WIS

PROJECT ID: 6280-02-76, 77

WITH: N/A

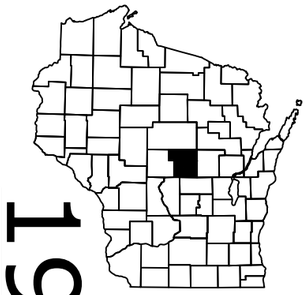
COUNTY: PORTAGE

SEPTEMBER 2024

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
~~Section No.~~	~~4~~	~~Right of Way Plat~~
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 294



19

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6280-02-76	———	1
6280-02-77	WISC 2024440	1

STEVENS POINT - ROSHOLT

BRIDGE OVERLAYS B-49-0073, 0074

STH 66

PORTAGE COUNTY

STATE PROJECT NUMBER

6280-02-76

STEVENS POINT - ROSHOLT

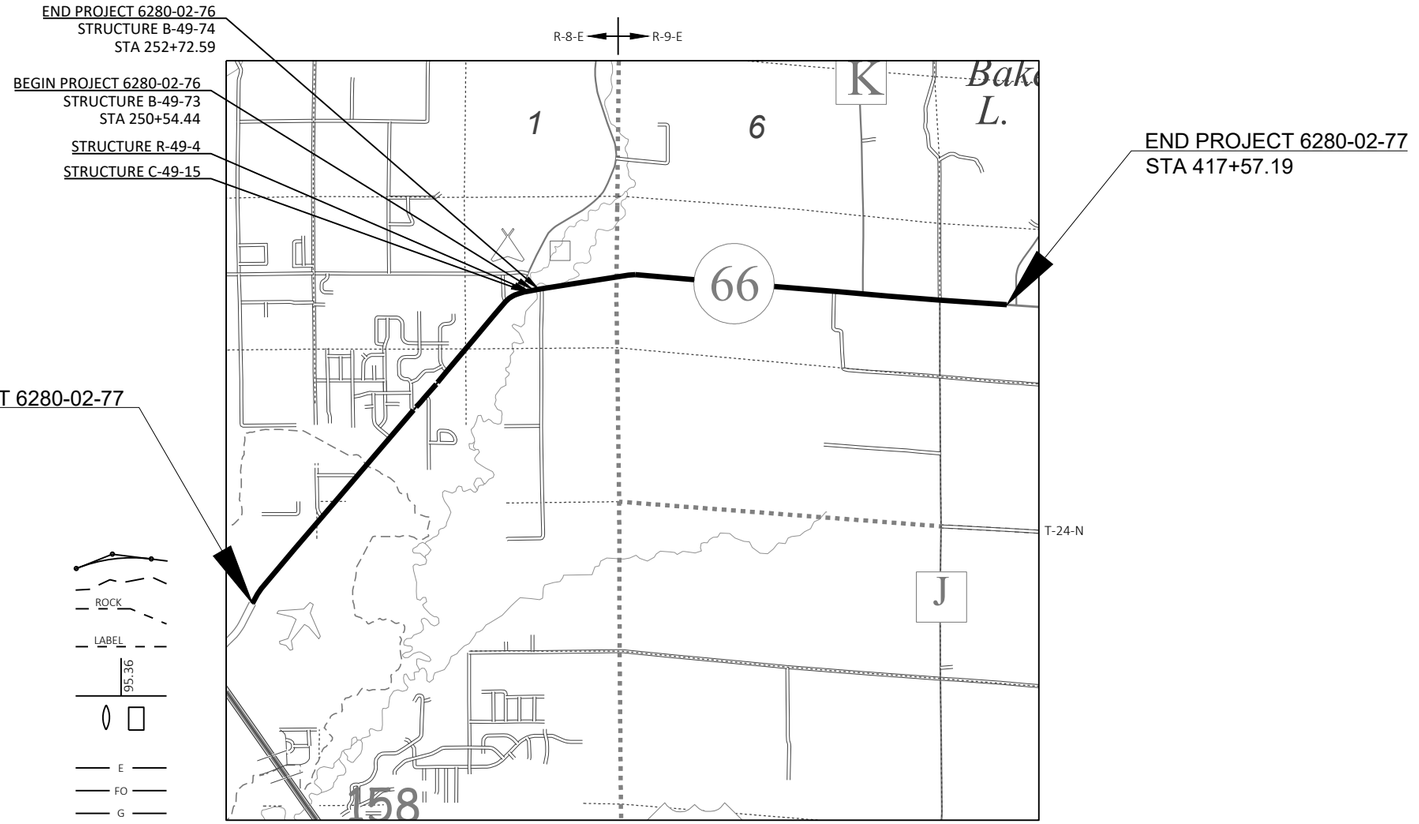
STEVENS PT AIRPORT TO E JCT CTH J

STH 66

PORTAGE COUNTY

STATE PROJECT NUMBER

6280-02-77



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000 MILES (6280-02-76)
TOTAL NET LENGTH OF CENTERLINE = 5.888 MILES (6280-02-77)

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), PORTAGE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

DESIGN DESIGNATION

A.A.D.T.	2025	=	4,360
A.A.D.T.	2045	=	4,360
D.H.V.		=	11.3
D.D.		=	60/40
T.		=	13.5%
DESIGN SPEED		=	45 MPH/55 MPH
ESALS		=	1,100,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ORIGINAL PLANS PREPARED BY:

ONEIDA Engineering Solutions

WISCONSIN BRETT A. PETERSON 44665-6 SUN PRAIRIE WI PROFESSIONAL ENGINEER

DATE: 4/15/24 (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	OES
Designer	OES
Project Manager	ZACHARY GRULING
Regional Examiner	FRED SCHUNKE
Regional Supervisor	NICHOLE LYSNE

APPROVED FOR THE DEPARTMENT

DATE: 4/28/2024 (Signature)

E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\010101-TI.DWG PLOT DATE : 4/10/2024 2:41 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

UTILITIES

AMHERST TELEPHONE COMPANY - COMMUNICATION LINE
ERIK DANIELSON
120 MILL STREET
P.O. BOX 279
AMHERST, WI 54406
715-572-8917
EDANIELSON@TVALLEY.COM.COM

ANR PIPELINE CO - GAS/PETROLEUM
TODD BRISTER
W3925 PIPELINE LANE
EDEN, WI 53019
920-979-0060
TODD_BRISTER@TCENERGY.COM

AT&T WISCONSIN - COMMUNICATION LINE
CHUCK BARTELT
70 E DIVISION STREET
FOND DU LAC, WI 54935
920-410-5104
CB1461@ATT.COM

CITY OF STEVENS POINT - SEWER
ERIC SOUTHWORTH
300 BLISS AVENUE
STEVENS POINT, WI 54481
715-342-4846
ESOUTHWORTH@STEVENSPOINT.COM

CITY OF STEVENS POINT - WATER
ERIC SOUTHWORTH
300 BLISS AVENUE
STEVENS POINT, WI 54481
715-342-4846
ESOUTHWORTH@STEVENSPOINT.COM

SPECTRUM - COMMUNICATION LINE
JASON O'KEEFE
5025 HEFFRON STREET
STEVENS POINT, WI 54481
715-382-3559
JASONOKEEFE@CHARTER.COM

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
KOREY KONIETZKI
1700 SHERMAN STREET
WAUSAU, WI 54401
715-573-2478
KOREY.KONIETZKI@WISCONSINPUBLICSERVICE.COM

WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
TYLER DAHLSTROM
1700 SHERMAN STREET
WAUSAU, WI 54401
715-848-7387
TYLER.DAHLSTROM@WISCONSINPUBLICSERVICE.COM

GENERAL NOTES

1. THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
3. RESTORE EXISTING DRIVEWAYS IN KIND AND AT THE LOCATION AND WIDTH DETERMINED BY THE ENGINEER IN THE FIELD. THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4. PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
5. HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
CROSS SECTION MATCHLINE DETAIL
EROSION CONTROL
STORM SEWER
PAVEMENT MARKING
TRAFFIC CONTROL
FENCING
ALIGNMENT DIAGRAM

WDNR LIAISON

JAY SCHIEFELBEIN
DNR NORTH CENTRAL REGION HEADQUARTERS
2984 SHAWANO AVENUE
GREEN BAY, WI 54313-6727
PHONE: (920) 360-3784
EMAIL: JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIPTURF:	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPETURF:			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT:	.70 - .95											
CONCRETE:	.80 - .95											
BRICK:	.70 - .80											
DRIVES, WALKS:	.75 - .85											
ROOFS:	.75 - .95											
GRAVEL ROADS, SHOULDERS:	.40 - .60											

TOTAL PROJECT AREA = 28.4 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 3.23 ACRES

2

2

BEGIN PROJECT
STA 106+67.17
X = 175,149.838
Y = 211,566.802

TOWN OF HULL
CITY OF STEVENS POINT

TORUN ROAD

AIRPORT ROAD

MOSES CREEK TRAIL

SOMERSET DRIVE

MEADOW VIEW LANE

SOUTH PONDEROSA DRIVE

DEER LANE

CTH Y

STH 66

110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265

WALTON ROAD

PLOVER HEIGHTS ROAD

TOWN OF HULL
CITY OF STEVENS POINT

STRUCTURE C-49-0015
STRUCTURE R-49-0004
STRUCTURE B-49-0073
STRUCTURE B-49-0074

JORDAN POND

BRILOWSKI ROAD

BRYCELL ROAD

STEVENS POINT
MUNICIPAL AIRPORT

N

TOWN OF HULL

TOWN OF SHARON

265 270 275 280 285 290 295 STH 66 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 STH 66 390 395 400 405 410 415 420

CTH K

SENSITIVE AREA

ELLIS ROAD

MUSIC DRIVE

CTH J SOUTH

END PROJECT
STA 417+57.19
X = 201,278.815
Y = 221,751.065

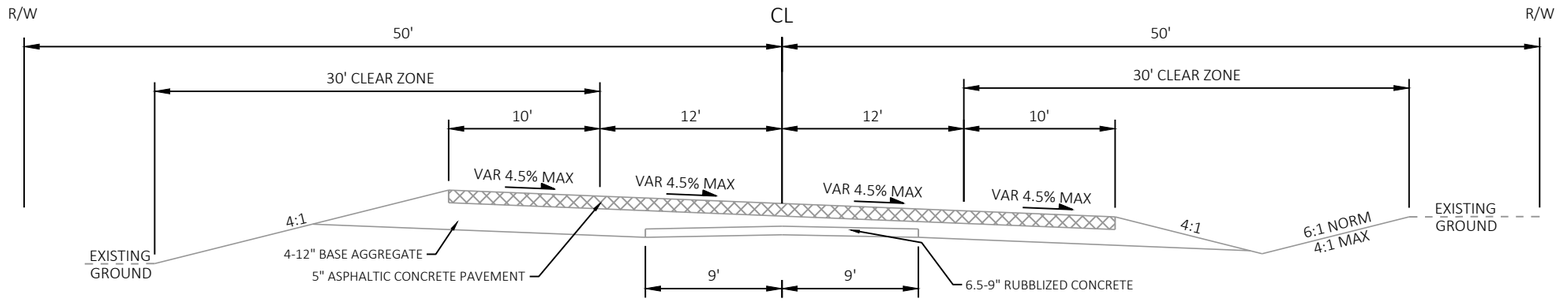
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01

PLOT DATE : 4/10/2024 2:45 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1" = 1000'

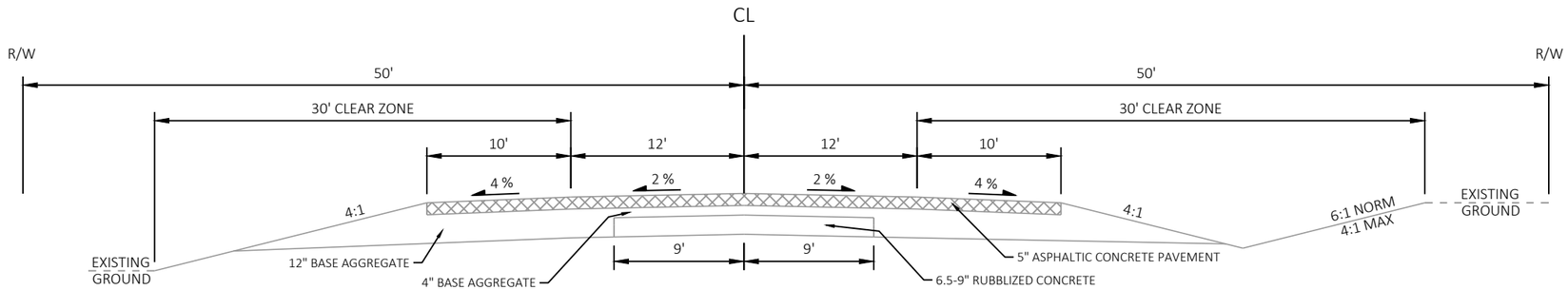
WISDOT/CADDS SHEET 42

2



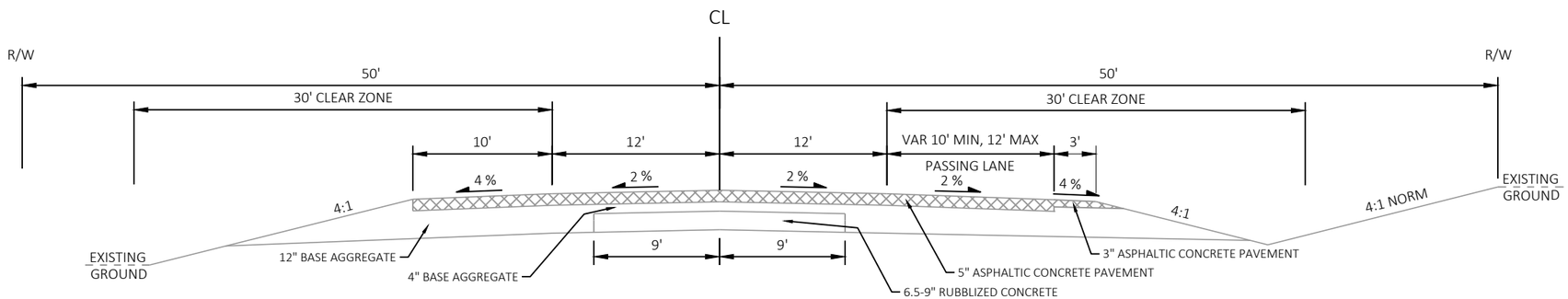
EXISTING TYPICAL SUPERELEVATION SECTION STH 66

STA 106+67.17 TO STA 112+24



EXISTING TYPICAL SECTION STH 66

STA 112+24 TO STA 139+48

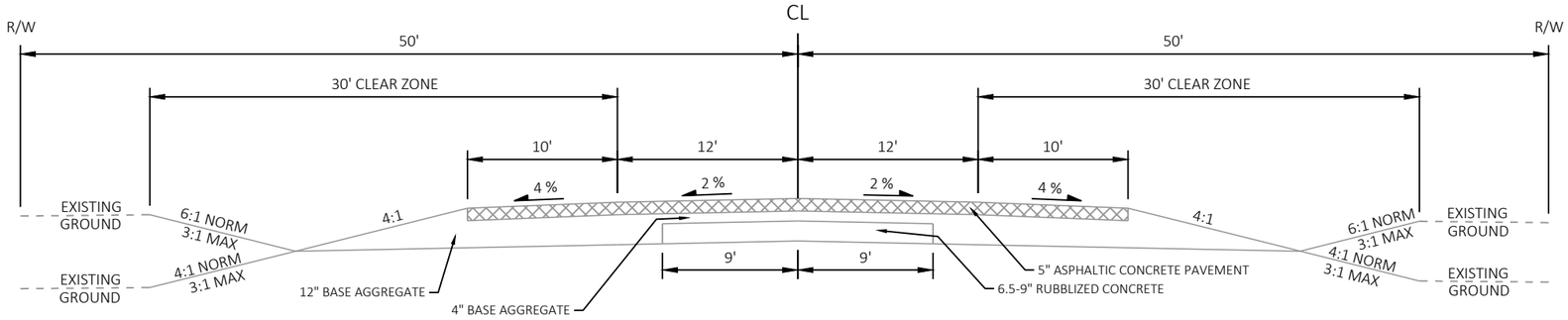


EXISTING TYPICAL SECTION STH 66

STA 139+48 TO STA 146+98

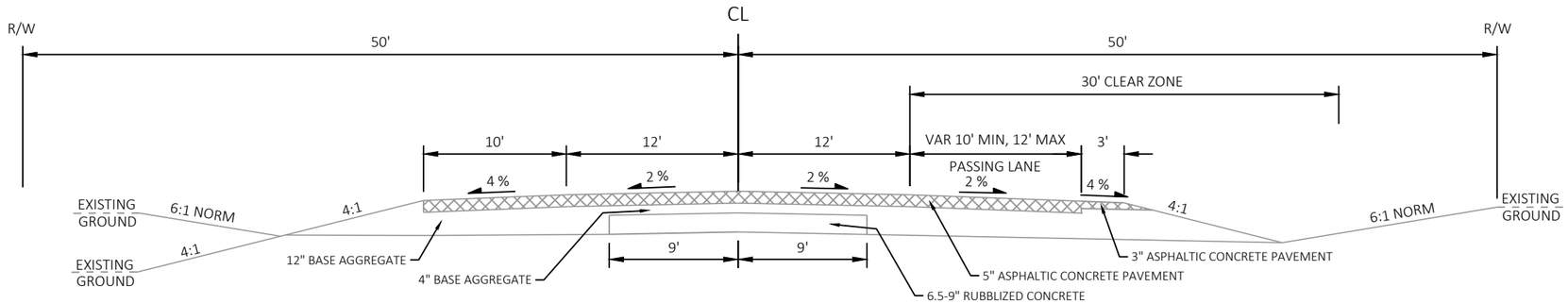
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 01-10ft
PLOT DATE : 4/10/2024 2:46 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



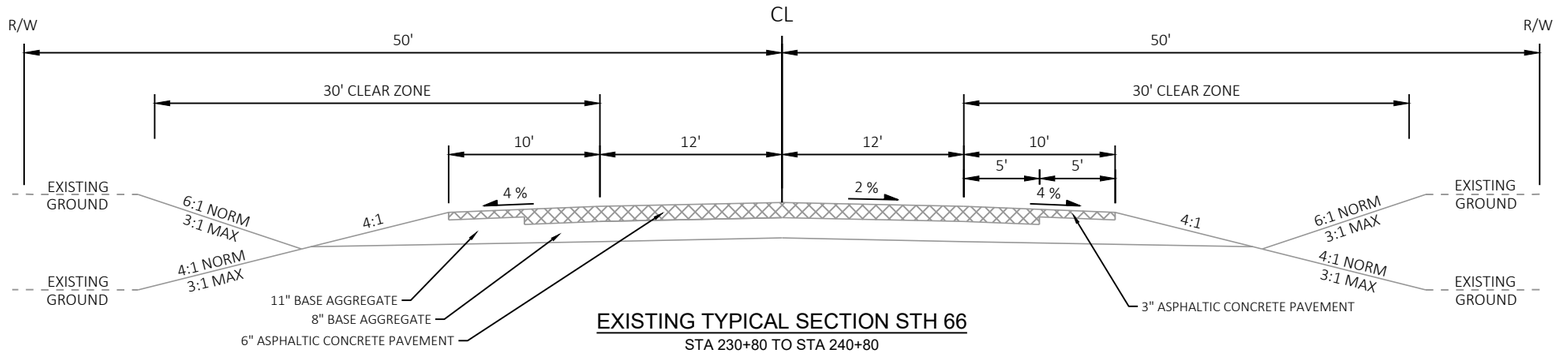
EXISTING TYPICAL SECTION STH 66

STA 146+98 TO STA 176+92
STA 181+49 TO STA 230+80



EXISTING TYPICAL SECTION STH 66

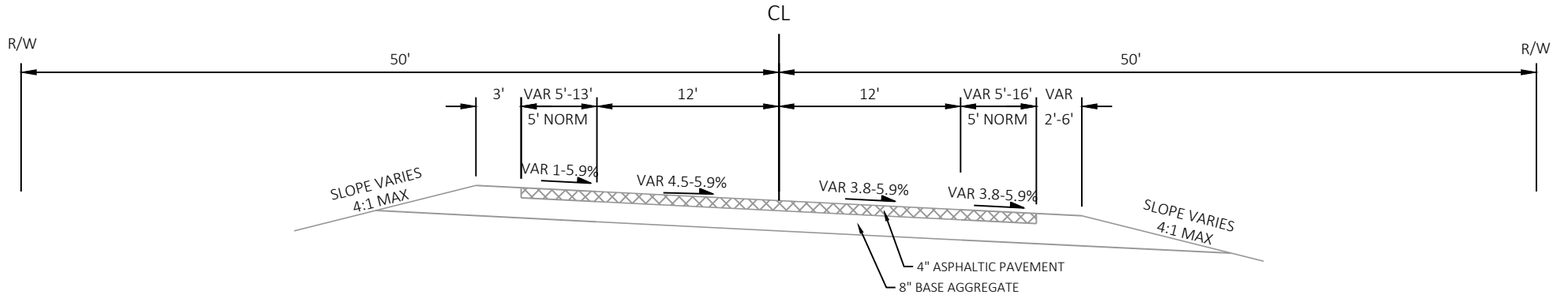
STA 176+92 TO STA 181+49



EXISTING TYPICAL SECTION STH 66

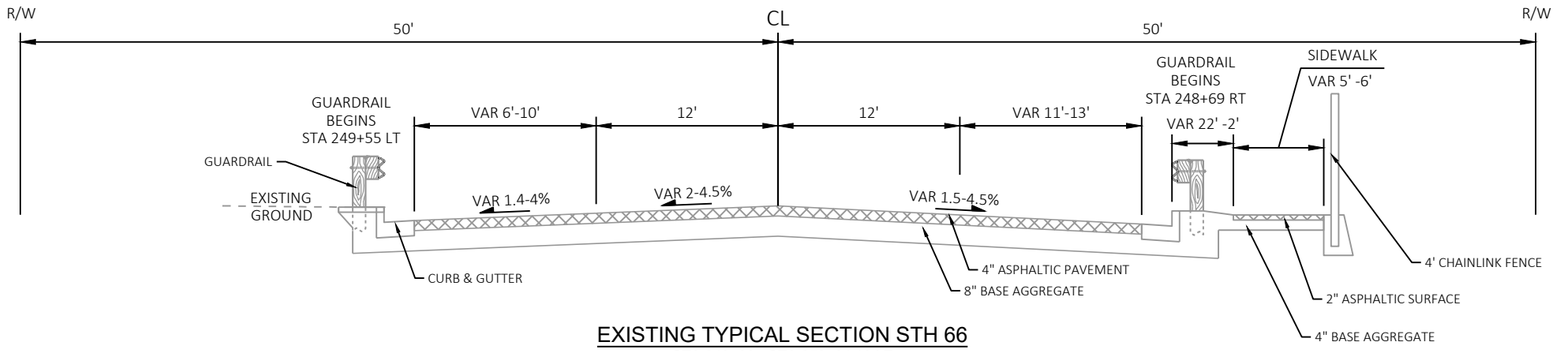
STA 230+80 TO STA 240+80

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 5	E



EXISTING TYPICAL SECTION STH 66

STA 240+80 - STA 249+00



EXISTING TYPICAL SECTION STH 66

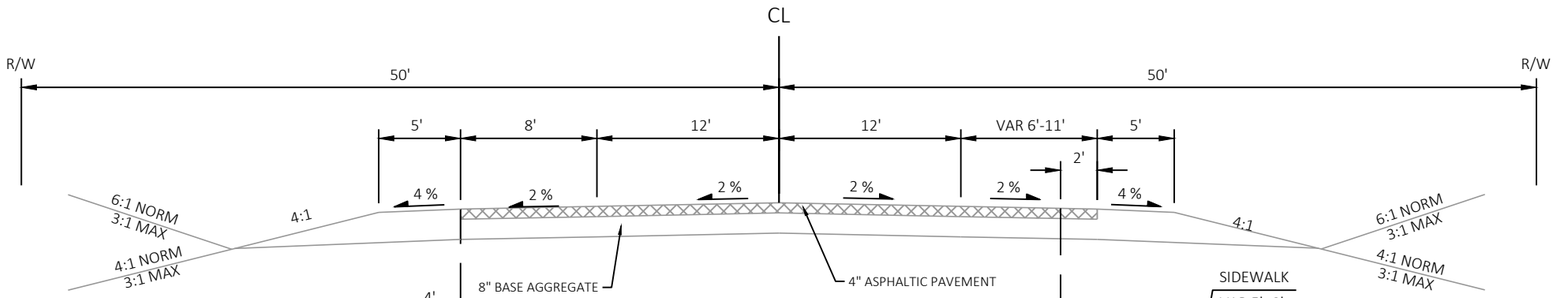
STA 249+00 - STA 250+64.18 LT

STA 249+00 - STA 249+60 RT

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 03-10ft
PLOT DATE : 4/10/2024 2:46 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION STH 66

STA 249+60 - STA 253+05 RT
STA 251+16.69 - STA 252+27 LT

GUARDRAIL

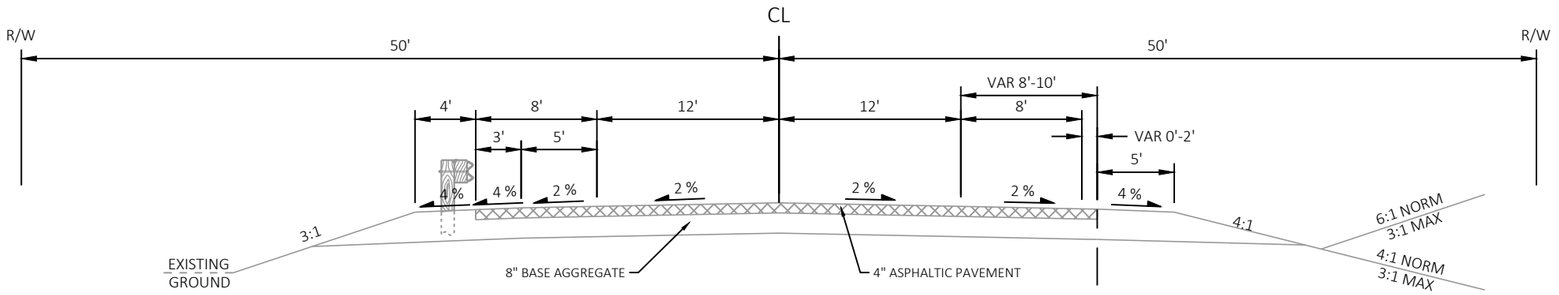
STA 251+16.69 - STA 252+27 LT

BARRIER

STA 249+60 - STA 250+64.18 RT
STA 251+16.69 - STA 252+48 RT
STA 252+73 - STA 253+05 RT

GENERAL NOTE:

1) STRUCTURE B-49-73 IS FROM STA 250+64.18 - STA 251+16.69
2) STRUCTURE B-49-74 IS FROM STA 252+37.39 - STA 252+62.59



EXISTING TYPICAL SECTION STH 66

STA 252+55 - STA 256+90 LT
STA 253+05 - STA 254+30 RT

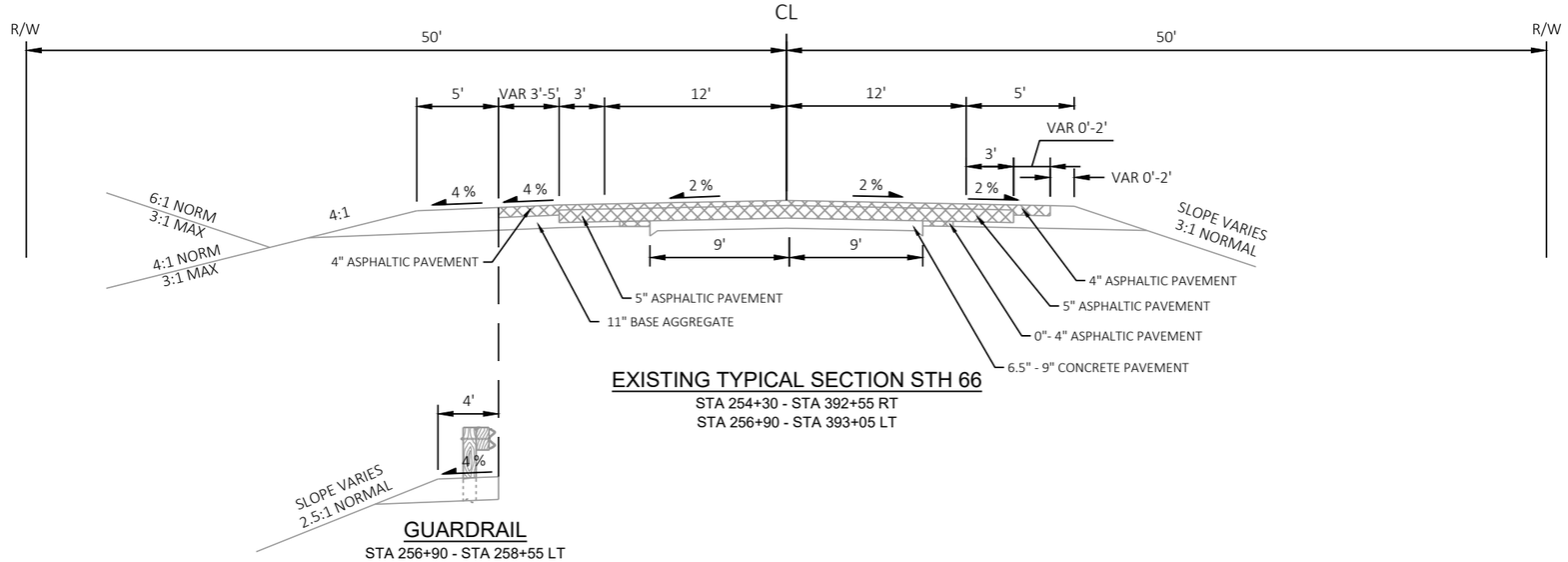
GUARDRAIL

STA 253+05 - STA 253+96 RT

* EXISTING SIDEWALK ENDS AT STA 254+55 RT

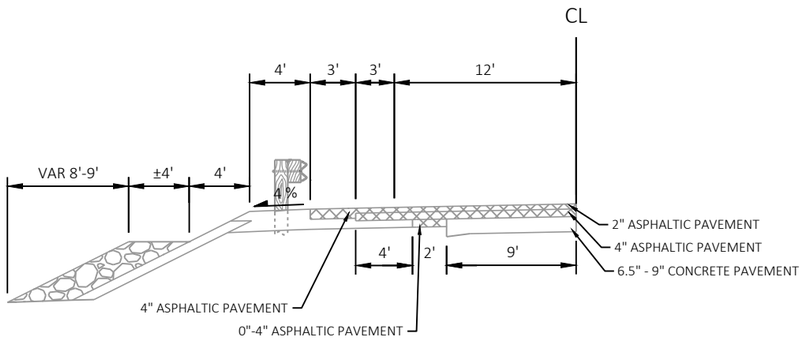
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 7	E

2

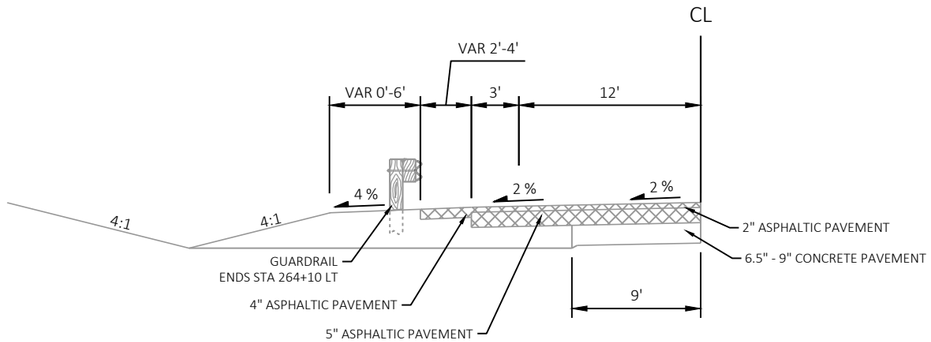


EXISTING TYPICAL SECTION STH 66
STA 254+30 - STA 392+55 RT
STA 256+90 - STA 393+05 LT

GUARDRAIL
STA 256+90 - STA 258+55 LT



EXISTING TYPICAL HALF SECTION STH 66
WITH GUARDRAIL & RIPRAP
STA 258+55 TO STA 263+05 LT

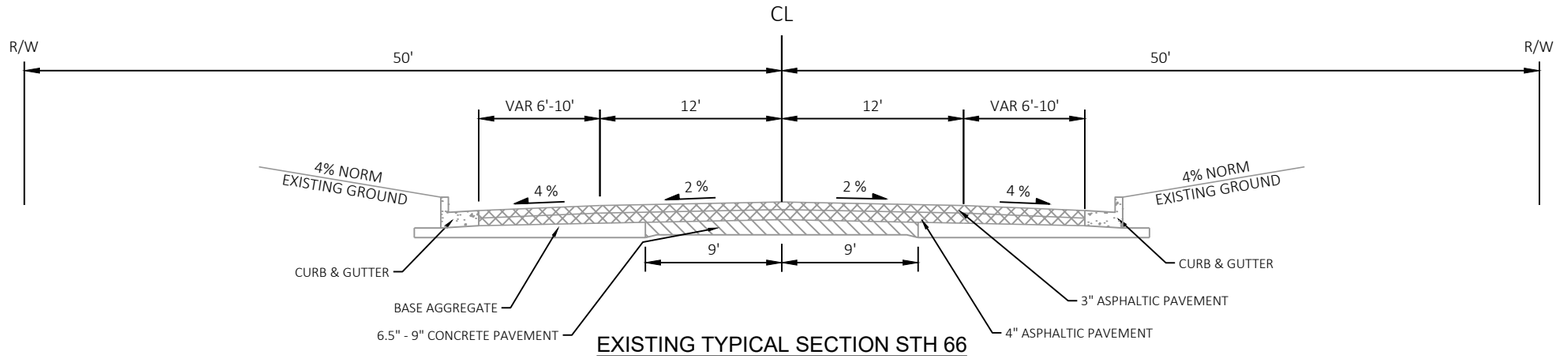


EXISTING TYPICAL HALF SECTION STH 66
STA 263+05 TO STA 265+30 LT

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 8	E

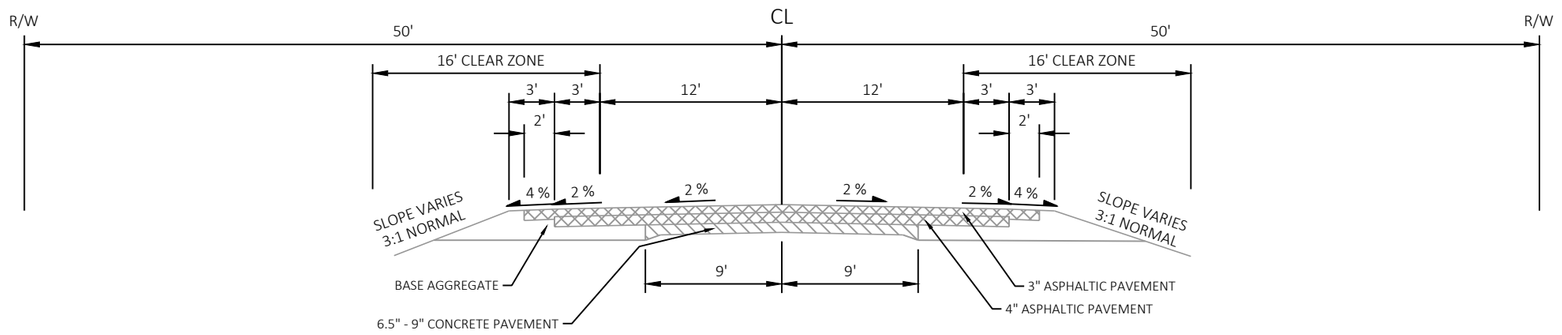
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LAYOUT NAME - 05-10ft
PLOT DATE : 4/10/2024 2:46 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION STH 66

STA 392+55 TO STA 396+70 RT
STA 393+05 TO STA 399+25 LT



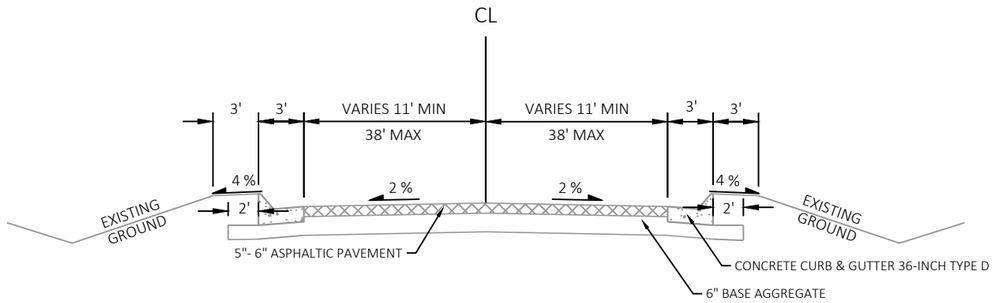
EXISTING TYPICAL SECTION STH 66

STA 396+70 TO STA 417+57.19 RT
STA 399+25 TO STA 417+57.19 LT

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 9	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 06-10ft
PLOT DATE : 4/10/2024 2:46 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT

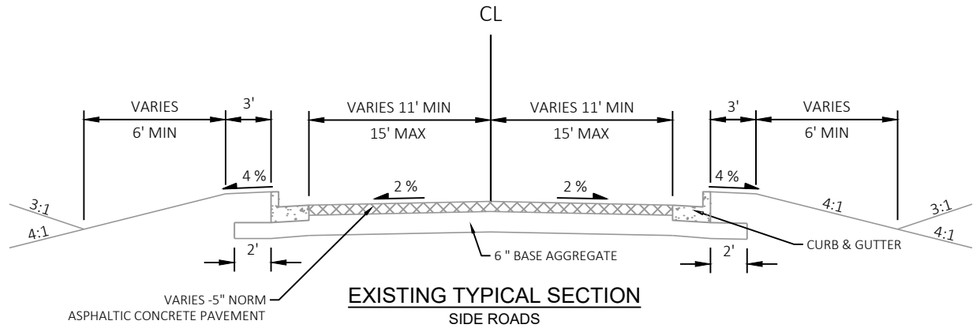
2



EXISTING TYPICAL SECTION

SIDE ROAD

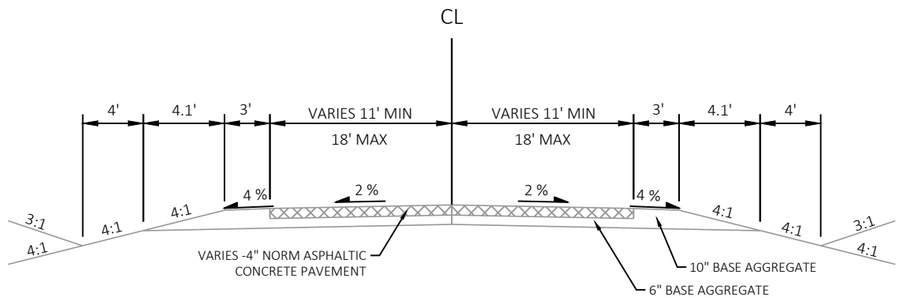
TORUN RD



EXISTING TYPICAL SECTION

SIDE ROADS

CTH Y	CTH J (EAST JCT)
CTH K	CTH J (WEST JCT)
ELLIS RD	SOMERSET DR
DEER LN	MEADOW VIEW LN
AIRPORT RD	PLOVER HEIGHTS RD
BRYCHELL RD	S PONDEROSA DR
BRILOWSKI RD	



EXISTING TYPICAL SECTION

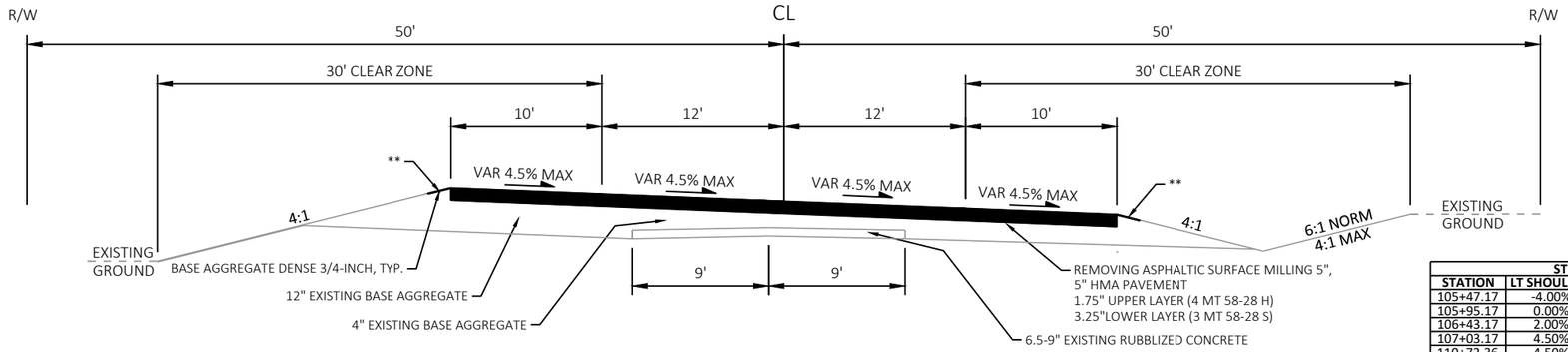
SIDE ROADS

WALTON RD

MUSIC DR

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 10	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 07-10ft
PLOT DATE : 4/10/2024 2:46 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

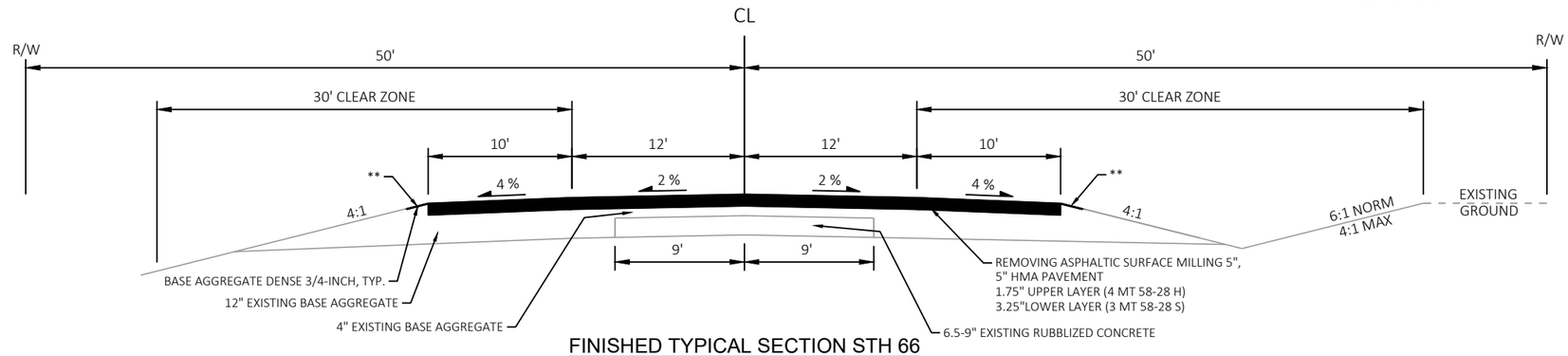


FINISHED TYPICAL SUPERELEVATION SECTION STH 66

STA 106+67.17 TO STA 112+24

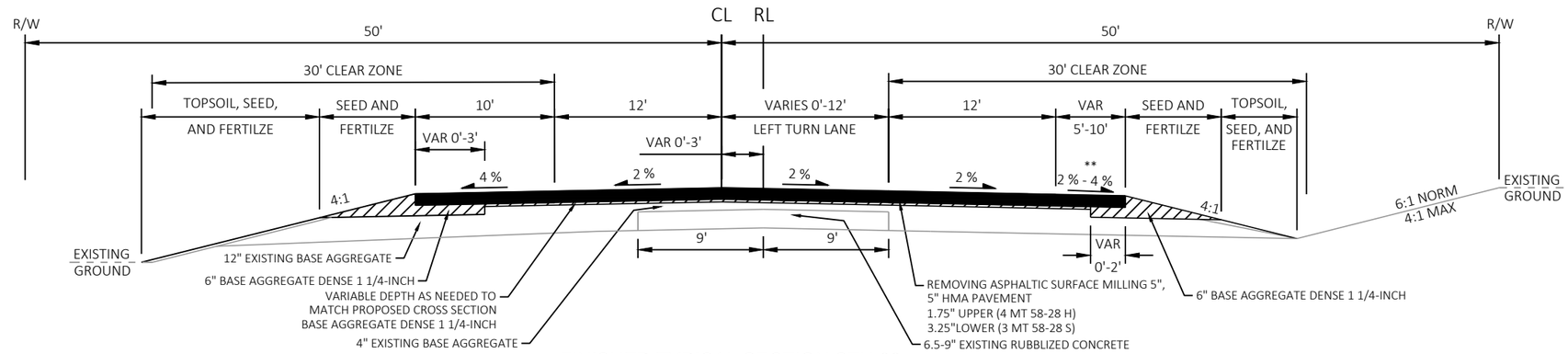
STH 66 SUPERELEVATION DATA - CURVE 1					
STATION	LT SHOULDER	LT LANE	RT LANE	RT SHOULDER	REMARKS
105+47.17	-4.00%	-2.00%	-2.00%	-4.00%	NORMAL CROWN
105+95.17	0.00%	0.00%	-2.00%	-4.00%	LEVEL CROWN
106+43.17	2.00%	2.00%	-2.00%	-4.00%	REVERSE CROWN
107+03.17	4.50%	4.50%	-4.50%	-4.50%	BEGIN FULL SUPER
110+72.36	4.50%	4.50%	-4.50%	-4.50%	END FULL SUPER
111+32.36	2.00%	2.00%	-2.00%	-4.00%	REVERSE CROWN
111+80.36	0.00%	0.00%	-2.00%	-4.00%	LEVEL CROWN
112+28.36	-4.00%	-2.00%	-2.00%	-4.00%	NORMAL CROWN

NOTE: SUPERELEVATION DATA SHOWN WAS CALCULATED BASED ON DESIGN SPEEDS AND THE BEST FIT ALIGNMENT SHOWN IN THE PLANS. SUPERELEVATION DATA SHOULD BE ADJUST TO FIT ACTUAL FIELD CONDITIONS.



FINISHED TYPICAL SECTION STH 66

STA 112+24 TO STA 135+76



FINISHED TYPICAL SECTION STH 66

STA 135+76 TO STA 140+26

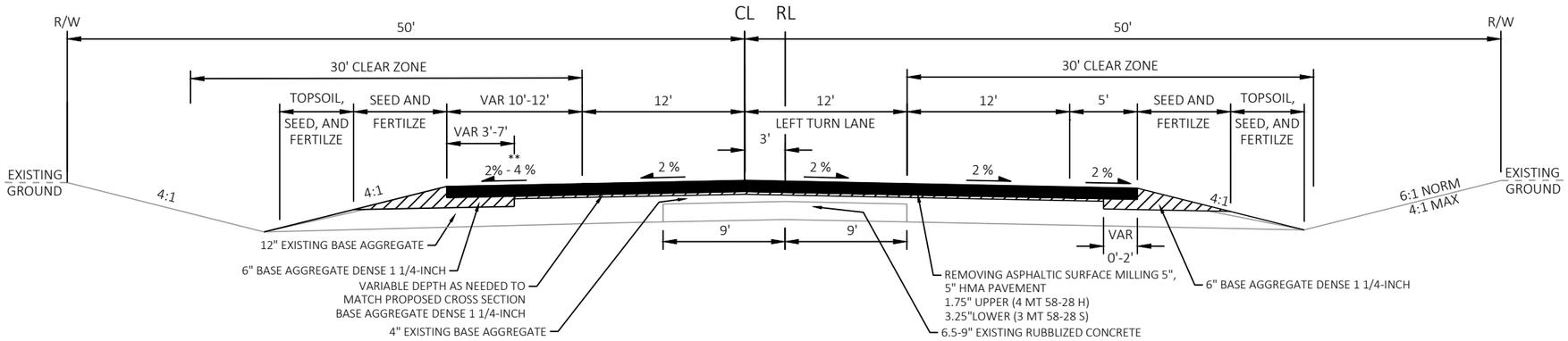
** SHOULDER SLOPES TRANSITION FROM 2% AT 5' SHOULDER TO 4% AT 10' SHOULDER

** ESTIMATED AT 1' WIDE BY 1" DEEP AND USED AS DIRECTED BY THE ENGINEER.

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 11	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 08-10ft

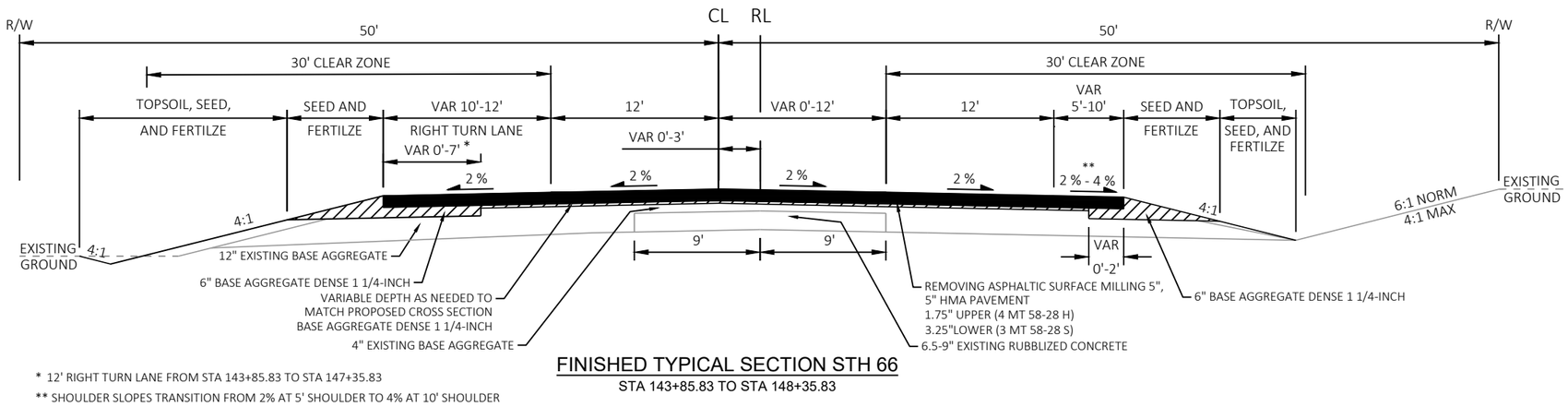
PLOT DATE : 4/10/2024 2:46 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT



FINISHED TYPICAL SECTION STH 66

STA 140+26 TO STA 143+85.83

** SHOULDER SLOPES TRANSITION FROM 2% AT 12' SHOULDER TO 4% AT 10' SHOULDER

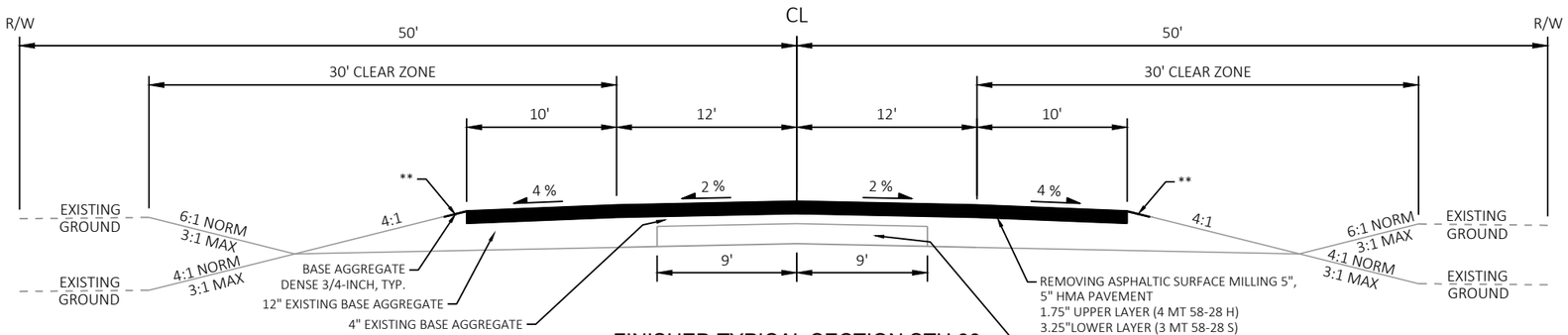


FINISHED TYPICAL SECTION STH 66

STA 143+85.83 TO STA 148+35.83

* 12' RIGHT TURN LANE FROM STA 143+85.83 TO STA 147+35.83

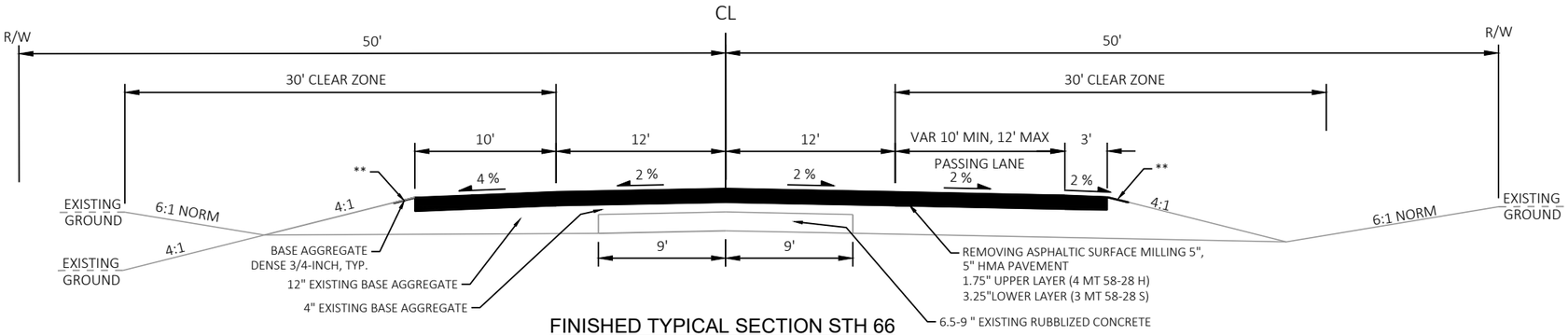
** SHOULDER SLOPES TRANSITION FROM 2% AT 5' SHOULDER TO 4% AT 10' SHOULDER



FINISHED TYPICAL SECTION STH 66

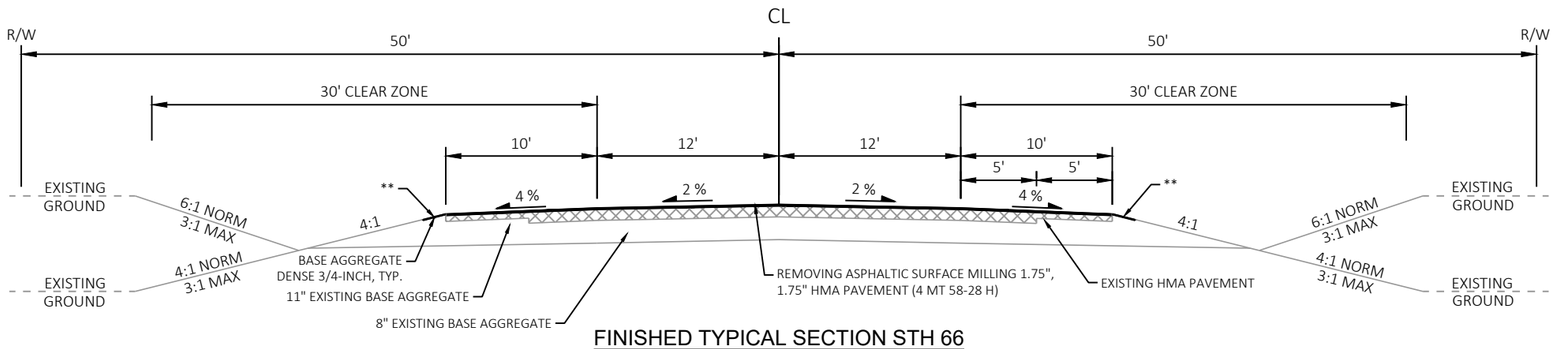
STA 148+35.83 TO STA 176+92
STA 181+49 TO STA 230+80

* ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19



FINISHED TYPICAL SECTION STH 66

STA 176+92 TO STA 181+49



FINISHED TYPICAL SECTION STH 66

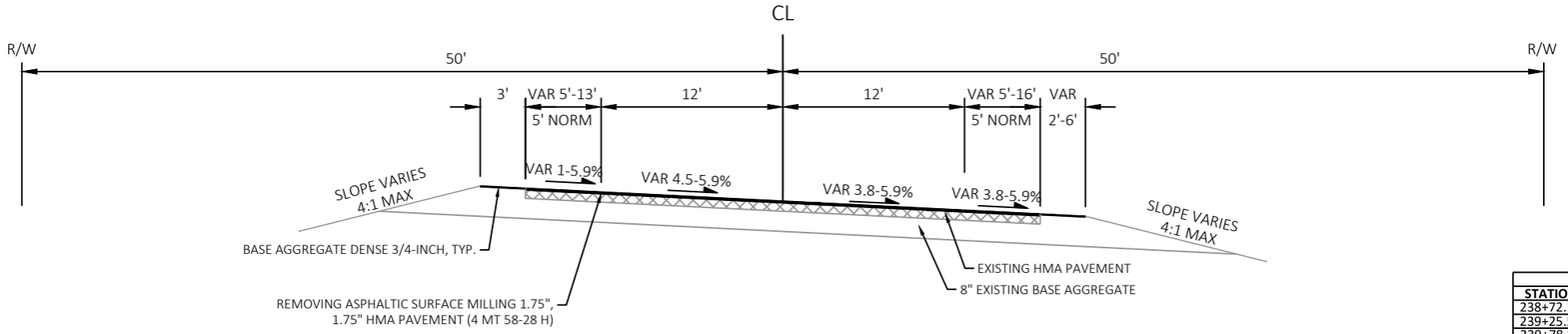
STA 230+80 TO STA 240+80

* ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19

** ESTIMATED AT 1' WIDE BY 1" DEEP AND USED AS DIRECTED BY THE ENGINEER.

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 13	E

2



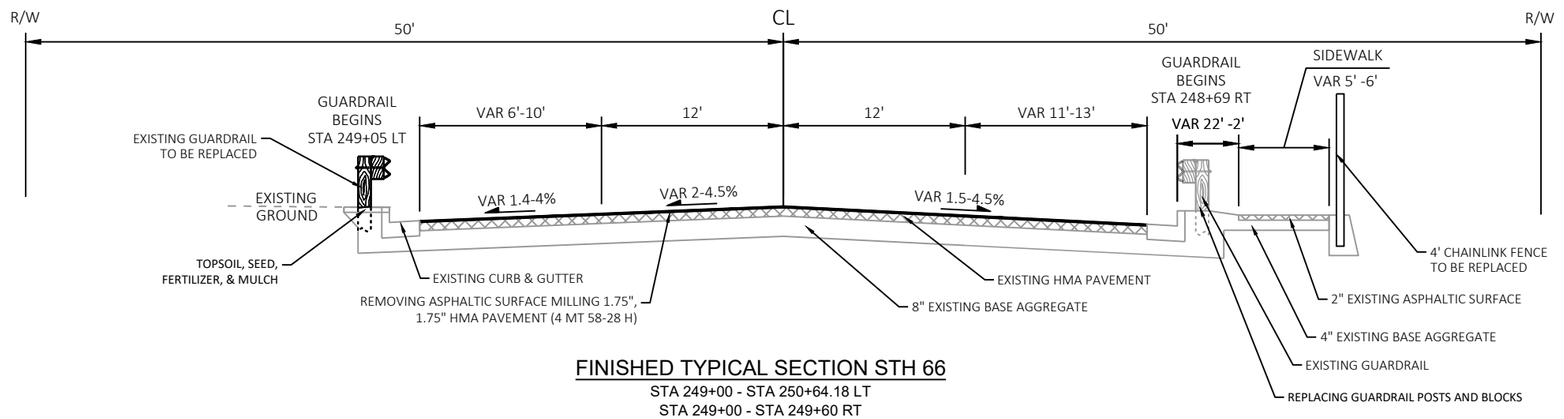
FINISHED TYPICAL SECTION STH 66

STA 240+80 - STA 249+00

* ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19

STH 66 SUPERELEVATION DATA - CURVE 2					
STATION	LT SHOULDER	LT LANE	RT LANE	RT SHOULDER	REMARKS
238+72.16	-4.00%	-2.00%	-2.00%	-4.00%	NORMAL CROWN
239+25.50	0.00%	0.00%	-2.00%	-4.00%	LEVEL CROWN
239+78.83	2.00%	2.00%	-2.00%	-4.00%	REVERSE CROWN
240+85.50	6.00%	6.00%	-6.00%	-6.00%	BEGIN FULL SUPER
248+68.86	6.00%	6.00%	-6.00%	-6.00%	END FULL SUPER
249+75.52	2.00%	2.00%	-2.00%	-4.00%	REVERSE CROWN
250+28.86	0.00%	0.00%	-2.00%	-4.00%	LEVEL CROWN
250+82.19	-4.00%	-2.00%	-2.00%	-4.00%	NORMAL CROWN

NOTE: SUPERELEVATION DATA SHOWN WAS CALCULATED BASED ON DESIGN SPEEDS AND THE BEST FIT ALIGNMENT SHOWN IN THE PLANS. SUPERELEVATION DATA SHOULD BE ADJUST TO FIT ACTUAL FIELD CONDITIONS.



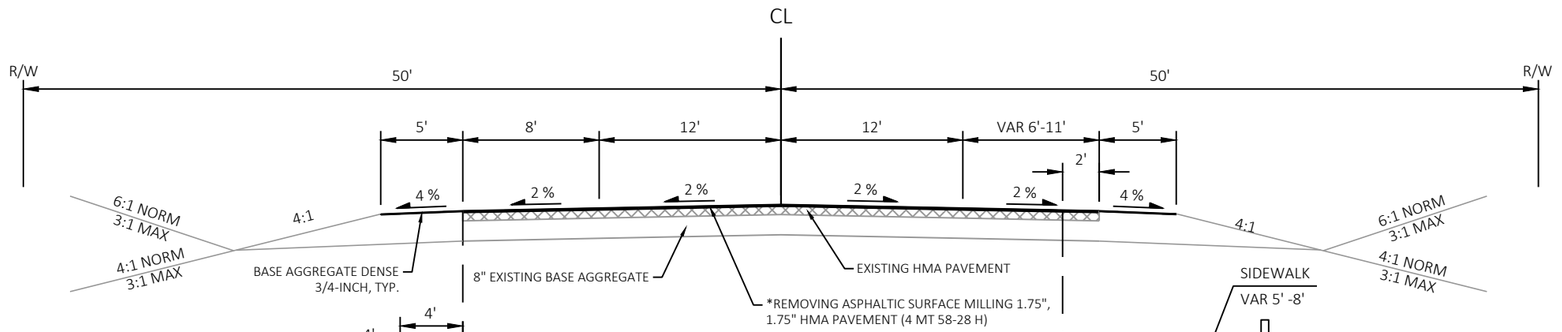
FINISHED TYPICAL SECTION STH 66

STA 249+00 - STA 250+64.18 LT

STA 249+00 - STA 249+60 RT

* ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19

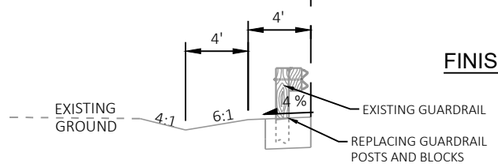
2



FINISHED TYPICAL SECTION STH 66

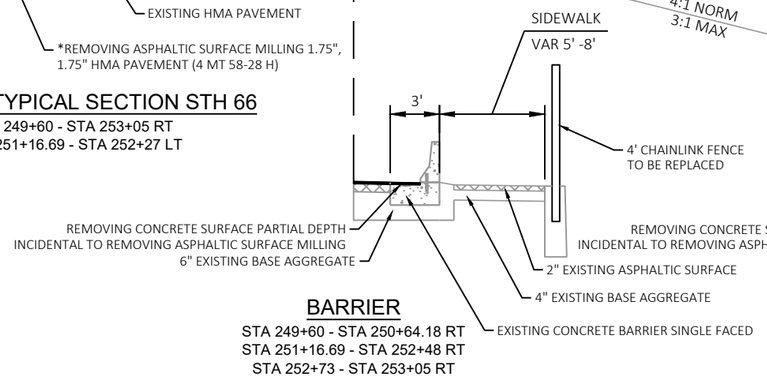
STA 249+60 - STA 253+05 RT

STA 251+16.69 - STA 252+27 LT



GUARDRAIL

STA 251+16.69 - STA 252+27 LT

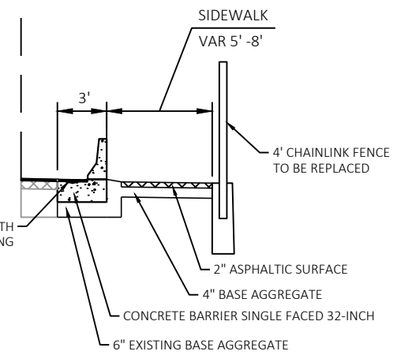


BARRIER

STA 249+60 - STA 250+64.18 RT

STA 251+16.69 - STA 252+48 RT

STA 252+73 - STA 253+05 RT



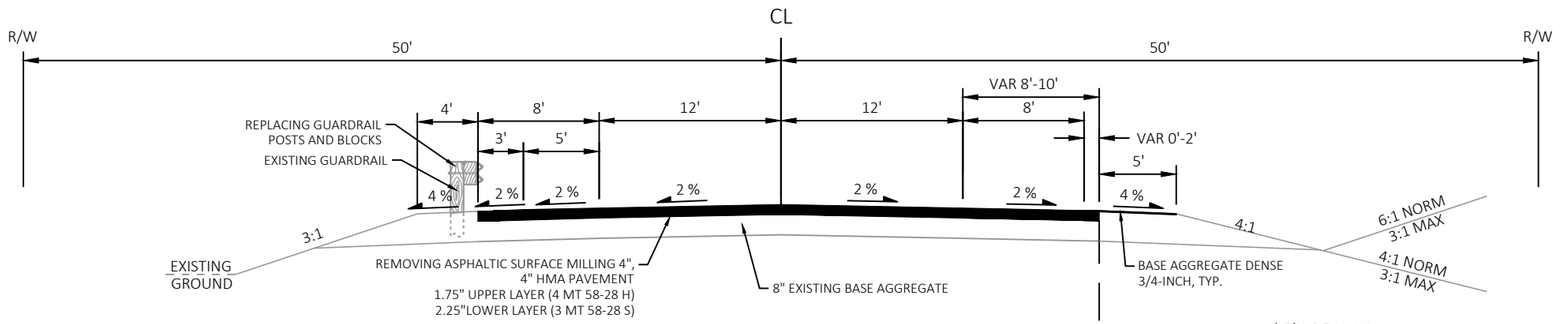
BARRIER

STA 251+57.00 - STA 251+73.00 RT

* FROM STA 252+73 - STA 253+05 RT REMOVING ASPHALTIC SURFACE MILLING 4", PLACING 4" HMA PAVEMENT
1.75" UPPER LAYER (4 MT 58-28-H)
2.25" LOWER LAYER (3 MT 58-28 S)

** ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19

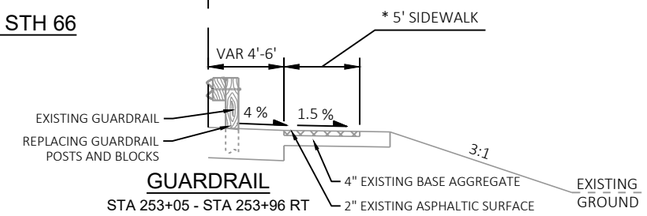
GENERAL NOTE:
1) STRUCTURE B-49-73 STA 250+64.44 - STA 251+16.43
2) STRUCTURE B-49-74 STA 252+37.39 - STA 252+62.59



FINISHED TYPICAL SECTION STH 66

STA 252+55 - STA 256+90 LT

STA 253+05 - STA 254+30 RT



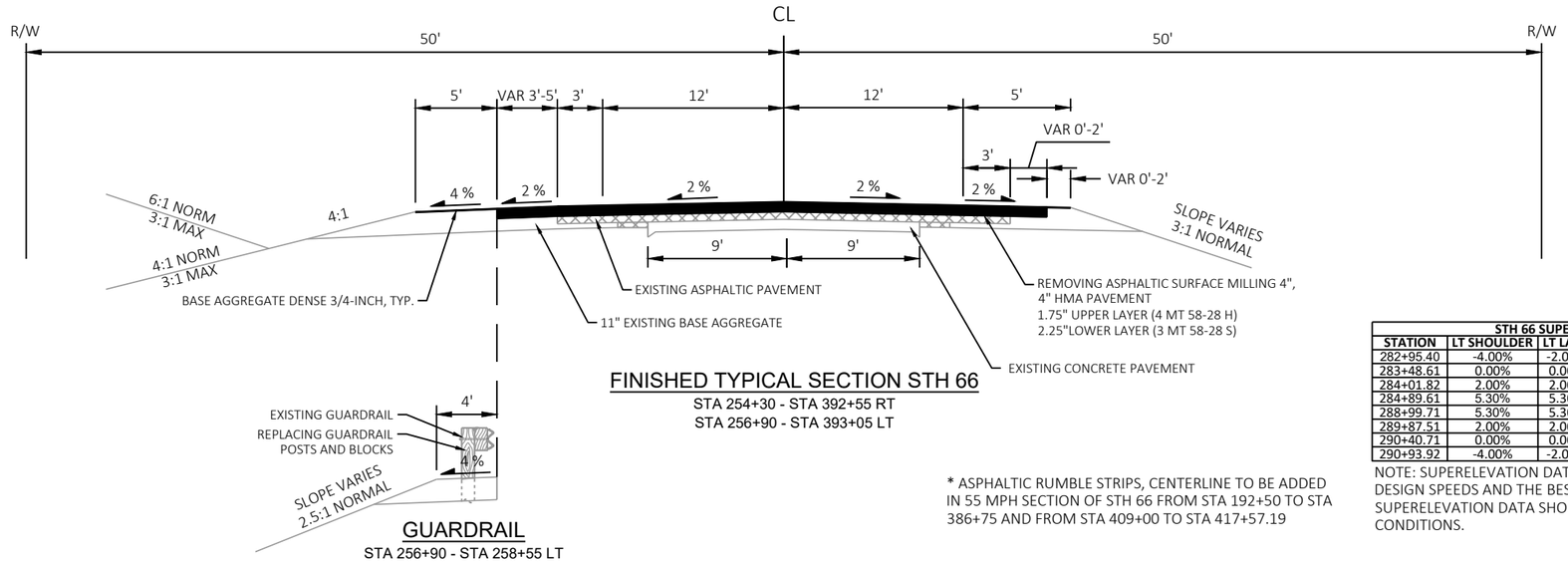
GUARDRAIL

STA 253+05 - STA 253+96 RT

* EXISTING SIDEWALK ENDS AT 254+55 RT

** ASPHALTIC RUMBLE STRIPS CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19

2



FINISHED TYPICAL SECTION STH 66

STA 254+30 - STA 392+55 RT
STA 256+90 - STA 393+05 LT

GUARDRAIL

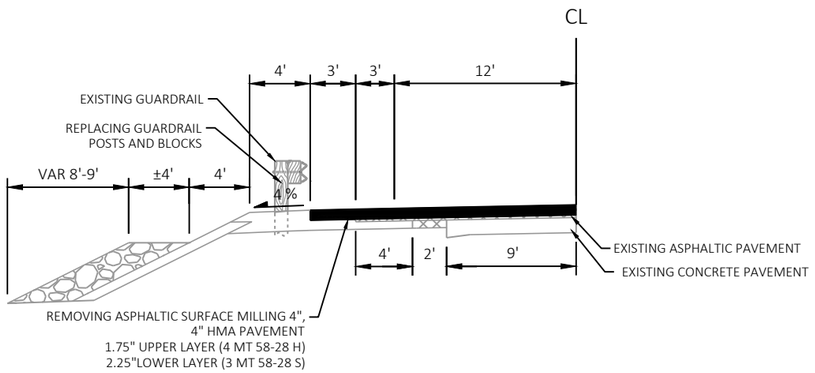
STA 256+90 - STA 258+55 LT

* ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19

STH 66 SUPERELEVATION DATA - CURVE 3

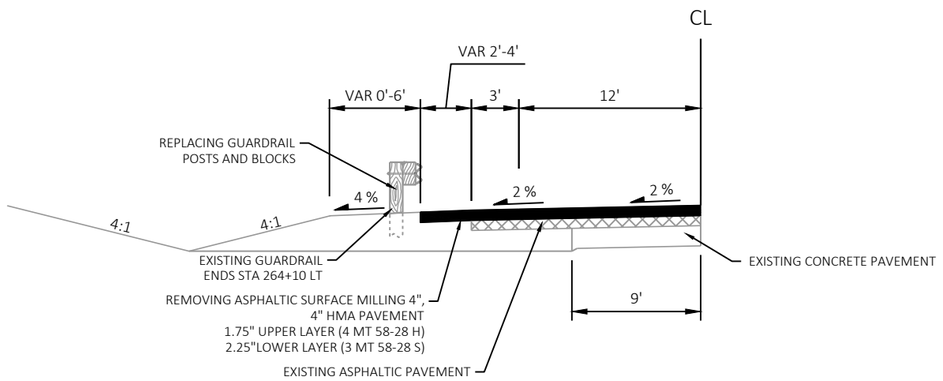
STATION	LT SHOULDER	LT LANE	RT LANE	RT SHOULDER	REMARKS
282+95.40	-4.00%	-2.00%	-2.00%	-4.00%	NORMAL CROWN
283+48.61	0.00%	0.00%	-2.00%	-4.00%	LEVEL CROWN
284+01.82	2.00%	2.00%	-2.00%	-4.00%	REVERSE CROWN
284+89.61	5.30%	5.30%	-5.30%	-5.30%	BEGIN FULL SUPER
288+99.71	5.30%	5.30%	-5.30%	-5.30%	END FULL SUPER
289+87.51	2.00%	2.00%	-2.00%	-4.00%	REVERSE CROWN
290+40.71	0.00%	0.00%	-2.00%	-4.00%	LEVEL CROWN
290+93.92	-4.00%	-2.00%	-2.00%	-4.00%	NORMAL CROWN

NOTE: SUPERELEVATION DATA SHOWN WAS CALCULATED BASED ON DESIGN SPEEDS AND THE BEST FIT ALIGNMENT SHOWN IN THE PLANS. SUPERELEVATION DATA SHOULD BE ADJUST TO FIT ACTUAL FIELD CONDITIONS.



FINISHED TYPICAL HALF SECTION STH 66

WITH GUARDRAIL & RIPRAP
STA 258+55 TO STA 263+05 LT



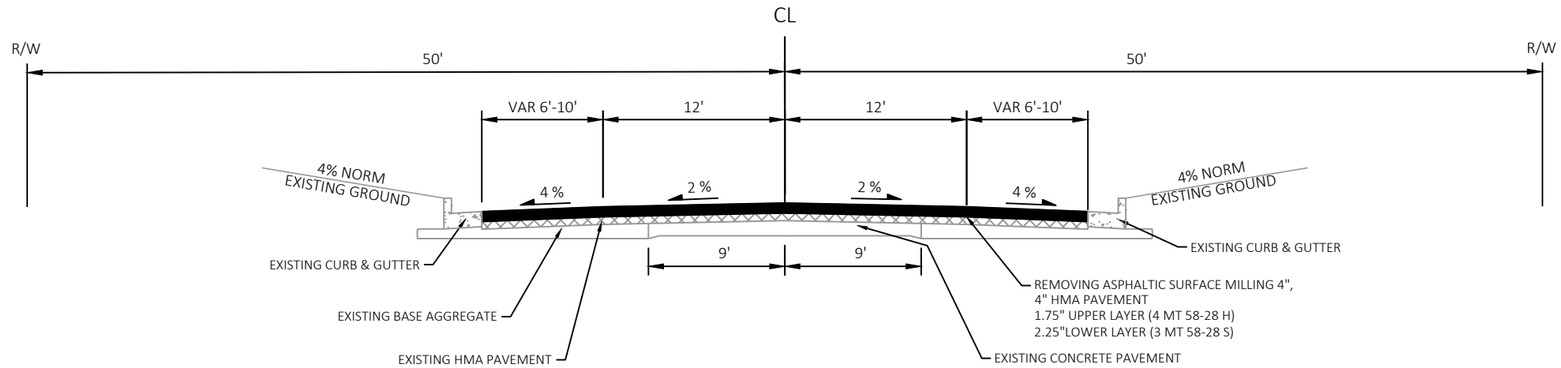
FINISHED TYPICAL HALF SECTION STH 66

STA 263+05 TO STA 265+30 LT

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 16	E

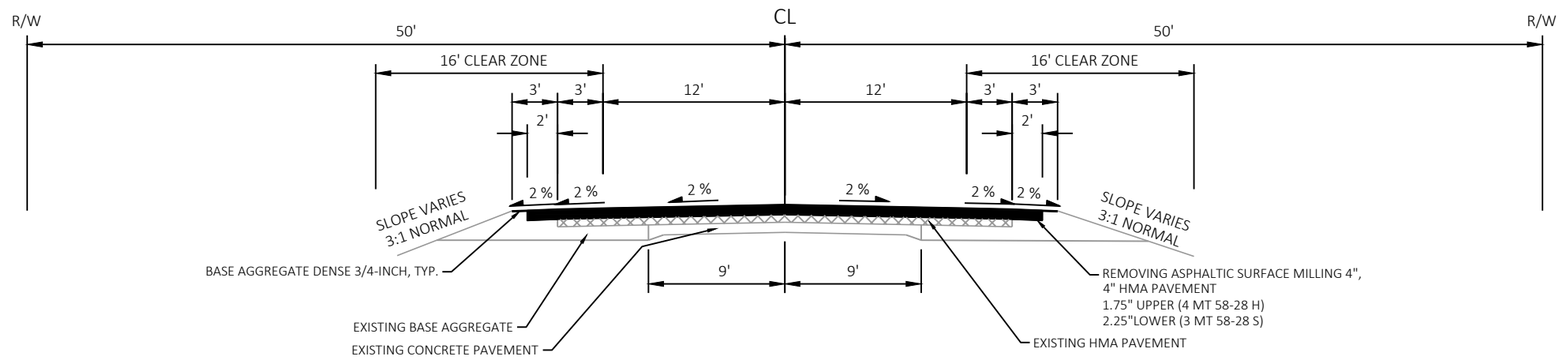
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 13-10ft
PLOT DATE : 4/10/2024 2:46 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



FINISHED TYPICAL SECTION STH 66

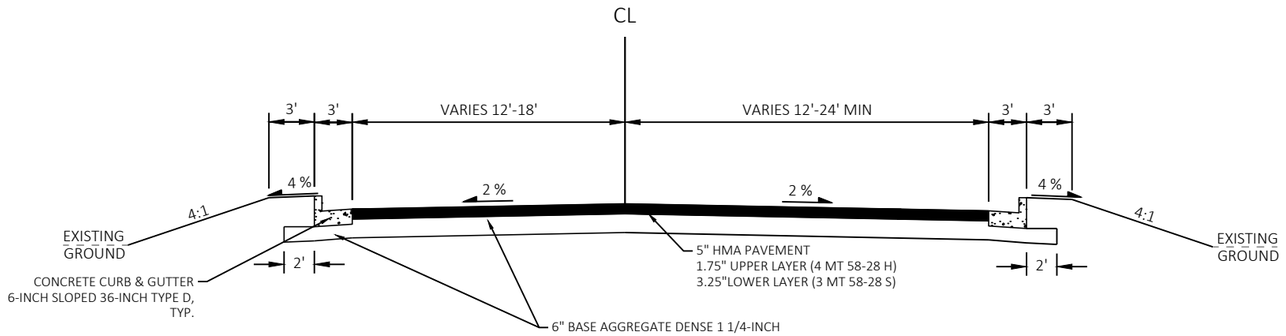
STA 392+55 TO STA 396+70 RT
STA 393+05 TO STA 399+25 LT



FINISHED TYPICAL SECTION STH 66

STA 396+70 TO STA 417+57.19 RT
STA 399+25 TO STA 417+57.19 LT

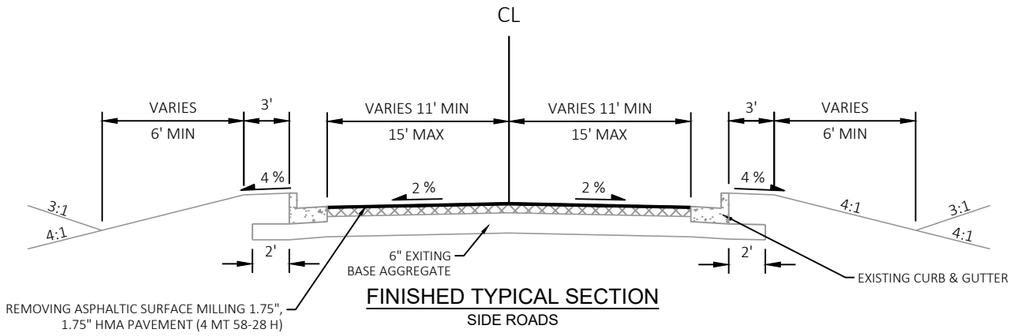
* ASPHALTIC RUMBLE STRIPS, CENTERLINE TO BE ADDED IN 55 MPH SECTION OF STH 66 FROM STA 192+50 TO STA 386+75 AND FROM STA 409+00 TO STA 417+57.19



FINISHED TYPICAL SECTION

SIDE ROAD

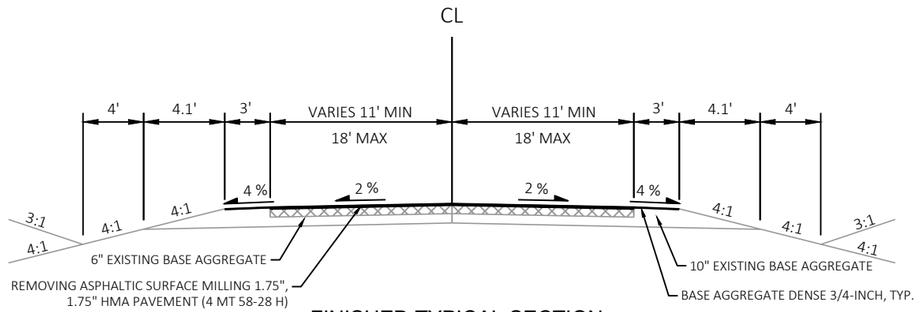
TORUN RD



FINISHED TYPICAL SECTION

SIDE ROADS

CTH Y	CTH J (EAST JCT)
CTH K	CTH J (WEST JCT)
ELLIS RD	SOMERSET DR
DEER LN	MEADOW VIEW LN
AIRPORT RD	PLOVER HEIGHTS RD
BRYCHELL RD	S PONDEROSA DR
BRILOWSKI RD	



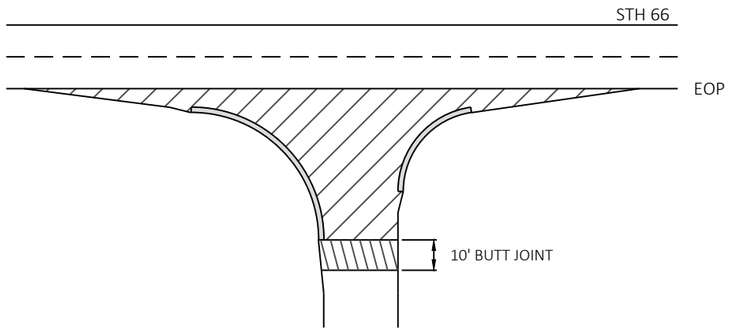
FINISHED TYPICAL SECTION

SIDE ROADS

WALTON RD

MUSIC DR

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 18	E



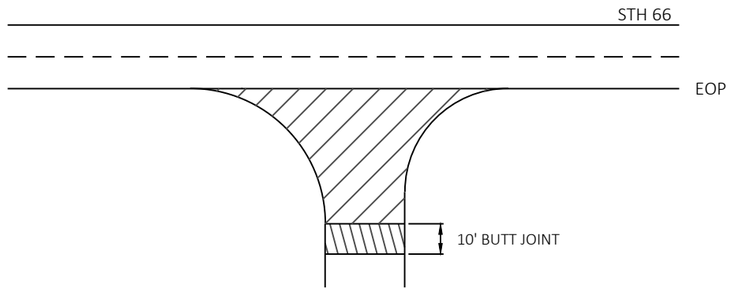
REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS

CTH Y	BRILOWSKI RD
CTH K	SOMERSET DR
DEER LN	MEADOW VIEW LN
AIRPORT RD	PLOVER HEIGHTS RD
BRYCHELL RD	S PONDEROSA DR



REMOVING ASPHALTIC SURFACE MILLING

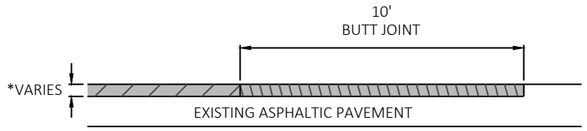
REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS

WALTON RD
MUSIC DR

*THICKNESS VARIES THROUGHOUT THE PROJECT.
- 5" (FROM BEGINNING OF PROJECT TO 230+80),
- 1.75" (FROM 230+80 TO 252+62.59)
- 4" (FROM 252+62.59 TO END OF PROJECT)



HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINT

MAINLINE AND SIDE ROADS

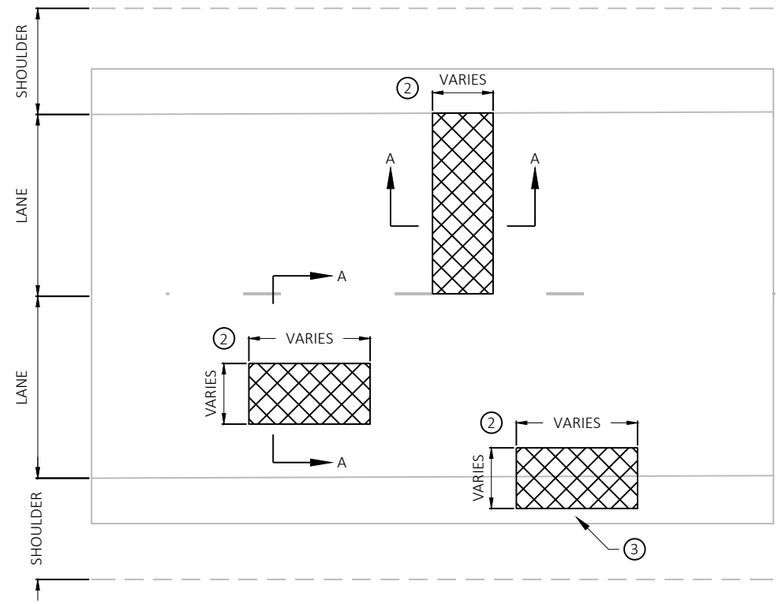
NOTES:

PERFORM REMOVING ASPHALTIC SURFACE MILLING PRIOR TO REMOVING DISTRESSED ASPHALTIC SURFACE MILLING

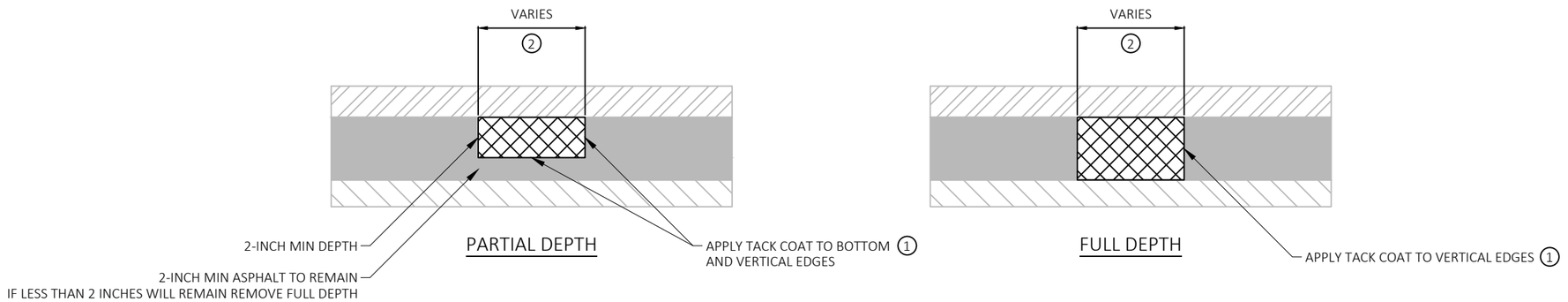
(1) MILLED VERTICAL EDGES ARE ACCEPTABLE, SAW CUTS ARE NOT REQUIRED.

(2) THE SMALLEST DIMENSION OF REMOVING DISTRESSED ASPHALTIC SURFACE MILLING IS 4 FEET IN ANY DIRECTION.

(3) WHEN THE DISTANCE FROM THE EDGE OF PAVEMENT TO EDGE OF REMOVING DISTRESSED ASPHALTIC SURFACE MILLING IS LESS THAN 1-FOOT, EXTEND THE REMOVING DISTRESSED ASPHALTIC SURFACE MILLING TO THE EDGE OF PAVEMENT.



PLAN VIEW



SECTION A-A

REMOVING ASPHALTIC SURFACE MILLING

REMOVING DISTRESSED ASPHALTIC SURFACE MILLING
ASPHALTIC SURFACE PATCHING

EXISTING ASPHALT

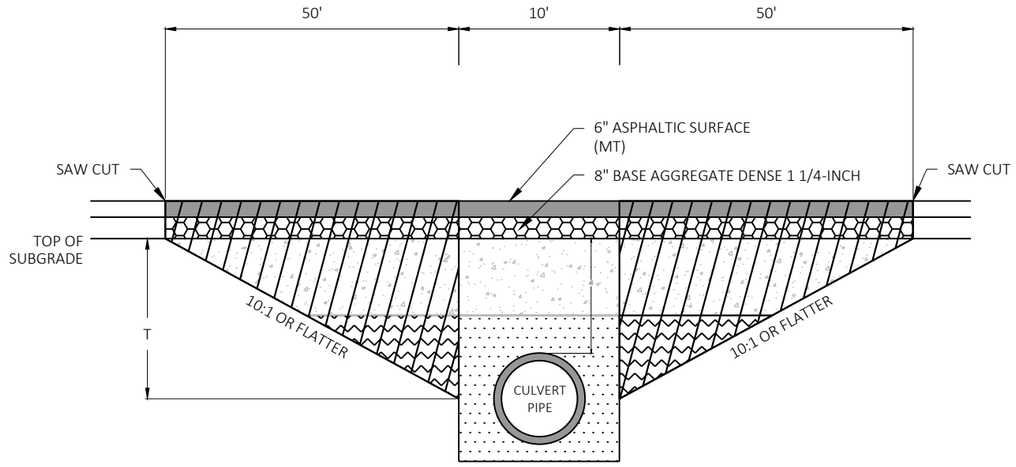
EXISTING BASE COURSE

REMOVING DISTRESSED ASPHALTIC SURFACE MILLING

LOCATIONS AND LIMITS DETERMINED BY THE ENGINEER IN THE FIELD

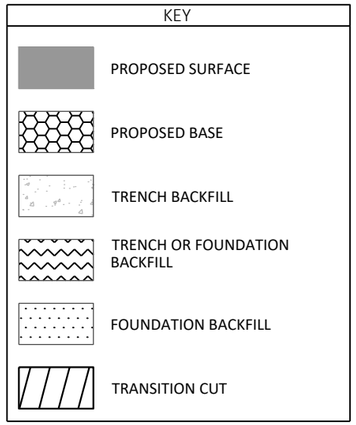
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CONSTRUCTION DETAILS	SHEET 20	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/18/2024 2:21 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



DEPTH D < 6 FT

TRANSITION CUT DEPTH (T) = THE LESSER OF DEPTH TO CENTER OF PIPE OR 5 FT.
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

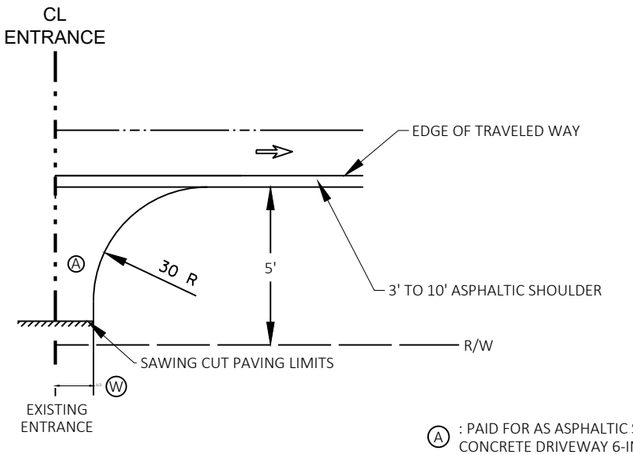


NOTES

TRANSITION CUT IS PAID AS EXCAVATION COMMON.
TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.
PERFORM CULVERT PIPE INSTALLATION BEFORE [MILLING AND PAVING].

CULVERT PIPE TRANSITION

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)	REMARKS
STH 66	235+90	3.7'	30 INCH	Culvert No. 49066005731

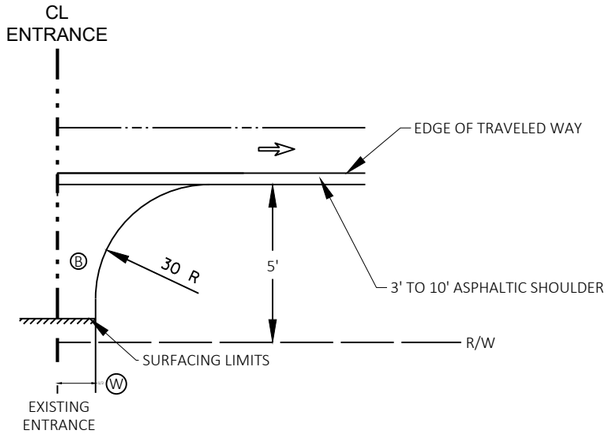


Ⓐ : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OR CONCRETE DRIVEWAY 6-INCH

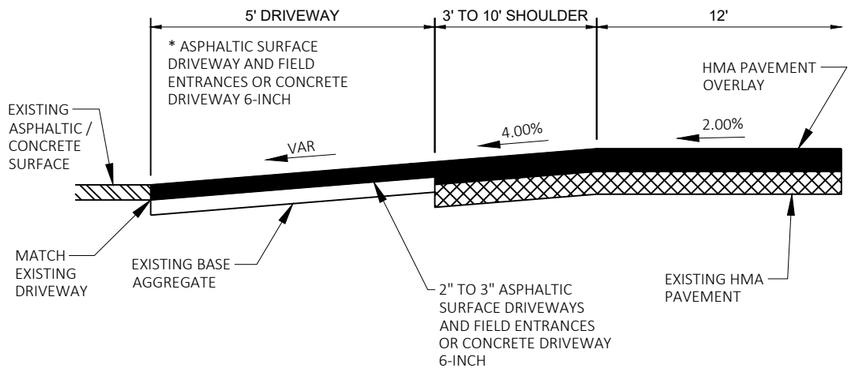
Ⓑ : PAID FOR AS BASE AGGREGATE DENSE 3/4-INCH (TON)

Ⓦ : DRIVEWAY WIDTH 16' MIN - 24' MAX

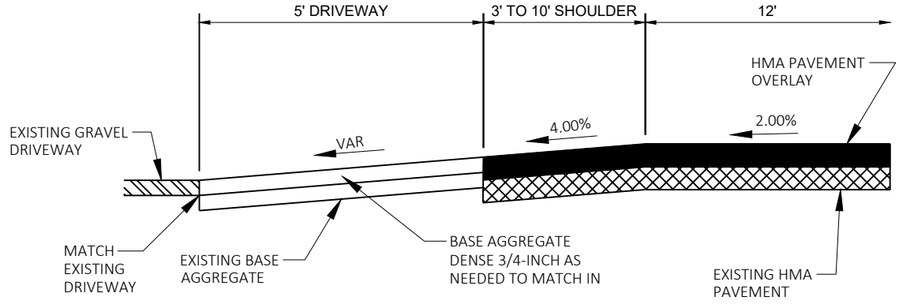
PLAN VIEW
HALF SECTION



PLAN VIEW
HALF SECTION



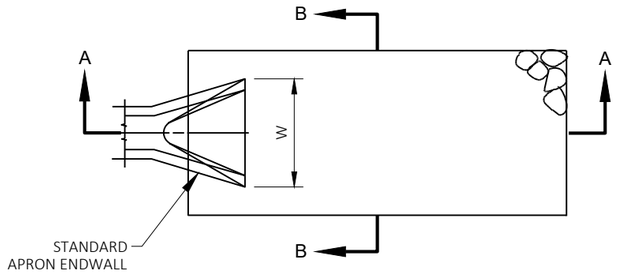
PROFILE VIEW
RURAL ENTRANCE WITH
ASPHALTIC / CONCRETE
SURFACE
RESURFACING PROJECTS

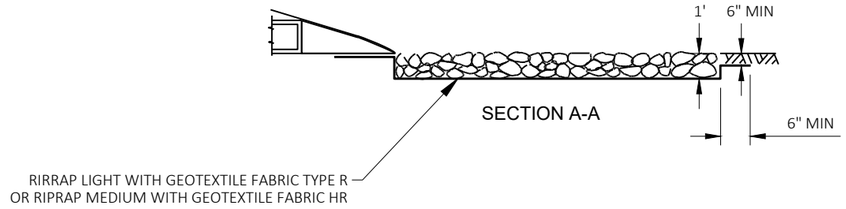


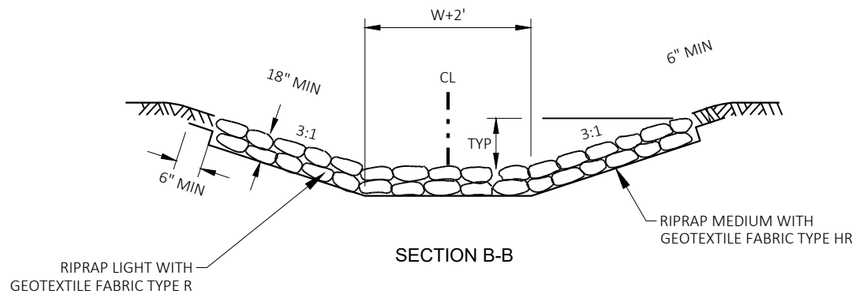
PROFILE VIEW
RURAL ENTRANCE WITH
AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

STH 66 - DRIVEWAY LIST

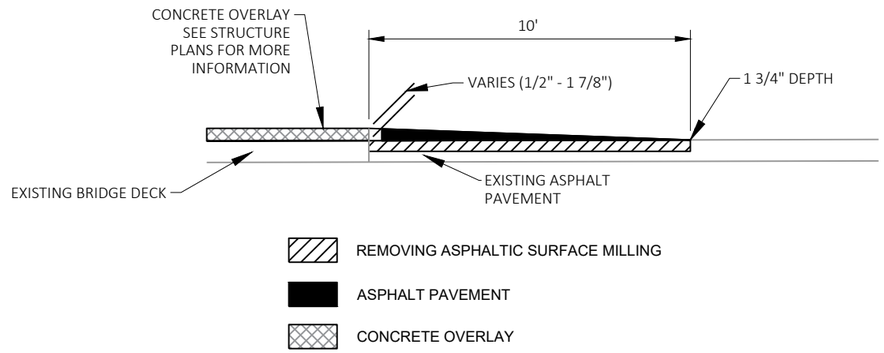
STATION	OFFSET	TYPE	SURFACE
115+01	LT	PE	GRAVEL
118+22	LT	PE	GRAVEL
120+00	LT	PE	GRAVEL
120+29	RT	PE	ASPHALT
122+05	RT	PE	GRAVEL
123+69	LT	PE	ASPHALT
124+03	RT	PE	GRAVEL
125+18	LT	PE	GRAVEL
125+35	RT	PE	GRAVEL
126+35	RT	PE	ASPHALT
126+92	RT	PE	ASPHALT
127+06	LT	PE	ASPHALT
128+06	RT	PE	ASPHALT
128+09	LT	PE	GRAVEL
128+88	RT	PE	ASPHALT
129+85	RT	PE	ASPHALT
130+47	LT	PE	ASPHALT
131+68	RT	PE	GRAVEL
132+00	LT	PE	GRAVEL
132+55	LT	PE	ASPHALT
133+69	LT	PE	ASPHALT
134+88	RT	PE	ASPHALT
135+21	LT	PE	ASPHALT
136+17	RT	PE	ASPHALT
136+69	LT	PE	CONCRETE
137+79	LT	PE	CONCRETE
137+95	RT	PE	ASPHALT
138+88	LT	PE	ASPHALT
139+14	RT	PE	GRAVEL
140+56	RT	PE	GRAVEL
140+57	LT	PE	GRAVEL
143+01	RT	PE	ASPHALT
145+49	RT	PE	ASPHALT
147+42	RT	PE	GRAVEL
148+14	RT	PE	ASPHALT
149+77	RT	PE	ASPHALT
151+56	LT	PE	GRAVEL
151+59	LT	PE	ASPHALT
151+91	LT	PE	ASPHALT
152+71	RT	PE	ASPHALT
153+81	LT	PE	GRAVEL
154+04	RT	PE	GRAVEL
155+04	RT	PE	GRAVEL
155+96	RT	PE	GRAVEL
156+02	LT	PE	ASPHALT
156+66	RT	PE	CONCRETE
157+33	LT	PE	GRAVEL
158+30	RT	PE	GRAVEL
159+55	RT	PE	GRAVEL
162+57	RT	PE	GRAVEL
166+70	RT	PE	GRAVEL
166+70	LT	PE	GRAVEL
167+79	LT	PE	GRAVEL
158+65	LT	PE	ASPHALT
169+45	RT	PE	ASPHALT
169+74	LT	PE	ASPHALT
170+82	LT	PE	ASPHALT
171+30	LT	PE	ASPHALT
172+88	LT	PE	ASPHALT
173+50	LT	PE	GRAVEL
174+04	LT	PE	GRAVEL
176+08	LT	PE	ASPHALT
177+89	RT	PE	GRAVEL
179+77	LT	PE	GRAVEL
182+52	LT	PE	ASPHALT
182+60	RT	PE	GRAVEL
184+25	RT	CE	ASPHALT
186+86	LT	PE	GRAVEL
188+87	RT	PE	ASPHALT
200+88	LT	PE	GRAVEL
204+50	LT	PE	GRAVEL
207+75	RT	PE	ASPHALT
215+06	RT	PE	GRAVEL
218+86	RT	PE	GRAVEL
217+08	RT	PE	ASPHALT
220+10	LT	FE	GRAVEL
221+86	LT	PE	ASPHALT
223+06	LT	PE	ASPHALT
224+32	RT	PE	ASPHALT
225+85	LT	CE	ASPHALT
226+44	LT	PE	GRAVEL
228+34	LT	PE	ASPHALT
232+35	LT	PE	ASPHALT
236+32	LT	CE	GRAVEL
238+50	LT	CE	GRAVEL
268+07	LT	CE	GRAVEL
277+60	LT	PE	GRAVEL
277+55	RT	FE	GRAVEL
282+10	LT	PE	GRAVEL
283+50	RT	FE	GRAVEL
305+18	LT	FE	GRAVEL
314+39	RT	FE	GRAVEL
333+86	RT	FE	GRAVEL
340+80	LT	FE	GRAVEL
341+20	RT	FE	GRAVEL
353+11	RT	FE	GRAVEL
365+71	LT	PE	GRAVEL
371+55	RT	CE	GRAVEL
372+34	LT	PE	GRAVEL
373+75	LT	PE	GRAVEL
380+55	LT	CE	GRAVEL
380+78	RT	CE	GRAVEL
381+63	LT	CE	ASPHALT
383+13	LT	PE	ASPHALT
384+40	LT	PE	ASPHALT
385+58	LT	PE	GRAVEL
385+59	LT	PE	ASPHALT
392+45	LT	PE	GRAVEL
393+27	LT	PE	GRAVEL
393+28	LT	PE	ASPHALT
395+01	LT	CE	ASPHALT
399+32	LT	CE	ASPHALT
399+44	RT	CE	GRAVEL
399+88	LT	CE	GRAVEL
403+19	LT	PE	GRAVEL
405+23	RT	CE	GRAVEL
405+67	LT	CE	ASPHALT
407+94	LT	FE	GRAVEL
410+15	LT	PE	ASPHALT



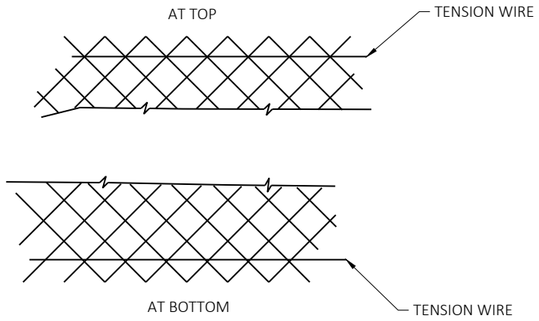




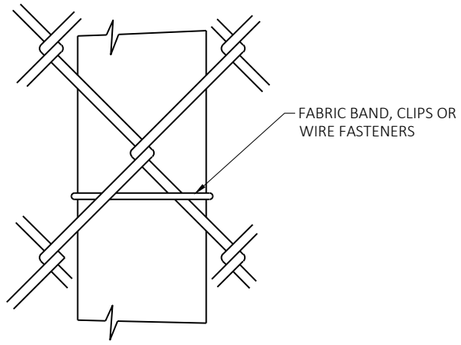
RIP RAP AND GEOTEXTILE



DECK OVERLAY TRANSITION DETAIL



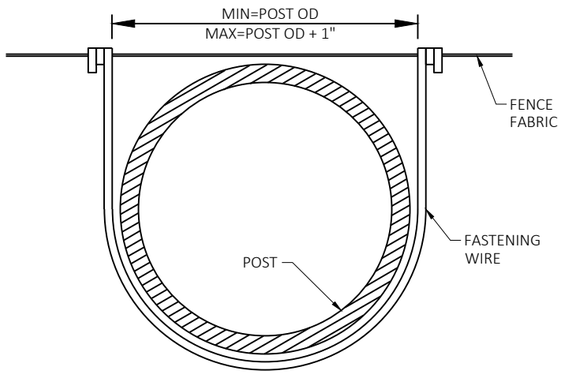
SELVAGES



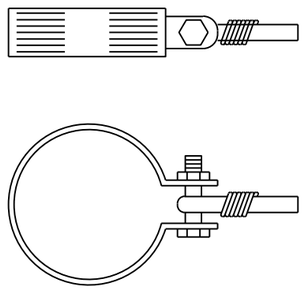
LINE POST

1) FABRIC FASTENERS:
MINIMUM 3/16" X 3/4" STRETCHER BAR BANDED TO TERMINAL POSTS, OR INDUSTRIAL FABRIC FITTINGS ON TERMINAL POSTS. ALL FASTENERS ARE NO. 6 ALUMINUM SPACED 14" MAX. VERTICALLY.

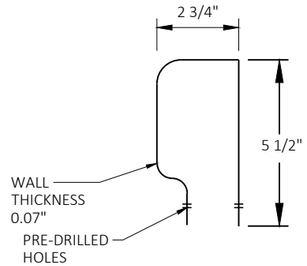
2) FENCE HEIGHT:
THE FABRIC HEIGHT IS THE NOMINAL FENCE HEIGHT.



FABRIC FASTENING DETAIL



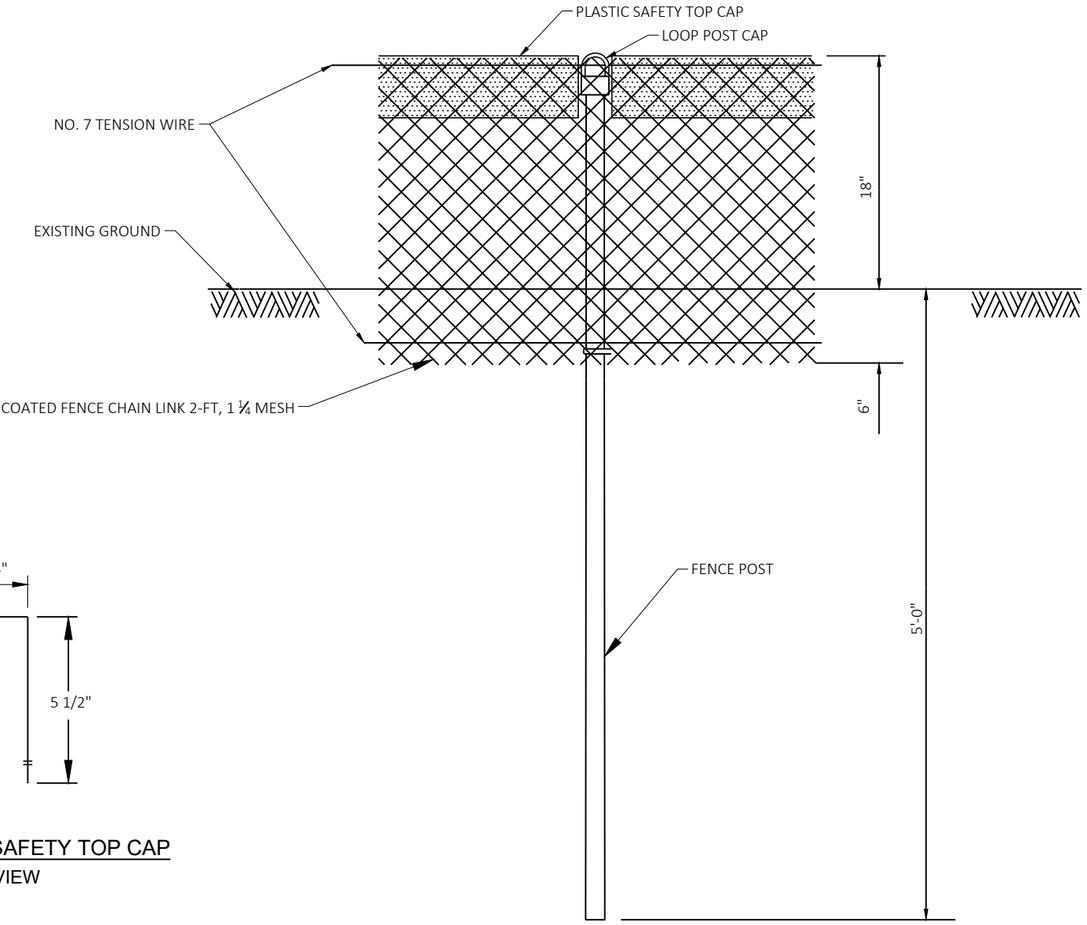
TENSION WIRE END CLAMP



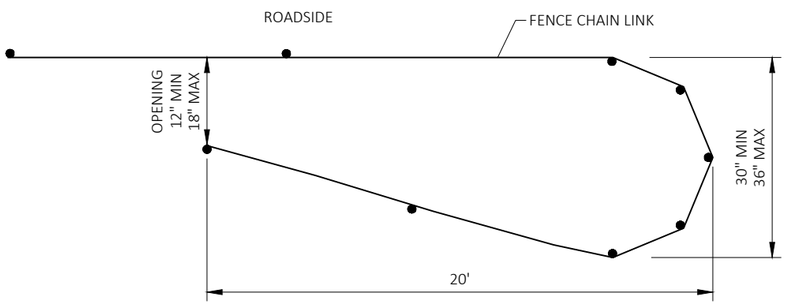
HDPE PLASTIC SAFETY TOP CAP
END VIEW

GENERAL NOTES:

1) ALL FENCING SHALL MEET FEDERAL SPECIFICATION F-162 AND RR-F-00191.
2) 6" FLEXIBLE PLASTIC PIPE MAY BE USED IN PLACE OF HDPE PLASTIC SAFETY TOP CAP IN RURAL, NON-POPULATED AREAS WITH THE APPROVAL OF THE ENGINEER.
3) UNLESS OTHERWISE SPECIFIED, ATTACH CHAIN-LINK FABRIC TO POSTS AND RACES WITH STANDARD TIE WIRE MEETING SPECIFICATIONS.
4) SAFETY TOP CAP REQUIRED ON THE ENTIRE LENGTH OF FENCE CHAIN LINK, 2-FT, ANIMAL BARRIER.
5) ALL FENCE COMPONENTS SHALL BE PVC COATED, DARK GREEN IN COLOR.
6) DO NOT PLACE SAFETY TOP CAP AROUND TURN-AROUND RADIUS
7) TENSION WIRE SHALL HAVE NO VISIBLE SAG WHEN FULLY TENSIONED.

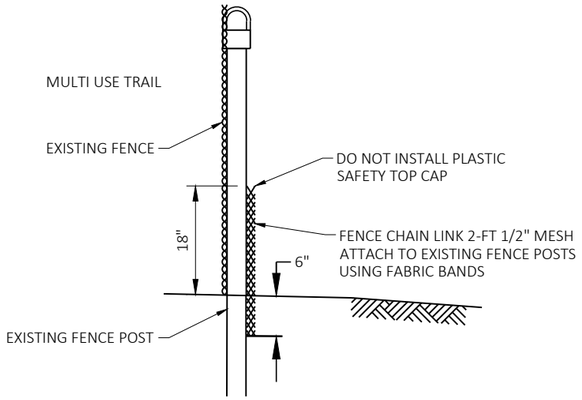


FENCE CHAIN LINK SMALL ANIMAL BARRIER



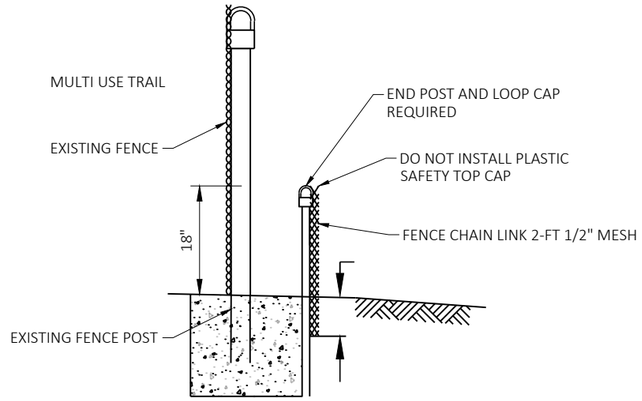
NOTES
THE PURPOSE OF THE SMALL ANIMAL TURN AROUNDS ARE TO REDIRECT THE TURTLES AWAY FROM THE ROADWAY. PLACE FENCE POSTS ON THE UPSLOPE SIDE OF FENCE. TURTLE BARRIER POSTS FOR THE TURN-AROUND SHOULD BE ON THE INSIDE OF THE TURN-AROUND. 5 POSTS MINIMUM WITHIN ARC OF TURN-AROUND.

SMALL ANIMAL TURN-AROUND DETAIL



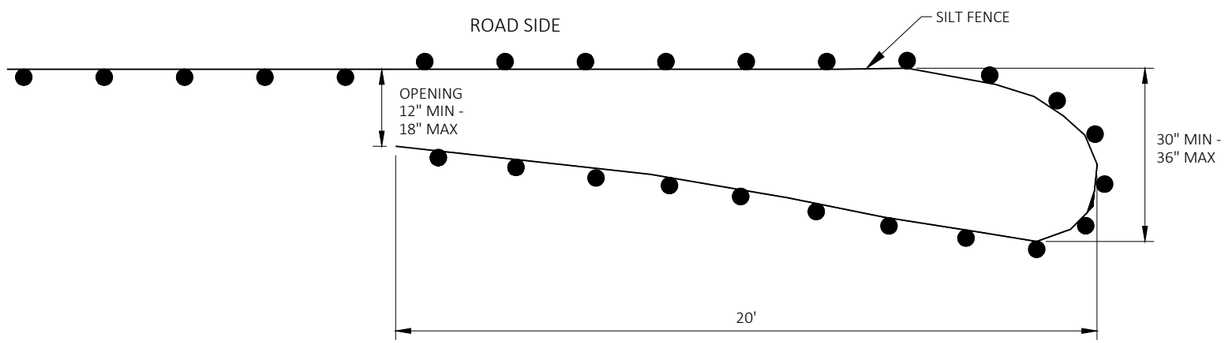
FENCE CHAIN LINK ANIMAL BARRIER

END VIEW



FENCE CHAIN LINK ANIMAL BARRIER

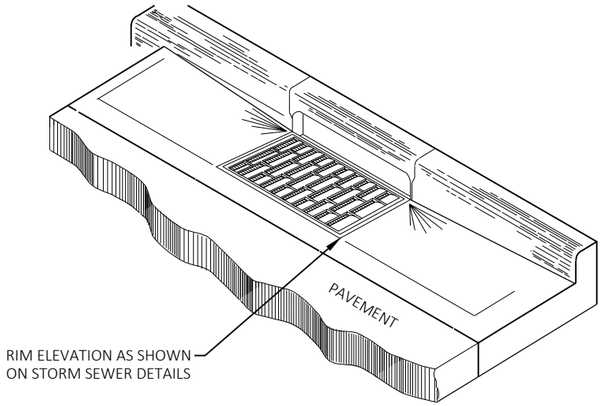
END VIEW AT CONCRETE ABUTMENT



PLAN VIEW

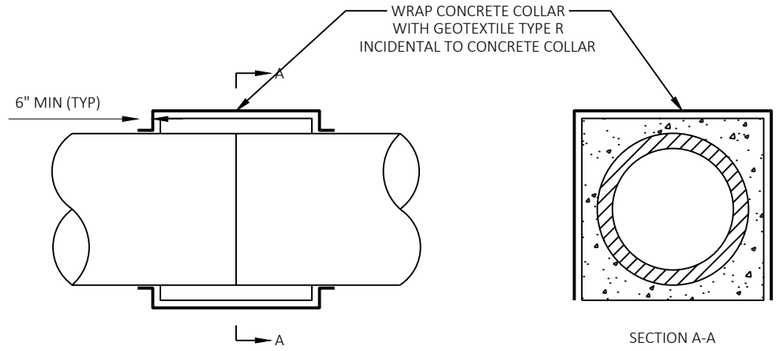
TEMPORARY SMALL ANIMAL TURN-AROUND

GENERAL NOTES:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.



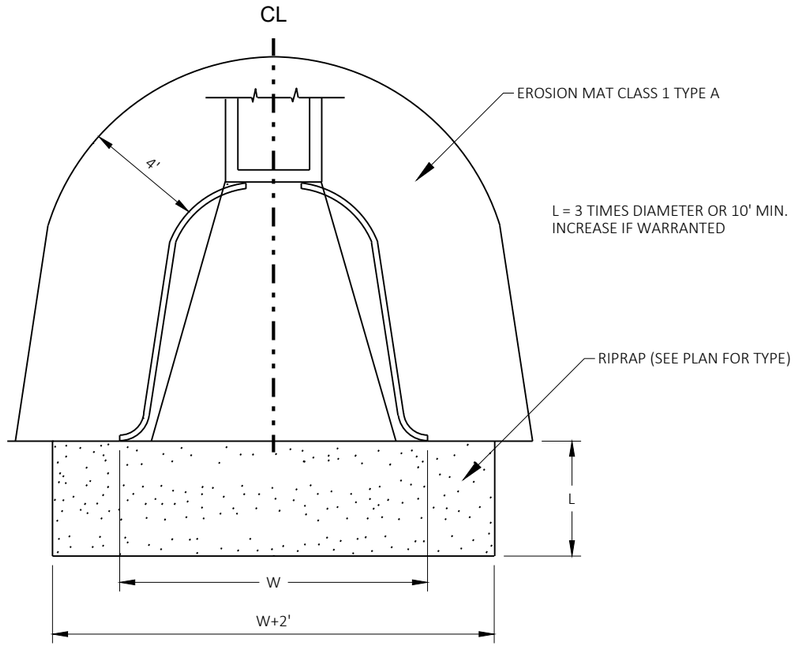
DETAIL OF CURB AND GUTTER AT INLETS

SEE SDD CONCRETE GUTTER, TIES AND CURB AND GUTTER APPLICATIONS FOR DETAILS NOT SHOWN



CONCRETE COLLAR

SEE SDD JOINT TIES FOR CONCRETE PIPE AND
CONCRETE PIPE COLLARS FOR DETAILS NOT SHOWN



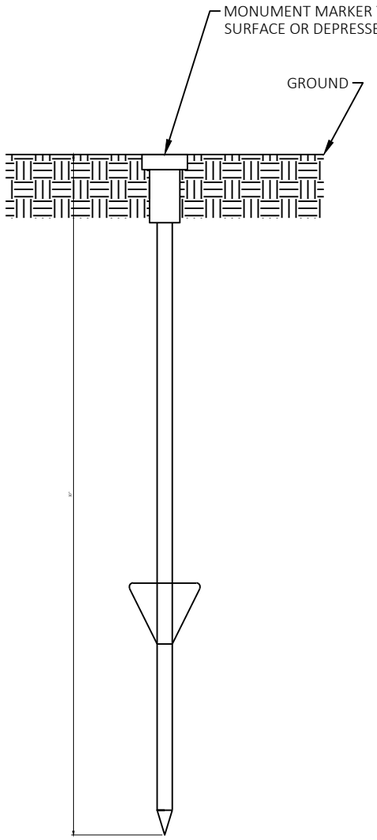
EROSION CONTROL AT PIPE ENDS

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CONSTRUCTION DETAILS	SHEET 26	E



WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

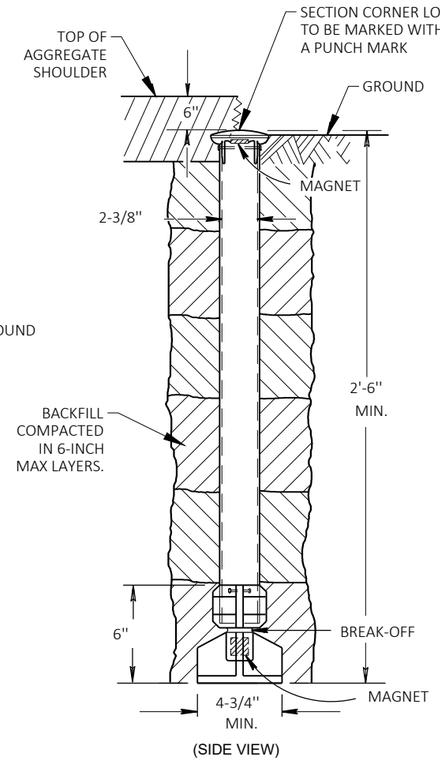
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

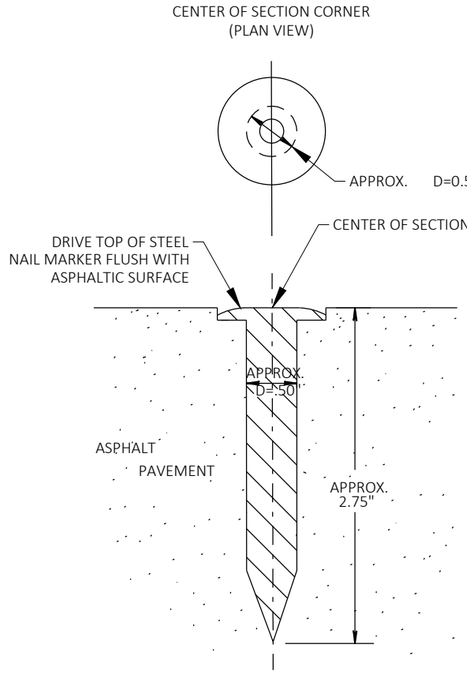
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

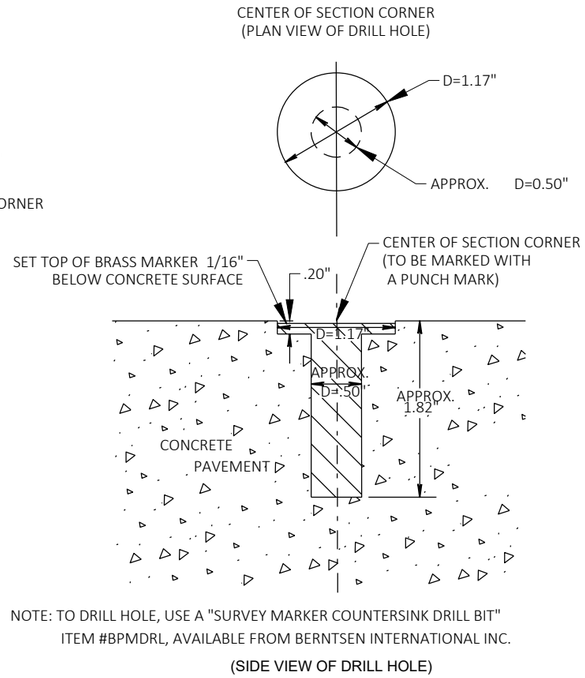
BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



NOTE: TO DRILL HOLE, USE A "SURVEY MARKER COUNTERSINK DRILL BIT" ITEM #BPMDRL, AVAILABLE FROM BERNTSEN INTERNATIONAL INC.

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

BERNTSEN BP - 1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

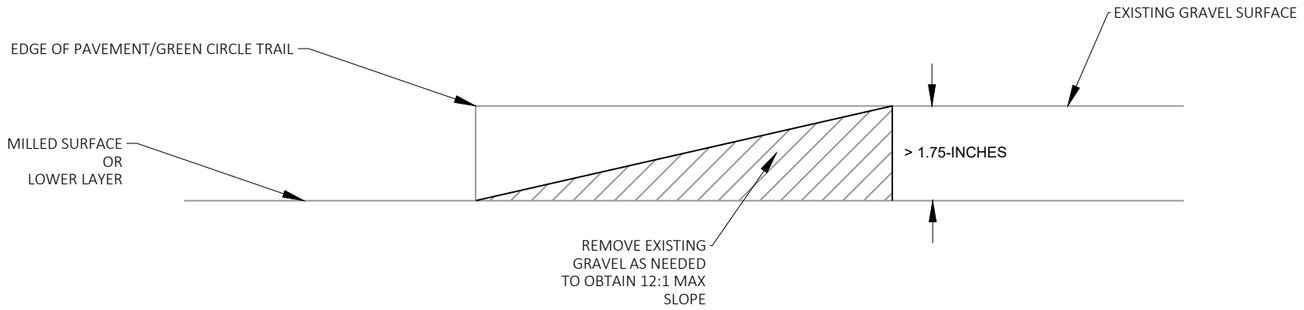
CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

NOTES:

THESE CONSTRUCTION DETAILS AND THE SPECIAL PROVISIONS SUPPLEMENT THE REQUIREMENTS FOR PROVIDING DROP-OFF PROTECTION AS STATED IN STANDARD SPECIFICATION 104.6.1.2.3

TEMPORARY GRAVEL SURFACE RAMP INCIDENTAL TO CONCRETE SIDEWALK 5-INCH



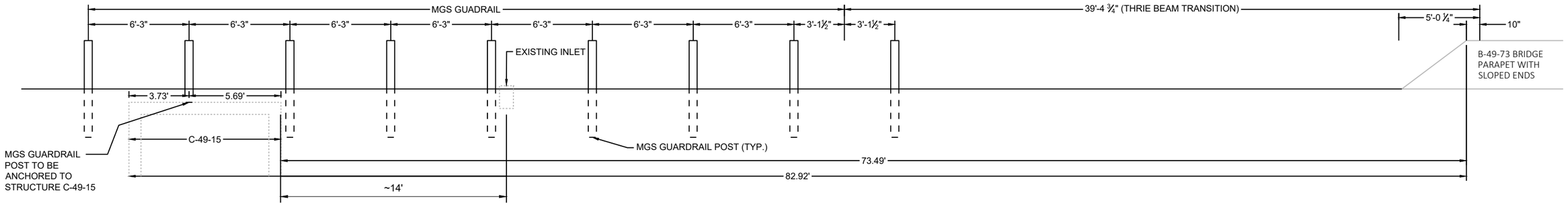
TEMPORARY GRAVEL SURFACE RAMP AT GREEN CIRCLE TRAIL

2

N

GENERAL NOTES:

1. GUARDRAIL POST ABOVE C-49-15 TO BE ANCHORED TO STRUCTURE C-49-15.
2. SEE STANDARD DETAIL DRAWING "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" AND "MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)".
3. SEE STRUCTURE PLAN C-49-15 FOR MORE INFORMATION.
4. THE EXACT LOCATION AND SPACING OF THE POSTS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CONSTRUCTION DETAILS	SHEET 29	E

2

2

N

12+00 Y

STA 11Y+55.69
19.06' R

AMHERST TEL CO

53.125'

MGS GUARDRAIL TERMINAL EAT

CTH Y

11+00 Y

AT&T WISCONSIN

STA 11Y+01.11
17.00' R

R53'

MGS SHORT RADIUS
NUMBER OF CRT POSTS = 16

SLOPE INTERCEPT

71.1'

MGS GUARDRAIL 3

39.4'

MGS THRIE BEAM TRANSITION

REMOVING CURB & GUTTER
CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE D
(DRIVEWAY ENTRANCE CURB)
R = 55'

STH 66

247+00

248+00

249+00

250+00

251+00

252+00

GUARDRAIL POST ABOVE C-49-15 TO BE ANCHORED TO C-49-15. SEE STRUCTURE PLAN C-49-15 FOR MORE INFORMATION. THE EXACT LOCATION AND SPACING OF THE POSTS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

CAUTION

SPECTRUM

WISCONSIN PUBLIC SERVICE CORPORATION

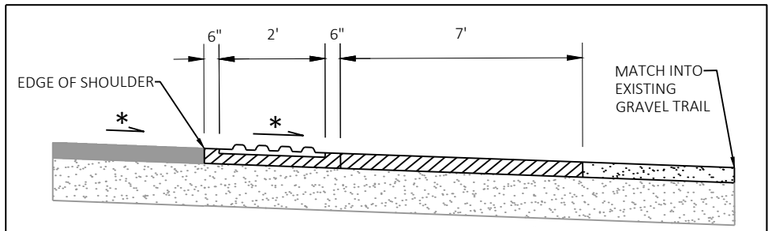
WISCONSIN PUBLIC SERVICE CORPORATION

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	MGS GUARDRAIL	SHEET 30	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 12

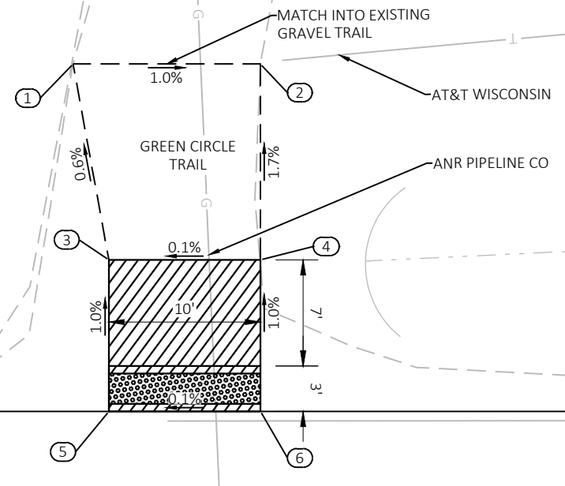
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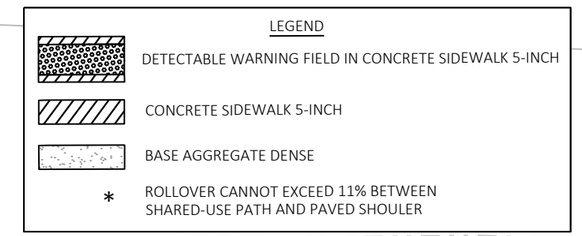
WISDOT/CADDS SHEET 42



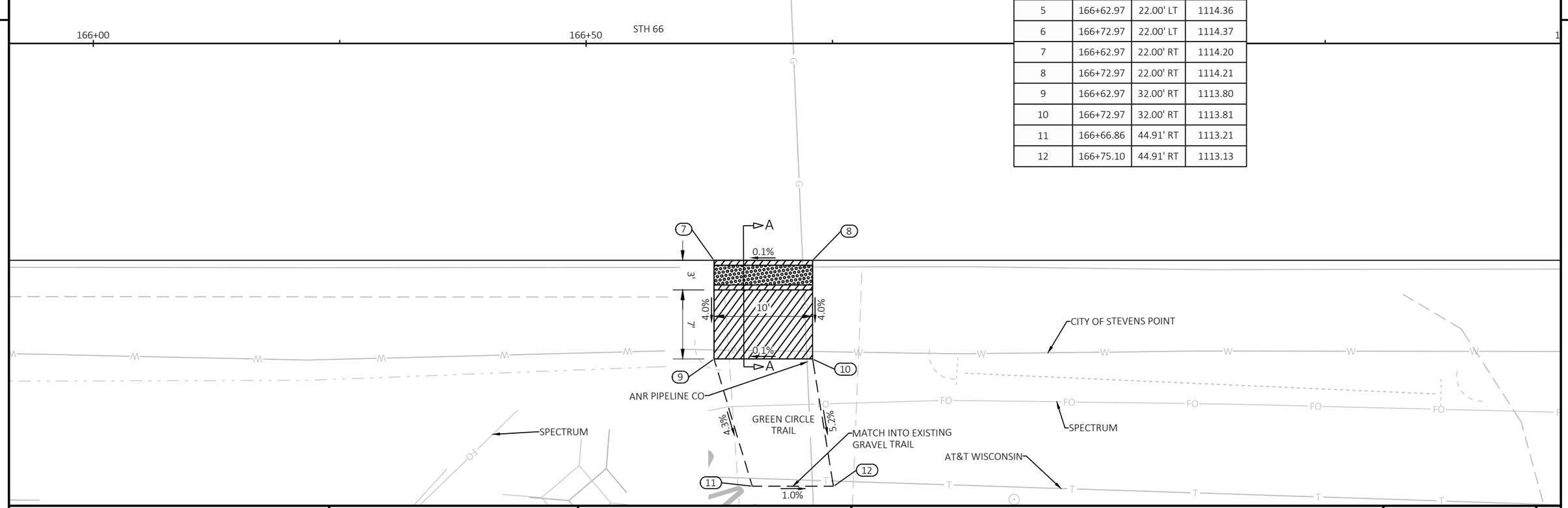
SECTION A-A

RURAL SHARED-USE PATH CROSSING WITH DETECTABLE WARNING FIELD



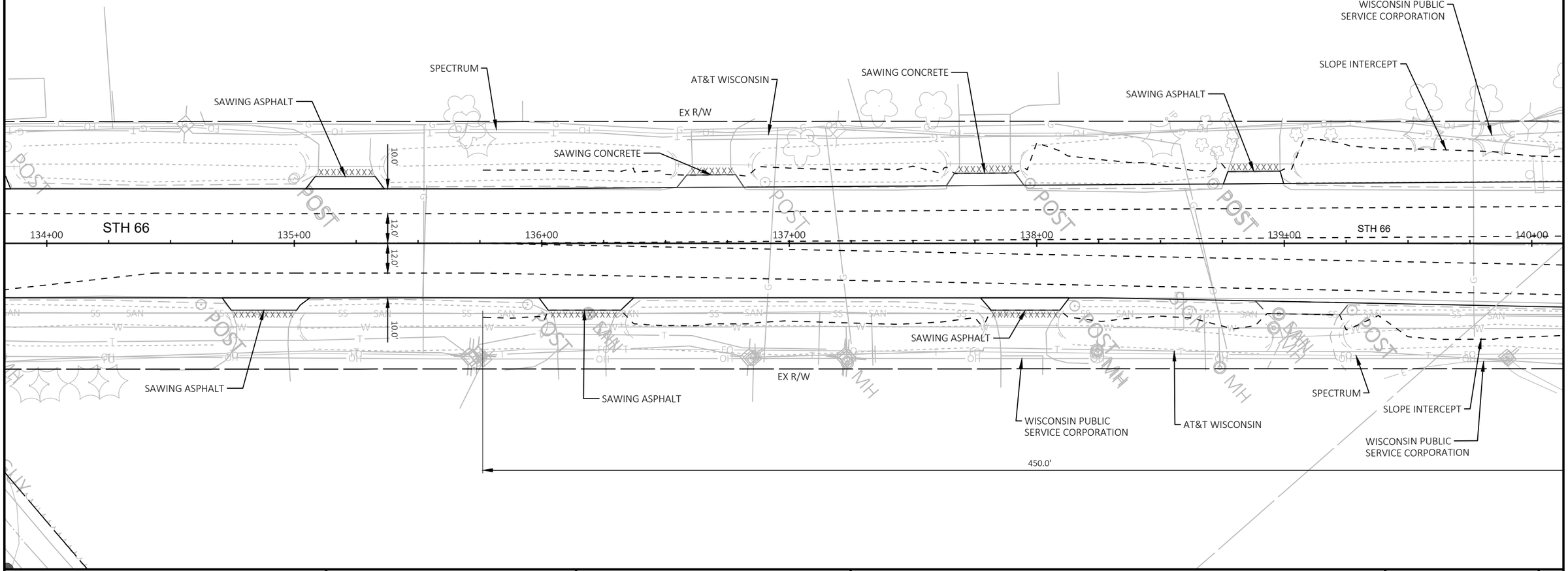


GREEN CIRCLE TRAIL RAMPS			
POINT NO.	STATION	OFFSET	ELEVATION
1	166+60.61	44.92' LT	1114.18
2	166+72.97	44.92' LT	1114.06
3	166+62.97	32.00' LT	1114.26
4	166+72.97	32.00' LT	1114.27
5	166+62.97	22.00' LT	1114.36
6	166+72.97	22.00' LT	1114.37
7	166+62.97	22.00' RT	1114.20
8	166+72.97	22.00' RT	1114.21
9	166+62.97	32.00' RT	1113.80
10	166+72.97	32.00' RT	1113.81
11	166+66.86	44.91' RT	1113.21
12	166+75.10	44.91' RT	1113.13



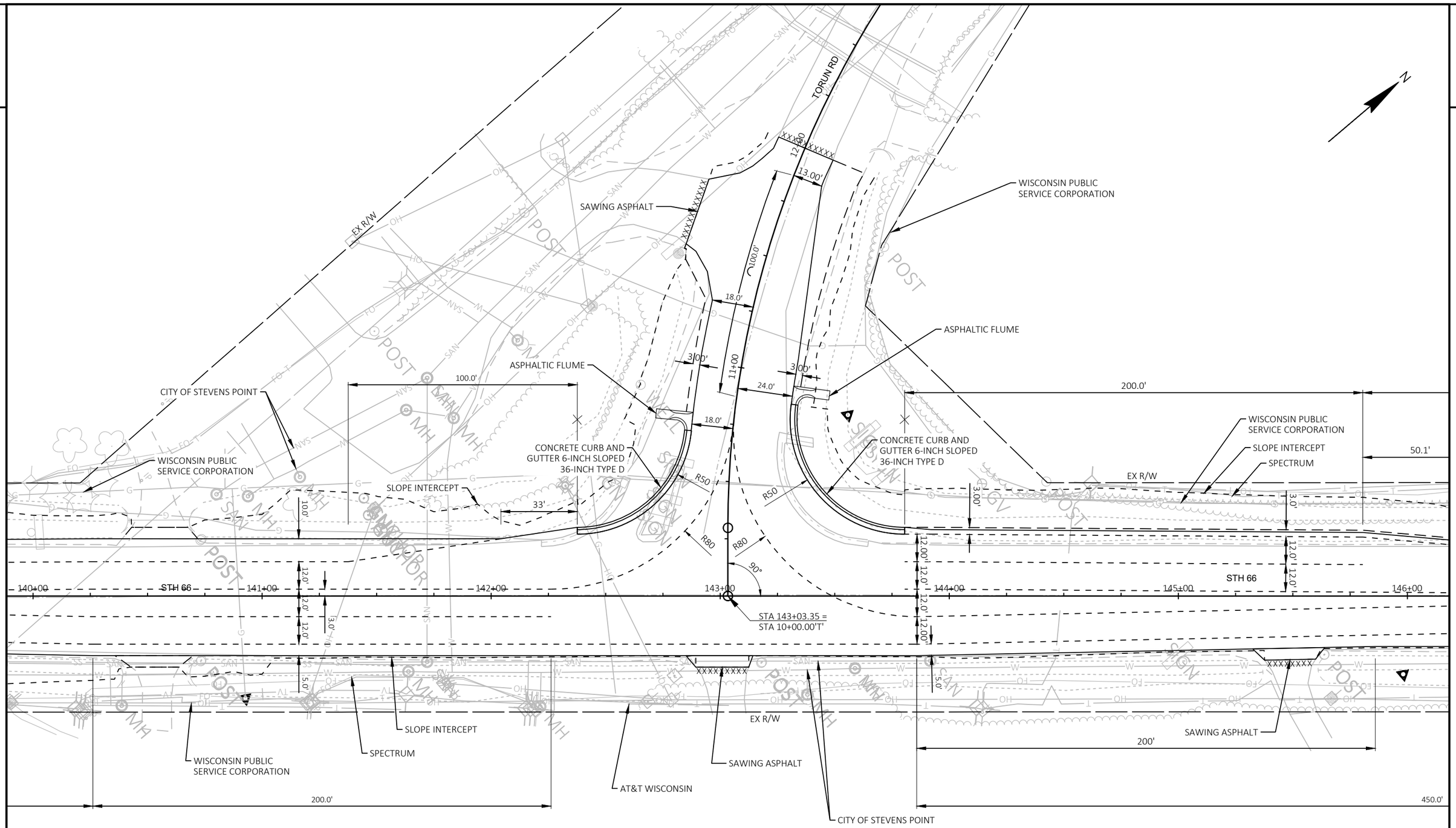
PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	RAMP DETAILS - GREEN CIRCLE TRAIL	SHEET 31	E

2



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	INTERSECTION DETAILS - TORUN ROAD	SHEET 32	E

2



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	INTERSECTION DETAILS - TORUN ROAD	SHEET 33	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2024 3:08 PM PLOT BY : MATTHEW KOZIAR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

150.0'

50.1'

450.0'

WISCONSIN PUBLIC SERVICE CORPORATION

SPECTRUM

EX R/W

SLOPE INTERCEPT

SAWING ASPHALT

AT&T WISCONSIN

CITY OF STEVENS POINT

10.0'

12.0'

146+00

147+00

148+00

149+00

STH 66

150+00

151+00

152+00

ANCHOR

POST

SIGN

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	INTERSECTION DETAILS - TORUN ROAD	SHEET 34	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 03

PLOT DATE : 4/10/2024 3:28 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

ELLIS RD

11+00 E

WISCONSIN PUBLIC SERVICE CORPORATION

AMHERST TEL CO

SPECTRUM

ASPHALTIC FLUME

SAWING ASPHALT

CONCRETE CURB AND GUTTER 30-INCH TYPE D

SLOPE INTERCEPT

STA 10+59.91E
-12.00' LT

STA. 10+59.91E
BUTT JOINT REQUIRED

STA 10+59.91E
12.00' RT

ADJUSTING INLET COVERS

CONCRETE CURB AND GUTTER 30-INCH TYPE D

SLOPE INTERCEPT

EX R/W

PROP

XXXXXX

7'

13'

R28'

R27'

107'

101'

392+00

STH 66

393+00

394+00

395+00

396+00

STH 66

397+00

31'

CONCRETE CURB AND GUTTER 30-INCH TYPE D

EX R/W

SEE STORM SEWER PLAN

SLOPE INTERCEPT

R75'

R40'

SEE STORM SEWER PLAN

EX R/W

24'

CONCRETE CURB AND GUTTER 30-INCH TYPE D

SLOPE INTERCEPT

STA 9+09.38JS
-15.00' LT

STA 9+09.38JS
15.00' RT

9+00 JS

STA. 9+09.38JS
BUTT JOINT REQUIRED

AMHERST TEL CO

WISCONSIN PUBLIC SERVICE CORPORATION

EX R/W

CTH J SOUTH

EX R/W

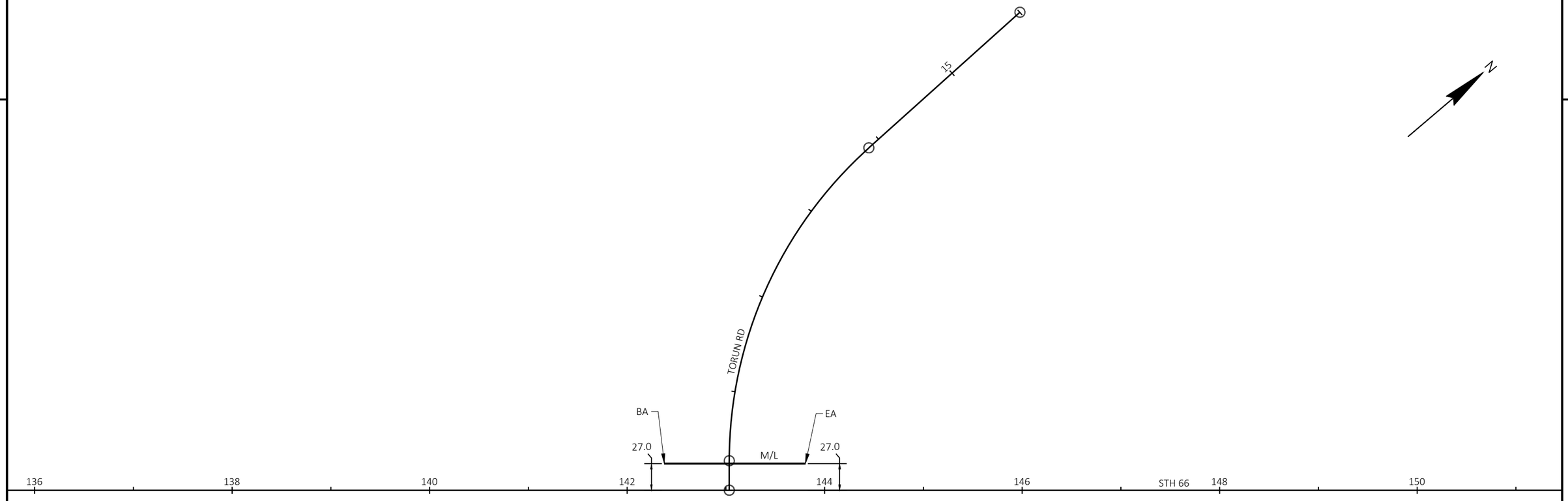
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	INTERSECTION DETAILS - CTH J SOUTH / ELLIS ROAD	SHEET 35	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 04

PLOT DATE : 4/10/2024 3:28 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



NOTES:

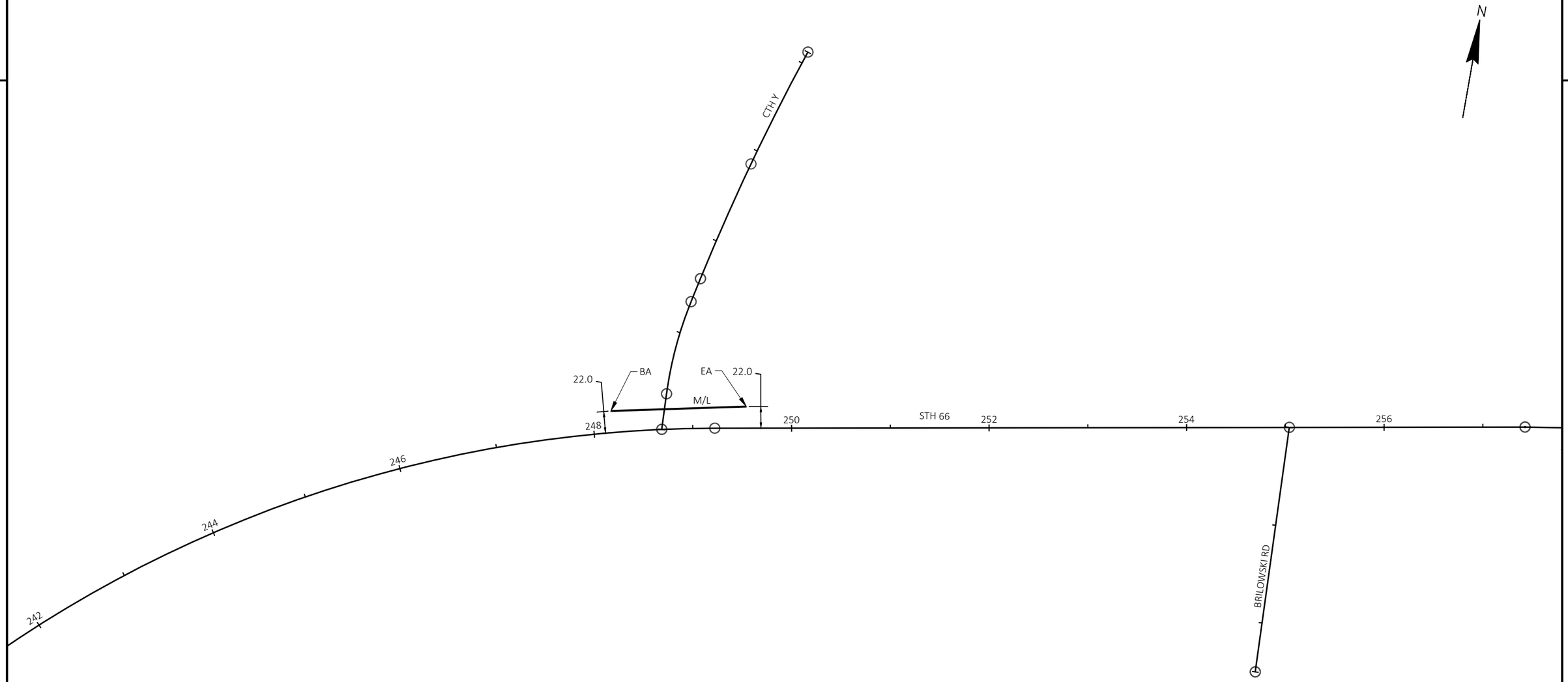
M/L = MATCHLINE
BA = BEGIN EARTHWORK ABRUPT
EA = END EARTHWORK ABRUPT

THIS LAYOUT SHOWS OFFSETS AT CROSS SECTIONS WHERE MATCHLINES ARE REQUIRED ONLY. CROSS SECTIONS ARE PROVIDED EVERY 50 FEET (TYP).

