MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
CONSTRUCTION PLANS FOR PROPOSED
STATE HIGHWAY

MORGAN COUNTY

DESIGN DESIGNATION

A.A.D.T. – 2024 = 11,498
A.A.D.T. – 2044 = 12,649
D.H.V. = 7.9%
T = 5.6%
V = 35 M.P.H.
D = 50.5%

FUNCTIONAL CLASSIFICATION– MINOR ARTERIAL

PARTIAL CONTROLLED ACCESS HIGHWAY

ROUTE 5 FROM STA 0+00.00 TO THE END OF CONSTRUCTION, ROUTE 5-52 FROM STA 648+33.70 TO THE END OF PROJECT, AND ROUTE 52 FROM STA 644+50 TO STA 648+33.70 SHALL BE A PARTIAL CONTROLLED ACCESS HIGHWAY.
EXCEPT AT LOCATIONS AND AS OTHERWISE SPECIFICALLY SHOWN ON THESE PLANS, NO ABUTTER'S RIGHTS IN OR OF DIRECT ACCESS TO, FROM, OR ACROSS THE HIGHWAY OR ITS RIGHT-OF-WAY SHALL ATTACH OR BELONG TO ANY PROPERTY ABUTTING ON SAID SECTION OF HIGHWAY, OR TO ANY PERSON MERELY BECAUSE OF OWNERSHIP OF SUCH ABUTTING PROPERTY WHERE THE SYMBOL SHOWN BELOW IS SHOWN ON THE RIGHT-OF-WAY LINE.

BEGINNING AND ENDING OF CONTROLLED ACCESS

NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.

NORMAL ACCESS HIGHWAY

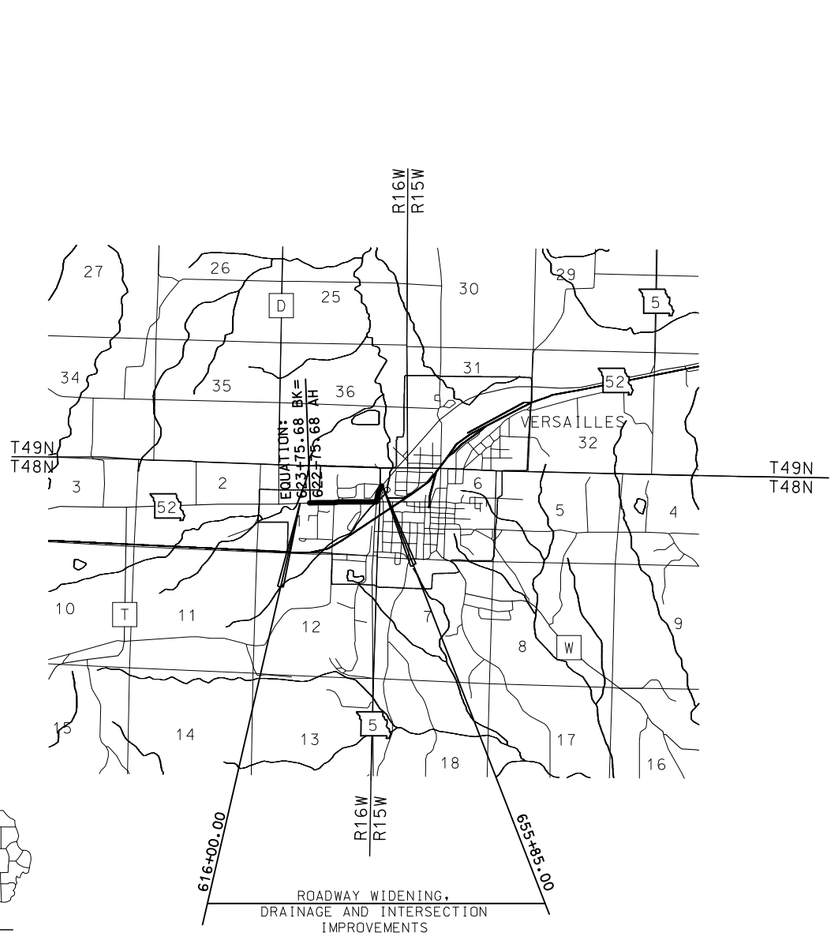
ROUTE 52 FROM STA 629+00 TO STA 644+50 SHALL BE A NORMAL ACCESS HIGHWAY,

ACQUISITION OF NORMAL ACCESS RIGHT OF WAY IS NECESSARY FOR CONSTRUCTION OF THIS PROJECT.

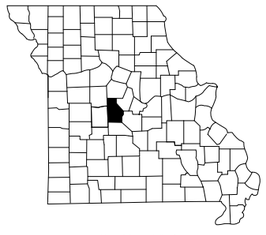
CONVENTIONAL SYMBOLS
(USED IN PLANS)

	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	

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES



NOT TO SCALE



KEY MAP
SHOWING LOCATION OF MORGAN 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.

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QUANTITIES (QU) (18 SHEETS)	3
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FOR INFORMATION ONLY
ESTIMATED DISTURBED ACRES 3.6 ACRES

LENGTH OF PROJECT

MO 52

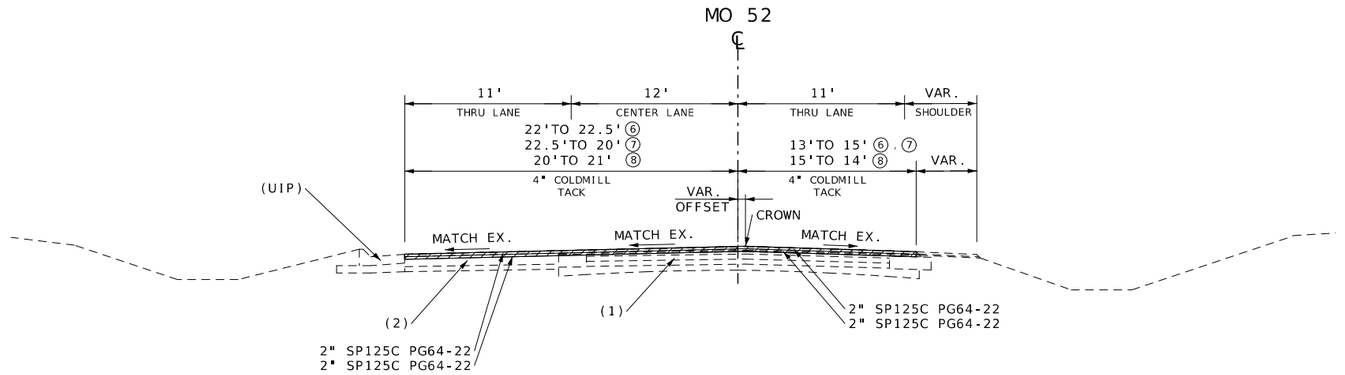
BEGINNING	STA.	616+00.00	
END	STA.	655+85.00	
APPARENT LENGTH		3985.000	FEET
EQUATIONS AND EXCEPTIONS			
EQUATION:	BK	623+75.68	
	AH	622+75.68	
CORRECTION:		-100.00	FEET
TOTAL CORRECTIONS		-100.000	FEET
NET LENGTH OF PROJECT		3885.000	FEET
STATE LENGTH		0.736	MILES

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:11:03 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/15/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 1
COUNTY: MORGAN
JOB NO.: J5P3575
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



SECTION ON TANGENT

⑥ STA 622+57.4 TO STA 622+67 (MO 52)

⑦ STA 622+67 TO STA 623+75.68 BK (MO 52)

⑧ STA 622+75.68 AH TO STA 629+00 (MO 52)

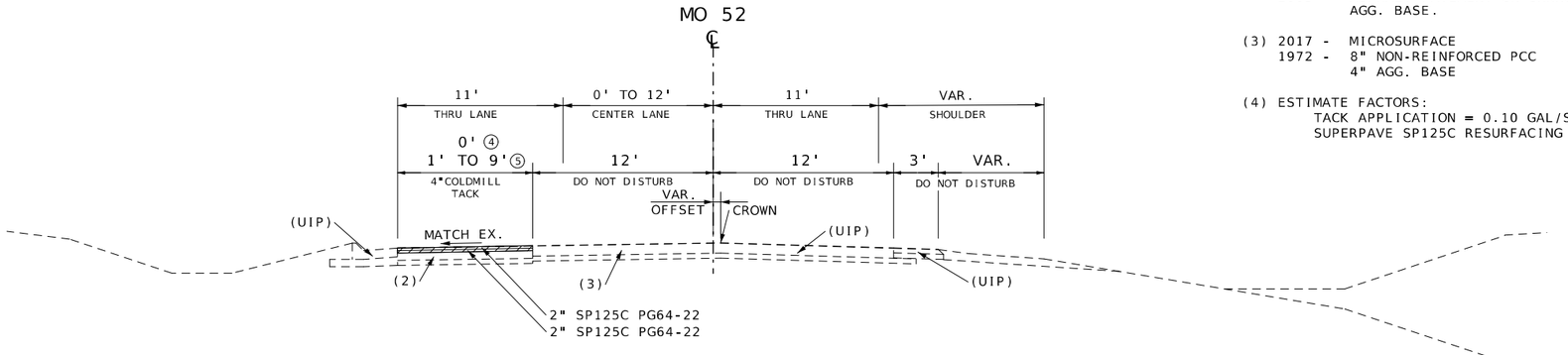
NOTES:

(1) PAVEMENT CORE #002 INDICATES 10-1/2" ASPHALT PAVEMENT
- 2017 - MICROSURFACE
- 2009 - 1-3/4" ASPHALT SURFACE
- 1993 - UNKNOWN THICKNESS BITUMINOUS SURFACE
- 1979 - 1-1/4" ASPHALT SURFACE; 1/2" LEVEL COURSE; PAVEMENT WIDENED TO 24' WITH 10" PMBB
- 1972 - UNKNOWN THICKNESS BITUMINOUS SURFACE
- 1932 - UNKNOWN THICKNESS BITUMINOUS SURFACE
- 1925 - 30' GRADED EARTH AND GRAVEL

(2) PAVEMENT CORE #001 INDICATES 11" ASPHALT PAVEMENT
- 2017 - MICROSURFACE
- 2009 - 1-3/4" ASPHALT SURFACE MODIFIED MILLED TO MATCH CURB AND GUTTER.
- 2005 - ASPHALT PAVEMENT ON UNKNOWN THICKNESS OF AGG. BASE.

(3) 2017 - MICROSURFACE
- 1972 - 8" NON-REINFORCED PCC 4" AGG. BASE

(4) ESTIMATE FACTORS:
TACK APPLICATION = 0.10 GAL/SY
SUPERPAVE SP125C RESURFACING MIX = 1.970 T/CY



SECTION ON TANGENT

④ STA 612+00 TO 617+78 (MO 52)

⑤ STA 617+78 TO STA 622+57.4 (MO 52)

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 10:25:50 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

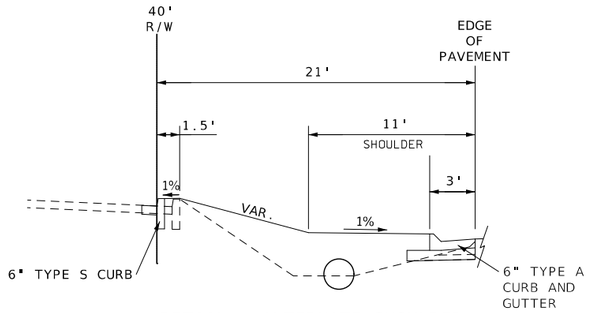
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

TYPICAL SECTION
4"COLDMILL/ 4"RESURFACE
SHEET 1 OF 9



DETAIL - ALTERNATE SHOULDER

PROPERTY (4) FRONTAGE
STA 641+65.8 Lt. TO STA 642+11.3 Lt. (MO 52)

NOTES:

(1) STA 629+00 TO STA 629+87.5
TRANSITION CROWN FROM OLD CROWN OFFSET
TO SURVEYED CENTERLINE.

(2) STA 629+87.5 TO STA 648+33.7
SET NEW CROWN TO SURVEYED CENTERLINE.

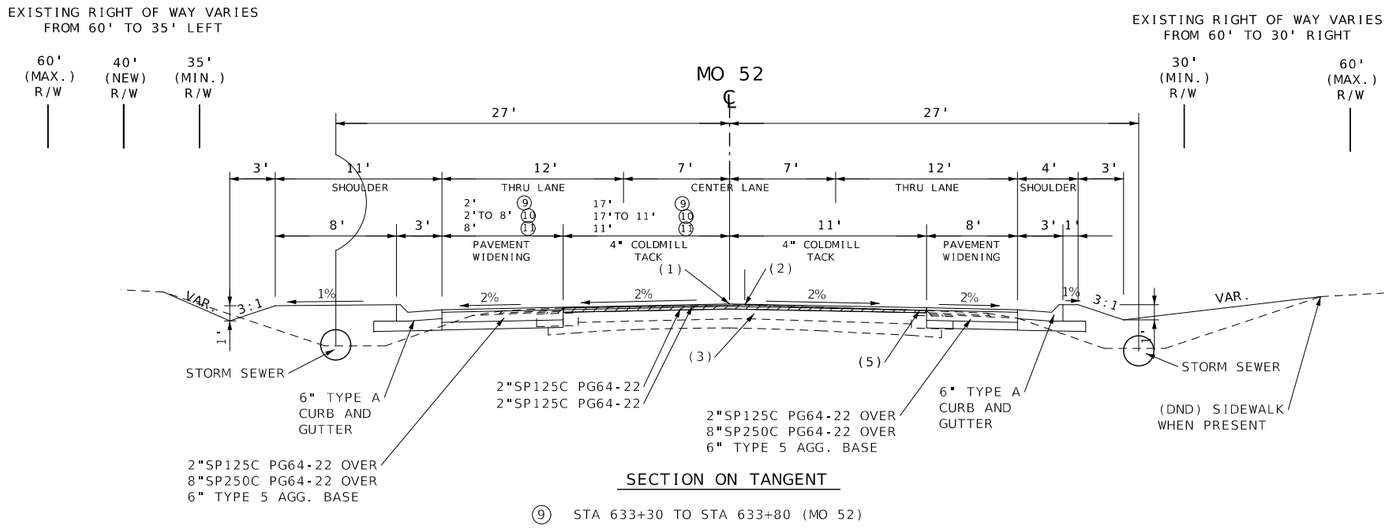
(3) PAVEMENT HISTORY: SEE NOTE (1) ON TYPICAL SECTION SHEET 1.

(4) PAVEMENT HISTORY: SEE NOTE (2) ON TYPICAL SECTION SHEET 1.

(5) APPLY ASPHALT WEDGE TO MATCH THE 2% MILLED CROSS SLOPE WHERE DEPTH OF MILLING IS INADEQUATE TO OBTAIN DESIRED CROSS SLOPE.

(6) ESTIMATE FACTORS:
TACK APPLICATION = 0.10 GAL/SY
SUPERPAVE SP125C RESURFACING MIX = 1.970 T/CY

THE DESIGN GUIDE FOR THE WIDTH OF RIGHT OF WAY FOR THIS PROJECT IS THE EXISTING RIGHT OF WAY WIDTH AS SHOWN ON THE PLANS. MORE RIGHT OF WAY, AS WELL AS OTHER PROPERTY INTERESTS, MAY BE SECURED TO SATISFY THE REQUIREMENTS OF THE DESIGN FEATURES OF THIS PROJECT.

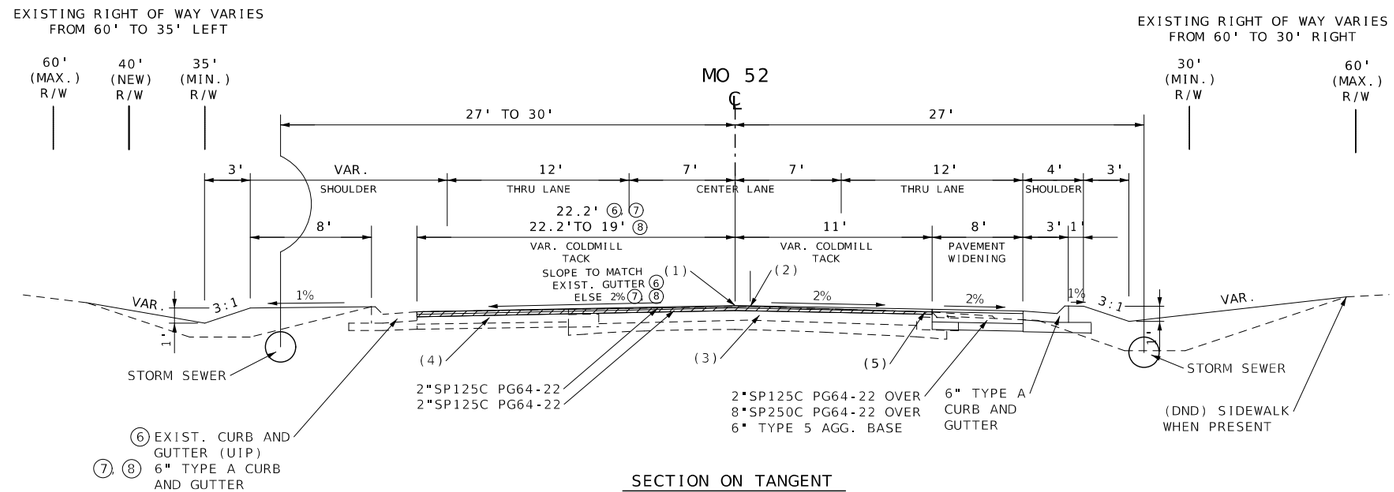


SECTION ON TANGENT

(9) STA 633+30 TO STA 633+80 (MO 52)

(10) STA 633+80 TO STA 635+33 (MO 52)

(11) STA 635+33 TO STA 645+14 (MO 52)



SECTION ON TANGENT

(6) STA 629+00 TO STA 631+83 (MO 52)

(7) STA 631+83 TO STA 632+50 (MO 52)

(8) STA 632+50 TO STA 633+30 (MO 52)

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 10:06:24 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

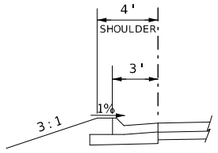
BRIDGE NO.

DESCRIPTION	DATE

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

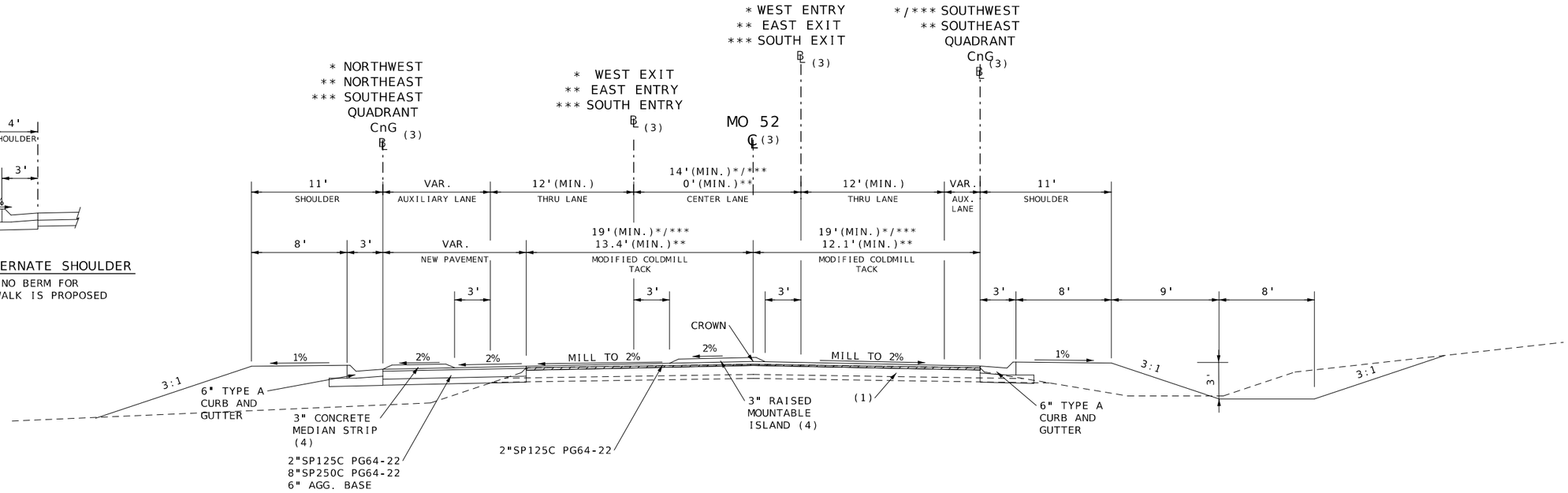
TYPICAL SECTION 4"COLDMILL/ 4"RESURFACE W/ 10" HMA WIDENING

SHEET 2 OF 9



DETAIL - ALTERNATE SHOULDER

BUILD WHERE NO BERM FOR
FUTURE SIDEWALK IS PROPOSED
(SEE PLANS)



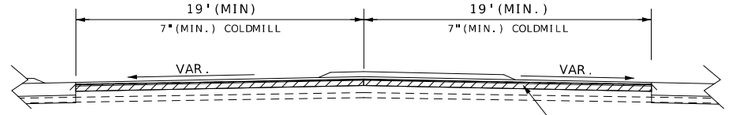
NOTES:

(1) PAVEMENT CORE #004 INDICATES 10-1/4" ASPHALT PAVEMENT.
2017 - MICROSURFACE
2009 - 1-3/4" ASPHALT SURFACE
1993 - UNKNOWN THICKNESS BITUMINOUS SURFACE
1972 - UNKNOWN THICKNESS BITUMINOUS SURFACE
1964 - 3" ASPHALT SURFACE
4" PMBB
4" AGGREGATE BASE
(2) CONSTRUCT TWO LIFTS OF SURFACE WHERE INDICATED ON PLANS.
(3) SEE SPECIAL SHEETS FOR BASELINE OFFSETS AND GEOMETRY.
(4) SEE SPECIAL SHEETS FOR RAISED ISLAND LOCATIONS AND GEOMETRY.
(5) OPTIONAL PAVEMENT:
8-1/2" NRPCCP
15' JOINTS W/ 1-1/4" DOWELS
13.5' WIDENED SLAB

10" HMA
2" SP125C PG 64-22
8" SP250C PG 64-22
(6) ESTIMATE FACTORS:
TACK APPLICATION = 0.10 GAL/SY
SUPERPAVE SP125C RESURFACING MIX = 1.970 T/CY

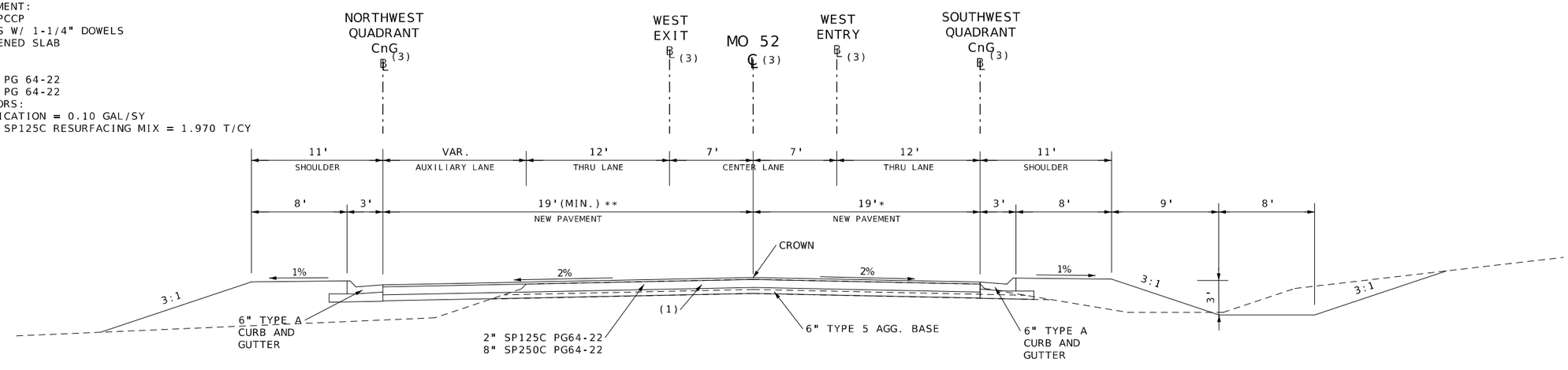
SECTION ON TANGENT

* STA 645+75 TO STA 646+93 (ON RIGHT) (MO 52)
* STA 645+87 TO STA 646+93 (ON LEFT) (MO 52)
** STA 9+60 TO STA 11+00 (E. NEWTON ST.)
*** STA 0+80 TO STA 3+50 (MO 5)



PAVEMENT SECTION

* STA 646+93 TO STA 647+51.76 (MO 52)
** STA 8+78.53 TO 9+60 (NEWTON ST.)
*** STA 0+41.76 TO STA 0+80 (MO 5)



SECTION ON TANGENT

* STA 645+14 TO STA 645+75 (ON RIGHT) (MO 52)
** STA 645+14 TO STA 645+87 (ON LEFT) (MO 52)

TYPICAL SECTION SHEET
SHEET 3 OF 10

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 10:06:34 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

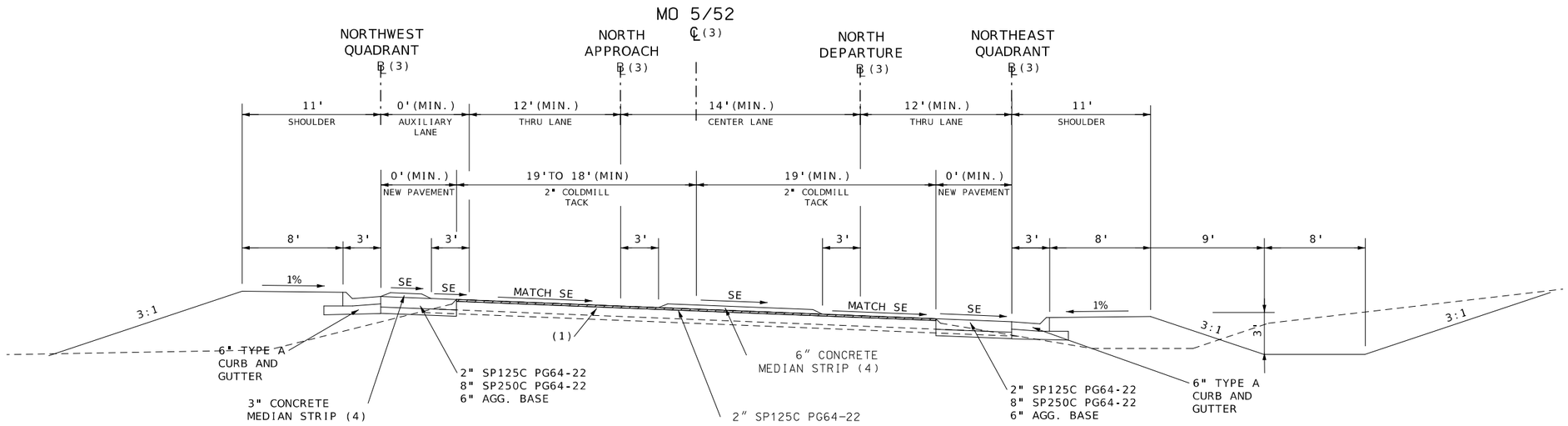
BRIDGE NO.

DESCRIPTION

DATE

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

TYPICAL SECTION
2"COLDMILL/ 2"RESURFACE W/ 10" HMA WIDENING
SHEET 3 OF 9

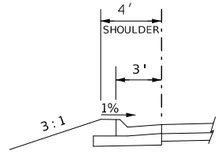


SECTION ON CURVE

STA 651+13.7 TO STA 654+00 (MO 5/52)

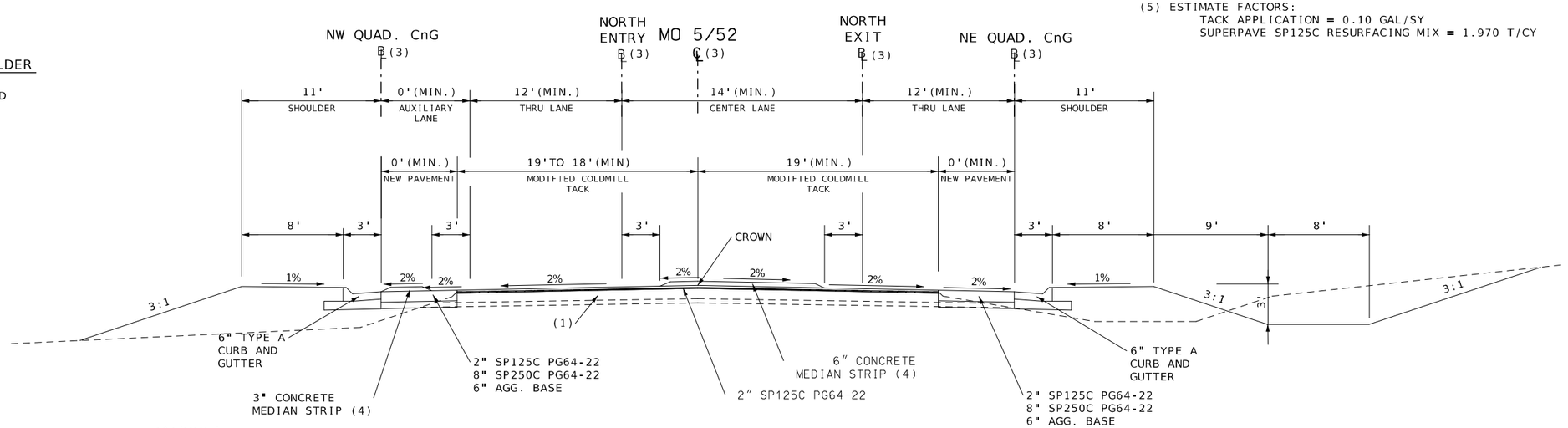
NOTES:

(1) PAVEMENT CORE #004 INDICATES 10-1/4" ASPHALT PAVEMENT.
2017 - MICROSURFACE
2009 - 1-3/4" ASPHALT SURFACE
1993 - UNKNOWN THICKNESS BITUMINOUS SURFACE
1972 - UNKNOWN THICKNESS BITUMINOUS SURFACE
1964 - 3" ASPHALT SURFACE
4" PMBB
4" AGGREGATE BASE
(2) CONSTRUCT TWO LIFTS OF SURFACE WHERE INDICATED ON PLANS.
(3) SEE SPECIAL SHEETS FOR BASELINE OFFSETS AND GEOMETRY.
(4) SEE SPECIAL SHEETS FOR RAISED ISLAND LOCATIONS AND GEOMETRY.
(5) ESTIMATE FACTORS:
TACK APPLICATION = 0.10 GAL/SY
SUPERPAVE SP125C RESURFACING MIX = 1.970 T/CY



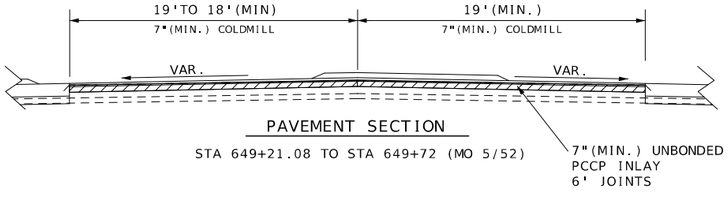
DETAIL - ALTERNATE SHOULDER

BUILD WHERE NO BERM FOR FUTURE SIDEWALK IS PROPOSED (SEE PLANS)



SECTION ON TANGENT

STA 649+72 TO STA 651+13.7 (MO 5/52)



PAVEMENT SECTION

STA 649+21.08 TO STA 649+72 (MO 5/52)

RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
STATE OF MISSOURI
03/21/2024 10:08:41 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY: MORGAN

JOB NO.: J5P3575

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

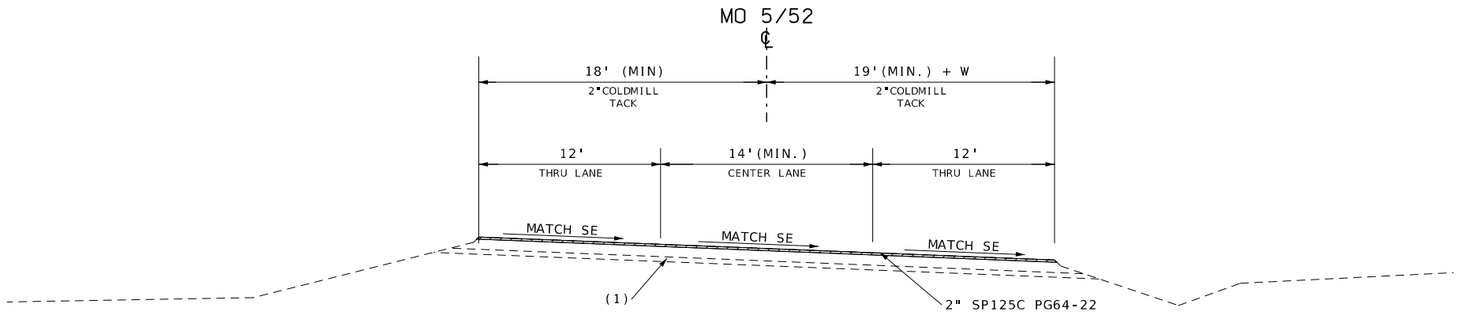
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TYPICAL SECTION 2"COLDMILL/ 2"RESURFACE W/ 10" HMA WIDENING

SHEET 4 OF 9



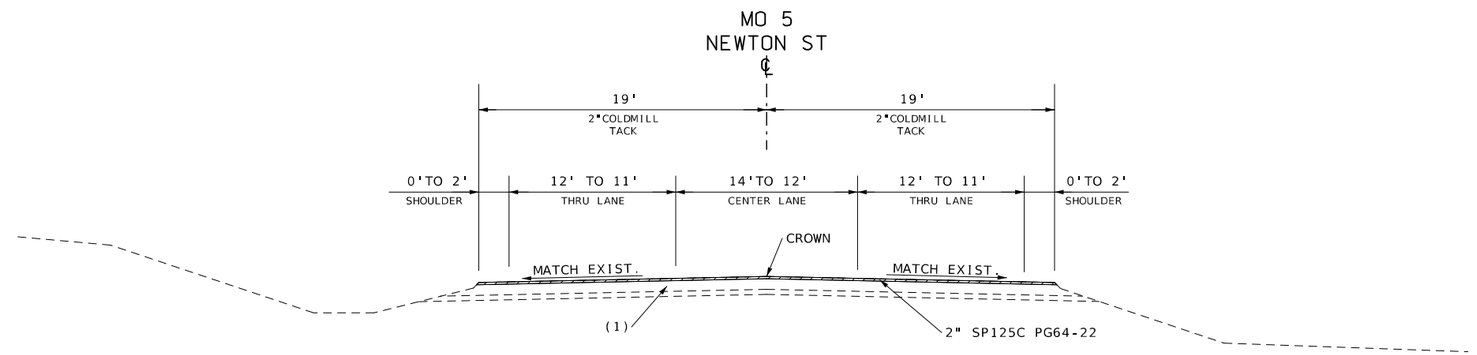
SECTION ON CURVE

STA 654+00 TO STA 655+85 (MO 5/52)

NOTES:

(1) PAVEMENT CORE #004 INDICATES 10-1/4" ASPHALT PAVEMENT.
2017 - MICROSURFACE
2009 - 1-3/4" ASPHALT SURFACE
1993 - UNKNOWN THICKNESS BITUMINOUS SURFACE
1972 - UNKNOWN THICKNESS BITUMINOUS SURFACE
1964 - 3" ASPHALT SURFACE
4" PMBB
4" AGGREGATE BASE

(2) ESTIMATE FACTORS:
TACK APPLICATION = 0.10 GAL/SY
SUPERPAVE SP125C RESURFACING MIX = 1.970 T/CY



SECTION ON TANGENT

STA 3+50 TO STA 7+00 (MO 5)
STA 10+18 TO 11+00 (NEWTON ST.)

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 10:06:48 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

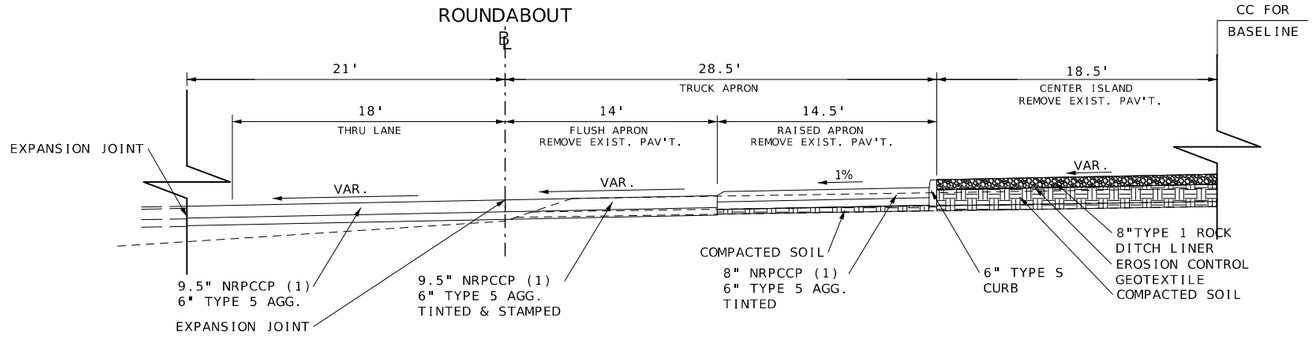
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

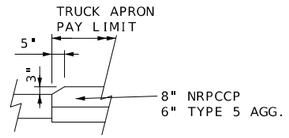
TYPICAL SECTION
2"COLDMILL/ 2"RESURFACE
SHEET 5 OF 9



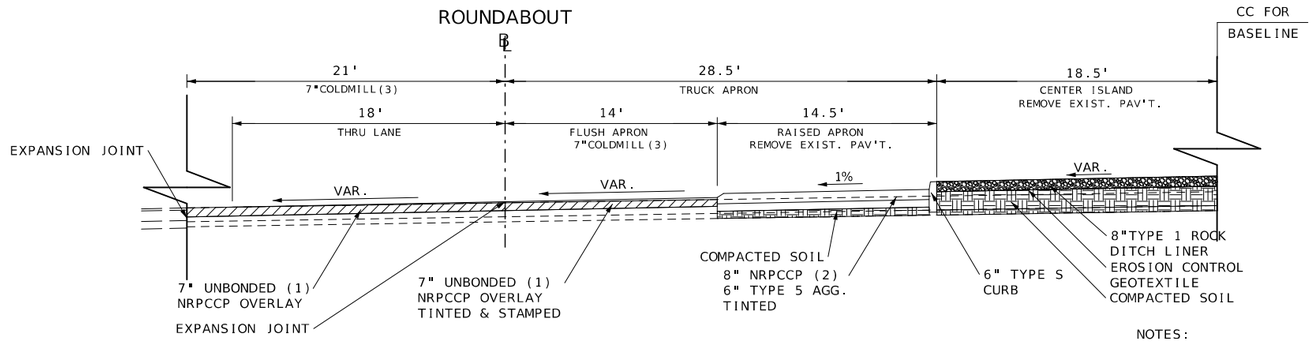
NOTES:
(1) 1-1/4" DOWELS, 15' JOINTS.
RADIATE TRANSVERSE JOINTS FROM ROUNDABOUT CENTER
WIDEST SPACING = 15'
NARROWEST SPACING = 2'

HALF SECTION

STA 2+16.77 TO STA 2+89.03



DETAIL
LIP FOR 8" CONCRETE
TRUCK APRON



NOTES:
(1) 6'x 6' JOINT SPACING
RADIATE TRANSVERSE JOINTS FROM ROUNDABOUT CENTER
WIDEST SPACING = 6'
NARROWEST SPACING = 2'
(2) 1-1/4" DOWELS, 15' JOINTS.
RADIATE TRANSVERSE JOINTS FROM ROUNDABOUT CENTER
WIDEST SPACING = 15'
NARROWEST SPACING = 2'
(3) MINIMUM 7" COLDMILL DEPTH TO AVOID USING A
BOND BREAKER.

HALF SECTION

STA 0+00 TO STA 2+16.77
STA 2+89.03 TO STA 2+95.31

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:37:07 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

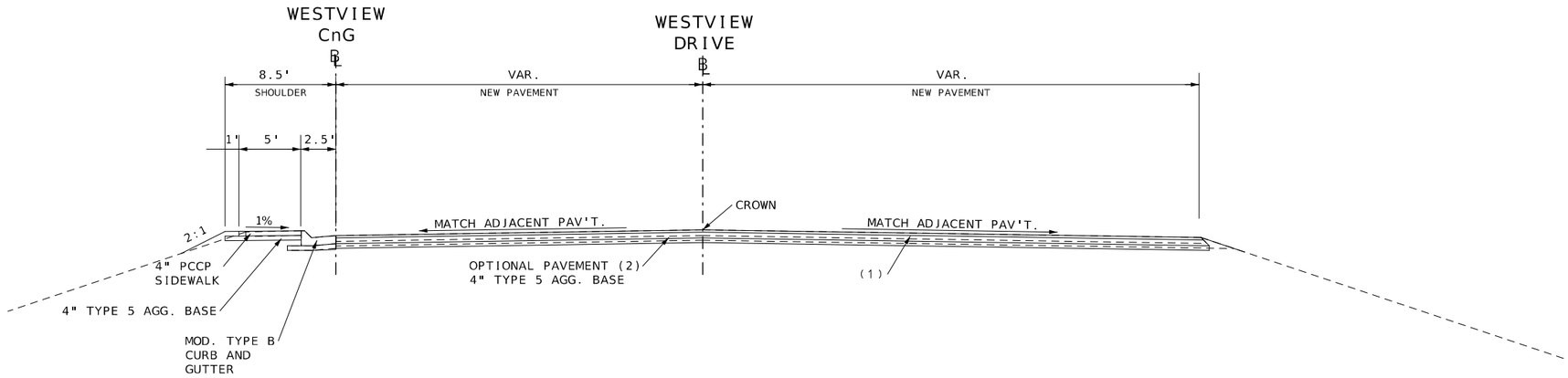
BRIDGE NO.

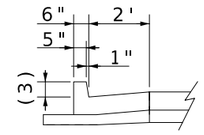
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TYPICAL SECTION
ROUNDABOUT
SHEET 6 OF 9





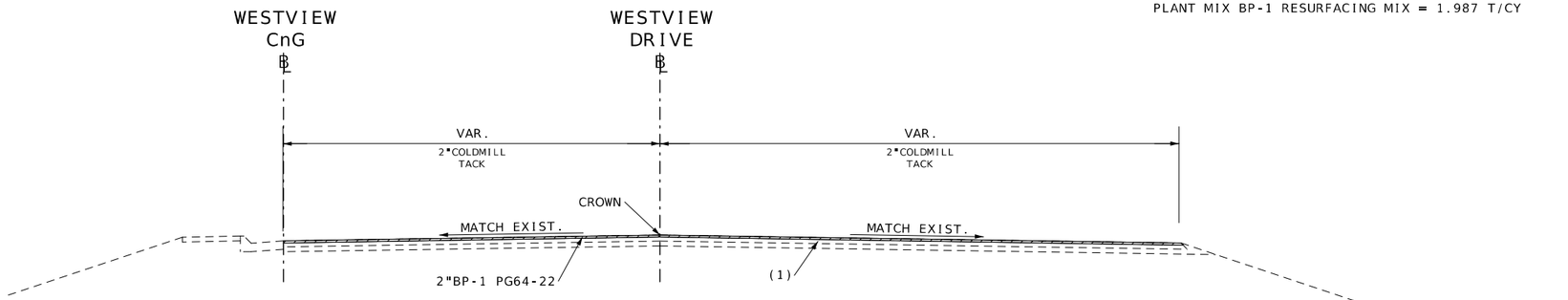
DETAIL
MODIFIED TYPE B
CURB AND GUTTER

SECTION ON TANGENT

STA 9+23.8 TO STA 9+59.3

NOTES:

(1) PAVEMENT CORE #005 INDICATES 5" ASPHALT PAVEMENT.
(2) OPTIONAL PAVEMENT:
    (A) 7" NR PCCP
        15' JOINTS
    (B) 2" BP-1 PG64-22
        5" BB PG64-22
(3) MATCH HEIGHT OF EXISTING CURB.
(4) ESTIMATE FACTORS:
        TACK APPLICATION = 0.10 GAL/SY
        PLANT MIX BP-1 RESURFACING MIX = 1.987 T/CY



SECTION ON TANGENT

STA 8+92 TO 9+23.8
STA 9+59.3 TO STA 9+64.3

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 10:07:07 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

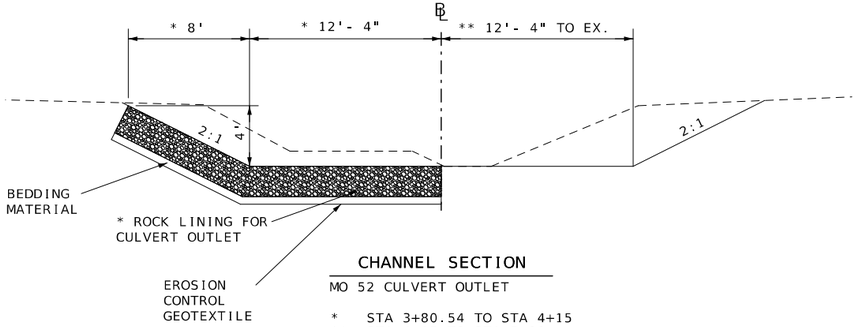
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TYPICAL SECTION
WESTVIEW DRIVE
SHEET 7 OF 9

STRAIGHT FORK CHANNEL

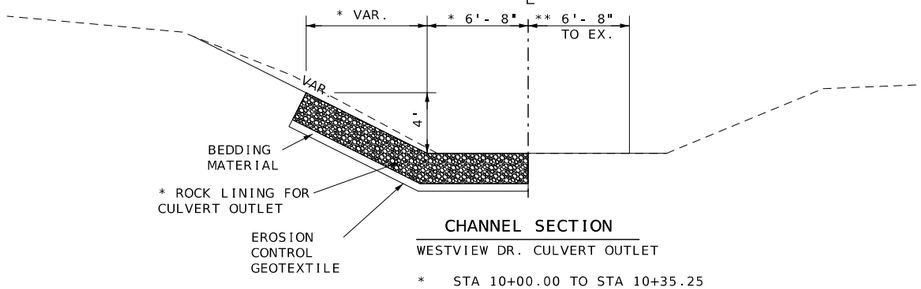


CHANNEL SECTION

MO 52 CULVERT OUTLET

* STA 3+80.54 TO STA 4+15
** STA 4+15 TO STA 5+00

WESTVIEW CULVERT CONSTR.

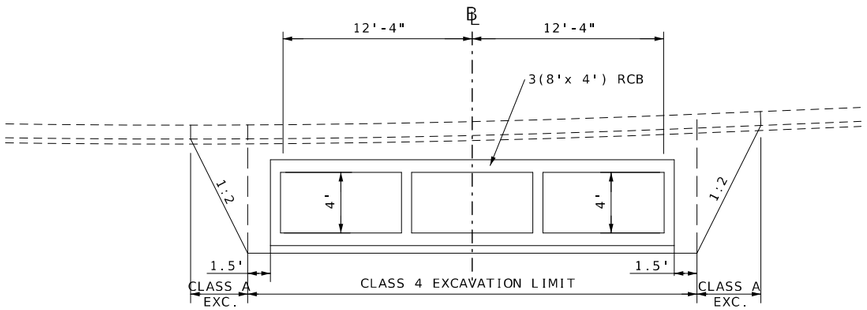


CHANNEL SECTION

WESTVIEW DR. CULVERT OUTLET

* STA 10+00.00 TO STA 10+35.25
* STA 11+64.75 TO STA 12+00.00
** STA 12+00.00 TO STA 12+35.00

STRAIGHT FORK CHANNEL

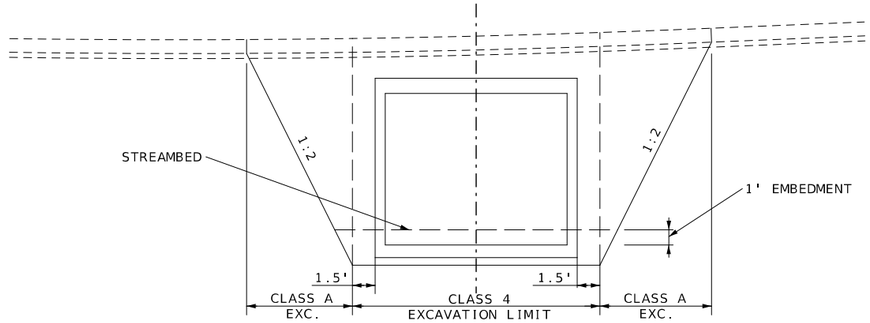


CHANNEL SECTION

MO 52 CULVERT

STA 2+54.69 TO STA 3+80.54

WESTVIEW CULVERT CONSTR.



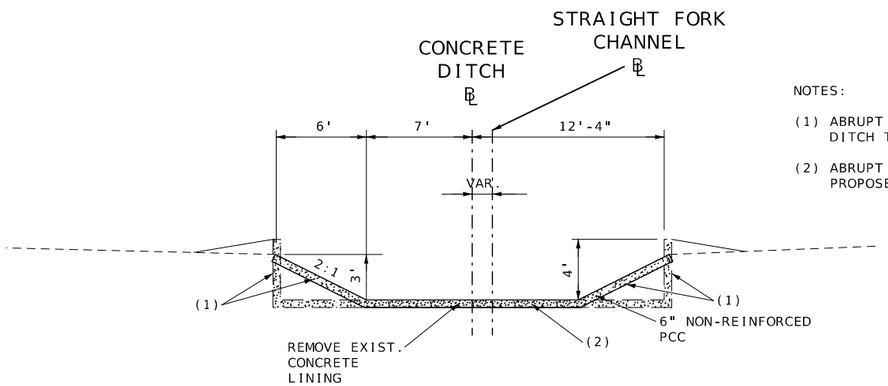
CHANNEL SECTION

WESTVIEW DR. CULVERT

STA 10+30.25 TO STA 11+64.75

STRAIGHT FORK CHANNEL

CONCRETE DITCH



NOTES:

(1) ABRUPT TRANSITION FROM EXISTING TRAPEZOIDAL DITCH TO PROPOSED RECTANGULAR MODIFIED INLET.

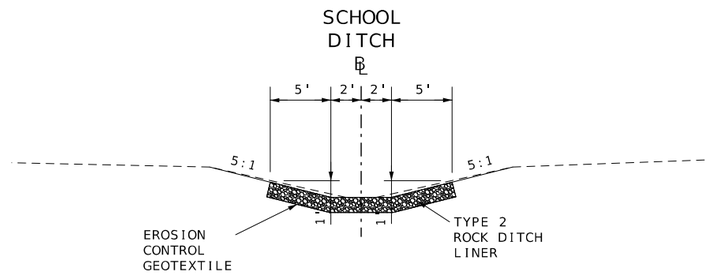
(2) ABRUPT TRANSITION FROM EXISTING 14' WIDTH TO PROPOSED 24'- 8" WIDTH .

CHANNEL SECTION

MO 52 CULVERT INLET

STA 2+16.00 TO STA 2+54.69

SCHOOL DITCH



CHANNEL SECTION

SCHOOL DITCH

STA 0+55.00 TO STA 2+00.00

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 11:27:07 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

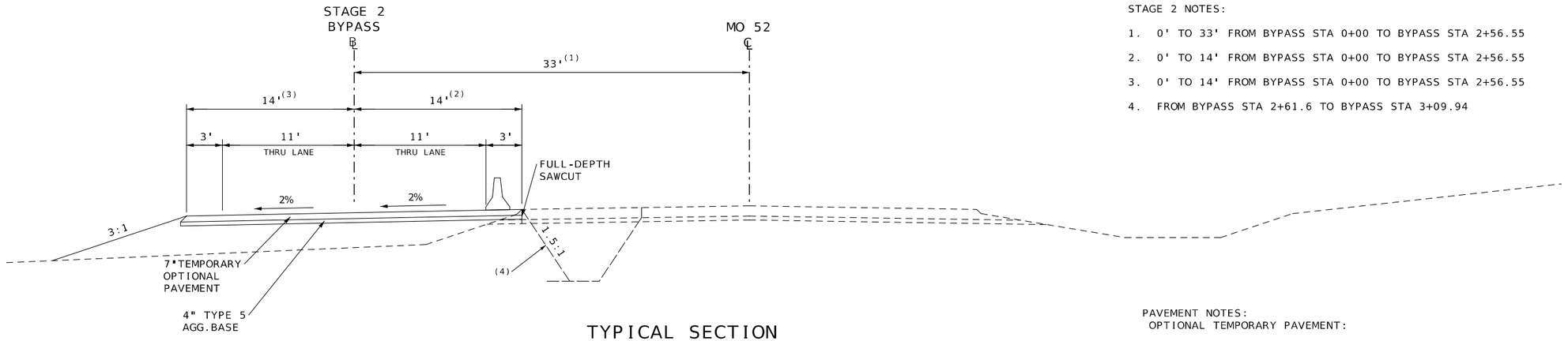
COUNTY: MORGAN
JOB NO.: J5P3575
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TYPICAL SECTION CHANNELS SHEET 8 OF 9



TYPICAL SECTION

MO 52 BYPASS
AROUND MO 52/STRAIGHT FORK CULVERT
STAGE 2 CONSTRUCTION

STA 0+00 TO STA 5+56.55

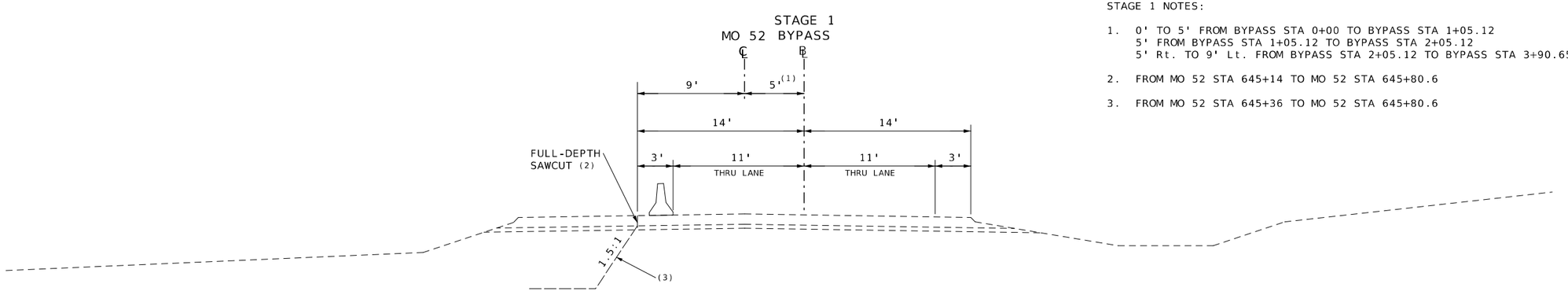
STAGE 2 NOTES:

1. 0' TO 33' FROM BYPASS STA 0+00 TO BYPASS STA 2+56.55
2. 0' TO 14' FROM BYPASS STA 0+00 TO BYPASS STA 2+56.55
3. 0' TO 14' FROM BYPASS STA 0+00 TO BYPASS STA 2+56.55
4. FROM BYPASS STA 2+61.6 TO BYPASS STA 3+09.94

PAVEMENT NOTES:
OPTIONAL TEMPORARY PAVEMENT:

(1) 7" NRPCCP w/ 15' JOINTS

(2) 2" BP-1 w/ PG64-22
5" BB w/ PG64-22



TYPICAL SECTION

MO 52 BYPASS
AROUND MO 52/STRAIGHT FORK CULVERT
STAGE 1 CONSTRUCTION

STA 0+00 TO STA 3+90.65

STAGE 1 NOTES:

1. 0' TO 5' FROM BYPASS STA 0+00 TO BYPASS STA 1+05.12
   5' FROM BYPASS STA 1+05.12 TO BYPASS STA 2+05.12
   5' Rt. TO 9' Lt. FROM BYPASS STA 2+05.12 TO BYPASS STA 3+90.65
2. FROM MO 52 STA 645+14 TO MO 52 STA 645+80.6
3. FROM MO 52 STA 645+36 TO MO 52 STA 645+80.6

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/01/2024 10:07:22 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	2

COUNTY
MORGAN

JOB NO.
J5P3575

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)

TYPICAL SECTION
PHASE 2 STAGE 2
TEMPORARY BYPASS
SHEET 9 OF 9

REMOVAL OF IMPROVEMENTS

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	AREA (sy)	QTY (ea)	DESCRIPTION	REMARKS
MO 52							
629+00.00	645+14.00	MO 52 Rt.	1614			FULL DEPTH SAWCUT	11' RIGHT OF CL
629+00.00	629+39.00	MO 52 Rt.		39		8" NRPCCP SURFACE	PART OF McDONALDS DRIVEWAY, RIGHT SHOULDER BACK OF FAIRGROUNDS ROAD
629+00.00		MO 52 Rt.	29			FULL DEPTH SAWCUT	McDONALDS DRIVEWAY
629+31.00		MO 52 Rt.			1	4' MANHOLE	STORM SEWER BETWEEN McDONALDS AND FAIRGROUND RD.
629+31.00		MO 52 Rt.	28			18 " CMP	UNDER McDONALDS DRIVEWAY (UIP - MODIFY) - REMOVE OUTLET END
629+31.00		MO 52 Rt.	13			15" CMP, 1- F.E.S.	INLET PIPE TO 4' MANHOLE, INCL F.E.S.
629+60.00		MO 52 Rt.	52			FULL DEPTH SAWCUT	FAIRGROUNDS ROAD TRANSVERSE CUT
630+60.00		MO 52 Lt.	2.75			24" CMP, 1- F.E.S.	ENTRANCE PIPE UNDER WEST SCHOOL DRIVEWAY, INCL. F.E.S.
631+83.00	632+50.00	MO 52 Lt.	67			6" CURB AND GUTTER	JUST BACK OF PED CROSSING TO END OF CURB AND GUTTER
632+00.00		MO 52 Lt.		4.3		CONCRETE DITCH LINER	INLET TO PIPES UNDER SCHOOL CROSSING
632+31.00		MO 52 Lt.		4.3		CONCRETE DITCH LINER	OUTLET TO PIPES UNDER SCHOOL CROSSING
632+00.00	632+31.00	MO 52 Lt.	70			2- 18"x 35' CMP'S, 4- F.E.S.	UNDER SCHOOL'S PED CROSSING
632+18.50		MO 52 Lt.		15		4" CONCRETE SURFACE	SCHOOL'S PED CROSSING SIDEWALK
632+18.50		MO 52 Lt.	8			FULL DEPTH SAWCUT	SCHOOL'S PED CROSSING SIDEWALK
632+16.50		MO 52 Rt.		20.3		4" CONCRETE SURFACE	SCHOOL'S PED CROSSING SIDEWALK
632+16.50		MO 52 Rt.		7		2- 6" RAISED ISLANDS	CONCRETE PADS ON EITHER SIDE OF PED CROSSING
632+16.50		MO 52 Rt.	20			18" CMP, 2- F.E.S.	UNDER SCHOOL'S PED CROSSING
632+16.50		MO 52 Rt.	8			FULL DEPTH SAWCUT	SCHOOL'S PED CROSSING SIDEWALK
633+10.00		MO 52 Lt.	12			24" CMP, 1 F.E.S.	EXIST. 24" PIPE INCL. F.E.S. ORIGINATES FROM SCHOOL PROPERTY
633+30.00	633+80.00	MO 52 Lt.	52			FULL DEPTH SAWCUT	CUT STRAIGHT EDGE FOR WIDENING
633+80.00	635+33.00	MO 52 Lt.	153			FULL DEPTH SAWCUT	17' TO 11' LEFT OF CL
634+09.00		MO 52 Lt.	18			18" CMP	EXIST. 18" PIPE ORIGINATES FROM SCHOOL PROPERTY
635+33.00	645+14.00	MO 52 Lt.	981			FULL DEPTH SAWCUT	11' LEFT OF CL
638+14.00		MO 52 Lt.			1	4' MANHOLE	SANITARY SEWER AT EAST SCHOOL DRIVEWAY
638+32.00		MO 52 Lt.	61			24" CMP, 2- F.E.S.	EBL ACROSS PAV'T FOR BRIDGE APPROACH
638+32.00		MO 52 Lt.		190		8" CONCRETE DRIVEWAY	EAST SCHOOL DRIVEWAY
638+32.00		MO 52 Lt.	20			FULL DEPTH SAWCUT	EAST SCHOOL DRIVEWAY
640+10.00		MO 52 Lt.		19.3		CONCRETE DITCH LINING	SCHOOL FLUME OUTLET
640+10.00		MO 52 Lt.	8			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS CONCRETE FLUME
640+45.00		MO 52 Lt.	10			2' CONCRETE ENCASEMENT	REMOVE ENOUGH TO MAKE ROOM FOR STORM SEWER
640+72.00		MO 52 Rt.			1	CONCRETE HEADWALL	INLET TO PIPE UNDER PARK ACCESS
640+72.00		MO 52 Rt.	6			12" CMP	EXIST. PIPE ORIGINATES FROM PARK GROUNDS
640+72.00	641+32.00	MO 52 Rt.	60			24" CMP	PIPE UNDER PARK ACCESS ROAD
640+98.00		MO 52 Rt.	23			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS PARK ACCESS ROAD
641+03.00		MO 52 Lt.			1	CONCRETE HEADWALL	INLET TO PIPE UNDER GUINN DRIVEWAY
641+10.00	641+69.00	MO 52 Lt.		165		CONCRETE DRIVEWAY	GUINN DRIVEWAY
641+10.00	641+69.00	MO 52 Lt.	59			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS GUINN DRIVEWAY
641+35.00		MO 52 Lt.	60			24" CMP	PIPE UNDER GUINN DRIVEWAY
641+65.00		MO 52 Lt.			1	CONCRETE HEADWALL	OUTLET TO PIPE UNDER GUINN DRIVEWAY
641+40.00		MO 52 Rt.		18		CONCRETE DITCH LINER	BETWEEN PARK ACCESS AND GAS DRIVEWAY
641+69.00	642+09.80	MO 52 Lt.	41			FULL DEPTH SAWCUT	LONGITUDINAL CUT ALONG RIGHT OF WAY
641+69.00	642+09.80	MO 52 Lt.		17		CONCRETE SURFACE/CURB	PARKING FRONTING GUINN PROP. ALONG RIGHT OF WAY
641+75.00		MO 52 Rt.	48			24" CMP	PIPE UNDER WEST PINNACLE GAS DRIVEWAY
641+98.00		MO 52 Rt.			1	CONCRETE HEADWALL	OUTLET TO PIPE UNDER WEST PINNACLE GAS DRIVEWAY
641+98.00		MO 52 Rt.	9			CONCRETE CURB	WEST PINNACLE GAS DRIVEWAY ON LEFT
642+03.00		MO 52 Lt.	7			12" CMP	EXIST. PIPE ORIGINATES FROM GUINN PROPERTY
642+03.00		MO 52 Lt.		3		CONCRETE DITCH LINER	OUTLET OF EXIST. PIPE FROM GUINN PROPERTY
642+09.80	642+79.80	MO 52 Lt.	73			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS WESTVUE WEST DRIVEWAY
642+13.00		MO 52 Lt.	17			CONCRETE CURB	WESTVUE WEST DRIVEWAY ON RIGHT
642+13.00		MO 52 Lt.			1	CONCRETE HEADWALL	INLET OF PIPE UNDER WESTVUE WEST DRIVEWAY
642+42.80		MO 52 Lt.	61			24" CMP	PIPE UNDER WESTVUE WEST DRIVEWAY
642+42.80		MO 52 Lt.		28		62'x 4' WIDE CONCRETE PATCH	PATCH OVER WATERLINE, DO NOT DISTURB WATERLINE
642+75.00		MO 52 Lt.		15		CONCRETE DITCH LINER	OUTLET OF PIPE UNDER WESTVUE WEST DRIVEWAY
642+75.00		MO 52 Lt.	26			CONCRETE CURB	WESTVUE WEST DRIVEWAY ON LEFT
643+56.00	643+85.00	MO 52 Lt.	29			FULL DEPTH SAWCUT	LONGITUDINAL CUT ALONG RIGHT OF WAY
643+58.00		MO 52 Rt.			1	CONCRETE HEADWALL	INLET TO PIPE UNDER EAST PINNACLE GAS DRIVEWAY
643+58.00		MO 52 Rt.	19			CONCRETE CURB	EAST PINNACLE GAS DRIVEWAY ON RIGHT
643+75.00		MO 52 Lt.			1	4' MANHOLE	SANITARY SEWER AT WESTVUE EAST DRIVEWAY
643+78.00		MO 52 Rt.	49			24" CMP	EAST PINNACLE GAS DRIVEWAY
644+00.00		MO 52 Rt.	6			CONCRETE CURB	EAST PINNACLE GAS DRIVEWAY ON LEFT

MOBILIZATION
1 LUMP SUM

ADDITIONAL MOBILIZATION FOR SEEDING
4 EACH

CONTRACTOR SURVEYING AND STAKING
1 LUMP SUM

SUMMARY OF QUANTITIES
SHEET 1 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:19:35 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

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 - CONTINUED

STATION FROM	STATION TO	ALIGNMENT	LENGTH (FT)	AREA (SY)	QTY (EACH)	DESCRIPTION	REMARKS
MO 52 CONT'D.							
643+86.00		MO 52 Lt.		17		CONCRETE DITCH LINER	INLET OF PIPE UNDER WESTVUE EAST DRIVEWAY
643+85.00	644+49.00	MO 52 Lt.	66			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS WESTVUE EAST DRIVEWAY
644+17.00		MO 52 Lt.	61			24" CMP	PIPE UNDER WESTVUE EAST DRIVEWAY
644+17.00		MO 52 Lt.		254		8" CONCRETE SURFACE	WESTVUE EAST DRIVEWAY
644+49.00		MO 52 Lt.		37		CONCRETE DITCH LINER	OUTLET OF PIPE UNDER WESTVUE EAST DRIVEWAY
645+14.00		MO 52 CL	38			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS MO 52
645+40.00		MO 52 CL Lt.			1	4' MANHOLE	SANITARY SEWER AT OULET END OF CULVERT XING 52
645+48.00		MO 52 CL Lt.	23			10" PIPE	SANITARY SEWER AT OULET END OF CULVERT XING 52
645+58.00		MO 52 CL Lt.			1	4' MANHOLE, 1- CONC. BASE	SANITARY SEWER AT OULET END OF CULVERT XING 52
645+70.00		MO 52 CL Lt.	24			10" PIPE	SANITARY SEWER AT OULET END OF CULVERT XING 52
645+70.00	646+08.00	MO 52 Rt.	38			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS EAGLE STOP DRIVEWAY
645+75.00		MO 52 Rt.	19			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS MO 52 EB LANE
645+75.00	645+87.00	MO 52 CL	12			FULL DEPTH SAWCUT	LONGITUDINAL CUT ALONG MO 52 CL
645+75.00	646+93.00	MO 52 CL	118			FULL DEPTH SAWCUT	CUT STRAIGHT EDGE FOR CURB AND GUTTER
645+82.00		MO 52 Lt.			1	4' MANHOLE, 1- CONC. BASE	SANITARY SEWER AT OULET END OF CULVERT XING 52
645+87.00		MO 52 Lt.	19			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS MO 52 WB LANE
645+87.00	646+93.00	MO 52 Lt.	106			FULL DEPTH SAWCUT	CUT STRAIGHT EDGE FOR WIDENING
645+90.00		MO 52 Lt.	23			10" PIPE	SANITARY SEWER AT OULET END OF CULVERT XING 52
645+90.00		MO 52 Rt.	108			2- 54'x 24" CMP'S	PIPES UNDER EAGLE STOP DRIVEWAY
645+90.00		MO 52 Rt.		188		CONCRETE SURFACE	EAGLE STOP DRIVEWAY
645+99.00		MO 52 Lt.			1	4' MANHOLE	SANITARY SEWER AT OULET END OF CULVERT XING 52
646+08.00	646+45.00	MO 52 Rt.	39			FULL DEPTH SAWCUT	LONGITUDINAL CUT IN PARKING LOT ALONG R/W
646+08.00		MO 52 Rt.	18			CONCRETE CURB	EAGLE STOP PARKING LOT ALONG R/W
646+93.00		MO 52 CL	38			FULL DEPTH SAWCUT	TRANSVERSE CUT STRAIGHT EDGE FOR CONCRETE OVERLAY
CULVERT CROSSING MO 52							
2+00.00		52 CULVERT BL	38			FULL DEPTH SAWCUT	TRANSVERSE CUT ACROSS CONCRETE INLET DITCH
2+46.00		52 CULVERT BL Lt.		15		CONCRETE DITCH LINER	DITCH UPSTREAM ALONG MO 52
2+60.00		52 CULVERT BL Rt.		36		CONCRETE DITCH LINER	DITCH AT OUTLET OF PIPES UNDER EAGLE STOP DRIVEWAY
2+51.00	3+27.00	52 CULVERT BL			1	12'x 4' RCB, 2- HEADWALLS	REMOVE IN 2 STAGES, STAGE POINT AT STATION 2+95
EAST NEWTON STREET							
9+60.00		E NEWTON ST. BL	35			FULL DEPTH SAWCUT	TRAN. CUT STRAIGHT EDGE FOR CONCRETE OVERLAY
9+60.00	9+80.00	E NEWTON ST. Lt.	22			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR WIDENING
9+80.00	10+18.00	E NEWTON ST. Lt.	38			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR CURB AND GUTTER
MO 5 & 52							
649+72.00		MO 5&52 CL	39			FULL DEPTH SAWCUT	TRAN. CUT STRAIGHT EDGE FOR CONCRETE OVERLAY
649+72.00	651+50.00	MO 5&52 Rt.	178			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR WIDENING
649+72.00	653+39.80	MO 5&52 Lt.	368			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR WIDENING
651+50.00	654+00.00	MO 5&52 Rt.	250			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR CURB AND GUTTER
653+39.80	654+00.00	MO 5&52 Lt.	60			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR CURB AND GUTTER
MO 5							
0+65.00		MO 5 Lt.	3			18" CMP, 1 F.E.S.	CROSSROAD PIPE INCL. F.E.S.
0+65.00		MO 5 Rt.	3			18" CMP	CROSSROAD PIPE
0+65.00		MO 5 Rt.			1	CONC. HEADWALL	CROSSROAD PIPE
0+80.00		MO 5 CL	46			FULL DEPTH SAWCUT	TRAN. CUT STRAIGHT EDGE FOR CONCRETE OVERLAY
0+80.00	1+12.80	MO 5 Lt.	33			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR CURB AND GUTTER
0+80.00	2+06.56	MO 5 Rt.	127			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR WIDENING
1+12.80	3+50.00	MO 5 Lt.	237			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR WIDENING
2+06.56	3+50.00	MO 5 Rt.	143			FULL DEPTH SAWCUT	LONG. CUT STRAIGHT EDGE FOR CURB AND GUTTER
WESTVIEW DRIVE							
9+23.80		WESTVIEW BL	50			FULL DEPTH SAWCUT	SAWCUT FOR CULVERT INSTALLATION
9+23.80		WESTVIEW Lt.	2.5			FULL DEPTH SAWCUT	TRANSVERSE CUT CURB AND GUTTER
9+23.80		WESTVIEW Lt.	5			FULL DEPTH SAWCUT	TRANSVERSE CUT 4" SIDEWALK
9+42.25		WESTVIEW BL	112			36" CMP	EXISTING CROSSROAD PIPE. TO BE REMOVED IN ONE STAGE
9+42.25		WESTVIEW BL	111			72" CMP	EXISTING CROSSROAD PIPE. TO BE REMOVED IN ONE STAGE
9+42.25		WESTVIEW BL	112			72" CMP	EXISTING CROSSROAD PIPE. TO BE REMOVED IN ONE STAGE
9+59.00		WESTVIEW BL	75			FULL DEPTH SAWCUT	SAWCUT FOR CULVERT INSTALLATION
9+67.00		WESTVIEW Lt.	2.5			FULL DEPTH SAWCUT	TRANSVERSE CUT CURB AND GUTTER
9+67.00		WESTVIEW Lt.	5			FULL DEPTH SAWCUT	TRANSVERSE CUT 4" SIDEWALK
9+59.30		WESTVIEW Lt.			1	2'x 1' DROP INLET	STORMWATER DRAINAGE
9+59.30		WESTVIEW Lt.	14			18" CMP, 1- F.E.S.	OUTLET PIPE, INCL. F.E.S.

SUMMARY OF QUANTITIES
SHEET 2 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
09/15/2024 3:19:25 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

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 - CONTINUED

STATION FROM	STATION TO	ALIGNMENT	LENGTH (FT)	AREA (SY)	QTY (EACH)	DESCRIPTION	REMARKS
ROUNDABOUT							
646+93.00	647+47.30	MO 52 Lt.	52			FULL DEPTH SAWCUT	PHASE 1 STAGE 1 CONSTRUCTION
646+93.00	1+90.00	52 CL TO RB BL	110			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 1, END CUT 14' Rt. OF RB BL
646+93.00		MO 52 Lt.	19			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 1
2+17.30		ROUNDABOUT BL	35			FULL DEPTH SAWCUT	PHASE 1 STAGE 1 CONSTRUCTION
2+17.30	2+26.30	ROUNDABOUT BL	9			FULL DEPTH SAWCUT, R33'	PHASE 1 STAGE 1 CONSTRUCTION
646+93.00	647+23.00	MO 52 Rt.	30			FULL DEPTH SAWCUT	PHASE 1 STAGE 2 CONSTRUCTION
646+93.00		MO 52 Rt.	19			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 2
647+23.00	1+75.00	MO 52 Rt. TO R.B. BL	64			FULL DEPTH SAWCUT, R75'	PHASE 1 STAGE 2 CONSTRUCTION
1+60.00	1+75.00	ROUNDABOUT BL	54			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 2, START 14' Rt. & END 25' Lt. RB BL
0+06.80		ROUNDABOUT BL	9			FULL DEPTH SAWCUT, R33'	PHASE 1 STAGE 3 CONSTRUCTION
0+06.80		ROUNDABOUT BL	35			FULL DEPTH SAWCUT	PHASE 1 STAGE 3 CONSTRUCTION
649+24.50	649+72.00	MO 5&52 Lt.	48			FULL DEPTH SAWCUT	PHASE 1 STAGE 3 CONSTRUCTION
649+72.00		MO 5&52 Lt.	19			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 3
0+34.00	649+72.00	R.B. BL TO 5&52 CL	101			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 3, START 14' Rt. RB BL
0+52.00	649+50.00	R.B. BL TO MO 5&52 Rt.	60			FULL DEPTH SAWCUT, R80'	PHASE 1 STAGE 4 CONSTRUCTION
649+50.00	649+72.00	MO 5&52 Rt.	22			FULL DEPTH SAWCUT	PHASE 1 STAGE 4 CONSTRUCTION
649+72.00		MO 5&52 Lt.	21			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 4
0+52.00		ROUNDABOUT BL	39			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 4, START 24.8' Lt., END 14' Rt. RB BL
0+52.00	9+34.15	R.B. BL TO E.NEWT. Lt.	66			FULL DEPTH SAWCUT, R80'	PHASE 1 STAGE 7 CONSTRUCTION
9+34.15	9+53.90	E. NEWT. Lt.	20			FULL DEPTH SAWCUT	PHASE 1 STAGE 7 CONSTRUCTION
9+53.90	9+60.00	E. NEWT. Lt.	8			FULL DEPTH SAWCUT	PHASE 1 STAGE 7 CONSTRUCTION
9+60.00		E. NEWT. Lt.	18			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 7
1+00.00	9+60.00	R.B. BL TO E.NEWT. CL	126			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 7, START 14' Rt RB CL
1+15.00	9+20.57	R.B. BL TO E.NEWT. Rt.	56			FULL DEPTH SAWCUT, R80'	PHASE 1 STAGE 8 CONSTRUCTION
9+20.57	9+27.63	E. NEWT. Rt.	7			FULL DEPTH SAWCUT	PHASE 1 STAGE 8 CONSTRUCTION
9+60.00		E. NEWT. Rt.	18			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 8
1+15.00	0+77.89	R.B. BL TO MO 5 Lt.	46			FULL DEPTH SAWCUT, R80'	PHASE 1 STAGE 6 CONSTRUCTION
0+77.89	0+80.00	MO 5 Lt.	2			FULL DEPTH SAWCUT	PHASE 1 STAGE 6 CONSTRUCTION
0+80.00		MO 5 Lt.	23			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 6
1+15.00		ROUNDABOUT BL	53			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 6, START 38.8' Lt., END 14' Rt. RB BL
0+80.00		MO 5 Rt.	23			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 5
1+75.00	0+80.00	R.B. BL TO MO 5 Rt.	50			FULL DEPTH SAWCUT, R75'	PHASE 1 STAGE 5 CONSTRUCTION
1+27.00	0+80.00	R.B. BL TO MO 5	84			PARTIAL DEPTH SAWCUT	PHASE 1 STAGE 5, START 14' Rt. RB BL
0+06.80	2+17.30	ROUNDABOUT BL	148			FULL DEPTH SAWCUT, R33'	PHASE 1 STAGE 13 CONSTRUCTION
EXISTING SIGNAL SYSTEM							
647+85.00		MO 52 Lt.			1	SIGNAL POLE	40' LEFT IN NORTHWEST QUADRANT
647+85.00	648+90.00	MO 52 TO MO 5 & 52	116		3	SIGNAL HEAD, SPAN WIRE	NORTH LEG OF INTERSECTION
647+85.00	648+90.00	MO 52 TO MO 5 & 52			2	SIGN	SIGNS MOUNTED ON SPAN WIRE; NORTH LEG OF INTERSECTION
648+90.00		MO 5 & 52 Rt.			1	SIGNAL POLE	62' RIGHT IN NORTHEAST QUADRANT
648+90.00	0+47.00	MO 5 & 52 TO MO 5	103		3	SIGNAL HEAD, SPAN WIRE	EAST LEG OF INTERSECTION
648+90.00	0+47.00	MO 5 & 52 TO MO 5			2	SIGN	SIGNS MOUNTED ON SPAN WIRE; EAST LEG OF INTERSECTION
0+47.00		MO 5 Lt.			1	SIGNAL POLE	62' LEFT IN SOUTHEAST QUADRANT
0+47.00	0+63.00	MO 5	110		3	SIGNAL HEAD, SPAN WIRE	SOUTH LEG OF INTERSECTION
0+47.00	0+63.00	MO 5			2	SIGN	SIGNS MOUNTED ON SPAN WIRE; SOUTH LEG OF INTERSECTION
0+63.00		MO 5 Rt.			1	SIGNAL POLE	46' RIGHT IN SOUTHWEST QUADRANT
0+63.00	647+85.00	MO 5 TO MO 52	97		3	SIGNAL HEAD, SPAN WIRE	WEST LEG OF INTERSECTION
0+63.00	647+85.00	MO 5 TO MO 52			2	SIGN	SIGNS MOUNTED ON SPAN WIRE; WEST LEG OF INTERSECTION
648+90.00		MO 5 & 52 Rt.			1	SIGNAL CONTROLLER	62' RIGHT IN NORTHEAST QUADRANT; SALVAGE AND STORE AT MODOT FACILITY
648+90.00		MO 5 & 52 Rt.			1	CONTROLLER BASE	CONCRETE FOUNDATION UNDER CONTROLLER

SUMMARY OF QUANTITIES
SHEET 3 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:38:25 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

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 - CONTINUED (SIGNS - REMOVALS AND RELOCATIONS)

SIGN OR SIGN SET	STATION	ALIGNMENT	SIGNS (EACH)	SIGNS (SF)	POSTS (EACH)	REMARKS
1	621+71	MO 52 RT.	1	6	1	REMOVE SIGN AND POST (CENTER LANE ONLY) - RELOCATE EXISTING SIGN TO NEW LOCATION ON NEW POST
2	622+80	MO 52 RT.	2	11	1	REMOVE SIGNS AND POST (PEDESTRIAN CROSSING, AHEAD) - RELOCATE EXISTING SIGNS TO NEW LOCATION ON NEW POST
3	0+95	FAIR. RD	1	-	1	REMOVE SIGN AND POST (FAIRGROUNDS RD.) - RELOCATE TO SAME LOCATION ON NEW POST
4	0+95	FAIR. RD.	1	9	1	REMOVE SIGN AND POST (STOP) - RELOCATE TO SAME LOCATION ON NEW POST
	629+30	MO 52 RT.	2	-	1	REMOVED BY OTHERS
5	630+97	MO 52 LT.	1	6	1	REMOVE SIGN AND POST (CENTER LANE ONLY) - RELOCATE EXISTING SIGN TO NEW LOCATION ON NEW POST
6	632+25	MO 52 LT.	2	12.75	-	REMOVE SIGNS FROM SIGNAL POLE AND RELOCATE TO NEW SIGNAL POLE (PEDESTRIAN CROSSING, DOWNWARD DIAGONAL ARROW)
7	632+25	MO 52 LT.	2	12.75	-	REMOVE SIGNS FROM SIGNAL POLE AND RELOCATE TO NEW SIGNAL POLE (PEDESTRIAN CROSSING, DOWNWARD DIAGONAL ARROW)
8	632+10	MO 52 RT.	2	12.75	-	REMOVE SIGNS FROM SIGNAL POLE AND RELOCATE TO NEW SIGNAL POLE (PEDESTRIAN CROSSING, DOWNWARD DIAGONAL ARROW)
9	632+10	MO 52 RT.	2	12.75	-	REMOVE SIGNS FROM SIGNAL POLE AND RELOCATE TO NEW SIGNAL POLE (PEDESTRIAN CROSSING, DOWNWARD DIAGONAL ARROW)
10	632+25	MO 52 LT.	1	0.75	-	REMOVE SIGN FROM SIGNAL POLE AND RELOCATE TO NEW SIGNAL POLE (PUSH BUTTON TO ACTIVATE WARNING LIGHTS)
11	632+10	MO 52 RT.	1	0.75	-	REMOVE SIGN FROM SIGNAL POLE AND RELOCATE TO NEW SIGNAL POLE (PUSH BUTTON TO ACTIVATE WARNING LIGHTS)
	632+90	MO 52 LT.	1	-	-	RELOCATE BY OTHERS (UTILITY SIGN)
13	636+25	MO 52 LT.	1	-	1	REMOVE SIGN AND POST (HITE PRAIRIE CONSERVATION AREA) - RELOCATE EXISTING SIGN TO SAME LOCATION ON NEW POST
15	637+68	MO 52 RT.	3	10.19	1	REMOVE SIGNS AND POST (JUNCTION, ROUTE W, MO 5) - RELOCATE EXISTING SIGNS TO SAME LOCATION ON NEW POST
17	640+68	MO 52 LT.	3	15	-	REMOVE SIGNS FROM SIGNAL POLE
17A	640+63	MO 52 LT.	2	11	1	REMOVE SIGNS AND POST (PEDESTRIAN CROSSING, AHEAD) - RELOCATE EXISTING SIGNS TO NEW LOCATION ON NEW POST
18	0+68	WESTVIEW DR.	1	9	1	REMOVE SIGN AND POST (STOP) - RELOCATE TO SAME LOCATION ON NEW POST
19	642+70	MO 52 LT.	1	-	1	REMOVE SIGN AND POST (WESTVIEW DR) - RELOCATE EXISTING SIGN TO NEW LOCATION ON NEW POST
20	642+70	MO 52 LT.	1	-	-	REMOVE SIGN (HIGHWAY 52) - RELOCATE EXISTING SIGN TO NEW LOCATION ON SAME POST AS NUMBER 19
	643+20	MO 52 LT.	1	-	-	RELOCATE BY OTHERS (UTILITY SIGN)
21	643+40	MO 52 LT.	1	12	1	REMOVE SIGN AND POST (SPEED LIMIT 35) - RELOCATE EXISTING SIGN ON NEW POST AT NEW LOCATION
	643+45	MO 52 RT.	2	6.18	1	REMOVE SIGNS AND POST (MO 52, ADVANCE LEFT ARROW)
	644+80	MO 52 RT.	1	15	2	REMOVE SIGN AND POSTS (ELDON 18, TIPTON 17, GRAVOIS MILLS 9)
	644+80	MO 52 RT.	1	-	-	RELOCATE BY OTHERS (UTILITY SIGN)
24	645+92	MO 52 LT.	2	5	1	REMOVE SIGNS AND POST (WEST, MO 52) - RELOCATE EXISTING SIGNS TO NEW LOCATION ON NEW POST
	646+84	MO 52 RT.	6	18.56	1	REMOVE SIGNS AND POST (DIRECTION ARROW (STRAIGHT), ROUTE W, MO 52, DIRECTION ARROW (LEFT), MO 5, DIRECTION ARROW (2 WAY)
		MO 52/ MO 5	8	-	-	REMOVE SIGNS FROM SPAN WIRE (STREET NAMES, LEFT TURN SIGNAL)
	1+45	NEWT LT.	4	12.37	1	REMOVE SIGNS AND POST (MO 5, DIRECTION ARROW (LEFT), MO 52, DIRECTION ARROW (UP AND RIGHT)
	1+93	NEWT LT.	1	15	2	REMOVE SIGN AND POSTS (STOVER 8, GRAVOIS MILLS 9, TIPTON 17)
39	649+71	MO 5/ 52 RT.	4	12.37	1	REMOVE SIGNS AND POST (NORTH, MO 5, EAST, MO 52) - REPLACE WITH NEW SIGNS AND POST AT NEW LOCATION
	649+97	MO 5/ 52 LT.	6	18.56	1	REMOVE SIGNS AND POST (MO 5, DIRECTION ARROW (STRAIGHT), ROUTE W, DIRECTION ARROW (LEFT), MO 52, DIRECTION ARROW (RIGHT)
41	650+85	MO 5/ 52 RT.	2	11	1	REMOVE SIGNS AND POST (PEDESTRAIN CROSSING, AHEAD) - RELOCATE EXISTING SIGNS TO NEW LOCATION ON NEW POST
	651+44	MO 5/ 52 LT.	1	10	2	REMOVE SIGN AND POSTS (GRAVOIS MILLS 9, STOVER 8)
45	654+65	MO 5/ 52 LT.	1	9	1	REMOVE SIGN AND POST (STOP) - RELOCATE TO SAME LOCATION ON NEW POST
	657+87	MO 5/ 52 LT.	4	12.37	1	REMOVE SIGNS AND POST (MO 5, DIRECTION ARROW (STRAIGHT), MO 52, DIRECTION ARROW (UP AND RIGHT)
	1+29	MO 5 LT.	6	18.56	1	REMOVE SIGNS AND POST (MO 5, DIRECTION ARROW (STRAIGHT), MO 52, DIRECTION ARROW (UP AND LEFT), ROUTE W, DIRECTION ARROW (RIGHT)
	1+74	MO 5 RT.	2	6	1	REMOVE SIGNS AND POST (SOUTH, MO 5) - RELOCATE EXISTING SIGNS TO NEW LOCATION ON NEW POST
	4+08	MO 5 LT.	1	15	2	REMOVE SIGN AND POSTS (TIPTON 17, ELDON 18, STOVER 8)
		TOTAL	LUMP SUM			

COLDMILLING BITUM. PAVEMENT FOR REMOVAL OF SURFACE

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	WIDTH (ft)	QUANTITIES < 3" (sy)	QUANTITIES > 3" (sy)	REMARKS
617+78.00	622+57.40	MO 52 Lt.	479.4	VAR.		268.0	4" DEPTH; BIT. PAV. ON LEFT OF EXIST. NRPCCP PAVEMENT JUST BACK OF BROWN ROAD
622+57.40	629+00.00	MO 52 CL	743.6	35		2891.8	4" DEPTH; FROM EXIST. NRPCCP SECTION TO START OF RIGHT WIDENING
629+00.00	632+50.00	MO 52 CL	350.0	32.75		1273.6	4" DEPTH; SLOPE CORRECTION; FROM START OF PAVEMENT WIDENING TO END OF EXIST. CURB AND GUTTER ON LEFT
632+50.00	633+30.00	MO 52 CL	80.0	31.61		281.0	4" DEPTH; SLOPE CORRECTION; BETWEEN LIMITS OF TAPER FROM 3-LANES TO 2-LANES AND START OF LEFT WIDENING
633+30.00	633+80.00	MO 52 CL	50.0	28		155.6	4" DEPTH; SLOPE CORRECTION; FRONTING SCHOOL'S MIDDLE DRIVEWAY
633+80.00	635+33.00	MO 52 CL	153.0	25		425.0	4" DEPTH; SLOPE CORRECTION; CONTINUING TAPER DOWN TO EXIST. 2-LANE
635+33.00	645+14.00	MO 52 CL	981.0	22		2398.0	4" DEPTH; SLOPE CORRECTION; EXIST. 2-LANE ENDING JUST BACK OF CULVERT
645+75.00	645+87.00	MO 52 Rt.	12.0	19	25.3		2" DEPTH; SLOPE CORRECTION; FRONTING EAGLE STOP DRIVEWAY
645+87.00	646+93.00	MO 52 CL	106	38	447.6		2" DEPTH; SLOPE CORRECTION; FROM CULVERT TO START OF PROP. CONCRETE OVERLAY
646+93.00		MO 52 CL	VAR.	VAR.		203.9	7" DEPTH; PHASE 1 STAGE 1 CONSTRUCTION OF CONCRETE OVERLAY
646+93.00		MO 52 CL	VAR.	VAR.		267.1	7" DEPTH; PHASE 1 STAGE 2 CONSTRUCTION OF CONCRETE OVERLAY
622+62.00	623+25.00	MO 52 Rt.	63.0	VAR.		41.3	4" DEPTH; RIGHT SHOULDER JUST BACK OF BROWN ROAD
623+25.00	622+85.00	MO 52 Rt.	60	VAR.		142.2	4" DEPTH; BROWN ROAD APRON
622+85.00	627+26.00	MO 52 Rt.	441.0	VAR.		174.7	4" DEPTH; RIGHT SHOULDER FROM BROWN ROAD TO CONCRETE McDONALD'S DRIVEWAYS
9+60.00		E. NEWTON BL	VAR.	VAR.		420.3	7" DEPTH; PHASE 1 STAGE 5 CONSTRUCTION OF CONCRETE OVERLAY
9+60.00		E. NEWTON BL	VAR.	VAR.		325.2	7" DEPTH; PHASE 1 STAGE 6 CONSTRUCTION OF CONCRETE OVERLAY
9+60.00	9+80.00	E. NEWTON BL	20.0	34.67	77.0		2" DEPTH; SLOPE CORRECTION; FRONTING BANK
9+80.00	10+18.00	E. NEWTON BL	38.0	34.57	146.0		2" DEPTH; SLOPE CORRECTION; FRONTING BANK
10+18.00	11+00.00	E. NEWTON BL	82.0	29.36	267.5		2" DEPTH; FRONTING BANK
649+72.00		MO 5&52 CL	VAR.	VAR.		186.5	7" DEPTH; PHASE 1 STAGE 3 CONSTRUCTION OF CONCRETE OVERLAY
649+72.00		MO 5&52 CL	VAR.	VAR.		252.2	7" DEPTH; PHASE 1 STAGE 4 CONSTRUCTION OF CONCRETE OVERLAY
649+72.00	651+13.70	MO 5&52 CL	141.7	40.89	643.8		2" DEPTH; FROM END OF PROP. CONC. OVERLAY TO CURVE SC POINT
651+13.70	654+00.00	MO 5&52 CL	286.3	40.89	1300.8		2" DEPTH; FROM CURVE SC POINT TO START OF TAPER TO WESTVIEW DR.
654+00.00	655+85.00	MO 5&52 CL	185.0	VAR.	1100.2		2" DEPTH; FROM START OF TAPER TO WESTVIEW DR. TO END OF PROJECT
0+80.00		MO 5 CL	VAR.	VAR.		239.7	7" DEPTH; PHASE 1 STAGE 7 CONSTRUCTION OF CONCRETE OVERLAY
0+80.00		MO 5 CL	VAR.	VAR.		289.8	7" DEPTH; PHASE 1 STAGE 8 CONSTRUCTION OF CONCRETE OVERLAY
0+80.00	1+05.00	MO 5 CL	25.0	42.1	116.9		2" DEPTH; FROM END OF PROP. CONC. OVERLAY
1+05.00	7+00.00	MO 5 CL	595.0	38	2512.2		2" DEPTH; TO END OF PAVING
8+95.00	9+23.83	WESTVIEW DR.	28.8	46.72	149.5		2" DEPTH; FROM R/W TO CULVERT
9+59.30	9+64.68	WESTVIEW DR.	5.4	VAR.	49.3		2" DEPTH; FROM CULVERT TO MO 5&52
0+29.00	0+40.00	FAIRGROUND RD	8.0	48	42.7		2" DEPTH; END OF CONCRETE APPROACH
				TOTAL	6878.8	10235.9	
				USE	6879	10236	

SUMMARY OF QUANTITIES
SHEET 4 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:38:50 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 4/10/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 3
COUNTY: MORGAN
JOB NO.: J5P3575
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)

OPTIONAL PAVEMENT - 7 IN HMA VS 7 IN NRPCCP

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	WIDTH (ft)	QUANTITIES (sy)	REMARKS
9+23.83	9+59.30	WESTVIEW DR	35.5	VAR.	242.8	OVER CULVERT CONSTR.
2+68.16	4+58.00	P2S2 BYPASS	189.8	VAR.	324.4	START PHASE 2 STAGE 2 BYPASS TO CULVERT
4+58.00	5+40.00	P2S2 BYPASS	82.0	28	255.1	BYPASS OVER CULVERT
5+40.00	5+65.36	P2S2 BYPASS	25.4	31.75	89.6	BYPASS OVER CULVERT
5+65.36	5+77.36	P2S2 BYPASS	12.0	35.5	47.3	BYPASS OVER CULVERT
5+77.36	7+16.98	P2S2 BYPASS	139.6	VAR.	306.4	BYPASS FROM CULVERT TO END OF PHASE 2 STAGE 2 BYPASS
				TOTAL	1265.6	
				USE	1265.6	

OPTIONAL PAVEMENT - 10 IN HMA VS 8.5 IN NRPCCP

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	AVG WIDTH (ft)	QUANTITIES (sy)	REMARKS
645+14.00	645+75.00	MO 52 CL	61.0	38	257.6	PAVEMENT OVER CULVERT
645+75.00	645+87.00	MO 52 Lt	12.0	19	25.3	PAVEMENT OVER CULVERT; LEFT LANE ONLY
				TOTAL	282.9	
				USE	282.9	

10 INCHES, ASPHALTIC CONCRETE PAVEMENT, SP125C

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	AVG WIDTH (ft)	QUANTITIES (sy)	REMARKS
629+00.00	645+14.00	MO 52 Rt.	1614.0	8	1434.7	WIDENING RIGHT FROM McDONALDS TO CULVERT
633+30.00	633+80.00	MO 52 Lt	50.0	2	11.1	WIDENING LEFT IN FRONT OF SCHOOL'S MIDDLE DRIVEWAY
633+80.00	635+33.00	MO 52 Lt	153.0	5	85.0	WIDENING LEFT TAPER DOWN TO EXIST. 2-LANE
635+33.00	645+14.00	MO 52 Lt	981.0	8	872.0	WIDENING LEFT START OF EXIST. 2-LANE ENDING JUST BACK OF CULVERT
0+26.01	1+40.93	NW QUAD CnG	114.9	4.45	56.8	WIDENING LEFT OF MO 52 ALONG NW QUAD BASELINE TO RADIUS POINT
1+40.93	1+94.36	NW QUAD CnG	53.4	VAR.	74.2	WIDENING LEFT OF MO 52 ALONG NW QUAD BASELINE TO START OF PROP. CONC. SURFACE
3+66.19	7+46.58	NW QUAD CnG	380.4	VAR.	613.5	WIDENING LEFT OF MO 5&52 ALONG NW QUAD BASELINE FROM PROP. CONCRETE TO END OF WIDENING
3+12.00	4+40.17	SW QUAD CnG	128.2	VAR.	105.6	START WIDENING RIGHT OF MO 5 AT PROP. CONC TO END WIDENING RIGHT OF MO 5 ALONG SW QUAD BASELINE
3+09.53	5+48.28	SE QUAD CnG	238.8	VAR.	174.8	START WIDENING LEFT OF MO 5 TO END WIDENING LEFT OF MO 5 ALONG SE QUAD BASELINE
2+17.32	3+91.84	NE QUAD CnG	174.5	VAR.	109.2	START WIDENING LEFT OF E. NEWTON TO END WIDENING RIGHT OF MO 5&52 ALONG NE QUAD BASELINE
				TOTAL	3536.9	
				USE	3536.9	

HOT MIX ASPHALT RESURFACING

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	PAY WIDTH (ft)	TOP AREA (sy)	THICK (in)	QUANTITIES (PG64-22) SP125C (T)	BP-1 (T)	TACK (gal)	REMARKS
617+78.00	622+57.40	MO 52 Lt.	479.4	VAR.	268.0	4	58.7		26.8	BIT. PAV. ON LEFT OF EXIST. NRPCCP PAVEMENT JUST BACK OF BROWN ROAD
622+57.40	629+00.00	MO 52 CL	743.6	35	2891.8	4	633.0		289.2	FROM EXIST. NRPCCP SECTION TO START OF RIGHT WIDENING
629+00.00	632+50.00	MO 52 CL	350.0	32.75	1273.6	4	278.8		127.4	FROM START OF PAVEMENT WIDENING TO END OF EXIST. CURB AND GUTTER ON LEFT
632+50.00	633+30.00	MO 52 CL	80.0	31.61	281.0	4	61.5		28.1	BETWEEN LIMITS OF TAPER FROM 3-LANES TO 2-LANES AND START OF LEFT WIDENING
633+30.00	633+80.00	MO 52 CL	50.0	28	155.6	4	34.1		15.6	FRONTING SCHOOL'S MIDDLE DRIVEWAY
633+80.00	635+33.00	MO 52 CL	153.0	25	425.0	4	93.0		42.5	CONTINUING TAPER DOWN TO EXIST. 2-LANE
635+33.00	645+14.00	MO 52 CL	981.0	22	2398.0	4	524.9		239.8	EXIST. 2-LANE ENDING JUST BACK OF CULVERT
645+75.00	645+87.00	MO 52 Rt.	12.0	19	25.3	2	2.8		2.5	FRONTING EAGLE STOP DRIVEWAY
645+87.00	646+93.00	MO 52 CL	106	38	447.6	2	49.0		44.8	FROM CULVERT TO START OF PROP. CONCRETE OVERLAY
622+62.00	623+25.00	MO 52 Rt.	63.0	VAR.	41.3	4	9.0		4.1	RIGHT SHOULDER JUST BACK OF BROWN ROAD
623+25.00	622+85.00	MO 52 Rt.	60	VAR.	142.2	4	31.1		14.2	BROWN ROAD APRON
622+85.00	627+26.00	MO 52 Rt.	441.0	VAR.	174.7	4	38.2		17.5	RIGHT SHOULDER FROM BROWN ROAD TO CONCRETE McDONALD'S DRIVEWAYS
9+60.00	9+80.00	E. NEWTON BL	20.0	34.67	77.0	2	8.4		7.7	FRONTING BANK
9+80.00	10+18.00	E. NEWTON BL	38.0	34.57	146.0	2	16.0		14.6	FRONTING BANK
10+18.00	11+00.00	E. NEWTON BL	82.0	29.36	267.5	2	29.3		26.8	FRONTING BANK
649+72.00	651+13.70	MO 5&52 CL	141.7	40.89	643.8	2	70.5		64.4	FROM END OF PROP. CONC. OVERLAY TO CURVE SC POINT
651+13.70	654+00.00	MO 5&52 CL	286.3	40.89	1300.8	2	142.4		130.1	FROM CURVE SC POINT TO START OF TAPER TO WESTVIEW DR.
654+00.00	655+85.00	MO 5&52 CL	185.0	VAR.	1100.2	2	120.4		110.0	FROM START OF TAPER TO WESTVIEW DR. TO END OF PROJECT
0+80.00	1+05.00	MO 5 CL	25.0	42.1	116.9	2	12.8		11.7	FROM END OF PROP. CONC. OVERLAY
1+05.00	7+00.00	MO 5 CL	595.0	38	2512.2	2	274.9		251.2	TO END OF PAVING
8+95.00	9+23.83	WESTVIEW DR.	28.8	46.72	149.5	2		16.5	15.0	FROM R/W TO CULVERT
9+59.30	9+64.68	WESTVIEW DR.	5.4	VAR.	49.3	2		5.4	4.9	FROM CULVERT TO MO 5&52
0+32.00	0+40.00	FAIRGROUND RD.	8.0	48	42.7	2		4.7	4.3	END OF CONCRETE APPROACH
						TOTAL	2488.8	26.6	1493.2	
						USE	2488.8	26.6	1493	

SUMMARY OF QUANTITIES
SHEET 5 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 10:25:40 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/21/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 3
COUNTY: MORGAN
JOB NO.: J5P3575
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)

GRAVEL (A) OR CRUSHED STONE (B)

STATION TO	STATION FROM	ALIGNMENT	LENGTH (ft)	WIDTH (ft)	THICK (in)	TOP AREA (sy)	QUANTITY (T)	REMARKS
0+34.00	0+42.00	PINNACLE WEST DWY	8.00	38	2	33.8	2.6	TIE TO PARKING LOT
0+34.00	0+67.00	PINNACLE EAST DWY	33.00	38	2	139.3	10.9	TIE TO PARKING LOT
0+19.00	0+40.00	EAGLE STOP DWY	21.00	VAR.	2	184.7	15.0	PHASE 2 STAGE 2, TEMP. WIDENING OF DRIVEWAY
		ROUNDABOUT	832.00	1	7	92.4	26.0	CONCRETE OVERLAY BACKFILL
		MISC.	VAR.	VAR.	2	230.0	17.9	USE FOR TEMP SURF. FOR VARIOUS DRIVEWAY CONSTR.
						TOTAL	72.4	
						USE	72	

PAVED APPROACH, 8 IN.

STATION TO	STATION FROM	ALIGNMENT	LOCATION	LENGTH (ft)	8 IN. PAVED APPROACH (sy)	REMARKS
628+85.00		52 Rt	McDONALDS EAST DRIVEWAY	VAR.	15.69	PARTIAL, MODIFIED APPROACH
629+60.00		52 Rt	FAIRGROUNDS ROAD	13	79.13	MODIFIED APPROACH
633+45.00		52 Lt	SCHOOL MIDDLE DRIVEWAY	15	79.7	STANDARD APPROACH, STUB
638+32.00		52 Lt	SCHOOL EAST DRIVEWAY	66	209.85	MODIFIED APPROACH
640+98.00		52 Rt	PARK ACCESS ROAD	15	49.87	MODIFIED APPROACH
641+35.00		52 Lt	GUINN DRIVEWAY	22	150.4	MODIFIED APPROACH
641+75.00		52 Rt	PINNACLE GAS WEST DRIVEWAY	15	77.53	STANDARD APPROACH
642+42.80		52 Lt	WESTVUE WEST DRIVEWAY	26	174.51	STANDARD APPROACH
643+78.00		52 Rt	PINNACLE GAS EAST DRIVEWAY	16	76.08	STANDARD APPROACH
644+17.00		52 Lt	WESTVUE EAST DRIVEWAY	31	198.02	STANDARD APPROACH
645+90.00		52 Rt	EAGLE STOP DRIVEWAY	41	208.6	STANDARD APPROACH
				TOTAL	1319.4	
				USE	1319.4	

UNBONDED CONCRETE OVERLAY (7 INCH NON-REINFORCED)

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	WIDTH (ft)	THICK (in)	FURNISHING (cy)	PLACING (sy)	FURNISHING - TINTED* (cy)	PLACING - STAMPED (sy)	REMARKS
646+93.00		MO 52 CL	VAR.	VAR.	7	39.6	167.7	7.0	36.2	PHASE 1 STAGE 1 CONSTRUCTION OF CONCRETE OVERLAY
646+93.00		MO 52 CL	VAR.	VAR.	7	51.9	227.4	7.7	39.7	PHASE 1 STAGE 2 CONSTRUCTION OF CONCRETE OVERLAY
649+72.00		MO 5&52 CL	VAR.	VAR.	7	36.3	151.0	6.9	35.5	PHASE 1 STAGE 3 CONSTRUCTION OF CONCRETE OVERLAY
649+72.00		MO 5&52 CL	VAR.	VAR.	7	49.0	227.3	4.8	24.9	PHASE 1 STAGE 4 CONSTRUCTION OF CONCRETE OVERLAY
9+60.00		E. NEWTON BL	VAR.	VAR.	7	81.7	357.4	12.2	62.9	PHASE 1 STAGE 5 CONSTRUCTION OF CONCRETE OVERLAY
9+60.00		E. NEWTON BL	VAR.	VAR.	7	63.2	305.9	3.8	19.3	PHASE 1 STAGE 6 CONSTRUCTION OF CONCRETE OVERLAY
0+80.00		MO 5 CL	VAR.	VAR.	7	46.6	223.3	3.2	16.4	PHASE 1 STAGE 7 CONSTRUCTION OF CONCRETE OVERLAY
0+80.00		MO 5 CL	VAR.	VAR.	7	56.4	245.9	8.5	43.9	PHASE 1 STAGE 8 CONSTRUCTION OF CONCRETE OVERLAY
					TOTAL	424.7	1905.9	- *	278.8	* "FURNISHING - TINTED" FOR INFORMATIONAL PURPOSES,
					USE	424.7	1905.9	- *	278.8	QUANTITY INCLUDED IN FURNISHING TOTAL .

CONCRETE PAVEMENT (9.5 IN. NON-REINFORCED, 15 FT. JOINTS)

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	WIDTH (ft)	QUANTITIES STANDARD (sy)	QUANTITIES TINTED/ STAMPED (sy)	REMARKS
1+94.36	3+66.19	NW QUAD CnG BL	171.8	VAR.	511.0		PHASE 1 STAGE 9 - OUTSIDE FLUSH TRUCK APRON
0+39.92	2+17.32	NE QUAD CnG BL	177.4	VAR.	178.7		PHASE 1 STAGE 10
2+25.00	3+12.00	SW QUAD CnG BL	87.0	VAR.	93.8		PHASE 1 STAGE 11
2+17.30	0+06.80	ROUNDABOUT BL	84.8	14		131.9	PHASE 1 STAGE 9 - FLUSH TRUCK APRON
				TOTAL	783.5	131.9	
				USE	783.5	131.9	

CONCRETE SIDEWALK, 4 IN.

