DESIGN DESIGNATION

AADT - 2025 = 2280
AADT - 2045 = 3014
T = 14%
V = 55 MPH

FUNCTIONAL CLASSIFICATION- MINOR ARTERIAL

NO NEW R/W REQUIRED

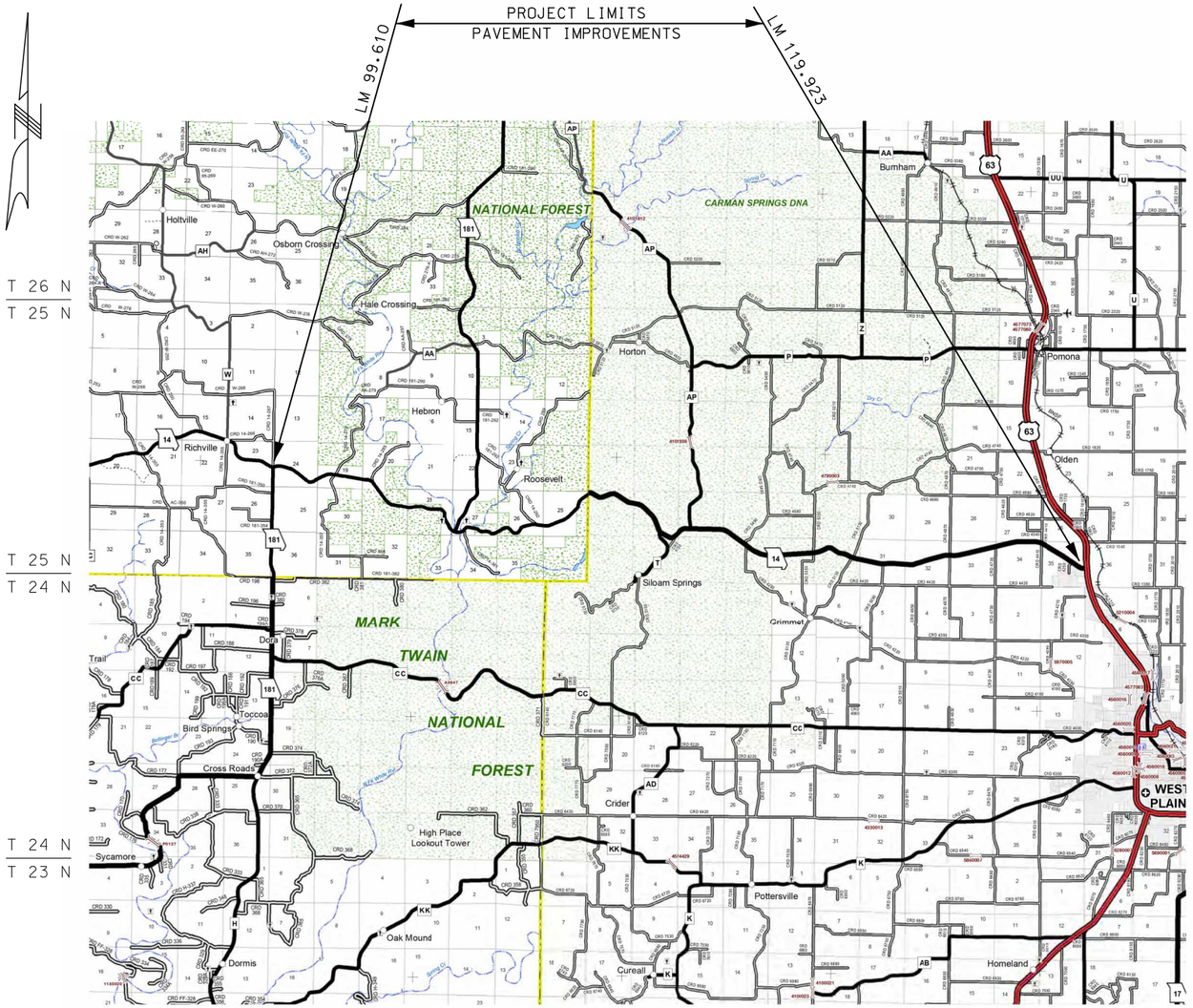
CONVENTIONAL SYMBOLS
(USED IN PLANS)

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

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY

DOUGLAS/HOWELL 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.

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
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SIGNING (SN)	12-13

LENGTH OF PROJECT

BEGINNING OF PROJECT	LM 99.610	
END OF PROJECT	LM 119.923	
APPARENT LENGTH	20.313	MILES
EXCEPTIONS:		
BRIDGE J0748 LOG MILE 104.310 TO LOG MILE 104.407	0.097	MILES
BRIDGE J0749 LOG MILE 104.510 TO LOG MILE 104.570	0.060	MILES
TOTAL CORRECTIONS	0.157	MILES
NET LENGTH OF PROJECT	20.156	MILES
STATE LENGTH	20.156	MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	0	ACRES

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:36:57 AM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED: 8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	1

COUNTY: DOUGLAS/HOWELL
JOB NO.: J9P3701
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)

SURFACE LEVELING OVERLAY AND TACK

LOCATION	LOG MILE	LOG MILE	TRAVELWAY WIDTH (FT)	OVERLAY DEPTH (IN)	OVERLAY AREA (SY)	BITUMINOUS PAVEMENT 1" SURFACE LEVELING PG 64-22 2.034 TONS/CY (TONS)	TACK COAT 0.08 GAL/SY (GAL)
ROUTE 14	99.610	104.310	20	1.0	55146.67	3115.8	4412
BRIDGE J0748 - UIP	104.310	104.407	20				
ROUTE 14	104.407	104.510	20	1.0	1208.53	68.3	97
BRIDGE J0749 - UIP	104.510	104.570	20				
ROUTE 14	104.570	119.893	20	1.0	179789.87	10158.1	14383
ROUTE 14	119.893	119.923	40	1.0	704.00	39.8	56
ROUTE 181 SOUTH	99.647			1.0	1190.60	67.3	95
ROUTE 181 NORTH	104.412			1.0	1710.98	96.7	137
ROUTE T	109.880			1.0	1323.08	74.8	106
ROUTE AP	110.702			1.0	332.19	18.8	27
1 PAVED COUNTY ROAD 45' X 10 EACH	VARIOUS			1.0	50	2.8	4
7 NON-PAVED COUNTY ROADS/CITY STREETS 45' X 10' EACH	VARIOUS			3.0	350	59.3	28
16 NON-PAVED COUNTY ROADS/CITY STREETS 45' X 25' EACH	VARIOUS			3.0	2000.0	339.0	160
5 PAVED PRIVATE ENTRANCES 40' X 2' EACH	VARIOUS			1.0	44.44	2.5	4
182 NON-PAVED PRIVATE ENTRANCES 40' X 2' EACH	VARIOUS			3.0	1617.78	274.2	129
100 TONS PER MILE FOR IRREGULARTIES						2031.3	
2% SAFETY EDGE						327.0	393
					TOTAL:	16675.7	20031

MOBILIZATION
1 LUMP SUM

MODIFIED COLD MILLING (DEPTH TRANSITIONS)

LOCATION	LOG MILE	LOG MILE	AREA (SY)
ROUTE 14 - BEGIN PROJECT	99.610	99.619	111
ROUTE 181 SOUTH	99.647		56
BRIDGE J0748 - WEST END	104.310		111
BRIDGE J0748 - EAST END	104.407		111
ROUTE 181 NORTH	104.412		56
BRIDGE J0749 - WEST END	104.510		111
BRIDGE J0749 - EAST END	104.570		111
ROUTE T	109.880		56
ROUTE AP	110.702		56
ROUTE 14 - END PROJECT	119.923		222
1 PAVED COUNTY ROADS/CITY STREETS	VARIOUS		50
5 PAVED PRIVATE AND COMMERCIAL ENTRANCES	VARIOUS		45
		TOTAL:	1096

