DESIGN DESIGNATION

A.A.D.T. - 2021 = 1452 - 3684

V = 55 M.P.H.

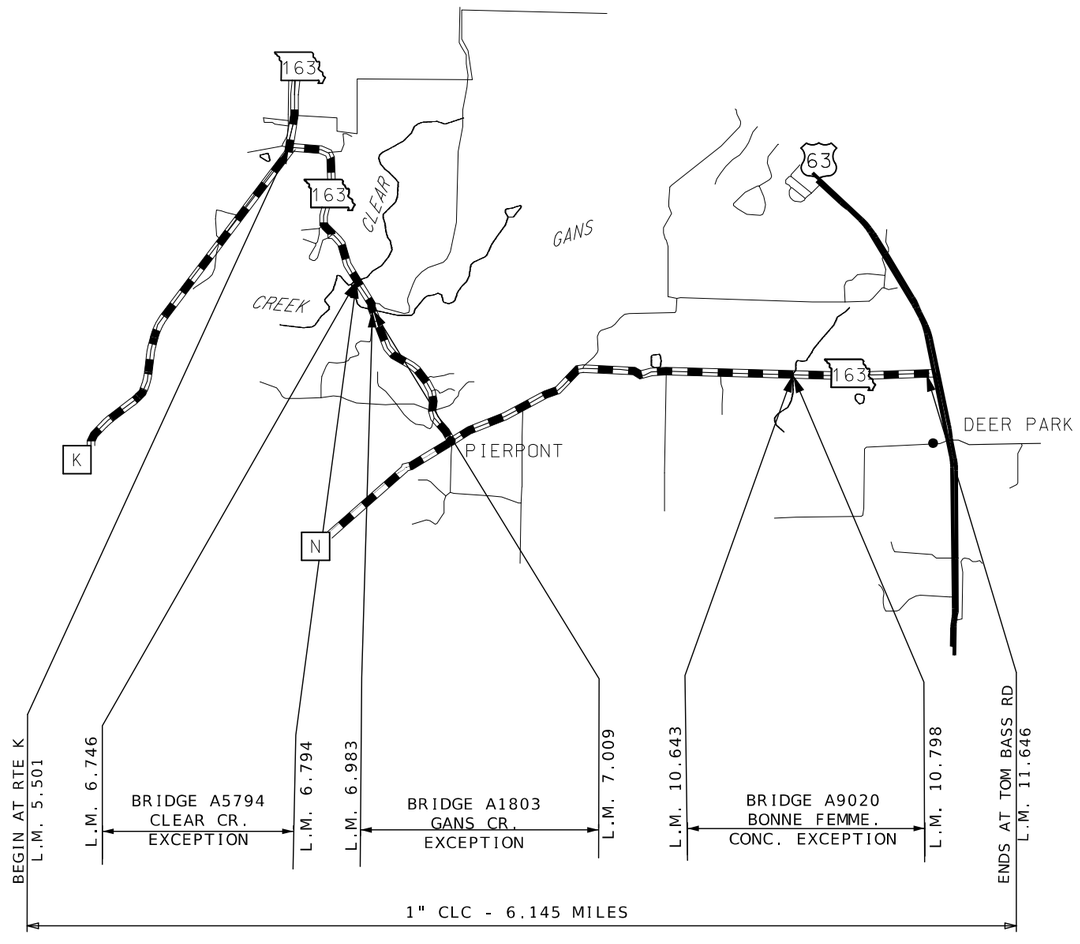
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED STATE HIGHWAY

BOONE COUNTY

KEY MAP

LOCATION OF BOONE COUNTY



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.

NOT TO SCALE

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS) (1 SHEET)	2
QUANTITIES (QU) (3 SHEETS)	3
SPECIAL SHEETS (SS)	4 - 8
TRAFFIC CONTROL SHEETS (TC)	9 - 13

LENGTH OF PROJECT

BEGINNING OF PROJECT	L.M. 5.501
END OF PROJECT	L.M. 11.646
APPARENT LENGTH	6.145 MILES
EQUATIONS AND EXCEPTIONS:	
STATE BRIDGE A5794	
BEGIN	L.M. 6.746
END	L.M. 6.794
STATE BRIDGE A1803	
BEGIN	L.M. 6.983
END	L.M. 7.009
CONC. EXCEPTION AT STATE BRIDGE A9020	
BEGIN	L.M. 10.643
END	L.M. 10.798
TOTAL CORRECTIONS	1209.12 FEET
NET LENGTH OF PROJECT	31236.48 FEET
STATE LENGTH	5.916 MILES

FOR INFORMATION ONLY

ESTIMATED DISTURBED ACRES 0 ACRES

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:16:53 AM
PATRICK J. HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED: 6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	1

COUNTY: BOONE

JOB NO.: JCD0190

CONTRACT ID.:

PROJECT NO.:

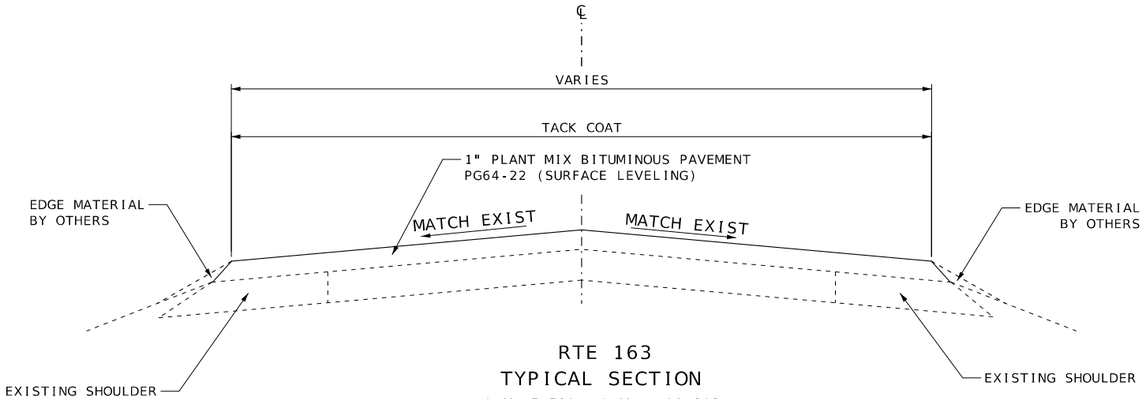
BRIDGE NO.:

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

BITUMINOUS PAVEMENT MIXTURE PG64-22 (SURFACE LEVELING)	1.987 TON/YD³
TACK COAT(EXIST. ASPHALT SURFACE)	0.08 GAL/YD²
TACK COAT(COLDMILLED ASPHALT)	0.10 GAL/YD²



RTE 163
TYPICAL SECTION
L.M. 5.501 - L.M. - 11.646

EXCEPTIONS

BRIDGE A5794 CLEAR CR.
L.M. 6.746 - L.M. 6.794

BRIDGE A1803 GANS CR.
L.M. 6.983 - L.M. 7.009

BRIDGE A9020 BONNE FEMME.
L.M. 10.643 - 10.798

NOTE:
SURFACE PLACEMENT SHALL BE ONE PASS PER LANE
NO S.E. CORRECTION.

NOT TO SCALE

TYPICAL SECTION
SHEET 1 OF 1

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:16:34 AM
PATRICK.J.HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
BOONE

JOB NO.
JCD0190

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)

REMOVAL OF IMPROVEMENTS

LOG MI	LOG MI	LOCATION	DESCRIPTION	QUANTITY		REMARKS
6.960	6.987	RTE. 163 - LT(NE)	BRIDGE ATTACHMENT, GUARDRAIL, END ANCHOR	124	LF	EXISTING BRIDGE END
6.957	6.985	RTE. 163 - RT(NW)	BRIDGE ATTACHMENT, GUARDRAIL, END ANCHOR	125	LF	EXISTING BRIDGE END
7.012	7.037	RTE. 163 - LT(SE)	BRIDGE ATTACHMENT, GUARDRAIL, END ANCHOR	128	LF	EXISTING BRIDGE END
7.010	7.033	RTE. 163 - RT(SW)	BRIDGE ATTACHMENT, GUARDRAIL, END ANCHOR	125	LF	EXISTING BRIDGE END
			TOTAL	1 LUMP SUM		

