DESIGN DESIGNATION

A.A.D.T. - 2026 = 2708
A.A.D.T. - 2046 = 3885
D.H.V. = 8.5%
T = 23.67%
V = 30 TO 55 M.P.H.
D = 47% EAST/53% WEST
FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

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	SAN	
FIRE HYDRANT	HYD	
WATER VALVE	WV	
WATER METER	WM	
DROP INLET	DI	
DITCH BLOCK		
GROUND MOUNTED SIGN	SIGN	
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL	PED	
FENCE		
CHAIN LINK	-V-	
WOVEN WIRE	-X-	
GATE POST		
BENCHMARK	BM	

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED

STATE HIGHWAY

ST. FRANCOIS COUNTY
RT 32



KEY MAP
LOCATION OF ST. FRANCOIS COUNTY



BEGIN PROJECT (LOG MILE 239.111) — PAVEMENT AND BRIDGE RESURFACING — END PROJECT (LOG MILE 246.065)

ROUTE 32 FROM HIGH ST TO THE SOUTH INTERSECTION OF BUSINESS 32

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.

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS) (4 SHEETS)	2
QUANTITIES (QU) (5 SHEETS)	3
PLAN-PROFILE (PP)	4-8
SPECIAL SHEETS (SS)	9-17
TRAFFIC CONTROL SHEETS (TC)	18
BRIDGE DRAWINGS (B)	
BRIDGE A2668	1-7
BRIDGE A2670	1-7

LENGTH OF PROJECT

BEGINNING OF PROJECT	LOG MILE 239.111
END OF PROJECT	LOG MILE 246.065
APPARENT LENGTH	6.954 MILES
PAVING EXCEPTIONS:	LOG MILE 239.495 TO LOG MILE 239.500 (RAILROAD EXCEPTION)
	LOG MILE 244.241 TO LOG MILE 244.243 (RAILROAD EXCEPTION)

(LOG MILES MEASURED FROM THE EB DIRECTION OF MO 32)

FOR INFORMATION ONLY
ESTIMATED DISTURBED ACRES 0 ACRES

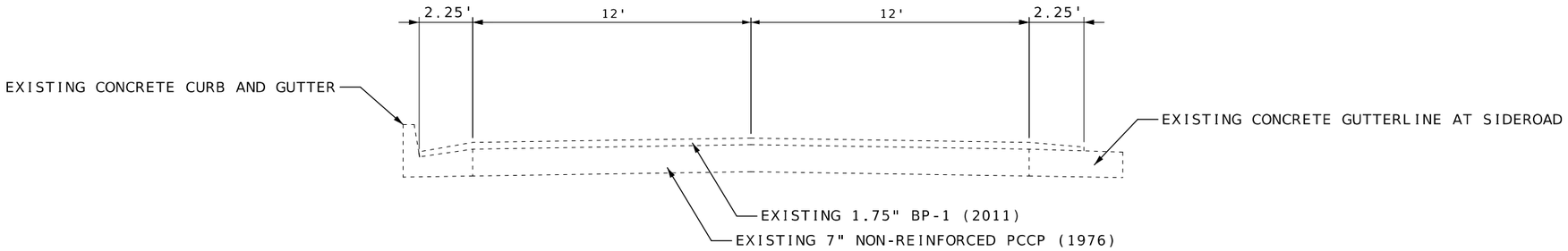
STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
06/24/2026 4:05:07 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED: 8/24/2026
ROUTE: 32 | STATE: MO
DISTRICT: SE | SHEET NO.: 1
COUNTY: ST. FRANCOIS
JOB NO.: J9P3852
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

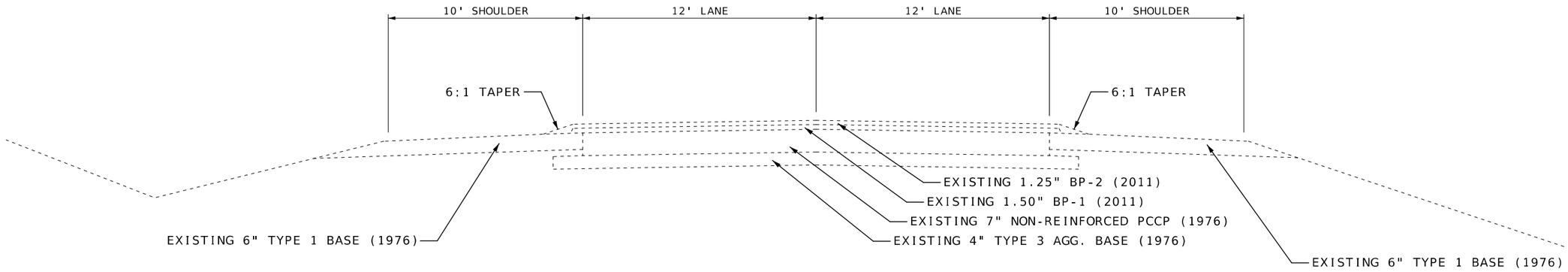
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TITLE SHEET



EXISTING TYPICAL SECTION
MO 32
LM 239.111 TO LM 239.495
LM 239.500 TO LM 239.896

EXCEPTION
RXR CROSSING - LM 239.495 TO LM 239.500



EXISTING TYPICAL SECTION
MO 32
LM 239.927 TO LM 241.860
LM 241.921 TO LM 244.241
LM 244.243 TO LM 244.426
LM 244.477 TO LM 246.065

EXCEPTIONS
BR A2668 - LM 241.860 TO LM 241.921
RXR CROSSING - LM LM 244.241 TO LM 244.243
BR A2670 - LM 244.426 TO LM 244.477

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/11/2026 11:58:19 AM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	2

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

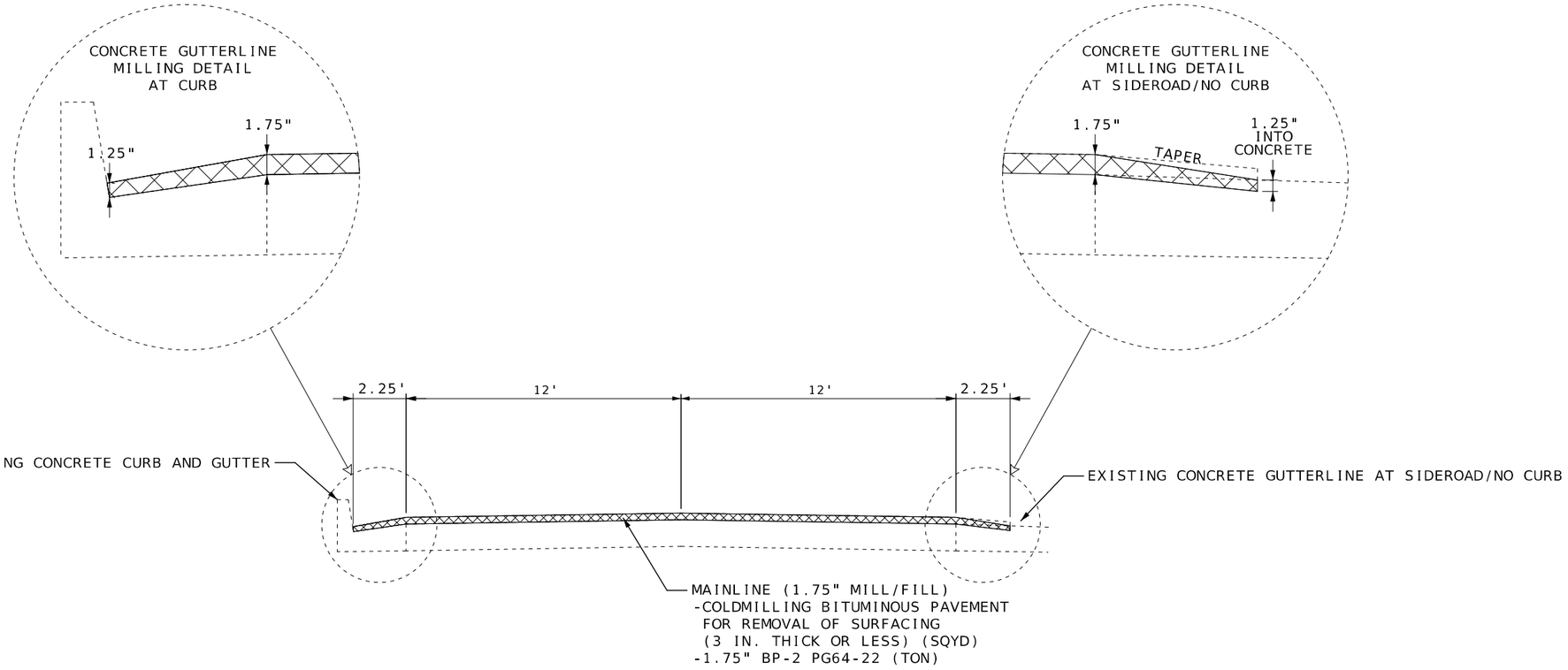
PROJECT NO.

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 SECTIONS



PROPOSED TYPICAL SECTION #1
MO 32

LM 239.111 TO LM 239.495
LM 239.500 TO LM 239.896

EXCEPTION
RXR CROSSING - LM 239.495 TO LM 239.500

LEGEND

COLDMILLING

DRAWING NOT TO SCALE.

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
8/11/2026 11:58:41 AM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	2

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

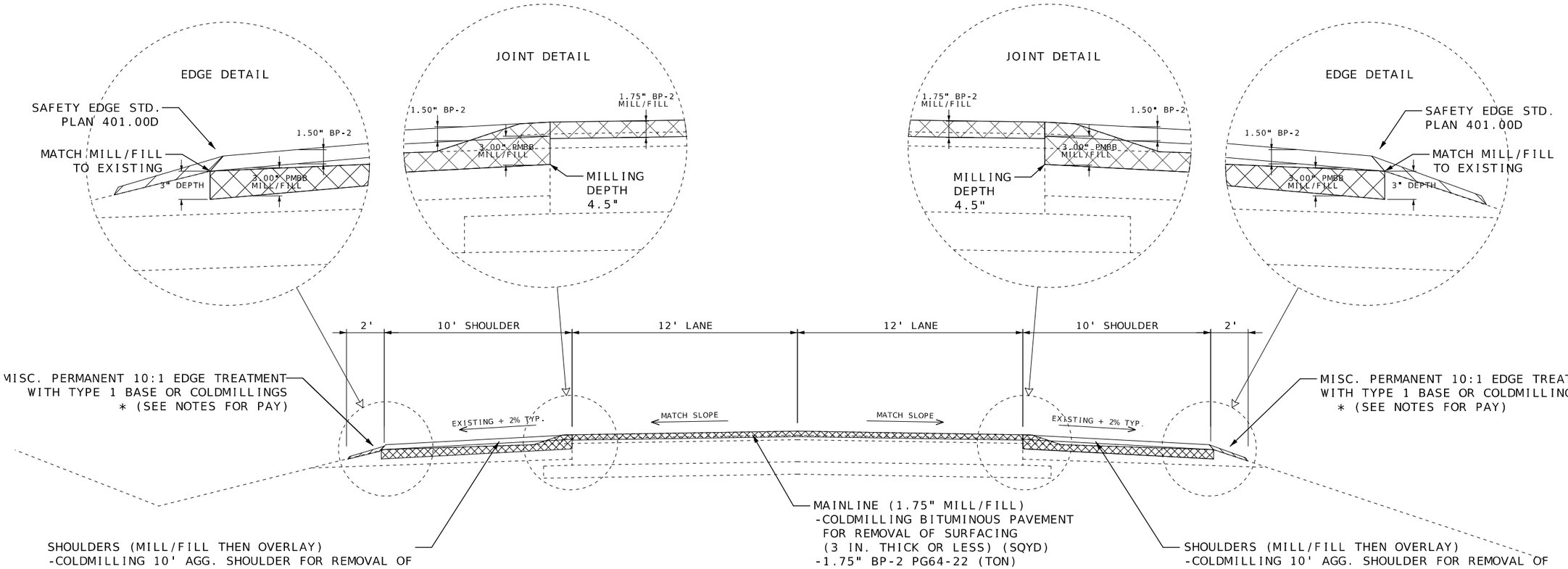
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PROPOSED
TYPICAL SECTIONS



SHOULDERS (MILL/FILL THEN OVERLAY)
-COLDMILLING 10' AGG. SHOULDER FOR REMOVAL OF SURFACING (3IN. THICK OR LESS) (SQYD)
-10' FILL WITH 3.00" PMBB PG64-22 (TON)
THEN
-10' OVERLAY WITH 1.50" BP-2 PG64-22 (TON)

MAINLINE (1.75" MILL/FILL)
-COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS) (SQYD)
-1.75" BP-2 PG64-22 (TON)

SHOULDERS (MILL/FILL THEN OVERLAY)
-COLDMILLING 10' AGG. SHOULDER FOR REMOVAL OF SURFACING (3IN. THICK OR LESS) (SQYD)
-10' FILL WITH 3.00" PMBB PG64-22 (TON)
THEN
-10' OVERLAY WITH 1.50" BP-2 PG64-22 (TON)

PROPOSED TYPICAL SECTION #2
MO 32

LM 239.896* TO LM 239.927
(* EB SHLDR BEGINS AT LM 239.864)

ORDER OF PLACEMENT
1.) PMBB SHOULDER
2.) BP-2 MAINLINE
3.) BP-2 SHOULDER

LEGEND

COLDMILLING

PERM. EDGE TREATMENT

NOTES

(1) MILL EXISTING SHOULDER TO 4" BELOW MAINLINE GRADE. MATCH MAINLINE CROSS-SLOPE.

DRAWING NOT TO SCALE.

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/25/2026 7:27:00 AM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/25/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	2

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

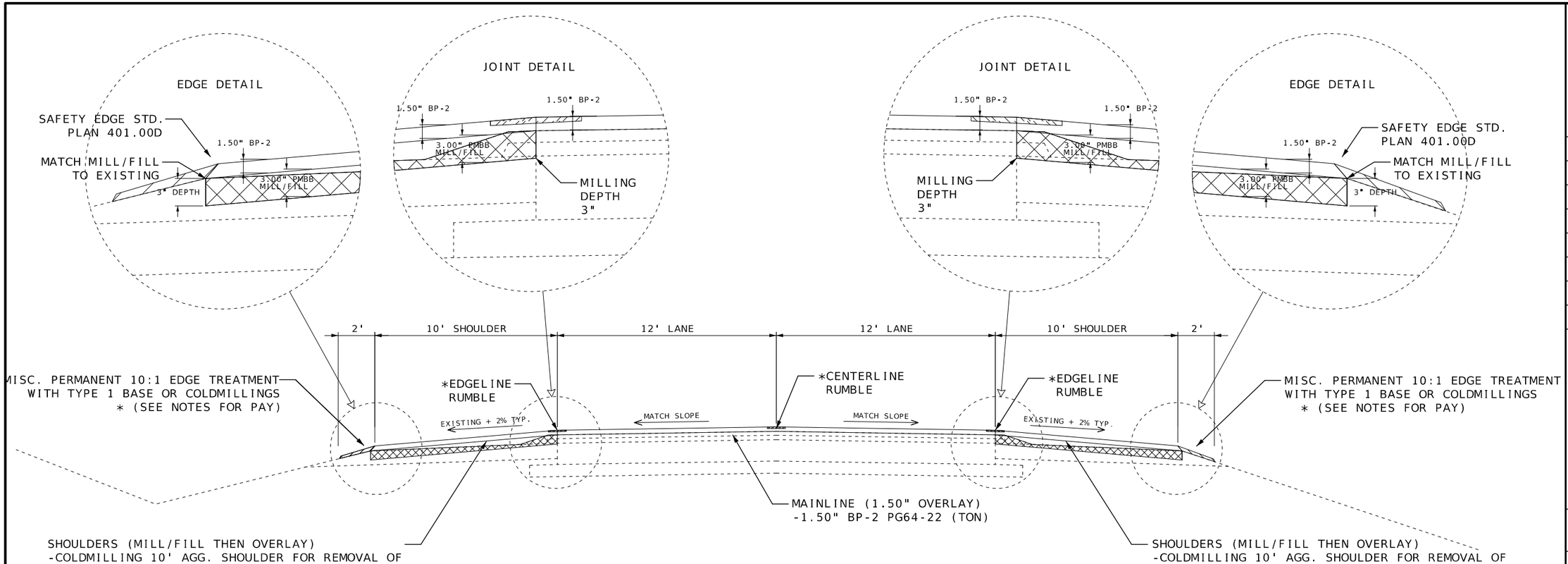
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

PROPOSED
TYPICAL SECTIONS



PROPOSED TYPICAL SECTION #3
MO 32
LM 239.927 TO LM 241.860
LM 241.921 TO LM 244.241
LM 244.243 TO LM 244.426
LM 244.477 TO LM 246.065

EXCEPTIONS
BR A2668 - LM 241.860 TO LM 241.921
RXR CROSSING - LM LM 244.241 TO LM 244.243
BR A2670 - LM 244.426 TO LM 244.477

* OMIT RUMBLES *
LM 239.927 TO LM 240.475

ORDER OF PLACEMENT
1.) PMBB SHOULDER
2.) BP-2 MAINLINE
3.) BP-2 SHOULDER

LEGEND

COLDMILLING

PERM. EDGE TREATMENT

NOTES

-THE "MISC. PERMANENT 10:1 EDGE TREATMENT WITH TYPE 1 BASE OR COLDMILLINGS" PAY ITEM, PAID PER STA., INCLUDES:
* ALL COSTS NECESSARY TO HAUL, MOVE, STORE, AND PLACE AS PERMANENT EDGE TREATMENT, THE COLDMILLINGS GENERATED FROM THE SHOULDER MILLING OPERATION.
* ALL COSTS NECESSARY TO PROCURE, HAUL, STORE, AND PLACE AS PERMANENT EDGE TREATMENT, TYPE 1 BASE AGGREGATE.

DRAWING NOT TO SCALE.

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/11/2026 11:59:49 AM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	2

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

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)

PROPOSED
TYPICAL SECTIONS

MAINLINE - PAVEMENT AND MILLING QUANTITIES

REMARKS	BEGIN LOG MILE	END LOG MILE	ROUTE	LENGTH FT	WIDTH FT	PAVED AREA SF	1.75" BIT. PVMT MILL/FILL BP-2 (2.047 TONS/CY) TONS	1.5" BIT. PVMT OVERLAY BP-2 (2.047 TONS/CY) TONS	TACK COAT LOW TRACKING OR NON TRACKING 0.10 GAL/SY GAL	COLDMILLING BIT. PVMT 3 IN. THICK OR LESS SY	MODIFIED COLDMILLING FOR DEPTH TRANSITION SY
MILL/FILL	239.111	239.495	32	2028	28.5	57798	636.8	-	642.2	6422	-
EXCEPTION - RXR CROSSING	239.495	239.500	32	-	-	-	-	-	-	-	-
MILL/FILL	239.500	239.899	32	2107	28.5	60050	661.7	-	667.2	6672	-
150' DEPTH TRANSITION	239.899	239.927	32	150	24	3600	39.7	-	40.0	-	400
OVERLAY	239.927	241.831	32	10053	24	241272	-	2278.7	2680.8	-	-
150' DEPTH TRANSITION	241.831	241.860	32	150	24	3600	-	34.0	40.0	-	400
EXCEPTION - BRIDGE A2668	241.860	241.921	32	-	-	-	-	-	-	-	-
150' DEPTH TRANSITION	241.921	241.949	32	150	24	3600	-	34.0	40.0	-	400
OVERLAY	241.949	244.213	32	11954	24	286896	-	2709.6	3187.7	-	-
150' DEPTH TRANSITION	244.213	244.241	32	150	24	3600	-	34.0	40.0	-	400
EXCEPTION - RXR CROSSING	244.241	244.243	32	-	-	-	-	-	-	-	-
150' DEPTH TRANSITION	244.243	244.271	32	150	24	3600	-	34.0	40.0	-	400
OVERLAY	244.271	244.398	32	671	24	16104	-	152.1	178.9	-	-
150' DEPTH TRANSITION	244.398	244.426	32	150	24	3600	-	34.0	40.0	-	400
EXCEPTION - BRIDGE A2670	244.426	244.477	32	-	-	-	-	-	-	-	-
150' DEPTH TRANSITION	244.477	244.505	32	150	24	3600	-	34.0	40.0	-	400
OVERLAY	244.505	246.037	32	8089	24	194136	-	1833.5	2157.1	-	-
150' DEPTH TRANSITION	246.037	246.065	32	150	24	3600	-	34.0	40.0	-	400
IRREGULARITIES - 60 TONS/LANE MILE	239.927	246.065	32	-	-	-	-	736.56	-	-	-
						SUBTOTAL	1338.2	7948.5	9833.9	13094	3200
						SHOULDERS SUBTOTAL	18112.2		3472.8	68434	-
						ENTRANCES SUBTOTAL	238.9		117.3	-	938
						PAY TOTAL	27638		13424	81528	4138

NOTE: SEE ENTRANCE QUANTITIES AND SHOULDER QUANTITIES FOR ADDITIONAL ENTRANCE AND SHOULDER QUANTITIES

SHOULDER - QUANTITIES

REMARKS	RTE 32 EB SHLDR	RTE 32 WB SHLDR	BEGIN LOG MILE	END LOG MILE	LENGTH FT	WIDTH FT	PAVED AREA SF	3.00" BIT. PVMT PMBB (PG64-22) (2.077 TONS/CY) TONS	6.00" BIT. PVMT BP-1 (PG64-22) (2.077 TONS/CY) TONS	1.50" BIT. PVMT BP-2 (PG64-22) (2.047 TONS/CY) TONS	TACK COAT LOW TRACKING OR NON TRACKING (0.05 GAL/SY) GAL	COLDMILLING BIT. PVMT GREATER THAN 3" THICK SY	COLDMILLING 10' AGG. SHLDR FOR REMOVAL OF SURFACE 3" OR LESS SY	MISC. PERMANENT 10:1 EDGE TREATMENT STA
TYPICAL SECTION 2	X		239.864	239.927	333	10	3330	64.0	-	31.6	18.5	-	370	3.3
TYPICAL SECTION 3	X		239.927	241.822	10006	10	100060	1924.3	-	948.3	555.9	-	11117	100.1
SPECIAL SHEETS / BRIDGE WORK	X		241.822	241.860	200	10	2000	-	76.9	19.0	-	222	223	2.0
EXCEPTION - BRIDGE A2668	X		241.860	241.921	322	-	-	-	-	-	-	-	-	-
SPECIAL SHEETS / BRIDGE WORK	X		241.921	241.959	200	10	2000	-	48.1	19.0	-	139	223	2.0
TYPICAL SECTION 3	X		241.959	244.241	12049	10	120490	2317.2	-	1141.9	669.4	-	13388	120.5
EXCEPTION - RAILROAD CROSSING	X		244.241	244.243	-	-	-	-	-	-	-	-	-	-
TYPICAL SECTION 3	X		244.243	244.388	766	10	7660	147.3	-	72.6	42.6	-	851	7.7
SPECIAL SHEETS / BRIDGE WORK	X		244.388	244.426	200	10	2000	-	76.9	19.0	-	222	223	2.0
EXCEPTION - BRIDGE A2670	X		244.426	244.477	269	-	-	-	-	-	-	-	-	-
SPECIAL SHEETS / BRIDGE WORK	X		244.477	244.515	200	10	2000	-	48.1	19.0	-	139	223	2.0
TYPICAL SECTION 3	X		244.515	246.065	8184	10	81840	1573.9	-	775.6	454.7	-	9093	81.8
											-			
TYPICAL SECTION 2		X	239.896	239.927	164	10	1640	31.5	-	15.5	9.1	-	182	1.6
TYPICAL SECTION 3		X	239.927	241.822	10006	10	100060	1924.3	-	948.3	555.9	-	11117	100.1
SPECIAL SHEETS / BRIDGE WORK		X	241.822	241.860	200	10	2000	-	76.9	19.0	-	222	223	2.0
EXCEPTION - BRIDGE A2668		X	241.860	241.921	322	-	-	-	-	-	-	-	-	-
SPECIAL SHEETS / BRIDGE WORK		X	241.921	241.959	200	10	2000	-	48.1	19.0	-	139	223	2.0
TYPICAL SECTION 3		X	241.959	244.241	12049	10	120490	2317.2	-	1141.9	669.4	-	13388	120.5
EXCEPTION - RAILROAD CROSSING		X	244.241	244.243	-	-	-	-	-	-	-	-	-	-
TYPICAL SECTION 3		X	244.243	244.388	766	10	7660	147.3	-	72.6	42.6	-	851	7.7
SPECIAL SHEETS / BRIDGE WORK		X	244.388	244.426	200	10	2000	-	76.9	19.0	-	222	223	2.0
EXCEPTION - BRIDGE A2670		X	244.426	244.477	269	-	-	-	-	-	-	-	-	-
SPECIAL SHEETS / BRIDGE WORK		X	244.477	244.515	200	10	2000	-	48.1	19.0	-	139	223	2.0
TYPICAL SECTION 3		X	244.515	246.065	8184	10	81840	1573.9	-	775.6	454.7	-	9093	81.8
EXIST PAVED SHLDR (18 X 140')	X	X	239.864	246.065	-2520	10	-25200	-484.6	-	-	-	-	-2800	-
EXIST ENTRANCES (57 X 70')	X	X	239.864	246.065	-3990	-	-	-	-	-	-	-	-	-39.9
							SUBTOTAL	11536.3	500.0	6075.9	3472.8	1444	68434	601.2
							PAY TOTAL	*	*	*	*	1444	*	601