PROJECT NO: 6280-02-76,77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTION MATCHLINE DETAIL	SHEET 36	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\021801-XM.DWG
LAYOUT NAME - 01
PLOT DATE : 4/10/2024 3:29 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



NOTES:

M/L = MATCHLINE
BA = BEGIN EARTHWORK ABRUPT
EA = END EARTHWORK ABRUPT

THIS LAYOUT SHOWS OFFSETS AT CROSS SECTIONS WHERE MATCHLINES ARE REQUIRED ONLY. CROSS SECTIONS ARE PROVIDED EVERY 50 FEET (TYP).

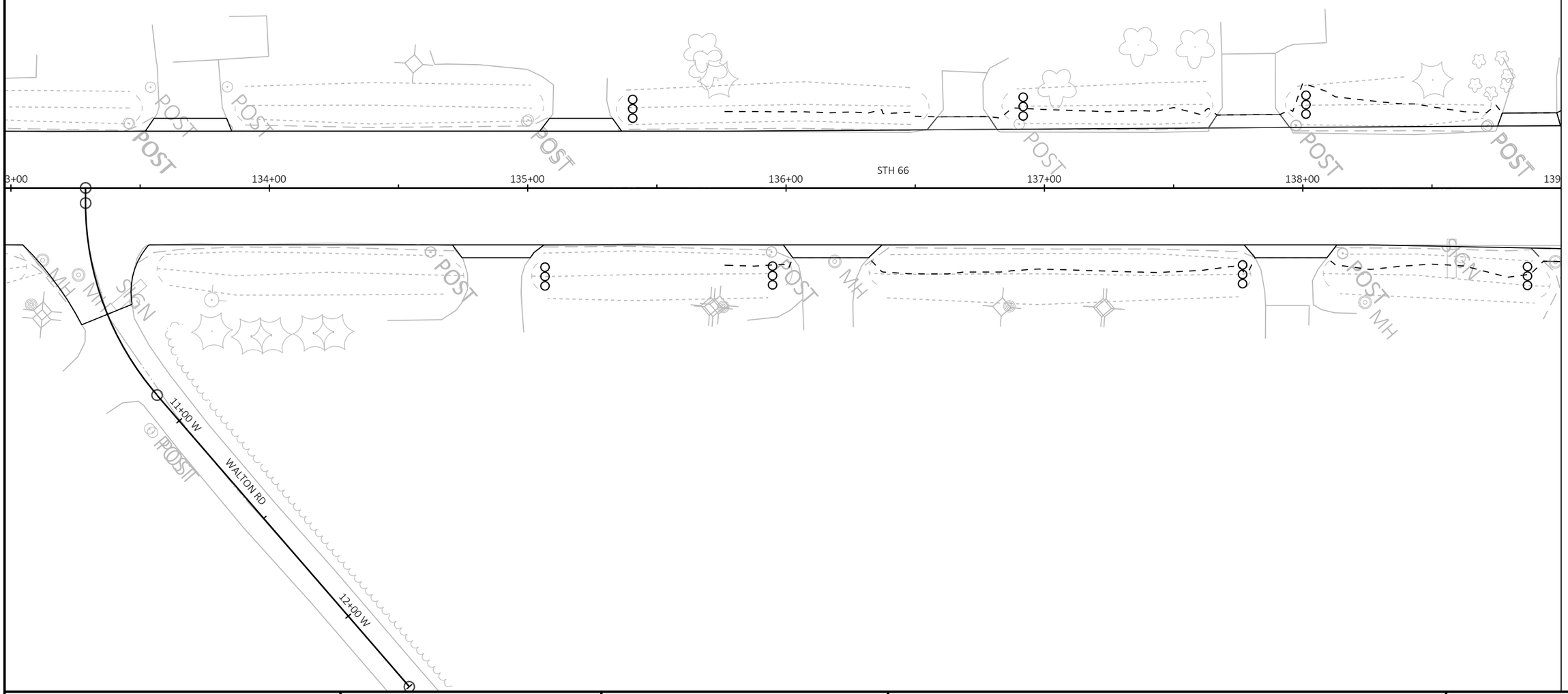
PROJECT NO: 6280-02-76,77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTION MATCHLINE DETAIL	SHEET 37	E

2

2

LEGEND

- EROSION MAT CLASS I TYPE A
- RIPRAP (SEE PLAN FOR TYPE)
- SILT FENCE
- INLET PROTECTION (SEE PLAN FOR TYPE)
- CULVERT PIPE CHECK
- DIRECTION OF FLOW
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	EROSION CONTROL	SHEET 38	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

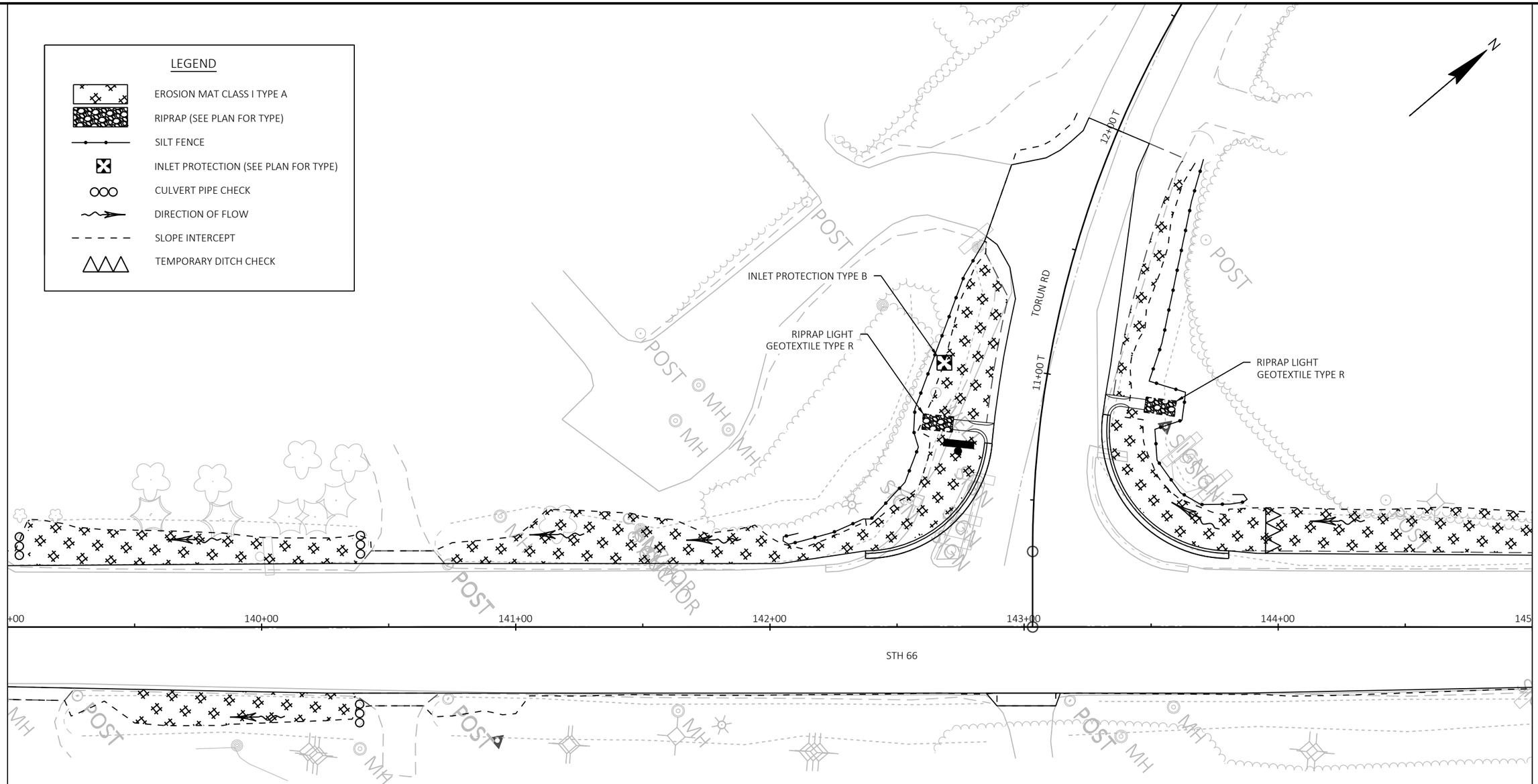
PLOT DATE : 4/10/2024 3:30 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I TYPE A
- RIPRAP (SEE PLAN FOR TYPE)
- SILT FENCE
- INLET PROTECTION (SEE PLAN FOR TYPE)
- CULVERT PIPE CHECK
- DIRECTION OF FLOW
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK



2

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	EROSION CONTROL	SHEET 39	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

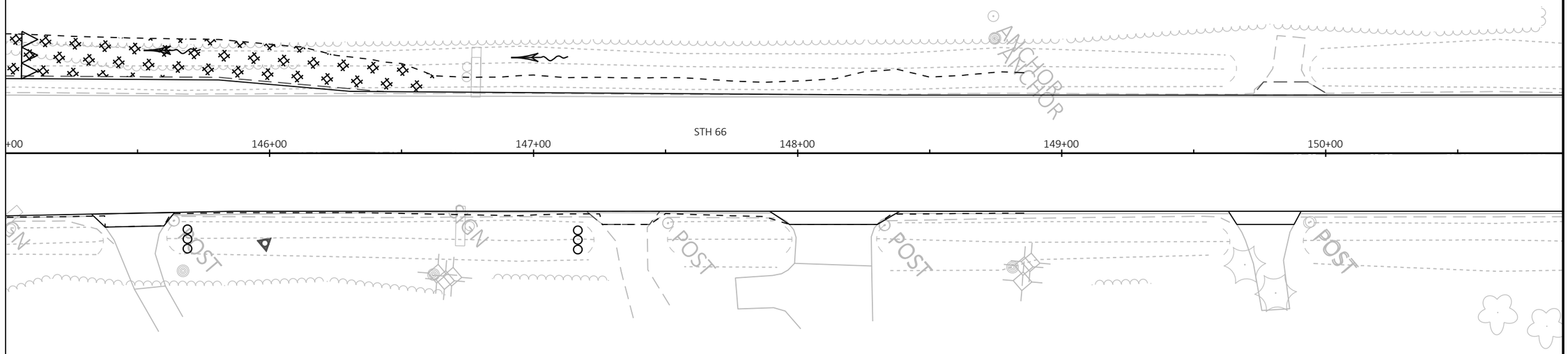
PLOT DATE : 4/10/2024 3:30 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EROSION MAT CLASS I TYPE A
- RIPRAP (SEE PLAN FOR TYPE)
- SILT FENCE
- INLET PROTECTION (SEE PLAN FOR TYPE)
- CULVERT PIPE CHECK
- DIRECTION OF FLOW
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK

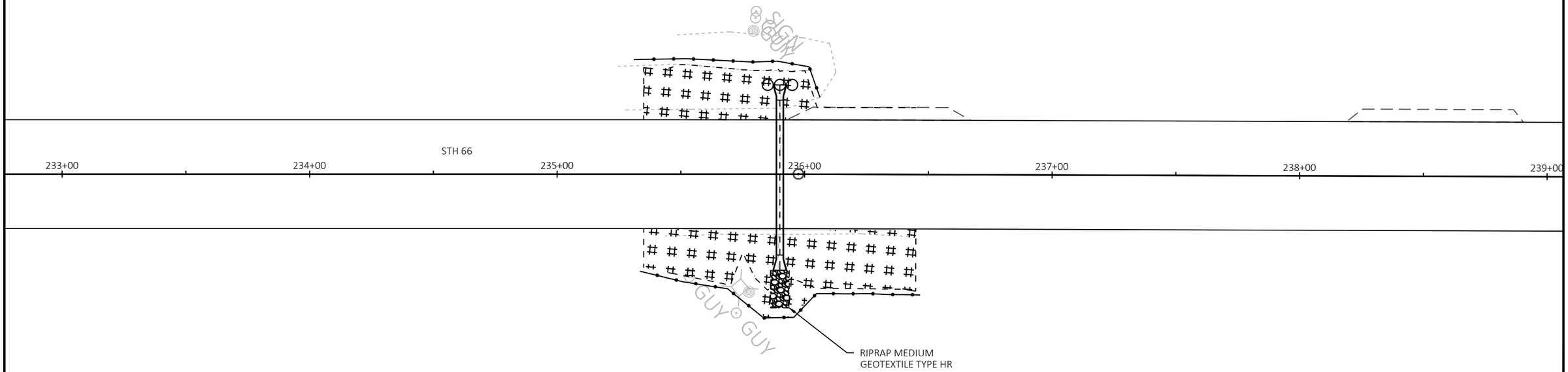


PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	EROSION CONTROL	SHEET 40	E

2

LEGEND

- EROSION MAT CLASS I TYPE A
- RIPRAP (SEE PLAN FOR TYPE)
- SILT FENCE
- INLET PROTECTION (SEE PLAN FOR TYPE)
- CULVERT PIPE CHECK
- DIRECTION OF FLOW
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK



2

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	EROSION CONTROL	SHEET 41	E

2

2

LEGEND

- EROSION MAT CLASS I TYPE A
- RIPRAP (SEE PLAN FOR TYPE)
- SILT FENCE
- INLET PROTECTION (SEE PLAN FOR TYPE)
- CULVERT PIPE CHECK
- DIRECTION OF FLOW
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK

N

12+00 Y

11+00 Y

CTH Y

SIGN

INLET PROTECTION TYPE B

INLET PROTECTION TYPE C

INLET PROTECTION TYPE B

248+00 249+00 250+00 251+00 252+00 253+00 254+

STH 66

SIGN SIGN SIGN

EROSION MAT CLASS I TYPE A, TYP.

RIPRAP MEDIUM GEOTEXTILE TYPE HR

INLET COVERS BOLTED DOWN. CONTRACTOR SHALL PREVENT SEDIMENT/DEBRIS FROM ENTERING INLET WHEN OPERATIONS ARE IN THE AREA.

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	EROSION CONTROL	SHEET 42	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 05

PLOT DATE : 4/10/2024 3:30 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE A
- RIPRAP (SEE PLAN FOR TYPE)
- SILT FENCE
- INLET PROTECTION (SEE PLAN FOR TYPE)
- CULVERT PIPE CHECK
- DIRECTION OF FLOW
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK

N

RIPRAP LIGHT GEOTEXTILE TYPE R

INLET PROTECTION TYPE C

INLET PROTECTION TYPE C

INLET PROTECTION TYPE C

ELLIS RD

11+00 E

9+00 S

CTH J

STH 66

392+00 393+00 394+00 395+00 396+00 397+00

POST GUY MH FLAG

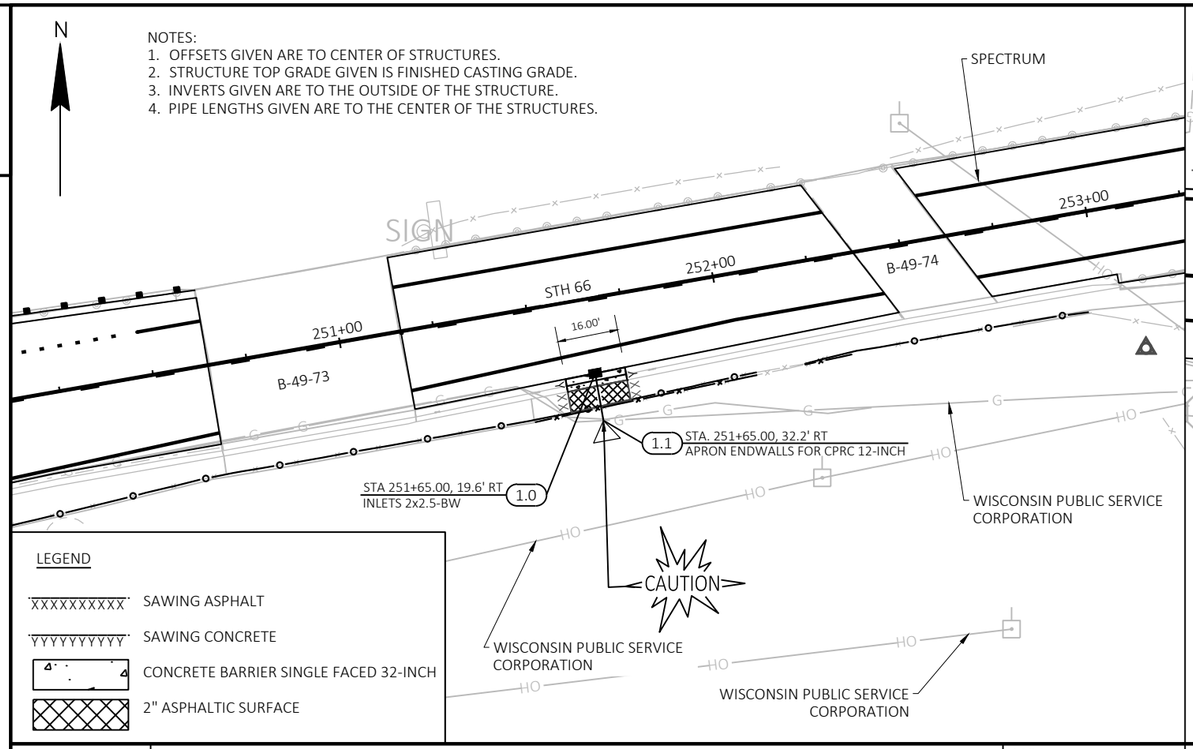
2

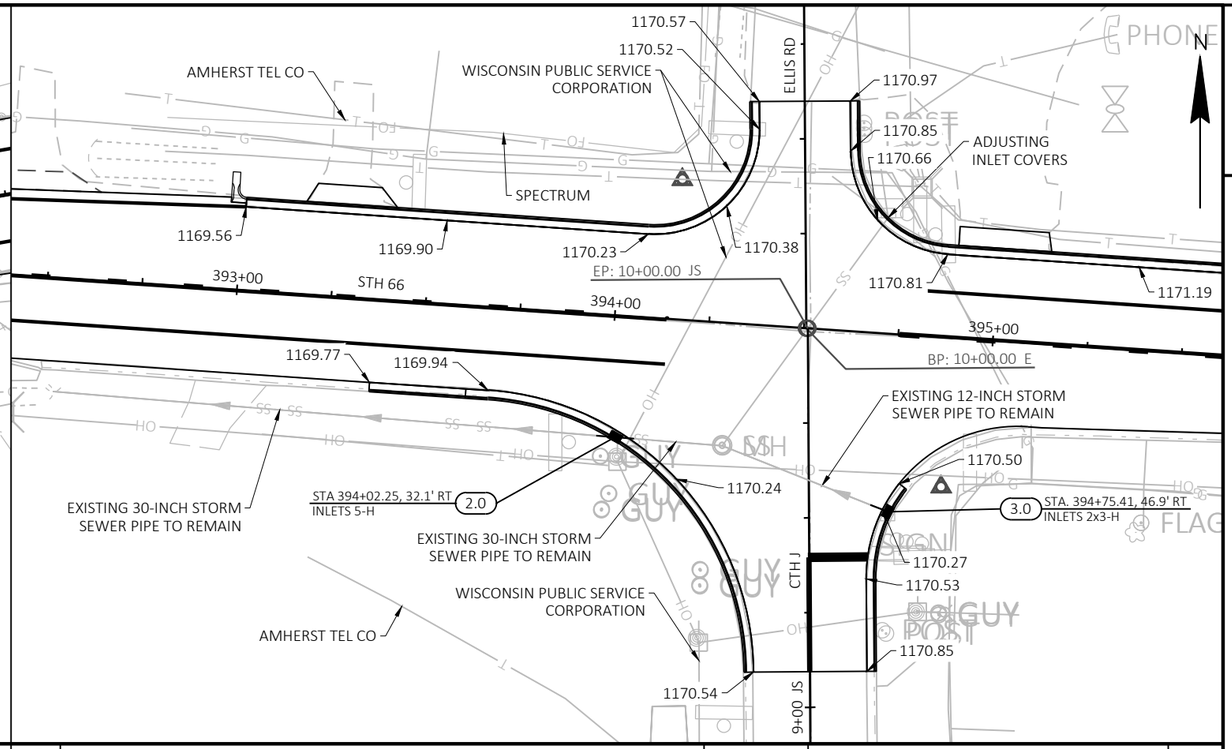
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	EROSION CONTROL	SHEET 43	E

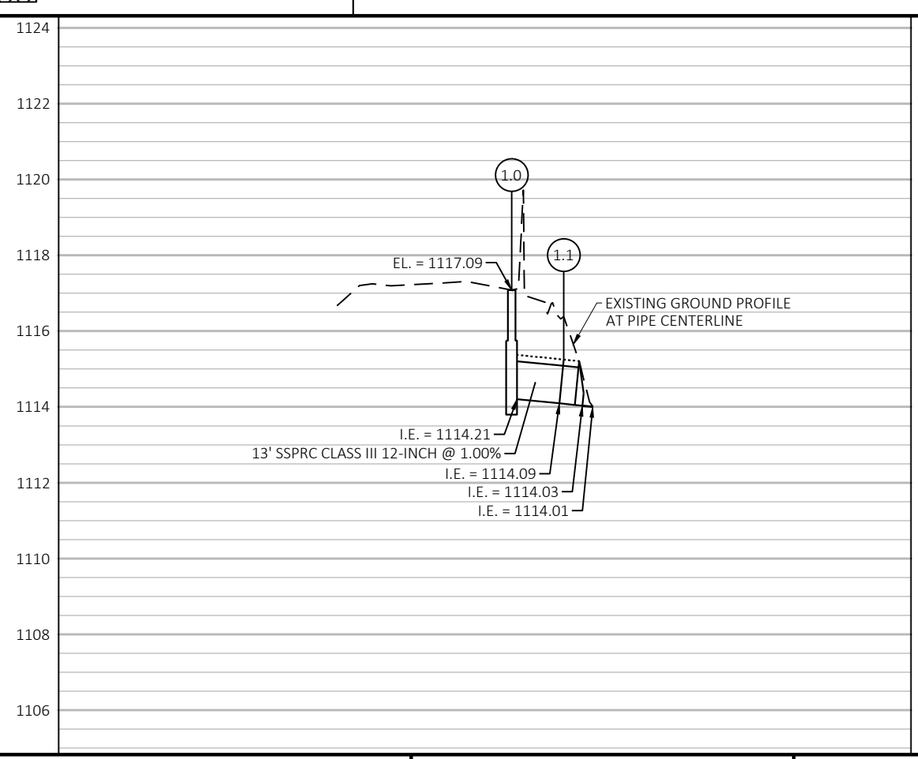
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 06

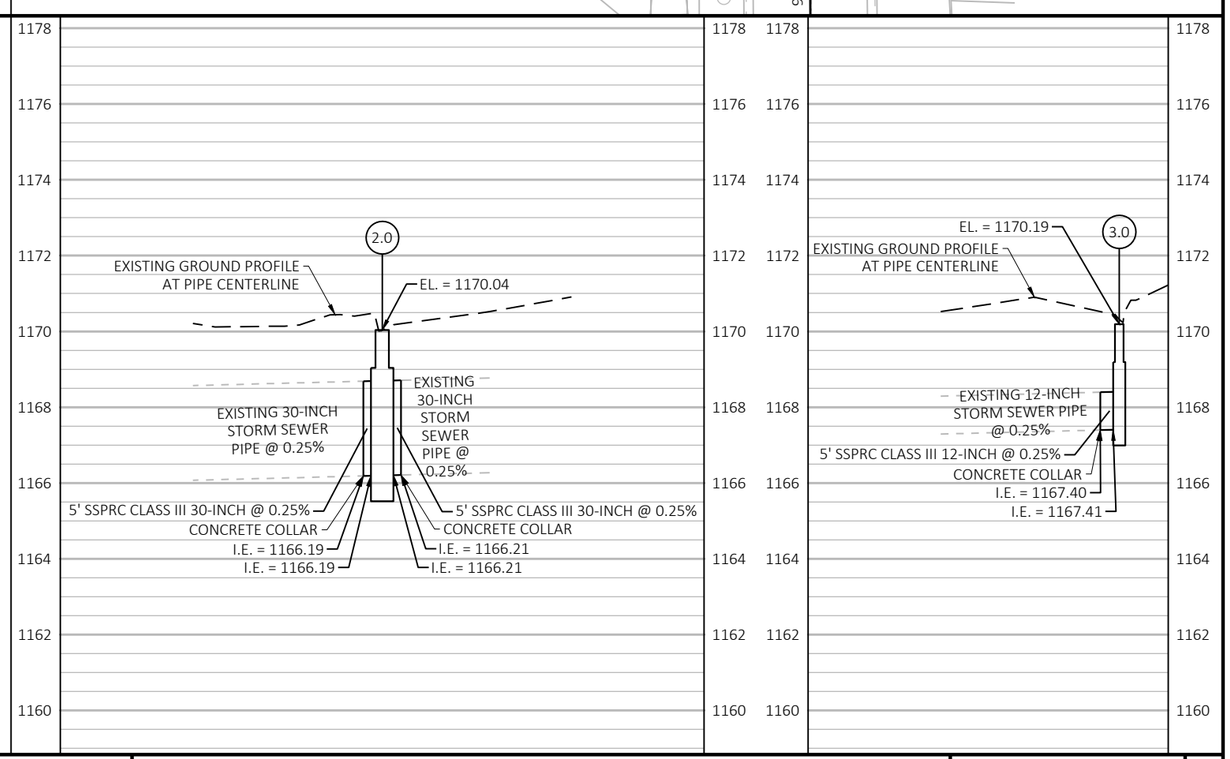
PLOT DATE : 4/10/2024 3:30 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:
1. OFFSETS GIVEN ARE TO CENTER OF STRUCTURES.
2. STRUCTURE TOP GRADE GIVEN IS FINISHED CASTING GRADE.
3. INVERTS GIVEN ARE TO THE OUTSIDE OF THE STRUCTURE.
4. PIPE LENGTHS GIVEN ARE TO THE CENTER OF THE STRUCTURES.



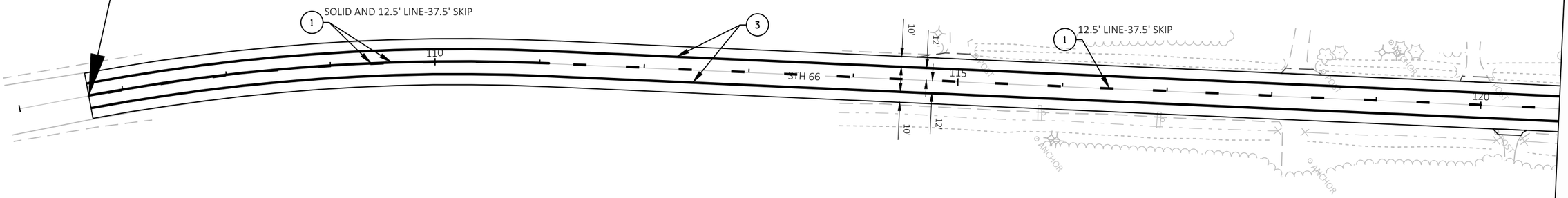






PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	STORM SEWER	SHEET 44	E

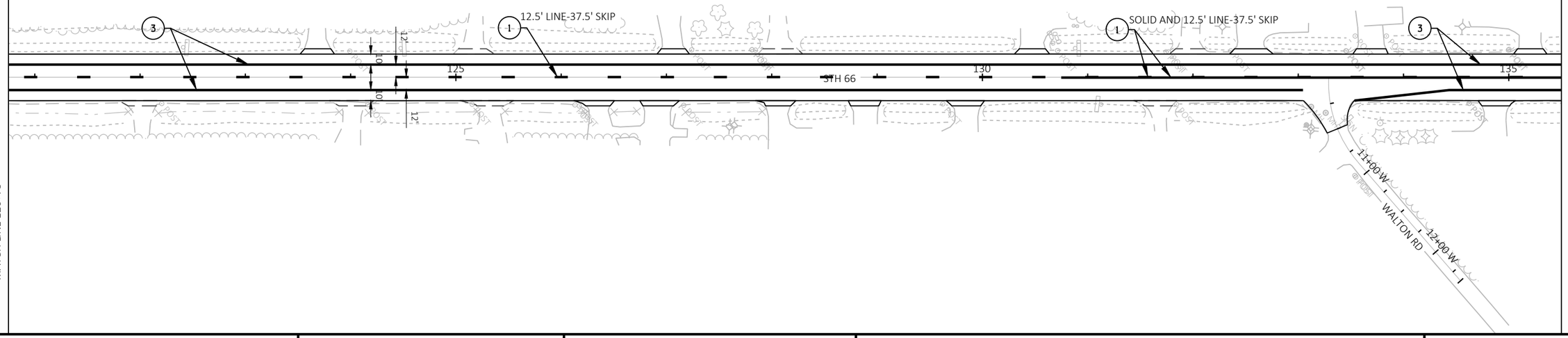
BEGIN PROJECT 6280-02-77
STA 106+67.17



MATCH LINE 120+75

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)

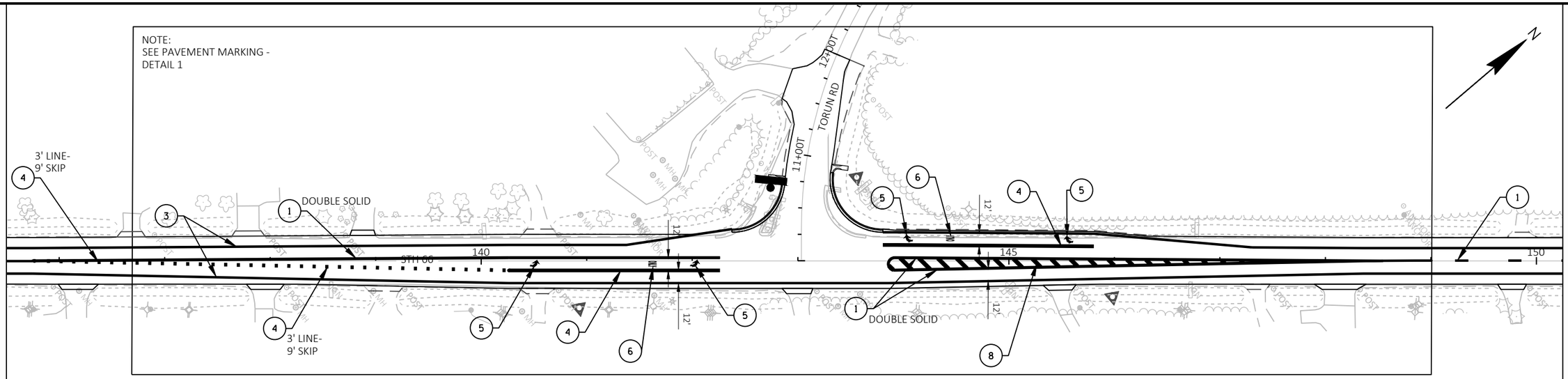


MATCH LINE 135+50

MATCH LINE 120+75

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 45	E

NOTE:
SEE PAVEMENT MARKING -
DETAIL 1

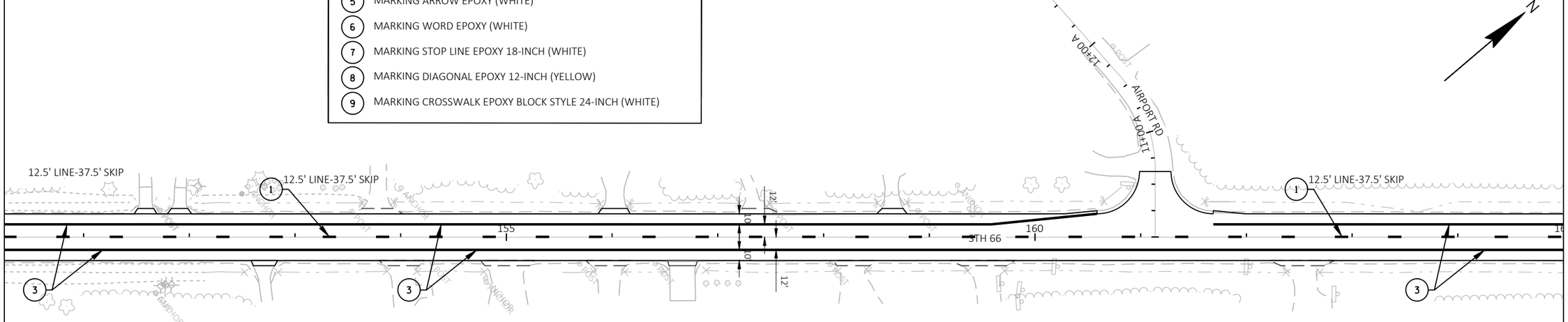


LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)

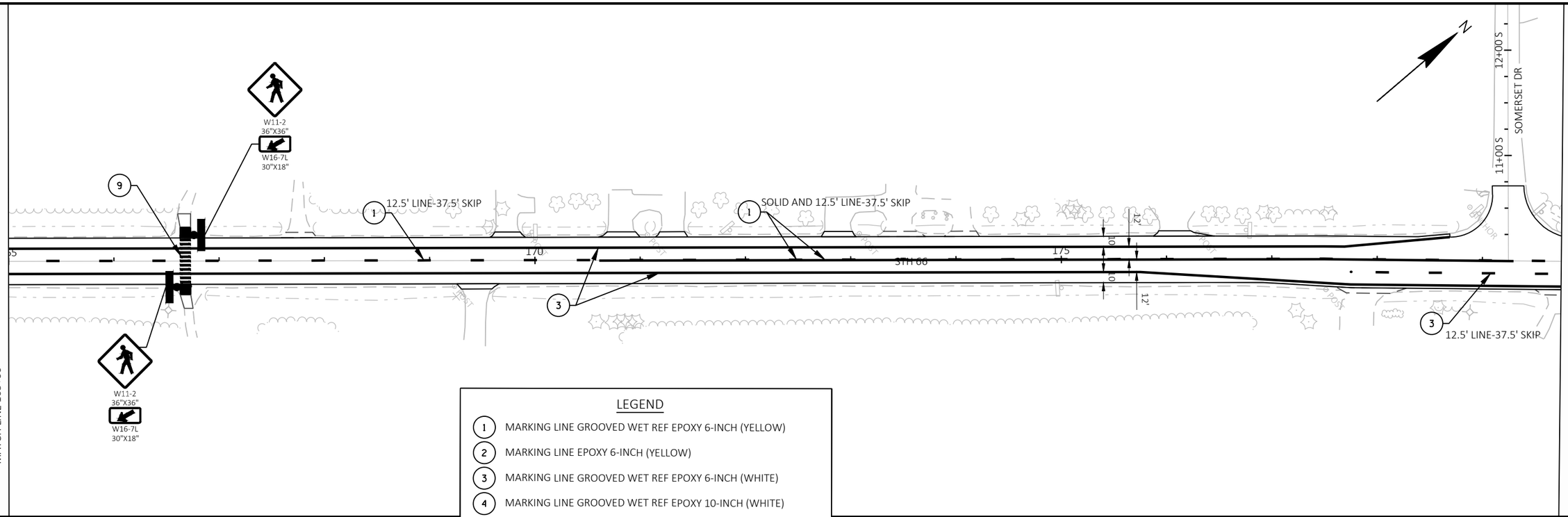
LEGEND - PERMANENT SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)



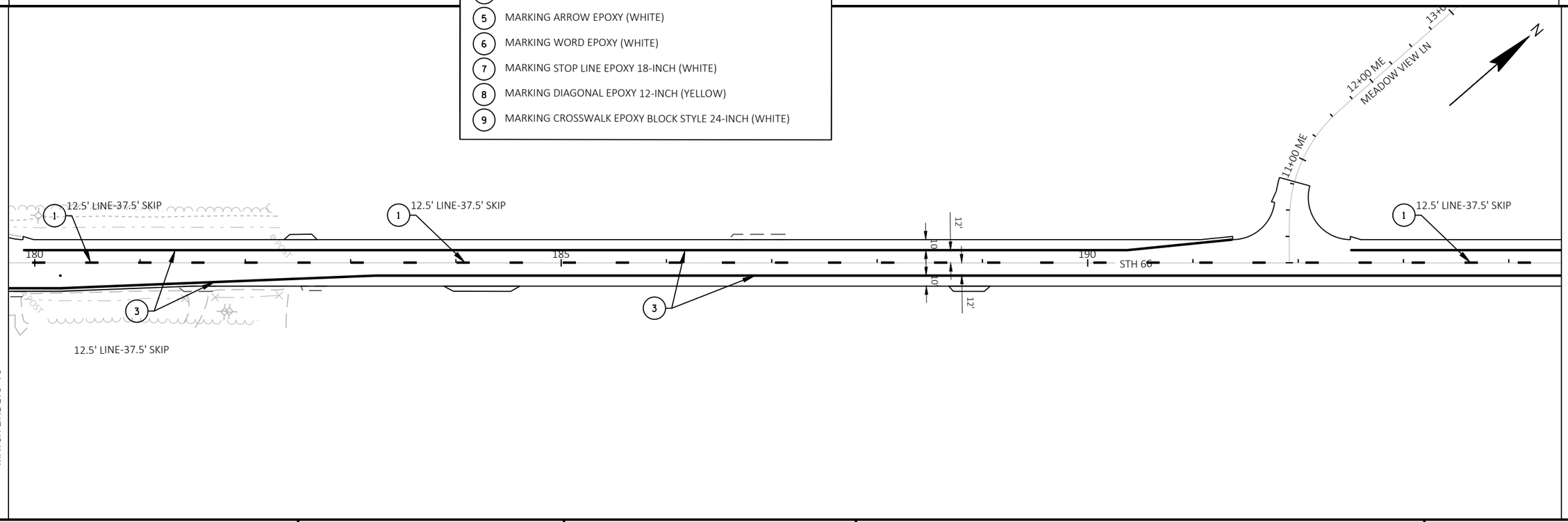
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 46	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 02
PLOT DATE : 4/10/2024 3:45 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 47	E

2

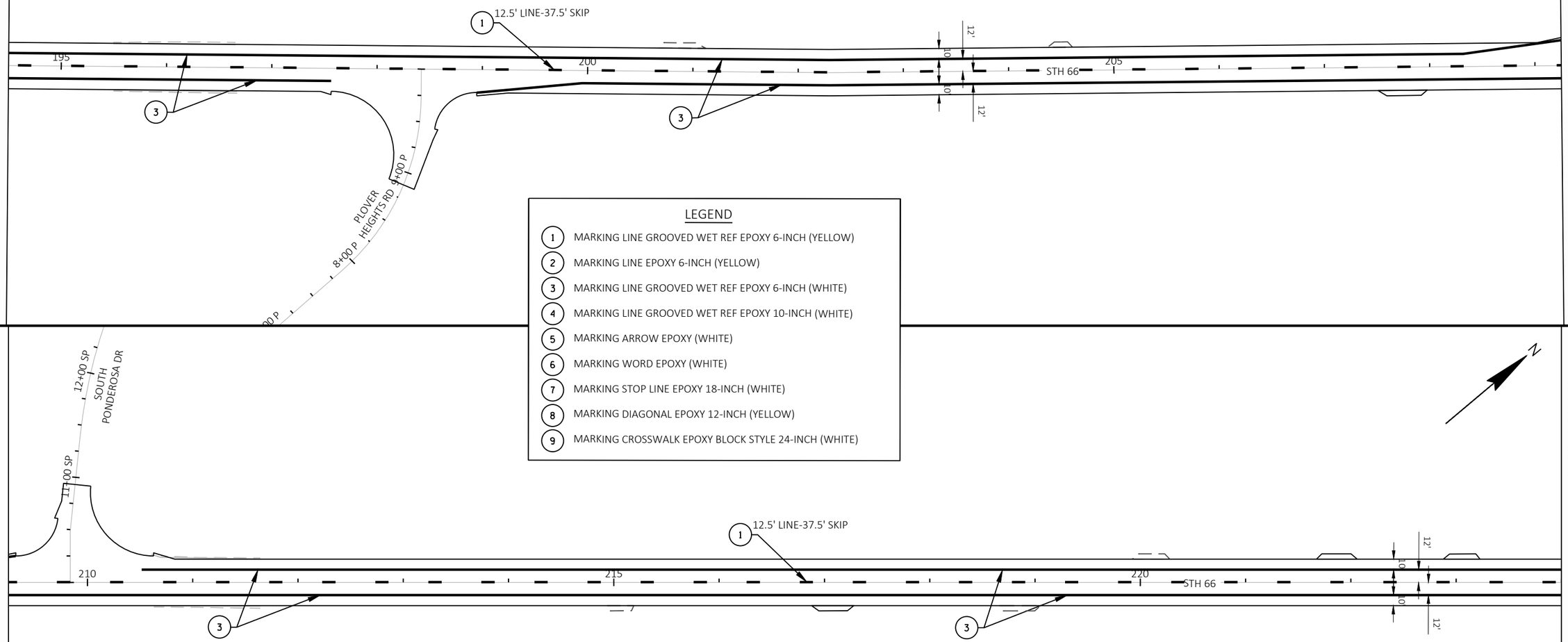
2

MATCH LINE 194+50

MATCH LINE 209+25

MATCH LINE 209+25

MATCH LINE 224+00



LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 48	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 04

PLOT DATE : 4/10/2024 3:45 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

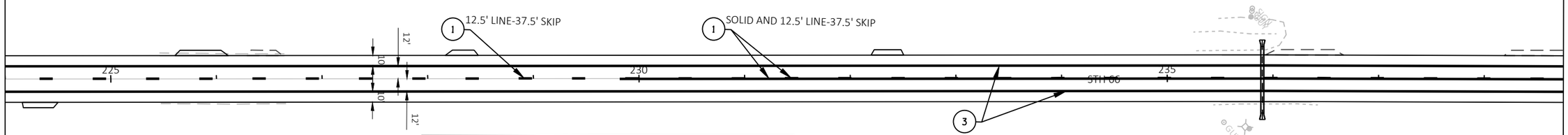
WISDOT/CADDS SHEET 44

2

2

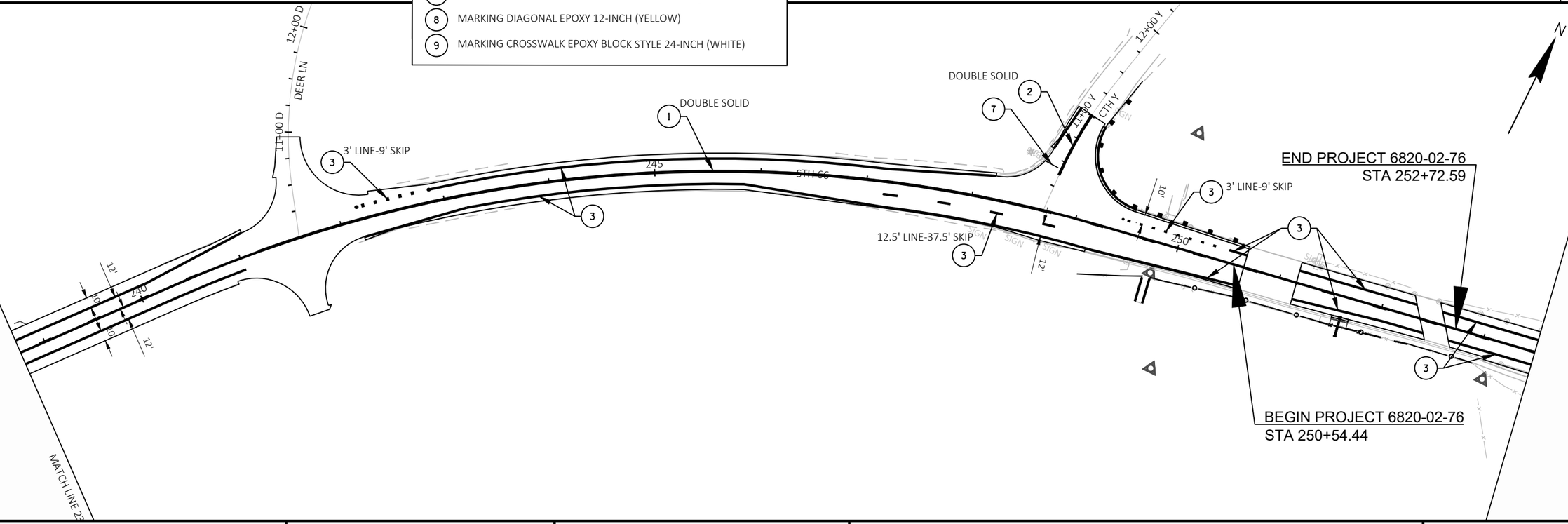
MATCH LINE 224+00

MATCH LINE 238+75



LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)

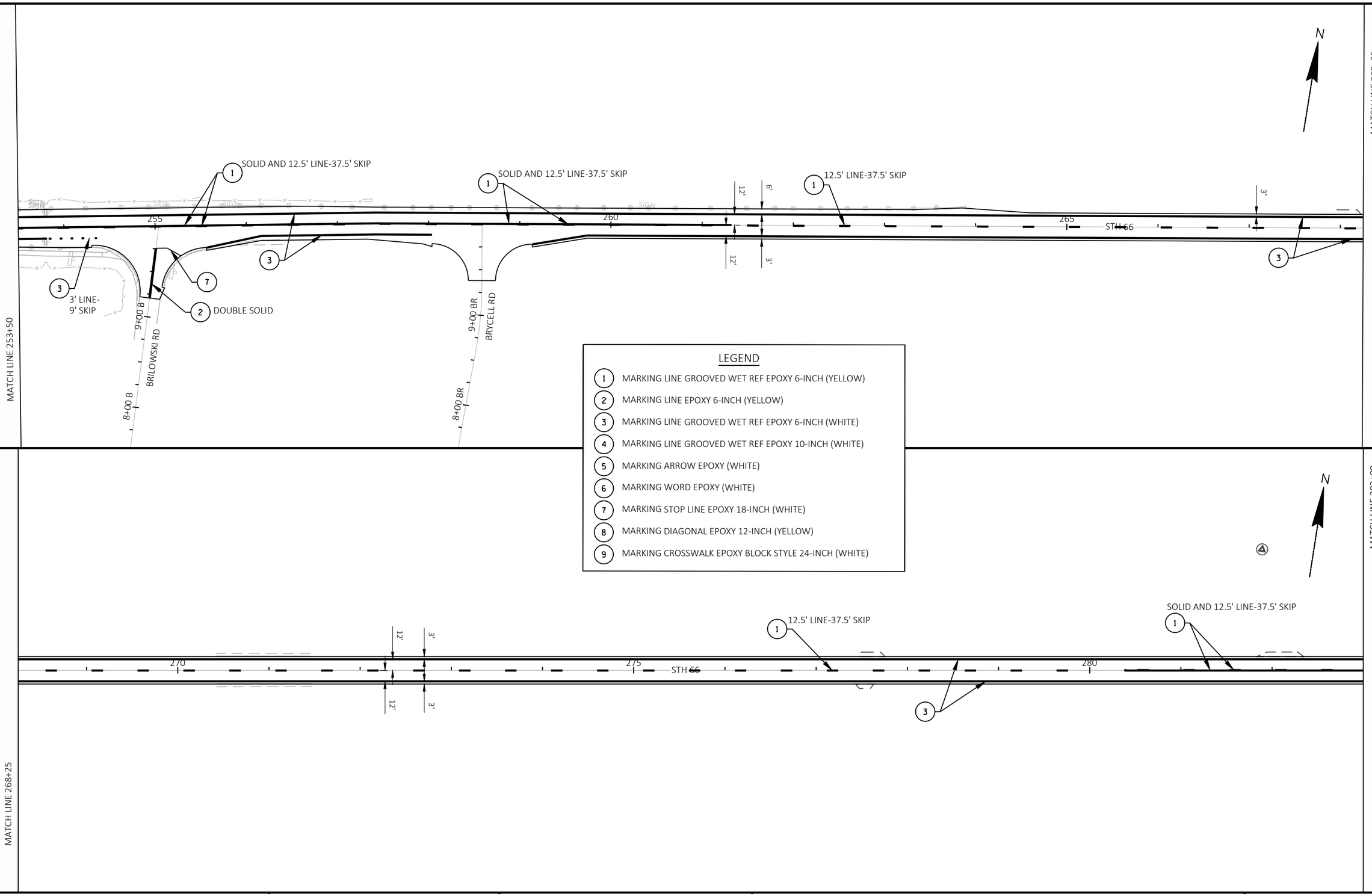


PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 49	E

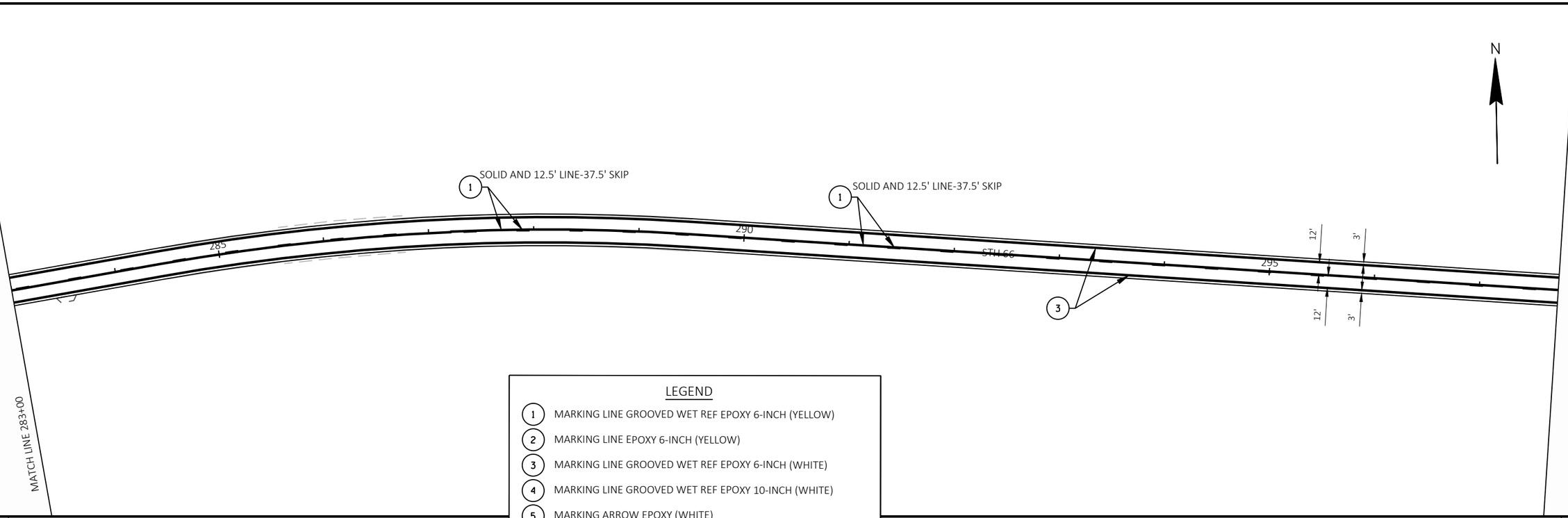
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 05

PLOT DATE : 4/10/2024 3:45 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

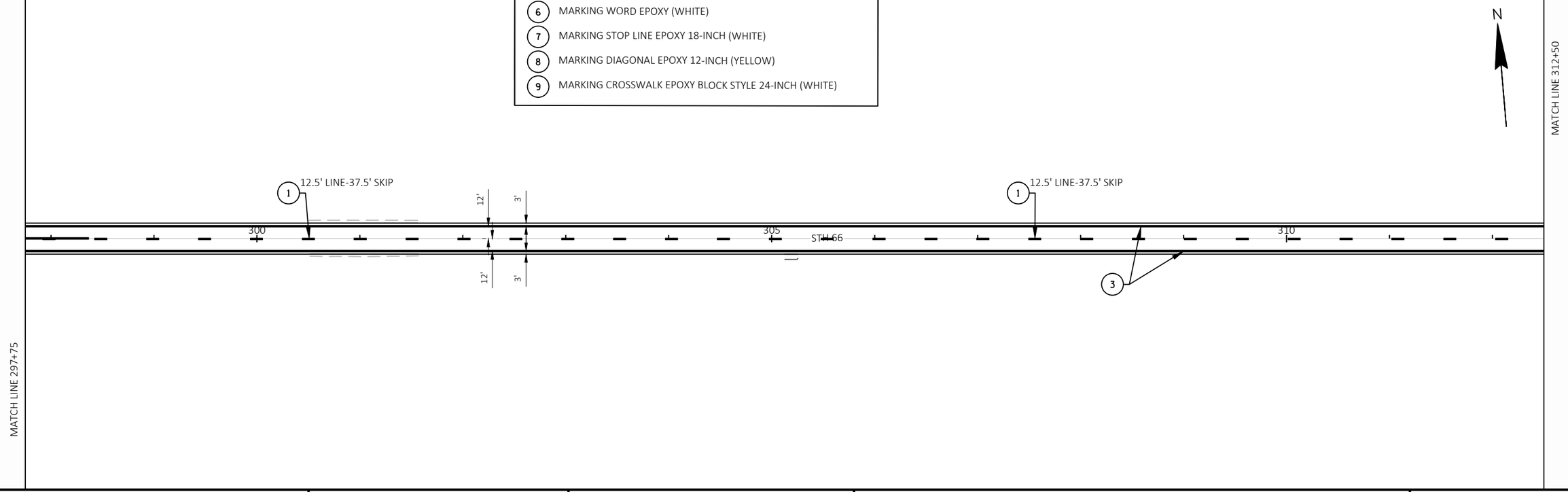

N
MATCH LINE 253+50
MATCH LINE 268+25
MATCH LINE 268+25
MATCH LINE 283+00
SOLID AND 12.5' LINE-37.5' SKIP
SOLID AND 12.5' LINE-37.5' SKIP
12.5' LINE-37.5' SKIP
3' LINE-
9' SKIP
DOUBLE SOLID
12'
6'
3'
12'
3'
255
260
265
270
275
280
STH 66
STH 66
9+00 B
BRILOWSKI RD
8+00 B
9+00 BR
BRYCELL RD
8+00 BR
SIGN
SIGN
SIGN

2



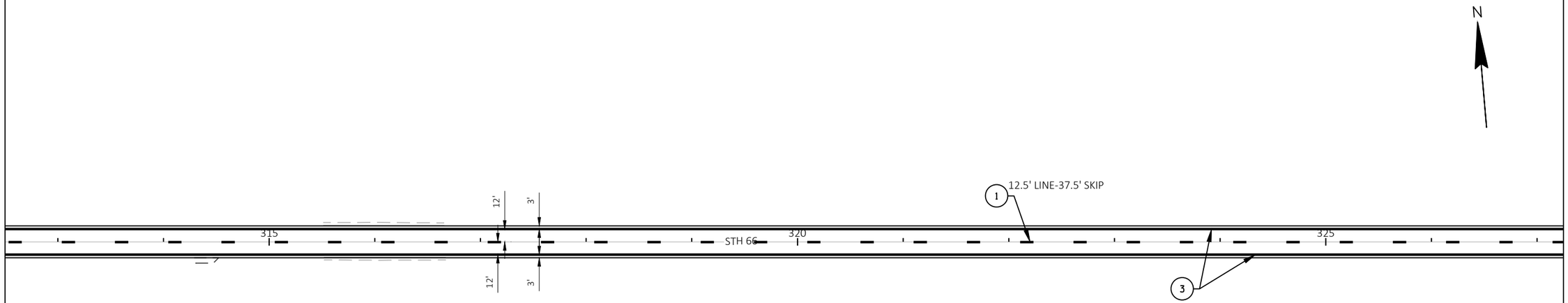
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)



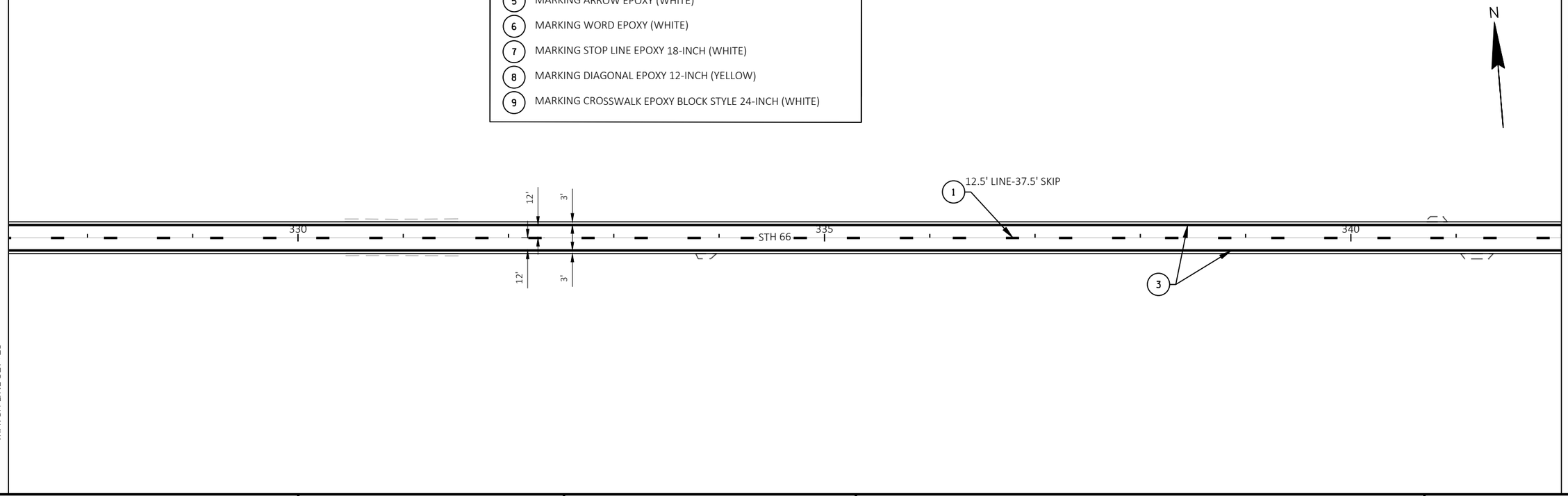
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 51	E

2



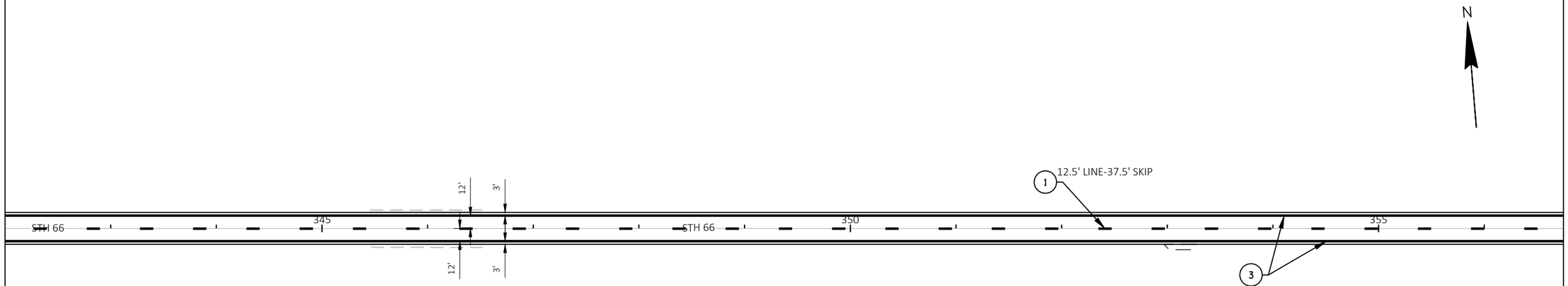
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 52	E

2

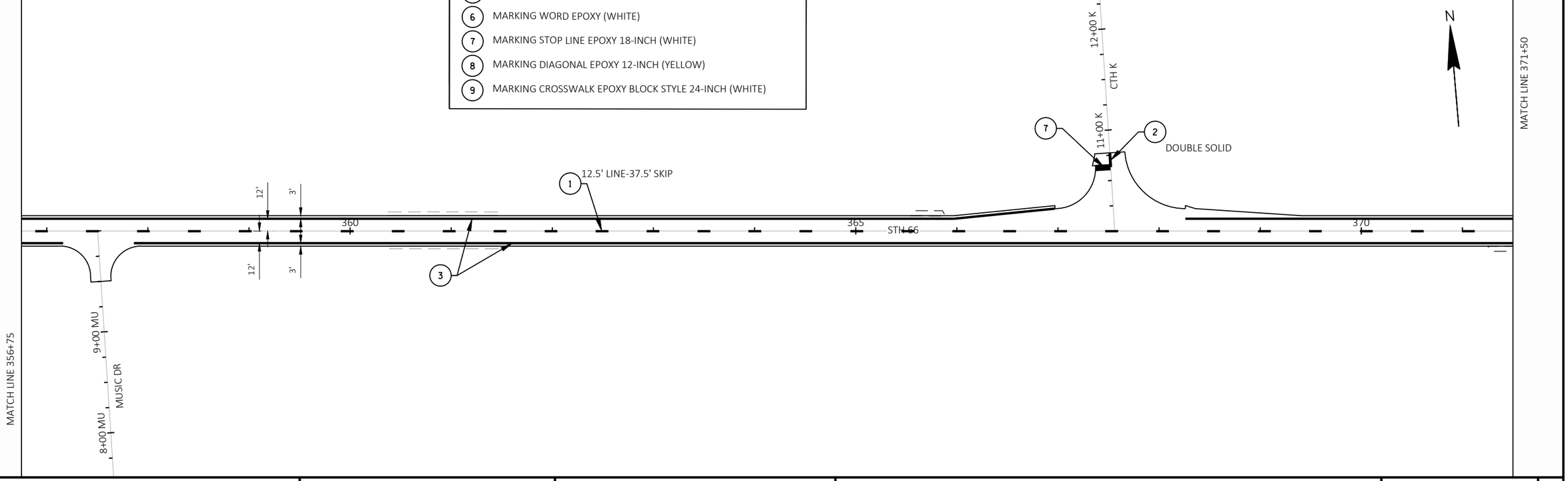


MATCH LINE 342+00

2

LEGEND

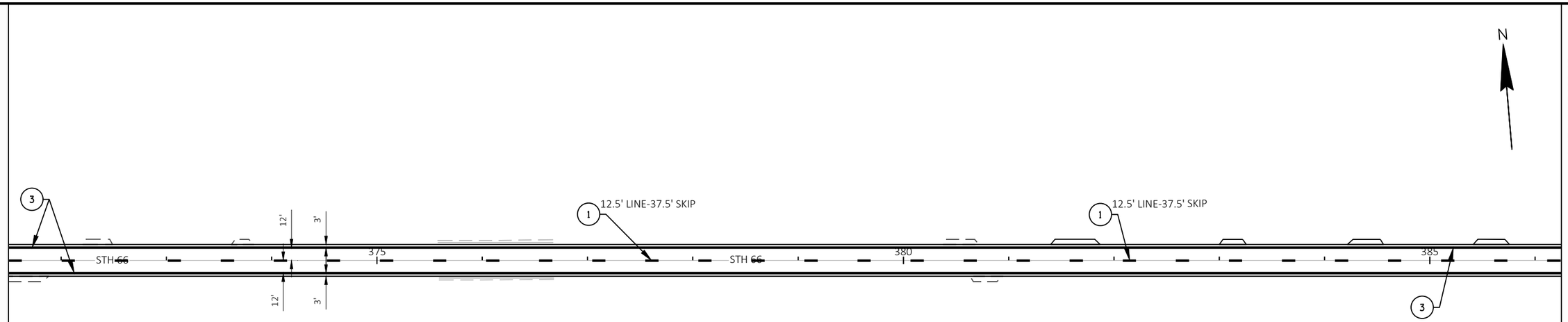
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3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 53	E

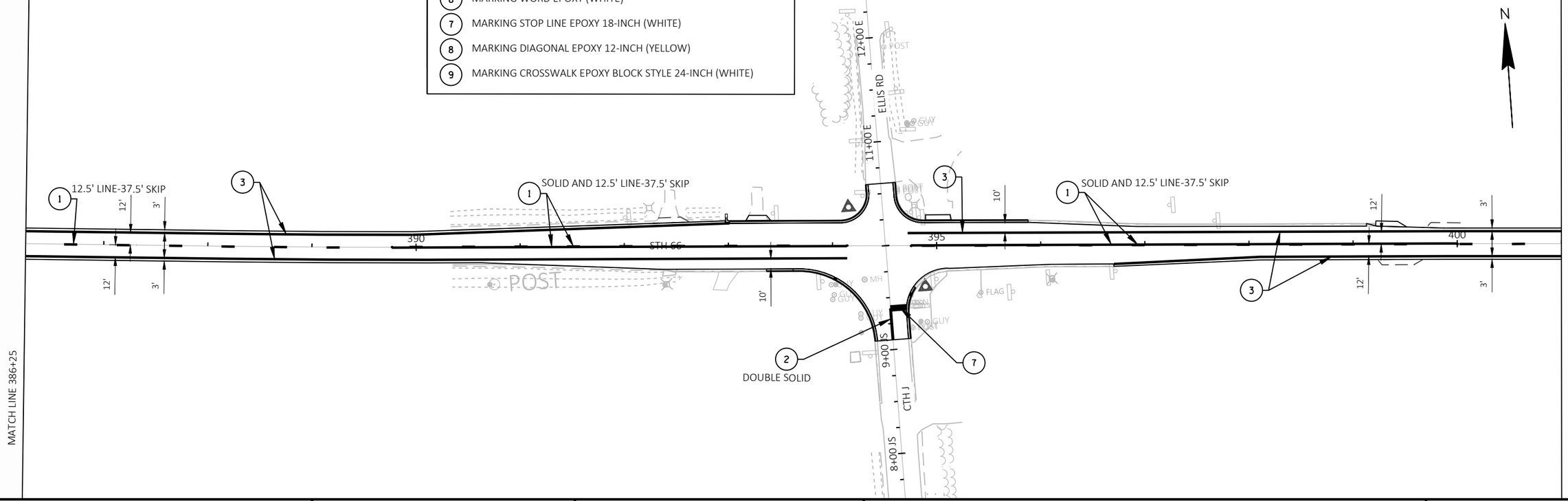
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 09
PLOT DATE : 4/10/2024 3:45 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



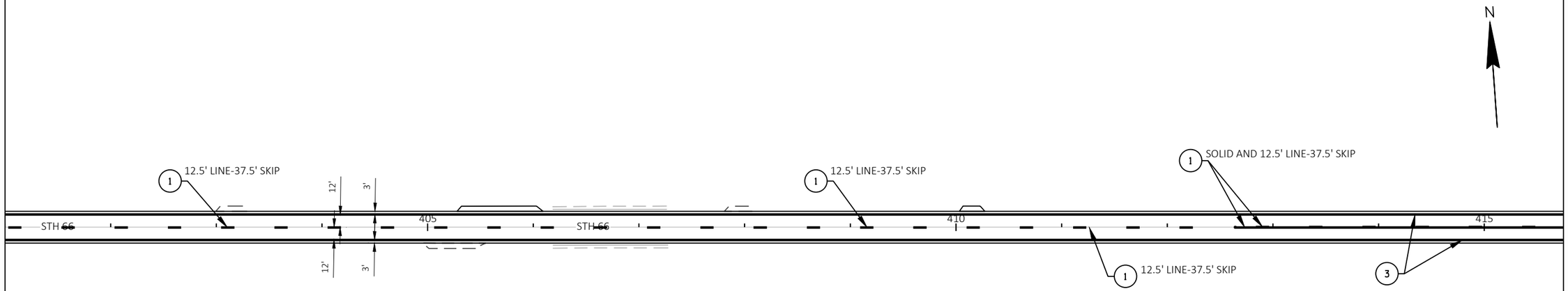
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)



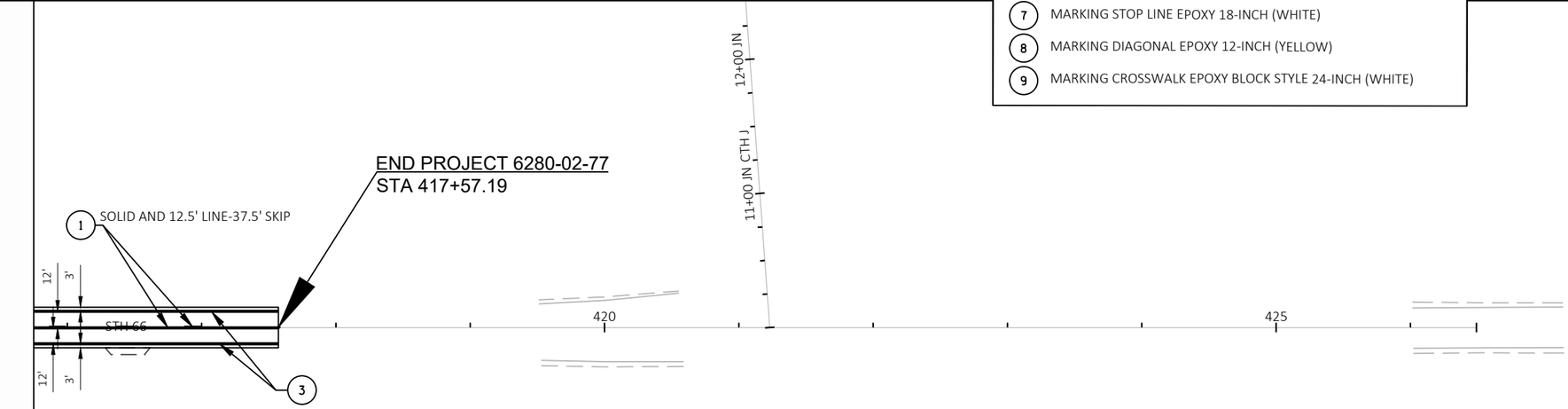
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 54	E

2



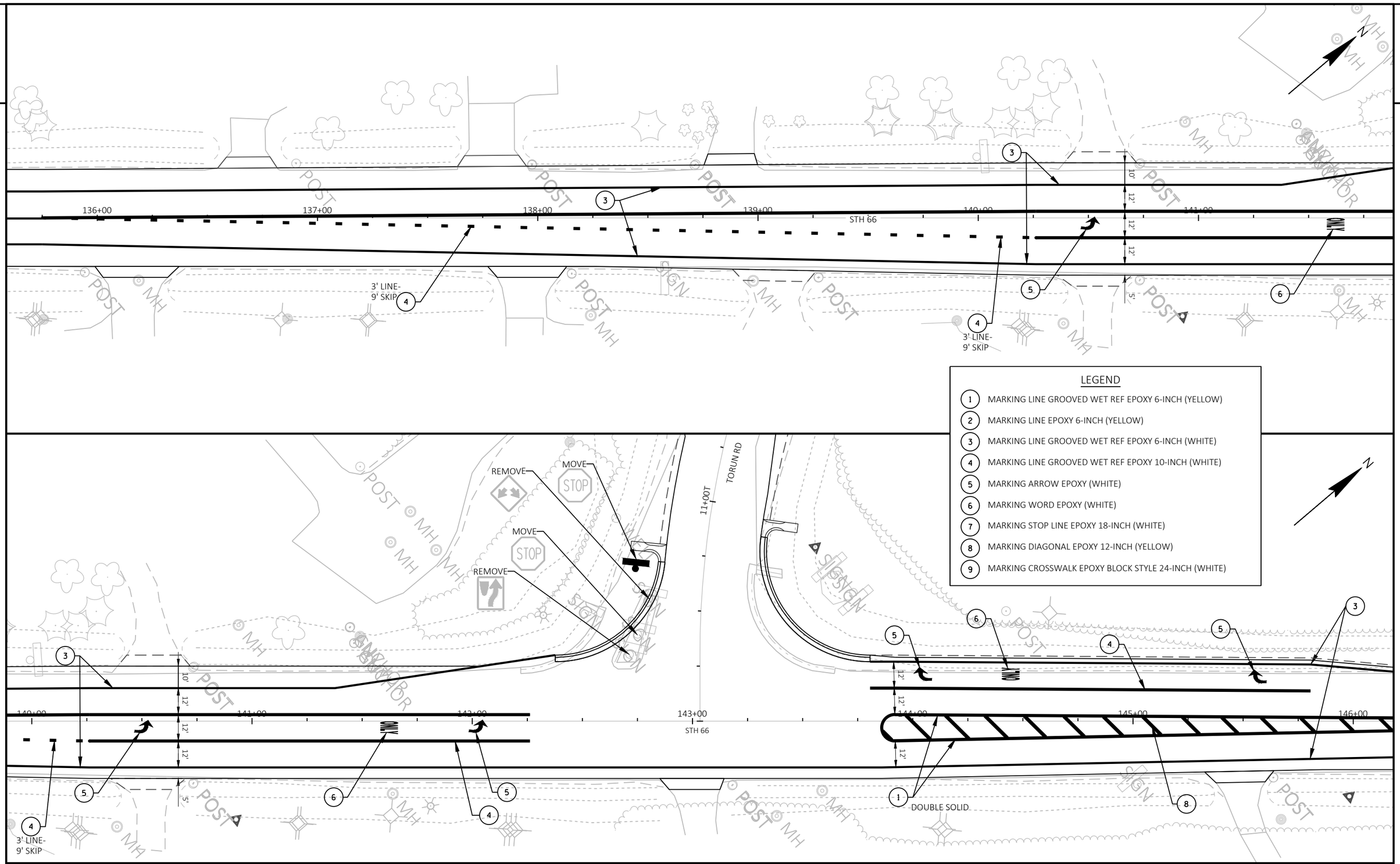
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 55	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 11
PLOT DATE : 4/10/2024 3:46 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

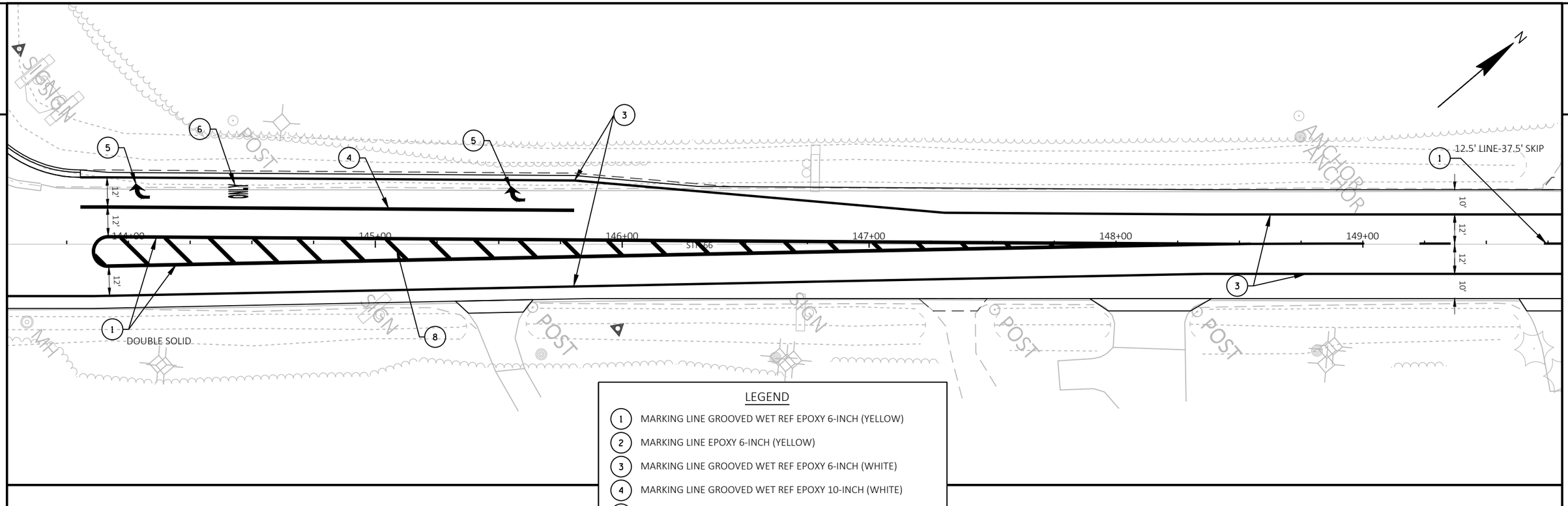


LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)

PROJECT NO: 6280-02-76,77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING - TORUN ROAD	SHEET 56	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\024502-PM (TORUN RD).DWG
LAYOUT NAME - 01
PLOT DATE : 4/10/2024 3:46 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



LEGEND

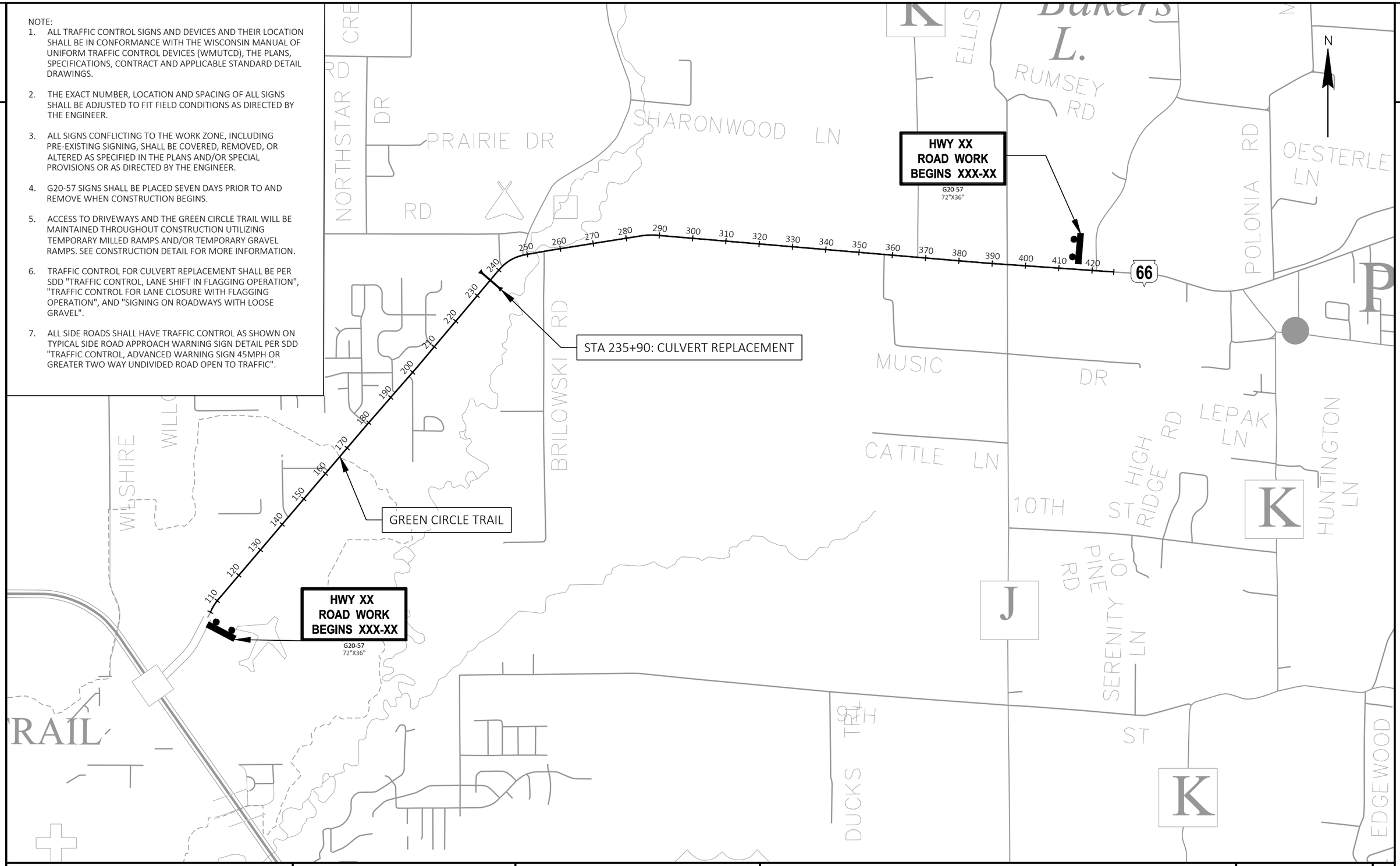
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2. MARKING LINE EPOXY 6-INCH (YELLOW)
3. MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
4. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
5. MARKING ARROW EPOXY (WHITE)
6. MARKING WORD EPOXY (WHITE)
7. MARKING STOP LINE EPOXY 18-INCH (WHITE)
8. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9. MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)

THIS FRAME LEFT INTENTIONALLY BLANK

PROJECT NO: 6280-02-76,77	HWY: STH 66	COUNTY: PORTAGE	PAVEMENT MARKING - TORUN ROAD	SHEET 57	E

NOTE:

1. ALL TRAFFIC CONTROL SIGNS AND DEVICES AND THEIR LOCATION SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD), THE PLANS, SPECIFICATIONS, CONTRACT AND APPLICABLE STANDARD DETAIL DRAWINGS.
2. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS CONFLICTING TO THE WORK ZONE, INCLUDING PRE-EXISTING SIGNING, SHALL BE COVERED, REMOVED, OR ALTERED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
4. G20-57 SIGNS SHALL BE PLACED SEVEN DAYS PRIOR TO AND REMOVE WHEN CONSTRUCTION BEGINS.
5. ACCESS TO DRIVEWAYS AND THE GREEN CIRCLE TRAIL WILL BE MAINTAINED THROUGHOUT CONSTRUCTION UTILIZING TEMPORARY MILLED RAMPS AND/OR TEMPORARY GRAVEL RAMPS. SEE CONSTRUCTION DETAIL FOR MORE INFORMATION.
6. TRAFFIC CONTROL FOR CULVERT REPLACEMENT SHALL BE PER SDD "TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION", "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION", AND "SIGNING ON ROADWAYS WITH LOOSE GRAVEL".
7. ALL SIDE ROADS SHALL HAVE TRAFFIC CONTROL AS SHOWN ON TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL PER SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGN 45MPH OR GREATER TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC".



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	FIXED MESSAGE SIGN AND TRAFFIC CONTROL OVERVIEW	SHEET 58	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\025100-TC FIXED MESSAGE SIGN.DWG
LAYOUT NAME - 01
PLOT DATE : 4/10/2024 3:47 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1" = 1000'

WISDOT/CADDS SHEET 42

2

LEGEND

WORK ZONE

SIGN ON PERMANENT SUPPORT

NOTES:
1. SEE SDD ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION.
2. LOCATION OF TRAFFIC CONTROL DEVICES AND SIGNS AS SHOWN ON PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS TO BE DETERMINED IN THE FIELD AND SHALL BE ADJUSTED AS NECESSARY BASED ON STAGING AND FIELD CONDITIONS AT TIME OF INSTALLATION.
3. MAX WIDTH ON W12-52 SIGNS TO BE ADJUSTED ACCORDINGLY BASED ON STAGING AND FIELD CONDITIONS. SEE CONSTRUCTION STAGE TYPICAL SECTIONS AND TRAFFIC CONTROL SHEETS FOR MORE INFORMATION.



W12-52
48"X48"

Y

B-49-73

B-49-74

66

K



W12-52
48"X48"



WO57-52
48"X36"

2



M3-4
24"X12"



M1-6
24"X24"



W12-52
48"X48"

K

J



M3-2
24"X12"

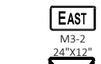


M1-6
24"X24"



W12-52
48"X48"

PLACE SIGNS NEXT TO TYPE 1 SIGN FOR EXIT 1 MILE



M3-2
24"X12"



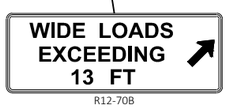
M1-6
24"X24"



W12-52
48"X48"

PLACE SIGNS NEXT TO TYPE 1 SIGN FOR EXIT 1/2 MILE





R12-70B
114"X42"

10



WO57-52
48"X36"

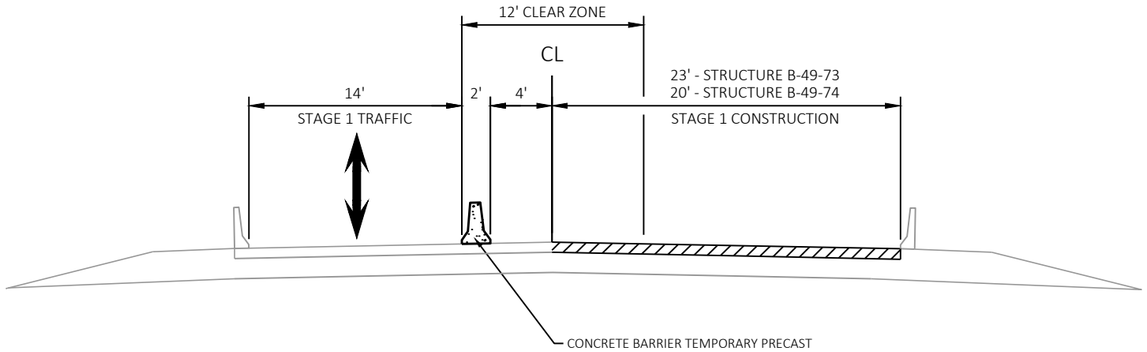


W12-52
48"X48"

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	ADVANCED WIDTH RESTRICTION SIGNING OVERVIEW	SHEET 59	E

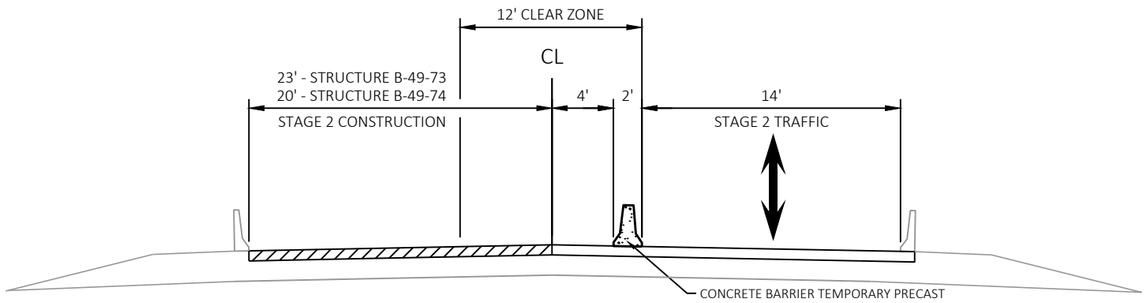
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\025101-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/11/2024 10:27 AM PLOT BY : BRETT PETERSON PLOT NAME : PLOT SCALE : 1 IN:2600 FT
WISDOT/CADDS SHEET 42

2



CONSTRUCTION STAGE TYPICAL SECTION STH 66

STA 250+64 TO STA 252+63
CONCRETE OVERLAY AND MINOR REPAIRS TO BRIDGES B-49-73,B-49-74
UTILIZING TEMPORARY TRAFFIC SIGNALS



CONSTRUCTION STAGE TYPICAL SECTION STH 66

STA 250+64 TO STA 252+63
CONCRETE OVERLAY AND MINOR REPAIRS TO BRIDGES B-49-73,B-49-74
UTILIZING TEMPORARY TRAFFIC SIGNALS

2

LEGEND

SIGN ON TEMPORARY SUPPORT

SIGN ON PERMANENT SUPPORT

WORK AREA

BASE AGGREGATE DENSE 3/4-INCH

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC

GREEN CIRCLE TRAIL

PLACE BASE AGGREGATE DENSE 3/4-INCH AND TEMPORARY CULVERT PIPE EXTENSION AS NEEDED TO MAINTAIN DRAINAGE THROUGH THE EXISTING DITCH. INCIDENTAL TO TEMPORARY PEDESTRIAN BYPASS ITEM.

M4-60L
30"X24"

5' MIN

WO11-2
48"X48"

WO16-7L
48"X24"

6'
MIN.

TEMPORARY MARKING
CROSSWALK REMOVABLE
TAPE 6-INCH

165+50 166+00 STH 66 166+50 167+00 167+50 168+00

PLACE BASE AGGREGATE DENSE 3/4-INCH AND TEMPORARY CULVERT PIPE EXTENSION AS NEEDED TO MAINTAIN DRAINAGE THROUGH THE EXISTING DITCH. INCIDENTAL TO TEMPORARY PEDESTRIAN BYPASS ITEM.

6'
MIN.

WO11-2
48"X48"

WO16-7L
48"X24"

M4-60R
30"X24"

5' MIN

GENERAL NOTES

TEMPORARY PEDESTRIAN BYPASS REQUIREMENTS: MINIMUM 2-INCHES BASE AGGREGATE DENSE 3/4-INCH. MINIMUM 6-FOOT WIDTH.

GREEN CIRCLE TRAIL

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG TRAIL, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE TRAIL.

USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PEDESTRIAN TRAFFIC CONTROL - GREEN CIRCLE TRAIL	SHEET 61	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\025103-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2024 3:16 PM PLOT BY : MATTHEW KOZIAR PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

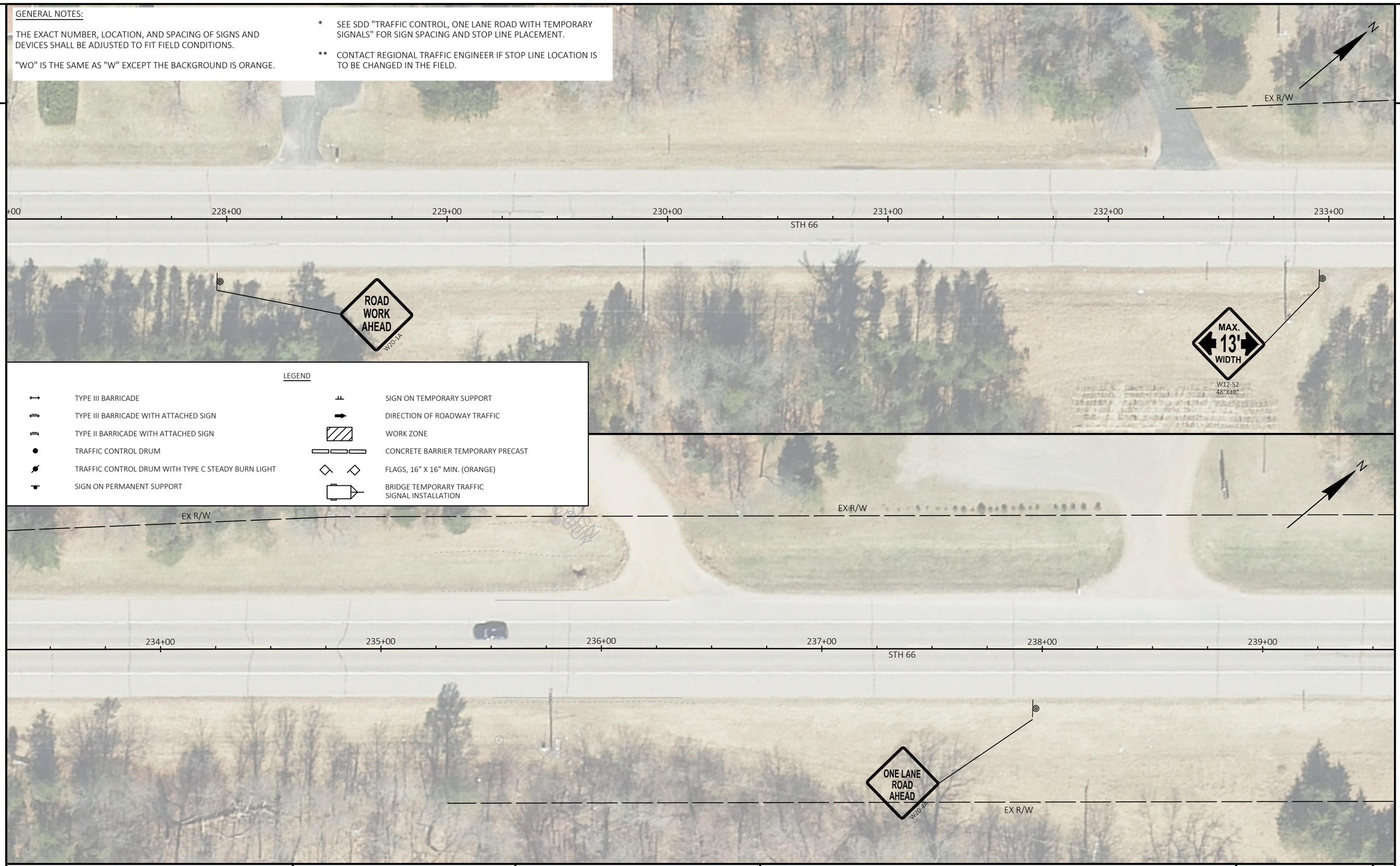
GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.



LEGEND

TYPE III BARRICADE	SIGN ON TEMPORARY SUPPORT
TYPE III BARRICADE WITH ATTACHED SIGN	DIRECTION OF ROADWAY TRAFFIC
TYPE II BARRICADE WITH ATTACHED SIGN	WORK ZONE
TRAFFIC CONTROL DRUM	CONCRETE BARRIER TEMPORARY PRECAST
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	FLAGS, 16" X 16" MIN. (ORANGE)
SIGN ON PERMANENT SUPPORT	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1 (BRIDGE)	SHEET 62	E

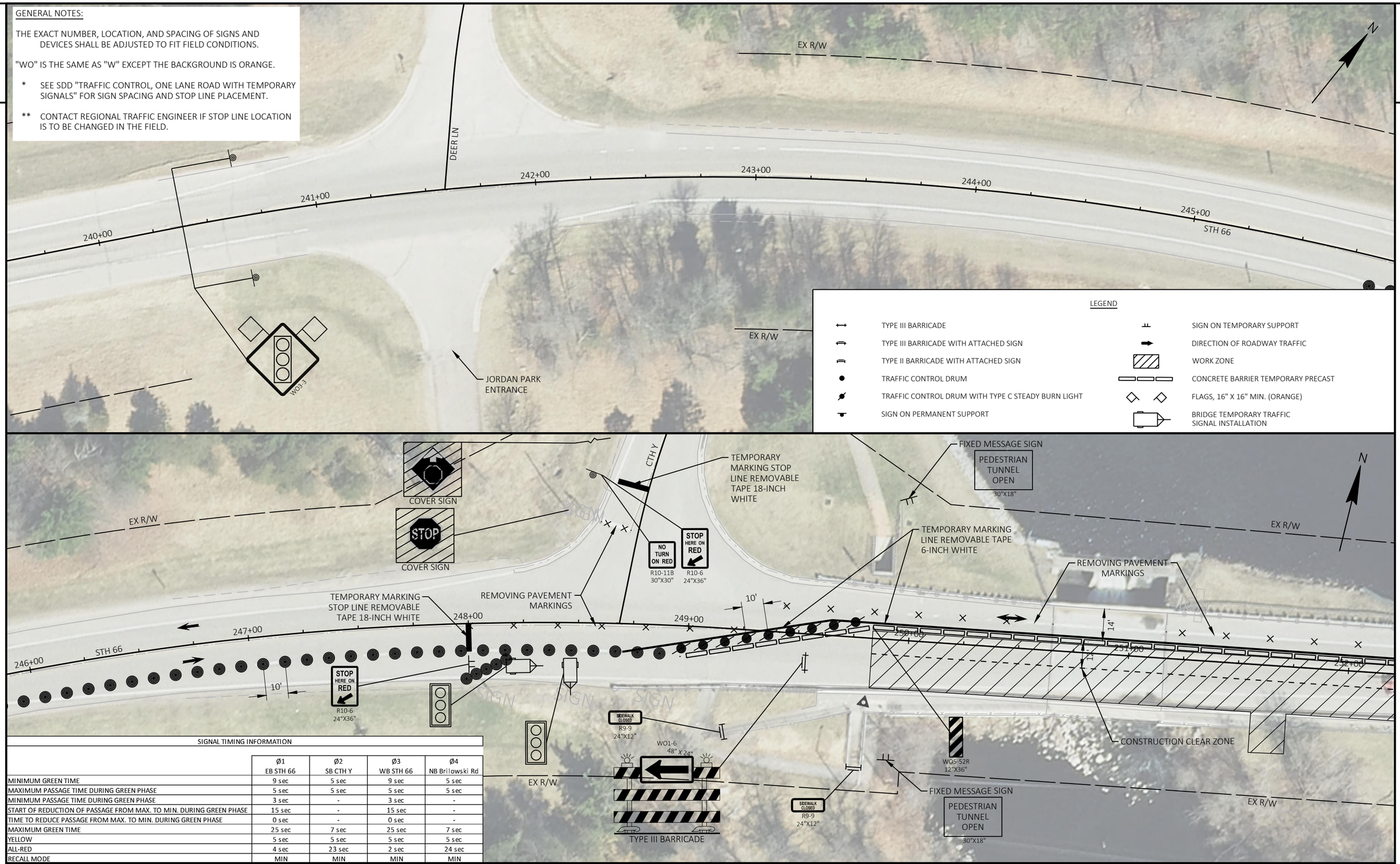
GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.



LEGEND

	TYPE III BARRICADE		SIGN ON TEMPORARY SUPPORT
	TYPE III BARRICADE WITH ATTACHED SIGN		DIRECTION OF ROADWAY TRAFFIC
	TYPE II BARRICADE WITH ATTACHED SIGN		WORK ZONE
	TRAFFIC CONTROL DRUM		CONCRETE BARRIER TEMPORARY PRECAST
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT		FLAGS, 16" X 16" MIN. (ORANGE)
	SIGN ON PERMANENT SUPPORT		BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

SIGNAL TIMING INFORMATION

	Ø1 EB STH 66	Ø2 SB CTH Y	Ø3 WB STH 66	Ø4 NB Brilowski Rd
MINIMUM GREEN TIME	9 sec	5 sec	9 sec	5 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec	-
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec	-
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec	-
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec	7 sec
YELLOW	5 sec	5 sec	5 sec	5 sec
ALL-RED	4 sec	23 sec	2 sec	24 sec
RECALL MODE	MIN	MIN	MIN	MIN

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1 (BRIDGE)	SHEET 63	E

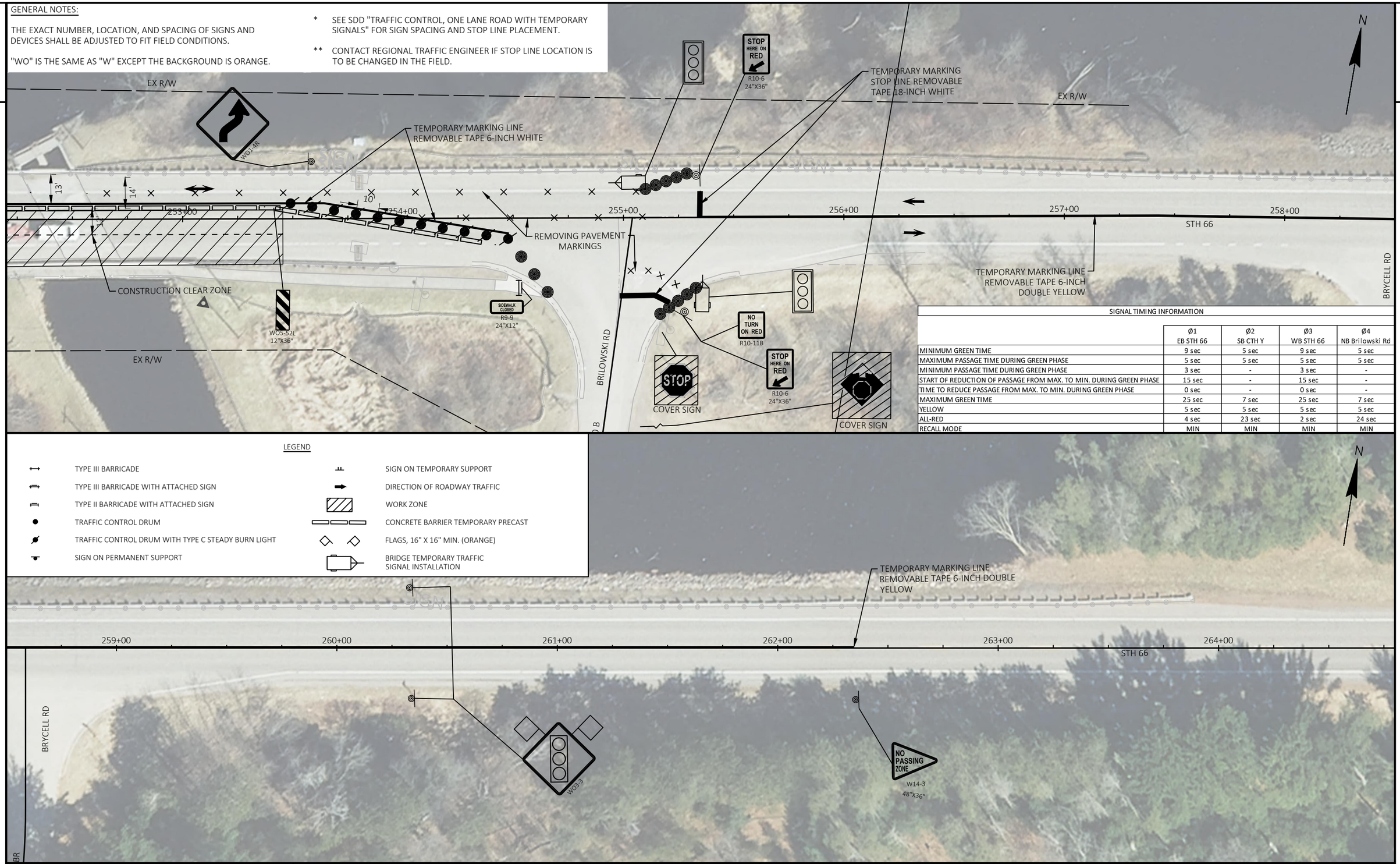
GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.



LEGEND

TYPE III BARRICADE	SIGN ON TEMPORARY SUPPORT
TYPE III BARRICADE WITH ATTACHED SIGN	DIRECTION OF ROADWAY TRAFFIC
TYPE II BARRICADE WITH ATTACHED SIGN	WORK ZONE
TRAFFIC CONTROL DRUM	CONCRETE BARRIER TEMPORARY PRECAST
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	FLAGS, 16" X 16" MIN. (ORANGE)
SIGN ON PERMANENT SUPPORT	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

SIGNAL TIMING INFORMATION

	Ø1 EB STH 66	Ø2 SB CTH Y	Ø3 WB STH 66	Ø4 NB Brilowski Rd
MINIMUM GREEN TIME	9 sec	5 sec	9 sec	5 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec	-
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec	-
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec	-
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec	7 sec
YELLOW	5 sec	5 sec	5 sec	5 sec
ALL-RED	4 sec	23 sec	2 sec	24 sec
RECALL MODE	MIN	MIN	MIN	MIN

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1 (BRIDGE)	SHEET 64	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\025104-TC (BRIDGE S1).DWG
LAYOUT NAME - 03

PLOT DATE : 4/18/2024 2:16 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.



LEGEND

TYPE III BARRICADE	SIGN ON TEMPORARY SUPPORT
TYPE III BARRICADE WITH ATTACHED SIGN	DIRECTION OF ROADWAY TRAFFIC
TYPE II BARRICADE WITH ATTACHED SIGN	WORK ZONE
TRAFFIC CONTROL DRUM	CONCRETE BARRIER TEMPORARY PRECAST
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	FLAGS, 16" X 16" MIN. (ORANGE)
SIGN ON PERMANENT SUPPORT	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1 (BRIDGE)	SHEET 65	E

2

2

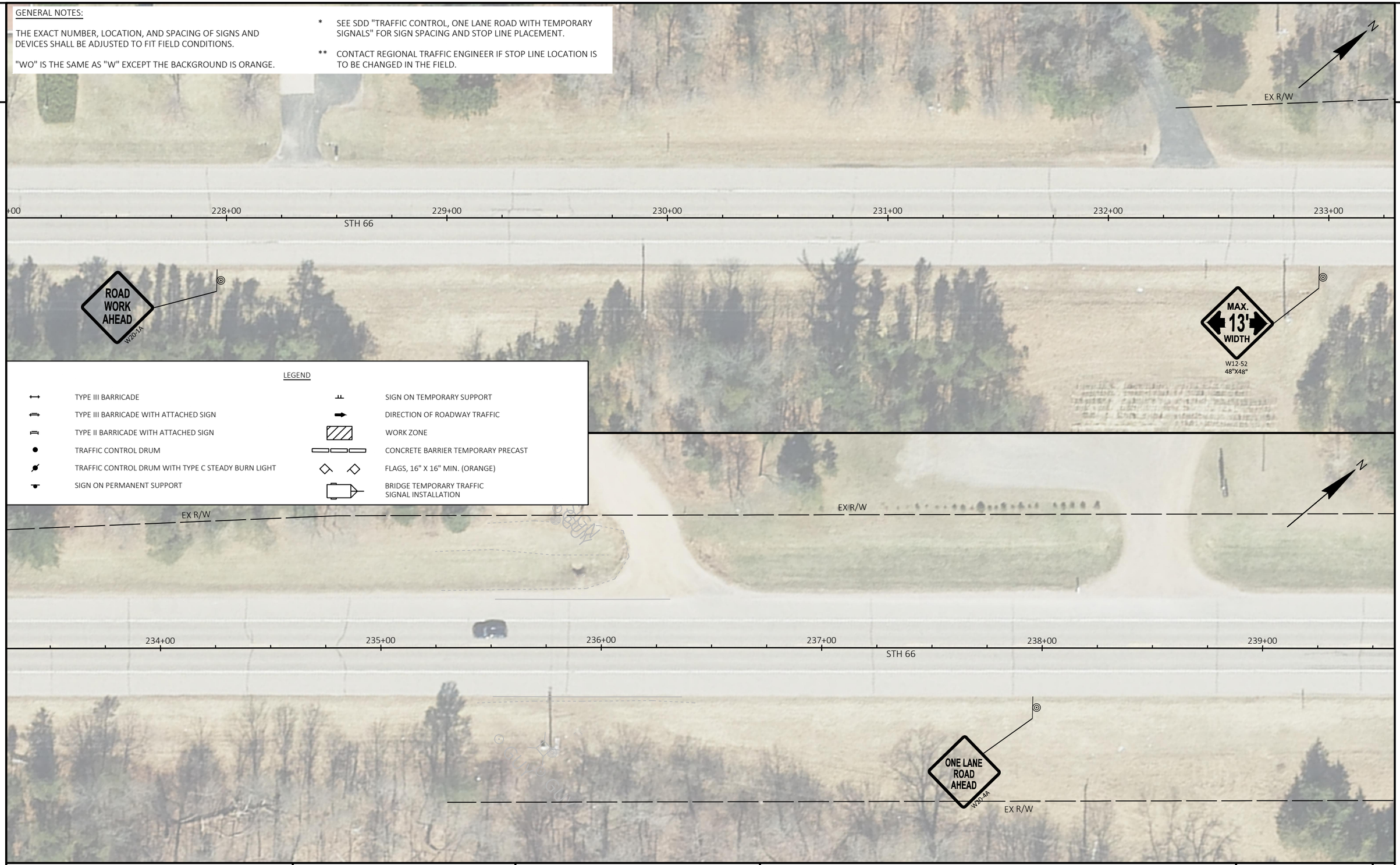
GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.



LEGEND

TYPE III BARRICADE	SIGN ON TEMPORARY SUPPORT
TYPE III BARRICADE WITH ATTACHED SIGN	DIRECTION OF ROADWAY TRAFFIC
TYPE II BARRICADE WITH ATTACHED SIGN	WORK ZONE
TRAFFIC CONTROL DRUM	CONCRETE BARRIER TEMPORARY PRECAST
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	FLAGS, 16" X 16" MIN. (ORANGE)
SIGN ON PERMANENT SUPPORT	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2 (BRIDGE)	SHEET 66	E

GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.

EX R/W

DEER LN

240+00 241+00 242+00 243+00 244+00 245+00 STH 66

EX R/W

W03-3

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE II BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF ROADWAY TRAFFIC
- WORK ZONE
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" X 16" MIN. (ORANGE)
- BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

SIGNAL TIMING INFORMATION

	Ø1 EB STH 66	Ø2 SB CTH Y	Ø3 WB STH 66	Ø4 NB Brilowski Rd
MINIMUM GREEN TIME	9 sec	5 sec	9 sec	5 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec	-
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec	-
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec	-
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec	7 sec
YELLOW	5 sec	5 sec	5 sec	5 sec
ALL-RED	4 sec	23 sec	2 sec	24 sec
RECALL MODE	MIN	MIN	MIN	MIN

CTH Y 11+00 Y

SIGN

COVER SIGN

TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH WHITE

WO5-52L 12"X36"

EX R/W

STOP

COVER SIGN

NO TURN ON RED R10-11B 24"X24"

STOP HERE ON RED R10-6 24"X36"

CONSTRUCTION CLEAR ZONE

TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH WHITE

REMOVING PAVEMENT MARKINGS

246+00 247+00 248+00 249+00 250+00 251+00 252+00 STH 66

10'

10'

14'

13'

STOP HERE ON RED R10-6 24"X36"

SIGN SIGN SIGN

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE

REMOVING PAVEMENT MARKINGS

WO1-4R

EX R/W

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2 (BRIDGE)	SHEET 67	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\025104-TC (BRIDGE S2).DWG
LAYOUT NAME - 02

PLOT DATE : 4/18/2024 2:18 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

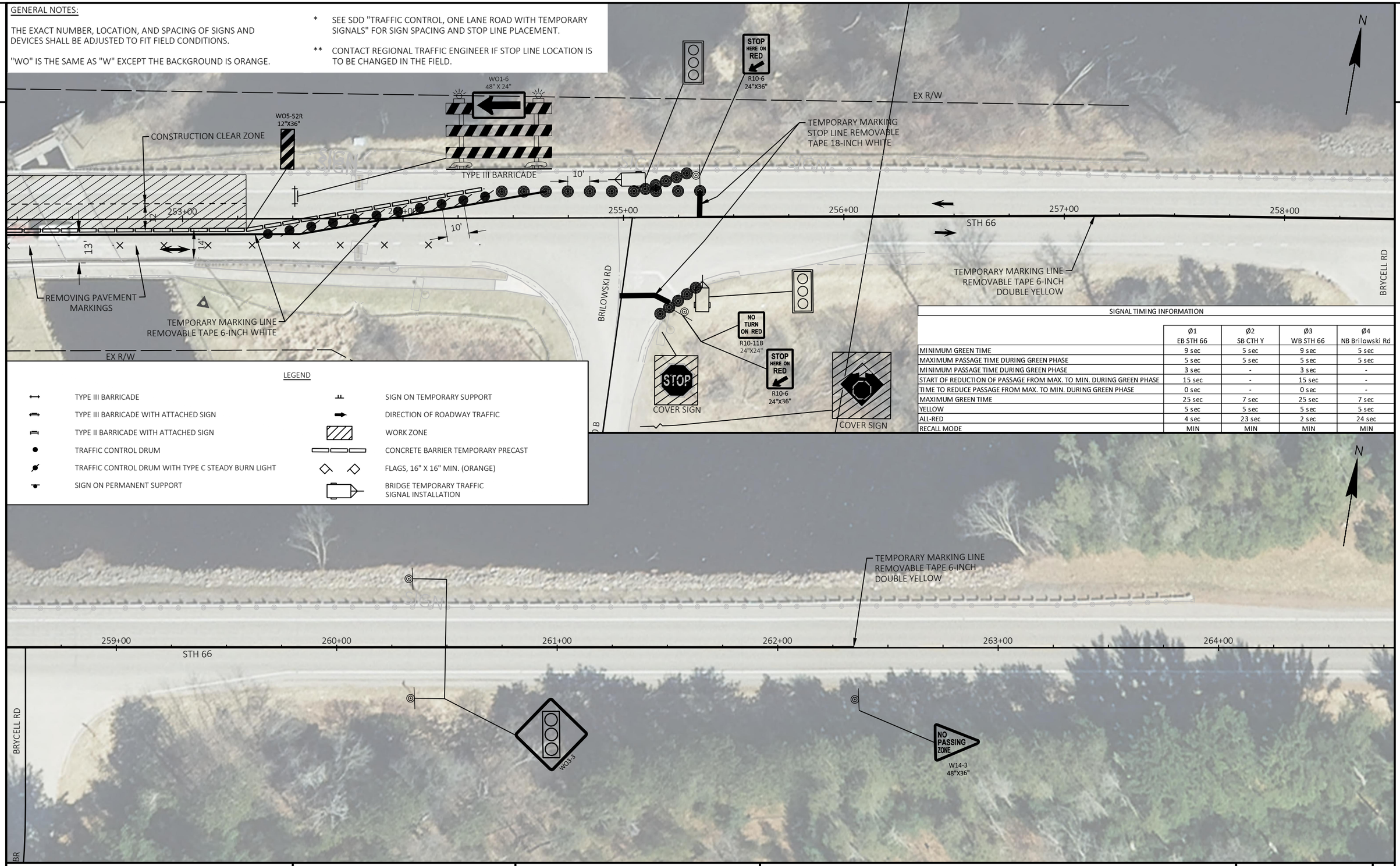
GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE II BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF ROADWAY TRAFFIC
- WORK ZONE
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" X 16" MIN. (ORANGE)
- BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

SIGNAL TIMING INFORMATION

	Ø1 EB STH 66	Ø2 SB CTH Y	Ø3 WB STH 66	Ø4 NB Brilowski Rd
MINIMUM GREEN TIME	9 sec	5 sec	9 sec	5 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec	-
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec	-
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec	-
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec	7 sec
YELLOW	5 sec	5 sec	5 sec	5 sec
ALL-RED	4 sec	23 sec	2 sec	24 sec
RECALL MODE	MIN	MIN	MIN	MIN

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2 (BRIDGE)	SHEET 68	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\025104-TC (BRIDGE S2).DWG
LAYOUT NAME - 03
PLOT DATE : 4/18/2024 2:18 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

GENERAL NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

* SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGN SPACING AND STOP LINE PLACEMENT.

** CONTACT REGIONAL TRAFFIC ENGINEER IF STOP LINE LOCATION IS TO BE CHANGED IN THE FIELD.



LEGEND

⟷	TYPE III BARRICADE	⊥	SIGN ON TEMPORARY SUPPORT
⟷	TYPE III BARRICADE WITH ATTACHED SIGN	➡	DIRECTION OF ROADWAY TRAFFIC
⟷	TYPE II BARRICADE WITH ATTACHED SIGN	▨	WORK ZONE
●	TRAFFIC CONTROL DRUM	▭▭▭	CONCRETE BARRIER TEMPORARY PRECAST
●	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	◇ ◇	FLAGS, 16" X 16" MIN. (ORANGE)
⊥	SIGN ON PERMANENT SUPPORT	▭	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

PROJECT NO: 6280-02-76/77	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2 (BRIDGE)	SHEET 69	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\025104-TC (BRIDGE S2).DWG
LAYOUT NAME - 04
PLOT DATE : 4/18/2024 2:18 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

AMHERST TEL CO

AT&T WISCONSIN

EXISTING CHAIN LINK
FENCE TO REMAIN

SEE STORM
PLAN SEWER

12+00

11+00

253+00

252+00

251+00

250+00

249+00

248+00

CAUTION

6280-02-77
REMOVING FENCE.
FENCE CHAIN LINK 4-FT
REMOVE, SALVAGE, AND
REINSTALL EXISTING
ANIMAL BARRIER FENCE

6280-02-76
B-49-74
FENCE CHAIN LINK 4-FT
REMOVAL AND DISPOSAL
OF EXISTING FENCE PAID
FOR AS REMOVING
STRUCTURE B-49-74
SEE STRUCTURE PLANS

6280-02-77
REMOVING FENCE
FENCE CHAIN LINK 4-FT
REMOVE, SALVAGE, AND
REINSTALL EXISTING
ANIMAL BARRIER FENCE

WISCONSIN PUBLIC
SERVICE CORPORATION

6280-02-77
EXISTING 12-FT GATE AND
ATTACHED ANIMAL BARRIER
FENCE TO REMAIN

6280-02-76
B-49-73, C-49-15, R-49-4
FENCE CHAIN LINK 4-FT
REMOVAL AND DISPOSAL
OF EXISTING FENCE PAID
FOR AS REMOVING
STRUCTURE B-49-73,
REMOVING STRUCTURE
C-49-15, AND REMOVING
STRUCTURE R-49-4
SEE STRUCTURE PLANS

6280-02-77
REMOVING FENCE
FENCE CHAIN LINK 4-FT

SPECTRUM

6280-02-76
R-49-4
RAILING PIPE
REMOVAL AND DISPOSAL
OF EXISTING RAILING
PAID FOR AS REMOVING
STRUCTURE R-49-4
SEE STRUCTURE PLANS

WISCONSIN PUBLIC
SERVICE CORPORATION

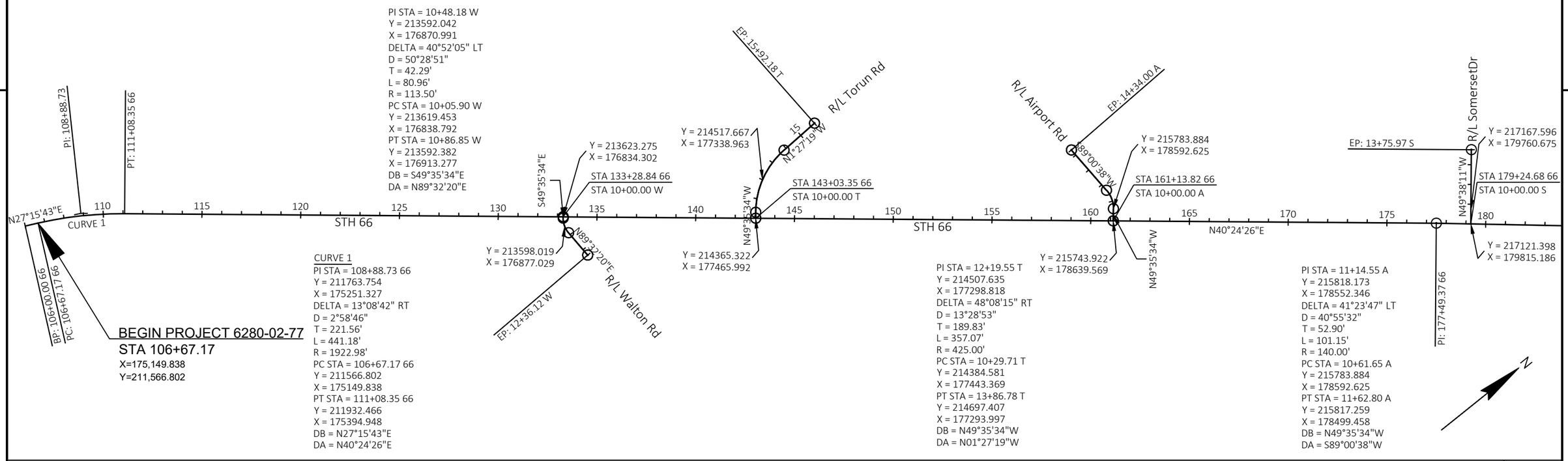
SIGN

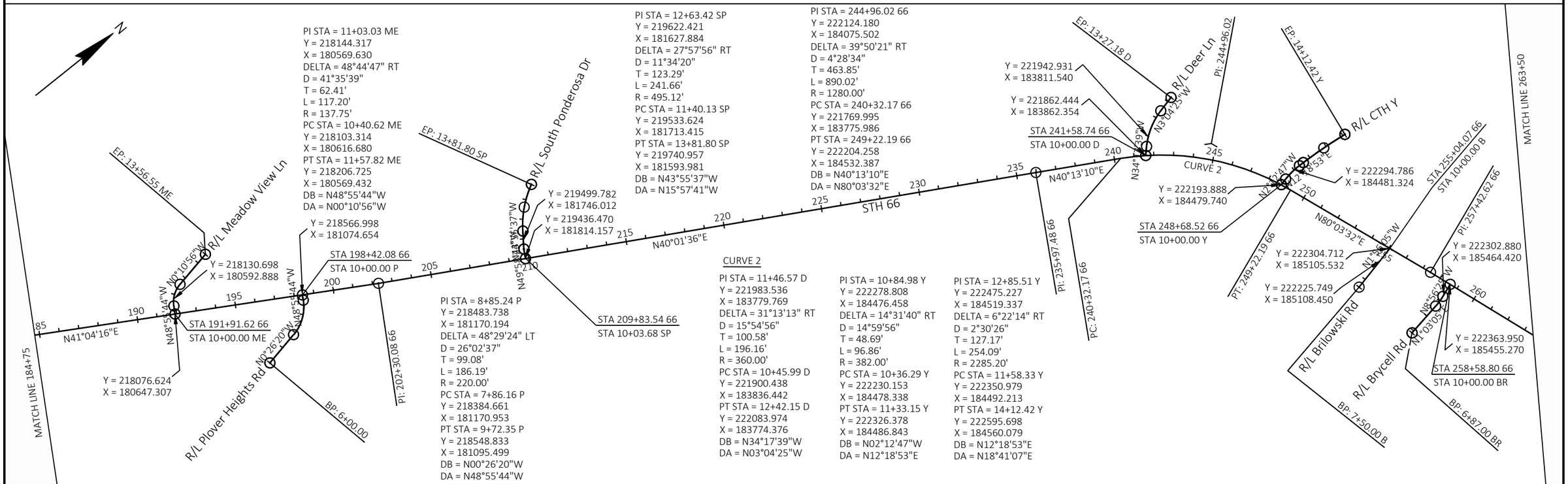
GUY

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	FENCING	SHEET 70	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\027101-FN.DWG
LAYOUT NAME - 01
PLOT DATE : 4/10/2024 3:54 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

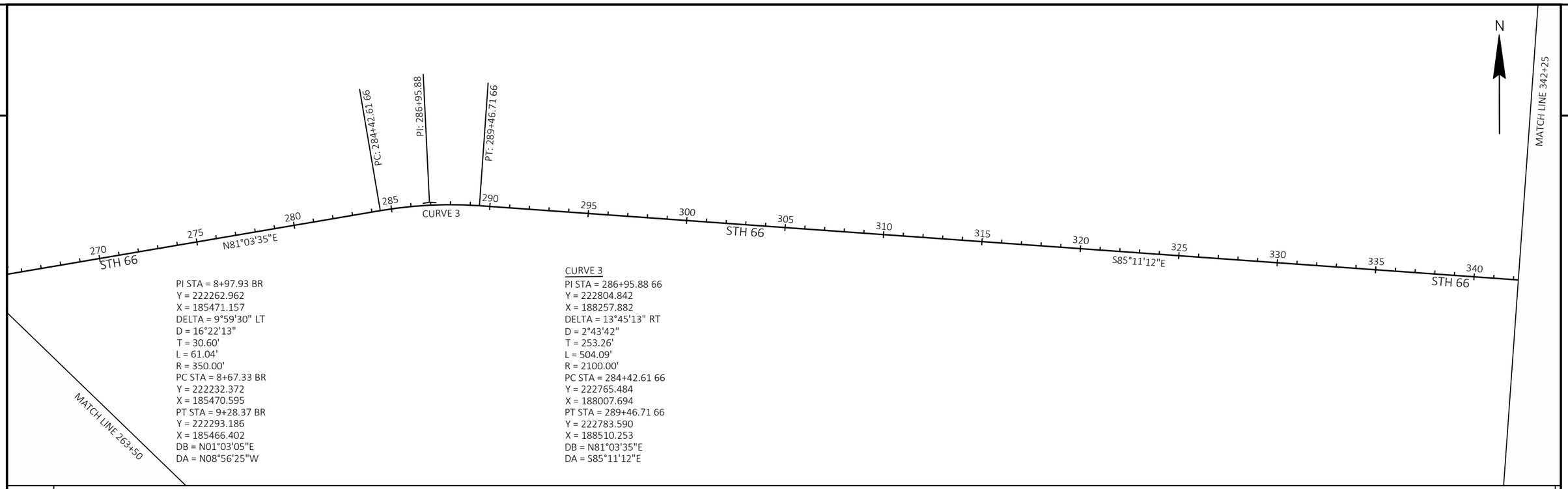
2





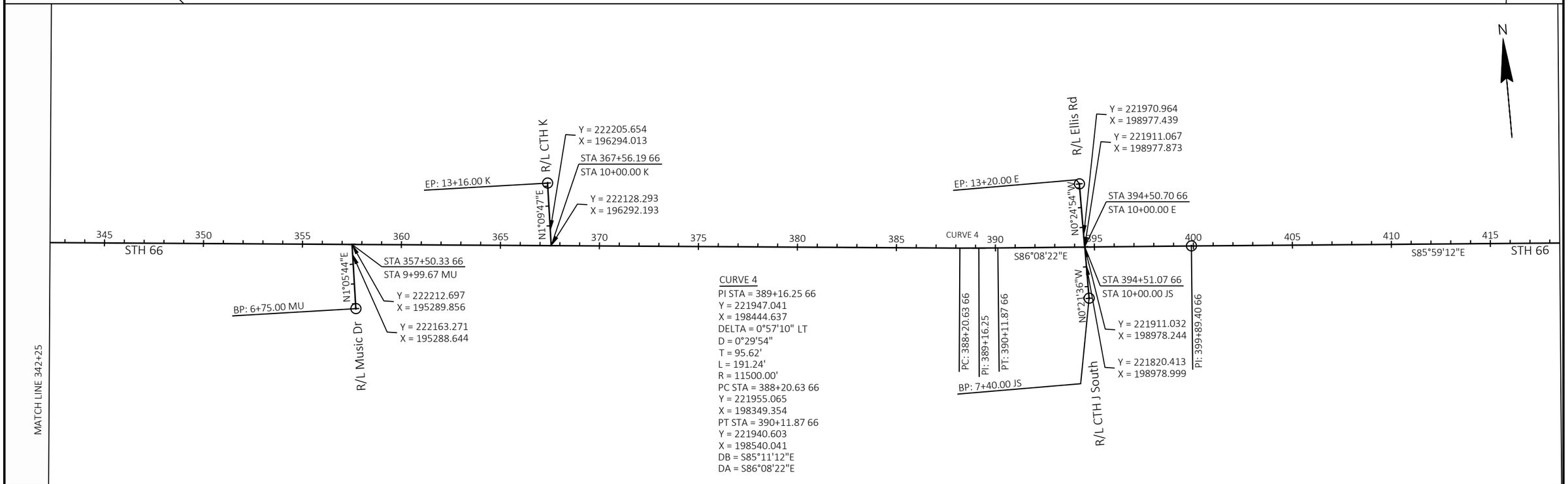
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	ALIGNMENT DIAGRAM	SHEET 71	E

2



PI STA = 8+97.93 BR
Y = 222262.962
X = 185471.157
DELTA = 9°59'30" LT
D = 16°22'13"
T = 30.60'
L = 61.04'
R = 350.00'
PC STA = 8+67.33 BR
Y = 222232.372
X = 185470.595
PT STA = 9+28.37 BR
Y = 222293.186
X = 185466.402
DB = N01°03'05"E
DA = N08°56'25"W

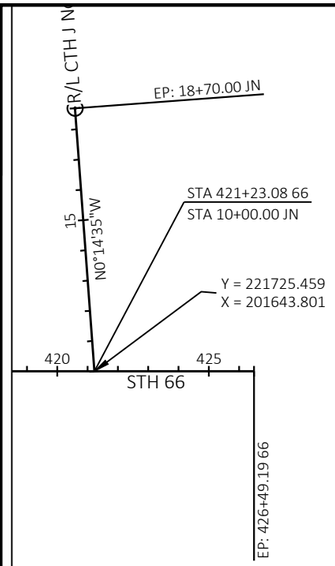
CURVE 3
PI STA = 286+95.88 66
Y = 222804.842
X = 188257.882
DELTA = 13°45'13" RT
D = 2°43'42"
T = 253.26'
L = 504.09'
R = 2100.00'
PC STA = 284+42.61 66
Y = 222765.484
X = 188007.694
PT STA = 289+46.71 66
Y = 222783.590
X = 188510.253
DB = N81°03'35"E
DA = S85°11'12"E



CURVE 4
PI STA = 389+16.25 66
Y = 221947.041
X = 198444.637
DELTA = 0°57'10" LT
D = 0°29'54"
T = 95.62'
L = 191.24'
R = 11500.00'
PC STA = 388+20.63 66
Y = 221955.065
X = 198349.354
PT STA = 390+11.87 66
Y = 221940.603
X = 198540.041
DB = S85°11'12"E
DA = S86°08'22"E

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	ALIGNMENT DIAGRAM	SHEET 72	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 7/23/2024 3:23 PM
PLOT BY : MATTHEW KOZIAR
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42





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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	ALIGNMENT DIAGRAM	SHEET 73	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 03
PLOT DATE : 7/23/2024 3:24 PM
PLOT BY : MATTHEW KOZIAR
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

Line	Item	Item Description	Unit	Total	6280-02-76 Qty	6280-02-77 Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	1.000		1.000
0004	203.0220	Removing Structure (structure) 01. B-49-73	EACH	1.000	1.000	
0006	203.0220	Removing Structure (structure) 02. B-49-74	EACH	1.000	1.000	
0008	203.0220	Removing Structure (structure) 03. C-49-15	EACH	1.000	1.000	
0010	203.0220	Removing Structure (structure) 04. R-49-4	EACH	1.000	1.000	
0012	203.0335	Debris Containment Over Waterway (structure) 01. B-49-73	EACH	1.000	1.000	
0014	203.0335	Debris Containment Over Waterway (structure) 02. B-49-74	EACH	1.000	1.000	
0016	204.0100	Removing Concrete Pavement	SY	44.000		44.000
0018	204.0115	Removing Asphaltic Surface Butt Joints	SY	533.000		533.000
0020	204.0120	Removing Asphaltic Surface Milling	SY	133,423.000	652.000	132,771.000
0022	204.0150	Removing Curb & Gutter	LF	789.000		789.000
0024	204.0157	Removing Concrete Barrier	LF	16.000		16.000
0026	204.0165	Removing Guardrail	LF	107.000		107.000
0028	204.0170	Removing Fence	LF	135.000		135.000
0030	204.0220	Removing Inlets	EACH	1.000		1.000
0032	205.0100	Excavation Common	CY	633.000		633.000
0034	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	1.000		1.000
0036	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 6280-02-76	EACH	1.000	1.000	
0038	211.0101	Prepare Foundation for Asphaltic Paving (project) 02. 6280-02-77	EACH	1.000		1.000
0040	213.0100	Finishing Roadway (project) 01. 6280-02-76	EACH	1.000	1.000	
0042	213.0100	Finishing Roadway (project) 02. 6280-02-77	EACH	1.000		1.000
0044	305.0110	Base Aggregate Dense 3/4-Inch	TON	687.000		687.000
0046	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	541.000		541.000
0048	455.0605	Tack Coat	GAL	11,029.000	46.000	10,983.000
0050	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000		2.000
0052	460.6223	HMA Pavement 3 MT 58-28 S	TON	19,058.000		19,058.000
0054	460.6424	HMA Pavement 4 MT 58-28 H	TON	13,149.000	64.000	13,085.000
0056	465.0105	Asphaltic Surface	TON	1,413.000		1,413.000
0058	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	175.000		175.000
0060	465.0315	Asphaltic Flumes	SY	27.000		27.000
0062	465.0560	Asphaltic Rumble Strips, Centerline	LF	16,750.000		16,750.000
0064	502.3200	Protective Surface Treatment	SY	360.000	360.000	
0066	502.3205	Pigmented Surface Sealer Reseal	SY	65.000	65.000	
0068	509.0301	Preparation Decks Type 1	SY	45.000	45.000	
0070	509.0302	Preparation Decks Type 2	SY	19.000	19.000	
0072	509.0500	Cleaning Decks	SY	360.000	360.000	
0074	509.1500	Concrete Surface Repair	SF	58.000	58.000	
0076	509.2000	Full-Depth Deck Repair	SY	1.000	1.000	
0078	509.2500	Concrete Masonry Overlay Decks	CY	35.000	35.000	
0080	513.2001	Railing Pipe	LF	50.000	50.000	
0082	520.8000	Concrete Collars for Pipe	EACH	3.000		3.000
0084	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	63.000		63.000
0086	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	3.000		3.000
0088	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000		2.000
0090	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	500.000		500.000
0092	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	248.000		248.000
0094	602.0410	Concrete Sidewalk 5-Inch	SF	200.000		200.000
0096	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	40.000		40.000
0098	602.0810	Concrete Driveway 6-Inch	SY	44.000		44.000

Line	Item	Item Description	Unit	Total	6280-02-76 Qty	6280-02-77 Qty
0100	603.0105	Concrete Barrier Single-Faced 32-Inch	LF	16.000		16.000
0102	603.8000	Concrete Barrier Temporary Precast Delivered	LF	563.000	563.000	
0104	603.8125	Concrete Barrier Temporary Precast Installed	LF	1,063.000	1,063.000	
0106	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	1,063.000	1,063.000	
0108	606.0100	Riprap Light	CY	10.000		10.000
0110	606.0200	Riprap Medium	CY	5.000		5.000
0112	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	18.000		18.000
0114	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	10.000		10.000
0116	611.0610	Inlet Covers Type BW	EACH	1.000		1.000
0118	611.0624	Inlet Covers Type H	EACH	2.000		2.000
0120	611.3225	Inlets 2x2.5-FT	EACH	1.000		1.000
0122	611.3230	Inlets 2x3-FT	EACH	1.000		1.000
0124	611.8115	Adjusting Inlet Covers	EACH	1.000		1.000
0126	614.0950	Replacing Guardrail Posts and Blocks	EACH	275.000		275.000
0128	614.2300	MGS Guardrail 3	LF	71.000		71.000
0130	614.2350	MGS Guardrail Short Radius	LF	99.000		99.000
0132	614.2500	MGS Thrie Beam Transition	LF	39.000		39.000
0134	614.2610	MGS Guardrail Terminal EAT	EACH	1.000		1.000
0136	616.0204	Fence Chain Link 4-FT	LF	362.000	227.000	135.000
0138	618.0100	Maintenance and Repair of Haul Roads (project) 01. 6280-02-76	EACH	1.000	1.000	
0140	618.0100	Maintenance and Repair of Haul Roads (project) 02. 6280-02-77	EACH	1.000		1.000
0142	619.1000	Mobilization	EACH	1.000	0.200	0.800
0144	621.0100	Landmark Reference Monuments	EACH	12.000		12.000
0146	624.0100	Water	MGAL	18.300		18.300
0148	625.0100	Topsoil	SY	2,291.000		2,291.000
0150	628.1504	Silt Fence	LF	1,479.000		1,479.000
0152	628.1520	Silt Fence Maintenance	LF	1,479.000		1,479.000
0154	628.1905	Mobilizations Erosion Control	EACH	5.000		5.000
0156	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000		3.000
0158	628.2002	Erosion Mat Class I Type A	SY	2,864.000		2,864.000
0160	628.7010	Inlet Protection Type B	EACH	5.000		5.000
0162	628.7015	Inlet Protection Type C	EACH	4.000		4.000
0164	628.7504	Temporary Ditch Checks	LF	13.000		13.000
0166	628.7555	Culvert Pipe Checks	EACH	19.000		19.000
0168	629.0210	Fertilizer Type B	CWT	1.400		1.400
0170	630.0120	Seeding Mixture No. 20	LB	41.000		41.000
0172	630.0500	Seed Water	MGAL	12.860		12.860
0174	633.5200	Markers Culvert End	EACH	5.000		5.000
0176	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000		2.000
0178	637.2210	Signs Type II Reflective H	SF	26.000		26.000
0180	638.2102	Moving Signs Type II	EACH	11.000		11.000
0182	638.2602	Removing Signs Type II	EACH	2.000		2.000
0184	638.3000	Removing Small Sign Supports	EACH	2.000		2.000
0186	642.5201	Field Office Type C	EACH	1.000	0.100	0.900
0188	643.0300	Traffic Control Drums	DAY	2,985.000	2,871.000	114.000
0190	643.0410	Traffic Control Barricades Type II	DAY	59.000	59.000	
0192	643.0420	Traffic Control Barricades Type III	DAY	40.000	40.000	
0194	643.0705	Traffic Control Warning Lights Type A	DAY	139.000	139.000	
0196	643.0715	Traffic Control Warning Lights Type C	DAY	792.000	792.000	

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	6280-02-76 Qty	6280-02-77 Qty
0198	643.0900	Traffic Control Signs	DAY	18,799.000	16,038.000	2,761.000
0200	643.0920	Traffic Control Covering Signs Type II	EACH	9.000	9.000	
0202	643.1000	Traffic Control Signs Fixed Message	SF	7.500	7.500	
0204	643.3165	Temporary Marking Line Paint 6-Inch	LF	158,914.000		158,914.000
0206	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	3,911.000	3,911.000	
0208	643.3265	Temporary Marking Line Paint 10-Inch	LF	1,026.000		1,026.000
0210	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	88.000		88.000
0212	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	126.000	126.000	
0214	643.5000	Traffic Control	EACH	1.000	0.500	0.500
0216	644.1810	Temporary Pedestrian Barricade	LF	179.000		179.000
0218	645.0120	Geotextile Type HR	SY	24.000		24.000
0220	645.0130	Geotextile Type R	SY	25.000		25.000
0222	646.2020	Marking Line Epoxy 6-Inch	LF	626.000	250.000	376.000
0224	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	79,569.000	488.000	79,081.000
0226	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	513.000		513.000
0228	646.5020	Marking Arrow Epoxy	EACH	4.000		4.000
0230	646.5120	Marking Word Epoxy	EACH	2.000		2.000
0232	646.6120	Marking Stop Line Epoxy 18-Inch	LF	81.000		81.000
0234	646.7120	Marking Diagonal Epoxy 12-Inch	LF	200.000		200.000
0236	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	110.000		110.000
0238	646.9000	Marking Removal Line 4-Inch	LF	1,369.000	1,369.000	
0240	646.9200	Marking Removal Line Wide	LF	44.000	44.000	
0242	648.0100	Locating No-Passing Zones	MI	5.890		5.890
0244	650.4000	Construction Staking Storm Sewer	EACH	3.000		3.000
0246	650.4500	Construction Staking Subgrade	LF	1,411.000		1,411.000
0248	650.5000	Construction Staking Base	LF	1,411.000		1,411.000
0250	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	748.000		748.000
0252	650.6000	Construction Staking Pipe Culverts	EACH	1.000		1.000
0254	650.8000	Construction Staking Resurfacing Reference	LF	31,089.000	218.000	30,871.000
0256	650.9000	Construction Staking Curb Ramps	EACH	2.000		2.000
0258	650.9500	Construction Staking Sidewalk (project) 01. 6280-02-77	EACH	1.000		1.000
0260	650.9911	Construction Staking Supplemental Control (project) 01. 6280-02-76	EACH	1.000	1.000	
0262	650.9911	Construction Staking Supplemental Control (project) 02. 6280-02-77	EACH	1.000		1.000
0264	650.9920	Construction Staking Slope Stakes	LF	3,062.000		3,062.000
0266	661.0101	Temporary Traffic Signals for Bridges (structure) 01. Concrete Overlays	EACH	1.000	1.000	
0268	690.0150	Sawing Asphalt	LF	1,922.000		1,922.000
0270	690.0250	Sawing Concrete	LF	76.000		76.000
0272	715.0603	Incentive Strength Concrete Barrier	DOL	8.000		8.000
0274	740.0440	Incentive IRI Ride	DOL	23,580.000	170.000	23,410.000
0276	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000		2,400.000
0278	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,980.000		1,980.000
0280	SPV.0055	Special 01. Incentive Density PWL HMA Pavement	DOL	20,430.000	40.000	20,390.000
0282	SPV.0055	Special 02. Incentive Air Voids HMA Pavement	DOL	32,220.000	70.000	32,150.000
0284	SPV.0055	Special 03. Incentive Density HMA Pavement Longitudinal Joints	DOL	12,370.000	30.000	12,340.000
0286	SPV.0060	Special 01. 5-ft Diameter Inlet	EACH	1.000		1.000
0288	SPV.0060	Special 02. Reestablish Section Corner Monuments	EACH	3.000		3.000
0290	SPV.0060	Special 03. Temporary Vehicle Detection, STH 66/CTH Y	EACH	1.000	1.000	
0292	SPV.0060	Special 04. Temporary Pedestrian Bypass	EACH	2.000		2.000
0294	SPV.0090	Special 01. Remove, Salvage, and Reinstall Existing Animal Barrier	LF	94.000		94.000

					6280-02-76	6280-02-77
0296	SPV.0180	Special 01. Removing Distressed Asphaltic Surface Milling	SY	7,000.000		7,000.000

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REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	* 204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
0010	250+54.44	-	252+72.59	STH 66	652
				TOTAL 0010	652

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

HMA PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	* 455.0605 TACK COAT GAL	* 460.6424 HMA PAVEMENT 4 MT 58-28 H TON
0010	250+54.44	-	252+72.59	STH 66	46	64
				TOTAL 0010	46	64

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

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PWL MIXTURE USE TABLE

LOCATION	STATION	TO	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS (INCHES)	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
12' DRIVING LANE	250+54.44	-	252+72.59	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 H	40	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
SHOULDER	250+54.44	-	252+72.59	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 H	20	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE

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TEMPORARY BARRIER

CATEGORY	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF	REMARKS
0010	STH 66	563	563	563	STAGE 1
0010	STH 66	-	500	500	STAGE 2
	TOTAL 0010	563	1,063	1,063	

TRAFFIC CONTROL

CATEGORY	STAGE	DURATION CALENDAR DAYS**	* 643.0300 TRAFFIC CONTROL DRUMS DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	* 643.0900 TRAFFIC CONTROL SIGNS DAY	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II SIGNS	# CYCLE	EACH	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF
0010	STAGE 1 (BRIDGE)	18	1,242	54	18	90	360	7,776	4	1	4	7.50
0010	STAGE 2 (BRIDGE)	18	1,368	-	18	36	360	6,804	4	1	4	-
0010	UNDISTRIBUTED		261	5	4	13	72	1458	1	-	1	-
0010	PROJECT 6280-02-76		-	-	-	-	-	-	-	-	-	-
		TOTAL 0010	2,871	59	40	139	792	16,038		9		7.50

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

** FOR INFORMATION PURPOSES ONLY

TEMPORARY PAVEMENT MARKING

CATEGORY	STAGE	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF
0010	1	1,981	63	920	44
0010	2	1930	63	449	-
	TOTAL 0010	3,911	126	1,369	44

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PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	* 646.2020 MARKING LINE EPOXY 6-INCH LF	* 646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF
0010	250+54.44	-	252+72.59	STH 66	250	488
				TOTAL 0010	250	488

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	* 650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	* 650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (6280-02-76) EACH
0010	250+54.44	-	252+72.59	STH 66	218	1
				TOTAL 0010	218	1

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY SIGNALS

CATEGORY	LOCATION	661.0101.01 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (01. CONCRETE OVERLAYS) EACH
0010	PROJECT 6280-02-76	1
	TOTAL 0010	1

TEMPORARY VEHICLE DETECTION

CATEGORY	SPV.0060.03 SPECIAL (TEMPORARY VEHICLE DETECTION, STH 66/CTH Y) EACH
0010	1
TOTAL 0010	1

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REMOVING CULVERT PIPES

			203.0100	208.1500.S	
			REMOVING SMALL PIPE CULVERTS	TEMPORARY LANE SHIFT DURING CULVERT WORK	
CATEGORY	STATION	LOCATION	EACH	EACH	REMARKS
0010	235+90	STH 66	1	1	30-INCH RCCP
		TOTAL 0010	1	1	

REMOVING CURB AND GUTTER

					204.0150
					REMOVING CURB & GUTTER
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	249+02	-	249+53	LT	95
0010	393+01	-	395+88	LT, RT	500
				TOTAL 0010	595
0020	142+22	-	143+64	LT	194
				TOTAL 0020	194
				PROJCET 6280-02-77 TOTAL	789

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REMOVING PAVEMENT

					204.0100	204.0120	SPV.0180.01	
					REMOVING CONCRETE PAVEMENT	REMOVING ASPHALTIC SURFACE MILLING	SPECIAL (REMOVING DISTRESSED ASPHALTIC SURFACE MILLING)	
CATEGORY	STATION	TO	STATION	LOCATION	SY	SY	SY	COMMENTS
0010	106+67	-	230+81	STH 66	-	62,605	-	
0010	230+81	-	250+64	STH 66	-	10,804	1000	10% OF THE ROADWAY AREA ASSUMED FOR REMOVING DISTRESSED ASPHALTIC SURFACE MILLING
0010	252+63	-	417+57	STH 66	-	58,464	6000	10% OF THE ROADWAY AREA ASSUMED FOR REMOVING DISTRESSED ASPHALTIC SURFACE MILLING
0010		136+69		STH 66 LT DRIVEWAY	13	898	-	
0010		137+79		STH 66 LT DRIVEWAY	16	-	-	
0010		156+66		STH 66 RT DRIVEWAY	15	-	-	
				TOTAL 0010	44	132,771	7,000	

ASPHALT REMOVAL INCIDENTAL IN CUT AREAS AND PAY FOR REMOVAL IN FILL AREAS

REMOVING BUTT JOINTS

		204.0115
		REMOVING ASPHALTIC SURFACE BUTT JOINTS
CATEGORY	LOCATION	SY
0010	BEGIN PROJECT	49
0010	WALTON RD	26
0010	AIRPORT RD	34
0010	SOMERSET DR	34
0010	MEADOW VIEW LANE	34
0010	PLOVER HEIGHTS RD	29
0010	SOUTH PONDEROSA DR	29
0010	DEER LANE	49
0010	CTH Y	36
0010	BRILOWSKI RD	27
0010	BRYCELL RD	34
0010	MUSIC DR	23
0010	CTH K	35
0010	ELLIS RD	27
0010	CTH J	34
0010	END PROJECT	33
	TOTAL 0010	533

REMOVING BARRIER

					204.0157
					REMOVING CONCRETE BARRIER
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	251+57	-	251+73	STH 66,RT	16
				TOTAL 0010	16

REMOVING GUARDRAIL

				204.0165
				REMOVING GUARDRAIL
CATEGORY	STATION	TO	STATION	LF
0010	249+57	-	250+64	107
			TOTAL 0010	107

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REMOVING FENCE

CATEGORY	STATION	TO	STATION	204.0170 REMOVING FENCE LF
0010	249+15	-	249+76	62
0010	251+47	-	252+33	73
			TOTAL 0010	135

REMOVING INLETS

CATEGORY	STATION	LOCATION	204.0220 REMOVING INLETS EACH	REMARKS
0010	394+75	STH 66, RT	1	SE QUADRANT
		TOTAL 0010	1	

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EXCAVATION

CATEGORY	STATION	TO	STATION	LOCATION	(1) 205.0100 EXCAVATION COMMON CY	(2) SALVAGED/ UNUSABLE PAVEMENT MATERIAL	(3) AVAILABLE MATERIAL	UNEXPANDED FILL	(4) EXPANDED FILL FACTOR 1.25	(5) MASS ORDINATE +/-	WASTE	REMARKS
0010	235+75	-	236+05	STH 66	68	20	48	11	14	34	34	CULVERT REPLACEMENT
0010	10+60	-	11+56	CTH Y	0	0	0	10	13	-13	0	GUARDRAIL REPLACEMENT
0010	249+22	-	250+65	STH 66	4	0	4	7	9	-5	0	GUARDRAIL REPLACEMENT
				TOTAL 0010	72	20	52	28	36	16	34	
0020	135+76	-	148+86	STH 66	259	0	259	108	135	124	124	TORUN ROAD SAFETY IMPROVEMENTS
0020	10+00	-	12+00	TORUN ROAD	302	146	156	29	36	120	120	TORUN ROAD SAFETY IMPROVEMENTS
				TOTAL 0020	561	146	415	137	171	244	244	
				PROJECT 6280-02-77 TOTAL	633							

(1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. BID ITEM NUMBER 205.0100

(2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL

(4) EXPANDED FILL = (UNEXPANDED)*(EXPANDED FILL FACTOR)

(5) MASS ORDINATE = (AVAILABLE MATERIAL - EXPANDED FILL). PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL. MINUS INDICATES SHORTAGE OF MATERIAL.