1" BITUMINOUS PAVEMENT SURFACE LEVELING PG64 - 22

APPROX. LOG MILE	APPROX. LOG MILE	LOCATION	LENGTH FT.	AVERAGE WIDTH FT.	AREA SQ. FT.	1" SURFACE LEVELING PG64-22 1" THICK 1.987 TON/CY TONS	TACK COAT NON-TRACKING EXIST. ASPHALT SURFACES 0.08 GAL/SY GAL	TACK COAT NON-TRACKING COLDMILLED SURFACES 0.10 GAL/SY GAL	REMARKS
5.501	5.506	ROUTE 163	25.00	VARIES	1260.00	7.73		14.00	MODIFIED COLDMILLING START PROJECT - APPROX.140 SQ. YDS.
5.506	5.596	ROUTE 163	475.20	VARIES	15886.35	97.43	141.21		1" SURFACE LEVELING COURSE APPROX. 1765.15 SQ. YDS.
5.596	6.714	ROUTE 163	5903.04	26	153479.04	941.24	1364.26		
6.714	6.735	ROUTE 163	110.88	33	3659.04	22.44			TAPER FROM 26 FT TO 40 FT
6.735	6.741	ROUTE 163	33.00	40	1320.00	8.10			
6.741	6.746	ROUTE 163	25.00	40	1000.00	6.13		11.11	MODIFIED COLDMILLING BEFORE BRIDGE EXCEPTION - APPROX. 111.11 SQ. YDS
6.746	6.794	ROUTE 163	247.00	40					EXCEPTION - BRIDGE A5794 CLEAR CR. (INCLUDES BRIDGE APPROACH SLABS)
6.794	6.799	ROUTE 163	25.00	40	1000.00	6.13		11.11	MODIFIED COLDMILLING AFTER BRIDGE EXCEPTION - APPROX. 111.11 SQ. YDS
6.799	6.807	ROUTE 163	40.00	40	1600.00	9.81			
6.807	6.828	ROUTE 163	110.88	33	3659.04	22.44	32.52		TAPER FROM 40 FT TO 26 FT
6.828	6.978	ROUTE 163	792.00	26	20592.00	126.28	183.04		
6.978	6.983	ROUTE 163	25.00	26	650.00	3.99		7.22	MODIFIED COLDMILLING BEFORE BRIDGE EXCEPTION - APPROX.72.22 SQ. YDS
6.983	7.009	ROUTE 163	136.00	26					EXCEPTION - BRIDGE A1803 GANS CR.
7.009	7.014	ROUTE 163	25.00	26	650.00	3.99		7.22	MODIFIED COLDMILLING AFTER BRIDGE EXCEPTION - APPROX.72.22 SQ. YDS
7.014	8.090	ROUTE 163	5681.28	26	147713.28	905.88	1313.01		
8.090	8.110	ROUTE 163	105.60	27.5	2904.00	17.81	25.81		TAPER FROM 26 FT TO 29 FT
8.110	8.143	ROUTE 163	174.24	VARIES	11294.82	69.27	100.40		INTERSECTION AT RTE 163,RTE N AND TOMLIN HILL RD. - APPROX. 1254.98 SQ. YDS.
8.143	10.010	ROUTE 163	9857.76	27.5	271088.40	1662.50	2409.67		
10.010	10.045	ROUTE 163	184.80	26.75	4943.40	30.32	43.94		TAPER FROM 27.5 FT TO 26 FT
10.045	10.638	ROUTE 163	3131.04	26	81407.04	499.24	723.62		
10.638	10.643	ROUTE 163	25.00	26	650.00	3.99		7.22	MODIFIED COLDMILLING BEFORE CONCRETE EXCEPTION - APPROX. 72.22 SQ. YDS
10.643	10.798	ROUTE 163	819.00	26					CONCRETE EXCEPTION - BRIDGE A9020 BONNE FEMME CR.
10.798	10.803	ROUTE 163	25.00	26	650.00	3.99		7.22	MODIFIED COLDMILLING AFTER CONCRETE EXCEPTION - APPROX. 72.22 SQ. YDS
10.803	11.641	ROUTE 163	4424.64	26	115040.64	705.51	1022.58		
11.641	11.646	ROUTE 163	25.00	26	650.00	3.99		7.22	MODIFIED COLDMILLING END PROJECT APPROX. 72.22 SQ. YDS.
SIDE ROADS AND ENTRANCES									
5.786		ROUTE 163 - LT	VARIES	VARIES	1158.93	7.11	10.30		RTE 163 AND PRIVATE DR. INTERSECTION APPROX. 128.77 SQ. YDS.
6.305		ROUTE 163 - RT	VARIES	VARIES	1922.04	11.79	17.08		RTE 163 AND ROC 3 - B INTERSECTION APPROX. 213.56 SQ. YDS.
6.395		ROUTE 163 - RT	VARIES	VARIES	881.37	5.41	7.83		RTE 163 AND ROC 2 - A INTERSECTION APPROX. 97.93 SQ. YDS.
6.946		ROUTE 163 - LT	VARIES	VARIES	1377.36	8.45	12.24		RTE 163 AND ROCK QUARRY RD. INTERSECTION APPROX. 153.04 SQ. YDS.
7.078		ROUTE 163 - RT	VARIES	VARIES	3595.32	22.05	31.96		RTE 163 AND ROC 10 D INTERSECTION APPROX. 399.48 SQ. YDS.
7.630		ROUTE 163 - LT	VARIES	VARIES	659.25	4.04	5.86		RTE 163 AND WHISENHUNT DR. INTERSECTION APPROX. 73.25 SQ. YDS.
9.796		ROUTE 163 - LT	VARIES	VARIES	2698.02	16.55	23.98		RTE 163 AND S. BENNETT DR. INTERSECTION APPROX. 299.78 SQ. YDS.
11.348		ROUTE 163 - RT	VARIES	VARIES	352.17	2.16	3.13		RTE 163 AND CADET CT INTERSECTION APPROX. 39.13 SQ. YDS.
		ROUTE 163	VARIES	2	4226.45	25.92	37.57		PRIVATE ENTRANCES
		ROUTE 163				1047.15			20% FOR IRREGULARITIES
		ROUTE 163				104.72			2% SAFETY EDGE
					TOTAL	6413.56	7510.01	72.32	
					USE	6413.6	7582		

COLDMILLING

APPROX. LOG MILE	APPROX. LOG MILE	LOCATION	LENGTH FT	WIDTH FT	MODIFIED COLDMILLING (DEPTH TRANSITIONS) SQ. YDS.	REMARKS
5.501	5.506	ROUTE 163	25.00	VARIES	140.00	MODIFIED COLDMILLING START PROJECT
6.741	6.746	ROUTE 163	25.00	40	111.11	MODIFIED COLDMILLING BEFORE BRIDGE EXCEPTION - A5794 CLEAR CR.
6.794	6.799	ROUTE 163	25.00	40	111.11	MODIFIED COLDMILLING AFTER BRIDGE EXCEPTION - A5794 CLEAR CR.
6.978	6.983	ROUTE 163	25.00	26	72.22	MODIFIED COLDMILLING BEFORE BRIDGE EXCEPTION - A1803 GANS CR.
7.009	7.014	ROUTE 163	25.00	26	72.22	MODIFIED COLDMILLING AFTER BRIDGE EXCEPTION - A1803 GANS CR.
8.110	8.143	ROUTE 163	10.00	VARIES	27.49	MODIFIED COLDMILLING AT RTE N AND RTE 163 INTERSECTION
8.110	8.143	ROUTE 163	10.00	VARIES	22.62	MODIFIED COLDMILLING AT TOMLIN HILL RD AND RTE 163 INTERSECTION
10.638	10.643	ROUTE 163	25.00	26	72.22	MODIFIED COLDMILLING BEFORE BRIDGE CONCRETE EXCEPTION - A9020 BONNE FEMME CR.
10.798	10.803	ROUTE 163	25.00	26	72.22	MODIFIED COLDMILLING AFTER BRIDGE CONCRETE EXCEPTION - A9020 BONNE FEMME CR.
11.641	11.646	ROUTE 163	25.00	26	72.22	MODIFIED COLDMILLING END PROJECT
		ROUTE 163	VARIES	4.00	496.64	CONCRETE ENTRANCES
SIDE ROADS						
5.786	5.786	ROUTE 163	10	VARIES	23.70	RTE 163 AND PRIVATE DR. INTERSECTION
6.305	6.305	ROUTE 163	10	VARIES	25.01	RTE 163 AND ROC 3 - B INTERSECTION
6.395	6.395	ROUTE 163	10	VARIES	15.81	RTE 163 AND ROC 2 - A INTERSECTION
6.946	6.946	ROUTE 163	10	VARIES	24.00	RTE 163 AND ROCK QUARRY RD. INTERSECTION
7.078	7.078	ROUTE 163	10	VARIES	77.03	RTE 163 AND ROC 10 D INTERSECTION
7.630	7.630	ROUTE 163	10	VARIES	17.77	RTE 163 AND WHISENHUNT RD INTERSECTION
9.796	9.796	ROUTE 163	10	VARIES	34.14	RTE 163 AND S. BENNETT DR. INTERSECTION
11.348	11.348	ROUTE 163	10	VARIES	39.13	RTE 163 AND CADET CT INTERSECTION
				TOTAL	1526.66	
				USE	1527	

SUMMARY OF QUANTITIES
SHEET 1 OF 3

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
05/29/2026 10:16:44 AM
PATRICK J HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
BOONE

JOB NO.
JCD0190

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)

PERMANENT PAVEMENT MARKING

APPROX. LOG MILE	APPROX. LOG MILE	LOCATION	LENGTH FT	CLASS I PAINT (18 MIL, TYPE P BEADS) 4" INT. YELLOW LF	4" SOLID YELLOW LF	4" SOLID WHITE LF	PREFORMED THERMOPLASTIC 24" SOLID WHITE LF	LEFT ARROW EACH	REMARKS
5.501	11.646	RTE 163	32445.60			64891.20			EDGELINES
5.490	5.514	RTE 163	126.72			126.72			LANE LINE
5.509		RTE 163	45.00					1	
5.495	6.617	RTE 163	5924.16		11848.32				DOUBLE YELLOW
6.617	6.800	RTE 163	966.24	241.56	966.24				
6.800	6.820	RTE 163	105.60		211.20				DOUBLE YELLOW
6.820	6.960	RTE 163	739.20	184.80	739.20				
6.960	7.100	RTE 163	739.20		1478.40				DOUBLE YELLOW
7.100	7.200	RTE 163	528.00	132.00	528.00				
7.200	8.125	RTE 163	4884.00		9768.00				DOUBLE YELLOW
8.125		RTE 163					11.00		
8.143		RTE 163					11.00		
8.145	8.575	RTE 163	2270.40		4540.80				DOUBLE YELLOW
8.575	8.735	RTE 163	844.80	211.20	844.80				
8.735	8.800	RTE 163	343.20	85.80					
8.800	8.915	RTE 163	607.20	151.80	607.20				
8.915	9.220	RTE 163	1610.40		3220.80				DOUBLE YELLOW
9.220	9.495	RTE 163	1452.00	363.00	1452.00				
9.495	9.955	RTE 163	2428.80		4857.60				DOUBLE YELLOW
9.955	10.245	RTE 163	1531.20	382.80	1531.20				
10.245	10.455	RTE 163	1108.80		2217.60				DOUBLE YELLOW
10.455	10.595	RTE 163	739.20	184.80	739.20				
10.595	10.780	RTE 163	976.80	244.20					
10.780	10.835	RTE 163	290.40	72.60	290.40				
10.835	11.135	RTE 163	1584.00		3168				DOUBLE YELLOW
11.135	11.255	RTE 163	633.60	158.40	633.60				
11.255	11.315	RTE 163	316.80	79.20					
11.315	11.435	RTE 163	633.60	158.40	633.60				
11.435	11.646	RTE 163	1114.08		2228.16				DOUBLE YELLOW
0.013		RTE N					11.00		INTERSECTION AT RTE 163, RTE N AND TOMLIN HILL RD
0.009		TOMLIN HILL RD					11.00		INTERSECTION AT RTE 163, RTE N AND TOMLIN HILL RD
			TOTAL	2650.56	52504.32	65017.92	44.00	1.00	
			USE	55155		65018	44	1	

NOTE: ALL PAVEMENT MARKING TO MATCH EXISTING UNLESS OTHERWISE SHOWN IN THE PLANS. LOCATE BEFORE RESURFACING.