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	WIDTH (ft)	QUANTITIES (sy)	TRUNCATED DOMES (sf)	REMARKS
0+61.00	0+74.80	PED XWALK Lt	13.8	8	12.3	16	SCHOOL CROSS WALK LEFT OF MO 52
0+22.00	0+39.73	PED XWALK Rt	17.7	8	15.7	16	SCHOOL CROSS WALK RIGHT OF MO 52
0+33.00	0+85.69	WESTVIEW Lt.	52.7	5	29.3		SIDEWALK LEFT OF WESTVIEW DRIVE
				TOTAL	57.3	32	
				USE	57.3	32	

CONCRETE PAVEMENT (8 IN. NON-REINFORCED, 15 FT. JOINTS)

STATION FROM	STATION TO	ALIGNMENT	LOCATION	LENGTH (ft)	WIDTH (ft)	QUANTITY STANDARD (sy)	QUANTITY TINTED (sy)	REMARKS
641+69.00	642+09.80	52 Lt	GUINN PARKING LOT	41	1	4.6		PARKING LOT EDGE BETWEEN GUINN AND WESTVUE WEST DRIVEWAYS
642+75.80	642+79.80	52 Lt	WESTVUE PARKING LOT	4	1	0.4		PARKING LOT EDGE LEFT OF WESTVUE WEST DRIVEWAY
643+56.00	643+85.00	52 Lt	WESTVUE PARKING LOT	29	2	6.4		PARKING LOT EDGERIGHT OF WESTVUE EAST DRIVEWAY
646+15.00	646+45.00	52 Rt	EAGLE STOP PARKING LOT	30	2	6.7		PARKING LOT
0+00.00	2+95.31	ROUNDABOUT BL	TRUCK APRON	161.4	14		251.1	PHASE 1 STAGE 13; AVG. LENGTH
					TOTAL	18.1	251.1	
					USE	18.1	251.1	

SUMMARY OF QUANTITIES
SHEET 6 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:39:18 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 4/10/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 3
COUNTY: MORGAN
JOB NO.: J5P3575
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)

CONCRETE CURB / CURB & GUTTER

STATION FROM	STATION TO	ALIGNMENT	CURB 6" TYPE S LENGTH (ft)	CURB 6" INTEGRAL TYPE B LENGTH (ft)	CURB & GUTTER 6" TYPE A (MOUNTABLE) LENGTH (ft)	CURB & GUTTER 6" TYPE A (MODIFIED) LENGTH (ft)	CURB & GUTTER 6" TYPE B (BARRIER) LENGTH (ft)	GUTTER TYPE A LENGTH (ft)	REMARKS
629+18.90	629+28.70	52 Rt.					9.8		BETWEEN McDONALDS DRIVEWAY AND FAIRGROUNDS ROAD
629+95.00	632+12.50	52 Rt.			217.5				FROM FAIRGROUNDS ROAD TO SCHOOL CROSSWALK
632+20.50	640+77.30	52 Rt.			856.8				FROM SCHOOL CROSSWALK TO PARK ACCESS ROAD
641+19.80	641+46.00	52 Rt.			26.2				FROM PARK ACCESS ROAD TO PINNACLE PROPANE WEST DWY.
642+04.00	643+49.00	52 Rt.			145.0				BETWEEN PINNACLE PROPANE WEST AND EAST DRIVEWAYS
644+07.00	645+00.00	52 Rt.			93.0				FROM PINNACLE PROPANE EAST DWY TO EAGLE STOP DWY. (645+00 = 0+00 SW_QUAD)
646+14.50	646+43.00	52 Rt.	28.5						EAGLE STOP PARKING LOT ALONG R/W LINE
0+22.00	0+35.00	RT_PED_XING Rt.	13.0						SCHOOL PED CROSSING Rt.; MO 52 ON RIGHT
0+22.00	0+35.00	RT_PED_XING Lt.	13.0						SCHOOL PED CROSSING Lt.; MO 52 ON RIGHT
0+00.00	0+50.00	SW_QUAD			50.0				JUST BACK OF CULVERT TO EAGLE STOP DRIVEWAY
1+30.00	5+84.93	SW_QUAD			454.9				FROM EAGLE STOP DRIVEWAY TO CnG END ON MO 5
631+83.00	632+14.50	52 Lt.			31.5				FROM EXISTING TO SCHOOL CROSSWALK
632+22.50	633+14.60	52 Lt.			92.1				FROM SCHOOL CROSSWALK TO SCHOOL' MIDDLE DRIVEWAY
633+75.00	637+96.70	52 Lt.			421.7				FROM SCHOOL'S MIDDLE TO EAST DRIVEWAYS
638+67.70	640+96.00	52 Lt.			228.3				FROM SCHOOL EAST DWY. TO GUINN DWY.
641+74.00	642+04.80	52 Lt.			30.8				FROM GUINN DWY TO WESTVUE WEST DWY.
642+80.80	643+80.00	52 Lt.			99.2				FROM WESTVUE WEST DWY TO WESTVUE EAST DWY.
644+54.00	645+00.00	52 Lt.			46.0				FROM WESTVUE EAST DWY TO BEG. OF NW_QUAD CHAIN
0+63.00	0+75.00	LT_PED_XING Rt.	12.0						SCHOOL PED CROSSING Rt.; MO 52 ON LEFT
0+63.00	0+75.00	LT_PED_XING Lt.	12.0						SCHOOL PED CROSSING Lt.; MO 52 ON LEFT
641+69.00	642+09.80	52 Lt.		40.8					FROM GUINN DWY TO WESTVUE WEST DWY. ALONG R/W LINE
642+75.80	642+79.80	52 Lt.		4.0					START FROM WESTVUE WEST DWY AND PROCEED ALONG R/W LINE
643+56.00	643+85.00	52 Lt.		29.0					PROCEED ALONG R/W LINE AND END AT WESTVUE EAST DWY.
0+00.00	8+11.45	NW_QUAD			811.5				FROM STA 645+00 MO 52 LEFT TO STA 654+00 MO 5/52 LEFT
0+01.80	6+35.55	NE_QUAD			633.8				FROM NEWTON ST. RIGHT TO STA 654+00 MO 5/52 RIGHT
1+65.00	5+48.28	SE_QUAD			383.3				START AT BANK DWY. AND PROCEED ALONG SE_QUAD
0+33.00	0+86.00	WESTVIEW_LT_BL				53.0			WESTVIEW DRIVE ON LEFT OVER CULVERT
0+00.00	2+95.31	CIRC Rt.	119.4						CENTRAL ISLAND OF ROUNDABOUT
2+14.50		52CULVERT Lt.						5.5	FORM INTO TOP OF CONCRETE DITCH LINER
		TOTAL	197.9	73.8	4621.6	53.0	9.8	5.5	
		USE	198	74	4622	53	10	6	

GRADING

STATION FROM	STATION TO	SECT. ID	PROJECT PHASE	LOCATION	CLASS A EXCAVATION (cy)	COMPACTING EMBANKMENT (cy)	EMBANKMENT IN PLACE (cy)	REMARKS
646+00.00	647+30.00	1B	1	MO 52 CL	175	495	347	OBTAIN 347 CY FROM OFF R/W
649+40.00	655+85.00	2	1	MO 5 & 52 CL	176	1453	1291	OBTAIN 13 CY FROM 3, 1291 CY OFF R/W
0+80.00	4+60.00	4	1	MO 5 CL	483	243		PLACE 166 CY ON 5
9+20.00	10+18.00	3	1	E. NEWTON BL	91	53		PLACE 131 CY ON 5, 13 CY ON 2
2+20.00	0+20.00	5	1	ROUNDABOUT BL	85	249		OBTAIN 166 CY FROM 4, 11 CY FROM 3
644+00.00	646+00.00	1A	2	MO 52 CL	218	770		OBTAIN 426 CY FROM CL 4, 159 CY FROM 6
2+00.00	3+10.00	8	2	MO 52 CULVERT BL	75	137		OBTAIN 73 CY FROM 6
3+10.00	5+10.00	6	2	MO 52 CULVERT BL	695	82		PLACE 159 CY ON 1A, 179 CY ON 7, 73 CY ON 8, 96 CY OFF R/W
2+68.16	7+16.97	7	2	P2S2 BYPASS	270	408		OBTAIN 179 CY FROM 6
629+00.00	631+40.00	9	3	MO 52 CL	121	110		OBTAIN 7 CY FROM 10
631+40.00	641+66.13	10	3	MO 52 CL	875	713		PLACE 29 CY ON 9,11
641+66.13	644+00.00	11	3	MO 52 CL	213	202		OBTAIN 21 CY FROM 10
9+23.80	9+61.00	15	3	WESTVIEW DR. BL	2	84		OBTAIN 82 CY FROM 12, 13
10+00.00	12+10.00	16	3	WESTVIEW CULVERT BL	518	663	150	OBTAIN 74 CY FROM 13, 150 CY FROM OFF R/W
0+19.00	0+67.00	14	3	PINNACLE GAS EAST DWY BL	19	15		PLACE 1 CY ON R/W
0+15.00	0+81.00	13	3	SCHOOL EAST DWY BL	125	0		PLACE 31 CY ON 15, 74 CY ON 16
0+55.00	2+00.00	12	3	SCHOOL DITCH REPAIR BL	65	4		PLACE 51 CY ON 15
				TOTAL	4206	5681	1788	
				USE	4206	5681	1788	

SUMMARY OF QUANTITIES
SHEET 7 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:39:39 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 4/10/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 3
COUNTY: MORGAN
JOB NO.: J5P3575
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)

TYPE 5 AGGREGATE BASE

STATION FROM	STATION TO	ALIGNMENT	LENGTH (ft)	WIDTH (ft)	QUANTITIES 6" THICK (sy)	QUANTITIES 4" THICK (sy)	REMARKS
BASE UNDER 10" ASPHALTIC CONCRETE PAVEMENT AND OPTIONAL PAVEMENT - 10 IN VS 8.5 IN							
629+00.00	645+14.00	MO 52 Rt.	1614.0	8	1434.7		WIDENING RIGHT FROM McDONALDS TO CULVERT
633+30.00	633+80.00	MO 52 Lt	50.0	2	11.1		WIDENING LEFT IN FRONT OF SCHOOL'S MIDDLE DRIVEWAY
633+80.00	635+33.00	MO 52 Lt	153.0	5	85.0		WIDENING LEFT TAPER DOWN TO EXIST. 2-LANE
635+33.00	645+14.00	MO 52 Lt	981.0	8	872.0		WIDENING LEFT START OF EXIST. 2-LANE ENDING JUST BACK OF CULVERT
645+14.00	645+75.00	MO 52 CL	61.0	38	257.6		PAVEMENT OVER CULVERT
645+75.00	645+87.00	MO 52 Lt	12.0	19	25.3		PAVEMENT OVER CULVERT; LEFT LANE ONLY
0+26.01	1+40.93	NW QUAD CnG	114.9	4.45	56.8		WIDENING LEFT OF MO 52 ALONG NW QUAD BASELINE TO RADIUS POINT
1+40.93	1+94.36	NW QUAD CnG	53.4	VAR.	74.2		WIDENING LEFT OF MO 52 ALONG NW QUAD BASELINE TO START OF PROP. CONC. SURFACE
3+66.19	7+46.58	NW QUAD CnG	380.4	VAR.	613.5		WIDENING LEFT OF MO 5&52 ALONG NW QUAD BASELINE FROM PROP. CONCRETE TO END OF WIDENING
3+12.00	4+40.17	SW QUAD CnG	128.2	VAR.	105.6		START WIDENING RIGHT OF MO 5 AT PROP. CONC TO END WIDENING RIGHT OF MO 5 ALONG SW QUAD BASELINE
3+09.53	5+48.28	SE QUAD CnG	238.8	VAR.	174.8		START WIDENING LEFT OF MO 5 TO END WIDENING LEFT OF MO 5 ALONG SE QUAD BASELINE
2+17.32	3+91.84	NE QUAD CnG	174.5	VAR.	109.2		START WIDENING LEFT OF E. NEWTON TO END WIDENING RIGHT OF MO 5&52 ALONG NE QUAD BASELINE
				SUBTOTAL	3819.8		
BASE UNDER OPTIONAL PAVEMENT - 7 IN VS 7 IN							
9+23.83	9+59.30	WESTVIEW DR	35.5	VAR.		242.8	OVER CULVERT CONSTR.
2+68.16	4+58.00	P2S2 BYPASS	189.8	VAR.		324.4	START PHASE 2 STAGE 2 BYPASS TO CULVERT
4+58.00	5+40.00	P2S2 BYPASS	82.0	28.0		255.1	BYPASS OVER CULVERT
5+40.00	5+65.36	P2S2 BYPASS	25.4	31.75		89.6	BYPASS OVER CULVERT
5+65.36	5+77.36	P2S2 BYPASS	12.0	35.5		47.3	BYPASS OVER CULVERT
5+77.36	7+16.98	P2S2 BYPASS	139.6	VAR.		306.4	BYPASS FROM CULVERT TO END OF PHASE 2 STAGE 2 BYPASS
				SUBTOTAL		1265.6	
BASE UNDER 9.5" NON-REINFORCED CONCRETE PAVEMENT AND TRUCK APRON							
1+94.36	3+66.19	NW QUAD CnG BL	171.8	VAR.	642.9		PHASE 1 STAGE 9
0+39.92	2+17.32	NE QUAD CnG BL	177.4	VAR.	178.7		PHASE 1 STAGE 10
2+25.00	3+12.00	SW QUAD CnG BL	87.0	VAR.	93.8		PHASE 1 STAGE 11
0+00.00	2+95.31	ROUNDABOUT BL	295.3	VAR.	251.1		PHASE 1 STAGE 15
				SUBTOTAL	1166.5		
BASE UNDER CONCRETE CURB AND GUTTER							
629+18.90	629+28.70	52 Rt.	9.8	4.5	4.9		BETWEEN McDONALDS DRIVEWAY AND FAIRGROUNDS ROAD
629+95.00	640+77.30	52 Rt.	1082.3	4.5	541.2		FROM FAIRGROUNDS ROAD TO PARK ACCESS ROAD
641+19.80	641+46.00	52 Rt.	26.2	4.5	13.1		FROM PARK ACCESS ROAD TO PINNACLE PROPANE WEST DWY.
642+04.00	643+49.00	52 Rt.	145.0	4.5	72.5		BETWEEN PINNACLE PROPANE WEST AND EAST DRIVEWAYS
644+07.00	645+00.00	52 Rt.	93.0	4.5	46.5		FROM PINNACLE PROPANE EAST DWY TO EAGLE STOP DWY.
0+00.00	0+50.00	SW_QUAD	50.0	4.5	25.0		JUST BACK OF CULVERT TO EAGLE STOP DRIVEWAY
1+30.00	5+84.93	SW_QUAD	454.9	4.5	227.5		FROM EAGLE STOP DRIVEWAY TO CnG END ON MO 5
631+83.00	633+14.60	52 Lt.	131.6	4.5	65.8		FROM JUST BACK OF PED XING TO SCHOOL'S MIDDLE DRIVEWAY
633+75.00	637+96.70	52 Lt.	421.7	4.5	210.9		FROM SCHOOL'S MIDDLE TO EAST DRIVEWAYS
638+67.70	640+96.00	52 Lt.	228.3	4.5	114.2		FROM SCHOOL EAST DWY. TO GUINN DWY.
641+74.00	642+04.80	52 Lt.	30.8	4.5	15.4		FROM GUINN DWY TO WESTVUE WEST DWY.
642+80.80	643+80.00	52 Lt.	99.2	4.5	49.6		FROM WESTVUE WEST DWY TO WESTVUE EAST DWY.
644+54.00	645+00.00	52 Lt.	46.0	4.5	23.0		FROM WESTVUE EAST DWY TO BEG. OF NW_QUAD CHAIN
0+00.00	8+11.45	NW_QUAD	811.5	4.5	405.8		FROM STA 645+00 MO 52 LEFT TO STA 654+00 MO 5/52 LEFT
0+01.80	6+35.55	NE_QUAD	633.8	4.5	316.9		FROM NEWTON ST. RIGHT TO STA 654+00 MO 5/52 RIGHT
1+65.00	5+48.24	SE_QUAD	383.2	4.5	191.6		START AT BANK DWY. AND PROCEED ALONG SE_QUAD
0+33.00	0+85.69	WESTVIEW_LT_BL	52.7	4	23.4		WESTVIEW DRIVE ON LEFT OVER CULVERT
				SUBTOTAL	2347.3		
BASE UNDER DRIVEWAYS							
628+85.00		52 Rt	VAR.	VAR.		15.69	McDONALDS EAST DRIVEWAY, PARTIAL, MODIFIED APPROACH
629+60.00		52 Rt	13	VAR.		79.13	FAIRGROUNDS ROAD, MODIFIED APPROACH
633+45.00		52 Lt	15	VAR.		79.7	SCHOOL MIDDLE DRIVEWAY, STANDARD APPROACH, STUB
638+32.00		52 Lt	66	VAR.		209.85	SCHOOL EAST DRIVEWAY, MODIFIED APPROACH
640+98.00		52 Rt	15	VAR.		49.87	PARK ACCESS ROAD, MODIFIED APPROACH
641+35.00		52 Lt	22	VAR.		153.3	GUINN DRIVEWAY, MODIFIED APPROACH
641+75.00		52 Rt	15	VAR.		77.53	PINNACLE GAS WEST DRIVEWAY, STANDARD APPROACH
642+42.80		52 Lt	26	VAR.		177.12	WESTVUE WEST DRIVEWAY, STANDARD APPROACH
643+78.00		52 Rt	16	VAR.		76.08	PINNACLE GAS EAST DRIVEWAY, STANDARD APPROACH
644+17.00		52 Lt	31	VAR.		201.24	WESTVUE EAST DRIVEWAY, STANDARD APPROACH
645+90.00		52 Rt	41	VAR.		212.8	EAGLE STOP DRIVEWAY, STANDARD APPROACH
641+69.00	642+09.80	52 Lt	41	1		4.56	PARKING LOT EDGE BETWEEN GUINN AND WESTVUE WEST DRIVEWAYS
642+75.80	642+79.80	52 Lt	4	1		0.44	PARKING LOT EDGE LEFT OF WESTVUE WEST DRIVEWAY
643+56.00	643+85.00	52 Lt	29	2		6.44	PARKING LOT EDGE RIGHT OF WESTVUE EAST DRIVEWAY
646+15.00	646+45.00	52 Rt	30	2		6.67	PARKING LOT
				SUBTOTAL		1350.4	
BASE UNDER SIDEWALK							
0+61.00	0+74.80	PED XWALK Lt	13.8	11		16.87	SCHOOL CROSS WALK LEFT OF MO 52
0+22.00	0+39.73	PED XWALK Rt	17.7	11		21.63	SCHOOL CROSS WALK RIGHT OF MO 52
0+33.00	0+85.69	WESTVIEW Lt	52.7	6.5		38.06	SIDEWALK LEFT OF WESTVIEW DRIVE
				SUBTOTAL		76.6	
				TOTAL	7333.6	2692.6	
				USE	7334	2693	

SUMMARY OF QUANTITIES

SHEET 8 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:39:59 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE 52 | STATE MO
DISTRICT CD | SHEET NO. 3
COUNTY MORGAN
JOB NO. J5P3575
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

PAVEMENT MARKINGS

STATION FROM	STATION TO	LOCATION	LENGTH (FT)	HIGH BUILD WATERBORNE PAV. MARK. PAINT, TYPE L BEADS			WATERBORNE PAV. MARK. PAINT, TYPE P BEADS			PREFORMED THERMOPLASTIC INTERSECTION MARKING					REMARKS
				6" SOLID YELLOW (FT)	6" SOLID WHITE (FT)	6" INTER WHITE (FT)	4" SOLID YELLOW (FT)	4" INTER YELLOW (FT)	4" SOLID WHITE (FT)	LEFT/ RIGHT ARROW (EACH)	COMBO ST/LT/RT ARROW (EACH)	24" YELLOW (FT)	YEILD LINE TRI. (EACH)	30" WHITE MIDBLOCK (EACH)	
611+90.00	617+22.00	MO 52 LT.	532.00						532.00						EDGELINE
611+90.00	617+22.00	MO 52	532.00				532.00	133.00							CENTERLINE
611+90.00	623+20.00	MO 52 RT.	1,130.00						1,130.00						EDGELINE
617+22.00	618+25.00	MO 52	103.00				206.00								CENTERLINE
618+25.00	622+80.00	MO 52	455.00				1,820.00					75			WIDENING
622+80.00	646+00.00	MO 52	2,320.00				4,640.00	1,160.00							TWTL
623+85.00	629+00.00	MO 52 RT.	515.00						515.00						EDGELINE
625+00.00		MO 52								2					LEFT ARROWS
629+00.00	633+30.00	MO 52 LT.	430.00						430.00						EDGELINE
630+00.00		MO 52								2					LEFT ARROWS
632+15.00		MO 52												6.5	CROSSWALK MARKING
635+00.00		MO 52								2					LEFT ARROWS
640+00.00		MO 52								2					LEFT ARROWS
645+00.00		MO 52								2					LEFT ARROWS
1+00.00	1+86.00	WEST IN BL	86.00					21.50							TWTL
1+00.00	2+47.00	WEST IN BL	147.00				147.00								TWTL
1+28.00	2+88.00	WEST IN RT.	160.00						184.00						INCLUDES 24' TO MO 5 SB
2+47.00	2+54.00	WEST IN BL	7.00						7.00						EDGELINE
2+47.00		WEST IN BL											9		
1+00.00	1+88.00	WEST OUT BL	88.00					22.00							EDGELINE
1+00.00	2+48.00	WEST OUT BL	148.00				148.00								EDGELINE
2+48.00	2+58.00	WEST OUT BL	10.00						10.00						EDGELINE
2+58.00	3+01.00	WEST OUT BL	43.00		43.00										EDGELINE
0+00.00	2+94.70	CIR. BL	294.70	294.70											EDGELINE
0+06.00	0+36.00	CIR. BL LT.	30.00		30.00										EDGELINE
0+36.00		CIR. BL LT.									1				STRIAGHT/LEFT ARROW
0+50.00	0+74.00	CIR. BL LT.	24.00			8.00									2' STRIPE W/ 4' GAP
0+74.00	1+01.00	CIR. BL LT.	27.00		27.00										EDGELINE
1+16.00	1+41.00	CIR. BL LT.	25.00			8.33									2' STRIPE W/ 4' GAP
1+69.00		CIR. BL LT.									1				STRIAGHT/LEFT ARROW
1+84.00	2+09.00	CIR. BL LT.	25.00			8.33									2' STRIPE W/ 4' GAP
2+01.00		CIR. BL LT.									1				STRIAGHT/LEFT ARROW
2+09.00	2+37.00	CIR. BL LT.	28.00		28.00										EDGELINE
2+37.00		CIR. BL LT.									1				STRIAGHT/LEFT ARROW
2+69.00	2+75.00	CIR. BL LT.	6.00	6.00											EDGELINE
2+75.00	0+06.00	CIR. BL LT.	37.75			12.58									2' STRIPE W/ 4' GAP
0+07.00	1+75.00	EAST IN BL LT.	168.00						168.00						EDGELINE
0+37.00	0+45.00	EAST IN BL	8.00						8.00						EDGELINE
0+45.00		EAST IN BL LT.											9		
0+45.00	1+16.00	EAST IN BL	71.00				71.00								EDGELINE
1+16.00	2+49.00	EAST IN BL	133.00				266.00								EDGELINE
0+29.00	0+86.00	EAST OUT BL RT.	57.00						57.00						EGELINE
0+43.00	0+53.00	EAST OUT BL	10.00						10.00						EDGELINE
0+53.00	1+30.00	EAST OUT BL	77.00				77.00								EDGELINE
1+30.00	2+64.00	EAST OUT BL	134.00				268.00								WIDENING
10+90.00	11+40.00	E NEWTON ST. BL	50.00				50.00								CENTERLINE
649+12.00	1+39.00	MO 5 & 52 CL / NORTH IN BL LT.	116.00		116.00										EDGELINE
0+37.00	0+45.00	NORTH IN BL	8.00		8.00										EDGELINE
0+45.00		NORTH IN BL LT.											9		
0+45.00	3+88.00	NORTH IN BL	343.00	343.00											EDGELINE
3+88.00	4+87.00	NORTH IN BL	99.00				198.00								WIDENING
		SUBTOTAL 1	643.70	252.00	37.24	8,423.00	1,336.50	3,051.00	10	4	75.0	27	6.5		

SUMMARY OF QUANTITIES

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:18:16 PM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/15/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 3
COUNTY: MORGAN
JOB NO.: J5P3575
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

PAVEMENT MARKINGS - CONTINUED

STATION FROM	STATION TO	LOCATION	LENGTH (FT)	HIGH BUILD WATERBORNE PAV. MARK. PAINT, TYPE L BEADS			WATERBORNE PAV. MARK. PAINT, TYPE P BEADS			PREFORMED THERMOPLASTIC INTERSECTION MARKING					REMARKS
				6" SOLID YELLOW (FT)	6" SOLID WHITE (FT)	6" INTER WHITE (FT)	4" SOLID YELLOW (FT)	4" INTER YELLOW (FT)	4" SOLID WHITE (FT)	LEFT/ RIGHT ARROW (EACH)	COMBO ST/LT/RT ARROW (EACH)	24" YELLOW (FT)	YEILD LINE TRI. (EACH)	30" WHITE MIDBLOCK (EACH)	
654+00.00	655+00.00	MO 5 & 52 CL	100.00				200.00								CENTERLINE
654+00.00	655+00.00	MO 5 & 52 LT.	100.00		100.00										EDGELINE
654+00.00	655+00.00	MO 5 & 52 RT.	100.00		100.00										LANELINE
654+00.00	655+96.00	MO 5 & 52 RT.	196.00		196.00										EDGELINE
654+30.00		MO 5 & 52 RT.								1					LEFT ARROW
655+40.00	655+96.00	MO 5 & 52 LT.	56.00		56.00										EDGELINE
655+40.00	655+96.00	MO 5 & 52	56.00		56.00										EDGELINE
655+40.00	655+96.00	MO 5 & 52 RT.	56.00				224.00								WIDENING
0+29.00	0+75.00	NORTH OUT BL RT.	46.00		46.00										EDGELINE
0+43.00	0+53.00	NORTH OUT BL	10.00		10.00										EDGELINE
0+53.00	3+88.00	NORTH OUT BL	335.00	335.00											EDGELINE
3+54.00	4+84.00	NORTH OUT BL RT.	130.00		130.00										LANE LINE
3+88.00	4+84.00	NORTH OUT BL	96.00				192.00								WIDENING AND CENTERLINE
4+36.00		NORTH OUT BL RT.								1					LEFT ARROW
0+04.00	1+40.00	SOUTH IN BL LT.	136.00		136.00										EDGELINE
0+37.00	0+45.00	SOUTH IN BL	8.00		8.00										EDGELINE
0+45.00	3+52.00	SOUTH IN BL	307.00	307.00									9		EDGELINE
0+28.00	0+53.00	SOUTH OUT BL RT.	25.00		25.00										EDGELINE
0+53.00	3+58.00	SOUTH OUT BL	305.00	305.00											EDLGLINE
3+50.00	4+60.00	MO 5	110.00				220.00					50			TWTL
3+50.00	7+10.00	MO 5 LT. & RT.	360.00		360.00										EDGELINES
3+50.00	7+10.00	MO 5	360.00	720.00											CENTERLINE
4+60.00	6+00.00	MO 5 LT.	140.00		140.00										LANE LINE
4+60.00	7+10.00	MO 5	250.00				500.00								CENTERLINE
5+60.00		MO 5 LT.								1					LEFT ARROW
		SUBTOTAL 2	1,667.00	1,363.00		0.00	1,336.00	0.00	0.00	3	0	50.0	9	0.0	
		SUBTOTAL 1	643.70	252.00		37.24	8,423.00	1,336.50	3,051.00	10	4	75.0	27	6.5	
		GRAND TOTAL	2,310.70	1,652.24			11,095.50		3,051.00	13	4	125.0	36	6.5	
		USE	2,311	1,652			11,096		3,051	13	4	125	36	7	

CONCRETE MEDIAN STRIP

STATION FROM	STATION TO	LOCATION	LENGTH (ft)	WIDTH (ft)	3" CONCRETE MEDIAN STRIP (sy)	6" CONCRETE MEDIAN STRIP (sy)	REMARKS
0+41	0+66	S. ENTRY BL RT. (RTE. 5)	25.0	VARIES		52.7	SPLITTER ISLAND
0+68	0+91	S. ENTRY BL RT. (RTE. 5)	23.0	VARIES		26.5	SPLITTER ISLAND
0+99	3+52	S. ENTRY BL RT. (RTE. 5)	253.0	VARIES		340.6	SPLITTER ISLAND
0+47	1+01	E. EXIT RT. (NEWT)/S. ENTRY BL LT. (RTE. 5)	85.0	VARIES	118.0		SPLITTER ISLAND - MOUNTABLE
1+10	1+20	S. ENTRY BL LT. (RTE. 5)	10.0	VARIES	4.4		SPLITTER ISLAND - MOUNTABLE
0+57	1+13	N. ENTRY BL RT. (RTE. 52/5)	56.0	VARIES		128.2	SPLITTER ISLAND
1+21	1+74	N. ENTRY BL RT. (RTE. 52/5)	53.0	VARIES		121.2	SPLITTER ISLAND
1+76	2+43	N. ENTRY BL RT. (RTE. 52/5)	67.0	VARIES		240.2	SPLITTER ISLAND
2+45	3+18	N. ENTRY BL RT. (RTE. 52/5)	72.0	VARIES		234.8	SPLITTER ISLAND
3+20	3+90	N. ENTRY BL RT. (RTE. 52/5)	70.0	VARIES		78.5	SPLITTER ISLAND
1+61	1+93	W. ENTRY BL RT. (RTE. 52)	32.0	VARIES	24.6		SPLITTER ISLAND - MOUNTABLE
1+86	1+99	W. ENTRY BL LT. (RTE. 52)	13.0	VARIES	11.2		SPLITTER ISLAND - MOUNTABLE
2+01	2+76	W. ENTRY BL RT. (RTE. 52)	75.0	VARIES	65.0		SPLITTER ISLAND - MOUNTABLE
2+06	2+28	W. ENTRY BL LT. (RTE. 52)	22.0	VARIES	26.5		SPLITTER ISLAND - MOUNTABLE
2+30	2+50	W. ENTRY BL LT. (RTE. 52)	20.0	VARIES		45.2	SPLITTER ISLAND
0+42	0+61	E. ENTRY BL RT. (NEWT)	19.0	VARIES		42.4	SPLITTER ISLAND
0+68	1+18	E. ENTRY BL RT. (NEWT)	50.0	VARIES		44.8	SPLITTER ISLAND
0+77	0+86	E. ENTRY BL LT. (NEWT)	9.0	VARIES	1.9		SPLITTER ISLAND - MOUNTABLE
0+41	0+67	N. EXIT BL RT. (52/5)/E. ENTRY BL LT. (NEWT)	53.0	VARIES	43.8		SPLITTER ISLAND - MOUNTABLE
				TOTAL	295.4	1355.1	
				USE	295.4	1355.1	

SUMMARY OF QUANTITIES
SHEET 10 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:18:05 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED 3/15/2024
ROUTE 52 | STATE MO
DISTRICT CD | SHEET NO. 3
COUNTY MORGAN
JOB NO. J5P3575
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)

CAST-IN-PLACE DROP INLETS

STR. NO.	STA	LOCATION	OFFSET	SKEW	TYPE	INTAKE BOX PAY 'D' 2.5' L (ft)	INTAKE BOX PAY 'D' 5' L (ft)	INTAKE BOX 2'X2' CUR. VANE GR. & FR. (ea)	EXTENSION OPENING L (ft)	CLASS B CONCRETE (cy)	REINF. STEEL (lbs)	CLASS 3 EXC. (cy)	REMARKS
DI03	2+41.01	52_SS_Lt.	4.8' Rt.	NONE	X	4.75		1	2.5	1.7	233.5	13.6	1-15" OPENING
DI05	3+41.09	52_SS_Lt.	5' Rt.	NONE	X	4.75		1	2.5	1.7	233.5	13.0	1-15" OPENING
DI08	6+31.09	52_SS_Lt.	5' Rt.	NONE	X	4		1	2.5	1.52	215.5	6.0	1-15" OPENING
DI09	8+26.08	52_SS_Lt.	5' Rt.	NONE	X	5		1	2.5	1.76	246.5	13.8	1-15" OPENING
DI11	9+41.08	52_SS_Lt.	5' Rt.	NONE	X	5		1	2.5	1.76	246.5	11.3	1-15" OPENING
DI15	11+26.09	52_SS_Lt.	5' Rt.	NONE	X	5		1	2.5	1.76	246.5	10.6	1-15" OPENING
DI16	12+31.08	52_SS_Lt.	5' Rt.	NONE	X	4.75		1	2.5	1.7	233.5	8.6	1-15" OPENING
DI17	13+41.08	52_SS_Lt.	5' Rt.	NONE	X	4.75		1	2.5	1.7	233.5	8.3	1-15" OPENING, INST. BEFORE P2S2 BYPASS CONSTR.
DI18	13+81.08	52_SS_Lt.	5' Rt.	NONE	X	4.75		1	2.5	1.7	233.5	9.1	1-15" OPENING, INST. BEFORE P2S2 BYPASS CONSTR.
DI20	14+11.08	52_SS_Lt.	5' Rt.	NONE	X	4.75		1	2.5	1.7	233.5	2.7	1-15" OPENING, INST. BEFORE P2S2 BYPASS CONSTR.
DI21	15+21.08	52_SS_Lt.	5' Rt.	NONE	X	5		1	2.5	1.76	246.5	12.3	1-15" OPENING, INST. BEFORE P2S2 BYPASS CONSTR.
DI03	2+40.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	7.9	1-15" OPENING
DI104	3+75.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	7.7	1-15" OPENING
DI106	5+80.66	52_SS_Rt.	5' Lt.	NONE	X	4.5		1	2.5	1.64	230.5	9.5	1-15" OPENING
DI108	7+70.66	52_SS_Rt.	5' Lt.	NONE	X	3.75		1	2.5	1.46	212.5	9.0	1-15" OPENING
DI109	9+25.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	9.0	1-15" OPENING
DI110	10+75.66	52_SS_Rt.	5' Lt.	NONE	X	4.25		1	2.5	1.58	227.5	8.4	1-15" OPENING
DI112	12+37.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	6.8	1-15" OPENING
DI114	13+15.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	7.5	1-15" OPENING
DI116	13+95.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	10.5	1-15" OPENING
DI117	15+00.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	9.3	1-15" OPENING
DI119	15+20.66	52_SS_Rt.	5' Lt.	NONE	X	4		1	2.5	1.52	215.5	8.9	1-15" OPENING
DI120	15+90.66	52_SS_Rt.	5' Lt.	NONE	X	4.5		1	2.5	1.64	230.5	10.8	1-15" OPENING
DI121	16+50.66	52_SS_Rt.	5' Lt.	NONE	X	4.5		1	2.5	1.64	230.5	9.4	1-15" OPENING
DI202	3+11.00	SW_QUAD_CnG	3'Rt.	NONE	X		3.5	1	5	1.71	250.9	6.5	1-15" OPENING
DI203	2+17.00	NE_QUAD_CnG	3'Rt.	NONE	X		2.75	1	5	1.53	232.9	3.3	1-12" OPENING
DI204	1+43.00	NW_QUAD_CnG	3'Lt.	NONE	X		3.25	1	5	1.65	238.9	4.6	1-15" OPENING
DI205	2+86.00	NW_QUAD_CnG	3'Lt.	NONE	X		2.5	1	5	1.47	229.9	2.5	1-12" OPENING
DI206	2+76.00	SE_QUAD_CnG	3'Lt.	NONE	X		3.25	1	5	1.65	238.9	11.7	1-15" OPENING
					TOTAL	106	15.25	29				252.6	CONCRETE (cy) AND STEEL (lbs) FOR INFORMATION ONLY
					USE	106	15	29					PAY"D" EQUALS ACTUAL "D"

PRECAST DROP INLETS

STR. NO.	STA	LOCATION	OFFSET	SKEW	TYPE	ACTUAL D' (ft)	PAY 'D' GRATE 2'x 2' (ft)	PAY 'D' GRATE 3'x 3' (ft)	PAY 'D' GRATE 5'x 3' (ft)	PAY 'D' CURB INLET 2'-6" (ft)	PAY 'D' CURB INLET 5'-0" (ft)	GRATE & BEARING PLATE 3X3 (ea)	GRATE & BEARING PLATE 5X3 (ea)	CURVED VANE GR. & FR. 2X2 (ea)	MANHOLE FRAME & COVER TYPE 3 (ea)	CLASS 3 EXC. (cy)	REMARKS
DI01	1+32.01	52_SS_Lt.	7' Lt.	NONE	S-1	3.9		4				1				7.8	1-15" OPENING
DI02	2+31.01	52_SS_Lt.	7' Lt.	NONE	S-1	3.8		4				1				8.2	1-15" OPENING
DI04	3+53.08	52_SS_Lt.	7.71' Lt.	NONE	S-1	4.1		4				1				9.0	2- 24" OPENINGS
DI06	4+49.09	52_SS_Lt.	7' Lt.	NONE	S-1	4.1		4				1				12.0	2- 18" OPENINGS
DI07	6+31.09	52_SS_Lt.	7' Lt.	NONE	S-1	5		5				1				11.6	1-15" OPENING
DI10	8+31.08	52_SS_Lt.	7' Lt.	NONE	S-1	4.3		4.5				1				10.6	1-15" OPENING
DI12	10+30.09	52_SS_Lt.	7' Lt.	NONE	S-1	3.7		4				1				12.7	1-15" OPENING
DI13	10+51.09	52_SS_Lt.	7' Lt.	90^L.A	S-1	5.1			5.5				1			15.7	1-15", 1-36" OPENING
DI14	11+16.09	52_SS_Lt.	7' Lt.	NONE	S-1	4.2		4				1				13.7	1-15" OPENING
DI19	14+01.08	52_SS_Lt.	7' Lt.	NONE	S-1	2.9		3				1				9.7	1-15" OPENING, INST. BEFORE P2S2 BYPASS CONSTR.
DI01	1+03.66	52_SS_Rt.	8' Lt.	NONE	D	3.1	3							1		9.0	1-15" OPENING
DI02	1+03.66	52_SS_Rt.	12' Rt.	NONE	S-1	2.4		2.5				1				10.4	1-15" OPENING
DI105	3+75.66	52_SS_Rt.	0	NONE	S-1	3.5		3.5				1				6.3	1- 15"; 2- 18" OPENINGS
DI107	5+80.66	52_SS_Rt.	0	NONE	S-1	3.9		4				1				7.7	1- 15"; 2- 18" OPENINGS
DI111	10+75.66	52_SS_Rt.	0	NONE	S-1	4		4				1				7.1	1- 15"; 2- 18" OPENINGS
DI113	12+37.66	52_SS_Rt.	0	NONE	S-1	3.5		3.5				1				5.5	1- 15"; 2- 18" OPENINGS
DI115	13+25.66	52_SS_Rt.	7' Rt.	NONE	S-1	3.1		3				1				9.9	1-15" OPENING
DI118	15+15.66	52_SS_Rt.	10' Rt.	NONE	S-1	2.6		2.5				1				8.0	1-15" OPENING
DI201	1+43.00	SW_QUAD_CnG	3'Rt.	NONE	T	5					5				1	13.6	1-15" OPENING
DI207	0+73.00	WESTVIEW_CnG_Lt	2.5'Lt.	NONE	T	4.9				5					1	10.8	1-15" OPENING
						TOTAL	3.0	59.5	5.5	5.0	5.0	16.0	1.0	1.0	2.0	199.3	
						USE	3	60	6	5	5	16	1	1	2		PAY "D" EQUALS ACTUAL "D"

PRECAST CONCRETE MANHOLE

STR. NO.	STA	ALIGNMENT	OFFSET	SKEW	ACTUAL D' (ft)	MANHOLE PAY' D 4' (ft)	MANHOLE PAY' D 5' (ft)	MANHOLE PAY' D 6' (ft)	MANHOLE FRAME AND COVER TYPE 2 (ea)	MANHOLE FRAME AND COVER TYPE 4 (ea)	CLASS 3 EXC. (CY)	REMARKS
MH01	1+32.01	52_SS_Lt.	0	NONE	6.4		6.5			1	14.9	1 - 15", 2- 24" OPENINGS
MH02	2+96.00	52_SS_Lt.	0	NONE	5.7	6.0				1	12.1	2- 24" OPENINGS
MH03	3+53.08	52_SS_Lt.	0	NONE	5.5		5.5			1	14.4	3- 24" OPENINGS
MH04	6+31.09	52_SS_Lt.	0	NONE	6.3		6.5			1	14.5	2- 15", 1- 24", 1- 30" OPENINGS
MH05	10+51.09	52_SS_Lt.	0	NONE	6.5			6.5		1	21.9	1- 30"; 2- 36" OPENINGS
MH06	15+41.08	52_SS_Lt.	0	NONE	7.5			7.5		1	15.3	1- 36"; 1- 48" OPENINGS, INST. BEFORE P2S2 BYPASS CONSTR.
MH101	1+03.66	52_SS_Rt.	0	NONE	4.8	5.0			1		12.7	2- 15"; 2- 18" OPENINGS
MH102	12+52.66	52_SS_Rt.	0	NONE	5.0	5.0			1		10.2	1- 12"; 1-18"; 1- 24" OPENINGS
MH103	16+50.66	52_SS_Rt.	0	NONE	5.6	6.0				1	7.5	1- 15"; 2- 24" OPENINGS
					TOTAL	22.0	18.5	14.0	2	7	123.5	
					USE	22	19	14	2	7		PAY "D" EQUALS ACTUAL "D"

SUMMARY OF QUANTITIES
SHEET 11 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:17:57 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

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)

GROUP B PIPE CULVERT

STR. NO.	STRUCT. FROM	STRUCT. TO	LOCATION	FILL HT. (FT)	GROUP B 12" PIPE (FT)	15" PIPE (FT)	18" PIPE (FT)	24" PIPE (FT)	CLASS 3 EXC. (CY)	COMMENT
P101	IN	COUPLE	52 SS Rt.				(LIP)			
P102	COUPLE	MH101	52 SS Rt.	2.5			18		8.2	1- 18^30' ELBOW; SMOOTH BORE
P103	MH101	DI105	52 SS Rt.	3.6			269		139.7	1- 15" TEE; SMOOTH BORE
P104	DI105	DI107	52 SS Rt.	4.5			203		99.4	SMOOTH BORE
P105	DI107	DI111	52 SS Rt.	3.8			493		241.7	2- 15" TEES; SMOOTH BORE
P106	DI111	DI113	52 SS Rt.	3.8			160		81.5	SMOOTH BORE
P107	DI113	MH102	52 SS Rt.	5.3			12		3.2	SMOOTH BORE
P108	MH102	MH103	52 SS Rt.	5.8				395	214.3	6- 15", 1- 18" TEES; SMOOTH BORE
P109	MH103	OUT	52 SS Rt.	6.7				39	19.8	SMOOTH BORE - INTERSECT AT CULVERT
P110	DI101	MH101	52 SS Rt.	3.5		4			0	SMOOTH BORE
P111	DI102	MH101	52 SS Rt.	3.5		9			2.8	SMOOTH BORE
P112	DI103	P103	52 SS Rt.	1.8		4			0	SMOOTH BORE, TEES INTO P103
P113	DI104	DI105	52 SS Rt.	2		3			0	SMOOTH BORE
P114	DI106	DI107	52 SS Rt.	2.2		3			0	SMOOTH BORE
P115	DI108	P105	52 SS Rt.	2.5		3			0	SMOOTH BORE, TEES INTO P105
P116	DI109	P105	52 SS Rt.	2.6		4			0	SMOOTH BORE, TEES INTO P105
P117	DI110	DI111	52 SS Rt.	2.5		3			0	SMOOTH BORE
P118	DI112	DI113	52 SS Rt.	2.6		3			0	SMOOTH BORE
P119	COUPLE	MH102	52 SS Rt.	1.7	3				1.5	1- COUPLE NDP, 1 - 7.5^ ELBOW NDP
P120	DI114	P108	52 SS Rt.	2.8		4			0	SMOOTH BORE, TEES INTO P108
P121	DI115	P108	52 SS Rt.	2.8		5			0.5	SMOOTH BORE, TEES INTO P108
P122	DI116	P108	52 SS Rt.	2.8		4			0	SMOOTH BORE, TEES INTO P108
P123	DI117	P108	52 SS Rt.	2.9		4			0	SMOOTH BORE, TEES INTO P108
P124	DI118	P108	52 SS Rt.	3		8			1.5	SMOOTH BORE, TEES INTO P108
P125	DI119	P108	52 SS Rt.	3		4			0	SMOOTH BORE, TEES INTO P108
P126A	P126	DI119	52 SS Rt.	1.6		7			0.9	2- 15° ELBOWS-NDP; SMOOTH BORE
P127	DI120	P108	52 SS Rt.	3.4		4			0	SMOOTH BORE, TEES INTO P108
P128	DI121	MH103	52 SS Rt.	3.3		2			0	SMOOTH BORE
			SUBTOTAL (1)		3	78	1155	434	815.0	

GROUP A PIPE CULVERT

STR. NO.	STRUCT. FROM	STRUCT. TO	STA FROM	STA TO	LOCATION	FILL HT. (FT)	GROUP A 18" PIPE (FT)	GROUP A 18" FES (EA)	CLASS 3 EXC. (CY)	ROCK LINING (OUTLET) (CY)	COMMENT
P207	EX. PIPE	OUT	0+65.00		MO 5 Rt	2.6	34	1	9.1	2.7	OUTLET TO DITCH
P208	IN	EX. PIPE	0+65.00		MO 5 Lt	2.2	13	1	2		INLET FROM DITCH
			4+40.00		MO 5 Rt					3.1	OUTLET FROM EX. 24" CMP
						TOTAL	47	2	11.1	5.8	
						USE	47	2		6	

SLOTTED DRAIN, TYPE C

STR. NO.	WING WALL STRUCT. FROM	WING WALL STRUCT. TO	LOCATION	FILL HT. (ft)	QUANTITY TYPE C (ft)	TYPE C GRATE 6" (ea)	CLASS 3 EXC. (cy)	COMMENT
P126		P126A	MO 52 Rt.		20	1	5.4	PINNACLE EAST DRIVEWAY
				TOTAL	20		5.4	NDP FOR GRATE;
				USE	20			INCLUDED IN PRICE FOR DRAIN

GROUP B PIPE CULVERT, CONT'D.

STR. NO.	STRUCT. FROM	STRUCT. TO	LOCATION	FILL HT. (FT)	GROUP B 12" PIPE (FT)	GROUP B 12" FES (EA)	GROUP B 15" PIPE (FT)	GROUP B 15" FES (EA)	CLASS 3 EXC. (CY)	COMMENT
P201	DI201	OUT	SW_QUAD_CnG	3.8			13	1	3.2	OUTLET TO DITCH
P202	DI202	OUT	SW_QUAD_CnG	2.2			14	1	3.6	OUTLET TO DITCH
P203	DI203	OUT	NE_QUAD_CnG	1.7	13	1			0.8	OUTLET TO DITCH
P204	DI204	OUT	NW_QUAD_CnG	2			44	1	6.2	OUTLET TO DITCH
P205	DI205	OUT	NW_QUAD_CnG	1.4	13	1			0	OUTLET TO DITCH
P206	DI206	OUT	NE_QUAD_CnG	2			14	1	1.9	OUTLET TO DITCH
P210	DI207	WVCULVERT	WESTVIEW_CnG_Lt	3.6			14	1	2.8	OUTLET TO DITCH
				SUBTOTAL (2)	26	2	99	5	18.5	

GROUP B PIPE CULVERT, CONT'D.

STR. NO.	STRUCT. FROM	STRUCT. TO	LOCATION	FILL HT. (FT)	GROUP B 12" PIPE (FT)	12" FES (EA)	15" PIPE (FT)	15" FES (EA)	18" PIPE (FT)	24" PIPE (FT)	30" PIPE (FT)	36" PIPE (FT)	48" PIPE (FT)	48" FES (EA)	CLASS 3 EXC. (CY)	COMMENT
P01	IN	COUPLE	52 SS Lt.							(LIP)						EXISTING (LIP); REM. 2'-9" FROM OUTLET END
P02	COUPLE	MH01	52 SS Lt.	1.4						34					10.2	1 - 15 ELBOW, SMOOTH BORE - INCLUDE COUPLE - NDP
P03	MH01	MH02	52 SS Lt.	6.8						160					136.9	2- 15" TEES, SMOOTH BORE
P04	MH02	MH03	52 SS Lt.	6.8						53					40.1	SMOOTH BORE
P05	MH03	MH04	52 SS Lt.	7.4						274					216.6	2- 15" TEES, SMOOTH BORE
P06	MH04	MH05	52 SS Lt.	7.4							415				397.3	3- 15" TEES; SMOOTH BORE
P07	MH05	MH06	52 SS Lt.	6.8								484			481.3	1 - 12"; 8 - 15" TEES; SMOOTH BORE, PART. INST. BEFORE P2S2 BYPASS CONSTR.
P08	MH06	OUT	52 SS Lt.	6.9									90	1	135.1	SMOOTH BORE, ROCK LINING INCL. W/ 52 CULVERT
P09	DI01	MH01	52 SS Lt.	3.2			4								0	SMOOTH BORE
P10	DI02	P03	52 SS Lt.	2.6			5								0.6	SMOOTH BORE, TEE INTO P03
P11	DI03	P03	52 SS Lt.	3.6			4								0	SMOOTH BORE, TEE INTO P03
P12	COUPLE	DI04	52 SS Lt.	1						13					7.4	1- 24" COUPLE; 2-32.5; 1-55 ELBOWS; SMOOTH BORE - INCLUDE COUPLER & ELBOWS - NDP
P13	DI04	MH03	52 SS Lt.	2.4						4					0	SMOOTH BORE
P14	DI05	P05	52 SS Lt.	3.5			4								0	SMOOTH BORE, TEE INTO P05
P15	COUPLE	DI06	52 SS Lt.	1					13						7.4	1- 18" COUPLE; 1-27.5; 1-32.5 ELBOWS; SMOOTH BORE
P16	DI06	P05	52 SS Lt.	3.7					5						0.8	SMOOTH BORE, TEE INTO P05
P17	DI07	MH04	52 SS Lt.	4			3								0	SMOOTH BORE
P18	DI08	MH04	52 SS Lt.	2.8			2								0	SMOOTH BORE
P19	DI09	P06	52 SS Lt.	3.8			3								0	SMOOTH BORE, TEE INTO P06
P20	DI10	P06	52 SS Lt.	3.9			3								0	SMOOTH BORE, TEE INTO P06
P21	DI11	P06	52 SS Lt.	4.1			3								0	SMOOTH BORE, TEE INTO P06
P22	DI12	DI13	52 SS Lt.	2.3			17								12.3	SMOOTH BORE
P23	DI13	MH05	52 SS Lt.	2.3								3			0	SMOOTH BORE
P24	DI14	P07	52 SS Lt.	4			4								0.4	SMOOTH BORE, TEE INTO P07
P25	DI15	P07	52 SS Lt.	3.8			3								0	SMOOTH BORE, TEE INTO P07
P26	DI16	P07	52 SS Lt.	3.7			3								0	SMOOTH BORE, TEE INTO P07
P27	COUPLE	P07	52 SS Lt.	1.4	12										5.7	SMOOTH BORE, TEE INTO P07 - INCLUDES 2-32.5 ELBOWS, 1-47.5 ELBOW, 1-COUPLE - ALL NDP
P28	DI17	P07	52 SS Lt.	3.5			3								0	SMOOTH BORE, TEE INTO P07, INST. BEFORE P2S2 BYPASS CONSTR.
P29	DI18	P07	52 SS Lt.	3.6			3								0	SMOOTH BORE, TEE INTO P07, INST. BEFORE P2S2 BYPASS CONSTR.
P30	DI19	P07	52 SS Lt.	1.6			6								1.3	SMOOTH BORE, TEE INTO P07, INST. BEFORE P2S2 BYPASS CONSTR.
P31	DI20	P07	52 SS Lt.	3.7			3								0	SMOOTH BORE, TEE INTO P07, INST. BEFORE P2S2 BYPASS CONSTR.
P32	DI21	P07	52 SS Lt.	4.1			3								0	SMOOTH BORE, TEE INTO P07, INST. BEFORE P2S2 BYPASS CONSTR.
			SUBTOTAL (3)		12	0	76	0	18	538	415	487	90	1	1453.4	
			SUBTOTAL (2)		26	2	99	5	0	0	0	0	0	0	18.5	
			SUBTOTAL (1)		3	0	78	0	1155	434	0	0	0	0	815.0	
			TOTAL		41	2	253	5	1173	972	415	487	90	1	2286.9	
			USE		41	2	253	5	1173	972	415	487	90	1		

SUMMARY OF QUANTITIES
SHEET 12 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
05/21/2024 1:51:21 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

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)

ROCK DITCH LINER

STATION FROM	STATION TO	ALIGNMENT	WIDTH (ft)	LENGTH (ft)	AVG. THICK (ft)	QUANTITIES TYPE 1 RDL FURNISH (cy)	TYPE 1 RDL PLACE (cy)	TYPE 2 RDL FURNISH (cy)	TYPE 2 RDL PLACE (cy)	TYPE 3 RDL FURNISH (cy)	TYPE 3 RDL PLACE (cy)	BEDDING MATERIAL (cy)	SEPARATION GEOTEXTILE (sy)	REMARKS
643+79.00		MO 52 Lt.	3	2.3	0.92	0.2	0.2						1.2	JUST BACK OF WESTVUE EAST DRIVEWAY; DRAIN FLUME - STANDARD 609.40
646+43.00		MO 52 Rt.	3	10.4	0.92	1.1	1.1						5.6	DRAINS EAGLE STOP PARKING LOT; DRAIN FLUME - STANDARD 609.40
3+58.00		SW_QUAD_CnG Rt.	3	10.3	0.92	1.1	1.1						5.5	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
4+34.00		SW_QUAD_CnG Rt.	3	11.3	0.92	1.2	1.2						6.1	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
5+10.00		SW_QUAD_CnG Rt.	3	12.4	0.92	1.3	1.3						6.7	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
3+16.00		SE_QUAD_CnG Lt.	3	14.9	0.92	1.5	1.5						8.0	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
3+94.00		SE_QUAD_CnG Lt.	3	9.2	0.92	0.9	0.9						4.9	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
4+72.00		SE_QUAD_CnG Lt.	3	10.8	0.92	1.1	1.1						5.8	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
0+30.00		NE_QUAD_CnG Rt.	3	10.1	0.92	1.0	1.0						5.4	JUST BACK OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
2+98.00		NE_QUAD_CnG Rt.	3	9.5	0.92	1.0	1.0						5.1	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
3+61.00		NE_QUAD_CnG Rt.	3	8.9	0.92	0.9	0.9						4.8	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
4+30.00		NE_QUAD_CnG Rt.	3	10.1	0.92	1.0	1.0						5.4	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
4+98.00		NE_QUAD_CnG Rt.	3	10.5	0.92	1.1	1.1						5.6	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
5+66.00		NE_QUAD_CnG Rt.	3	10.5	0.92	1.1	1.1						5.6	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
6+34.00		NE_QUAD_CnG Rt.	3	9.7	0.92	1.0	1.0						5.2	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
4+05.00		NW_QUAD_CnG Lt.	3	20.1	0.92	2.1	2.1						10.8	JUST AHEAD OF INTERSECTION; DRAIN FLUME - STANDARD 609.40
0+55.00	1+97.66	School_Ditch	14	142.66	1.00			74.0	74.0				253.6	DITCH REPAIR ON SCHOOL PROPERTY
630+79.00	630+89.00	MO 52 Lt.	4	10.00	0.67	1.0	1.0						5.9	WEST OF DI01
630+93.00	630+98.74	MO 52 Lt.	4	5.74	0.67	0.6	0.6						3.4	EAST OF DI01
637+78.00	637+88.00	MO 52 Lt.	4	10.00	0.67	1.0	1.0						5.9	WEST OF DI10
637+92.00	638+02.00	MO 52 Lt.	4	10.00	0.67	1.0	1.0						5.9	EAST OF DI10
639+91.00	640+27.00	MO 52 Lt.	VARIES	36	1.00			14.7	14.7				54.1	AROUND DI13; WIDTH VARIES - 6' TO 14.5'
643+62.00	643+81.00	MO 52 Lt.	4	25.25	0.67	2.5	2.5						15.0	EAST OF DI19; 19' ALONG MO 52 AND 6.25' FROM DITCH TO PARKING LOT
645+68.00	646+37.00	MO 52 Lt.	VARIES	-	1.83					134.6	134.6	49.0	287.1	OUTLET OF BR A9255 AND P08
654+45.31	654+59.23	MO 5&52 Lt.	VARIES	13.92	1.83					21.1	21.1	7.0	55.0	INLET OF WESTVIEW CULVERT
655+77.09	656+08.02	MO 5&52 Lt.	VARIES	30.93	1.83					51.7	51.7	17.2	111.0	OUTLET OF WESTVIEW CULVERT
-	-	ROUNDABOUT BL	-	-	0.67	26.7	26.7						128.1	CENTER OF ROUNDABOUT
					TOTAL	50.4	50.4	88.7	88.7	207.4	207.4	73.2	1016.7	
					USE	50	50	89	89	207	207	73	1017	

REINFORCED CONCRETE BOX CULVERT

LOCATION	STA	SKEW (deg)	FILL HT. (ft)	NO. OF BARRELS (ea)	SPAN (ft)	HEIGHT (ft)	LENGTH (ft)	CONCRETE CLASS B-1 (CULVERTS) (cy)	CONCRETE CLASS B-1 (CULVERT-BRIDGE) (cy)	REINFORCING STEEL (CULVERTS) (lbs)	REINFORCING STEEL (CULVERT-BRIDGE) (lbs)	SELECT GRANULAR BACKFILL (cy)	CLASS 4 EXC. (cy)	COMMENT
MO 52	645+50.90	33^ L.A.	1.6	3	8	4	113		SEE BRIDGE QUANTITIES		SEE BRIDGE QUANTITIES	69.4	348.1	STRAIGHT WINGS, LEFT AHEAD
MO 52 - RT	645+50.90	33^ L.A.						26.62		4537		15.3	61	UPSTREAM MODIFIED INLET
WESTVIEW DR.	9+42.25	3^37'37" R.A.	1.4	1	12	10	95	171.1		22248.2		40.1	821.4	STRAIGHT WINGS; SQUARED SKEW
							TOTAL	197.7		26785.2		124.8	1230.5	
							USE	197.7		26790		125	1231	

PIPE-ARCH CULVERT

STR. NO.	STRUCT. FROM	STRUCT. TO	STATION FROM	STATION TO	LOCATION	FILL HT. (FT)	PIPE-ARCH B-5 (FT)	PIPE-ARCH FES (EACH)	CLASS 3 EXC. (CY)	COMMENT
P209	IN	52CULVERT	0+46.00		CENEX DWY		178	2	124.0	2(18"x 89') B-5'S ; 2- 33^ ELBOWS (1 PER PIPE); ATTACH TO INLET TO 52CULVERT
						TOTAL	178	2	124.0	
						USE	178	2		

36 IN SURFACE MOUNT DELINEATOR POST

PAVEMENT MARKING SHEET NO.	STATION FROM	STATION TO	LOCATION	WHITE EACH	YELLOW EACH	REMARKS
4	0+44	1+56	NEWTON ST.	2	6	RAISED MEDIAN
5	647+29	647+49	MO 52 LT.	2	2	RAISED MEDIAN
6	649+18	652+56	MO 5/52	2	17	RAISED MEDIAN
7	0+44	3+50	MO 5	2	10	RAISED MEDIAN
			TOTAL	8	35	
			USE	43		

CLASS 3 EXCAVATION

SUBTOTAL	CLASS 3 EXCAVATION (CY)
CAST-IN-PLACE DROP INLETS	252.6
PRECAST DROP INLETS	199.3
PRECAST CONCRETE MANHOLES	123.5
GROUP A PIPE CULVERTS	11.1
GROUP B PIPE CULVERTS	2286.9
SLOTTED DRAIN, TYPE C	5.4
PIPE-ARCH CLUVERT	124.0
TOTAL	3002.8
USE	3003

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/02/2024 8:57:35 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/2/2024

ROUTE	STATE
52	MO

DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
04/11/24	REV01- PAY ITEM ADDED; CLARIFY INFO

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

SUMMARY OF QUANTITIES
SHEET 13 OF 18

LIGHTING - EQUIPMENT

POLE NO.	PULL BOX NO.	STA.	OFFSET* FT.	LOCATION	240V - 4 CIRC BASE MOUNTED CONT. STATION EA.	POLE 30' TYPE AT DESIGN (1) EA.	150 W 16,500 LUMEN EQV. LED - A EA.	BRACKET ARM - 4' EA.	BRACKET ARM - 8' EA.	BRACKET ARM - 10' EA.	BRACKET ARM - 12' EA.	BRACKET ARM - 15' EA.	POLE FOUNDATION 30' MOUNT HT EA.	PULL BOX PREFORMED CL 1 ** EA.	REMARKS
CONTROLLER 1															
		1+05	50	NEQ RT.	1										
	1	1+18	10	NEQ RT.										1	TYPE II DRAIN
	2	1+83	6	SEQ LT.										1	TYPE II DRAIN
A		2+36	4	SEQ LT.		1	1					1	1		
B		3+80	26	MO 5 LT.		1	1		1				1		
C		1+40	4	NEQ RT.		1	1					1	1		
	3	2+70	7	NEQ RT.										1	
	4	3+92	10	NWQ LT.										1	TYPE II DRAIN
D		2+80	10	NWQ LT.		1	1			1			1		
	5	1+50	10	NWQ LT.										1	
	6	646+42	10	MO 52 RT.										1	TYPE II DRAIN
E		646+45	10	MO 52 RT.		1	1				1		1		
F		2+56	4	SWQ RT.		1	1				1		1		
G		7+15	10	NWQ LT.		1	1			1			1		
H		0+35	4	NEQ RT.		1	1	1					1		
				TOTAL	1	8	8	1	1	2	2	2	8	6	
				USE	1	8	8	1	1	2	2	2	8	6	

NOTE: ALL CIRCUITS REQUIRE 15 AMP BREAKER IN CONTROLLER

*OFFSET FROM PROPOSED EDGE OF PAVEMENT (TRAVELWAY)

** USE TYPE I DRAIN W/ PULL BOX, UNLESS NOTED OTHERWISE

LIGHTING - CONDUIT, CABLE, AND TRENCHING

STATION FROM	STATION TO	SYSTEM/ CIRCUIT	CENTER TO CENTER DIST. (FT.)	2" RIGID CONDUIT TRENCHED (FT.)	3" RIGID CONDUIT TRENCHED (FT.)	3" RIGID CONDUIT PUSHED (FT.)	TRENCHING TYPE I (FT.)	TRENCHING TYPE II (FT.)	POWER CABLE 1c-#2 AWG (FT.)	1" CABLE CONDUIT 2c-#8 AWG (FT.)	POLE & BRACKET CABLE 1c-#10 AWG (FT.)	REMARKS
CONTROLLER 1												
PS1	CONT1		72	80					264			3 RUNS OF 88' - #2 AWG CABLE
CONT1	1	1	41		88					52		2 RUNS OF 44' - 3" CONDUIT
1	2	1	85		36	47				91		
2	A	1	51					49		62	90	A - 30' POLE WITH 15' BRACKET
A	B	1	343				341			371	76	B - 30' POLE WITH 8' BRACKET
CONT1	1	2	41							52		TRENCHING CONDUIT INCLUDED WITH CIRCUIT #1
1	C	2	25					23		35	90	C - 30' POLE WITH 15' BRACKET
C	3	2	101				99			114		
3	4	2	78		37	39				84		
4	D	2	107				105			121	80	D - 30' POLE WITH 10' BRACKET
D	5	2	119				117			135		
5	6	2	74		34	38				80		
6	E	2	5					3		14	84	E - 30' POLE WITH 12' BRACKET
E	F	2	109				107			125	84	F - 30' POLE WITH 12' BRACKET
CONT1	1	3	41							52		TRENCHING CONDUIT INCLUDED WITH CIRCUIT #1
1	3	3	118							132		
3	4	3	78							84		TRENCHING CONDUIT INCLUDED WITH CIRCUIT #2
4	G	3	325				323			350	80	G - 30' POLE WITH 10' BRACKET
CONT1	1	4	41							52		TRENCHING CONDUIT INCLUDED WITH CIRCUIT #1
1	H	4	75							87	68	H - 30' POLE WITH 4' BRACKET
			TOTAL	80	195	124	1,092	75	264	2,093	652	
			USE	80	195	124	1,092	75	260	2,090	650	

POWER SUPPLY ASSEMBLIES
TYPE 2 240/120 VOLT SERVICE, LIGHTING ONLY

CONTROLLER NUMBER	APPROACH	STATION	OFFSET	DRAWING 901.80	CIRCUIT BREAKER TRIP RATING – LIGHTING CONTROLLER – CIRCUIT 1	CIRCUIT 2	CIRCUIT 3	CIRCUIT 4	POWER SUPPLY DISCONNECT MAIN BREAKER – SIGNALS	LIGHTING	SERVICE POLE – CONTRACT FURNISH	UTILITY COMPANY
1	NE QUAD	1+05	50'	1	15 AMPS	15 AMPS	15 AMPS	15 AMPS		100 AMPS	SEE UTILITY JSP	
			TOTAL	1								
			USE	1								

SUMMARY OF QUANTITIES
SHEET 14 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 1:51:58 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/21/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 3
COUNTY: MORGAN
JOB NO.: J5P3575
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)

TEMPORARY INLET PROTECTION

STA FROM	TO	ALIGNMENT	DITCH CHECK ROCK (lf)	DITCH CHECK ALTERNATE (lf)	CURB INLET CHECK (ea)	SEDIMENT REMOVAL (cy)	COMMENT
629+23.00		MO 52 Rt.		41		0.9	2x2 GRATE INLET, 3x3 GRATE INLET IN DITCH
630+60.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
630+91.00		MO 52 Lt.	32			0.9	3X3 GRATE INLET IN DITCH
631+90.00		MO 52 Lt.		32		0.9	3X3 GRATE INLET IN DITCH
631+95.00		MO 52 Rt.		41	1	0.9	2x2 GRATE INLET W/ 2.5' CURB INLET; 3x3 GRATE INLET IN DITCH
632+00.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
633+12.40		MO 52 Lt.		32		0.9	3X3 GRATE INLET IN DITCH
634+00.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
634+00.00		MO 52 Rt.		41	1	0.9	2x2 GRATE INLET W/ 2.5' CURB INLET; 3x3 GRATE INLET IN DITCH
634+08.00		MO 52 Lt.		32		0.9	3X3 GRATE INLET IN DITCH
635+90.00		MO 52 Lt.		41	1	0.9	2x2 GRATE INLET W/ 2.5' CURB INLET; 3x3 GRATE INLET IN DITCH
635+90.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
637+45.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
637+85.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
637+90.00		MO 52 Lt.	32				3X3 GRATE INLET IN DITCH
638+95.00		MO 52 Rt.		41	1	0.9	2x2 GRATE INLET W/ 2.5' CURB INLET; 3x3 GRATE INLET IN DITCH
638+00.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
639+89.00		MO 52 Lt.	32				3X3 GRATE INLET IN DITCH
640+10.00		MO 52 Lt.	34				5X3 GRATE INLET IN DITCH
640+57.00		MO 52 Rt.		41	1	0.9	2x2 GRATE INLET W/ 2.5' CURB INLET; 3x3 GRATE INLET IN DITCH
640+75.00		MO 52 Lt.		32		0.9	3X3 GRATE INLET IN DITCH
640+85.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
641+35.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
641+45.00		MO 52 Rt.		32		0.9	3X3 GRATE INLET IN DITCH
641+90.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
642+15.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
643+00.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
643+20.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
643+35.00		MO 52 Rt.		32		0.9	3X3 GRATE INLET IN DITCH
643+40.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
643+40.00		MO 52 Rt.		45	1		2x2 GRATE INLET W/ 2.5' CURB INLET; 20' SLOTTED DRAIN
643+60.00		MO 52 Lt.	32				3X3 GRATE INLET IN DITCH
643+70.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
643+79.00		MO 52 Lt.			1		DRAIN FLUME ON WESTVUE PARKING LOT
644+10.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
644+70.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
644+80.00		MO 52 Lt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
646+43.00		MO 52 Rt.		9	1		2x2 GRATE INLET W/ 2.5' CURB INLET
646+43.00		MO 52 Rt.			1		DRAIN FLUME ON CENEX PARKING LOT
9+90.00		E.NEWTON Lt.			1		DRAIN FLUME
1+43.70		NW QUAD BL			1		5' CURB INLET
2+86.00		NW QUAD BL			1		5' CURB INLET
4+05.00		NW QUAD BL			1		DRAIN FLUME
2+17.00		NE QUAD BL			1		2.5' CURB INLET
2+98.00	5+66.00	NE QUAD BL			5		DRAIN FLUMES
3+11.00		SW QUAD BL			1		5' CURB INLET
3+58.00	5+10.00	SW QUAD BL			3		DRAIN FLUMES
2+76.00		SE QUAD BL			1		5' CURB INLET
2+86.00	4+42.00	SE QUAD BL			3		DRAIN FLUMES
0+73.00		WESTVIEW CnG BL			1		2.5' CURB INLET
		SUBTOTAL	162	654	46	11.7	

TEMPORARY SLOPE PROTECTION

STA FROM	TO	ALIGNMENT	SILT FENCE (lf)	SEDIMENT REMOVAL (cy)	COMMENT
641+64.50	642+14.50	52 Lt.	61	0.6	BETWEEN GUINN AND WESTVUE WEST DWY
643+50.00		52 Rt.	25	0.3	PINNACLE GAS DWY ON RIGHT
644+00.00		52 Rt.	34	0.3	PINNACLE GAS DWY ON LEFT
0+46.00		CENEX DWY	52	0.5	ABOVE DOUBLE PIPE CIULVERT INLET
9+93.00	10+21.00	E. NEWTON ST Lt.	35	0.4	NEAR GAS VALVE AT OFFICE DWY.
0+65.00		MO 5 Lt.	15	0.2	ABOVE PIPE CIULVERT INLET
1+65.00	2+45.00	SE QUAD CnG	69	0.7	NEAR BANK DWY
5+30.00	654+30.00	NW QUAD CnG/5 & 52 Lt.	321	3.2	JUST BACK OF WESTVIEW DR.
		SUBTOTAL	612	6.2	

SUMMARY OF QUANTITIES
SHEET 15 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 1:52:12 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE 52 | STATE MO
DISTRICT CD | SHEET NO. 3
COUNTY MORGAN
JOB NO. J5P3575
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)

TEMPORARY DITCH PROTECTION

STA FROM	TO	ALIGNMENT	DITCH CHECK ROCK (lf)	DITCH CHECK ALTERNATE (lf)	SEDIMENT TRAP (cy)	SEDIMENT REMOVAL (cy)	COMMENT
629+90.00	631+95.00	MO 52 Rt.		54		1.5	1' V-DITCH; 6 - 9' D.C.'S; EFF. D = 9"
630+91.00	631+90.00	MO 52 Lt.		18		0.5	1' V-DITCH; 2 - 9' D.C.'S; EFF. D = 9"
632+30.00	634+00.00	MO 52 Rt.		36		1.0	1' V-DITCH; 4 - 9' D.C.'S; EFF. D = 9"
632+30.00	633+12.40	MO 52 Lt.		18		0.5	1' V-DITCH; 2 - 9' D.C.'S; EFF. D = 9"
633+12.40	634+08.00	MO 52 Lt.		18		0.5	1' V-DITCH; 2 - 9' D.C.'S; EFF. D = 9"
634+00.00	635+90.00	MO 52 Rt.		36		1.0	1' V-DITCH; 4 - 9' D.C.'S; EFF. D = 9"
634+08.00	635+90.00	MO 52 Lt.		36		1.0	1' V-DITCH; 4 - 9' D.C.'S; EFF. D = 9"
635+90.00	637+90.00	MO 52 Lt.		27		0.8	1' V-DITCH; 3 - 9' D.C.'S; EFF. D = 9"
635+90.00	638+95.00	MO 52 Rt.		54		1.5	1' V-DITCH; 6 - 9' D.C.'S; EFF. D = 9"
638+70.00	639+89.00	MO 52 Lt.		14		0.4	1' V-DITCH; 2 - 7' D.C.'S; EFF. D = 9"
638+95.00	640+57.00	MO 52 Rt.		18		0.5	1' V-DITCH; 2 - 9' D.C.'S; EFF. D = 9"
642+60.00		MO 52 Rt.		9		0.3	1' V-DITCH; 1 - 9' D.C; EFF. D = 9"
653+94.00	655+44.00	MO 5&52 Rt.		20		0.6	4' FBD; 2 - 10' D.C.; EFF. D = 9"
0+65.00		MO 5 Lt.	32			1.8	4' FBD; 2 - 16' D.C.; EFF. D = 18"
2+30.00	3+80.00	MO 5 Rt.	48			2.7	4' FBD; 3 - 16' D.C.; EFF. D = 18"
1+80.00	4+80.00	NE QUAD CnG		30		0.8	4' FBD; 3 - 10' D.C.; EFF. D = 9"
2+21.00		NE QUAD CnG		10		0.3	4' FBD; 1 - 10' D.C.; EFF. D = 9"
3+15.00	3+90.00	SW QUAD CnG	40			2.4	8' FBD; 2 - 20' D.C.; EFF. D = 18"
3+00.00	4+53.00	SE QUAD CnG	48			2.7	4' FBD; 3 - 16' D.C.; EFF. D = 18"
0+15.00	637+90.00	SCHOOL EAST DWY. Rt.		36		1.0	1' V-DITCH; 6 - 6' D.C.'S; EFF. D = 9"
0+40.00	638+70.00	SCHOOL EAST DWY. Lt.		24		0.7	1' V-DITCH; 4 - 6' D.C.'S; EFF. D = 9"
		SUBTOTAL	168	458	0	22.5	

EROSION CONTROL TOTALS

SUBTOTAL	DITCH CHECK ROCK (lf)	DITCH CHECK ALTERNATE (lf)	CURB INLET CHECK (ea)	SILT FENCE (lf)	SEDIMENT REMOVAL (cy)
TEMPORARY INLET PROTECTION	162	654	46	0	11.7
TEMPORARY SLOPE PROTECTION	0	0	0	612	6.2
TEMPORARY DITCH PROTECTION	168	458	0	0	22.5
TOTAL	330	1112	46	612	40.4
USE	330	1112	46	612	40

RIGHT OF WAY MARKERS

STATION	OFFSET	LOCATION	MARKERS QTY (EACH)	2 IN. CAP QTY (EACH)	6 FT. POST QTY (EACH)	REMARKS
RIGHT OF WAY MARKERS						
629+69.56	40'	ROUTE 52 LT.	1	1	1	
637+06.00	40'	ROUTE 52 LT.	1	1	1	
		TOTAL	2	2	2	
		USE	2	2	2	

FOR INFORMATIONAL PURPOSES ONLY - SUPPLIED BY OTHERS

SEEDING

STA FROM	TO	ALIGNMENT	SEASON COOL (ac)	SEASON WARM (ac)	TEMPORARY (ac)	MULCHING (AC	COMMENT
629+00.00	629+36.00	52 Rt.	0.02			0.02	AREA JUST AHEAD OF FAIRGROUND RD.
629+90.00	635+00.00	52 Rt.	0.16			0.16	FAIRGROUND RD. TO AHEAD OF SCHOOL X-ING
630+45.00	635+00.00	52 Lt.	0.17			0.17	SCHOOL WEST DWY TO SCHOOL X-ING
635+00.00	640+00.00	52 Rt.	0.12			0.12	ALONG MULTI-PURPOSE TRAIL
635+00.00	640+00.00	52 Lt.	0.22			0.22	BACK OF TO AHEAD OF EAST SCHOOL DWY
640+00.00	645+00.00	52 Lt.	0.15	0.003		0.15	BACK OF GUINN DWY TO AHEAD OF WESTVUE EAST DWY
640+00.00	645+00.00	52 Rt.	0.16	0.002		0.16	BACK OF PARK ACCESS TO CONCRETE DRAINAGE DITCH
645+00.00	646+93.00	52 Lt.	0.12	0.14		0.26	AHEAD OF WESTVUE EAST DWY TO BEG. OF CONC. PAV'T
645+00.00	646+93.00	52 Rt.	0.08	0.03		0.11	CULVERT TO BEG. OF CONC. PAV'T.
9+60.00	10+21.00	E. NEWTON Lt.	0.02			0.02	FROM CONC PAV'T LIMIT TO END OF CURB AND GUTTER
1+94.36	3+66.19	NW QUAD CnG	0.06			0.06	WITHIN ROUNDABOUT CONC. PAV'T . LIMITS
0+59.97	2+17.26	NE QUAD CnG	0.07			0.07	WITHIN ROUNDABOUT CONC. PAV'T . LIMITS
1+32.59	2+76.51	SE QUAD CnG	0.04			0.04	WITHIN ROUNDABOUT CONC. PAV'T . LIMITS
2+66.38	2+84.15	SW QUAD CnG	0.06	0.01		0.07	WITHIN ROUNDABOUT CONC. PAV'T . LIMITS
649+72.00	653+33.70	5 & 52 Lt.	0.14			0.14	FROM CONC PAV'T LIMIT TO JUST BACK OF WESTVIEW DR.
649+72.00	653+33.70	5 & 52 Rt.	0.13			0.13	FROM CONC PAV'T LIMIT TOWARDS WESTVIEW DR.
653+33.70	655+00.00	5 & 52 Lt.	0.05	0.03		0.08	JUST BACK OF WESTVIEW DR.
655+00.00	655+85.00	5 & 52 Lt.		0.06		0.06	JUST AHEAD OF WESTVIEW DR.
653+33.70	655+85.00	5 & 52 Rt.	0.07			0.07	TO END OF PROJECT
9+20.00	9+58.00	WESTVIEW DR. Rt.	0.01			0.01	JUST BACK OF 5 & 52
9+20.00	9+58.00	WESTVIEW DR. Lt.	0.01			0.01	JUST BACK OF 5 & 52
0+80.00	3+80.00	5 Lt.	0.12			0.12	FROM CONC. PAV'T TO END OF CURB AND GUTTER
0+80.00	4+61.00	5 Rt.	0.20	0.01		0.21	FROM CONC. PAV'T TO SERVICE ROAD ACCESS
		TOTAL	2.18	0.29	0.62	3.09	TEMPORARY ESTIMATED AT 25% OF PERMANENT
		USE	2.2	0.3	0.6	3.1	

SUMMARY OF QUANTITIES
SHEET 16 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 1:52:24 PM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/21/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

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)

TEMPORARY PAVEMENT MARKING

STA FROM	TO	ALIGNMENT	REMOVABLE MARKING TAPE 4"WHITE (lf)	REMOVABLE MARKING TAPE 4"YELLOW (lf)	REMOVABLE MARKING TAPE 12" STOP BAR (lf)	WATERBORNE PAINT 4"WHITE (lf)	WATERBORNE PAINT 4"YELLOW (lf)	P.M. REMOVAL (lf)	COMMENT
646+93.00	647+74.00	MO 52 Lt.		182	12			194	PHASE 1, STAGE 1 CENTERLINE, REMOVE STAGE 13
646+93.00	647+96.00	MO 52 Rt.	113		44			157	PHASE 1, STAGE 2 LANELINE, REMOVE STAGE 13
648+91.00	649+72.00	MO 5/52 Lt.	91					91	PHASE 1, STAGE 3 LANELINE, REMOVE STAGE 13
648+91.00	649+72.00	MO 5/52 Rt.		182	12			194	PHASE 1, STAGE 4 CENTERLINE, REMOVE STAGE 13
0+60.00	0+80.00	MO 5 Rt.		60	12			72	PHASE 1, STAGE 5 CENTERLINE, REMOVE STAGE 13
0+29.00	0+80.00	MO 5 Lt.	61		47			108	PHASE 1, STAGE 6 LANELINE, REMOVE STAGE 13
8+76.00	9+60.00	E.NEWTON Lt.	94		50			144	PHASE 1, STAGE 7 LANELINE, REMOVE STAGE 13
8+76.00	9+60.00	E.NEWTON Rt.		140	10			150	PHASE 1, STAGE 8 CENTERLINE, REMOVE STAGE 13
646+40.00	1+14.00	52 TO 5	233					233	PHASE 1 STAGE 8 SW QUAD EDGELINE, REMOVE STAGE 13
1+14.00	9+32.00	5 TO E. NEWTON	130					130	PHASE 1 STAGE 8 SE QUAD EDGELINE, REMOVE STAGE 13
10+18.00	649+72.00	E. NEWTON TO 5/52	244					244	PHASE 1 STAGE 8 NE QUAD EDGELINE, REMOVE STAGE 13
646+75.00	649+72.00	52 TO 5/52	251					251	PHASE 1 STAGE 8 NW QUAD EDGELINE, REMOVE STAGE 13
643+50.00	646+93.00	52				416	662	0	PHASE 2 STAGE 1 MO 52 EDGELINE
646+93.00	647+44.00	52	72					72	PHASE 2 STAGE 1 MO 52 EDGELINE
646+93.00	647+44.00	52		248				248	PHASE 2 STAGE 1 MO 52 CENTERLINE
644+02.00	646+93.00	52						941	PHASE 2 STAGE 1 REMOVE EXIST. PAINT
642+70.00	647+44.00	52						1668	PHASE 2 STAGE 2 REMOVE EXIST. AND STAGE 1 MARKINGS
2+43.07	6+71.30	BYPASS P2S2A				811	874		PHASE 2 STAGE 2 MO 52 CENTERLINE, EDGELINE
6+71.30	7+32.00	BYPASS P2S2A		120					PHASE 2 STAGE 2 MO 52 CENTERLINE
0+00.00	0+78.00	BYPASS P2S2B				78	156		PHASE 2 STAGE 2 MO 52 CENTERLINE, EDGELINE
0+78.00	1+40.00	BYPASS P2S2B	83	124					PHASE 2 STAGE 2 MO 52 CENTERLINE, EDGELINE
631+83.00	646+93.00	MO 52 Lt.				1627		327	PHASE 3 STAGE 1 MO 52 EDGELINE, REMOVE SOME OF PHASE 2
629+00.00	646+93.00	MO 52 Rt.				1650			PHASE 3 STAGE 1 MO 52 EDGELINE
644+00.00	647+50.00	MO 52		119			586	119	PHASE 3 STAGE 1, CENTERLINE, REMOVE SOME OF PHASE 3
		TOTAL	1372	1175	187	4582	2278	5343	
		USE	1372	1175	187	4582	2278	5343	

TRAFFIC SIGNAL/LIGHTING MODIFICATIONS *

STATION FROM	STATION TO	OFFSET	ALIGNMENT	SIGNAL POLE (ea)	SIGNAL SPAN WIRE (ft)	SIGNAL CONTROLLER (ea)	SIGNAL SIGNAL HEAD (ea)	SIGNAL TRAFFIC DETECTION (ea)	LIGHTING LUMINAIRE 150W (EQ.) (ea)	LIGHTING BRACKET ARM 6' (ea)	COMMENT
647+84.00		39.3	52 Rt.	1					1	1	SW QUADRANT
647+84.00	647+96.00		52		75		3				CROSSING MO 52
647+96.00		34.8	52 Lt.	1					1	1	NW QUADRANT
647+96.00	648+80.00		5&52		94		3				CROSSING MO 5/52
648+80.00		51.3	5/52 Rt.	1					1	1	NE QUADRANT
648+80.00	0+48.00		5&52 TO 5		95		3				CROSSING E. NEWTON St.
0+48.00	647+84.00		5 TO 52		108		3				CROSSING MO 5
649+13.00		85.5	5/52 Rt.	1		1		1			NE QUADRANT, AT CONTROLLER
648+80.00	649+13.00		5&52		48						SPAN TO CONTROLLER
649+13.00			5&52		75						CONTROLLER TO POWER SOURCE
			TOTAL	4	495	1	12	1	3	3	
			USE	LUMP SUM							

* FOR INFORMATIONAL PURPOSES ONLY

PAVEMENT EDGE TREATMENT

STA FROM	TO	ALIGNMENT	QUANTITY (lf)	COMMENT
629+00.00	645+14.00	MO 52 Rt.	1614	GREATER THAN 3" EDGE DIFFERENCE
631+83.00	645+14.00	MO 52 Lt.	1315	GREATER THAN 3" EDGE DIFFERENCE
		TOTAL	2929	
		USE	2929	

SUMMARY OF QUANTITIES
SHEET 17 OF 18

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/21/2024 1:52:42 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED 3/21/2024
ROUTE 52 | STATE MO
DISTRICT CD | SHEET NO. 3
COUNTY MORGAN
JOB NO. J5P3575
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	3	48			15	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	4	50			16	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	4	64			12	SIGNAL AHEAD (SYMBOL)
WO3-4	48X48	16.00	2	32			11	BE PREPARED TO STOP
WO3-5	48X48	16.00						SPEED LIMIT AHEAD
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)
WO4-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)
WO4-1aL	48X48	16.00						MERGE (LEFT)
WO4-1aR	48X48	16.00						MERGE (RIGHT)
WO5-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS
WO5-3	48X48	16.00						ONE LANE BRIDGE
WO5-5	48X48	16.00	4	64			34	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	2	10			44A	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	2	32			36	UNEVEN LANES
WO8-12	48X48	16.00	2	32			35	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	4	64			23	SHOULDER DROP-OFF (SYMBOL RIGHT)
WO8-17P	30X24	5.00	4	20			23	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)
W012-2x	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	3	18.75			44	ADVISORY SPEED (PLAQUE)
WO16-2	30X24	5.00						XXX FEET (PLAQUE)
WO16-3	30X24	5.00						X MILE (PLAQUE)
WO20-1	48X48	16.00	4	64			2	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	2	32			7	ONE LANE ROAD AHEAD
WO20-5	48X48	16.00	4	64			5	RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00	5	80			6	RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00	4	64			8	FLAGGER (SYMBOL)
WO21-2	36X36	9.00						FRESH OIL
WO21-5	48X48	16.00	4	64			21	SHOULDER WORK / SHOULDER WORK AHEAD
WO22-1	48X48	16.00						BLASTING ZONE AHEAD
WO22-2	42X36	10.50						TURN OFF 2-WAY RADIO AND PHONE
WO22-3	42X36	10.50						END BLASTING ZONE
GO22-1	21X15	2.19	4	8.76			NA	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	4	48			49	GORE EXIT
E05-2	48X36	12.00						EXIT OPEN
E05-2a	48X36	12.00						EXIT CLOSED
GO20-1	60X24	10.00	4	40			1	ROAD WORK NEXT XX MILES
GO20-2	48X24	8.00	4	32			26	END ROAD WORK
GO20-4	36X18	4.50						PILOT CAR FOLLOW ME
GO20-4a	42X30	8.75						PILOT CAR IN USE WAIT & FOLLOW
GO20-4a	18X12	1.50						PILOT CAR IN USE WAIT & FOLLOW
GO20-5aP	36X24	6.00	1	6			54	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	4	27.72			13	YIELD
R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)
R1-3P	30X12	2.50						ALL WAY (PLAQUE)
R2-1	36X48	12.00						SPEED LIMIT XX
R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00						NO TURNS
R3-4	48X48	16.00						NO U-TURN (SYMBOL)
R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00						DO NOT PASS
R4-2	36X48	12.00						PASS WITH CARE
R4-7a	36X48	12.00	4	48			42	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	4	8			72	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	4	24			47	STOP HERE ON RED (45^ ARROW)
R11-2	48X30	10.00	4	40			29	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	3	96				POINT OF PRESENCE
CONST-7	48X24	8.00	3	24				RATE OUR WORK ZONE
CONST-7	72X36	18.00						RATE OUR WORK ZONE
CONST-8	48X36	12.00	4	48				WORK ZONE NO PHONE ZONE

616-10.05 CONSTRUCTION SIGNS	TOTAL
	1254

616-10.10 RELOCATED SIGNS	TOTAL
	0

ITEM NUMBER	TOTAL QTY	DESCRIPTION
6122008	2	IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
6122009	1	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	4	REPLACEMENT SAND BARREL
6122030	1	IMPACT ATTENUATOR (RELOCATION)
6123001		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	150	CHANNELIZER (TRIM LINE)
6161030	17	TYPE III MOVEABLE BARRICADE
6161033		DIRECTION INDICATOR BARRICADE
6161040	3	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	4	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
	62.5	TEMPORARY TRAFFIC BARRIER
6173600D		CONTRACTOR FURNISHED/RETAINED
	437.5	TEMPORARY TRAFFIC BARRIER, ANCHORED
6173700B		CONTRACTOR FURNISHED/RETAINED
		TEMP. TRAFFIC BARRIER, STIFFNESS TRANS.
6173706		CONTRACTOR FURNISHED/RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
	650	RELOCATING TEMPORARY TRAFFIC BARRIER, ANCHORED
6175011B		
6175013		RELOCATING TEMPORARY TRAFFIC BARRIER, STIFFNESS TRANSITION
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

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:37:44 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO

DISTRICT	SHEET NO.
CD	3

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

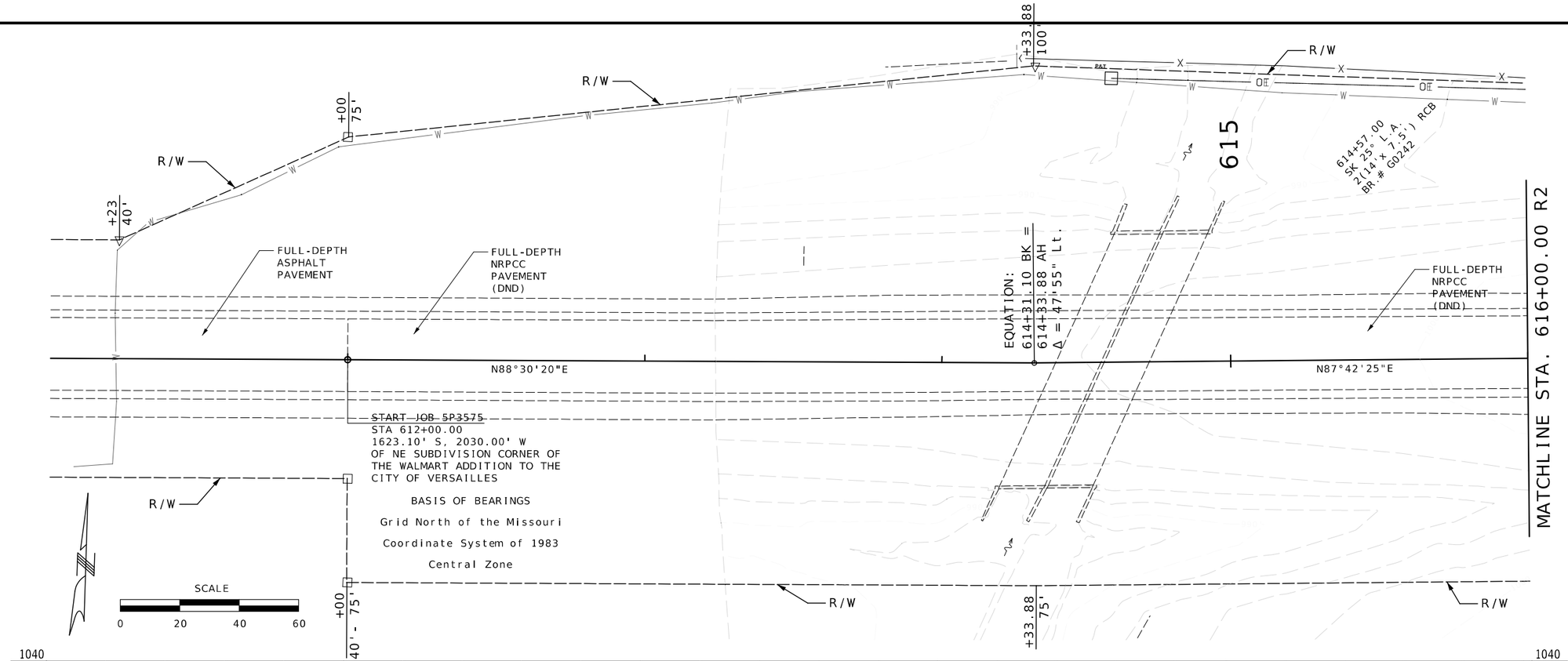
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
04/11/24	REV01 - PAY ITEMS ADDED

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

SUMMARY OF QUANTITIES
SHEET 18 OF 18



ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

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.

RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STATION 616+00 (52) TO STATION 655+85 (5/52). A DISTANCE OF 0.736 MILES.

DISCLAIMER

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411 RSMO) SPECIFICATION, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 9:59:44 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	4

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

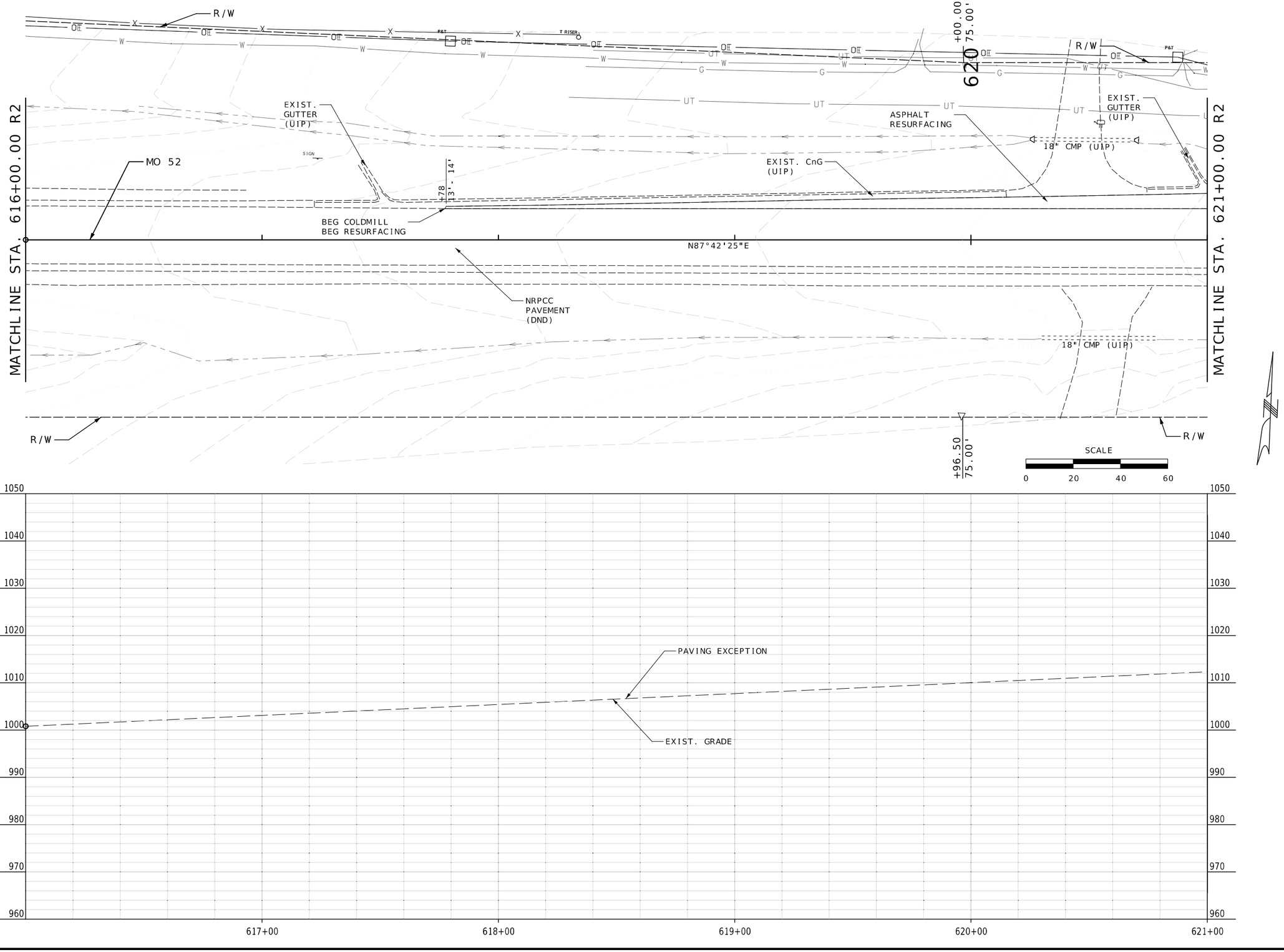
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

MISSOURI ROUTE 52 ℄
STA 612+00 TO STA 616+00



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER

03/13/2024 10:47:32 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/13/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	5

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

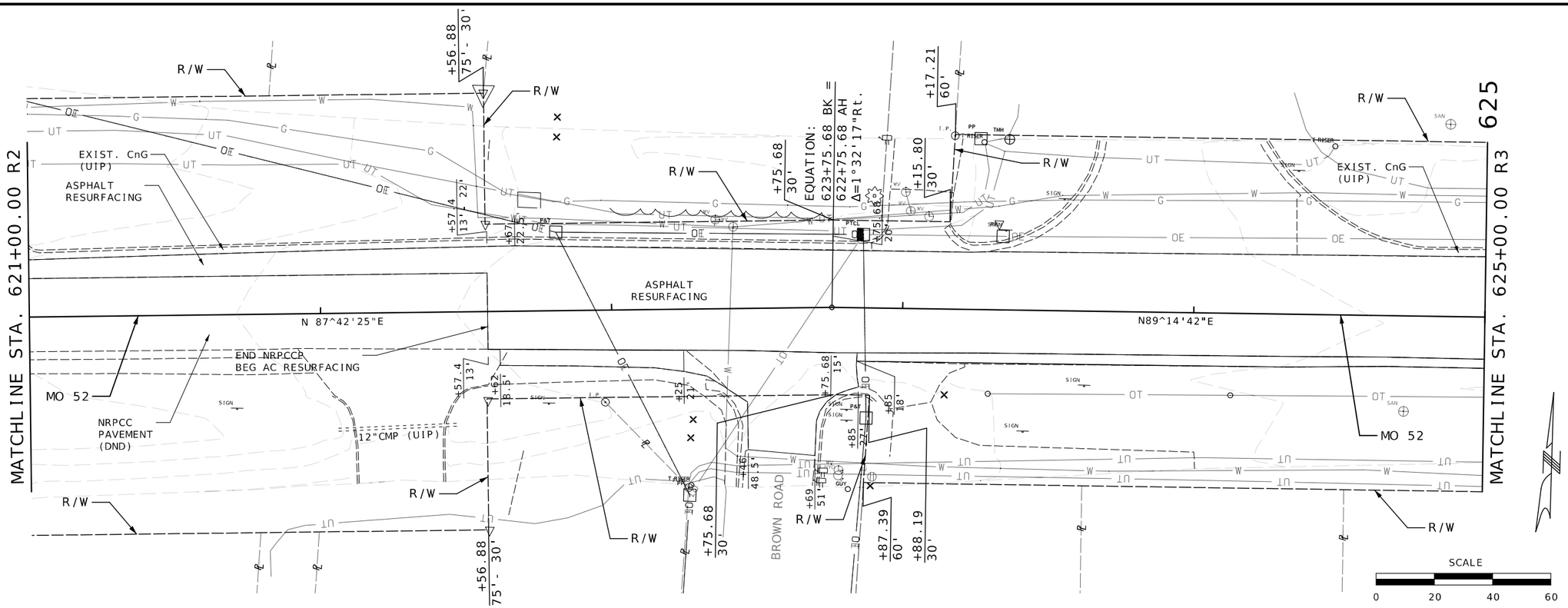
BRIDGE NO.

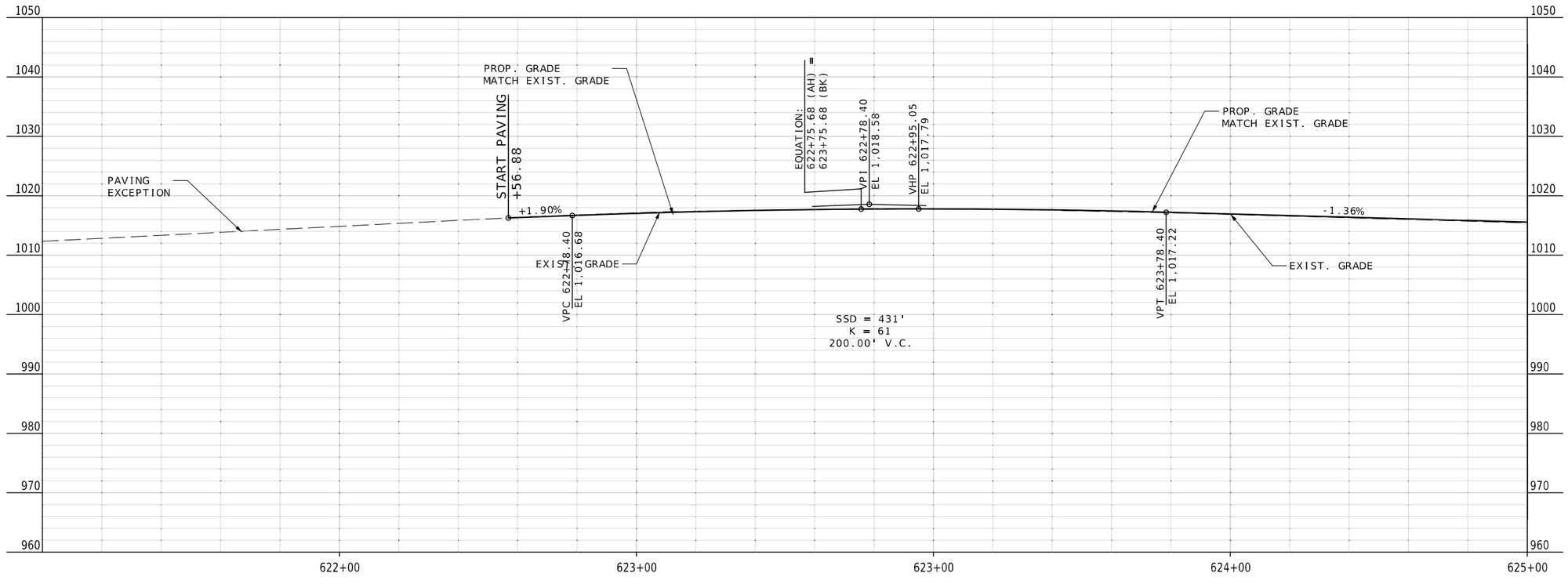
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 52 ℄
STA 616+00 TO STA 621+00





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 10:48:38 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	6

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

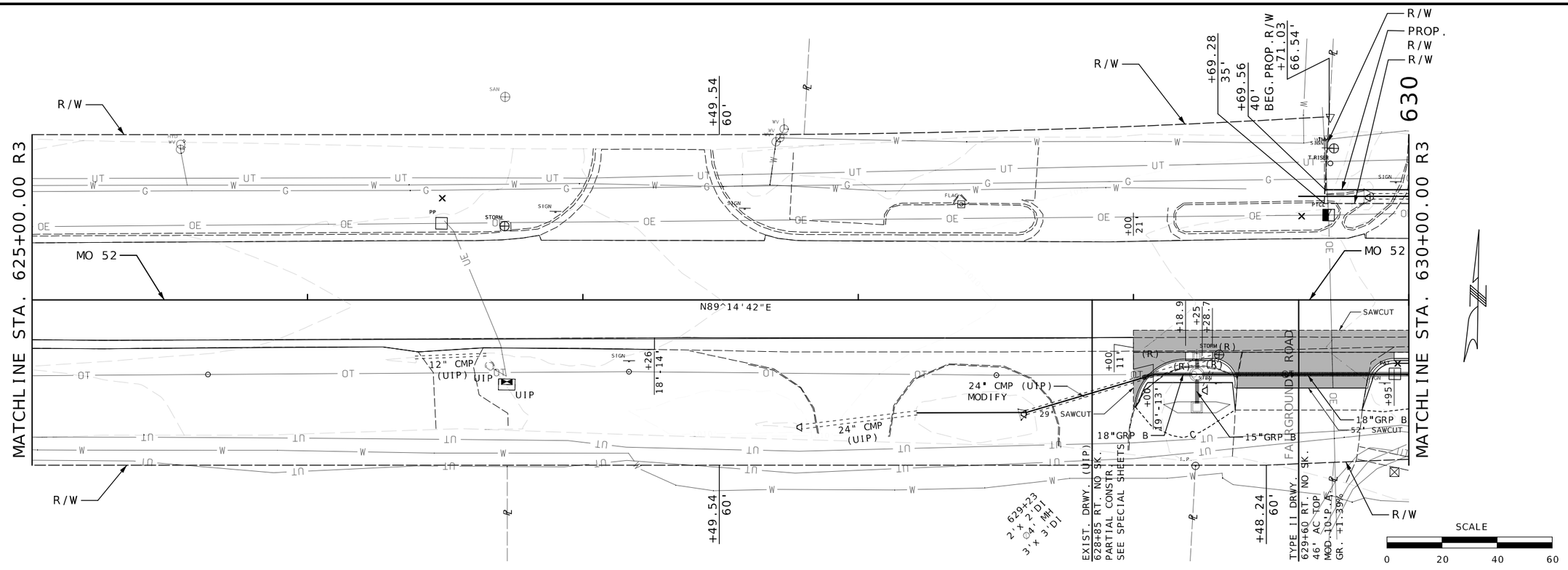
BRIDGE NO.

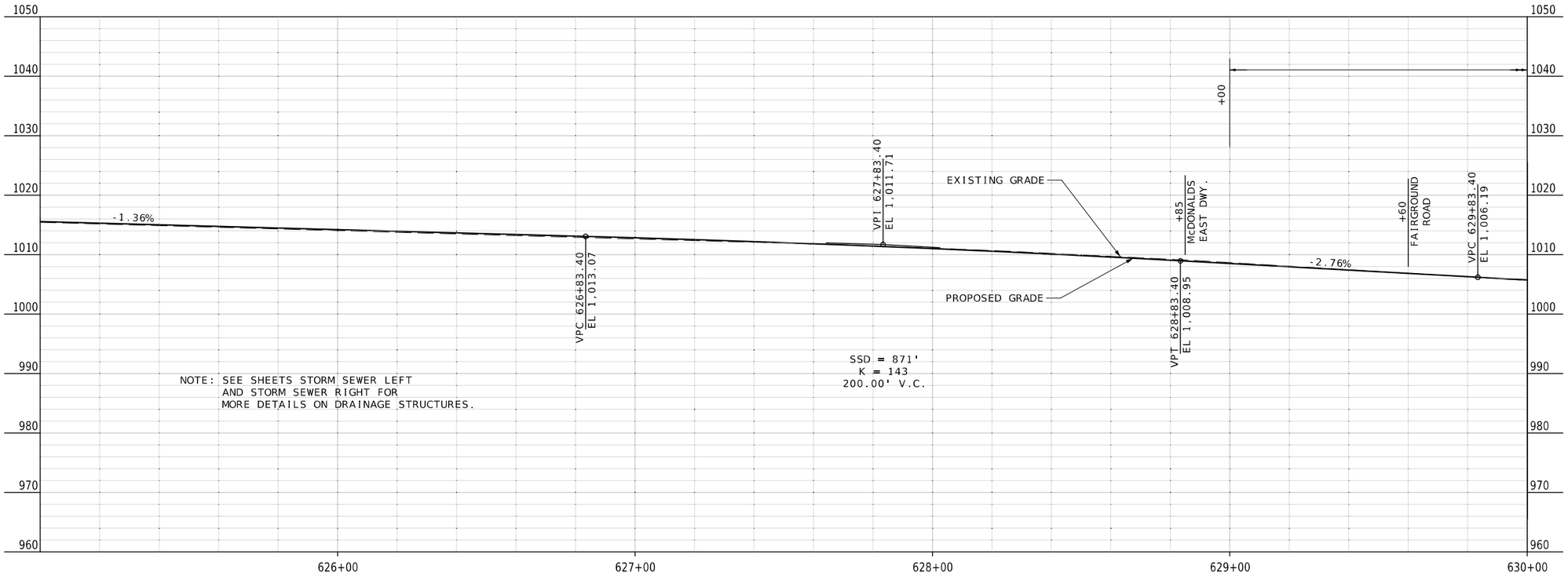
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 52 ℄
STA 621+00 TO STA 625+00





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 10:54:13 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	7

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

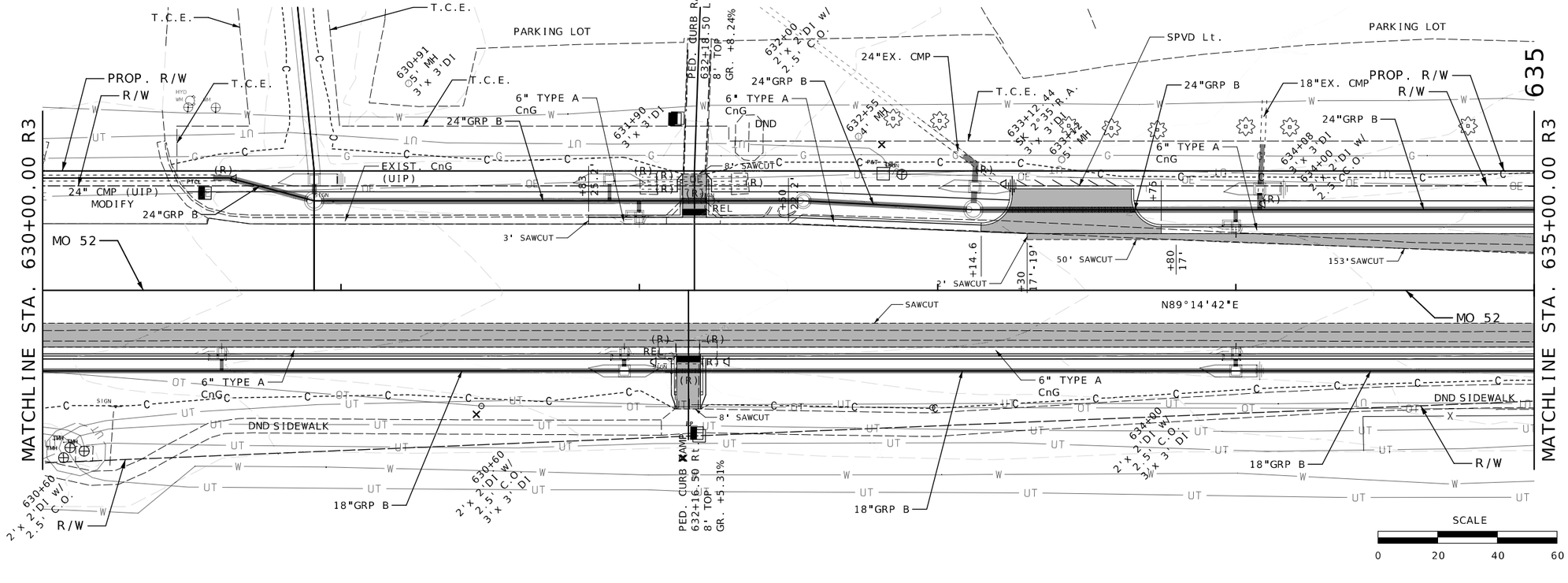
BRIDGE NO.