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BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	COMMENTS
0010	106+67	-	230+81	STH 66	80	-	1.2	
0010	230+81	-	252+63	STH 66	14	-	0.2	
0010	252+63	-	417+57	STH 66	107	-	1.6	
0010	106+67	-	417+57	STH 66 DRIVEWAYS	413	-	6.2	
0010	235+35	-	236+45	CULVERT REPLACEMENT	0	239	3.6	
0010				UNDISTRIBUTED	31	12	0.6	
				TOTAL 0010	645	251	13.4	
0020	135+76	-	148+86	STH 66	-	223	3.3	BASE AGGREGATE IS FOR SHIFT IN CROWN AND LANE WIDENING FOR THE RIGHT TURN LANE
0020	10+00	-	12+00	TORUN RD	40	53	1.4	
0020				UNDISTRIBUTED	2	14	0.2	
				TOTAL 0020	42	290	4.9	
				PROJECT 6280-02-77 TOTAL	687	541	18.3	

ASPHALTIC PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	* 460.6424 HMA PAVEMENT 4 MT 58-28 H TON	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	106+67	-	230+81	STH 66	3,130	11,395	6,136	-	
0010	230+81	-	250+64	STH 66	756	0	1,059	405	ASPHALTIC SURFACE FOR CULVERT REPLACEMENT AND REMOVING DISTRESSED ASPHALTIC SURFACE MILLING
0010	252+63	-	417+57	STH 66	7,016	7,367	5,730	1,008	ASPHALTIC SURFACE FOR REMOVING DISTRESSED ASPHALTIC SURFACE MILLING
				TOTAL 0010	10,902	18,762	12,925	1,413	
0020	142+38	-	147+31	TORUN RD	81	296	160	-	INCLUDES TORUN RD AND STH 66 WESTBOUND RIGHT TURN LANE
				TOTAL 0020	81	296	160	0	
				PROJECT 6280-02-77 TOTAL	10,983	19,058	13,085	1,413	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

HMA PWL TEST STRIP

CATEGORY	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH
0010	PROJECT 6280-02-77	2
	TOTAL 0000	2

PWL MIXTURE USE TABLE

LOCATION	STATION	TO	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS (INCHES)	QUALITY MANAGEMENT PROGRAM TO BE USED FOR MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR DENSITY ACCEPTANCE
12' DRIVING LANE/TURN LANE/PASSING LANE	106+67.17	-	230+81	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	3480	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
12' DRIVING LANE/TURN LANE/PASSING LANE	106+67.17	-	230+81	LOWER LAYER	RUBBILIZED CONCRETE	3 MT 58-28 S	6460	3.25	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
SHOULDER/SIDE ROADS	106+67.17	-	230+81	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	2820	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
SHOULDER/SIDE ROADS	106+67.17	-	230+81	LOWER LAYER	RUBBILIZED CONCRETE	3 MT 58-28 S	5230	3.25	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
12' DRIVING LANE/TURN LANE/PASSING LANE	230+81	-	250+64	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 H	600	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
SHOULDER/SIDE ROADS	230+81	-	250+64	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 H	460	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
12' DRIVING LANE/TURN LANE/PASSING LANE	252+63	-	417+57.19	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	4310	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
12' DRIVING LANE/TURN LANE/PASSING LANE	252+63	-	417+57.19	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	5540	2.25	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
SHOULDER/SIDE ROADS	252+63	-	417+57.19	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	1420	1.75	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
SHOULDER/SIDE ROADS	252+63	-	417+57.19	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	1820	2.25	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
VARIOUS	235+35	-	236+45	CULVERT PATCH	BASE AGGREGATE	ASPHALTIC SURFACE (MT)	180	6	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
VARIOUS	230+81	-	250+64	REMOVING DISTRESSED ASPHALTIC SURFACE MILLING	BASE AGGREGATE/MILLED EXISTING HMA SURFACE	ASPHALTIC SURFACE (MT)	220	4	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
VARIOUS	252+63	-	417+57.19	REMOVING DISTRESSED ASPHALTIC SURFACE MILLING	BASE AGGREGATE/MILLED EXISTING HMA SURFACE	ASPHALTIC SURFACE (MT)	1010	3	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

3

FLUMES

465.0315

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	SY
0010	392+98	STH 66, LT	9
		TOTAL 0010	9
0020	10+76	TORUN ROAD, LT	9
0020	10+94	TORUN ROAD, RT	9
		TOTAL 0020	18
		PROJECT 6280-02-77 TOTAL	27

CENTERLINE RUMBLE STRIPS

465.0560

ASPHALTIC RUMBLE STRIPS, CENTERLINE

CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	192+50	-	386+75	STH 66	15,893
0010	409+00	-	417+57	STH 66	857
				TOTAL 0010	16,750

ASPHALTIC DRIVEWAYS

465.0120

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	LOCATION	TON	REMARKS
0010	120+29	STH 66, RT	3	PE
0010	123+69	STH 66, LT	3	PE
0010	126+35	STH 66, RT	3	PE
0010	126+92	STH 66, RT	4	PE
0010	127+06	STH 66, LT	3	PE
0010	128+06	STH 66, RT	3	PE
0010	128+88	STH 66, RT	3	PE
0010	129+85	STH 66, RT	3	PE
0010	130+47	STH 66, LT	3	PE
0010	132+55	STH 66, LT	4	PE
0010	133+69	STH 66, LT	3	PE
0010	134+88	STH 66, RT	3	PE
0010	135+21	STH 66, LT	3	PE
0010	136+17	STH 66, RT	4	PE
0010	137+95	STH 66, RT	3	PE
0010	138+88	STH 66, LT	3	PE
0010	143+01	STH 66, RT	3	PE
0010	145+49	STH 66, RT	3	PE
0010	148+14	STH 66, RT	4	PE
0010	149+77	STH 66, RT	3	PE
0010	151+59	STH 66, LT	2	PE
0010	151+91	STH 66, LT	2	PE
0010	152+71	STH 66, RT	3	PE
0010	156+02	STH 66, LT	3	PE
0010	158+65	STH 66, LT	3	PE
0010	166+68	STH 66, LT	4	GREEN CIRCLE TRAIL
0010	166+68	STH 66. RT	3	GREEN CIRCLE TRAIL
0010	169+45	STH 66, RT	4	PE
0010	169+74	STH 66, LT	3	PE
0010	170+82	STH 66, LT	4	PE
0010	171+30	STH 66, LT	3	PE
0010	172+88	STH 66, LT	3	PE
0010	176+08	STH 66, LT	4	PE
0010	182+52	STH 66, LT	3	PE
0010	184+25	STH 66, RT	6	CE
0010	188+87	STH 66, RT	4	PE
0010	207+75	STH 66, RT	4	PE
0010	217+08	STH 66, RT	4	PE
0010	221+86	STH 66, LT	4	PE
0010	223+06	STH 66, LT	3	PE
0010	224+32	STH 66, RT	3	PE
0010	225+85	STH 66, LT	5	CE
0010	228+34	STH 66, LT	3	PE
0010	232+35	STH 66, LT	3	PE
0010	381+63	STH 66, LT	4	CE
0010	383+13	STH 66, LT	3	PE
0010	384+40	STH 66, LT	3	PE
0010	393+28	STH 66, LT	2	PE
0010	395+01	STH 66, LT	3	CE
0010	399+32	STH 66, LT	3	CE
0010	405+67	STH 66, LT	8	CE
0010	410+15	STH 66, LT	2	PE
		TOTAL 0010	175	

3

STORM SEWER PIPE SCHEDULE

PIPE LOCATION					INVERT			520.8000	* 522.1012	608.0312	608.0330	* 633.5200
CATEGORY	FROM	TO	ROADWAY	LOCATION	INLET	DISCHARGE	SLOPE	CONCRETE COLLARS FOR PIPE EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	MARKERS CULVERT END EACH
0010	1.0	1.1	STH 66	251+65 RT	1114.21	1114.09	1.00%	-	1	13	-	1
0010	-	2.0	STH 66	394+00 RT	1166.19	1166.19	0.25%	1	-	-	5	-
0010	2.0	-	STH 66	394+05 RT	1166.21	1166.21	0.25%	1	-	-	5	-
0010	3.0	-	STH 66	394+70 RT				1	-	5	-	-
							TOTAL 0010	3	1	18	10	1

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

CULVERT PIPE

			522.0430 CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH	* 522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	* 633.5200 MARKERS CULVERT END	650.6000 CONSTRUCTION STAKING PIPE CULVERTS
CATEGORY	LOCATION	STATION	LF	EACH	EACH	EACH	EACH
0010	STH 66	235+90	63	-	2	2	1
0010	ELLIS ROAD, LT	10+80	-	1	-	1	-
0010	ELLIS ROAD, RT	11+06	-	1	-	1	-
		TOTAL 0010	63	2	2	4	1

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

CURB AND GUTTER

		601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER
CATEGORY	LOCATION	LF	LF	LF
0010	NE QUADRANT STH 66/CTH Y	-	95	95
0010	ELLIS RD/CTH J	500	-	500
	TOTAL 0010	500	95	595
0020	TORUN RD	-	153	153
	TOTAL 0020	0	153	153
	PROJECT 6280-02-77 TOTAL	500	248	748

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	MISCELLANEOUS QUANTITIES	SHEET 85	E

3

SIDEWALK

CATEGORY	STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9500.01 CONSTRUCTION STAKING SIDEWALK (PROJECT) (6280-02-77) EACH	REMARKS
0010	166+70	STH 66	200	40	2	1	GREEN CIRCLE TRAIL
		TOTAL 0010	200	40	2	1	

CONCRETE DRIVEWAY

CATEGORY	STATION	LOCATION	602.0810 CONCRETE DRIVEWAY 6-INCH SY	REMARKS
0010	136+69	STH 66, LT	13	PE
0010	137+79	STH 66, LT	16	PE
0010	156+66	STH 66, RT	15	PE
		TOTAL 0010	44	

CONCRETE BARRIER

CATEGORY	STATION	TO	STATION	LOCATION	603.0105 CONCRETE BARRIER SINGLE-FACED 32-INCH LF
0010	251+57	-	251+73	STH 66, RT	16
				TOTAL 0010	16

3

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	606.0100 RIPRAP LIGHT CY	606.0200 RIPRAP MEDIUM CY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2002 EROSION MAT CLASS I TYPE A SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	645.0120 GEOTEXTILE TYPE HR SY	645.0130 GEOTEXTILE TYPE R SY	REMARKS
0010	135+00	-	149+00	STH 66 LT	5	-	356	356	1,314	10	5	-	16	ASSUMED 1 ROCK BAG FOR EACH DRIVEWAY CULVERT
0010	135+00	-	149+00	STH 66 RT	-	-	-	-	120	-	7	-	-	ASSUMED 1 ROCK BAG FOR EACH DRIVEWAY CULVERT
0010	235+51	-	236+37	STH 66 LT & RT	-	4	206	206	414	-	3	13	-	ASSUMED 3 ROCK BAGS FOR 30" CULVERT
0010	249+00	-	250+65	STH 66 LT	-	-	-	-	306	-	-	-	-	GUARDRAIL REPLACEMENT
0010	251+16	-	252+50	STH 66 RT	2	-	156	156	25	-	-	6	-	NEW STORM SEWER
0010		ELLIS ROAD		STH 66 LT	1	-	282	282	70	-	-		4	CURB & GUTTER REPLACEMENT
0010		CTH J		STH 66 RT	-	-	183	183	42	-	-	-	-	CURB & GUTTER REPLACEMENT
0010		UNDISTRIBUTED			2	1	296	296	573	3	4	5	5	
				TOTAL 0010	10	5	1,479	1,479	2,864	13	19	24	25	

STORM SEWER STRUCTURE SCHEDULE

CATEGORY	STRUCTURE NUMBER	(1) STATION	OFFSET FT	OFFSET LOCATION	CASTING HEIGHT INCHES	TOP SLAB THICKNESS INCHES	ADJUSTING RINGS HEIGHT INCHES	RIM ELEVATION	(2) TOP OF STRUCTURE ELEVATION	CRITICAL BOTTOM PIPE ELEVATION	PIPE SIZE BOTTOM OF ELEVATION INCHES	PIPE THICKNESS FOR BOTTOM ELEVATION INCHES	BOTTOM OF STRUCTURE ELEVATION	(3) DEPTH OF STRUCTURE FT	611.0610 INLET COVERS TYPE BW EACH	611.0624 INLET COVERS TYPE H EACH	611.3225 INLETS 2X2.5-FT EACH	611.3230 INLETS 2X3-FT EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.01 SPECIAL (5-FT DIAMETER INLET) EACH
0010	1.0	251+65	19.6' RT	STH 66	10.00	0.00	6.00	1117.09	1115.76	1114.21	12.00	2.00	1114.04	1.72	1	-	1	-	1	-
0010	2.0	394+02.25	32.1' RT	STH 66	6.00	8.00	3.00	1170.04	1169.29	1166.19	30.00	3.50	1165.89	3.40	-	1	-	-	1	1
0010	3.0	394+75.52	49.2' RT	STH 66	6.00	0.00	6.00	1170.19	1169.19	1167.41	12.00	2.00	1167.24	1.95	-	1	-	1	1	-
														TOTAL 0010	1	2	1	1	3	1

3

INLET COVERS

			611.8115
			ADJUSTING INLET COVERS
CATEGORY	STATION	LOCATION	EACH
0010	394+70	STH 66, LT	1
		TOTAL 0010	1

GUARDRAIL REPLACEMENT

					614.0950
					REPLACING GUARDRAIL POSTS AND BLOCKS
CATEGORY	STATION	TO	STATION	LOCATION	EACH
0010	248+68	-	253+96	STH 66 RT	50
0010	251+17	-	263+87	STH 66 LT	225
				TOTAL 0010	275

3

REPLACING BEAMGUARD

					614.2300	614.2350	614.2500	614.2610
					MGS GUARDRAIL 3	MGS GUARDRAIL SHORT RADIUS	MGS THRIE BEAM TRANSITION	MGS GUARDRAIL TERMINAL EAT
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF	EACH
0010	249+05	-	249+54	STH 66	-	99	-	-
0010	249+54	-	250+25	STH 66	71	-	-	-
0010	250+25	-	250+65	STH 66	-	-	39	-
0010	11+01	-	11+30	CTH Y	-	-	-	1
				TOTAL 0010	71	99	39	1

FENCE

					*
					616.0204
					FENCE CHAIN LINK 4-FT
CATEGORY	STATION	TO	STATION		LF
0010	249+15	-	249+76		62
0010	251+47	-	252+33		73
			TOTAL 0010		135

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

RESTORATION

					625.0100	629.0210	630.0120	630.0500	
					TOPSOIL	FERTILIZER TYPE B	SEEDING MIXTURE NO. 20	SEED WATER	
CATEGORY	STATION	TO	STATION	LOCATION	SY	CWT	LB	MGAL	REMARKS
0010	135+00	-	149+00	STH 66 LT	1,314	0.80	24	7.38	
0010	135+00	-	149+00	STH 66 RT	120	0.10	2	0.67	
0010	235+50	-	236+36	STH 66 LT & RT	414	0.30	7	2.32	CULVERT REPLACEMENT
0010	249+00	-	250+65	STH 66 LT	306	0.20	6	1.72	GUARDRAIL REPLACEMENT
0010	251+16	-	252+50	STH 66 RT	25	0.00	0	0.14	NEW STORM SEWER
0010		ELLIS ROAD		STH 66 LT	70	0.00	1	0.39	CURB & GUTTER REPLACEMENT
0010		CTH J		STH 66 RT	42	0.00	1	0.24	CURB & GUTTER REPLACEMENT
				TOTAL 0010	2,291	1.4	41	12.86	

MONUMENTS

			621.0100	SPV.0060.02
			LANDMARK REFERENCE MONUMENTS	SPECIAL (REESTABLISH SECTION CORNER MONUMENTS)
CATEGORY	STATION	LOCATION	EACH	EACH
0010	219+59	STH 66	4	1
0010	367+67	STH 66	4	1
0010	394+52	STH 66	4	1
		TOTAL 0010	12	3

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EC MOBILIZATION

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	6280-02-77	5	3
	TOTAL 0010	5	3

INLET PROTECTION

CATEGORY	STATION	LOCATION	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	REMARKS
0010	10+87	TORUN RD, LT	1	-	
0010	249+57	STH 66, LT	1	-	
0010	250+06	STH 66, LT	-	1	
0010	251+65	STH 66, RT	1	-	
0010	253+80	STH 66, LT/RT	2	-	INLET COVERS BOLTED DOWN. CONTRACTOR SHALL PREVENT SEDIMENT/DEBRIS FROM ENTERING INLET WHEN OPERATIONS ARE IN THE AREA.
0010	394+02	STH 66, RT	-	1	
0010	394+69	STH 66, LT/RT	-	2	
		TOTAL 0010	5	4	

3

PERMANENT SIGNS

CATEGORY	SIGN CODE	SIGN DIMENSIONS W	X	H	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	REMARKS
0010	W11-2	36	X	36	1	9.00	
0010	W11-2	36	X	36	1	9.00	
0010	W16-7L	30	X	18	-	3.75	MOUNTED ON SAME POST AS W11-2 SIGN
0010	W16-7L	30	X	18	-	3.75	MOUNTED ON SAME POST AS W11-2 SIGN
			TOTAL 0010		2	26.00	

SIGNS

CATEGORY	SIGN CODE	SIGN MESSAGE	STATION	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	648.0100 LOCATING NO-PASSING ZONES MI	REMARKS
0010	W14-3	NO PASSING ZONE	6280-02-77	STH 66	10	-	-	5.89	
				TOTAL 0010	10	0	0	5.89	
0020	R4-7	KEEP RIGHT SYMBOL	10+30	TORUN RD, LT	-	1	1	-	MEDIAN ISLAND
0020	R1-1	STOP	10+47	TORUN RD, LT	1	-	-	-	MOVING FROM MEDIAN ISLAND
0020	W12-1D	DOUBLE ARROW	10+54	TORUN RD, LT	-	1	1	-	MEDIAN ISLAND
				TOTAL 0020	1	2	2	0	
				PROJECT TOTAL	11	2	2	5.89	

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TEMPORARY PEDESTRIAN CROSSING

CATEGORY	LOCATION	643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH LF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
0010	GREEN CIRCLE TRAIL	88	179
	TOTAL 0010	88	179

TEMPORARY PAVEMENT MARKING

CATEGORY	LOCATION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	643.3265 TEMPORARY MARKING LINE PAINT 10-INCH LF
0010	PROJECT 6280-02-77 (LOWER LAYER)	79,457	513
0010	PROJECT 6280-02-77 (UPPER LAYER)	79,457	513
	TOTAL 0010	158,914	1,026

3

TRAFFIC CONTROL

CATEGORY	STATION	DURATION CALENDAR DAYS**	* 643.0300 TRAFFIC CONTROL DRUMS DAY	* 643.0900 TRAFFIC CONTROL SIGNS DAY
0010	STAGE 1 CULVERT REPLACEMENT	2	52	12
0010	STAGE 2 CULVERT REPLACEMENT	2	52	12
0010	MILLING/PAVING OPERATIONS	68	-	408
0010	FIXED MESSAGE SIGN OVERVIEW	7	-	14
0010	ADVANCED WIDTH RESTRICTION	114	-	2052
0010	GREEN CIRCLE TRAIL PEDESTRIAN ACCOMODATIONS	2	-	12
0010	UNDISTRIBUTED		10	251
0010	PROJECT 6280-02-77	-	-	-
		TOTAL 0010	114	2,761

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
** FOR INFORMATION PURPOSES ONLY

3

PERMANENT PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	646.2020 MARKING LINE EPOXY 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.7520 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH LF
0010	106+67.17	-	135+75	STH 66	-	7217	-	-	-	-	-	-
0010	149+00	-	192+50	STH 66	-	10624	-	-	-	-	-	110
0010	192+50	-	386+75	STH 66	-	47905	-	-	-	-	-	-
0010	386+75	-	409+00	STH 66	-	5,526	-	-	-	-	-	-
0010	409+00	-	417+57.19	STH 66	-	2,421	-	-	-	-	-	-
0010	10+35 Y	-	11+02 Y	CTH Y	176	-	-	-	-	20	-	-
0010	9+21 B	-	9+75 B	BRILOWSKI RD	110	-	-	-	-	30	-	-
0010	10+63 K	-	10+78 K	CTH K	30	-	-	-	-	15	-	-
0010	9+09 JS	-	9+40 JS	CTH J SOUTH	60	-	-	-	-	16	-	-
				TOTAL 0010	376	73,693	0	0	0	81	0	110
0020	135+75	-	149+00	TORUN RD	-	5,388	513	4	2	-	200	-
				TOTAL 0020	0	5,388	513	4	2	0	200	0
				PROJECT 6280-02-77 TOTAL	376	79,081	513	4	2	81	200	110

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	* 650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	* 650.9911.02 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (6280-02-77) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	135+76	-	148+86	STH 66	1,310	1,310	-	-	2,620
0010	235+45	-	236+46	STH 66	101	101	-	-	202
0010	11+55	-	10+37	CTH Y GUARDRAIL REPLACEMENT	-	-	-	-	118
0010	249+43	-	250+65	STH 66 GUARDRAIL REPLACEMENT	-	-	-	-	122
0010	106+67	-	250+54	STH 66	-	-	14,387	-	-
0010	252+73	-	417+57	STH 66	-	-	16,484	-	-
0010	-	-	-	PROJECT	-	-	-	1	-
				TOTAL 0010	1,411	1,411	30,871	1	3,062

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	106+67	-	169+61	STH 66 RT	557	DRIVEWAYS
0010	106+67	-	176+46	STH 66 LT	750	DRIVEWAYS
0010	251+57	-	251+73	STH 66 RT	11	NEW STORM SEWER
0010	11+45 'T'	-	12+00 'T'	TORUN RD	56	
0010	393+01 LT	-	394+34 LT	ELLIS RD	173	
0010	394+58 LT	-	395+88 LT	ELLIS RD	167	MANHOLE
0010	393+36.5 RT	-	394+43 RT	CTH J	151	
0010	394+73 RT	-	394+78 RT	CTH J	57	INLET
				TOTAL 0010	1,922	

SAWING CONCRETE

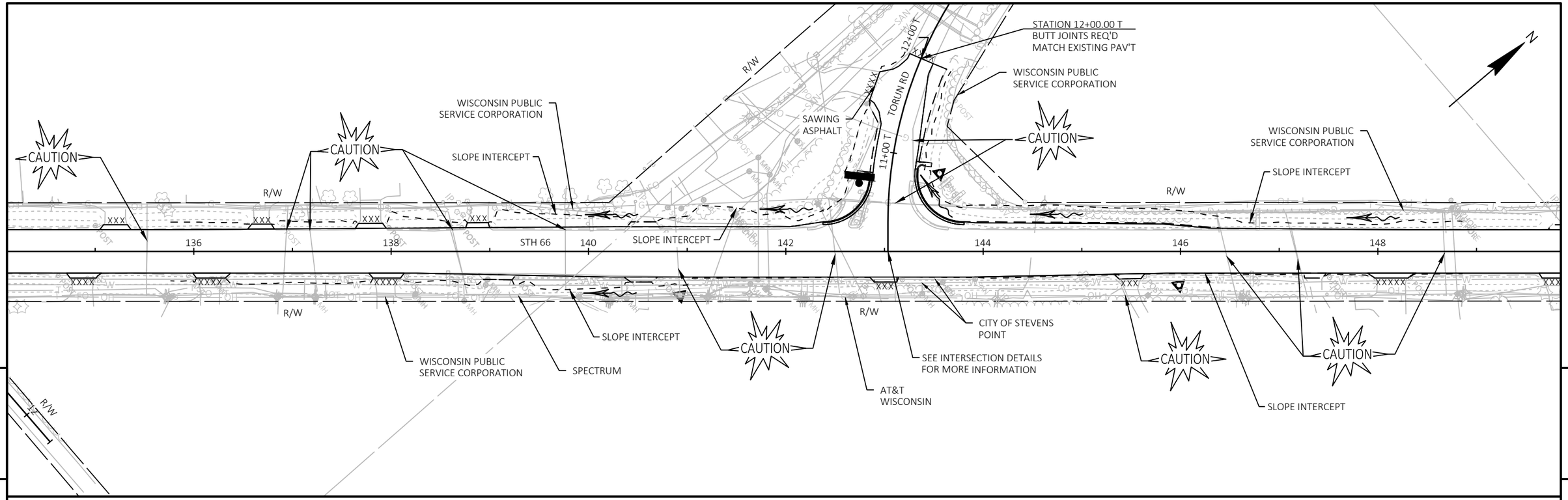
CATEGORY	STATION	TO	STATION	LOCATION	690.0250 SAWING CONCRETE LF
0010	394+58 LT	-	395+88 LT	ELLID RD	3
0010	393+36.5 RT	-	394+43 RT	CTH J	10
0010	394+73 RT	-	394+78 RT	CTH J	6
0010	251+57	-	251+73	STH 66 RT	7
0010		PROJECT		DRIVEWAYS	50
				TOTAL 0010	76

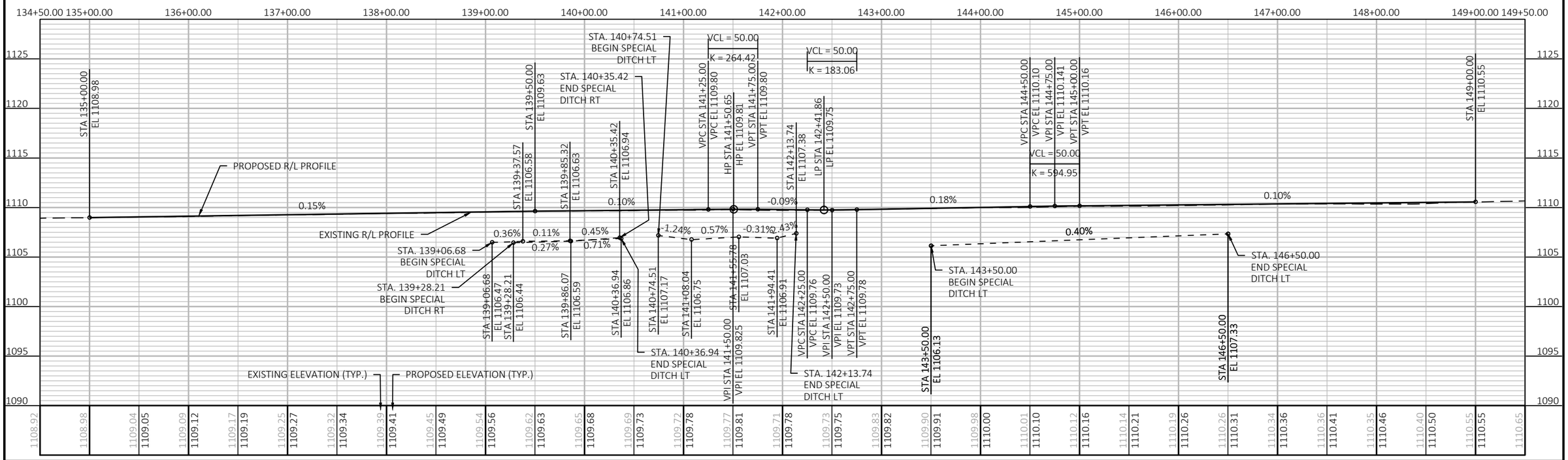
TEMPORARY PEDESTRIAN BYPASS

CATEGORY	STATION	LOCATION	SPV.0060.04 SPECIAL (TEMPORARY PEDESTRIAN BYPASS) EACH
0010	166+82	GREEN CIRCLE TRAIL LT	1
0010	166+82	GREEN CIRCLE TRAIL RT	1
		TOTAL 0010	2

ANIMAL BARRIER

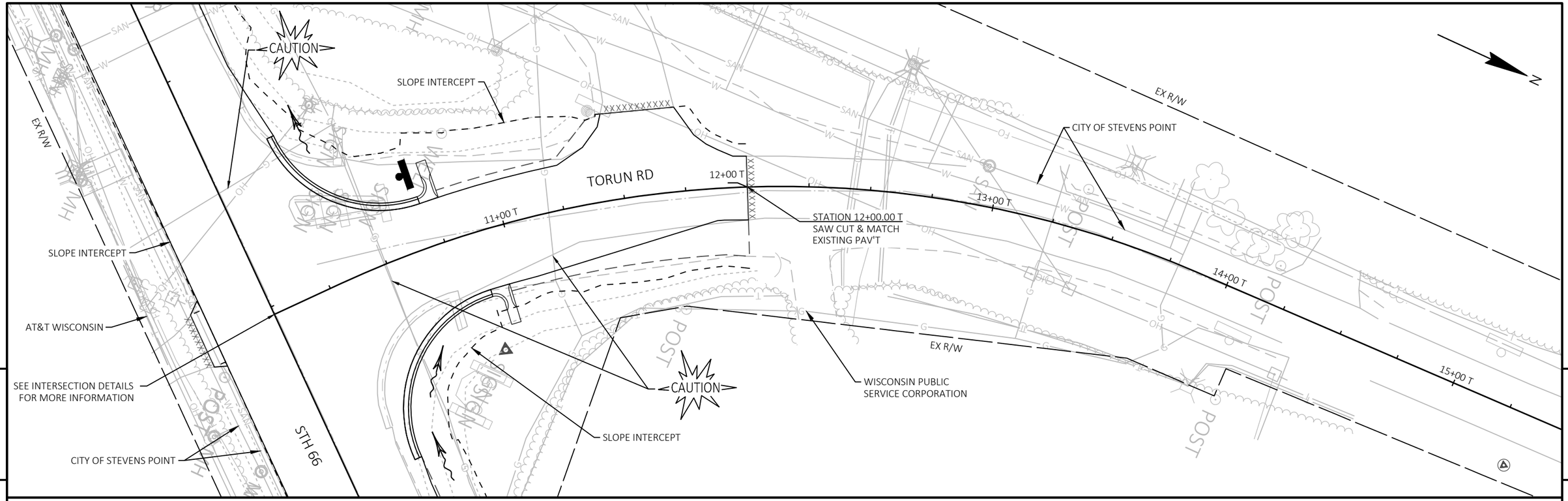
CATEGORY	STATION	TO	STATION	SPV.0090.01 SPECIAL (REMOVE, SALVAGE, AND REINSTALL EXISTING ANIMAL BARRIER) LF
0010	251+47	-	252+33	73
0010	252+76	-	252+97	21
			TOTAL 0010	94

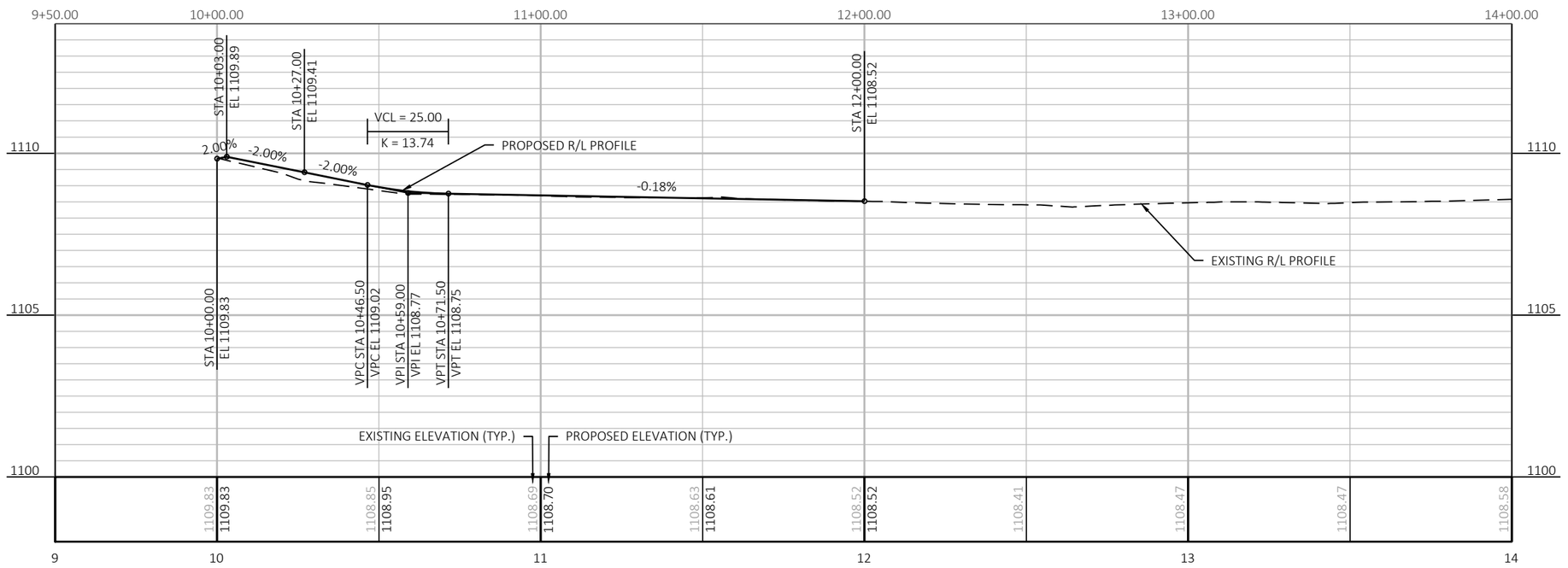




PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN AND PROFILE: STH 66	SHEET 92	E

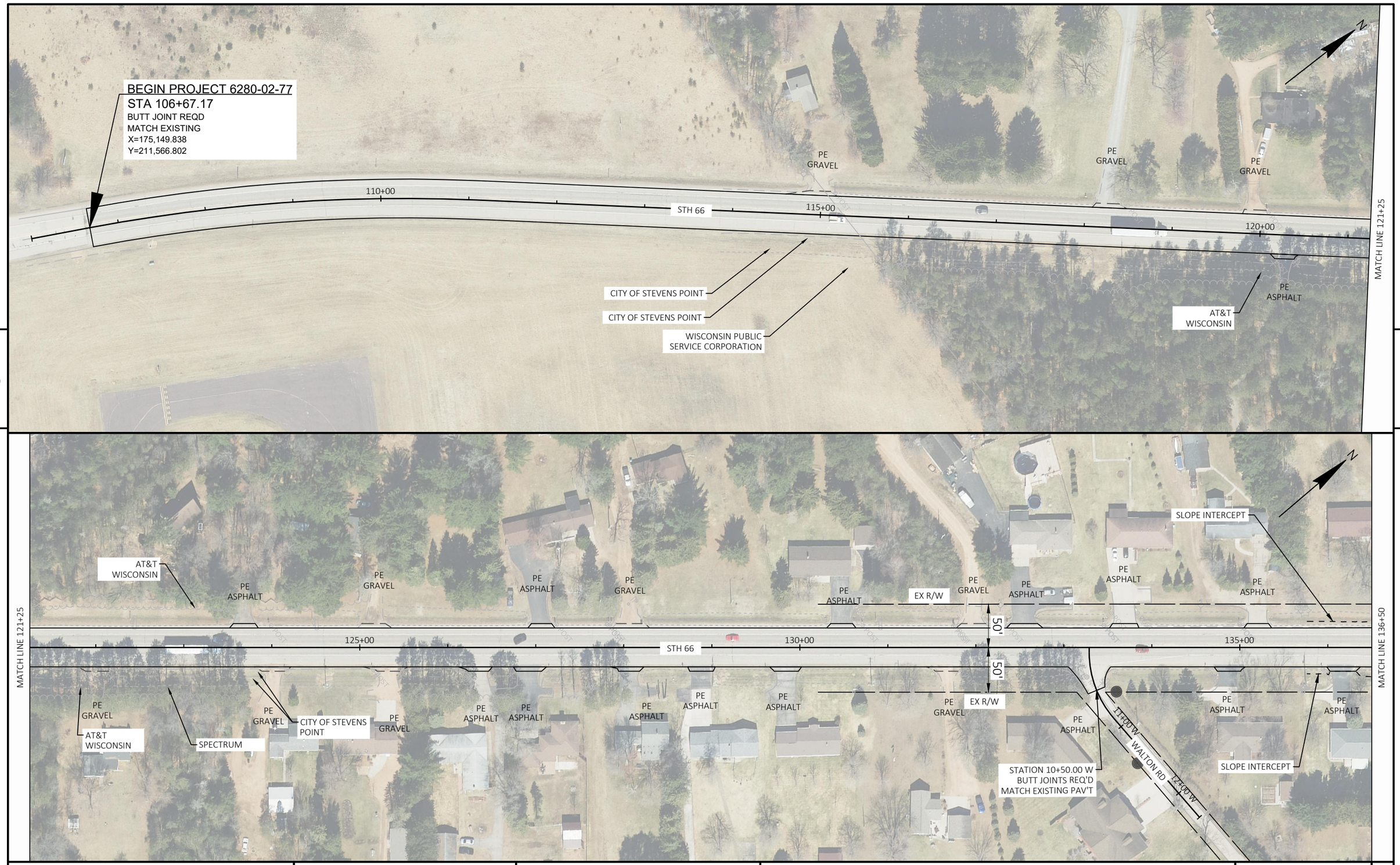
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 01
PLOT DATE : 4/11/2024 12:50 PM
PLOT BY : BRETT PETERSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN AND PROFILE: TORUN ROAD	SHEET 93	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050102-PP (TORUN RD).DWG
LAYOUT NAME - 02
PLOT DATE : 4/10/2024 4:06 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 94	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 01

PLOT DATE : 4/18/2024 2:26 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
701	143+56	1107.224	CP / MAG SPIKE
702	140+90	1110.690	CP / MAG SPIKE
703	145+98	1108.073	CP / MAG SPIKE

MATCH LINE 136+50

MATCH LINE 151+75

MATCH LINE 167+00

5

5

PE ASPHALT
PE CONCRTE
EX R/W
PE CONCRTE
PE ASPHALT
PE GRAVEL
WISCONSIN PUBLIC SERVICE CORPORATION
SLOPE INTERCEPT
REMOVING CURB & GUTTER
TORUN RD T
11+00 T
STATION 12+00.00 T SAW CUT & MATCH EXISTING PAV'T
WISCONSIN PUBLIC SERVICE CORPORATION
BM 701
REMOVING CURB & GUTTER
SLOPE INTERCEPT
EX R/W
WISCONSIN PUBLIC SERVICE CORPORATION
PE GRAVEL
AT&T WISCONSIN
PE ASPHALT
STH 66
140+00
N40°24'26"E
145+00
150+00
50'
50'
EX R/W
PE ASPHALT
PE GRAVEL
WISCONSIN PUBLIC SERVICE CORPORATION
SLOPE INTERCEPT
SPECTRUM
PE GRAVEL
BM 702
CAUTION
PE ASPHALT
AT&T WISCONSIN
CITY OF STEVENS POINT
SEE INTERSECTION DETAILS FOR MORE INFORMATION
EX R/W
PE ASPHALT
BM 703
PE GRAVEL
PE ASPHALT
PE ASPHALT
PE ASPHALT
PE GRAVEL
PE ASPHALT
PE ASPHALT
12+00 A
11+00 A
AIRPORT RD
STATION 10+62.00 A BUTT JOINTS REQ'D MATCH EXISTING PAV'T
EXISTING CURB & GUTTER TO REMAIN
EXISTING CURB & GUTTER TO REMAIN
AT&T WISCONSIN
GREEN CIRCLE TRAIL
PE ASPHALT
PE GRAVEL
PE ASPHALT
PE GRAVEL
PE ASPHALT
PE ASPHALT
EX R/W
50'
50'
EX R/W
155+00
STH 66
160+00
165+00
PE ASPHALT
PE GRAVEL
PE GRAVEL
PE GRAVEL
PE CONCRETE
PE GRAVEL
CE GRAVEL
PE GRAVEL
ANR PIPELINE CO
GREEN CIRCLE TRAIL

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 95	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 02

PLOT DATE : 4/18/2024 2:26 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 167+00

FE GRAVEL

AT&T WISCONSIN

PE ASPHALT

PE ASPHALT

PE ASPHALT

PE ASPHALT

PE GRAVEL

PE GRAVEL

PE ASPHALT

AT&T WISCONSIN

EXISTING CURB & GUTTER TO REMAIN

PE ASPHALT

ASPHALT

12+00 S

11+00 S

SOMERSET DR

STATION 10+71.20 S
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

EXISTING CURB & GUTTER TO REMAIN

N

170+00

175+00

180+00

STH 66

MATCH LINE 182+25

AT&T WISCONSIN

PE ASPHALT

CITY OF STEVENS POINT

AT&T WISCONSIN

SPECTRUM

PE GRAVEL

PE GRAVEL

PE GRAVEL

MATCH LINE 182+25

PE ASPHALT

PE GRAVEL

13+00

12+00 ME

MEADOW VIEW LN

11+00 ME

STATION 10+77.49 ME
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

EXISTING CURB & GUTTER TO REMAIN

EXISTING CURB & GUTTER TO REMAIN

N

185+00

190+00

195+00

STH 66

PE GRAVEL

CE ASPHALT

PE ASPHALT

MATCH LINE 197+50

5

5

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 96	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 03

PLOT DATE : 4/18/2024 2:26 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 197+50

MATCH LINE 212+75

PE
GRAVEL

PE
GRAVEL

200+00

205+00

STH 66

210+00

SOUTH
PONDEROSA DR

11+00 SP

STATION 10+93.15 SP
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

EXISTING CURB &
GUTTER TO REMAIN

EXISTING CURB &
GUTTER TO REMAIN

EXISTING CURB &
GUTTER TO REMAIN

PE
ASPHALT

PLOVER
HEIGHTS RD

8+00 P

8+00 P

STATION 8+87.82 P
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

5

5

MATCH LINE 212+75

MATCH LINE 228+00

24
11 12
14 13
8

T
N
R
E

FE
GRAVEL

PE
ASPHALT

PE
ASPHALT

CE
ASPHALT

PE
GRAVEL

215+00

220+00

STH 66

225+00

PE
GRAVEL

PE
ASPHALT

PE
GRAVEL

PE
ASPHALT

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 97	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 04

PLOT DATE : 4/18/2024 2:26 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
706	249+89	1118.120	CP /MAG SPIKE
707	249+81	1115.460	CP /MAG SPIKE
708	250+07	1105.540	CP /MAG SPIKE
709	253+09	1116.070	CP /MAG SPIKE

5

MATCH LINE 228+00

PE ASPHALT

230+00

PE ASPHALT

SLOPE INTERCEPT

I.E. = 1116.14
29.90' LT

STA 235+90
63' - CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH @ 1.09%
WITH (2) APRON ENDWALLS FOR CULVERT
PIPE REINFORCED CONCRETE 30-INCH

CE GRAVEL

EX R/W

SPECTRUM

CE GRAVEL

235+00

STH 66

240+00

EXISTING CURB & GUTTER TO REMAIN

PE ASPHALT

12+00 D

DEER LN

11+00 D

STATION 10+95.28 D
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

EX R/W

N

MATCH LINE 243+25

REMOVING SMALL PIPE CULVERTS

I.E. = 1115.46
32.73' RT

EX R/W

SLOPE INTERCEPT

WISCONSIN PUBLIC SERVICE CORPORATION

EXISTING CURB & GUTTER TO REMAIN

CE ASPHALT

EX R/W

5

EXISTING ANIMAL BARRIER FENCE TO REMAIN

REPLACING GUARDRAIL POSTS AND BLOCKS

JORDAN POND

AMHERST TEL CO

SLOPE INTERCEPT

BM 706

REMOVE AND REPLACE GUARDRAIL
(SEE CONSTRUCTION DETAILS)

END PROJECT 6820-02-76
STA 252+72.59

STATION 11+01.07 Y
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

CTH Y

12+00 Y

11+00 Y

AT&T WISCONSIN

REMOVING CURB & GUTTER
CONCRETE CURB AND GUTTER 6-INCH
SLOPED 36-INCH TYPE D
(DRIVEWAY ENTRANCE CURB)

EXISTING CURB & GUTTER TO REMAIN

C-49-15

REPLACING GUARDRAIL POSTS AND BLOCKS

SPECTRUM

EX R/W

EXISTING INLETS

WISCONSIN PUBLIC SERVICE CORPORATION

EX R/W

56'

69'

EX R/W

245+00

250+00

B-49-73

BM 707

STH 66

255+00

B-49-74

BM 709

MATCH LINE 243+25

WISCONSIN PUBLIC SERVICE CORPORATION

SEE STORM SEWER PLAN

BM 708

FENCE CHAIN LINK 4-FT

BEGIN PROJECT 6820-02-76
STA 250+54.44

EXISTING CURB & GUTTER TO REMAIN

MATCH LINE 258+50

9+00 B

FE GRAVEL

STATION 9+20.73 B
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

REPLACING GUARDRAIL POSTS AND BLOCKS

BRILOWSKI RD

8+00 B

WISCONSIN PUBLIC SERVICE CORPORATION

EX R/W

REPLACING GUARDRAIL POSTS AND BLOCKS

SPECTRUM

AMHERST TEL CO

PLOVER RIVER

EXISTING ANIMAL BARRIER FENCE TO REMAIN

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 98	E

MATCH LINE 258+50

REPLACING GUARDRAIL POSTS AND BLOCKS

CE GRAVEL

260+00

265+00

STH 66

270+00

MATCH LINE 273+75

EXISTING CURB & GUTTER TO REMAIN

BRYCELL RD

STATION 9+38.00 BR
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

5

5

N

N

PE GRAVEL

PE GRAVEL

STH 66

FE GRAVEL

FE GRAVEL

MATCH LINE 273+75

MATCH LINE 289+00

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 99	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 4/18/2024 2:27 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT



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5

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 100	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 07
PLOT DATE : 4/18/2024 2:27 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 101	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 08
PLOT DATE : 4/18/2024 2:27 PM
PLOT BY : CAMERON B. MCDONALD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

MATCH LINE 350+00

STH 66

FE
GRAVEL

STATION 9+50.00 MU
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

9+00 MU

MUSIC DR

8+00 MU

N

5

5

12+00 K

PE
ASPHALT

CTH K

STATION 11+77.38 K
BUTT JOINTS REQ'D
MATCH EXISTING PAV'T

EXISTING CURB &
GUTTER TO REMAIN

PE
GRAVEL

PE
GRAVEL

PE
GRAVEL

STA. 377+00 TO STA. 381+00 LT
SENSITIVE AREA
SEE PROJECT SPECIAL
PROVISIONS FOR DETAILS

CE
GRAVEL

N

370+00

375+00

380+00

STH 66

MATCH LINE 365+25

MATCH LINE 380+50

CE
GRAVEL

T 24 N
R 9 E
7

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 102	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 09

PLOT DATE : 4/18/2024 2:27 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
704	394+15	1170.510	CP /MAG SPIKE
705	394+89	1171.419	CP /MAG SPIKE

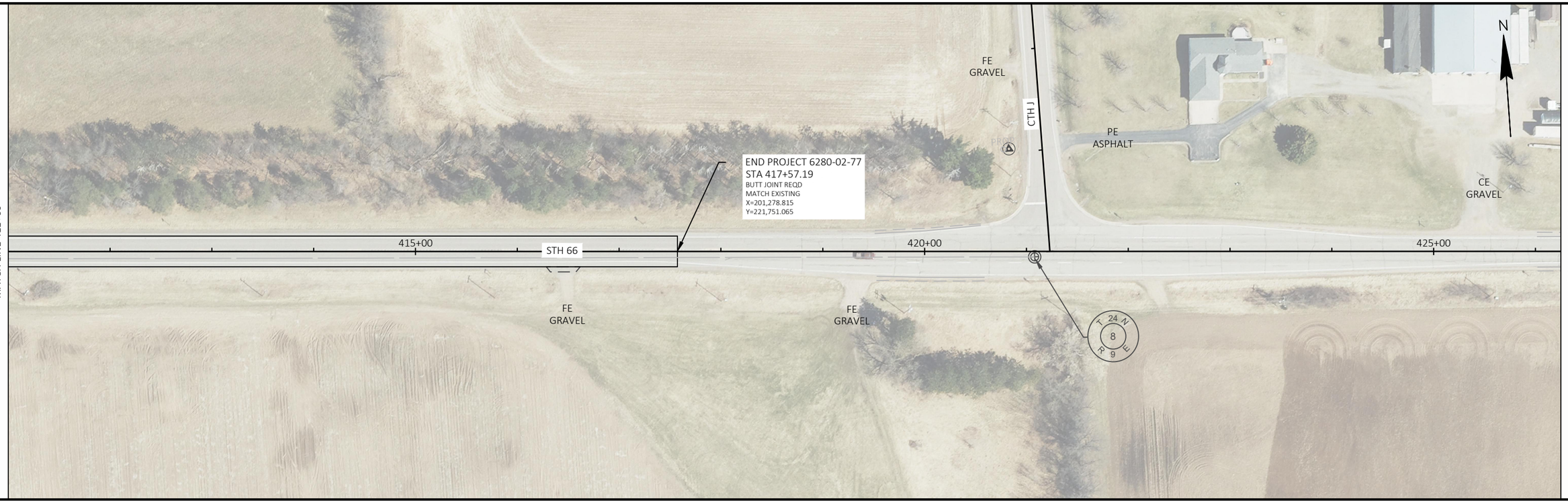
MATCH LINE 380+50

CE GRAVEL
CE ASPHALT
PE ASPHALT
PE ASPHALT
PE GRAVEL
385+00
STH 66
390+00
CE GRAVEL
EX R/W
41'
49'
EX R/W
CAUTION
WISCONSIN PUBLIC SERVICE CORPORATION
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH
STATION 10+59.91 E BUTT JOINTS REQ'D MATCH EXISTING PAV'T
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH
ADJUSTING INLET COVERS
CONCRETE CURB & GUTTER 30-INCH TYPE D
PE GRAVEL
BM 704
PE ASPHALT
SLOPE INTERCEPT
CAUTION
31'
35'
12+00 E
EX R/W
EX R/W
ELLIS RD
11+00 E
N
CAUTION
CE GRAVEL
CE ASPHALT
EX R/W
395+00
SEE STORM SEWER PLAN
BM 705
CE ASPH
EX R/W
SLOPE INTERCEPT
FE GRAVEL
CONCRETE CURB & GUTTER 30-INCH TYPE D
SEE STORM SEWER PLAN
9+00 JS
CE ASPHALT
STATION 9+09.38 JS BUTT JOINTS REQ'D MATCH EXISTING PAV'T
WISCONSIN PUBLIC SERVICE CORPORATION
CTH J
8+00 JS
EX R/W
EX R/W
34'
32'
MATCH LINE 395+75

CE GRAVEL
EX R/W
33'
33'
CE ASPHALT
EX R/W
CE ASPHALT
CE ASPHALT
CE GRAVEL
CE GRAVEL
PE GRAVEL
CE ASPHALT
FE GRAVEL
PE ASPHALT
STH 66
CE GRAVEL
CE GRAVEL
N
MATCH LINE 411+00

PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 103	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 10
PLOT DATE : 4/18/2024 2:27 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



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PROJECT NO: 6280-02-77	HWY: STH 66	COUNTY: PORTAGE	PLAN	SHEET 104	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 11

PLOT DATE : 4/18/2024 2:27 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:100 FT

Standard Detail Drawing List

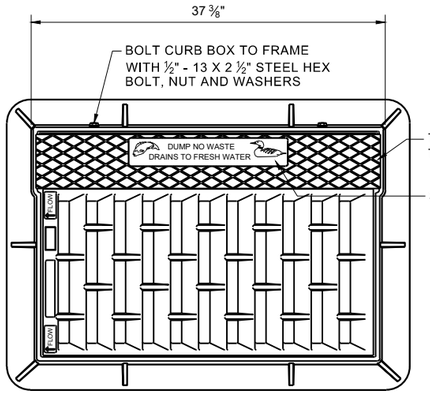
08A05-20A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-20D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B22-07A	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B22-07B	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B53-02A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

6

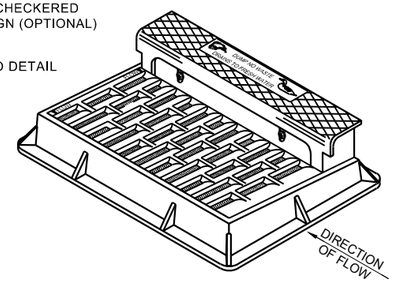
Standard Detail Drawing List

14B53-02H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C35-06B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-06C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D33-09	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

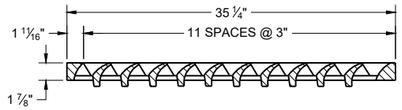
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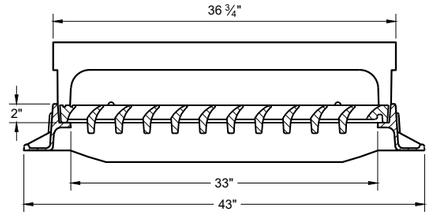


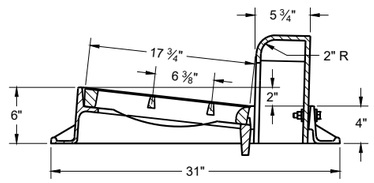
NOTE: EITHER CASTING IS ACCEPTABLE

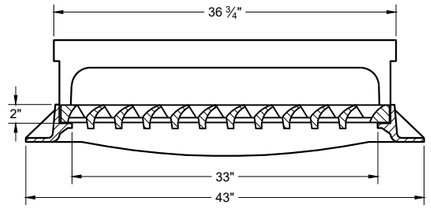


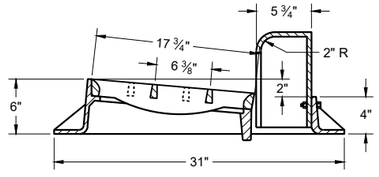
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







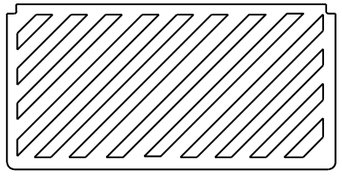




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

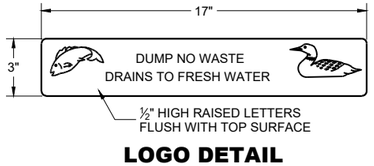
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



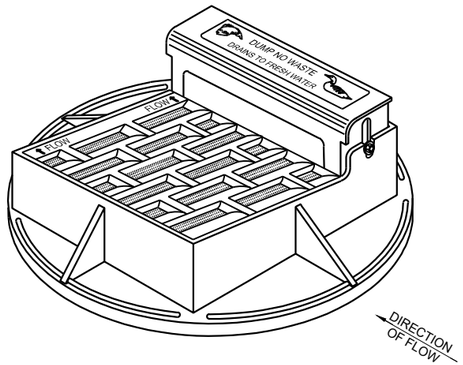
LOGO DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

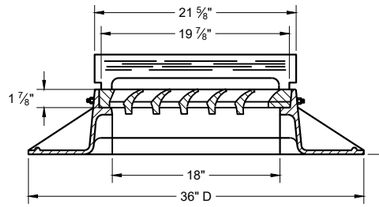
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

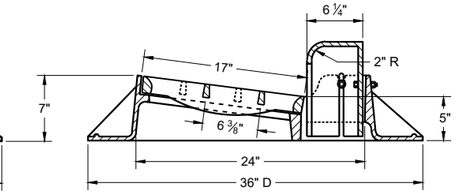
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



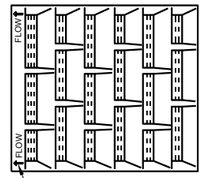
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

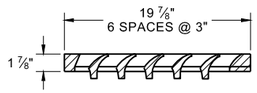
NOTE: EITHER CASTING IS ACCEPTABLE



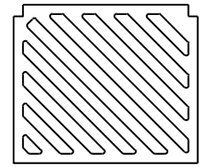


TYPE "A"





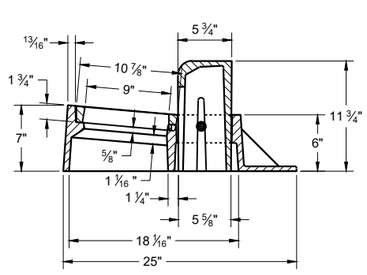
1" DIAGONAL BARS WITH 1 ½" OPENINGS



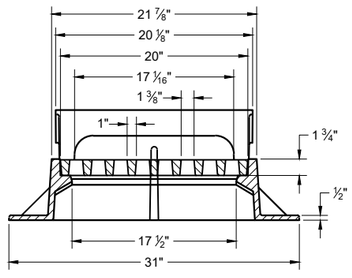
SPECIAL GRATE FOR TYPE "A" COVER

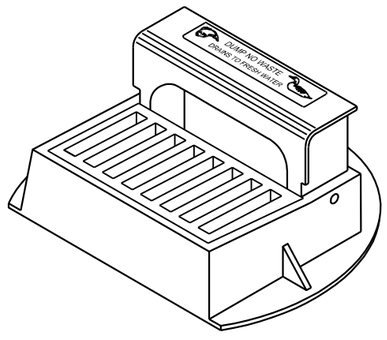
(MEASURES 19 ¾" X 17" X 1 ⅞")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

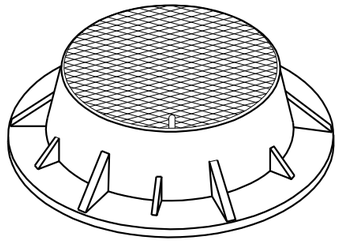
SDD 08A05-20a

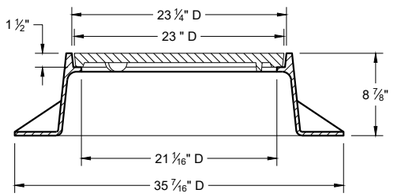
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

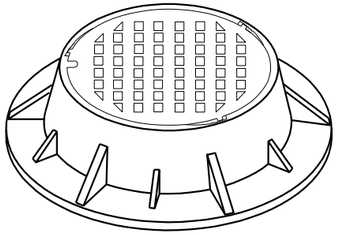
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

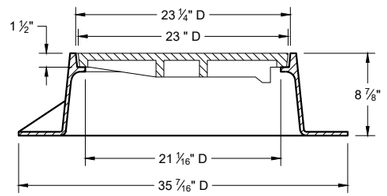




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

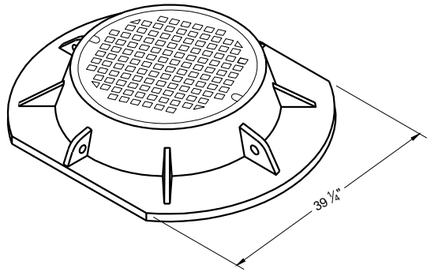


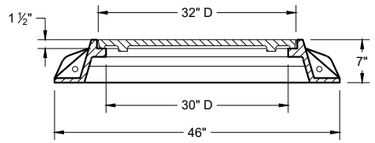


TYPE "J" SPECIAL

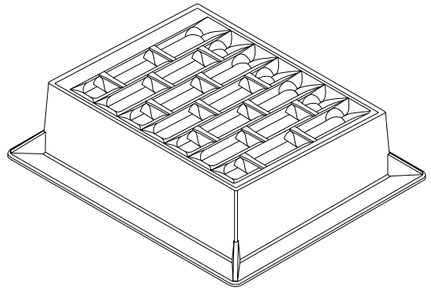
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

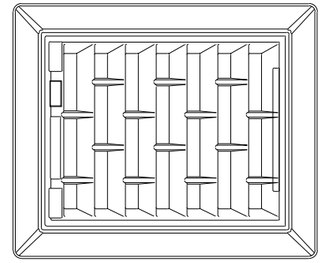
NOTE: EITHER CASTING IS ACCEPTABLE

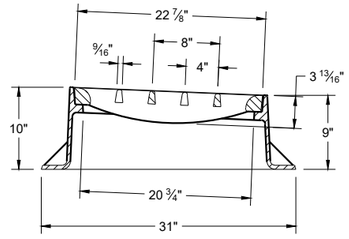


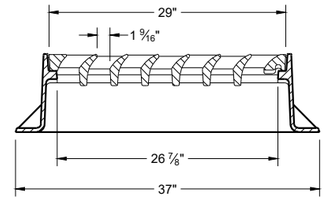


TYPE "K"

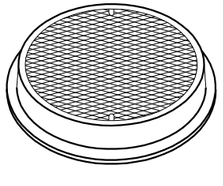


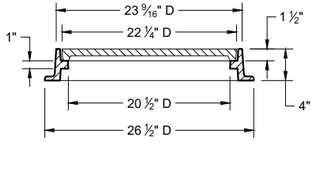




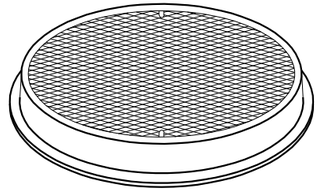


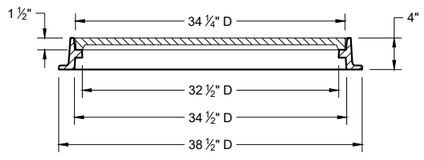
INLET COVER TYPE "BW"





TYPE "L"





TYPE "M"

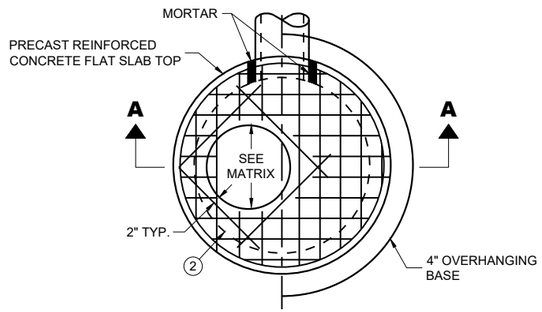
INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

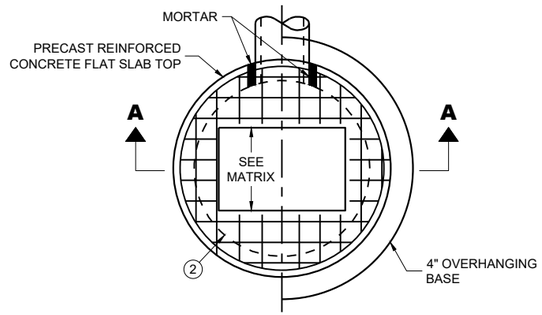
APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

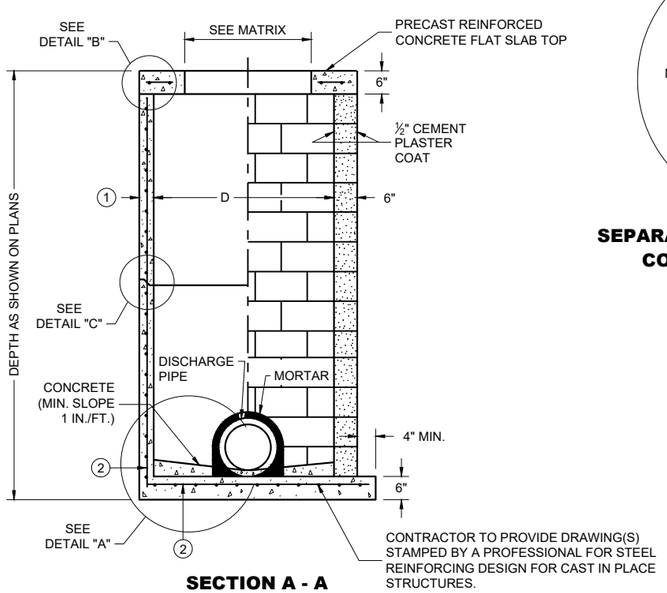
6
SDD 08A05-20d



PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

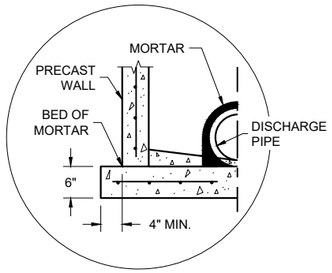
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

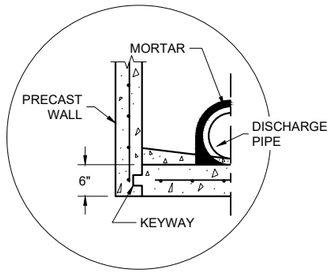
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

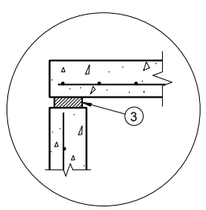


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

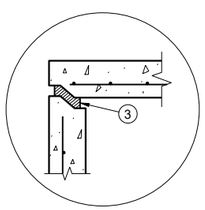


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

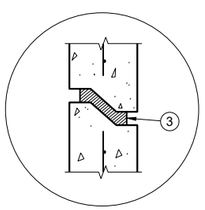
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

INLETS 3-FT AND 4-FT DIAMETER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

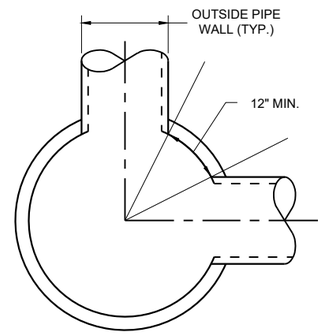
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

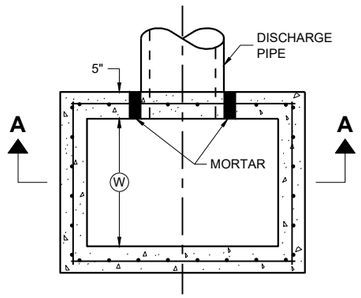
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

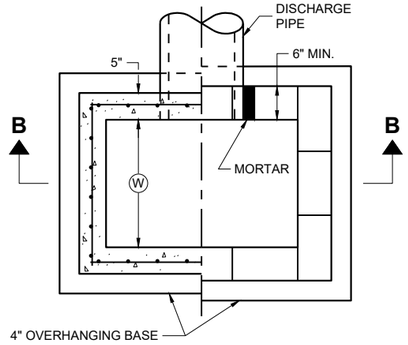
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December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

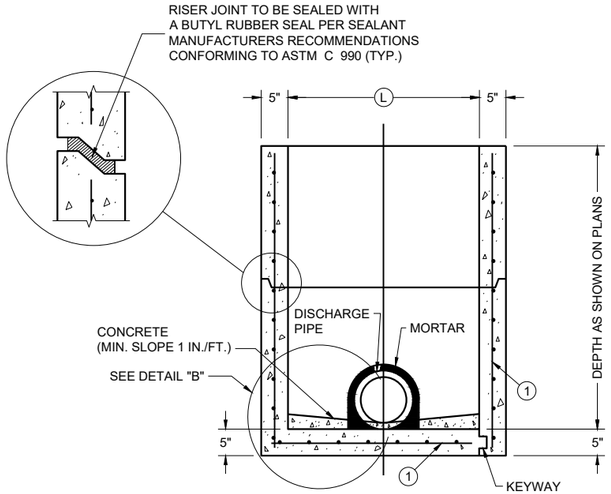
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SDD 08C06-03



PLAN VIEW



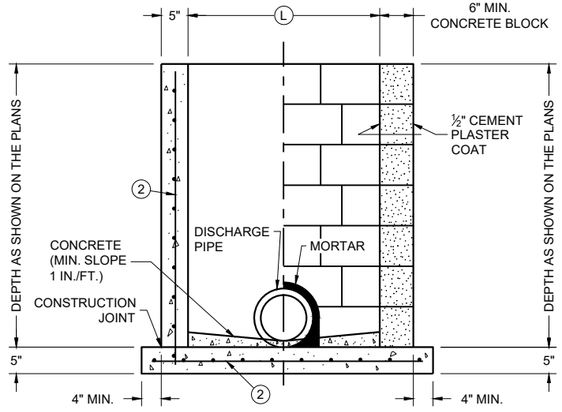
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

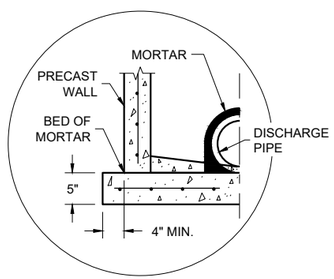
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

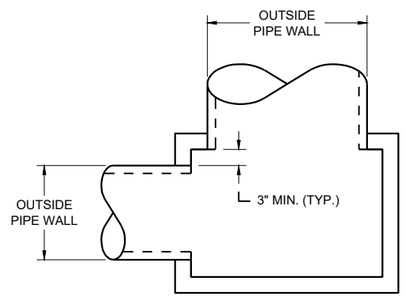
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

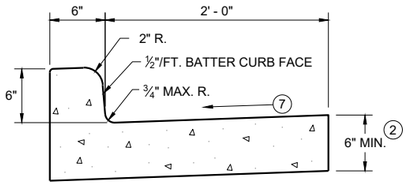
INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

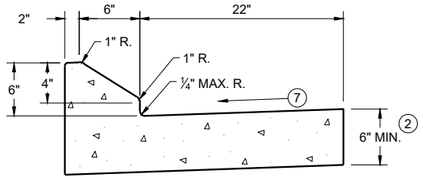
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

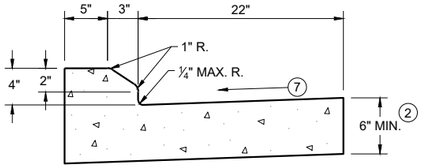
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SDD 08C07-03



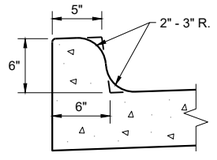
TYPES A (1) & D



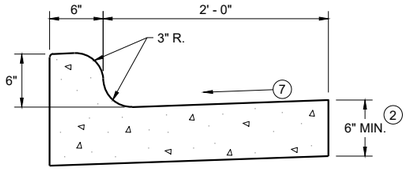
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

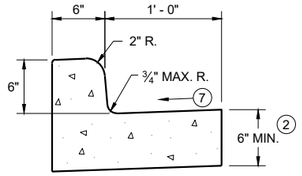


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



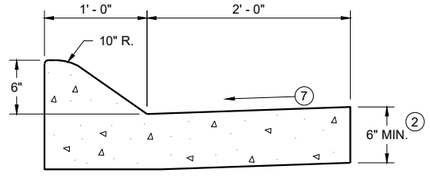
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

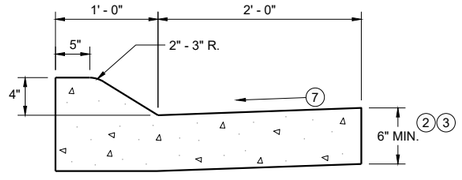


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

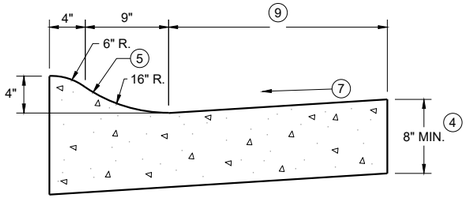


6" SLOPED CURB TYPES A (1) & D



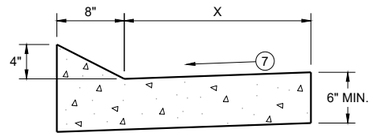
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

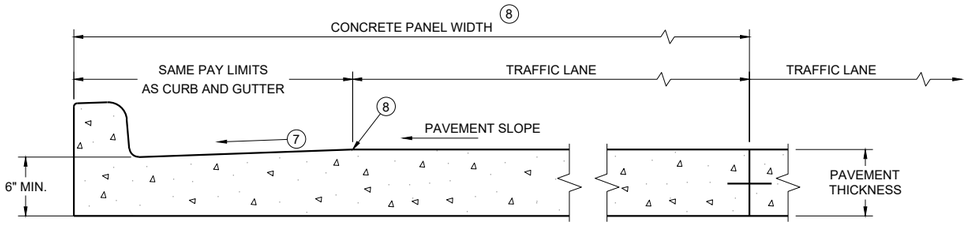


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

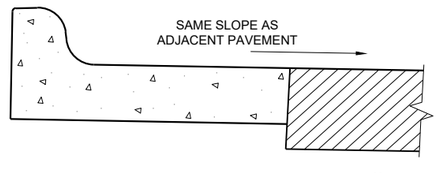
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

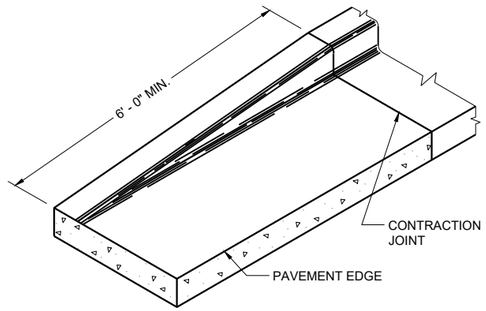
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

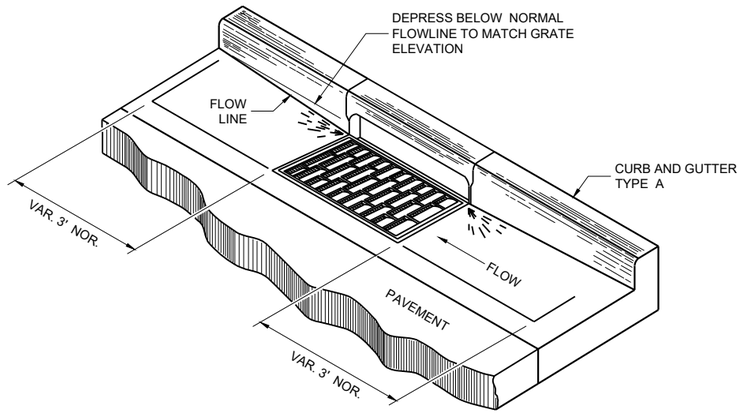
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

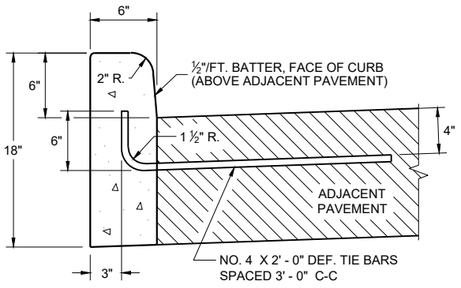
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

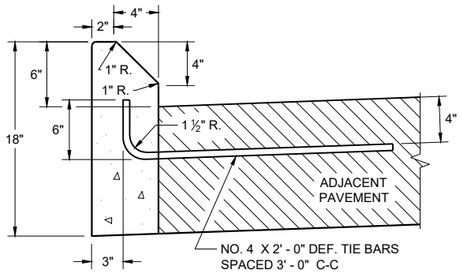
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

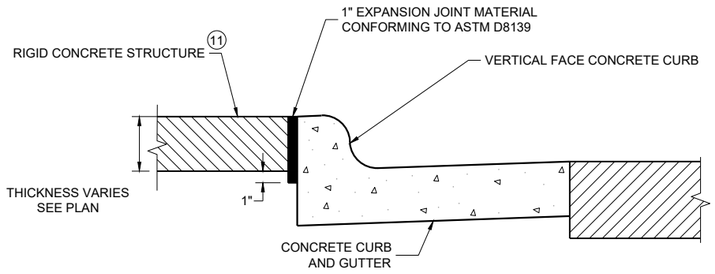


TYPES A (1) & D

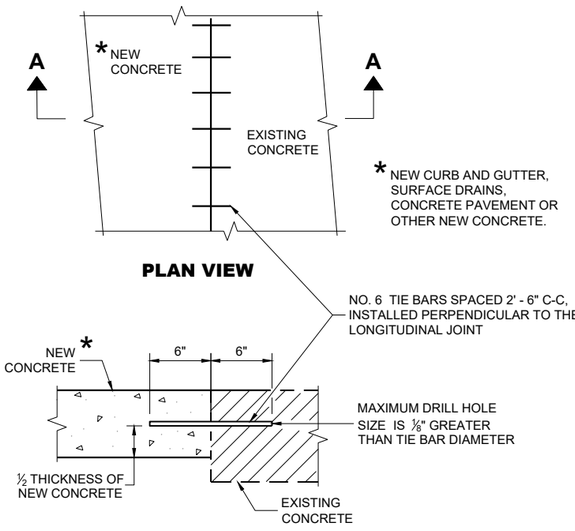


TYPES G (1) & J

CONCRETE CURB



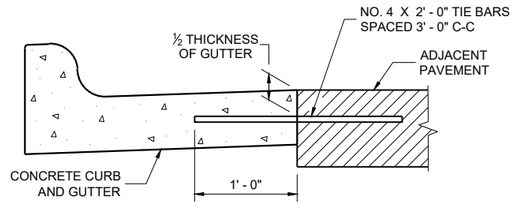
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



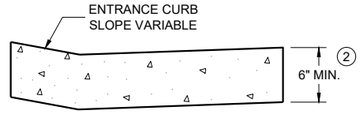
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

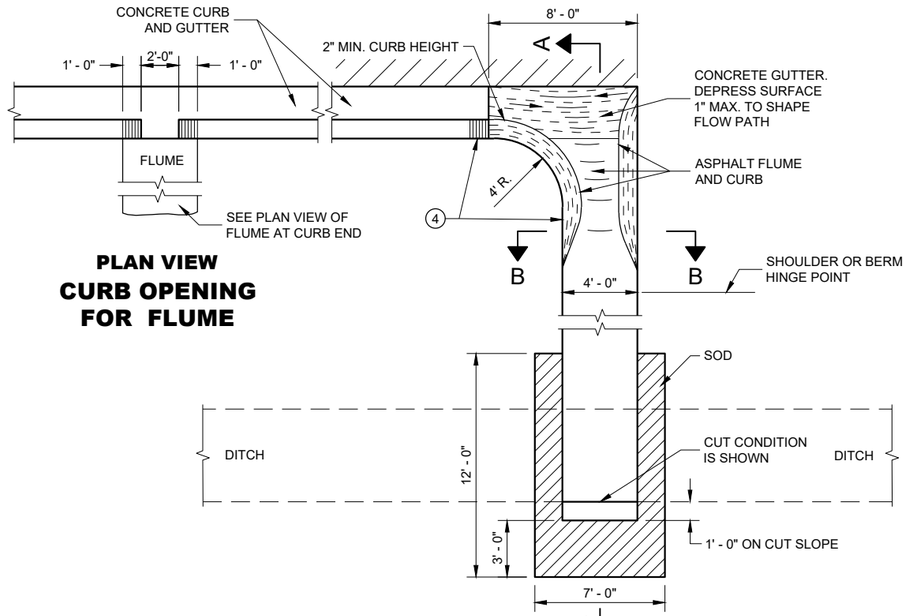
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

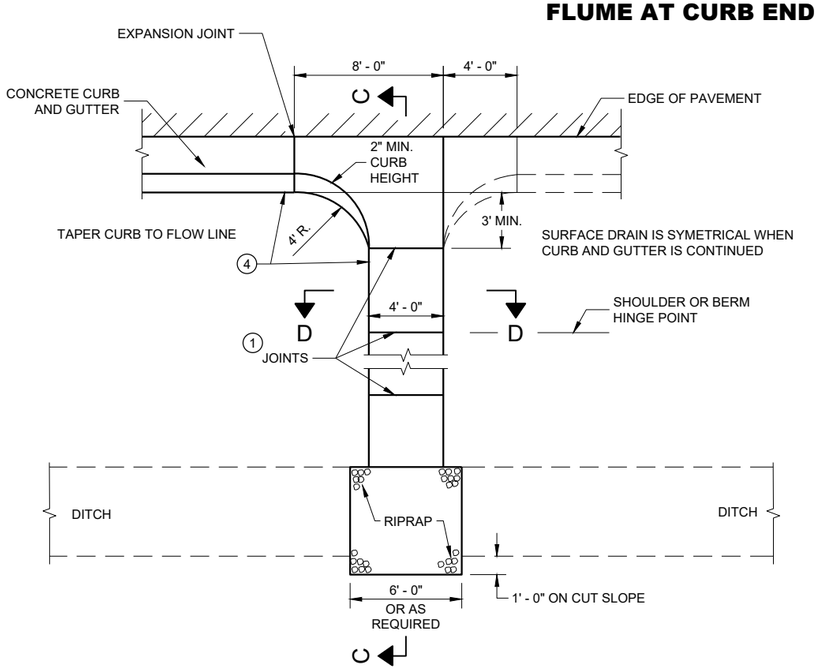
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



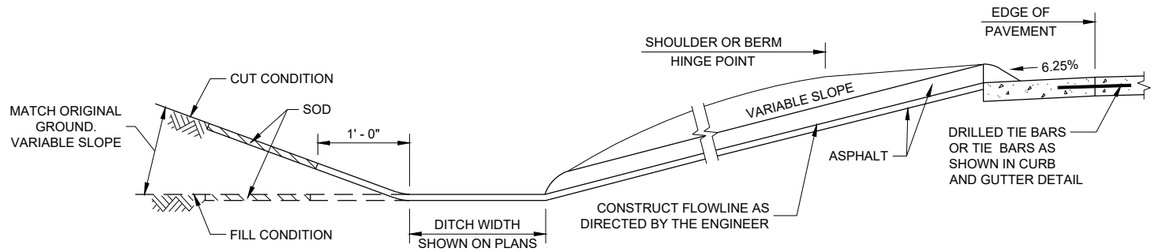
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

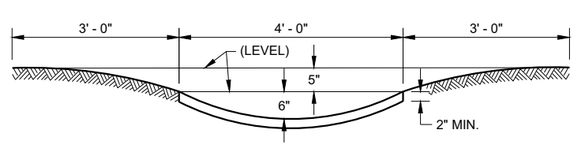
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

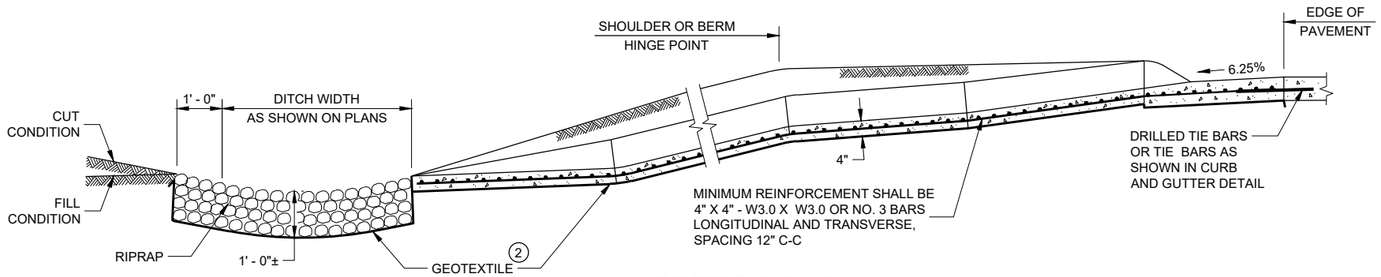
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



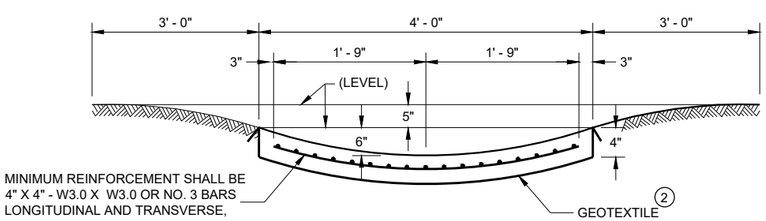
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

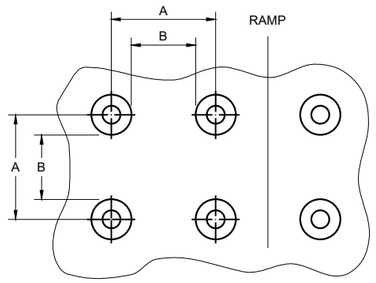
FHWA

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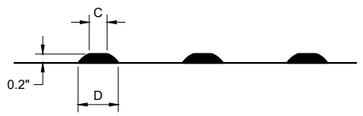
SDD 08D04 - 07

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

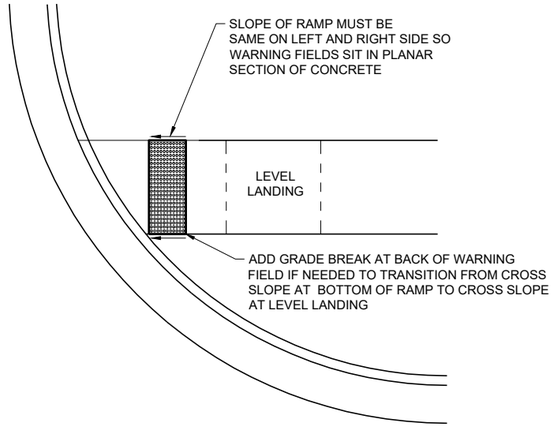
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

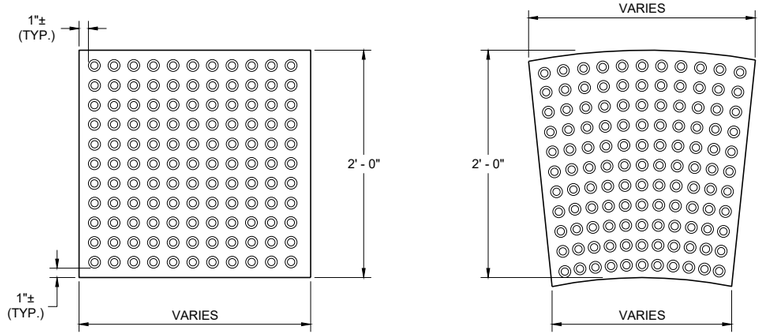
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

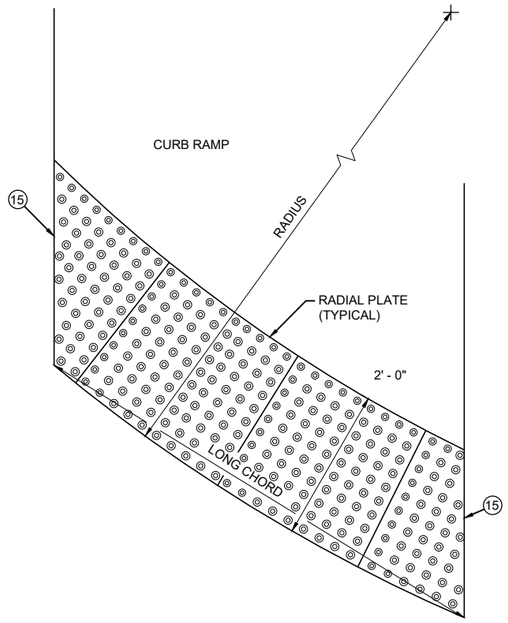
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



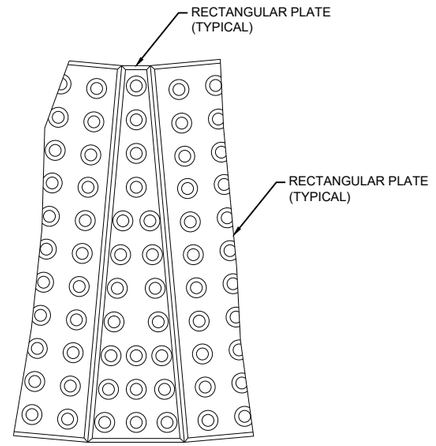
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

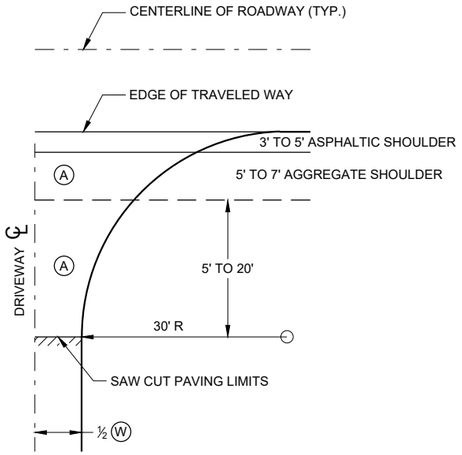
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SDD 08D05-21g

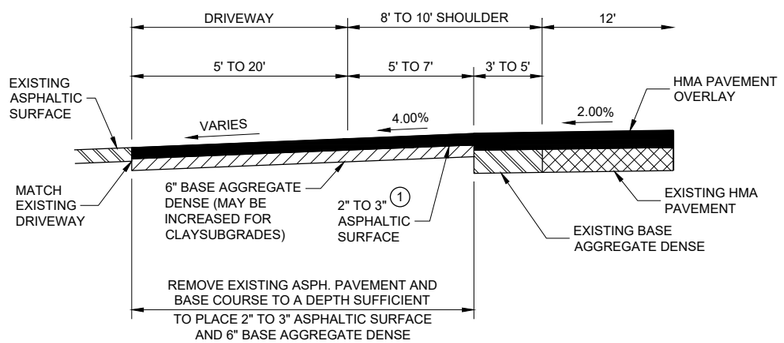
GENERAL NOTES

(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW

HALF SECTION



PROFILE VIEW

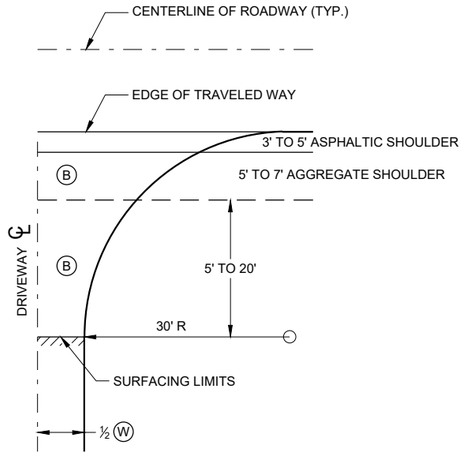
RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

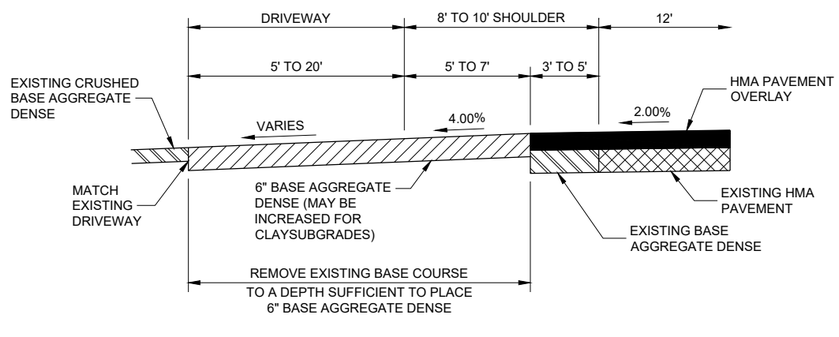
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE

RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

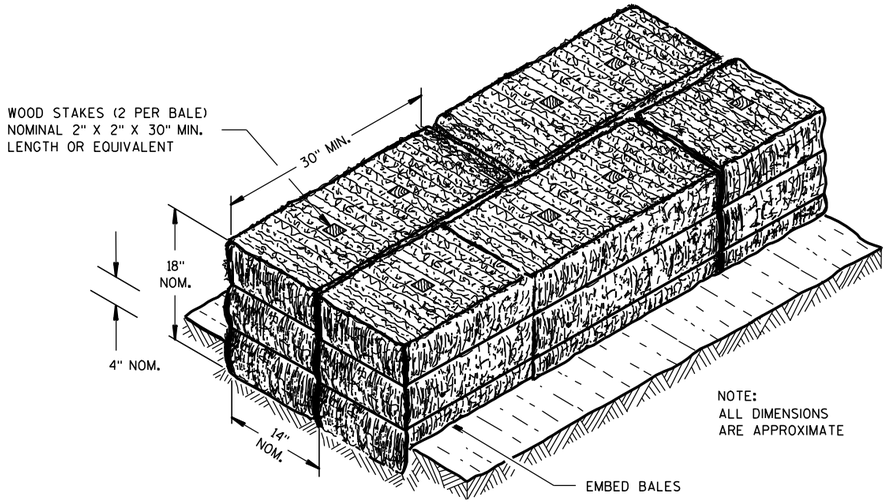
FHWA

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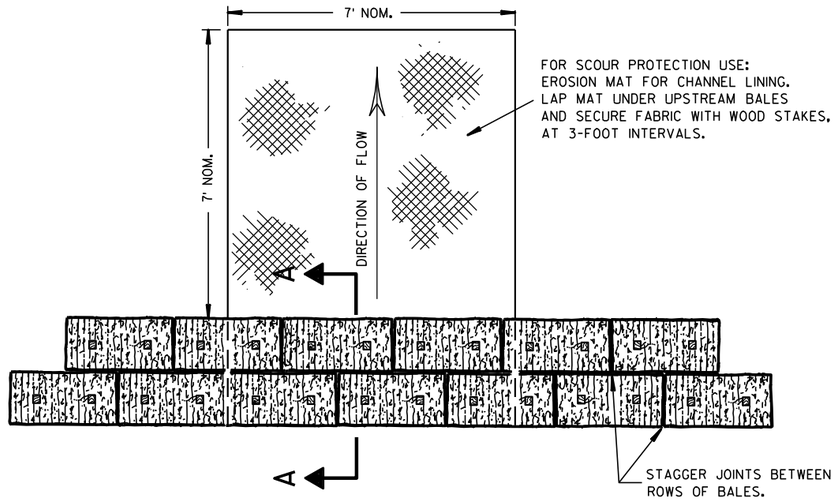
SDD 08D22 - 01

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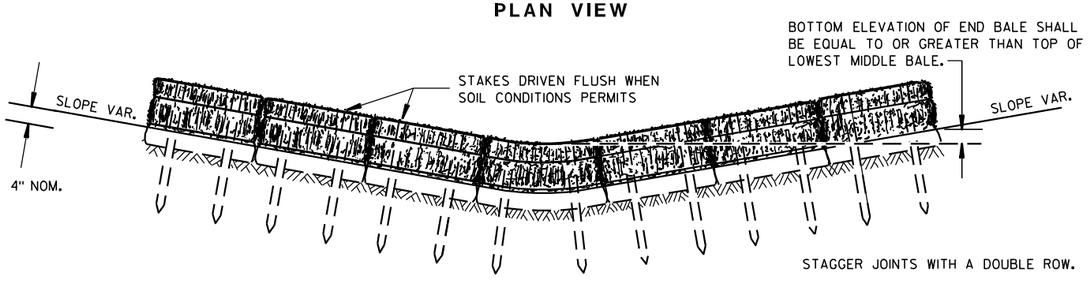
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



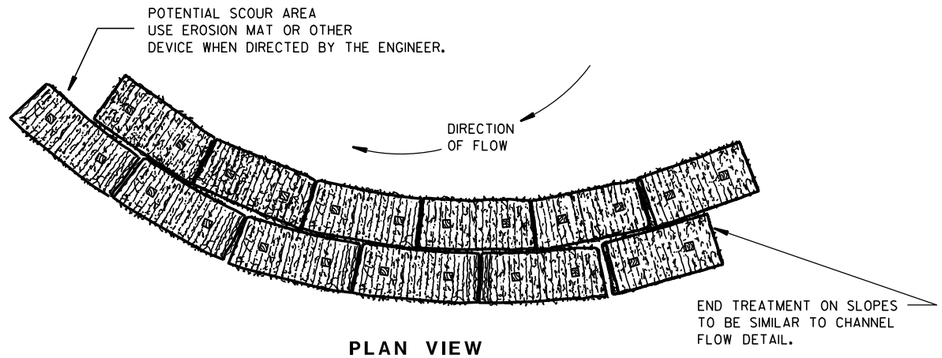
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

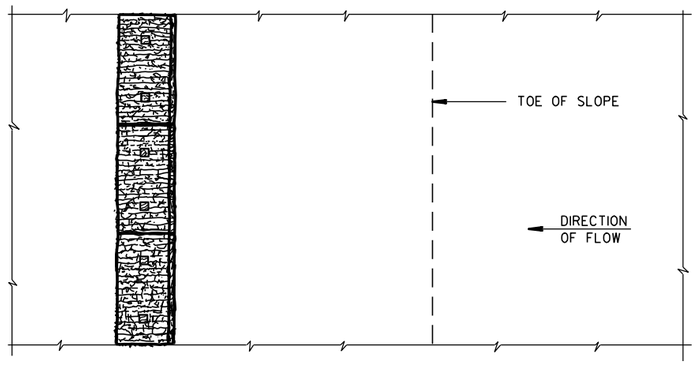
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

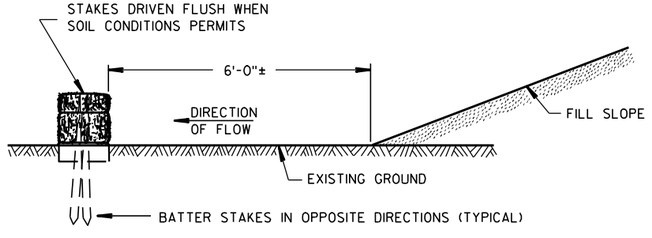


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

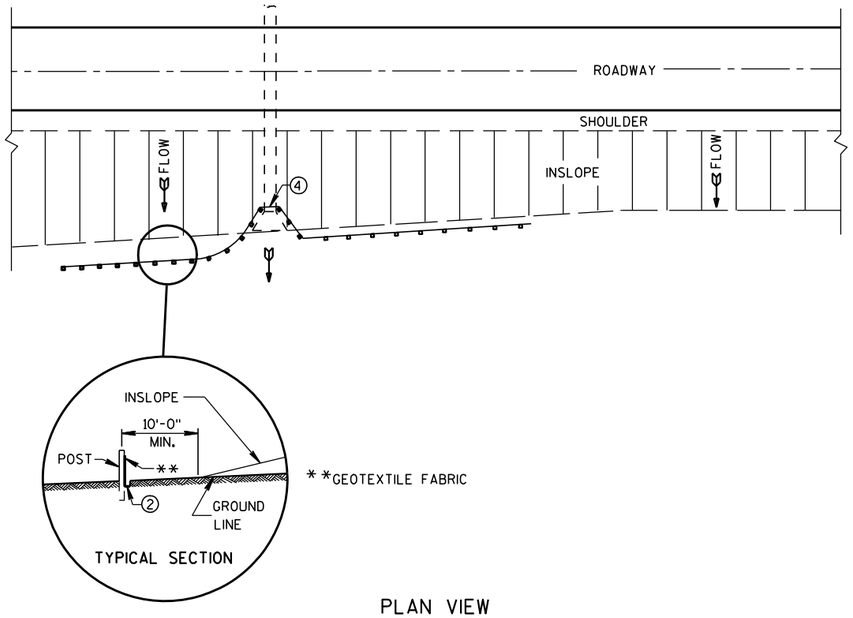
FHWA

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S.D.D. 8 E 8-3

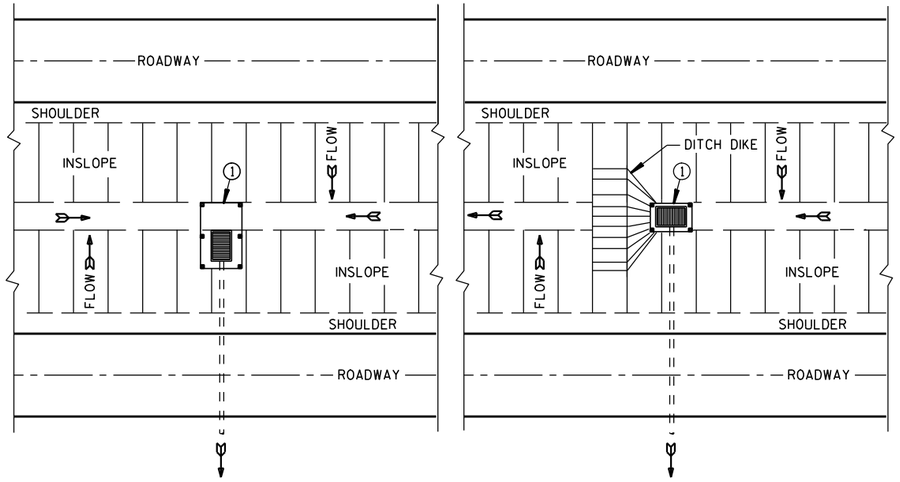
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



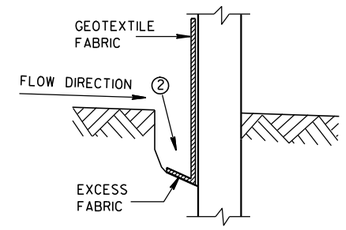
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

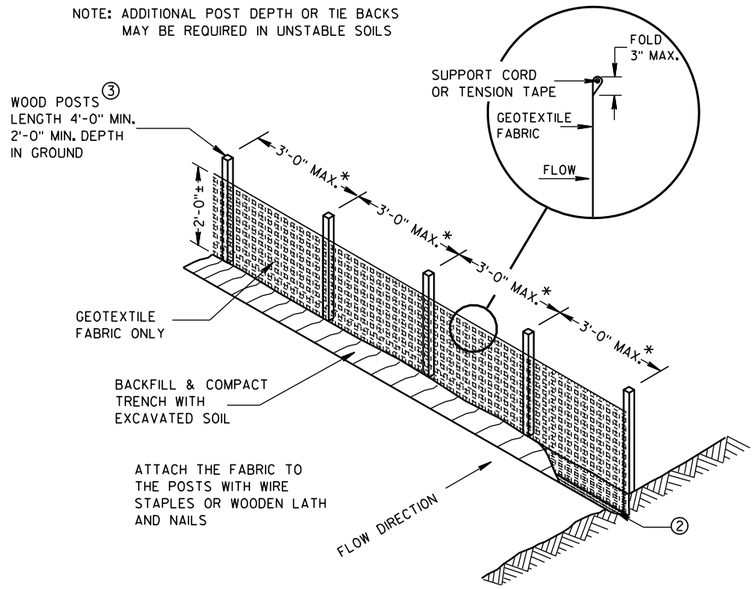
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

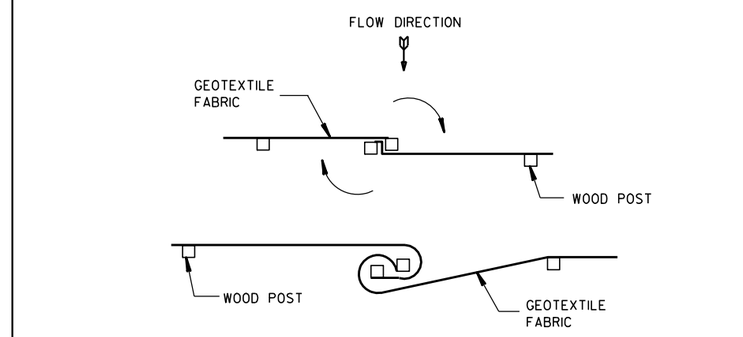
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



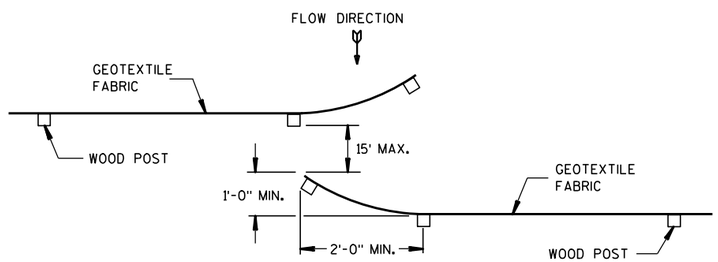
TRENCH DETAIL



SILT FENCE

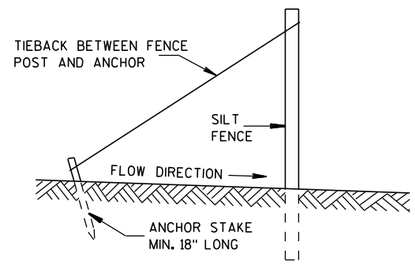


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

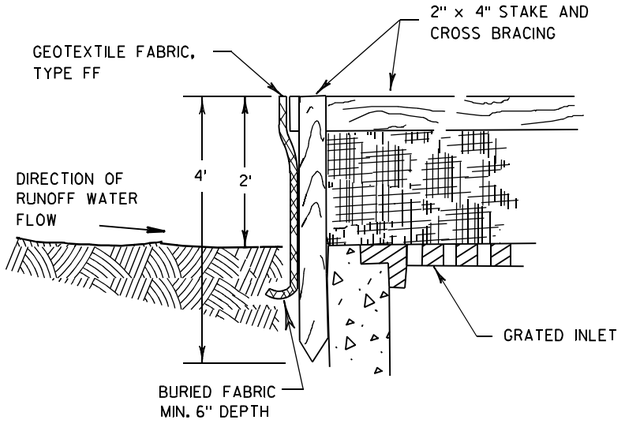
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

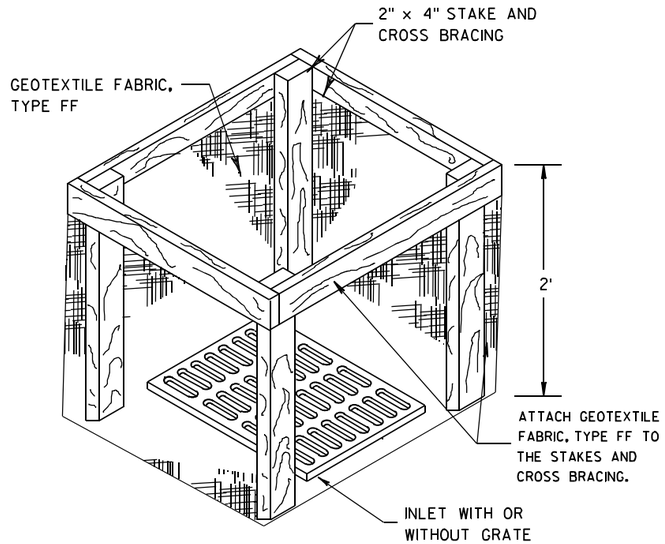
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S.D.D. 8 E 9-6

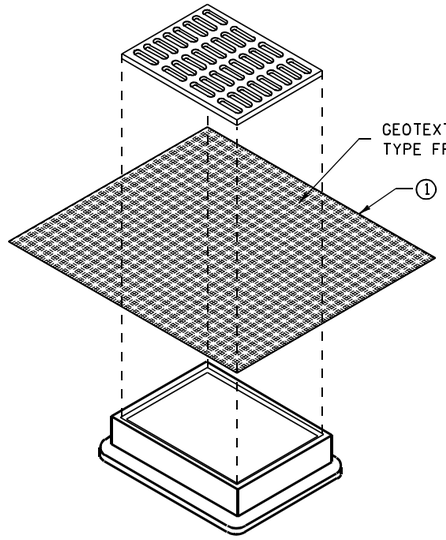
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S.D.D. 8 E 9-6



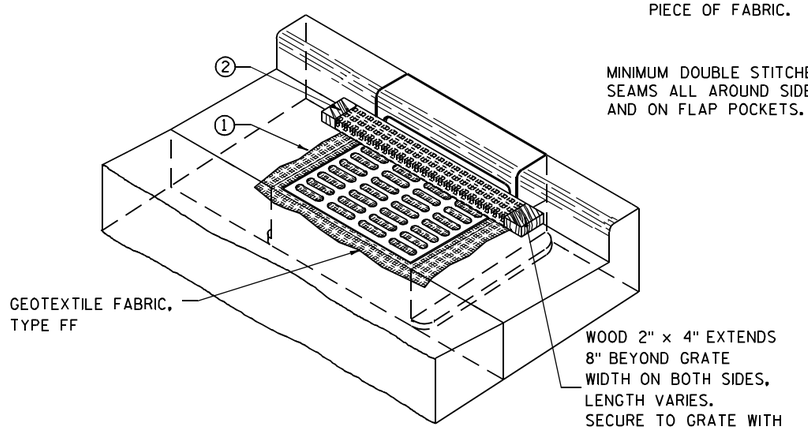


INLET PROTECTION, TYPE A

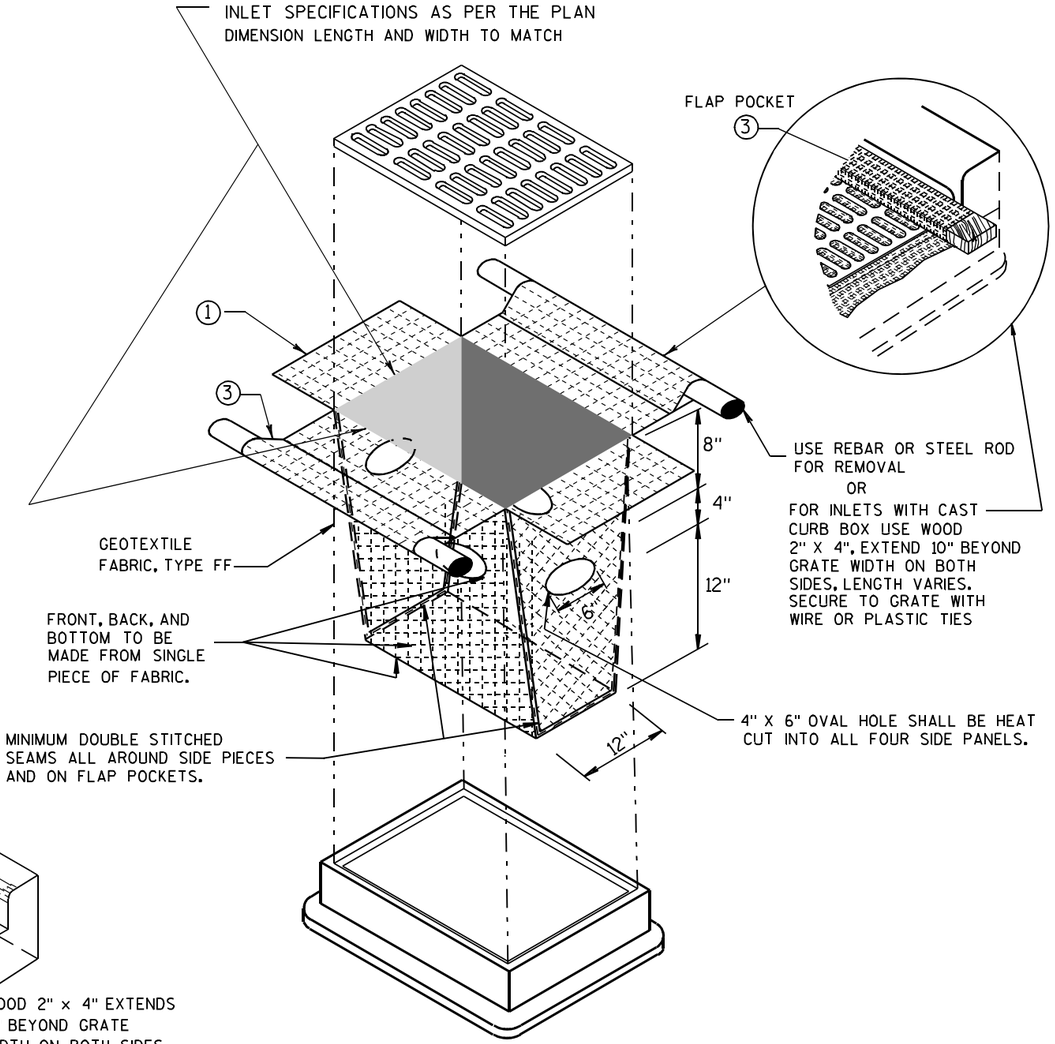


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

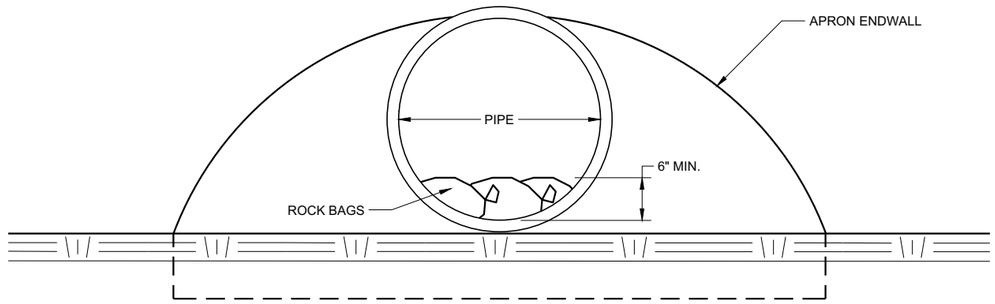
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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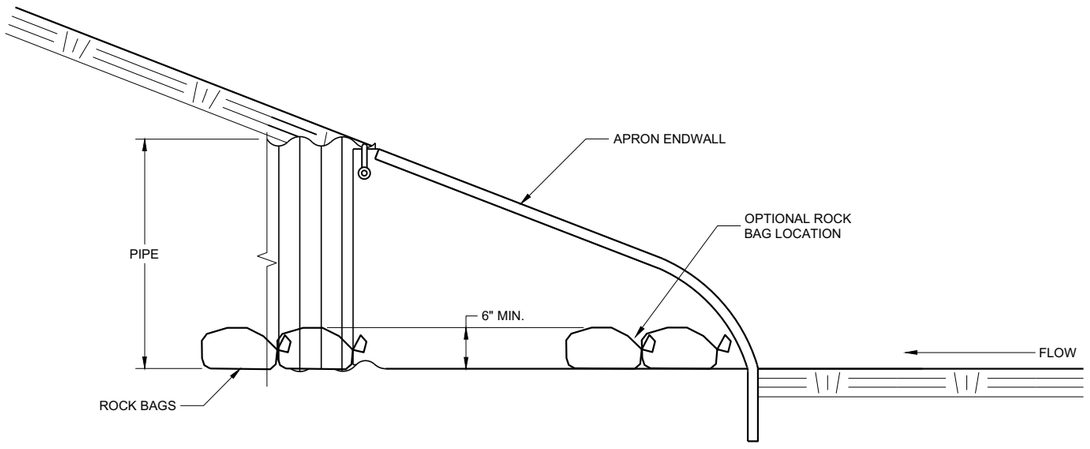
S.D.D. 8 E 10-2

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S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

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SDD 08E15 - 01

METAL APRON ENDWALLS

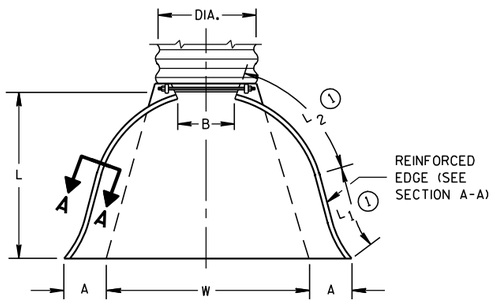
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

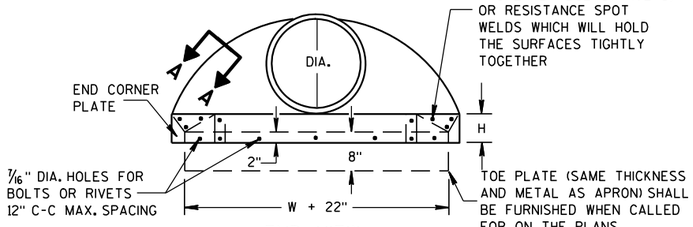
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

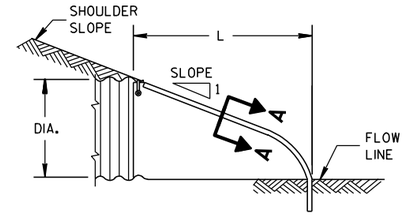
*MINIMUM
**MAXIMUM



PLAN VIEW

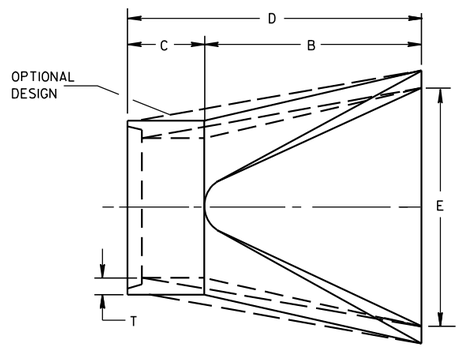


END VIEW

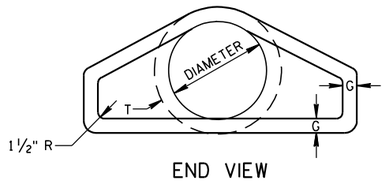


SIDE ELEVATION

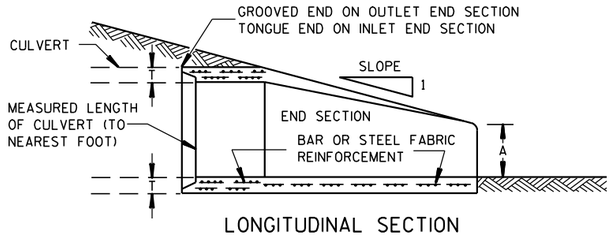
METAL ENDWALLS



PLAN

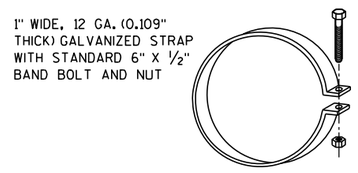


END VIEW



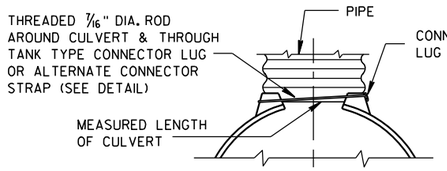
LONGITUDINAL SECTION

CONCRETE ENDWALLS

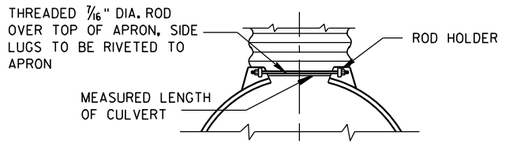


ALTERNATE FOR TYPE 1 CONNECTION

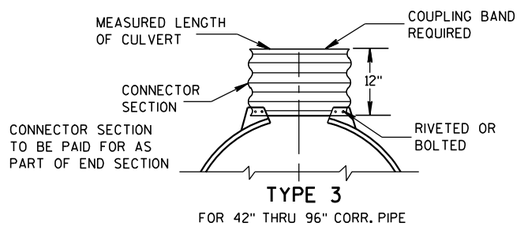
END SECTION CONNECTOR STRAP



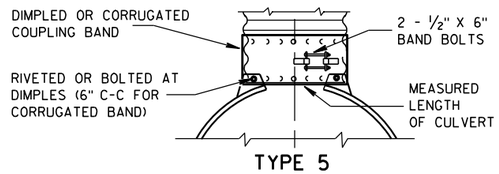
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

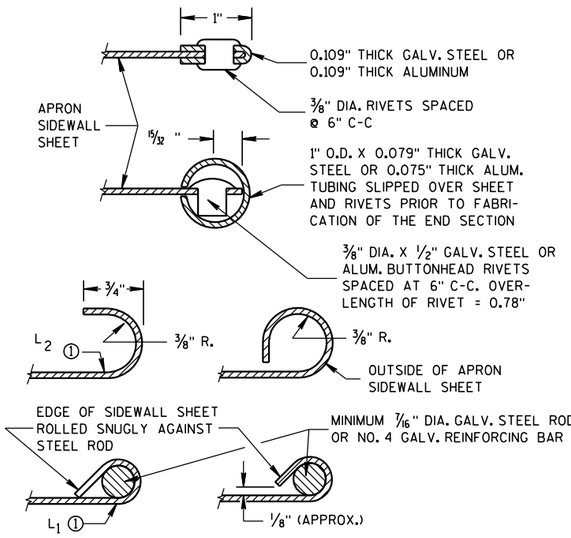
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

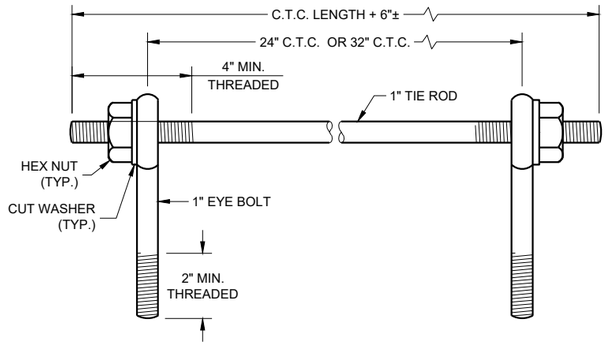
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

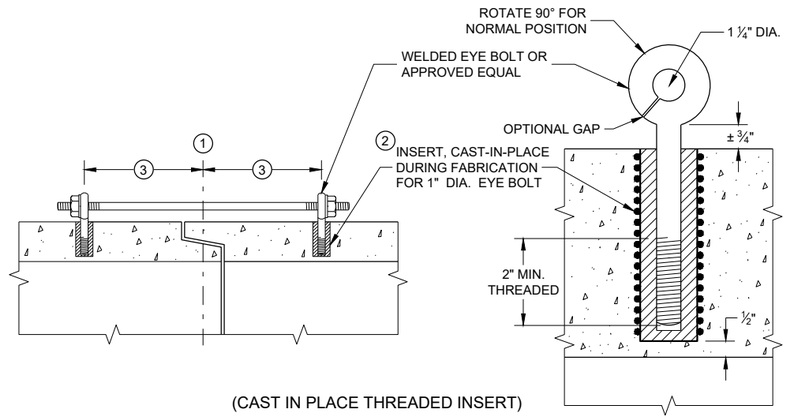
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

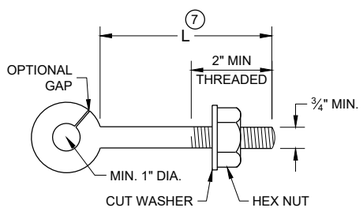
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

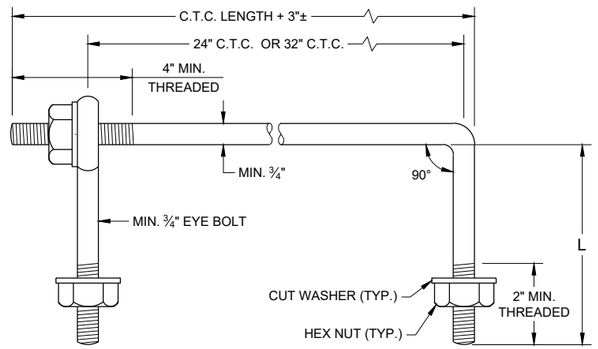
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

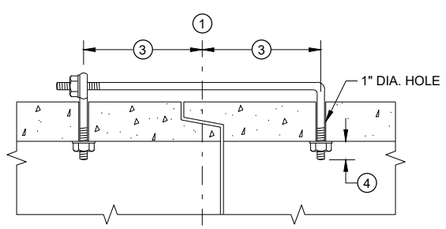


EYE BOLT (7)

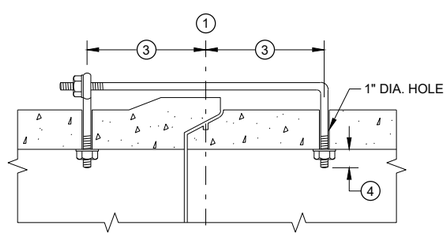
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

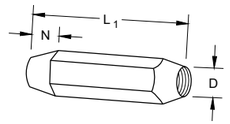
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

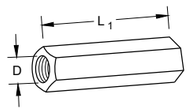
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



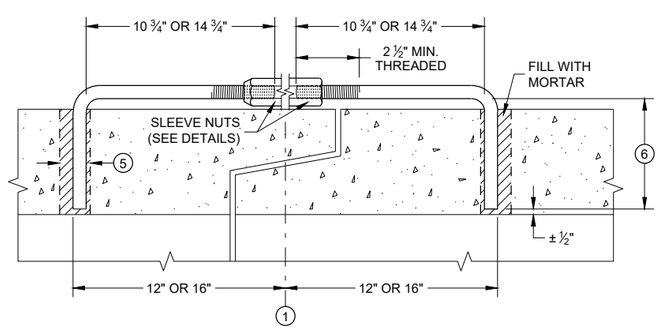
TAPERED



PLAIN

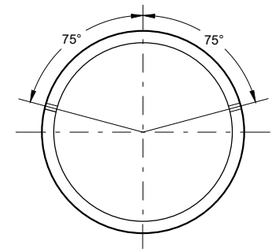
RIGHT AND LEFT THREADS

SLEEVE NUTS



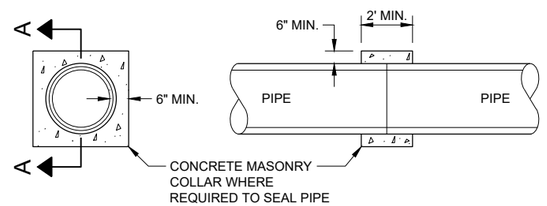
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

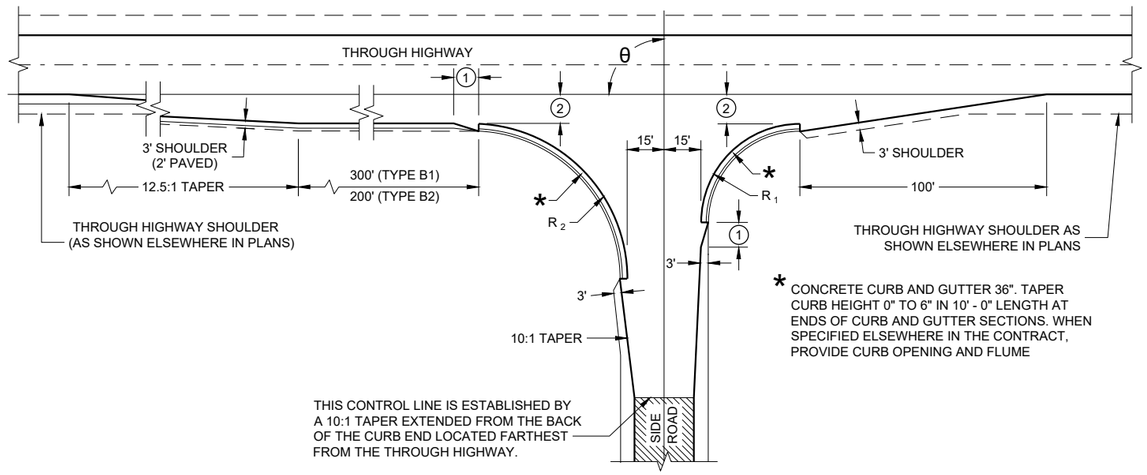
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08F04 - 08

SDD 08F04 - 08



* CONCRETE CURB AND GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10' - 0" LENGTH AT ENDS OF CURB AND GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME

TYPE "B1" AND "B2"

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65 - 70	35	70
71 - 80	40	70
81 - 90	40	60
91 - 100	50	55
101 - 110	60	45

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

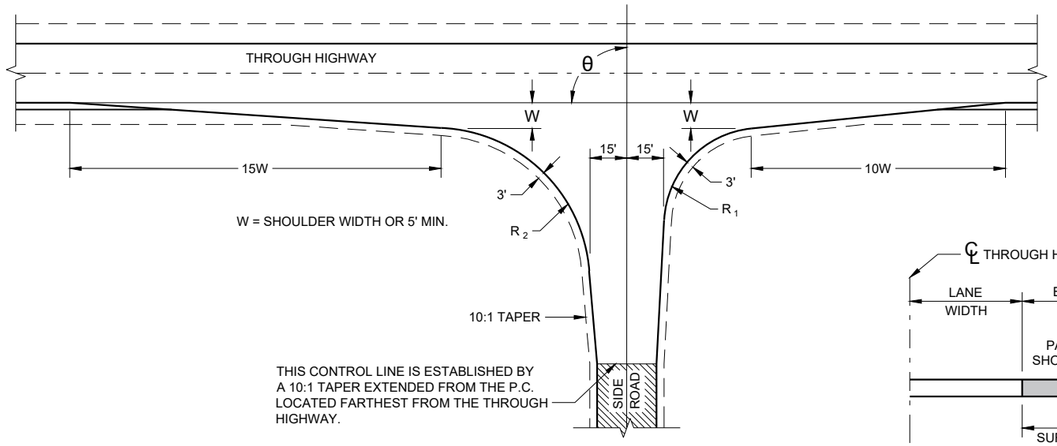
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

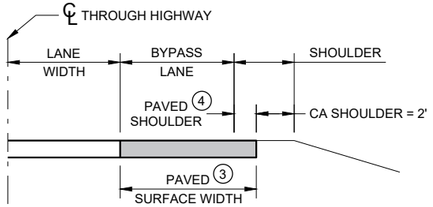
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
- ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH
- PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH

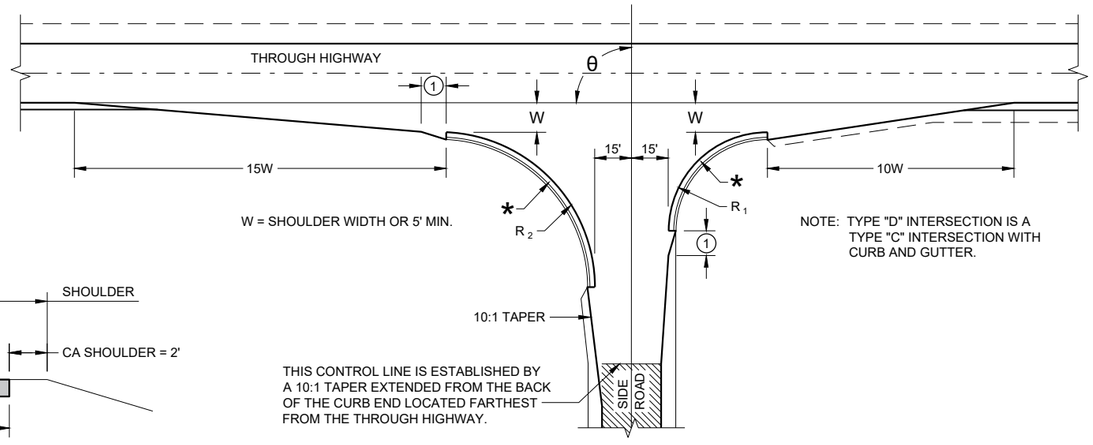
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

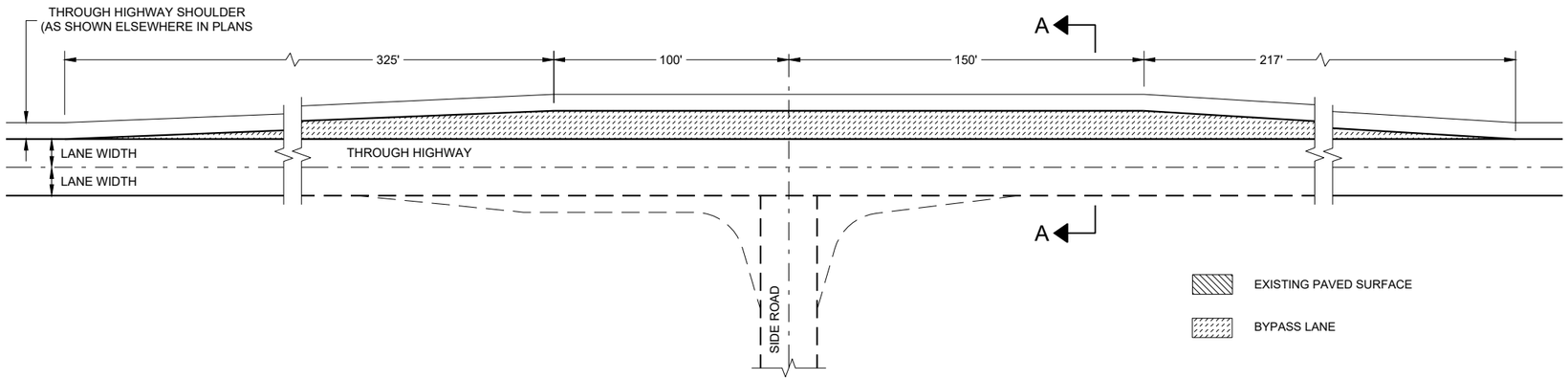


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB AND GUTTER.

