

DESIGN DESIGNATION

A.A.D.T. - 2026 = 1,560
A.A.D.T. - 2046 = 1,784
D.H.V. = 12.1%
T = 4.19%
V = 55 M.P.H.

FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR

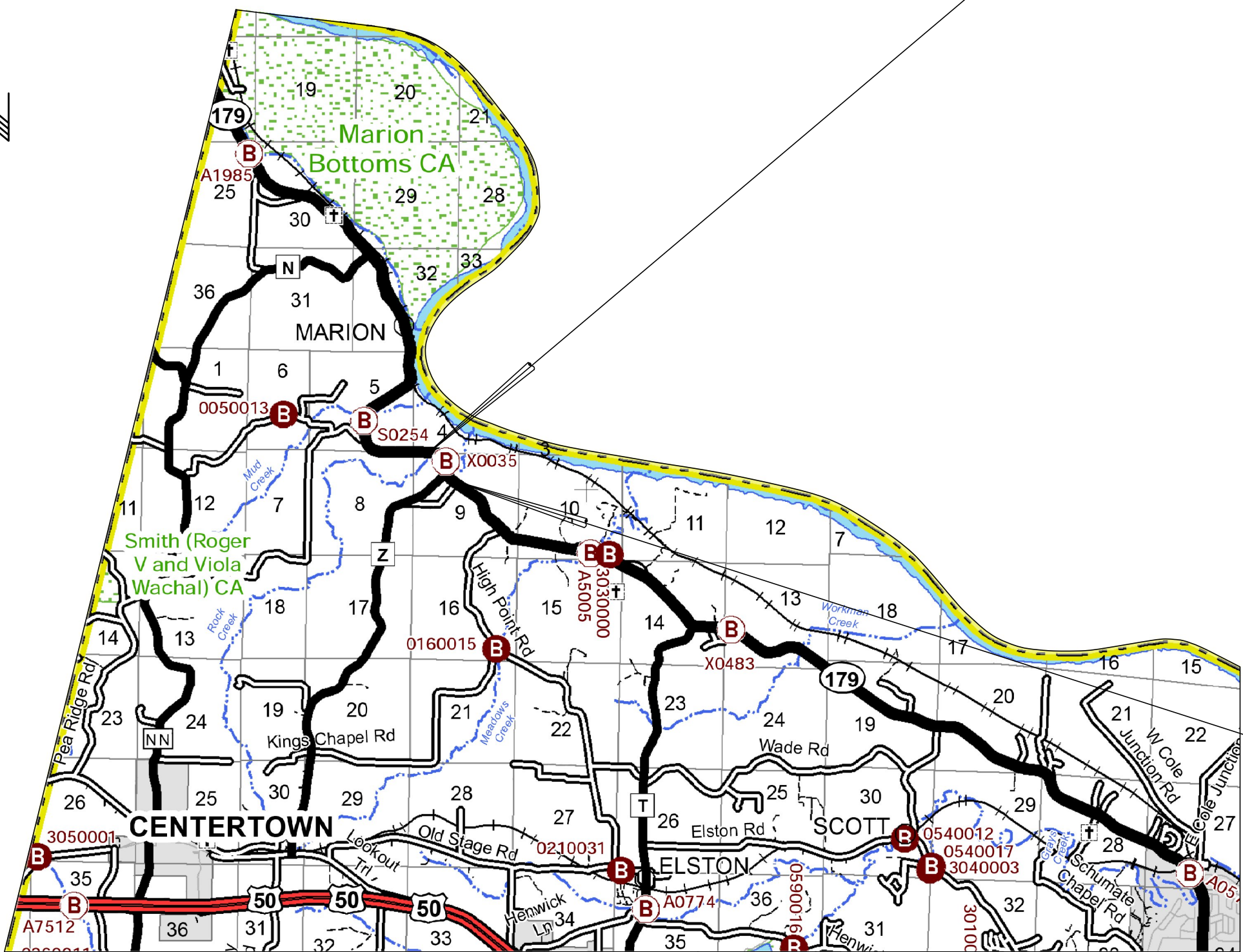
NEW R/W REQUIRED:
TEMPORARY EASEMENTS
S9 T45N R13W

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	-V-	-V-
WOVEN WIRE	-X-	-X-
GATE POST		
BENCHMARK		

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY
COLE COUNTY
S9 T45N R13W



NOT TO SCALE

BEGIN PROJECT
STA 104+81.78

END PROJECT
STA 110+72.51

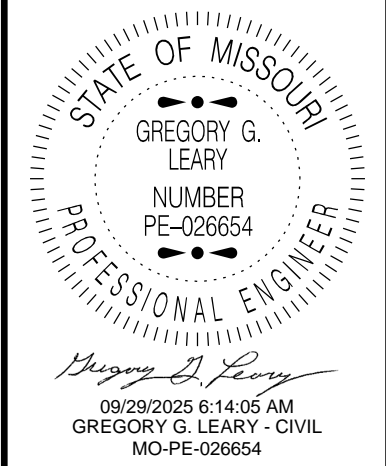
ROUTE 179 BRIDGE REDECK
BRIDGE NO. X0035 OVER ROCK CREEK
PAVEMENT WIDENING & GUARDRAIL

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET -----	1
TYPICAL SECTIONS (TS) (1 SHEET)-----	2
QUANTITIES (QU) (2 SHEETS)-----	3
PLAN-PROFILE (PP)-----	4
RIGHT OF WAY (RW)-----	5
REFERENCE & COORDINATE POINTS (RP/CP)-	6
TRAFFIC CONTROL SHEETS (TC)-----	7-11
EROSION CONTROL SHEETS (EC)-----	12
SIGNING SHEETS (SN)-----	13-14
CROSS SECTIONS (XS)-----	1-7
BRIDGE DRAWINGS (B)	
X00351 -----	1-13

LENGTH OF PROJECT

BEGINNING OF PROJECT	STA. 104+81.78
END OF PROJECT	STA. 110+72.51
APPARENT LENGTH	590.73 FEET
EQUATIONS AND EXCEPTIONS:	NONE
TOTAL CORRECTIONS	0 FEET
NET LENGTH OF PROJECT	590.73 FEET
STATE LENGTH	0.112 MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	0.5 ACRE



DATE PREPARED 9/23/2025	
ROUTE 179	STATE MO
DISTRICT CD	SHEET NO. 1
COUNTY COLE	
JOB NO. JCD0074	
CONTRACT ID.	

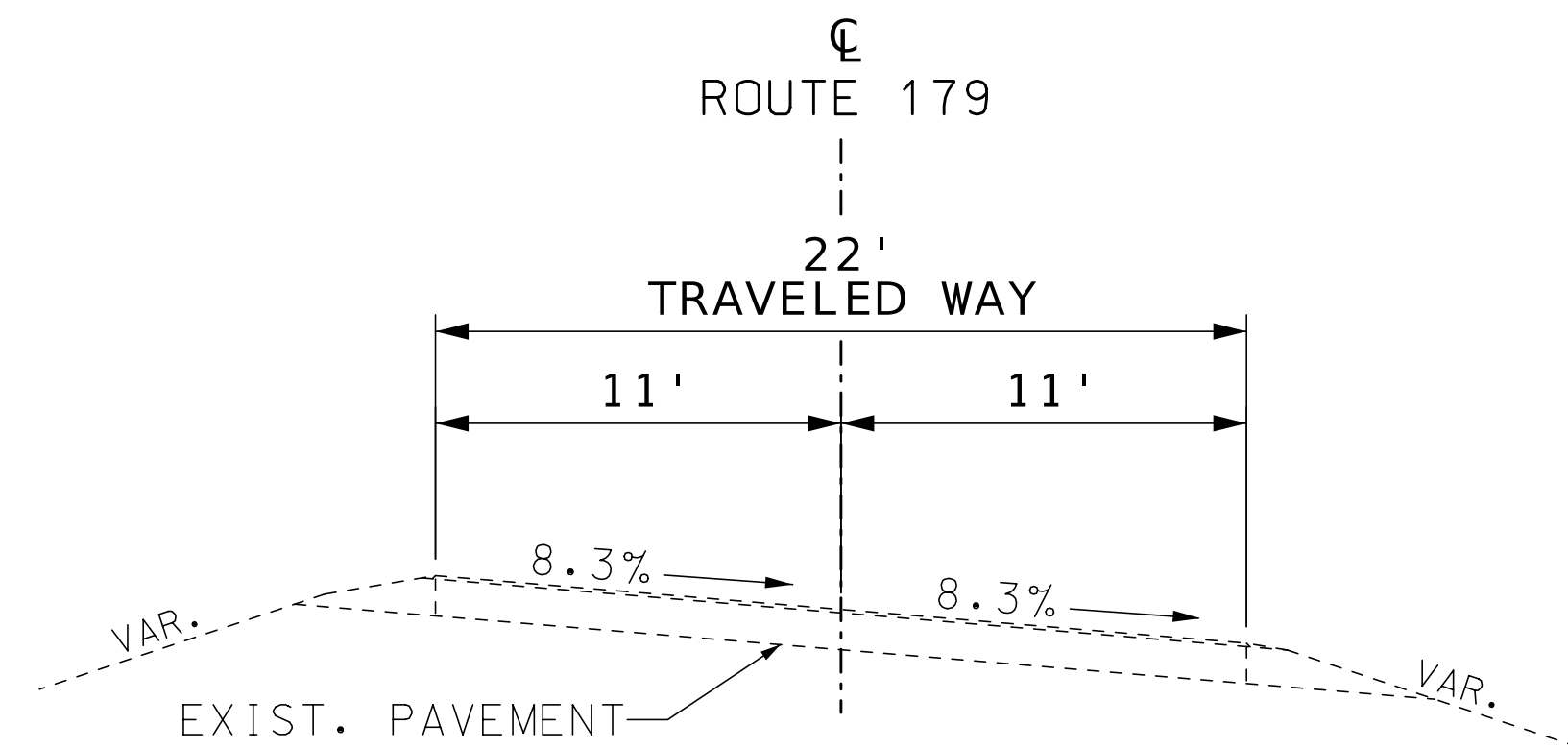
PROJECT NO.

BRIDGE NO.

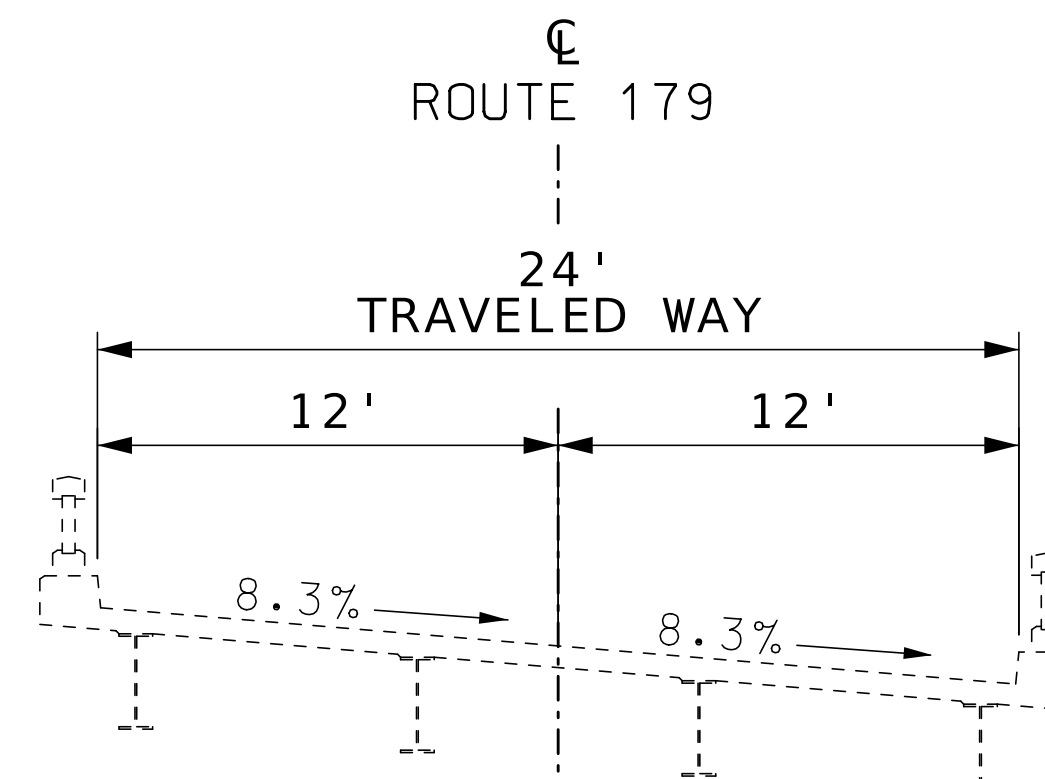
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

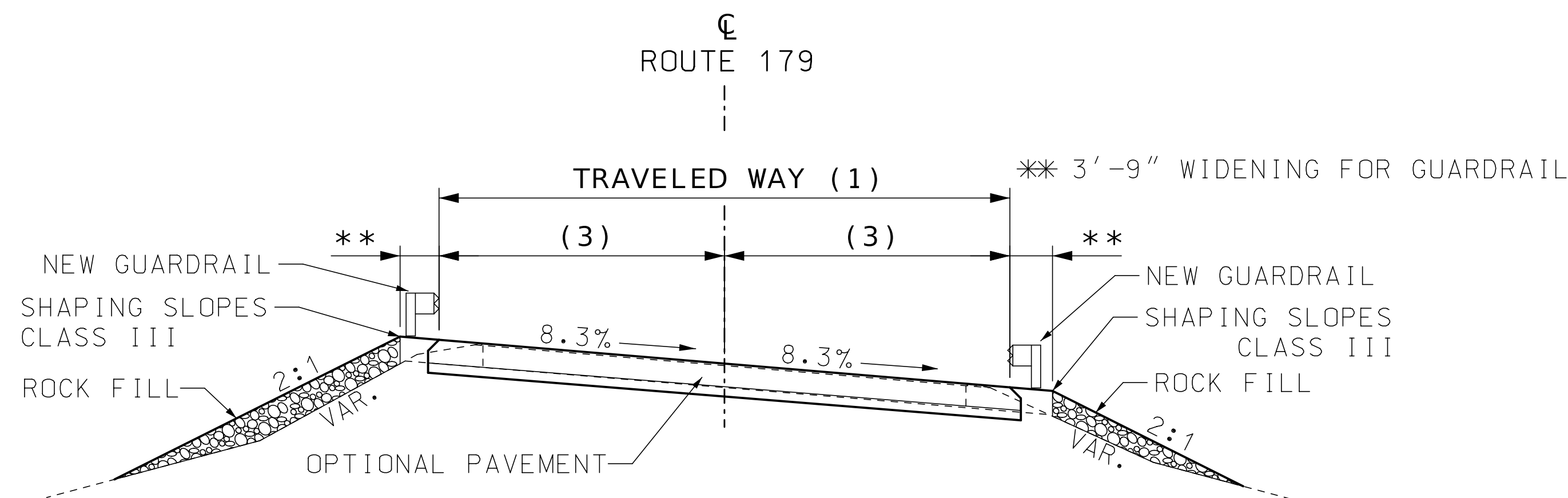
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



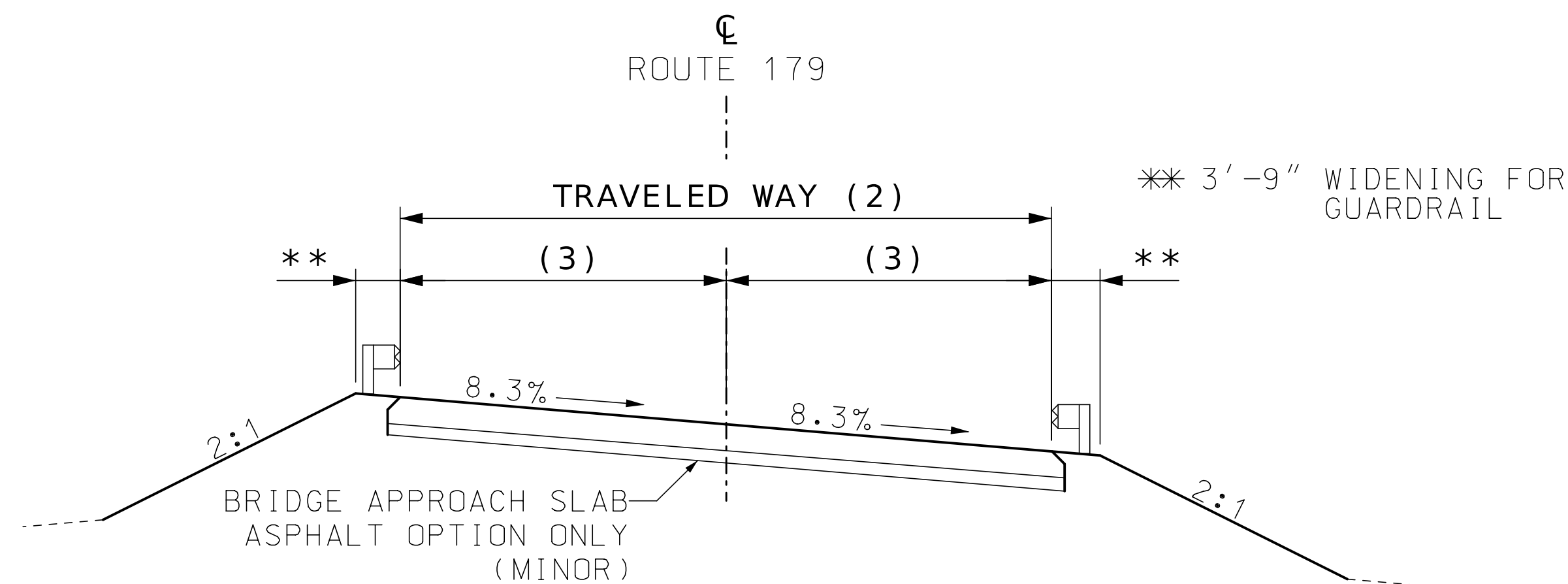
EXISTING TYPICAL SECTION
ROUTE 179
STA. 104+81.78 TO STA. 110+72.51



EXISTING BRIDGE TYPICAL SECTION
ROUTE 179 - BR X0035
STA. 107+29.50 TO STA. 108+31.52



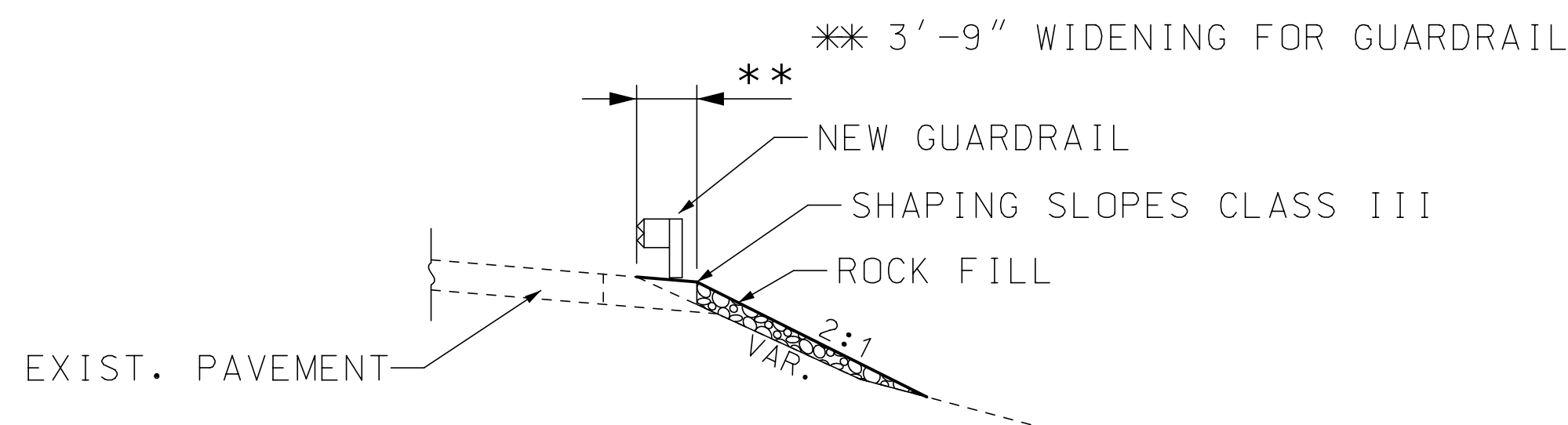
PROPOSED TYPICAL SECTION
ROUTE 179
STA. 106+84.50 TO STA. 107+09.50 (1) 20.8' * - 25.0'
STA. 108+51.52 TO STA. 108+76.52 (1) 25.0' - 21.0' *
* MATCH EXISTING



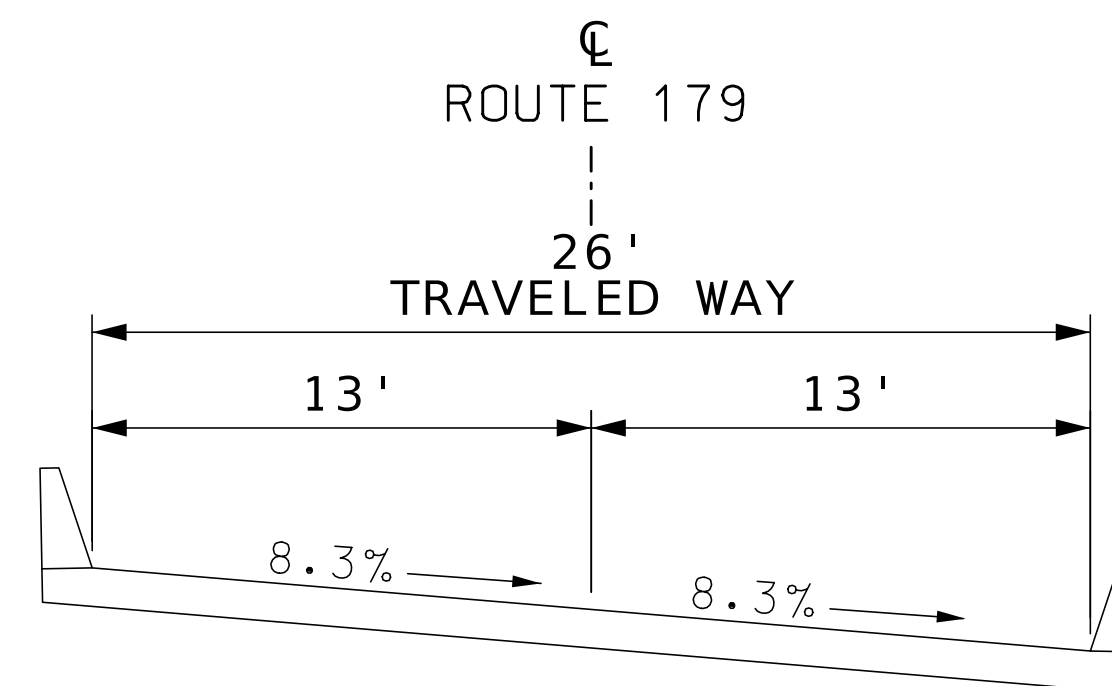
PROPOSED TYPICAL SECTION
BRIDGE APPROACH SLAB
MINOR ROUTE 20' EACH END
ROUTE 179
STA. 107+09.50 TO STA. 107+29.50 (2) 25.0' - 26.0'
STA. 108+31.52 TO STA. 108+51.52 (2) 26.0' - 25.0'

OPTIONAL PAVEMENT:	
10" HMA	
2" BIT. PAVEMENT MIX (BP-1) PG 64-22	
8" BIT. PAVEMENT MIX (BASE) PG 64-22	
4" TYPE 1 BASE	
8" PCCP	
15' JOINTS, 1 1/4" DOWELS	
4" TYPE 1 BASE	

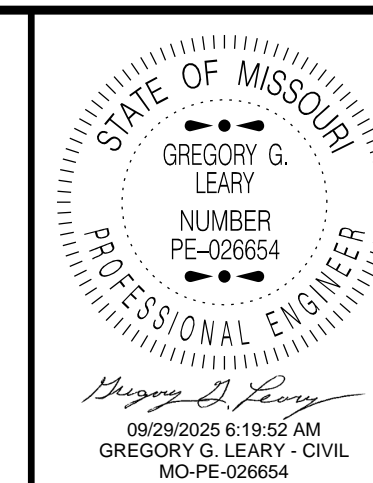
LANE WIDTH (3)		
	LT	RT
STA. 106+84.50 TO STA. 107+09.50	* -12.5'	* -12.5'
STA. 108+51.52 TO STA. 108+76.52	12.5' - *	12.5' - *
STA. 107+09.50 TO STA. 107+29.50	12.5' - 13.0'	
STA. 108+31.52 TO STA. 108+51.52	13.0' - 12.5'	
	* MATCH EXISTING	



PROPOSED TYPICAL GUARDRAIL WIDENING
RTE. 179
STA. 105+06.78 TO STA. 106+84.50 RT
STA. 106+61.78 TO STA. 106+84.50 LT
STA. 108+76.52 TO STA. 109+65.78 RT
STA. 108+76.52 TO STA. 110+47.51 LT



PROPOSED BRIDGE TYPICAL SECTION
ROUTE 179 - BR X00351
STA. 107+29.50 TO STA. 108+31.52



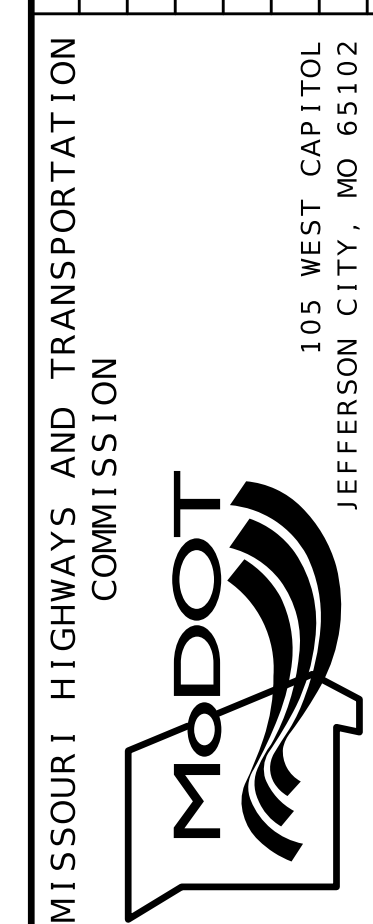
DATE PREPARED 9/23/2025	
ROUTE 179	STATE MO
DISTRICT CD	SHEET NO. 2

COUNTY COLE
JOB NO. JCD0074
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE



SIGN	SIZE	AREA	QTY	TOTAL AREA	RELOC	TOTAL RELOC	SIGN	DESCRIPTION	SIGN	SIZE	AREA	QTY	TOTAL	RELOC	TOTAL RELOC	SIGN	DESCRIPTION	ITEM	TOTAL	EFFECTIVE: 07-01-2025
IN.	SQ. FT.	EACH	SQ. FT.	EACH	SQ. FT.	NO.	IN.		SQ. FT.	EACH	SQ. FT.	EACH	SQ. FT.	NO.	NUMBER	QTY		DESCRIPTION		
WARNING SIGNS									GUIDE SIGNS									6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)	E05-1	36X48	12.00						GORE EXIT	6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)	E05-2	48X36	12.00						EXIT OPEN	6122010		IMPACT ATTENUATOR 50 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			52	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						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	48TR1.	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	8	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			CHANGEABLE MESSAGE SIGN,
WO4-1aR	48X48	16.00						MERGE (RIGHT)	R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT	6161096		COMMISSION FURNISHED/RETAINED
WO5-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS	R4-1	36X48	12.00						DO NOT PASS			CHANGEABLE MESSAGE SIGN WITHOUT COMM.
WO5-3	48X48	16.00						ONE LANE BRIDGE	R4-2	36X48	12.00						PASS WITH CARE	6161098A	2	INTERFACE, CONTRACTOR FURNISHED/RETAINED
WO5-5	48X48	16.00						NARROW LANES	R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)			CHANGEABLE MESSAGE SIGN WITH COMM.
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)	R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)	6161099		INTERFACE, CONTRACTOR FURNISHED/RETAINED
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)	R5-1	30X30	6.25						DO NOT ENTER	6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)	R5-1a	36X24	6.00						WRONG WAY	6162002		TEMPORARY LONG-TERM RUMBLE STRIPS
WO7-3a	30X24	5.00						NEXT XX MILES (PLAQUE)	R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)			TEMPORARY TRAFFIC BARRIER,
WO8-1	48X48	16.00						BUMP	R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)	6173600D		CONTRACTOR FURNISHED/RETAINED
WO8-2	48X48	16.00						DIP	R6-2L	24X30	5.00						ONE WAY (LEFT)			TEMP. TRAFFIC BARRIER ANCHORED,
WO8-3	48X48	16.00						PAVEMENT ENDS	R6-2R	24X30	5.00						ONE WAY (RIGHT)	6173700B		CONTRACTOR FURNISHED/RETAINED
WO8-4	48X48	16.00						SOFT SHOULDER	R9-9	24X12	2.00						SIDEWALK CLOSED			TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)									SIDEWALK CLOSED AHEAD,	6173706		CONTRACTOR FURNISHED/RETAINED
WO8-6	48X48	16.00						TRUCK CROSSING									(ARROW LEFT) CROSS HERE			TEMP. TRAFFIC BARRIER HEIGHT TRANSITION,
WO8-6c	48X48	16.00						TRUCK ENTRANCE	R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD,	6174000A		CONTRACTOR FURNISHED/RETAINED
WO8-7	36X36	9.00						LOOSE GRAVEL	R9-11R	24X18	3.00						(ARROW RIGHT) CROSS HERE	6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL	R10-6	24X36	6.00						STOP HERE ON RED (45° ARROW)	6175011B		RELOCATING TEMP. TRAFFIC BARRIER ANCHORED
WO8-9	48X48	16.00						LOW SHOULDER	R11-2	48X30	10.00	2	20.00			29	ROAD CLOSED	6175013		RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS
WO8-11	48X48	16.00						UNEVEN LANES									ROAD CLOSED 3 MILES AHEAD	6175020A		RELOCATING TEMP. TRAFFIC BARRIER HEIGHT
WO8-12	48X48	16.00						NO CENTER LINE	R11-3a	60X30	12.50	2	25.00			55A	LOCAL TRAFFIC ONLY	6208064A		TEMPORARY RAISED PAVEMENT MARKER
WO8-15	48X48	16.00						GROOVED PAVEMENT	R11-4	60X30	12.50						ROAD CLOSED TO THRU TRAFFIC	9029400		TEMPORARY TRAFFIC SIGNALS
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)	CONST-3A	60X48	20.00						FINE SIGN	9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING
WO8-17L	48X48	16.00						SHOULDER DROP-OFF (SYMBOL LEFT)	CONST-3X	56X12	4.67						SPEEDING/PASSING (PLATE)			
WO8-17R	48X48	16.00						SHOULDER DROP-OFF (SYMBOL RIGHT)	MISCELLANEOUS SIGNS											
WO8-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)	CONST-5	48X36	12.00	2	24.00			60	POINT OF PRESENCE			
WO10-1	42RND.	9.62						RAILROAD CROSSING	CONST-5	96X48	32.00						POINT OF PRESENCE			
WO12-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)	CONST-8	48X36	12.00						WORK ZONE NO PHONE ZONE			
WO12-2	48X48	16.00						LOW CLEARANCE (SYMBOL)		36X78	19.50	11	214.50				50A			
WO12-2x	24X18	3.00						LOW CLEARANCE (PLAQUE)		36X78	19.50	5	97.50				50B			
WO12-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)		36X78	19.50	5	97.50				50C			
WO12-4	120X60	50.00						LOW CLEARANCE XX FT XX IN XX MILES AHEAD		36X78	19.50	1	19.50				50D			
WO12-5	120X60	50.00						WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD		36X78	19.50	1	19.50				50E			
WO13-1	30X30	6.25						ADVISORY SPEED (PLAQUE)		36X78	19.50	11	214.50				50F			
WO16-2	30X24	5.00						XXX FEET (PLAQUE)		36X78	19.50	1	19.50				50G			
WO16-3	30X24	5.00						X MILE (PLAQUE)		36X78	19.50	1	19.50				50H			
WO20-1	48X48	16.00						ROAD/BRIDGE/RAMP WORK AHEAD		36X78	19.50	4	78.00				50J			
WO20-2	48X48	16.00	3	48.00			18	DETOUR AHEAD		36X78	19.50	4	78.00				50K			
WO20-3	48X48	16.00	6	96.00			20/20A	ROAD CLOSED AHEAD		36X78	19.50	1	19.50				50L			
WO20-4	48X48	16.00	2	32.00				ONE LANE ROAD AHEAD		36X78	19.50	1	19.50				50M			
WO20-5	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED AHEAD	616-10.05				TOTAL							
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD	CONSTRUCTION SIGNS			1157								
WO20-6a	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED	616-10.10					TOTAL						
WO20-7a	48X48	16.00						FLAGGER (SYMBOL)	RELOCATED SIGNS											
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	4	8.76				WET PAINT (ARROW PIVOTS)												

STATE OF MISSOURI

GREGORY G. LEARY

NUMBER

PE-026654

PROFESSIONAL ENGINEER

09/29/2025 6:21:08 AM

GREGORY G. LEARY - CIVIL

MO-PE-026654

DATE PREPARED

9/23/2025

ROUTE

179

STATE

MO

DISTRICT

CD

SHEET NO.

3

COUNTY

COLE

JOB NO.

JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL

JEFFERSON CITY, MO 65102



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

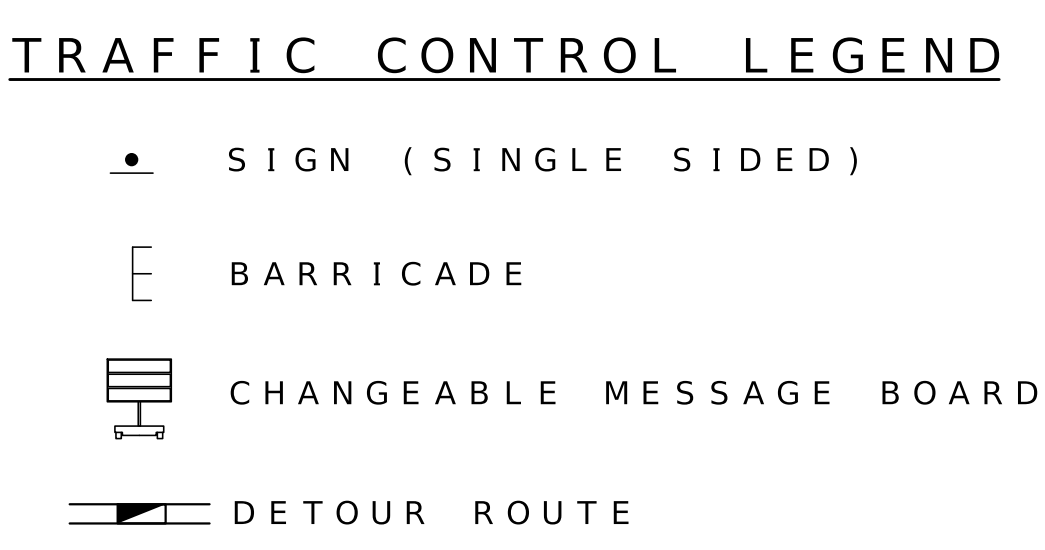
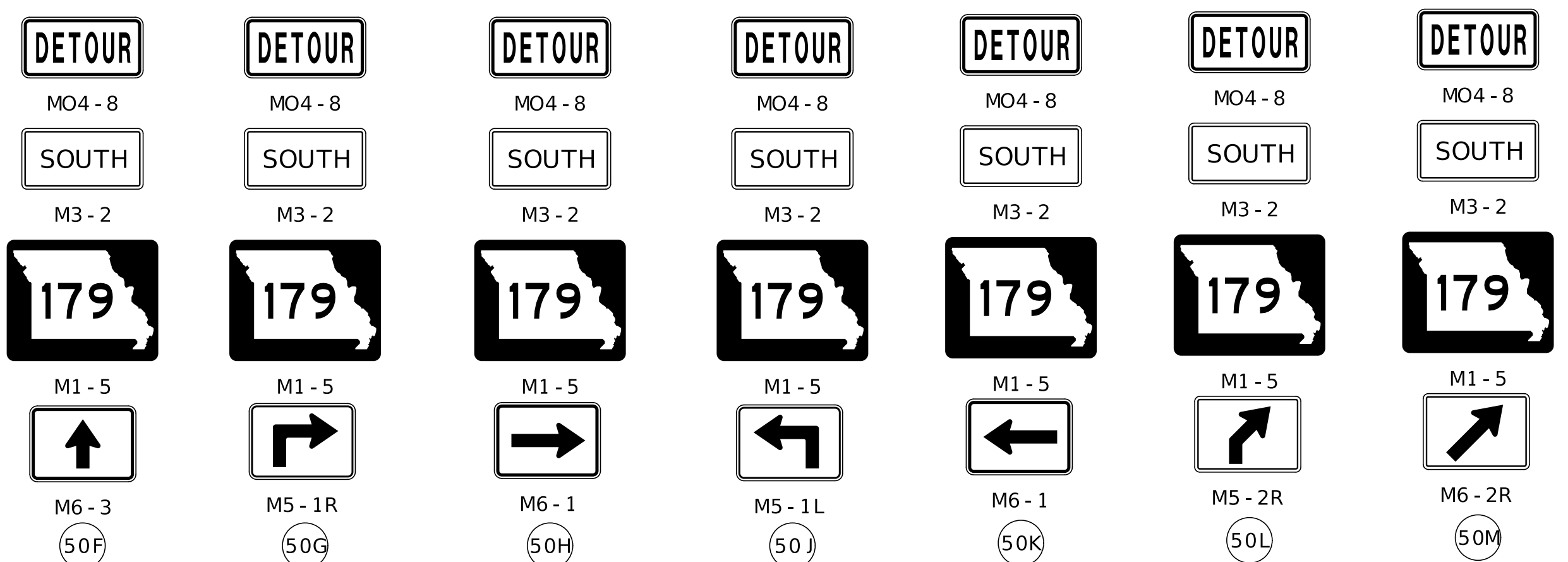
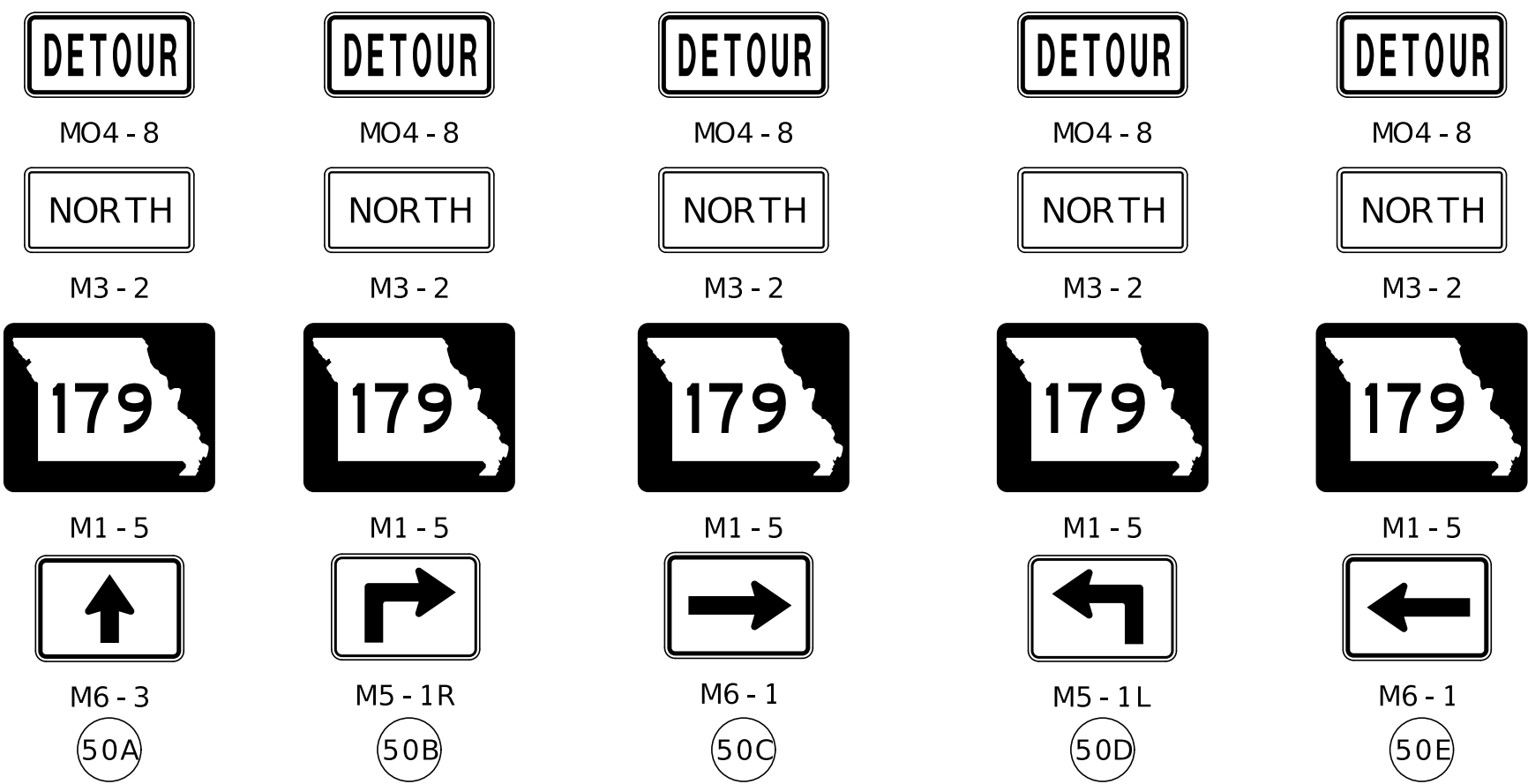
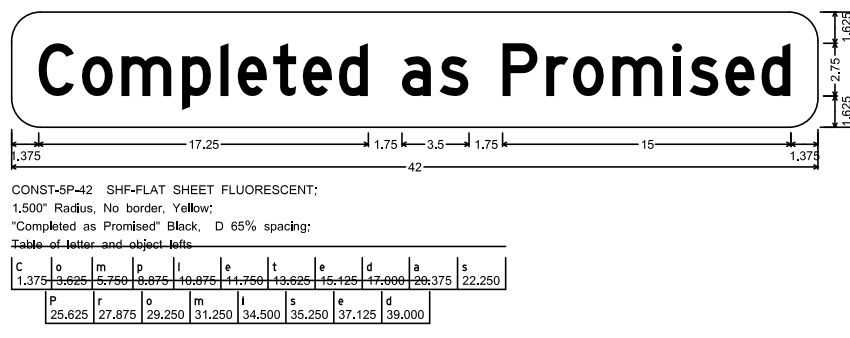
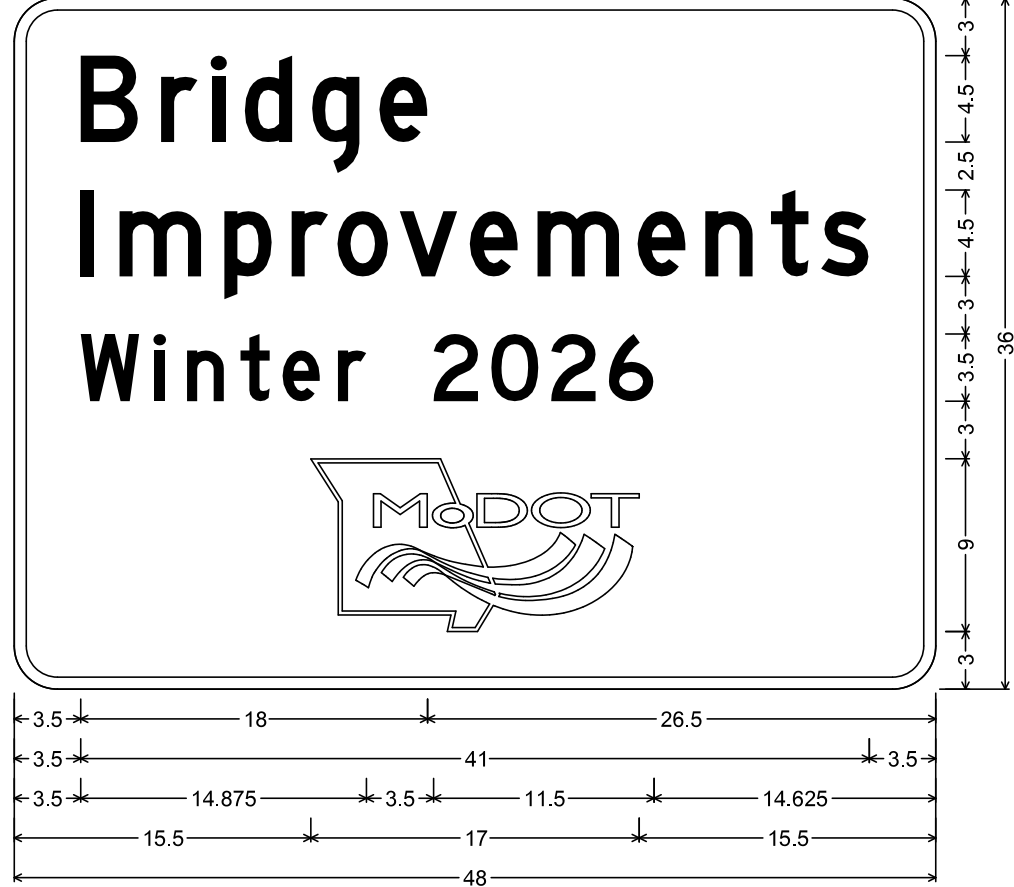
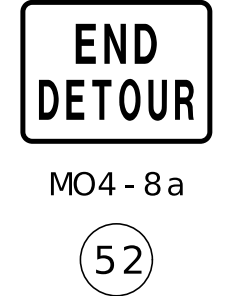
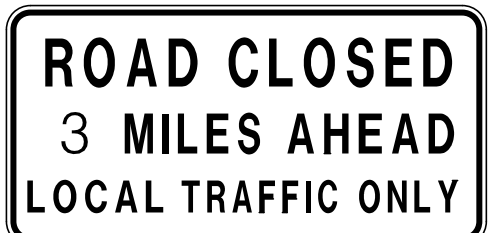
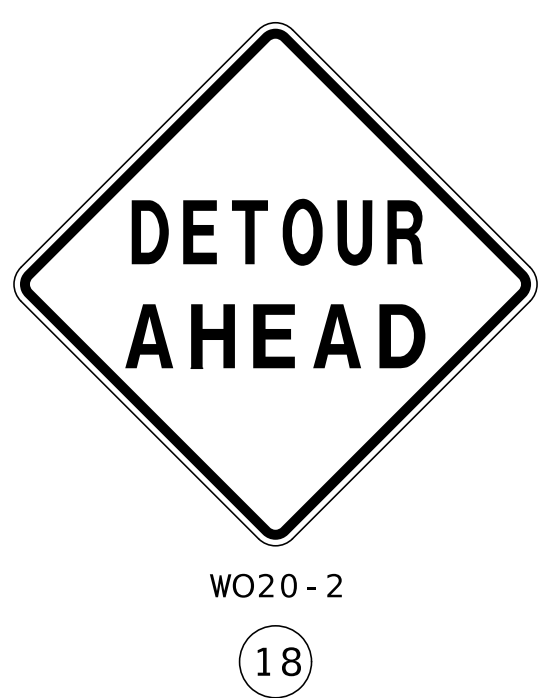
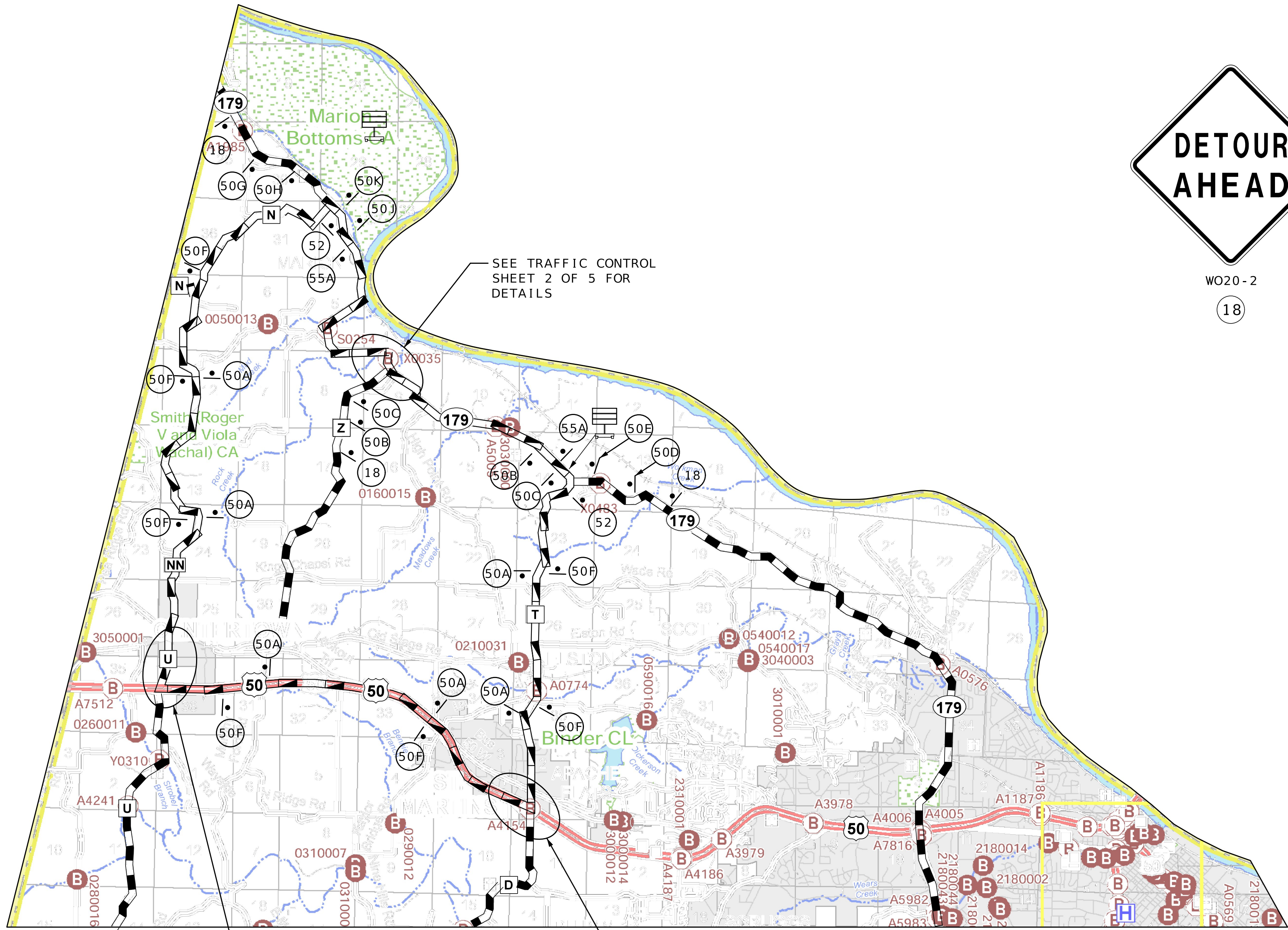
SUMMARY OF QUANTITIES

SHEET 2 OF 2

[illegible]

A scale bar labeled "SCALE" with markings at 0, 50, 100, and 150. The bar is divided into three equal segments of 50 units each, with alternating black and white segments.

	
DATE PREPARED 9/23/2025	
ROUTE 179	STATE MO
DISTRICT CD	SHEET NO. 4
COUNTY COLE	
JOB NO. JCD0074	
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)	



GENERAL NOTES:

- NUMBERED ROUTE DETOUR SIGN ASSEMBLY 36" X 78"
- CMS BOARDS PLACED AS APPROVED BY THE ENGINEER.
- CONST-5-48 SIGN (60) IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS.
- ALL DISTANCES AND SPACING OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE AND MAY BE REVISED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.