GRAVEL A OR CRUSHED STONE B

LOG MILE	LOG MILE	GRAVEL A OR CRUSHED STONE B (TONS)	REMARKS
VARIOUS	VARIOUS	155	AT 206 AGGREGATE ENTRANCES
	TOTAL	155	

SUMMARY OF QUANTITIES

SHEET 1 OF 3

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
10/08/2024 3:34:12 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
9/27/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	3

COUNTY
DOUGLAS/HOWELL

JOB NO.
J9P3701

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 MILE	LOG MILE	LOCATION	REMARKS
			REMOVE EXISTING GUARDRAIL/OBJECT MARKERS
104.244	104.310	RT	BRIDGE J0748 - WEST END
104.407		LT	BRIDGE J0748 - EAST END EXTENDING UP RT. 181 N
104.473	104.510	RT	BRIDGE J0749 - WEST END
104.570	104.623	LT	BRIDGE J0749 - EAST END

1 LUMP SUM

AGGREGATE EDGE TREATMENT

LOG MILE	LOG MILE	AGG. EDGE TREATMENT 180 TONS / MILE (TONS)
99.610	119.923	3628.1
	TOTAL:	3628.1

GUARDRAIL

LOG MILE	LOG MILE	LOCATION	MGS GUARDRAIL 8 FT POSTS 6 FT 3 IN SPACING (FT)	MGS TRANSITION SECTION (EA)	END ANCHOR MASH (EA)	TYPE A CRASHWIRTHY END TERMINAL (MASH) (EA)	MODIFIED SHAPING SLOPES CLASS III (LF)	REMARKS
104.260	104.310	RT	175	1	1			BRIDGE J0748 - WEST END
104.407	-	LT	150	1	1			BRIDGE J0748 - EAST END EXTENDING UP RT. 181 N
104.490	104.510	RT	12.5	1	1			BRIDGE J0749 - WEST END
104.570	104.615	LT	175	1		1	80	BRIDGE J0749 - EAST END
		TOTAL	512.5	4	3	1	80	
		USE	513	4	3	1	80	

SEE STANDARD PLANS 606.50 AND 606.81 FOR DETAILS

PAVEMENT MARKING

LOG MILE	LOG MILE	WATERBORNE PAVEMENT MARKING PAINT 4" WHITE TYPE P BEADS (L.F.)	WATERBORNE PAVEMENT MARKING PAINT 4" SOLID YELLOW TYPE P BEADS (L.F.)	WATERBORNE PAVEMENT MARKING PAINT 4" INT. YELLOW TYPE P BEADS (L.F.)
99.610	119.923	214508	197362	3840
USE		214508	201202	

PAVEMENT MARKING TO BE LOCATED IN ACCORDANCE WITH PAVEMENT MARKING LOG JSP

SUMMARY OF QUANTITIES
SHEET 2 OF 3

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E Berry
08/08/2024 10:38:43 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	3

COUNTY
DOUGLAS/HOWELL

JOB NO.
J9P3701

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)

EFFECTIVE: 04-01-2024

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	DESCRIPTION
WARNING SIGNS								
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)
WO1-2L	48X48	16.00						CURVE (SYMBOL LEFT)
WO1-2R	48X48	16.00						CURVE (SYMBOL RIGHT)
WO1-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)
WO1-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)
WO1-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT)
WO1-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT)
WO1-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)
WO1-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)
WO1-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
WO1-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)
WO1-8	18X24	3.00						CHEVRON (SYMBOL)
WO1-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
WO3-1	48X48	16.00						STOP AHEAD (SYMBOL)
WO3-2	48X48	16.00						YIELD AHEAD (SYMBOL)
WO3-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)
WO3-4	48X48	16.00	10	160				BE PREPARED TO STOP
WO3-5	48X48	16.00	3	48				SPEED LIMIT AHEAD
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)
WO4-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)
WO4-1aL	48X48	16.00						MERGE (LEFT)
WO4-1aR	48X48	16.00						MERGE (RIGHT)
WO5-1	48X48	16.00	1	16				ROAD/BRIDGE/RAMP NARROWS
WO5-3	48X48	16.00						ONE LANE BRIDGE
WO5-5	48X48	16.00						NARROW LANES
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)
WO7-3a	30X24	5.00						NEXT XX MILES (PLAQUE)
WO8-1	48X48	16.00						BUMP
WO8-2	48X48	16.00						DIP
WO8-3	48X48	16.00						PAVEMENT ENDS
WO8-4	48X48	16.00						SOFT SHOULDER
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)
WO8-6	48X48	16.00						TRUCK CROSSING
WO8-6c	48X48	16.00						TRUCK ENTRANCE
WO8-7	36X36	9.00						LOOSE GRAVEL
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL *
WO8-9	48X48	16.00						LOW SHOULDER
WO8-11	48X48	16.00	40	640				UNEVEN LANES
WO8-12	48X48	16.00	20	320				NO CENTER LINE
WO8-15	48X48	16.00						GROOVED PAVEMENT
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)
WO8-17L	48X48	16.00						SHOULDER DROP-OFF (SYMBOL LEFT)
WO8-17R	48X48	16.00						SHOULDER DROP-OFF (SYMBOL RIGHT)
WO8-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)
W10-1	42RND.	9.62						RAILROAD CROSSING
WO12-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)
WO12-2	48X48	16.00						LOW CLEARANCE (SYMBOL)
WO12-2x	24X18	3.00						LOW CLEARANCE (PLAQUE)
WO12-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)
WO12-4	120X60	50.00						LOW CLEARANCE XX FT XX IN XX MILES AHEAD
WO12-5	120X60	50.00						WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD
WO13-1	30X30	6.25						ADVISORY SPEED (PLAQUE)
WO16-2	30X24	5.00						XXX FEET (PLAQUE)
WO16-3	30X24	5.00						X MILE (PLAQUE)
WO20-1	48X48	16.00	16	256				ROAD/BRIDGE/RAMP WORK AHEAD
WO20-2	48X48	16.00						DETOUR AHEAD
WO20-3	48X48	16.00						ROAD CLOSED AHEAD
WO20-4	48X48	16.00	9	144				ONE LANE ROAD AHEAD
WO20-5	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00	14	224				FLAGGER (SYMBOL)
WO21-2	36X36	9.00						FRESH OIL
WO21-5	48X48	16.00	2	32				SHOULDER WORK / SHOULDER WORK AHEAD
WO22-1	48X48	16.00						BLASTING ZONE AHEAD
WO22-2	42X36	10.50						TURN OFF 2-WAY RADIO AND PHONE
WO22-3	42X36	10.50						END BLASTING ZONE
GO22-1	21X15	2.19	2	4.38				WET PAINT (ARROW PIVOTS)

