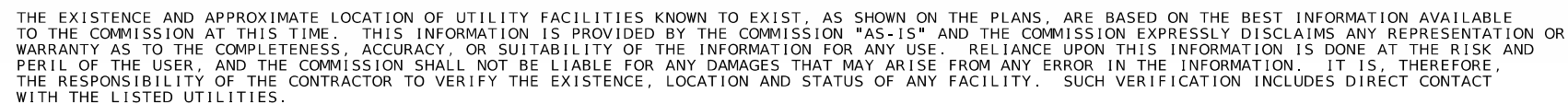


A.A.D.T. - 2025 = 7,054
A.A.D.T. - 2045 = 7,794
D.H.V. = 9.81%
T = 7.09%
V = 55 M.P.H.
D = 49.1%/50.9%

FUNCTIONAL CLASSIFICATION- MINOR ARTERIAL

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

KEY MAP
LOCATION OF RIPLEY COUNTY



Seiji Shimbo

U.S. GOVERNMENT PRINTING OFFICE: 2004
 SEIJI SHIMBO - CIVIL
 MO-PE-2017019046

PROJECT NO.
BRIDGE NO.



MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

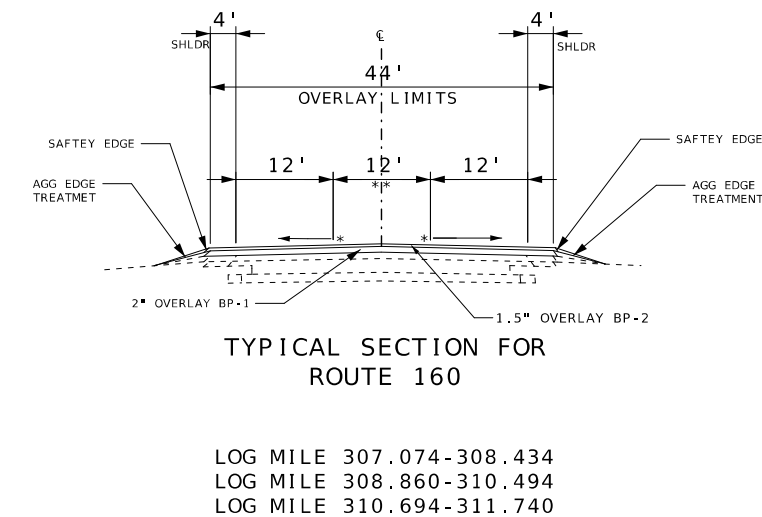
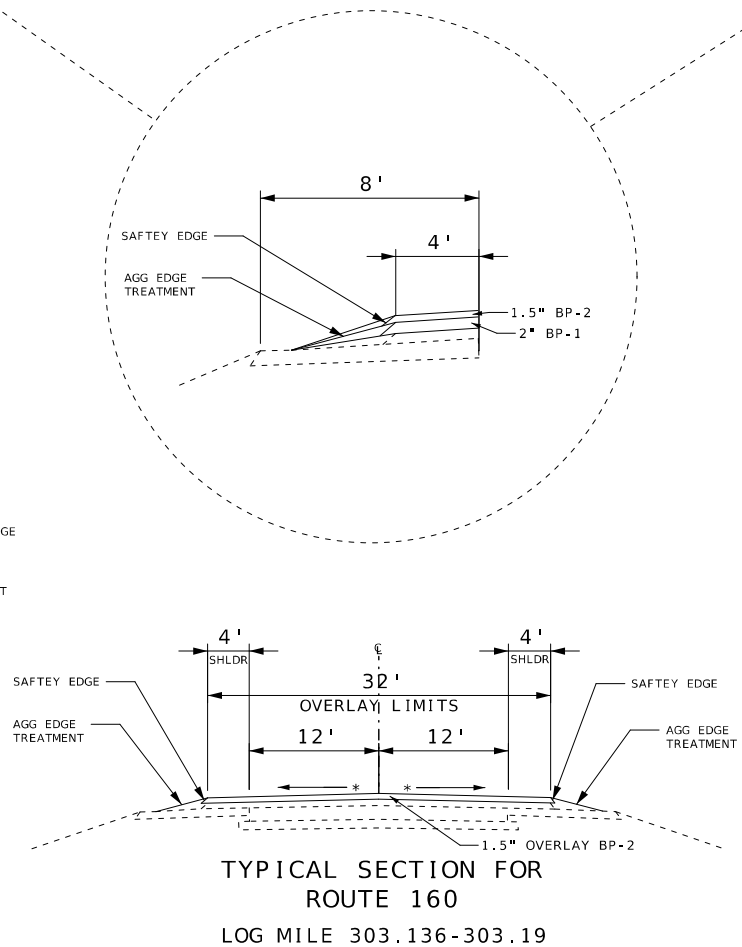
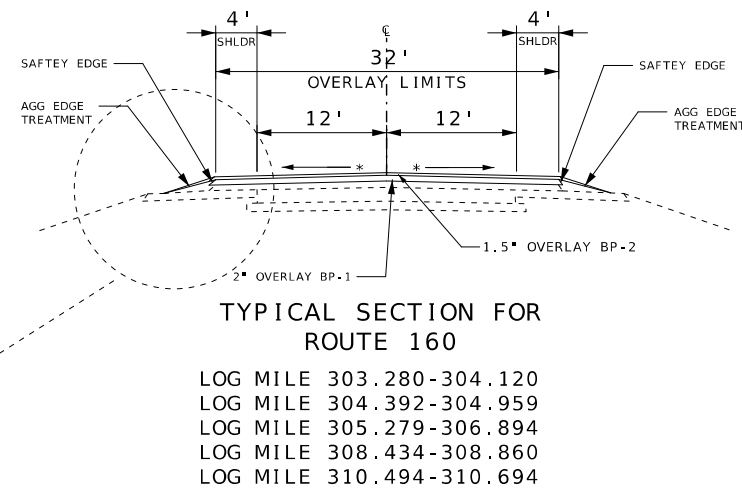
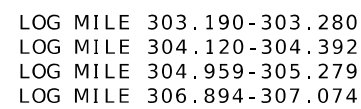
BEGINNING OF PROJECT-US 160	LOG MILE	303.136
BEGINNING OF PROJECT-MO 21	LOG MILE	184.531
END OF PROJECT-US 160	LOG MILE	312.316
END OF PROJECT-MO 21	LOG MILE	184.764

APPARENT LENGTH	49,700.64	FEET
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EQUATIONS AND EXCEPTIONS:		
BRIDGE A4632:	1,076	FEET

TOTAL CORRECTIONS	1,076	FEET
NET LENGTH OF PROJECT	48624.64	FEET
STATE LENGTH	9.209	MILES

FOR INFORMATION ONLY	0.013	ACRES
ESTIMATED DISTURBED ACRES		



BP -1 PG64-22	2.050 /TON
BP -2 PG64-22	2.040 /TON
TACK COAT	.08 /GAL

DRAWING NOT TO SCALE

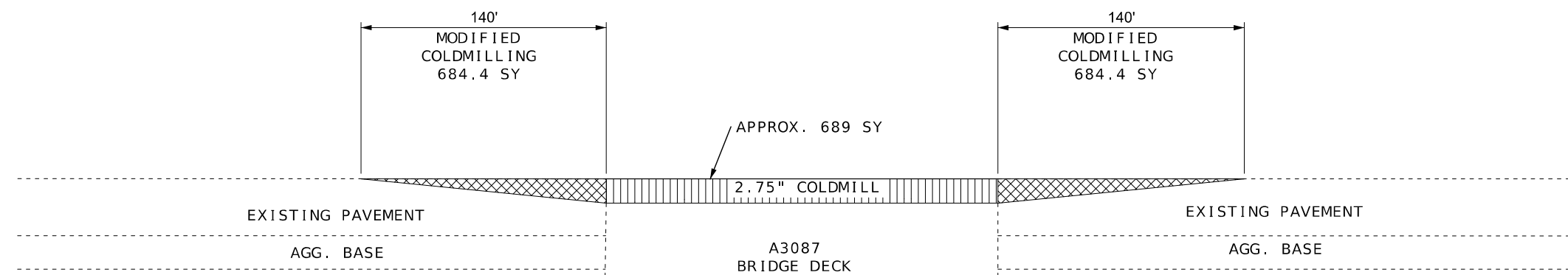


DATE PREPARED	
8/11/2025	
ROUTE	STATE
160	MO
DISTRICT	SHEET NO.
SE	2
COUNTY	
RIPLEY	
JOB NO.	
J9S3806	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

[illegible]

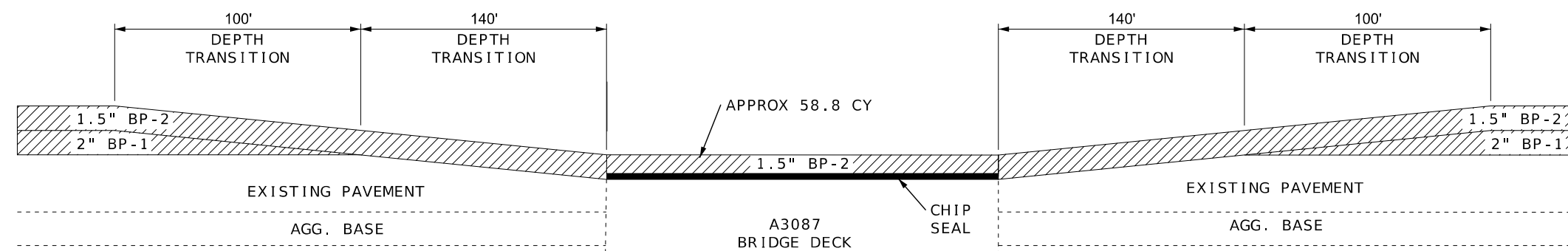
MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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



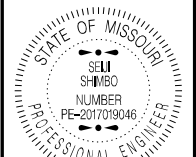
TYPICAL SECTION
US 160 @ BRIDGE A3087
MODIFIED COLMILLING & COLDMILLING

LOG MILE 310.080 (WEST END)
LOG MILE 310.094 (EAST END)



TYPICAL SECTION
US 160 @ BRIDGE A3087
OVERLAY

LOG MILE 310.080 (WEST END)
LOG MILE 310.094 (EAST END)



Seiji Shimbo

DATE PREPARED

ROUTE	STATE
160	MO

DISTRICT	SHEET NO.
SE	2

COUNTY
RIPLEY

JOB NO.
J9S3806

7555888
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

PAVEMENT AND TACK										
LOG MILE	LOG MILE	LOCATION	LENGTH (FT)	WIDTH (FT)	1ST LIFT DEPTH (IN)	2ND LIFT DEPTH (IN)	BITUMINOUS PAVEMENT BP-1 w/PG 64-22 (2.050 TON/CY) (TONS)	BITUMINOUS PAVEMENT BP-2 w/PG 64-22 (2.040 TON/CY) (TONS)	TACK (0.08 GAL/SY) (GAL)	REMARKS
303.136	306.915	LT/RT	19953	32	2	1.5	8079.74	6030.24	11351.04	US 160 TRAVELWAY - START OF PROJECT TO MO 21 NORTH
306.915	312.316	LT/RT	28517	44	2	1.5	15877.99	11850.40	22306.64	US 160 TRAVELWAY - FROM MO 21 NORTH TO END OF PROJECT
303.615	303.675	RT	VAR	VAR	2	1.5	158.07	117.98	222.07	3RD ST INTERSECTION [12,491 SF TOTAL AREA]
304.190	304.286	RT	VAR	VAR	2	1.5	135.56	101.17	190.44	JEFFERSON ST INTERSECTION [10,712 SF TOTAL AREA]
304.708	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
304.765	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
305.080	-	RT	VAR	VAR	2	1.5	89.31	66.65	125.46	MO 142/WALNUT ST INTERSECTION [7,057 SF TOTAL AREA]
305.080	-	RT	38	75	-	1.5	-	26.92	50.67	DEPTH TRANSITION FOR MO 142
305.080	-	LT	VAR	VAR	2	1.5	42.70	31.87	59.99	RTE Y INTERSECTION [3,374 SF TOTAL AREA]
305.080	-	LT	33	75	-	1.5	-	23.38	44.00	DEPTH TRANSITION FOR RTE Y
305.320	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
305.396	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
306.016	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
306.092	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
306.475	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
306.551	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
306.627	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
306.779	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
307.053	-	LT	VAR	VAR	2	1.5	77.25	57.65	108.52	MO 21 INTERSECTION [6,104 SF TOTAL AREA]
307.053	-	LT	24	75	-	1.5	-	17.00	32.00	DEPTH TRANSITION FOR MO 21
304.847	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
308.605	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
308.984	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
309.363	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
309.742	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
310.035	310.076	LT/RT	141	44	-	1.5	-	58.60	110.30	BRIDGE A3087 MILL, SEAL, OVERLAY
310.879	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
312.016	-	LT/RT	1	4	-	-	0.19	-	0.08	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1)
312.190	-	RT	24	75	-	1.5	-	17.00	32.00	DEPTH TRANSITION FOR RTE JJ
312.190	-	RT	VAR	VAR	2	1.5	36.41	27.18	51.15	RTE JJ INTERSECTION [2,877 SF TOTAL AREA]
312.190	-	LT/RT	44	75	-	1.5	-	31.17	58.67	DEPTH TRANSITION FOR US 160 END OF PROJECT
VAR	-	LT/RT	60	20	2	1.5	136.67	204.12	384.00	PAVED CITY / COUNTY ROADS [18 @ AVG LENGTH =60']
VAR	-	LT/RT	40	8	2	1.5	50.62	75.75	142.23	PAVED PRIVATE / COMM ENTRANCES [25 @ AVG LENGTH =40']
VAR	-	LT/RT	40	2	2	1.5	66.82	50.16	93.87	NON-PAVED PRIVATE / COMM ENTRANCES W/ APRON [66 @ AVG LENGTH = 40']
VAR	-	LT/RT	1	4	-	-	3.80	-	1.43	BACKFILL FOR AGG EDGE DRAIN (3.75 IN BP-1) 20 LOCATIONS TO BE DIRECTED BY ENGINEER
303.136	312.316	LT/RT	48470	-	2	1.5	479.16	357.62	-	SAFETY EDGE [2% OF MAINLINE TONNAGE]
303.136	312.316	LT/RT	48470	-	-	-	-	1376.99	-	RUTTING & IRREGULARITIES [150 TONS/MILE]
184.531	184.764	LT/RT	1230	32	-	1.5	-	371.74	699.74	MO 21 SOUTH OF US 160 - MO 142/21 INTERSECTION.
184.531	184.764	LT/RT	1230	-	-	1.5	-	357.62	-	SAFETY EDGE [2% OF MAINLINE TONNAGE]
184.531	184.764	LT/RT	1230	-	-	-	-	34.95	-	MO 21 RUTTING & IRREGULARITIES [150 TONS/MILE]
VAR	-	LT/RT	60	20	-	1.5	-	11.34	10.67	MO 21 PAVED CITY / COUNTY ROADS [1 @ AVG LENGTH =60']
VAR	-	LT/RT	40	2	-	1.5	-	3.80	3.60	MO 21 PAVED PRIVATE / COMM ENTRANCES [5 @ AVG LENGTH =40']
VAR	-	LT/RT	40	2	-	1.5	-	4.56	4.27	MO 21 NON-PAVED PRIVATE / COMM ENTRANCES W/ APRON [6 @ AVG LENGTH = 40']
					TOTAL		25237.33	21305.86	36084.12	
					USE		25237.4	21305.9	36085	
PAVEMENT WIDTHS INCLUDE SHOLDERS LOG MILES ARE APPROXIMATE.										

GRAVEL A OR CRUSHED STONE B / AGGREGATE EDGE TREATMENT						
LOG MILE	LOG MILE	LOCATION	LENGTH (MI)	GRAVEL A OR CRUSHED STONE B (TONS)	PERM AGG EDGE TREATMENT (TONS)	REMARKS
303.136	312.316	RT	9.18	-	1377.0	AGGREGATE EDGE TREATMENT - US 160 TRAVELWAY PROJECT LIMITS [150 TONS/MI]
303.136	312.316	LT	9.18	-	1377.0	AGGREGATE EDGE TREATMENT - US 160 TRAVELWAY PROJECT LIMITS [150 TONS/MI]
184.531	184.764	RT	0.23	-	20.7	AGGREGATE EDGE TREATMENT - MO 21 TRAVELWAY PROJECT LIMITS [90 TONS/MI]
184.531	184.764	LT	0.23	-	20.7	AGGREGATE EDGE TREATMENT - MO 21 TRAVELWAY PROJECT LIMITS [90 TONS/MI]
VARIOUS	-	RT/LT	-	216.0	-	NON-PAVED PRIVATE / COMM ENTRANCES W/ APRON [72 @ 3 TON EA]
VARIOUS	-	RT/LT	-	33.0	-	NON-PAVED PRIVATE / COMM ENTRANCES W/O APRON [11 @ 3 TON EA]
			TOTAL	249.0	2795.4	
			USE	249	2796	

LOG MILES ARE APPROXIMATE .

SUMMARY OF QUANTITIES
SHEET 1 OF 6

COLDMILLING									
LOG MILE	LOG MILE	LOCATION	MODIFIED COLDMILLING			COLDMILLING			REMARKS
			LENGTH (FT)	WIDTH (FT)	DEPTH TRANSITION (SY)	LENGTH (FT)	WIDTH (FT)	COLDMILLING 3" OR LESS (SY)	
303.136	303.151	LT/RT	75	32.0	266.7	-	-	-	US 160 BEGIN PROJECT
184.764	184.768	LT/RT	75	32.0	266.7	-	-	-	MO 21 DEPTH TRANSITION SOUTH OF US 160
303.245	303.254	LT/RT	100	44.0	488.9	-	-	-	DEPTH TRANSITION ON US 160 EAST OF MO 142/ 21 INTERSECTION
303.615	303.675	RT	10	65	72.2	-	-	-	3RD ST INTERSECTION
303.841	303.841	LT/RT	75	34	283.3	-	-	-	BRIDGE A4632 - BEGIN DEPTH TRANSITION
304.061	304.061	LT/RT	75	34	283.3	-	-	-	BRIDGE A4632 - END DEPTH TRANSITION
304.190	304.286	RT	10	74	82.2	-	-	-	JEFFERSON ST INTERSECTION
305.080	305.080	LT	75	42	350.0	-	-	-	MO 142 - US 160 INTERSECTION
305.080	305.080	RT	75	34	283.3	-	-	-	RTE. Y - US 160 INTERSECTION
307.034	307.034	RT	75	28	233.3	-	-	-	MO 21 - US 160 INTERSECTION
310.035	310.035	LT/RT	140	44	684.4	-	-	-	BRIDGE A3087 - BEGIN DEPTH TRANSITION
310.035	310.076	LT/RT	-	-	-	141	44	689	BRIDGE A3087 - MILL/FILL
310.076	310.076	LT/RT	140	44	684.4	-	-	-	BRIDGE A3087 - END DEPTH TRANSITION
312.316	312.316	LT	75	20	166.7	-	-	-	RTE. JJ - US 160 INTERSECTION
312.316	312.316	LT/RT	100	44	488.9	-	-	-	ROUTE 160 TRAVELWAY - END PROJECT
VARIOUS	-	LT/RT	1972	4	876.4	-	-	-	PAVED PRI/COMM [29 @ AVERAGE LENGTH = 68']
VARIOUS	-	LT/RT	1520	10	1688.9	-	-	-	PAVED CITY/COUNTY [19 @ AVERAGE LENGTH = 80']
				TOTAL	7199.6	-	-	689	
				USE	7200	-	-	689	
LOG MILES ARE APPROXIMATE.									