STATE OF MISSOURI
GREGORY G. LEARY
NUMBER
PE-026654
PROFESSIONAL ENGINEER
09/28/2025 8:20:46 AM
GREGORY G. LEARY - CIVIL
MO-PE-026654

DATE PREPARED
9/23/2025

ROUTE
179

DISTRICT
CD

COUNTY
COLE

JOB NO.
JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOT TO SCALE

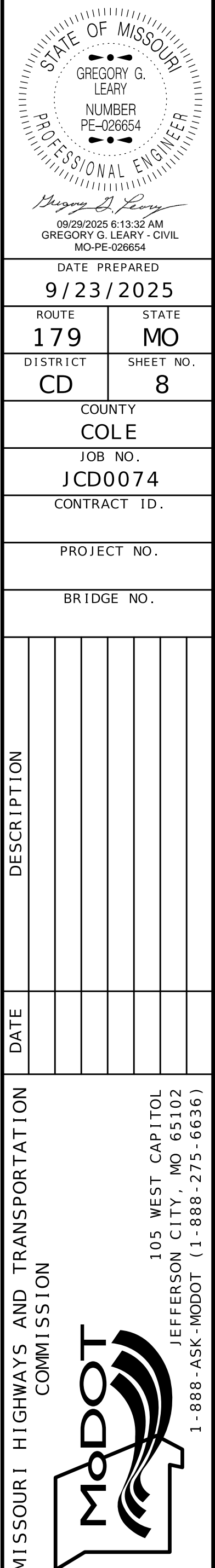
TRAFFIC CONTROL
SHEET 1 OF 5

BRIDGE X0035 CLOSURE



NOT TO SCALE

TRAFFIC CONTROL
SHEET 2 OF 5

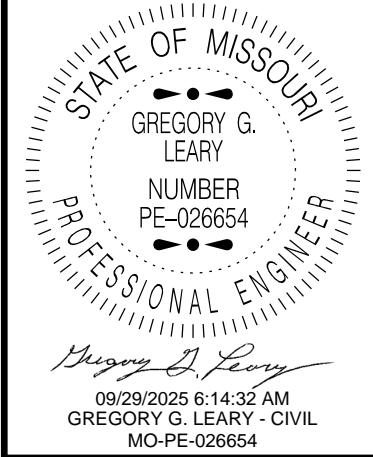


ROUTE 179 DETOUR THROUGH CENTERTOWN



NOT TO SCALE

TRAFFIC CONTROL
SHEET 3 OF 5



DATE PREPARED
9/23/2025

ROUTE	STATE
179	MO

DISTRICT	SHEET NO.
CD	9

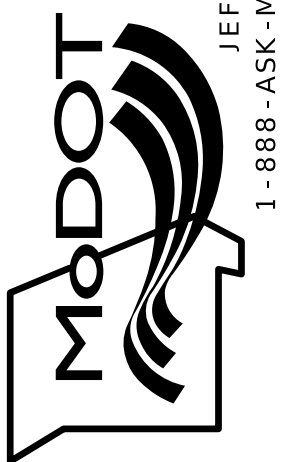
COUNTY
COLE

JOB NO.
JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO.							

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COMMISSION

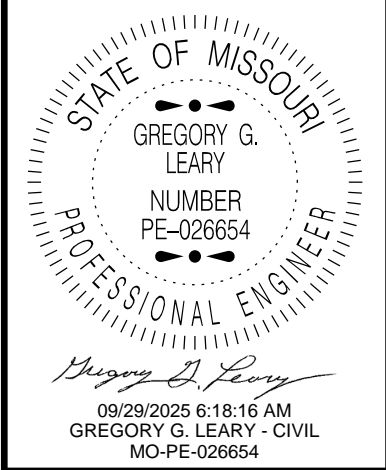
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

ROUTE 179 DETOUR AT ROUTE T



NOT TO SCALE

TRAFFIC CONTROL
SHEET 4 OF 5



DATE PREPARED

ROUTE	STATE
179	MO

DISTRICT	SHEET NO.
CD	10

COUNTY
COLE

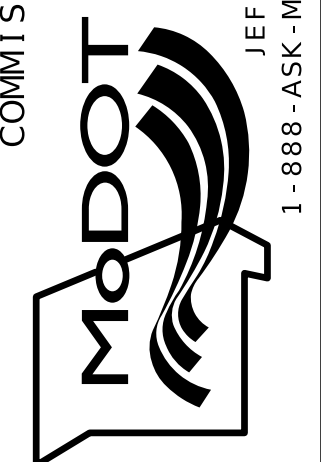
JOB NO.
JCD0074

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)

NOT TO SCALE

NOTES:

UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PROVIDE ADDITIONAL PROTECTIVE TRUCKS EQUIPPED WITH PROPER WARNING DEVICES.

PROTECTIVE TRUCKS AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

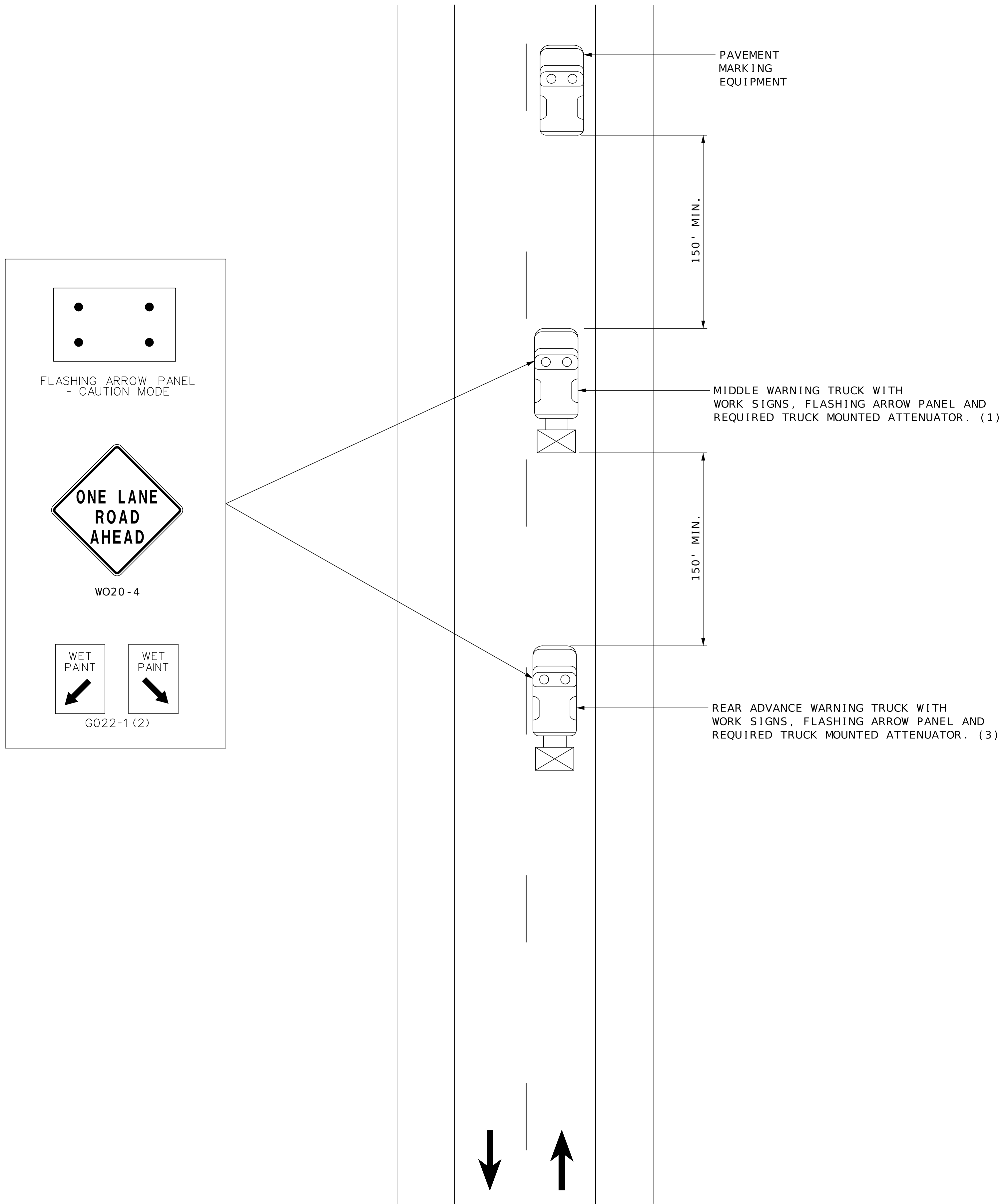
VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED IN A MANNER SUCH THAT THEY ARE NOT OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS ON VEHICLE-MOUNTED SIGNS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.

FLASHING ARROW PANELS SHALL BE INCIDENTAL TO TRUCK MOUNTED ATTENUATORS, WHEREVER USED. NO ADDITIONAL PAYMENT WILL BE MADE.

(1) TRUCK IS OPTIONAL ON TWO-LANE UNDIVIDED HIGHWAYS IF SIGNING AND ARROW BOARD ARE MOUNTED ON THE PAVEMENT MARKING EQUIPMENT.

(2) WET PAINT SIGNS ARE INSTALLED TO INDICATE THE SIDE IN WHICH THE PAVEMENT MARKING MATERIAL IS BEING APPLIED. AT THE CONTRACTOR'S OPTION, A FRONT FACING WET PAINT SIGN MAY BE INSTALLED ON THE LEFT SIDE OF THE PAVEMENT MARKING EQUIPMENT.

(3) REAR WARNING TRUCK IS POSITIONED AT THE NO TRACK POINT OF THE PAVEMENT MARKING MATERIAL, OR VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE, OR SPACING SHOWN, WHICHEVER IS GREATER.



STRIPING ON TWO-LANE HIGHWAY

STATE OF MISSOURI

GREGORY G. LEARY

NUMBER
PE-026654

PROFESSIONAL ENGINEER

Gregory G. Leary

09/29/2025 6:21:24 AM

GREGORY G. LEARY - CIVIL

MO-PE-026654

DATE PREPARED

9/23/2025

ROUTE

179

STATE

MO

DISTRICT

CD

SHEET NO.

11

COUNTY

COLE

JOB NO.

JCD0074

CONTRACT ID.

PROJECT NO.

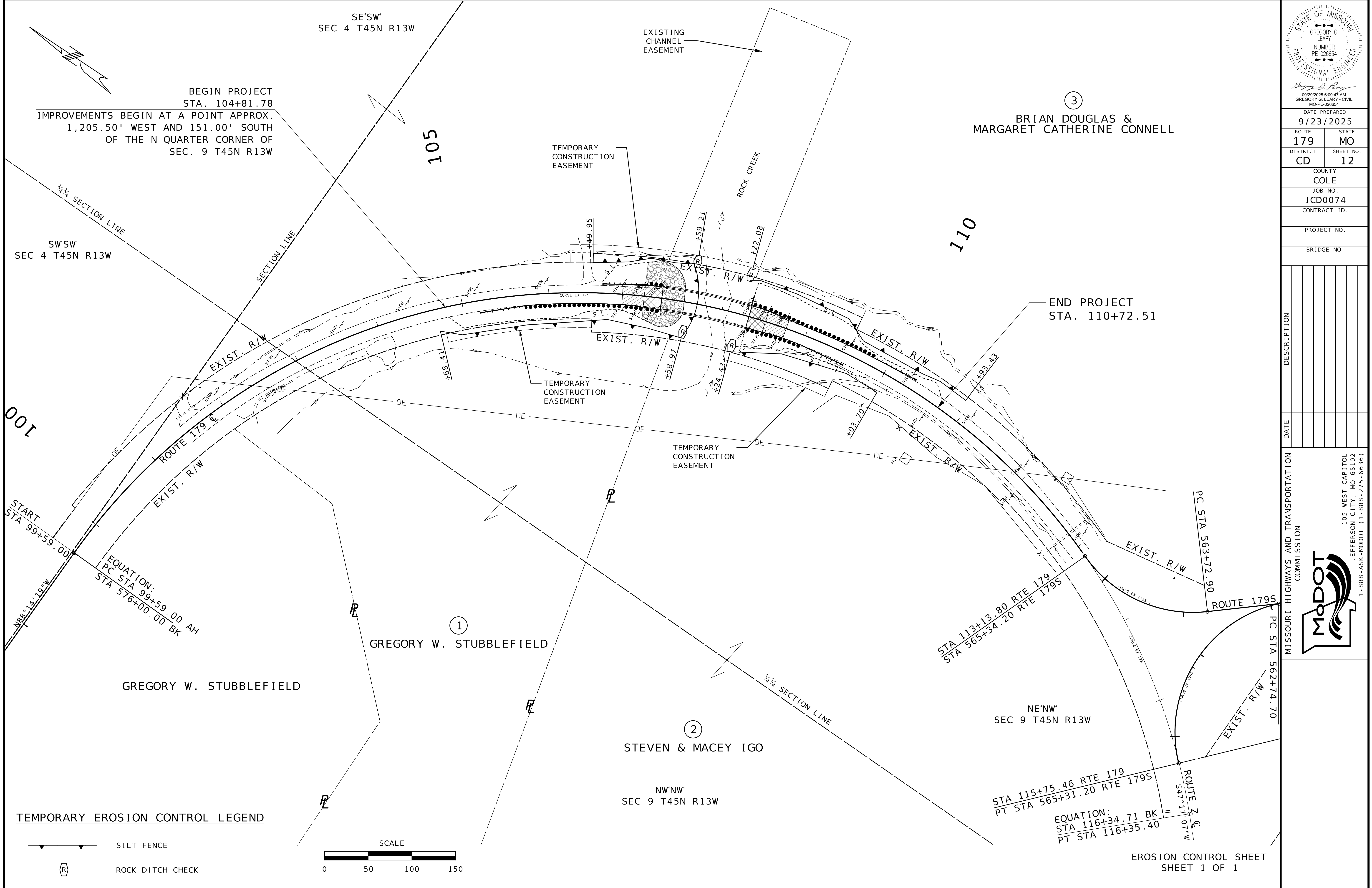
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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



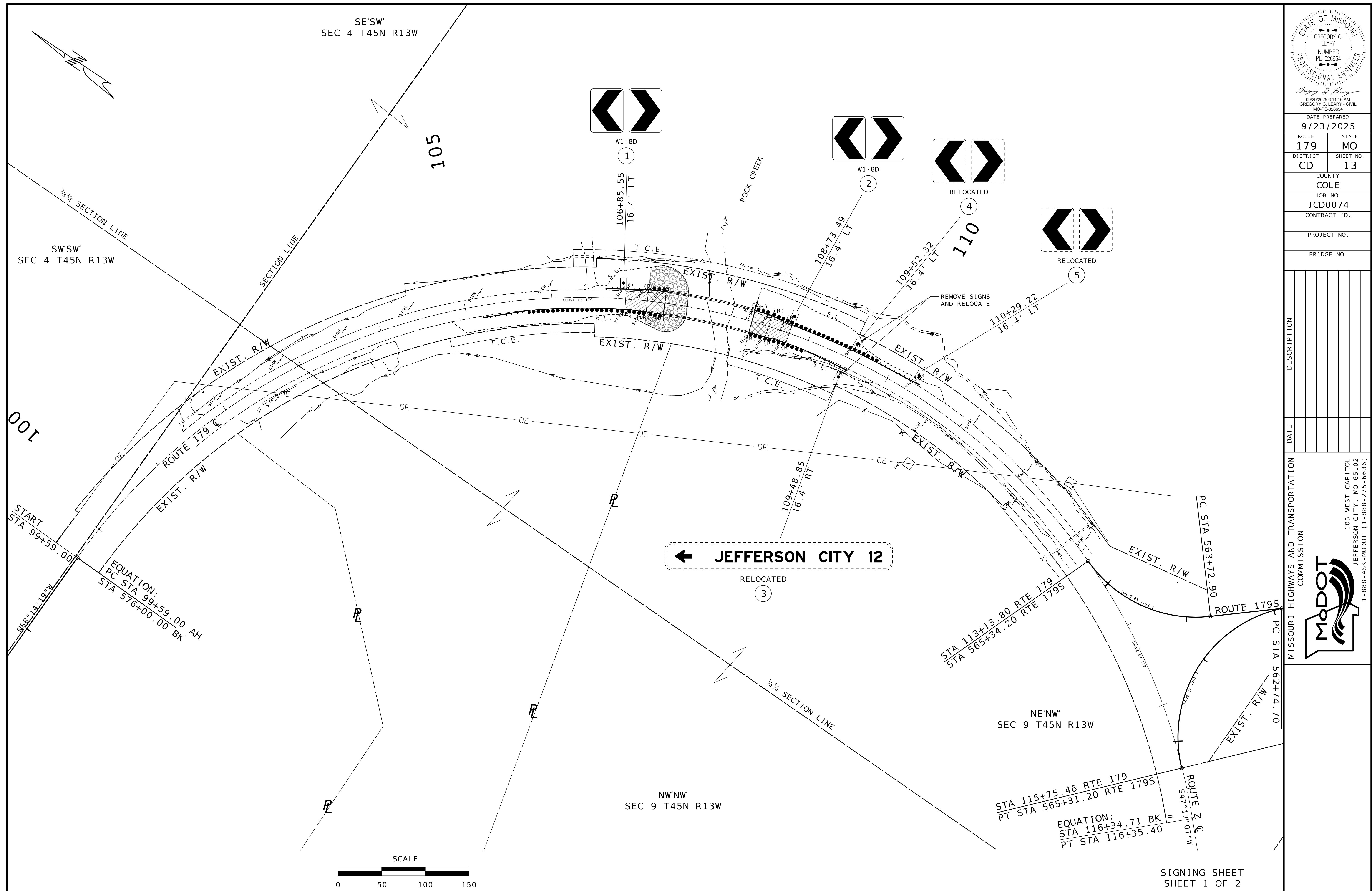
STATE OF MISSOURI
GREGORY G. LEARY
NUMBER
PE-026654
PROFESSIONAL ENGINEER
Gregory G. Leary
09/29/2025 6:08:47 AM
GREGORY G. LEARY - CIVIL
MO-PE-026654

DATE PREPARED 9/23/2025	
ROUTE 179	STATE MO
DISTRICT CD	SHEET NO. 12
COUNTY COLE	
JOB NO. JCD0074	
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)



***PSST POST SHALL BE CUT IN THE FIELD TO MEET THE MINIMUM SIGN MOUNTING HEIGHT AS SHOWN IN STD PLAN 903.03 AT NO DIRECT PAY.

STANDARD SIGN ASSEMBLIES							
SIGN NO	STATION	OFFSET	LOCATION	FLAT SHEET FLUORESCENT			
				SHF	SH	SH	SH
							
1	106+85.55	16.4'LT	RTE 179	1			
2	108+73.49	16.4'LT	RTE 179	1			
			TOTAL	2			

* ORANGE, YELLOW & YELLOW/GREEN

General Notes:

U.I.P., REDECK AND MAKE COMPOSITE EXISTING (49', 49') WIDE FLANGE BEAM SPANS (SKEW: VARIES)

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Seismic Performance Category A

Design Loading:

H10 (1931) (Existing)
HS20-44 (New Construction)
35 lb/sf Future Wearing Surface
Earth - 120 lb/cf, Equivalent Fluid Pressure 45 lb/cf
Fatigue Stress - Case II

Design Unit Stresses:

Class B-1 Concrete (Barrier) f'c = 4,000 psi
Class B-2 Concrete (Superstructure, except Barrier) f'c = 4,000 psi
Reinforcing Steel (ASTM A615 Grade 60) fy = 60,000 psi
Structural Steel (ASTM A709 Grade 50) fy = 50,000 psi

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.

Miscellaneous:

Protective coating for concrete bents and piers (Urethane) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for plain bars and 30 diameters for deformed bars, unless otherwise noted.

Roadway surfacing adjacent to bridge ends shall match new bridge slab surface. (Roadway item)

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Dimensions are based on existing bridge plans. Contractor shall verify all dimensions in field.

The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

Rubblized concrete from the existing bridge deck that qualifies as clean fill may be placed on spill slopes at end bents above ordinary high water line (Roadway item).

For adjusted girder deflection due to the weight of the new deck and barriers, see Bridge Electronic Deliverables.

Structural Steel Protective Coating:

Protective Coating: Gray epoxy-mastic primer in accordance with Sec 1081.

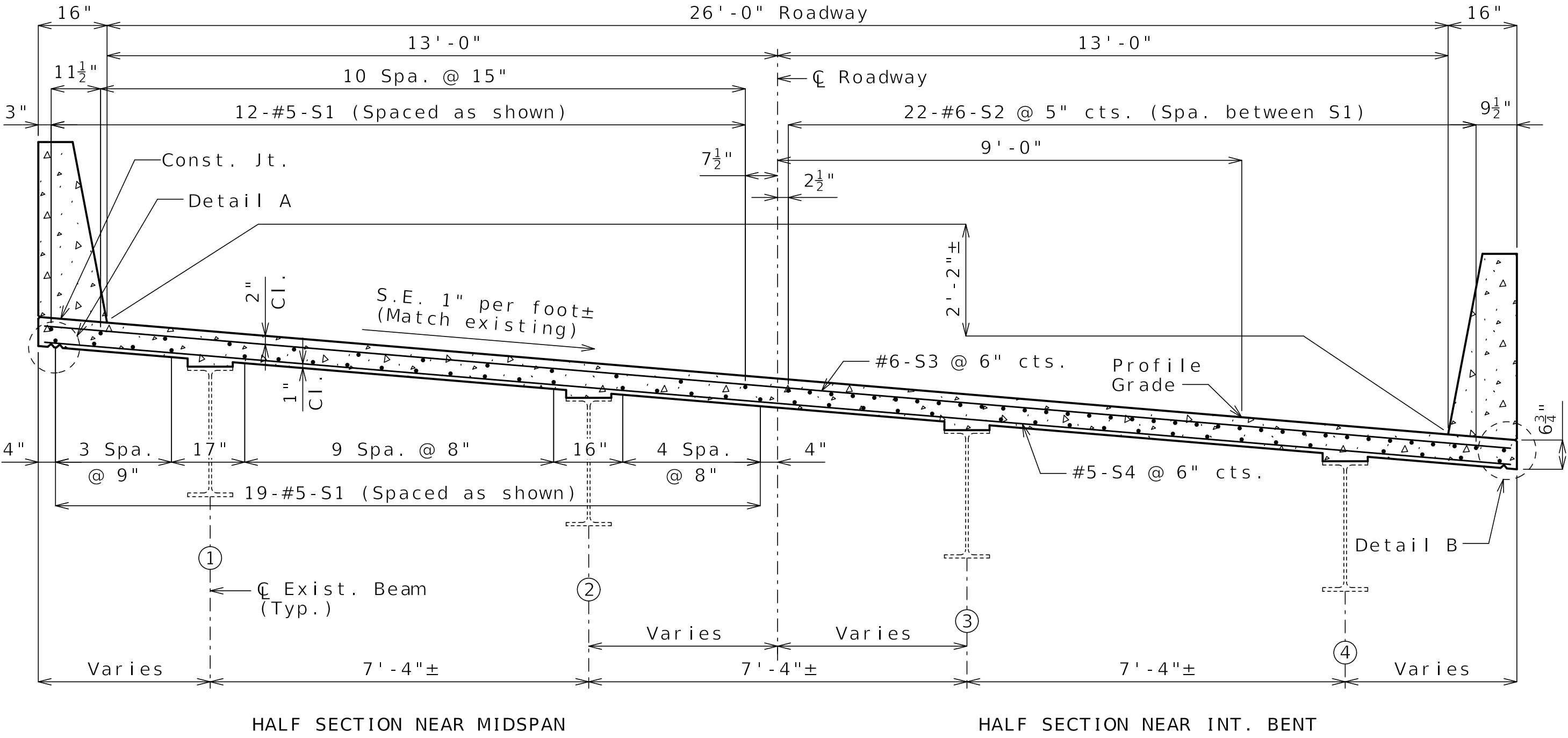
Surface Preparation: Surface preparation of the existing steel shall be in accordance with Sec 1081 for gray epoxy-mastic primer. The cost of surface preparation will be considered completely covered by the contract lump sum price for Surface Preparation for Applying Epoxy-Mastic Primer.

Prime Coat: The cost of the prime coat will be considered completely covered by the contract lump sum price for Gray Epoxy-Mastic Primer.

For locations of protective coatings on beams, see Sheet No. 6.

Traffic Handling:

Structure to be closed during construction. See roadway plans for traffic control details.



TYPICAL SECTION THRU SLAB

Estimated Quantities		
Item		Total
Removal of Existing Bridge Deck	sq. foot	2,755
Bridge Approach Slab (Minor)	sq. yard	118
Slab on Steel	sq. yard	322
Type D Barrier	linear foot	202
Protective Coating - Concrete Bents and Piers (Urethane)	lump sum	1
Shear Connectors	each	856
Strengthening Existing Beams	lump sum	1
Slab Drain	each	10
Surface Preparation for Applying Epoxy-Mastic Primer	lump sum	1
* Gray Epoxy-Mastic Primer	lump sum	1

Cost of any required excavation for bridge will be considered completely covered by the contract unit price for other items.

* Additional Surface Preparation and Gray Epoxy-Mastic primer may be required for spot overcoating, to be determined by the engineer.

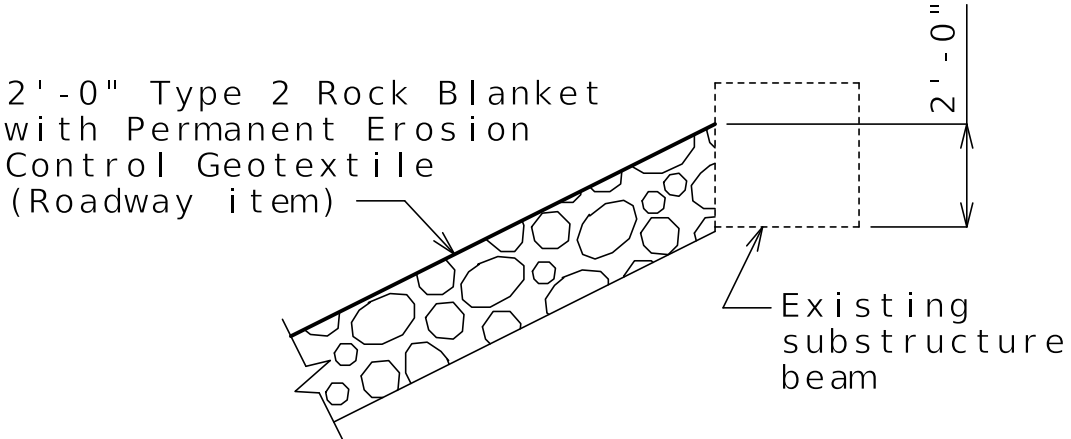
Estimated Quantities for Slab on Steel		
Item		Total
Class B-2 Concrete	cu. yard	75
Reinforcing Steel (Epoxy Coated)	pound	24,980

The table of Estimated Quantities for Slab on Steel 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.

