WIS

PROJECT ID: 1166-04-84

WITH: N/A

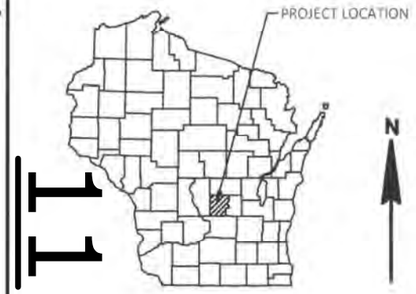
COUNTY: MARQUETTE

OCTOBER 2025

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 = 322



DESIGN DESIGNATION IH 39 SB

A.A.D.T.	(2026)	=	6,700 - 9,300 (SB LANES ONLY)
A.A.D.T.	(2046)	=	6,700 - 10,800 (SB LANES ONLY)
D.H.V.	(2046)	=	1,850 (SB LANES ONLY)
D.D.		=	58/42
T.		=	14.1% - 28.3%
DESIGN SPEED		=	75 MPH
ESALS		=	8,913,000

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
- 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PORTAGE - COLOMA

COLUMBIA CO LINE TO FAWN COURT, SB

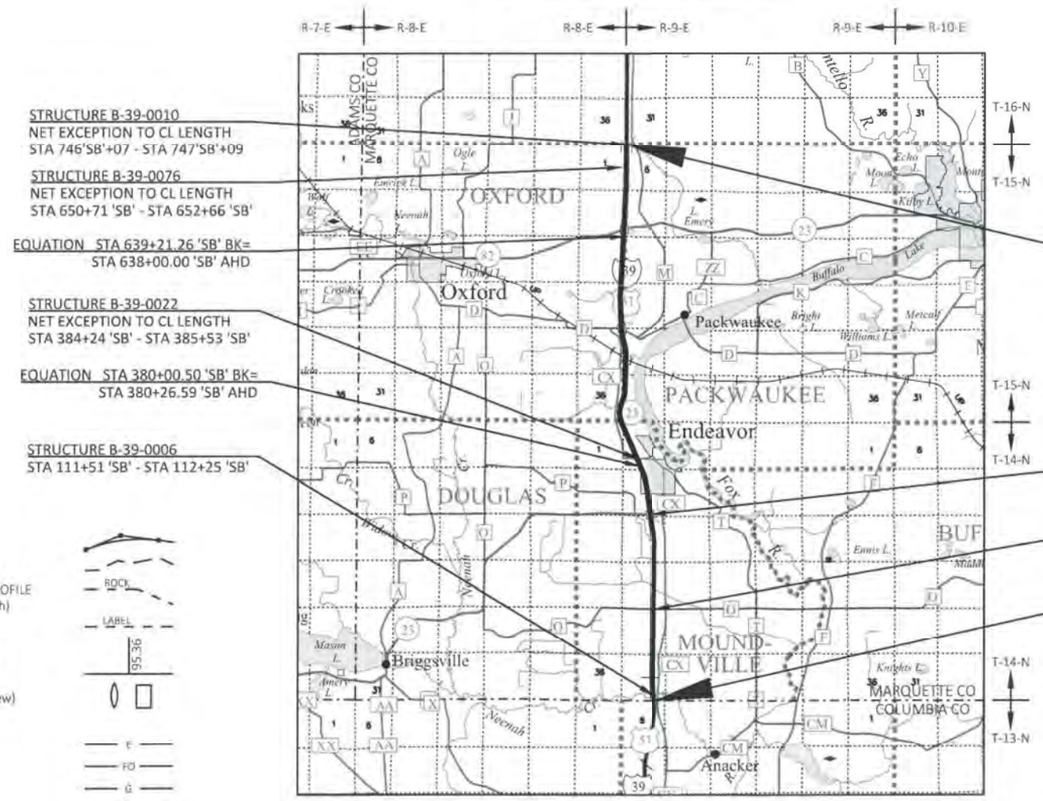
IH 39

MARQUETTE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1166-04-84	WISC 2026027	1

STATE PROJECT NUMBER

1166-04-84



STRUCTURE B-39-0010
NET EXCEPTION TO CL LENGTH
STA 746'SB'+07 - STA 747'SB'+09

STRUCTURE B-39-0076
NET EXCEPTION TO CL LENGTH
STA 650+71 'SB' - STA 652+66 'SB'

EQUATION STA 639+21.26 'SB' BK=
STA 638+00.00 'SB' AHD

STRUCTURE B-39-0022
NET EXCEPTION TO CL LENGTH
STA 384+24 'SB' - STA 385+53 'SB'

EQUATION STA 380+00.50 'SB' BK=
STA 380+26.59 'SB' AHD

STRUCTURE B-39-0006
STA 111+51 'SB' - STA 112+25 'SB'

END PROJECT
STA 747+08 'SB'

STRUCTURE B-39-0020
NET EXCEPTION TO CL LENGTH
STA 317+53 'SB' - STA 319+61 'SB'

STRUCTURE B-39-0018
NET EXCEPTION TO CL LENGTH
STA 209+55 'SB' - STA 210+71 'SB'

BEGIN PROJECT
STA 105+31.78 'SB'
Y = 199961.97
X = 434612.03

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 12.017 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MARQUETTE 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.

ORIGINAL PLANS PREPARED BY

AYRES

WISCONSIN
MARK R. PETERSEN
E - 36785
EAU CLAIRE
WI
PROFESSIONAL ENGINEER

DATE: 6/19/2025 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY:

Surveyor	MSA PROFESSIONAL SERVICES, INC
Designer	AYRES ASSOCIATES INC
Project Manager	TIM HANLEY
Regional Examiner	FRED SCHUNKE
Regional Supervisor	NICHOLE LYSNE

APPROVED FOR THE DEPARTMENT

DATE: 06-27-25 Timothy R. Hanley (Signature)

Digitally signed by Timothy R. Hanley
DN: CN=E-mail=timothy.hanley@dot.wi.gov, O=WISDOT NCR, OU=Project Development Section, CN=Timothy R. Hanley
Date: 2025.06.27 08:18:35-05'00'

E

2

GENERAL NOTES

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.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WETLANDS.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
GUARDRAIL DETAILS & EROSION CONTROL
BARRIER REPLACEMENT DETAIL & EROSION CONTROL
PAVEMENT MARKING
TRAFFIC CONTROL DETAILS
DETOUR

DNR AREA LIAISON

OSHKOSH SERVICE CENTER
625 EAST COUNTY ROAD Y, SUITE 70
OSHKOSH, WI 54901-9731
ATTN: MARTY DILLENBURG
920-410-7428
marty.dillenburg@wisconsin.gov

UTILITIES

ADAMS-COLUMBIA ELECTRIC COOP - ELECTRIC
401 E. LAKE ST / P.O. BOX 70
FRIENDSHIP, WI 53934
ATTN: STEVE LOIS
PHONE: 800-831-8629 EXT.436
slois@acecwi.com

ALLIANT ENERGY - ELECTRIC
2777 COLUMBIA DRIVE
PORTAGE, WI 53901
ATTN: MATT JOHNSON
PHONE: 608-742-0801
mathewjohnson@AlliantEnergy.com

ATC MANAGEMENT INC - TRANSMISSION LINE
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
ATTN: DOUG VOSBERG
PHONE: 608-877-7650
dvosberg@atcllc.com

ENBRIDGE ENERGY - GAS/PETROLEUM
803 HIGHLAND AVE
FORT ATKINSON, WI 53538
ATTN: CRAIG GUTTENBURG
PHONE: 920-691-6827
craig.guttenburg@enbridge.com

FRONTIER COMMUNICATION OF WI - COMMUNICATIONS
521 N 4TH STREET
WAUSAU, WI 54403
ATTN: CHRIS POLLACK
PHONE: 715-847-1240
christopher.pollack@ftr.com

LUMEN - COMMUNICATION LINE
3235 INTERTECH DRIVE, SUITE 600
BROOKFIELD, WI 53045
ATTN: RYAN BIRDSALL
PHONE: 608-444-2493
ryan.birdsall@lumen.com

MARQUETTE ADAMS TELEPHONE COOP - COMMUNICATIONS
113 NORTH OXFORD STREET
OXFORD, WI 53952
ATTN: RUSS PRACHEL
PHONE: 608-586-7065
rprachel@maadtelco.com

SPECTRUM - COMMUNICATIONS
2701 DANIELS STREET
MADISON, WI 53718
ATTN: GLEN JAKUSZ
PHONE: 608-209-3202
glen.jakusz@charter.com

WE ENERGIES - GAS/PETROLEUM
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
ATTN: LARRY KOCH
PHONE: 715-421-7249
larry.koch@we-energies.com

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

PAVEMENT BORING LOG

BORING NO.	STATION	OFFSET	ASPHALT DEPTH (INCHES)	UNDERLYING MATERIAL
1	105+45.00	2' RT	4.75	BASE
2	120+45.00	4' LT	13 (PCC)	BASE
3	135+45.00	20' LT	6	9" PCC, BASE
4	150+45.00	29' LT	8.75	BASE
5	165+45.00	2' RT	9.25	BASE
6	180+45.00	4' LT	5.75	8.5" PCC, BASE
7	195+45.00	20' LT	5.75	9" PCC, BASE
8	210+45.00	29' LT	6.5	BASE
9	225+45.00	2' RT	9.75	BASE
10	240+45.00	4' LT	5.75	9" PCC, BASE
11	255+45.00	20' LT	6	9.25" PCC, BASE
12	270+45.00	29' LT	8.5	BASE
13	285+45.00	2' RT	10	BASE
14	300+45.00	4' LT	6.25	9" PCC, BASE
15	315+45.00	20' LT	4.5	8.5" PCC, BASE
16	330+45.00	29' LT	9.5	BASE
17	345+45.00	2' RT	11.5	BASE
18	360+45.00	4' LT	6	10" PCC, BASE
19	375+45.00	20' LT	5.75	9.25" PCC, BASE
20	390+45.00	29' LT	9.75	BASE
21	405+45.00	2' RT	10.75	BASE
22	420+45.00	4' LT	4	9.5" PCC, BASE
23	435+45.00	20' LT	3	9.25" PCC, BASE
24	450+45.00	29' LT	7.25	BASE
25	465+45.00	2' RT	6.25	BASE

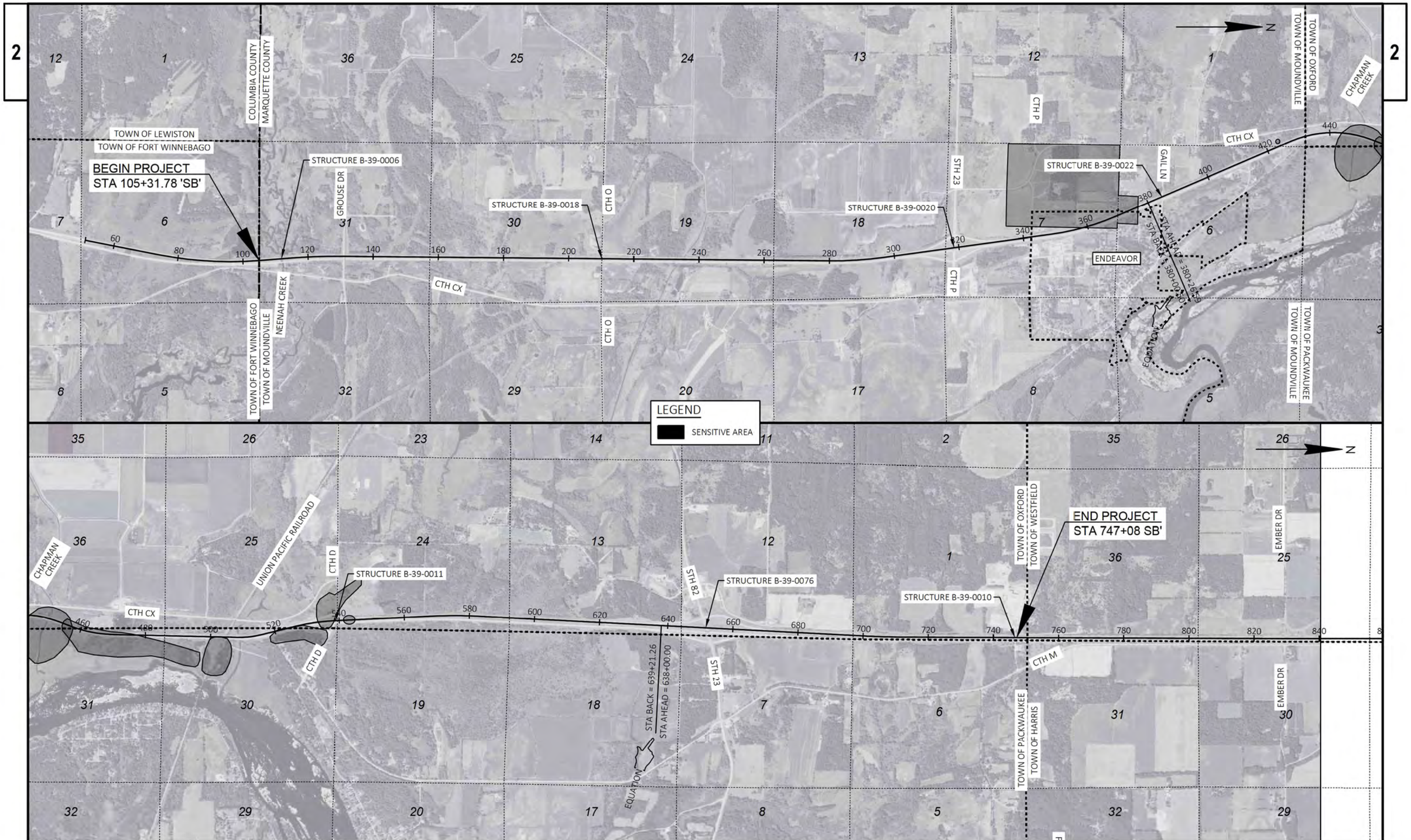
PAVEMENT BORING LOG

BORING NO.	STATION	OFFSET	ASPHALT DEPTH (INCHES)	UNDERLYING MATERIAL
26	480+45.00	4' LT	3	9" PCC, BASE
27	495+45.00	20' LT	3	9" PCC, BASE
28	510+45.00	29' LT	6	BASE
29	525+45.00	2' RT	11.25	BASE
30	540+45.00	4' LT	4	7.5" PCC, BASE
31	555+45.00	20' LT	17.5	BASE
32	570+45.00	29' LT	11.25	BASE
33	585+45.00	2' RT	9.5	BASE
34	600+45.00	4' LT	9.25	BASE
35	615+45.00	20' LT	13	BASE
36	630+45.00	29' LT	6.25	BASE
37	644+48.34	2' RT	6.25	BASE
38	659+48.34	4' LT	6.25	BASE
39	674+48.34	20' LT	13.5	BASE
40	689+48.34	29' LT	8.25	BASE
41	704+48.34	2' RT	9	BASE
42	719+48.34	4' LT	13.25	BASE
43	734+48.34	20' LT	14.75	BASE
87	130+94.90	4' LT	5.75	6" PCC, BASE
88	504+09.54	4' LT	3	6.5" PCC, BASE
89	538+78.14	20' LT	8.25	BASE

RUNOFF COEFFICIENT TABLE

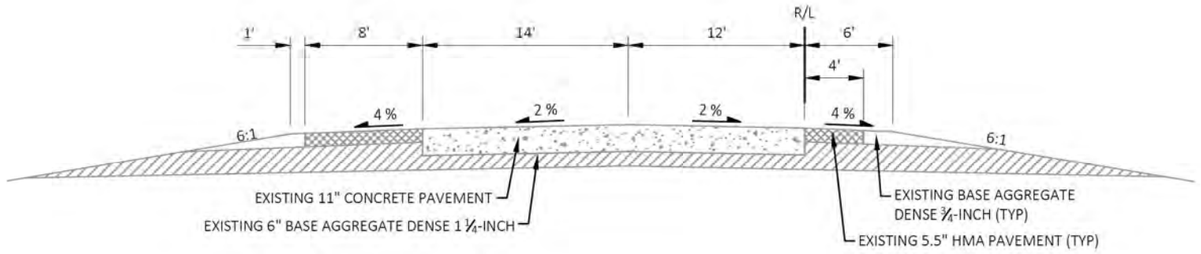
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .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 = 66.2 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.9 ACRES



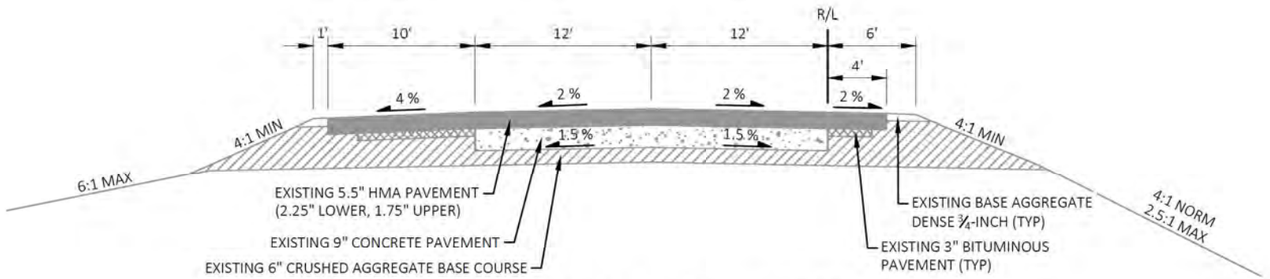
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PROJECT OVERVIEW	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\020201-PO.DWG
LAYOUT NAME - 01
PLOT DATE : 6/13/2025 9:23 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:0.5 MI
WISDOT/CA



EXISTING TYPICAL SECTION - IH-39 SB

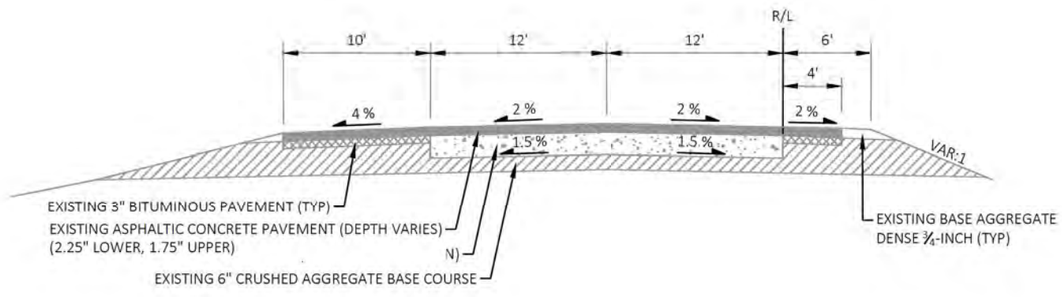
STA 105'SB'+31.78 - STA 120'SB'+75



EXISTING TYPICAL SECTION - IH-39 SB

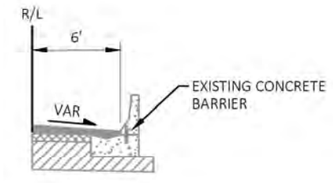
STA 120'SB'+75 - STA 415'SB'+80

STA 517'SB'+10 - STA 542'SB'+00



EXISTING TYPICAL SECTION - IH-39 SB

STA 415'SB'+80 - STA 517'SB'+10

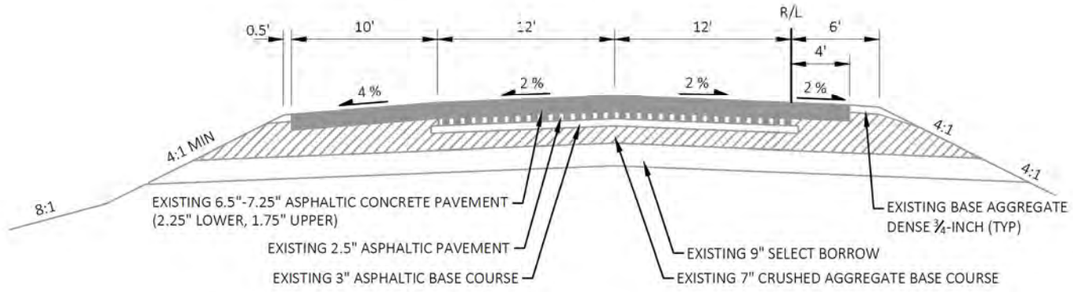


STA 445'SB'+57 - STA 511'SB'+08

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TYPICAL SECTIONS	SHEET	E

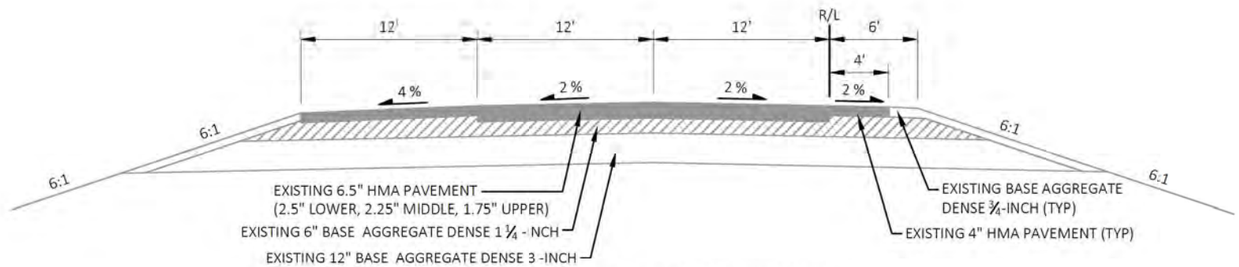
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LAYOUT NAME - 020301-ts

PLOT DATE : 6/13/2025 9:23 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT



EXISTING TYPICAL SECTION - IH-39 SB

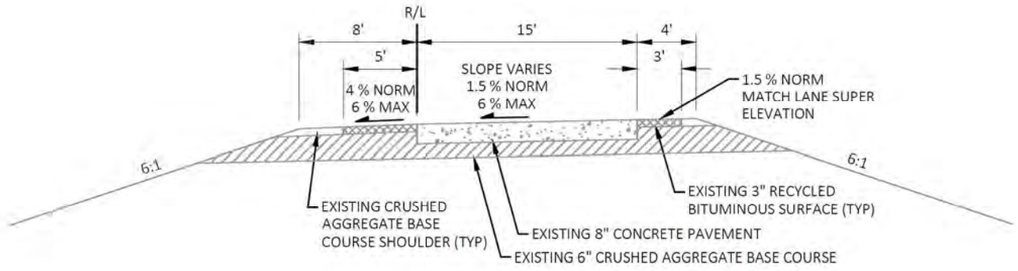
STA 542'SB'+00 - STA 638'SB'+00
STA 663'SB'+00 - STA 747'SB'+08



EXISTING TYPICAL SECTION - IH-39 SB

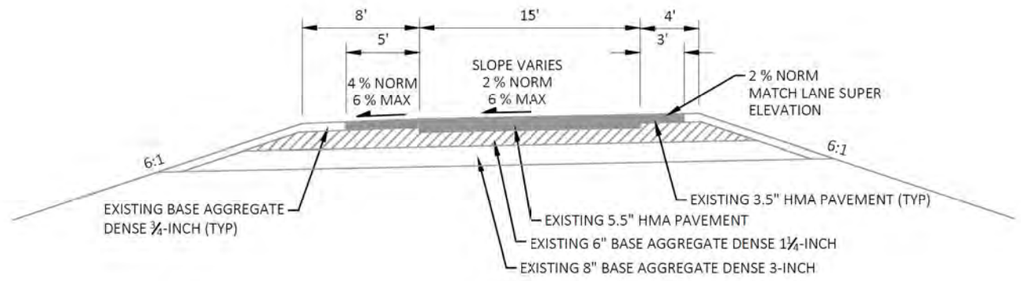
STA 638'SB'+00 - STA 663'SB'+00

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TYPICAL SECTIONS	SHEET	E



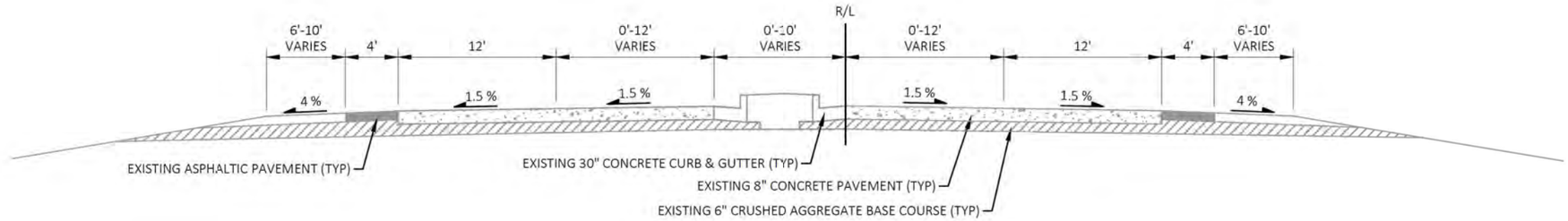
EXISTING RAMP TYPICAL SECTION

STH 23/CTH P
CTH D



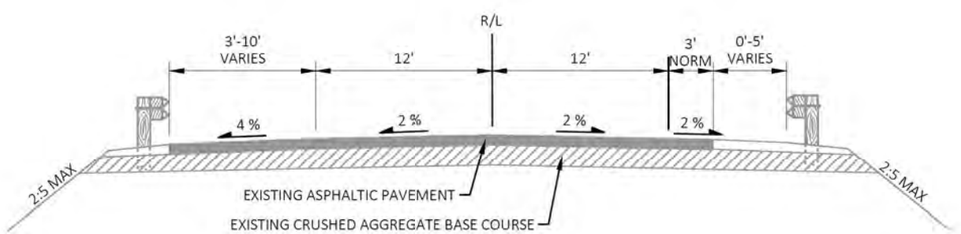
EXISTING RAMP TYPICAL SECTION

STH 82/STH 23



EXISTING TYPICAL SECTION

STH 23/CTH P

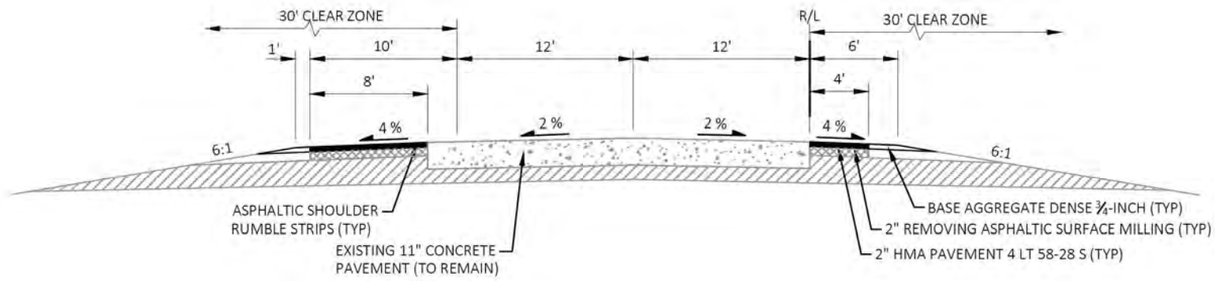


EXISTING TYPICAL SECTION

CTH D

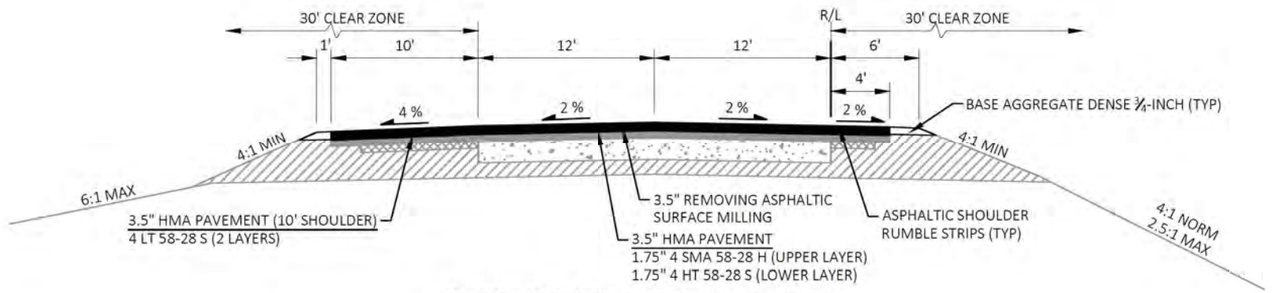
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TYPICAL SECTIONS	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\020301-TS.DWG
LAYOUT NAME - 020303-ts
PLOT DATE : 6/13/2025 9:23 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT



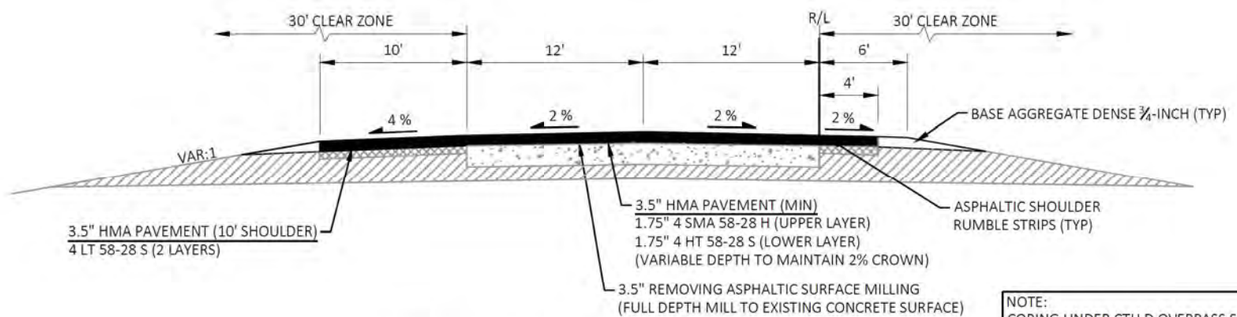
FINISHED TYPICAL SECTION - IH-39 SB

STA 105'SB'+31.78 - STA 120'SB'+75



FINISHED TYPICAL SECTION - IH-39 SB

STA 120'SB'+75 - STA 415'SB'+80
STA 517'SB'+10 - STA 542'SB'+00



FINISHED TYPICAL SECTION - IH-39 SB

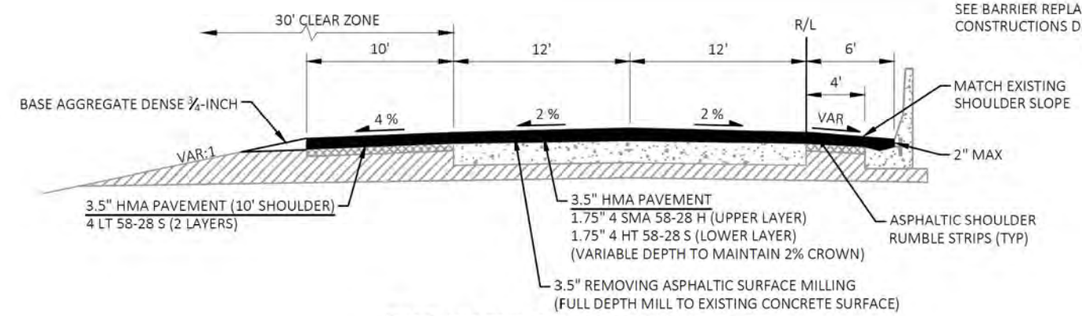
STA 415'SB'+80 - STA 446'SB'+13
STA 511'SB'+26 - STA 517'SB'+10

NOTE:
CORING UNDER CTH D OVERPASS SHOWS 8.25" OF HMA OVER BASE. LIMITS OF EXISTING CONCRETE UNDER THIS STRUCTURE ARE UNKNOWN.

NOTE: EXISTING CONCRETE HAS A 1% CROSS SLOPE.

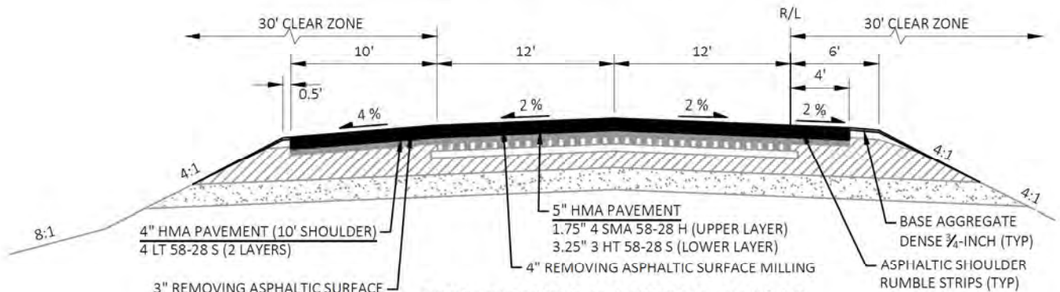
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TYPICAL SECTIONS	SHEET	E

SEE BARRIER REPLACEMENT DETAIL FOR LOCATIONS AND CONSTRUCTIONS DETAILS FOR ADDITIONAL INFORMATION.



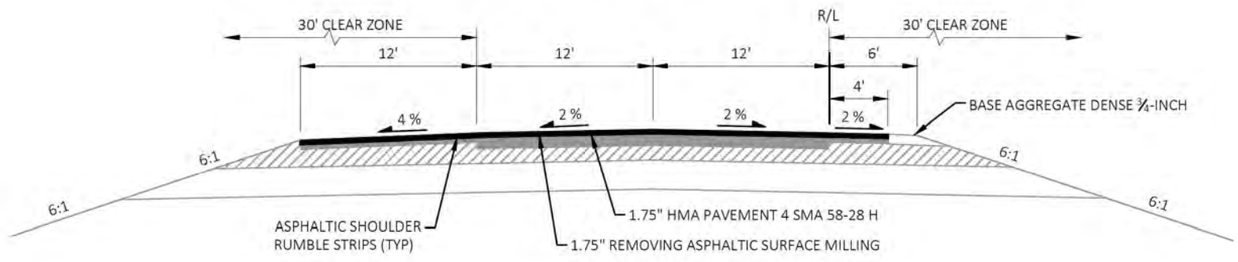
FINISHED TYPICAL SECTION - IH-39 SB

STA 446'SB'+13 - STA 511'SB'+26



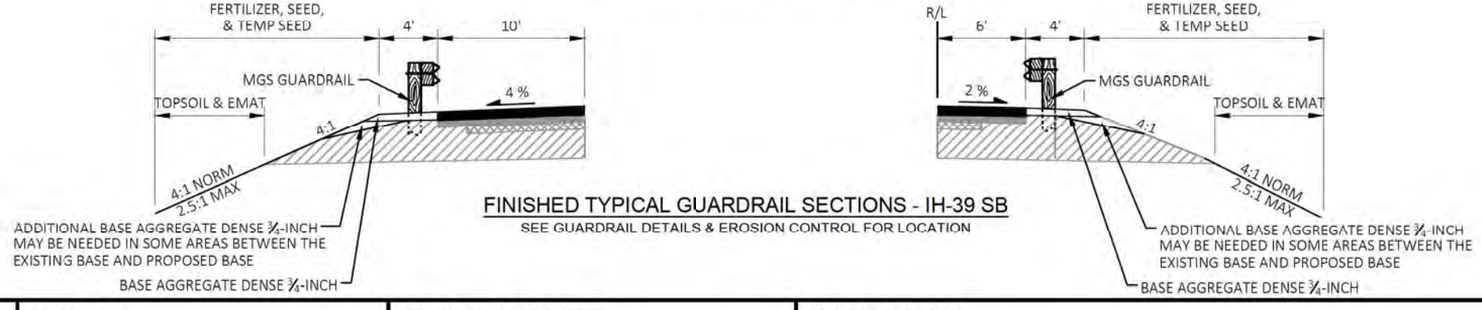
FINISHED TYPICAL SECTION - IH-39 SB

STA 542'SB'+00 - STA 638'SB'+00
STA 663'SB'+00 - STA 747'SB'+08



FINISHED TYPICAL SECTION - IH-39 SB

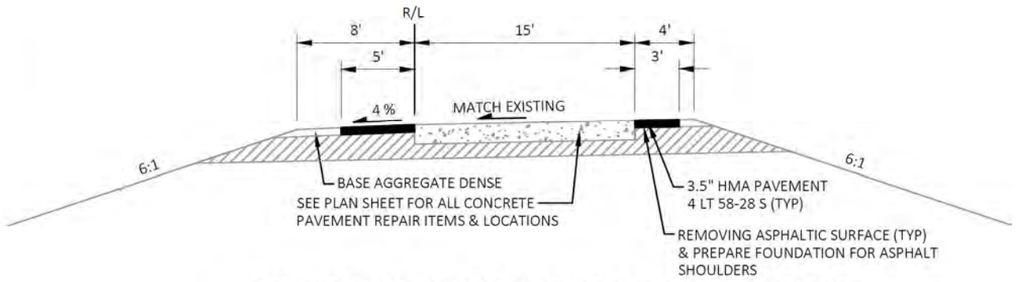
STA 638'SB'+00 - STA 663'SB'+00



FINISHED TYPICAL GUARDRAIL SECTIONS - IH-39 SB

SEE GUARDRAIL DETAILS & EROSION CONTROL FOR LOCATION

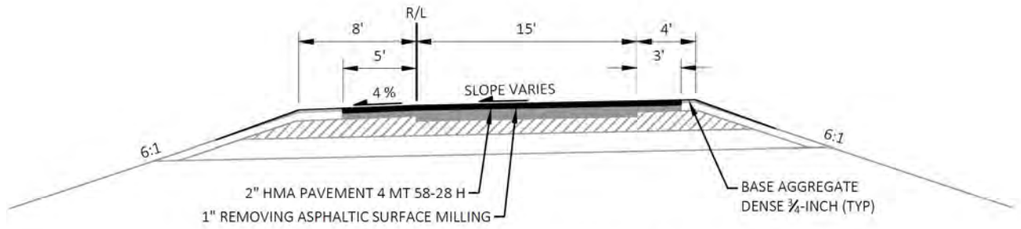
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TYPICAL SECTIONS	SHEET E



FINISHED RAMP TYPICAL SECTION - STH 23/CTH P & CTH D

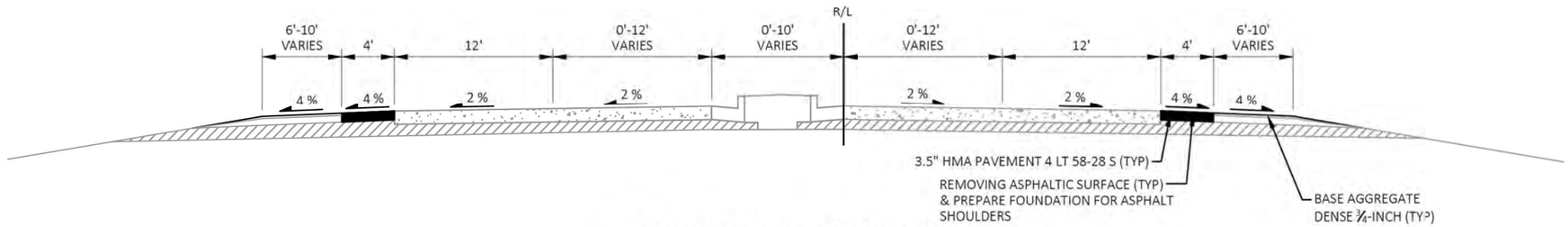
STA 306'AC'+00 - STA 319'AC'+22.39
STA 318'AD'+93.55 - STA 333'AD'+00
STA 527'BC'+00 - STA 539'BC'+58.93

SEE STH23/CTH P ENTRANCE RAMP PLAN, STH 23/CTH P EXIT RAMP PLAN, AND CTH D ENTRANCE RAMP PLAN FOR ALL CONCRETE REPAIR ITEMS.



FINISHED RAMP TYPICAL SECTION - STH 82/STH 23

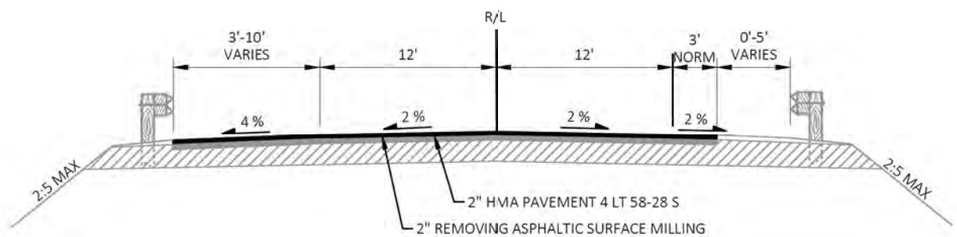
STA 635'CC'+00 - STA 650'CC'+25
STA 652'CD'+25 - STA 671'CD'+79



FINISHED TYPICAL SECTION - STH 23/CTH P

STA 17'P'+07.7 - STA 34'P'+18

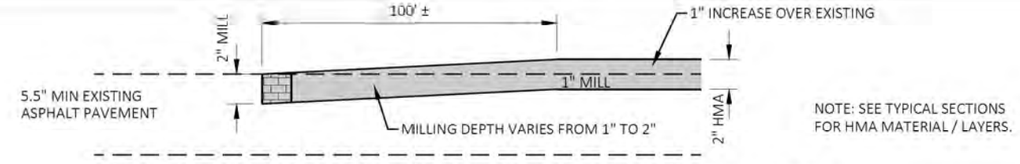
SEE STH 23/CTH P PLAN FOR ALL CONCRETE REPAIR ITEMS.



FINISHED TYPICAL SECTION - CTH D

STA 14'D'+61 - STA 21'D'+17

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TYPICAL SECTIONS	SHEET	E

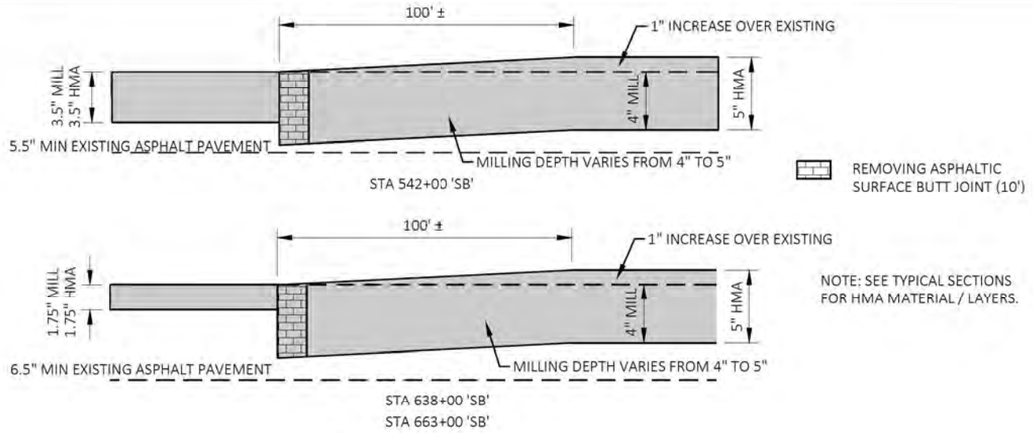


NOTE: SEE TYPICAL SECTIONS FOR HMA MATERIAL / LAYERS.

STH 82/STH 23 RAMP TRANSITION DETAIL

REMOVING ASPHALTIC SURFACE BUTT JOINT (10')

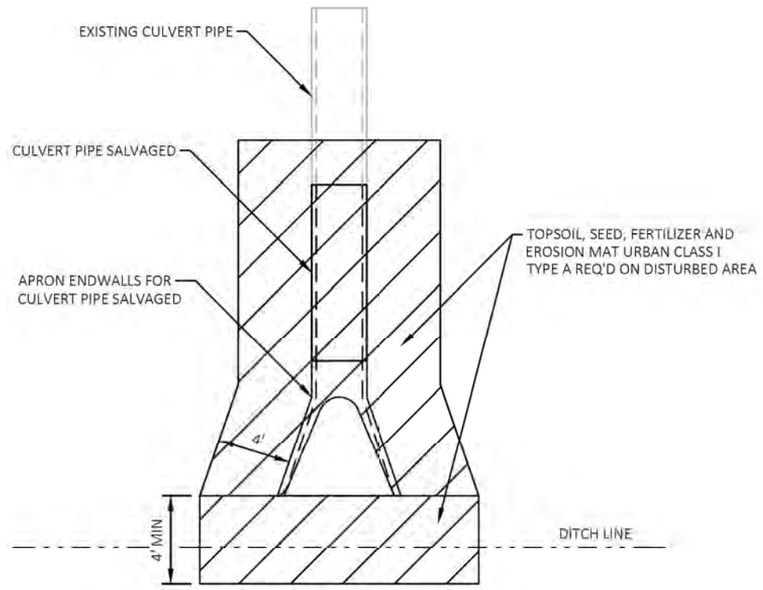
STA 650+25 'CC'
STA 652+25 'CD'



REMOVING ASPHALTIC SURFACE BUTT JOINT (10')

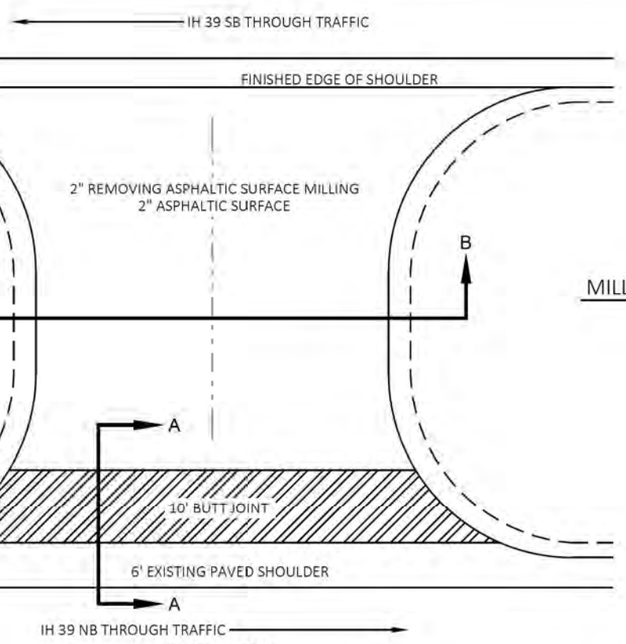
NOTE: SEE TYPICAL SECTIONS FOR HMA MATERIAL / LAYERS.