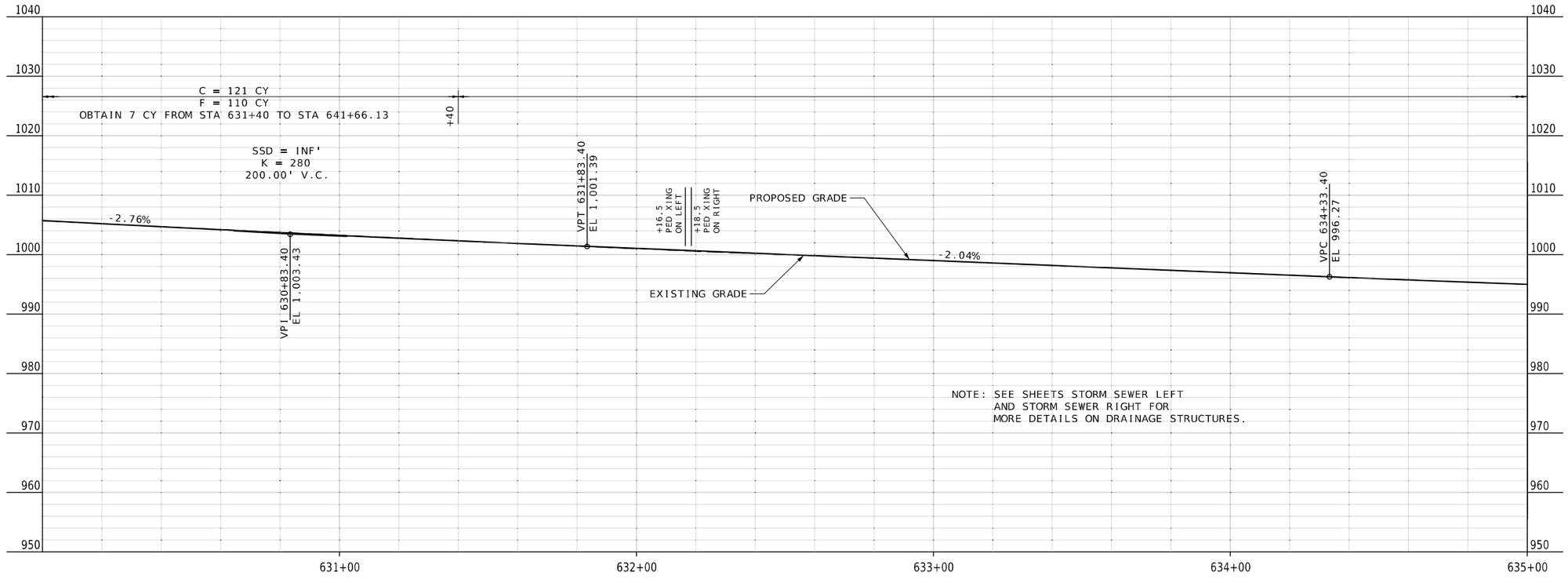
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 52 ℄
STA 625+00 TO STA 630+00





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 10:56:30 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	8

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

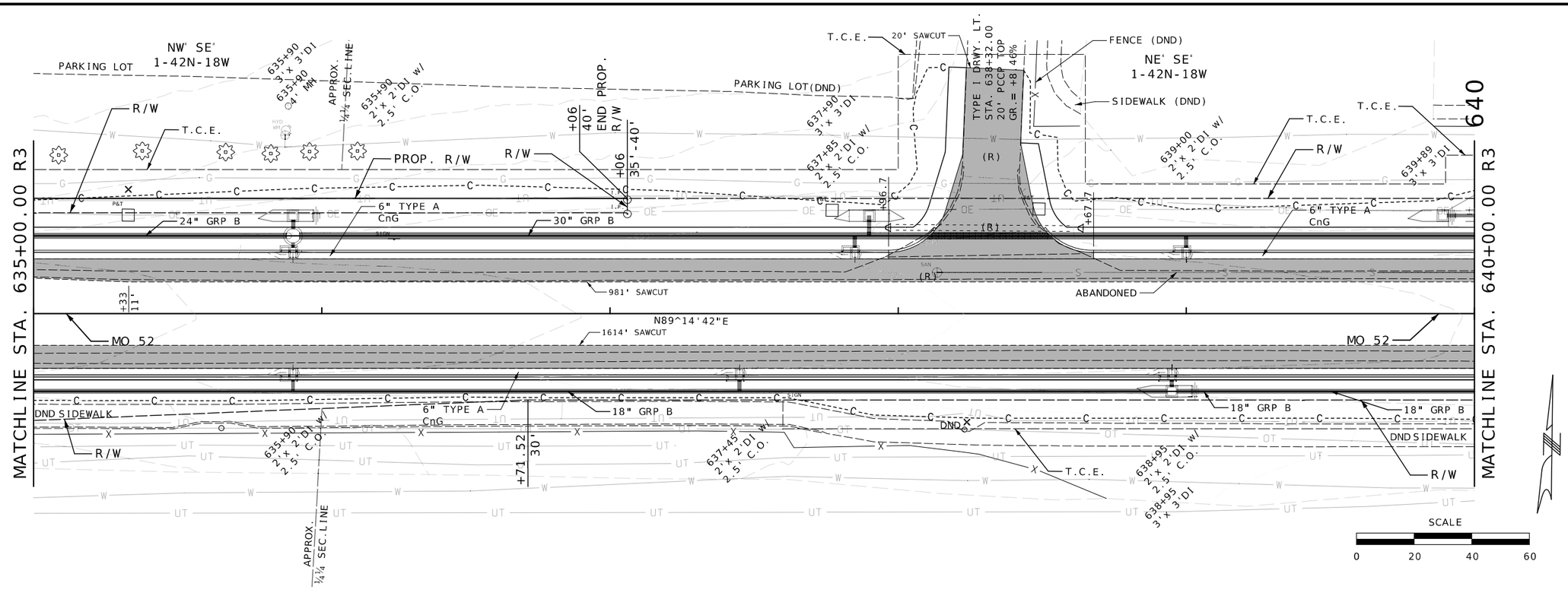
BRIDGE NO.

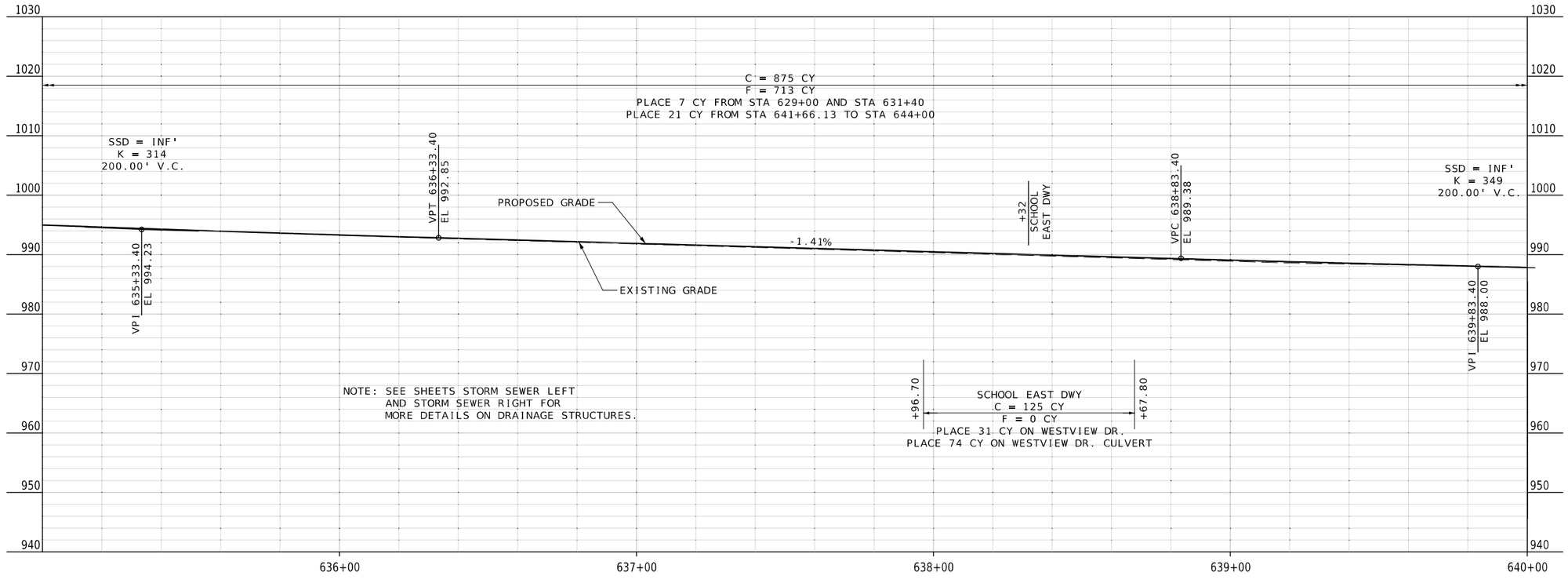
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 52 ℄
STA 630+00 TO STA 635+00





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:08:43 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	9

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

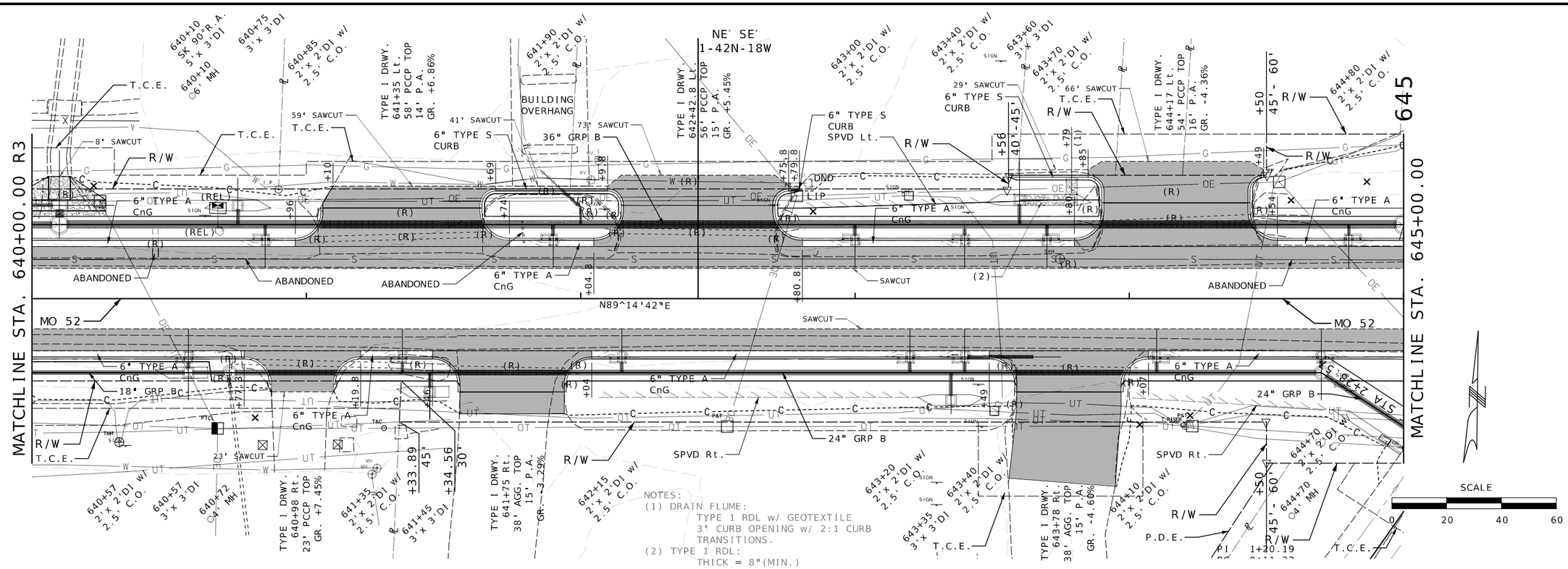
BRIDGE NO.

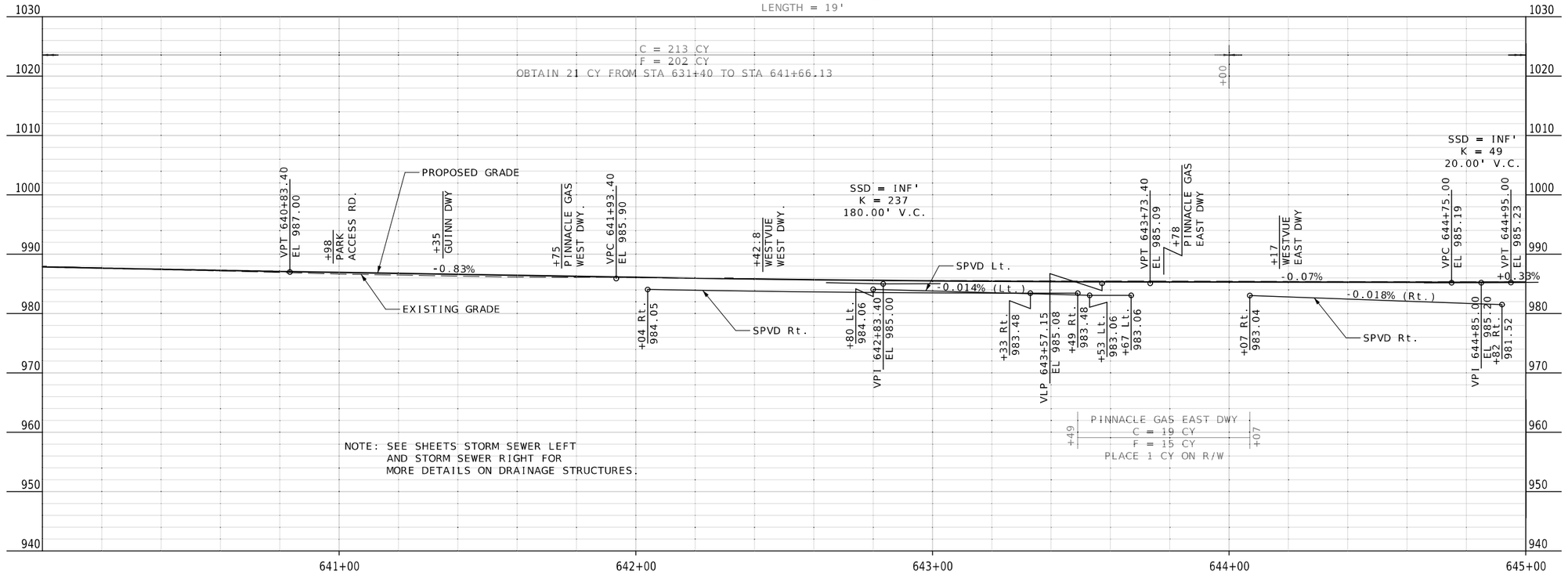
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 52 ℄
STA 635+00 TO STA 640+00





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 10:58:10 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	10

COUNTY
MORGAN

JOB NO.
J5P3575

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)

MISSOURI ROUTE 52 ℄
STA 640+00 TO STA 645+00

MATCHLINE STA. 645+00.00 (52)
STA. 0+00.00 NWQ AND STA. 0+00.00 SWQ

645

10

48"GRP B

R/W

+30

60'

645+00 6' MH

A925S 645+50.90 SK 33° L.A. 3(B x 4' x 113') RCB DA = 1.7 SQ. MI. Q = 687 cfs Q = 815 cfs Q = 972 cfs

NW QUAD CnG ℄

6"TYPE A CnG

CIRCLE

MO 5 & 52

6"TYPE A CnG

R/W

ABANDONED

MO 52

106'SAWCUT

19'SAWCUT

12'SAWCUT

38' SAWCUT

ABANDONED

38'SAWCUT

DO NOT DISTURB SANITARY SEWER MANHOLE

ABANDONED

N89°14'42"E

E.NEWTON ST.

118'SAWCUT

6"TYPE A (R) CnG

6"TYPE A CnG

DO NOT DISTURB SANITARY SEWER MANHOLE

MO 5

SCALE 0 20 40 60

SW QUAD CnG ℄

6"TYPE A CnG

R/W

PARKING LOT

38'SAWCUT

38'SAWCUT

TYPE I DRWY. 645+89 Rt. 40' PCCP TOP 16' P.A. GR. -4.67% 2(B5 x 89') GRP B

P.D.E.

R/W

T.C.E.

6" TYPE S CURB

39'SAWCUT

T.C.E.

R/W

PARKING LOT

1030 1020 1010 1000 990 980 970 960 950 940

C = 218 CY
F = 770 CY
OBTAIN 426 CY FROM CLASS 4 EXCAVATION
OBTAIN 159 CY FROM CULVERT CONSTR. STAGE 1

+00

C = 175 CY
F = 495 CY
OBTAIN 347 CY FROM OFF R/W

+30

VHP 645+28.46 EL 985.31
VPI 645+30.00 EL 985.35
VPC 645+90.00 EL 985.12
VPT 646+50.00 EL 985.01
VPT 647+51.76 EL 985.02
VPT 647+75.20 EL 985.23
VPT 648+33.70 EL 985.30

SSD = INF'
K = 92
60.00' V.C.

PROPOSED GRADE

+0.33% -0.56% +0.09% +0.86% +0.12%

VPC 645+10.00 EL 985.28
VPT 645+50.00 EL 985.27
VPI 646+20.00 EL 985.00
646+30 EL 979.42
VLP 646+47.30 EL 985.01
647+51.4 EL 980.40

8' SPFBD Rt.

0.8%

OUTLET OF CULVERT CROSSING MO 5

EXIST. GROUND

INLET OF CULVERT CROSSING GAS STATION ENTRANCE

SSD = 1,234'
K = 45
40.00' V.C.

* LOCATED ON ASSOCIATED QUAD ALIGNMENT AND MISC. DRAINAGE AROUND JUNCTION RTE. 5 AND RTE. 52.

645+00 646+00 647+00 648+00

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:08:33 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	11

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

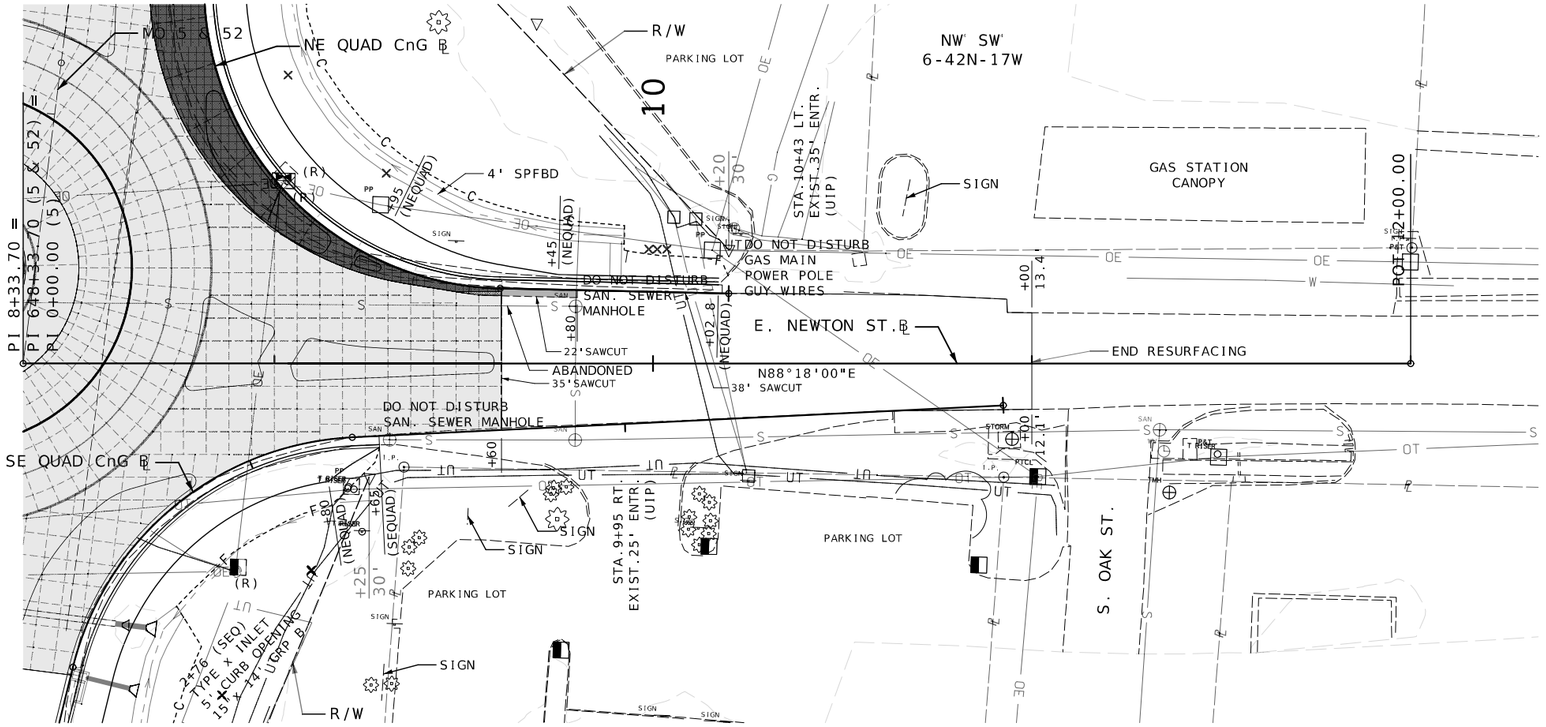
DESCRIPTION

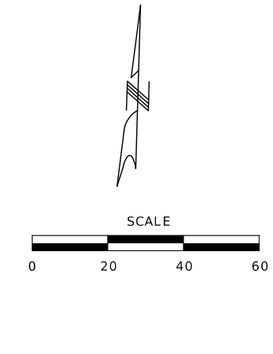
DATE

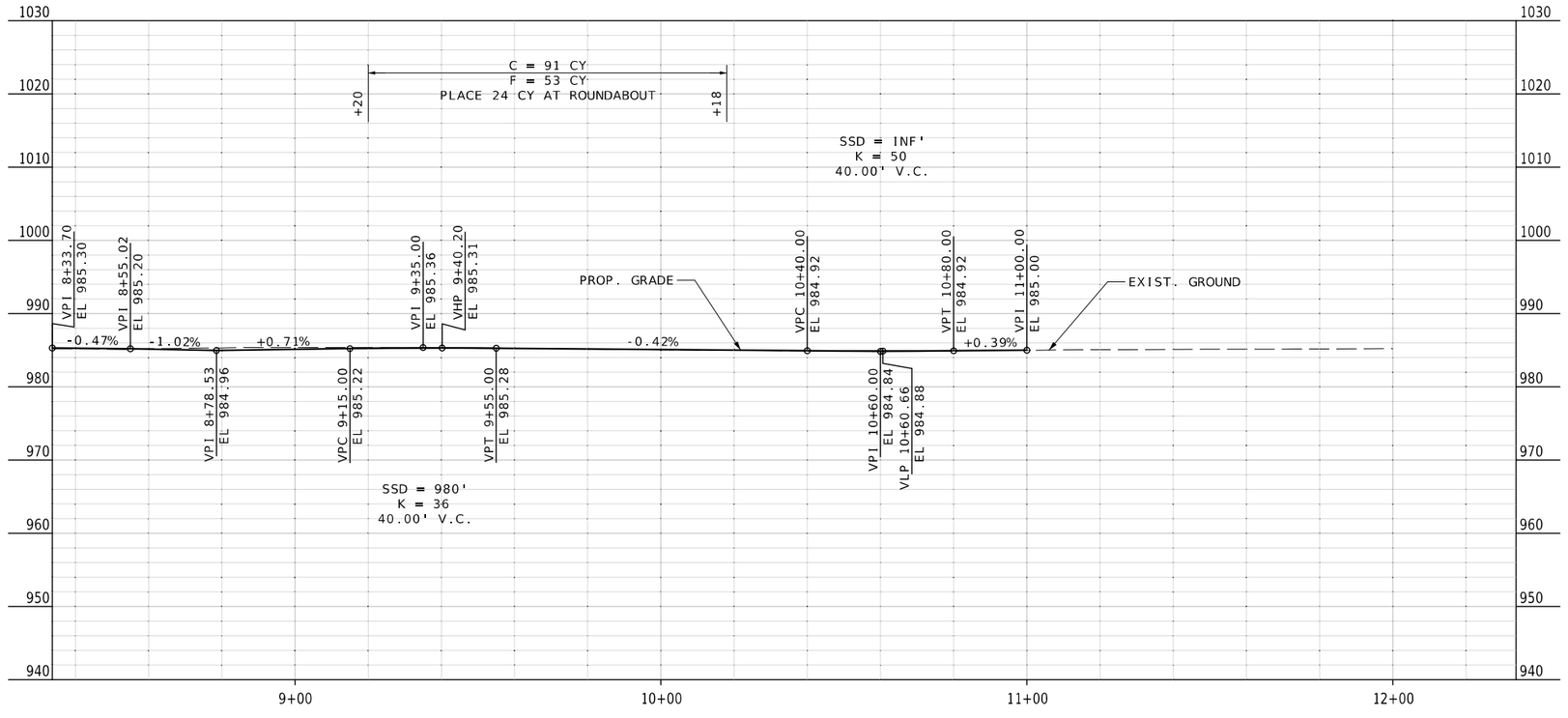
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 52 ℄
STA 645+00 TO STA 648+33.70







STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 9:42:19 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	12

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

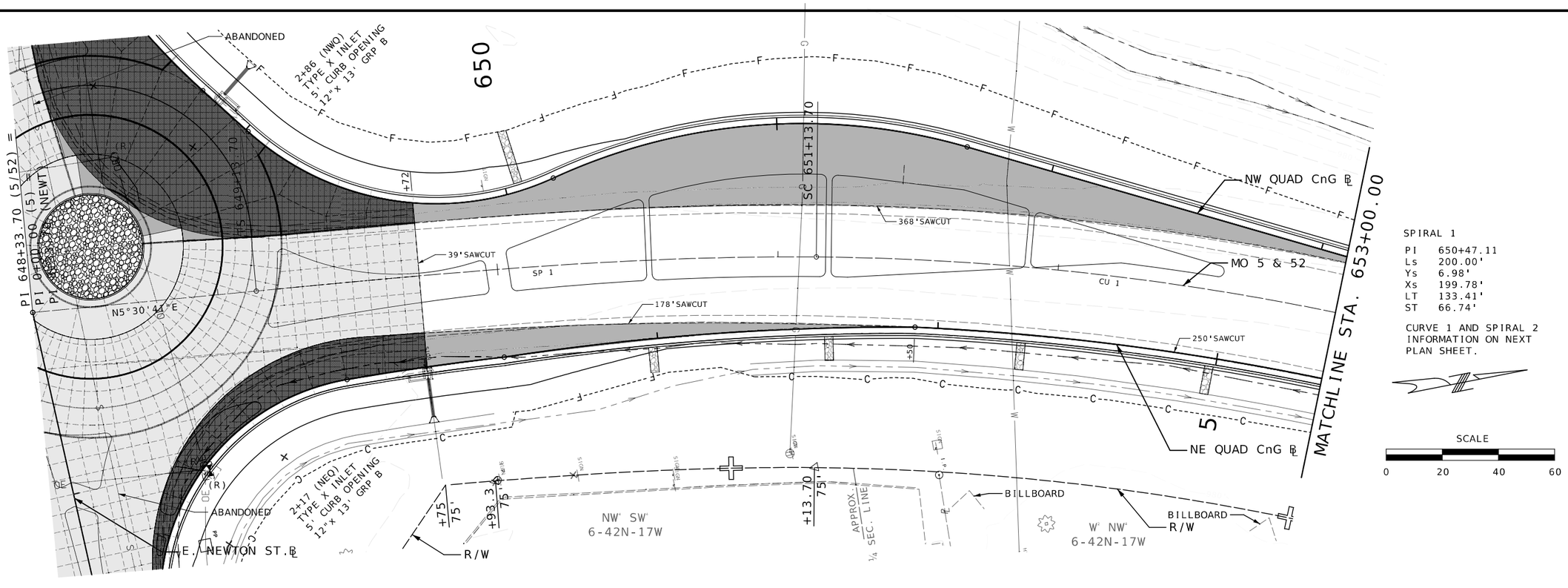
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EAST NEWTON STREET
STA 8+33.70 TO STA 12+00



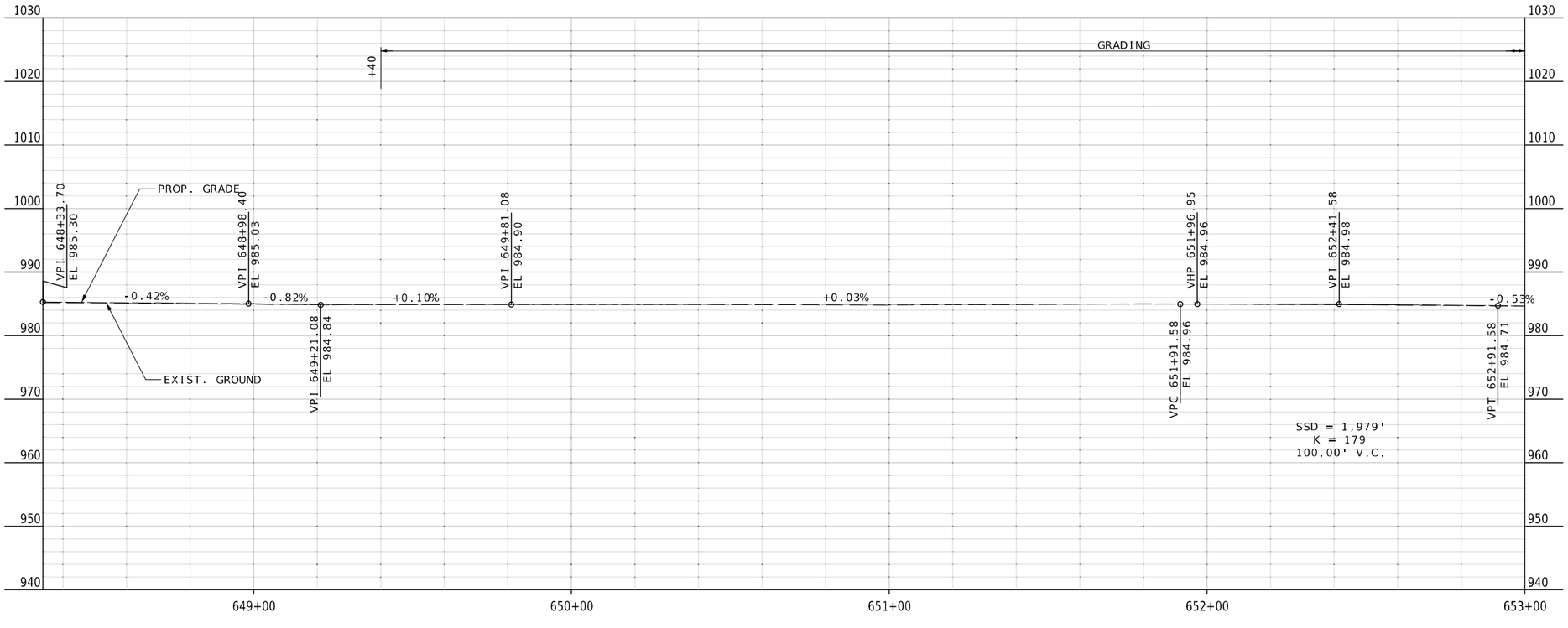
SPIRAL 1

PI	650+47.11
Ls	200.00'
Ys	6.98'
Xs	199.78'
LT	133.41'
ST	66.74'

CURVE 1 AND SPIRAL 2 INFORMATION ON NEXT PLAN SHEET.

SCALE

0 20 40 60



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 9:42:10 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	13

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

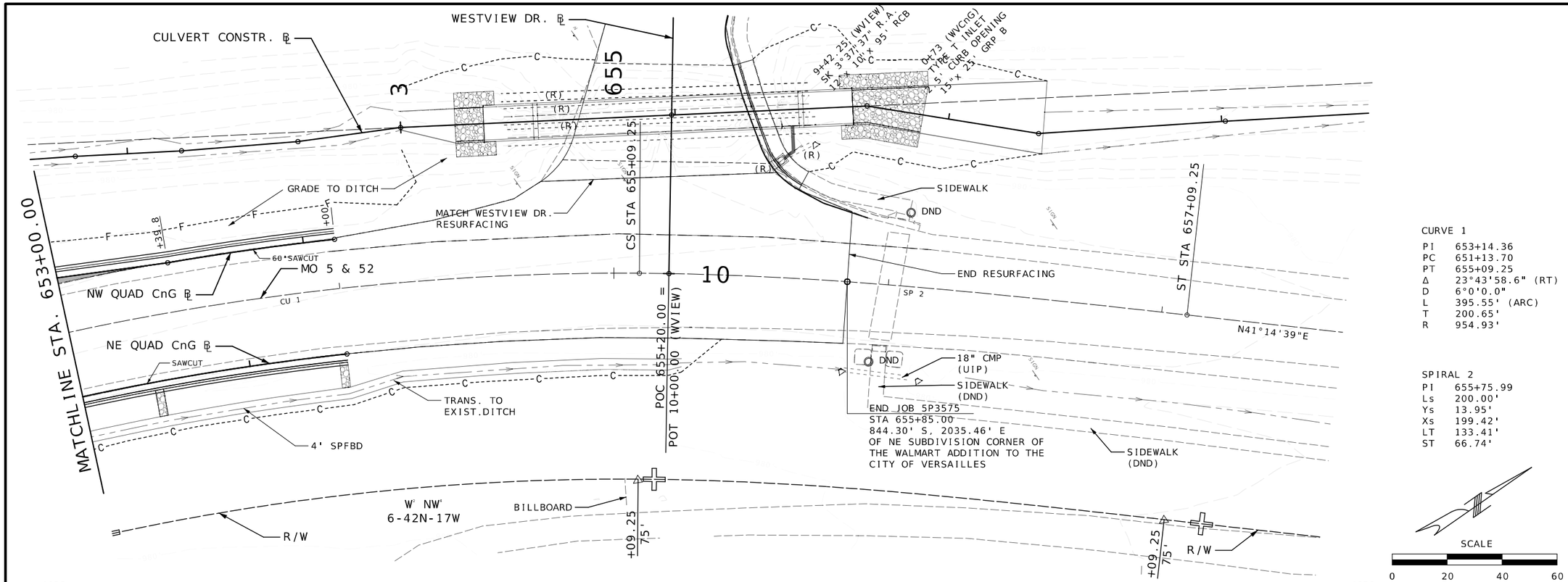
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 5 & 52 ℄
STA 648+33.70 TO STA 653+00



CURVE 1

PI	653+14.36
PC	651+13.70
PT	655+09.25
Δ	23°43'58.6" (RT)
D	6°0'0.0"
L	395.55' (ARC)
T	200.65'
R	954.93'

SPIRAL 2

PI	655+75.99
Ls	200.00'
Ys	13.95'
Xs	199.42'
LT	133.41'
ST	66.74'

SCALE

0 20 40 60

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:27:32 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED 3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	14

COUNTY MORGAN

JOB NO. J5P3575

CONTRACT ID.

PROJECT NO.

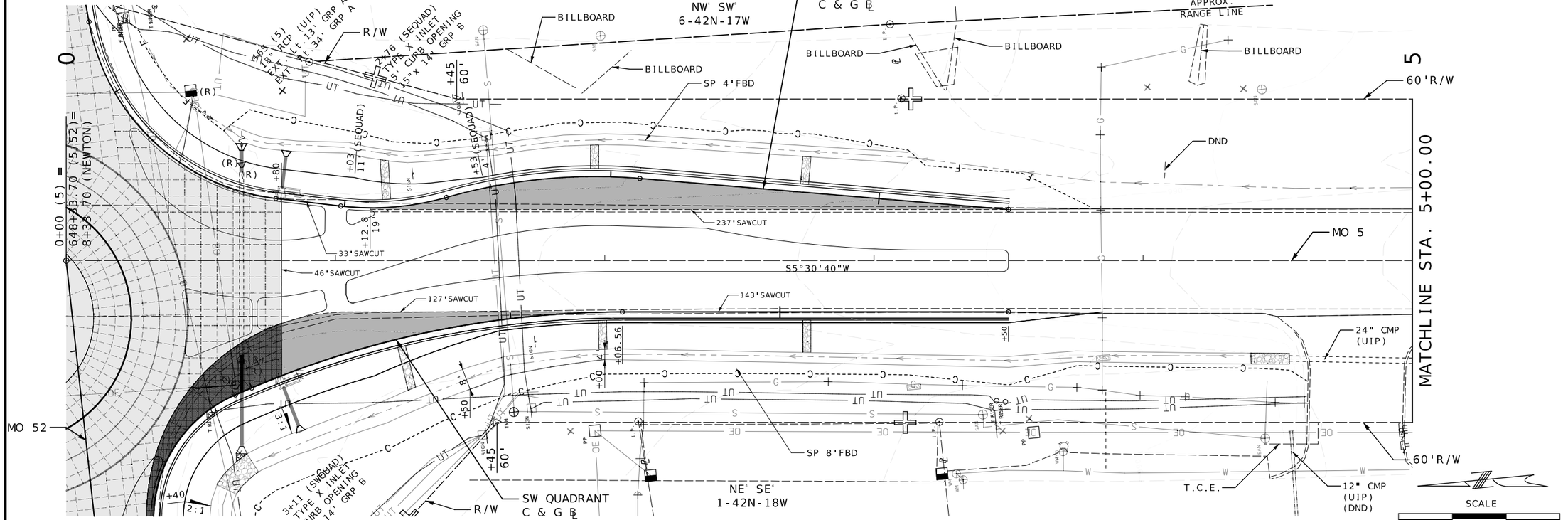
BRIDGE NO.

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 5 & 52 ℄
STA 653+00 TO STA 655+85



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:08:22 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	15

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

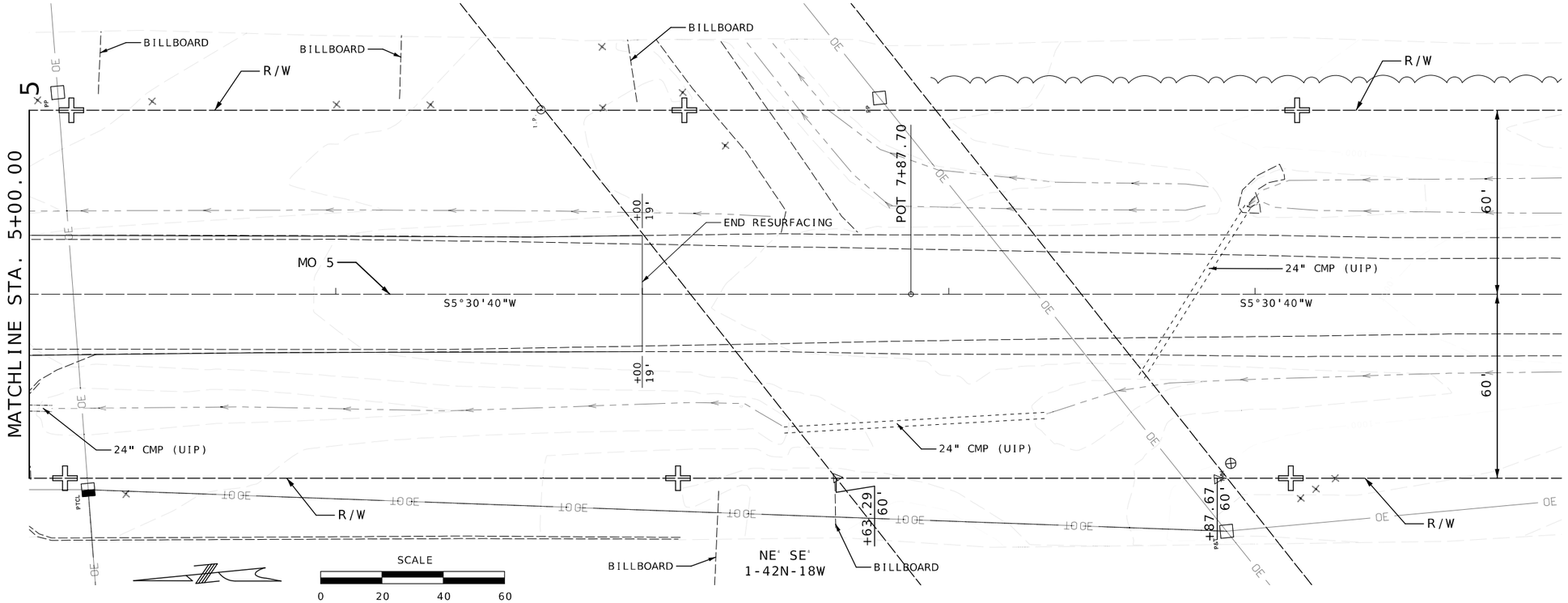
BRIDGE NO.

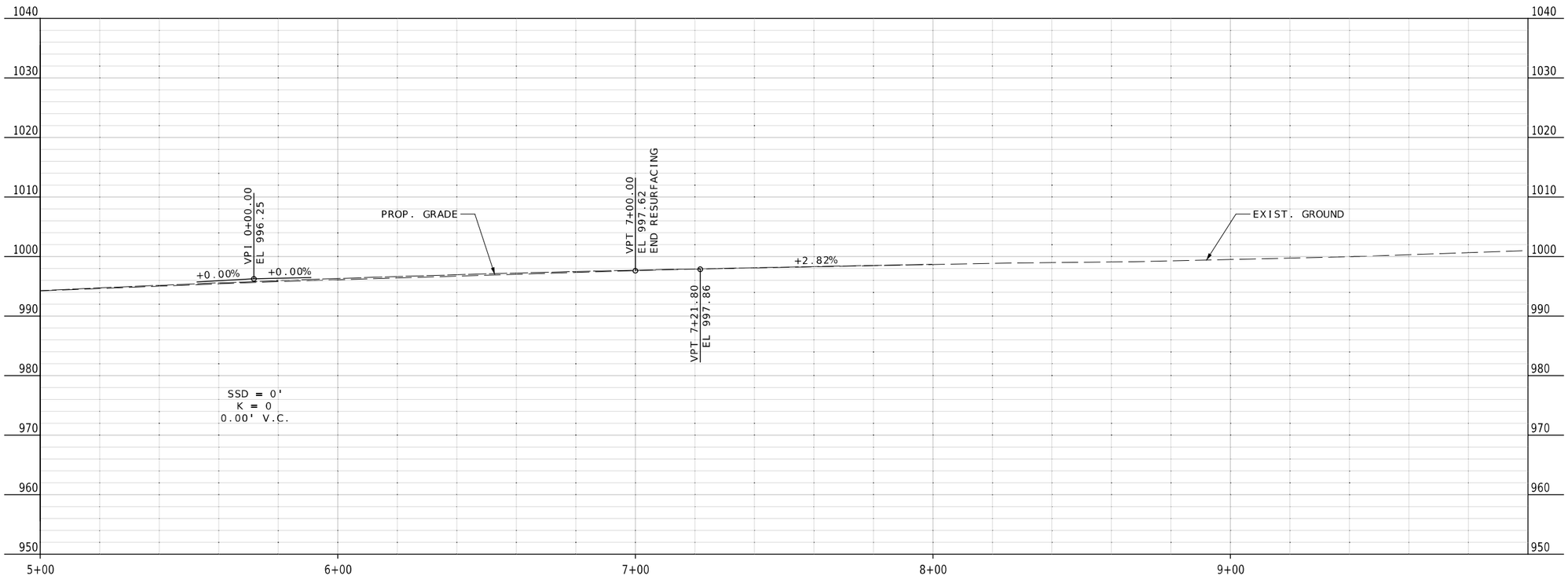
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISSOURI ROUTE 5 ℄
STA 0+00 TO STA 5+00





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:34:22 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	16

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

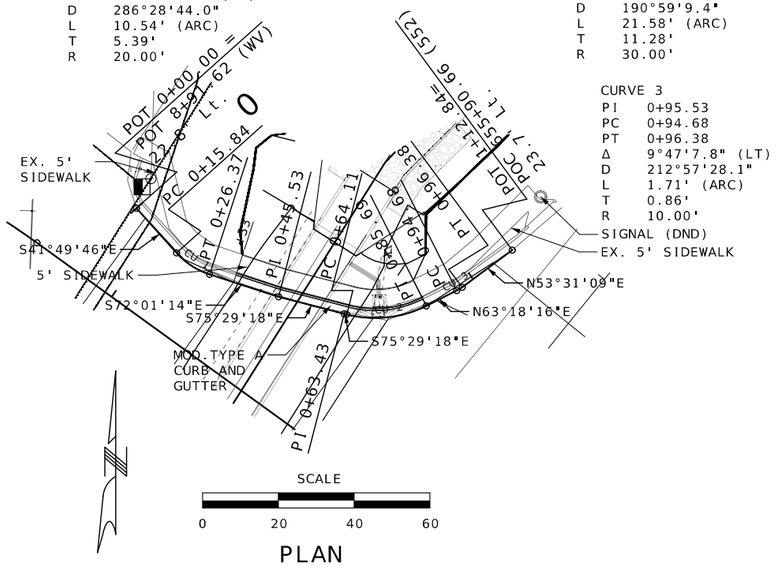
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI ROUTE 5 ℄
STA 5+00 TO STA 7+00

CURVE 1
PI 0+21.23
PC 0+15.84
PT 0+26.37
Δ 30°11'27.3" (LT)
D 286°28'44.0"
L 10.54' (ARC)
T 5.39'
R 20.00'

CURVE 2
PI 0+75.39
PC 0+64.11
PT 0+85.69
Δ 41°12'25.5" (LT)
D 190°59'9.4"
L 21.58' (ARC)
T 11.28'
R 30.00'

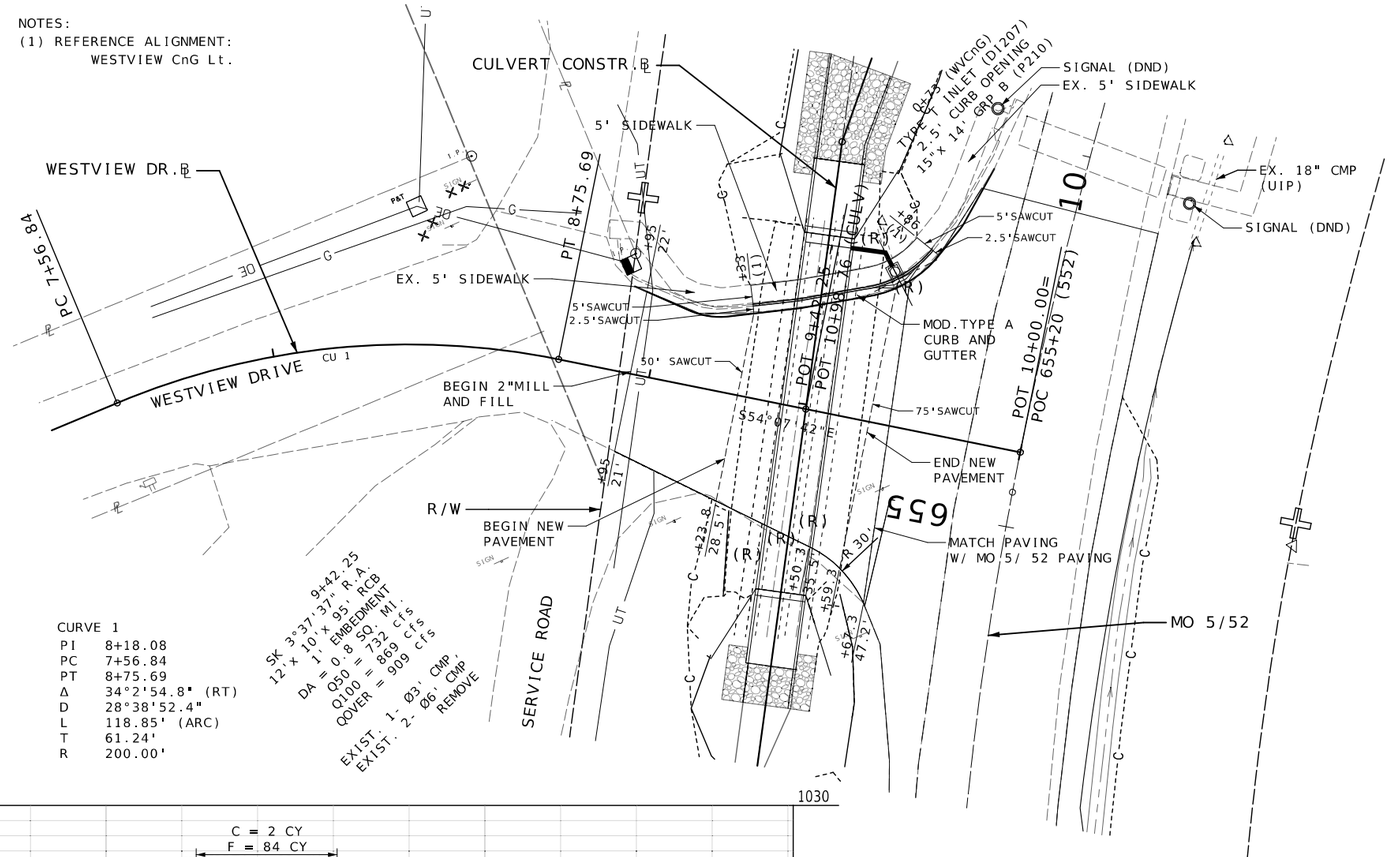
CURVE 3
PI 0+95.53
PC 0+94.68
PT 0+96.38
Δ 9°47'7.8" (LT)
D 212°57'28.1"
L 1.71' (ARC)
T 0.86'
R 10.00'



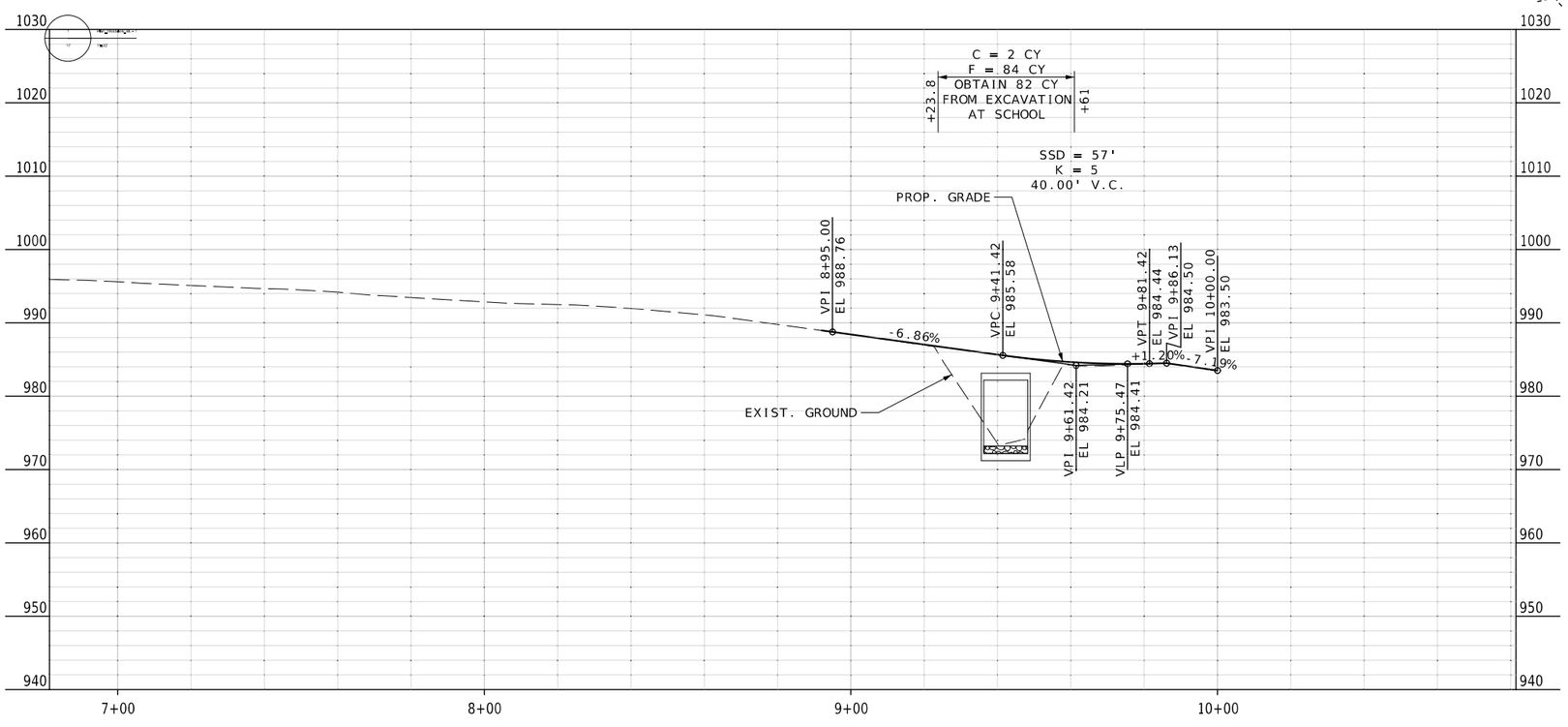
SCALE
0 20 40 60

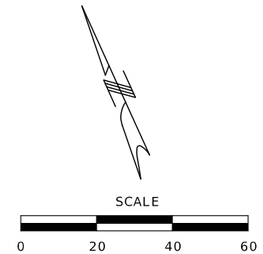
PLAN
WESTVIEW DRIVE LEFT ALONG CURB AND GUTTER BASELINE

NOTES:
(1) REFERENCE ALIGNMENT:
WESTVIEW CnG Lt.



CURVE 1
PI 8+18.08
PC 7+56.84
PT 8+75.69
Δ 34°2'54.8" (RT)
D 28°38'52.4"
L 118.85' (ARC)
T 61.24'
R 200.00'





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:08:13 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	17

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

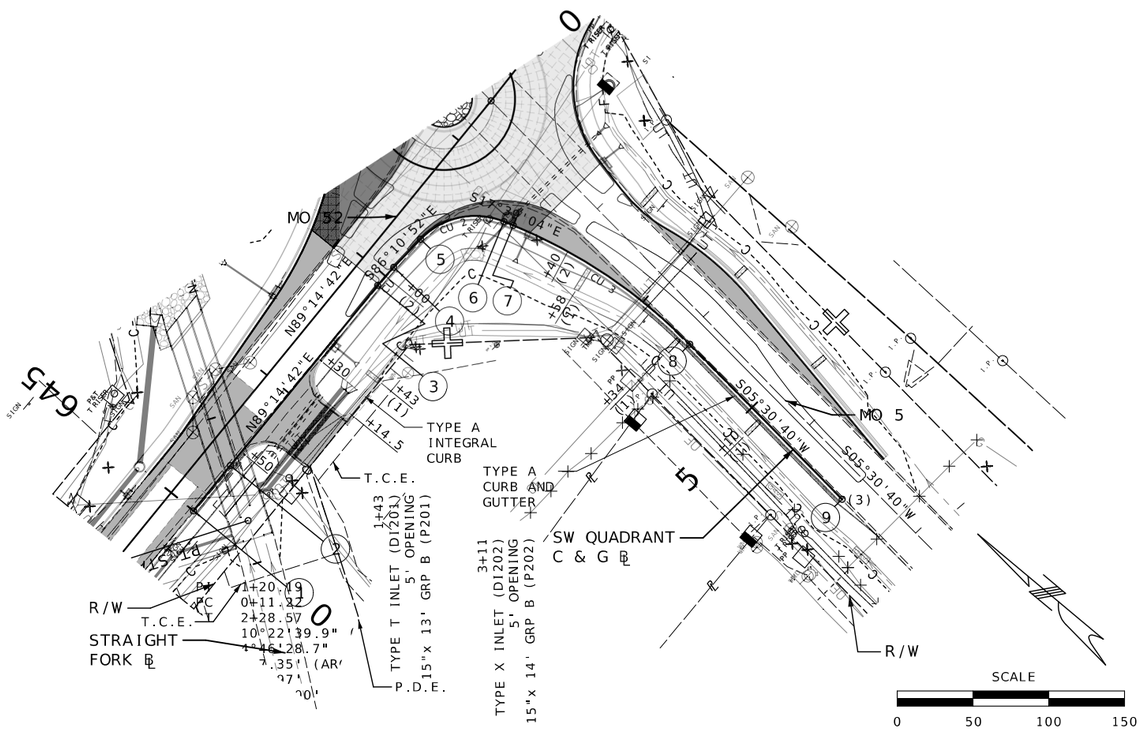
PROJECT NO.

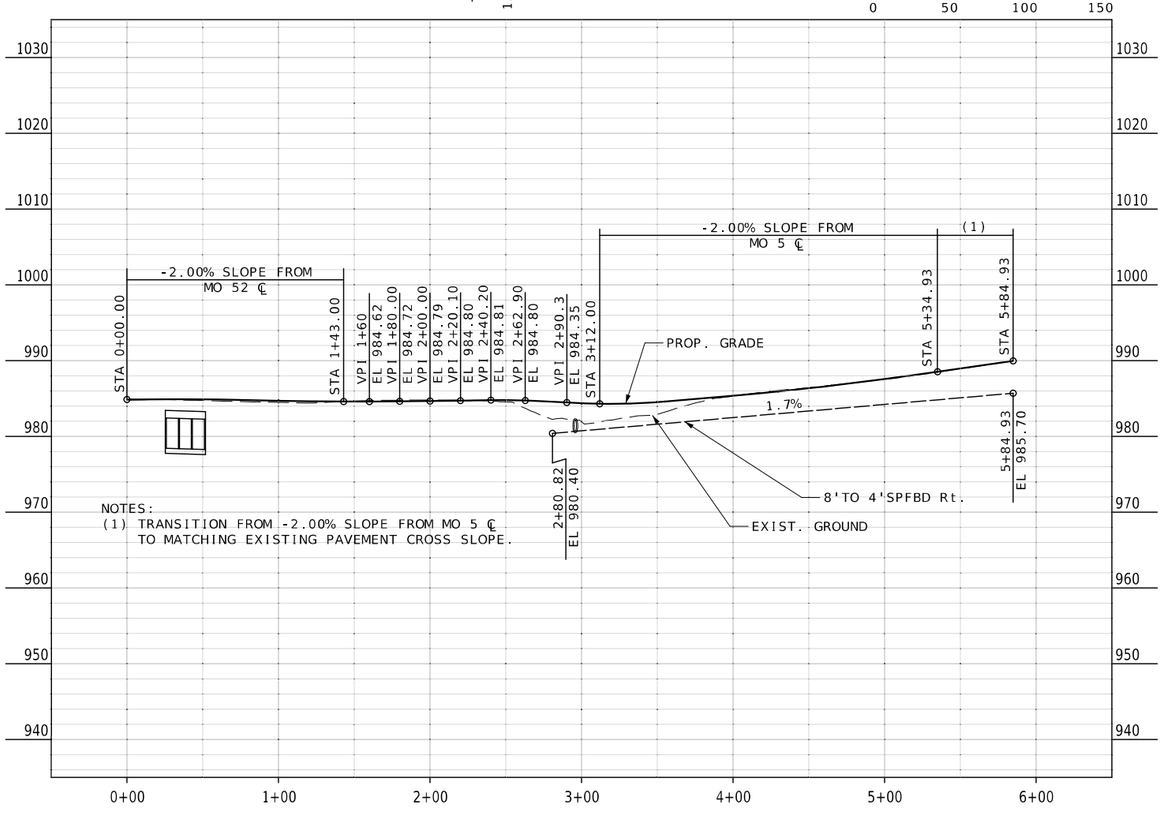
BRIDGE NO.

DESCRIPTION	DATE

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

WESTVIEW DRIVE ℄





CURVE 1
PI 2+00.00
PC 1+92.01
PT 2+07.98
Δ 4°34'26.1" (RT)
D 28°38'52.4"
L 15.97' (ARC)
T 7.99'
R 200.00'

CURVE 2
PI 2+67.63
PC 2+33.57
PT 2+93.37
Δ 68°31'47.9" (RT)
D 114°35'28.4"
L 59.80' (ARC)
T 34.06'
R 50.00'

CURVE 3
PI 3+71.73
PC 3+00.00
PT 4+41.49
Δ 23°9'44.3" (RT)
D 16°22'12.8"
L 141.49' (ARC)
T 71.72'
R 350.00'

ALIGNMENT NOTES
1. POT 0+00 (SWQUAD) = POT 645+00 (52) 19' Rt.
2. POT 0+38.56
3. PC 1+92.01
4. PT 2+07.98
5. PC 2+33.57
6. PT 2+93.37
7. PC 3+00.00
8. PT 4+41.49
9. POT 5+84.93 (SWQUAD)= POT 3+50 (5) 19'Rt.

NOTES:
(1) DRAIN FLUME:
TYPE 1 ROCK DITCH LINER w/ GEOTEXTILE.
3' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(2) 6' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(3) 2:1 CURB TRANSITION

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
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PROFESSIONAL ENGINEER
03/15/2024 9:41:25 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED 3/15/2024

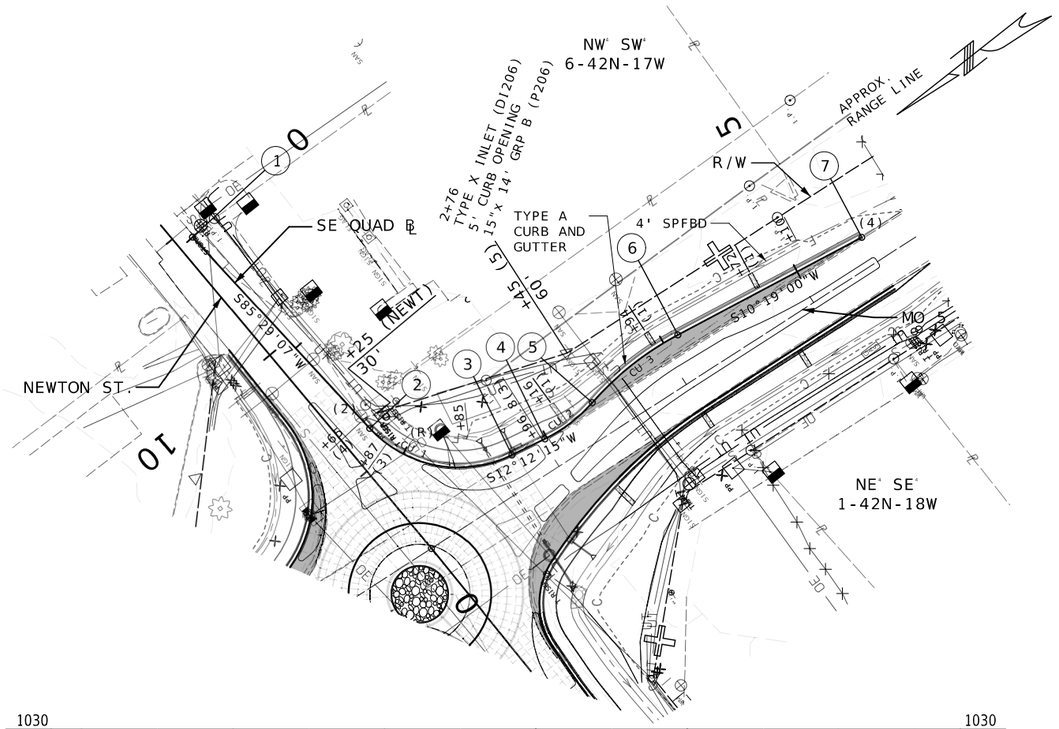
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	18

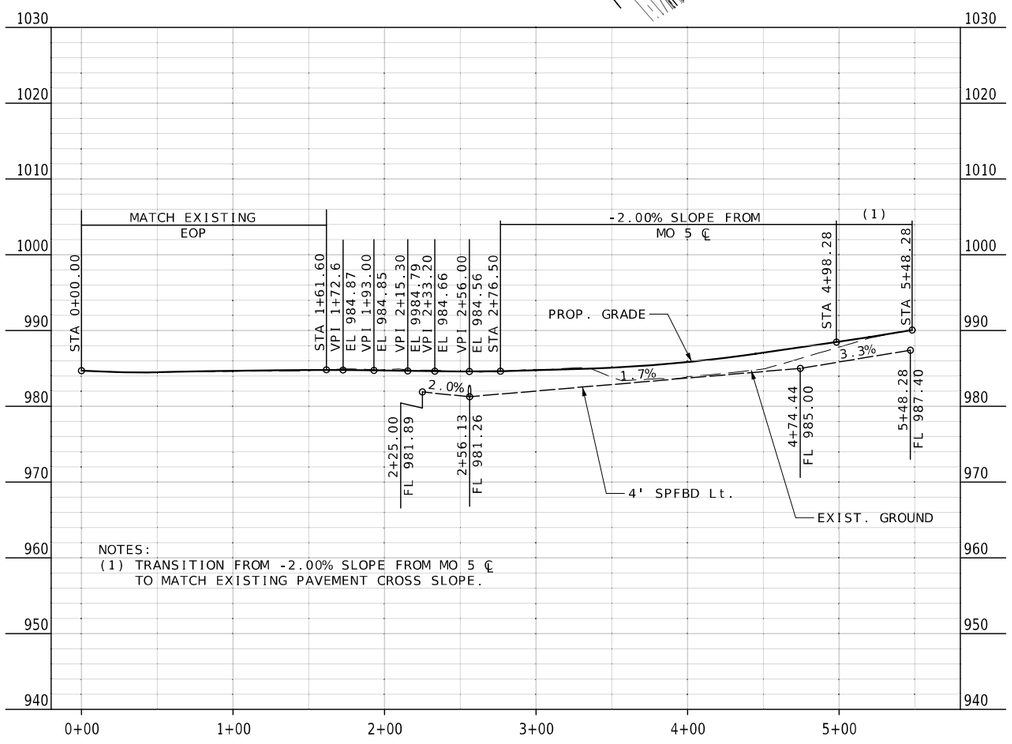
COUNTY MORGAN
JOB NO. J5P3575
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

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

PLAN/PROFILE SHEET
SOUTHWEST QUADRANT CnG ℄





CURVE 1

PI	2+31.57
PC	1+72.07
PT	2+74.39
Δ	73°16'52.4" (LT)
D	71°37'11.0"
L	102.32' (ARC)
T	59.50'
R	80.00'

CURVE 2

PI	3+18.70
PC	2+98.63
PT	3+38.24
Δ	22°41'34.1" (LT)
D	57°17'44.8"
L	39.61' (ARC)
T	20.07'
R	100.00'

CURVE 3

PI	3+74.96
PC	3+38.24
PT	4+10.86
Δ	20°48'19.2" (RT)
D	28°38'52.4"
L	72.62' (ARC)
T	36.72'
R	200.00'

SCALE

0 50 100 150

ALIGNMENT LABELS

1. 0+00.00 (SEQ)= 10+85.00 (NEWT) 20.8' Rt.
2. PC 1+72.07
3. PT 2+74.39
4. PC 2+98.63
5. PRC 3+38.24
6. PT 4+10.86
7. 5+48.28 (SEQ)= 3+50.00 (5) 19' Lt.

NOTES:
(1) DRAIN FLUME:
TYPE 1 ROCK DITCH LINER w/ GEOTEXTILE.
3' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(2) DO NOT DISTURB SANITARY SEWER MANHOLE.
(3) 6' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(4) 2:1 CURB TRANSITION

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 9:41:16 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	19

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

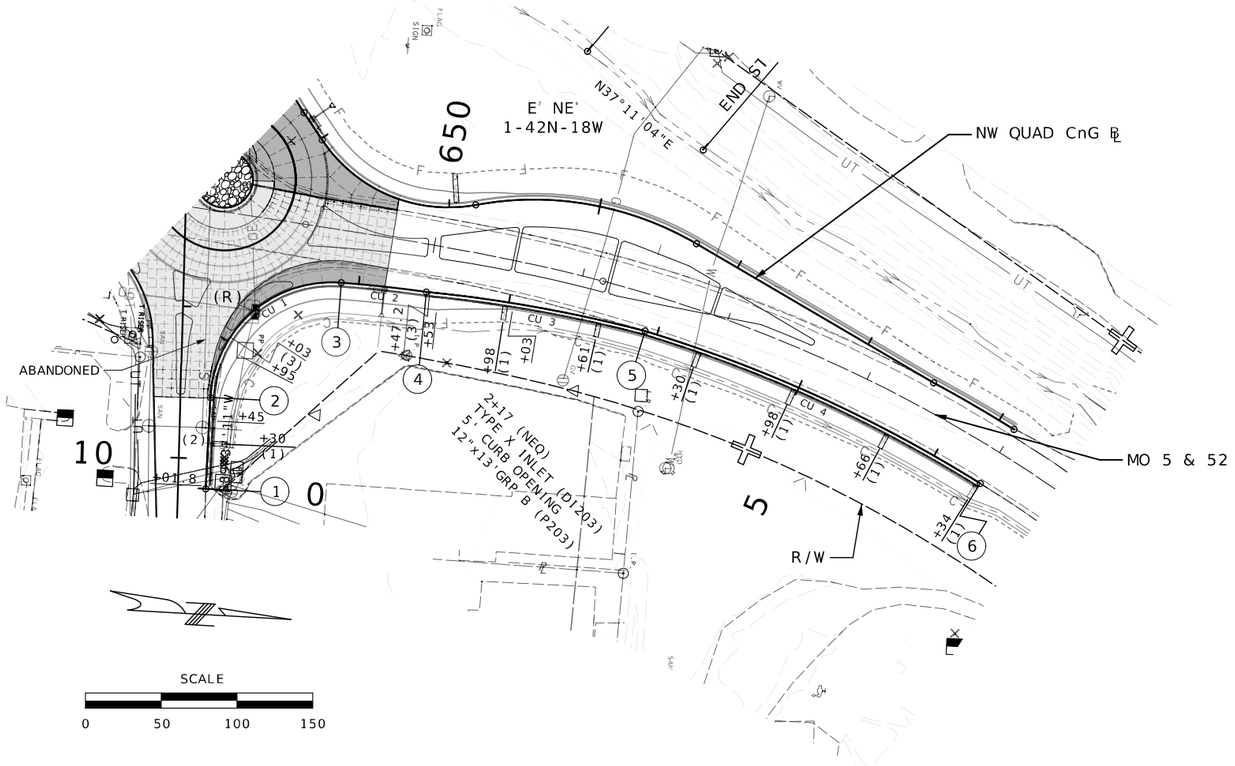
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SOUTHEAST QUADRANT CnG ℄



CURVE 1
PI 1+42.43
PC 0+60.33
PT 1+88.38
Δ 91°29'12.3" (RT)
D 71°37'11.0"
L 127.74' (ARC)
T 82.10'
R 80.00'

CURVE 2
PI 2+16.67
PC 1+88.38
PT 2+44.94
Δ 3°30'13.8" (RT)
D 6°11'40.6"
L 56.56' (ARC)
T 28.29'
R 924.93'

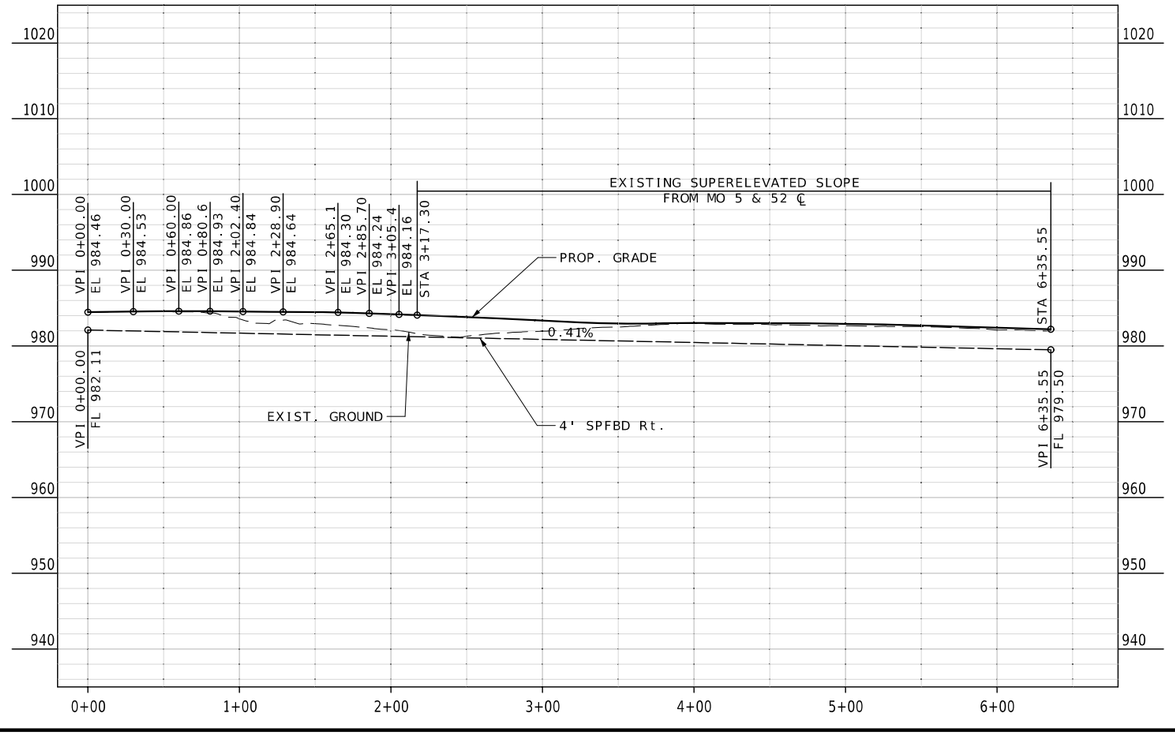
CURVE 3
PI 3+18.54
PC 2+44.94
PT 3+91.84
Δ 9°2'37.6" (RT)
D 6°9'24.3"
L 146.89' (ARC)
T 73.60'
R 930.62'

CURVE 4
PI 5+14.39
PC 3+91.84
PT 6+35.55
Δ 15°0'0.0" (RT)
D 6°9'16.9"
L 243.72' (ARC)
T 122.56'
R 930.93'

ALIGNMENT LABELS

1. 0+00.00 (NEQ)= 10+19.95 (NEWT) 18.49'Lt.
2. PC 0+60.64
3. PCC 1+88.38
4. PCC 2+44.94
5. PCC 3+91.84
6. POC 6+35.55 (NEQ)= POC 654+00.00 (5/52) 24' Lt.

NOTES:
(1) DRAIN FLUME:
TYPE 1 ROCK DITCH LINER w/ GEOTEXTILE.
3' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(2) DO NOT DISTURB SANITARY SEWER MANHOLE.
(3) 6' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(4) 2:1 CURB TRANSITION



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 9:41:06 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED 3/15/2024

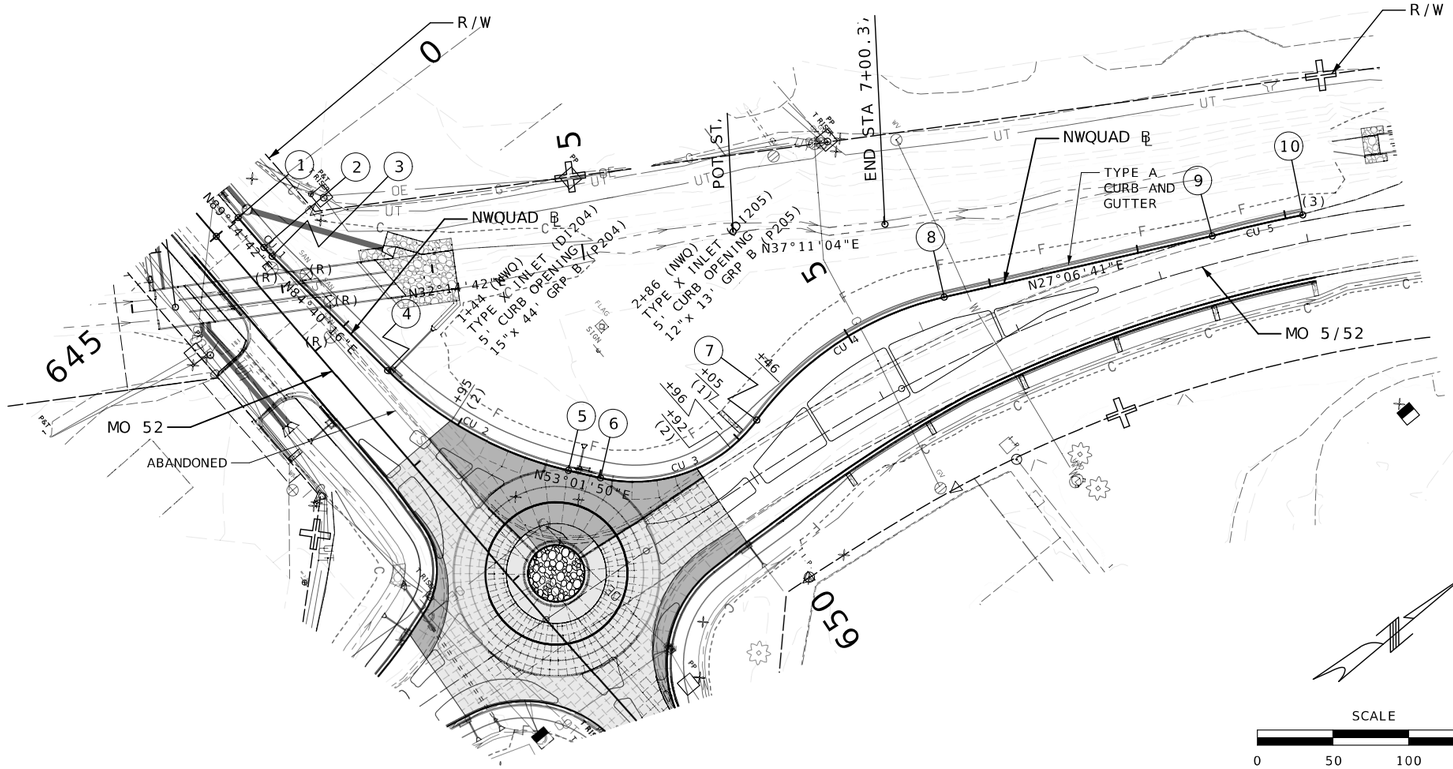
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	20

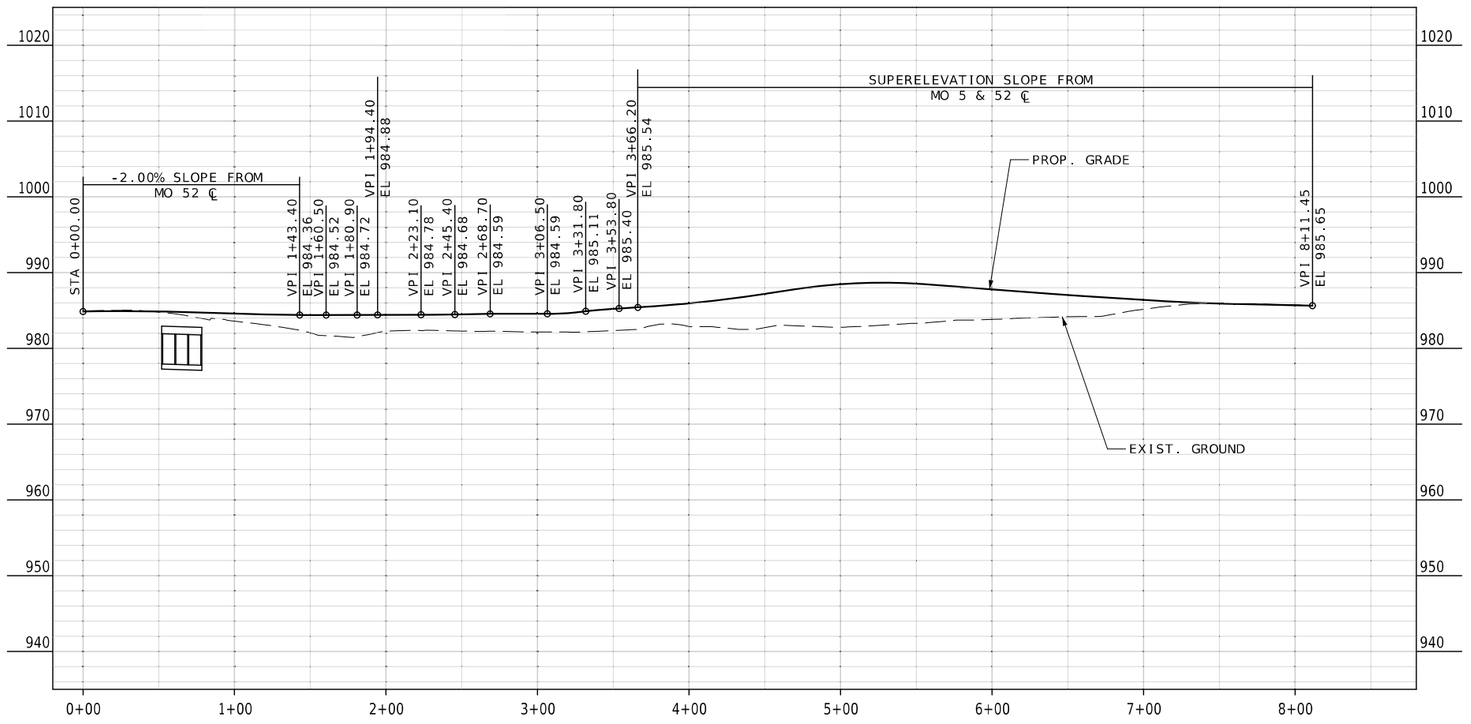
COUNTY MORGAN
JOB NO. J5P3575
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

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

NORTHEAST QUADRANT CnG ℄





CURVE 1
PI 0+30.00
PC 0+26.01
PT 0+33.99
Δ 4°34'26.1" (LT)
D 57°17'44.8"
L 7.98' (ARC)
T 3.99'
R 100.00'

CURVE 2
PI 2+12.12
PC 1+41.28
PT 2+79.34
Δ 31°38'26.1" (LT)
D 22°55'5.8"
L 138.06' (ARC)
T 70.84'
R 250.00'

CURVE 3
PI 3+66.94
PC 3+01.06
PT 4+17.56
Δ 66°45'3.2" (LT)
D 57°17'44.8"
L 116.50' (ARC)
T 65.88'
R 100.00'

CURVE 4
PI 4+96.47
PC 4+17.56
PT 5+68.65
Δ 40°49'54.9" (RT)
D 27°1'34.7"
L 151.08' (ARC)
T 78.91'
R 212.00'

CURVE 5
PI 7+80.80
PC 7+50.12
PT 8+11.45
Δ 3°36'42.9" (RT)
D 5°53'20.4"
L 61.33' (ARC)
T 30.68'
R 972.93'

ALIGNMENT LABELS

(1) 0+00.00 (NWQ)= 645+00.00 (52) 19' Lt.

(2) PC 0+26.01

(3) PT 0+33.99

(4) PC 1+41.28

(5) PT 2+79.34

(6) PC 3+01.06

(7) PRC 4+17.56

(8) PT 5+68.65

(9) PC 7+50.12

(10) PT 8+11.45 (NWQ)= POC 654+00.00 (5/52) 18' Lt.

NOTES:
(1) DRAIN FLUME: TYPE 1 ROCK DITCH LINER w/ GEOTEXTILE. 3' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(2) 6' CURB OPENING w/ 2:1 CURB TRANSITIONS.
(3) 2:1 CURB TRANSITION

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 9:40:57 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED 3/15/2024

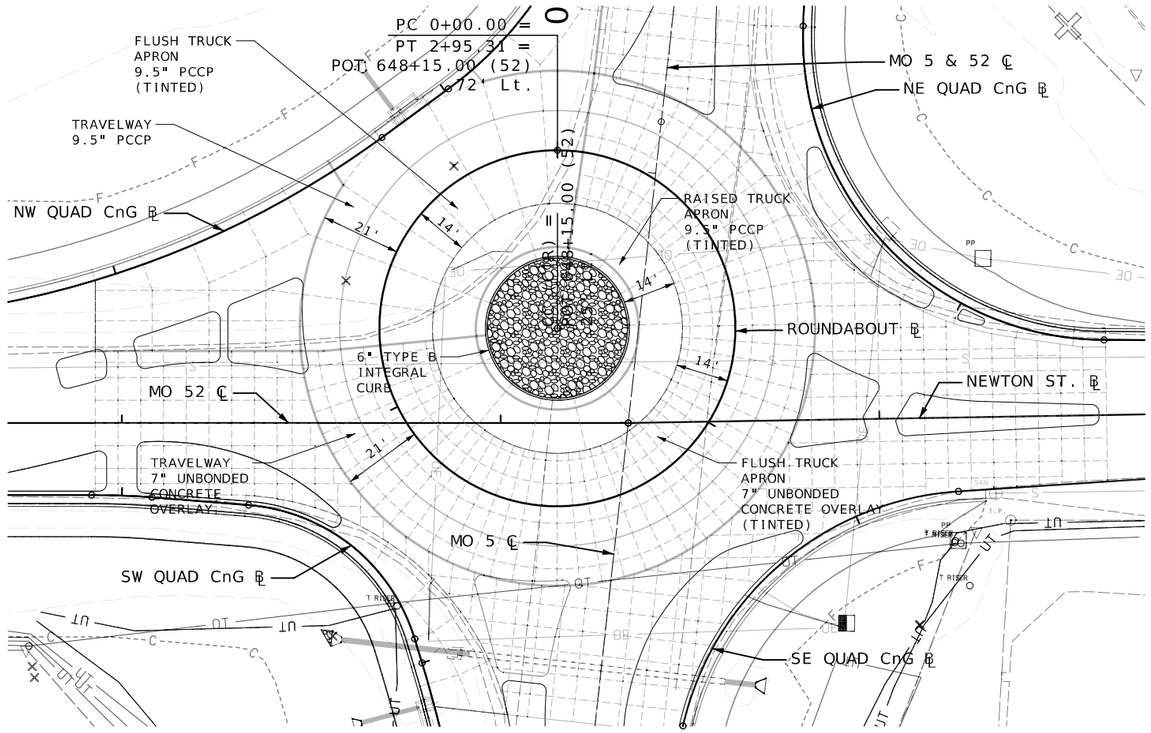
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	21

COUNTY MORGAN
JOB NO. J5P3575
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

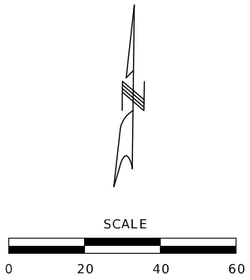
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

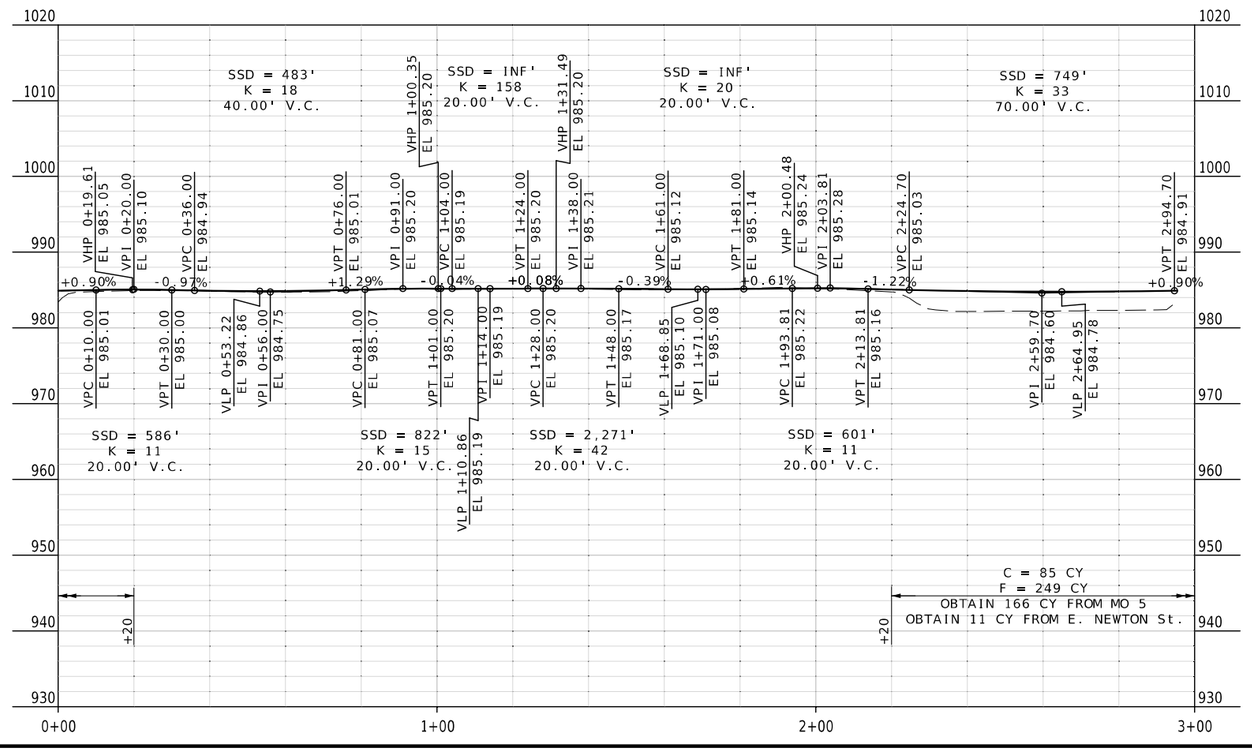
NORTHWEST QUADRANT CnG ℄



CIRCLE

PI	0+00.00
PC	0+00.00
PT	2+95.3097
Δ	360°00'00" (RT)
D	121°54'21.3"
L	295.3097' (ARC)
T	0.00'
R	47.00'





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:08:04 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	22

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

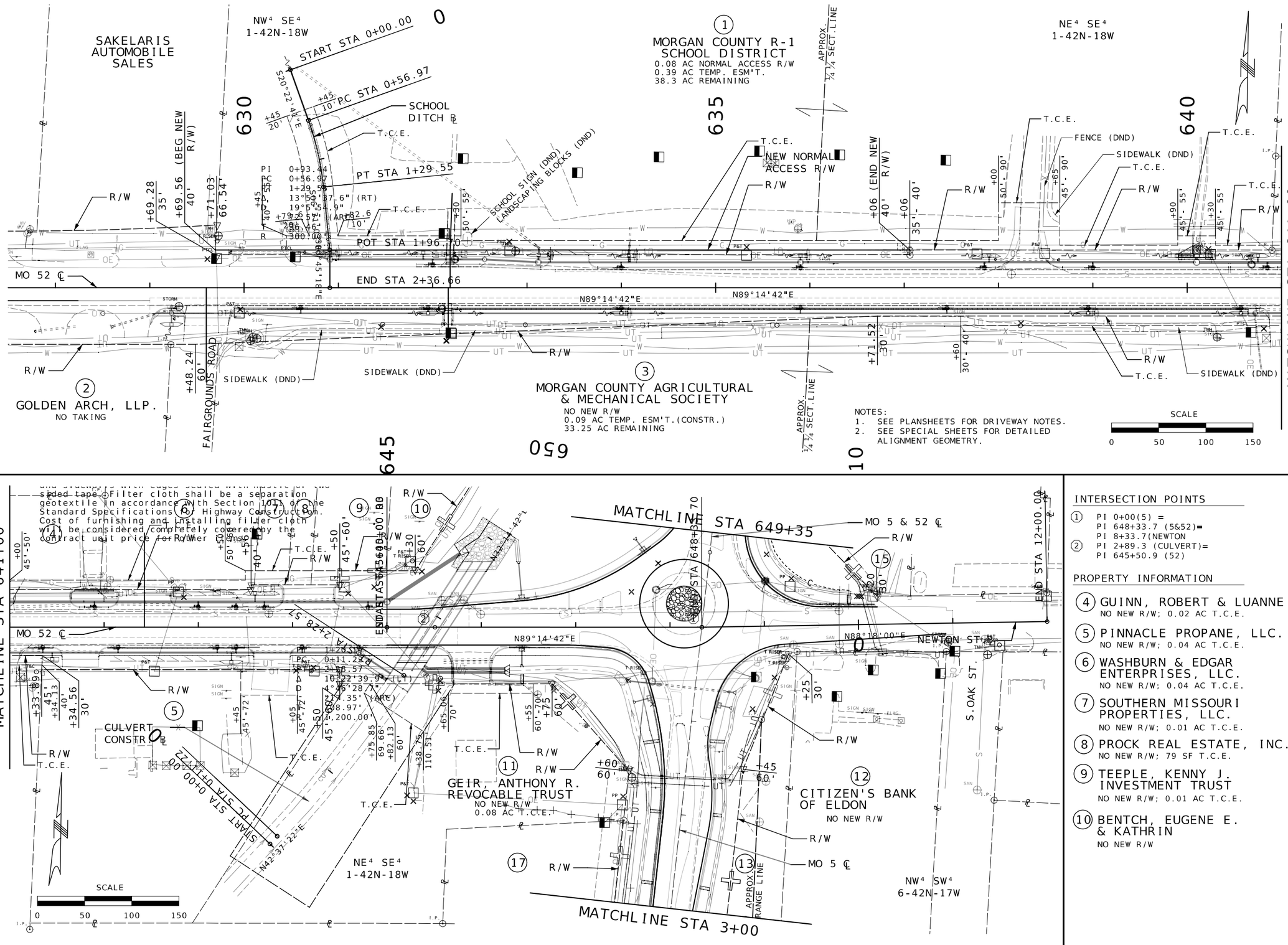
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ROUNDABOUT ℄



INTERSECTION POINTS

1. PI 0+00(5) =
   PI 648+33.7 (5&52)=
   PI 8+33.7(NEWTON
2. PI 2+89.3 (CULVERT)=
   PI 645+50.9 (52)

PROPERTY INFORMATION

4. GUINN, ROBERT & LUANNE
   NO NEW R/W; 0.02 AC T.C.E.
5. PINNACLE PROPANE, LLC.
   NO NEW R/W; 0.04 AC T.C.E.
6. WASHBURN & EDGAR ENTERPRISES, LLC.
   NO NEW R/W; 0.04 AC T.C.E.
7. SOUTHERN MISSOURI PROPERTIES, LLC.
   NO NEW R/W; 0.01 AC T.C.E.
8. PROCK REAL ESTATE, INC.
   NO NEW R/W; 79 SF T.C.E.
9. TEEPLE, KENNY J. INVESTMENT TRUST
   NO NEW R/W; 0.01 AC T.C.E.
10. BENTCH, EUGENE E. & KATHRIN
    NO NEW R/W
11. 17.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:38:49 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED 3/12/2024

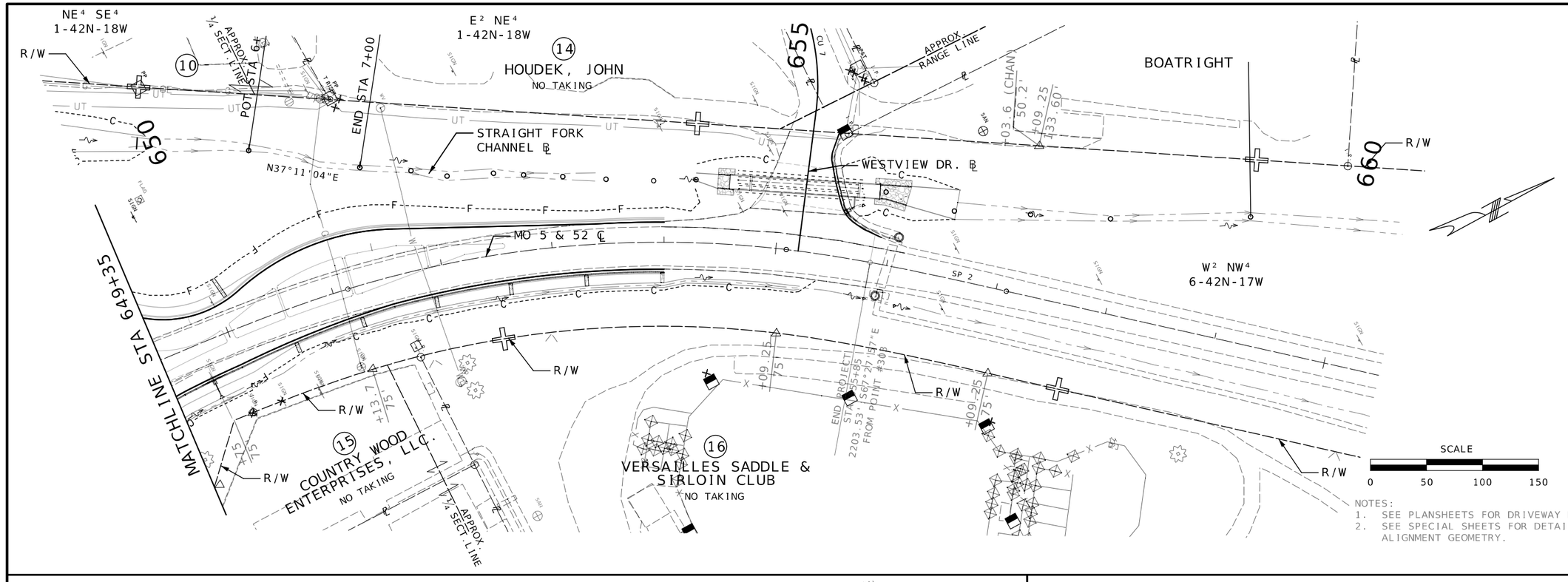
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	23

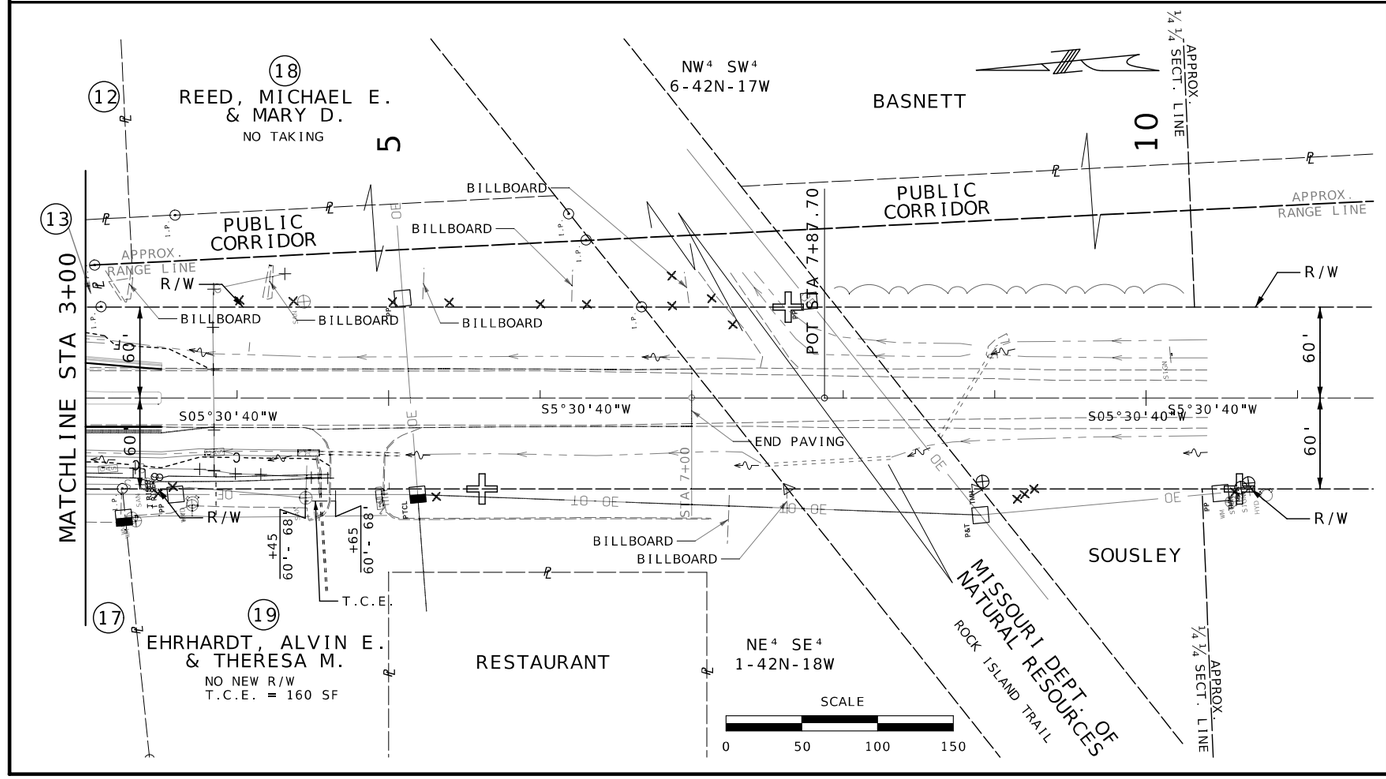
COUNTY MORGAN
JOB NO. J5P3575
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

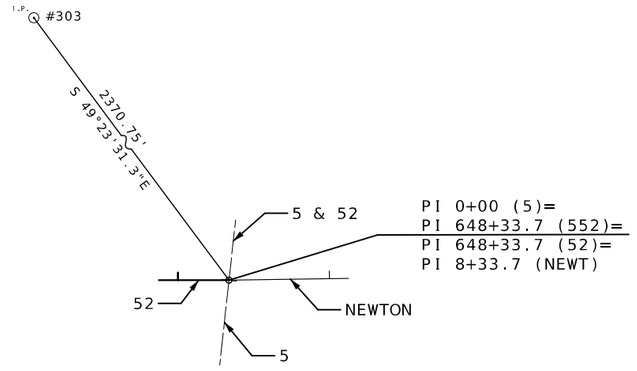
RIGHT OF WAY
SHEET 1 OF 2





LANDCORNER TIE TO PROJECT

POINT #303
FOUND 2" PIPE AT NORTHEAST SUBDIVISION CORNER OF THE WAL-MART ADDITION TO THE CITY OF VERSAILLES, AS PER DOCUMENT 2006-951 LOCATED IN THE MORGAN COUNTY RECORDERS OFFICE.



NOTES:
1. SEE PLANSHEETS FOR DRIVEWAY NOTES.
2. SEE SPECIAL SHEETS FOR DETAILED ALIGNMENT GEOMETRY.

PROPERTY INFORMATION

13 BAX, ROBERT
NO TAKING

17 MEMPHIS RYAN, LLC.
NO TAKING

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:39:08 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	24

COUNTY
MORGAN

JOB NO.
J5P3575

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)

RIGHT OF WAY
SHEET 2 OF 2

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
ALIGNMENTS								
	612+00.00	MO 52	0	946,207.67	1,535,979.57		POT, BEGIN PROJECT, 52_01_CL ALIGNMENT	
	614+31.10	MO 52	0	946,218.91	1,536,410.52		EQUATION BACK (REGION 1)	
	614+33.88	MO 52	0	946,218.91	1,536,410.52		EQUATION AHEAD (REGION 2)	
	623+75.68	MO 52	0	946,256.59	1,537,351.57		EQUATION BACK (REGION 2)	
	622+75.68	MO 52	0	946,256.59	1,537,351.57		EQUATION AHEAD (REGION 3)	
	645+00.00	MO 52	0	946,285.90	1,539,575.70		POT, END ALIGNMENT	
	645+00.00	MO 52	0	946,285.90	1,539,575.70		POT, BEG 52_02_CL ALIGNMENT	
	648+33.70	MO 52	0	946,290.30	1,539,909.37		INTERSECTION TIE	
	8+33.70	NEWTON ST.	0	946,290.30	1,539,909.37		INTERSECTION TIE, BEG NEWTON_CL ALIGNMENT	
	12+00.00	NEWTON ST.	0	946,301.17	1,540,275.51		POT, END ALIGNMENT	
	648+33.70	MO 5/52	0	946,290.30	1,539,909.37		INTERSECTION TIE, BEG 5_52_CL ALIGNMENT	
	649+13.70	MO 5/52	0	946,369.93	1,539,917.05		TS SPIRAL #1	
	650+47.11	MO 5/52		946,502.73	1,539,929.86		SPI SPIRAL #1	
	651+13.70	MO 5/52	0	946,568.12	1,539,943.18		SC CURVE #1	
	653+14.36	MO 5/52		946,764.74	1,569,983.23		PI CURVE #1	
		MO 5/52		946,377.55	1,540,878.90		CC CURVE #1	
	655+09.25	MO 5/52	0	946,928.61	1,540,099.01		CS CURVE #1	
	655+75.99	MO 5/52		946,983.11	1,540,137.53		SPI SPIRAL #2	
	655+85.00	MO 5/52	0	946,988.91	1,540,144.83		POC, END PROJECT	
	657+09.25	MO 5/52	0	947,083.43	1,540,225.48		ST SPIRAL #2	
	662+00.00	MO 5/52	0	947,452.42	1,540,549.01		PI, END ALIGNMENT	
	0+00.00	MO 5	0	946,290.30	1,539,909.37		INTERSECTION TIE, BEG 5_CL ALIGNMENT	
	7+87.70	MO 5	0	945,506.24	1,539,833.72		POT	
	12+00.00	MO 5	0	945,095.85	1,539,794.12		POT, END ALIGNMENT	
	0+00.00	CREEK	0	946,054.60	1,539,454.66		POT, BEG 52Culvert_BL ALIGNMENT	
	0+11.22	CREEK	0	946,062.86	1,539,462.25		PC CURVE	
	1+20.19	CREEK		946,143.04	1,539,536.05		PI CURVE	
		CREEK		946,875.46	1,538,579.26		CC CURVE	
	2+28.57	CREEK	0	946,235.21	1,539,594.19		PT CURVE	
	6+00.00	CREEK	0	946,549.36	1,539,792.36		PI	
	7+00.37	CREEK	0	946,629.32	153,985.02		POT, END ALIGNMENT	
	4+81.42	WESTVIEW	0	947,056.79	1,539,618.42		POT, BEG Westview_BL ALIGNMENT	
	7+56.84	WESTVIEW	0	947,048.03	1,539,893.70		PC CURVE	
	8+18.08	WESTVIEW		947,046.08	1,539,954.91		PI CURVE	
		WESTVIEW		946,848.13	1,539,887.34		CC CURVE	
	8+75.69	WESTVIEW	0	947,010.20	1,540,004.53		PT CURVE	
	10+00.00	WESTVIEW	0	946,937.35	1,540,105.26		POT, END ALIGNMENT	
	10+00.00	CREEK	0	946,887.67	1,540,005.78		PI, BEG Westview_Culvert_Constr ALIGNMENT	
	11+70.00	CREEK	0	947,031.45	1,540,096.48		PI	
	12+33.20	CREEK	0	947,076.91	1,540,140.39		PI, END CONSTRUCTION	
	0+00.00	SCHOOL	0	946,497.84	1,538,121.99		POT, BEG School_Ditch ALIGNMENT	
	0+56.97	SCHOOL	0	946,444.43	1,538,141.83		PC CURVE	
	0+93.44	SCHOOL		946,410.25	1,538,154.53		PI CURVE	
		SCHOOL		946,339.97	1,537,860.61		CC CURVE	
	1+29.55	SCHOOL	0	946,374.02	1,538,158.67		PT CURVE	
	1+96.70	SCHOOL	0	946,307.30	1,538,166.29		PI	
	2+36.67	SCHOOL	0	946,267.34	1,538,166.82		PI, END ALIGNMENT	

ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES MULTIPY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION

COORDINATE SYSTEM	MODIFIED STATE PLANE
HORIZONTAL DATUM	NAD83
VERTICAL DATUM	NAVD88
GEOID MODEL	GEOID12A
ELEVATIONS DETERMINED BY	XX
PROJECT PROJECTION FACTOR	1.00008940

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM	MODIFIED STATE PLANE
CONTROL STATION	XX
DESIGNATION	MODOT ELDON CORS ARP
CORS_ID	MOEL
PID	DL6153
LATITUDE	N 38^20'49.67807"
LONGITUDE	W 92^35'43.33476"
NORTHING (M)	278965.6230
EASTING (M)	491663.5450
ZONE	2402 (MO-CENTRAL)
PROJECT AVERAGE GRID FACTOR	0.99991060

EXAMPLE OF PROJECT COORDINATE TO S.P.C.

PROJECT NORTHING X AVERAGE GRID FACTOR
= STATE PLANE NORTHING
PROJECT EASTING X AVERAGE GRID FACTOR
= STATE PLANE EASTING

EXAMPLE: CONTROL POINT #___
N ______.____ X _.________ = N ______.___
E _______.____ X _.________ = E _______.___

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT SHEET
SHEET 1 OF 5

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:39:31 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	25

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

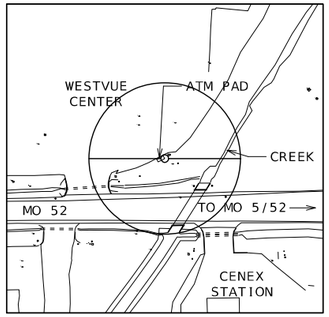
BRIDGE NO.