GUARDRAIL								
LOG MILE	LOG MILE	LOCATION	MGS GUARDRAIL 8 FT POSTS 6 FT 3 IN SPACING (LF)	MGS TRANSITION SECTION NO CURB (EA)	TYPE A CRASHWORTHY END TERMINAL (MASH) (EA)	MGS END ANCHOR (EA)	MODIFIED SHAPING SLOPES CLASS III (LF)	REMARKS
303.220	303.270	1-RT	1051	-	2	-	-	-
303.240	303.501	2-LT	1377	-	2	-	-	-
303.841	303.859	3-RT	175	1	2	-	80.00	SE CORNER FOR BRIDGE A4632
303.841	303.859	4-LT	175	1	2	-	80.00	SW CORNER FOR BRIDGE A4632
304.060	304.078	5-RT	175	1	2	-	80.00	NE CORNER FOR BRIDGE A4632
304.060	304.078	6-LT	175	1	2	-	80.00	NW CORNER FOR BRIDGE A4632
304.408	304.495	7-RT	460	-	2	-	-	-
304.382	304.498	8-RT	613	-	2	-	-	-
304.705	304.843	9-RT	727	-	2	-	-	-
304.699	304.840	10-LT	743	-	2	-	-	-
305.008	305.056	11-RT	253	-	2	-	-	-
305.008	305.079	12-LT	831	-	2	-	-	-
305.099	305.241	13-RT	751	-	2	-	-	-
305.085	305.180	14-LT	741	-	2	-	-	-
305.796	305.906	15-RT	589	-	1	1	-	-
305.796	305.906	16-LT	560	-	1	1	-	-
306.215	306.316	17-RT	535	-	2	-	-	-
306.215	306.316	18-LT	535	-	2	-	-	-
306.574	306.698	19-RT	653	-	2	-	-	-
306.574	306.709	20-LT	1715	-	2	-	-	-
310.005	310.038	21-RT	175	1	2	-	80.00	SE CORNER FOR BRIDGE A3087
310.005	310.038	22-LT	175	1	2	-	80.00	SW CORNER FOR BRIDGE A3087
310.076	310.101	23-RT	175	1	2	-	80.00	NE CORNER FOR BRIDGE A3087
310.076	310.101	24-LT	175	1	2	-	80.00	NW CORNER FOR BRIDGE A3087
			TOTAL	13534	8	46	640	
			USE	13534	8	46	640	
REMARKS ARE BASED ON EXISTING GUARDRAIL END LOCATIONS SEE STANDARD PLANS 606.50 AND 606.81 FOR DETAILS								

MOBILIZATION
1 LUMP SUM

ADDITIONAL MOBILIZATION FOR SEEDING
1 EACH

SHOULDER RUMBLE STRIP					
LOG MILE	LOG MILE	LOCATION	LENGTH (FT)	ENTERANCE EXCEPTIONS (FT)	LT /RT EDGE RUMBLE STRIP (STA.)
303.136	312.316	US 160 LT/RT	48470.40	27285.12	424
				TOTAL	424
LOG MILES ARE APPROXIMATE				USE	424

CENTERLINE RUMBLE STRIP				
LOG MILE	LOG MILE	LOCATION	LENGTH (FT)	CENTERLINE RUMBLE STRIP (STA.)
305.574	306.909	US. 160 CL	7048.80	70
307.219	308.514	US. 160 CL	6837.60	68
307.219	308.514	US. 160 CL	6837.60	68
308.510	308.810	US. 160 CL	1584.00	16
309.071	309.816	US. 160 CL	3933.60	39
309.071	309.816	US. 160 CL	3933.60	39
310.770	311.768	US. 160 CL	5269.44	53
310.770	311.768	US. 160 CL	5269.44	53
			TOTAL	406
LOG MILES ARE APPROXIMATE			USE	406



DATE PREPARED 8/29/2025	
ROUTE 160	STATE MO
DISTRICT SE	SHEET NO. 3
COUNTY RIPLEY	
JOB NO. J9S3806	
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)

CROSS DRAIN				
LOG MILE	PIPE AGG PAVEMENT CROSS DRAIN (LF)	PLACING TYPE TYPE 1 ROCK DITCH LINER (CY)	FURNISHING TYPE 1 ROCK DITCH LINER (CY)	SILT FENCE (LF)
303.297	24	0.34	0.34	20
303.572	40	0.34	0.34	20
304.510	40	0.34	0.34	20
304.822	40	0.34	0.34	20
305.244	40	0.34	0.34	20
305.406	40	0.34	0.34	20
305.646	40	0.34	0.34	20
305.940	40	0.34	0.34	20
306.203	40	0.34	0.34	20
306.396	24	0.34	0.34	20
306.400	40	0.34	0.34	20
306.703	40	0.34	0.34	20
307.036	24	0.34	0.34	20
307.042	48	0.34	0.34	20
307.167	24	0.34	0.34	20
307.182	24	0.34	0.34	20
307.195	48	0.34	0.34	20
307.316	48	0.34	0.34	20
307.416	48	0.34	0.34	20
307.627	48	0.34	0.34	20
307.665	24	0.34	0.34	20
307.676	24	0.34	0.34	20
307.725	48	0.34	0.34	20
307.833	24	0.34	0.34	20
307.847	24	0.34	0.34	20
308.060	48	0.34	0.34	20
308.131	48	0.34	0.34	20
308.259	48	0.34	0.34	20
308.276	24	0.34	0.34	20
308.434	48	0.34	0.34	20
308.868	48	0.34	0.34	20
309.070	24	0.34	0.34	20
309.185	48	0.34	0.34	20
309.198	24	0.34	0.34	20
309.513	48	0.34	0.34	20
309.663	24	0.34	0.34	20
309.823	48	0.34	0.34	20
310.215	48	0.34	0.34	20
310.354	48	0.34	0.34	20
310.488	48	0.34	0.34	20
310.742	48	0.34	0.34	20
310.943	48	0.34	0.34	20
311.144	48	0.34	0.34	20
311.240	48	0.34	0.34	20
311.336	48	0.34	0.34	20
311.564	48	0.34	0.34	20
311.598	48	0.34	0.34	20
TOTAL	1864.00	15.98	15.98	940
USE	1864	16	16	940
LOG MILES ARE APPROXIMATE REFER TO STANDARD PLAN 601.101 TEMPORARY EROSION CONTROL TO BE PLACED AS DIRECTED BY ENGINEER.				

LOOP DETECTOR			
LOCATION	LOOP NO.	CABLE LOOP DETECTOR IN DUCT (LF)	REMARKS
US 160 EB LANE	1	280	EB THROUGH LANE
US 160 / RTE Y TURN LANE	2	280	NB TURN LANE TO RTE Y
MO 142 NB LANE	3	280	NB THROUGH LANE
MO 142 / US 160 TURN LANE	4	280	WB TURN LANE TO US 160
RTE Y SB LANE	5	280	SB THROUGH LANE
RTE Y / US 160 TURN LANE	6	280	EB TURN LANE TO US 160
US 160 WB LANE	7	280	WB THROUGH LANE
US 160 / MO 142 TURN LANE	8	280	SB TURN LANE TO MO 142
	TOTAL	2240	
	USE	2240	
CUT EXISTING LOOP WIRES / SEE STD.902.5 FOR LOOP DETECTION INSTALLATION DETAILS INSTALL NEW LOP DETECTORS INTO EXISTING PAVEMENT AFTER COLDMILLING & PRIOR TO RESURFACING			

AGGREGATE EDGE DRAIN				
LOG MILE	LOCATION	AGGREGATE DRAIN (LF)	SILT FENCE (LF)	REMARKS
304.708	RT/LT	16	20	
304.765	RT/LT	16	20	
305.320	RT/LT	16	20	
305.396	RT/LT	16	20	
306.016	RT/LT	16	20	
306.092	RT/LT	16	20	
306.475	RT/LT	16	20	
306.551	RT/LT	16	20	
306.627	RT/LT	16	20	
306.779	RT/LT	16	20	
307.847	RT/LT	16	20	AT PAVEMENT RELIEF JOINT
308.605	RT/LT	16	20	AT PAVEMENT RELIEF JOINT
308.984	RT/LT	16	20	AT PAVEMENT RELIEF JOINT
309.363	RT/LT	16	20	AT PAVEMENT RELIEF JOINT
309.742	RT/LT	16	20	AT PAVEMENT RELIEF JOINT
310.879	RT/LT	16	20	AT PAVEMENT RELIEF JOINT
312.016	RT/LT	16	20	AT PAVEMENT RELIEF JOINT
	RT/LT	160	400	10 LOCATIONS TO BE DETERMINED BY THE ENGINEER
	TOTAL	432	740	
	USE	432	740	
LOG MILES ARE APPROXIMATE REFER TO STANDARD PLANS 605.101				

SEEDING AND MULCHING					
LOG MILE	LOG MILE	LOCATION	SEEDING COOL SEASON GRASSES (AC)	MULCHING (AC)	REMARKS
303.136	312.320	VARIOUS	0.13	0.13	CROSS ROAD DRAIN OUTLETS
		TOTAL	0.13	0.13	
		USE	1	1	
*LOG MILES ARE APPROXIMATE					

PAVEMENT RELIEF JOINT	
LOG MILE	PAVEMENT RELIEF JOINT [6139903] (LF)
307.089	44
307.468	44
307.847	44
308.226	44
308.605	44
308.984	44
309.363	44
309.742	38
310.121	32
310.500	32
310.879	42
311.258	44
311.637	44
312.016	44
TOTAL	584
USE	584

STATE OF MISSOURI

SEJI SHIMBO

NUMBER

PE-2017019046

PROFESSIONAL ENGINEER

Seiji Shimbo

REGISTERED PROFESSIONAL ENGINEER

SEJI SHIMBO - CIVIL

MO-PE-2017019046

DATE PREPARED

8/28/2025

ROUTE

160

STATE

MO

DISTRICT

SE

SHEET NO.

3

COUNTY

RIPLEY

JOB NO.

J9S3806

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)

MoDOT

SUMMARY OF QUANTITIES

SHEET 3 OF 6

003_QU_XX-XX_Summary_of_Quantities_11.dgn.dgn 2:01:44 PM 8/28/2025

REMOVAL OF IMPROVEMENTS				PAVEMENT REPAIRS								
LOG MILE	LOG MILE	LOCATION	REMARKS	LOG MILE	LOCATION	TOTAL REPAIR WIDTH (FT)	TOTAL REPAIR LENGTH (FT)	FURNISHING & PLACING FULL DEPTH PVMT REPAIR (SY)	SUBGRADE COMPACT FOR PVMT REPAIR (SY)	TYPE 5 AGG FOR BASE (SY)	FULL DEPTH PVMT REPAIR SAW CUT (LF)	DOWEL BARS (EA)
303.218	-	US 160-RT	INFORMATION SIGN ASSEMBLY	303.572	LT	16	6	10.7	1.1	1.1	44	20
303.229	-	US 160-LT	INFORMATION SIGN ASSEMBLY	304.510	LT	16	6	10.7	1.1	1.1	44	20
303.229	-	US 160-LT	STOP SIGN	304.828	LT	16	6	10.7	1.1	1.1	44	20
303.236	-	US 160-LT	YIELD / DO NOT ENTER	305.244	LT	16	6	10.7	1.1	1.1	44	20
303.236	-	US 160-RT	YIELD / DO NOT ENTER	305.406	LT	16	6	10.7	1.1	1.1	44	20
303.220	303.270	US 160-RT	REPLACE GUARDRAIL 1-(1051')	305.646	LT	16	6	10.7	1.1	1.1	44	20
303.240	303.501	US 160-LT	REPLACE GUARDRAIL 2-(1377')	305.940	LT	16	6	10.7	1.1	1.1	44	20
303.635	-	US 160 / 3RD ST	YIELD / DO NOT ENTER	306.203	LT	16	6	10.7	1.1	1.1	44	20
303.640	-	US 160-RT	DOUBLE ARROW SIGN	306.396	LT	16	6	10.7	1.1	1.1	44	20
303.655	-	US 160-RT	STOP / 3RD ST SIGN	306.400	LT	16	6	10.7	1.1	1.1	44	20
303.658	-	US 160-RT	YIELD / DO NOT ENTER	306.703	LT	16	6	10.7	1.1	1.1	44	20
303.841	303.859	US 160-RT	REMOVE GUARDRAIL 3-(98')	307.036	LT	16	6	10.7	1.1	1.1	44	20
303.841	303.859	US 160-LT	REMOVE GUARDRAIL 4-(98')	307.042	LT	16	6	10.7	1.1	1.1	44	20
304.060	304.078	US 160-RT	REMOVE GUARDRAIL 5-(98')	307.167	LT	16	6	10.7	1.1	1.1	44	20
304.060	304.078	US 160-LT	REMOVE GUARDRAIL 6-(98')	307.182	LT	16	6	10.7	1.1	1.1	44	20
304.227	-	US 160 / JEFFERSON ST	YIELD / DO NOT ENTER	307.195	LT	28	6	18.7	1.9	1.9	68	40
304.238	-	US 160-RT	STOP SIGN	307.316	LT	28	6	18.7	1.9	1.9	68	40
304.253	-	US 160-RT	YIELD / DO NOT ENTER	307.416	LT	28	6	18.7	1.9	1.9	68	40
304.408	304.495	US 160-RT	REPLACE GUARDRAIL 7-(460')	307.627	LT	28	6	18.7	1.9	1.9	68	40
304.382	304.498	US 160-RT	REPLACE GUARDRAIL 8-(613')	307.665	LT	16	6	10.7	1.1	1.1	56	20
304.705	304.843	US 160-RT	REPLACE GUARDRAIL 9-(727')	307.676	LT	16	6	10.7	1.1	1.1	56	20
304.699	304.840	US 160-LT	REPLACE GUARDRAIL 10-(743')	307.725	LT	28	6	18.7	1.9	1.9	68	40
304.708	-	US 160-RT/LT	REMOVAL OF SHOULDER FOR AGG DRAIN	307.833	LT	16	6	10.7	1.1	1.1	44	20
304.765	-	US 160-RT/LT	REMOVAL OF SHOULDER FOR AGG DRAIN	307.847	LT	16	6	10.7	1.1	1.1	44	20
305.008	305.056	US 160-RT	REPLACE GUARDRAIL 11-(253')	308.060	LT	28	6	18.7	1.9	1.9	68	40
305.008	305.079	US 160-LT	REPLACE GUARDRAIL 12-(831')	308.131	LT	28	6	18.7	1.9	1.9	68	40
305.099	305.241	US 160-RT	REPLACE GUARDRAIL 13-(751')	308.259	LT	28	6	18.7	1.9	1.9	68	40
305.320	-	US 160-RT/LT	REMOVAL OF SHOULDER FOR AGG DRAIN	308.276	LT	16	6	10.7	1.1	1.1	44	20
305.396	-	US 160-RT/LT	REMOVAL OF SHOULDER FOR AGG DRAIN	308.434	LT	16	6	10.7	1.1	1.1	44	20
305.085	305.180	US 160-LT	REPLACE GUARDRAIL 14-(741')	308.868	LT	16	6	10.7	1.1	1.1	44	20
305.796	305.906	US 160-RT	REPLACE GUARDRAIL 15-(589')	309.070	LT	16	6	10.7	1.1	1.1	44	20
305.796	305.906	US 160-LT	REPLACE GUARDRAIL 16-(560')	309.185	LT	28	6	18.7	1.9	1.9	68	40
306.016	-											

PAVEMENT REPAIRS								
LOG MILE	LOCATION	TOTAL REPAIR WIDTH (FT)	TOTAL REPAIR LENGTH (FT)	FURNISHING & PLACING FULL DEPTH PVMT REPAIR (SY)	SUBGRADE COMPACT FOR PVMT REPAIR (SY)	TYPE 5 AGG FOR BASE (SY)	FULL DEPTH PVMT REPAIR SAW CUT (LF)	DOWEL BARS (EA)
303.297	RT	16	6	10.667	1.067	1.067	44	20
303.572	RT	16	6	10.667	1.067	1.067	44	20
304.510	RT	16	6	10.667	1.067	1.067	44	20
304.828	RT	16	6	10.667	1.067	1.067	44	20
305.244	RT	16	6	10.667	1.067	1.067	44	20
305.406	RT	16	6	10.667	1.067	1.067	44	20
305.646	RT	16	6	10.667	1.067	1.067	44	20
305.940	RT	16	6	10.667	1.067	1.067	44	20
306.203	RT	16	6	10.667	1.067	1.067	44	20
306.400	RT	16	6	10.667	1.067	1.067	44	20
306.703	RT	16	6	10.667	1.067	1.067	44	20
307.042	RT	16	6	10.667	1.067	1.067	44	20
307.195	RT	28	6	18.667	1.867	1.867	68	40
307.316	RT	28	6	18.667	1.867	1.867	68	40
307.416	RT	28	6	18.667	1.867	1.867	68	40
307.627	RT	28	6	18.667	1.867	1.867	68	40
307.725	RT	28	6	18.667	1.867	1.867	68	40
308.060	RT	28	6	18.667	1.867	1.867	68	40
308.131	RT	28	6	18.667	1.867	1.867	68	40
308.259	RT	28	6	18.667	1.867	1.867	68	40
308.434	RT	16	6	10.667	1.067	1.067	44	20
308.868	RT	16	6	10.667	1.067	1.067	44	20
309.185	RT	28	6	18.667	1.867	1.867	68	40
309.513	RT	28	6	18.667	1.867	1.867	68	40
309.823	RT	28	6	18.667	1.867	1.867	68	40
310.215	RT	28	6	18.667	1.867	1.867	68	40
310.354	RT	28	6	18.667	1.867	1.867	68	40
310.488	RT	28	6	18.667	1.867	1.867	68	40
310.742	RT	28	6	18.667	1.867	1.867	68	40
310.943	RT	28	6	18.667	1.867	1.867	68	40
311.144	RT	28	6	18.667	1.867	1.867	68	40
311.240	RT	28	6	18.667	1.867	1.867	68	40
311.336	RT	28	6	18.667	1.867	1.867	68	40
311.564	RT	28	6	18.667	1.867	1.867	68	40
311.598	RT	28	6	18.667	1.867	1.867	68	40
			SUBTOTAL	541.345	54.145	54.145	2044	1120
REFER TO STANDARD PLAN 613.00T LENGTH OVER 6' REQUIRES CUT IN WIDTH. (EPG 613.1.1) LOG MILES ARE APPROXIMATE								

PERMANENT PAVEMENT MARKING										
LOG MILE	LOG MILE	LENGTH (FT)	CLASS 1 4" WHITE (LF)	CLASS 1 4" YELLOW (LF)	CLASS 1 8" WHITE (LF)	THERMOPLASTIC PVMT MARKING 24" YELLOW (LF)	THERMOPLASTIC PVMT MARKING 24" WHITE (LF)	THERMOPLASTIC PMVT MARKING L TURN ARROW (EA)	THERMOPLASTIC PVMT MARKING R TURN ARROW (EA)	REMARKS
303.136	312.316	48470.4	109850.0	148020.0	-	1681	158	32	3	US 160 FINAL PAVEMENT MARKING
184.531	184.764	1230.2	6926.5	6926.5	-	-	-	-	-	MO 142/21 FINAL PAVEMENT MARKING
310.035	310.076	-	7139.7	-	-	-	-	-	-	TEMPORARY PAVEMENT MARKING
VARIOUS	-	-	-	-	597.5	-	475	-	-	ISLAND STRIPING
			TOTAL	123916.2	154946.5	597.5	1681	32	3	
			USE	123917	154947	598	1681	32	3	
LOG MILES ARE APPROXIMATE. SEE PAVEMENT MARKING LOG JSP. SEE PAVEMENT MARKING SHEETS 1-3 AND STD. PLAN 620.00P FOR STD. ALTERNATE PASSING LANE STRIPING.										