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	DESCRIPTION
GUIDE SIGNS								
E05-1	36X48	12.00						GORE EXIT
E05-2	48X36	12.00						EXIT OPEN
E05-2a	48X36	12.00						EXIT CLOSED
GO20-1	60X24	10.00	2	20				ROAD WORK NEXT 20 MILES
GO20-2	48X24	8.00	2	16				END ROAD WORK
GO20-4	36X18	4.50	1	4.5				PILOT CAR FOLLOW ME
GO20-4a	42X30	8.75	2	17.5				PILOT CAR IN USE WAIT & FOLLOW
GO20-4a	18X12	1.50	7	10.5				PILOT CAR IN USE WAIT & FOLLOW
GO20-5aP	36X24	6.00						WORK ZONE (PLAQUE)
MO4-8a	24X18	3.00						END DETOUR
MO4-9L	48X36	12.00						DETOUR (LEFT)
MO4-9R	48X36	12.00						DETOUR (RIGHT)
MO4-9P	48X12	4.00						STREET NAME (PLAQUE)
MO4-10L	48X18	6.00						DETOUR ARROW (LEFT)
MO4-10R	48X18	6.00						DETOUR ARROW (RIGHT)
REGULATORY SIGNS								
R1-1	48X48	13.25						STOP
R1-2	48TRI.	6.93						YIELD
R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)
R1-3P	30X12	2.50						ALL WAY (PLAQUE)
R2-1	36X48	12.00	6	72				SPEED LIMIT XX
R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00						NO TURNS
R3-4	48X48	16.00						NO U-TURN (SYMBOL)
R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00						DO NOT PASS
R4-2	36X48	12.00						PASS WITH CARE
R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)
R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)
R5-1	30X30	6.25						DO NOT ENTER
R5-1a	36X24	6.00						WRONG WAY
R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)
R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)
R6-2L	24X30	5.00						ONE WAY (LEFT)
R6-2R	24X30	5.00						ONE WAY (RIGHT)
R9-9	24X12	2.00						SIDEWALK CLOSED
R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE
R9-11R	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE
R10-6	24X36	6.00						STOP HERE ON RED (45^ ARROW)
R11-2	48X30	10.00						ROAD CLOSED
R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50						ROAD CLOSED TO THRU TRAFFIC
CONST-3A	60X48	20.00						FINE SIGN
CONST-3X	56X12	4.67						SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS								
CONST-5	48X36	12.00						POINT OF PRESENCE
CONST-5	96X48	32.00						POINT OF PRESENCE
CONST-7	48X24	8.00						RATE OUR WORK ZONE
CONST-7	72X36	18.00						RATE OUR WORK ZONE
CONST-8	48X36	12.00	2	24				WORK ZONE NO PHONE ZONE

616-10.05 CONSTRUCTION SIGNS	TOTAL
	2009

616-10.10 RELOCATED SIGNS	TOTAL
	0

ITEM NUMBER	TOTAL QTY	DESCRIPTION
6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)
6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)
6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)
6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)
6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6123001	1	TRUCK MOUNTED ATTENUATOR (TMA)
6161008		ADVANCED WARNING RAIL SYSTEM
6161012		BUOYS (BOATS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161025	200	CHANNELIZER (TRIM LINE)
6161030		TYPE III MOVEABLE BARRICADE
6161033		DIRECTION INDICATOR BARRICADE
6161040		FLASHING ARROW PANEL
6161047		TYPE III OBJECT MARKER
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A	2	CHANGEABLE MESSAGE SIGN W/O COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED
6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002		TEMPORARY LONG-TERM RUMBLE STRIPS
6173600D		TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/RETAINED
6173602B		TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/COMMISSION RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
6176000B		TEMPORARY TRAFFIC BARRIER COMMISSION FURNISHED/RETAINED
6177000B		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION COMMISSION FURNISHED/RETAINED
6208064A		TEMPORARY RAISED PAVEMENT MARKER
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING

SEE STANDARD 616.20
FOR TRAFFIC CONTROL PLAN
IN ADDITION TO
TRAFFIC CONTROL SHEETS 1-3

SUMMARY OF QUANTITIES
SHEET 3 OF 3

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:39:22 AM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

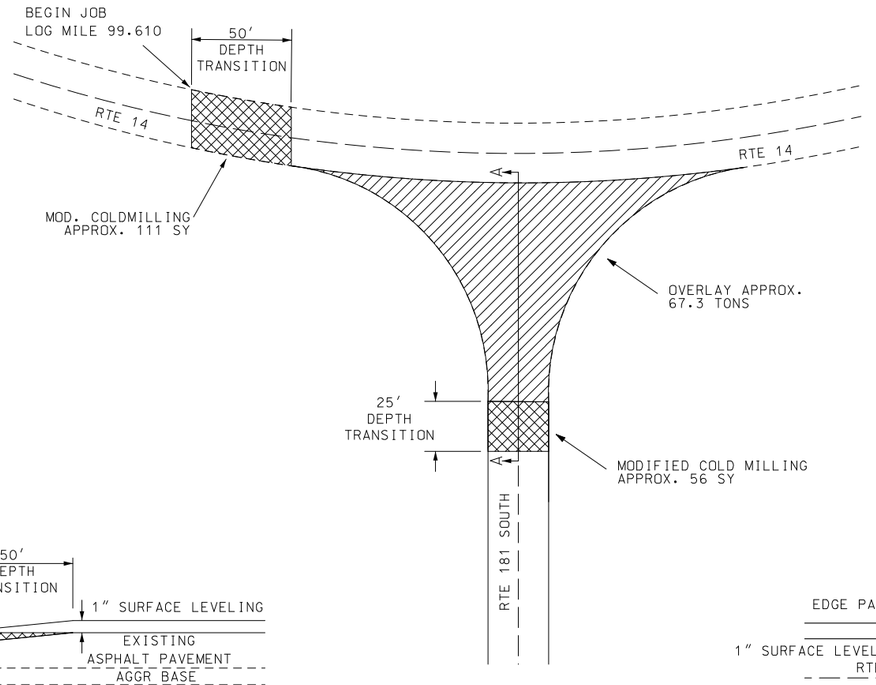
DATE PREPARED
8/8/2024

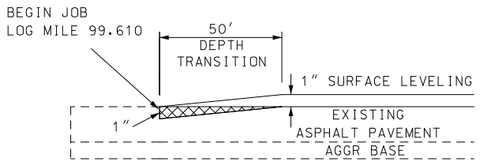
ROUTE 14 | STATE MO
DISTRICT SE | SHEET NO. 3
COUNTY DOUGLAS/HOWELL
JOB NO. J9P3701
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