TEMPORARY TRAFFIC CONTROL

SIGN NO.	SIGN	SIZE	AREA SF	QUANTITY EA	TOTAL AREA SF	DESCRIPTION
CONSTRUCTION SIGNS						
1	GO20-1	60X24	10.00	2	20	ROAD WORK NEXT 6 MILES
2	WO20-1	48X48	16.00	16	256	ROAD WORK AHEAD
7	WO20-4	48X48	16.00	18	288	ONE LANE ROAD AHEAD
8	WO20-7a	48X48	16.00	16	256	FLAGGER SYMBOL (WITH FLAGS)
26	GO20-2	48X24	8.00	2	16	END ROAD WORK
35	WO8-12	48X48	16.00	12	192	NO CENTER LINE
36	WO8-11	48X48	16.00	18	288	UNEVEN LANES
53	GO20-4	36X18	4.50	1	4.5	PILOT CAR FOLLOW ME
58	GO20-4a	18X12	1.5	12	18	PILOT CAR IN USE WAIT & FOLLOW
58	GO20-4a	42X30	8.75	1	8.75	PILOT CAR IN USE WAIT & FOLLOW
59	CONST-B	48X36	12.00	2	24	WORK ZONE NO PHONE ZONE
	GO22-1	21X15	2.19	4	8.76	WET PAINT (ARROW PIVOTS)
CONSTRUCTION SIGNS TOTAL					1380.01	
ADDITIONAL TRAFFIC CONTROL ITEMS						
				377	CHANNELIZERS (TRIM-LINE)	
			619-1098A	3 *	CHANGEABLE MESSAGE SIGN WITHOUT COMMUNICATION INTERFACE CONTRACTOR FURNISHED, CONTRACTOR RETAINED	
TEMPORARY TRAFFIC CONTROL TOTAL				1 LUMP SUM		

* NOT INCLUDED IN LUMP SUM TRAFFIC CONTROL

NOTE: ALL TRAFFIC CONTROL ITEMS ARE INCLUDED IN PAY ITEM 616-99.01, LUMP SUM TEMPORARY TRAFFIC CONTROL, UNLESS OTHERWISE NOTED IN THE PLANS. THE QUANTITIES SHOWN ARE ONLY AN ESTIMATE AND ARE SUBJECT TO CHANGE BASED UPON FIELD CONDITIONS AND CONTRACTOR'S OPERATIONS.

NO DIRECT PAY WILL BE MADE FOR RELOCATION OF CONSTRUCTION SIGNS OR DEVICES.

MOBILIZATION
1 LUMP SUM

SUMMARY OF QUANTITIES
SHEET 2 OF 3

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:17:39 AM
PATRICK.J.HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED: 6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: BOONE
JOB NO.: JCD0190
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)

BITUMINOUS RUMBLE STRIPS

LOG MILE FROM	LOG MILE TO	LOCATION	LENGTH (MILES)	BITUMINOUS CENTERLINE RUMBLE STRIP (STA)	BITUMINOUS SHOULDER RUMBLE STRIP (STA)	REMARKS
5.615	6.746	RTE 163	1.13	59.664	119.328	BEGIN OF PROJECT
6.746	6.794	RTE 163				EXCEPTION - BRIDGE A5794 CLEAR CR.
6.794	6.983	RTE 163	0.19	10.032	20.064	
6.983	7.009	RTE 163				EXCEPTION - BRIDGE A1803 GANS CR.
7.009	8.110	RTE 163	1.10	58.080	116.16	
8.110	8.143	RTE 163				INTERSECTION AT RTE 163,RTE N AND TOMLIN HILL RD.
8.168	10.643	RTE 163	2.48	130.944	261.888	
10.643	10.798	RTE 163				CONCRETE EXCEPTION - BRIDGE A9020 BONNE FEMME CR.
10.798	11.646	RTE 163	0.85	44.880	89.76	END OF PROJECT
EXCEPTIONS						
5.501	11.646	RTE 163	3.47		183.216	RESIDENTIAL,COMMERCIALS AND OUTER ROADS
			TOTAL	303.60	423.98	
			USE	304	424	

GRAVEL (A), CRUSHED STONE (B)

LOG MILE	LOG MILE	LOCATION	GRAVEL (A) CRUSHED STONE (B) TONS	REMARKS
5.501	11.646	RTE 163	265.00	GRAVEL ENTRANCES AND COUNTY ROADS
		TOTAL	265.0	
		USE	265	

GUARDRAIL

LOG MI	LOG MI	LOCATION	TOTAL LENGTH FT	MSG GUARDRAIL FT	MSG BRIDGE APPROACH TRANS. SECTION REGULAR./NO CURB EA	TYPE A CRASHWORTHY END TERMINAL (MASH) EA	SHAPING SLOPES CLASS III 100 LF	REMARK
6.960	6.987	ROUTE 163 - LT	125	37.5	1	1	1.4	BRIDGE A1803 GANS CREEK - NORTHEAST
6.957	6.985	ROUTE 163 - RT	200	112.5	1	1	2.3	BRIDGE A1803 GANS CREEK - NORTHWEST
7.012	7.037	ROUTE 163 - LT	200	112.5	1	1	2.3	BRIDGE A1803 GANS CREEK - SOUTHEAST
7.010	7.033	ROUTE 163 - RT	125	37.5	1	1	1.4	BRIDGE A1803 GANS CREEK - SOUTHWEST
			TOTAL	300	4	4	7.4	
			USE	300	4	4	7	

PATCHING DAMAGED PAVEMENT

LOCATION	REMOVAL OF DAMAGED PAVEMENT SY	REPLACEMENT OF DAMAGED PAVEMENT TON
RTE 163	1475	307.3
TOTAL	1475	307.3
USE	1475	307.3

SUMMARY OF QUANTITIES
SHEET 3 OF 3

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
07/28/2026 1:26:05 PM
PATRICK J HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
BOONE

JOB NO.
JCD0190

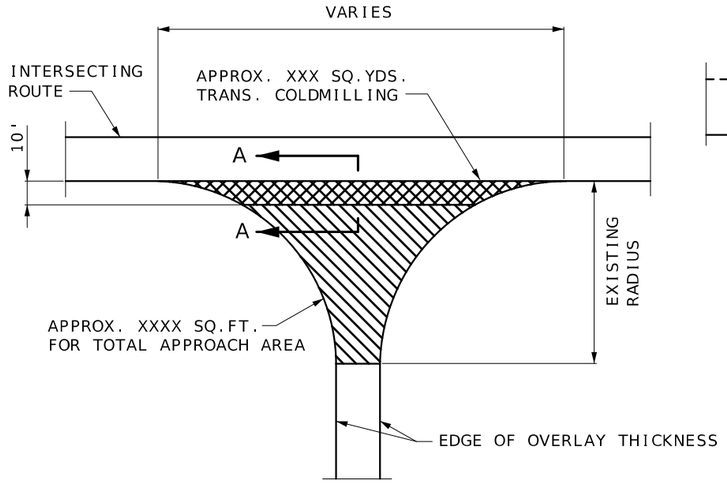
CONTRACT ID.

PROJECT NO.

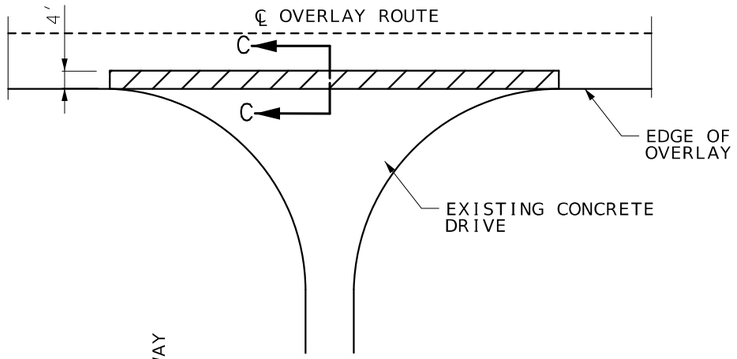
BRIDGE NO.

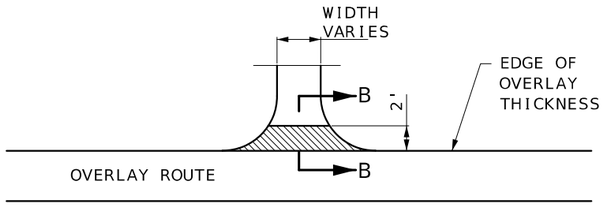
DESCRIPTION	DATE

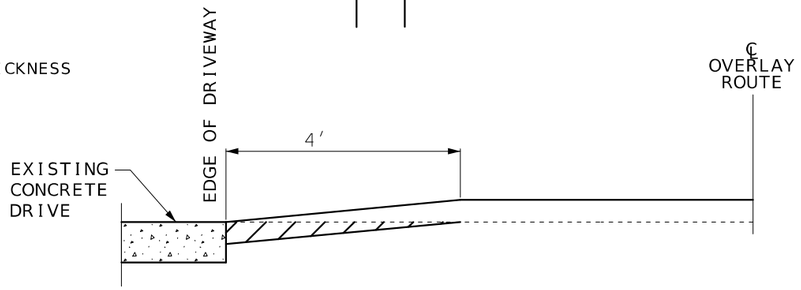
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