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

AT GRADE SIDE ROAD INTERSECTION TYPES "B1", "B2", "C", "D" AND TEE INTERSECTION BYPASS LANE

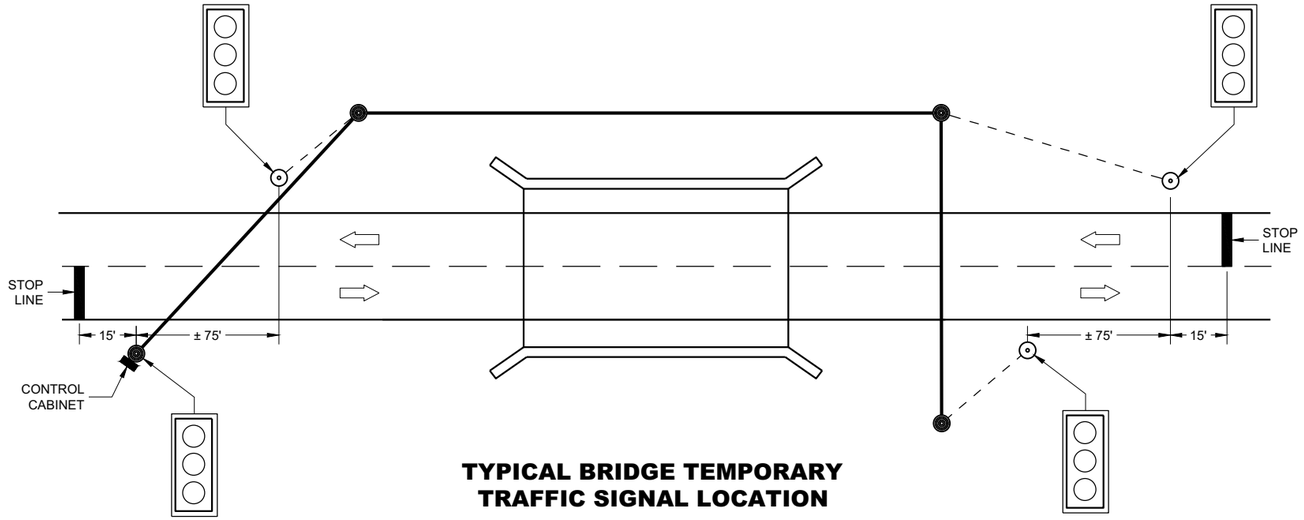
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 09A01 - 14a

6

SDD 09A01 - 14a



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREADAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- DIRECTION OF TRAFFIC
- LED TRAFFIC SIGNAL WITH BACKPLATE (3-12")

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAY BE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

WOOD POLES (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

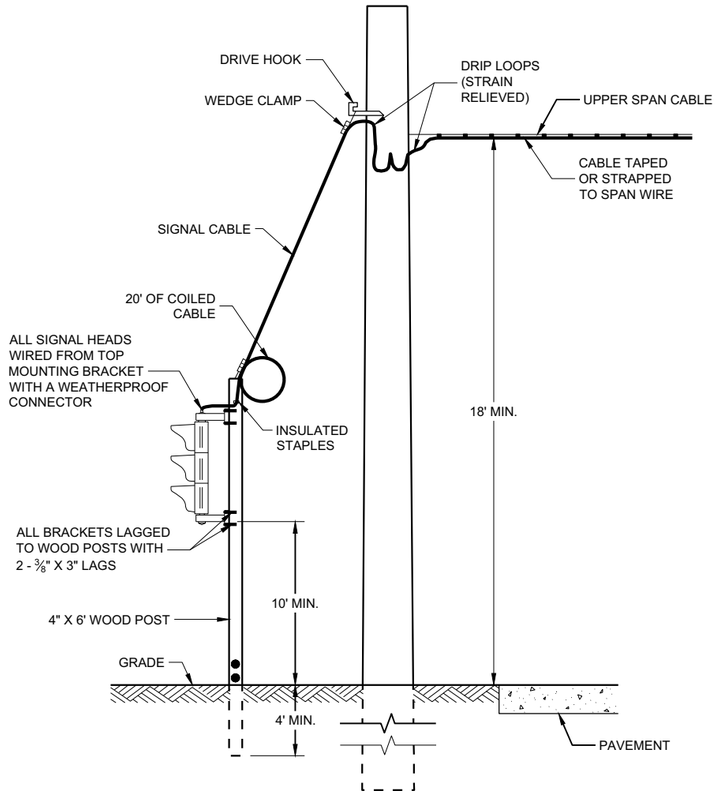
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

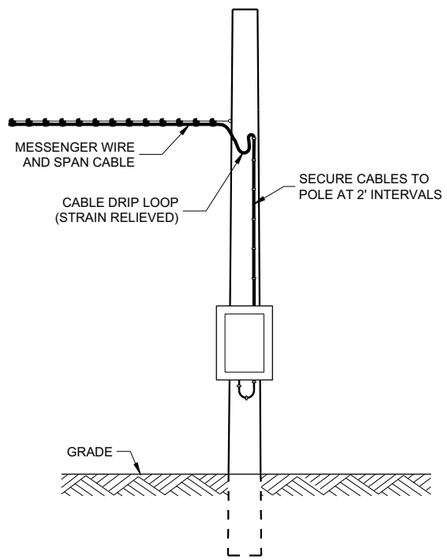
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

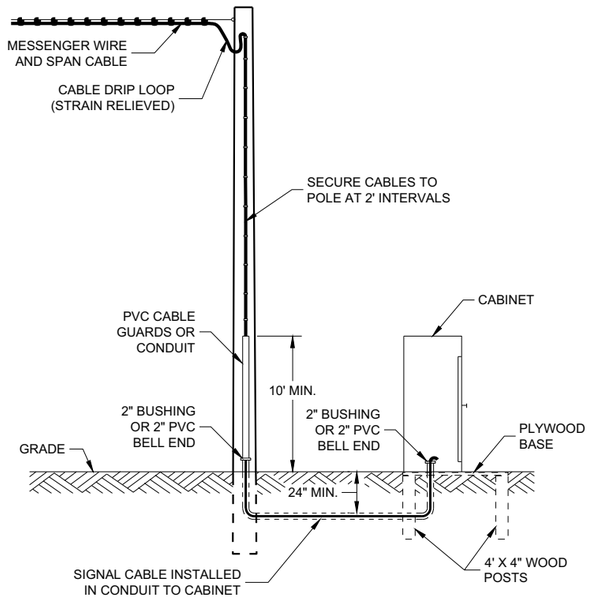
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE*
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/CURBS	2 FT

* NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

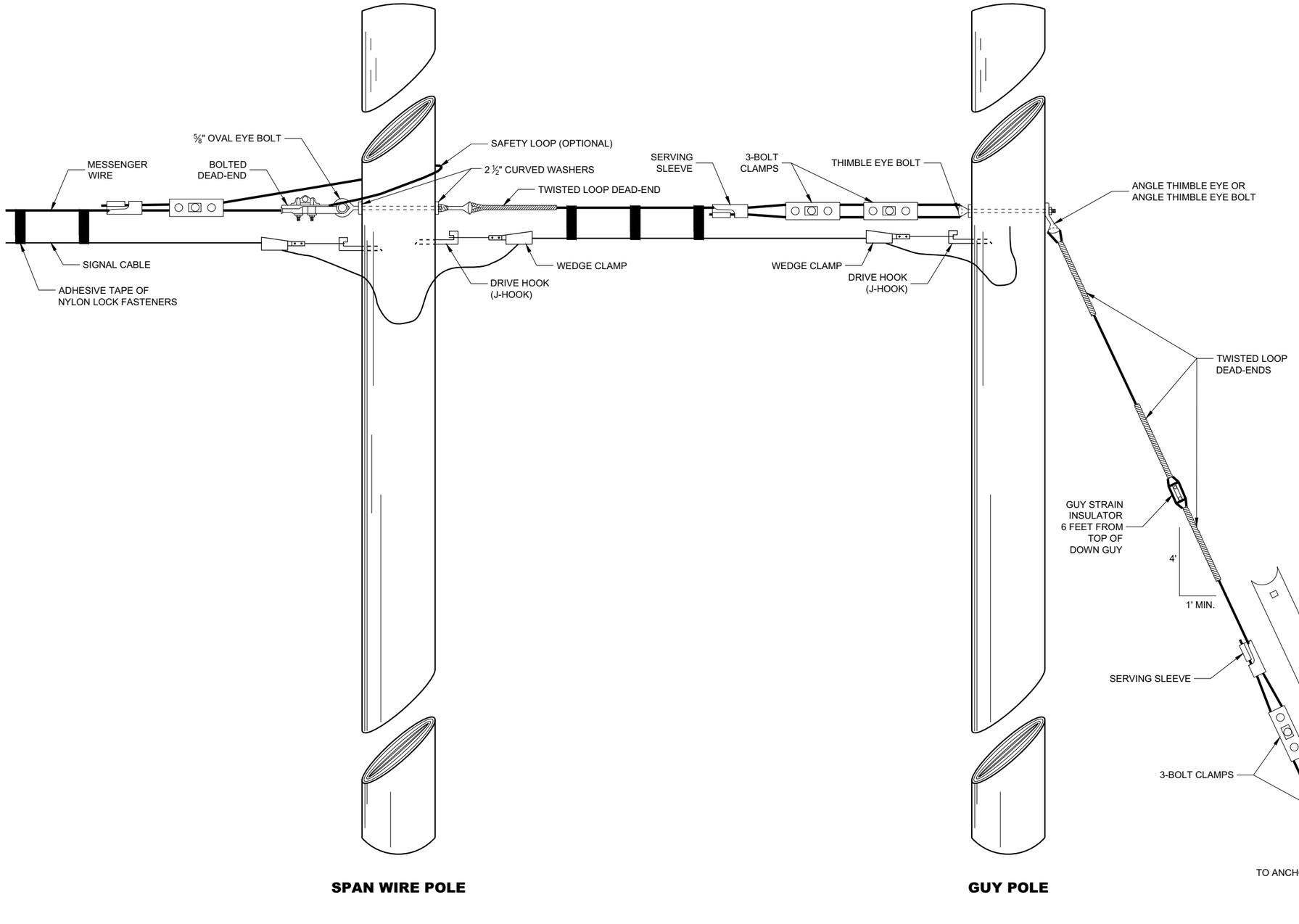
SDD09G02 - 05a

6

SDD09G02 - 05a

GENERAL NOTES

USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

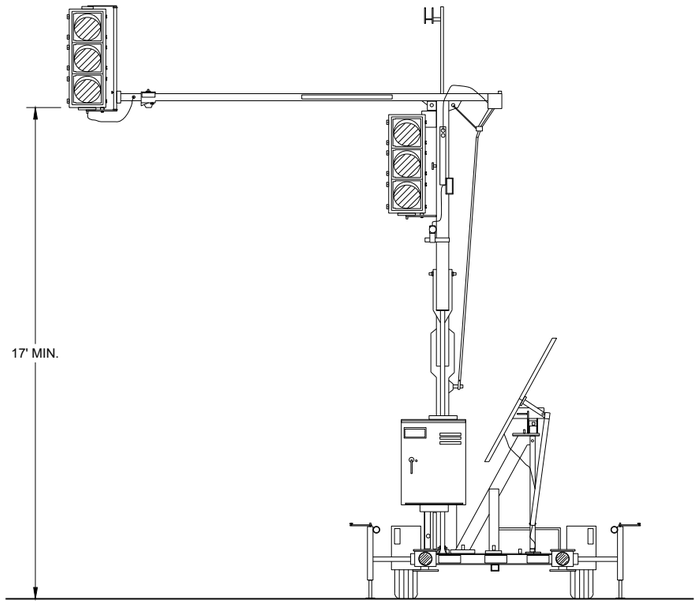
FHWA

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SDD09G02 - 05b

6

SDD09G02 - 05b

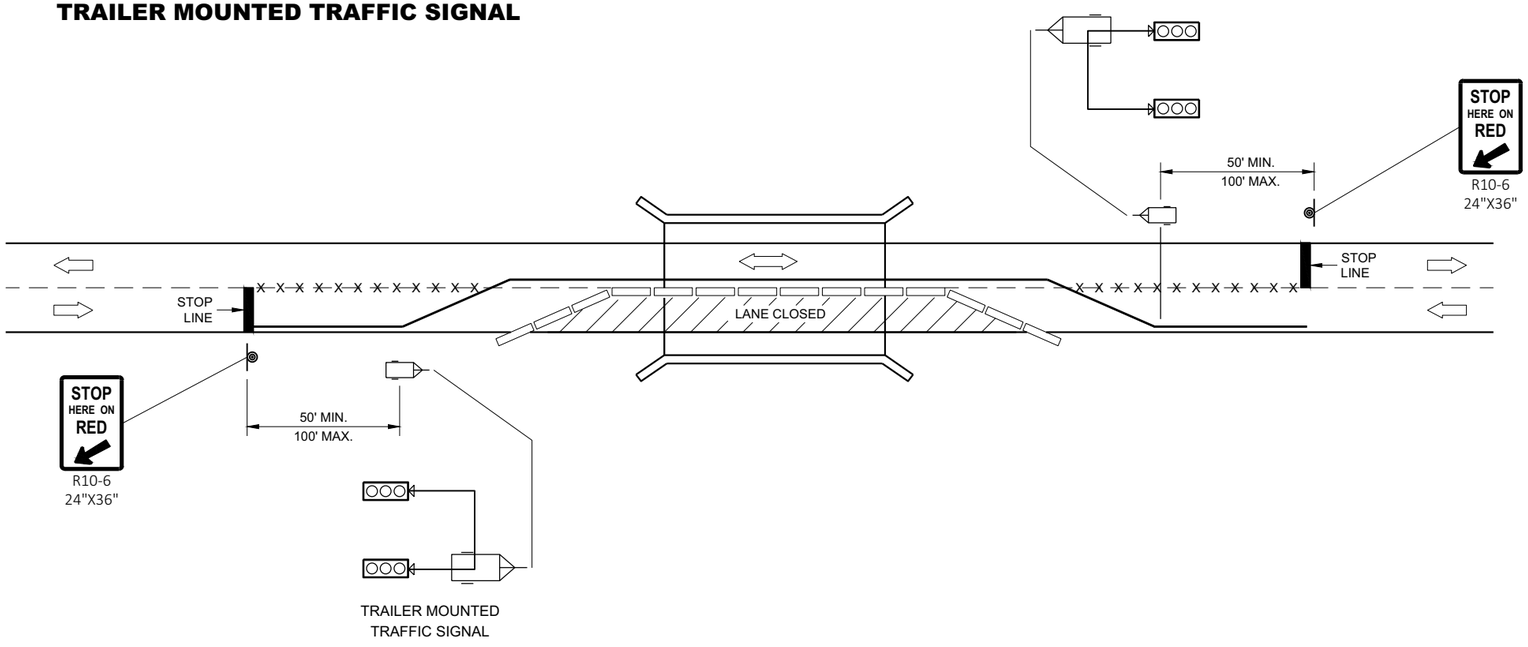


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

DETAIL OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD09G02 - 05c

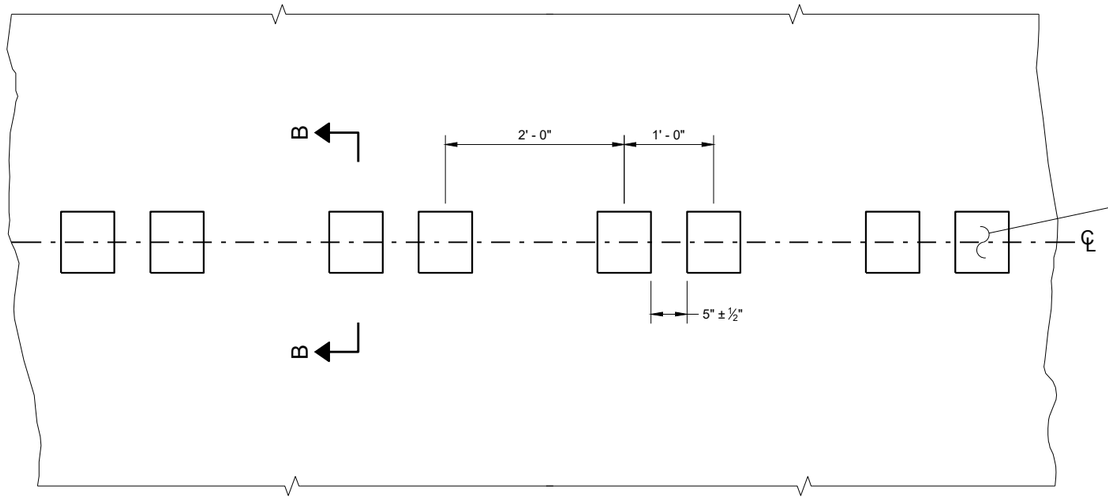
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SDD09G02 - 05c

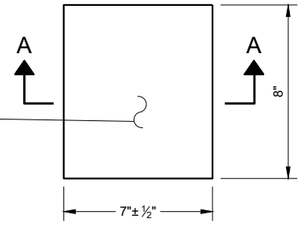
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

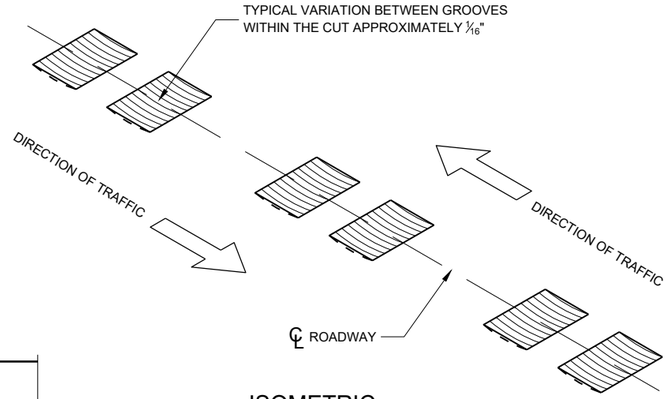
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



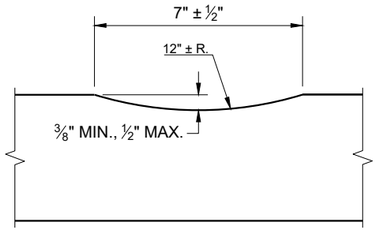
PLAN DETAIL VIEW



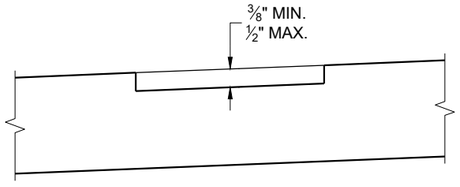
PLAN VIEW
(SINGLE GROOVE)



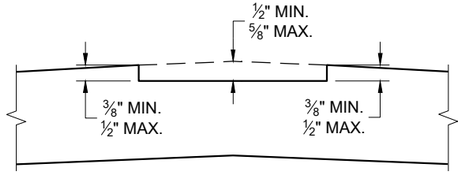
ISOMETRIC



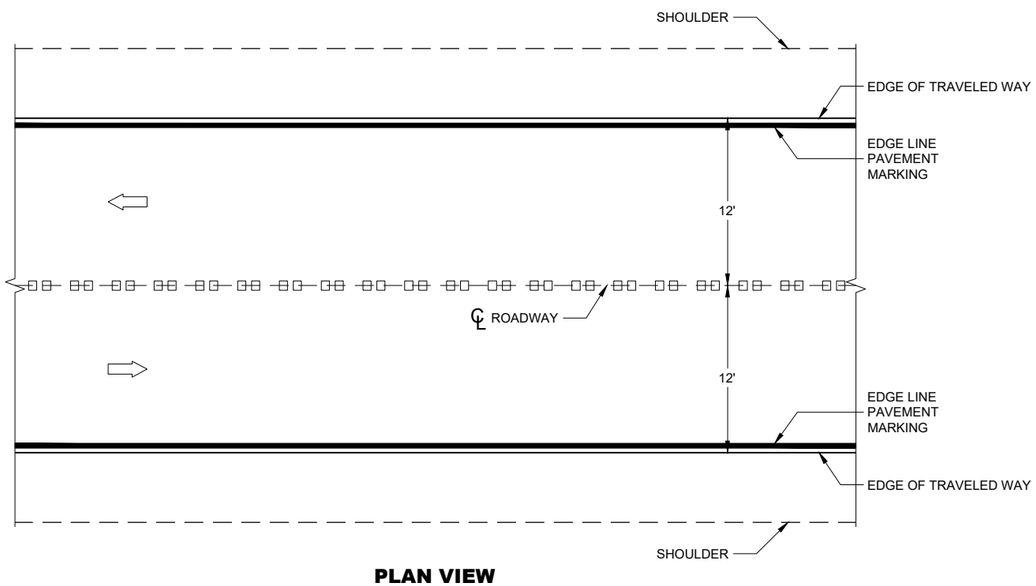
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

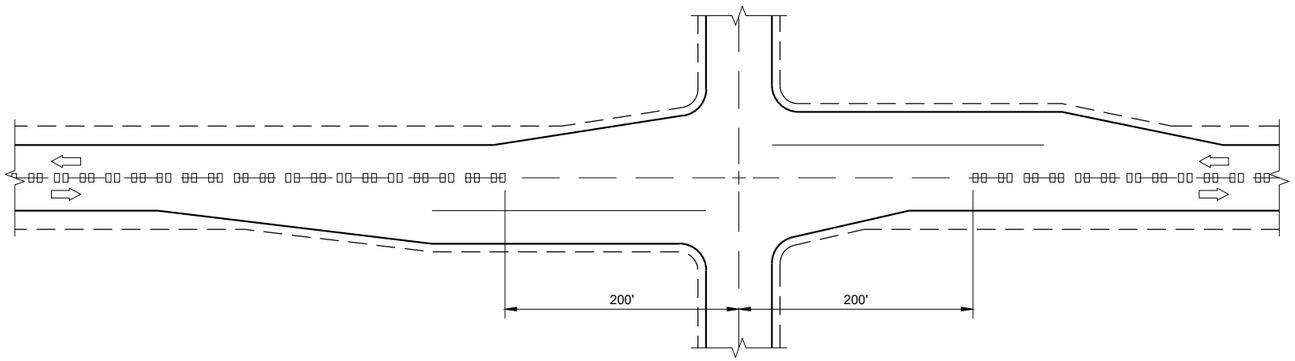
CENTERLINE RUMBLE STRIPS - ASPHALT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTA	126

6

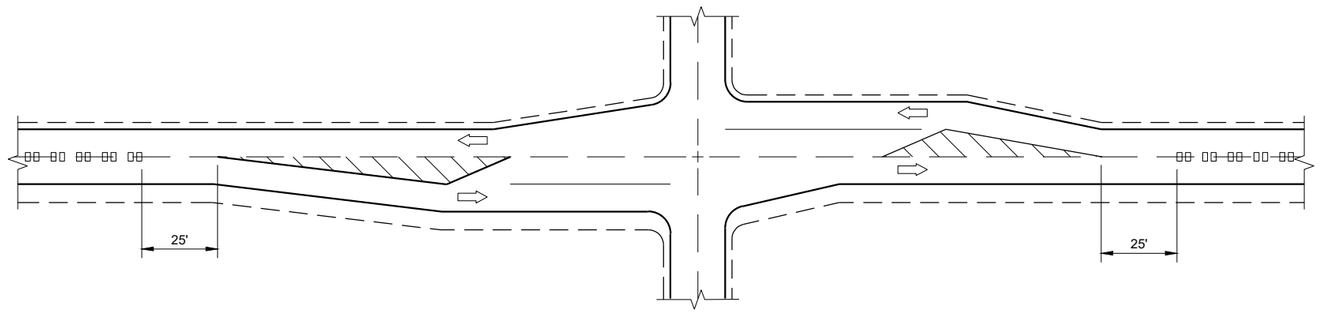
SDD 13A11 - 04a

6

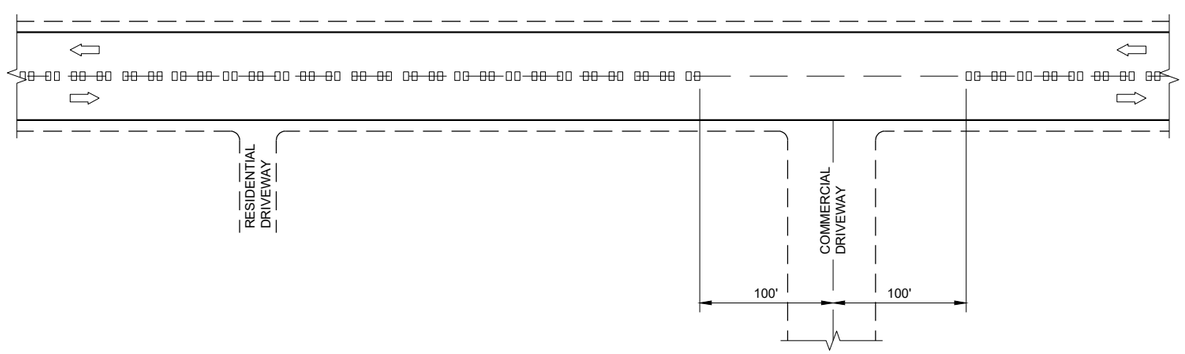
SDD 13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



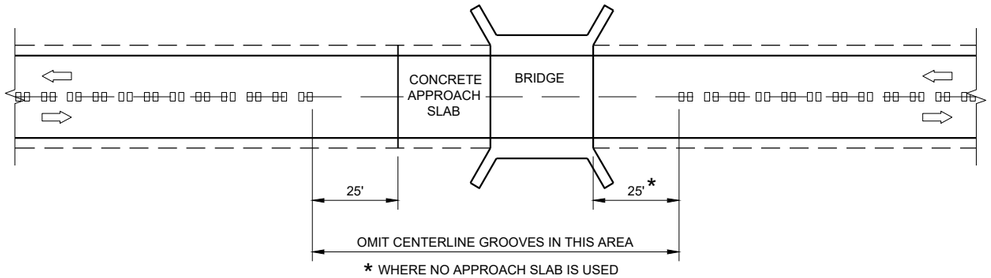
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



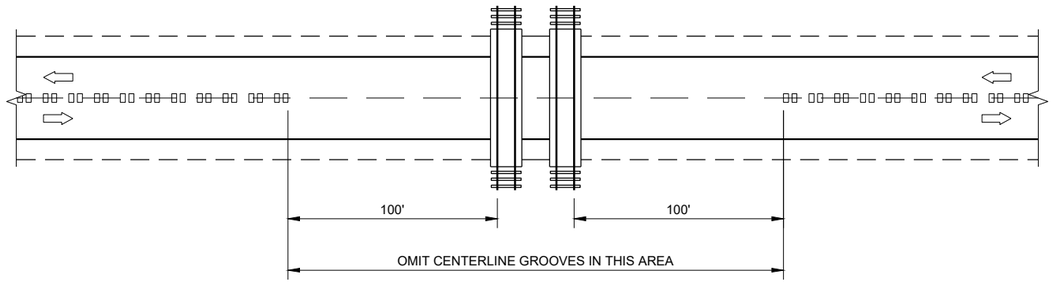
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS

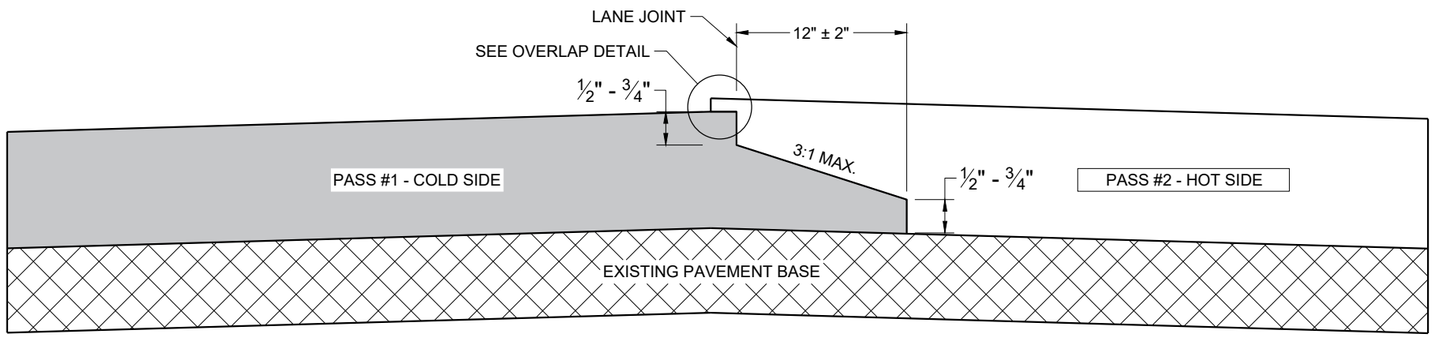
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

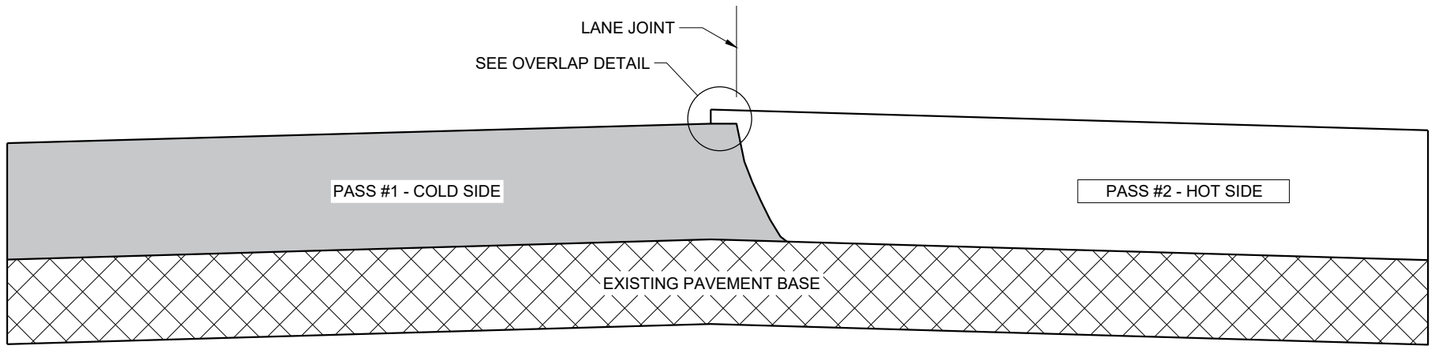
FHWA

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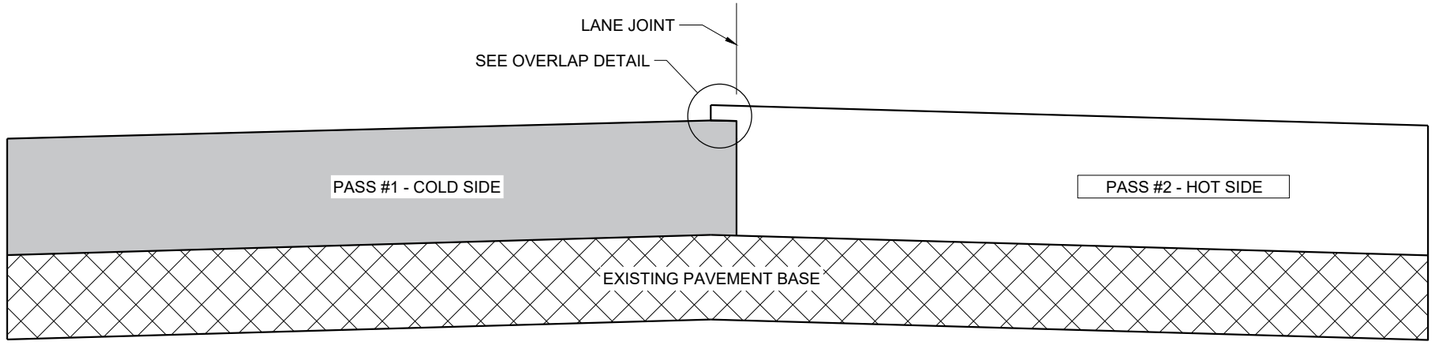
SDD 13A11 - 04d
SDD 13A11 - 04d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

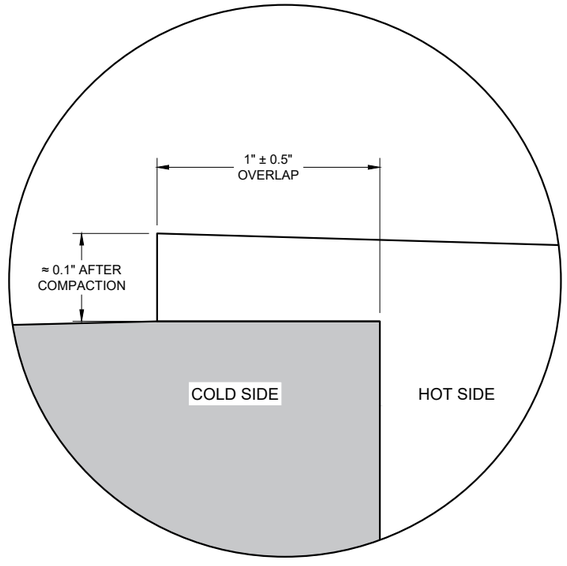
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

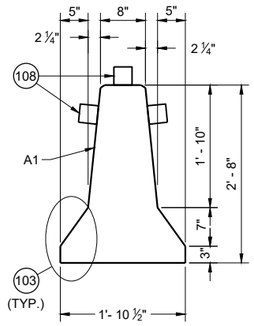
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

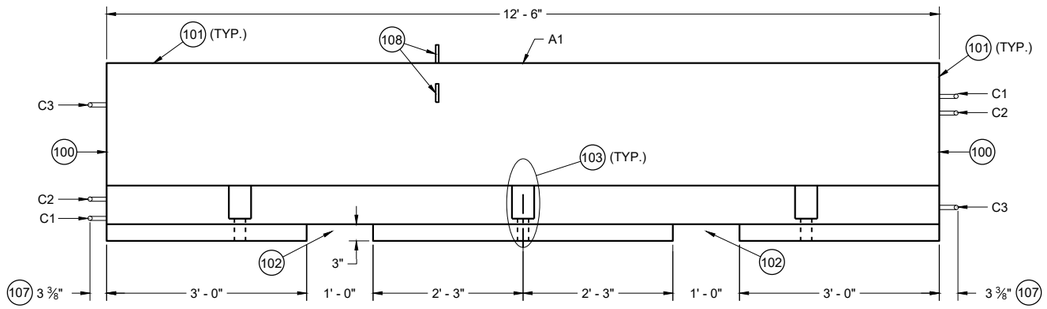
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



CROSS SECTION



PROFILE VIEW

GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

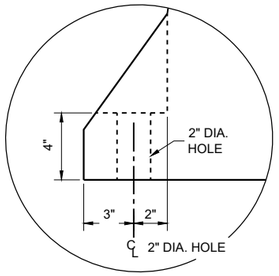
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

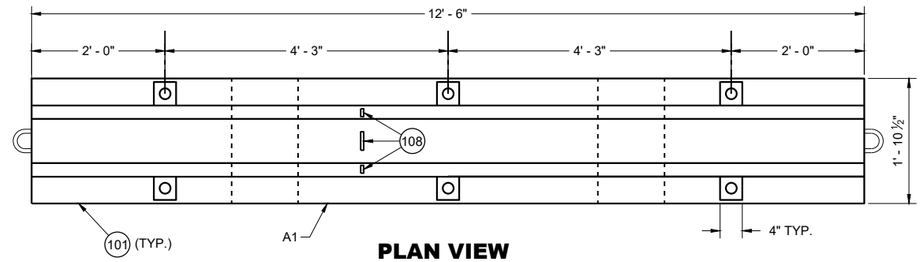
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

(108) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

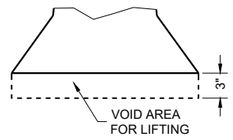


ANCHOR BLOCK DETAIL

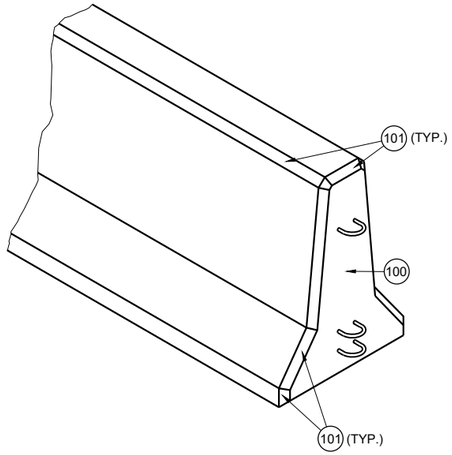


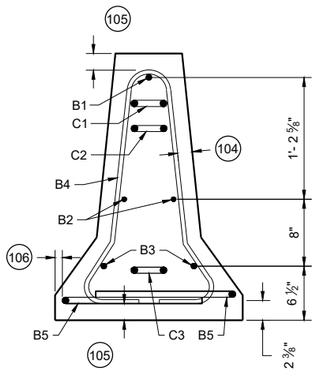
PLAN VIEW

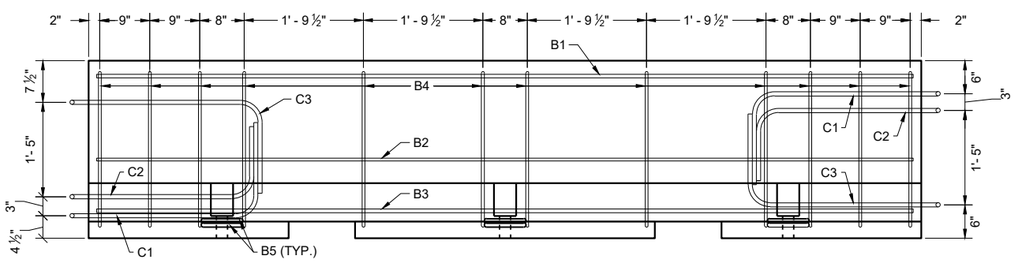
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)







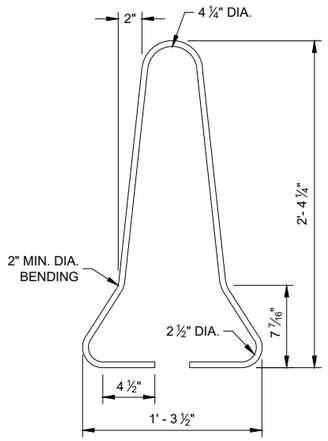
PROFILE VIEW

TEMPORARY BARRIER REINFORCEMENT

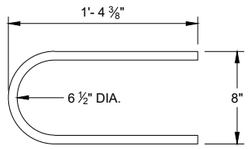
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

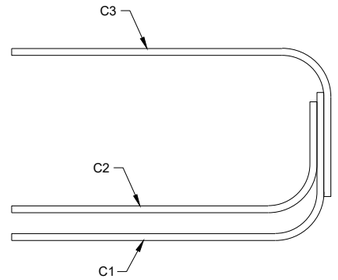
SDD 14B07-16a



B4 BAR DETAIL

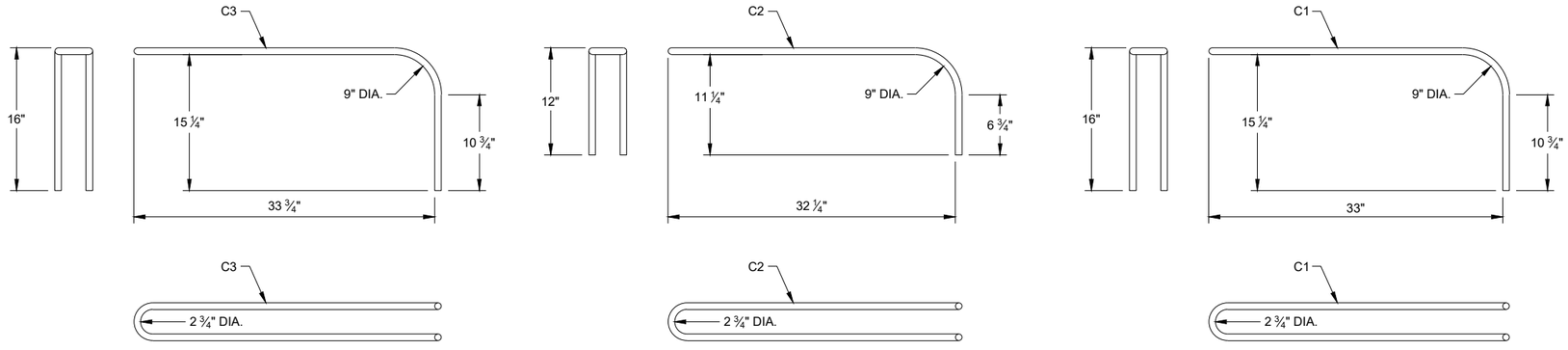


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY

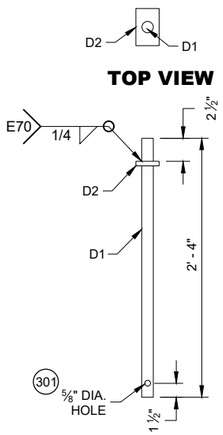


C BAR DETAILS

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

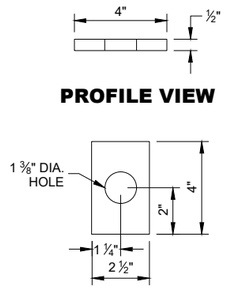
6
SDD 14B07-16b



TOP VIEW

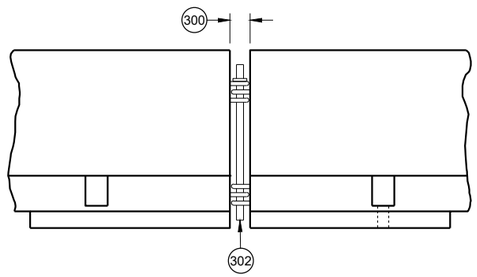
PROFILE VIEW

CONNECTOR PIN ASSEMBLY



PROFILE VIEW

TOP VIEW D2



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

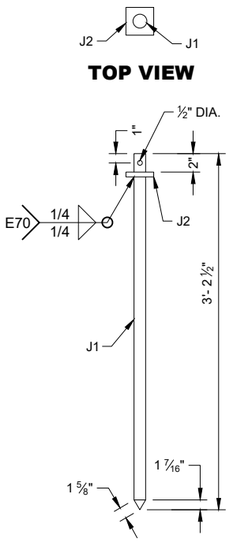
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

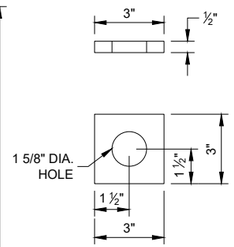
309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



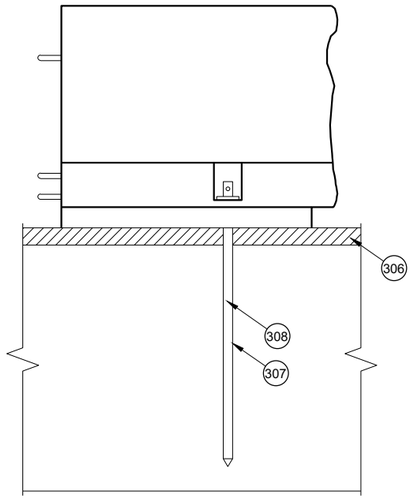
TOP VIEW

PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY

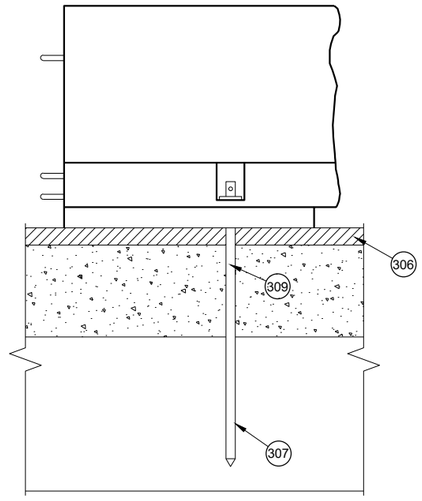


TOP VIEW J2



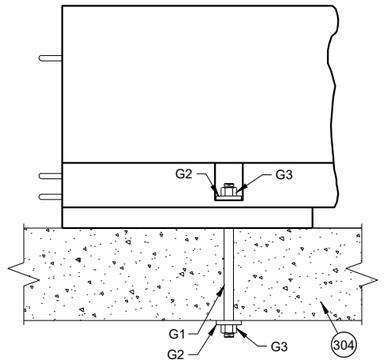
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



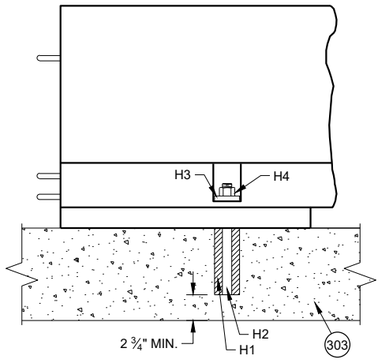
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

THROUGH BOLT ANCHOR INSTALLATION (305)



SIDE VIEW

ADHESIVE ANCHOR INSTALLATION (305)

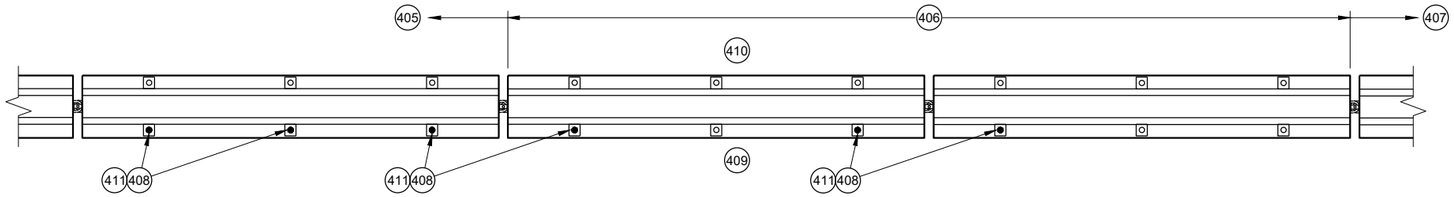
6

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CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

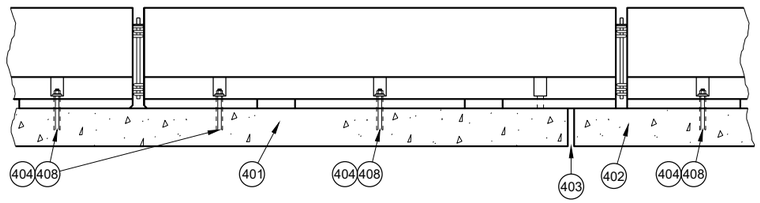
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SDD 14B07-16c



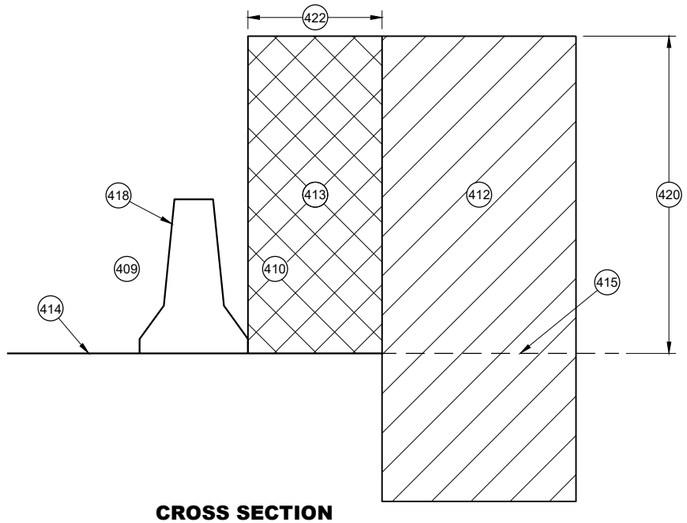
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



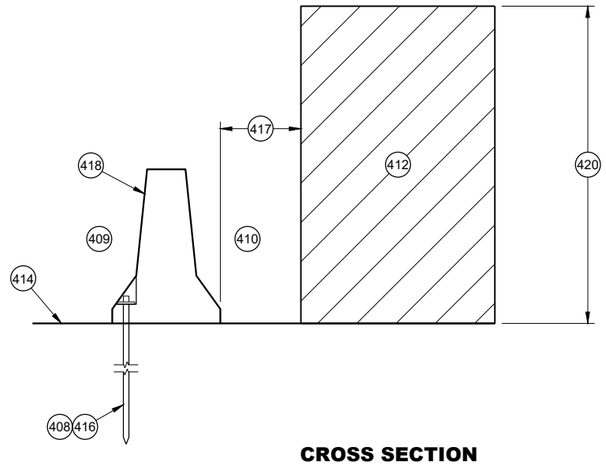
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



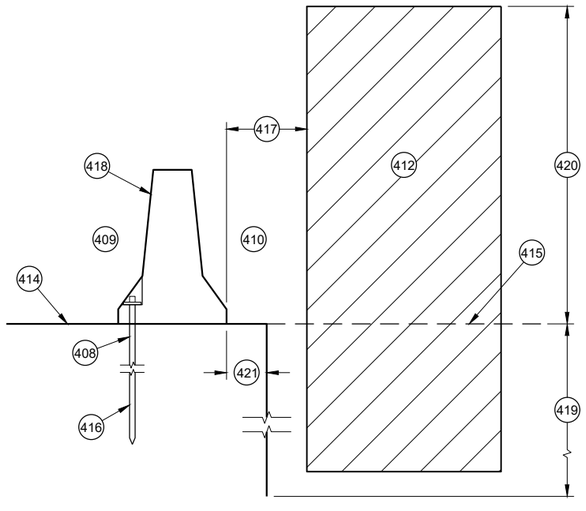
CROSS SECTION

FREE STANDING BARRIER



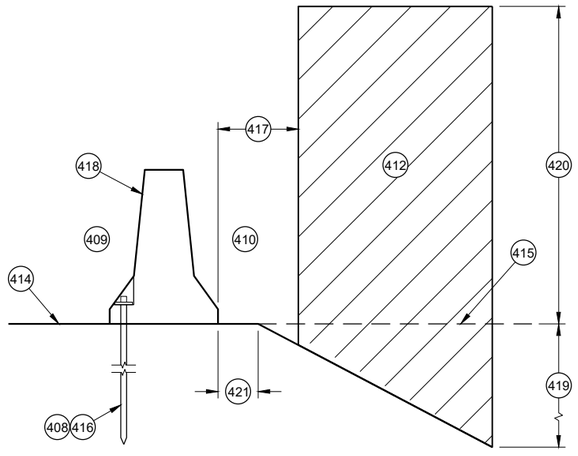
CROSS SECTION

ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

(400) NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

(408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

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GENERAL NOTES

(500) EXISTING RIGID BARRIERS (VARIES)

(501) TEMPORARY BARRIER

(502) SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

(503) ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

(504) NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

(505) TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

(506) TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

(507) VERTICAL BARRIER

(508) SAFETY SHAPE BARRIER

(509) SINGLE SLOPE BARRIER

(510) CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

(511) BENT THRIE BEAM TO FIT.

(512) THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

(513) TWO (2) P1, P2 AND P3 ARE REQUIRED

(514) FIVE (5) N1, N2 AND N3 ARE REQUIRED

(515) TWO (2) R1, R2 AND R3 ARE REQUIRED

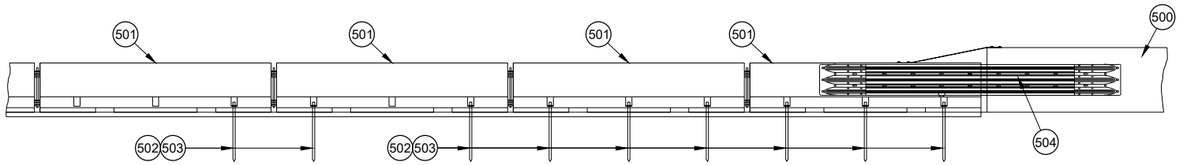
(516) CUT WOOD BLOCK TO FIT.

(517) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

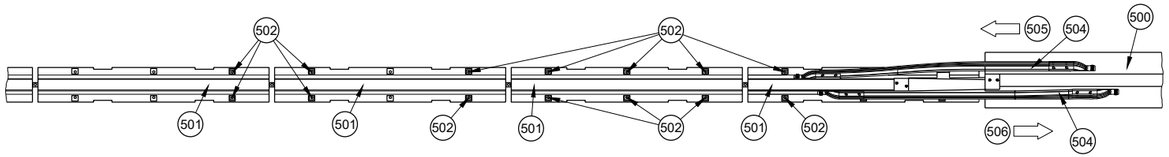
(518) CAP ASSEMBLY

(519) 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

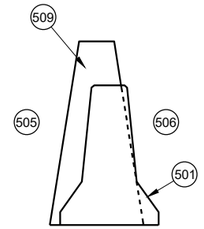
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



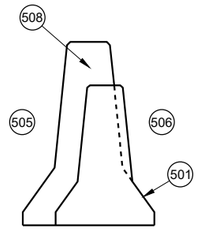
PROFILE VIEW



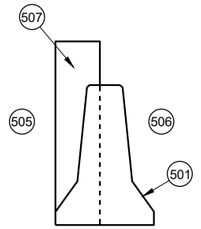
PLAN VIEW



CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE

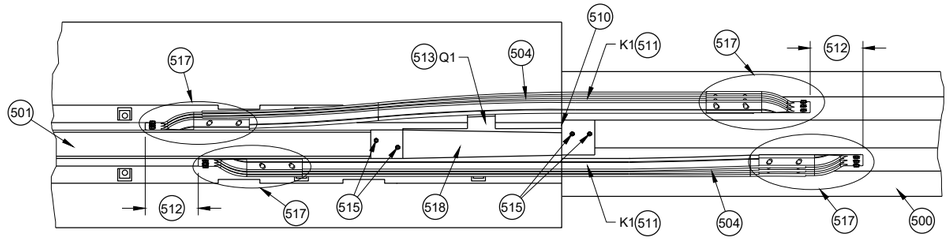


CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE

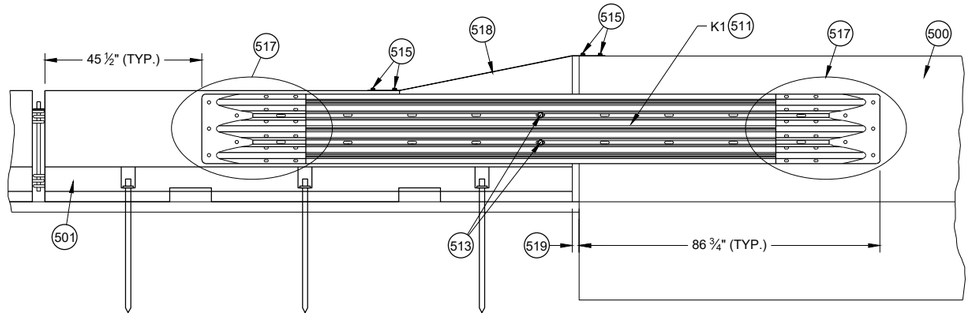


CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL

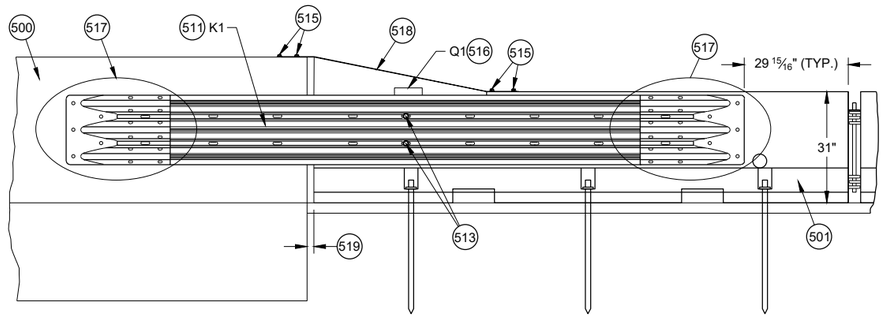
PLAN VIEW
TRANSITION TO RIGID BARRIER



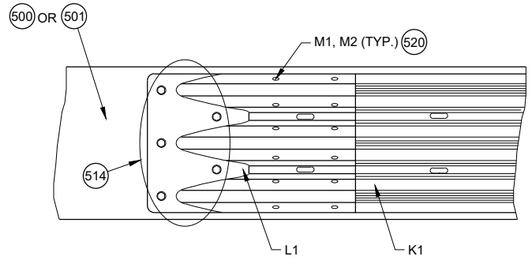
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER



(517) DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

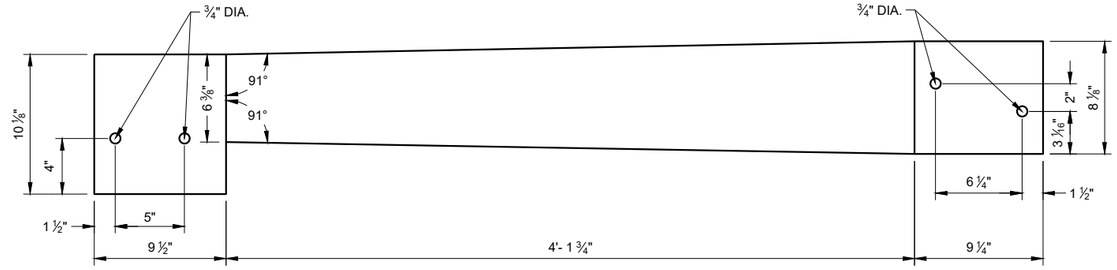
STATE OF WISCONSIN
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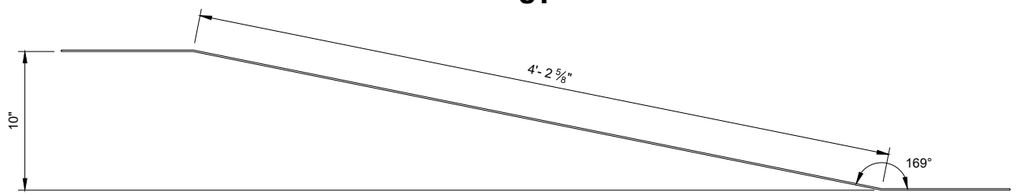
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SDD 14B07-16e



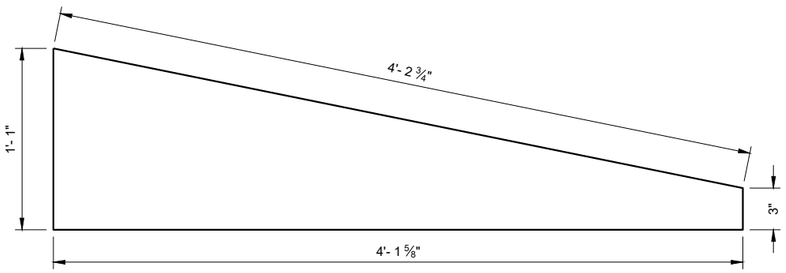
TOP VIEW

S1



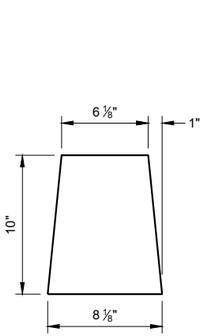
ELEVATION VIEW

S1

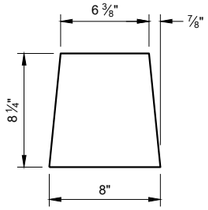


SIDE VIEW

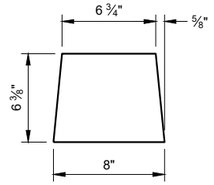
S3



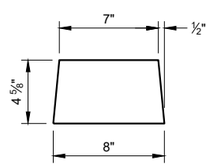
S2



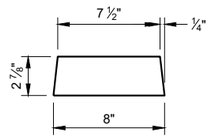
S4



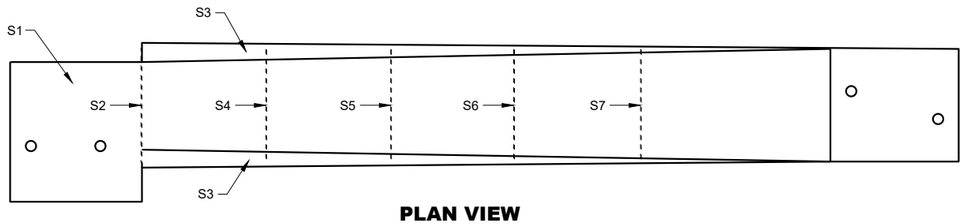
S5



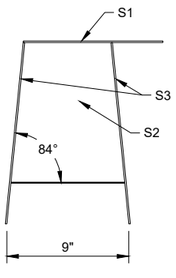
S6



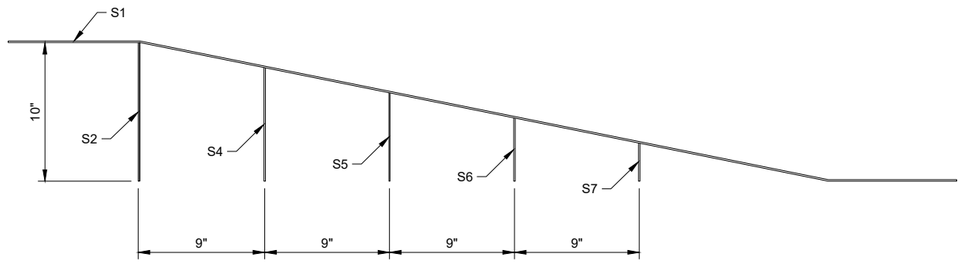
S7



PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

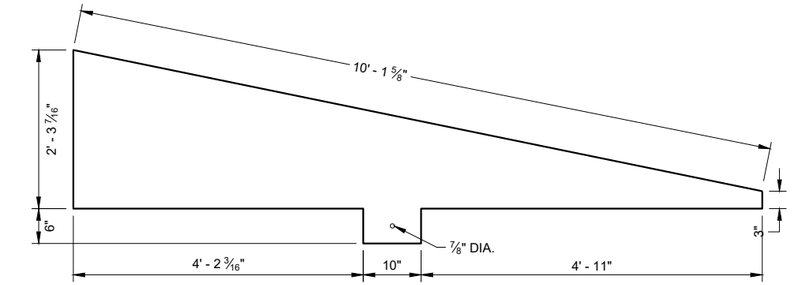
(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
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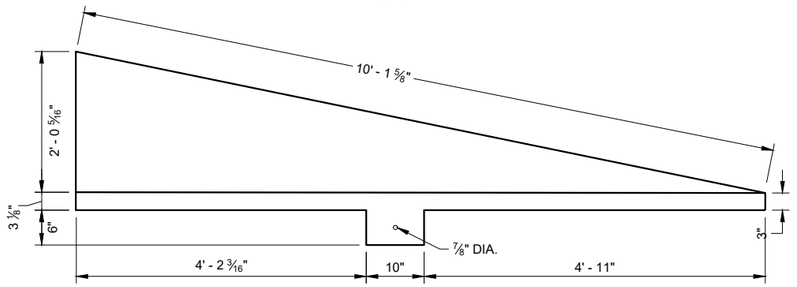
SDD 14B07-16f



SIDE VIEW
T4



END VIEW



SIDE VIEW
T3

END VIEW

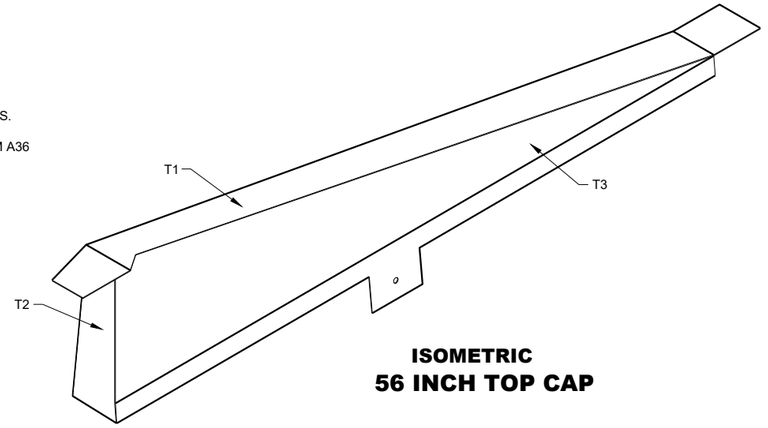
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

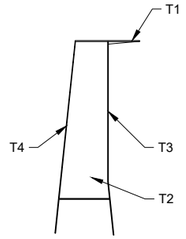
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

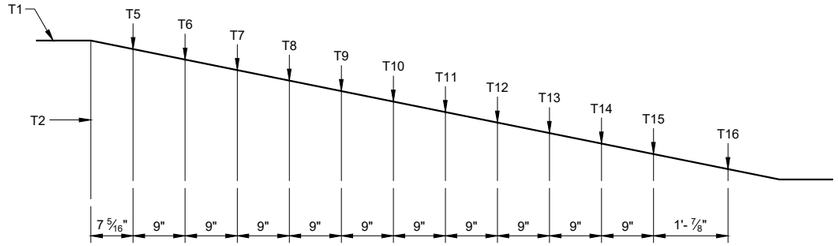
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



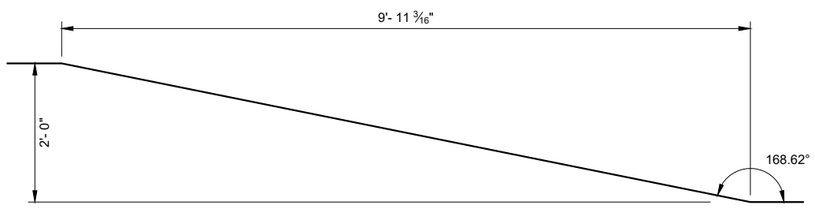
ISOMETRIC
56 INCH TOP CAP



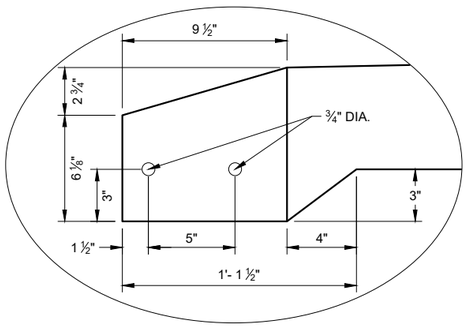
END VIEW
56 INCH TOP CAP



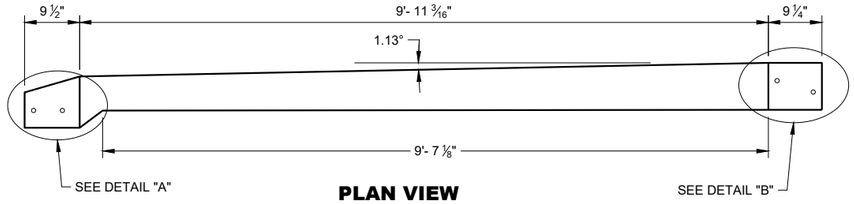
SIDE VIEW (700)
56 INCH TOP CAP



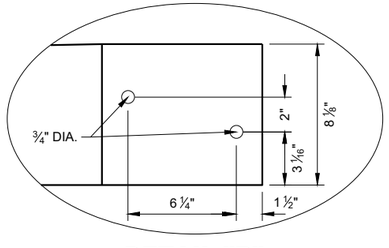
SIDE VIEW
TOP PLATE T1



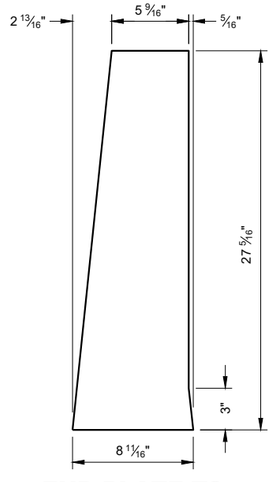
DETAIL "A"



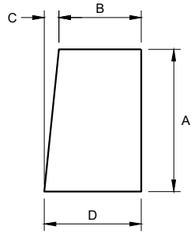
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2



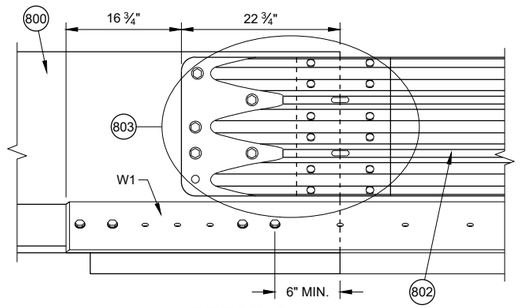
GUSSET PLATES
T5 - T16

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 11/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

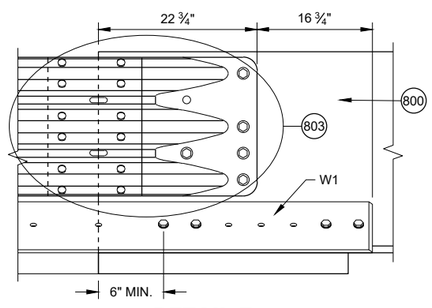
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

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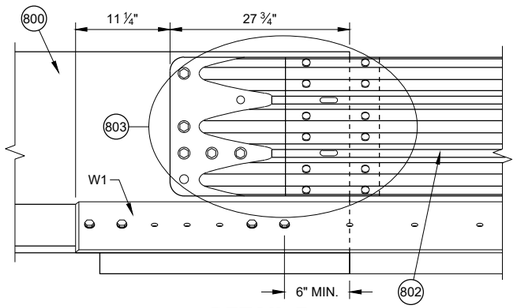
6
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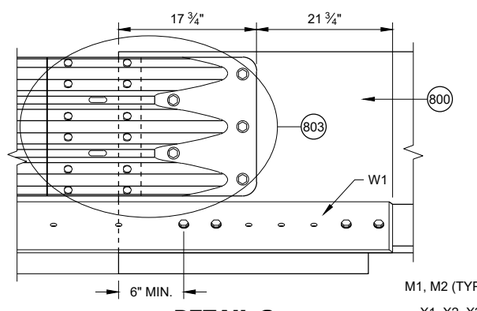
DETAIL D



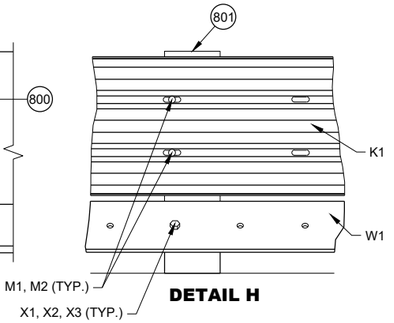
DETAIL E



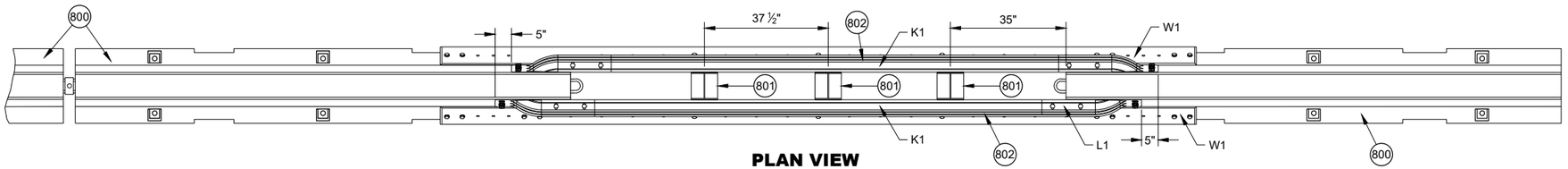
DETAIL F



DETAIL G



DETAIL H



PLAN VIEW

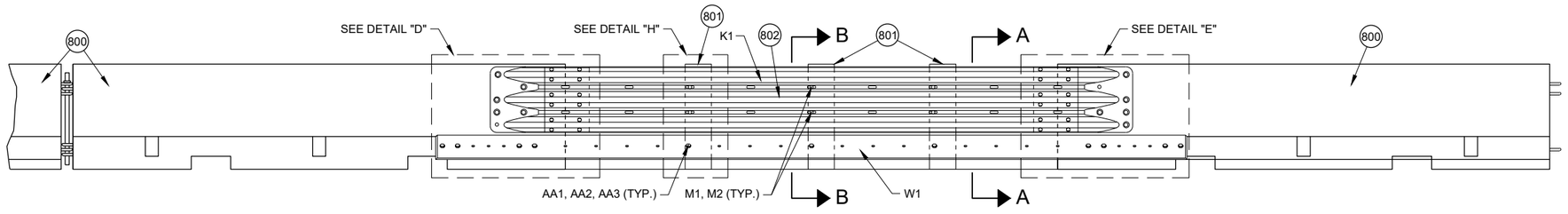
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

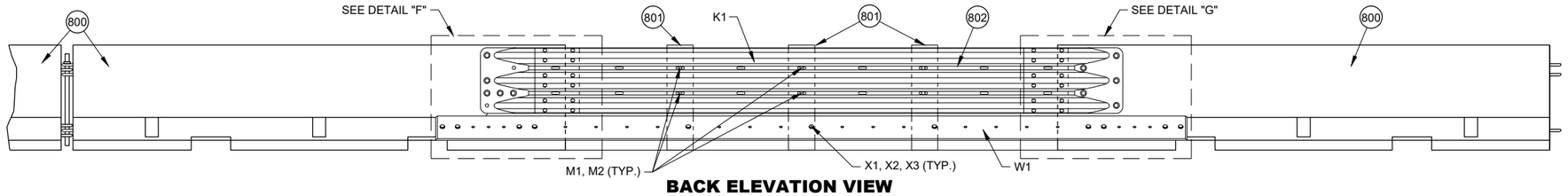
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



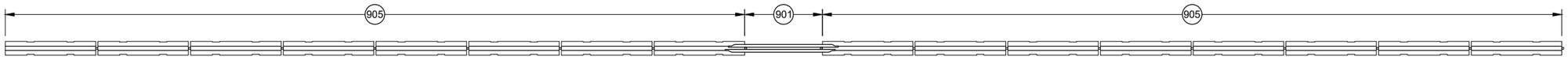
BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

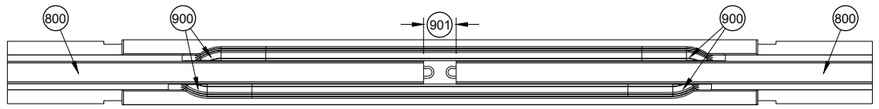
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
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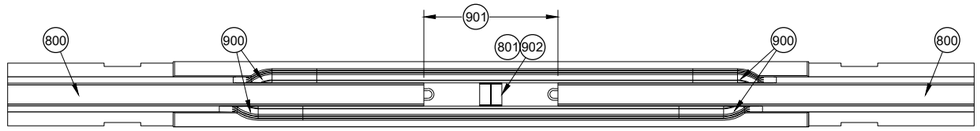
PLAN VIEW
GAP WITHIN SPACING



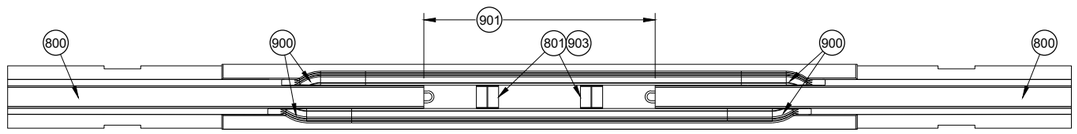
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

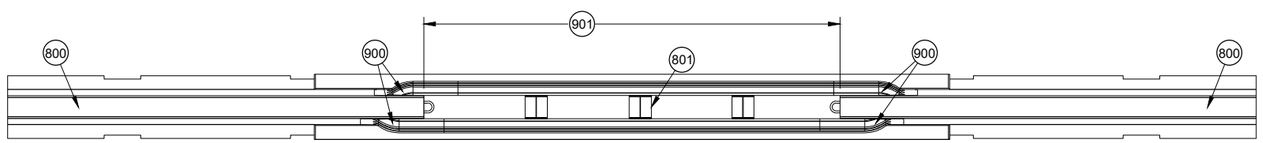
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. (904)



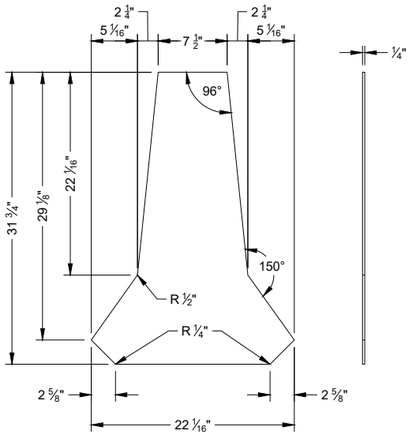
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. (904)



PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. (904)

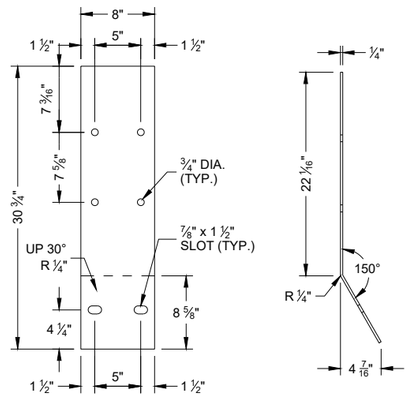
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

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PROFILE VIEW SIDE VIEW

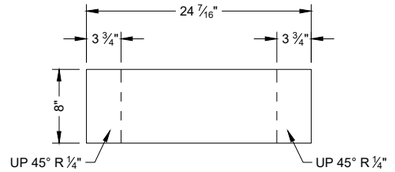
STIFFENER ASSEMBLY CENTER PANEL U1



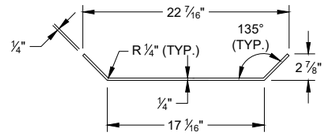
FLAT PATTERN

SIDE VIEW

STIFFENER ASSEMBLY SIDE PANEL U2

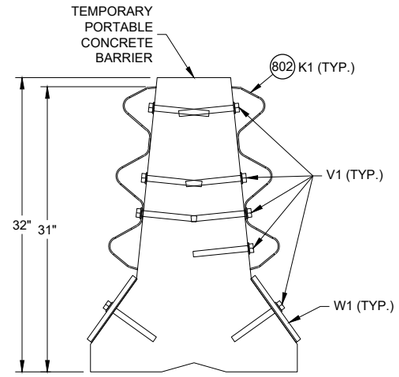


FLAT PATTERN

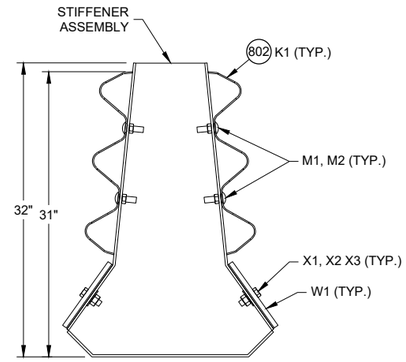


PROFILE VIEW

STIFFENER ASSEMBLY BOTTOM PANEL U3

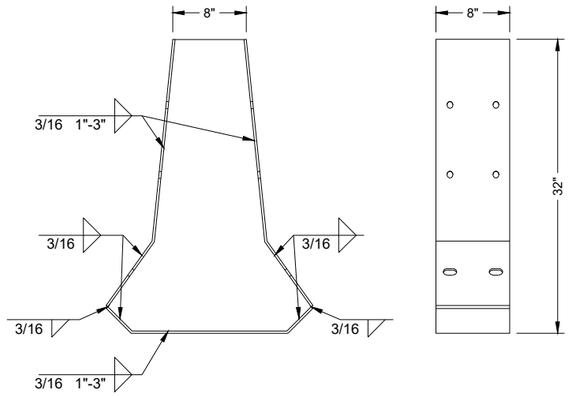


SECTION A - A



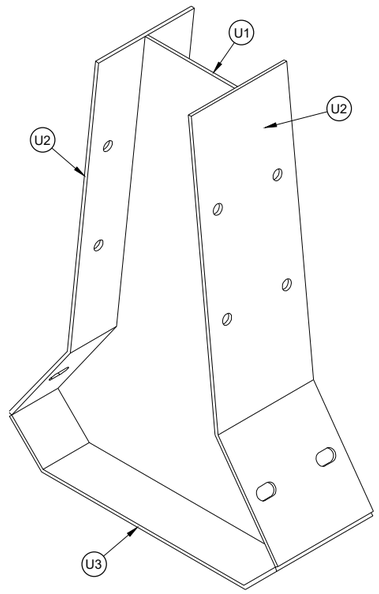
SECTION B - B

PLAN VIEW



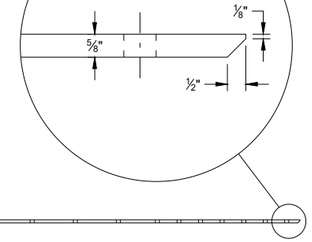
PROFILE VIEW

SIDE VIEW

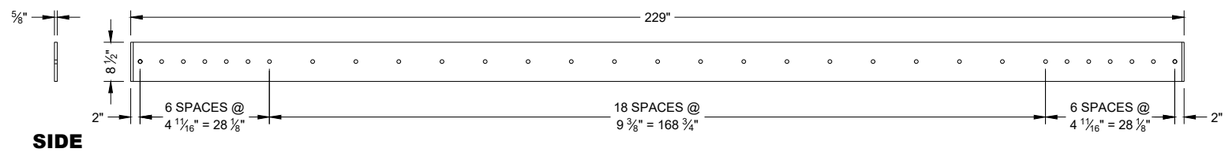


ISOMETRIC

GAP STIFFENER ASSEMBLY



PLAN VIEW

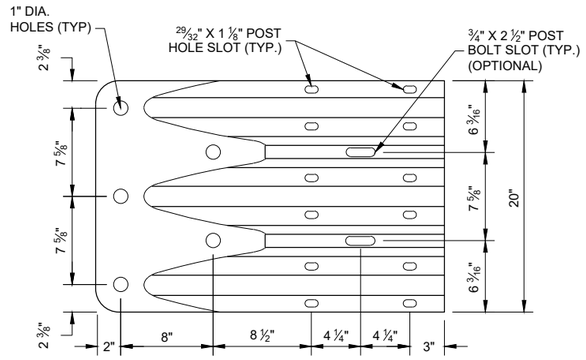


SIDE VIEW

ELEVATION VIEW

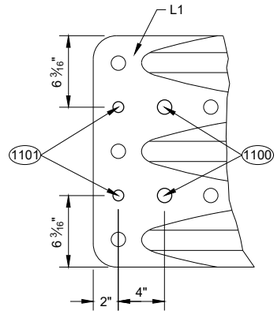
W1 TOE PLATE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"



ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

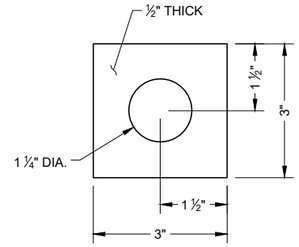


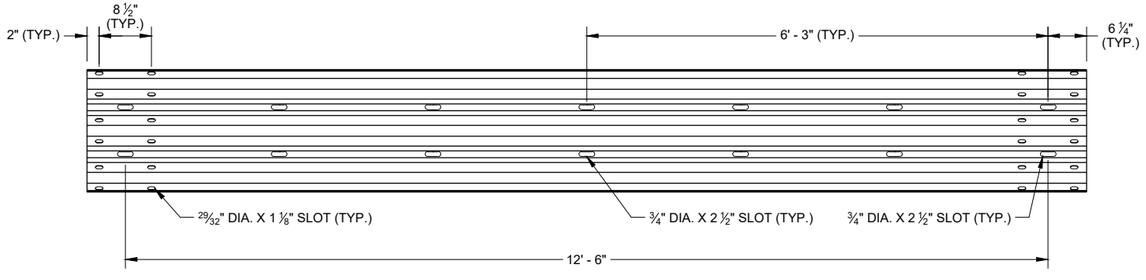
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

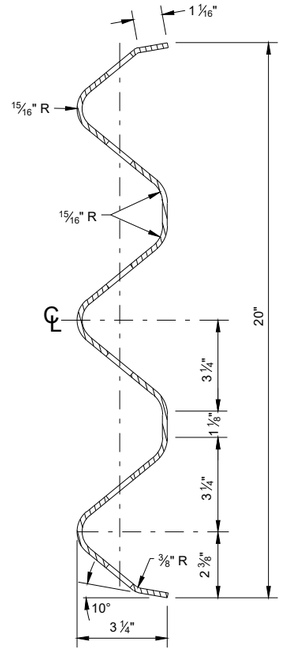
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



SLOTTED THRIE BEAM RAIL K1



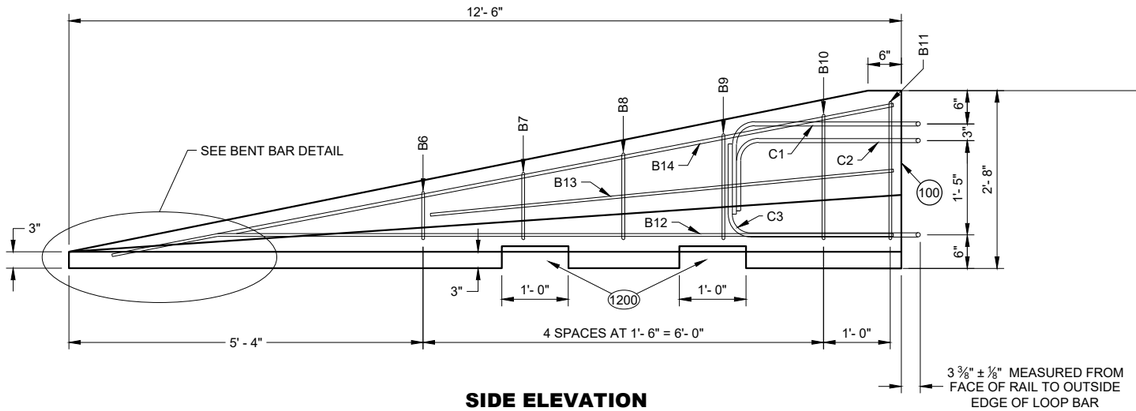
SECTION THROUGH BEAM K1

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

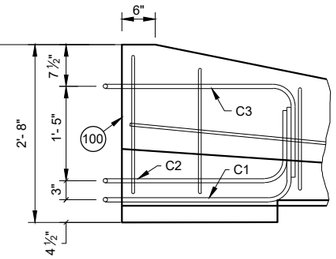
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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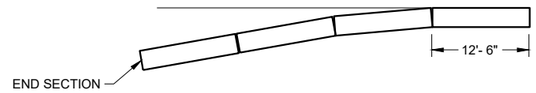
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

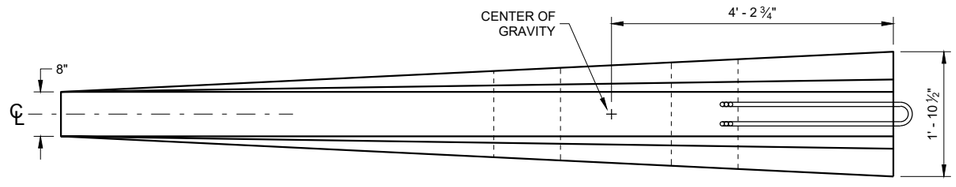
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

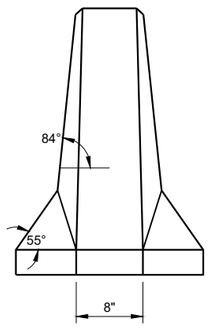


FLARE AT BARRIER END

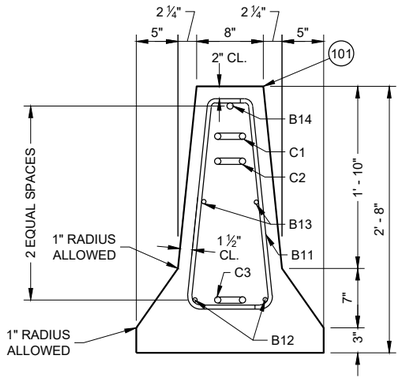
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



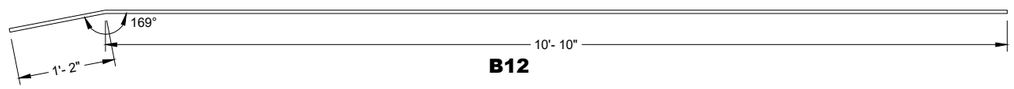
PLAN VIEW



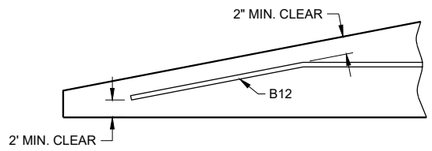
FRONT ELEVATION



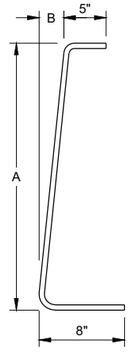
END SECTION



B12



BENT BAR DETAIL



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 ¼"
B8	1'- 5"	1 ⅝"
B9	1'- 8"	1 ⅞"
B10	2'- 0 ½"	2 ⅜"
B11	2'- 3"	2 ¾"

B BARS
2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅛" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅛" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

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CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

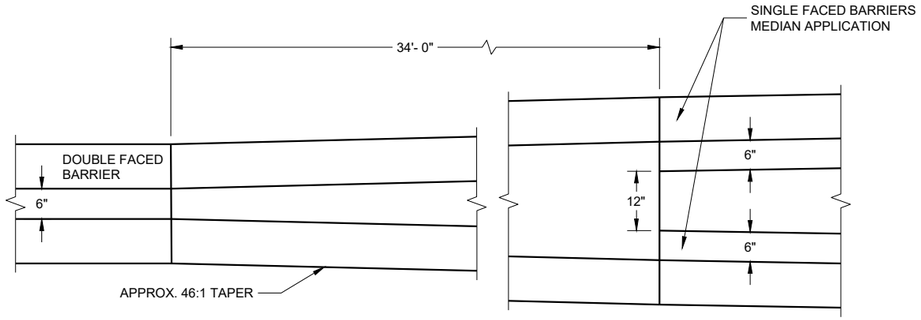
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B07-16n



PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

(FOOTINGS ARE NOT SHOWN)

GENERAL NOTES

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

4000 PSI AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

(1) BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN THE CONTRACT.

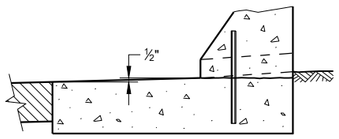
(2) OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.

(3) 3/4 -INCH BEVEL OR 1-INCH RADIUS (TYPICAL).

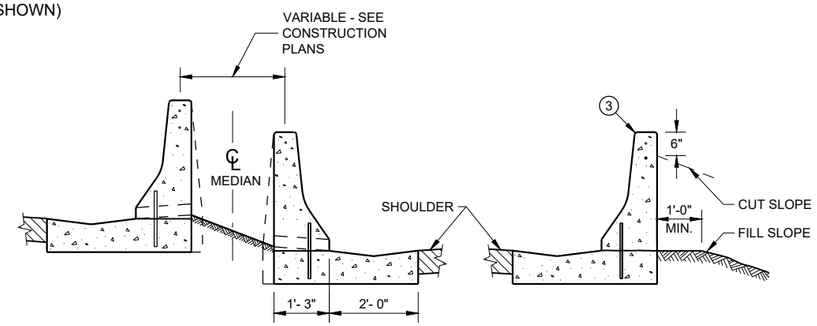
(4) NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.

(5) EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES. SEE REINFORCEMENT AT BARRIER END DETAIL.

(6) SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 25 FEET.

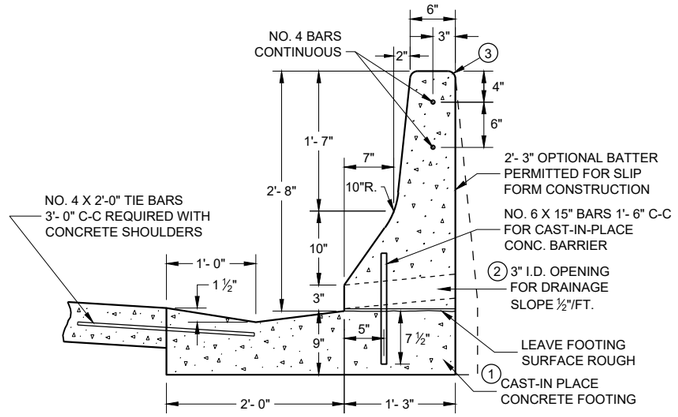


HIGH SIDE CONCRETE BARRIER DETAIL

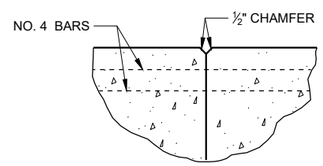


MEDIAN **SHOULDER**

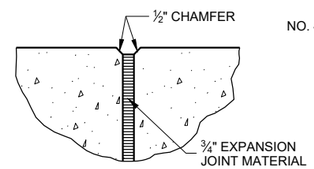
TYPICAL APPLICATIONS



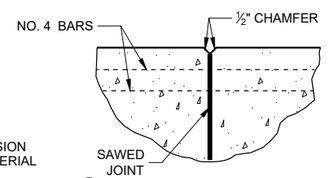
SECTION VIEW



4 **CONSTRUCTION JOINT**



5 **EXPANSION JOINT**



6 **CONTRACTION JOINT**

JOINT DETAILS

CONCRETE BARRIER (DOUBLE FACED)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/16/2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

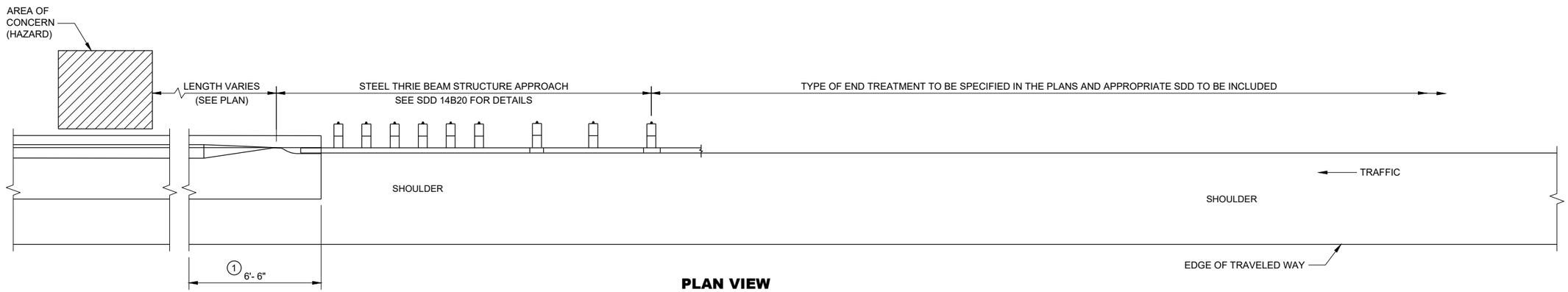
FHWA

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SDD 14B22 - 07a

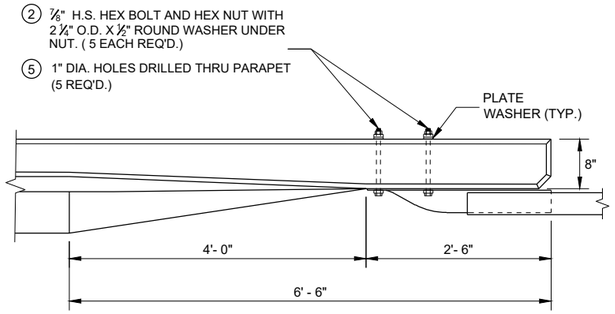
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SDD 14B22 - 07a



PLAN VIEW

TRANSITION TO STEEL PLATE BEAM GUARD AND END TERMINAL



PLAN VIEW

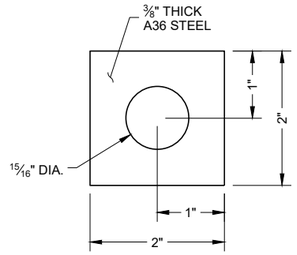
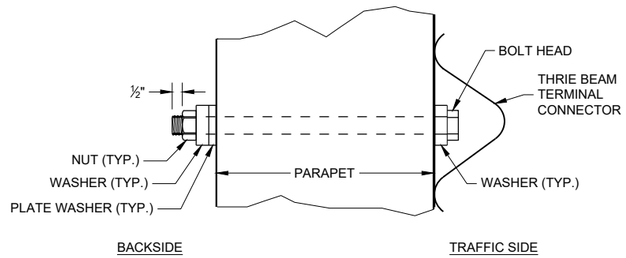


PLATE WASHER DETAIL

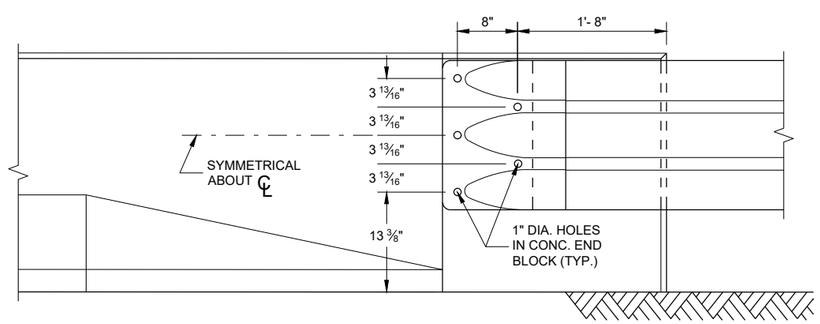


THRIE BEAM BOLT DETAIL

GENERAL NOTES

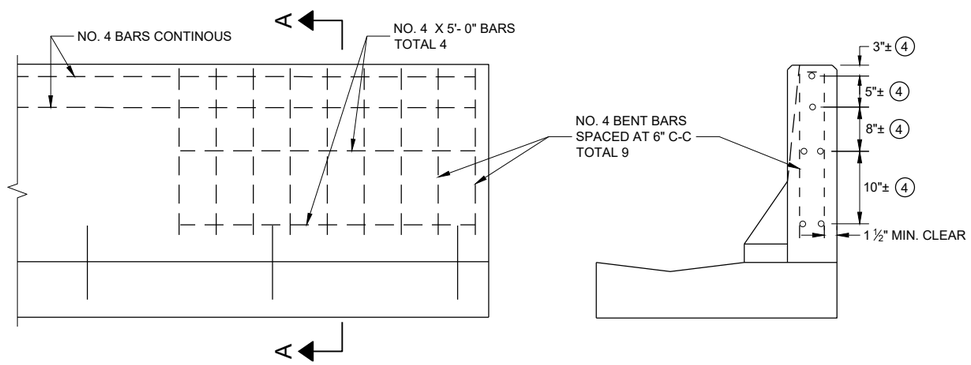
1. A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.
2. BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
3. REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.
4. PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.
5. INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

   DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



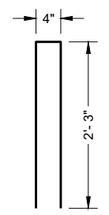
FRONT VIEW

CONCRETE BARRIER TRANSITION TO THRIE BEAM



FRONT VIEW **SECTION A - A**

3 REINFORCEMENT AT BARRIER END



BENT BAR DETAIL

CONCRETE BARRIER, SINGLE FACED (WITH ANCHORAGE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/16/2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 14B22 - 07b

SDD 14B22 - 07b

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

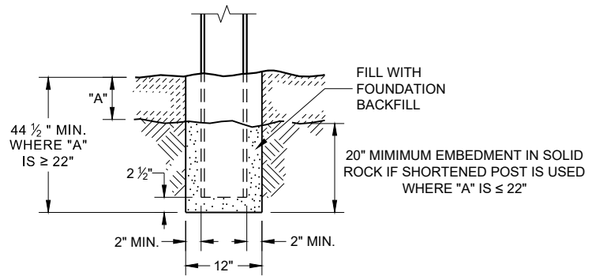
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

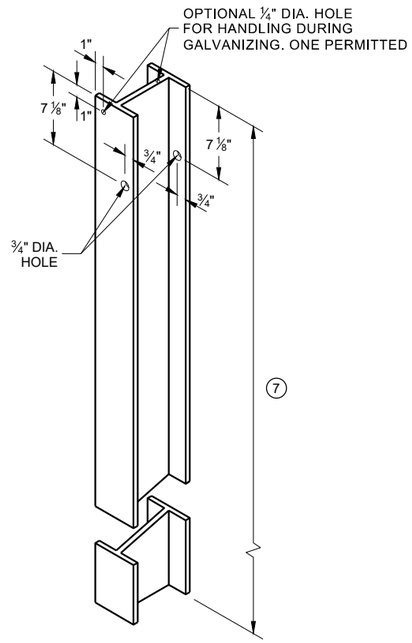
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

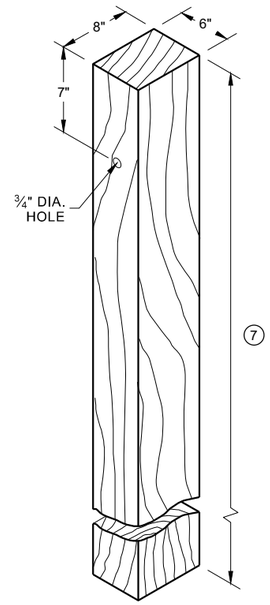
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



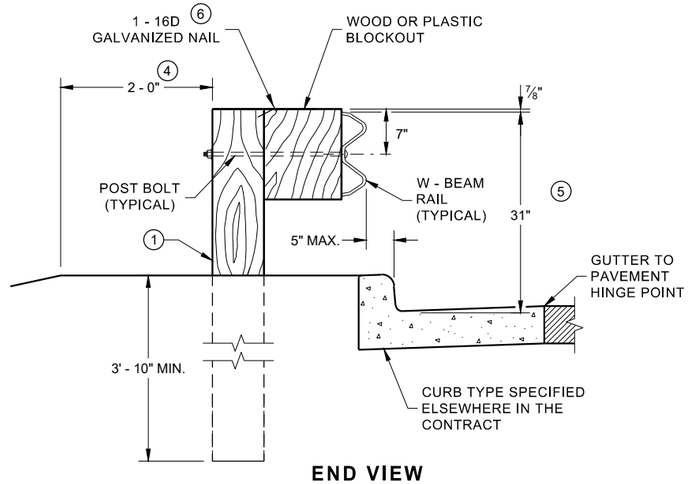
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



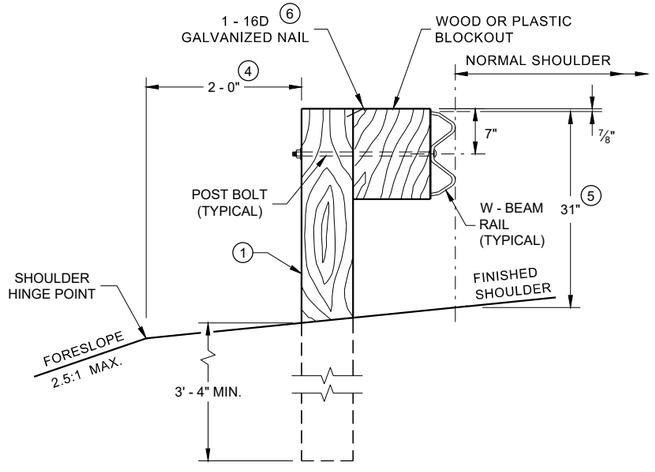
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



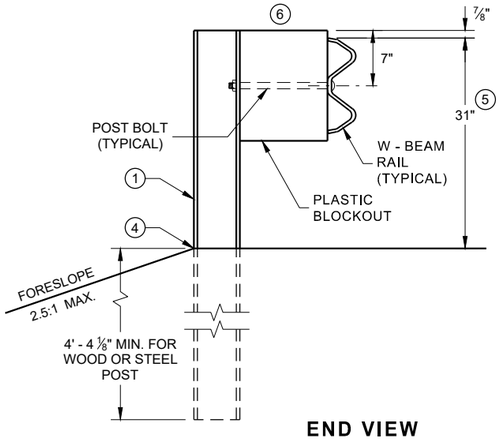
WOOD POST (6" X 8") NOMINAL (1)



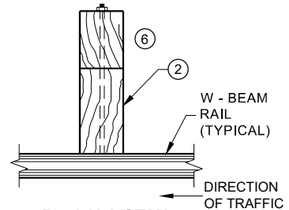
END VIEW
LOCATED ALONG A CURBED ROADWAY



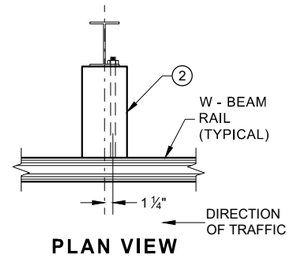
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



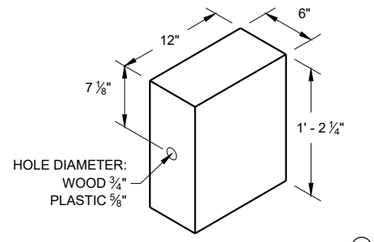
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

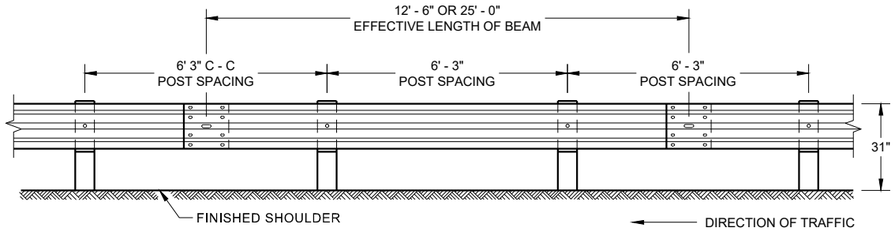
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

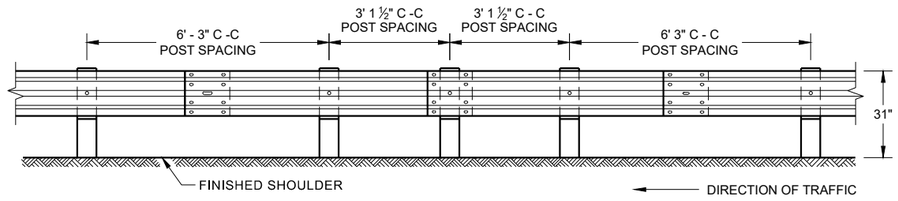
SDD 14B42 - 07a

6

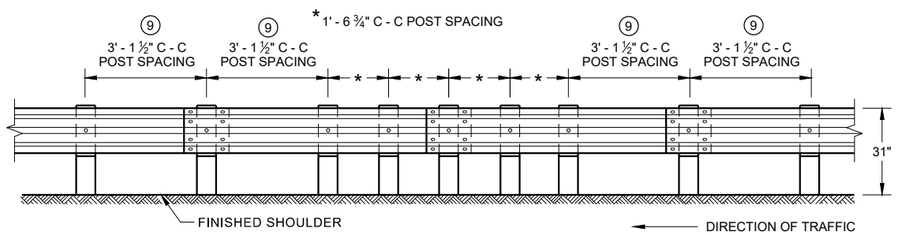
SDD 14B42 - 07a



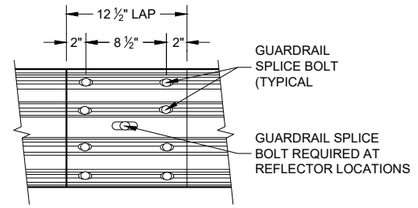
FRONT VIEW
POST SPACING STANDARD INSTALLATION



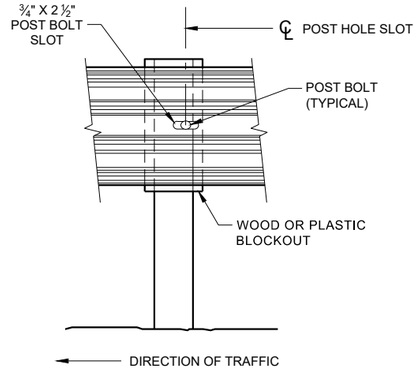
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



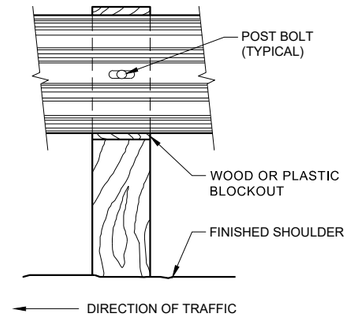
FRONT VIEW
QUARTER POST SPACING (QS)



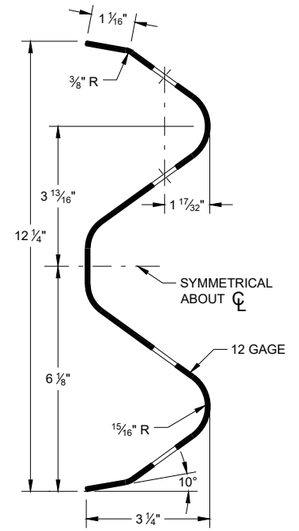
FRONT VIEW
MID-SPAN BEAM SPLICE



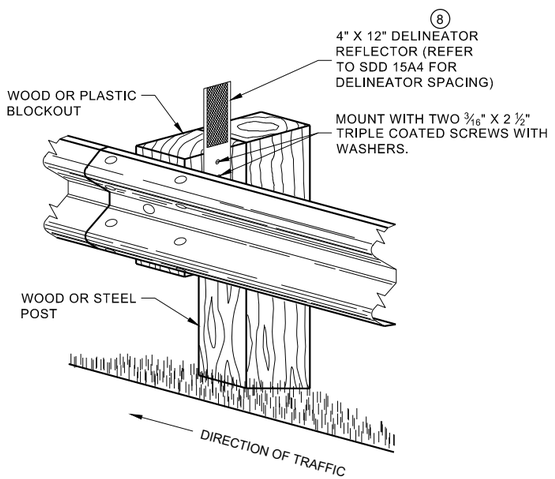
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

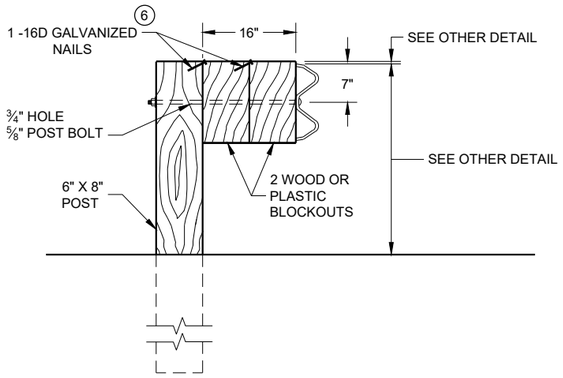
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

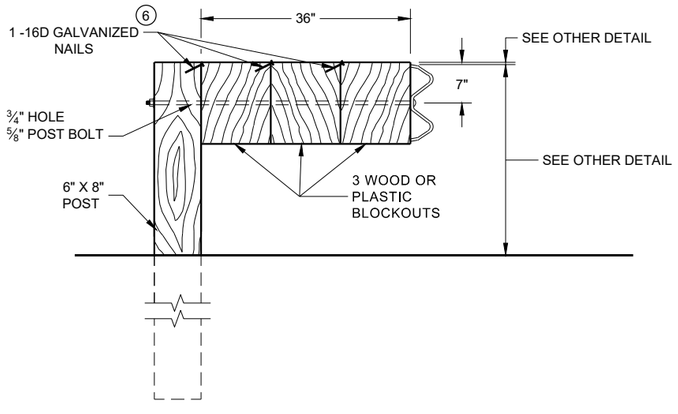
6

SDD 14B42 - 07b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



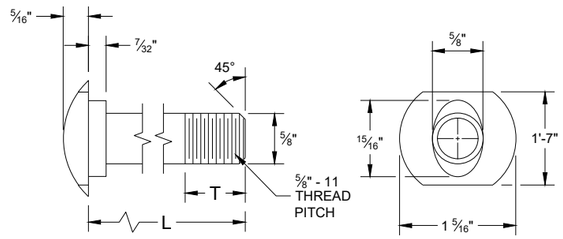
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

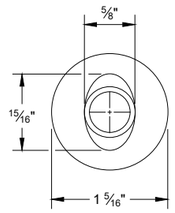
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

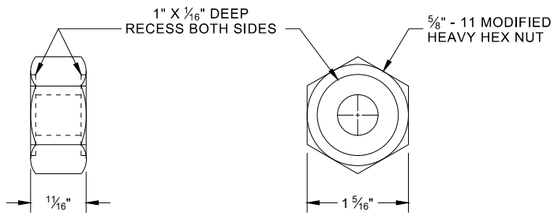


POST BOLT TABLE

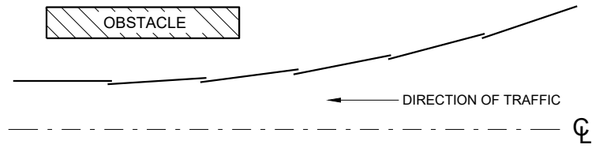
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



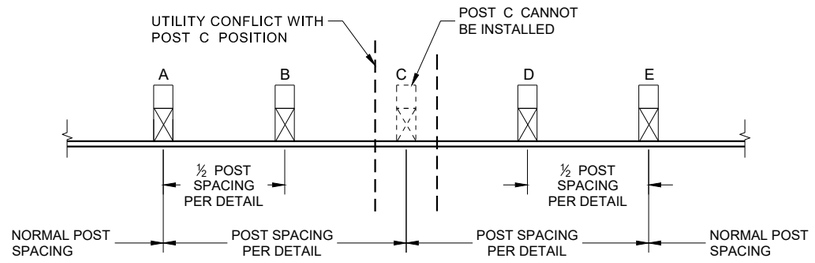
ALTERNATE BOLT HEAD



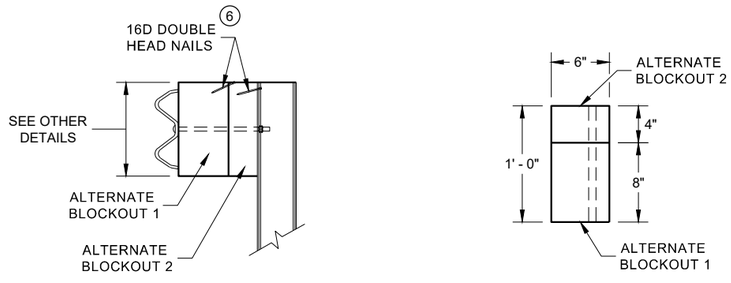
POST BOLT, SPLICE BOLT AND RECESS NUT



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW

PLAN VIEW

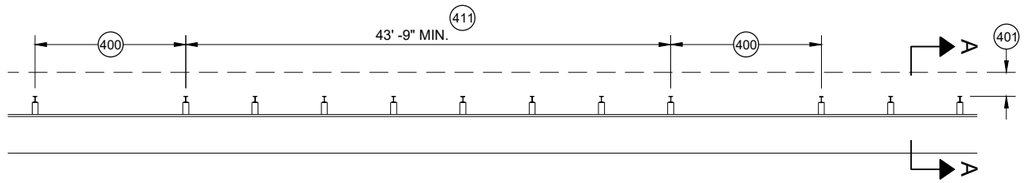
ALTERNATE WOOD BLOCKOUT DETAIL

6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

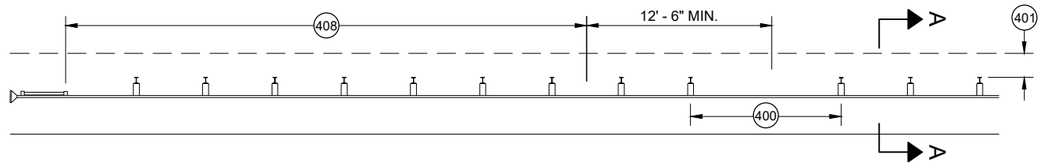
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

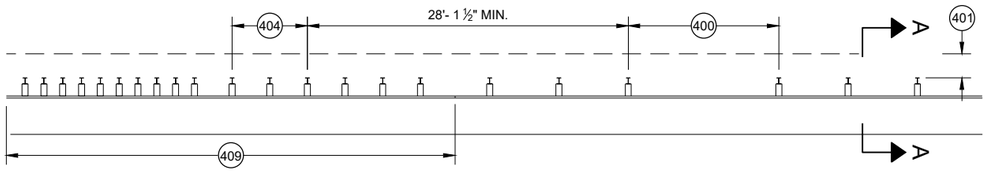
SDD 14B42 - 07c



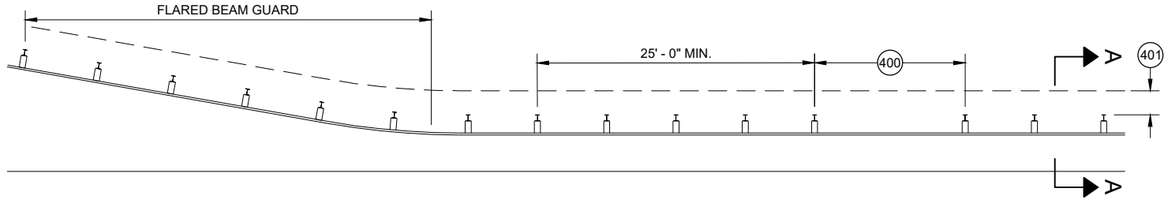
MISSING POST IN MGS GUARDRAIL



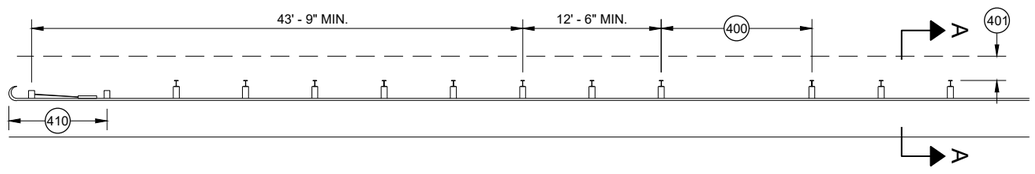
MISSING POST IN MGS GUARDRAIL NEAR EAT



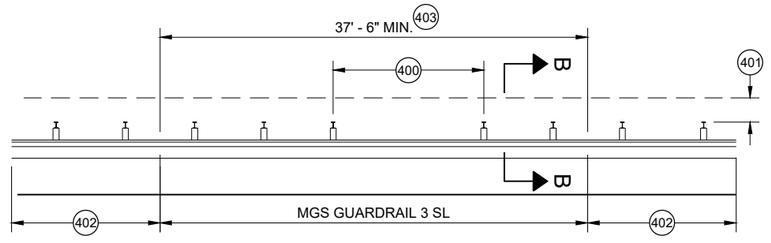
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

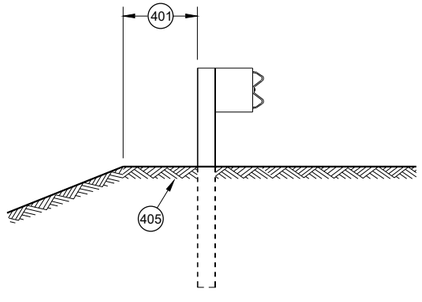


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

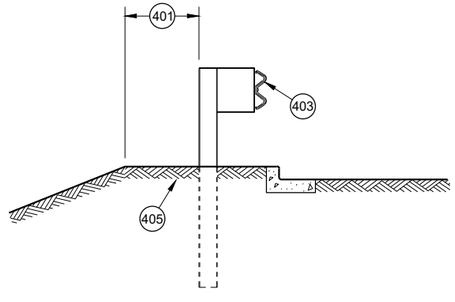


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

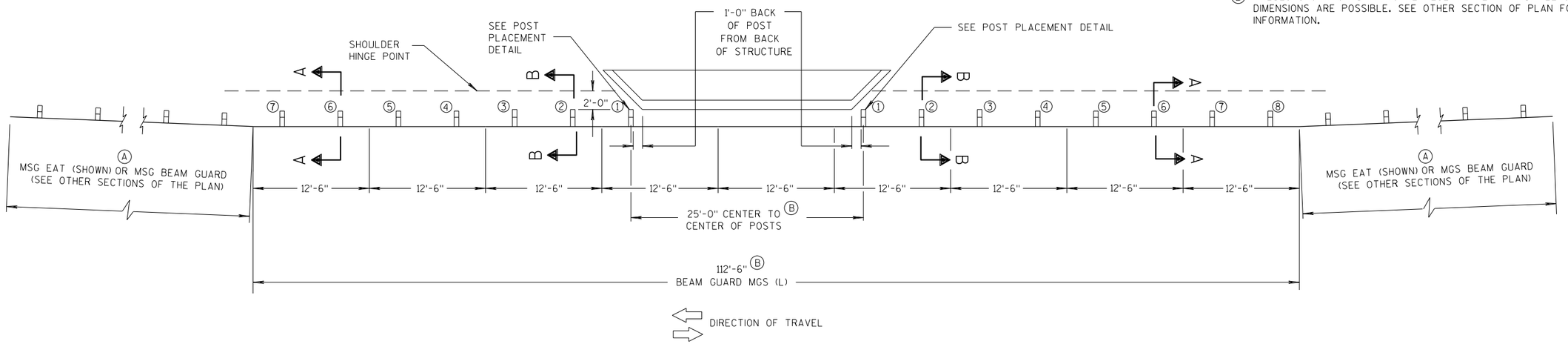
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

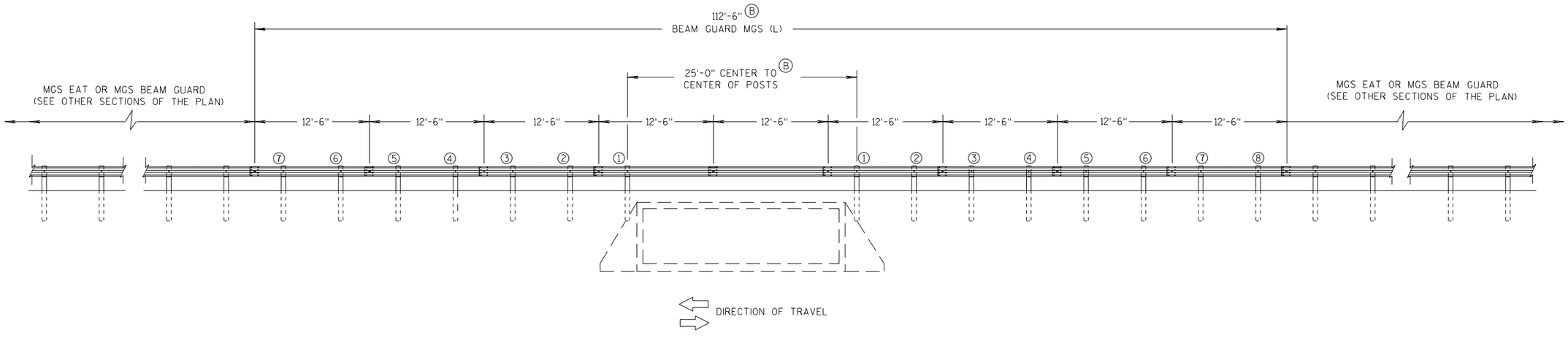
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 43-4a

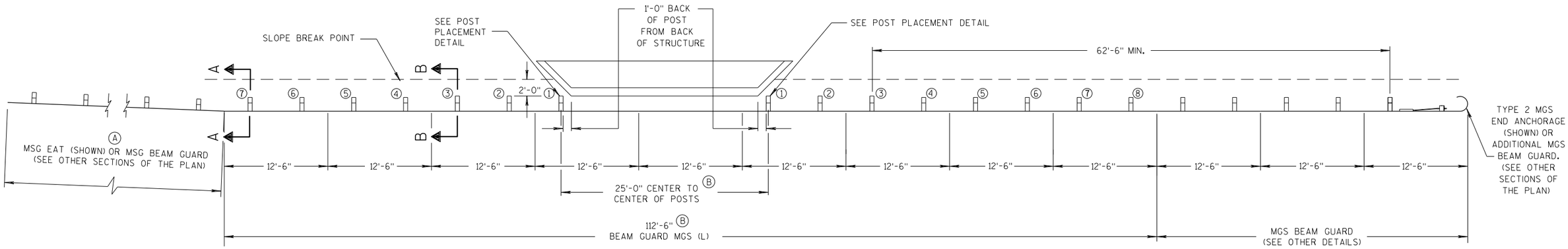
GENERAL NOTES

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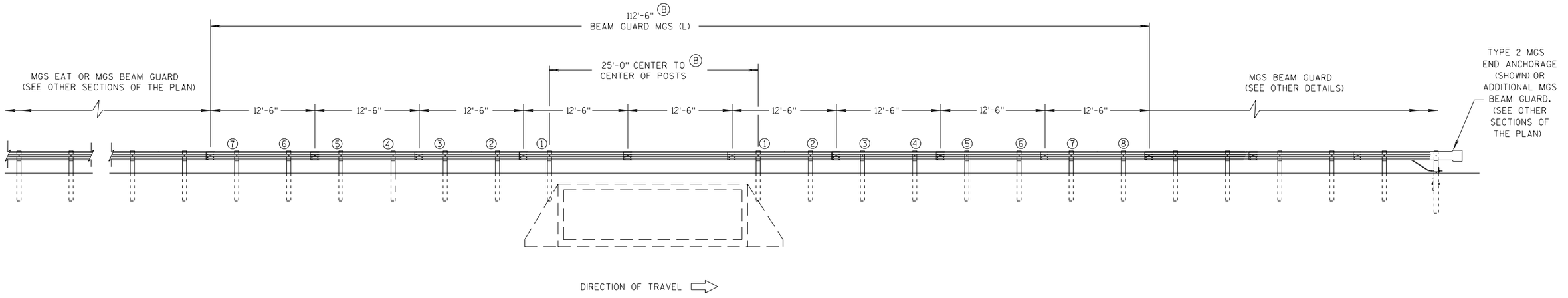
SEE SDD 14 B 42 FOR MORE DETAILS.