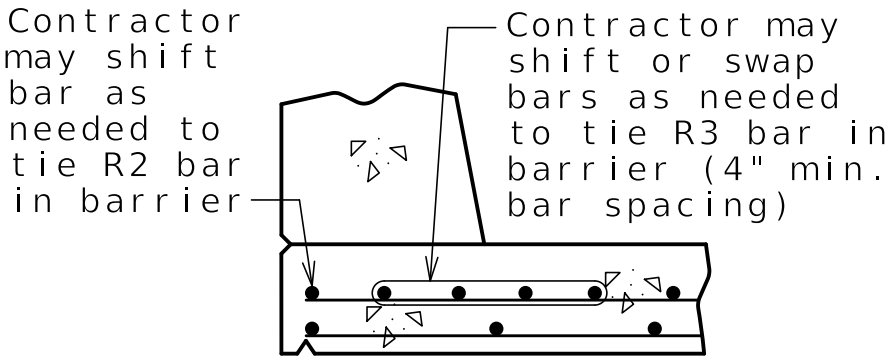
Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness Class SC 4 and a finish Type I, II or III.

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

For Optional Stay-In-Place Form Details, see Sheet No. 2.



ROCK BLANKET ON SPILL SLOPES



OPTIONAL SHIFTING TOP BARS AT BARRIER

REPAIRS TO BRIDGE:
ROUTE 179 OVER ROCK CREEK

ROUTE 179 FROM ROUTE Z TO ROUTE N
ABOUT 0.1 MILE NORTH OF ROUTE Z
BEGINNING STATION 107+29.50± (MATCH EXISTING)

STATE OF MISSOURI

TIMOTHY D. LEAF

NUMBER PE-2012000778

PROFESSIONAL ENGINEER

09/15/2025 8:57:26 AM

TIMOTHY D. LEAF - CIVIL

MO-PE-2012000778

DATE PREPARED

9/15/2025

ROUTE 179

DISTRICT BR

STATE MO

SHEET NO. 1

COUNTY COLE

JOB NO. JCD0074

CONTRACT ID.

PROJECT NO.

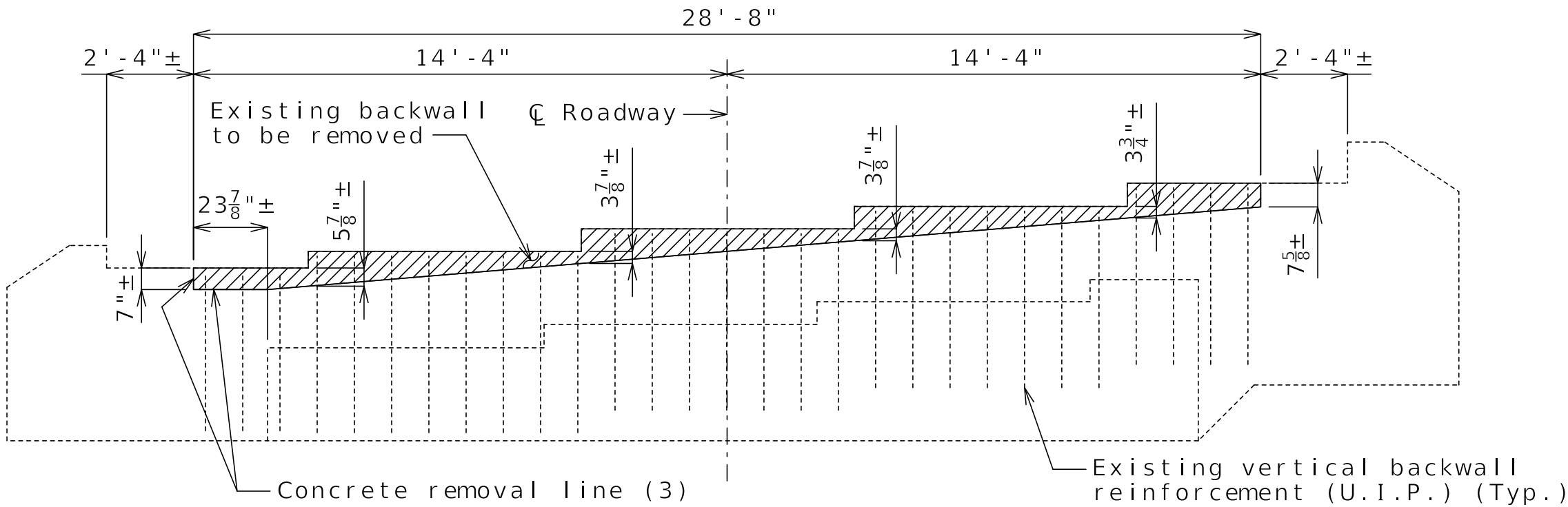
BRIDGE NO. X00351

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DETAILS OF CONCRETE REMOVAL AT END BENTS

End Bent No. 1 shown, End Bent No. 3 similar.
(Existing structural steel not shown for clarity.)

The cost of concrete removal as shown will be considered completely covered by the contract unit price for Removal of Existing Bridge Deck.

A smooth, level surface shall be provided at Bent No. 1 & 3 removal lines.

(3) Use 1" deep saw cut at fill face of backwall. Match slope of existing roadway superelevation. Existing vertical backwall reinforcement shall be cleaned and used in place. Horizontal reinforcement embedded in existing concrete not removed shall be used in place where possible. Any existing reinforcement not reused shall be cut off one inch below concrete removal surface and the resulting holes shall be filled with a qualified special mortar.

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 flanges. 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 flange. Welding on or drilling holes in the beam flanges 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.

The contractor shall provide a method of preventing the direct contact of the stay-in-place forms and connection components with uncoated weathering steel members that is approved by the engineer.

Pouring and Finishing Slab:

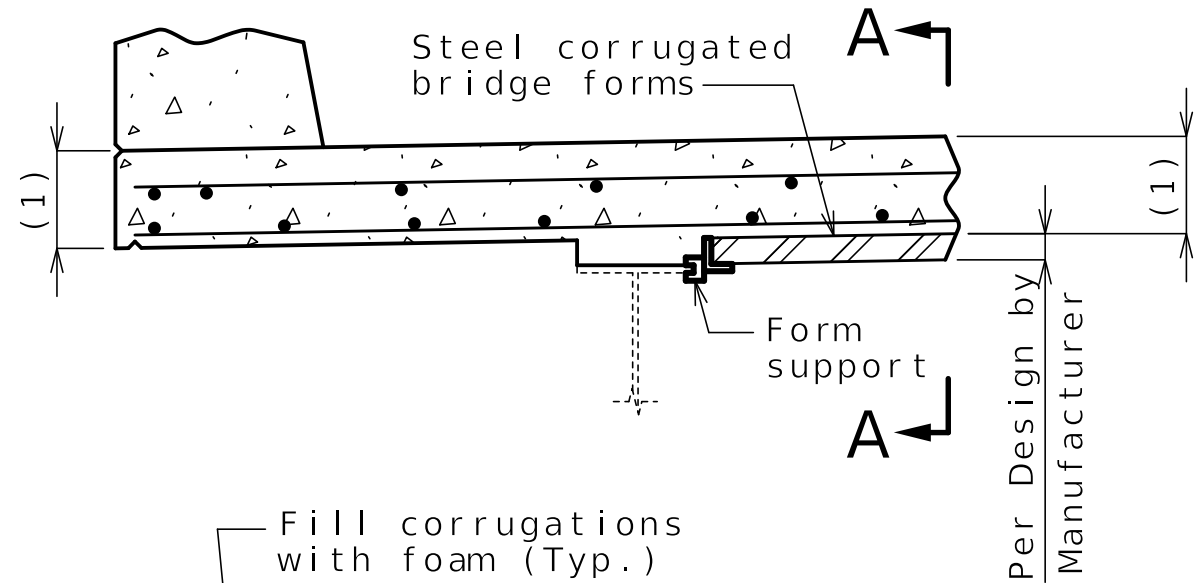
The contractor shall provide bracing necessary for lateral and torsional stability of the beams during construction of the concrete slab and remove the bracing after the slab has attained 75% design strength. Contractor shall not weld on or drill holes in the beams. The cost for furnishing, installing, and removing bracing will be considered completely covered by the contract unit price for Slab on Steel.

Slab shall be poured upgrade from end to end at a minimum rate of 25 cubic yards per hour.

Alternate pour sequences may be submitted to the engineer for approval. Keyed construction joints shall be provided between pours.

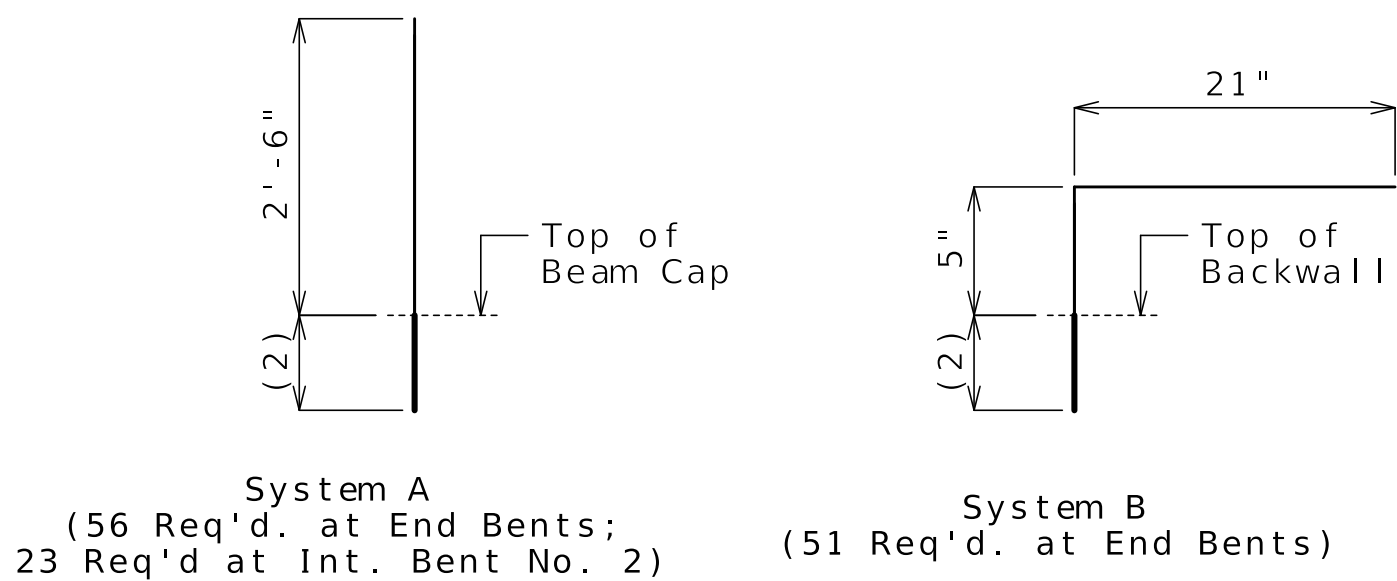
Haunching:

(1) Slab is to be considered a uniform thickness as shown on the plans. Haunching will vary. See front sheet for slab thickness.



SECTION A-A

OPTIONAL STAY-IN-PLACE FORM DETAILS



DETAILS OF RESIN ANCHOR SYSTEMS

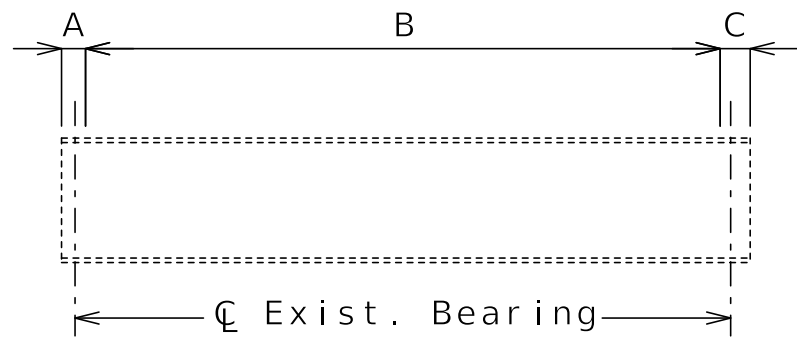
(2) Manufacturer's recommended embedment length (5 inches minimum)

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

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Slab on Steel.

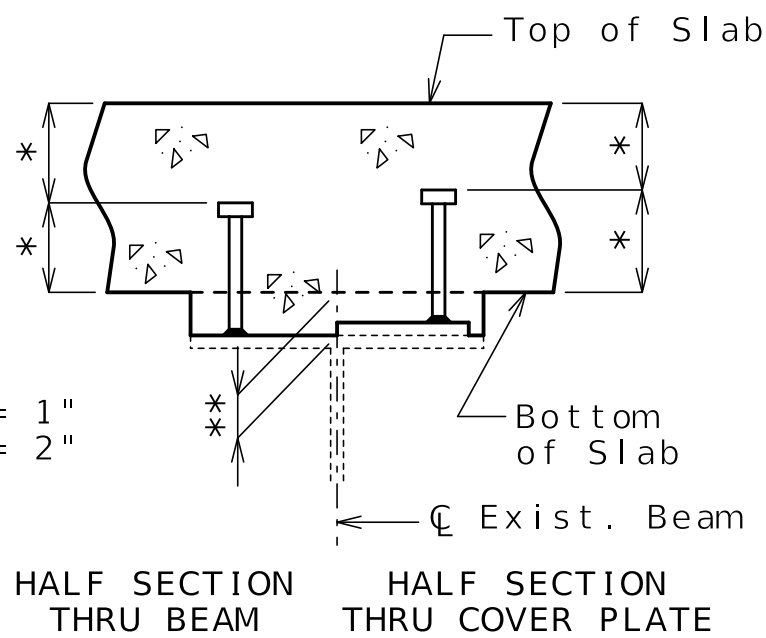
The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5 inches.

An epoxy coated #6 Grade 60 reinforcing bar shall be substituted for the 3/4-inch diameter threaded rod.

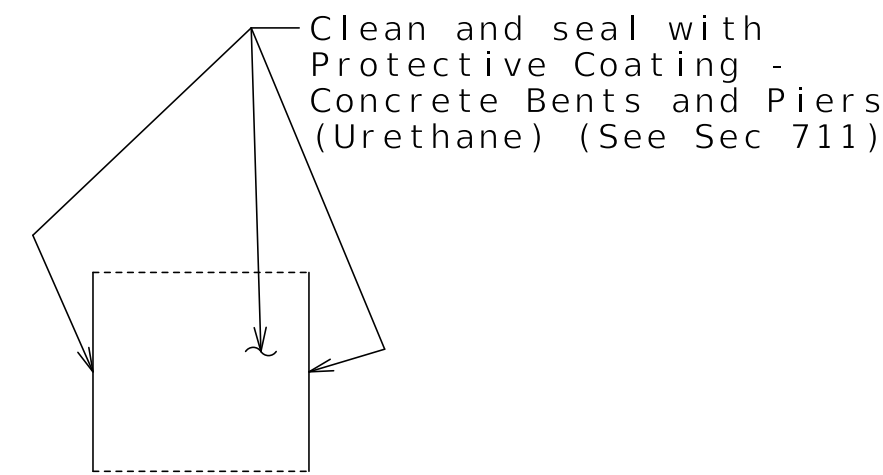


ELEVATION SHOWING SHEAR CONNECTOR SPACING

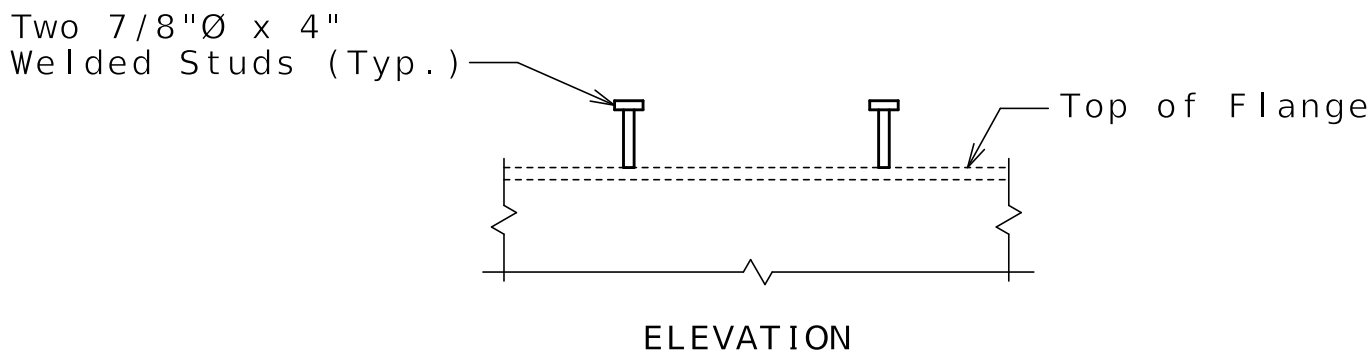
TABLE SHOWING SHEAR CONNECTOR UNIT SPACING				
Girder	S.C. per unit	A	B	C
1	2	11 1/4"±	54 Units @ 11" cts.	11 1/4"±
2	2	8 1/4"±	54 Units @ 11" cts.	8 1/4"±
3	2	10 1/2"±	53 Units @ 11" cts.	10 1/2"±
4	2	7 3/8"±	53 Units @ 11" cts.	7 3/8"±
Total shear connectors required				856



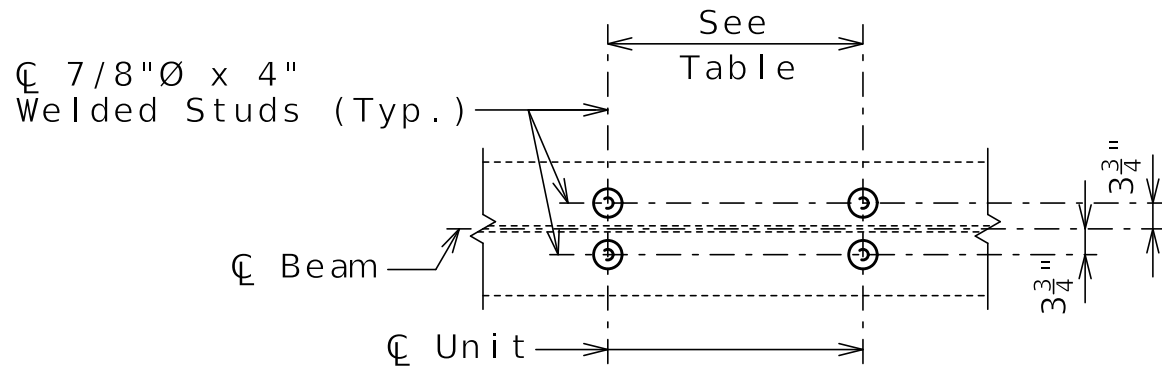
SECTION THRU EXIST. BEAM SHOWING SHEAR CONNECTORS



TYPICAL SECTION THRU INT. BENT 2 SHOWING PROTECTIVE COATING



ELEVATION

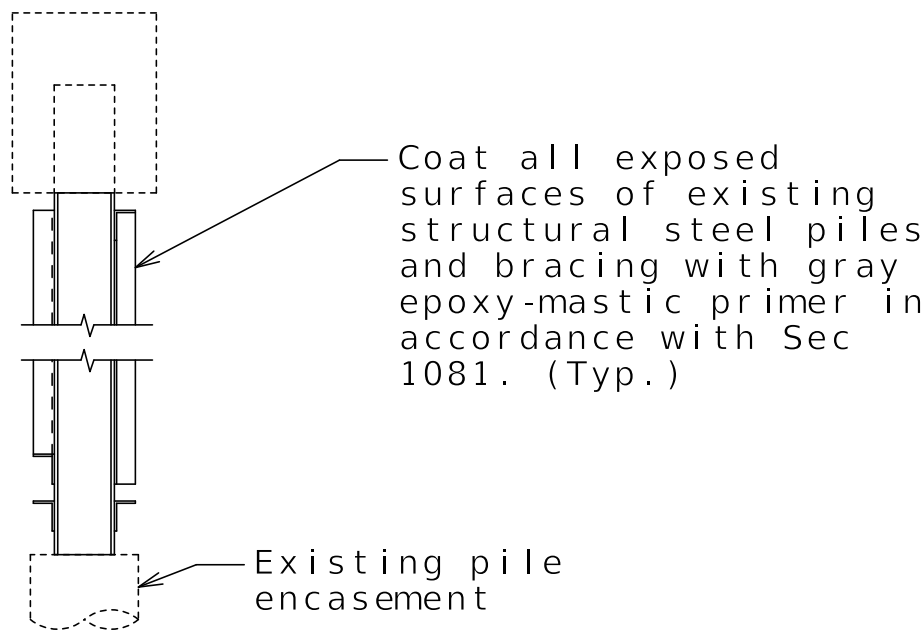


PLAN OF SHEAR CONN. (2 PER UNIT)

DETAILS OF SHEAR CONNECTORS

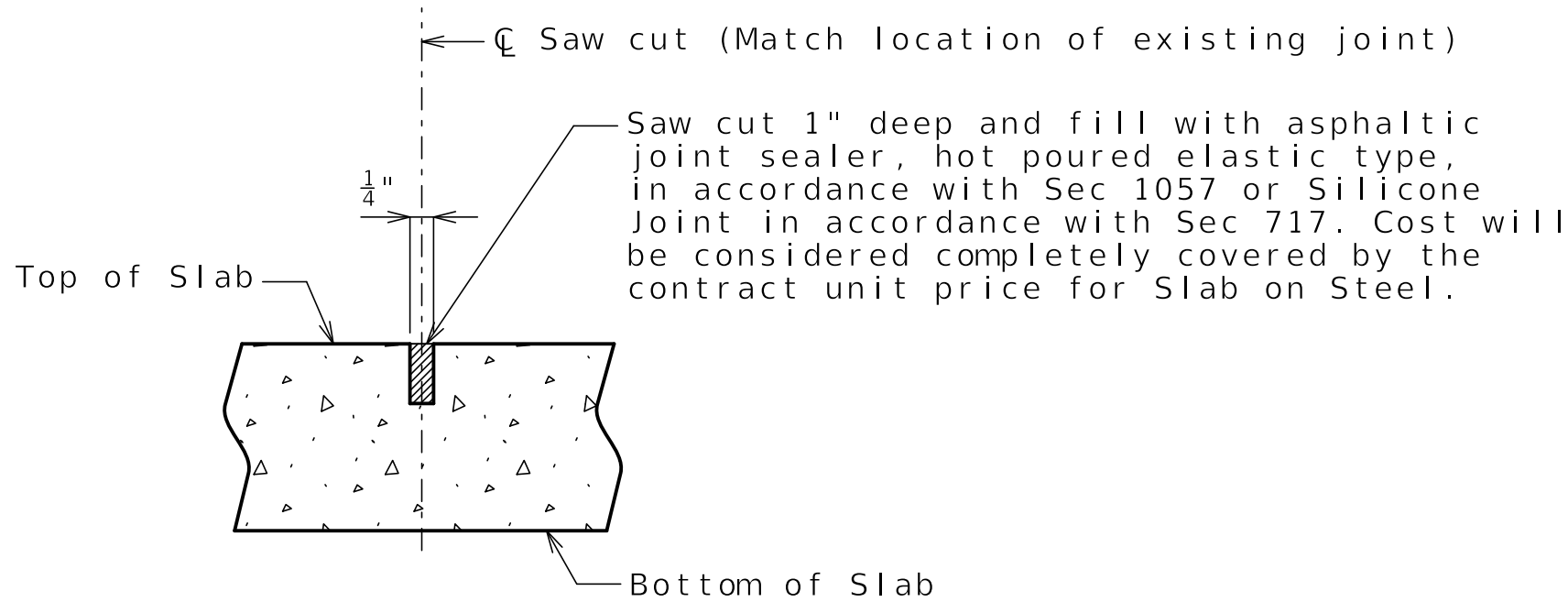
The cost of supplying and installing shear connectors will be considered completely covered by the contract unit price for Shear Connectors.

Shear connectors shall be in accordance with Sec 712, 1037 & 1080.

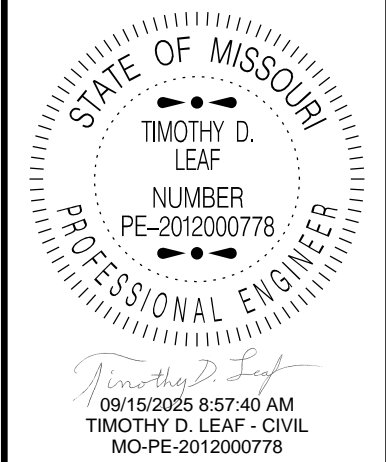


SECTION THRU INT. BENT NO. 2 SHOWING RECOATING OF PILES

All exposed surfaces of the existing structural steel piles shall be recoated with one 6-mil thickness of gray epoxy-mastic primer applied over an SSPC-SP3 surface preparation in accordance with Sec 1081. The cost of surface preparation will be considered completely covered by the contract lump sum price for Surface Preparation for Applying Epoxy-Mastic Primer. The cost of the gray epoxy-mastic primer will be considered completely covered by the contract lump sum price for Gray Epoxy-Mastic Primer.