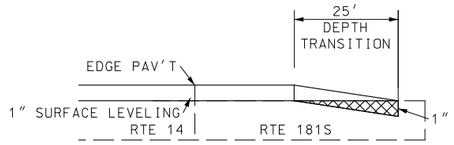
BEGIN PROJECT





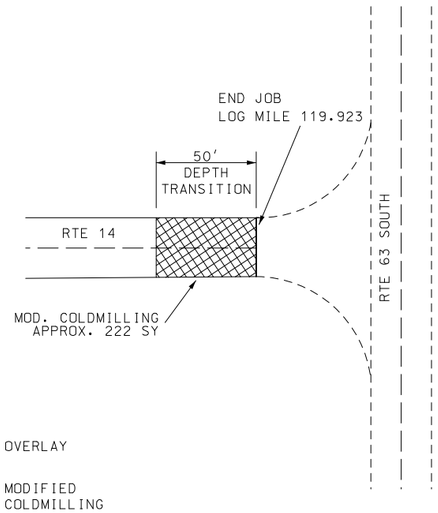
TYPICAL
RTE 14

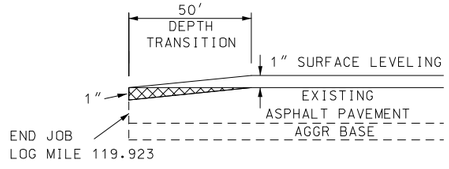
PLAN VIEW AT RTE 14 AND RTE 181S



TYPICAL
SECTION A-A

END PROJECT



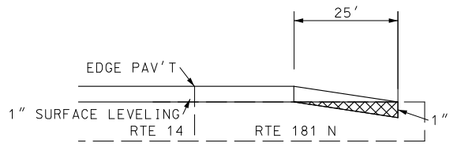


TYPICAL
RTE 14

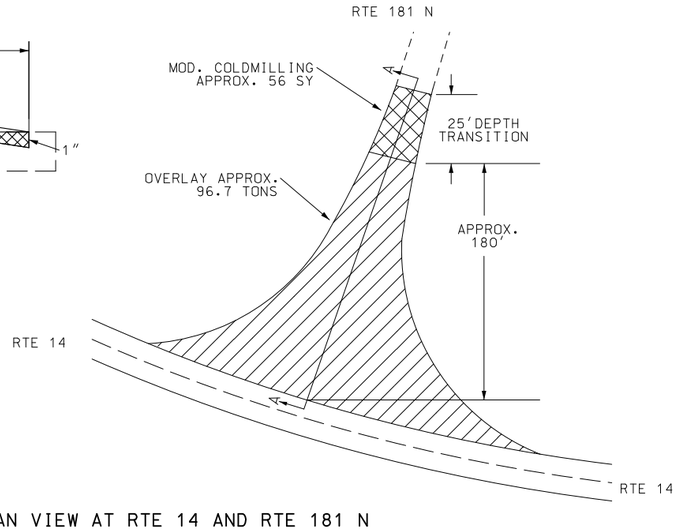
OVERLAY

MODIFIED
COLDMILLING

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



TYPICAL
SECTION A-A



PLAN VIEW AT RTE 14 AND RTE 181 N

SPECIAL SHEET
SHEET 1 OF 5
DRAWING NOT TO SCALE

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:39:54 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	4

COUNTY
DOUGLAS / HOWELL

JOB NO.
J9P3701

CONTRACT ID.

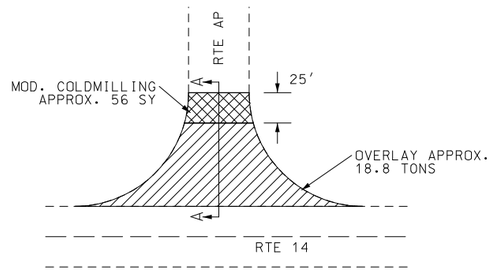
PROJECT NO.

BRIDGE NO.

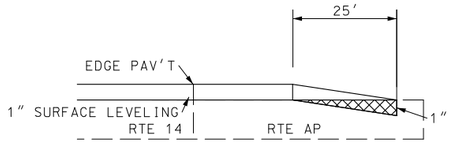
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

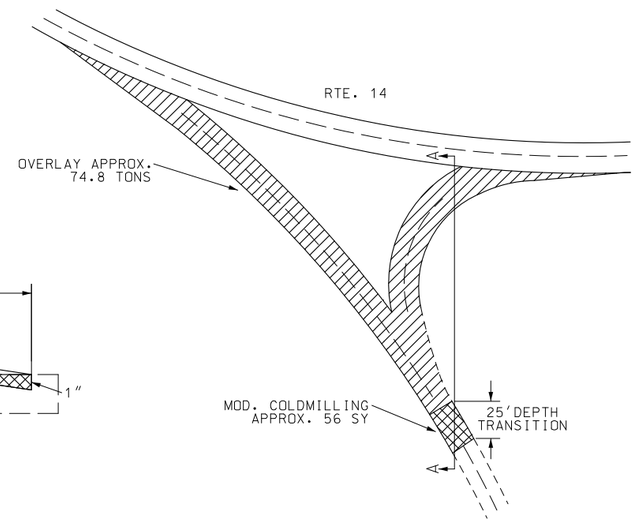


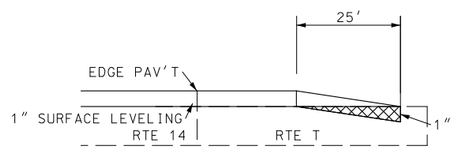
PLAN VIEW AT RTE 14 AND RTE AP



TYPICAL
SECTION A-A

PLAN VIEW AT RTE 14 AND RTE T



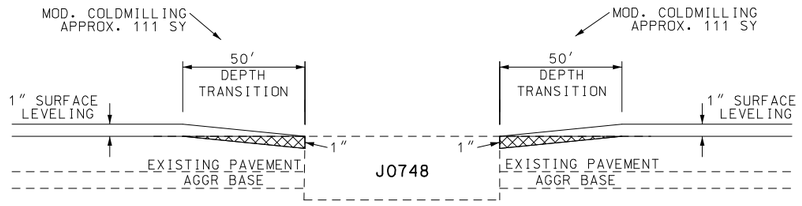


TYPICAL
SECTION A-A

OVERLAY

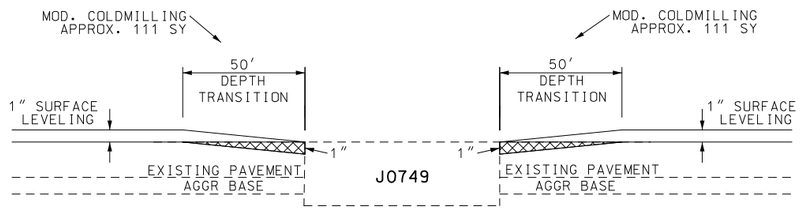
MODIFIED
COLDMILLING

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



TYPICAL AT BRIDGE J0748

LOG MILE 104.310 TO LOG MILE 104.407



TYPICAL AT BRIDGE J0749

LOG MILE 104.510 TO LOG MILE 104.570

SPECIAL SHEET
SHEET 2 OF 5
DRAWING NOT TO SCALE

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E Berry
08/08/2024 10:40:27 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	5

COUNTY
DOUGLAS / HOWELL

JOB NO.
J9P3701

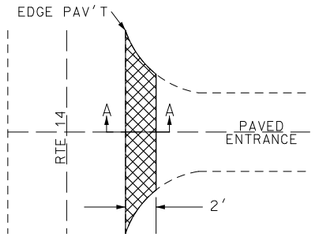
CONTRACT ID.

PROJECT NO.

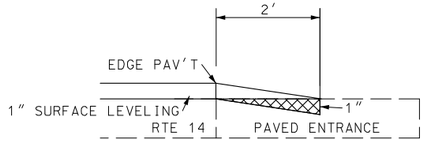
BRIDGE NO.

DESCRIPTION	DATE

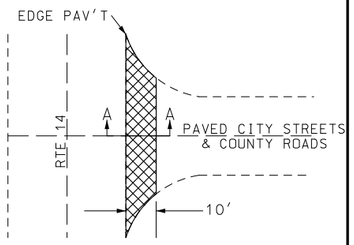
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