*SEE MAINLINE PAVEMENT AND MILLING QUANTITIES TABLE FOR PAY TOTALS

SUMMARY OF QUANTITIES

SHEET 1 OF 5

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/11/2026 12:08:36 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED 8/10/2026

ROUTE 32 | STATE MO

DISTRICT SE | SHEET NO. 3

COUNTY ST. FRANCOIS

JOB NO. J9P3852

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)

ENTRANCE REPAVING QUANTITIES

LOG MILE	ROUTE	ENTRANCE NAME	OFFSET	DISTANCE (D) FT	LENGTH (L) FT	THICKNESS INCHES	EXISTING ENTRANCE TYPE	BIT. PVMT BP-2 (PG64-22) (2.047 TONS/CY) TONS	GRAVEL (A) OR CRUSHED STONE (B) SY	TACK COAT LOW TRACKING OR NON TRACKING (0.05 GAL/SY) GAL	MODIFIED MILLING FOR DEPTH TRANSITION SY	CONCRETE PAVEMENT (8 IN. NON RENF.) SY	TYPE 5 AGGREGATE FOR BASE SY	REMARKS
239.544	32	PRIVATE ENTRANCE	LT	16	32	8.00	CONCRETE					56.89	56.89	
239.974	32	PRIVATE ENTRANCE	LT	2	40	3.00	ROCK	1.52	4.44					
239.976	32	INDIAN TRAIL DR	RT	2	100	1.50	ASPHALT	1.90		1.11	11.1			
239.982	32	PRIVATE ENTRANCE	LT	2	45	1.50	ASPHALT	0.85		0.50	5			
239.996	32	PRIVATE ENTRANCE	RT	2	55	1.50	ASPHALT	1.04		0.61	6.1			
240.002	32	PRIVATE ENTRANCE	LT	2	72	1.50	ASPHALT	1.36		0.80	8			
240.016	32	PRIVATE ENTRANCE	LT	2	45	1.50	ASPHALT	0.85		0.50	5			
240.026	32	PRIVATE ENTRANCE	LT	2	25	3.00	ROCK	0.95	2.78	0.28				
240.032	32	PARKING LOT ENTR.	RT	2	55	1.50	ASPHALT	1.04		0.61	6.1			
240.056	32	PRIVATE ENTRANCE	LT	2	35	3.00	ROCK	1.33	3.89	0.39				
240.071	32	PARKING LOT ENTR.	RT	2	55	1.50	ASPHALT	1.04		0.61	6.1			
240.072	32	PRIVATE ENTRANCE	LT	2	32	3.00	ROCK	1.21	3.56	0.36				
240.101	32	PRIVATE ENTRANCE	LT	2	40	3.00	ROCK	1.52	4.44	0.44				
240.104	32	PARKING LOT ENTR.	RT	2	100	1.50	CONCRETE	1.90		1.11				
240.13	32	PRIVATE ENTRANCE	LT	2	35	3.00	ROCK	1.33		0.39				
240.172	32	PRIVATE ENTRANCE	LT	2	55	3.00	ROCK	2.08	6.11	0.61				
240.179	32	PARKING LOT ENTR.	RT	2	65	1.50	ASPHALT	1.23		0.72	7.2			
240.227	32	CEDAR LN	RT	10	65	1.50	ASPHALT	6.16		3.61	36.1			
240.412	32	PRIVATE ENTRANCE	LT	2	50	1.50	ASPHALT	0.95		0.56	5.6			
240.418	32	CEDAR LN	RT	10	75	1.50	ASPHALT	7.11		4.17	41.7			
240.45	32	SELF STORAGE ENTR.	LT	2	50	3.00	ROCK	1.90	5.56	0.56				
240.577	32	PRIVATE ENTRANCE	LT	2	42	3.00	ROCK	1.59	4.67	0.47				
240.717	32	WALLEN RD	LT	10	95	1.50	ASPHALT	9.00		5.28	52.8			
240.717	32	ROCK RD	RT	10	75	1.50	ASPHALT	7.11		4.17	41.7			
241.017	32	KINGS RD	RT	10	80	1.50	ASPHALT	7.58		4.44	44.4			
241.024	32	PRIVATE ENTRANCE	LT	2	50	3.00	ROCK	1.90	5.56	0.56				
241.623	32	BREWER RD	LT	10	90	3.00	ROCK	17.06	10.00	5.00				
242.222	32	PRIVATE ENTRANCE	LT	2	90	3.00	ROCK	3.41	10.00	1.00				
242.365	32	PRIVATE ENTRANCE	LT	2	45	1.50	ASPHALT	0.85		0.50	5			
242.431	32	PRIVATE ENTRANCE	LT	2	50	3.00	ROCK	1.90	5.56	0.56				
242.699	32	OLD IRONDALE RD	LT	10	80	1.50	ASPHALT	7.58		4.44	44.4			
242.699	32	KINGS RD	RT	10	70	1.50	ASPHALT	6.63		3.89	38.9			
242.923	32	PRIVATE ENTRANCE	LT	2	35	3.00	ROCK	1.33	3.89	0.39				
243.055	32	OLD HIGHWAY 32	RT	10	70	1.50	ASPHALT	6.63		3.89	38.9			
243.057	32	DAVIS CROSSING RD	LT	10	80	1.50	ASPHALT	7.58		4.44	44.4			
243.185	32	PRIVATE ENTRANCE	RT	2	35	3.00	ROCK	1.33	3.89	0.39				
243.223	32	PRIVATE ENTRANCE	LT	2	35	1.50	ASPHALT	0.66		0.39	3.9			
243.575	32	PRIVATE ENTRANCE	LT	2	40	3.00	ROCK	1.52	4.44	0.44				
243.863	32	BARNES RD	RT	10	85	1.50	ASPHALT	8.06		4.72	47.2			
243.868	32	COPELAND RD	LT	10	90	1.50	ASPHALT	8.53		5.00	50			
244.003	32	OAKWOOD RD	RT	10	105	3.00	ROCK	19.90	11.67	5.83				
244.177	32	COPELAND RD	LT	10	70	1.50	ASPHALT	6.63		3.89	38.9			
244.177	32	OLD BISMARCK RD	RT	10	90	1.50	ASPHALT	8.53		5.00	50			
244.381	32	MAPLES RD	RT	10	90	1.50	ASPHALT	8.53		5.00	50			
244.516	32	PRIVATE ENTRANCE	LT	2	45	3.00	ROCK	1.71	5.00	0.50				
244.517	32	ELLIS RD	RT	10	90	1.50	ASPHALT	8.53		5.00	50			
244.714	32	OAK RIDGE TRAIL	LT	10	80	1.50	ASPHALT	7.58		4.44	44.4			
245.118	32	PINE RIDGE TRAIL	LT	10	65	1.50	ASPHALT	6.16		3.61	36.1			
245.261	32	HARVEST ENTRANCE 1	LT	2	55	1.50	CONCR	1.04		0.61				
245.352	32	HARVEST ENTRANCE 2	LT	2	55	1.50	ASPHALT	1.04		0.61	6.1			
245.502	32	PRIVATE ENTRANCE	RT	2	40	3.00	ROCK	1.52	4.44	0.44				
245.516	32	PRIVATE ENTRANCE	LT	2	40	3.00	ROCK	1.52	4.44	0.44				
245.563	32	PRIVATE ENTRANCE	RT	2	40	1.50	ASPHALT	0.76		0.44	4.4			
245.608	32	CLEMONS RD	LT	10	80	1.50	ASPHALT	7.58		4.44	44.4			
245.637	32	FRISCO RD	RT	10	50	1.50	ASPHALT	4.74		2.78	27.8			
245.781	32	LANE CEMETERY RD	RT	10	65	1.50	ASPHALT	6.16		3.61	36.1			
246.045	32	LANE CEMETERY RD	RT	10	50	3.00	ROCK	9.48	5.56	2.78				
							SUBTOTAL	238.9	109.9	117.3	937.8	56.89	56.89	
							PAY TOTAL	*	110	*	*	57	57	

*SEE MAINLINE PAVEMENT AND MILLING QUANTITIES TABLE FOR PAY TOTALS

NOTE: SEE SPECIAL SHEETS FOR ENTRANCE DETAILS

SUMMARY OF QUANTITIES
SHEET 2 OF 5

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/24/2026 4:05:43 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED: 8/24/2026
ROUTE: 32 | STATE: MO
DISTRICT: SE | SHEET NO.: 3
COUNTY: ST. FRANCOIS
JOB NO.: J9P3852
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)

PAVEMENT MARKING QUANTITIES (WHITE)

BEGIN LOG MILE	END LOG MILE	ROUTE	DIR.	SHOULDER LENGTH (MEASURED FROM INSIDE EDGE OF SHLDR) LF	4" SOLID WHITE LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING LF	THERMOPLASTIC RAILROAD CROSSING MARKINGS EACH	REMARKS
239.481	239.509	32				48	2	
239.577	239.585	32				68		CEDAR ST
239.834	239.836	32				36		CROSSWALK FROM GAS STATION TO SCHOOL
239.864	239.896	32		173.8	173.8			WHITE STRIPE STARTS WHEN SHOULDER STARTS
239.896	240.040	32		1509.2	1509.2			
240.040	240.316	32		2905.17	2905.17			
240.316	240.578	32		2792.5	2792.5			
240.578	240.790	32		2330.4	2330.4			
240.790	241.632	32		8815.1	8815.1			
241.632	241.859	32		2371.6	2371.6			
241.859	242.101	32		2498.4	2498.4			
242.101	242.436	32		3594.2	3594.2			
242.436	242.919	32		5116.1	5116.1			
242.919	243.578	32		6961.7	6961.7			
243.578	244.170	32		6240	6240			
244.170	244.237	32		657.1	657.1			NO PAVEMENT STRIPING ON RAILROAD
244.197	244.271	32				48	2	
244.246	244.427	32		1872.1	1872.1			
244.427	244.709	32		2978.5	2978.5			
244.709	246.065	32		14321.4	14321.4			
				SUBTOTAL	65137.27	200	4	
				PAY TOTAL	65137	200	4	

PAVEMENT MARKING QUANTITIES (YELLOW)

BEGIN LOG MILE	END LOG MILE	ROUTE	DIR.	CENTERLINE LENGTH LF	4" SOLID YELLOW LF	4" INTERMITTENT YELLOW LF	REMARKS
239.11	239.14	32		158	316		DOUBLE SOLID
239.140	239.491	32		1853	1853	1853	SOLID AND INTERM COMBINED
239.502	239.54	32		201	201	201	SOLID AND INTERM COMBINED
239.54	239.62	32		422	844		DOUBLE SOLID
239.62	240.46	32		4435		4435	SINGLE INTERMEDIATE
240.46	240.61	32		792	792	792	SOLID AND INTERM COMBINED
240.61	240.68	32		370	740		DOUBLE SOLID
240.68	240.81	32		686	686	686	SOLID AND INTERM COMBINED
240.81	241.29	32		2534		2534	SINGLE INTERMEDIATE
241.29	241.47	32		950	950	950	SOLID AND INTERM COMBINED
241.47	241.53	32		317	634		DOUBLE SOLID
241.53	241.70	32		898	898	898	SOLID AND INTERM COMBINED
241.70	242.59	32		4699		4699	SINGLE INTERMEDIATE
242.59	242.74	32		792	792	792	SOLID AND INTERM COMBINED
242.74	242.77	32		158		158	SINGLE INTERMEDIATE
242.77	242.95	32		950	950	950	SOLID AND INTERM COMBINED
242.95	243.81	32		4541		4541	SINGLE INTERMEDIATE
243.81	244.01	32		1056	1056	1056	SOLID AND INTERM COMBINED
244.01	244.237	32		1199	2398		DOUBLE SOLID
244.246	244.41	32		866	866	866	SOLID AND INTERM COMBINED
244.41	244.62	32		1109		1109	SINGLE INTERMEDIATE
244.62	244.78	32		845	845	845	SOLID AND INTERM COMBINED
244.78	244.86	32		422	844		DOUBLE SOLID
244.86	245.02	32		845	845	845	SOLID AND INTERM COMBINED
245.02	245.21	32		1003		1003	SINGLE INTERMEDIATE
245.21	245.38	32		898	898	898	SOLID AND INTERM COMBINED
245.38	245.47	32		475	950		DOUBLE SOLID
245.47	245.64	32		898	898	898	SOLID AND INTERM COMBINED
245.64	246.065	32		2244		2244	SINGLE INTERMEDIATE
				SUBTOTAL	19256	33253	
				PAY TOTAL	52509		

SUMMARY OF QUANTITIES
SHEET 3 OF 5

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/24/2026 4:06:28 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/24/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	3

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

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)

GUARDRAIL QUANTITIES

BEGIN LOG MILE	END LOG MILE	ROUTE	OFFSET	EXIST. GUARDRAIL LENGTH LF	MGS GUARDRAIL LF	MGS TYPE A CRASHWORTHY END TERMINAL EACH	MGS BRIDGE APPROACH TRANSITION SECTION EACH	MODIFIED SHAPING SLOPES CLASS III 100 FT	REMARKS
241.837	241.861	32	RT	125	112.5	1	1	0.5	
241.846	241.872	32	LT	125	112.5	1	1	0.5	
241.909	241.932	32	RT	125	112.5	1	1	0.5	
241.919	241.940	32	LT	125	112.5	1	1	0.5	
244.401	244.427	32	LT	125	112.5	1	1	0.5	
244.412	244.437	32	RT	125	112.5	1	1	0.5	
244.469	244.489	32	LT	125	112.5	1	1	0.5	
244.477	244.499	32	RT	125	112.5	1	1	0.5	
				SUBTOTAL	900	8	8	4	
				PAY TOTAL	900	8	8	4	

BITUMINOUS SHOULDER RUMBLE STRIPS	476 STATIONS
BITUMINOUS CENTERLINE RUMBLE STRIPS	281 STATIONS

CONTRACTOR FURNISHED SURVEYING & STAKING	1 LUMP SUM

MOBILIZATION	1 LUMP SUM

REMOVAL OF IMPROVEMENTS

BEGIN LOG MILE	END LOG MILE	ROUTE	LOCATION	DESCRIPTION	QTY	UNITS	REMARKS
241.837	241.94	32	LT/RT	GUARDRAIL	500	LF	NEAR BRIDGE #A2668
244.401	244.499	32	LT/RT	GUARDRAIL	475	LF	NEAR BRIDGE #A2670
239.544		32	LT	CONCRETE PAVEMENT	57	SY	UNICO BANK ENTRANCE
				PAY TOTAL	1 LUMP SUM		

SUMMARY OF QUANTITIES
SHEET 4 OF 5

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/11/2026 12:09:10 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611
DATE PREPARED
8/10/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	3

COUNTY
ST. FRANCOIS
JOB NO.
J9P3852
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)

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NO.	DESCRIPTION
WARNING SIGNS								
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)
WO1-2L	48X48	16.00						CURVE (SYMBOL LEFT)
WO1-2R	48X48	16.00						CURVE (SYMBOL RIGHT)
WO1-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)
WO1-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)
WO1-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT)
WO1-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT)
WO1-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)
WO1-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)
WO1-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
WO1-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)
WO1-8	18X24	3.00						CHEVRON (SYMBOL)
WO1-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
WO3-1	48X48	16.00						STOP AHEAD (SYMBOL)
WO3-2	48X48	16.00						YIELD AHEAD (SYMBOL)
WO3-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)
WO3-4	48X48	16.00						BE PREPARED TO STOP
WO3-5	48X48	16.00						SPEED LIMIT AHEAD
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)
WO4-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)
WO4-1aL	48X48	16.00						MERGE (LEFT)
WO4-1aR	48X48	16.00						MERGE (RIGHT)
WO5-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS
WO5-3	48X48	16.00						ONE LANE BRIDGE
WO5-5	48X48	16.00						NARROW LANES
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)
WO7-3a	30X24	5.00						NEXT XX MILES (PLAQUE)
WO8-1	48X48	16.00						BUMP
WO8-2	48X48	16.00						DIP
WO8-3	48X48	16.00						PAVEMENT ENDS
WO8-4	48X48	16.00						SOFT SHOULDER
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)
WO8-6	48X48	16.00						TRUCK CROSSING
WO8-6c	48X48	16.00						TRUCK ENTRANCE
WO8-7	36X36	9.00						LOOSE GRAVEL
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL
WO8-9	48X48	16.00						LOW SHOULDER
WO8-11	48X48	16.00	8	128.00				UNEVEN LANES
WO8-12	48X48	16.00	8	128.00				NO CENTER LINE
WO8-15	48X48	16.00						GROOVED PAVEMENT
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)
WO8-17L	48X48	16.00	8	128.00				SHOULDER DROP-OFF (SYMBOL LEFT)
WO8-17R	48X48	16.00	8	128.00				SHOULDER DROP-OFF (SYMBOL RIGHT)
WO8-17P	30X24	5.00	12	60.00				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	8	128.00				ROAD/BRIDGE/RAMP WORK AHEAD
WO20-2	48X48	16.00						DETOUR AHEAD
WO20-3	48X48	16.00						ROAD CLOSED AHEAD
WO20-4	48X48	16.00	16	256.00				ONE LANE ROAD AHEAD
WO20-5	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00	8	128.00				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)

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NO.	DESCRIPTION
GUIDE SIGNS								
E05-1	36X48	12.00						GORE EXIT
E05-2	48X36	12.00						EXIT OPEN
E05-2a	48X36	12.00						EXIT CLOSED
GO20-1	60X24	10.00	2	20.00				ROAD WORK NEXT XX MILES
GO20-2	48X24	8.00	2	16.00				END ROAD WORK
GO20-4	36X18	4.50	2	9.00				PILOT CAR FOLLOW ME
GO20-4a	42X30	8.75	4	35.00				PILOT CAR IN USE WAIT & FOLLOW
GO20-4a	18X12	1.50	8	12.00				PILOT CAR IN USE WAIT & FOLLOW
GO20-5aP	36X24	6.00	2	12.00				WORK ZONE (PLAQUE)
MO4-8a	24X18	3.00						END DETOUR
MO4-9L	48X36	12.00						DETOUR (LEFT)
MO4-9R	48X36	12.00						DETOUR (RIGHT)
MO4-9P	48X12	4.00						STREET NAME (PLAQUE)
MO4-10L	48X18	6.00						DETOUR ARROW (LEFT)
MO4-10R	48X18	6.00						DETOUR ARROW (RIGHT)
REGULATORY SIGNS								
R1-1	48X48	13.25						STOP
R1-2	48TRI.	6.93						YIELD
R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)
R1-3P	30X12	2.50						ALL WAY (PLAQUE)
R2-1	36X48	12.00	4	48.00				SPEED LIMIT XX
R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00						NO TURNS
R3-4	48X48	16.00						NO U-TURN (SYMBOL)
R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00						DO NOT PASS
R4-2	36X48	12.00						PASS WITH CARE
R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)
R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)
R5-1	30X30	6.25						DO NOT ENTER
R5-1a	36X24	6.00						WRONG WAY
R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)
R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)
R6-2L	24X30	5.00						ONE WAY (LEFT)
R6-2R	24X30	5.00						ONE WAY (RIGHT)
R9-9	24X12	2.00						SIDEWALK CLOSED
R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE
R9-11R	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE
R10-6	24X36	6.00						STOP HERE ON RED (45^ ARROW)
R11-2	48X30	10.00						ROAD CLOSED
R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50						ROAD CLOSED TO THRU TRAFFIC
CONST-3A	60X48	20.00						FINE SIGN
CONST-3X	56X12	4.67						SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS								
CONST-5	48X36	12.00						POINT OF PRESENCE
CONST-5	96X48	32.00	2	64.00				POINT OF PRESENCE
CONST-8	48X36	12.00	2	24.00				WORK ZONE NO PHONE ZONE

616-10.05 CONSTRUCTION SIGNS	TOTAL 1324

616-10.10 RELOCATED SIGNS	TOTAL *

NOTE:

SEE STANDARD PLANS 616.20 FOR ADDITIONAL TRAFFIC CONTROL PLANS

* NO DIRECT PAY FOR RELOCATION OF CONSTRUCTION SIGNS

ITEM NUMBER	TOTAL QTY	EFFECTIVE: 07-01-2025 DESCRIPTION
6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)
6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)
6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)
6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)
6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6122040	4	WORK ZONE CRASH CUSHION (NARROW)
6122041	4	WORK ZONE CRASH CUSHION (RELOCATION)
6123001		TRUCK MOUNTED ATTENUATOR (TMA)
6161012		BUOYS (BOATS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161020		CHANNELIZER (DRUM-LIKE)
6161022		CHANNELIZER (CONE)
6161025	120	CHANNELIZER (TRIM-LINE)
6161026		CHANNELIZER (VERTICAL PANEL)
6161030		TYPE 3 MOVEABLE BARRICADE
6161033		DIRECTION INDICATOR BARRICADE
6161040		FLASHING ARROW PANEL
6161047		TYPE 3 OBJECT MARKER
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A	2	CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6162000A	1	WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002	4	TEMPORARY LONG-TERM RUMBLE STRIPS
6173600D	1200	TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED
6173700B		TEMP. TRAFFIC BARRIER ANCHORED, CONTRACTOR FURNISHED/RETAINED
6173706		TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION CONTRACTOR FURNISHED/RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED
6175010A	1200	RELOCATING TEMPORARY TRAFFIC BARRIER
6175011B		RELOCATING TEMP. TRAFFIC BARRIER ANCHORED
6175013		RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS
6175020A		RELOCATING TEMP. TRAFFIC BARRIER HEIGHT
6208064A		TEMPORARY RAISED PAVEMENT MARKER
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/11/2026 12:09:21 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED: 8/10/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	3