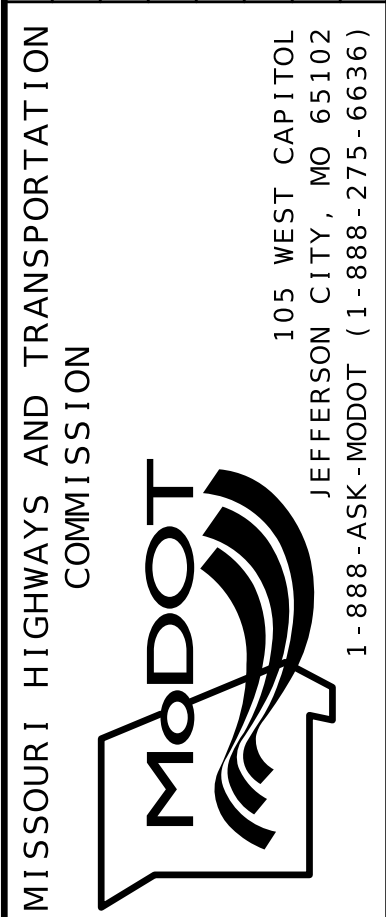
TYPICAL SECTION THRU SAW CUT AT INTERMEDIATE BENT

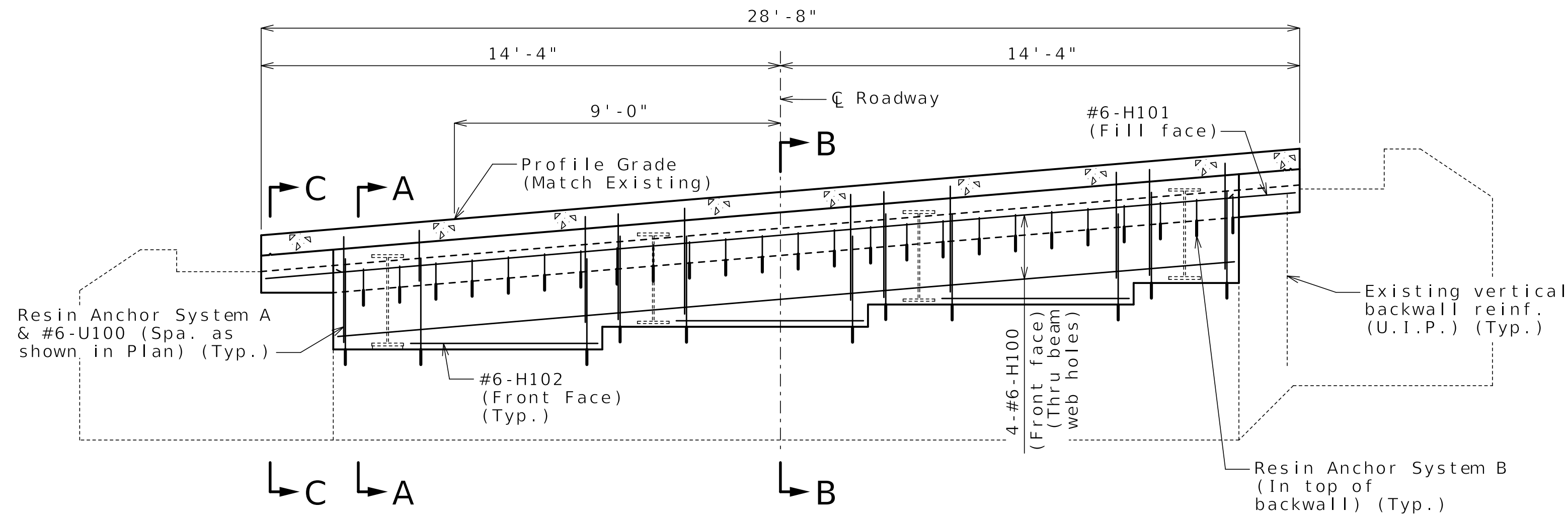


DATE PREPARED 9/15/2025	
ROUTE 179	STATE MO
DISTRICT BR	SHEET NO. 2
COUNTY COLE	
JOB NO. JCD0074	
CONTRACT ID.	

PROJECT NO.	
BRIDGE NO. X00351	

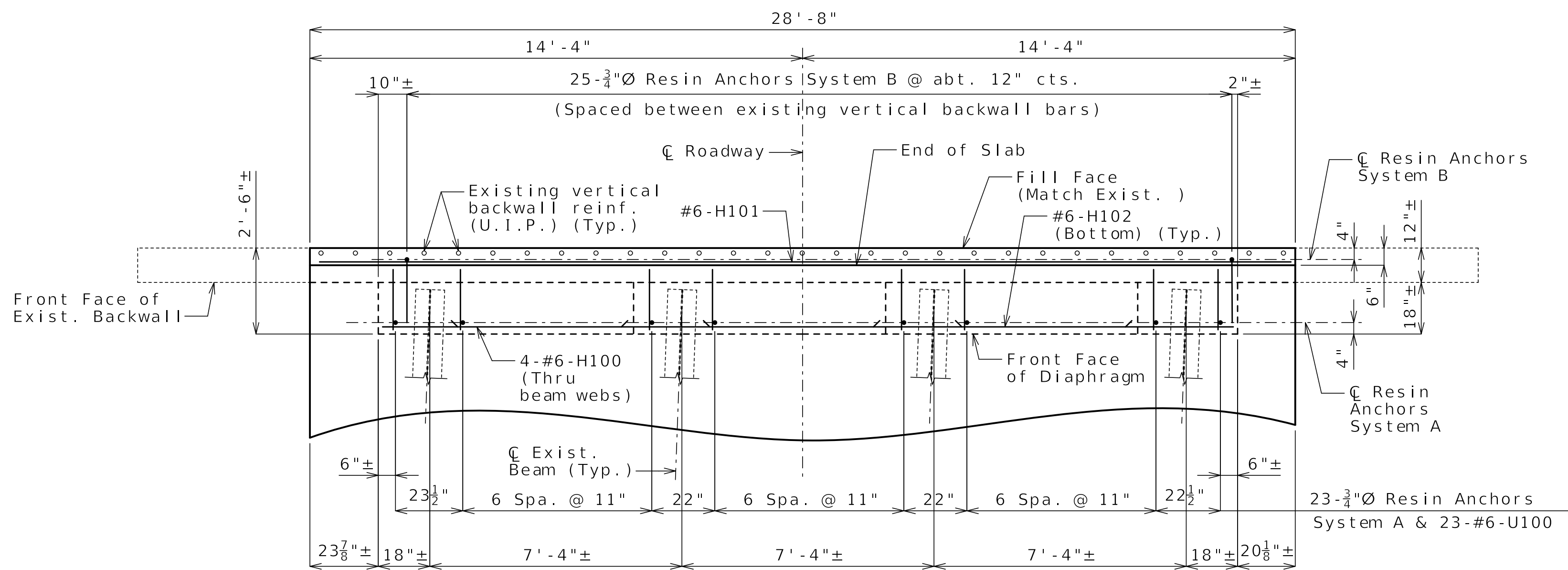
DESCRIPTION	DATE





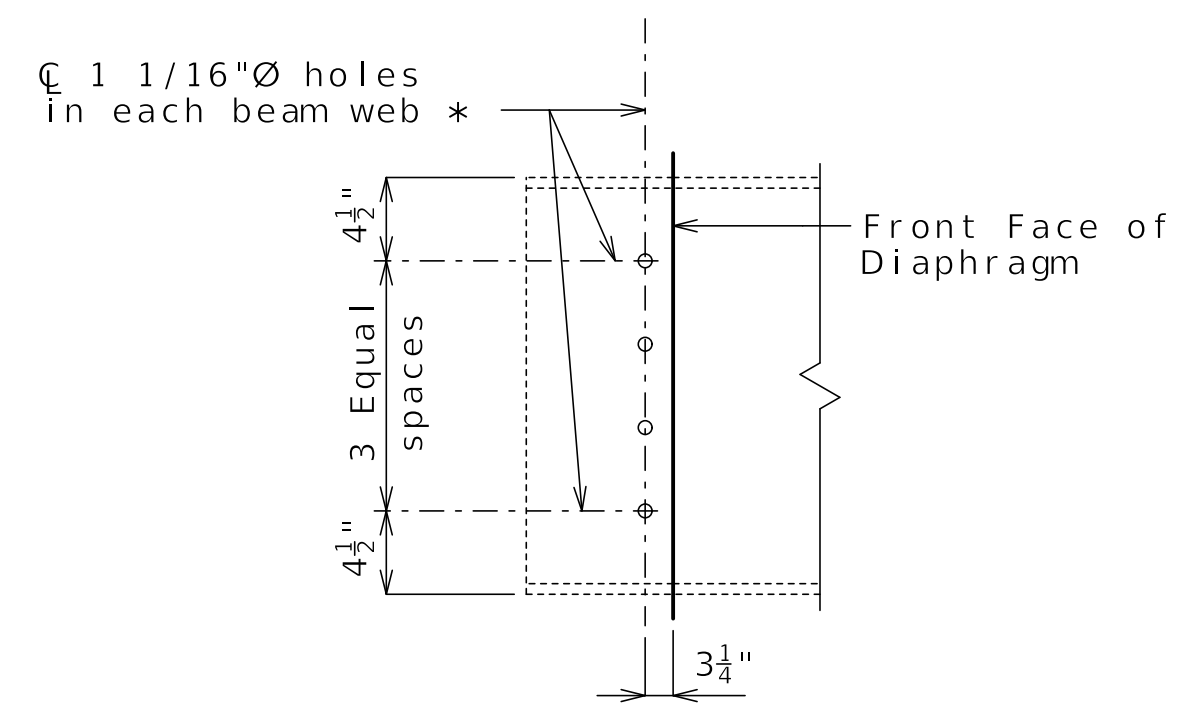
SECTION NEAR END BENT

Slab reinforcement and existing steel diaphragms not shown for clarity.



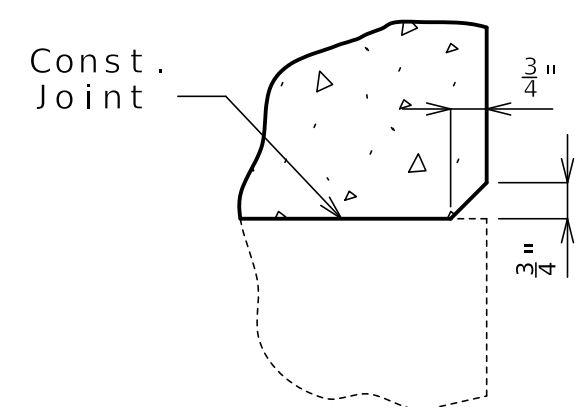
PLAN

Slab reinforcement not shown for clarity.

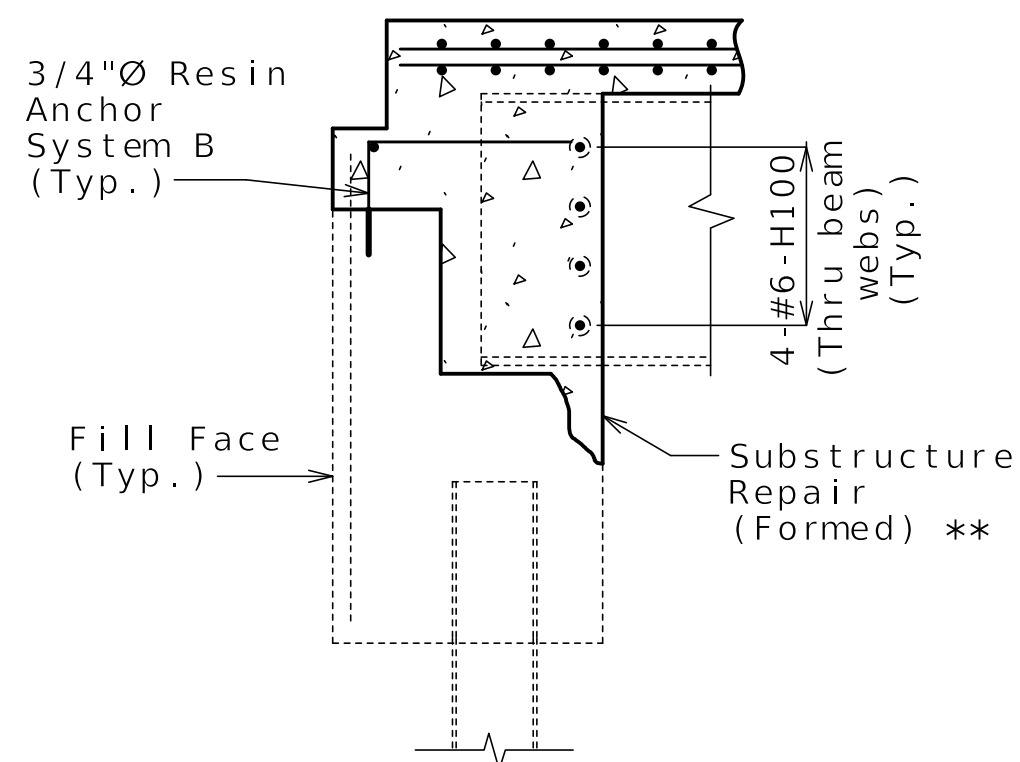


DETAILS OF WEB HOLES AT END BENTS

* Cost of field drilling holes in existing wide flange beam webs will be considered completely covered by the contract unit price for Slab on Steel.

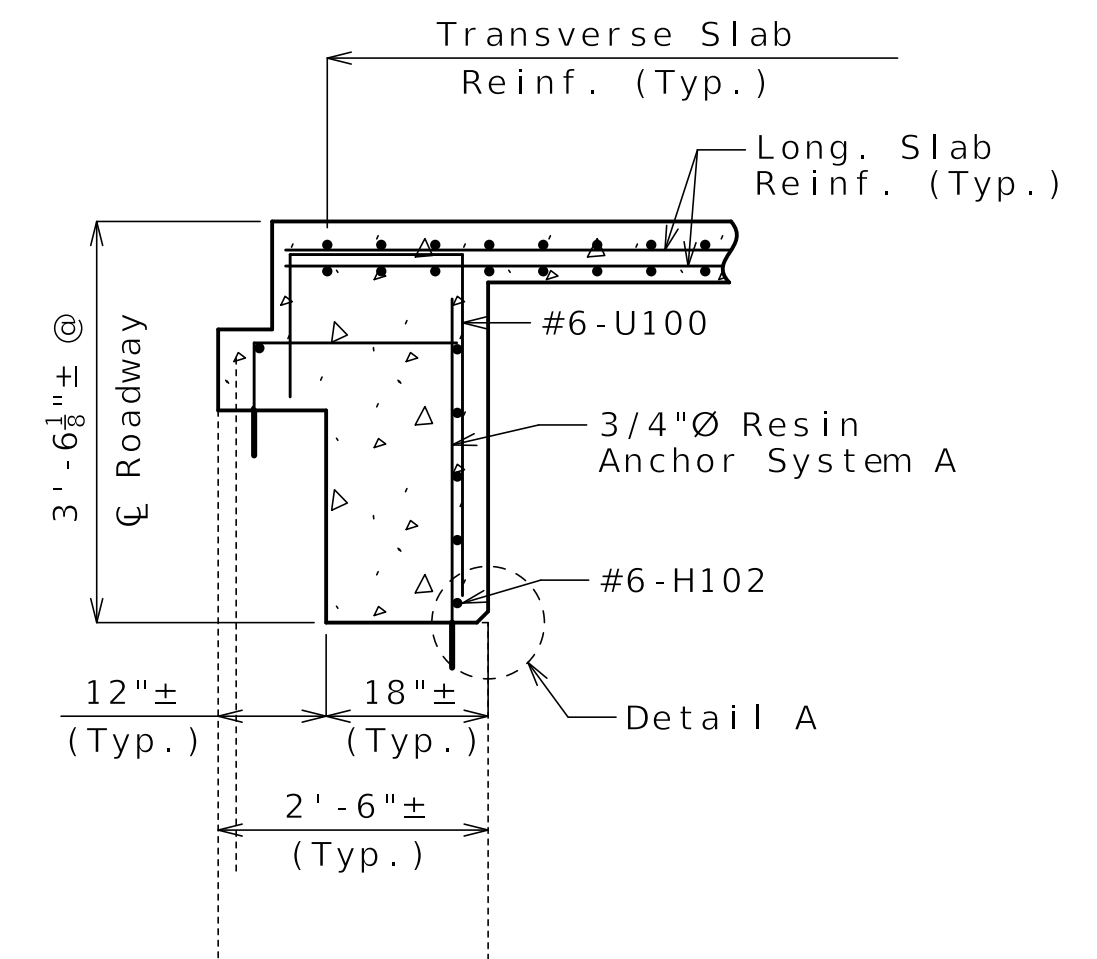


DETAIL A

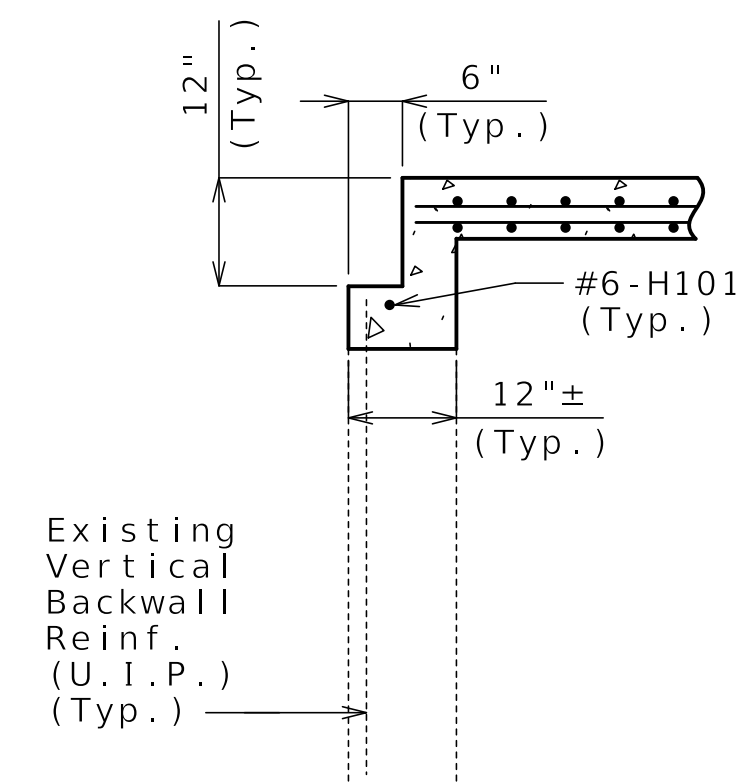


SECTION A-A

** See Sec 704. Pour monolithically with diaphragm. No direct pay.



SECTION B-B



SECTION C-C

Notes:

The exposed and accessible surfaces of the existing structural steel and bearings that will be encased in concrete shall be cleaned with a minimum of one coat of grey epoxy-mastic primer (non-aluminum) in accordance with Sec 1081 to produce a dry fill thickness of not less than 3 mils before concrete is poured. The surface preparation and coating for beams shall extend a minimum of one foot outside the face of the beam encasement. Payment for cleaning and coating steel to be encased in concrete will be considered completely covered by the contract unit price for Slab on Steel.

All concrete and reinforcement is included in the Table of Estimated Quantities for Slab on Steel and will be considered completely covered by the contract unit price for Slab on Steel.

For details and reinforcement of Barrier not shown, see Sheets No. 9 & 10.

For notes and details of resin anchor systems, see Sheet No. 2.

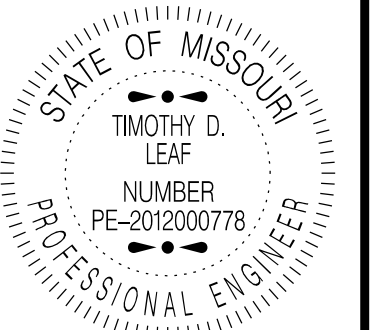
The H100 bars are segmented for ease of placement through beam web holes. The total bar length for H100 bars shown in Bill of Reinforcing Steel allows for one lap splice with a length of 3'-10". Actual bar segment lengths to be determined by contractor for ease of installing bars. The contractor may use a mechanical bar splice in lieu of a lap splice. When a mechanical bar splice is used, the actual bar segment length will be determined by the contractor to accommodate manufacturer's recommendations for installation and ease of construction. The cost of furnishing and installing the bar splices will be considered completely covered by the contract unit price for Slab on Steel. No adjustment of the quantity of reinforcing steel will be allowed for the use of mechanical bar splices.