IH 39 TRANSITION DETAIL



EROSION CONTROL FOR CROSS DRAIN RESTORATION

STA 313+04 (CTH P RAMP)
STA 369+77 'SB'
STA 429+78 'SB'
STA 592+69 'SB'

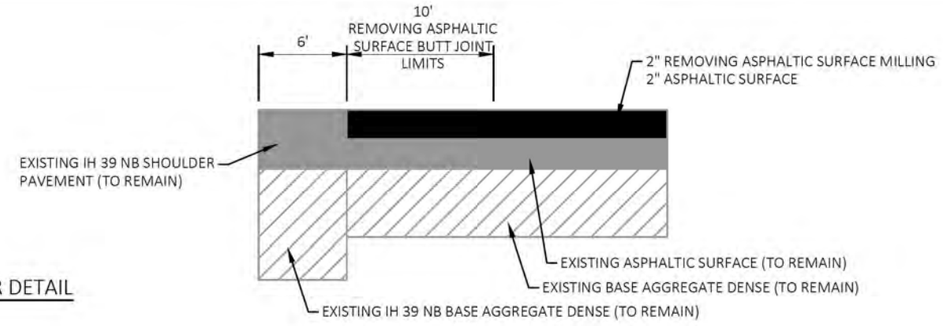


PLAN VIEW

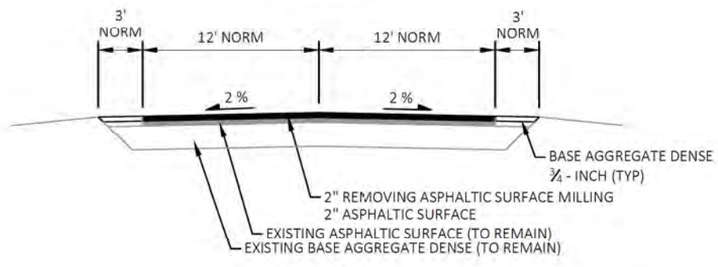
MILL & OVERLAY AT MAINTENANCE CROSSOVER DETAIL

STA 123+00 'SB'
STA 194+64 'SB'
STA 222+21 'SB'
STA 284+76 'SB'
STA 341+69 'SB'
STA 440+45 'SB'
STA 521+53 'SB'
STA 662+24 'SB'
STA 726+45 'SB'

NOTE:
SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, TRAFFIC QUEUE WARNING SYSTEM" AND "TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM" FOR TRAFFIC CONTROL WHILE MILLING BUTT JOINT AND PAVING.

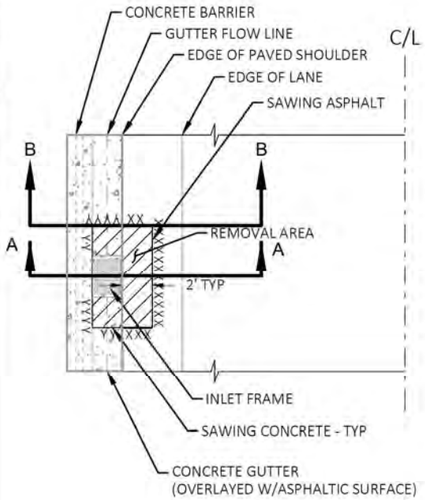


SECTION A-A

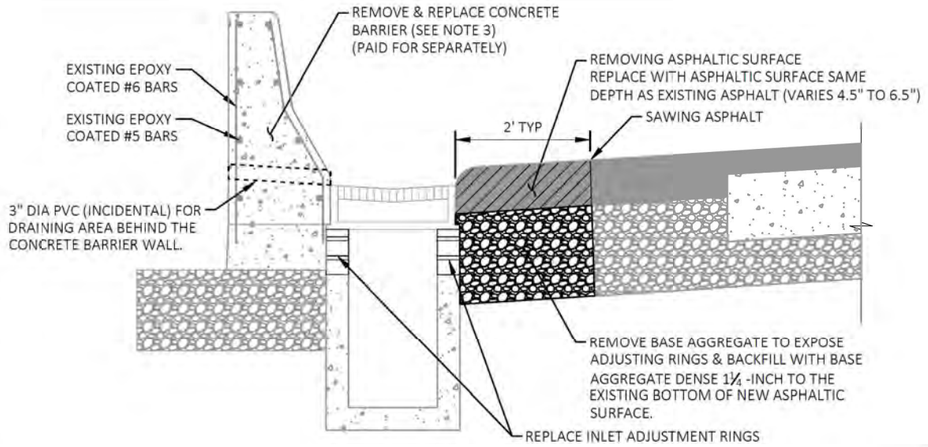


SECTION B-B

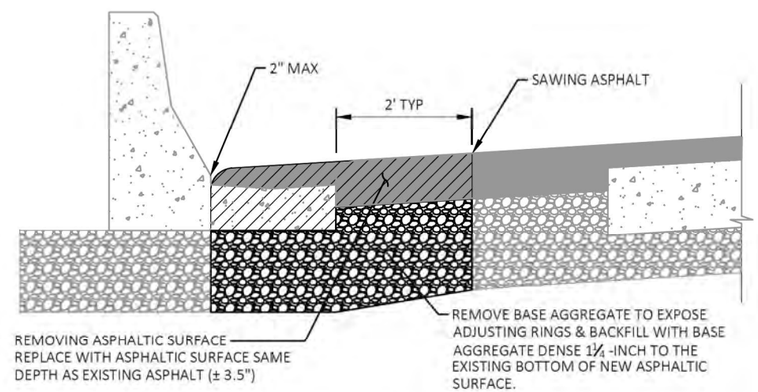
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET E



PLAN VIEW



SECTION A-A



SECTION B-B

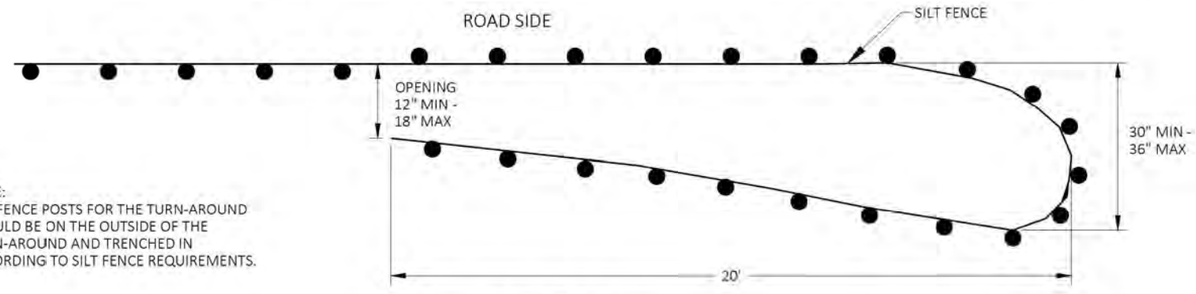
REPLACE INLET ADJUSTMENT RINGS DETAIL

SEE BARRIER REPLACEMENT DETAIL FOR LOCATIONS.

NOTES:

1. ALL SAWING, PAVEMENT REMOVAL, CONCRETE GUTTER REMOVAL, EXCAVATION, BACKFILL, BASE AGGREGATE DENSE 1 ¼ -INCH, ASPHALTIC SURFACE, TUCK POINTING, AND ANY OTHER WORK NECESSARY FOR REPLACING RINGS SHALL BE INCIDENTAL TO THE BID ITEM. REMOVAL AND REPLACEMENT OF CONCRETE BARRIER WILL BE PAID FOR AS A SEPARATE ITEM.
2. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATION AND SPECIAL PROVISIONS.
3. PRESERVE EXISTING HORIZONTAL REINFORCING STEEL WHERE POSSIBLE. ALTERNATELY, DRILL AND EPOXY IN THE SAME SIZE EPOXY COATED HORIZONTAL REINFORCING STEEL WITH MINIMUM 2'-7" OVERLAP. PROVIDE NEW VERTICAL REINFORCING STEEL TO MATCH EXISTING DRILL AND EPOXY INTO FOUNDATION PER MANUFACTURER'S REQUIREMENTS.

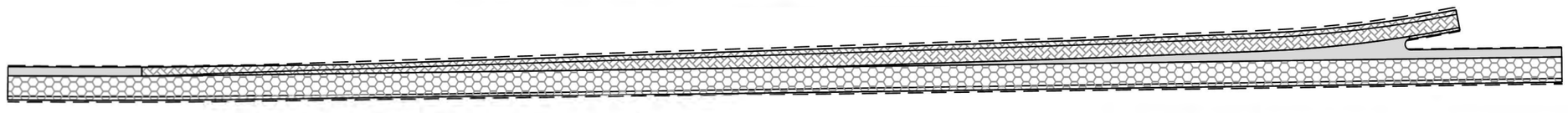
SEE SDD "CONCRETE BARRIER, SINGLE FACED (WITH ANCHORAGE)" FOR ADDITIONAL DETAILS.



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

PLAN VIEW

TEMPORARY SMALL ANIMAL TURN-AROUND



HMA PAVEMENT LEGEND

- 4 SMA 58-28 H OVER 4 HT 58-28 S
- 4 LT 58-28 S
- 4 MT 58-28 H

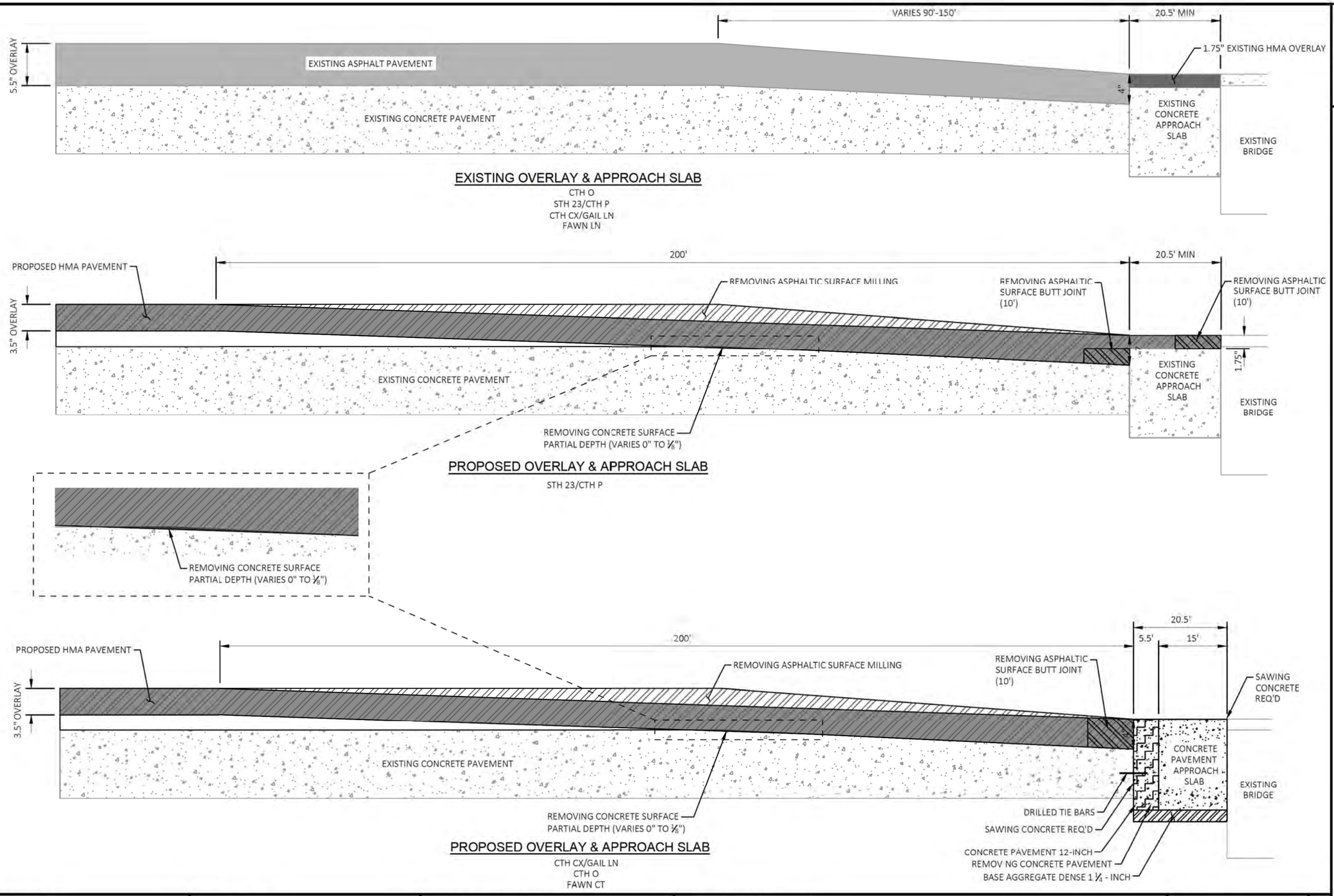
RAMP GORE PAVING DETAIL

STH 23/CTH P
CTH D
STH 82/STH 23

NOTE: THIS DETAIL IS TO BE USED FOR GENERAL LOCATIONS OF HMA PAVEMENT MATERIAL USED IN THE RAMP GORES. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION ON PAVEMNT LIFT THICKNESSES.

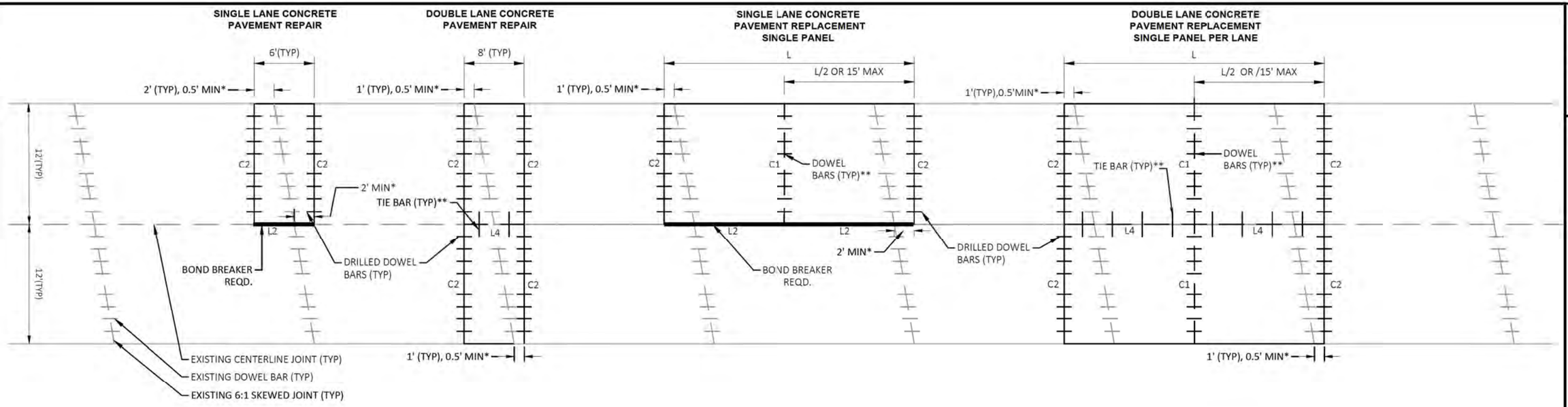
NOTE: CTH D AND STH 23/CTH P RAMPS SWITCH TO EXISTING CONCRETE PAVEMENT SURFACE.

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET E



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021001-CD.DWG
LAYOUT NAME - 021003-cd
PLOT DATE : 6/25/2025 11:48 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ########## WISDOT/C



CONCRETE PAVEMENT REPAIR/REPLACEMENT DETAILS FOR SKEWED JOINTS

NOTES:
FINAL LOCATIONS OF SAW CUTS AND REMOVAL LIMITS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REFER TO S.D.D "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR ADDITIONAL DETAILS.

GRINDING IS ANTICIPATED WITHIN 5' OF ALL CONCRETE PAVEMENT REPAIR/REPLACEMENT. ACTUAL LIMITS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

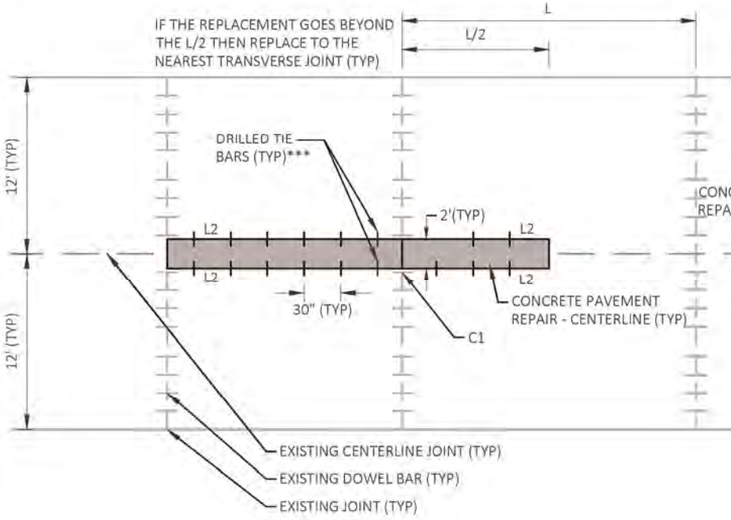
*ENSURE FULL REMOVAL OF EXISTING DOWELS BAR AT CONCRETE REPAIR/REPLACEMENT LOCATIONS.

**INCIDENTAL WHEN NOT ABUTTING EXISTING PAYMENTS.

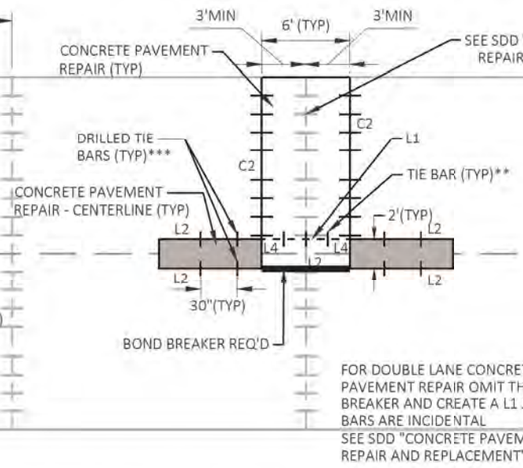
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET E

2

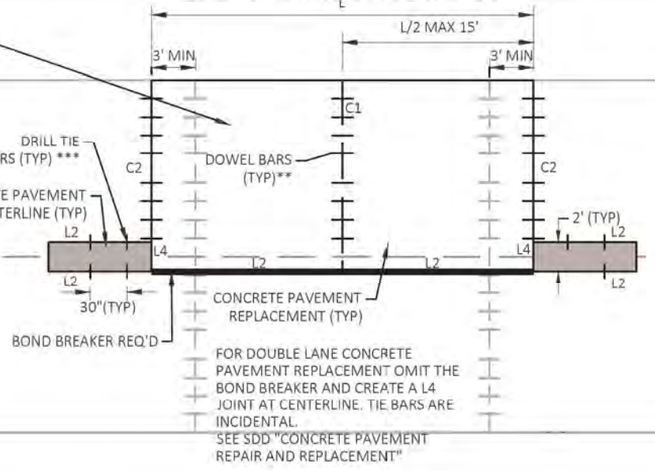
CONCRETE PAVEMENT REPAIR - CENTERLINE



CONCRETE PAVEMENT REPAIR - CENTERLINE WITH SINGLE LANE TRANSVERSE CONCRETE PAVEMENT REPAIR

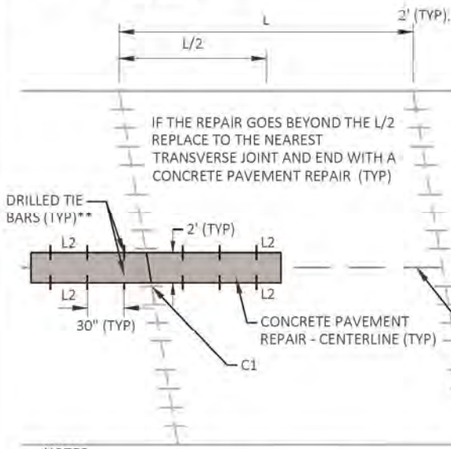


CONCRETE PAVEMENT REPAIR - CENTERLINE WITH SINGLE LANE TRANSVERSE CONCRETE PAVEMENT REPLACEMENT (SINGLE OR MULTIPLE PANEL)

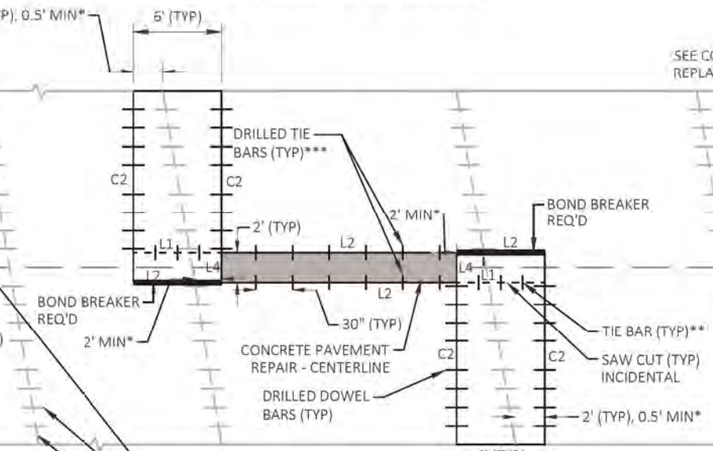


CONCRETE PAVEMENT REPAIR - CENTERLINE DETAILS FOR PERPENDICULAR JOINTS

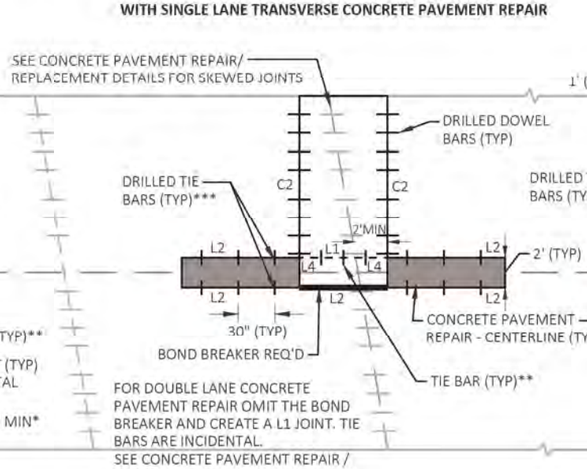
CONCRETE PAVEMENT REPAIR - CENTERLINE (MIDPANEL)



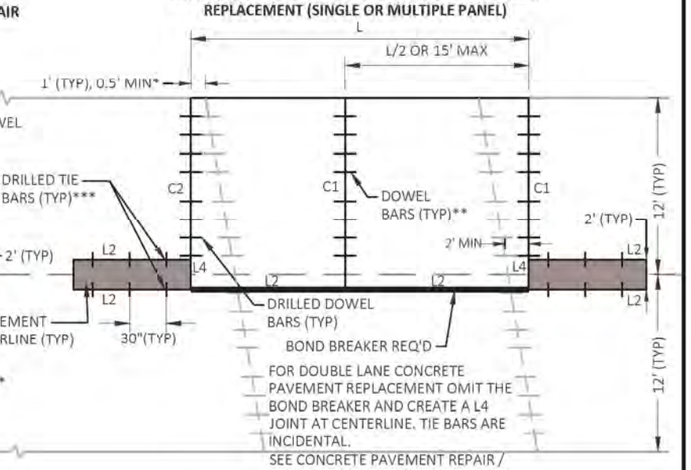
CONCRETE PAVEMENT REPAIR - CENTERLINE



CONCRETE PAVEMENT REPAIR - CENTERLINE WITH SINGLE LANE TRANSVERSE CONCRETE PAVEMENT REPAIR



CONCRETE PAVEMENT REPAIR - CENTERLINE WITH SINGLE LANE TRANSVERSE CONCRETE PAVEMENT REPLACEMENT (SINGLE OR MULTIPLE PANEL)



NOTES:
FINAL LOCATIONS OF SAW CUTS AND REMOVAL LIMITS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REFER TO S.D.D "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR ADDITIONAL DETAILS.

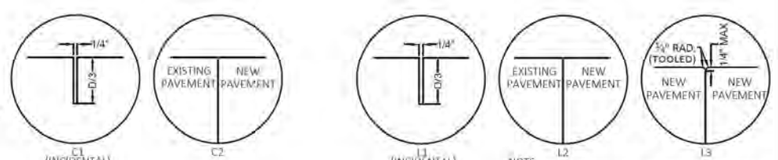
GRINDING IS ANTICIPATED WITHIN 5' OF ALL CONCRETE PAVEMENT REPAIR/REPLACEMENT. ACTUAL LIMITS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

*ENSURE FULL REMOVAL OF EXISTING DOWELS BAR AT CONCRETE REPAIR/REPLACEMENT LOCATIONS.

**INCIDENTAL WHEN NOT ABUTTING EXISTING PAYMENTS.

***TIE BAR MAY BE DRILLED AT AN ANGLE, THEN BENT PERPENDICULAR TO JOINT AFTER INSTALLATION.

CONCRETE PAVEMENT REPAIR - CENTERLINE DETAILS FOR SKEWED JOINTS



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET E

FILE NAME: I:\41\410884_IH 39 MARQUETTE CNTY\C30\SHEETS\021001-CD.DWG
LAYOUT NAME: 021005-cd
PLOT DATE: 6/25/2025 11:49 AM
PLOT BY: RESHESKE, CARRIE
PLOT NAME:
PLOT SCALE: ##########
WISDOT/CA

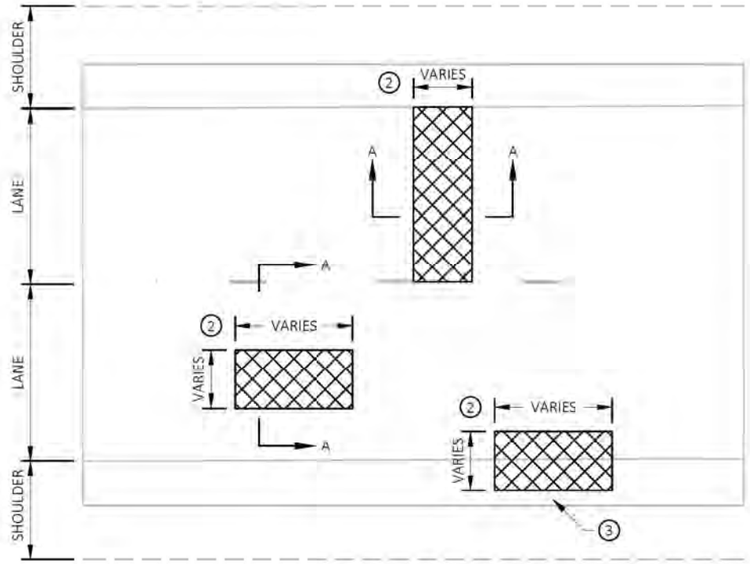
2

NOTES:

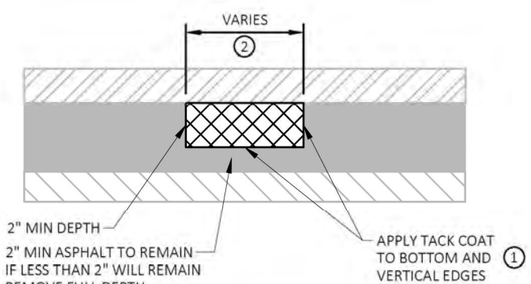
PERFORM REMOVING ASPHALTIC SURFACE MILLING PRIOR TO REMOVING DISTRESSED ASPHALTIC SURFACE MILLING

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.

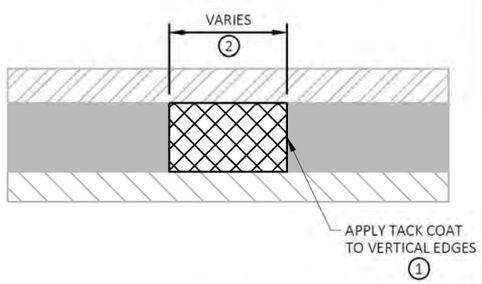
REMOVING ASPHALTIC SURFACE MILLING
REMOVING DISTRESSED ASPHALTIC SURFACE MILLING ASPHALTIC SURFACE PATCHING
EXISTING ASPHALT
EXISTING BASE COURSE



PLAN VIEW



PARTIAL DEPTH



FULL DEPTH

SECTION A-A

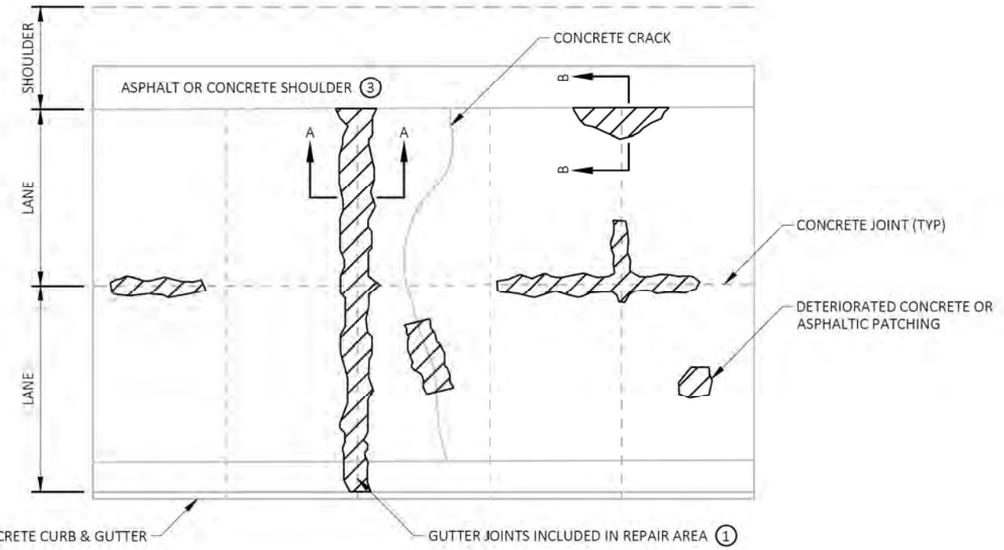
REMOVING DISTRESSED ASPHALTIC SURFACE MILLING

LOCATIONS AND LIMITS DETERMINED BY THE ENGINEER IN THE FIELD

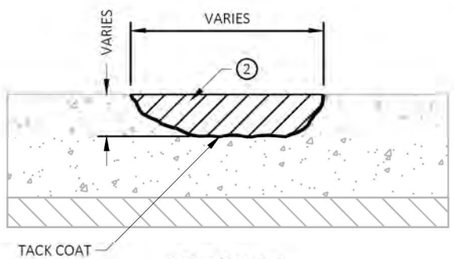
NOTES:

1. PERFORM CONCRETE JOINT AND CRACK CLEANING AND REPAIR IF ASPHALT OVERLAY WILL BE PLACED ON CONCRETE GUTTER
2. REMOVE UNSOUND AND DETERIORATED MATERIAL INCLUDING EXISTING ASPHALTIC PATCHING
3. EXISTING CONCRETE SHOULDER 5-FOOT OR LESS INCLUDED IN REPAIR AREA OF ADJACENT LANE

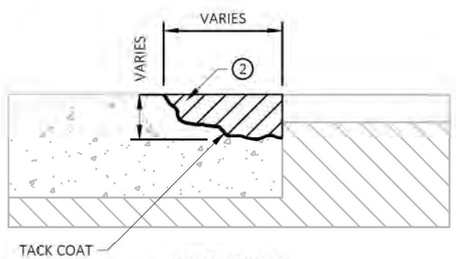
ASPHALTIC SURFACE
EXISTING CONCRETE PAVEMENT
EXISTING BASE COURSE



PLAN VIEW



SECTION A-A



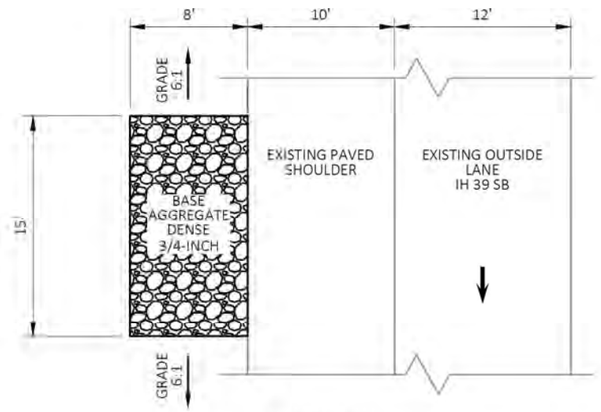
SECTION B-B

CONCRETE JOINT AND CRACK CLEANING AND REPAIR

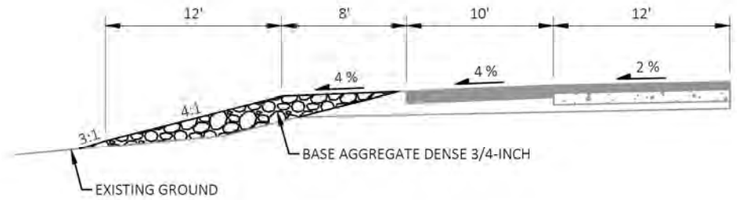
LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CONSTRUCTION DETAILS	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021001-CD.DWG
LAYOUT NAME - 021006-cd
PLOT DATE : 6/13/2025 9:23 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ########## WISDOT/CA



PLAN VIEW



PROFILE VIEW

DIGITAL SPEED LIMIT TRAILER PAD DETAIL

NOTE:
ABUT SILT FENCE TO BRIDGE OR SURFACE DRAIN TO CAPTURE EXPOSED AREAS.

POST 1 114+65.60, 36' LT
POST 5 114+40.60, 35' LT
POST 9 114+15.60, 34' LT
TAPER 114+12.48, 34' LT

MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, &
MGS GUARDRAIL TERMINAL EAT

WETLAND BOUNDRY

SLOPE INTERCEPT

PC: 115'SB'+67.92

IH 39 SB

111'SB'+00 | 112'SB'+00 | 113'SB'+00 | 114'SB'+00 | 115'SB'+00 | 116'SB'+00

NEENAH CREEK

MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, &
MGS GUARDRAIL TERMINAL EAT

POST 1 114+65.47, 12' RT
POST 5 114+40.47, 11' RT
POST 9 114+15.47, 10' RT
TAPER 114+12.35, 10' RT

WETLAND BOUNDRY

SLOPE INTERCEPT

IH 39 NB

LEGEND

- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B URBAN
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- INLET PROTECTION (TYPE AS NOTED)
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

PT: 129'SB'+21.01

GROUSE DR

MARQUETTE ADAMS FO

IH 39 SB

STEEL THRIE BEAM BULLNOSE TERMINAL
STA 130+31 SB, 25.30' RT

STEEL THRIE BEAM BULLNOSE TERMINAL
STA 131+58.43 SB, 25.30' RT

128'SB'+00 | 129'SB'+00 | 130'SB'+00 | 131'SB'+00 | 132'SB'+00 | 133'SB'+00 | 134'SB'+00

SLOPE INTERCEPT

STEEL THRIE BEAM BULLNOSE TERMINAL
STA 130+31 SB, 39.50' RT

STEEL THRIE BEAM BULLNOSE TERMINAL
STA 131+58.43 SB, 39.50' RT

STEEL THRIE BEAM

TYPE A

TYPE A

IH 39 NB

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS & EROSION CONTROL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021002-CD.DWG
LAYOUT NAME - 021010-cd
PLOT DATE : 8/20/2025 11:55 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

SAWCUT REQ'D
ADJUSTING INLET COVERS
CONCRETE CURB & GUTTER 4" SLOPED, 36" TYPE TBT & TBTT (MATCH EXISTING PAVEMENT ELEVATION AT FLAG LINE)
CTH O
TYPE B
12-IN CONCRETE SHOULDER ALL FOUR QUANDRANTS
CONCRETE PAVEMENT APPROACH SLAB SEE PROPOSED OVERLAY & APPROACH SLAB DETAIL
ADAMS-COLUMBIA ELEC
NOTE:
ABUT SILT FENCE TO BRIDGE OR SURFACE DRAIN TO CAPTURE EXPOSED AREAS.
MGS GUARDRAIL 3, MGS THRIE BEAM TRANSITION, & MGS GUARDRAIL TERMINAL EAT
POST 1 213+70, 36' LT
POST 5 213+45, 35' LT
POST 9 213+20, 34' LT
TAPER 213+16.88, 34' LT
SLOPE INTERCEPT
N
IH 39 SB
210'SB'+00
211'SB'+00
212'SB'+00
213'SB'+00
214'SB'+00
215'SB'+00
REMOVING SURFACE DRAINS
CONCRETE SURFACE DRAIN (FLUME TYPE)
MGS GUARDRAIL 3, MGS THRIE BEAM TRANSITION, & MGS GUARDRAIL TERMINAL EAT
SLOPE INTERCEPT
POST 1 214+32.42, 8' RT
POST 5 214+07.42, 7' RT
POST 9 213+82.42, 6' RT
TAPER 213+79.30, 6' RT
ADJUST STATION AND OFFSET ACCORDINGLY TO MATCH FIELD CONDITIONS
IH 39 NB

LEGEND
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B URBAN
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- INLET PROTECTION (TYPE AS NOTED)
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

SAWCUT REQ'D
ADJUSTING INLET COVERS
CONCRETE CURB & GUTTER 4" SLOPED, 36" TYPE TBT (MATCH EXISTING PAVEMENT ELEVATION AT FLAG LINE)
CTH P/STH 23
MARQUETTE ADAMS FO
TYPE B
SEE PROPOSED OVERLAY & APPROACH SLAB DETAIL
MGS GUARDRAIL 3, MGS THRIE BEAM TRANSITION, & MGS GUARDRAIL TERMINAL EAT
POST 1 322+56.60, 36' LT
POST 5 322+31.60, 35' LT
POST 9 322+06.60, 34' LT
TAPER 322+03.48, 34' LT
SLOPE INTERCEPT
N
IH 39 SB
318'SB'+00
319'SB'+00
320'SB'+00
321'SB'+00
322'SB'+00
323'SB'+00
CONCRETE SURFACE DRAIN TO REMAIN
NOTE:
ABUT SILT FENCE TO BRIDGE OR SURFACE DRAIN TO CAPTURE EXPOSED AREAS.
TYPE A
SLOPE INTERCEPT
MGS GUARDRAIL 3, MGS THRIE BEAM TRANSITION, & MGS GUARDRAIL TERMINAL EAT
POST 1 323+12.65, 8' RT
POST 5 322+87.65, 7' RT
POST 9 322+62.65, 6' RT
TAPER 322+59.53, 6' RT
ADJUST STATION AND OFFSET ACCORDINGLY TO MATCH FIELD CONDITIONS
IH 39 NB

2

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS & EROSION CONTROL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021002-CD.DWG
LAYOUT NAME - 021011-cd
PLOT DATE : 6/18/2025 12:31 PM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

2

NOTE:
ABUT SILT FENCE TO BRIDGE OR SURFACE DRAIN TO CAPTURE EXPOSED AREAS.

REMOVING SURFACE DRAINS
REMOVING INLET
REMOVING SMALL PIPE CULVERT

CONCRETE CURB & GUTTER 4" SLOPED, 36" TYPE TBT (MATCH EXISTING PAVEMENT ELEVATION AT FLAG LINE)

TYPE B

CONCRETE SURFACE DRAIN (DROP INLET TYPE)

MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, &
MGS GUARDRAIL TERMINAL EAT

POST 1 388+69.72, 36' LT
POST 5 388+44.72, 35' LT
POST 9 388+19.72, 34' LT
TAPER 388+16.60, 34' LT

SLOPE INTERCEPT

12-IN CONCRETE SHOULDER
ALL FOUR QUANDRANTS

CONCRETE PAVEMENT APPROACH SLAB
SEE PROPOSED OVERLAY & APPROACH SLAB DETAIL

SAWCUT REQ'D

IH 39 SB

384'SB'+00 385'SB'+00 386'SB'+00 387'SB'+00 388'SB'+00 389'SB'+00 390'SB'+00

FO FO FO

CTH CX/GAIL DR

REMOVING SURFACE DRAINS

CONCRETE CURB & GUTTER 4" SLOPED, 36" TYPE TBT & TBTT (MATCH EXISTING PAVEMENT ELEVATION AT FLAG LINE)

CONCRETE SURFACE DRAIN (FLUME TYPE)

FINAL PLACEMENT OF THE FLUME MUST MAINTAIN THE MINIMUM POST SEPARATION DISTANCES IN THE STANDARD SPECS

MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, &
MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT

TYPE A

POST 1 389+13.90, 8' RT
POST 5 388+88.90, 7' RT
POST 9 388+63.90, 6' RT
TAPER 388+60.78, 6' RT

ADJUST STATION AND OFFSET ACCORDINGLY TO MATCH FIELD CONDITIONS

IH 39 NB

LEGEND

- SURFACE WATER FLOW
- EROSION MAT CLASS I, TYPE B URBAN
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- INLET PROTECTION (TYPE AS NOTED)
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

IH 39 SB

441'SB'+00 442'SB'+00 443'SB'+00 444'SB'+00 445'SB'+00 446'SB'+00 447'SB'

SLOPE INTERCEPT

MGS GUARDRAIL 3 & 3K,
MGS THRIE BEAM TRANSITION, &
MGS GUARDRAIL TERMINAL TYPE 2

TYPE A

ADJUST STATION AND OFFSET ACCORDINGLY TO MATCH FIELD CONDITIONS

IH 39 NB

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS & EROSION CONTROL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021002-CD.DWG
LAYOUT NAME - 021012-cd

PLOT DATE : 6/18/2025 12:31 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, &
MGS GUARDRAIL TERMINAL EAT

LUMEN

N

POST 1 507+66.72, 36' LT
POST 5 507+41.72, 35' LT
POST 9 507+16.72, 34' LT
TAPER 507+13.60, 34' LT

ADJUST STATION AND
OFFSET ACCORDINGLY TO
MATCH FIELD CONDITIONS

SLOPE INTERCEPT

PC: 508'SB+04.00

IH 39 SB

'+00 504'SB'+00 505'SB'+00 506'SB'+00 507'SB'+00 508'SB'+00 509'SB'+00

IH 39 NB

UNION PACIFIC RAILROAD

LEGEND

- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B URBAN
- RIPRAP MEDIUM (UNLESS NCTED OTHERWISE)
- SILT FENCE
- INLET PROTECTION (TYPE AS NOTED)
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

N

PT: 515'SB+18.13

B'+00 511'SB'+00 512'SB'+00 513'SB'+00 514'SB'+00 515'SB'+00 516'SB'+00

IH 39 SB

SLOPE INTERCEPT

MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, &
MGS GUARDRAIL TERMINAL EAT

IH 39 NB

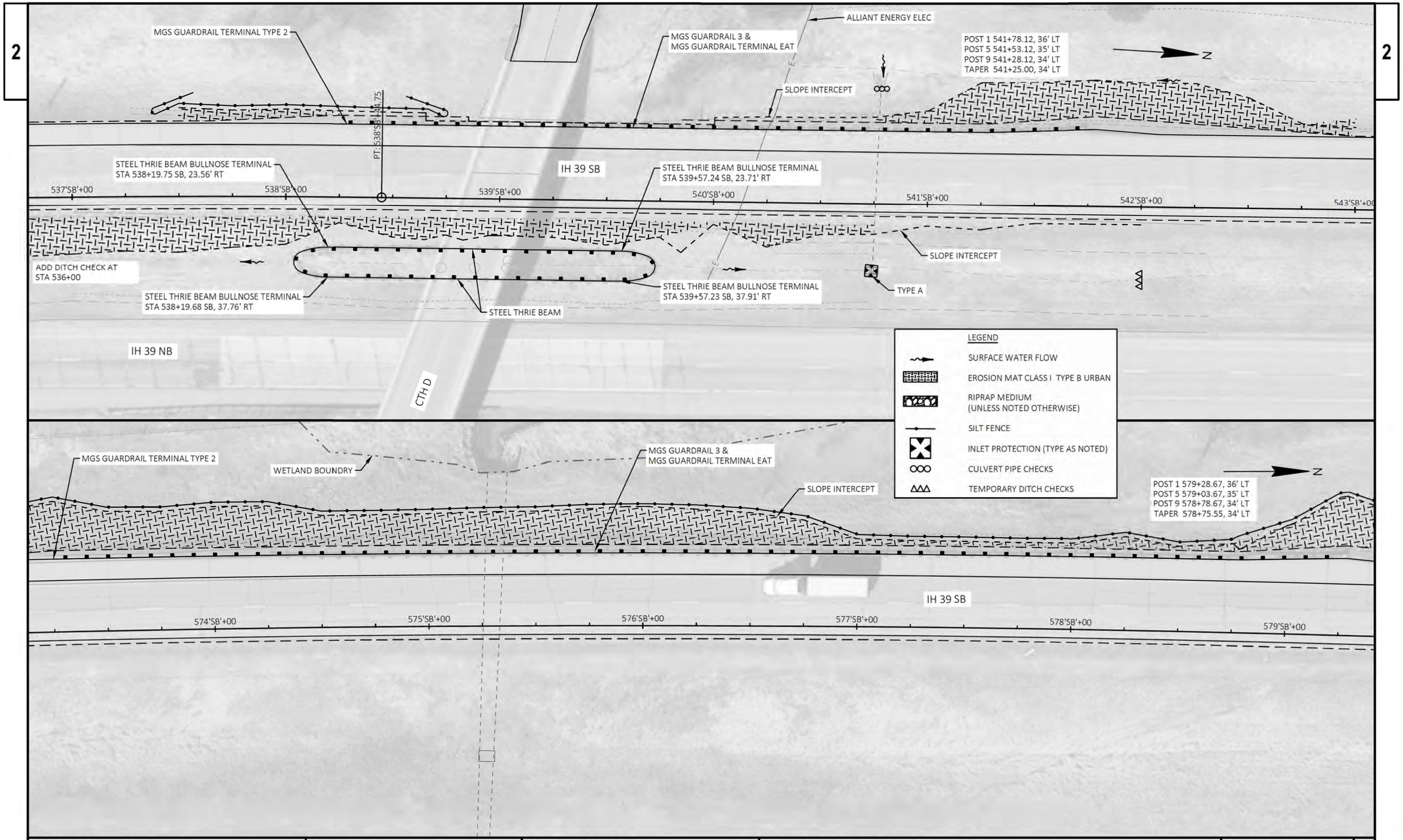
POST 1 514+79.30, 8' RT
POST 5 514+54.30, 7' RT
POST 9 514+29.30, 6' RT
TAPER 514+26.18, 6' RT

ADJUST STATION AND
OFFSET ACCORDINGLY TO
MATCH FIELD CONDITIONS

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS & EROSION CONTROL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021002-CD.DWG
LAYOUT NAME - 021013-cd