COUNTY: ST. FRANCOIS

JOB NO.: J9P3852

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)

SUMMARY OF QUANTITIES
SHEET 5 OF 5

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER

05/11/2026 12:12:26 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	4

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

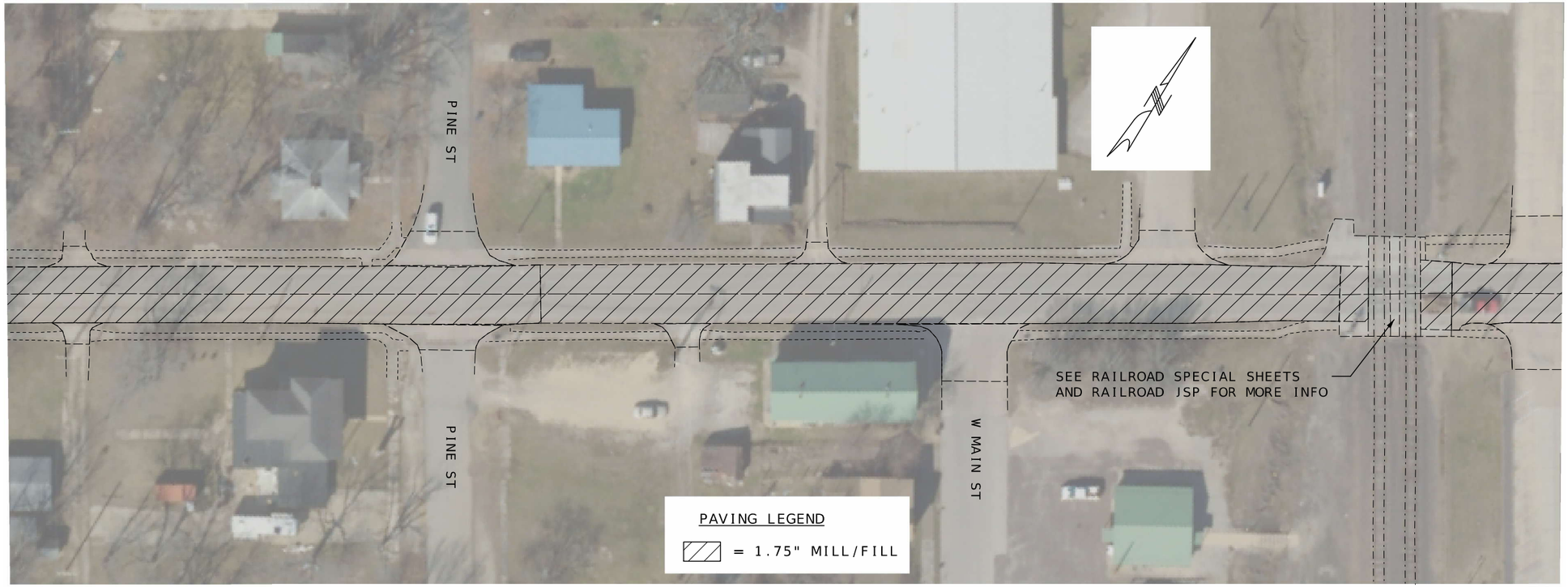
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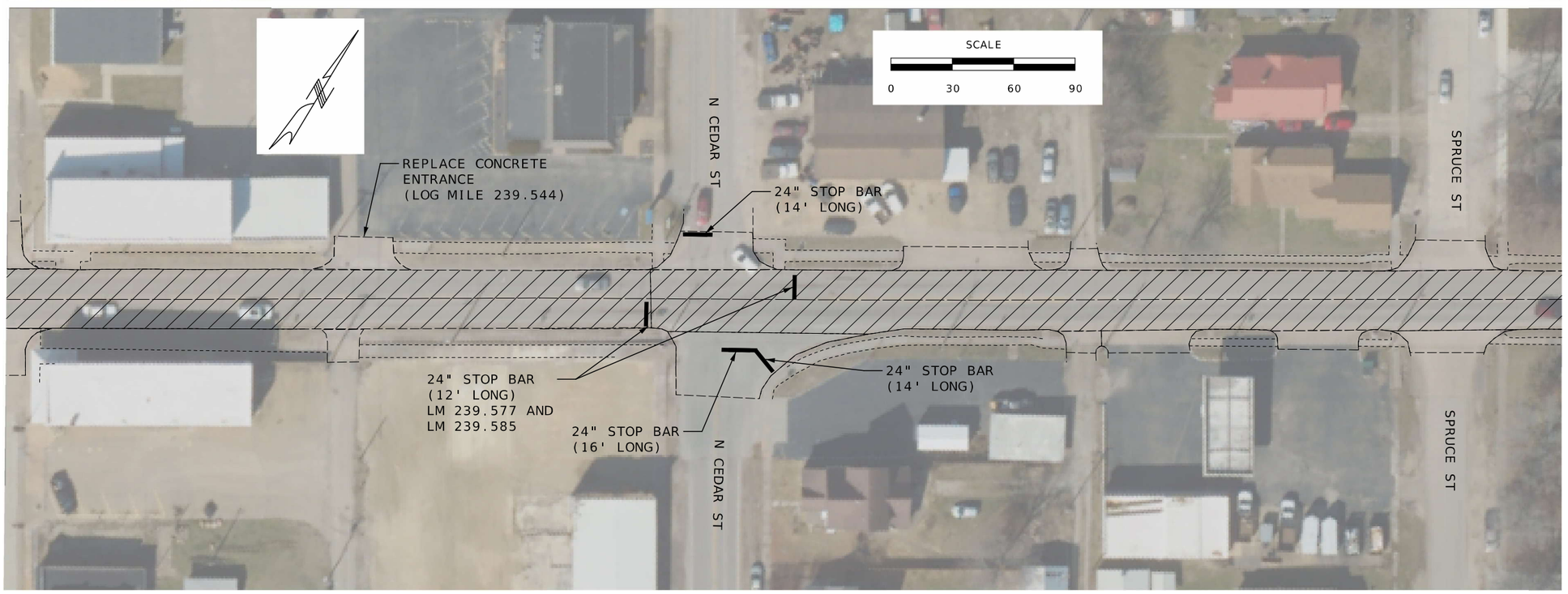
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEETS





STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/24/2026 4:14:39 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/24/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	5

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

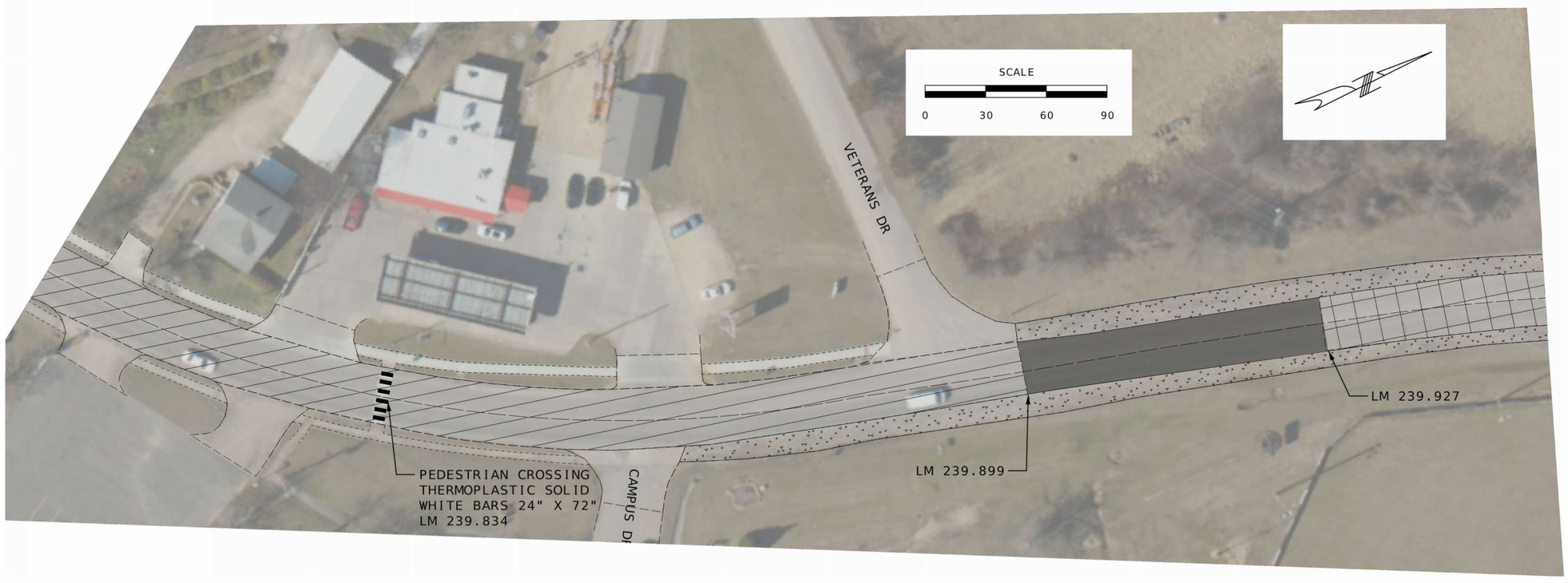
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEETS





STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/24/2026 4:14:06 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/24/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	6

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

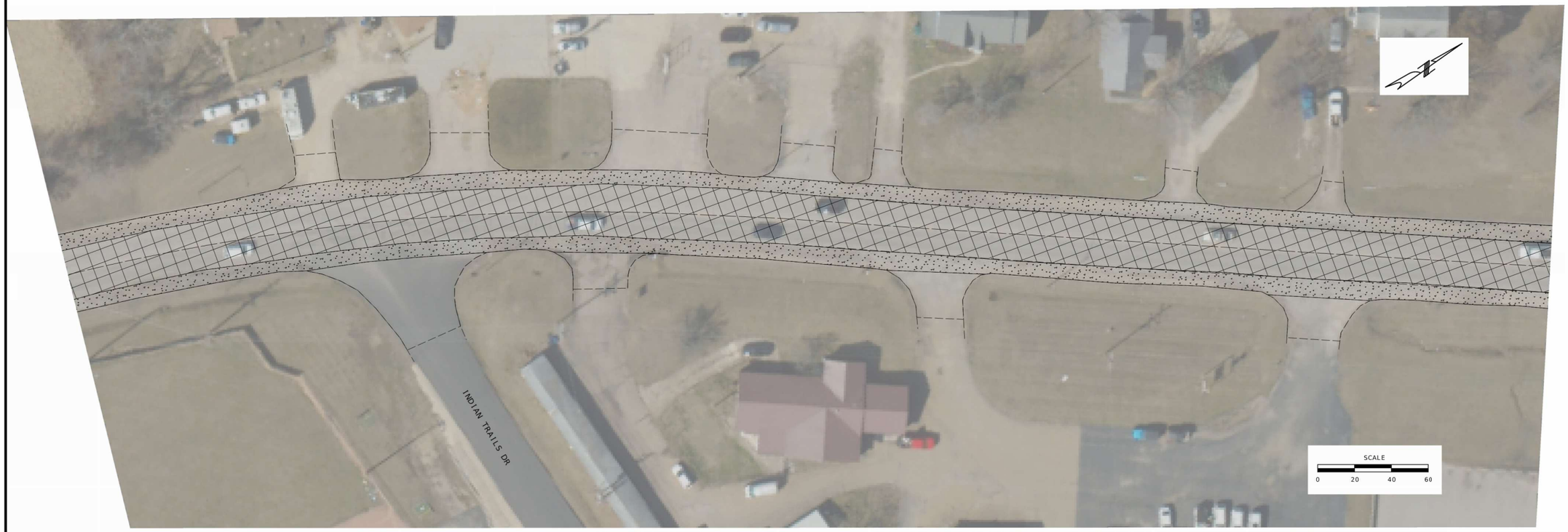
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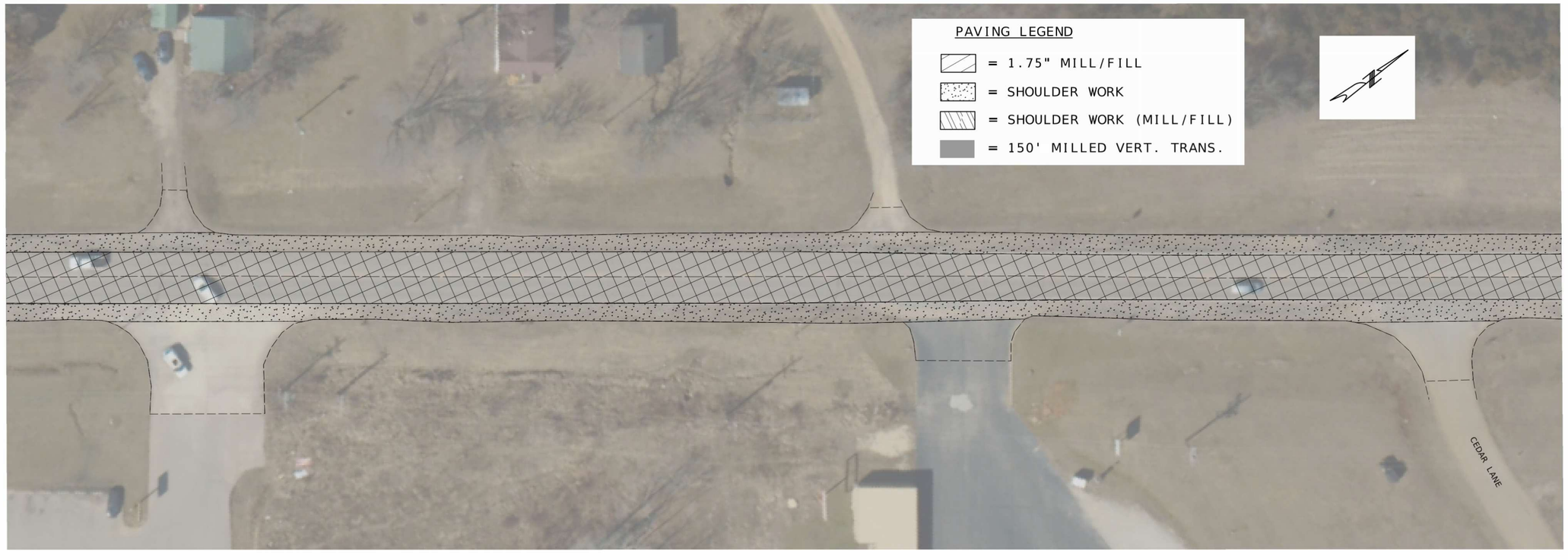
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEETS





STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/11/2026 12:12:44 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	7

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

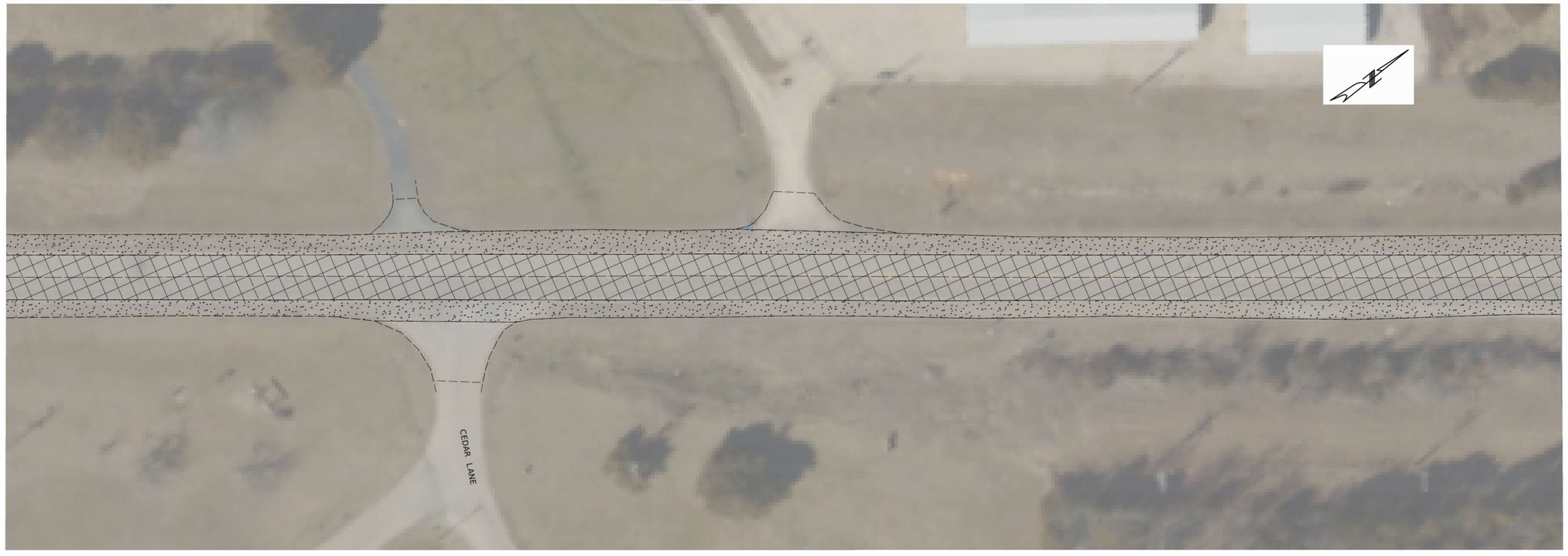
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEETS





STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
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CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO

DISTRICT	SHEET NO.
SE	8

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

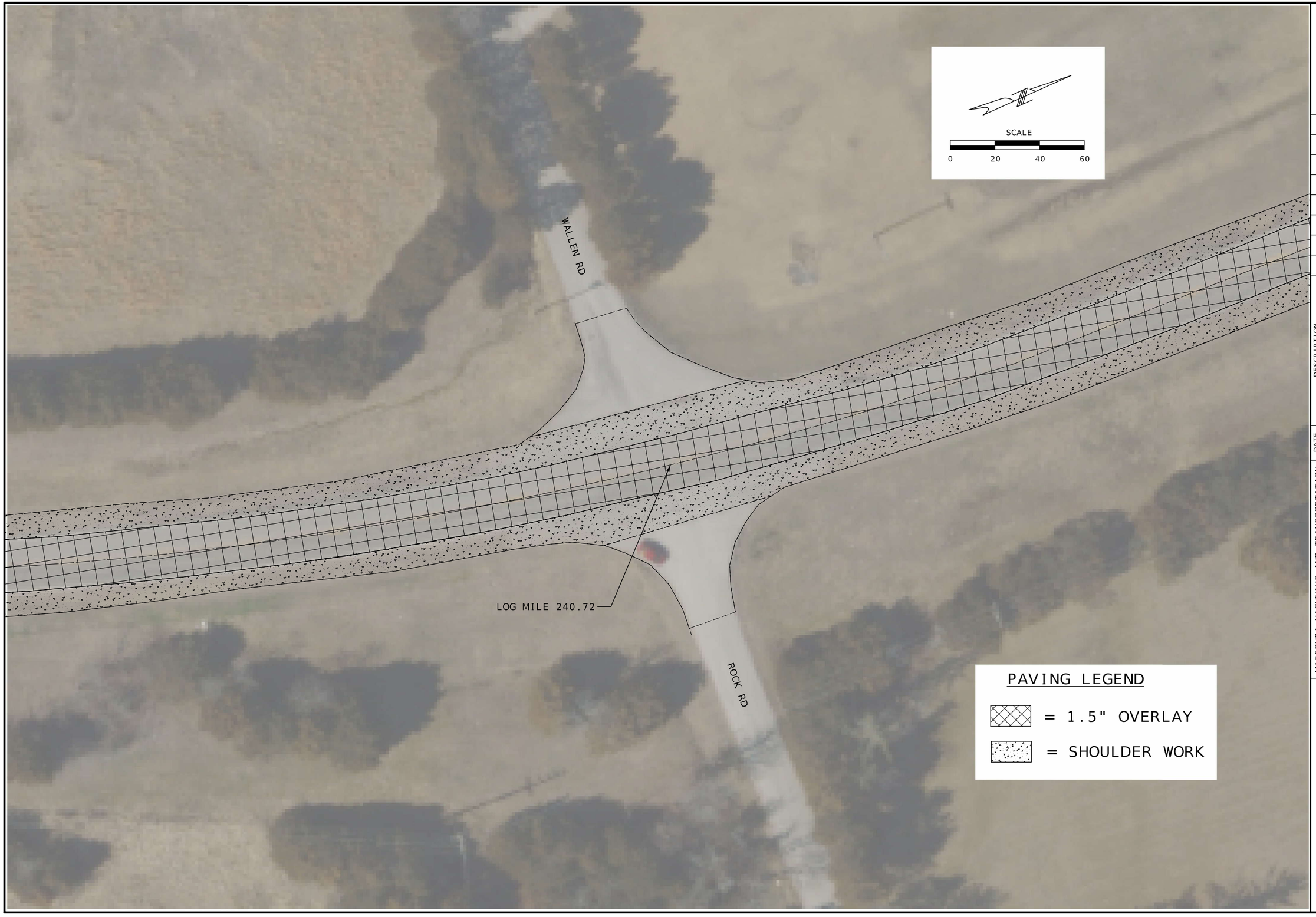
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEETS



STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER

08/11/2026 12:17:51 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	9

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

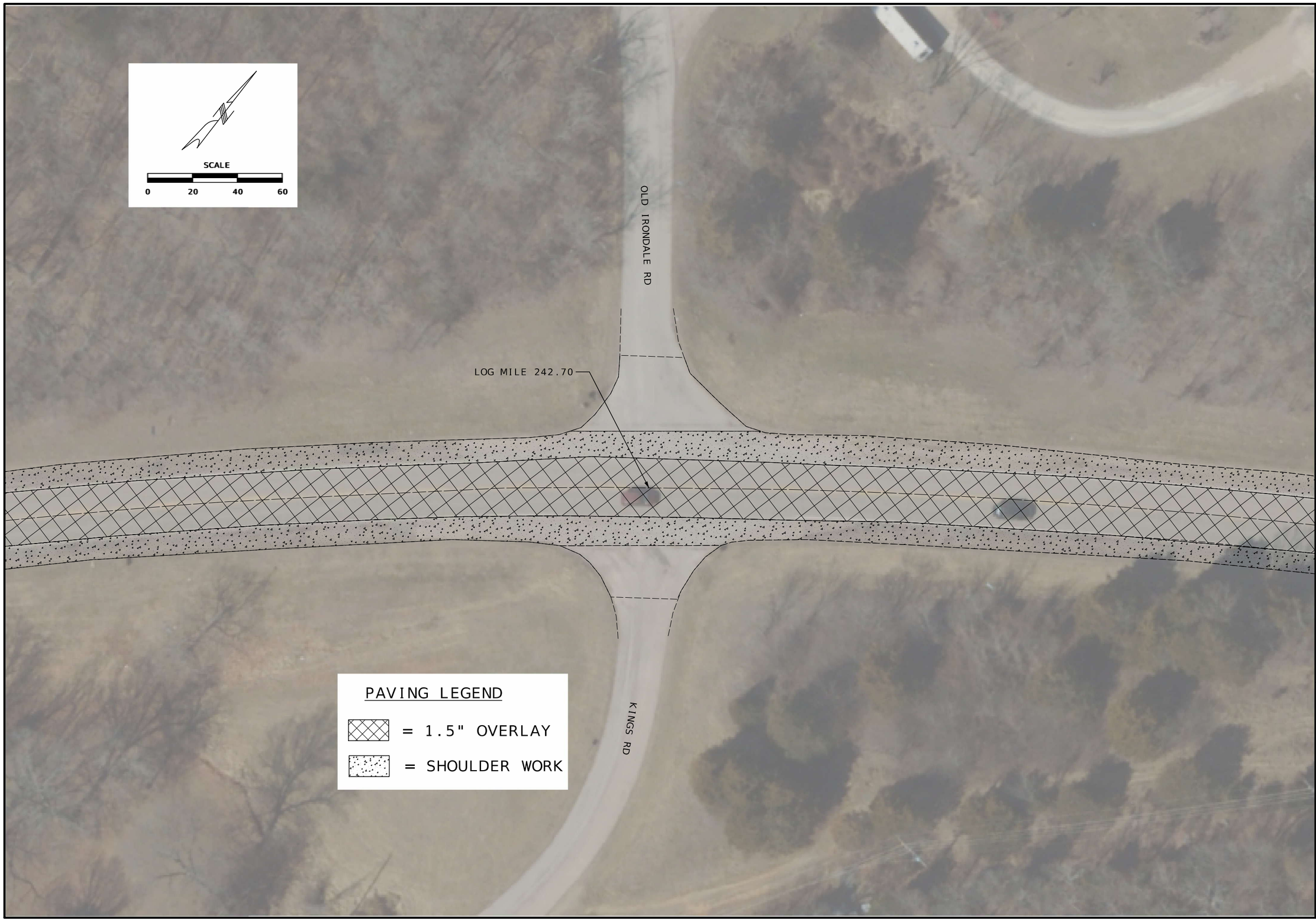
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SHEETS
INTERSECTIONS



STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER

08/11/2026 12:18:49 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO

DISTRICT	SHEET NO.
SE	10

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

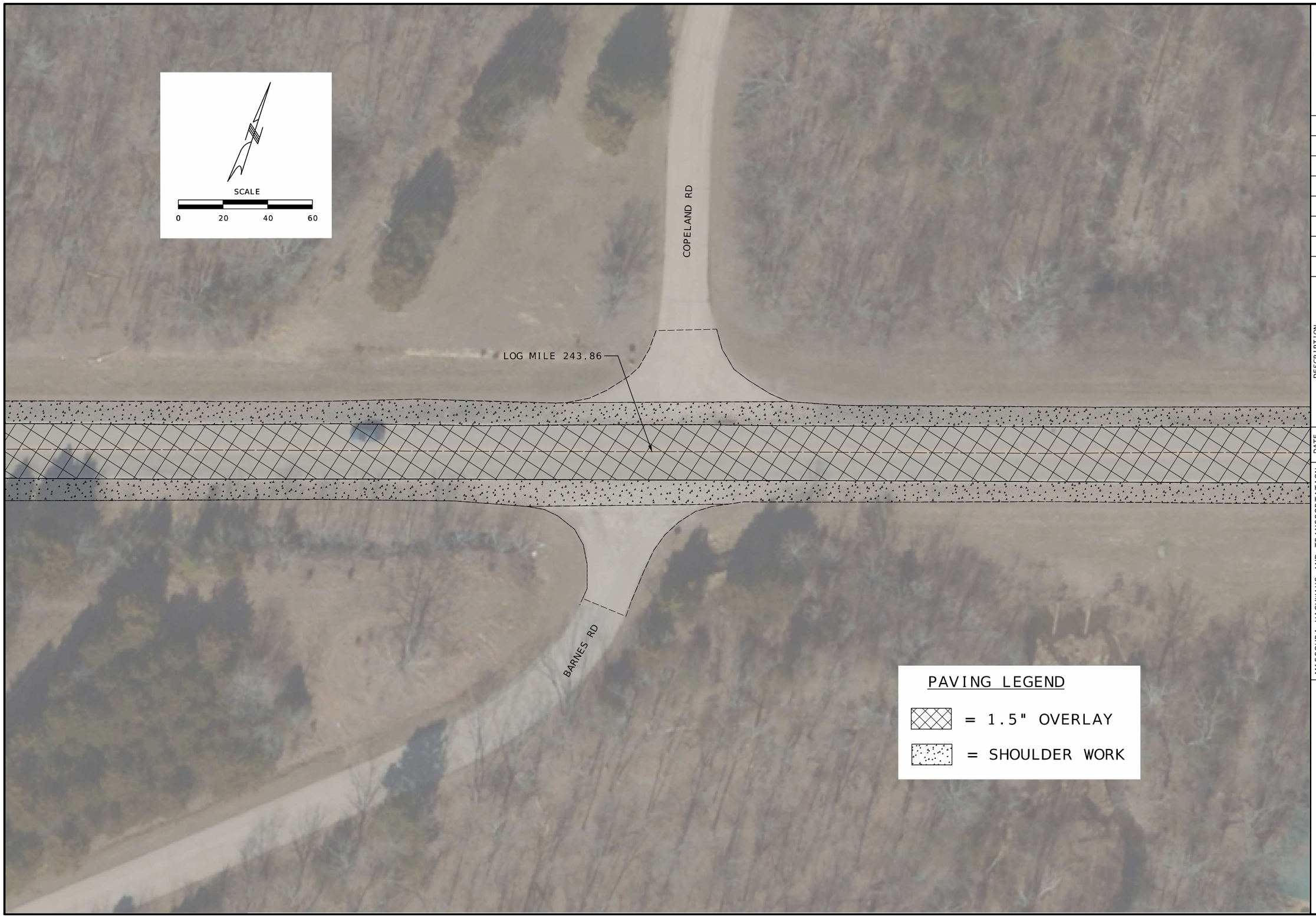
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SHEETS
INTERSECTIONS



STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER

08/11/2026 12:22:53 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	11

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

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)

SPECIAL SHEETS
INTERSECTIONS

SCALE

0 20 40 60

COPELAND RD

LOG MILE 244.18

OLD BISMARCK RD

PAVING LEGEND

= 1.5" OVERLAY

= SHOULDER WORK

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER

08/11/2026 12:23:21 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	12

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

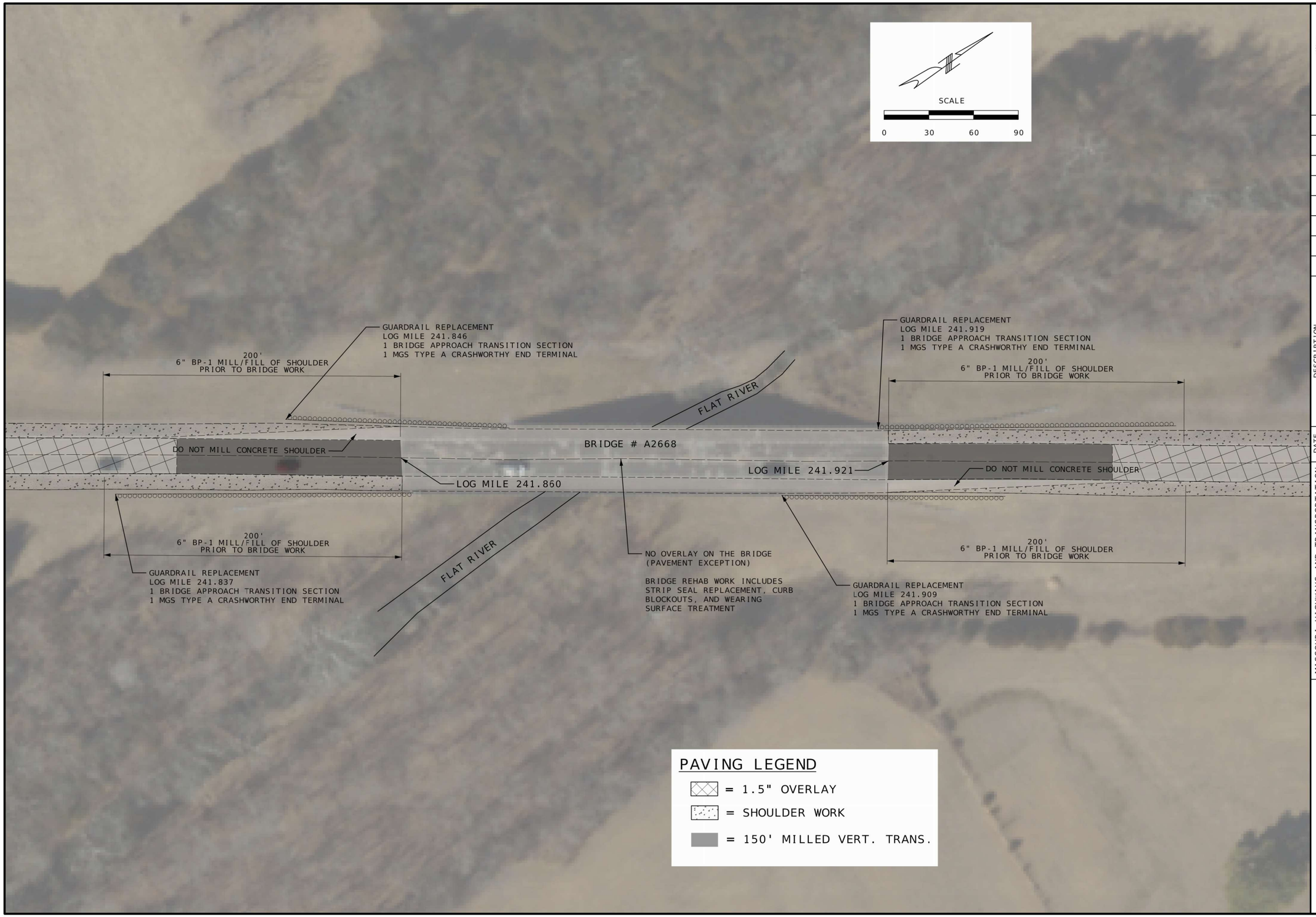
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SHEETS
INTERSECTIONS



STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/11/2026 12:23:58 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	13

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

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)



STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/19/2026 2:42:24 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	14

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

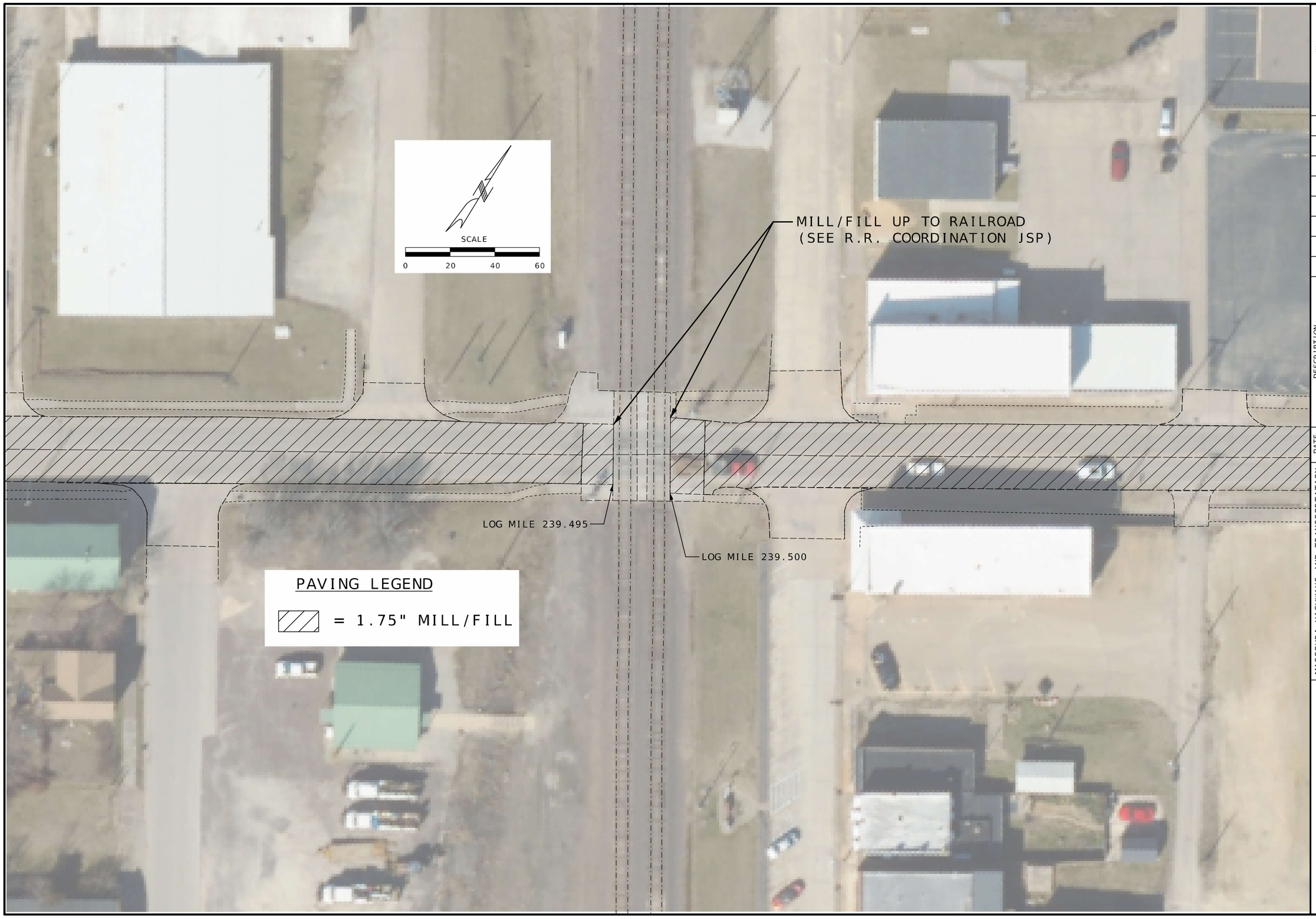
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
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CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	15

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

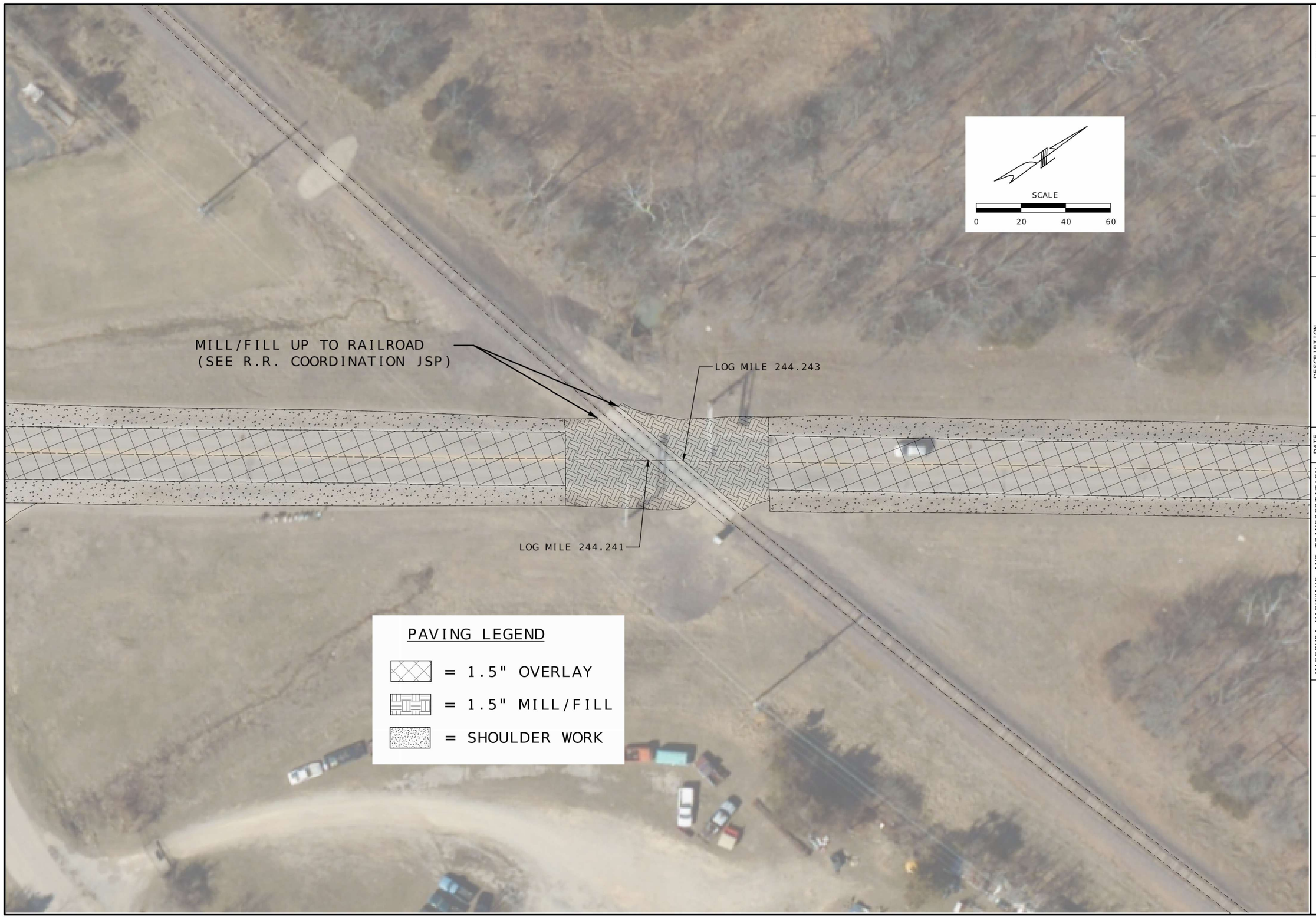
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

RAILROAD COORDINATION PLAN SHEETS



STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/19/2026 2:43:33 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	16

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

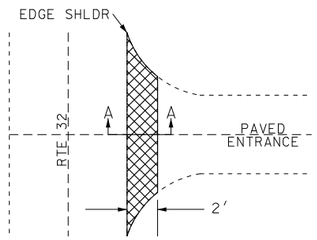
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DESCRIPTION	DATE

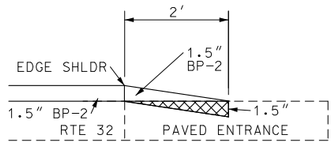
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

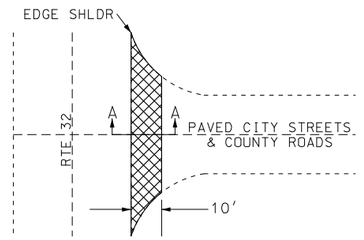
RAILROAD COORDINATION PLAN SHEETS



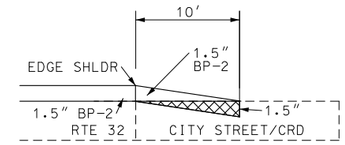
PLAN VIEW FOR PAVED
PRIVATE AND COMMERCIAL ENTRANCES



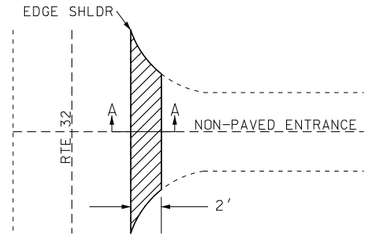
TYPICAL
SECTION A-A



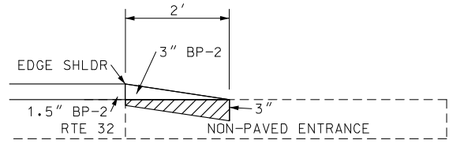
PLAN VIEW FOR PAVED
CITY STREETS AND COUNTY ROADS



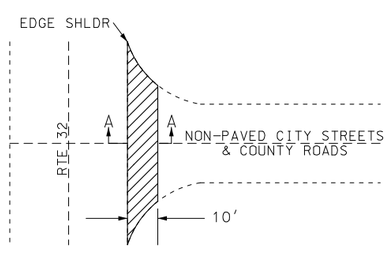
TYPICAL
SECTION A-A



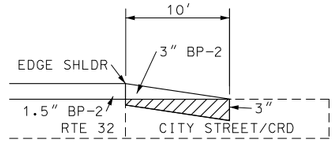
PLAN VIEW FOR NON-PAVED PRIVATE
AND COMMERCIAL ENTRANCES



TYPICAL
SECTION A-A



PLAN VIEW FOR NON-PAVED
CITY STREETS AND COUNTY ROADS



TYPICAL
SECTION A-A

COLDMILLING

GRADING

NOTES

ALL GRADING NECESSARY FOR THE PROPER CONSTRUCTION OF HOT MIX AND AGGREGATE APRONS SHALL BE CONSIDERED INCIDENTAL WORK AND AT NO DIRECT PAY.

THE WIDTH OF ALL HOT MIX AND AGGREGATE APRONS MAY BE ADJUSTED BY THE ENGINEER AS NECESSARY TO OBTAIN SUITABLE TRANSITIONS.

NOT TO SCALE

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/25/2026 7:27:45 AM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/25/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	17

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

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)

SPECIAL SHEET
ENTRANCE DETAIL



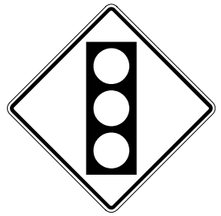
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(2)



W020-4

(7)



W03-3

(12)



G020-5aP

(54)



R10-6

(47)



R2-1

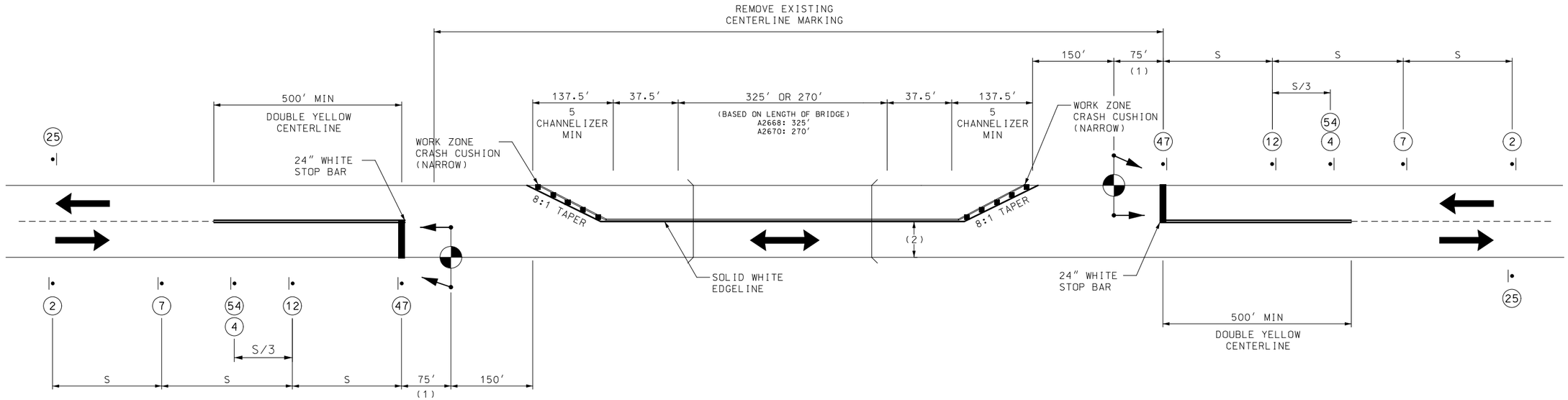
(25)



R2-1

(4)

SPEED	SIGN SPACING (FT)	
PERMANENT POSTED (MPH)	UNDIVIDED (S)	DIVIDED (S)
0-35	200	-
40-45	350	-
50-55	500	-
60-70	1000	-



NOTE:

(1) 75' RECOMMENDED SPACING. SPACING MAY BE BETWEEN 40' AND 150'.
(2) DRIVING LANE SHALL BE AT LEAST 10' IN WIDTH.