BEGINNING AND END OF PROJECT
AT INTERSECTING ROUTE

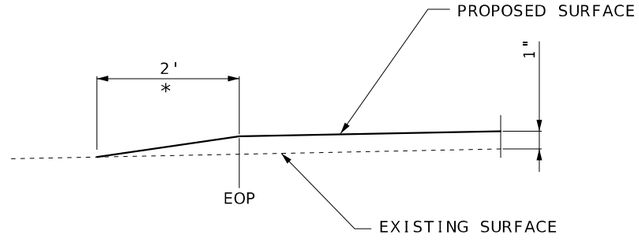




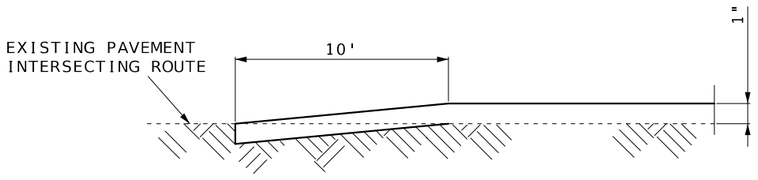


SECTION C-C

OPTIONAL - MILL ALONG
CONCRETE ENTRANCES AND INTERSECTION ROUTE

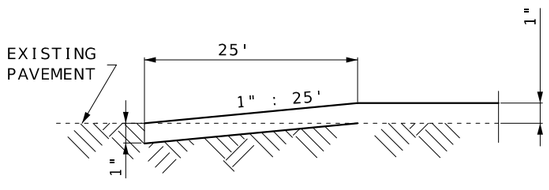


SECTION B-B
TYPICAL PAVED ENTRANCE
(FIELD, PRIVATE OR AGGREGATE COUNTY ROAD)
* TAPER AT 1:1 FOR FIELD ENTRANCE

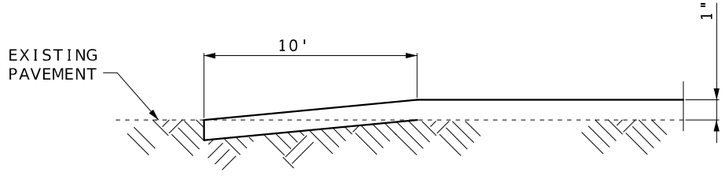


SECTION A-A

DEPTH TRANSITIONS
BEGINNING AND END OF PROJECT
AT INTERSECTING ROUTE

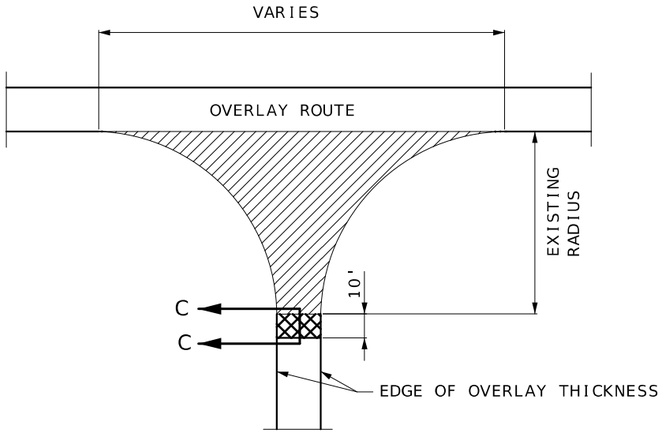


BEGINNING AND END OF PROJECT
NOT AT INTERSECTING ROUTE
AND AT EXCEPTIONS



SECTION C-C

TYPICAL PAVED SIDE ROAD, STATE ROUTE JUNCTION
(COLDMILLED TRANSITION)



TYPICAL PAVED SIDE ROAD
AND STATE ROUTE JUNCTION

SPECIAL SHEET
1 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:17:31 AM
PATRICK.J.HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	4

COUNTY
BOONE

JOB NO.
JCD0190

CONTRACT ID.

PROJECT NO.

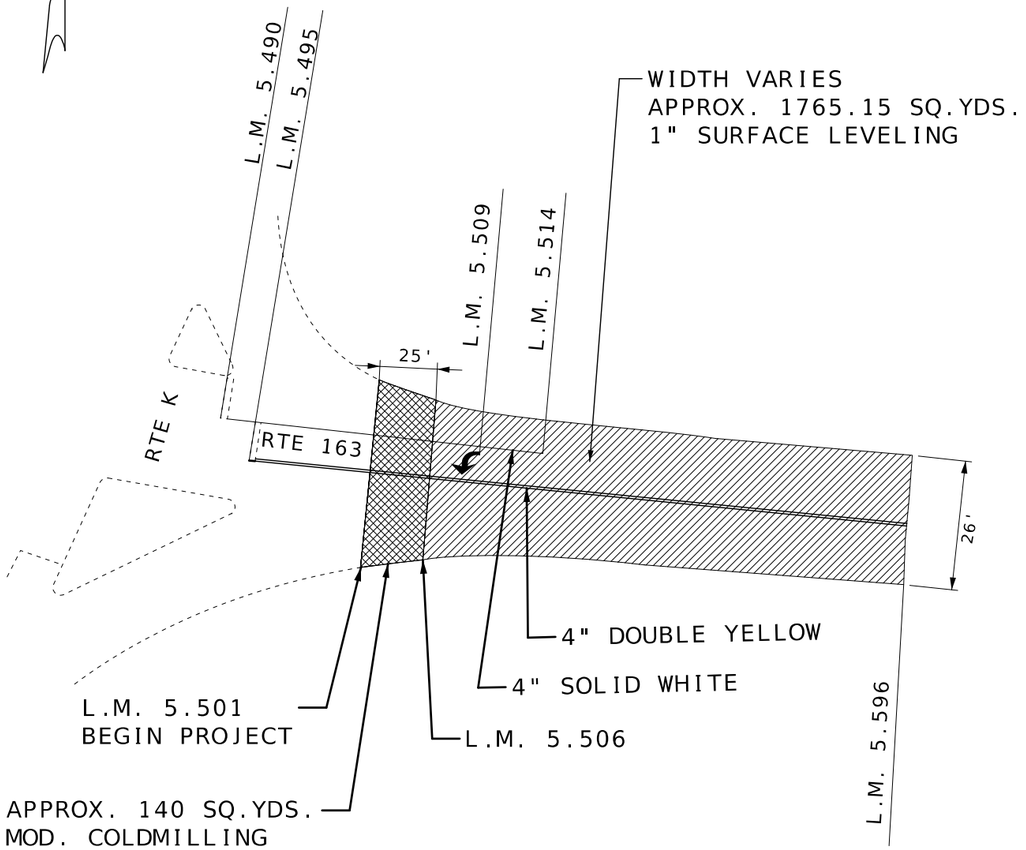
BRIDGE NO.

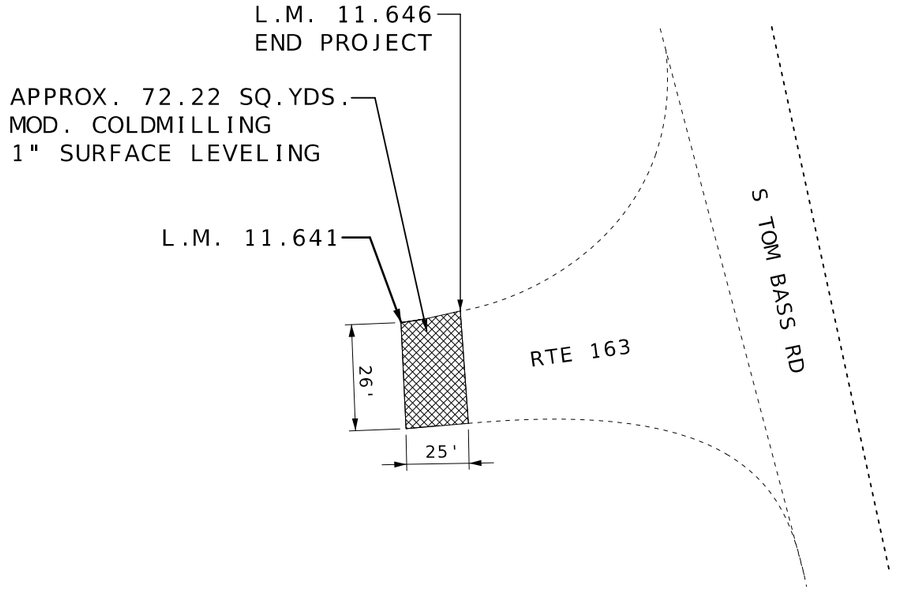
DESCRIPTION

DATE

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

SPECIAL SHEET
SHEET 1 OF 12





MOD. COLDMILLING

1" SURFACE LEVELING

BEGIN OF PROJECT
AT INTERSECTION RTE K AND RTE 163

NOT TO SCALE

END OF PROJECT
AT RTE 163/TOM BASS RD

SPECIAL SHEET
2 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
07/28/2026 1:25:37 PM
PATRICK.J.HAKE-CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	5

COUNTY
BOONE

JOB NO.
JCD0190

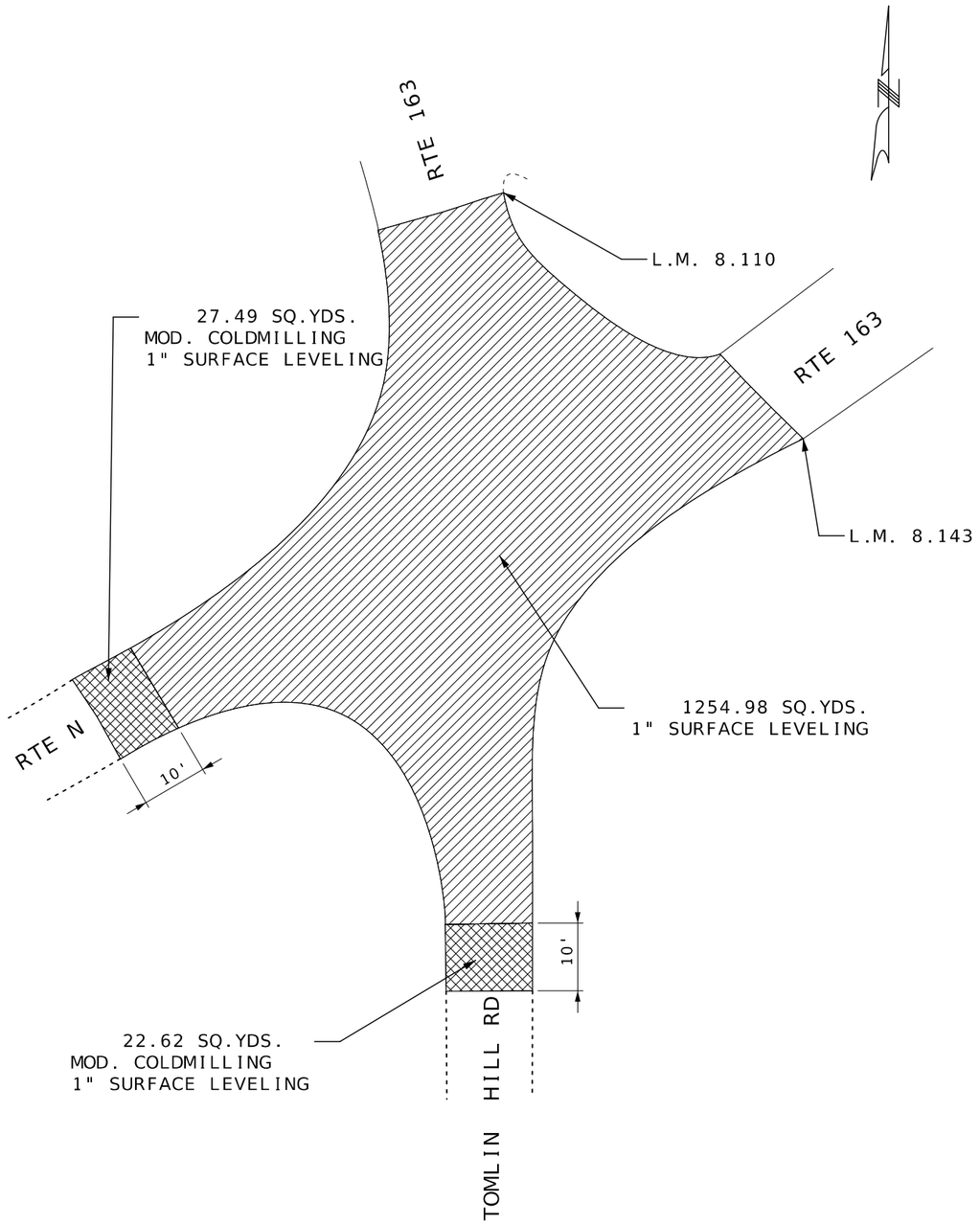
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