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PLAN VIEW



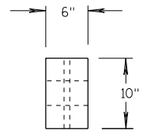
ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

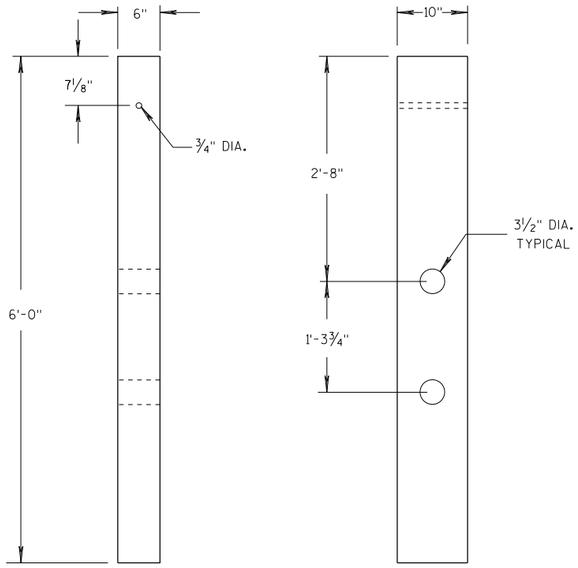
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	150

6

S.D.D. 14 B 43-4b

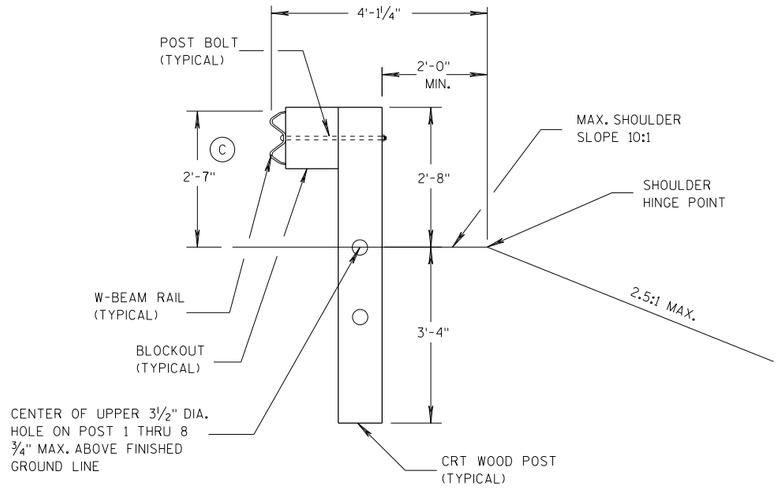


PLAN VIEW



FRONT VIEW SIDE VIEW

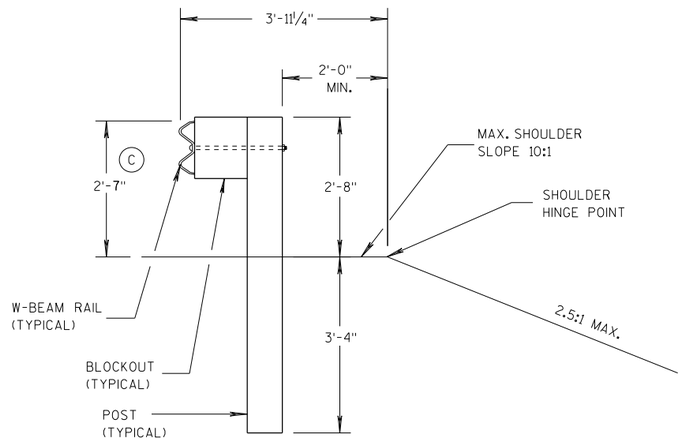
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



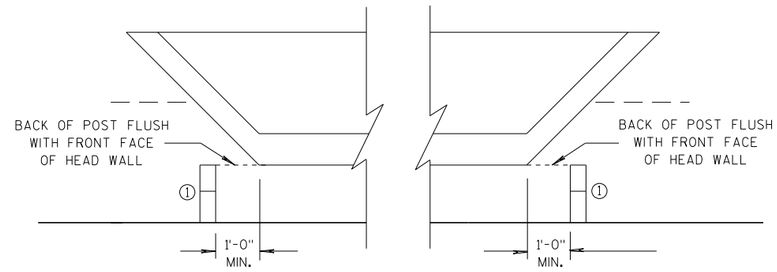
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

151

6

S.D.D. 14 B 43-4c

6

S.D.D. 14 B 43-4c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

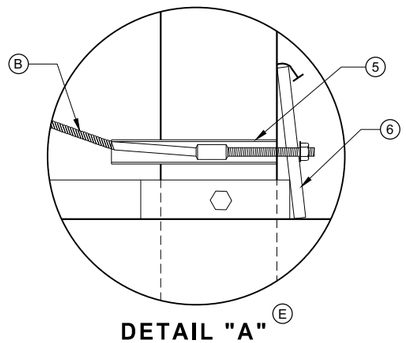
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

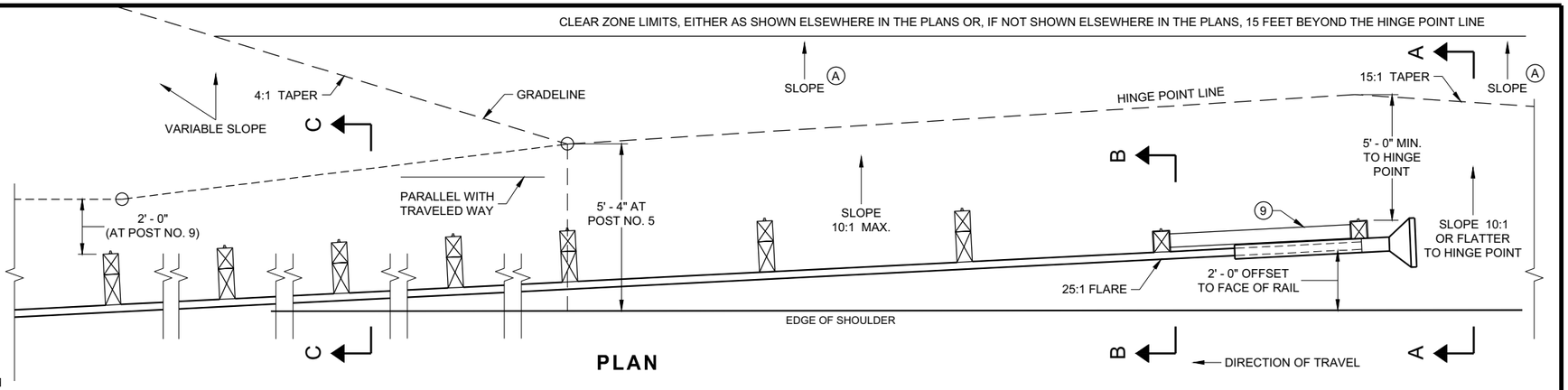
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

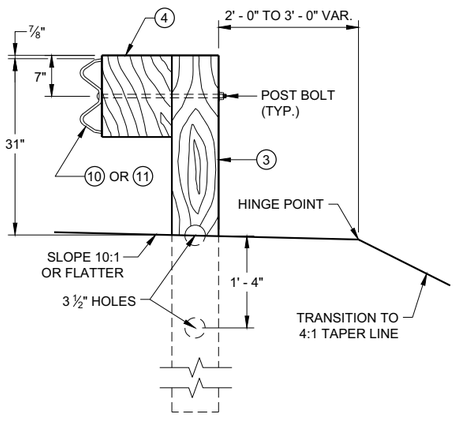
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

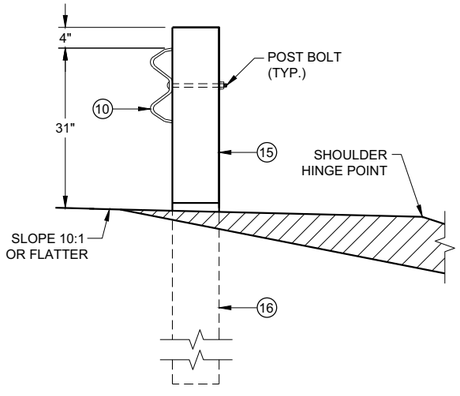


DETAIL "A" (E)

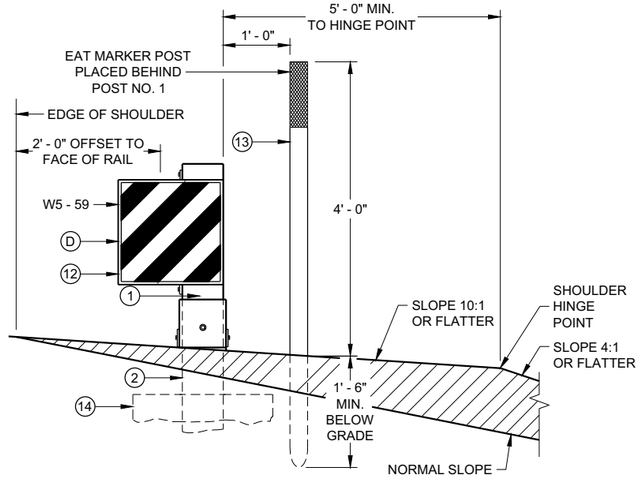




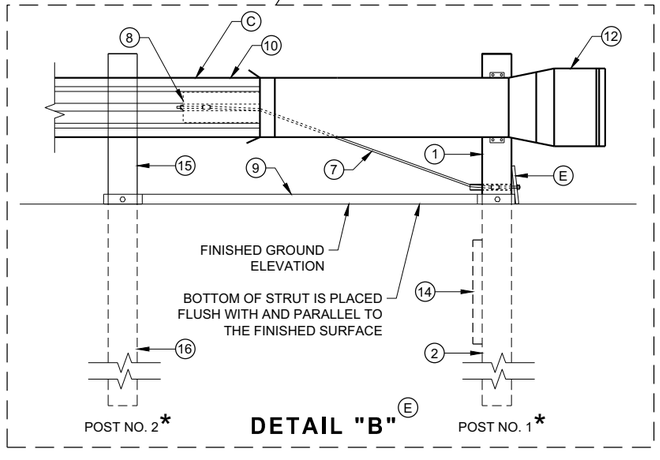
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



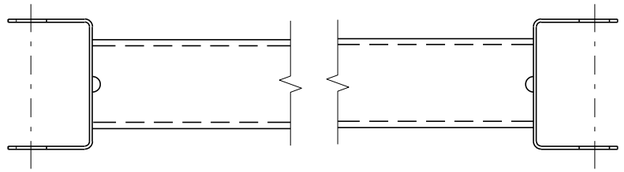
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

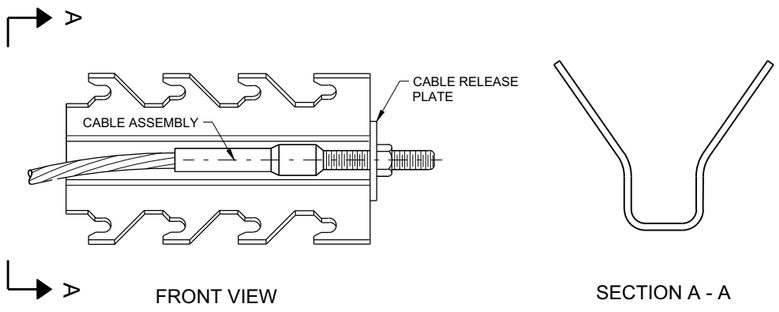
SDD 14B44 - 04a



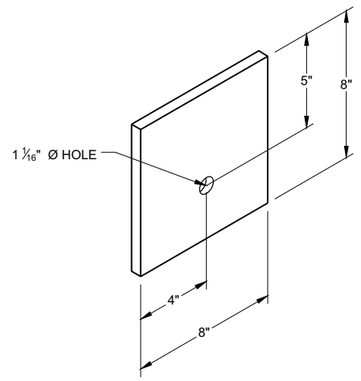
GENERIC GROUND STRUT (9) (E)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

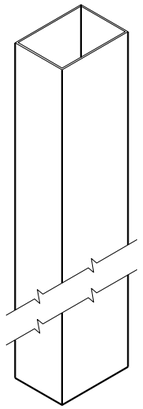
6

SDD 14B44 - 04b

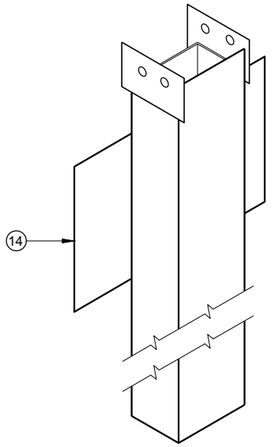
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

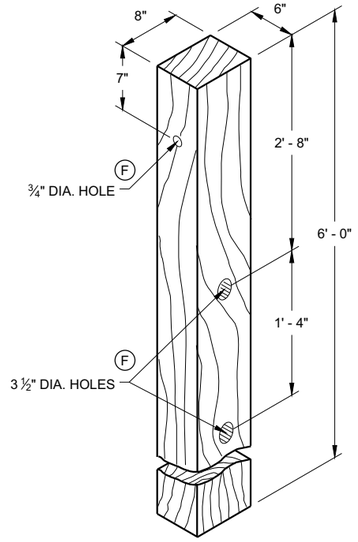
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



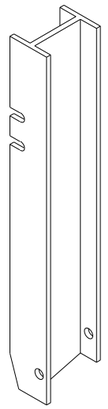
UPPER POST NO. 1 (1) (E)



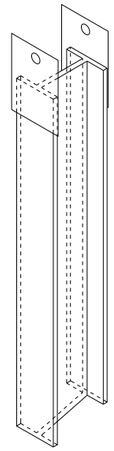
LOWER POST NO. 1 (2) (E)



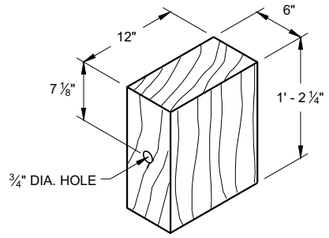
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



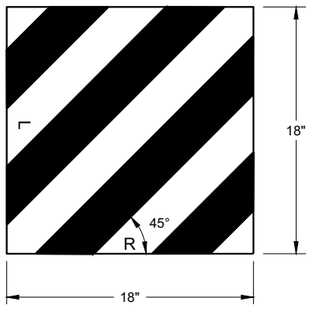
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

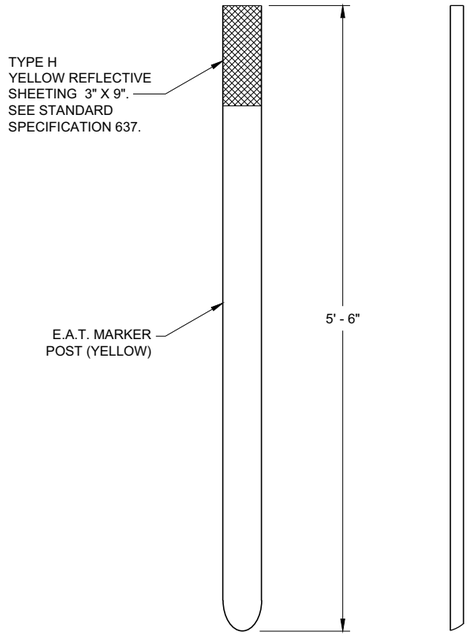


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



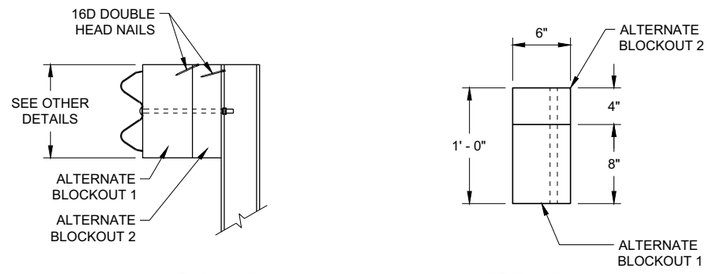
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

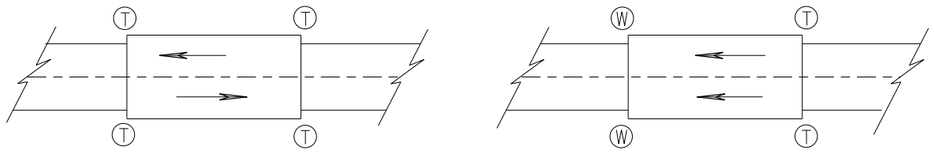
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

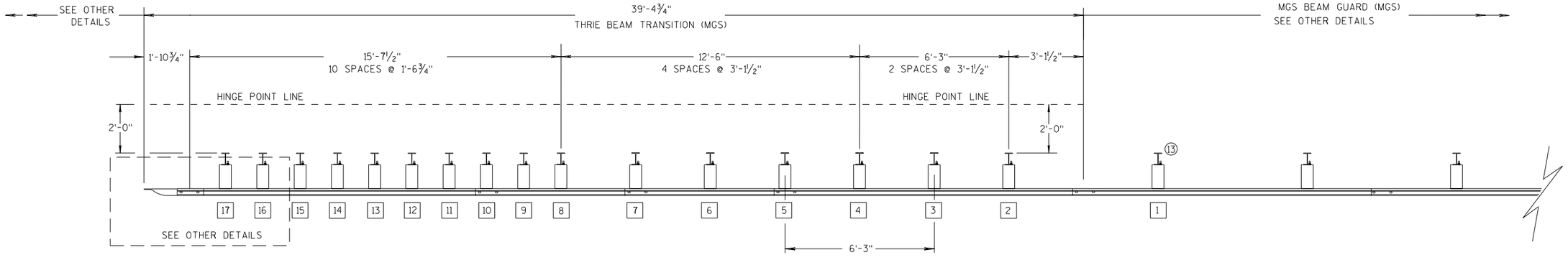
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

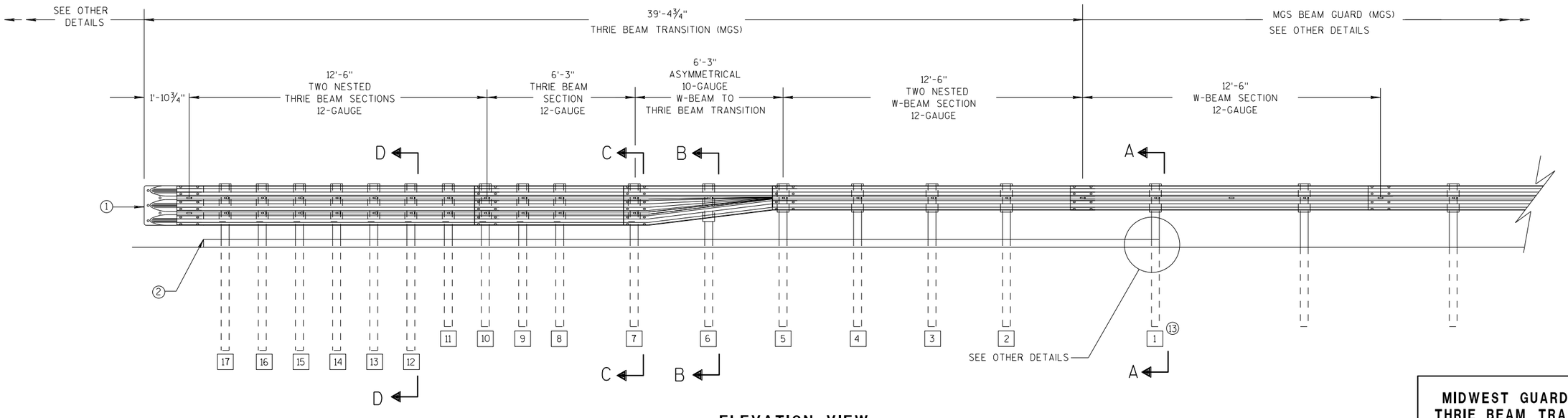
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

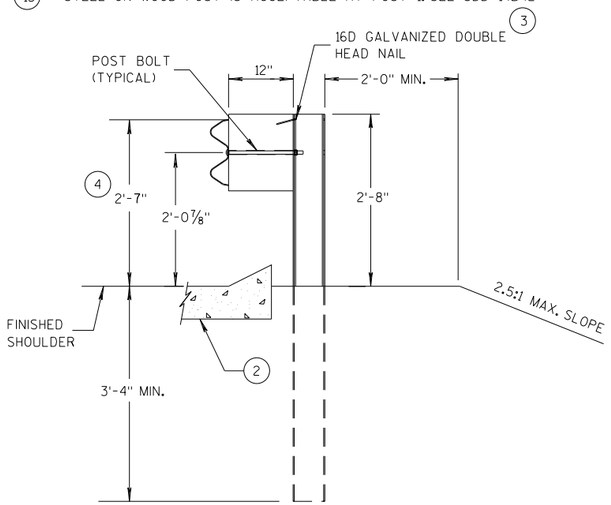
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

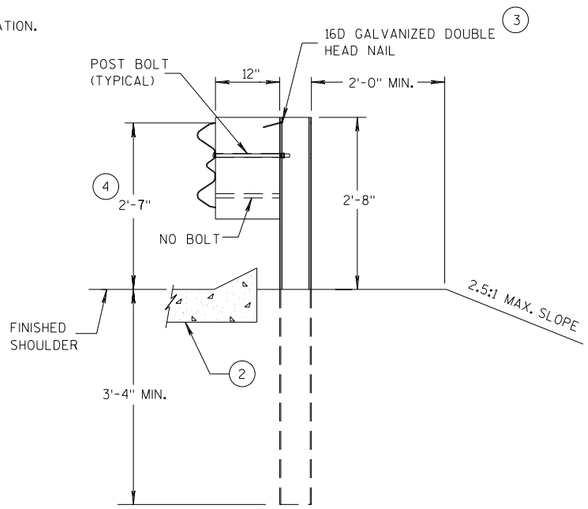
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



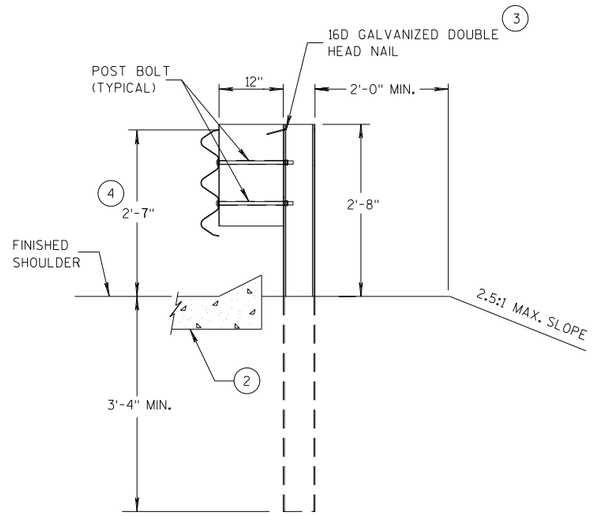
SECTION A-A (13)

POSTS 1-5



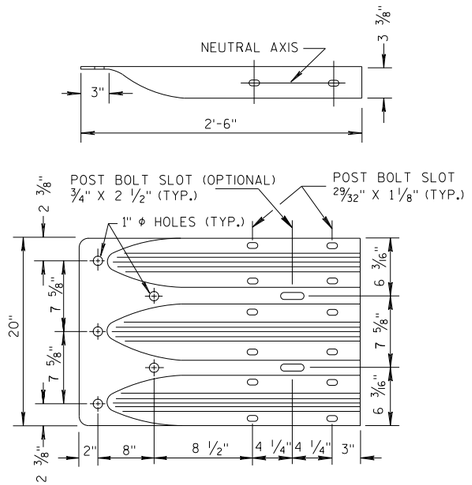
SECTION B-B

POST 6

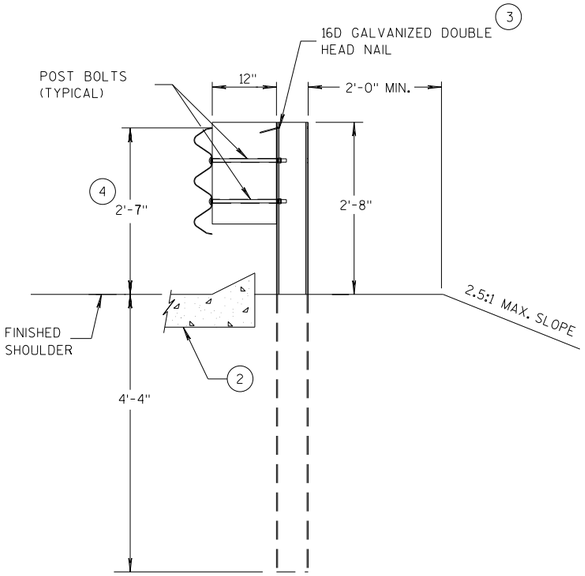


SECTION C-C

POSTS 7-11

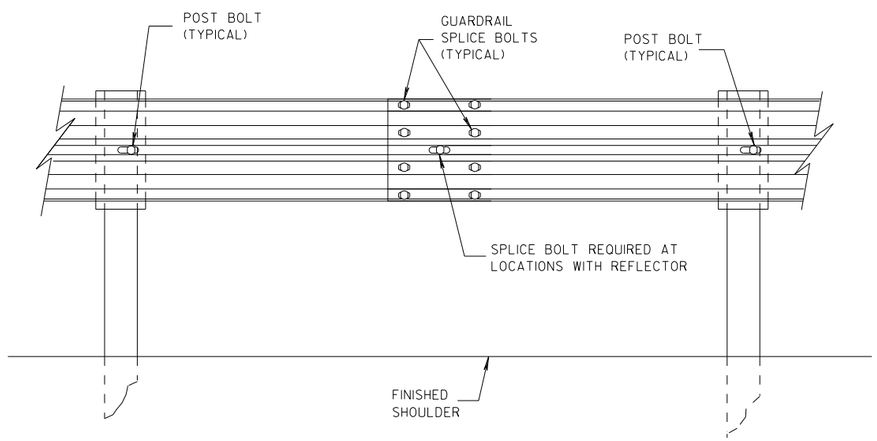


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

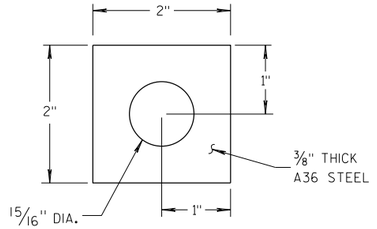
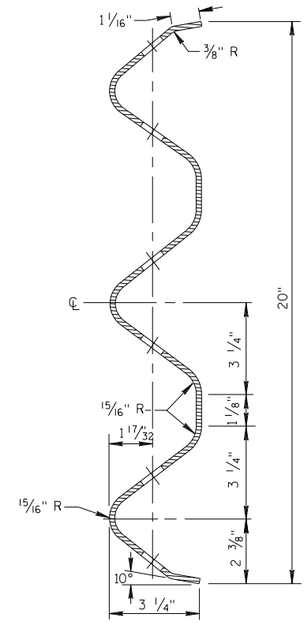


PLATE WASHER DETAIL



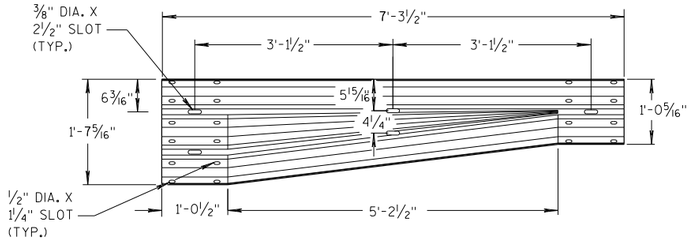
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

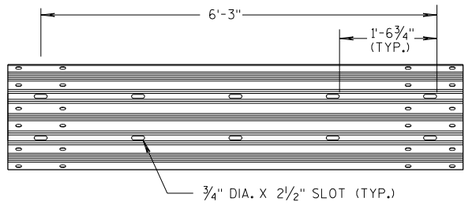
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

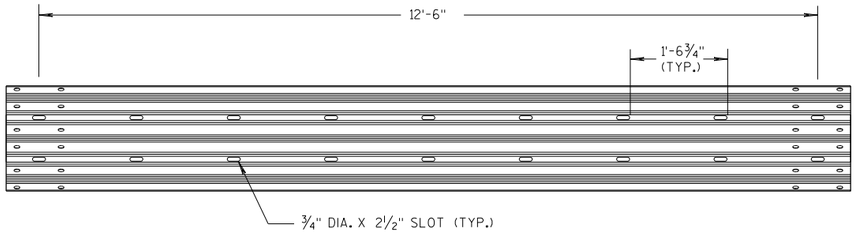
S.D.D. 14 B 45-5b



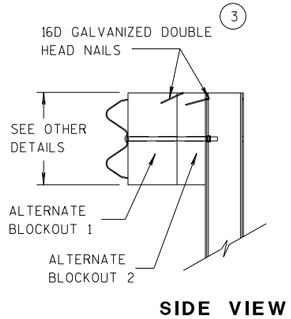
W-BEAM TO THRIE BEAM TRANSITION SECTION



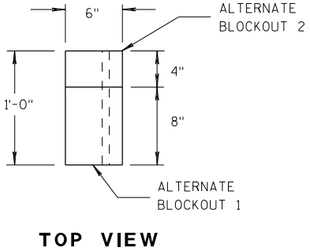
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

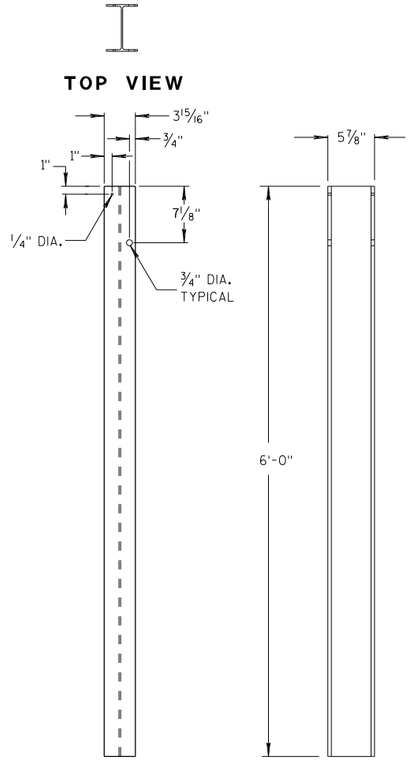


SIDE VIEW



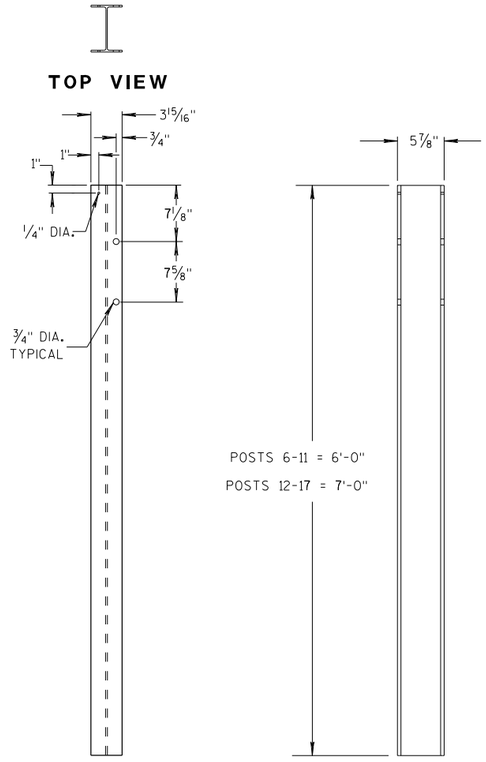
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



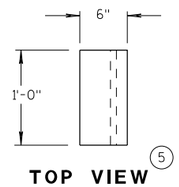
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

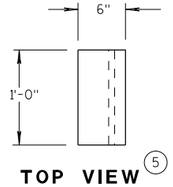


FRONT VIEW SIDE VIEW

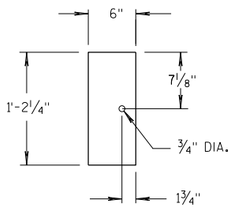
STEEL POSTS 6-17



TOP VIEW (5)

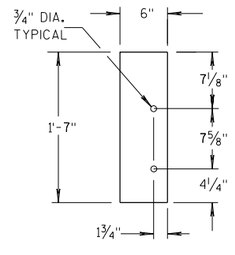


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

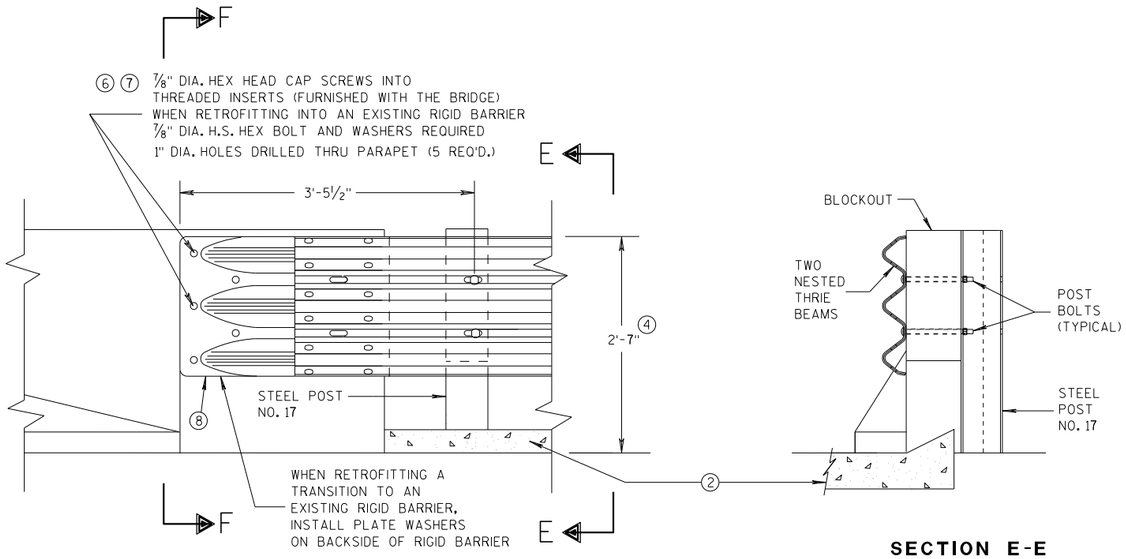
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

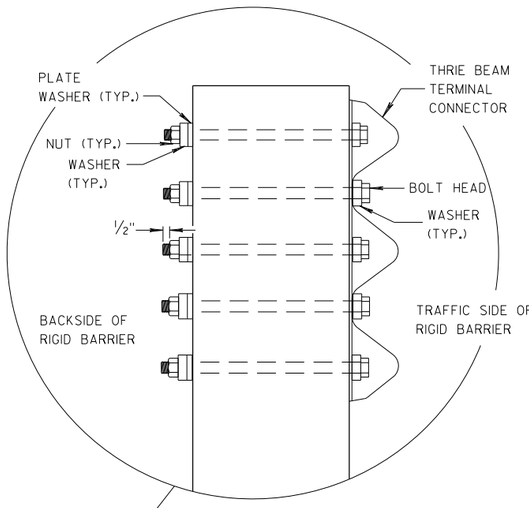
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

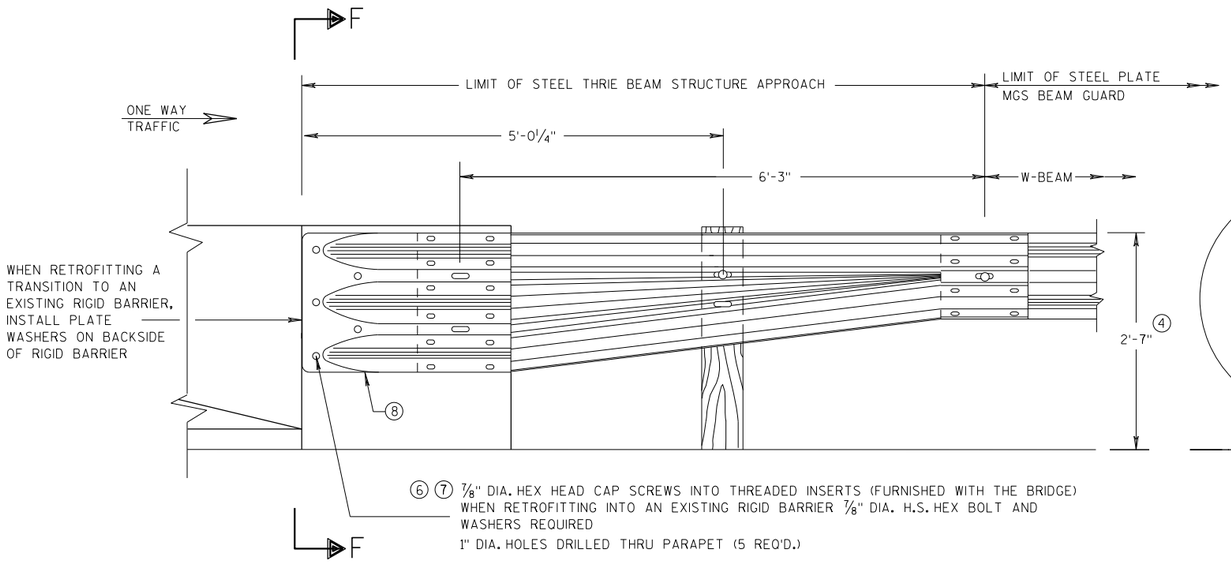
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

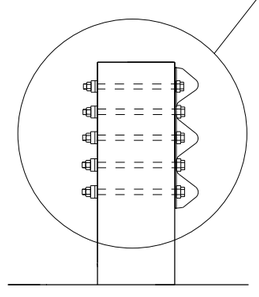
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

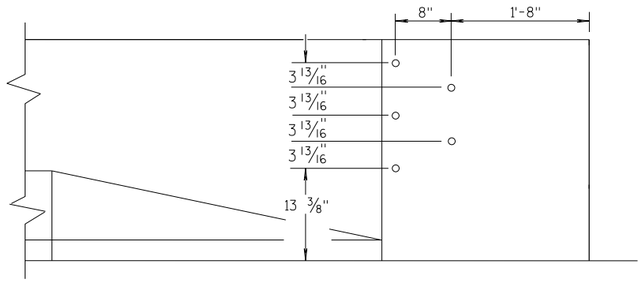




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[illegible] UNIT SUPERVIS[illegible] — NT
FHWA

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S.D.D. 14 B 45-5d

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S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

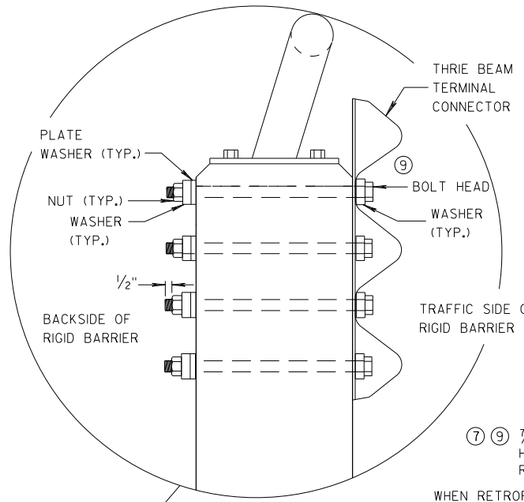
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

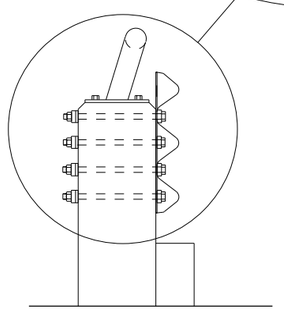
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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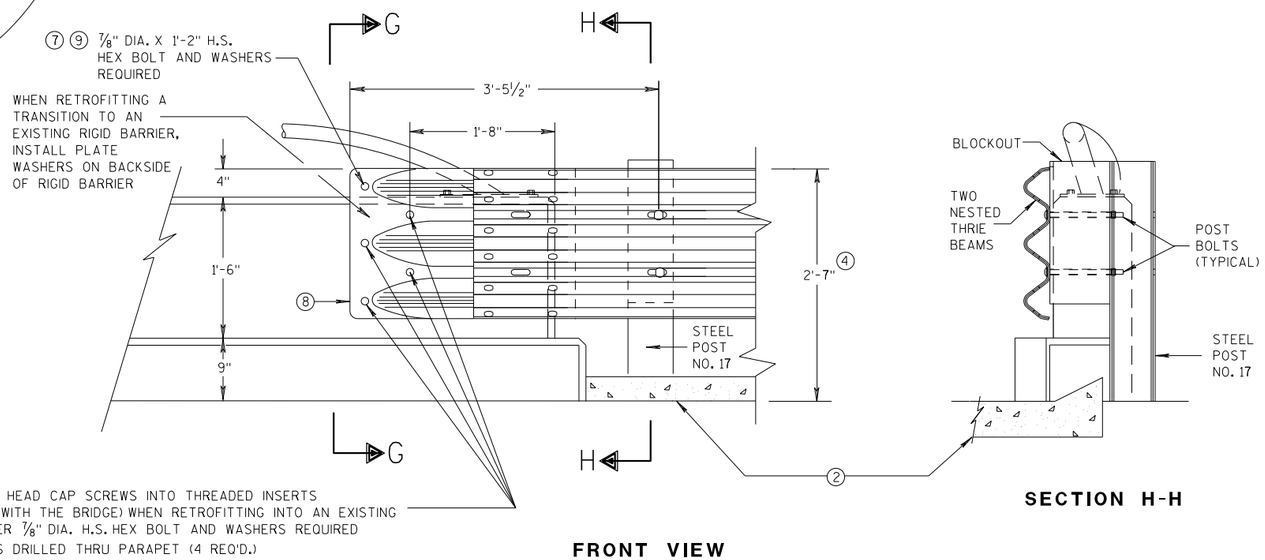
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





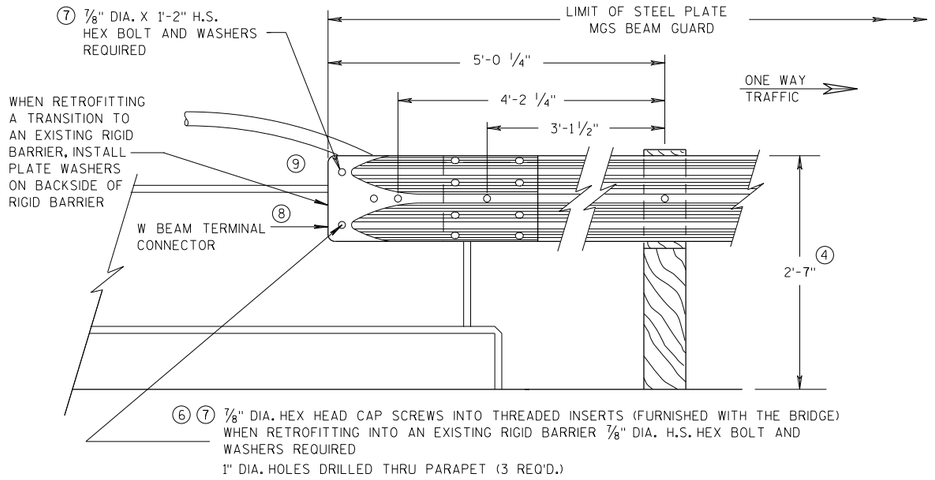
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

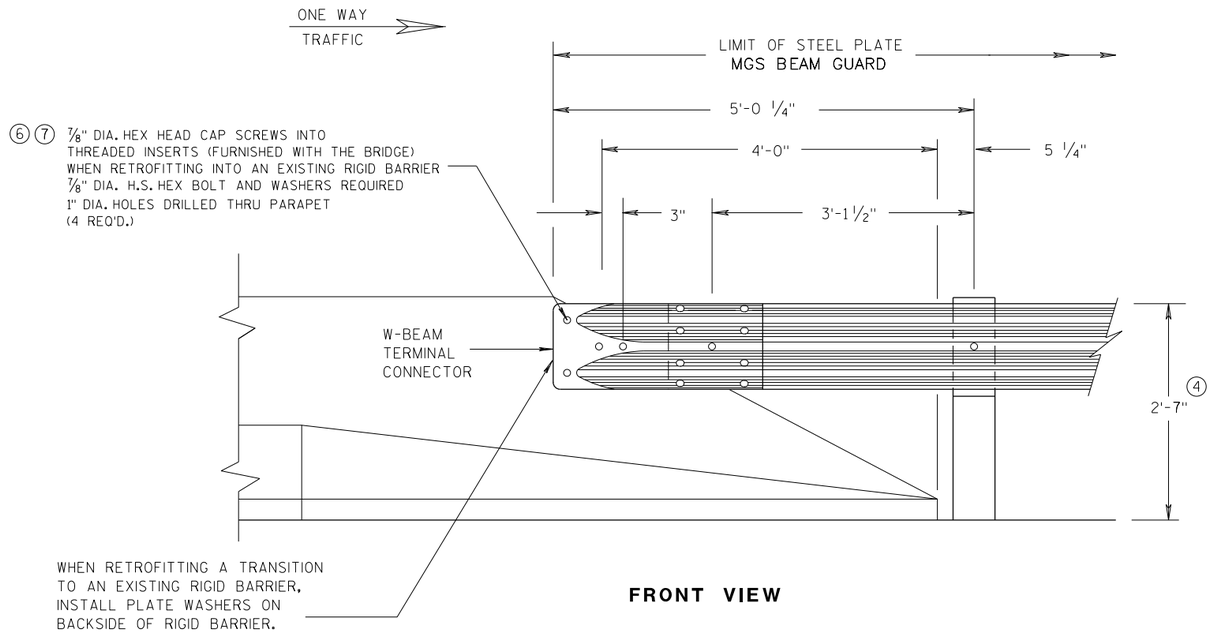
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS NT

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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

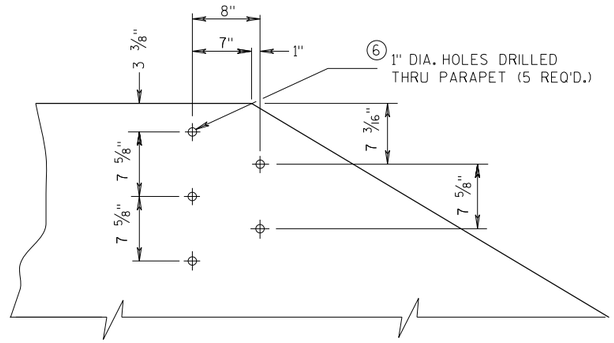
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

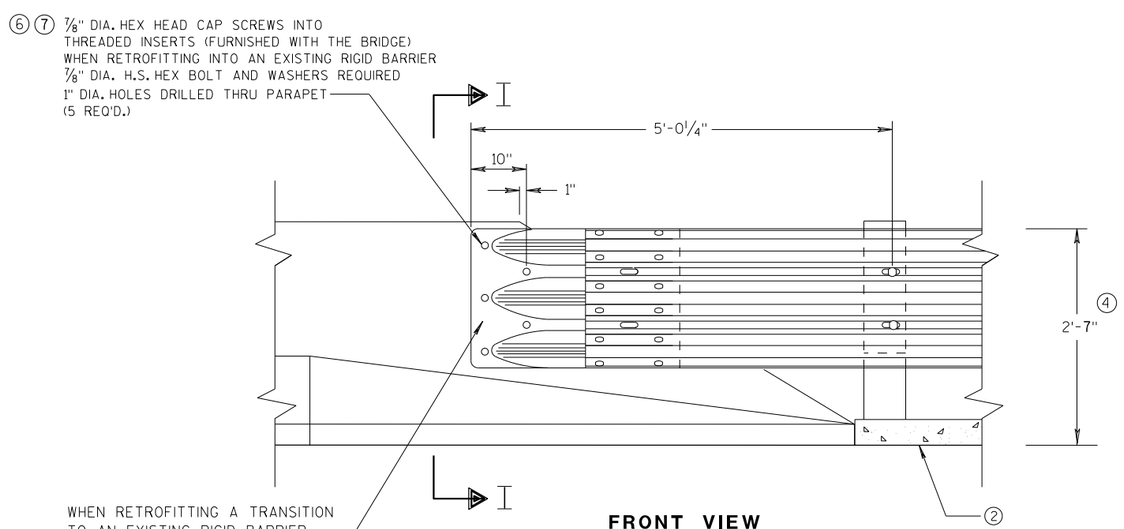
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

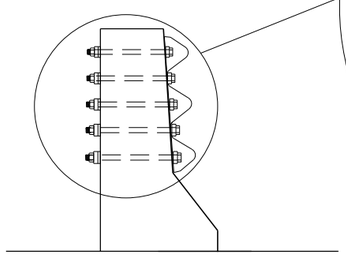
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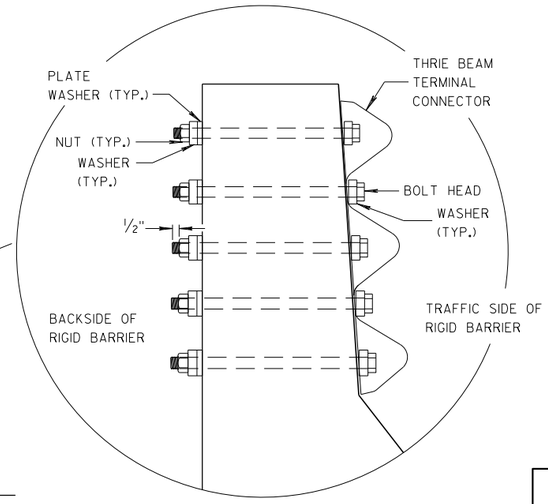
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

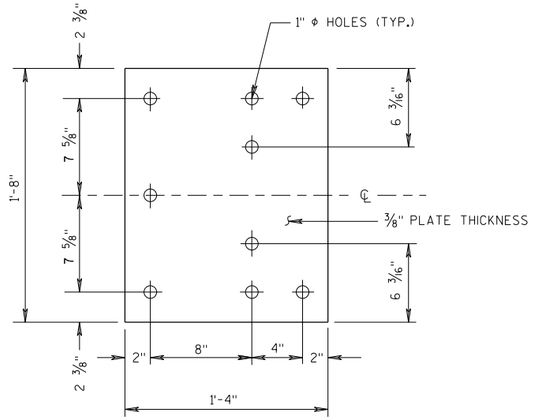
APPROVED
07/2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS [illegible] UNIT SUPERVI[illegible]ENT
FHWA

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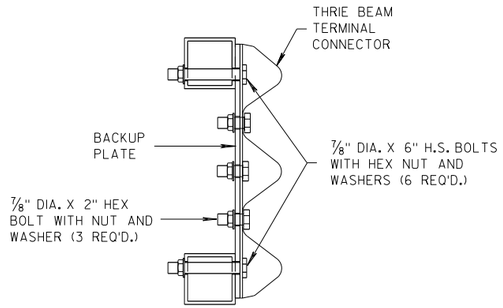
S.D.D. 14 B 45-5f

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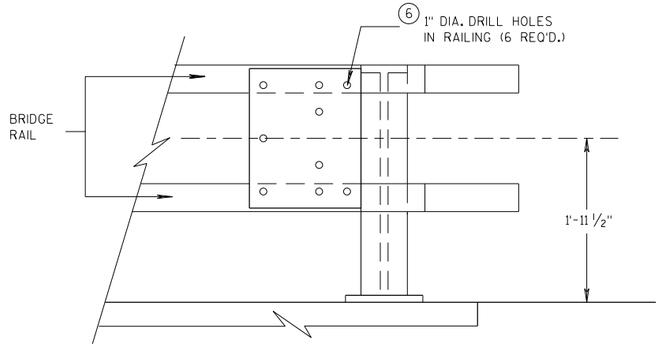
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

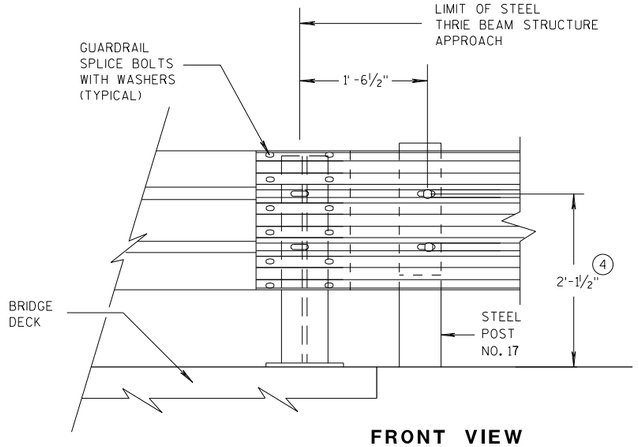


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

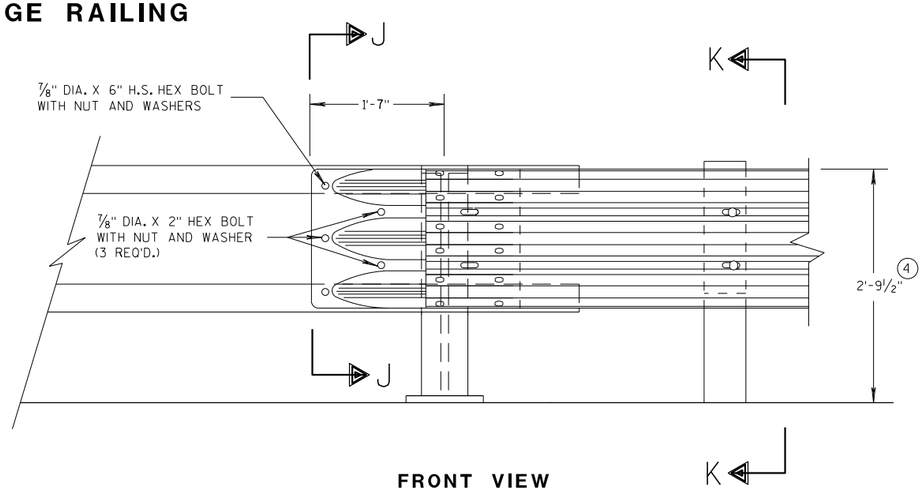
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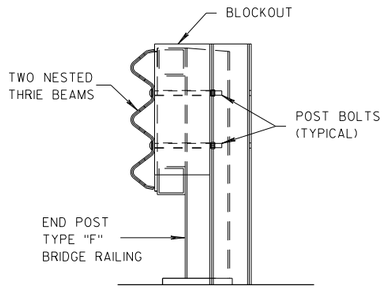


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
FHWA

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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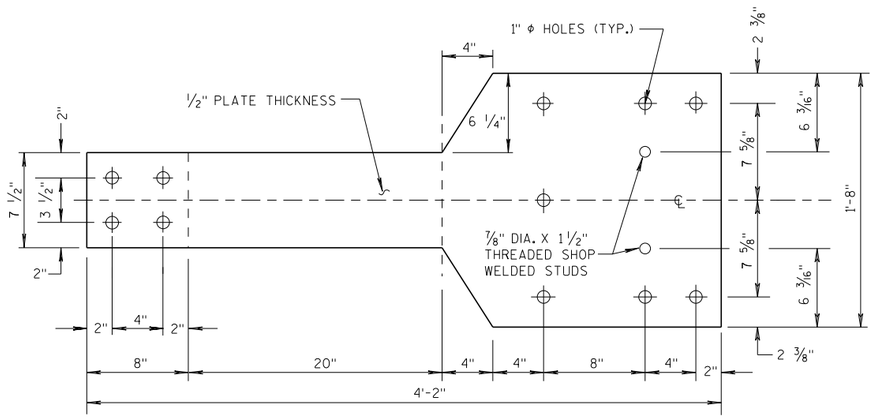
S.D.D. 14 B 45-5g

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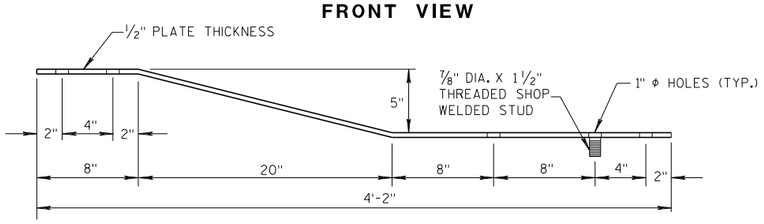
S.D.D. 14 B 45-5g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

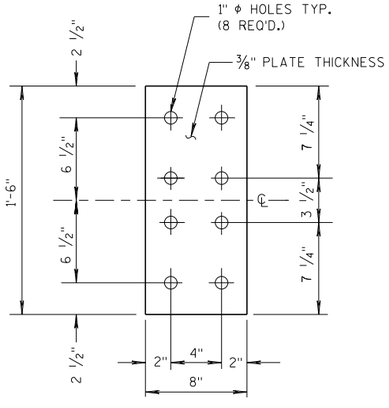


FRONT VIEW



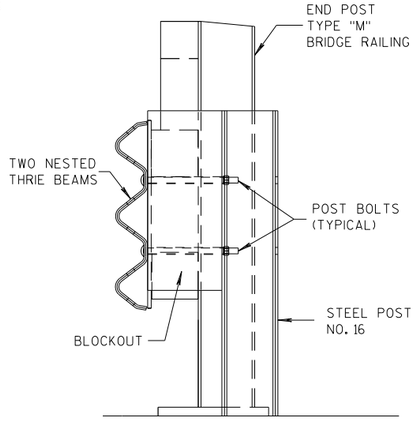
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

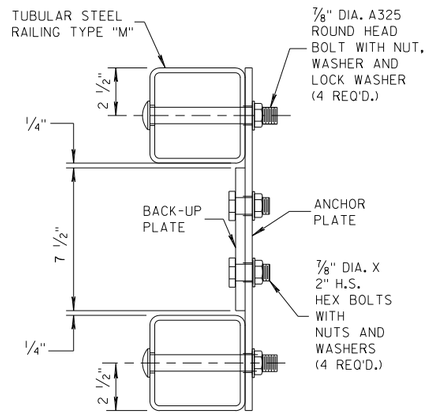


FRONT VIEW

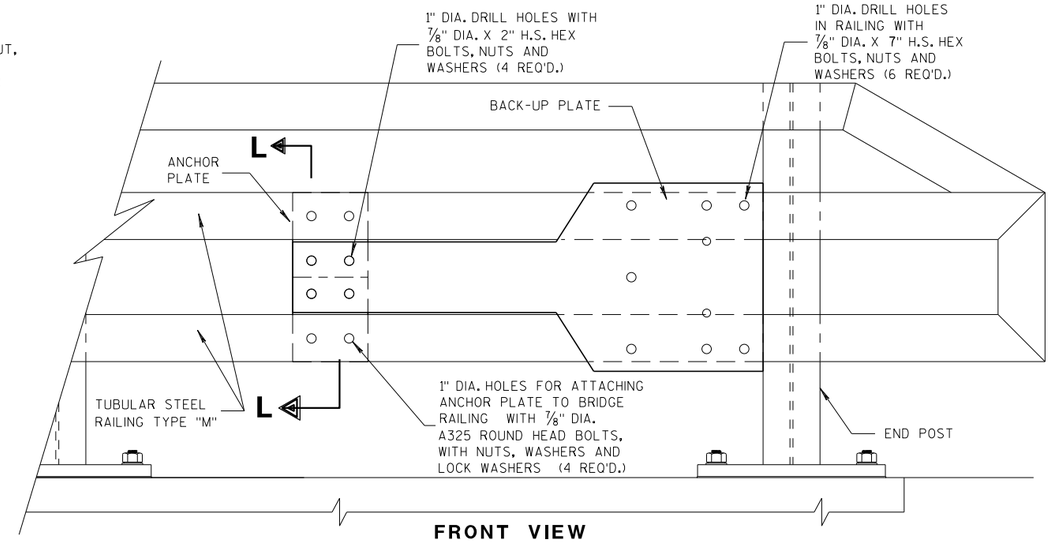
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

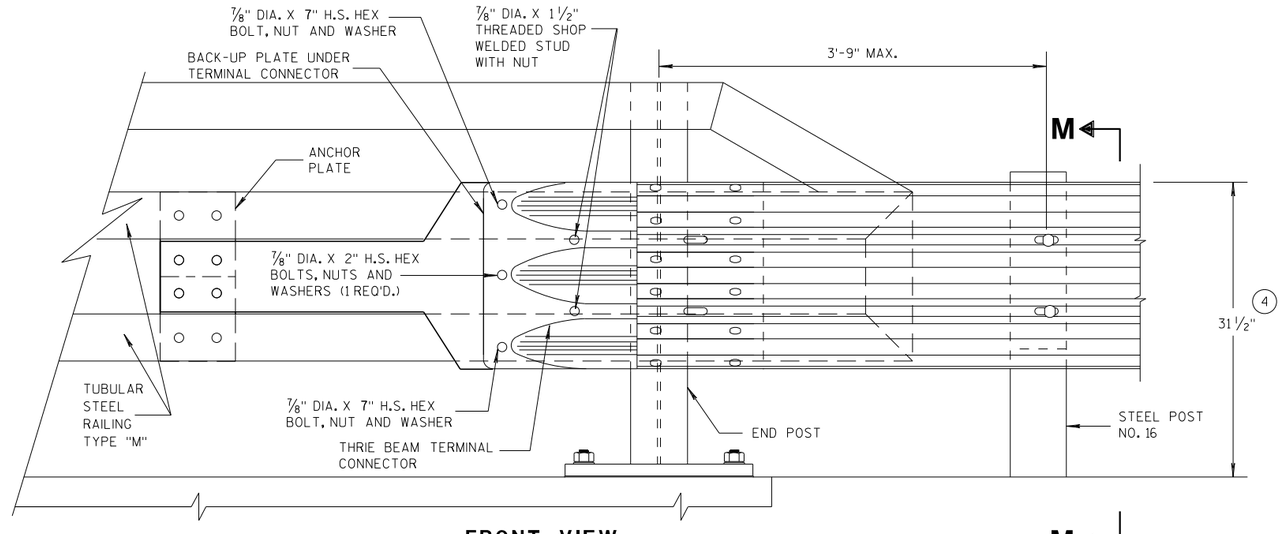


SECTION L-L

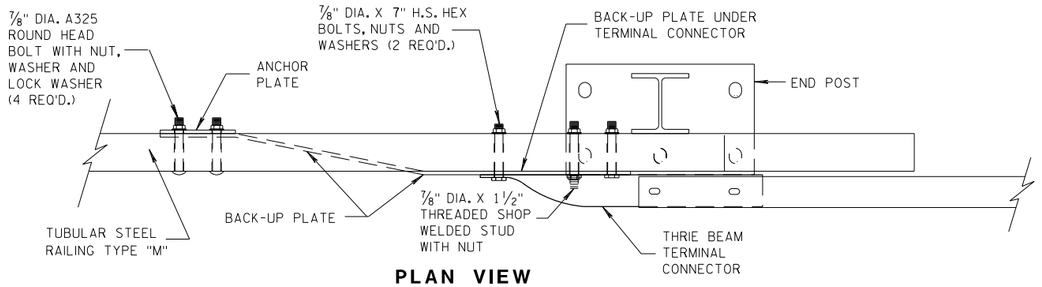


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

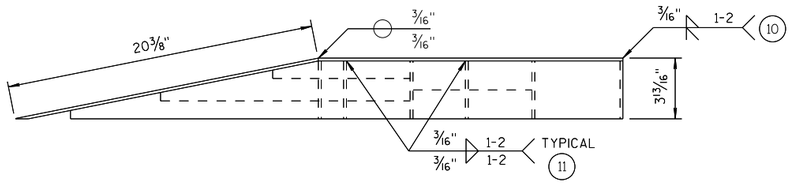
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

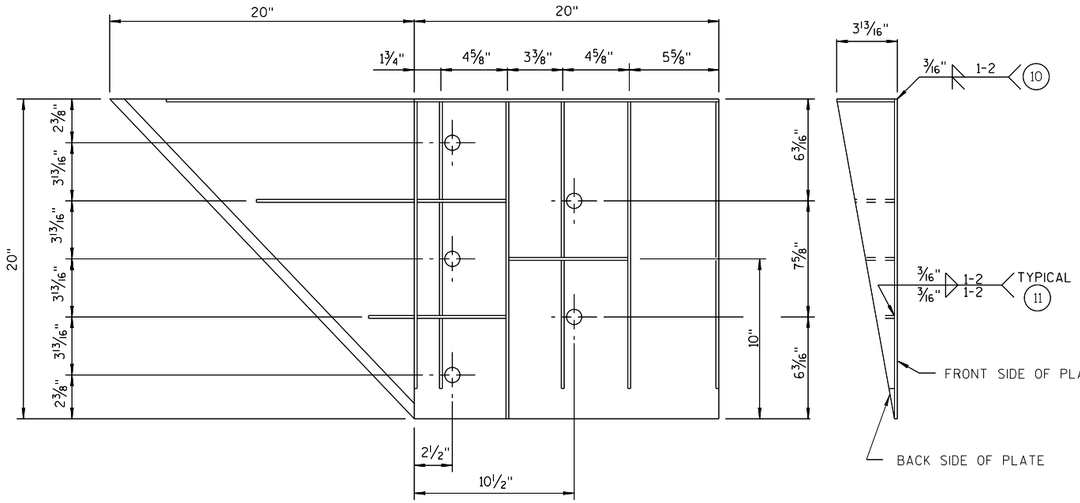
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S.D.D. 14 B 45-5h

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S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

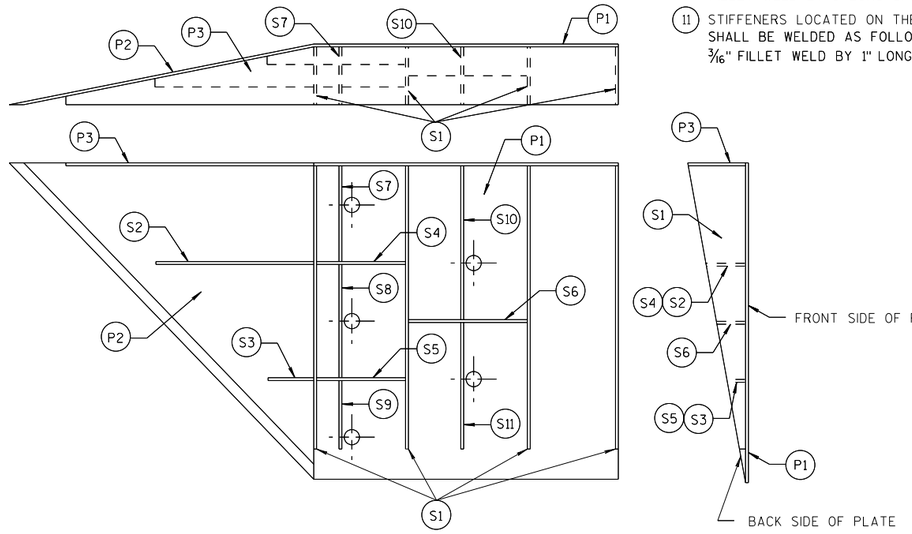


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

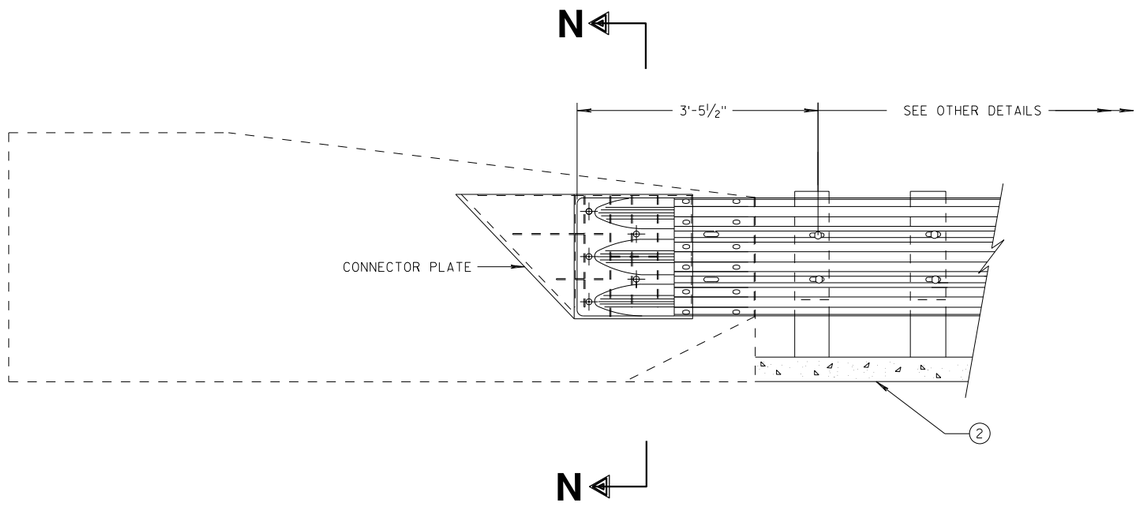
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

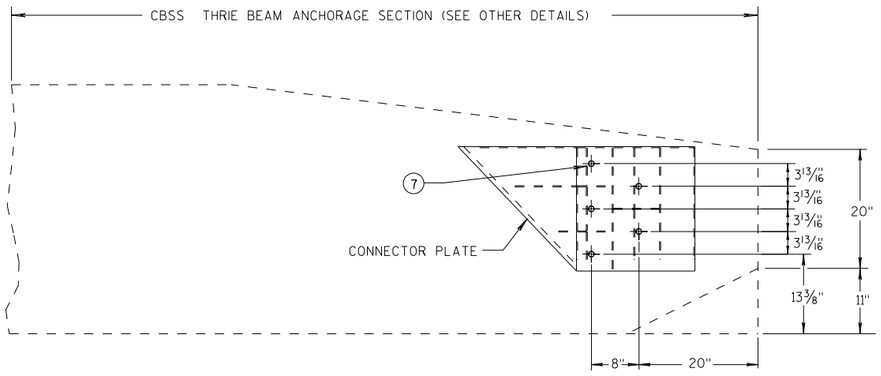
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7/2018
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UNIT SUPERVI

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S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



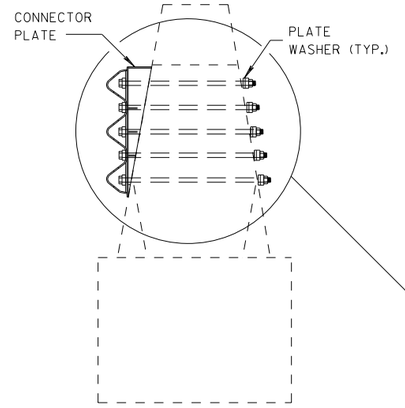
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

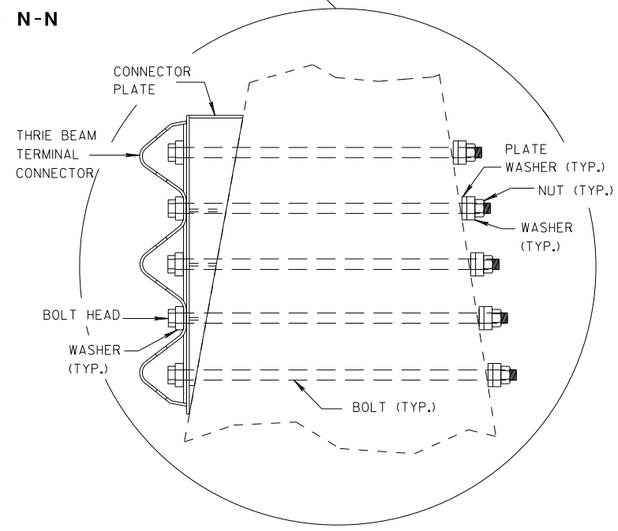
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

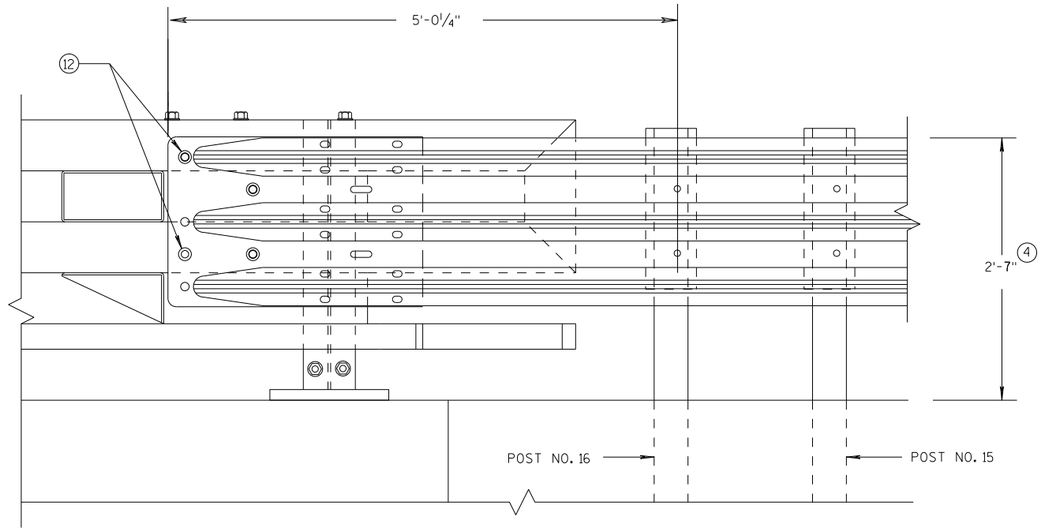
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DI UNIT SUPERVIS NT
FHWA

6

S.D.D. 14 B 45-5j

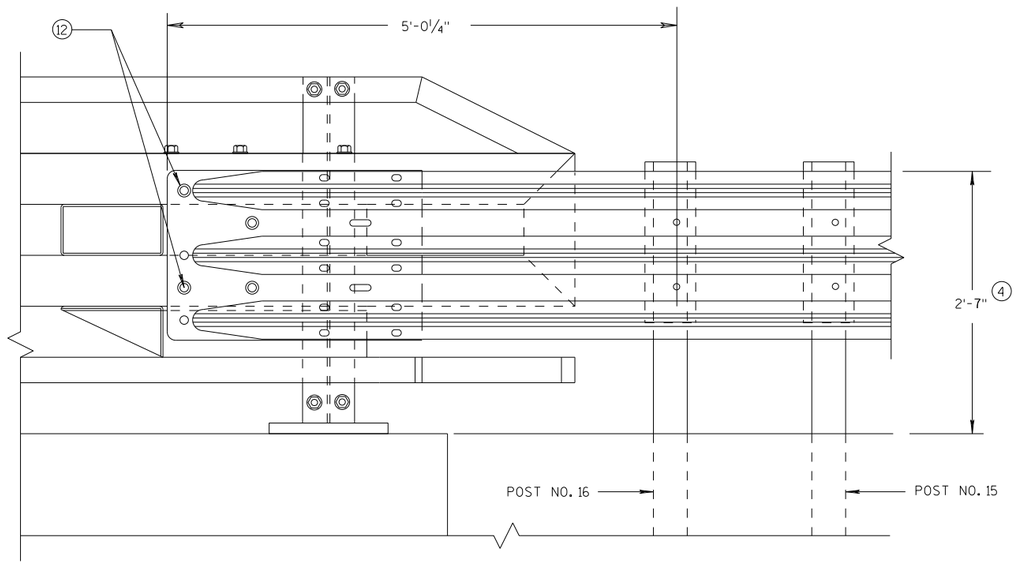
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S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

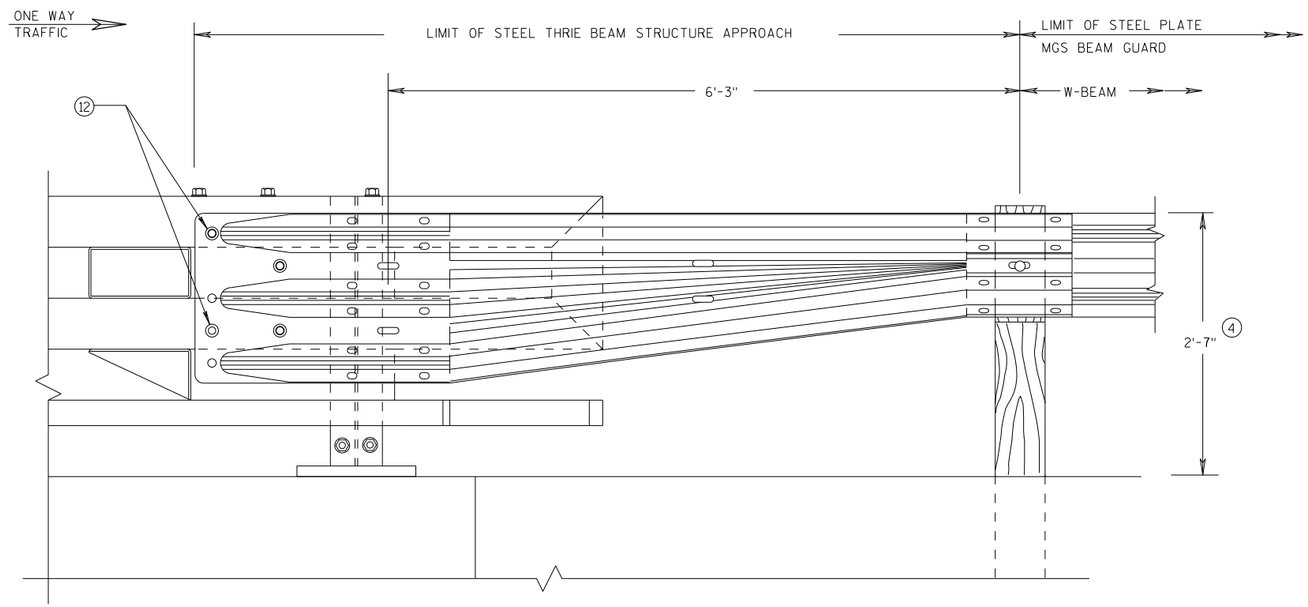
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D
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S.D.D. 14 B 45-5k

6

S.D.D. 14 B 45-5k



FRONT VIEW

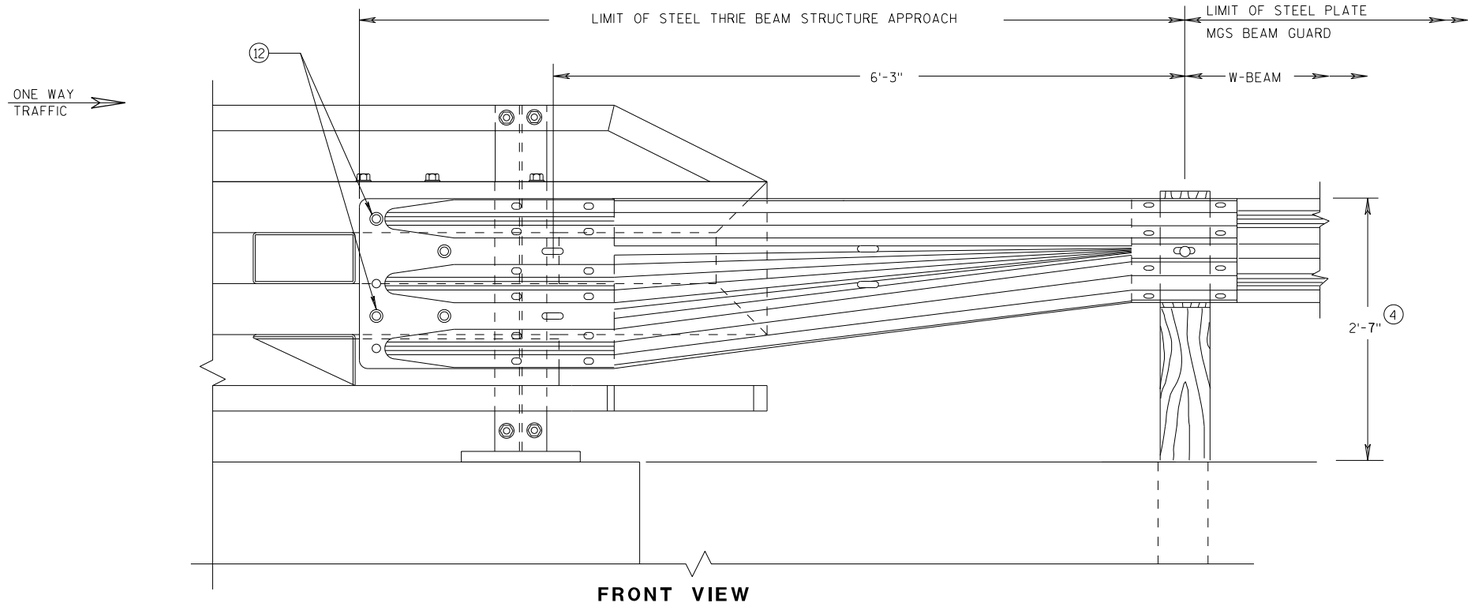
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

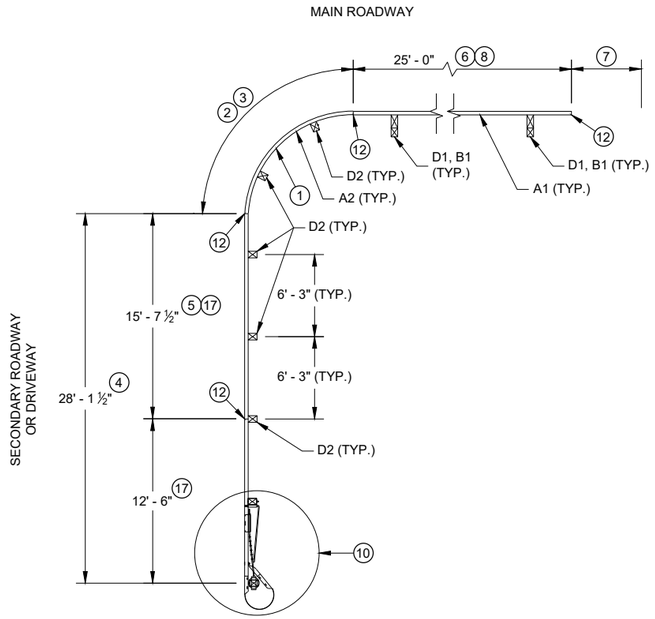
APPROVED
7/2018 DATE
/S/ Rodney Taylor
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S.D.D. 14 B 45-5L

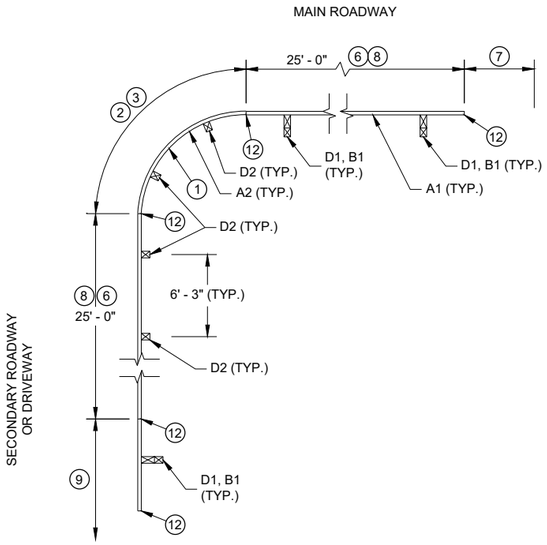
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S.D.D. 14 B 45-5L



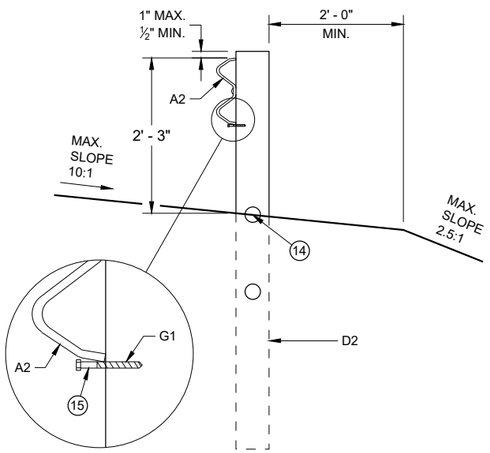
PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

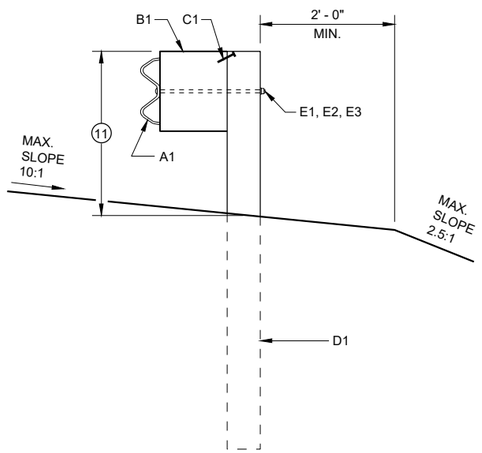


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY



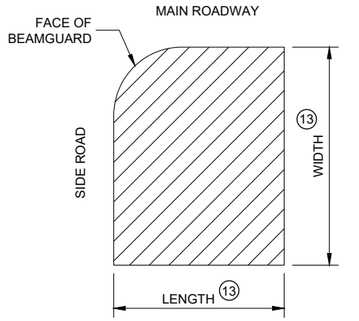
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



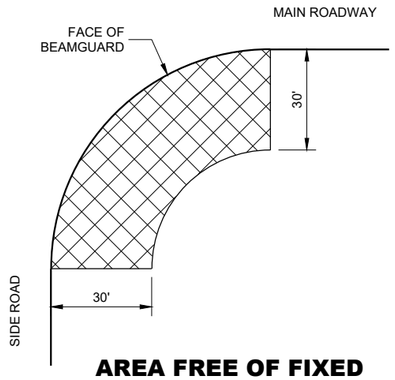
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

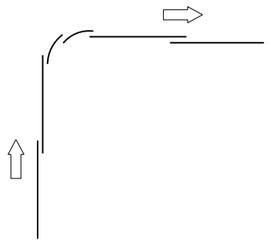
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS).

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

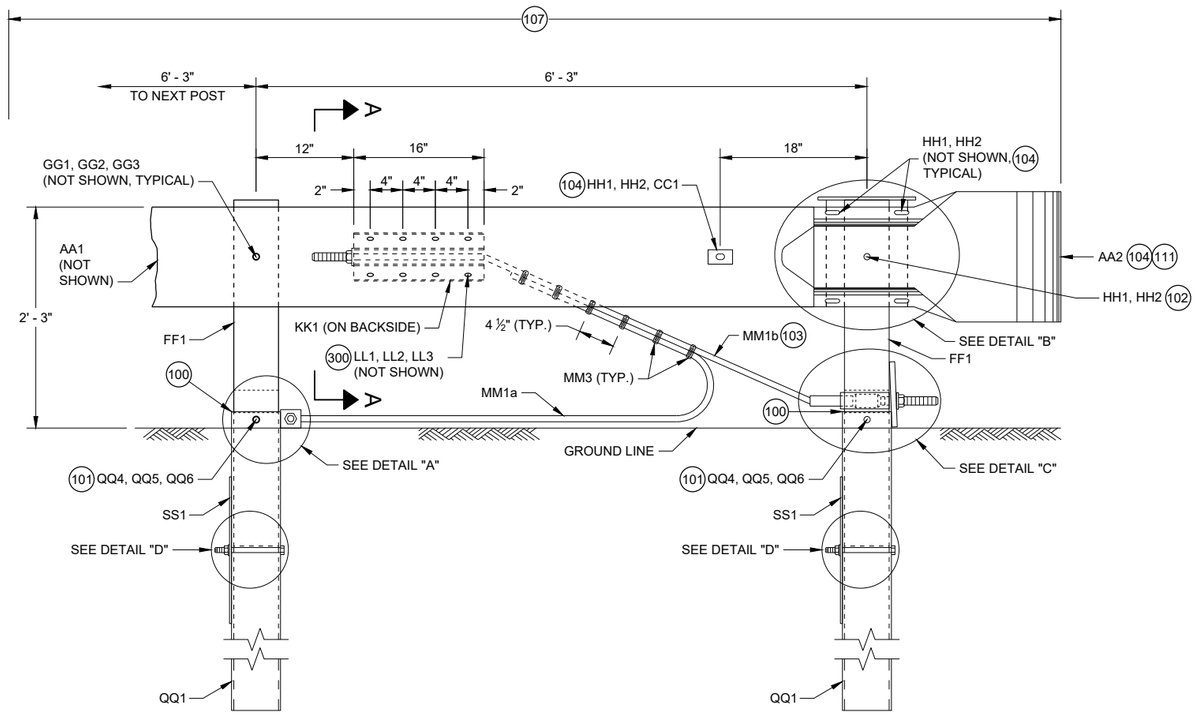
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 02a

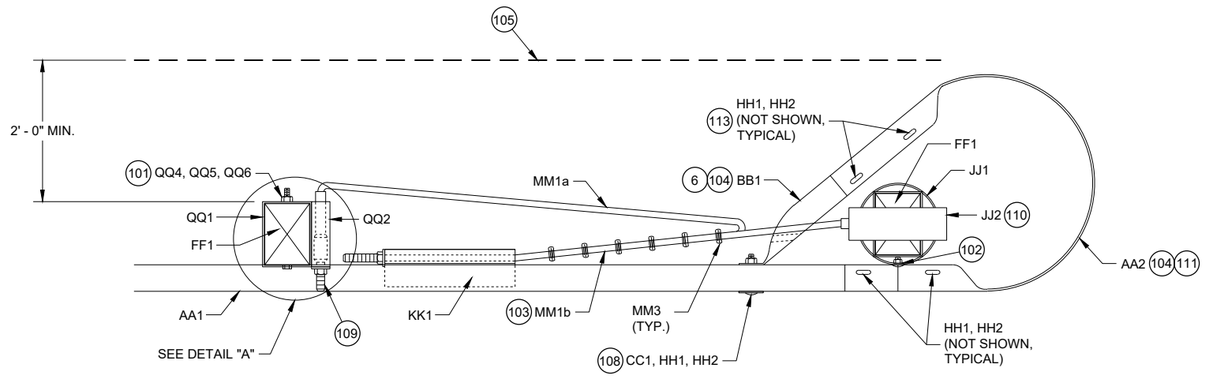
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SDD 14B53 - 02a



PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

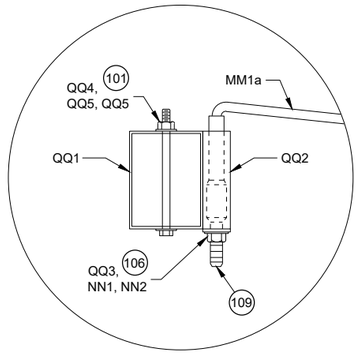
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

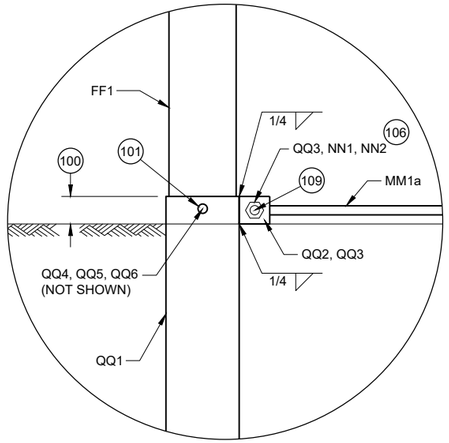
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

6

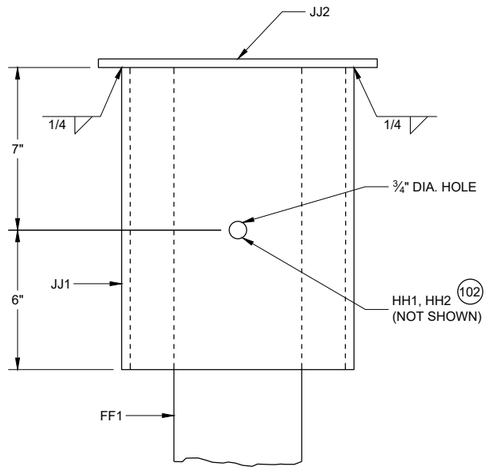
SDD 14B53 - 02b

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

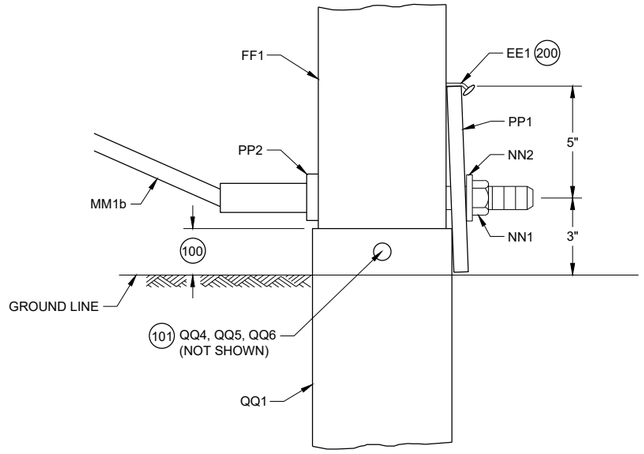
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



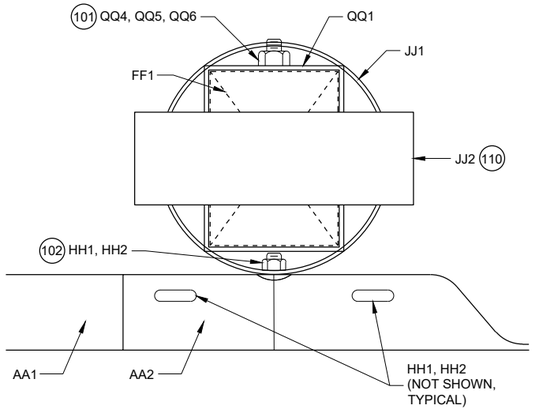
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



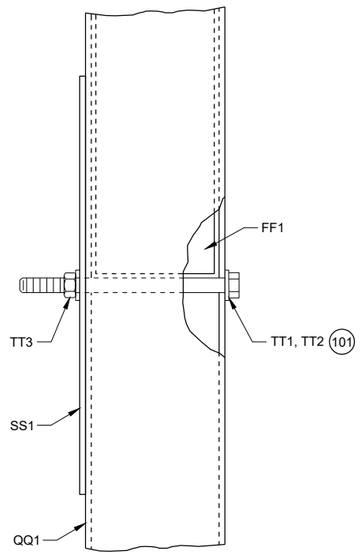
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

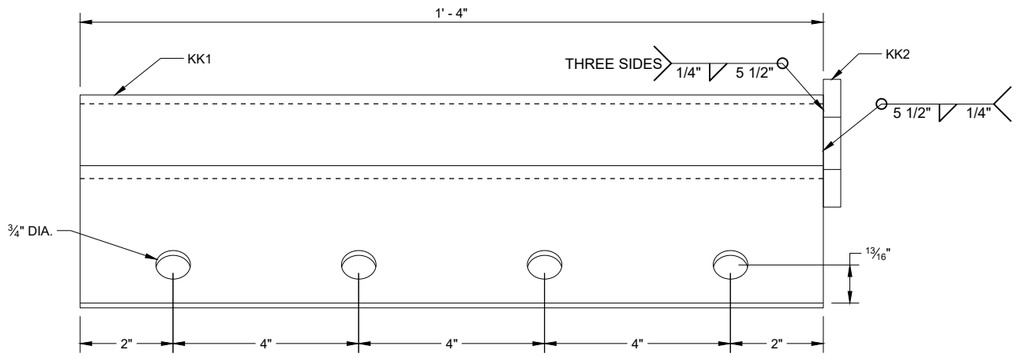
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

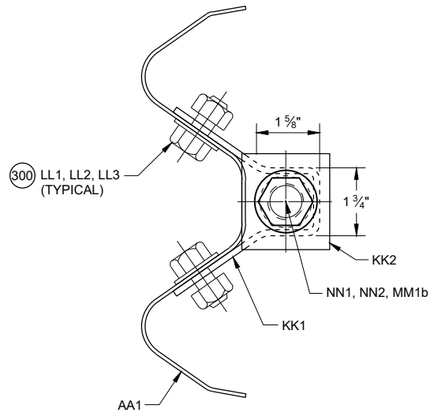
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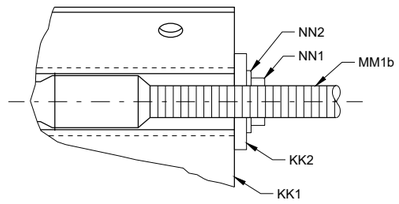
SDD 14B53 - 02c

GENERAL NOTES

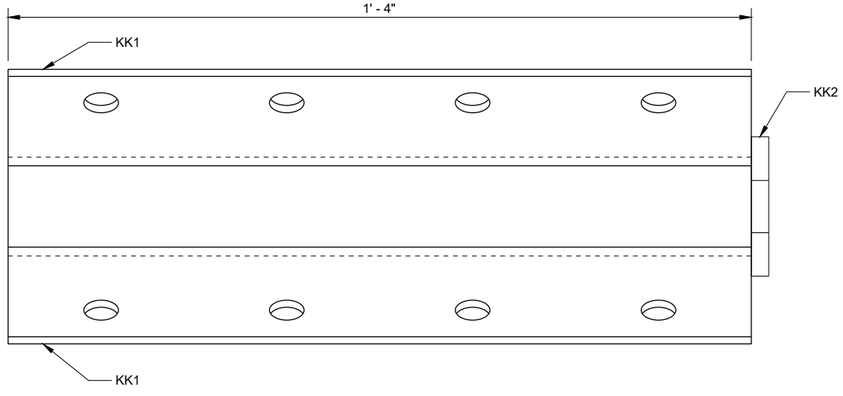
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

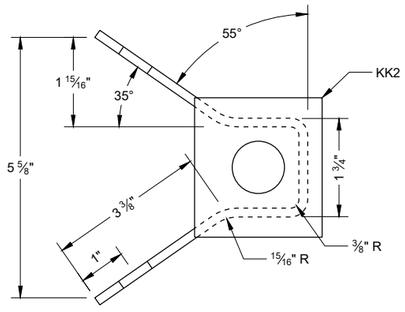




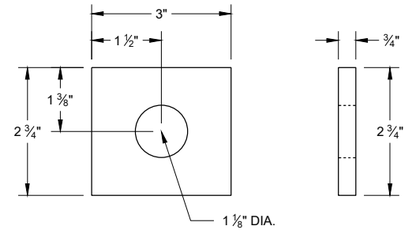


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

6

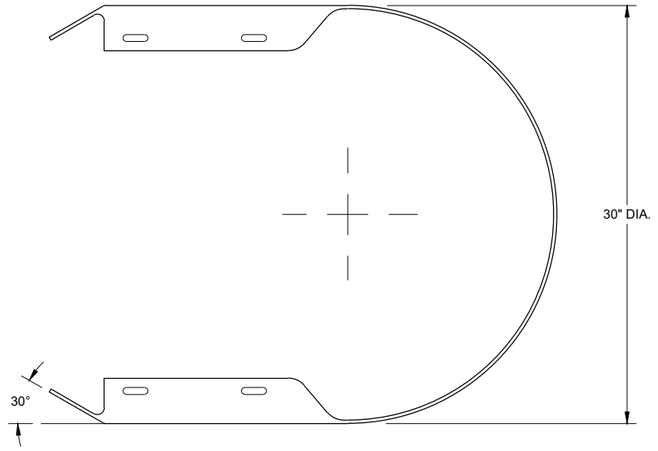
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

SDD 14B53 - 02d

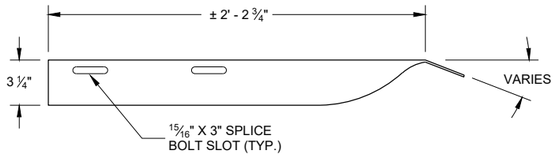
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

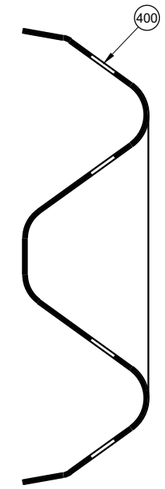
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



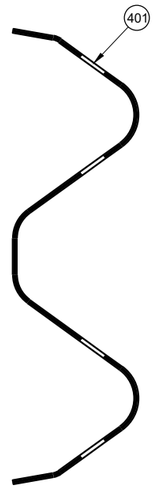
TOP VIEW



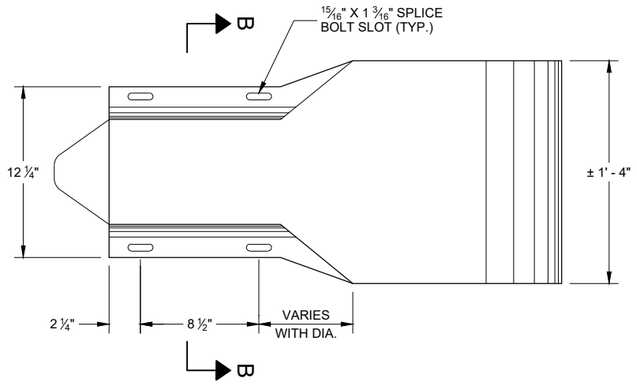
TOP VIEW



SECTION B -B

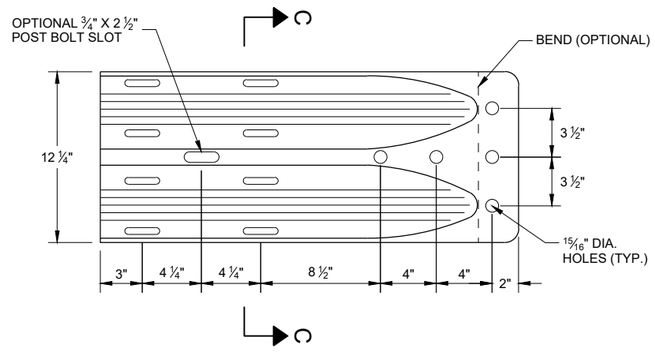


SECTION C -C



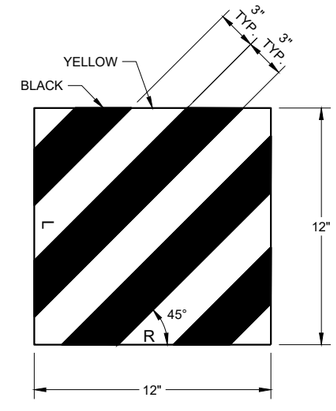
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



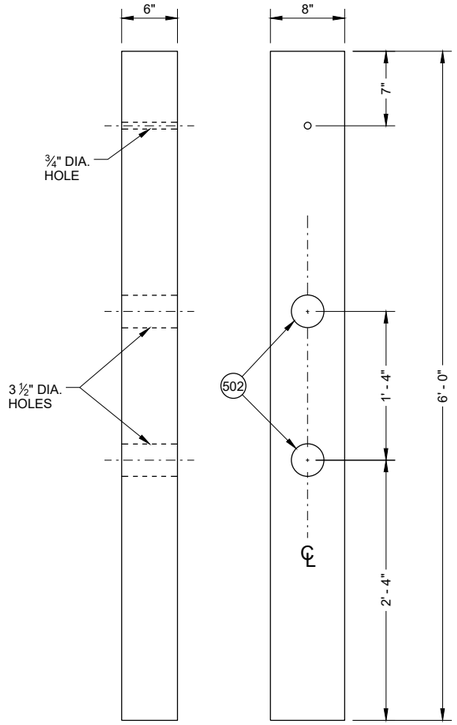
REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

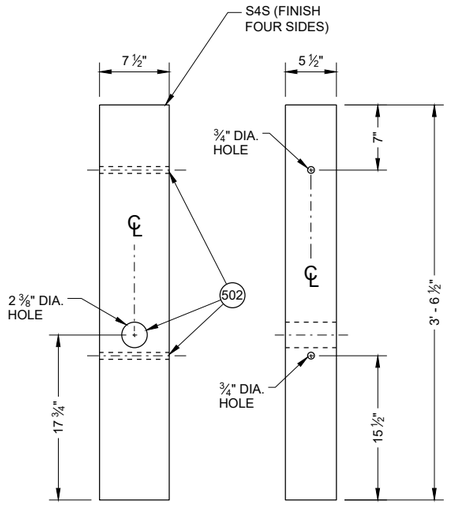
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SDD 14B53 - 02e



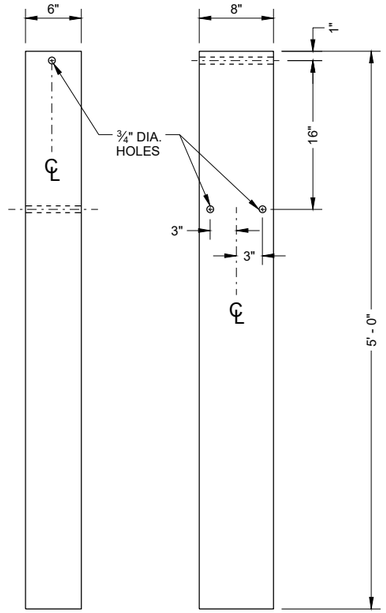
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) (500)

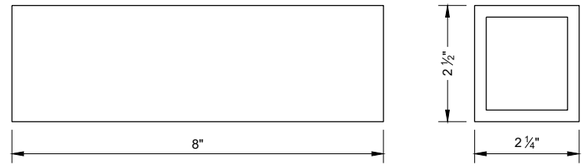
GENERAL NOTES

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

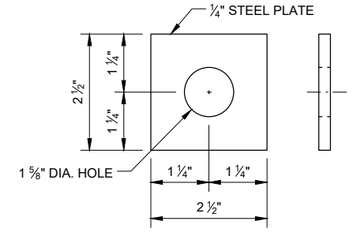
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

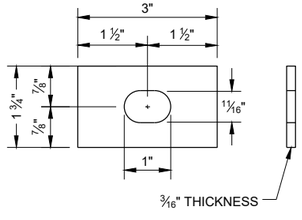
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



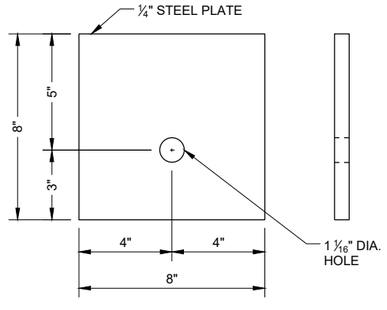
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



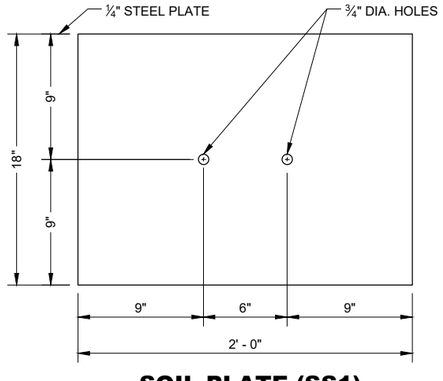
ANCHOR CABLE TUBE END PLATE (QQ3)



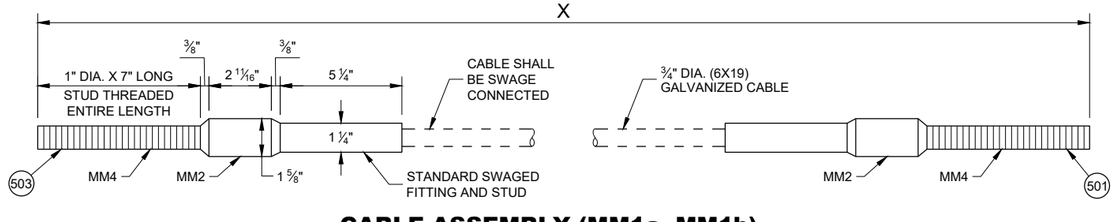
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B53 - 02f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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SDD 14B53 - 02g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

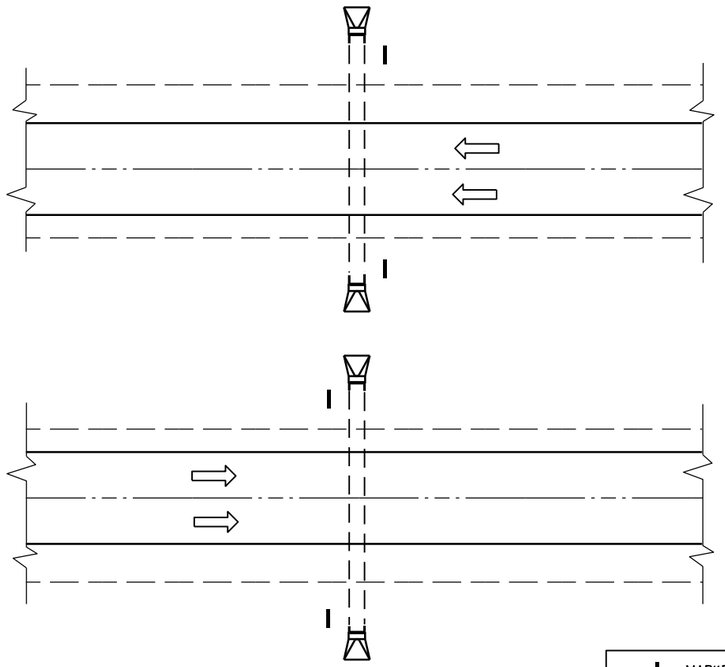
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

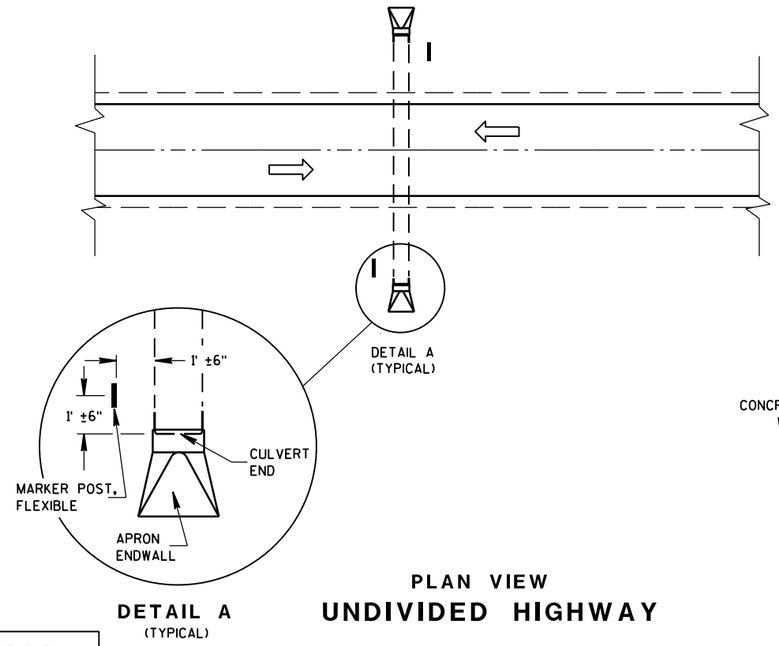
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SDD 14B53 - 02i



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

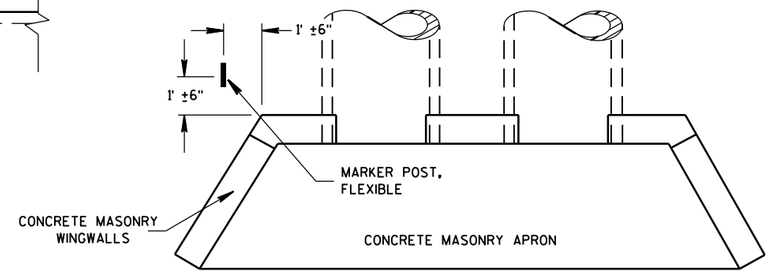
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

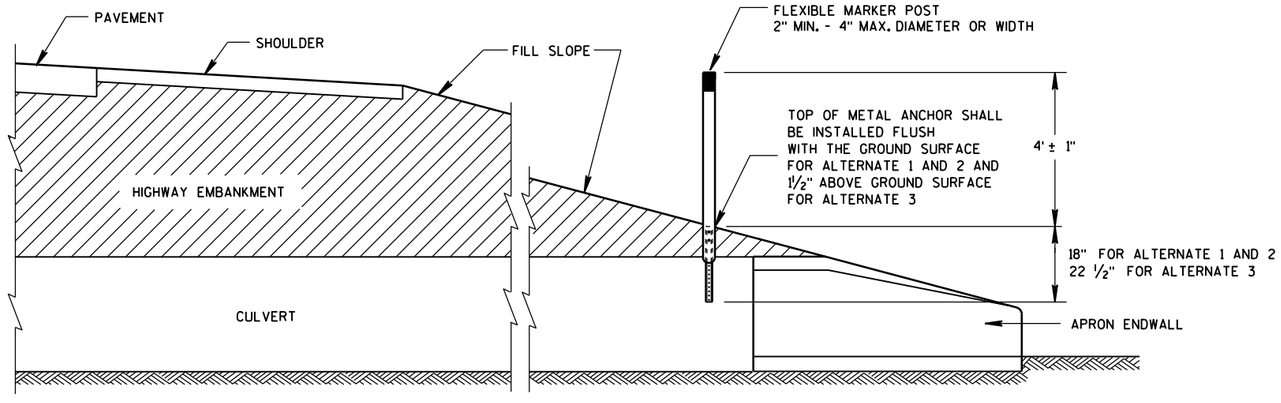
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

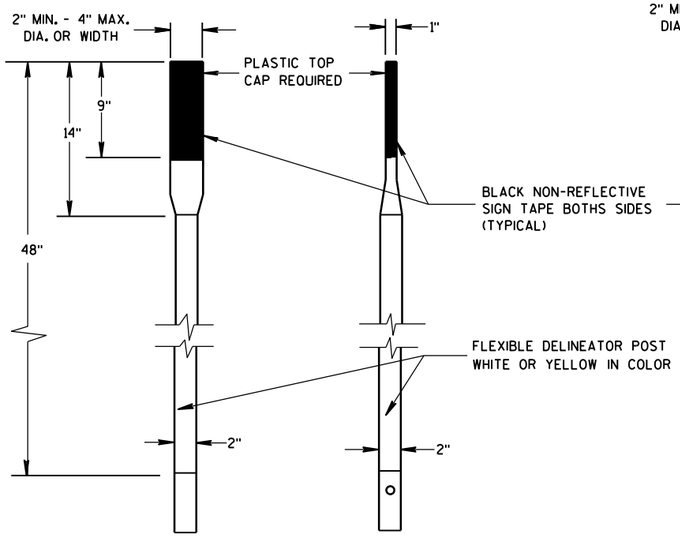
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

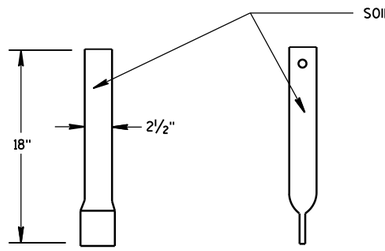
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S.D.D. 15 A 3-2a

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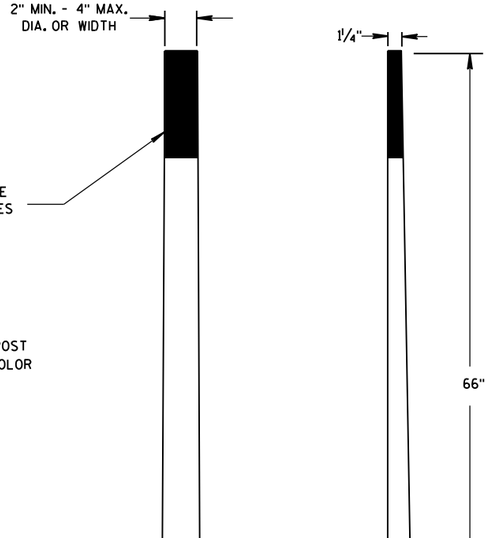
S.D.D. 15 A 3-2a





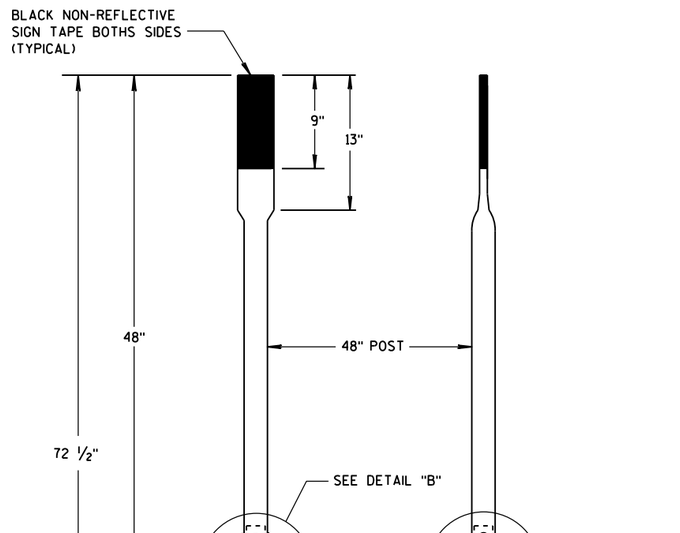
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

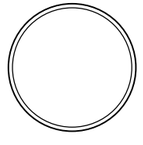
ALTERNATE 2



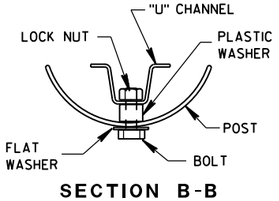
FRONT VIEW SIDE VIEW

ALTERNATE 3

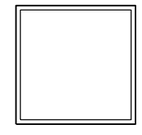
FLEXIBLE MARKER POSTS



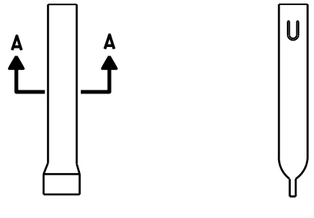
SECTION A-A



SECTION B-B

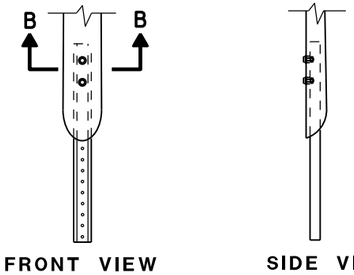


SECTION C-C



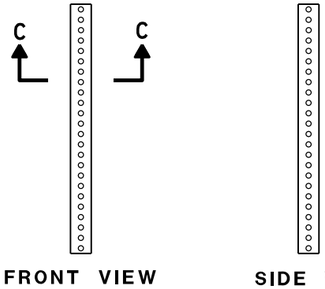
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

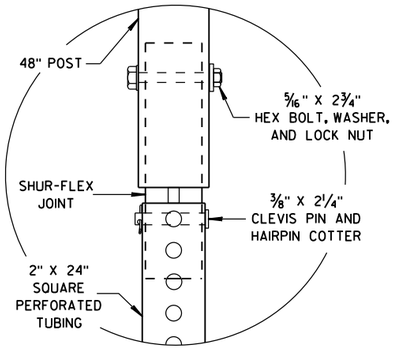
ALTERNATE 2



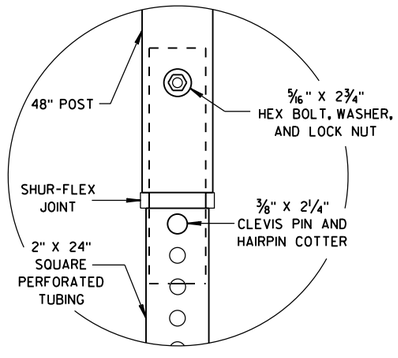
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

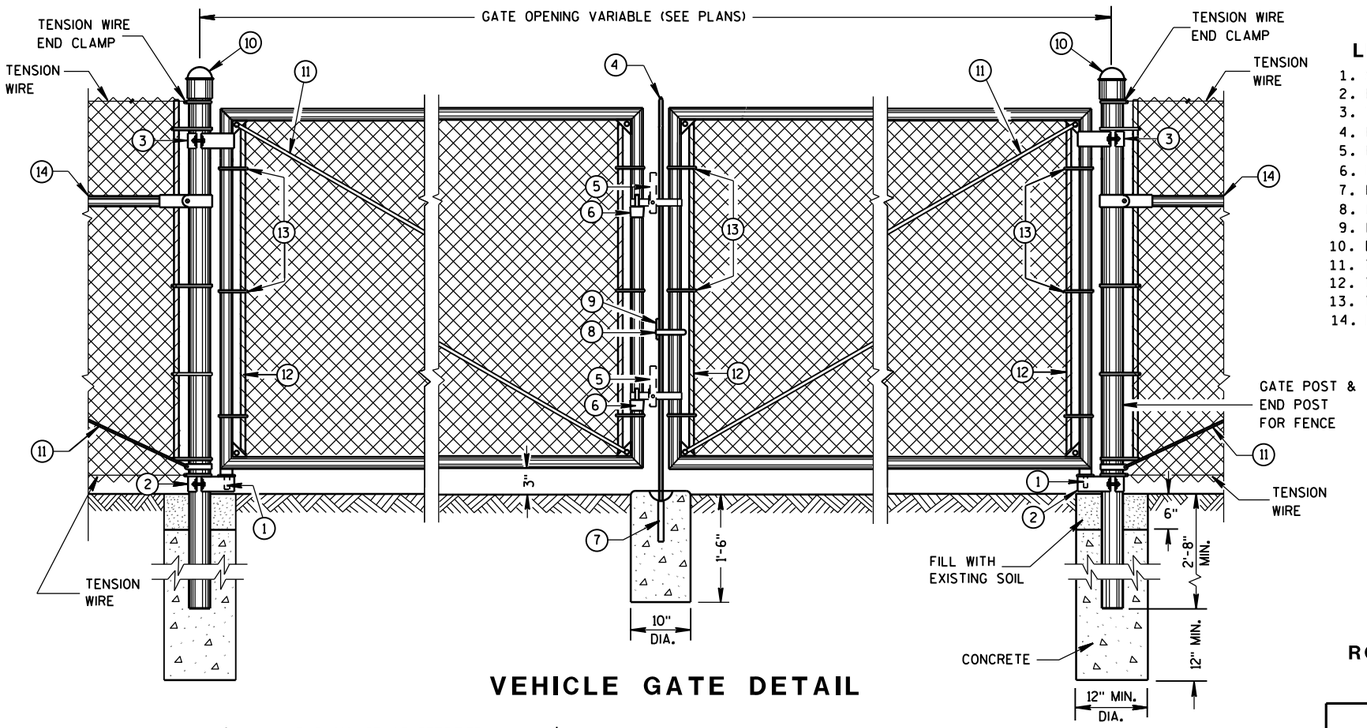
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

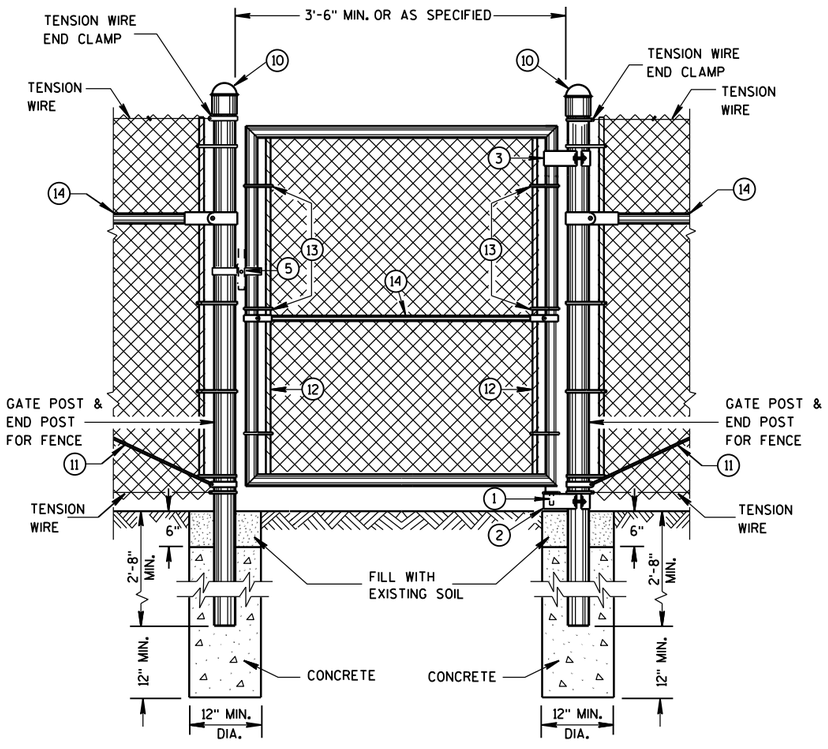
S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

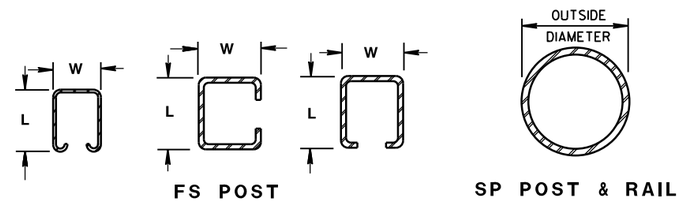
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

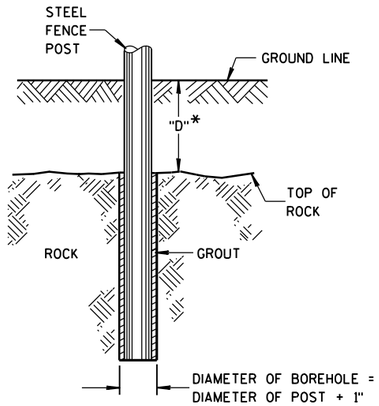
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

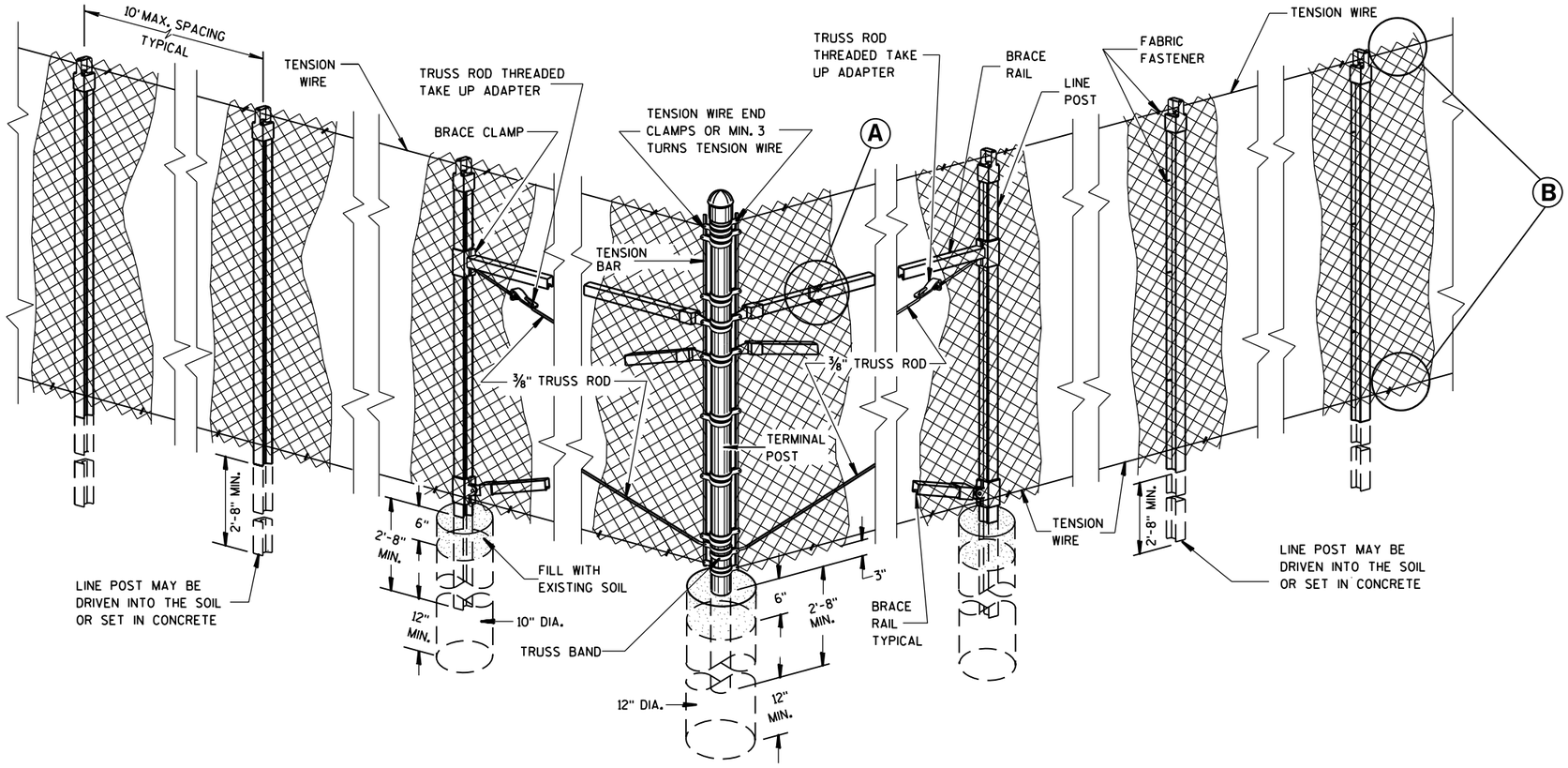
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S.D.D. 15 B 3-15a

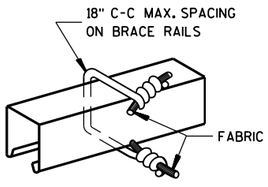


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



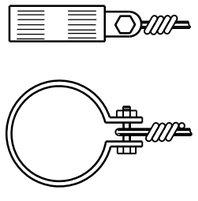
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



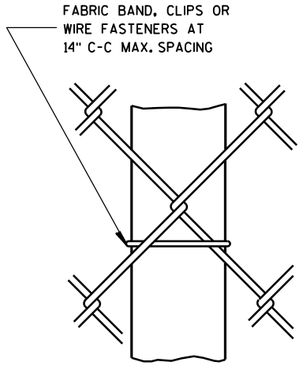
BRACE RAIL

FABRIC FASTENER

Ⓐ



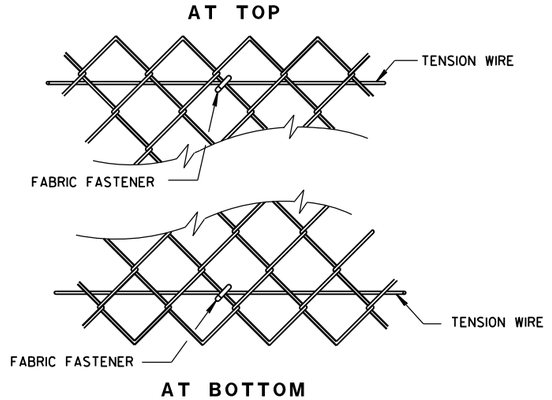
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

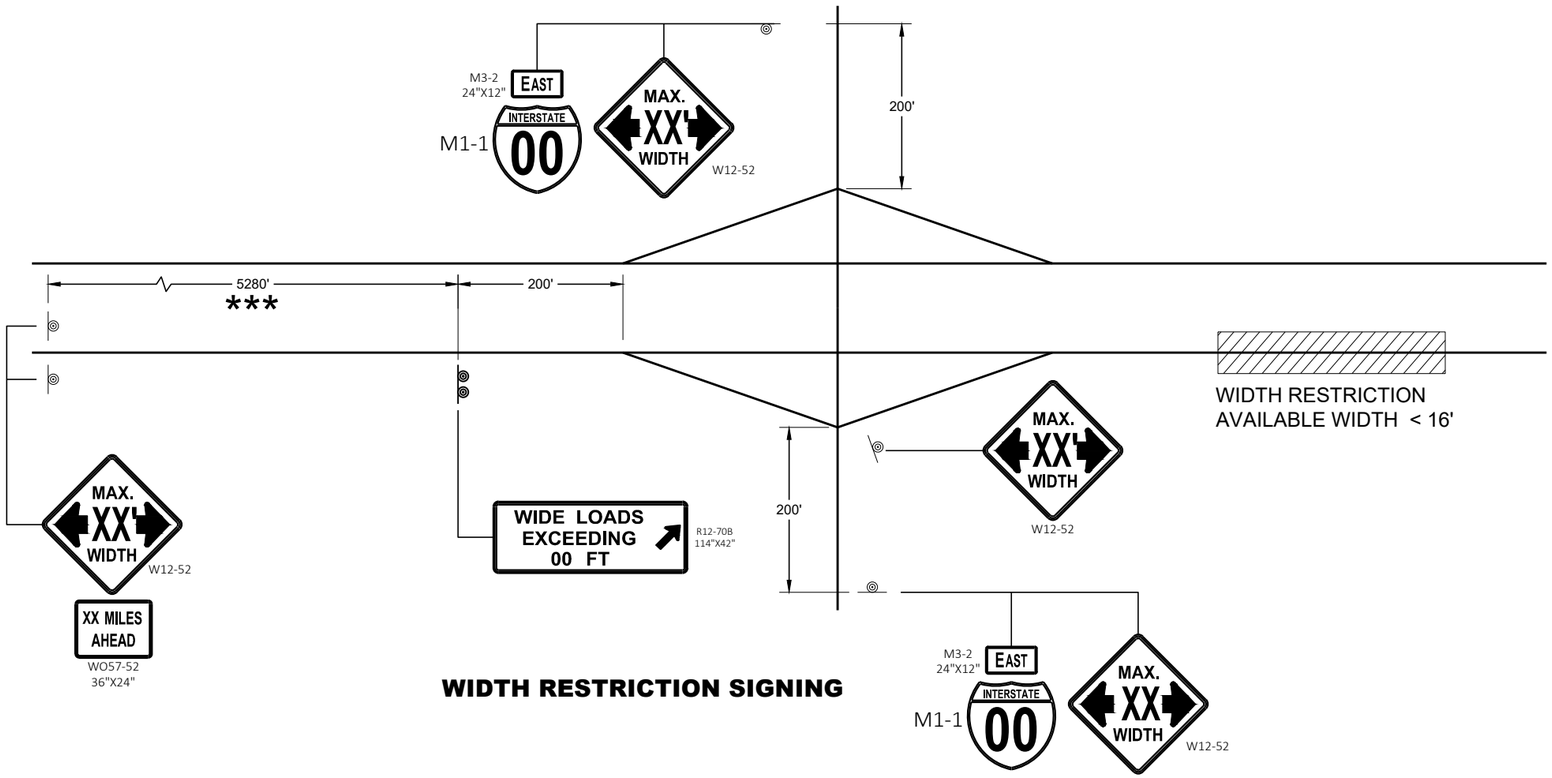
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

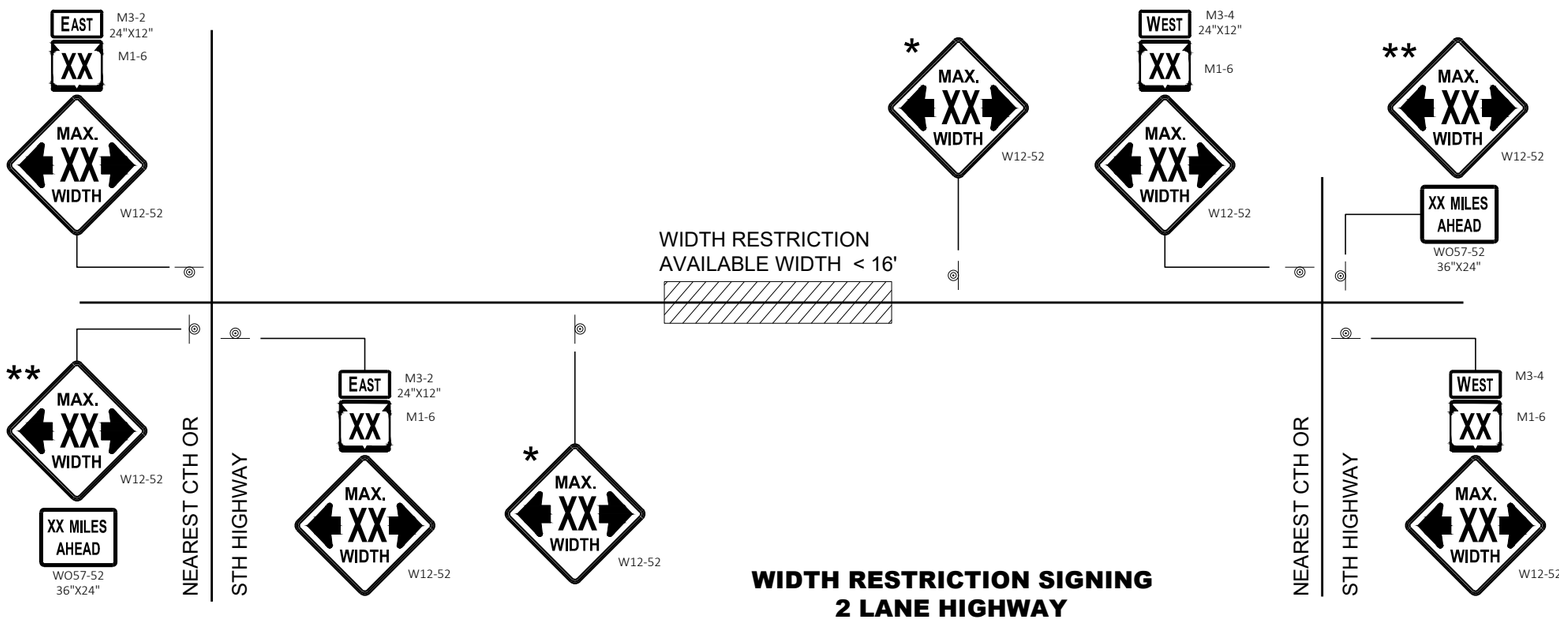
S.D.D. 15 B 3-15b

6

S.D.D. 15 B 3-15b



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

◎ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL " IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C02 - 09f

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

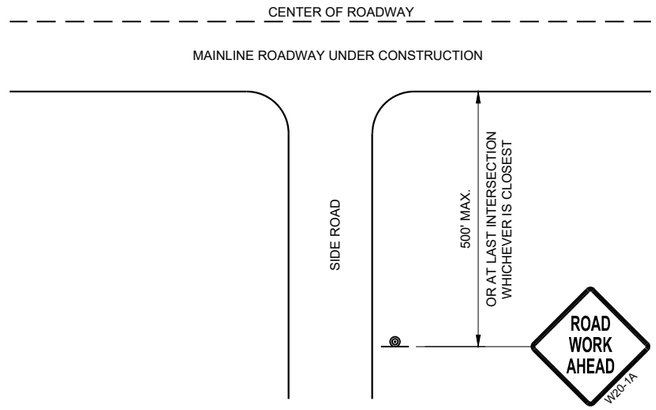
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



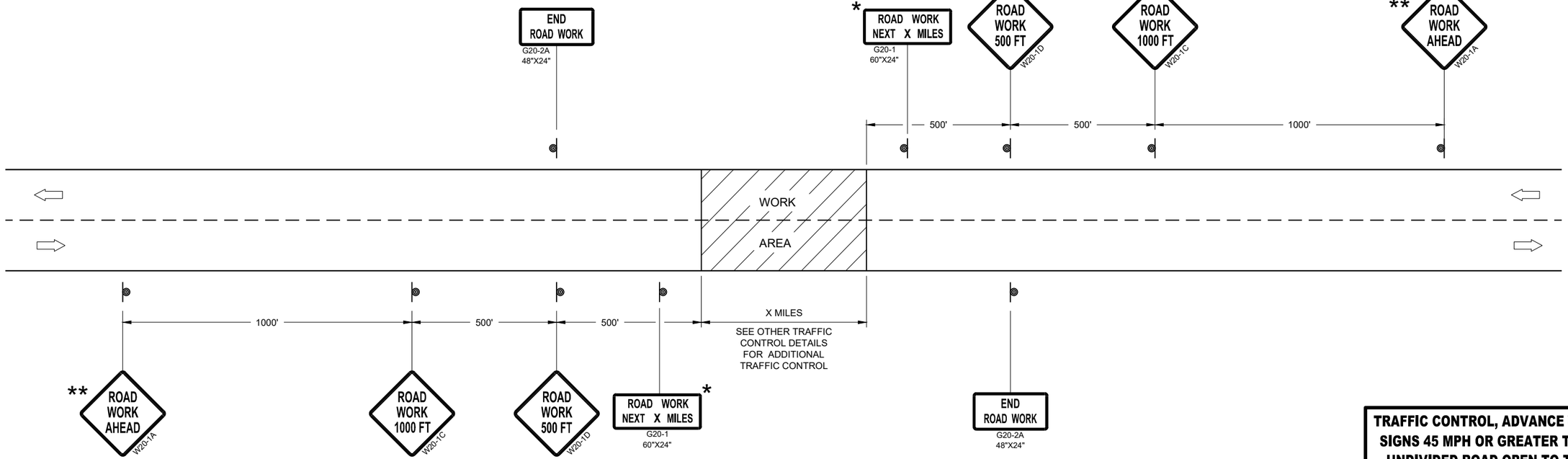
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

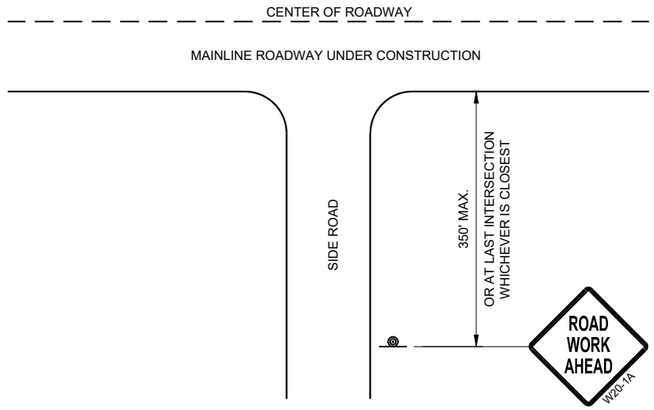
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

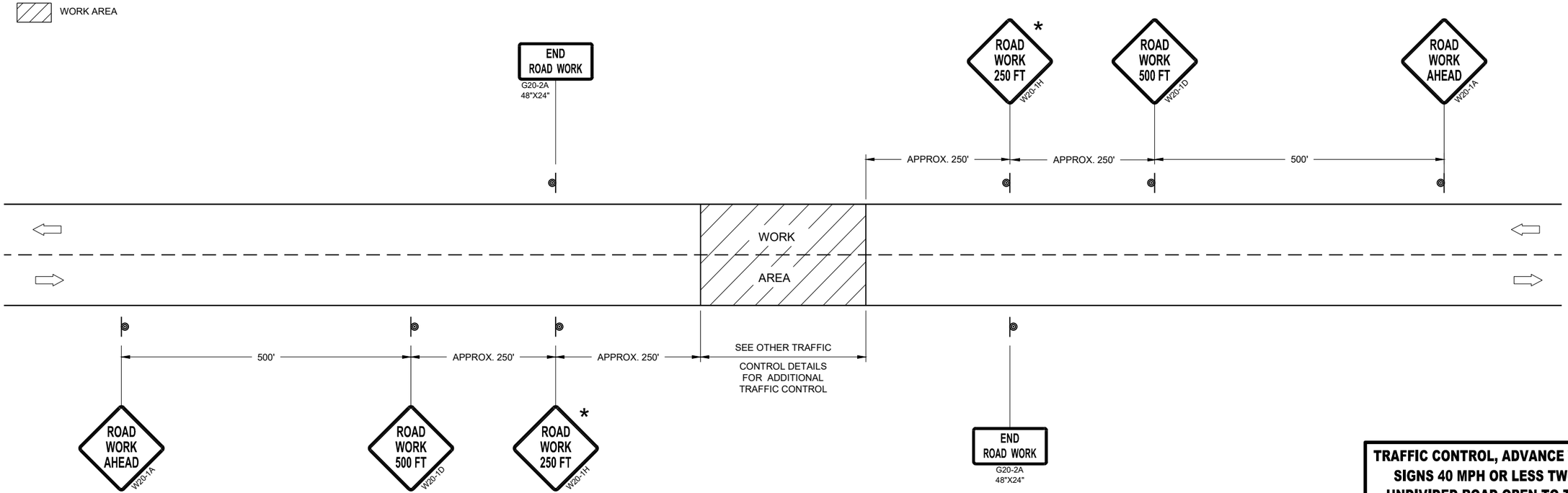
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

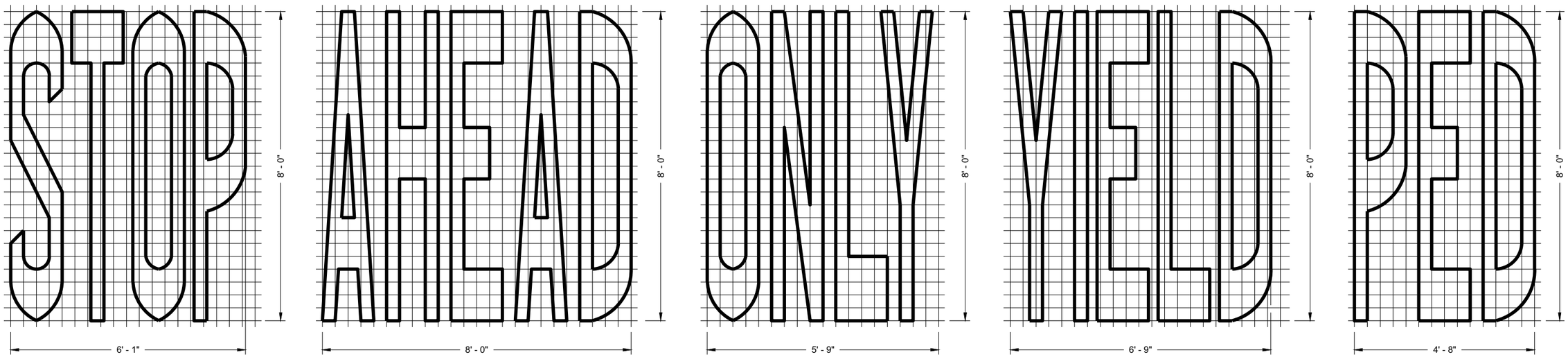
APPROVED
July 2018
DATE

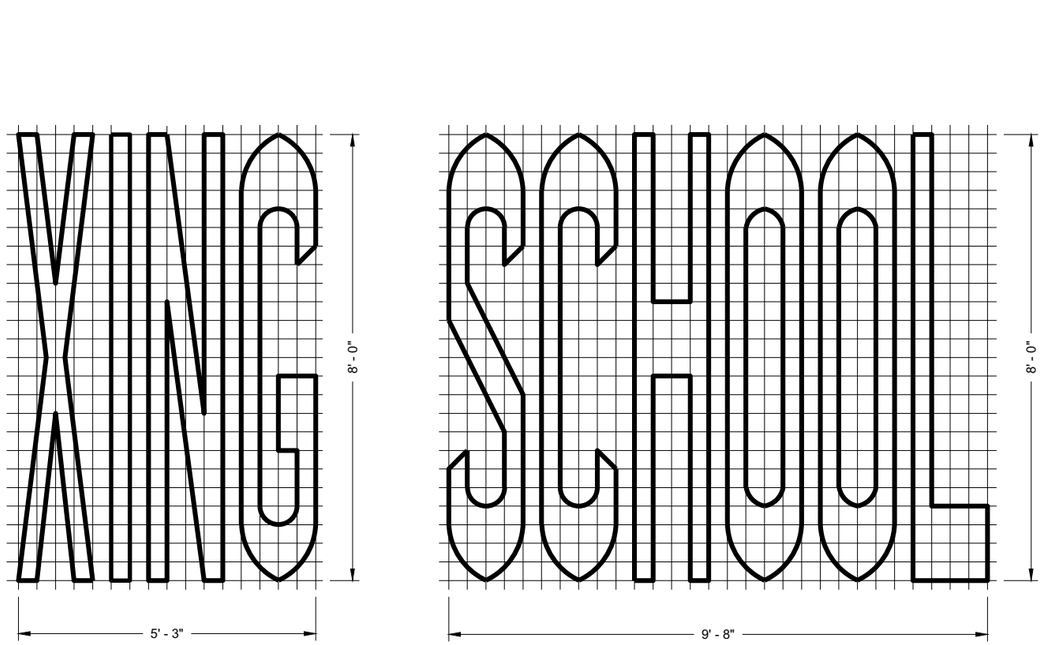
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

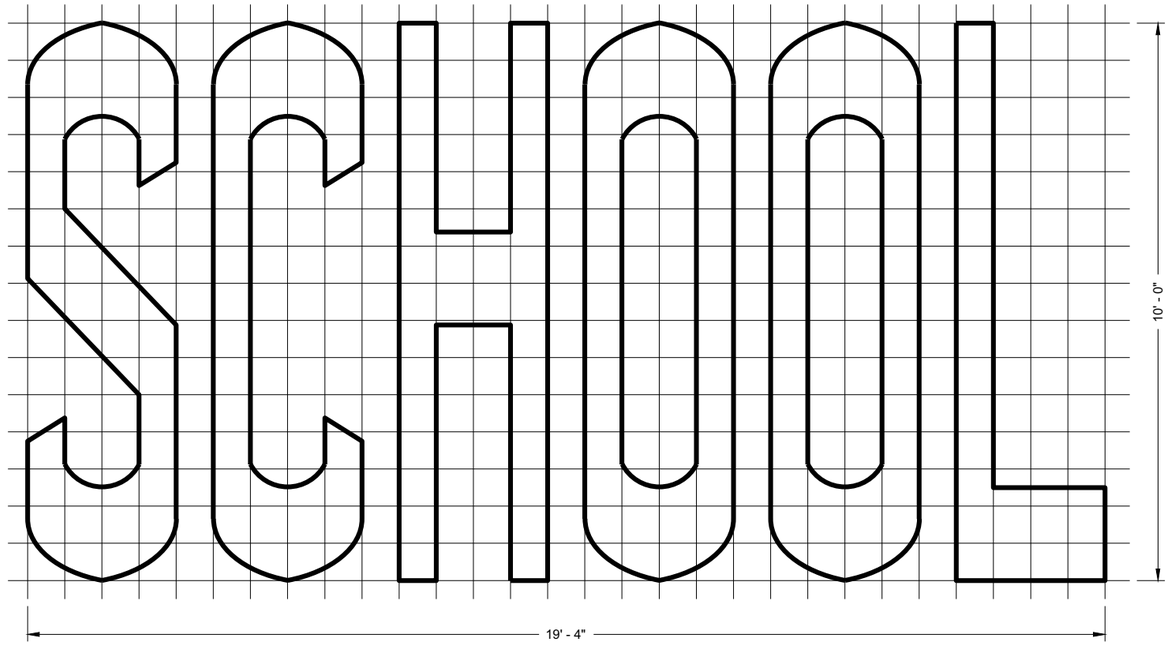
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SDD 15C05 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

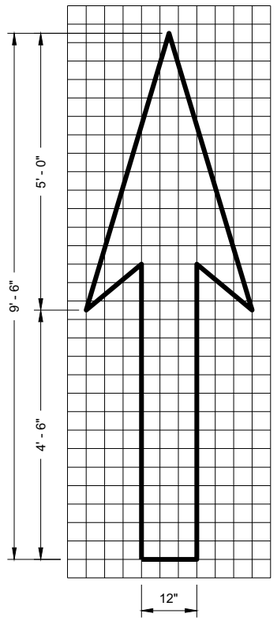
FHWA

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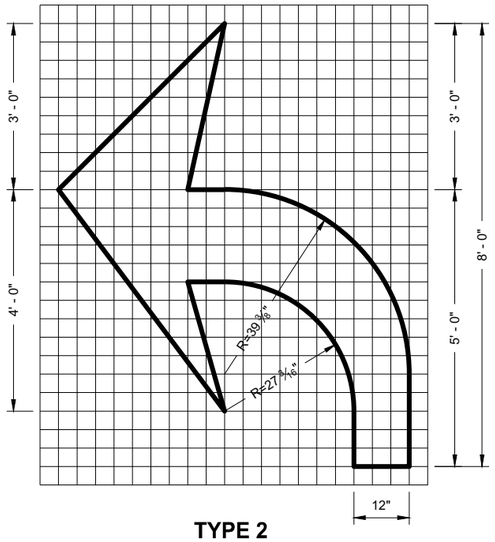
SDD 15C07 - 15b

6

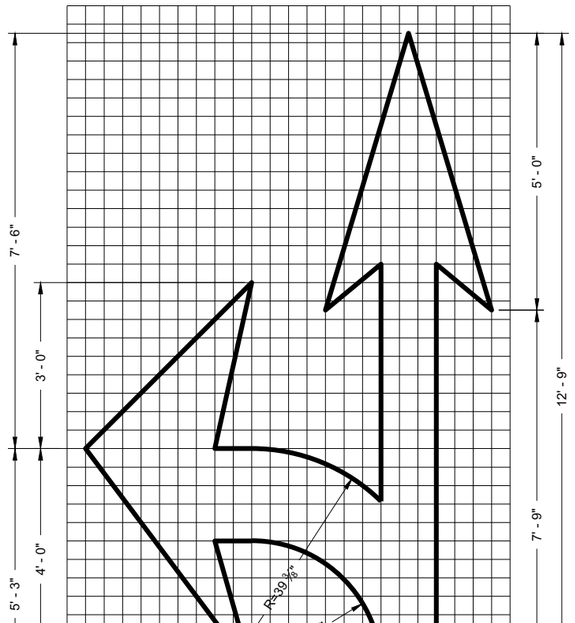
SDD 15C07 - 15b



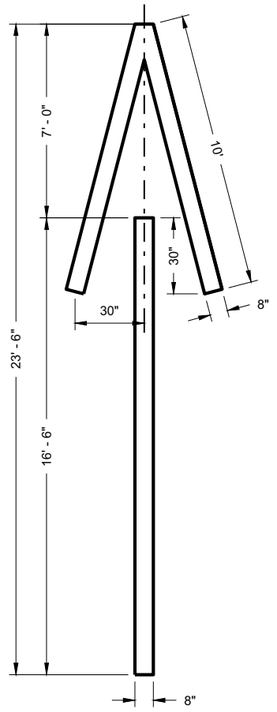
TYPE 1



TYPE 2



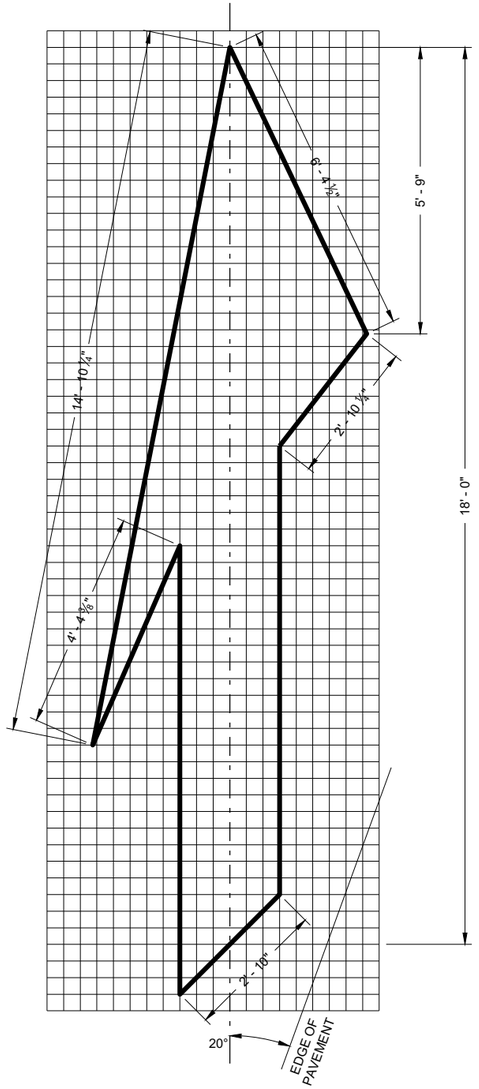
TYPE 3



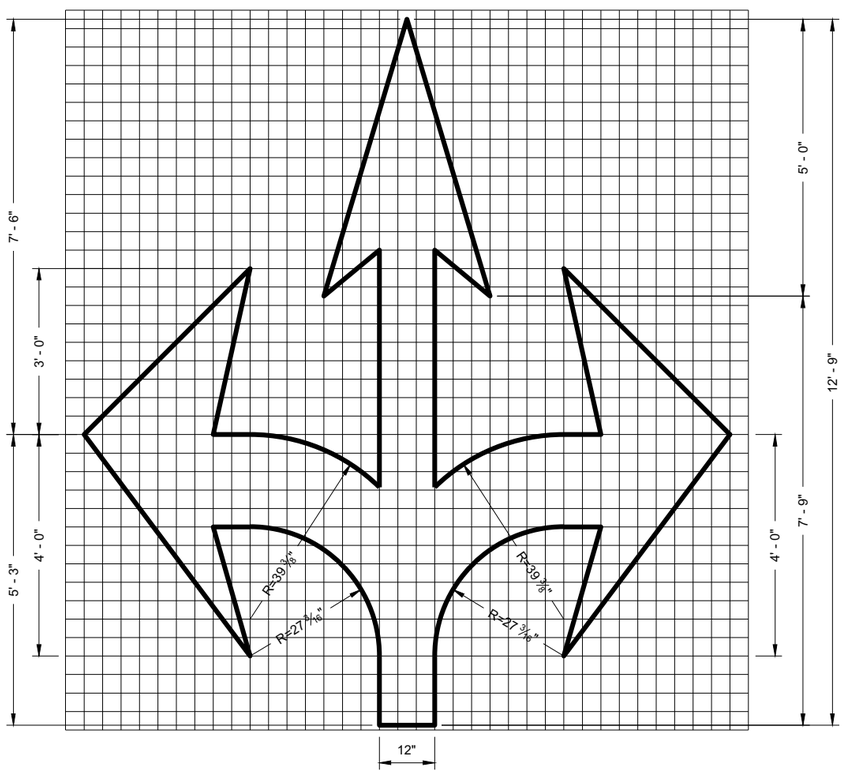
TYPE 4

GENERAL NOTES

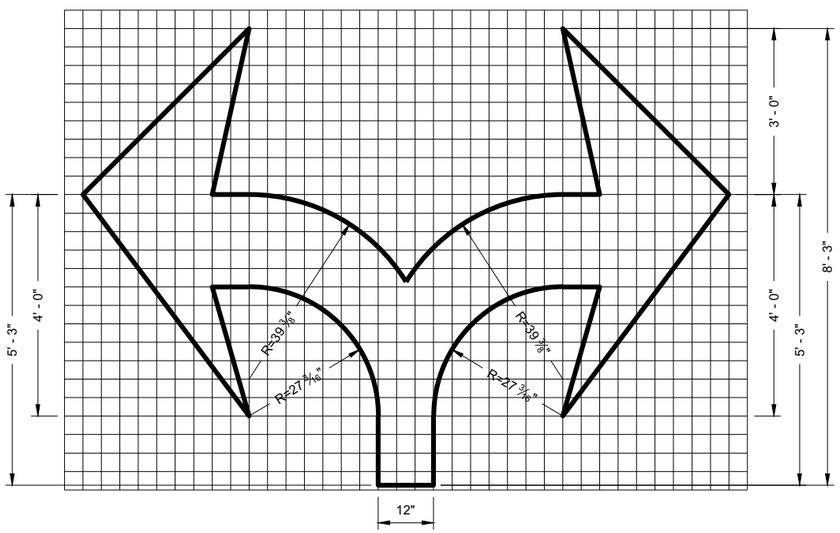
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

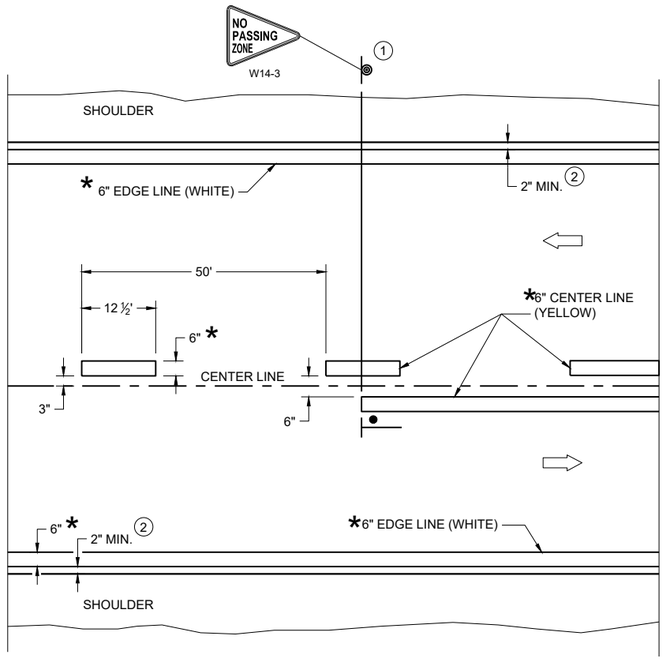
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

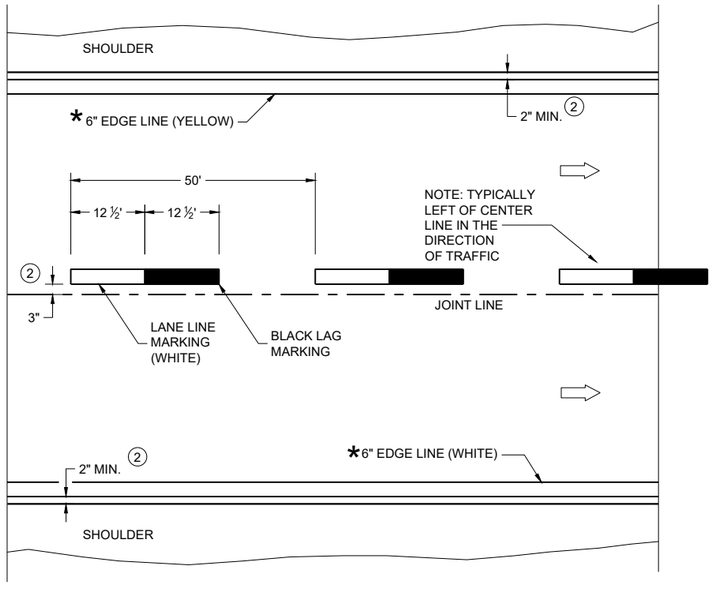
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

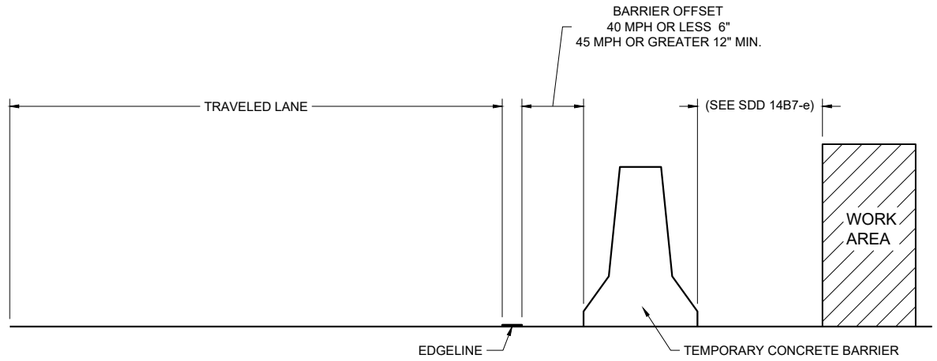
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA

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TEMPORARY BARRIER OFFSET FROM EDGELINE

