

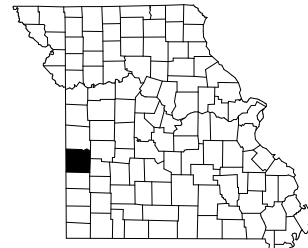
DESIGN DESIGNATION

A.A.D.T. - 2026 = 851
 A.A.D.T. - 2046 = 948
 D.H.V. = 8.78%
 T = 13.5%
 V = 55 M.P.H.
 D = 50.1%/49.9%

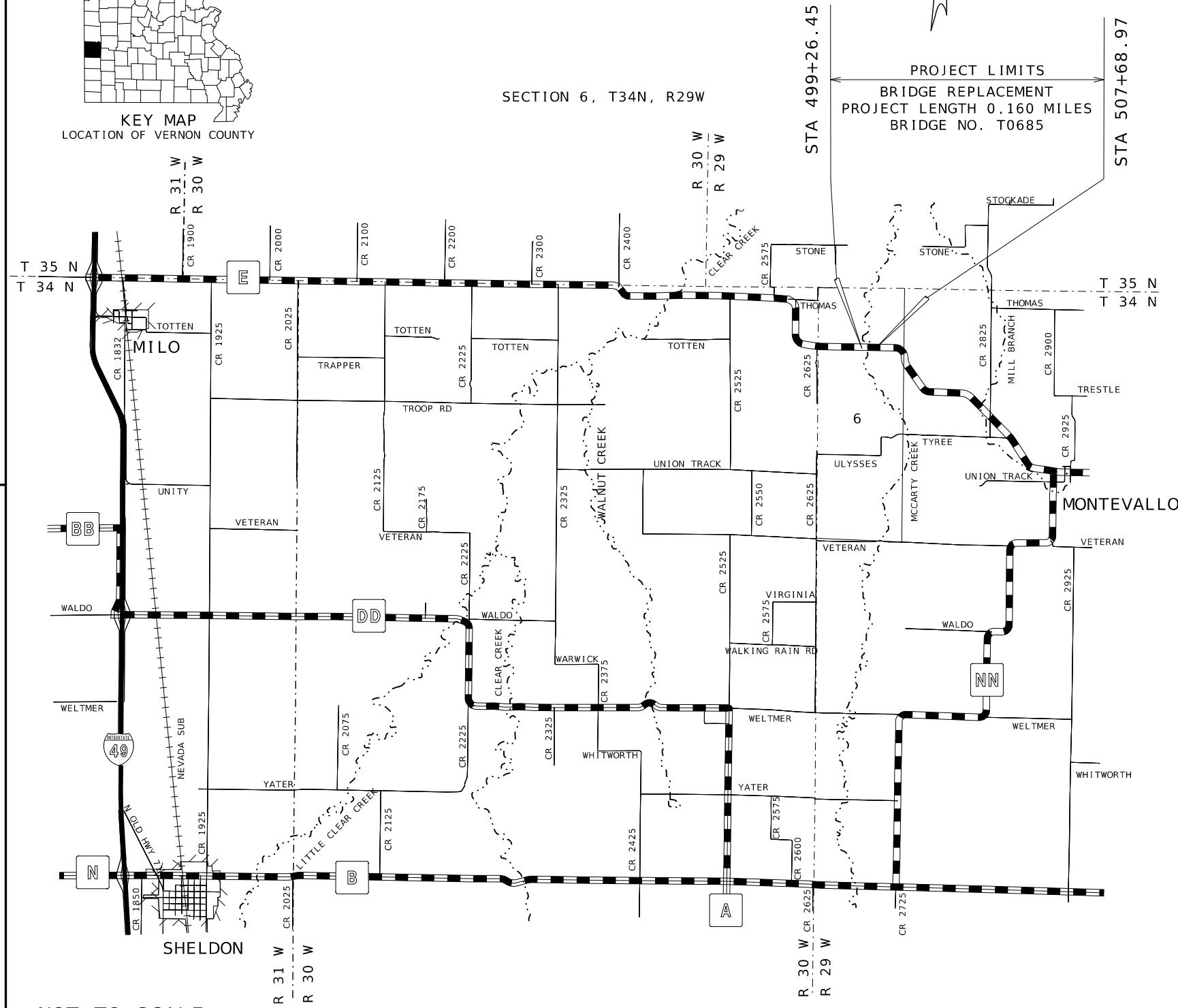
FUNCTIONAL CLASSIFICATION-MAJOR COLLECTOR

NORMAL RIGHT OF WAY

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION PLANS FOR PROPOSED STATE HIGHWAY VERNON COUNTY



KEY MAP
 LOCATION OF VERNON COUNTY



NOT TO SCALE

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.

**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

INDEX OF SHEETS

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TITLE SHEET	1
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SPECIAL SHEETS (SS)	8
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CROSS SECTIONS (XS)	1-14



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
 2/27/2026

ROUTE E STATE MO

DISTRICT SW SHEET NO. 1

COUNTY VERNON

JOB NO. JSR0140

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

LENGTH OF PROJECT

BEGINNING OF PROJECT STA. 499 + 26.45
 END OF PROJECT STA. 507 + 68.97

APPARENT LENGTH 842.52 FEET

EQUATIONS AND EXCEPTIONS:

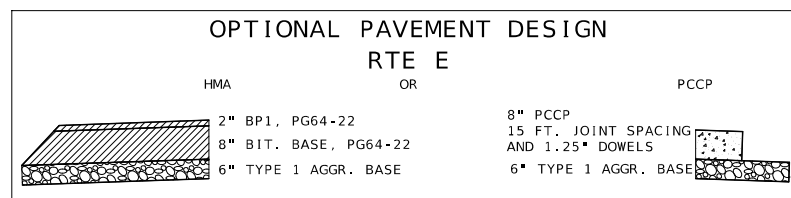
TOTAL CORRECTIONS	0.00 FEET
NET LENGTH OF PROJECT	842.52 FEET
STATE LENGTH	0.160 MILES
FOR INFORMATION ONLY	
ESTIMATED DISTURBED ACRES	1.3 ACRES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

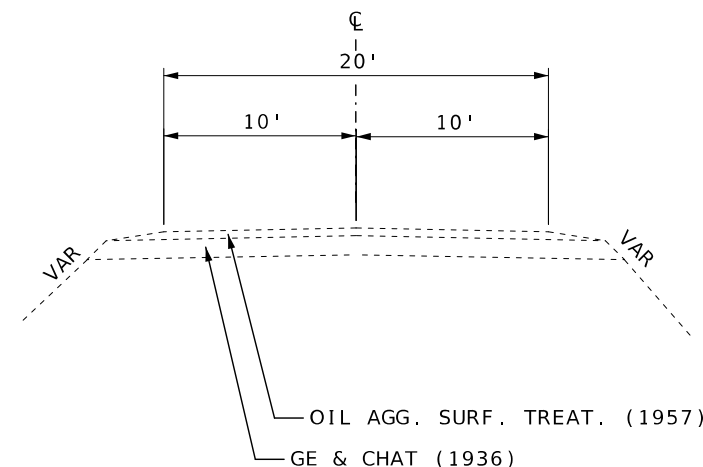
ASPHALT FACTORS	
MATERIAL	TONS/CY
BP-1	1.960
BITUMINOUS BASE	1.975

EQUIVALENT PAVEMENT DESIGN			
LOCATION	BASE TYPE	HMA DESIGN	PCCP DESIGN
ROUTE E	6" TYPE 1 AGGREGATE BASE	10" HMA 2" BP1 W/ PG 64-22 OVER 8" BIT. BASE W/ PG 64-22	8" PCCP 15 FT JOINTS W/ 1 1/4" DOWELS

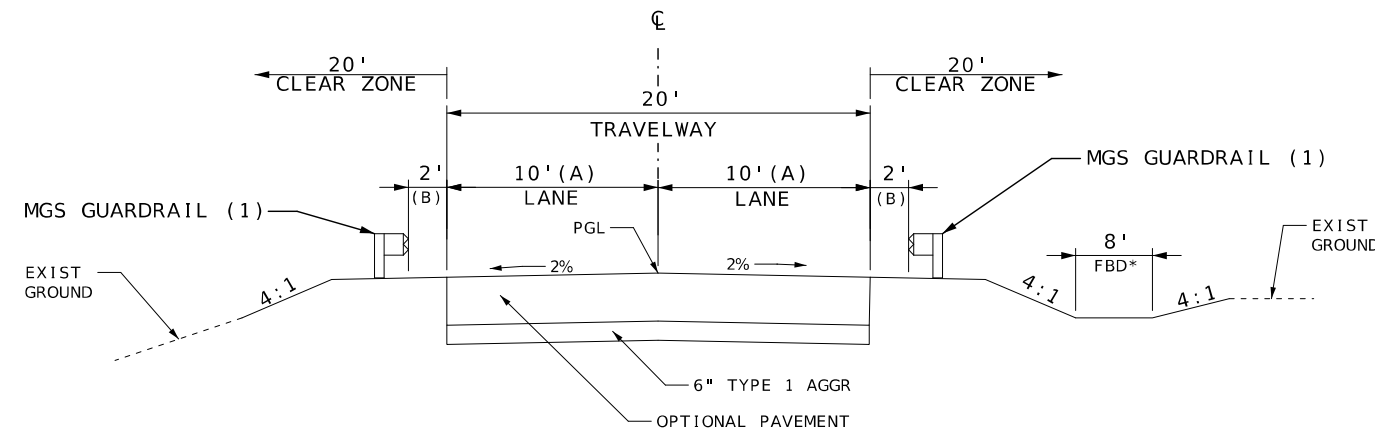


WIDTH TRANSITIONS

- (A) TRANSITION FROM 10' AT STA 501+11.75 TO 12' AT STA 502+21.75
- TRANSITION FROM 12' AT ST 504+15.25 TO 10' AT STA 505+25.25
- (B) TRANSITION FROM 2' AT STA 501+11.75 TO 0' AT STA 502+21.75
- TRANSITION FROM 0' AT ST 504+15.25 TO 2' AT STA 505+25.25

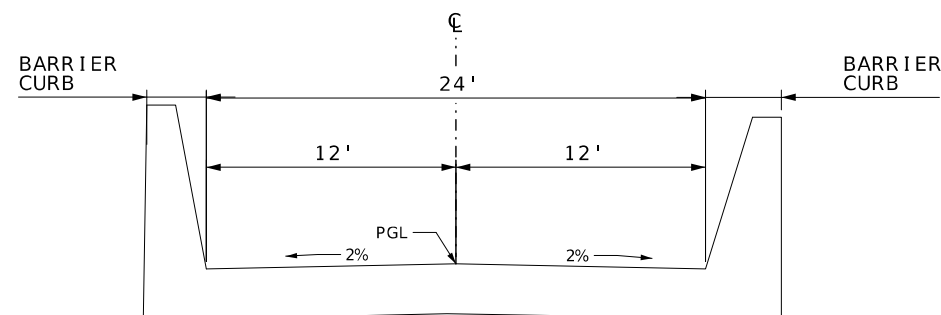


SECTION ON TANGENT
EXISTING TYPICAL SECTION RTE E

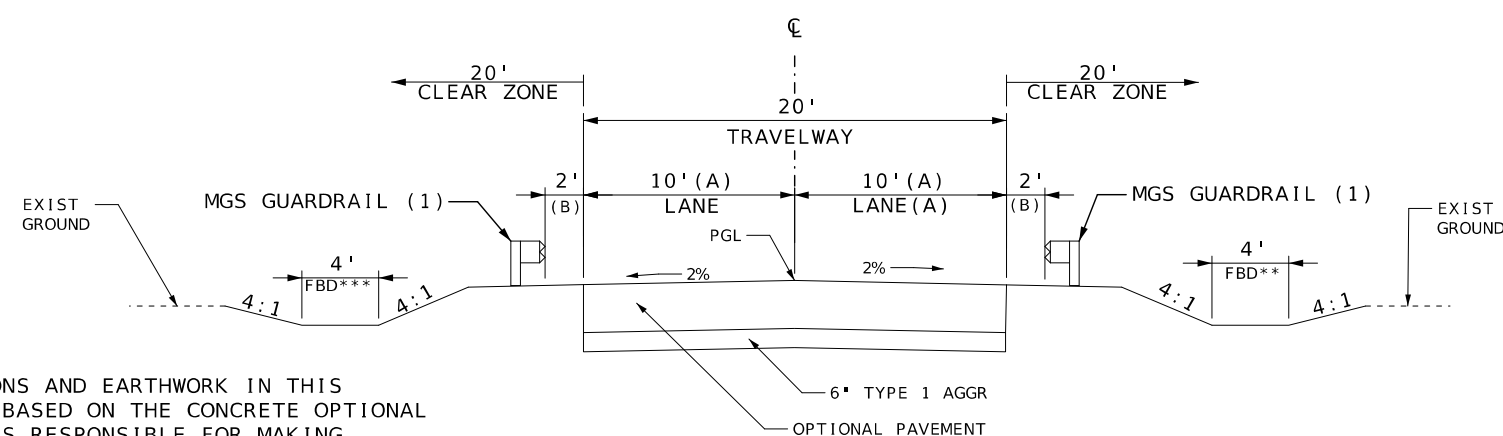


SECTION ON TANGENT
PROPOSED TYPICAL SECTION RTE E
STA 499+26.45 TO STA 502+21.75

*DITCH RUNS FROM STA 500+00.00 TO STA 502+36.29



PROPOSED BRIDGE
PROPOSED TYPICAL SECTION RTE E
STA 502+41.75 TO STA 503+95.25
MINOR ROAD BRIDGE APPROACH SLAB
STA 502+21.75 TO STA 502+41.75
STA 503+95.25 TO STA 504+15.25



SECTION ON TANGENT
PROPOSED TYPICAL SECTION RTE E
STA 504+15.25 TO STA 507+68.97

**DITCH RUNS FROM STA 504+15.25 TO STA 505+61.00
***DITCH RUNS FROM STA 504+00.25 TO STA 507+68.97

CROSS SECTIONS AND EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE OPTIONAL CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT OPTIONAL IS USED.

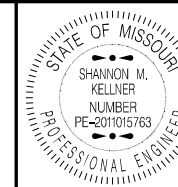
NO DIRECT PAY FOR SAWCUTS.

NOTE:

- (1) GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD PLANS 606.50 AND 606.81. SEE PLAN SHEET FOR EXACT LIMITS OF MGS GUARDRAIL.

NOT TO SCALE

TYPICAL SECTIONS
SHEET 1 OF 1



DATE PREPARED
2/27/2026

ROUTE E	STATE MO
DISTRICT SW	SHEET NO. 2

COUNTY
VERNON
JOB NO.
JSR0140
CONTRACT ID.

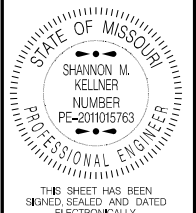
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DATE PREPARED
2/27/2026

ROUTE STATE
E MO

DISTRICT SHEET NO.
SW 3

COUNTY
VERNON

JOB NO.
JSR0140

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

SEEDING						
STA	STA	LOCATION	SEEDING COOL SEASON MIX (ACRES)	TEMPORARY SEEDING (ACRES)	MULCHING (ACRES)	REMARKS
502+21.75	502+68.00	LT/RT RTE E	0.62	0.16	0.78	WEST OF BRIDGE
503+70.00	504+15.25	LT/RT RTE E	0.43	0.11	0.54	EAST OF BRIDGE
TOTAL			1.05	0.27	1.32	
USE			1.1	0.3	1.4	

TEMPORARY EROSION CONTROL						
STA	STA	LOCATION	SILT FENCE (LF)	ROCK DITCH CHECK (LF)	TYPE C BERM (LF)	SEDIMENT REMOVAL (CY)
499+26.45	502+80.79	LT/RT RTE E	779.5	32	170	11.80
503+45.48	507+68.97	LT/RT RTE E	931.7	64	202	17.32
TOTAL			1711.2	96	372	29.12
USE			1712	96	372	30

REMOVAL OF IMPROVEMENTS								
ROUTE	STA	-	STA	LOCATION	DESCRIPTION	UNITS	TOTAL	REMARKS
RTE E	502+21.53	-		LT & RT	SIGN	EACH	2	
RTE E	502+42.55	-		LT & RT	SIGN	EACH	2	
RTE E	502+59.86	-		LT & RT	SIGN	EACH	2	
RTE E	503+70.85	-		LT & RT	SIGN	EACH	2	
RTE E	503+89.01	-		LT & RT	SIGN	EACH	2	
RTE E	504+09.27	-		LT & RT	SIGN	EACH	2	
TOTAL							1 LUMP SUM	

ROCK BLANKET							
BEGIN STA	END STA	LOCATION	ROCK DEPTH (FT)	TYPE 2 ROCK BLANKET FURNISH (CY)	BLANKET PLACE (CY)	GEOTEXTILE FABRIC (SY)	REMARKS
502+21.75	502+68.00	LT/RT OF RTE E	2	114	114	171	WEST END OF BRIDGE
503+70.00	504+15.25	LT/RT OF RTE E	2	122	122	183	EAST END OF BRIDGE
TOTAL				236	236	354	

CLEARING AND GRUBBING			
BEGIN STA	END STA	LOCATION	CLEARING AND GRUBBING (ACRES)
499+90.00	503+14.17	WEST OF BRIDGE	0.37
503+64.70	506+25.00	EAST OF BRIDGE	0.13
TOTAL			0.5
USE			1

EARTHWORK							
BEGIN STA	END STA	LOCATION	APPROXIMATE EARTHWORK		UNCLASSIFIED EXCAVATION (CY)	COMPACTING EMBANKMENT (CY)	REMARKS
			CUT (CY)	FILL (CY)			
499+26.45	502+21.75	RTE E	318.9	456.3	318.9	456.3	WEST OF BRIDGE
502+21.75	502+75.04	RTE E	159.0	1.0	159.0	1.0	WEST END BENT
503+50.99	504+15.25	RTE E	277.9	1.2	277.9	1.2	EAST END BENT
504+15.25	507+68.97	RTE E	238.9	194.6	238.9	194.6	EAST OF BRIDGE
ROUNDING 500 CY / MILE							
TOTAL					80.0		
USE					1074.7	653.1	
					1075	654	

OPTIONAL PAVEMENT & AGGREGATE BASE					
BEGIN STA	END STA	LOCATION	OPTIONAL PAVEMENT (SY)	6" TYPE 1 AGGREGATE (SY)	REMARKS
499+26.45	502+21.75	RTE E	680.7	680.7	WEST OF BRIDGE
504+15.25	507+68.97	RTE E	810.5	810.5	EAST OF BRIDGE
TOTAL			1491.2	1491.2	
USE			1491.2	1492	

CONTRACTOR FURNISHED SURVEYING & STAKING
1 LUMP SUM

GUARDRAIL & BARRIERS					
BEGIN STA	END STA	LOCATION	MGS BRIDGE APPROACH TRANSITION (REGULAR/NO CURB) (EACH)	TYPE A CRASHWORTHY END TERMINAL (MASH) (EACH)	MGS GUARDRAIL (FT)
500+48.50	502+36.75	RTE E RT	1	1	100
501+11.00	502+36.75	RTE E LT	1	1	37.5
504+00.25	505+26.00	RTE E RT	1	1	37.5
504+00.25	505+88.50	RTE E LT	1	1	100
TOTAL			4	4	275

ADDITIONAL MOBILIZATION FOR SEEDING
EACH
4

MOBILIZATION
1 LUMP SUM

PERMANENT PAVEMENT MARKING						
BEGIN STA	END STA	LOCATION	LENGTH (FT)	4" WHITE CLASS 1 PAVEMENT MARKING PAINT (18-MIL, TYPE P BEADS) (FT)	4" YELLOW CLASS 1 PAVEMENT MARKING PAINT (18-MIL, TYPE P BEADS) (FT)	REMARKS
499+26.45	506+37.50	LT, RT, CL OF RTE E	711.05	1422.1	177.8	EDGELINES & INTERMITTENT CL
506+37.50	507+68.97	LT, RT, CL OF RTE E	131.47	262.94	164.3375	EDGELINES, SOLID CL & INTERMITTENT CL
TOTAL				1685.04	342.1375	
USE				1686	343	

SUMMARY OF QUANTITIES
SHEET 1 OF 2

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

WARNING SIGNS												GUIDE SIGNS												EFFECTIVE: 07-01-2025		
SIGN	SIZE	AREA	QTY	TOTAL	QTY	TOTAL	SIGN	DESCRIPTION				SIGN	SIZE	AREA	QTY	TOTAL	QTY	TOTAL	SIGN	DESCRIPTION				ITEM	TOTAL	DESCRIPTION
IN.	SQ. FT.	EACH	AREA	RELOC	RELOC	NO.						IN.	SQ. FT.	EACH	AREA	RELOC	RELOC	NO.				NUMBER	QTY			
WO1-1L	48X48	16.00					TURN	(SYMBOL LEFT)			E05-1	36X48	12.00							GORE EXIT	6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)			
WO1-1R	48X48	16.00					TURN	(SYMBOL RIGHT)			E05-2	48X36	12.00							EXIT OPEN	6122010		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)			
WO1-2L	48X48	16.00					CURVE	(SYMBOL LEFT)			E05-2a	48X36	12.00							EXIT CLOSED	6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)			
WO1-2R	48X48	16.00					CURVE	(SYMBOL RIGHT)			GO20-1	60X24	10.00							ROAD WORK NEXT XX MILES	6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)			
WO1-3L	48X48	16.00					REVERSE TURN	(SYMBOL LEFT)			GO20-2	48X24	8.00							END ROAD WORK	6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)			
WO1-3R	48X48	16.00					REVERSE TURN	(SYMBOL RIGHT)			GO20-4	36X18	4.50							PILOT CAR FOLLOW ME	6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)			
WO1-4L	48X48	16.00					REVERSE CURVE	(SYMBOL LEFT)			GO20-4a	42X30	8.75							PILOT CAR IN USE WAIT & FOLLOW	6122020		REPLACEMENT SAND BARREL			
WO1-4R	48X48	16.00					REVERSE CURVE	(SYMBOL RIGHT)			GO20-4a	18X12	1.50							PILOT CAR IN USE WAIT & FOLLOW	6122030		IMPACT ATTENUATOR (RELOCATION)			
WO1-4bL	48X48	16.00					DOUBLE ARROW REVERSE CURVE	(SYMBOL LEFT)			GO20-5aP	36X24	6.00							WORK ZONE (PLAQUE)	6122040		WORK ZONE CRASH CUSHION (NARROW)			
WO1-4bR	48X48	16.00					DOUBLE ARROW REVERSE CURVE	(SYMBOL RIGHT)			MO4-8a	24X18	3.00	2	6.00					END DETOUR	6122041		WORK ZONE CRASH CUSHION (RELOCATION)			
WO1-4cL	48X48	16.00					TRIPLE ARROW REVERSE CURVE	(SYMBOL LEFT)			MO4-9L	48X36	12.00							DETOUR (LEFT)	6123001		TRUCK MOUNTED ATTENUATOR (TMA)			
WO1-4cR	48X48	16.00					TRIPLE ARROW REVERSE CURVE	(SYMBOL RIGHT)			MO4-9R	48X36	12.00							DETOUR (RIGHT)	6161012		BUOYS (BOATS KEEP OUT)			
WO1-6	60X30	12.50					HORIZONTAL ARROW	(SYMBOL)			MO4-9P	48X12	4.00							STREET NAME (PLAQUE)	6161013		BUOYS (NO WAKE)			
WO1-6a	72X36	18.00					HORIZ. ARROW	(SYMBOL ON PERMANENT BARRICADE)			MO4-10L	48X18	6.00	1	6.00					DETOUR ARROW (LEFT)	6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)			
WO1-7	60X30	12.50					DOUBLE HEAD HORIZONTAL ARROW	(SYMBOL)			MO4-10R	48X18	6.00							DETOUR ARROW (RIGHT)	6161020		CHANNELIZER (DRUM-LIKE)			
WO1-7a	72X36	18.00					DOUBLE HEAD HORIZ. ARROW	(SYMBOL ON PERM. BARR.)			REGULATORY SIGNS												6161022		CHANNELIZER (CONE)	
WO1-8	18X24	3.00					CHEVRON	(SYMBOL)			R1-1	48X48	13.25								STOP	6161025		CHANNELIZER (TRIM-LINE)		
WO1-8a	30X36	7.50					CHEVRON	(SYMBOL FOR DIVIDED HIGHWAYS)			R1-2	48TRI.	6.93								YIELD	6161026		CHANNELIZER (VERTICAL PANEL)		
WO3-1	48X48	16.00					STOP AHEAD	(SYMBOL)			R1-2a	36X36	9.00								TO ONCOMING TRAFFIC (PLAQUE)	6161030	10	TYPE 3 MOVEABLE BARRICADE		
WO3-2	48X48	16.00					YIELD AHEAD	(SYMBOL)			R1-3P	30X12	2.50								ALL WAY (PLAQUE)	6161033		DIRECTION INDICATOR BARRICADE		
WO3-3	48X48	16.00					SIGNAL AHEAD	(SYMBOL)			R2-1	36X48	12.00								SPEED LIMIT XX	6161040		FLASHING ARROW PANEL		
WO3-4	48X48	16.00					BE PREPARED TO STOP				R3-1	48X48	16.00								NO RIGHT TURN (SYMBOL)	6161047		TYPE 3 OBJECT MARKER		
WO3-5	48X48	16.00					SPEED LIMIT AHEAD				R3-2	48X48	16.00								NO LEFT TURN (SYMBOL)	6161055		SEQUENTIAL FLASHING WARNING LIGHT		
WO4-1L	48X48	16.00					MERGE	(SYMBOL FROM LEFT)			R3-3	36X36	9.00								NO TURNS	6161070		TUBULAR MARKER		
WO4-1R	48X48	16.00					MERGE	(SYMBOL FROM RIGHT)			R3-4	48X48	16.00								NO U-TURN (SYMBOL)	6161095		RADAR SPEED ADVISORY SYSTEM		
WO4-1aL	48X48	16.00					MERGE	(LEFT)			R3-7L	30X30	6.25								LEFT LANE MUST TURN LEFT	6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED		
WO4-1aR	48X48	16.00					MERGE	(RIGHT)			R3-7R	30X30	6.25								RIGHT LANE MUST TURN RIGHT	6161096		CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED		
WO5-1	48X48	16.00					ROAD/BRIDGE/RAMP NARROWS				R4-1	36X48	12.00								DO NOT PASS	6161098A	3	CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED		
WO5-3	48X48	16.00					ONE LANE BRIDGE				R4-2	36X48	12.00								PASS WITH CARE	6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED		
WO5-5	48X48	16.00					NARROW LANES				R4-7a	36X48	12.00								KEEP RIGHT (HORIZONTAL ARROW)	6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM		
WO6-1	48X48	16.00					DIVIDED HIGHWAY	(SYMBOL)			R4-8a	36X48	12.00								KEEP LEFT (HORIZONTAL ARROW)	6162002		TEMPORARY LONG-TERM RUMBLE STRIPS		
WO6-2	48X48	16.00					DIVIDED HIGHWAY END	(SYMBOL)			R5-1	30X30	6.25								DO NOT ENTER	6173600D		TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED		
WO6-3	48X48	16.00					TWO WAY TRAFFIC	(SYMBOL)			R5-1a	36X24	6.00								WRONG WAY	6173700B		TEMP. TRAFFIC BARRIER ANCHORED, CONTRACTOR FURNISHED/RETAINED		
WO7-3a	30X24	5.00					NEXT XX MILES	(PLAQUE)			R6-1L	54X18	6.75								ONE WAY ARROW (LEFT)	6173706		TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION, CONTRACTOR FURNISHED/RETAINED		
WO8-1	48X48	16.00					BUMP				R6-1R	54X18	6.75								ONE WAY ARROW (RIGHT)	6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED		
WO8-2	48X48	16.00					DIP				R6-2L	24X30	5.00								ONE WAY (LEFT)	6175010A		RELOCATING TEMP. TRAFFIC BARRIER		
WO8-3	48X48	16.00					PAVEMENT ENDS				R6-2R	24X30	5.00								ONE WAY (RIGHT)	6175011B		RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS		
WO8-4	48X48	16.00					SOFT SHOULDER				R9-9	24X12	2.00								SIDEWALK CLOSED	6175020A		RELOCATING TEMP. TRAFFIC BARRIER HEIGHT		
WO8-5	48X48	16.00					SLIPPERY WHEN WET	(SYMBOL)			R9-11L	24X18	3.00								SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE	6208064A		TEMPORARY RAISED PAVEMENT MARKER		
WO8-6	48X48	16.00					TRUCK CROSSING				R10-6	24X36	6.00								SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE	9029400		TEMPORARY TRAFFIC SIGNALS		
WO8-6c	48X48	16.00					TRUCK ENTRANCE				R11-2	48X30	10.00	2	20.00						STOP HERE ON RED (45° ARROW)	9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING		
WO8-7	36X36	9.00					LOOSE GRAVEL				R11-3a	60X30	12.50	2	25.00						ROAD CLOSED					
WO8-7a	36X36	9.00					FRESH OIL / LOOSE GRAVEL				R11-4	60X30	12.50								ROAD CLOSED XX MILES AHEAD					
WO8-9	48X48	16.00					LOW SHOULDER				CONST-3A	60X48	20.00								LOCAL TRAFFIC ONLY					
WO8-11	48X48	16.00					UNEVEN LANES				CONST-3X	56X12	4.67								ROAD CLOSED TO THRU TRAFFIC					
WO8-12	48X48	16.00					NO CENTER LINE				MISCELLANEOUS SIGNS															
WO8-15	48X48	16.00					GROOVED PAVEMENT				CONST-5	48X36	12.00									POINT OF PRESENCE				
WO8-15P	30X24	5.00					MOTORCYCLE	(PLAQUE)			CONST-5	96X48	32.00									POINT OF PRESENCE				
WO8-17L	48X48	16.00					SHOULDER DROP-OFF	(SYMBOL LEFT)			CONST-8	48X36	12.00									WORK ZONE NO PHONE ZONE				
WO8-17R	48X48	16.00					SHOULDER DROP-OFF	(SYMBOL RIGHT)			DETOUR	36X60	15.00	39	585.00							DETOUR SIGNS				
WO8-17P	30X24	5.00					SHOULDER DROP-OFF	(PLAQUE)																		
W10-1	42RND.	9.62					RAILROAD CROSSING																			
WO12-1	24X24	4.00					DOUBLE DOWN ARROW	(SYMBOL)																		
WO12-2	48X48	16.00					LOW CLEARANCE	(SYMBOL)																		
WO12-2x	24X18	3.00					LOW CLEARANCE	(PLAQUE)																		
WO12-2a	84X24	14.00					OVERHEAD LOW CLEARANCE	(FEET AND INCHES)																		
WO12-4	120X60	50.00					LOW CLEARANCE XX FT XX IN XX MILES AHEAD																			
WO12-5	120X60	50.00					WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD																			
WO13-1	30X30	6.25					ADVISORY SPEED	(PLAQUE)																		
WO16-2	30X24	5.00					XXX FEET	(PLAQUE)																		
WO16-3	30X24	5.00					X MILE	(PLAQUE)																		
WO20-1	48X48	16.00					ROAD/BRIDGE/RAMP WORK AHEAD																			
WO20-2	48X48	16.00	3	48.00			DETOUR AHEAD																			
WO20-3	48X48	16.00	4	64.00			ROAD CLOSED AHEAD				616-10.05										TOTAL					
WO20-4	48X48	16.00					ONE LANE ROAD AHEAD				CONSTRUCTION SIGNS				754											
WO20-5	48X48	16.00					RIGHT/CENTER/LEFT LANE CLOSED AHEAD				616-10.10										TOTAL					
WO20-5a	48X48	16.00					2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD				RELOCATED SIGNS															
WO20-6a	48X48	16.00					RIGHT/CENTER/LEFT LANE CLOSED																			
WO20-7a	48X48	16.00					FLAGGER	(SYMBOL)																		
WO21-2	36X36	9.00					FRESH OIL																			
WO21-5	48X48	16.00					SHOULDER WORK / SHOULDER WORK AHEAD																			
WO22-1	48X48	16.00					BLASTING ZONE AHEAD																			
WO22-2	42X36	10.50					TURN OFF 2-WAY RADIO AND PHONE																			
WO22-3	42X36	10.50					END BLASTING ZONE																			
GO22-1	21X15	2.19					WET PAINT	(ARROW PIVOTS)																		

STATE OF MISSOURI
SHANNON M. KELLNER
NUMBER PE-2

NOTES

ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

THE APPROXIMATE LOCATION OF PROPERTY LINES 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

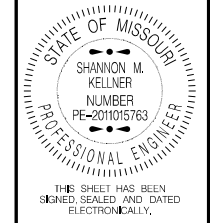
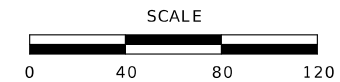
RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STATION 499+90.00 TO STATION 506+25.00 A DISTANCE OF 0.12 MILES

ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARING WEST ZONE

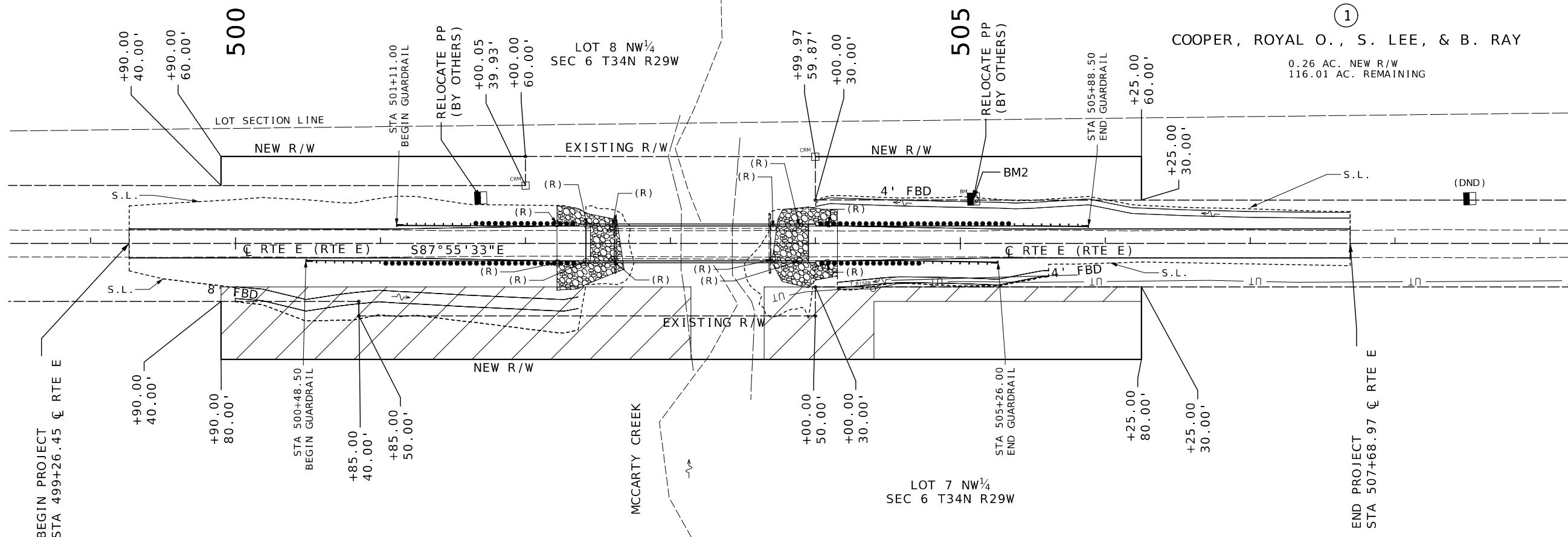
PLAN

PROPOSED BRIDGE A9612
 BRIDGE TYPE:
 PRESTRESSED CONCRETE SPREAD
 BOX BEAM SPANS (21")
 (45' - 60' - 45')
 STA 502+41.75
 LENGTH: 150'
 WIDTH: 24'

EXISTING BRIDGE T0685
 BRIDGE TYPE:
 SIMPLE CONCRETE
 DECK GIRDER SPANS
 (30' - 40' - 30')
 STA 502+61.70
 LENGTH: 109.92'
 WIDTH: 20'
 YEAR BUILT: 1935

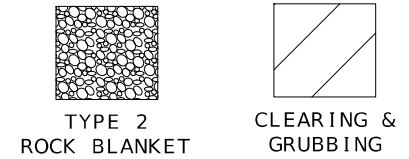


DATE PREPARED 2/27/2026	
ROUTE E	STATE MO
DISTRICT SW	SHEET NO. 4
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



①
 COOPER, ROYAL O., S. LEE, & B. RAY
 0.26 AC. NEW R/W
 116.01 AC. REMAINING

②
 GUINN, BRAD A.
 0.57 AC. NEW R/W
 77.74 AC. REMAINING



DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/2/2026

ROUTE STATE
E MO

DISTRICT SHEET NO.
SW 5

COUNTY
VERNON

JOB NO.
JSR0140


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

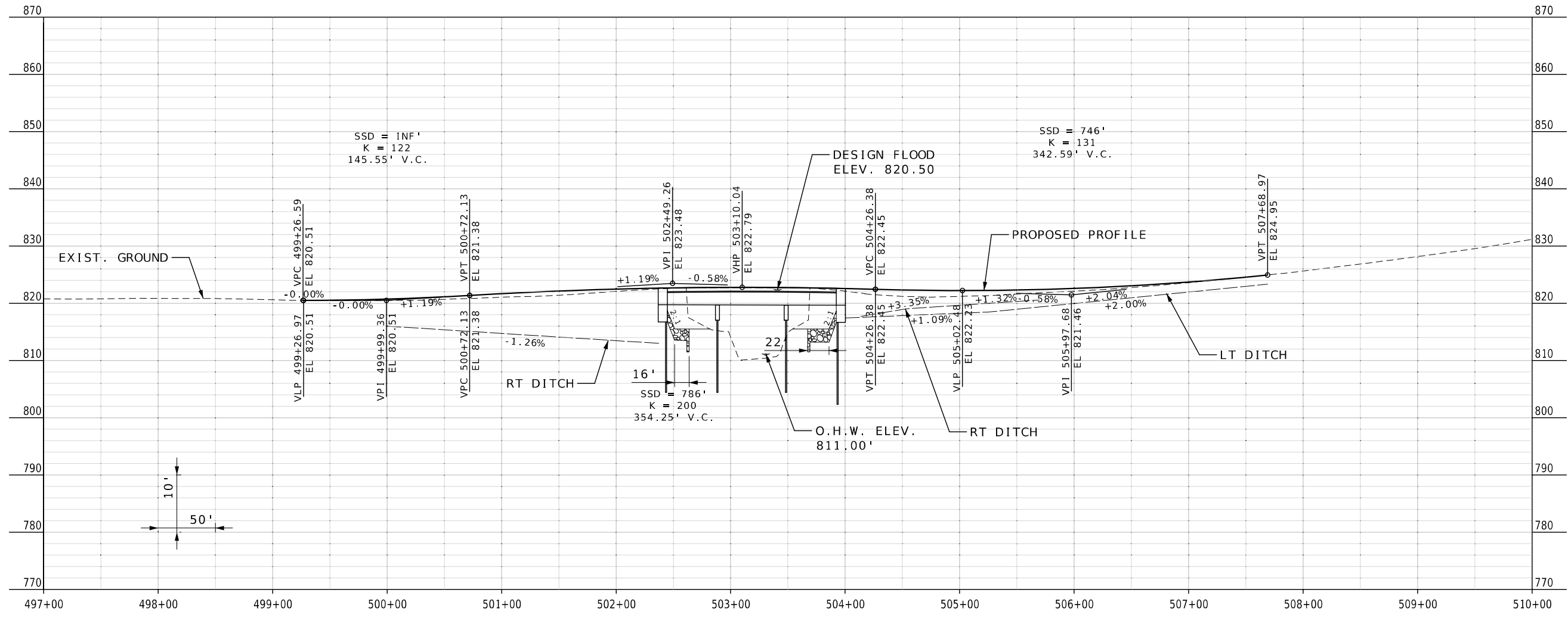
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

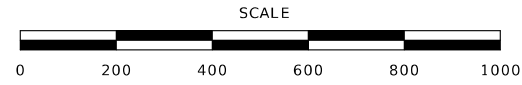


105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

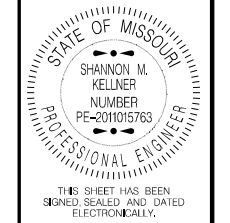
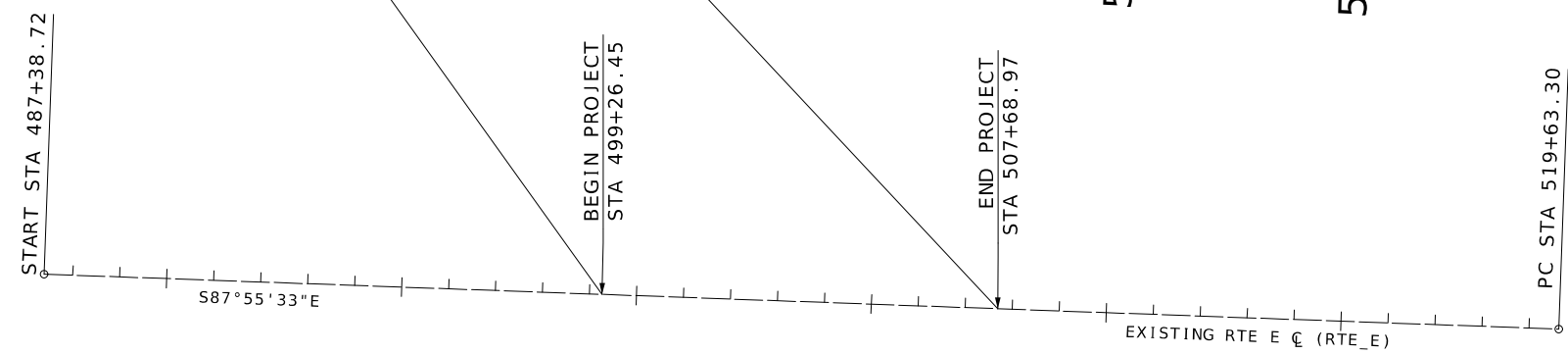
RTE E C



NE CORNER S1 T34N R30W
 DOC# 600-46930
 JOHN DOUGLAS
 LS# 1764



$\frac{S35^{\circ}38'52"E}{4548.79'}$
 $\frac{S43^{\circ}08'40"E}{5107.93'}$



DATE PREPARED 3/2/2026	
ROUTE E	STATE MO
DISTRICT SW	SHEET NO. 6
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
 COMMISSION

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



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
3/9/2026

ROUTE STATE
E MO

DISTRICT SHEET NO.
SW 7

COUNTY
VERNON

JOB NO.
JSR0140


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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

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, WESTERN
HORIZONTAL DATUM	NAD83
VERTICAL DATUM	NAVD88
GEOID MODEL	GEOID18
ELEVATIONS DETERMINED BY	MODOT GNSS

PROJECT PROJECTION FACTOR 1.00008131

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM	MISSOURI STATE PLANE
CONTROL STATION	MODOT GNSS
DESIGNATION	MODOT NEVADA CORS ARP
CORS_ID	MONE
PID	DM4686
LATITUDE	37° 51' 56.71985"
LONGITUDE	94° 20' 58.36878"
NORTHING (M)	188561.007
EASTING (M)	863237.946
ZONE	2403 (MO-WEST)
PROJECT AVERAGE GRID FACTOR	0.99990844

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

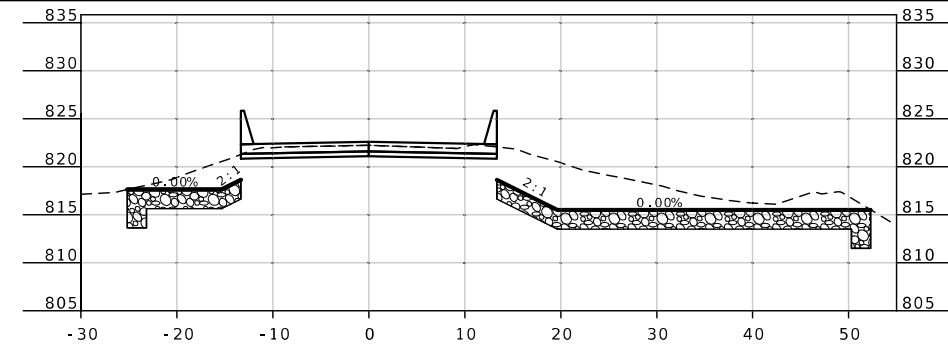
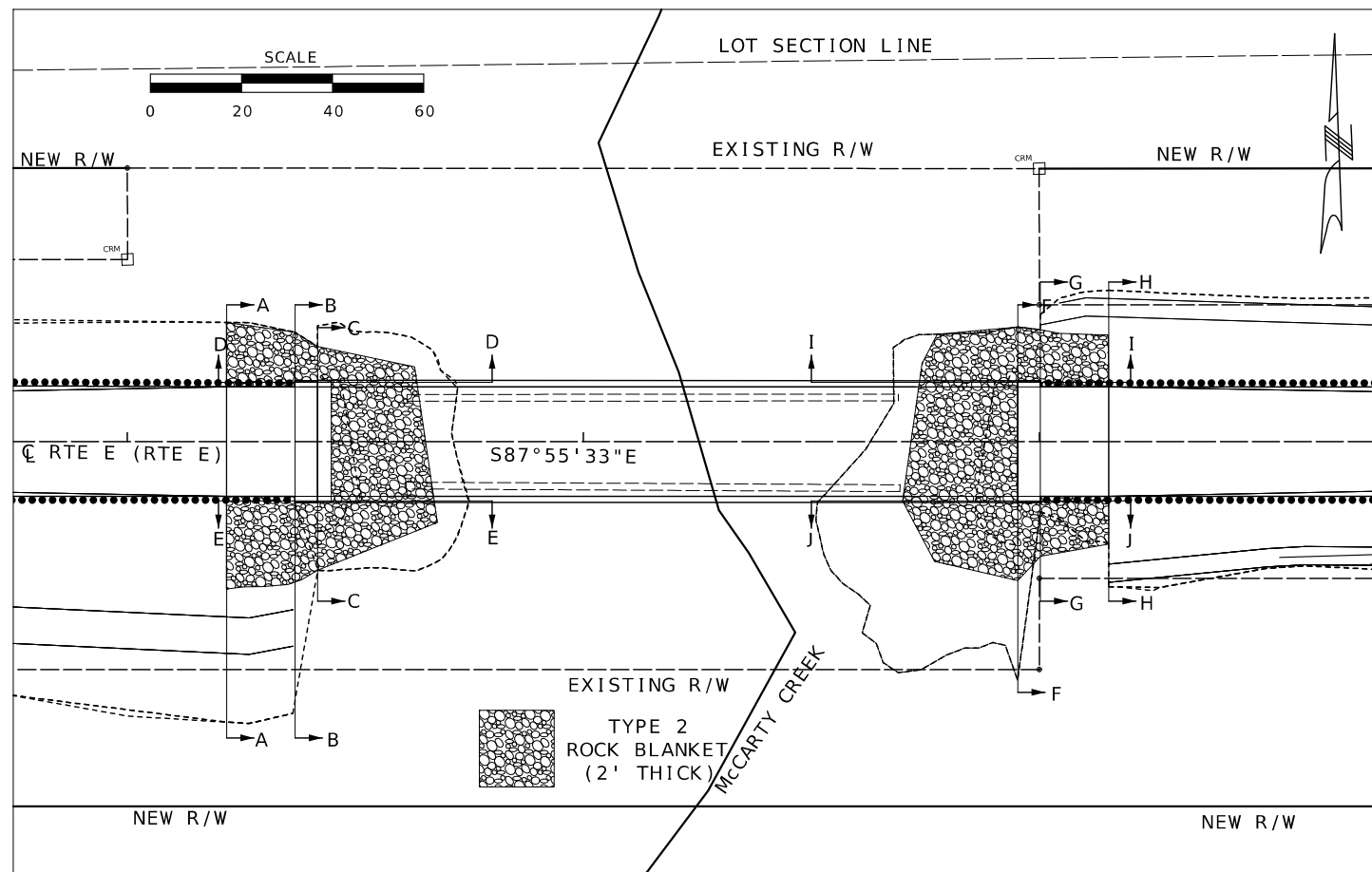
EXAMPLE: CONTROL POINT #101
 N 575987.412 X 0.99990844 = 575934.6746 N
 E 2889809.465 X 0.99990844 = 2889544.8740 E

LINEAR UNIT CONVERSION

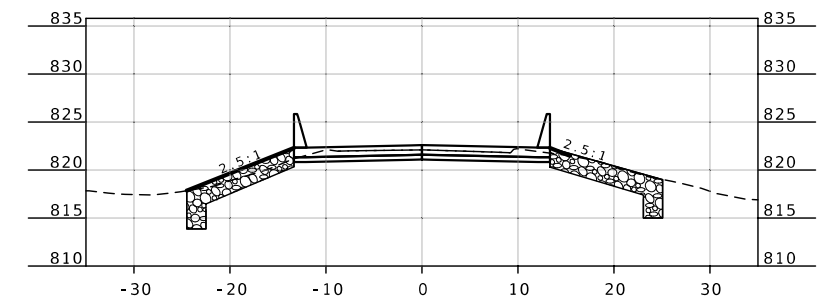
1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING

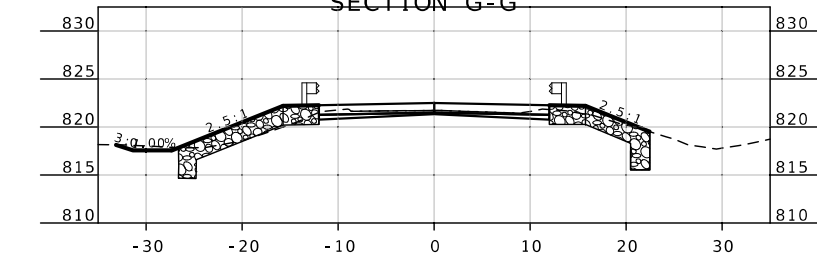
SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	
PROJECT CONTROL POINTS							
N/A	497+94.37	RT C RTE E	18.2807	575987.412	2889809.465	819.266	CP#101 / 5/8" IP WITH PINK CAP
N/A	511+32.08	LT C RTE E	-25.4349	575982.681	2891147.879	835.474	CP#102 / 5/8" IP WITH PINK CAP
N/A	N/A	N/A	N/A	575937.315	2892221.412	918.268	CP#103 / 5/8" IP WITH PINK CAP
4	497+31.97	RT C RTE E	13.8834	575994.065	2889747.264	820.115	BM#1 / CHISELED SQ CULVERT HDWL
N/A	505+08.90	LT C RTE E	-30.6586	576010.457	2890525.299	820.900	BM#2 / RR SPIKE POWER POLE
ALIGNMENT: RTE E							
N/A	487+38.72	C OF RTE E	0	576043.890	2888755.169		POT - BEGIN RTE E CHAIN
N/A	519+63.30	C OF RTE E	0	575927.177	2891977.633		PC - END RTE E CHAIN



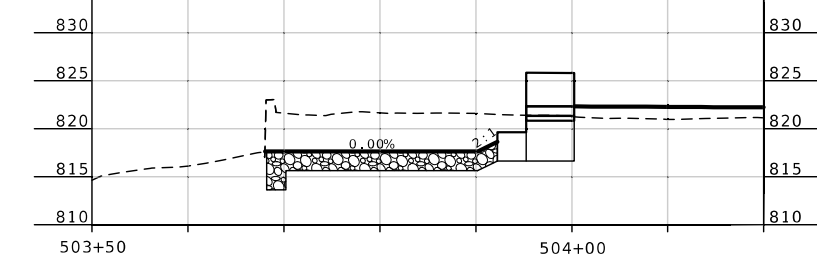
STA 503+95.25
SECTION F-F



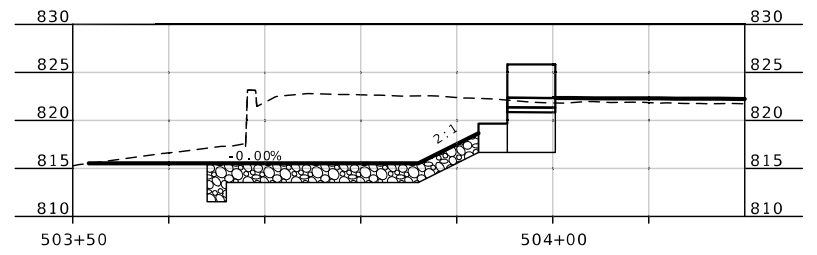
STA 504+00.25
SECTION G-G



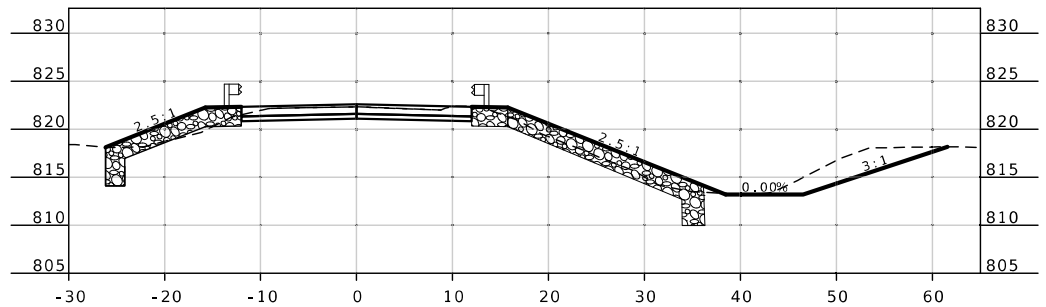
STA 504+15.25
SECTION H-H



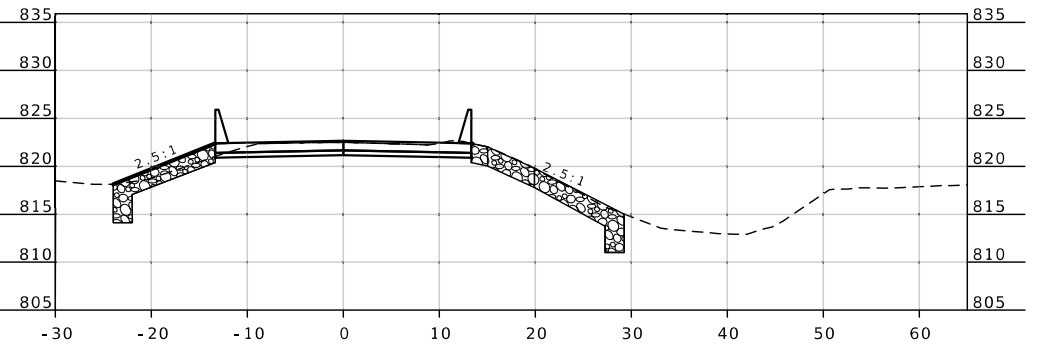
SECTION I-I



SECTION J-J

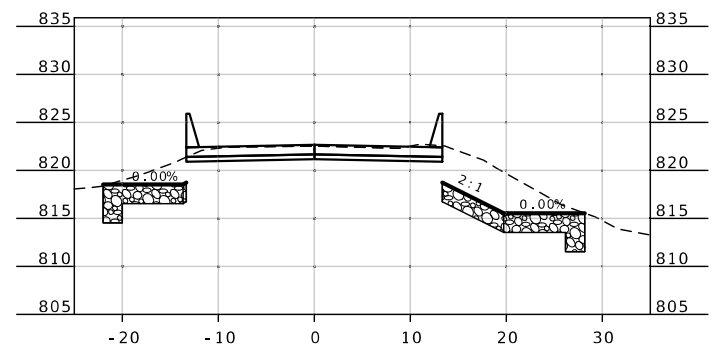


STA 502+21.75
SECTION A-A

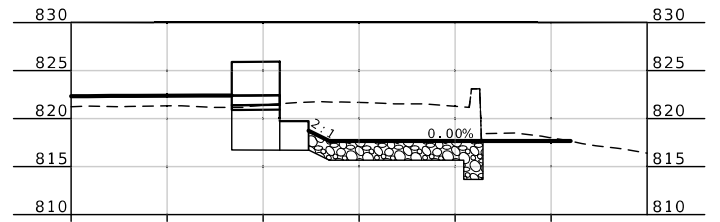


STA 502+36.75
SECTION B-B

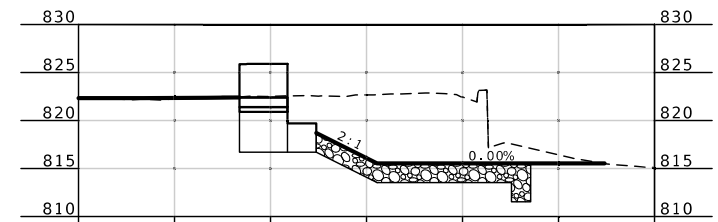
NOTE:
CONSTRUCT DRAIN FLUME IN BLANKET AT END OF WINGWALL IN ACCORDANCE WITH STANDARD PLAN 609.40



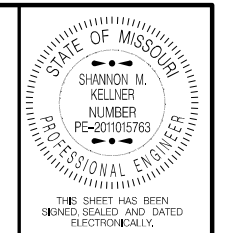
STA 502+41.75
SECTION C-C



SECTION D-D



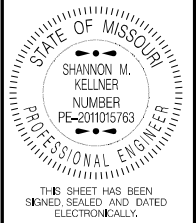
SECTION E-E



DATE PREPARED
2/27/2026
ROUTE E STATE MO
DISTRICT SW SHEET NO. 8
COUNTY VERNON
JOB NO. JSR0140
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

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



THE SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

DATE PREPARED
3/2/2026

ROUTE E	STATE MO
DISTRICT SW	SHEET NO. 11

COUNTY
VERNON

JOB NO.
JSR0140

CONTRACT ID.

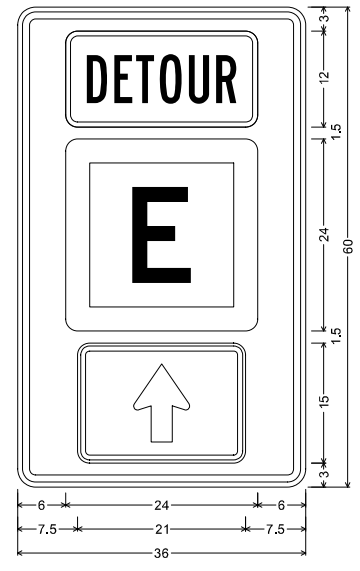
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

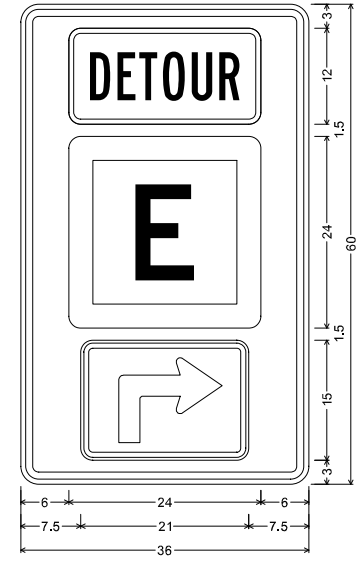
MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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



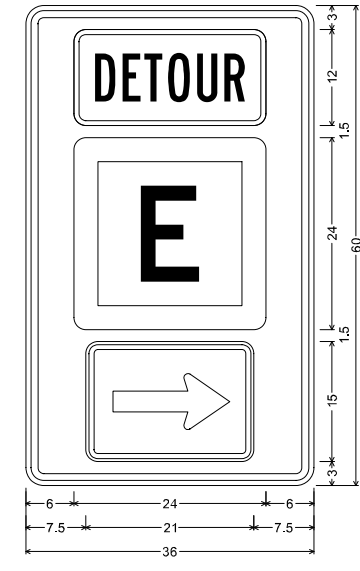
MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts

6,000
6,000
7,500



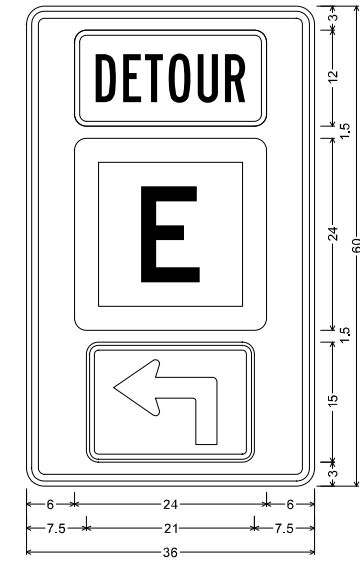
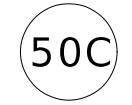
MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts

6,000
6,000
7,500



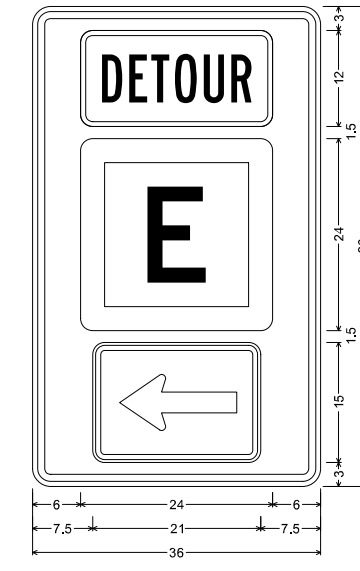
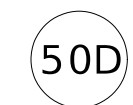
MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts

6,000
6,000
7,500



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts

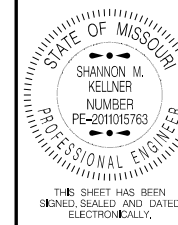
6,000
6,000
7,500



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts

6,000
6,000
7,500





THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

DATE PREPARED
2/27/2026

ROUTE STATE
E MO

DISTRICT SHEET NO.
SW 12

COUNTY
VERNON

JOB NO.
JSR0140

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

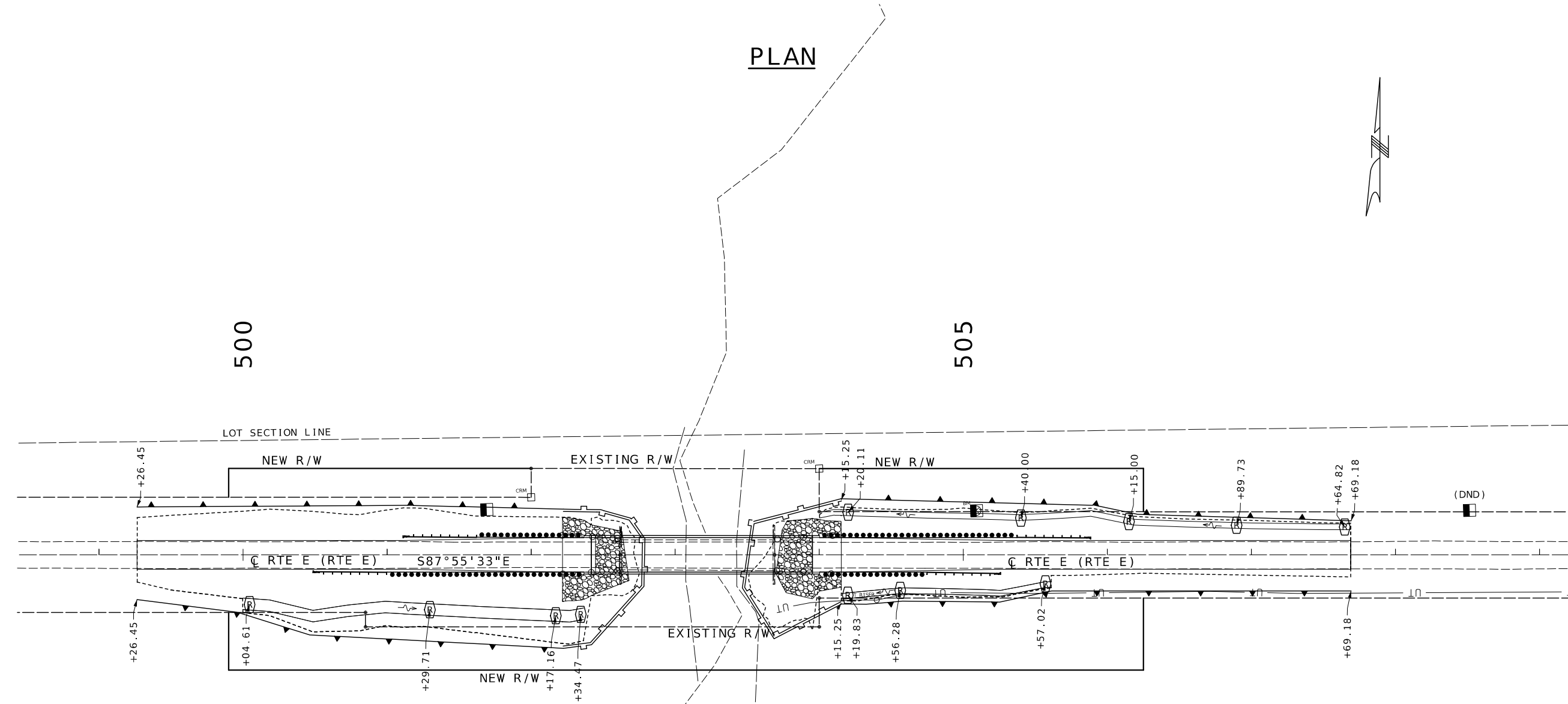
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