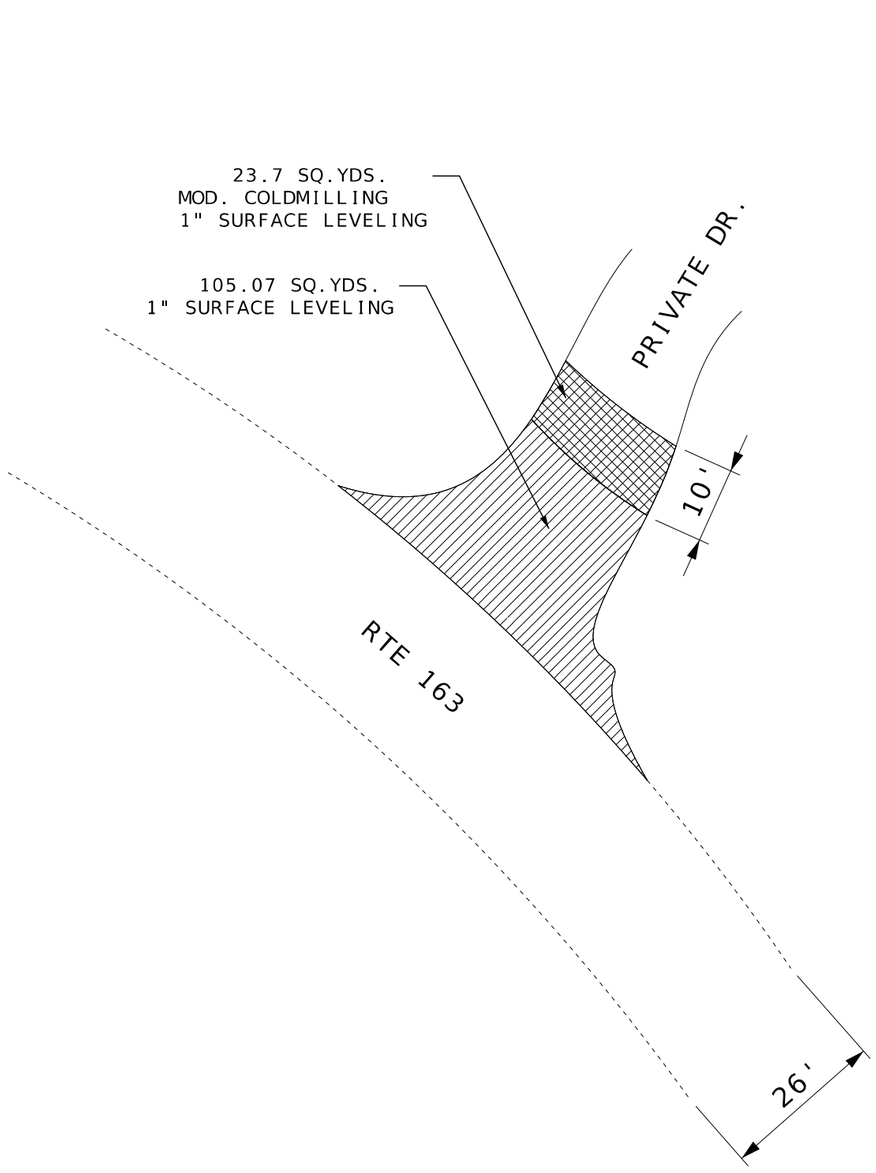
DESCRIPTION	DATE

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



INTERSECTION AT
RTE 163, TOMLIN HILL RD
AND RTE N

L.M. 8.134



RTE 163 AND PRIVATE DR.
INTERSECTION

L.M. 5.786

MOD. COLDMILLING

1" SURFACE LEVELING

NOT TO SCALE

SPECIAL SHEET
3 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:18:37 AM
PATRICK.J.HAKE-CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	6

COUNTY
BOONE

JOB NO.
JCD0190

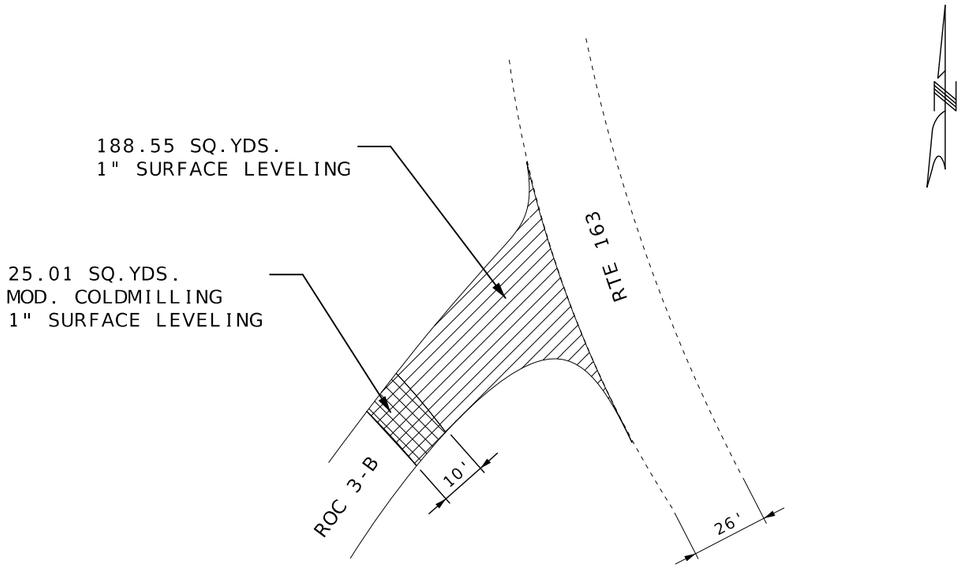
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

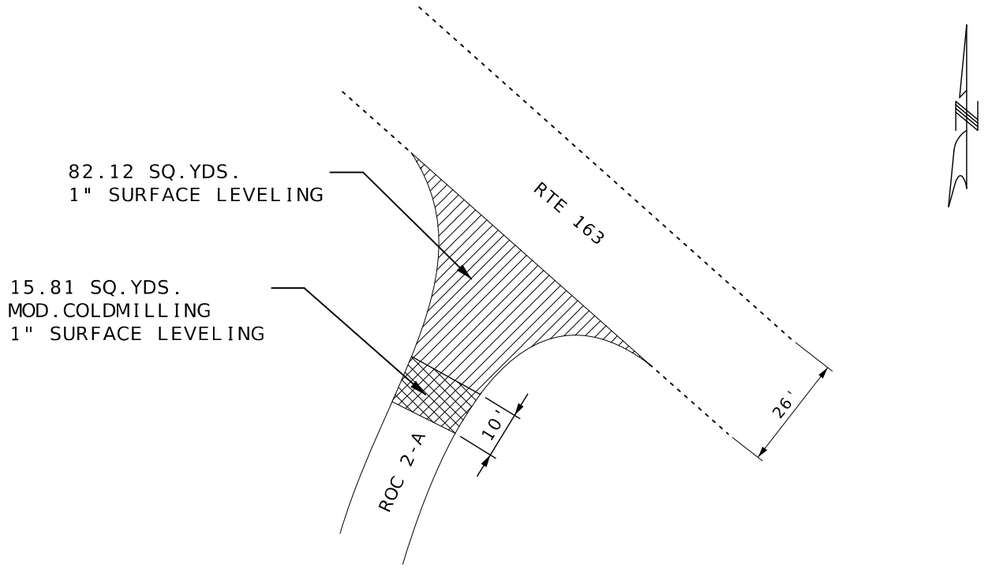
DESCRIPTION	DATE

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



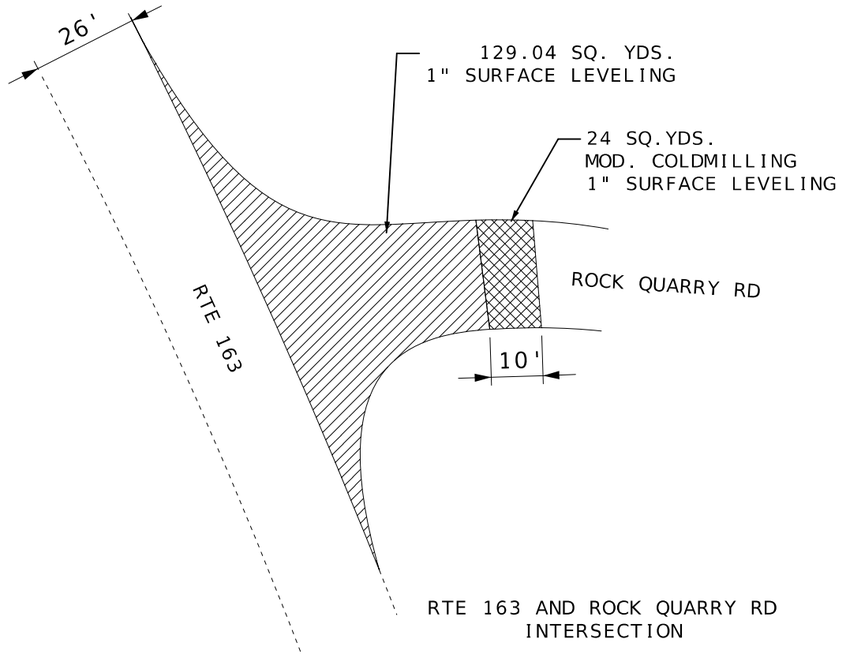
RTE 163 AND ROC 3-B
INTERSECTION
(STATE PARK ENTRANCE)

L.M. 6.305



RTE 163 AND ROC 2-A
INTERSECTION
(STATE PARK ENTRANCE)

L.M. 6.395



RTE 163 AND ROCK QUARRY RD
INTERSECTION

L.M. 6.946

NOT TO SCALE

MOD. COLDMILLING

1" SURFACE LEVELING

SPECIAL SHEET
4 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:18:28 AM
PATRICK.J.HAKE - CD - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	7

COUNTY
BOONE

JOB NO.
JCD0190

CONTRACT ID.