EXISTING CONFLICTING PAVEMENT MARKINGS AND RAISED PAVEMENT MARKER REFLECTORS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE REMOVED. AFTER THE TEMPORARY TRAFFIC CONTROL SIGNAL IS REMOVED, THE STOP LINES AND OTHER TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED AND THE PERMANENT PAVEMENT MARKINGS RESTORED.

REDUCED SPEED LIMIT SIGNING SHALL BE REMOVED, COVERED, OR TURNED FROM TRAFFIC WHEN CONDITIONS REQUIRING THE REDUCED SPEED NO LONGER EXIST.

RELOCATE PORTABLE TRAFFIC SIGNALS AS REQUIRED AT NO DIRECT PAY.

DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

TEMPORARY SIGNALS FOR BRIDGE WORK
BR# A2668 AND BR# A2670

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- TEMPORARY TRAFFIC BARRIER
- CHANGEABLE MESSAGE BOARD
- PORTABLE TRAFFIC SIGNAL AND LUMINARE

STATE OF MISSOURI
CHRISTOPHER CROCKER
NUMBER PE-2016017611
PROFESSIONAL ENGINEER
08/24/2026 4:13:16 PM
CHRISTOPHER CROCKER - CIVIL
MO-PE-2016017611

DATE PREPARED
8/24/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
SE	18

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

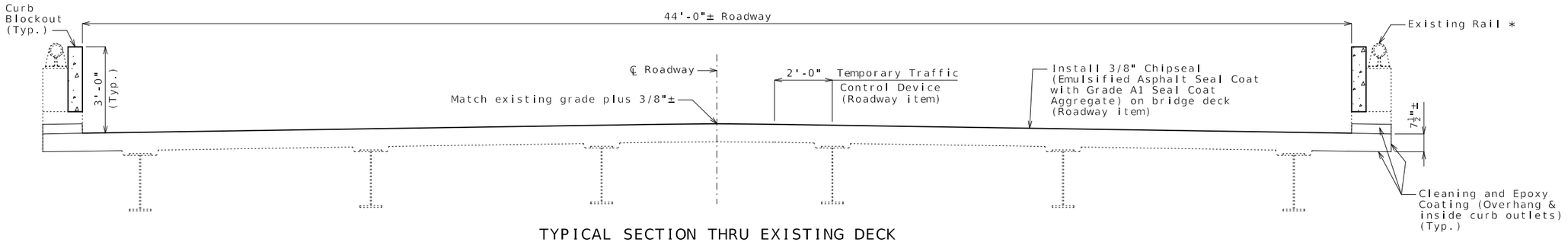
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TRAFFIC CONTROL
SHEET 1 OF 1

SEC/SUR 29 TWP 36N RGE 4E

U.I.P. AND REHABILITATE EXISTING (37'- 3 @ 47'- 37') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS (SKEW: 55°00'00" L.A.)



TYPICAL SECTION THRU EXISTING DECK

Estimated Quantities		
Item		Total
Removal of Miscellaneous ACM (Non-Friable)	sq. foot	22
Removal of Existing Expansion Joint & Adjacent Concrete	linear foot	82
Remove and Replace Curb & Parapet	linear foot	11
Class B-2 Concrete	cu. yard	8.5
Curb Blockout	linear foot	493
Cleaning and Epoxy Coating	sq. foot	1663
Reinforcing Steel (Epoxy Coated)	sq. foot	740
Protective Coating - Concrete Bents and Piers (Epoxy)	lump sum	1
Surface Preparation for Recoating Structural Steel	sq. foot	700
Field Application of Inorganic Zinc Primer	sq. foot	700
Finish Field Coat (System L)	sq. foot	700
Strip Seal Expansion Joint System	linear foot	77

* Asbestos (Friability Category 11 NF) has been detected in the Insulation compound between the top of the concrete parapet and the base of the handrail posts. Removal of the handrail and posts, or leave in place is the Contractor's option. Should the Contractor elect to remove the handrail and posts, the Contractor will be required to use an Abatement Contractor during the removal. No direct payment will be made for removal of the handrail and posts and for asbestos abatement should the Contractor choose to perform this work. Cost for the described work will be considered completely covered by the contract unit price for other items in the contract.

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 6

Design Loading:

H20-44 (1973), HS20-44 (New Construction)

Design Unit Stresses:

Class B-1 Concrete (Curb Blockout) f'c = 4,000 psi
Class B-2 Concrete f'c = 4,000 psi
Reinforcing Steel (ASTM A615 Grade 60) fy = 60,000 psi

Structural Steel Protective Coatings:

Protective Coating: System L in accordance with Sec 1081.

Surface Preparation: Surface preparation of the existing steel shall be in accordance with Sec 1081 for Recoating of Structural Steel (System G, H, I or L) with inorganic zinc primer. The cost of surface preparation will be considered completely covered by the contract unit price per sq. foot for Surface Preparation for Recoating Structural Steel.

Prime Coat: The cost of the prime coat will be considered completely covered by the contract unit price per sq. foot for Field Application of Inorganic Zinc Primer.

Field Coat(s): The color of the field coat(s) shall be Gray (Federal Standard #26373). The cost of the finish field coat will be considered completely covered by the contract unit price per sq. foot for Finish Field Coat (System L).

Miscellaneous:

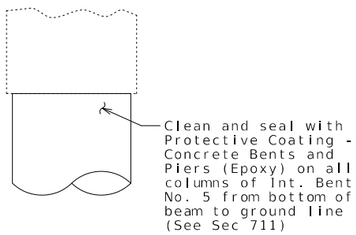
Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway item).

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

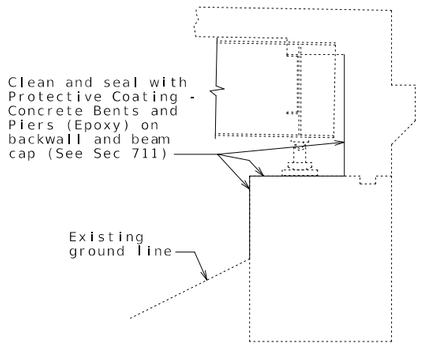
Contractor shall verify all dimensions in field before finalizing the shop drawings.

Traffic Handling:

Traffic to be maintained on structure during construction. See roadway plans for traffic control.



PART SECTION THRU INTERMEDIATE BENT NO. 5 SHOWING CONCRETE PROTECTIVE COATING



PART SECTION THRU END BENTS NO. 1 & 6 SHOWING CONCRETE PROTECTIVE COATING

(End Bent No. 6 shown, End Bent No. 1 similar)

REPAIRS TO BRIDGE: ROUTE 32 OVER FLAT RIVER

ROUTE 32 FROM ROUTE BB TO ROUTE 67
ABOUT 2.3 MILES NORTHEAST OF ROUTE BB
BEGINNING STATION 183+35.80± (MATCH EXISTING)

Detailed June 2026
Checked July 2026

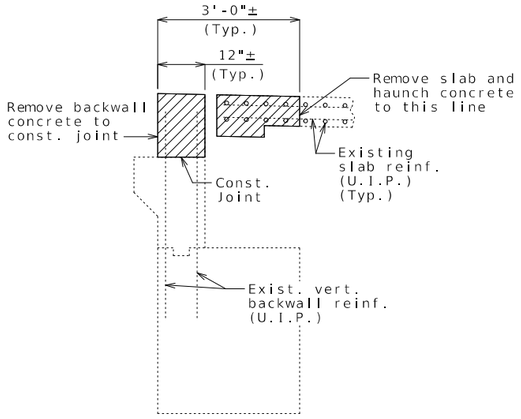
Note: This drawing is not to scale. Follow dimensions.

STATE OF MISSOURI
GARRETT L. HAGER
NUMBER PE-2023000437
PROFESSIONAL ENGINEER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED 8/11/2026
ROUTE 32 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY ST. FRANCOIS
JOB NO. J9P3852
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A26681

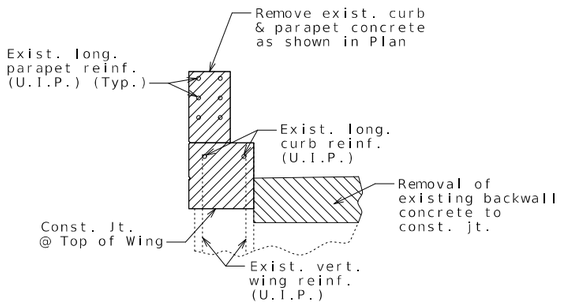
DESCRIPTION | DATE

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

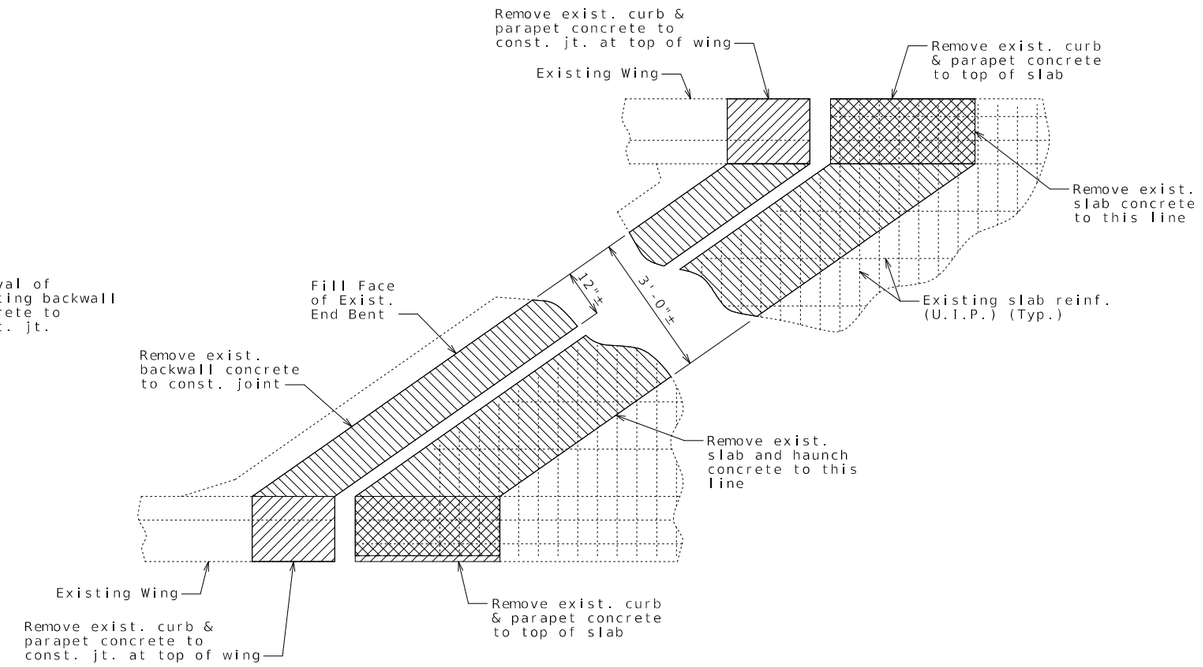


PART SECTION THRU
END BENT NO. 1
SHOWING CONCRETE REMOVAL

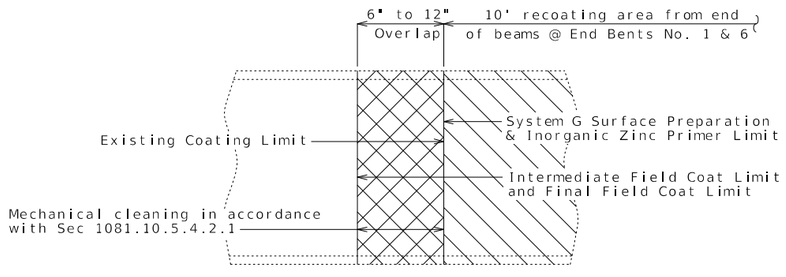
Steel beam & diaphragm not shown for clarity.



PART SECTION THRU
WING AT END BENT NO. 1
SHOWING CONCRETE REMOVAL



PART PLAN OF END BENT NO. 1
SHOWING CONCRETE REMOVAL



PART ELEVATION SHOWING LIMITS OF PAINT OVERLAP

(Vertical or horizontal paint limit. Horizontal limit shown)

Limits of Paint Overlap: System G shall overlap the existing coating between 6 inches and 12 inches in order to achieve maximum coverage at the paint limit of each complete system near the expansion and contraction areas. The final field coating shall be masked to provide crisp, straight lines and to prevent overspray beyond the overlap required.

REHAB DETAILS

Detailed June 2026
Checked July 2026

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STATE OF MISSOURI
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PROFESSIONAL ENGINEER
GARRETT L HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	2

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

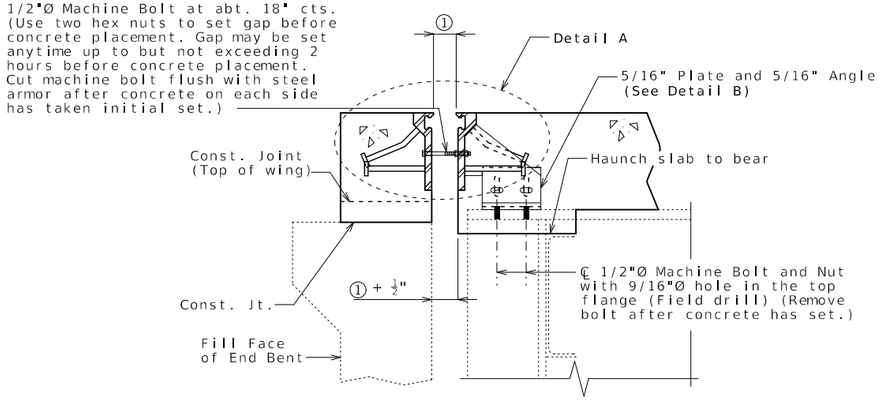
PROJECT NO.

BRIDGE NO.
A26681

DATE	DESCRIPTION

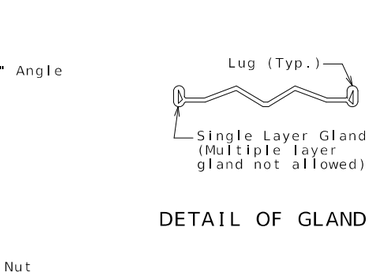
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

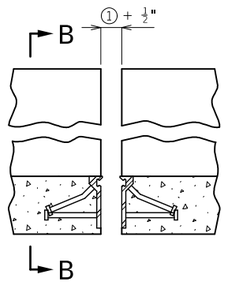


SECTION A-A

Strip seal gland not shown for clarity.

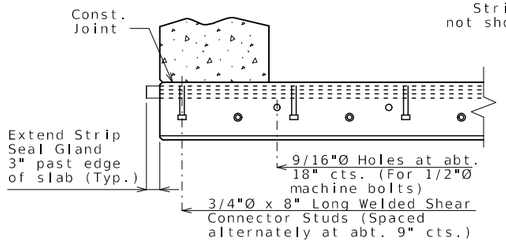


DETAIL OF GLAND

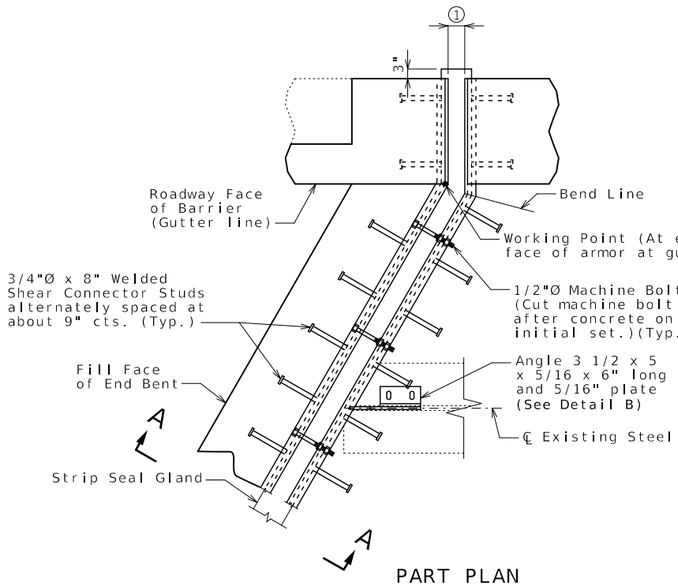


PART ELEVATION OF BARRIER

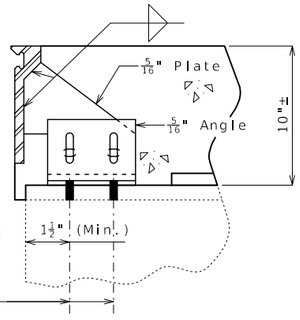
Strip seal gland not shown for clarity.

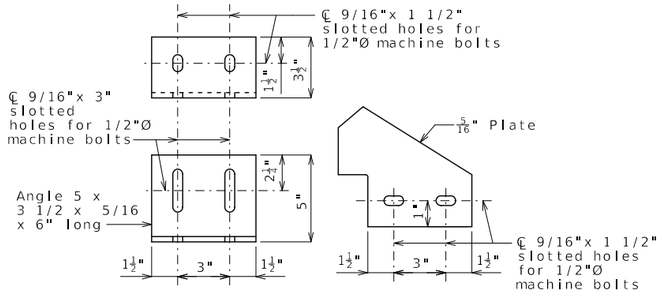


PART SECTION B-B

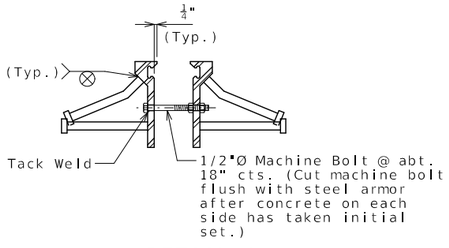


PART PLAN





DETAIL B



DETAIL A

GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for staged construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

Longitudinal reinforcing steel shall be placed so that ends shall be 1" from the vertical leg of the steel armor at the expansion joint system.

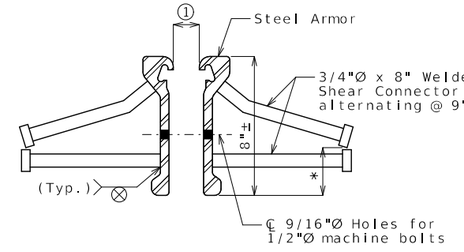
Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

② The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

③ MoDOT Construction personnel will indicate the strip seal expansion joint system installed.

Steel armor may also be referred to as extrusion or rail.

Proposed wearing surface not shown for clarity.



DETAIL OF JOINT ARMOR

* Bend stud in shop to maintain 1" min. from bottom of steel armor.

Table of Allowed Transverse Strip Seal Expansion Joint System

Manufacturer	Strip Seal System (Designated Name)	Movement Parallel to RDWY	① Allowed Installation Gap Normal to Joint at RDWY Surface @ Air/Surface Temperature ②						③
			@ 40°F	@ 50°F	@ 60°F	@ 70°F	@ 80°F	@ 90°F	
D S Brown	Strip seal L2-500	1 9/16"	2 1/8"	2 1/16"	2"	1 15/16"	1 7/8"	1 13/16"	□
Watson Bowman Acme (Wabo)	Strip seal SE-300	1 9/16"	2 1/8"	2 1/16"	2"	1 15/16"	1 7/8"	1 13/16"	□
Watson Bowman Acme (Wabo)	Strip seal SE-400	1 9/16"	2 1/8"	2 1/16"	2"	1 15/16"	1 7/8"	1 13/16"	□

STRIP SEAL EXPANSION JOINT SYSTEM AT END BENT NO. 1

Detailed June 2026
Checked July 2026

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

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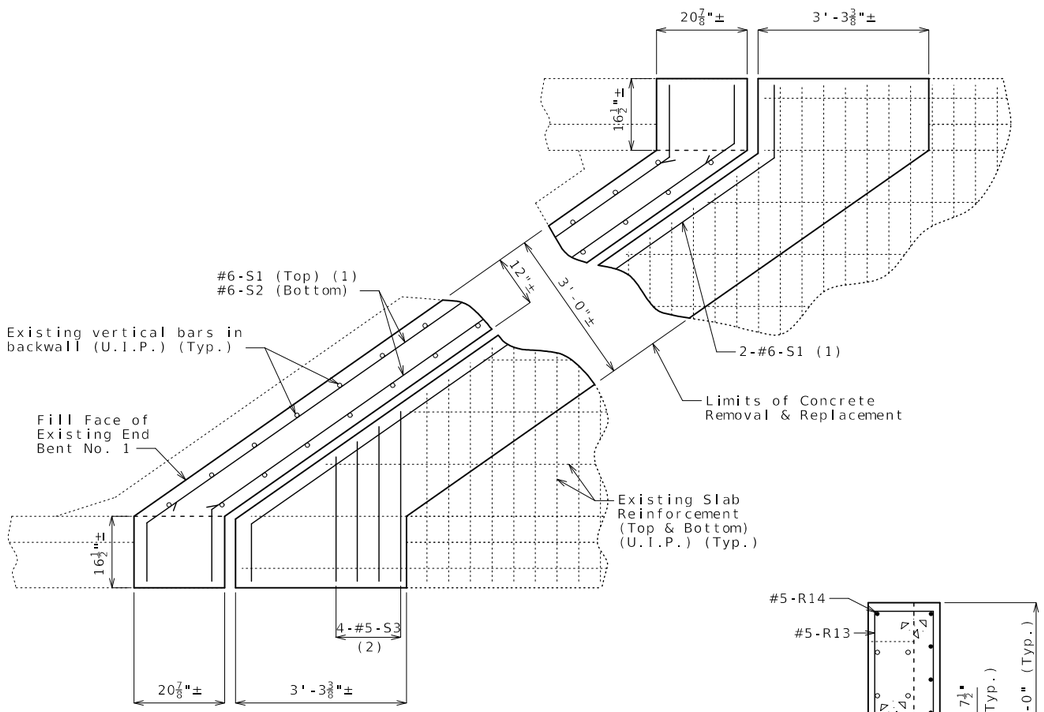
DATE PREPARED 8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	3

COUNTY ST. FRANCOIS
JOB NO. J9P3852
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A26681

DESCRIPTION
DATE

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



PART PLAN OF SLAB AT END BENT NO. 1 SHOWING SLAB REINFORCEMENT

(Replacement barrier and proposed wearing surface not shown for clarity.)

(1) Bend in field.