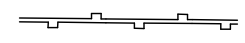
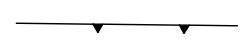



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

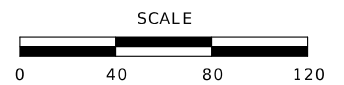
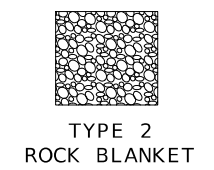
PLAN



TEMPORARY EROSION CONTROL LEGEND

-  TEMPORARY BERM TYPE C
-  SILT FENCE
-  ROCK DITCH CHECK

NOTE:
LOCATION / LIMITS OF TEMPORARY EROSION CONTROL DEVICES
MAY BE ADJUSTED TO MEET FIELD CONDITIONS AS DIRECTED BY THE ENGINEER





THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

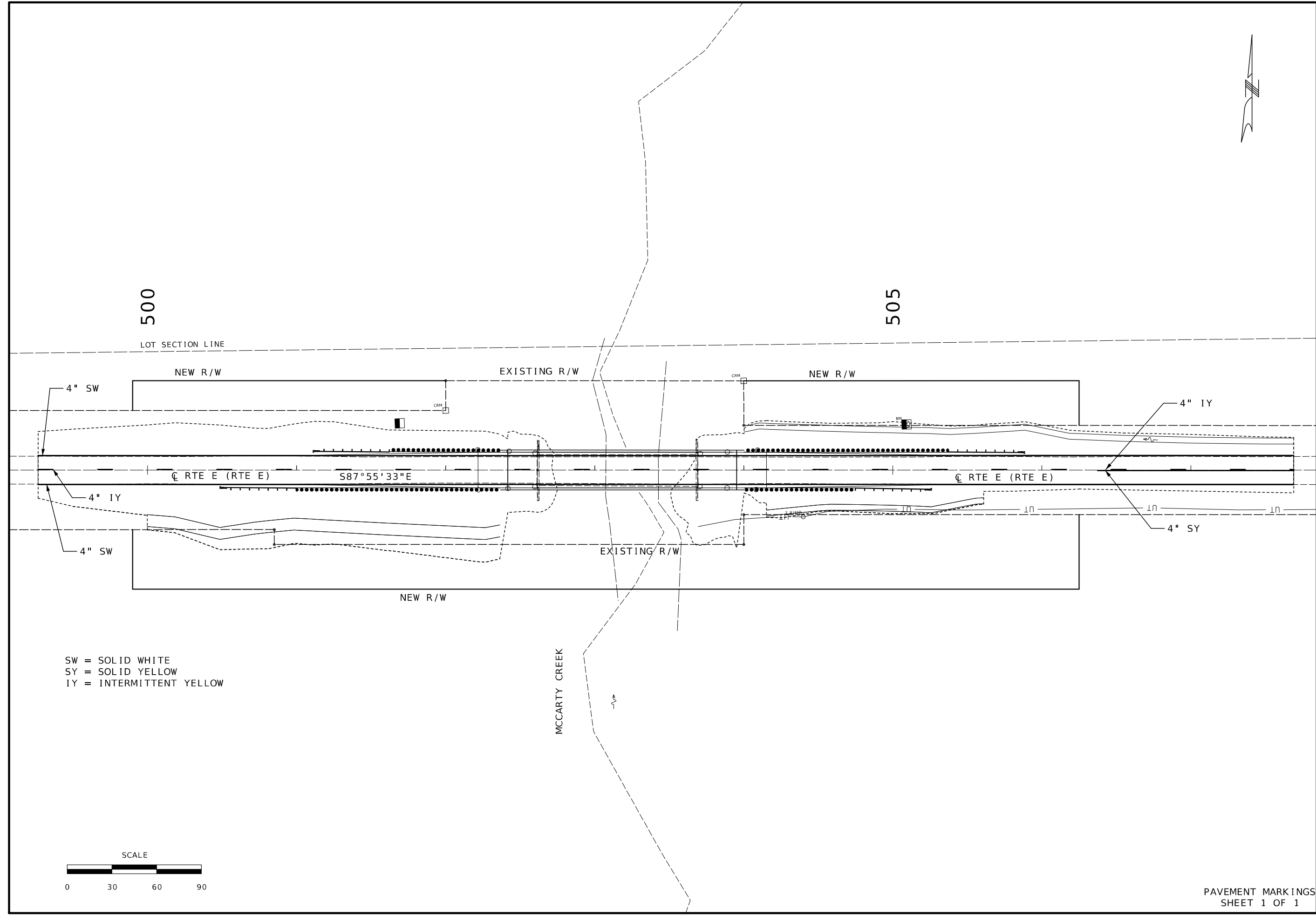
DATE PREPARED 2/27/2026	
ROUTE E	STATE MO
DISTRICT SW	SHEET NO. 13
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

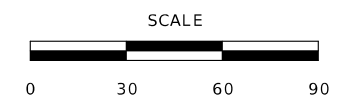
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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

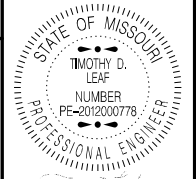


SW = SOLID WHITE
SY = SOLID YELLOW
IY = INTERMITTENT YELLOW

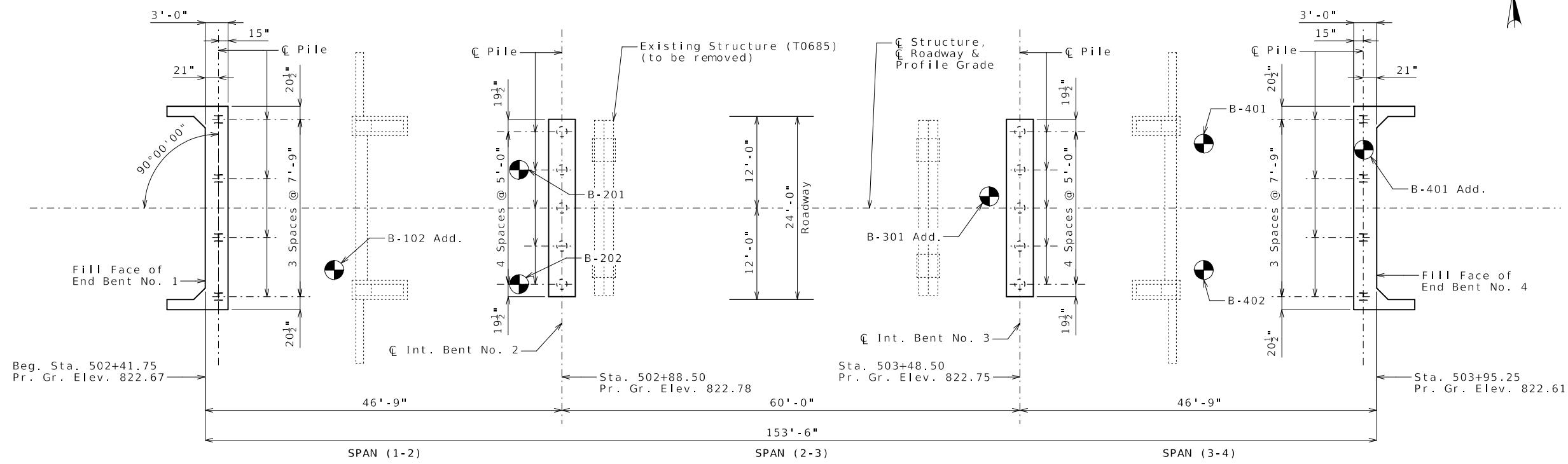
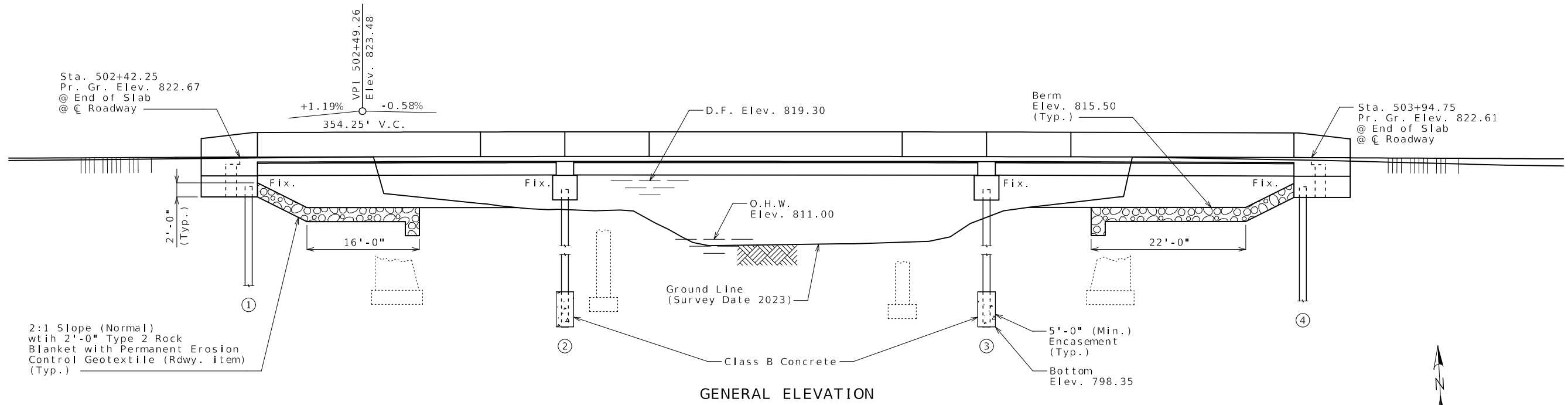


(45' - 60' - 45') PRESTRESSED CONCRETE SPREAD BOX BEAM SPANS

SEC/SUR 6 TWP 34N RGE 29W



DATE PREPARED	
2/18/2026	
ROUTE	STATE
E	MO
DISTRICT	SHEET NO.
BR	1
COUNTY	
VERNON	
JOB NO.	
JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
A9612	



⊕ 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. 25 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.

Roadway fill shall be completed to the final roadway section and up to the elevation of the bottom of the concrete beam within the limits of the structure and for not less than 25 feet in back of the fill face of the end bents before any piles are driven for any bents falling within the embankment section.

For General Notes, Location Sketch, Hydrologic Data, Foundation Data, Estimated Quantities and Estimated Quantities for Slab on Concrete Beam, see Sheet No. 2.

B.M. #1 = CHISELED SQ CULVERT HDWL, X = 2889747.264, Y = 575994.065, Z = 820.122

B.M. #2 = RR SPIKE POWER POLE, X = 2890525.299, Y = 576010.457, Z = 820.900

BRIDGE: ROUTE E OVER McCARTY CREEK
ROUTE E FROM ROUTE NN TO ROUTE I-49
ABOUT 2.8 MILES WEST OF ROUTE NN
BEGINNING STATION 502+41.75

Designed Sep. 2025
Detailed Oct. 2025
Checked Dec. 2025

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

Sheet No. 1 of 25

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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

Estimated Quantities			
Item		Substr.	Superstr. Total
Class 1 Excavation	cu. yard	50	50
Removal of Bridges (T0685)	lump sum		1
Bridge Approach Slab (Minor)	sq. yard		109
Galvanized Structural Steel Piles (12 in)	linear foot	200	200
Galvanized Cast-In-Place Concrete Piles (20 in)	linear foot	320	320
Pre-Bore for Piling	linear foot	467	467
Pile Point Reinforcement (H-Pile)	each	8	8
Pile Point Reinforcement (CECIP)	each	10	10
Class B Concrete (Substructure)	cu. yard	36.2	36.2
Type D Barrier	linear foot		327
Slab on Concrete Beam	sq. yard		452
21 in., Prestressed Concrete Spread Box Beam	linear foot		448
Reinforcing Steel (Bridges)	pound	3710	3710
Slab Drain	each		26
Vertical Drain at End Bents	each		2
Plain Neoprene Bearing Pad	each		6
Laminated Neoprene Bearing Pad	each		12

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.

All reinforcement in the intermediate bent concrete diaphragms except reinforcement embedded in the beam cap is included in the Estimated Quantities for Slab on Concrete Beam.

All concrete above the intermediate beam cap is included in the Estimated Quantities for Slab on Concrete Beam.

Estimated Quantities for Slab on Concrete Beam		
Item		Total
Class B-2 Concrete	cu. yard	138
Reinforcing Steel (Epoxy Coated)	pound	36,660

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 stay-in-place corrugated steel forms, conventional forms, 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 SC4 and a finish type I, II, or III.

Slab shall be cast-in-place with conventional forms or stay-in-place corrugated steel forms. Precast prestressed panels will not be permitted.

For details and notes of optional stay-in-place corrugated steel forms, see Sheet No. 18.

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 = A (Nonseismic)
Design earthquake response spectral acceleration coefficient at 1.0 second period, $S_{D1} < 0.15$
Acceleration Coefficient (effective peak ground acceleration coefficient), $A_s = 0.066g$

Design Loading:
Vehicular = HL-93
Future Wearing Surface = 35 lb/sf
Earth = 120 lb/cf
Equivalent Fluid Pressure = 45 lb/cf (Min.)
Superstructure: Simply-Supported, Non-Composite for dead load.
Continuous Composite for live load.

Design Unit Stresses:
Class B Concrete (Substructure except CIP Piles and Pile Encasement) $f'c = 3,000$ psi
Class B-2 Concrete (Superstructure, except Prestressed Beams and Barrier) $f'c = 4,000$ psi
Class B-1 Concrete (Barrier & CIP Piles) $f'c = 4,000$ psi
Reinforcing Steel (ASTM A615 Grade 60) $f_y = 60,000$ psi
Structural Steel HP Pile (ASTM A709 Grade 50) $f_y = 50,000$ psi
Welded or Seamless steel shell (pipe) for CIP pile (ASTM A252 Modified Grade 3) $f_y = 50,000$ psi

For prestressed box beam stresses, see Sheets No. 12 & 13.

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

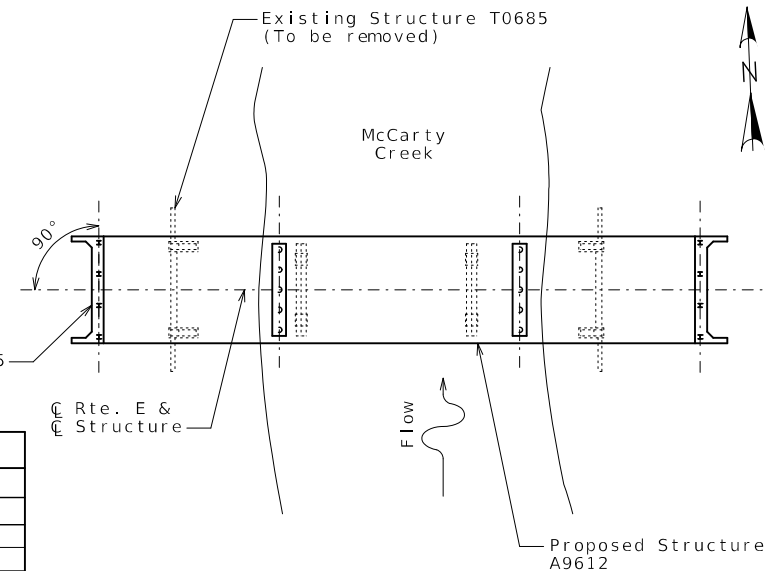
Joint Filler:
All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

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

Minimum clearance between galvanized piles and uncoated (plain) reinforcing steel including bar supports shall be 1 1/2". Nylon, PVC, or polyethylene spacers shall be used to maintain clearance. Nylon cable ties shall be used to bind the spacers to the reinforcement.

Traffic Handling:
Structure to be closed during construction. Traffic to be maintained on other routes during construction. See Roadway plans for traffic control.

Hydrologic Data	
Drainage Area =	20 mi ²
Design Flood Frequency =	25 years
Design Flood Discharge =	4,000 cfs
Design Flood (D.F.) Elevation =	819.3 ft
Base Flood (100-year)	
Base Flood Elevation =	821.0 ft
Base Flood Discharge =	5,600 cfs
Estimated Backwater =	1.1 ft
Average Velocity thru Opening =	6.3 ft/s
Freeboard (50-year)	
Freeboard =	-0.4 ft
Roadway Overtopping	
Overtopping Flood Discharge =	5,500 cfs
Overtopping Flood Frequency =	87 years
Overtopping Flood Elevation =	820.7 ft



Foundation Data						
Type	Design Data	Bent Number				
		1	2	3	4	
Load Bearing Pile	Pile Type and Size	HP 12x53	CECIP 20"	CECIP 20"	HP 12x53	
	Number	ea 4	5	5	4	
	Approximate Length Per Each	ft 26	32	32	24	
	Pile Point Reinforcement	ea ALL	ALL	ALL	ALL	
	Min. Galvanized Penetration (Elev.)	ft Full Length	Full Length	Full Length	Full Length	
	Est. Max. Scour Depth (Elev.)	ft	803	803		
	Minimum Tip Penetration (Elev.)	ft	793	787	795	
	Criteria for Min. Tip Penetration	Min. Embed	Scour	Scour	Min. Embed	
	Pile Driving Verification Method	DF	DF	DF	DF	
	Resistance Factor		0.4	0.4	0.4	
	Minimum Nominal Axial Compressive Resistance	kip	374	472	472	374

DF = FHWA-Modified Gates Dynamic Pile Formula

Minimum Nominal Axial Compressive Resistance = $\frac{\text{Maximum Factored Loads}}{\text{Resistance Factor}}$

CECIP = Closed Ended Cast-In-Place

Prebore for piles at Bent(s) No. 1,2,3 and 4 to elevation(s) 793, 787, 787 and 795, respectively.

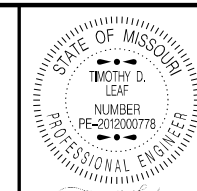
Note:

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.

HP piles are anticipated to be driven to refusal on rock. Review all borings for depth of rock and restrict driving criteria 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.

The contractor shall make every effort to achieve the minimum galvanized penetration (elevation) shown on the plans for all piles. Deviations in penetration 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.

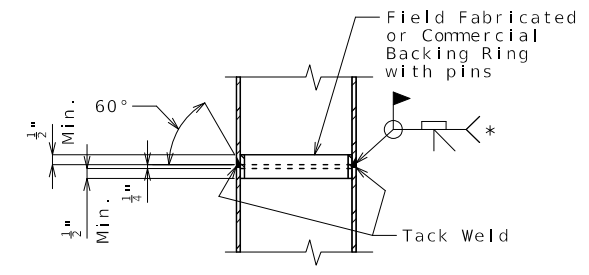
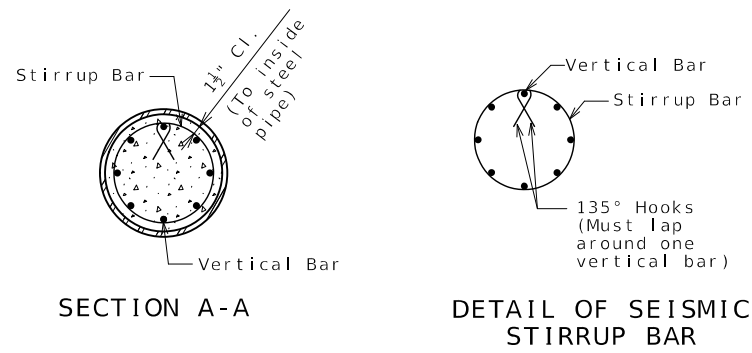
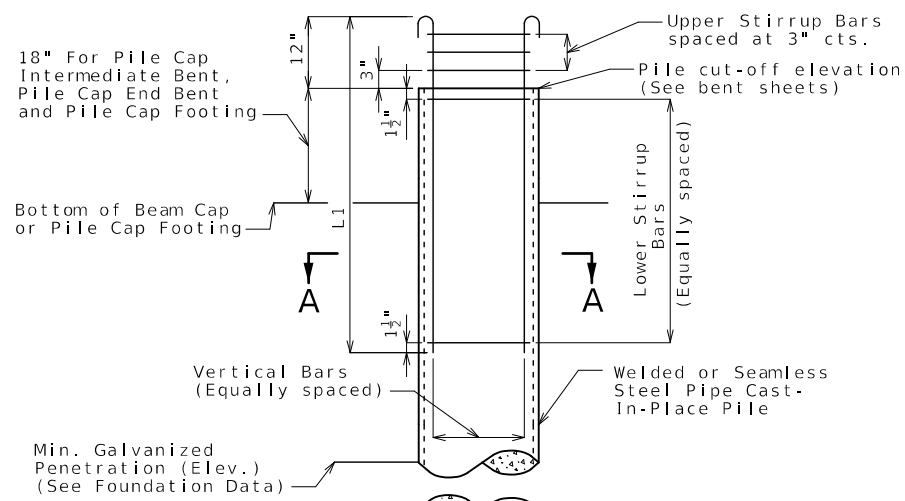


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CONTRACT ID.

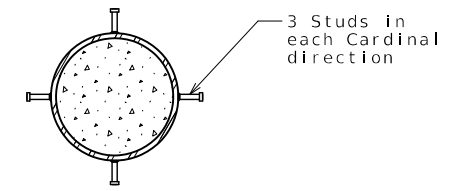
PROJECT NO.
BRIDGE NO. A9612

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105 WEST CAPITOL JEFFERSON CITY, MO 65102
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* Galvanizing material shall be omitted or removed one inch clear of weld locations in accordance with Sec 702.



SECTION B-B
Note: Concrete Pile Encasement not shown for clarity.

Notes:
Welded or seamless steel shell (pipe) shall be ASTM A252 Modified Grade 3 (fy = 50,000 psi) with physical and chemical requirements that meet ASTM A572 Grade 50. Pipe certification and source material certification shall be required.

Concrete for cast-in-place pile shall be Class B-1.
Steel for closure plate shall be ASTM A709 Grade 50.

Steel for cruciform pile point reinforcement shall be ASTM A709 Grade 50.
The minimum wall thickness of any spot or local area of any type shall not be more than 12.5% under the specified nominal wall thickness.

The contractor shall determine the pile wall thickness required to avoid damage from all driving activities, but wall thickness shall not be less than the minimum specified. No additional payment will be made for furnishing a thicker pile wall than specified on the plans.

Closure plate shall not project beyond the outside diameter of the pipe pile. Satisfactory weldments may be made by beveling tip end of pipe or by use of inside backing rings. In either case, proper gaps shall be used to obtain weld penetration full thickness of pipe. Payment for furnishing and installing closure plate will be considered completely covered by the contract unit price for Galvanized Cast-In-Place Concrete Piles.

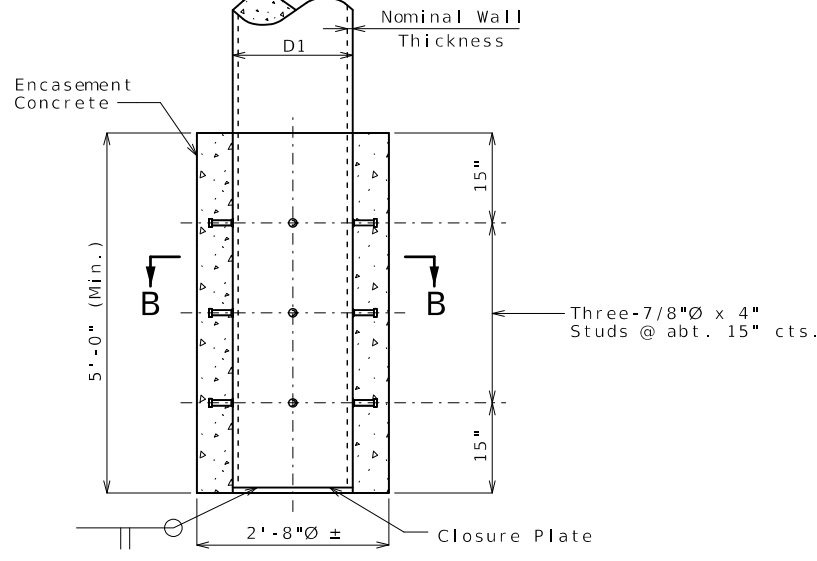
Splices of pipe for cast-in-place pipe pile shall be made watertight and to the full strength of the pipe above and below the splice to permit hard driving without damage. Pipe damaged during driving shall be replaced without cost to the state. Pipe sections used for splicing shall be at least 5 feet in length.

At the contractor's option, the hooks of vertical bars embedded in the beam cap may be oriented inward or outward. Closure plate need not be galvanized.

Reinforcing steel for cast-in-place pile is included in the Bill of Reinforcing Steel.
Reinforcement for cast-in-place pile at intermediate bents is included in the substructure quantity tables.

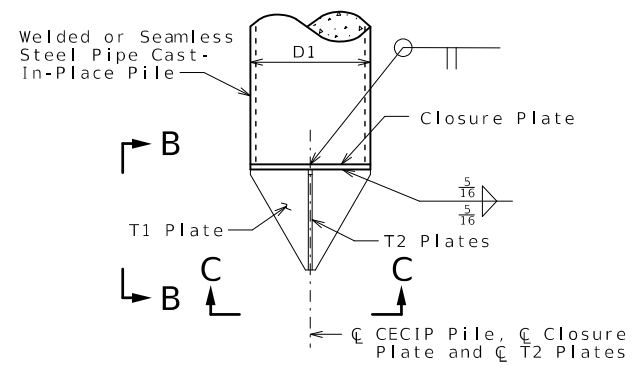
For Foundation Data table, see Sheet No. 2.
The cost of supplying and installing encasement concrete will be considered completely covered by the contract unit price for Galvanized Cast-In-Place Concrete Piles (20 in.).

The cost of supplying and installing shear connectors will be considered completely covered by the contract unit price for Galvanized Cast-In-Place Concrete Piles (20 in.).
Shear connectors shall be in accordance with Sec 712, 1037 & 1080.

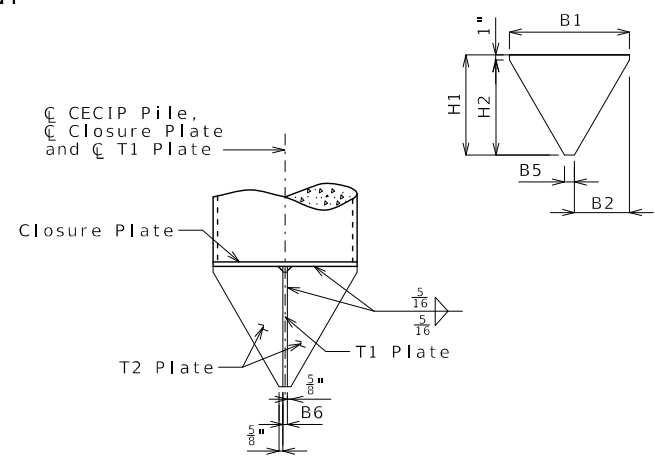


GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE WITHOUT PILE POINT REINFORCEMENT

GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE DATA		
Bent Number	2	3
D1, CECIP Pile (O.D.)	20"	20"
Min. Nominal Wall Thickness	1/2"	1/2"
Pile Point Reinforcement	Cruciform	Cruciform
Vertical Bars	8-#6-V200	8-#6-V200
L1, Length of Vertical Bars	7'-3"	7'-3"
Upper Stirrup Bars	3-#4-P200	3-#4-P200
Lower Stirrup Bars	7-#4-P200	7-#4-P200
Closure Plate Thickness	1"	1"



CRUCIFORM PILE POINT
Note: Cost of closure plate is included with cast-in-place concrete pile.



T2 PLATE DETAILS (2 REQUIRED)
CRUCIFORM PILE POINT REINFORCEMENT

GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE

STATE OF MISSOURI
TIMOTHY D. LEAF
NUMBER
PE-2012000778
PROFESSIONAL ENGINEER

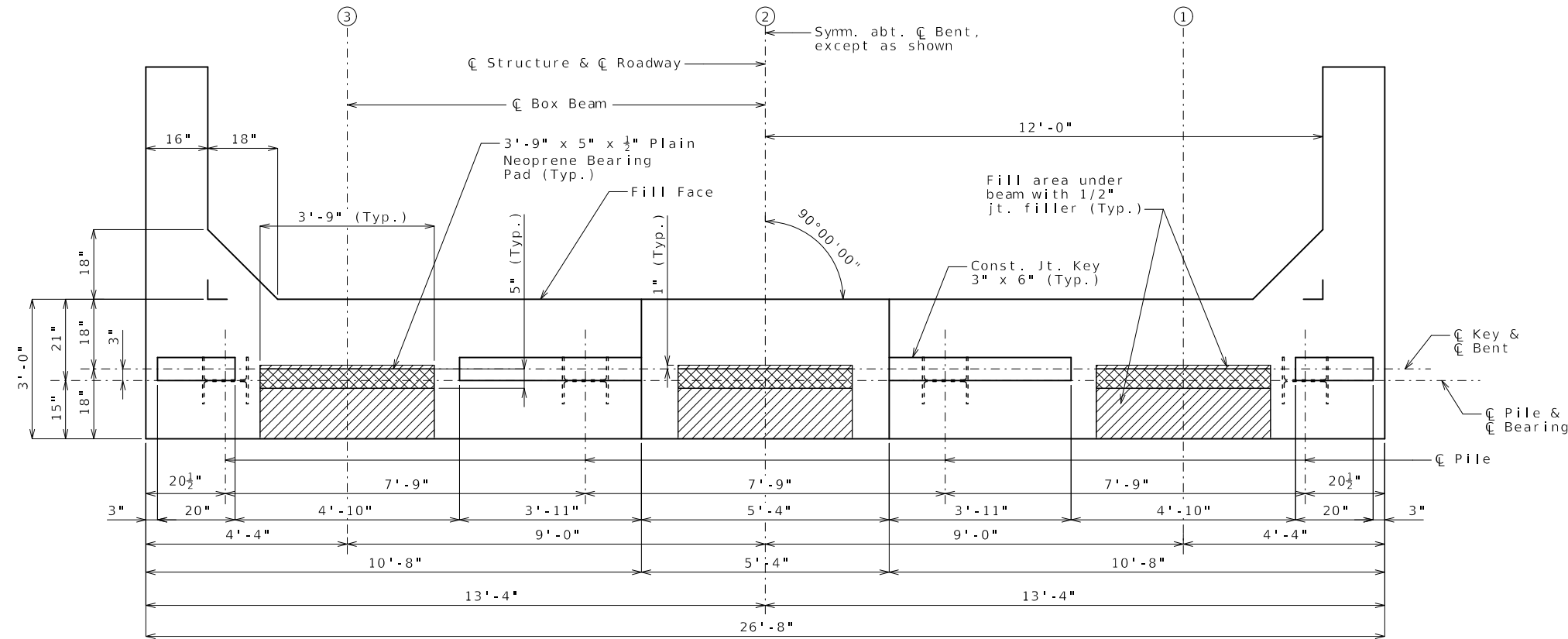
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ROUTE E	STATE MO
DISTRICT BR	SHEET NO. 3
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9612	
DESCRIPTION	DATE

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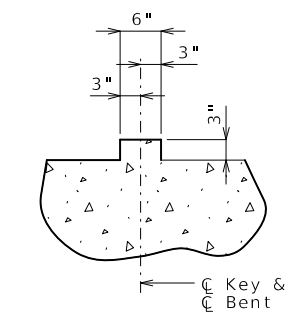
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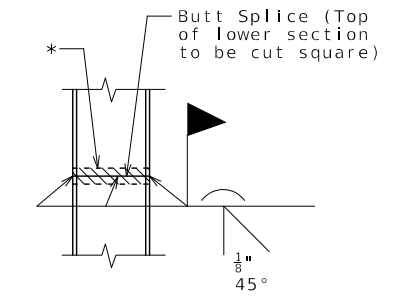
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 COUNTY **VERNON**
 JOB NO. **JSR0140**
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 PROJECT NO.
 BRIDGE NO. **A9612**



PLAN OF BEAM



SECTION THRU KEY

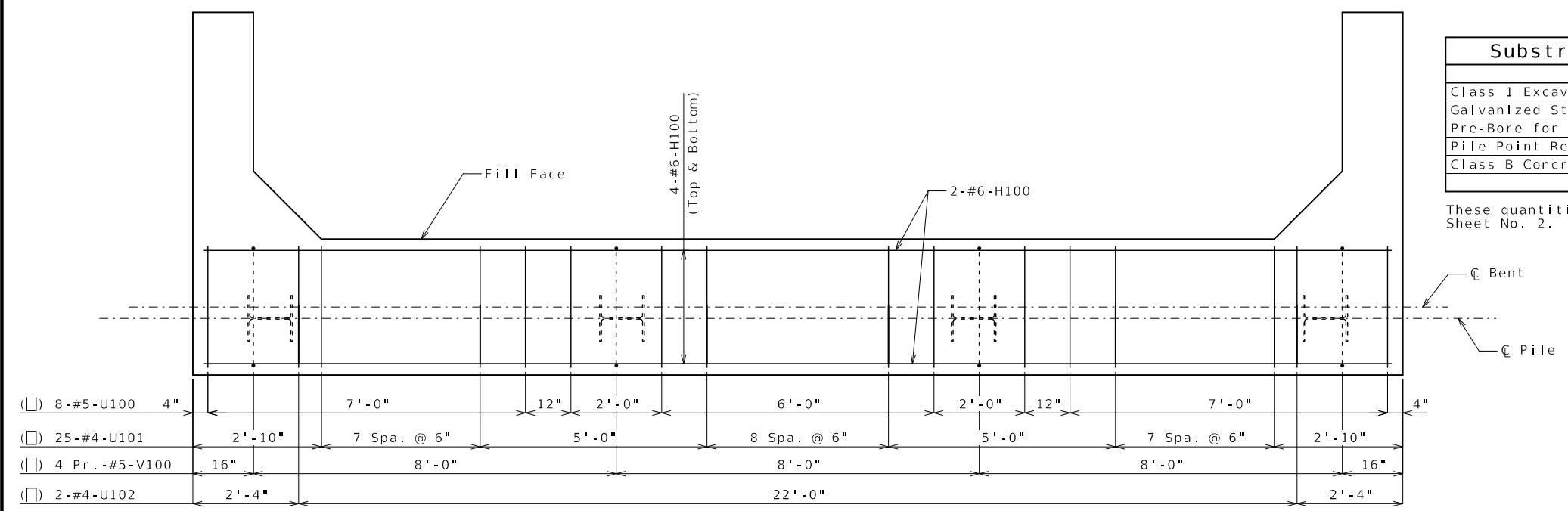


STEEL PILE SPLICE
(If required)

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

Item	Quantity
Class 1 Excavation	cu. yard 25
Galvanized Structural Steel Piles (12 in.)	linear foot 104
Pre-Bore for Piling	linear foot 100
Pile Point Reinforcement (H-Pile)	each 4
Class B Concrete (Substructure)	cu. yard 10.8

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



PLAN OF BEAM SHOWING REINFORCEMENT

Note: Steps and keys not shown for clarity.

