11/2/2025  
ROUTE STATE  
61 MO  
DISTRICT SHEET NO.  
BR 19  
COUNTY  
CAPE GIRARDEAU  
JOB NO.  
J9S3810  
CONTRACT ID.  
PROJECT NO.

BRIDGE NO.  
A9732