PLOT DATE : 6/18/2025 12:31 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS & EROSION CONTROL	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021002-CD.DWG
LAYOUT NAME - 021014-cd
PLOT DATE : 8/20/2025 11:55 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ########## WISDOT/C

2

SLOPE INTERCEPT

MGS GUARDRAIL 3 &
MGS GUARDRAIL TERMINAL TYPE 2

N

IH 39 SB

671'SB'+00 672'SB'+00 673'SB'+00 674'S3'+00 675'SB'+00 676'SB'+00 677'SB'+00

LEGEND

- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B URBAN
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- INLET PROTECTION (TYPE AS NOTED)
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS

POST 1 681+50.00, 36' LT
POST 5 681+25.00, 35' LT
POST 9 681+00.00, 34' LT
TAPER 680+96.88, 34' LT

MGS GUARDRAIL 3 &
MGS GUARDRAIL TERMINAL EAT

N

SLOPE INTERCEPT

IH 39 SB

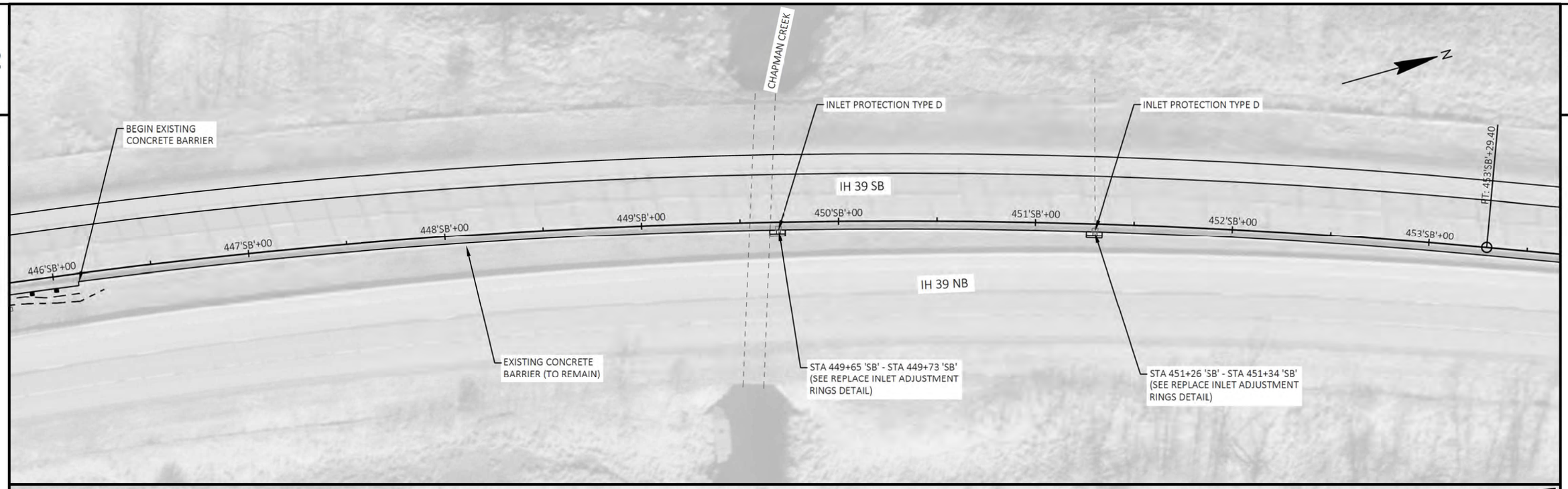
677'SB'+00 678'SB'+00 679'SB'+00 680'SB'+00 681'SB'+00 682'SB'+00 683'SB'+00

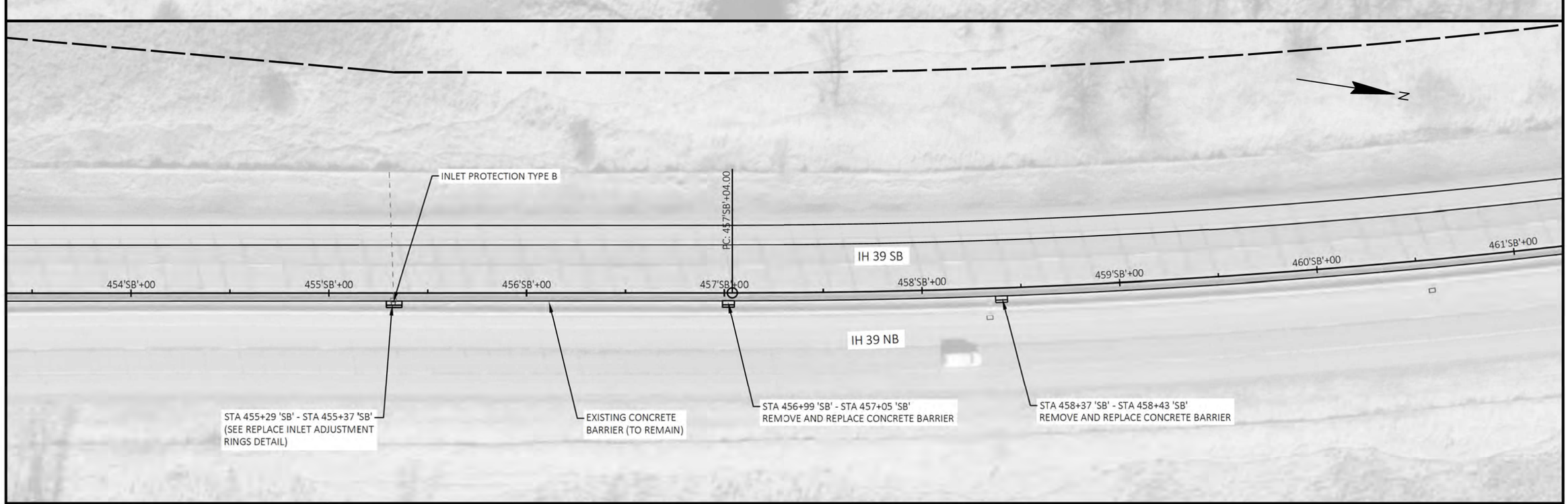
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	GUARDRAIL DETAILS & EROSION CONTROL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021002-CD.DWG
LAYOUT NAME - 021015-cd

PLOT DATE : 6/18/2025 12:31 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2





PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	BARRIER REPLACEMENT DETAIL	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021003-CD.DWG
LAYOUT NAME - 021016-cd
PLOT DATE : 6/25/2025 11:40 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/C

2

2

N

EXISTING CONCRETE BARRIER (TO REMAIN)

461'SB'+00 462'SB'+00 463'SB'+00 464'SB'+00 465'SB'+00 466'SB'+00 467'SB'+00 468'SB'+00

IH 39 SB

IH 39 NB

N

RT: 470'SB'+15.50

EXISTING CONCRETE BARRIER (TO REMAIN)

INLET PROTECTION TYPE B

IH 39 SB

469'SB'+00 470'SB'+00 471'SB'+00 472'SB'+00 473'SB'+00 474'SB'+00 475'SB'+00 476'SB'+00

IH 39 NB

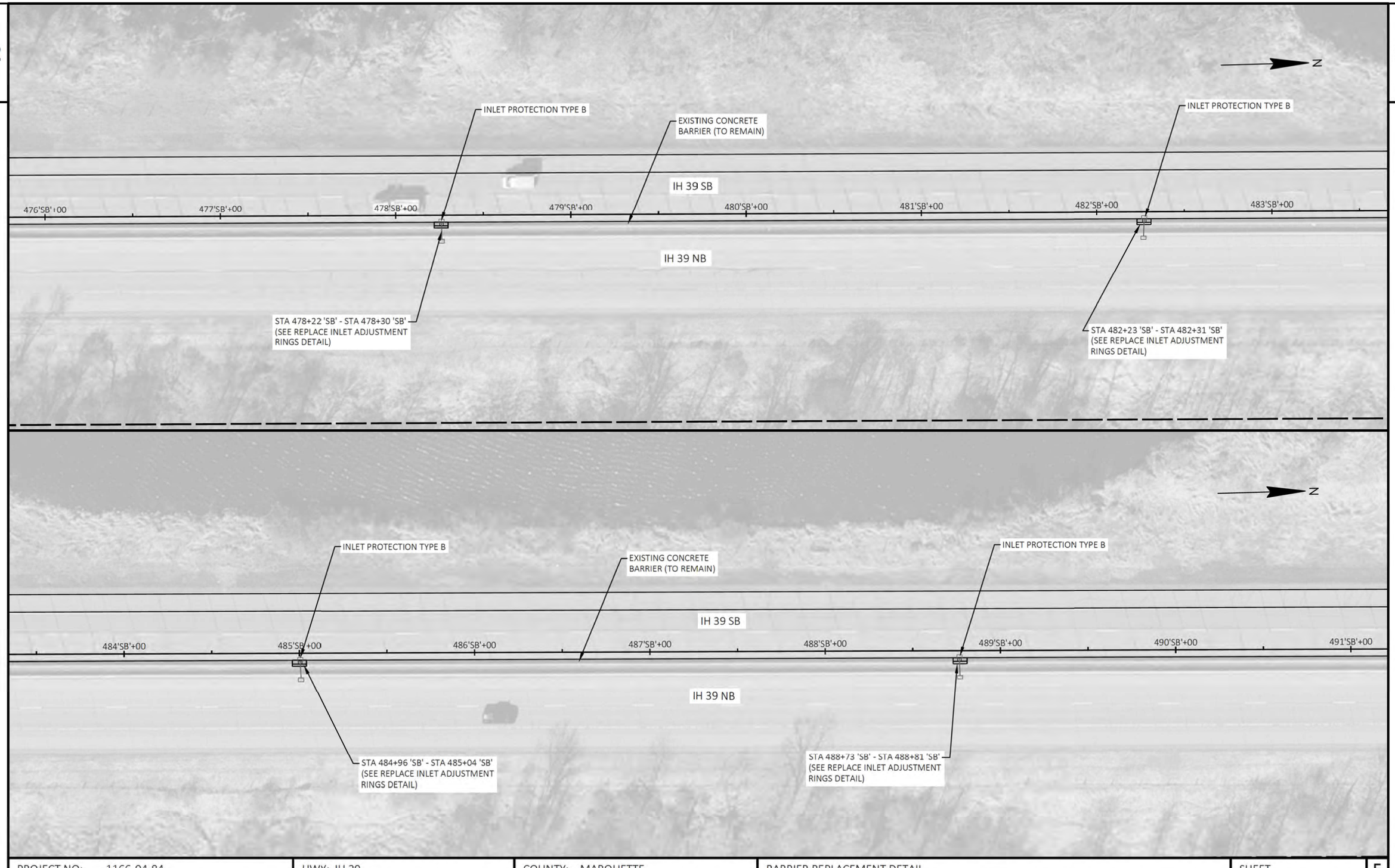
STA 471+73 'SB' - STA 471+93 'SB'
(SEE REPLACE INLET ADJUSTMENT RINGS DETAIL)

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	BARRIER REPLACEMENT DETAIL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021003-CD.DWG
LAYOUT NAME - 021017-cd

PLOT DATE : 6/25/2025 11:40 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



2

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	BARRIER REPLACEMENT DETAIL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021003-CD.DWG
LAYOUT NAME - 021018-cd

PLOT DATE : 6/25/2025 11:40 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:50 FT

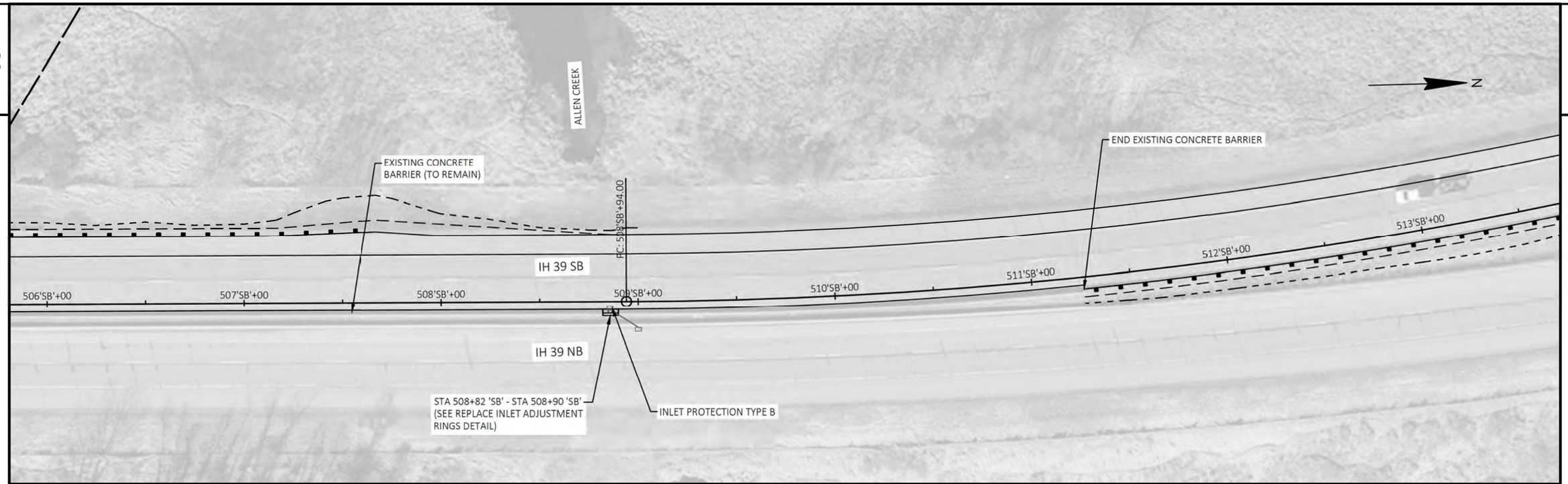
2



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	BARRIER REPLACEMENT DETAIL	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021003-CD.DWG
LAYOUT NAME - 021019-cd

PLOT DATE : 6/25/2025 11:40 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:50 FT



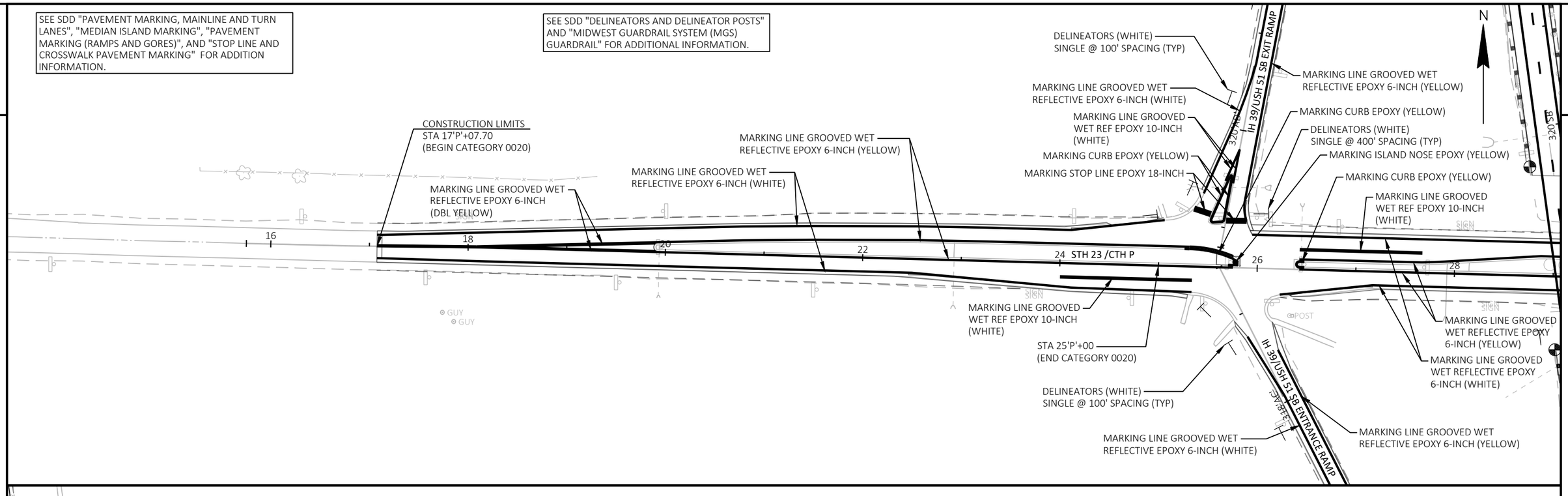
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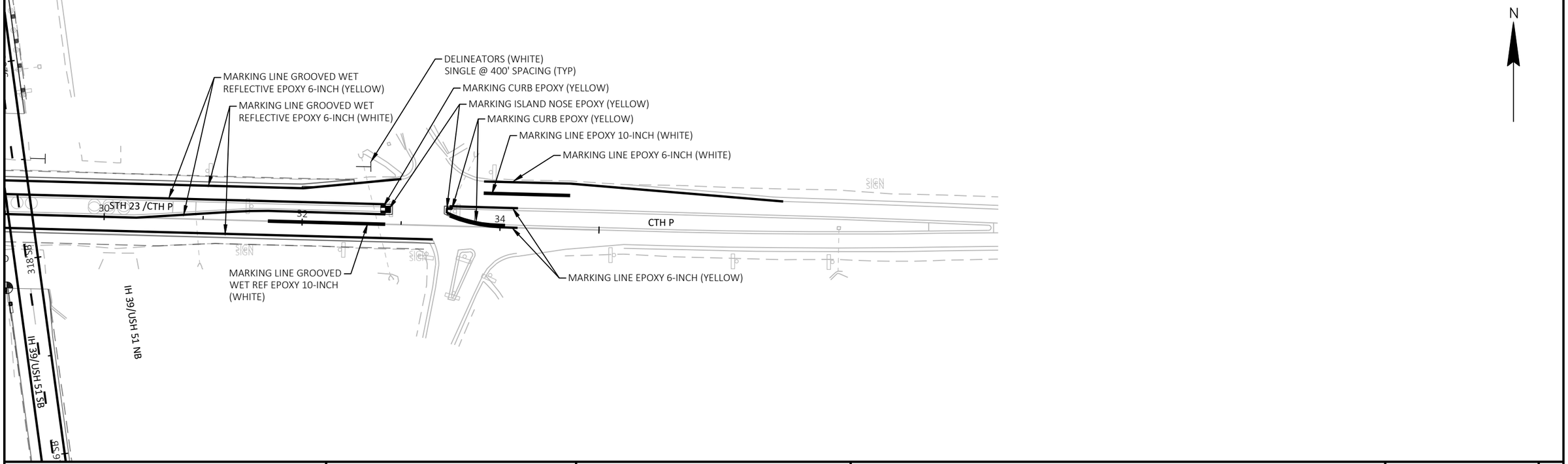
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	BARRIER REPLACEMENT DETAIL	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\021003-CD.DWG
LAYOUT NAME - 021020-cd
PLOT DATE : 6/25/2025 11:40 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:50 FT

SEE SDD "PAVEMENT MARKING, MAINLINE AND TURN LANES", "MEDIAN ISLAND MARKING", "PAVEMENT MARKING (RAMPS AND GORES)", AND "STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR ADDITION INFORMATION.

SEE SDD "DELINEATORS AND DELINEATOR POSTS" AND "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" FOR ADDITIONAL INFORMATION.





PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PAVEMENT MARKING -STH 23/CTH P	SHEET 28	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\024501-PM.DWG
LAYOUT NAME - PM01
PLOT DATE : 9/3/2025 9:16 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

DELINEATORS (WHITE)
(REFLECTOR ONLY)
SINGLE

MARKING LINE EPOXY 6-INCH (DBL YELLOW C/L)

MARKING LINE EPOXY 6-INCH (WHITE)

MARKING LINE EPOXY 10-INCH (WHITE)

DELINEATORS (WHITE)
SINGLE @ 100' SPACING (TYP)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH (YELLOW)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH (WHITE)

SEE SDD "DELINEATORS AND DELINEATOR POSTS" AND "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" FOR ADDITIONAL INFORMATION.

SEE SDD "PAVEMENT MARKING, MAINLINE AND TURN LANES", "MEDIAN ISLAND MARKING", "PAVEMENT MARKING (RAMPS AND GORES)", AND "STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR ADDITION INFORMATION.

N

12
14
16
18
20
22

CTH D

540'SB'
538'SB'
IH 39/USH 51 SB

IH 39/USH 51 SB ENTRANCE RAMP

536'BC'

N

DELINEATORS (WHITE)
SINGLE @ 400' SPACING (TYP)

DELINEATORS (WHITE)
DOUBLE @ 100' SPACING (TYP)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH
(3' DASH, 9' GAP) (WHITE)

DELINEATORS (WHITE)
SINGLE @ 100' SPACING (TYP)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH (WHITE)

MARKING LINE GROOVED
WET REF EPOXY 10-INCH
(WHITE)

MARKING LINE GROOVED WET REF EPOXY
6-INCH (WHITE) & GROOVED BLACK EPOXY
6-INCH (12.5' WHITE EPOXY LAGGED BY 12.5'
BLACK EPOXY, 25' GAP)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH (YELLOW)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH (YELLOW)

DELINEATORS (WHITE)
SINGLE @ 400' SPACING (TYP)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH (WHITE)

524'SB'
526'SB'
528'SB'
530'SB'
532'SB'
534'SB'
536'SB'

526'BC'
528'BC'
530'BC'
532'BC'
534'BC'
536'BC'

IH 39/USH 51 SB

IH 39/USH 51 SB ENTRANCE RAMP

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PAVEMENT MARKING - CTH D & CTH D RAMP GORE	SHEET 29	E

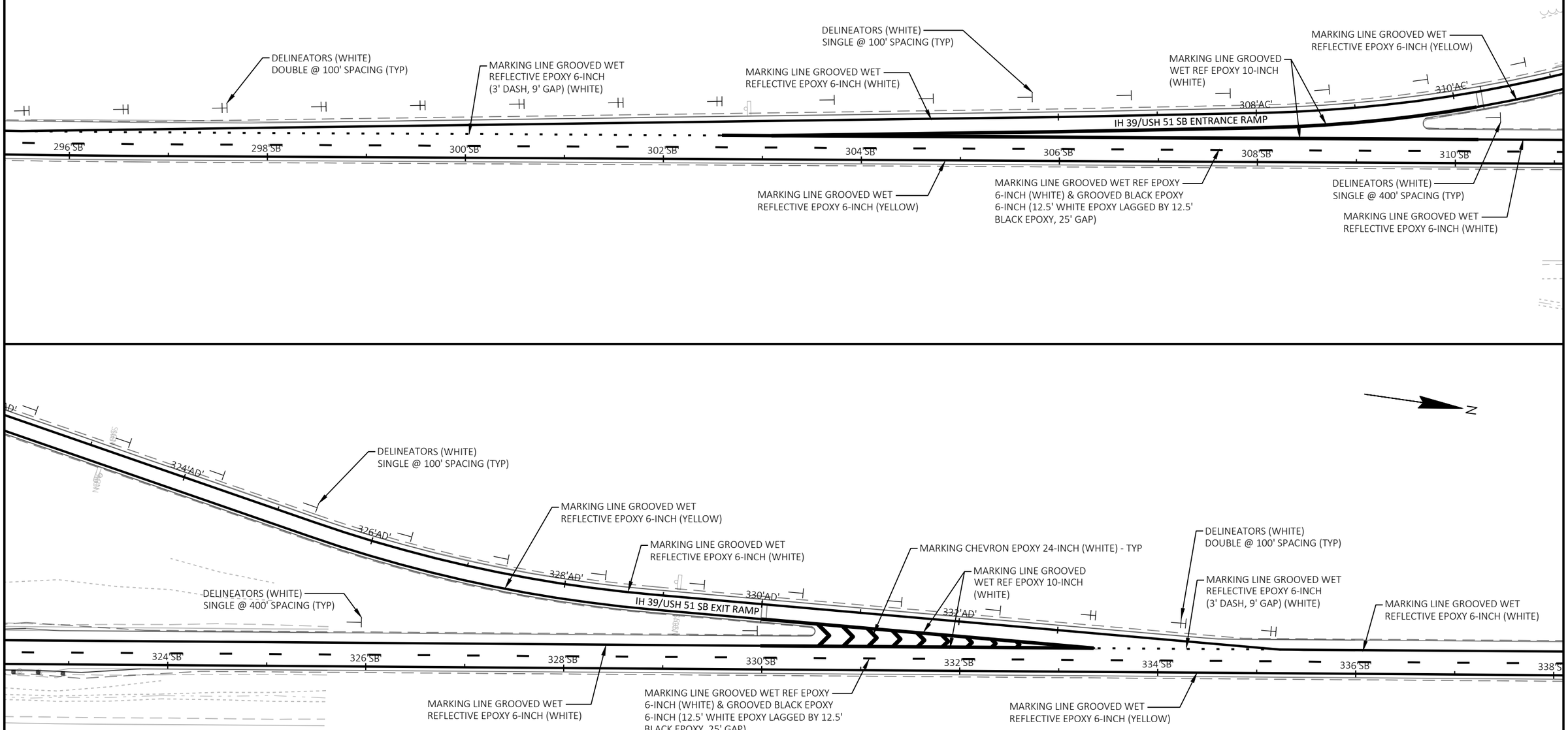
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\024501-PM.DWG
LAYOUT NAME - PM03

PLOT DATE : 9/3/2025 9:16 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:100 FT

SEE SDD "PAVEMENT MARKING, MAINLINE AND TURN LANES", "MEDIAN ISLAND MARKING", "PAVEMENT MARKING (RAMPS AND GORES)", AND "STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR ADDITION INFORMATION.

SEE SDD "DELINEATORS AND DELINEATOR POSTS" AND "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" FOR ADDITIONAL INFORMATION.

N



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PAVEMENT MARKING - STH 23/CTH P RAMP GORES	SHEET 30	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\024501-PM.DWG
LAYOUT NAME - PM02

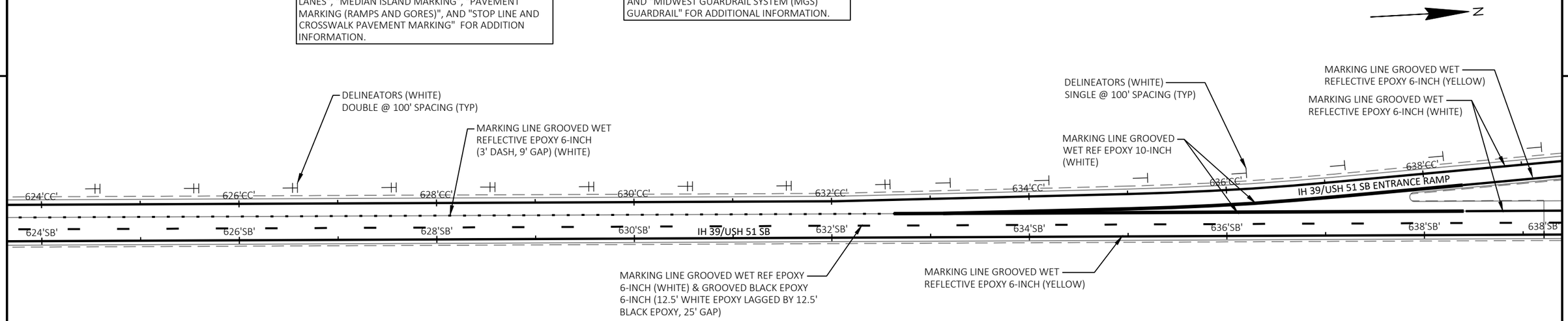
PLOT DATE : 9/3/2025 9:16 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:100 FT

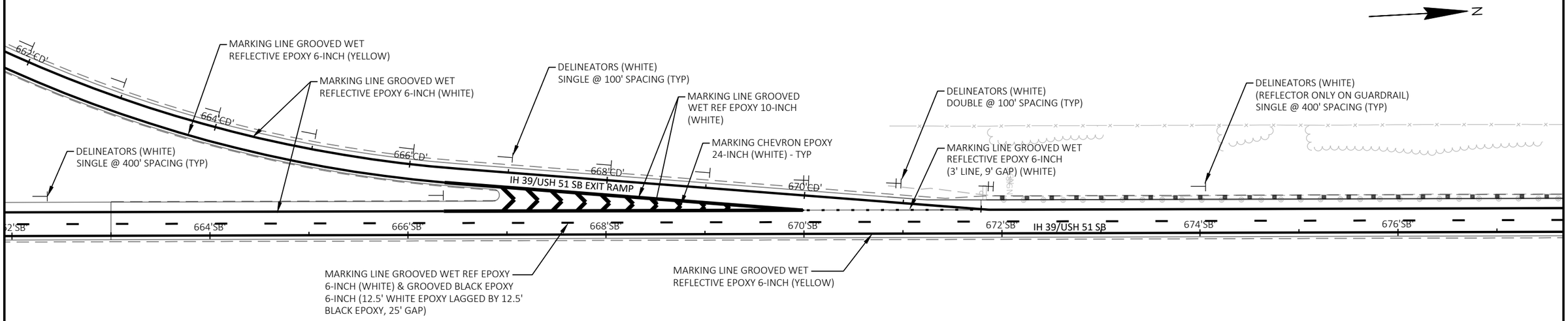
WISDOT/CADDS SHEET 44

2

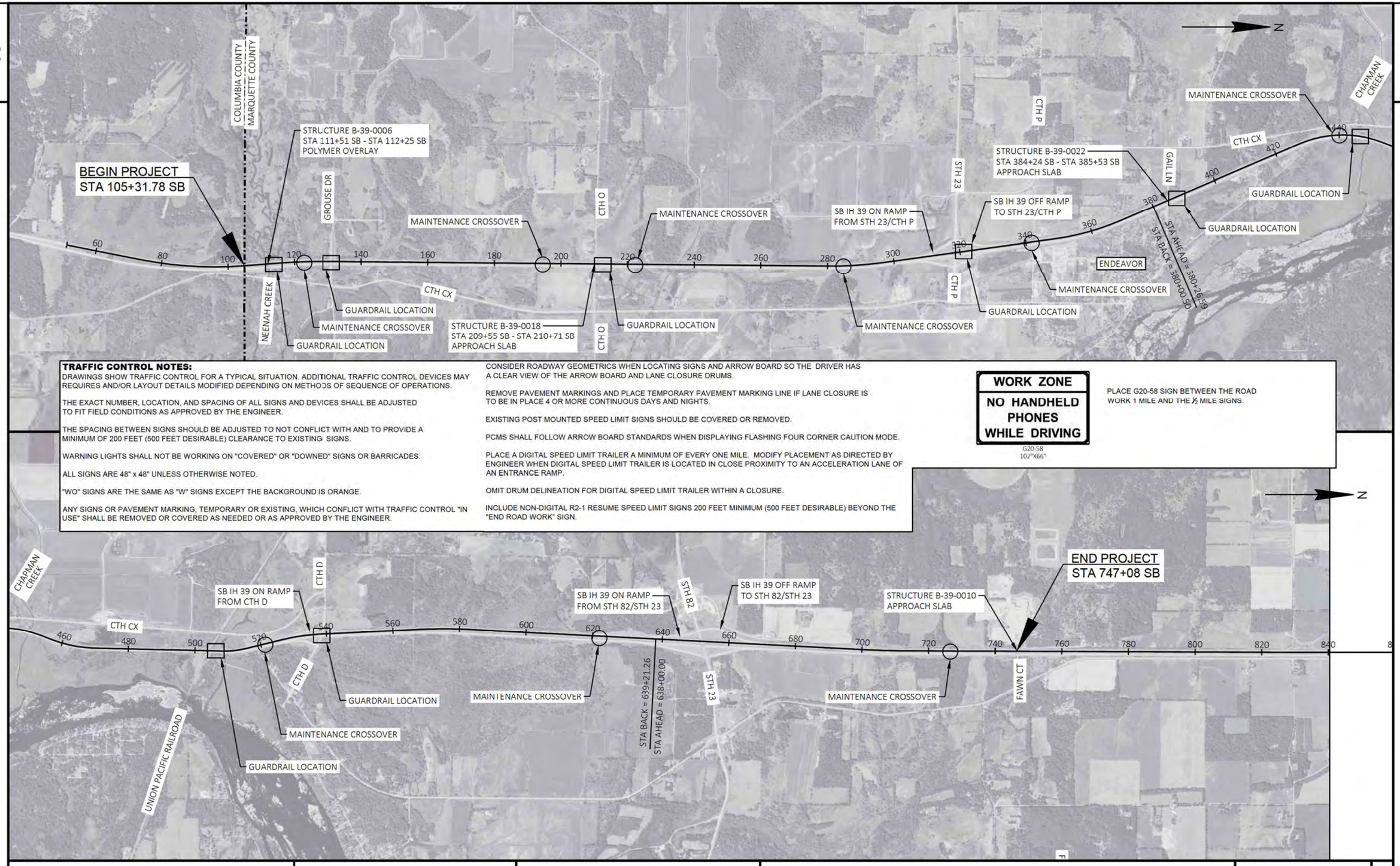
SEE SDD "PAVEMENT MARKING, MAINLINE AND TURN LANES", "MEDIAN ISLAND MARKING", "PAVEMENT MARKING (RAMPS AND GORES)", AND "STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR ADDITION INFORMATION.

SEE SDD "DELINEATORS AND DELINEATOR POSTS" AND "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" FOR ADDITIONAL INFORMATION.





PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PAVEMENT MARKING - STH 82/STH23 RAMP GORES	SHEET 31	E



TRAFFIC CONTROL NOTES:

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY REQUIRES AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON METHODS OF SEQUENCE OF OPERATIONS.

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

EXISTING POST MOUNTED SPEED LIMIT SIGNS SHOULD BE COVERED OR REMOVED.

PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE.

PLACE A DIGITAL SPEED LIMIT TRAILER A MINIMUM OF EVERY ONE MILE. MODIFY PLACEMENT AS DIRECTED BY ENGINEER WHEN DIGITAL SPEED LIMIT TRAILER IS LOCATED IN CLOSE PROXIMITY TO AN ACCELERATION LANE OF AN ENTRANCE RAMP.

OMIT DRUM DELINEATION FOR DIGITAL SPEED LIMIT TRAILER WITHIN A CLOSURE.

INCLUDE NON-DIGITAL R2-1 RESUME SPEED LIMIT SIGNS 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END ROAD WORK" SIGN.

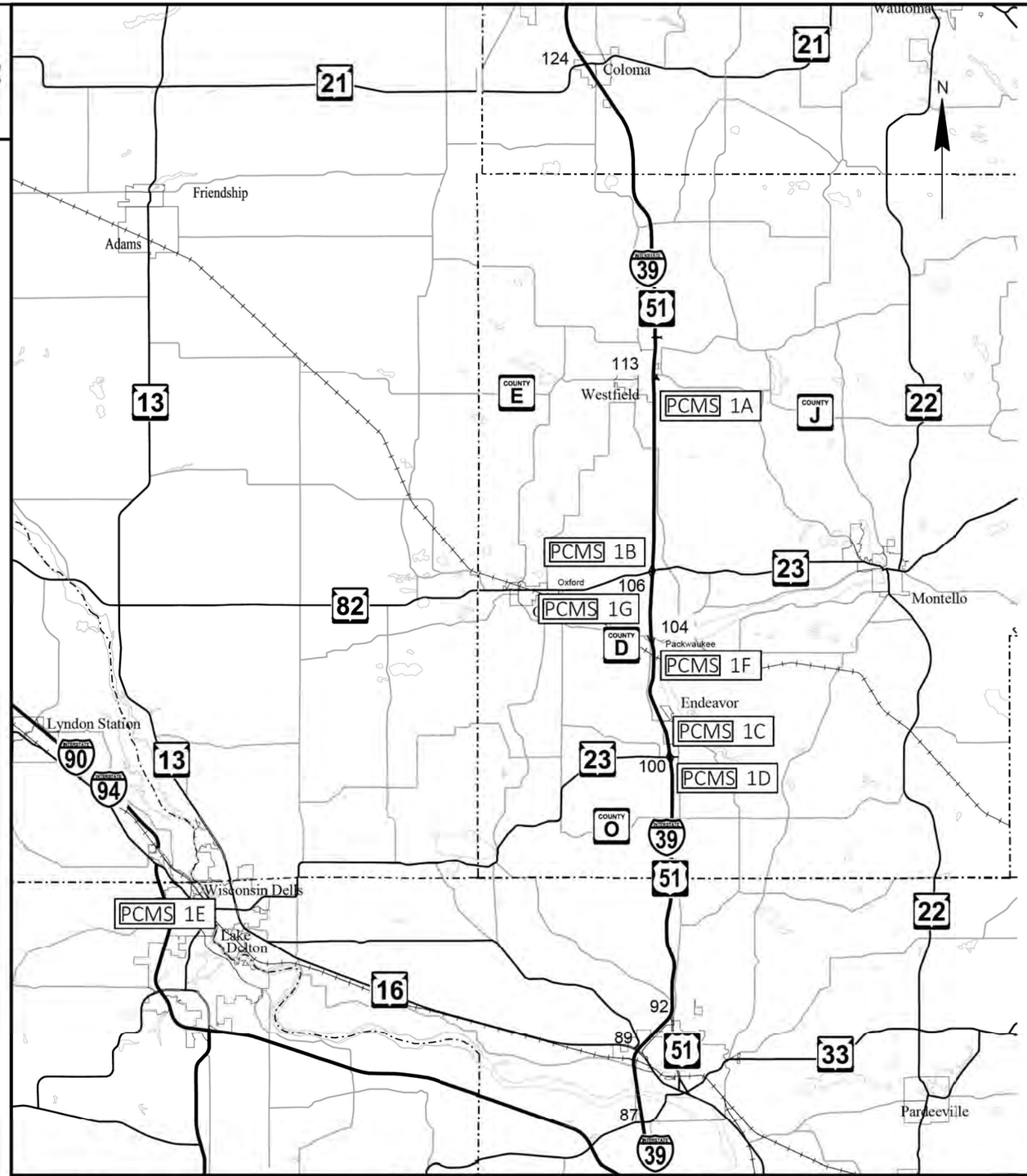
WORK ZONE
NO HANDHELD PHONES WHILE DRIVING

G20-58
102"X66"

PLACE G20-58 SIGN BETWEEN THE ROAD WORK 1 MILE AND THE ½ MILE SIGNS.

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL OVERVIEW	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025004-TCO.DWG
LAYOUT NAME - 025004-tco
PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:0.5 MI



PCMS XX

GENERAL NOTES FOR CHANGEABLE MESSAGE BOARDS

PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

CONSIDER CLEAR ROADWAY GEOMETRICS WHEN LOCATING MESSAGE SIGNS. PLACE THE SIGNS SO THE DRIVER HAS A CLEAR VIEW OF THE MESSAGE FOR A MINIMUM OF 1500 FEET.

MESSAGE SIGNS SHOULD BE PLACED AS FAR AWAY FROM THE LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY. IN ADVANCE OF INTERSTATE CONSTRUCTION PROJECTS, THE SIGNS SHOULD BE PLACED ON THE BACKSLOPE BEYOND THE DITCH. THE LOCATION SELECTED SHOULD BE AT OR SLIGHTLY ABOVE THE ROADWAY.

FOR INTERMITTENT WORK SUCH AS A FREEWAY LANE CLOSURE, OR WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER. THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY AND MAINTENANCE CONSIDERATIONS. A TAPER OF FIVE (5) REFLECTORIZED DRUMS SHALL BE PLACED AHEAD OF A PCMS THAT IS PLACED ON THE SHOULDER IF IT IS NOT SHIELDED BY BARRIER.

PCMS SITE LOCATIONS

SITE	APPROXIMATE LOCATION
1A	ON SB IH 39 APPROXIMATELY 1 MILE SOUTH OF EXIT 113
1B	ON STH 82/STH 23 OFF RAMP
1C	ON STH 23/CTH P OFF RAMP
1D	ON STH 23/CTH P ON RAMP
1E	ON EB STH 23 APPROXIMATELY 2 BLOCKS WEST OF STH 13
1F	ON CTH D ON RAMP
1G	ON STH 82/STH 23 ON RAMP

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION" FOR ADDITIONAL DETAILS.

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - PCMS LOCATIONS	SHEET E

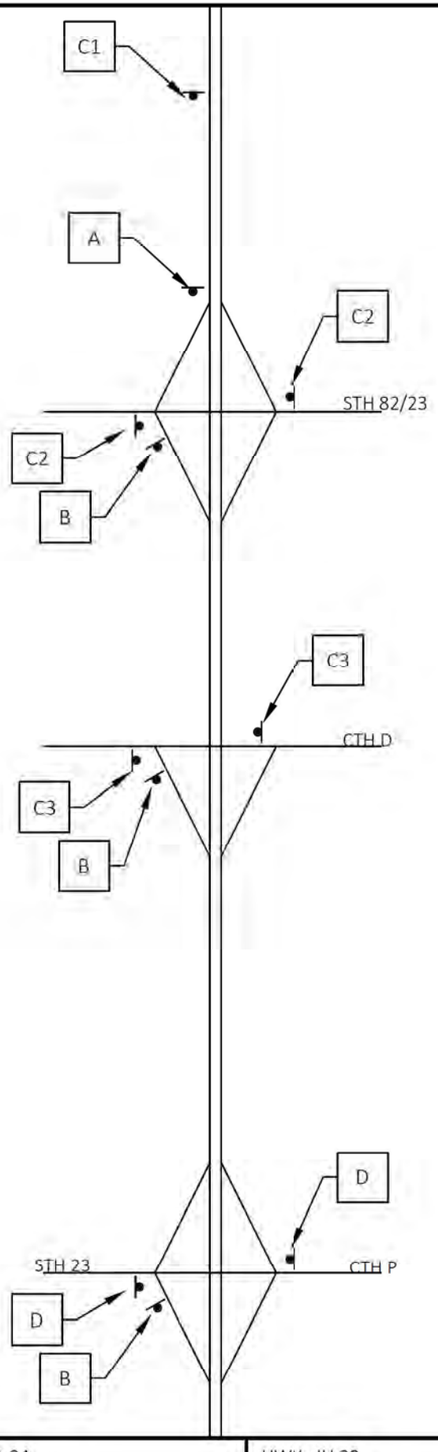
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025106-TC.DWG
LAYOUT NAME - 025106-tc
PLOT DATE : 8/25/2025 11:04 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:4 MI

2

SITE NO.	7 DAYS PRIOR TO STH 23/CTH P INTERCHANGE CLOSURE		DURING STH 23/CTH P INTERCHANGE CLOSURE		7 DAYS PRIOR TO STH 82/23 RAMP CLOSURES		7 DAYS PRIOR TO CTH D RAMP CLOSURE		7 DAYS PRIOR TO STAGE 1		STAGE 1	
	PHASE 1	PHASE 2	PHASE 1	PHASE 2	PHASE 1	PHASE 2	PHASE 1	PHASE 2	PHASE 1	PHASE 2	PHASE 1	PHASE 2
1A	NO MESSAGE BOARD USED										XXXX LANE CLOSED	X MILES AHEAD
1B	NO MESSAGE BOARD USED				RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED					
1C	RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED									
1D	RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED									
1E	NO MESSAGE BOARD USED		HWY 23 CLOSED	19 MILES AHEAD	NO MESSAGE BOARD USED							
1F	NO MESSAGE BOARD USED						RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED			
1G	NO MESSAGE BOARD USED				RAMP TO CLOSE	MONTH DAY TIME	NO MESSAGE BOARD USED					
MISC	NO MESSAGE BOARD USED								I-39 ROADWORK BEGINS	MONTH DAY TIME	STRADDLE RUMBLE STRIPS	STRADDLE RUMBLE STRIPS

IN THE EVENT OF AN INCIDENT, NOTIFY THE TRAFFIC MANAGEMENT CENTER AT (800) 375-7302 FOR INCIDENT MANAGEMENT MESSAGING

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - PCMS LOCATIONS	SHEET	E



N

A



R12-70B
114"X42"

B



W12-52
48"X48"

C



M3-3
24"X12"

M1-1
36"X36"



W12-52
48"X48"

C1 = 6 MILES
C2 = 5 MILES
C3 = 3 MILES



W057-52
48"X36"

D



M3-3
24"X12"

M1-1
36"X36"



W12-52
48"X48"

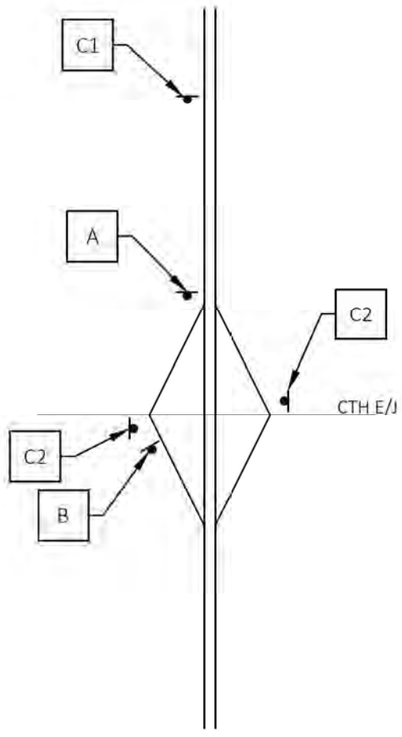
TRAFFIC CONTROL SIGN AND SUPPORT

SEE SDD "ADVANCED WIDTH RESTRICTION SIGNING" FOR ADDITIONAL INFORMATION.

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL - WIDTH RESTRICTION SIGNING (STAGE 1B)	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025105-TC.DWG
LAYOUT NAME - 025105-tc

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:100 FT



A — WIDE LOADS EXCEEDING 14 FT
R12-70B
114"X42"

B — MAX. 14' WIDTH
W12-52
48"X48"

C — SOUTH INTERSTATE 39
M3-3
24"X12"
M1-1
36"X36"

MAX. 14' WIDTH
W12-52
48"X48"

C1 = 6 MILES
C2 = 5 MILES
00 MILES AHEAD
WO57-52
48"X36"

TRAFFIC CONTROL SIGN AND SUPPORT

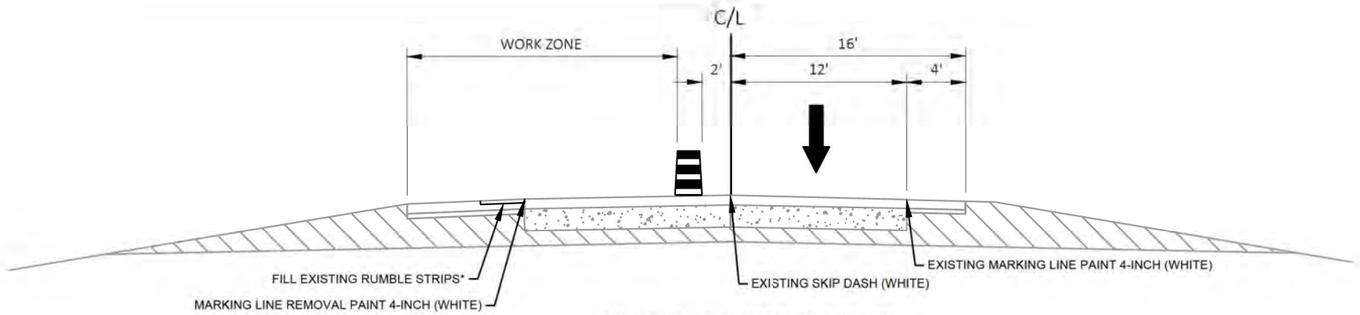
SEE SDD "ADVANCED WIDTH RESTRICTION SIGNING" FOR ADDITIONAL INFORMATION.