END BENT NO. 1

Detailed Oct. 2025
 Checked Dec. 2025

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

Sheet No. 4 of 25

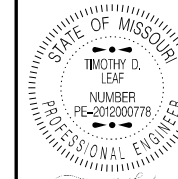
Notes:

Work this sheet with Sheets No. 5 & 6.

Reinforcing steel shall be shifted to clear piles. U bars shall clear piles by at least 1 1/2".

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DISTRICT BR SHEET NO. 5

COUNTY VERNON

JOB NO. JSR0140

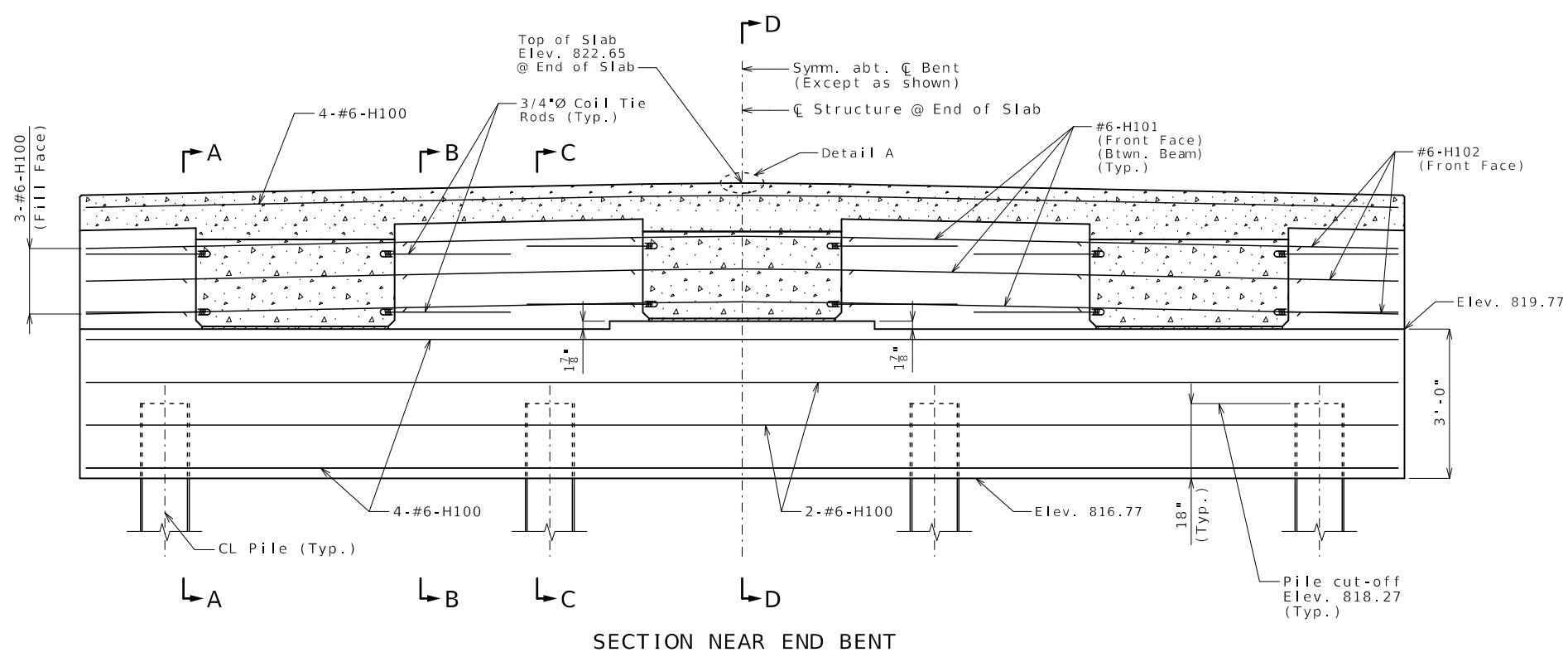
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PROJECT NO.

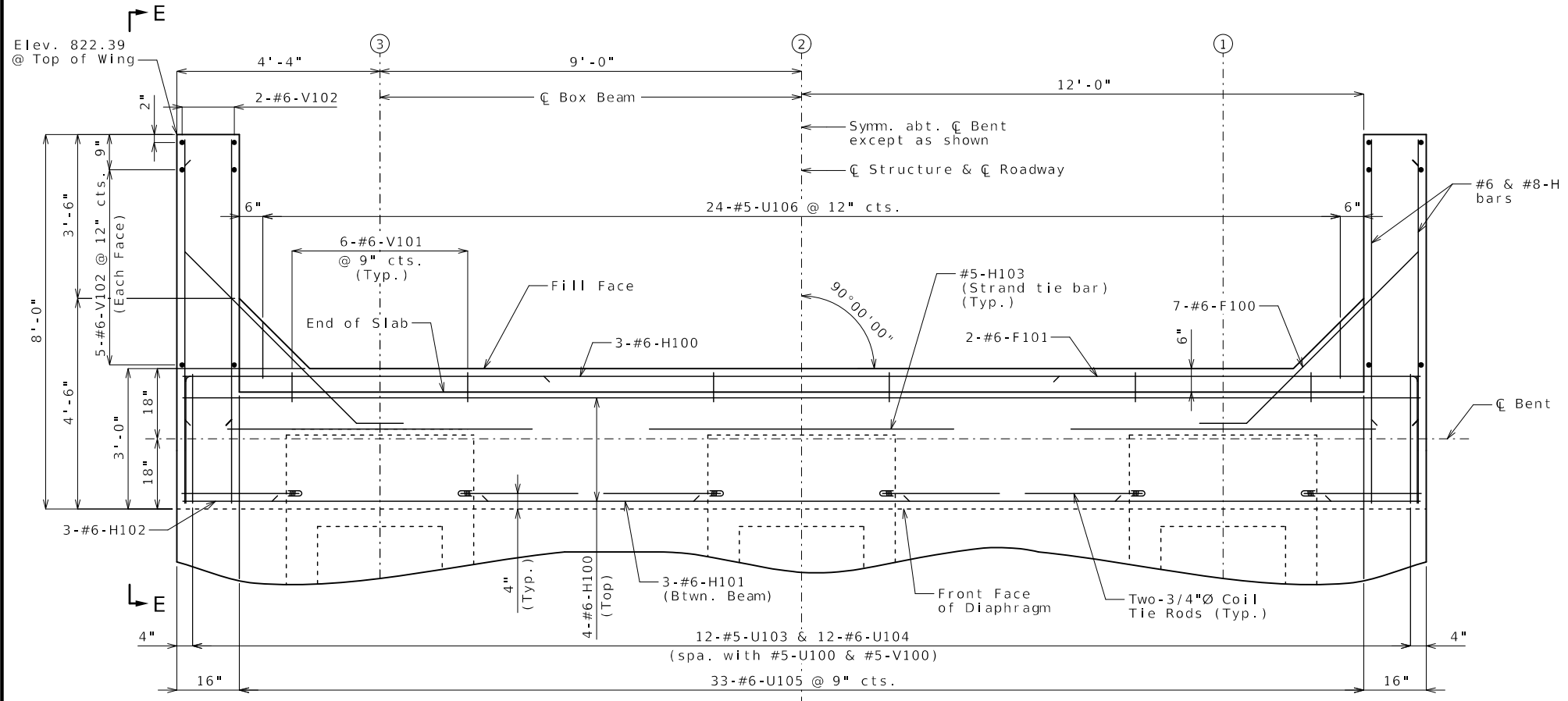
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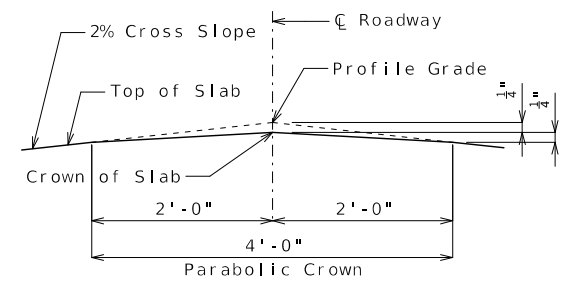
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SECTION NEAR END BENT



PART PLAN
 END BENT NO. 1



DETAIL A

- Notes:
- Work this sheet with Sheets No. 4 & 6.
 - All concrete in the end bent above top of beam and below top of slab shall be Class B-2.
 - Strands at end of beams shall be field bent or, if necessary, cut in field to maintain 1 1/2-inch minimum clearance to fill face of end bent.
 - For location of coil tie rods and #5-H103 (strand tie bar), see Sheet No. 12.
 - For details of vertical drain at end bents, see Sheet No. 7.
 - The #6-F100 bars shall be bent in field to clear beams.
 - For details of bridge approach slab, see Sheet No. 21.

Detailed Oct. 2025
 Checked Dec. 2025

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

Sheet No. 5 of 25



STATE OF MISSOURI
 TIMOTHY D. LEAF
 NUMBER
 PE-201200778
 PROFESSIONAL ENGINEER

DATE PREPARED
 2/18/2026
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 DISTRICT BR SHEET NO. 6

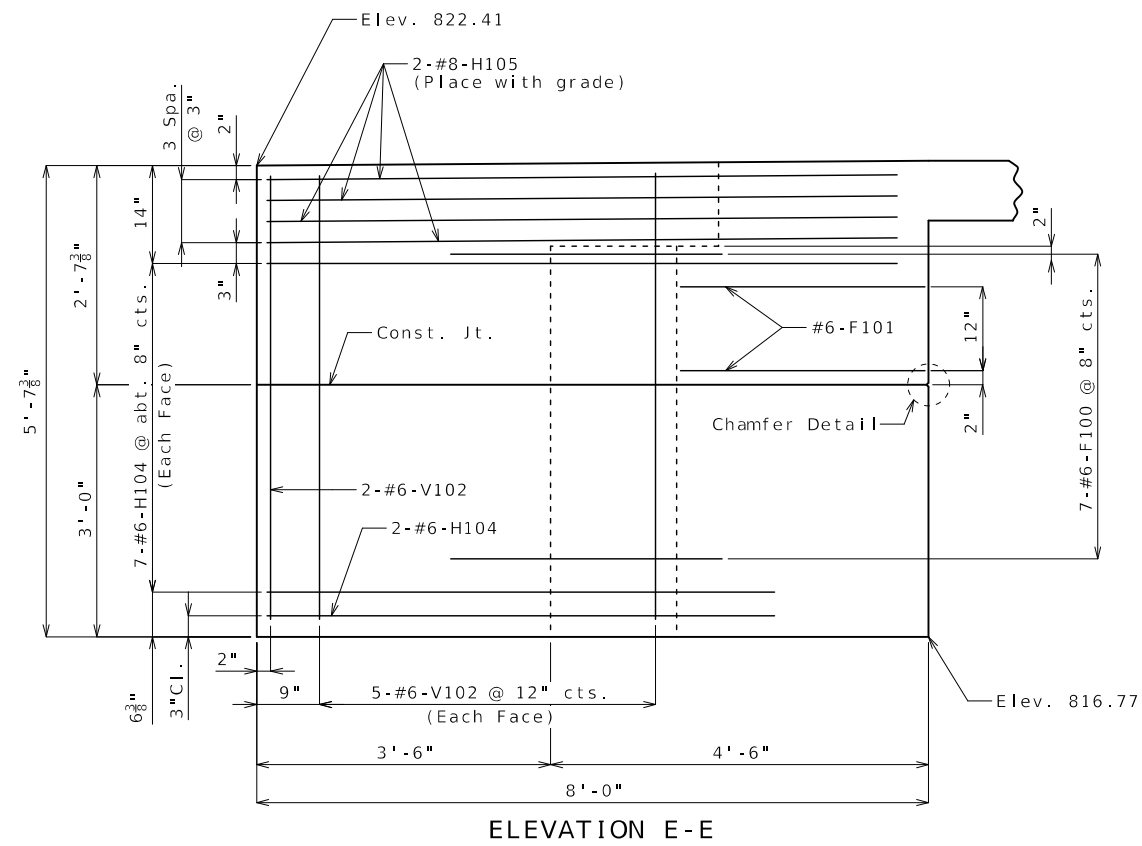
COUNTY
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 JOB NO.
 JSR0140
 CONTRACT ID.

PROJECT NO.
 BRIDGE NO.
 A9612

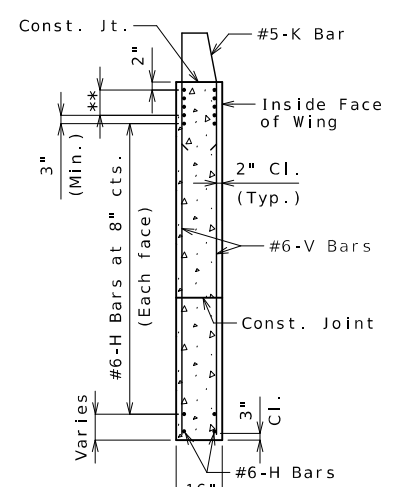
DATE	DESCRIPTION

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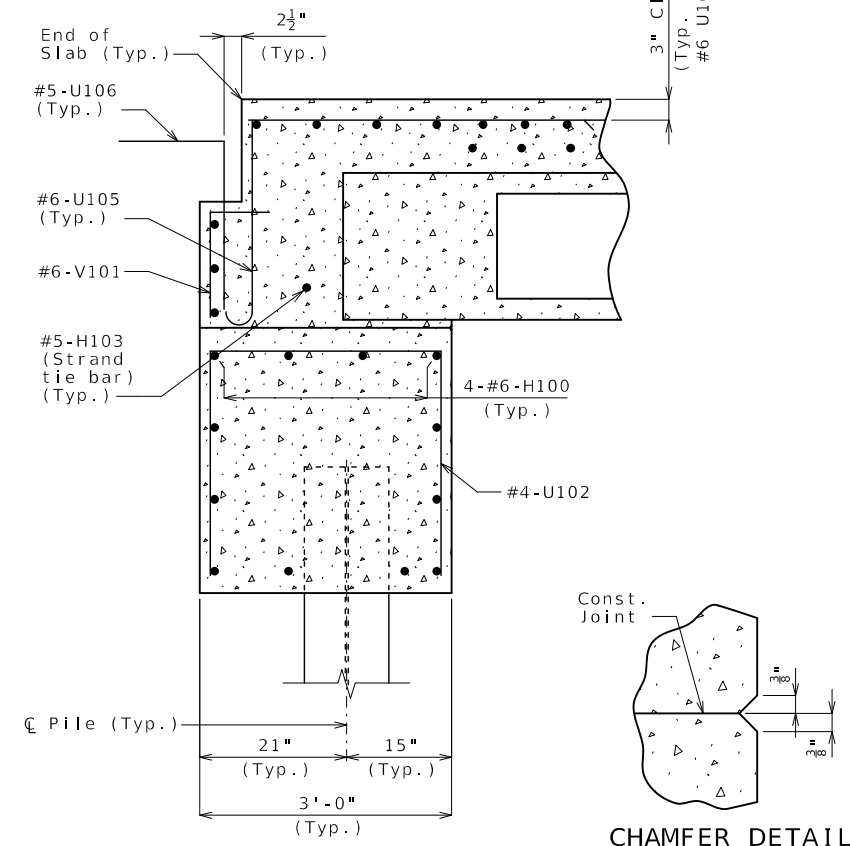
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ELEVATION E-E

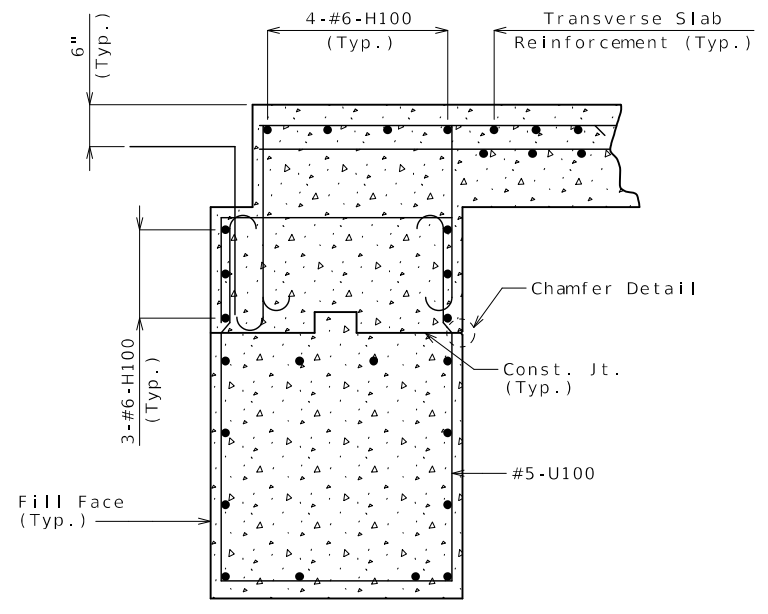


TYPICAL SECTION THRU WING
 ** #8-H Bars at 3" cts. (Each face) (Place with grade)

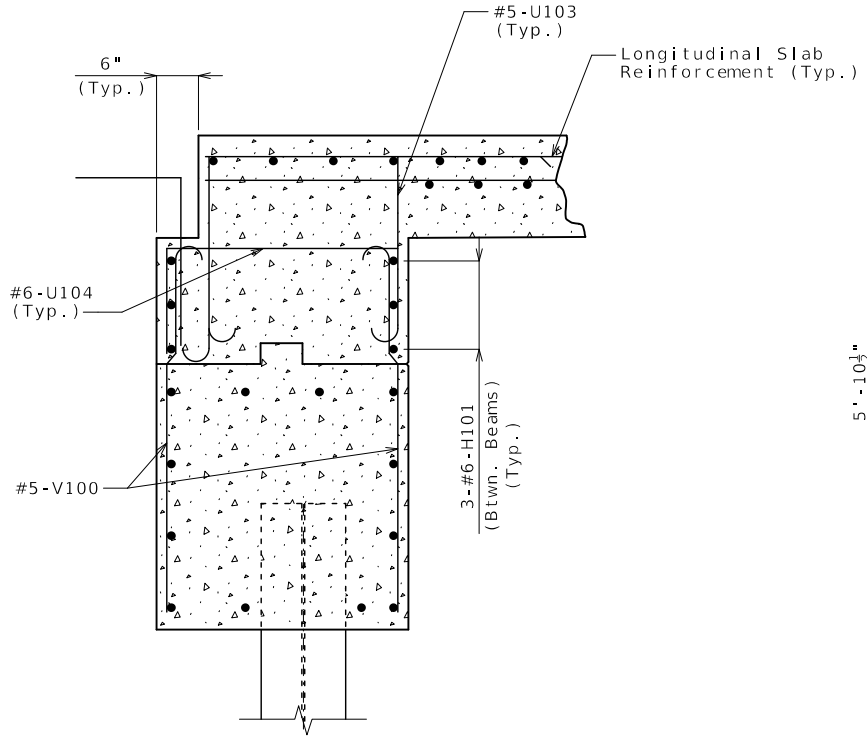


SECTION A-A

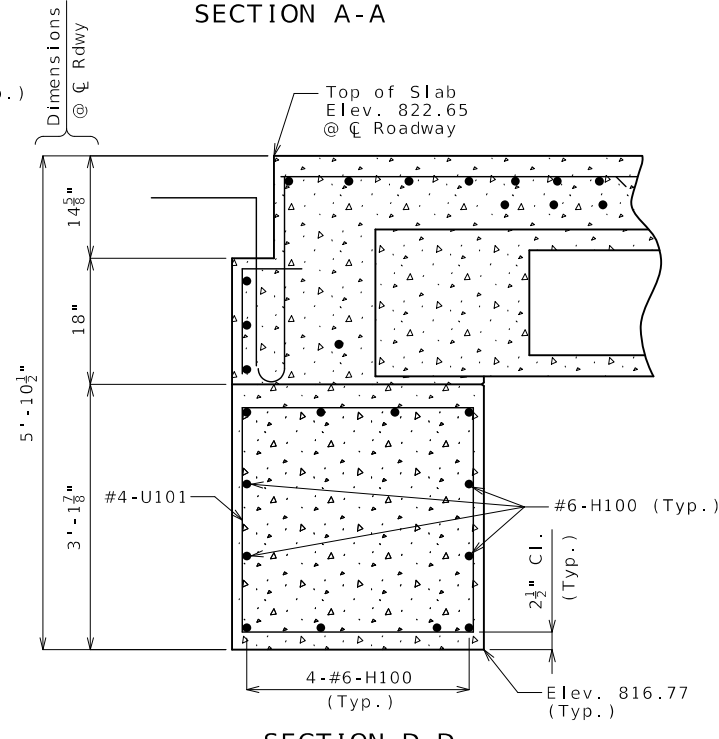
CHAMFER DETAIL



SECTION B-B



SECTION C-C



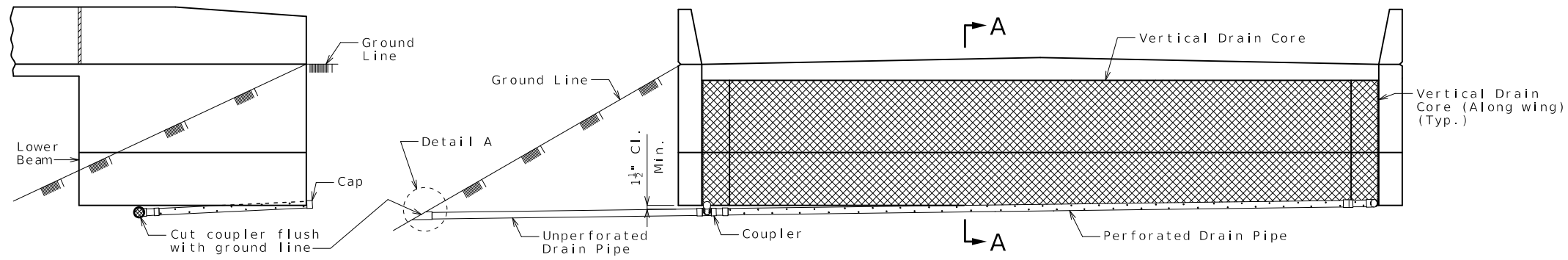
SECTION D-D

END BENT NO. 1

Notes:
 Work this sheet with Sheets No. 4 & 5.
 For reinforcement of the barrier, see Sheet No. 20.

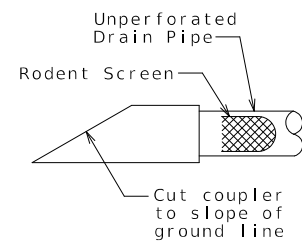
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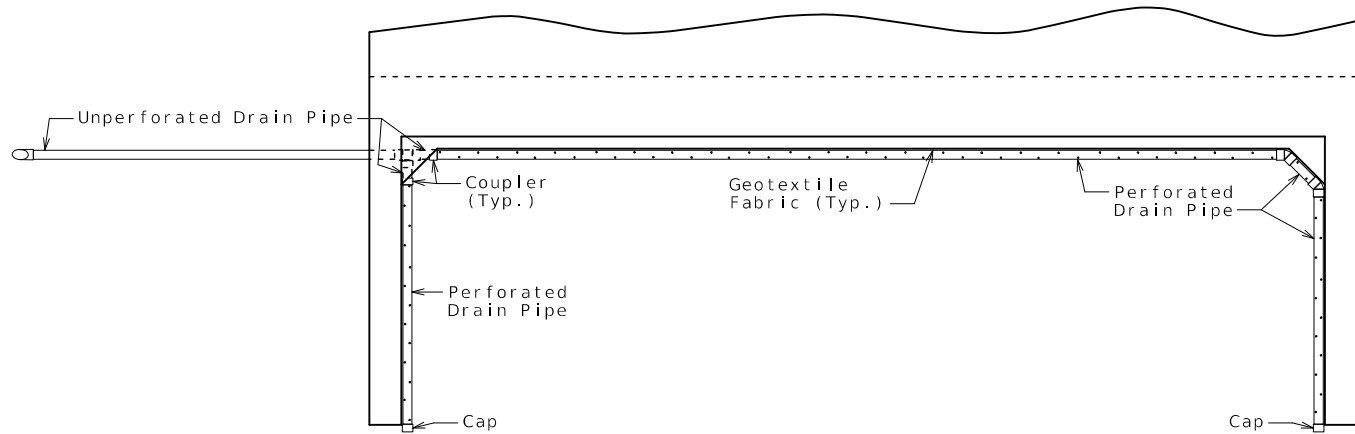


ELEVATION OF WING

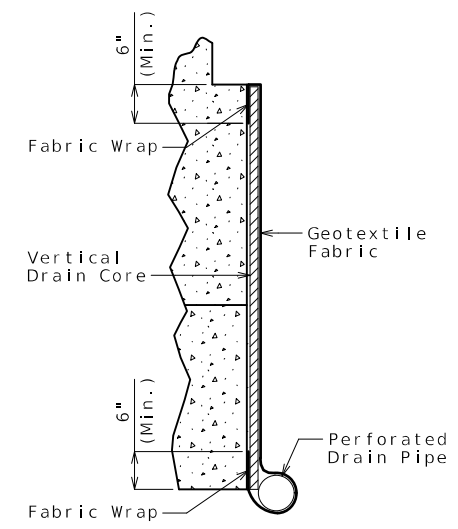
ELEVATION OF END BENT



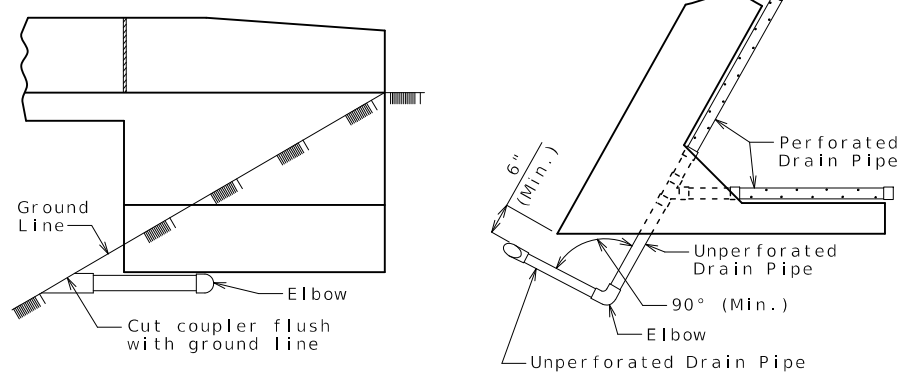
DETAIL A



PLAN OF END BENT



PART SECTION A-A
(Section thru wing similar)



ELEVATION OF WING

PART PLAN

OPTIONAL TURNED DRAIN

(Use only when straight drain is not practical.)

VERTICAL DRAIN AT END BENTS

(Squared end bent shown, skewed end bent similar)

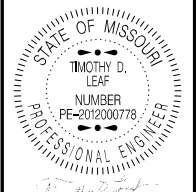
General Notes:

All drain pipe shall be sloped 1 to 2 percent.

Drain pipe may be either 6-inch diameter corrugated metallic-coated steel pipe underdrain, 4-inch diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4-inch diameter corrugated polyethylene (PE) drain pipe.

Drain pipe shall be placed at fill face of end bent and inside face of wings. The pipe shall slope to lowest grade of ground line, also missing the lower beam of end bent by a minimum of 1 1/2 inches.

Perforated pipe shall be placed at fill face side and inside face of wings at the bottom of end bent and plain pipe shall be used where the vertical drain ends to the exit at ground line.



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BR	7
COUNTY	
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CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
A9612	

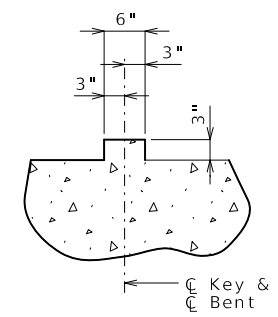
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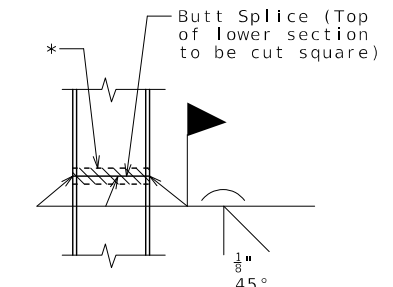
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 COUNTY **VERNON**
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 CONTRACT ID.
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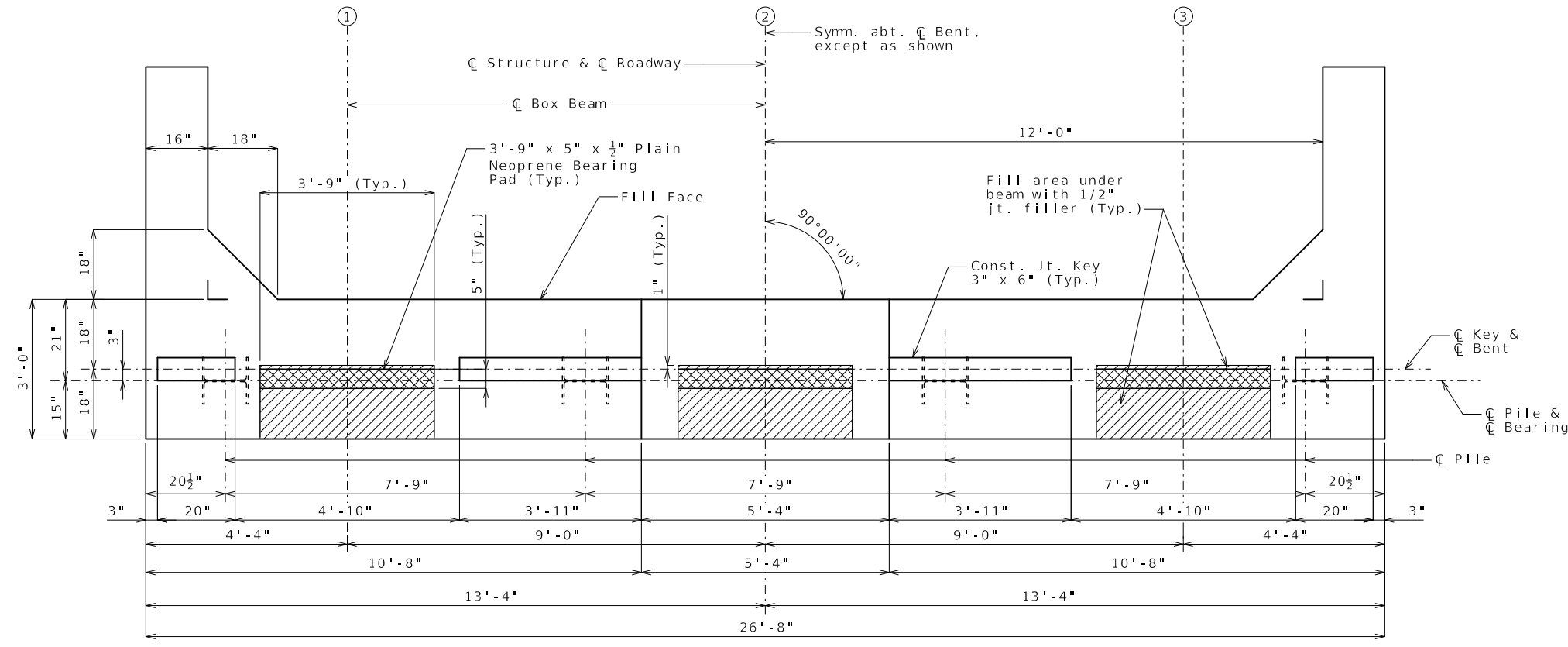


SECTION THRU KEY



STEEL PILE SPLICE
(If required)

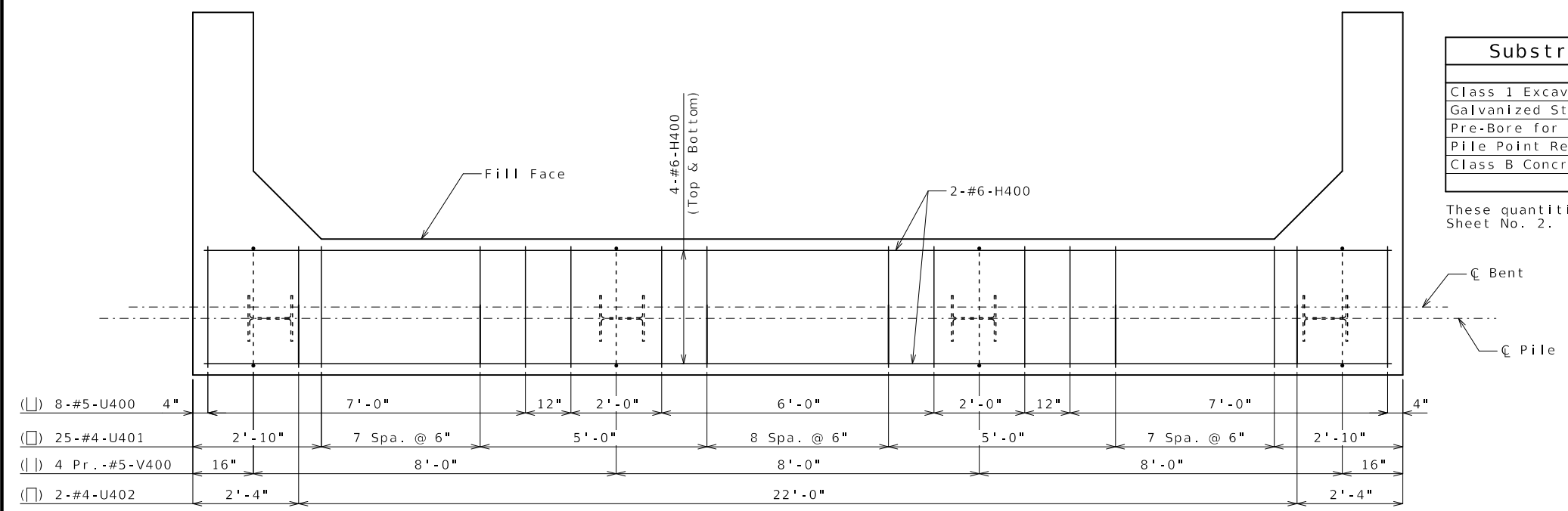
* Galvanizing material shall be omitted or removed one inch clear of weld locations in accordance with Sec 702.