(2) Top & bottom, @ 5" cts.

(3) 3-#5-R13 & 3-#5-R15, equally spaced

(4) See Curb Blockout details on Sheet No. 5.

Notes:

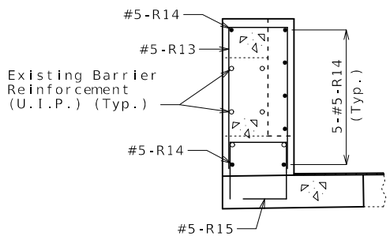
Expansion device not shown for clarity.

For details of strip seal expansion joint system, see Sheet No. 3.

The total bar length for S1 & S2 bars shown in Bill of Reinforcing Steel allows for one lap splice with a length of 2'-4". Actual bar segment lengths to be determined by contractor for stage construction. 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 Reinforcing Steel (Epoxy Coated). No adjustment of the quantity of reinforcing steel will be allowed for the use of mechanical bar splices.

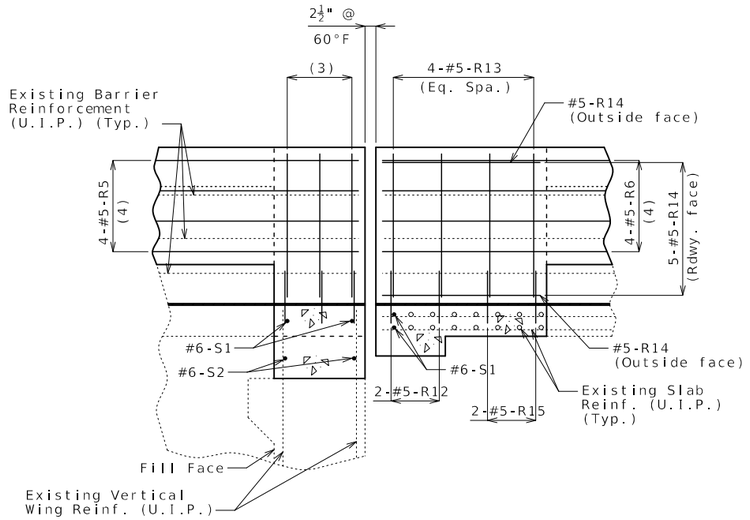
SECTION A-A

Left barrier shown, right barrier similar.



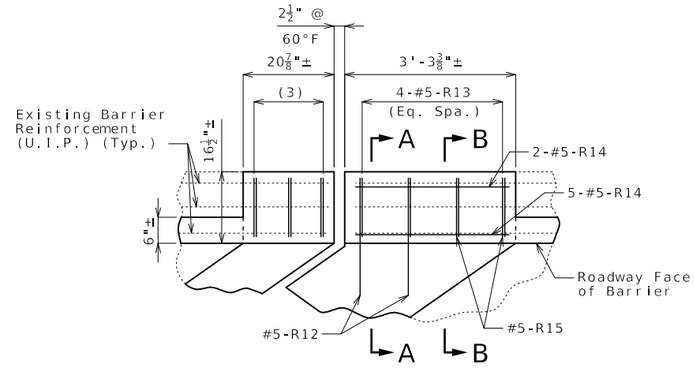
SECTION B-B

Left barrier shown, right barrier similar.

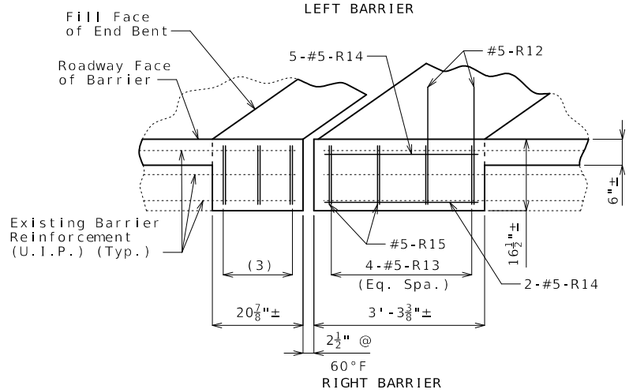


PART ELEVATION SHOWING SLAB AND BARRIER REPLACEMENT

Left barrier shown, right barrier similar.



LEFT BARRIER



RIGHT BARRIER

PART PLAN SHOWING BARRIER REPLACEMENT

(Proposed wearing surface not shown for clarity.)

SLAB AND BARRIER REPLACEMENT AT END BENT NO. 1

Detailed June 2026
Checked July 2026

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

STATE OF MISSOURI
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MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	4

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

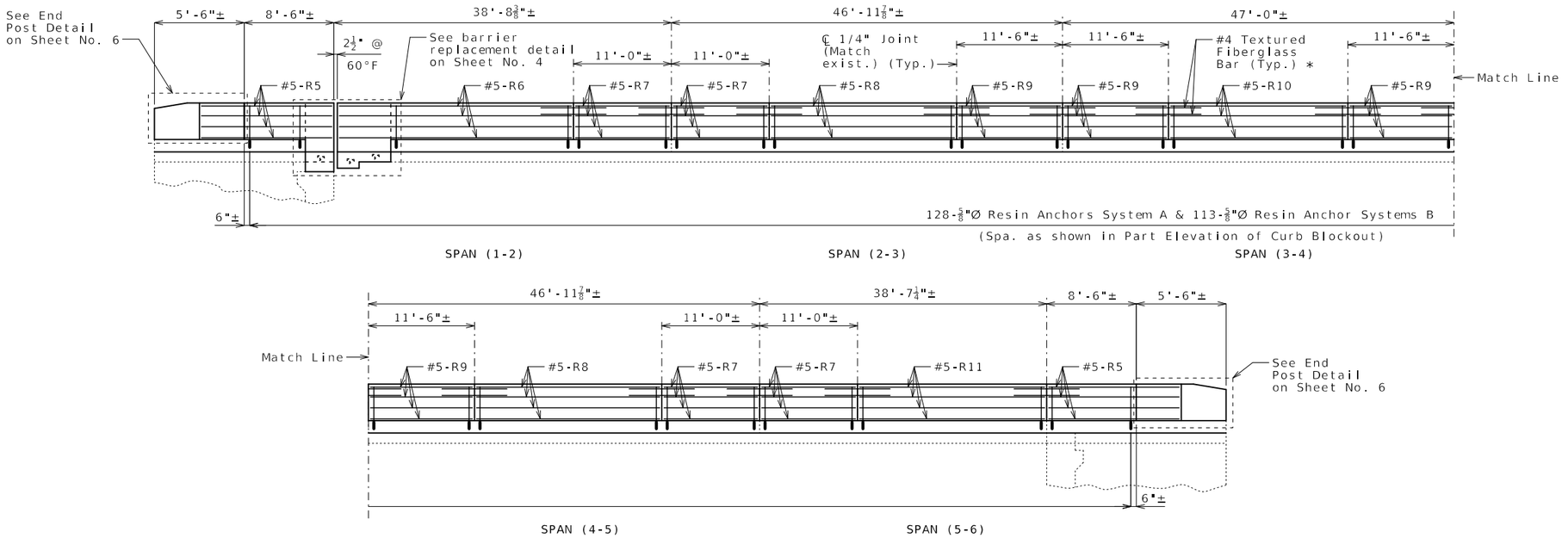
PROJECT NO.

BRIDGE NO.
A26681

DESCRIPTION

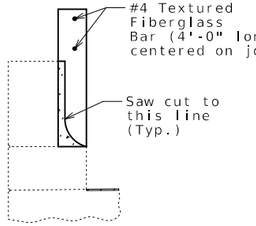
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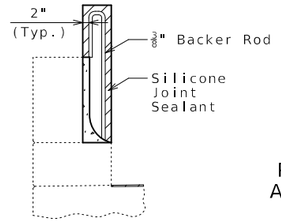
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



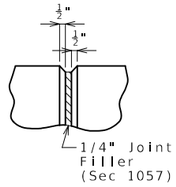
ELEVATION OF LEFT CURB BLOCKOUT

(Right curb blockout similar)



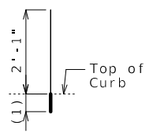


SECTION THRU SAW CUT JOINT

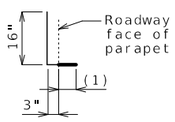


PART ELEVATION AT FORMED JOINT

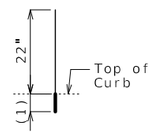
Longitudinal dimensions are along grade and are taken at top outside edge of parapet (based on existing bridge plans).



RESIN ANCHOR SYSTEM A
(256 req'd)
(Install in curb)



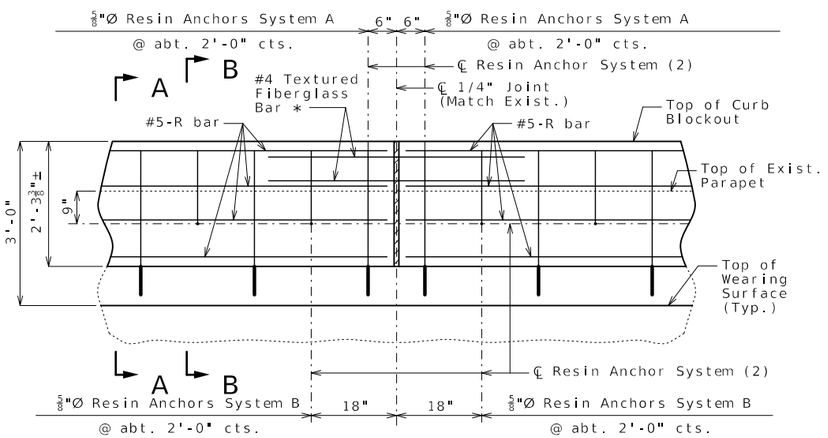
RESIN ANCHOR SYSTEM B
(226 req'd)
(Install in parapet)



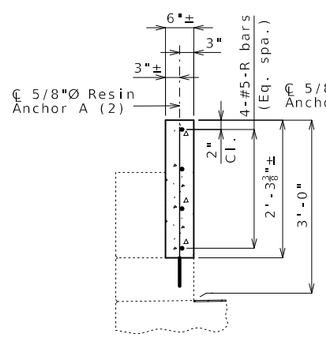
RESIN ANCHOR SYSTEM C
(64 req'd)
(Install in curb at end post)

(1) Use manufacturer's embedment length (5" minimum embedment).

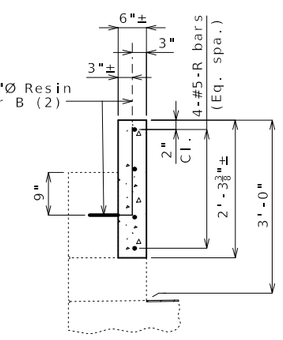
DETAILS OF RESIN ANCHORS



PART ELEVATION OF CURB BLOCKOUT



SECTION A-A



SECTION B-B

Notes:

* Slip-formed option only.

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

Bridge rail (to be removed) not shown for clarity.

Concrete in curb blockout shall be Class B-1.

Measurement of curb blockout is to the nearest linear foot, measured at the top outside edge of parapet. (Match existing curb and parapet)

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

Payment for concrete, reinforcement, resin anchor systems and any other work incidental to the curb blockout, complete in place, will be considered completely covered by the contract unit price for Curb Blockout per linear foot.

Cost of any concrete curb or parapet repair will be considered completely covered by the contract unit price for Curb Blockout.

All curb blockout reinforcement shall be epoxy coated.

(2) Shift resin anchors where necessary to clear existing anchor bolts for bridge rail, miss curb outlets (if present) and clear existing reinforcement.

Use a minimum lap of 3'-1" for #5 horizontal curb blockout bars.

Concrete traffic barrier delineators shall be placed on top of the curb blockout similarly as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Curb Blockout.

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

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system 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 #5 Grade 60 reinforcing bar shall be substituted for the 5/8"Ø threaded rod.

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

CURB BLOCKOUT

STATE OF MISSOURI
GARRETT L HAGER
NUMBER PE-2023000437
PROFESSIONAL ENGINEER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	5

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

CONTRACT ID.

PROJECT NO.

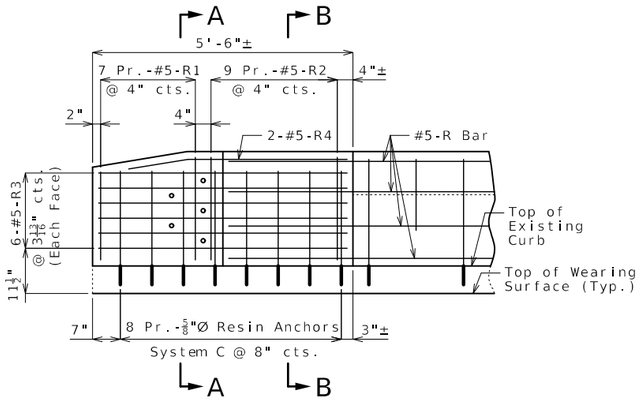
BRIDGE NO.
A26681

DESCRIPTION	DATE

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

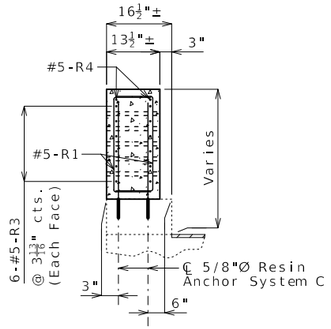
Detailed June 2026
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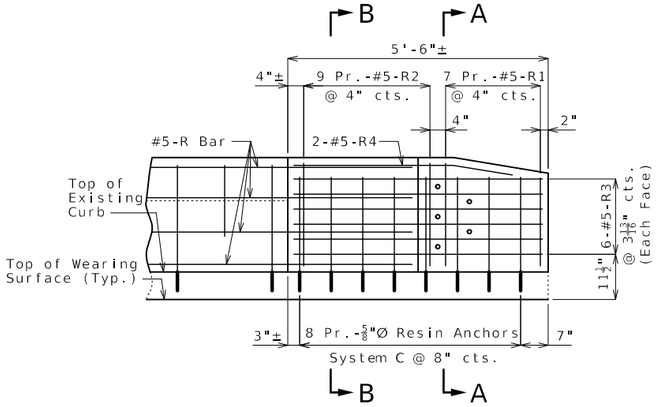


ELEVATION SHOWING REINFORCEMENT

(Right End Post at End Bent No. 6 similar)

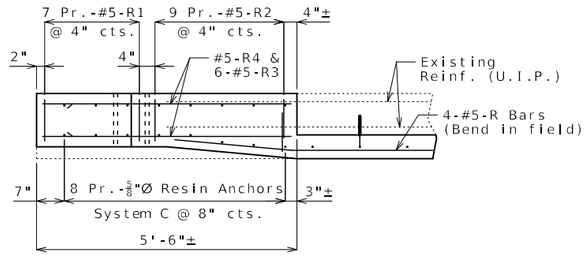


SECTION A-A



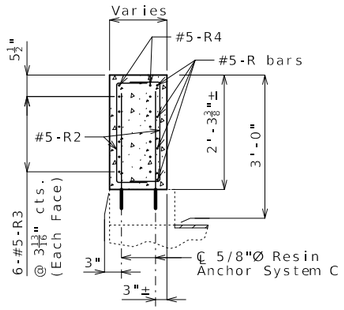
ELEVATION SHOWING REINFORCEMENT

(Right End Post at End Bent No. 1 similar)

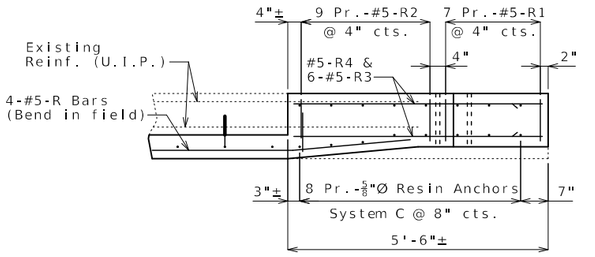


PLAN SHOWING REINFORCEMENT

LEFT END POST AT END BENT NO. 1

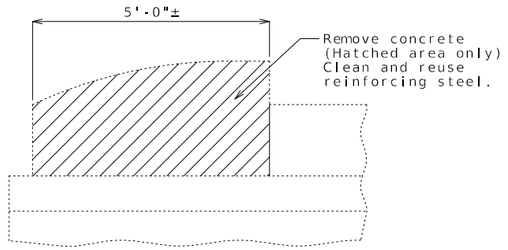


SECTION B-B



PLAN SHOWING REINFORCEMENT

LEFT END POST AT END BENT NO. 6



PART ELEVATION SHOWING END POST CONCRETE REMOVAL

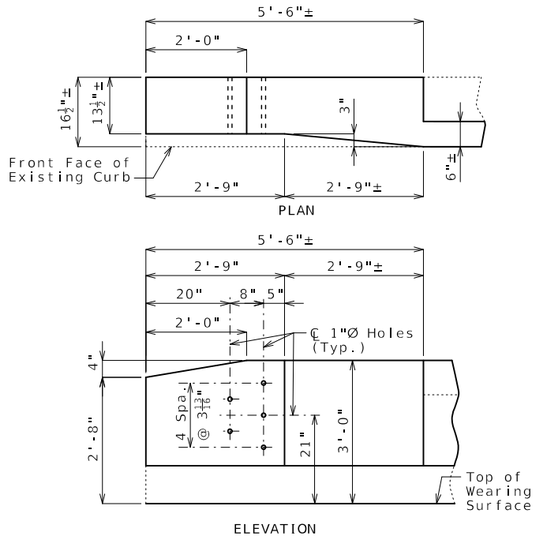
Cost of removing existing end posts will be considered completely covered by the contract unit price for Curb Blockout.

Notes:

Work this sheet with Sheet No. 5.

For details of resin anchors, see Sheet No. 5.

Resin anchors shall be shifted or bent in field to clear one-inch diameter holes by at least 1/2 inch.



DETAILS OF END POST AND GUARD RAIL ATTACHMENT

CURB BLOCKOUT AT END BENTS

Detailed June 2026
Checked July 2026

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

STATE OF MISSOURI
GARRETT L. HAGER
NUMBER PE-2023000437
PROFESSIONAL ENGINEER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	6

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

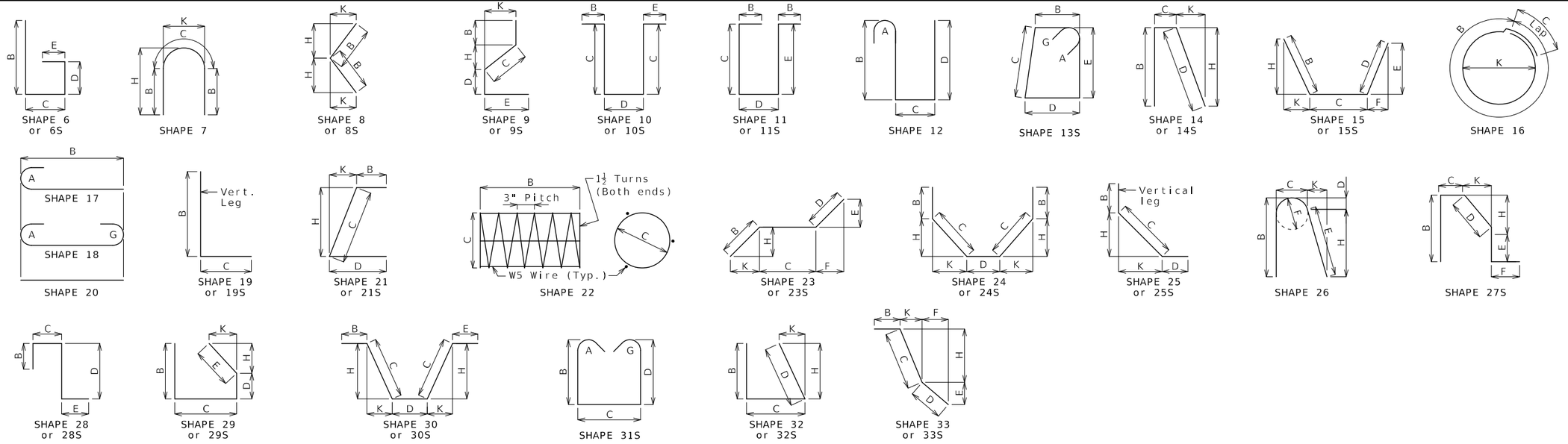
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A26681

DESCRIPTION | DATE

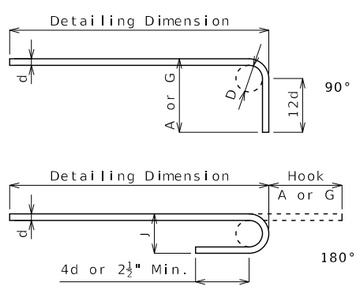
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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



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	3¾"	10"	7"	5"
#6	1	4½"	12"	8¼"	6"
#7	2	5¼"	14"	9¾"	7"
	3	7"	15"	11½"	8¾"
#8	2	6"	16"	11"	8"
	3	8"	17"	13¼"	10"
#9	1	9½"	19½"	15½"	11¾"
#10	1	10¾"	22"	17½"	13¼"
#11	1	12"	24½"	19⅝"	14⅞"
#14	1	18¼"	31¼"	27½"	21⅝"
#18	1	24"	41½"	36¼"	28½"

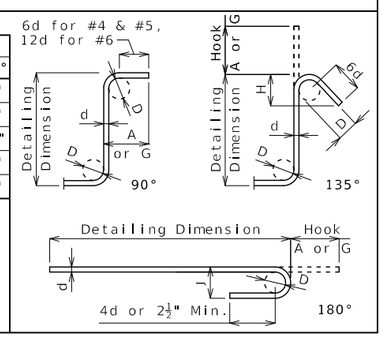


Stirrup Pin Bend Shapes (S)

Size	Case	D	A or G			H	J
			90°	135°	180°	135°	180°
#4	2	2"	4½"	4½"	5"	2⅞"	3"
	3	3"	5"	5¼"	6"	3"	4"
#5	2	2½"	5¾"	5¾"	5¾"	3⅝"	3¾"
	3	3¾"	6¼"	6½"	7"	3⅞"	5"
#6	1	4½"	12"	7¾"	8¼"	4⅝"	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.



All dimensions are out to out.

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.