STATE OF MISSOURI

SEI SHIMBO

NUMBER

PE-2017019046

PROFESSIONAL ENGINEER

Seiji Shimbo

REGISTERED PROFESSIONAL ENGINEER

SEIJI SHIMBO - CIVIL

MO-PE-2017019046

DATE PREPARED

8/11/2025

ROUTE

160

STATE

MO

DISTRICT

SE

SHEET NO.

3

COUNTY

RIPLEY

JOB NO.

J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

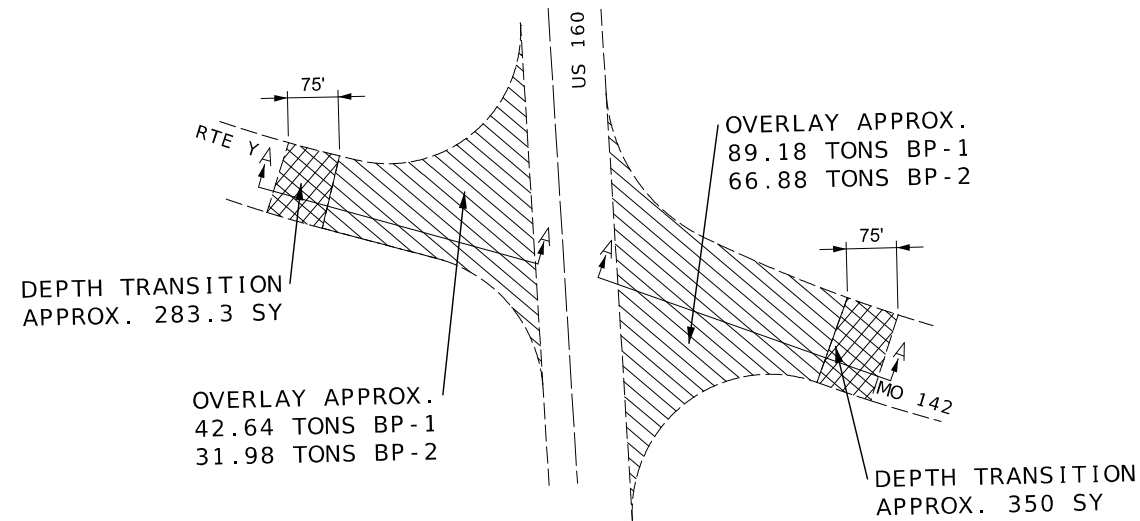
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

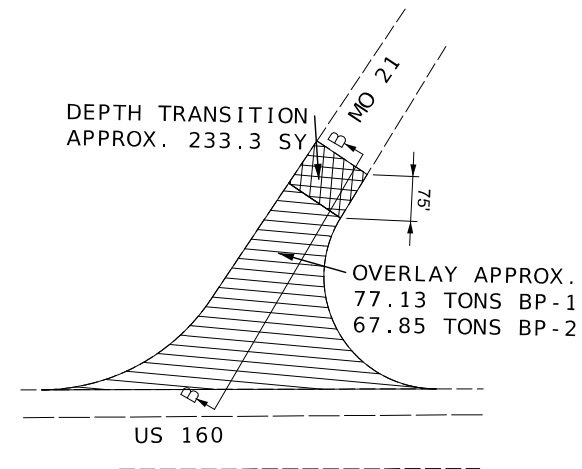
105 WEST CAPITOL

JEFFERSON CITY, MO 65102

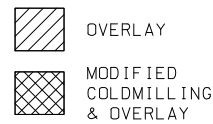
1-888-ASK-MODOT (1-888-275-6636)



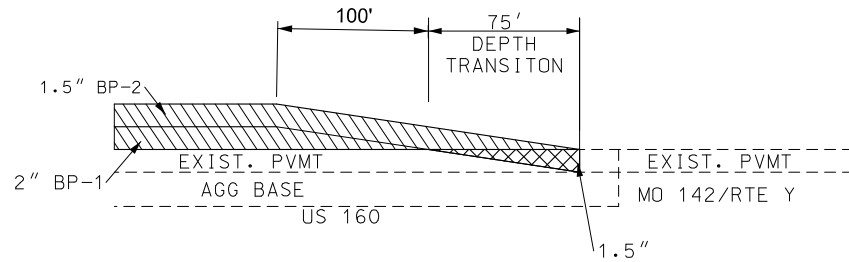
PLAN VIEW AT MO 142 AND RTE Y
LOG MILE 305.8



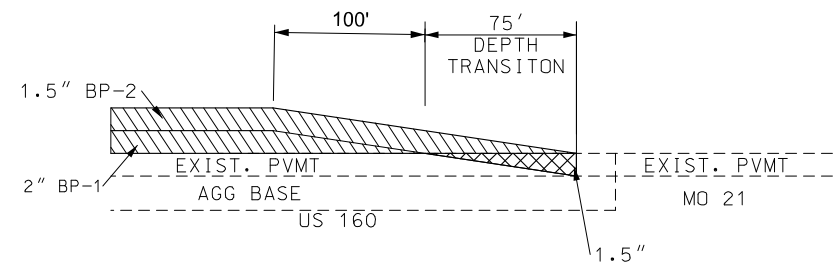
PLAN VIEW AT MO 21
LOG MILE 307.053



LOG MILE LOCATIONS APPROXIMATE
ADJUST AS DIRECTED BY ENGINEER
TO FIT FIELD CONDITIONS.

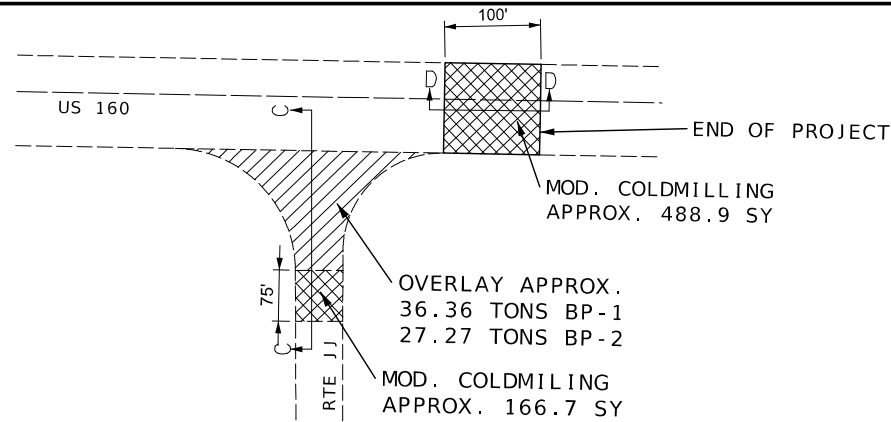


TYPICAL
SECTION A-A

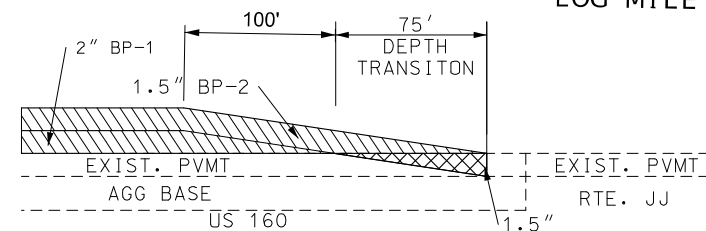


TYPICAL
SECTION B-B

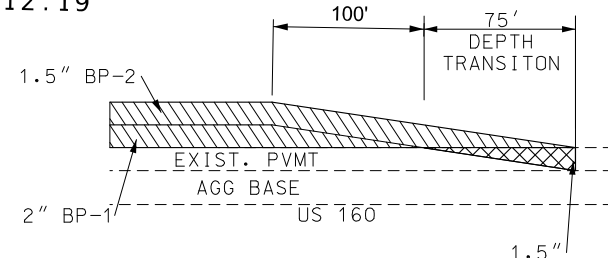
END PROJECT



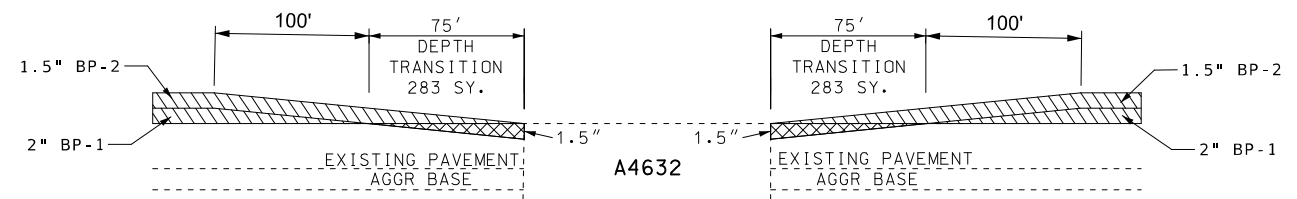
PLAN VIEW AT RTE JJ
LOG MILE 312.19



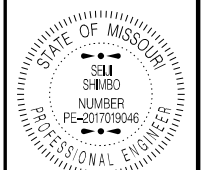
TYPICAL
SECTION C-C



TYPICAL
SECTION D-D



TYPICAL AT BRIDGE A4632
LOG MILE 303.895 (WEST BRIDGE END)
LOG MILE 304.102 (EAST BRIDGE END)



Seiji Shimbo

DATE PREPARED
8/11/2025

ROUTE 160 STATE MO

DISTRICT SE SHEET NO. 4

COUNTY RIPLEY

JOB NO. J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

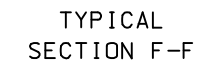
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

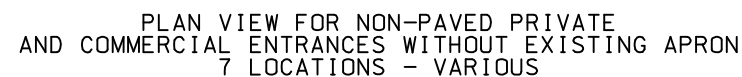
105 WEST CAPITOL JEFFERSON CITY, MO 65102

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

MODOT

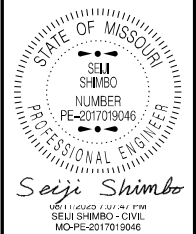


LOCATIONS:	
BRIDGE ST----	LM 303.740
1ST ST-----	LM 303.782
SMITH ST----	LM 304.980
HILLCREST DR-	LM 305.000
LEROUX ST----	LM 305.201
CR 160 E-1----	LM 305.737
OLD HWY 160--	LM 305.798
CR 160 E-3----	LM 306.437
OLD HWY 160--	LM 306.816
CR 160-5-----	LM 307.675
CR 160 E-4----	LM 307.746
CR 160 E-6----	LM 307.840
CR 160 E-6----	LM 307.840
CR 160 E-8----	LM 308.075
CR 160 E-10----	LM 308.245
CR 160 E-8----	LM 309.480
CR 160 E-12----	LM 309.480
CR 160 E-12----	LM 311.243



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.



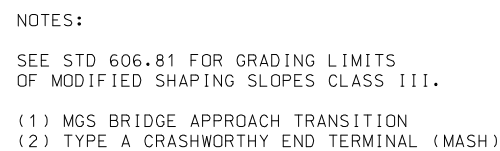
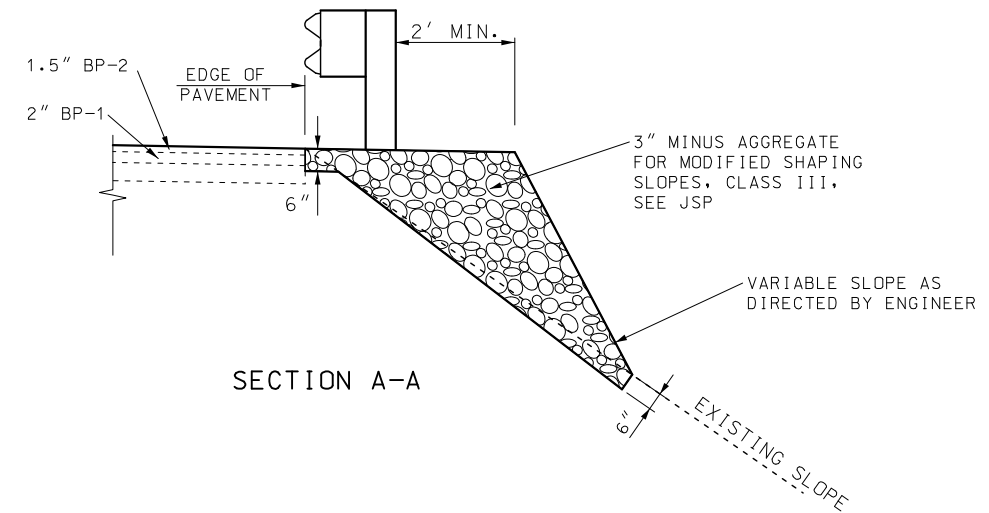
DATE PREPARED	
8/11/2025	
ROUTE	STATE
160	MO
DISTRICT	SHEET NO.
SE	5
COUNTY	
RIPLEY	
JOB NO.	
J9S3806	
CONTRACT ID.	

PROJECT NO.
BRIDGE NO.

[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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



TYPICAL GUARDRAIL AND GRADING LIMITS AT BRIDGES

SPECIAL SHEET
SHEET 3 OF 8
DRAWING NOT TO SCALE



Seiji Shimbo

08/11/2025 7:05:20 PM
SEJI SHIMBO - CIVIL
MO-PE-2017019046

DATE PREPARED
8/11/2025

07/11/2023	
ROUTE	STATE

160	MO
-----	----

DISTRICT	SHEET NO.
SE	6

SE	0
COUNTY	

RIPLEY

JOB NO.
1953806

9999999
CONTRACT ID.

DD FORM NO.

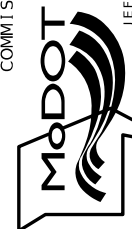
PROJECT NO.

BRIDGE NO.

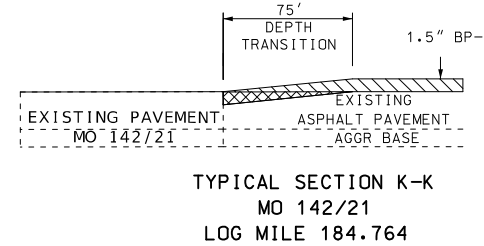
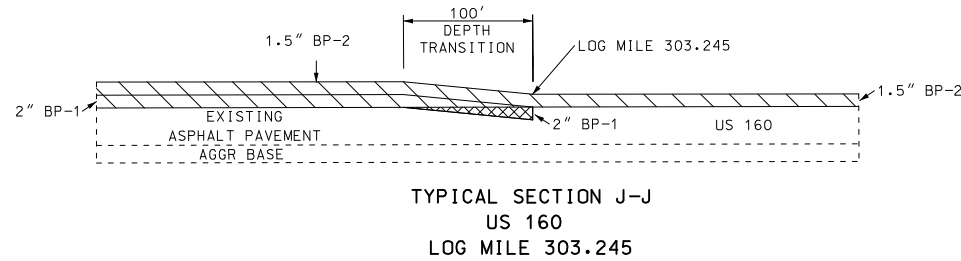
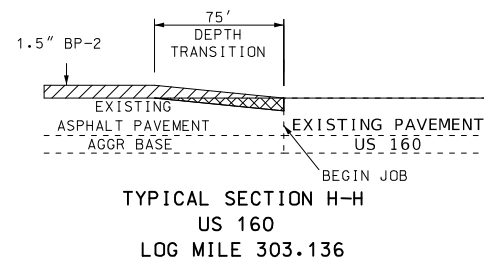
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MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

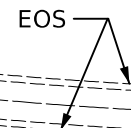
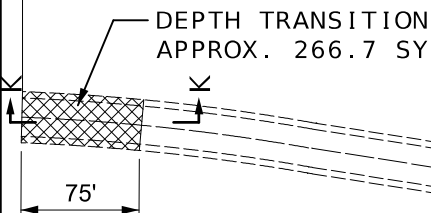
 105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)



BEGIN PROJECT



END SEGMENT MO 142/21
LOG MILE 184.764



MO 142/21

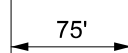
EDGE OF PAVEMENT

BEGIN SEGMENT MO 142/21
LOG MILE 184.531

BEGIN PROJECT US 160
LOG MILE 303.136

DEPTH TRANSITION
APPROX. 266.7 SY

US 160



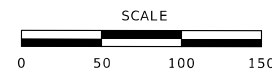
BEGIN DEPTH
TRANSITION
LOG MILE 303.245
APPROX. 607.15 SY

EDGE OF PAVEMENT
EOS

EDGE OF
PAVEMENT
EOS



NOTES:
-LOG MILES ARE APPROXIMATE



SPECIAL SHEET
SHEET 4 OF 8



DATE PREPARED
8/11/2025

ROUTE 160 STATE MO
DISTRICT SE SHEET NO. 7

COUNTY
RIPLEY
JOB NO.
J9S3806
CONTRACT ID.