END BENT NO. 1

Detailed Aug. 2025
Checked Aug. 2025

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

Sheet No. 3 of 13



DATE PREPARED
9/15/2025

ROUTE
179

DISTRICT
BR

COUNTY
COLE

JOB NO.
JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
X00351

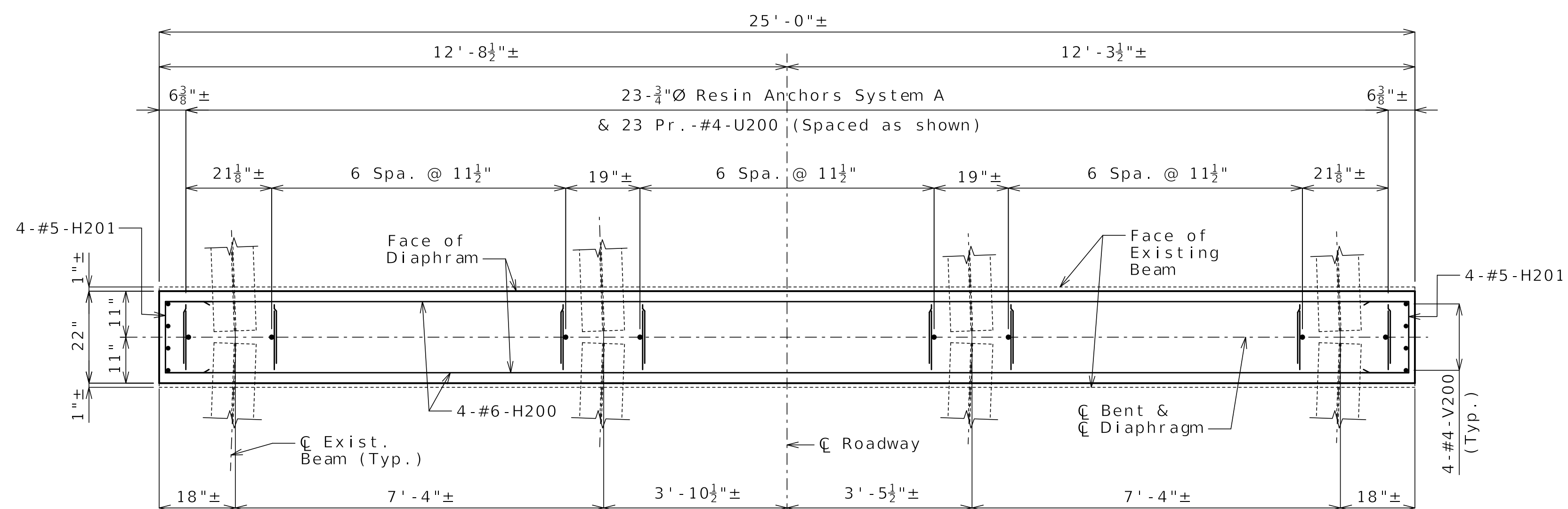
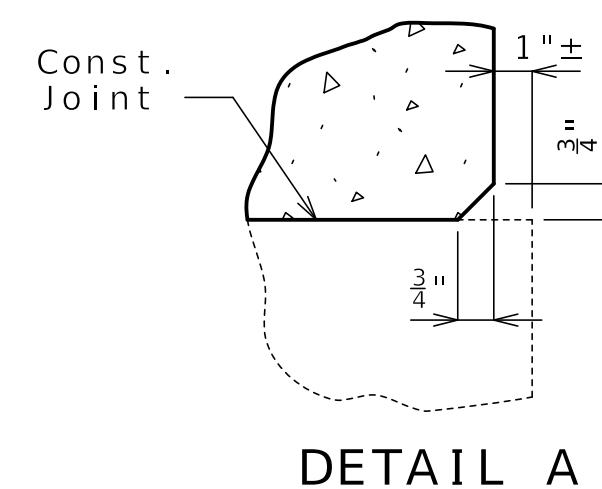
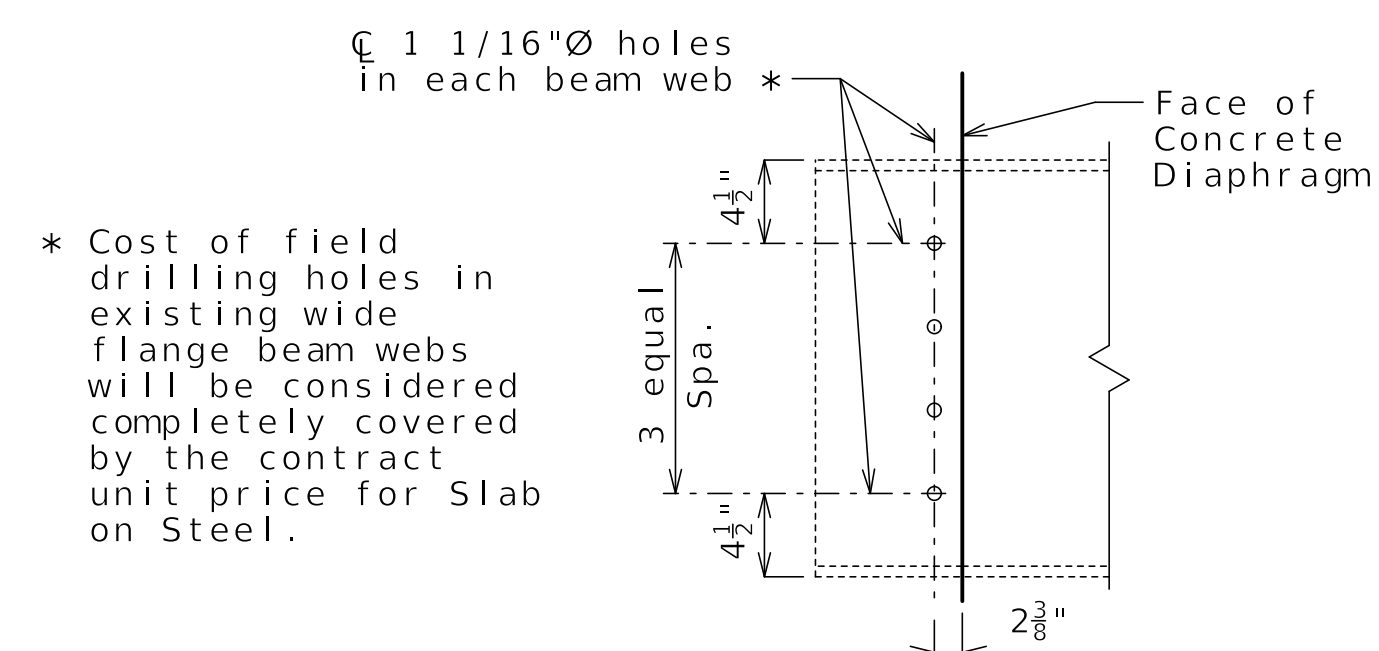
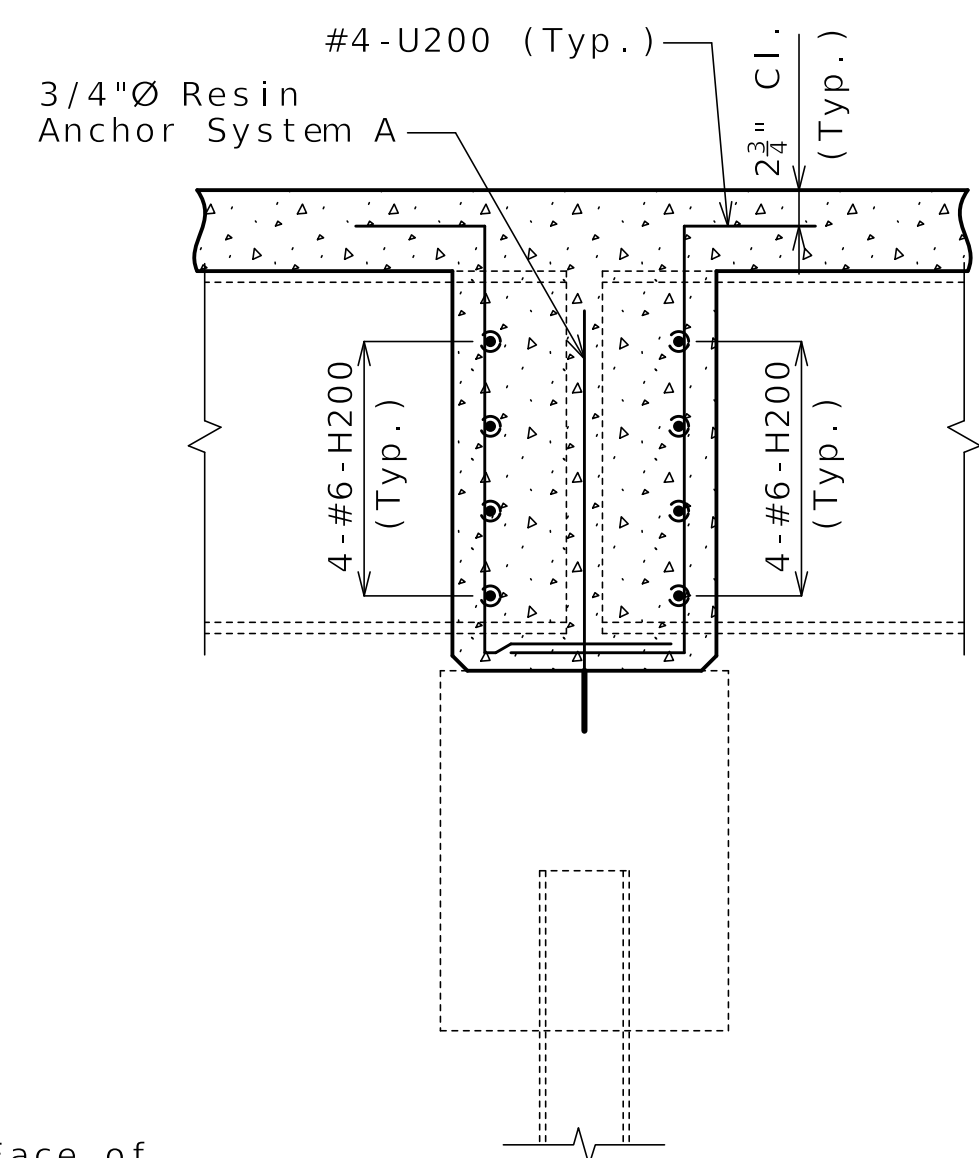
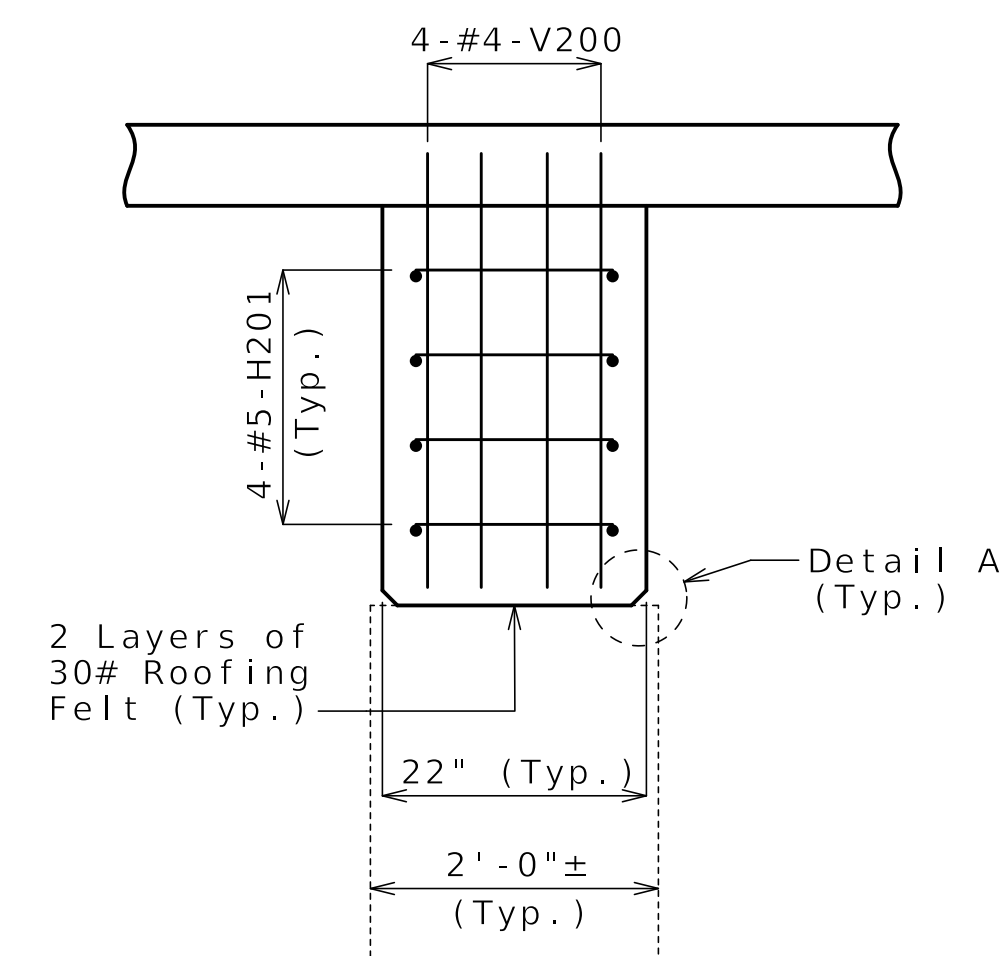
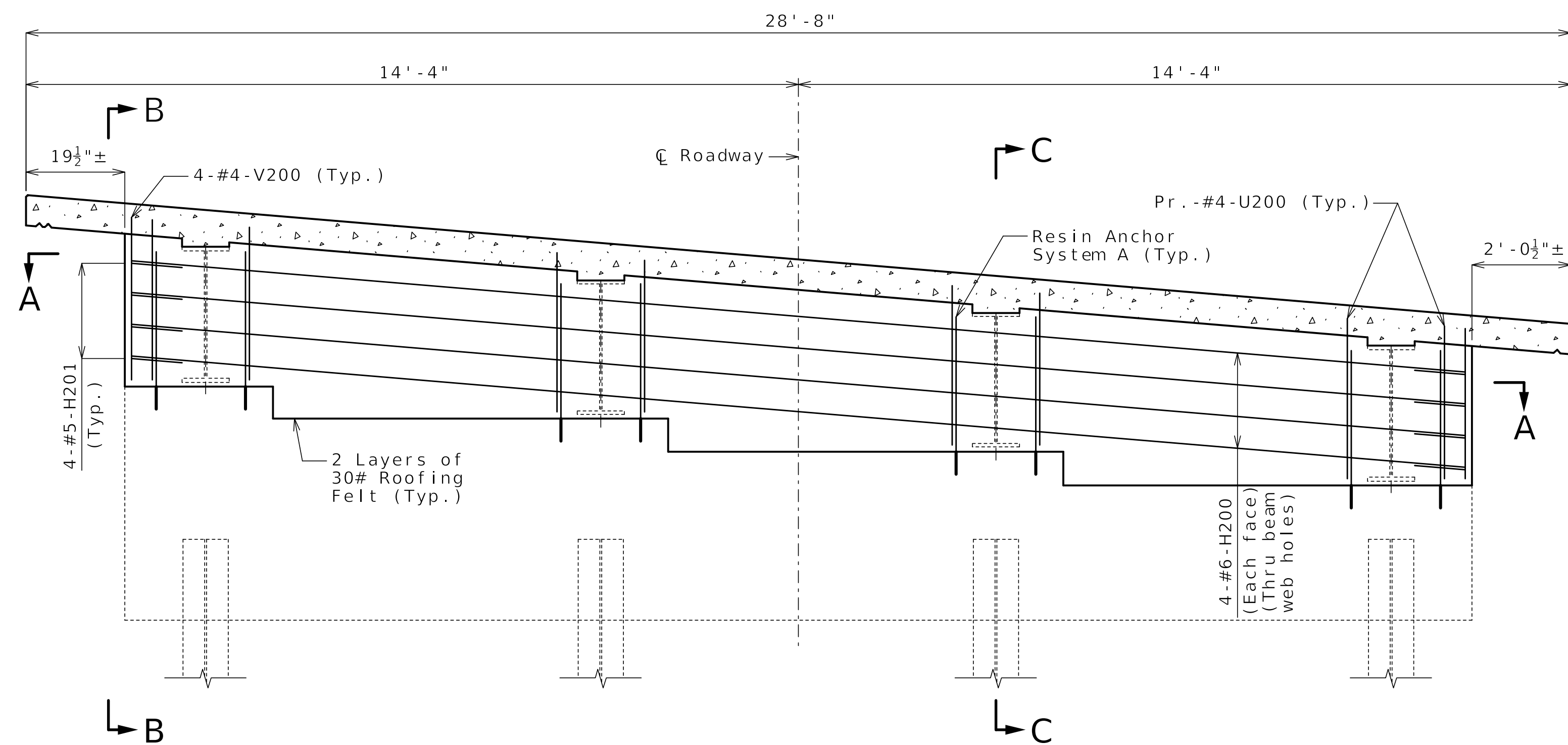
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT



Notes :

The exposed and accessible surfaces of the existing structural steel and bearings that will be encased in concrete shall be cleaned with a minimum of one coat of two way epoxy plastic primer (non aluminum) in accordance with Sec 1081 to produce a dry fill thickness of not less than 3 mils before concrete is poured. The surface preparation and coating for beams shall extend a minimum of one foot outside the face of the beam encasement. Payment for cleaning and coating steel to be encased in concrete will be considered completely covered by the contract unit price for Slab on Steel.

All concrete and reinforcement is included in the Table of Estimated Quantities for Slab on Steel and will be considered completely covered by the contract unit price for Slab on Steel.

For details and reinforcement of barrier not shown, see Sheets No. 9 & 10.

For notes and details of resin anchor systems, see Sheet No. 2.

The H200 bars are segmented for ease of placement through girder web holes. The total bar length for H200 bars shown in Bill of Reinforcing Steel allows for one lap splice with a length of 3'-10". Actual bar segment lengths to be determined by contractor for ease of installing bars. The contractor may use a mechanical bar splice in lieu of a lap splice. When a mechanical bar splice is used, the actual bar segment length will be determined by the contractor to accommodate manufacturer's recommendations for installation and ease of construction. The cost of furnishing and installing the bar splices will be considered completely covered by the contract unit price for Slab on Steel. No adjustment of the quantity of reinforcing steel will be allowed for the use of mechanical bar splices.



09/15/2025 8:57:59 AM
TIMOTHY D. LEAF - CIVIL
MO-PE-2012000778

DATE PREPARED
0 / 15 / 2025

9/15/2025	
ROUTE	STATE

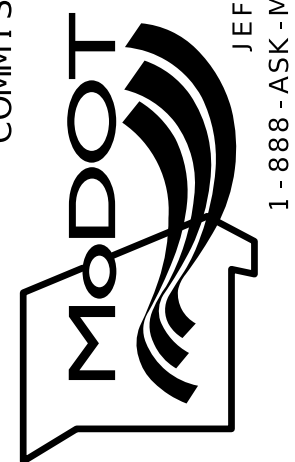
ROUTE	STATE
179	MO

DISTRICT	SHEET NO.
33	1

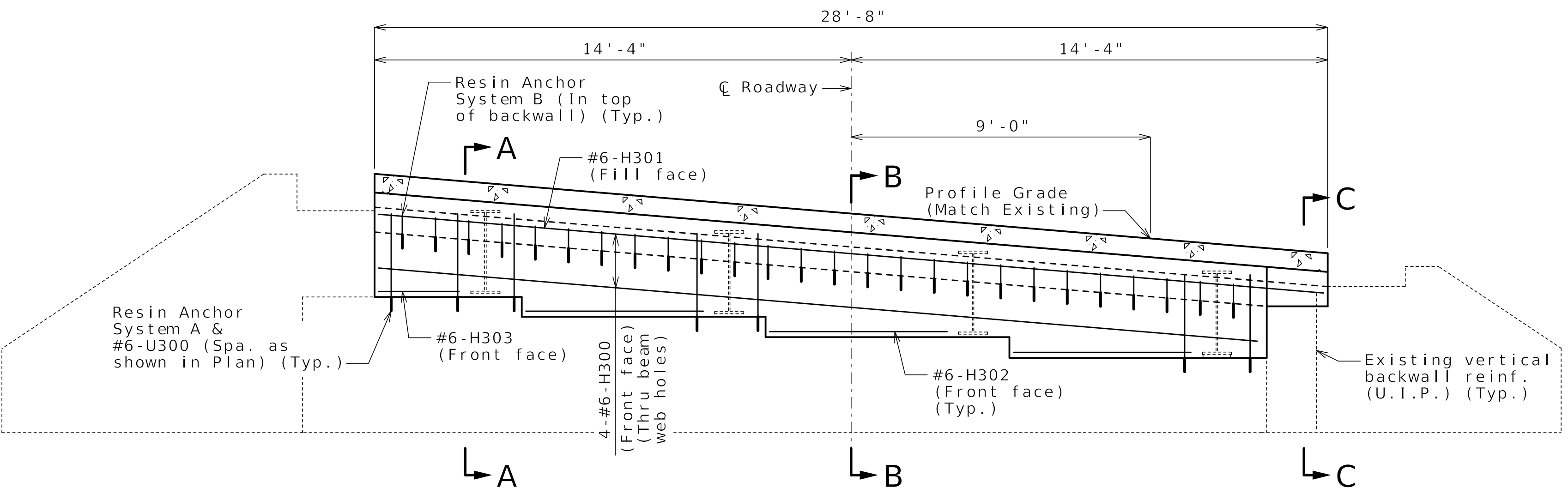
BR	4
COUNTY	

COUNTY
COLLEGE

JOB NO.

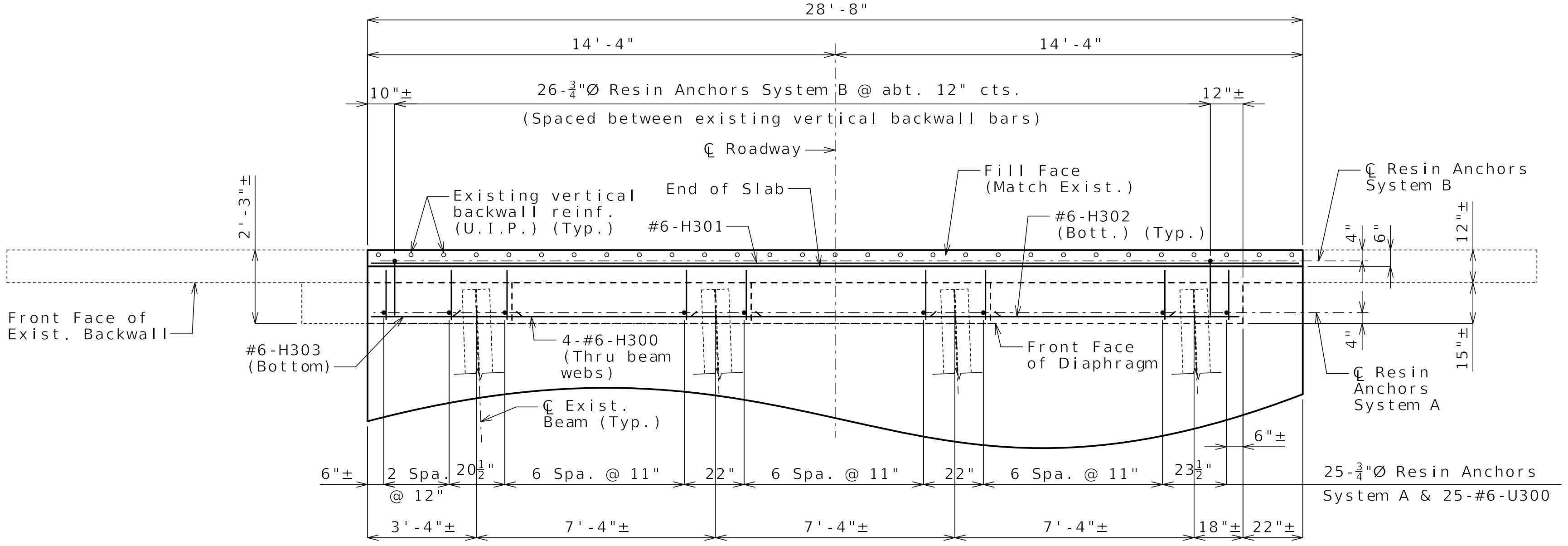
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COMMISSION

INTERMEDIATE BENT NO. 2



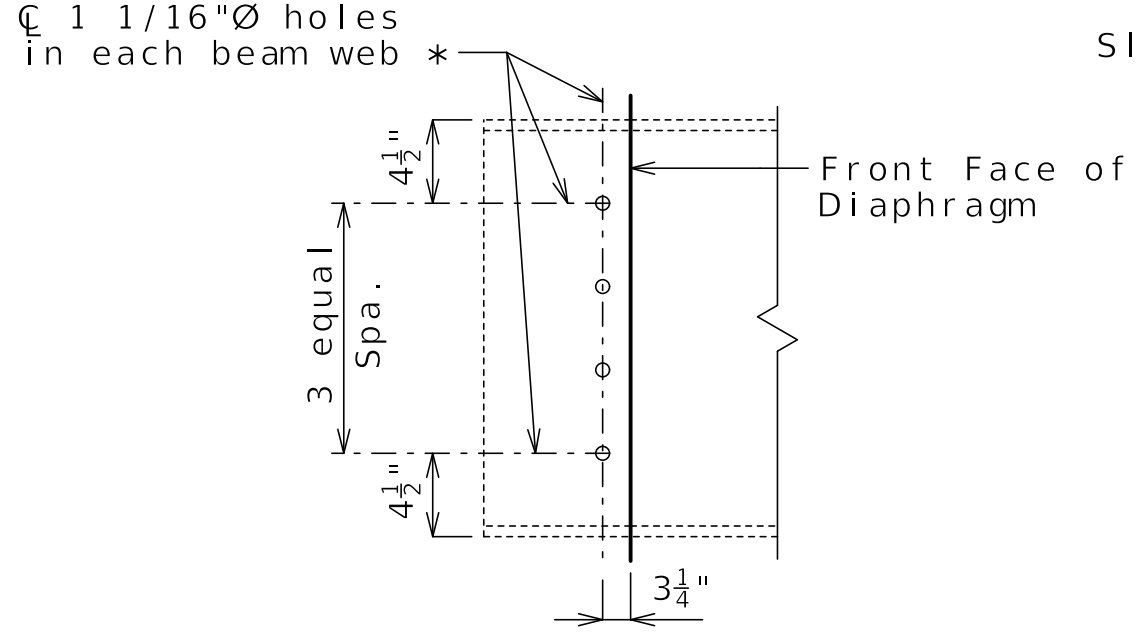
SECTION NEAR END BENT

Slab reinforcement and existing steel diaphragms not shown for clarity.



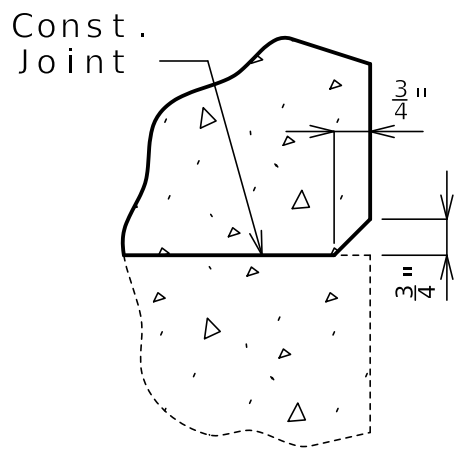
PLAN

Slab reinforcement not shown for clarity.



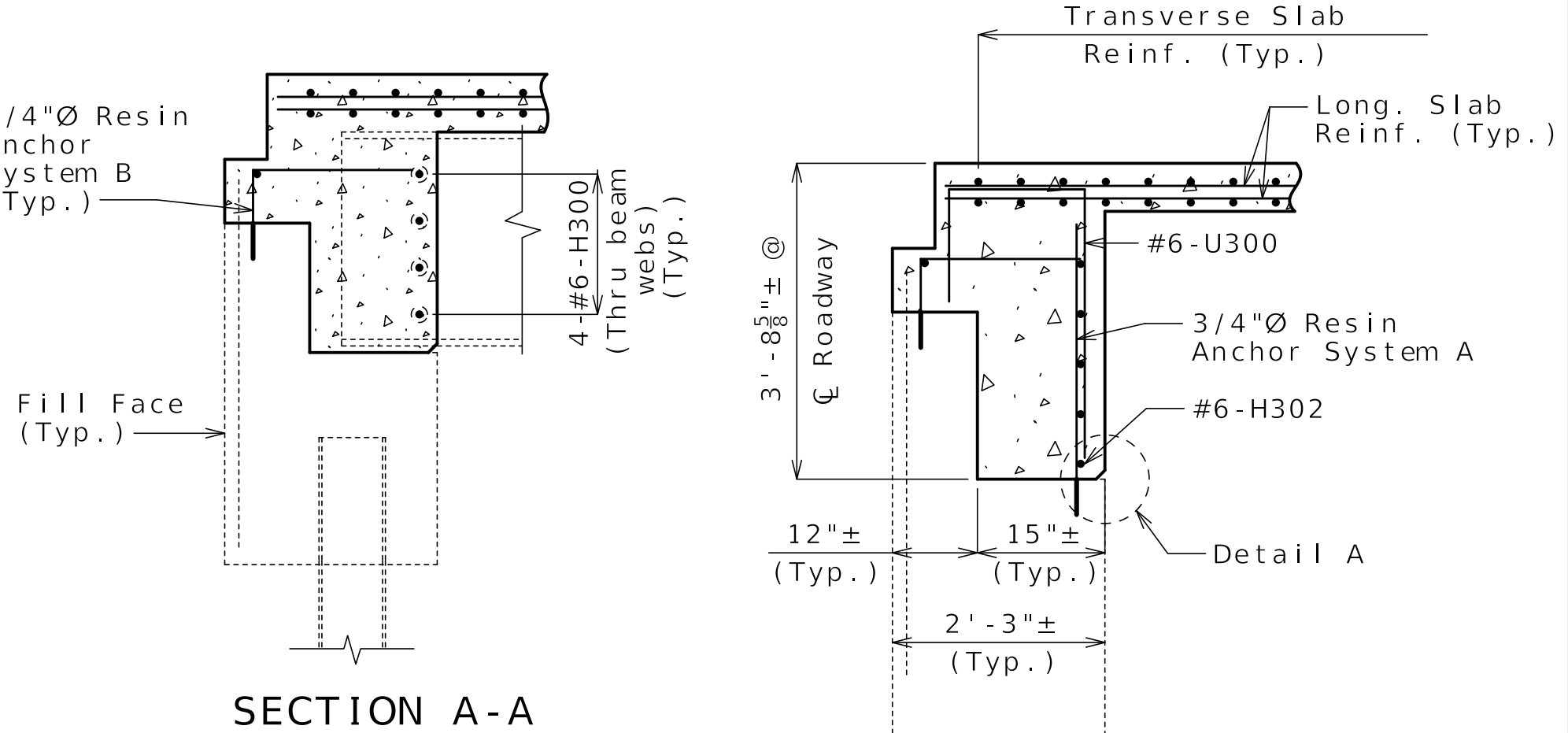
DETAILS OF WEB HOLES AT END BENTS

* Cost of field drilling holes in existing wide flange beam webs will be considered completely covered by the contract unit price for Slab on Steel.



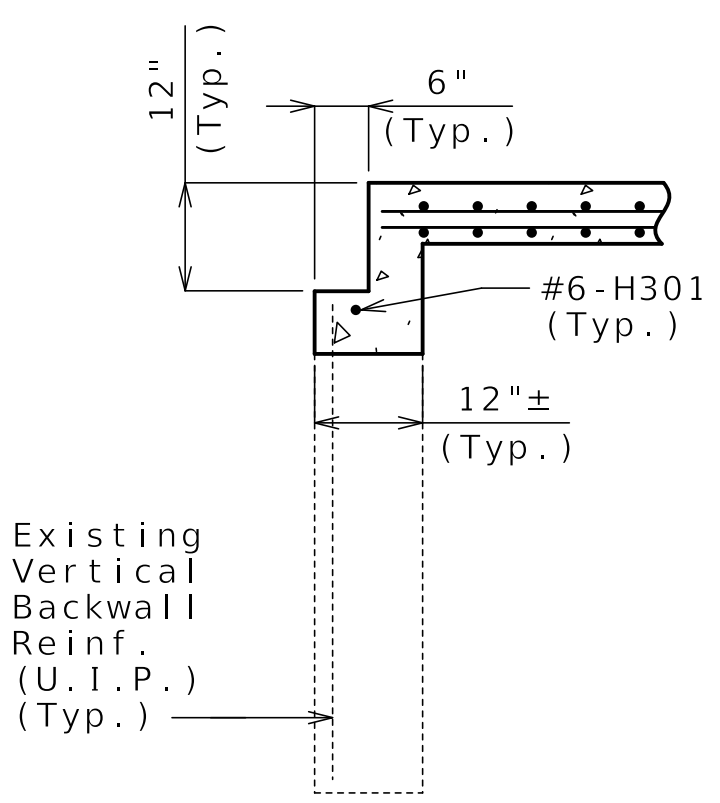
DETAIL A

END BENT NO. 3



SECTION A-A

SECTION B-B



SECTION C-C

Notes:

The exposed and accessible surfaces of the existing structural steel and bearings that will be encased in concrete shall be cleaned with a minimum of one coat of gray epoxy-mastic primer (non-aluminum) in accordance with Sec 1081 to produce a dry fill thickness of not less than 3 mils before concrete is poured. The surface preparation and coating for beams shall extend a minimum of one foot outside the face of the beam encasement. Payment for cleaning and coating steel to be encased in concrete will be considered completely covered by the contract unit price for Slab on Steel.

All concrete and reinforcement is included in the Table of Estimated Quantities for Slab on Steel and will be considered completely covered by the contract unit price for Slab on Steel.

For details and reinforcement of barrier not shown, see Sheets No. 9 & 10.

For notes and details of resin anchor systems, see Sheet No. 2.

The H300 bars are segmented for ease of placement through beam web holes. The total bar length for H300 bars shown in Bill of Reinforcing Steel allows for one lap splice with a length of 3'-10". Actual bar segment lengths to be determined by contractor for ease of installing bars. The contractor may use a mechanical bar splice in lieu of a lap splice. When a mechanical bar splice is used, the actual bar segment length will be determined by the contractor to accommodate manufacturer's recommendations for installation and ease of construction. The cost of furnishing and installing the bar splices will be considered completely covered by the contract unit price for Slab on Steel. No adjustment of the quantity of reinforcing steel will be allowed for the use of mechanical bar splices.