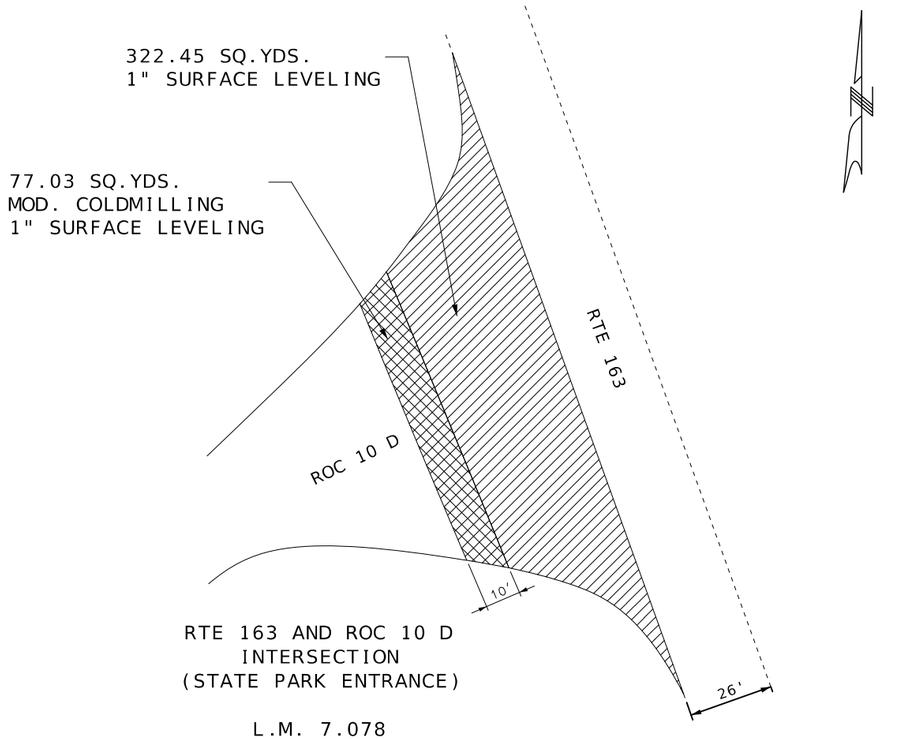
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

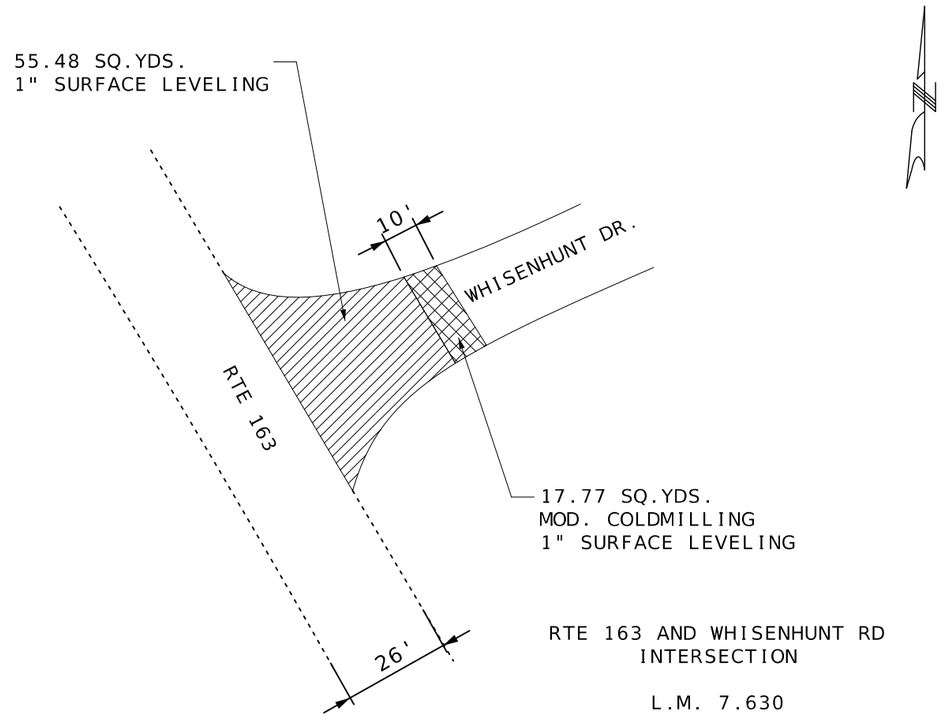
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



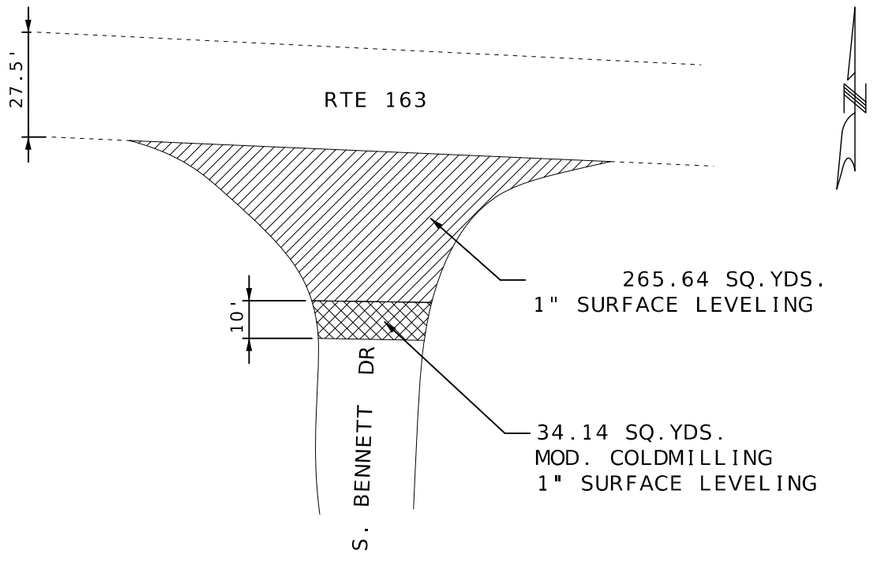
RTE 163 AND ROC 10 D
INTERSECTION
(STATE PARK ENTRANCE)

L.M. 7.078



RTE 163 AND WHISENHUNT RD
INTERSECTION

L.M. 7.630

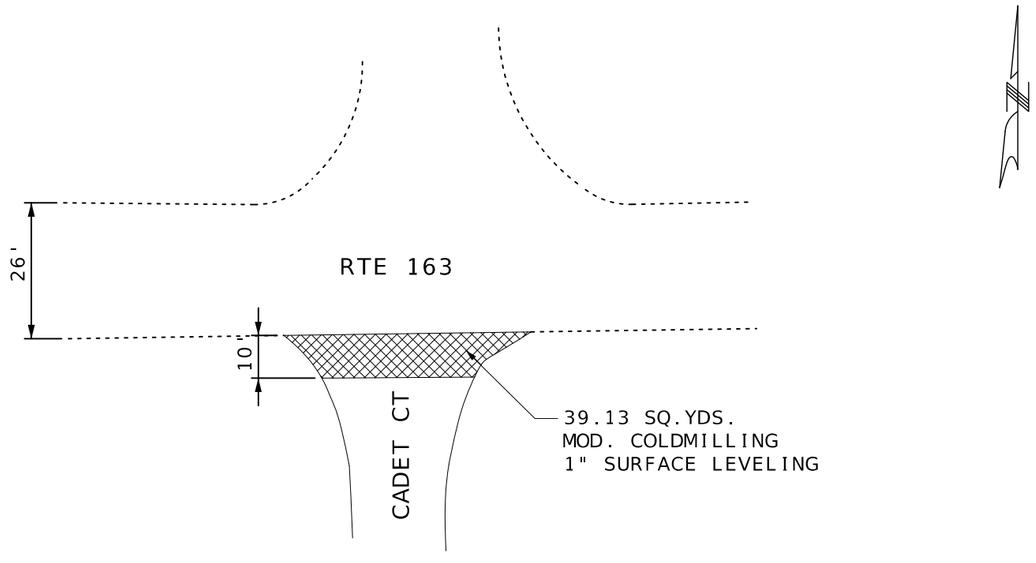


MOD. COLDMILLING

1" SURFACE LEVELING

RTE 163 AND S. BENNETT DR
INTERSECTION

L.M. 9.796



RTE 163 AND CADET CT
INTERSECTION

L.M. 11.348

NOT TO SCALE

SPECIAL SHEET
5 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:17:49 AM
PATRICK.J.HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	8

COUNTY
BOONE

JOB NO.
JCD0190

CONTRACT ID.

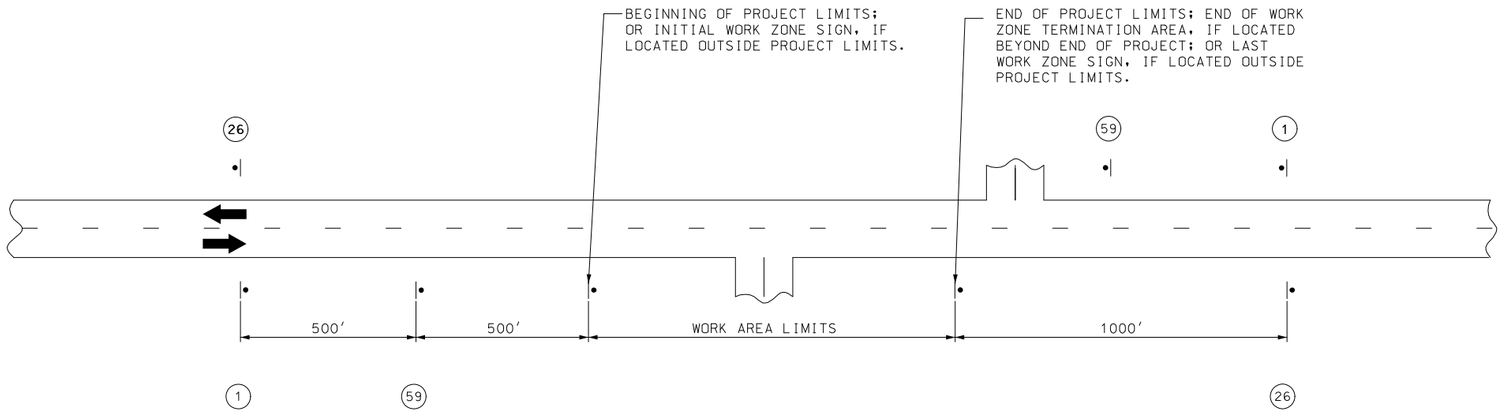
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

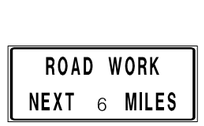


NOTES:

SIGN (1) AND (26) ARE ONLY USED ON PROJECT LENGTHS 2 MILES OR GREATER.