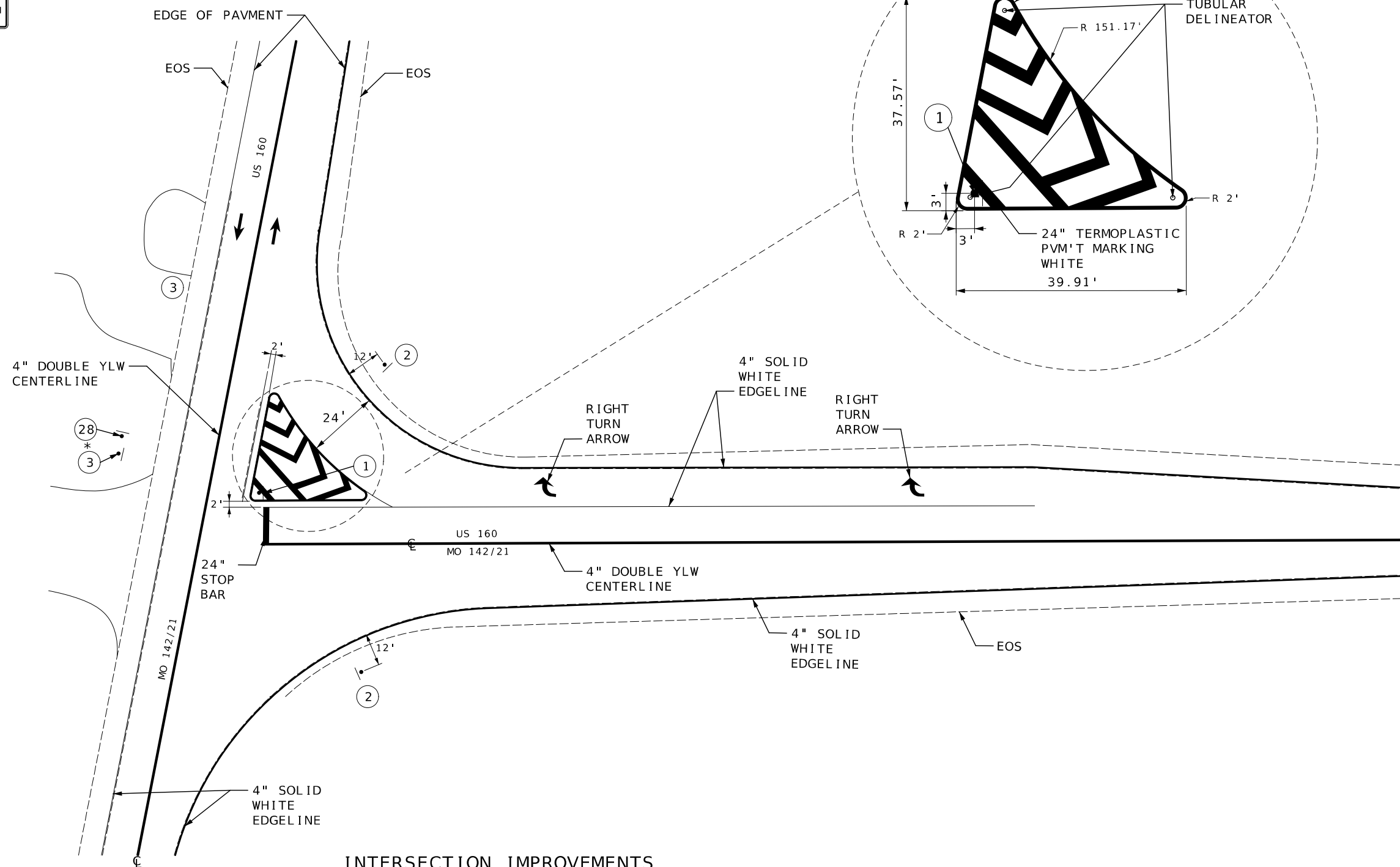
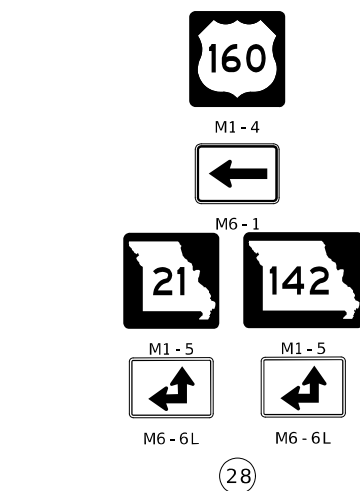
PROJECT NO.

BRIDGE NO.

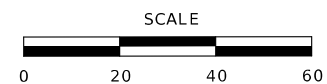
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

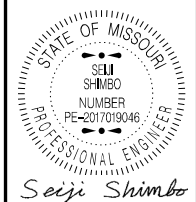
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



NOTES:
 -REFER TO STD. PLAN 903.00 FOR DELINEATOR PLACEMENT.
 -REFER TO STD. PLAN 620.00 FOR PAVEMENT MARKING DETAILS.
 -LOG MILES ARE APPROXIMATE.
 * SIGN ASSEMBLIES 3 AND 28 TO BE PLACED ON BACKSLOPE OF DITCH



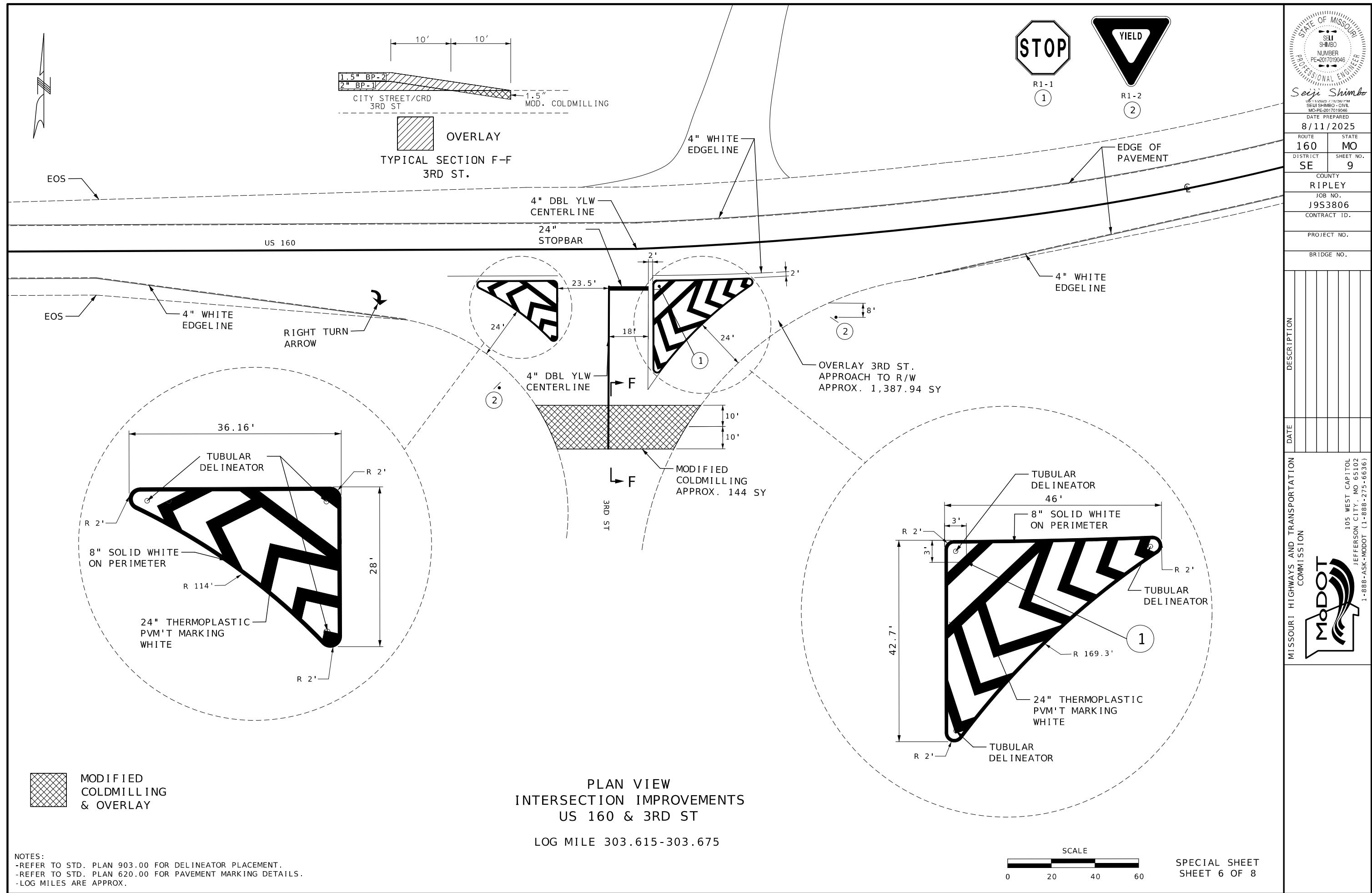
SPECIAL SHEET
SHEET 5 OF 8

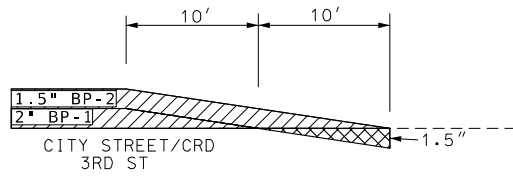
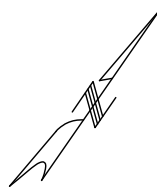


MO-PE-2017013046	
DATE PREPARED	
8/11/2025	
ROUTE	STATE
160	MO
DISTRICT	SHEET NO.
SE	8
COUNTY	
RIPLEY	
JOB NO.	
J953806	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

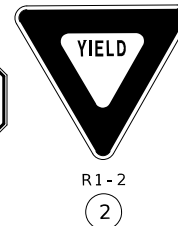
[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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





OVERLAY
TYPICAL SECTION F-F
JEFFERSON ST.



Seiji Shimbo
PE-2017019046
CIVIL

DATE PREPARED
8/11/2025

ROUTE 160 STATE MO

DISTRICT SE SHEET NO. 10

COUNTY RIPLEY

JOB NO. 19S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MODOT

1

8

PLAN VIEW

INTERSECTION IMPROVEMENTS

US 160 & JEFFERSON ST

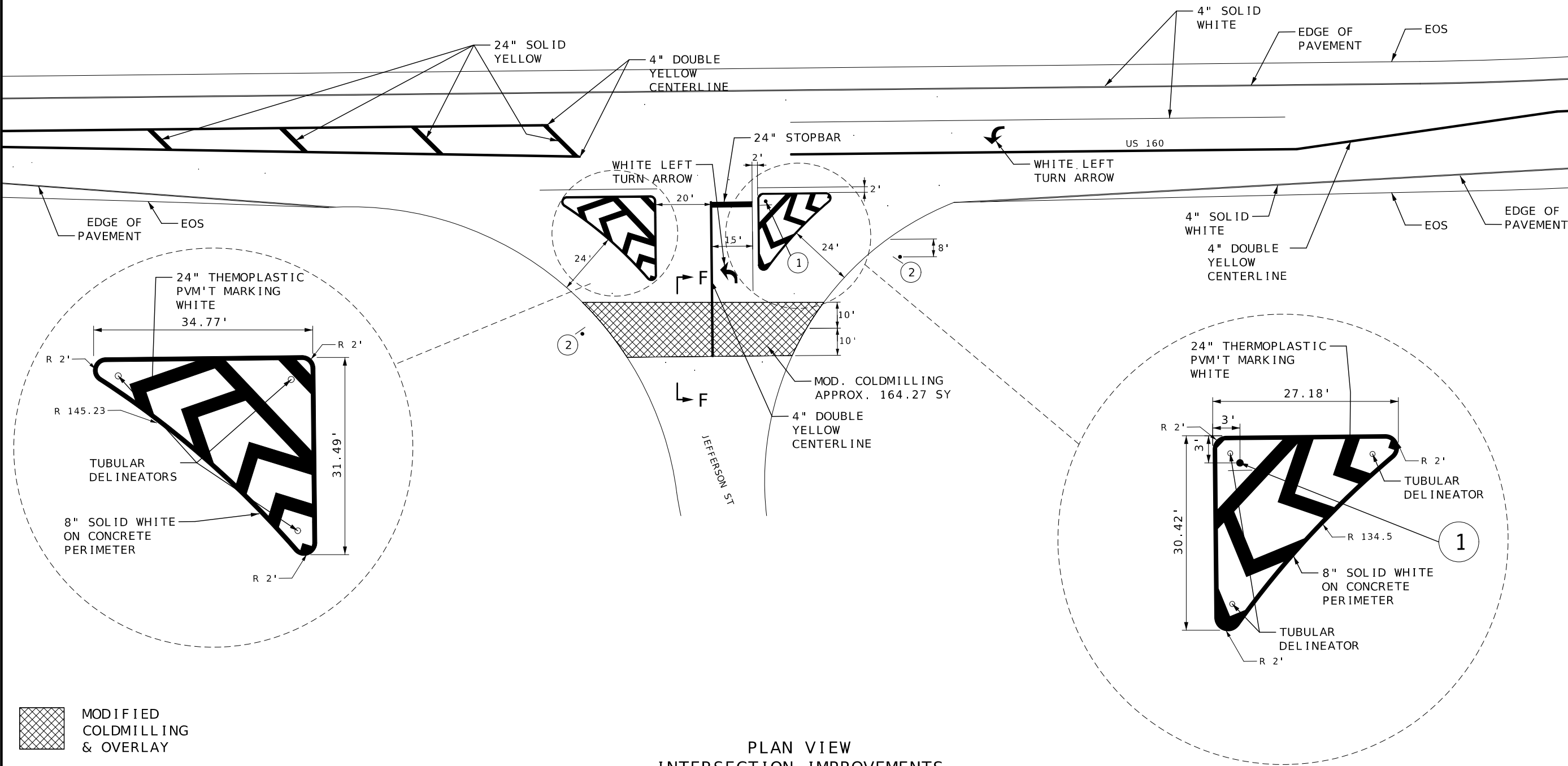
LOG MILE 303.615-303.680

SCALE

0 20 40 60

SPECIAL SHEET

SHEET 7 OF 8



NOTES:
-REFER TO STD.PLAN 903.00 FOR DELINEATOR LOCATIONS.
-REFER TO STD. PLAN 620.00 FOR PAVEMENT MARKING DETAILS.
-LOG MILES ARE APPROXIMATE

Sign Spacing, Device Spacing
and Channelizing Taper Lengths

SIGN SPACING (S) FOR ADVANCE SIGN SERIES (1) (2)		
SPEED MPH	UNDIVIDED HIGHWAYS	DIVIDED HIGHWAYS
0-35	200	200
40-45	350	500
50-55	500	1000
60-70	1000	SA-1000 SB-1500 SC-2640

TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES					
SPEED MPH	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MAXIMUM CHANNELIZER SPACING	
	10 FT	11 FT	12 FT	THROUGH TAPER	THROUGH WORK AREA
0-35	205	225	245	35	40
40-45	450	495	540	40	80
50-55	550	605	660	50	80
60-70	700	770	840	60	120

NOTES:

DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

- (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION
- (2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS
- (3) SEE STANDARD PLAN SECTION 616.20 FOR TEMP TRAFFIC CONTROL FOR 2 LANE ROADWAYS

LONGITUDINAL BUFFER SPACE (B)	
SPEED MPH	BUFFER SPACE
0-35	250
40-45	360
50-55	495
60-70	730

TAPER LENGTH (L):

L = WS FOR 40 MPH OR MORE

L = $\frac{WS^2}{60}$ FOR 35 MPH OR LESS

FOR SHOULDER TAPER USE L/3

WHERE:

L = TAPER LENGTH IN FEET

W = LATERAL SHIFT IN FEET

S = POSTED SPEED IN MPH

TRAFFIC CONTROL DEVICES

GENERAL NOTES:

1. SEE STANDARD PLAN 616.10 FOR DETAILS AND ITEMS NOT SHOWN
2. EXISTING SIGNS SHALL BE COVERED DURING WORKING HOURS ONLY IF IN CONFLICT WITH TRAFFIC CONTROL PLANS.
3. NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING, COVERING, UNCOVERING OR REMOVING SIGNS.
4. CONES ALLOWABLE FOR DAYTIME OPERATIONS ONLY.
6. LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE, ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS OR CONES.

TRAFFIC CONTROL LEGEND

• SIGN (SINGLE SIDED)

◁ FLAGGER

▲ DIRECTION INDICATOR BARRICADE

■ CHANNELIZER

E BARRICADE

◻ FLASHING ARROW PANEL

⊠ TMA (TRUCK MOUNTED ATTENUATOR) WITH FLASHING ARROW PANEL



Seiji Shimbo
REGISTERED PROFESSIONAL ENGINEER
SEIJI SHIMBO - CIVIL
MO-PE-2017019046

DATE PREPARED 8/11/2025	
ROUTE 160	STATE MO
DISTRICT SE	SHEET NO. 12
COUNTY RIPLEY	
JOB NO. J9S3806	
CONTRACT ID.	