PLAN OF BEAM

Substructure Quantity Table for Bent No. 4		
Item		Quantity
Class 1 Excavation	cu. yard	25
Galvanized Structural Steel Piles (12 in.)	linear foot	96
Pre-Bore for Piling	linear foot	92
Pile Point Reinforcement (H-Pile)	each	4
Class B Concrete (Substructure)	cu. yard	10.8

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



PLAN OF BEAM SHOWING REINFORCEMENT

Note: Steps and keys not shown for clarity.

END BENT NO. 4

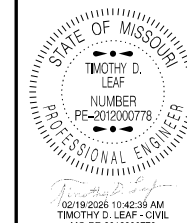
Notes:
 Work this sheet with Sheets No. 10 & 11.
 Reinforcing steel shall be shifted to clear piles.
 U bars shall clear piles by at least 1 1/2".

Detailed Oct. 2025
 Checked Dec. 2025

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

Sheet No. 9 of 25

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DATE PREPARED
2/18/2026

ROUTE E STATE MO

DISTRICT BR SHEET NO. 10

COUNTY VERNON

JOB NO. JSR0140

CONTRACT ID.

PROJECT NO.

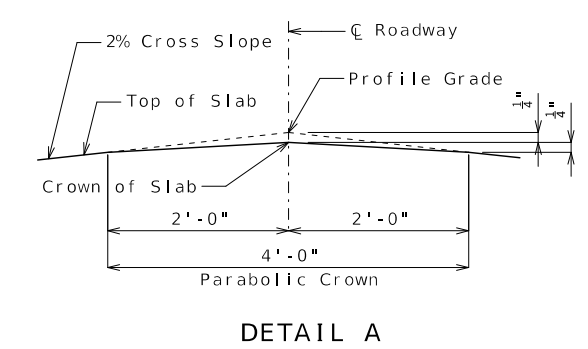
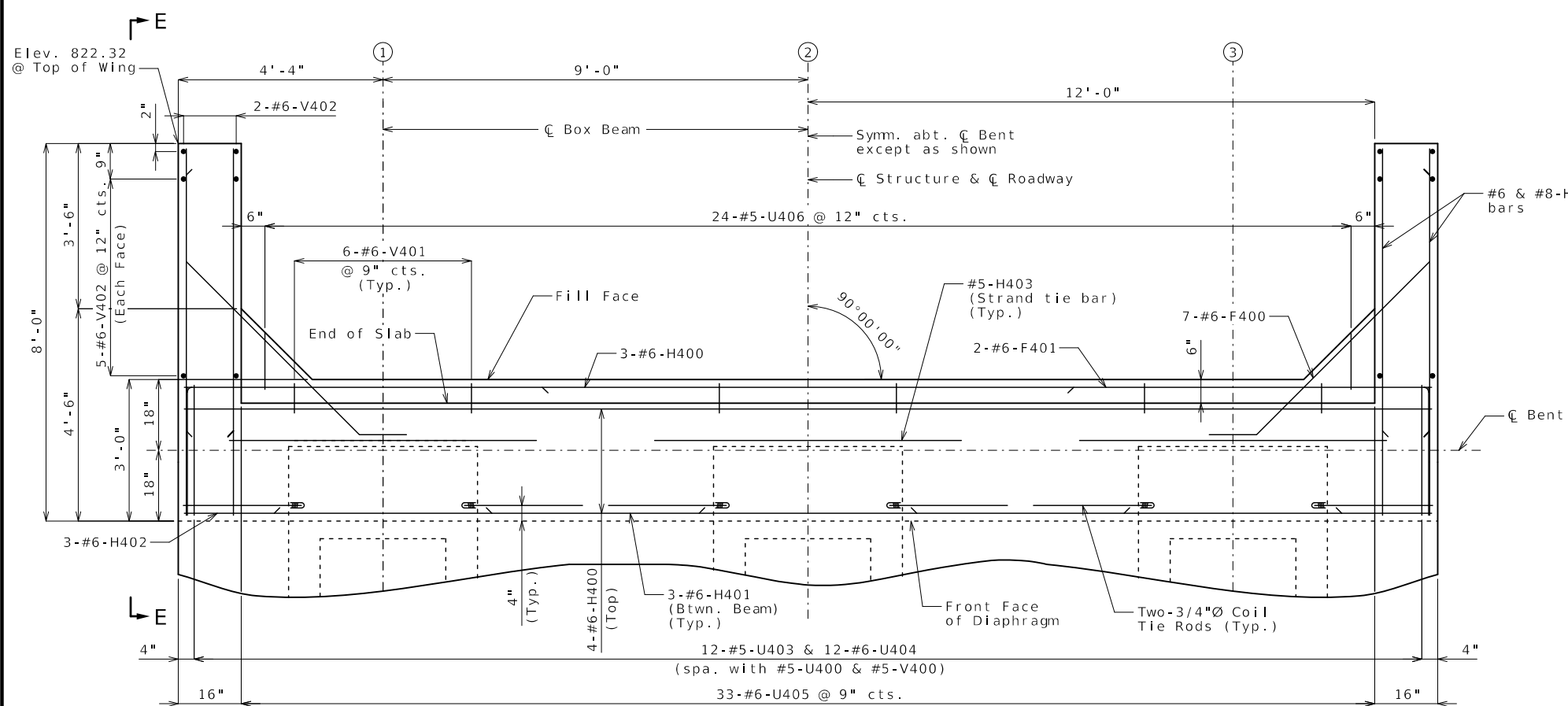
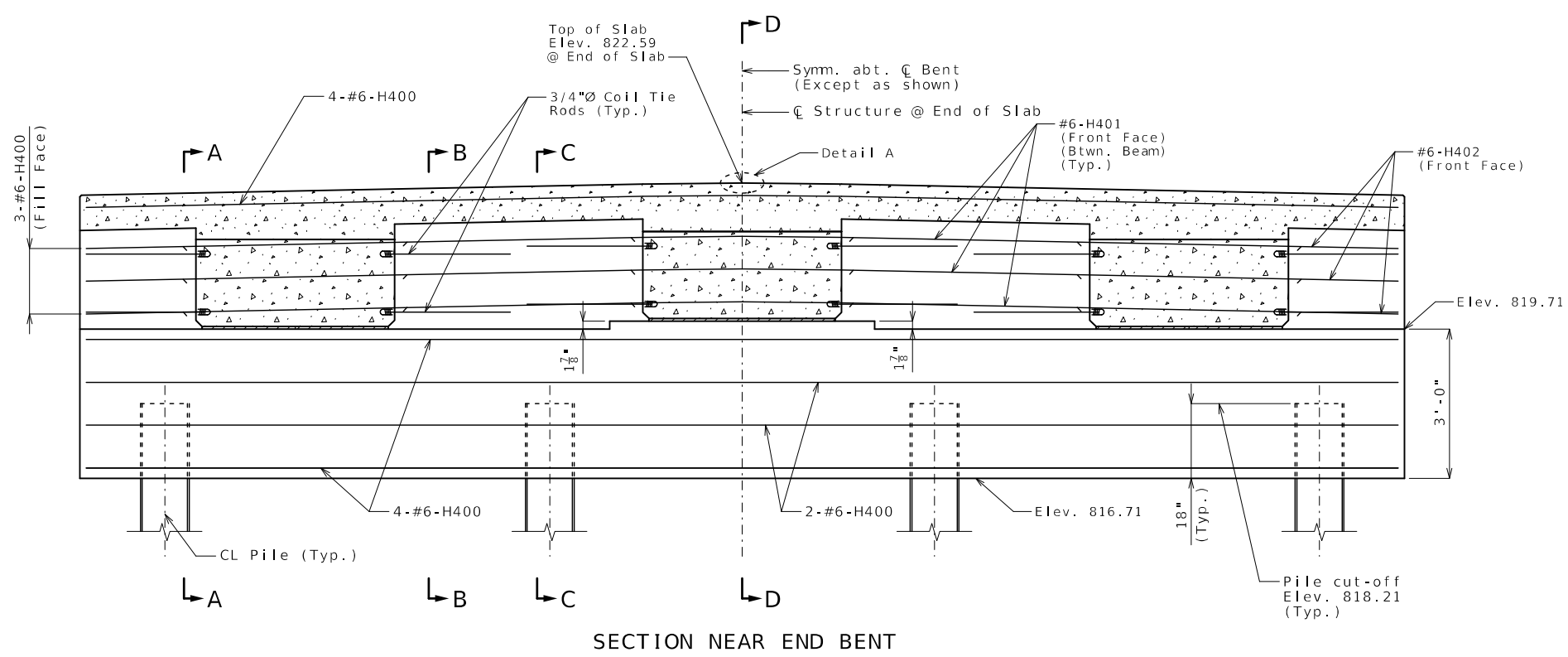
BRIDGE NO. A9612

DESCRIPTION	DATE

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)



Notes:

Work this sheet with Sheets No. 9 & 11.

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

Strands at end of beams shall be field bent or, if necessary, cut in field to maintain 1 1/2-inch minimum clearance to fill face of end bent.

For location of coil tie rods and #5-H403 (strand tie bar), see Sheet No. 12.

For details of vertical drain at end bents, see Sheet No. 7.

The #6-F100 bars shall be bent in field to clear beams.

For details of bridge approach slab, see Sheet No. 21.

PART PLAN
END BENT NO. 4

Detailed Oct. 2025
Checked Dec. 2025



STATE OF MISSOURI
TIMOTHY D. LEAF
NUMBER
PE-201200778
PROFESSIONAL ENGINEER

DATE PREPARED
2/18/2026

ROUTE E STATE MO
DISTRICT BR SHEET NO. 11

COUNTY
VERNON
JOB NO.
JSR0140
CONTRACT ID.

PROJECT NO.

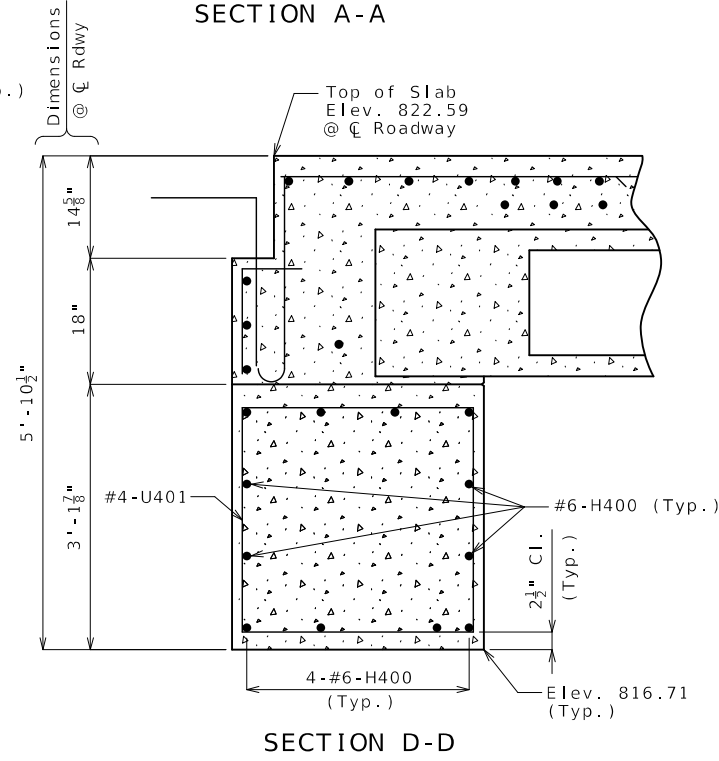
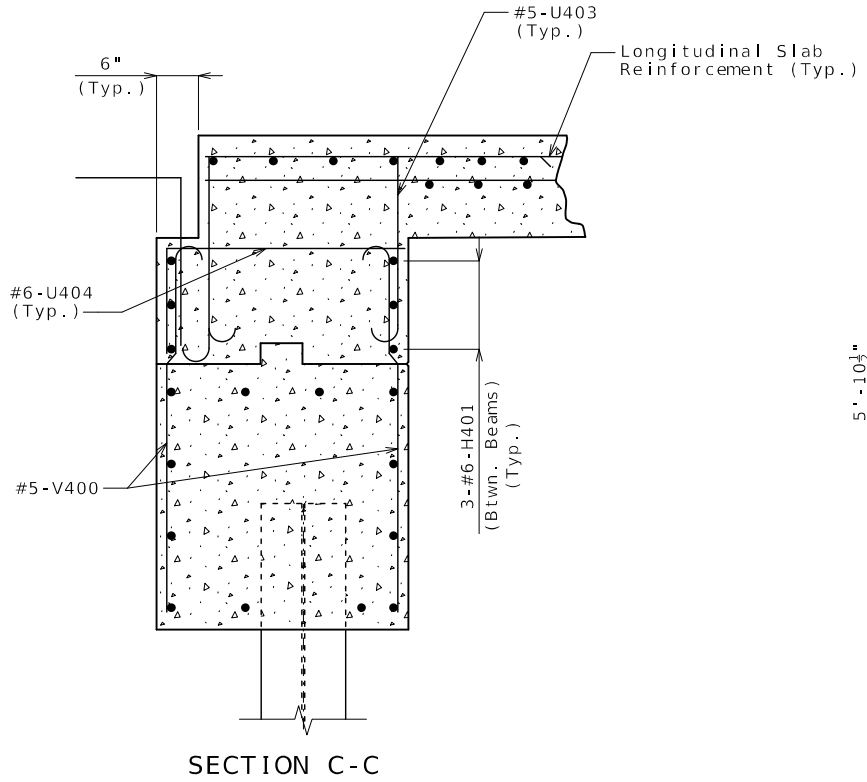
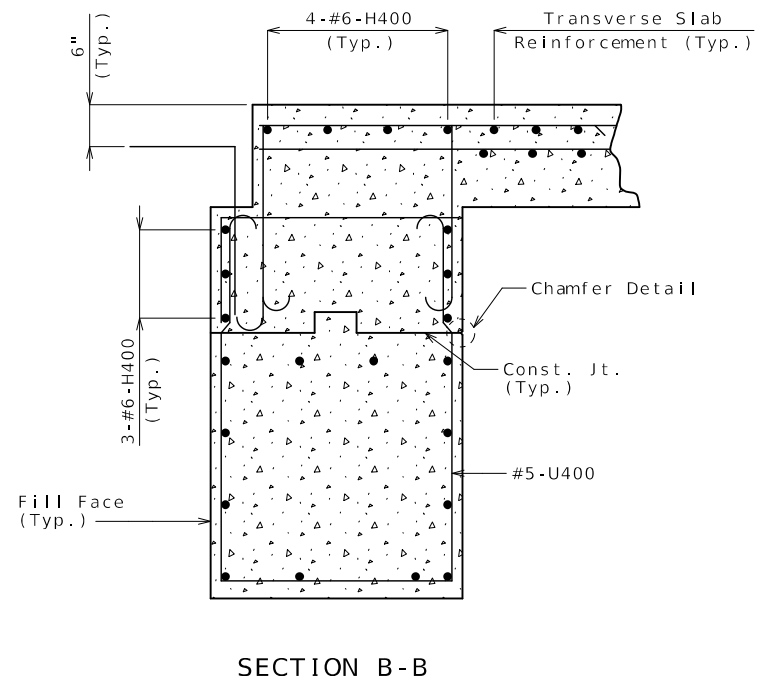
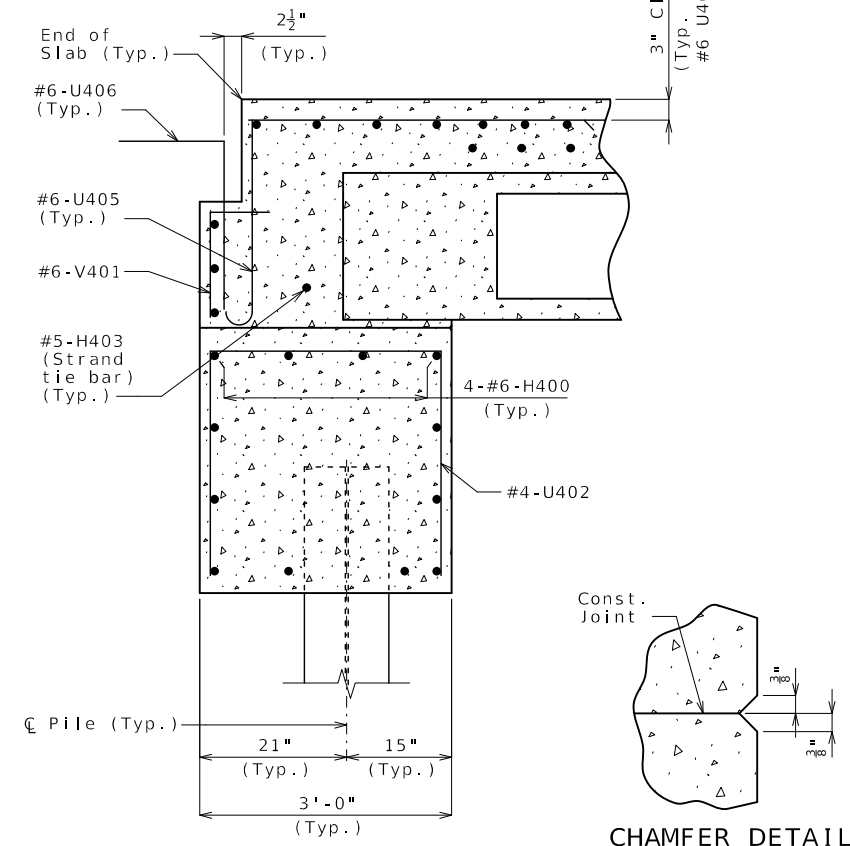
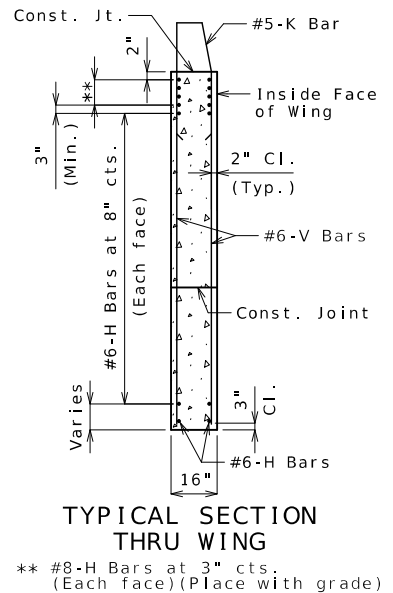
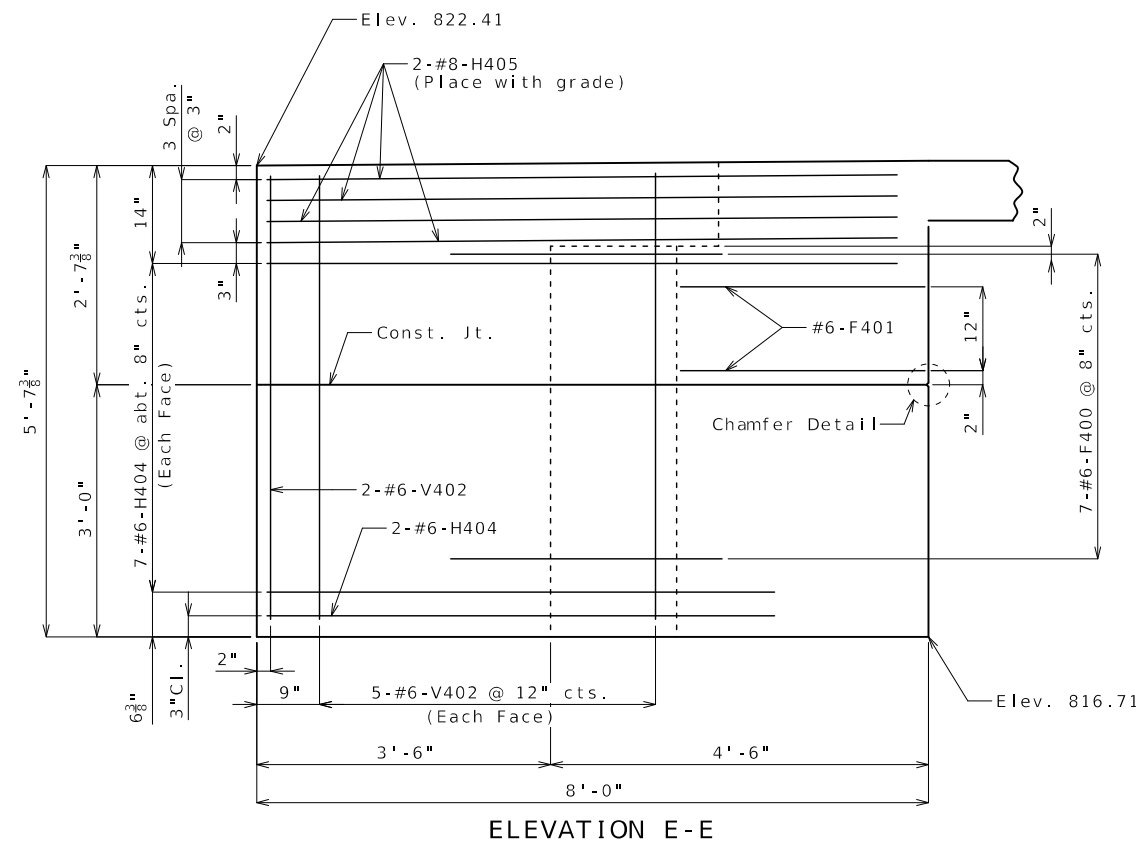
BRIDGE NO.
A9612

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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



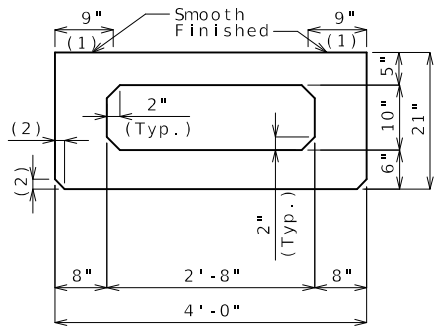
END BENT NO. 4

Detailed Oct. 2025
Checked Dec. 2025

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

Sheet No. 11 of 25

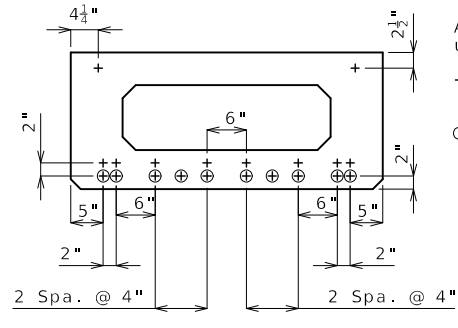
Notes:
Work this sheet with Sheets No. 9 & 10.
For reinforcement of the barrier, see Sheet No. 20.



DIMENSIONS

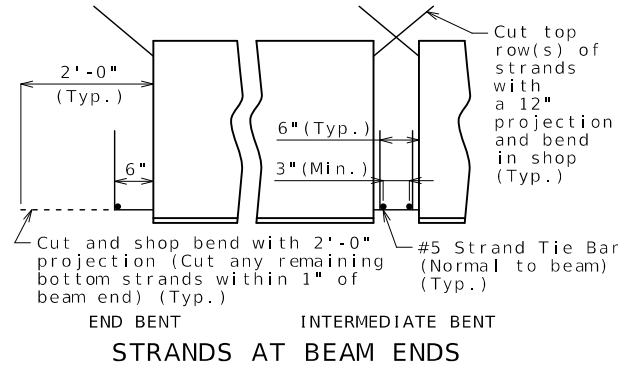
(1) Fabricator shall apply a bond breaker to this region

(2) 1 1/2" (Typ.) (3/4" Optional)



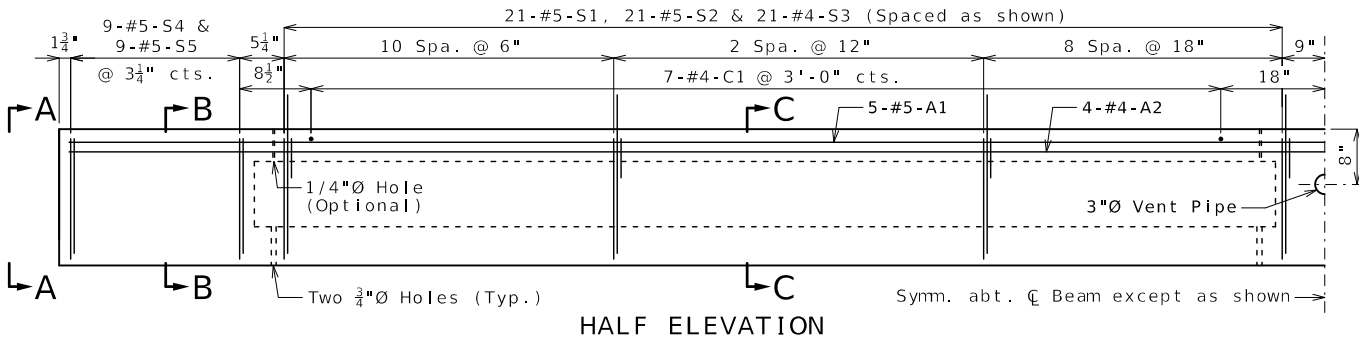
STRAND ARRANGEMENT

All strands are fully bonded unless otherwise noted.
 + Indicates prestressing strand.
 O Indicates cut and shop bend with 2'-0" projection.

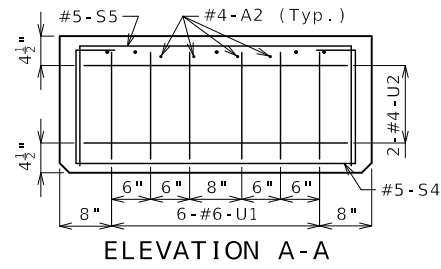


STRANDS AT BEAM ENDS

BILL OF REINFORCING STEEL - EACH BEAM				BENDING DIAGRAM	
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE		
5	5 A1	44'-10"	20	18 1/2" (#4)	
4	4 A2	44'-10"	20	18 1/2" (#5)	
7	4 C1	3'-7"	20	3'-7" (S1, S4) 3'-7" (S5)	
42	5 S1	7'-3"	10S	21" 17" (U1)	
42	5 S2	6'-9"	51S	3'-5 3/4" 2'-0" (U2)	
42	4 S3	4'-6"	50S	SHAPE 10S	
18	5 S4	7'-3"	10S	SHAPE 20	
18	5 S5	6'-4"	10S		
12	6 U1	4'-7"	10S	10" 2 1/2" 18" 2 1/2" (SHAPE 50S)	
4	4 U2	7'-4"	10S	17 1/2" 7 3/4" 12" 2 1/2" (SHAPE 51S)	



HALF ELEVATION



ELEVATION A-A

Strands not shown for clarity.

All dimensions are out to out. Use symmetry for dimensions not shown.

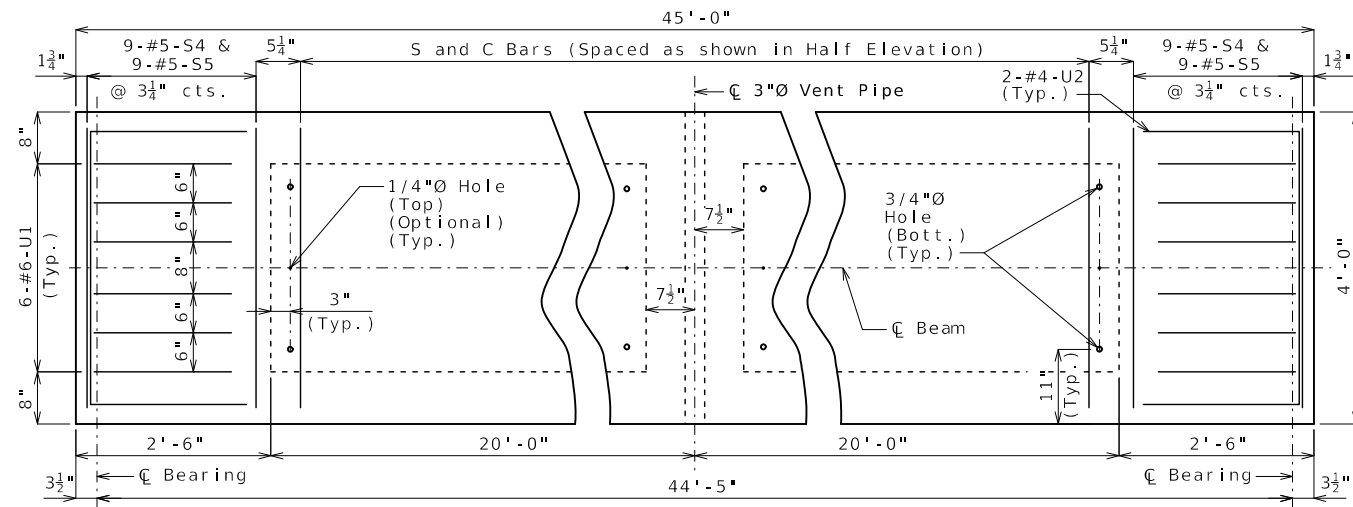
Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual lengths are measured along centerline of bar to the nearest inch.

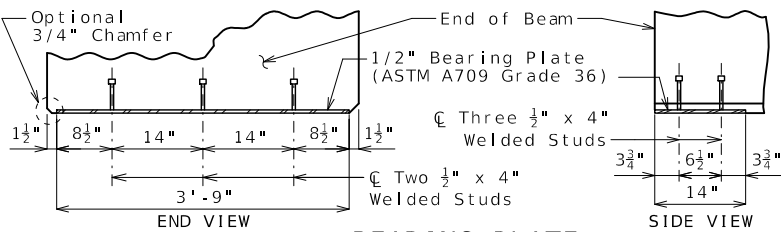
Minimum clearance to reinforcing shall be one inch, unless otherwise shown.