FAWN COURT APPROACH SLAB WORK

2

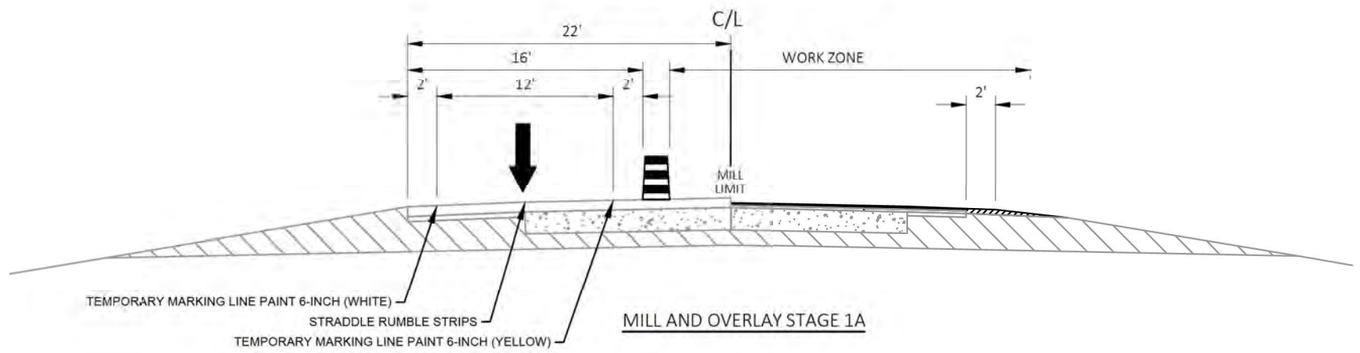
WORK:
MILL AND PAVE OUTSIDE RUMBLE STRIPS IN TRAFFIC SHIFT LOCATIONS

*NOTE: AT LOCATION WHERE TRAFFIC WILL TAPER ACROSS.



MILL AND OVERLAY STAGE 1 (PREP)

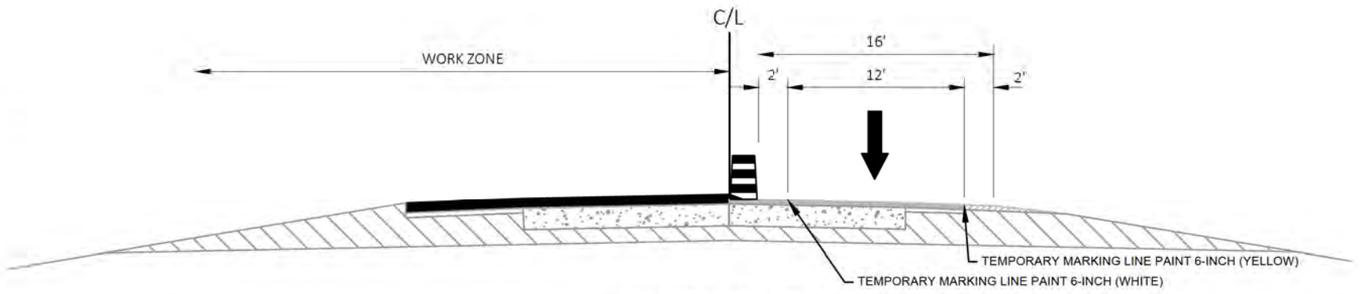
WORK:
MILL EXISTING ASPHALTIC SURFACE AND INSTALL LOWER LIFT OF HMA PAVEMENT INSIDE LANE AND SHOULDER



MILL AND OVERLAY STAGE 1A

WORK:
MILL EXISTING ASPHALTIC SURFACE AND INSTALL LOWER AND UPPER LIFTS OF HMA PAVEMENT OUTSIDE LANE AND SHOULDER

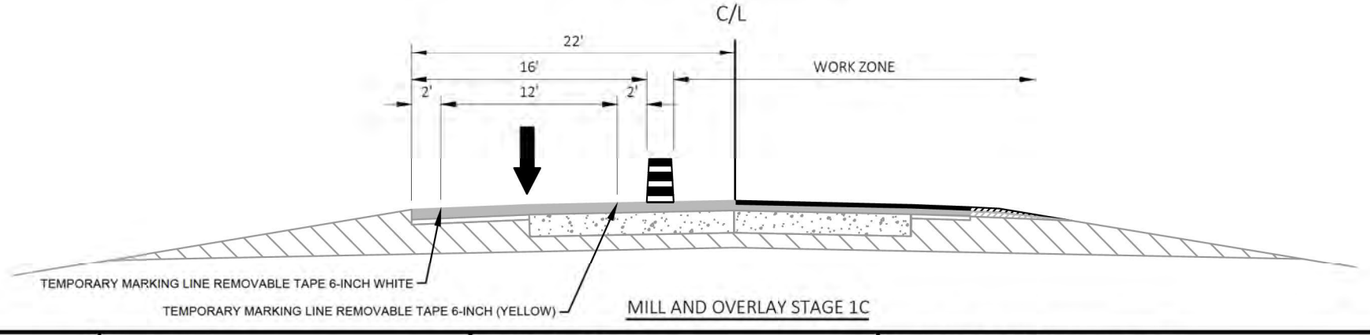
NOTE: MAINTAIN MINIMUM 14' WIDTH OF PAVEMENT DURING CONSTRUCTION OPERATIONS. RETURN DRUMS TO OTHER SIDE OF CENTERLINE AT THE END OF THE WORK DAY.



MILL AND OVERLAY STAGE 1B

WORK:
INSTALL UPPER LIFT OF HMA PAVEMENT INSIDE LANE AND SHOULDER

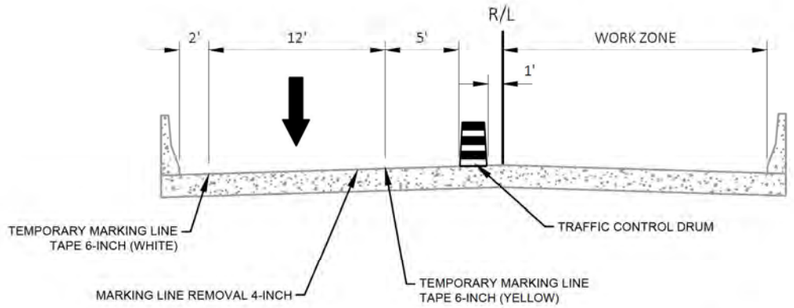
NOTE: RETURN DRUMS TO CENTERLINE AT END OF THE WORK DAY.



MILL AND OVERLAY STAGE 1C

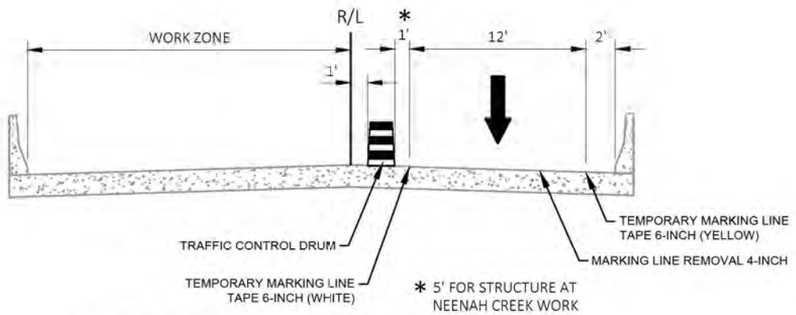
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STAGING TYPICAL SECTIONS IH 39	SHEET	E

2



APPROACH SLAB REPLACEMENT/STRUCTURE WORK STAGE 1A

NEENAH CREEK (PCLYMER OVERLAY)
CTH O
GAIL DR
FAWN CT



APPROACH SLAB REPLACEMENT/STRUCTURE WORK STAGE 1B

NEENAH CREEK (POLYMER OVERLAY)
CTH O
GAIL DR
FAWN CT

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STAGING TYPICAL SECTIONS IH 39	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025101-TC.DWG
LAYOUT NAME - 025102-tc

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

COLUMBIA COUNTY

MARQUETTE COUNTY

280' TAPER

WO1-6
48"X24"

NEENAH CR

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

WO1-4L

55 MPH
WO13-1
36"X36"

N

IH 39 SB

105'SB'

110'SB'

115'SB'

100' (TYP.)

50' (TYP.)

200'

B-39-0006

800'

((E))

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

NOTE: TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH ON STRUCTURE

END ROAD WORK
G20-2A
48"X24"

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96"X48"

GROUSE DR

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

280' TAPER

500'

840' TAPER

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

IH 39 SB

120'SB'

125'SB'

130'SB'

100' (TYP.)

800'

50' (TYP.)

WO1-6
48"X24"

IH 39 NB

WO1-4R

55 MPH
WO13-1
36"X36"

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0006, NEENAH CREEK)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

2

2

N

SPEED LIMIT YY

1000'

1600'

840' TAPER

500'

IH 39 SB

135'SB

140'SB'

145'SB'

IH 39 NB

TEMPORARY MARKING LINE REMOAVABLE TAPE 6-INCH (YELLOW)

W04-2L

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

1600'

2600'

500'

1 MILE

1 MILE

IH 39 SB

150'SB'

155'SB'

160'SB'

IH 39 NB

((S))

FBS

FBS

FBS

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

LEFT LANE CLOSED 1/2 MILE
W20-3SG

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-58
102"X66"

ROAD WORK 1 MILE
W20-1F

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0006, NEENAH CREEK)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc2

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

2

COLUMBIA COUNTY

MARQUETTE COUNTY

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

100' (TYP.)

NEENAH CR

LANE CLOSED
R11-2L
48"X30"

IH 39 SB

105'SB'

110'SB'

115'SB'

END ROAD WORK
G20-2A
48"X24"

((E))

WO1-6
48"X24"

140' TAPER

200'

B-39-0006

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

800'

NOTE: TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH ON STRUCTURE

WO1-4R

55 MPH
WO13-1
36"X36"

N

2

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96"X48"

GROUSE DR

WO1-4L

55 MPH
WO13-1
36"X36"

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

100' (TYP.)

50' (TYP.)

WO1-6
48"X24"

120'SB'

125'SB'

IH 39 SB

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

130'SB'

800'

140' TAPER

500'

840' TAPER

IH 39 NB

N

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0006, NEENAH CREEK)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME : 025109-tc3

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

2

2

N

1000'

840' TAPER

500'

1600'

50' (TYP.)

SPEED LIMIT YY

IH 39 SB

135'SB'

140'SB'

145'SB'

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

IH 39 NB

WO4-3R

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96"X48"

N

1600'

2600'

500'

1 MILE

1 MILE

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

FBS

FBS

FBS

150'SB'

155'SB'

160'SB'

IH 39 SB

IH 39 NB

((S))

RIGHT LANE CLOSED 1/2 MILE
W20-5G

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-58
102"X66"

ROAD WORK 1 MILE
W20-1F

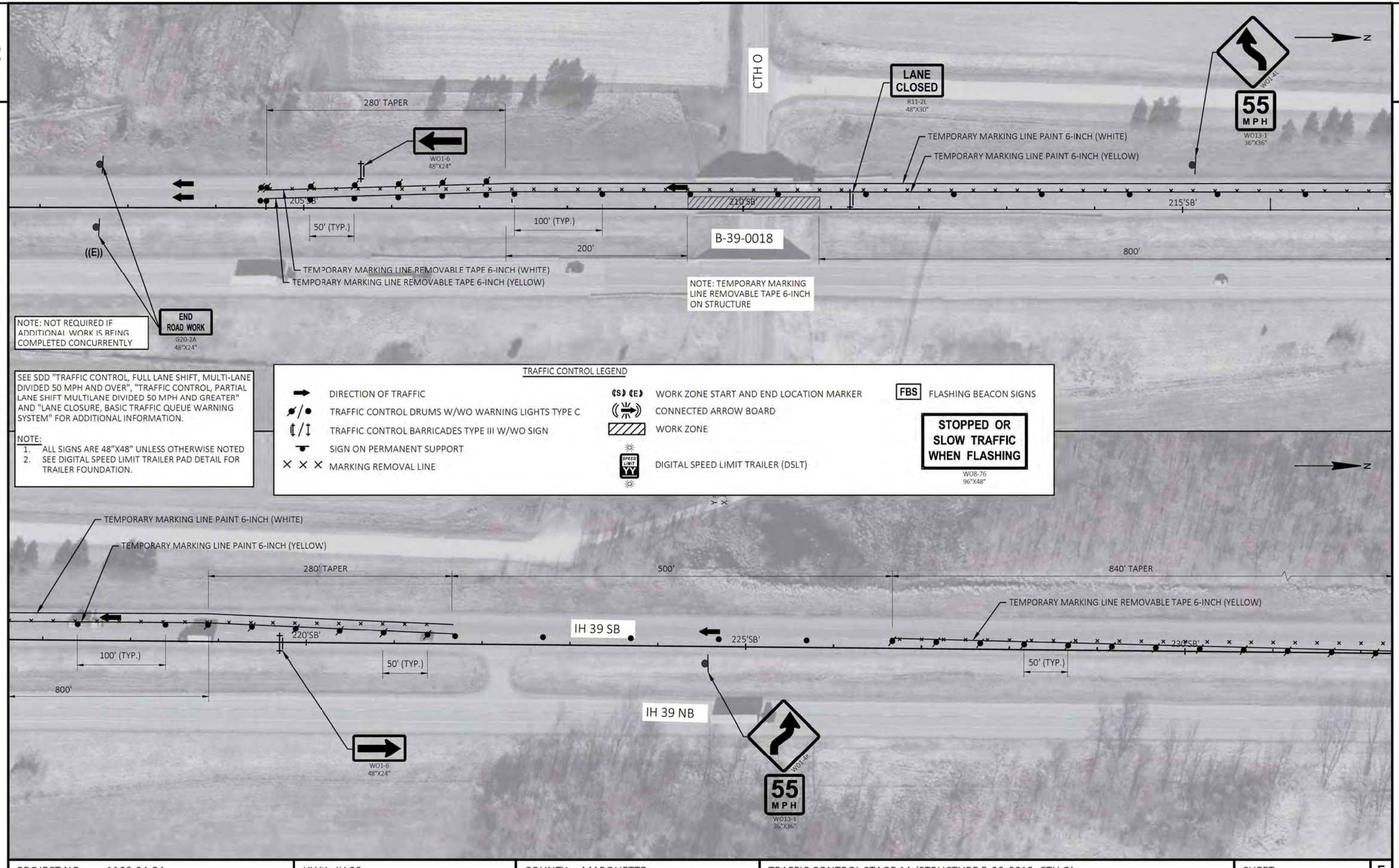
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0006, NEENAH CREEK)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc4

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

WISDOT/C

2



SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- SPEED LIMIT YY — DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0018, CTH O)	SHEET E

2

GOOD EARTH CREEK

SPEED LIMIT YY

840' TAPER

500'

1000'

1600'

235'SB'

IH 39 SB

240'SB'

245'SB'

IH 39 NB

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

W04-2L

N

2

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- SPEED LIMIT YY DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

TOWN OF MOUNDVILLE

TOWN OF PACKWAUKEE

1600'

2600'

500'

1 MILE

1 MILE

250'SB'

IH 39 SB

255'SB'

260'SB'

IH 39 NB

((S))

FBS

FBS

FBS

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

LEFT LANE CLOSED 1/2 MILE
W20-5SG

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-58
102"X66"

ROAD WORK 1 MILE
W20-1F

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0018, CTH O)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc6

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

WISDOT/C

2

2

2

N

END ROAD WORK
G20-2A
48"X24"

NOTE: NOT REQUIRED IF ADDITIONAL WORK IS BEING COMPLETED CONCURRENTLY

((E))

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

100' (TYP.)

205'SB'

WO1-6
48"X24"

140' TAPER

200'

CTH O

B-39-0018

210'SB'

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

800'

215'SB'

NOTE: TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH ON STRUCTURE

WO1-4R

55 MPH
WO13-1
36"X36"

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

100' (TYP.)

50' (TYP.)

WO1-6
48"X24"

220'SB'

IH 39 SB

WO1-4L

55 MPH
WO13-1
36"X36"

225'SB'

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

230'SB'

800'

140' TAPER

500'

840' TAPER

IH 39 NB

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0018, CTH O)	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc7

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

2

GOOD EARTH CREEK

N

1000'

840' TAPER

500'

1600'

50' (TYP.)

SPEED LIMIT YY

IH 39 SB

235'SB'

240'SB'

245'SB'

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

IH 39 NB

W4-2R

2

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

TOWN OF MOUNDVILLE

TOWN OF PACKWAUKEE

1600'

2600'

500'

1 MILE

1 MILE

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

FBS

FBS

FBS

IH 39 SB

250'SB'

255'SB'

260'SB'

((S))

IH 39 NB

RIGHT LANE CLOSED 1/2 MILE
W20-5G

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-58
102"X66"

ROAD WORK 1 MILE
W20-1F

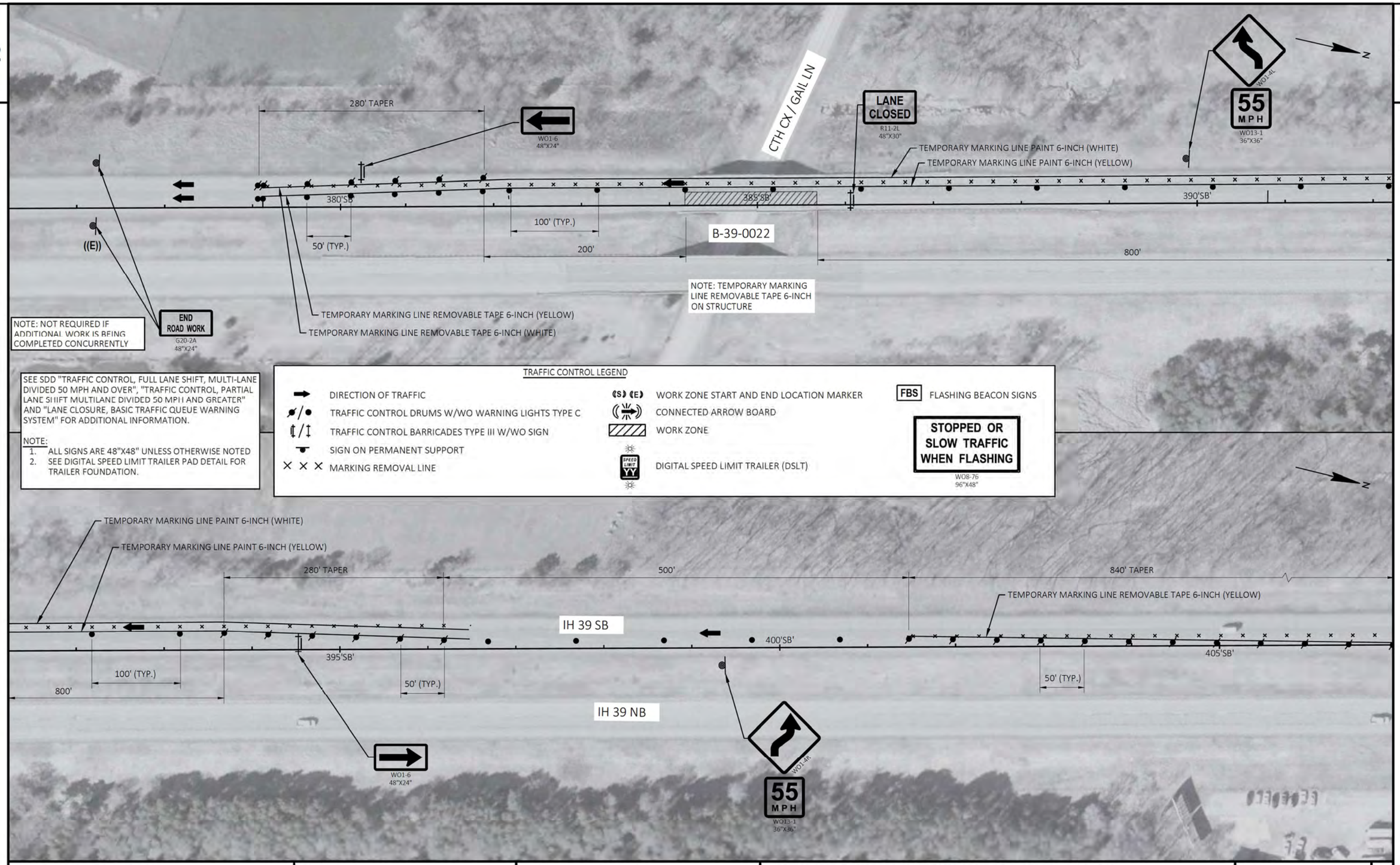
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0018, CTH O)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc8

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

WISDOT/C

2



SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96"X48"

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0022, CTH CX/GAIL LN)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc9
PLOT DATE : 6/25/2025 10:49 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : ##########
WISDOT/C

2

SPEED LIMIT YY

1000'

1600'

840' TAPER

500'

410'SB'

IH 39 SB

415'SB'

420'SB'

IH 39 NB

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

W04-2L

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

CTH CX

1600'

2600'

500'

1 MILE

1 MILE

425'SB'

IH 39 SB

430'SB'

435'SB'

IH 39 NB

((S))

FBS

FBS

FBS

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

LEFT LANE CLOSED 1/2 MILE
W20-5SG

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-5S
102"X66"

ROAD WORK 1 MILE
W20-1F

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0022, CTH CX/GAIL LN)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc10

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

2

2

NOTE: NOT REQUIRED IF ADDITIONAL WORK IS BEING COMPLETED CONCURRENTLY

END ROAD WORK
G20-2A
48"X24"

((E))

WO1-6
48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

100' (TYP.)

380'SB

140' TAPER

200'

B-39-0022

CTH CX / GAIL LN

LANE CLOSED
R11-2L
48"X30"

385'SB

390'SB

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

800'

NOTE: TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH ON STRUCTURE

WO1-4R

55 MPH
WO13-1
36"X36"

N

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96"X48"

N

WO1-4L

55 MPH
WO13-1
36"X36"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

WO1-6
48"X24"

IH 39 SB

395'SB'

400'SB

405'SB'

100' (TYP.)

50' (TYP.)

800'

140' TAPER

500'

IH 39 NB

840' TAPER

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0022, CTH CX/GAIL LN)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME : 025109-tc11

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

2

2

N

840' TAPER

500'

1000'

1600'

50' (TYP.)

SPEED LIMIT YY

410'SB'

415'SB'

420'SB'

IH 39 SB

IH 39 NB

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

W04-2R

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

CTH CX

1600'

2600'

500'

1 MILE

1 MILE

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

FBS

FBS

FBS

425'SB'

430'SB'

435'SB'

IH 39 SB

IH 39 NB

((S))

RIGHT LANE CLOSED 1/2 MILE
W20-5G

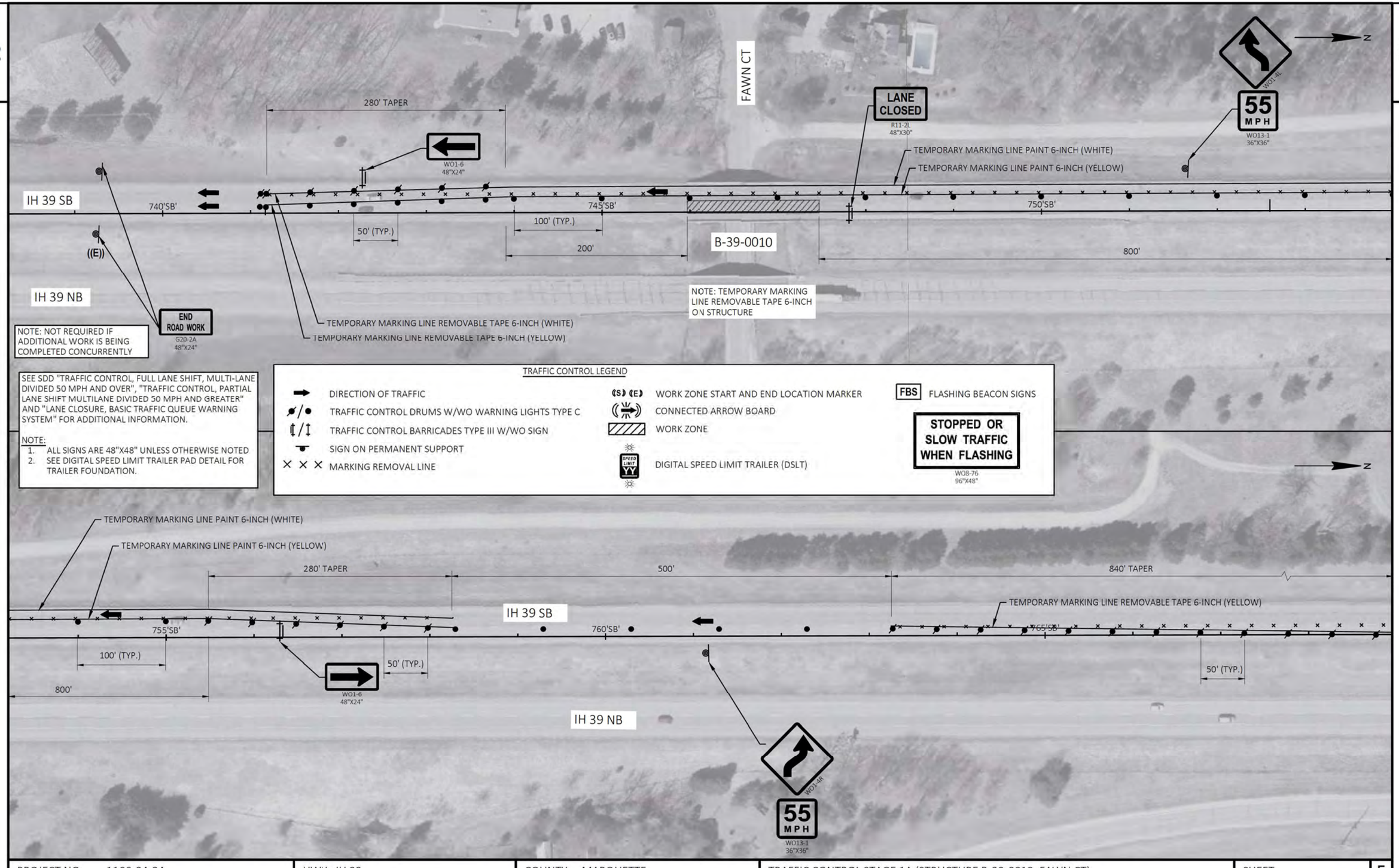
WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-5B
102"X66"

ROAD WORK 1 MILE
W20-1T

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0022, CTH CX/GAIL LN)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc12

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############



SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0010, FAWN CT)	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc13
PLOT DATE : 6/25/2025 10:49 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : ##########
WISDOT/C

2

2

N

SPEED LIMIT YY

1000'

1600'

840' TAPER

500'

IH 39 SB

770'SB'

775'SB'

780'SB'

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

IH 39 NB

W04-2L

CTH M

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- (S) (E) WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

1600'

2600'

500'

1 MILE

1 MILE

785'SB'

790'SB'

795'SB'

IH 39 SB

IH 39 SB

((S))

FBS

FBS

FBS

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

IH 39 NB

LEFT LANE CLOSED 1/2 MILE
W20-5SG

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-5S
102"X66"

ROAD WORK 1 MILE
W20-1P

CTH M

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1A (STRUCTURE B-39-0010, FAWN CT)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc14

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

WISDOT/C

2

NOTE: NOT REQUIRED IF ADDITIONAL WORK IS BEING COMPLETED CONCURRENTLY

END ROAD WORK
G20-2A
48"X24"

IH 39 SB

740'SB'

((E))

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

100' (TYP.)

745'SB'

WO1-6
48"X24"

140' TAPER

200'

IH 39 NB

FAWN CT

B-39-0010

NOTE: TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH ON STRUCTURE

LANE CLOSED
R11-2L
48"X30"

755'SB'

TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

800'

WO1-4R

55 MPH
WO13-1
36"X36"

N

2

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

WO1-4L

55 MPH
WO13-1
36"X36"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

50' (TYP.)

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)

WO1-6
48"X24"

IH 39 SB

75'SB'

760'SB'

765'SB'

100' (TYP.)

50' (TYP.)

800'

140' TAPER

500'

840' TAPER

IH 39 NB

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0010, FAWN CT)	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc15

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

2

2

N

1000'

500'

1600'

840' TAPER

SPEED LIMIT YY

770'SB'

775'SB'

780'SB'

IH 39 SB

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

IH 39 NB

W04-2R

CTH M

SEE SDD "TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER", "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER" AND "LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM" FOR ADDITIONAL INFORMATION.

NOTE:
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED
2. SEE DIGITAL SPEED LIMIT TRAILER PAD DETAIL FOR TRAILER FOUNDATION.

TRAFFIC CONTROL LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- MARKING REMOVAL LINE
- WORK ZONE START AND END LOCATION MARKER
- CONNECTED ARROW BOARD
- WORK ZONE
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
W08-76
96"X48"

N

PORTABLE TRAFFIC SENSOR (PTS)

PORTABLE TRAFFIC SENSOR (PTS)

1600'

2600'

500'

1 MILE

1 MILE

FBS

FBS

FBS

785'SB'

790'SB'

795'SB'

IH 39 SB

IH 39 SB

((S))

IH 39 NB

RIGHT LANE CLOSED 1/2 MILE
W20-5G

WORK ZONE
NO HANDHELD PHONES WHILE DRIVING
G20-5S
102"X66"

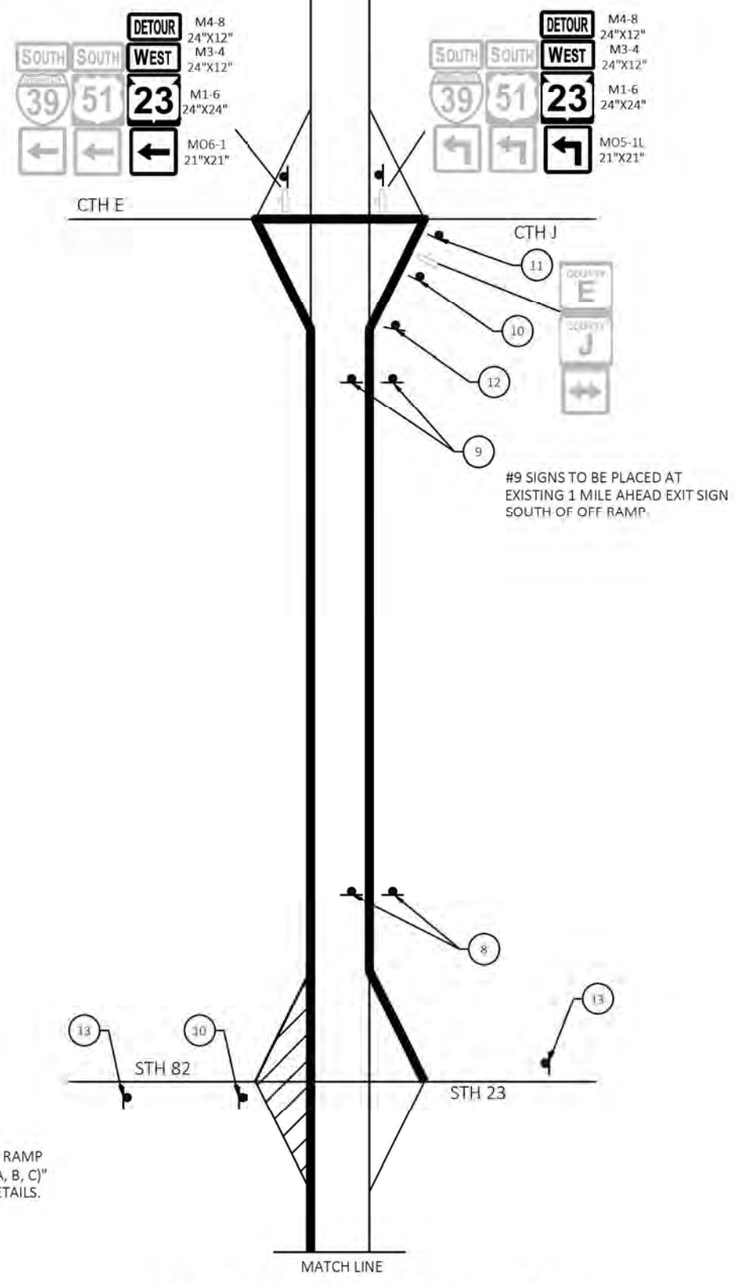
ROAD WORK 1 MILE
W20-1F

CTH M

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	TRAFFIC CONTROL STAGE 1B (STRUCTURE B-39-0010, FAWN CT)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025109-TC.DWG
LAYOUT NAME - 025109-tc16

PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############



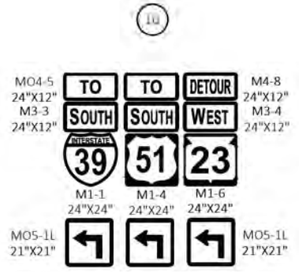
SIGNING FOR IH 39 SB ON RAMP CLOSURE
AT STH 23/STH 82 INTERCHANGE

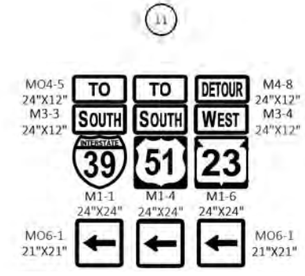
NOTE: PLACE TRAFFIC CONTROL BARRICADES TYPE III W/R11-2 SIGN AT MEDIAN CROSSOVERS. (4 CROSSOVERS TOTAL)

LEGEND

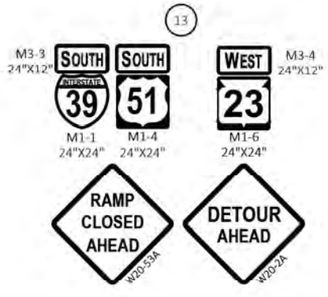
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- REDIRECTION ROUTE
- CLOSED RAMP





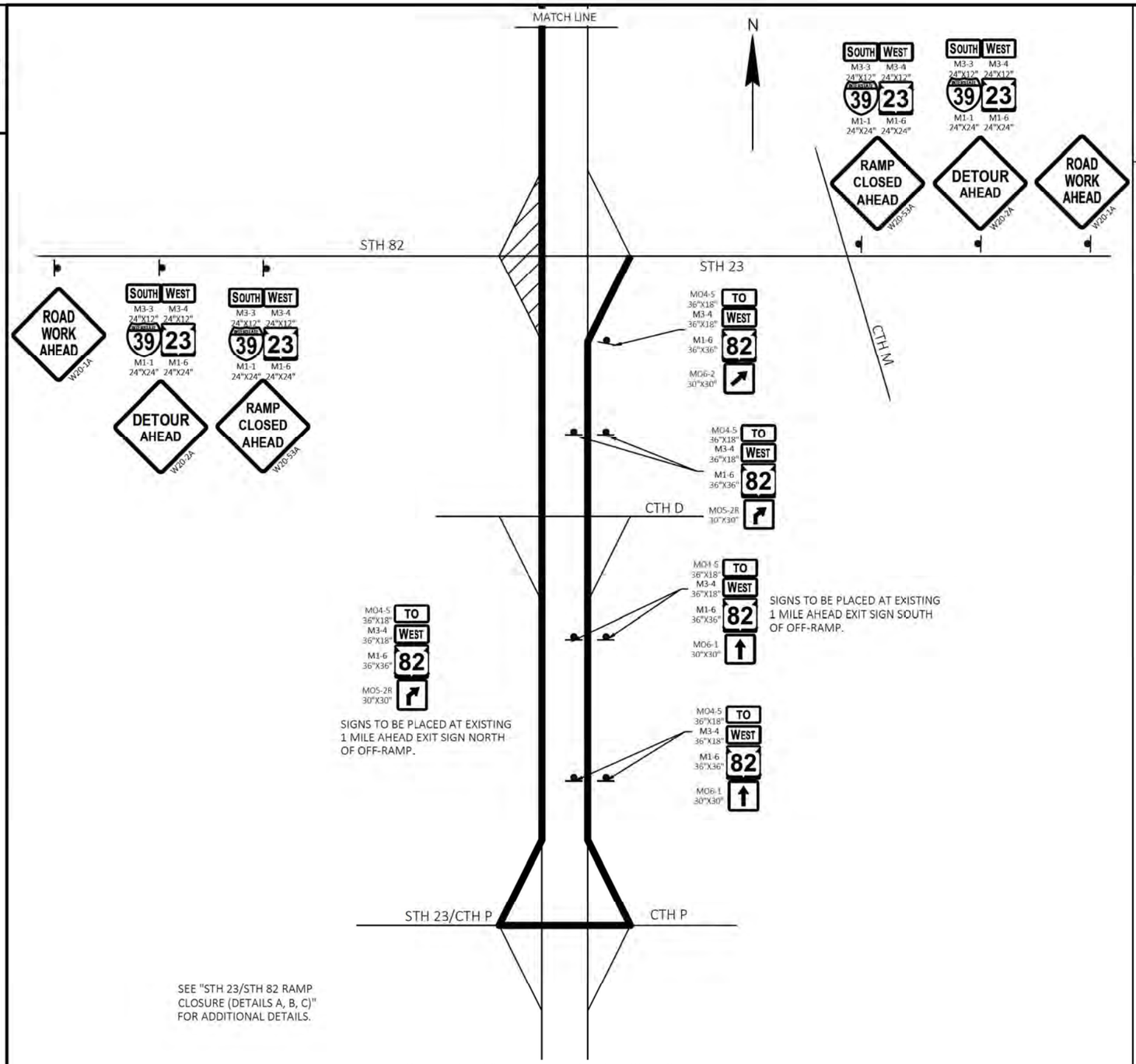






PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	IH 39 ON-RAMP CLOSURE AT STH 23/ STH 82 INTERCHANGE SIGNING	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\027006-DT.DWG
LAYOUT NAME - 027006-dt
PLOT DATE : 6/25/2025 10:49 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:100 FT



SIGNING FOR IH 39 SB OFF RAMP CLOSURE
AT STH 23/STH 82 INTERCHANGE

NOTE: PLACE TRAFFIC CONTROL BARRICADES TYPE III W/R11-2 SIGN AT MEDIAN CROSSOVERS. (4 CROSSOVERS TOTAL)

LEGEND

- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- REDIRECTION ROUTE
- CLOSED RAMP

2

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	IH 39 OFF-RAMP CLOSURE AT STH 23/ STH 82 INTERCHANGE SIGNING	SHEET E

SEE SDD "TRAFFIC CONTROL EXIT RAMP CLOSURE" AND "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

N

245'SB' 250'SB' 255'SB' IH 39 SB 260'SB' 265'SB' 270'SB' 275'SB' 280'SB' 285'SB' 290'SB'

IH 39 NB

PCMS

EXIT 100
23 WEST P
Wis Dells
Endeavor
COVER CLOSED
G20-60
108"X24"

RAMP CLOSED AHEAD
W20-53A

TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

STH 23/CTH P

N

EXIT 100

RAMP CLOSED
R11-2R
48"X30"

290'SB' 295'SB' 300 SB' 305'SB' 310'A' 310'SB' IH 39 SB 315'SB' 315'A' 320'SB' 320'B' 325'B' 325'SB' 330'B' 330'SB' 335'SB'

25' SPACING (TYP)

IH 39 NB

RAMP CLOSED 1000 FT
W20-53E

DETOUR M4-8 24"X12"
WEST M3-4 36"X18"
23 M1-6 36"X36"
M06-1 30"X30"

DRUMS @ 25' SPACING (TYP)

EXIT 100
23 WEST P
Endeavor
CLOSED
G20-60
108"X24"

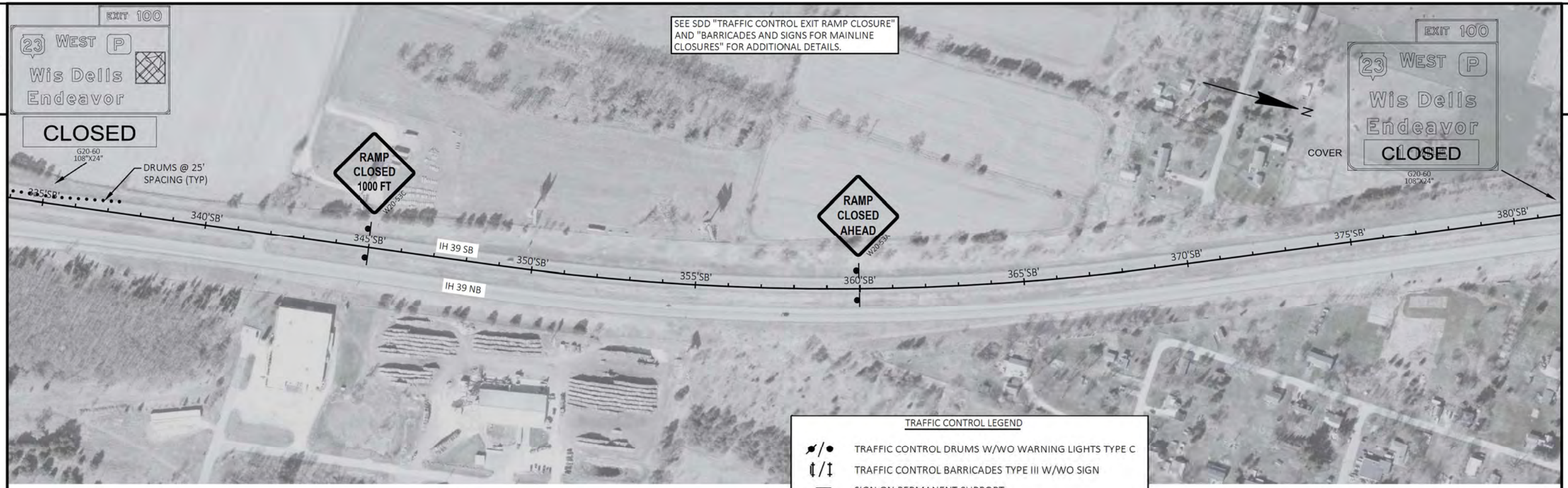
RAMP CLOSED
R11-2R
48"X30"

EXIT 100

CTH P

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23 / CTH P RAMP CLOSURE (DETAIL A)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025107-TC.DWG
LAYOUT NAME - 025107-tc 23P
PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:300 FT



TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

THIS FRAME INTENTIONALLY LEFT BLANK

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23 / CTH P RAMP CLOSURE (DETAIL B)	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025107-TC.DWG
LAYOUT NAME - 025108-tc 23P
PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:300 FT
WISDOT/C

SEE SDD "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE", "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "TRAFFIC CONTROL FOR ON RAMP CLOSURE" FOR ADDITIONAL DETAILS.

TRAFFIC CONTROL LEGEND

- TRAFFIC CONTRCL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTRCL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

FLAG CTH D TRAFFIC FOR WORK ON CTH D.
SEE SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR ADDITIONAL DETAILS.