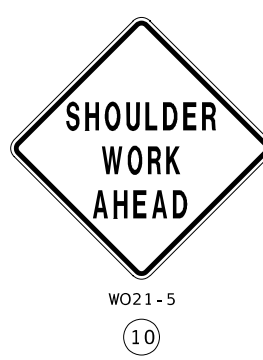
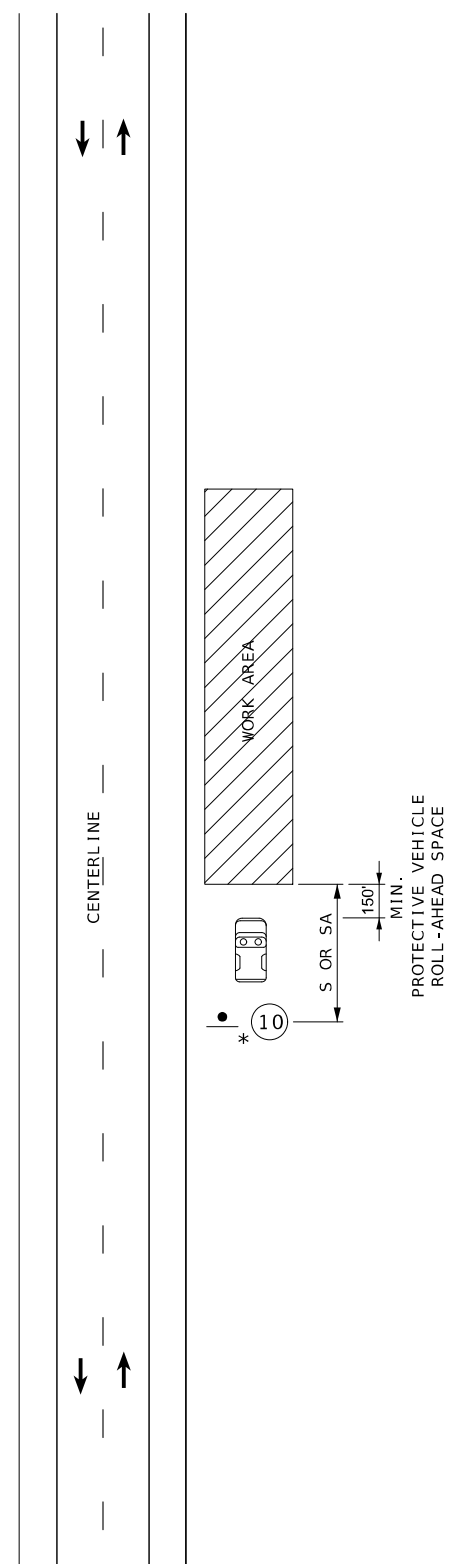
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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



WORK BEYOND THE SHOULDER
(UNDIVIDED OR DIVIDED HIGHWAY)

NOT TO SCALE

* ADVANCED WARNING SIGNS MAY BE ELIMINATED IF WORK SPACE IS 15FT

STATE OF MISSOURI
SEIJI SHIMBO
NUMBER
PE-2017019046
PROFESSIONAL ENGINEER

Seiji Shimbo
06/11/2025 11:51:17 PM
SEIJI SHIMBO - CIVIL
MO-PE-2017019046

DATE PREPARED
8/11/2025

ROUTE
160

DISTRICT
SE

STATE
MO

SHEET NO.
13

COUNTY
RIPLEY

JOB NO.
J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

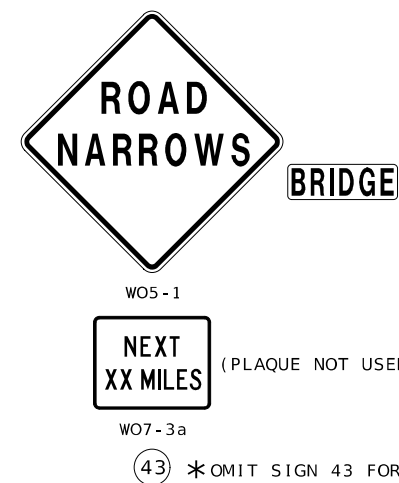
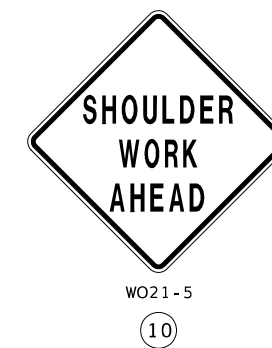
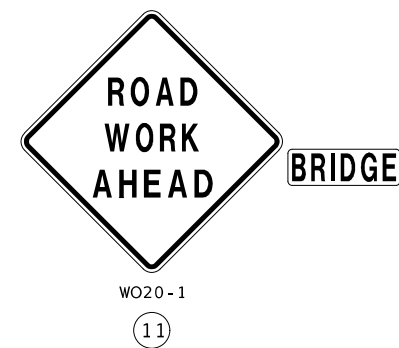
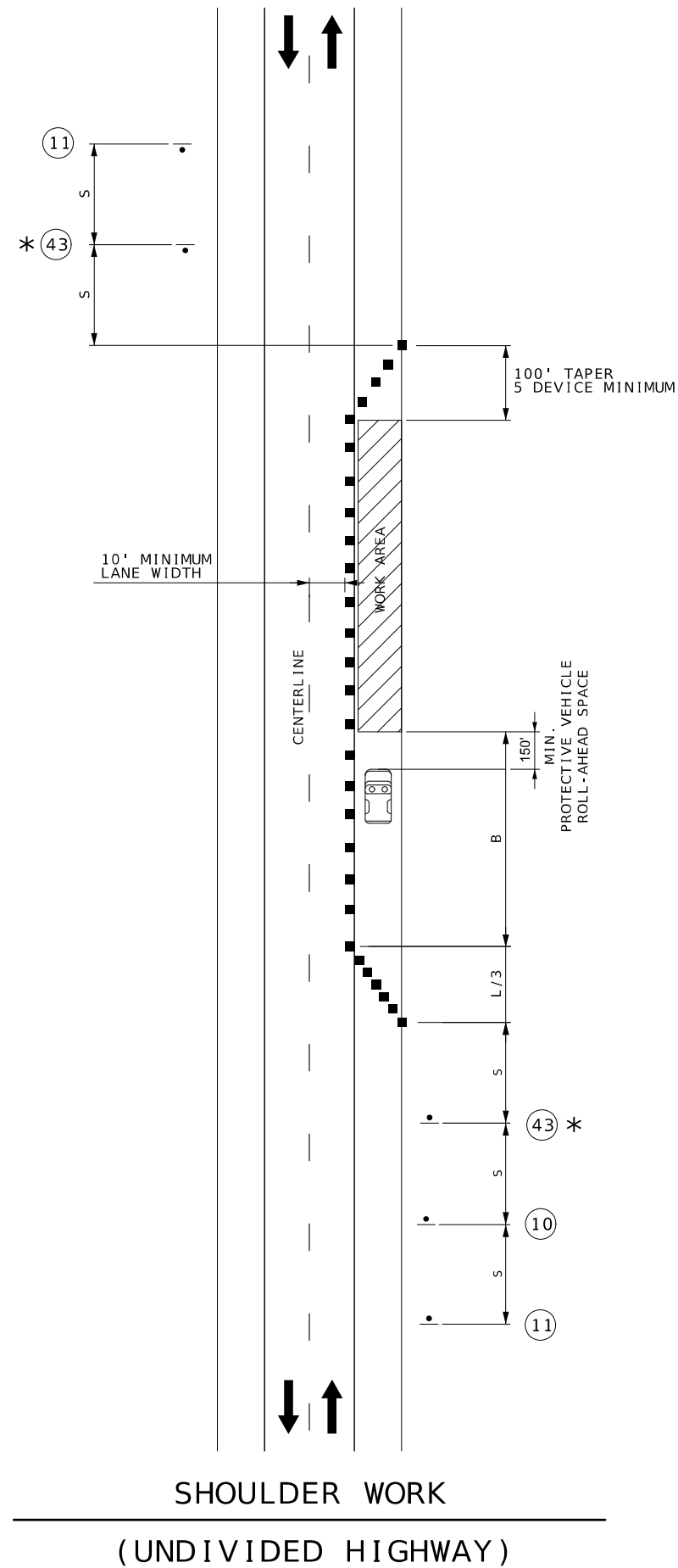
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

MoDOT

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

NOT TO SCALE

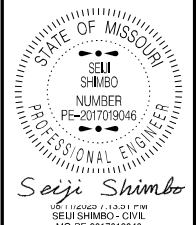


ES (PLAQUE NOT USED IF LESS THAN ONE MILE.)

* OMIT SIGN 43 FOR NO TRAVELWAY ENCROACHMENT.

TEMPORARY TRAFFIC CONTROL

SHEET 3 OF 10



DATE PREPARED

8/11/2025

ROUTE	STATE
160	MO

DISTRICT	SHEET NO.
SE	14

COUNTY
RIPLEY

RIFLE
JOB NO.
J953806

1955800
CONTRACT ID.

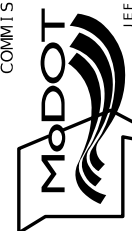
CONTRACT ID.
PROJECT NO.

PROJECT NO.
BRIDGE NO.

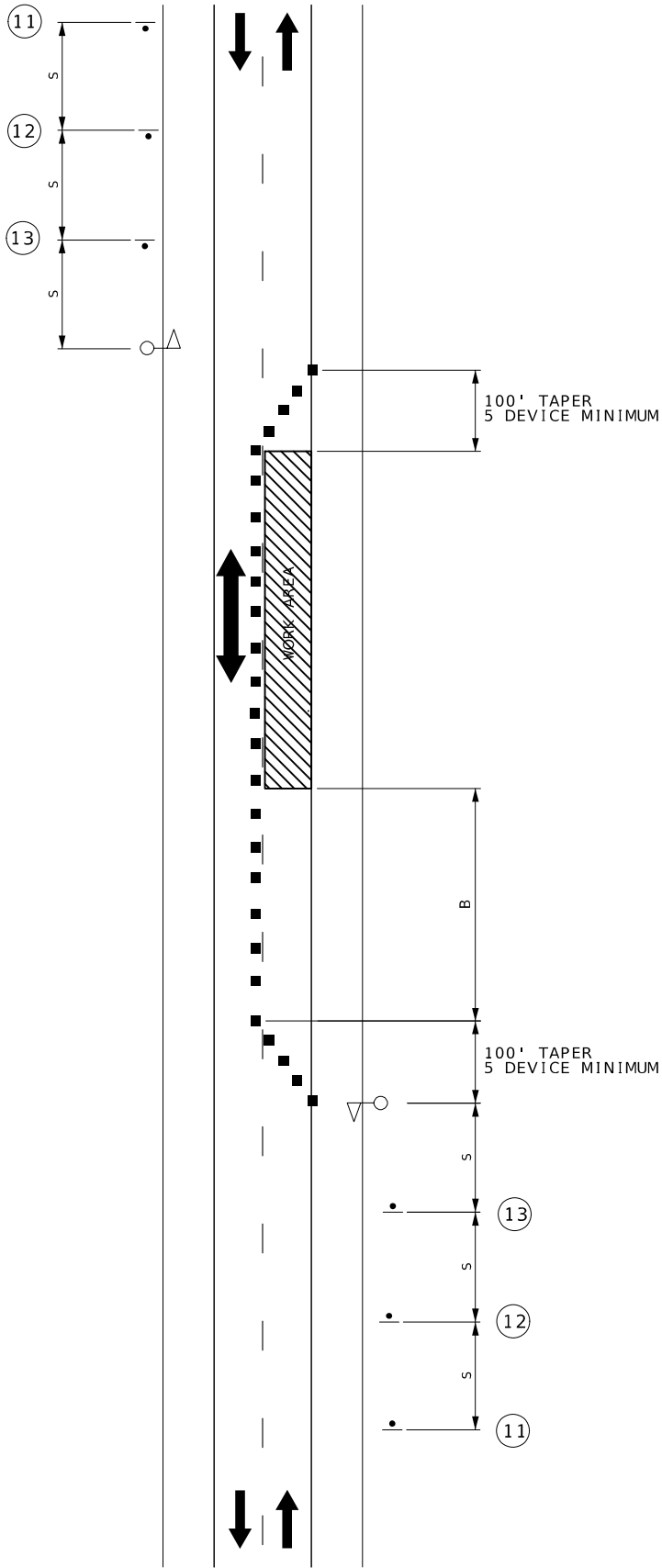
BRIDGE NO.						

DESCRIPTION

DATE _____

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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



LANE CLOSURE
ON TWO-LANE ROAD
USING FLAGGERS



WO20-1

11



WO20-4

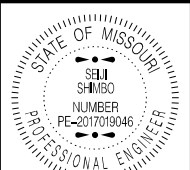
12



WO20-7a

13

NOT TO SCALE



Seiji Shimbo

REGISTERED PROFESSIONAL ENGINEER
SEIJI SHIMBO - CIVIL
MO-PE-2017019046

DATE PREPARED
8/11/2025

ROUTE 160	STATE MO
--------------	-------------

DISTRICT SE	SHEET NO. 15
----------------	-----------------

COUNTY
RIPLEY

JOB NO.
J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

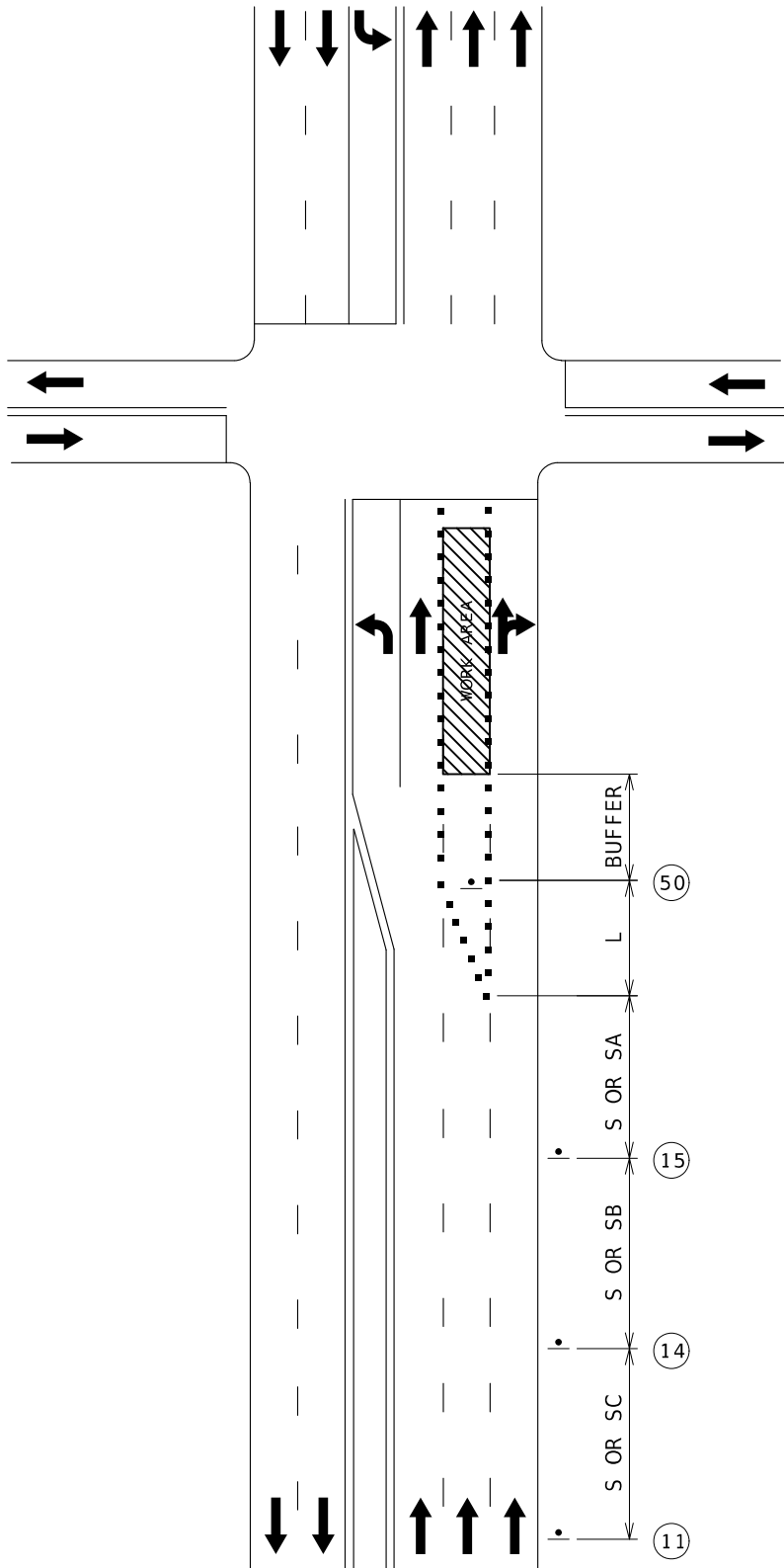
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