PROVIDE SIGNS IN EACH DIRECTION ON TWO-WAY HIGHWAY.

DISTANCE MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS.

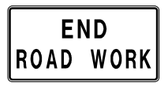


G020-1

(1)

CONST-8

(59)



G020-2

(26)

TRAFFIC CONTROL
SHEET 1 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
05/29/2026 10:17:12 AM
PATRICK.J.HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	9

COUNTY
BOONE

JOB NO.
JCD0190

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)

W020-1

(2)

W020-4

(7)

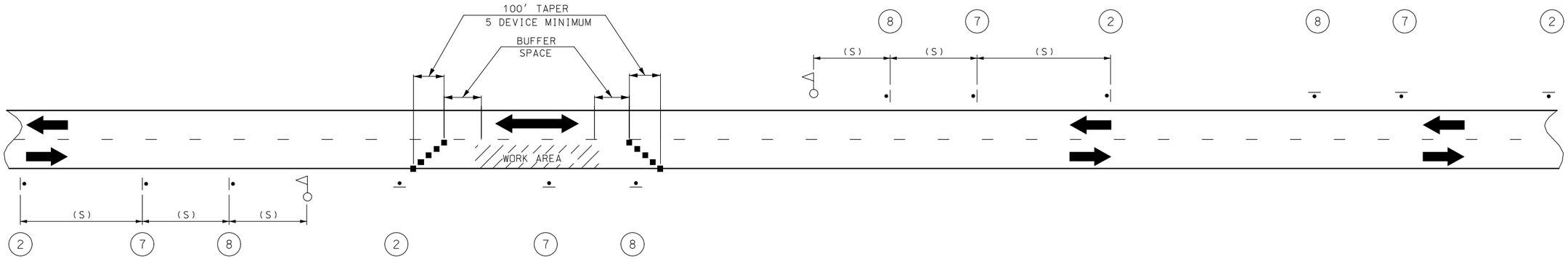
W020-7a

(8)

G020-4

(53)

SIGN 53, "PILOT CAR FOLLOW ME" SHALL BE THE CONTRACTOR'S RESPONSIBILITY WHEN IN USE DURING OPERATION.



SET 1	SET 2	SET 3	SET 4
ACTIVE	INACTIVE	ACTIVE	INACTIVE

NOTES:

THIS PLAN IS FOR DAYLIGHT FLAGGING OPERATIONS ONLY. WHEN NIGHT WORK IS REQUIRED, OR OTHERWISE ALLOWED BY THE ENGINEER, WORK ZONE LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH SEC 616.5.2.

CHANNELIZING DEVICES LOCATED DOWNSTREAM OF THE ONE-LANE, TWO-WAY TAPER ARE OPTIONAL. THESE DEVICES SHOULD BE ELIMINATED WHEN THEIR USE WILL REDUCE THE USABLE LANE WIDTH, INCLUDING ANY ACCEPTABLE SHOULDERS, TO LESS THAN 10' OR WILL SIGNIFICANTLY AFFECT THE RESURFACING OPERATION.

SIGN SETS 1 AND 3 ARE ACTIVE AND (I.E., SIGNS FACE ONCOMING TRAFFIC) SIGN SETS 2 AND 4 ARE INACTIVE (I.E., SIGNS DO NOT FACE EITHER DIRECTION OF TRAFFIC) WHEN THE RESURFACING OPERATION IS LOCATED BETWEEN SIGN SETS 1 AND 3.

WHEN SIGN SETS 2 AND 4 ARE ACTIVE, SIGN SETS 1 AND 3 BECOME INACTIVE AND ARE ADVANCED TO BECOME SETS 2 AND 4 WITH SIGN LEGENDS TURNED AWAY FROM BOTH DIRECTIONS OF TRAFFIC. WHEN THE RESURFACING OPERATION ADVANCES TO BETWEEN SIGN SETS 2 AND 4, SIGN SETS 2 AND 4 BECOME ACTIVE (I.E., NEW SIGN SETS 1 AND 3) AND SIGN SETS 1 AND 3 ADVANCED IN THE DIRECTION OF THE OPERATION (I.E., NEW SIGN SETS 2 AND 4).

■ – CHANNELIZERS

– FLAGGER

SPEED	SIGN SPACING (FT) (1)	BUFFER SPACE
PERMANENT POSTED (MPH)	NON-DIVIDED HIGHWAYS (S)	LENGTH (FT)
0-35	200	250
40-45	350	360
50-55	500	495
60-70	1000	730

(1) SPACING BETWEEN SIGNS, BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER OR SIGNED CONDITION.

SPACING MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER

06/29/2026 10:18:19 AM
PATRICK J HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	10

COUNTY
BOONE

JOB NO.
JCD0190

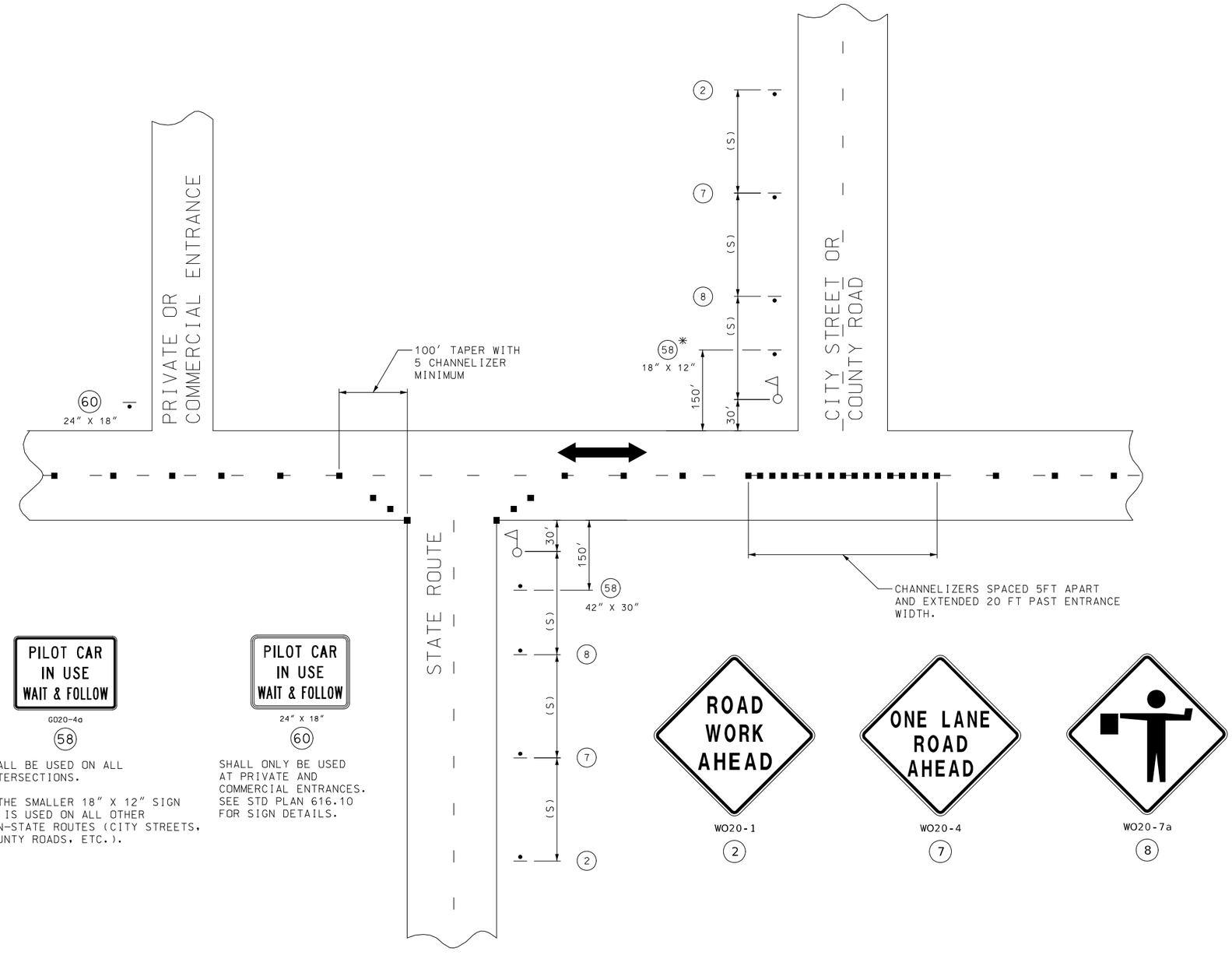
CONTRACT ID.

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)



SPEED	SIGN SPACING (FT) (1)	CHANNELIZER SPACING (FT)
PERMANENT POSTED (MPH)	NON-DIVIDED HIGHWAYS (S)	BUFFER/ WORK AREA (TYP.)
0-35	200	40
40-45	350	80
50-55	500	80
60-70	1000	120

(1) SPACING BETWEEN SIGNS, BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER OR SIGNED CONDITION.

SPACING MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

NOTES:
WARNING SIGNS SHALL BE ERECTED AT EACH INTERSECTION WITH ANOTHER STATE HIGHWAY WITHIN THE WORK ZONE.

ADDITIONAL WARNING SIGNS SHALL BE ERECTED AT OTHER INTERSECTIONS WITHIN THE WORK ZONE, AS DIRECTED BY THE ENGINEER.