BENDING DIAGRAMS

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

Reinforcing steel (ASTM A615 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

Reinforcing Steel Totals (Pounds)

	Size	Substructure		Superstructure			Entire Bridge	
		Plain	Epoxy	Slab	Barrier	Slip Form	Plain	Epoxy
By Size	W5	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0
	5	0	0	22	2,940	0	0	2,962
	6	0	0	718	0	0	0	718
	7	0	0	0	0	0	0	0
By Type		0	0	740	2,940	0	0	3,680

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

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		SLAB													
8	6 S1	SLAB	E	20		39 4.00							39 4	39 4	473
4	6 S2	SLAB	E	20		40 10.00							40 10	40 10	245
8	5 S3	SLAB	E	20	2	2 3.00							2 3	2 3	
		Incr. = 3.375"				3 1.00							3 1	3 1	22
		CURB BLOCKOUT & REPLACEMENT													
56	5 R1	END POST	E	10S	8		10.50	21.00					3 6	3 3	
		Incr. = 0.500"					10.50	2 0.00					3 9	3 6	197
72	5 R2	END POST	E	10S	8		10.50	2 0.00					3 9	3 6	
		Incr. = 0.750"					13.50	2 0.00					4 3	4 0	282
48	5 R3	END POST	E	20		5 3.00							5 3	5 3	263
8	5 R4	END POST	E	23S		16.25	3 4.00				2.75	16.00	4 8	4 7	38
16	5 R5	BLOCKOUT	E	20		10 11.00							10 11	10 11	182
8	5 R6	BLOCKOUT	E	20		27 1.00							27 1	27 1	226
32	5 R7	BLOCKOUT	E	20		10 9.00							10 9	10 9	359
16	5 R8	BLOCKOUT	E	20		24 2.00							24 2	24 2	403
32	5 R9	BLOCKOUT	E	20		11 3.00							11 3	11 3	375
8	5 R10	BLOCKOUT	E	20		23 9.00							23 9	23 9	198
8	5 R11	BLOCKOUT	E	20		27 4.00							27 4	27 4	228
4	5 R12	REPLACEMENT	E	28S		13.00	12.50	13.00	12.00				4 3	3 11	16
14	5 R13	REPLACEMENT	E	10S			2 8.50	12.50					6 6	6 3	91
14	5 R14	REPLACEMENT	E	20		2 11.00							2 11	2 11	43
10	5 R15	REPLACEMENT	E	6S		13.00	12.50	13.00	10.00				4 1	3 9	39

BILL OF REINFORCING STEEL

Detailed June 2026
Checked July 2026

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NUMBER PE-2023000437
PROFESSIONAL ENGINEER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED 8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	7

COUNTY ST. FRANCOIS

JOB NO. J9P3852

CONTRACT ID.

PROJECT NO.

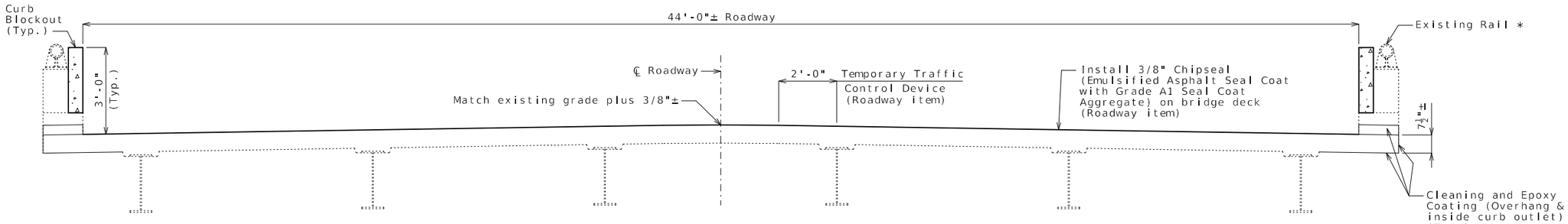
BRIDGE NO. A26681

DESCRIPTION | DATE

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

SEC/SUR 22 TWP 36N RGE 4E

U.I.P. AND REHABILITATE EXISTING (31'- 3 @ 41'- 31') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS (SKEW: 40°00'00" R.A.)

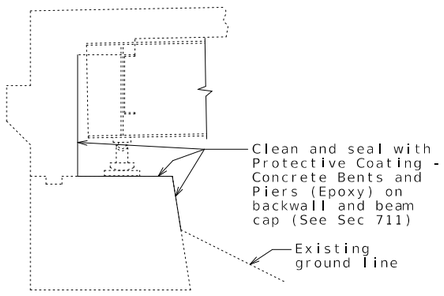


TYPICAL SECTION THRU EXISTING DECK

* Asbestos (Friability Category 11 NF) has been detected in the Insulation compound between the top of the concrete parapet and the base of the handrail posts. Removal of the handrail and posts, or leave in place is the Contractor's option. Should the Contractor elect to remove the handrail and posts, the Contractor will be required to use an Abatement Contractor during the removal. No direct payment will be made for removal of the handrail and posts and for asbestos abatement should the Contractor choose to perform this work. Cost for the described work will be considered completely covered by the contract unit price for other items in the contract.

Estimated Quantities

Item		Total
Removal of Miscellaneous ACM (Non-Friable)	sq. foot	19
Removal of Existing Expansion Joint & Adjacent Concrete	linear foot	61
Remove and Replace Barrier Curb	linear foot	8
Class B-2 Concrete	cu. yard	5.5
Curb Blockout	linear foot	417
Cleaning and Epoxy Coating	sq. foot	1448
Reinforcing Steel (Epoxy Coated)	sq. foot	560
Protective Coating - Concrete Bents and Piers (Epoxy)	lump sum	1
Surface Preparation for Recoating Structural Steel	sq. foot	700
Field Application of Inorganic Zinc Primer	sq. foot	700
Finish Field Coat (System L)	sq. foot	700
Strip Seal Expansion Joint System	linear foot	61



PART SECTION THRU END BENTS NO. 1 & 6 SHOWING CONCRETE PROTECTIVE COATING

(End Bent No. 1 shown, End Bent No. 6 similar)

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 7

Design Loading:

HS20-44 (1973 & New Construction)

Design Unit Stresses:

Class B-1 Concrete (Curb Blockout) f'c = 4,000 psi
Class B-2 Concrete f'c = 4,000 psi
Reinforcing Steel (ASTM A615 Grade 60) fy = 60,000 psi

Structural Steel Protective Coatings:

Protective Coating: System L in accordance with Sec 1081.

Surface Preparation: Surface preparation of the existing steel shall be in accordance with Sec 1081 for Recoating of Structural Steel (System G, H, I or L) with inorganic zinc primer. The cost of surface preparation will be considered completely covered by the contract unit price per sq. foot for Surface Preparation for Recoating Structural Steel.

Prime Coat: The cost of the prime coat will be considered completely covered by the contract unit price per sq. foot for Field Application of Inorganic Zinc Primer.

Field Coat(s): The color of the field coat(s) shall be Gray (Federal Standard #26373). The cost of the finish field coat will be considered completely covered by the contract unit price per sq. foot for Finish Field Coat (System L).

Miscellaneous:

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

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

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

Traffic Handling:

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

REPAIRS TO BRIDGE: ROUTE 32 OVER FLAT RIVER

ROUTE 32 FROM ROUTE BB TO ROUTE 67
ABOUT 4.9 MILES NORTHEAST OF ROUTE BB
BEGINNING STATION 318+83.40± (MATCH EXISTING)

STATE OF MISSOURI
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NUMBER PE-2023000437
PROFESSIONAL ENGINEER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED 8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	1

COUNTY ST. FRANCOIS

JOB NO. J9P3852

CONTRACT ID.

PROJECT NO.

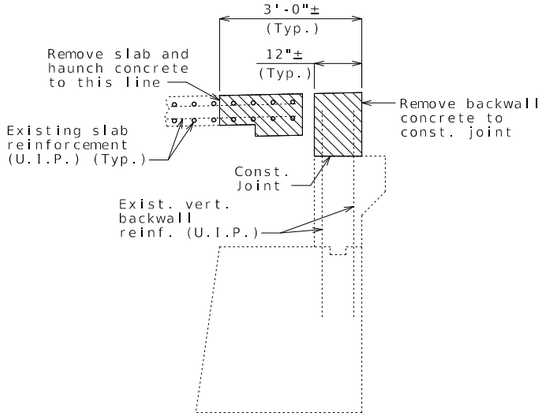
BRIDGE NO. A26701

DESCRIPTION	DATE

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

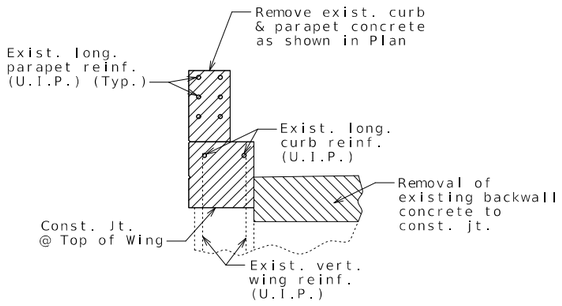
Detailed June 2026
Checked July 2026

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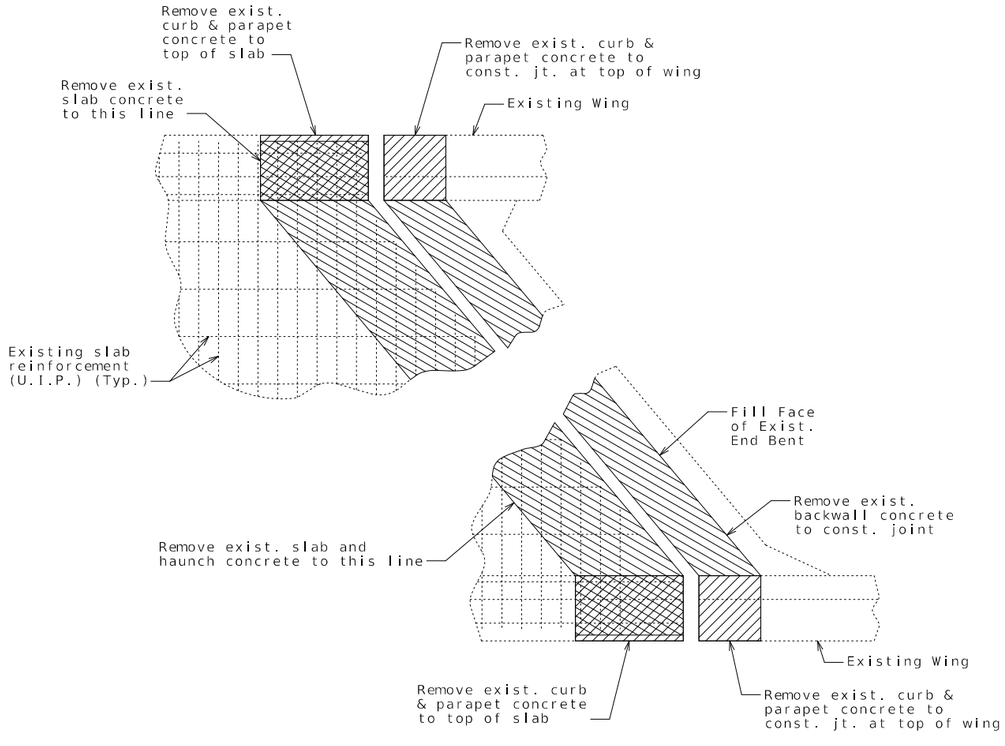


PART SECTION THRU
END BENT NO. 6
SHOWING CONCRETE REMOVAL

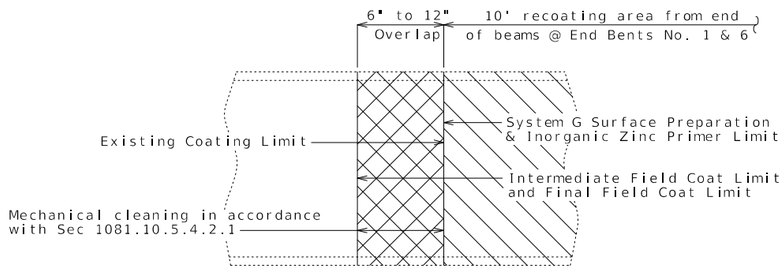
Steel beam & diaphragm not shown for clarity.



PART SECTION THRU
WING AT END BENT NO. 6
SHOWING CONCRETE REMOVAL



PART PLAN OF END BENT NO. 6
SHOWING CONCRETE REMOVAL



PART ELEVATION SHOWING LIMITS OF PAINT OVERLAP

(Vertical or horizontal paint limit. Horizontal limit shown)

Limits of Paint Overlap: System G shall overlap the existing coating between 6 inches and 12 inches in order to achieve maximum coverage at the paint limit of each complete system near the expansion and contraction areas. The final field coating shall be masked to provide crisp, straight lines and to prevent overspray beyond the overlap required.

REHAB DETAILS

Detailed June 2026
Checked July 2026

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GARRETT L. HAGER
NUMBER PE-2023000437
PROFESSIONAL ENGINEER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	2

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

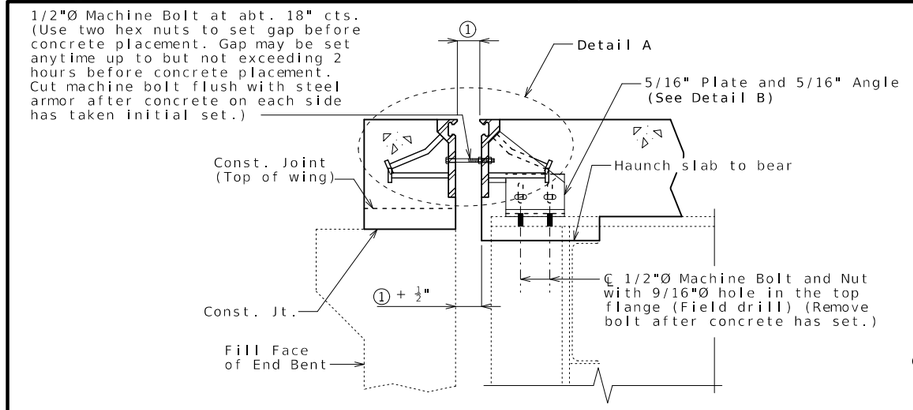
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A26701

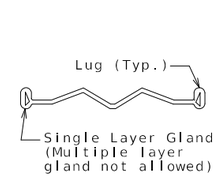
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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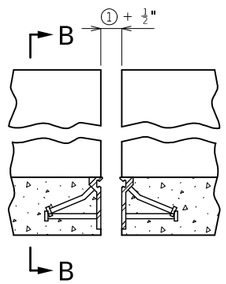


SECTION A-A

Strip seal gland not shown for clarity.

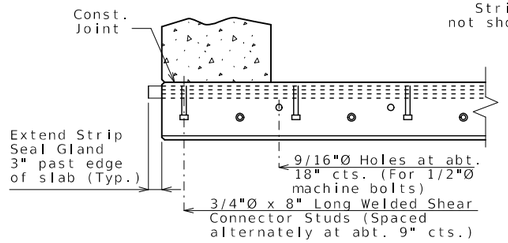


DETAIL OF GLAND

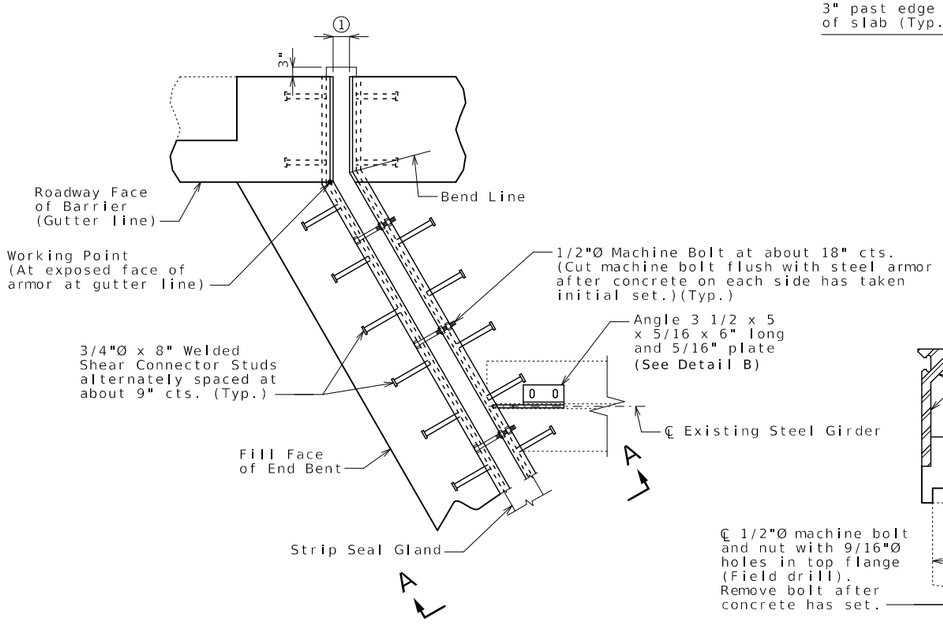


PART ELEVATION OF BARRIER

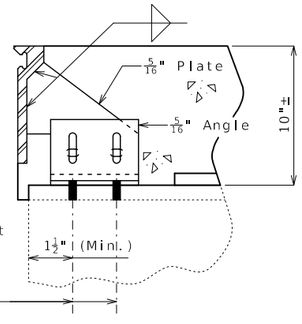
Strip seal gland not shown for clarity.

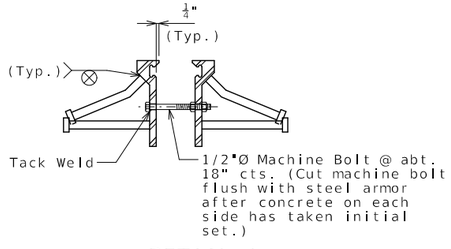


PART SECTION B-B

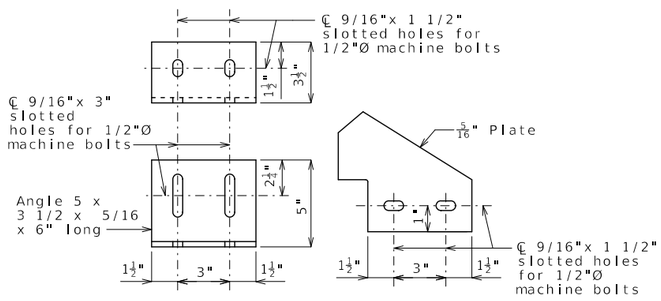


PART PLAN





DETAIL A



DETAIL B

GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for staged construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

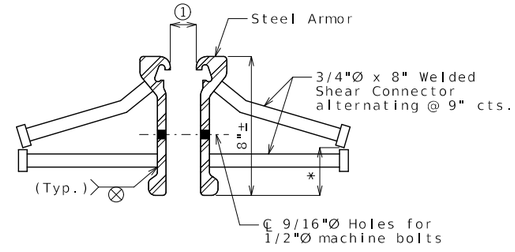
Longitudinal reinforcing steel shall be placed so that ends shall be 1" from the vertical leg of the steel armor at the expansion joint system.

Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

② The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

③ MoDOT Construction personnel will indicate the strip seal expansion joint system installed.

Steel armor may also be referred to as extrusion or rail.



DETAIL OF JOINT ARMOR

* Bend stud in shop to maintain 1" min. from bottom of steel armor.

Table of Allowed Transverse Strip Seal Expansion Joint System

Manufacturer	Strip Seal System (Designated Name)	Movement Parallel to RDWY	① Allowed Installation Gap Normal to Joint at RDWY Surface @ Air/Surface Temperature ②						③
			@ 40°F	@ 50°F	@ 60°F	@ 70°F	@ 80°F	@ 90°F	
D S Brown	Strip seal L2-400	1 5/16"	2 1/8"	2 1/16"	2"	1 15/16"	1 7/8"	1 13/16"	☐
D S Brown	Strip seal L2-500	1 5/16"	2 1/8"	2 1/16"	2"	1 15/16"	1 7/8"	1 13/16"	☐
Watson Bowman Acme (Wabo)	Strip seal SE-300	1 5/16"	2 1/8"	2 1/16"	2"	1 15/16"	1 7/8"	1 13/16"	☐
Watson Bowman Acme (Wabo)	Strip seal SE-400	1 5/16"	2 1/8"	2 1/16"	2"	1 15/16"	1 7/8"	1 13/16"	☐

STRIP SEAL EXPANSION JOINT SYSTEM AT END BENT NO. 6

Detailed June 2026
Checked July 2026

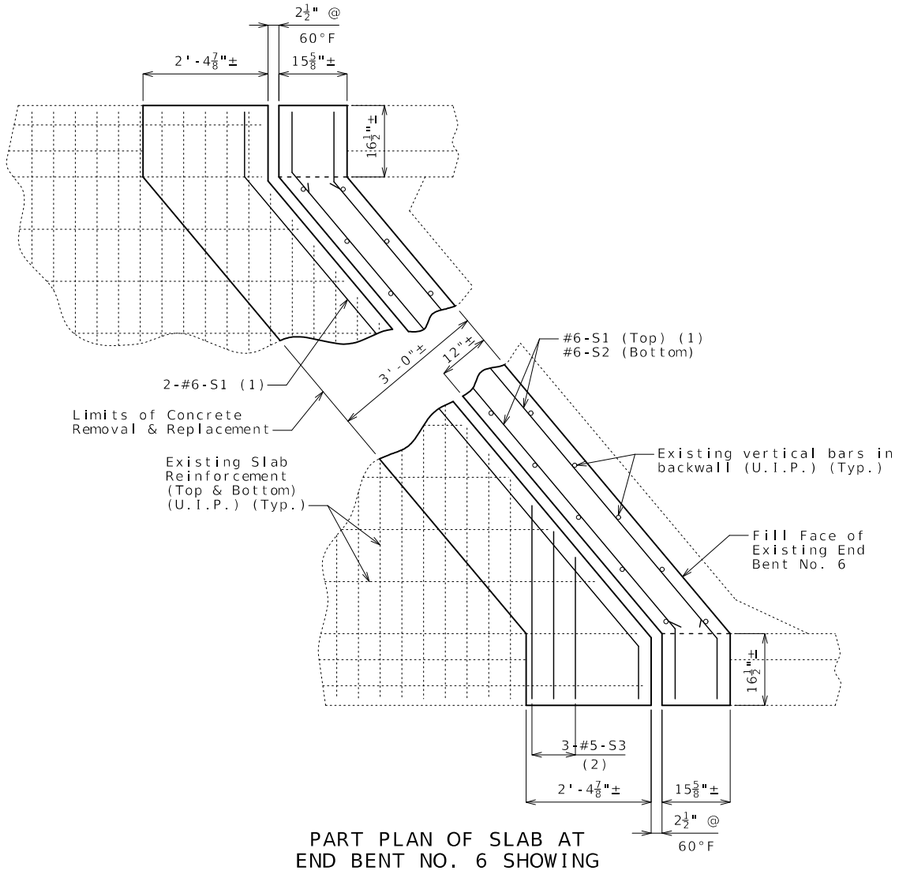
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STATE OF MISSOURI
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

DATE PREPARED 8/11/2026
ROUTE 32 | STATE MO
DISTRICT BR | SHEET NO. 3
COUNTY ST. FRANCOIS
JOB NO. J9P3852
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A26701

DESCRIPTION | DATE



PART PLAN OF SLAB AT END BENT NO. 6 SHOWING SLAB REINFORCEMENT

(Replacement barrier not shown for clarity.)

(1) Bend in field.

(2) Top & bottom, @ 5" cts.

(3) 2-#5-R13 & 2-#5-R15, equally spaced

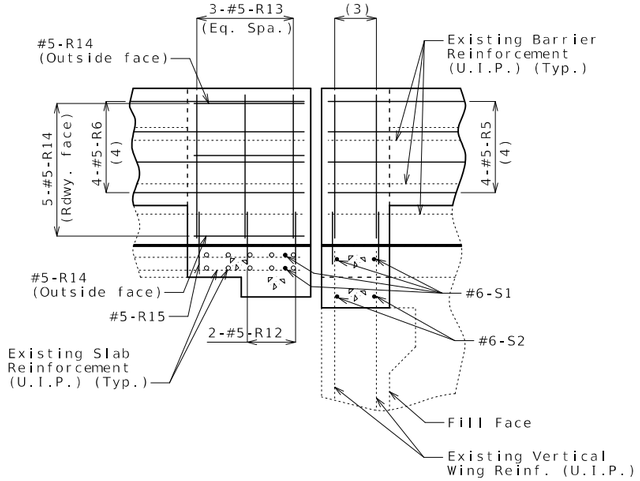
(4) See Curb Blockout details on Sheet No. 5.