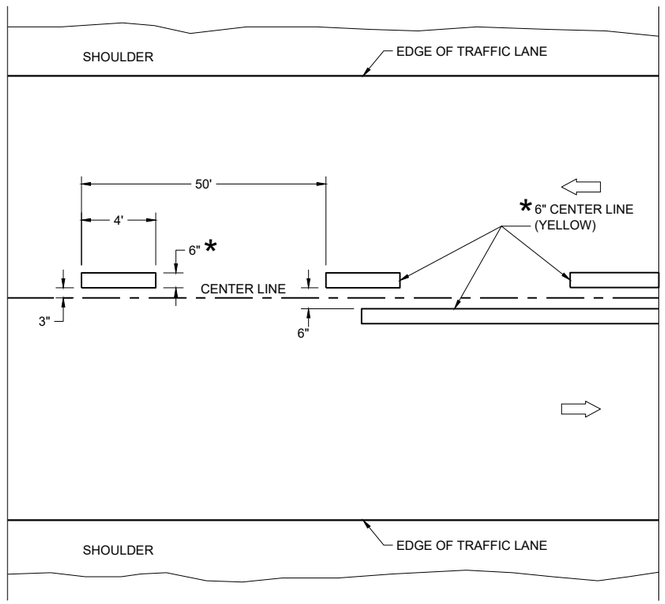
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

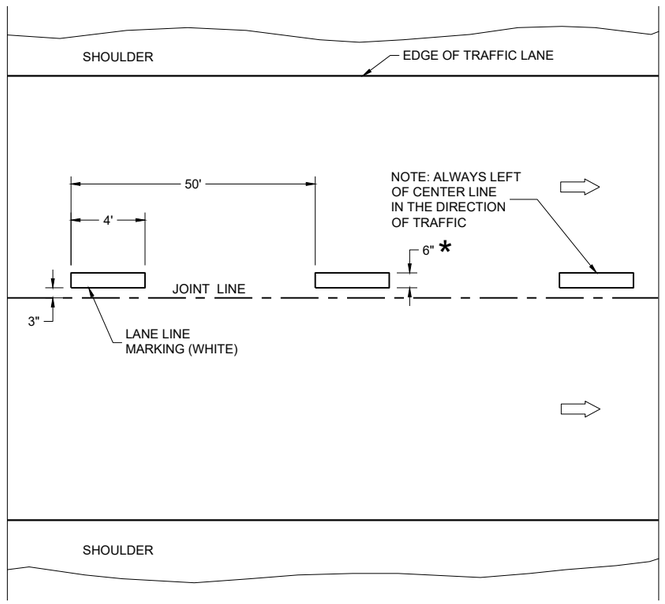
LEGEND

DIRECTION OF TRAFFIC

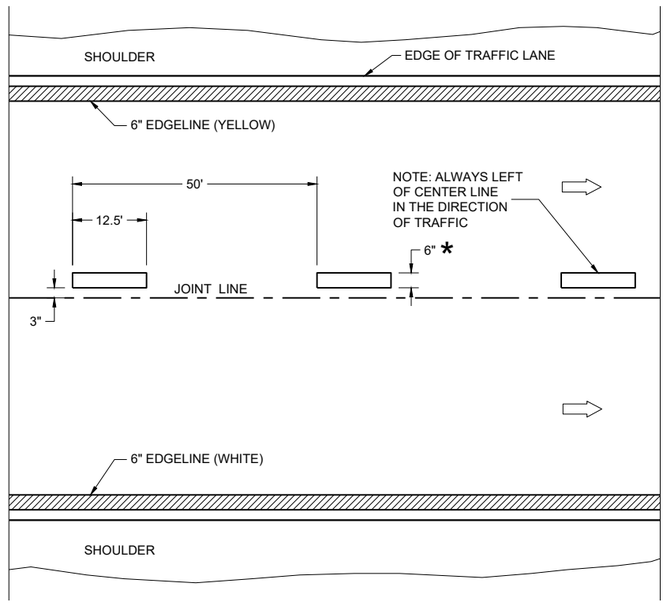
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

FHWA

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SDD 15C08-23b

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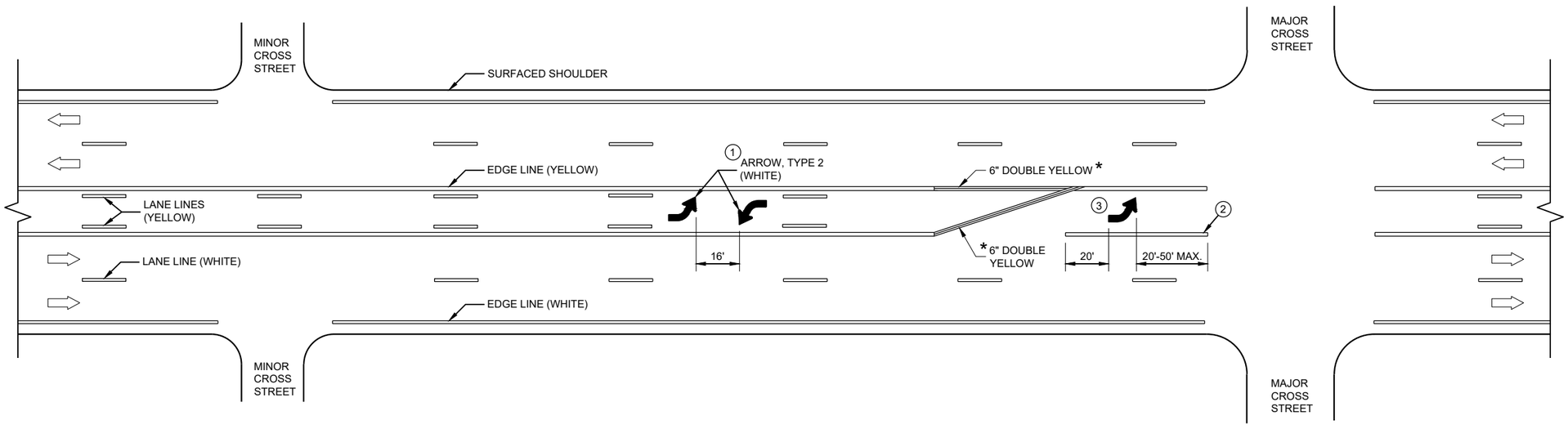
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



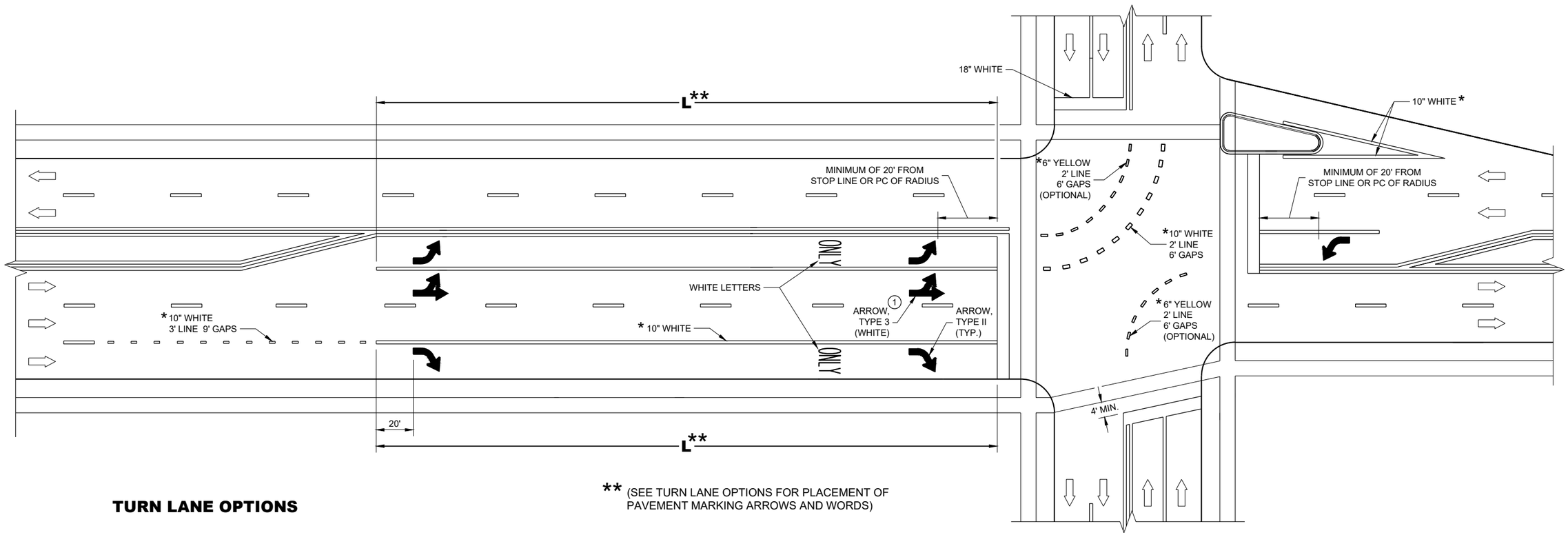
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 187

SDD 15C08-23c

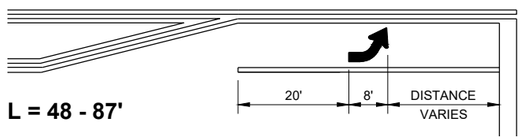
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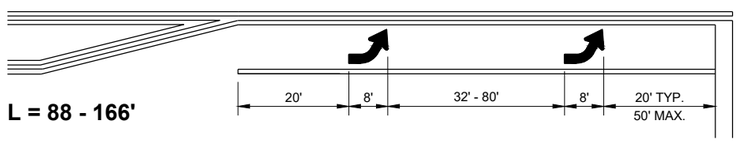
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

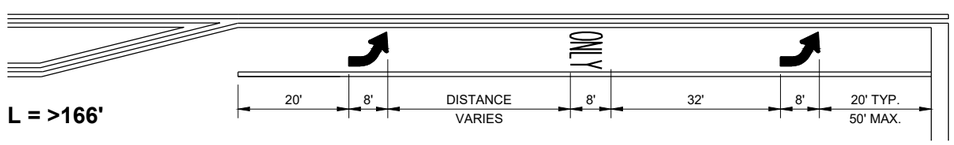
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

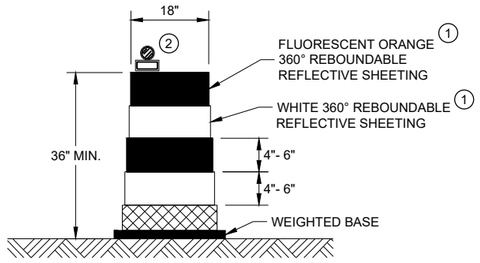
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SDD 15C08-23d

SDD 15C08-23d

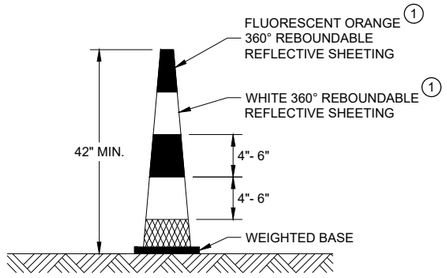
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

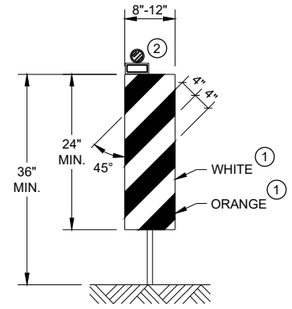
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

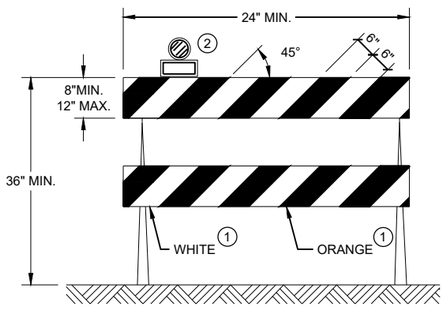
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



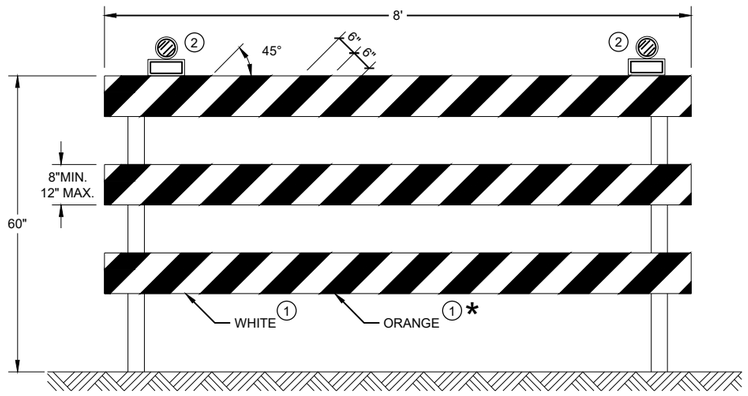
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 10b

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

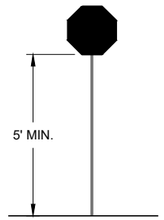
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



STOP/SLOW PADDLE ON SUPPORT STAFF

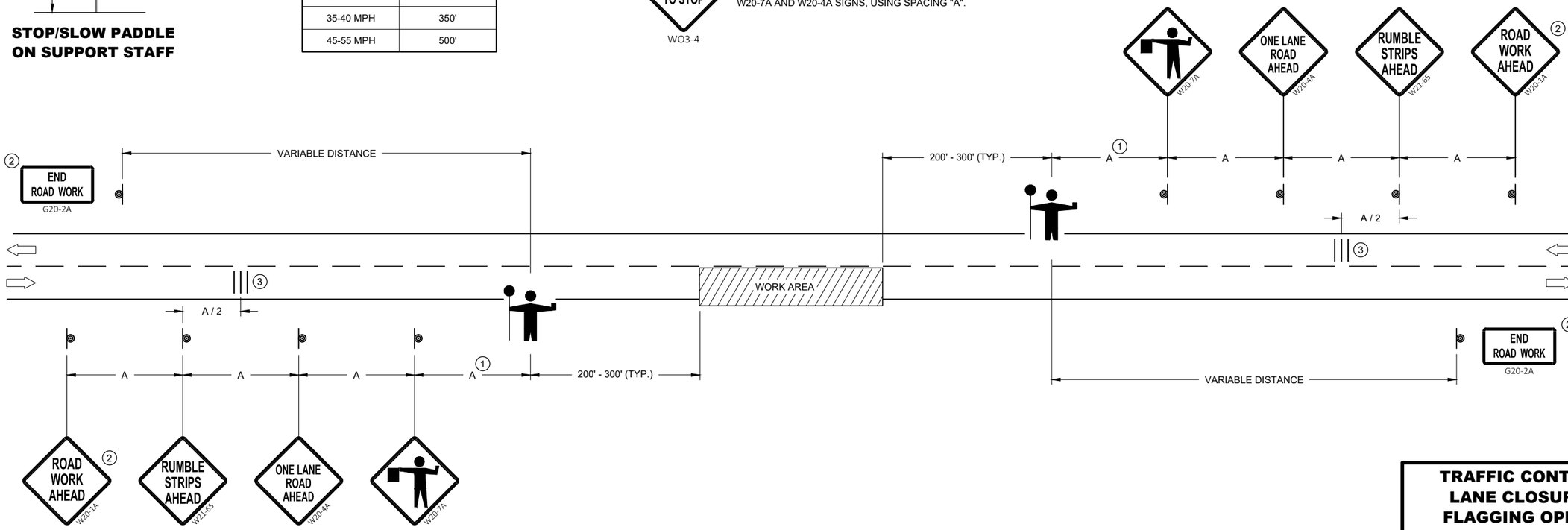
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C12 - 09a

6

SDD 15C12 - 09a

GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

(1) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

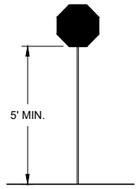
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

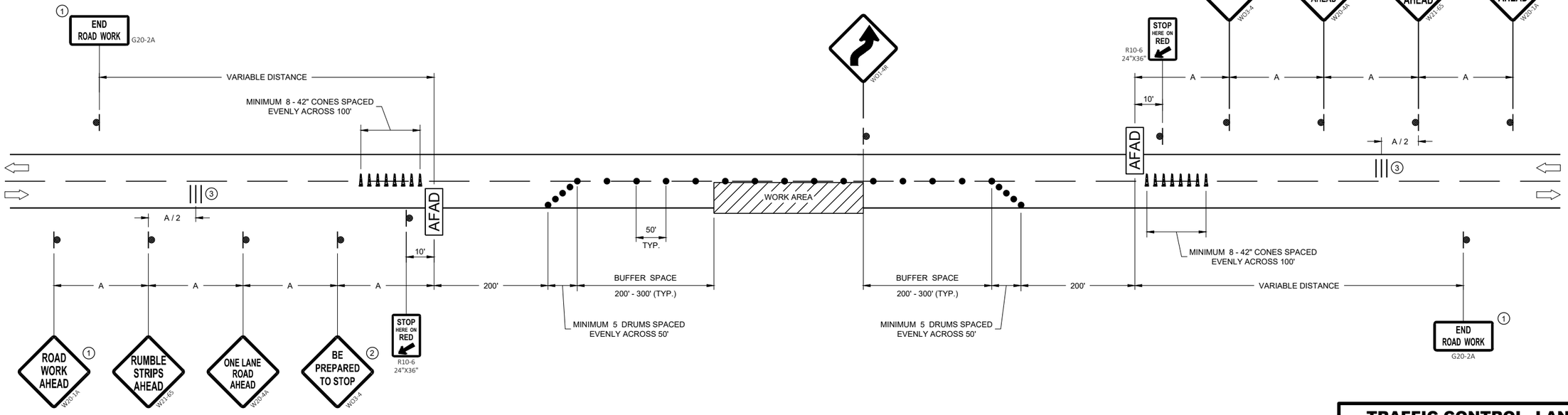
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

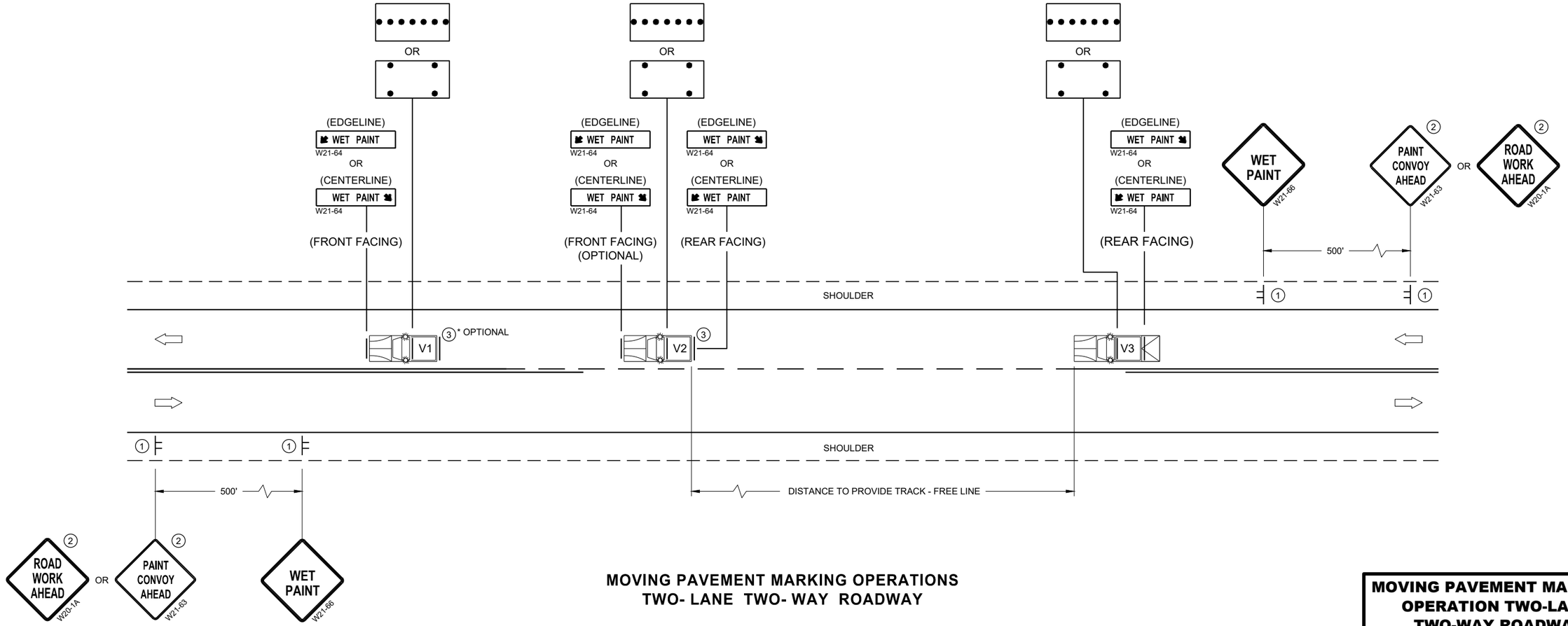
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

FHWA

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SDD 15C19-08a

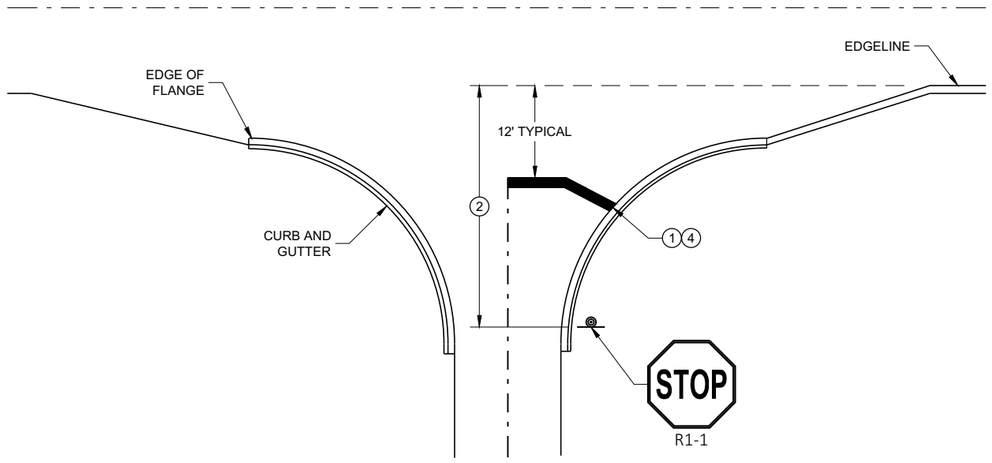
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SDD 15C19-08a

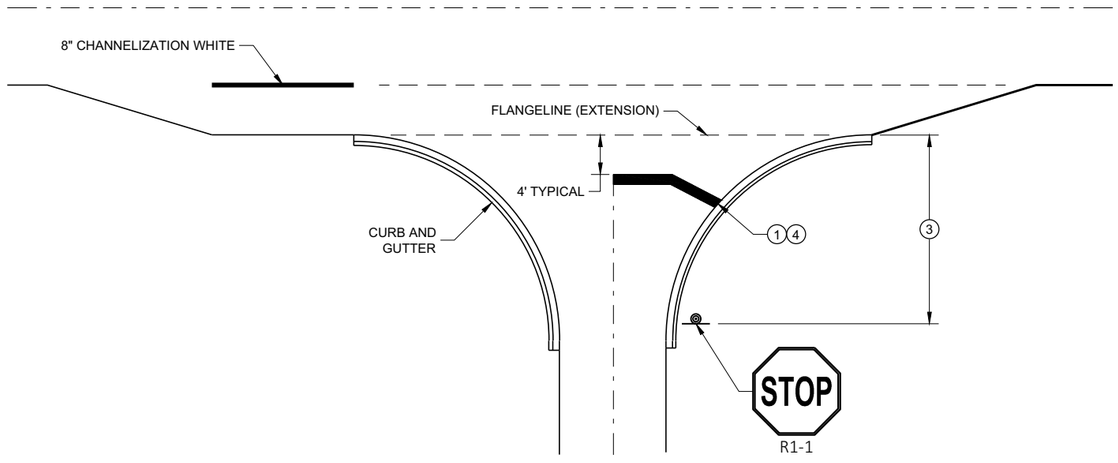
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

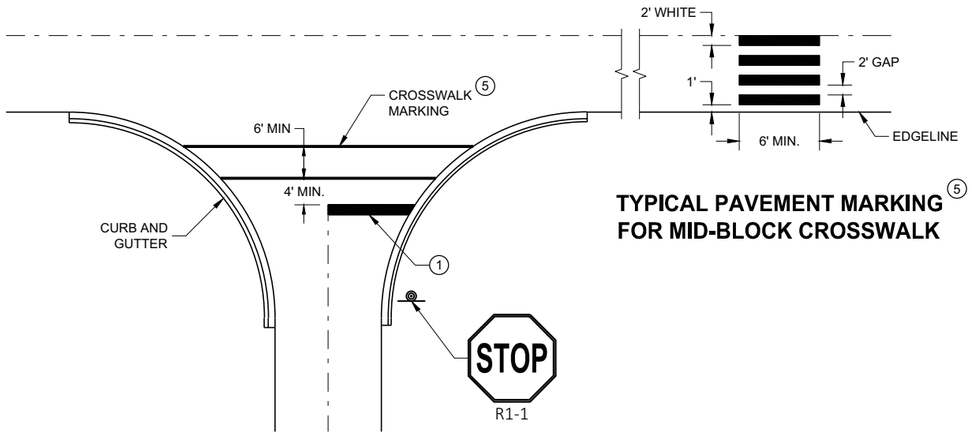
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

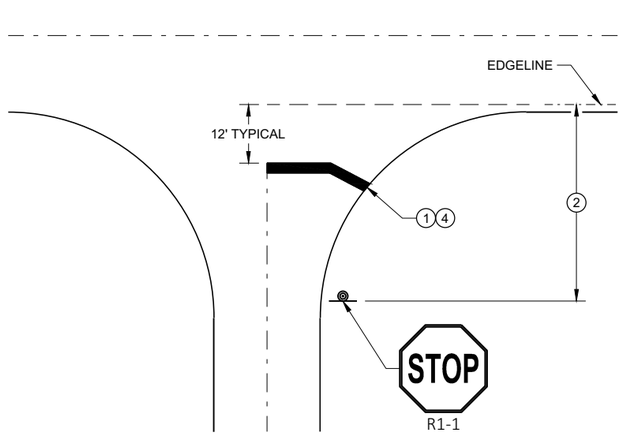


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

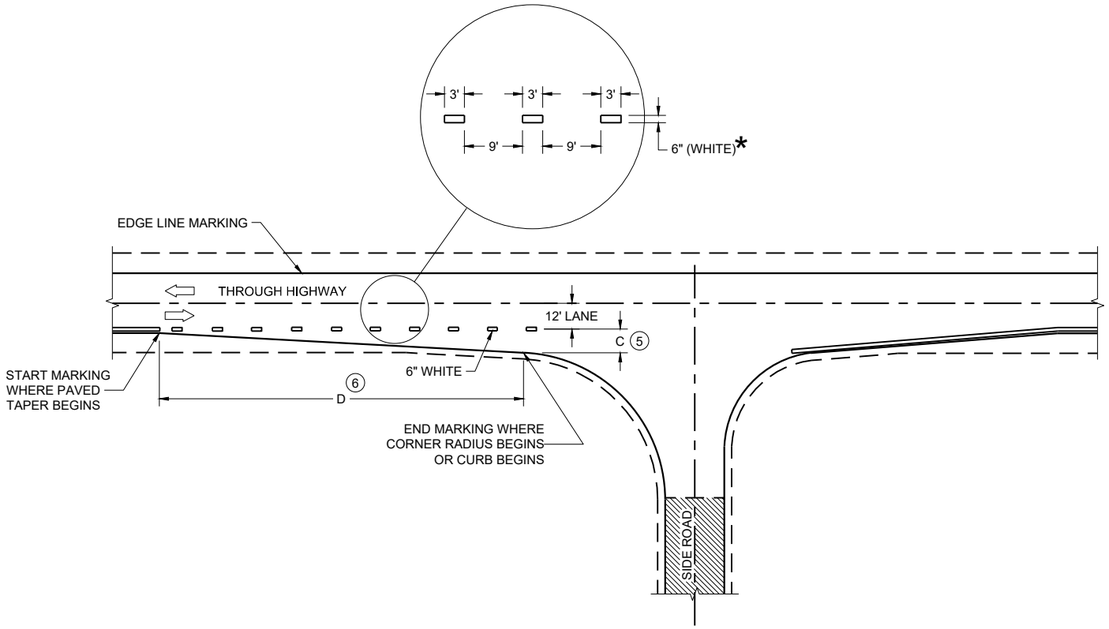
APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

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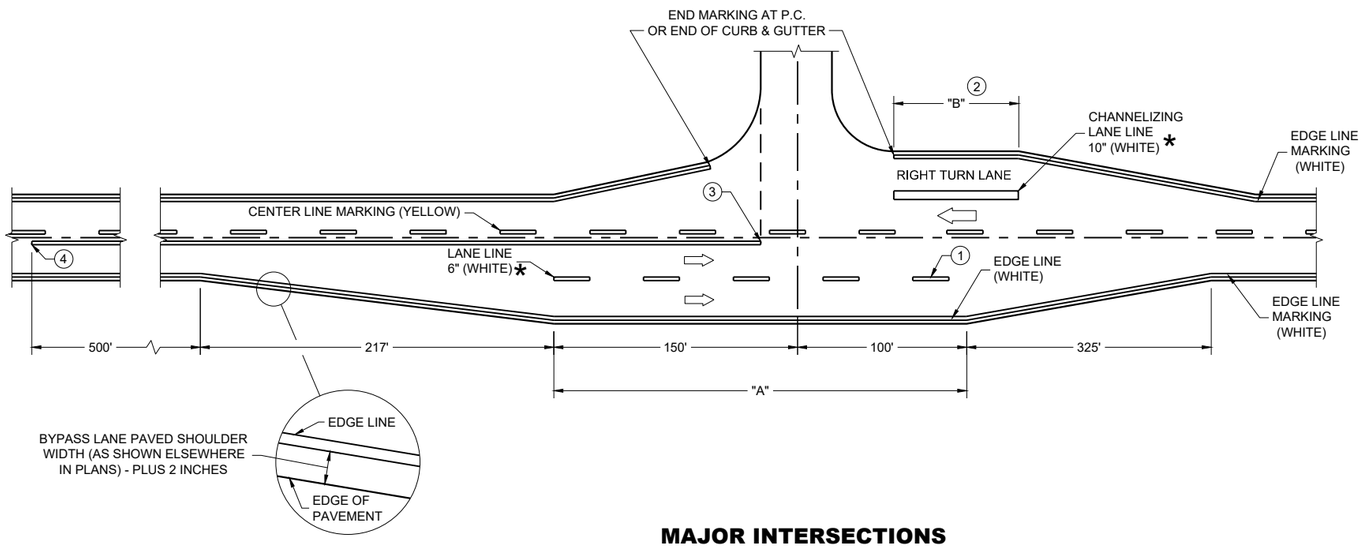
SDD 15C33 - 04

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SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

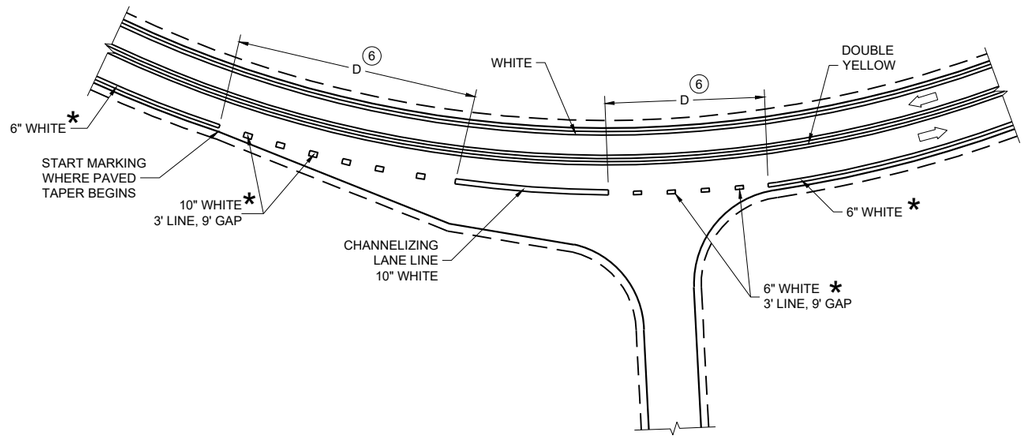
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

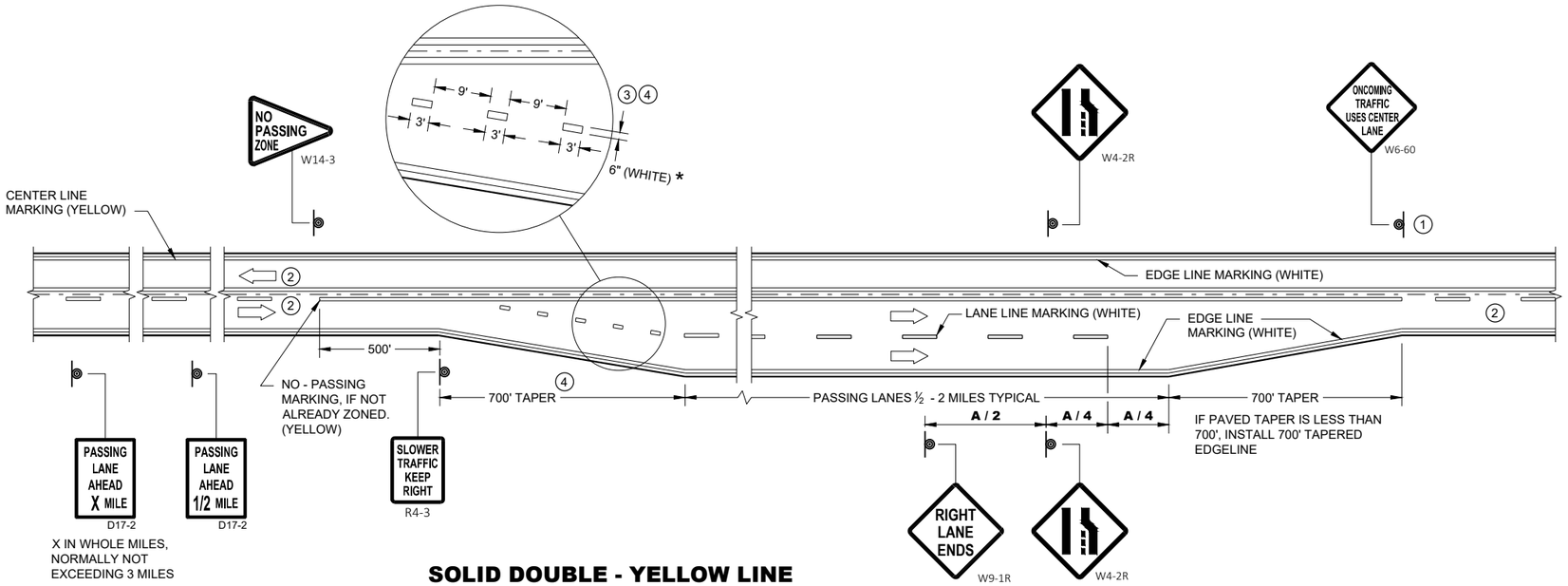
DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)

GENERAL NOTES

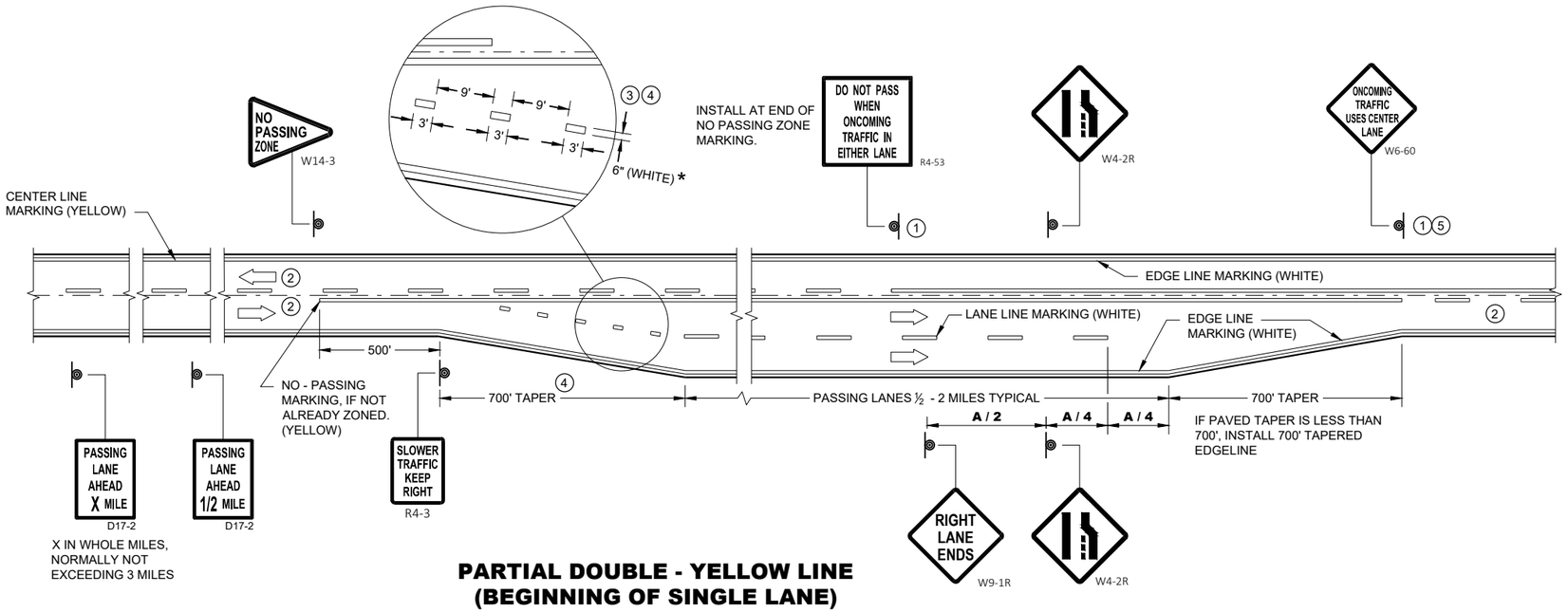
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



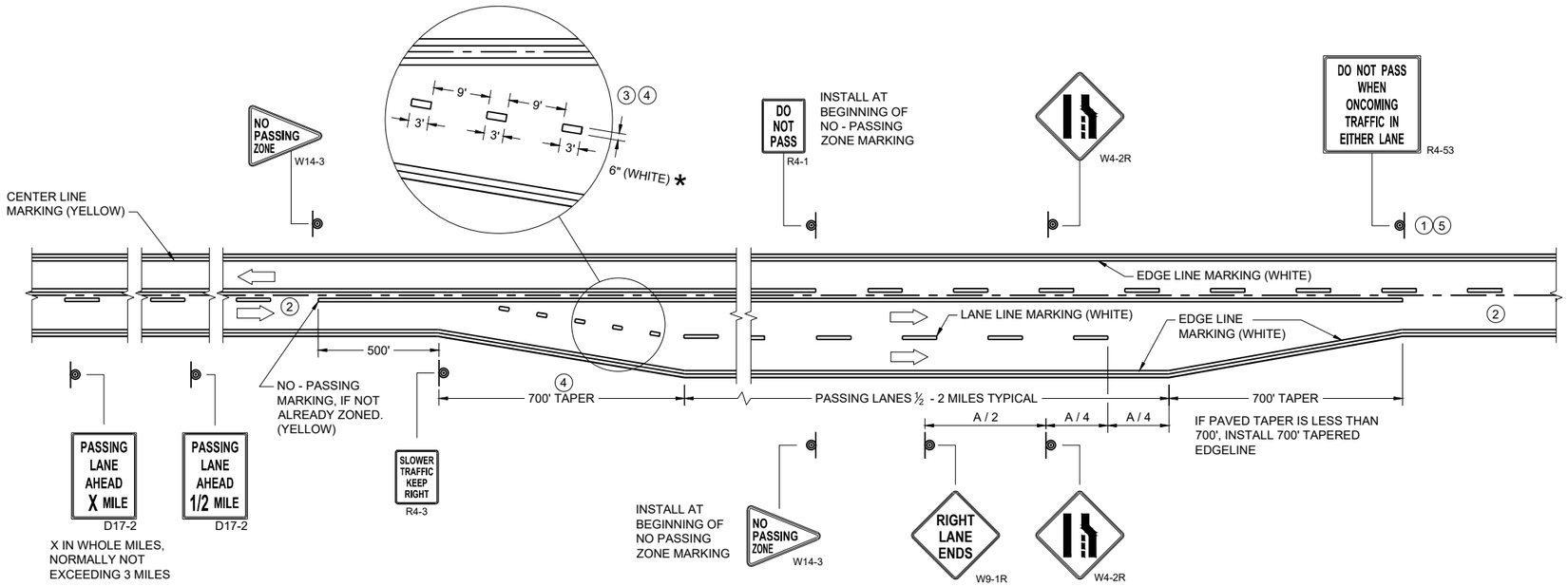
PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35-06b
SDD 15C35-06b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

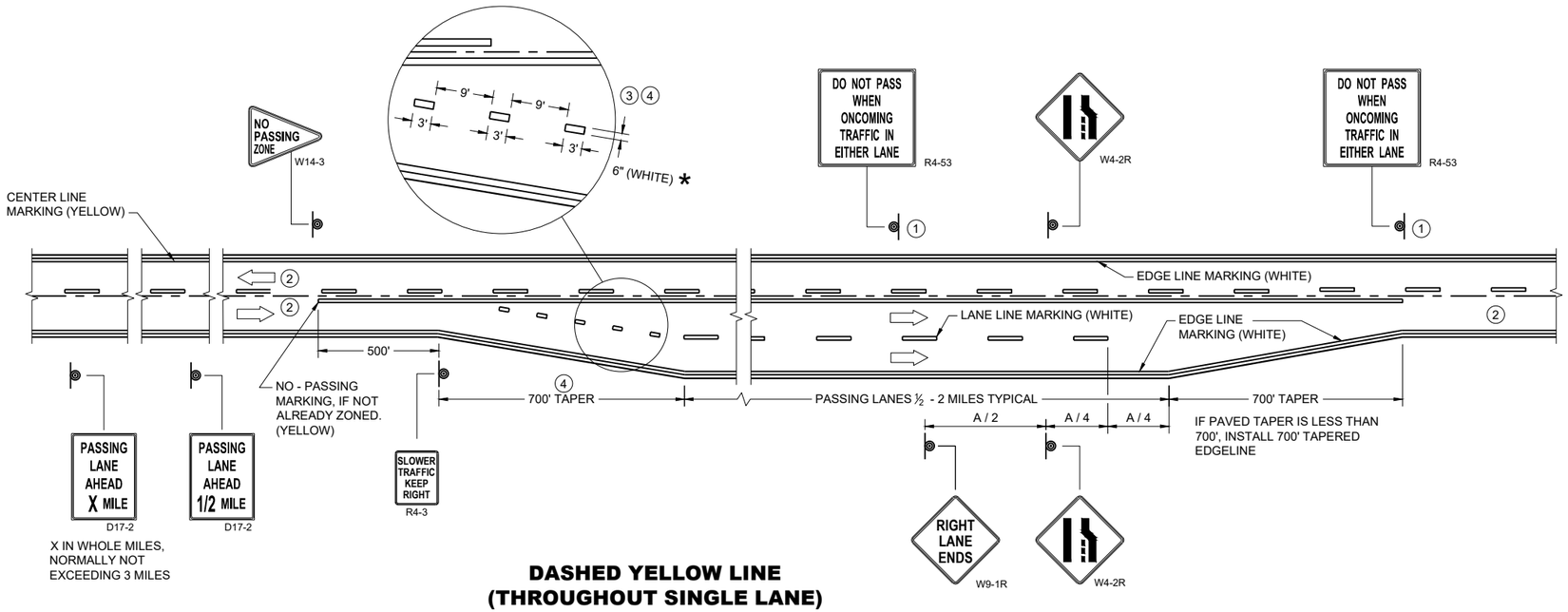
GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA

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SDD 15C35-06c

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SDD 15C35-06c

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

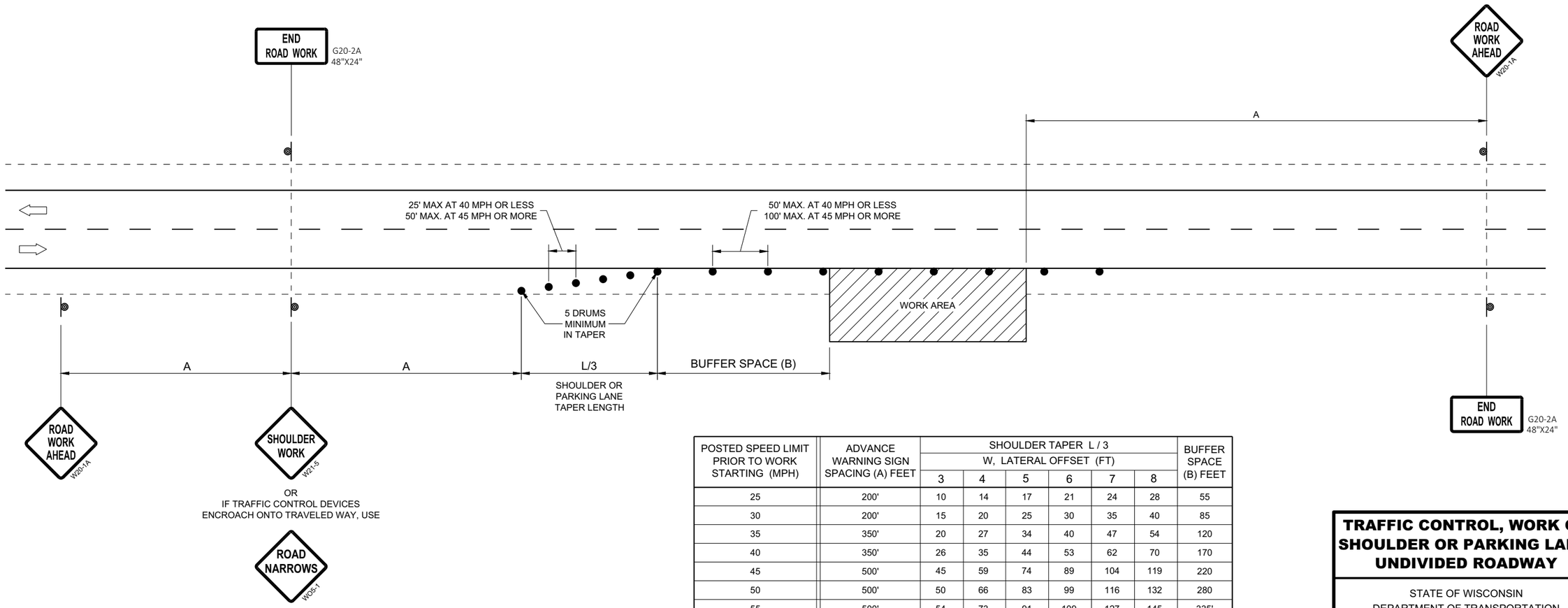
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

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SDD 15D28 - 04

GENERAL NOTES

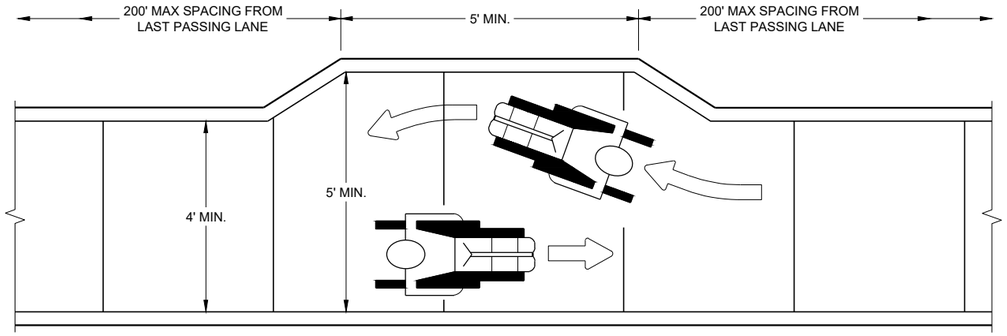
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

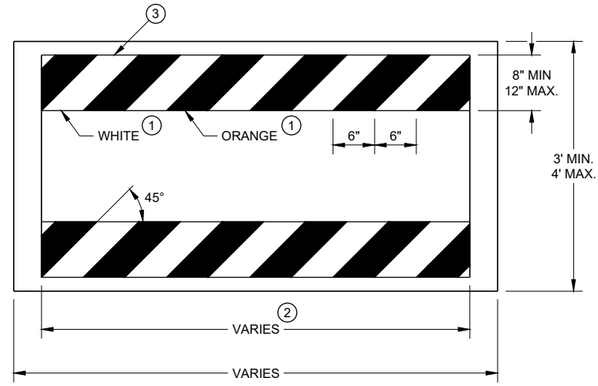
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

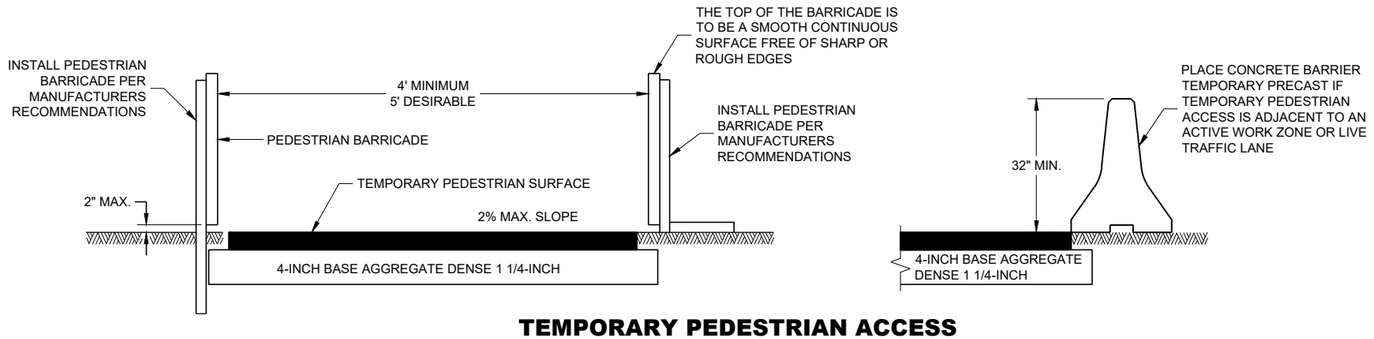
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

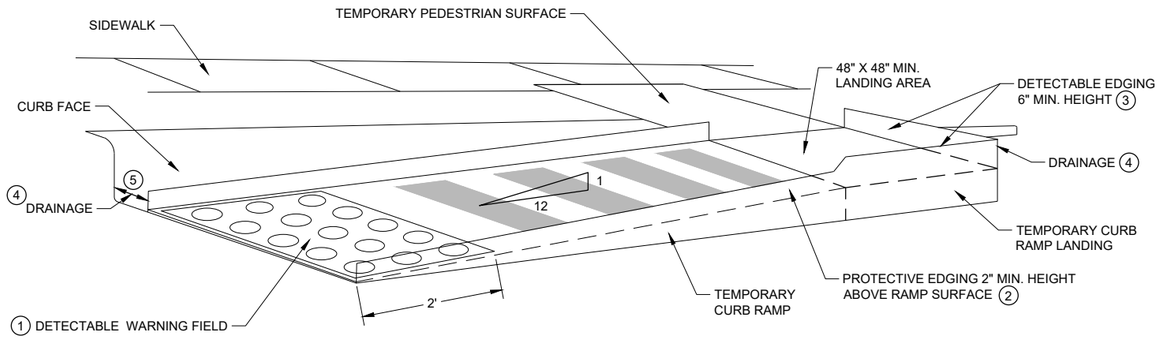
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SDD 15D30 - 09a

SDD 15D30 - 09a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

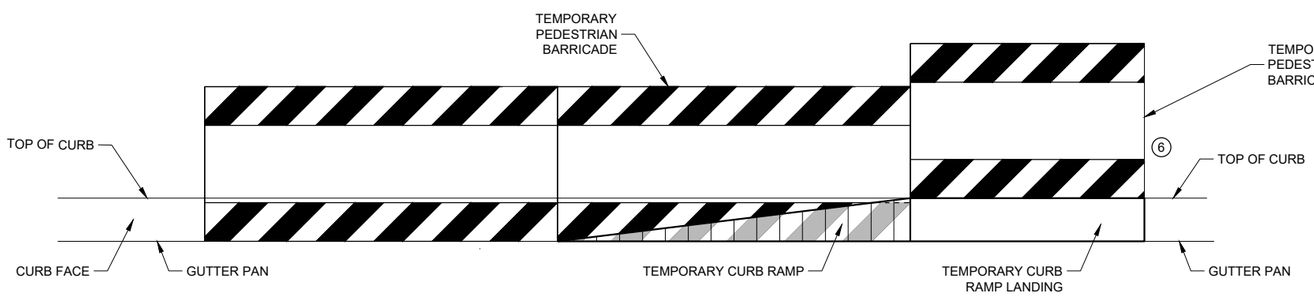
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

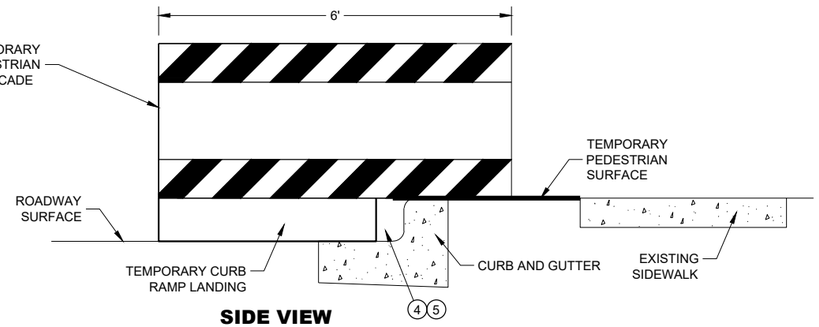
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

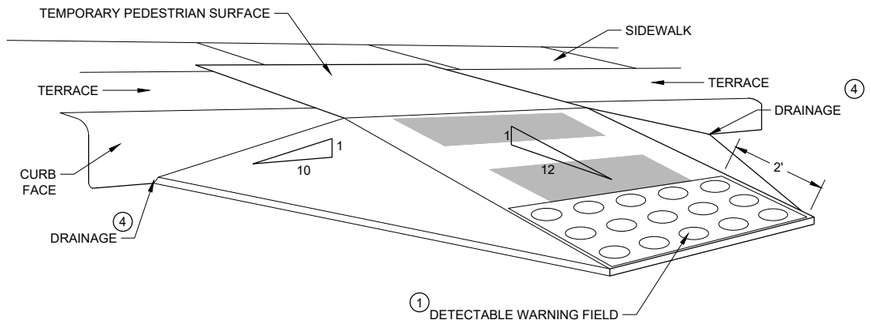
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

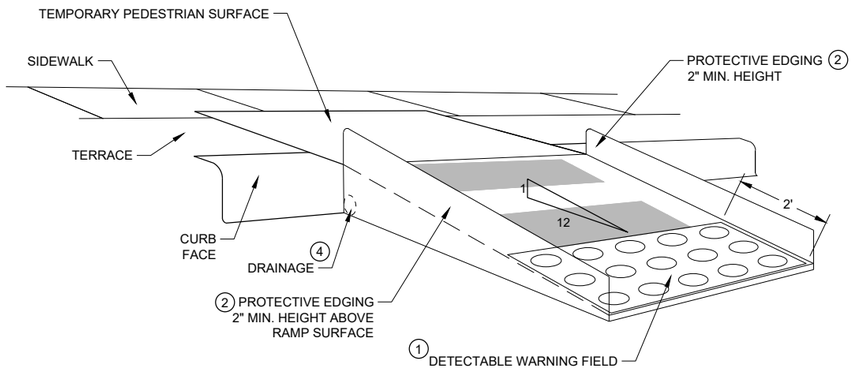
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

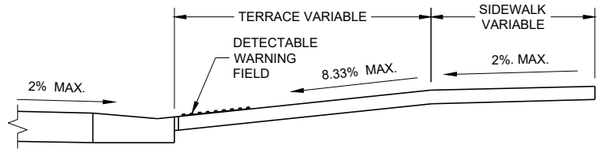
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

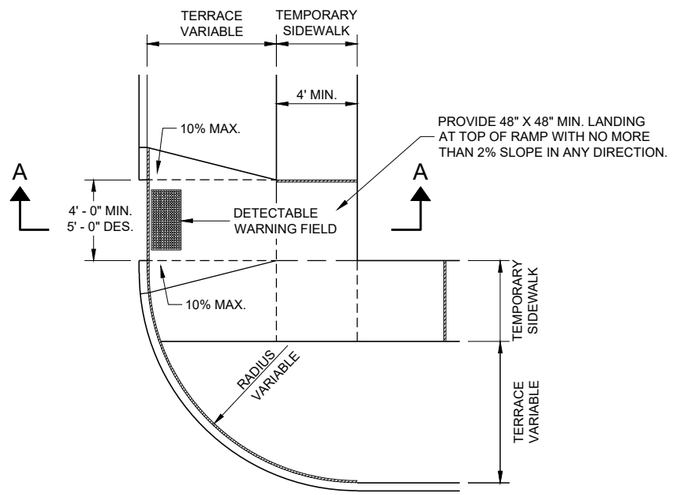
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

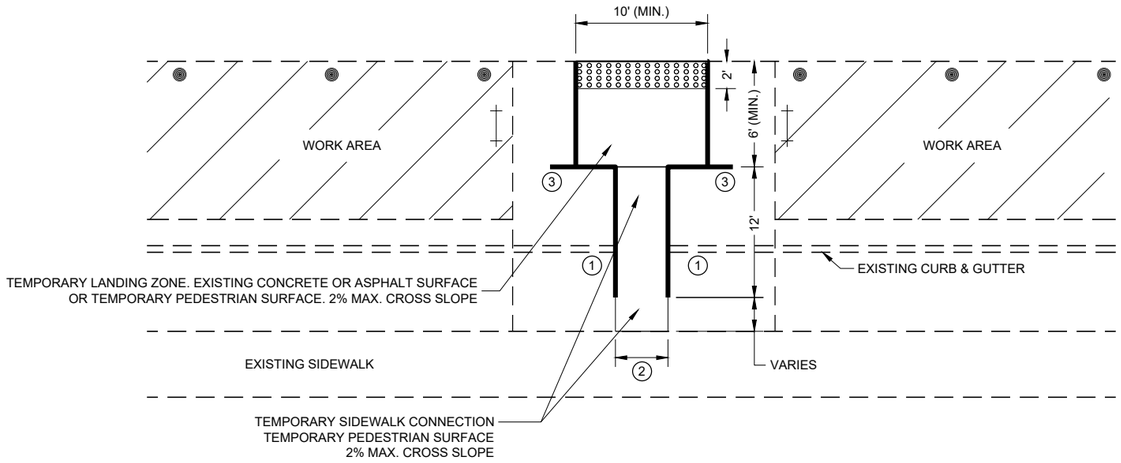
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

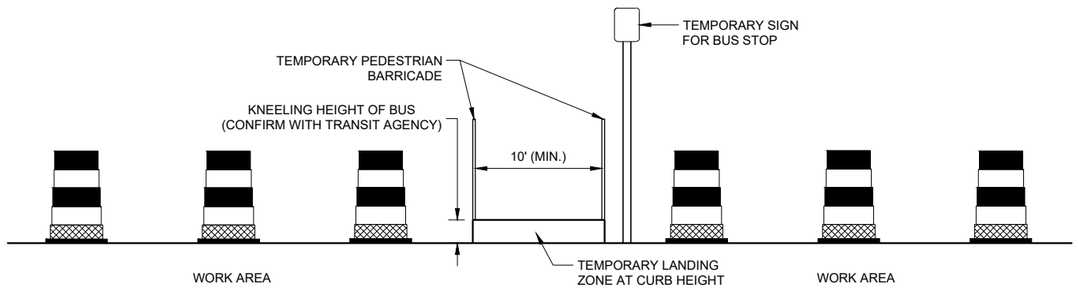
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D30-09d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

6

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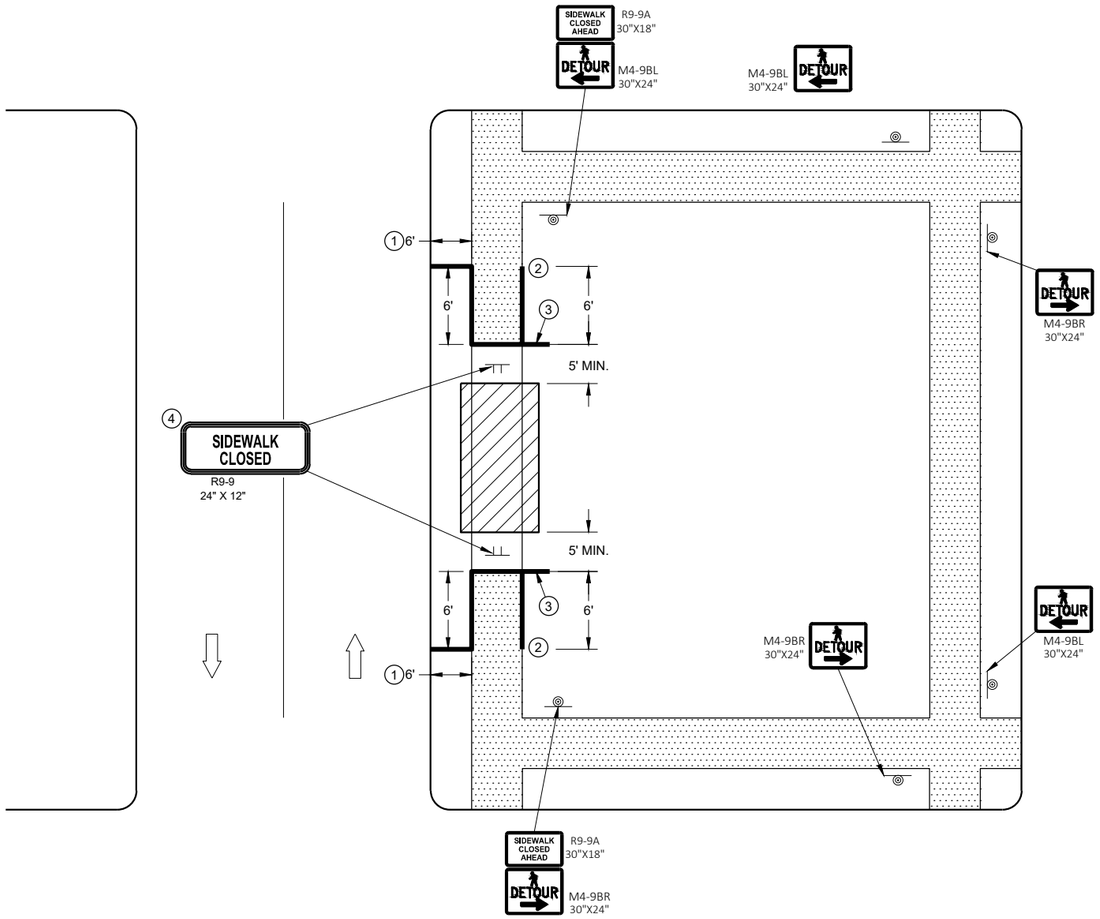
SDD 15D30 - 09e

SDD 15D30 - 09e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

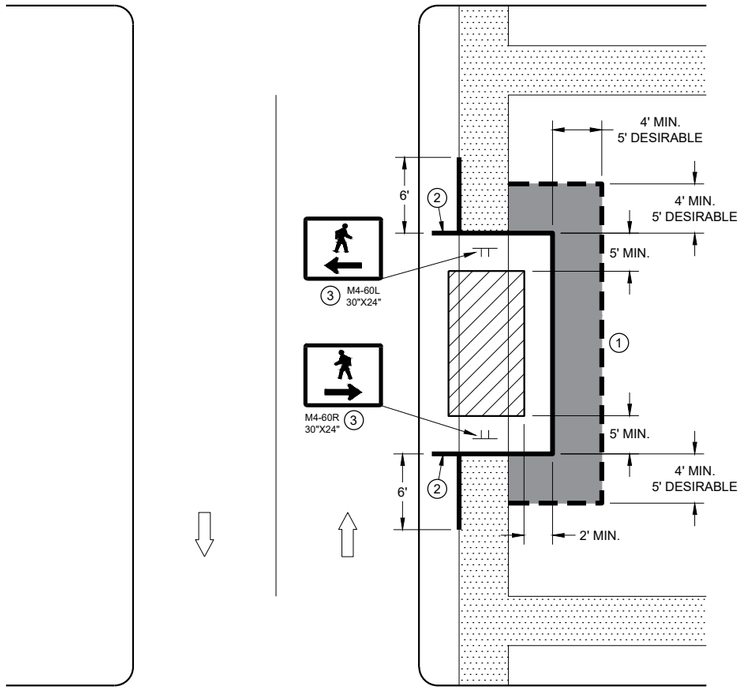
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 09g

6

SDD15D30 - 09g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

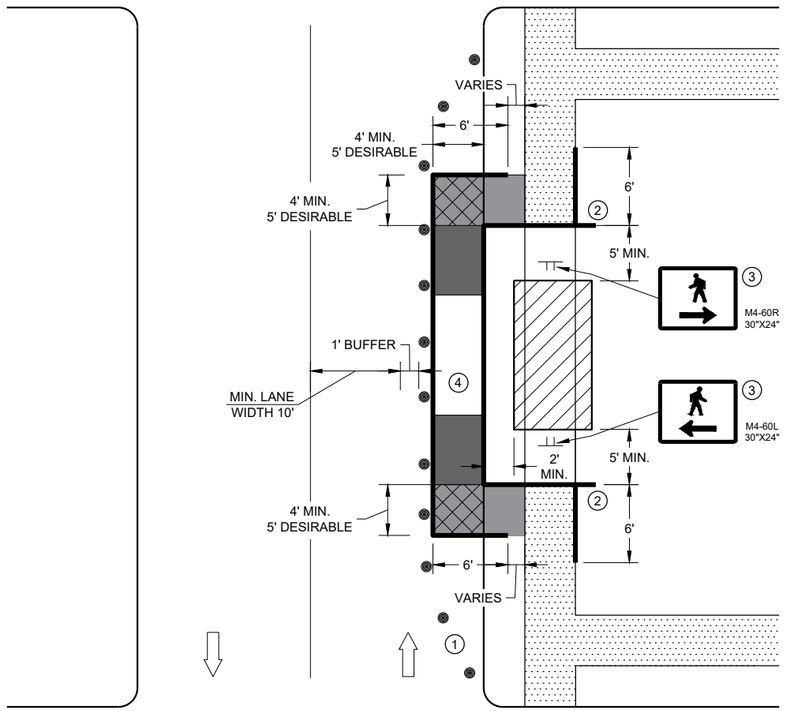
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



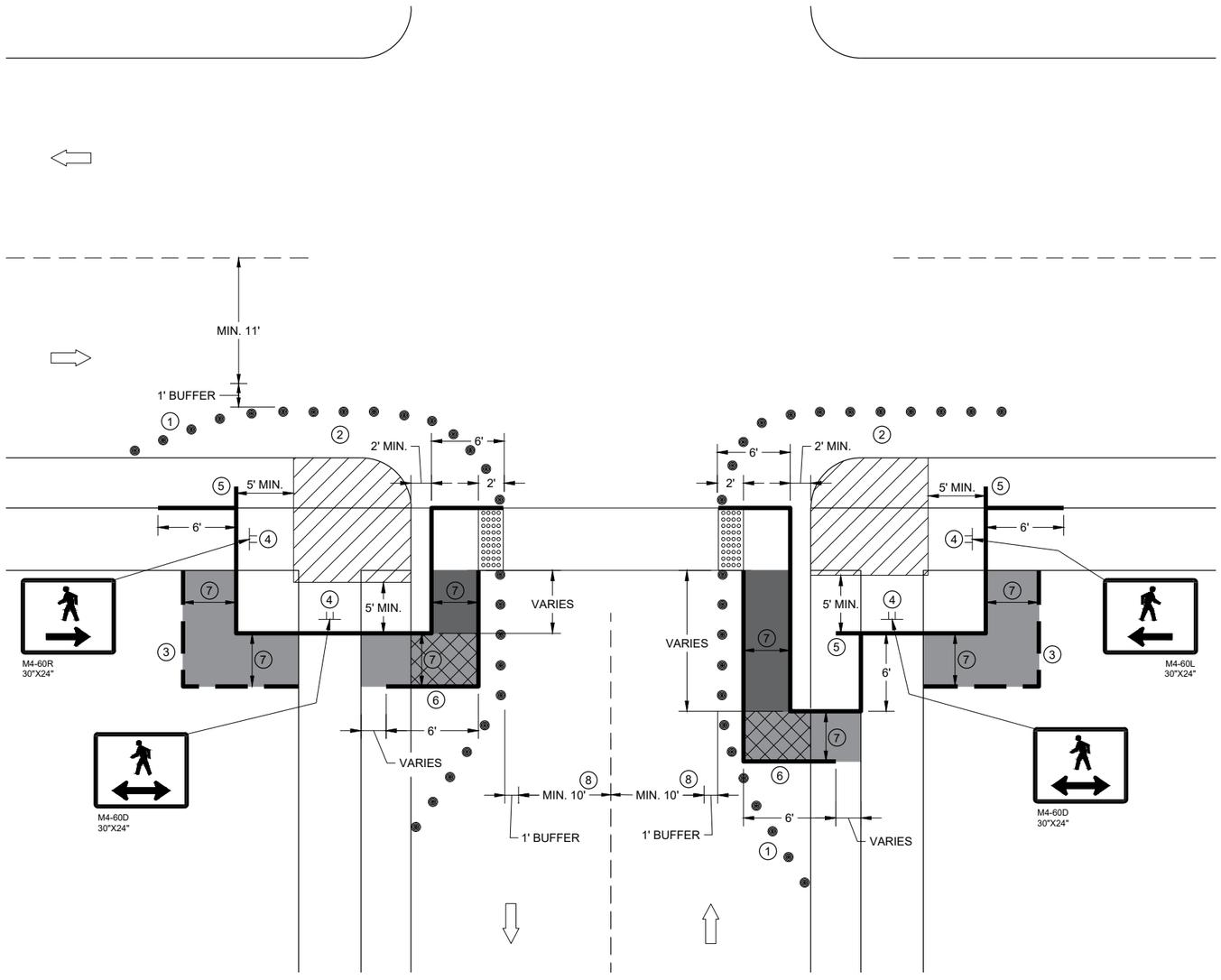
SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

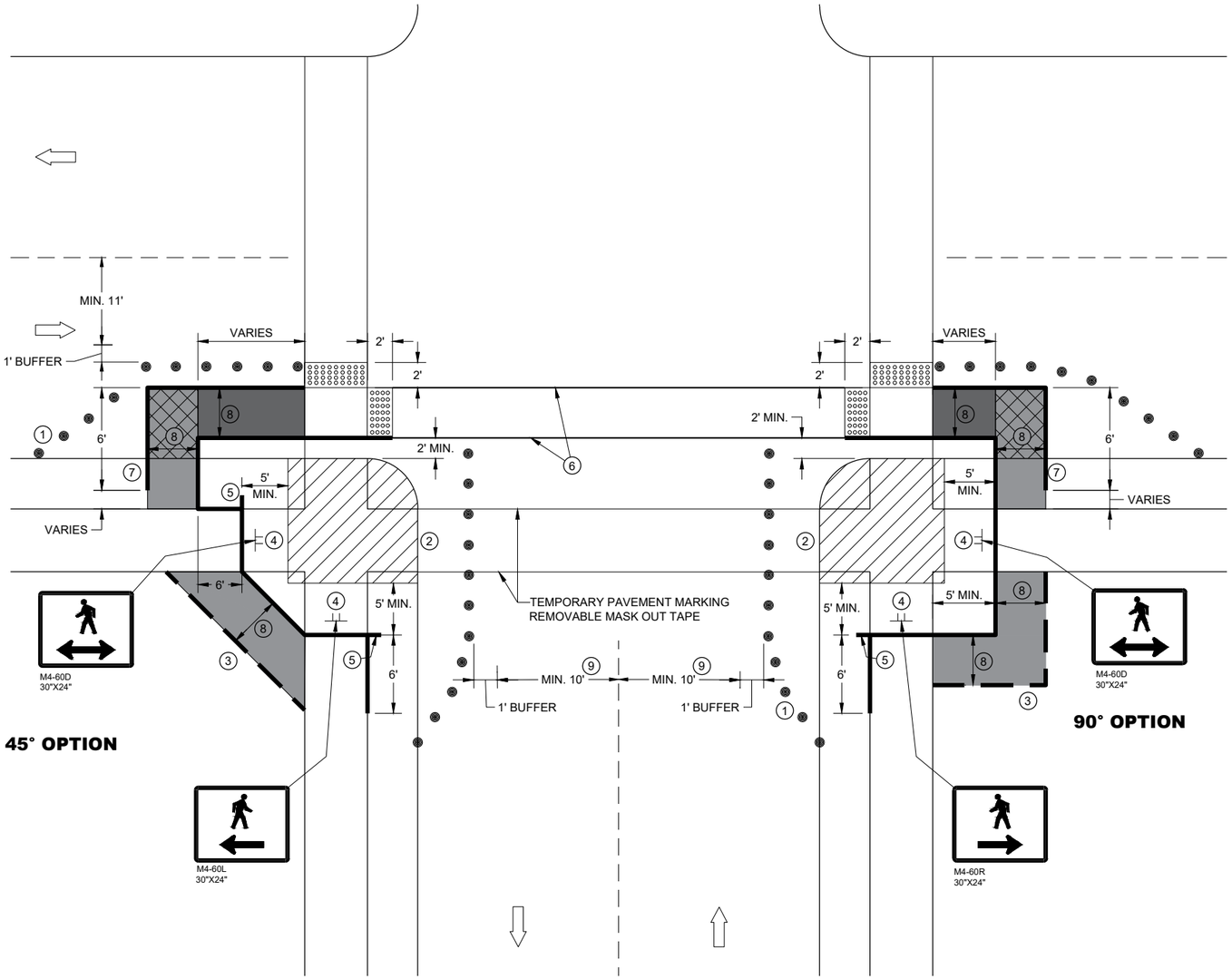
(7) 4 FEET MINIMUM, 5 FEET DESIRABLE

(8) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

SIGN ON PERMANENT SUPPORT

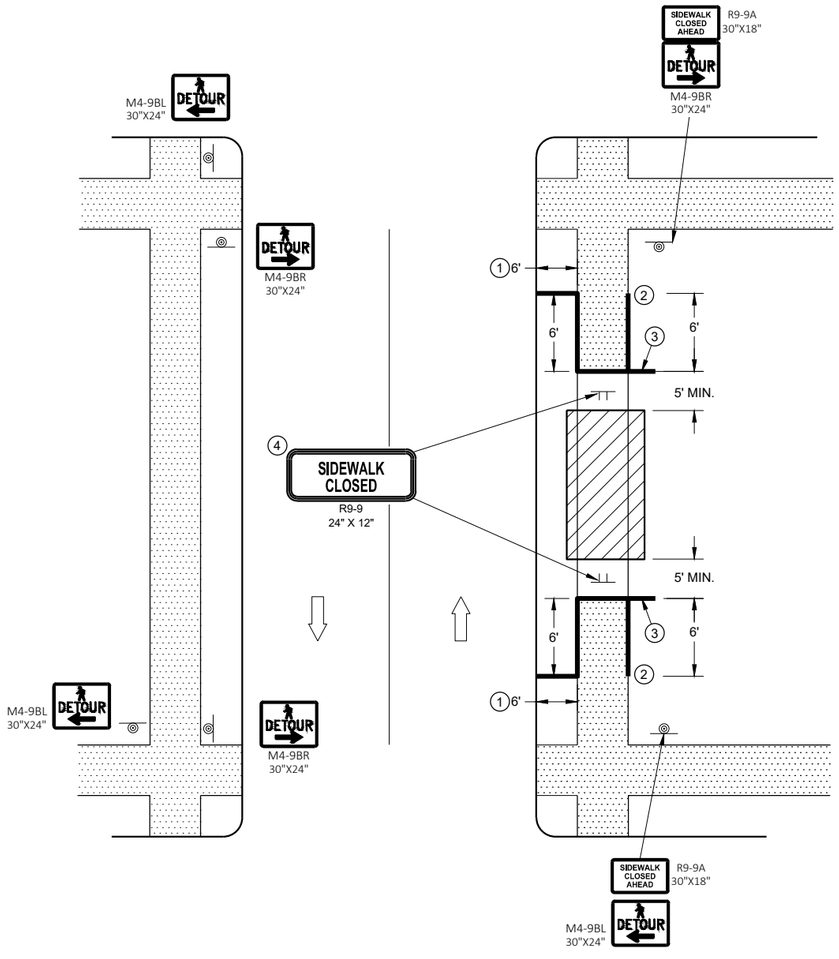
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

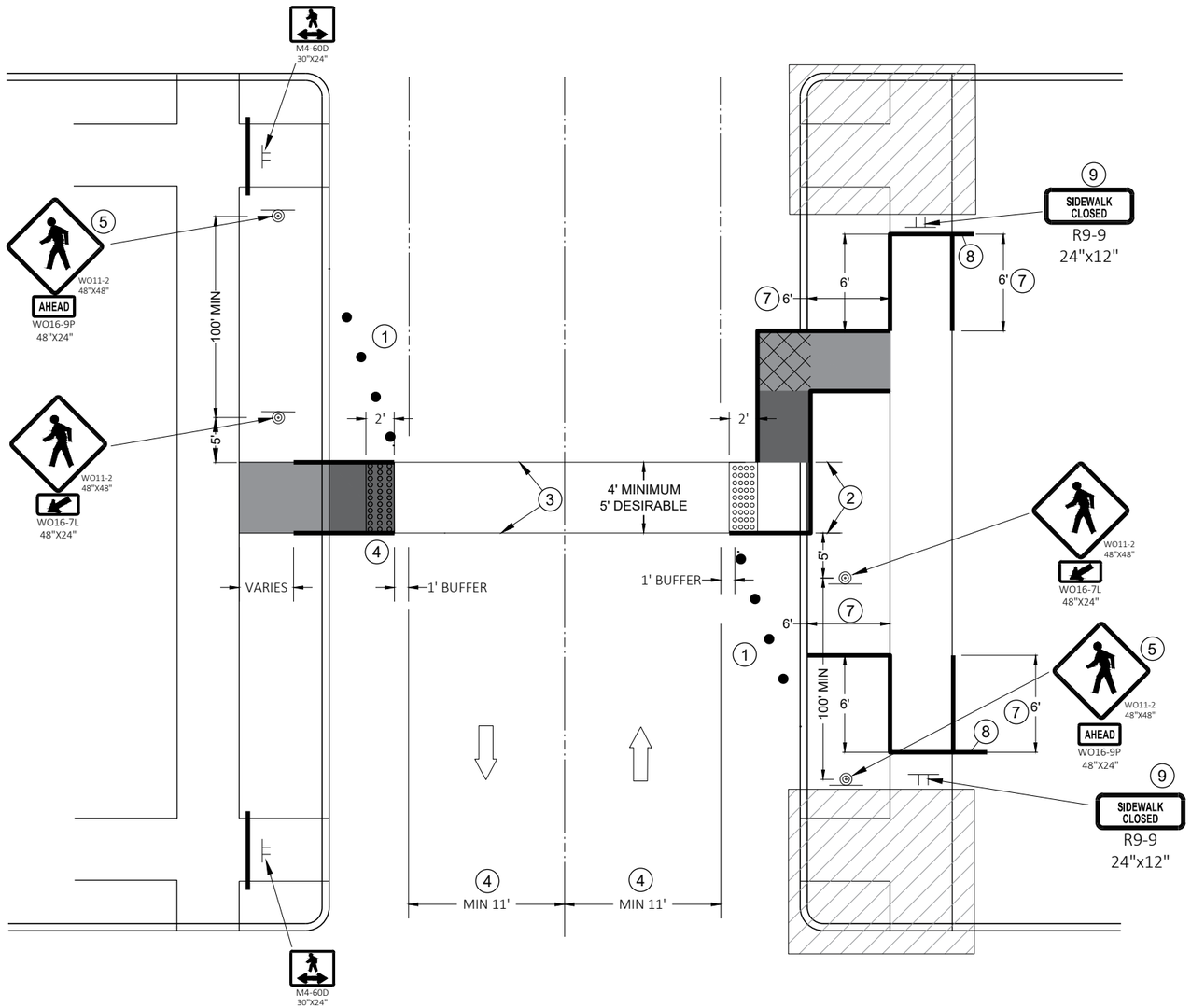
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

6

SDD 15D30 - 09k

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

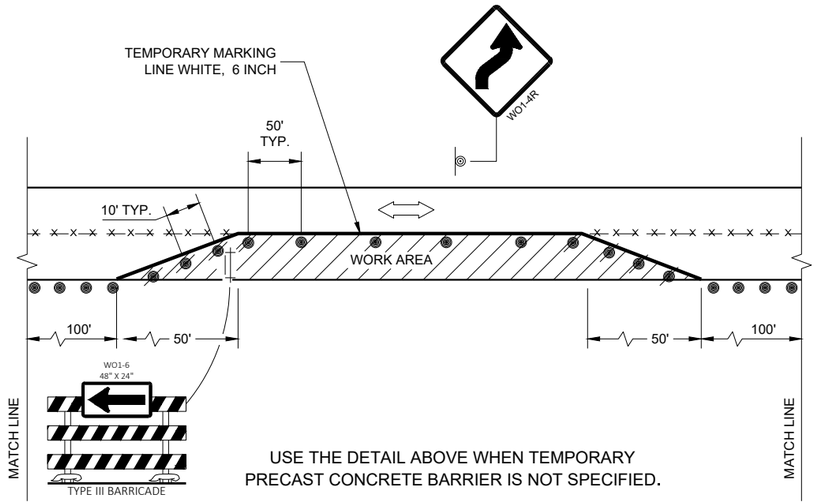
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TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09L

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST
- TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT



USE THE DETAIL ABOVE WHEN TEMPORARY PRECAST CONCRETE BARRIER IS NOT SPECIFIED.

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE..

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

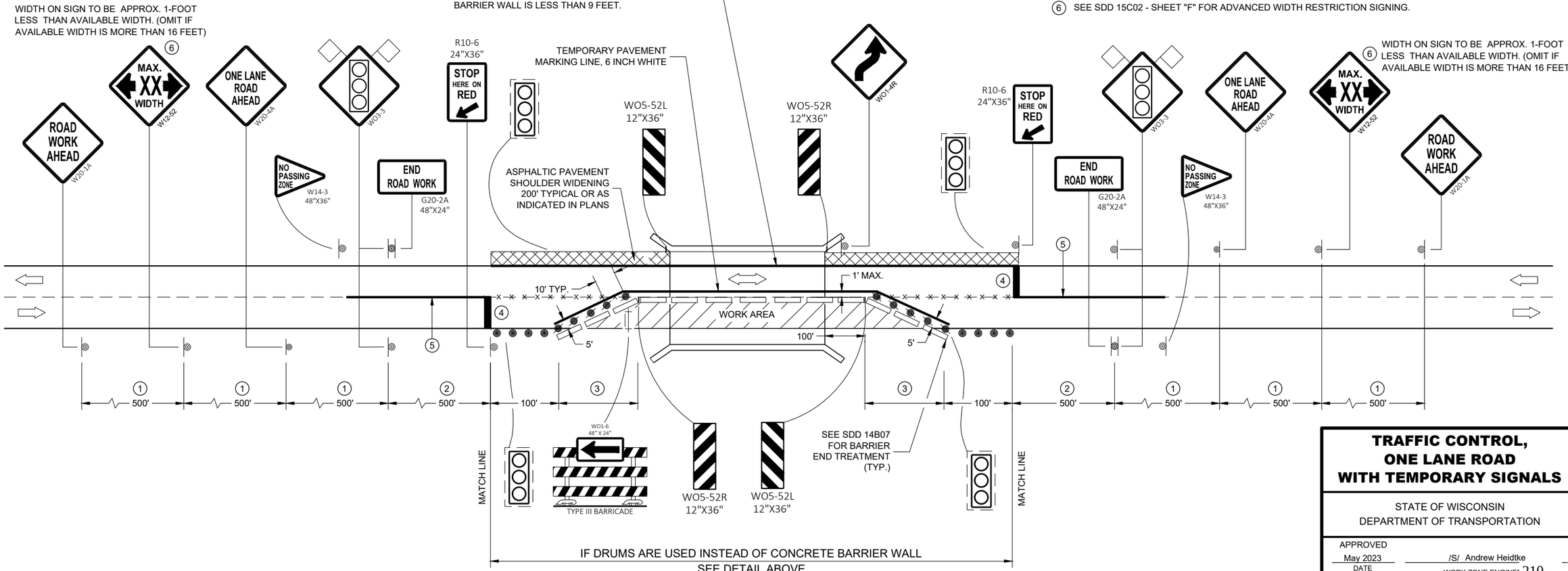
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT MARKING LINES IF THE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

INSTALL OVERHEAD TEMPORARY SIGNAL HEADS ABOVE THE MIDDLE OF THE TRAVEL LANE THEY ARE CONTROLLING.

1. 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
2. USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
3. DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
4. TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.
5. 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
6. SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

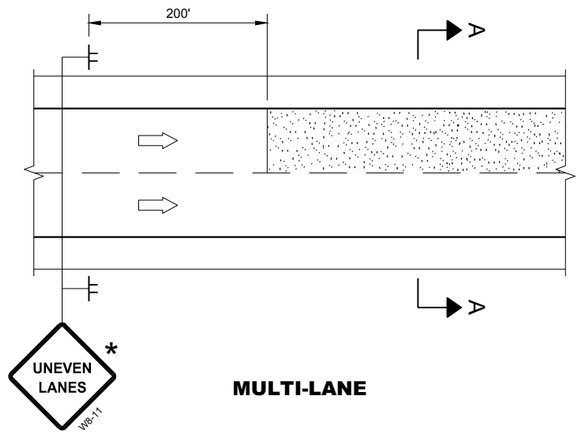
FHWA

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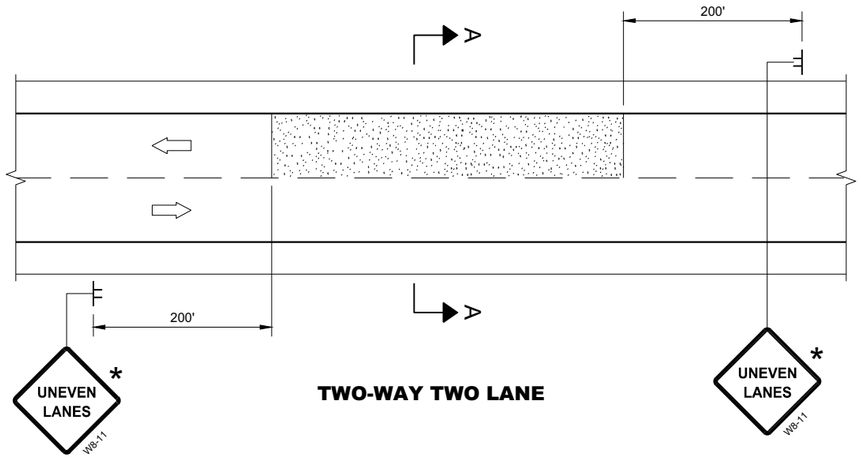
SDD 15D33-09

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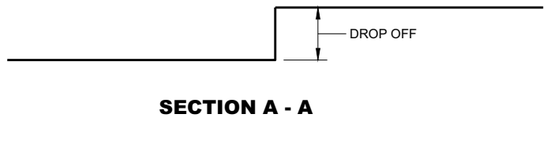
SDD 15D33-09



MULTI-LANE

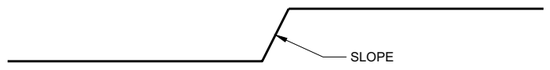


TWO-WAY TWO LANE

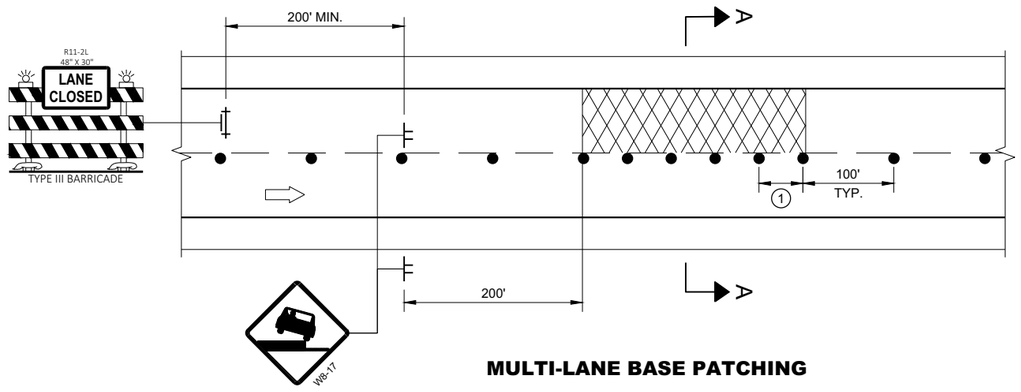


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

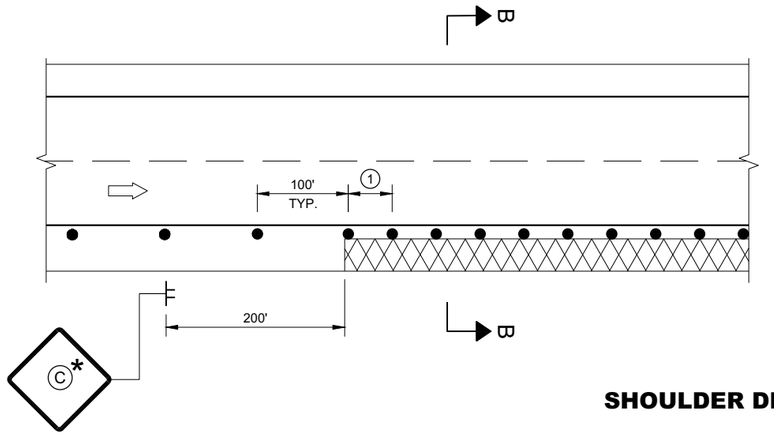
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

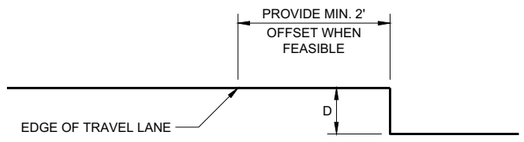
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D39 - 02

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SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

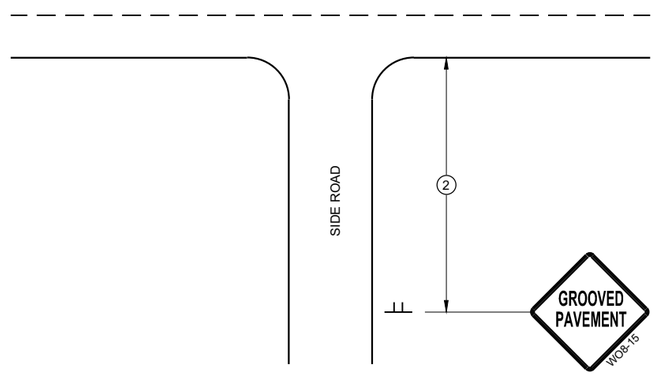
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

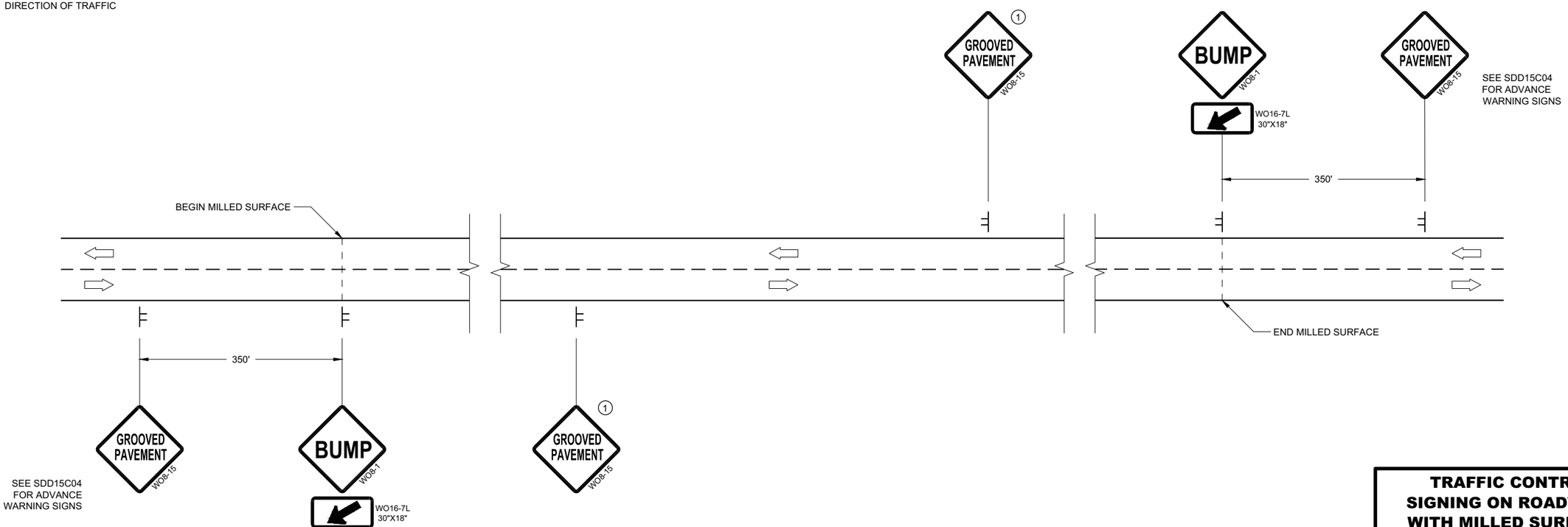
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

(1) PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

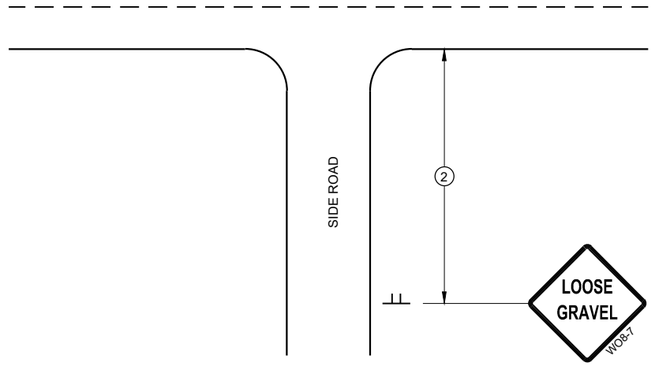
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

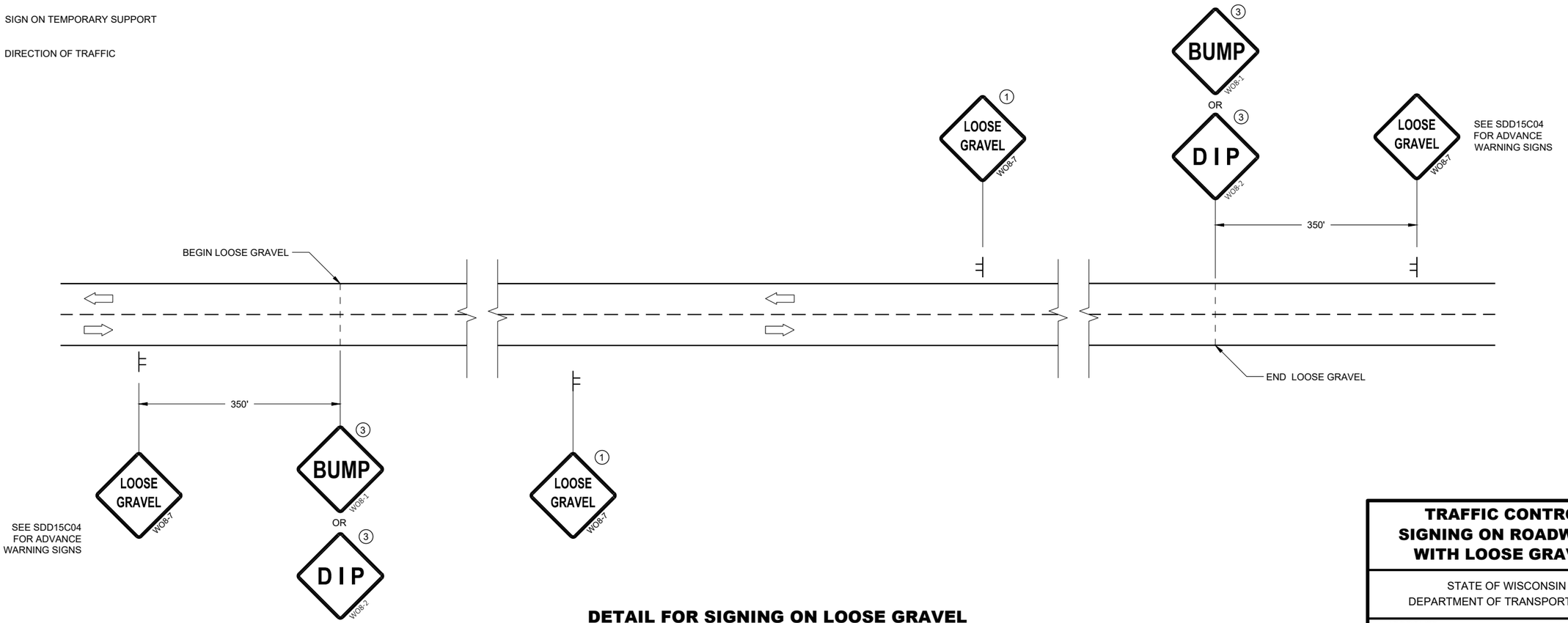
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

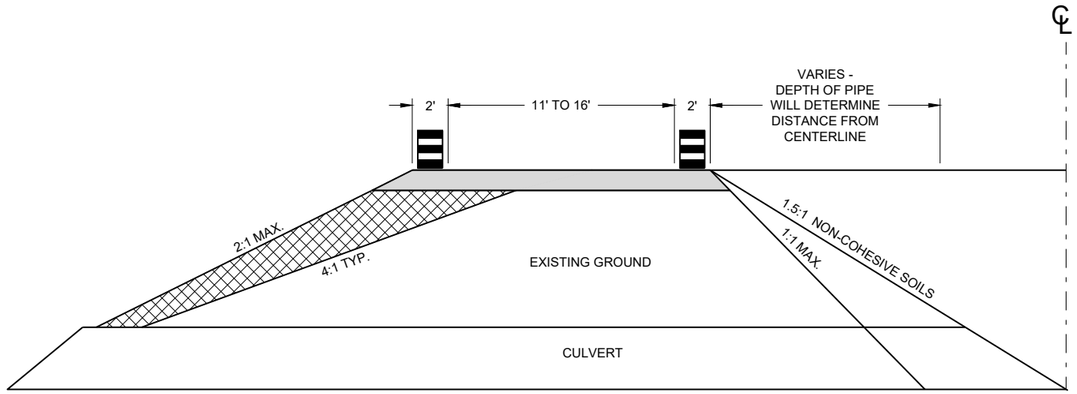
FHWA

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SDD 15D45 - 03

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SDD 15D45 - 03



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

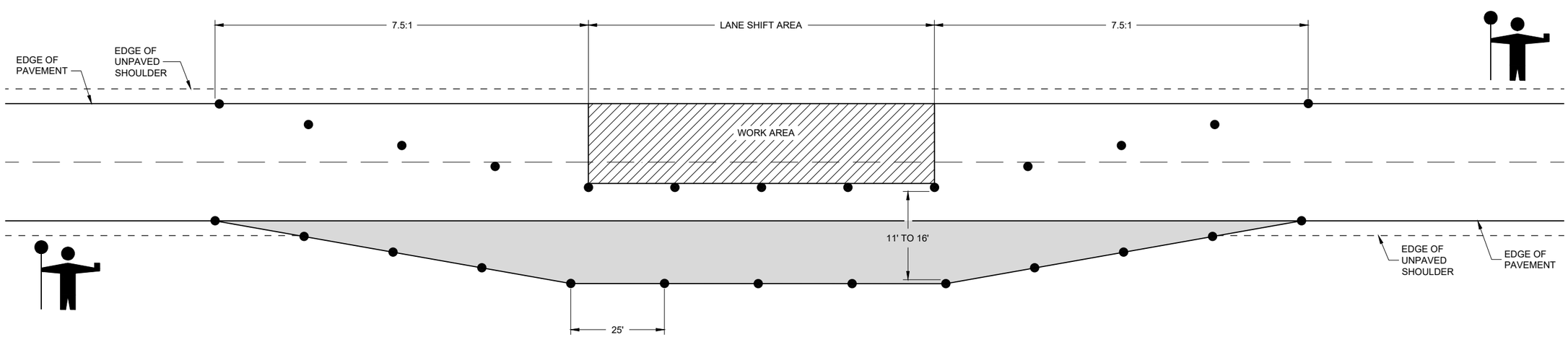
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D48 - 01

6

SDD 15D48 - 01

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

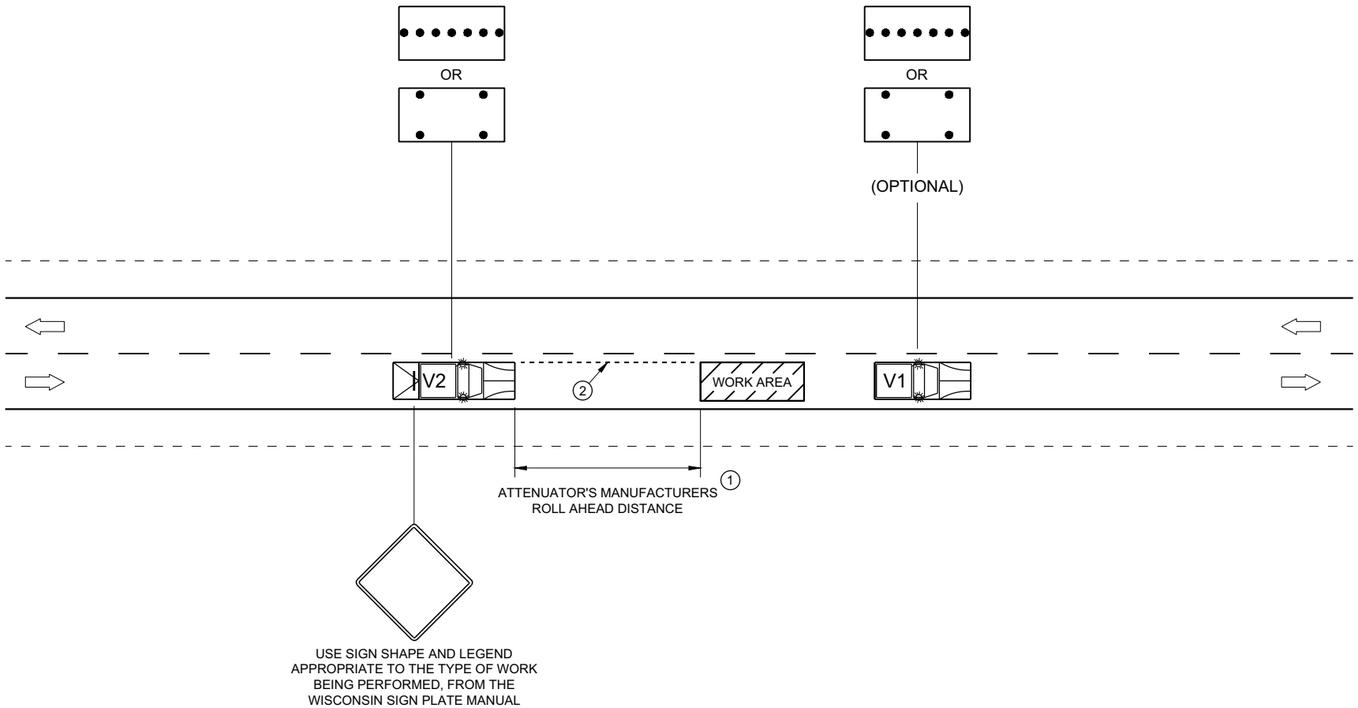
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



6

SDD 15D51 - 01

TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

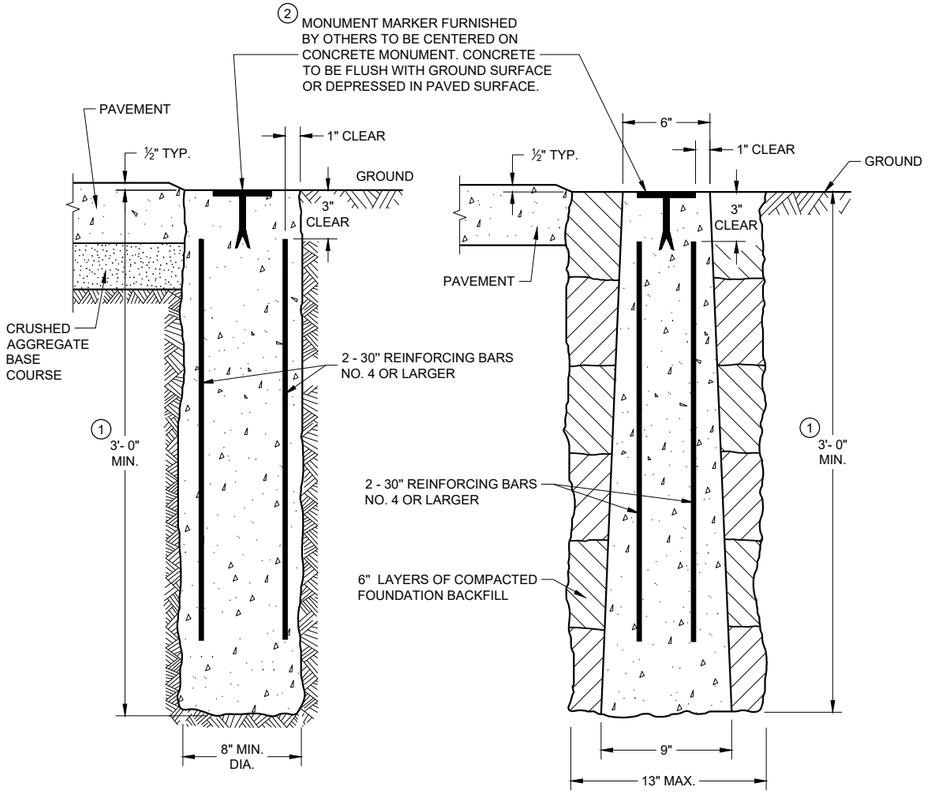
February 2021
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

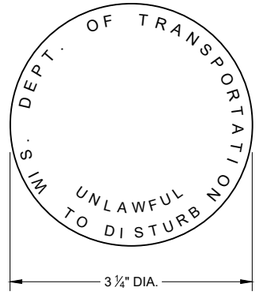
6

SDD 15D51 - 01



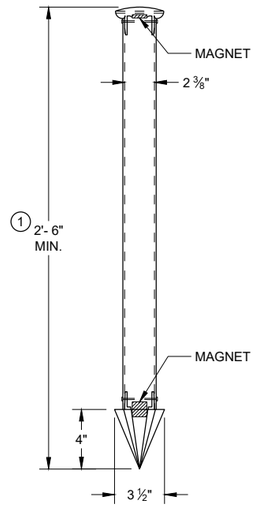
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

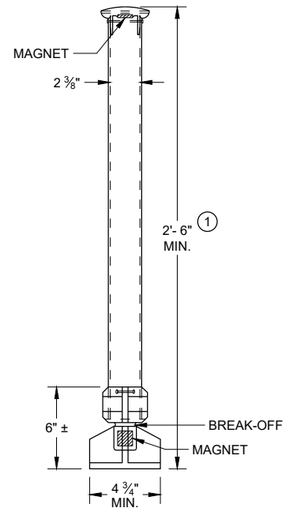


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

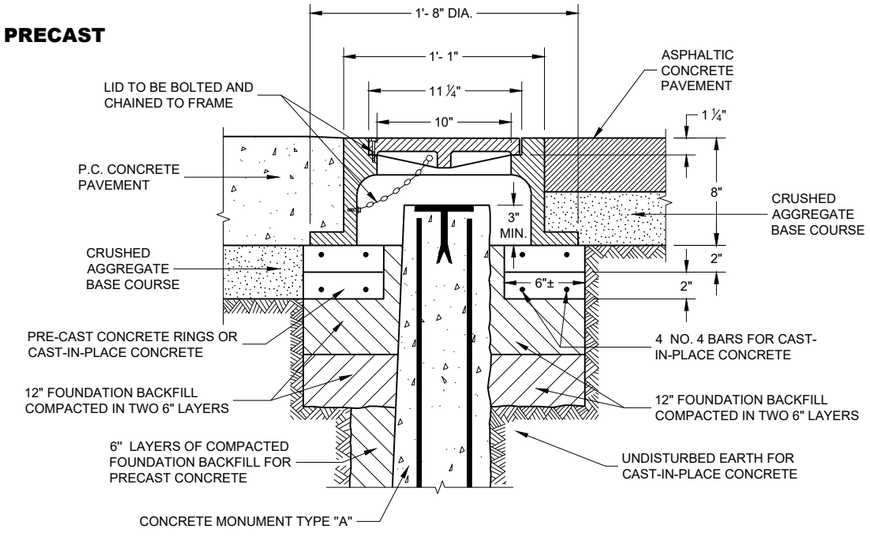


TYPE C
DRIVEN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

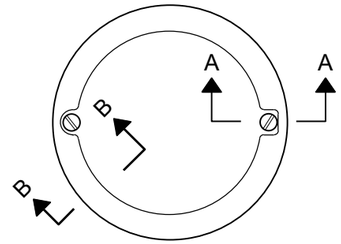
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

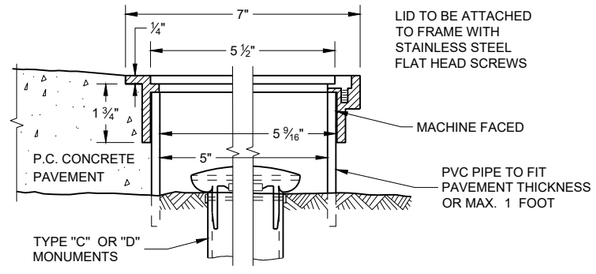
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MAPPING ENGINEER

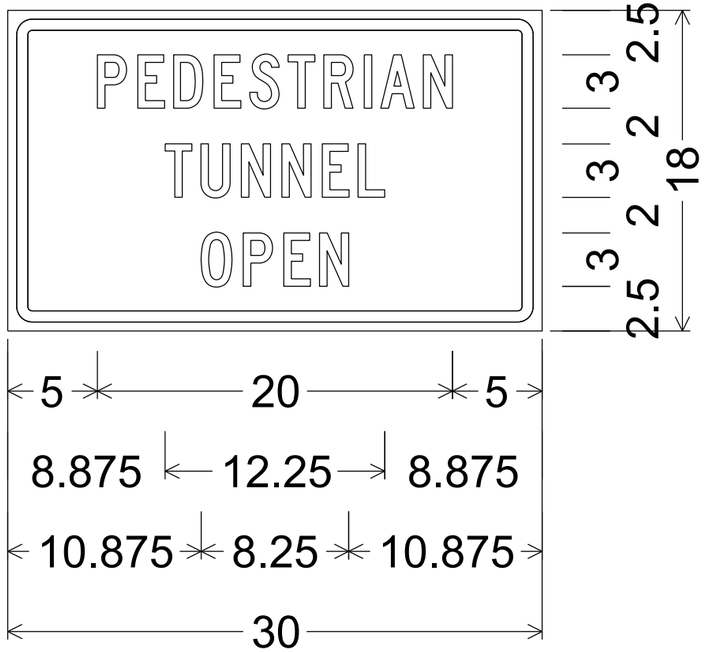
FHWA

6

SDD 16A01 - 07

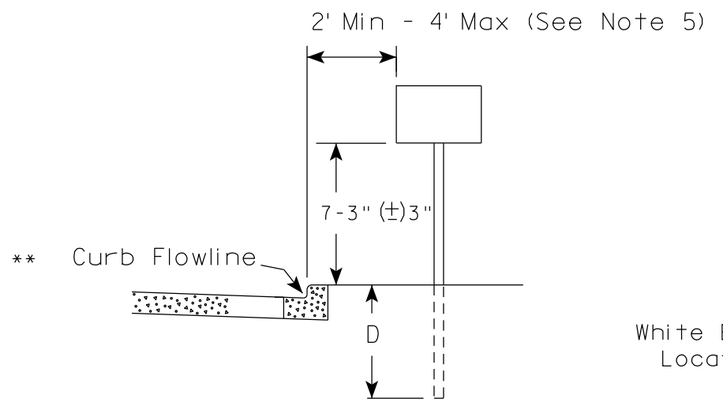
NOTES

1. Fixed Message Sign Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C

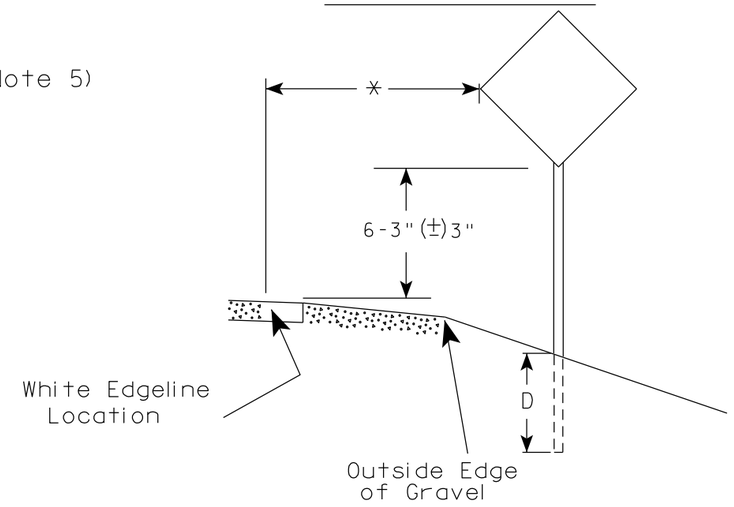


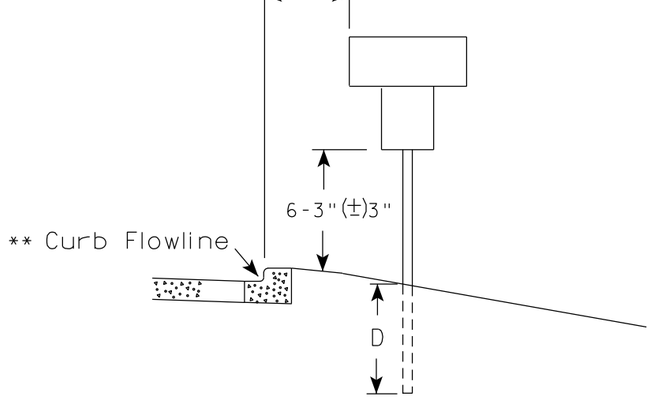
1.375" Radius, 0.625" Border, 0.500" Indent

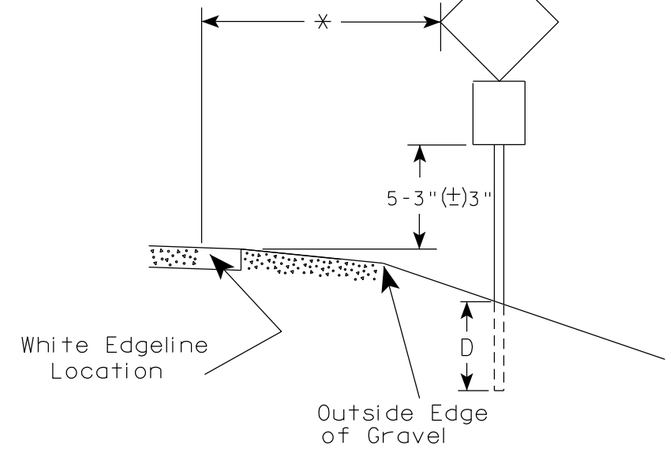
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

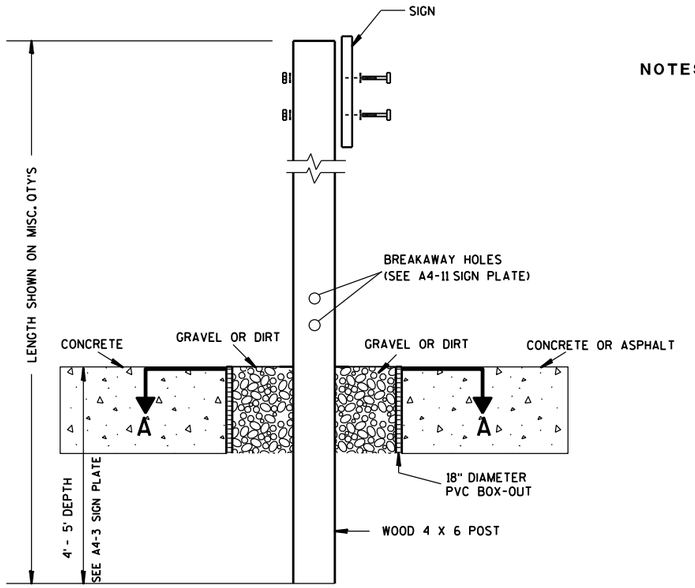
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

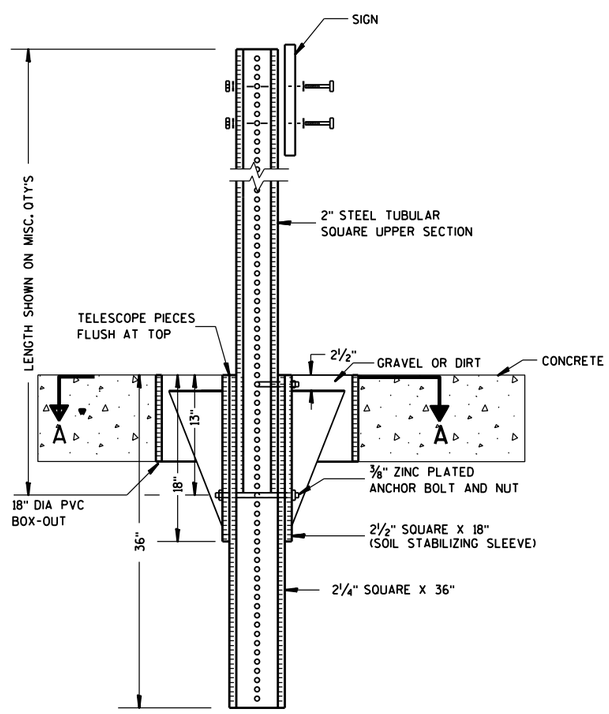
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 218	E



ELEVATION VIEW

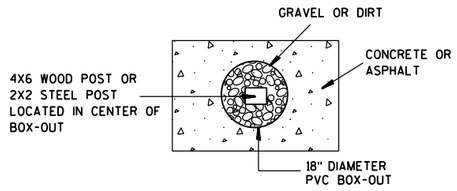
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

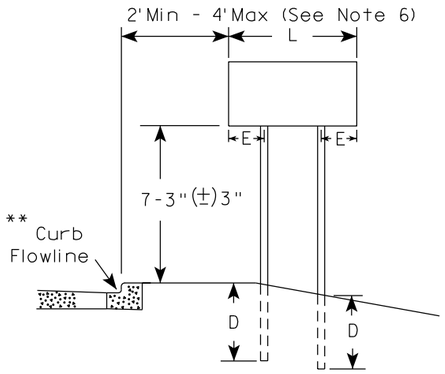
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

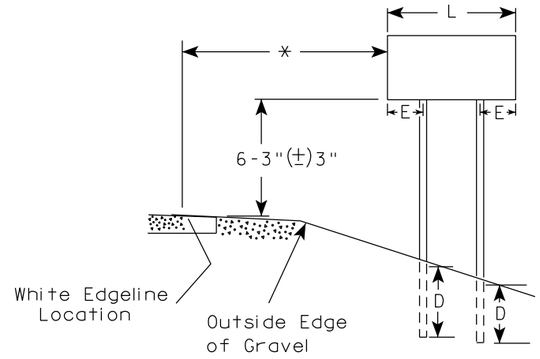
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

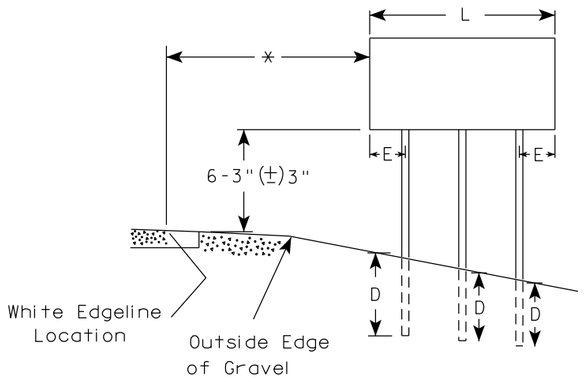
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

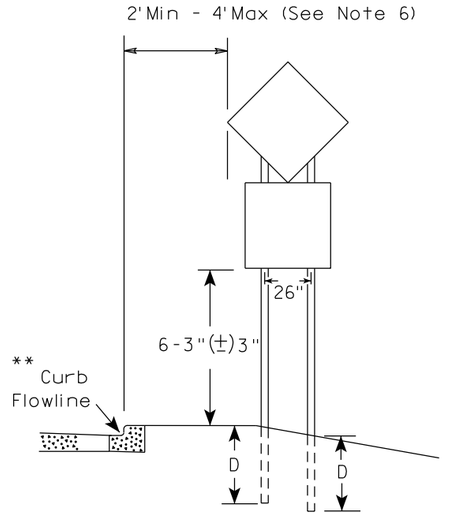
URBAN AREA



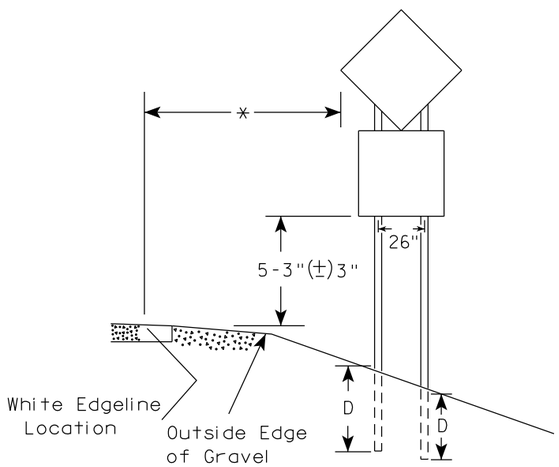
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

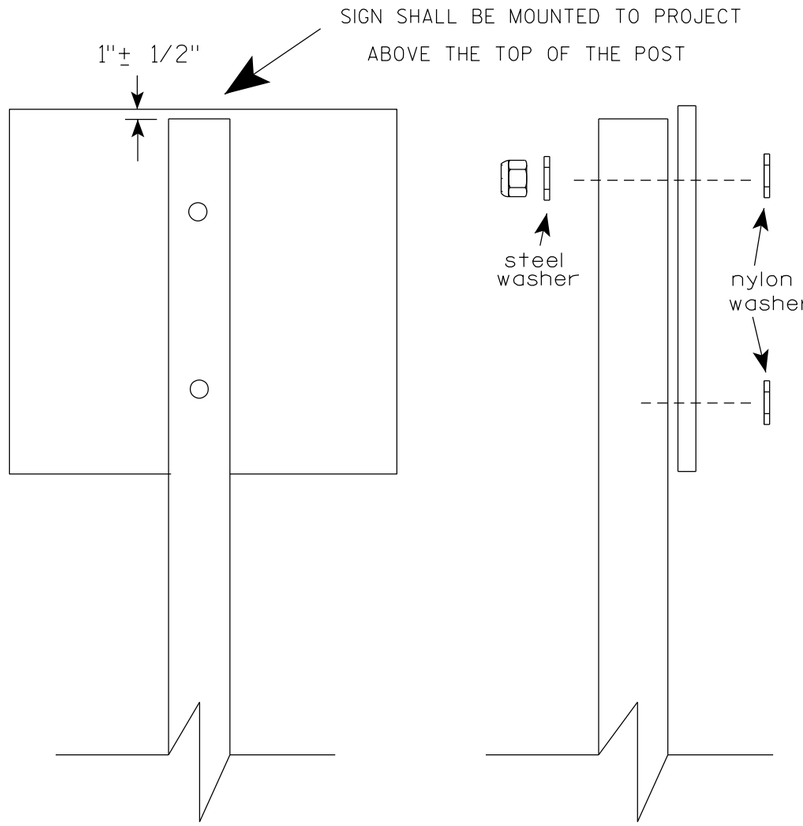
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

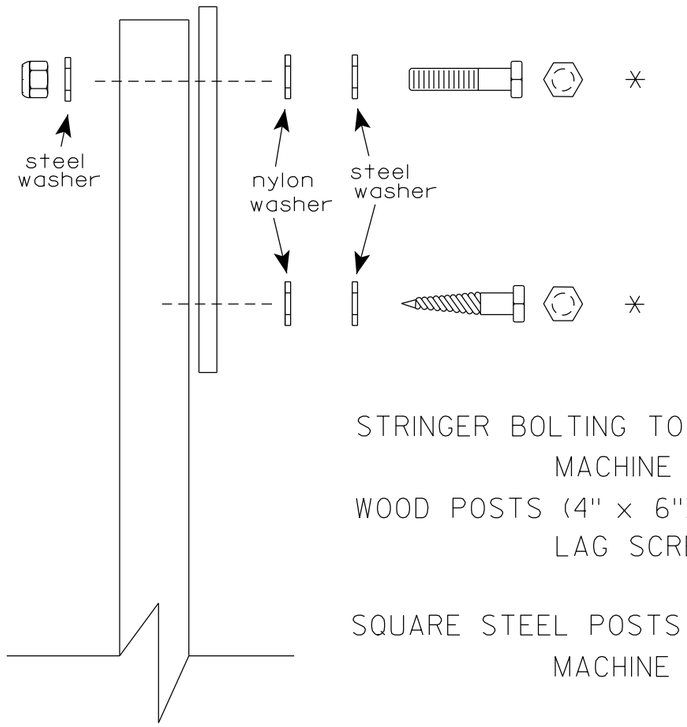
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 220	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

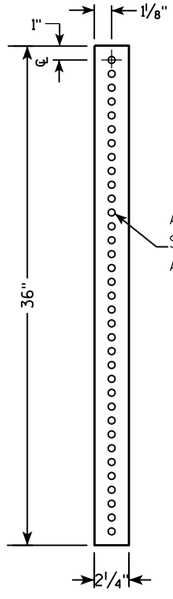
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

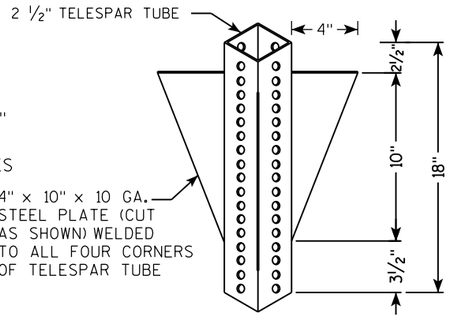
SHEET NO: 221 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

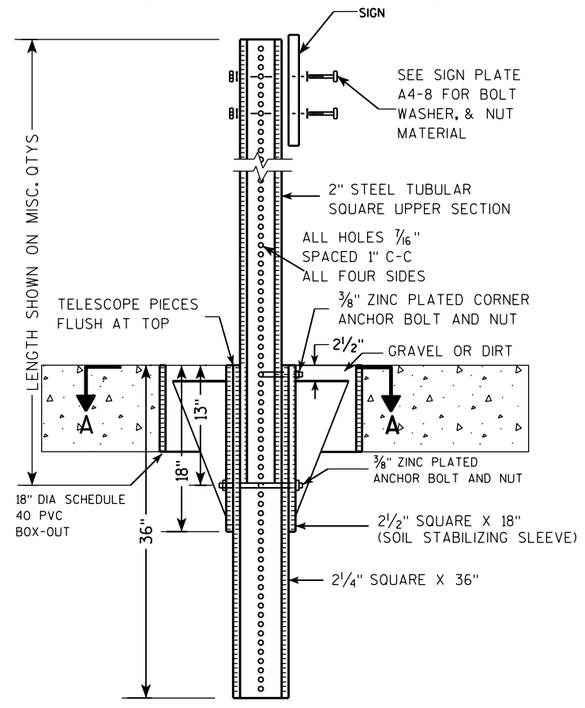
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



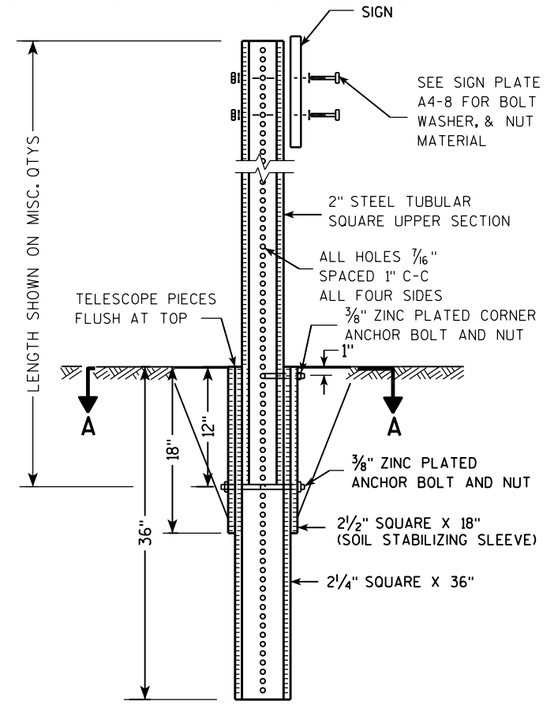
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

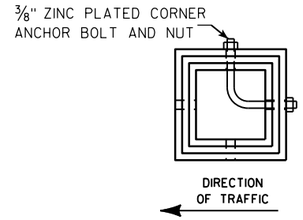


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

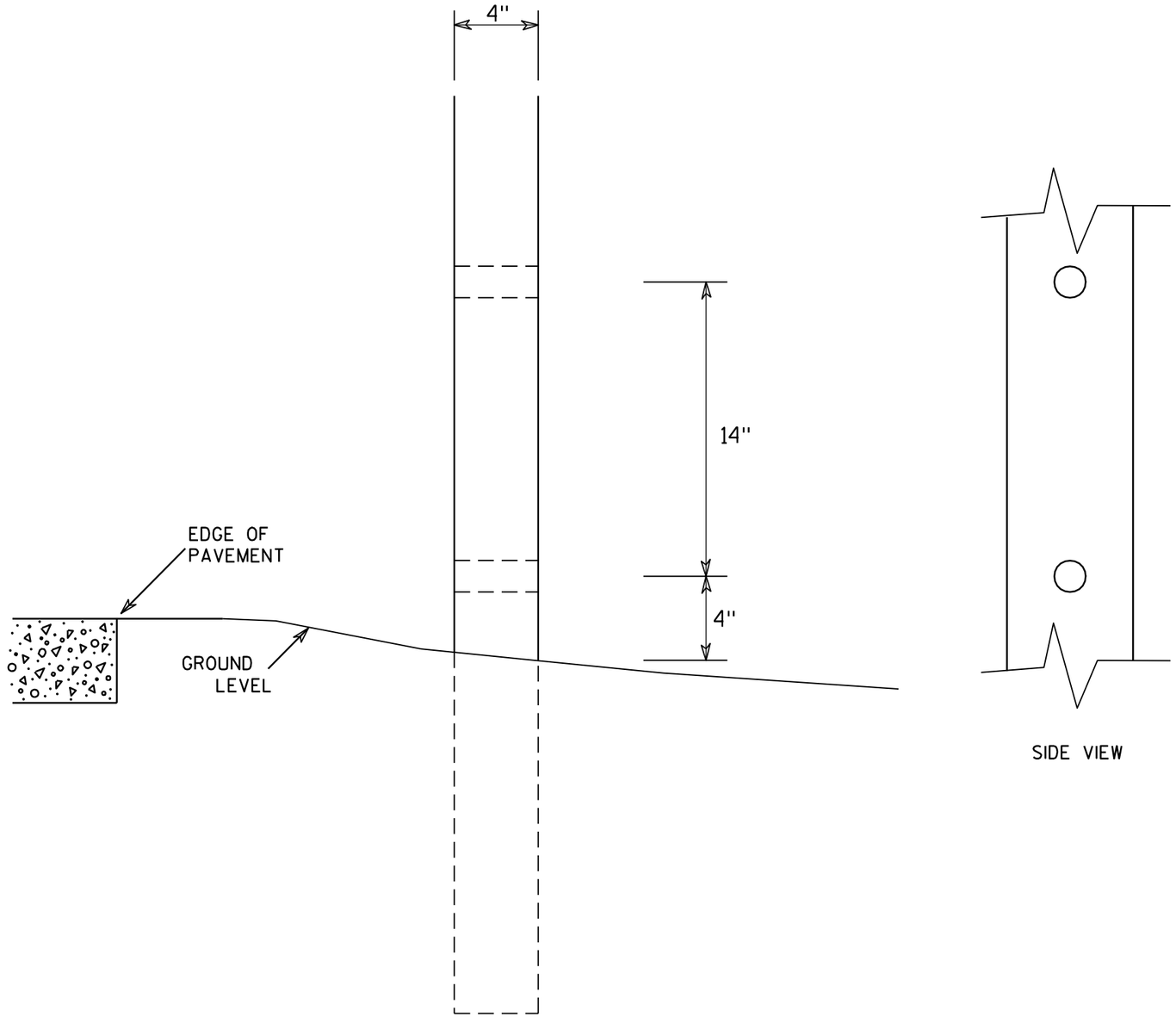
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 222 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

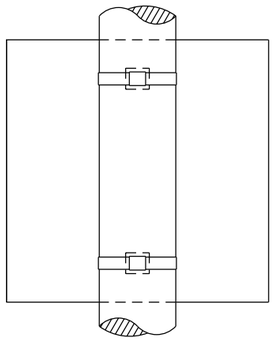
APPROVED Chester J Spang
for State Traffic Engineer

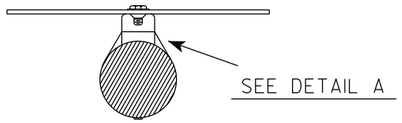
DATE 3/27/97 PLATE NO. A4-11.2

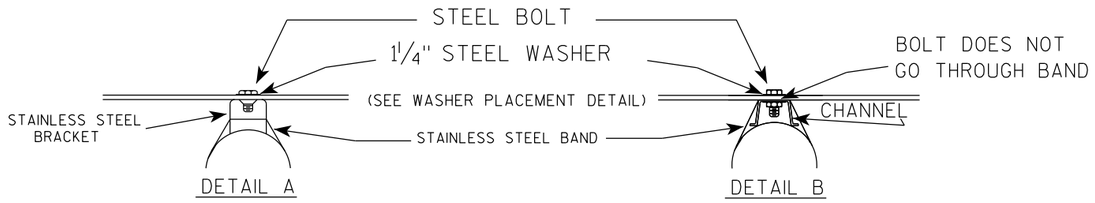
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 223	E

BANDING

SINGLE SIGN



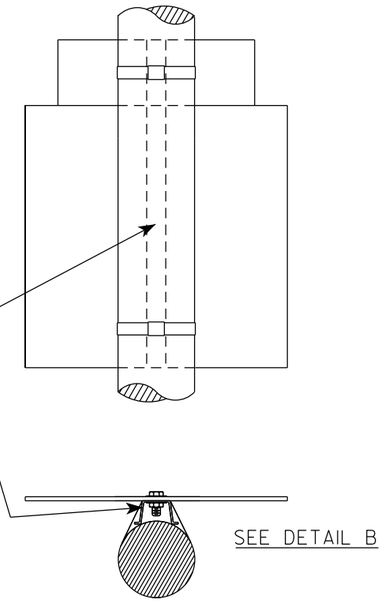




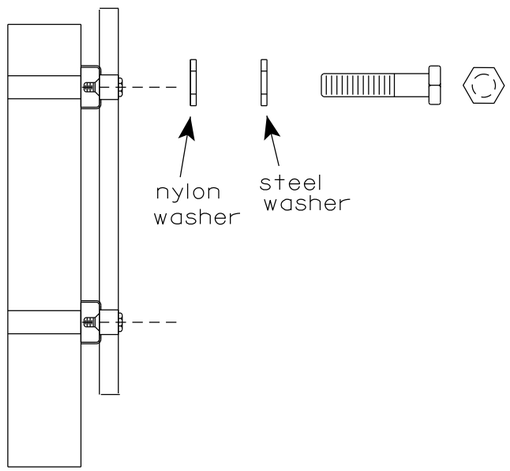
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

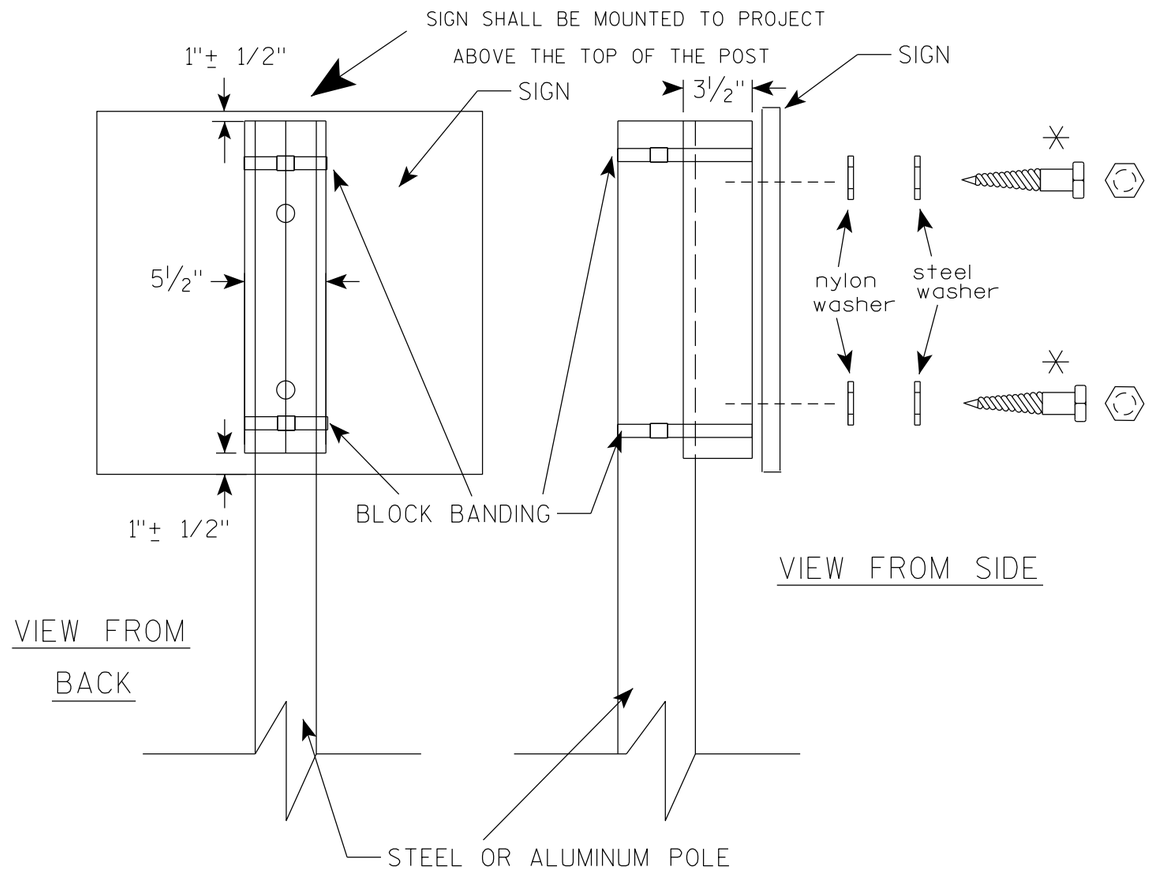
DATE 6/10/19 PLATE NO. A5-9.4

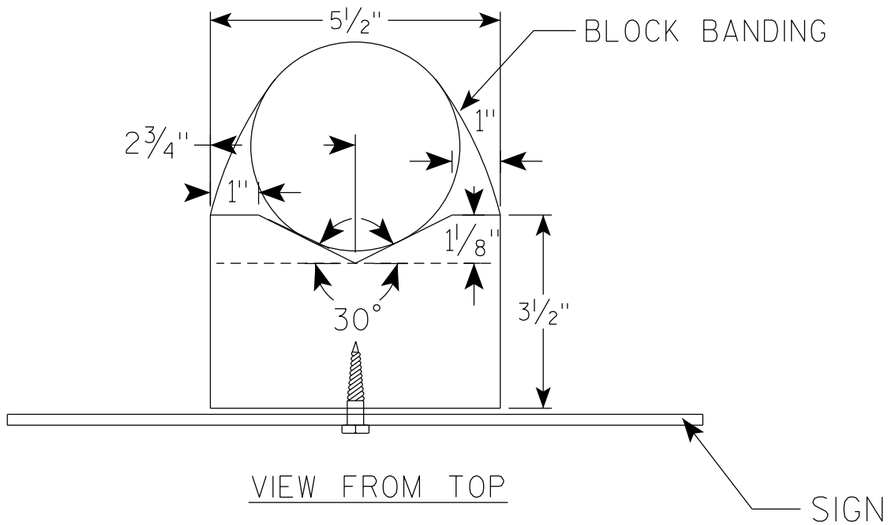
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 224	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

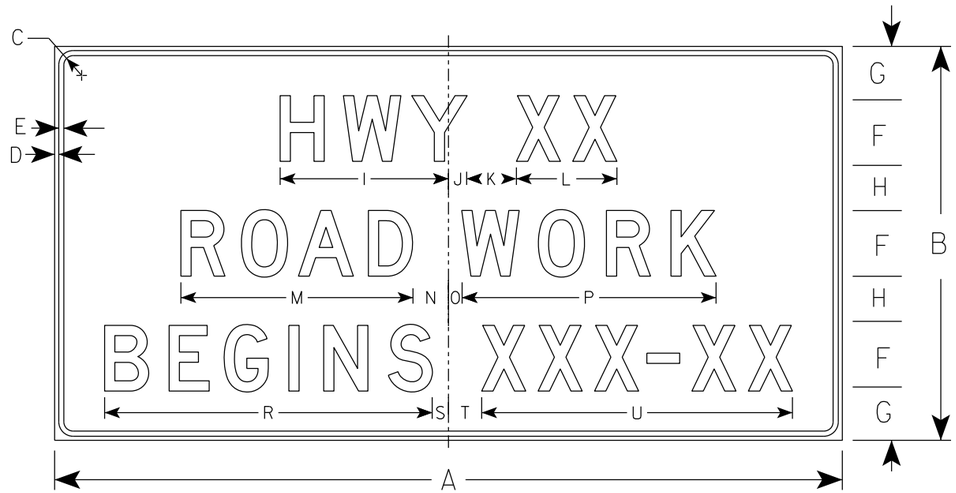
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 225 E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	23 1/4		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