■ - CHANNELIZERS (AS SPECIFIED)

- FLAGGER

NOT TO SCALE

PILOT CAR IN USE WAIT & FOLLOW

G020-4a

58

SHALL BE USED ON ALL INTERSECTIONS.

* THE SMALLER 18" X 12" SIGN 58 IS USED ON ALL OTHER NON-STATE ROUTES (CITY STREETS, COUNTY ROADS, ETC.).

PILOT CAR IN USE WAIT & FOLLOW

24" X 18"

60

SHALL ONLY BE USED AT PRIVATE AND COMMERCIAL ENTRANCES. SEE STD PLAN 616.10 FOR SIGN DETAILS.

WO20-1

2

WO20-4

7

WO20-7a

8

SIDE ROADS ENTERING WORK ZONES

TRAFFIC CONTROL
SHEET 3 OF 5

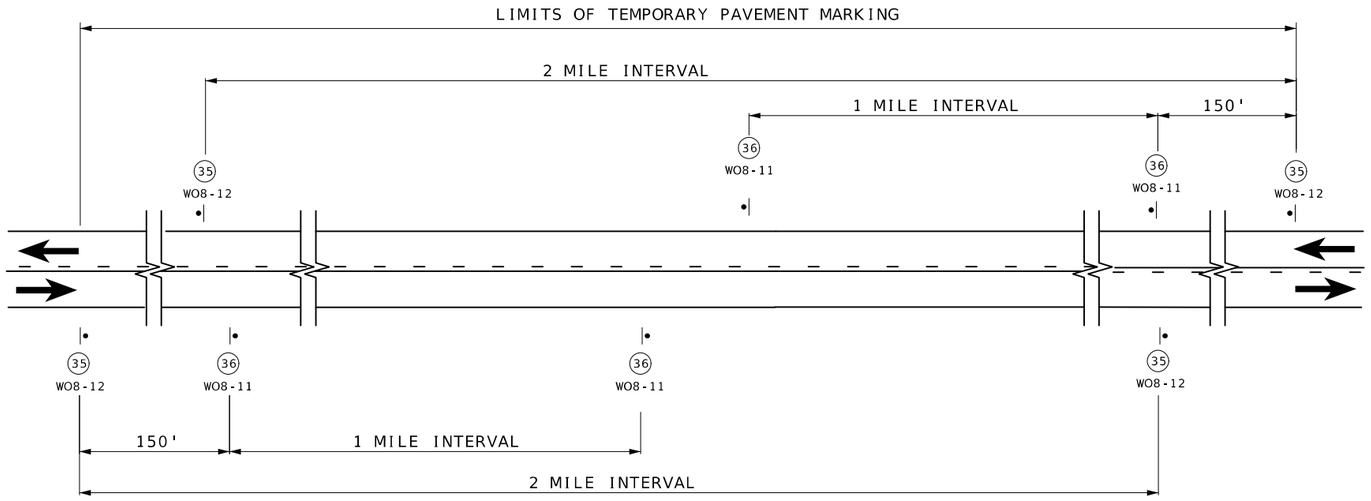
STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:18:08 AM
PATRICK J. HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

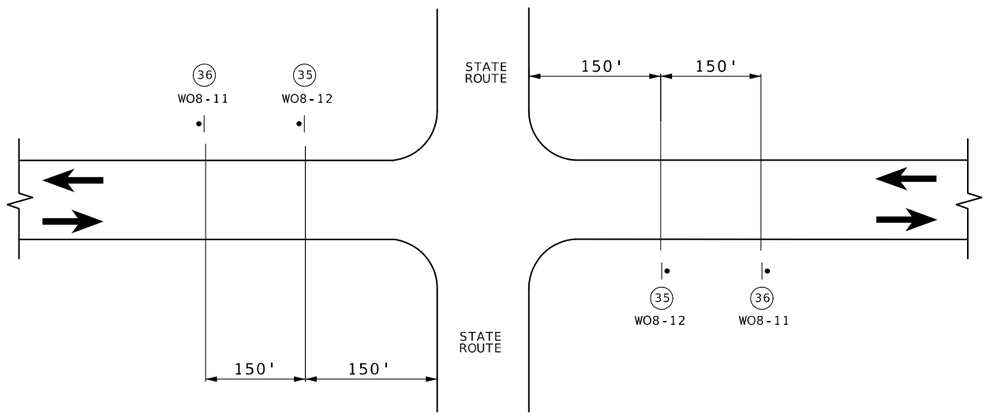
ROUTE 163 | STATE MO
DISTRICT CD | SHEET NO. 11
COUNTY BOONE
JOB NO. JCD0190
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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



SIGN SPACING AND TEMPORARY STRIPING FOR MAINLINE



SIGN SPACING AT STATE ROUTE INTERSECTIONS
SHOWING TEMPORARY STRIPING FOR MAINLINE

NOTES:

SIGN (35) AND TEMPORARY RAISED PAVEMENT MARKING (SEE STANDARD PLAN 620.10) INSTALLED WHERE CENTERLINE STRIPING HAS BEEN COVERED OR REMOVED. SIGNS ARE TO REMAIN IN PLACE UNTIL THE PERMANENT CENTERLINE PAVEMENT MARKINGS ARE IN PLACE. SIGNS SHALL BE COVERED OR REMOVED WHEN PAVEMENT CENTERLINE MARKING HAS BEEN INSTALLED.

SIGN (35) IS PLACED AT APPROXIMATELY TWO-MILE INTERVALS AND AT STATE ROUTE JUNCTIONS. WHEN THE INSTALLATION AT A JUNCTION IS WITHIN ONE-EIGHTH MILE OF THE NORMAL MAINLINE SIGN (35), THE LATTER MAY BE ELIMINATED.

ALL SIGNS SHALL BE POST MOUNTED AND IN ACCORDANCE WITH STANDARD PLAN 616.10 AND 903.03.

NOT TO SCALE

TRAFFIC CONTROL
SHEET 4 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:17:22 AM
PATRICK.J.HAKE-C/VIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	12

COUNTY
BOONE

JOB NO.
JCD0190

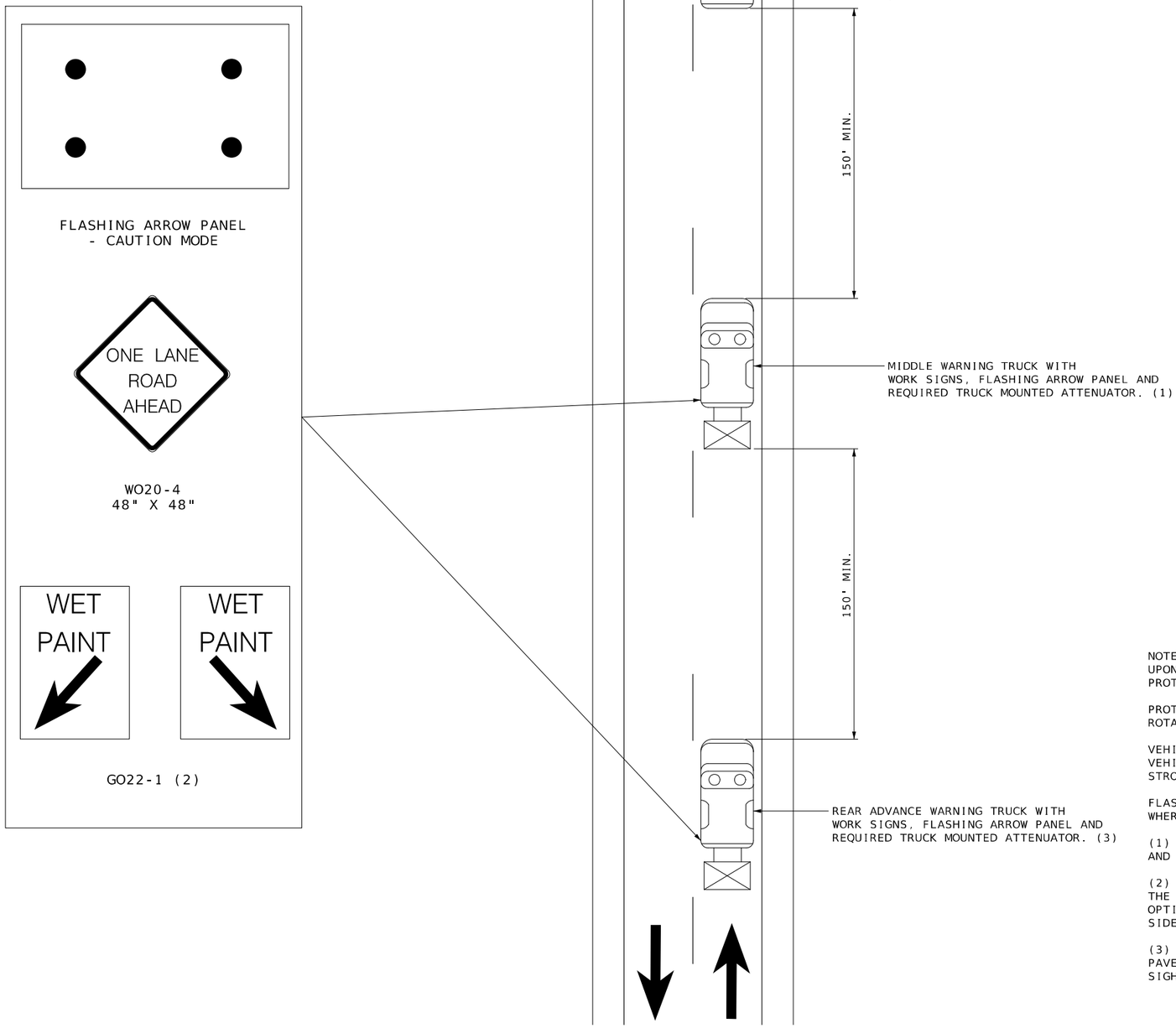
CONTRACT ID.

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

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

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

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

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

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

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

CENTERLINE/EDGELINE STRIPING ON TWO-LANE HIGHWAYS

TRAFFIC CONTROL
SHEET 5 OF 5

STATE OF MISSOURI
PATRICK J. HAKE
NUMBER PE-2010000826
PROFESSIONAL ENGINEER
06/29/2026 10:17:57 AM
PATRICK J HAKE - CIVIL
MO-PE-2010000826

DATE PREPARED
6/29/2026

ROUTE	STATE
163	MO
DISTRICT	SHEET NO.
CD	13

COUNTY
BOONE

JOB NO.
JCD0190

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)