DESCRIPTION | DATE

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

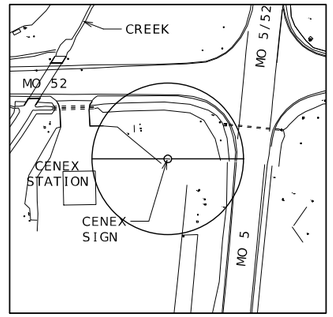
COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
ALIGNMENTS								
	0+00.00	NW QUAD	0	946,304.90	1,539,575.45		BEGIN NW_QUAD_CnG ALIGNMENT	
	0+26.01	NW QUAD	0	946,305.25	1,539,601.45		PC CURVE #1	
	0+30.00	NW QUAD		946,305.30	1,539,605.44		PI CURVE #1	
		NW QUAD		946,405.24	1,539,600.13		CC CURVE #1	
	0+33.99	NW QUAD	0	946,305.67	1,539,609.42		PT CURVE #1	
	1+41.28	NW QUAD	0	946,315.63	1,539,716.25		PC CURVE #2	
	2+12.12	NW QUAD		946,322.21	1,539,786.78		PI CURVE #2	
		NW QUAD		946,564.55	1,539,693.03		CC CURVE #2	
	2+79.34	NW QUAD	0	946,364.81	1,539,843.38		PT CURVE #2	
	3+01.06	NW QUAD	0	946,377.88	1,539,860.73		PC CURVE #3	
	3+66.94	NW QUAD		946,417.49	1,539,913.36		PI CURVE #3	
		NW QUAD		946,457.77	1,539,800.59		CC CURVE #3	
	4+17.56	NW QUAD	0	946,481.49	1,539,897.74		PRC CURVE #3 / #4	
	4+96.47	NW QUAD		946,558.15	1,539,879.02		PI CURVE #4	
		NW QUAD		946,531.77	1,540,103.69		CC CURVE #4	
	5+68.65	NW QUAD		946,628.39	1,539,914.98		PT CURVE #4	
	7+50.12	NW QUAD	0	946,789.92	1,539,997.69		PC CURVE #5	
	7+80.80	NW QUAD		946,817.71	1,540,010.69		PI CURVE #5	
		NW QUAD		946,377.55	1,540,878.90		CC CURVE #5	
	8+11.45	NW QUAD	0	946,844.62	1,540,025.41		PT CURVE #5, END ALIGNMENT	
	0+00.00	NE QUAD	0	946,314.27	1,540,094.99		BEG NE_QUAD_CnG ALIGNMENT	
	0+60.64	NE QUAD	0	946,313.87	1,540,034.35		PC CURVE #1	
	1+42.75	NE QUAD		946,313.33	1,539,952.56		PI CURVE #1	
		NE QUAD		946,393.87	1,540,034.13		CC CURVE #1	
	1+88.38	NE QUAD	0	946,395.42	1,539,954.15		PCC CURVE #1 / #2	
	2+16.67	NE QUAD		946,423.96	1,539,954.71		PI CURVE #2	
		NE QUAD		946,377.55	1,540,878.90		CC CURVE #2	
	2+44.94	NE QUAD	0	946,452.16	1,539,956.99		PCC CURVE #2 / #3	
	3+18.54	NE QUAD		946,525.70	1,539,959.94		PI CURVE #3	
		NE QUAD		946,414.82	1,540,886.85		CC CURVE #3	
	3+91.84	NE QUAD	0	946,597.86	1,539,974.42		PCC CURVE #3 / #4	
	5+14.39	NE QUAD		946,716.94	1,540,003.42		PI CURVE #4	
		NE QUAD		946,377.55	1,540,878.90		CC CURVE #4	
	6+35.55	NE QUAD	0	946,824.45	1,540,062.26		PT CURVE #4, END ALIGNMENT	
	0+00.00	SE QUAD	0	946,286.93	1,540,168.31		BEG SE_QUAD_CnG ALIGNMENT	
	1+72.07	SE QUAD	0	946,273.39	1,539,996.78		PC CURVE #1	
	2+31.58	SE QUAD		946,268.71	1,539,937.46		PI CURVE #1	
		SE QUAD		946,193.64	1,540,003.07		CC CURVE #1	
	2+74.39	SE QUAD	0	946,210.55	1,539,924.88		PT CURVE #1	
	2+98.63	SE QUAD	0	946,186.86	1,539,919.76		PC CURVE #2	
	3+18.70	SE QUAD		946,167.24	1,539,915.51		PI CURVE #2	
		SE QUAD		946,165.72	1,540,017.50		CC CURVE #2	
	3+38.24	SE QUAD	0	946,147.51	1,539,919.17		PRC CURVE #2 / #3	
	3+74.96	SE QUAD		946,111.41	1,539,925.85		PI CURVE #3	
		SE QUAD		946,111.11	1,539,919.28		CC CURVE #3	
	4+10.86	SE QUAD	0	946,075.29	1,539,919.28		PT CURVE #3	
	5+48.28	SE QUAD	0	945,940.09	1,539,894.67		POT, END ALIGNMENT	



BM 1-22
CUT □ ON E CORNER OF CONCRETE ATM PAD.
56' N/O MO 52 NORTH EOP,
273' W/O MO 5/52 WEST EOP.

X - 1539594.253
Y - 946351.6738
Z - 986.405



BM 2-22
CUT L IN S/E CORNER OF CENEX SIGN BASE.
84' S/O MO 52 SOUTH EOP,
92' W/O MO 5 WEST EOP.

X - 1539789.5159
Y - 946185.4276
Z - 984.750

COORDINATE POINT SHEET
SHEET 2 OF 5

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:42:53 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/12/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 26
COUNTY: MORGAN
JOB NO.: J5P3575
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)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
ALIGNMENTS								
	0+00.00	SW QUAD	0	946,266.91	1,539,575.95		BEGIN SW_QUAD_CnG ALIGNMENT	
	1+92.01	SW QUAD	0	946,269.44	1,539,767.94		PC CURVE #1	
	2+00.00	SW QUAD		946,269.54	1,539,775.93		PI CURVE #1	
		SW QUAD		946,069.45	1,539,770.58		CC CURVE #1	
	2+07.98	SW QUAD	0	946,269.01	1,539,783.90		PT CURVE #1	
	2+33.57	SW QUAD	0	946,267.30	1,539,809.43		PC CURVE #2	
	2+67.63	SW QUAD		946,265.04	1,539,843.42		PI CURVE #2	
		SW QUAD		946,217.42	1,539,806.10		CC CURVE #2	
	2+93.37	SW QUAD	0	946,232.58	1,539,853.75		PT CURVE #2	
	3+00.00	SW QUAD	0	946,226.26	1,539,855.76		PC CURVE #3	
	3+71.73	SW QUAD		946,157.91	1,539,877.51		PI CURVE #3	
		SW QUAD		946,120.13	1,539,522.24		CC CURVE #3	
	4+41.49	SW QUAD	0	946,086.52	1,539,870.62		PT CURVE #3	
	5+84.93	SW QUAD	0	945,943.74	1,539,856.84		POT, END ALIGNMENT	
	0+00.00	MO 52 LEG	0	946,292.90	1,539,575.60		BEG WEST_EXIT ALIGNMENT	
	0+82.87	MO 52 LEG	0	946,294.00	1,539,658.47		PC CURVE	
	1+94.87	MO 52 LEG		946,295.47	1,539,770.46		PI CURVE	
		MO 52 LEG		946,693.96	1,539,653.19		CC CURVE	
	3+01.29	MO 52 LEG	0	946,354.89	1,539,865.41		PT CURVE, END ALIGNMENT	
	0+00.00	MO 52 LEG	0	946,278.90	1,539,575.79		BEG WEST_ENTRY ALIGNMENT	
	0+82.87	MO 52 LEG	0	946,280.00	1,539,658.65		PC CURVE #1	
	1+41.81	MO 52 LEG		946,280.77	1,539,717.58		PI CURVE #1	
		MO 52 LEG		946,693.96	1,539,653.19		CC CURVE #1	
	1+99.95	MO 52 LEG	0	946,297.96	1,539,773.95		PRC CURVE #1 / #2	
	2+49.95	MO 52 LEG		946,312.55	1,539,821.77		PI CURVE #2	
		MO 52 LEG		946,211.88	1,539,800.21		CC CURVE #2	
	2+91.22	MO 52 LEG	0	946,279.66	1,539,859.42		PT CURVE #2, END ALIGNMENT	
	0+00.00	NEWTON LEG	0	946,269.97	1,539,903.64		PC CURVE, BEG EAST_EXIT ALIGNMENT	
	0+43.32	NEWTON LEG		946,282.23	1,539,945.19		PI CURVE	
		NEWTON LEG		945,886.31	1,540,016.79		CC CURVE	
	0+86.31	NEWTON LEG	0	946,285.30	1,539,988.40		PT CURVE	
	2+63.91	NEWTON LEG	0	946,297.90	1,540,165.56		PI, END OF ALIGNMENT	
	0+00.00	NEWTON LEG	0	946,340.83	1,539,929.64		PC CURVE, BEG EAST_ENTRY ALIGNMENT	
	0+47.79	NEWTON LEG		946,300.86	1,539,955.85		PI CURVE	
		NEWTON LEG		946,390.18	1,540,004.90		CC CURVE	
	0+87.87	NEWTON LEG	0	946,300.19	1,540,003.64		PT CURVE	
	2+49.80	NEWTON LEG	0	946,297.90	1,540,165.56		PI, END OF ALIGNMENT	
	0+00.00	MO 5/52 LEG	0	946,320.76	1,539,936.99		PC CURVE #1, BEG NORTH_EXIT ALIGNMENT	
	0+21.32	MO 5/52 LEG		946,341.91	1,539,934.41		PI CURVE #1	
		MO 5/52 LEG		946,369.29	1,540,334.04		CC CURVE #1	
	0+42.59	MO 5/52 LEG	0	946,363.23	1,539,934.08		PCC CURVE #1 / #2	
	2+91.88	MO 5/52 LEG		946,612.49	1,539,930.30		PI CURVE #2	
		MO 5/52 LEG		946,377.55	1,540,878.90		CC CURVE #2	
	5+30.06	MO 5/52 LEG	0	946,831.17	1,540,049.98		PT CURVE #2, END ALIGNMENT	

COORDINATE POINT SHEET
SHEET 3 OF 5

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:43:13 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	27

COUNTY
MORGAN

JOB NO.
J5P3575

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)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
ALIGNMENTS								
	0+00.00	MO 5/52 LEG	0	946,357.14	1,539,869.42		PC CURVE #1, BEG NORTH_ENTRY ALIGNMENT	
	0+78.92	MO 5/52 LEG		946,392.27	1,539,940.09		PI CURVE #1	
		MO 5/52 LEG		946,437.73	1,539,829.36		CC CURVE #1	
	1+29.58	MO 5/52 LEG	0	946,466.92	1,539,914.50		PRC CURVE #1 / #2	
	2+15.29	MO 5/52 LEG		946,548.00	1,539,886.70		PI CURVE #2	
		MO 5/52 LEG		946,531.77	1,540,103.69		CC CURVE #2	
	2+91.54	MO 5/52 LEG	0	946,624.05	1,539,926.25		PT CURVE #2	
	5+12.37	MO 5/52 LEG	0	946,819.97	1,540,028.13		PC CURVE #3	
	5+22.52	MO 5/52 LEG		946,828.98	1,540,032.82		PI CURVE #3	
		MO 5/52 LEG		946,377.68	1,540,878.66		CC CURVE #3	
	5+32.68	MO 5/52 LEG	0	946,837.89	1,540,037.69		PT CURVE #3, END ALIGNMENT	
	0+00.00	MO 5 LEG	0	946,295.30	1,539,847.69		PC CURVE, BEG SOUTH_EXIT ALIGNMENT	
	1+08.55	MO 5 LEG	0	946,196.81	1,539,893.31		PI CURVE	
		MO 5 LEG		946,127.18	1,539,484.74		CC CURVE	
	2+11.99	MO 5 LEG	0	946,088.76	1,539,882.89		PT CURVE	
	3+58.84	MO 5 LEG	0	945,942.59	1,539,868.79		POT, END ALIGNMENT	
	0+00.00	MO 5 LEG	0	946,279.95	1,539,921.59		PC CURVE #1, BEG SOUTH_ENTRY ALIGNMENT	
	0+61.89	MO 5 LEG		946,238.80	1,569,875.36		PI CURVE #1	
		MO 5 LEG		946,212.72	1,539,981.43		CC CURVE #1	
	1+08.43	MO 5 LEG	0	946,180.90	1,539,897.24		PRC CURVE #1 / #2	
	1+76.69	MO 5 LEG		946,117.05	1,539,921.37		PI CURVE #2	
		MO 5 LEG		946,110.20	1,539,710.15		CC CURVE #2	
	2+40.00	MO 5 LEG	0	946,051.77	1,539,901.42		PRC CURVE #2 / #3	
	2+80.20	MO 5 LEG		946,013.32	1,539,889.68		PI CURVE #3	
		MO 5 LEG		945,934.89	1,540,283.97		CC CURVE #3	
	3+20.13	MO 5 LEG	0	945,973.30	1,539,885.81		PT CURVE #3	
	3+52.34	MO 5 LEG	0	945,941.25	1,539,882.72		POT, END ALIGNMENT	
	0+00.00	ROUNDABOUT	0	946,362.05	1,539,889.72		PC CURVE, BEG CIRCULATORY1 ALIGNMENT	
		ROUNDABOUT		946,315.05	1,539,890.34		CC CURVE	
	2+95.31	ROUNDABOUT	0	946,362.05	1,539,889.72		PT CURVE, END ALIGNMENT	
	0+00.00	ST. SEW. Lt	0	946,303.17	1,538,035.34		POT, BEG CG_SS_Left ALIGNMENT	
	1+02.31	ST. SEW. Lt	0	946,304.61	1,538,137.64		PI	
	1+32.01	ST. SEW. Lt	0	946,297.33	1,538,166.43		PI	
	2+96.00	ST. SEW. Lt	0	946,299.50	1,538,330.41		PI	
	3+53.08	ST. SEW. Lt	0	946,297.25	1,538,387.44		PI	
	6+31.09	ST. SEW. Lt	0	946,300.91	1,538,665.43		PI	
	10+51.09	ST. SEW. Lt	0	946,306.44	1,539,085.39		PI	
	15+41.08	ST. SEW. Lt	0	946,312.90	1,539,575.34		PI	
	16+83.90	ST. SEW. Lt	0	946,392.89	1,539,693.66		POT, END ALIGNMENT	
	0+00.00	ST. SEW. Rt	0	946,222.77	1,537,897.75		POT, BEG CG_SS_Right ALIGNMENT	
	0+39.67	ST. SEW. Rt	0	946,223.42	1,537,937.41		PI	
	0+88.41	ST. SEW. Rt	0	946,237.93	1,537,983.95		PI	
	1+03.66	ST. SEW. Rt	0	946,238.13	1,537,999.19		PI	
	3+75.66	ST. SEW. Rt	0	946,241.71	1,538,271.17		PI	
	5+80.66	ST. SEW. Rt	0	946,244.41	1,538,476.15		PI	
	10+75.66	ST. SEW. Rt	0	946,250.93	1,538,971.11		PI	
	12+37.66	ST. SEW. Rt	0	946,253.07	1,539,133.09		PI	
	12+52.66	ST. SEW. Rt	0	946,253.27	1,539,148.09		PI	
	16+50.66	ST. SEW. Rt	0	946,258.51	1,539,546.06		PI	
	17+03.79	ST. SEW. Rt	0	946,203.01	1,539,590.89		POT, END ALIGNMENT	

COORDINATE POINT SHEET
SHEET 4 OF 5

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:43:29 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/12/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 28
COUNTY: MORGAN
JOB NO.: J5P3575
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)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
ALIGNMENTS								
	0+00.00	McDONALDS	0	946,264.62	1,537,960.84		POT, BEG DWY_McD_East ALIGNMENT	
	1+00.00	McDONALDS	0	946,164.63	1,537,962.15		POT, END ALIGNMENT	
	0+00.00	FAIRGROUND	0	946,265.61	1,538,035.83		POT, BEG STR_Fairground ALIGNMENT	
	1+00.00	FAIRGROUND	0	946,165.62	1,538,037.15		POT, END ALIGNMENT	
	0+00.00	XWALK Rt	0	946,268.99	1,538,292.31		POT, BEG PED_School_Xwalk_Rt ALIGNMENT	
	0+50.00	XWALK Rt	0	946,218.99	1,538,292.97		POT, END ALIGNMENT	
	0+00.00	XWALK Lt	0	946,369.00	1,538,295.11		POT, BEG PED_School_Xwalk_Lt ALIGNMENT	
	0+59.98	XWALK Lt	0	946,309.04	1,538,293.78		PI	
	1+00.00	XWALK Lt	0	946,269.02	1,538,294.31		POT, END ALIGNMENT	
	0+00.00	SCHOOL	0	946,370.68	1,538,419.48		POT, BEG DWY_School_Middle ALIGNMENT	
	1+00.00	SCHOOL	0	946,270.68	1,538,420.80		POT, END ALIGNMENT	
	0+00.00	SCHOOL	0	946,377.03	1,538,908.69		POT, BEG DWY_School_East ALIGNMENT	
	0+49.96	SCHOOL	0	946,327.10	1,538,907.10		PI	
	0+99.96	SCHOOL	0	946,277.10	1,538,907.75		POT, END ALIGNMENT	
	0+00.00	PARK	0	946,280.61	1,539,173.73		POT, BEG DWY_Park ALIGNMENT	
	1+00.00	PARK	0	946,180.62	1,539,175.05		POT, END ALIGNMENT	
	0+00.00	GUINN	0	946,381.09	1,539,209.41		POT, BEG DWY_Guinn ALIGNMENT	
	1+00.00	GUINN	0	946,281.09	1,539,210.73		POT, END ALIGNMENT	
	0+00.00	PINNACLE	0	946,281.62	1,539,250.72		POT, BEG DWY_Pinn_West ALIGNMENT	
	1+00.00	PINNACLE	0	946,181.63	1,539,252.04		POT, END ALIGNMENT	
	0+00.00	WESTVUE	0	946,382.51	1,539,317.21		POT, BEG DWY_Westvue_West ALIGNMENT	
	1+00.00	WESTVUE	0	946,282.51	1,539,318.53		POT, END ALIGNMENT	
	0+00.00	PINNACLE	0	946,284.30	1,539,453.71		POT, BEG DWY_Pinn_East ALIGNMENT	
	0+40.00	PINNACLE	0	946,244.30	1,539,454.23		PI	
	0+85.14	PINNACLE	0	946,199.26	1,539,451.33		POT, END ALIGNMENT	
	0+00.00	WESTVUE	0	946,384.80	1,539,491.39		POT, BEG DWY_Westvue_East ALIGNMENT	
	1+00.00	WESTVUE	0	946,284.81	1,539,492.70		POT, END ALIGNMENT	
	0+00.00	CENEX	0	946,287.09	1,539,665.69		POT, BEG DWY_EagleStop ALIGNMENT	
	1+00.00	CENEX	0	946,187.10	1,539,667.01		POT, END ALIGNMENT	
	0+00.00	WESTVIEW Lt	0	947,019.36	1,540,030.81		POT, BEG Westview_CnG_LT ALIGNMENT	
	0+15.84	WESTVIEW Lt	0	947,007.56	1,540,041.37		PC CURVE #1	
	0+21.23	WESTVIEW Lt		947,003.54	1,540,044.97		PI CURVE #1	
		WESTVIEW Lt		947,020.90	1,540,056.27		CC CURVE #1	
	0+26.38	WESTVIEW Lt	0	947,001.88	1,540,050.10		PT CURVE #1	
	0+45.53	WESTVIEW Lt	0	946,995.96	1,540,068.32		PI	
	0+63.43	WESTVIEW Lt	0	946,991.48	1,540,085.65		PI	
	0+64.11	WESTVIEW Lt	0	946,991.31	1,540,086.31		PC CURVE #2	
	0+75.39	WESTVIEW Lt		946,988.48	1,540,097.23		PI CURVE #2	
		WESTVIEW Lt		947,020.35	1,540,093.83		CC CURVE #2	
	0+85.69	WESTVIEW Lt	0	946,993.55	1,540,107.30		PT CURVE #2	
	0+94.68	WESTVIEW Lt	0	946,997.58	1,540,115.33		PC CURVE #3	
	0+95.53	WESTVIEW Lt		946,997.97	1,540,116.10		PI CURVE #3	
		WESTVIEW Lt		947,006.52	1,540,110.84		CC CURVE #3	
	0+96.38	WESTVIEW Lt	0	946,998.48	1,540,116.78		PT CURVE #3	
	1+12.84	WESTVIEW Lt	0	947,008.26	1,540,130.01		POT, END ALIGNMENT	

COORDINATE POINT SHEET
SHEET 5 OF 5

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:43:45 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/12/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	29

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

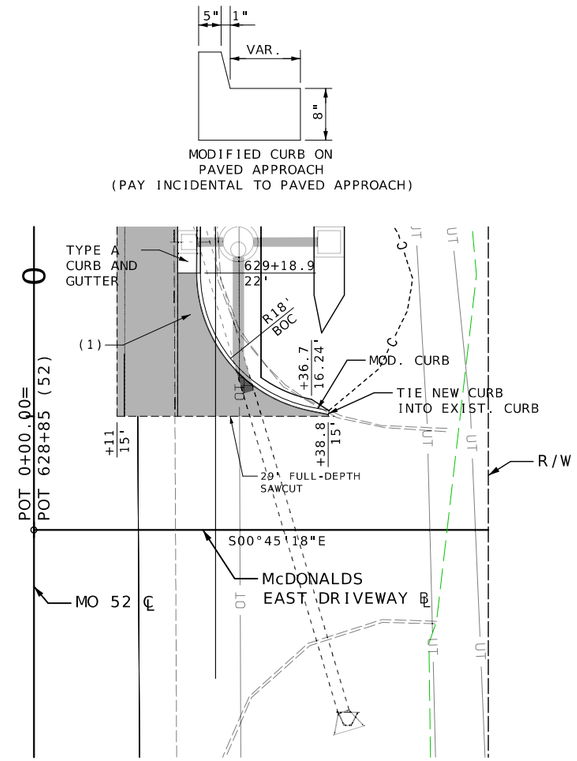
PROJECT NO.

BRIDGE NO.

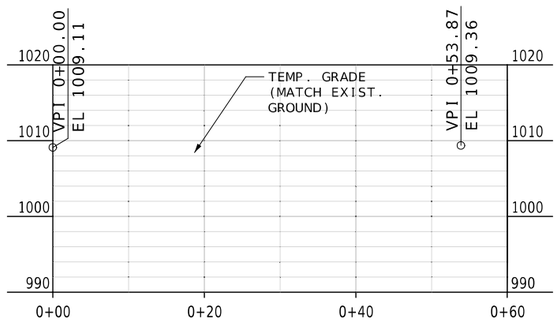
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

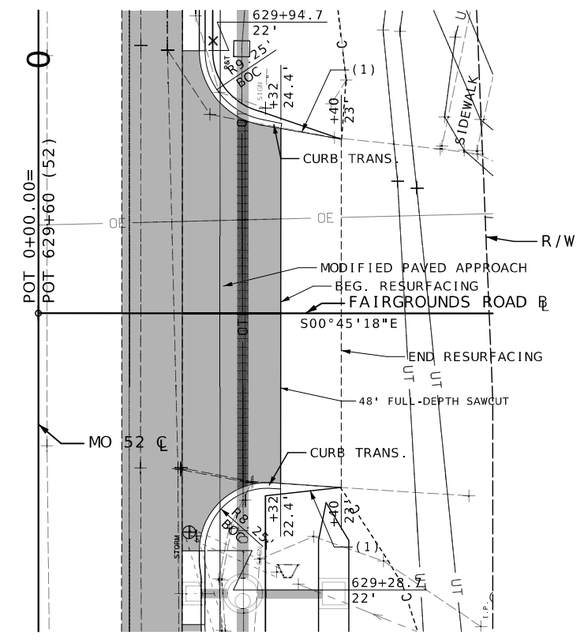


NOTES:
(1) WARP SURFACE TO MATCH: FROM EXISTING DRIVEWAY PAVEMENT TO PROPOSED CURB AND GUTTER CROSS SECTION.

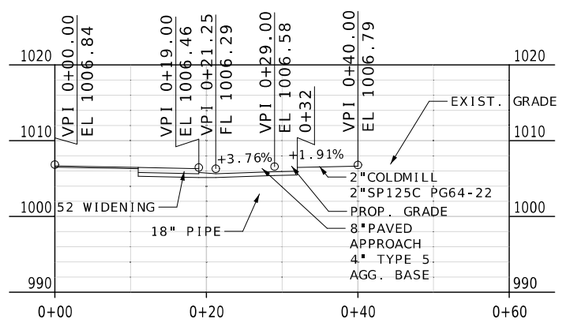


McDONALDS EAST DRIVEWAY

PARTIAL REPLACEMENT OF
CONCRETE APPROACH

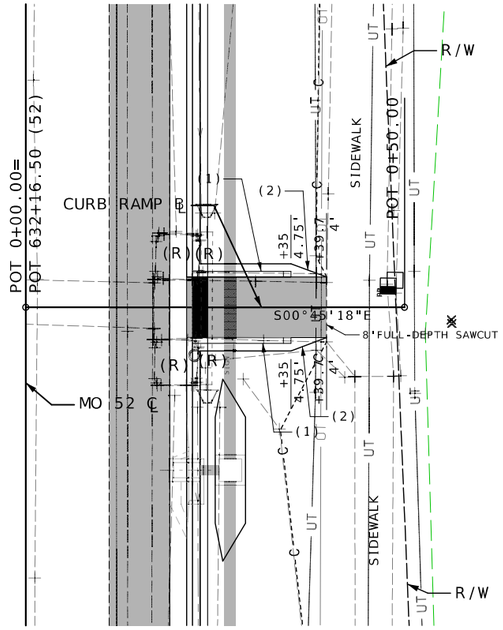


NOTES:
(1) TRANSITION BERM FROM 1' TO 0' WIDE.

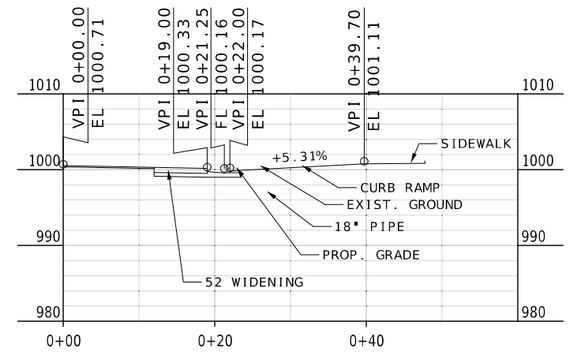


FAIRGROUNDS ROAD

MODIFIED CONCRETE APPROACH
W/ 2" MILL AND FILL



NOTES:
(1) 13' TYPE S CURB BUTTS AGAINST BACK OF CURB ALONG MO 52 CURB TRANSITION AT END OF CURB.
(2) BERM TRANSITION FROM 1' TO 0' WIDE.



PEDESTRIAN CURB RAMP
MO 52 ON RIGHT

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:40:22 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	30

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

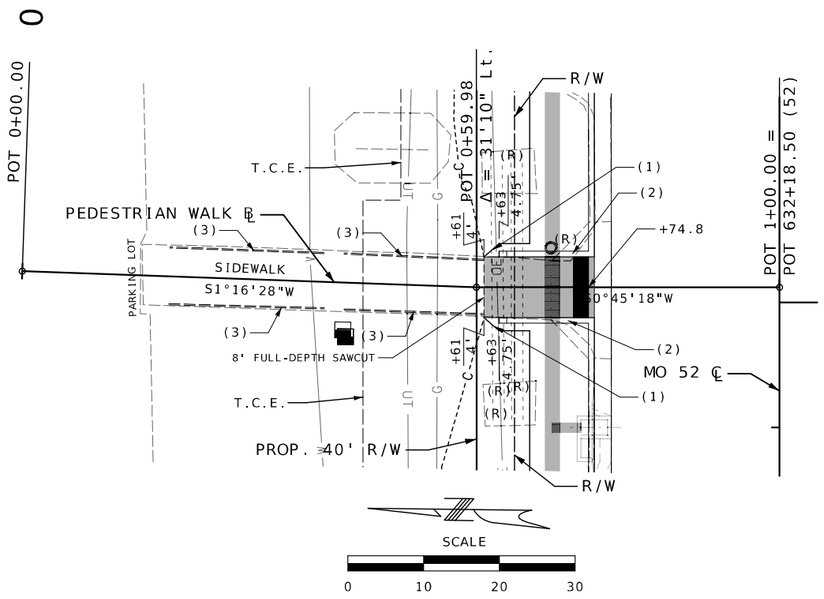
BRIDGE NO.

DESCRIPTION	DATE

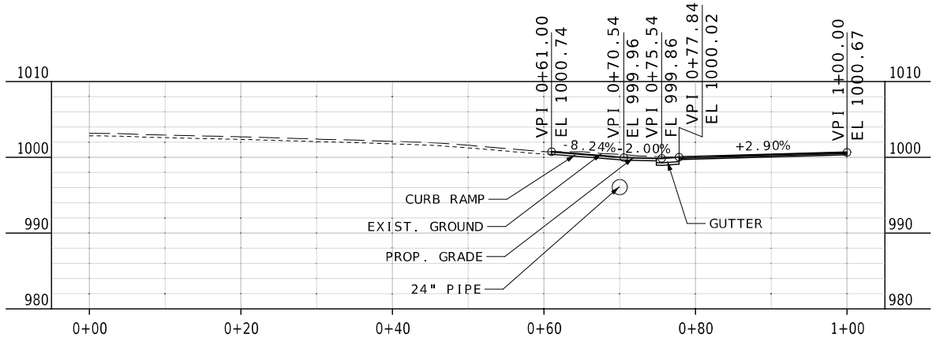
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

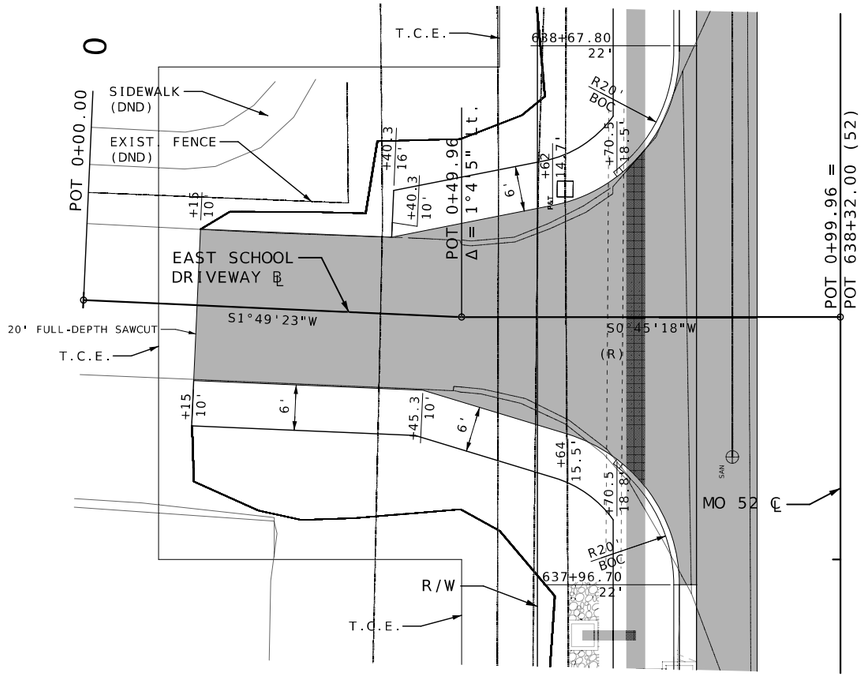
DRIVEWAYS ALONG MO 52
SPECIAL SHEET 1 OF 11

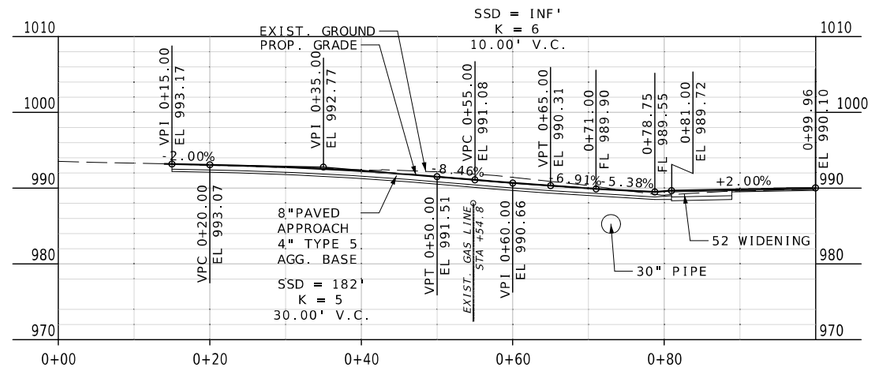


NOTES:
(1) BERM TRANSITION FROM 0' TO 1'.
(2) TYPE S CURB BUTTS AGAINST BACK OF CURB ALONG MO 52. CURB TRANSITION AT BEGIN OF CURB. 12' LONG CURB.
(3) EXISTING HANDRAIL (UIP).



PEDESTRIAN CURB RAMP
MO 52 ON LEFT





EAST SCHOOL DRIVEWAY

MODIFIED CONCRETE APPROACH
PAVEMENT

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:47:41 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/13/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	31

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

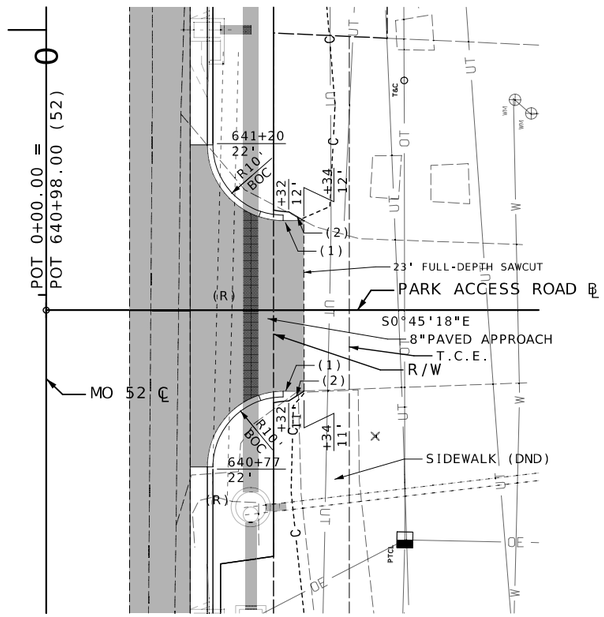
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

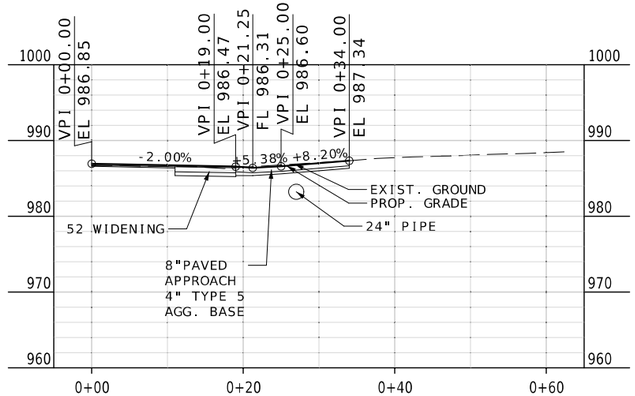
DRIVEWAYS ALONG MO 52
SPECIAL SHEET 2 OF 11



SCALE

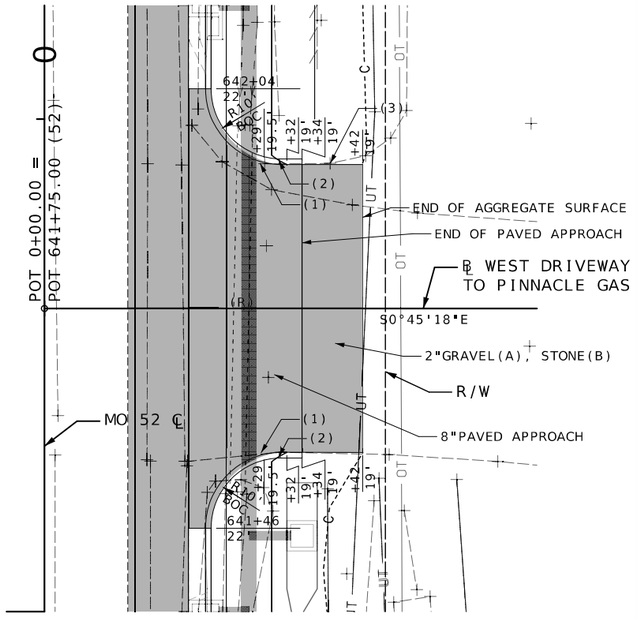
0 10 20 30

NOTES:
(1) CURB HEIGHT TRANSITION.
(2) BERM TRANSITION FROM 1' TO 0' WIDE.



PARK ACCESS ROAD

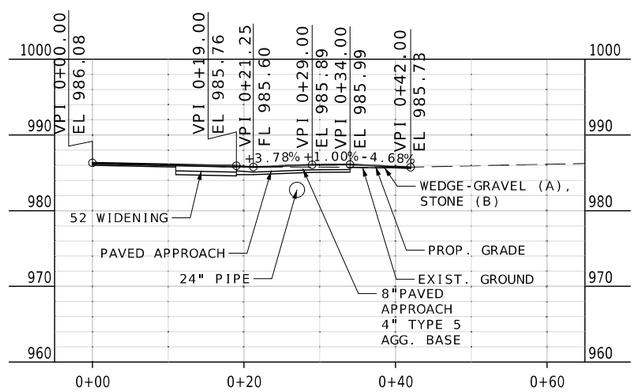
MODIFIED PAVEMENT APPROACH



SCALE

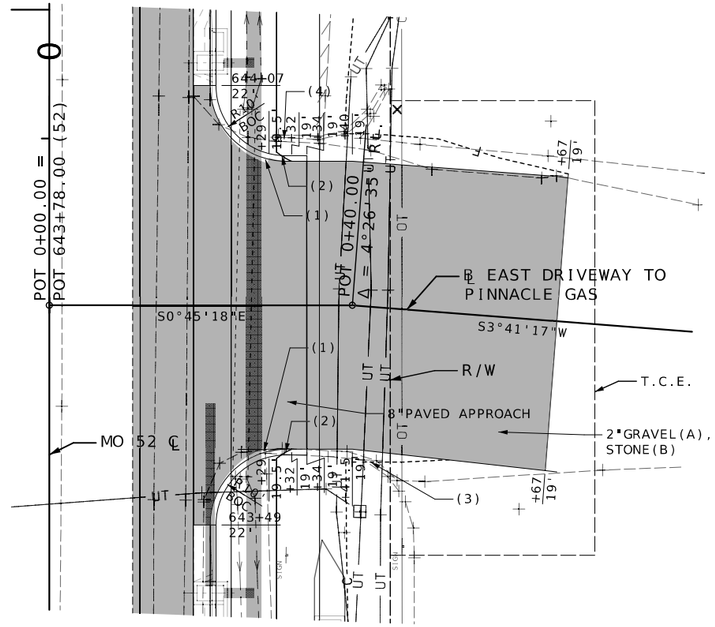
0 10 20 30

NOTES:
(1) CURB HEIGHT TRANSITION
(2) BERM WIDTH TRANSITION FROM 1' TO 0' WIDE.
(3) REMOVE 9' OF EXISTING CURB BEGINNING AT CULVERT.



WEST DRIVEWAY TO PINNACLE GAS

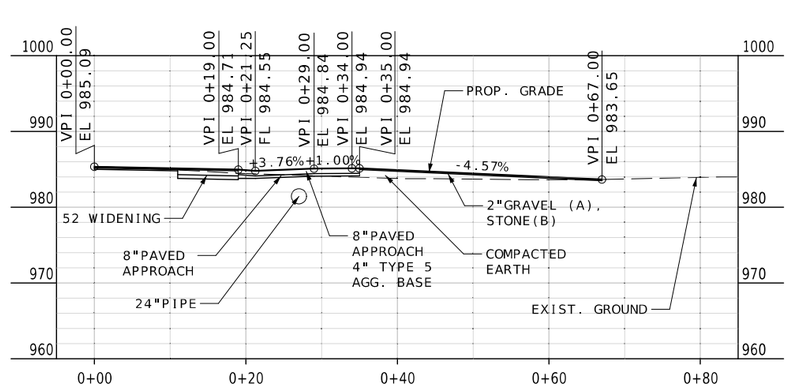
PAVED APPROACH W/
AGGREGATE TOP



SCALE

0 10 20 30

NOTES:
(1) CURB HEIGHT TRANSITION
(2) BERM TRANSITION FROM 1' TO 0'
(3) REM. 19' OF CURB BEGINNING FROM PIPE CULVERT.
(4) REM. 6' OF CURB BEGINNING FROM PIPE CULVERT.



EAST DRIVEWAY TO PINNACLE GAS

PAVED APPROACH W/
AGGREGATE TOP

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:48:09 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/13/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	32

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

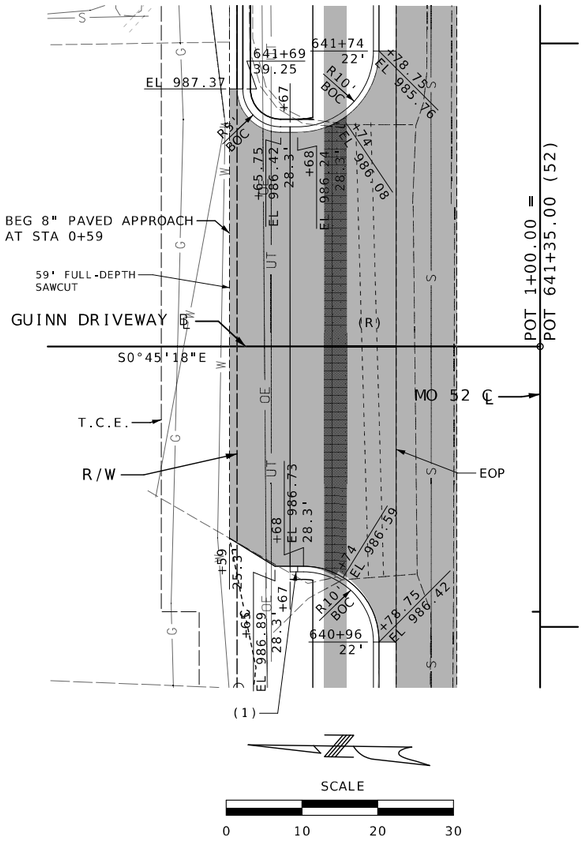
PROJECT NO.

BRIDGE NO.

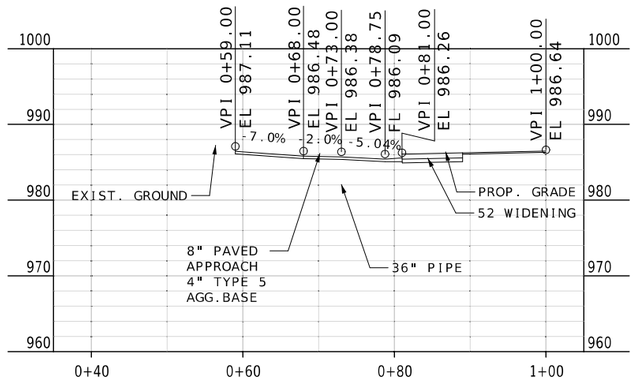
DESCRIPTION	DATE

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

DRIVEWAYS ALONG MO 52
SPECIAL SHEET 3 OF 11

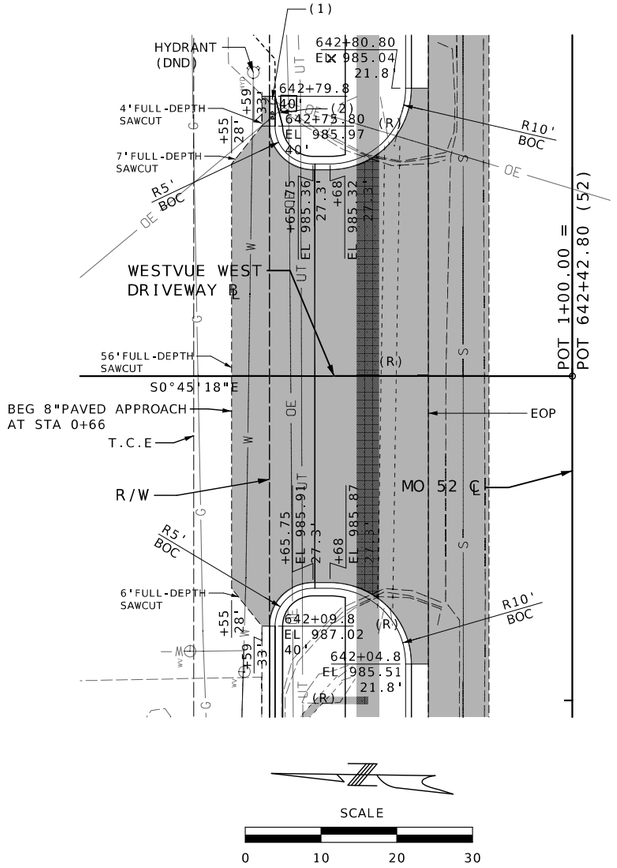


NOTES:
(1) CURB HEIGHT TRANSITION
(2) BERM TRANSITION FROM 0' TO 1'

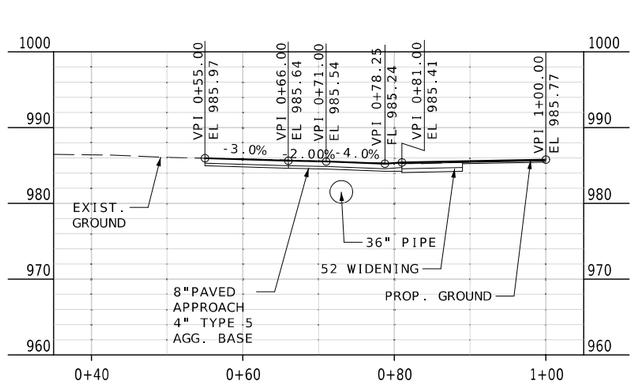


DRIVEWAY TO GUINN PROPERTRY

PAVED APPROACH W/
PCC PAVEMENT

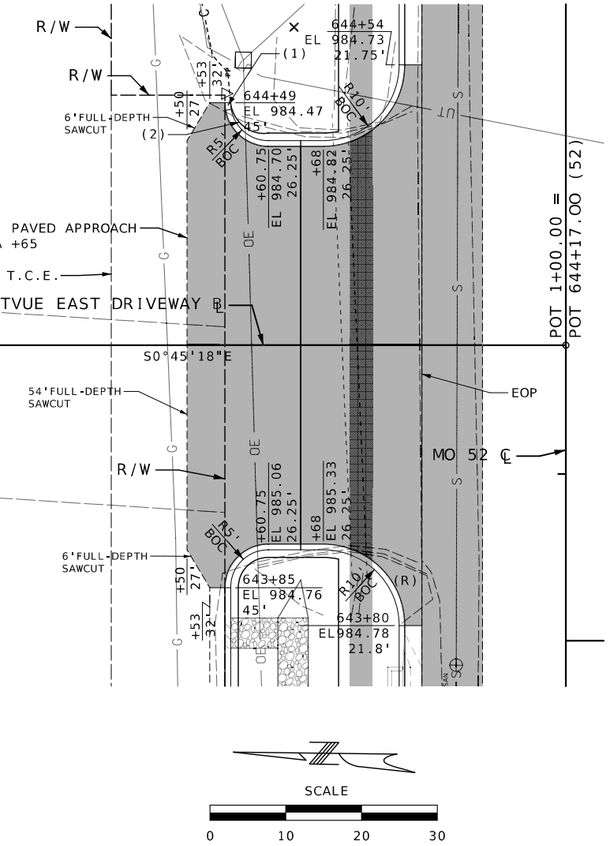


NOTES:
(1) CURB HEIGHT TRANSITION.
(2) BERM TRANSITION FROM 1' TO 0' WIDE.

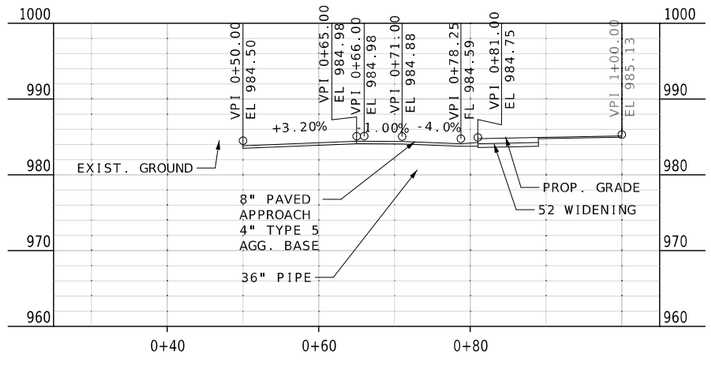


WEST DRIVEWAY TO WESTVUE SHOPPING CENTER

PAVED APPROACH
W/ PCCP TOP



NOTES:
(1) CURB HEIGHT TRANSITION.
(2) BERM TRANSITION FROM 0' TO 1' WIDE.



EAST DRIVEWAY TO WESTVUE SHOPPING CENTER

PAVED APPROACH
W/ PCCP TOP

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:40:53 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	33

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

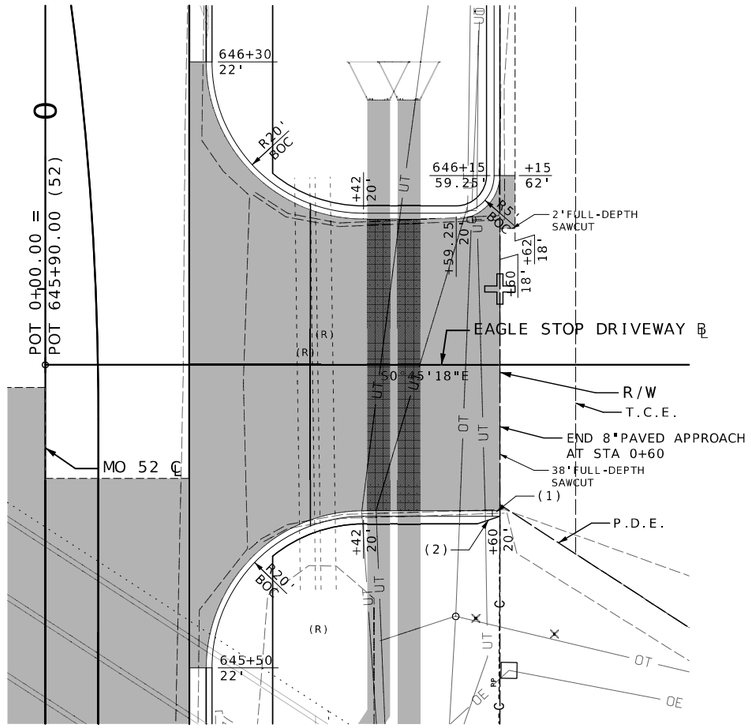
PROJECT NO.

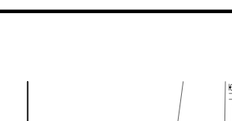
BRIDGE NO.

DATE	DESCRIPTION

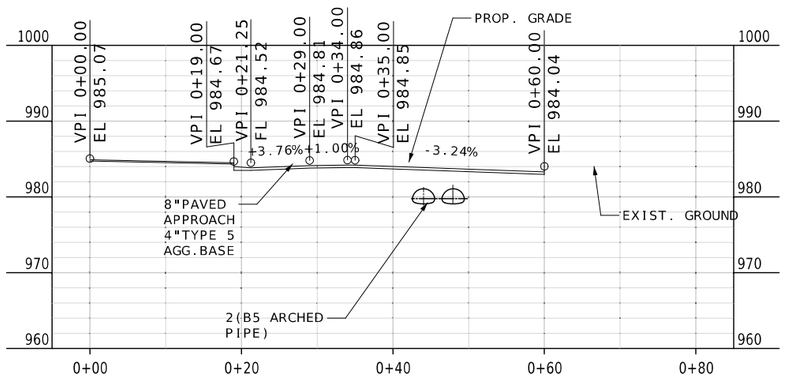
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

DRIVEWAYS ALONG MO 52
SPECIAL SHEET 4 OF 11



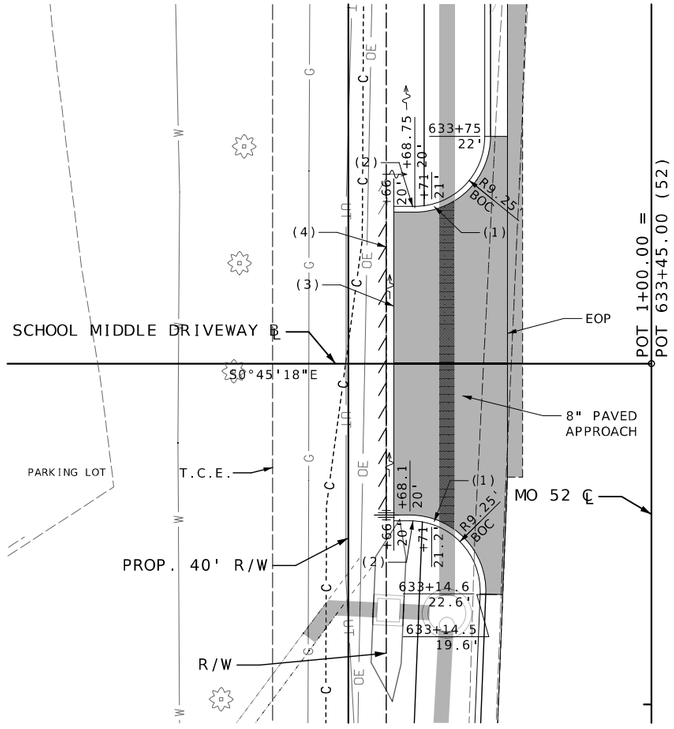


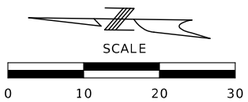
NOTES:
(1) CURB HEIGHT TRANSITION.
(2) BERM TRANSITION FROM 1' TO 0' WIDE.



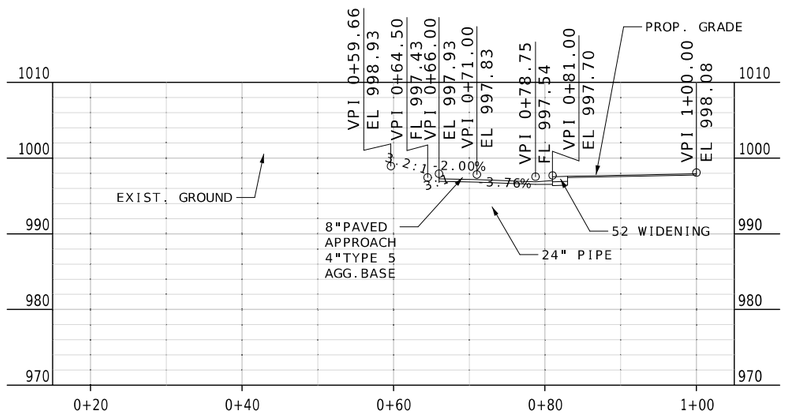
DRIVEWAY TO EAGLE STOP

PAVED APPROACH W/
PCCP TOP





NOTES:
(1) CURB HEIGHT TRANSITION.
(2) BERM TRANSITION FROM 0' TO 1' WIDE.
(3) STUB DRIVEWAY AT BEGIN OF THE PAVED APPROACH.
(4) GRADE TO DRAIN AT BEGIN OF STUB.



MIDDLE DRIVEWAY STUB TO THE SCHOOL

PAVED APPROACH

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:41:10 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	34

COUNTY
MORGAN

JOB NO.
J5P3575

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)

DRIVEWAYS ALONG MO 52
SPECIAL SHEET 5 OF 11

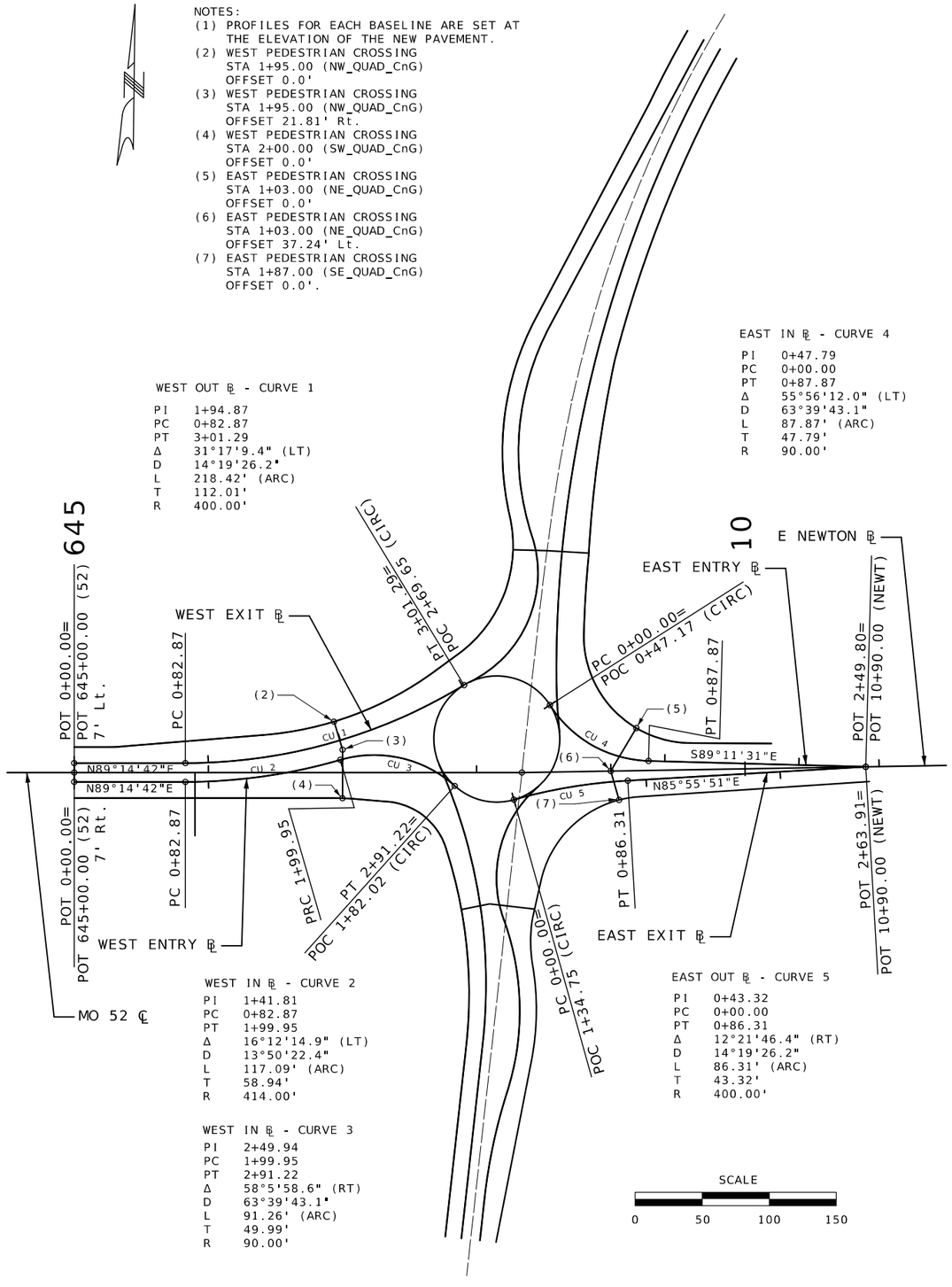
NOTES:
(1) PROFILES FOR EACH BASELINE ARE SET AT THE ELEVATION OF THE NEW PAVEMENT.
(2) WEST PEDESTRIAN CROSSING
STA 1+95.00 (NW_QUAD_CnG)
OFFSET 0.0'
(3) WEST PEDESTRIAN CROSSING
STA 1+95.00 (NW_QUAD_CnG)
OFFSET 21.81' Rt.
(4) WEST PEDESTRIAN CROSSING
STA 2+00.00 (SW_QUAD_CnG)
OFFSET 0.0'
(5) EAST PEDESTRIAN CROSSING
STA 1+03.00 (NE_QUAD_CnG)
OFFSET 0.0'
(6) EAST PEDESTRIAN CROSSING
STA 1+03.00 (NE_QUAD_CnG)
OFFSET 37.24' Lt.
(7) EAST PEDESTRIAN CROSSING
STA 1+87.00 (SE_QUAD_CnG)
OFFSET 0.0'.

WEST OUT ℄ - CURVE 1

PI	1+94.87
PC	0+82.87
PT	3+01.29
Δ	31°17'9.4" (LT)
D	14°19'26.2"
L	218.42' (ARC)
T	112.01'
R	400.00'

EAST IN ℄ - CURVE 4

PI	0+47.79
PC	0+00.00
PT	0+87.87
Δ	55°56'12.0" (LT)
D	63°39'43.1"
L	87.87' (ARC)
T	47.79'
R	90.00'



WEST IN ℄ - CURVE 2

PI	1+41.81
PC	0+82.87
PT	1+99.95
Δ	16°12'14.9" (LT)
D	13°50'22.4"
L	117.09' (ARC)
T	58.94'
R	414.00'

WEST IN ℄ - CURVE 3

PI	2+49.94
PC	1+99.95
PT	2+91.22
Δ	58°5'58.6" (RT)
D	63°39'43.1"
L	91.26' (ARC)
T	49.99'
R	90.00'

EAST OUT ℄ - CURVE 5

PI	0+43.32
PC	0+00.00
PT	0+86.31
Δ	12°21'46.4" (RT)
D	14°19'26.2"
L	86.31' (ARC)
T	43.32'
R	400.00'

NORTH IN ℄ - CURVE 8

PI	0+78.92
PC	0+00.00
PT	1+29.58
Δ	82°29'31.7" (LT)
D	63°39'43.1"
L	129.58' (ARC)
T	78.92'
R	90.00'

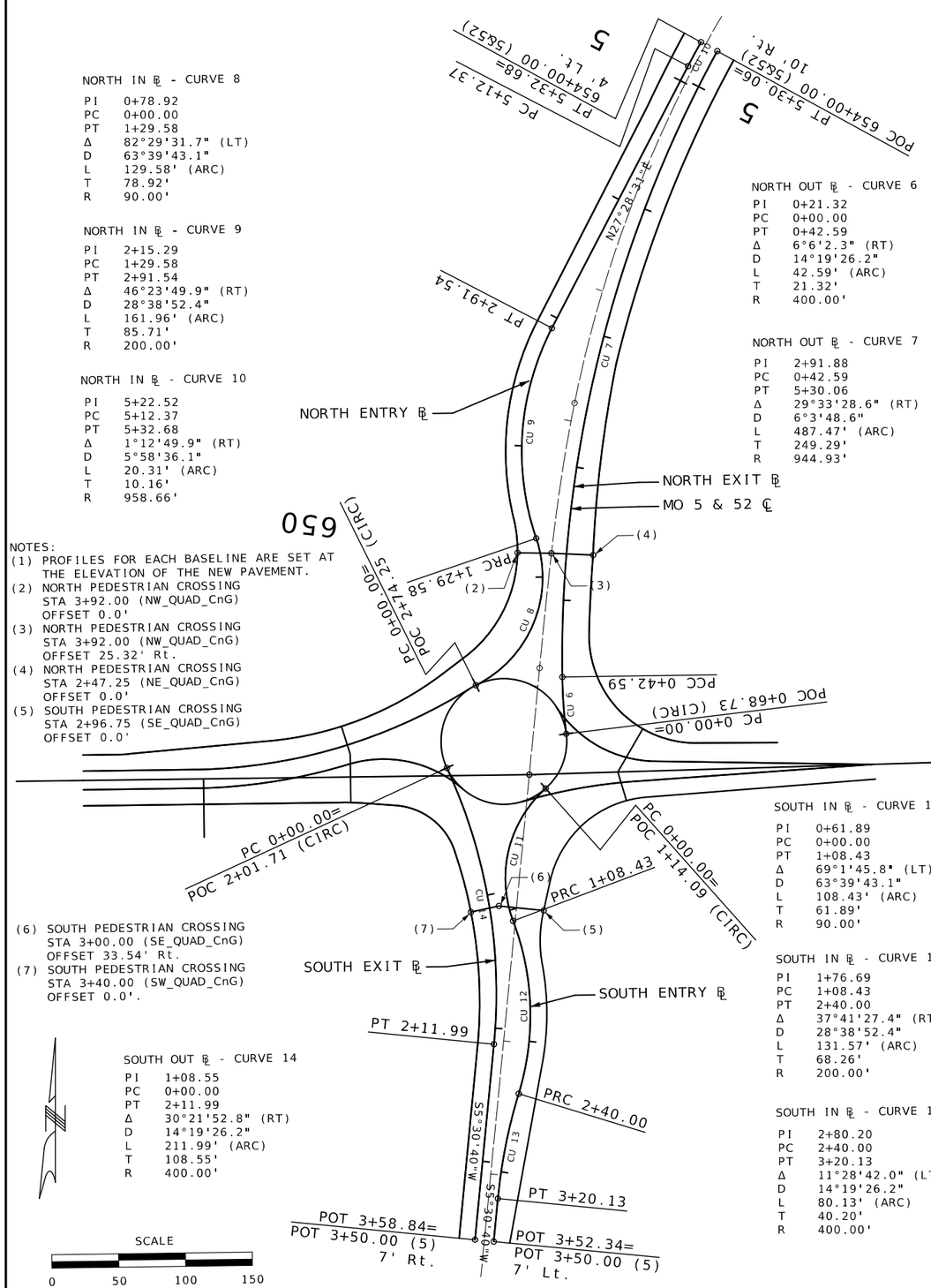
NORTH IN ℄ - CURVE 9

PI	2+15.29
PC	1+29.58
PT	2+91.54
Δ	46°23'49.9" (RT)
D	28°38'52.4"
L	161.96' (ARC)
T	85.71'
R	200.00'

NORTH IN ℄ - CURVE 10

PI	5+22.52
PC	5+12.37
PT	5+32.68
Δ	1°12'49.9" (RT)
D	5°58'36.1"
L	20.31' (ARC)
T	10.16'
R	958.66'

NOTES:
(1) PROFILES FOR EACH BASELINE ARE SET AT THE ELEVATION OF THE NEW PAVEMENT.
(2) NORTH PEDESTRIAN CROSSING
STA 3+92.00 (NW_QUAD_CnG)
OFFSET 0.0'
(3) NORTH PEDESTRIAN CROSSING
STA 3+92.00 (NW_QUAD_CnG)
OFFSET 25.32' Rt.
(4) NORTH PEDESTRIAN CROSSING
STA 2+47.25 (NE_QUAD_CnG)
OFFSET 0.0'
(5) SOUTH PEDESTRIAN CROSSING
STA 2+96.75 (SE_QUAD_CnG)
OFFSET 0.0'



NORTH OUT ℄ - CURVE 6

PI	0+21.32
PC	0+00.00
PT	0+42.59
Δ	6°6'2.3" (RT)
D	14°19'26.2"
L	42.59' (ARC)
T	21.32'
R	400.00'

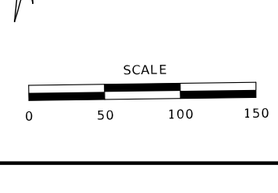
NORTH OUT ℄ - CURVE 7

PI	2+91.88
PC	0+42.59
PT	5+30.06
Δ	29°33'28.6" (RT)
D	6°3'48.6"
L	487.47' (ARC)
T	249.29'
R	944.93'

(6) SOUTH PEDESTRIAN CROSSING
STA 3+00.00 (SE_QUAD_CnG)
OFFSET 33.54' Rt.
(7) SOUTH PEDESTRIAN CROSSING
STA 3+40.00 (SW_QUAD_CnG)
OFFSET 0.0'.

SOUTH OUT ℄ - CURVE 14

PI	1+08.55
PC	0+00.00
PT	2+11.99
Δ	30°21'52.8" (RT)
D	14°19'26.2"
L	211.99' (ARC)
T	108.55'
R	400.00'



SOUTH IN ℄ - CURVE 11

PI	0+61.89
PC	0+00.00
PT	1+08.43
Δ	69°1'45.8" (LT)
D	63°39'43.1"
L	108.43' (ARC)
T	61.89'
R	90.00'

SOUTH IN ℄ - CURVE 12

PI	1+76.69
PC	1+08.43
PT	2+40.00
Δ	37°41'27.4" (RT)
D	28°38'52.4"
L	131.57' (ARC)
T	68.26'
R	200.00'

SOUTH IN ℄ - CURVE 13

PI	2+80.20
PC	2+40.00
PT	3+20.13
Δ	11°28'42.0" (LT)
D	14°19'26.2"
L	80.13' (ARC)
T	40.20'
R	400.00'

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:50:12 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/13/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	35

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

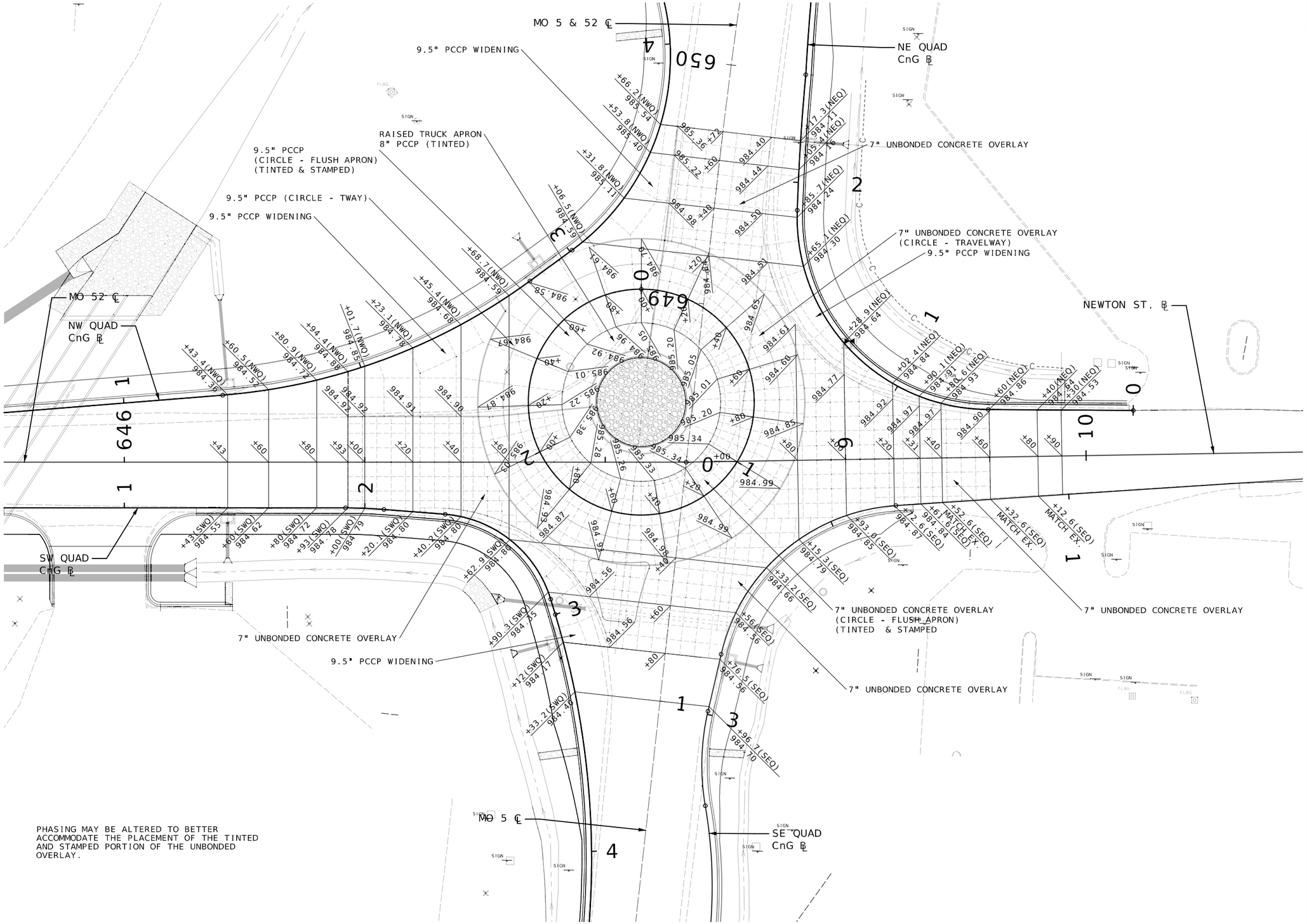
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

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

ENTER/EXIT BASELINES
SPECIAL SHEET 6 OF 11



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER

03/13/2024 11:50:29 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED	
3/13/2024	
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	36

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

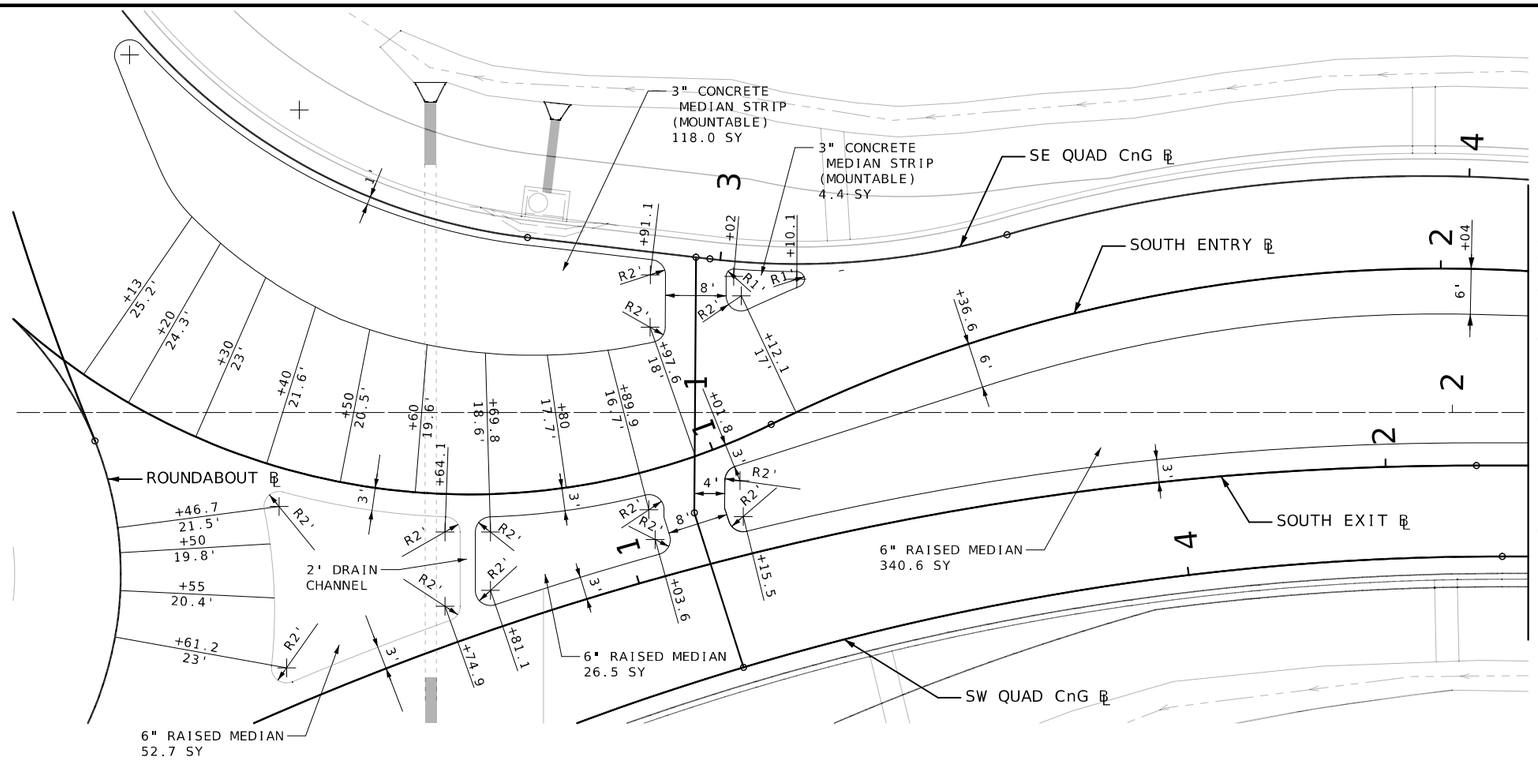
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

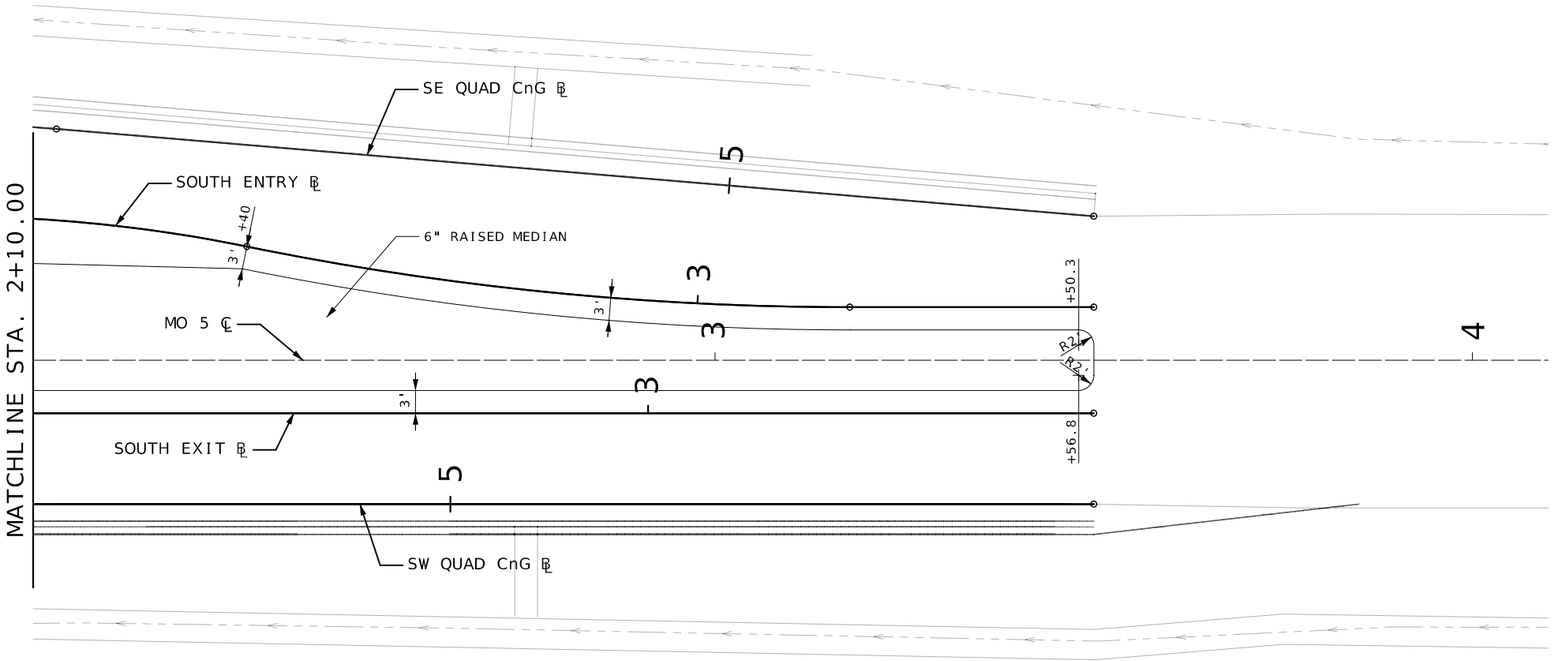
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MoDOT

ROUNDABOUT CONCRETE ELEVATION DETAILS SPECIAL SHEET 7 OF 11



MO 5
SPLITTER ISLANDS
TRUCK APRON
PLAN



MO 5
SPLITTER ISLANDS
TRUCK APRON
PLAN

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:51:20 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/13/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	37

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

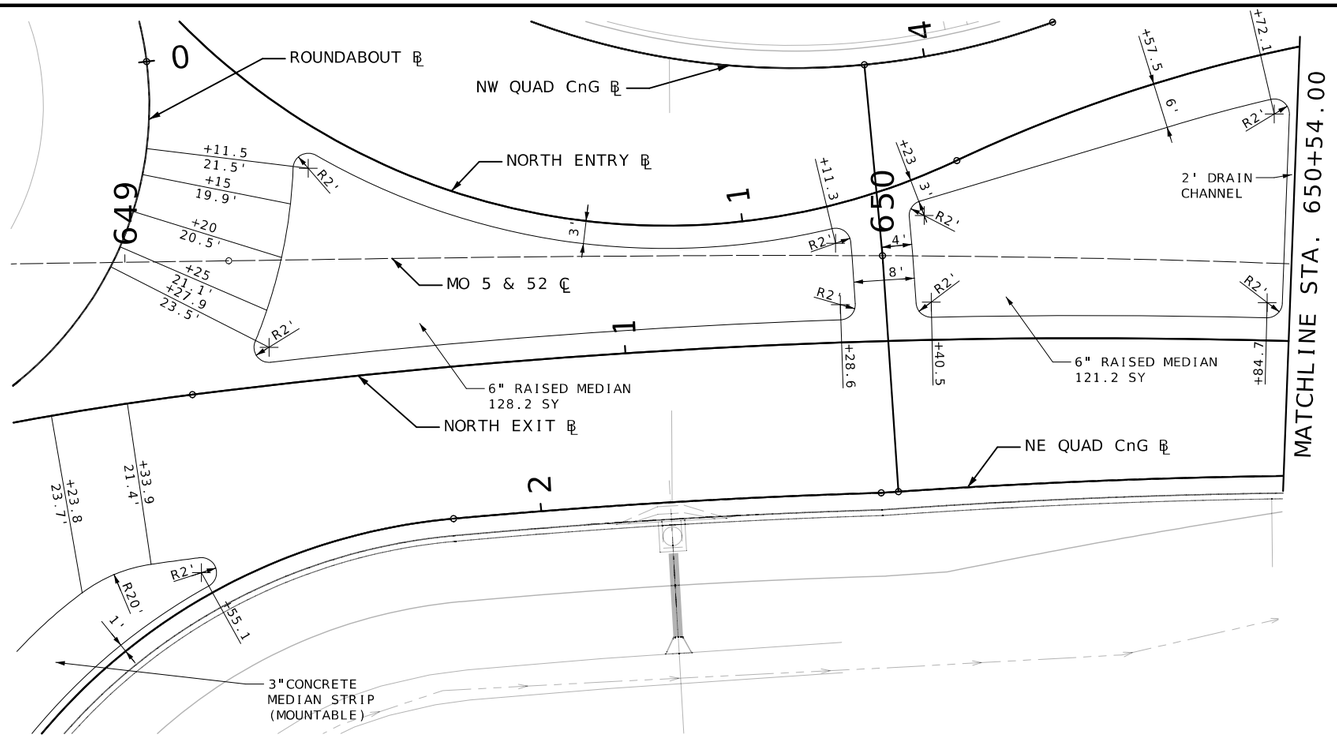
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

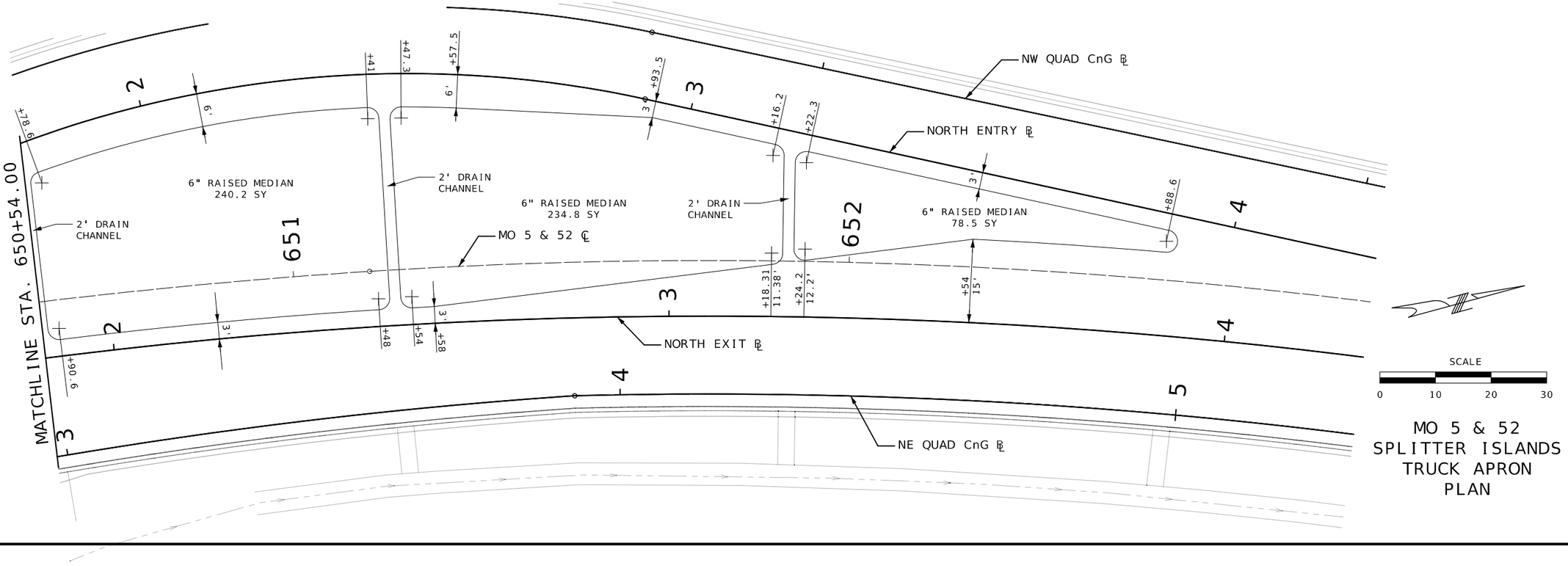
SPLITTER ISLAND
TRUCK APRON DETAILS
SPECIAL SHEET
SHEET 8 OF 11



SCALE

0 10 20 30

MO 5 & 52
SPLITTER ISLANDS
TRUCK APRON
PLAN



SCALE

0 10 20 30

MO 5 & 52
SPLITTER ISLANDS
TRUCK APRON
PLAN

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER

03/13/2024 11:51:40 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/13/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	38

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

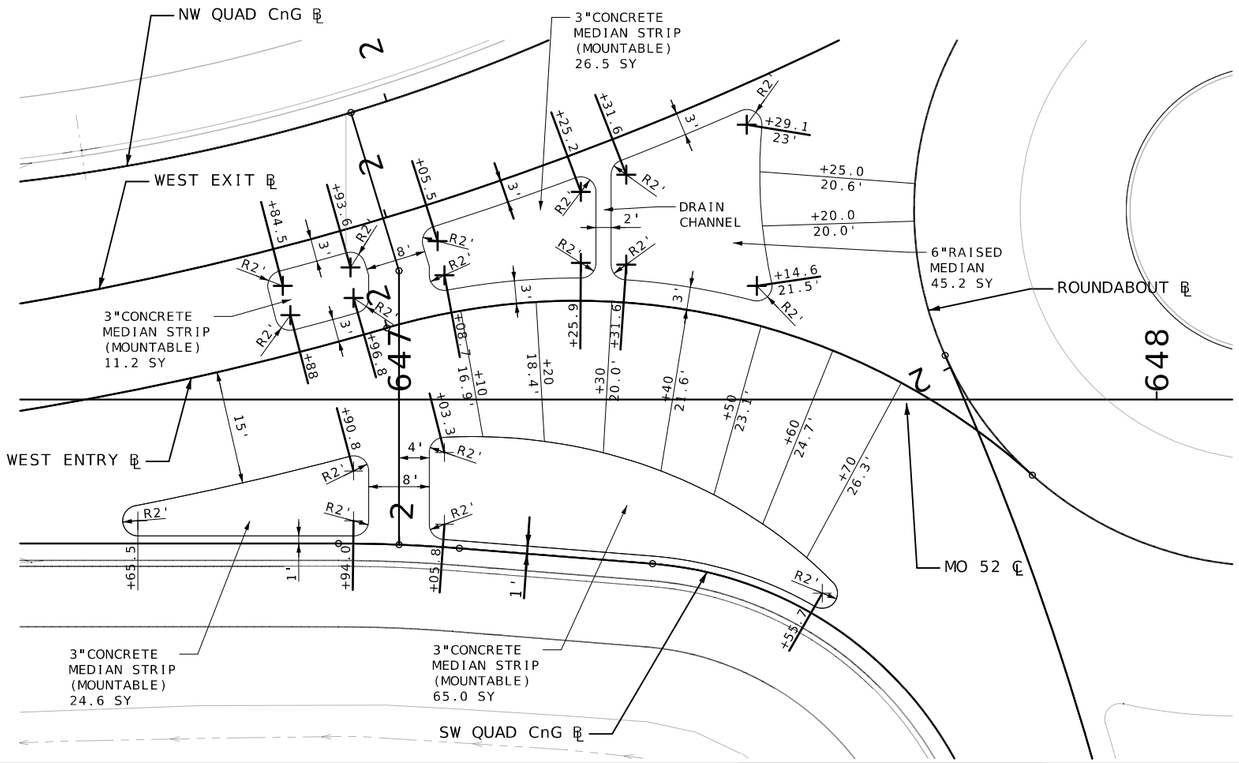
BRIDGE NO.

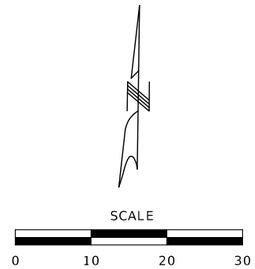
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

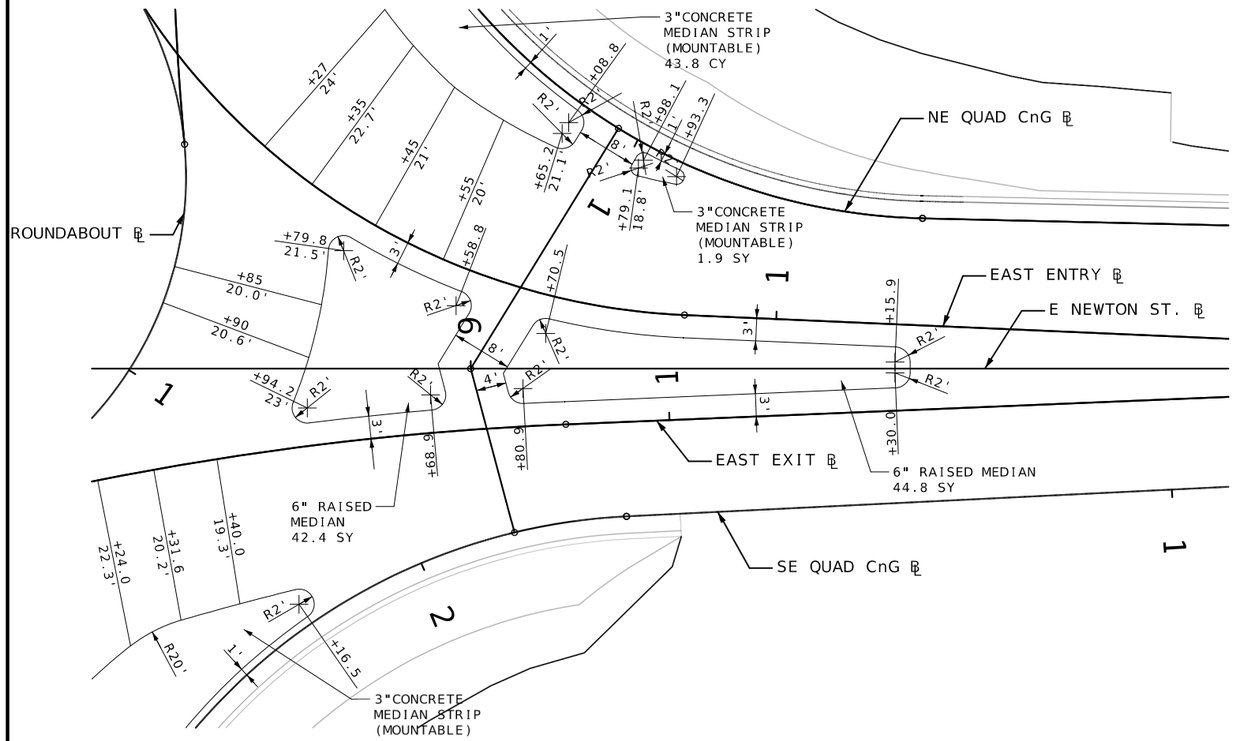
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

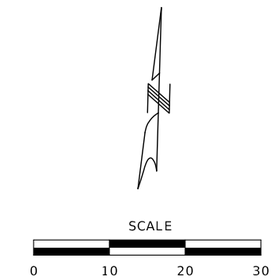
SPLITTER ISLAND
TRUCK APRON DETAILS
SPECIAL SHEET
SHEET 9 OF 11





WEST LEG
SPLITTER ISLAND
CHANNELIZING ISLAND
PLAN





EAST LEG
SPLITTER ISLAND
CHANNELIZING ISLAND
PLAN

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/13/2024 11:52:05 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/13/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	39

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

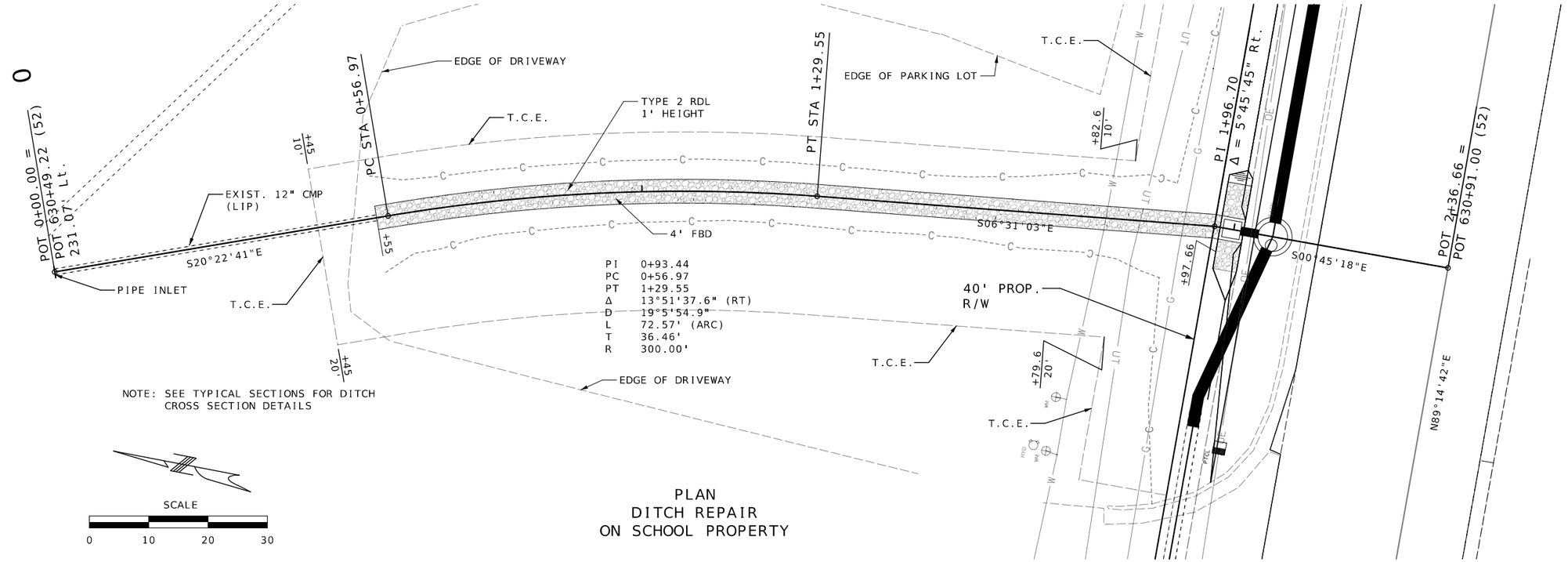
BRIDGE NO.

DESCRIPTION	DATE

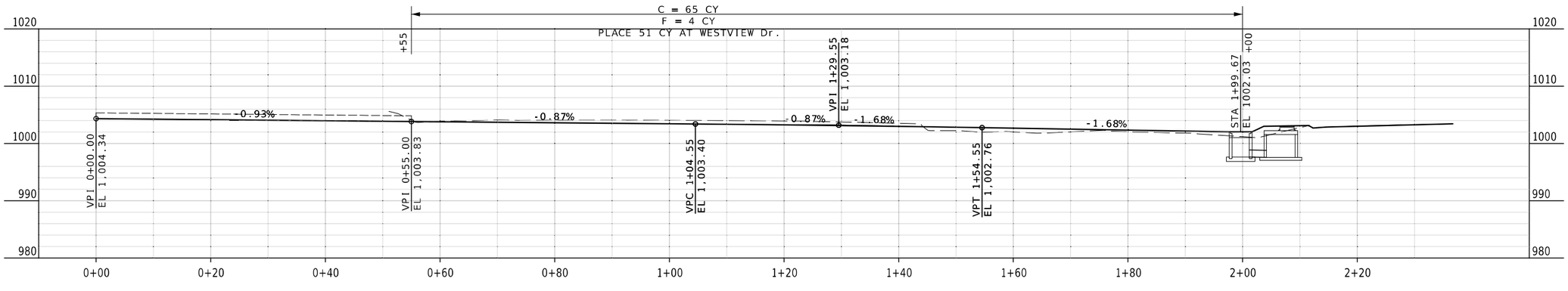
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPLITTER ISLAND
TRUCK APRON DETAILS
SPECIAL SHEET
SHEET 10 OF 11



PLAN
DITCH REPAIR
ON SCHOOL PROPERTY



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:07:53 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	40

COUNTY
MORGAN

JOB NO.
J5P3575

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)

SCHOOL DITCH REPAIR
SPECIAL SHEET
11 OF 11

G020-1

(1)

W020-1

(2) (2)

W03-5

(3) (2)(3)

R2-1

(4) (2)

W020-5

(5) (2)

W020-5a

(5A) (2)

W020-6a

(6) (2)

W04-1aL (LEFT)
W04-1aR (RIGHT)

(6A) (2)

W020-4

(7) (2)

W020-7a

(8) (1)

W08-6c

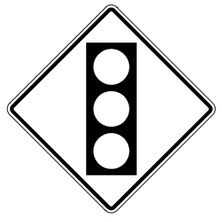
(9)

W08-6

(10) (1)(2)

W03-4

(11) (2)



W03-3

(12) (2)

R1-2

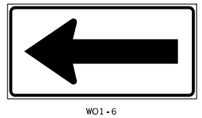
(13)

W01-3L (LEFT)
W01-3R (RIGHT)

(14) (2)(4)

W01-4L (LEFT)
W01-4R (RIGHT)

(15) (2)(5)

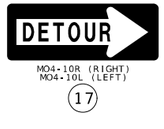


W01-6

(16)

W01-8 (SMALL)
W01-8a (LARGE)

(16A) (6)



M04-10R (RIGHT)
M04-10L (LEFT)

(17)

NOTES:

(1) FLAGS SHALL ENHANCE THE SIGN.

(2) FOR LONG-TERM STATIONARY OPERATIONS, ADVANCE WARNING RAIL SYSTEM SHALL ENHANCE ALL SIGNS WITHIN THE FIRST ADVANCE WARNING AREA,

(3) USE ONLY WHEN SPEED REDUCTION IS GREATER THAN 10 MPH BELOW NORMAL POSTED SPEED LIMIT.

(4) USE WHEN DESIGN SPEED IS 30 MPH OR LESS. CONSIDER USING SIGN 44.

(5) USE WHEN DESIGN SPEED IS GREATER THAN 30 MPH. CONSIDER USING SIGN 44.

(6) USE W01-8a CHEVRON ON DIVIDED HIGHWAYS.

FOR DETAILS AND DIMENSIONS, SEE STANDARD PLAN 616.10.

TEMPORARY TRAFFIC CONTROL SHEET
SIGNS AND DEVICES LEGEND
SHEET 1 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER

04/10/2024 10:41:28 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	41

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

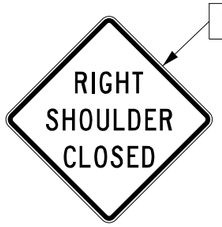
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
SIGNS AND DEVICES LEGEND
SHEET 1 OF 28

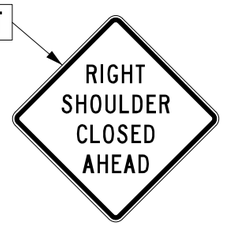
W020-2
18

W020-3
20 (2)

W021-5
21



W021-5aR
21a



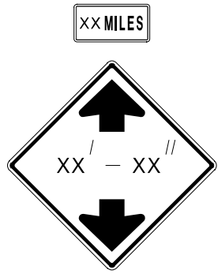
W021-5bR
21b

W08-9
22

W08-17R

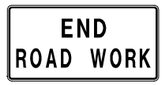
W08-17L

W08-17P
23



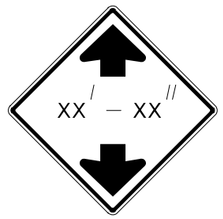
W012-2
W012-2x
24

R2-1
(NORMAL SPEED)
25



G020-2
26

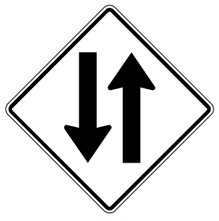
M04-9R (RIGHT)
M04-9L (LEFT)
27



W012-2
W012-2x
28

R11-2
29

W012-2a
30



W06-3
31

W01-4bR (RIGHT)
W01-4bL (LEFT)
32

W01-4cR (RIGHT)
W01-4cL (LEFT)
33

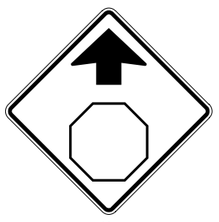
W05-5
34

W08-12
35

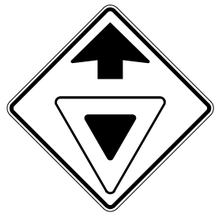
W08-11
36

W01-2L (LEFT)
W01-2R (RIGHT)
37 (5)

W01-1L (LEFT)
W01-1R (RIGHT)
38



W03-1
39



W03-2
40

R1-1
41

NOTES:

FOR DETAILS AND DIMENSIONS, SEE STANDARD PLAN 616.10.

TEMPORARY TRAFFIC CONTROL SHEET
SIGNS AND DEVICES LEGEND
SHEET 2 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:41:46 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	42

COUNTY
MORGAN

JOB NO.
J5P3575

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)

TEMP. TRAFFIC CONTROL
SIGNS AND DEVICES LEGEND
SHEET 2 OF 28

R1-3P

41A (7)

R4-7a

42

WO5-1

43

WO13-1

44 (8) (9)

WO7-3a

44A (8)

R4-1

46

R4-2

46A

R10-6L

47

SPECIAL

48

SPECIAL

48

E05-1

49

M04-8a

52

CONST-3A

53

OR

CONST-3X

53A

G020-5aP

54

NOTES:

(7) ONLY FOR USE IF ALL INTERSECTION APPROACHES ARE CONTROLLED BY STOP SIGN WHEN CONDITION EXISTS. FOR TWO-WAY, THREE-WAY, FOUR-WAY, OR OTHER NUMBERS OF WAYS SHALL NOT BE USED WITH STOP SIGNS.

(8) ONLY USED IN COMBINATION WITH WARNING SIGN.

(9) SHOULD BE USED WHEN THE DESIGN SPEED IS LESS THAN THE POSTED WORK ZONE SPEED.

FOR DETAILS AND DIMENSIONS, SEE STANDARD PLAN 616.10.

TEMPORARY TRAFFIC CONTROL SHEET
SIGNS AND DEVICES LEGEND
SHEET 3 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER

04/10/2024 10:42:07 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	43

COUNTY
MORGAN

JOB NO.
J5P3575

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)

TEMP. TRAFFIC CONTROL
SIGNS AND DEVICES LEGEND
SHEET 3 OF 28

SIGN SPACING FOR ADVANCE SIGN SERIES (1) (2)		
PERMANENT POSTED SPEED MPH	UNDIVIDED 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′

TAPER LENGTHS AND END TREATMENTS FOR CONCRETE BARRIER				
PERMANENT POSTED SPEED MPH	MINIMUM LANE TAPER LENGTH (3)			
	10′	11′	12′	END TREATMENT (4)
<40	160′	168′	176′	BARRIER HEIGHT TRANSITION
>40	160′	168′	350′	APPROVED CRASH CUSHION

TAPER LENGTHS AND SPACING FOR CHANNELIZERS						
PERMANENT POSTED SPEED MPH	MINIMUM LANE TAPER LENGTH (3) (T2)			MINIMUM SHOULDER TAPER LENGTH BASED ON 10′ SHOULDER (T1)	BUFFER LENGTH FT. (B)	MAXIMUM CHANNELIZER SPACING
	10′	11′	12′			THROUGH TAPER / THROUGH WORK AREA
0-35	205′	225′	245′	70′	400′	35′✳ / 40′✳
40-45	450′	495′	540′	150′	400′	40′✳ / 80′✳
50-55	550′	605′	660′	185′	560′	50′✳✳ / 80′✳✳
60-70	700′	770′	840′	235′	840′	60′✳✳ / 120′✳✳

✳ SPACING REDUCED TO 1/2 AT INTERSECTIONS.
✳✳ SPACING MAY BE REDUCED TO 1/2 AT INTERSECTIONS.

NOTES:

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

(2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS ND VISIBILTY.

(3) TAPER LENGTHS SHOWN INCLUDE LENGTH REQUIRED FOR LANE AND 10′ SHOULDER.

(4) CONCRETE BARRIER MAY BE INSTALLED AT AND 8:1 FLARE RATE FROM THE SHOULDER POINT TO THE LIMITS OF THECLEAR ZONE WHERE TEH SIDE SLOPE IS 6:1 OR FLATTER.

(5) DISTANCE PLACED BEFORE THE FEATURE REQUIRING ATTENTION (e.g. MERGE, LANE SHIFT, REDUCED SPEED).

(6) SPACING MAY NEED TO BE ADJUSTED IF TEMPORARY RUMBLE STRIPS ARE SLIDING OR MOVING.

ROADWAY TYPE	SIGN HEIGHT	MAX. WORK ZONE LENGTH (L)
URBAN	1′ PORTABLE 7′ POST	1 MILE
RURAL DIVIDED	1′ PORTABLE 7′ POST	2 MILE
RURAL UNDIVIDED	1′ PORTABLE 5′ POST	3 MILE

LONG-TERM RUMBLE STRIPS		
PERMANENT POSTED SPEED (MPH)	DISTANCE (FT) (5)	SPACING (FT) (6)
0-45 (OPTIONAL)	120	10-12
50-55	160	10-12
60-70	200	10-12

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLAGGER
- CONE
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TUBULAR MARKER
- MOVABLE BARRICADE (PLAN VIEW)
- CHANGEABLE MESSAGE BOARD
- TRAFFIC BARRIER (PLAN VIEW)
- TRAFFIC BARRIER (SECTION VIEW)
- HIGH-LEVEL WARNING DEVICE (FLAG TREE)
- SHORT -TERM OR LONG-TERM RUMBLE STRIPS
- WORK SPACE
- ADVANCE WARNING RAIL SYSTEM
- FLASHING ARROW PANEL
- FLASHING ELECTRIC LIGHT
- IMPACT ATTENUATOR ARRAY (SAND BARRELS)
- MOVABLE BARRICADE (SIDE VIEW)
- OBJECT MARKER - TYPE I
- OBJECT MARKER - TYPE II
- OBJECT MARKER - TYPE III
- LUMINAIRE
- TMA - TRUCK MOUNTED ATTENUATOR
- CRASH CUSHION
- TRAFFIC OR PEDESTRIAN SIGNAL

TEMPORARY TRAFFIC CONTROL SHEET
SPACING AND TAPER LENGTHS FOR
WORK ZONES, CHANNELIZERS AND
CONCRETE BARRIER
TRAFFIC CONTROL LEGEND
SHEET 4 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 11:31:56 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	44

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

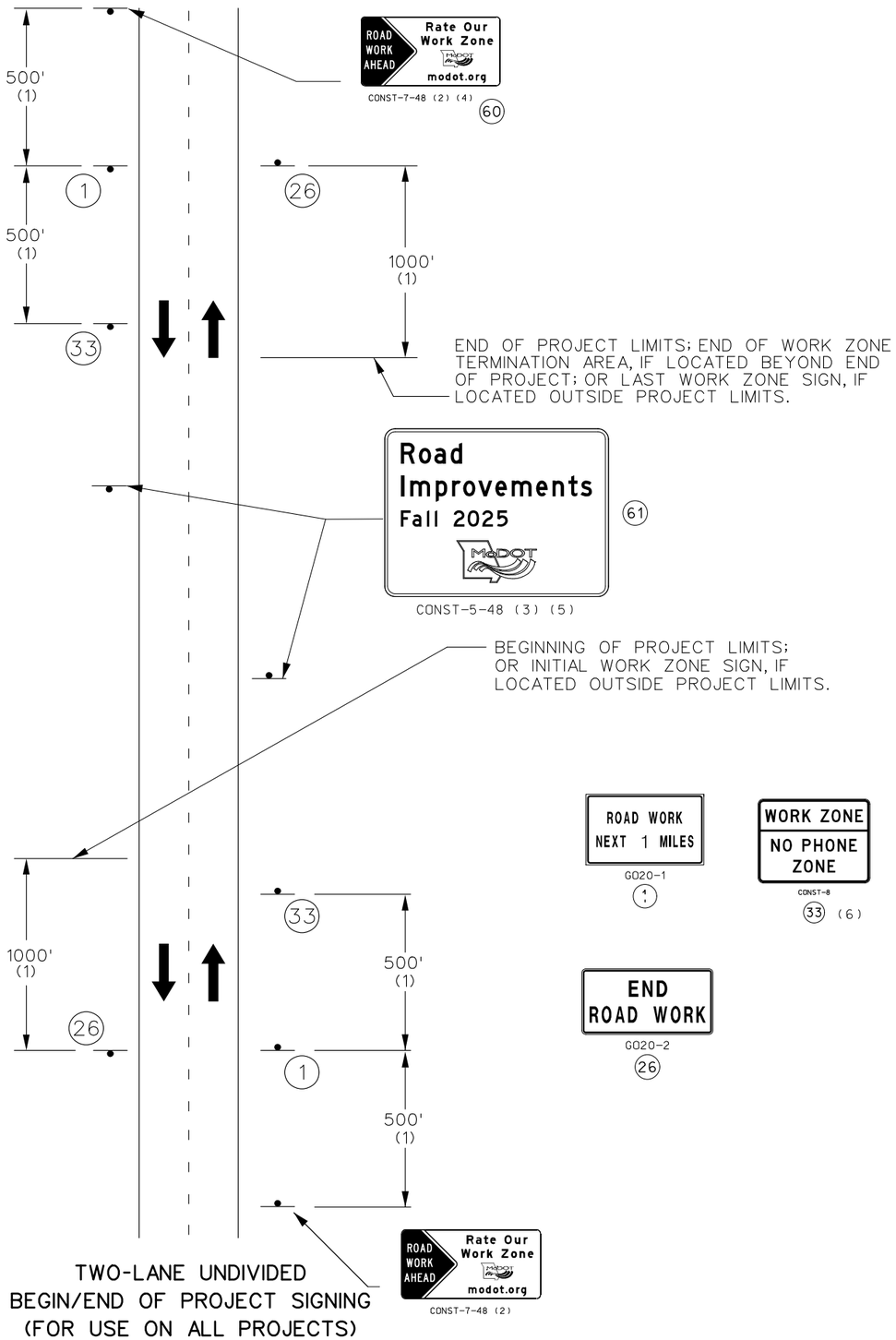
PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

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

TEMP. TRAFFIC CONTROL
SPACING AND TAPER LENGTHS
CHANNELIZERS AND BARRIER
SHEET 4 OF 28



TWO-LANE UNDIVIDED
BEGIN/END OF PROJECT SIGNING
(FOR USE ON ALL PROJECTS)

G020-1

1

CONST-8

33 (6)

G020-2

26

NOTES:

SIGN G020-2 IS USED ON ALL PROJECTS WHERE SIGN G020-1 IS USED.