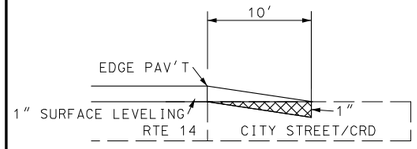
PLAN VIEW FOR PAVED
PRIVATE AND COMMERCIAL ENTRANCES



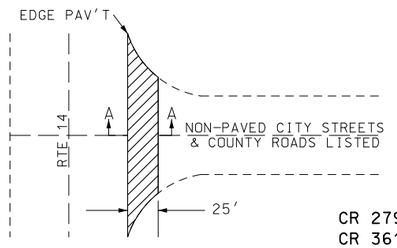
TYPICAL
SECTION A-A



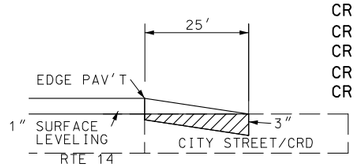
PLAN VIEW FOR PAVED
CITY STREETS AND COUNTY ROADS



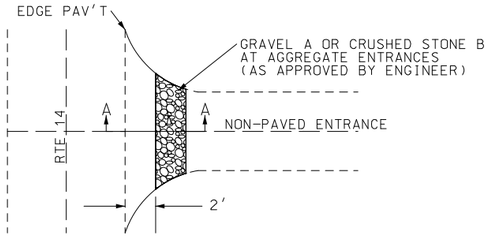
TYPICAL
SECTION A-A



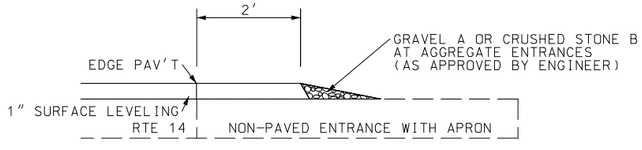
PLAN VIEW
CR 279 N. (DOUGLAS CO.)
CR 361 S. (DOUGLAS CO.)
CR 5490 N. (HOWELL CO.)
CR 4280 S. (HOWELL CO.)
CR 5350 N./S. (HOWELL CO.)
CR 5130 N./S. (HOWELL CO.)
CR 5090 S. (HOWELL CO.)
CR 4870 N./S. (HOWELL CO.)
CR 4730 S. (HOWELL CO.)
CR 4410 N./S. (HOWELL CO.)
CR 4361 N. (HOWELL CO.)
CR 4350 S. (HOWELL CO.)



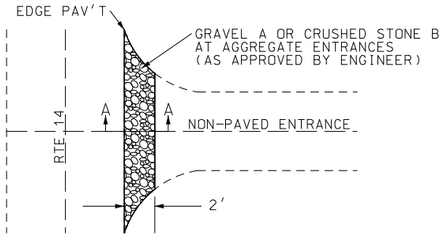
TYPICAL
SECTION A-A



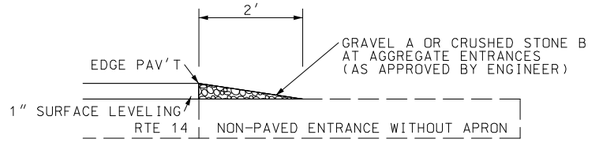
PLAN VIEW FOR NON-PAVED PRIVATE
AND COMMERCIAL ENTRANCES WITH EXISTING APRON



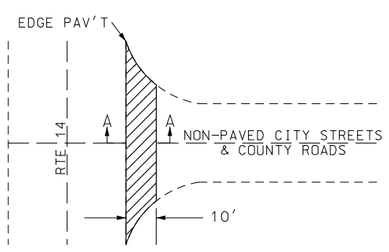
TYPICAL
SECTION A-A



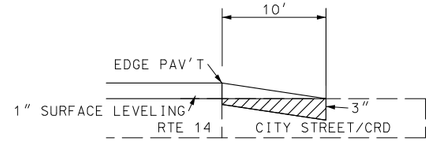
PLAN VIEW FOR NON-PAVED PRIVATE
AND COMMERCIAL ENTRANCES WITHOUT EXISTING APRON



TYPICAL
SECTION A-A



PLAN VIEW FOR NON-PAVED
CITY STREETS AND COUNTY ROADS



TYPICAL
SECTION A-A

COLDMILLING

GRADING

GRAVEL A OR
CRUSHED STONE B

NOTES

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

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

SPECIAL SHEET
SHEET 3 OF 5
DRAWING NOT TO SCALE

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E Berry
08/08/2024 10:40:57 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	6

COUNTY
DOUGLAS/HOWELL

JOB NO.
J9P3701

CONTRACT ID.

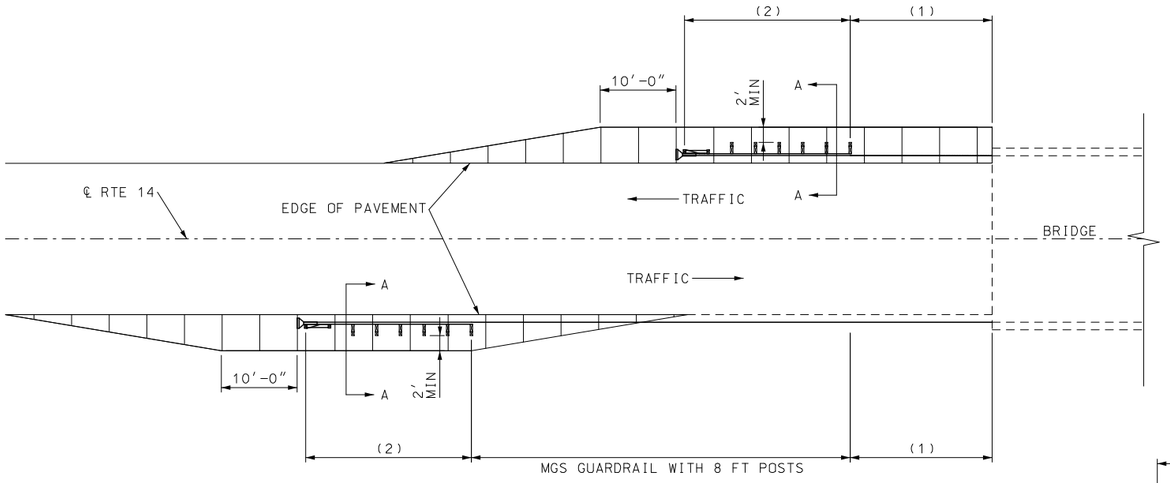
PROJECT NO.

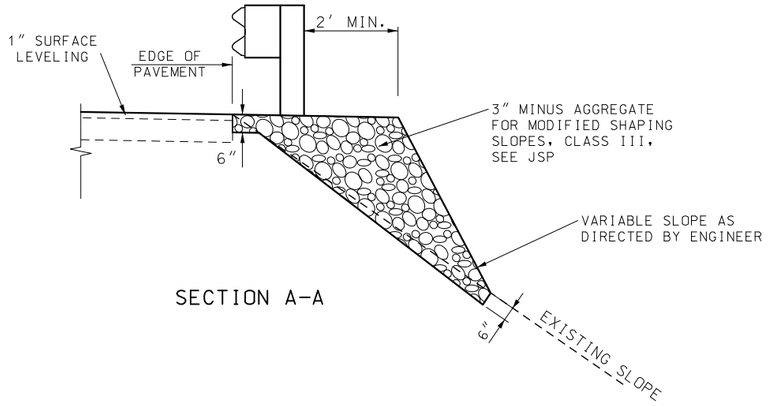
BRIDGE NO.

DESCRIPTION	DATE

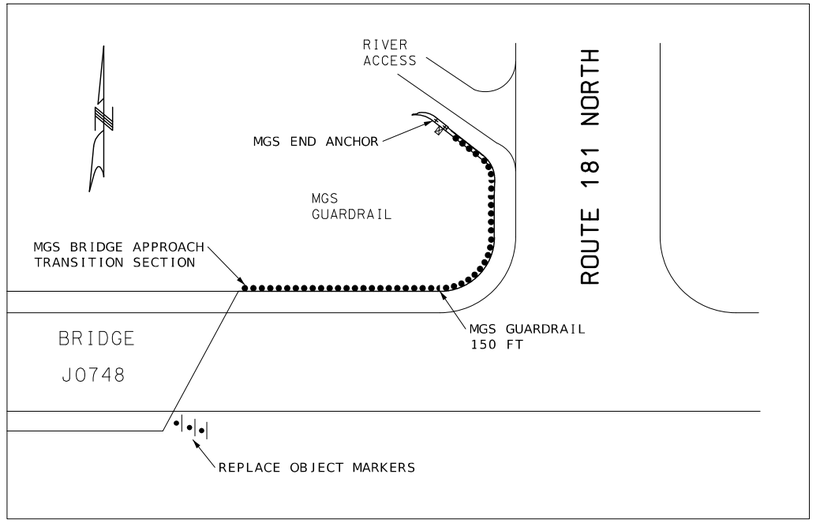
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