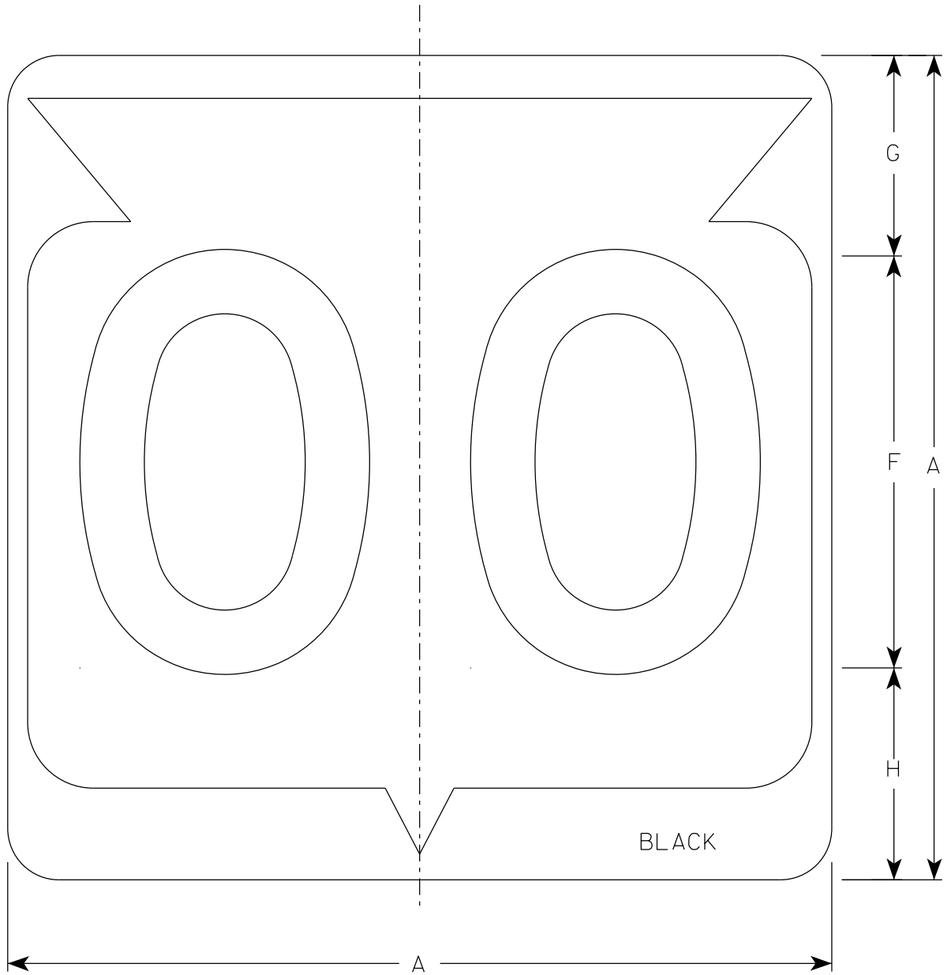
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/22/19 PLATE NO. G20-57.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 226 | E

7

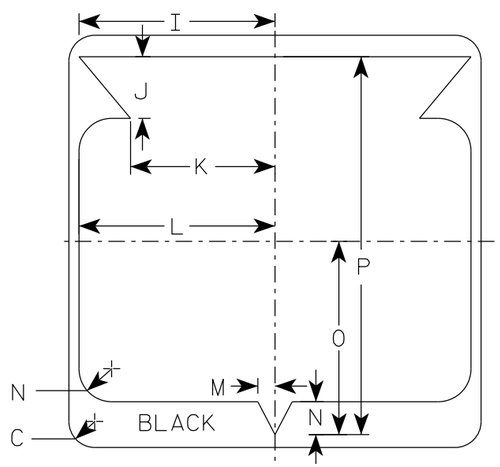
7



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

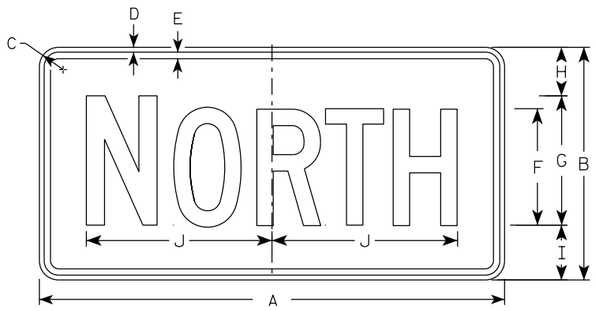
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

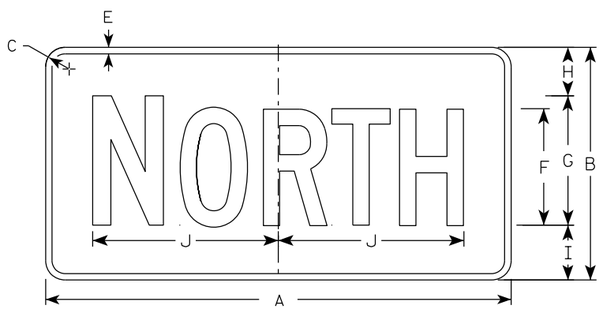
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

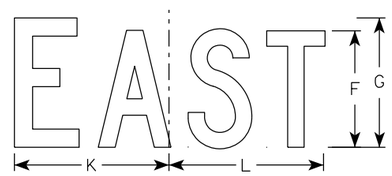
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 227	E



M3-1
MM3-1
MP3-1



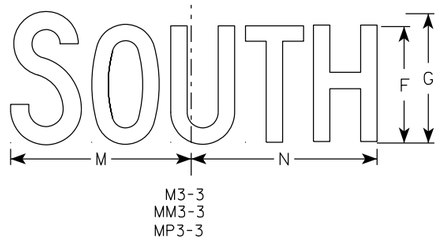
MB3-1
MK3-1
MN3-1



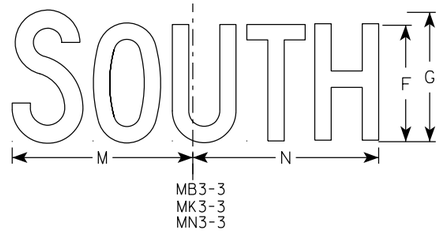
M3-2
MM3-2
MP3-2



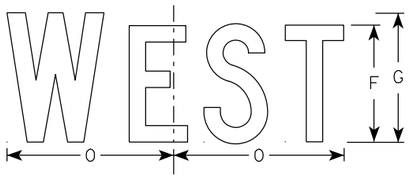
MB3-2
MK3-2
MN3-2



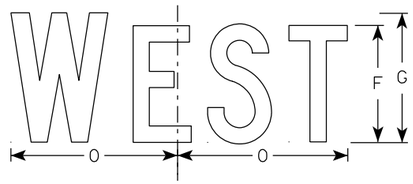
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

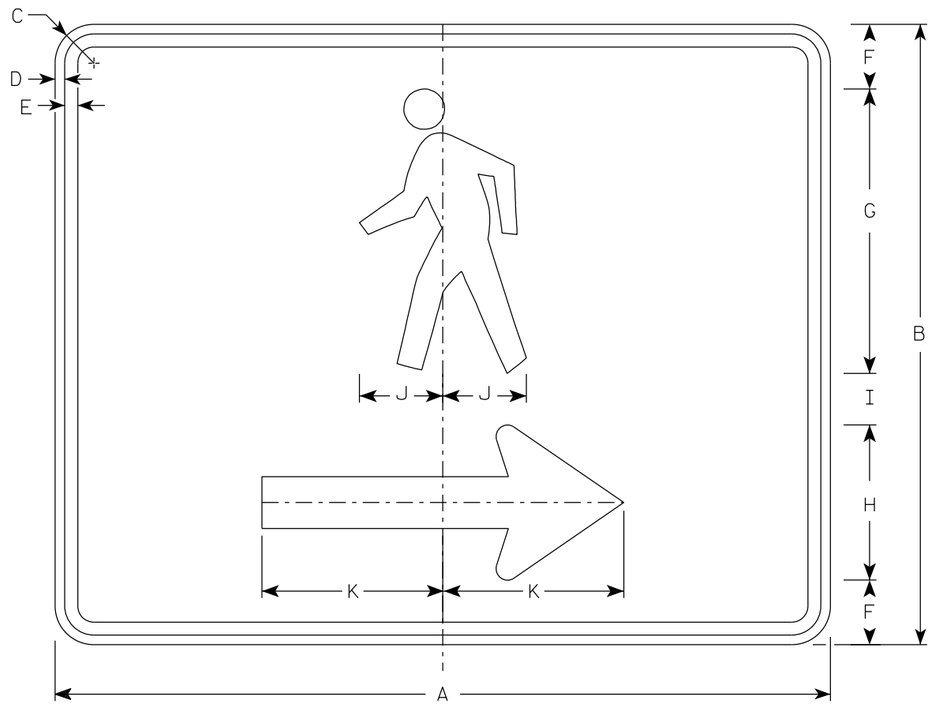
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

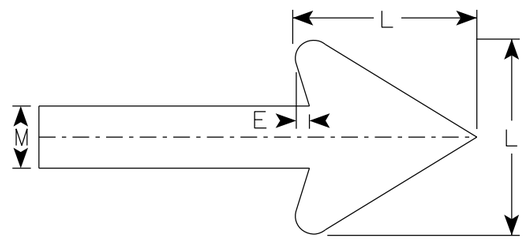
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 228 | E



M4-60R

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

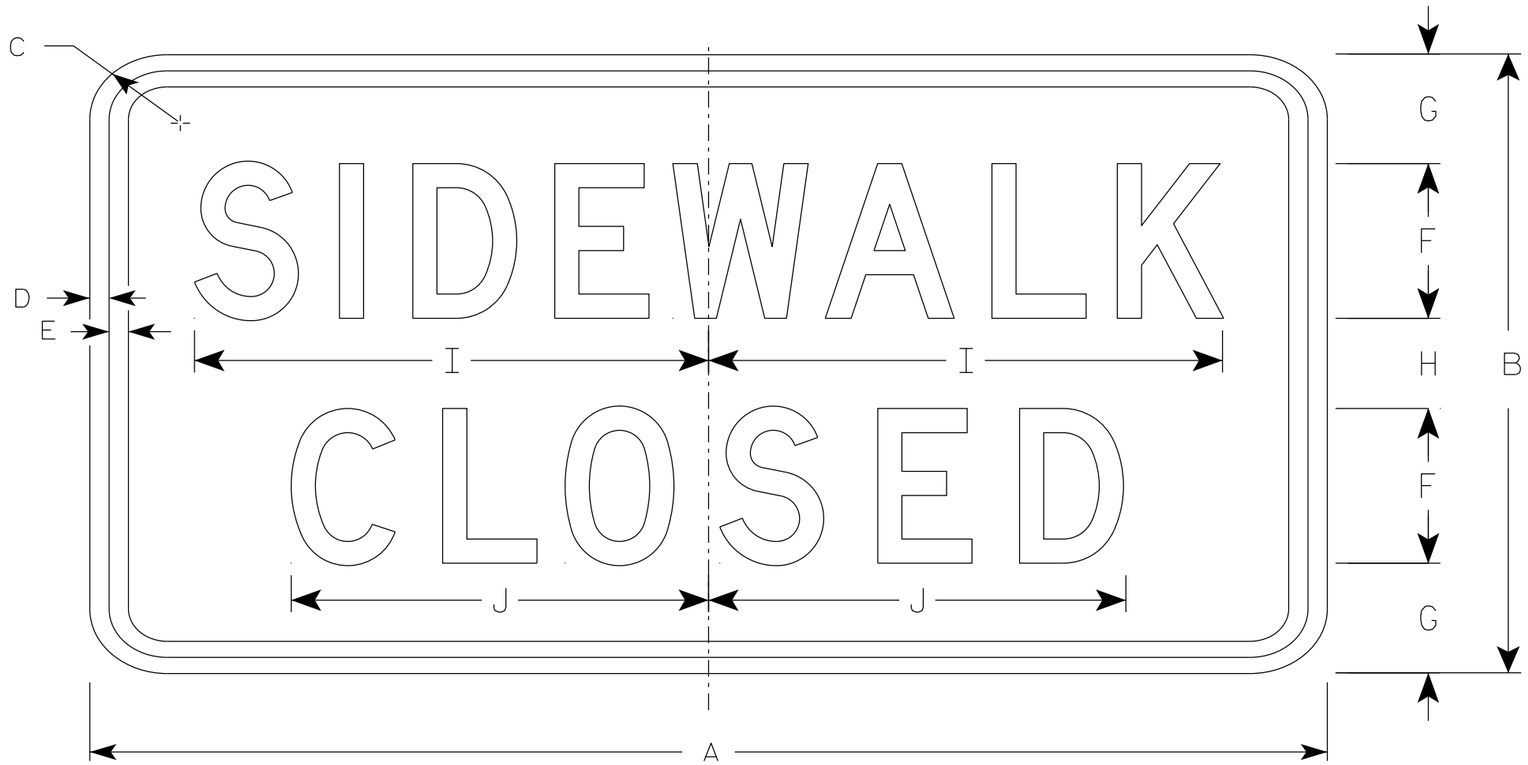
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 229 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

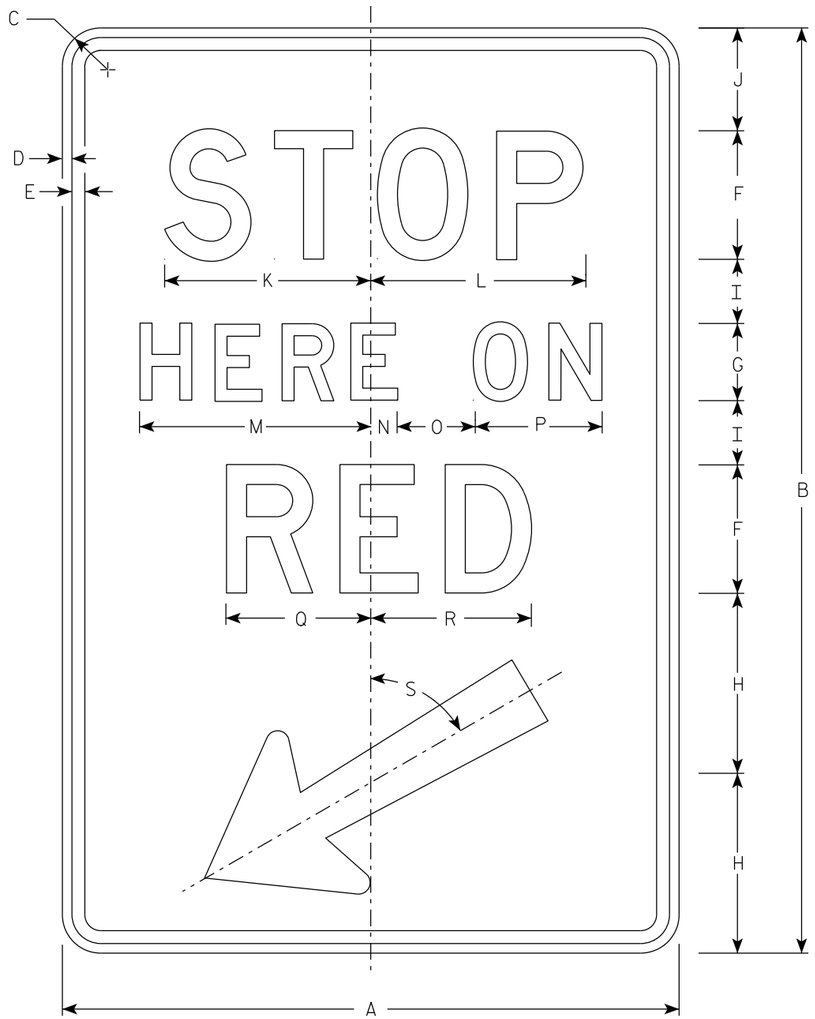
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

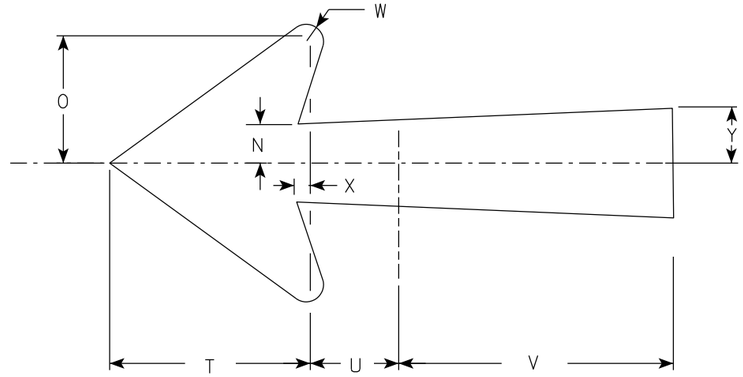
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 230 | E



R10-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/2	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

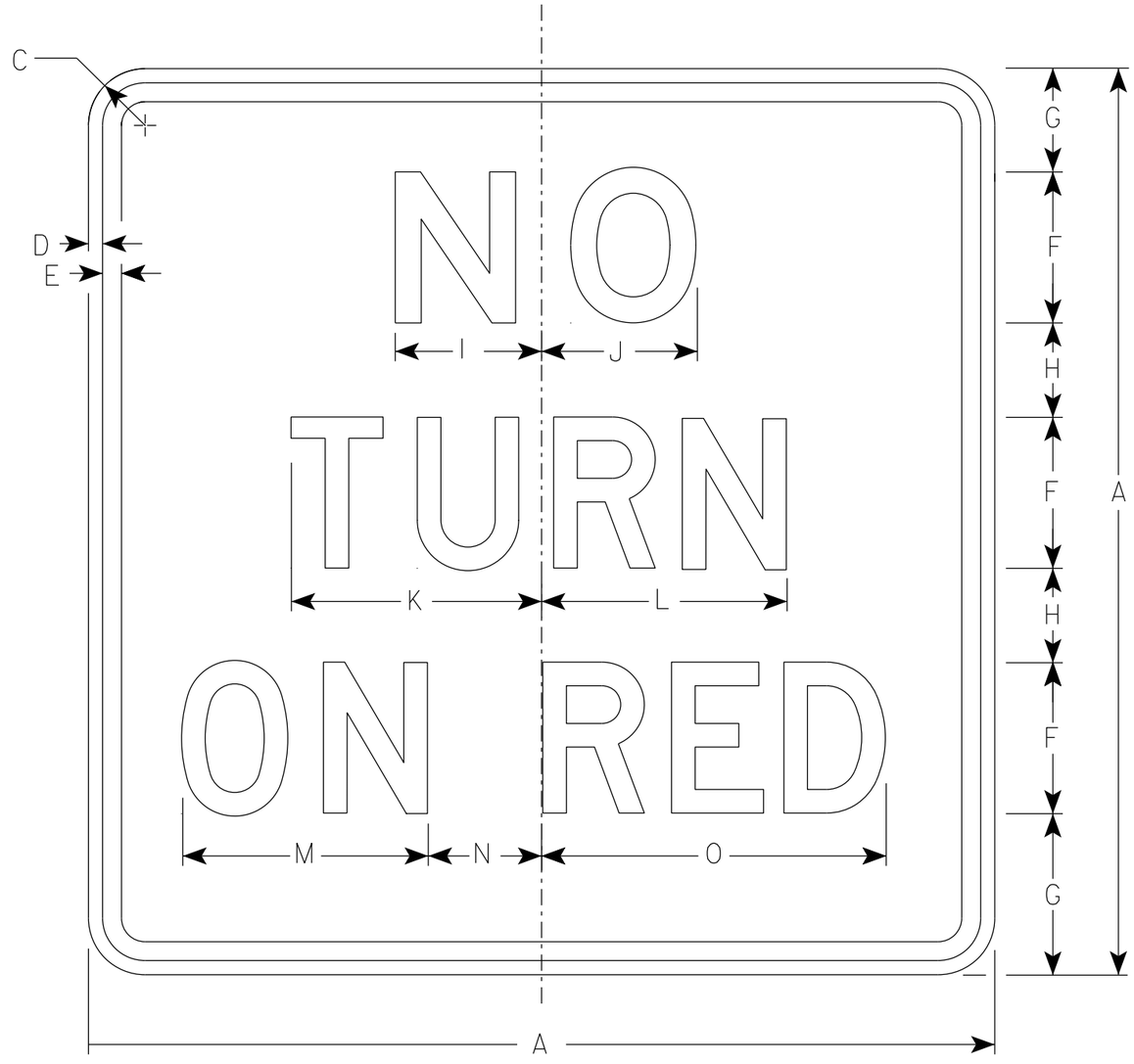
STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/24 PLATE NO. R10-6.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 231	E



R10-11B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series E.
   Lines 2 and 3 are Series D.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/2	3/8	3/8	3	2 3/4	1 3/4	3	3 1/8	5	4 7/8	5 1/4	1 7/8	7 1/8												2.25
2S	24		1 1/2	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
2M	24		1 1/2	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
3	30		1 7/8	1/2	5/8	5	4 1/2	3	4 7/8	5 1/4	8 1/4	8 1/8	7 3/4	4 1/8	11 7/8												6.25
4																											
5																											

STANDARD SIGN
R10-11B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

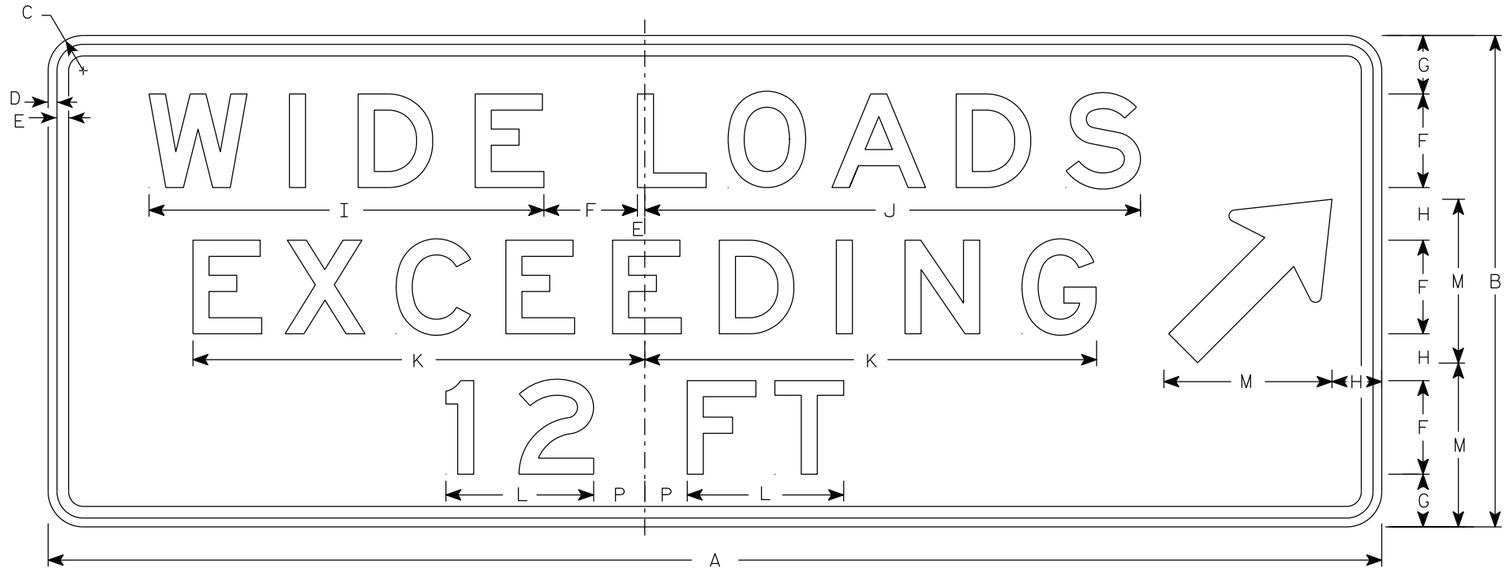
DATE 1/31/24 PLATE NO. R10-11B.5

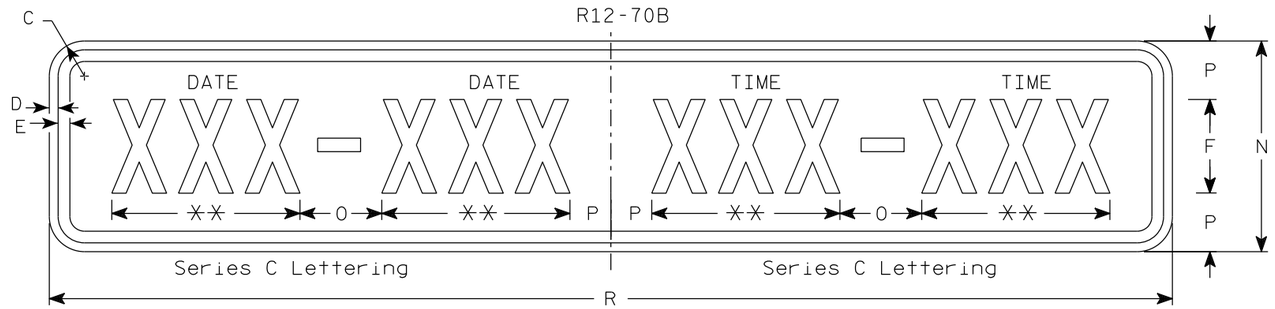
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 232 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E except as noted
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

** Substitute appropriate message, optically center message





R12-70C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	R12-70 Area sq. ft.	R12-70C Area sq. ft.
1																												
2S	90	36	3	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
2M	90	36	3	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
3	90	36	3	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
4	114	42	3	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0
5	114	42	3	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0

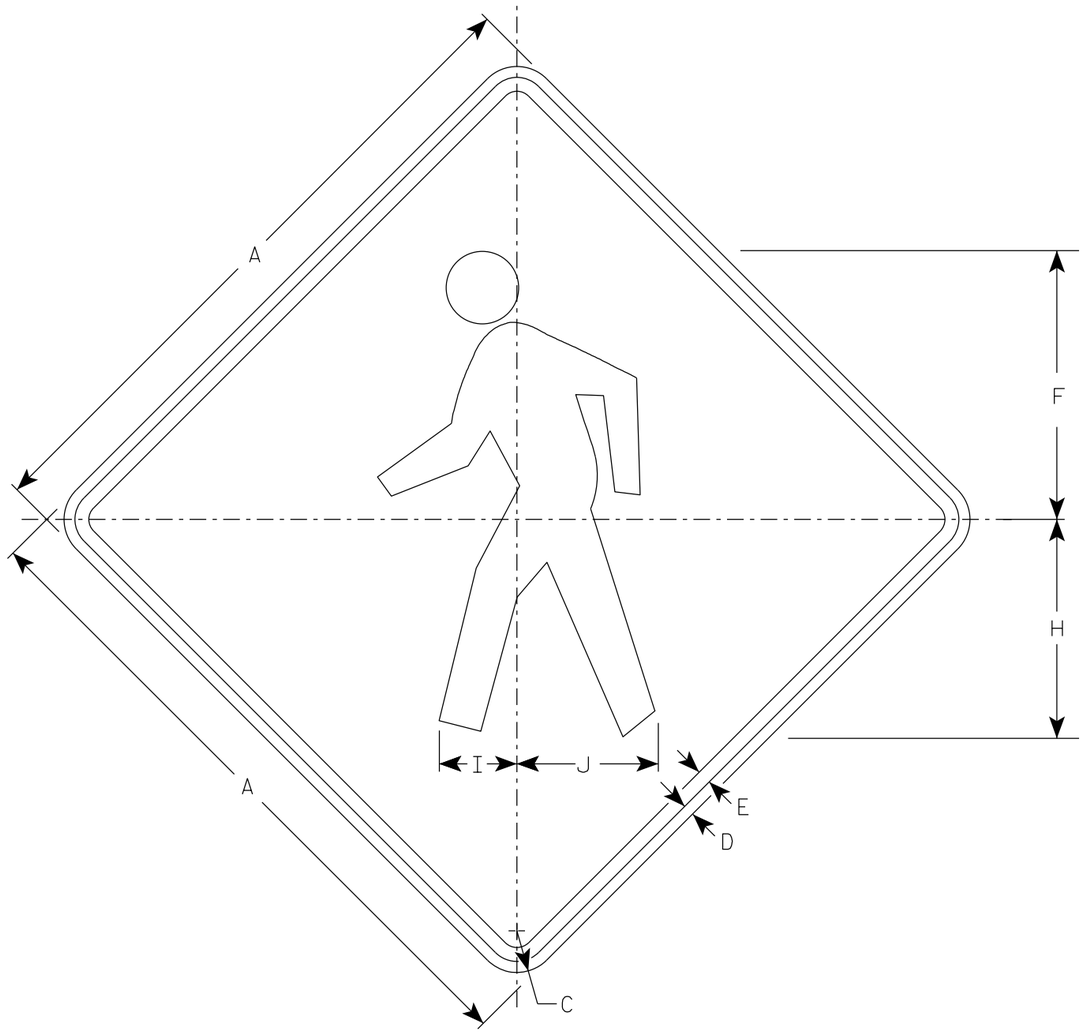
TYPICAL SIGN
R12-70B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/24 PLATE NO. R12-70B.4

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 233	E



W11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 7/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

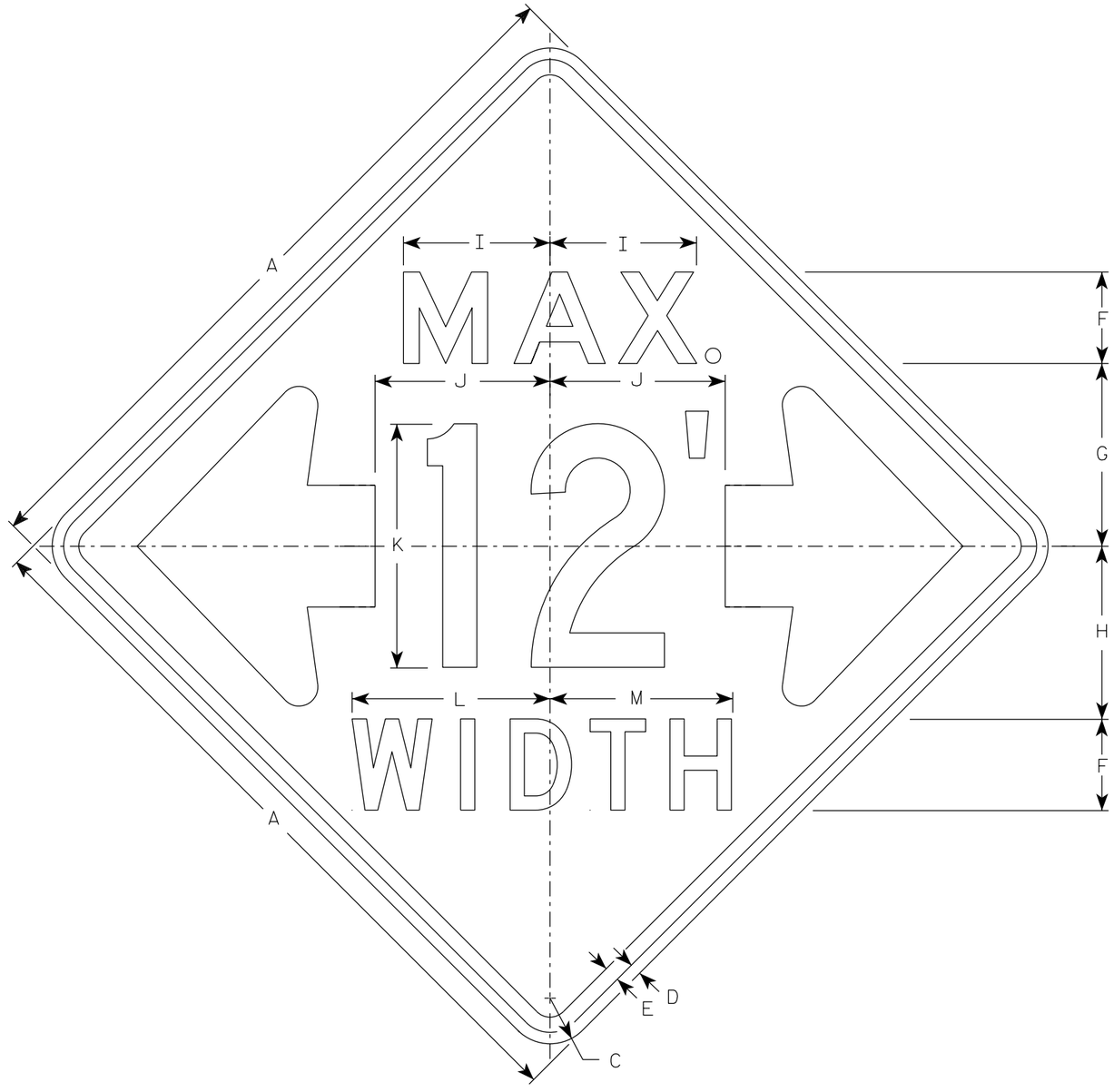
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/15/2023 PLATE NO. W11-2.9

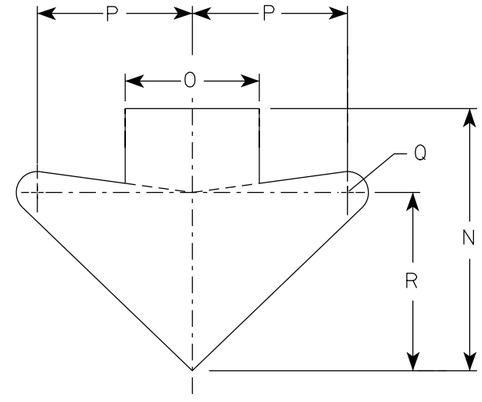
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 234 E



W12-52

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. The top line is series E, the numerals are series C, and the bottom line is series D.
5. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		3	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		3	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

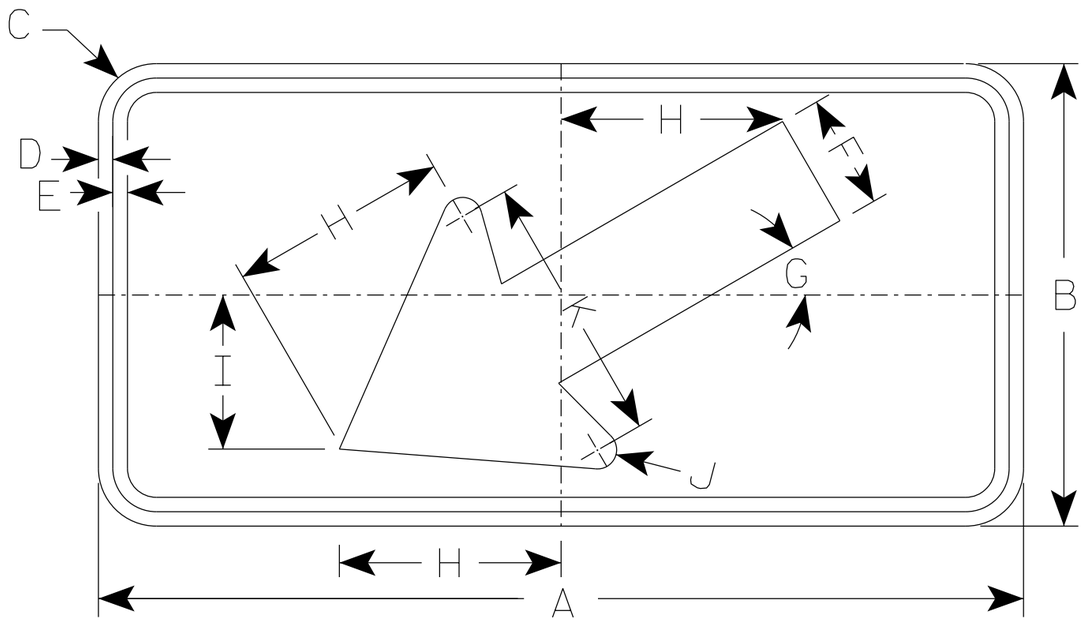
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 235 E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W16-7R is the same as W16-7L except the arrow is reversed along the vertical centerline.

* For 36" x 36" Warning Signs, use 30" x 18" W16-7L signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-7L signs.

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1																											
	2S	24	12	1 ½	⅜	⅜	3	30°	5 ¾	4	½	7																2.0
*	2M	30	18	1 ½	⅜	½	4 ½	30°	8 ½	6	⅝	10 ¼																3.75
*	3	30	18	1 ½	⅜	½	4 ½	30°	8 ½	6	⅝	10 ¼																3.75
*	4	48	24	1 ⅞	½	⅝	6	30°	11 ½	8	1	14																8.0
	5																											

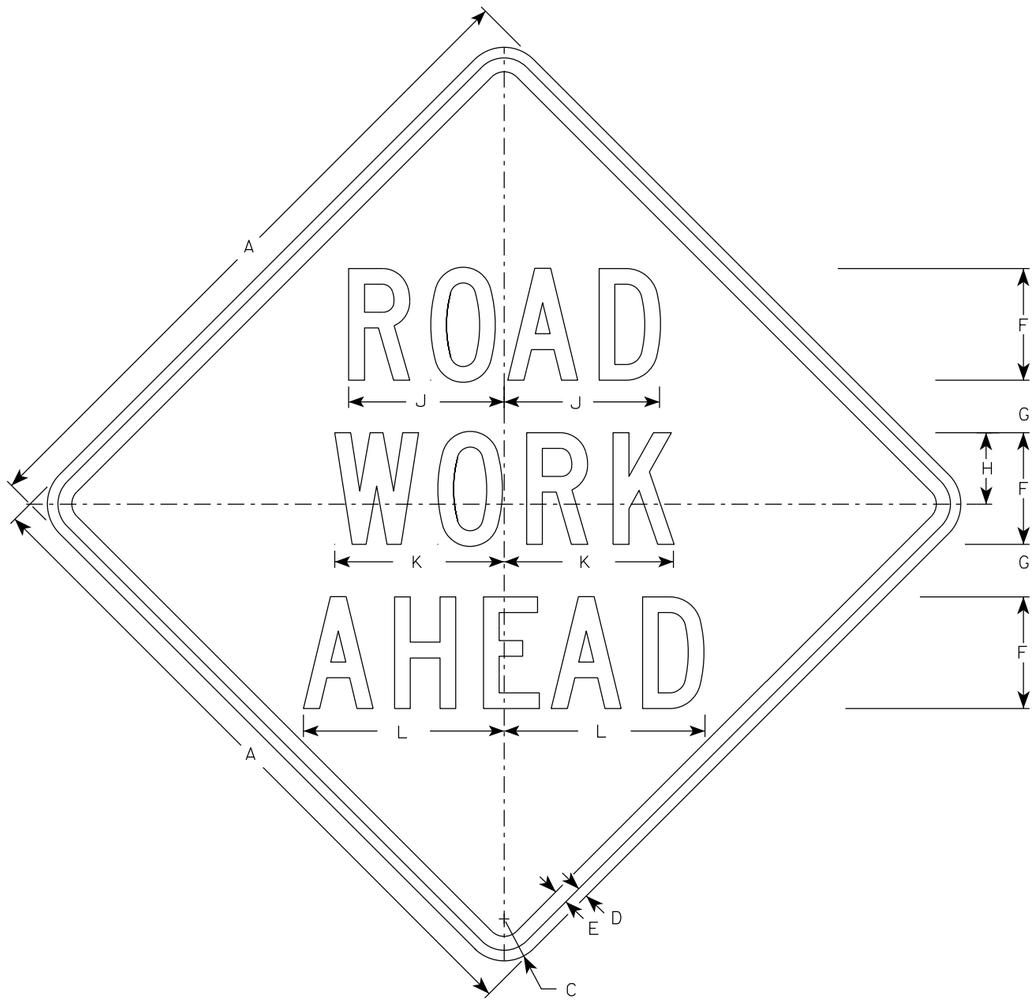
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

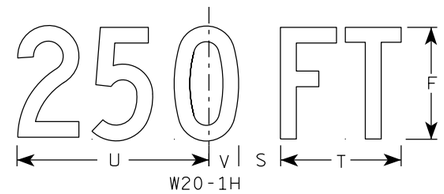
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/9/2024 PLATE NO. W16-7.9

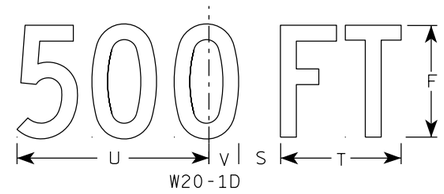
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 236 E



W20-1A



W20-1H



W20-1D



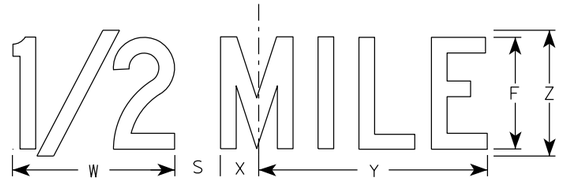
W20-1C



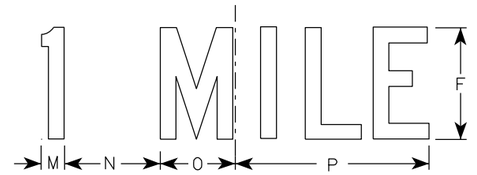
W20-1B

NOTES

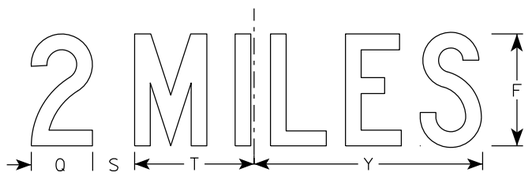
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

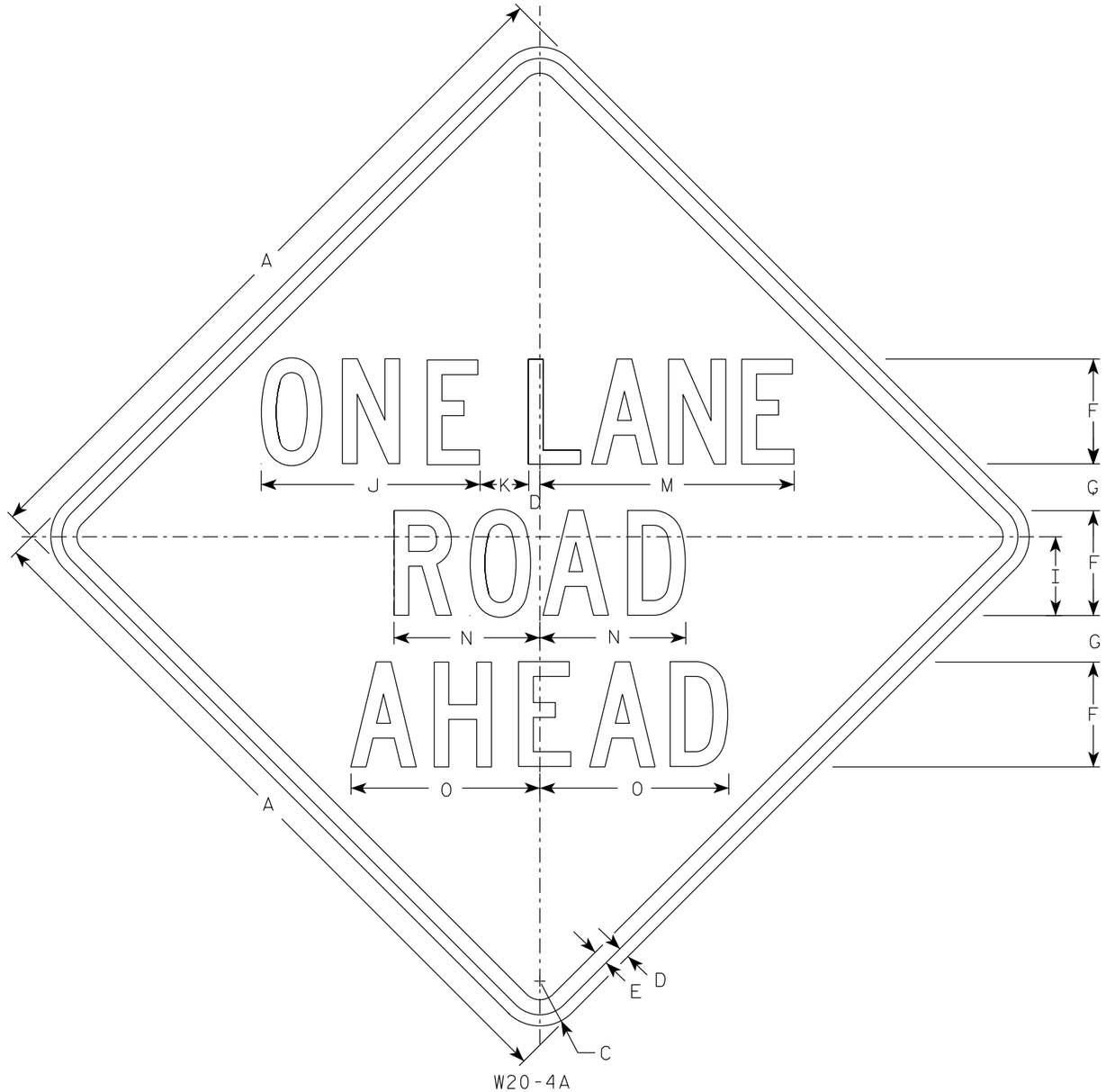
WISCONSIN DEPT OF TRANSPORTATION

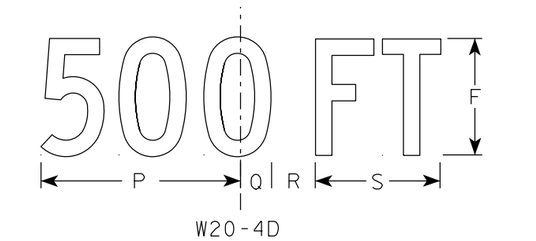
APPROVED Matthew R Rauch
for State Traffic Engineer

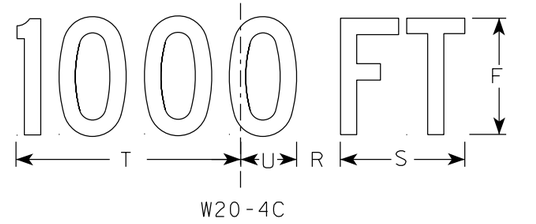
DATE 1/10/2024 PLATE NO. W20-1.12

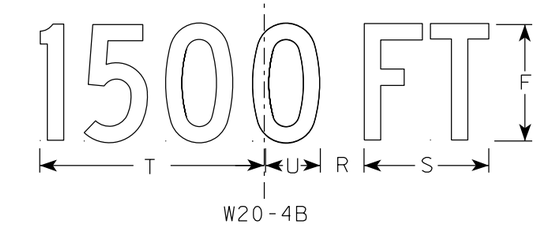
PROJECT NO:

SHEET NO: 237 E

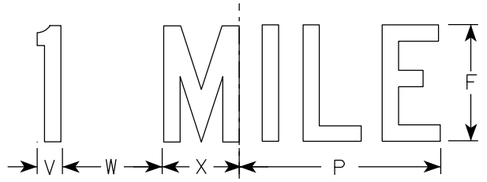












NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-4A, B, C, D, F & G

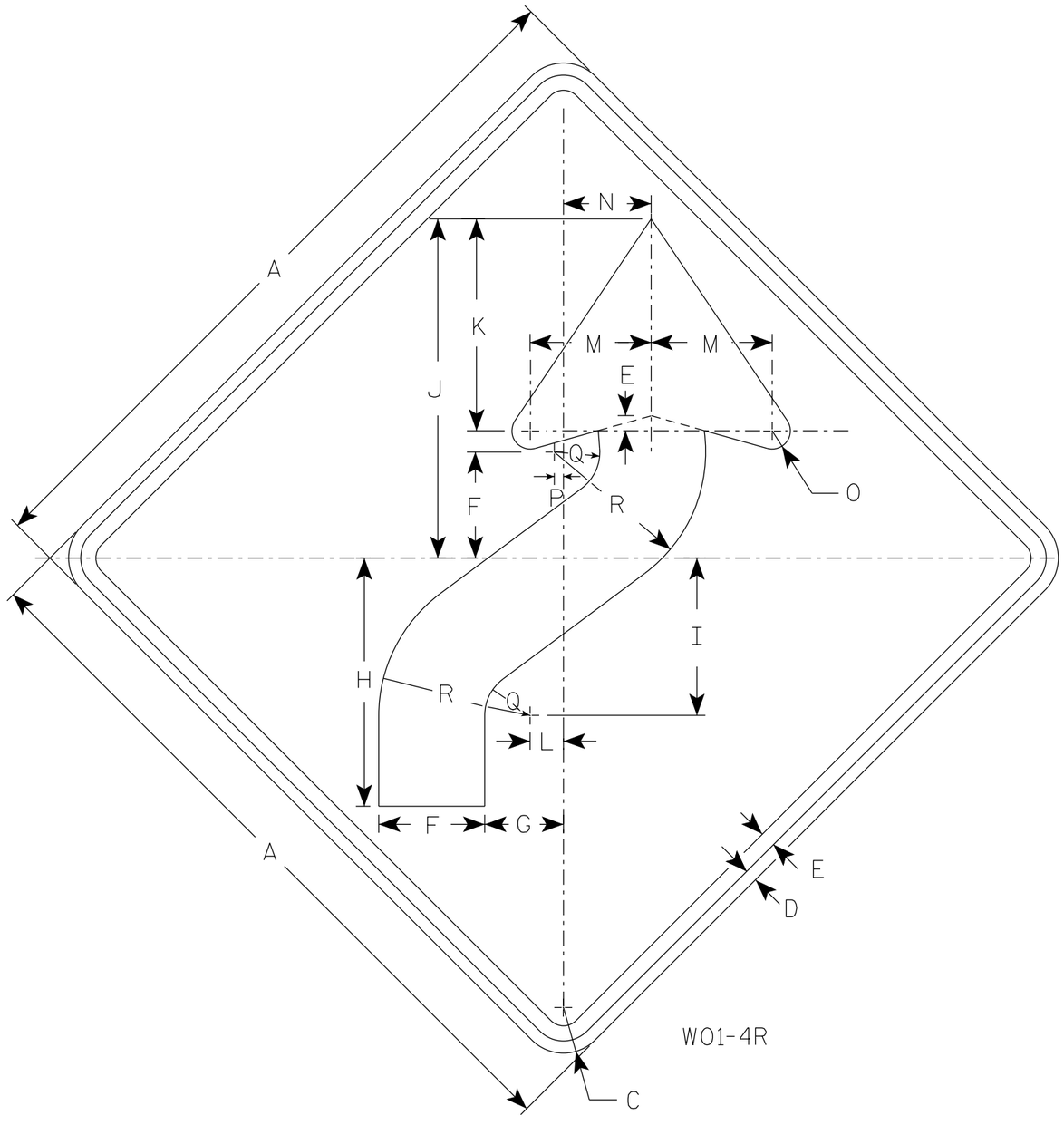
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-4.10

PROJECT NO:

SHEET NO: 238 E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

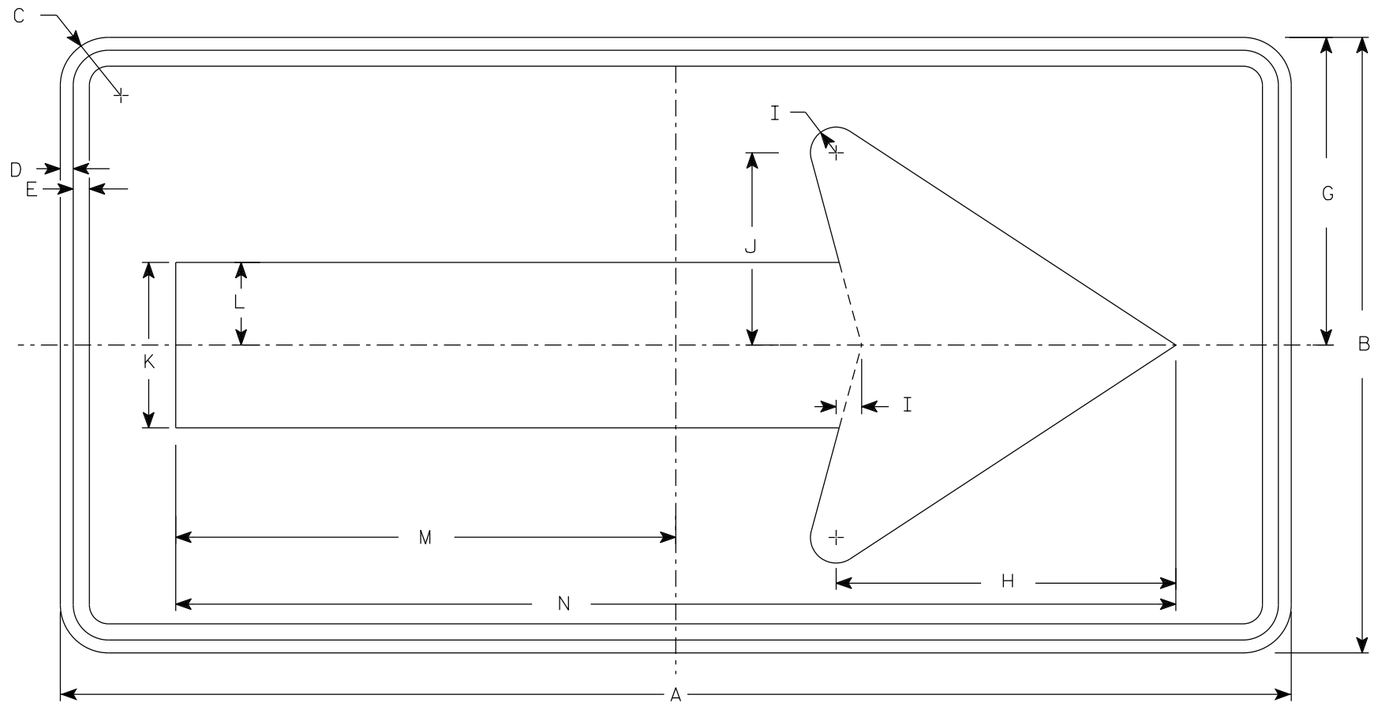
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 239 | E



WO1-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

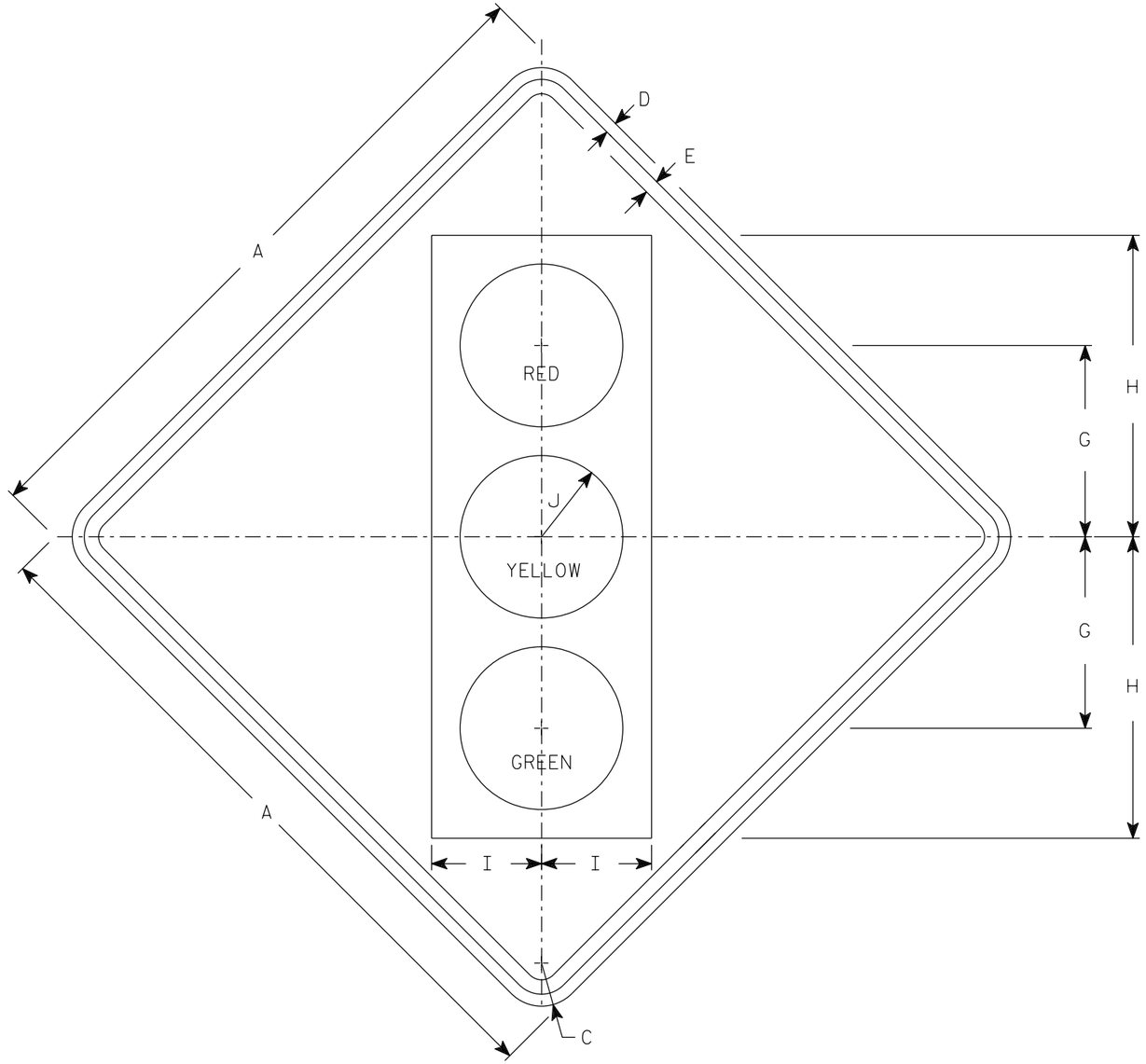
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W03-3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2S	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
2M	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
3	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
4	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W03-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

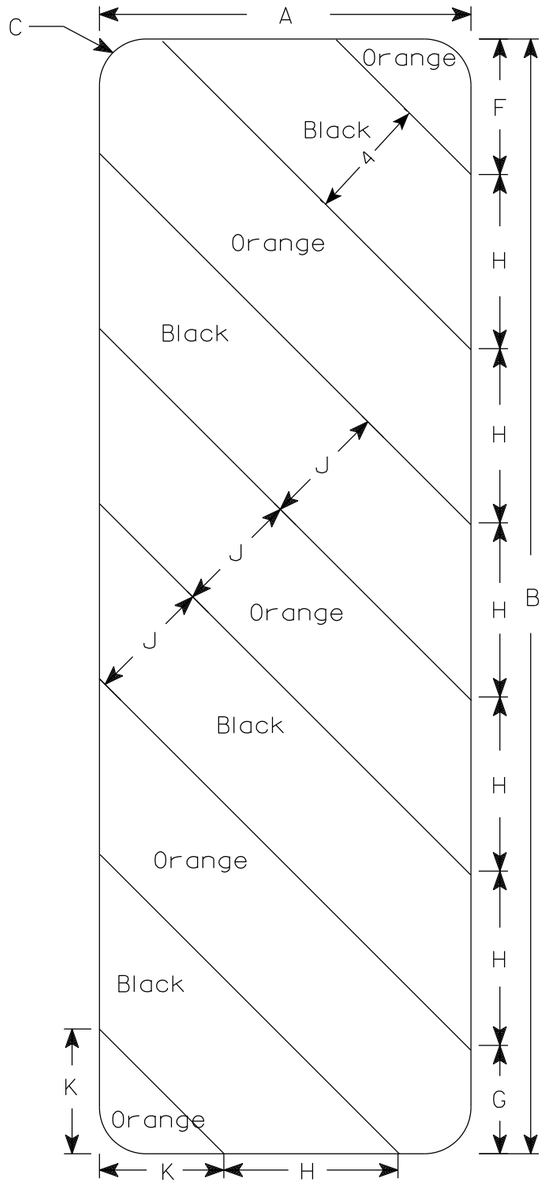
DATE 1/24/2024 PLATE NO. W03-3.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

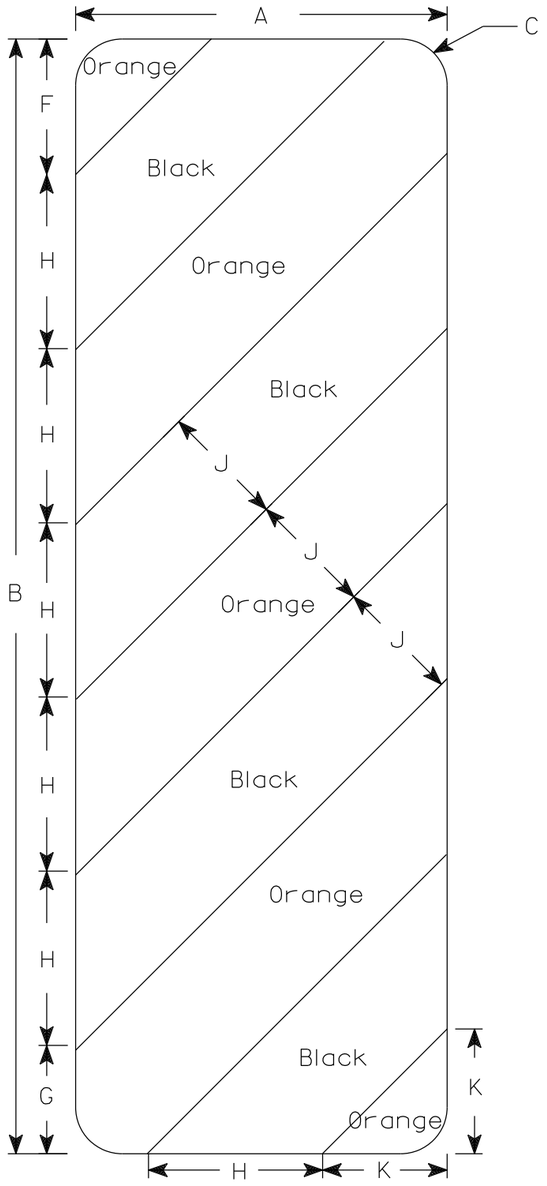
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W033.DGN PLOT DATE : 24-JAN 2024 2:07 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

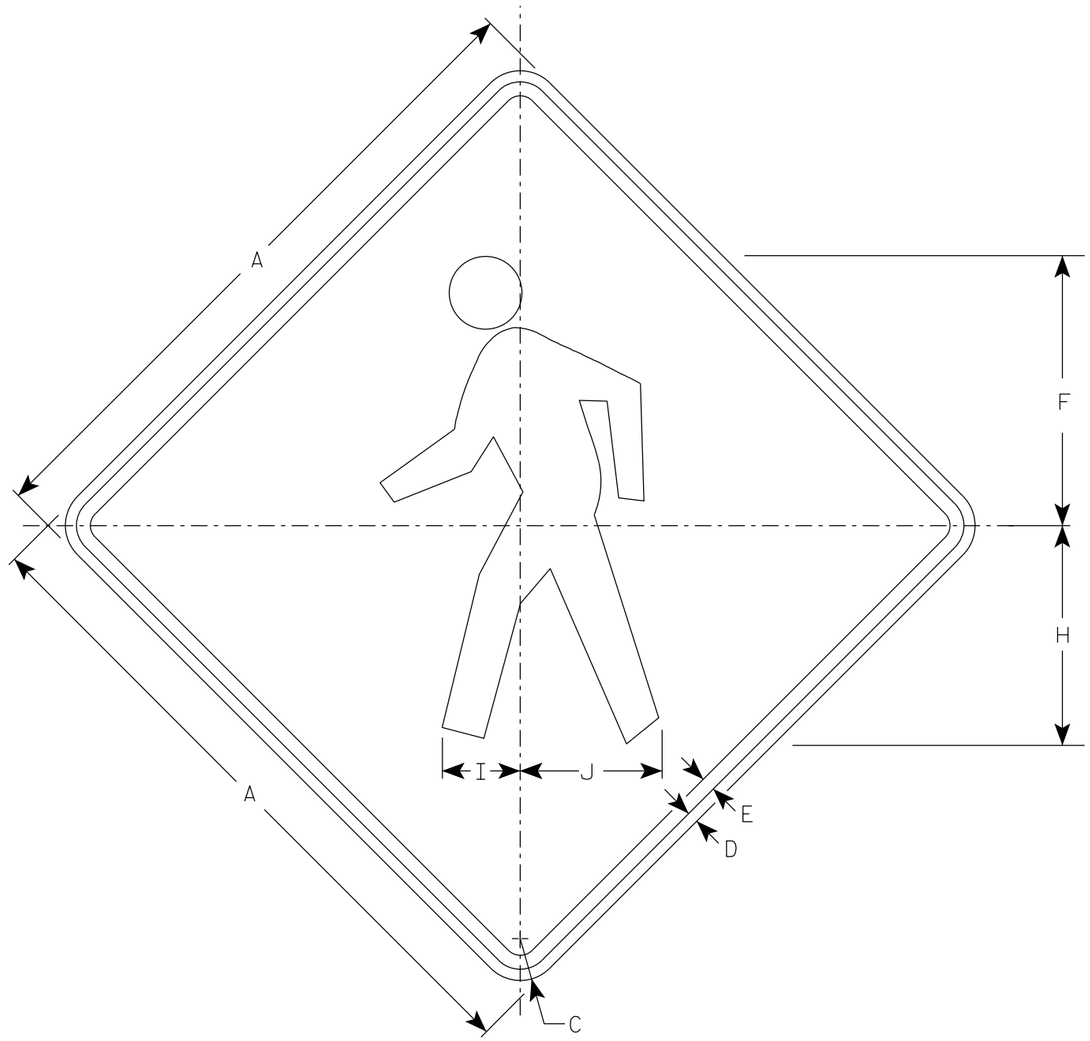
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/2024 PLATE NO. W05-52.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 242 | E



WO11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN

WO11-2

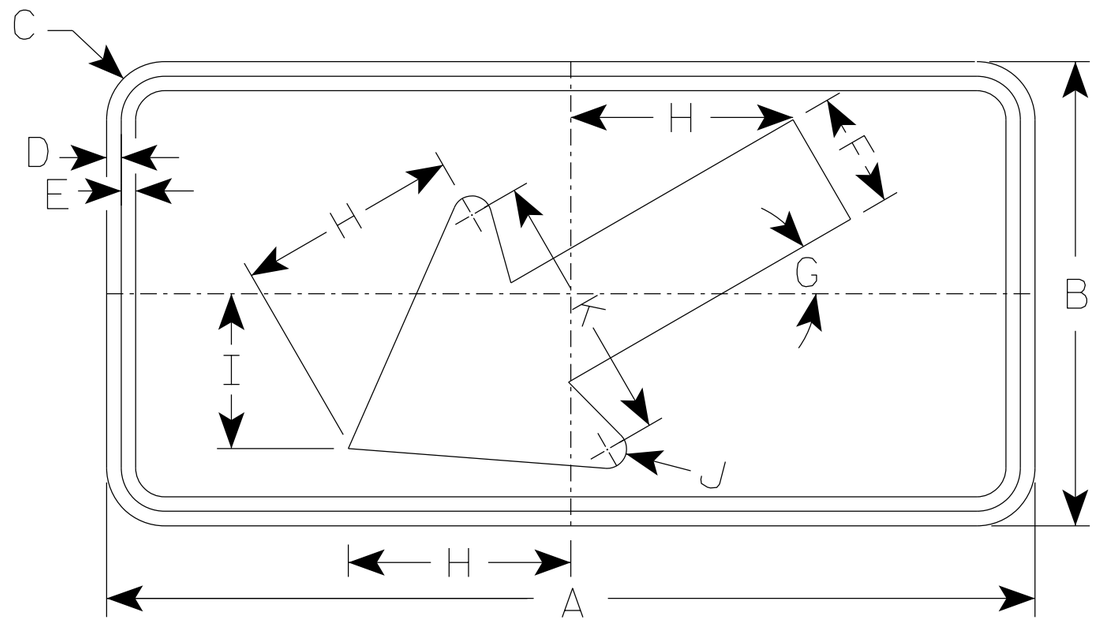
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

For State Traffic Engineer

DATE 2/1/2024 PLATE NO. WO11-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 243 E



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

STANDARD SIGN
W016-7

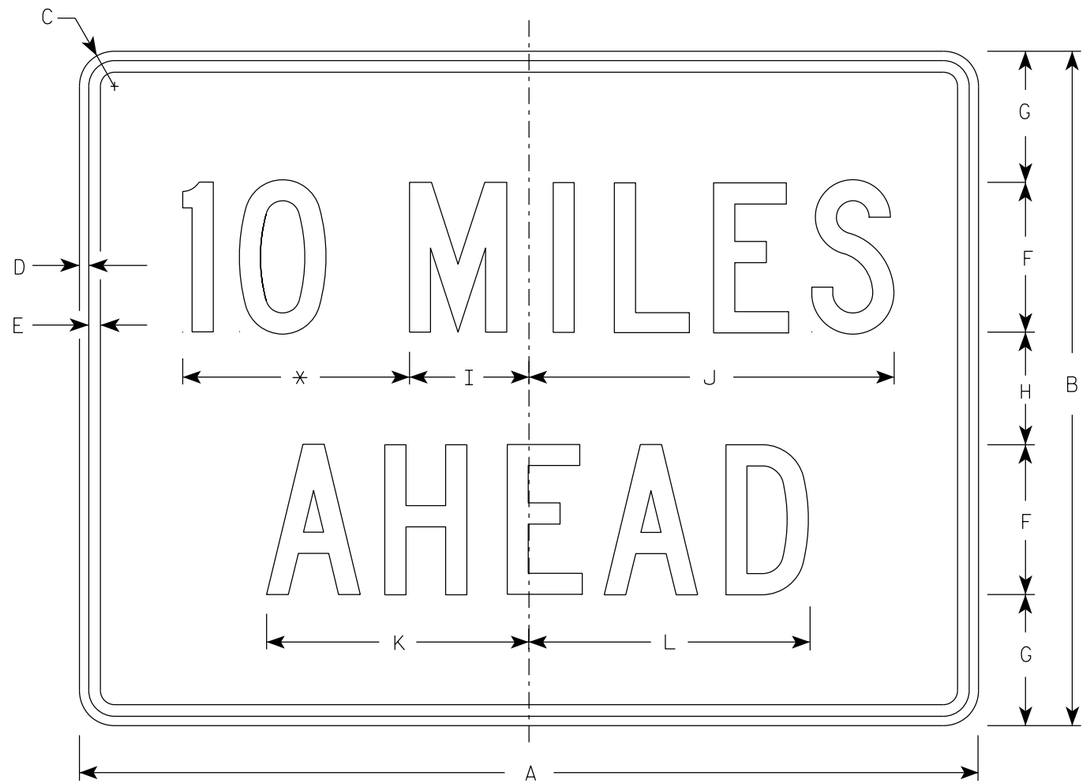
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

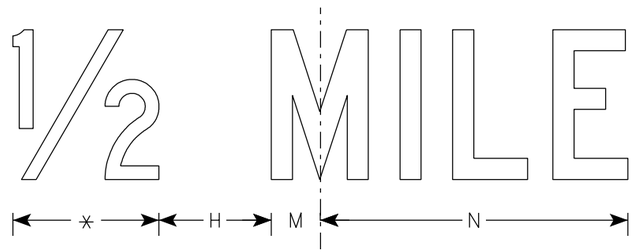
DATE 2/1/2024 PLATE NO. W016-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 244 E

7



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

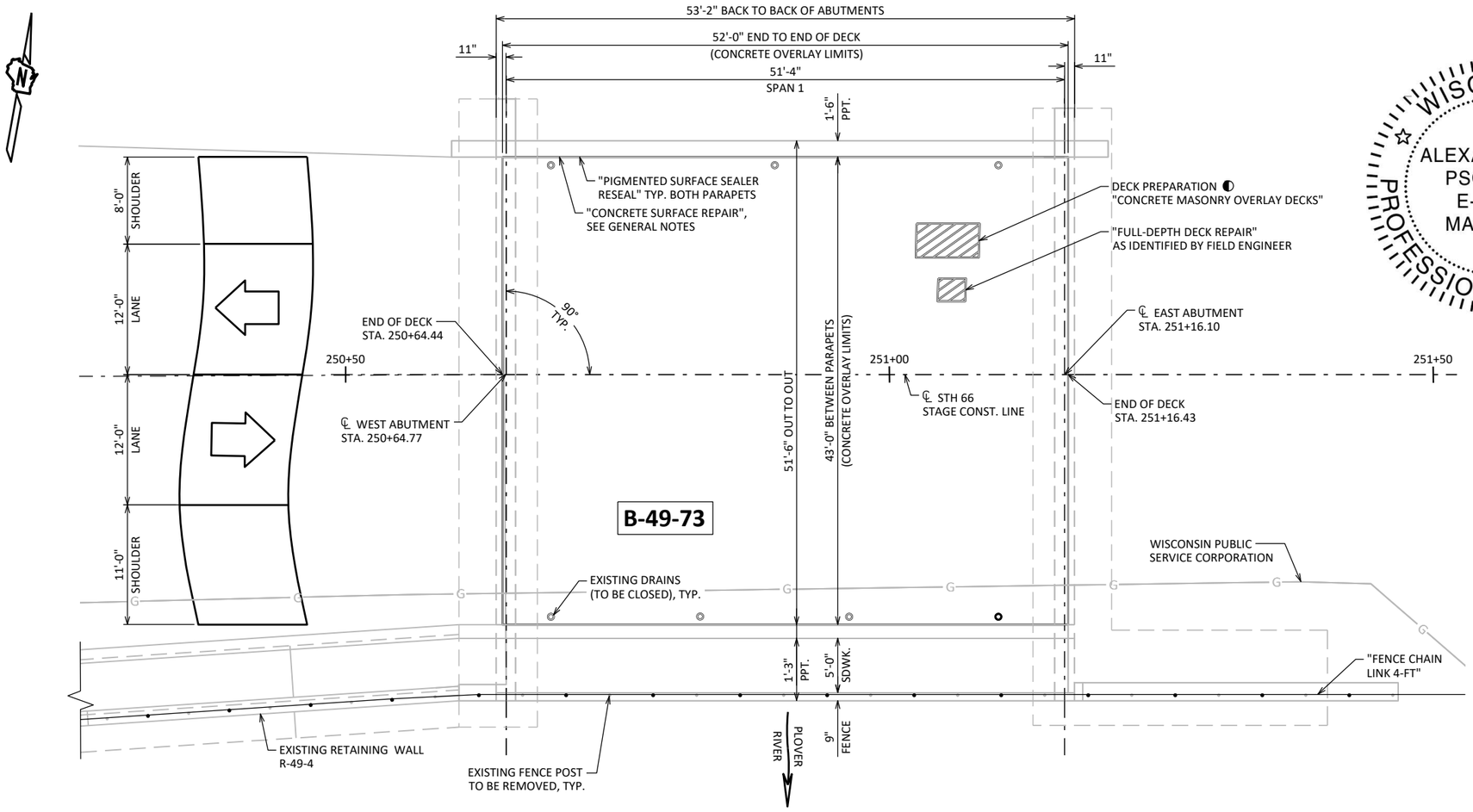
STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

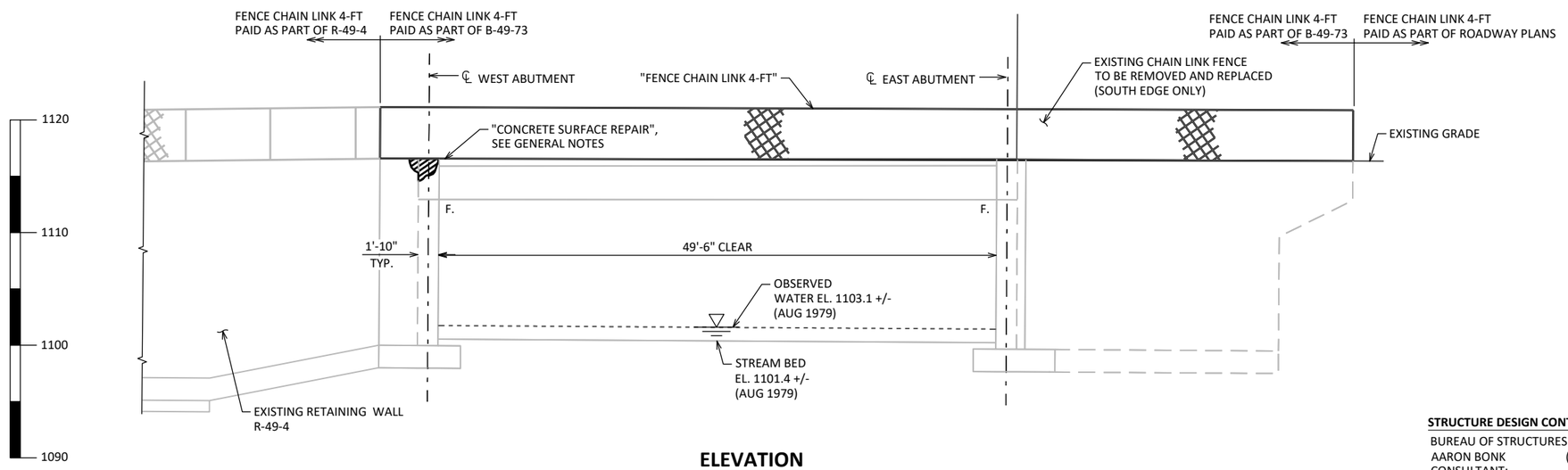
DATE 2/1/2024 PLATE NO. W057-52.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 E



PLAN

SINGLE SPAN 36" PRESTRESSED GIRDERS - CONCRETE OVERLAY



ELEVATION

(LOOKING NORTH)

* ELEVATIONS BASED ON ORIGINAL 1985 PLANS

WISCONSIN
ALEXANDER B. PSCHORR
E-44374
MADISON, WI
PROFESSIONAL ENGINEER
4/26/2024
Alexander B Pschorr

STATE PROJECT NUMBER

6280-02-76

DESIGN DATA

LIVE LOAD:

INVENTORY RATING: HS-18
OPERATING RATING: HS-31
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & OVERLAY DECKS — f'_c = 4,000 PSI
ALL OTHER — f'_c = 3,500 PSI

SCOPE OF WORK B-49-73

1. CONCRETE OVERLAY WITH CROSS SLOPE CORRECTION
2. CLOSE EXISTING DRAIN PIPES
3. DECK REPAIRS
4. CONCRETE SURFACE REPAIRS
5. CLEAN & RESEAL CONCRETE PARAPETS
6. REMOVE AND REPLACE CHAIN LINK FENCE (SOUTH EDGE ONLY)

TRAFFIC DATA

FEATURE ON: STH 66

A.D.T. = 4,360 (2025)
A.D.T = 4,360 (2045)
R.D.S. = 60 MPH

FEATURE UNDER: PLOVER RIVER

A.D.T. = N/A
R.D.S. = N/A

LEGEND

◐ SURVEY TYPE: INFRARED THERMOGRAPHY SCAN (COMPLETED 06/24/2022)

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. GENERAL NOTES, QUANTITIES, & CROSS SECTION
3. STAGING CROSS SECTIONS
4. FENCING REMOVAL DETAILS
5. FENCING DETAILS AT ABUT/WINGS
6. FENCING DETAILS AT BRIDGE DECK
7. THERMOGRAPHIC DECK SCAN PLAN

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
1255 FOURIER DRIVE
SUITE 100
MADISON, WI 53717

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 05/07/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-49-73

STH 66 OVER PLOVER RIVER

COUNTY	TOWN
PORTAGE	HULL

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ABP	AA	LTK	LMVK

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
LINDA KRUEGER (608) 821-8700

GENERAL PLAN & ELEVATION

SHEET 1 OF 7
246

SCALE = 12

I.D. 6280-02-06

DATE: 1/19/2024

8

8

STATE PROJECT NUMBER
6280-02-76

GENERAL NOTES

THE EXISTING STRUCTURE B-49-73, IS A SINGLE SPAN PRESTRESSED GIRDER STRUCTURE WITH AN OUT-TO-OUT WIDTH OF 51'-6" AND A BACK-TO-BACK OF ABUTMENT LENGTH OF 53'-2".

THE ENTIRE BRIDGE DECK SHALL BE PREPARED FOR A NEW CONCRETE OVERLAY. EXISTING DRAINS SHALL BE CLOSED. BOTH PARAPETS SHALL BE CLEANED AND RECEIVE PIGMENTED SURFACE SEALER. ABUTMENT AND PARAPET CONCRETE SURFACE REPAIRS SHALL BE MADE WHERE DIRECTED BY THE FIELD ENGINEER.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS ARE BASED ON EXISTING PLANS.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

THE EXISTING THIN POLYMER OVERLAY AND 1" OF THE ORIGINAL DECK SHALL BE REMOVED UNDER BID ITEM "CLEANING DECKS". A MINIMUM OF 1" OF THE EXISTING CONCRETE COVER SHALL BE MAINTAINED.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND FULL-DEPTH DECK REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

DECK DRAINS TO BE PLUGGED AND OVERLAID WITH CONCRETE. COST INCIDENTAL TO "CONCRETE MASONRY OVERLAY DECKS".

ALL CONCRETE REMOVAL NOT COVERED BY CONCRETE OVERLAY SHALL BE DEFINED BY A 1" DEEP SAW CUT.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.

ANY EXCAVATION NECESSARY TO COMPLETE THE OVERLAY IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

GENERAL NOTES CONT.

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE DECK SURFACE, AFTER SURFACE PREPARATION, IN THE SOUTH GUTTERLINE OF THE ROADWAY AND A MINIMUM OVERLAY THICKNESS OF 2⅞" PLACED ABOVE THE DECK SURFACE, AFTER SURFACE PREPARATION, AT THE ROADWAY CROWN. EXPECTED AVERAGE OVERLAY THICKNESS IS 2¾". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½" CONTACT THE STRUCTURES DESIGN SECTION.

PERFORM "CONCRETE SURFACE REPAIR" AT THE WEST ABUTMENT, NORTH PARAPET, AND OTHER LOCATIONS AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE TOP AND ROADWAY FACE OF THE LENGTH OF THE PARAPET.

ASBESTOS-CONTAINING MATERIAL (ACM) IS NOT PRESENT ON THIS STRUCTURE, PER THE ASBESTOS INSPECTION CONDUCTED ON JULY 20, 2021 BY GEI CONSULTANTS, INC.

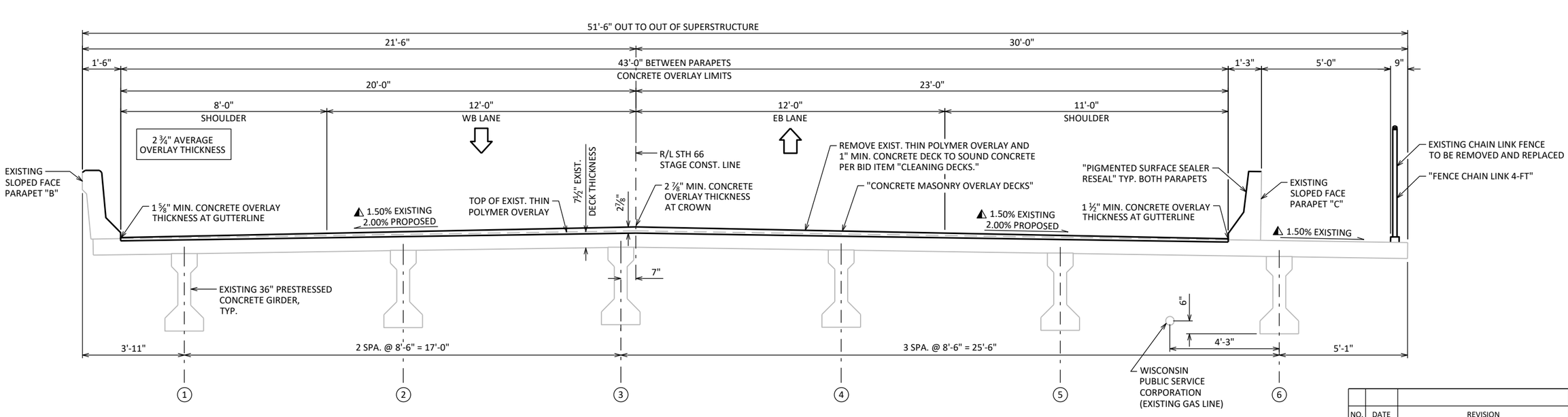
REMOVE EXISTING CHAIN LINK FENCE ALONG THE ENTIRE LENGTH OF SOUTH EDGE OF BRIDGE. SEE SHEET 4 FOR FENCE POST REMOVAL AND REPAIR DETAILS. INSTALL NEW CHAIN LINK FENCING ALONG THE ENTIRE LENGTH OF SOUTH EDGE OF BRIDGE, INCLUDING ALONG THE WINGWALL. SEE SHEETS 5 & 6 FOR FENCING DETAILS. REMOVAL AND DISPOSAL OF EXISTING FENCE INCLUDED IN "REMOVING STRUCTURE B-49-73" BID ITEM.

THE DAM NEAR THIS STRUCTURE IS PRIVATELY OWNED. CONTACT INFORMATION IS MIKE BIGALKE, BIG PLOVER MILLS. PLOVER RIVER HYDRO-ELECTRIC DAM OPERATOR, HOME PHONE (715) 592-4942, CELL (715) 498-0770.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	WEST ABUTMENT	EAST ABUTMENT	SUPER.	TOTAL
203.0220.01	REMOVING STRUCTURE B-49-73	EACH	---	---	1	1
203.0335.01	DEBRIS CONTAINMENT OVER WATERWAY B-49-73	EACH	---	---	1	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	248	248
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	---	---	44	44
509.0301	PREPARATION DECKS TYPE 1	SY	---	---	6	6
509.0302	PREPARATION DECKS TYPE 2	SY	---	---	3	3
509.0500	CLEANING DECKS	SY	---	---	248	248
509.1500	CONCRETE SURFACE REPAIR	SF	12	4	12	28
509.2000	FULL-DEPTH DECK REPAIR	SY	---	---	1	1
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	---	---	20	20
616.0204	FENCE CHAIN LINK 4-FT	LF	---	---	86	86

NOTE: CONCRETE SURFACE REPAIR AND DECK PREPARATION QUANTITIES ARE APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD BY THE ENGINEER.



CROSS SECTION

LOOKING EAST

LEGEND

(X) GIRDER NUMBER

⚠ EXISTING CROSS SLOPE ON EXISTING DECK AND THIN POLYMER OVERLAY IS 1.5%. PROPOSED CROSS SLOPE ON PROPOSED CONCRETE OVERLAY IS 2.0%.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-73

DRAWN BY LTK | PLANS CK'D LMVK

GENERAL NOTES, QUANTITIES, & CROSS SECTION

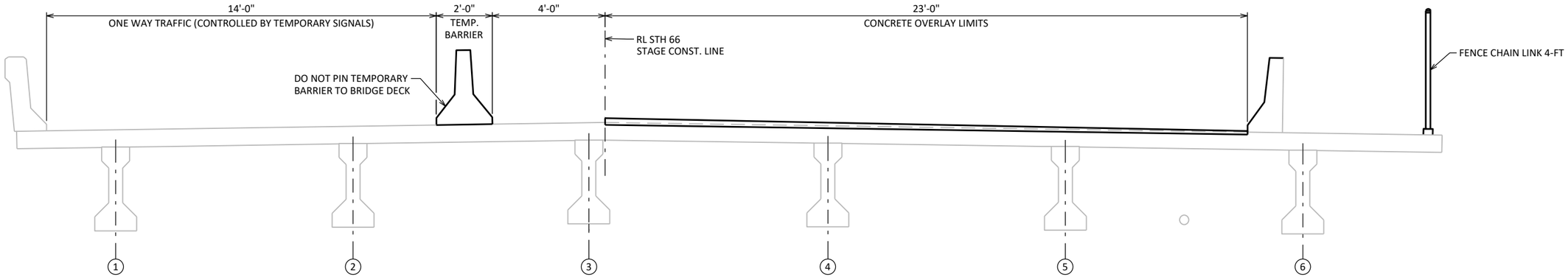
SHEET 2 OF 7
247

SCALE = 4

8

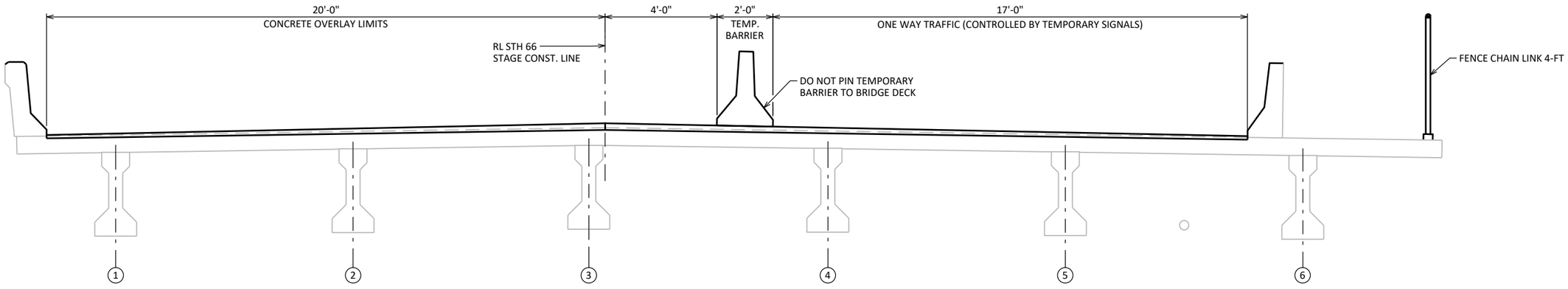
8

STATE PROJECT NUMBER
6280-02-76



STAGE 1 CONSTRUCTION SECTION

LOOKING EAST



STAGE 2 CONSTRUCTION SECTION

LOOKING EAST

8

8

NOTES

FOR TRAFFIC CONTROL AND STAGE CONSTRUCTION DETAILS, SEE ROADWAY PLANS.

LEGEND

(X) GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-73

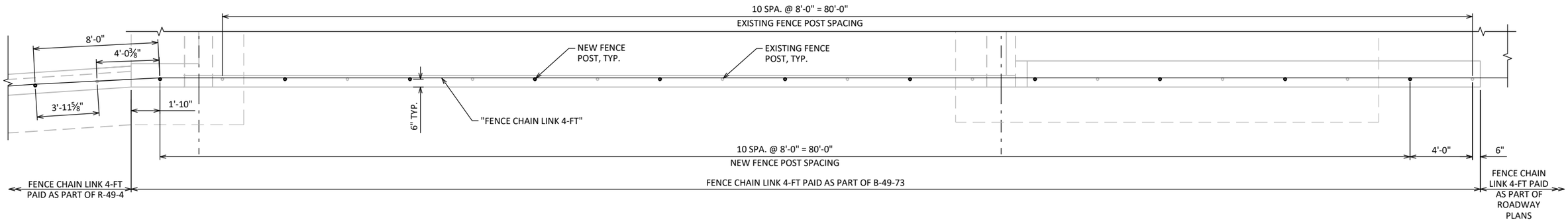
DRAWN BY LTK | PLANS CK'D LMVK

STAGING CROSS SECTIONS

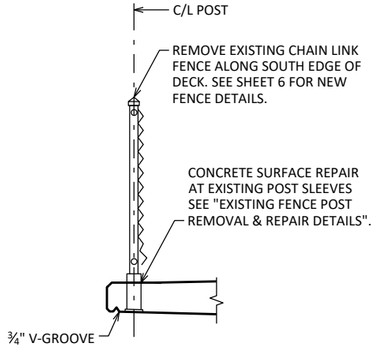
SHEET 3 OF 7

SCALE = 4

STATE PROJECT NUMBER
6280-02-76

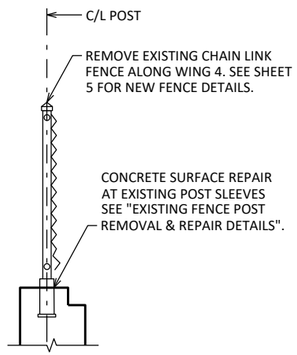


POST SPACING DETAIL



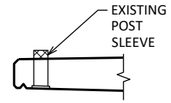
SECTION THRU EXISTING FENCE ON BRIDGE DECK

REMOVAL WORK SHALL BE PAID FOR UNDER "REMOVING STRUCTURE B-49-73"

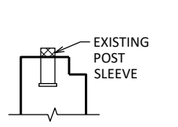


SECTION THRU EXISTING FENCE ON WING 4

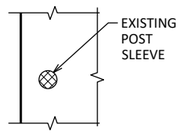
REMOVAL WORK SHALL BE PAID FOR UNDER "REMOVING STRUCTURE B-49-73"



SECTION THRU BRIDGE DECK

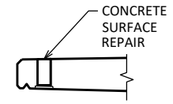


SECTION THRU ABUT/WING

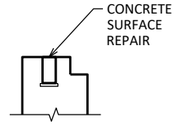


PLAN

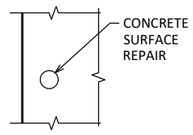
① REMOVE EXISTING STEEL POST SLEEVE FLUSH WITH CONCRETE. WORK SHALL BE PAID FOR UNDER BID ITEM, "REMOVING STRUCTURE B-49-73".



SECTION THRU BRIDGE DECK

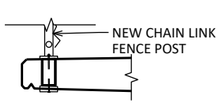


SECTION THRU ABUT/WING

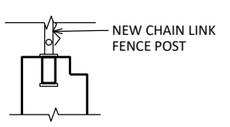


PLAN

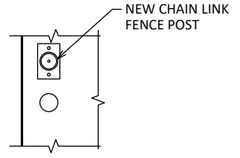
② FILL POST SLEEVE WITH CONCRETE. WORK TO BE PAID FOR UNDER BID ITEM "CONCRETE SURFACE REPAIR".



SECTION THRU BRIDGE DECK



SECTION THRU ABUT/WING



PLAN

③ INSTALL NEW CHAIN LINK FENCE. SEE POST SPACING DETAIL FOR POST SPACING, AND SEE SHEETS 5 & 6 FOR ADDITIONAL DETAILS. DO NOT INSTALL NEW FENCE POSTS OVER OLD FENCE POST SLEEVES.

EXISTING FENCE POST REMOVAL & REPAIR DETAILS

(REQUIRED AT 11 POSTS AT SOUTH EDGE OF BRIDGE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-73

DRAWN BY ABP | PLANS CK'D LMVK

FENCING REMOVAL DETAILS

SHEET 4 OF 7
249

SCALE = 10.7

8

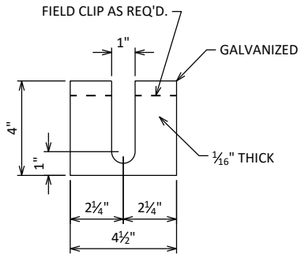
8

STATE PROJECT NUMBER

6280-02-76

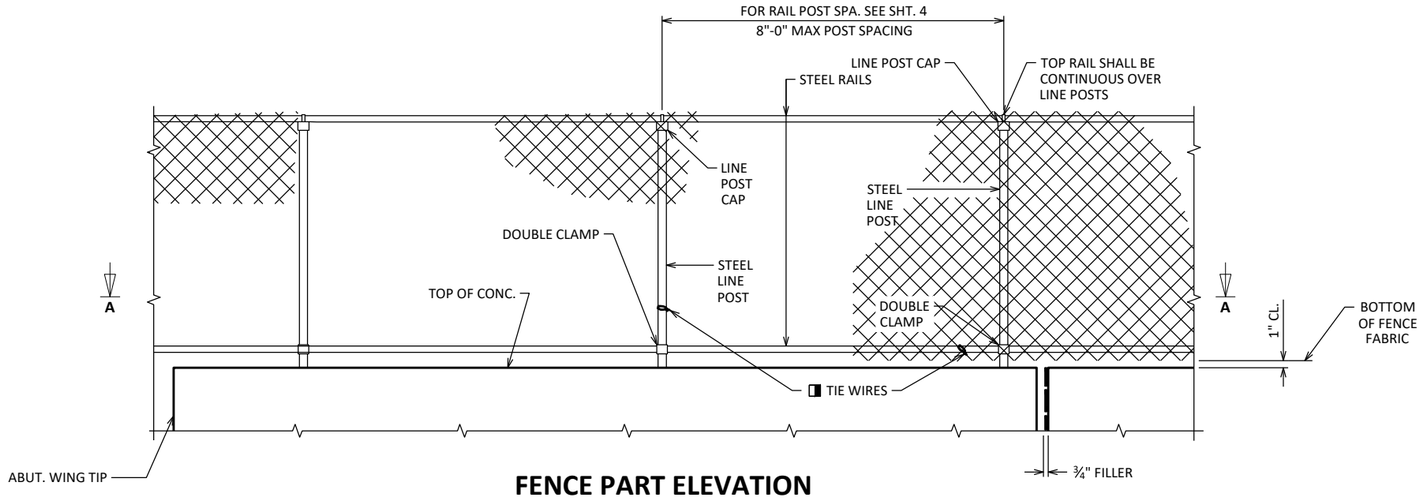
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



FENCE PART ELEVATION

VIEWING FABRIC SIDE

NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OF A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT".

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

▪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

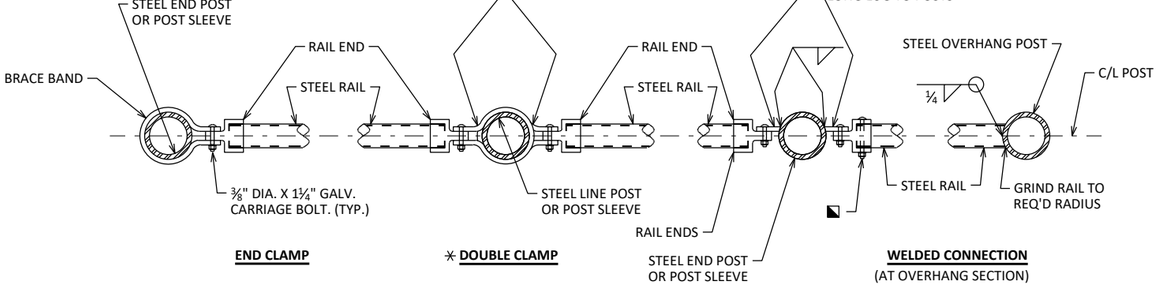
✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

☆ CONCRETE ADHESIVE ANCHORS ¾-INCH. EMBED 12" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS. MINIMUM YIELD STRENGTH OF THE ADHESIVE ANCHORS SHALL BE 55 KSI. TO BE INCLUDED IN BID ITEM, "FENCE CHAIN LINK 4-FT".

◧ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◪ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

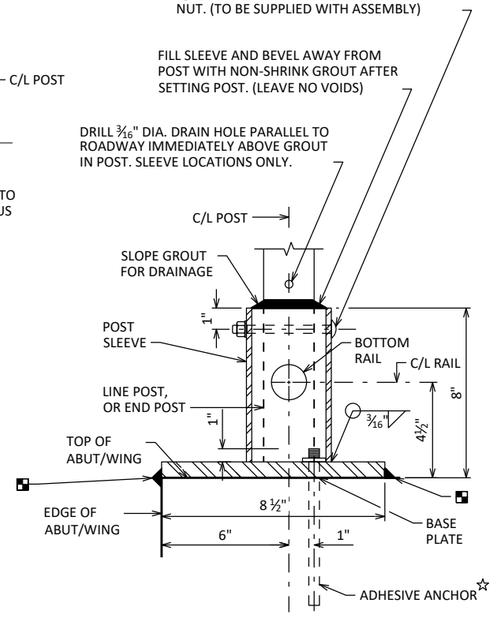
MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR ¼ POINT OF POST SPACING.



END CLAMP | ✳ **DOUBLE CLAMP** | **WELDED CONNECTION** (AT OVERHANG SECTION)

SECTION A-A

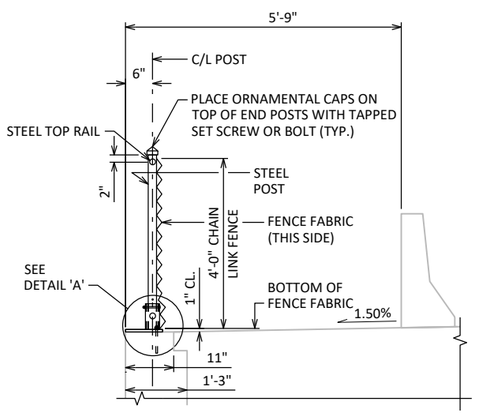
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



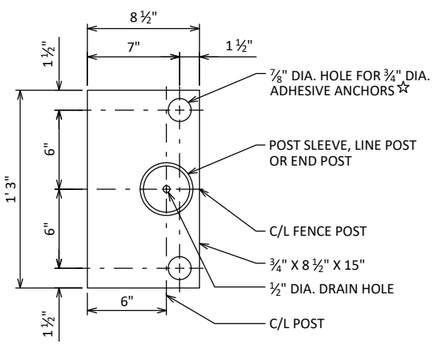
DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

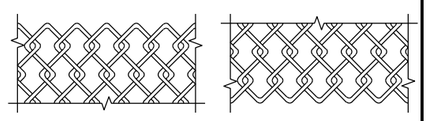
NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.



SECTION THRU FENCE AT ABUT/WING



BASE PLATE



TOP DETAIL | **BOTTOM DETAIL**

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-73

DRAWN BY ABP | PLANS CK'D LMVK

FENCING DETAILS AT ABUT/WINGS

SHEET 5 OF 7

250

SCALE = 10.7

8

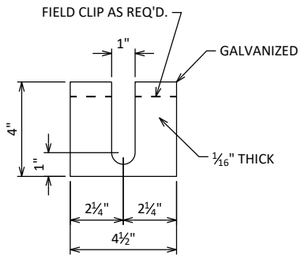
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STATE PROJECT NUMBER

6280-02-76

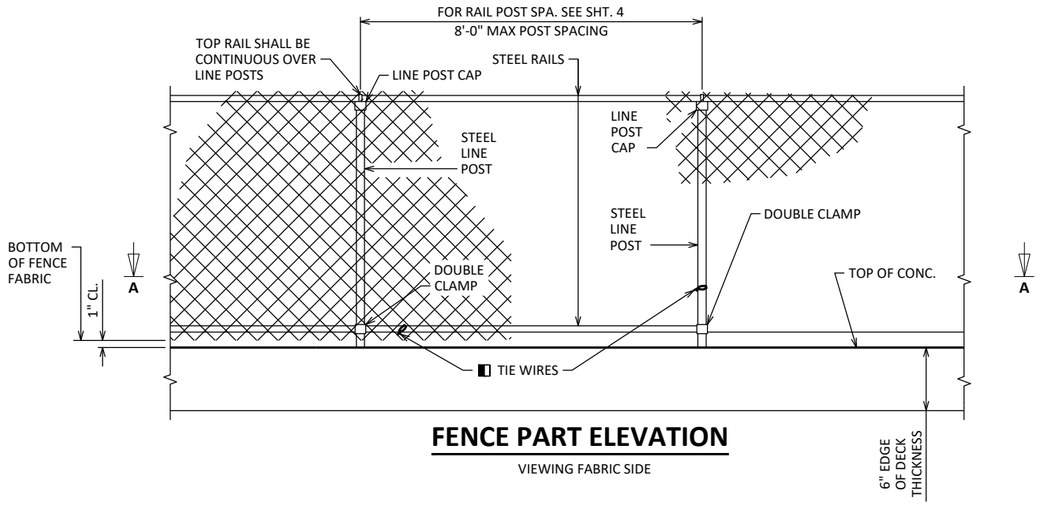
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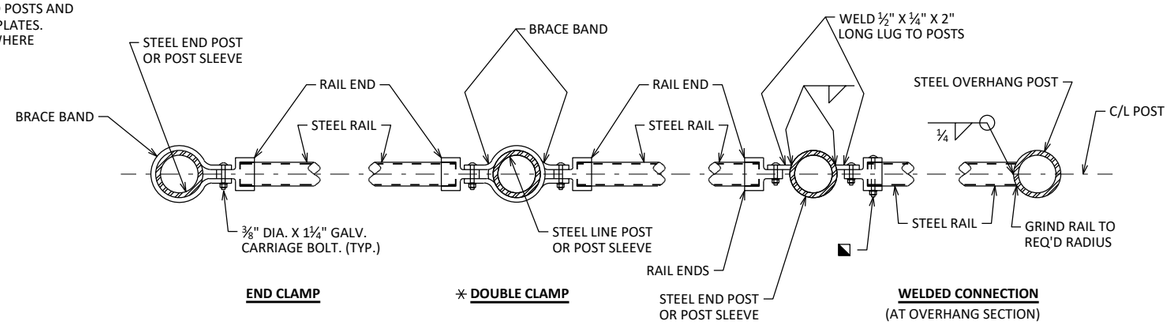
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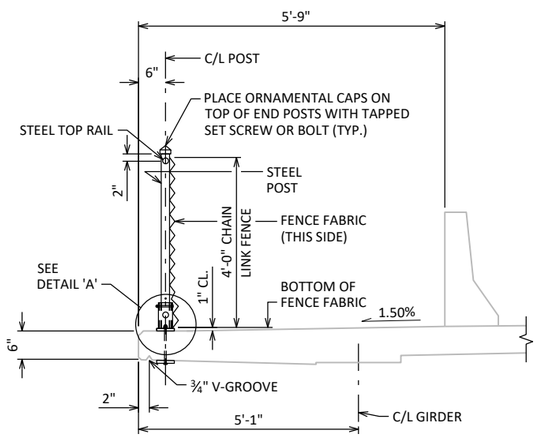
FENCE PART ELEVATION

VIEWING FABRIC SIDE

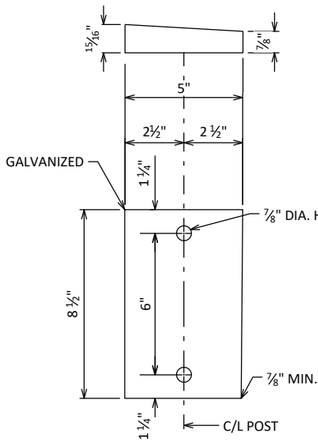


SECTION A-A

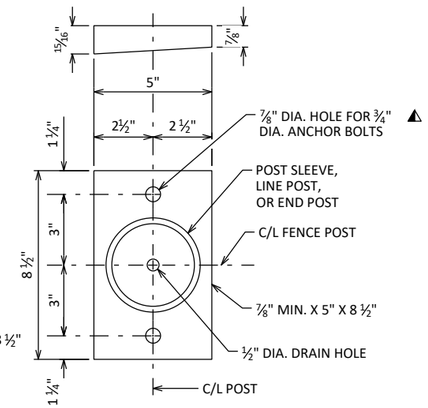
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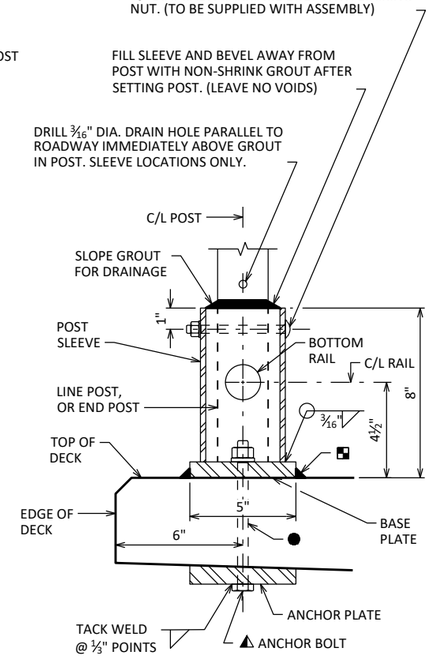
SECTION THRU FENCE AT BRIDGE DECK



ANCHOR PLATE



BASE PLATE



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.

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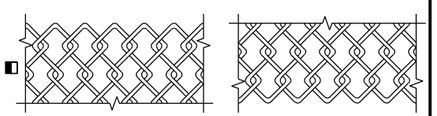
◭ ¾" DIA. X 9" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED. MINIMUM YIELD STRENGTH OF THE BOLTS SHALL BE 55 KSI.

◧ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR ¼ POINT OF POST SPACING.

● HOLES FOR THE ANCHOR BOLTS SHALL BE CORE DRILLED (NOT HAMMER DRILLED). CARE SHALL BE TAKEN TO MINIMIZE SPALLING ON THE UNDERSIDE OF THE DECK DURING DRILLING.



TOP DETAIL **BOTTOM DETAIL**

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-73

DRAWN BY ABP | PLANS CK'D LMVK

FENCING DETAILS AT BRIDGE DECK

SHEET 6 OF 7
251

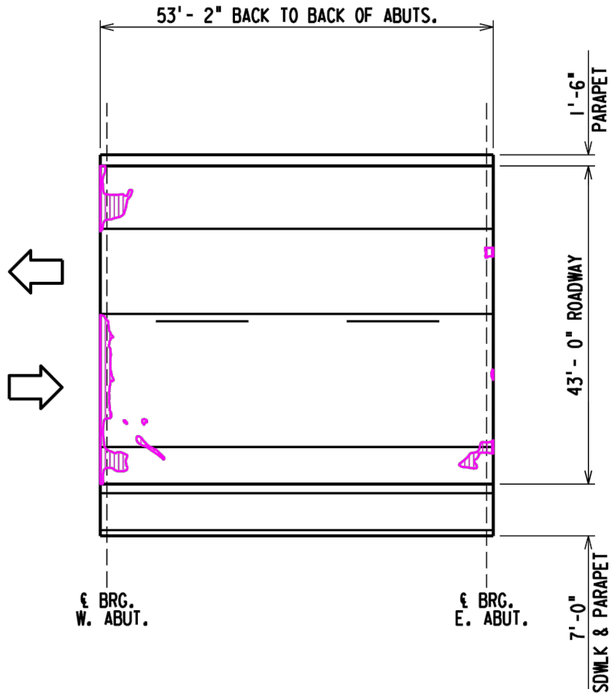
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STATE PROJECT NUMBER

6280-02-76



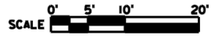
PLAN

INFRARED THERMOGRAPHIC SURVEY RESULTS



STRUCTURE NO. B-49-73

FIELD OBSERVATIONS SUMMARY		ROADWAY		SIDEWALK		LEGEND
ITEM	UNIT	QUANT.	%	QUANT.	%	
TOTAL AREA	ft^2	2236		265		DELAMINATION
SHADE/DEBRIS	ft^2	0		0		SPALL
DELAMINATION	ft^2	0	0	0	0	DEBONDED/MISSING OVERLAY
SPALL	ft^2	0	0	0	0	ASPHALT PATCH
DEBONDED/MISSING OVERLAY	ft^2	54	2.4	N/A	N/A	PCC PATCH
ASPHALT PATCH	ft^2	0	0	0	0	SHADE/DEBRIS
PCC PATCH	ft^2	0	0	0	0	



SURFACE TYPE: EPOXY OVERLAY
INFRARED INSPECTION DATE: 6/24/22

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-73

DRAWN BY ABP | PLANS CK'D LMVK

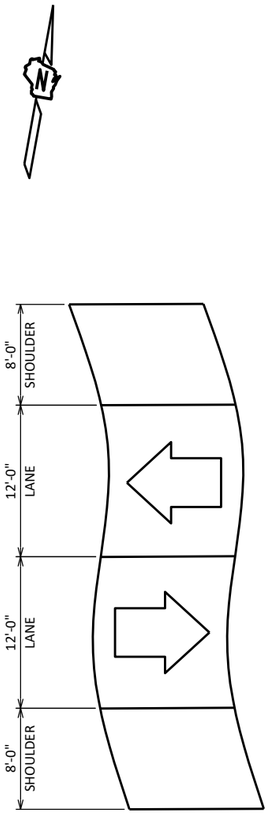
THERMOGRAPHIC DECK SCAN PLAN

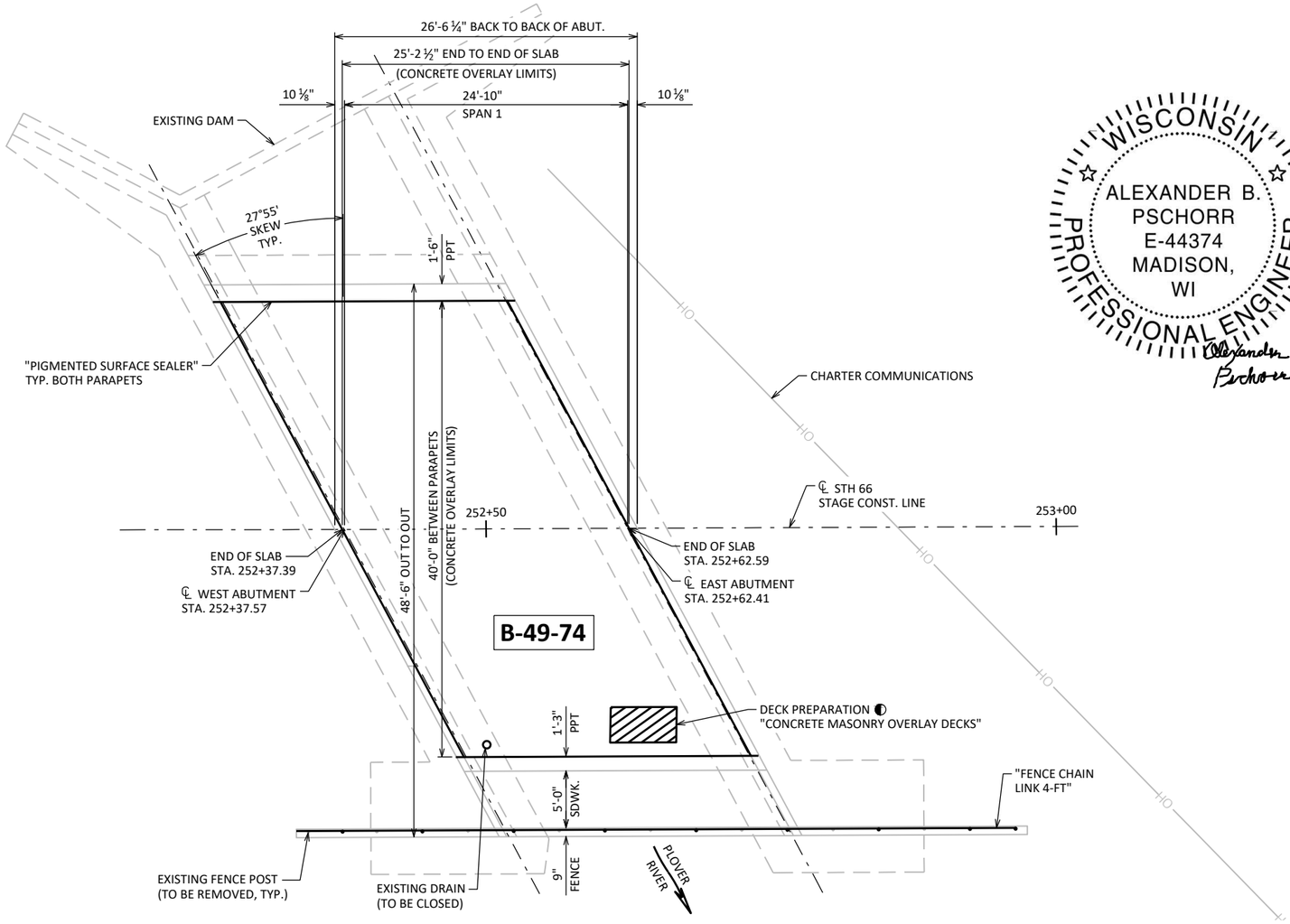
SHEET 7 OF 7
252

SCALE = 4

STATE PROJECT NUMBER

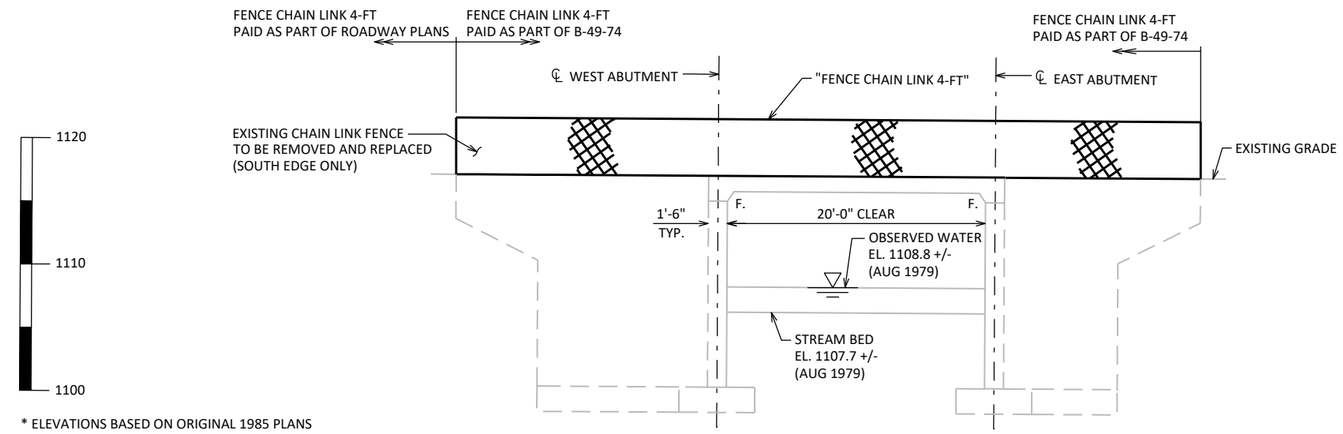
6280-02-76





PLAN

SINGLE SPAN CONCRETE FLAT SLAB - CONCRETE OVERLAY



* ELEVATIONS BASED ON ORIGINAL 1985 PLANS

ELEVATION

(LOOKING NORTH)

WISCONSIN
ALEXANDER B. PSCHORR
E-44374
MADISON, WI
PROFESSIONAL ENGINEER

4/26/2024

Alexander B Pschorr

DESIGN DATA

LIVE LOAD:

INVENTORY RATING: HS-20
OPERATING RATING: HS-34
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 160 (KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & CONCRETE OVERLAY DECKS — f'_c = 4,000 PSI
ALL OTHER — f'_c = 3,500 PSI

SCOPE OF WORK B-49-74

1. CONCRETE OVERLAY WITH CROSS SLOPE CORRECTION
2. DECK REPAIRS
3. CLEAN & RESEAL CONCRETE PARAPETS
4. CLOSE EXISTING DRAIN PIPE
5. REMOVE AND REPLACE CHAIN LINK FENCE (SOUTH EDGE ONLY)

TRAFFIC DATA

FEATURE ON: STH 66

A.D.T. = 4,360 (2025)
A.D.T = 4,360 (2045)
R.D.S. = 60 MPH

FEATURE UNDER: PLOVER RIVER

A.D.T. = N/A
R.D.S. = N/A

LEGEND

◐ SURVEY TYPE: INFRARED THERMOGRAPHY SCAN (COMPLETED 06/24/2022)

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. GENERAL NOTES, QUANTITIES, & CROSS SECTION
3. STAGING CROSS SECTIONS
4. FENCING REMOVAL DETAILS
5. FENCING DETAILS
6. THERMOGRAPHIC DECK SCAN PLAN

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 05/07/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-49-74

STH 66 OVER PLOVER RIVER

COUNTY	TOWN
PORTAGE	HULL

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ABP	AA	LTK	LMVK

GENERAL PLAN & ELEVATION

SHEET 1 OF 6
253

SCALE = 12

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
LINDA KRUEGER (608) 821-8700

I.D. 6280-02-06

DATE: 1/19/2024

8

8

STATE PROJECT NUMBER

6280-02-76

GENERAL NOTES

THE EXISTING STRUCTURE B-49-74, IS A SINGLE SPAN CONCRETE SLAB STRUCTURE WITH AN OUT-TO-OUT WIDTH OF 48'-6" AND A BACK-TO-BACK OF ABUTMENT LENGTH OF 26'-6¼".

THE ENTIRE BRIDGE DECK SHALL BE PREPARED FOR A NEW CONCRETE OVERLAY. EXISTING DRAIN SHALL BE CLOSED. BOTH PARAPETS SHALL BE CLEANED AND RECEIVE PIGMENTED SURFACE SEALER.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS ARE BASED ON EXISTING PLANS.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

THE EXISTING THIN POLYMER OVERLAY AND 1" OF THE ORIGINAL DECK SHALL BE REMOVED UNDER BID ITEM "CLEANING DECKS". A MINIMUM OF 1" OF THE EXISTING CONCRETE COVER SHALL BE MAINTAINED.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

DECK DRAINS TO BE PLUGGED AND OVERLAID WITH CONCRETE. COST INCIDENTAL TO "CONCRETE MASONRY OVERLAY DECKS".

ALL CONCRETE REMOVAL NOT COVERED BY CONCRETE OVERLAY SHALL BE DEFINED BY A 1" DEEP SAW CUT.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½" TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.

ANY EXCAVATION NECESSARY TO COMPLETE THE OVERLAY IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE DECK SURFACE, AFTER SURFACE PREPARATION, IN THE GUTTERLINES OF THE ROADWAY AND A MINIMUM OVERLAY THICKNESS OF 2¾" PLACED ABOVE THE DECK SURFACE, AFTER SURFACE PREPARATION, AT THE ROADWAY CROWN. EXPECTED AVERAGE OVERLAY THICKNESS IS 2⅝". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½" CONTACT THE STRUCTURES DESIGN SECTION.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE TOP AND ROADWAY FACE OF THE LENGTH OF THE PARAPET.

ASBESTOS-CONTAINING MATERIAL (ACM) IS NOT PRESENT ON THIS STRUCTURE, PER THE ASBESTOS INSPECTION CONDUCTED ON JULY 20, 2021 BY GEI CONSULTANTS, INC.

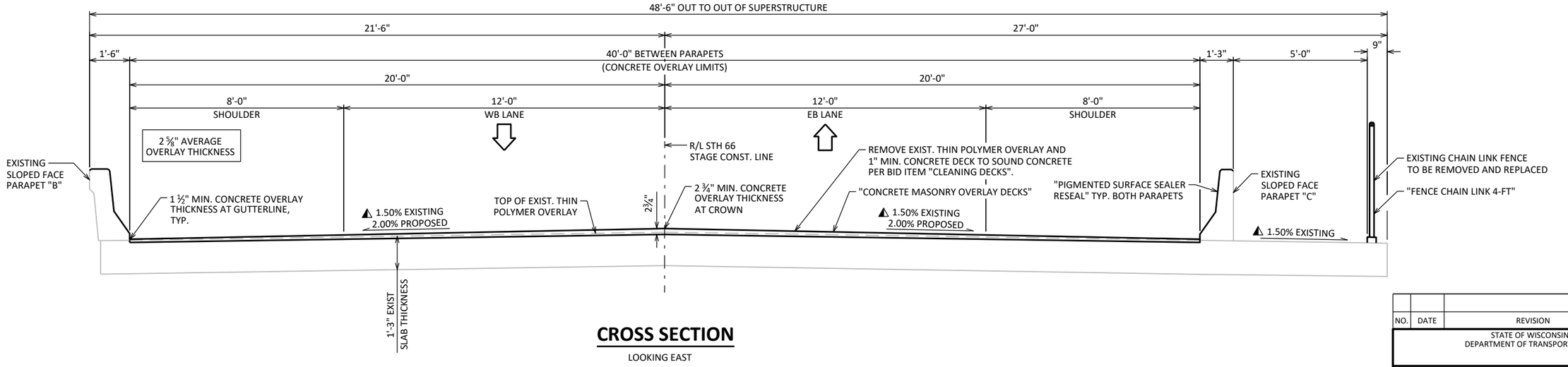
REMOVE EXISTING CHAIN LINK FENCE ALONG THE ENTIRE LENGTH OF SOUTH EDGE OF BRIDGE. SEE SHEET 4 FOR FENCE POST REMOVAL AND REPAIR DETAILS. INSTALL NEW CHAIN LINK FENCING ALONG THE ENTIRE LENGTH OF SOUTH EDGE OF BRIDGE, INCLUDING ALONG WINGWALLS. SEE SHEET 5 FOR FENCING DETAILS. REMOVAL AND DISPOSAL OF EXISTING FENCE INCLUDED IN "REMOVING STRUCTURE B-49-74" BID ITEM.

THE DAM UNDER THE STRUCTURE IS PRIVATELY OWNED. CONTACT- INFORMATION IS MIKE BIGALKE, BIG PLOVER MILLS. PLOVER RIVER HYDRO - ELECTRIC DAM OPERATOR, HOME PHONE (715) 592-4942, CELL (715) 498-0770.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	WEST ABUTMENT	EAST ABUTMENT	SUPER.	TOTAL
203.0220.02	REMOVING STRUCTURE B-49-74	EACH	---	---	1	1
203.0335.02	DEBRIS CONTAINMENT OVER WATERWAY B-49-74	EACH	---	---	1	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	112	112
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	---	---	21	21
509.0301	PREPARATION DECKS TYPE 1	SY	---	---	39	39
509.0302	PREPARATION DECKS TYPE 2	SY	---	---	16	16
509.0500	CLEANING DECKS	SY	---	---	112	112
509.1500	CONCRETE SURFACE REPAIR	SF	3	3	3	9
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	---	---	15	15
616.0204	FENCE CHAIN LINK 4-FT	LF	---	---	63	63

NOTE: CONCRETE SURFACE REPAIR AND DECK PREPARATION QUANTITIES ARE APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD BY THE ENGINEER.



CROSS SECTION

LOOKING EAST

LEGEND

⚠ EXISTING CROSS SLOPE ON EXISTING DECK AND THIN POLYMER OVERLAY IS 1.5%. PROPOSED CROSS SLOPE ON PROPOSED CONCRETE OVERLAY IS 2.0%.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-74

DRAWN BY LTK | PLANS CK'D LMVK

GENERAL NOTES, QUANTITIES, & CROSS SECTION

SHEET 2 OF 6

254

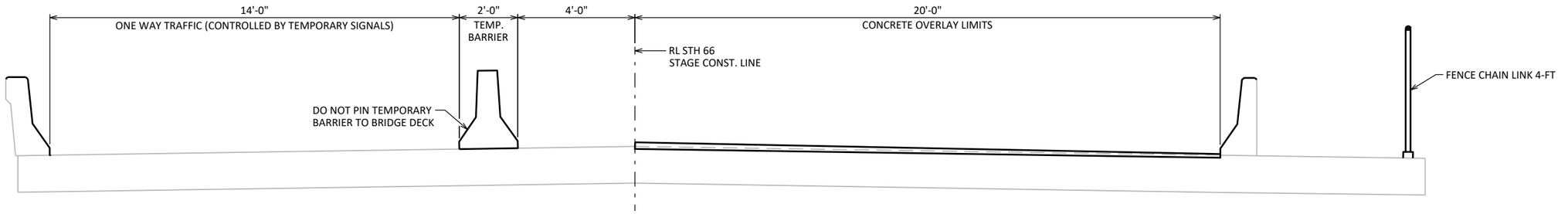
SCALE = 4

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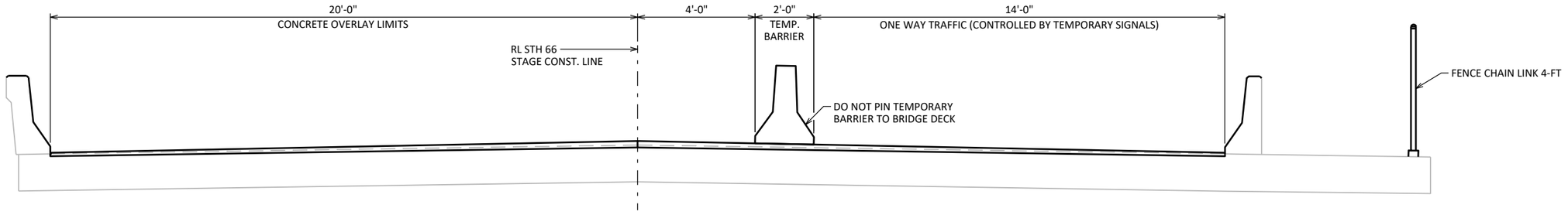
STATE PROJECT NUMBER

6280-02-76



STAGE 1 CONSTRUCTION SECTION

LOOKING EAST



STAGE 2 CONSTRUCTION SECTION

LOOKING EAST

NOTES

FOR TRAFFIC CONTROL AND STAGE CONSTRUCTION DETAILS, SEE ROADWAY PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-74

DRAWN BY LTK | PLANS CK'D LMVK

STAGING CROSS SECTIONS

SHEET 3 OF 6

255

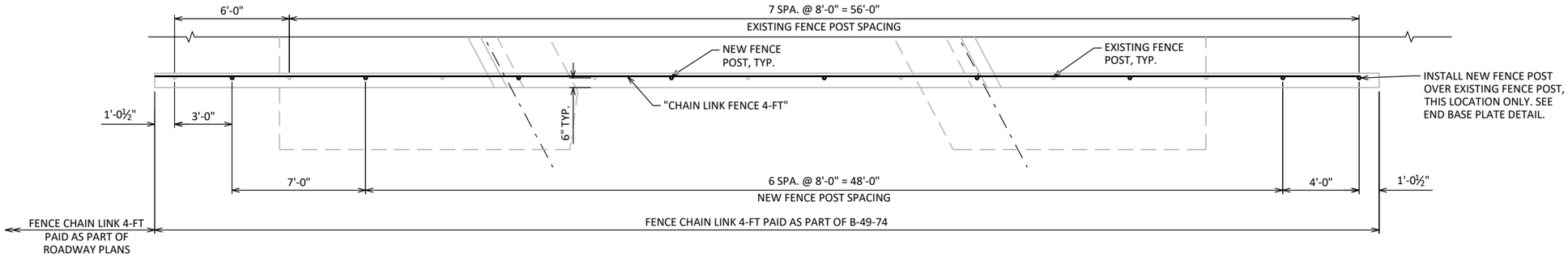
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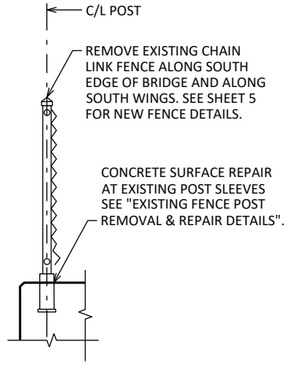
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STATE PROJECT NUMBER

6280-02-76

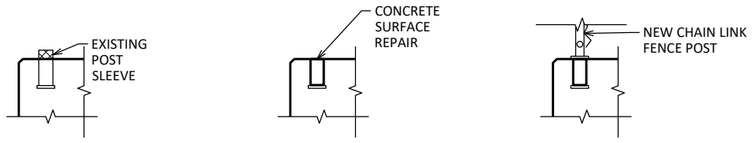


POST SPACING DETAIL

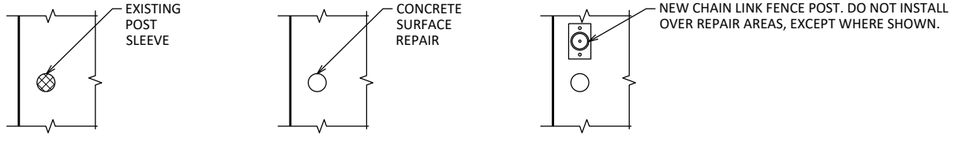


SECTION THRU EXISTING FENCE

REMOVAL WORK SHALL BE PAID FOR UNDER "REMOVING STRUCTURE B-49-74"



SECTION **SECTION** **SECTION**



PLAN **PLAN** **PLAN**

① REMOVE EXISTING STEEL POST SLEEVE FLUSH WITH CONCRETE. WORK SHALL BE PAID FOR UNDER BID ITEM, "REMOVING STRUCTURE B-49-74".

② FILL POST SLEEVE WITH CONCRETE. WORK TO BE PAID FOR UNDER BID ITEM "CONCRETE SURFACE REPAIR".

③ INSTALL NEW CHAIN LINK FENCE. SEE POST SPACING DETAIL FOR POST SPACING, AND SEE SHEET 5 FOR ADDITIONAL DETAILS. DO NOT INSTALL NEW FENCE POSTS OVER OLD FENCE POST SLEEVES, EXCEPT WHERE SHOWN. FOR DETAILS SEE END BASE PLATE DETAIL.

EXISTING FENCE POST REMOVAL & REPAIR DETAILS

(REQUIRED AT 9 POSTS AT SOUTH EDGE OF BRIDGE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-74

DRAWN BY ABP | PLANS CK'D LMVK

FENCING REMOVAL DETAILS

SHEET 4 OF 6

256

SCALE = 10.7

8

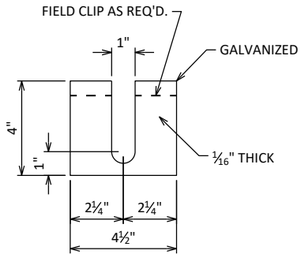
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STATE PROJECT NUMBER

6280-02-76

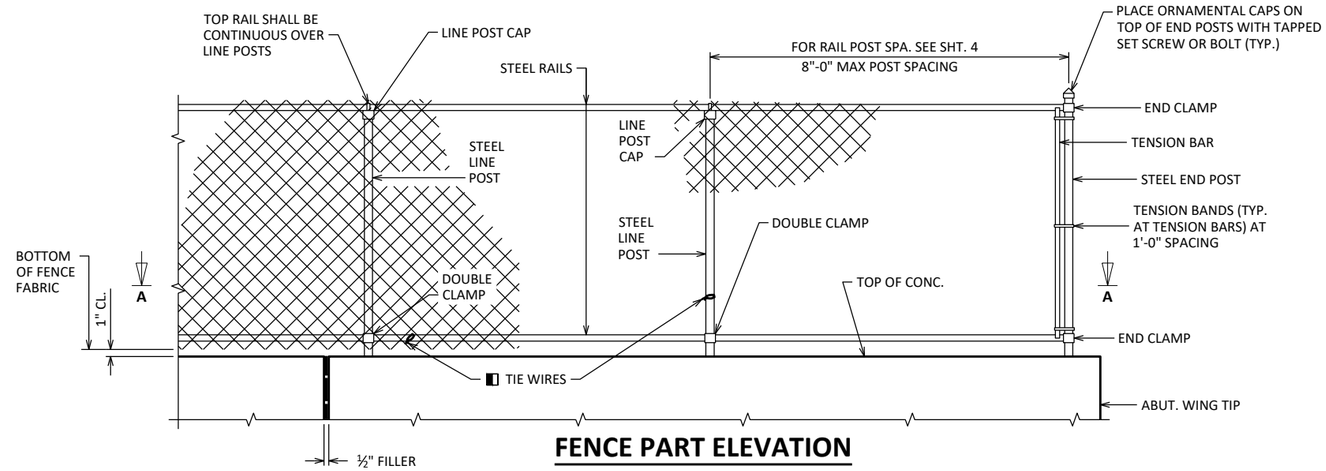
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



FENCE PART ELEVATION

VIEWING FABRIC SIDE

NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OF A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT".

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

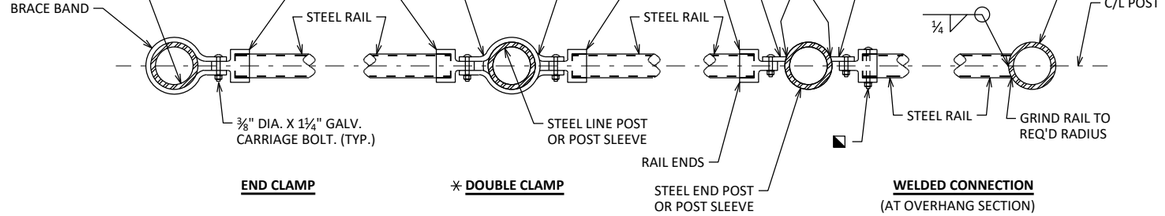
✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

☆ CONCRETE ADHESIVE ANCHORS ¾"-INCH. EMBED 12" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS. MINIMUM YIELD STRENGTH OF THE ADHESIVE ANCHORS SHALL BE 55 KSI. TO BE INCLUDED IN BID ITEM, "FENCE CHAIN LINK 4-FT".

◧ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

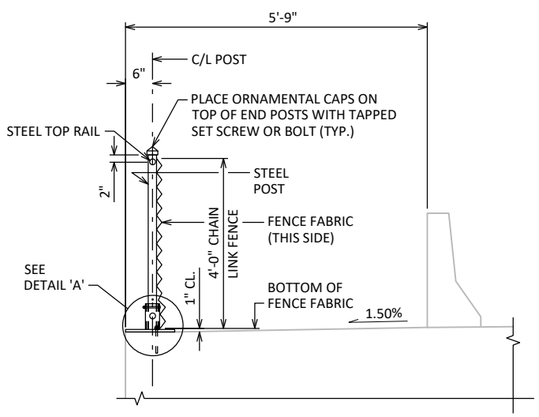
◪ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR ¼ POINT OF POST SPACING.

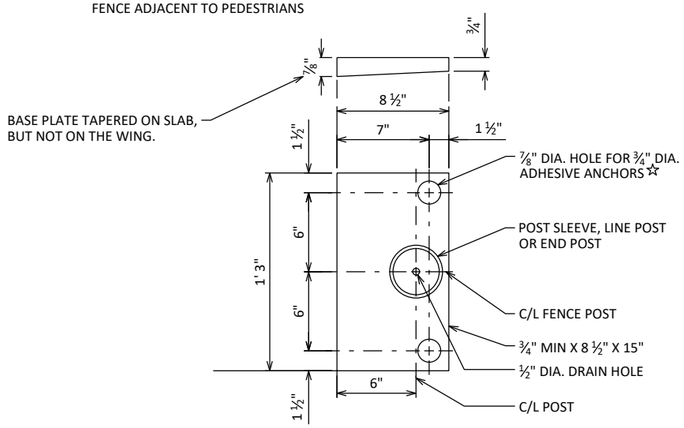


SECTION A-A

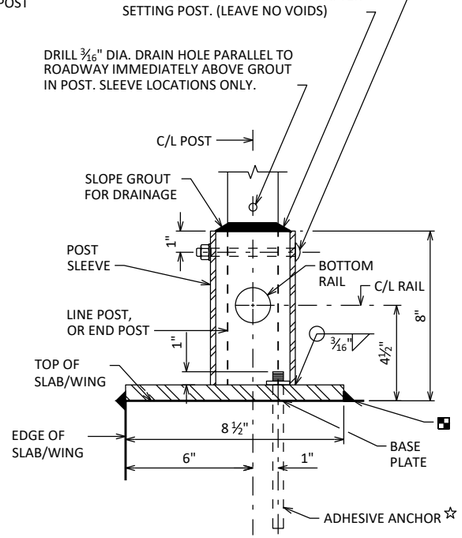
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



SECTION THRU FENCE



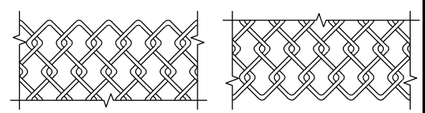
BASE PLATE



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.



TOP DETAIL **BOTTOM DETAIL**

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-74

DRAWN BY ABP | PLANS CK'D LMVK

FENCING DETAILS

SHEET 5 OF 6

257

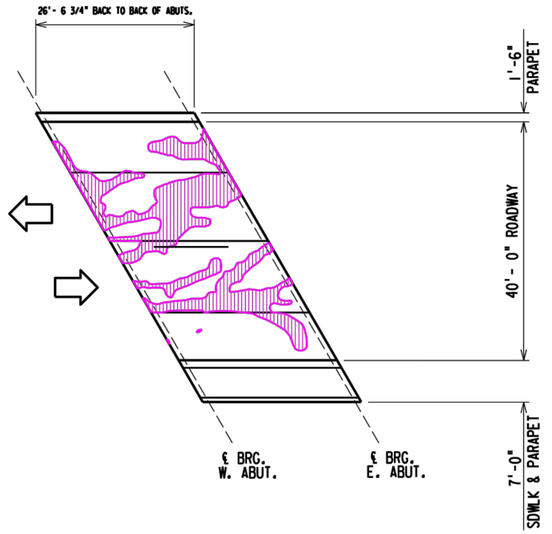
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8

STATE PROJECT NUMBER

6280-02-76



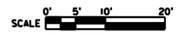
PLAN

INFRARED THERMOGRAPHIC SURVEY RESULTS



STRUCTURE NO. B-49-74

FIELD OBSERVATIONS SUMMARY		ROADWAY		SIDEWALK		LEGEND
ITEM	UNIT	QUANT.	%	QUANT.	%	DELAMINATION
TOTAL AREA	ft^2	1008		126		SPALL
SHADE/DEBRIS	ft^2	0		0		DEBONDED/MISSING OVERLAY
DELAMINATION	ft^2	0	0	0	0	SPALL
SPALL	ft^2	0	0	0	0	ASPHALT PATCH
DEBONDED/MISSING OVERLAY	ft^2	343	34.0	0	0	PCC PATCH
ASPHALT PATCH	ft^2	0	0	0	0	SHADE/DEBRIS
PCC PATCH	ft^2	0	0	0	0	



SURFACE TYPE: EPOXY OVERLAY
INFRARED INSPECTION DATE: 6/24/22

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-74

DRAWN BY ABP | PLANS CK'D LMVK

THERMOGRAPHIC DECK SCAN PLAN

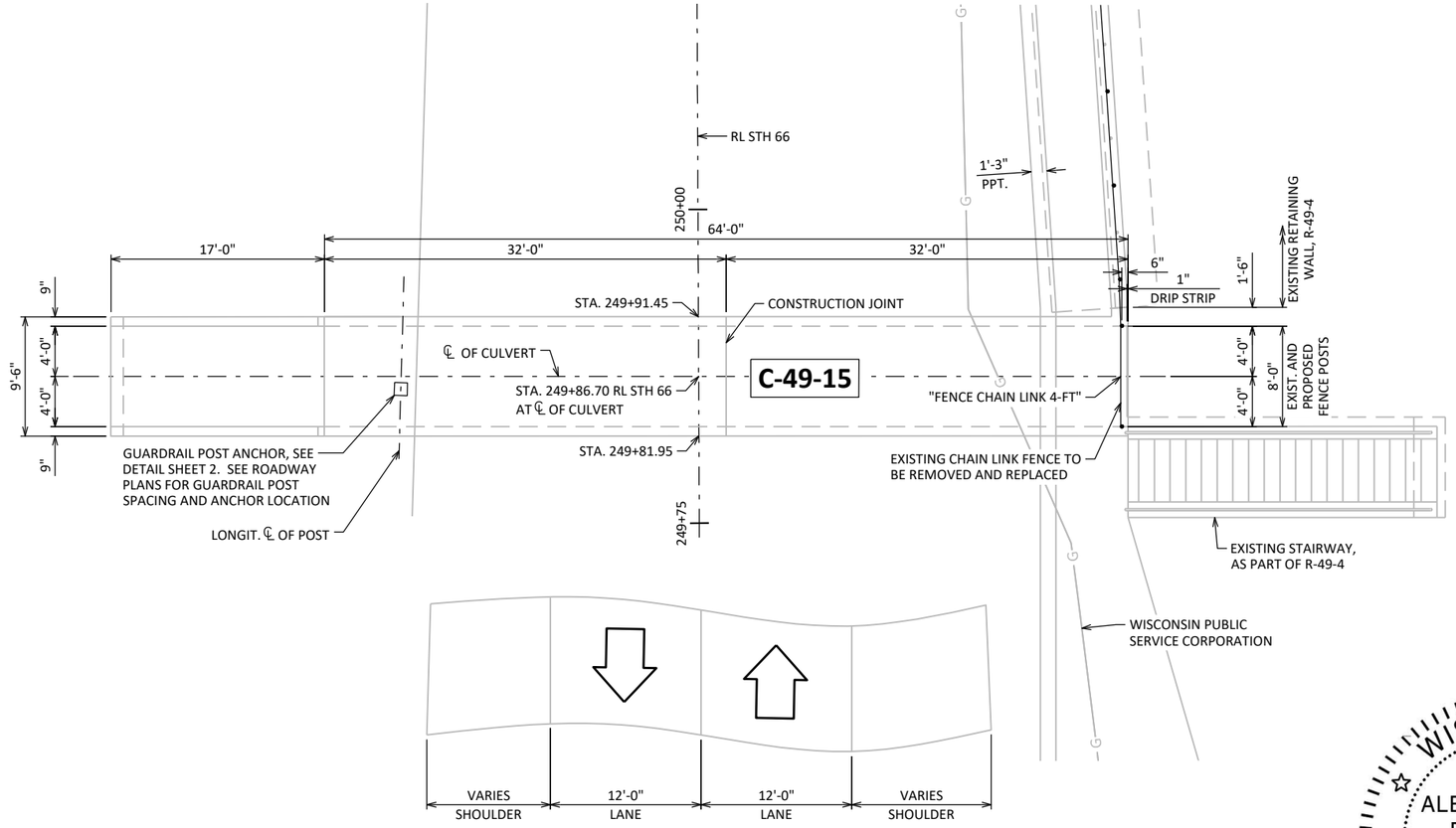
SHEET 6 OF 6

258

SCALE = 4

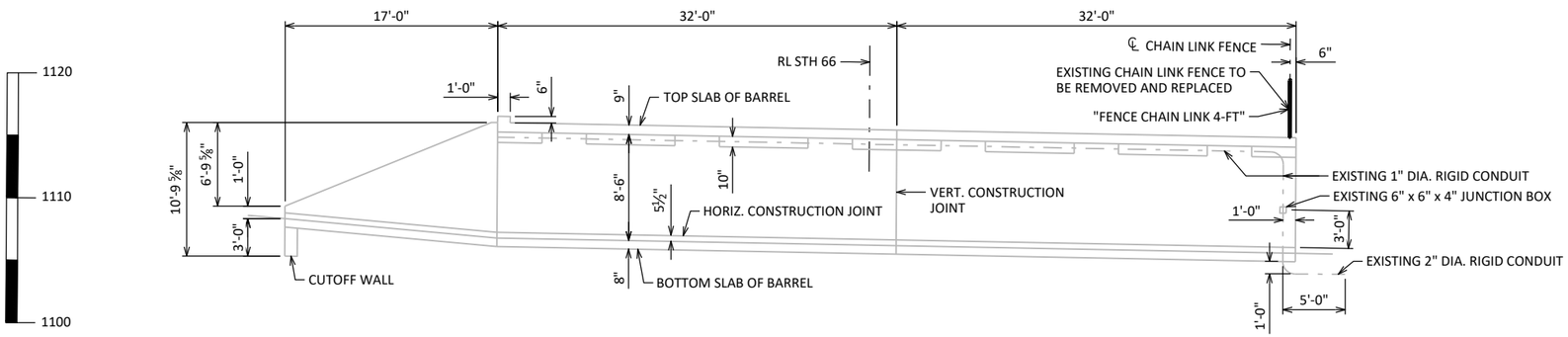
STATE PROJECT NUMBER

6280-02-76



PLAN

SINGLE CELL REINFORCED CONCRETE BOX CULVERT - CHAIN LINK FENCE REPLACEMENT



* ELEVATIONS BASED ON ORIGINAL 1985 PLANS

ELEVATION

(LOOKING EAST)

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 12/11/2023
INVENTORY RATING: N/A
OPERATING RATING: N/A
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): N/A

MATERIAL PROPERTIES:

CONCRETE MASONRY:
ALL OTHER ——— f'_c = 3,500 PSI

SCOPE OF WORK C-49-15

1. REMOVE AND REPLACE CHAIN LINK FENCE (SOUTH EDGE ONLY)

TRAFFIC DATA

FEATURE ON: STH 66

A.D.T. = 4,360 (2025)
A.D.T = 4,360 (2045)
R.D.S. = 60 MPH

FEATURE UNDER: PEDESTRIAN PATH

A.D.T. = N/A
R.D.S. = N/A

WISCONSIN
ALEXANDER B. PSCHORR
E-44374
MADISON, WI
PROFESSIONAL ENGINEER

4/26/2024

Alexander B Pschorr

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. GENERAL NOTES, QUANTITIES, & CROSS SECTION
3. FENCING REMOVAL DETAILS
4. FENCING DETAILS

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
1255 FOURIER DRIVE
SUITE 100
MADISON, WI 53717

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 05/08/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-49-15

STH 66 OVER PEDESTRIAN PATH

COUNTY	TOWN
PORTAGE	HULL

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ABP	JRS	LTK	LMVK

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
LINDA KRUEGER (608) 821-8700

GENERAL PLAN & ELEVATION

SHEET 1 OF 4
259

SCALE = 12

I.D. 6280-02-06 DATE: 1/19/24

8

8

STATE PROJECT NUMBER

6280-02-76

GENERAL NOTES

THE EXISTING STRUCTURE C-49-15, IS A BOX CULVERT WITH AN OVERALL HEIGHT OF 9'-11", AN OVERALL WIDTH OF 9'-6", AND A TYPICAL WALL THICKNESS OF 0'-9".