OTHER SIGNS SUCH AS DETOUR OR ALTERNATE ROUTE SIGNING MAY BE USED OUTSIDE THE PROJECT LIMITS.

ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.

(1) DISTANCE MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS. WHERE TRAFFIC BACKUPS ARE EXPECTED BEYOND THE ADVANCE WARNING AREA, ADDITIONAL SIGNING MAY BE NEEDED.

(2) SIGN CONST-7-48 IS PLACED 500 FEET BEFORE THE BEGINNING OF PROJECT LIMITS OR THE ROAD WORK AHEAD SIGN OR ROAD WORK NEXT XX MILES SIGN, IF USED, WHEN THESE SIGNS ARE LOCATED OUTSIDE THE PROJECT LIMITS.

(3) SIGN CONST-5-96 IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS. IF A VISIBLE LOCATION WITHIN THE PROJECT IS NOT AVAILABLE, THE SIGN MAY BE PLACED 500 FEET BEFORE SIGN CONST-7-48.

(4) THE "RATE OUR WORK ZONE" SIGN IS AVAILABLE IN TWO SIZES DEPENDING ON ROADWAY CONDITIONS. THE 48 IN. X 24 IN. SIGN IS USED ON LOW VOLUME ROUTES THAT CARRY 400 AADT OR LESS,ON PROJECTS THAT HAVE A DURATION OF 4 WEEKS OR LESS OR IN URBAN AREAS WHERE THERE IS INSUFFICIENT RIGHT OF WAY FOR A SIX FOOT WIDE SIGN. THE 72 IN. X 36 IN. VERSION OF THE SIGN IS USED IN ALL OTHER APPLICATIONS. BUT CAN ALSO BE USED IN PLACE OF THE 48 IN. X 24 IN. SIGN IF ADDED EMPHASIS IS DEEMED NECESSARY.

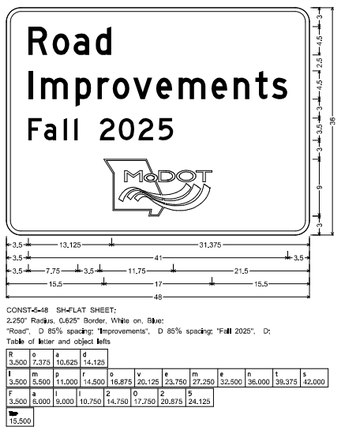
(5) THE "POINT OF PRESENCE" SIGN IS AVAILABLE IN TWO SIZES DEPENDING ON ROADWAY CONDITION. THE 48 IN. X 36 IN. SIGN IS USED ON LOW VOLUME ROUTES THAT CARRY 400 AADT OR LESS, ON PROJECTS THAT HAVE A DURATION OF 4 WEEKS OR LESS OR IN URBAN AREAS WHERE THERE IS INSUFFICIENT RIGHT OF WAY FOR AN EIGHT FOOT WIDE SIGN. THE 96IN. X 48 IN. VERSION OF THE SIGN IS USED IN ALL OTHER APPLICATIONS. BUT CAN ALSO BE USED IN PLACE OF THE 48 IN. X 36 IN. SIGN IF ADDED EMPHASIS IS DEEMED NECESSARY.

(6) THE "WORK ZONE NO PHONE ZONE" SIGN IS PLACED A MINIMUM OF 500 FEET BEFORE THE ROAD WORK AHEAD SIGN.

(7) PLACE SIGN SEQUENCE ON MO 52, MO 5/52, AND MO 5.

(8) PLACE SIGN SEQUENCE WITHOUT SIGN #60 AND #61 ON EAST NEWTON STREET (RT W).

61



CONST-5-48 SM-FLAT SHEET:
2,250" Radius, 0,625" Border, White on, Blue:
"Road", D 85% spacing; "Improvements", D 85% spacing; "Fall 2025", D:
Table of letter and object lefts

R 3,500	o 5,500	a 11,000	d 14,500
i 3,500	m 5,500	p 11,000	r 14,500
s 18,875	v 20,125	e 23,750	m 27,250
s 32,500	h 36,000	t 39,375	f 42,000
f 3,500	a 6,000	l 9,000	l 10,750
2 14,750	0 17,750	2 20,875	5 24,125
MoDOT 16,500			

TEPORARY TRAFFIC CONTROL SHEET
BEGIN / END PROJECT SIGNING
2-LANE UNDIVIDED
SHEET 5 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 11:31:45 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	45

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

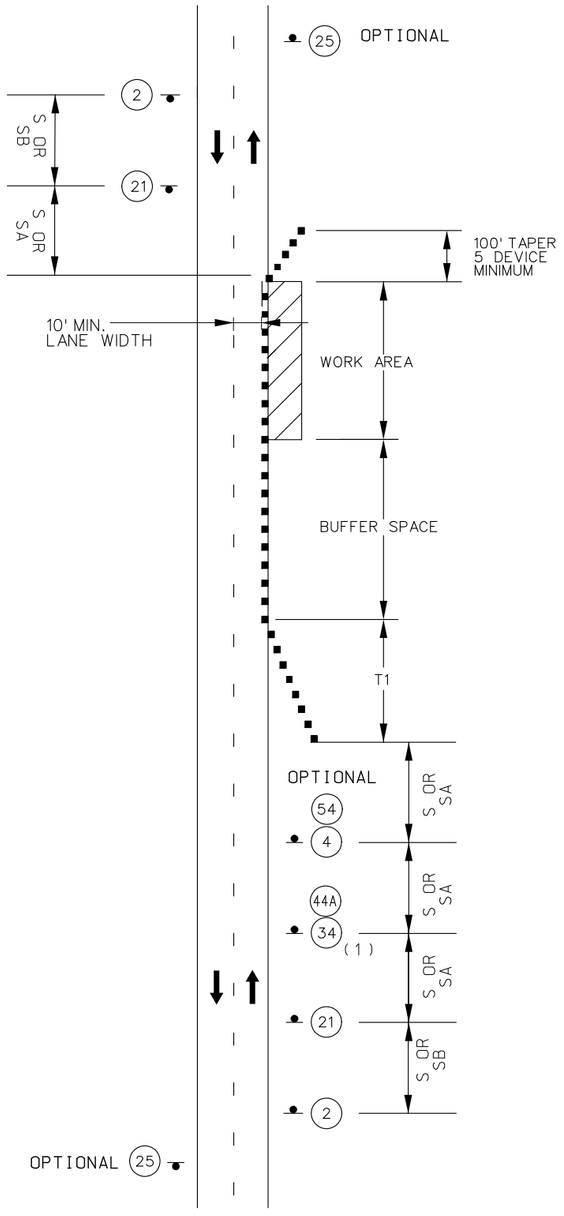
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

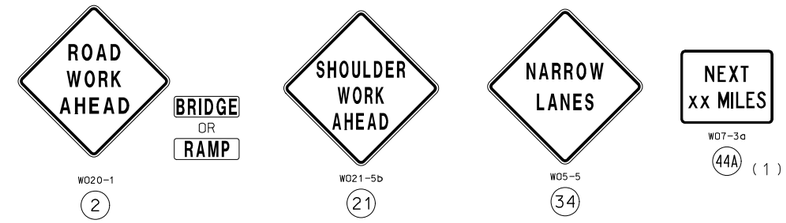
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
BEGI/END PROJECT SIGNING
2-LANE UNDIVIDED
SHEET 5 OF 28



TWO LANE UNDIVIDED
SHOULDER WORK
MINOR TRAVELWAY ENCROACHMENT

CONSTRUCTION ACTIVITY:
PHASE 1
ROUNDABOUT BUILD NORTHWEST, NORTHEAST SOUTHWEST, AND SOUTHEAST QUADRANTS
SAWCUT ALONG EDGE OF PAVEMENT,
GRADE FOR PAVEMENT WIDENING,
BUILD CURB AND GUTTER, DRAINAGE.
MO 52 WIDENING LEFT AND RIGHT
BUILD STORM SEWER
BUILD CURB AND GUTTER



NOTES:

SEE TRAFFIC CONTROL SHEET 4 FOR WORKZONE SPEED LIMIT GUIDELINES.

SEE TRAFFIC CONTROL SHEET 4 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.

SIGN 2 NOT REQUIRED IF SHOULDER WORK IS LOCATED WITHIN THE LIMITS OF AN ACTIVITY AREA WHERE ANOTHER SIGN 2 IS ALREADY USED.

THE PROTECTIVE VEHICLE MAY BE OMITTED IF A TAPER AND CHANNELIZING DEVICES ARE USED.

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

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

SHADOW AND WORK VEHICLES SHALL DISPLAY HIGH-DENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

(1). SIGN 44A NOT REQUIRED FOR NARROW LANE SECTIONS LESS THAN ONE MILE.

TEMPORARY TRAFFIC CONTROL SHEET
SHOULDER WORK WITH ENCROACHEMENT
ON DIVIDED AND UNDIVIDED HIGHWAYS
SHEET 6 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 11:31:32 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	46

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

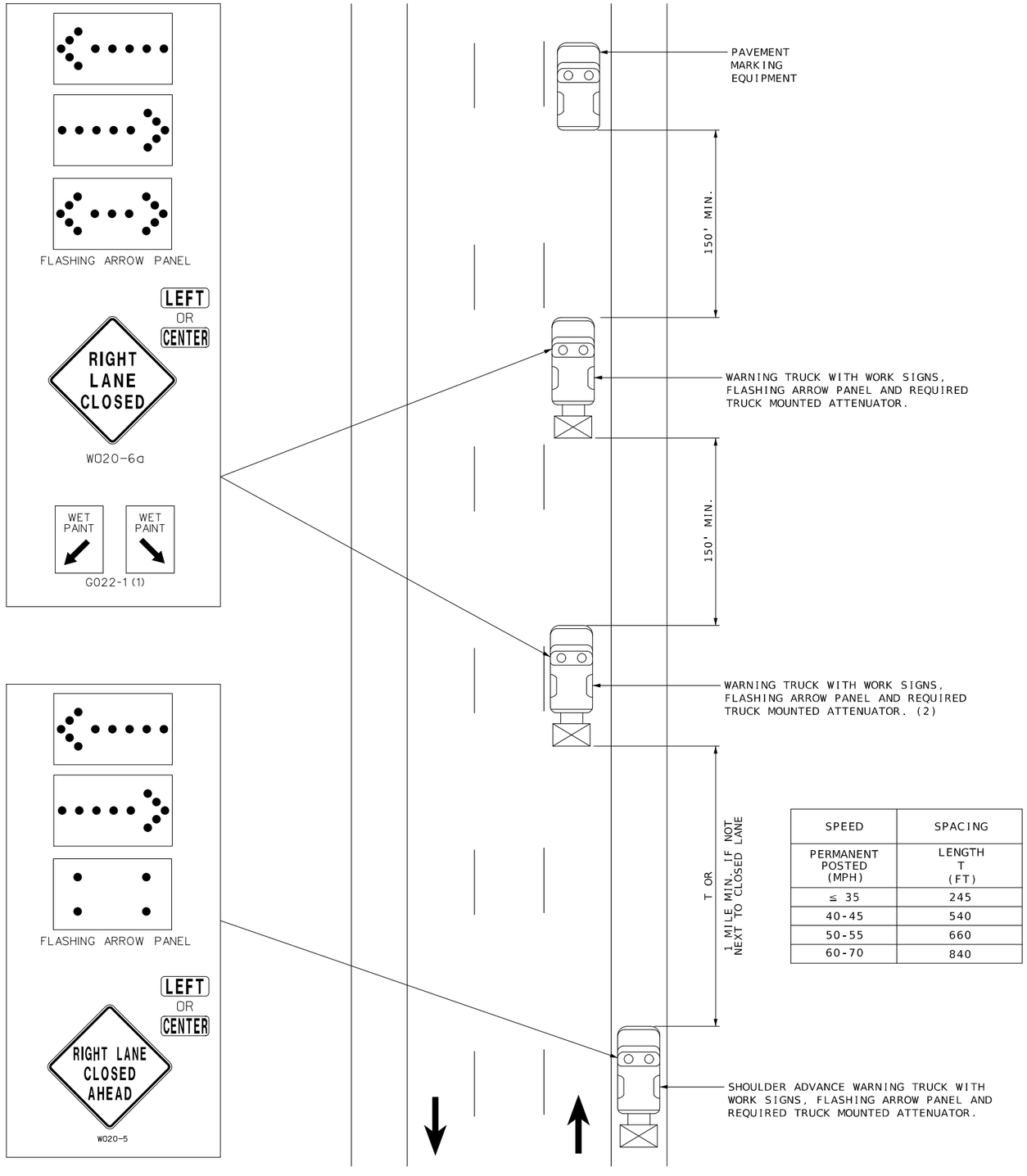
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

TEMP. TRAFFIC CONTROL
SHOULDER WORK
WITH ENCROACHMENT
SHEET 6 OF 28



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

STRIPING ON MULTI-LANE HIGHWAY

NOT TO SCALE

NOTES:

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

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

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

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

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

FLASHING ARROW PANELS SHALL, AS A MINIMUM, BE TYPE B, WITH A SIZE OF 60 X 30 INCHES.

A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE LANE CLOSED, A SEPARATE FLASHING ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

(1) 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.

(2) WARNING TRUCK IS POSITIONED AT THE NO TRACK POINT OF THE PAVEMENT MARKING MATERIAL, OR SPACING SHOWN, WHICH EVER IS GREATER.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 11:31:23 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	47

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

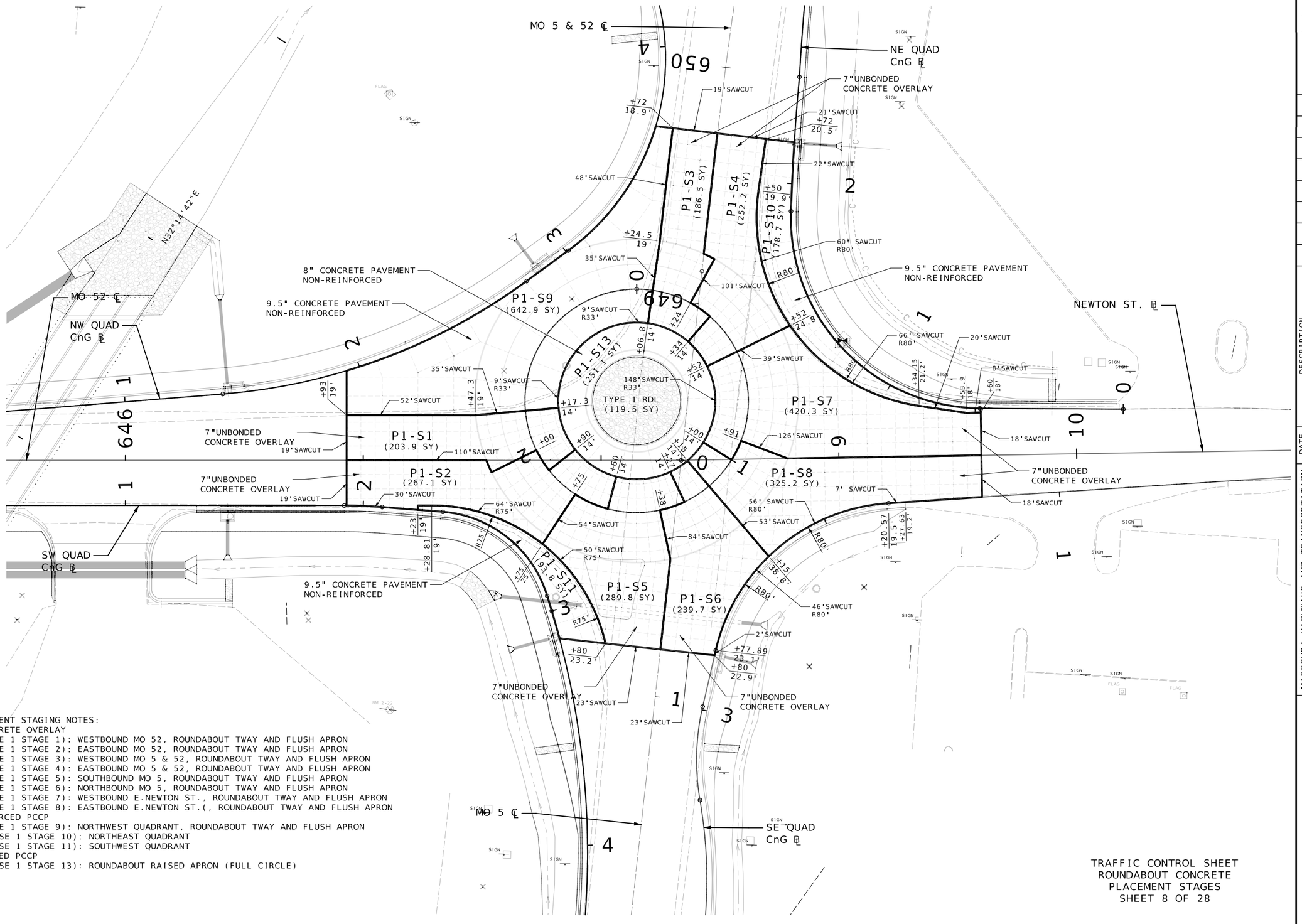
BRIDGE NO.

DESCRIPTION

DATE

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

TEMP. TRAFFIC CONTROL
STRIPING ON
MULTI-LANE HWY
SHEET 7 OF 28



CONCRETE PLACEMENT STAGING NOTES:
7"UNBONDED CONCRETE OVERLAY
- P1-S1 (PHASE 1 STAGE 1): WESTBOUND MO 52, ROUNDABOUT TWAY AND FLUSH APRON
- P1-S2 (PHASE 1 STAGE 2): EASTBOUND MO 52, ROUNDABOUT TWAY AND FLUSH APRON
- P1-S3 (PHASE 1 STAGE 3): WESTBOUND MO 5 & 52, ROUNDABOUT TWAY AND FLUSH APRON
- P1-S4 (PHASE 1 STAGE 4): EASTBOUND MO 5 & 52, ROUNDABOUT TWAY AND FLUSH APRON
- P1-S5 (PHASE 1 STAGE 5): SOUTHBOUND MO 5, ROUNDABOUT TWAY AND FLUSH APRON
- P1-S6 (PHASE 1 STAGE 6): NORTHBOUND MO 5, ROUNDABOUT TWAY AND FLUSH APRON
- P1-S7 (PHASE 1 STAGE 7): WESTBOUND E.NEWTON ST., ROUNDABOUT TWAY AND FLUSH APRON
- P1-S8 (PHASE 1 STAGE 8): EASTBOUND E.NEWTON ST.(, ROUNDABOUT TWAY AND FLUSH APRON

9.5" NON-REINFORCED PCCP
- P1-S9 (PHASE 1 STAGE 9): NORTHWEST QUADRANT, ROUNDABOUT TWAY AND FLUSH APRON
- P1-S10 (PHASE 1 STAGE 10): NORTHEAST QUADRANT
- P1-S11 (PHASE 1 STAGE 11): SOUTHWEST QUADRANT

8" NON-REINFORCED PCCP
- P1-S13 (PHASE 1 STAGE 13): ROUNDABOUT RAISED APRON (FULL CIRCLE)

TRAFFIC CONTROL SHEET
ROUNDABOUT CONCRETE
PLACEMENT STAGES
SHEET 8 OF 28

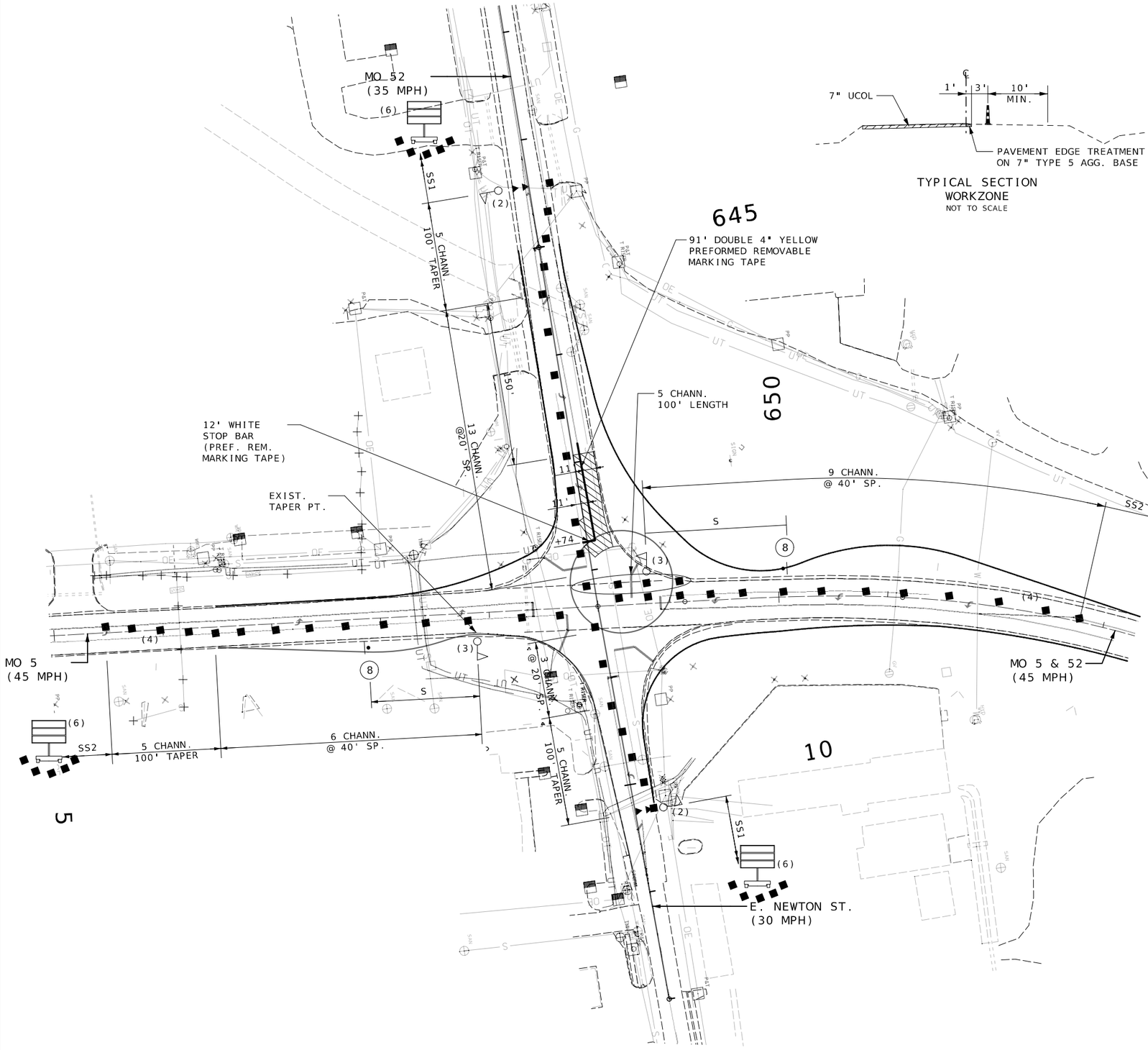
STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:42:28 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 4/10/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 48
COUNTY: MORGAN
JOB NO.: J5P3575
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

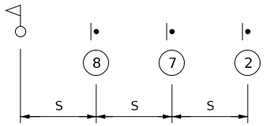
DESCRIPTION | DATE

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

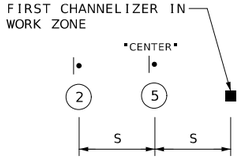
TEMP. TRAFFIC CONTROL
ROUNDABOUT STAGES
SHEET 8 OF 28



TYPICAL SECTION
WORKZONE
NOT TO SCALE



TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.

SCALE
0 50 100 150

TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 1

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 12:01:20 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	49

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

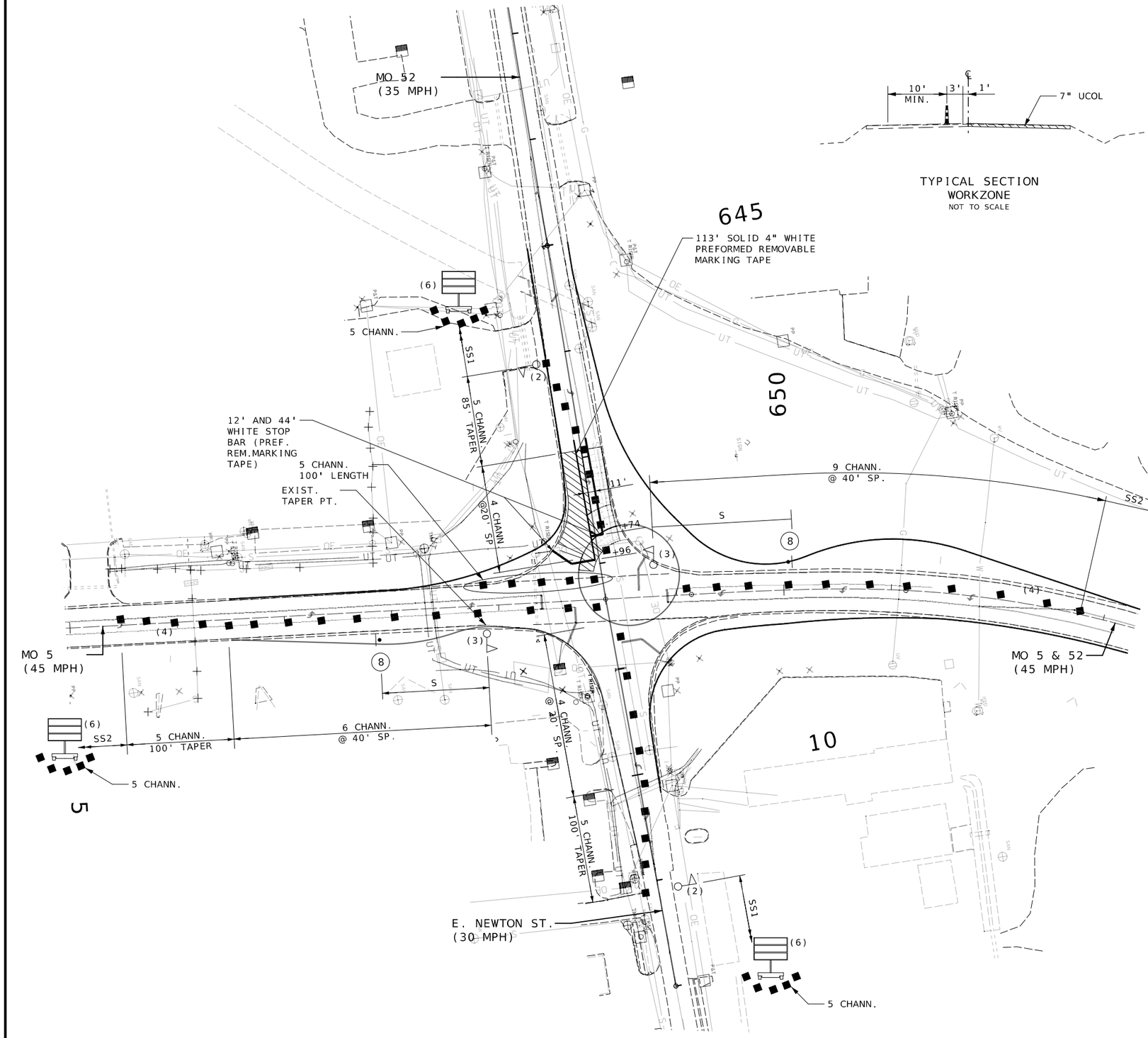
BRIDGE NO.

DESCRIPTION	DATE

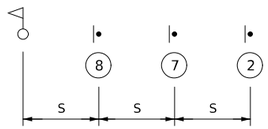
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

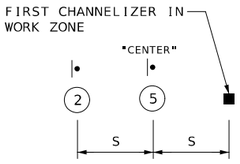
TEMP. TRAFFIC CONTROL
CONCRETE OVERLAY
PHASE 1 STAGE 1
SHEET 9 OF 28



TYPICAL SECTION
WORKZONE
NOT TO SCALE



TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.

SCALE
0 50 100 150

TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 2

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:42:48 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	50

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

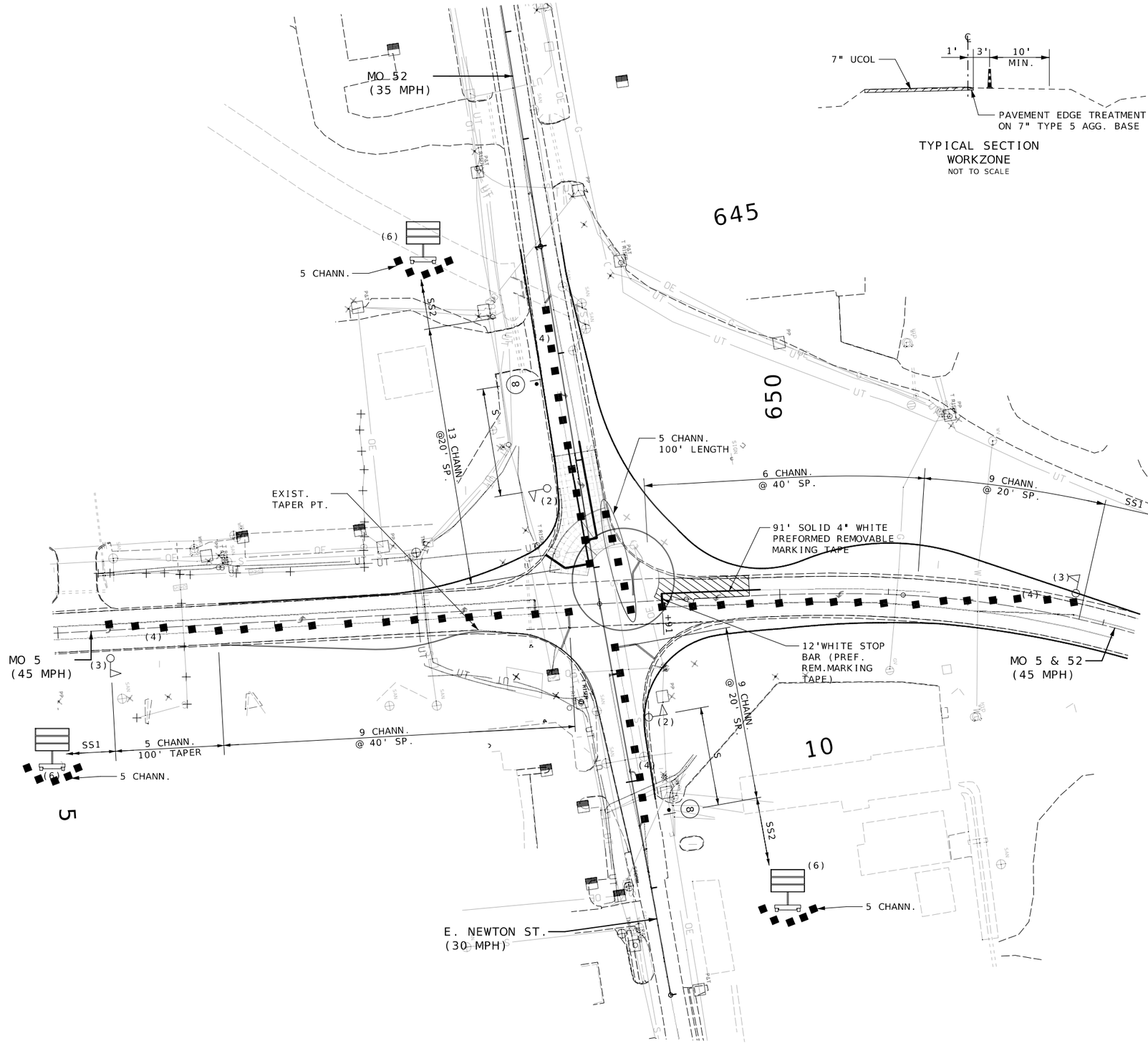
BRIDGE NO.

DESCRIPTION	DATE

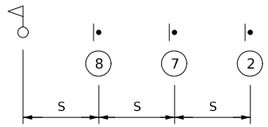
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

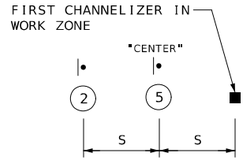
TEMP. TRAFFIC CONTROL
CONCRETE OVERLAY
PHASE 1 STAGE 2
SHEET 10 OF 28



TYPICAL SECTION
WORKZONE
NOT TO SCALE



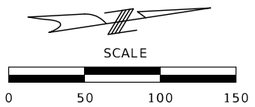
TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.



TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 3

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 12:00:42 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO

DISTRICT	SHEET NO.
CD	51

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

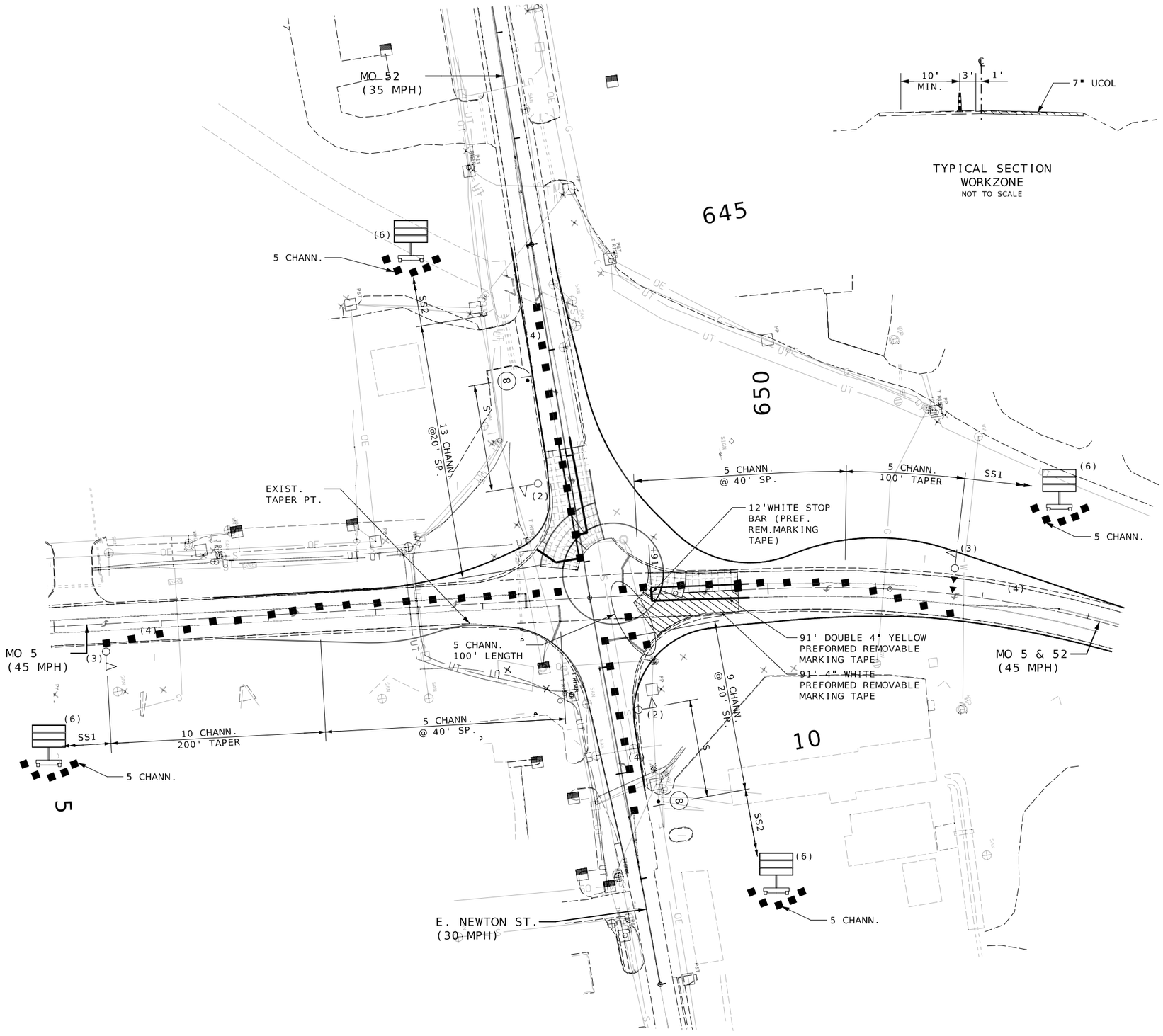
PROJECT NO.

BRIDGE NO.

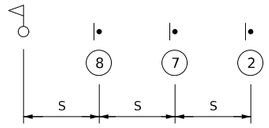
DATE	DESCRIPTION

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

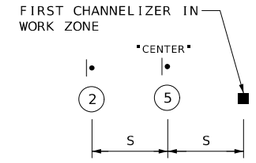
TEMP. TRAFFIC CONTROL CONCRETE OVERLAY PHASE 1 STAGE 3 SHEET 11 OF 28



TYPICAL SECTION
WORKZONE
NOT TO SCALE



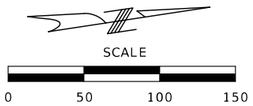
TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.



TRAFFIC CONTRL SHEET
ROUNDABOUT
PHASE 1 STAGE 4

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 12:00:24 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	52

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

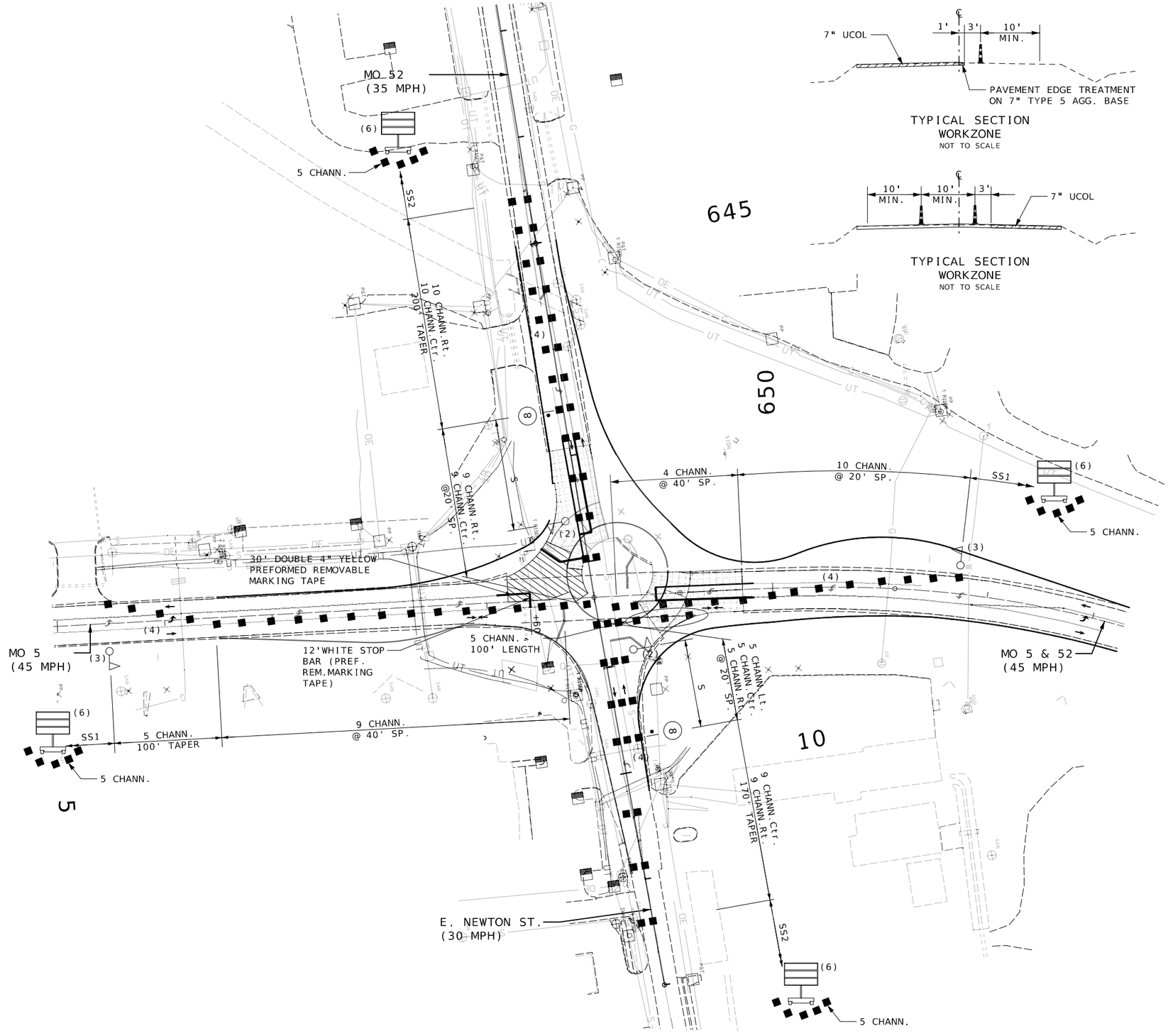
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

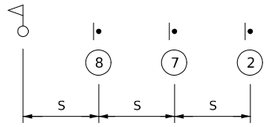
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
CONCRETE OVERLAY
PHASE 1 STAGE 4
SHEET 12 OF 28

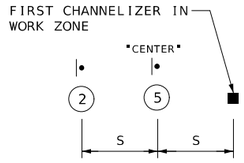


TYPICAL SECTION
WORKZONE
NOT TO SCALE

TYPICAL SECTION
WORKZONE
NOT TO SCALE



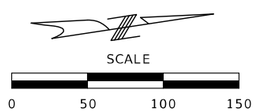
TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.



TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 5

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:43:08 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

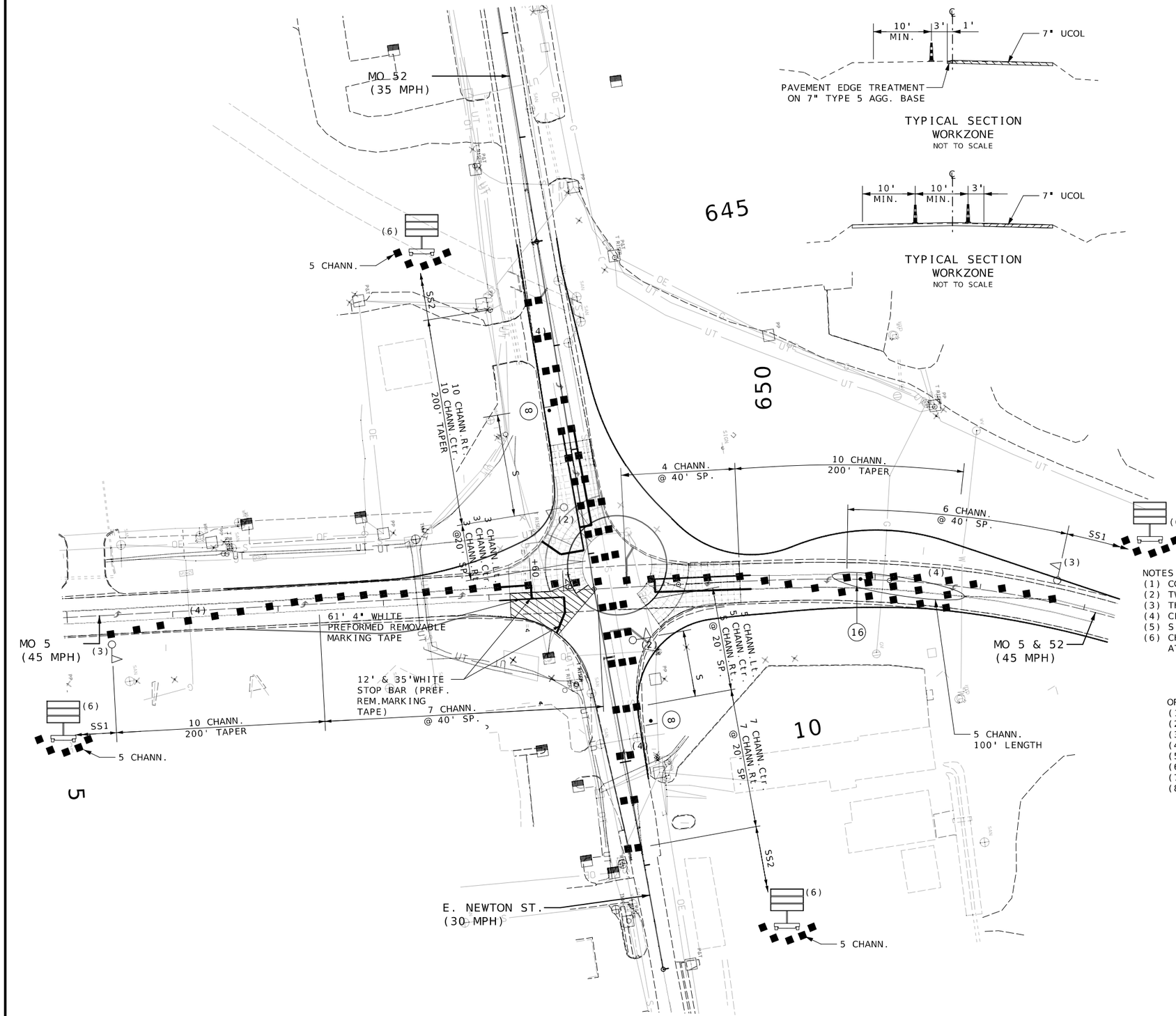
DATE PREPARED	
4/10/2024	
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	53
COUNTY	
MORGAN	
JOB NO.	
J5P3575	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

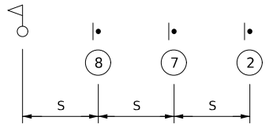
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL CONCRETE OVERLAY PHASE 1 STAGE 5 SHEET 13 OF 28

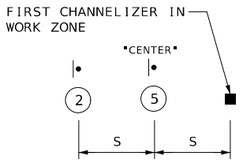


TYPICAL SECTION
WORKZONE
NOT TO SCALE

TYPICAL SECTION
WORKZONE
NOT TO SCALE



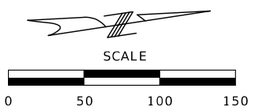
TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.



TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 6

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:43:27 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	54

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

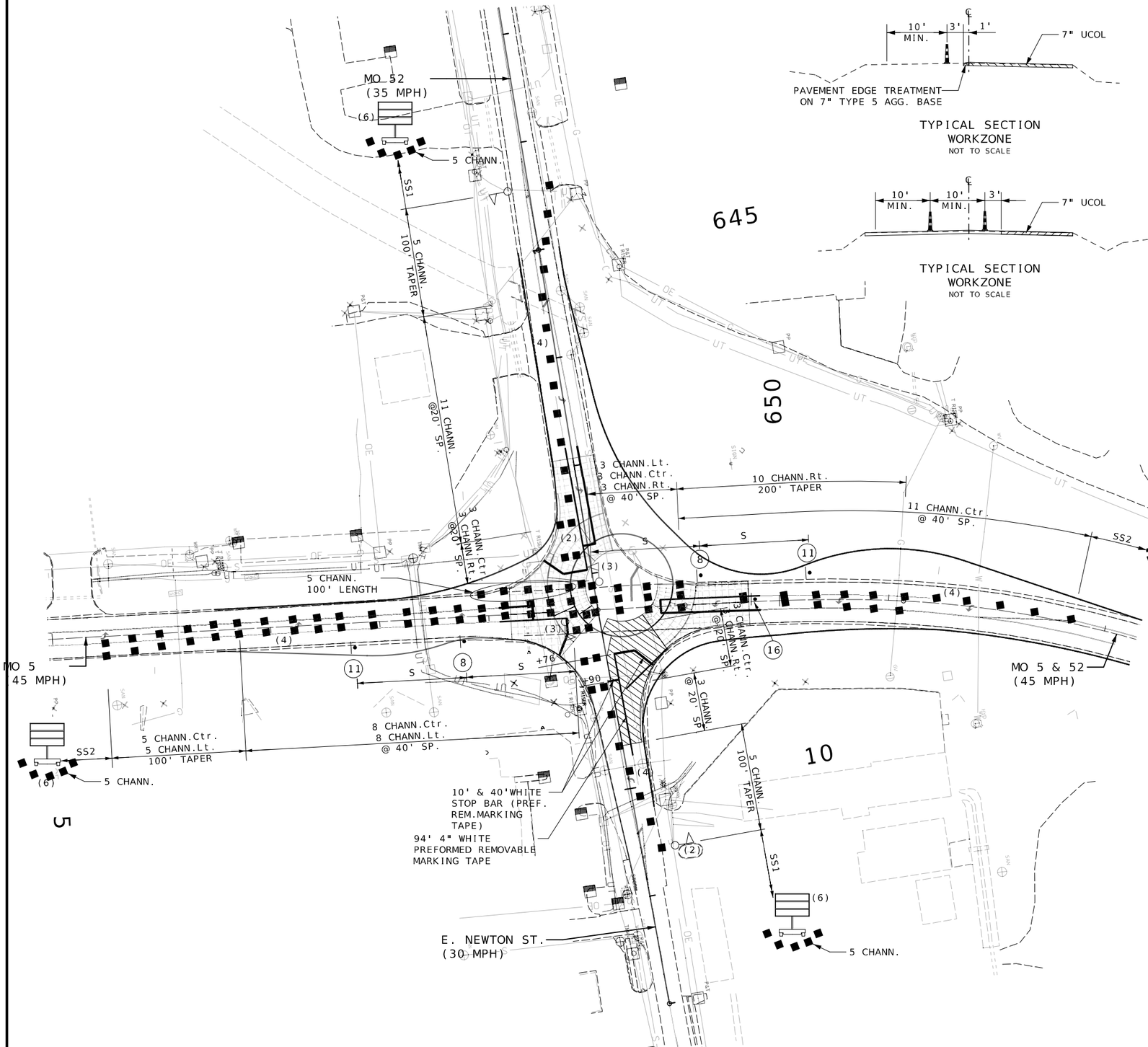
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

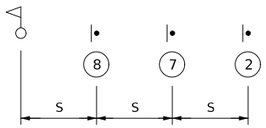
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
CONCRETE OVERLAY
PHASE 1 STAGE 6
SHEET 14 OF 28

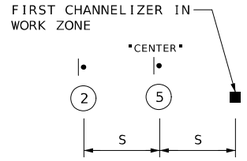


TYPICAL SECTION
WORKZONE
NOT TO SCALE

TYPICAL SECTION
WORKZONE
NOT TO SCALE



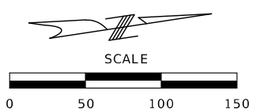
TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.



TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 7

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:43:47 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	55

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

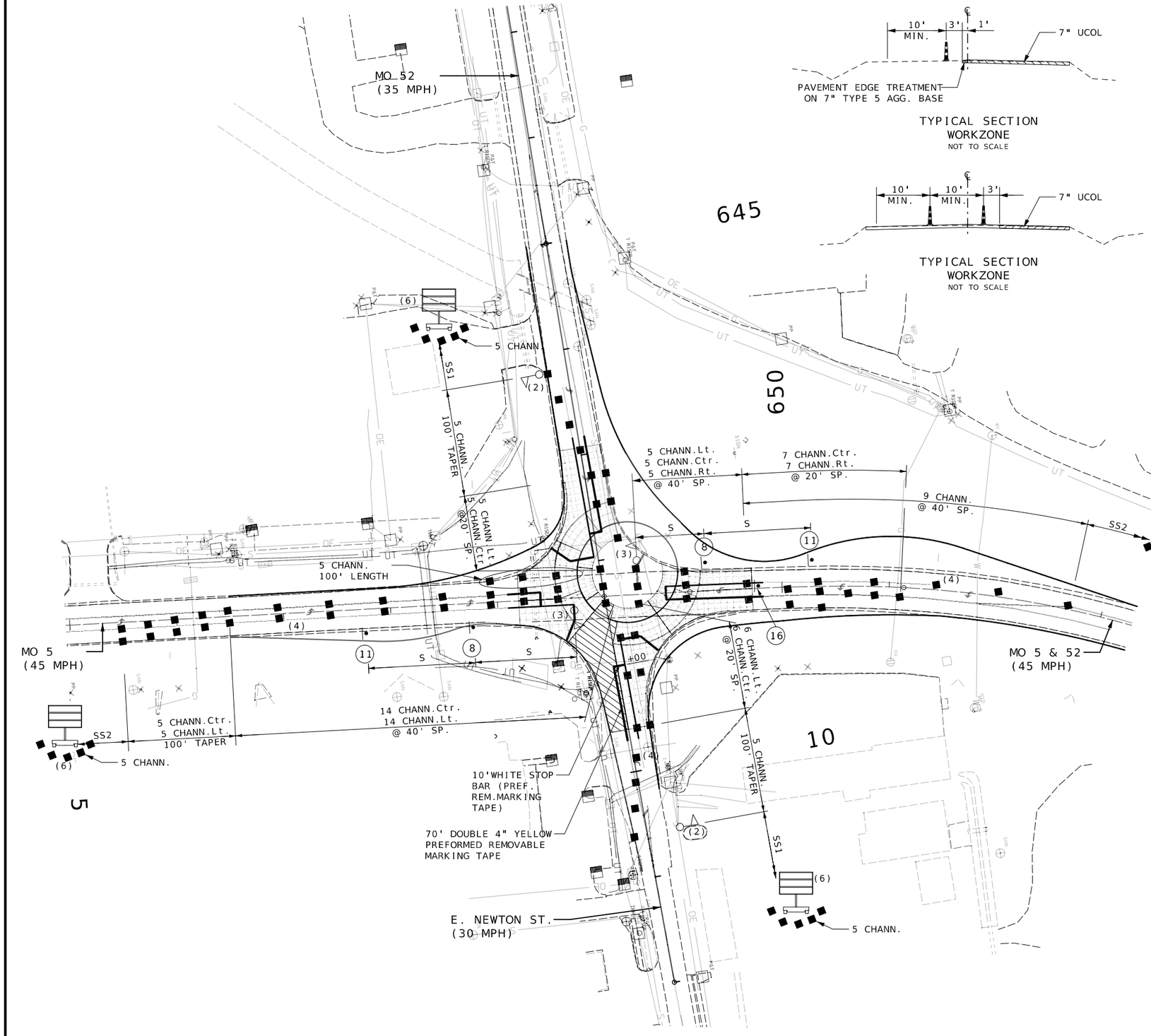
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

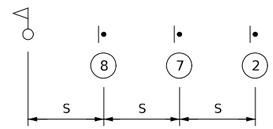
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL CONCRETE OVERLAY PHASE 1 STAGE 7 SHEET 15 OF 28

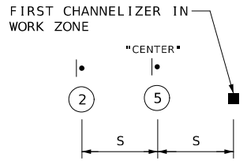


TYPICAL SECTION
WORKZONE
NOT TO SCALE

TYPICAL SECTION
WORKZONE
NOT TO SCALE



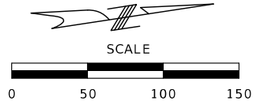
TYPICAL
SIGN SERIES 1
(SS1)



TYPICAL
SIGN SERIES 2
(SS2)

NOTES:
(1) CONSTRUCTION OF THIS STAGE IS A NIGHTIME OPERATION.
(2) TWO-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(3) THREE-CONE FLAGGING PROCEDURE. AREA LIGHTING IS REQUIRED.
(4) CLOSE LEFT-TURN LANE DURING CONSTRUCTION.
(5) SIGNAL TURN OFF/TURN ON TO BE DONE BY MODOT FORCES.
(6) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) COLDMILL ASPHALT PAVEMENT.
(3) FURNISH UNBONDED CONCRETE OVERLAY.
(4) PLACE UNBONDED CONCRETE OVERLAY.
(5) ALLOW FOR CURING.
(6) SAW JOINTS.
(7) TAKE DOWN TRAFFIC CONTROL.
(8) OPEN TO TRAFFIC.



TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 8

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:44:05 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	56

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

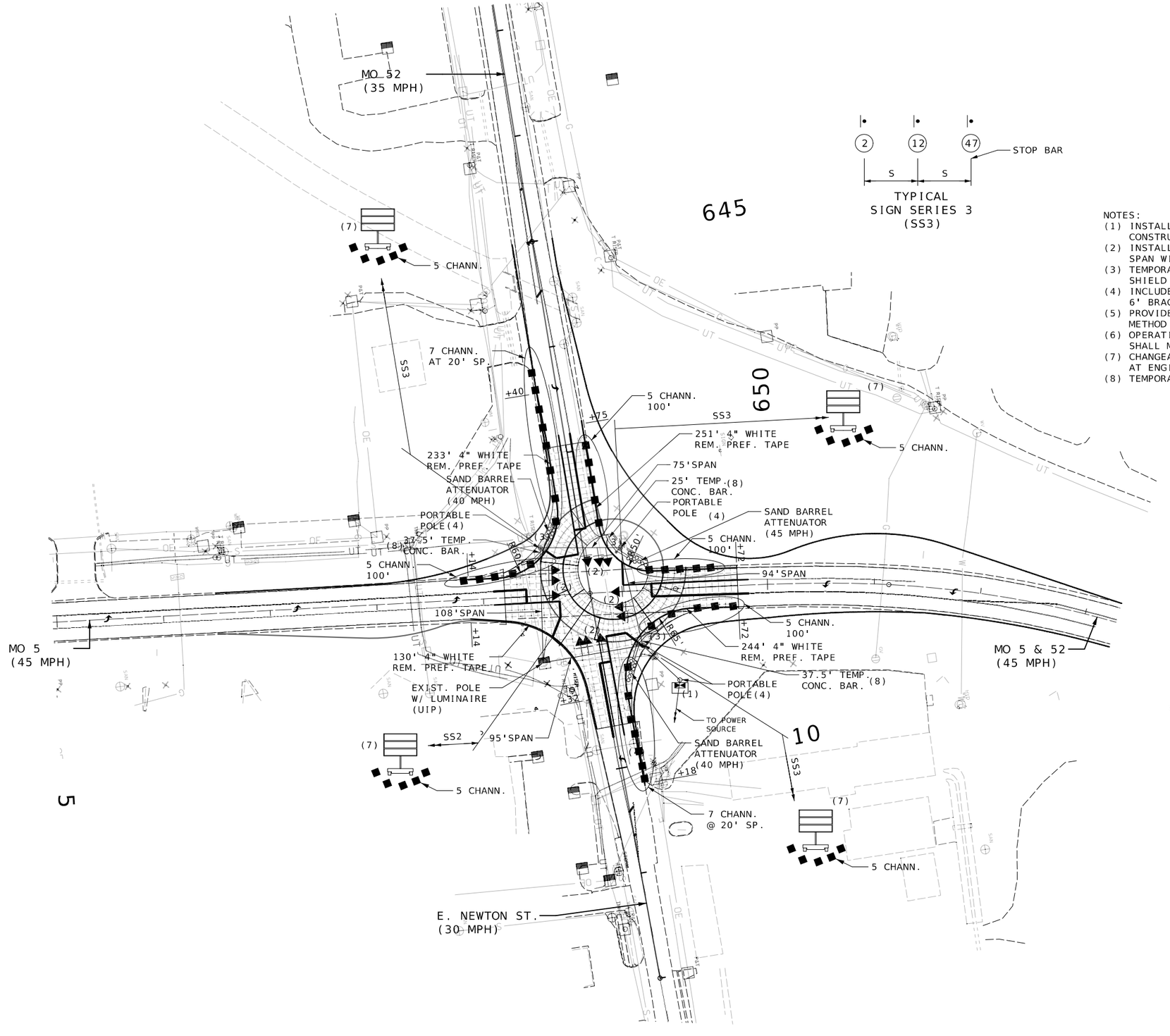
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

TEMP. TRAFFIC CONTROL CONCRETE OVERLAY PHASE 1 STAGE 8A SHEET 16 OF 28



NOTES:
(1) INSTALL TEMPORARY CONTROLLER OUTSIDE OF CONSTRUCTION SLOPE LIMITS.
(2) INSTALL TEMPORARY SIGNAL HEADS TO TEMPORARY SPAN WIRE.
(3) TEMPORARY TRAFFIC BARRIER IS INTENDED TO SHIELD THE POLE FROM TRAFFIC.
(4) INCLUDE A 150W EQUIVALENT LUMINAIRE W/ 6' BRACKET ARM.
(5) PROVIDE A NON-INTRUSIVE TRAFFIC DETECTION METHOD FOR THE SYSTEM.
(6) OPERATIONAL CHARACTERISTICS OF TEMPORARY SIGNAL SHALL MATCH EXISTING SIGNAL OPERATION.
(7) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.
(8) TEMPORARY CONCRETE BARRIER SHALL BE ANCHORED.

ORDER OF WORK:
(1) SET UP TRAFFIC CONTROL.
(2) SET UP TEMPORARY SIGNAL/LIGHTING SYSTEM.
(3) TEST OPERATION OF SIGNALS AND LIGHTING.
(4) TURN OFF OLD SIGNAL/LIGHTING SYTEM.
(5) REMOVE OLD SIGNAL/LIGHTING SYSTEM.

SCALE
0 50 100 150

TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 8B
TEMPORARY SIGNAL SETUP

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/20/2024 2:07:19 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/20/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	57

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

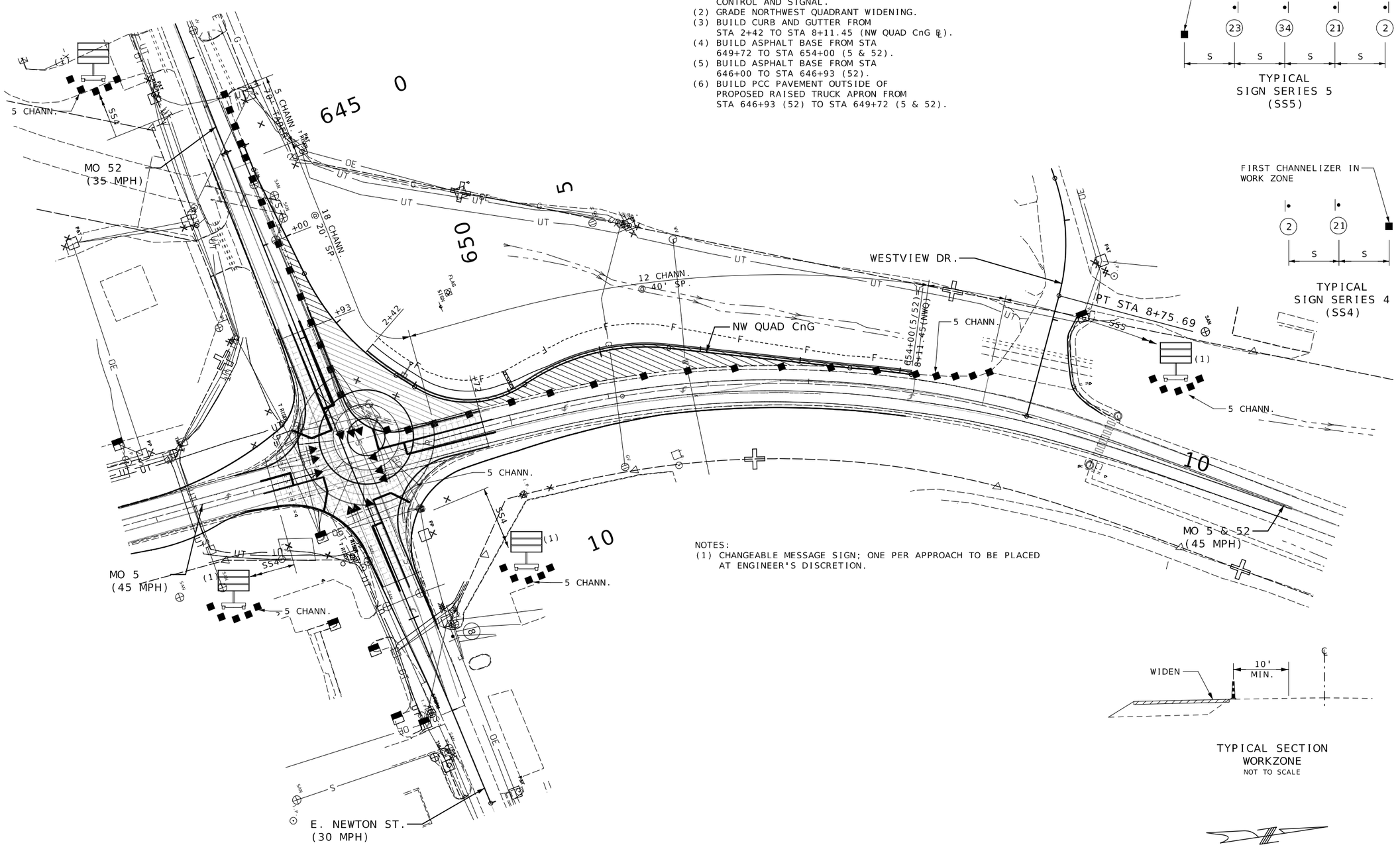
BRIDGE NO.

DATE	DESCRIPTION

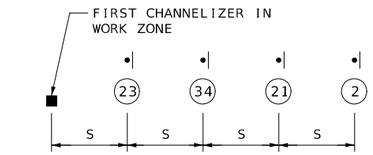
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
TEMPORARY SIGNAL SET-UP
PHASE 1 STAGE 8B
SHEET 17 OF 28

ORDER OF WORK:
(1) SET UP TEMPORARY TRAFFIC CONTROL AND SIGNAL.
(2) GRADE NORTHWEST QUADRANT WIDENING.
(3) BUILD CURB AND GUTTER FROM STA 2+42 TO STA 8+11.45 (NW QUAD CnG ℄).
(4) BUILD ASPHALT BASE FROM STA 649+72 TO STA 654+00 (5 & 52).
(5) BUILD ASPHALT BASE FROM STA 646+00 TO STA 646+93 (52).
(6) BUILD PCC PAVEMENT OUTSIDE OF PROPOSED RAISED TRUCK APRON FROM STA 646+93 (52) TO STA 649+72 (5 & 52).



NOTES:
(1) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.



TYPICAL
SIGN SERIES 5
(SS5)

TYPICAL
SIGN SERIES 4
(SS4)

TYPICAL SECTION
WORKZONE
NOT TO SCALE

SCALE
0 50 100 150

TRAFFIC CONTROL SHEET
ROUNDABOUT
NORTHWEST QUADRANT WIDENING
PHASE 1 STAGE 9

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 11:58:45 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	58

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

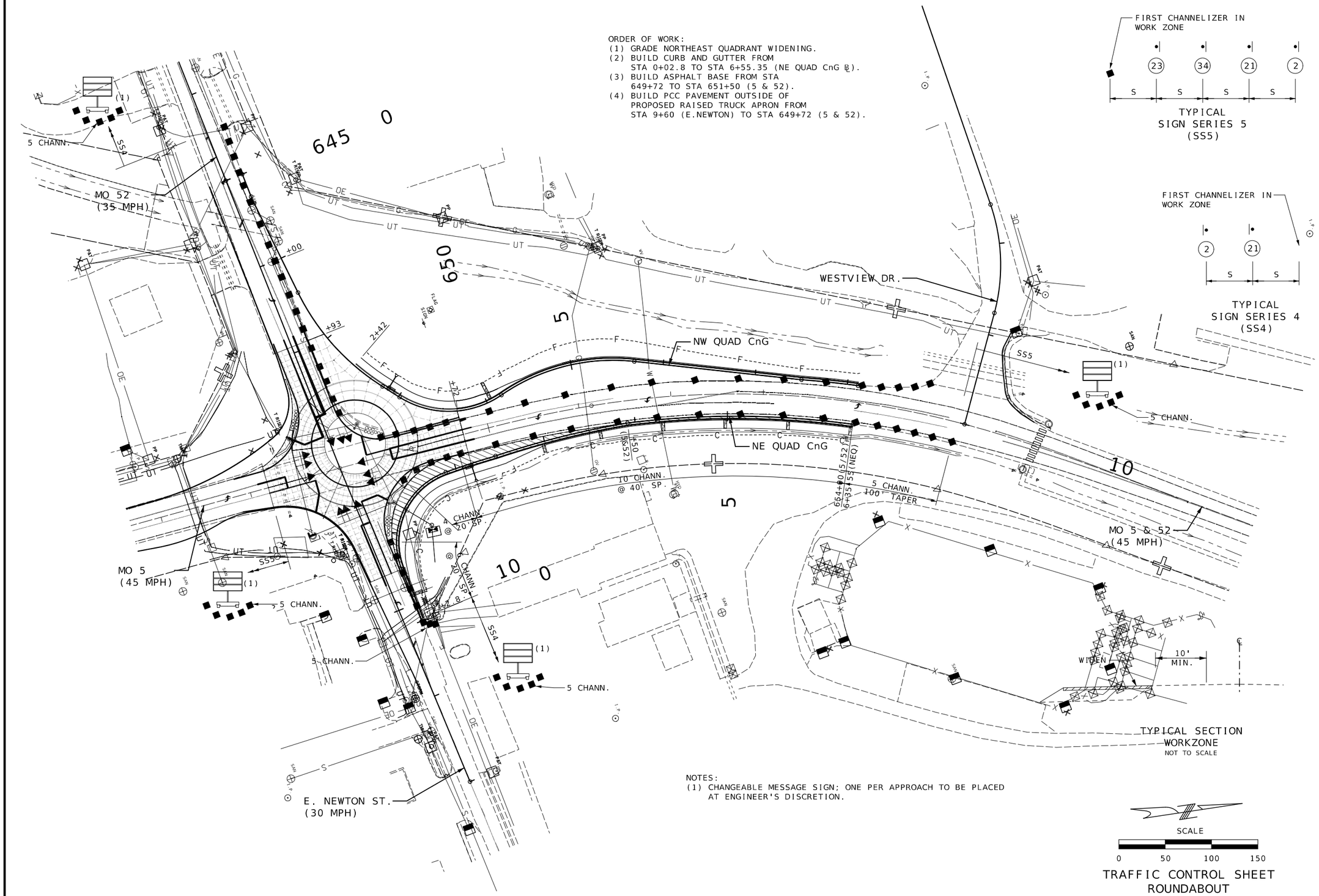
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMP. TRAFFIC CONTROL
NW QUADRANT WIDENING
PHASE 1 STAGE 9
SHEET 18 OF 28

ORDER OF WORK:
(1) GRADE NORTHEAST QUADRANT WIDENING.
(2) BUILD CURB AND GUTTER FROM STA 0+02.8 TO STA 6+55.35 (NE QUAD CnG ℄).
(3) BUILD ASPHALT BASE FROM STA 649+72 TO STA 651+50 (5 & 52).
(4) BUILD PCC PAVEMENT OUTSIDE OF PROPOSED RAISED TRUCK APRON FROM STA 9+60 (E.NEWTON) TO STA 649+72 (5 & 52).



TYPICAL
SIGN SERIES 5
(SS5)

TYPICAL
SIGN SERIES 4
(SS4)

TYPICAL SECTION
WORKZONE
NOT TO SCALE

NOTES:
(1) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

SCALE
0 50 100 150

TRAFFIC CONTROL SHEET
ROUNDABOUT
NORTHWEST QUADRANT WIDENING
PHASE 1 STAGE 10

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:44:27 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	59

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

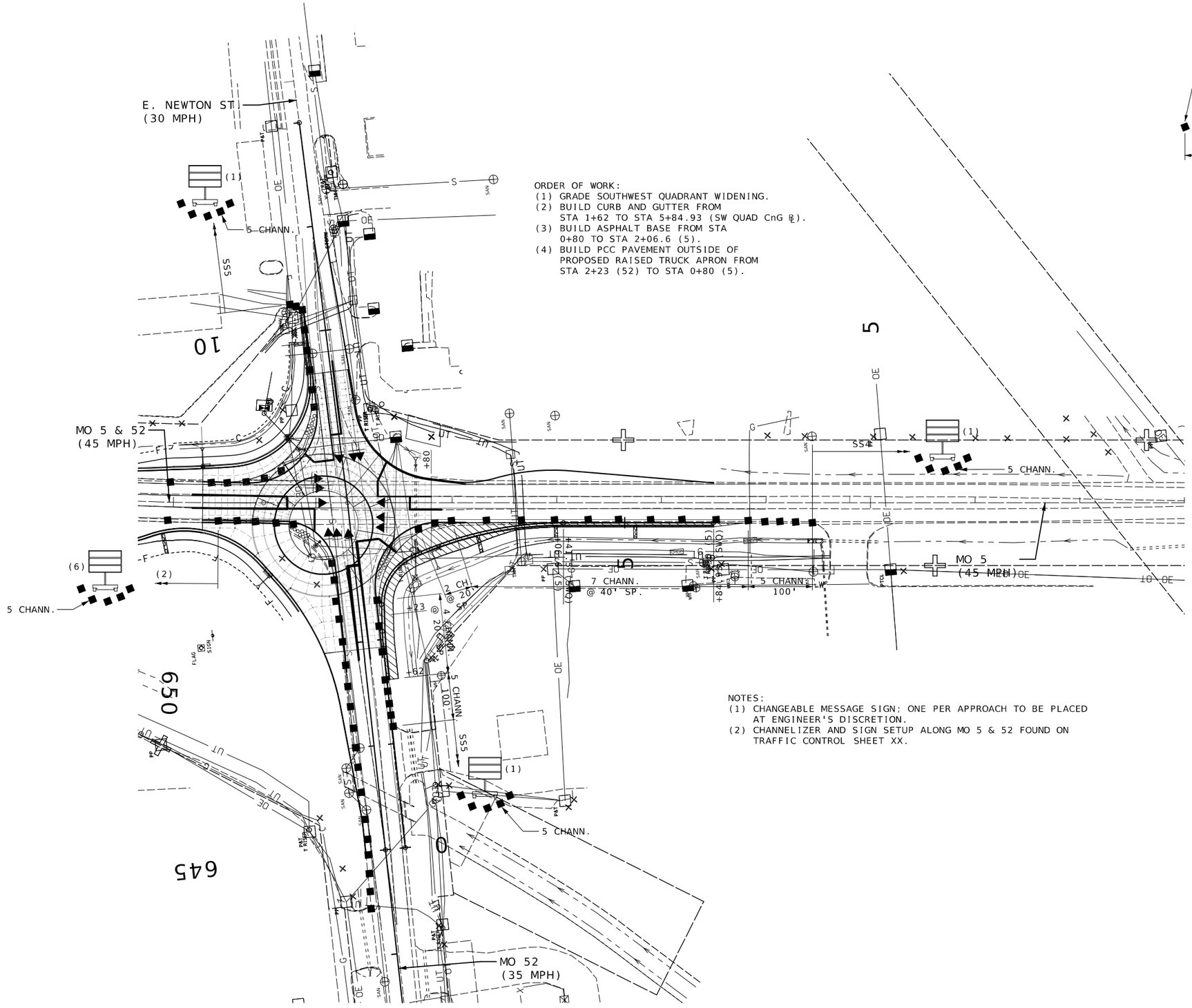
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

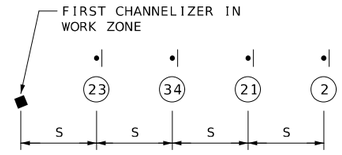
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
NE QUADRANT WIDENING
PHASE 1 STAGE 10
SHEET 19 OF 28

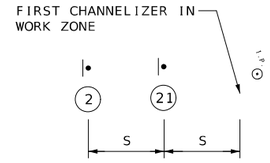


ORDER OF WORK:
(1) GRADE SOUTHWEST QUADRANT WIDENING.
(2) BUILD CURB AND GUTTER FROM STA 1+62 TO STA 5+84.93 (SW QUAD CnG ℄).
(3) BUILD ASPHALT BASE FROM STA 0+80 TO STA 2+06.6 (5).
(4) BUILD PCC PAVEMENT OUTSIDE OF PROPOSED RAISED TRUCK APRON FROM STA 2+23 (52) TO STA 0+80 (5).

NOTES:
(1) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.
(2) CHANNELIZER AND SIGN SETUP ALONG MO 5 & 52 FOUND ON TRAFFIC CONTROL SHEET XX.



TYPICAL
SIGN SERIES 5
(SS5)



TYPICAL
SIGN SERIES 4
(SS4)

SCALE
0 50 100 150

TRAFFIC CONTRL SHEET
ROUNDABOUT
PHASE 1 STAGE 11

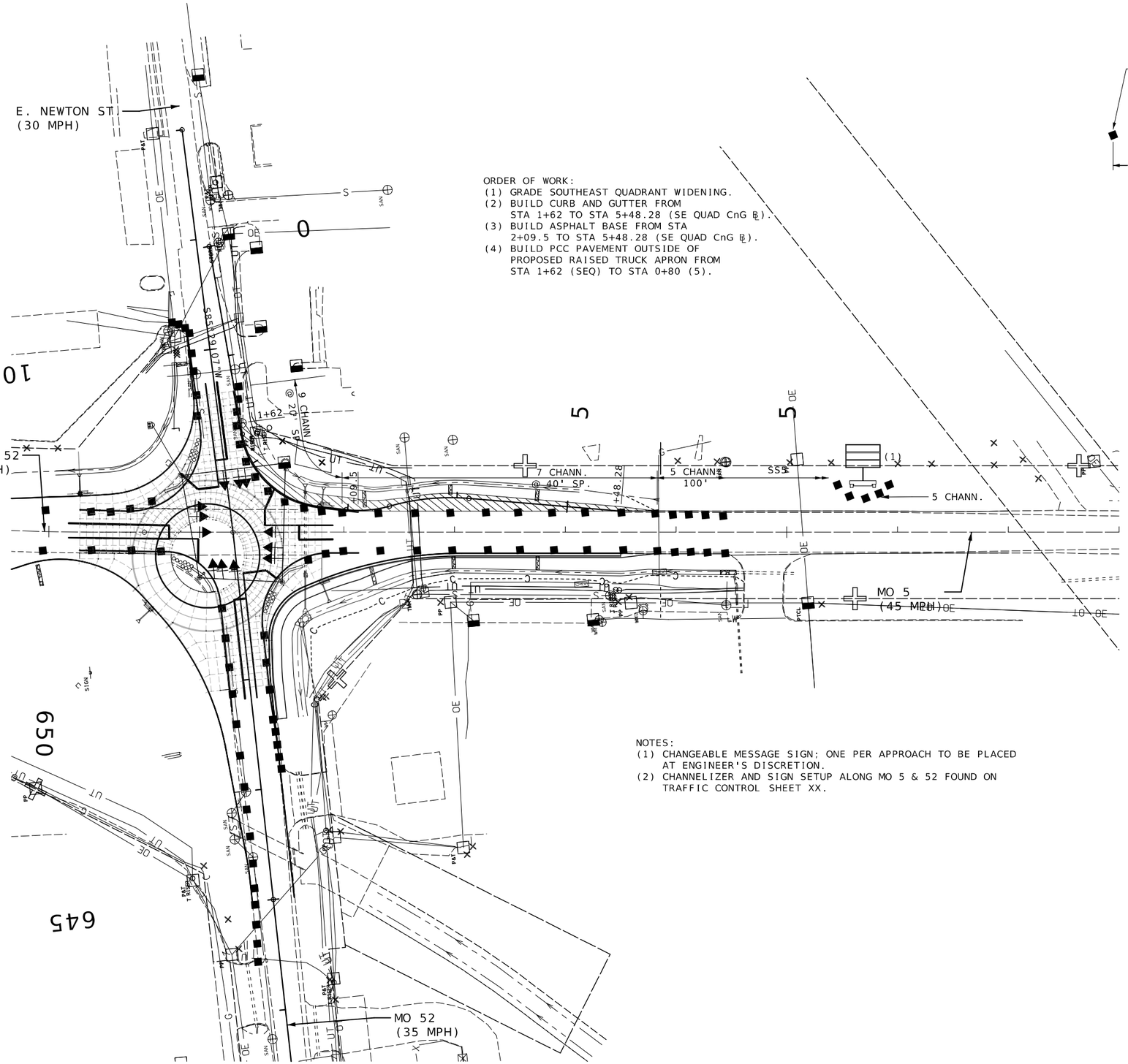
STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:44:46 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED	
4/10/2024	
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	60
COUNTY	
MORGAN	
JOB NO.	
J5P3575	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION | DATE

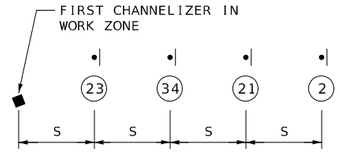
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL SW QUADRANT WIDENING PHASE 1 STAGE 11 SHEET 20 OF 28

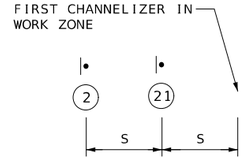


ORDER OF WORK:
(1) GRADE SOUTHEAST QUADRANT WIDENING.
(2) BUILD CURB AND GUTTER FROM STA 1+62 TO STA 5+48.28 (SE QUAD CnG ℄).
(3) BUILD ASPHALT BASE FROM STA 2+09.5 TO STA 5+48.28 (SE QUAD CnG ℄).
(4) BUILD PCC PAVEMENT OUTSIDE OF PROPOSED RAISED TRUCK APRON FROM STA 1+62 (SEQ) TO STA 0+80 (5).

NOTES:
(1) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.
(2) CHANNELIZER AND SIGN SETUP ALONG MO 5 & 52 FOUND ON TRAFFIC CONTROL SHEET XX.



TYPICAL
SIGN SERIES 5
(SS5)



TYPICAL
SIGN SERIES 4
(SS4)

SCALE
0 50 100 150

TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 12

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/10/2024 10:45:07 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/10/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	61

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

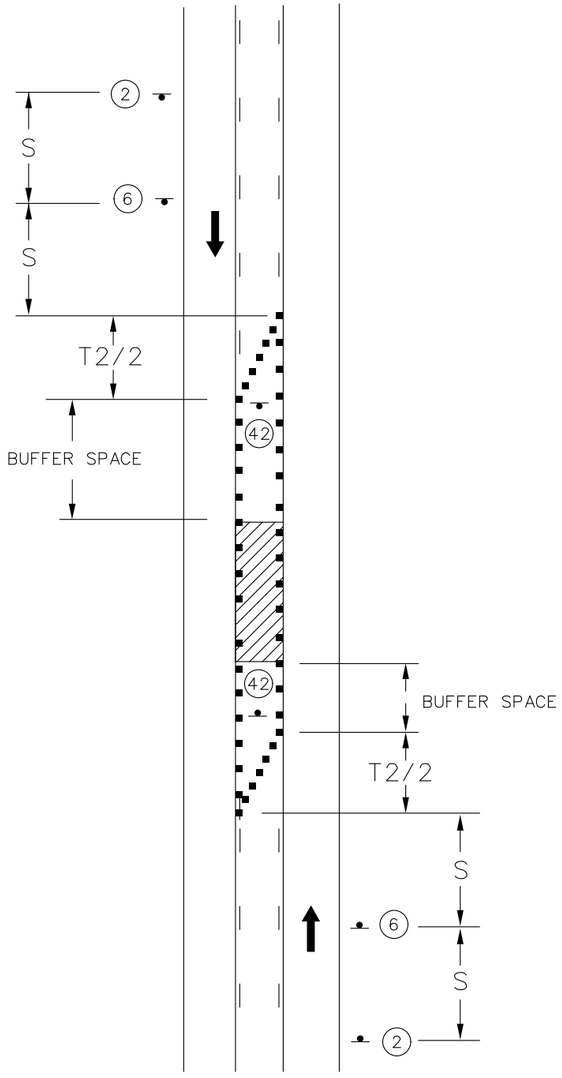
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
SE QUADRANT WIDENING
PHASE 1 STAGE 12
SHEET 21 OF 28

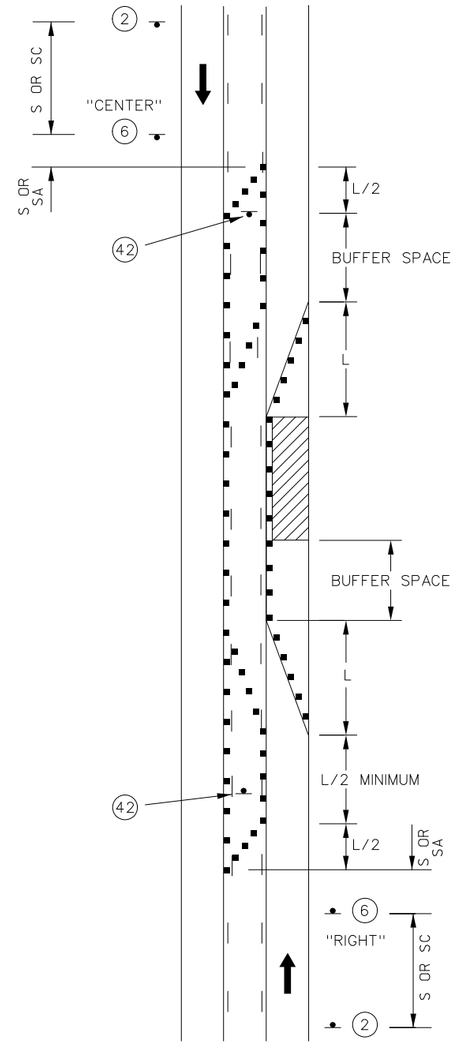
ORDER OF WORK:
PHASE 1
(1) NORTH LEG (MO 5 & 52) RESURFACING FROM STA 649+72 TO STA 655+85.
(2) SOUTH LEG (MO 5) RESURFACING FROM STA 0+80 TO STATION 7+00.
(3) EAST LEG (E. NEWTON ST.) RESURFACING FROM STA 9+60 TO STA 11+00.
PHASE 2
(4) WEST LEG (MO 52) RESURFACING FROM STA 645+75 TO STA 646+93.
PHASE 3
(5) MO 52 RESURFACING FROM STA 611+78 TO STA 645+14.

SEE TRAFFIC CONTROL SHEET 4 FOR WORK ZONE SPEED LIMIT GUIDELINES.

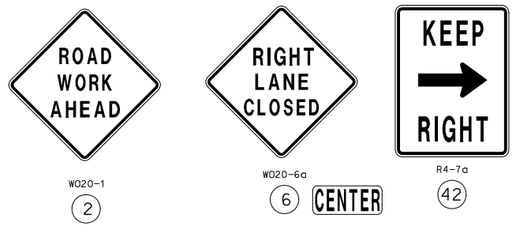
SEE TRAFFIC CONTROL SHEET 4 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.



CENTER TURN LANE ON MULTI-LANE UNDIVIDED HIGHWAYS



TRAVELWAY LANE CLOSURE DIVERTING TRAFFIC TO CENTER TURN LANE-LANE



TEMPORARY TRAFFIC CONTROL SHEET
RESURFACING OPERATIONS ON
MULTI-LANE UNDIVIDED HIGHWAY
SHEET 22 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 12:51:08 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	62

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

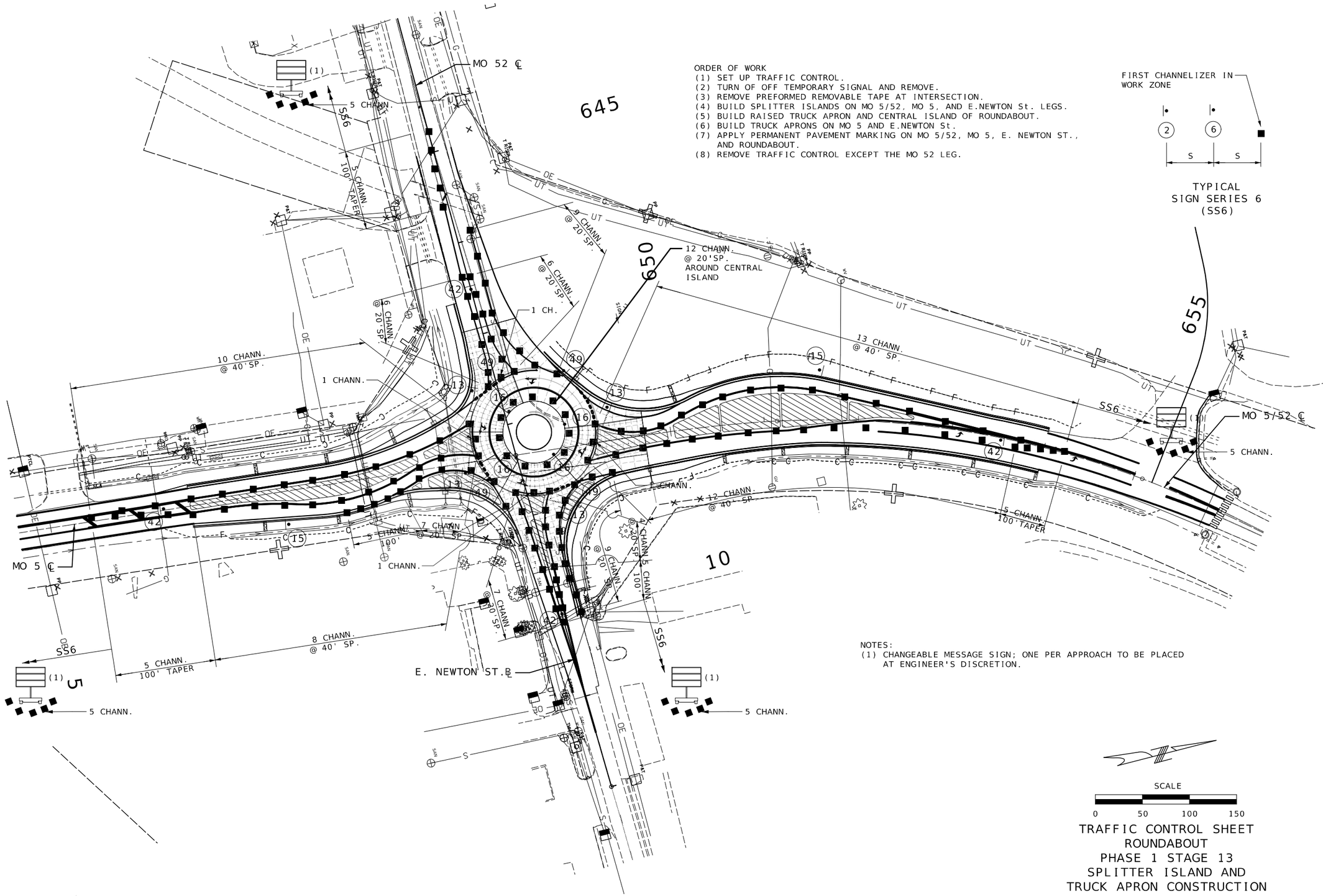
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
MULTI-LANE RESURFACING
SHEET 22 OF 28

ORDER OF WORK
(1) SET UP TRAFFIC CONTROL.
(2) TURN OF OFF TEMPORARY SIGNAL AND REMOVE.
(3) REMOVE PREFORMED REMOVABLE TAPE AT INTERSECTION.
(4) BUILD SPLITTER ISLANDS ON MO 5/52, MO 5, AND E.NEWTON St. LEGS.
(5) BUILD RAISED TRUCK APRON AND CENTRAL ISLAND OF ROUNDABOUT.
(6) BUILD TRUCK APRONS ON MO 5 AND E.NEWTON St.
(7) APPLY PERMANENT PAVEMENT MARKING ON MO 5/52, MO 5, E. NEWTON ST., AND ROUNDABOUT.
(8) REMOVE TRAFFIC CONTROL EXCEPT THE MO 52 LEG.

FIRST CHANNELIZER IN WORK ZONE

TYPICAL
SIGN SERIES 6
(SS6)



NOTES:
(1) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.

SCALE
0 50 100 150

TRAFFIC CONTROL SHEET
ROUNDABOUT
PHASE 1 STAGE 13
SPLITTER ISLAND AND
TRUCK APRON CONSTRUCTION

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 12:50:56 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	63

COUNTY
MORGAN

JOB NO.
J5P3575

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)

TEMP. TRAFFIC CONTROL
BUILD ISLAND/APRON
PHASE 1 STAGE 13
SHEET 23 OF 28

NOTES:
(1) BUILD PARTIAL STORM SEWER FOR BYPASS DRAINAGE IN STAGE 2.
THE TOPS OF THE DROP INLETS AND MANHOLE SHALL NOT BE INSTALLED.
COVER THE BASES INSTEAD AND COMPLETE AT A LATER STAGE.
(2) REMOVE EXISTING DRIVEWAY.
(3) THIS DROP INLET SHALL BE BUILT TO COMPLETION.
(4) 72'-4" WHITE PREFORMED REMOVABLE MARKING TAPE.
126'-4" DOUBLE YELLOW PREFORMED REMOVABLE MARKING TAPE.
122'-4" DOUBLE YELLOW PREFORMED REMOVABLE MARKING TAPE.
(5) NO ANCHORING REQUIRED.
(6) ANCHORING SHALL BE REQUIRED.

ORDER OF WORK:
(1) SET UP TEMPORARY TRAFFIC CONTROL.
(2) CLOSE AND REMOVE WESTVUE EAST DRIVEWAY.
(3) EXCAVATE FOR CULVERT.
(4) BUILD STORM SEWER ON LEFT FROM STA 13+26 (SS_LT ℄) TO OUTFALL OF THE SYSTEM (STA 16+34.19)
(5) BUILD CULVERT FROM STA 3+10 (CULV. CONSTR. ℄) TO END OF GRADING AT 5+15 (CULV. CONSTR. ℄).
(6) WAIT FOR CURING TIME.
(7) PROCEED TO PHASE 2 STAGE 2.

640 645 099 10

GRADE TO DRAIN
13+26
(1) (2) (3) (4) (5) (6) (9)
62.5'
TEMP. CONC. BARRIER
4 CHANN. @ 20' SP.
105' SAWCUT
5 CHANN. 100'
5 CHANN.
SS7
5 (MIN.)
+50 +40 +00 +14 +05 +54 +93 +25 +44 +90 +54
4" WHITE PAINT
4" DOUBLE YELLOW PAINT W/ TEMP. RPM'S AT 20' SP.
UIP EXIST. WHITE EDGELINE
REMOVE EXISTING PAVEMENT MARKING
4 CHANN. @ 20'SP.
1 CHANN.
S (MIN.)
29 49 42 13 2 1

2 15 44
BEGIN WORK ZONE
S S
TYPICAL SIGN SERIES 7 (SS7)

CULVERT EXCAVATION
1' 10' MIN. 10' MIN.
TYPICAL SECTION WORKZONE
NOT TO SCALE

SCALE
0 50 100 150

TRAFFC CONTROL SHEET
BUILD CULVERT ON MO 52
CROSSING STRAIGHT FORK TRIBUTARY
PHASE 2 STAGE 1

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/20/2024 2:08:44 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/20/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	64

COUNTY
MORGAN

JOB NO.
J5P3575

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)

TEMP. TRAFFIC CONTROL
BUILD 52 CULVERT OUTLET
PHASE 2 STAGE 1
SHEET 24 OF 28

BYPASS P2S2 A
PI 2+69.31
PC 2+43.07
PT 2+95.43
Δ 10°0'0.0" (LT)
D 19°5'54.9"
L 52.36' (ARC)
T 26.25'
R 300.00'

BYPASS P2S2 A
PI 5+02.41
PC 4+76.16
PT 5+28.52
Δ 10°0'0.0" (RT)
D 19°5'54.9"
L 52.36' (ARC)
T 26.25'
R 300.00'

BYPASS P2S2 A
PI 7+36.99
PC 7+02.34
PT 7+69.04
Δ 38°12'47.6" (LT)
D 57°17'44.8"
L 66.69' (ARC)
T 34.64'
R 100.00'

BYPASS P2S2 B
PI 0+94.38
PC 0+00.00
PT 1+82.88
Δ 34°55'36.3" (RT)
D 19°5'54.9"
L 182.88' (ARC)
T 94.38'
R 300.00'

BEG. WORKZONE

2 15 44

SIGN SERIES 7
SS7

25 MPH

WO13-1 (44)

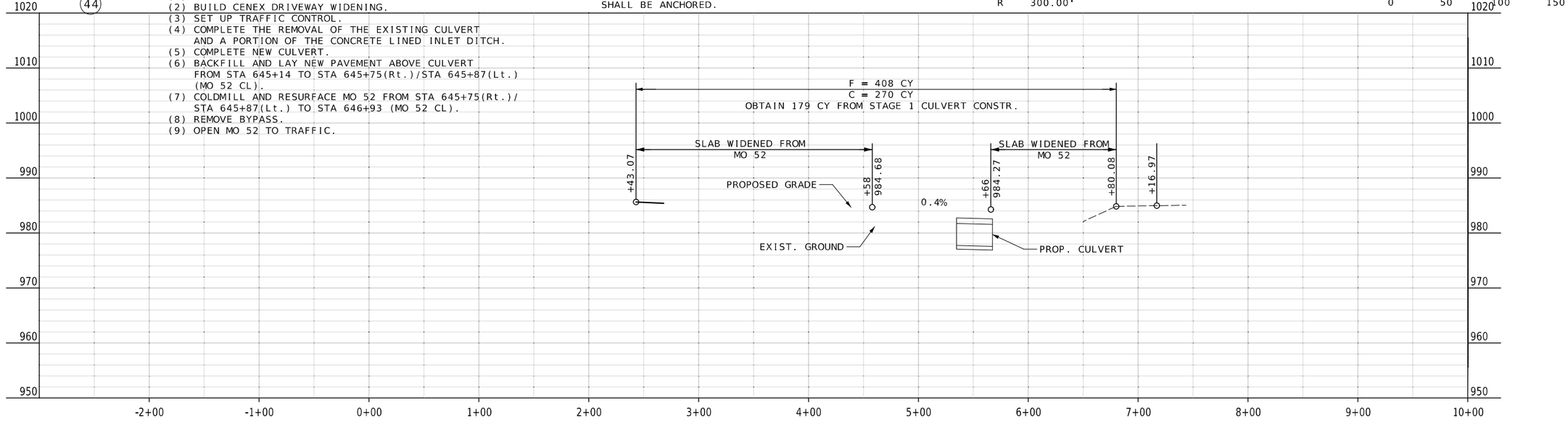
DETAIL
TEMPORARY DRIVEWAY
WIDENING

TEMPORARY 2-24"x 45' GROUP B LAY IN EXIST. DITCH COUPLE TO EXIST. PIPE
GRADE TO DRAIN
2" GRAVEL(A), CRUSHED STONE(B), OR CHAT (EST. 15 T)
89'SAWCUT AT CURB TOE
EST. F=35 CY

ORDER OF WORK
(1) BUILD BYPASS.
(2) BUILD CENEX DRIVEWAY WIDENING.
(3) SET UP TRAFFIC CONTROL.
(4) COMPLETE THE REMOVAL OF THE EXISTING CULVERT AND A PORTION OF THE CONCRETE LINED INLET DITCH.
(5) COMPLETE NEW CULVERT.
(6) BACKFILL AND LAY NEW PAVEMENT ABOVE CULVERT FROM STA 645+14 TO STA 645+75(Rt.)/STA 645+87(Lt.) (MO 52 CL).
(7) COLDMILL AND RESURFACE MO 52 FROM STA 645+75(Rt.)/ STA 645+87(Lt.) TO STA 646+93 (MO 52 CL).
(8) REMOVE BYPASS.
(9) OPEN MO 52 TO TRAFFIC.

NOTES:
(1) TEMPORARY CONCRETE BARRIER SHALL BE ANCHORED.

SCALE
0 50 100 150



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/20/2024 2:08:34 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/20/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	65

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

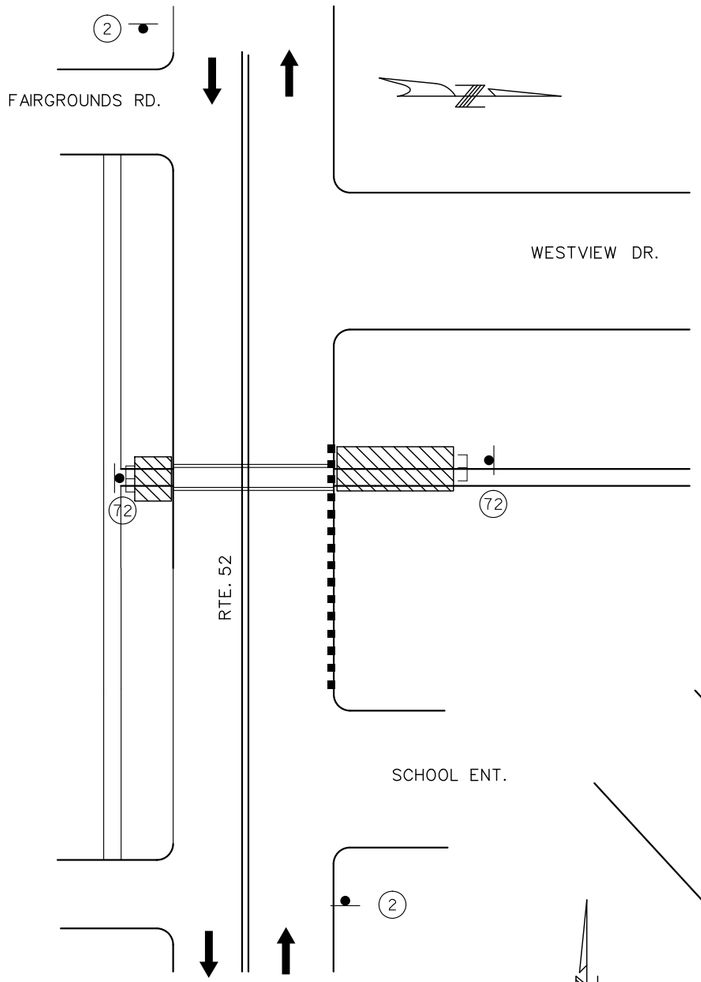
BRIDGE NO.

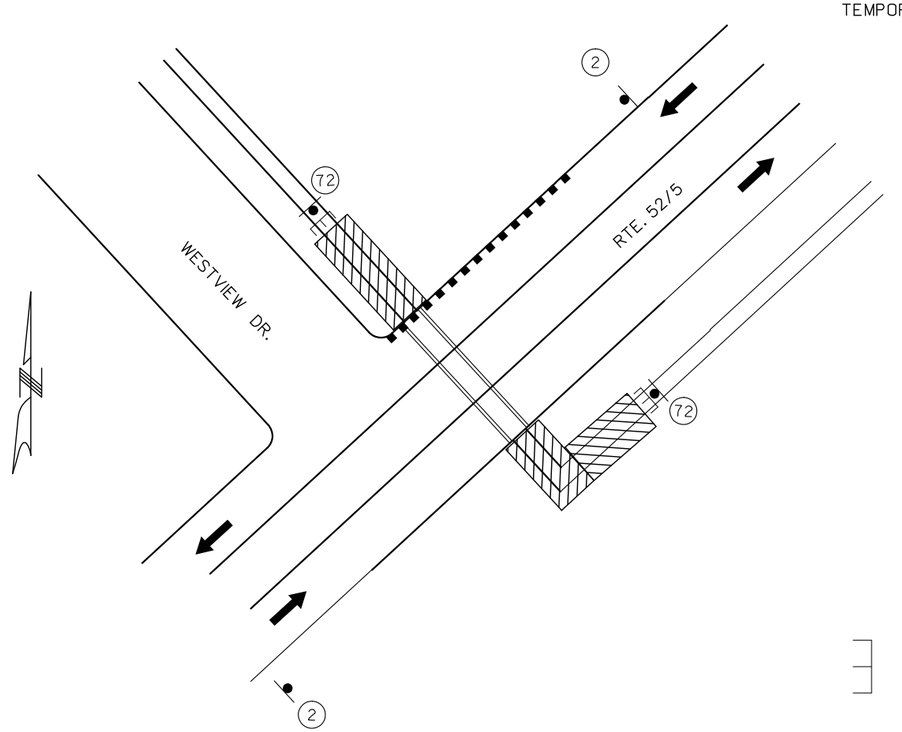
DESCRIPTION

DATE

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

TEMP. TRAFFIC CONTROL
BUILD 52 CULVERT INLET
PHASE 2 STAGE 2
SHEET 25 OF 28





CROSSWALK/SIDEWALK CLOSURES

NOTES:

(1). WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITES ARE CLOSED OR RELOCATED, TEMPORARY FACILITES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.

(2). CURB PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OD THE MISBLOCK CROSSWALK.

(3). AUDIBLE INFORMATION DEVICES SHOULD BE CONSIDERED WHERE MIDBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMINICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABLITIES.

(4). ONLY THE TCC DEVICES REALTED TO PEDESTRIANS ARE SHOWN. OTHER DEVICES, SUCH AS LANE CLOSURE SIGNING OR ROAD NARROWS SIGNS, MAY BE USED TO CONTROL VEHICULAR TRAFFIC.

(5). FOR NIGHTTIME CLOSURES,TYPE A FLASHING WARNING LIGHTS MAY BE USED ON BARRICADES THAT SUPPORT SIGNS AND CLOSE SIDEWALKS.

(6). TYPE C STEADY-BURN OR TYPE D 360-DEGREE STEADY-BURN WARNING LIGHTS MAY BE USED ON CHANNELIZING DEVICES SEPERATING THE TEMPORARY SIDEWALKS FROM VEHICULAR TRAFFIC FLOW.

W020-1

2

R9-9

72

MOVEABLE
BARRICADE

TEMPORARY TRAFFIC CONTROL SHEET
CROSSWALK/SIDEWALK CLOSURES
SHEET 26 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 12:50:17 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	66

COUNTY
MORGAN

JOB NO.
J5P3575

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)

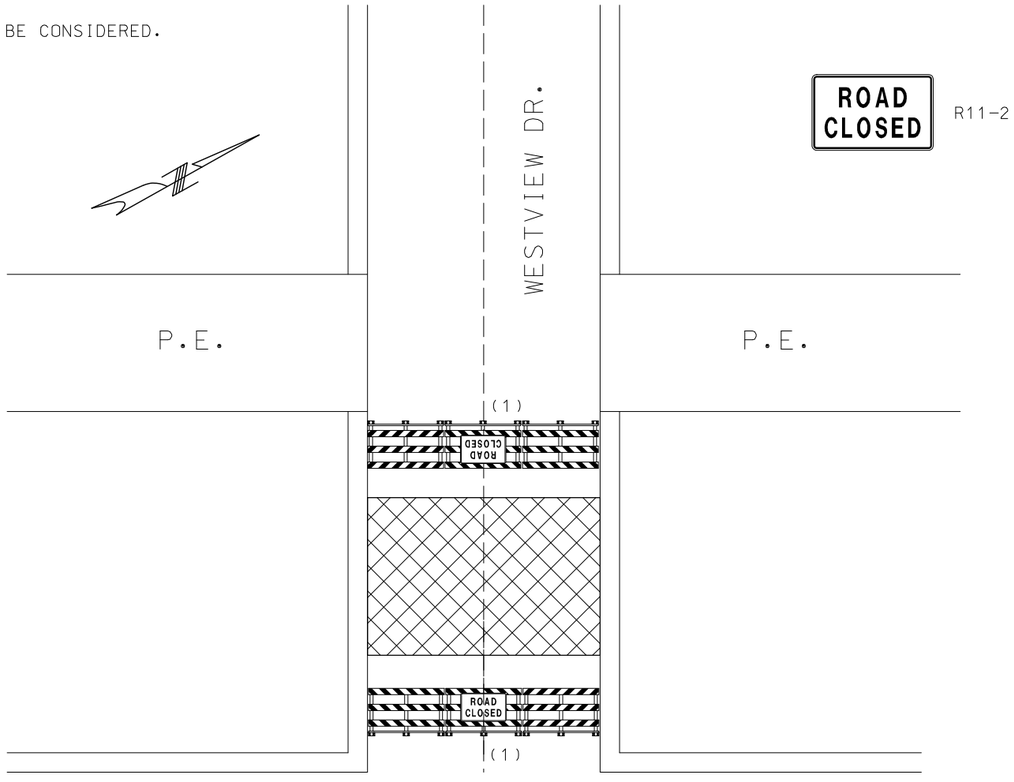
TEMP. TRAFFIC CONTROL
CROSSWALK/SIDEWALK
CLOSURES
SHEET 26 OF 28

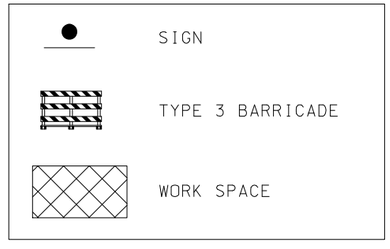
(1) ROAD CLOSED SIGN MAY BE PLACED 7-10 FEET BEHIND THE BARRICADES AND AT A SIGN HEIGHT APPROPRIATE TO THE TYPE OF ROADWAY. ONE BARRICADE SHOULD BE REQUIRED TO COMPLETELY CLOSE EACH 8-FEET OF PAVEMENT. PAVED SHOULDERS SHALL NE INCLUDED IN THE AREA TO BE CLOSED.