STATE OF MISSOURI

TIMOTHY D. LEAF

NUMBER

PE-2012000778

PROFESSIONAL ENGINEER

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TIMOTHY D. LEAF - CIVIL

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DATE PREPARED

9/15/2025

ROUTE

179

STATE

MO

DISTRICT

BR

SHEET NO.

5

COUNTY

COLE

JOB NO.

JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

X00351

DESCRIPTION

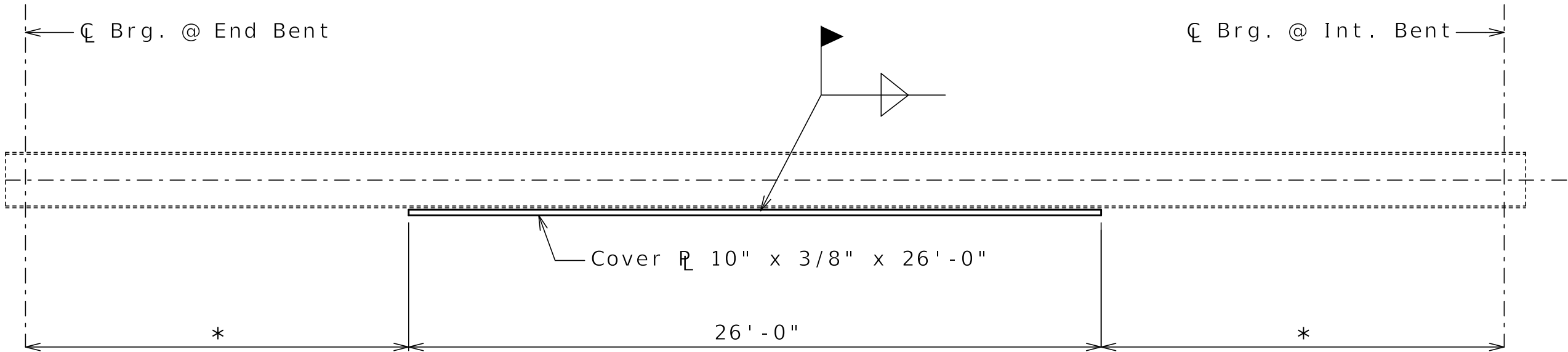
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

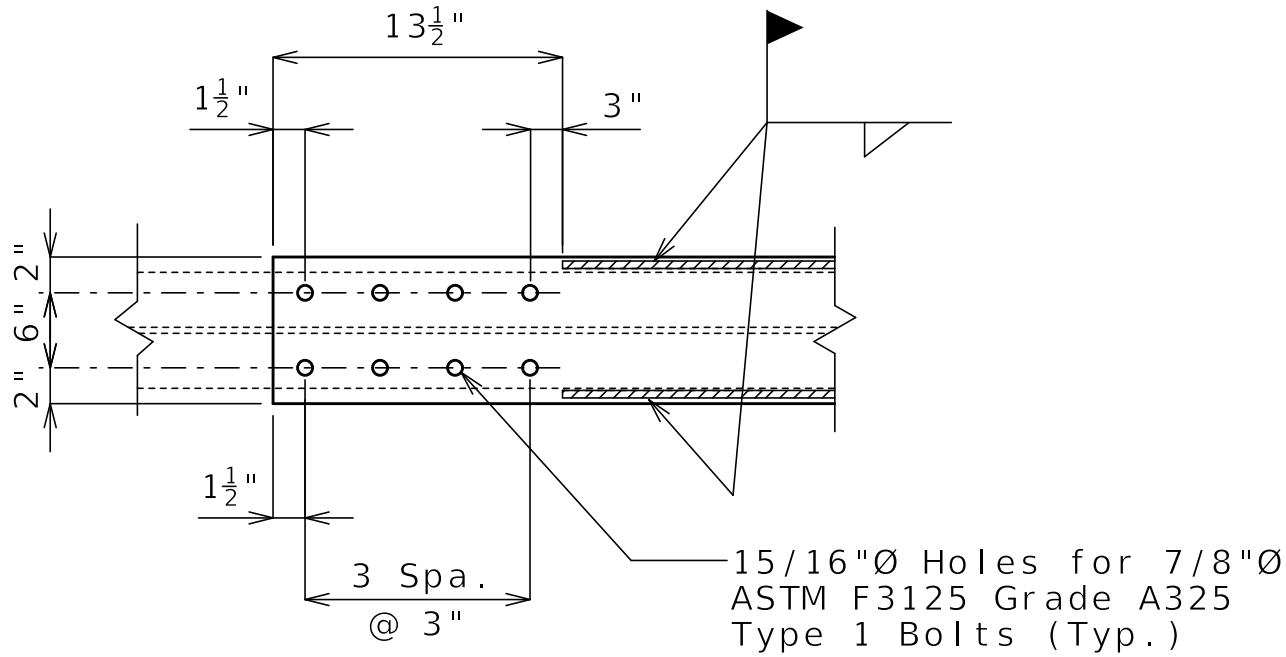
JEFFERSON CITY, MO 65102

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PART ELEVATION OF BEAM SHOWING COVER PLATE INSTALLATION
ALL BEAMS IN SPAN (1-2) AND SPAN (2-3)

- * Girder 1: 11'-10⁷/₈"±
- Girder 2: 11'-7⁵/₈"±
- Girder 3: 11'-4¹/₂"±
- Girder 4: 11'-1³/₈"±



TYPICAL DETAIL OF THE
ENDS OF COVER PLATES
(BOTTOM VIEW)

Notes:

Beam with end-bolted cover plates shall be installed in the following sequence after existing bridge deck is removed:

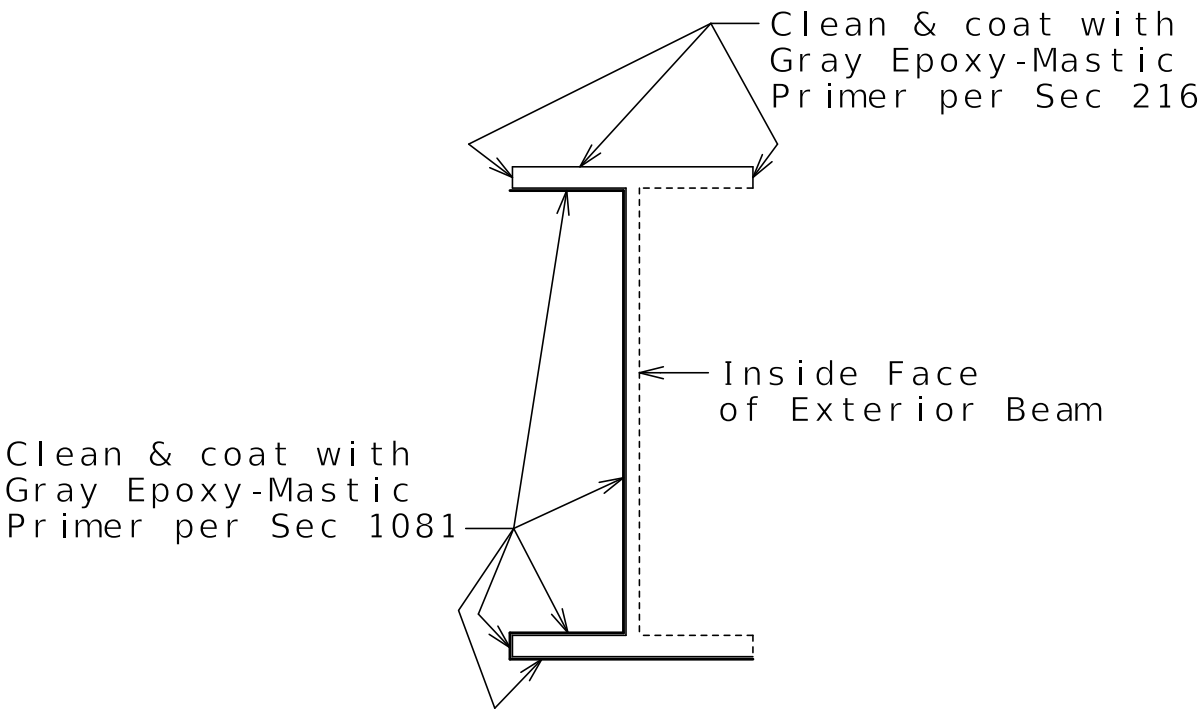
1. Drill holes in cover plate and flange.
2. Clean faying surfaces. (See Special Provisions)
3. Install and tighten bolts.
4. Weld cover plate to flange.

Fabricated Structural Steel shall be ASTM A709 Grade 50, except as noted.

Payment for 2658 pounds of new cover plates complete in place will be considered completely covered by the contract lump sum price for Strengthening Existing Beams.

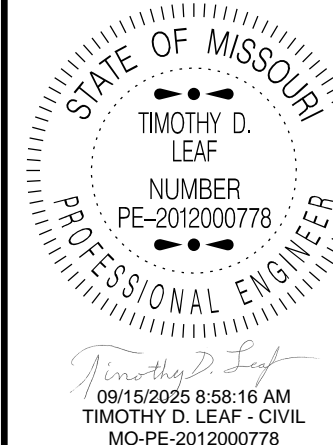
Notch toughness is required for all cover plates.

Contractor shall verify all dimensions in field before finalizing the shop drawings.



OVERCOATING DETAILS
OF EXTERIOR BEAMS

STRENGTHENING EXISTING BEAMS & MISC. DETAILS



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ROUTE 179	STATE MO
DISTRICT BR	SHEET NO. 6
COUNTY COLE	
JOB NO. JCD0074	
CONTRACT ID.	

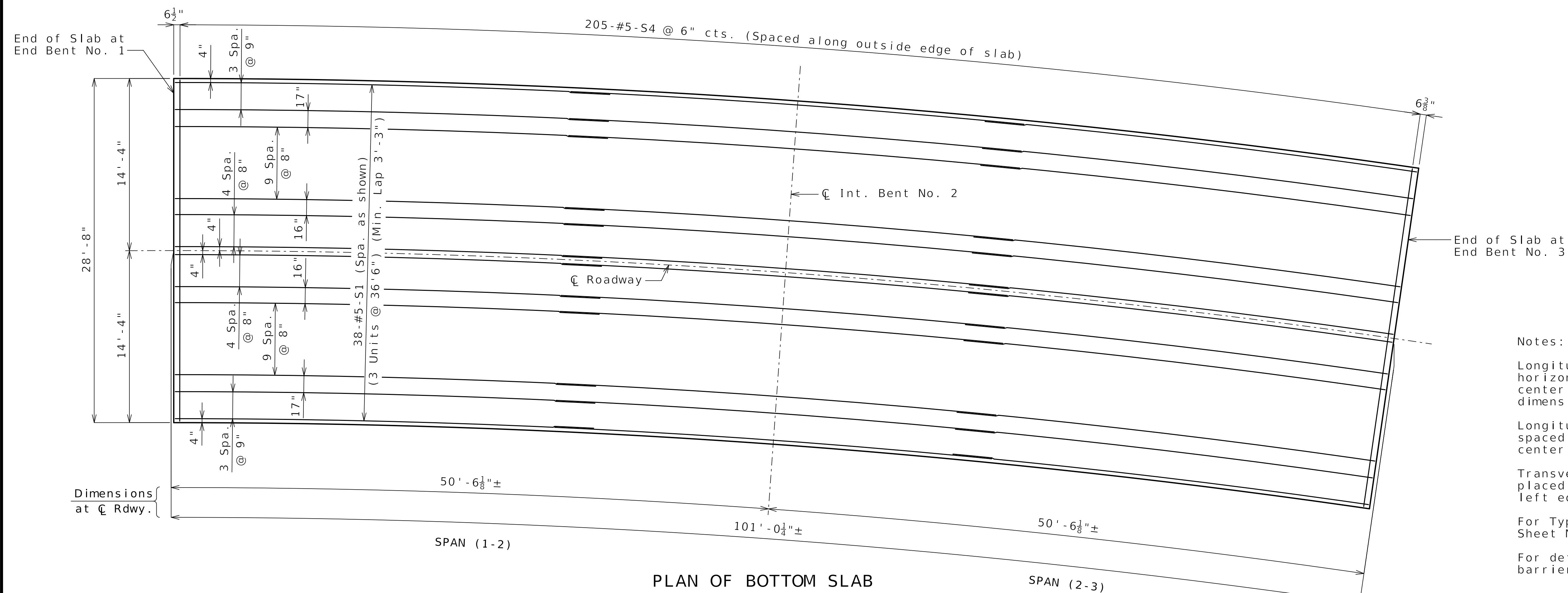
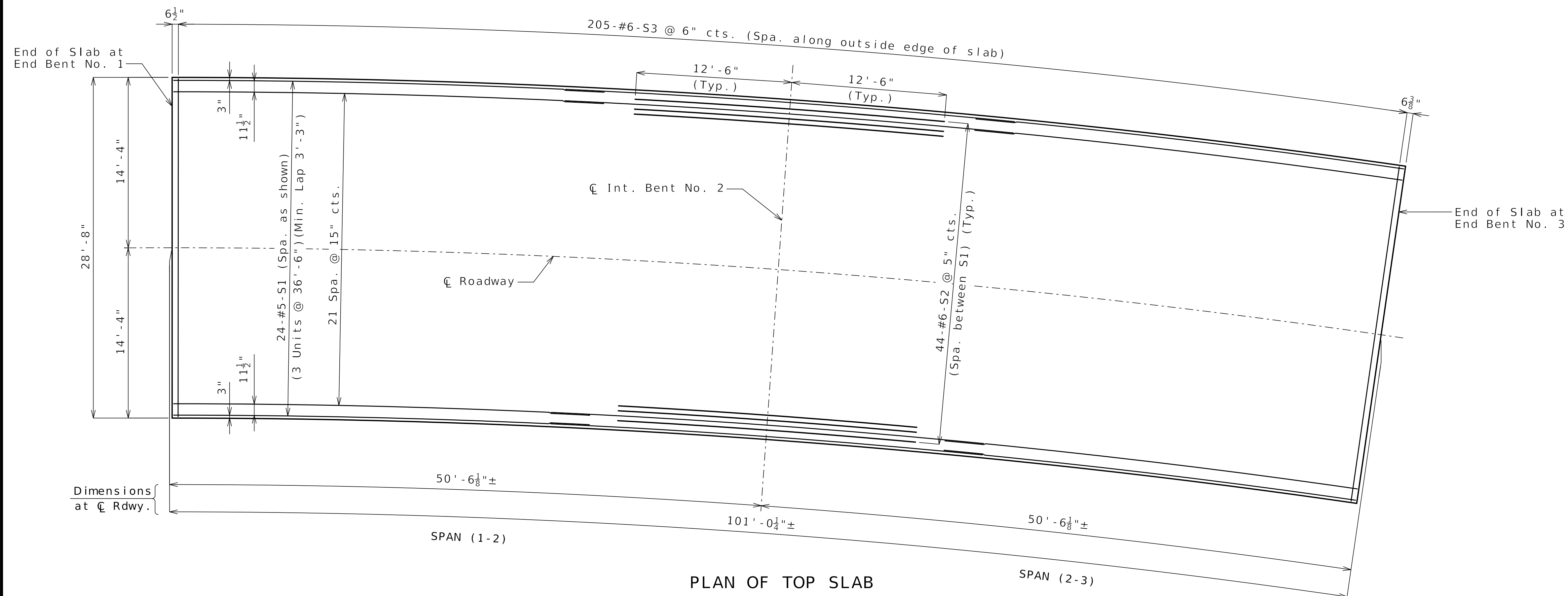
PROJECT NO.
BRIDGE NO. X00351

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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JEFFERSON CITY, MO 65102
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Notes:

Longitudinal slab dimensions are horizontal arc dimensions along centerline of roadway and transverse dimensions are radial.

Longitudinal reinforcement shall be spaced radially and placed parallel to centerline of roadway.

Transverse reinforcement shall be placed radially and spaced along the left edge of slab.

For Typical Section Thru Slab, see
Sheet No. 1.

For details and reinforcement of barrier, see Sheets No. 9 & 10.



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DATE PREPARED

ROUTE	STATE
179	MO

DISTRICT	SHEET NO.
BR	8

COUNTY
COLE

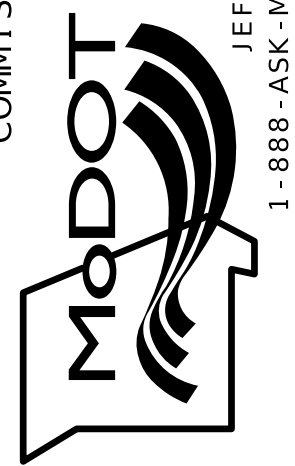
JOB NO.
JCD0074

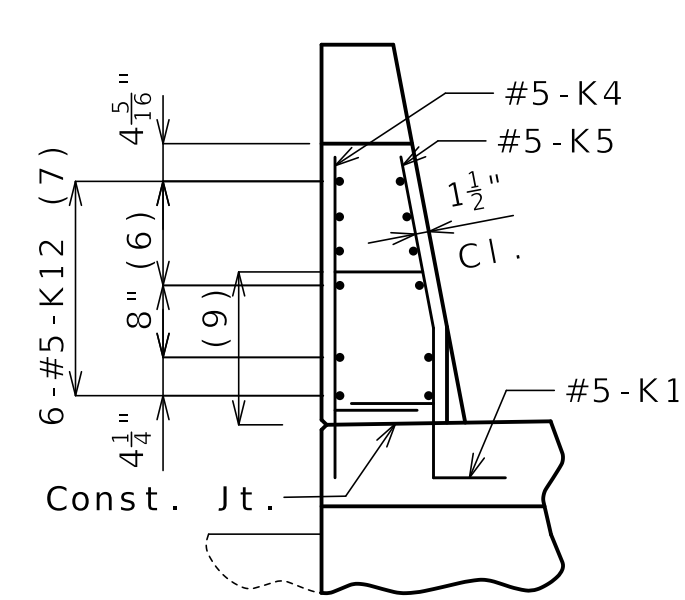
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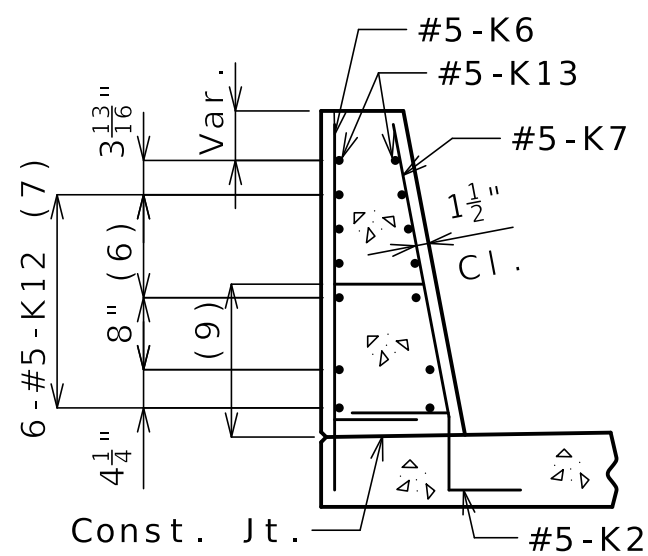
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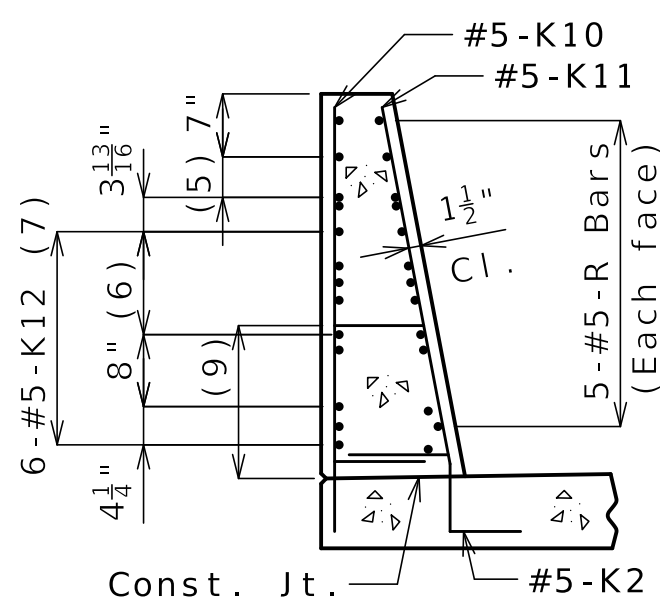




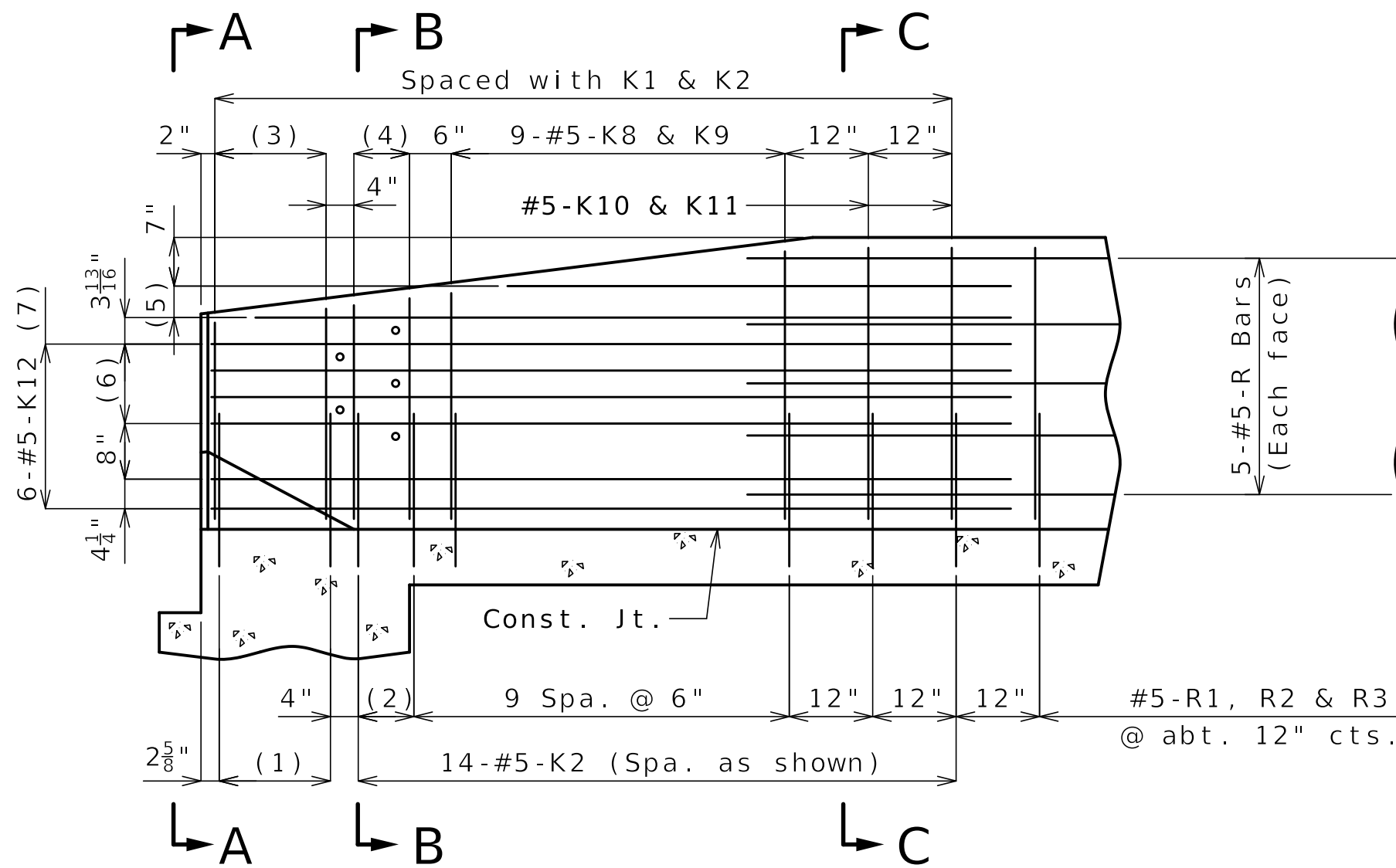
ELEVATION A-A



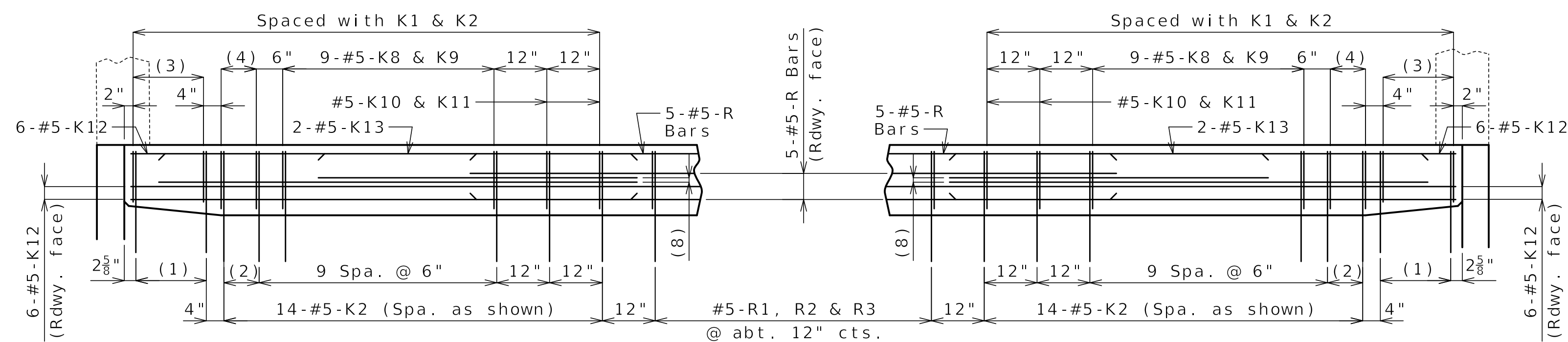
SECTION B-B



SECTION C-C

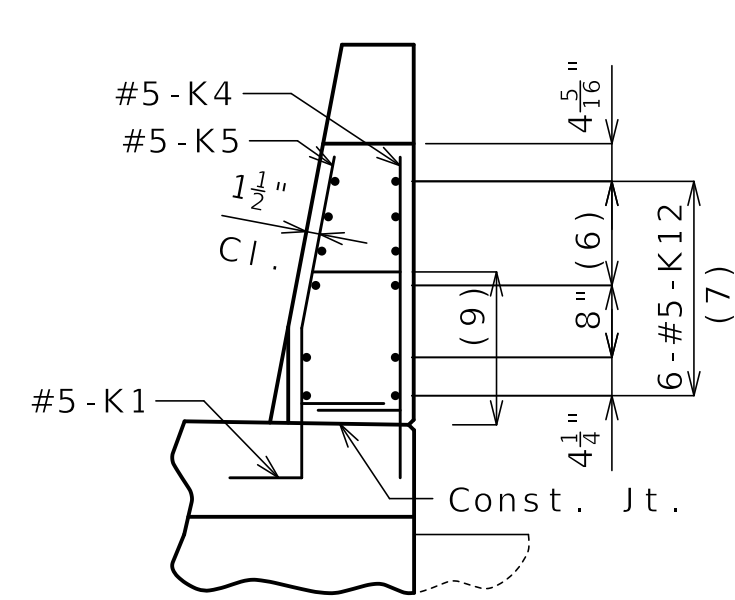


PART ELEVATION

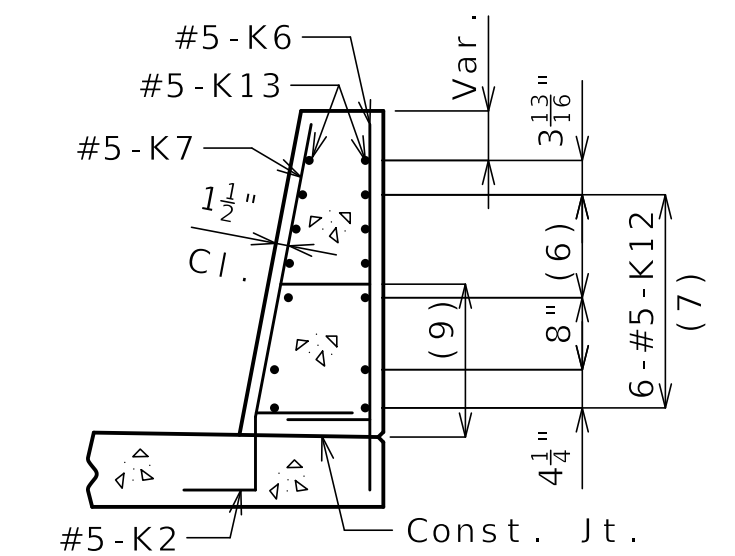


PART PLAN

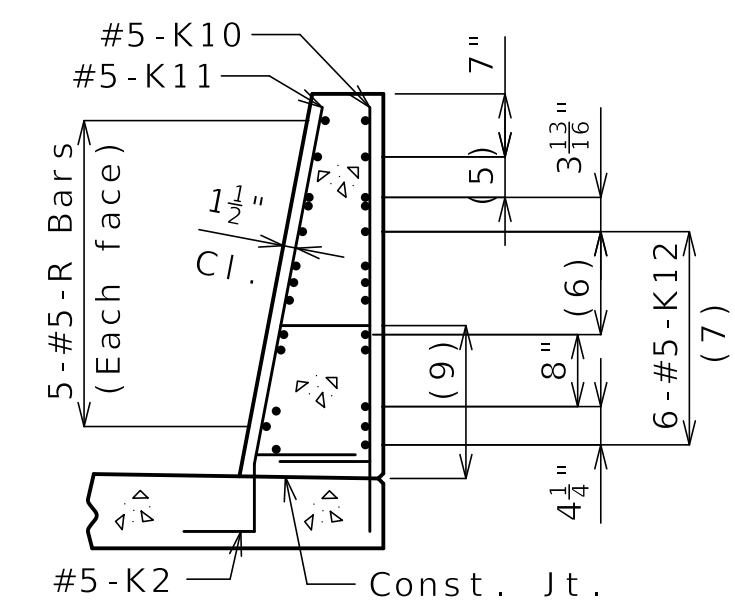
(Top of barrier not shown for clarity.)