All reinforcement shall be ASTM A615 or A706 Grade 60.

All S2 bars shall be epoxy coated.



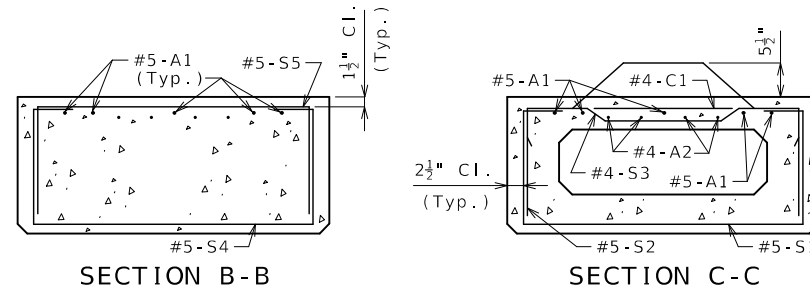
PART PLAN



BEARING PLATE

Detailed Oct. 2025
 Checked Dec. 2025

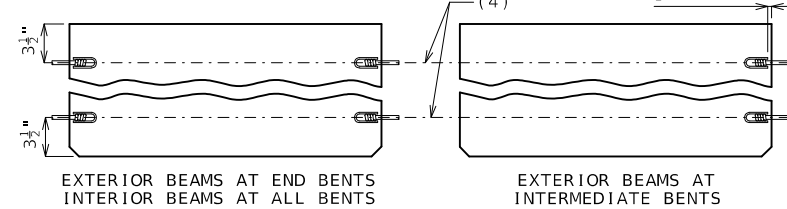
Note: This drawing is not to scale. Follow dimensions.



SECTION B-B

SECTION C-C

(4) C 3/4"Ø (Min.) Coil Tie Rods 2'-6" long (2'-4" at exterior face of exterior beams at end bents)



COIL TIES

General Notes:

Concrete for prestressed beams shall be Class A-1 with f'c = 8,000 psi and f'ci = 6,500 psi.

Use 20 strands, 0.6"Ø Grade 270, with an initial prestress force of 879 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior beams are the same except: coil ties and coil inserts for slab drains.

For Beam Camber Diagram, see Sheet No. 16.

For location of coil inserts at slab drains, see Sheet No. 15.

For location of coil ties at concrete bent diaphragms, see Sheets No. 5, 10 and 14.

SPREAD BOX BEAMS - SPANS (1-2) AND (3-4)



DATE PREPARED
 2/18/2026

ROUTE E STATE MO

DISTRICT BR SHEET NO. 12

COUNTY VERNON

JOB NO. JSR0140

CONTRACT ID.

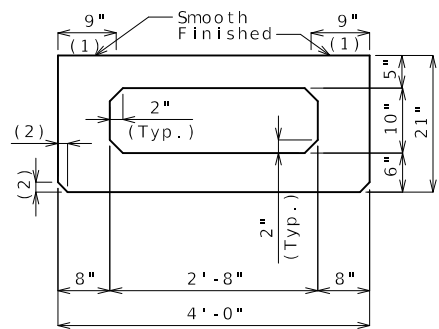
PROJECT NO.

BRIDGE NO. A9612

DATE	DESCRIPTION

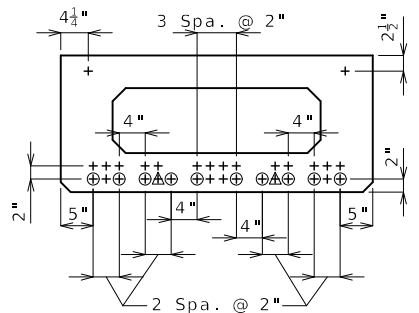
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)





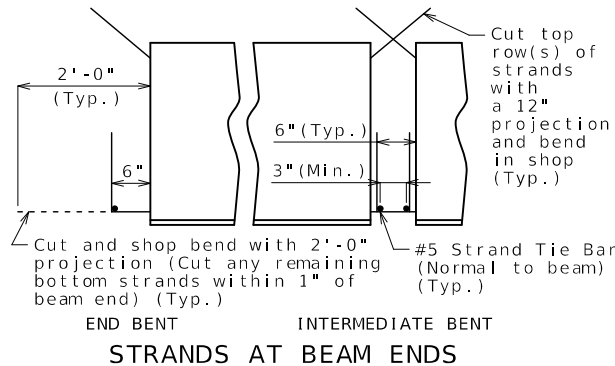
DIMENSIONS

- (1) Fabricator shall apply a bond breaker to this region.
- (2) 1 1/2" (Typ.) (3/4" Optional)



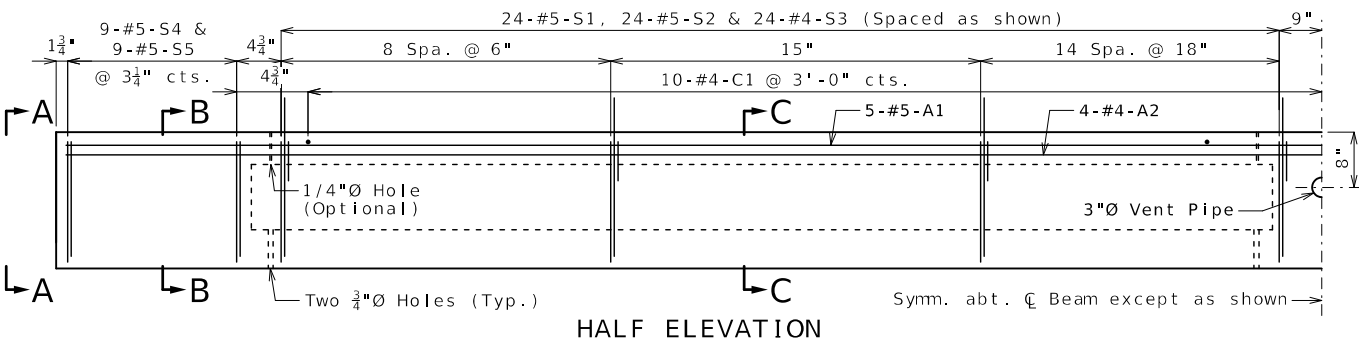
STRAND ARRANGEMENT

All strands are fully bonded unless otherwise noted.
 + Indicates prestressing strand.
 O Indicates cut and shop bend with 2'-0" projection.
 Δ Indicates debonded for 3'-0" from end of beam.

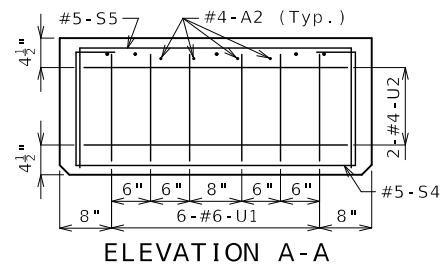


STRANDS AT BEAM ENDS

BILL OF REINFORCING STEEL - EACH BEAM				BENDING DIAGRAM	
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE		
5	5 A1	59'-3"	20	18 1/2" (#4)	3'-7"
4	4 A2	59'-3"	20	18 1/2" (#5)	3'-7"
10	4 C1	3'-7"	20	4 1/2" (#4)	(S1, S4) (S5)
				6" (#5)	
48	5 S1	7'-3"	10S	21"	3'-5 3/4"
48	5 S2	6'-9"	51S	17"	2'-0"
48	4 S3	4'-6"	50S		(U1) (U2)
18	5 S4	7'-3"	10S		SHAPE 10S
18	5 S5	6'-4"	10S		SHAPE 20
12	6 U1	4'-7"	10S	10"	2 1/2"
4	4 U2	7'-4"	10S	6"	18"
				7 3/4"	12"
					SHAPE 50S
					SHAPE 51S

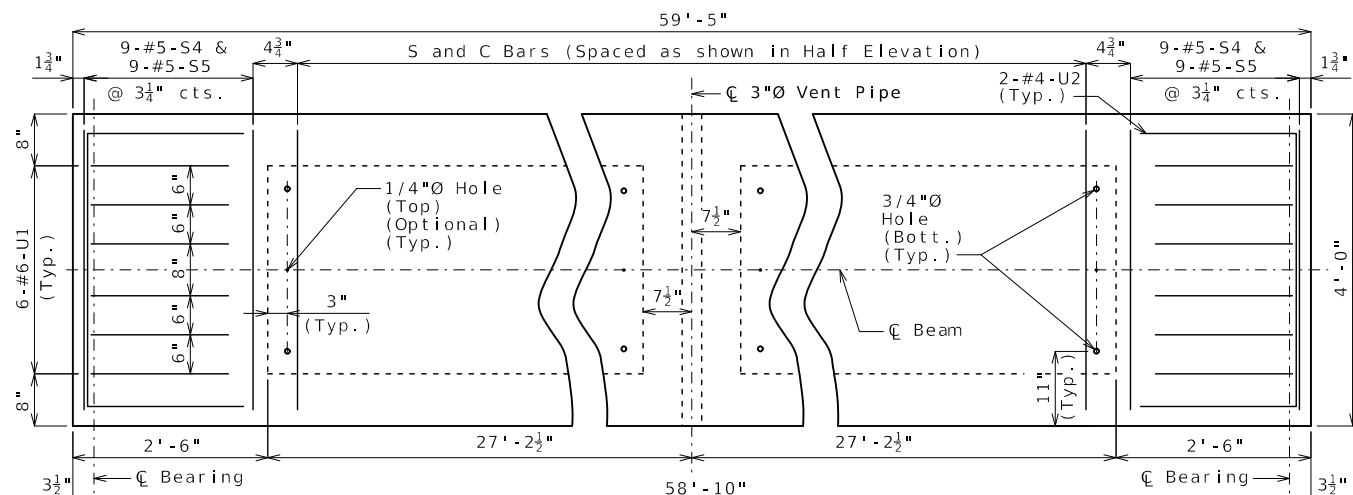


HALF ELEVATION

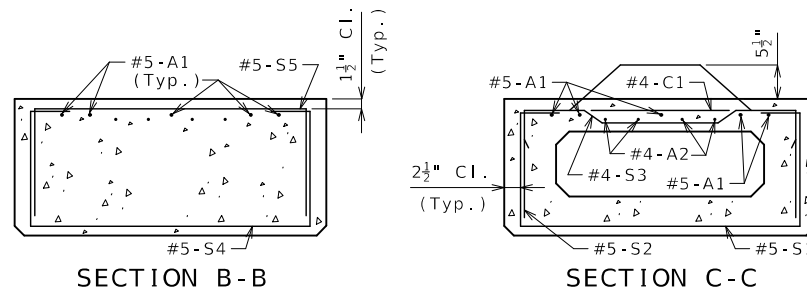


ELEVATION A-A

Strands not shown for clarity.

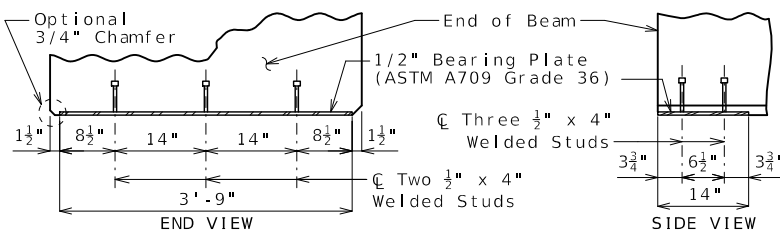


PART PLAN

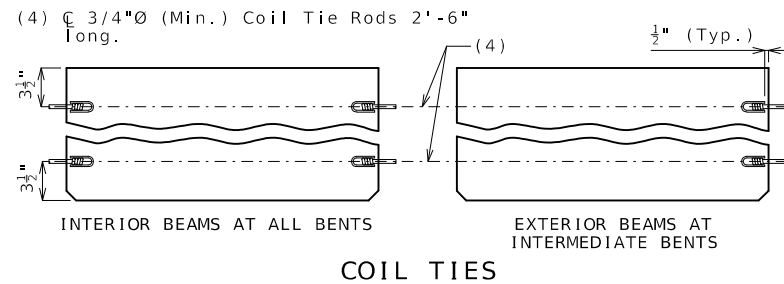


SECTION B-B

SECTION C-C



BEARING PLATE



COIL TIES

All dimensions are out to out. Use symmetry for dimensions not shown.

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

Actual lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be one inch, unless otherwise shown.

All reinforcement shall be ASTM A615 or A706 Grade 60.

All S2 bars shall be epoxy coated.

General Notes:

Concrete for prestressed beams shall be Class A-1 with f'c = 8,000 psi and f'ci = 6,500 psi.

Use 32 strands, 0.6 inch Grade 270, with an initial prestress force of 1406 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior beams are the same except: coil ties and coil inserts for slab drains.

For Beam Camber Diagram, see Sheet No. 16.

For location of coil inserts at slab drains, see Sheet No. 15.

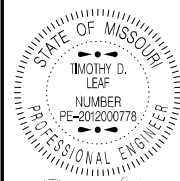
For location of coil ties at concrete bent diaphragms, see Sheet No. 14.



DATE PREPARED
 2/18/2026
 ROUTE E STATE MO
 DISTRICT BR SHEET NO. 13
 COUNTY VERNON
 JOB NO. JSR0140
 CONTRACT ID.
 PROJECT NO.
 BRIDGE NO. A9612

DATE	DESCRIPTION

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



DATE PREPARED
2/18/2026

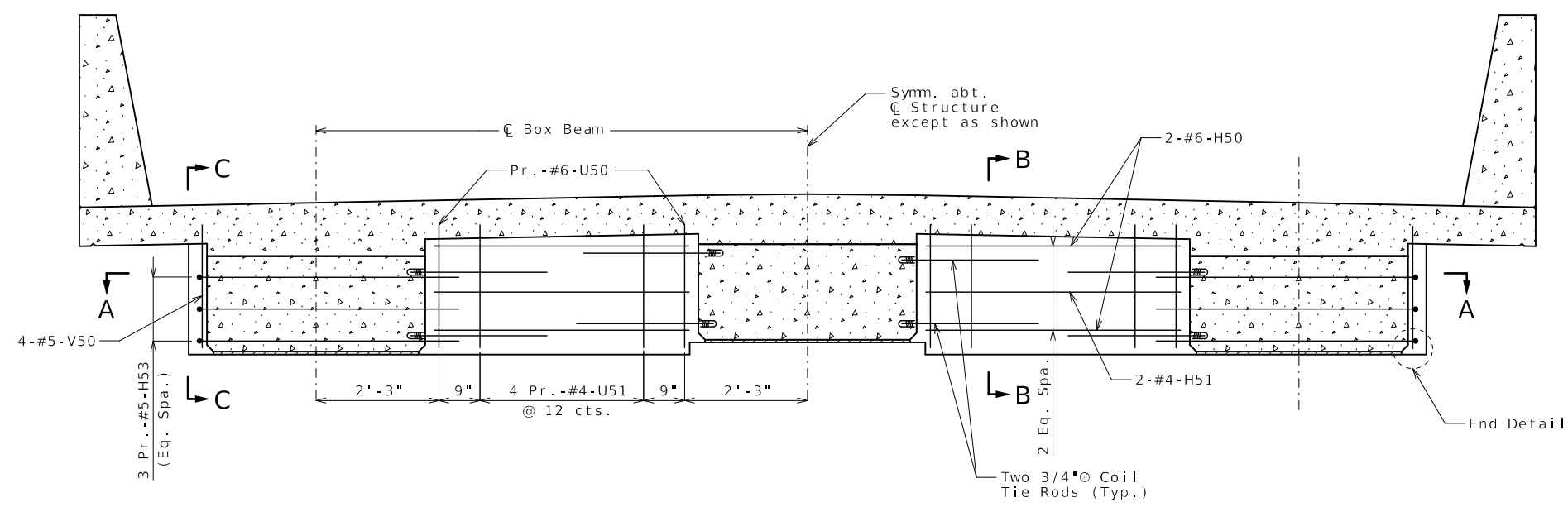
ROUTE E STATE MO
DISTRICT BR SHEET NO. 14

COUNTY VERNON
JOB NO. JSR0140
CONTRACT ID.

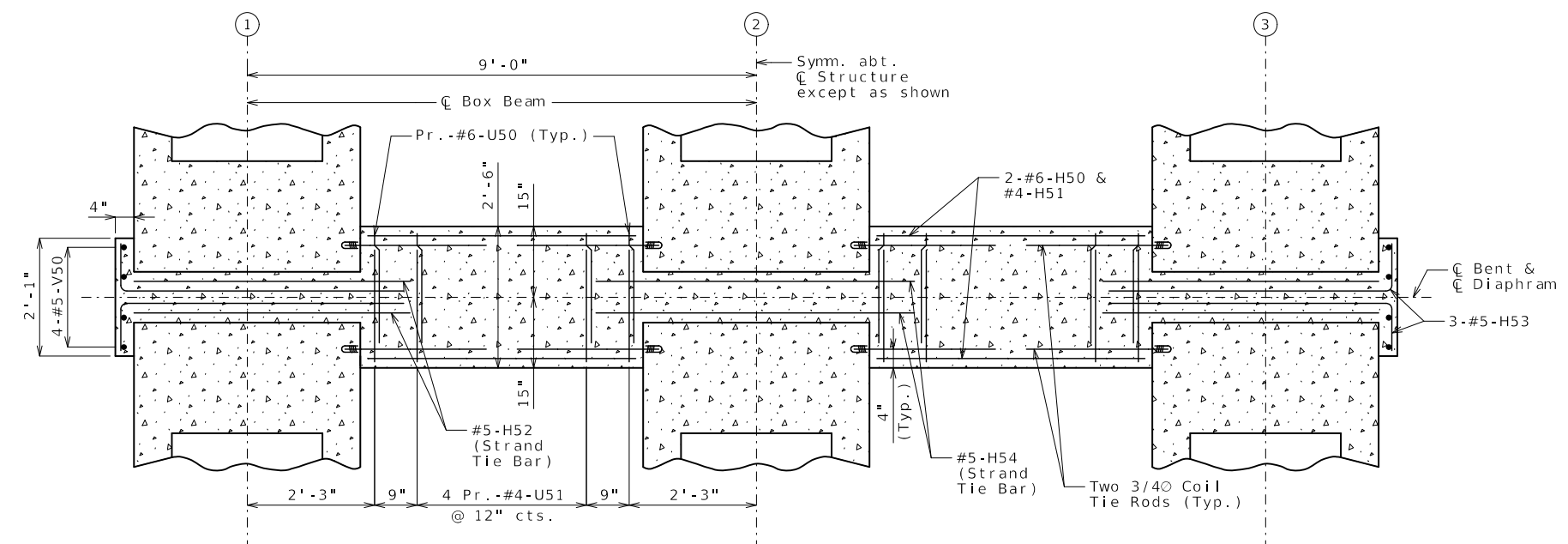
PROJECT NO.
BRIDGE NO. A9612

DESCRIPTION	DATE

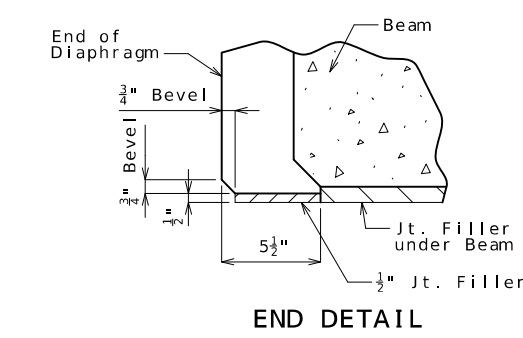
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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



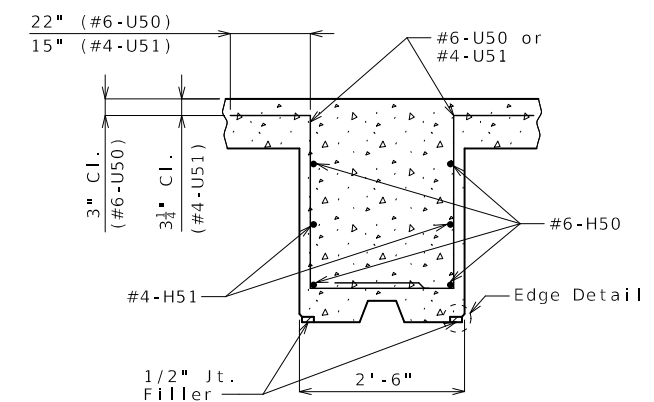
SECTION NEAR INTERMEDIATE BENT



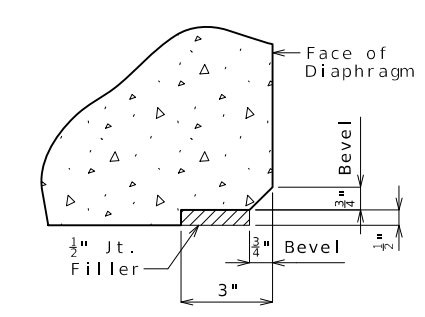
SECTION A-A



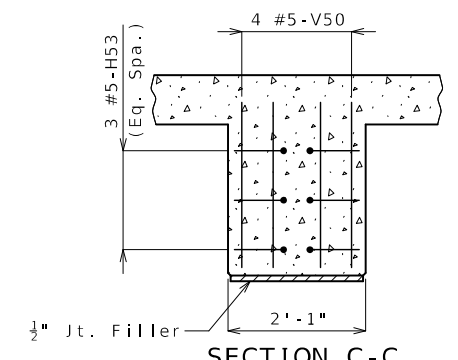
END DETAIL



SECTION B-B



EDGE DETAIL



SECTION C-C

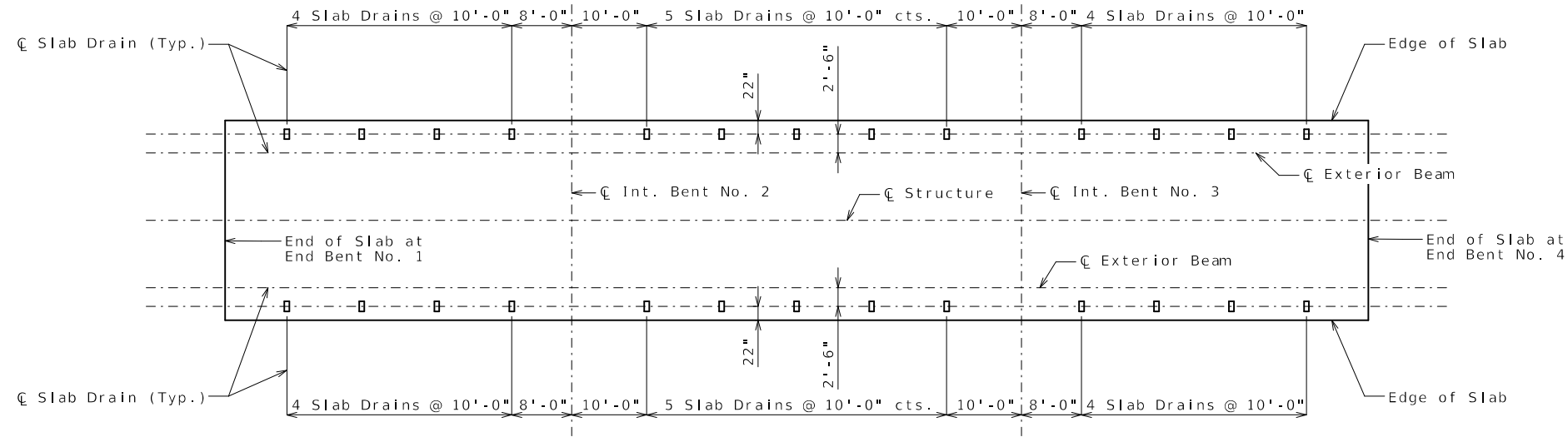
CONCRETE DIAPHRAGMS AT INTERMEDIATE BENTS NO. 2 & 3

Notes:
For location of Strand Tie Bars, see Sheets No. 12 & 13.

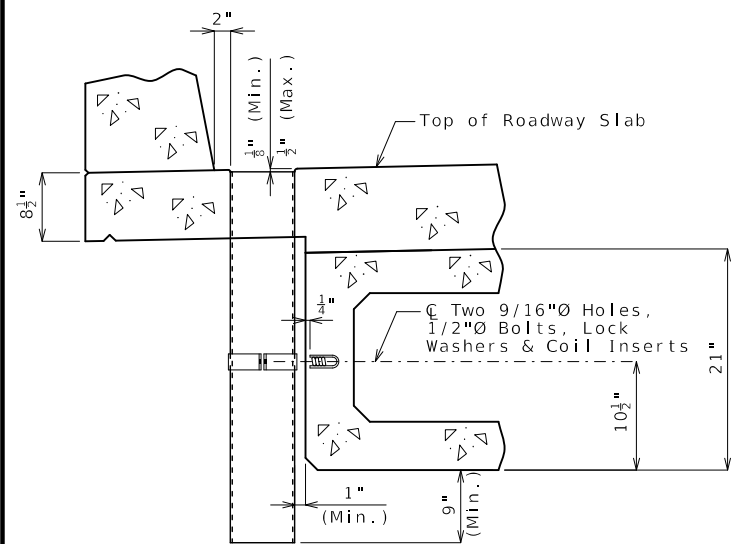
For location and details of Coil Tie Rods, see Sheets No. 12 & 13.

Diaphragms at intermediate bents shall be built vertical.

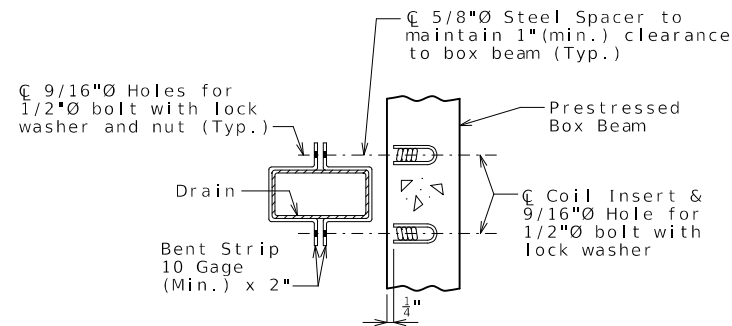
All U-bars in diaphragms are to be placed parallel to \bar{C} Roadway.



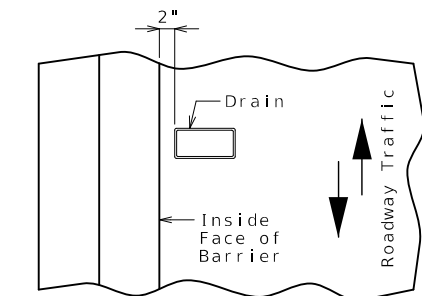
PLAN OF SLAB SHOWING SLAB DRAIN LOCATIONS



PART SECTION NEAR DRAIN

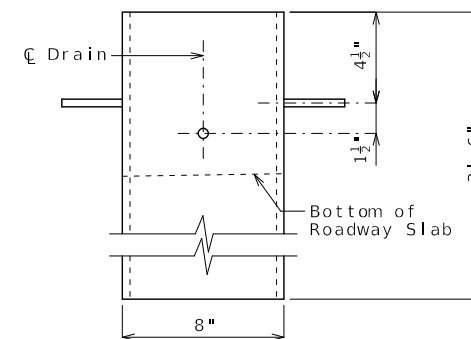


PART SECTION SHOWING BRACKET ASSEMBLY

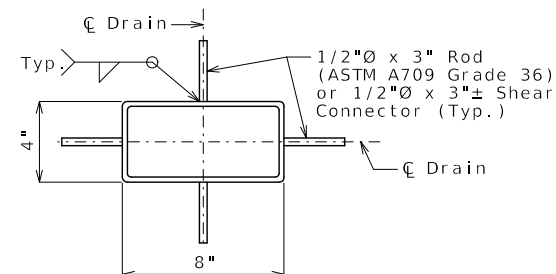


PART PLAN OF SLAB AT DRAIN

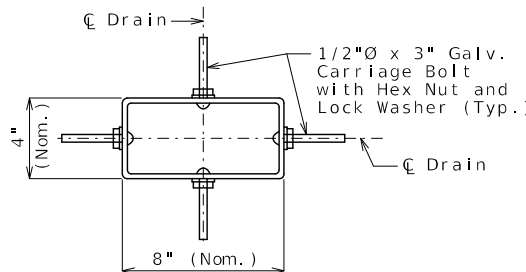
SLAB DRAINS



ELEVATION OF DRAIN



PLAN OF STEEL DRAIN OPTION



PLAN OF FRP DRAIN OPTION

General Notes:

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.

Notes for Steel Drain:

Slab drains may be fabricated of either 1/4" welded sheets of ASTM A709 Grade 36 steel or from 1/4" structural steel tubing ASTM A500 or A501.

Outside dimensions of drains are 8" x 4".

The drains shall be galvanized in accordance with ASTM A123.

Notes for FRP Drain:

Drains shall be machine filament-wound thermosetting resin tubing meeting the requirements of ASTM D2996 with the following exceptions:

Shape of drains shall be rectangular with outside nominal dimensions of 8" x 4".

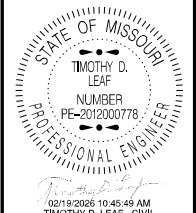
Minimum reinforced wall thickness shall be 1/4 inch.

The resin used shall be ultraviolet (UV) resistant and/or have UV inhibitors mixed throughout. Drains may have an exterior coating for additional UV resistance.

The color of the slab drain shall be gray (Federal Standard #26373). The color shall be uniform throughout the resin and any coating used.

The combination of materials used in the manufacture of the drains shall be tested for UV resistance in accordance with ASTM D4329 Cycle A. The representative material shall withstand at least 500 hours of testing with only minor discoloration and without any physical deterioration. The contractor shall furnish the results of the required ultraviolet testing prior to acceptance of the slab drains.

At the contractor's option, drains may be field cut. The method of cutting FRP slab drain shall be as recommended by the manufacturer to ensure a smooth, chip free cut.

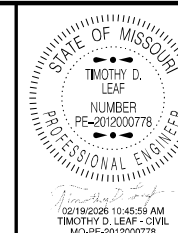


DATE PREPARED 2/18/2026	
ROUTE E	STATE MO
DISTRICT BR	SHEET NO. 15
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9612	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DATE PREPARED
2/18/2026

ROUTE STATE
E MO

DISTRICT SHEET NO.
BR 16

COUNTY
VERNON

JOB NO.
JSR0140

CONTRACT ID.

PROJECT NO.

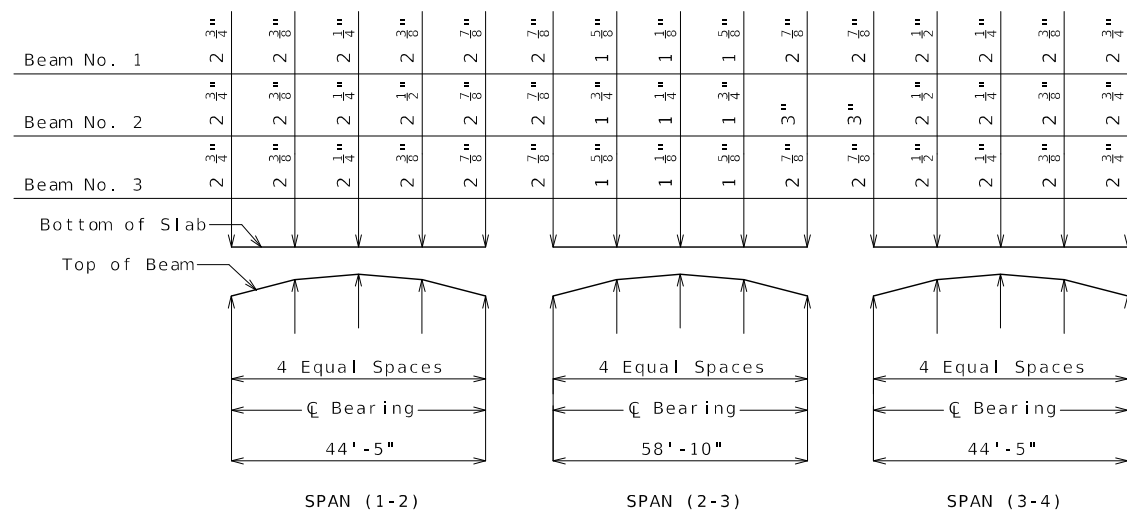
BRIDGE NO.
A9612

DESCRIPTION

DATE	DESCRIPTION

DATE

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



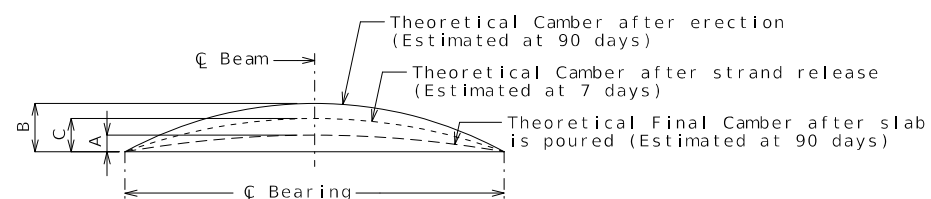
THEORETICAL SLAB HAUNCHING DIAGRAM (ESTIMATED AT 90 DAYS)

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 and Concrete Beam.