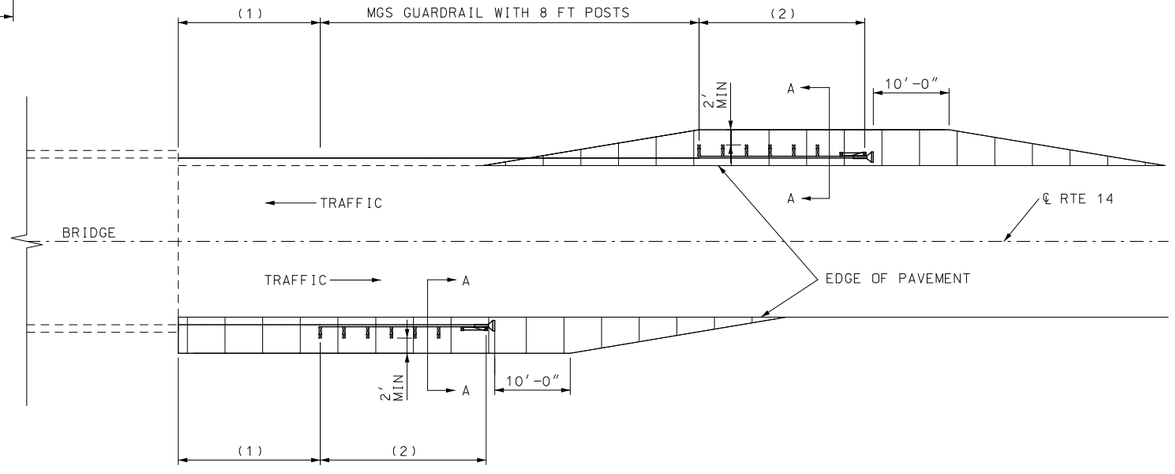
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)





SECTION A-A





NOTES:

SEE STD 606.81 FOR GRADING LIMITS
OF MODIFIED SHAPING SLOPES CLASS III.

(1) MGS BRIDGE APPROACH TRANSITION
(2) TYPE A CRASHWORTHY END TERMINAL (MASH)

TYPICAL GUARDRAIL AND GRADING LIMITS AT BRIDGES

SPECIAL SHEET
SHEET 4 OF 5
DRAWING NOT TO SCALE

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:41:26 AM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	7

COUNTY
DOUGLAS/HOWELL

JOB NO.
J9P3701

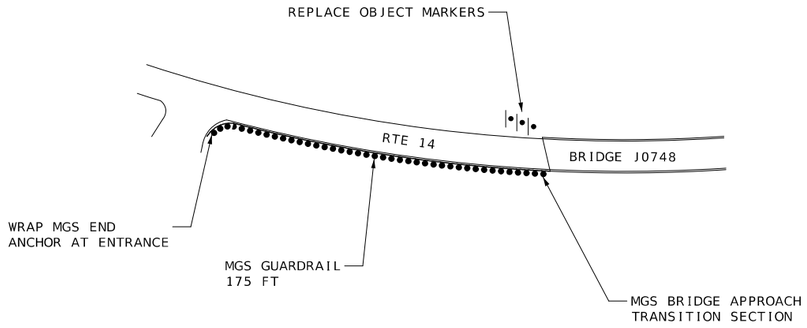
CONTRACT ID.

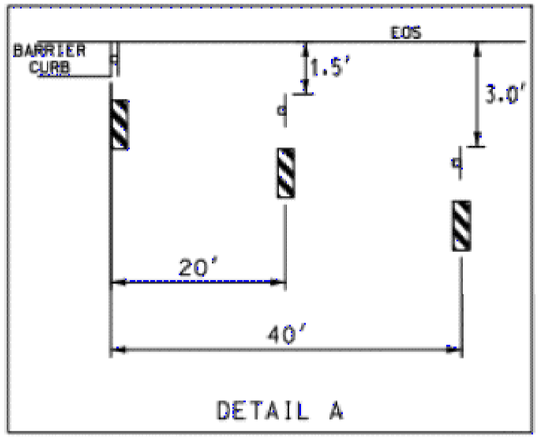
PROJECT NO.

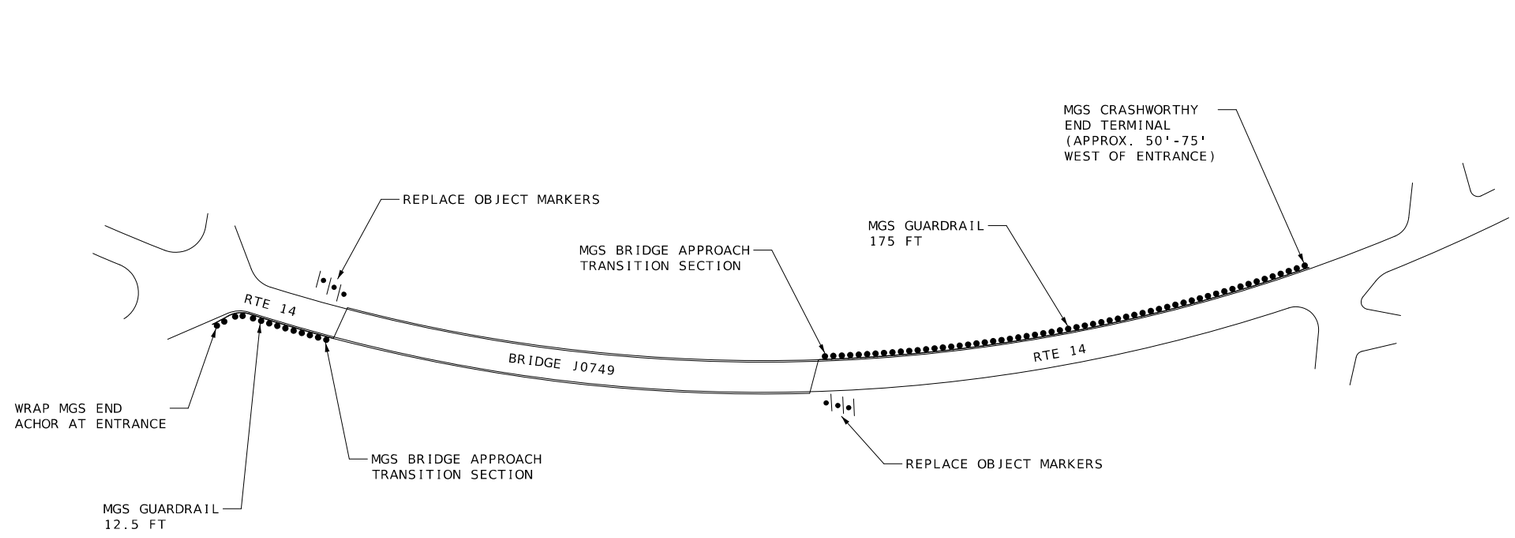
BRIDGE NO.