TRAFFIC CONTROL SHOULD BE REMOVED AS SOON AS PRACTICAL AFTER CONDITIONS FOR THE CLOSURE NO LONGER EXISTS.

SUPPLEMENTAL WARNING METHODS MAY BE USED TO CALL ATTENTION TO THE WORK ZONE.

FOR LONG-TERN CLOSURE, DETOUR SIGNING SHOULD BE CONSIDERED.





WESTVIEW DRIVE ENTRANCE CLOSURE
(DURING CULVERT CONSTRUCTION)

TEMPORARY TRAFFIC CONTROL SHEET
WESTVIEW DR. ENTRANCE CLOSURE
SHEET 27 OF 28

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 12:49:55 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	67

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

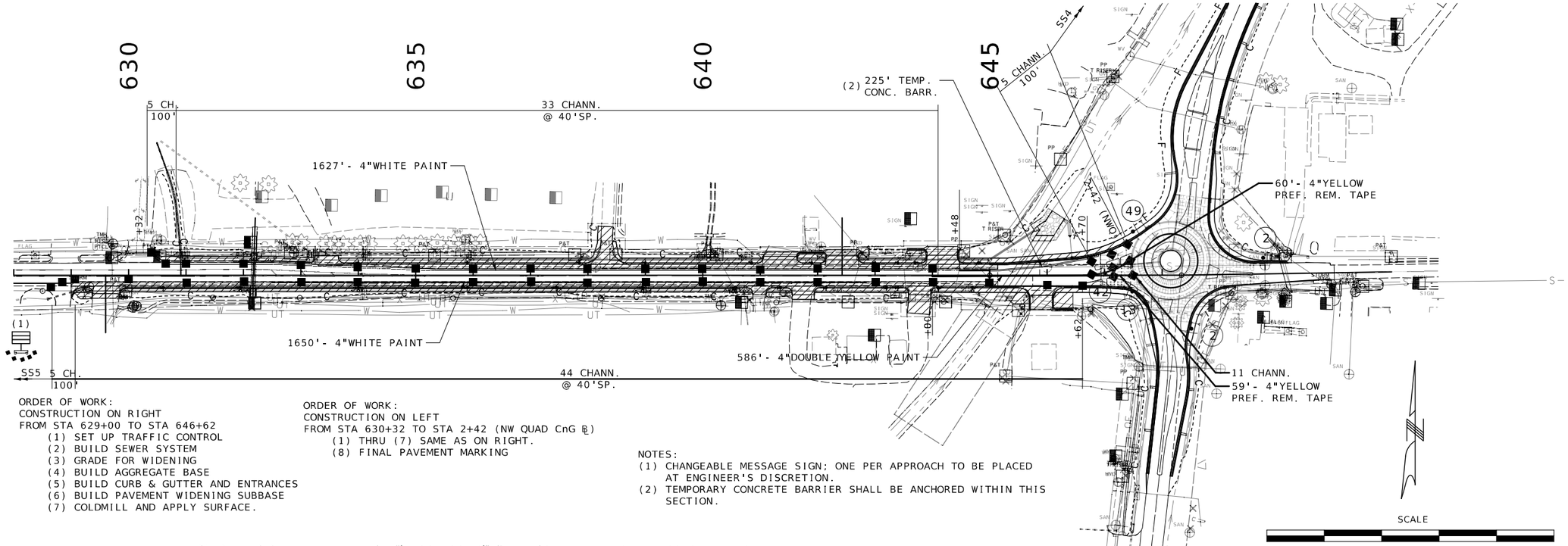
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMP. TRAFFIC CONTROL
WESTVIEW DR.
ENTRANCE CLOSURE
SHEET 27 OF 28

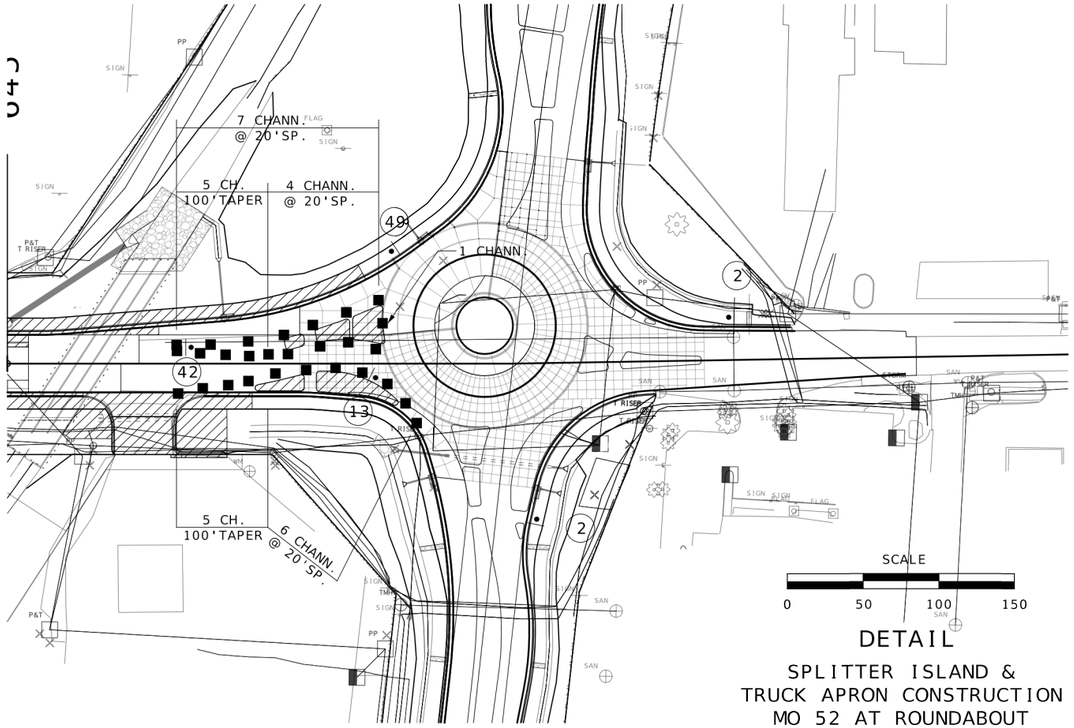


ORDER OF WORK:
CONSTRUCTION ON RIGHT
FROM STA 629+00 TO STA 646+62
(1) SET UP TRAFFIC CONTROL
(2) BUILD SEWER SYSTEM
(3) GRADE FOR WIDENING
(4) BUILD AGGREGATE BASE
(5) BUILD CURB & GUTTER AND ENTRANCES
(6) BUILD PAVEMENT WIDENING SUBBASE
(7) COLDMILL AND APPLY SURFACE.

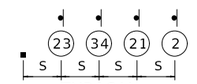
ORDER OF WORK:
CONSTRUCTION ON LEFT
FROM STA 630+32 TO STA 2+42 (NW QUAD CnG ℄)
(1) THRU (7) SAME AS ON RIGHT.
(8) FINAL PAVEMENT MARKING

NOTES:
(1) CHANGEABLE MESSAGE SIGN; ONE PER APPROACH TO BE PLACED AT ENGINEER'S DISCRETION.
(2) TEMPORARY CONCRETE BARRIER SHALL BE ANCHORED WITHIN THIS SECTION.

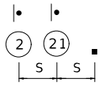
MO 52 WIDENING



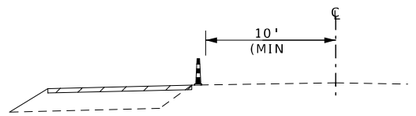
DETAIL
SPLITTER ISLAND &
TRUCK APRON CONSTRUCTION
MO 52 AT ROUNDABOUT



TYPICAL
SIGN SERIES 5
(SS5)



TYPICAL
SIGN SERIES 4
(SS4)



TYPICAL SECTION
WORKZONE
NOT TO SCALE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/02/2024 9:06:46 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/2/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	68

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

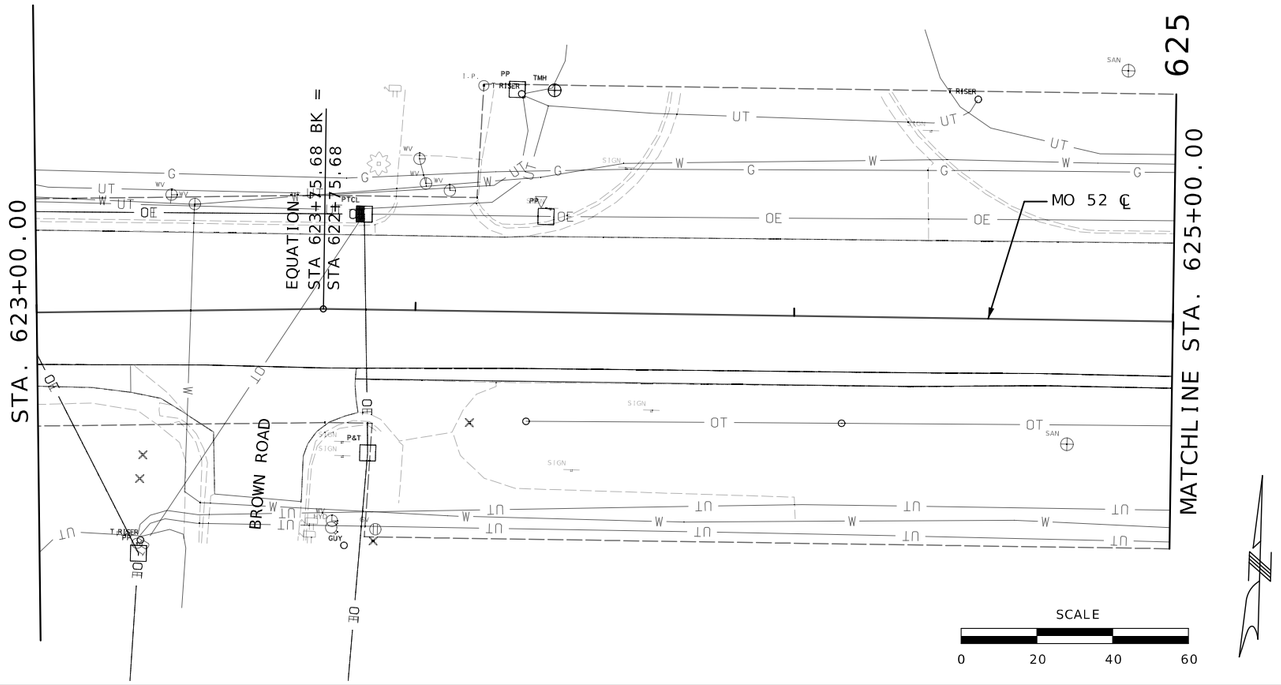
DATE	DESCRIPTION
04/11/24	REV01 - TEMP. BARR. NOTE CORRECTION

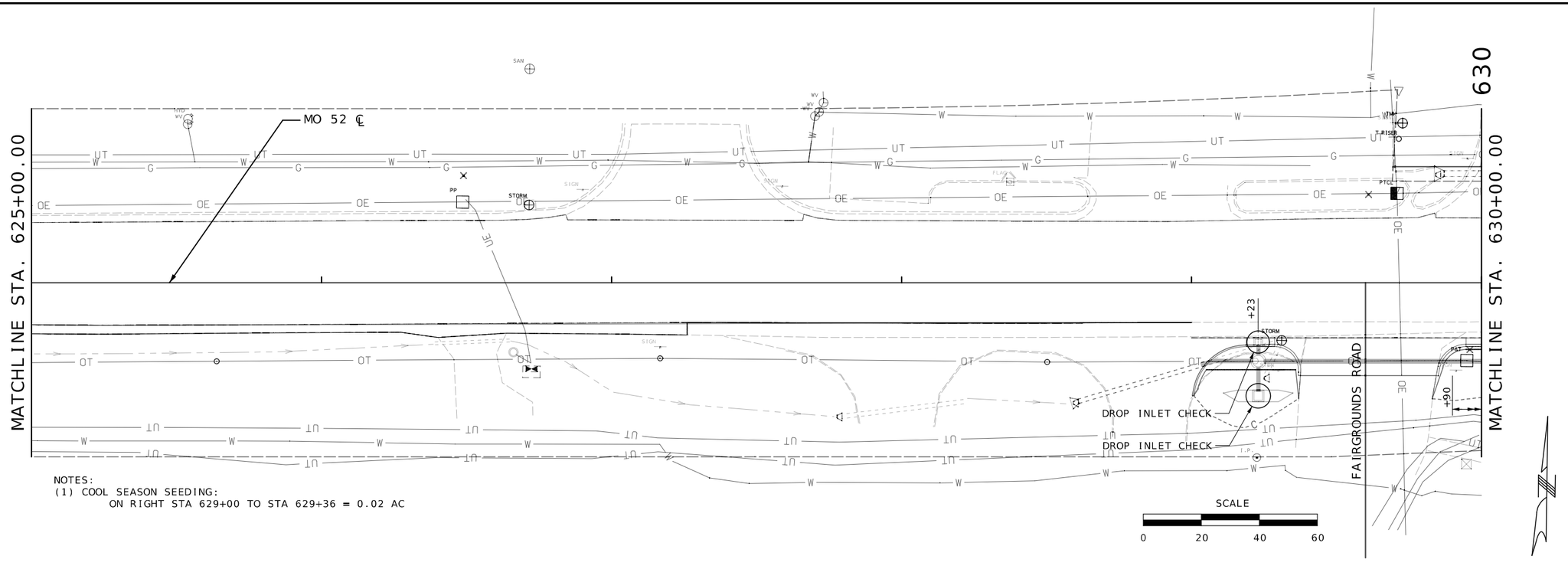
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TEMP. TRAFFIC CONTROL
MO 52 WIDENING
PHASE 3 STAGE 1
SHEET 28 OF 28

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- (S) SEDIMENT TRAP
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE
- TEMPORARY SEDIMENT BASIN
- PERMANENT SEDIMENT BASIN





NOTES:
(1) COOL SEASON SEEDING:
ON RIGHT STA 629+00 TO STA 629+36 = 0.02 AC

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 6:18:04 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	69

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

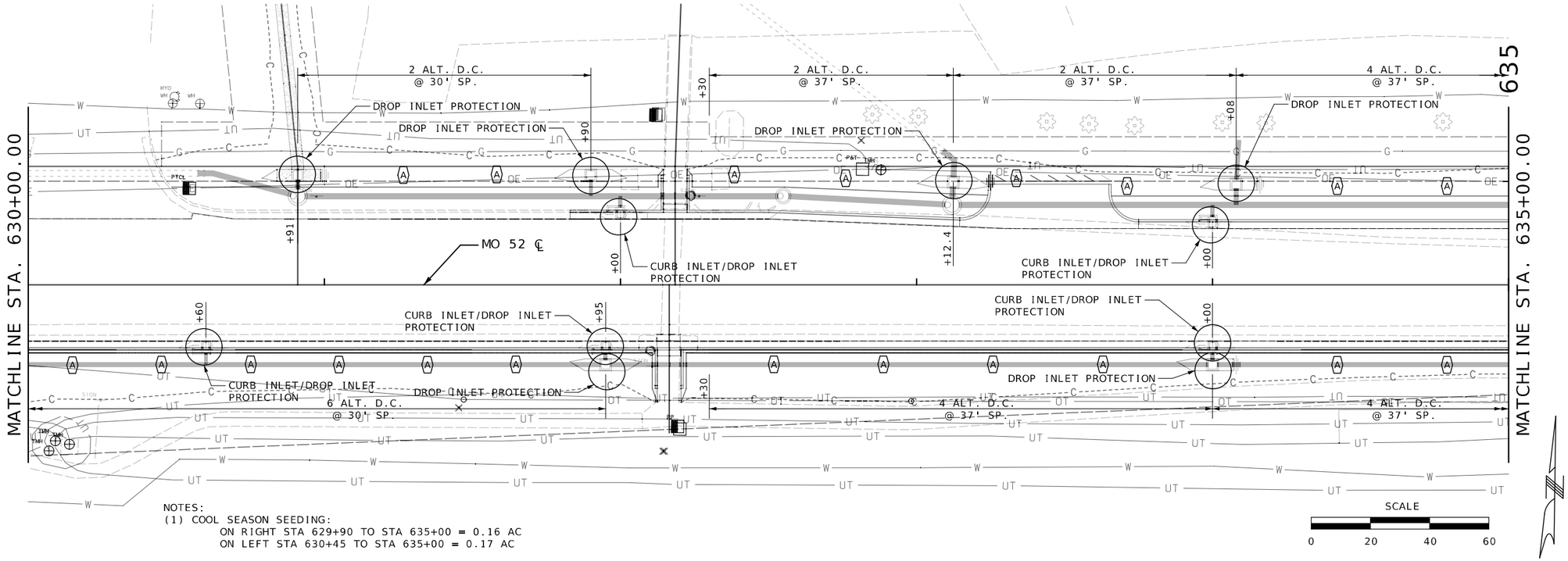
DESCRIPTION

DATE

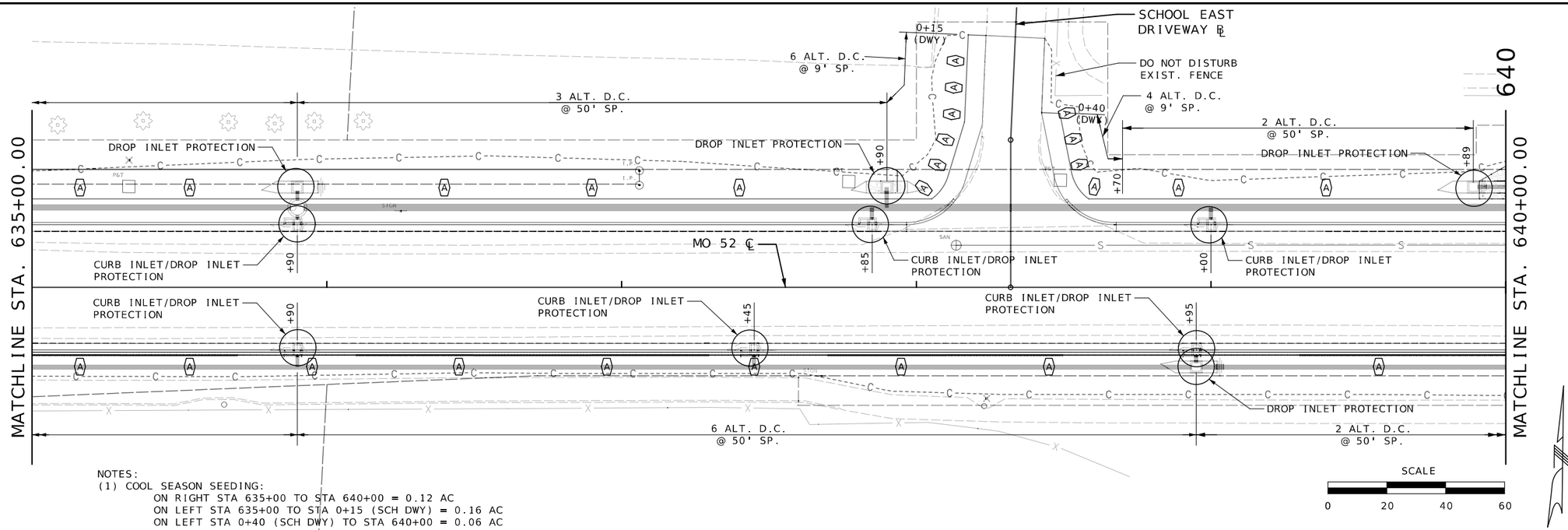
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL
MISSOURI ROUTE 52 ℄
SHEET 1 OF 6



NOTES:
(1) COOL SEASON SEEDING:
ON RIGHT STA 629+90 TO STA 635+00 = 0.16 AC
ON LEFT STA 630+45 TO STA 635+00 = 0.17 AC



NOTES:
(1) COOL SEASON SEEDING:
ON RIGHT STA 635+00 TO STA 640+00 = 0.12 AC
ON LEFT STA 635+00 TO STA 0+15 (SCH DWY) = 0.16 AC
ON LEFT STA 0+40 (SCH DWY) TO STA 640+00 = 0.06 AC

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 6:17:56 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	70

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

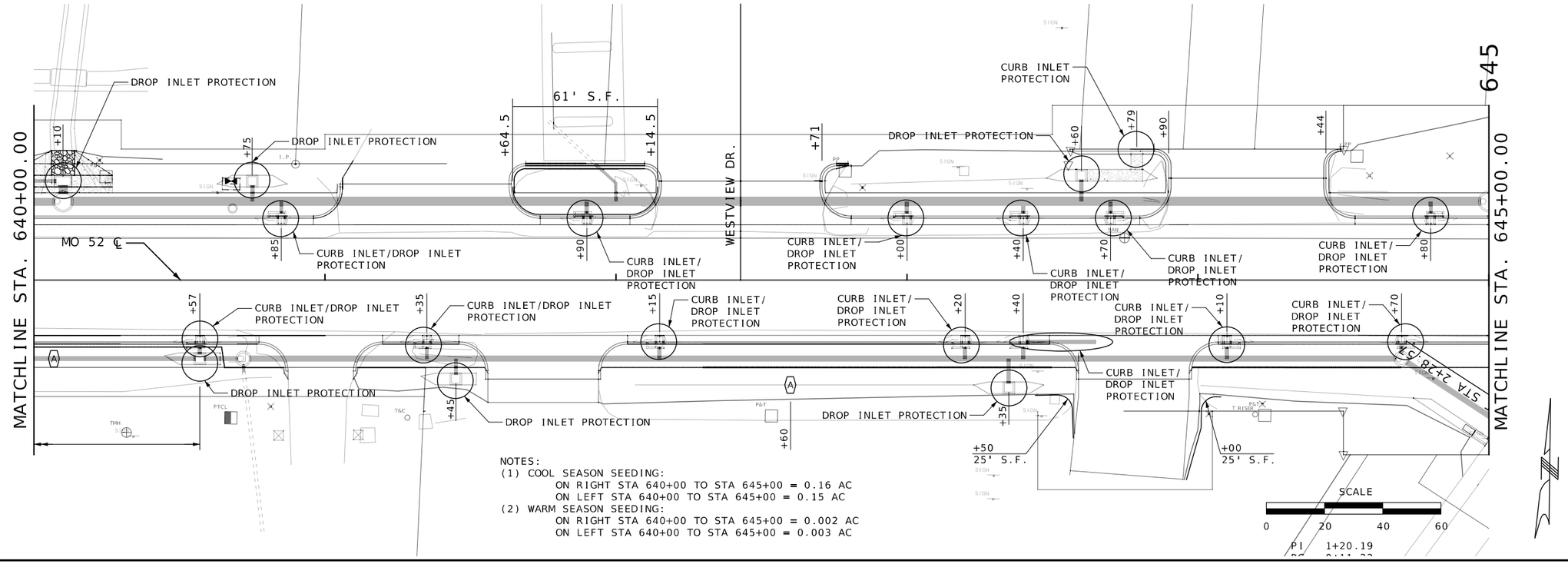
BRIDGE NO.

DESCRIPTION	DATE

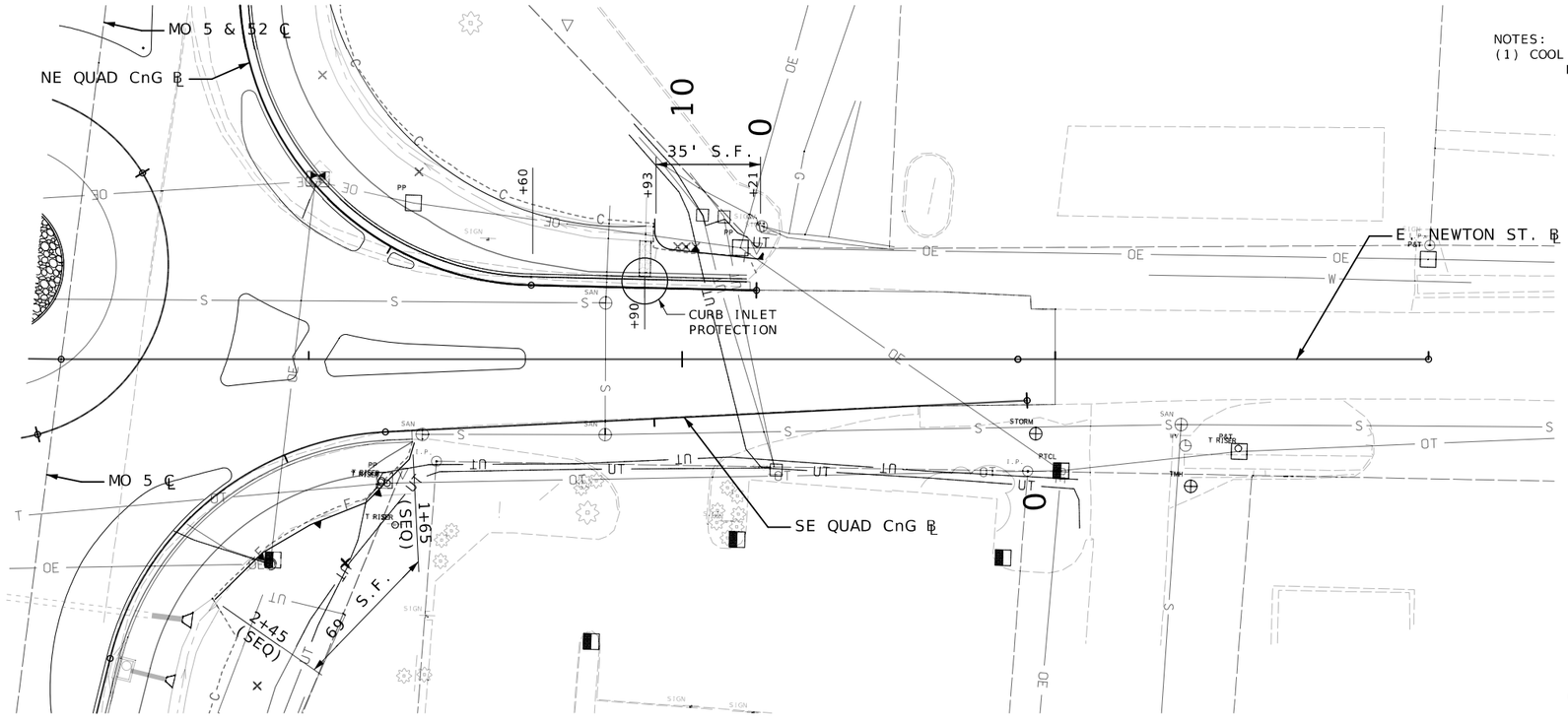
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL
MISSOURI ROUTE 52 ℄
SHEET 2 OF 6



NOTES:
(1) COOL SEASON SEEDING:
ON RIGHT STA 640+00 TO STA 645+00 = 0.16 AC
ON LEFT STA 640+00 TO STA 645+00 = 0.15 AC
(2) WARM SEASON SEEDING:
ON RIGHT STA 640+00 TO STA 645+00 = 0.002 AC
ON LEFT STA 640+00 TO STA 645+00 = 0.003 AC



NOTES:
(1) COOL SEASON SEEDING:
E. NEWTON ST. ON LEFT STA 9+60 TO STA 10+21 = 0.02 AC

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 6:17:42 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	71

COUNTY
MORGAN

JOB NO.
J5P3575

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)

EROSION CONTROL
MISSOURI ROUTE 52 ℄
EAST NEWTON ST. ℄
SHEET 3 OF 6

NOTES:
(1) COOL SEASON SEEDING:
MO 52 ON RIGHT STA 645+00 TO STA 646+93 = 0.08 AC
MO 52 ON LEFT STA 645+00 TO STA 646+93 = 0.12 AC
E. NEWTON ST. ON LEFT STA 9+60 TO STA 10+21 = 0.02 AC
NW QUAD CnG STA 1+94.36 TO STA 3+66.19 = 0.06 AC
NE QUAD CnG STA 0+59.97 TO STA 2+17.26 = 0.07 AC
SE QUAD CnG STA 1+32.59 TO STA 2+76.51 = 0.04 AC
SW QUAD CnG STA 2+66.68 TO STA 2+84.15 = 0.06 AC
(2) WARM SEASON SEEDING:
MO 52 ON RIGHT STA 645+00 TO STA 646+93 = 0.03 AC
MO 52 ON LEFT STA 645+00 TO STA 646+93 = 0.14 AC
SW QUAD CnG STA 2+66.68 TO STA 2+84.15 = 0.01 AC

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 6:17:32 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	72

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

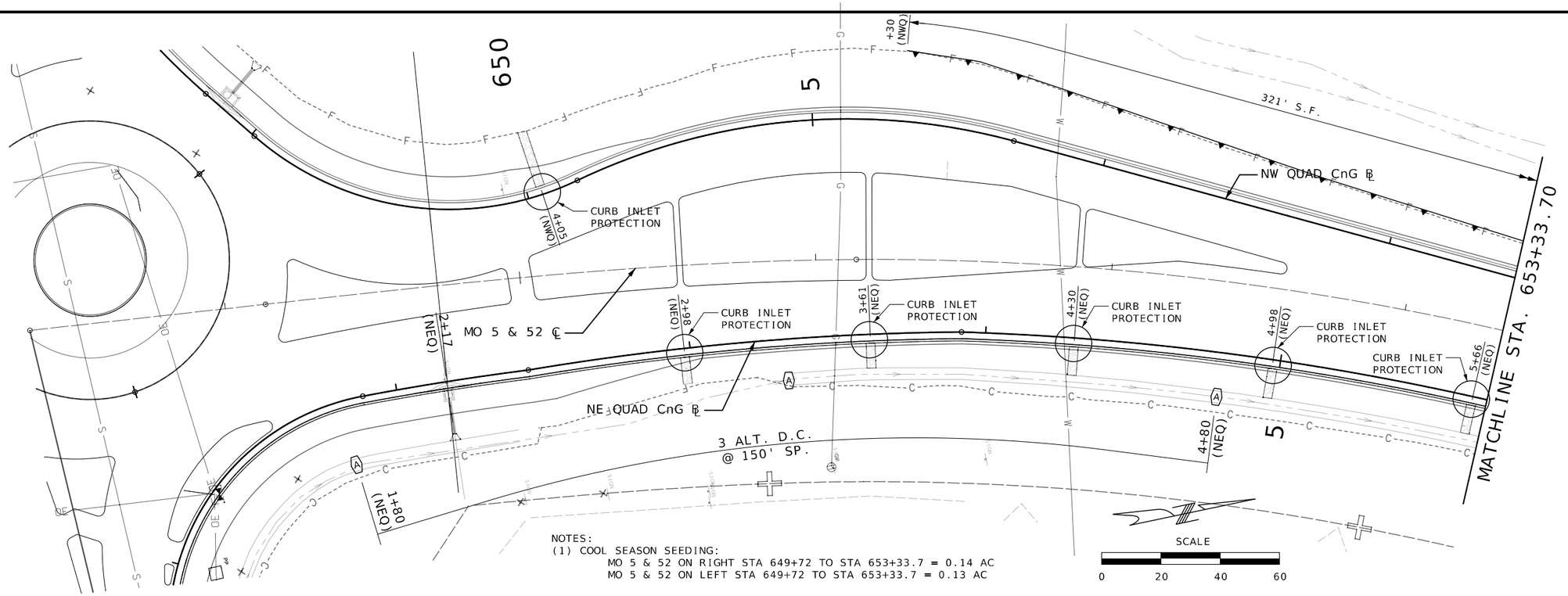
BRIDGE NO.

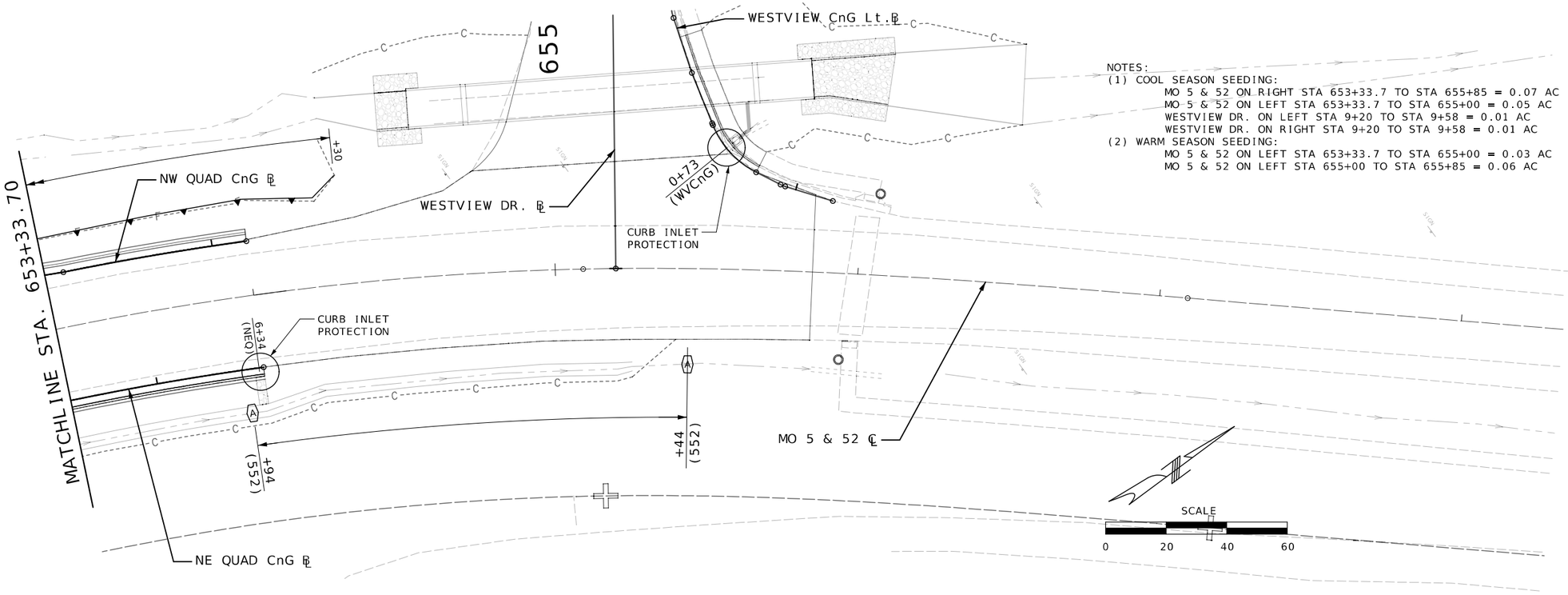
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING
MISSOURI ROUTE 52 ℄
ROUNDABOUT ℄
SHEET 4 OF 6





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 6:17:20 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	73

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

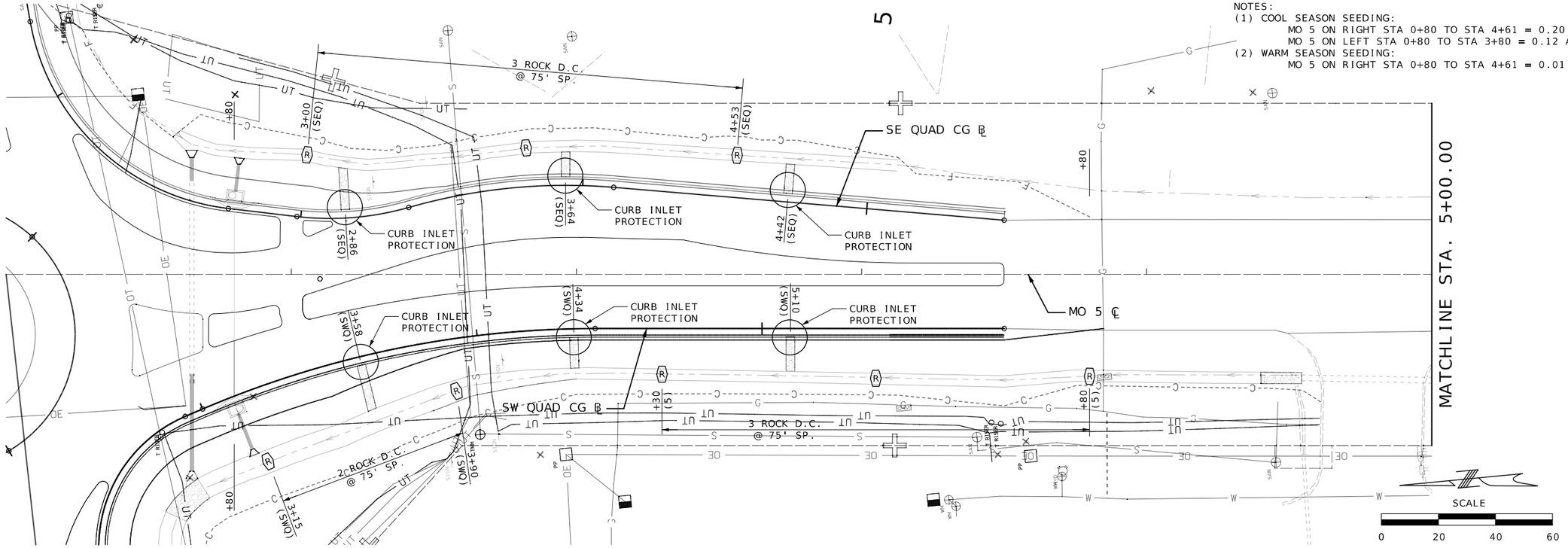
DESCRIPTION	DATE

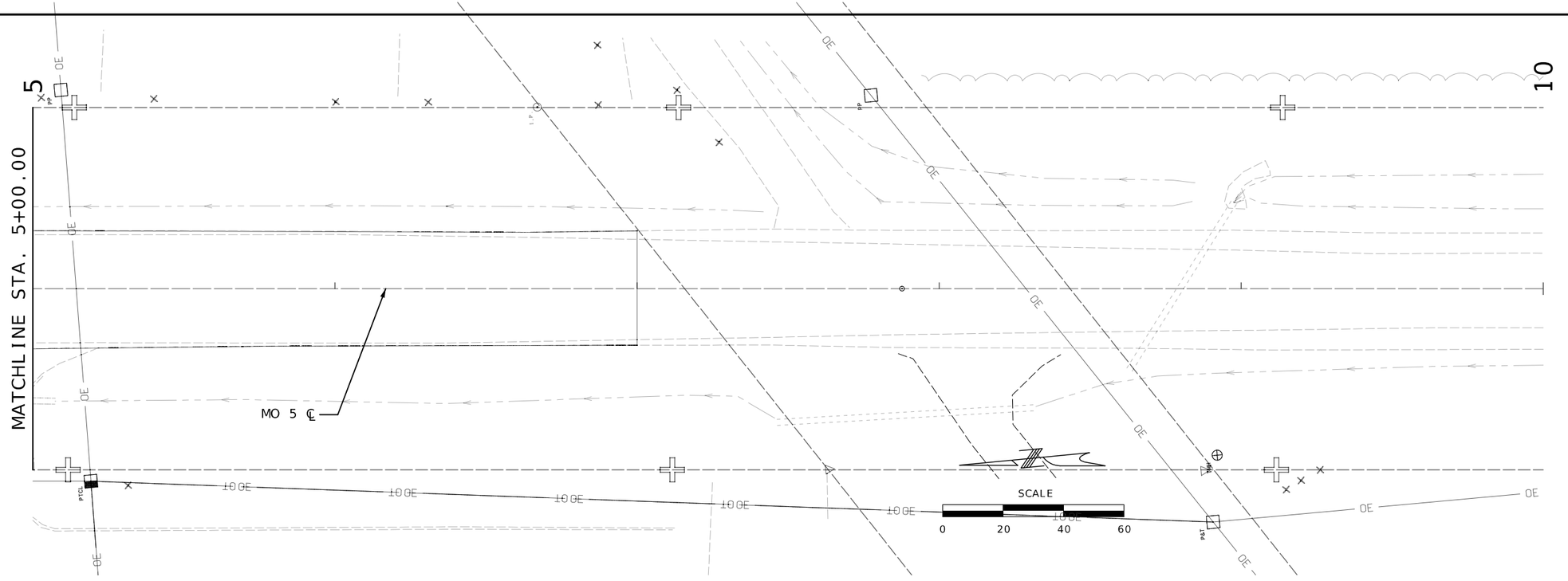
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL
MISSOURI ROUTE 5 & 52 ℄
SHEET 5 OF 6

NOTES:
(1) COOL SEASON SEEDING:
MO 5 ON RIGHT STA 0+80 TO STA 4+61 = 0.20 AC
MO 5 ON LEFT STA 0+80 TO STA 3+80 = 0.12 AC
(2) WARM SEASON SEEDING:
MO 5 ON RIGHT STA 0+80 TO STA 4+61 = 0.01 AC





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 6:17:07 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	74

COUNTY
MORGAN

JOB NO.
J5P3575

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)

EROSION CONTROL
MISSOURI ROUTE 5 ℄
SHEET 6 OF 6

TRAFFIC SIGNALS LEGEND

- CONTROLLER (EXISTING)
- WOOD POST (EXISTING)
- SIGNAL HEAD (EXIST.) (STANDARD)
- SPAN WIRE (EXISTING)

MO 5 & 52 ℄

SALVAGE EXISTING CONTROLLER UNIT.
STORE AT VERSAILLES MAINTENANCE SHED.

NEWTON ST. ℄

MO 52 ℄

MO 5 ℄

SCALE
0 10 20 30

EXISTING SPANWIRE SIGNAL SYSTEM REMOVAL

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:51:14 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	75

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

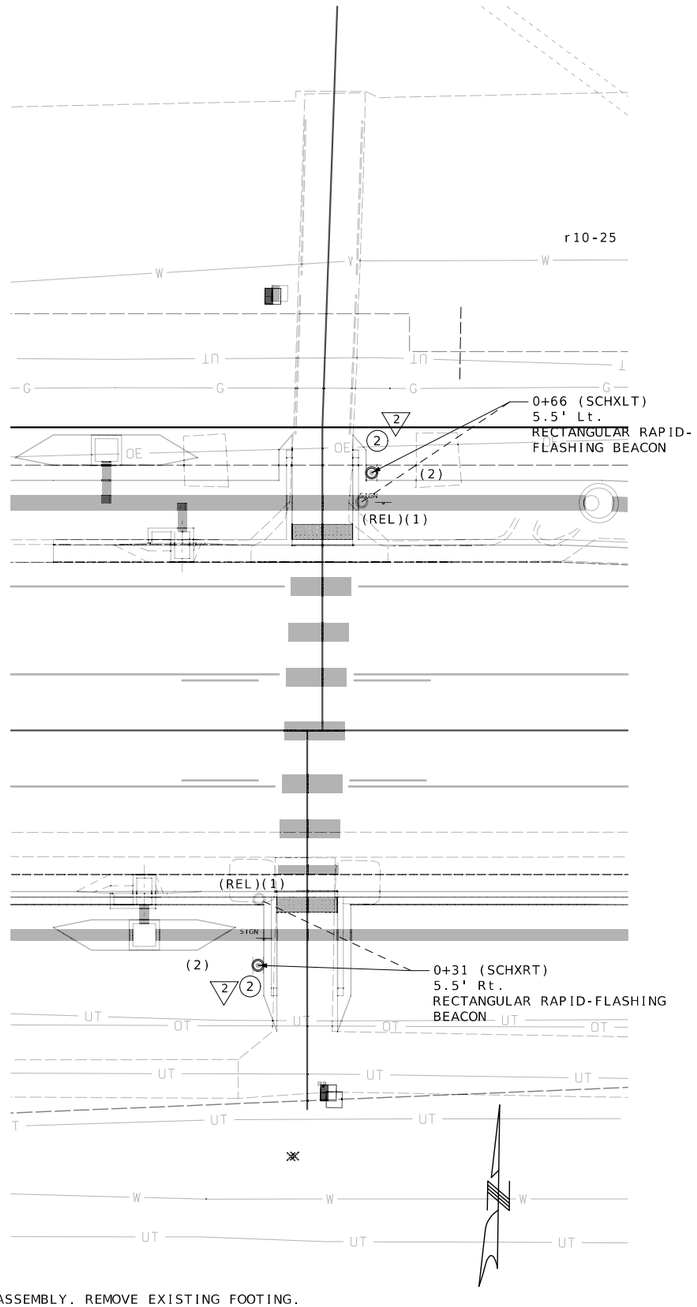
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

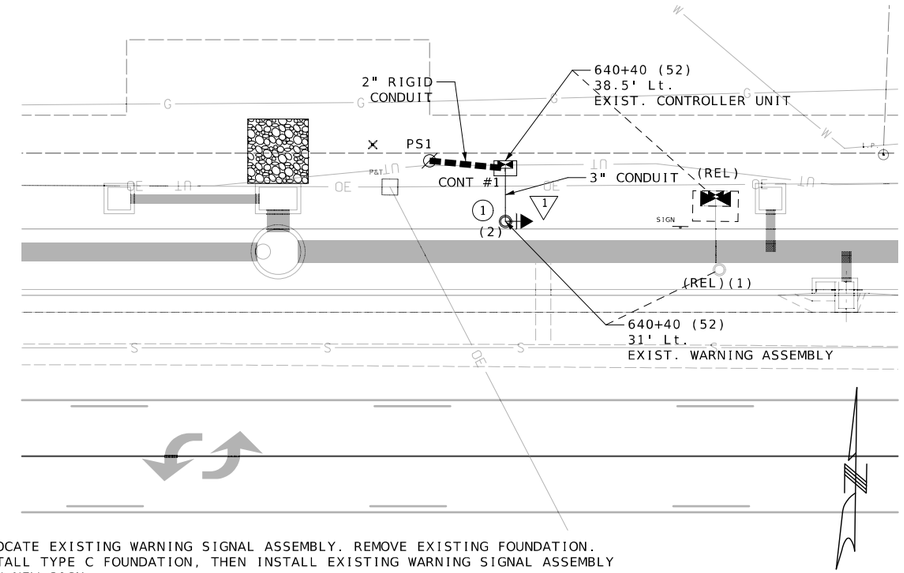
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HIGHWAY SIGNALS
ROUNDABOUT
SHEET 1 OF 3



NOTES:
(1) RELOCATE BEACON ASSEMBLY. REMOVE EXISTING FOOTING.
(2) CONSTRUCT NEW FOOTING FOR RELOCATED BEACON ASSEMBLY. SEE POST FOUNDATION DETAIL.
(3) EXISTING PEDESTRIAN WARNING LIGHTS OPERATE BY MEANS OF SOLAR POWERED RADIO TRANSCEIVERS. CONTACT THE CITY OF VERSAILLES PRIOR TO BEGINNING WORK. NO WORK TO BE DONE UNTIL SYSTEM IS POWERED DOWN.

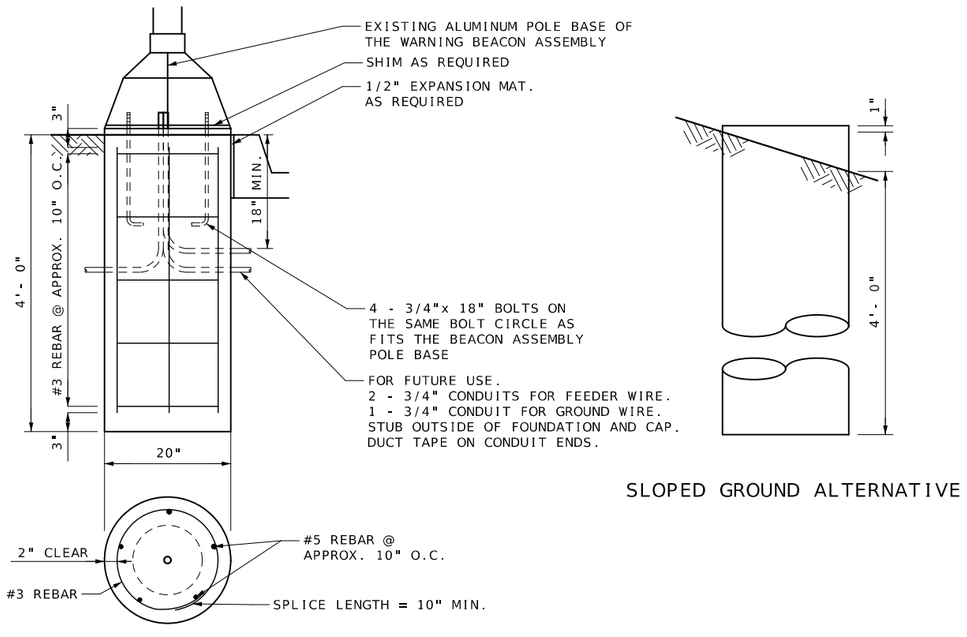
FLASHING PEDESTRIAN CROSSING BEACON AT MO 52 CROSSING



NOTES:
(1) RELOCATE EXISTING WARNING SIGNAL ASSEMBLY. REMOVE EXISTING FOUNDATION.
(2) INSTALL TYPE C FOUNDATION, THEN INSTALL EXISTING WARNING SIGNAL ASSEMBLY WITH NEW SIGN.

SCHOOL ZONE WARNING LIGHT ALONG MO 52 WESTBOUND

SCALE
0 10 20 30



FLAT GROUND ALTERNATIVE

SLOPED GROUND ALTERNATIVE

DETAIL - POST FOUNDATION

SCALE: 1" = 1'

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:51:04 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED	
3/14/2024	
ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	76
COUNTY	
MORGAN	
JOB NO.	
J5P3575	
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)

HIGHWAY SIGNALS
MO 52 DETAILS
SHEET 2 OF 3

EFFECTIVE: 04-01-2018

POWER SUPPLY - RELOCATE

LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
					CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
							SIGNALS	LIGHTING				
MO 52 RT.	640+30	38.75'	Type		15 Amps	15 Amps	45 Amps	Amps		Amps	Cl. Ft.	
			Type		15 Amps	Amps	Amps	Amps		Amps	Cl. Ft.	

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

RELOCATE EXISTING CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			FLASHING SIGNAL CONTROLLER
APPROACH	STATION	OFFSET	
MO 52 RT.	640+40	38.5'	1

REMARKS

ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED.

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

** SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES.

*** USE D3-16 FOR ONE LINE. USE D3-18 FOR TWO LINE.

SIGNAL STRUCTURES WHICH WILL EXCEED THE DIMENSION LIMITS SHOWN ON STANDARD PLAN SHEETS IN SECTION 902 AND ANY OTHER INSTALLATION WHERE THE DETAILS OF CONSTRUCTION ARE NOT FURNISHED IN THE CONTRACT PLANS, SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION, AND LATEST INTERIMS. THE STRUCTURE SHALL BE DESIGNED AS IMPORTANCE CATEGORY I FOR FATIGUE WITH A 50-YEAR DESIGN LIFE. THE CONTRACTOR SHALL SUBMIT A SET OF SHOP DETAIL DRAWINGS INCLUDING WELD PROCEDURE SPECIFICATIONS AND DESIGN COMPUTATIONS FOR MODOT RECORDS AND REFERENCE. THE SUBMITTED DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED IN ACCORDANCE WITH THE LAWS RELATING TO ARCHITECTS AND PROFESSIONAL ENGINEERS (CHAPTER 327, RSMO.), AND SHALL INCLUDE A TITLE BLOCK OR SUMMARY SHEET WHICH LISTS AND CERTIFIES THAT THE PRODUCT MEETS ALL OF THE SPECIFIED DESIGN CRITERIA.

LEGEND

T - TOP MOUNT
S - SIDE MOUNT
C - SPANWIRE MOUNT
B - MAST ARM MOUNT

CONDUIT (WITH #14 TRACER WIRE)

FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET.	TRENCH				PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"		2"	3"	4"	2"	3"	4"	2"	3"		
∅	⋈	10		22													
⋈	①	7			15												INCLUDES ALL MOUNTING & CONNECTION HARDWARE
①	▽	0													9		
SUBTOTALS				22	15										9		
TOTALS				22	15										9		

CABLE

FROM	TO	CENTER TO CENTER DISTANCE	POWER		CONTROL				CLOSED LOOP INTERCONNECT	LUMINAIRE		DETECTOR		FIBER		REMARKS
			1c #8	1c #2	2c #8	5c #16	7c #16	3c #16	3 PAIR #16	CONTROL 2c #12	POLE & BRACKET 1c #10	1c #14 IN DUCT	2c #14 LEAD-IN CABLE	SINGLE-MODE	MULTI-MODE	
∅	⋈	10		52												2 - 26' RUNS
⋈	▽	7	48													2 - 24' RUNS
SUBTOTALS			48	52												
TOTALS			50	60												

RELOCATE EXISTING SIGNAL HEADS

LOCATION		
APPROACH	STATION	SIGNAL HEAD NUMBER
MO 52 RT.	640+40	1
MO 52 RT.	0+66 (SCHXLT)	2
MO 52 LT.	0+31 (SCHXRT)	3

POST FOUNDATION

LOCATION			
APPROACH	STATION	CLASS B CONCRETE (CY)	REINFORCED STEEL (LBS)
MO 52 RT.	640+40	0.49	64
MO 52 RT.	0+66 (SCHXLT)	0.49	64
MO 52 LT.	0+31 (SCHXRT)	0.49	64
	SUBTOTALS	1.47	192
	TOTALS	2.0	200

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/20/2024 12:53:00 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

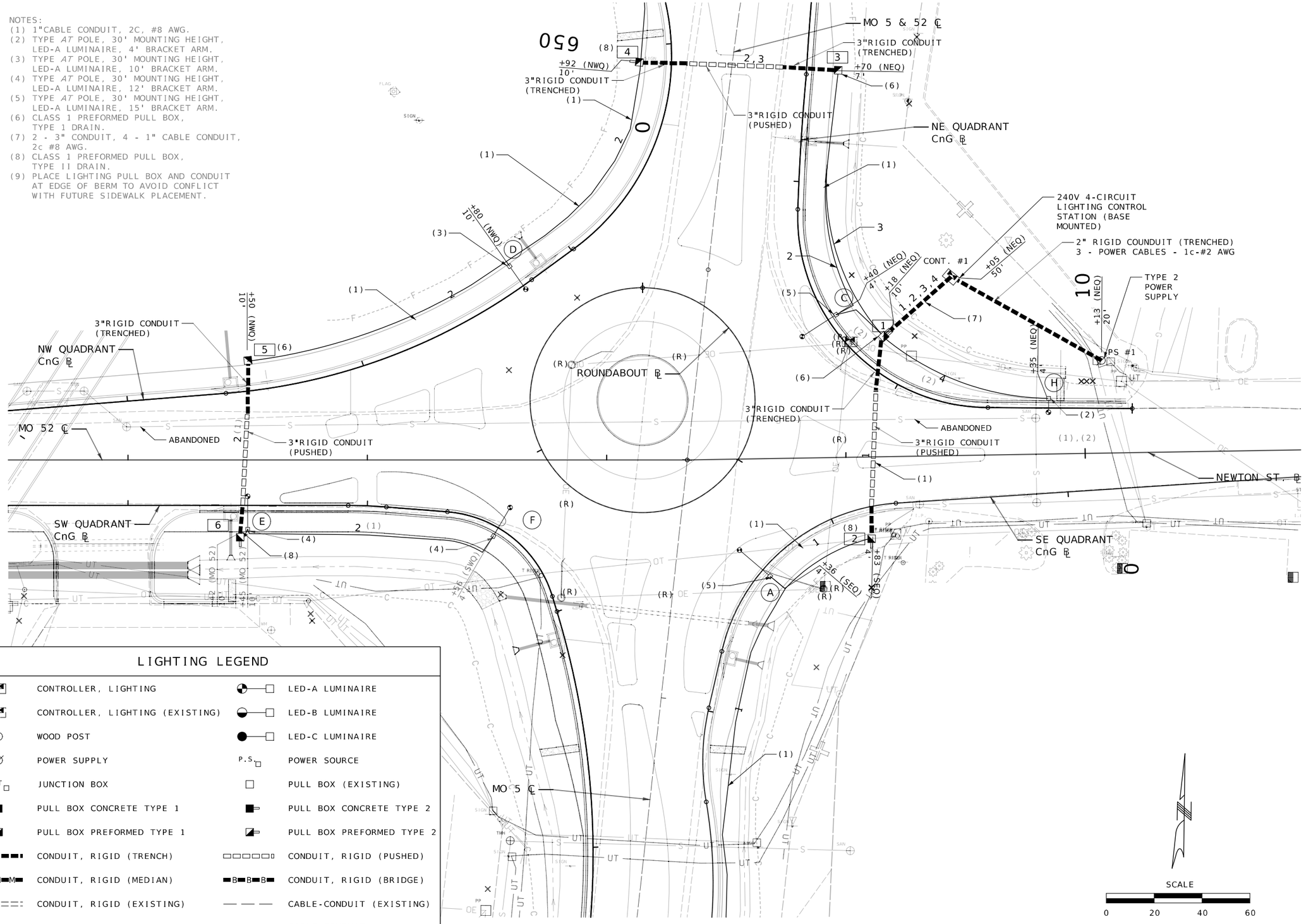
DATE PREPARED: 3/20/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 77
COUNTY: MORGAN
JOB NO.: J5P3575
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

HIGHWAY SIGNALS
SIGNAL QUANTITIES
SHEET 3 OF 3

NOTES:
(1) 1"CABLE CONDUIT, 2C, #8 AWG.
(2) TYPE AT POLE, 30' MOUNTING HEIGHT, LED-A LUMINAIRE, 4' BRACKET ARM.
(3) TYPE AT POLE, 30' MOUNTING HEIGHT, LED-A LUMINAIRE, 10' BRACKET ARM.
(4) TYPE AT POLE, 30' MOUNTING HEIGHT, LED-A LUMINAIRE, 12' BRACKET ARM.
(5) TYPE AT POLE, 30' MOUNTING HEIGHT, LED-A LUMINAIRE, 15' BRACKET ARM.
(6) CLASS 1 PREFORMED PULL BOX, TYPE 1 DRAIN.
(7) 2 - 3" CONDUIT, 4 - 1" CABLE CONDUIT, 2c #8 AWG.
(8) CLASS 1 PREFORMED PULL BOX, TYPE II DRAIN.
(9) PLACE LIGHTING PULL BOX AND CONDUIT AT EDGE OF BERM TO AVOID CONFLICT WITH FUTURE SIDEWALK PLACEMENT.



LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

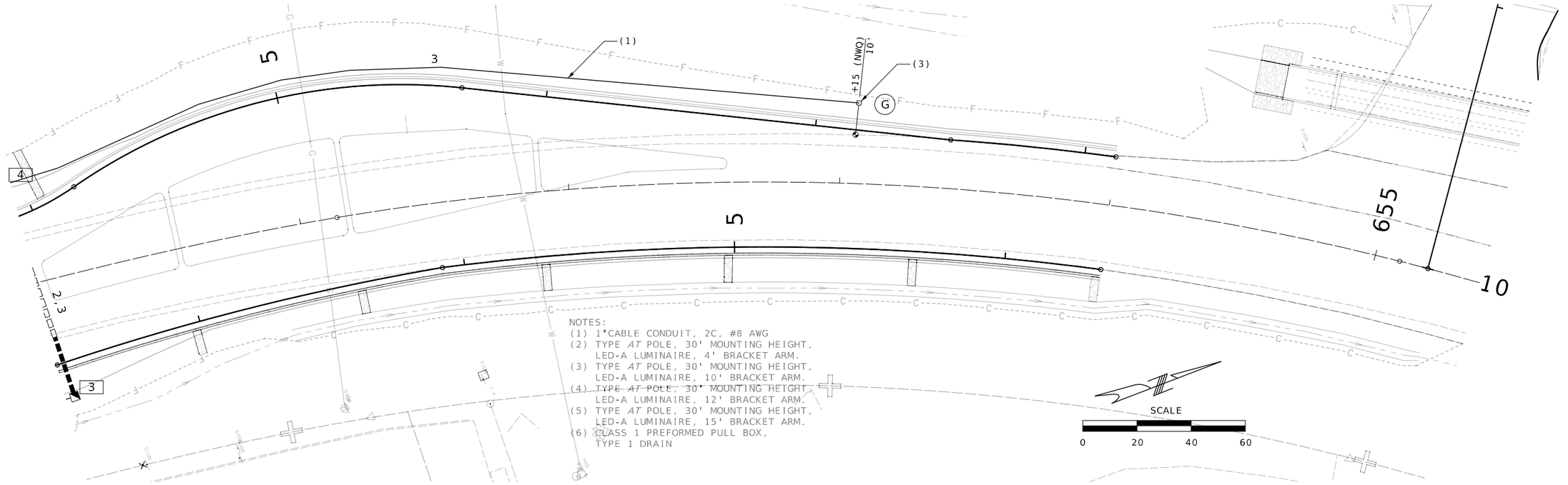
STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 6:18:44 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

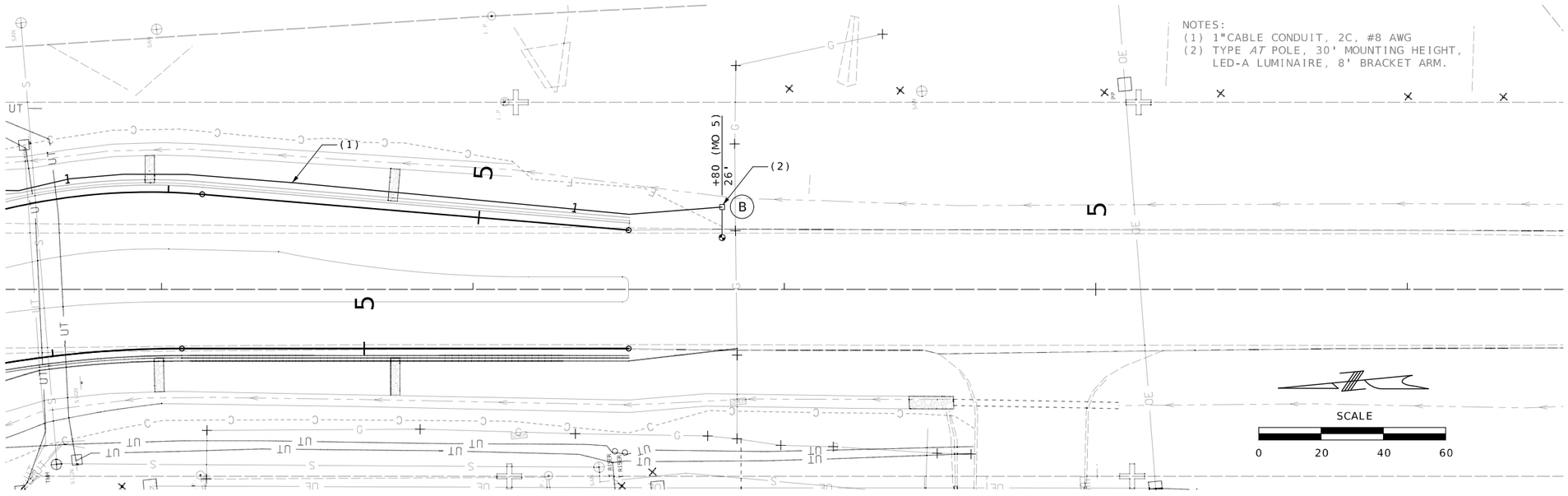
DATE PREPARED: 3/15/2024
ROUTE: 52 | STATE: MO
DISTRICT: CD | SHEET NO.: 78
COUNTY: MORGAN
JOB NO.: J5P3575
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

HIGHWAY LIGHTING ROUNDABOUT SHEET 1 OF 2





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER

03/14/2024 4:50:26 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	79

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

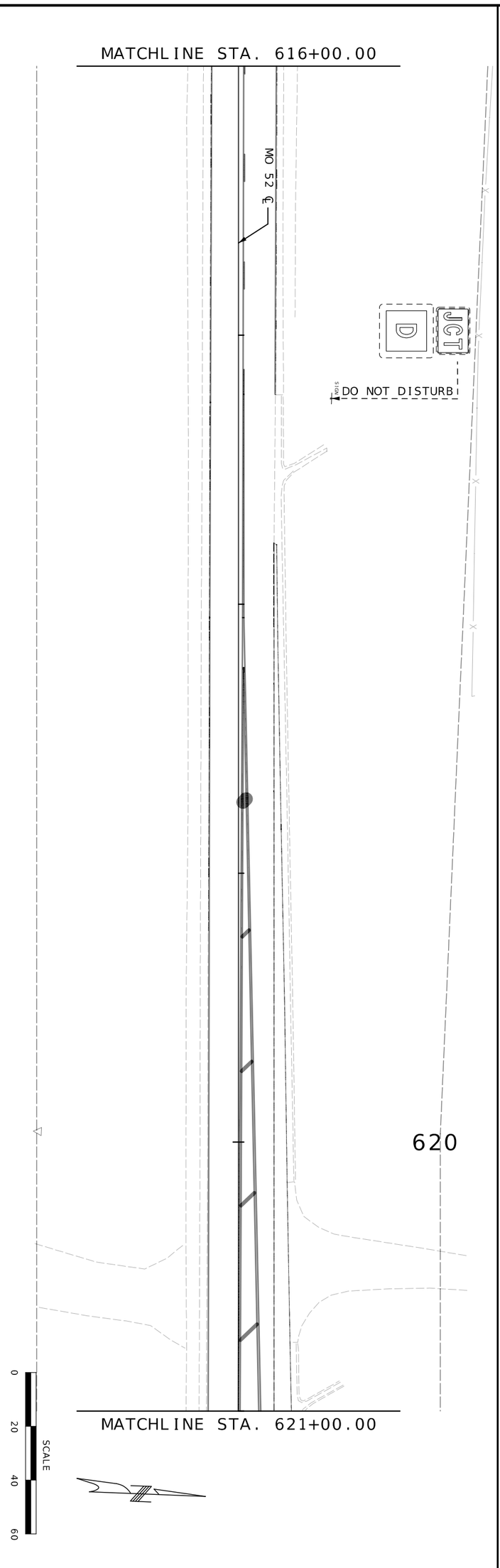
BRIDGE NO.

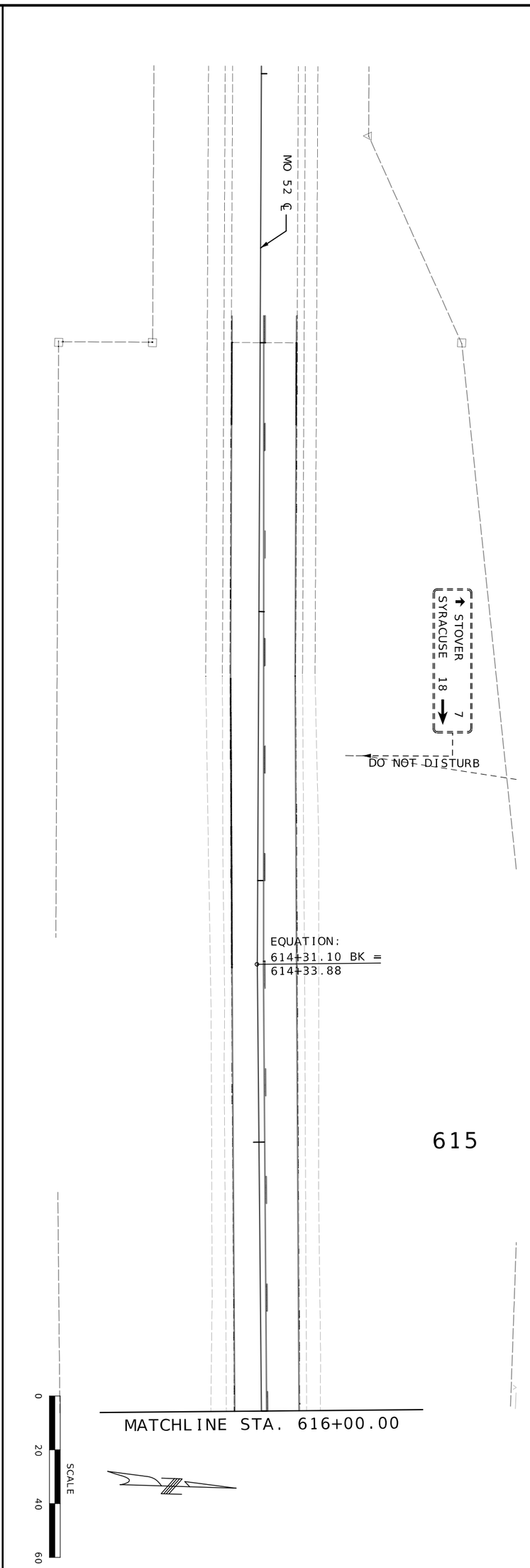
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HIGHWAY LIGHTING
MO 5 & 52 ℄, MO 5 ℄
SHEET 2 OF 2





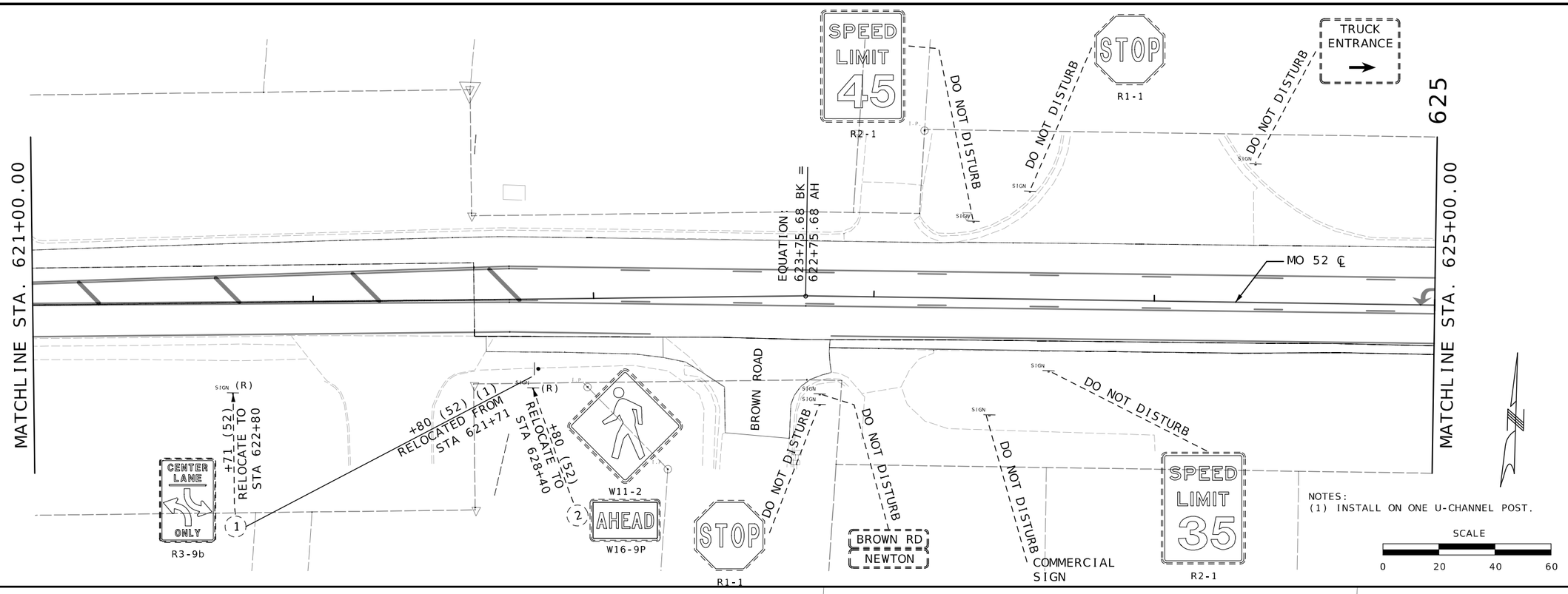
HIGHWAY SIGNAGE
MISSOURI ROUTE 52 ℄
SHEET 1 OF 15

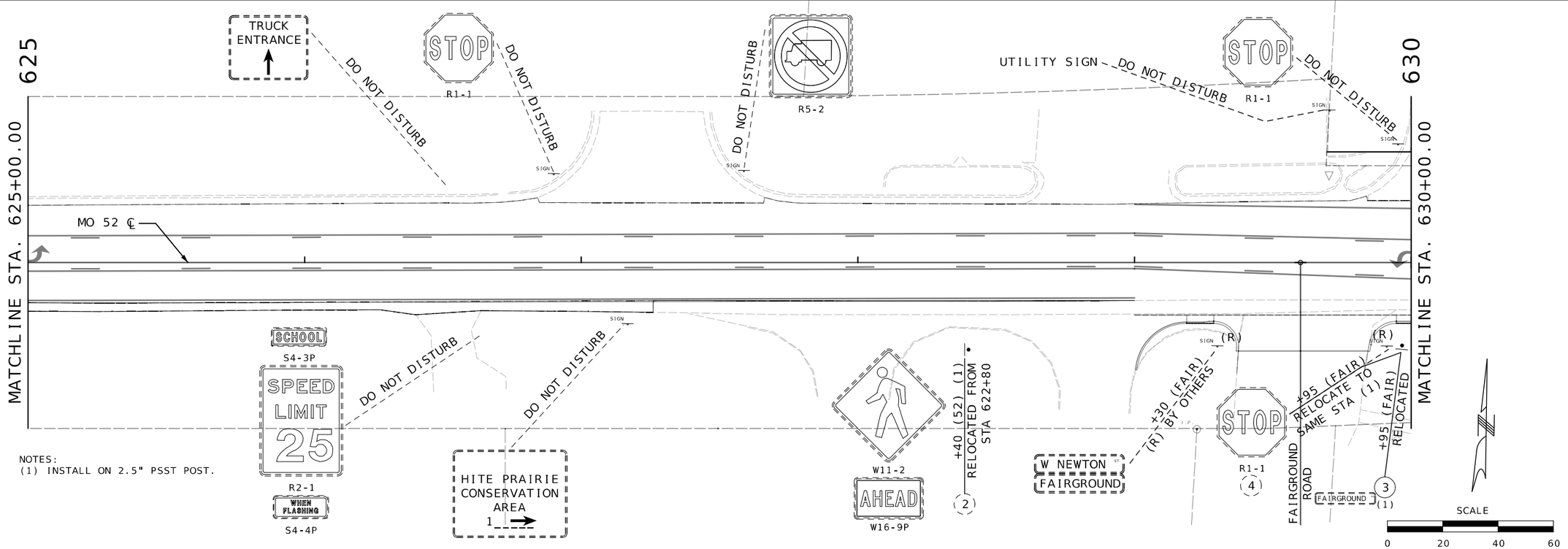
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
CONTRACT ID. JSP3575
JOB NO.
COUNTY MORGAN
DISTRICT CD
SHEET NO. 80
ROUTE 52
STATE MO
DATE PREPARED 3/14/2024

STATE OF MISSOURI
RYAN JOSEPH LIEBERT
NUMBER PE-2009019879
PROFESSIONAL ENGINEER
RYAN JOSEPH LIEBERT PE-2009019879
MO-PE-2009019879





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:53:11 PM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	81

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

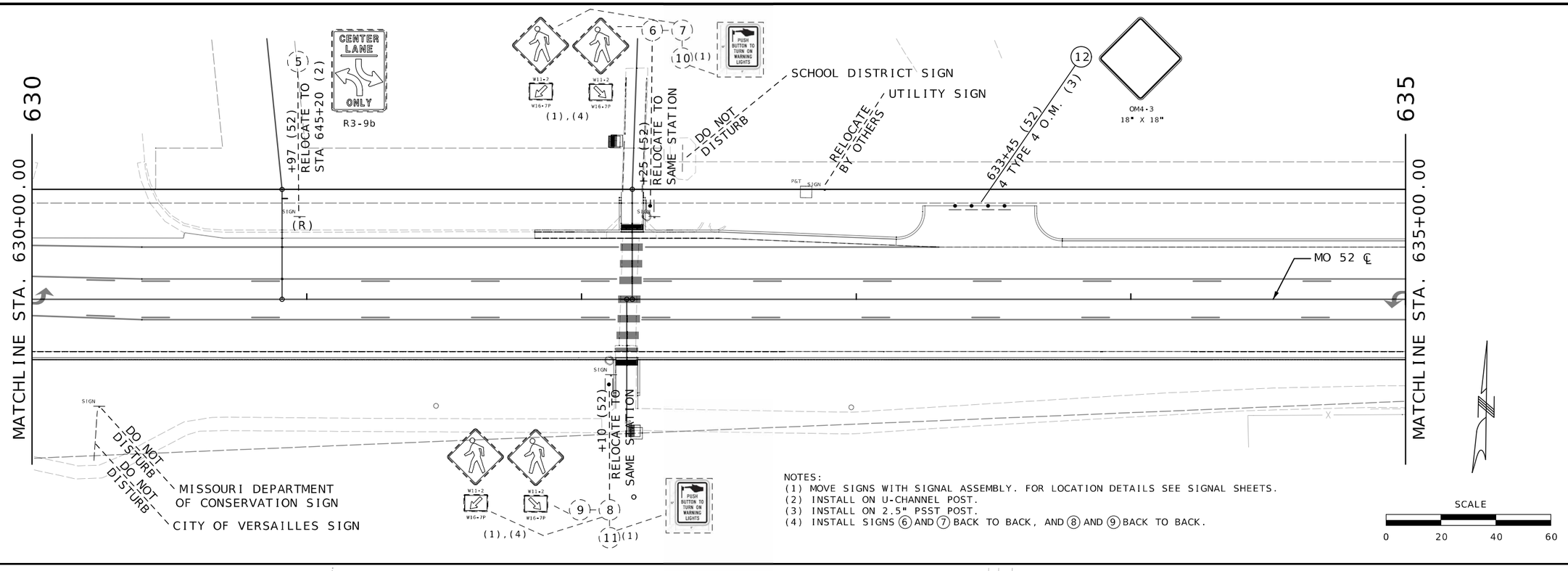
PROJECT NO.

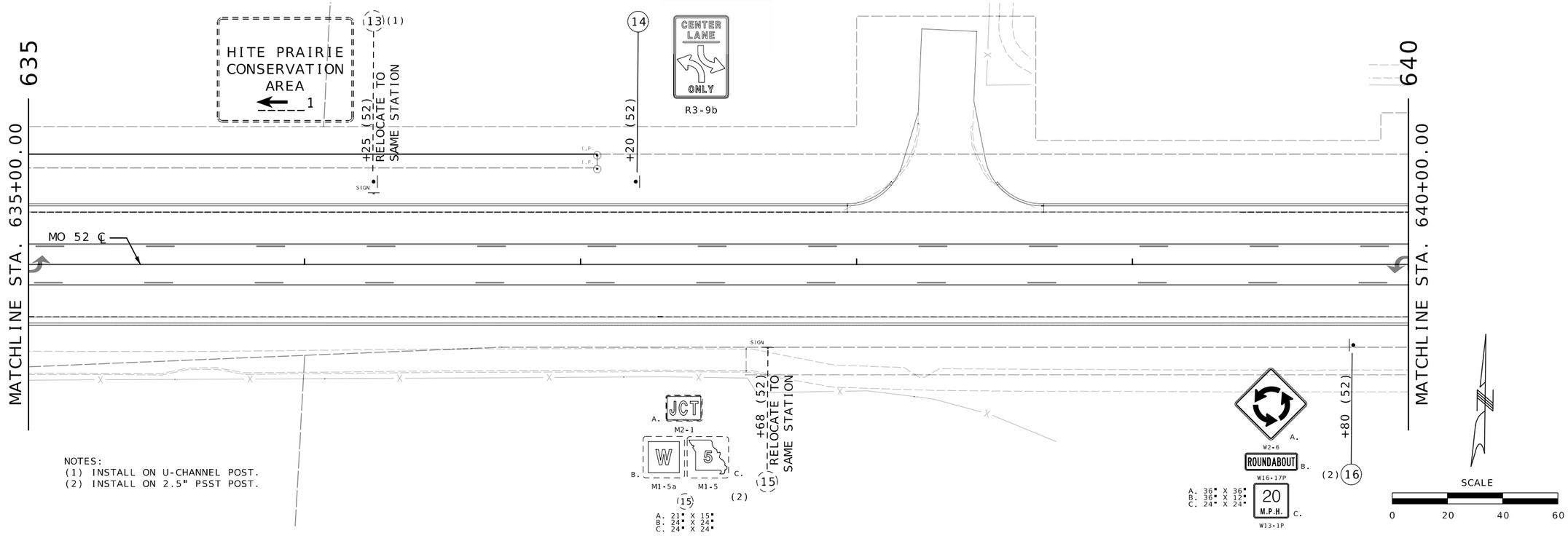
BRIDGE NO.

DATE	DESCRIPTION

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

HIGHWAY SIGNAGE
MISSOURI ROUTE 52 ℄
SHEET 2 OF 15





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:53:29 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	82

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

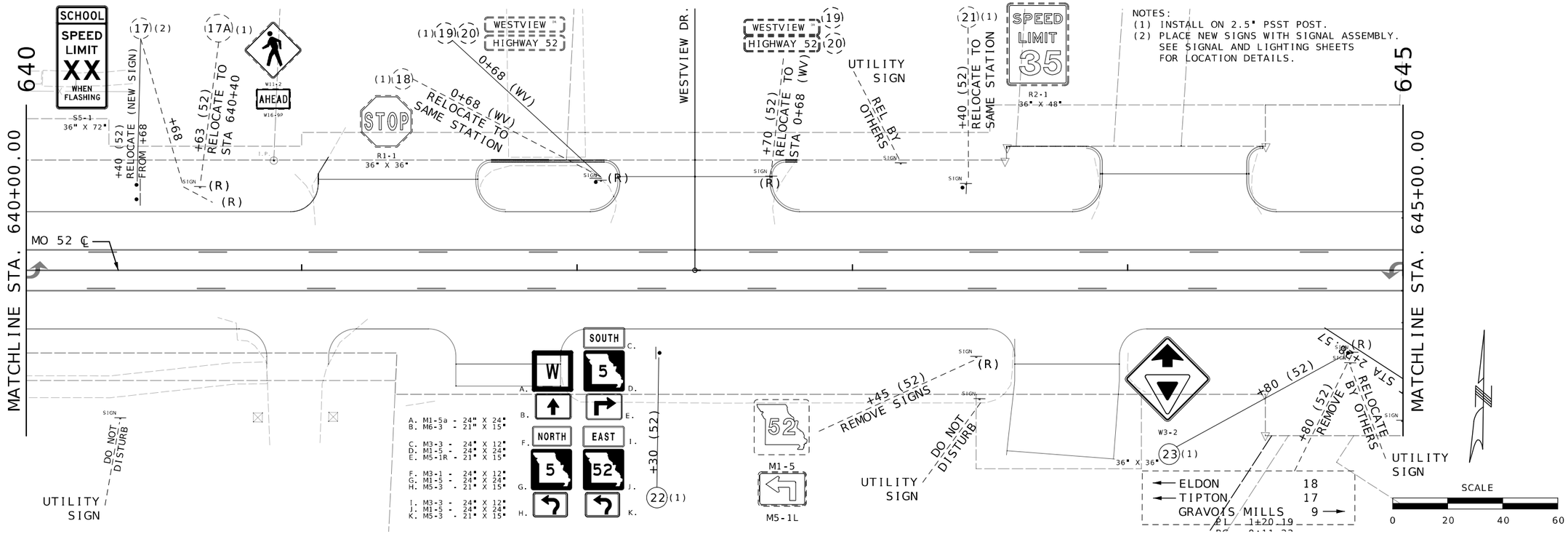
BRIDGE NO.

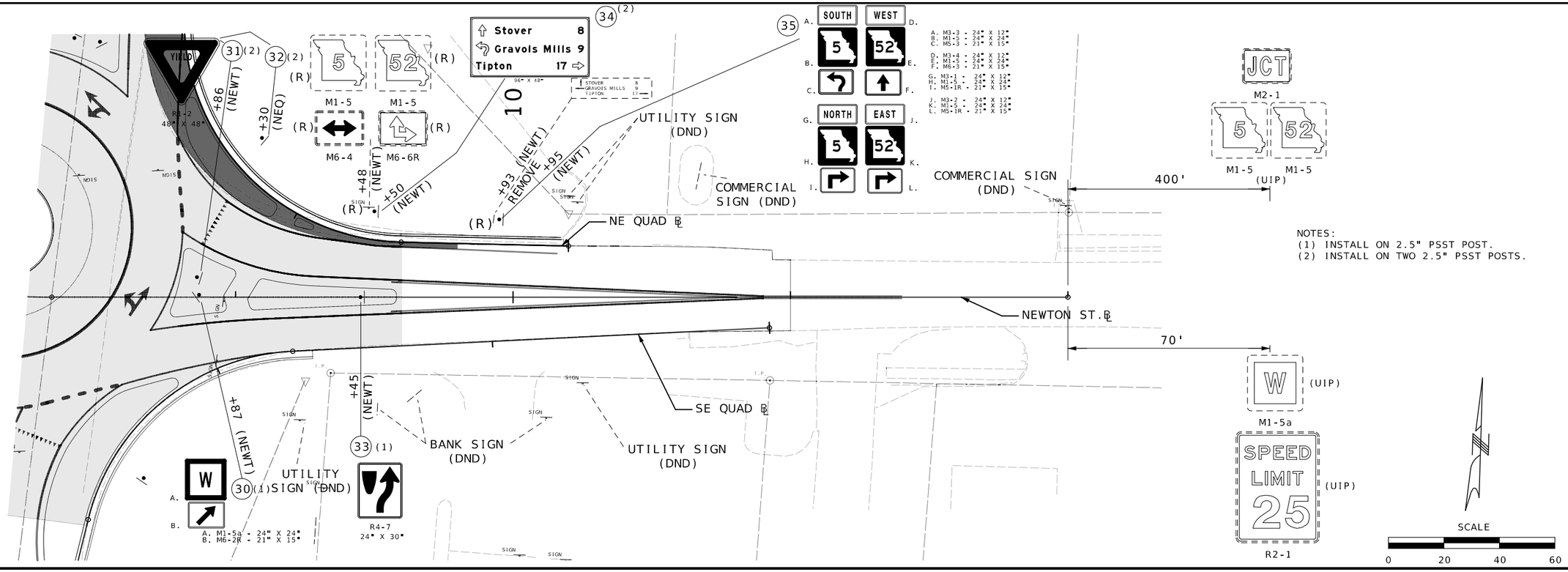
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HIGHWAY SIGNAGE
MISSOURI ROUTE 52 ℄
SHEET 3 OF 15





NOTES:
(1) INSTALL ON 2.5" PSST POST.
(2) INSTALL ON TWO 2.5" PSST POSTS.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:53:54 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	83

COUNTY
MORGAN

JOB NO.
J5P3575

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)

HIGHWAY SIGNAGE
MISSOURI ROUTE 52 ℄
SHEET 4 OF 15

MO 5/52 ℄

MATCHLINE STA. 645+00.00

645

NWQUAD ℄

MO 52 ℄

SWQUAD ℄

NEWTON ℄

MO 5 ℄

SIGN

CENTER LANE ONLY
R3-9b
24" X 36"

(5)
(1)
+20 (52)
RELOCATE FROM
STA 630+97

+92 (52)
RELOCATE TO
STA +50 (NWQ)

N32°14'42"E

(24)(2)
+50 (NWQ)
RELOCATE FROM
STA 645+92 (52)

WEST
A. M3-4 - 24" X 12"
B. M1-5 - 24" X 24"
A.
B.
52

R4-7
24" X 30"
(26)(2)
+87 (52)
13.6' Lt.

YIELD
R1-2
48" X 48"
(29)(3)
+42 (52)
22' Lt.

A. M3-4 - 24" X 12"
B. M1-5 - 24" X 24"
C. M6-2R - 21" X 15"
A.
B.
C.
WEST
52
(28)(2)
+40 (52)
28' Lt.

ONE WAY
R6-1R
36" X 12"
R6-4
30" X 24"
(61)(2)
+09 (52)
38' Lt.

ONE WAY
R6-1R
36" X 12"
R6-4
30" X 24"
(60)(2)
+25 (52)
35' Lt.

(4)
(R)
(5)
(R)
(R)
(4)
(R)
(5)
(R)
(4)
(R)
(5)
(R)
(4)
(R)
(5)

(25)(3)
+30 (52)

Tipton 17
Eldon 18
Gravois Mills 9
96" X 48"

DO NOT DISTURB

+84 (52)
REMOVE

M6-3

COMMERCIAL SIGN

M1-5a
52
5

M1-5
M6-1

M1-5
M6-4

YIELD
(3)
R1-2
48" X 48"
+35 (SWQ)
(27)(3)

+05 (52)
13' Lt.

ONE WAY
R6-1R
36" X 12"
R6-4
30" X 24"
(62)(2)

COMMERCIAL SIGN

(63)(2)
+25 (52)
13' Lt.

ONE WAY
R6-1R
36" X 12"
R6-4
30" X 24"

MO 5 ℄

NOTES:
(1) INSTALL ON U-CHANNEL POST.
(2) INSTALL ON 2.5" PSST POST.
(3) INSTALL ON TWO 2.5" PSST POSTS.
(4) REMOVE STREETNAME SIGN FROM SPANWIRE.
(5) REMOVE "LEFT TURN SIGNAL" SIGN FROM SPANWIRE.

SCALE
0 20 40 60

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:54:13 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	84

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

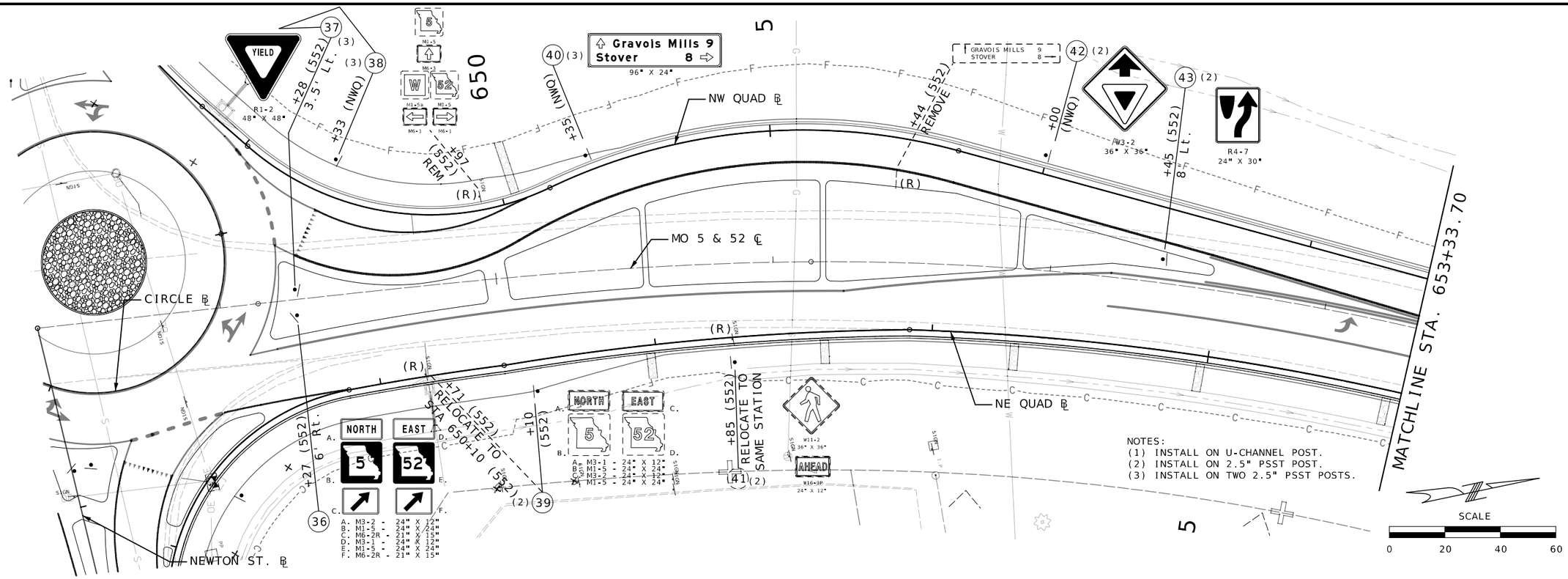
BRIDGE NO.

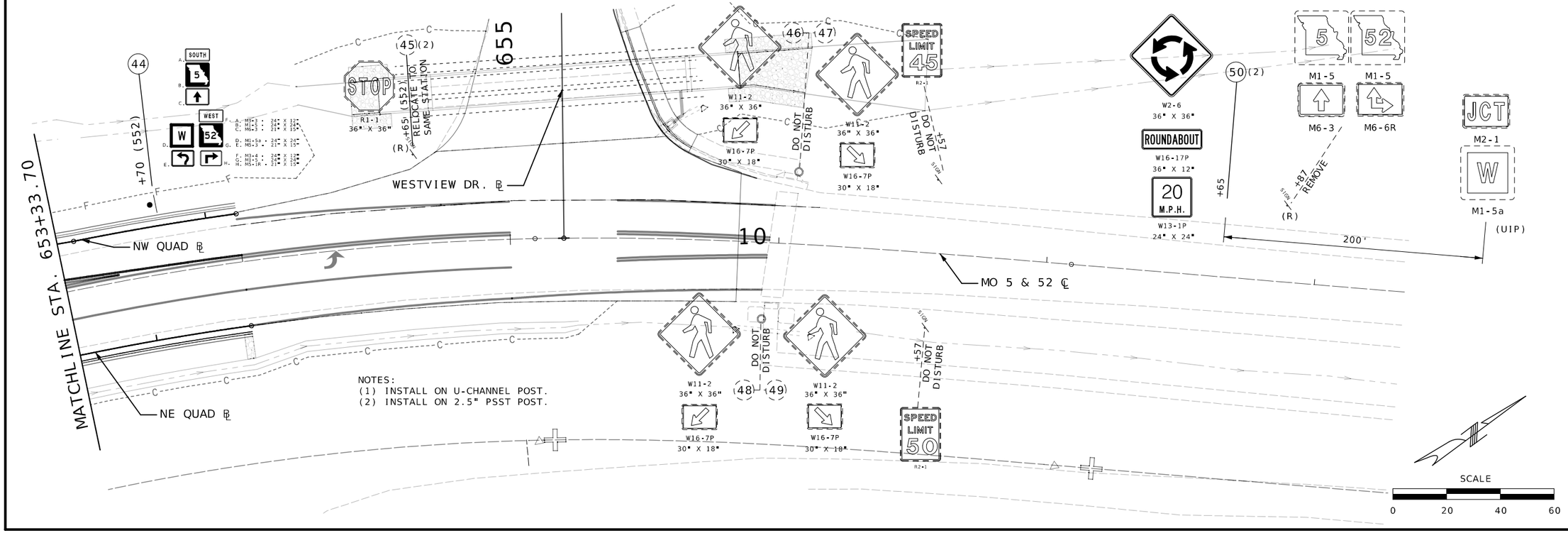
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HIGHWAY SIGNAGE
MISSOURI ROUTE 52 ℄
SHEET 5 OF 15





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:54:35 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	85

COUNTY
MORGAN

JOB NO.
J5P3575

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)

HIGHWAY SIGNAGE
MISSOURI ROUTE 5/52 ℄
SHEET 6 OF 15

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:54:55 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	86

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

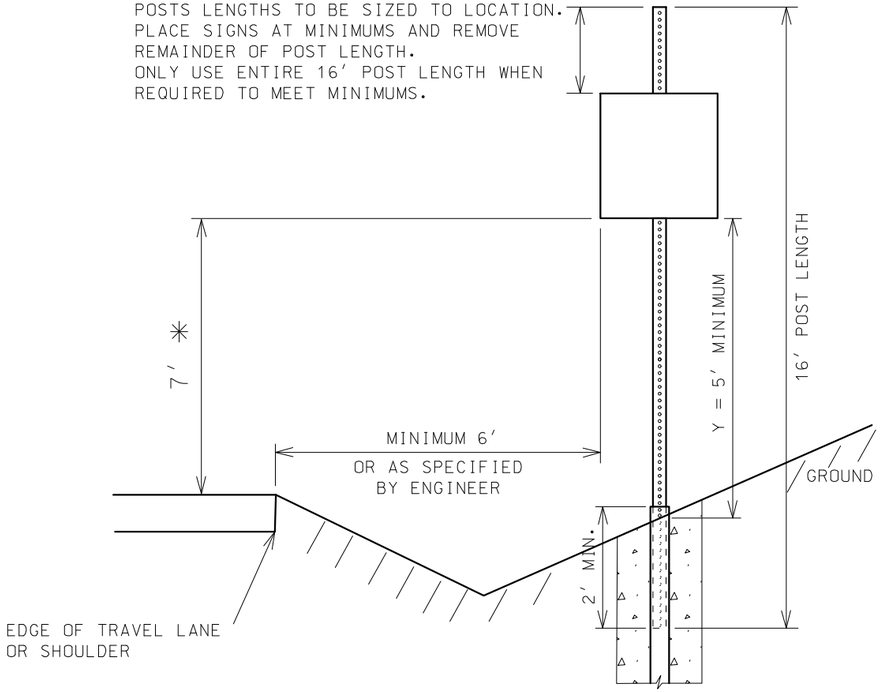
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HIGHWAY SIGNAGE
MISSOURI ROUTE 5 ℄
SHEET 7 OF 15

MOUNTING HEIGHT DETAIL



SEE STANDARD PLANS 903.03 FOR INSTALLATION DETAILS

POSTS – 12 GAUGE – 2.5″ X 2.5″

ANCHORS – 7 GAUGE – 3″ X 3″ O.D.

BREAKAWAY – CERTIFIED NCHRP 350 COMPLIANT
USE REQUIRED FOR DOUBLE POST
INSTALLATIONS ONLY

GALVANIZATION – ALL PSST POSTS, ANCHORS AND
BREAKAWAY CASTINGS SHALL BE
GALVANIZED PER MoDOT STANDARD
SPECIFICATIONS

NOT TO SCALE

✳ 7′ MINIMUM REQUIRED IN URBAN APPLICATIONS AND PREFERRED IN RURAL APPLICATIONS.
IN RURAL APPLICATIONS ONLY – IN SITUATIONS WHERE THE 7′ MINIMUM CAN
NOT BE ATTAINED WITH A 16′ PSST A RANGE OF 5′– 7′ CAN BE USED AS
LONG AS DISTANCE "Y" IS ALSO MAINTAINED.