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

NOT TO SCALE



LANE CLOSURE ON
NEAR SIDE OF INTERSECTION



WO20-1
11



WO20-5
14

CENTER
OR
LEFT



WO20-6a
15

CENTER
OR
LEFT



WO12-1
50



Seiji Shimbo

DATE PREPARED
8/11/2025

ROUTE STATE
160 MO

DISTRICT SHEET NO.
SE 16

COUNTY
RIPLEY

JOB NO.
J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

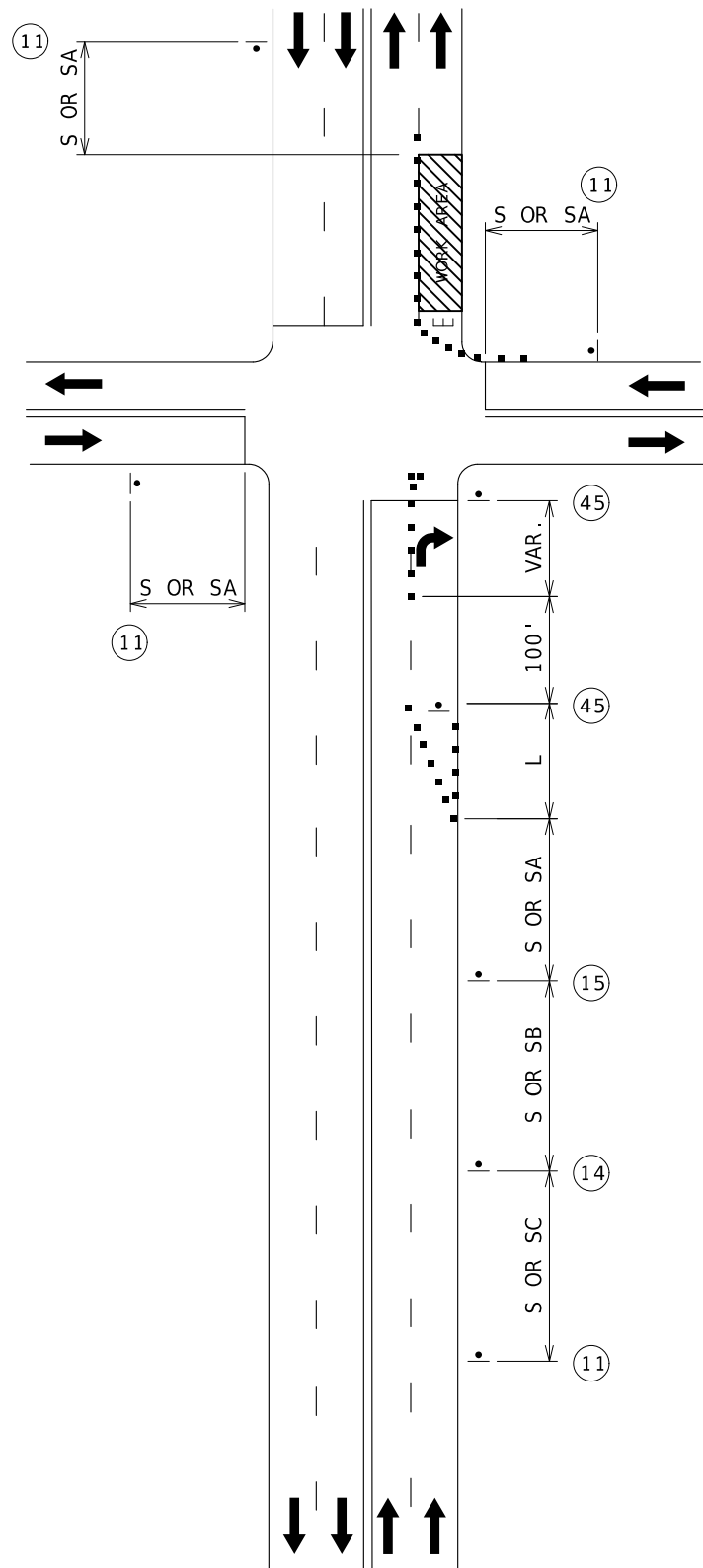
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOT TO SCALE



RIGHT LANE CLOSURE ON
FAR SIDE OF INTERSECTION



WO20-1
11



WO20-5
14

CENTER
OR
LEFT

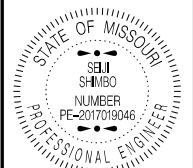


WO20-6a
15

CENTER
OR
LEFT



R3-7R
45



Seiji Shimbo

DATE PREPARED
8/11/2025

ROUTE STATE
160 MO

DISTRICT SHEET NO.
SE 17

COUNTY
RIPLEY

JOB NO.
J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

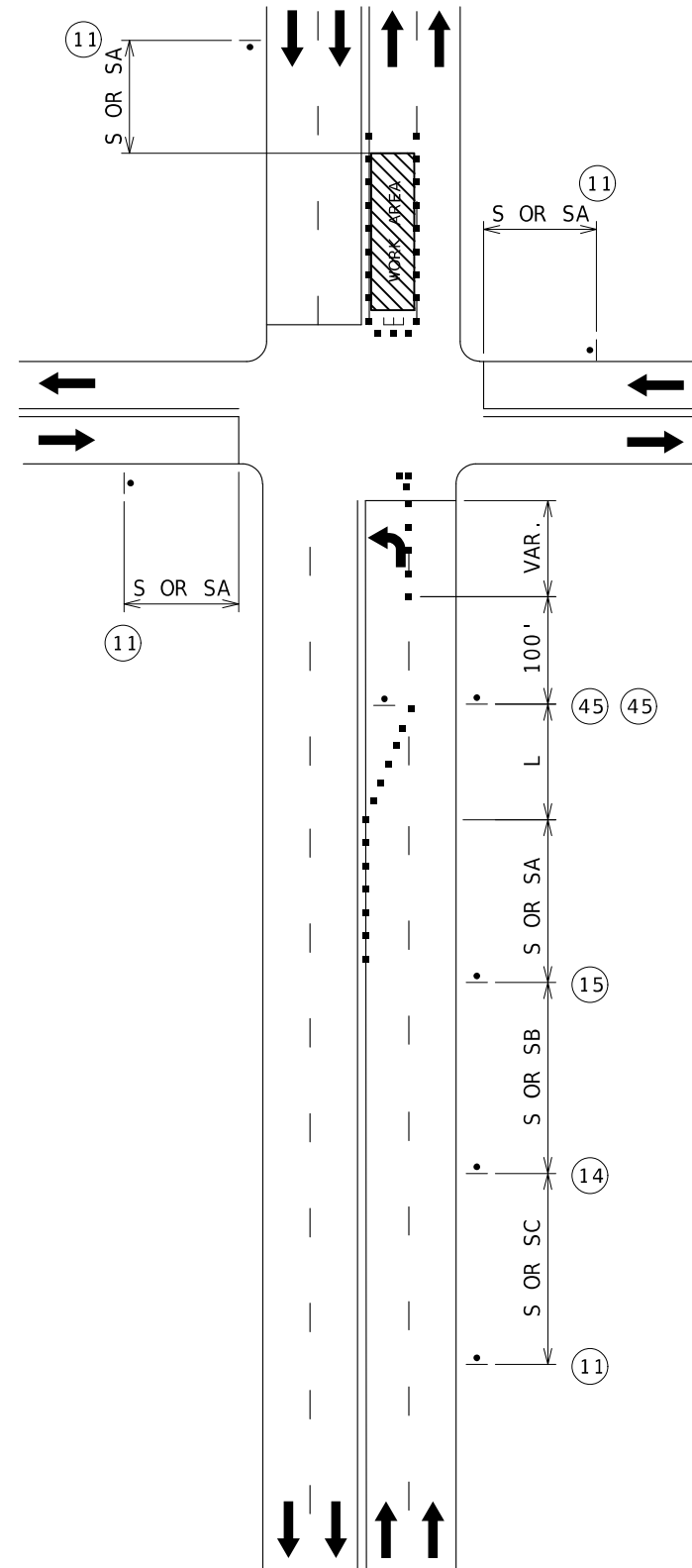
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MODOT

NOT TO SCALE



LEFT LANE CLOSURE ON FAR SIDE OF INTERSECTION



WO20-1



WO20-5

CENTER
OR
LEFT



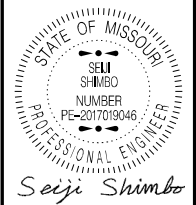
WO20-6a

CENTER
OR
LEFT



R3-7L

TEMPORARY TRAFFIC CONTROL
SHEET 7 OF 10



DATE PREPARED

8 / 11 / 2025

ROUTE 160	STATE MO
--------------	-------------

DISTRICT	SHEET NO.
SE	18

COUNTY
RIPLEY

JOB NO.
J953806

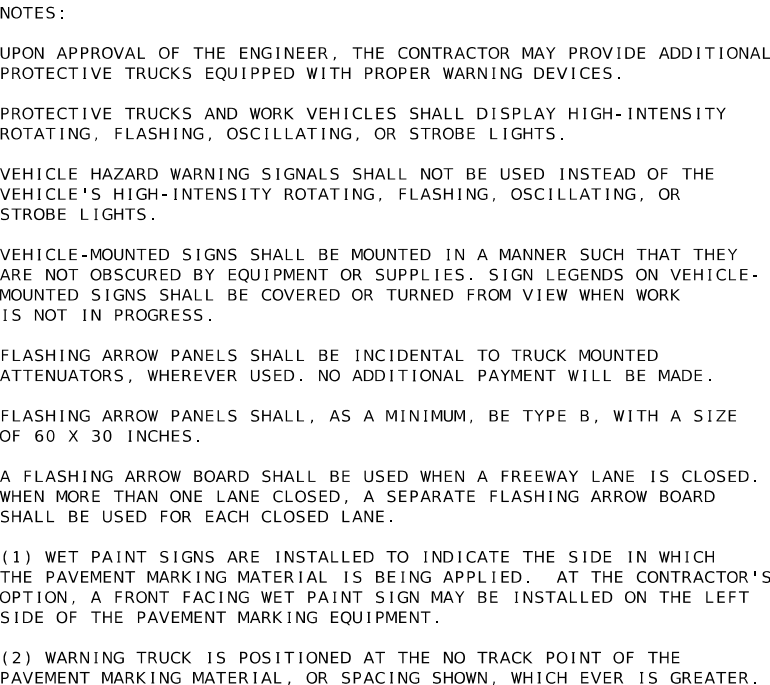
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

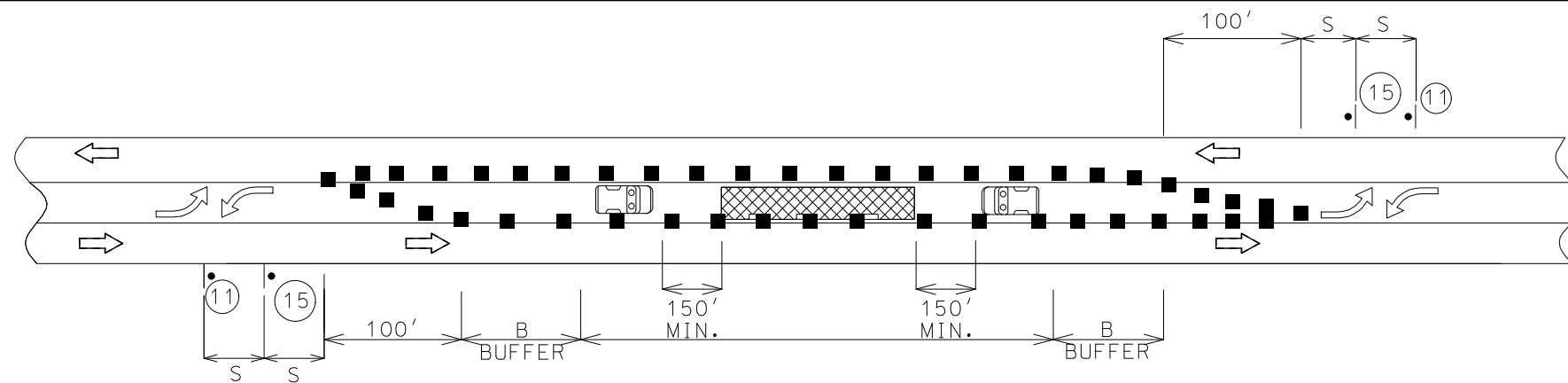
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



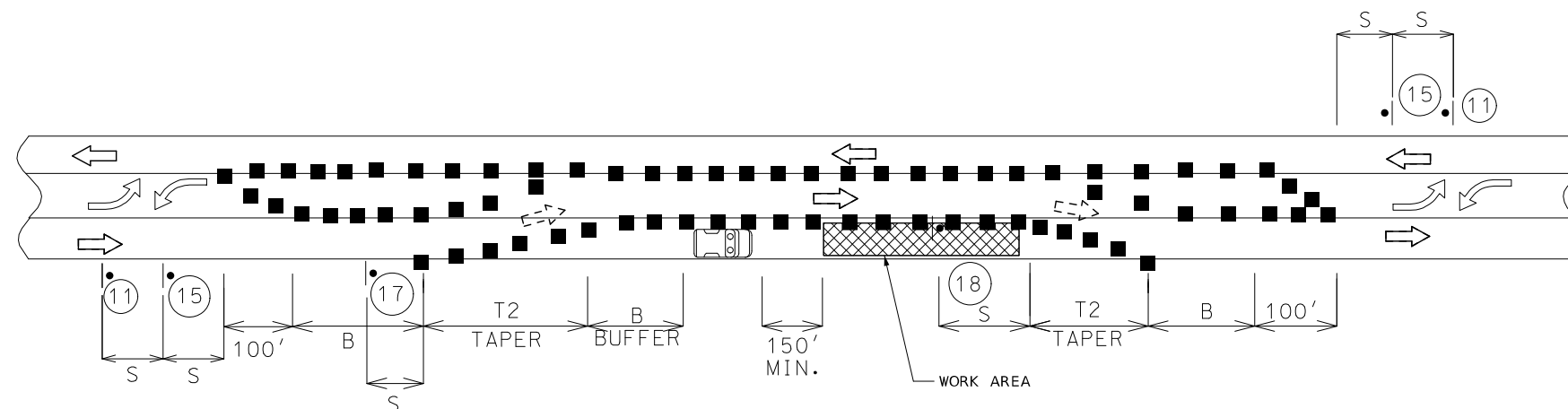
SPEED	SPACING
PERMANENT POSTED (MPH)	LENGTH T (FT)
≤ 35	245
40 - 45	540
50 - 55	660
60 - 70	840

TEMPORARY TRAFFIC CONTROL
SHEET 8 OF 10

STATE OF MISSOURI SEJI SHIMBO NUMBER PE-2017019046 PROFESSIONAL ENGINEER	
Seiji Shimbo US#116265 / 10-18 PM SEJI SHIMBO - CIVIL MO-PE-2017019046	
DATE PREPARED 8/11/2025	
ROUTE 160	STATE MO
DISTRICT SE	SHEET NO. 19
COUNTY RIPLEY	
JOB NO. J9S3806	
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)



CENTER TURN LANE CLOSURE



THROUGH LANE CLOSURE
IN 3 LANE SECTION WITH TWO WAY LEFT TURN LANE
(MAINTAIN AT LEAST 16' LANE WIDTH IN TAPER)

TRAFFIC CONTROL LEGEND

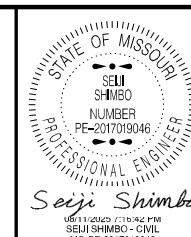
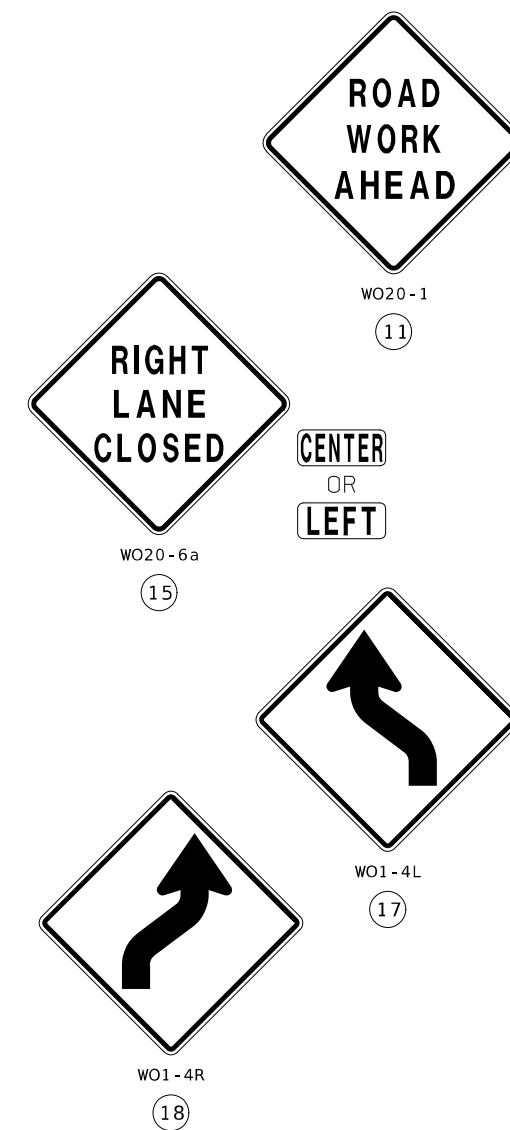
- SIGN (PORTABLE MOUNT)
- CHANNELIZER (TRIM LINE)

* WHEN A PAVED SHOULDER IS PRESENT, A 4 DEVICE, 150' TAPER SHALL BE PLACED ON THE SHOULDER IN ADVANCE OF THE THROUGH LANE TAPER

GENERAL NOTES:

- REFER TO STANDARD PLAN SHEETS 616.20 FOR ADDITIONAL TEMPORARY TRAFFIC CONTROL.
- ALL STATIONING, DISTANCES AND SPACING OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE AND MAY BE ADJUSTED BASED ON FIELD CONDITIONS.
- ALL EXISTING SIGNS ARE TO BE USED IN PLACE, ADJUSTED, AND/OR COVERED AS CONDITIONS REQUIRE.
- SEE CHART FOR CHANNELIZER SPACING

SPEED	SIGN SPACING (FT)		TAPER LENGTH (FT)		RECOMMENDED	CHANNELIZER SPACING (FT)	
PERMANENT POSTED (MPH)	UNDIVIDED (S)	DIVIDED (S)	SHOULDER (1) (T1)	LANE (2) (T2)	BUFFER LENGTH (FT) (B)	TAPERS	BUFFER/ WORK AREAS
0 - 35	200	-	70	245	250	35	40
40 - 45	350	-	150	540	360	40	80
50 - 55	500	-	185	660	495	50	80
60 - 70	1000	-	235	840	730	60	120
1. SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET. 2. LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.							



DATE PREPARED
8/11/2025

ROUTE 160 STATE MO

DISTRICT SE SHEET NO. 20

COUNTY RIPLEY

JOB NO. J9S3806

CONTRACT ID.

PROJECT NO.

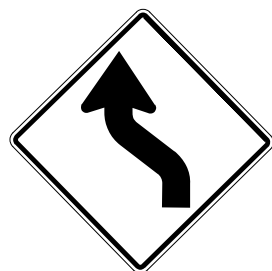
BRIDGE NO.