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS ARE BASED ON EXISTING PLANS.

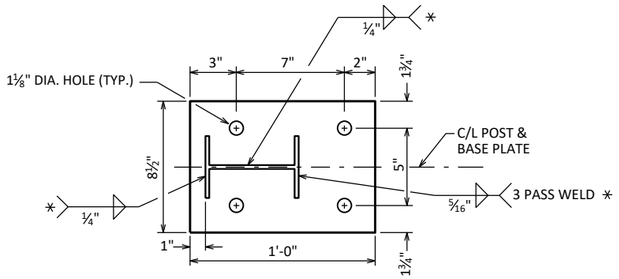
ALL STATIONS AND ELEVATIONS ARE IN FEET.

REMOVE EXISTING CHAIN LINK FENCE ALONG THE ENTIRE WIDTH OF THE BOX CULVERT. SEE "FENCING REMOVAL DETAILS" SHEET FOR FENCE POST REMOVAL AND REPAIR DETAILS. SEE "FENCING DETAILS" SHEET FOR FENCE REPLACEMENT DETAILS. REMOVAL AND DISPOSAL OF EXISTING FENCE INCLUDED IN "REMOVING STRUCTURE C-49-15" BID ITEM.

TOTAL ESTIMATED QUANTITIES

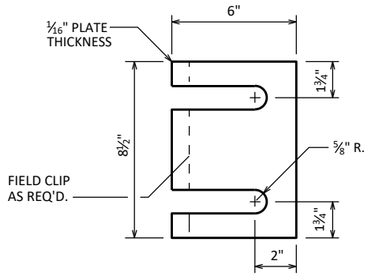
ITEM NUMBER	ITEM DESCRIPTION	UNIT	CULVERT	TOTAL
203.0220.03	REMOVING STRUCTURE C-49-15	EACH	1	1
509.1500	CONCRETE SURFACE REPAIR	SF	2	2
616.0204	FENCE CHAIN LINK 4-FT	LF	10	10

NOTE: CONCRETE SURFACE REPAIR QUANTITY IS APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD BY THE ENGINEER.



SECTION A-A

POST & BASE PLATE



STEEL SHIM DETAIL

4 PER POST

NOTES

DETAILS SHOWN FOR POSTS, PLATES, ANCHORAGE SYSTEM AND INSTALLATION, BLOCKS, AND GUARDRAIL ARE NOT PART OF THE STRUCTURE CONTRACT, BUT ARE BID PER THE ROADWAY DESIGN PLANS.

POST BASE PLATES (AND BOTTOM PLATES IF USED) SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

CUT BOTTOM OF POST SO THAT POST WILL BE VERTICAL WHEN POST ASSEMBLY IS PLACED ON TOP OF THE CULVERT. ALONG THE ROADWAY THE POST WILL BE NORMAL TO GRADE LINE. HEX BOLTS AND THREADED RODS ARE TO BE PLACED PERPENDICULAR TO THE BASE PLATE (AND BOTTOM PLATE IF USED).

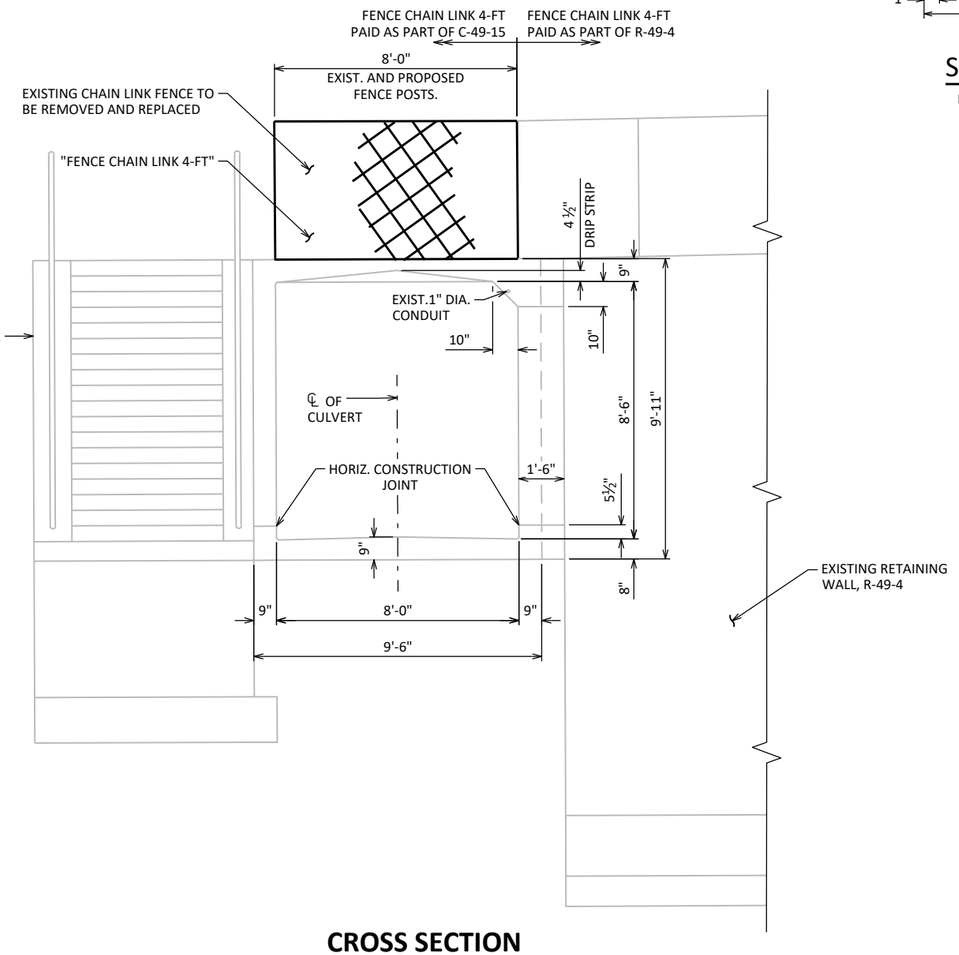
POST, BASE PLATE (AND BOTTOM PLATE IF USED), AND SHIMS SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL POSTS AND PLATES SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY SSPC SPECS.

ALL MATERIAL USED IN POSTS AND PLATES SHALL BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A709 GRADE 50 OR 50S.

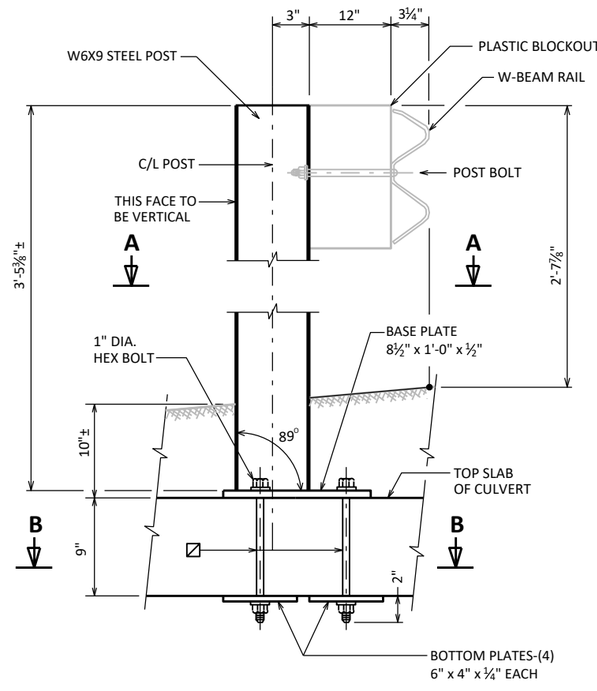
HEX BOLTS, THREADED RODS, HEX NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1554 GRADE 36, AND SHALL BE GALVANIZED. RODS ARE TO BE FULLY THREADED AND BOLTS TO BE THREADED 3". CHAMFER TOP OF BOLTS AND RODS BEFORE THREADING.

STEEL SHIMS MAY BE USED BETWEEN PLATES AND SLAB WHERE REQUIRED FOR ALIGNMENT.



CROSS SECTION

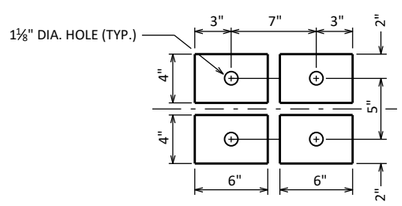
(LOOKING NORTH)



ELEVATION

GUARDRAIL POST ANCHORS TYPE 2

1 REQUIRED



SECTION B-B

(4)-BOTTOM PLATES

LEGEND

∗ WELDING IS TO BE COMPLETED USING THE GAS-METAL ARC WELDING (GMAW) PROCESS WITH ER70S-3 WELDING WIRE AND ARGON-OXYGEN OR CO_2 COVER GAS.

☒ THRU-BOLTS (1-INCH DIA. HEX BOLT). DRILL THRU TOP SLAB. HOLES FOR THE ANCHOR BOLTS SHALL BE CORE DRILLED (NOT HAMMER DRILLED). CARE SHALL BE TAKEN TO MINIMIZE SPALLING ON THE UNDERSIDE OF THE TOP SLAB OF THE CULVERT DURING DRILLING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-49-15

DRAWN BY LTK | PLANS CK'D LMVK

GENERAL NOTES, QUANTITIES, & CROSS SECTION

SHEET 2 OF 4

260

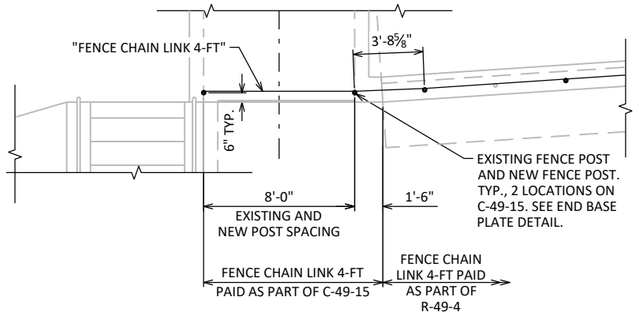
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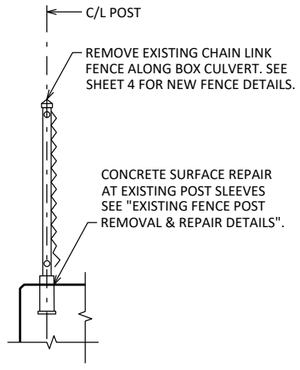
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STATE PROJECT NUMBER

6280-02-76

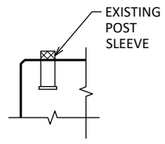


POST SPACING DETAIL

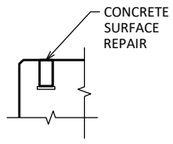


SECTION THRU EXISTING FENCE ON BOX CULVERT

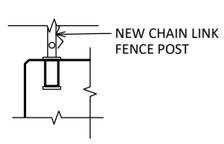
REMOVAL WORK SHALL BE PAID FOR UNDER "REMOVING STRUCTURE C-49-15"



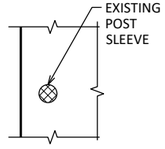
SECTION



SECTION

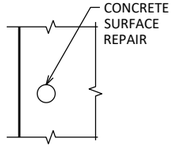


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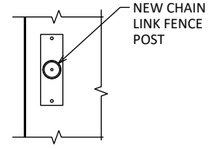
PLAN

① REMOVE EXISTING STEEL POST SLEEVE FLUSH WITH CONCRETE. WORK SHALL BE PAID FOR UNDER BID ITEM, "REMOVING STRUCTURE C-49-15".



PLAN

② FILL POST SLEEVE WITH CONCRETE. WORK TO BE PAID FOR UNDER BID ITEM "CONCRETE SURFACE REPAIR".



PLAN

③ INSTALL NEW CHAIN LINK FENCE. SEE POST SPACING DETAIL FOR POST SPACING, AND SEE SHEET 4 FOR ADDITIONAL DETAILS. INSTALL NEW FENCE POSTS OVER OLD FENCE POST SLEEVES, FOR DETAILS SEE END BASE PLATE DETAIL.

EXISTING FENCE POST REMOVAL & REPAIR DETAILS

(REQUIRED AT 2 POSTS AT SOUTH END OF CULVERT)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-49-15

DRAWN BY ABP | PLANS CK'D LMVK

FENCING REMOVAL DETAILS

SHEET 3 OF 4

261

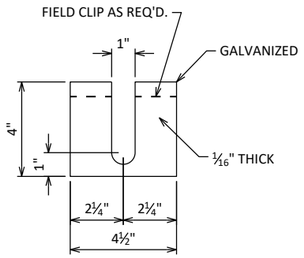
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STATE PROJECT NUMBER

6280-02-76

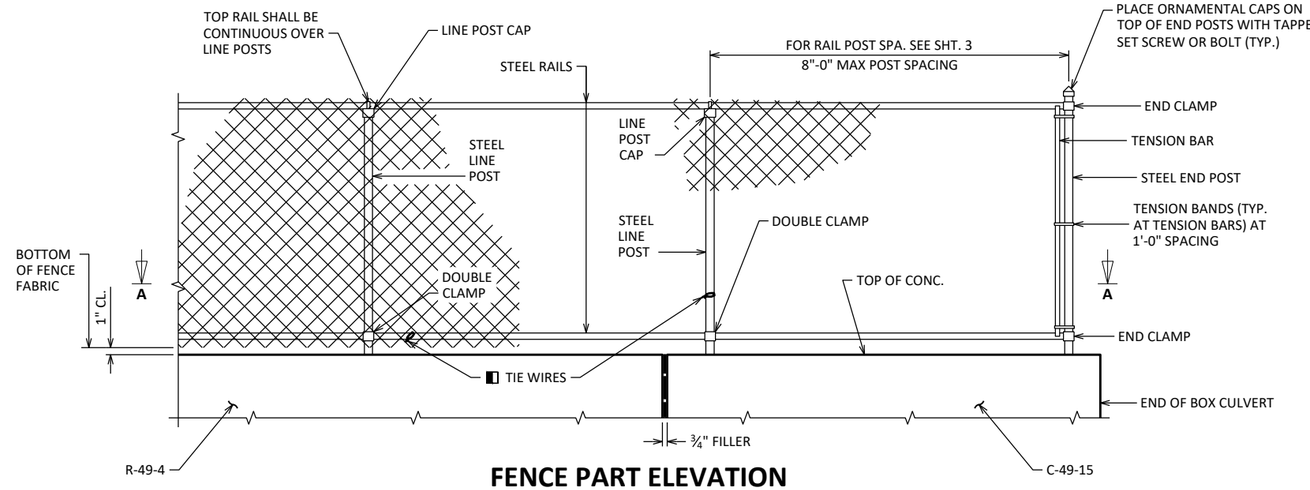
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



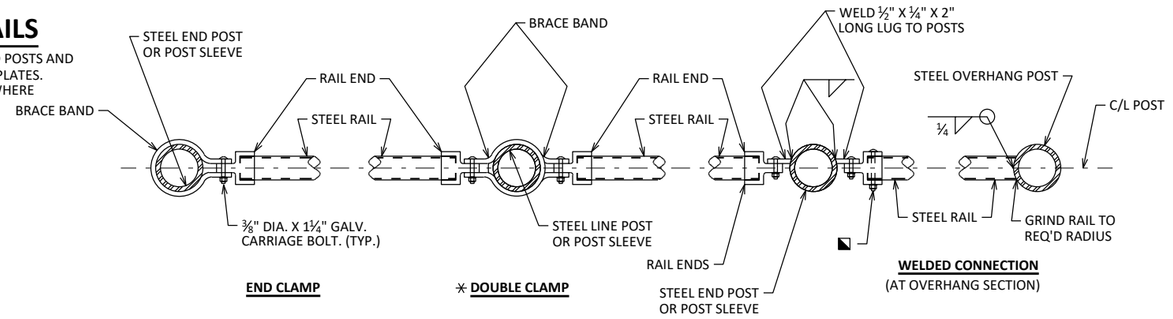
POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



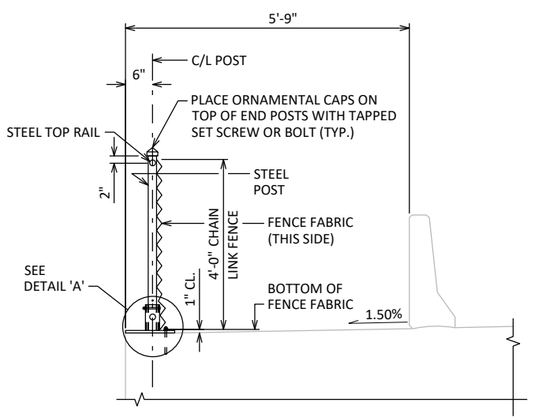
FENCE PART ELEVATION

VIEWING FABRIC SIDE

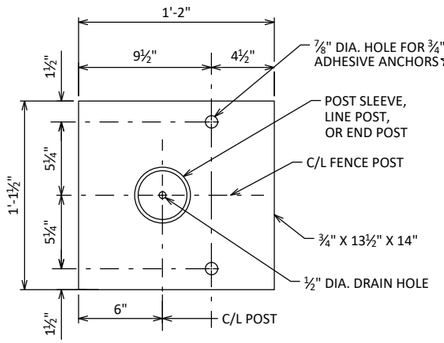


SECTION A-A

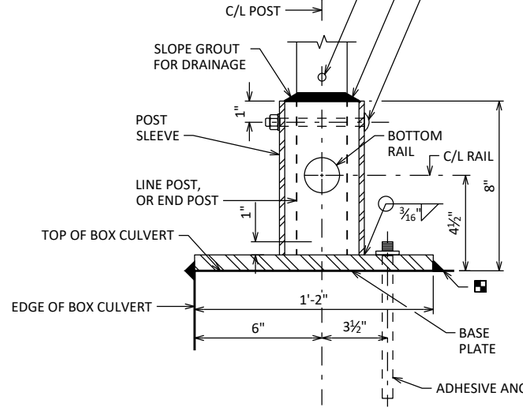
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



SECTION THRU FENCE



END BASE PLATE DETAIL



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.

NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OF A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT".

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

▪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

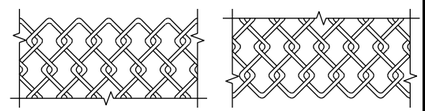
✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

☆ CONCRETE ADHESIVE ANCHORS ¾-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS. MINIMUM YIELD STRENGTH OF THE ADHESIVE ANCHOR SHALL BE 55 KSI. TO BE INCLUDED IN BID ITEM, "FENCE CHAIN LINK 4-FT".

◧ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◹ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR ¼ POINT OF POST SPACING.



TOP DETAIL **BOTTOM DETAIL**

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-49-15

DRAWN BY ABP | PLANS CK'D LMVK

FENCING DETAILS

SHEET 4 OF 4
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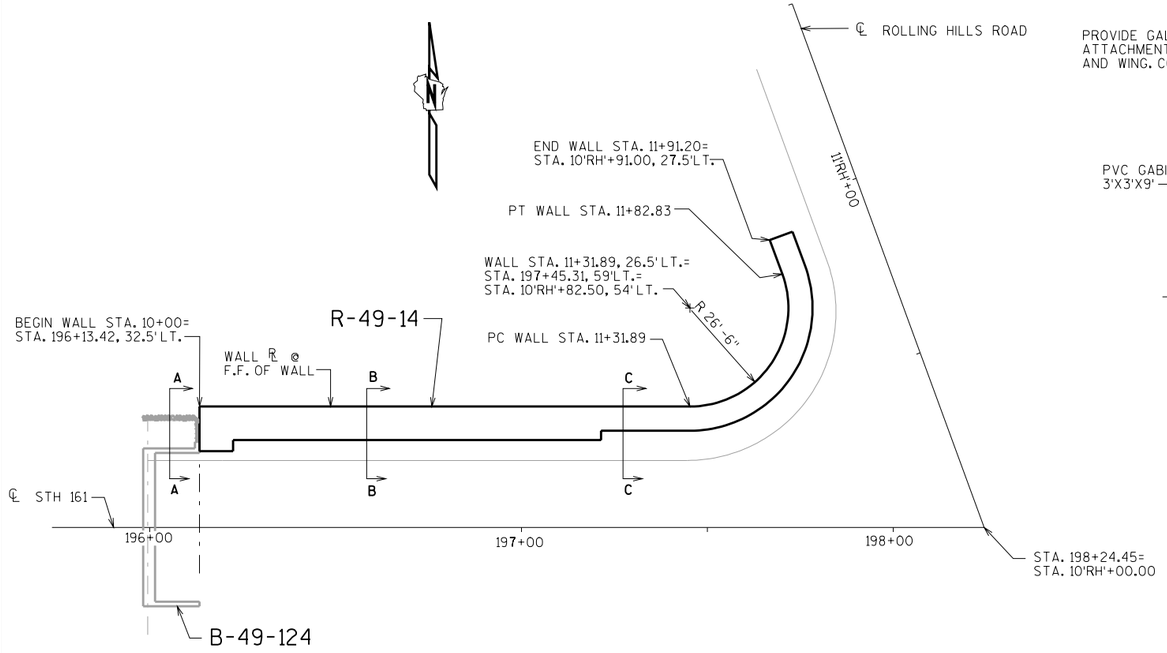
SCALE = 10.7

8

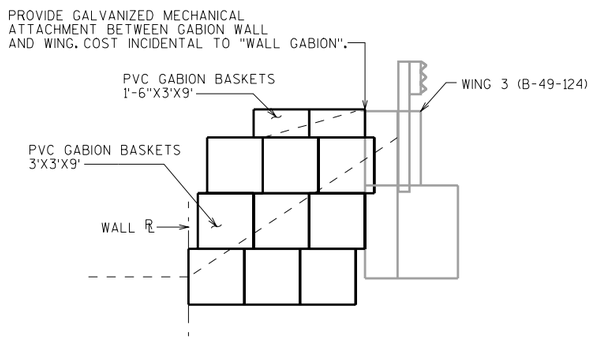
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STATE PROJECT NUMBER

6260-00-74

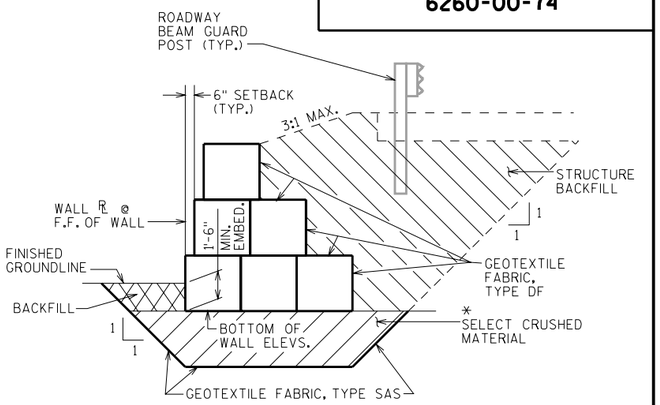


WALL PLAN



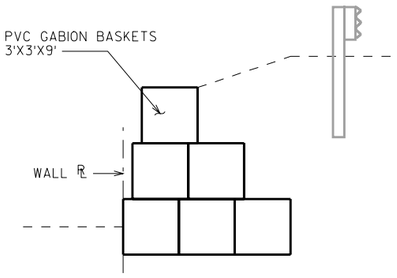
SECTION A-A

WALL STA. 10+00 TO 10+09



TYP. WALL SECTION

* SELECT CRUSHED MATERIAL TO BE PLACED AS DIRECTED BY ENGINEER IN AREA WHERE SOFT SILT AND LOOSE SILTY SANDS ARE REMOVED. APPROXIMATE DEPTH = 2' TO 3'± FROM BOTTOM OF WALL.



SECTION B-B

WALL STA. 10+09 TO 11+08

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE CONSTRUCTION OF THE GABION WALL AND FILL SHOULD BE COMPLETED APPROX. 3 MONTHS PRIOR TO PAVING OF THE ROAD TO ALLOW FOR CONSOLIDATION.

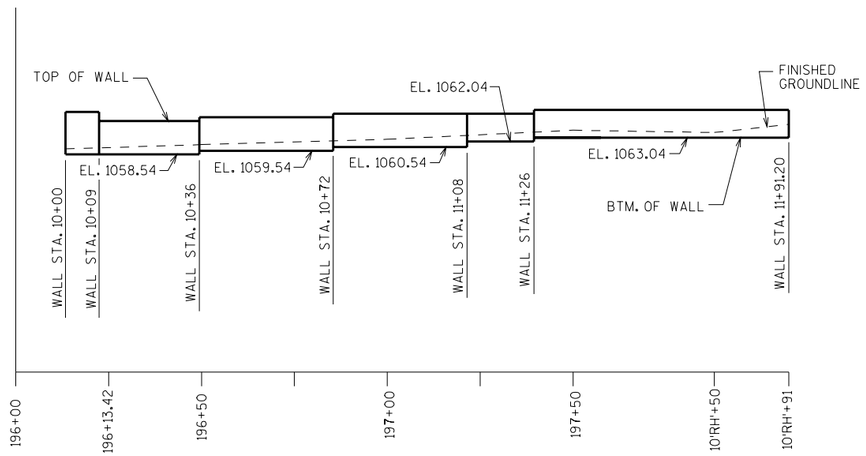
LOCATE THE EXISTING SPRINGS IN THE AREA OF THE FILL AND BACKFILL WITH THE SELECT CRUSHED MATERIAL WITH DAY LIGHTING OF THE FLOW TO A DITCH IN FRONT OF THE GABION WALL.

THE DISTRICT ENGINEER SHOULD BE PRESENT TO EVALUATE THE SUBSURFACE CONDITIONS AT THE TIME OF CONSTRUCTION.

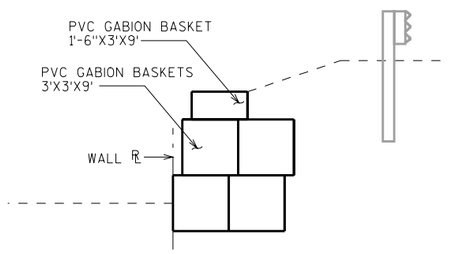
THE SELECT CRUSHED MATERIAL AND STRUCTURE BACKFILL IS INCLUDED IN THE BID ITEM "WALL GABION".

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	TOTALS
WALL GABION	CY	363
GEOTEXTILE FABRIC TYPE SAS	SY	340
GEOTEXTILE FABRIC TYPE DF	SY	271



WALL ELEVATION



SECTION C-C

WALL STA. 11+08 TO 11+91.20

LIST OF DRAWINGS

1. GABION WALL
2. SUBSURFACE EXPLORATION

STRUCTURES DESIGN CONTACTS:
BILL DREHER (608) 261-8205
WARNER RISSER (608) 266-5081

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

APPROVED William C. Dreher SDR 2-28-07
CHIEF STRUCTURAL DESIGN ENGINEER — DATE

STRUCTURE R-49-14

ALONG STH 161

COUNTY: PORTAGE		TOWN ~~CITY/VILLAGE~~: NEW HOPE	
DESIGN SPEC.: AASHTO STD. SPEC. 2003		LOAD: HS-20	CONST. SPEC.: 2003
DESIGNED BY: D.G.	DESIGN CK'D.: ---	DRAWN BY: WWR/JHG	PLANS CK'D.: KTN

GABION WALL

SHEET 1 OF 2

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I.D. 6260-00-04A

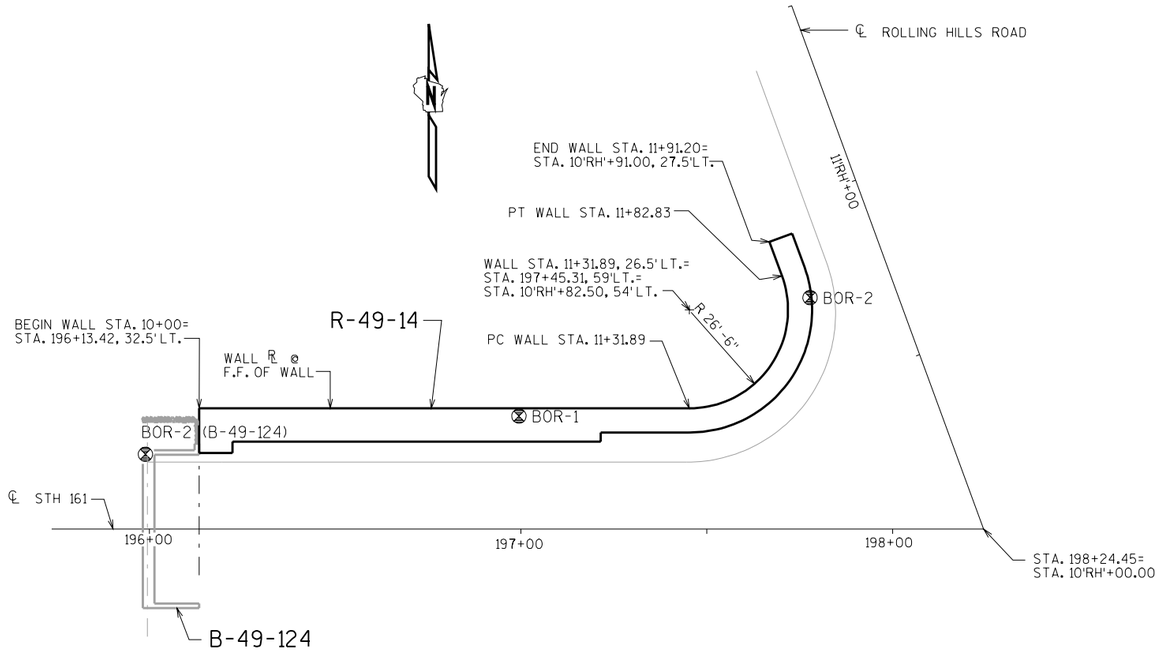
DATE: **07/11/2006**

FILE= 1-14GENERALPLAN.DGN
SCALE = 20

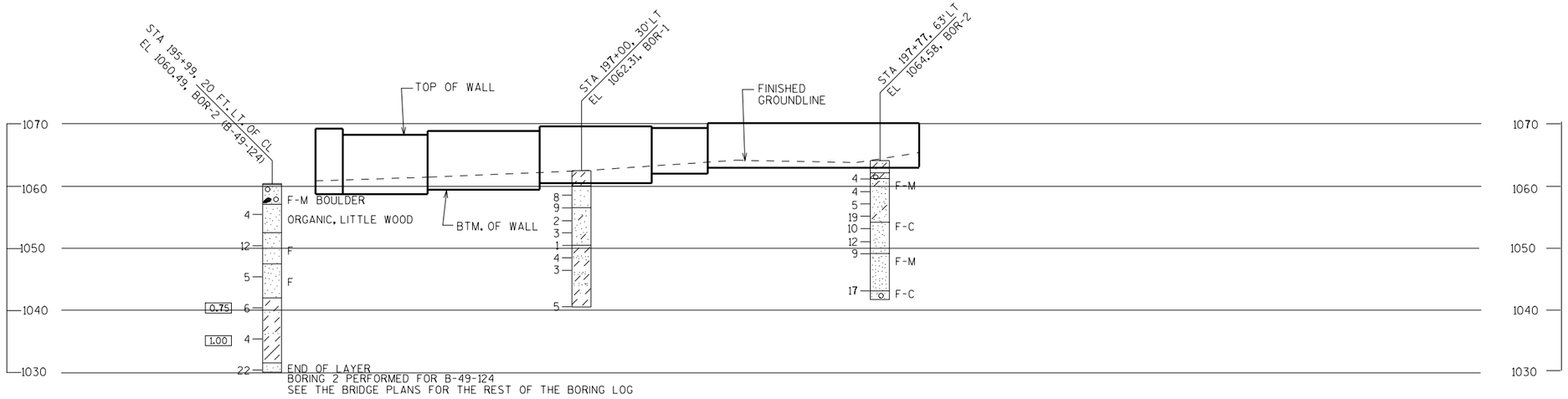
8

8

RELOCATED STH 161 GABION WALL
PORTAGE COUNTY



WALL PLAN



STATE PROJECT NUMBER

6260-00-74

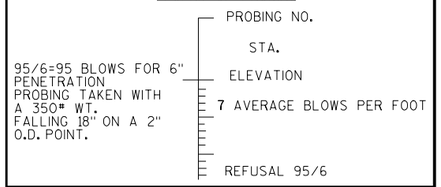
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

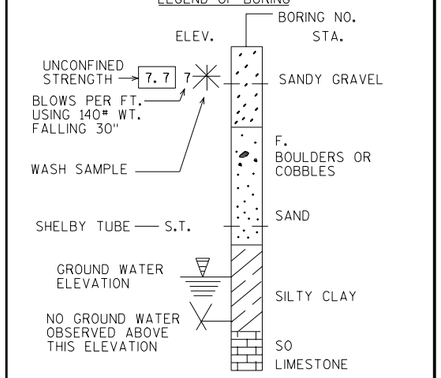
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-49-14

DRAWN BY WWR/JHG | PLANS CK'D. KTN

SUBSURFACE EXPLORATION

SHEET 2

264

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FILE= 2-14SOILS.DGN
SCALE = 1

6280-02-76/77										
		CUT			FILL		CUMULATIVE			
	STATION	AREA (SQ. FT.)	VOLUME (CU. YD.)	REUSABLE VOLUME (CU. YD.)	AREA (SQ. FT.)	VOLUME (CU. YD.)	CUT (CU. YD.)	REUSABLE CUT (CU. YD.)	FILL (CU. YD.)	NET VOLUME (CU. YD.)
STH 66	135+76.17	7.83			0.00					
STH 66	136+00.00	8.58	7.24	7.24	0.00	0.00	7.24	7.24	0.00	7.24
STH 68	136+50.00	8.99	16.27	16.27	0.00	0.00	23.51	23.51	0.00	23.51
STH 66	136+69.00	4.70	4.82	4.82	0.00	0.00	28.33	28.33	0.00	28.33
STH 66	137+00.00	8.15	7.38	7.38	0.00	0.00	35.71	35.71	0.00	35.71
STH 66	137+50.00	8.33	15.26	15.26	0.00	0.00	50.96	50.96	0.00	50.96
STH 66	137+79.00	4.74	7.02	7.02	0.00	0.00	57.98	57.98	0.00	57.98
STH 66	138+00.00	8.63	5.20	5.20	1.63	0.63	63.18	63.18	0.63	62.55
STH 66	138+50.00	7.41	14.86	14.86	0.00	1.51	78.04	78.04	2.14	75.90
STH 66	138+87.50	3.57	7.62	7.62	0.00	0.00	85.66	85.66	2.14	83.52
STH 66	139+00.00	5.78	2.16	2.16	0.00	0.00	87.83	87.83	2.14	85.69
STH 66	139+50.00	7.06	11.89	11.89	2.22	2.06	99.72	99.72	4.20	95.52
STH 66	140+00.00	6.45	12.51	12.51	3.30	5.12	112.22	112.22	9.32	102.90
STH 66	140+50.00	9.02	14.33	14.33	0.00	3.06	126.55	126.55	12.38	114.17
STH 66	141+00.00	6.95	14.78	14.78	1.88	1.74	141.33	141.33	14.12	127.22
STH 66	141+50.00	11.51	17.09	17.09	1.94	3.53	158.42	158.42	17.65	140.77
STH 66	142+00.00	1.70	12.23	12.23	0.43	2.19	170.65	170.65	19.84	150.81
STH 66	142+37.62	9.07	7.50	7.50	0.00	0.30	178.15	178.15	20.13	158.02
STH 66	142+50.00	0.00	2.08	2.08	0.00	0.00	180.23	180.23	20.13	160.10
STH 66	143+00.00	0.00	0.00	0.00	0.00	0.00	180.23	180.23	20.13	160.10
STH 66	143+50.00	0.00	0.00	0.00	0.00	0.00	180.23	180.23	20.13	160.10
STH 66	143+80.55	2.86	1.62	1.62	19.03	10.76	181.85	181.85	30.90	150.95
STH 66	144+00.00	5.85	3.14	3.14	9.00	10.09	184.99	184.99	40.99	144.00
STH 66	144+50.00	6.44	11.38	11.38	7.41	15.20	196.36	196.36	56.19	140.18
STH 66	145+00.00	5.88	11.40	11.40	8.48	14.72	207.77	207.77	70.90	136.86
STH 66	145+50.00	4.92	10.00	10.00	8.55	15.77	217.77	217.77	86.67	131.10
STH 66	146+00.00	3.90	8.17	8.17	6.83	14.23	225.93	225.93	100.90	125.03
STH 66	146+50.00	2.17	5.62	5.62	0.36	6.65	231.55	231.55	107.56	124.00
STH 66	147+00.00	2.93	4.72	4.72	0.00	0.33	236.27	236.27	107.89	128.39
STH 66	147+35.83	2.76	3.78	3.78	0.00	0.00	240.05	240.05	107.89	132.17
STH 66	147+50.00	2.84	1.47	1.47	0.00	0.00	241.52	241.52	107.89	133.64
STH 66	148+00.00	2.91	5.33	5.33	0.00	0.00	246.85	246.85	107.89	138.96
STH 66	148+50.00	3.62	6.05	6.05	0.00	0.00	252.90	252.90	107.89	145.01
STH 66	148+85.83	4.87	5.64	5.64	0.00	0.00	258.54	258.54	107.89	150.65
6280-02-76/77										
STH 66	235+75.00	59.47			0.90					
STH 66	235+85.00	58.04	21.76	21.76	21.87	4.22	21.76	21.76	4.22	17.54
STH 66	235+90.00	63.65	11.27	11.27	10.56	3.00	33.03	33.03	7.22	25.81
STH 66	235+95.00	64.70	11.88	11.88	11.56	2.05	44.91	44.91	9.27	35.64
STH 66	236+05.00	59.85	23.06	23.06	0.14	2.17	67.98	67.98	11.43	56.54

9

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PROJECT NO: 6280-02-76, 77 | HWY: STH 66 | COUNTY: PORTAGE | EARTHWORK DATA | SHEET 265 | E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 01

PLOT DATE : 4/26/2024 4:14 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1" = 1'

					6280-02-76/77					
STH 66	249+22.19	0.00			2.04					
STH 66	249+25.00	0.00	0.00	0.00	2.19	0.22	0.00	0.00	0.22	-0.22
STH 66	249+50.00	0.00	0.00	0.00	3.17	2.48	0.00	0.00	2.70	-2.70
STH 66	249+65.89	0.23	0.07	0.07	3.01	1.82	0.07	0.07	4.52	-4.45
STH 66	249+75.00	1.56	0.30	0.30	0.00	0.51	0.37	0.37	5.03	-4.66
STH 66	249+85.00	0.23	0.33	0.33	0.07	0.01	0.70	0.70	5.04	-4.34
STH 66	250+00.00	0.69	0.26	0.26	0.93	0.28	0.96	0.96	5.32	-4.36
STH 66	250+25.00	3.15	1.78	1.78	0.00	0.43	2.74	2.74	5.75	-3.01
STH 66	250+50.00	0.00	1.46	1.46	1.28	0.59	4.20	4.20	6.34	-2.14
STH 66	250+64.67	0.00	0.00	0.00	0.56	0.50	4.20	4.20	6.84	-2.64

					6280-02-76/77					
TORUN RD	10+50.00	65.97			38.79					
TORUN RD	10+75.00	64.03	60.19	60.19	11.64	23.35	60.19	60.19	23.35	36.84
TORUN RD	10+87.14	62.25	28.39	28.39	6.44	4.07	88.58	88.58	27.41	61.16
TORUN RD	11+00.00	54.92	27.90	27.90	0.00	1.53	116.48	116.48	28.95	87.53
TORUN RD	11+12.50	49.29	24.12	24.12	0.01	0.00	140.60	140.60	28.95	111.65
TORUN RD	11+25.00	45.96	22.05	22.05	0.00	0.00	162.65	162.65	28.95	133.70
TORUN RD	11+50.00	58.00	48.13	48.13	0.00	0.00	210.78	210.78	28.95	181.83
TORUN RD	11+62.50	56.24	26.45	26.45	0.00	0.00	237.22	237.22	28.95	208.27
TORUN RD	11+75.00	54.33	25.60	25.60	0.00	0.00	262.82	262.82	28.95	233.87
TORUN RD	11+87.14	39.43	21.08	21.08	0.13	0.03	283.90	283.90	28.98	254.92
TORUN RD	12+00.00	34.55	17.62	17.62	0.11	0.06	301.52	301.52	29.04	272.48

					6280-02-76/77					
CTH Y	10+60.00	0.00			1.75					
CTH Y	10+70.00	0.00	0.00	0.00	0.88	0.49	0.00	0.00	0.49	-0.49
CTH Y	10+80.00	0.00	0.00	0.00	0.75	0.30	0.00	0.00	0.79	-0.79
CTH Y	10+85.00	0.00	0.00	0.00	0.92	0.15	0.00	0.00	0.94	-0.94
CTH Y	10+90.00	0.00	0.00	0.00	1.15	0.19	0.00	0.00	1.14	-1.14
CTH Y	11+00.00	0.12	0.02	0.02	0.16	0.24	0.02	0.02	1.38	-1.36
CTH Y	11+04.37	0.14	0.02	0.02	0.74	0.07	0.04	0.04	1.45	-1.41
CTH Y	11+25.00	0.00	0.05	0.05	6.68	2.83	0.10	0.10	4.29	-4.19
CTH Y	11+30.57	0.00	0.00	0.00	8.03	1.52	0.10	0.10	5.80	-5.71
CTH Y	11+50.00	0.00	0.00	0.00	2.44	3.77	0.10	0.10	9.57	-9.47
CTH Y	11+55.55	0.16	0.02	0.02	2.38	0.49	0.11	0.11	10.06	-9.95

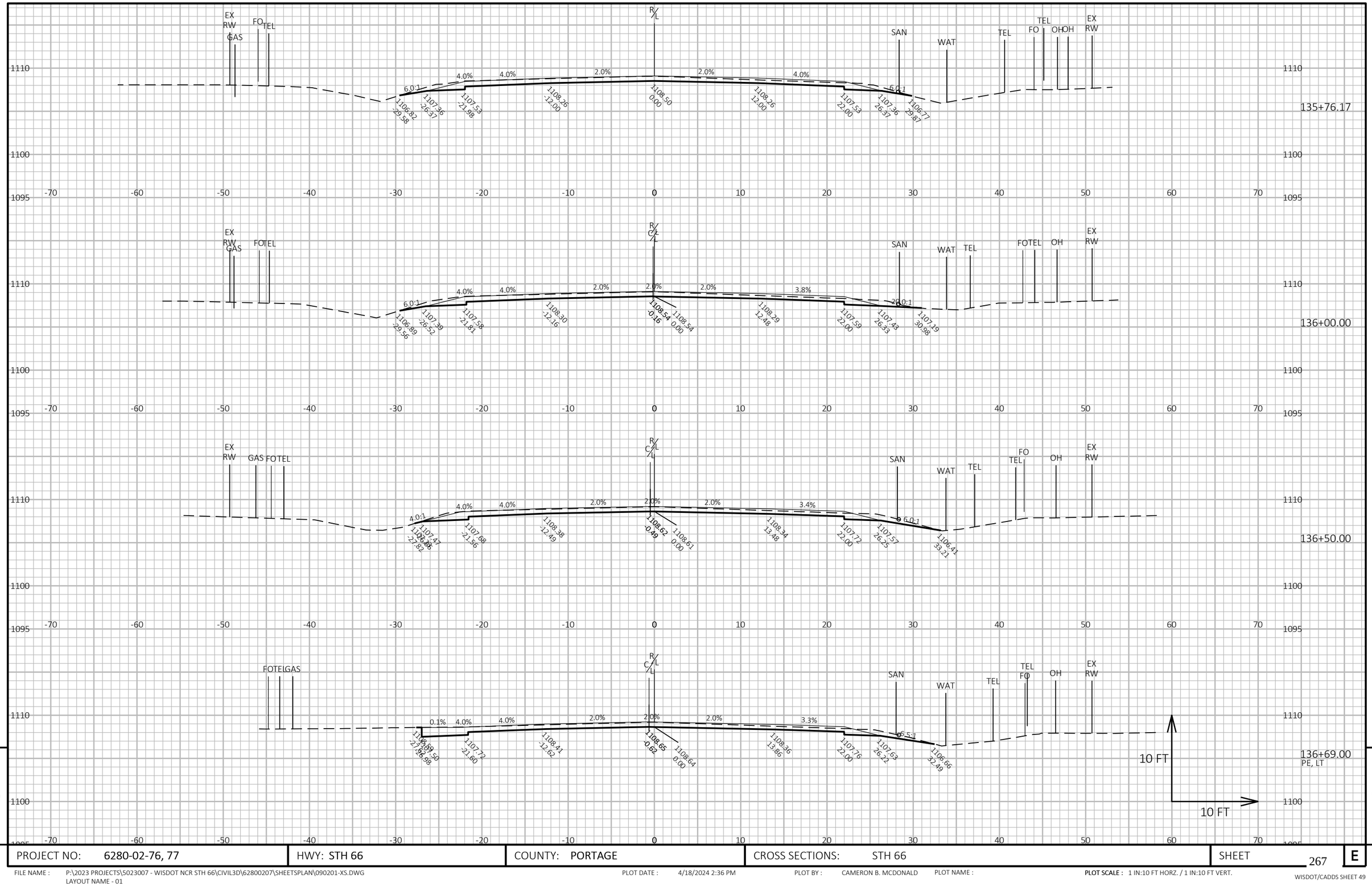
9

9

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	EARTHWORK DATA	SHEET 266	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 02

PLOT DATE : 4/26/2024 4:14 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1" = 1'

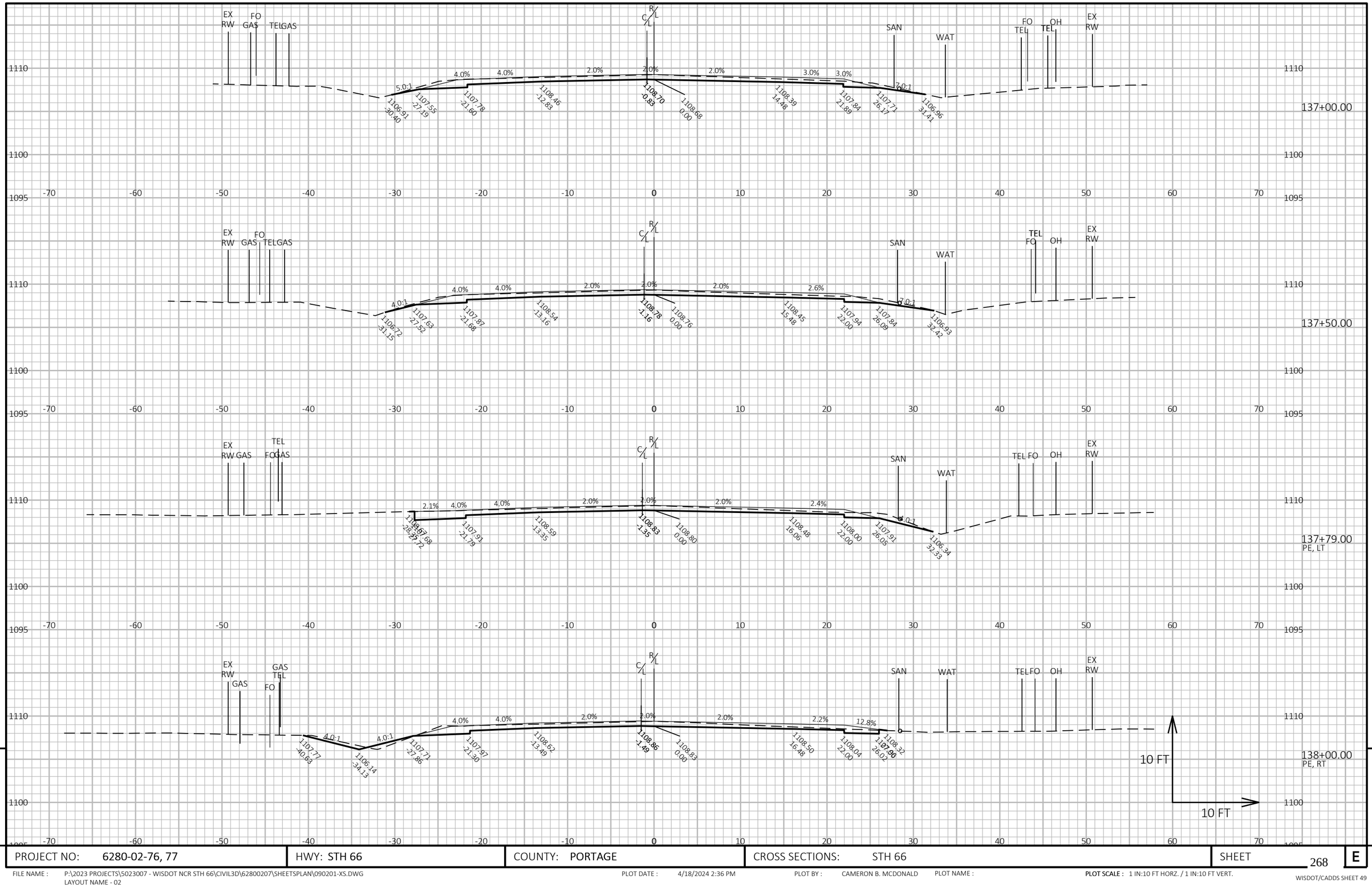


PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 267	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 268	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

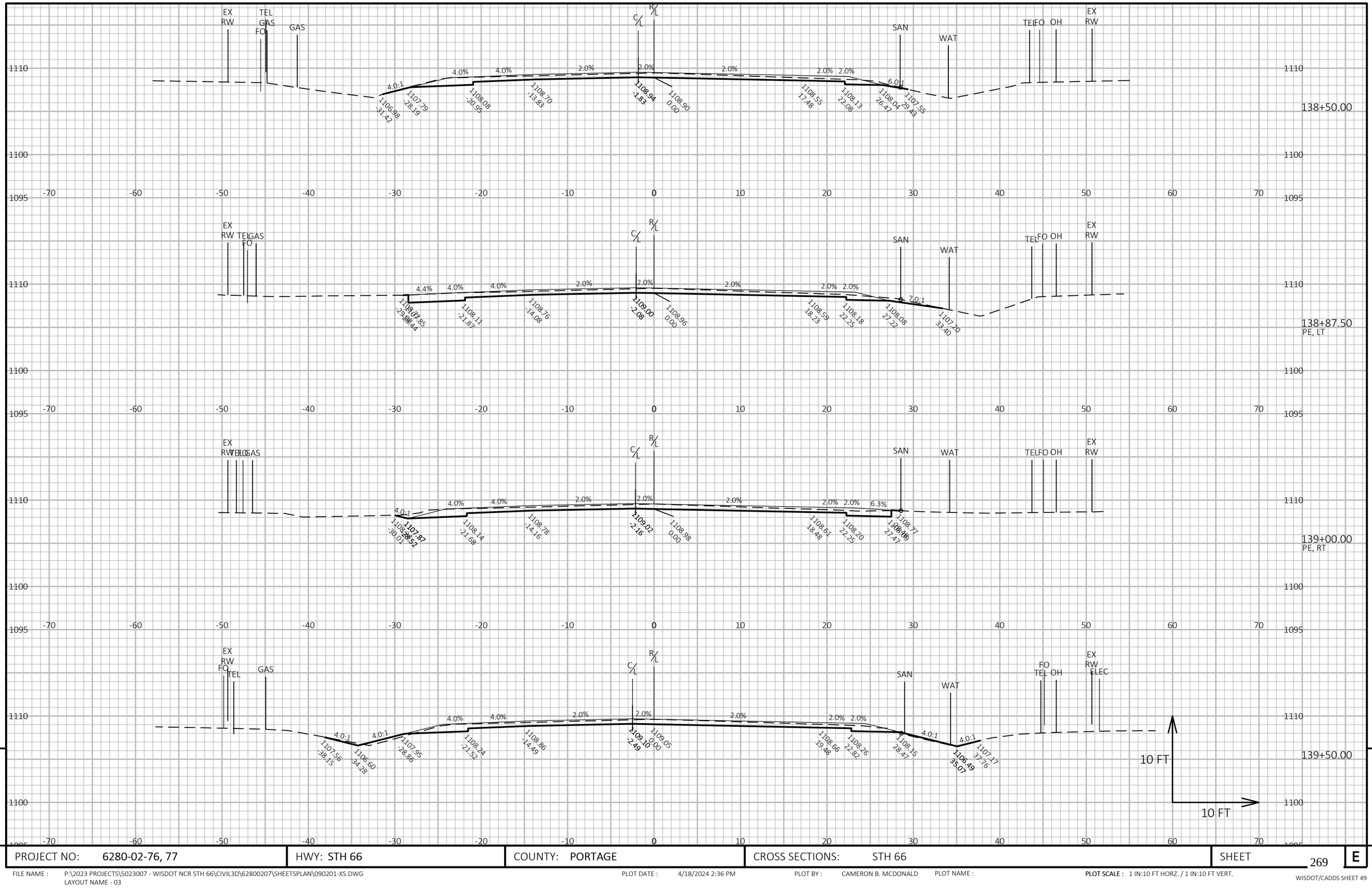
PLOT DATE : 4/18/2024 2:36 PM

PLOT BY : CAMERON B. MCDONALD

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 269	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

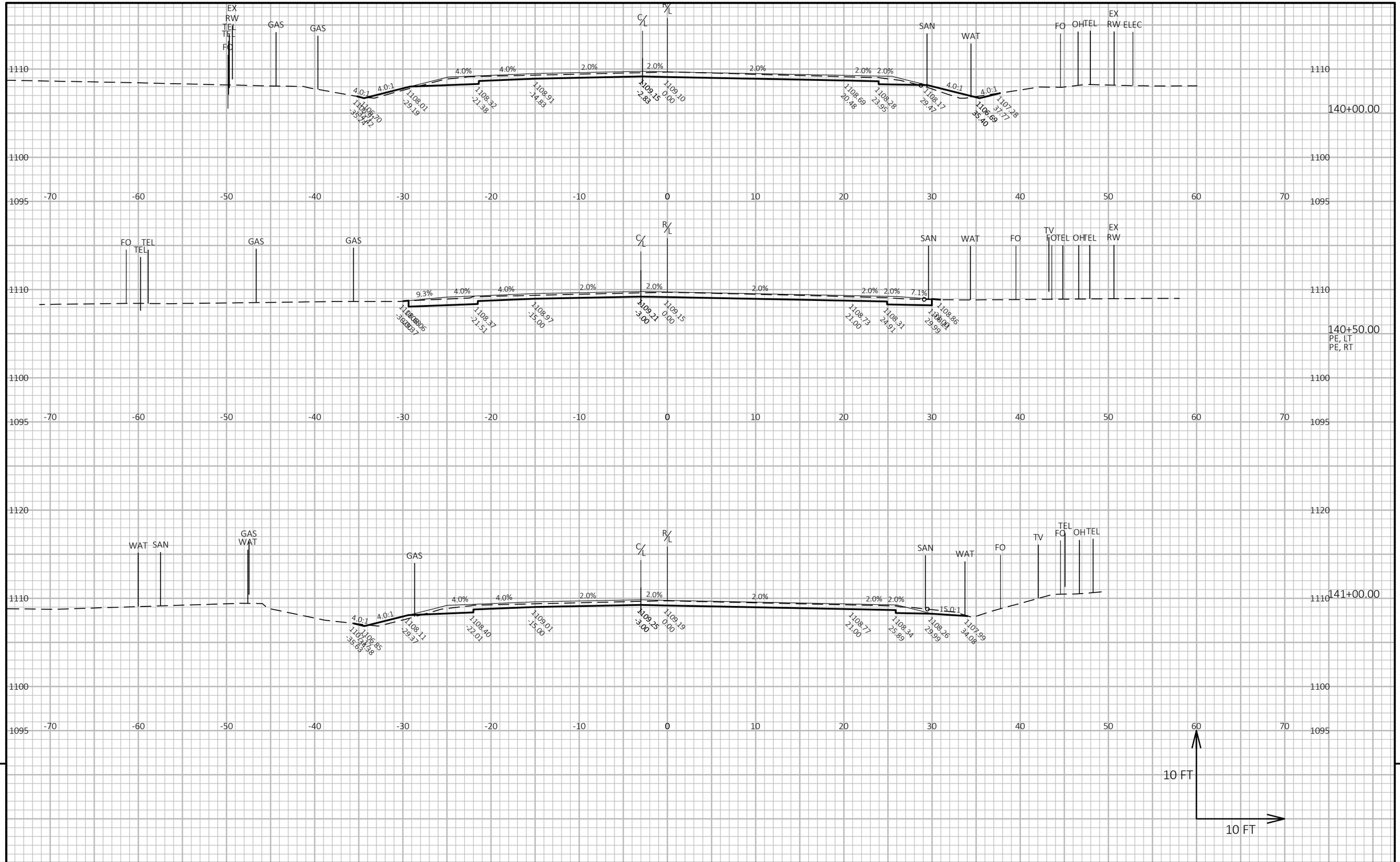
PLOT DATE : 4/18/2024 2:36 PM

PLOT BY : CAMERON B. MCDONALD

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 270 E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

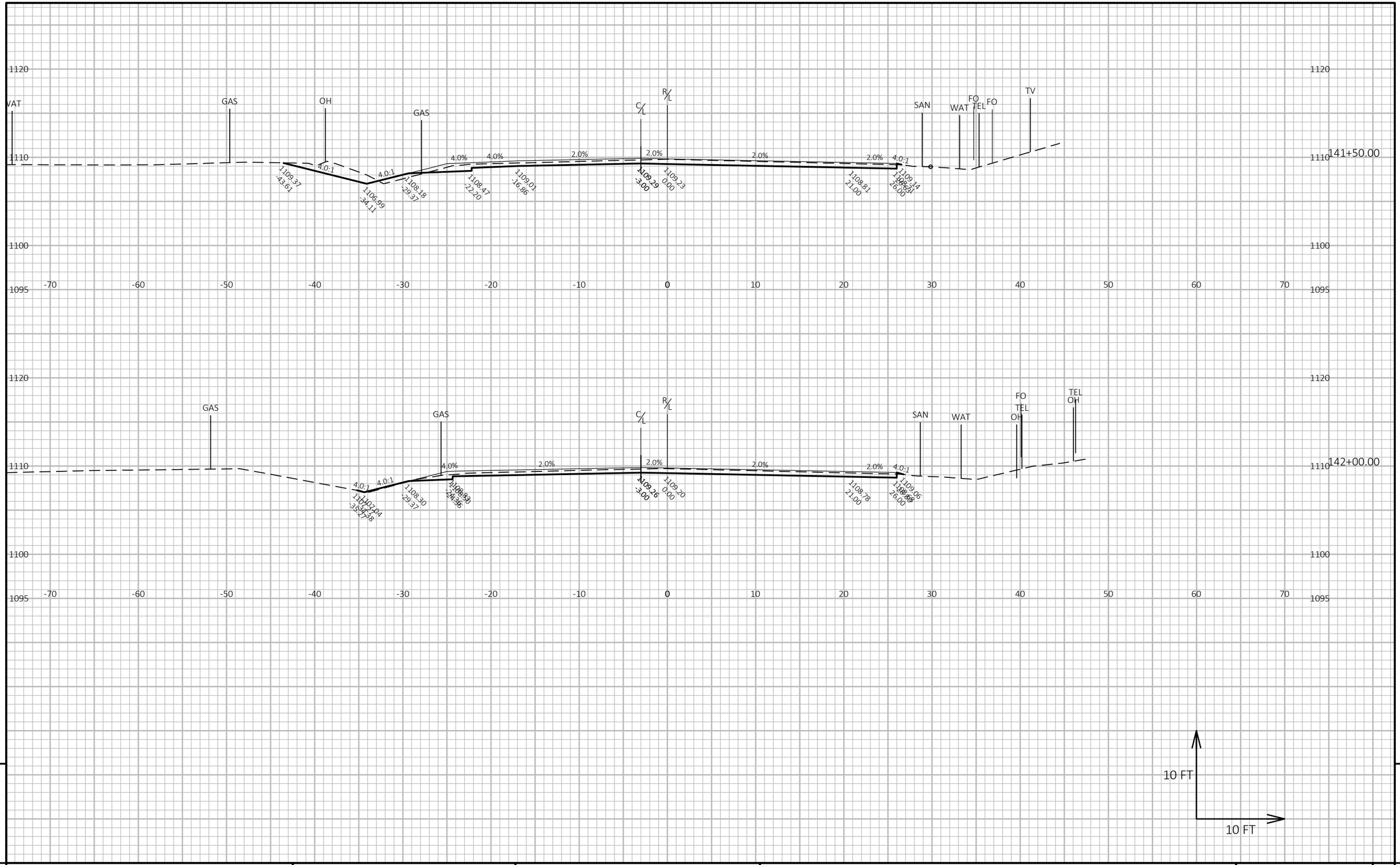
PLOT DATE : 4/18/2024 2:36 PM

PLOT BY : CAMERON B. MCDONALD

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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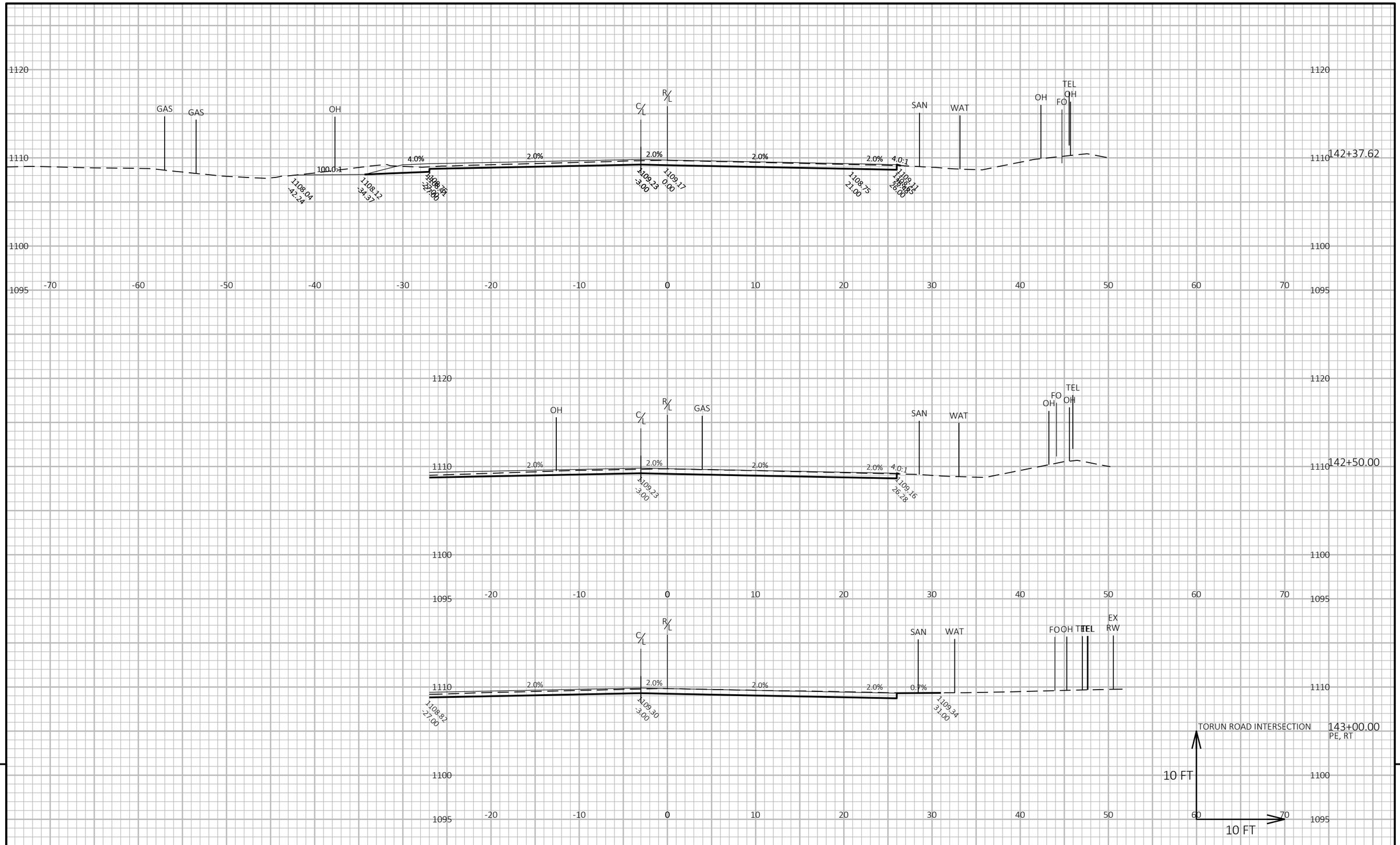
9

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 271	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 272	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

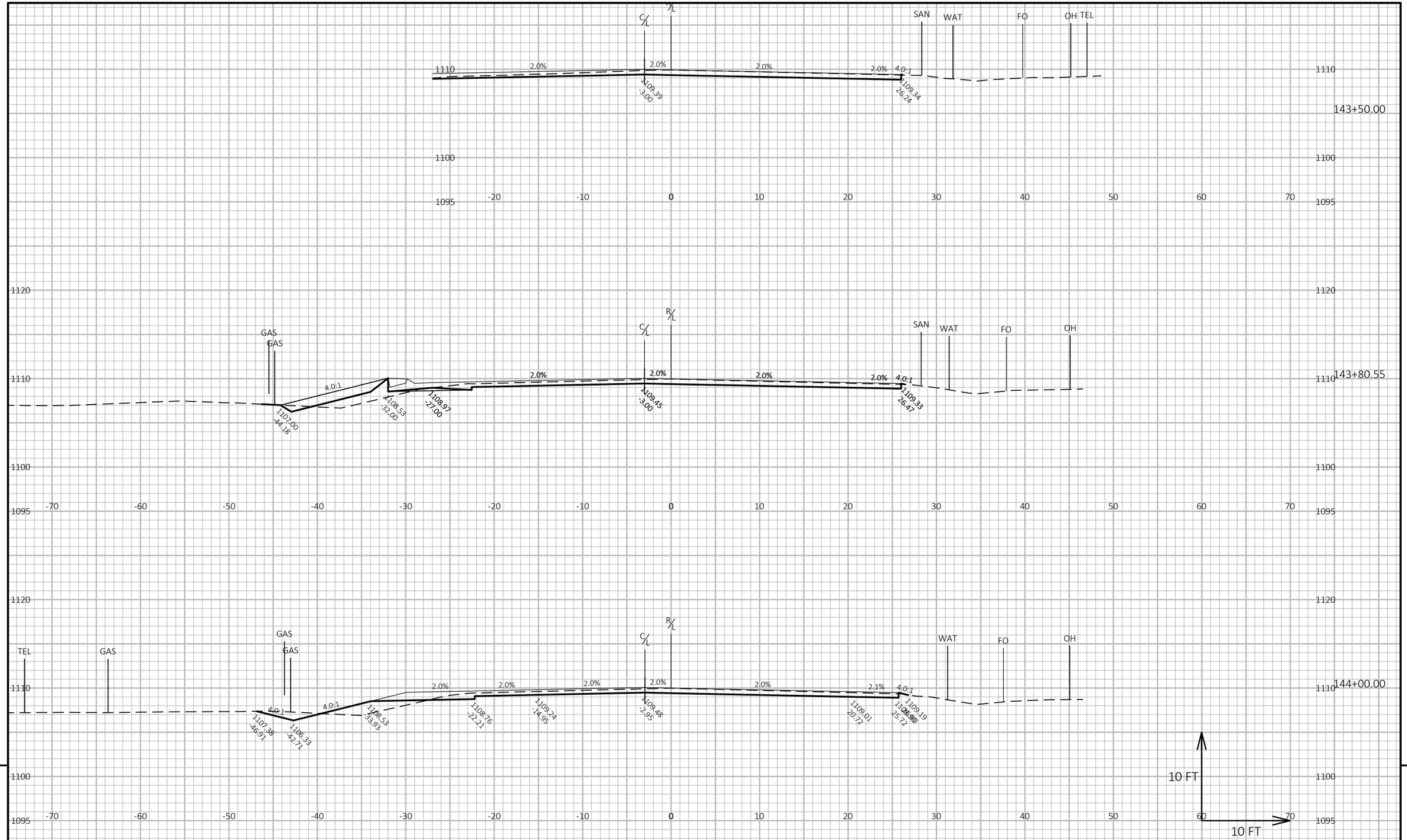
PLOT DATE : 4/18/2024 2:36 PM

PLOT BY : CAMERON B. MCDONALD

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

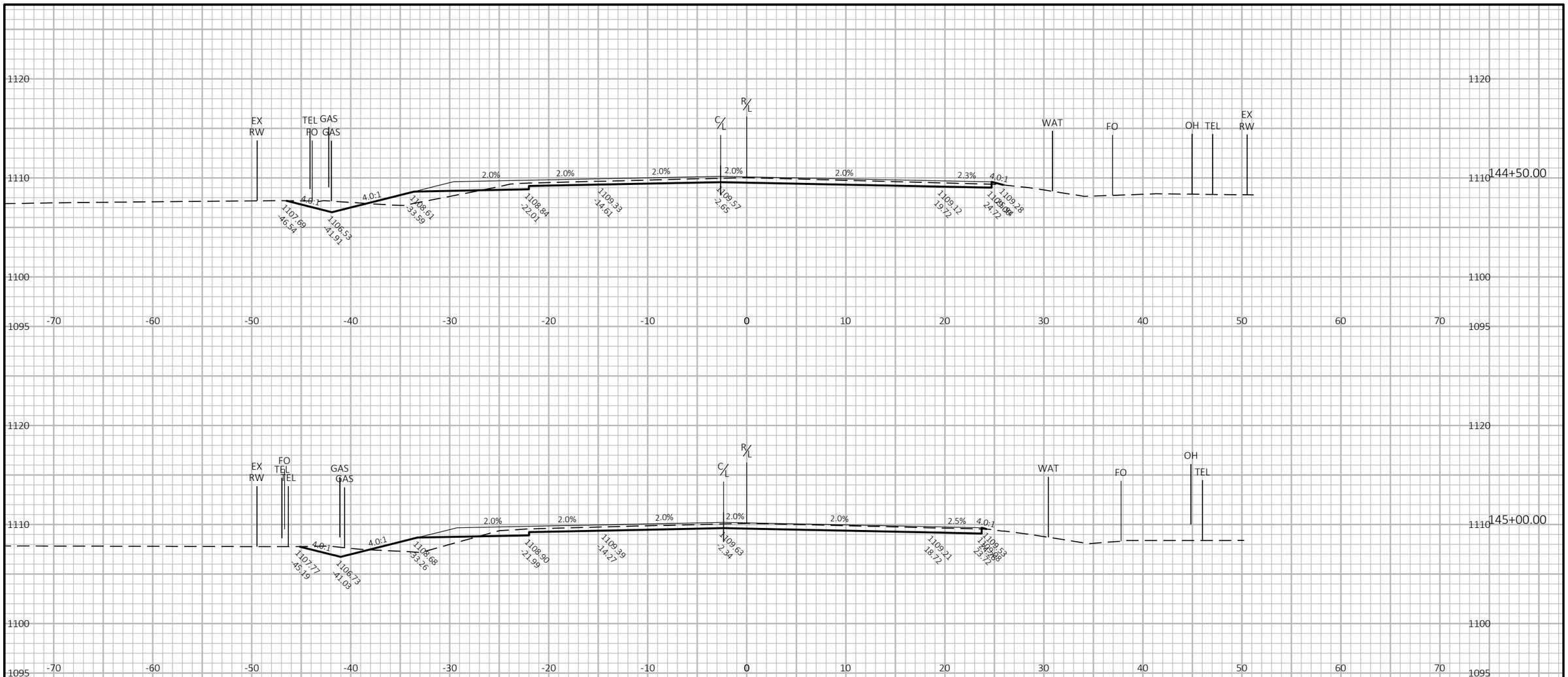


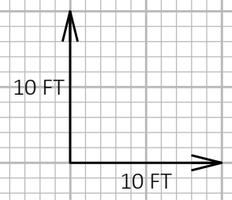
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 273	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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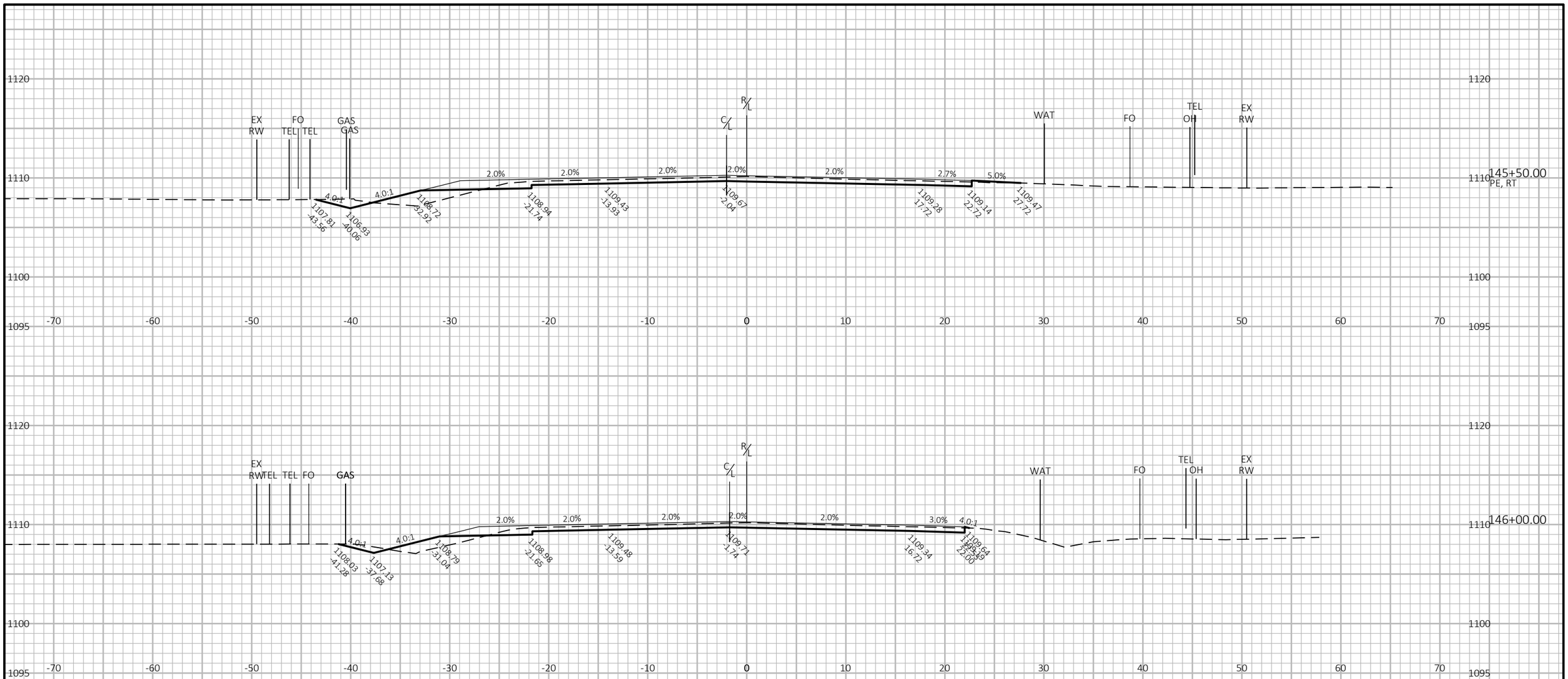
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 274	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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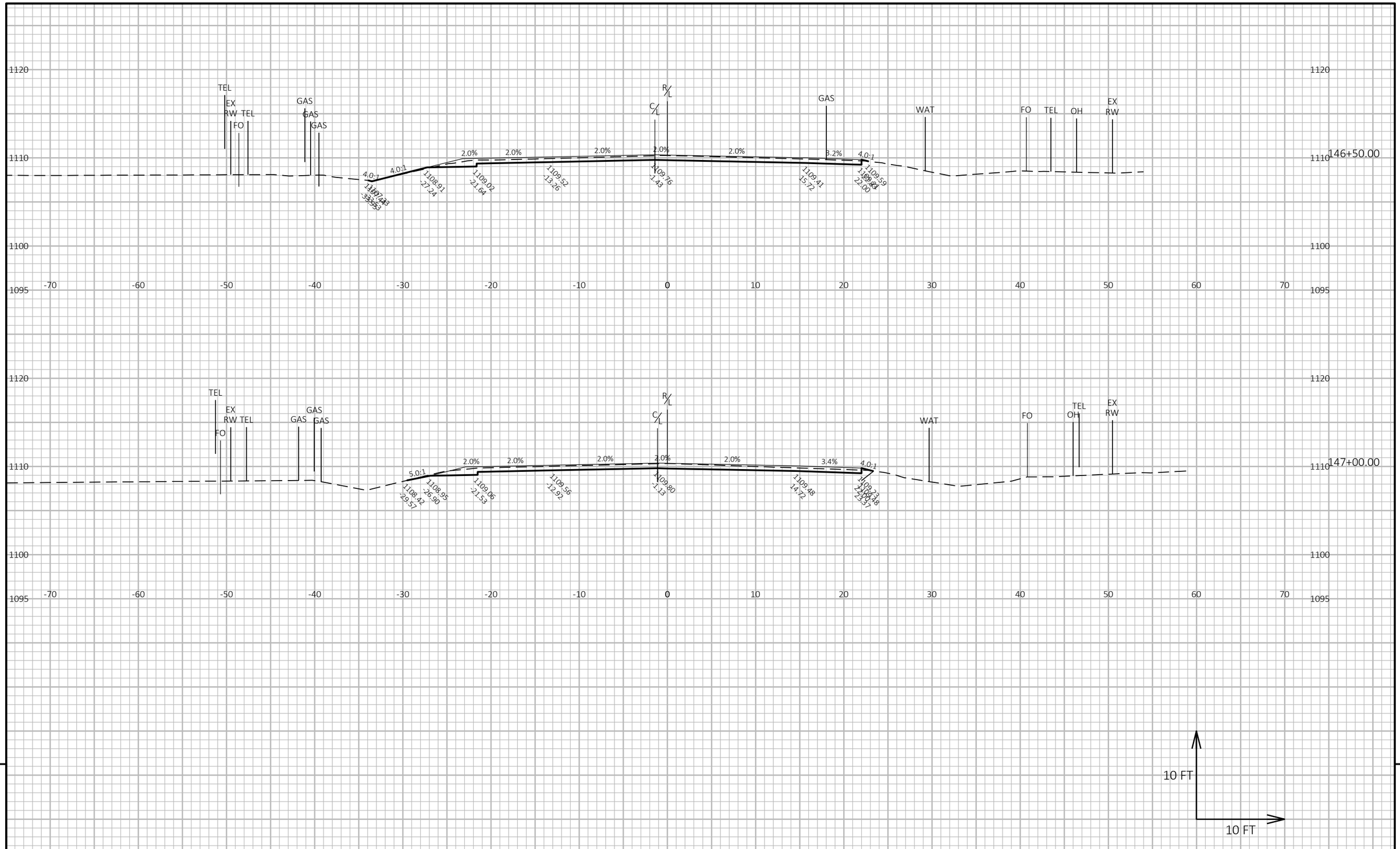
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 275	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



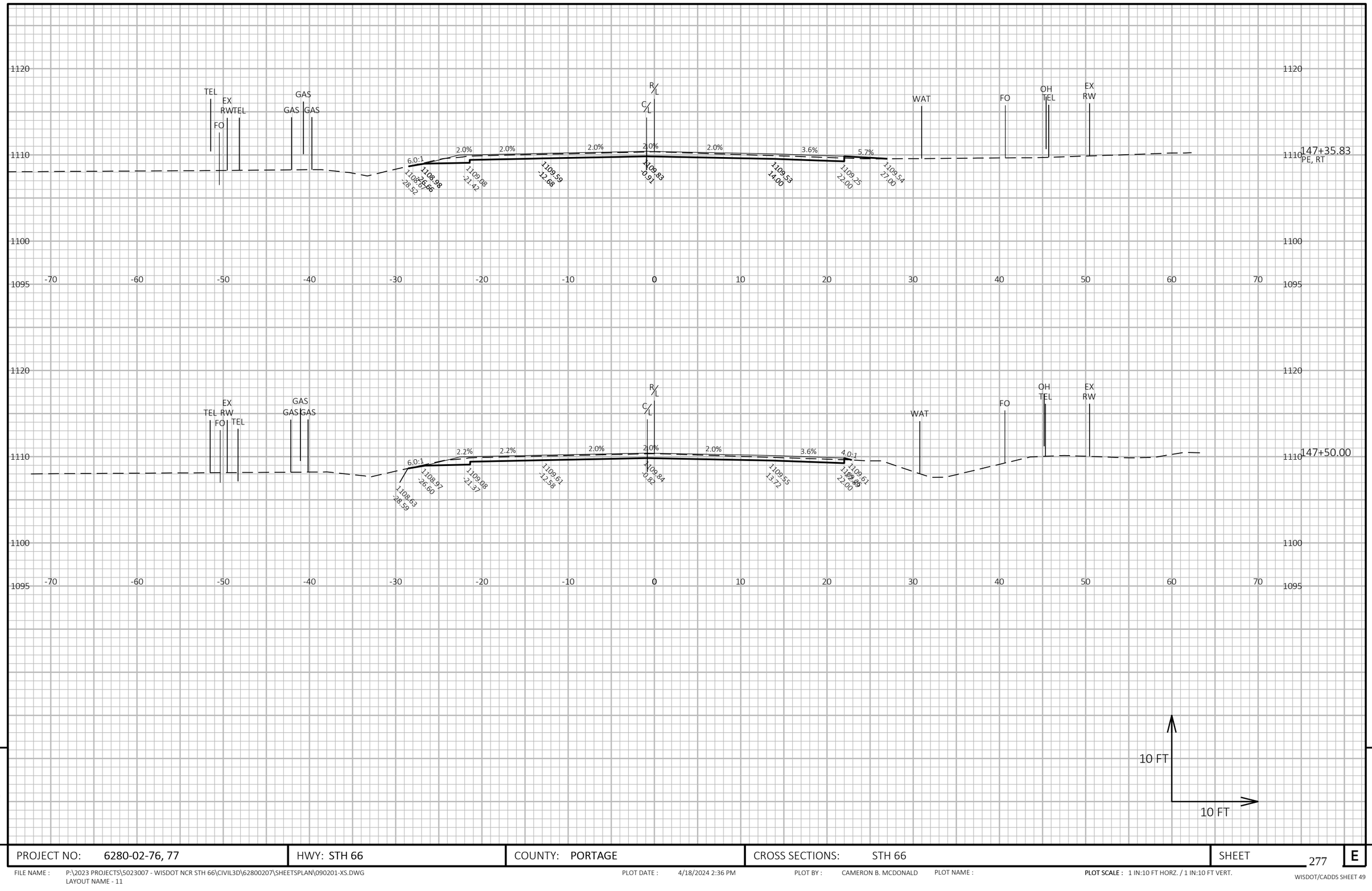
9

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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 276	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



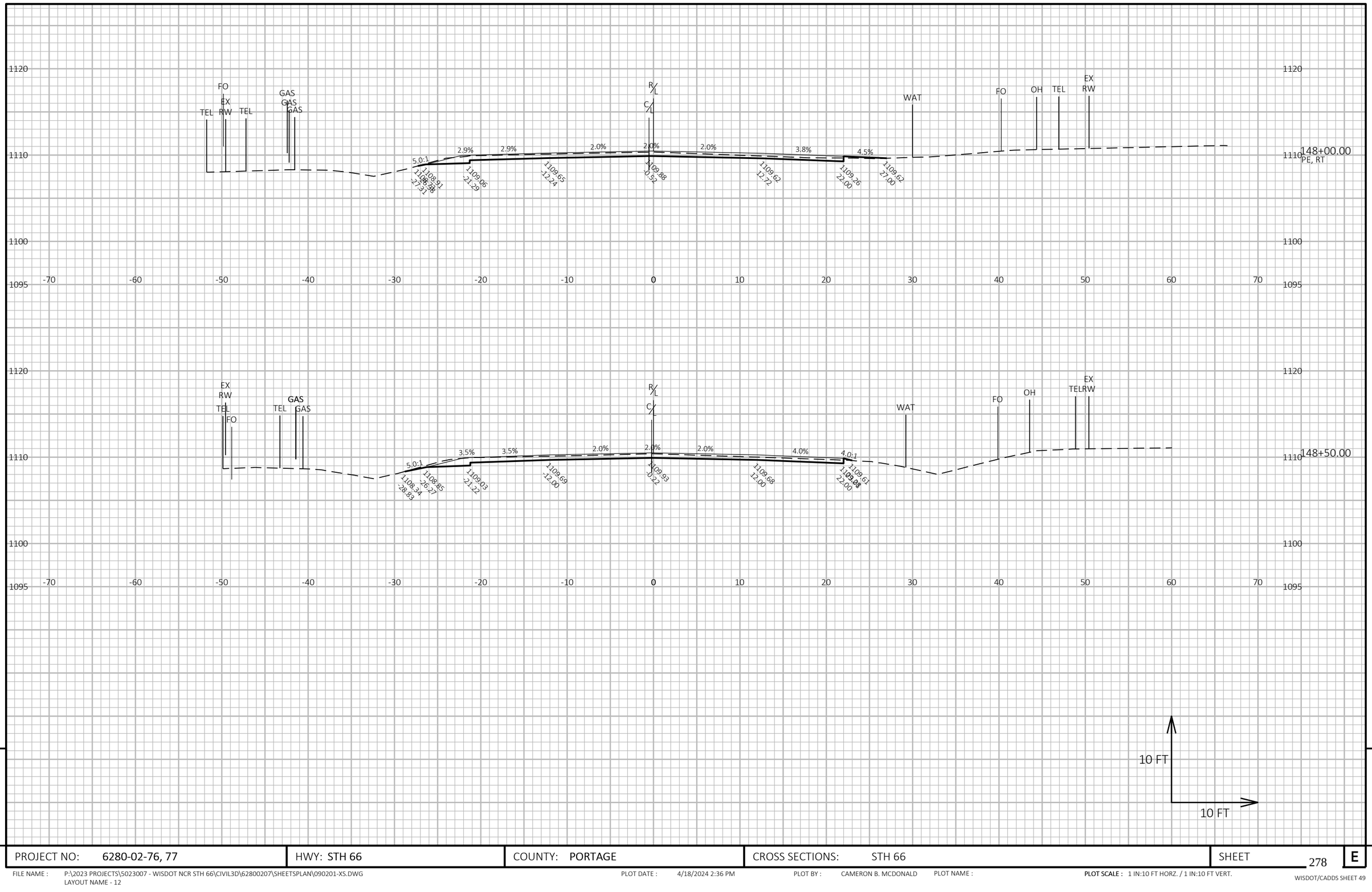
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 277	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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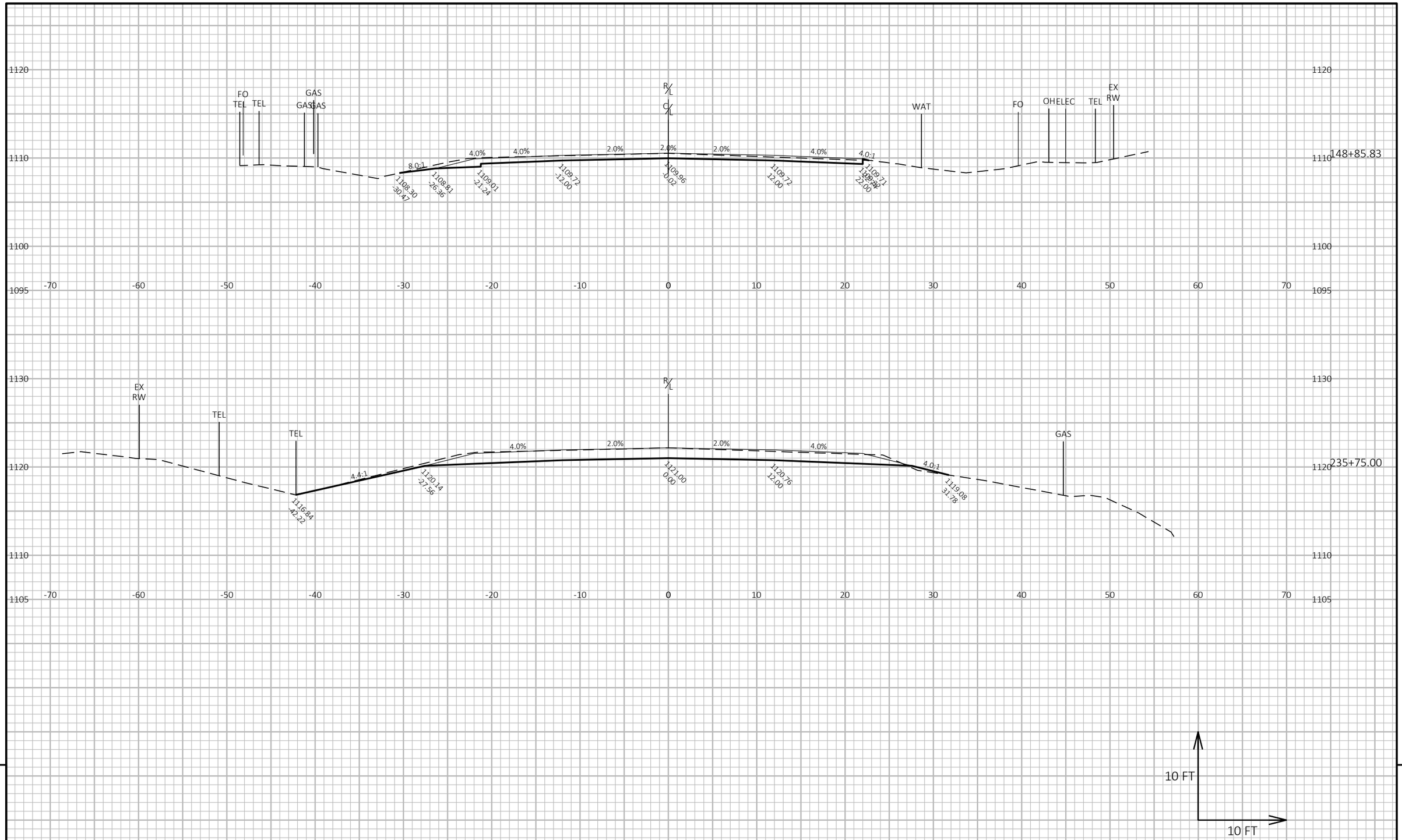
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 278	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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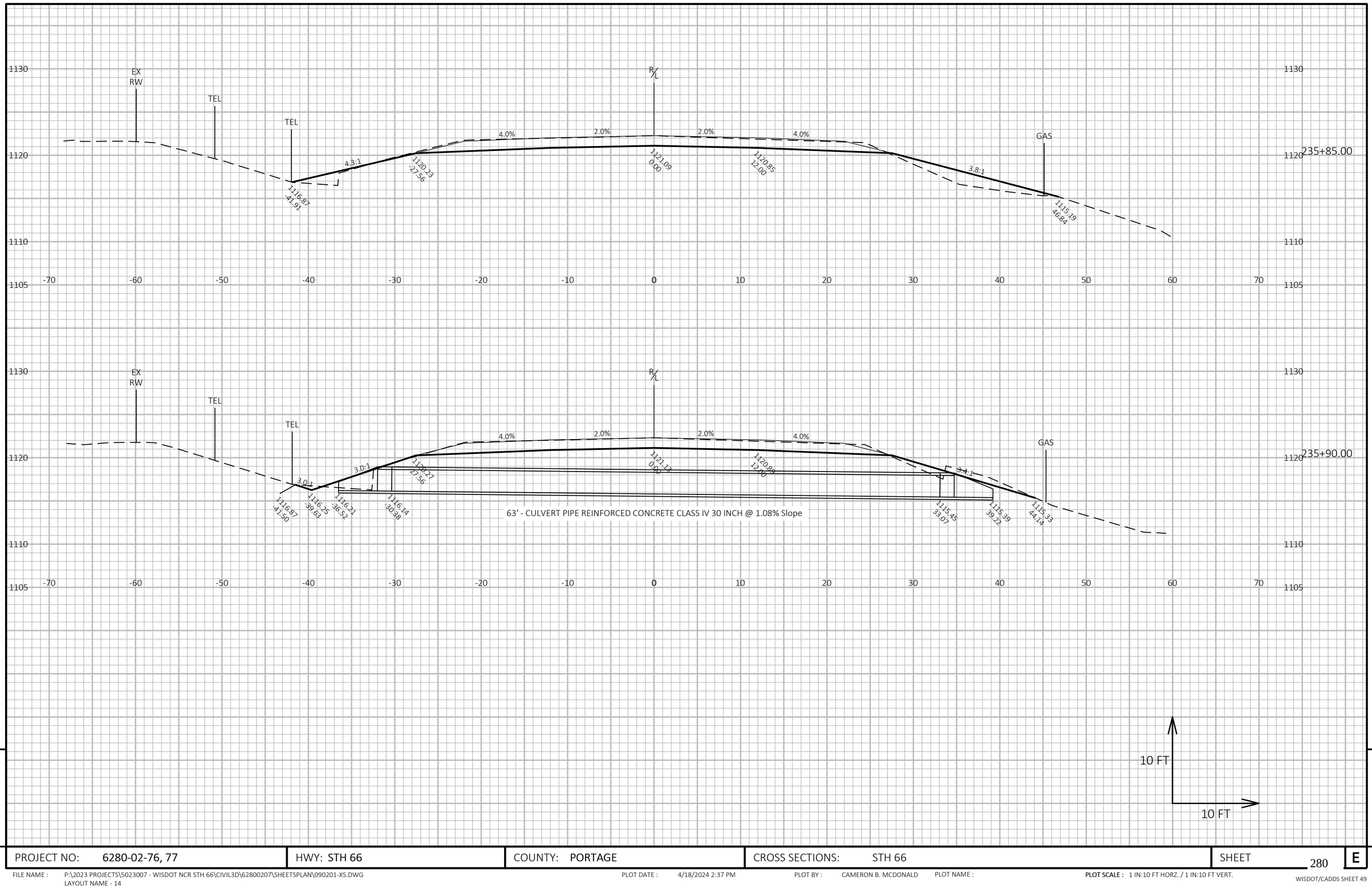
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 279	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 4/18/2024 2:36 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

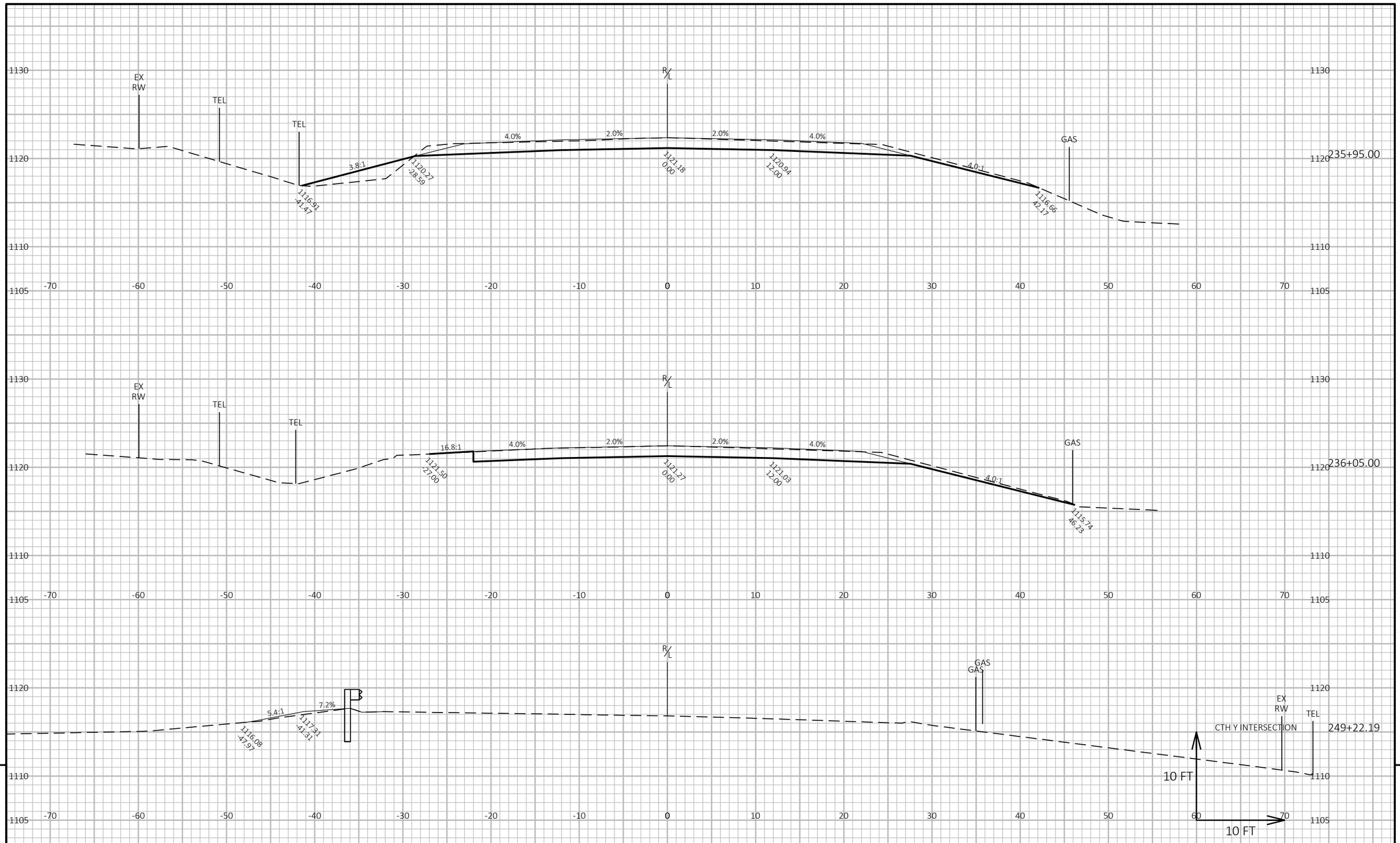
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 280	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 4/18/2024 2:37 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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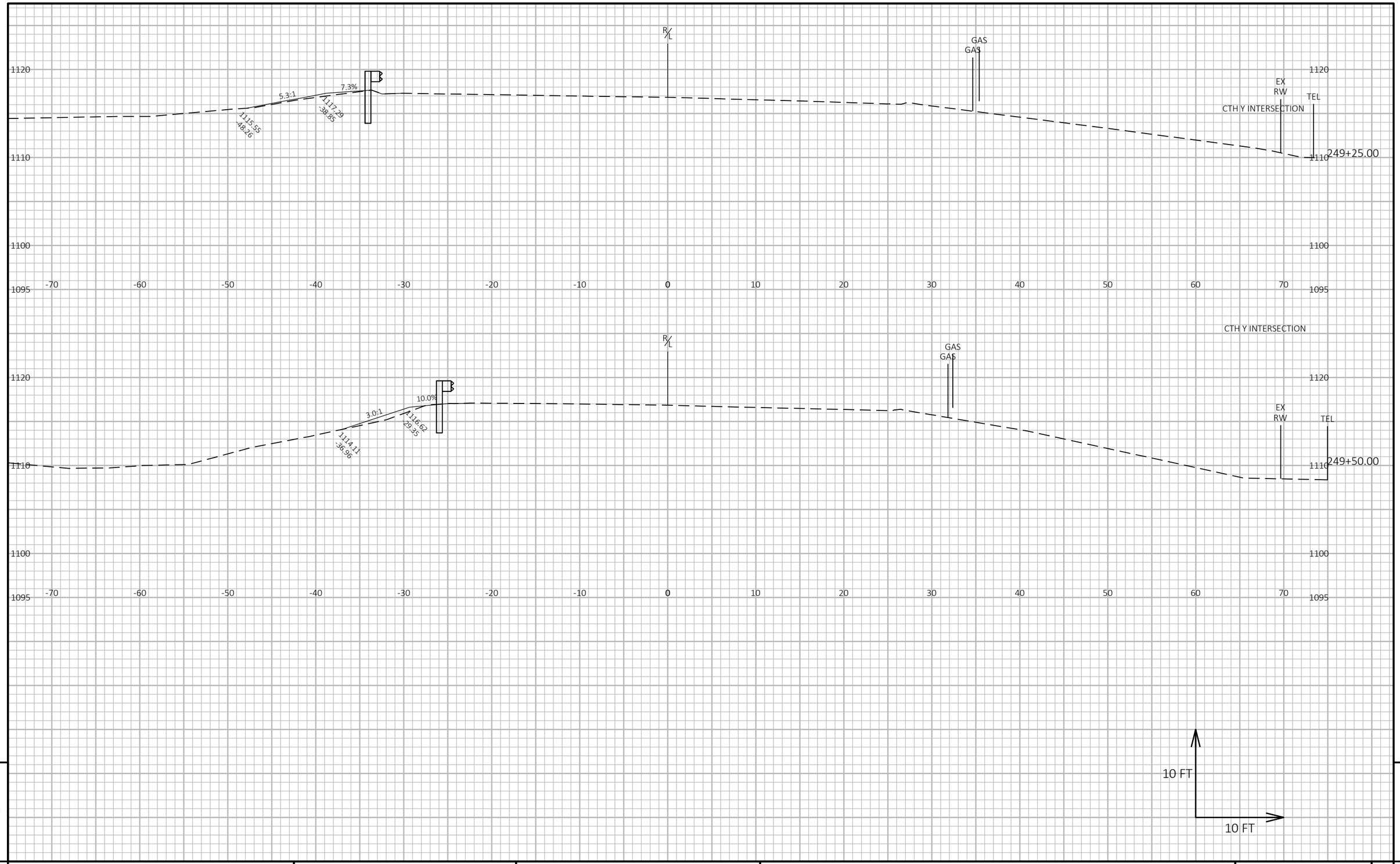
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 281	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 4/18/2024 2:37 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 282	E

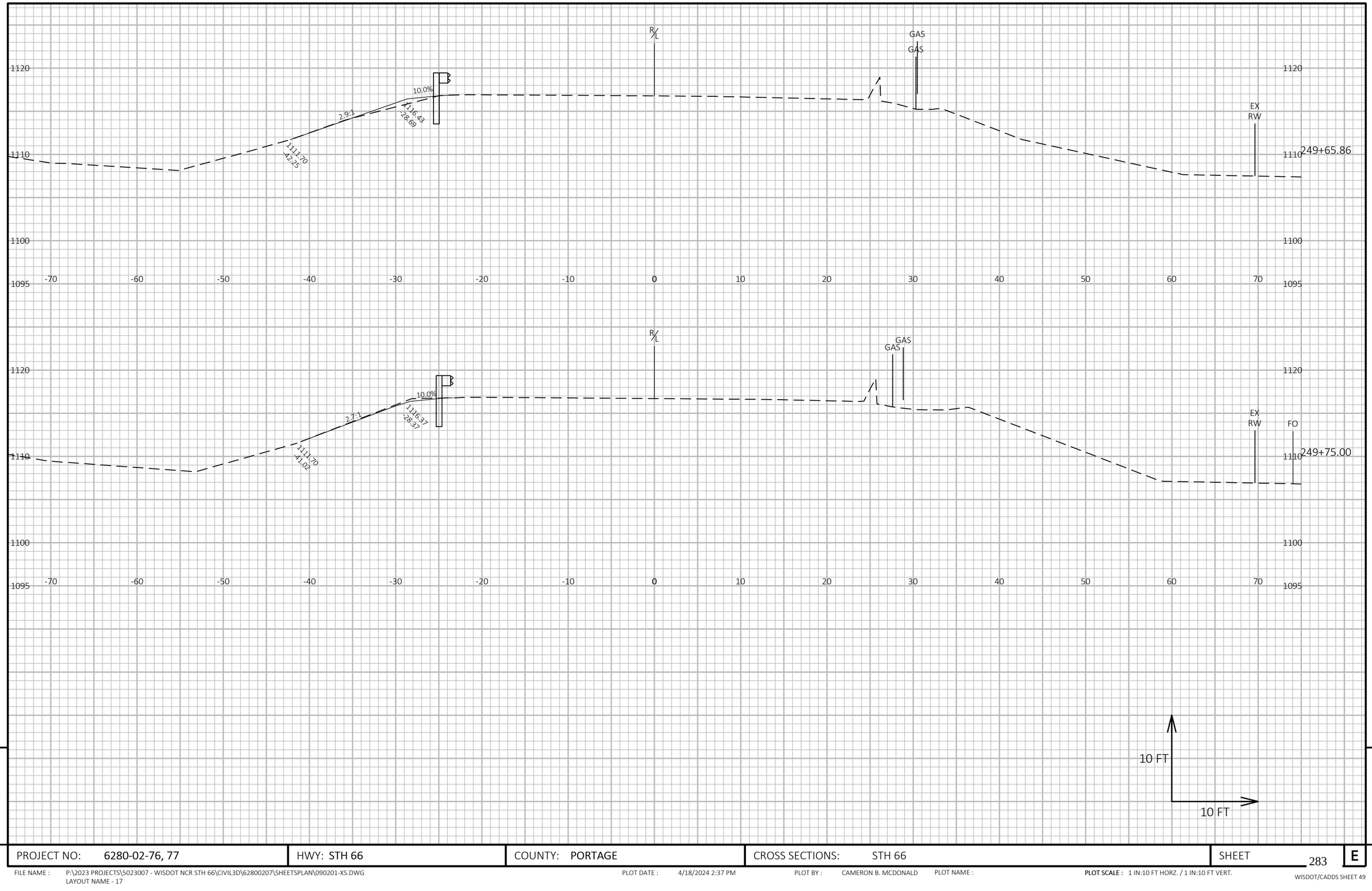
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 4/18/2024 2:37 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



9

9

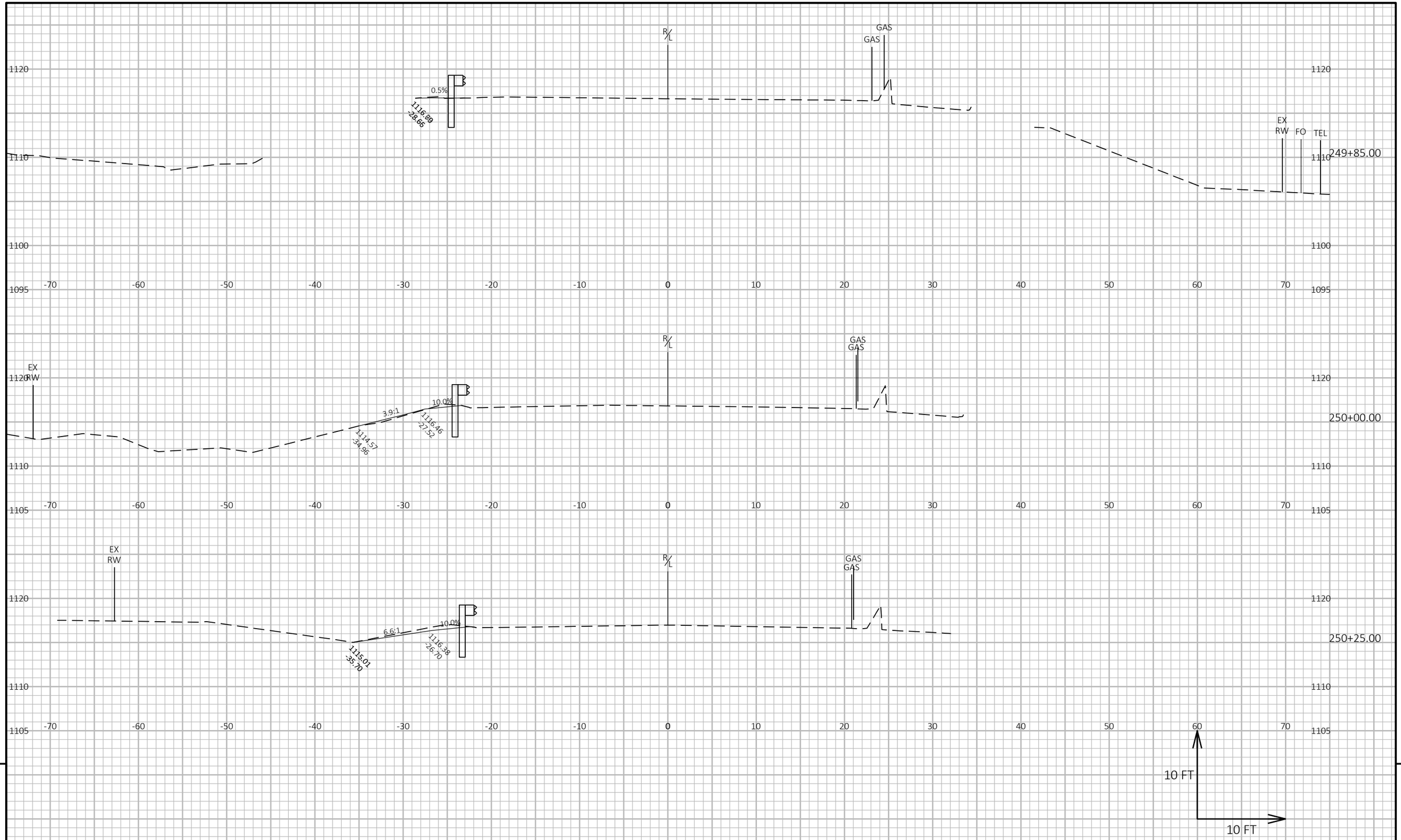
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 283	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 4/18/2024 2:37 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

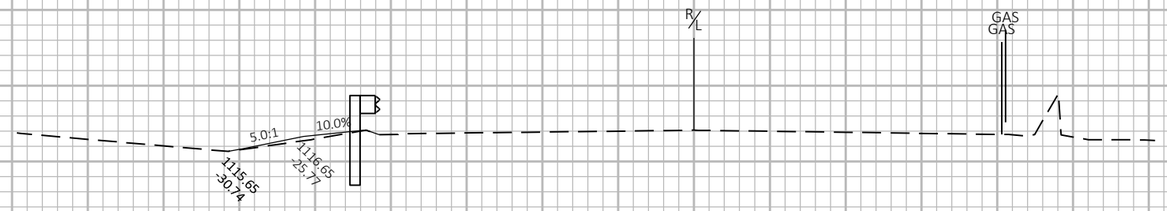
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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 284	E

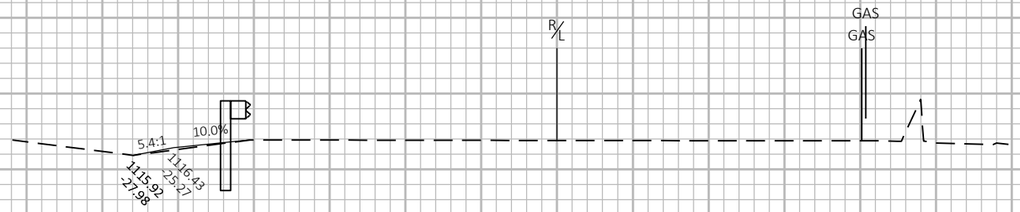
FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 4/18/2024 2:37 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



250+50.00



250+64.67

10 FT

10 FT

9

9

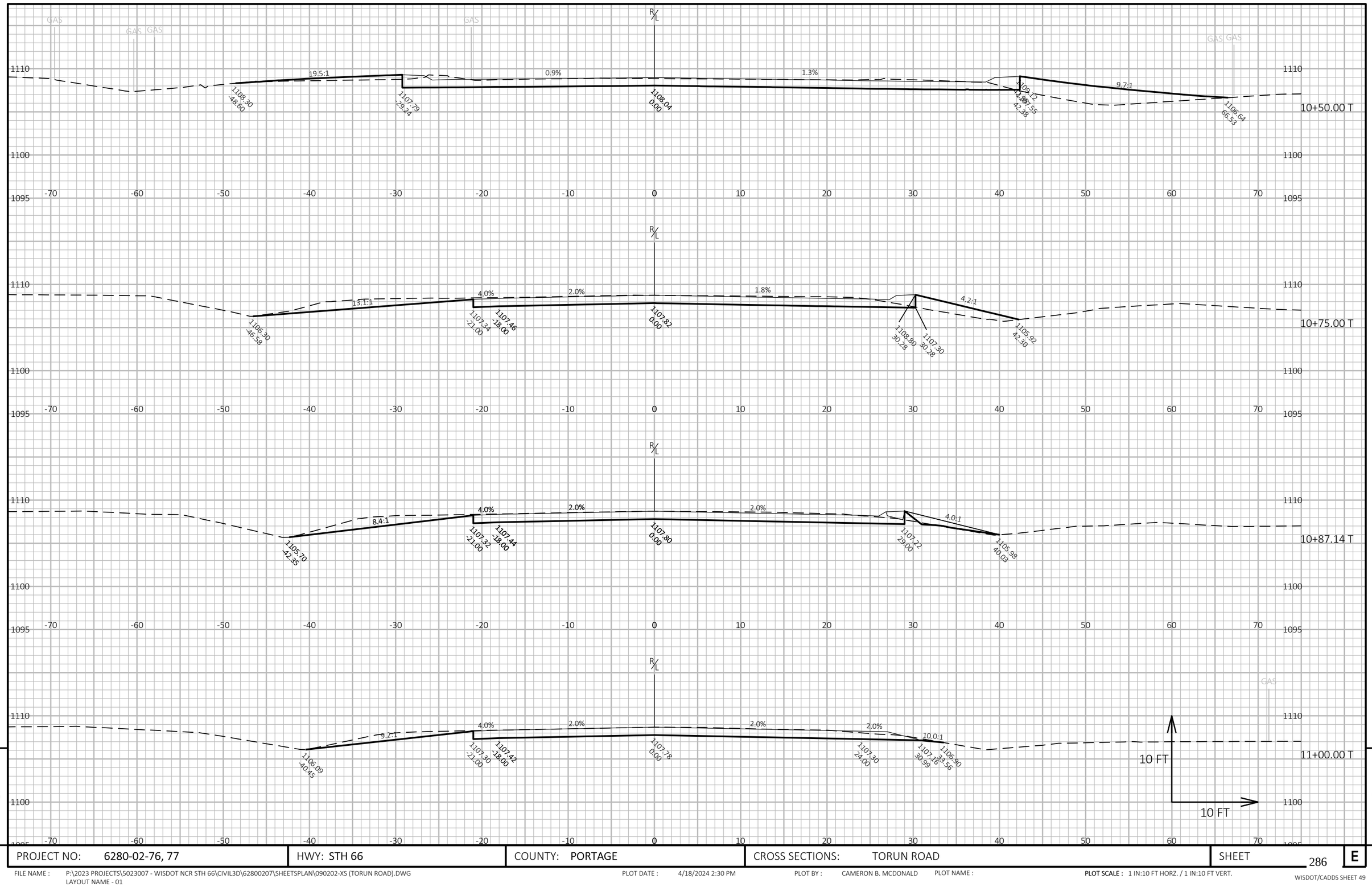
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: STH 66	SHEET 285	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 4/18/2024 2:37 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

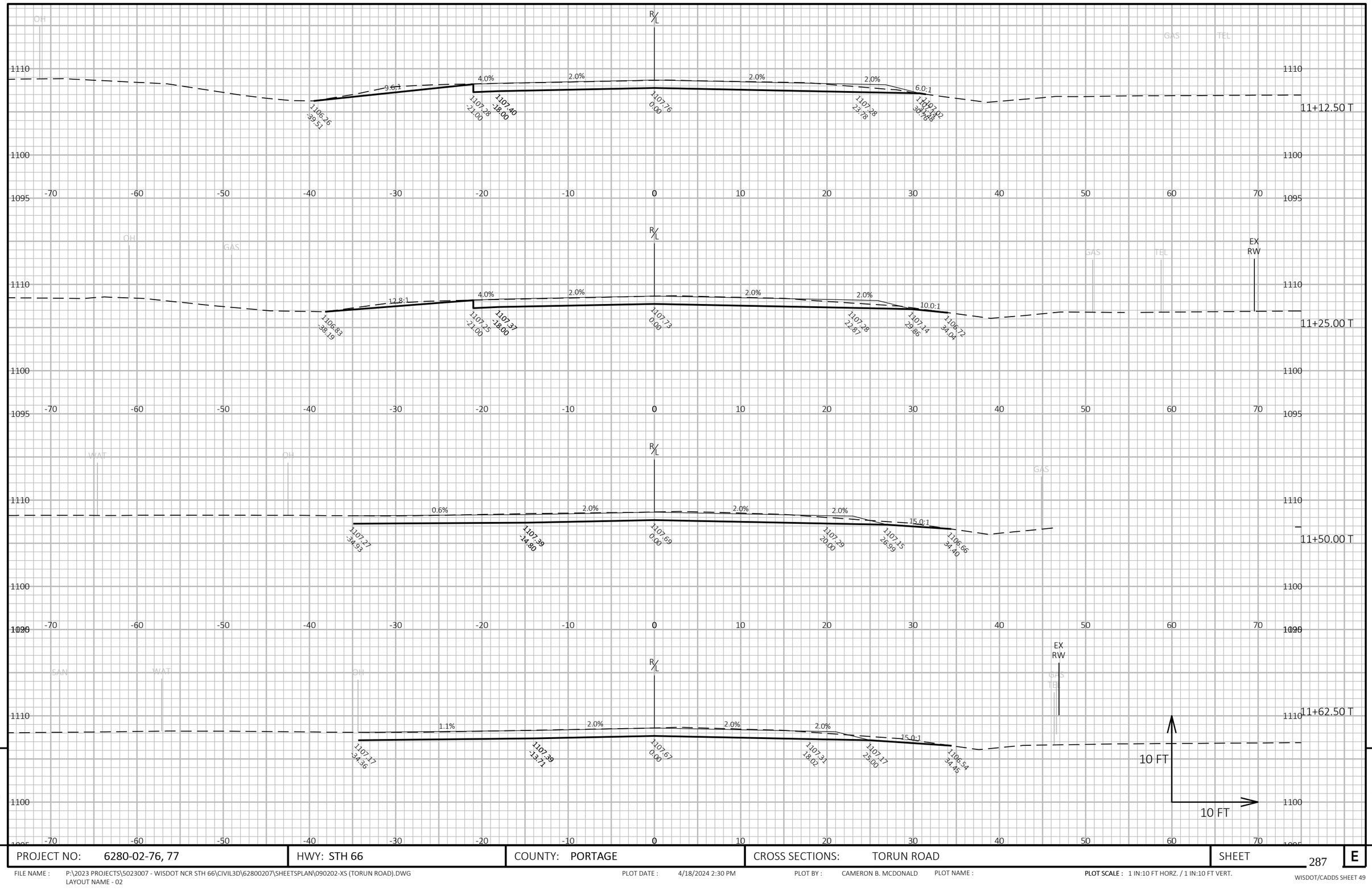
9

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: TORUN ROAD	SHEET 286	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090202-XS (TORUN ROAD).DWG
LAYOUT NAME - 01

PLOT DATE : 4/18/2024 2:30 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

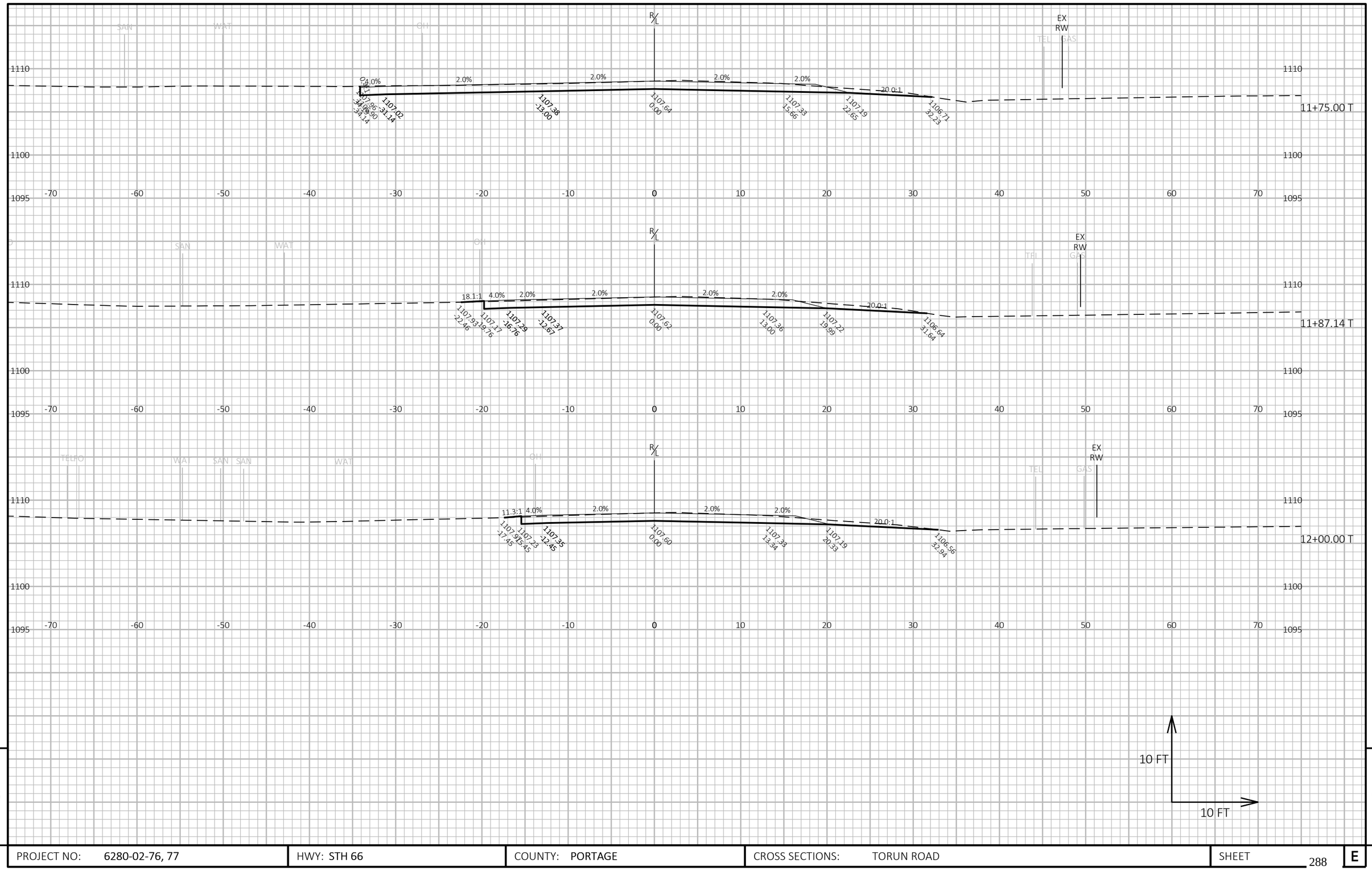


PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: TORUN ROAD	SHEET 287	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090202-XS (TORUN ROAD).DWG
LAYOUT NAME - 02

PLOT DATE : 4/18/2024 2:30 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

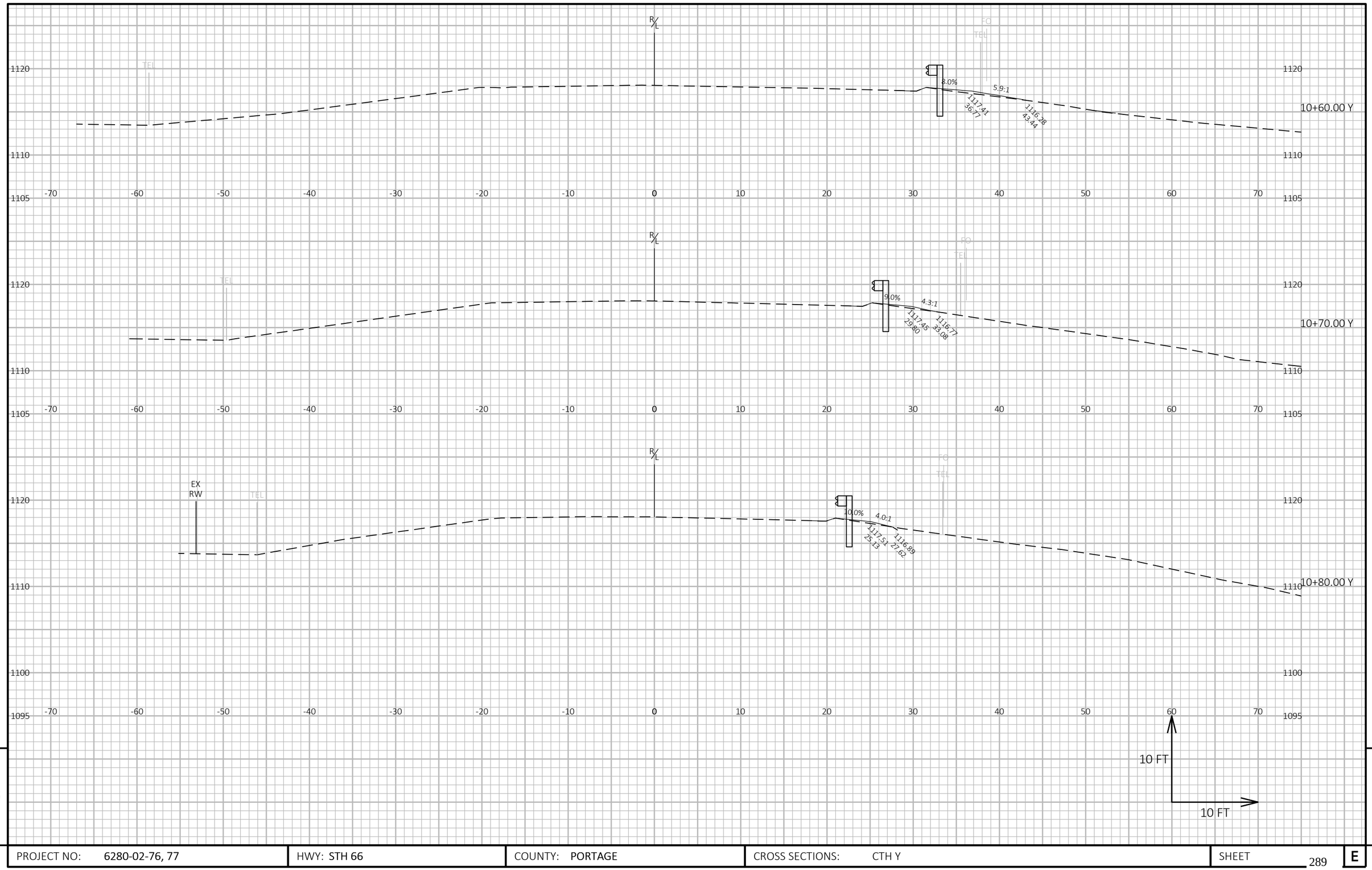


PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: TORUN ROAD	SHEET 288	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090202-XS (TORUN ROAD).DWG
LAYOUT NAME - 03

PLOT DATE : 4/18/2024 2:31 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

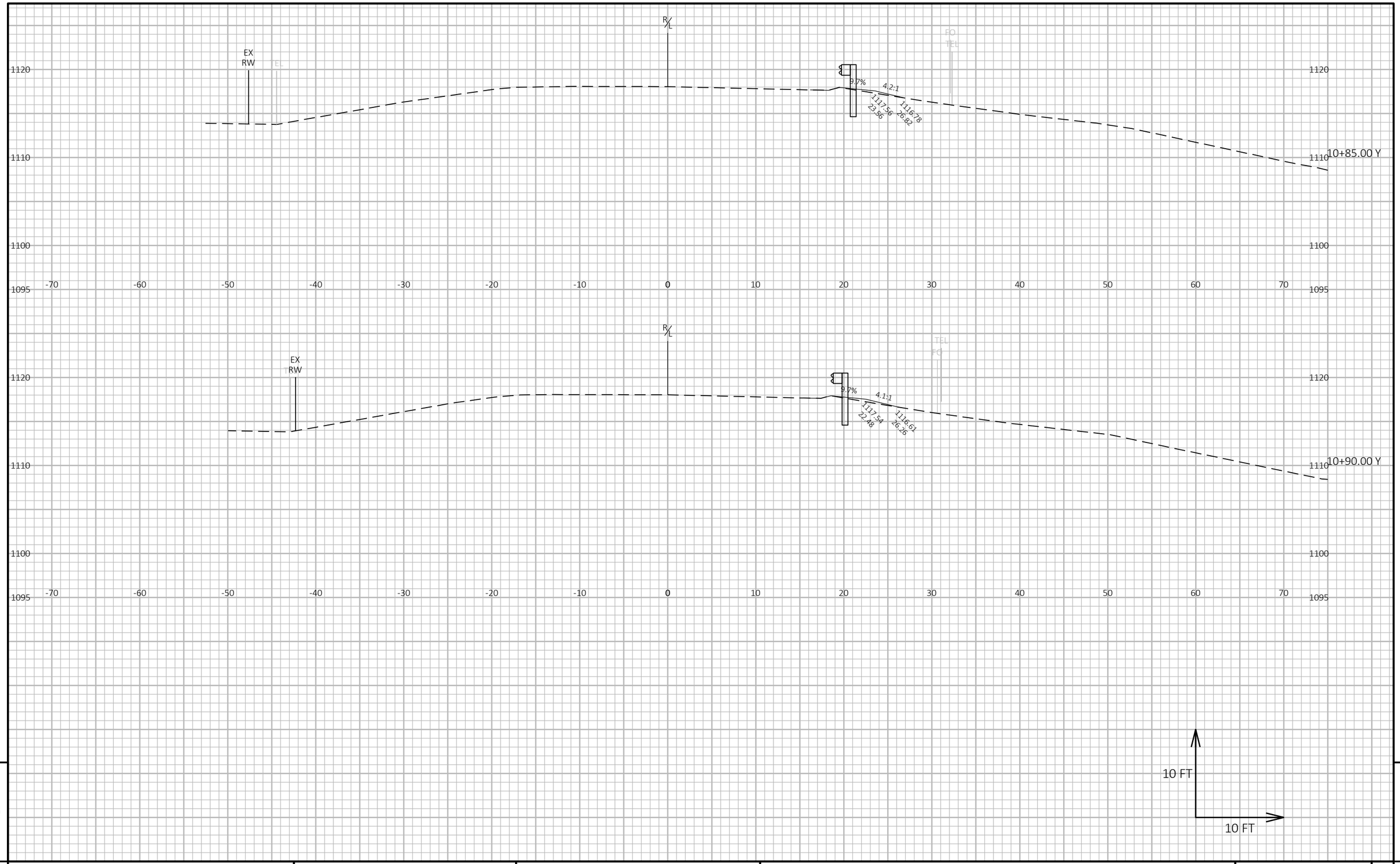
PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: CTH Y	SHEET 289	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090203-XS (CTH Y).DWG
LAYOUT NAME - 01

PLOT DATE : 4/18/2024 2:33 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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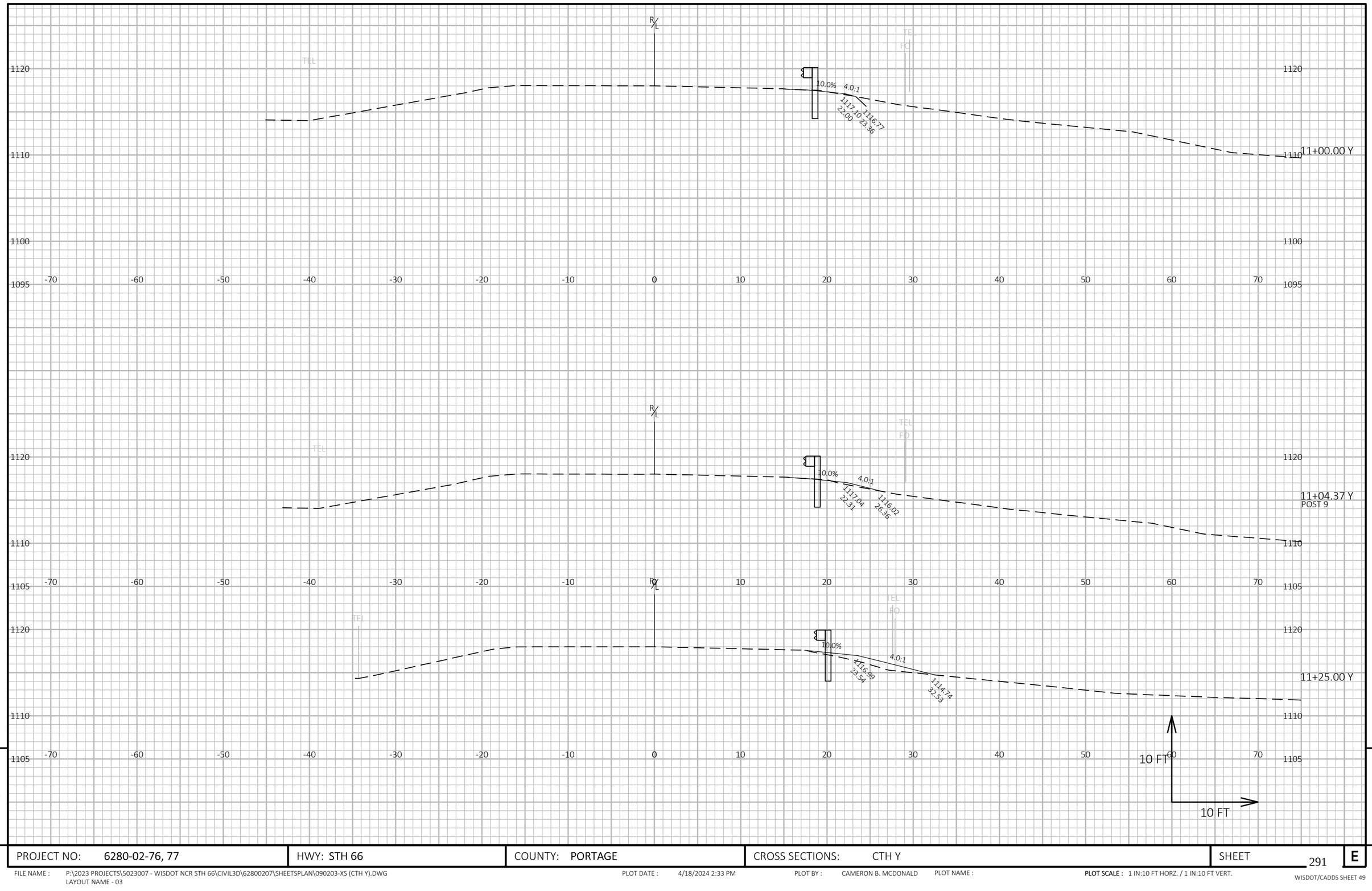
9

PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: CTH Y	SHEET 290	E

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LAYOUT NAME - 02

PLOT DATE : 4/18/2024 2:33 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: CTH Y	SHEET 291	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090203-XS (CTH Y).DWG
LAYOUT NAME - 03

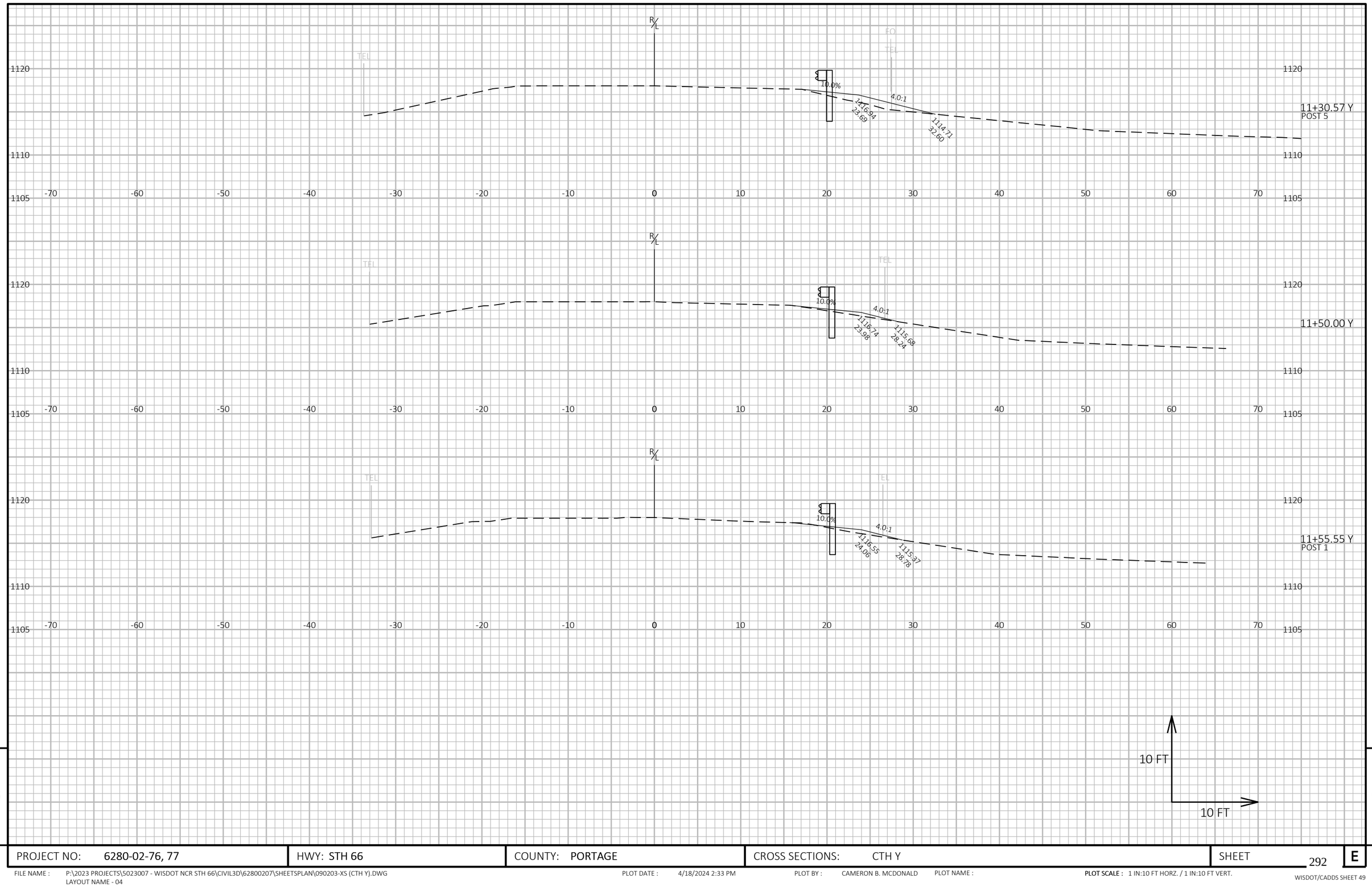
PLOT DATE : 4/18/2024 2:33 PM

PLOT BY : CAMERON B. MCDONALD

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6280-02-76, 77	HWY: STH 66	COUNTY: PORTAGE	CROSS SECTIONS: CTH Y	SHEET 292	E

FILE NAME : P:\2023 PROJECTS\5023007 - WISDOT NCR STH 66\CIVIL3D\62800207\SHEETSPLAN\090203-XS (CTH Y).DWG
LAYOUT NAME - 04

PLOT DATE : 4/18/2024 2:33 PM PLOT BY : CAMERON B. MCDONALD PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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