SOUTH
M3-3
24"X12"
ALTERNATE
39
M1-1
24"X24"

RAMP CLOSED AHEAD
W20-53A

R3-2
24"X24"

RAMP CLOSED
R11-2R
48"X30"

R3-1
24"X24"

RAMP CLOSED
R11-2R
48"X30"
3 BARRICADES

DRUMS @ 25' SPACING (TYP)

CTH CX

CTH D

IH 39 SB

IH 39 NB

550'SB

545'SB

540'SB

535'SB

530'SB

525'SB

525'A

530'A

535'A

NO RE-ENTRY TO FREEWAY

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CTH D RAMP CLOSURE DETAIL	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025107-TC.DWG
LAYOUT NAME - 025110-tc D

PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:300 FT

2

TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

N

STH 23/CTH P

CTH P

IH 39 NB

IH 39 SB

310'A' 315'A' 320'B' 325'B' 330'B'

310'SB' 315'SB' 320'SB' 325'SB' 330'SB' 335'SB' 340'SB' 345'SB' 350'SB'

TO
M04-5
24"X12"
WEST
M3-4
24"X12"
82
M1-6
24"X24"
M05-1L
21"X21"

NORTH NORTH EAST
39 51 23

TO TO
M04-5 M04-5
24"X12" 24"X12"
WEST EAST
M3-4 M3-2
24"X12" 24"X12"
82 23
M1-6 M1-6
24"X24" 24"X24"
M06-1 M06-1
21"X21" 21"X21"

WEST
COUNTY P 23

ALTERNATE
39

TO TO
M04-5 M04-5
24"X12" 24"X12"
WEST EAST
M3-4 M3-2
24"X12" 24"X12"
82 23
M1-6 M1-6
24"X24" 24"X24"
M05-1L M05-1L
21"X21" 21"X21"

TO TO
M04-5 M04-5
36"X18" 36"X18"
WEST EAST
M3-4 M3-2
36"X18" 36"X18"
82 23
M1-6 M1-6
36"X36" 36"X36"
M06-2 M06-2
30"X30" 30"X30"

TO TO
M04-5 M04-5
36"X18" 36"X18"
WEST EAST
M3-4 M3-2
36"X18" 36"X18"
82 23
M1-6 M1-6
36"X36" 36"X36"

NORTH NORTH EAST
39 51 23

TO
M04-5
24"X12"
WEST
M3-4
24"X12"
82
M1-6
24"X24"
M06-1
21"X21"

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23 / STH 82 RAMP CLOSURE (DETAIL A)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025108-TC.DWG
LAYOUT NAME - 025107-tc 23P (2)
PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############

SEE SDD "TRAFFIC CONTROL EXIT RAMP CLOSURE" AND "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

RAMP CLOSED 1000 FT W20-5SC

CROSSROADS CLINIC RD

NORTH (AUSTIN) 39 | NORTH 51 | EAST 23 | SOUTH (AUSTIN) 39 | SOUTH 51 | WEST 23 — COVER
M06-1 21"X21" | M06-1 21"X21" | M06-1 21"X21"

DRUMS @ 25' SPACING (TYP)

STH 82

RAMP CLOSED R11-2R 48"X30"

Montello
Portage
Wis Dells
A4-12 9½"x9½"
COVER

R3-1 24"X24"

RAMP CLOSED R11-2R 48"X30"

650'A'

655'A'

660'A'

RAMP CLOSED

645'B'

650'B'

(3 BARRICADES)

R3-2 24"X24"

RAMP CLOSED

645'SB' | 650'SB' | 655'SB' | IH 39 SB | 660'SB' | 665'SB' | 670'SB' | 675'SB' | 680'SB' | 685'SB'

IH 39 NB

EXIT 106

RAMP CLOSED R11-2R 48"X30"

DRUMS @ 25' SPACING (TYP)

665'A'

670'A'

EXIT 106
EAST 23 | WEST 82
Oxford
Montello
CLOSED
G20-60 108"X24"

M04-5 36"X18" | M03-4 36"X18" | M1-6 36"X36" | M06-1 30"X30"
TO WEST 82 | TO EAST 23

RAMP CLOSED 1000 FT W20-5SC

M04-5 36"X18" | M03-2 24"X12" | M1-6 36"X36" | M06-1 30"X30"
TO WEST 82 | TO EAST 23

NORTH (AUSTIN) 39 | NORTH 51 | EAST 23
SOUTH M3-3 24"X12" | WEST M3-4 24"X12"
(AUSTIN) 39 | 23
M1-1 24"X24" | M1-6 24"X24"
M05-1L 21"X21" | M05-1L 21"X21"

NORTH (AUSTIN) 39 | NORTH 51 | EAST 23
SOUTH M3-3 24"X12" | WEST M3-4 24"X12"
(AUSTIN) 39 | 23
M1-1 24"X24" | M1-6 24"X24"
M06-1 21"X21" | M06-1 21"X21"

STH 23

NORTH 39 | 51
SOUTH M3-3 24"X12" | WEST M3-4 24"X12"
(AUSTIN) 39 | 23
M1-1 24"X24" | M1-6 24"X24"
M06-1 21"X21" | M06-1 21"X21"

SOUTH 39 | WEST 82 | NORTH 51

COVER

A4-12 9½"x9½"
Portage
Wis Dells
Stevens Point

SOUTH 39 | WEST 82 | NORTH 51
M05-1R 21"X21"

WEST
M3-4 24"X12"
23
M1-6 24"X24"
M05-1R 21"X21"

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23 / STH 82 RAMP CLOSURE (DETAIL B)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025108-TC.DWG
LAYOUT NAME : 025111-tc 2382 (2)
PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:300 FT

SEE SDD "TRAFFIC CONTROL EXIT RAMP CLOSURE" AND "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.



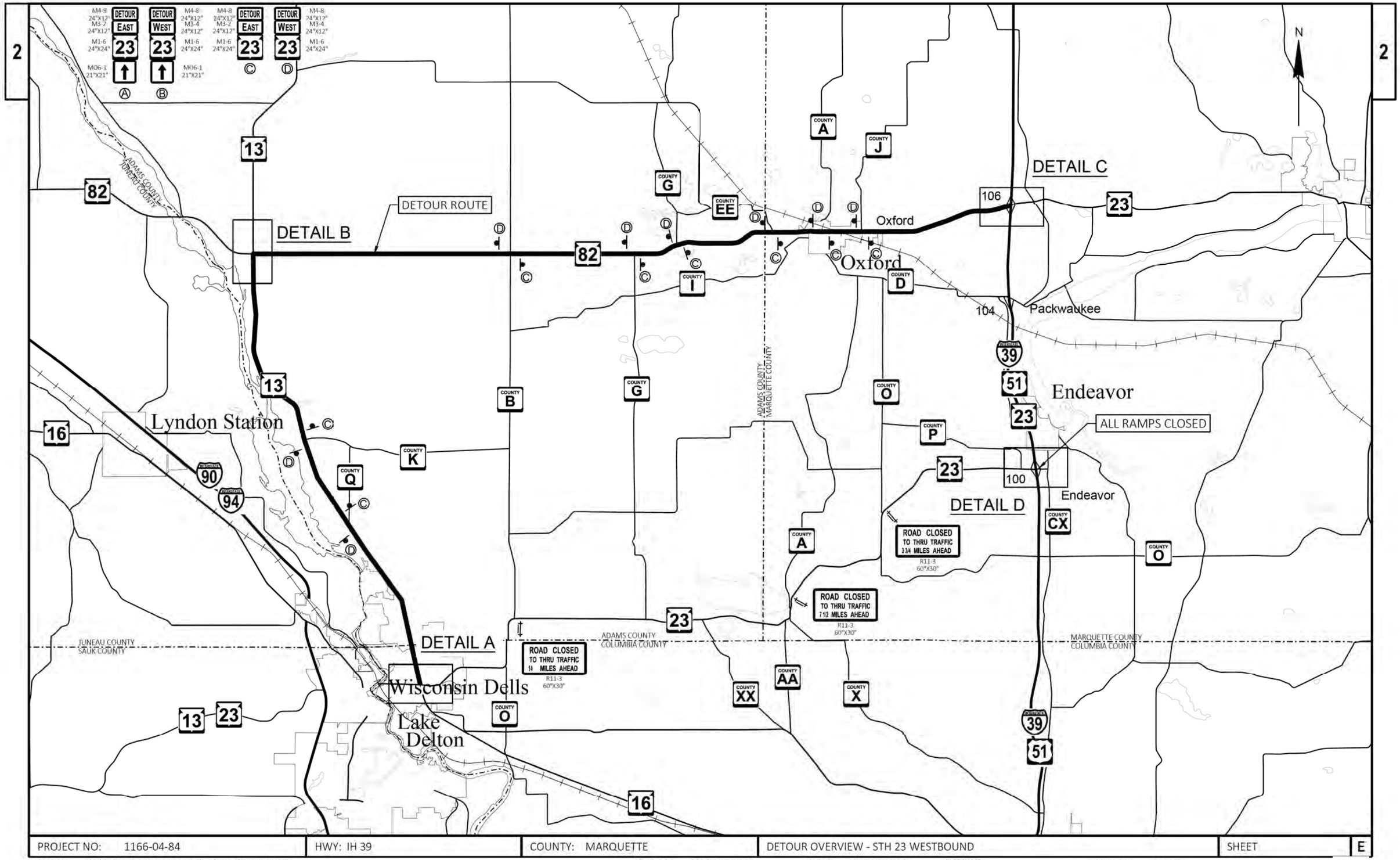
TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

THIS FRAME INTENTIONALLY LEFT BLANK

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23 / STH 82 RAMP CLOSURE (DETAIL C)	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\025108-TC.DWG
LAYOUT NAME - 025111-tc 2382
PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ############



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	DETOUR OVERVIEW - STH 23 WESTBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\027001-DT.DWG
LAYOUT NAME - 027001-dt
PLOT DATE : 6/25/2025 10:50 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 FT:2 MI

2

2

TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

N

STH 13

PLUM ST

STH 13/16/23

STH 23

STH 16

M4-8 24"X12" DETOUR
SOUTH WEST WEST
13 16 23

EAST EAST
23 16

M4-8A 24"X18" END DETOUR
SOUTH WEST WEST
13 16 23

M4-8 24"X12" DETOUR
SOUTH WEST WEST
13 16 23

M4-8 24"X12"
M3-2 24"X12"
DETOUR DETOUR
EAST ALTERNATE
NORTH 13 23 39
M1-6 24"X24"
M4-8 24"X12"
MO4-1 24"X12"
M1-1 24"X24"

Portage
Wis Dells

EAST
23

ALTERNATE 90 ALTERNATE 94

EAST
23
M3-2 24"X12"
M1-6 24"X24"
DETOUR AHEAD W20-2A

M4-8 24"X12" DETOUR
NORTH EAST SOUTH
13 23 16
MO5-1L 21"X21"
COVER

Endeavor
Adams
Portage

M4-8 24"X12" DETOUR
M3-2 24"X12"
EAST
23
M1-6 24"X24"
MO6-1 21"X21"
NORTH SOUTH
13 16

M4-8 24"X12" DETOUR DETOUR M4-8 24"X12"
SOUTH WEST WEST NORTH EAST ALTERNATE
13 16 23 13 23 39
MO6-1 21"X21" MO6-1 21"X21"
COVER

Wis Rapids
Wis Dells
Montello
M4-12 9"X9"
COVER

M4-8 24"X12" DETOUR DETOUR M4-8 24"X12"
SOUTH WEST WEST NORTH EAST ALTERNATE
13 16 23 13 23 39
MO6-1 21"X21" MO6-1 21"X21"
COVER

EAST
23
M3-2 24"X12"
M1-6 24"X24"
DETOUR AHEAD W20-2A

JCT JCT
13 23

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	SHEET	E

FILE NAME: I:\41\4\10884_IH 39 MARQUETTE CNTY\C3D\SHEETS\027002-DT.DWG
LAYOUT NAME: 027002-dt
PLOT DATE: 6/25/2025 10:50 AM
PLOT BY: RESHESKE, CARRIE
PLOT NAME:
PLOT SCALE: 1 IN=583 FT

2

N

TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

STH 13

STH 82

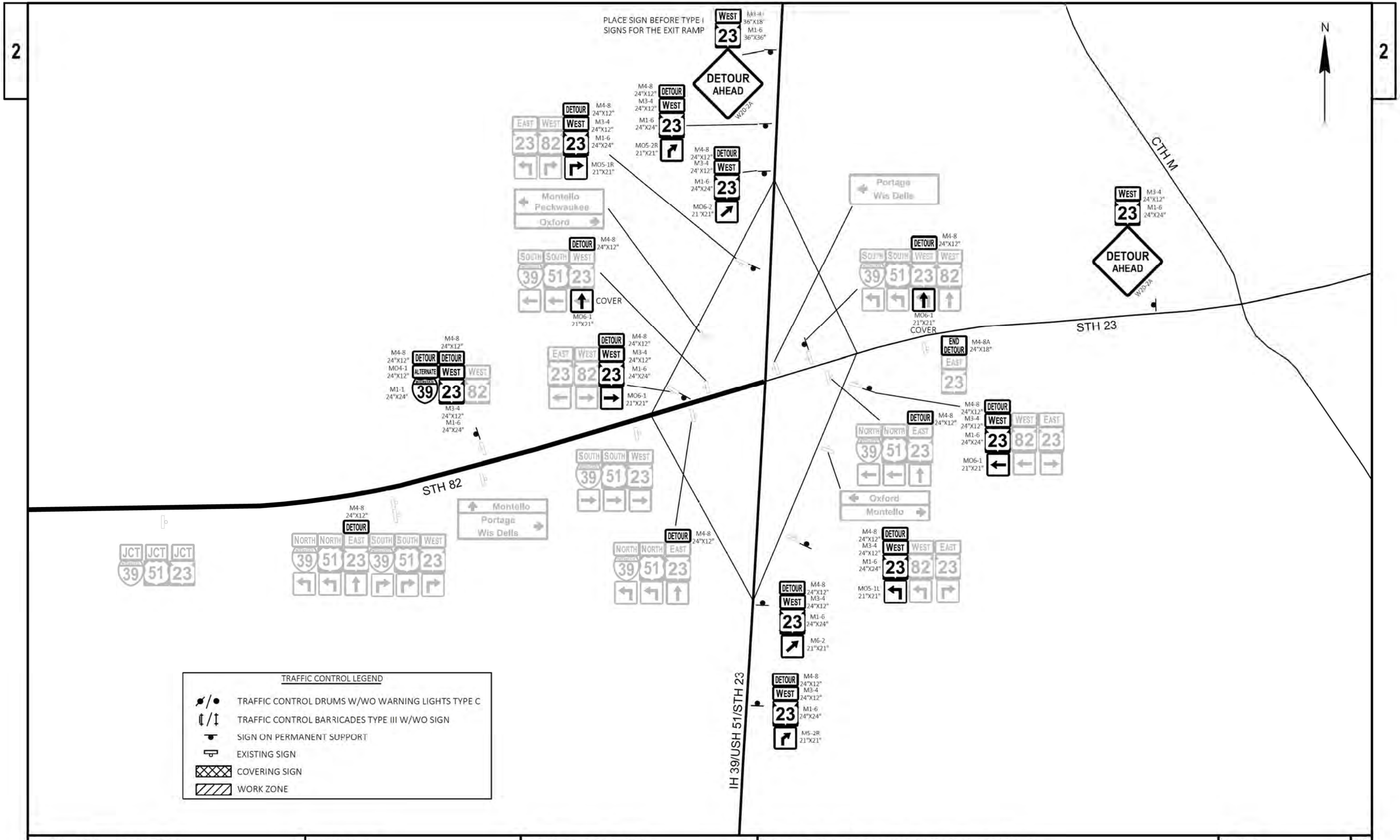
STH 82

STH 13

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL B)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\027002-DT.DWG
LAYOUT NAME - 027003-dt

PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:500 FT



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL C)	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\027002-DT.DWG
LAYOUT NAME - 027004-dt
PLOT DATE : 6/25/2025 10:50 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:500 FT

2

2

N

WEST 23
M3-4 36"X18"
M1-6 36"X36"

DETOUR AHEAD
W20-2A

IH 39/USH 51/STH 23

CTH P

23 P
COVER
M06-1 21"X21"

ROAD CLOSED
R11-2 48"X30"

STH 23

STH 23/CTH P

CTH P

ROAD CLOSED
R11-2 48"X30"

ROAD CLOSED TO THRU TRAFFIC
R11-4 60"X30"

23 CX NORTH COUNTY CX

COUNTY P
M06-1 21"X21"
COVER

PLACE 5 BARRICADES FOR ROAD CLOSURE

PLACE 5 BARRICADES FOR ROAD CLOSURE

CTH CX

EXISTING SIGNS WITHIN CLOSURE DO NOT NEED TO BE COVERED

TRAFFIC CONTROL LEGEND

- TRAFFIC CONTROL DRUMS W/WO WARNING LIGHTS TYPE C
- TRAFFIC CONTROL BARRICADES TYPE III W/WO SIGN
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN
- COVERING SIGN
- WORK ZONE

IH 39/USH 51

DETAIL D

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL D)	SHEET	E

FILE NAME: E:\41\41\0884_IH 39 MARQUETTE CNTY\C3D\SHEETS\027002-DT.DWG
LAYOUT NAME: 027005-dt
PLOT DATE: 6/25/2025 10:50 AM
PLOT BY: RESHESKE, CARRIE
PLOT NAME:
PLOT SCALE: 1 IN:50 FT

Estimate Of Quantities

1166-04-84

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0004	203.0220	Removing Structure (structure) 01. B-39-22	EACH	1.000	1.000
0006	203.0330	Debris Containment (structure) 01. B-39-22	EACH	1.000	1.000
0008	203.0335	Debris Containment Over Waterway (structure) 01. B-39-06	EACH	1.000	1.000
0010	204.0100	Removing Concrete Pavement	SY	403.000	403.000
0012	204.0109.S	Removing Concrete Surface Partial Depth	SF	4,438.000	4,438.000
0014	204.0110	Removing Asphaltic Surface	SY	3,621.000	3,621.000
0016	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,414.000	1,414.000
0018	204.0120	Removing Asphaltic Surface Milling	SY	281,509.000	281,509.000
0020	204.0150	Removing Curb & Gutter	LF	74.000	74.000
0022	204.0165	Removing Guardrail	LF	5,127.000	5,127.000
0024	204.0180	Removing Delineators and Markers	EACH	259.000	259.000
0026	204.0190	Removing Surface Drains	EACH	3.000	3.000
0028	204.0220	Removing Inlets	EACH	1.000	1.000
0030	205.0100	Excavation Common	CY	585.000	585.000
0032	206.1001	Excavation for Structures Bridges (structure) 01. B-39-22	EACH	1.000	1.000
0034	208.0100	Borrow	CY	1,168.000	1,168.000
0036	210.1500	Backfill Structure Type A	TON	2.000	2.000
0038	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1166-04-84	EACH	1.000	1.000
0040	213.0100	Finishing Roadway (project) 01. 1166-04-84	EACH	1.000	1.000
0042	305.0110	Base Aggregate Dense 3/4-Inch	TON	7,940.000	7,940.000
0044	415.0120	Concrete Pavement 12-Inch	SY	234.000	234.000
0046	415.0410	Concrete Pavement Approach Slab	SY	231.000	231.000
0048	416.0610	Drilled Tie Bars	EACH	732.000	732.000
0050	416.0620	Drilled Dowel Bars	EACH	1,547.000	1,547.000
0052	416.1710	Concrete Pavement Repair	SY	910.000	910.000
0054	416.1720	Concrete Pavement Replacement	SY	941.000	941.000
0056	420.1000	Continuous Diamond Grinding Concrete Pavement	SY	4,030.000	4,030.000
0058	450.4000	HMA Cold Weather Paving	TON	1,000.000	1,000.000
0060	455.0605	Tack Coat	GAL	37,946.000	37,946.000
0062	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0064	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0066	460.0115.S	HMA Pavement Test Strip Volumetrics	EACH	1.000	1.000
0068	460.0120.S	HMA Pavement Test Strip Density	EACH	1.000	1.000
0070	460.2000	Incentive Density HMA Pavement	DOL	23,056.000	23,056.000
0072	460.5224	HMA Pavement 4 LT 58-28 S	TON	14,050.000	14,050.000
0074	460.6424	HMA Pavement 4 MT 58-28 H	TON	2,360.000	2,360.000
0076	460.7223	HMA Pavement 3 HT 58-28 S	TON	10,200.000	10,200.000
0078	460.7224	HMA Pavement 4 HT 58-28 S	TON	12,840.000	12,840.000
0080	460.8424	HMA Pavement 4 SMA 58-28 H	TON	19,380.000	19,380.000
0082	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000
0084	465.0105	Asphaltic Surface	TON	429.000	429.000
0086	465.0110	Asphaltic Surface Patching	TON	260.000	260.000
0088	465.0510	Asphaltic Rumble Strips, Shoulder Divided Roadway	LF	124,095.000	124,095.000
0090	502.0100	Concrete Masonry Bridges	CY	1.900	1.900
0092	502.3205	Pigmented Surface Sealer Reseal	SY	182.000	182.000
0094	502.4205	Adhesive Anchors No. 5 Bar	EACH	26.000	26.000
0096	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	370.000	370.000
0098	509.0301	Preparation Decks Type 1	SY	10.000	10.000

1166-04-84

Line	Item	Item Description	Unit	Total	Qty
0100	509.0302	Preparation Decks Type 2	SY	4.000	4.000
0102	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	100.000	100.000
0104	509.1500	Concrete Surface Repair	SF	90.000	90.000
0106	509.2000	Full-Depth Deck Repair	SY	1.000	1.000
0108	509.2100.S	Concrete Masonry Deck Repair	CY	1.000	1.000
0110	509.5100.S	Polymer Overlay	SY	362.000	362.000
0112	509.9015.S	Removing Polymer Overlay (structure) 01. B-39-06	SY	362.000	362.000
0114	516.0500	Rubberized Membrane Waterproofing	SY	2.000	2.000
0116	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0118	520.8700	Cleaning Culvert Pipes	EACH	3.000	3.000
0120	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	1.000	1.000
0122	524.0118	Culvert Pipe Salvaged 18-Inch	LF	32.000	32.000
0124	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	2.000	2.000
0126	524.0624	Apron Endwalls for Culvert Pipe Salvaged 24-Inch	EACH	1.000	1.000
0128	524.0660	Apron Endwalls for Culvert Pipe Salvaged 60-Inch	EACH	1.000	1.000
0130	530.0112	Culvert Pipe Corrugated Polyethylene 12-Inch	LF	70.000	70.000
0132	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	32.000	32.000
0134	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	34.000	34.000
0136	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	119.000	119.000
0138	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	23.000	23.000
0140	602.3010	Concrete Surface Drains	CY	2.000	2.000
0142	606.0200	Riprap Medium	CY	12.000	12.000
0144	611.0654	Inlet Covers Type V	EACH	1.000	1.000
0146	611.3220	Inlets 2x2-FT	EACH	1.000	1.000
0148	611.8115	Adjusting Inlet Covers	EACH	7.000	7.000
0150	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	24.000	24.000
0152	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
0154	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	4.000	4.000
0156	614.0230	Steel Thrie Beam	LF	230.000	230.000
0158	614.2300	MGS Guardrail 3	LF	3,362.500	3,362.500
0160	614.2330	MGS Guardrail 3 K	LF	37.500	37.500
0162	614.2500	MGS Thrie Beam Transition	LF	402.200	402.200
0164	614.2610	MGS Guardrail Terminal EAT	EACH	13.000	13.000
0166	614.2620	MGS Guardrail Terminal Type 2	EACH	4.000	4.000
0168	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1166-04-84	EACH	1.000	1.000
0170	619.1000	Mobilization	EACH	1.000	1.000
0172	620.0300	Concrete Median Sloped Nose	SF	167.000	167.000
0174	624.0100	Water	MGAL	135.000	135.000
0176	625.0100	Topsoil	SY	11,570.000	11,570.000
0178	628.1504	Silt Fence	LF	8,330.000	8,330.000
0180	628.1520	Silt Fence Maintenance	LF	8,330.000	8,330.000
0182	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0184	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0186	628.2008	Erosion Mat Urban Class I Type B	SY	10,020.000	10,020.000
0188	628.7005	Inlet Protection Type A	EACH	8.000	8.000
0190	628.7010	Inlet Protection Type B	EACH	19.000	19.000
0192	628.7015	Inlet Protection Type C	EACH	4.000	4.000
0194	628.7020	Inlet Protection Type D	EACH	3.000	3.000
0196	628.7504	Temporary Ditch Checks	LF	255.000	255.000

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty
0198	629.0210	Fertilizer Type B	CWT	8.700	8.700
0200	630.0130	Seeding Mixture No. 30	LB	520.000	520.000
0202	630.0200	Seeding Temporary	LB	125.000	125.000
0204	630.0500	Seed Water	MGAL	140.000	140.000
0206	633.0100	Delineator Posts Steel	EACH	313.000	313.000
0208	633.0500	Delineator Reflectors	EACH	372.000	372.000
0210	633.5200	Markers Culvert End	EACH	4.000	4.000
0212	642.5201	Field Office Type C	EACH	1.000	1.000
0214	643.0300	Traffic Control Drums	DAY	139,700.000	139,700.000
0216	643.0370.S	Digital Speed Reduction System (DSRS)	DAY	2,530.000	2,530.000
0218	643.0420	Traffic Control Barricades Type III	DAY	12,840.000	12,840.000
0220	643.0705	Traffic Control Warning Lights Type A	DAY	22,450.000	22,450.000
0222	643.0715	Traffic Control Warning Lights Type C	DAY	11,890.000	11,890.000
0224	643.0810.S	Connected Arrow Board	DAY	460.000	460.000
0226	643.0900	Traffic Control Signs	DAY	40,150.000	40,150.000
0228	643.0910	Traffic Control Covering Signs Type I	EACH	7.000	7.000
0230	643.0920	Traffic Control Covering Signs Type II	EACH	33.000	33.000
0232	643.1050	Traffic Control Signs PCMS	DAY	1,090.000	1,090.000
0234	643.1205.S	Basic Traffic Queue Warning System	DAY	480.000	480.000
0236	643.1220.S	Connected Work Zone Start and End Location Markers	DAY	960.000	960.000
0238	643.3165	Temporary Marking Line Paint 6-Inch	LF	272,700.000	272,700.000
0240	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	147,790.000	147,790.000
0242	643.5000	Traffic Control	EACH	1.000	1.000
0244	645.0120	Geotextile Type HR	SY	34.000	34.000
0246	646.2020	Marking Line Epoxy 6-Inch	LF	2,974.000	2,974.000
0248	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	16,044.000	16,044.000
0250	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	160,607.000	160,607.000
0252	646.4020	Marking Line Epoxy 10-Inch	LF	136.000	136.000
0254	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	5,031.000	5,031.000
0256	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	10.000	10.000
0258	646.6120	Marking Stop Line Epoxy 18-Inch	LF	39.000	39.000
0260	646.7220	Marking Chevron Epoxy 24-Inch	LF	397.000	397.000
0262	646.8120	Marking Curb Epoxy	LF	250.000	250.000
0264	646.8220	Marking Island Nose Epoxy	EACH	3.000	3.000
0266	646.9000	Marking Removal Line 4-Inch	LF	84,507.000	84,507.000
0268	650.8000	Construction Staking Resurfacing Reference	LF	68,456.000	68,456.000
0270	650.9911	Construction Staking Supplemental Control (project) 01. 1166-04-84	EACH	1.000	1.000
0272	650.9920	Construction Staking Slope Stakes	LF	4,197.000	4,197.000
0274	690.0150	Sawing Asphalt	LF	409.000	409.000
0276	690.0250	Sawing Concrete	LF	6,296.000	6,296.000
0278	740.0440	Incentive IRI Ride	DOL	49,090.000	49,090.000
0280	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000
0282	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,800.000	4,800.000
0284	SPV.0055	Special 01. Incentive Density PWL HMA Pavement	DOL	19,590.000	19,590.000
0286	SPV.0055	Special 02. Incentive Air Voids HMA Pavement	DOL	22,920.000	22,920.000
0288	SPV.0055	Special 03. Incentive Density HMA Longitudinal Joint	DOL	12,700.000	12,700.000
0290	SPV.0060	Special 01. Replace Inlet Adjustment Rings	EACH	13.000	13.000
0292	SPV.0060	Special 02. Digital Speed Limit Pad	EACH	26.000	26.000
0294	SPV.0090	Special 01. Remove & Replace Concrete Barrier	LF	135.000	135.000

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Line	Item	Item Description	Unit	Total	Qty
0296	SPV.0165	Special 01. Slab Underside Concrete Surface Repair	SF	132.000	132.000
0298	SPV.0180	Special 01. Removing Distressed Asphaltic Surface Milling	SY	2,300.000	2,300.000
0300	SPV.0195	Special 01. Concrete Joint and Crack Cleaning and Repair	TON	100.000	100.000

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REMOVING SMALL PIPE CULVERTS & INLETS

STATION	LOCATION	203.0100 REMOVING SMALL PIPE EACH	204.0220 REMOVING INLETS EACH	SIZE/TYPE
385+81	IH 38, LT	1	1	58'x12" CMCP
TOTAL 0010		1	1	

REMOVING CONCRETE PAVEMENT, CONCRETE PAVEMENT PARTIAL DEPTH AND ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH SF	204.0110 REMOVING ASPHALTIC SURFACE SY
0010				APPROACH SLABS @ CTH O	142	1,268	--
				CONCRETE SURFACE FLUME @ STH 23/CTH P	6	--	--
				TRANSITION @ STH 23/CTH P	--	1,268	--
	25+00 P	-	34+18 P	STH 23/CTH P SHOULDERS	--	--	620
	25+58 P	-	25+80 P	STH 23/CTH P MEDIAN	--	--	20
	27+87 P	-	27+97 P	STH 23/CTH P MEDIAN	--	--	8
	30+87 P	-	30+97 P	STH 23/CTH P MEDIAN	--	--	11
	32+79 P	-	32+89 P	STH 23/CTH P MEDIAN	--	--	5
	33+46 P	-	33+74 P	STH 23/CTH P MEDIAN	--	--	27
	310+28 AD	-	319+23 AD	STH 23/CTH P ENTRANCE RAMP	--	--	751
	318+94 AC	-	330+00 AC	STH 23/CTH P EXIT RAMP	--	--	941
				APPROACH SLABS @ CTH CX/GAIL LN	178	1,268	--
	532+00 BC	-	539+71 BC	CTH D ENTRANCE RAMP	--	--	618
				APPROACH SLAB @ FAWN CT	77	634	--
				TOTAL 0010	403	4,438	3,001
0020	17+07 P	-	17+12 P	STH 23/CTH P	--	--	14
	17+12 P	-	25+00 P	STH 23/CTH P SHOULDERS	--	--	606
				TOTAL 0020	0	0	620
				PROJECT TOTAL	403	4,438	3,621

REMOVING CURB & GUTTER

STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF
25+75 P	STH 23/CTH P	14
27+93 P	STH 23/CTH P	6
27+93 P	STH 23/CTH P	1
30+93 P	STH 23/CTH P	6
32+85 P	STH 23/CTH P	11
33+46 P	STH 23/CTH P	11
	BC RAMP	25
	TOTAL 0010	74

REMOVING SURFACE DRAINS

STATION	LOCATION	204.0190 REMOVING SURFACE DRAINS EACH
209+42	RT	1
385+66	RT	1
385+81	LT	1
	TOTAL 0010	3

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION		204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	* MILL DEPTH (INCHES)
105+42	-	111+41	IH 39 SB	LT/RT SHOULDERS	871	2
112+35	-	120+75	IH 39 SB	LT/RT SHOULDERS	1,345	2
120+85	-	209+24	IH 39 SB	MAINLINE & SHLDRS	37,372	3.5
211+02	-	317+43	IH 39 SB	MAINLINE & SHLDRS	46,820	3.5
319+76	-	383+93	IH 39 SB	MAINLINE & SHLDRS	28,003	3.5
385+95	-	415+80	IH 39 SB	MAINLINE & SHLDRS	12,687	3.5
415+80	-	517+10	IH 39 SB	MAINLINE & SHLDRS	42,972	3.5
517+10	-	542+08	IH 39 SB	MAINLINE & SHLDRS	11,581	3.5
542+18	-	639+11	IH 39 SB	MAINLINE & SHLDRS	38,741	4
638+00	-	650+60	IH 39 SB	MAINLINE & SHLDRS	5,296	1.75
652+76	-	663+00	IH 39 SB	MAINLINE & SHLDRS	4,442	1.75
663+10	-	745+77	IH 39 SB	MAINLINE & SHLDRS	34,352	4
		123+00	IH 39 SB	MAINTENANCE X-OVER	184	2
		194+64	IH 39 SB	MAINTENANCE X-OVER	145	2
		222+21	IH 39 SB	MAINTENANCE X-OVER	147	2
		284+76	IH 39 SB	MAINTENANCE X-OVER	111	2
		341+69	IH 39 SB	MAINTENANCE X-OVER	159	2
		440+45	IH 39 SB	MAINTENANCE X-OVER	91	2
		521+53	IH 39 SB	MAINTENANCE X-OVER	148	2
		622+24	IH 39 SB	MAINTENANCE X-OVER	387	1
		726+45	IH 39 SB	MAINTENANCE X-OVER	185	1
14+72 D	-	16+87 D	CTH D	MAINLINE & SHOULDERS LT/RT	841	2
19+11 D	-	21+06 D	CTH D	MAINLINE & SHOULDERS LT/RT	705	2
619+40 CC	-	650+15 CC	STH 82/23 ENTRANCE RAMP	RAMP & SHLDRS	7,243	1
652+25 CD	-	671+79 CD	STH 82/23 EXIT RAMP	RAMP & SHLDRS	5,096	1
			WZ/STRUCT ENTRANCE/EXIT TAPER	RUMBLE STRIPS	1,585	2
				TOTAL 0010	281,509	

* FOR INFORMATION PURPOSES ONLY

REMOVING GUARDRAIL

STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF
112+23	-	114+46	IH 39 SB, LT	223
112+23	-	114+46	IH 39 SB, RT	223
130+10	-	131+79	IH 39, MEDIAN	350
210+75	-	211+70	IH 39 SB, LT	95
210+75	-	214+07	IH 39 SB, RT	332
319+62	-	320+56	IH 39 SB, LT	94
319+55	-	322+87	IH 39 SB, RT	332
385+75	-	387+19	IH 39 SB, LT	144
385+57	-	388+89	IH 39 SB, RT	332
442+54	-	446+15	IH 39 SB, RT	361
504+74	-	505+96	IH 39 SB, LT	122
511+24	-	514+82	IH 39 SB, RT	358
538+04	-	539+73	IH 39, MEDIAN	351
538+31	-	541+72	IH 39 SB, LT	341
574+24	-	579+27	IH 39 SB, LT	503
671+84	-	681+50	IH 39 SB, LT	966
			TOTAL 0010	5,127

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

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REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
		123+00	MAINTENANCE X-OVER	51
		194+64	MAINTENANCE X-OVER	49
		222+21	MAINTENANCE X-OVER	49
		284+76	MAINTENANCE X-OVER	38
		341+69	MAINTENANCE X-OVER	51
		440+45	MAINTENANCE X-OVER	41
		521+53	MAINTENANCE X-OVER	49
		622+24	MAINTENANCE X-OVER	59
		726+45	MAINTENANCE X-OVER	49
105+32	-	105+42	LT/RT SHOULDER	14
111+41	-	111+51	LT/RT SLOULDER	20
112+25	-	112+35	LT/RT SLOULDER	20
120+75	-	120+85	IH 39	42
209+24	-	209+34	IH 39	44
210+92	-	211+02	IH 39	45
310+18 AC	-	310+28 AC	STH 23/CTH P ENT RAMP	26
317+37	-	317+47	IH 39	27
317+58	-	317+67	IH 39	46
319+46	-	319+57	IH 39	45

~ CONTINUE ~

REMOVING ASPHALTIC SURFACE BUTT JOINTS ~ CONTINUED ~

STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
319+71	-	319+81	IH 39	27
330+01 AD	-	330+11 AD	STH 23/CTH P EXIT RAMP	26
383+93	-	384+03	IH 39	44
385+85	-	385+95	IH 39	40
531+92 BC	-	532+03 BC	CTH D ENT RAMP	26
14+62 D	-	14+72 D	CTH D	37
16+87 D	-	16+97 D	CTH D	35
19+00 D	-	19+11 D	CTH D	35
21+06 D	-	21+16 D	CTHD	38
542+08	-	542+18	IH 39	43
619+30	-	619+40	IH 39 LT SHOULDER	11
639+11	-	638+00	IH 39	43
650+15 CC	-	650+25 CC	STH 82/STH 23 ENT RAMP	26
650+60	-	650+71	IH 39	46
652+66	-	652+76	IH 39	48
663+00	-	663+10	IH 39	43
652+25 CD	-	652+35 CD	STH 82/STH 23 EXIT RAMP	26
671+79	-	671+89	IH 39 LT SHOULDER	11
745+77	-	745+87	IH 39	44
			TOTAL 0010	1,414

FROM/TO STATION	205.0100 COMMON EXCAVATION (1) CUT (2)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.30	MASS ORDINATE +/- (14)	208.0100 BORROW
112+50/116+44.09 LEFT	25	0	25	14	18	7	0
112+50/116+44.09 RIGHT	20	0	20	83	108	-88	88
128+00/134+00 RIGHT	36	0	36	85	111	-75	75
210+75/215+52.42 LEFT	54	0	54	39	51	3	0
210+75/215+52.42 RIGHT	37	0	37	18	23	14	0
319+75/324+32.65 LEFT	58	0	58	44	57	1	0
319+75/324+32.65 RIGHT	36	0	36	10	13	23	0
385+75/390+33.90 LEFT	57	0	57	69	90	-33	33
385+75/390+33.90 RIGHT	41	0	41	20	26	15	0
441+84.46/446+12.30 RIGHT	4	0	4	34	44	-40	40
504+75/508+86.72 LEFT	18	0	18	15	20	-2	2
511+25/515+99.30 RIGHT	17	0	17	41	53	-36	36
536+00/543+00 LEFT	84	0	84	0	0	84	0
536+00/543+00 RIGHT	48	0	48	23	30	18	0
572+50/580+48.12 LEFT	20	0	20	193	251	-231	231
671+50/682+70 LEFT	30	0	30	534	694	-664	664
SUB TOTAL	585	0	585	1,222	1,589	-1,004	1,168
TOTAL COMMON EXC	585						

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.30 (EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR)
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

PREPARE FOUNDATION FOR ASPHALTIC PAVING

STATION	TO	STATION	LOCATION		211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 1166-04-84) EACH
17+08 P	-	34+18 P	STH 23/CTH P	LT/RT SHOULDERS	
306+00 AC	-	319+22 AC	STH 23/CTH P ENTRANCE RAMP	LT/RT SHOULDERS	
318+94 AD	-	333+00 AD	STH 23/CTH P EXIT RAMP	LT/RT SHOULDERS	1
527+00 BC	-	539+59 BC	CTH D ENTRANCE RAMP	LT/RT SHOULDERS	
				TOTAL 0010	1

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON
0010	112+25	-	115+16	IH 39 SB, GUARDRAIL LT/RT	50
	210+79	-	214+33	IH 39 SB, GUARDRAIL LT/RT	50
	319+60	-	323+13	IH 39 SB, GUARDRAIL LT/RT	50
	385+61	-	389+14	IH 39 SB, GUARDRAIL LT/RT	50
	442+50	-	446+13	IH 39 SB, GUARDRAIL RT	30
	504+76	-	506+04	IH 39 SB, GUARDRAIL LT	30
	511+26	-	514+79	IH 39 SB, GUARDRAIL RT	30
	538+25	-	541+78	IH 39 SB, GUARDRAIL LT	30
	542+08	-	638+00	IH 39 SB, LT/RT	200
	638+00	-	650+71	IH 39 SB, LT/RT	30
	655+62	-	663+00	IH 39 SB, LT/RT	20
	663+00	-	745+92	IH 39 SB, LT/RT	180
			622+24	IH 39 SB, MAINTENANCE X-OVER, LT/RT	10
			726+45	IH 39 SB, MAINTENANCE X-OVER, LT/RT	10
	619+40 CC	-	650+25 CC	STH 82/23 ENTRANCE RAMP, LT/RT	80
	652+25 CD	-	671+79 CD	STH 82/23 EXIT RAMP, LT/RT	60
	115+86	-	209+55	SHOULDER DRESSING, LT/RT	1,090
	214+90	-	317+59	SHOULDER DRESSING, LT/RT	1,200
	310+28 AC	-	318+27 AC	SHOULDER DRESSING, LT/RT	130
	26+00 P	-	33+25 P	SHOULDER DRESSING, LT/RT	460
	319+28 AD	-	330+00 AD	SHOULDER DRESSING, LT/RT	160
	323+77	-	384+30	SHOULDER DRESSING, LT/RT	700
	389+90	-	441+85	SHOULDER DRESSING, LT/RT	500
	515+98	-	639+21	SHOULDER DRESSING, RT	960
	517+10	-	537+64	SHOULDER DRESSING, LT	80
	532+00 BC	-	538+92 BC	SHOULDER DRESSING, LT/RT	110
	543+00	-	573+65	SHOULDER DRESSING, LT	60
	580+48	-	619+40	SHOULDER DRESSING, LT	80
	UNDISTRIBUTED			AREA BETWEEN EXISTING BASE AND PROPOSED BASE FOR BEAMGUARD AREAS	1,000
				TOTAL 0010	7,440
0020	17+08 P	-	25+00 P	SHOULDER DRESSING, LT/RT	500
				TOTAL 0020	500
				PROJECT TOTAL	7,940

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONCRETE PAVEMENT REPAIR & REPLACEMENT

CATEGORY	STATION	TO	STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	420.1000 CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT SY
0010	310+28 AC	-	319+23 AC	STH 23/CTH P ENTRANCE RAMP	55	159	52	105	337
	318+94 AD	-	330+00 AD	STH 23/CTH P EXIT RAMP	69	140	86	99	393
	25+34 P	-	34+18 P	STH 23/CTH P EB MAINL NE	181	444	287	161	987
	25+07 P	-	33+83 P	STH 23/CTH P WB MAINLINE	177	342	260	143	952
	532+00 BC	-	539+71 BC	CTH D ENTRANCE RAMP	145	40	--	146	339
				TOTAL 0010	627	1,125	685	654	3,008
0020	17+14 P	-	25+34 P	STH 23/CTH P EB MAINLINE	59	245	105	140	485
	17+14 P	-	25+07 P	STH 23/CTH P WB MAINLINE	46	177	120	147	537
				TOTAL 0020	105	422	225	287	1,022
				PROJECT TOTAL	732	1,547	910	941	4,030

CULVERT PIPE ITEMS

STATION	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EACH	520.8700 CLEANING CULVERT PIPES EACH	524.0118 CULVERT PIPE SALVAGED 18-INCH LF	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0660 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 60-INCH EACH	633.5200 MARKERS CULVERT END EACH
313+04	CTH P RAMP, LT	--	1	--	--	--	1	1
351+85	IH 39 SB	--	1	--	--	--	--	--
369+77	IH 39 SB, LT	1	1	16	1	--	--	1
429+78	IH 39 SB, LT	1	--	16	1	--	--	1
592+69	IH 39 SB, LT	--	--	--	--	1	--	1
	TOTAL 0010	2	3	32	2	1	1	4

INSTALL JOINT TIES AT JOINTS EXPOSED DURING REMOVAL AND REPLACEMENT. DRILL HOLES FOR TIES IF NOT ALREADY PRESENT.

CONCRETE SURFACE DRAIN ITEMS

STATION	LOCATION	TYPE	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	530.0112 CULVERT PIPE CORRUGATED POLYETHYLENE 12-INCH LF	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF	602.3010 CONCRETE SURFACE DRAINS CY	611.0654 INLET COVERS TYPE V EACH	611.3220 INLETS 2X2-FT EACH	611.8115* ADJUSTING INLET COVERS EACH	STRUCTURE DEPTH (IN)	RIM ELEV	DISCHARGE ELEV
209+42	7' RT	FLUME TYPE, ANGLED	--	--	--	--	1	--	--	--	--	--	--
209+44	34' LT	DROP INLET TYPE	--	--	7	5	--	--	--	1	--	--	--
317+56	34' LT	DROP INLET TYPE	--	--	12	--	--	--	--	1	--	--	--
386+05	6' RT	FLUME TYPE, PERPENDICULAR	--	--	41	18	1	--	--	--	--	--	--
386+23	34' LT	DROP INLET TYPE	1	70	59	--	--	1	1	--	24	804.718	802.718
445+75	14' RT	MEDIAN INLET	--	--	--	--	--	--	--	1	--	--	--
		TOTAL 0010	1	70	119	23	2	1	1	3			
		PROJECT TOTAL								7			

NOTE: FINAL PLACEMENT OF THE INLET MUST MAINTAIN THE MINIMUM POST SEPARATION DISTANCES IN THE STANDARD DETAIL.

* QUANTITY LOCATED ELSEWHERE IN THE PLAN.