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 5 OF 5
DRAWING NOT TO SCALE

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:42:03 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	8

COUNTY
DOUGLAS / HOWELL

JOB NO.
J9P3701

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)

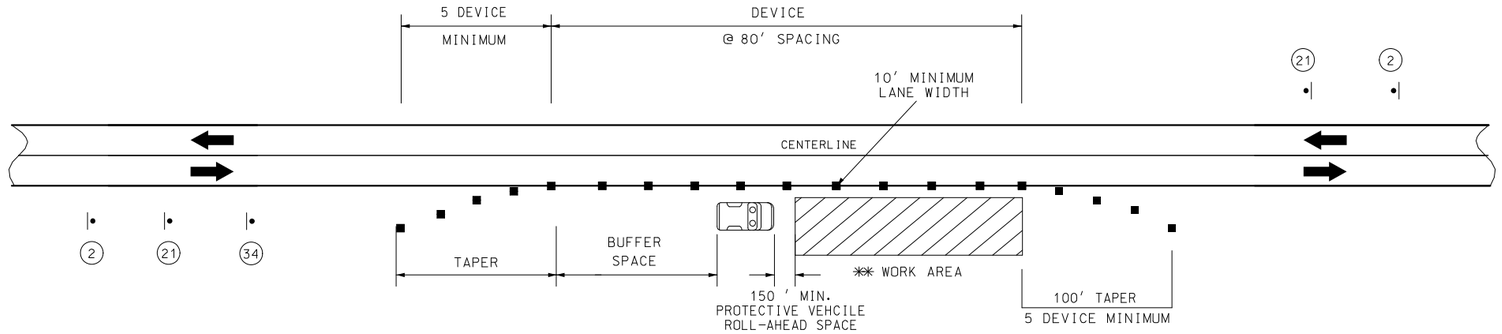
BRIDGE
OR
RAMP

W020-1
(2)

W021-5
(21)

BRIDGE
OR
RAMP

W05-1
(34)



WORK ZONE FOR
SHOULDER WORK WITH MINOR
ENCROACHMENT ON DIVIDED
AND UNDIVIDED HIGHWAYS

TRAFFIC CONTROL LEGEND

■ CHANNELIZER

SIGN

SPEED	SIGN SPACING (FT.) (1)	
PERMANENT POSTED (MPH)	NON-DIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)
0-35	200	200
40-45	350	500
50-55	500	1000
60-70	1000	(SA)-1000 (SB)-1500 (SC)-2640

PERMANENT POSTED SPEED LIMIT (MPH)	BUFFER SPACE LENGTH (FT)	TAPER LENGTH SHOULDER (FT)	CHANNELIZER SPACING (FT)	
			TAPERS	BUFFER/ WORK AREAS
0 - 35	280	70	35	40
40 - 45	400	150	40	80
50 - 55	560	185	50	80
60 - 70	840	235	60	120

NOTES:

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

SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

NOTES:

- ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPETELY COVERED OR REMOVED.
- NO PAYMENT WILL BE MADE FOR RELOCATION OF CONSTRUCTION SIGNS.
- REFER TO STANDARD PLAN SHEETS 616.20 FOR ADDITIONAL TEMPORARY TRAFFIC CONTROL.

DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

TRAFFIC CONTROL
SHEET 1 OF 3

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E Berry
08/08/2024 10:42:45 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	9

COUNTY
DOUGLAS / HOWELL

JOB NO.
J9P3701

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)

WO20-1
(2)

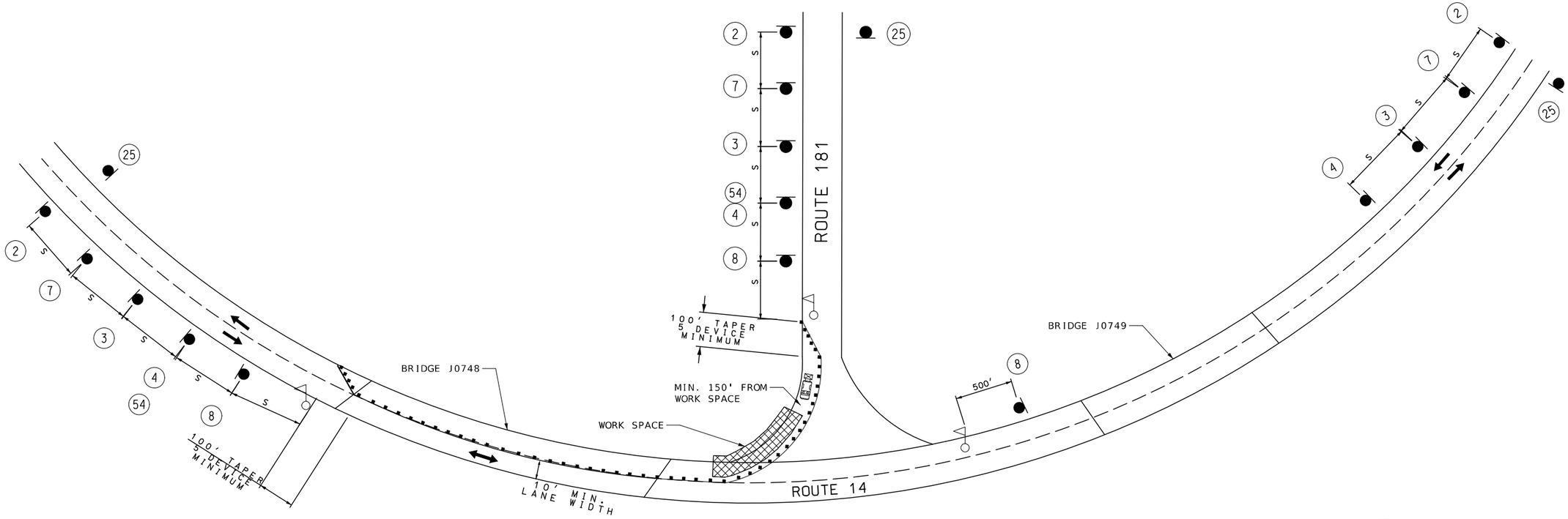
WO20-4
(7)

WO3-5
(3)

R2-1
(4)

WO20-7a
(8)

R2-1
(25)



■ – CHANNELIZERS

– FLAGGER

– PROTECTIVE VEHICLE WITH TMA

NOTES:

DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

(1) POSTED SPEED LIMIT PRIOR TO ROAD WORK.

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

(3) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

DAYLIGHT FLAGGING OPERATIONS ONLY.

LANE REDUCTION MAY ONLY BE ACTIVE AT ONE BRIDGE AT A TIME.

ADJUST SIGN PACKAGE LOCATION AS NEEDED TO ACCOMMODATE BRIDGE WORK AND GUARDRAIL INSTALLATION.

LONGITUDINAL BUFFER SPACE (1)	
SPEED (P) MPH	BUFFER SPACE (FEET)
0-35	250
40-45	360
50-55	495
60-70	730

SIGN SPACING FOR ADVANCE SIGN SERIES IN FEET (1) (2) (3)		
SPEED (P) MPH	NON-DIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)
0-35	200	200
40-45	350	500
50-55	500	1000
60-70	SA-1000, SB-1500, SC-2640	

TRAFFIC CONTROL
SHEET 2 OF 3

DRAWING NOT TO SCALE

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:43:15 AM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	10

COUNTY
DOUGLAS / HOWELL

JOB NO.
J9P3701

CONTRACT ID.

PROJECT NO.