Beam Number	Span (1-2) (44'-5" C Brg. - C Brg.)					Span (2-3) (58'-10" C Brg. - C Brg.)					Span (3-4) (44'-5" C Brg. - C Brg.)				
	C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.
1	821.79	821.85	821.89	821.90	821.89	821.89	821.99	822.02	821.97	821.87	821.86	821.87	821.85	821.80	821.73
2	821.95	822.01	822.05	822.06	822.05	822.05	822.15	822.18	822.13	822.03	822.02	822.03	822.01	821.96	821.89
3	821.79	821.85	821.89	821.90	821.89	821.89	821.99	822.02	821.97	821.87	821.86	821.87	821.85	821.80	821.73

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 and barrier.

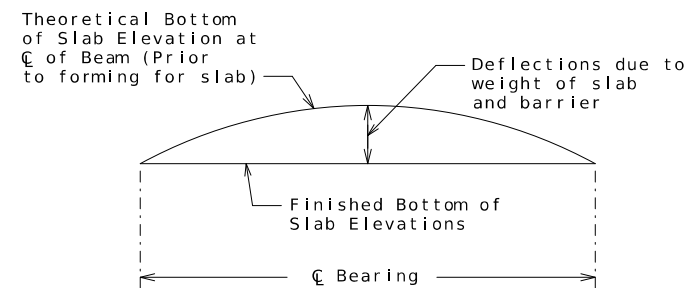


Beam	Span (1-2)			Span (2-3)			Span (3-4)		
	A	B	C	A	B	C	A	B	C
Exterior	3/4"	1 1/4"	7/8"	2"	3 3/8"	2 3/8"	3/4"	1 1/4"	7/8"
Interior	3/4"			2"			3/4"		

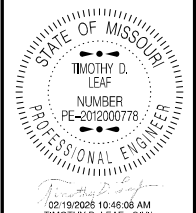
BEAM CAMBER DIAGRAM

Conversion Factors for Beam Camber (Estimated at 90 days):

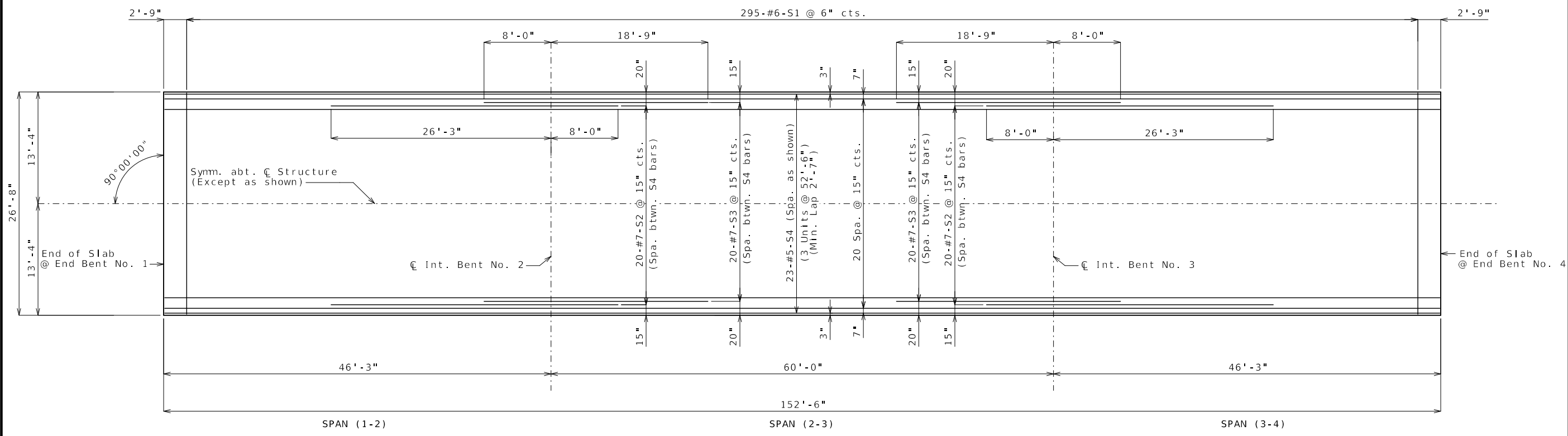
0.25 pt. = 0.7125 x 0.5 pt.



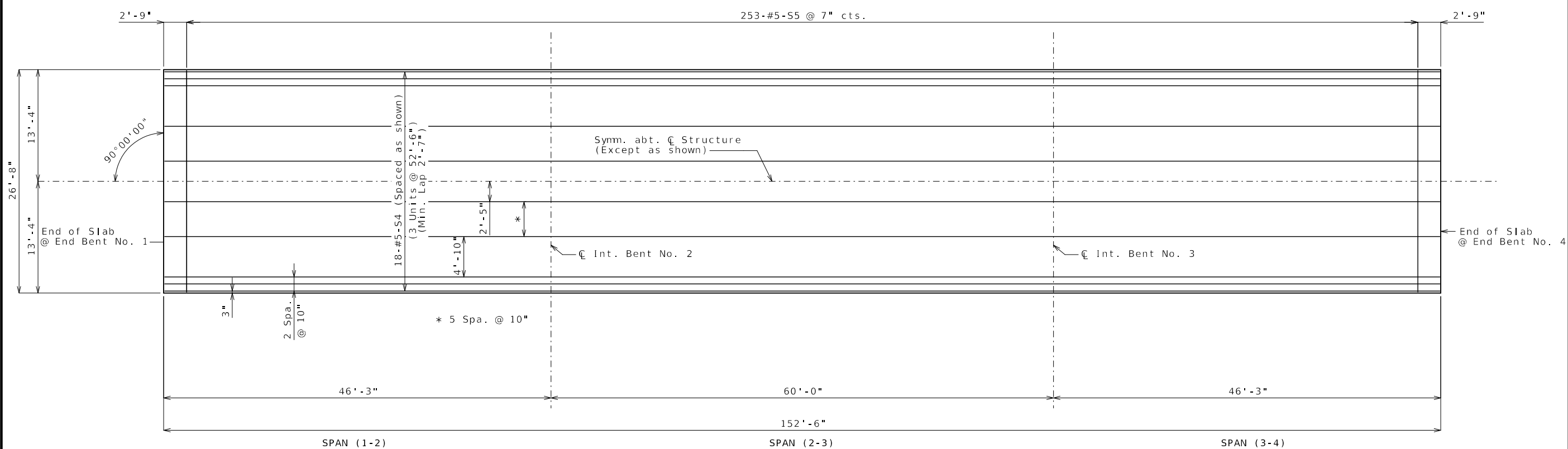
TYPICAL SLAB ELEVATIONS DIAGRAM



DATE PREPARED 2/18/2026	
ROUTE E	STATE MO
DISTRICT BR	SHEET NO. 17
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9612	



PLAN OF SLAB SHOWING TOP REINFORCEMENT



PLAN OF SLAB SHOWING BOTTOM REINFORCEMENT

PLAN OF SLAB SHOWING REINFORCEMENT

Notes:
 Longitudinal slab dimensions shown are measured horizontally.
 For Section Thru Slab and Slab Pouring Sequence, see Sheet No. 18.
 For details and reinforcement of barrier, see Sheets 19 & 20.
 For details and locations of Slab Drains, see Sheet No. 15.
 For Theoretical Slab Haunch Diagram and Theoretical Bottom of Slab Elevations, see Sheet No. 16.

Detailed Oct. 2025
 Checked Dec. 2025

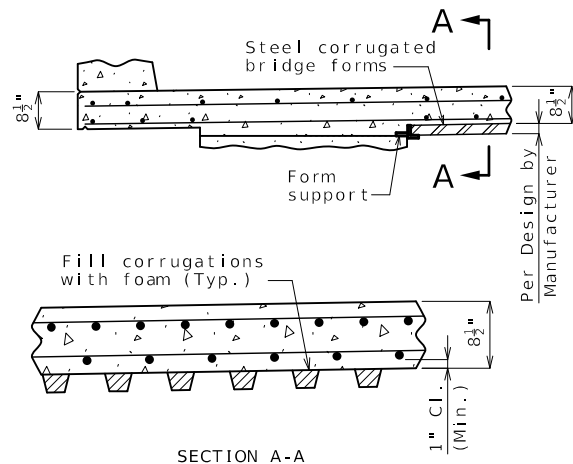
Note: This drawing is not to scale. Follow dimensions.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
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OPTIONAL STAY-IN-PLACE FORM DETAILS

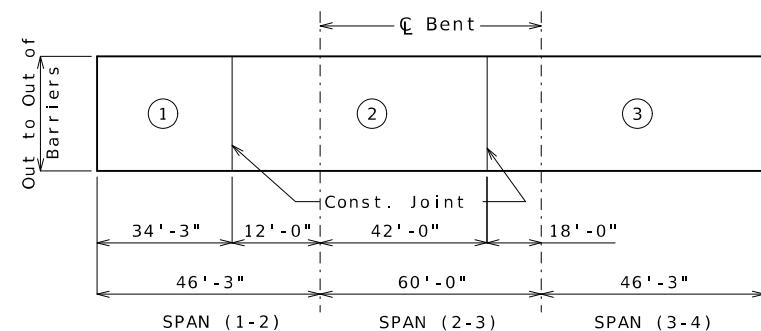
Stay-In-Place Forms:

Corrugated steel forms, supports, closure elements and accessories shall be in accordance with grade requirement and coating designation G165 of ASTM A653. Complete shop drawings of the permanent steel deck forms shall be required in accordance with Sec 1080.

Corrugations of stay-in-place forms shall be filled with an expanded polystyrene material. The polystyrene material shall be placed in the forms with an adhesive in accordance with the manufacturer's recommendations.

Form sheets shall not rest directly on the top of beam. Sheets shall be securely fastened to form supports with a minimum bearing length of one inch on each end. Form supports shall be placed in direct contact with the top of beam. Drilling holes in the beam will not be permitted. All steel fabrication and construction shall be in accordance with Sec 1080 and 712. Certified field welders will not be required for welding of the form supports.

The design of stay-in-place corrugated steel forms is per manufacturer which shall be in accordance with Sec 703 for false work and forms. Maximum actual weight of corrugated steel forms allowed shall be 4 psf assumed for beam loading.



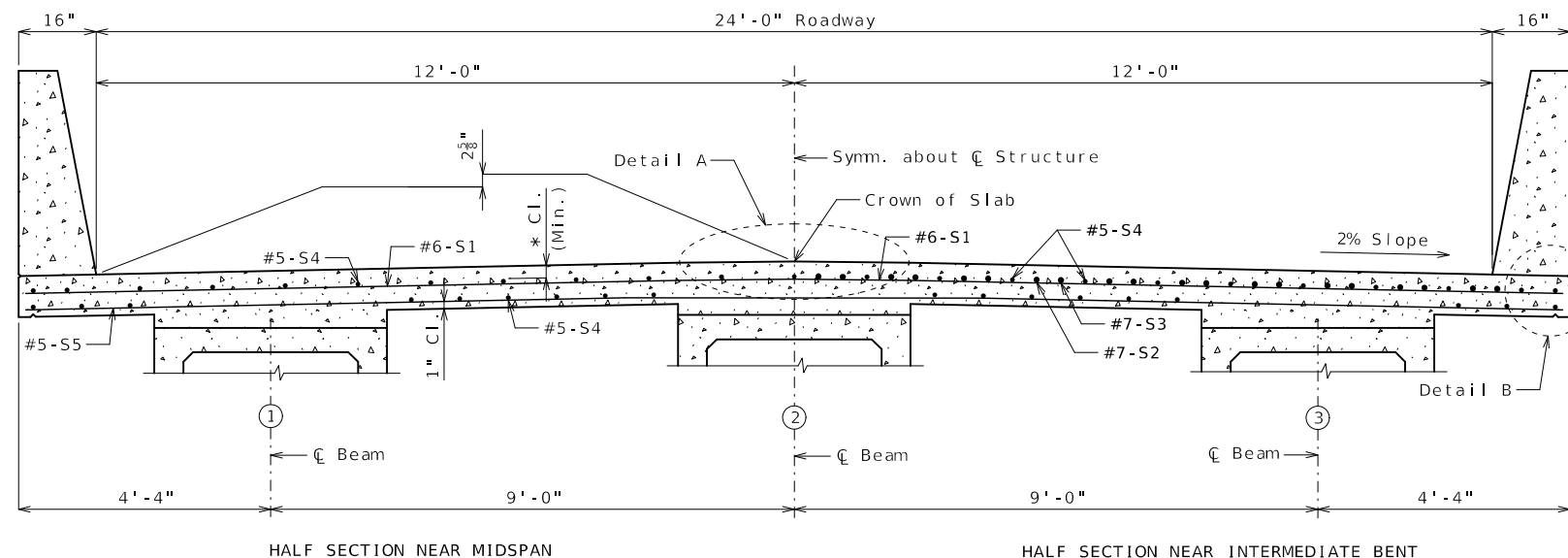
	Sequence of Pours			Min. Rate of Pour Cu. Yds./Hr.
	Direction			
Basic Sequence	1	2	3	25
	End to 2	1 to 3	2 to End	
Alternate pours to the basic sequence are subject to the approval of the engineer in accordance with Sec 703.				
Alternate A Pours	1 + 2	3		25
	End to 3	2 to End		
Alternate B Pours	1 + 2 + 3			25
	End to End			

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 pours at the rate given.

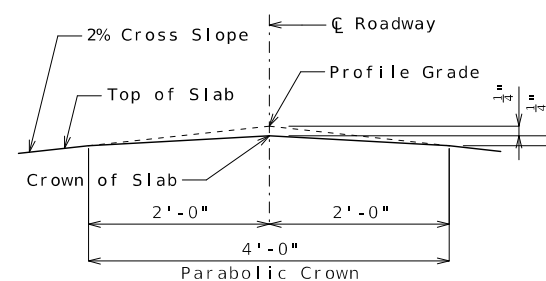
The concrete diaphragm at the intermediate bents and integral end bents shall be poured a minimum of 30 minutes and a maximum of 2 hours before the slab is poured.

SLAB POURING SEQUENCE

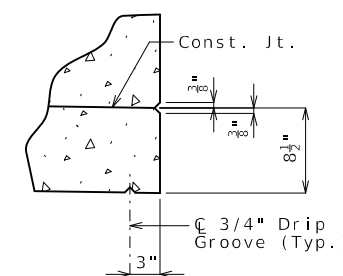
Note: This drawing is not to scale. Follow dimensions.



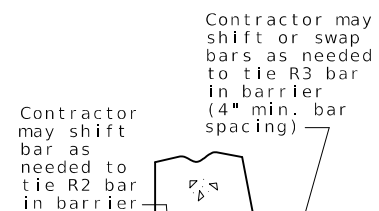
SECTION THRU SLAB



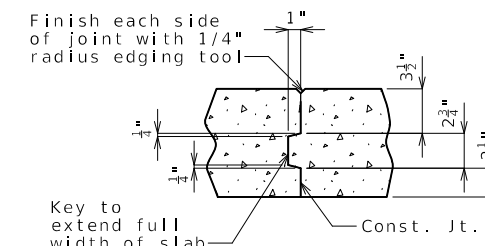
DETAIL A



DETAIL B



OPTIONAL SHIFTING TOP BARS AT BARRIER



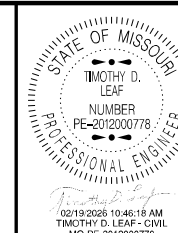
SLAB CONSTRUCTION JOINT

Notes:

For reinforcement of barrier not shown, see Sheet No. 20.

For Theoretical Bottom of Slab Elevations, Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 16.

For Plan of Slab Showing Reinforcement, see Sheet No. 17.



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2/18/2026

ROUTE E STATE MO

DISTRICT BR SHEET NO. 18

COUNTY VERNON

JOB NO. JSR0140

CONTRACT ID.

PROJECT NO.

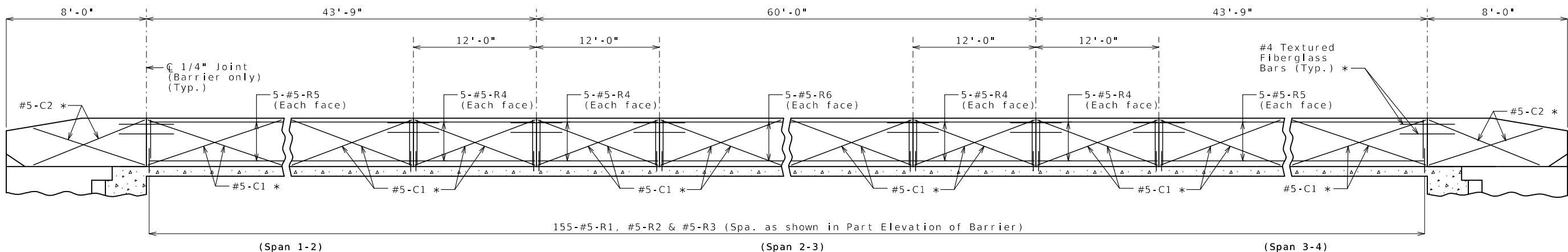
BRIDGE NO. A9612

DESCRIPTION

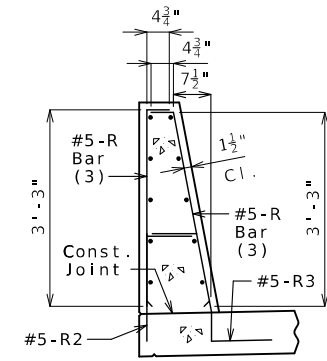
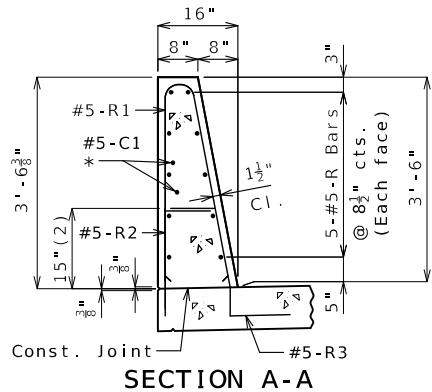
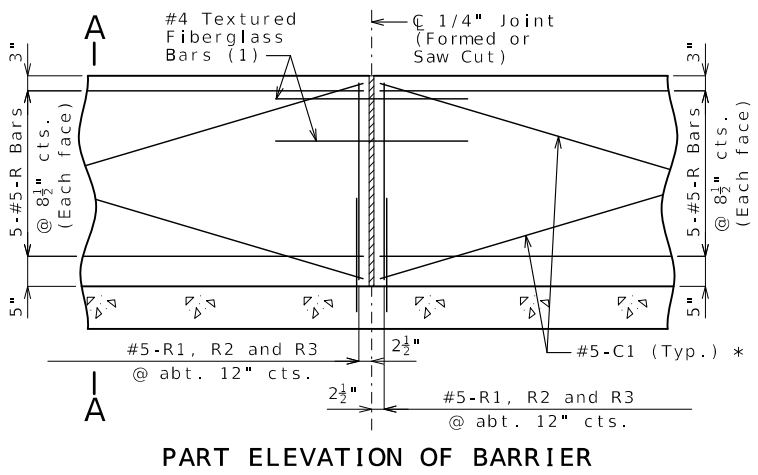
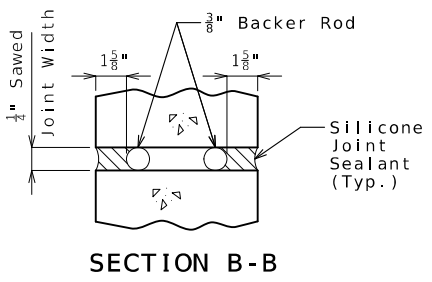
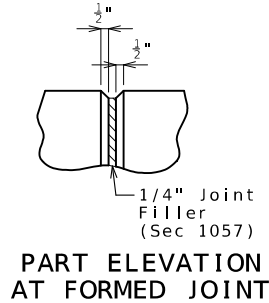
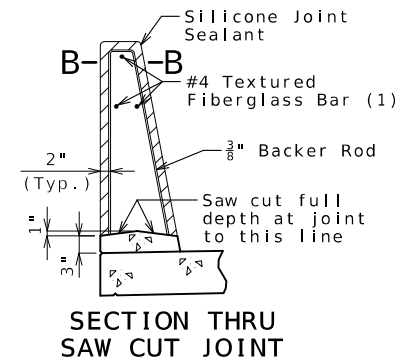
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION





ELEVATION OF BARRIER
(Left barrier shown, right barrier similar)
Longitudinal dimensions are horizontal.



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.



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ROUTE E	STATE MO
DISTRICT BR	SHEET NO. 19
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9612	

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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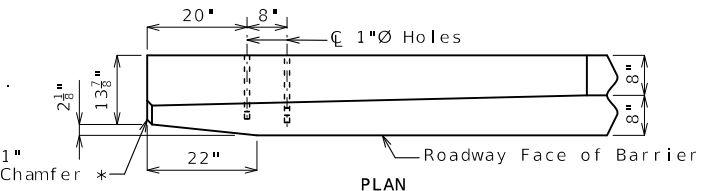
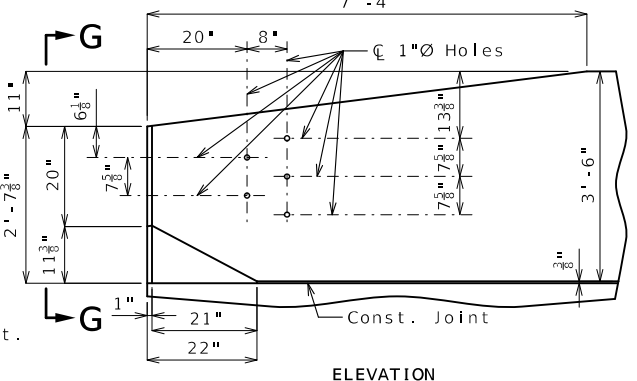
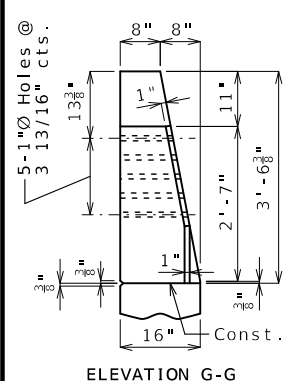
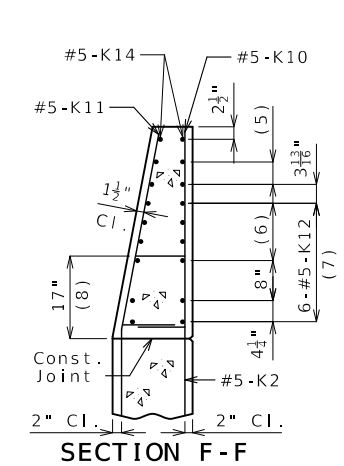
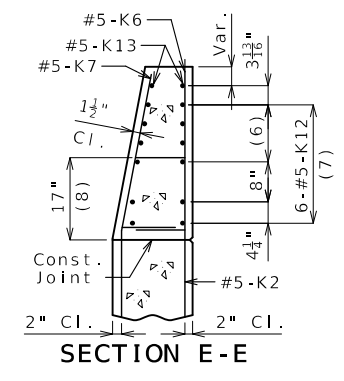
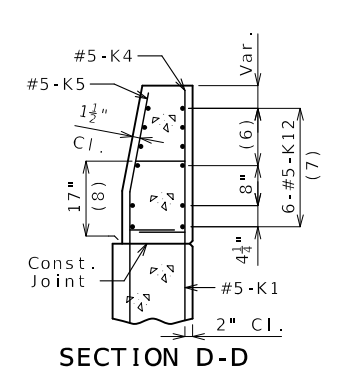
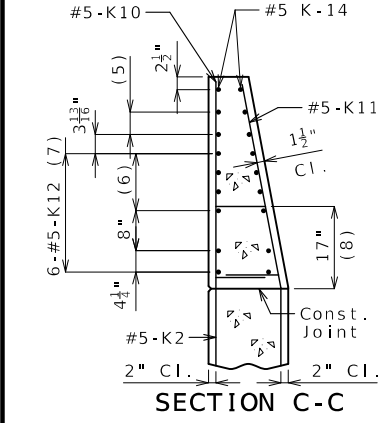
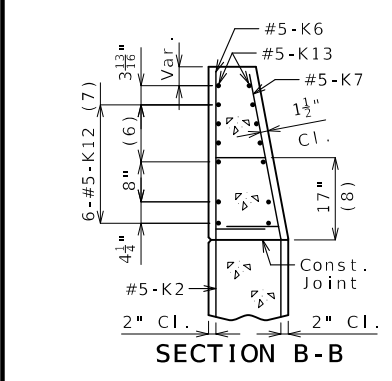
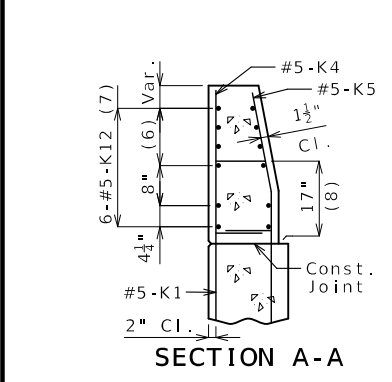
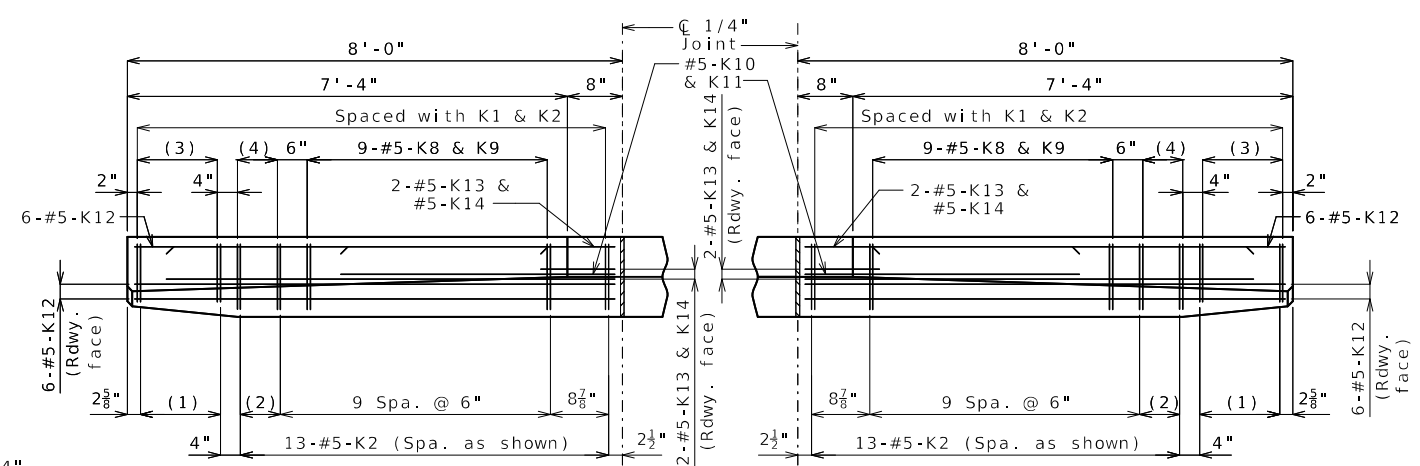
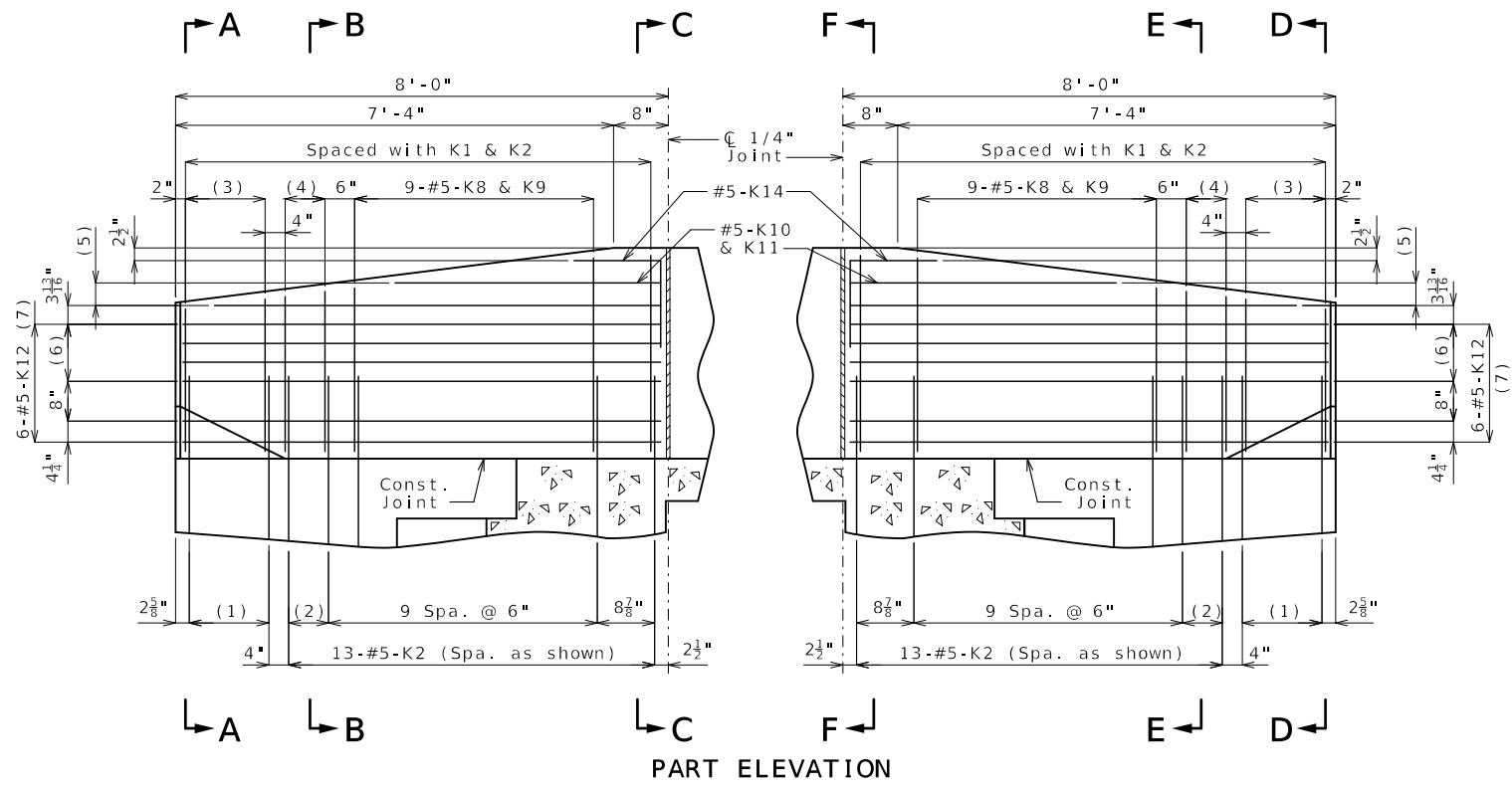


DATE PREPARED 2/18/2026	
ROUTE E	STATE MO
DISTRICT BR	SHEET NO. 20
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9612	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



* Transition to zero at Type A curb for gutter lines to match.

DETAILS OF GUARD RAIL ATTACHMENT

PART PLAN

- (1) 5-#5-K1 @ 4" cts.
- (2) 2 spaces @ 4"
- (3) 5-#5-K4 & K5
- (4) 3-#5-K6 & K7
- (5) 2-#5-K13 @ 4 1/2" cts., each face
- (6) 3 spaces @ 3 1/8"
- (7) Spaced as shown, each face
- (8) To top of bar

General Notes:

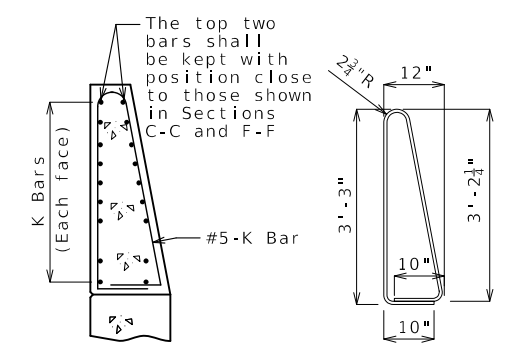
Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered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

Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1 1/2" except as shown for bars embedded into end bent.