CONCRETE PAVEMENT APPROACH SLAB

STATION	TO	STATION	LOCATION/STRUCTURE	415.0120 CONCRETE PAVEMENT 12-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY
209+40	-	209+55	IH 39/B-39-0018 (CTH O)	43	41
210+71	-	210+83	IH 39/B-39-0018 (CTH O)	42	40
384+09	-	384+35	IH 39/B-39-0022 (CTH CX/GAIL LN)	56	55
385+53	-	385+79	IH 39/B-39-0022 (CTH CX/GAIL LN)	45	55
745+92	-	746+07	IH 39/B-39-0010 (FAWN CT)	48	40
			TOTAL 0010	234	231

SURFACE REPAIR ITEMS

STATION	TO	STATION	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	SPV.0180.01 SPECIAL (01. REMOVING DISTRESSED ASPHALTIC SURFACE MILLING) SY	SPV.0195.01 SPECIAL (01. CONCRETE JOINT AND CRACK CLEANING AND REPAIR) TON
415+80	-	517+10	UNDISTRIBUTED MISCELLANEOUS REPAIRS	--	--	100
120+75 517+10	- -	415+80 749+30	UNDISTRIBUTED MISCELLANEOUS REPAIRS	260	2,300	--
			TOTAL 0010	260	2,300	100

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ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

HMA PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	PAVEMENT SECTION	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6424 HMA PAVEMENT 4 MT 58-28 H TON	460.7223 HMA PAVEMENT 3 HT 58-28 S TON	460.7224 HMA PAVEMENT 4 HT 58-28 S TON	460.8424 HMA PAVEMENT 4 SMA 58-28 H TON	465.0105 ASPHALTIC SURFACE TON	465.0510 ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY LF
0010	105+32	-	111+51	IH 39 SB	LT/RT SHOULDERS	63	110	–	–	–	–	1	1,238
	112+25	-	120+75	IH 39 SB	LT/RT SHOULDERS	96	160	–	–	–	–	–	1,700
	120+75	-	209+55	IH 39 SB	MAINLINE & SHOULDERS	5,240	1,930	–	–	2,710	2,710	–	17,710
	210+71	-	317+67	IH 39 SB	MAINLINE & SHLDRS	6,191	2,130	–	–	3,270	3,280	6	21,577
	319+46	-	384+24	IH 39 SB	MAINLINE & SHLDRS	3,785	1,370	–	–	1,970	1,970	4	12,306
	385+53	-	415+80	IH 39 SB	MAINLINE & SHLDRS	1,783	660	–	–	930	930	4	6,004
	415+80	-	517+10	IH 39 SB	MAINLINE & SHLDRS	6,132	2,220	–	–	3,190	3,190	3	20,260
	517+10	-	542+08	IH 39 SB	MAINLINE & SHLDRS	1,399	440	–	–	770	770	–	4,660
	542+08	-	638+00	IH 39 SB	MAINLINE & SHLDRS	5,505	2,040	–	5,500	–	2,970	–	18,260
	638+00	-	650+71	IH 39 SB	MAINLINE & SHLDRS	281	–	–	–	–	560	–	2,492
	652+66	-	663+00	IH 39 SB	MAINLINE & SHLDRS	236	–	–	–	–	470	–	2,018
	663+00	-	745+92	IH 39 SB	MAINLINE & SHLDRS	4,886	2,050	–	4,700	–	2,530	–	15,870
			123+00	IH 39 SB	MAINTENANCE X-OVER	17	–	–	–	–	–	27	–
			194+64	IH 39 SB	MAINTENANCE X-OVER	14	–	–	–	–	–	22	–
			222+21	IH 39 SB	MAINTENANCE X-OVER	14	–	–	–	–	–	22	–
			284+76	IH 39 SB	MAINTENANCE X-OVER	11	–	–	–	–	–	17	–
			341+69	IH 39 SB	MAINTENANCE X-OVER	15	–	–	–	–	–	24	–
			440+45	IH 39 SB	MAINTENANCE X-OVER	10	–	–	–	–	–	15	–
			521+53	IH 39 SB	MAINTENANCE X-OVER	14	–	–	–	–	–	22	–
			622+24	IH 39 SB	MAINTENANCE X-OVER	32	–	–	–	–	–	50	–
			726+45	IH 39 SB	MAINTENANCE X-OVER	17	–	–	–	–	–	27	–
				STH 23/CTH P ENTRANCE RAMP	GORE AREA	385	–	540	–	–	–	–	–
				STH 23/CTH P EXIT RAMP	GORE AREA	146	–	210	–	–	–	–	–
	25+00 P	-	34+18 P	STH 23/CTH P	LT/RT SHOULDERS & MEDIAN	44	130	–	–	–	–	12	–
	310+28 AC	-	319+23 AC	STH 23/CTH P ENTRANCE RAMP	LT/RT SHOULDERS	105	150	–	–	–	–	–	–
	318+94 AD	-	330+00 AD	STH 23/CTH P EXIT RAMP	LT/RT SHOULDERS	132	190	–	–	–	–	–	–
				CTH D ENTRANCE RAMP	GORE AREA	227	–	320	–	–	–	–	
	14+61 D	-	16+90 D	CTH D	MAINLINE & SHOULDERS LT/RT	64	110	–	–	–	–	–	–
	19+00 D	-	21+17 D	CTH D	MAINLINE & SHOULDERS LT/RT	55	90	–	–	–	–	–	–
	532+00 BC	-	539+71 BC	CTH D ENTRANCE RAMP	LT/RT SHOULDERS	86	130	–	–	–	–	–	–
	619+40 CC	-	650+25 CC	STH 82/23 ENTRANCE RAMP	RAMP & SHLDRS	473	–	760	–	–	–	–	–
	652+25 CD	-	671+79 CD	STH 82/23 EXIT RAMP	RAMP & SHLDRS	329	–	530	–	–	–	–	–
				WZ/STRUCTURE ENTRANCE/EXIT TAPER	RUMBLE STRIPS	108	–	–	–	–	–	173	–
					TOTAL 0010	37,895	13,910	2,360	10,200	12,840	19,380	429	124,095
0020	18+13 P	-	19+92 P	STH 23/CTH P	GORE AREA	8	20	–	–	–	–	–	–
	17+12 P	-	25+00 P	STH 23/CTH P	LT/RT SHOULDERS	43	120	–	–	–	–	–	–
					TOTAL 0020	51	140	0	0	0	0	0	0
					PROJECT TOTAL	37,946	14,050	2,360	10,200	12,840	19,380	429	124,095

HMA COLD WEATHER PAVING

LOCATION	450.4000 HMA COLD WEATHER PAVING TON
UNDISTRIBUTED	1,000
TOTAL 0010	1,000

MATERIAL TRANSFER VEHICLE

LOCATION	460.9000.S MATERIAL TRANSFER VEHICLE EACH
PROJECT LIMITS	1
TOTAL 0010	1

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

Location	Station	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
							Mixture Acceptance	Density Acceptance
12 FOOT DRIVING LANES	120+75 - 638+00 663+00 - 747+08	UPPER LAYER	4 HT 58-28 S	4 SMA 58-28 H	15,580	1.75"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
SHOULDER LT/RT	105+32 - 120+75	UPPER LAYER	EXISTING ASPHALT	4 LT 58-28 S	260	2"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
SHOULDER LT	120+75 - 638+00 663+00 - 747+08	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	6,420	1.75"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
SHOULDER RT	120+75 - 638+00 663+00 - 747+08	UPPER LAYER	4 HT 58-28 S	4 SMA 58-28 H	2,760	1.75"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
12 FOOT DRIVING LANES	638+00 - 663+00	UPPER LAYER	EXISTING CONCRETE	4 SMA 58-28 H	610	1.75"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
SHOULDER LT	638+00 - 663+00	UPPER LAYER	EXISTING ASPHALT	4 SMA 58-28 H	315	1.75"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
SHOULDER RT	638+00 - 663+00	UPPER LAYER	EXISTING ASPHALT	4 SMA 58-28 H	105	1.75"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
RAMPS STH 82/STH 23/CTH D	VARIOUS	UPPER LAYER	EXISTING ASPHALT	4 MT 58-28 H	2,360	2"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
CTH D	14+61 - 21+17	UPPER LAYER	EXISTING ASPHALT	4 LT 58-28 S	200	2"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
STH 23/CTH P/CTH D RAMP SHOULDERS LT/RT	17+07 - 34+18	UPPER LAYER	EXISTING BASE COURSE	4 LT 58-28 S	740	3.5"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
12 FOOT DRIVING LANES	120+75 - 415+80 517+10 - 542+00	LOWER LAYER	EXISTING ASPHALT	4 HT 58-28 S	8,260	1.75"	PWL QMP CORE ONLY, INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	PWL QMP CORE ONLY, INCENTIVE DENSITY PWL PAVEMENT SPV.0055.01
12 FOOT DRIVING LANES	542+00 - 638+00 663+00 - 747+08	LOWER LAYER	EXISTING ASPHALT	3 HT 58-28 S	8,680	3.25"	PWL QMP CORE ONLY, INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	PWL QMP CORE ONLY, INCENTIVE DENSITY PWL PAVEMENT SPV.0055.01
12 FOOT DRIVING LANES	415+80 - 517+10	LOWER LAYER	EXISTING CONCRETE	4 HT 58-28 S	2,650	1.75"	PWL QMP CORE ONLY, INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	PWL QMP CORE ONLY, INCENTIVE DENSITY PWL PAVEMENT SPV.0055.01
SHOULDER LT	120+75 - 638+00 663+00 - 747+08	LOWER LAYER	EXISTING ASPHALT	4 LT 58-28 S	6,400	1.75"	QMP as per SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
SHOULDER RT	120+75 -542+00	LOWER LAYER	EXISTING ASPHALT	4 HT 58-28 S	1,810	1.75"	PWL QMP CORE ONLY, INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGIBLE FOR INCENTIVE
SHOULDER RT	542+00 - 638+00 663+00 - 747+08	LOWER LAYER	EXISTING ASPHALT	3 HT 58-28 S	1,520	3.25"	PWL QMP CORE ONLY, INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGIBLE FOR INCENTIVE
MISCELLANEOUS/ MAINTENANCE CROSS OVERS	VARIOUS	UPPER LAYER	EXISTING ASPHALT/GRAVEL	ASPHALTIC SURFACE	256	VARIES	SS 465	ORDINARY COMPACTION SS 450.3.2.6.2

Note: Department Acceptance Cores will be cut and tested by the contractor under the supervision of the engineer. The Department will maintain custody of the cores.

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONCRETE CURB & GUTTER

STATION	TO	STATION	LOCATION	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	NOSE TYPE
		25+75	STH 23/CTH P	--	--	69	1
		32+85	STH 23/CTH P	--	--	72	1
			STH 23/CTH P	9	--	--	
14+61	-	14+95	CTH D	--	34	--	
			TOTAL 0010	9	34	141	

MGS GUARDRAIL

STATION	TO	STATION	LOCATION	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
112+25	-	115+16	IH 39 SB, LT	--	--	200	--	39.4	1	--
112+25	-	115+16	IH 39 SB, RT	--	--	200	--	39.4	1	--
130+15	-	131+74	IH 39, MEDIAN	2	105	--	--	--	--	--
210+79	-	213+70	IH 39 SB, LT	--	--	200	--	39.4	1	--
210+79	-	214+33	IH 39 SB, RT	--	--	262.5	--	39.4	1	--
319+66	-	322+57	IH 39 SB, LT	--	--	200	--	39.4	1	--
319+60	-	323+13	IH 39 SB, RT	--	--	262.5	--	39.4	1	--
385+79	-	388+70	IH 39 SB, LT	--	--	200	--	39.4	1	--
385+61	-	389+14	IH 39 SB, RT	--	--	262.5	--	39.4	1	--
442+05	-	446+13	IH 39 SB, RT	--	--	362.5	37.5	8.2	--	1
504+76	-	506+04	IH 39 SB, LT	--	--	200.0	--	39.4	1	--
511+26	-	514+79	IH 39 SB, RT	--	--	262.5	--	39.4	1	--
538+04	-	539+73	IH 39, MEDIAN	2	125	--	--	--	--	--
538+25	-	541+78	IH 39 SB, LT	--	--	300	--	--	1	1
574+25	-	579+28	IH 39 SB, LT	--	--	450	--	--	1	1
671+84	-	681+50	IH 39 SB, LT	--	--	912.5	--	--	1	1
			TOTAL 0010	4	230	3,362.5	37.5	402.2	13	4

ADJUSTING INLET COVERS

STATION	LOCATION	* 611.8115 ADJUSTING INLET COVERS EACH
27+93 P	10.3' LT, STH 23/CTH P	1
27+93 P	2' LT, STH 23/CTH P	1
30+93 P	4.9' LT, STH 23/CTH P	1
30+93 P	18.1' LT, STH 23/CTH P	1
	TOTAL 0010	4
	PROJECT TOTAL	7

* QUANTITY LOCATED ELSEWHERE IN THE PLAN

DELINEATORS

CATEGORY	STATION	TO	STATION	LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH	TYPE / COLOR
0010	105+32	-	305+00	IH 39 SB	50	46	50	SINGLE / WHITE
				IH 39 SB	--	8	16	DOUBLE / WHITE
	310+00	-	333+00	IH 39 SB	9	6	6	SINGLE / WHITE
	306+00 AC	-	319+25 AC	CTH P/STH 23 ENTRANCE RAMP	20	17	17	SINGLE / WHITE
	319+00 AD	-	333+00 AD	CTH P/STH 23 EXIT RAMP	14	15	15	SINGLE / WHITE
				CTH P/STH 23 EXIT RAMP	--	3	6	DOUBLE / WHITE
	333+00	-	527+00	IH 39 SB	49	46	50	SINGLE / WHITE
	527+00 BC	-	539+25 BC	CTH D ENTRANCE RAMP	15	11	11	SINGLE / WHITE
				CTH D ENTRANCE RAMP	--	6	12	DOUBLE / WHITE
	533+00	-	620+00	IH 39 SB	22	20	28	SINGLE / WHITE
	638+00	-	666+00	IH 39 SB	8	8	8	SINGLE / WHITE
	620+00 CC	-	650+25 CC	STH 82/STH 23 ENTRANCE RAMP	30	18	18	SINGLE / WHITE
				STH 82/STH 23 ENTRANCE RAMP	--	14	28	DOUBLE / WHITE
	652+25 CD	-	671+79 CD	STH 82/STH 23 EXIT RAMP	20	18	18	SINGLE / WHITE
				STH 82/STH 23 EXIT RAMP	--	3	6	DOUBLE / WHITE
	672+00	-	746+07	IH 39 SB	19	17	26	SINGLE / WHITE
			UNDISTRIBUTED		--	54	54	
				TOTAL 0010	256	310	369	
0020	26+25 P	-	33+00 P	STH 23	3	3	3	SINGLE / WHITE
				TOTAL 0020	3	3	3	
				PROJECT TOTAL	259	313	372	

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

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WATER

LOCATION	624.0100 WATER MGAL
DUST CONTROL	125
COMPACTION	10
TOTAL 0010	135

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT LIMITS	2	4
TOTAL 0010	2	4

RIPRAP MEDIUM & GEOTEXTILE TYPE HR

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
209+30	RT	4	12
317+28	RT	4	12
386+04	RT	2	5
386+23	LT	2	5
TOTAL 0010		12	34

EROSION CONTROL

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	628.7504 TEMPORARY DITCH CHECKS LF
112+25	-	116+50	LT/RT	889	889	738	–	1	1	–	–
128+00	-	134+00	RT	–	–	830	2	–	–	–	60
210+75	-	215+50	LT/RT	1,008	1,008	368	–	–	–	–	30
		313+04	LT	–	–	27	–	–	–	–	–
		317+56	LT	–	–	–	–	1	–	–	–
319+59	-	324+33	LT/RT	997	997	464	1	1	1	–	30
		369+77	LT	–	–	34	–	–	–	–	–
385+82	-	390+35	LT/RT	953	953	639	1	1	1	–	30
		429+78	LT	–	–	34	–	–	–	–	–
441+50	-	446+25	RT	–	–	361	1	–	–	–	–
		449+69	RT	–	–	–	–	–	–	1	–
		451+30	RT	–	–	–	–	–	–	1	–
		455+33	RT	–	–	–	–	1	–	–	–
		471+77	RT	–	–	–	–	1	–	–	–
		478+26	RT	–	–	–	–	1	–	–	–
		482+27	RT	–	–	–	–	1	–	–	–
		485+00	RT	–	–	–	–	1	–	–	–
		488+77	RT	–	–	–	–	1	–	–	–
		492+77	RT	–	–	–	–	1	–	–	–
		496+87	RT	–	–	–	–	1	–	–	–
		498+67	RT	–	–	–	–	1	–	–	–
		503+25	RT	–	–	–	–	1	–	–	–
		508+86	RT	–	–	–	–	1	–	–	–
504+75	-	509+00	LT	480	480	109	–	–	–	–	–
511+25	-	516+00	RT	–	–	31	–	–	–	–	25
536+00	-	543+00	LT/RT	216	216	836	1	–	–	–	30
572+50	-	580+50	LT	868	868	1,057	–	–	–	–	–
		592+69	LT	–	–	18	–	–	–	–	–
671+00	-	682+75	LT	1,254	1,254	2,470	–	–	–	–	–
			UNDISTRIBUTED	1,665	1,665	2,004	2	4	1	1	50
			TOTAL 0010	8,330	8,330	10,020	8	19	4	3	255

RESTORATION ITEMS

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
112+25	-	115+16	IH 39 SB, MGS AREA	754	0.5	34	–	9
130+15	-	131+74	IH 39 SB, MGS AREA	1,118	0.8	50	–	13
210+79	-	214+33	IH 39 SB, MGS AREA	461	0.3	21	–	6
		313+04	ENDWALL AREA, LT	27	0.1	1	–	1
319+60	-	323+13	IH 39 SB, MGS AREA	682	0.5	31	–	8
		369+77	ENDWALL AREA, LT	34	0.1	2	–	1
385+61	-	389+14	IH 39 SB, MGS AREA	683	0.5	31	–	8
		429+78	ENDWALL AREA, LT	34	0.1	2	–	1
442+50	-	446+13	IH 39 SB, MGS AREA	351	0.3	16	–	4
504+76	-	506+04	IH 39 SB, MGS AREA	188	0.2	8	–	3
511+26	-	514+79	IH 39 SB, MGS AREA	249	0.2	11	–	3
538+04	-	541+78	IH 39 SB, MGS AREA	1,091	0.7	49	–	13
574+25	-	579+28	IH 39 SB, MGS AREA	1,096	0.7	49	–	13
		592+69	ENDWALL AREA, LT	18	0.1	1	–	1
671+84	-	681+50	IH 39 SB, MGS AREA	2,468	1.6	111	–	28
			UNDISTRIBUTED	2,316	2.0	103	125	28
			TOTAL 0010	11,570	8.7	520	125	140

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL

LOCATION	STAGE	IN SERVICE DAYS	#	643.0300 TRAFFIC CONTROL DRUMS 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	#	643.0810.S CONNECTED ARROW BOARD DAY	#	643.0900 TRAFFIC CONTROL SIGNS DAY	#	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY
IH 39 SB	STAGE 1	7	641	4,487	50	350	100	700	–	–	–	–	–	–	–	–
STRUCTURE B-39-0006	STAGE 1A APPROACH WORK	35	45	1,575	3	105	6	210	30	1,050	1	35	15	525	–	–
STRUCTURE B-39-0018	STAGE 1A APPROACH WORK	35	45	1,575	3	105	6	210	30	1,050	1	35	15	525	–	–
STRUCTURE B-39-0022	STAGE 1A APPROACH WORK	35	45	1,575	3	105	6	210	30	1,050	1	35	15	525	–	–
STRUCTURE B-39-0010	STAGE 1A APPROACH WORK	35	45	1,575	3	105	6	210	30	1,050	1	35	15	525	–	–
IH 39 SB	STAGE 1A	42	641	26,922	50	2,100	100	4,200	–	–	–	–	–	–	–	–
STRUCTURE B-39-0006	STAGE 1B APPROACH WORK	35	42	1,470	3	105	6	210	27	945	1	35	15	525	–	–
STRUCTURE B-39-0018	STAGE 1B APPROACH WORK	35	42	1,470	3	105	6	210	27	945	1	35	15	525	–	–
STRUCTURE B-39-0022	STAGE 1B APPROACH WORK	35	42	1,470	3	105	6	210	27	945	1	35	15	525	–	–
STRUCTURE B-39-0010	STAGE 1B APPROACH WORK	35	42	1,470	3	105	6	210	27	945	1	35	15	525	–	–
IH 39 SB	STAGE 1B	56	641	35,896	50	2,800	100	5,600	–	–	–	–	–	–	–	–
IH39 SB	STAGE 1C	21	641	13,461	50	1,050	100	2,100	–	–	–	–	–	–	–	–
STH 23 WB DETOUR	DETOUR	42	–	–	–	–	–	–	–	–	–	–	201	8,442	–	–
IH 39 SB ON RAMP DETOUR (STH 82/STH 23)	DETOUR	42	–	–	24	1,008	32	1,344	–	–	–	–	162	6,804	–	–
IH 39 SB OFF RAMP DETOUR (STH 82/STH 23)	DETOUR	42	–	–	24	1,008	32	1,344	–	–	–	–	112	4,704	–	–
IH 39 NB ADVANCED WARNING	ALL STAGES	5	37	185	1	5	–	–	17	85	1	5	9	45	–	–
IH 39 SB ADVANCED WARNING	ALL STAGES	126	37	4,662	1	126	–	–	17	2,142	1	126	9	1,134	–	–
PCMS LOCATIONS	ALL STAGES	126	–	–	–	–	–	–	–	–	–	–	–	–	7	882
OSOW SIGNING	ALL STAGES	56	–	–	–	–	–	–	–	–	–	–	43	2,408	–	–
STH 23/CTH P RAMPS	ALL STAGES	42	66	2,772	8	336	–	–	–	–	–	–	68	2,856	–	–
CTH D RAMPS	ALL STAGES	14	22	308	–	–	–	–	–	–	–	–	12	168	–	–
STH 23/STH 82 RAMPS	ALL STAGES	42	66	2,772	7	294	–	–	–	–	–	–	130	5,460	–	–
IH 39 NB	NB LANE CLOSURE	35	678	23,730	51	1,785	100	3,500	17	595	–	–	–	–	3	105
UNDISTRIBUTED				12,325	–	1,138	–	1,982	–	1,088	–	49	–	3,929	–	103
	TOTAL 0010			139,700		12,840		22,450		11,890		460		40,150		1,090

DIGITAL SPEED REDUCTION SYSTEM & BASIC TRAFFIC QUEUE WARNING SYSTEM

LOCATION	STAGE	IN SERVICE DAYS	DIGITAL SPEED LIMIT TRAILERS (DSLT)	#	643.0370.S DIGITAL SPEED REDUCTION SYSTEM (DSRS) DAY	FLASHING BEACON SIGNS (FBS)	PORTABLE TRAFFIC SENSORS (PTS)	#	643.1205.S BASIC TRAFFIC QUEUE WARNING SYSTEM DAY	#	643.1220.S CONNECTED WORK ZONE START AND END LOCATION MARKERS DAY
IH 39 SB	STAGE 1 - PREP	7	13	13	91	3	2	1	7	2	14
STRUCTURE B-39-0006	STAGE 1A APPROACH WORK	35	1	1	35	3	2	1	35	2	70
STRUCTURE B-39-0018	STAGE 1A APPROACH WORK	35	1	1	35	3	2	1	35	2	70
STRUCTURE B-39-0022	STAGE 1A APPROACH WORK	35	1	1	35	3	2	1	35	2	70
STRUCTURE B-39-0010	STAGE 1A APPROACH WORK	35	1	1	35	3	2	1	35	2	70
IH 39 SB	STAGE 1A	42	13	13	546	3	2	1	42	2	84
STRUCTURE B-39-0006	STAGE 1 B APPROACH WORK	35	1	1	35	3	2	1	35	2	70
STRUCTURE B-39-0018	STAGE 1 B APPROACH WORK	35	1	1	35	3	2	1	35	2	70
STRUCTURE B-39-0022	STAGE 1 B APPROACH WORK	35	1	1	35	3	2	1	35	2	70
STRUCTURE B-39-0010	STAGE 1 B APPROACH WORK	35	1	1	35	3	2	1	35	2	70
IH 39 SB	STAGE 1 3	56	13	13	728	3	2	1	56	2	112
IH 39 SB	STAGE 1C	15	13	13	195	3	2	1	15	2	30
IH 39 NB	NB LANE CLOSURE	35	13	13	455	3	2	1	35	2	70
	UNDISTRIBUTED				235				45		90
			TOTAL 0010		2,530				480		960

DIGITAL SPEED LIMIT TRAILER PAD

STATION	LOCATION	SPV.0060.02 SPECIAL (02. DIGITAL SPEED LIMIT TRAILER PAD) EACH
UNDISTRIBUTED	IH 39 SB	13
UNDISTRIBUTED	IH 39 NB	13
	TOTAL 0010	26

NOTE : LOCATIONS TO BE DETERMINED BASED ON CONTRACTORS LANE CLOSURE OPERATIONS.

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

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COVERING SIGNS

SHEET NAME	SIGN	LOCATION	# OF CYCLES	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	(EAST 23) AHEAD ARROW	STH 13/16/23, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	LT ARROW MONTELLO	STH 13 NB, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	(EAST 23 & ALT 39) AHEAD/RT ARROWS	STH 16 WB, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	(MONTELLO) ARROW	STH 16 WB, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	(EAST 23 & ALT 39) RT ARROWS	STH 16 WB, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	EAST 23, ALT 39	STH 23 WB	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL A)	MONTELLO 31, FOND DU LAC 79	STH 23 WB	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL C)	(WEST 23) LT ARROW	IH 39 OFF RAMP (STH 82/23)	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL C)	(WEST 23) AHEAD/LT ARROW	STH 23 WB, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL D)	(23) LT ARROW & P LT/RT ARROW	CTH P, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL D)	(P) LT/AHEAD ARROW	STH 23, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL D)	JCT P	CTH CX, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL D)	TO 23 LT ARROW, WEST P LT ARROW	CTH CX, RT	1	--	1
DETOUR - STH 23 EASTBOUND/WESTBOUND (DETAIL D)	TO 39/51/23 RT ARROW	CTH CX, LT	1	--	1
STH 23 / CTH P RAMP CLOSURE	(WIS DELLS, ENDEAVOR) 1 MILE	IH 39 NB	1	1	--
STH 23 / CTH P RAMP CLOSURE	(ENDEAVOR) RT ARROW	IH 39 NB, OFF RAMP (CTH P/STH 23)	1	1	--
STH 23 / CTH P RAMP CLOSURE	EXIT 100 RT ARROW	IH 39 SB, OFF RAMP (CTH P/STH 23)	1	--	1
STH 23 / CTH P RAMP CLOSURE	EXIT 100 RT ARROW	IH 39 SB, OFF RAMP (CTH P/STH 23)	1	--	1
STH 23 / CTH P RAMP CLOSURE	(WIS DELLS, ENDEAVER) RT ARROW	IH 39 SB, OFF RAMP (CTH P/STH 23)	1	1	--
STH 23 / CTH P RAMP CLOSURE	(WIS DELLS, ENDEAVOR) 1 MILE	IH 39 SB	1	1	--
CTH D RAMP CLOSURE DETAIL	NORTHBOUND	I39 OFF RAMP (CTH D)	1	--	1
STH 23 / STH 82 RAMP CLOSURE	(SOUTH 39, DOUTH 51, WEST 23) AHEAD/RT ARROW (3)	STH 23 EB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	(MONTELLO, AHEAD ARROW; PORTAGE, WIS DELLS) RT ARROW	STH 23 EB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	SOUTH 39/SOUTH 51/WEST 23, RT ARROW (3)	STH 23 EB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	SOUTH 39/SOUTH 51/WEST 23, LT ARROW (3)	STH 23 WB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	PORTAGE, WIS DELLS, LT ARROW	STH 23 WB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	SOUTH 39/SOUTH 51/WEST 23, AHEAD/LT ARROW (3)	STH 23 WB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	(PORTAGE, WIS DELLS) AHEAD ARROW (STEVENS POINT, RT ARROW)	STH 23 WB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	(SOUTH 39/51) AHEAD ARROW	STH 23 WB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	(WEST) 23 (82, AHEAD ARROW)	STH 23 WB, RT	1	--	1
STH 23 / STH 82 RAMP CLOSURE	EXIT 106	IH 39 OFF RAMP (STH 82/23)	1	--	1
STH 23 / STH 82 RAMP CLOSURE	(OXFORD, MONTELLO) RT ARROW	IH 39 OFF RAMP (STH 82/23)	1	1	--
STH 23 / STH 82 RAMP CLOSURE	PACKWAUKEE, EXIT 106	IH 39 SB	1	1	--
STH 23 / STH 82 RAMP CLOSURE	(OXFORD, MONTELLO) 1 MILE	IH 39 SB	1	1	--
TRAFFIC CONTROL LIMITS	70 MPH SPEED LIMIT SIGNS	IH 39 SB	1	--	3
TRAFFIC CONTROL LIMITS	70 MPH SPEED LIMIT SIGNS	IH 39 NB	1	--	3
		TOTAL 0010		7	33

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

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TEMPORARY PAVEMENT MARKING

STATION	TO	STATION	LOCATION/TYPE	STAGE	COLOR	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH LF	646.9000 MARKING REMOVAL LINE 4-INCH LF
105+32	-	746+07	IH 39 SB	STAGE 1		--	840	64,107
			STRUCTURE B-39-0006/EDGELINES	STAGE 1A APPROACH WORK	WHITE/YELLOW	2,050	2,210	2,550
			STRUCTURE B-39-0018/EDGELINES	STAGE 1A APPROACH WORK	WHITE/YELLOW	2,050	2,210	2,550
			STRUCTURE B-39-0022/EDGELINES	STAGE 1A APPROACH WORK	WHITE/YELLOW	2,050	2,210	2,550
			STRUCTURE B-39-0010/EDGELINES	STAGE 1A APPROACH WORK	WHITE/YELLOW	2,050	2,210	2,550
105+32	-	746+07	IH 39 SB	STAGE 1A	WHITE/YELLOW	128,150	840	--
			STRUCTURE B-39-0006/EDGELINES	STAGE 1B APPROACH WORK	WHITE/YELLOW	2,050	1,650	2,550
			STRUCTURE B-39-0018/EDGELINES	STAGE 1B APPROACH WORK	WHITE/YELLOW	2,050	1,650	2,550
			STRUCTURE B-39-0022/EDGELINES	STAGE 1B APPROACH WORK	WHITE/YELLOW	2,050	1,650	2,550
			STRUCTURE B-39-0010/EDGELINES	STAGE 1B APPROACH WORK	WHITE/YELLOW	2,050	1,650	2,550
105+32	-	746+07	IH 39 SB	STAGE 1B	WHITE/YELLOW	128,150	840	--
105+32	-	746+07	IH 39 SB	STAGE 1C	WHITE/YELLOW	--	128,990	--
105+32	-	746+07	IH 39 NB	NB LANE CLOSURE		--	840	--
			TOTAL 0010			**272,700**	**147,790**	**84,507**

MARKING AERIAL ENFORCEMENT BAR EPOXY

STATION	LOCATION	646.5420 MARKING AERIAL ENFORCEMENT BAR EPOXY EACH
692+05	IH 39 SB	2
698+65	IH 39 SB	2
705+25	IH 39 SB	2
711+85	IH 39 SB	2
718+45	IH 39 SB	2
TOTAL 0010		**10**

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION/TYPE	COLOR	646.2020 MARKING LINE EPOXY 6-INCH LF	646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.4020 MARKING LINE EPOXY 10-INCH LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7220 MARKING CHEVRON EPOXY 24-INCH LF
0010	105+32	-	747+08	IH 39 SB, LANELINE	BLACK/WHITE	--	16,044	16,044	--	--	--	--
	105+32	-	747+08	IH 39 SB, RT EDGELINE	YELLOW	--	--	64,171	--	--	--	--
	105+32	-	295+50	IH 39 SB, LT EDGELINE	WHITE	--	--	19,019	--	--	--	--
	295+51	-	302+59	IH 39 SB, RT DOTTED EDGELINE	WHITE	--	--	177	--	--	--	--
	295+50	-	319+00 AC	STH 23/CTH P ENTRANCE RAMP	WHITE/YELLOW	--	--	2,039	--	1,479	--	--
	310+23	-	329+98	IH 39 SB, LT EDGELINE	WHITE	--	--	1,975	--	--	--	--
	319+00 AD	-	335+23	STH 23/CTH P EXIT RAMP	WHITE/YELLOW	--	--	2,693	--	674	39	184
	333+35	-	335+23	IH 39 SB, RT DOTTED EDGELINE	WHITE	--	--	47	--	--	--	--
	335+23	-	522+88	IH 39 SB, LT EDGELINE	WHITE	--	--	18,737	--	--	--	--
	522+88	-	528+65	IH 39 SB, RT DOTTED EDGELINE	WHITE	--	--	145	--	--	--	--
	522+88	-	539+20 BC	CTH D ENTRANCE RAMP	WHITE/YELLOW	--	--	2,317	--	792	--	--
	532+58	-	619+15	IH 39 SB, LT EDGELINE	WHITE	--	--	8,662	--	--	--	--
	619+15	-	650+25 CC	STH 82/STH 23 ENTRANCE RAMP	WHITE/YELLOW	--	--	4,301	--	1,106	--	--
	623+00	-	632+63	IH 39 SB, RT DOTTED EDGELINE	WHITE	--	--	241	--	--	--	--
	638+40	-	666+36	IH 39 SB, LT EDGELINE	WHITE	--	--	2,918	--	--	--	--
	652+25 CD	-	671+79 CD	STH 82/STH 23 EXIT RAMP	WHITE/YELLOW	--	--	3,369	--	726	--	213
	669+99	-	671+87	IH 39 SB, RT DOTTED EDGELINE	WHITE	--	--	47	--	--	--	--
	671+87	-	747+08	IH 39 SB, LT EDGELINE	WHITE	--	--	7,420		--	--	--
	25+00 P	-	34+18 P	STH 23/CTH P	WHITE/YELLOW	443	--	2,888	88	154	--	--
	14+61 D	-	21+17 D	CTH D	WHITE/YELLOW	2,531	--	--	48	--	--	--
					TOTAL 0010	**2,974**	**16,044**	**157,210**	**136**	**4,931**	**39**	**397**
0020	17+07 P	-	25+00 P	STH 23/CTH P	WHITE/YELLOW	--	--	3,397	--	100	--	--
					TOTAL 0020	**0**	**0**	**3,397**	**0**	**100**	**0**	**0**
					PROJECT TOTAL	**2,974**	**16,044**	**160,607**	**136**	**5031**	**39**	**397**

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

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MARKING CURB & ISLAND NOSE EPOXY

STATION	TO	STATION	LOCATION	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
319+00 AD	-	333+00 AD	STH 23/CTH P EXIT RAMP	113	–
25+00 P	-	34+18 P	STH 23/CTH P	137	3
			TOTAL 0010	**250**	**3**

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010			209+10	APPROACH SLAB	57	24
			210+86	APPROACH SLAB	51	24
	310+28 AC	-	319+23 AC	STH 23/CTH P ENTRANCE RAMP	–	560
	318+94 AD	-	330+00 AD	STH 23/CTH P EXIT RAMP	–	565
	25+34 P	-	34+18 P	STH 23/CTH P EB MAINLINE	40	1,565
	25+07 P	-	33+83 P	STH 23/CTH P WB MAINLINE	–	1,405
			384+09	APPROACH SLAB	51	24
			385+79	APPROACH SLAB	47	24
	385+61	-	386+20	CURB	106	21
	532+00 BC	-	539+71 BC	CTH D ENTRANCE RAMP	–	650
			745+92	APPROACH SLAB	57	24
				TOTAL 0010	**409**	**4,886**
0020	17+14 P	-	25+35 P	STH 23/CTH P EB MAINLINE	–	760
	17+14 P	-	25+13 P	STH 23/CTH P WB MAINLINE	–	650
				TOTAL 0020	**0**	**1,410**
				PROJECT TOTAL	**409**	**6,296**

3

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
105+32	-	746+07	IH 39 SB	64,075	–
14+61 D	-	21+17 D	CTH D	656	–
632+00 CC	-	650+25 CC	STH 82/STH 23 ENTRANCE RAMP	1,825	–
652+25 CD	-	671+25 CD	STH 82/STH 23 EXIT RAMP	1,900	–
112+25	-	115+16	IH 39 SB, MGS AREA	–	291
130+15	-	131+74	IH 39 SB, MGS AREA	–	159
210+79	-	214+33	IH 39 SB, MGS AREA	–	354
319+60	-	323+13	IH 39 SB, MGS AREA	–	353
385+61	-	389+14	IH 39 SB, MGS AREA	–	353
442+50	-	446+13	IH 39 SB, MGS AREA	–	363
504+76	-	506+04	IH 39 SB, MGS AREA	–	128
511+26	-	514+79	IH 39 SB, MGS AREA	–	353
538+04	-	541+78	IH 39 SB, MGS AREA	–	374
574+25	-	579+28	IH 39 SB, MGS AREA	–	503
671+84	-	681+50	IH 39 SB, MGS AREA	–	966
			TOTAL 0010	68,456	4,197

REPLACE INLET ADJUSTING RINGS

STATION	LOCATION	SPV.0060.01 SPECIAL (01. REPLACE INLET ADJUSTING RINGS) EACH
449+69	IH 39 SB, RT	1
451+30	IH 39 SB, RT	1
455+33	IH 39 SB, RT	1
471+77	IH 39 SB, RT	1
478+26	IH 39 SB, RT	1
482+27	IH 39 SB, RT	1
485+00	IH 39 SB, RT	1
488+77	IH 39 SB, RT	1
492+77	IH 39 SB, RT	1
496+87	IH 39 SB, RT	1
498+67	IH 39 SB, RT	1
503+25	IH 39 SB, RT	1
508+86	IH 39 SB, RT	1
	TOTAL 0010	13

REMOVE & REPLACE CONCRETE BARRIER

STATION	TO	STATION	LOCATION	SPV.0090.01 SPECIAL (01. REMOVE & REPLACE CONCRETE BARRIER) LF
449+65	-	449+73	IH 39 SB, RT	8
451+26	-	451+34	IH 39 SB, RT	8
455+29	-	455+37	IH 39 SB, RT	8
456+99	-	457+05	IH 39 SB, RT	6
458+37	-	458+43	IH 39 SB, RT	6
471+73	-	471+93	IH 39 SB, RT	20
478+22	-	478+30	IH 39 SB, RT	8
482+23	-	482+31	IH 39 SB, RT	8
484+96	-	485+04	IH 39 SB, RT	8
488+73	-	488+81	IH 39 SB, RT	8
492+73	-	492+81	IH 39 SB, RT	8
496+83	-	496+91	IH 39 SB, RT	8
498+63	-	498+71	IH 39 SB, RT	8
503+21	-	503+36	IH 39 SB, RT	15
508+82	-	508+90	IH 39 SB, RT	8
			TOTAL 0010	135

ALL ITEMS ON THIS SHEET ARE PROJECT ID 1166-04-84 CATEGORY 0010 UNLESS OTHERWISE NOTED

PI STA = 89'SB'+52.91
Y = 198368.765
X = 434735.374
DELTA = 15°29'46" LT
D = 0°29'53"
T = 1564.89'
L = 3110.69'
R = 11501.52'
PC STA = 73'SB'+88.01
Y = 196832.983
X = 434434.925
PT STA = 104'SB'+98.70
Y = 199928.990
X = 434614.581
SE = RC
LR = 90'

BEGIN PROJECT
STA 105'SB'+31.78
Y = 199961.97
X = 434612.03
MATCH EXISTING
10' BUTT JOINT REQ'D
(ASPHALT SHOULDERS)

PT: 104'SB'+98.70

STRUCTURE B-39-0006
(POLYMER OVERLAY)
SEE STRUCTURE PLAN

BM#513

WETLAND BOUNDARY

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAILS
& EROSION CONTROL)

PC: 115'SB'+87.92

STA 105'SB'+32 - STA 120'SB'+75
(2" MILLING ASPHALTIC PAVEMENT,
SHOULDERS AND 2" HMA PAVEMENT)

MATCH LINE STA 120'SB'+00

N04° 25' 37"W
1089.22'

10' BUTT JOINT REQ'D
(ASPHALT SHOULDERS)

CP#943

CP#942

WETLAND BOUNDARY

90'SB
95'SB'
100'SB'
105'SB'
110'SB'
115'SB'
120

IH 39 SB

IH 39 NB

CTH CX

HO

COLUMBIA COUNTY

MARQUETTE COUNTY

NEENAH CREEK

CONTROL POINT 943
STA 111+37.90 'SB', 40.1 RT
Y = 200569.38
X = 434605.19
¾" REBAR W/MSA RED CAP
ELEV = 787.43

CONTROL POINT 942
STA 115+51.55 'SB', 32.9 RT
Y = 200981.24
X = 434566.16
¾" REBAR W/MSA RED CAP
ELEV = 784.71

N

5

5

PI STA = 122'SB'+54.88
Y = 201679.927
X = 434479.024
DELTA = 4°56'48" RT
D = 0°22'16"
T = 666.96'
L = 1333.09'
R = 15440.59'
PC STA = 115'SB'+87.92
Y = 201014.958
X = 434530.506
PT STA = 129'SB'+21.01
Y = 202346.859
X = 434485.074
SE = NC
LR = N/A

GROUSE DR

PT: 129'SB'+21.01

STRUCTURE B-39-0016
NO WORK REQ'D
EXISTING CLEARANCE 18.53'

MARQUETTE ADAMS

N00° 31' 11"E
9503.96'

BENCH MARKS

NO.	STATION	ELEV.	DESCRIPTION
513	112+22.1	791.60	34.5' LT, BRIDGE DISK
511	131+11.9	807.79	152.4' RT, BRIDGE "X" ON WALL

STA 120'SB'+75
BEGIN MILLING &
PAVING MAINLINE
MATCH EXISTING
BUTT JOINT REQ'D

MATCH LINE STA 120'SB'+00

MATCH LINE STA 150+00'SB'

'SB'
125'SB'
130'SB'
135'SB'
140'SB'
145'SB'
150

IH 39 SB

IH 39 NB

STA 123'SB'+00
(SEE MILL & OVERLAY AT
MAINTENANCE CROSSOVER
DETAIL)

CP#941

CP#940

BM#511

BULLNOSE REQ'D
(SEE GUARDRAIL DETAILS
& EROSION CONTROL)

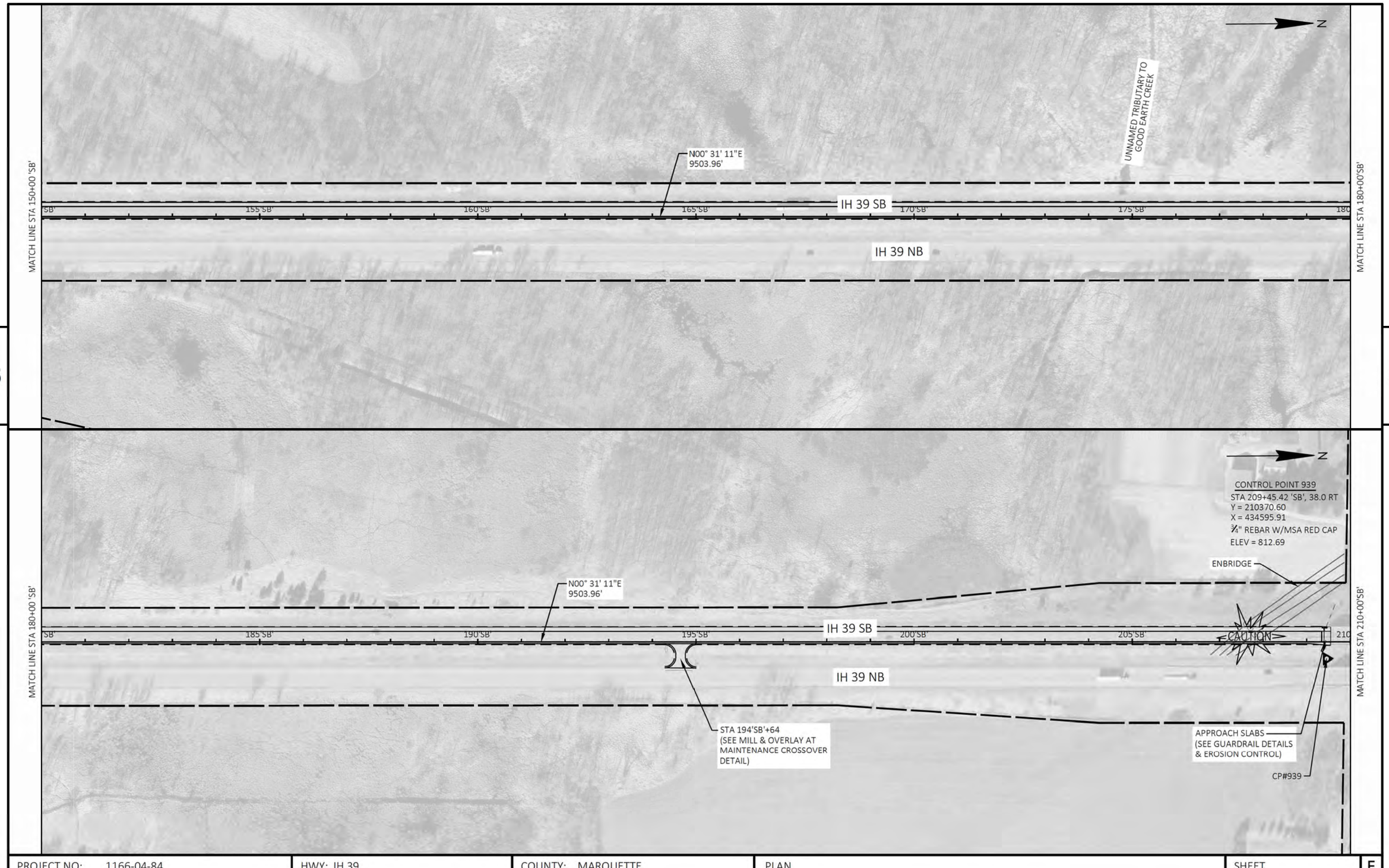
CONTROL POINT 941
STA 129+07.64 'SB', 39.4 RT
Y = 202333.17
X = 434524.33
¾" REBAR W/MSA RED CAP
ELEV = 783.40

CONTROL POINT 940
STA 132+87.13 'SB', 37.0 RT
Y = 202712.64
X = 434525.36
¾" REBAR W/MSA RED CAP
ELEV = 783.52

N

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 01
PLOT DATE : 6/25/2025 10:41 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 02

PLOT DATE : 6/25/2025 10:41 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
510	210+73.9	816.10	34.3' LT, BRIDGE DISK

CTH O

ADAMS COLUMBIA ELEC

STRUCTURE B-39-0018
NET EXCEPTION TO CL LENGTH
STA 209'SB'+55 - STA 210'SB'+71

BM#510

MATCH LINE STA 210+00 'SB'

N00° 31' 11"E
9503.96'

PI: 224'SB'+24.96
Y = 211850.43
X = 434571.28

N00° 32' 41"E
5589.56'

GOOD EARTH CREEK

'SB' 215'SB' 220'SB' 225'SB' 230'SB' 235'SB' 240

IH 39 SB

IH 39 NB

CP#938

APPROACH SLABS & MGS GUARDRAIL REQ'D (SEE GUARDRAIL DETAILS & EROSION CONTROL)

CONTROL POINT 938
STA 215+17.70 'SB', 28.2 RT
Y = 210942.95
X = 434591.22
¾" REBAR W/MSA RED CAP
ELEV = 808.37

STA 222'SB'+21
(SEE MILL & OVERLAY AT MAINTENANCE CROSSOVER DETAIL)

UNNAMED TRIBUTARY TO GOOD EARTH CREEK

GOOD EARTH CREEK

MATCH LINE STA 240+00'SB'

MATCH LINE STA 240+00 'SB'

UNNAMED TRIBUTARY TO GOOD EARTH CREEK

N00° 32' 41"E
5589.56'

'SB' 245'SB' 250'SB' 255'SB' 260'SB' 265'SB' 270

IH 39 SB

IH 39 NB

UNNAMED TRIBUTARY TO GOOD EARTH CREEK

MATCH LINE STA 270+00'SB'

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 03

PLOT DATE : 6/25/2025 10:41 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

PI STA = 288'SB'+43.00
Y = 218268.172
X = 434632.299
DELTA = 8°19'00" LT
D = 0°30'10"
T = 828.48'
L = 1654.04'
R = 11395.16'
PC STA = 280'SB'+14.52
Y = 217439.732
X = 434624.423
PT STA = 296'SB'+68.57
Y = 219089.039
X = 434520.264
SE = RC
LR = 90'

N

UNNAMED TRIBUTARY TO GOOD EARTH CREEK

N00° 32' 41"E
5589.56'

PC: 280'SB'+14.52

PT: 296'SB'+68.57

N07° 46' 19"W
5209.89'

MATCH LINE STA 270+00 'SB'

MATCH LINE STA 300+00'SB'

SB'

275'SB'

280'SB'

285'SB'

290'SB'

295'SB'

300

IH 39 SB

IH 39 NB

STA 284'SB'+76
(SEE MILL & OVERLAY AT
MAINTENANCE CROSSOVER
DETAIL)

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
509	317+73.8	831.70	35.2' LT, BRIDGE DISK
508	319+60.7	835.07	35.3' LT, BRIDGE "X" ON WALL

39039005221 (STA 313'AC'+04)
APRON ENDWALLS FOR CULVERT
PIPE SALVAGED 60-INCH
RESET & TIE ENDWALL
CLEANING CULVERT PIPES
(EXISTING 60" RCCP)

MARQUETTE ADAMS

N

SEE RAMP PAVING DETAIL FOR
ADDITIONAL INFORMATION.