DESCRIPTION	DATE





W020-1
(11)

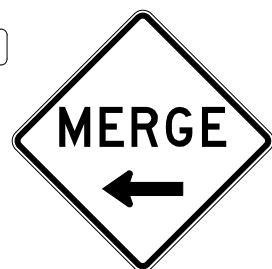


W01-4L
(17)



W020-5
(14)

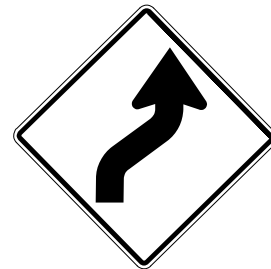
CENTER LANE
OR
LEFT LANE



W04-1aL
(23)



W04-1aR
(20)



W01-4R
(18)



W020-6a
(15)

CENTER
OR
LEFT



W013-1
(44)



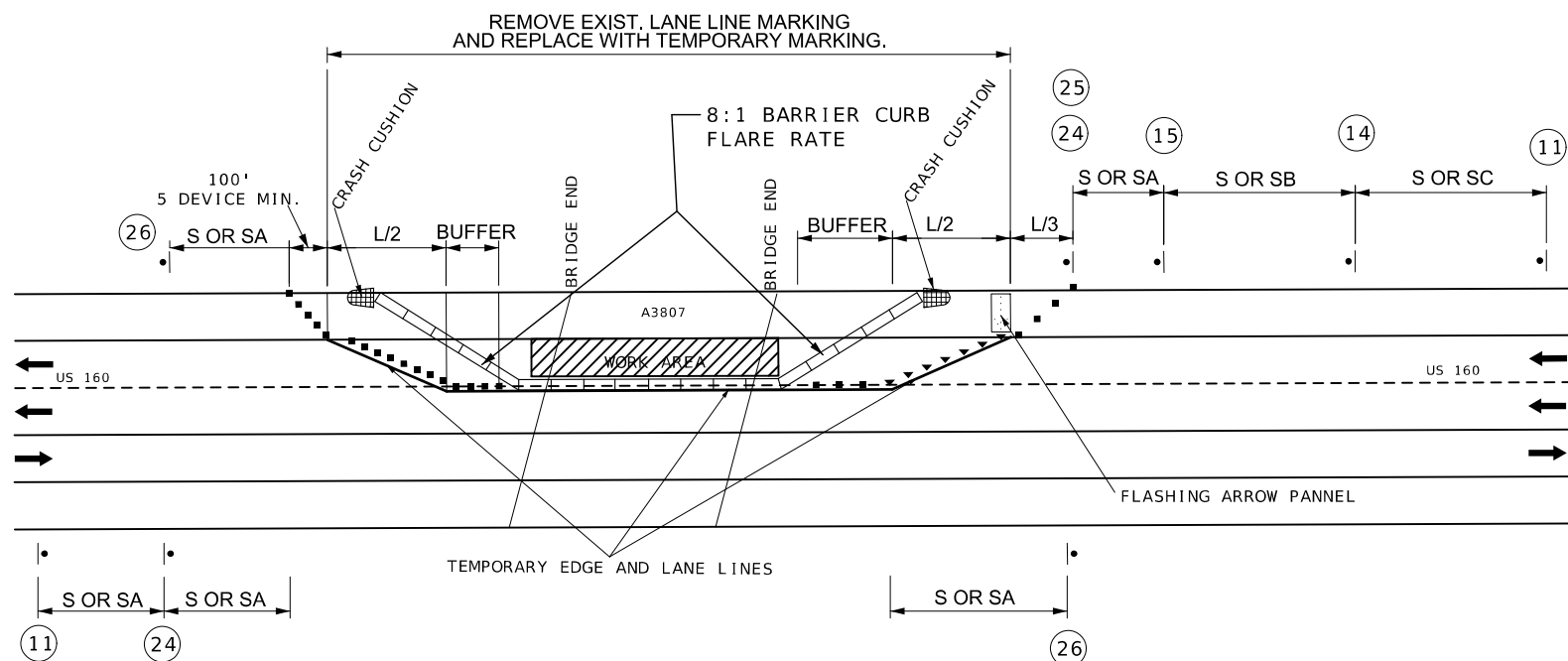
GO20-5aP
(25)



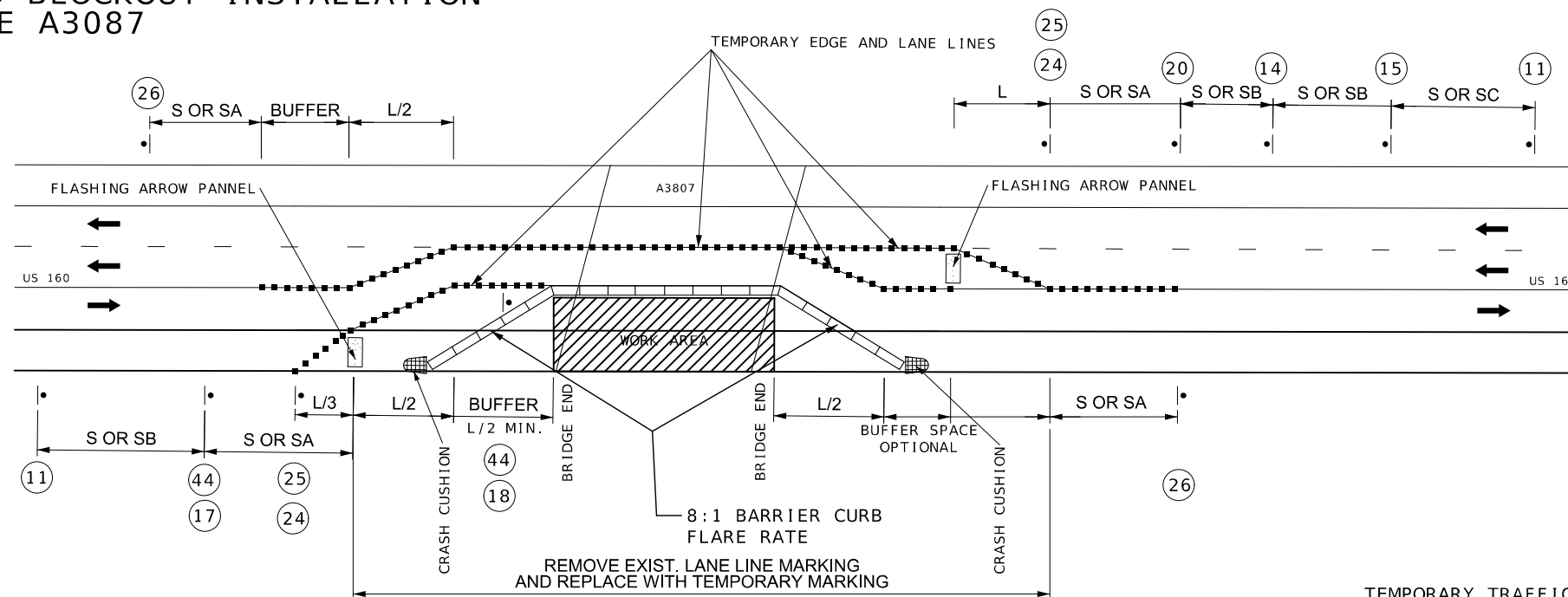
R2-1
(24)



R2-1
(26)



LANE CLOSURE FOR CURB BLOCKOUT INSTALLATION
BRIDGE A3807



LANE SHIFT FOR CURB BLOCKOUT INSTALLATION
BRIDGE A3807

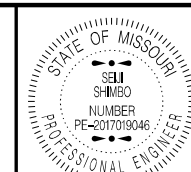
NOTE:
EXISTING CONFLICTING PAVEMENT MARKINGS AND RAISED PAVEMENT
MARKER REFLECTORS SHALL BE REMOVED. AFTER THE TEMPORARY TRAFFIC BARRIERS
ARE REMOVED, TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED AND THE
PERMANENT PAVEMENT MARKINGS RESTORED.

QUANTITIES PROVIDED ARE FOR ONE SET-UP AT A TIME

WORK ZONE FOR CURB BLOCKOUT WORK SHALL BE ACTIVE ONE DIRECTION AT A TIME

TEMPORARY TRAFFIC CONTROL
SHEET 10 OF 10

NOT TO SCALE



Seiji Shimbo

DATE PREPARED
8/11/2025

ROUTE 160 STATE MO

DISTRICT SE SHEET NO. 21

COUNTY RIPLEY

JOB NO. J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

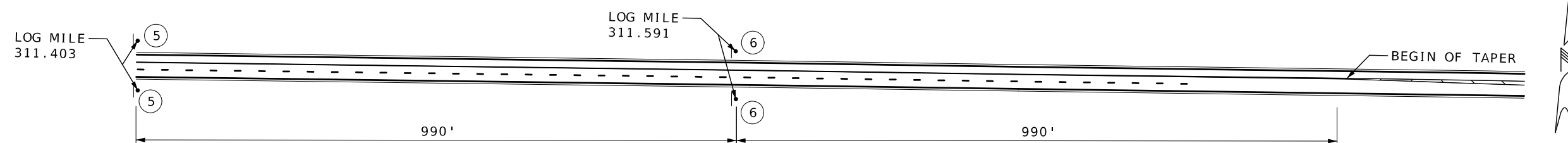
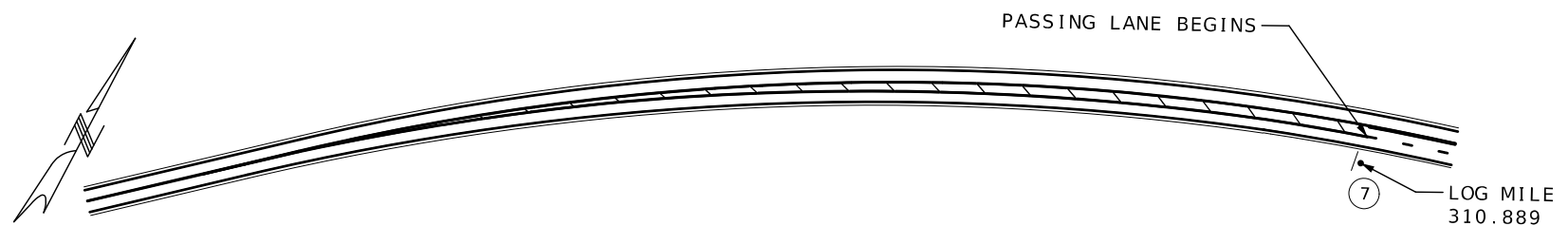
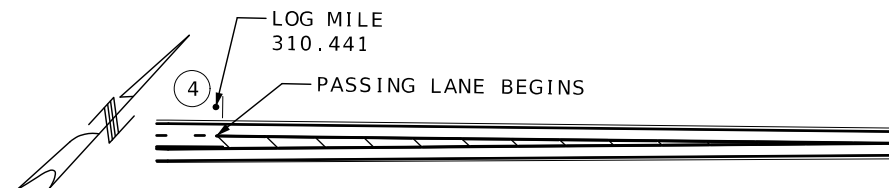
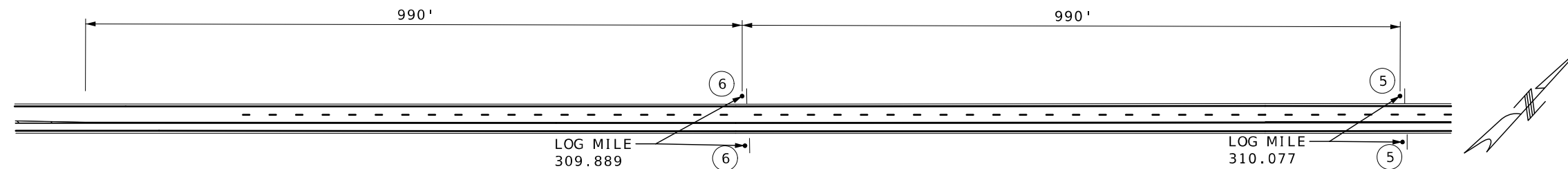
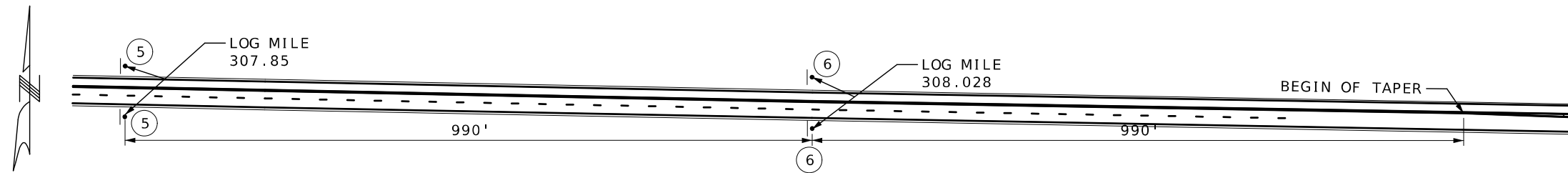
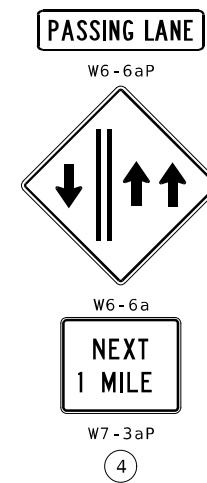
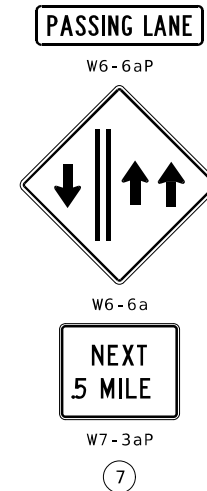
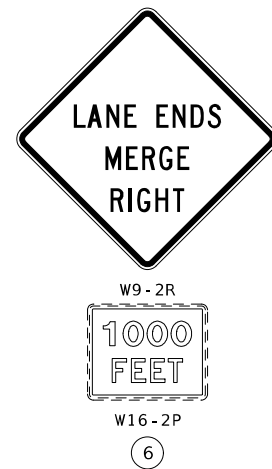
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

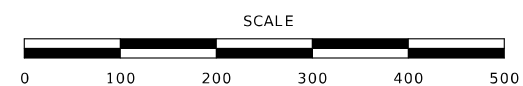
1-888-ASK-MODOT (1-888-275-6636)

MODOT

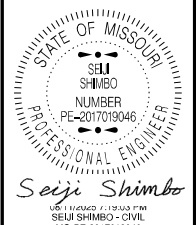


NOTES:

- REFER STD. PLAN 620.00P FOR ALTERNATING PASSING LANE DETAILS.
- REFER TO EPG 903.6.6 FOR ADVANCE PLACEMENT OF WARNING SIGNS.
- SIGNS NOT NOTED IN PLANS ARE TO BE USED IN PLACE.
- LOG MILES ARE APPROX.



SIGNING SHEET
SHEET 3 OF 3



DATE PREPARED

ROUTE	STATE
160	MO

DISTRICT SE	SHEET NO. 24
----------------	-----------------

COUNTY
RIPLEY

JOB NO.
J9S3806

CONTRACT ID.

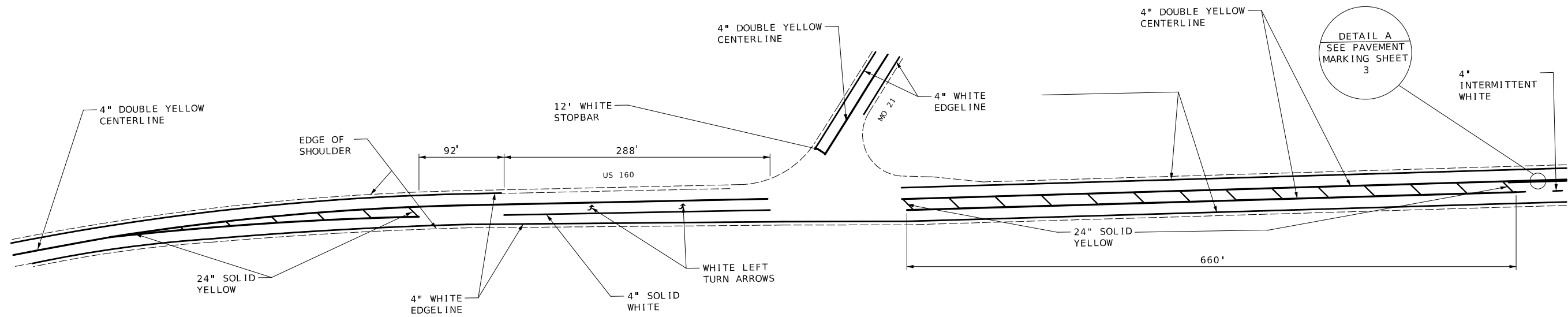
PROJECT NO.

BRIDGE NO.

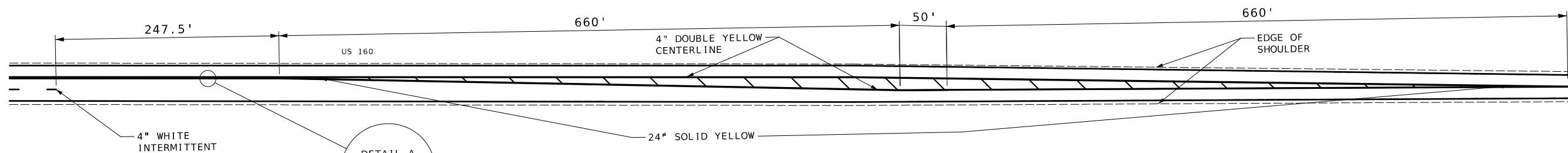
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MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

 105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-2-75-6636)

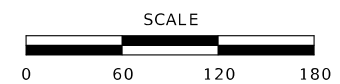


US 160
LOG MILE
306.93-307.21

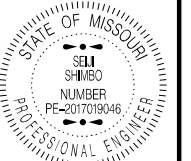


US 160
LOG MILE
308.07-308.49

NOTES:
-REFER TO STD. PLAN 620.00P PAVEMENT MARKING
-ALL OTHER STRIPING TO BE REPLACED WITHOUT CHANGE. REFER TO JSP.



PAVEMENT MARKING
SHEET 1 OF 3



Seiji Shimbo

DATE PREPARED
8/11/2025

ROUTE STATE
160 MO

DISTRICT SHEET NO.
SE 25

COUNTY
RIPLEY

JOB NO.
J9S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

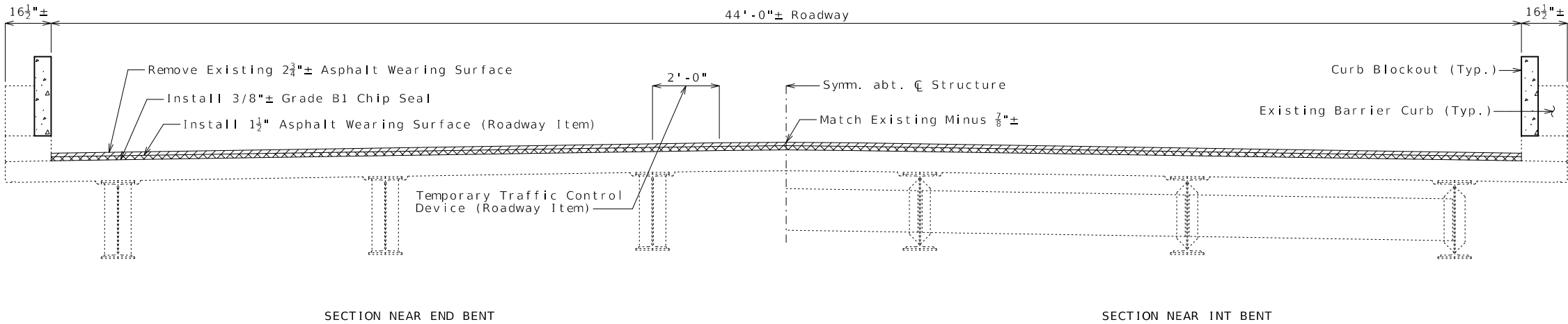
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

REHABILITATE AND U.I.P. (41'-56'-41') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS (SKEW: 30°00'00" L.A.)