TYPE D BARRIER AT END BENTS

(Left barrier shown, right barrier similar)

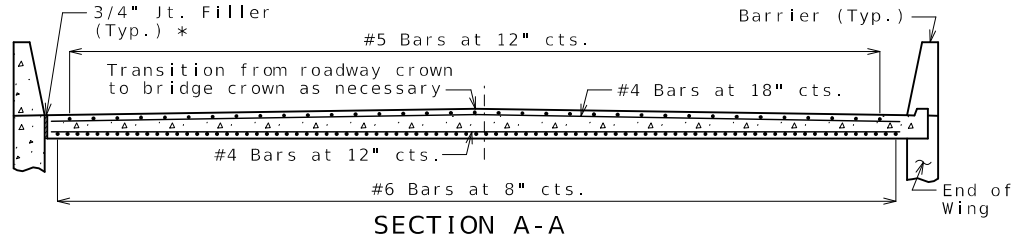
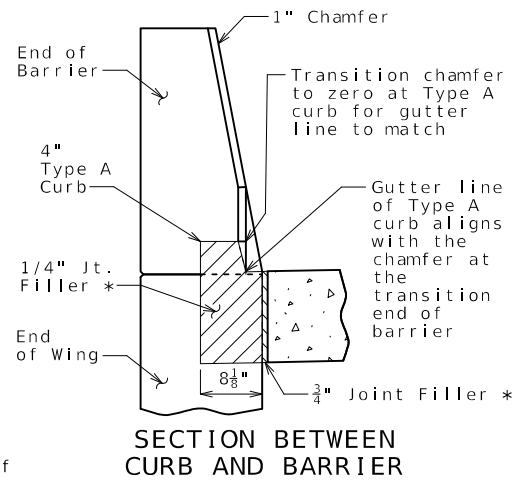
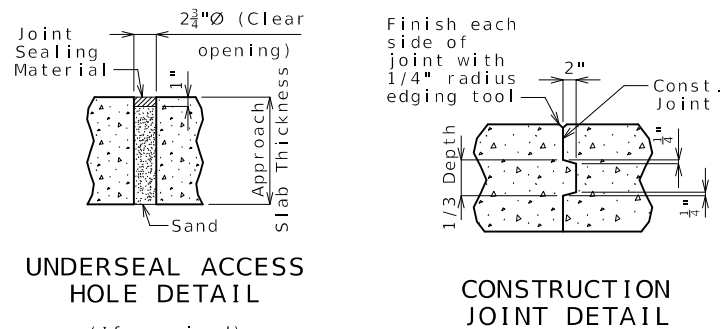
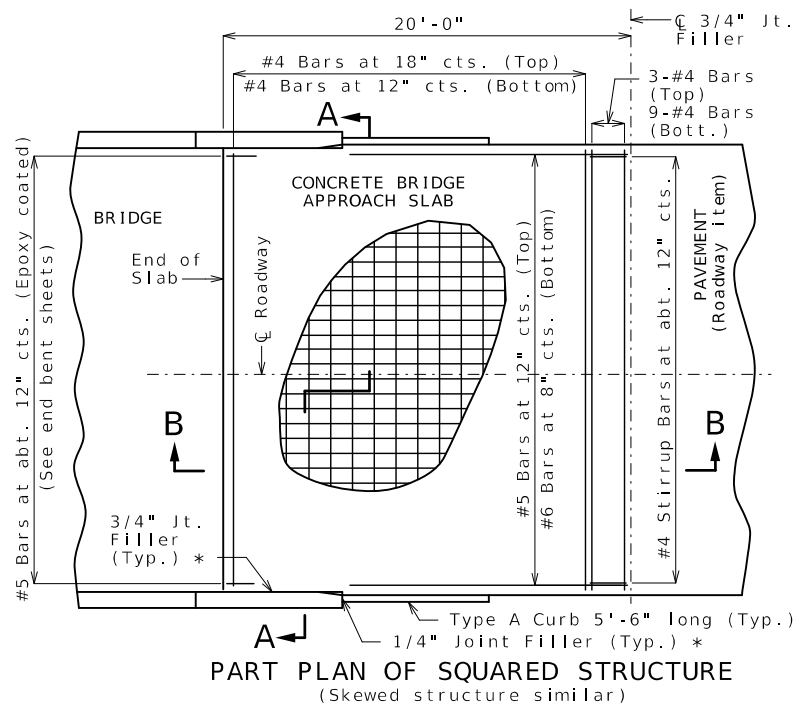


K10-K11 BAR PERMISSIBLE ALTERNATE SHAPE

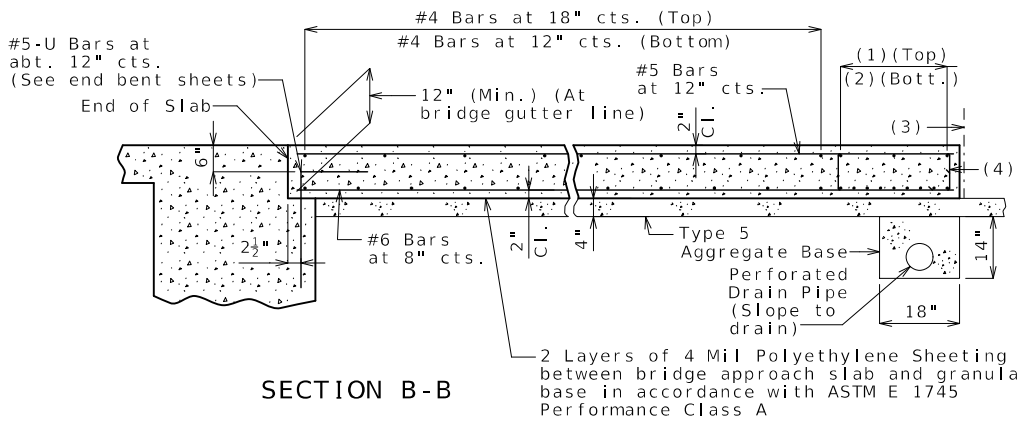
(Other K bars not shown for clarity)

The K10-K11 bar combination may be furnished as one bar as shown, at the contractor's option.

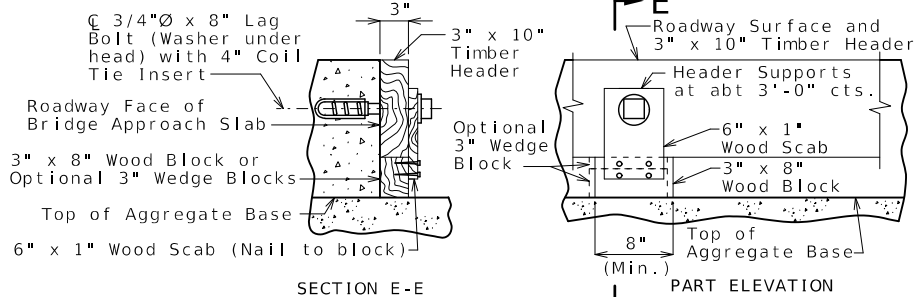
All dimensions are out to out.



With the approval of the engineer, the contractor may crown the bottom of the approach slab to match the crown of the roadway surface.



- (1) 3-#4 Bars
- (2) 9-#4 Bars
- (3) 3/4\"/>
- (4) #4 Stirrup Bars at abt. 12\"/>

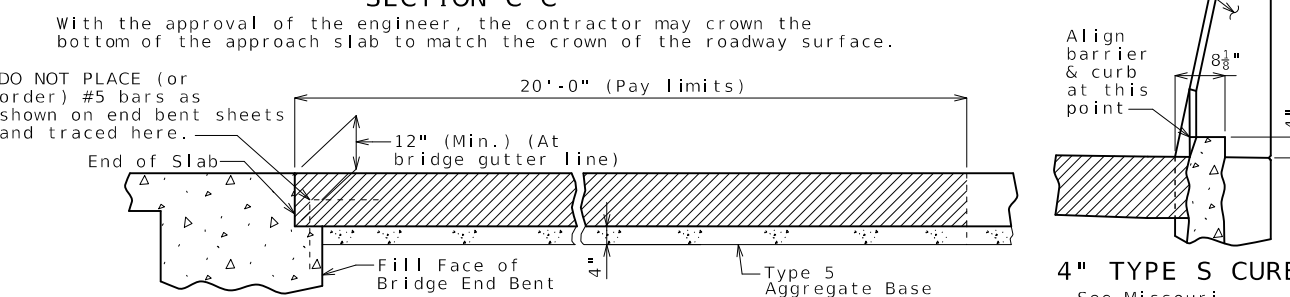
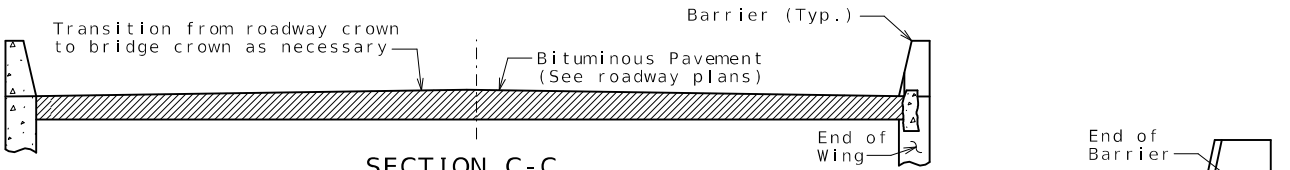
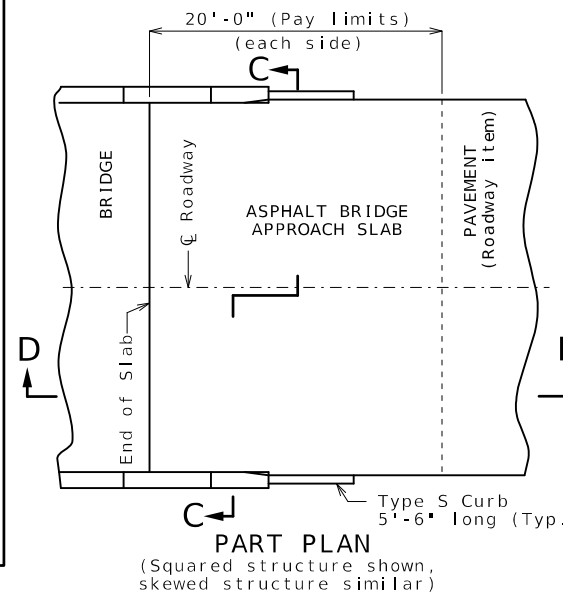


OPTIONAL CONCRETE SLAB
Remove timber header when concrete pavement is placed.

Notes For Concrete Slab Only:
All concrete for the bridge approach slab shall be in accordance with Sec 503 ($f'c = 4,000$ psi).
The reinforcing steel in the bridge approach slab shall be epoxy coated Grade 60 with $f_y = 60,000$ psi.
Longitudinal construction joints in bridge approach slab shall be aligned with longitudinal construction joints in bridge slab.
Minimum clearance to reinforcing steel shall be 1 1/2\", unless otherwise shown.
The reinforcing steel in the bridge approach slab shall be continuous. The transverse reinforcing steel may be made continuous by providing a minimum lap splice of 26 inches for #4 bars, or by mechanical bar splice.
Mechanical bar splices shall be in accordance with Sec 710.
All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.
Payment for furnishing all materials, labor and excavation necessary to construct the concrete bridge approach slab, including the timber header, underdrain, Type 5 aggregate base, joint filler, and all other appurtenances and incidental work as shown on this sheet, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.
Drain pipe may be either 6\"/>

General Notes:
Contractor shall have the option to construct either slab except as noted.
The contractor shall pour and satisfactorily finish the bridge slab before placing the bridge approach slab.
MoDOT Construction personnel will indicate the bridge approach slab used for this structure:
 Concrete Bridge Approach Slab
 Asphalt Bridge Approach Slab

Notes For Asphalt Slab Only:
Payment for furnishing all materials, labor and excavation necessary to construct the asphalt bridge approach slab, including tack, curb, and Type 5 aggregate base within the pay limits shown, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.
Application of tack is required between lifts per Sec 403.



OPTIONAL ASPHALT SLAB (NOT ALLOWED WITH CONCRETE PAVEMENT)
With the approval of the engineer, the contractor may crown the bottom of the approach slab to match the crown of the roadway surface.
DO NOT PLACE (or order) #5 bars as shown on end bent sheets and traced here.

STATE OF MISSOURI
TIMOTHY D. LEAF
NUMBER PE-2012000778
PROFESSIONAL ENGINEER
02/18/2026 10:48:59 AM
TIMOTHY D. LEAF - CIVIL
MO-PE-2012000778

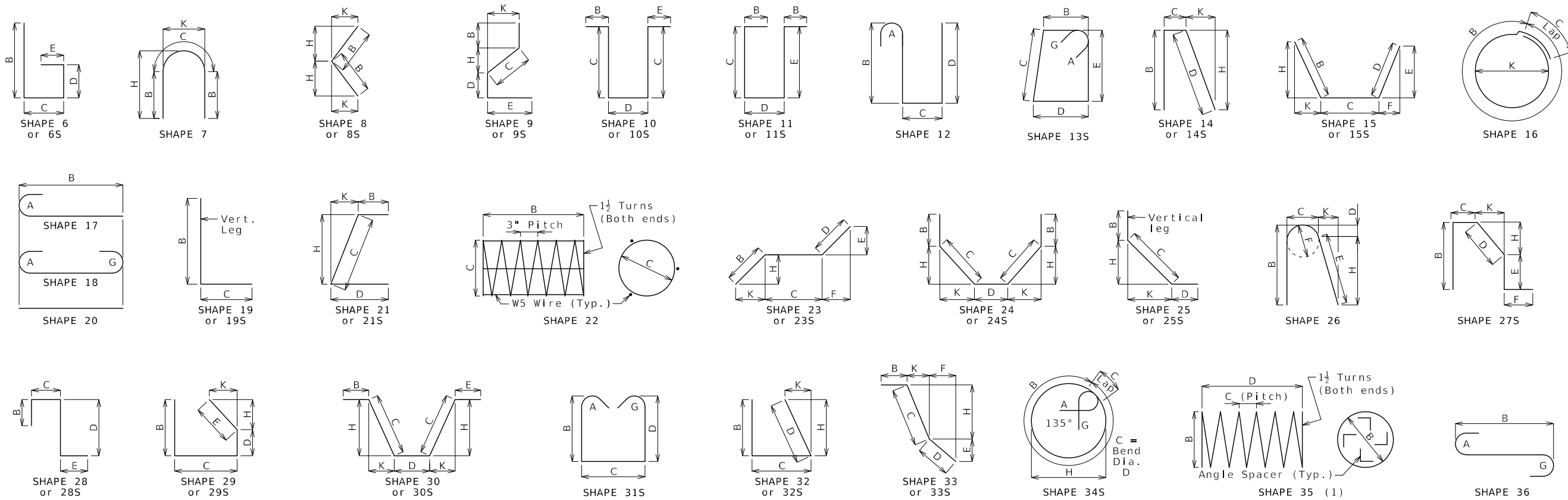
DATE PREPARED
2/18/2026

ROUTE E STATE MO
DISTRICT BR SHEET NO. 21
COUNTY VERNON
JOB NO. JSR0140
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9612

DESCRIPTION	DATE

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

BRIDGE APPROACH SLAB (MINOR)



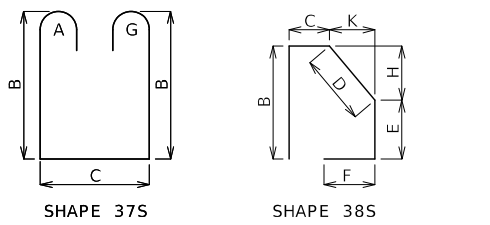
Finished Bend Diameters D and Hook Dimensions

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 1/2"	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 1/4"
#11	1	12"	24 1/2"	19 1/2"	14 7/8"
#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°	135°	180°
#4	2	2"	4 1/2"	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 3/8"	3 3/4"
	3	3 3/4"	6 1/4"	6 1/4"	7"	3 3/8"	5"
#6	1	4 1/2"	12"	7 3/4"	8 1/4"	4 3/8"	6"

6d for #4 & #5, 12d for #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.



SHAPE 37S SHAPE 38S
BENDING DIAGRAMS

All dimensions are out to out. (1) Shall be a deformed or plain spiral bar or wire.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

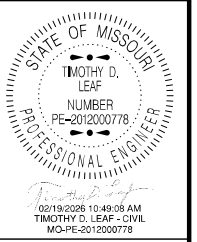
Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

Size	Substructure			Superstructure			Entire Bridge	
	Plain	Epoxy	Slip Form	Slab	Barrier	Slip Form	Plain	Epoxy
W5	0	0	0	0	0	0	0	0
4	353	0	0	539	0	0	353	539
5	682	0	0	14,630	8,988	549	682	24,167
6	1,868	0	0	15,867	0	0	1,868	15,867
7	807	0	0	4,987	0	0	807	4,987
8	0	0	0	640	0	0	0	640
9	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0
By Type	3,710	0	0	36,663	8,988	549	3,710	46,200

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.



DATE PREPARED
2/18/2026

ROUTE STATE
E MO

DISTRICT SHEET NO.
BR 22

COUNTY
VERNON

JOB NO.
JSR0140

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9612

DESCRIPTION	DATE

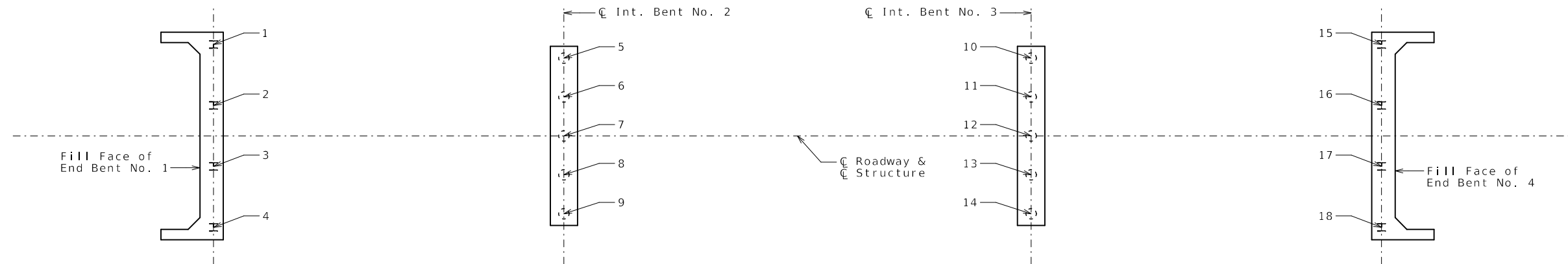
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

Bill of Reinforcing Steel																		
No. Req.	Size/Mark	Location	Codes			Dimensions							Nom. Length	Actual Length	Weight			
			C	SH	V	B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.						
Substructure																		
Int Bents																		
No. 2 & 3																		
28	6 D200	BEAM	20			2	6.00						2	6	2	6	105	
16	7 H200	BEAM	18			23	0.00						24	8	24	8	807	
16	6 H201	BEAM	20			23	0.00						23	23			553	
24	6 H202	BEAM	10S					12.00	2	9.00			4	9	4	5	159	
16	6 H203	BEAM	18			2	10.00						4	2	4	2	100	
20	4 P200	COLUMN	34S			4	2.25	2.00					5	1	5		67	
18	5 U200	BEAM	10S					2	9.00	2	9.00		8	3	8		150	
44	5 U201	BEAM	13S			2	9.00	2	9.00	2	9.00	2	9.00	11	11	11	7	532
8	4 U202	BEAM	10S					6.00	2	9.00			3	9	3	7	19	
16	6 V200	COLUMN	17			7	3.00						7	11	7	11	190	
Superstructure																		
End Bent 1																		
14	6 F100	WING BRACE	E 15S			20.25	4	7.00	20.25	14.25	14.25	14.25	8	7	8	6	179	
4	6 F101	DIAPHRAGM	E 19S			7	8.00	2	9.00				10	5	10	3	62	
19	6 H100	BEAM/DIAPHRAGM	E 20			26	5.00						26	5	26	5	754	
6	6 H101	DIAPHRAGM	E 20			4	9.00						4	9	4	9	43	
6	6 H102	DIAPHRAGM	E 20			2	1.00						2	1	2	1	19	
3	5 H103	STRAND TIE	E 20			6	6.00						6	6	6	6	20	
28	6 H104	WING	E 20			6	0.00						6		6		252	
16	8 H105	WING	E 20			7	6.00						7	6	7	6	320	
8	5 U100	BEAM	E 37S			4	3.00	2	9.00				12	1	11	10	99	
25	4 U101	BEAM	E 13S			2	9.00	2	8.00	2	8.00	2	8.00	11	8	11	4	189
2	4 U102	BEAM	E 10S					2	8.00	2	9.00		8	1	7	10	10	
12	5 U103	DIAPHRAGM	E 37S			2	3.00	2	3.00				7	11	7	8	96	
12	6 U104	DIAPHRAGM	E 19S					15.00	2	9.00			4		3	10	69	
33	6 U105	DIAPHRAGM	E 12			2	3.00	4	3.00				7	2	7		347	
24	5 U106	APPROACH NOTCH	E 19S			2	0.00	15.00					3	3	3	1	77	
8	5 V100	BEAM	E 17			4	3.00						4	9	4	9	40	
18	6 V101	DIAPHRAGM	E 19S					15.00	9.00				2		1	10	50	
24	6 V102	WING	E 20			5	4.00						5	4	5	4	192	
End Bent 4																		
14	6 F400	WING BRACE	E 15S			20.25	4	7.00	20.25	14.25	14.25	14.25	8	7	8	6	179	
4	6 F401	DIAPHRAGM	E 19S			7	8.00	2	9.00				10	5	10	3	62	
19	6 H400	BEAM/DIAPHRAGM	E 20			26	5.00						26	5	26	5	754	
6	6 H401	DIAPHRAGM	E 20			4	9.00						4	9	4	9	43	
6	6 H402	DIAPHRAGM	E 20			2	1.00						2	1	2	1	19	
3	5 H403	STRAND TIE	E 20			6	6.00						6	6	6	6	20	
28	6 H404	WING	E 20			6	0.00						6		6		252	
16	8 H405	WING	E 20			7	6.00						7	6	7	6	320	
8	5 U400	BEAM	E 37S			4	3.00	2	9.00				12	1	11	10	99	
25	4 U401	BEAM	E 13S			2	9.00	2	8.00	2	8.00	2	8.00	11	8	11	4	189
2	4 U402	BEAM	E 10S					2	8.00	2	9.00		8	1	7	10	10	
12	5 U403	DIAPHRAGM	E 37S			2	3.00	2	3.00				7	11	7	8	96	
12	6 U404	DIAPHRAGM	E 19S					15.00	2	9.00			4		3	10	69	
33	6 U405	DIAPHRAGM	E 12			2	3.00	4	3.00				7	2	7		347	
24	5 U406	APPROACH NOTCH	E 19S			2	0.00	15.00					3	3	3	1	77	
8	5 V400	BEAM	E 17			4	3.00						4	9	4	9	40	
18	6 V401	DIAPHRAGM	E 19S					15.00	9.00				2		1	10	50	
24	6 V402	WING	E 20			5	4.00						5	4	5	4	192	
Int Diaphragms																		
16	6 H50	DIAPHRAGM	E 20			4	9.00						4		4		96	
8	4 H51	DIAPHRAGM	E 20			4	9.00						4		4		21	
8	5 H52	DIAPHRAGM	E 20			5	3.00						5	3	5	3	44	
24	5 H53	DIAPHRAGM	E 19S			5	2.50	10.00					6	1	5	11	148	
4	5 H54	DIAPHRAGM	E 20			6	6.00						6	6	6	6	27	

Bill of Reinforcing Steel																					
No. Req.	Size/Mark	Location	Codes			Dimensions							Nom. Length	Actual Length	Weight						
			C	SH	V	B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.									
16	6 U50	DIAPHRAGM	E 28S					22.00	2	1.50	2	3.00					6	3	5	11	142
32	4 U51	DIAPHRAGM	E 28S					15.00	2	1.25	2	3.00					5	7	5	5	116
16	5 V50	DIAPHRAGM	E 20			2	4.00										2	4	2	4	39
Slab																					
295	6 S1	SLAB	E 20			26	5.00										26	5	26	5	11,705
40	7 S2	SLAB	E 20			34	3.00										34	3	34	3	2,800
40	7 S3	SLAB	E 20			26	9.00										26	9	26	9	2,187
123	5 S4	SLAB	E 20			52	6.00										52	6	52	6	6,735
253	5 S5	SLAB	E 20			26	5.00										26	5	26	5	6,971
Barrier																					
Type D																					
20	5 K1	BARRIER	E 27S			3	5.00	9.25	5.25	2	11.75		5.25	1.00			7	7	7	5	155
52	5 K2	BARRIER	E 27S			3	5.00	9.25	14.50	2	2.75		14.25	2.75			7	8	7	5	402
20	5 K4	BARRIER	E 19S	4		2	4.25	10.00									3	2	3	1	64
		Incr. = 0.500"				2	6.25	10.00									3	4	3	3	66
20	5 K5	BARRIER	E 38S	4				18.50	9.50	8.25	18.00	4.00	3		2	11	61				
		Incr. = 0.500"						20.50	9.50	8.25	20.00	4.50	3	2	3	1	63				
12	5 K6	BARRIER	E 19S			2	6.75	10.00									3	5	3	3	41
12	5 K7	BARRIER	E 21S					2	6.75	10.00			2	6.00	6.25		3	5	3	4	42
36	5 K8	BARRIER	E 19S	4		2	8.50	10.00									3	7	3	5	128
		Incr. = 0.750"				3	2.50	10.00									4	1	3	11	138
36	5 K9	BARRIER	E 21S	4				2	8.50	10.00			2	7.75	6.75		3	7	3	6	131
		Incr. = 0.750"						3	2.50	10.00			3	1.75	7.75		4	1	4		141
4	5 K10	BARRIER	E 19S			3	3.00	10.00									4	1	3	11	16
4	5 K11	BARRIER	E 21S					3	3.00	10.00			3	2.25	7.75		4	1	4		17
48	5 K12	BARRIER	E 20			7	9.00										7	9	7	9	388
16	5 K13	BARRIER	E 20	8		7	0.00										7		7		92
		Incr. = 36.000"				4	0.00										4		4		92
8	5 K14	BARRIER	E 19S					12.00	12.00								2		1	11	16
310	5 R1	BARRIER	E 26			3	3.00	5.50	2.25	3	1.25	5.50	3	0.75	6.75		7	0	6	9	2,182
310	5 R2	BARRIER	E 19S					20.50	9.50								2	6	2	4	754
310	5 R3	BARRIER	E 27S					9.50	15.25	5.00	12.00	15.00	3	0.00							



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

As-Built Pile Data (HP 12x53)			
Pile No.	Length in Place (ft)	Computed Nominal Axial Compressive Resistance (kips)	Remarks
			End Bent No .1
1			
2			
3			
4			
			End Bent No .4
15			
16			
17			
18			

As-Built Pile Data (CECIP 20")			
Pile No.	Length in Place (ft)	Computed Nominal Axial Compressive Resistance (kips)	Remarks
			Intermediate Bent No .2
5			
6			
7			
8			
9			
			Intermediate Bent No .3
10			
11			
12			
13			
14			

AS-BUILT PILE DATA

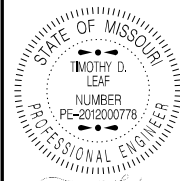
Note:
 Indicate in remarks column:
 A. Pile type and grade
 B. Batter
 C. Driven to practical refusal

This sheet to be completed by MoDOT construction personnel.

DATE PREPARED 2/18/2026	
ROUTE E	STATE MO
DISTRICT BR	SHEET NO. 24
COUNTY VERNON	
JOB NO. JSR0140	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9612	
DESCRIPTION	
DATE	

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)



DATE PREPARED
2/18/2026

ROUTE STATE
E MO

DISTRICT SHEET NO.
BR 25

COUNTY
VERNON

JOB NO.
JSR0140

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9612

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

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

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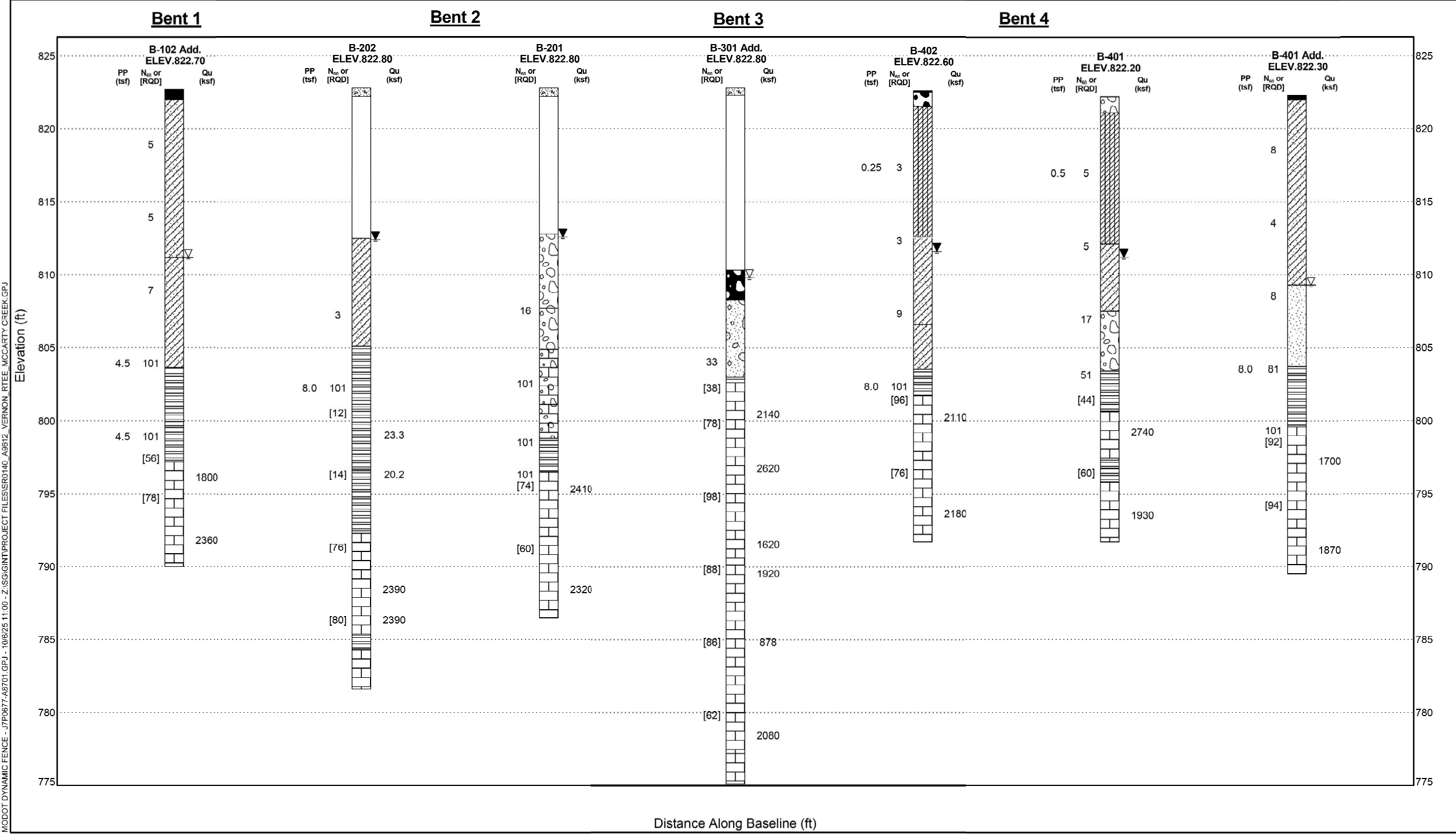
SUBSURFACE DIAGRAM



MoDOT-Geotechnical Section
1617 Missouri Blvd
Jefferson City, MO 65109

PROJECT NAME Bridge Replacement
PROJECT LOCATION Over McCarthy Creek
CLIENT _____
PROJECT NUMBER SR0140

- Asphalt
- Limestone
- USCS Poorly-graded Gravel
- USCS Poorly-graded Gravelly Sand
- USCS Clayey Sand
- Concrete
- Highly Weathered Limestone
- USCS Low Plasticity Silty Clay
- Shale
- No Core
- Boulders and cobbles
- USCS Poorly-graded Sand



BORING DATA

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

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

Sheet No. 25 of 25

Detailed Oct. 2025
Checked Dec. 2025

MoDOT DYNAMIC FENCE - JTP0677-A8701.GPJ - 10/8/25 11:00 - Z:\SG\GINT\PROJECT FILES\SR0140_A9612_VERNON RTEE_MCCARTHY CREEK.GPJ