BP: 306'AC'+00.00
Y= 220004.56
X= 434350.47

PC: 308'AC'+04.78

PT: 312'AC'+48.19

'AC' RAMP

315'AC'

10' BUTT JOINT REQ'D

310'AC'

CTH P / STH 23

'AD' RAMP

320'AD'

PC: 325'AD'+38.49

325'AD'

PT: 328'AD'+90.41

MARQUETTE ADAMS

STRUCTURE B-39-0020
NET EXCEPTION TO CL LENGTH
STA 317'SB'+53 - STA 319'SB'+65

N07° 46' 19"W
5209.89'

BM#509

BM#508

CP#936

CP#937

CP#952

MATCH LINE STA 300+00 'SB'

'SB'

305'SB'

310'SB'

315'SB'

320'SB'

325'SB'

330

IH 39 SB

IH 39 NB

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAILS
& EROSION CONTROL)

CONTROL POINT 936
STA 321+60.88 'SB', -47.8 LT
Y = 221552.00
X = 434135.90
¾" REBAR W/MSA RED CAP
ELEV = 832.02

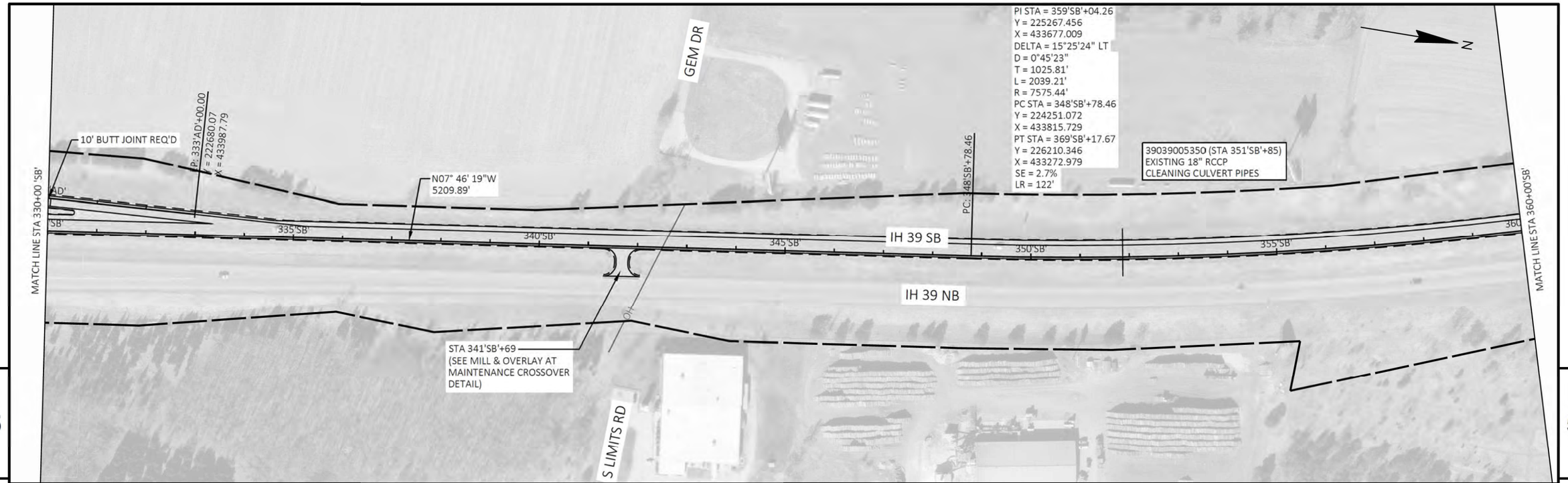
CONTROL POINT 937
STA 317+47.60 'SB', 33.5 RT
Y = 221153.50
X = 434272.30
¾" REBAR W/MSA RED CAP
ELEV = 828.97

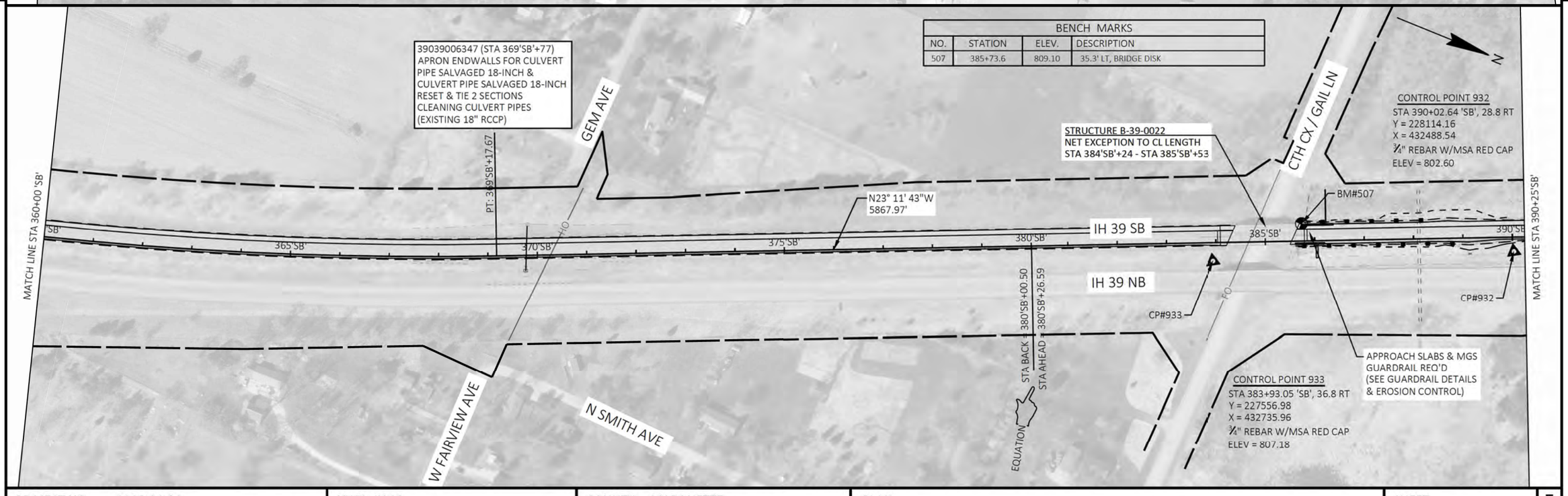
CONTROL POINT 952
STA 29+71.64 P, 37.4 RT
Y = 221205.23
X = 434269.56
¾" REBAR W/MSA RED CAP
ELEV = 807.39

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 04

PLOT DATE : 6/25/2025 10:41 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT





PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 05
PLOT DATE : 6/25/2025 10:41 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/C#

5

MATCH LINE STA 390+25 'SB'

N23° 11' 43"W
5867.97'

395'SB' 400'SB' 405'SB' 410'SB' 415'SB' 420'SB'

IH 39 SB

IH 39 NB

OH

S 7TH AVE

MATCH LINE STA 420+25'SB'

5

N

CTH CX

39039005343 (STA 429'SB'+78)
APRON ENDWALLS FOR CULVERT
PIPE SALVAGED 18-INCH &
CULVERT PIPE SALVAGED 18-INCH
RESET & TIE 2 SECTIONS
(EXISTING 18" RCCP)

PC: 428'SB'+11.73

N23° 11' 43"W
5867.97'

425'SB 430'SB' 435'SB'

IH 39 SB

IH 39 NB

440'SB'

445'SB'

450'SB'

STA 440'SB'+45
(SEE MILL & OVERLAY AT
MAINTENANCE CROSSOVER
DETAIL)

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAILS
& EROSION CONTROL)

BEGIN EXISTING
CONCRETE BARRIER

EXISTING CONCRETE
BARRIER (TO REMAIN)

STA 445'SB'+75
ADJUSTING INLET
COVERS

SEE CONCRETE BARRIER REPLACEMENT DETAIL
FOR AREAS OF BARRIER REPLACEMENT AND
INLET ADJUSTMENT

PI STA = 441'SB'+37.15
Y = 232822.284
X = 430439.750
DELTA = 44°15'48" RT
D = 1°45'29"
T = 1325.42'
L = 2517.67'
R = 3258.95'
PC STA = 428'SB'+11.73
Y = 231603.999
X = 430961.788
PT STA = 453'SB'+29.40
Y = 234059.106
X = 430916.210
SE = 5.1%
LR = 230'

MATCH LINE STA 470+25 'SB'

MATCH LINE STA 450+25'SB'

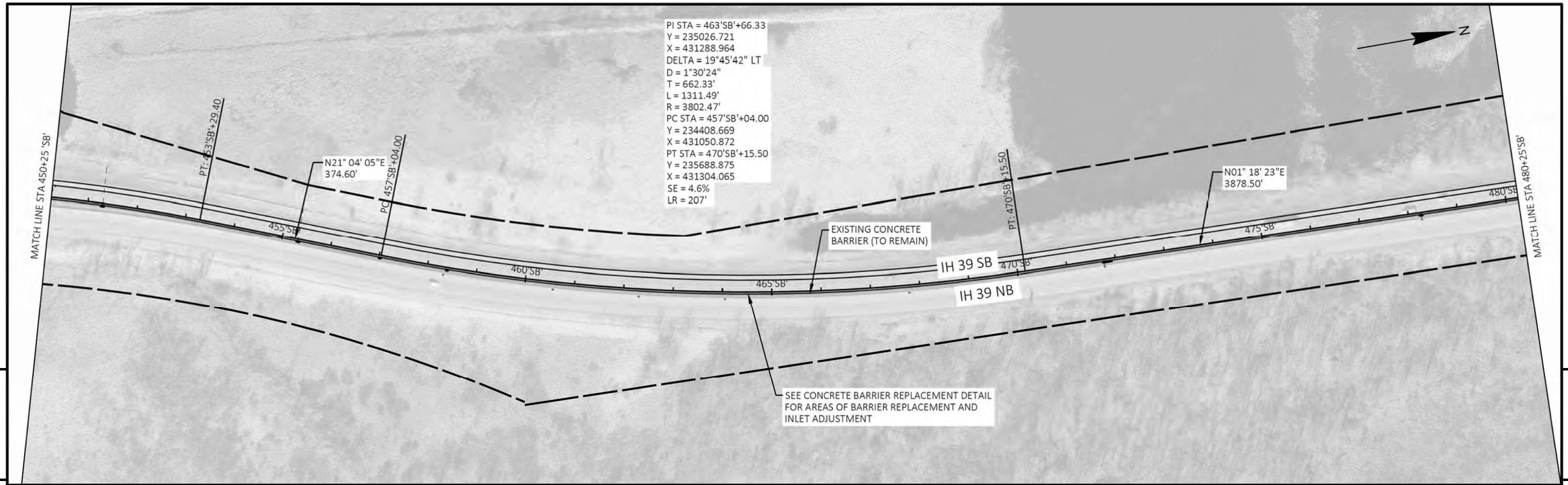
7TH RD

CHAPMAN CREEK

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 6/25/2025 10:41 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 07
PLOT DATE : 6/25/2025 10:41 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

PI STA = 512'SB'+07.86
Y = 239880.142
X = 431399.655
DELTA = 14°58'38" LT
D = 2°23'59"
T = 313.85'
L = 624.13'
R = 2387.64'
PC STA = 508'SB'+94.00
Y = 239566.369
X = 431392.499
PT STA = 515'SB'+18.13
Y = 240185.105
X = 431325.478
SE = 5.9%
LR = 266'

CTH CX

NOTE:
MAINTAIN EXISTING CLEARANCE OF 16.41' UNDER STRUCTURE.

MGS GUARDRAIL REQ'D (SEE GUARDRAIL DETAILS & EROSION CONTROL)

STRUCTURE B-39-0011 (NO WORK REQ'D)

PC: 534'BC'+03.95

PT: 536'BC'+68.21

PC: 527'SB'+00.87
BP: 527'BC'+00.00
Y = 241349.844
X = 431007.765

10' BUTT JOINT REQ'D

'BC' RAMP

PT: 538'SB'+44.75

N13° 40' 14"W
1182.74'

END EXISTING CONCRETE BARRIER

PT: 515'SB'+18.13

MATCH LINE STA 510+25 'SB'

530'BC'

535'BC'

530'SB'

535'SB'

540'SB'

IH 39 SB

525'SB'

515'SB'

520'SB'

FO G

IH 39 NB

STA 521'SB'+53
(SEE MILL & OVERLAY AT MAINTENANCE CROSSOVER DETAIL)

ALLEN CREEK

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAILS & EROSION CONTROL)

PI STA = 532'SB'+74.56
Y = 241891.775
X = 430910.362
DELTA = 10°57'37" RT
D = 0°57'29"
T = 573.69'
L = 1143.87'
R = 5979.64'
PC STA = 527'SB'+00.87
Y = 241334.339
X = 431045.948
PT STA = 538'SB'+44.75
Y = 242464.820
X = 430883.235
SE = 3.3%
LR = 149'

CONTROL POINT 931
STA 536+99.82 'SB', 38.5 RT
Y = 242322.90
X = 430930.26
¾" REBAR W/MSA RED CAP
ELEV = 776.99

CP#931

BULLNOSE REQ'D
(SEE GUARDRAIL DETAILS & EROSION CONTROL)

BM#506

MATCH LINE STA 540+25'SB'

CTH D

N

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
506	19'D'+01.1	803.24	17.2' LT, BRIDGE "X" ON WALL

ALLIANT

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAILS & EROSION CONTROL)

N02° 42' 37"W
3149.51'

PC: 569'SB'+94.26

MATCH LINE STA 540+25 'SB'

545'SB'

550'SB'

IH 39 SB

555'SB'

560'SB'

565'SB'

570'SB'

MATCH LINE STA 570+25'SB'

END 3.5" MILL & 3.5" FILL
BEGIN 4" MILL & 5" FILL
TRANSITION (SEE DETAIL)

IH 39 NB

CP#930

CONTROL POINT 930
STA 541+12.23 'SB', 31.7 RT
Y = 242733.51
X = 430902.30
¾" REBAR W/MSA RED CAP
ELEV = 777.50

ALLEN CREEK

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 08

PLOT DATE : 6/25/2025 10:41 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/C

PI STA = 575'SB'+91.53
Y = 246207.415
X = 430706.065
DELTA = 5°38'38" RT
D = 0°28'22"
T = 597.28'
L = 1193.59'
R = 12116.86'
PC STA = 569'SB'+94.26
Y = 245610.807
X = 430734.308
PT STA = 581'SB'+87.84
Y = 246803.908
X = 430736.634
SE = RC
LR = 90'

CONTROL POINT 929
STA 573+21.96 'SB', -44.1 LT
Y = 245937.42
X = 430679.15
¾" REBAR W/MSA RED CAP
ELEV = 790.39

CONTROL POINT 928
STA 580+23.29 'SB', -48.3 LT
Y = 246641.34
X = 430681.07
¾" REBAR W/MSA RED CAP
ELEV = 792.92

N

39039080819 (STA 592'SB'+69)
APRON ENDWALLS FOR CULVERT PIPE
SALVAGED 24-INCH
RESET & TIE ENDWALL AND CLEAN PIPE
(EXISTING 24" RCCP)

WETLAND BOUNDARY
MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAILS
& EROSION CONTROL)
CP#929
CP#928
PT: 581'SB'+87.84
N02° 56' 01"E
12055.57'
WETLAND BOUNDARY
MATCH LINE STA 570+25 'SB'
575'SB'
580'SB'
585'SB'
590'SB'
595'SB'
600'SB'
IH 39 SB
IH 39 NB
ALLEN CREEK
WETLAND BOUNDARY
MATCH LINE STA 600+25'SB'

5

5

N

1" REMOVING ASPHALTIC MILLING & 2" HMA
PAVEMENT (PARALLEL ENTRANCE RAMP)

LIMIT OF 1" REMOVING ASPHALTIC MILLING &
2" HMA PAVEMENT (PARALLEL ENTRANCE RAMP)

BP: 619'CC'+40.44
Y = 250552.89
X = 430903.87

PI: 623'CC'+00.64
Y = 250913.00
X = 430910.33

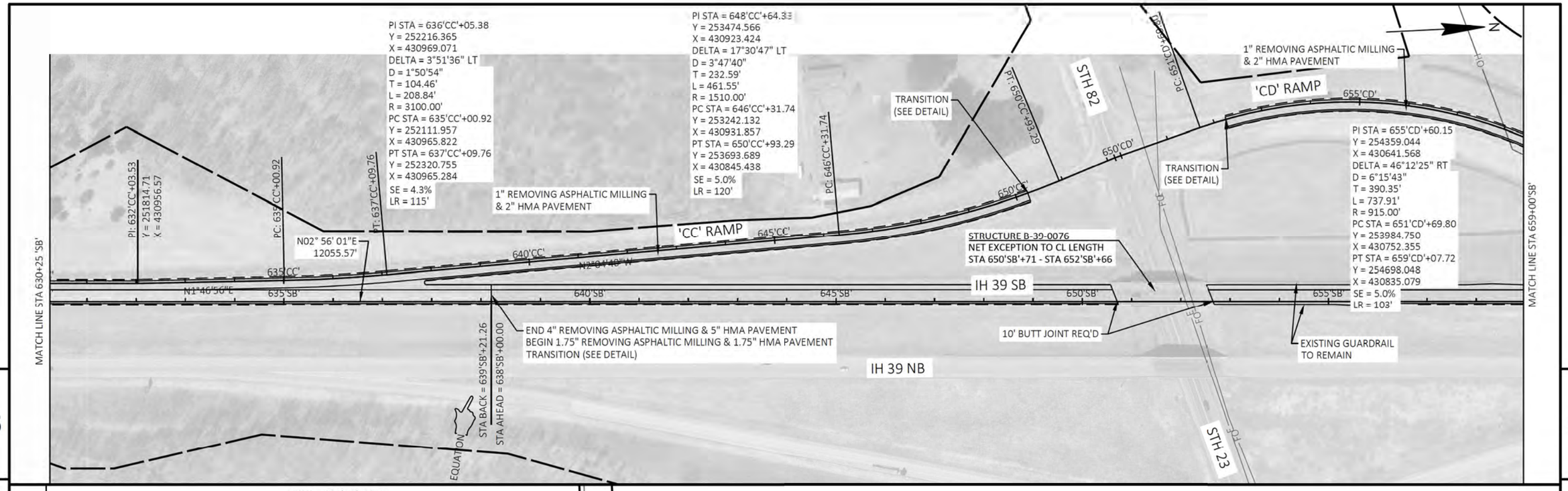
N02° 56' 01"E
12055.57'

MATCH LINE STA 600+25 'SB'
605'SB'
610'SB'
615'SB'
620'CC'
620'SB'
625'CC'
625'SB'
630'CC'
630'SB'
IH 39 SB
N1°01'37"E
N2°56'10"E
IH 39 NB
MATCH LINE STA 630+25'SB'

STA 662'SB'+24
(SEE MILL & OVERLAY AT
MAINTENANCE CROSSOVER
DETAIL)

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET	E

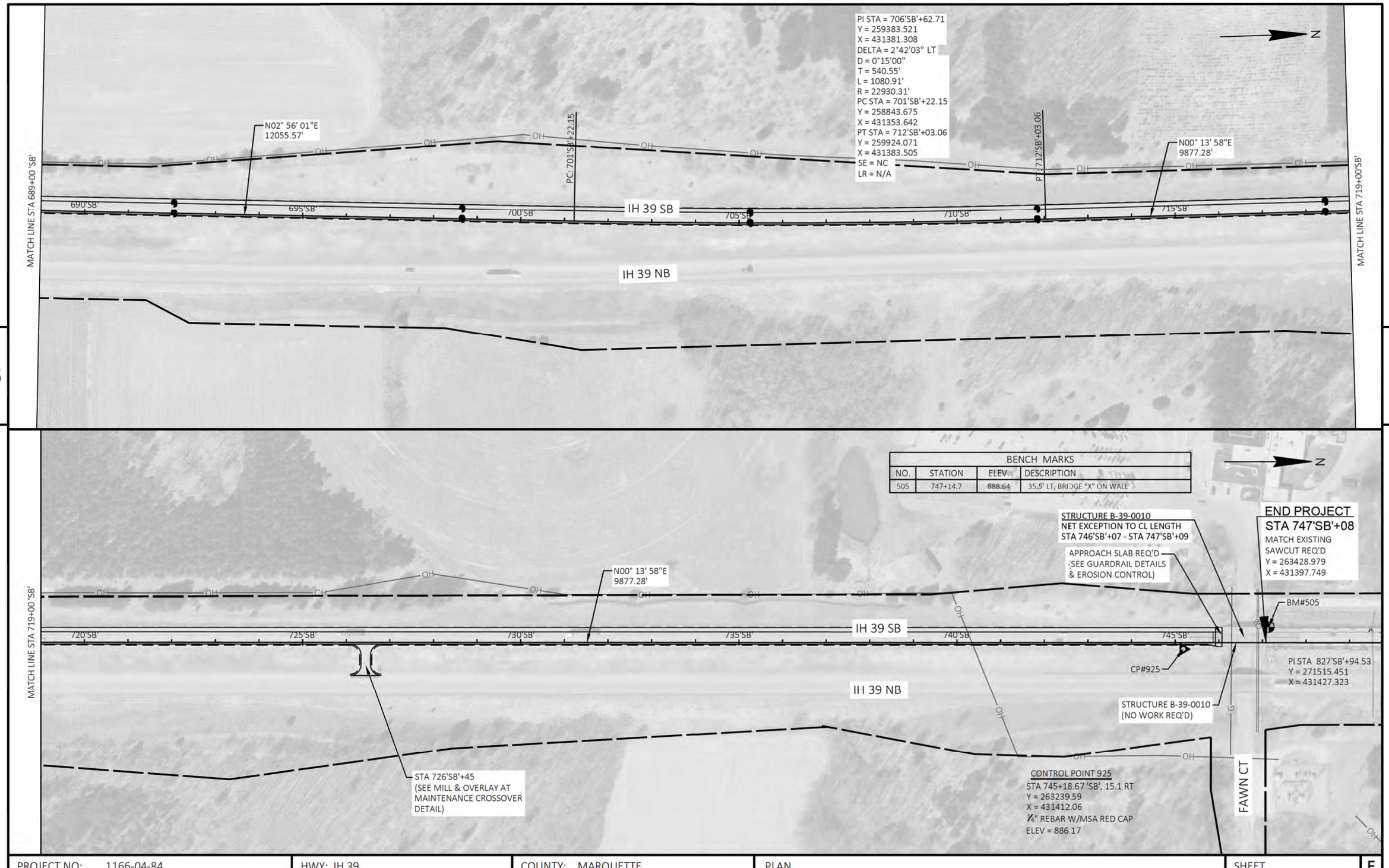
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 09
PLOT DATE : 6/25/2025 10:41 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/C#



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 10

PLOT DATE : 6/25/2025 10:41 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050201-PN.DWG
LAYOUT NAME - 11
PLOT DATE : 6/25/2025 10:41 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

NOTE:
EXACT LOCATION OF CONCRETE PAVEMENT REPLACEMENT, REPAIRS, AND DIAMOND GR NDING TO BE DETERMINED BY FIELD ENGINEER. SEE "CONCRETE PAVEMENT REPAIR/REPLACEMENT DETAILS FOR SKEWED JOINTS" FOR ADDITIONAL INFORMATION.

N

CONSTRUCTION LIMITS
JOINT REPAIR & SHOULDER REPLACEMENT
STA 17'P'+07.7 (BEGIN CATEGORY 0020)

PI: 16'P'+81.09
Y = 221275.31
X = 432980.45

PI: 18'P'+12.80
Y = 221273.83
X = 433112.14

PI: 20'P'+41.57
Y = 221267.81
X = 433340.84

CTH P / STH 23 WB

17'P'+00
18'P'+00
19'P'+00
20'P'+00
21'P'+00
22'P'+00
23'P'+

S89°21'17"E
S88°29'36"E
S88°26'57"E

CTH P / STH 23 EB

REMOVING ASPHALTIC SURFACE / 6" HMA PAVEMENT 4 LT 58-28 S

REMOVING ASPHALTIC SURFACE / 3.5" HMA PAVEMENT 4 LT 58-28 S

2' CONCRETE KICKER (TYP.)

CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT
CONCRETE PAVEMENT REPLACEMENT
CONCRETE REPAIRS

ALLIANT
GUY
GUY

MARQUETTE ADAMS TELEPHONE COOP

N

IH 39 SB

REMOVING ASPHALTIC SURFACE
3" ASPHALTIC SURFACE

CONCRETE MEDIAN SLOPED NOSE TYPE 1

ADJUSTING INLET COVERS

CTH P / STH 23 WB

Y = 221273.76
X = 433862.19
BP: 318'AD'+79.48

319'AD'+00

CP#949

23'P'+00
24'P'+00
25'P'+00
26'P'+00
27'P'+00
28'P'+00
29'P'+00

CTH P / STH 23 EB

S88°26'57"E

Y = 221273.79
X = 433960.64
EP: 319'AD'+52.26

319'AC'+00

STA 25'P'+00 (END CATEGORY 0020)

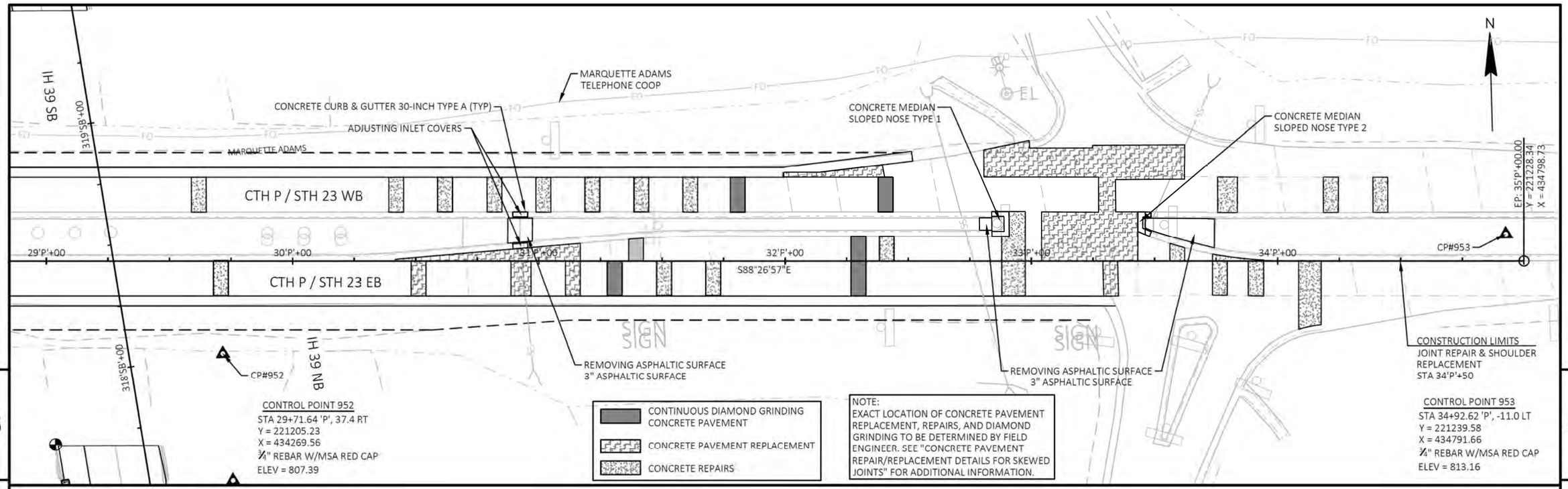
REMOVING ASPHALTIC SURFACE
3" ASPHALTIC SURFACE

CONCRETE CURB & GUTTER 30-INCH TYPE A (TYP)

CONTROL POINT 949
STA 24+52.92 'P', -9.6 LT
Y = 221266.25
X = 433752.29
¾" REBAR W/MSA RED CAP
ELEV = 804.35

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23/CTH P PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050202-PN.DWG
LAYOUT NAME : 12
PLOT DATE : 6/25/2025 10:41 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1 IN:40 FT



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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23/CTH P PLAN	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050202-PN.DWG
LAYOUT NAME - 13
PLOT DATE : 6/25/2025 10:41 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:40 FT

PC: 308'AC'+04.78
308'AC'+00
309'AC'+00
310'AC'+00
311'AC'+00
312'AC'+00
313'AC'+00
314'AC'+00
315'AC'+00
316'AC'+00
317'AC'+00
318'AC'+00
319'AC'+00
309'SB'+00
310'SB'+00
311'SB'+00

REMOVING ASPHALTIC SURFACE / 6" HMA PAVEMENT 4 MT 58-28 H

HMA PAVEMENT

CONCRETE

IH 39 SB

PI STA = 310'AC'+28.28
Y = 220427.265
X = 434281.622
DELTA = 17°44'28" LT
D = 4°00'04"
T = 223.49'
L = 443.41'
R = 1432.00'
PC STA = 308'AC'+04.78
Y = 220206.679
X = 434317.548
PT STA = 312'AC'+48.19
Y = 220626.414
X = 434180.189
DB = N09°15'01"W
DA = N26°59'29"W
SE = 6.0%
LR = 160'

PT: 312'AC'+48.19

'AC' RAMP

N26°59'29"W

N

S5

5

5

NOTE:
EXACT LOCATION OF CONCRETE PAVEMENT REPLACEMENT, REPAIRS, AND DIAMOND GRINDING TO BE DETERMINED BY FIELD ENGINEER. SEE "CONCRETE PAVEMENT REPAIR/REPLACEMENT DETAILS FOR SKEWED JOINTS" FOR ADDITIONAL INFORMATION.

CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT

CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIRS

MARQUETTE ADAMS TELEPHONE COOP

S88°26'57"E

325.00'

EP: 319'AD'+52.26
Y = 221736.79
X = 433960.64

BP: 318'AD'+79.48
Y = 221673.76
X = 433862.19

319'AD'+00

100.00'

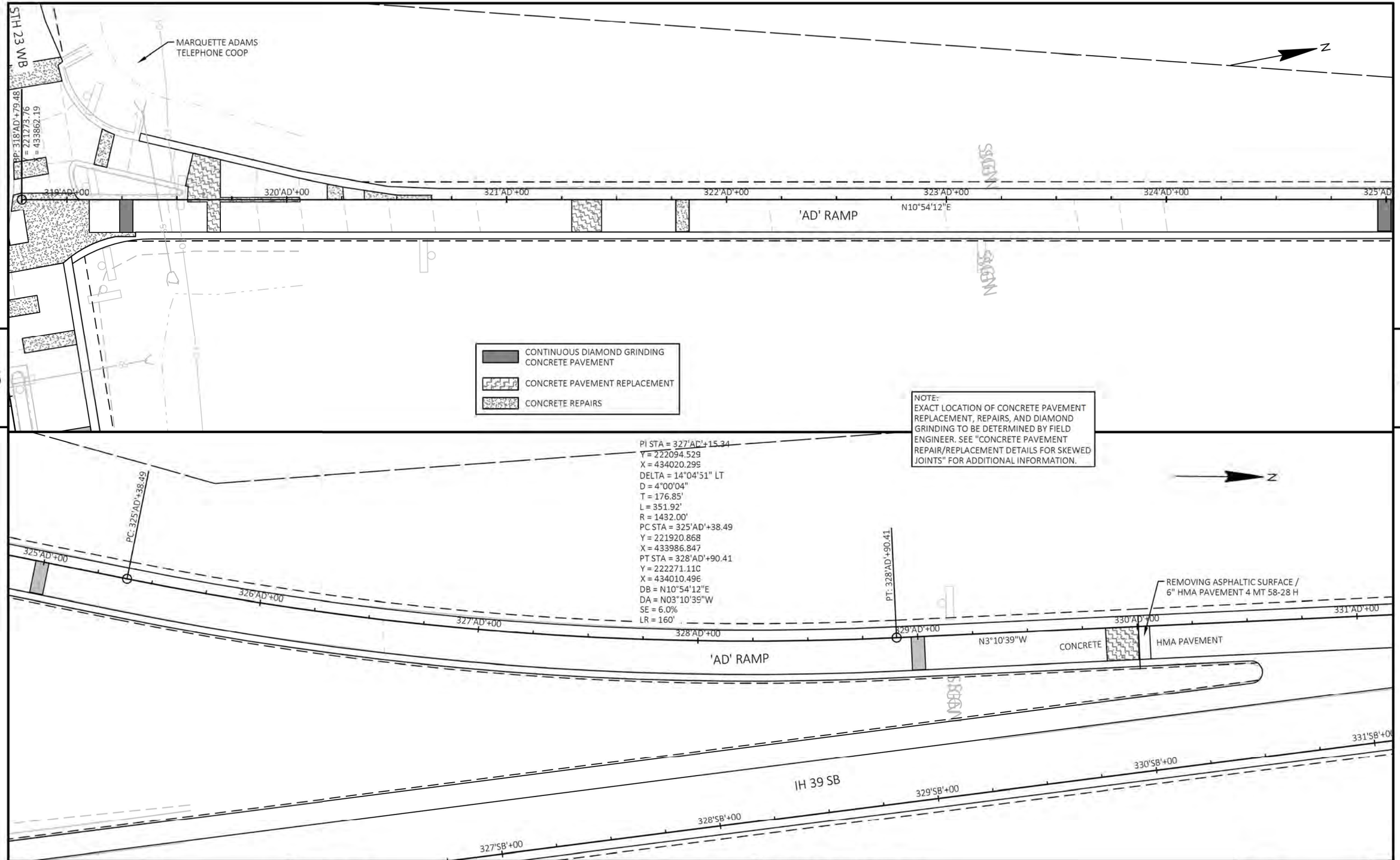
EL POST

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23/CTH P ENTRANCE RAMP PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050202-PN.DWG
LAYOUT NAME - 14

PLOT DATE : 6/25/2025 10:42 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/C



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	STH 23/CTH P EXIT RAMP PLAN	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050202-PN.DWG
LAYOUT NAME - 15
PLOT DATE : 6/25/2025 10:42 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/C#

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
506	19'D'+01.1	803.24	17.2' LT, BRIDGE "X" ON WALL

FRONTIER COMM

CONSTRUCTION LIMITS
2" MILL & 2" OVERLAY
STA 14'D'+61

STRUCTURE B-39-0011
(NO WORK REQ'D)

BM#506

CTH D

PCC: 21'D'+27.93

CONSTRUCTION LIMITS
2" MILL & 2" OVERLAY
STA 21'D'+17

IH 39 NB

IH 39 SB

REMOVING CONCRETE
CURB & GUTTER
CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE A

REMOVING CONCRETE CURB & GUTTER
CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE A

'BC' RAMP

PT: 538'SB'+14.75

PI STA = 16'D'+97.62
Y = 242587.524
X = 430819.957
DELTA = 26°25'55" RT
D = 3°00'56"
T = 446.20'
L = 876.52'
R = 1900.00'
PC STA = 12'D'+51.42
Y = 242590.919
X = 430373.771
PT STA = 21'D'+27.93
Y = 242385.871
X = 431217.989
DB = S89°33'50"E
DA = S63°07'56"E
SE = 4.5%
LR = 108'

PI STA = 21'D'+63.30
Y = 242369.888
X = 431249.537
DELTA = 2°42'05" RT
D = 3°49'11"
T = 35.37'
L = 70.72'
R = 1500.00'
PC STA = 21'D'+27.93
Y = 242385.871
X = 431217.989
PT STA = 21'D'+98.65
Y = 242352.435
X = 431280.297
DB = S63°07'56"E
DA = S60°25'51"E
SE = 5.1%
LR = 122'

NOTE:
EXACT LOCATION OF CONCRETE PAVEMENT REPLACEMENT, REPAIRS, AND DIAMOND GRINDING TO BE DETERMINED BY FIELD ENGINEER. SEE "CONCRETE PAVEMENT REPAIR/REPLACEMENT DETAILS FOR SKEWED JOINTS" FOR ADDITIONAL INFORMATION.

CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT
CONCRETE PAVEMENT REPLACEMENT
CONCRETE REPAIRS

PI STA = 535'BC'+36.25
Y = 242157.442
X = 430792.123
DELTA = 7°05'54" LT
D = 2°41'10"
T = 132.30'
L = 264.26'
R = 2133.00'
PC STA = 534'BC'+03.95
Y = 242029.613
X = 430826.222
PT STA = 536'BC'+68.21
Y = 242280.078
X = 430742.489
DB = N14°56'10"W
DA = N22°02'04"W
SE = 4.8%
LR = 123'

PC: 534'BC'+03.95

PT: 536'BC'+68.21

HMA PAVEMENT

CONCRETE

N14°56'10"W

N22°02'04"W

'BC' RAMP

IH 39 SB

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CTH D AND ENTRANCE RAMP PLAN	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\SHEETS\050202-PN.DWG
LAYOUT NAME - 16

PLOT DATE : 6/25/2025 10:42 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/C

Standard Detail Drawing List

08A05-21D	INLET COVERS TYPE V, V-B, & VV-B
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
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D03-09A	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D03-09B	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
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
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
11B02-02	CONCRETE MEDIAN NOSE
13A05-06A	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A05-06B	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C09-17A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C19-03	HMA LONGITUDINAL JOINTS
14B22-07A	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B26-05A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05H	STEEL THRIE BEAM BULLNOSE TERMINAL
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
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)
14B47-06A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-08B	BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING
15A04-08C	DELINEATOR POST WITH REFLECTIVE SHEETING
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09D	ON RAMP LANE CLOSURE
15C02-09E	OFF RAMP LANE CLOSURE

6

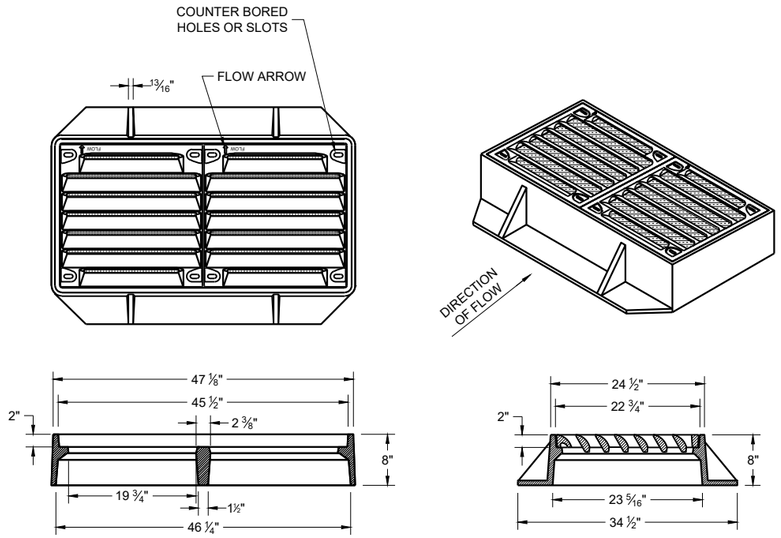
Standard Detail Drawing List

15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C02-09G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
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
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C14-04	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-09A	MEDIAN ISLAND MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C19-09C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-08A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-08C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D12-14B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D12-14E	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D12-14G	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D15-07A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D40-05B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND OVER
15D40-05D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS

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.

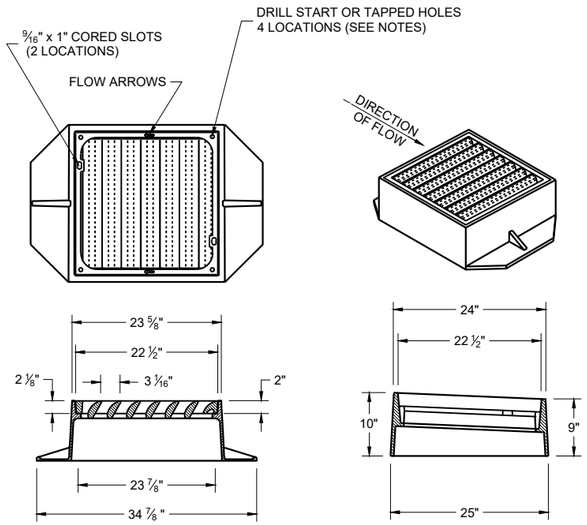
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER
ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

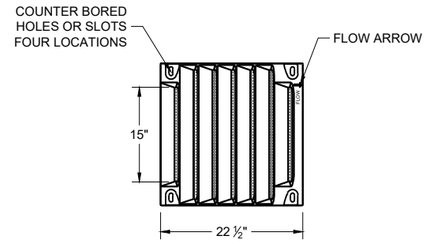
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
⅜" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
⅜" DIA. X 1/16" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



BOLT DOWN GRATE FOR TYPE "V" AND "VV-B" COVER

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER NOTED AS TYPE "V-B" OR "VV-B" (FOR DOUBLE GRATE) ON DRAINAGE TABLE

TAP ½" -13 HOLES IN FOUR LOCATIONS PER GRATE IN FRAME TO BOLT GRATE(S).
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - ½" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT OVERTIGHTEN.

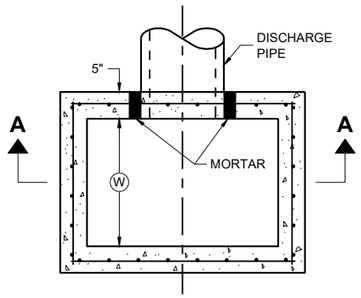
INLET COVERS
TYPES V, V-B, AND VV-B

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

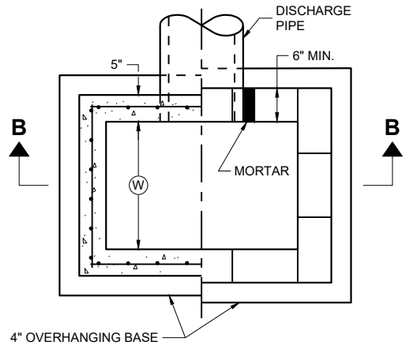
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

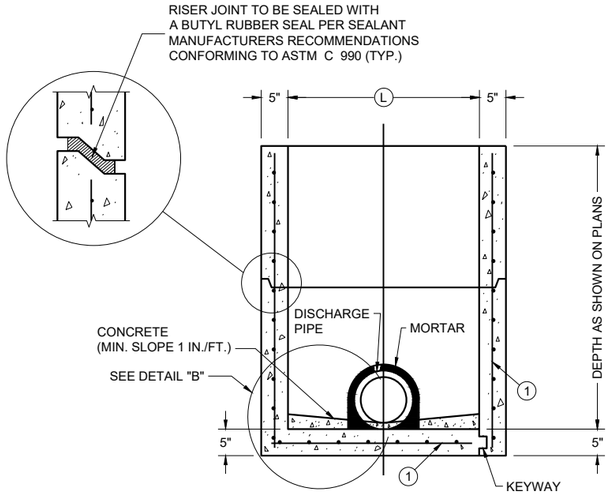
6
SDD 08A05-21d



PLAN VIEW



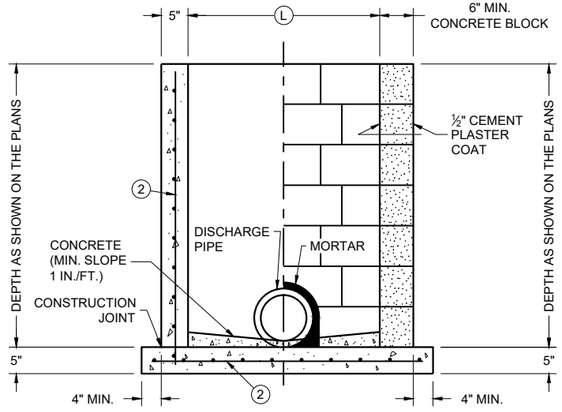
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

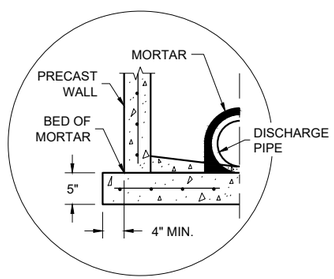
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

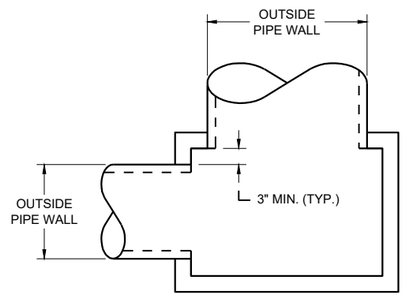
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

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

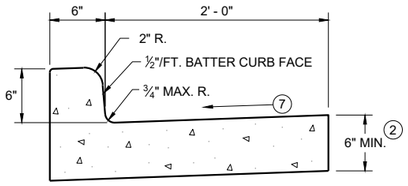
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

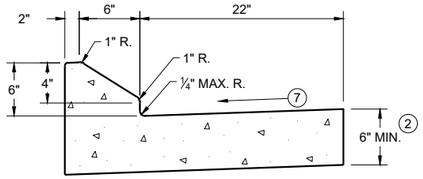
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

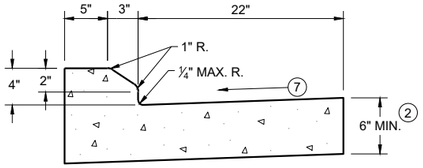
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SDD 08C07-03



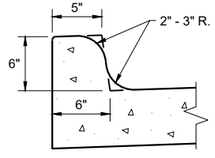
TYPES A (1) & D



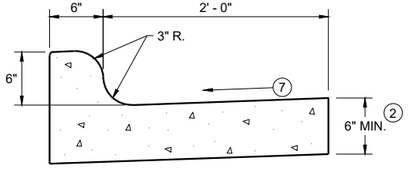
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

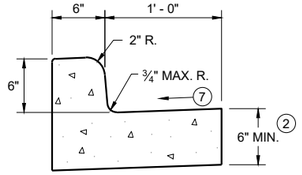


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



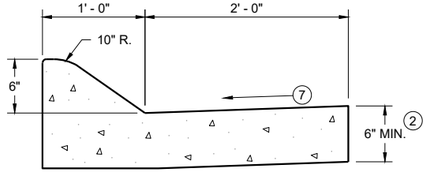
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

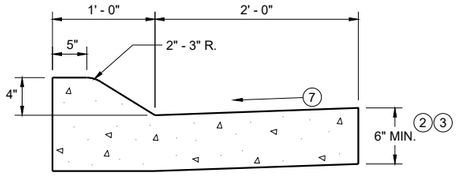


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

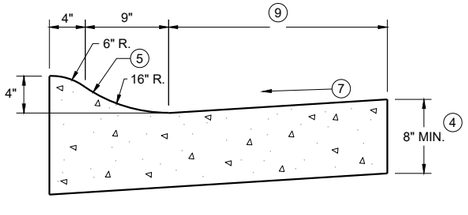


6" SLOPED CURB TYPES A (1) & D



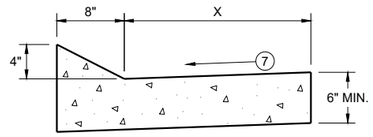
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

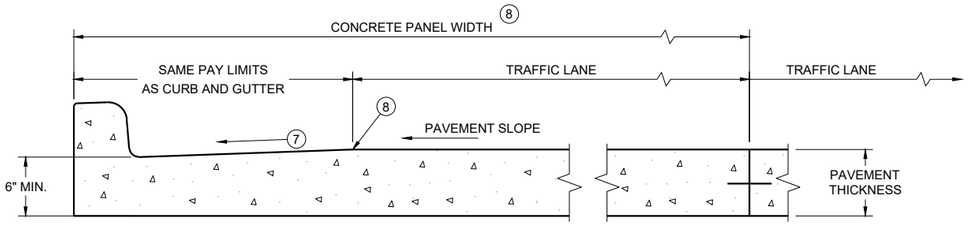


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

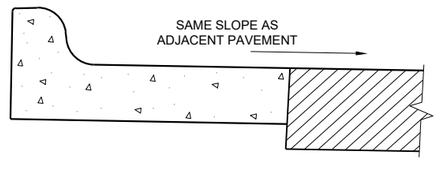
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

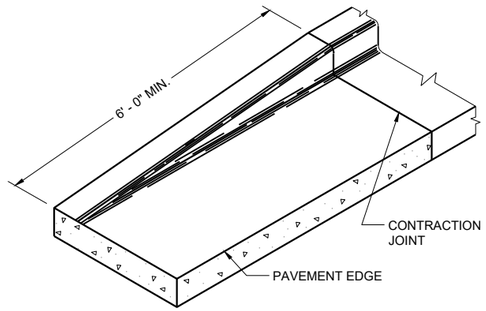
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(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

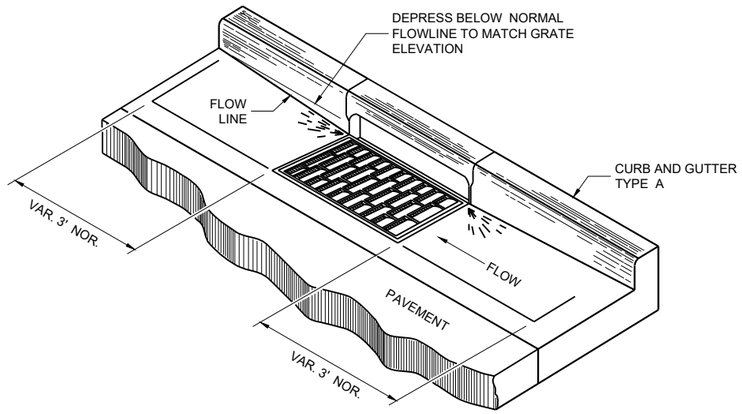
CONCRETE CURB AND GUTTER

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.