General Notes:

- Design Specifications:
- 2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 6
- Design Loading:
- H20-44 (1973 & New Construction)
- Design Unit Stresses:
- Class B-2 Concrete (Superstructure)
Reinforcing Steel (ASTM A615 Grade 60)
- Reinforcing Steel:
- Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.
- Miscellaneous:
- Bars bonded in existing concrete not removed shall be clean, tight, and embedded into new concrete where possible.
 $f_c = 4,000$ psi
 $f_y = 60,000$ psi
- Roadway surfacing adjacent to bridge ends shall match new bridge surface (Roadway Item).
- Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.
- The contractor shall exercise care to ensure spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the seal coat.
- Asbestos (Friability Category II NF) has been detected in the insulation compound between the top of the existing concrete parapet and the base of existing handrail posts. The contractor has the option to remove the handrail and post or leave in place. Should the contractor elect to remove the handrail and posts, the contractor will be required to use a licensed abatement contractor during the removal. No direct payment will be made for removal of the handrail and posts, or for asbestos abatement. The described work will be considered completely covered by the contract unit price for other items in the contract.
- Traffic Handling:
- Traffic to be maintained on structure during construction. See roadway plans for traffic control.

Estimated Quantities		
Item		Total
Removal of Asphalt Wearing Surface	sq. foot	6,174
Emulsified Asphalt, Seal Coat	gallon	275
Seal Coat Aggregate, Grade B1	sq. yard	686
Curb Blockout	linear foot	319

REPAIRS TO BRIDGE: ROUTE 160
OVER LOGAN CREEK
ROUTE 160 FROM ROUTE 21 TO ROUTE JJ
ABOUT 3.0 MILES EAST OF ROUTE 21
BEGINNING STATION 326+12.80 (MATCH EXISTING ±)

STATE OF MISSOURI

TED S. KOESTER

NUMBER

PE-2013000591

PROFESSIONAL ENGINEER

Ted Koester

08/07/2025 8:21:22 AM

TED S. KOESTER - CIVIL

MO-PE-2013000591

DATE PREPARED

8/7/2025

ROUTE

160

STATE

MO

DISTRICT

BR

SHEET NO.

1

COUNTY

RIPLEY

JOB NO.

19S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A30871

DESCRIPTION

DATE

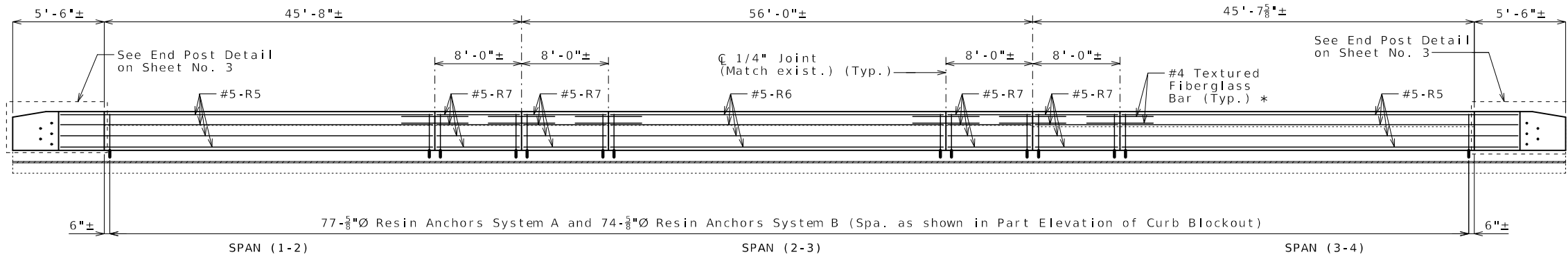
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

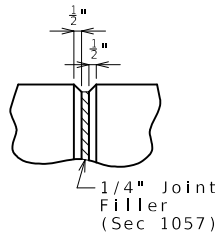
1-888-ASK-MODOT (1-888-273-6636)

MoDOT

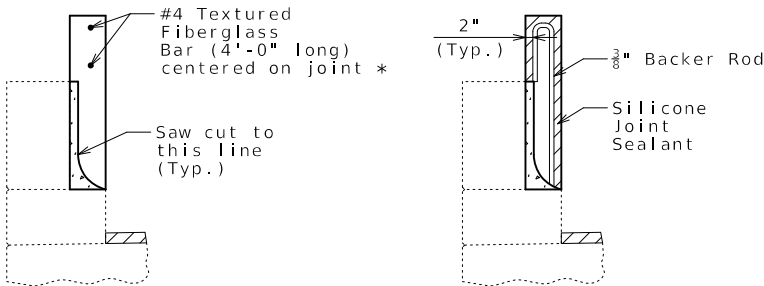


ELEVATION OF LEFT CURB BLOCKOUT
(Right curb blockout similar)

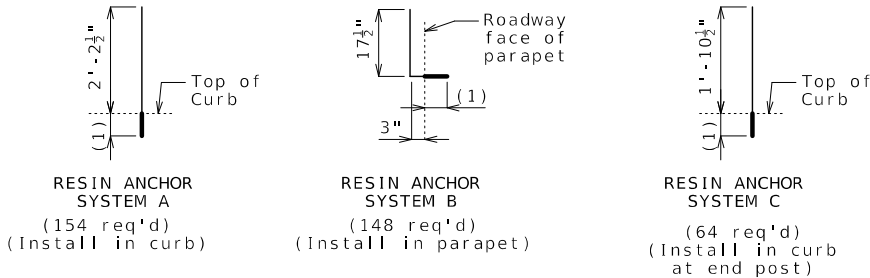
Longitudinal dimensions are along grade and are taken at top outside edge of parapet.



PART ELEVATION AT FORMED JOINT

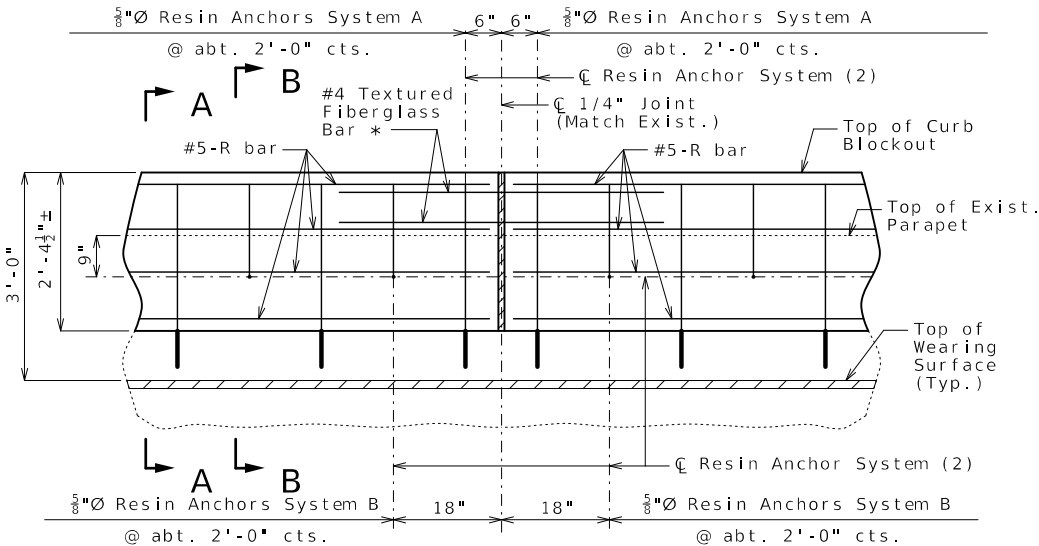


SECTION THRU SAW CUT JOINT

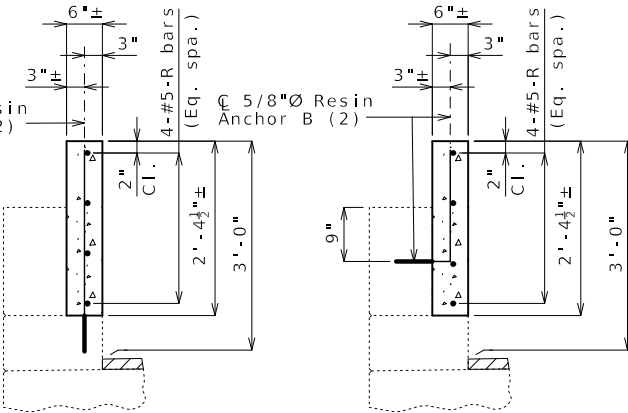


(1) Use manufacturer's embedment length (5" minimum embedment).

DETAILS OF RESIN ANCHORS



PART ELEVATION OF CURB BLOCKOUT



SECTION A-A

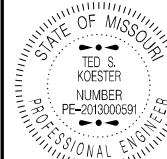
SECTION B-B

CURB BLOCKOUT

Sheet No. 2 of 4

Detailed Aug. 2025
Checked Aug. 2025

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



DATE PREPARED
8/7/2025

ROUTE
160

DISTRICT
BR

COUNTY
RIPLEY

JOB NO.
19S3806

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A30871

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

STATE

SHEET NO.
2

Notes:

* Slip-formed option only.

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

Bridge rail 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.

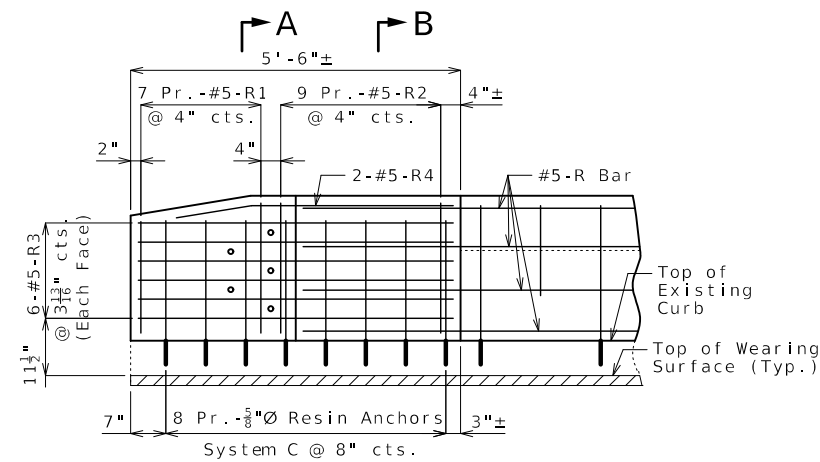
Concrete traffic barrier delineators shall be placed on top of the curb blockout similarly as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators 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.

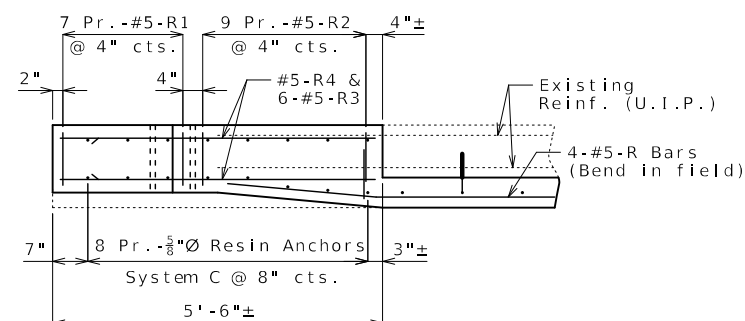
The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5 inches.

An epoxy coated #5 Grade 60 reinforcing bar shall be substituted for the 5/8"Ø threaded rod.

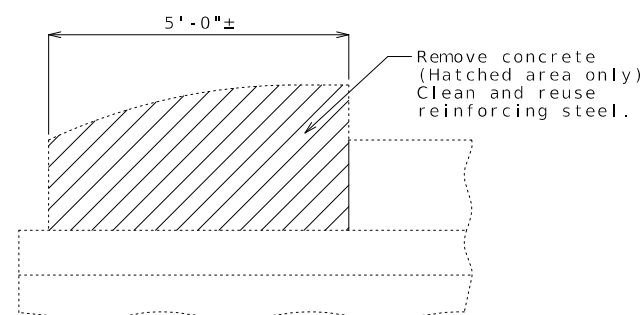
For slip-formed option, both sides of the curb blockout shall have a vertically broomed finish and the top shall have a transversely broomed finish.



ELEVATION SHOWING REINFORCEMENT
(Right End Post at End Bent No. 4 similar)

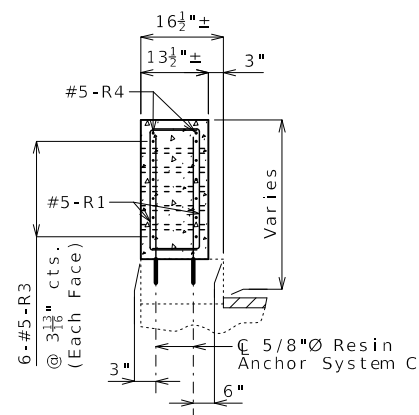


PLAN SHOWING REINFORCEMENT
LEFT END POST AT END BENT NO. 1

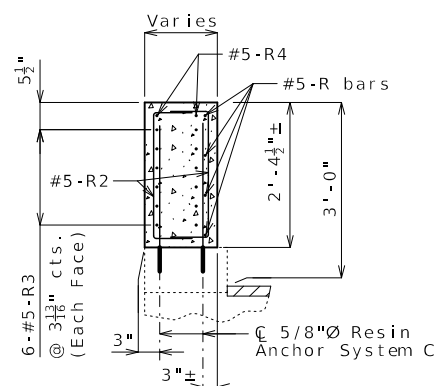


PART ELEVATION SHOWING END POST
CONCRETE REMOVAL

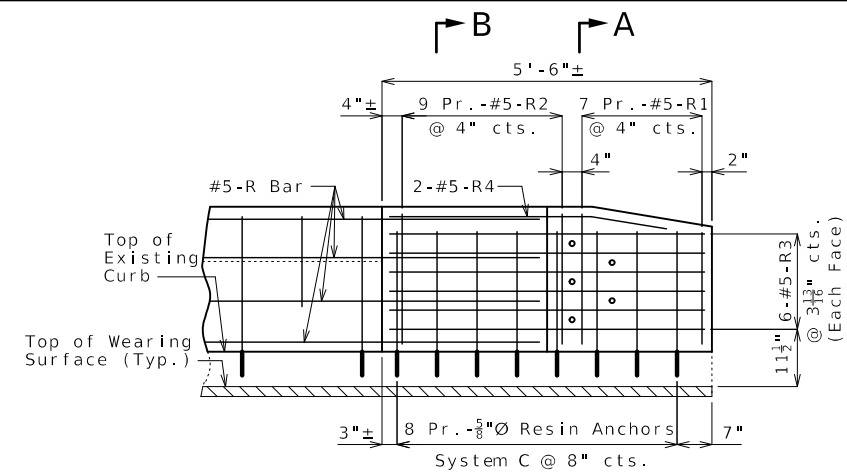
Cost of removing existing end posts will be considered completely covered by the contract unit price for Curb Blockout.



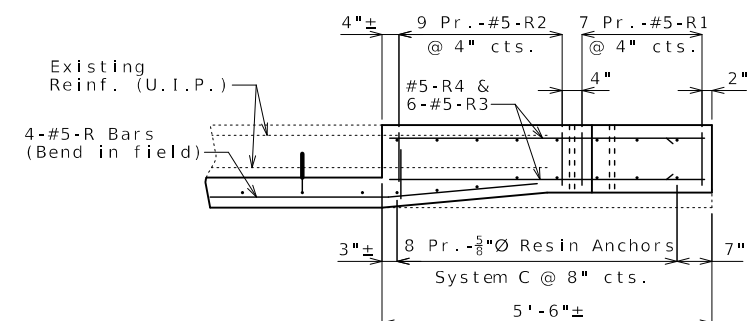
SECTION A-A



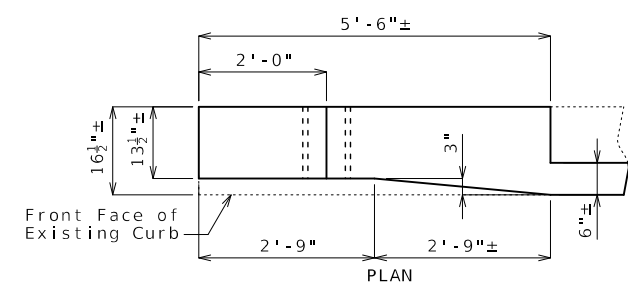
SECTION B-B



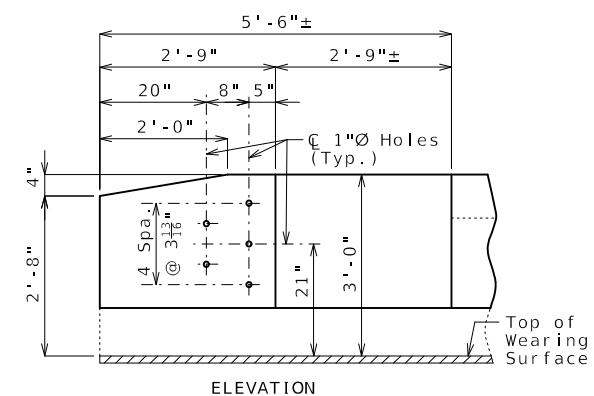
ELEVATION SHOWING REINFORCEMENT
(Right End Post at End Bent No. 1 similar)



PLAN SHOWING REINFORCEMENT
LEFT END POST AT END BENT NO. 4



PLAN



ELEVATION

DETAILS OF END POST AND GUARD RAIL ATTACHMENT

Notes:

Work this sheet with Sheet No. 2.

For details of resin anchors, see Sheet No. 2.

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

[illegible]