Notes:

Expansion device not shown for clarity.

For details of strip seal expansion joint system, see Sheet No. 3.

The total bar length for S1 & S2 bars shown in Bill of Reinforcing Steel allows for one lap splice with a length of 2'-4". Actual bar segment lengths to be determined by contractor for stage construction. 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 Reinforcing Steel (Epoxy Coated). No adjustment of the quantity of reinforcing steel will be allowed for the use of mechanical bar splices.



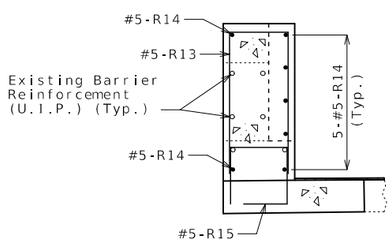
PART ELEVATION SHOWING SLAB AND BARRIER REPLACEMENT

Left barrier shown, right barrier similar.



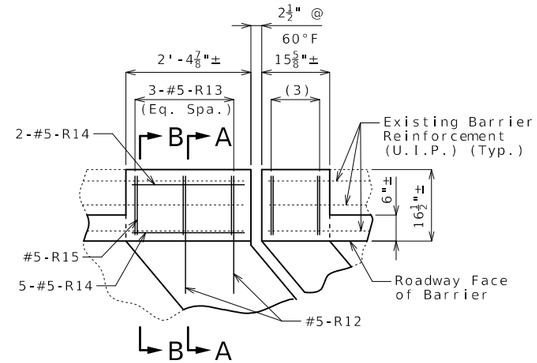
SECTION A-A

Left barrier shown, right barrier similar.

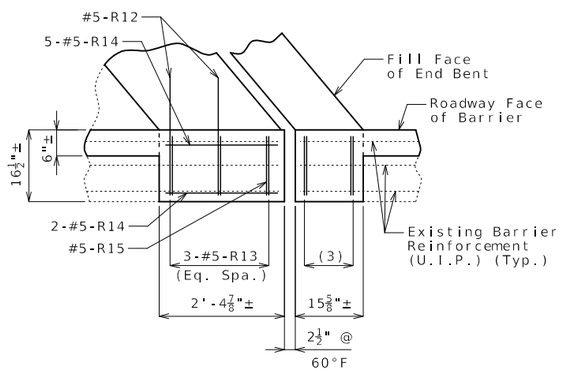


SECTION B-B

Left barrier shown, right barrier similar.



LEFT BARRIER



RIGHT BARRIER

PART PLAN SHOWING BARRIER REPLACEMENT

SLAB AND BARRIER REPLACEMENT AT END BENT NO. 6

Detailed June 2026
Checked July 2026

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

STATE OF MISSOURI
GARRETT L. HAGER
NUMBER PE-2023000437
PROFESSIONAL ENGINEER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	4

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

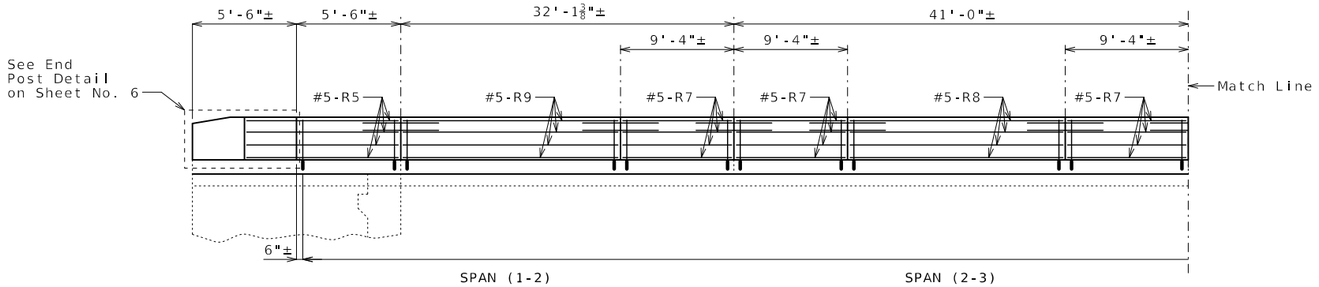
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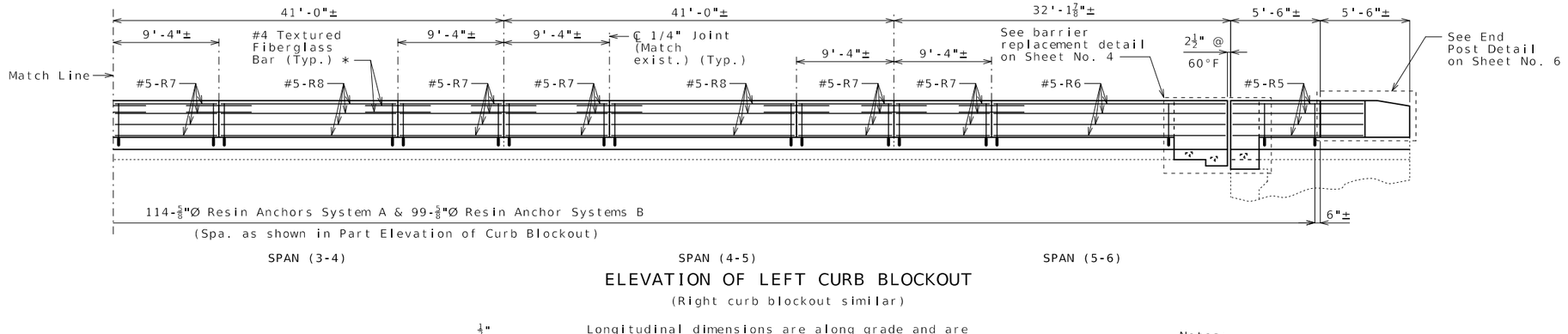
PROJECT NO.

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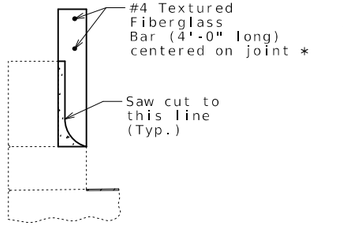
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

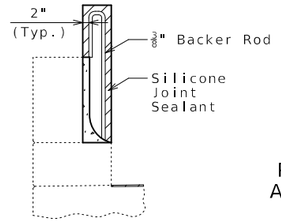




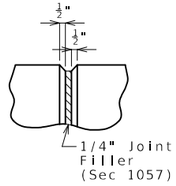
ELEVATION OF LEFT CURB BLOCKOUT

(Right curb blockout similar)



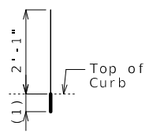


SECTION THRU SAW CUT JOINT

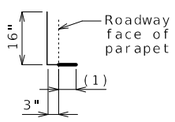


PART ELEVATION AT FORMED JOINT

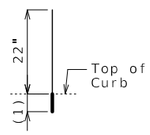
Longitudinal dimensions are along grade and are taken at top outside edge of parapet (based on existing bridge plans).



RESIN ANCHOR SYSTEM A
(228 req'd)
(Install in curb)



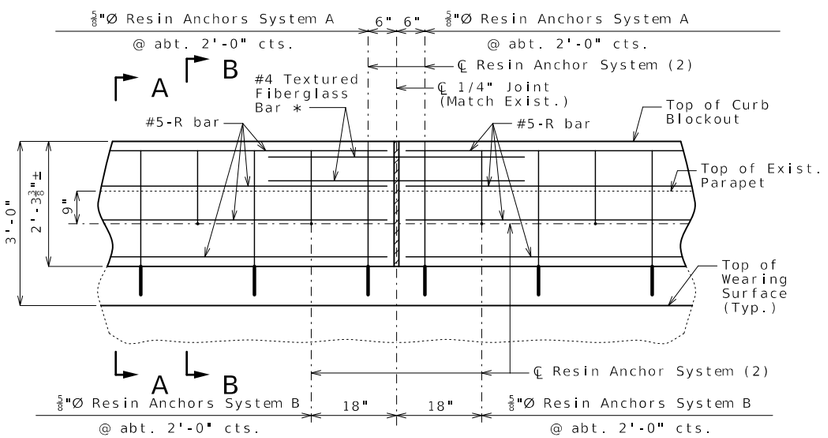
RESIN ANCHOR SYSTEM B
(198 req'd)
(Install in parapet)



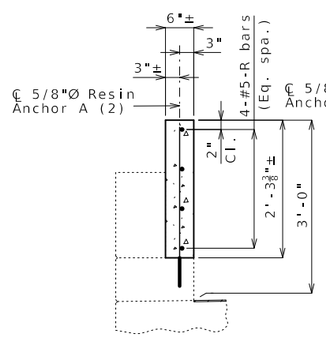
RESIN ANCHOR SYSTEM C
(64 req'd)
(Install in curb at end post)

(1) Use manufacturer's embedment length (5" minimum embedment).

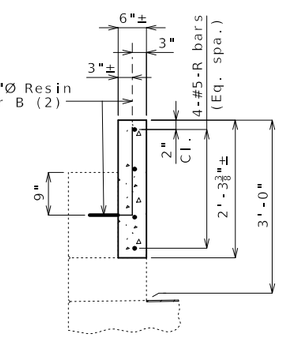
DETAILS OF RESIN ANCHORS



PART ELEVATION OF CURB BLOCKOUT



SECTION A-A



SECTION B-B

Notes:

* Slip-formed option only.

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

Bridge rail (to be removed) not shown for clarity.

Concrete in curb blockout shall be Class B-1.

Measurement of curb blockout is to the nearest linear foot, measured at the top outside edge of parapet. (Match existing curb and parapet)

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

Payment for concrete, reinforcement, resin anchor systems and any other work incidental to the curb blockout, complete in place, will be considered completely covered by the contract unit price for Curb Blockout per linear foot.

Cost of any concrete curb or parapet repair will be considered completely covered by the contract unit price for Curb Blockout.

All curb blockout reinforcement shall be epoxy coated.

(2) Shift resin anchors where necessary to clear existing anchor bolts for bridge rail, miss curb outlets (if present) and clear existing reinforcement.

Use a minimum lap of 3'-1" for #5 horizontal curb blockout bars.

Concrete traffic barrier delineators shall be placed on top of the curb blockout similarly as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Curb Blockout.

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

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system 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 #5 Grade 60 reinforcing bar shall be substituted for the 5/8"Ø threaded rod.

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

CURB BLOCKOUT

Detailed June 2026
Checked July 2026

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

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GARRETT L. HAGER
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PROFESSIONAL ENGINEER
Garrett L. Hager
DIGITALLY SIGNED BY GARRETT L. HAGER
GARRETT L. HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	5

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

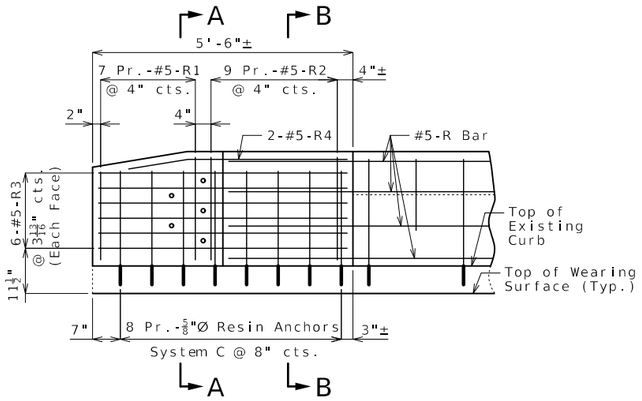
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A26701

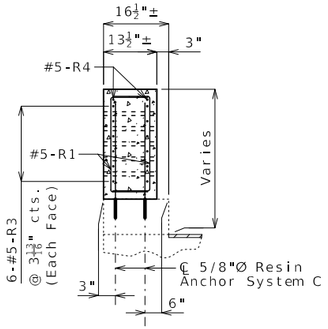
DESCRIPTION	DATE

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

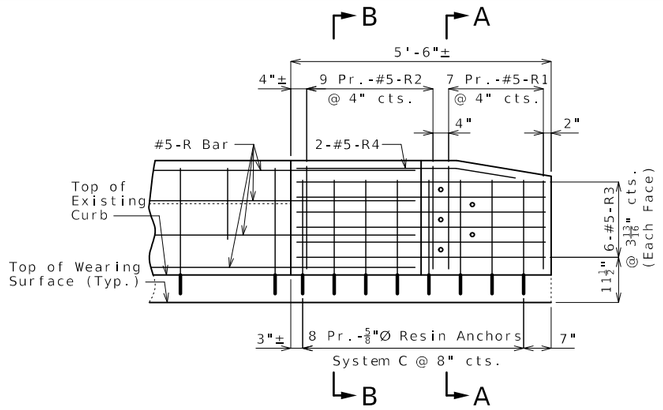


ELEVATION SHOWING REINFORCEMENT

(Right End Post at End Bent No. 6 similar)

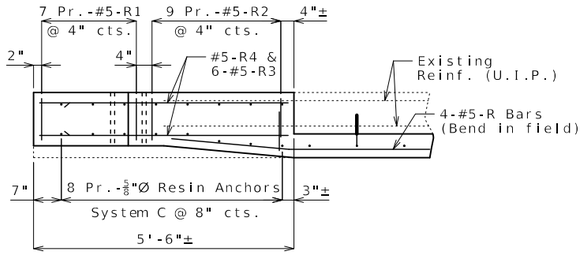


SECTION A-A



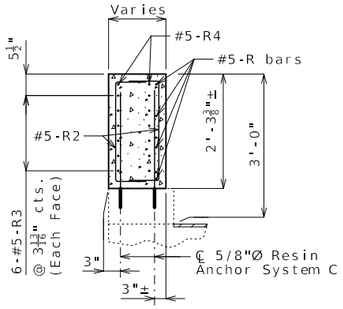
ELEVATION SHOWING REINFORCEMENT

(Right End Post at End Bent No. 1 similar)

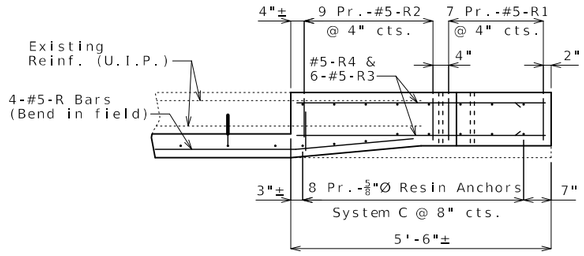


PLAN SHOWING REINFORCEMENT

LEFT END POST AT END BENT NO. 1

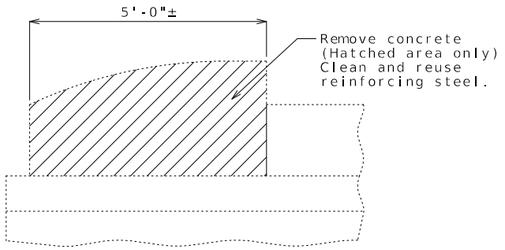


SECTION B-B



PLAN SHOWING REINFORCEMENT

LEFT END POST AT END BENT NO. 6



PART ELEVATION SHOWING END POST CONCRETE REMOVAL

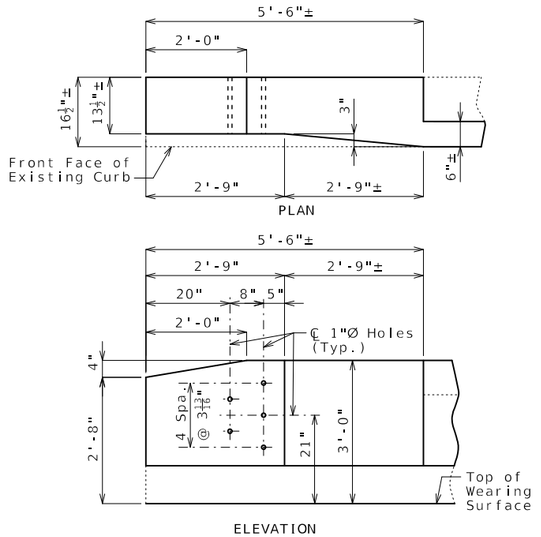
Cost of removing existing end posts will be considered completely covered by the contract unit price for Curb Blockout.

Notes:

Work this sheet with Sheet No. 5.

For details of resin anchors, see Sheet No. 5.

Resin anchors shall be shifted or bent in field to clear one-inch diameter holes by at least 1/2 inch.



DETAILS OF END POST AND GUARD RAIL ATTACHMENT

CURB BLOCKOUT AT END BENTS

Detailed June 2026
Checked July 2026

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

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GARRETT L HAGER - CIVIL
MO-PE-2023000437

DATE PREPARED
8/11/2026

ROUTE	STATE
32	MO
DISTRICT	SHEET NO.
BR	6

COUNTY
ST. FRANCOIS

JOB NO.
J9P3852

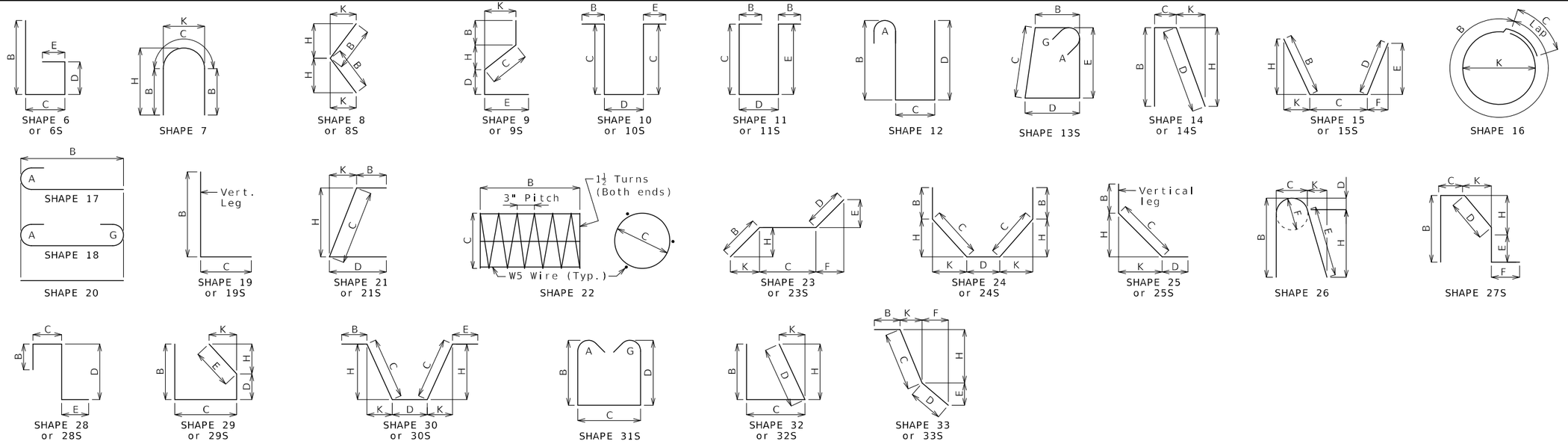
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
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DESCRIPTION	DATE

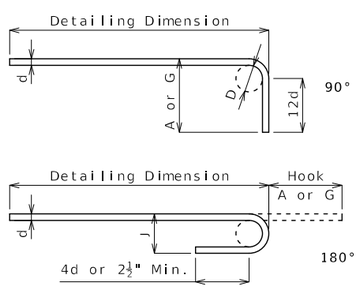
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



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	3¾"	10"	7"	5"
#6	1	4½"	12"	8¼"	6"
#7	2	5¼"	14"	9¾"	7"
	3	7"	15"	11½"	8¾"
#8	2	6"	16"	11"	8"
	3	8"	17"	13¼"	10"
#9	1	9½"	19½"	15½"	11¾"
#10	1	10¾"	22"	17½"	13¼"
#11	1	12"	24½"	19½"	14⅝"
#14	1	18¼"	31¼"	27½"	21⅝"
#18	1	24"	41½"	36¼"	28½"

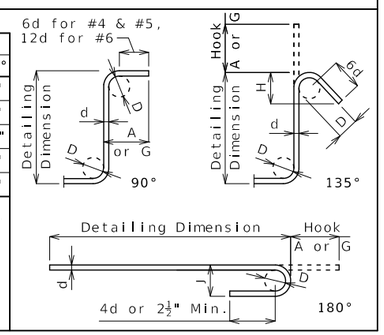


Stirrup Pin Bend Shapes (S)

Size	Case	D	A or G			H	J
			90°	135°	180°	135°	180°
#4	2	2"	4½"	4½"	5"	2⅞"	3"
	3	3"	5"	5¼"	6"	3"	4"
#5	2	2½"	5¾"	5¾"	5¾"	3⅝"	3¾"
	3	3¾"	6¼"	6½"	7"	3⅞"	5"
#6	1	4½"	12"	7¾"	8¼"	4⅝"	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.



All dimensions are out to out.

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.

BENDING DIAGRAMS

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

Reinforcing steel (ASTM A615 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

Reinforcing Steel Totals (Pounds)

	Size	Substructure		Superstructure			Entire Bridge	
		Plain	Epoxy	Slab	Barrier	Slip Form	Plain	Epoxy
By Size	W5	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0
	5	0	0	19	2,578	0	0	2,597
	6	0	0	555	0	0	0	555
	7	0	0	0	0	0	0	0
By Type		0	0	574	2,578	0	0	3,152

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

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		SLAB													
8	6 S1	SLAB	E	20		31 3.00							31 3	31 3	376
4	6 S2	SLAB	E	20		29 9.00							29 9	29 9	179
6	5 S3	SLAB	E	20	2	2 7.00							2 7	2 7	
		Incr. = 6.000"				3 7.00							3 7	3 7	19
		CURB BLOCKOUT & REPLACEMENT													
56	5 R1	END POST	E	10S	8		10.50	21.00					3 6	3 3	
		Incr. = 0.500"					10.50	2 0.00					3 9	3 6	197
72	5 R2	END POST	E	10S	8		10.50	2 0.00					3 9	3 6	
		Incr. = 0.750"					13.50	2 0.00					4 3	4 0	282
48	5 R3	END POST	E	20		5 3.00							5 3	5 3	263
8	5 R4	END POST	E	23S		16.25	3 4.00				2.75	16.00	4 8	4 7	38
16	5 R5	BLOCKOUT	E	20		7 11.00							7 11	7 11	132
8	5 R6	BLOCKOUT	E	20		22 3.00							22 3	22 3	186
64	5 R7	BLOCKOUT	E	20		9 1.00							9 1	9 1	606
24	5 R8	BLOCKOUT	E	20		22 1.00							22 1	22 1	553
8	5 R9	BLOCKOUT	E	20		22 6.00							22 6	22 6	188
4	5 R12	REPLACEMENT	E	28S		13.00	12.50	13.00	12.00				4 3	3 11	16
10	5 R13	REPLACEMENT	E	10S			2 8.50	12.50					6 6	6 3	65
14	5 R14	REPLACEMENT	E	20		2 0.00							2 0	2 0	29
6	5 R15	REPLACEMENT	E	6S		13.00	12.50	13.00	10.00				4 1	3 9	23

BILL OF REINFORCING STEEL

Detailed June 2026
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