ELEVATION D-D



SECTION E-E



SECTION F-F

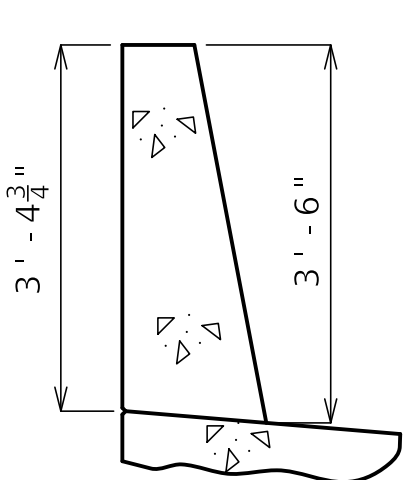
General Notes:

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.

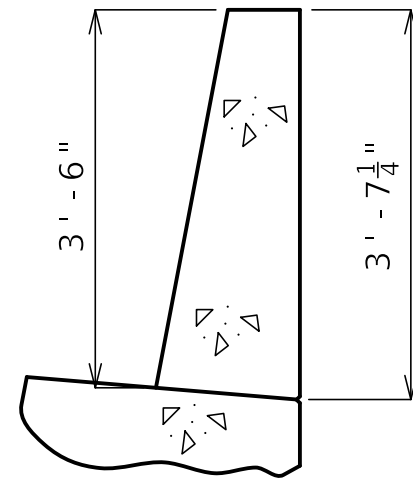
Reinforcing Steel:

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

Use a minimum lap of 2'-6" between horizontal K bars and R bars.

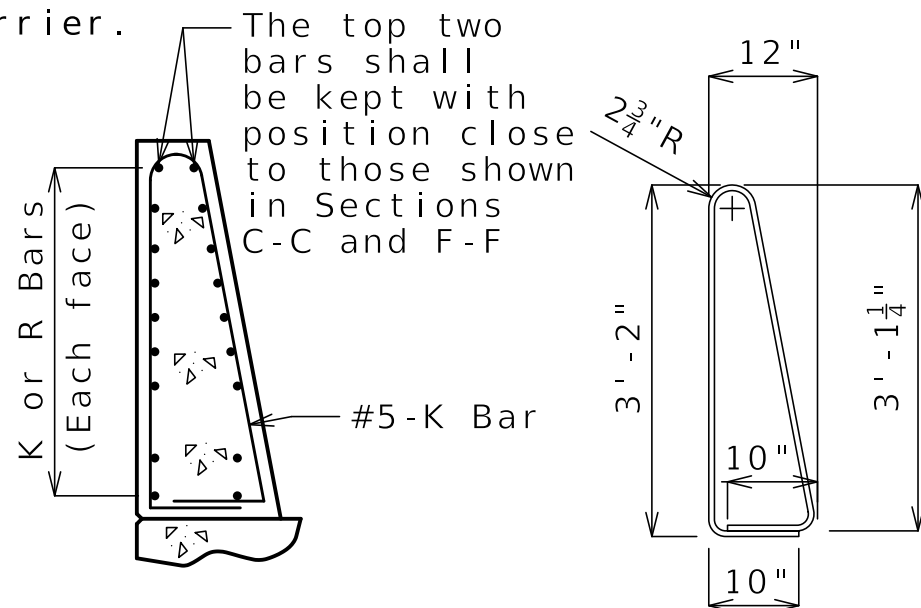


LEFT BARRIER



RIGHT BARRIER

SUPERELEVATION DETAILS

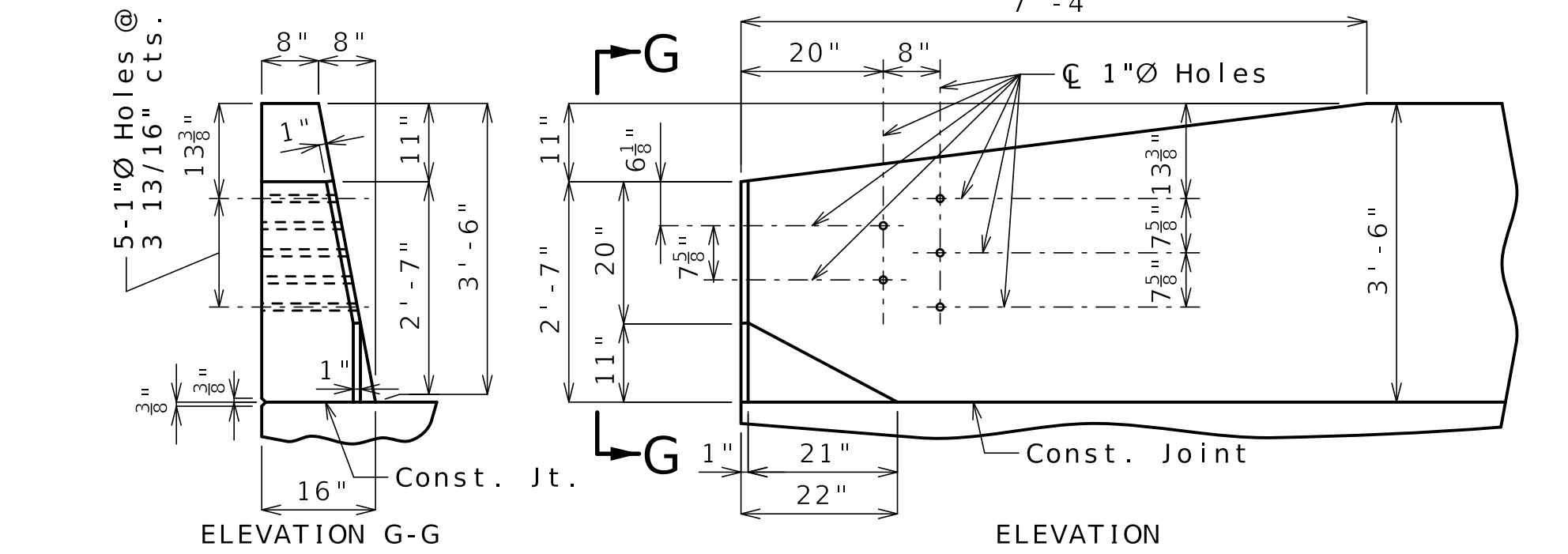


K10-K11 BAR PERMISSIBLE ALTERNATE SHAPE

(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.

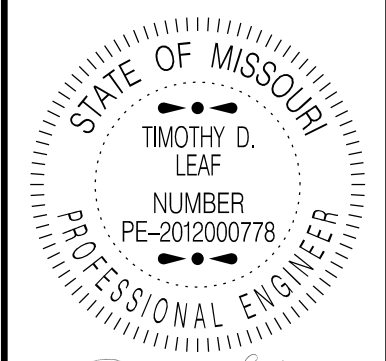


DETAILS OF GUARD RAIL ATTACHMENT

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

TYPE D BARRIER AT END BENTS

(Left barrier shown, right barrier similar except for superelevation.)



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9/15/2025

ROUTE
179

STATE
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BR

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COUNTY
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JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
X00351

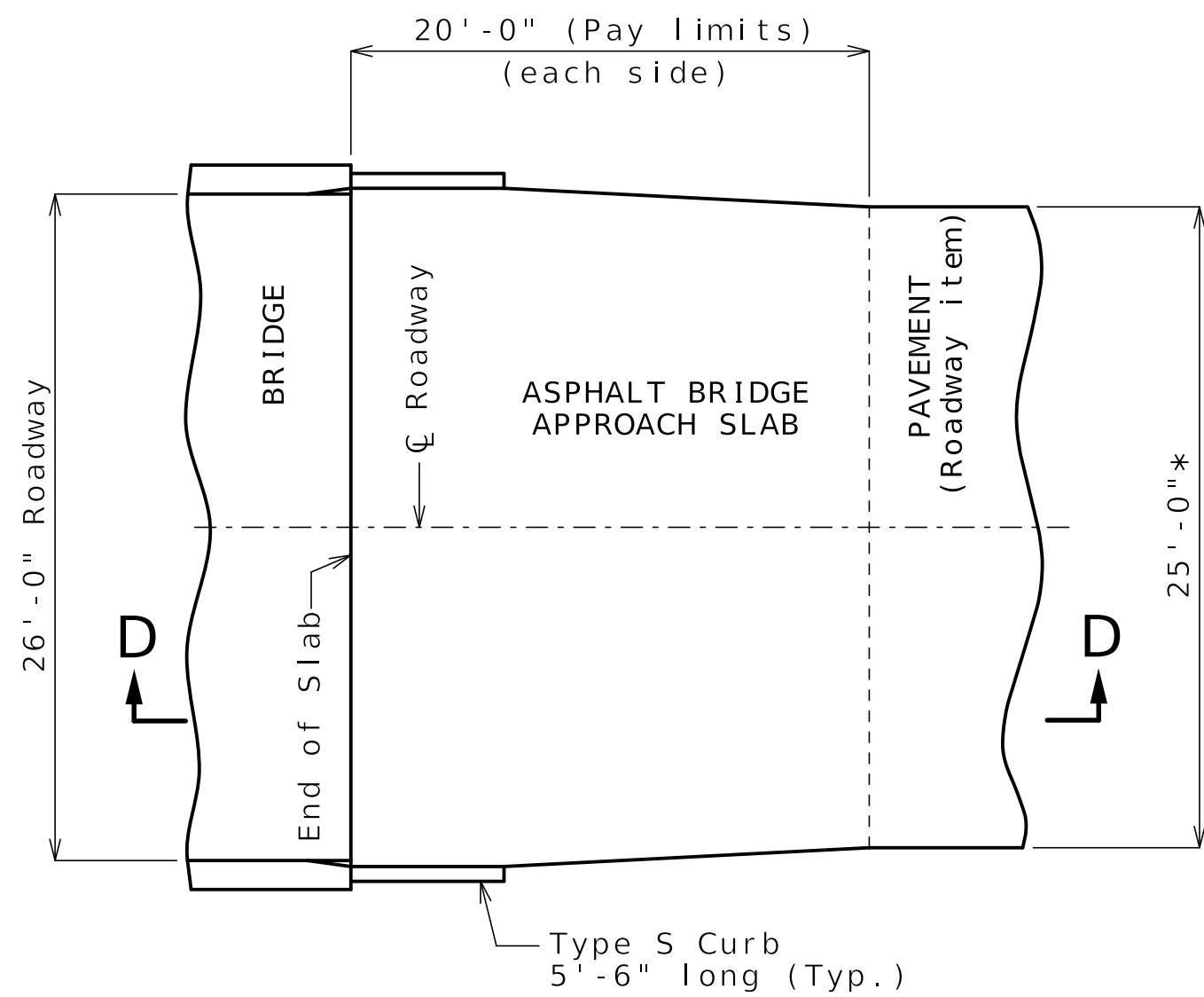
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

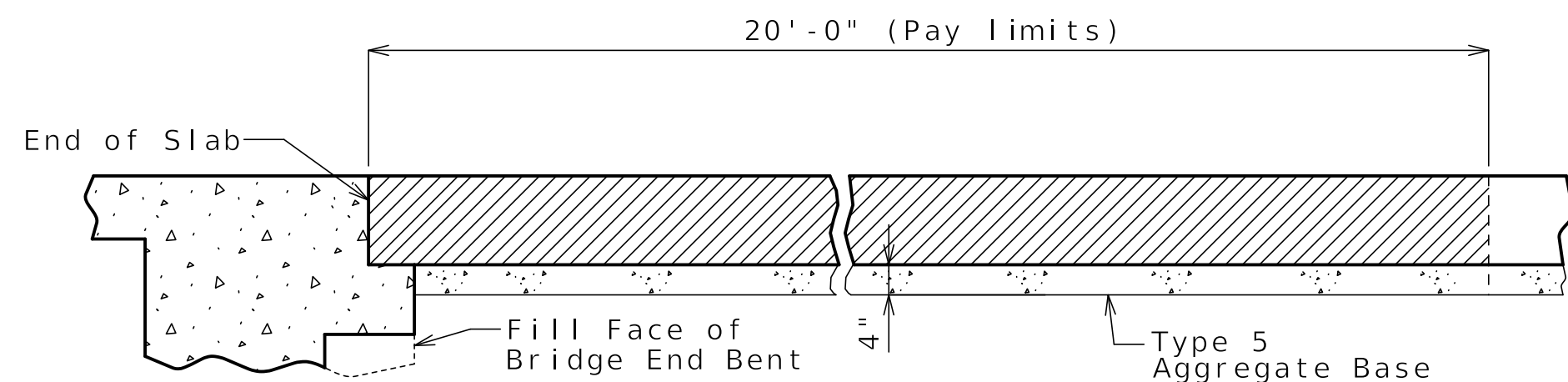
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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MoDOT

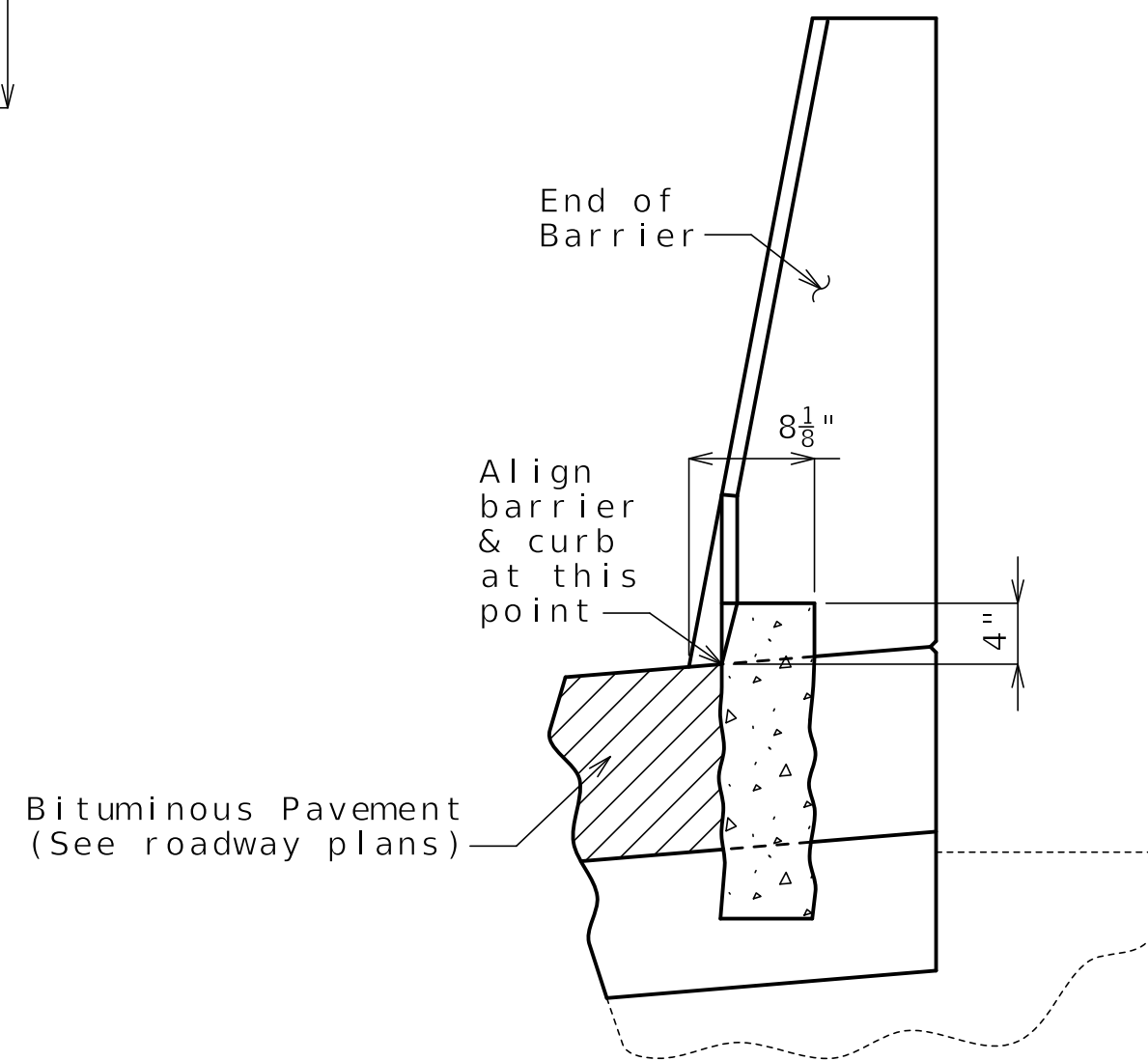


PART PLAN

*Taper approach slab to 25 feet wide where it meets the roadway pavement. See roadway plans for additional detail.



SECTION D-D



4" TYPE S CURB

See Missouri Standard Plan 609.00 for details of Type S curb.

General Notes:

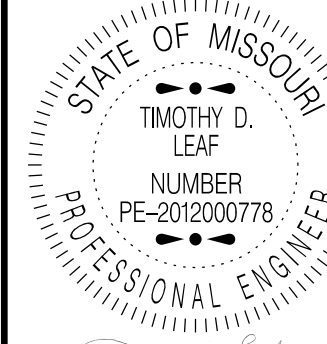
The contractor shall pour and satisfactorily finish the bridge slab before placing the bridge approach slab.

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.

ASPHALT SLAB

BRIDGE APPROACH SLAB (MINOR)



DATE PREPARED
9/15/2025

ROUTE 179 STATE MO

DISTRICT BR SHEET NO. 11

COUNTY COLE

JOB NO. JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO. X00351

DESCRIPTION

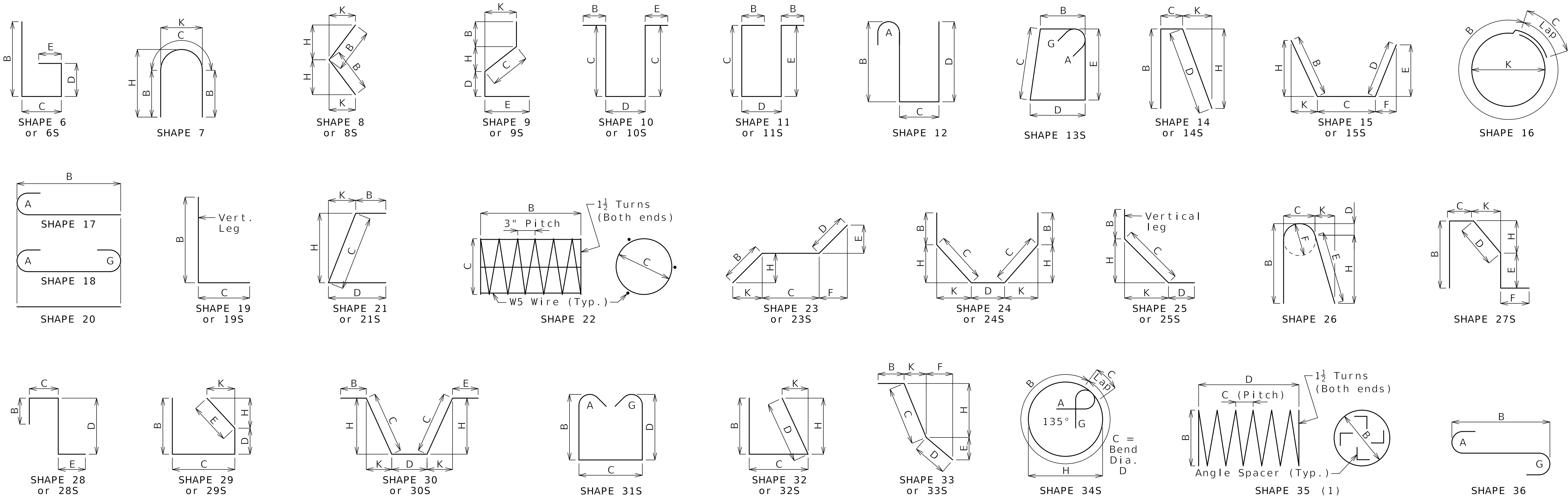
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

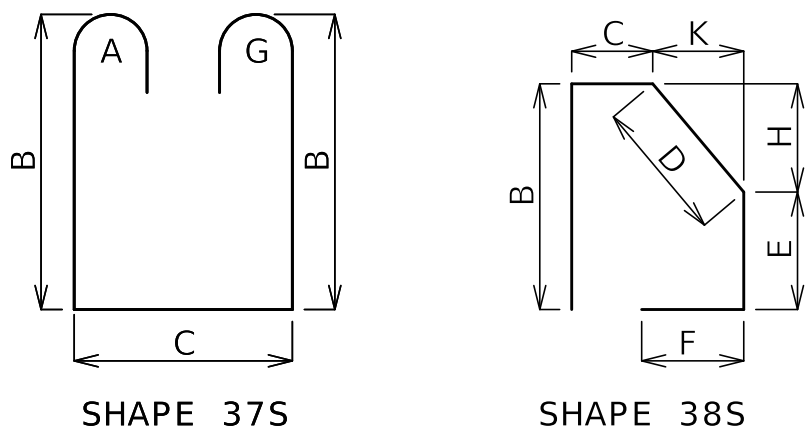
105 WEST CAPITOL JEFFERSON CITY, MO 65102

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

MODOT



Finished Bend Diameters D and Hook Dimensions						
Standard Pin Bend Shapes						
Size	Case	D	A or G		J	
			90°	180°	180°	
#4	1	3"	8"	6"	4"	
#5	1	3 3/4"	10"	7"	5"	
#6	1	4 1/2"	12"	8 1/4"	6"	
#7	2	5 1/4"	14"	9 3/4"	7"	
	3	7"	15"	11 1/2"	8 3/4"	
#8	2	6"	16"	11"	8"	
	3	8"	17"	13 1/4"	10"	
#9	1	9 1/2"	19 1/2"	15 1/2"	11 3/8"	
#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			J
			90°	135°	180°	
#4	2	2"	4 1/2"	4 1/2"	5"	2 7/8"
	3	3"	5"	5 1/4"	6"	3"
#5	2	2 1/2"	5 3/4"	5 3/4"	5 3/4"	3 3/4"
	3	3 3/4"	6 1/4"	6 1/2"	7"	3 7/8"
#6	1	4 1/2"	12"	7 3/4"	8 1/4"	4 5/8"
Applicable for all grades of steel. Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.						



BENDING DIAGRAMS

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	Slab	Barrier	Slip Form	Plain	Epoxy
W5	0	0	0	0	0	0	0
4	0	0	181	0	0	0	181
5	0	0	13,181	5,554	300	0	19,035
6	0	0	11,618	0	0	0	11,618
7	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0
By Type	0	0	24,980	5,554	300	0	30,834

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

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

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

Timothy D. Leaf
09/15/2025 8:59:11 AM
TIMOTHY D. LEAF - CIVIL
MO-PE-2012000778

DATE PREPARED
9/15/2025

ROUTE
179

DISTRICT
BR

STATE
MO

SHEET NO.
12

COUNTY
COLE

JOB NO.
JCD0074

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
X00351

DESCRIPTION

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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