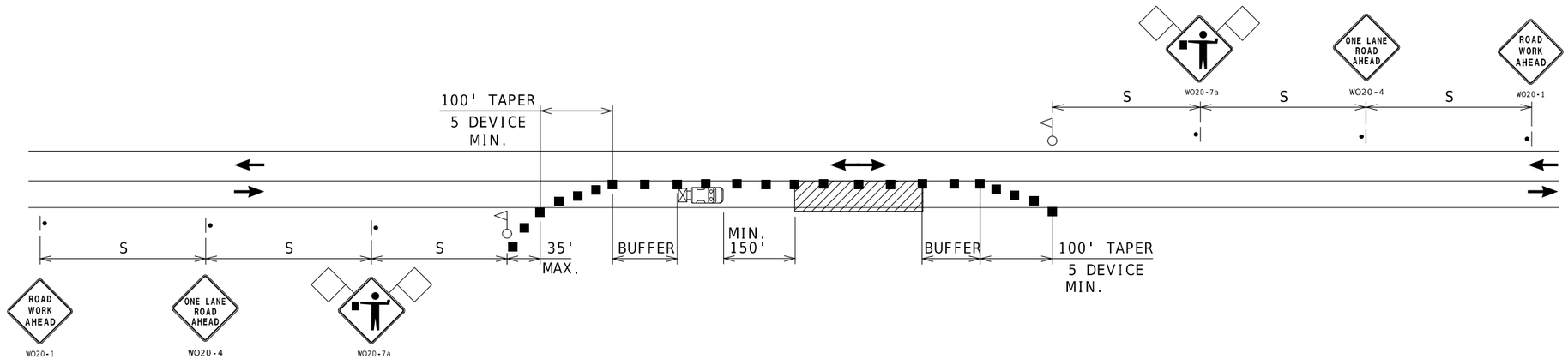
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

INCLUDES ALL 3-WAY INTERSECTION LOCATIONS
WITH UNDIVIDED HIGHWAY



ONE-LANE TWO-WAY OPERATION WITH FLAGGERS

A MINIMUM OF TWO FLAGGERS WILL BE REQUIRED TO DIRECT TRAFFIC. ADDITIONAL FLAGGERS MAY BE REQUIRED WHEN WORKING AT INTERSECTING STREETS OR RAMPS AS DIRECTED BY THE ENGINEER. NO DIRECT PAYMENT WILL BE MADE FOR FLAGGERS

NOTES:

SEE TCP SHEET 1 FOR SIGN SPACING AND TAPER LENGTHS.

TRAFFIC CONTROL
SHEET 3 OF 3
DRAWING NOT TO SCALE

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:43:47 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE	STATE
14	MO
DISTRICT	SHEET NO.
SE	11

COUNTY
DOUGLAS/HOWELL

JOB NO.
J9P3701

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)

EFFECTIVE: 07-01-2024

SIGNS (902 SIGNAL SIGNS TABULATED ON D-37A SHEET)						CONCRETE FOOTINGS EMBEDDED	STRUCTURAL STEEL POSTS *						PIPE POSTS *					BACKING BARS **				U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE												BREAK-AWAY ASSEMBLY	REMARKS AND OTHER REQUIRED ITEMS
																							2 IN. POST						2.5 IN. POST							
																										ANCHORS					ANCHORS				
SIGN NO.	SIGN SIZE	STATION	HORZ CLEAR IF NOT STD	LOCATION	SIGN DTL. SHT. NO.	ITEM NO. 9031010	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO. 9031210	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	NO. EACH	LGTH	TOTAL	TOTAL	ITEM NO. 9031250A	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	ITEM NO. 9031241	
						CY		LF	LF	LF		LBS	IN.	LF	LF		LBS	EACH	IN.	LF	LBS	LF	LF	LF	LF	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA	
1	12"X36"	104.300		LT	8	0.13																	12		12			1								OM3-L
2	12"X36"	104.300		LT	8	0.13																	12		12			1								OM3-L
3	12"X36"	104.300		LT	8	0.13																	12		12			1								OM3-L
4	12"X36"	104.389		RT	8	0.13																	12		12			1								OM3-L
5	12"X36"	104.389		RT	8	0.13																	12		12			1								OM3-L
6	12"X36"	104.389		RT	8	0.13																	12		12			1								OM3-L
7	12"X36"	104.515		LT	8	0.13																	12		12			1								OM3-L
8	12"X36"	104.515		LT	8	0.13																	12		12			1								OM3-L
9	12"X36"	104.515		LT	8	0.13																	12		12			1								OM3-L
10	12"X36"	104.563		RT	8	0.13																	12		12			1								OM3-L
11	12"X36"	104.563		RT	8	0.13																	12		12			1								OM3-L
12	12"X36"	104.563		RT	8	0.13																	12		12			1								OM3-L
SUBTOTAL						1.56																			144			12								
TOTAL						1.6																**			144			12								

* BREAKAWAY ASSEMBLY IS INCIDENTAL FOR STRUCTURAL STEEL AND PIPE POSTS.
** BACKING BARS ARE TOTALED WITH STRUCTURAL STEEL OR PIPE POSTS.

ROUND PIPE POST AND FOOTING DATA TABLE

NOM. SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	C.Y.
2½	5.79	0.48	4'- 3½"	12"	4~6"	0.13
4	10.79	0.90	5'- 3½"	18"	5~6"	0.36

STRUCTURAL STEEL POST AND FOOTING DATA TABLE

POST DES. NO.	NOM. SIZE	POST WEIGHT LBS/FT	POST WEIGHT LBS/IN	POST STUB LENGTH	FOOTING DIA.	LEVEL GROUND DEPTH	LEVEL GROUND C.Y.	6:1 GRADE DEPTH	6:1 GRADE C.Y.	4:1 GRADE DEPTH	4:1 GRADE C.Y.	3:1 OR 2:1 GRADE DEPTH	3:1 OR 2:1 GRADE C.Y.
1	W6	9.0	0.75	3'-0"	15"	3'-0"	0.14	3'-2"	0.15	3'-3"	0.16	3'-6"	0.17
2	W6	15.0	1.25	4'-0"	24"	4'-0"	0.47	4'-2"	0.50	4'-3"	0.51	4'-6"	0.54
3	W8	18.0	1.50	4'-6"	28"	4'-6"	0.71	4'-8"	0.73	4'-9"	0.74	5'-0"	0.78
4	W10	22.0	1.83	5'-0"	36"	5'-0"	1.31	5'-2"	1.36	5'-3"	1.39	5'-6"	1.45
5	W10	26.0	2.17	5'-0"	36"	5'-0"	1.31	5'-3"	1.37	5'-5"	1.43	5'-9"	1.52
6	W12	35.0	2.92	5'-6"	36"	5'-6"	1.44	5'-9"	1.52	5'-11"	1.56	6'-3"	1.65

SIGNING SHEET
SHEET 1 OF 2

D-29

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:44:24 PM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED
8/8/2024

ROUTE 14 | STATE MO
DISTRICT SE | SHEET NO. 12
COUNTY
DOUGLAS / HOWELL
JOB NO.
J9P3701
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)

EFFECTIVE: 10-01-2016

STANDARD SIGN ASSEMBLIES

SIGN NUMBER	STATION	LOCATION	TYPE — SIGN DESCRIPTION, SIZES & NUMBER OF EACH
			OM3-L
1-12	VARIOUS	VARIOUS	12

SIGN SUMMARY

STANDARD SIGN OR SPECIAL SIGN NUMBER	SIGN DETAIL SHEET NO.	NO. EACH	SIZE, TYPE & SQUARE FEET — SIZE	FLAT SHEET SH (ITEM NO. 9035004A)	FLAT SHEET FLUORESCENT SHF * (ITEM NO. 9035069A)	STRUCTURAL ST (ITEM NO. 9035011A)	STRUCTURAL FLUORESCENT STF * (ITEM NO. 9035071A)
OM3-L TYPE 3 OBJECT MARKER LEFT	8	12	12"X36"		36		
TOTAL					36		

* ORANGE, YELLOW & YELLOW/GREEN

STATE OF MISSOURI
CHRIS E. BERRY
NUMBER PE-2001018707
PROFESSIONAL ENGINEER
Chris E. Berry
08/08/2024 10:44:55 AM
CHRIS E. BERRY - CIVIL
MO-PE-2001018707

DATE PREPARED: 8/8/2024
ROUTE: 14 | STATE: MO
DISTRICT: SE | SHEET NO.: 13
COUNTY: DOUGLAS / HOWELL
JOB NO.: J9P3701
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)

SIGNING SHEET
SHEET 2 OF 2