NOTE: PERFORATED SQUARE STEEL TUBE (PSST) POSTS ARE PAID AS 16 LINEAR FOOT, CONTRACTOR
IS RESPONSIBLE TO PROPERLY PLACE SIGN AS SHOWN ABOVE IN "MOUNTING HEIGHT DETAIL"

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:55:18 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	87

COUNTY
MORGAN

JOB NO.
J5P3575

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)

HIGHWAY SIGNAGE
2.5" PSST POST DETAILS
SHEET 8 OF 15

EFFECTIVE: 07-01-2022

SIGNS

902 SIGNAL SIGNS TABULATED ON D-37A SHEET

SIGN OR SET NO.	SIGN SIZE	STATION	HORZ CLEAR IF NOT STD	LOCATION	SIGN DTL. SHT. NO.
1	24"X36"	622+80		MO 52 RT.	
2	36"X36"	628+40		MO 52 RT.	
	24"X12"				
3		629+95		FAIR LT.	
4	36"X36"	629+95		FAIR LT.	
5	24"X36"	645+20		MO 52 RT.	
6	36"X36"	632+25		MO 52 LT.	
	30"X18"				
7	36"X36"	632+25		MO 52 LT.	
	30"X18"				
8	36"X36"	632+10		MO 52 RT.	
	30"X18"				
9	36"X36"	632+10		MO 52 RT.	
	30"X18"				
10	9"X12"	632+25		MO 52 LT.	
11	9"X12"	632+10		MO 52 RT.	
12	18"X18"	633+55		MO 52 LT.	
	18"X18"				
	18"X18"				
	18"X18"				
13		636+25		MO 52 LT.	
14	24"X36"	637+20		MO 52 LT.	
15	21"X15"	642+30		MO 52 RT.	
	24"X24"				
	24"X24"				
16	36"X36"	639+80		MO 52 RT.	
	36"X12"				
	24"X24"				
17	36"X72"	640+40		MO 52 LT.	
17A	36"X36"	640+40		MO 52 LT.	
	24"X12"				
18	36"X36"	0+68		WV LT.	
19		0+68		WV LT.	
20		0+68		WV LT.	
21	36"X48"	643+40		MO 52 LT.	
22	24"X24"	644+30		MO 52 RT.	
	21"X15"				
	24"X12"				
	24"X24"				
	21"X15"				
	24"X12"				
	24"X24"				
	21"X15"				
	24"X12"				
	24"X24"				
	21"X15"				
23	36"X36"	644+80		MO 52 RT.	
24	24"X12"	1+50		NWQ LT.	
	24"X24"				
25	96"X48"	646+30		MO 52 RT.	1
26	24"X30"	646+87		MO 52 LT.	
27	48" TRI	2+35		SWQ LT.	
28	24"X12"	647+40		MO 52 LT.	
	24"X24"				
	21"X15"				
29	48" TRI	647+42		MO 52 LT.	
30	24"X12"	0+87		NEWT	
	24"X24"				
31	48" TRI	0+86		NEWT LT.	
32	48" TRI	0+30		NEQ LT.	
				SUBTOTAL	
				TOTAL 1	

CONCRETE FOOTINGS EMBEDDED	STRUCTURAL STEEL POSTS *						PIPE POSTS *					BACKING BARS **					U-CHANNEL POST
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	2" X 3/8" BARS @ 2.55 LBS PER FT NO. EACH	LGTH	TOTAL	TOTAL		ITEM NO. 9031250A
CY		LF	LF	LF		LBS	IN.	LF	LF		LBS		IN.	LF	LBS		LF
																	16
																	16

EFFECTIVE: 07-01-2022

SIGNS						CONCRETE FOOTINGS EMBEDDED	STRUCTURAL STEEL POSTS *						PIPE POSTS *					BACKING BARS **				U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE											REMARKS AND OTHER REQUIRED ITEMS
902 SIGNAL SIGNS TABULATED ON D-37A SHEET																							2 IN. POST						2.5 IN. POST						BREAK-AWAY ASSEMBLY	
																										ANCHORS					ANCHORS			
SIGN OR SET 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	
33	24"X30"	1+45		NEWT																									16		16			1	1	
34	96"X48"	1+50		NEWT LT.	1																								15.5	15.5	31			2	2	
35	24"X12"	1+95		NEWT LT.		0.36							4	23.5		10.79	253.56	12	50	50	127.5															
	24"X24"																																			
	21"X15"																												16		16		1			
	24"X12"																																			
	24"X24"																																			
	21"X15"																																			
	24"X12"																																			
	24"X24"																																			
	21"X15"																																			
	24"X12"																																			
	24"X24"																																			
	21"X15"																																			
36	24"X12"	649+27		MO 5/52 RT.														6	50	25	63.75								16		16			1	1	
	24"X24"																																			
	21"X15"																																			
	24"X12"																																			
	24"X24"																																			
	21"X15"																																			
37	48" TRI	649+28		MO 5/52 RT.																									16	16	32			2	2	
38	48" TRI	3+33		NWQ LT.																									16	16	32			2	2	
39	24"X12"	650+10		MO 5/52 RT.		0.36							4	17.75		10.79	191.52	4	50	16.7	42.59															SIGN RELOCATED FROM 649+71 MO 52 LT.
	24"X24"																																			
	24"X12"																																			
	24"X24"																																			
40	96"X24"	4+35		NWQ LT.	1																								16	16	32			2	2	
41	36"X36"	650+85		MO 5/52 RT.																									16		16			1	1	EXIST. SIGNS ON NEW POST
	24"X12"																																			
42	36"X36"	6+00		NWQ LT.																									16		16			1	1	
43	24"X30"	652+45		MO 5/52 LT.																									16		16			1	1	
44	24"X12"	653+70		MO 5/52 LT.		0.36							4	28		10.79	302.12	6	50	25	63.75															
	24"X24"																																			
	21"X15"																																			
	24"X24"																																			
	21"X15"																																			
	24"X12"																																			
	24"X24"																																			
	21"X15"																																			
45	36"X36"	654+65		MO 5/52 LT.																									16		16			1	1	EXIST. SIGN ON NEW POST
50	36"X36"	657+65		MO 5/52 LT.																									16		16			1	1	
	36"X12"																																			
	24"X24"																																			
51	48" TRI	0+50		MO 5 RT.																									16	16	32			2	2	
52	24"X12"	0+52		MO 5 RT.																									16		16			1	1	
	24"X24"																																			
	21"X15"																																			
53	48" TRI	2+50		SEQ LT.																									16	16	32			2	2	
54	72"X48"	3+50		SEQ LT.	1																								16.5	15.75	32.25			2	2	
55	24"X12"	2+40		MO 5 RT.																									16		16			1	1	SIGN RELOCATED FROM 1+74 MO 5 RT.
	24"X24"																																			
56	36"X36"	3+45		MO 5 LT.																									16		16			1	1	
57	24"X30"	3+45		MO 5																									16		16			1	1	
				SUBTOTAL		1.08											747.2				297.6											415.3	0	1	25	25	
				TOTAL 2		1.08											1045				**											416	0	1	25	25	

SEE SHEET X FOR STRUCTURAL STEEL AND PIPE POST NOTES AND DATA TABLES.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:59:13 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	89

COUNTY
MORGAN

JOB NO.
J5P3575

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)

HIGHWAY SIGNAGE
POST QUANTITIES
SHEET 10 OF 15

EFFECTIVE: 07-01-2022

SIGNS						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
902 SIGNAL SIGNS TABULATED ON D-37A SHEET																							2 IN. POST						2.5 IN. POST							
																										ANCHORS						ANCHORS			
SIGN OR SET 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	2" X 3/8" BARS @ 2.55 LBS PER FT 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	
58	24"X12"	5+50		MO 5 LT.		0.36							4	24.5		10.79	264.36	10	50	41.7	106.3																
	24"X24"																	2	25	4.2	10.7																
	21"X15"																																				
	24"X12"																																				
	24"X24"																																				
	21"X15"																																				
	24"X12"																																				
	24"X24"																																				
	21"X15"																																				
	24"X24"																																				
	21"X15"																																				
59	36"X36"	7+40		MO 5 LT.																									16		16			1	1	
	36"X12"																																				
	24"X24"																																				
60	36"X12"	648+25		MO 52 LT.																									16		16		1			
	30"X24"																																				
61	36"X12"	648+09		MO 52 LT.																									16		16		1			
	30"X24"																																				
62	36"X12"	648+05		MO 52 LT.																									16		16		1			
	30"X24"																																				
63	36"X12"	648+25		MO 52 LT.																									16		16		1			
	30"X24"																																				

SEE SHEET X FOR STRUCTURAL STEEL AND PIPE POST NOTES AND DATA TABLES.	SUBTOTAL	0.36		0			264.4		117	0		0	0	0	0		80	0	4	1	1														
	TOTAL 3	0.36		0			382		**	0		0	0	0	0		80	0	4	1	1														
	TOTAL 1	0.36		0			371		117	64		0	0	0	0		451	0	12	16	16														
	TOTAL 2	1.08		0			1045		297.6	0		0	0	0	0		416	0	1	25	25														
	TOTAL 3	0.36		0			382		117	0		0	0	0	0		80	0	4	1	1														
	GRAND TOTAL	1.80		0			1797			64		0	0	0	0		947	0	17	42	42														
	USE	1.8		0			1800			64		0	0	0	0		947	0	17	42	42														

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 4:59:35 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	90

COUNTY
MORGAN

JOB NO.
J5P3575

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)

HIGHWAY SIGNAGE
POST QUANTITIES
SHEET 11 OF 15

STANDARD SIGN ASSEMBLIES

SIGN OR SIGN SET NUMBER	STATION	LOCATION	TYPE: OM4-3	R3-9B	W2-6	W16-17P	W13-1P	S5-1	M3-2	M3-1	M1-5	M5-3	M3-3	M1-5A	M6-3	M1-5	M5-1R	W3-2
			SIGN DESCRIPTION, SIZES & NUMBER OF EACH															
			18"X18"	24"X36"	36"X36"	36"X12"	24"X24"	36"X72"	24"X12"	24"X12"	24"X24"	21"X15"	24"X12"	24"X24"	21"X15"	24"X24"	21"X15"	36"X36"
12	633+55	MO 52 LT	4															
14	637+20	MO 52 RT		1														
16	639+80	MO 52 RT			1	1	1											
17	640+40	MO 52 RT						1										
22	644+30	MO 52 RT							1	1	1	2	1	1	1	2	1	
23	644+30	MO 52 RT																1

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
OM4-3		4	1.5' X 1.5'		9		
R3-9B		1	2' X 3'	6			
W2-6		1	3' X 3'		9		
W16-17P		1	3' X 1'		3		
W13-1P		1	2' X 2'		4		
S5-1		1	3' X 6'	15	3		
M3-2		1	2' X 1'	2			
M3-1		1	2' X 1'	2			
M1-5		3	1.75' X 1.25'	6.56			
M5-3		2	1.75' X 1.25'	4.38			
M3-3		1	2' X 1'	2			
M1-5A		1	2' X 2'	4			
M6-3		1	1.75' X 1.25'	2.19			
M5-1R		1	1.75' X 1.25'	2.19			
W3-2		1	3' X 3'	9			
	SUBTOTAL 1			55.3	28	0	0

STANDARD SIGN ASSEMBLIES

SIGN OR SIGN SET NUMBER	STATION	LOCATION	TYPE: D1-3D	R4-7	R1-2	M3-4	M1-5	M6-2R	M3-3	M1-5A	D1-3D	M3-1	M3-2	M1-5	D1-2D	W3-2	M6-3	M5-3	M5-1R
			SIGN DESCRIPTION, SIZES & NUMBER OF EACH																
			96"X48"	24"X30"	48"X48"	24"X12"	24"X24"	21"X15"	24"X12"	24"X24"	96"X48"	24"X12"	24"X12"	24"X24"	96"X24"	36"X36"	21"X15"	21"X15"	21"X15"
25	646+30	MO 52 RT	1																
26	646+87	MO 52 LT		1															
27	2+35	SWQ LT			1														
28	647+40	MO 52 LT				1	1	1											
29	647+42	MO 52 LT			1														
30	0+87	NEWT						1		1									
31	0+86	NEWT LT			1														
32	0+30	NEQ LT			1														
33	1+45	NEWT		1															
34	1+50	NEWT LT									1								
35	1+95	NEWT LT				1	2		1			1	1	2			1	1	2
36	649+27	MO 5/52 RT					1	2				1	1	1					
37	649+28	MO 5/52 RT			1														
38	3+33	NWQ LT			1														
40	4+35	NWQ LT													1				
42	6+00	NWQ LT														1			
43	652+45	MO 5/52 LT		1															
44	653+70	MO 5/52 LT				1	1		1	1				1			1	1	1

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
D1-3D	1	2	8' X 4'			64	
R4-7		3	2' X 2.5'	15			
R1-2		6	4' X 4'	96			
M3-4		3	2' X 1'	6			
M1-5		9	2' X 2'	36			
M6-2R		4	1.75' X 1.25'	8.75			
M3-3		2	2' X 1'	4			
M1-5A		2	2' X 2'	8			
M3-1		2	2' X 1'	4			
M3-2		2	2' X 1'	4			
D1-2D	1	1	8' X 2'			16	
W3-2		1	3' X 3'		9		
M6-3		2	1.75' X 1.25'	4.38			
M5-3		2	1.75' X 1.25'	4.38			
M5-1R		4	1.75' X 1.25'	8.76			
	SUBTOTAL 2			199.27	9	80	0

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:05:08 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	91

COUNTY: MORGAN

JOB NO.: J5P3575

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)

HIGHWAY SIGNAGE
SHEETING QUANTITIES
SHEET 12 OF 15

STANDARD SIGN ASSEMBLIES

SIGN OR SIGN SET NUMBER	STATION	LOCATION	TYPE: W2-6	W16-17P	W13-1P	R1-2	M3-3	M1-5	M6-2R	D1-3D	W3-2	R4-7	M3-1	M6-3	M3-2	M1-5	M3-4	M5-3	M1-5A	M5-1R
			SIGN DESCRIPTION, SIZES & NUMBER OF EACH																	
			36"X36"	36"X12"	24"X24"	48"X48"	24"X12"	24"X24"	21"X15"	72"X48"	36"X36"	24"X30"	24"X12"	21"X15"	24"X12"	24"X24"	24"X12"	21"X15"	24"X24"	21"X15"
50	657+65	MO 5/52 LT	1	1	1															
51	0+50	MO 5 RT				1														
52	0+52	MO 5 RT					1	1	1											
53	2+50	SEQ LT				1														
54	3+50	SEQ LT								1										
56	3+45	MO 5 LT									1									
57	3+45	MO 5										1								
58	5+50	MO 5 LT						1					1	2	1	2	1	1	1	1
59	7+40	MO 5 LT	1	1	1															

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
W2-6		2	3' X 3'		18		
W16-17P		2	3' X 1'		6		
W13-1P		2	2' X 2'		8		
R1-2		2	4' X 4'	32			
M3-3		1	2' X 1'	2			
M1-5		4	2' X 2'	16			
M6-2R		1	1.75' X 1.25'	2.18			
D1-3D	1	1	6' X 4'			24	
W3-2		1	3' X 3'		9		
R4-7		1	2' X 2.5'	5			
M3-1		1	2' X 1'	2			
M6-3		2	1.75' X 1.25'	4.38			
M3-2		1	2' X 1'	2			
M3-4		1	2' X 1'	2			
M5-3		1	1.75' X 1.25'	2.18			
M1-5A		1	2' X 2'	4			
M5-1R		1	1.75' X 1.25'	2.18			
		SUBTOTAL 3		59.9	41	24	0

STANDARD SIGN ASSEMBLIES

SIGN OR SIGN SET NUMBER	STATION	LOCATION	TYPE: R6-1R	R6-4
			SIGN DESCRIPTION, SIZES & NUMBER OF EACH	
			36"X12"	30"X24"
60	648+25	MO 52 LT	1	1
61	648+09	MO 52 LT	1	1
62	648+05	MO 52 LT	1	1
63	648+25	MO 52 LT	1	1

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
R6-1R		4	3'X 1'	12			
R6-4		4	2.5'X 2'	20			
		SUBTOTAL 4		32	0	0	0
		SUBTOTAL 1		55.3	28	0	0
		SUBTOTAL 2		199.27	9	80	0
		SUBTOTAL 3		59.9	41	24	0
		TOTAL		345.47	78	104	0
		USE		346	78	104	0

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:04:59 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED: 3/14/2024

ROUTE	STATE
52	MO

DISTRICT	SHEET NO.
CD	92

COUNTY: MORGAN

JOB NO.: J5P3575

CONTRACT ID.:

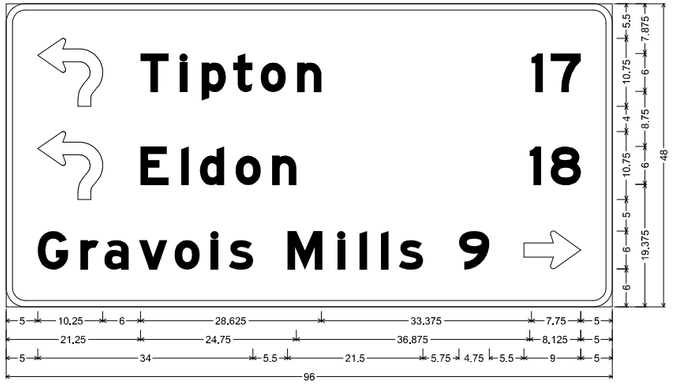
PROJECT NO.:

BRIDGE NO.:

DESCRIPTION	DATE

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

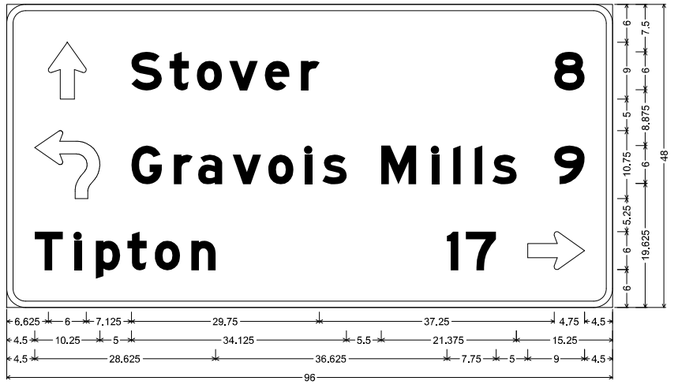
HIGHWAY SIGNAGE
SHEETING QUANTITIES
SHEET 13 OF 15



D1-3d ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
"Tipton", E Mod; "17", E Mod; "Eldon", E Mod; "18", E Mod; "Gravois Mills", E Mod; "9", E Mod;
Standard Arrow Custom 9.000" X 6.000" 0';
Table of letter and object lefts

5.000	T 21.250	i 27.500	p 31.000	t 36.000	o 40.375	n 46.125	l 83.250	7 86.250
5.000	E 21.250	l 27.750	d 30.625	o 36.375	n 42.125	l 82.875	8 86.250	
G 5.000	r 11.750	a 15.500	v 21.000	o 26.625	l 32.500	s 35.250	M 44.500	l 52.500	l 56.000	l 59.375	s 62.125	9 71.750	⇨ 82.000	

(25)
646+30 MO 52 RT



D1-3d ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
Standard Arrow Custom 9.000" X 6.000" 90°; "Stover", E Mod; "8", E Mod; "Gravois Mills", E Mod; "9", E Mod;
"Tipton", E Mod; "17", E Mod; Standard Arrow Custom 9.000" X 6.000" 0';
Table of letter and object lefts

⇧ 6.625	S 19.750	t 25.750	o 30.125	v 35.250	e 40.875	r 46.625	8 86.750	
4.500	G 19.750	r 26.500	a 30.375	v 35.750	o 41.500	l 47.250	s 50.000	M 59.375	l 67.250	l 70.750	l 74.125	s 77.000	9 86.750
T 4.500	l 10.750	p 14.125	t 19.125	o 23.500	n 29.250	l 69.750	7 72.750	⇨ 82.500					

(34)
1+50 NEWT LT

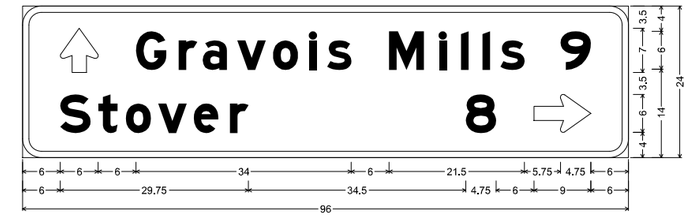
S5-1 SH-FLAT SHEET;

2.250" Radius, 0.625" Border, White on, Black;
Rounded Rectangle 0.750" Radius Bright yellow green;

2.250" Radius, 0.625" Border, White on, Black;
Rounded Rectangle 0.750" Radius;
Table of letter and object lefts

1.500
1.500

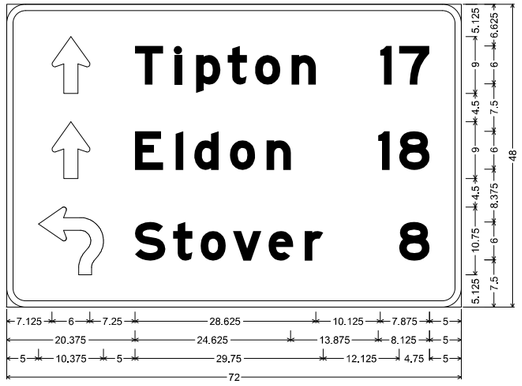
(17)
640+40 MO 52 RT



D1-2a ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.000" 90'; "Gravois Mills", E Mod; "9", E Mod; "Stover", E Mod; "8", E Mod;
Standard Arrow Custom 9.000" X 6.000" 0';
Table of letter and object lefts

⇧ 6.000	G 18.000	r 24.750	a 28.500	v 34.000	o 39.625	l 45.500	s 48.250	M 58.000	l 66.000	l 69.500	l 72.875	s 75.625	9 85.250	
S 6.000	t 12.000	o 16.375	v 21.500	e 27.125	r 32.875	8 70.250	⇨ 81.000							

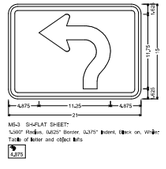
(40)
4+35 NWQ LT



D1-3d ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
Standard Arrow Custom 9.000" X 6.000" 90'; "Tipton", E Mod; "17", E Mod;
Standard Arrow Custom 9.000" X 6.000" 90'; "Eldon", E Mod; "18", E Mod;
"Stover", E Mod; "8", E Mod;
Table of letter and object lefts

⇧ 7.125	T 20.375	l 26.625	p 30.000	t 35.000	o 39.375	n 45.125	l 59.125	7 62.250
⇧ 7.125	E 20.375	l 26.750	d 29.750	o 35.375	n 41.125	l 58.875	8 62.250	
5.000	S 20.375	t 26.375	o 30.750	v 35.875	e 41.500	r 47.250	8 62.250	

(54)
3+50 SEQ LT



M5-3 SHFLAT SHEET;
1.500" Radius, 0.625" Border, 0.375" Indent, Black on, White;
Table of letter and object lefts

4.875

(22)
644+30 MO 52 RT

(35)
1+93 NEWT LT

(45)
7+35 NWQ LT

(46)
654+20 MO 5/52 LT

(61)
5+75 MO 5 LT

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:04:51 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	93

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

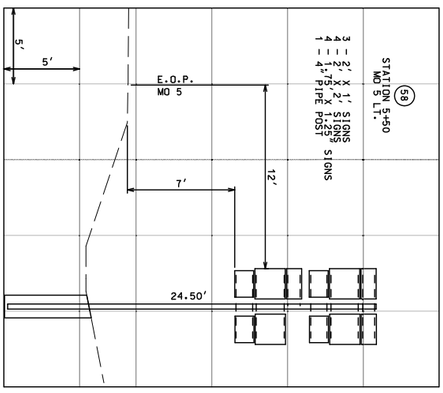
BRIDGE NO.

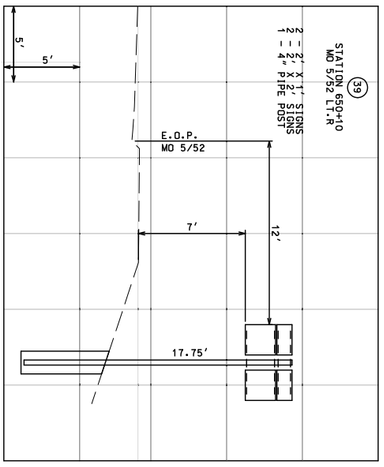
DESCRIPTION	DATE

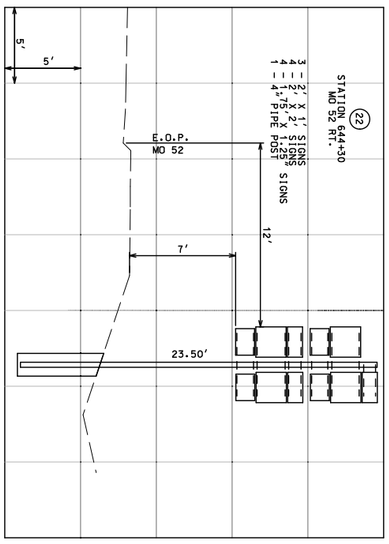
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

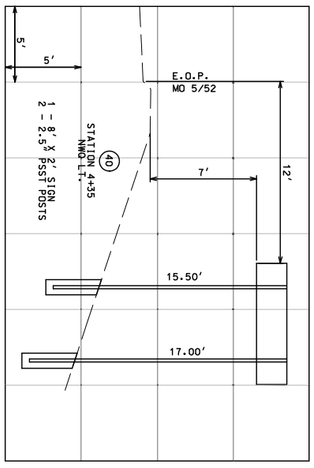
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

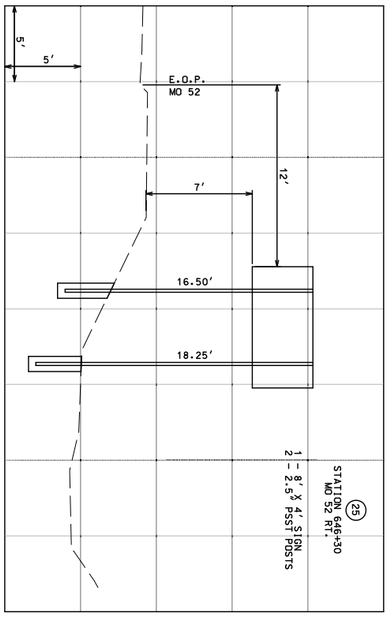
HIGHWAY SIGNAGE
SIGN DETAILS
SHEET 14 OF 15

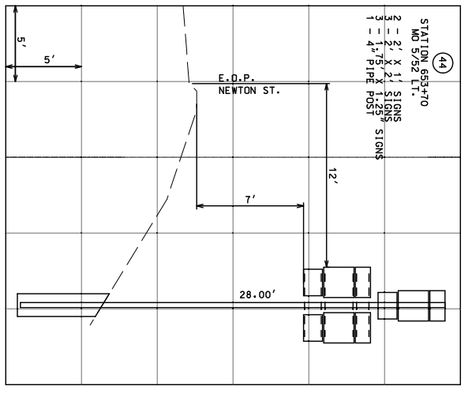


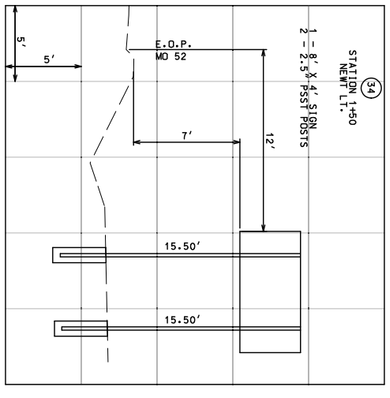


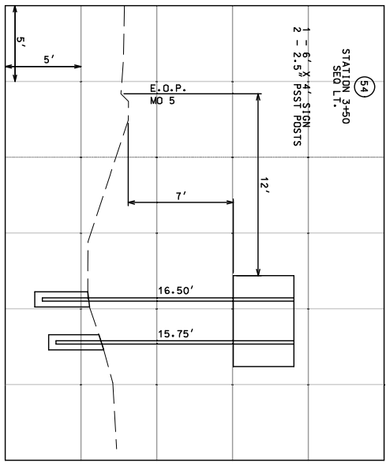


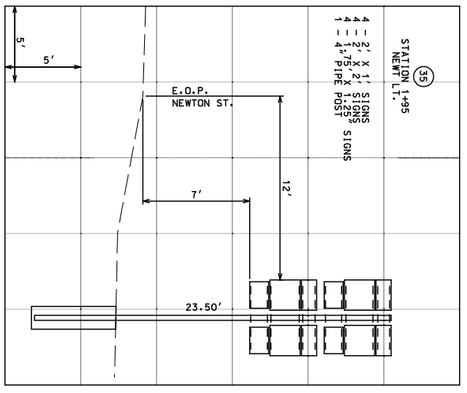












HIGHWAY SIGNAGE
CROSS SECTIONS
SHEET 15 OF 15

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

DATE	DESCRIPTION

BRIDGE NO.

PROJECT NO.

JSP3575
CONTRACT ID.

MORGAN
COUNTY

JOB NO.

CD
DISTRICT

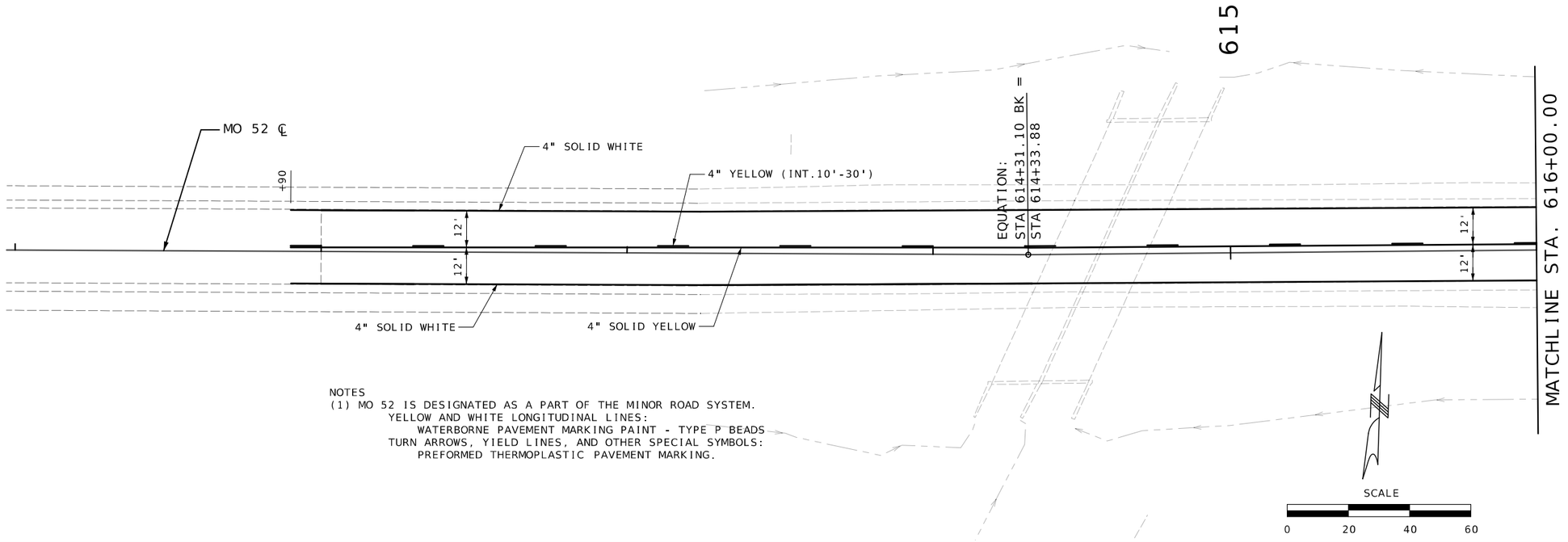
94
SHEET NO.

52
ROUTE

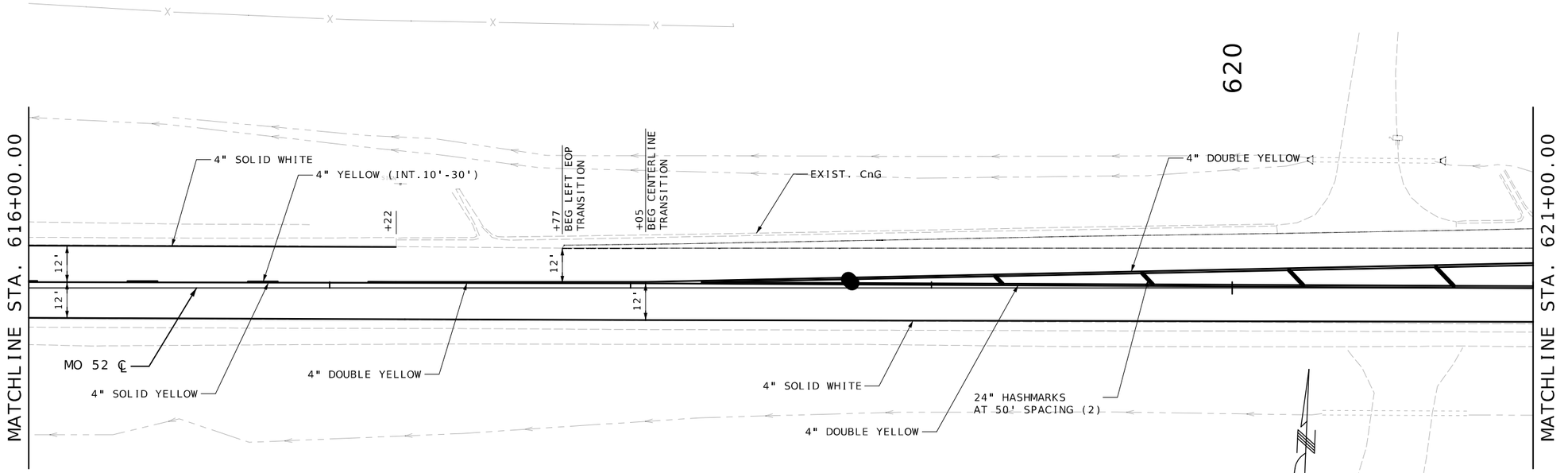
MO
STATE

3/14/2024
DATE PREPARED

STATE OF MISSOURI
RYAN JOSEPH LIEBERT
NUMBER PE-2009019879
PROFESSIONAL ENGINEER
RYAN JOSEPH LIEBERT, PE
MO-PE-2009019879



NOTES
(1) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.



NOTES
(1) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

(2) INSTALL HASHMARKS ACCORDING TO MoDOT STANDARD PLAN 620.00

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:06:54 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	95

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

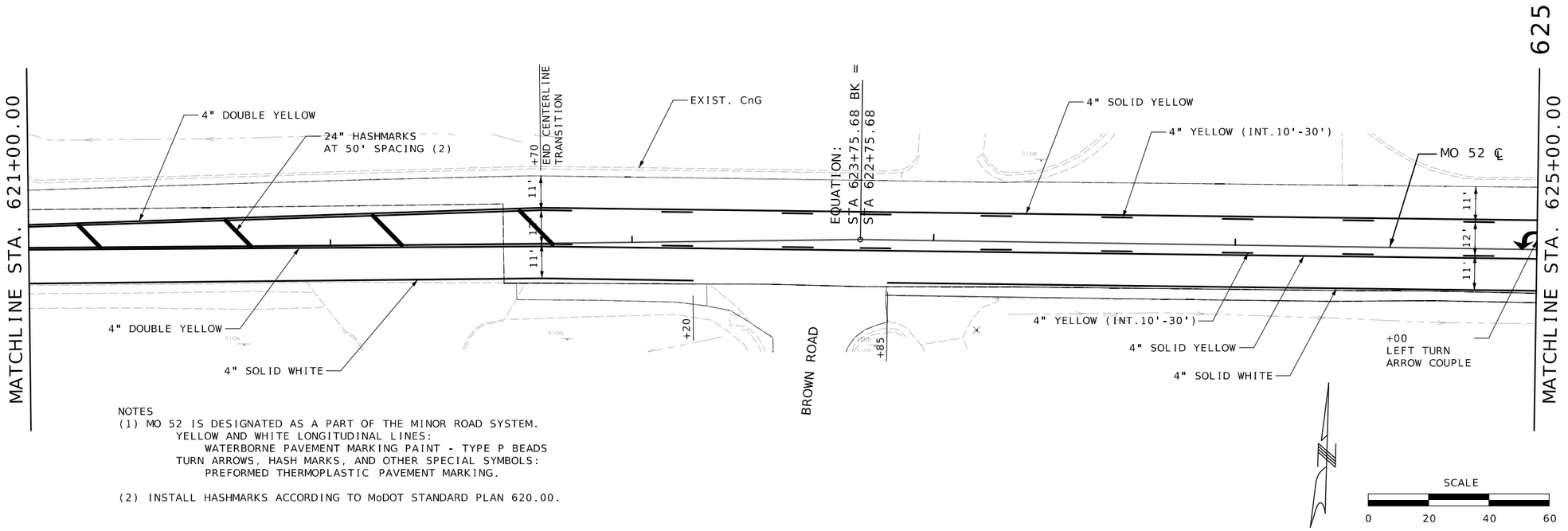
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

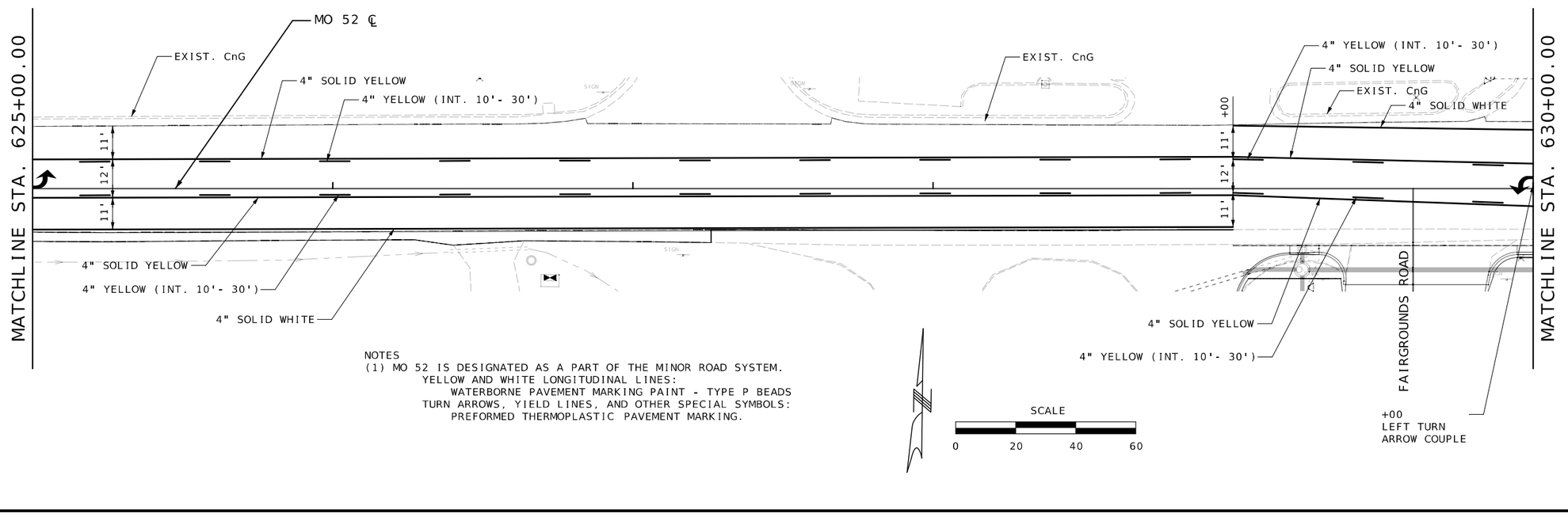
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PAVEMENT MARKING
MISSOURI ROUTE 52 ℄
SHEET 1 OF 7



NOTES
(1) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, HASH MARKS, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

(2) INSTALL HASHMARKS ACCORDING TO MoDOT STANDARD PLAN 620.00.



NOTES
(1) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:07:14 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	96

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

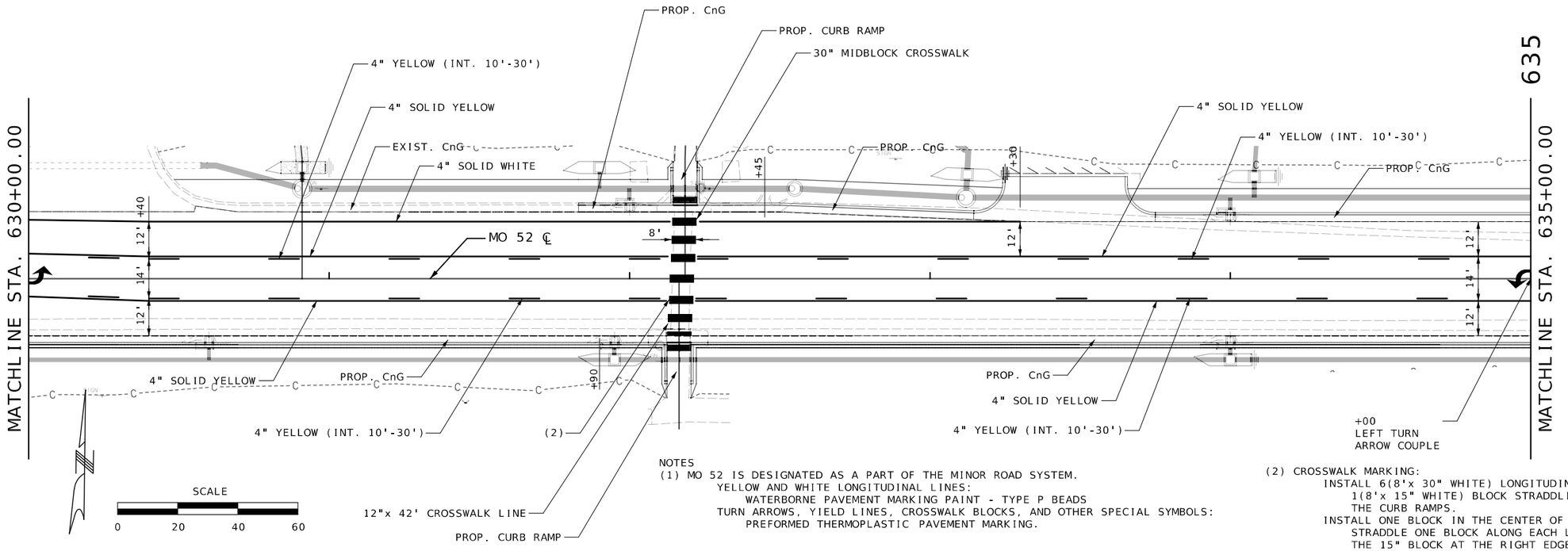
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

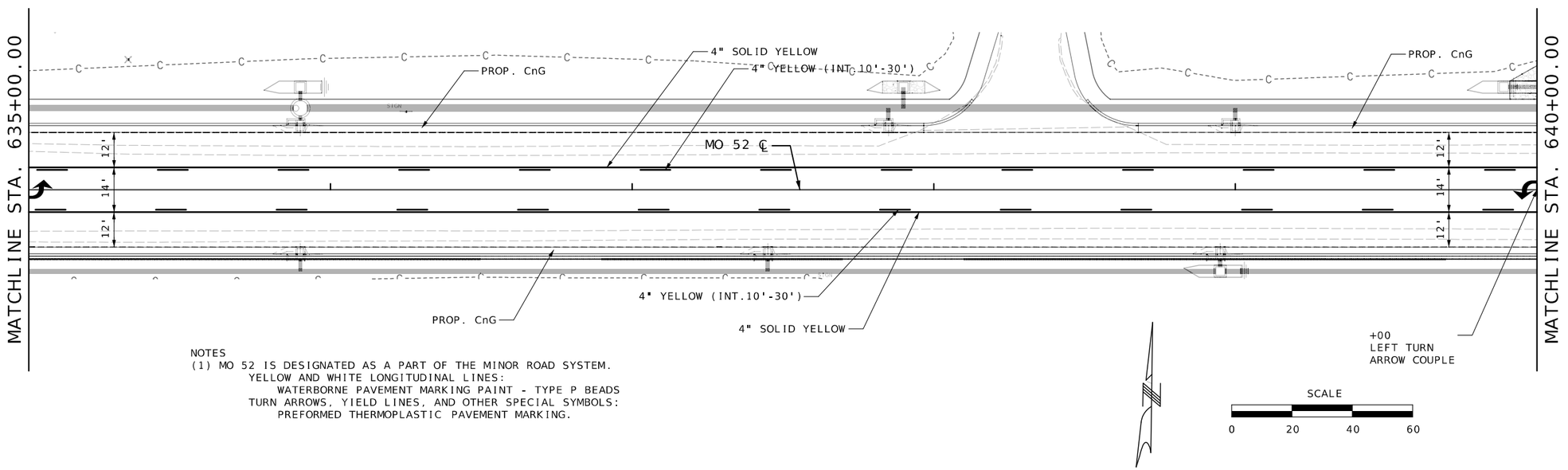
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PAVEMENT MARKING
MISSOURI ROUTE 52 ℄
SHEET 2 OF 7



NOTES
(1) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, CROSSWALK BLOCKS, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

(2) CROSSWALK MARKING:
INSTALL 6(8'x 30" WHITE) LONGITUDINAL BLOCKS AND 1(8'x 15" WHITE) BLOCK STRADDLING THE CENTER OF THE CURB RAMPS.
INSTALL ONE BLOCK IN THE CENTER OF EACH LANE, STRADDLE ONE BLOCK ALONG EACH LANELINE, AND PLACE THE 15" BLOCK AT THE RIGHT EDGE OF PAVEMENT.



NOTES
(1) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, CROSSWALK BLOCKS, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:07:31 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	97

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

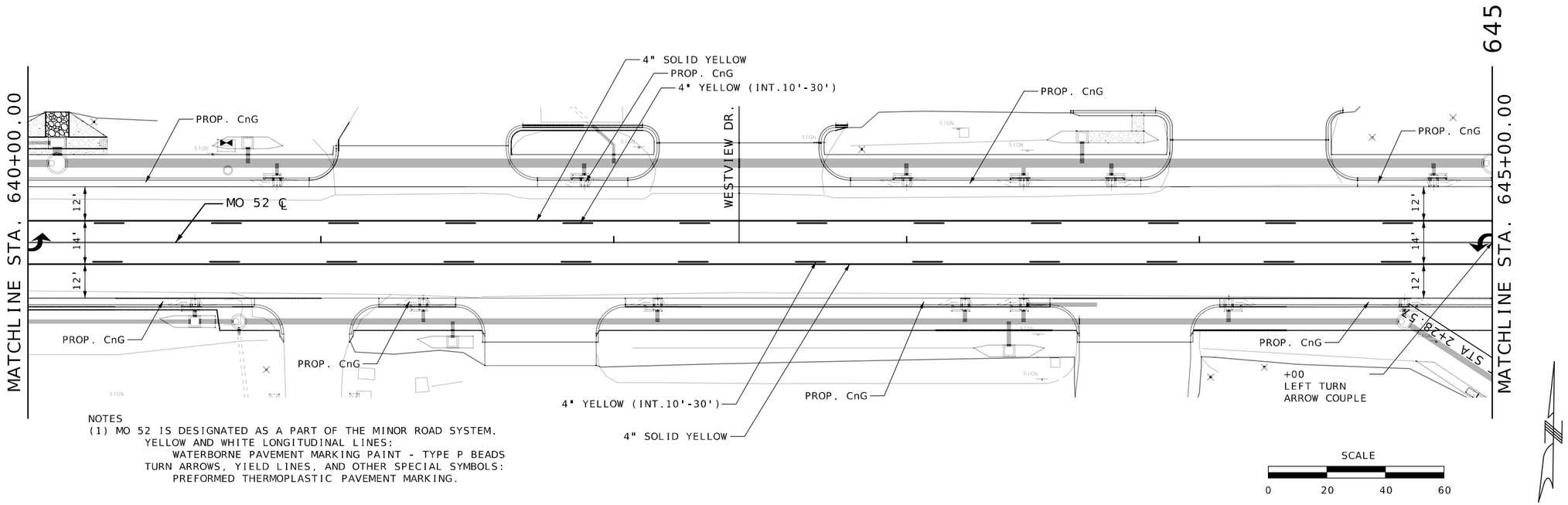
BRIDGE NO.

DESCRIPTION	DATE

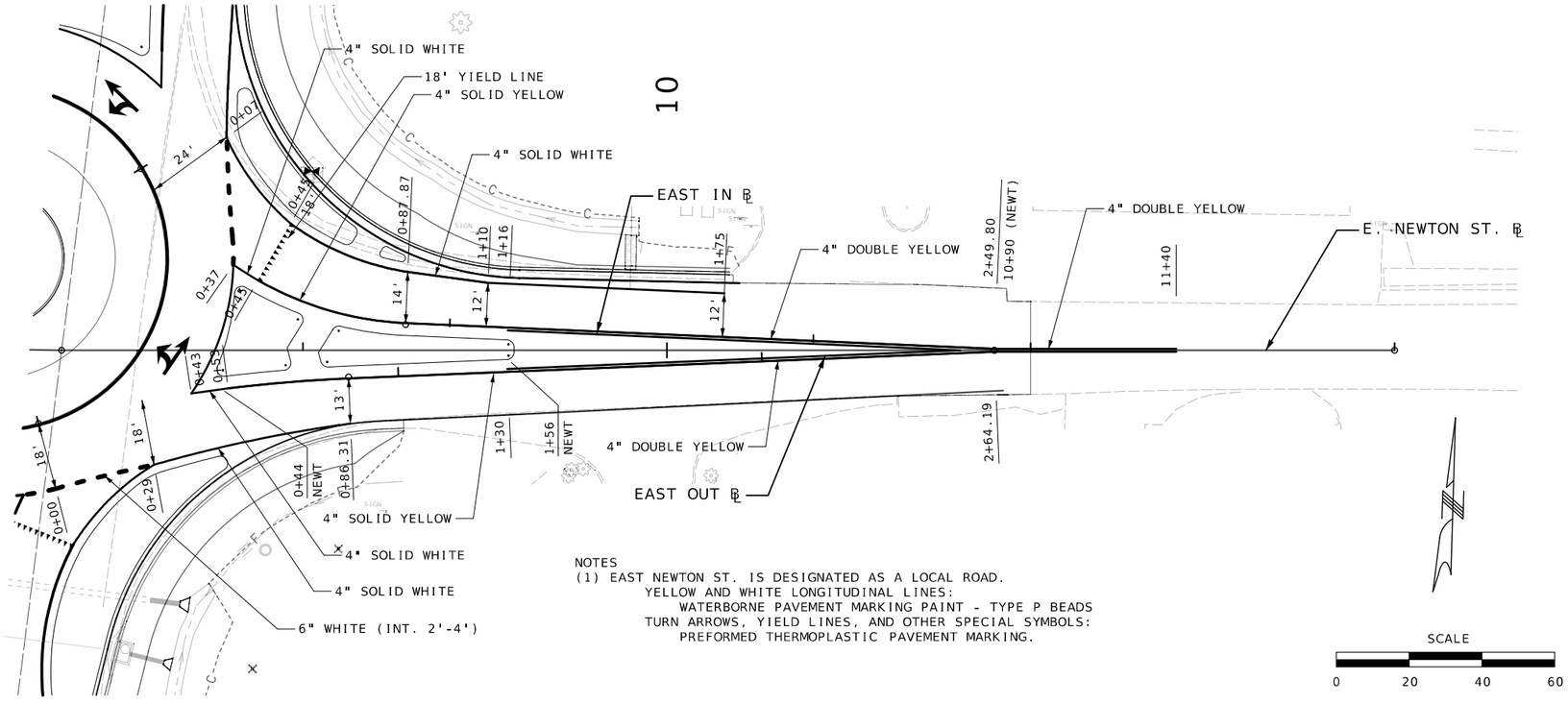
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING
MISSOURI ROUTE 52 ℄
SHEET 3 OF 7



NOTES
(1) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.



NOTES
(1) EAST NEWTON ST. IS DESIGNATED AS A LOCAL ROAD.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:07:51 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	98

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

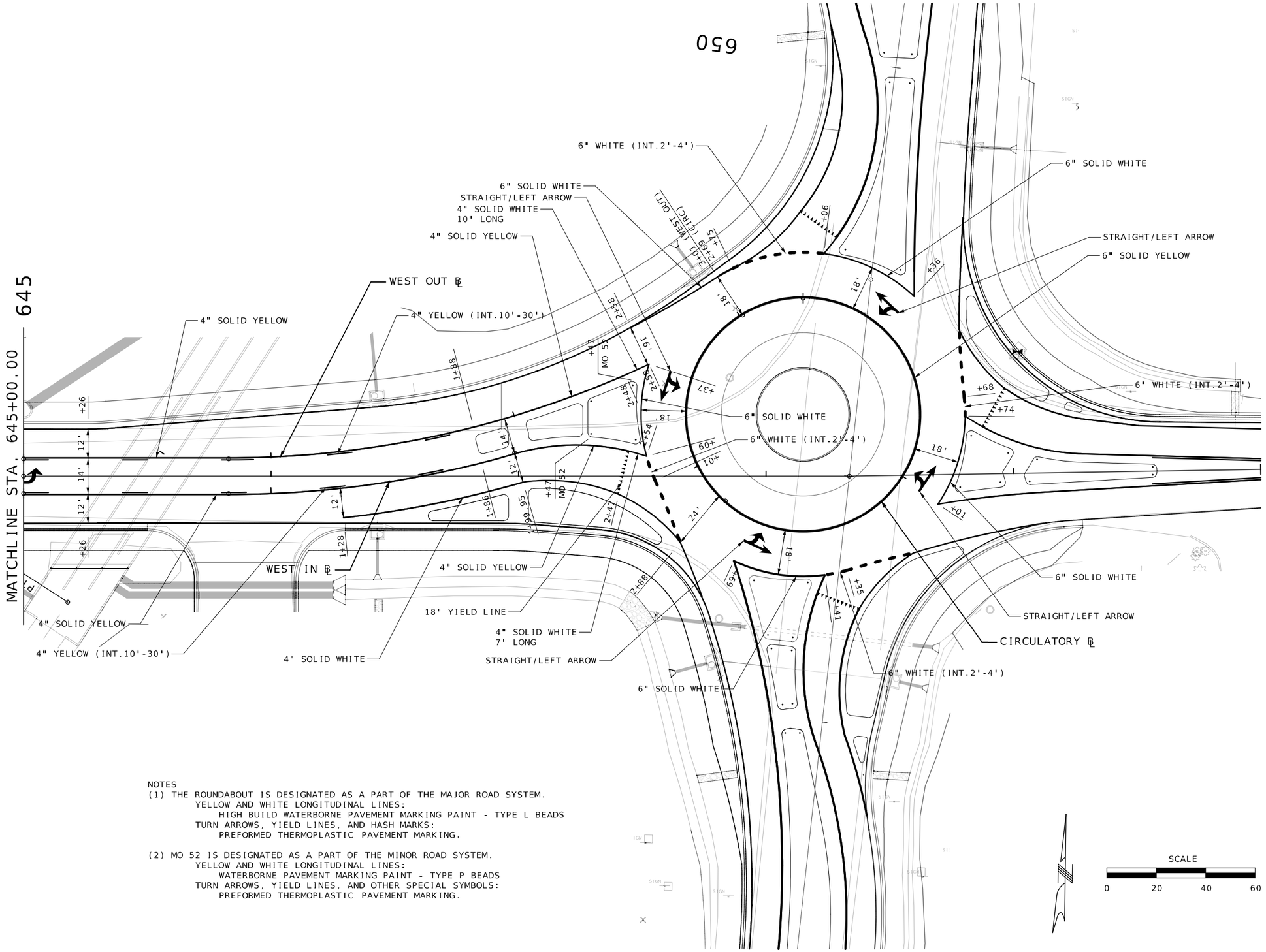
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING
MISSOURI ROUTE 52 ℄
EAST NEWTON ST. ℄
SHEET 4 OF 7



NOTES
(1) THE ROUNDABOUT IS DESIGNATED AS A PART OF THE MAJOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT - TYPE L BEADS
TURN ARROWS, YIELD LINES, AND HASH MARKS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

(2) MO 52 IS DESIGNATED AS A PART OF THE MINOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
WATERBORNE PAVEMENT MARKING PAINT - TYPE P BEADS
TURN ARROWS, YIELD LINES, AND OTHER SPECIAL SYMBOLS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:08:13 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	99

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

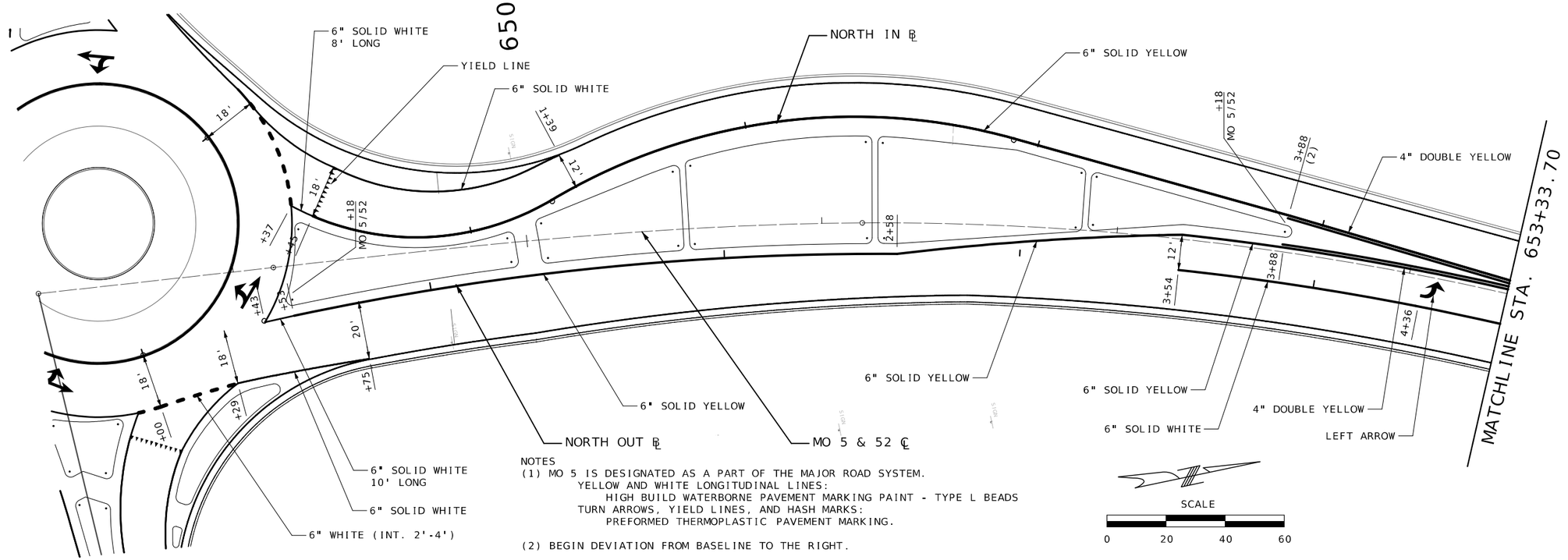
BRIDGE NO.

DESCRIPTION

DATE

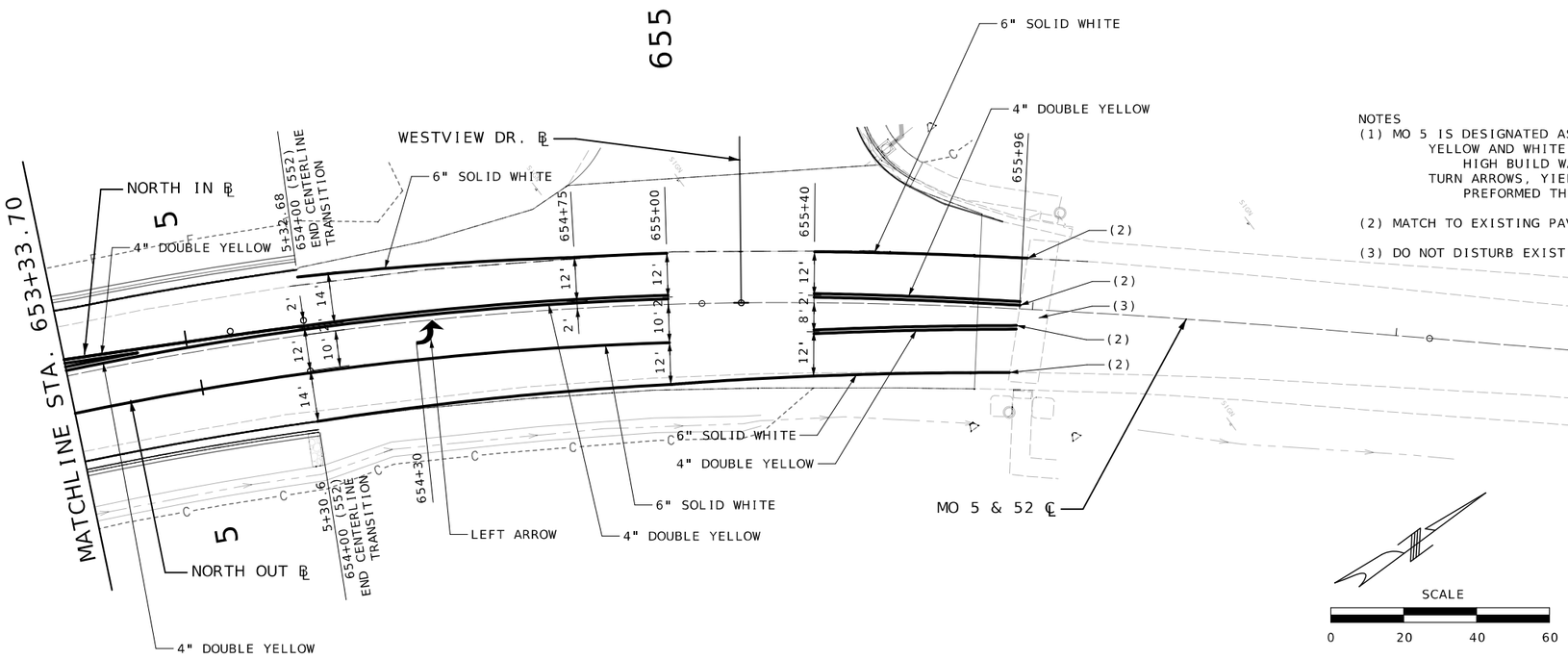
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PAVEMENT MARKING
MISSOURI ROUTE 52 ℄
ROUNDABOUT ℄
SHEET 5 OF 7



NOTES
(1) MO 5 IS DESIGNATED AS A PART OF THE MAJOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT - TYPE L BEADS
TURN ARROWS, YIELD LINES, AND HASH MARKS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

(2) BEGIN DEVIATION FROM BASELINE TO THE RIGHT.



NOTES
(1) MO 5 IS DESIGNATED AS A PART OF THE MAJOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT - TYPE L BEADS
TURN ARROWS, YIELD LINES, AND HASH MARKS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

(2) MATCH TO EXISTING PAVEMENT MARKING OFFSETS.

(3) DO NOT DISTURB EXISTING CROSSWALK MARKING.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:08:34 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	100

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

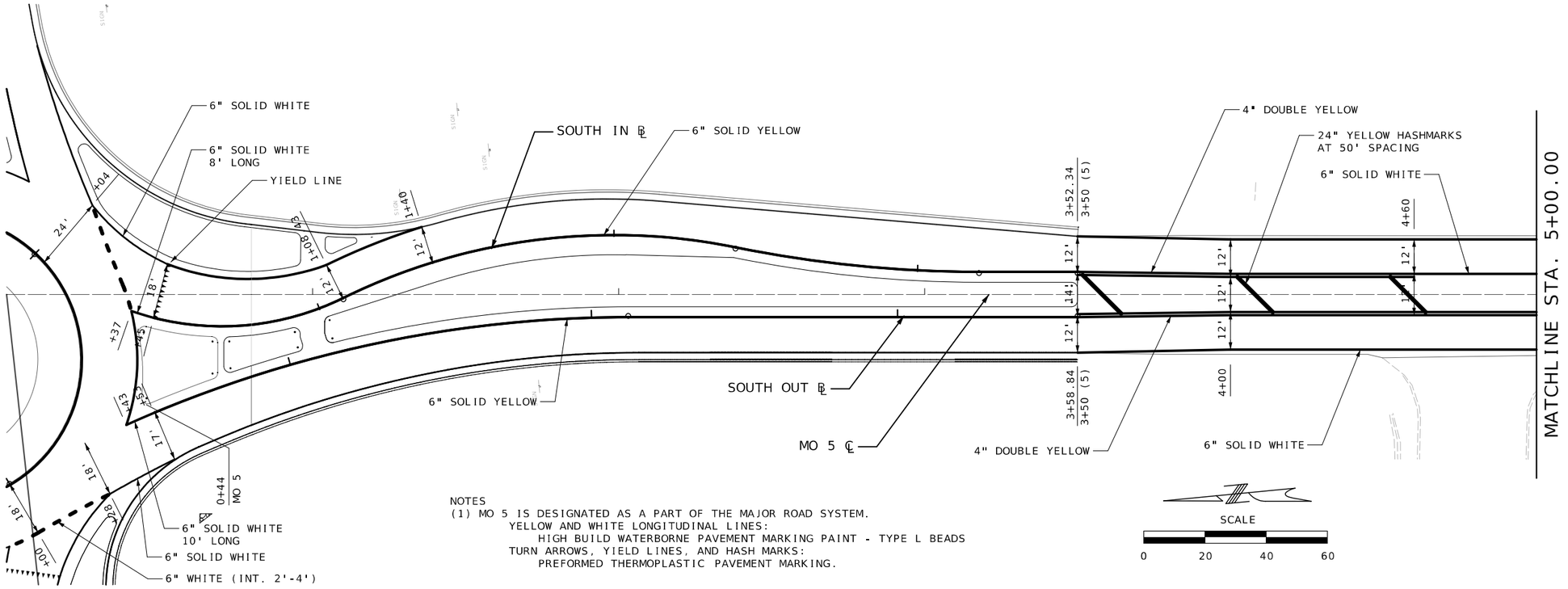
BRIDGE NO.

DESCRIPTION	DATE

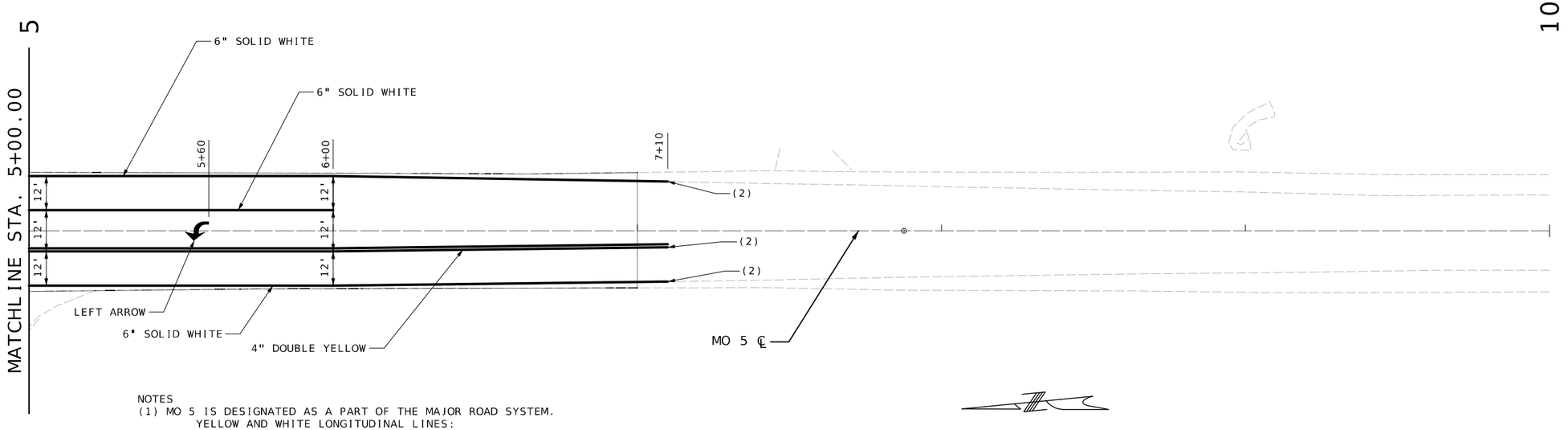
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING
MISSOURI ROUTE 5 & 52 ℄
SHEET 6 OF 7



NOTES
(1) MO 5 IS DESIGNATED AS A PART OF THE MAJOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT - TYPE L BEADS
TURN ARROWS, YIELD LINES, AND HASH MARKS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.



NOTES
(1) MO 5 IS DESIGNATED AS A PART OF THE MAJOR ROAD SYSTEM.
YELLOW AND WHITE LONGITUDINAL LINES:
HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT - TYPE L BEADS
TURN ARROWS, YIELD LINES, AND HASH MARKS:
PREFORMED THERMOPLASTIC PAVEMENT MARKING.

(2) MATCH TO EXISTING PAVEMENT MARKING OFFSETS.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/14/2024 5:08:53 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/14/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	101

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

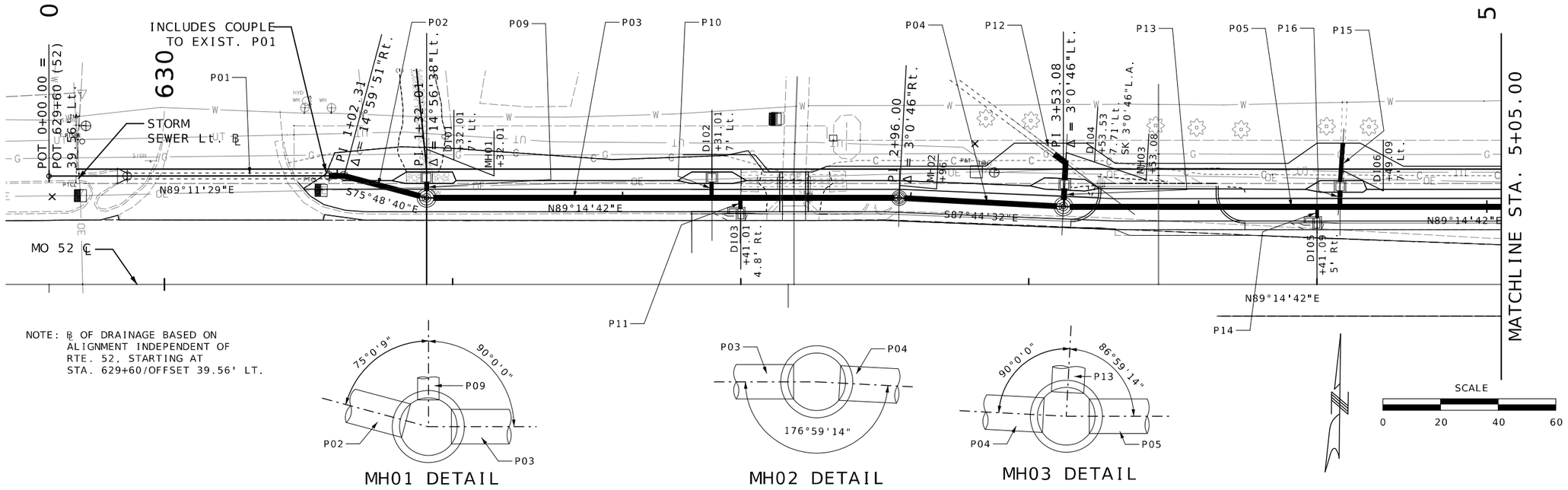
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING
MISSOURI ROUTE 5 ℄
SHEET 7 OF 7

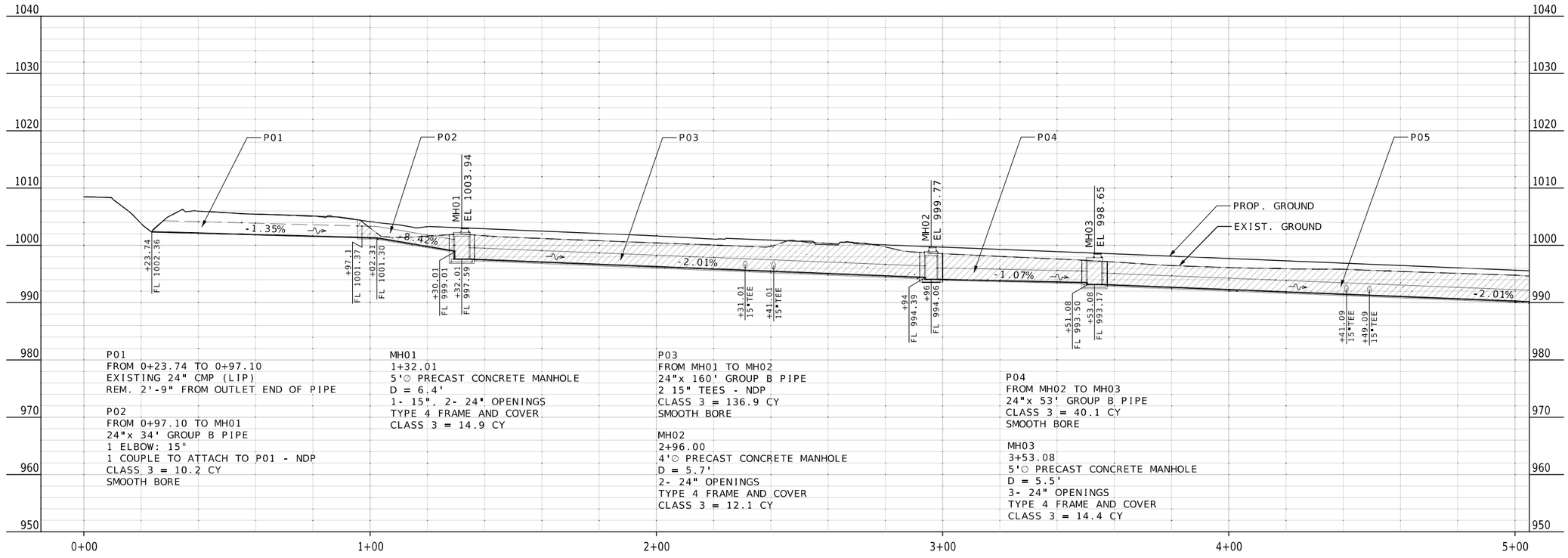


NOTE: ℄ OF DRAINAGE BASED ON ALIGNMENT INDEPENDENT OF RTE. 52, STARTING AT STA. 629+60/OFFSET 39.56' LT.

MH01 DETAIL

MH02 DETAIL

MH03 DETAIL



P01
FROM 0+23.74 TO 0+97.10
EXISTING 24" CMP (LIP)
REM. 2'-9" FROM OUTLET END OF PIPE

P02
FROM 0+97.10 TO MH01
24"x 34' GROUP B PIPE
1 ELBOW: 15°
1 COUPLE TO ATTACH TO P01 - NDP
CLASS 3 = 10.2 CY
SMOOTH BORE

MH01
1+32.01
5'∅ PRECAST CONCRETE MANHOLE
D = 6.4'
1- 15", 2- 24" OPENINGS
TYPE 4 FRAME AND COVER
CLASS 3 = 14.9 CY

P03
FROM MH01 TO MH02
24"x 160' GROUP B PIPE
2 15" TEES - NDP
CLASS 3 = 136.9 CY
SMOOTH BORE

MH02
2+96.00
4'∅ PRECAST CONCRETE MANHOLE
D = 5.7'
2- 24" OPENINGS
TYPE 4 FRAME AND COVER
CLASS 3 = 12.1 CY

P04
FROM MH02 TO MH03
24"x 53' GROUP B PIPE
CLASS 3 = 40.1 CY
SMOOTH BORE

MH03
3+53.08
5'∅ PRECAST CONCRETE MANHOLE
D = 5.5'
3- 24" OPENINGS
TYPE 4 FRAME AND COVER
CLASS 3 = 14.4 CY

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:26:53 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	102

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

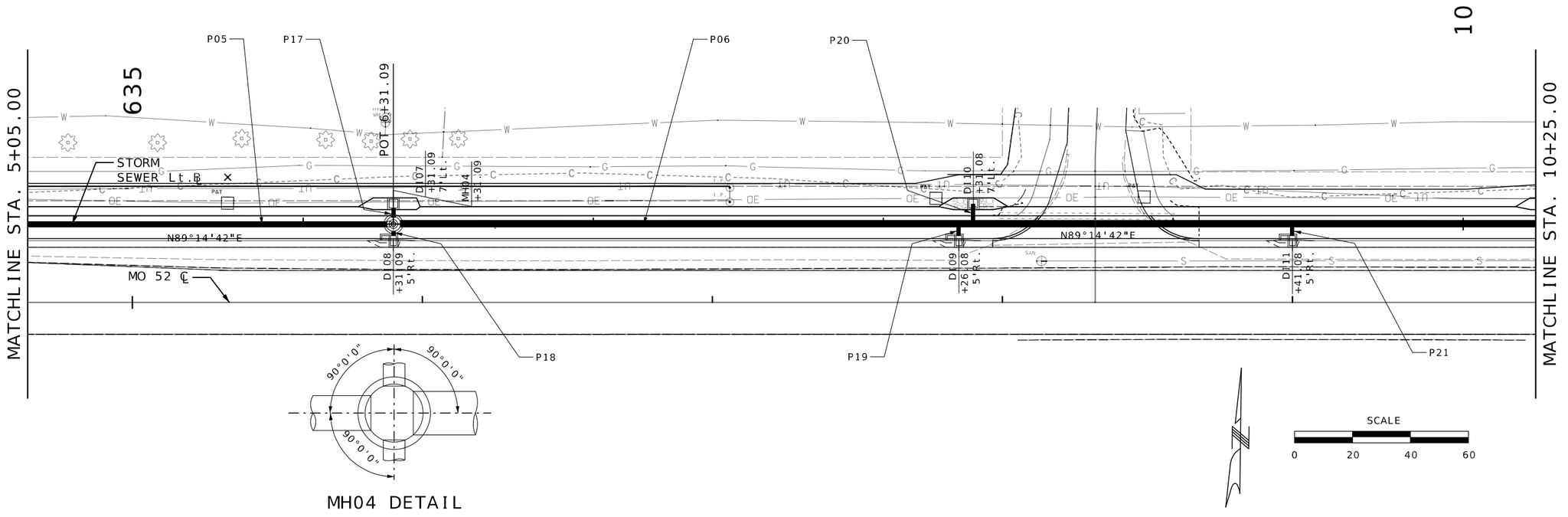
BRIDGE NO.

DESCRIPTION	DATE

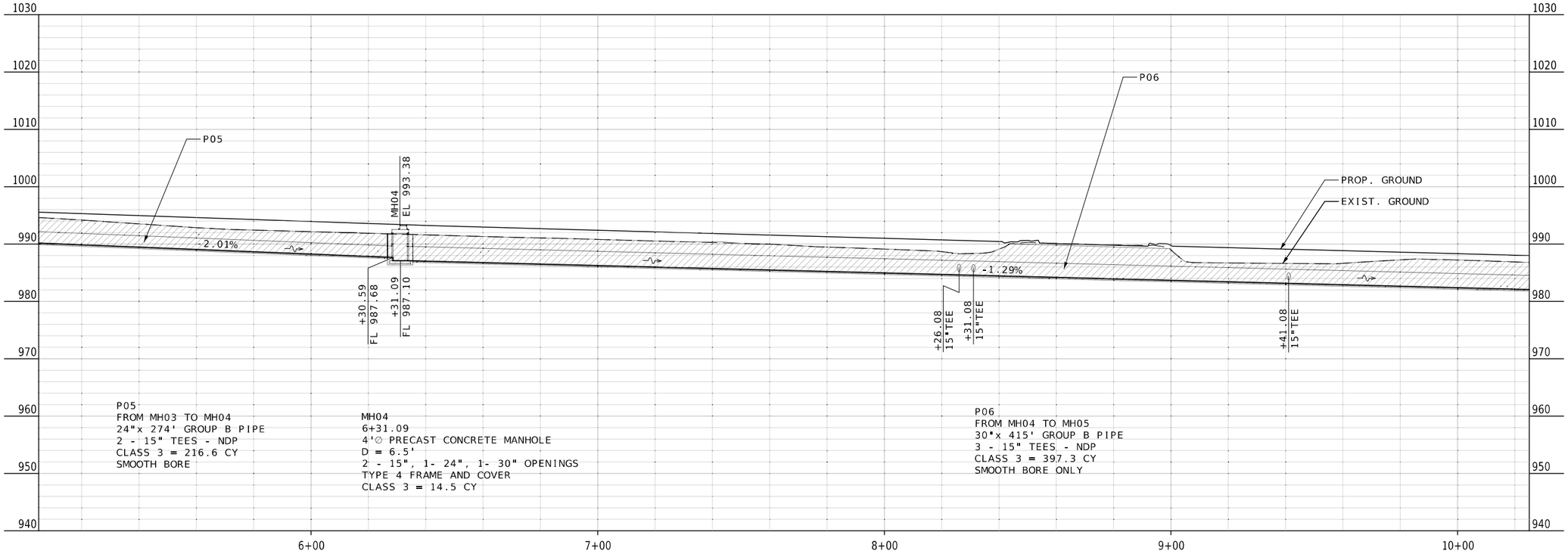
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 1 OF 9



MH04 DETAIL



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:26:44 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	103

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

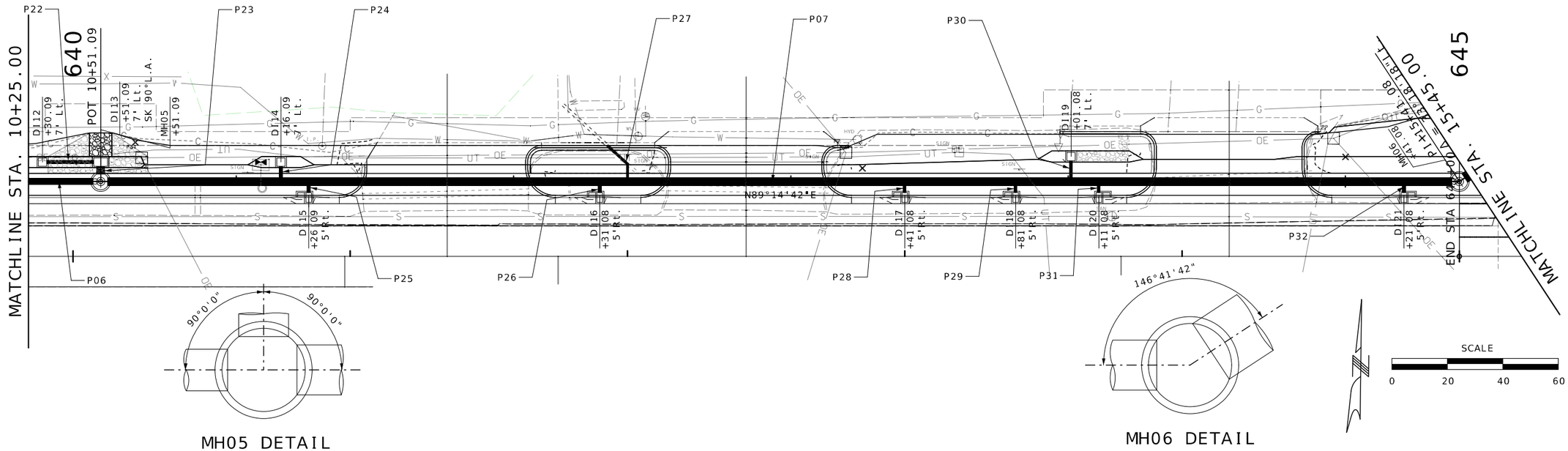
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

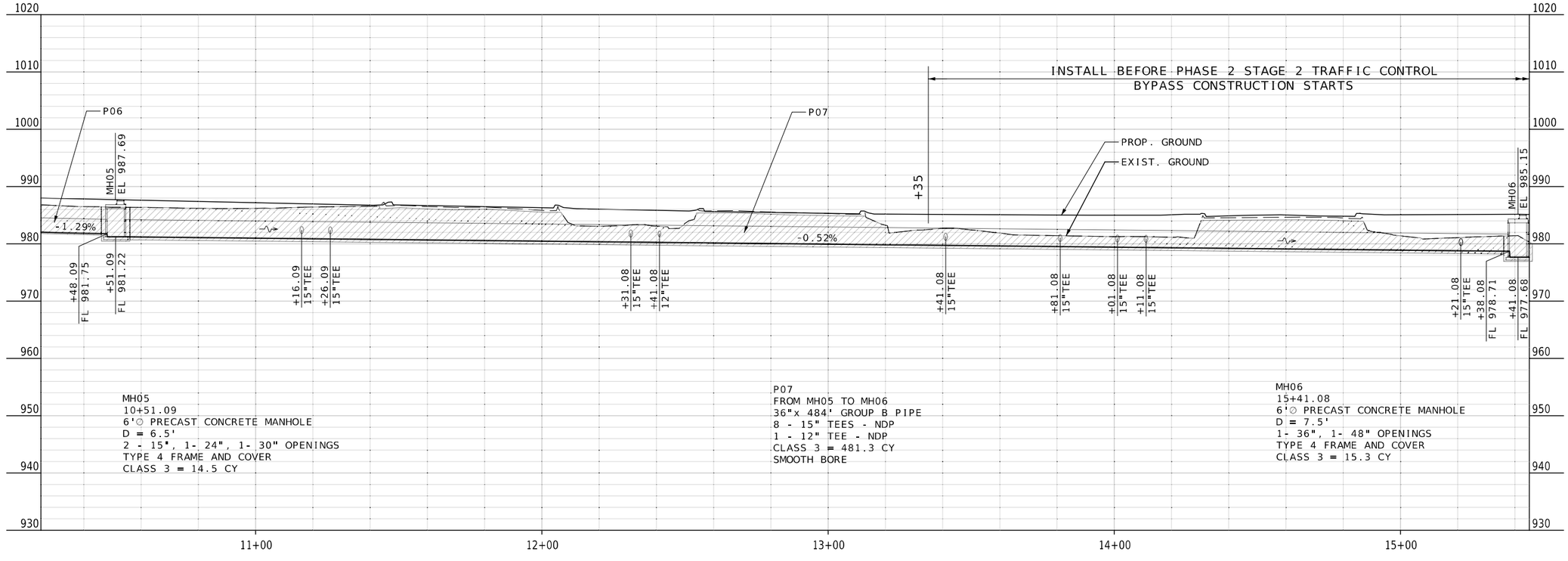
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 2 OF 9



MH05 DETAIL

MH06 DETAIL



MH05
10+51.09
6'∅ PRECAST CONCRETE MANHOLE
D = 6.5'
2 - 15", 1- 24", 1- 30" OPENINGS
TYPE 4 FRAME AND COVER
CLASS 3 = 14.5 CY

P07
FROM MH05 TO MH06
36"x 484' GROUP B PIPE
8 - 15" TEES - NDP
1 - 12" TEE - NDP
CLASS 3 = 481.3 CY
SMOOTH BORE

MH06
15+41.08
6'∅ PRECAST CONCRETE MANHOLE
D = 7.5'
1- 36", 1- 48" OPENINGS
TYPE 4 FRAME AND COVER
CLASS 3 = 15.3 CY

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:26:25 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	104

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

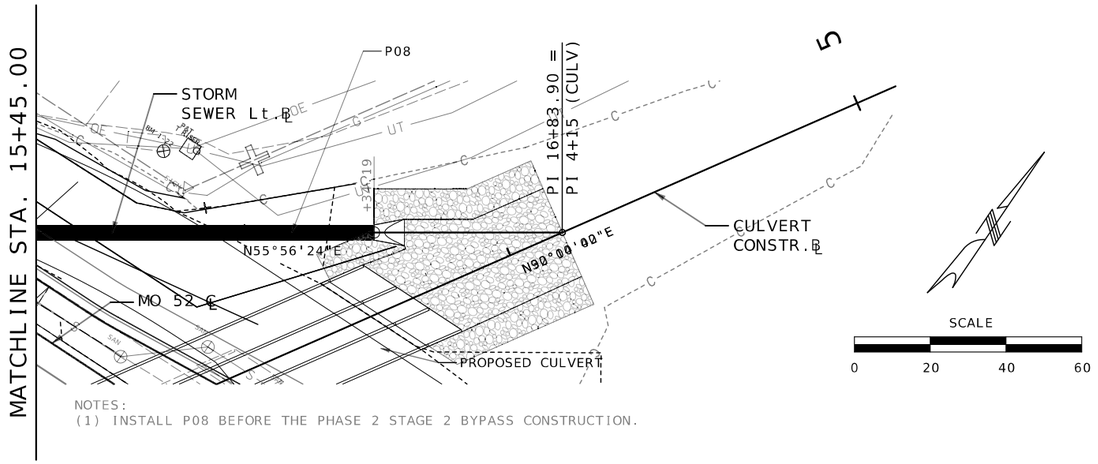
PROJECT NO.

BRIDGE NO.

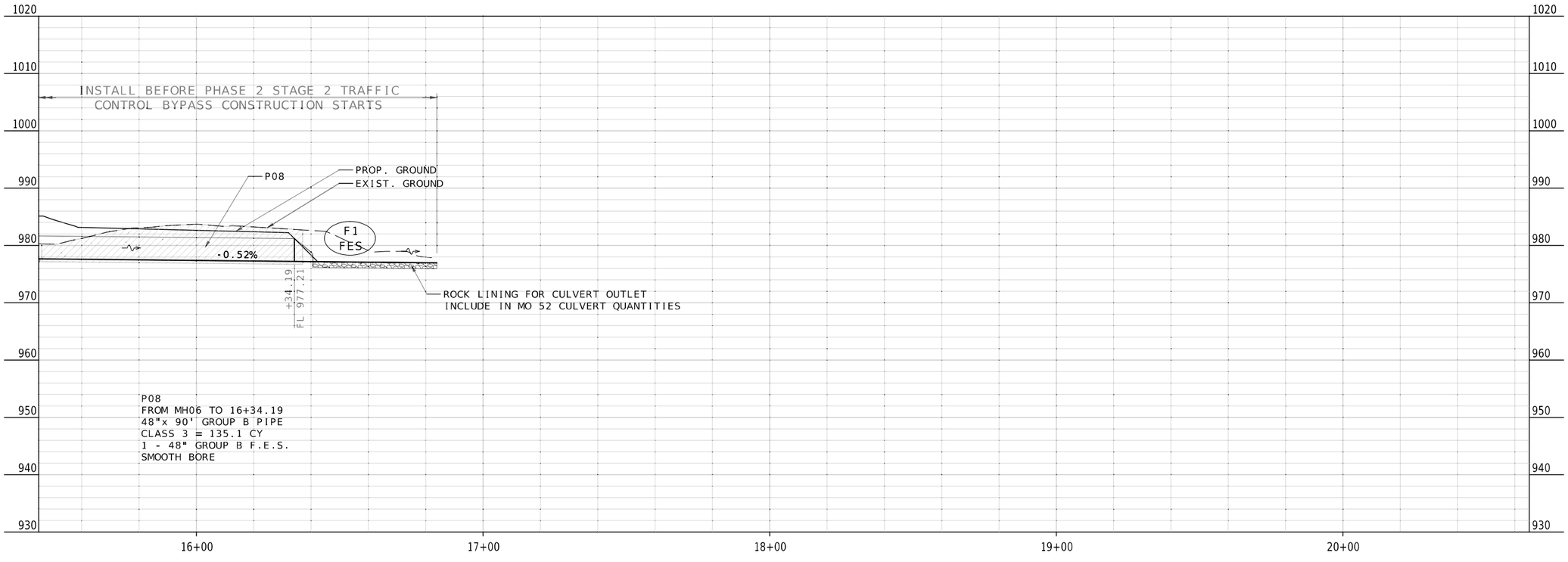
DESCRIPTION	DATE

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

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 3 OF 9



NOTES:
(1) INSTALL P08 BEFORE THE PHASE 2 STAGE 2 BYPASS CONSTRUCTION.



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:26:09 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	105

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

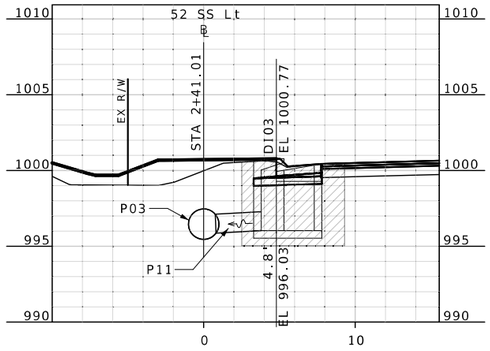
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

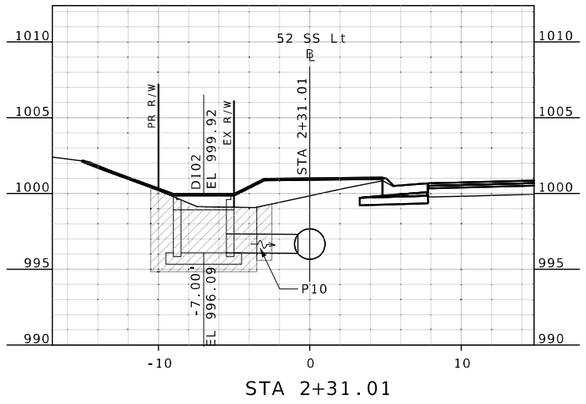
STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 4 OF 9



STA 2+41.01

DI03
STA 2+41.01
4.8' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.75'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.70 CY
REINFORCING STEEL = 233.5 LBS
CLASS 3 EXC. = 13.6 CY

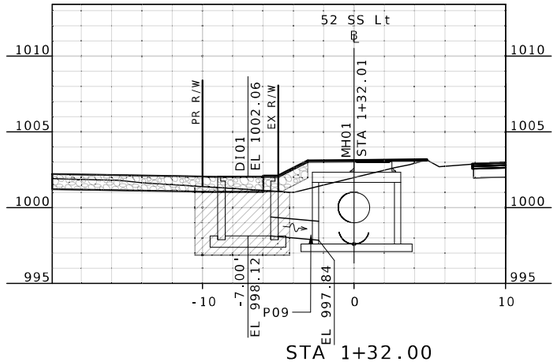
P11
FROM DI03 TO P03 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 2+31.01

DI02
STA 2+32.01
7' Lt.
3'x 3' S-1 DROP INLET
D = 3.8'
1- GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 8.2 CY

P10
FROM DI02 TO P03 (TEE)
15" x 5' GROUP B PIPE
CLASS 3 EXC. = 0.6 CY
SMOOTH BORE



STA 1+32.00

DI01
STA 1+32.01
7' Lt.
3'x 3' S-1 DROP INLET
D = 3.9'
1- GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 7.8 CY

P09
FROM DI01 TO MH01
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:25:55 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	106

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

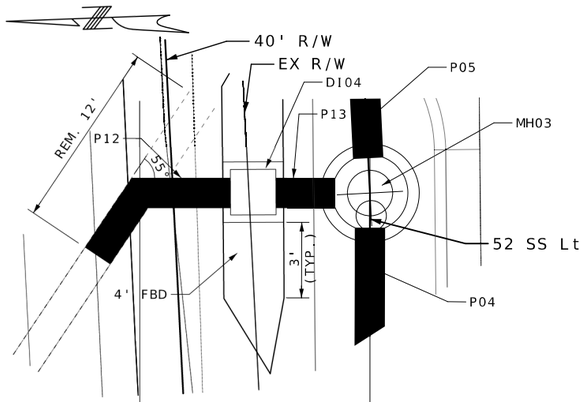
BRIDGE NO.

DESCRIPTION	DATE

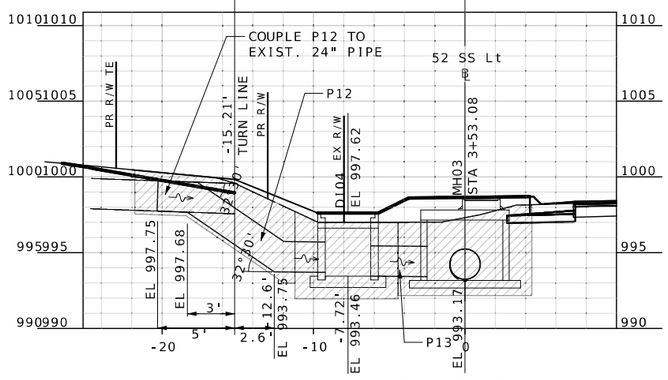
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 5 OF 9



DETAIL
PIPES P12 AND P13

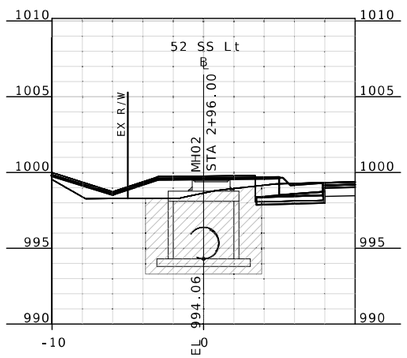


STA 3+53.08

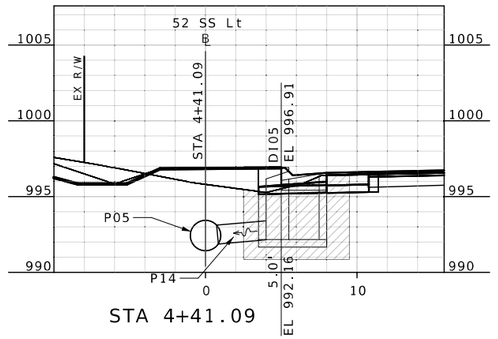
DI04
STA 3+53.08
7.72' Lt.
3'x 3' S-1 DROP INLET
D = 4.1'
1- GRATE AND BEARING PLATE
2- 24" OPENINGS
CLASS 3 EXC. = 9.0 CY

P12
FROM EX. CMP TO DI04
24" x 13' GROUP B PIPE
2-32°30'; 1-55° ELBOWS
CLASS 3 EXC. = 7.4 CY
INCLUDES COUPLER - NDP
SMOOTH BORE

P13
FROM DI04 TO MH03
24" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 2+96.00



STA 4+41.09

DI05
STA 4+41.09
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.75'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.70 CY
REINFORCING STEEL = 233.5 LBS
CLASS 3 EXC. = 13.0 CY

P14
FROM DI05 TO P05 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:25:33 AM
RYAN.JOSEPH.LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	107

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

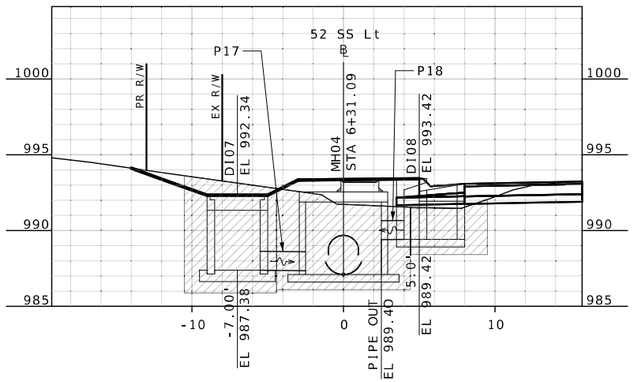
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 6 OF 9



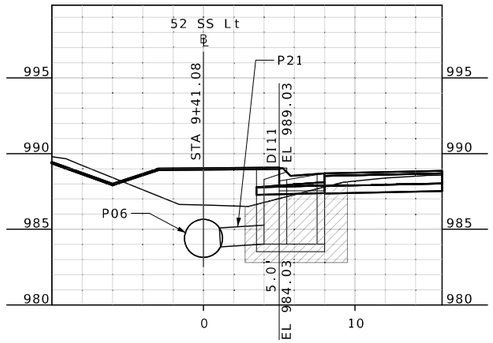
STA 6+31.09

DI07
STA 6+31.09
7' Lt.
3'x 3' S-1 DROP INLET
D = 5.0'
1- GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 11.6 CY

P17
FROM DI07 TO MH04
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

DI08
STA 6+31.09
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 6.0 CY

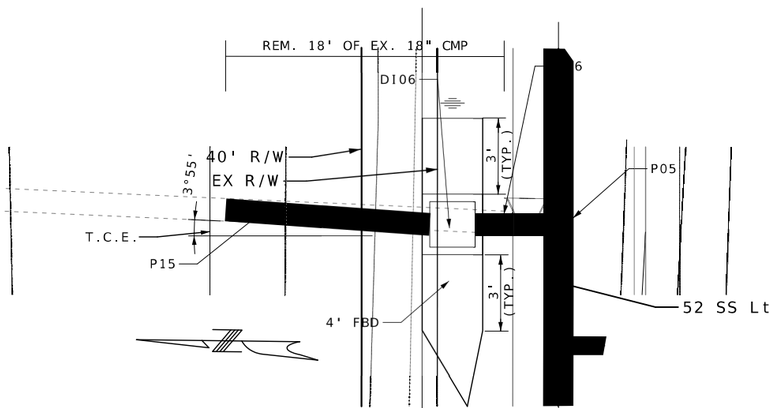
P18
FROM DI08 TO MH04
15" x 2' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



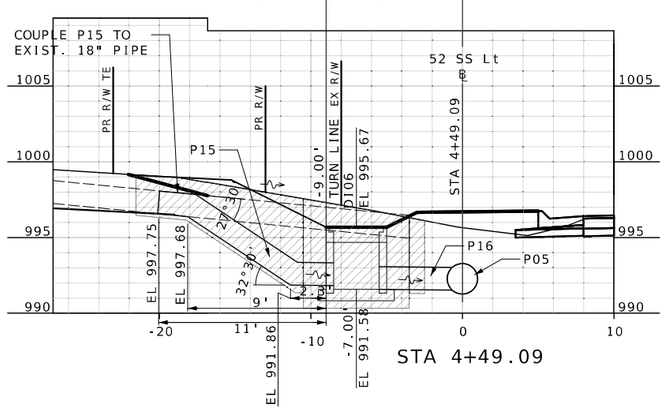
STA 9+41.08

DI11
STA 9+41.08' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 5.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.76 CY
REINFORCING STEEL = 246.5 LBS
CLASS 3 EXC. = 11.3 CY

P21
FROM DI11 TO P06 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



DETAIL
PIPES P15 AND P16

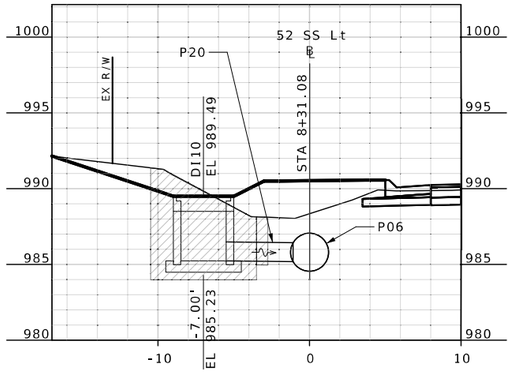


STA 4+49.09

DI06
STA 4+49.09
7.00' Lt.
3'x 3' S-1 DROP INLET
D = 4.1'
1- GRATE AND BEARING PLATE
2- 18" OPENINGS
CLASS 3 EXC. = 12.0 CY

P15
FROM EX. CMP TO DI06
18" x 13' GROUP B PIPE
1-27°30'; 1-32°30' ELBOWS
CLASS 3 EXC. = 7.4 CY
INCLUDE COUPLER - NDP
SMOOTH BORE

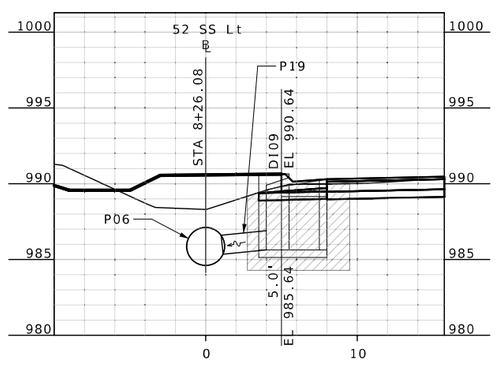
P16
FROM DI04 TO P05(TEE)
18" x 5' GROUP B PIPE
CLASS 3 EXC. = 0.8 CY
SMOOTH BORE



STA 8+31.08

DI10
STA 8+31.08
7' Lt.
3'x 3' S-1 DROP INLET
D = 4.3'
1- GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 10.6 CY

P20
FROM DI10 TO P06 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0.4 CY
SMOOTH BORE



STA 8+26.08

DI09
STA 8+26.08
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 5.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.76 CY
REINFORCING STEEL = 246.5 LBS
CLASS 3 EXC. = 13.8 CY

P19
FROM DI09 TO P06 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:25:20 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	108

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

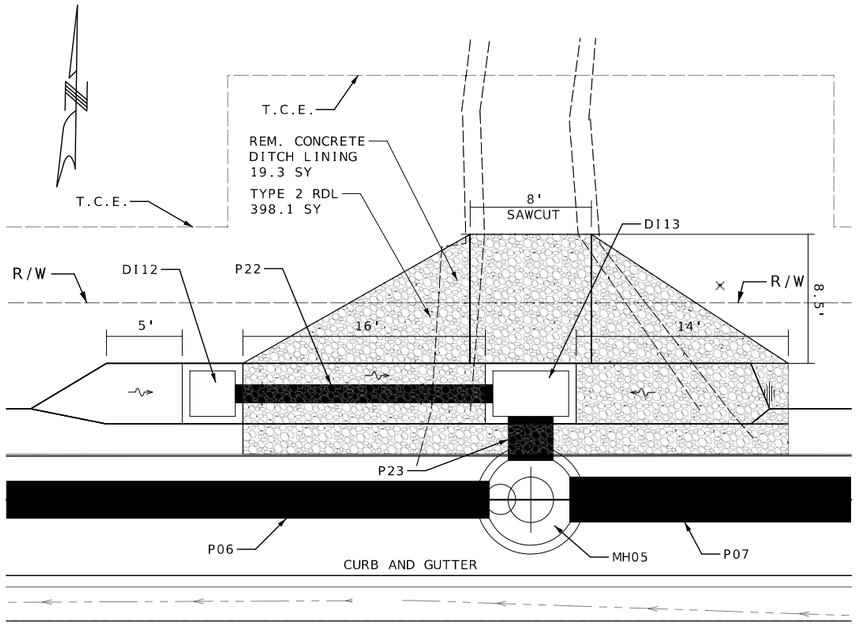
BRIDGE NO.

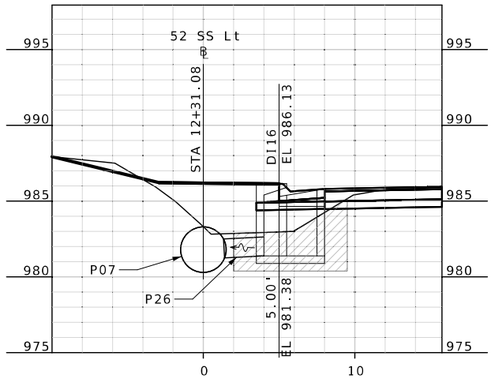
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 7 OF 9

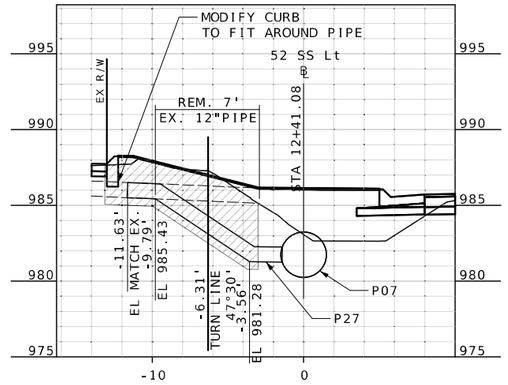




STA 12+31.08

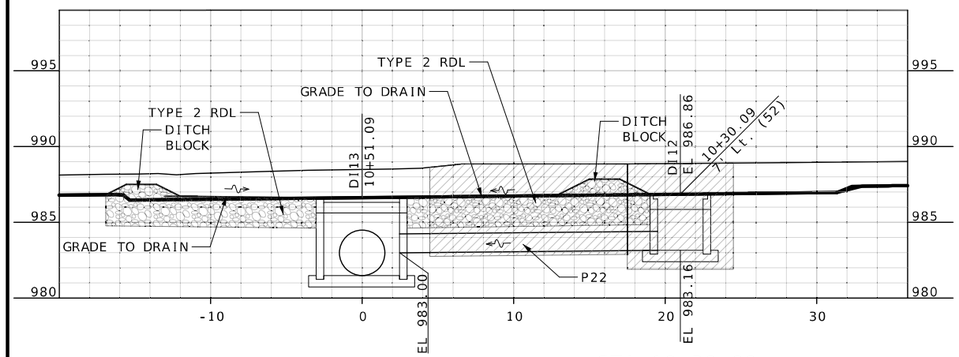
DI16
STA 12+31.08
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.75'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.70 CY
REINFORCING STEEL = 233.5 LBS
CLASS 3 EXC. = 8.6 CY

P26
FROM DI16 TO P07 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH



STA 12+41.08

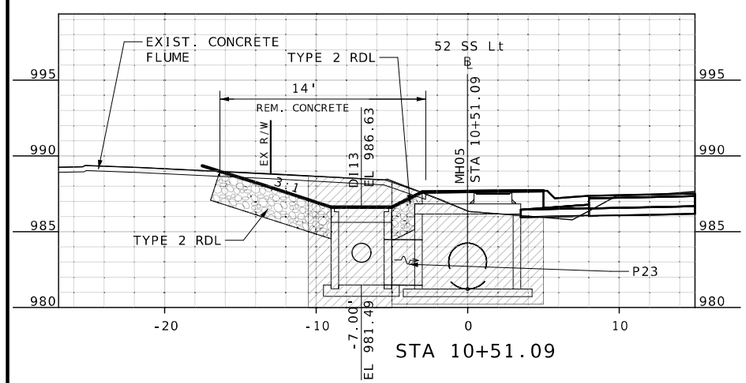
P27
FROM EX. 12" PIPE TO P07 (TEE)
12" x 12' GROUP B PIPE
1- 12" COUPLE
2- 32°30', 1-47°30' ELBOWS
CLASS 3 EXC. = 5.7 CY
ELBOWS AND COUPLE - NDP
SMOOTH BORE



STA 10+30.09

DI12
STA 10+30.09
7' Lt.
3'x 3' S-1 DROP INLET
D = 3.7'
1- GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 12.7 CY

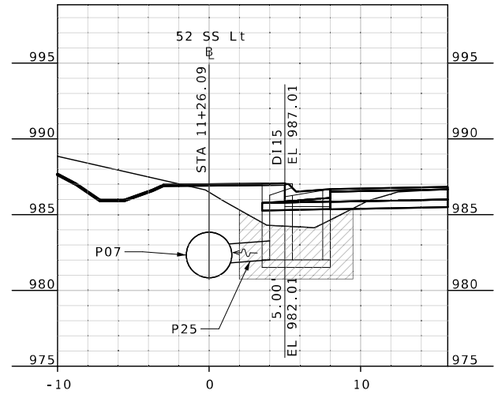
P22
FROM DI12 TO DI13
15" x 17' GROUP B PIPE
CLASS 3 EXC. = 12.3 CY
SMOOTH BORE



STA 10+51.09

DI13
STA 10+51.09
SK. 90° L.A.
7' Lt.
5'x 3' S-1 DROP INLET
D = 5.1'
1- GRATE AND BEARING PLATE
1- 15", 1- 36" OPENING
CLASS 3 EXC. = 15.7 CY

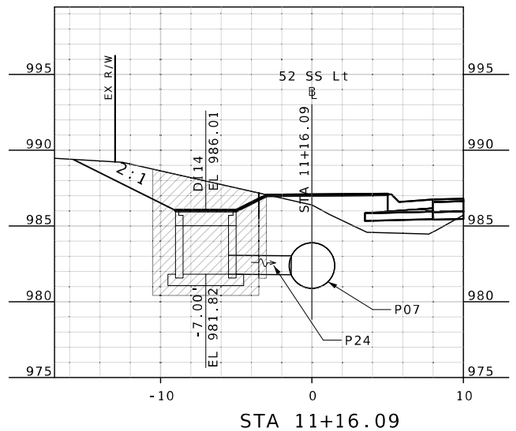
P23
FROM DI07 TO MH04
36" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 11+26.09

DI15
STA 11+26.09
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 5.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.76 CY
REINFORCING STEEL = 246.5 LBS
CLASS 3 EXC. = 10.6 CY

P25
FROM DI15 TO P07 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 11+16.09

DI14
STA 11+16.09
7' Lt.
3'x 3' S-1 DROP INLET
D = 4.2'
1- GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 13.7 CY

P24
FROM DI14 TO P07 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0.4 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:25:07 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	109

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

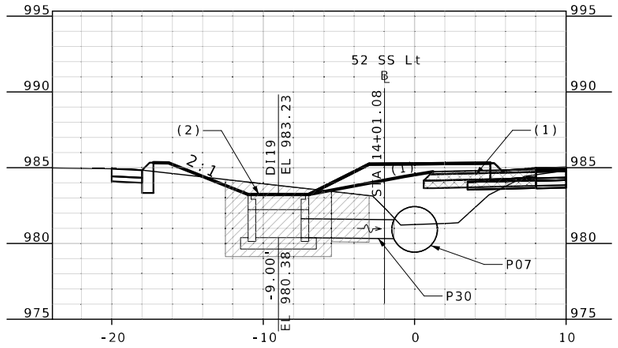
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 8 OF 9

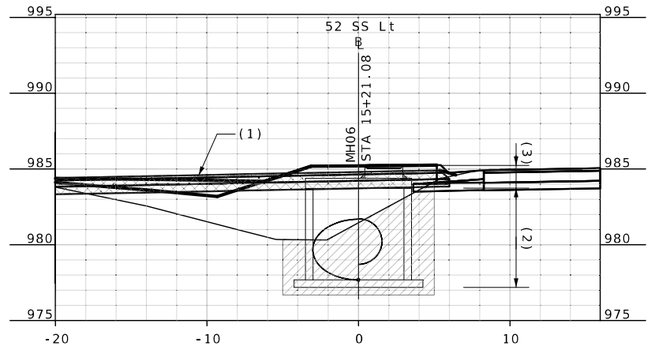


STA 14+01.08

DI19
STA 14+01.08
9' Lt.
3'x 3' S-1 DROP INLET
D = 2.9'
1- GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 9.7 CY

P30
FROM DI19 TO P07 (TEE)
15" x 6' GROUP B PIPE
CLASS 3 EXC. = 1.3 CY
SMOOTH BORE

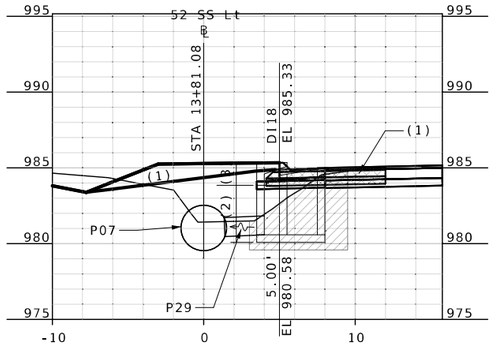
NOTES:
(1) PHASE 2 STAGE 2 BYPASS
(2) INSTALL BEFORE PHASE 2 STAGE 2 BYPASS IS BUILT.



STA 15+41.08

MH06
STA 15+41.08

NOTES:
(1) PHASE 2 STAGE 2 BYPASS
(2) INSTALL AND COVER BEFORE PHASE 2 STAGE 2 BYPASS IS BUILT.
(3) INSTALL TOP DURING CURB AND GUTTER CONSTRUCTION.

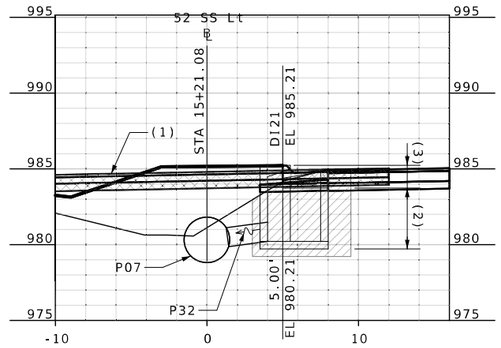


STA 13+81.08

DI18
STA 13+81.08
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.75'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.70 CY
REINFORCING STEEL = 233.5 LBS
CLASS 3 EXC. = 9.1 CY

P29
FROM DI18 TO P07 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

NOTES:
(1) PHASE 2 STAGE 2 BYPASS
(2) INSTALL AND COVER BEFORE PHASE 2 STAGE 2 BYPASS IS BUILT.
(3) INSTALL TOP DURING CURB AND GUTTER CONSTRUCTION.

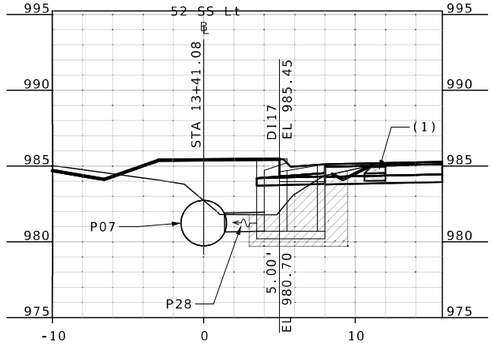


STA 15+21.08

DI21
STA 15+21.08
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 5.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.76 CY
REINFORCING STEEL = 246.5 LBS
CLASS 3 EXC. = 12.3 CY

P32
FROM DI21 TO P07 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

NOTES:
(1) PHASE 2 STAGE 2 BYPASS
(2) INSTALL AND COVER BEFORE PHASE 2 STAGE 2 BYPASS IS BUILT.
(3) INSTALL TOP DURING CURB AND GUTTER CONSTRUCTION.

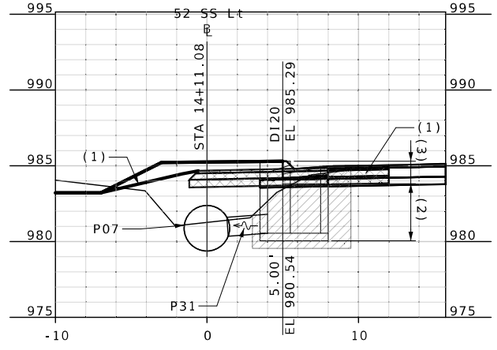


STA 13+41.09

DI17
STA 13+41.08
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.75'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.70 CY
REINFORCING STEEL = 233.5 LBS
CLASS 3 EXC. = 8.3 CY

P28
FROM DI17 TO P07 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

NOTES:
(1) PHASE 2 STAGE 2 BYPASS



STA 14+11.08

DI20
STA 14+11.08
5.0' Rt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.75'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.70 CY
REINFORCING STEEL = 233.5 LBS
CLASS 3 EXC. = 2.7 CY

P31
FROM DI20 TO P07 (TEE)
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

NOTES:
(1) PHASE 2 STAGE 2 BYPASS
(2) INSTALL AND COVER BEFORE PHASE 2 STAGE 2 BYPASS IS BUILT.
(3) INSTALL TOP DURING CURB AND GUTTER CONSTRUCTION.

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:24:51 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	110

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

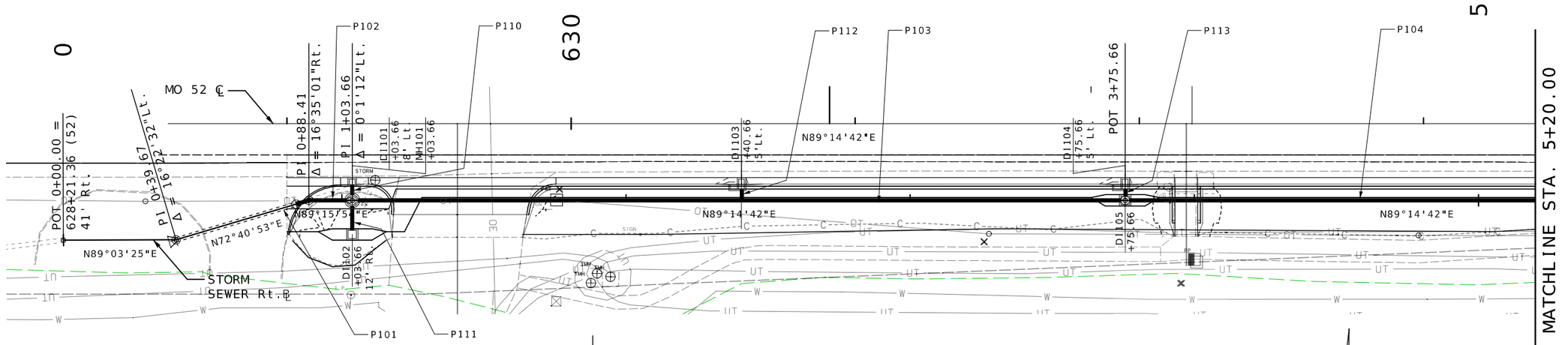
BRIDGE NO.

DESCRIPTION	DATE

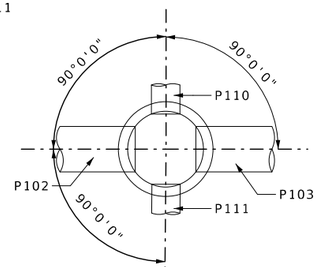
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER LEFT
MISSOURI ROUTE 52
SHEET 9 OF 9

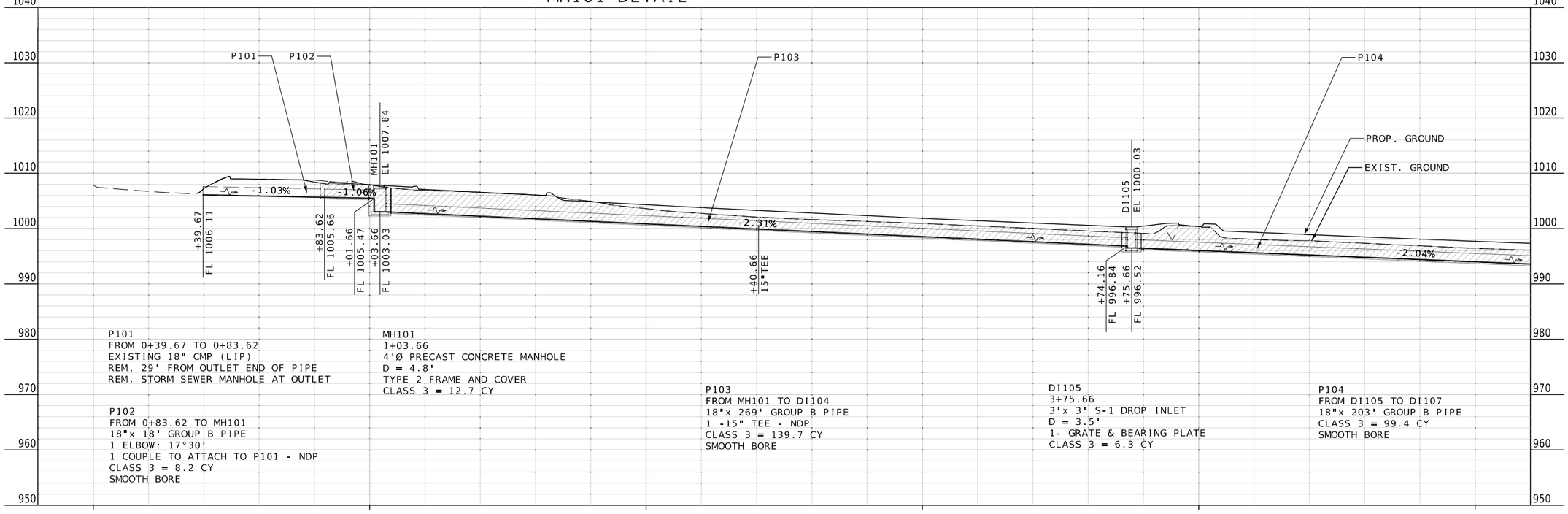


NOTE: ℄ OF DRAINAGE BASED ON ALIGNMENT INDEPENDENT OF RTE. 52, STARTING AT STA. 628+21.36/OFFSET 41' RT.



MH101 DETAIL

SCALE
0 20 40 60



P101
FROM 0+39.67 TO 0+83.62
EXISTING 18" CMP (LIP)
REM. 29' FROM OUTLET END OF PIPE
REM. STORM SEWER MANHOLE AT OUTLET

P102
FROM 0+83.62 TO MH101
18"x 18' GROUP B PIPE
1 ELBOW: 17°30'
1 COUPLE TO ATTACH TO P101 - NDP
CLASS 3 = 8.2 CY
SMOOTH BORE

MH101
1+03.66
4'Ø PRECAST CONCRETE MANHOLE
D = 4.8'
TYPE 2 FRAME AND COVER
CLASS 3 = 12.7 CY

P103
FROM MH101 TO DI104
18"x 269' GROUP B PIPE
1 -15" TEE - NDP
CLASS 3 = 139.7 CY
SMOOTH BORE

DI105
3+75.66
3'x 3' S-1 DROP INLET
D = 3.5'
1- GRATE & BEARING PLATE
CLASS 3 = 6.3 CY

P104
FROM DI105 TO DI107
18"x 203' GROUP B PIPE
CLASS 3 = 99.4 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:31:35 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	111

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

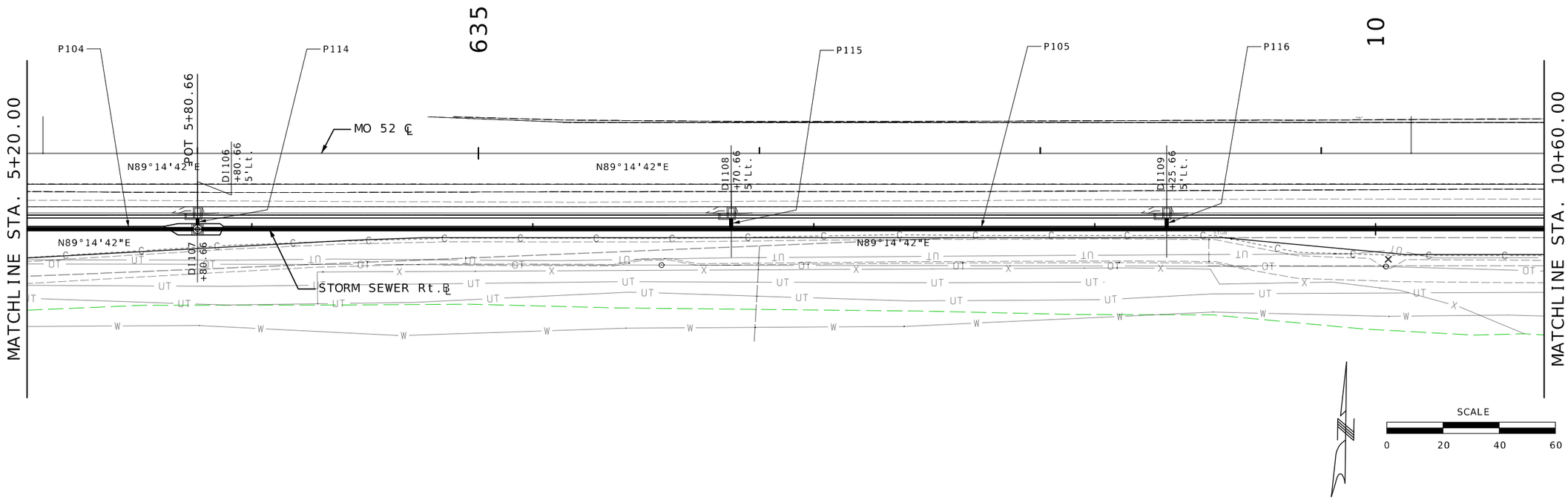
BRIDGE NO.

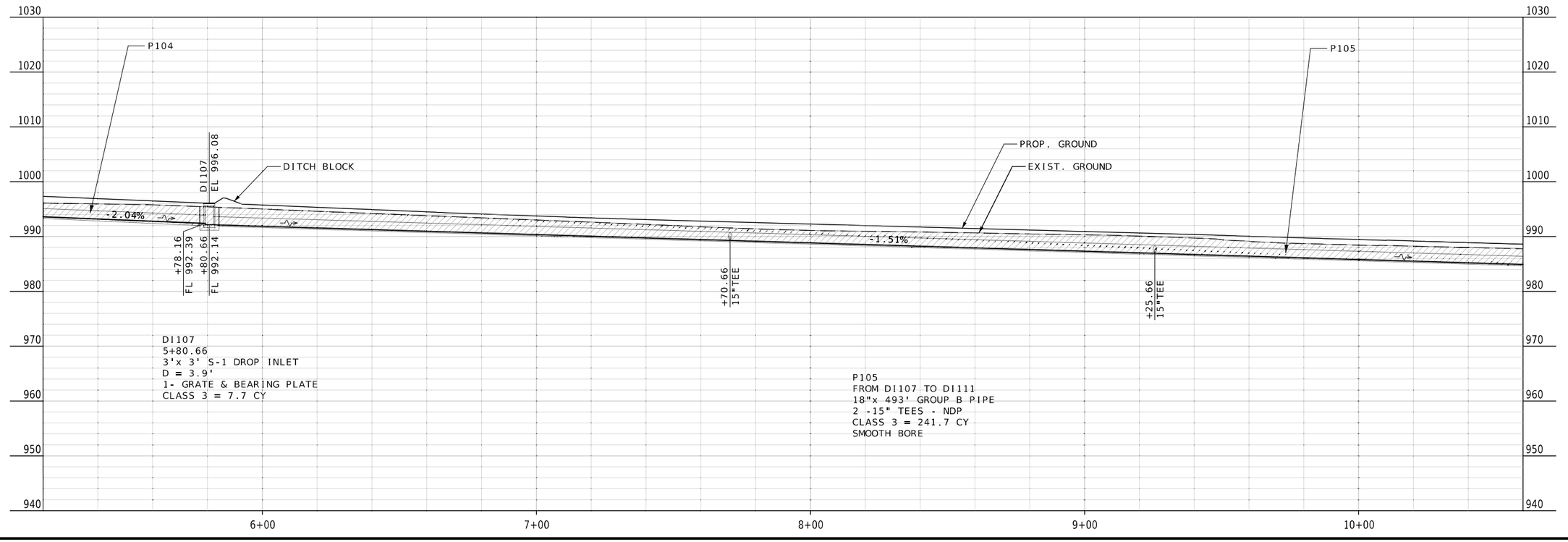
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER RIGHT
MISSOURI ROUTE 52
SHEET 1 OF 7





STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:31:25 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	112

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

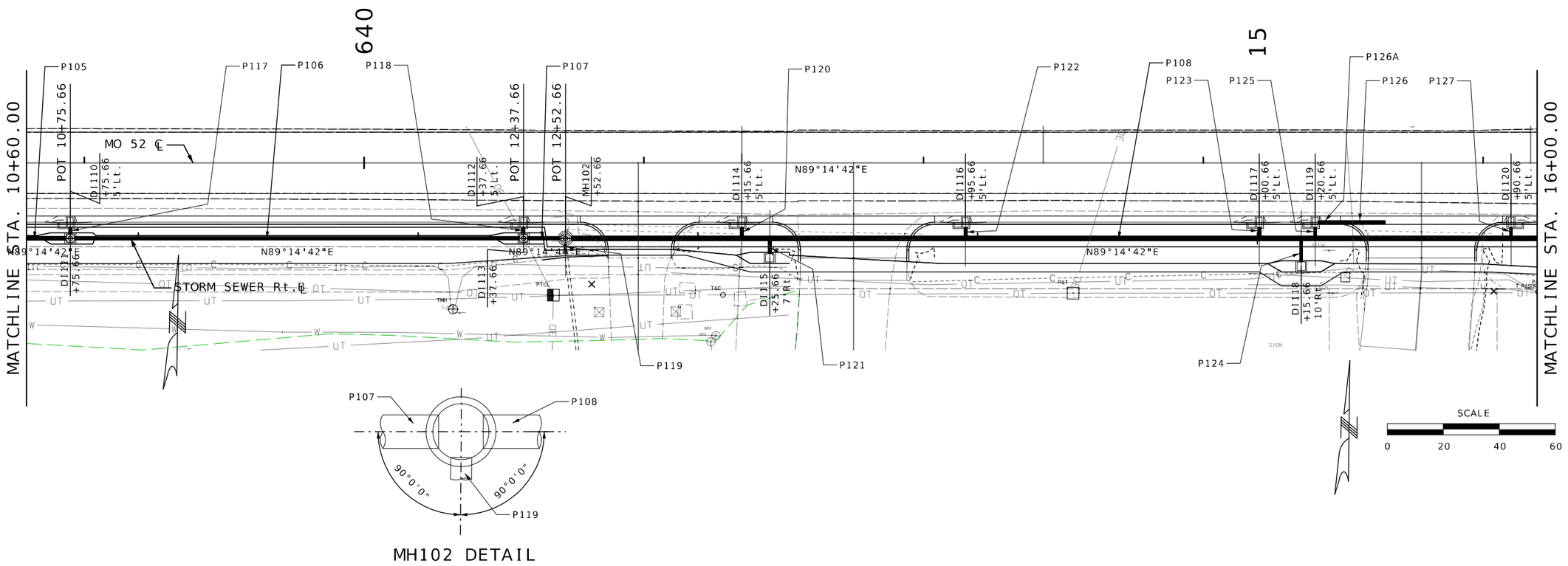
BRIDGE NO.

DESCRIPTION	DATE

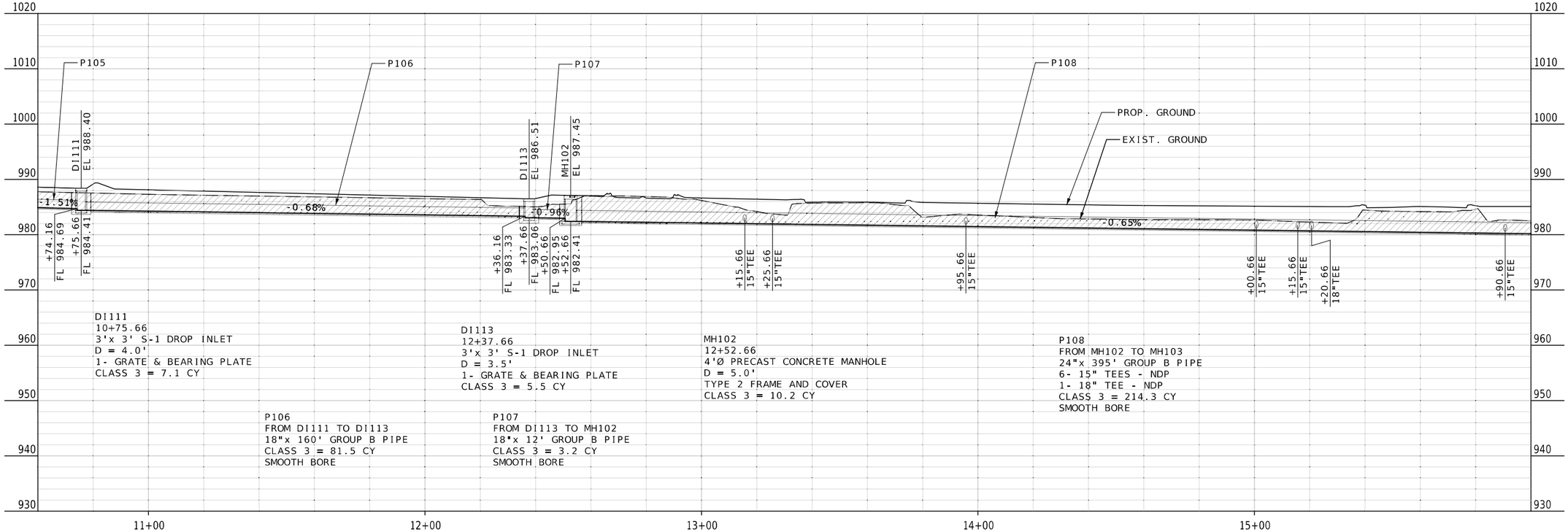
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER RIGHT
MISSOURI ROUTE 52
SHEET 2 OF 7



MH102 DETAIL



DI111
10+75.66
3'x 3' S-1 DROP INLET
D = 4.0'
1- GRATE & BEARING PLATE
CLASS 3 = 7.1 CY

P106
FROM DI111 TO DI113
18"x 160' GROUP B PIPE
CLASS 3 = 81.5 CY
SMOOTH BORE

DI113
12+37.66
3'x 3' S-1 DROP INLET
D = 3.5'
1- GRATE & BEARING PLATE
CLASS 3 = 5.5 CY

P107
FROM DI113 TO MH102
18"x 12' GROUP B PIPE
CLASS 3 = 3.2 CY
SMOOTH BORE

MH102
12+52.66
4'Ø PRECAST CONCRETE MANHOLE
D = 5.0'
TYPE 2 FRAME AND COVER
CLASS 3 = 10.2 CY

P108
FROM MH102 TO MH103
24"x 395' GROUP B PIPE
6- 15" TEES - NDP
1- 18" TEE - NDP
CLASS 3 = 214.3 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:31:15 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	113

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

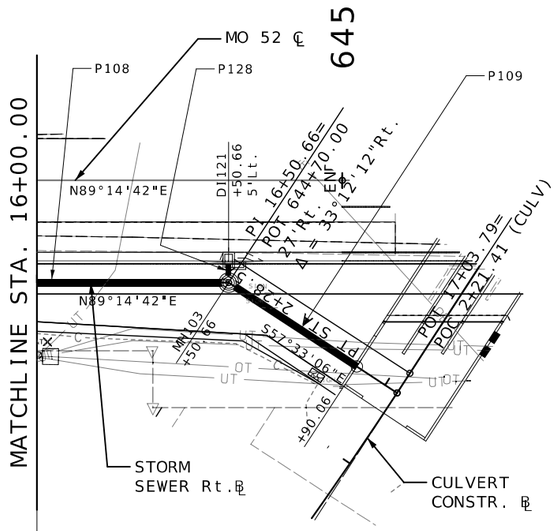
BRIDGE NO.

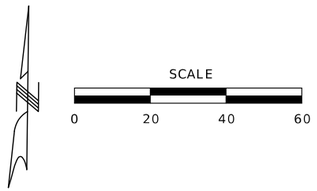
DESCRIPTION	DATE

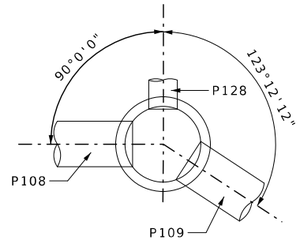
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER RIGHT
MISSOURI ROUTE 52
SHEET 3 OF 7







MH103 DETAIL

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:31:07 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	114

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

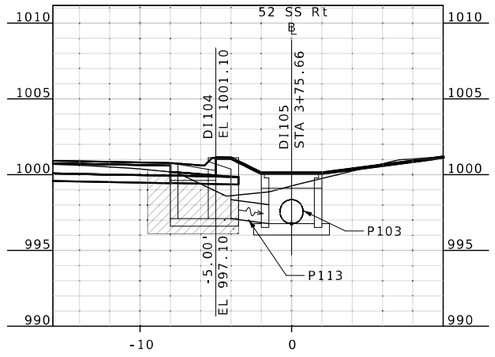
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

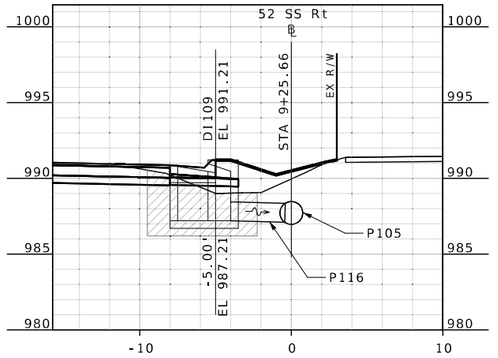
STORM SEWER RIGHT
MISSOURI ROUTE 52
SHEET 4 OF 7



STA 3+75.66

DI104
STA 3+75.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 7.7 CY

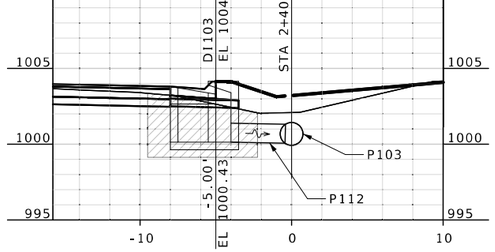
P113
FROM DI104 TO DI105
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 9+25.66

DI109
STA 9+25.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 9.0 CY

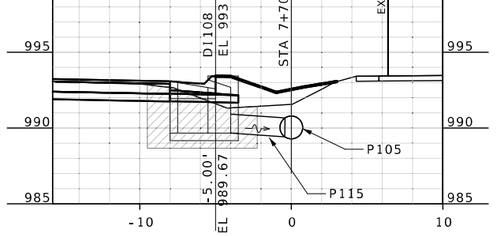
P116
FROM DI108 TO P105 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 2+40.66

DI103
STA 2+40.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 7.9 CY

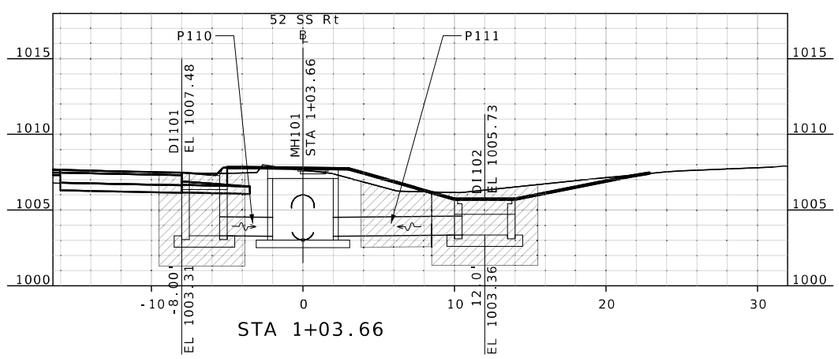
P112
FROM DI103 TO P103 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 7+70.66

DI108
STA 7+70.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 3.75'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.46 CY
REINFORCING STEEL = 212.5 LBS
CLASS 3 EXC. = 9.0 CY

P115
FROM DI108 TO P105 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



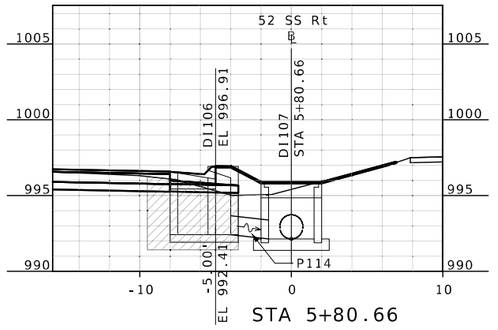
STA 1+03.66

DI101
STA 1+03.66
8' Lt.
2'x 2' TYPE D DROP INLET
D = 3.1'
1- CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS 3 EXC. = 9.0 CY

P110
FROM DI101 TO MH101
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

DI102
STA 1+03.66
12.0' Rt.
3'x 3' S-1 DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 2.4'
1- 3'x 3' GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 10.4 CY

P111
FROM DI102 TO MH101
15" x 9' GROUP B PIPE
CLASS 3 EXC. = 2.8 CY
SMOOTH BORE



STA 5+80.66

DI106
STA 5+80.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.50'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.64 CY
REINFORCING STEEL = 230.5 LBS
CLASS 3 EXC. = 9.5 CY

P114
FROM DI106 TO DI107
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:30:58 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	115

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

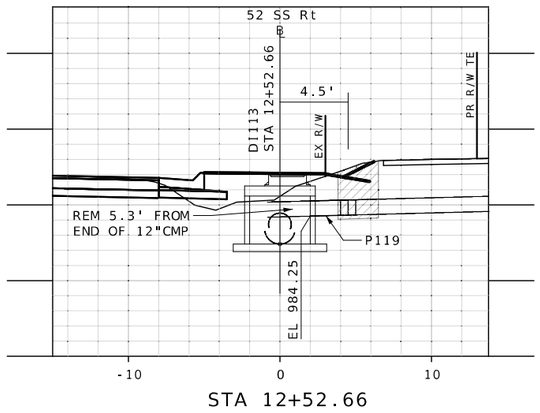
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

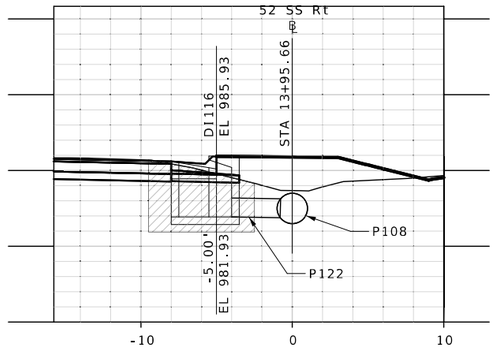
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STORM SEWER RIGHT
MISSOURI ROUTE 52
SHEET 5 OF 7



STA 12+52.66

P119
FROM EX. PIPE TO DI113
12" x 3' GROUP B PIPE
CLASS 3 EXC. = 1.5 CY
1- 12" COUPLE - NDP
1- 7°30' ELBOW - NDP



STA 13+95.66

DI116
STA 13+95.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 10.5 CY

P122
FROM DI116 TO P108 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

STA 12+37.66

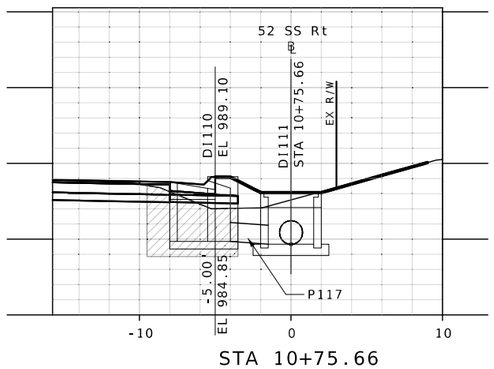
DI112
STA 12+37.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 6.8 CY

P118
FROM DI112 TO DI113
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

STA 13+25.66

DI115
STA 13+25.66
7.0' Rt.
3'- 3' S-1 DROP INLET
D = 3.1'
1- 3'X 3' GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 9.9 CY

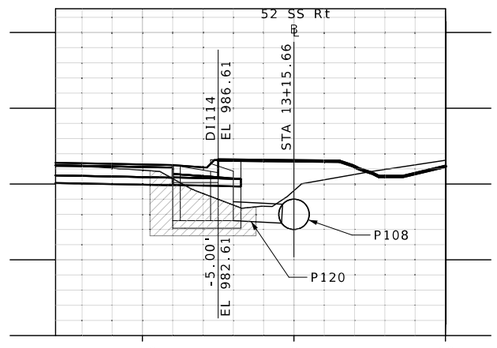
P121
FROM DI15 TO P108 (TEE)
15" x 5' GROUP B PIPE
CLASS 3 EXC. = 0.5 CY
SMOOTH BORE



STA 10+75.66

DI110
STA 10+75.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.25'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.58 CY
REINFORCING STEEL = 227.5 LBS
CLASS 3 EXC. = 8.4 CY

P117
FROM DI110 TO DI111
15" x 3' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 13+15.66

DI114
STA 13+15.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 7.5 CY

P120
FROM DI14 TO P108 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
STATE OF MISSOURI
03/15/2024 10:30:50 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	116

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

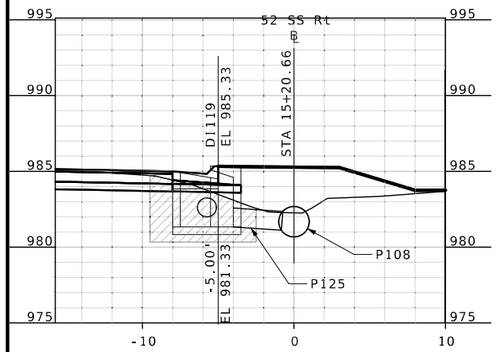
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

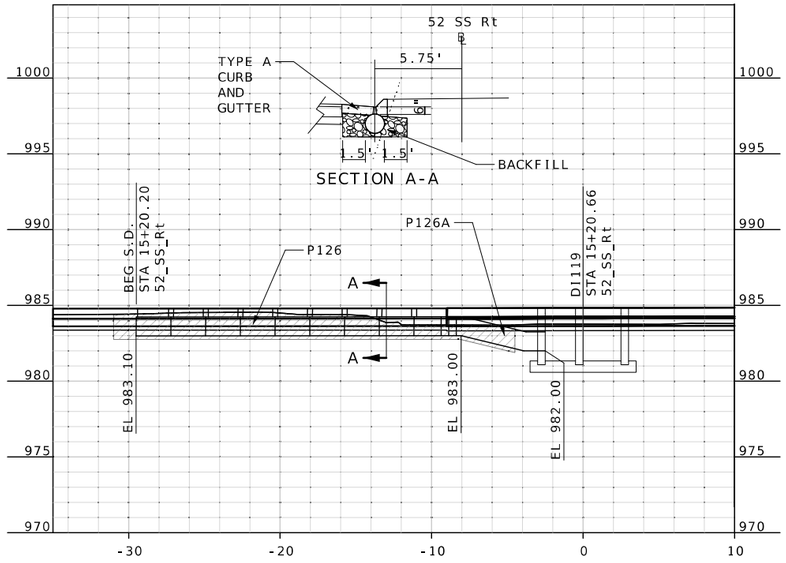
STORM SEWER RIGHT
MISSOURI ROUTE 52
SHEET 6 OF 7



STA 15+20.66

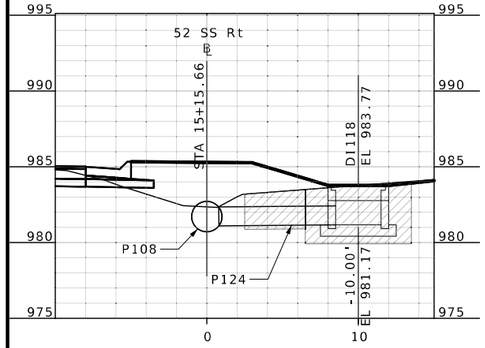
DI119
STA 15+20.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 8.9 CY

P125
FROM DI119 TO P108 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



P126
TO P126A
15" x 20' TYPE C SLOTTED DRAIN
6" TYPE C GRATE
BACKFILL = 3.5 CY
CLASS 3 EXC. = 5.4 CY

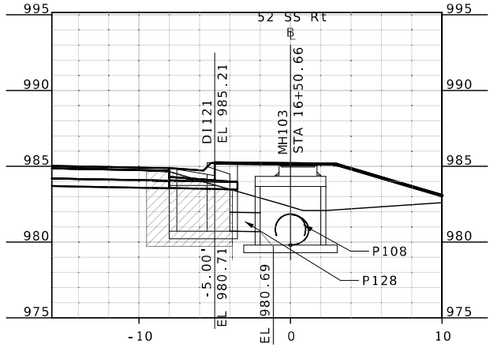
P126A
FROM P126 TO DI119
15" x 7' GROUP B PIPE
2- 15° ELBOWS - NDP
CLASS 3 EXC. = 0.9 CY



STA 15+15.66

DI118
STA 15+15.66
10.0' Rt.
3'- 3' S-1 DROP INLET
D = 2.6'
1- 3'X 3' GRATE AND BEARING PLATE
1- 15" OPENING
CLASS 3 EXC. = 8.0 CY

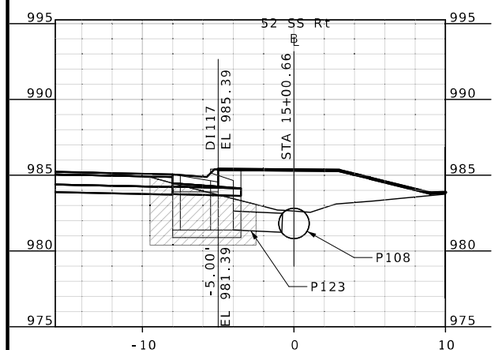
P124
FROM DI118 TO P108 (TEE)
15" x 8' GROUP B PIPE
CLASS 3 EXC. = 1.5 CY
SMOOTH BORE



STA 16+50.66

DI121
STA 16+50.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.50'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.64 CY
REINFORCING STEEL = 230.5 LBS
CLASS 3 EXC. = 9.4 CY

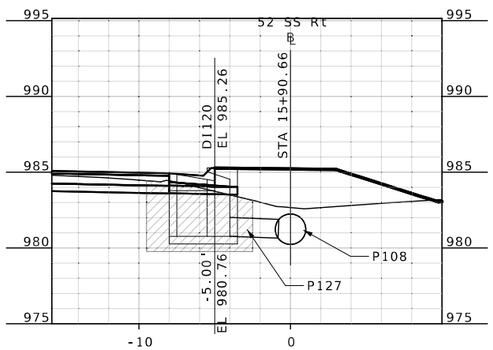
P128
FROM DI121 TO MH103
15" x 2' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 15+00.66

DI117
STA 15+00.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.00'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.52 CY
REINFORCING STEEL = 215.5 LBS
CLASS 3 EXC. = 9.3 CY

P123
FROM DI117 TO P108 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE



STA 15+90.66

DI120
STA 15+90.66
5.0' Lt.
TYPE X DROP INLET
L = 2'-6"; 2'x 2' GRATE
D = 4.50'
1- 2'X 2' CURVED VANE GRATE AND FRAME
1- 15" OPENING
CLASS B CONCRETE = 1.64 CY
REINFORCING STEEL = 230.5 LBS
CLASS 3 EXC. = 10.8 CY

P127
FROM DI120 TO P108 (TEE)
15" x 4' GROUP B PIPE
CLASS 3 EXC. = 0 CY
SMOOTH BORE

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:30:39 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	117

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

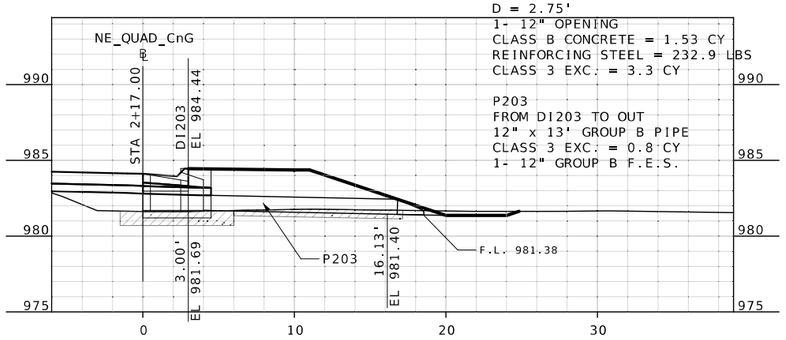
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STORM SEWER RIGHT
MISSOURI ROUTE 52
SHEET 7 OF 7

DI203
STA 2+17.00
3.0' Rt.
TYPE X DROP INLET
L = 5'-0"; 2'x 2' GRATE
D = 2.75'
1- 12" OPENING
CLASS B CONCRETE = 1.53 CY
REINFORCING STEEL = 232.9 LBS
CLASS 3 EXC. = 3.3 CY

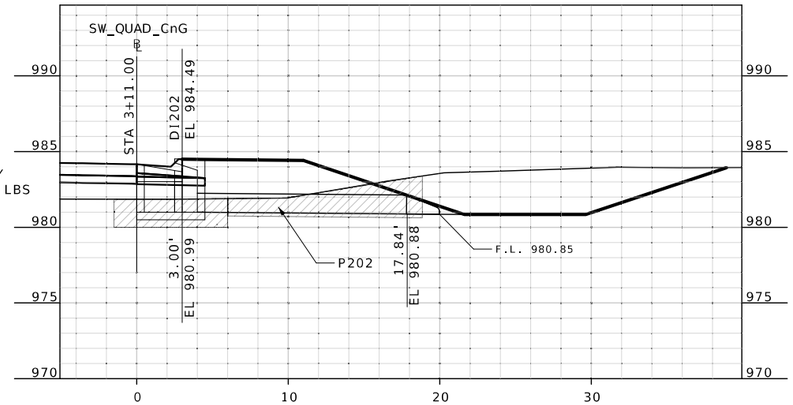
P203
FROM DI203 TO OUT
12" x 13' GROUP B PIPE
CLASS 3 EXC. = 0.8 CY
1- 12" GROUP B F.E.S.



STA 2+17.00
NORTHEAST QUADRANT

DI202
STA 3+11.00
3.0' Rt.
TYPE X DROP INLET
L = 5'-0", 2'x 2' GRATE
D = 3.5'
1- 15" OPENING
CLASS B CONCRETE = 1.71 CY
REINFORCING STEEL = 250.9 LBS
CLASS 3 EXC. = 6.5 CY

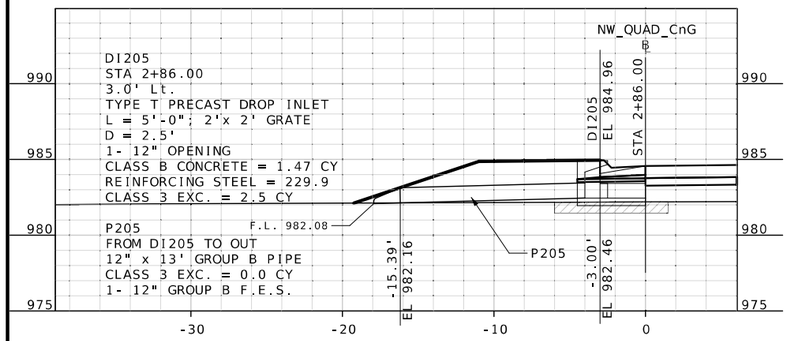
P202
FROM DI202 TO OUT
15" x 14' GROUP B PIPE
CLASS 3 EXC. = 3.6 CY
1- 15" GROUP B F.E.S.



STA 3+11.00
SOUTHWEST QUADRANT

DI205
STA 2+86.00
3.0' Lt.
TYPE T PRECAST DROP INLET
L = 5'-0"; 2'x 2' GRATE
D = 2.5'
1- 12" OPENING
CLASS B CONCRETE = 1.47 CY
REINFORCING STEEL = 229.9
CLASS 3 EXC. = 2.5 CY

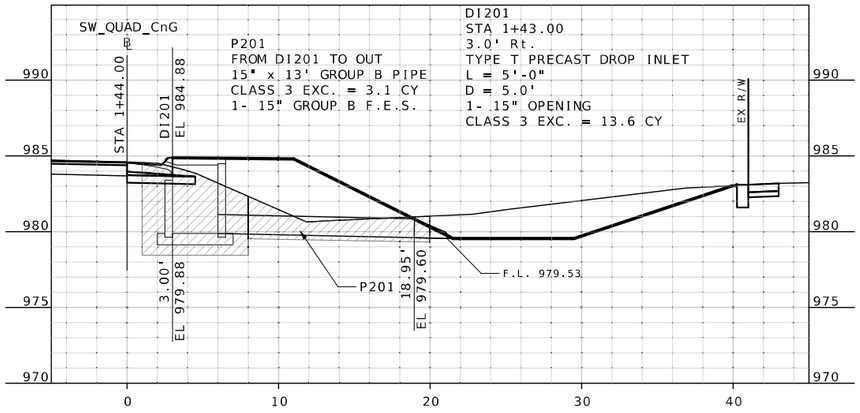
P205
FROM DI205 TO OUT
12" x 13' GROUP B PIPE
CLASS 3 EXC. = 0.0 CY
1- 12" GROUP B F.E.S.



STA 2+86.00
NORTHWEST QUADRANT

DI201
STA 1+43.00
3.0' Rt.
TYPE T PRECAST DROP INLET
L = 5'-0"
D = 5.0'
1- 15" OPENING
CLASS 3 EXC. = 13.6 CY

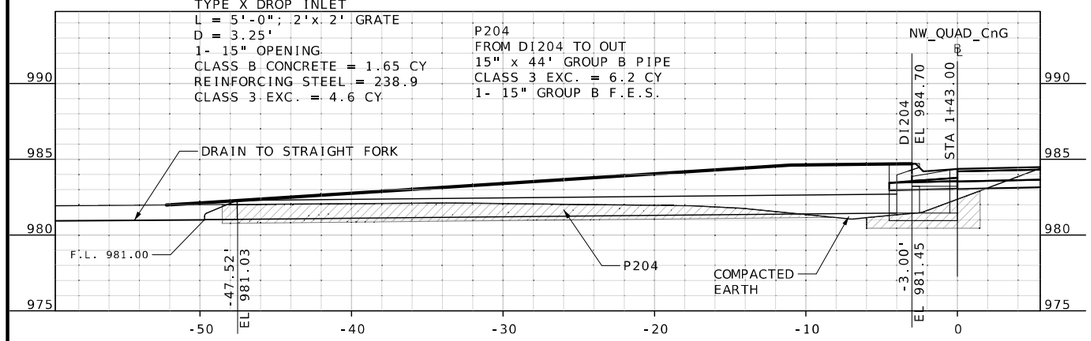
P201
FROM DI201 TO OUT
15" x 13' GROUP B PIPE
CLASS 3 EXC. = 3.1 CY
1- 15" GROUP B F.E.S.



STA 1+44.00
SOUTHWEST QUADRANT

DI204
STA 1+43.00
3.0' Lt.
TYPE X DROP INLET
L = 5'-0"; 2'x 2' GRATE
D = 3.25'
1- 15" OPENING
CLASS B CONCRETE = 1.65 CY
REINFORCING STEEL = 238.9
CLASS 3 EXC. = 4.6 CY

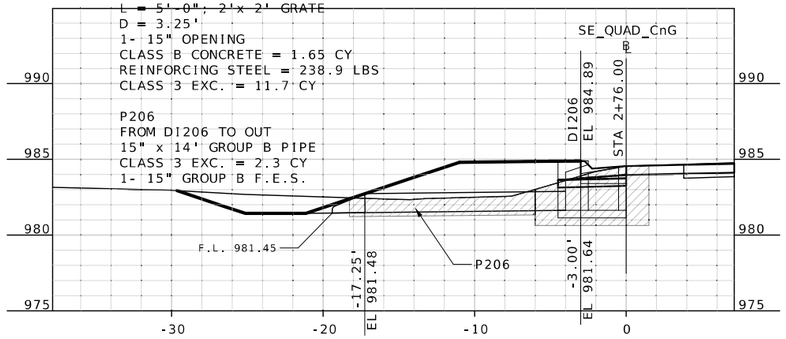
P204
FROM DI204 TO OUT
15" x 44' GROUP B PIPE
CLASS 3 EXC. = 6.2 CY
1- 15" GROUP B F.E.S.



STA 1+43.00
NORTHWEST QUADRANT

DI206
STA 2+76.00
3.0' Lt.
TYPE X DROP INLET
L = 5'-0"; 2'x 2' GRATE
D = 3.25'
1- 15" OPENING
CLASS B CONCRETE = 1.65 CY
REINFORCING STEEL = 238.9 LBS
CLASS 3 EXC. = 11.7 CY

P206
FROM DI206 TO OUT
15" x 14' GROUP B PIPE
CLASS 3 EXC. = 2.3 CY
1- 15" GROUP B F.E.S.



STA 2+76.00
SOUTHEAST QUADRANT

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:58:23 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	118

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

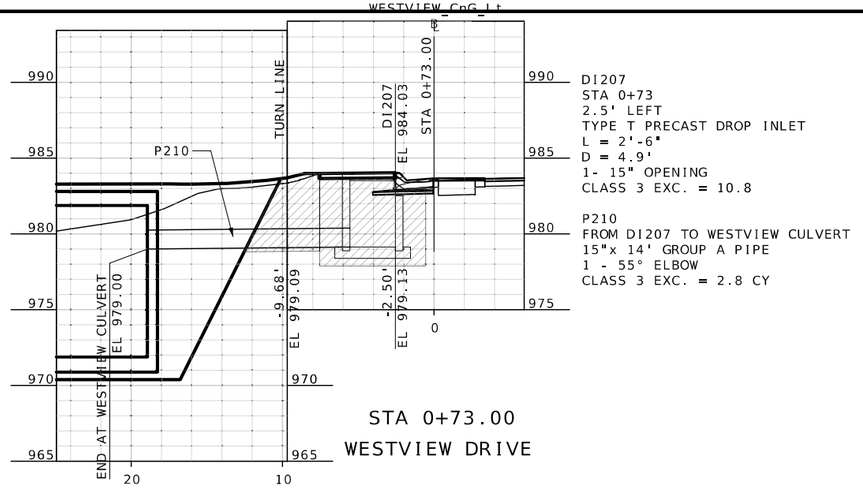
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

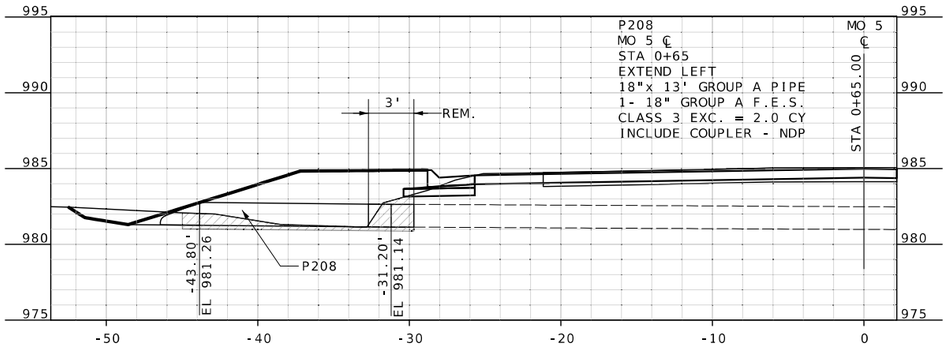
MISCELLANEOUS DRAINAGE AROUND JUNCTION 5 & 52
SHEET 1 OF 6



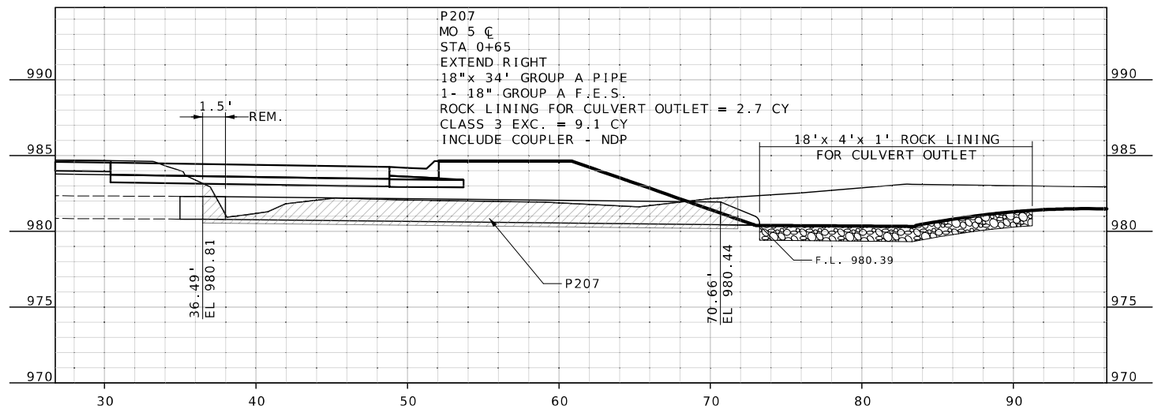
DI207
STA 0+73
2.5' LEFT
TYPE T PRECAST DROP INLET
L = 2'-6"
D = 4.9'
1- 15" OPENING
CLASS 3 EXC. = 10.8

P210
FROM DI207 TO WESTVIEW CULVERT
15"x 14' GROUP A PIPE
1 - 55° ELBOW
CLASS 3 EXC. = 2.8 CY

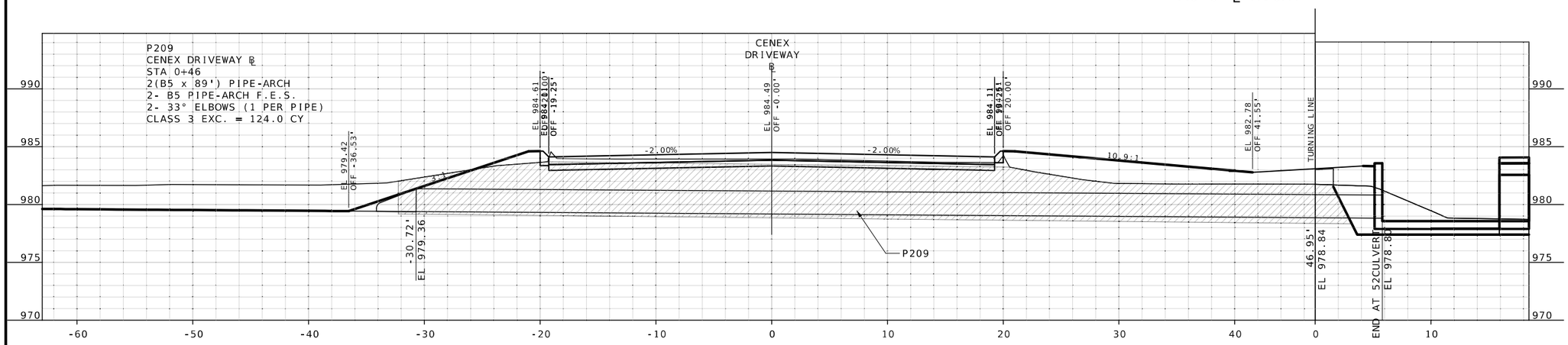
STA 0+73.00
WESTVIEW DRIVE



STA 0+65.00
MO 5 ℄ LEFT



STA 0+65.00
MO 5 ℄ RIGHT



STA 0+46.00
CENEX STATION DRIVEWAY
ACCESS TO MO 52

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:58:33 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	119

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

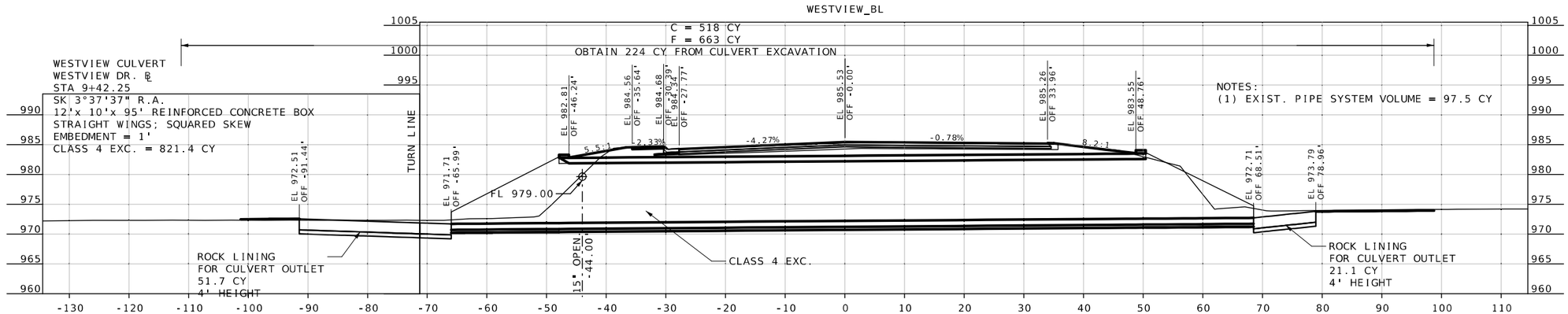
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISCELLANEOUS DRAINAGE AROUND JUNCTION 5 & 52
SHEET 2 OF 6



STA 9+42.25
WESTVIEW DRIVE ℄

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:58:44 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	120

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

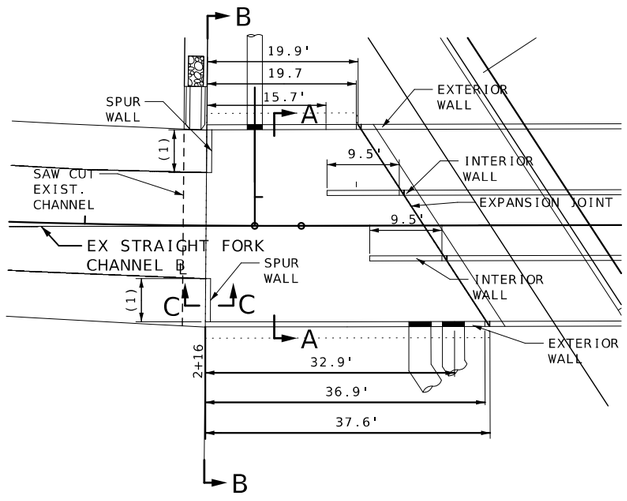
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISCELLANEOUS DRAINAGE
WESTVIEW DR. RCB
SHEET 3 OF 6

A9255 MODIFIED INLET

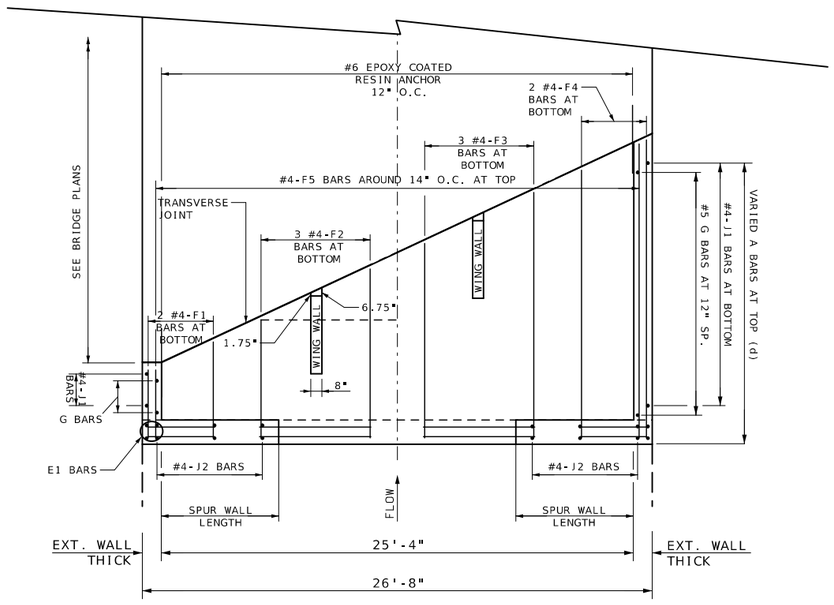
NOT TO SCALE



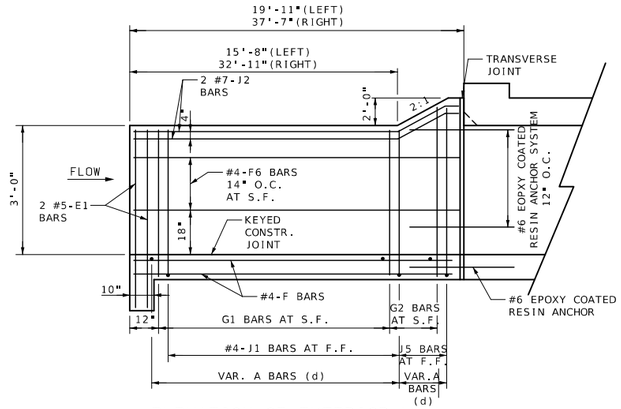
NOTES:
(1) MATCH SPUR WALL LENGTH WITH WIDTH OF EXISTING DITCH SIDE SLOPE.

SEE MISC. DRAINAGE SHEET 5 OF 6 FOR MORE INFORMATION

CULVERT ON MO 52 CROSSING STRAIGHT FORK



PLAN OF BOTTOM SLAB



ELEVATION OF EXTERIOR WALL

J1 BARS MAY BE BENT IN FIELD OR SHOP.

RESIN ANCHOR SYSTEM

(47 REQUIRED)
INSTALL IN CULVERT BARREL WALLS AND BOTTOM SLAB

(1) USE MANUFACTURERS RECOMMENDED EMBEDMENT LENGHT (5" MIN.)
(2) COST OF FURNISHING AND INSTALLING THE RESIN ANCHOR SYSTEM, COMPLETE AND IN PLACE, SHALL BE COMPLETELY COVERED BY THE CONTRACT UNIT PRICE FOR CLASS B-1 CONCRETE (CULVERTS-BRIDGE).

GENERAL NOTES:

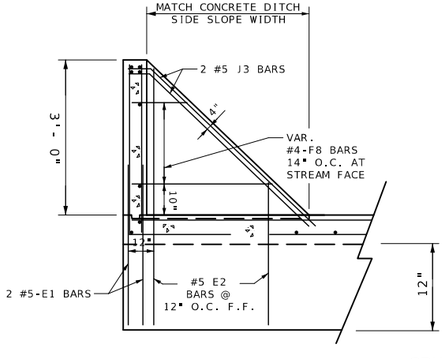
SEE STANDARD SHEET 703.82 FOR GENERAL NOTES, INTERIOR WALL DESIGN, AND CONSTRUCTION INFORMATION.

GRANULAR BACKFILL TO BE PLACED BENEATH THE BOTTOM SLAB. SEE BRIDGE PLANS.

NOTATIONS (d) CAN BE FOUND IN STANDARD PLANS.

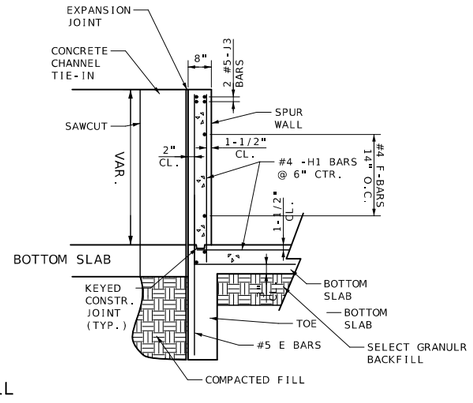
SEE BRIDGE PLANS FOR THE INTERIOR WING WALL DETAILS.

PIPE INLET REINFORCEMENT INFORMATION:
- SEE STANDARD PLANS 703.60 FOR PIPE INLET REINFORCEMENT.
- OMIT HORIZONTAL BARS BELOW #6 BAR AT 3" ABOVE PIPES (P2 AND P3 BARS).
- USE STD. NUMBER AND SPACING FOR #6 VERTICAL BARS, SET IN BOTTOM SLAB, START AT BOTTOM REINFORCING LAYER; MODIFED LENGTH, SEE BAR BILL, P1 BARS.

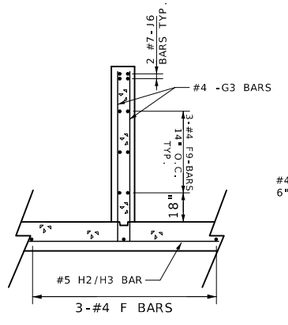


SPUR WALL

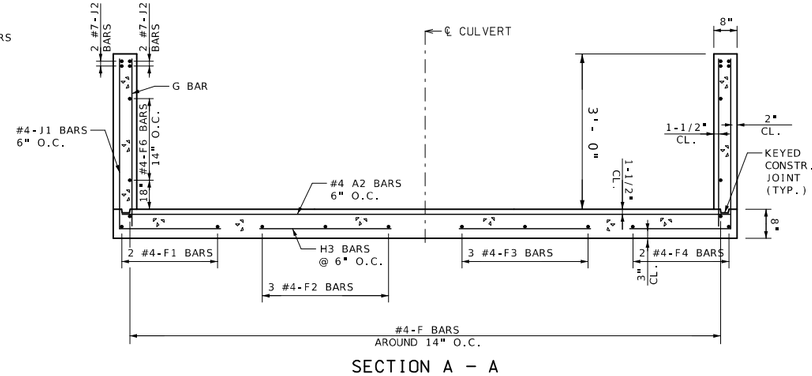
SECTION B – B



SECTION C – C



INTERIOR WING WALLS



SECTION A – A

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
04/02/2024 9:07:19 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
4/2/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	121

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
04/11/24	REV01 - CORRECT NOTE SHIFT
04/11/24	REV01 - PAY ITEMS ADDED

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

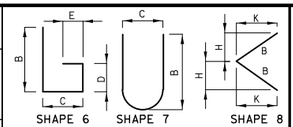
MISCELLANEOUS DRAINAGE
SHEET 4 OF 6

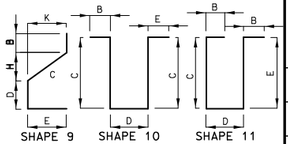
BILL OF REINFORCING STEEL

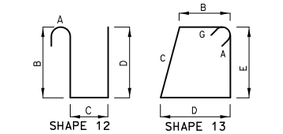
NO. REQ'D.	MARK NO. SIZE	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
			INLET																									
36	4	A2	BOT-SLAB TOP		20					26	5.000													26	5	26	5	635
41	4	A3	BOT-SLAB TOP		20			V	1	26	5.000													26	5	26	5	
			INCREMENT =							2	2.000													2	2	2	2	391
			7.250 INCH																									
8	5	E1	EXT WALL		20					4	4.000													4	4	4	4	36
20	5	E2	SPUR WALL		20			V	2	3	5.000													3	5	3	5	
			INCREMENT =								17.000													0	17	0	17	50
			2.625 INCH																									
2	4	F1	BOT-SLAB BOT		20			V	1	19	7.000													19	7	19	7	
			INCREMENT =							21	9.000													21	9	21	9	28
			26.000 INCH																									
3	4	F2	BOT-SLAB BOT		20			V	1	23	4.000													23	4	23	4	
			INCREMENT =							27	8.000													27	8	27	8	51
			26.000 INCH																									
3	4	F3	BOT SLAB-BOT		20			V	1	29	1.000													29	1	29	1	
			INCREMENT =							33	4.000													33	4	33	4	63
			25.500 INCH																									
2	4	F4	BOT SLAB-BOT		20			V	1	34	11.000													34	11	34	11	
			INCREMENT =							37	3.000													37	3	37	3	48
			28.000 INCH																									
24	4	F5	BOT SLAB-TOP		20			V	1	19	7.000													19	7	19	7	
			INCREMENT =							37	3.000													37	3	37	3	456
			9.250 INCH																									
2	4	F6	EXT WALL(SF)		20					19	7.000													19	7	19	7	26
2	4	F7	EXT WALL(SF)		20					37	3.000													37	3	37	3	50
4	4	F8	SPUR WALL		20			V	2	4	2.000													4	2	4	2	
			INCREMENT =								20.000													0	20	0	20	8
			30.000 INCH																									
12	4	F9	INT WALLS		20					9	2.000													9	2	9	2	73
52	5	G1	EXT WALL(SF)		20					3	3.000													3	3	3	3	176
10	5	G2	EXT WALL(SF)		20			V	2	3	3.000													3	3	3	3	
			INCREMENT =							5	3.000													5	3	5	3	44
			6.000 INCH																									
40	5	G3	INT WALLS		20			V	4		20.000													0	20	0	20	
			INCREMENT =							5	1.000													5	1	5	1	141
			4.500 INCH																									
16	4	H1	SPUR WALL		19			V	2	2	6.000	3	3.000											5	9	5	8	
			INCREMENT =								9.000	3	3.000											4	0	3	11	51
			3.000 INCH																									
107	5	H2	BOT-SLAB BOT		20					6	6.000													6	6	6	6	725
8	5	H3	BOT-SLAB BOT		20			V	2	6	6.000													6	6	6	6	
			INCREMENT =							3	3.000													3	3	3	3	41
			13.000 INCH																									
102	4	J1	EXT WALL(FF)		19					3	3.000	3	2.750											6	6	6	5	437
4	7	J2	EXT WALL(L+)		15					4	8.375	15	6.000					2	0.000	4	3.000			20	2	20	2	165
8	5	J3	SPUR WALL		15						6.750	6	7.000						3.000		6.000			7	2	7	2	60
4	7	J4	EXT WALL(R+)		15					4	8.375	32	11.000					2	0.000	4	3.000			37	7	37	7	307
18	4	J5	EXT WALL(FF)		19			V	2	5	3.000	3	2.750											8	6	8	5	
			INCREMENT =							3	3.000	3	2.750											6	6	6	5	89
			3.000 INCH																									
8	7	J6	INT WALLS		15					10	4.750	3	8.250					4	5.000	9	5.000			14	1	14	1	230
24	6	P1	EXT WALL(P)		20					2	11.000													2	11	2	11	105

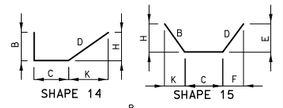
BILL OF REINFORCING STEEL

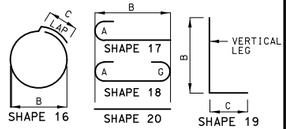
NO. REQ'D.	MARK NO. SIZE	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
2	6	P2	EXT WALL(B5)		20					10	10.000													10	10	10	10	33
2	6	P3	EXT WALL(GB)		20					6	0.000													6	0	6	0	18
			TOTALS																									
	4																											2406
	5																											1273
	6																											156
	7																											702
			TOTAL																									4537
			TOTAL	E																								0
			Slab on																									
			Girder																									
	4																											2406
	5																											1273
	6																											156
	7																											702
			TOTAL																									4537

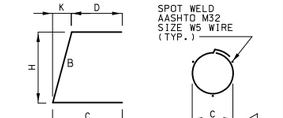


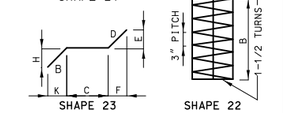


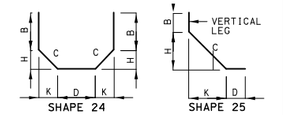


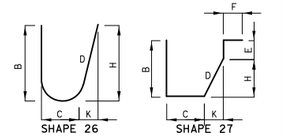


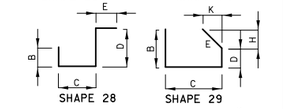


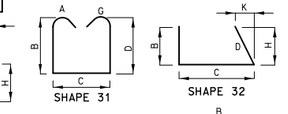


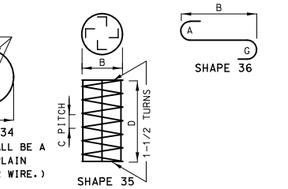




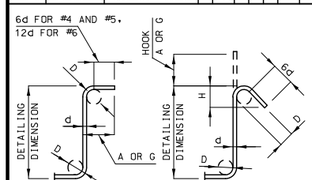






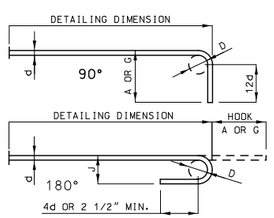


BENDING DIAGRAMS



STIRRUP HOOK DIMENSIONS				
GRADES 40 - 50 - 60 KSI				
BAR SIZE	D (IN.)	90° HOOK	135° HOOK	
		HOOK A OR G	HOOK A OR G	APPROX. H
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	8"	4 1/2"

NOTE: UNLESS OTHERWISE NOTED, DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"
#11	12"	19"	14 3/4"	2'-0"
#14	18 1/4"	2'-3"	21 3/4"	2'-7"

NOTE:
ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.

E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.

NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.

PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED ON INSIDE OF SPIRALS. LENGTH AND WEIGHT OF COLUMN SPIRALS DO NOT INCLUDE SPLICES OR SPACERS.

REINFORCING STEEL (GRADE 60) FY = 60,000 PSI.

Detailed Mar. 2024
Checked Mar. 2024

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

Sheet No. _ of _

STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 10:59:09 AM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	122

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

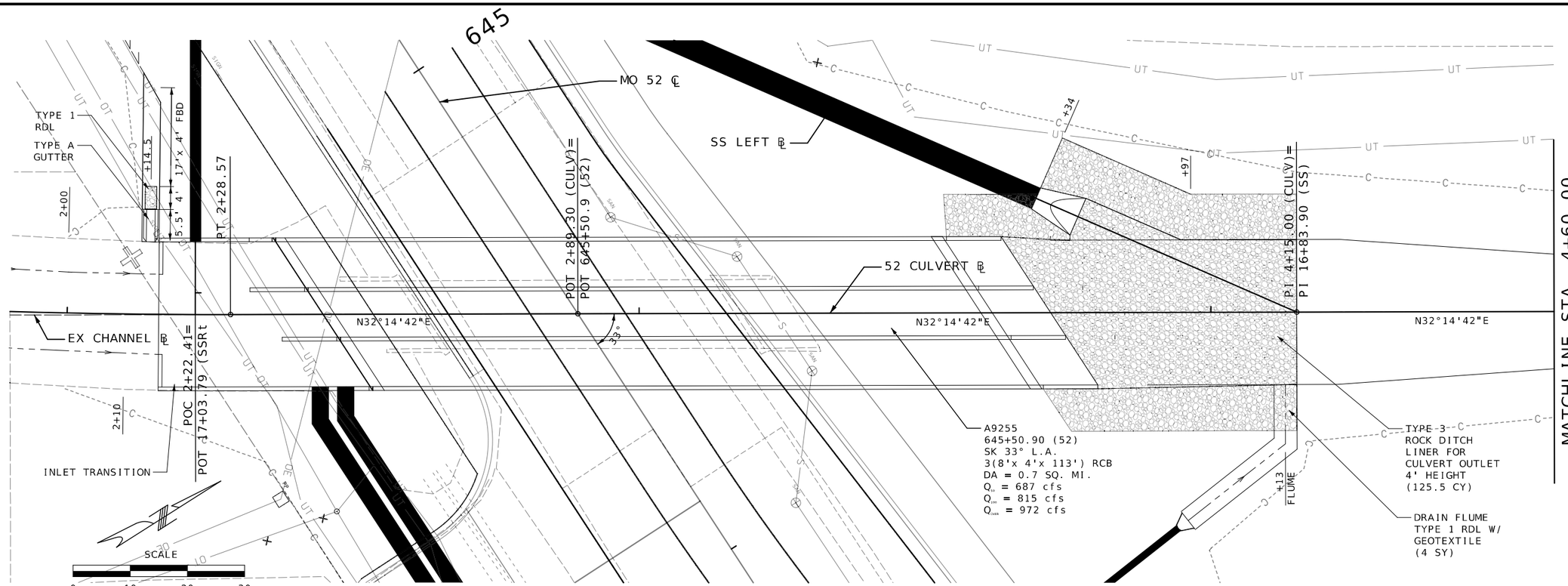
DESCRIPTION

DATE

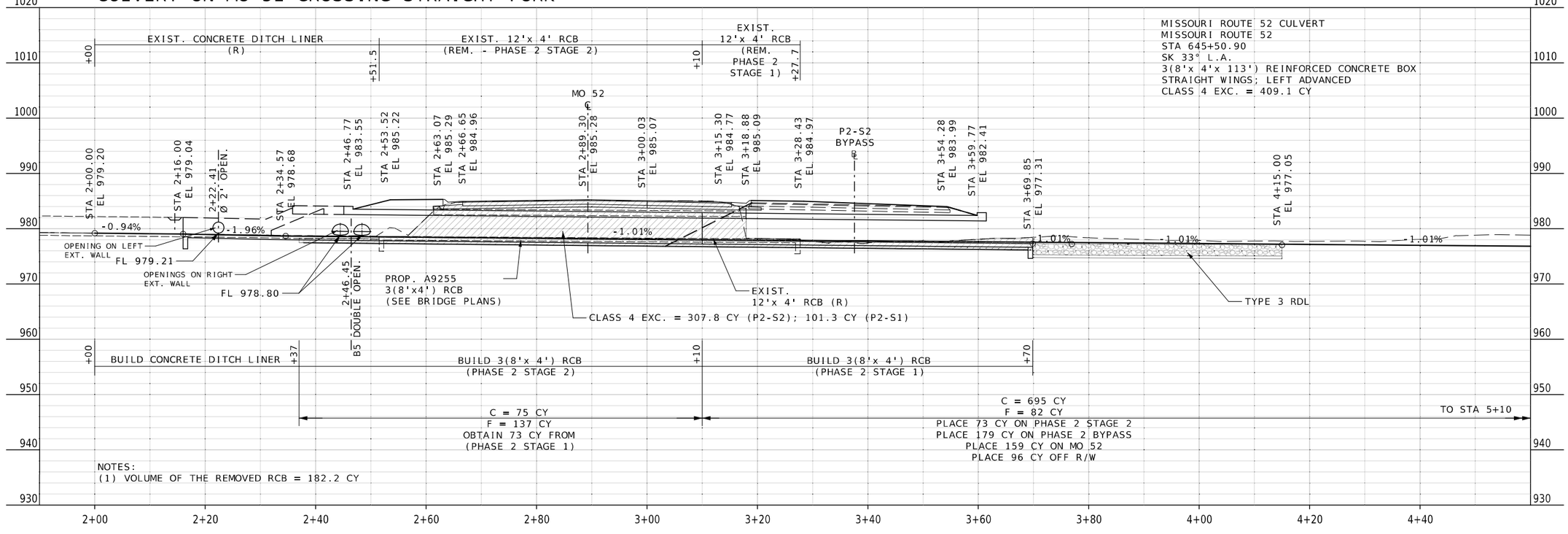
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISCELLANEOUS DRAINAGE
SHEET 5 OF 6



CULVERT ON MO 52 CROSSING STRAIGHT FORK



STATE OF MISSOURI
RYAN JOSEPH LIBBERT
NUMBER PE-2006019679
PROFESSIONAL ENGINEER
03/15/2024 3:07:31 PM
RYAN JOSEPH LIBBERT - CIVIL
MO-PE-2006019679

DATE PREPARED
3/15/2024

ROUTE	STATE
52	MO
DISTRICT	SHEET NO.
CD	123

COUNTY
MORGAN

JOB NO.
J5P3575

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

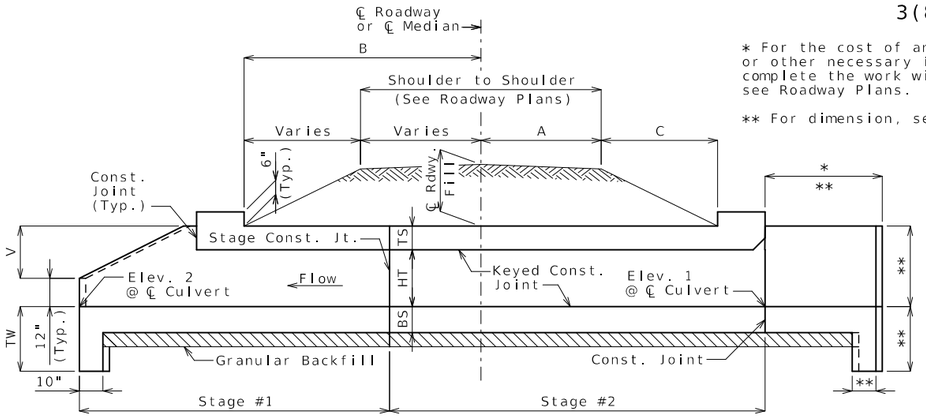
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MISCELLANEOUS DRAINAGE
MISSOURI ROUTE 52 RCB
SHEET 6 OF 6

3(8'x 4') CONCRETE BOX CULVERT

SEC/SUR 01 TWP 42N RGE 17W



GENERAL ELEVATION A-A

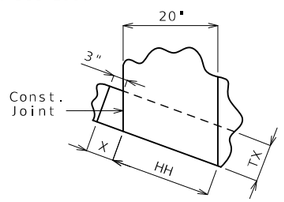
Stage construction joint shown, typical construction joint key not shown for clarity, see standard plans for details.

If any part of the barrel is exposed, the roadway fill shall be warped to provide 12 inches minimum cover. (Roadway Item)

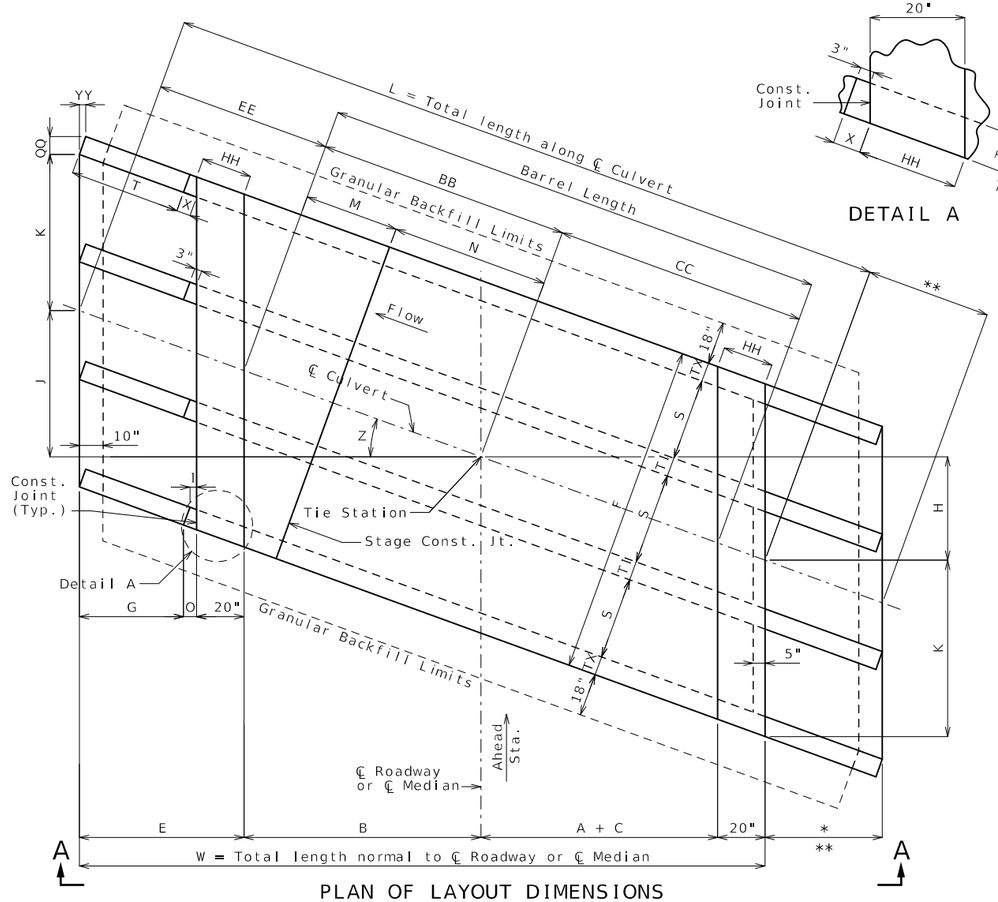
If unsuitable material is encountered, excavation of unsuitable material and furnishing and placing of granular backfill shall be in accordance with Sec 206.

* For the cost of any labor, materials or other necessary items required to complete the work within these limits, see Roadway Plans.

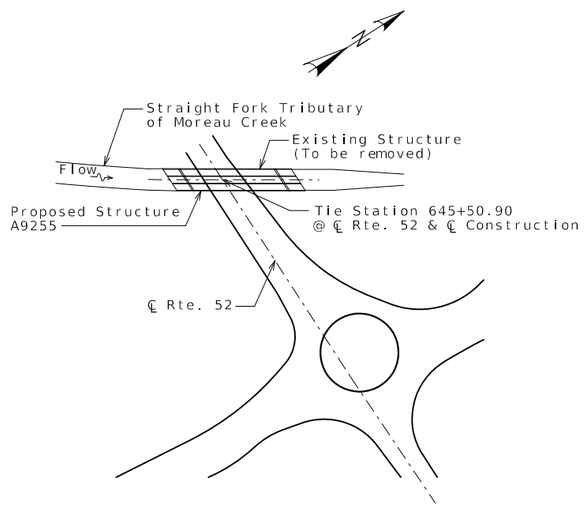
** For dimension, see Roadway Plans.



DETAIL A



PLAN OF LAYOUT DIMENSIONS



LOCATION SKETCH

Layout Dimensions

Var.	Equation	Dim.	Var.	Equation	Dim.	Var.	Equation	Dim.
S	- - -	8'-0"	H	(A + C + 20")(tan Z)	24'-2⅞"	Z	Skew Angle	33°
HT	- - -	4'-0"	I	3"(cos Z)	2½"	BB	(B)(sec Z)	70'-6⅜"
TS	- - -	12"	J	(B + E)(tan Z)	45'-0⅞"	CC	(A + C)(sec Z)	42'-6⅜"
BS	- - -	8"	K	(F/2) / (cos Z)	15'-10¾"	EE	E(sec Z)	12'-2½"
TX	- - -	8"	L	EE + BB + CC + HH	137'-5⅞"	HH	20"(sec Z)	23⅞"
TI	- - -	8"	M	- - -	49'-10⅛"	QQ	TX(cos Z)	6¾"
A	- - -	19'-0"	N	- - -	20'-8⅜"	YY	TX(sin Z)	4⅜"
B	- - -	52'-2"	O	I + YY	6⅞"	TW	Max{3'-4" or (BS + 12")}	3'-4"
C	- - -	16'-8"	T	G(sec Z)	9'-6½"			
E	G + O + 20"	10'-2⅞"	V	HT + TS - 12"	4'-0"			
F	3S + 2TX + 2TI	26'-8"	W	A + B + C + E + 20"	115'-3¾"			
G	2V	8'-0"	X	3" + TX(tan Z)	8¼"			

Hydrologic Data

Drainage Area = 0.7 mi^2
Design Flood Frequency = 50 years
Design Flood Discharge = 690 cfs
Design Flood (D.F.) Elevation = 681.8
Base Flood (100-year)
Base Flood Elevation = 981.8
Base Flood Discharge = 815 cfs
Estimated Backwater = 2.6 ft
Outlet Velocity = 17.3 ft/s
Roadway Overtopping
Overtopping Flood Discharge = 970 cfs
Overtopping Flood Frequency = 295 years
Overtopping Flood Elevation = 984.7

Elevations

Upstream (Elev. 1) = 978.57
Downstream (Elev. 2) = 977.28
Pr. Gr. at Tie Sta. = 985.57

Fill Heights

℄ Rdwy at ℄ Culvert = 2.15 ft
Design (All units) = 2 - 4 ft

Dimensions are based on end units.
Fill heights are measured from the top of top slab to the top of earth fill or roadway.

Estimated Quantities

			Final
Class 4 Excavation	cu. yard	460	
Temporary Shoring	lump sum	1	
Dewatering	lump sum	1	
Class B-1 Concrete (Culverts-Bridge)	cu. yard	244.9	
Reinforcing Steel (Culverts-Bridge)	pound	45,080	
Mechanical Bar Splice	each	95	

General Notes:

Design Specifications:
2010 AASHTO LRFD Bridge Design Specifications and 2010 Interim Revisions

Design Loading:
Vehicular = HL-93 minus lane load, Earth = 120 lb/cf
Equivalent Fluid Pressure = 30 lb/cf (min.), 60 lb/cf (max.)

Design Unit Stresses:
Class B-1 Concrete (Box Culvert) f'c = 4,000 psi
Reinforcing Steel (Grade 60) fy = 60,000 psi

Standard Plans:
703.37, 703.82 703.86, 703.87

Miscellaneous:
MoDOT Construction personnel will indicate the type of box culvert constructed:
☐ Precast Concrete Box used
☐ Cast-in-Place Concrete Box used

When alternate precast concrete box sections are used, the minimum distance from inside face of headwalls to precast sections measured along the shortest wall shall be 3 feet. Reinforcement and dimensions for wings and headwalls shall be in accordance with Missouri Standard Plans.

Channel bottom shall be graded within the right of way for transition of channel bed to culvert openings. Channel banks shall be tapered to match culvert openings. (Roadway Item)

If any part of the barrel is exposed, the roadway fill shall be warped to provide 12 inches minimum cover. (Roadway Item)

Mechanical bar splices shall be in accordance with Sec 706 or 710.

Traffic Handling:
Traffic to be maintained on existing route during construction. See roadway plans for traffic control.

B.M. 2" Pipe at the NE subdivision corner of the Wal-Mart Addition to theCity of Versailles as recorded in survey plat #2006-951

CULVERT-BRIDGE: ROUTE 52 OVER STRAIGHT FORK TRIBUTARY OF MOREAU CREEK

ROUTE 52 FROM ROUTE 5 TO HIGHWAY D
ABOUT 0.1 MILES WEST OF ROUTE 5
TIE STA. 645+50.90

STATE OF MISSOURI
TRENTON B. CRAWFORD
NUMBER PE-2012018053
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

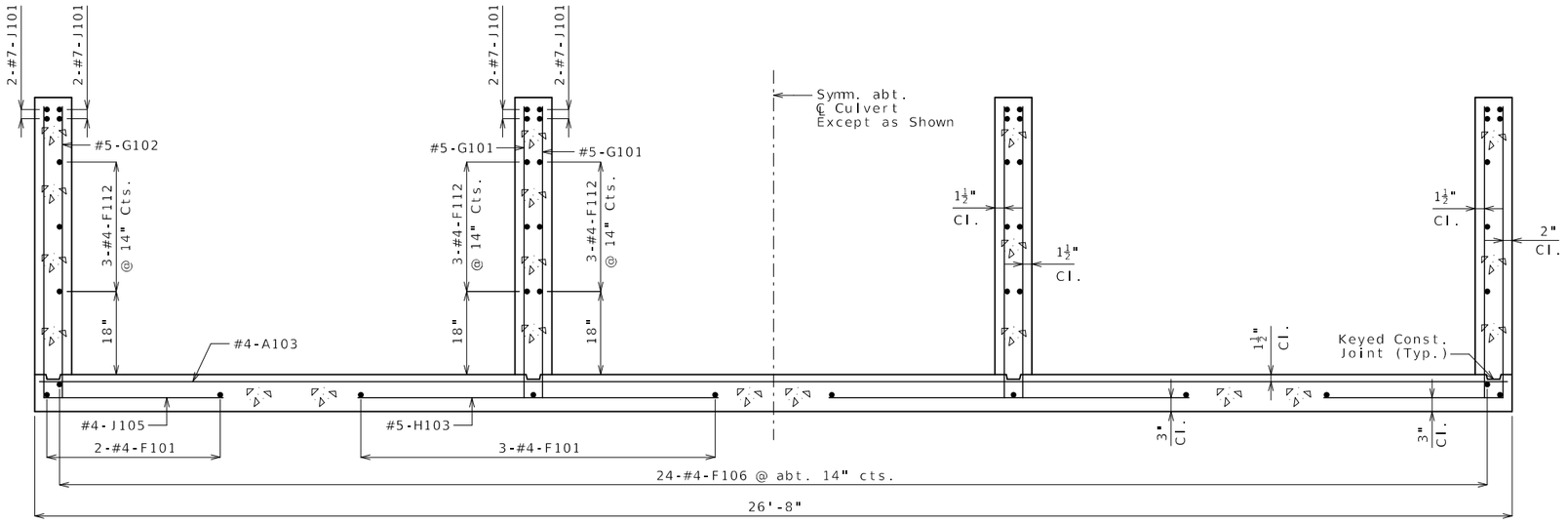
DATE PREPARED 3/12/2024
ROUTE 52 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY MORGAN
JOB NO. J5P3575
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9255

DESCRIPTION | DATE

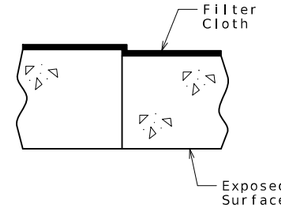
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Designed Oct. 2023
Detailed Nov. 2023
Checked Feb. 2024

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

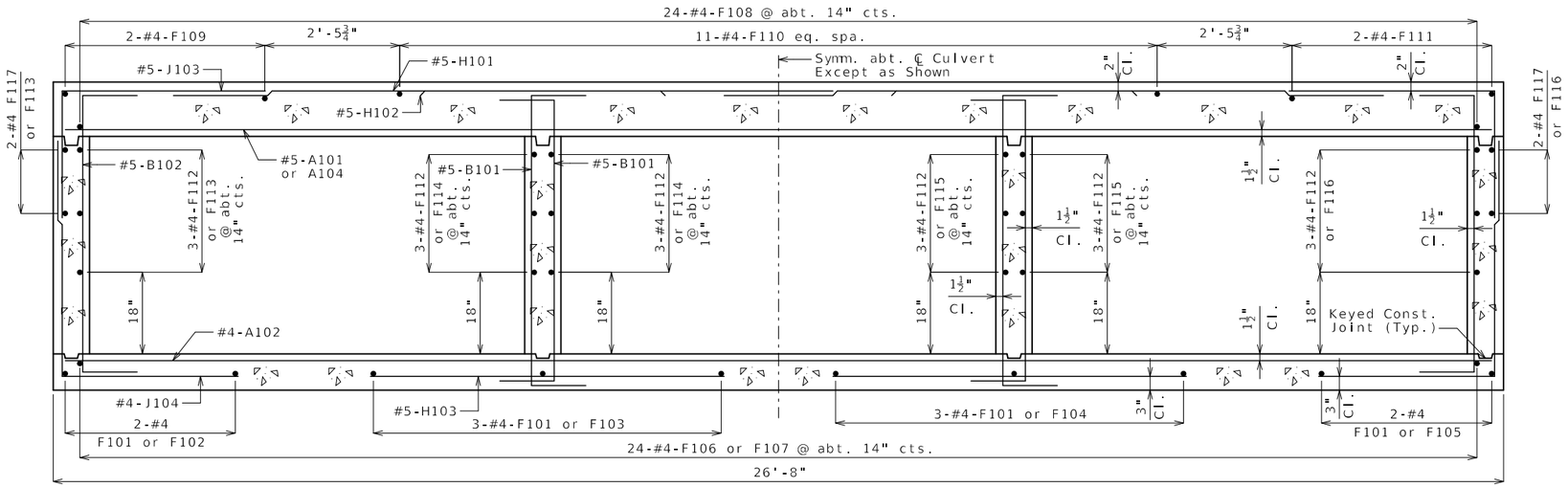


DOWNSTREAM WING REINFORCEMENT
(Looking Downstream)

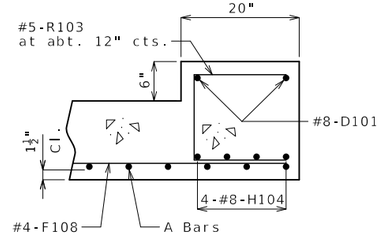


STAGE CONSTRUCTION JOINT

Filter cloth 3 feet in width and double thickness shall be centered on stage construction joint in top slab and sidewalls with edges sealed with mastic or two-sided tape. Filter cloth shall be a separation geotextile in accordance with Section 1011 of the Standard Specifications for Highway Construction. Cost of furnishing and installing filter cloth will be considered completely covered by the contract unit price for other items.



BARREL REINFORCEMENT
(Looking Downstream)



SECTION THRU
DOWNSTREAM HEADWALL

STAGE 1 CONSTRUCTION SHOWING REINFORCEMENT

Detailed Jan. 2024
Checked Feb. 2024

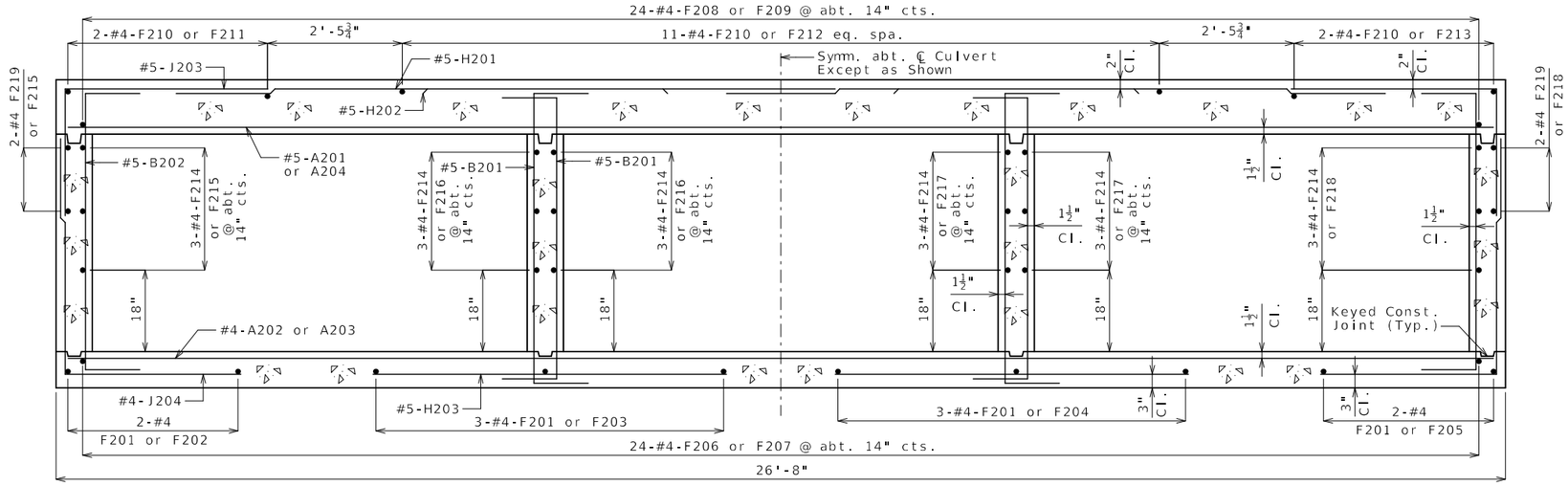
Note: This drawing is not to scale. Follow dimensions.

STATE OF MISSOURI
TRENTON B. CRAWFORD
NUMBER PE-2012018053
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

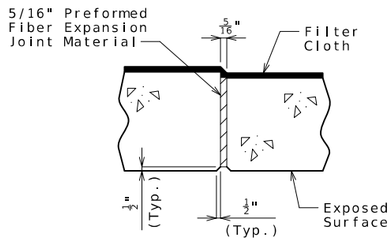
DATE PREPARED: 3/12/2024
ROUTE: 52 | STATE: MO
DISTRICT: BR | SHEET NO.: 2
COUNTY: MORGAN
JOB NO.: J5P3575
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9255

DESCRIPTION | DATE

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



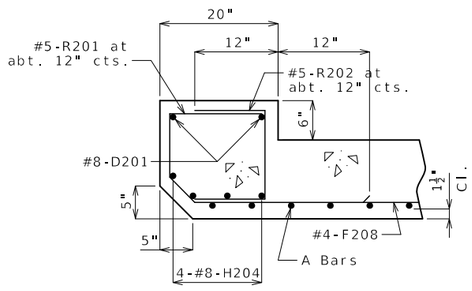
BARREL REINFORCEMENT
(Looking Downstream)



TRANSVERSE JOINT

Preformed fiber expansion joint material shall be securely stitched to one face of the concrete with 10 Gage copper wire or 12 Gage soft drawn galvanized steel wire.

Filter cloth 3 feet in width and double thickness shall be centered on transverse joints in top slab and sidewalls with edges sealed with mastic or two-sided tape. Filter cloth shall be a separation geotextile in accordance with Section 1011 of the Standard Specifications for Highway Construction. Cost of furnishing and installing filter cloth will be considered completely covered by the contract unit price for other items.



SECTION THRU UPSTREAM HEADWALL

STAGE 2 CONSTRUCTION SHOWING REINFORCEMENT

Detailed Jan. 2024
Checked Feb. 2024

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

STATE OF MISSOURI
TRENTON B. CRAWFORD
NUMBER PE-2012018053
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED: 3/12/2024
ROUTE: 52 | STATE: MO
DISTRICT: BR | SHEET NO.: 3
COUNTY: MORGAN
JOB NO.: J5P3575
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9255

DESCRIPTION | DATE

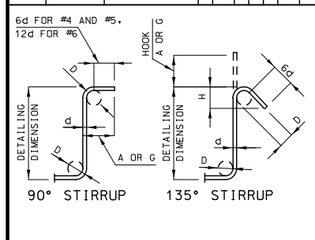
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BILL OF REINFORCING STEEL

NO. REQ'D.	MARK NO. SIZE	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
			STAGE 1 CONS																									
74	5	A101	TOP SLAB-BOT		20					26	5.000													26	5	26	5	2039
107	4	A102	BOT SLAB-TOP		20					26	5.000													26	5	26	5	1888
31	4	A103	BOT SLAB-TOP		20			V	1	2	8.000													2	8	2	8	
			INCREMENT =							25	9.000													25	9	25	9	294
			9.250 INCH																									
28	5	A104	TOP SLAB-BOT		20			V	1	2	7.000													2	7	2	7	
			INCREMENT =							25	11.000													25	11	25	11	416
			10.375 INCH																									
230	5	B101	INT WALL		10							12	0.000	5	3.000									29	3	29	0	6957
107	5	B102	EXT WALL		10							12	0.000	5	3.000									29	3	29	0	3236
2	8	D101	DWNSTRM HDW		20					31	6.000													31	6	31	6	168
16	5	E101	DWNSTRM TOE		20					4	0.000													4	0	4	0	67
10	4	F101	BOT SLAB-BOT		20					20	0.000													20	0	20	0	134
2	4	F102	BOT SLAB-BOT		20			V	1	35	4.000													35	4	35	4	
			INCREMENT =							37	4.000													37	4	37	4	49
			24.000 INCH																									
3	4	F103	BOT SLAB-BOT		20			V	1	39	0.000													39	0	39	0	
			INCREMENT =							43	2.000													43	2	43	2	82
			25.000 INCH																									
3	4	F104	BOT SLAB-BOT		20			V	1	44	7.000													44	7	44	7	
			INCREMENT =							48	8.000													48	8	48	8	93
			24.500 INCH																									
2	4	F105	BOT SLAB-BOT		20			V	1	50	4.000													50	4	50	4	
			INCREMENT =							52	1.000													52	1	52	1	68
			21.000 INCH																									
24	4	F106	BOT SLAB-TOP		20					20	0.000													20	0	20	0	321
24	4	F107	BOT SLAB-TOP		20			V	1	35	6.000													35	6	35	6	
			INCREMENT =							52	1.000													52	1	52	1	702
			8.625 INCH																									
24	4	F108	TOP SLAB-BOT		20			V	1	42	2.000													42	2	42	2	
			INCREMENT =							59	10.000													59	10	59	10	818
			9.250 INCH																									
2	4	F109	TOP SLAB-TOP		20			V	1	43	2.000													43	2	43	2	
			INCREMENT =							45	0.000													45	0	45	0	59
			22.000 INCH																									
10	4	F110	TOP SLAB-TOP		20			V	1	46	7.000													46	7	46	7	
			INCREMENT =							56	9.000													56	9	56	9	345
			13.500 INCH																									
2	4	F111	TOP SLAB-TOP		20			V	1	58	4.000													58	4	58	4	
			INCREMENT =							60	0.000													60	0	60	0	79
			20.000 INCH																									
18	4	F112	WALLS		20			V	6	14	5.000													14	5	14	5	
			INCREMENT =							20	0.000													20	0	20	0	207
			33.500 INCH																									
5	4	F113	WALL 1		20					33	10.000													33	10	33	10	113
6	4	F114	WALL 2		20					39	6.000													39	6	39	6	158
6	4	F115	WALL 3		20					45	1.000													45	1	45	1	181
5	4	F116	WALL 4		20					50	9.000													50	9	50	9	170
4	4	F117	EXT WALLS-EX		20			V	2	14	5.000													14	5	14	5	
			INCREMENT =							17	3.000													17	3	17	3	42
			34.000 INCH																									

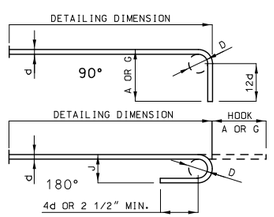
BILL OF REINFORCING STEEL

NO. REQ'D.	MARK NO. SIZE	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
40	5	G101	INT WINGS		20			V	4	20	0.000													0	20	0	20	
			INCREMENT =							5	1.000													5	1	5	1	141
			4.500 INCH																									
20	5	G102	EXT WINGS		20			V	2	20	0.000													0	20	0	20	
			INCREMENT =							5	0.000													5	0	5	0	70
			4.500 INCH																									
72	5	H101	TOP SLAB-TOP		20					12	2.000													12	2	12	2	914
78	5	H102	TOP SLAB-TOP		20					4	6.000													4	6	4	6	366
238	5	H103	BOT SLAB-BOT		20					6	6.000													6	6	6	6	1614
4	8	H104	DWNSTRM HDW		20					31	6.000													31	6	31	6	336
16	7	J101	WING/TOP SLA		15					10	3.000	3	8.250							4	0.500	9	5.000	13	11	13	11	455
201	5	J103	WALL/TOP SLA		19					2	4.000	3	8.750											6	1	5	11	1240
210	4	J104	WALL/BOT SLA		19					4	4.000	3	2.750											7	7	7	6	1052
32	4	J105	WING/BOT SLA		19			V	2	2	1.750	3	2.750											5	5	5	3	
			INCREMENT =							5	3.500	3	2.750											8	6	8	5	146
			2.500 INCH																									
32	5	R103	DWNSTRM HDW		10							17	000	15	000									4	1	3	10	128
			STAGE 2 CONS																									
97	5	A201	TOP SLAB-BOT		20					26	5.000													26	5	26	5	2673
113	4	A202	BOT SLAB-TOP		20					26	5.000													26	5	26	5	1994
32	4	A203	BOT SLAB-TOP		20			V	1	2	1.000													2	1	2	1	
			INCREMENT =							26	0.000													26	0	26	0	300
			9.250 INCH																									
28	5	A204	TOP SLAB-BOT		20			V	1	2	6.000													2	6	2	6	
			INCREMENT =							25	10.000													25	10	25	10	414
			10.375 INCH																									
288	5	B201	INT WALL		10							12	000	5	3.000									7	3	7	0	2103
132	5	B202	EXT WALL		10							12	000	5	3.000									7	3	7	0	964
2	8	D201	UPSTRM HDW		20					31	6.000													31	6	31	6	168
10	4	F201	BOT SLAB-BOT		20					20	0.000													20	0	20	0	134
2	4	F202	BOT SLAB-BOT		20			V	1	53	6.000													53	6	53	6	
			INCREMENT =							55	6.000													55	6	55	6	73
			24.000 INCH																									
3	4	F203	BOT SLAB-BOT		20			V	1	47	8.000													47	8	47	8	
			INCREMENT =							51	10.000													51	10	51	10	100
			25.000 INCH																									
3	4	F204	BOT SLAB-BOT		20			V	1	42	5.000													42	5	42	5	
			INCREMENT =							46	7.000													46	7	46	7	89
			25.000 INCH																									
2	4	F205	BOT SLAB-BOT		20			V	1	38	6.000													38	6	38	6	
			INCREMENT =							40	6.000													40	6	40	6	53
			24.000 INCH																									
24	4	F206	BOT SLAB-TOP		20					20	0.000													20	0	20	0	321
24	4	F207	BOT SLAB-TOP		20			V	1	38	8.000													38	8	38	8	
			INCREMENT =							55	4.000													55	4	55	4	754
			8.750 INCH																									
24	4	F208	TOP SLAB-BOT		20					20	0.000													20	0	20	0	321
24	4	F209	TOP SLAB-BOT		20			V	1	38	8.000													38	8	38	8	
			INCREMENT =							55	4.000													55	4	55	4	754
			8.750 INCH																									
14	4	F210	TOP SLAB-TOP		20					20	0.000													20	0	20	0	187



STIRRUP HOOK DIMENSIONS				
GRADES 40 - 50 - 60 KSI				
BAR SIZE	D (IN.)	90° HOOK	135° HOOK	
		HOOK A OR G	HOOK A OR G	APPROX. H
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	8"	4 1/2"

NOTE: UNLESS OTHERWISE NOTED, DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"
#11	12"	19"	14 3/4"	2'-0"
#14	18 1/4"	2'-3"	21 3/4"	2'-7"

NOTE:
ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.

E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.

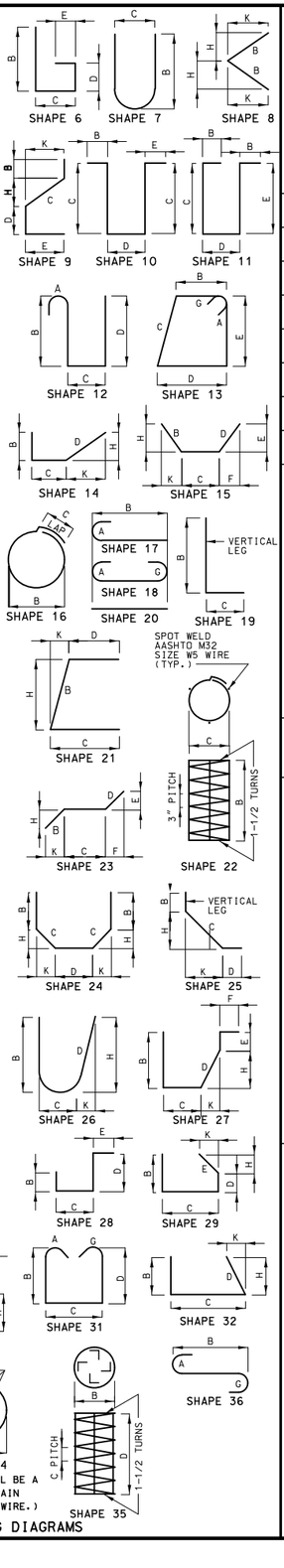
NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.

PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED ON INSIDE OF SPIRALS. LENGTH AND WEIGHT OF COLUMN SPIRALS DO NOT INCLUDE SPLICES OR SPACERS.

REINFORCING STEEL (GRADE 60) FY = 60,000 PSI.



BENDING DIAGRAMS

STATE OF MISSOURI
TRENTON B. CRAWFORD
NUMBER PE-2012018053
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 3/12/2024
ROUTE 52 | STATE MO
DISTRICT BR | SHEET NO. 4
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DESCRIPTION
DATE

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

Detailed Feb. 2024
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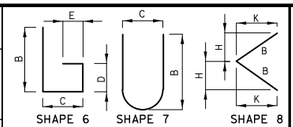
Note: This drawing is not to scale. Follow dimensions.

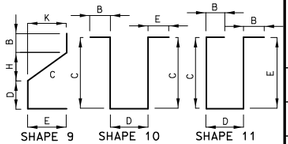
BILL OF REINFORCING STEEL

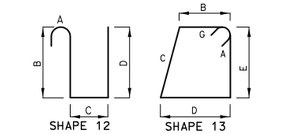
NO. REQ'D.	MARK NO. SIZE	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.
2	4	F211	TOP SLAB-TOP		20			V	1	53	8.000													53	8	53	8	
			INCREMENT =							55	6.000													55	6	55	6	73
			22.000 INCH																									
10	4	F212	TOP SLAB-TOP		20			V	1	41	11.000													41	11	41	11	
			INCREMENT =							52	1.000													52	1	52	1	314
			13.500 INCH																									
2	4	F213	TOP SLAB-TOP		20			V	1	38	6.000													38	6	38	6	
			INCREMENT =							40	4.000													40	4	40	4	53
			22.000 INCH																									
22	4	F214	WALLS		20					20	0.000													20	0	20	0	294
5	4	F215	WALL 1		20					55	6.000													55	6	55	6	185
6	4	F216	WALL 2		20					49	10.000													49	10	49	10	200
6	4	F217	WALL 3		20					44	3.000													44	3	44	3	177
5	4	F218	WALL 4		20					28	7.000													28	7	28	7	95
92	5	H201	TOP SLAB-TOP		20					12	2.000													12	2	12	2	1167
107	5	H202	TOP SLAB-TOP		20					4	6.000													4	6	4	6	502
292	5	H203	BOT SLAB-BOT		20					6	6.000													6	6	6	6	1980
4	8	H204	UPSTRM HDW		20					31	6.000													31	6	31	6	336
256	5	J203	WALL/TOP SLA		19					2	4.000	3	8.750											6	1	5	11	1580
263	4	J204	WALL/BOT SLA		19					4	4.000	3	2.750											7	7	7	6	1318
32	5	R201	UPSTRM HDW		27					16.000		10.125		5.500		2	2.125			3.875		3.875		4	10	4	8	156
32	5	R202	UPSTRM HDW		10							12.125		14.000										3	2	2	11	97
			TOTALS																									
	4																											14790
	5																											28824
	7																											455
	8																											1008
			TOTAL																									45077
			TOTAL	E																								0
			TOTALS																									
	4																											14790
	5																											28824
	7																											455
	8																											1008
			TOTAL																									45077

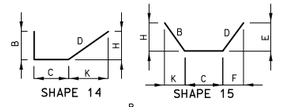
BILL OF REINFORCING STEEL

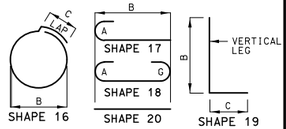
NO. REQ'D.	MARK NO. SIZE	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	K FT.	K IN.	NOMINAL LENGTH FT.	NOMINAL LENGTH IN.	ACTUAL LENGTH FT.	ACTUAL LENGTH IN.	WEIGHT LBS.

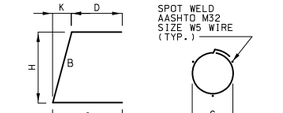


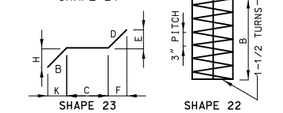


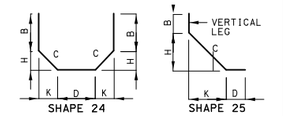


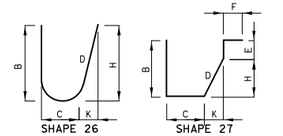


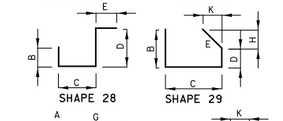


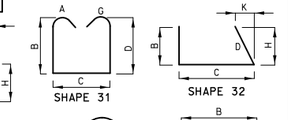


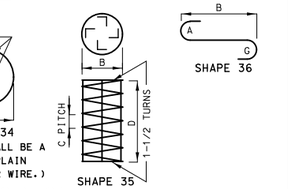




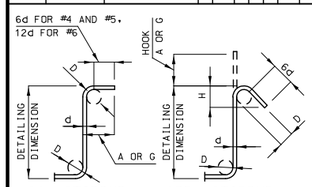






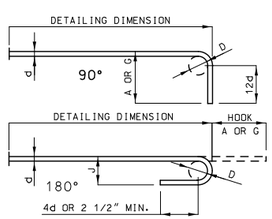


BENDING DIAGRAMS



STIRRUP HOOK DIMENSIONS				
GRADES 40 - 50 - 60 KSI				
BAR SIZE	D (IN.)	90° HOOK HOOK A OR G	135° HOOK HOOK A OR G	135° HOOK APPROX. H
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	8"	4 1/2"

NOTE: UNLESS OTHERWISE NOTED, DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



END HOOK DIMENSIONS				
		ALL GRADES		
BAR SIZE	D (IN.)	180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"
#11	12"	19"	14 3/4"	2'-0"
#14	18 1/4"	2'-3"	21 3/4"	2'-7"

NOTE:
ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.

E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.

NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.

PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED ON INSIDE OF SPIRALS. LENGTH AND WEIGHT OF COLUMN SPIRALS DO NOT INCLUDE SPLICES OR SPACERS.

REINFORCING STEEL (GRADE 60) FY = 60,000 PSI.

Detailed Feb. 2024
Checked Feb. 2024

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

STATE OF MISSOURI
TRENTON B. CRAWFORD
NUMBER PE-2012018053
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 3/12/2024
ROUTE 52 | STATE MO
DISTRICT BR | SHEET NO. 5
COUNTY MORGAN
JOB NO. J5P3575
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9255

DESCRIPTION
DATE

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