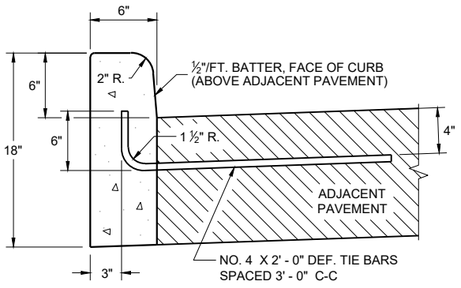
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

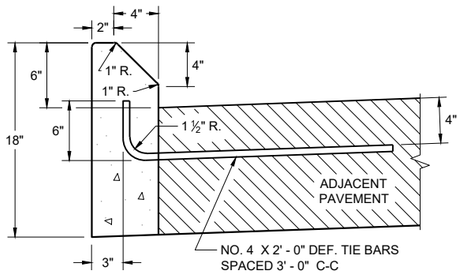
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

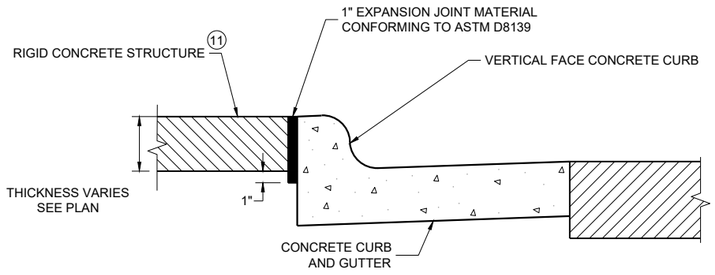


TYPES A (1) & D

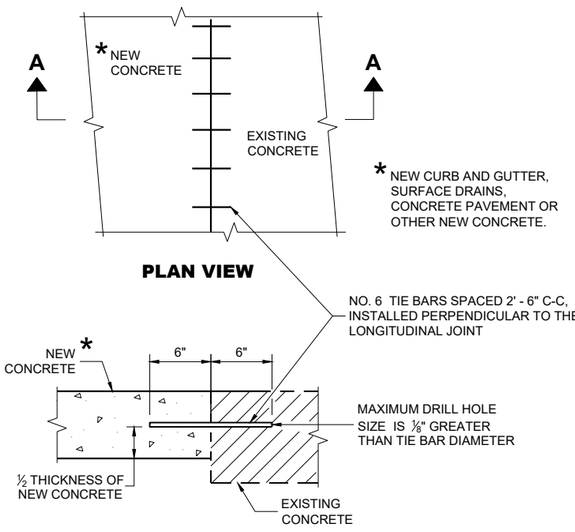


TYPES G (1) & J

CONCRETE CURB



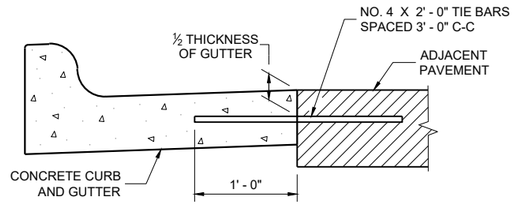
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



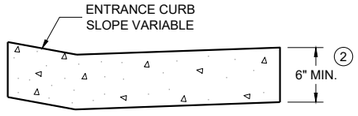
PLAN VIEW

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

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.

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

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

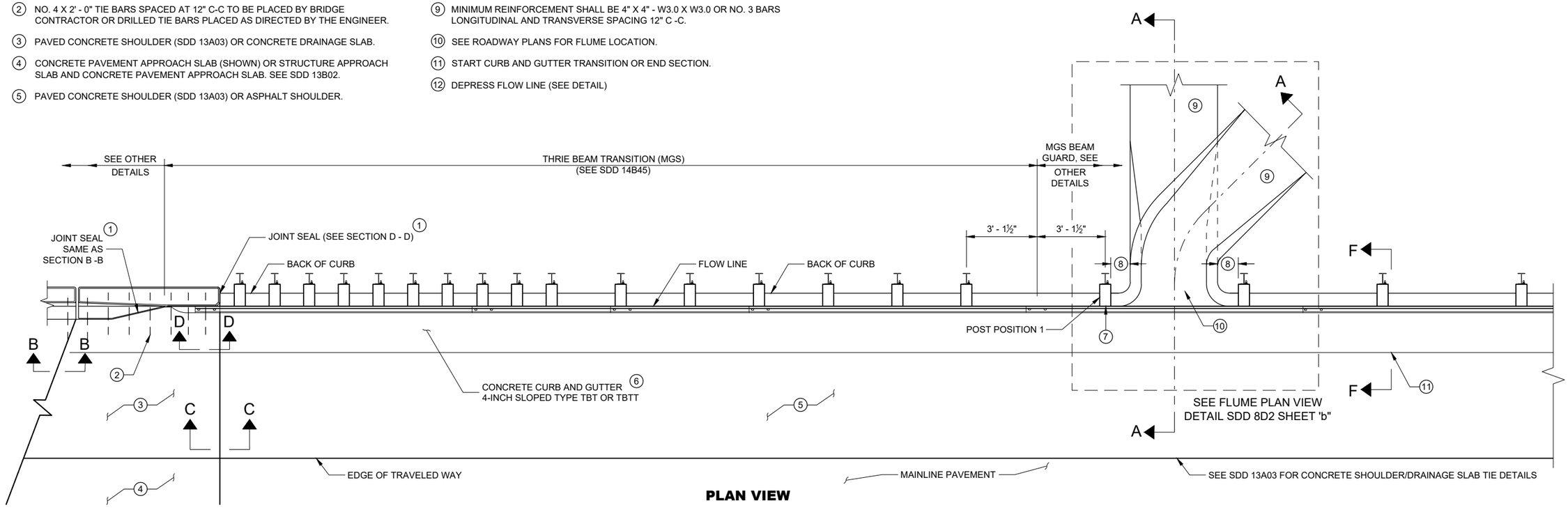
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

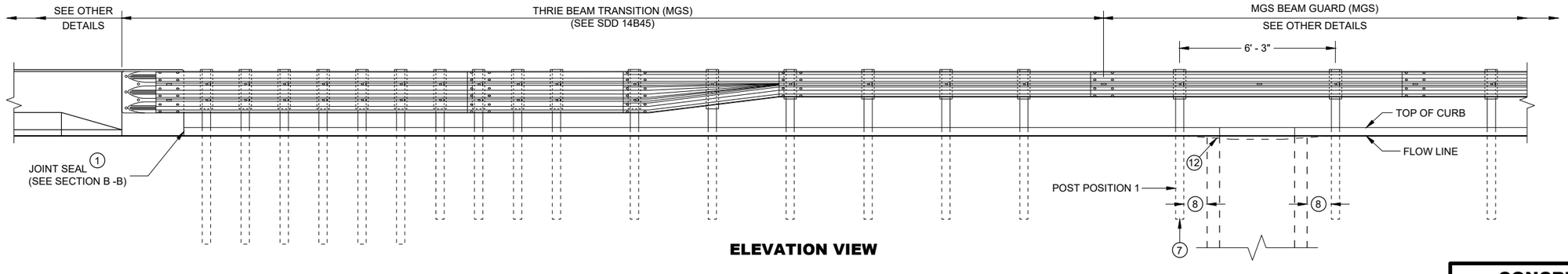
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



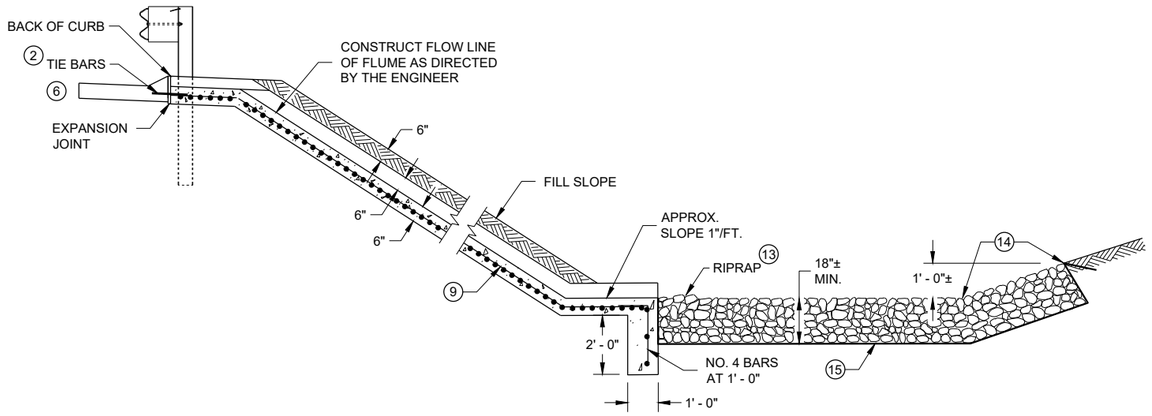
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

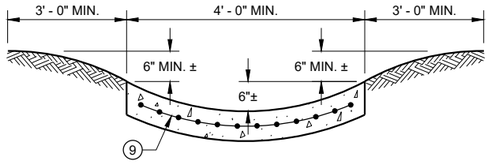
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

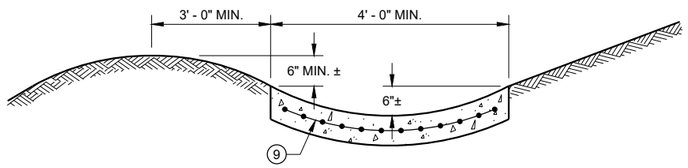
SDD 08D02 - 08a



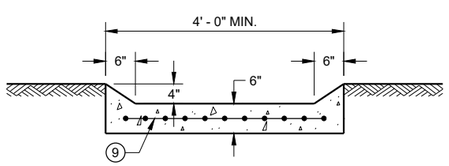
SECTION A - A



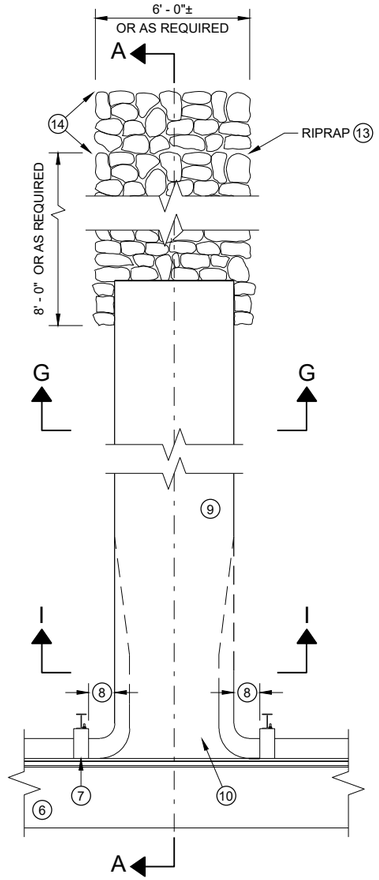
SECTION G - G



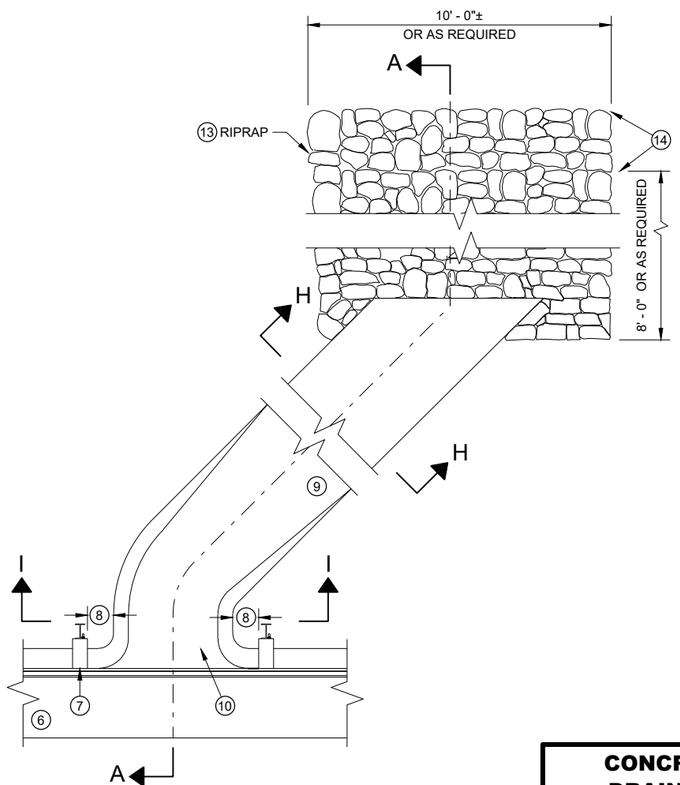
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

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.

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

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

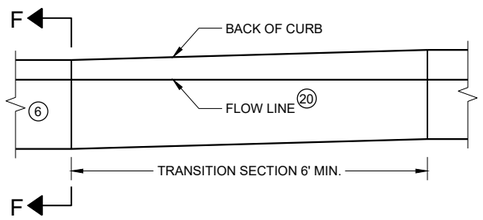
(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.

(15) GEOTEXTILE TYPE HR.

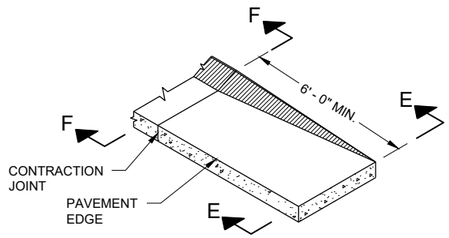
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SDD 08D02 - 08b

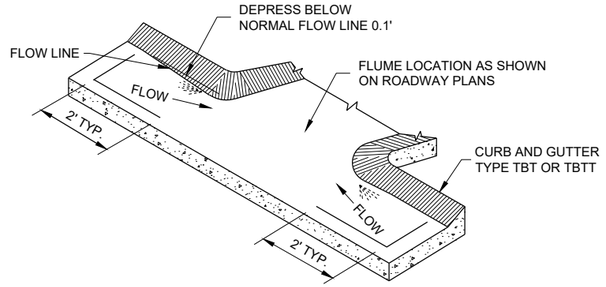
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES



**CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT**

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.

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(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

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(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

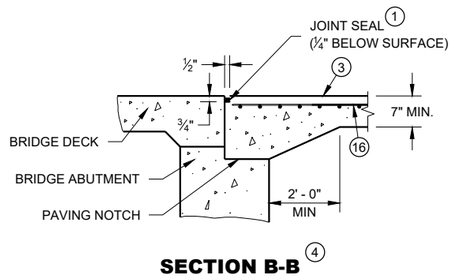
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

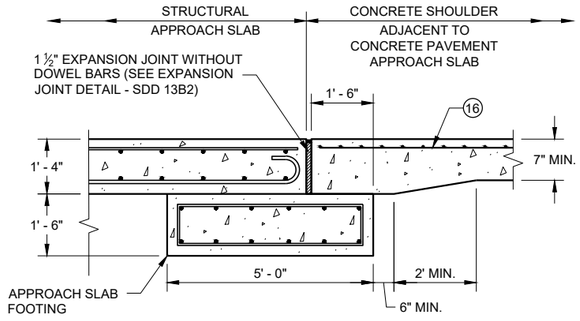
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

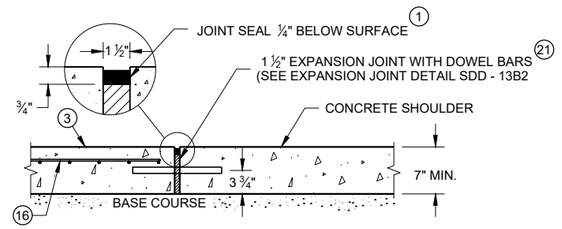
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



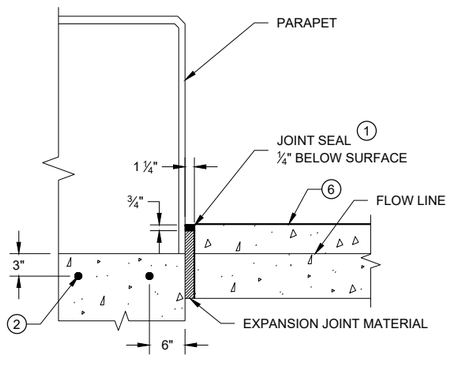
SECTION B-B



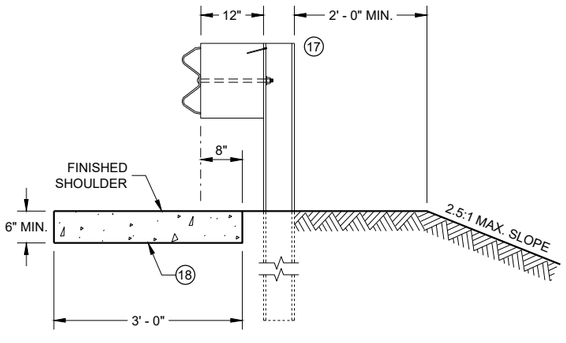
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



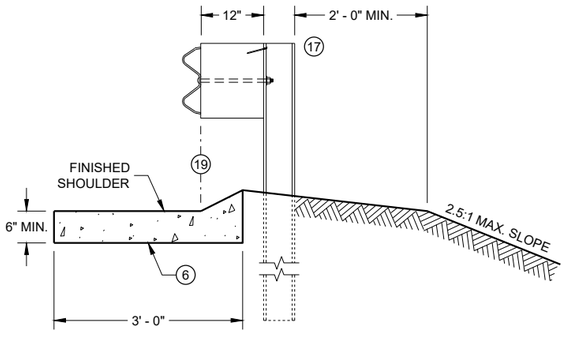
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

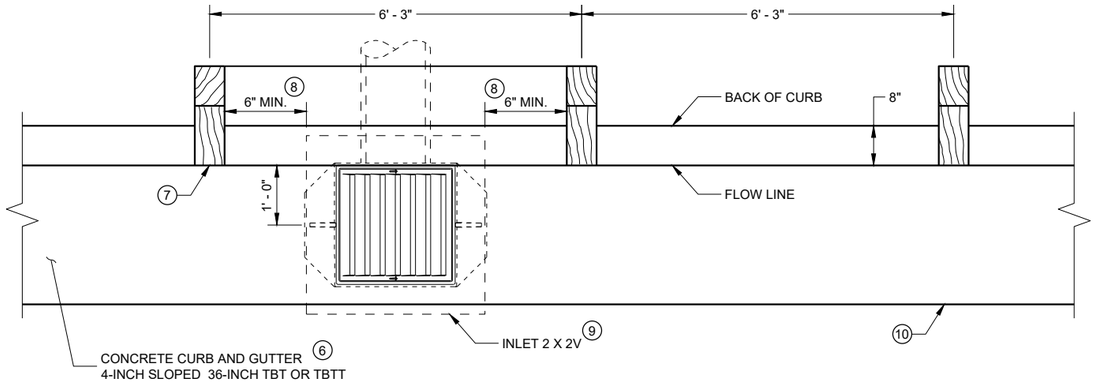
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

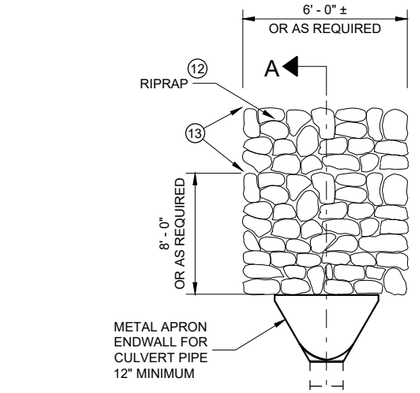
FHWA

6
SDD 08D02 - 08c



INLET PLAN VIEW

(NOTE: RAIL NOT SHOWN FOR CLARITY)

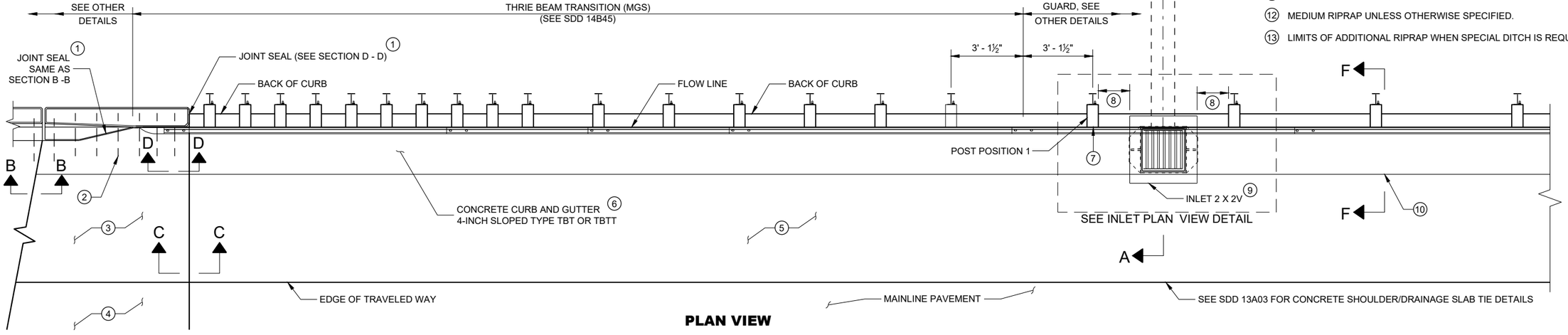


GENERAL NOTES

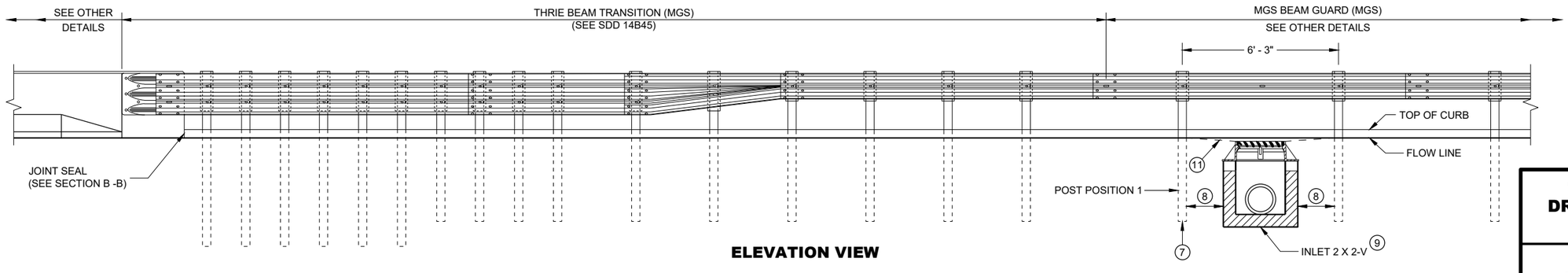
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE DRAINAGE STRUCTURE BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.
9. SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.
10. START CURB AND GUTTER TRANSITION OR END SECTION.
11. DEPRESS FLOW LINE (SEE DETAIL)
12. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
13. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.



PLAN VIEW



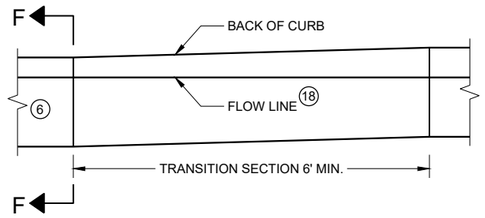
ELEVATION VIEW

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

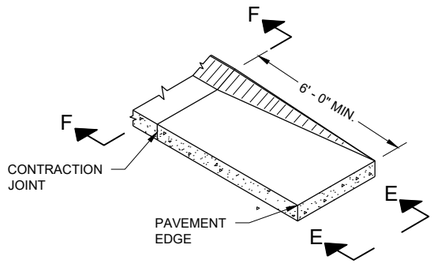
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D03 - 09a

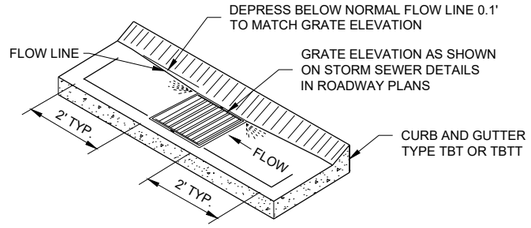
SDD 08D03 - 09a



CURB AND GUTTER TRANSITION SECTION CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION AT INLETS CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

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.

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(8) CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.

(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

(10) START CURB AND GUTTER TRANSITION OR END SECTION.

(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(13) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(14) GEOTEXTILE TYPE HR.

(15) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(16) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

(17) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

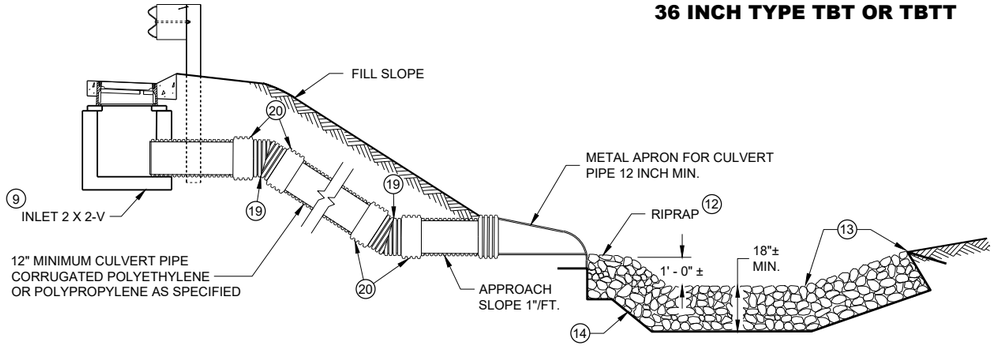
(18) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

(19) MANUFACTURER SUPPLIED BEND.

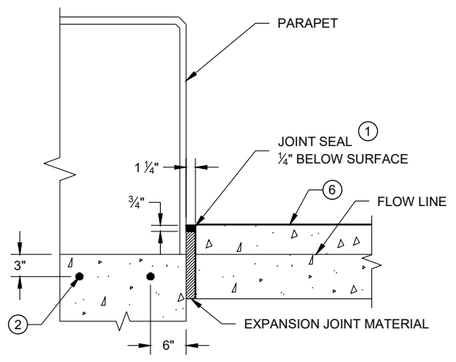
(20) MANUFACTURER SUPPLIED EXTERNAL MECHANICAL COUPLING OR A MANUFACTURER RECOMMENDED COUPLING WITH A MASTIC IMPREGNATED GEOTEXTILE WRAP AND MECHANICAL FASTENING BANDS.

(21) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

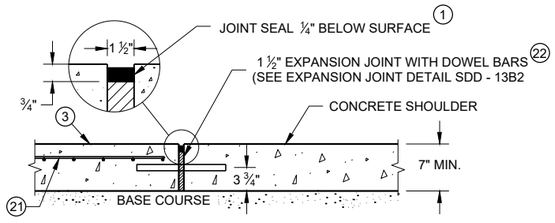
(22) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



SECTION A - A

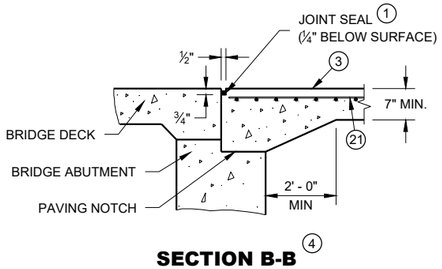


SECTION D - D

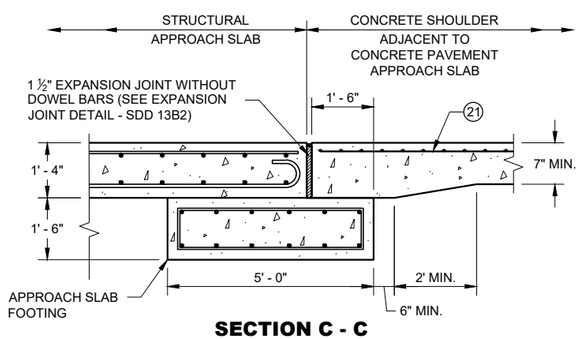


SECTION C - C

JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS

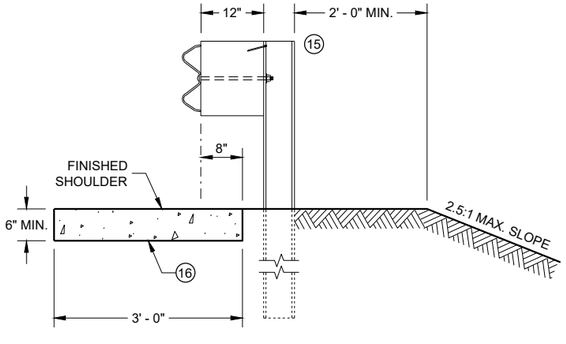


SECTION B-B 4

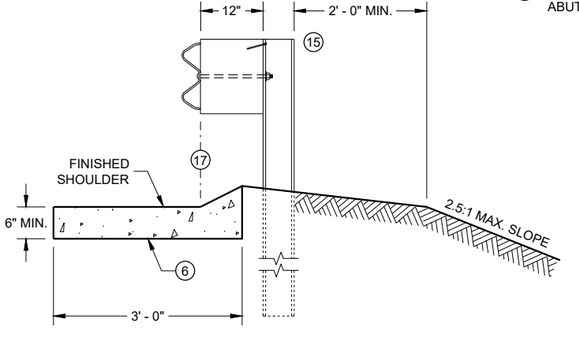


SECTION C - C

JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

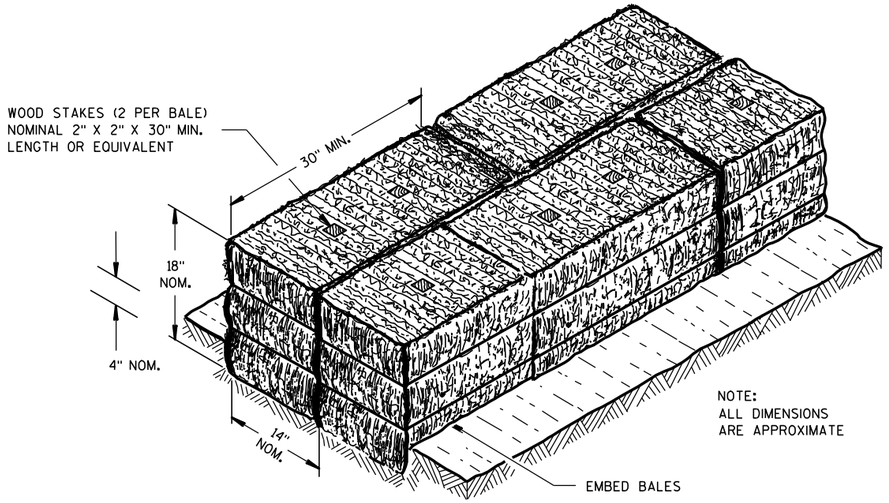
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

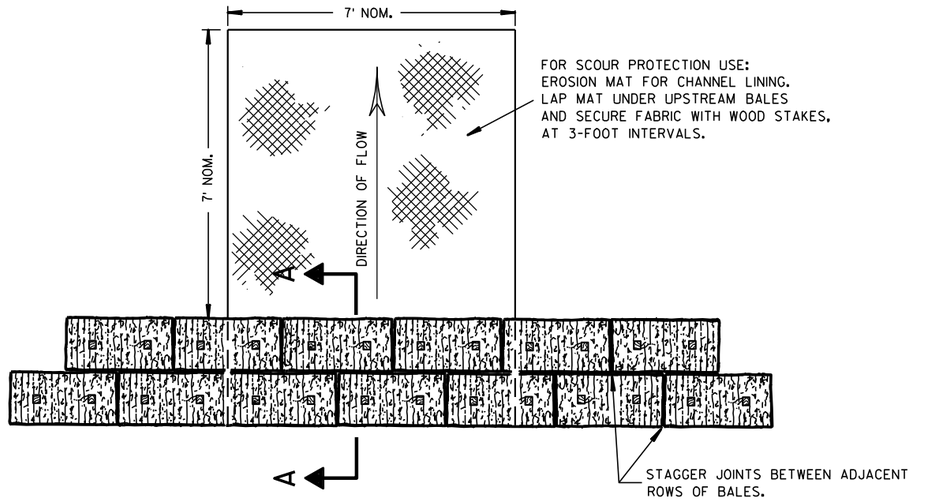
FHWA

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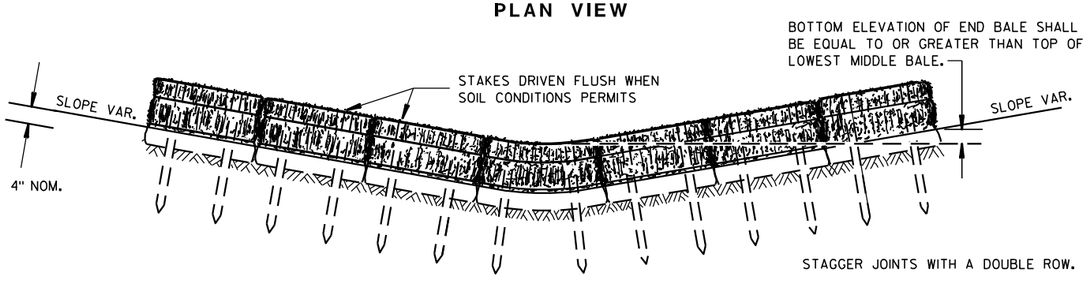
SDD 08D03 - 09b
SDD 08D03 - 09b



SECTION A-A



PLAN VIEW



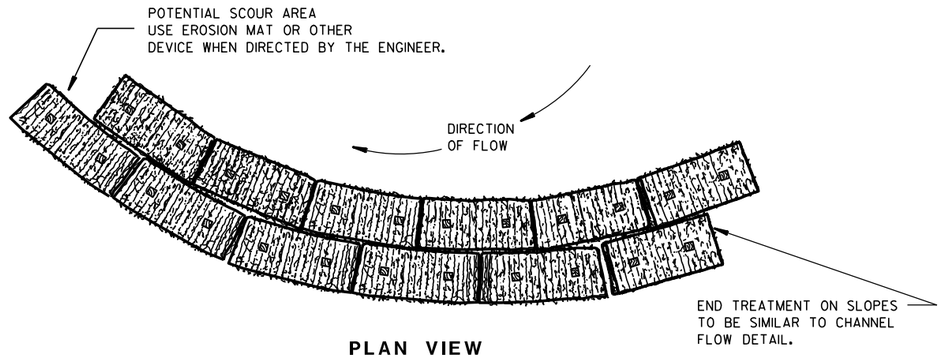
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

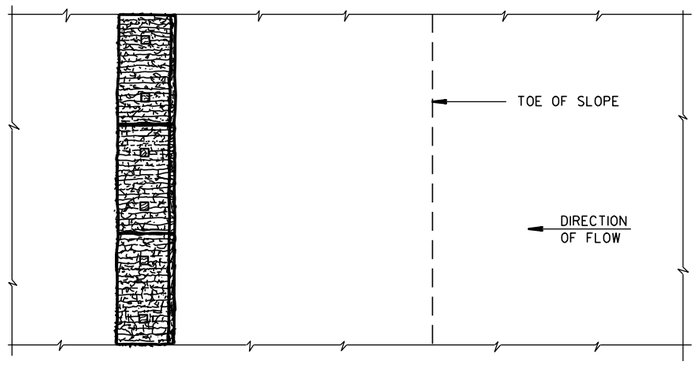
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

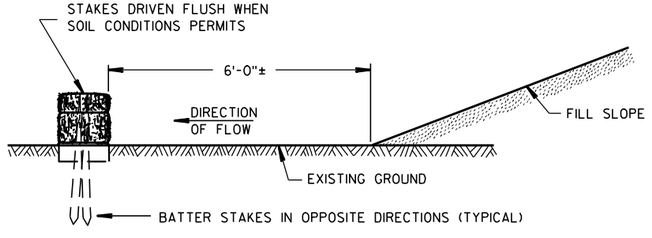


PLAN VIEW

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

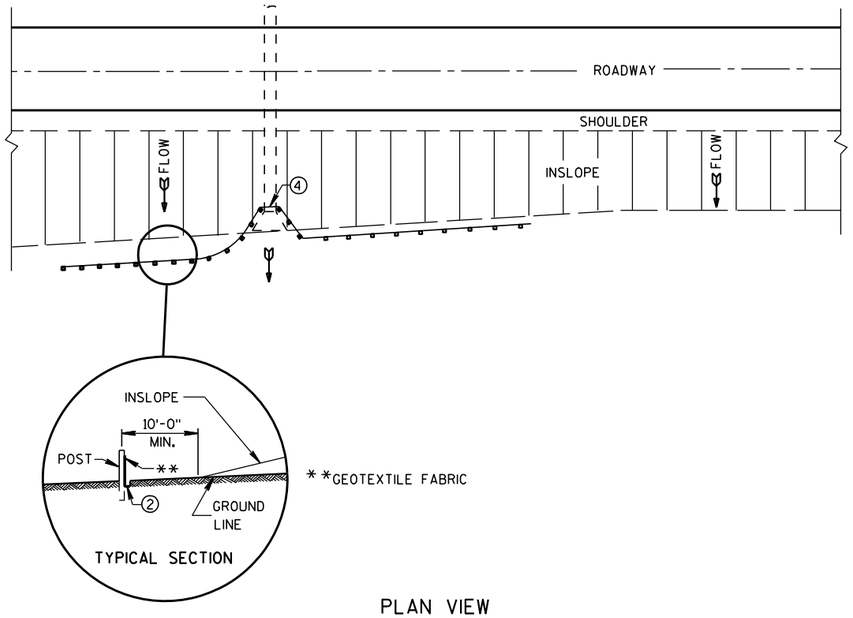
FHWA

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S.D.D. 8 E 8-3

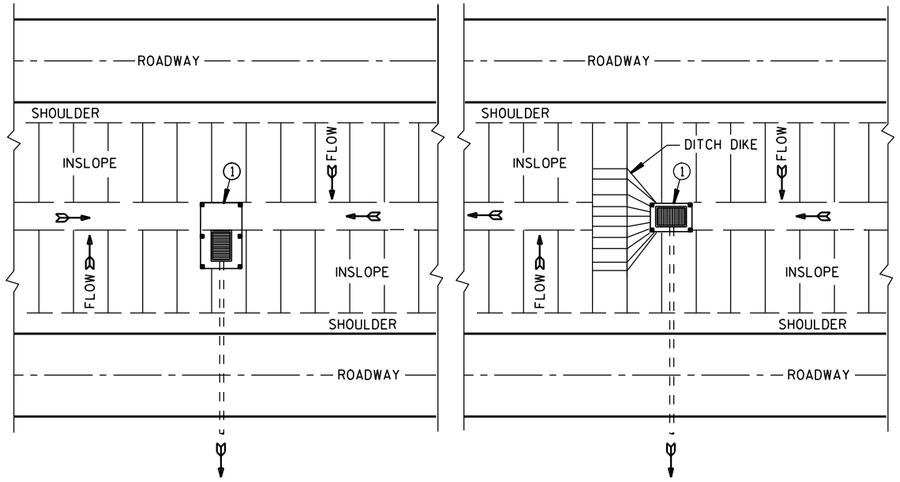
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S.D.D. 8 E 8-3



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.

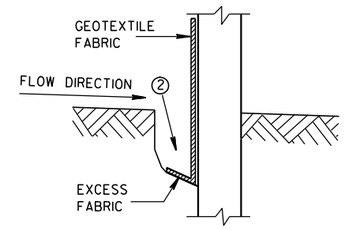
(1) HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

(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.

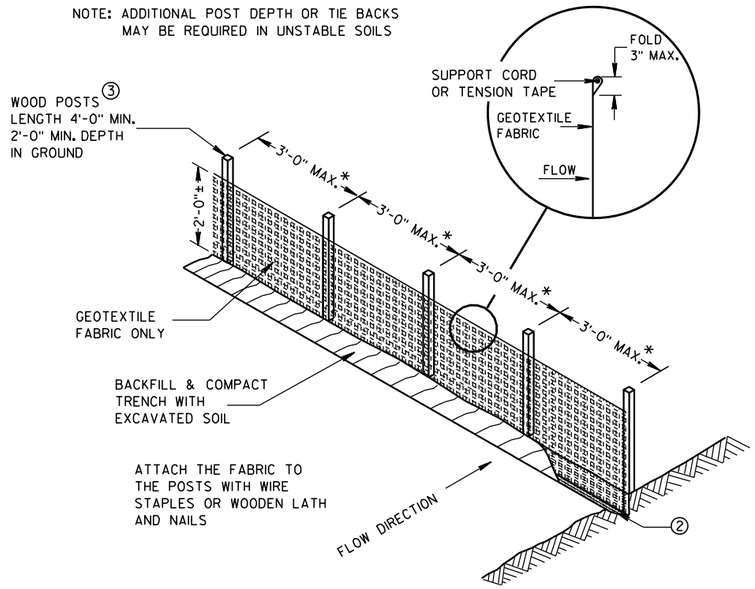
(3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

(4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

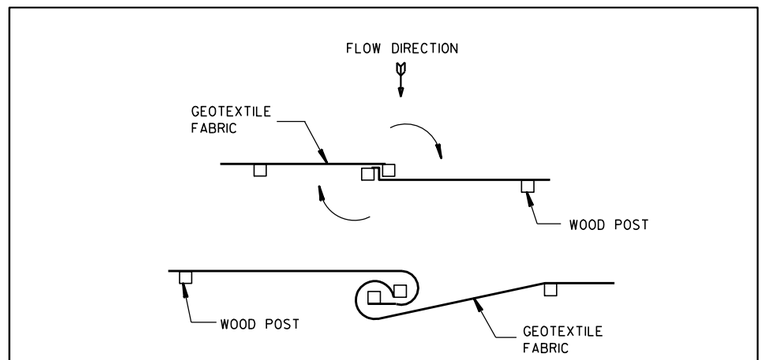
(5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



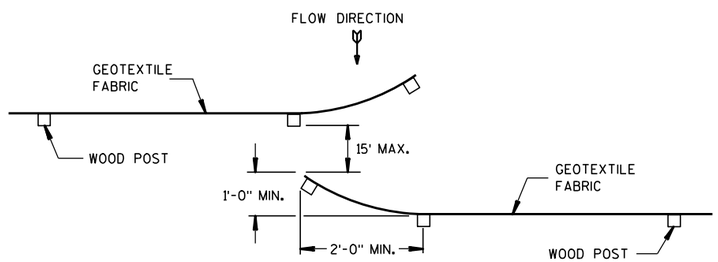
TRENCH DETAIL



SILT FENCE

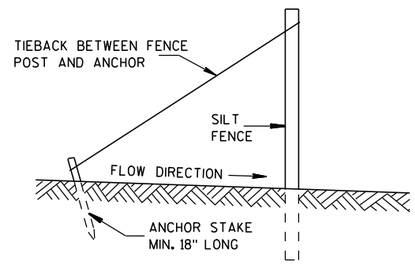


TWIST METHOD



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

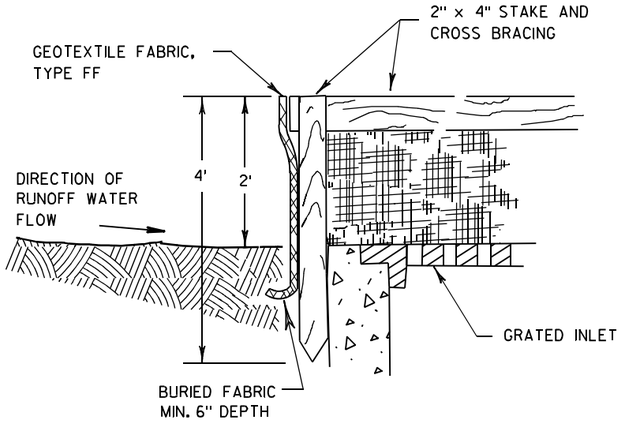
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

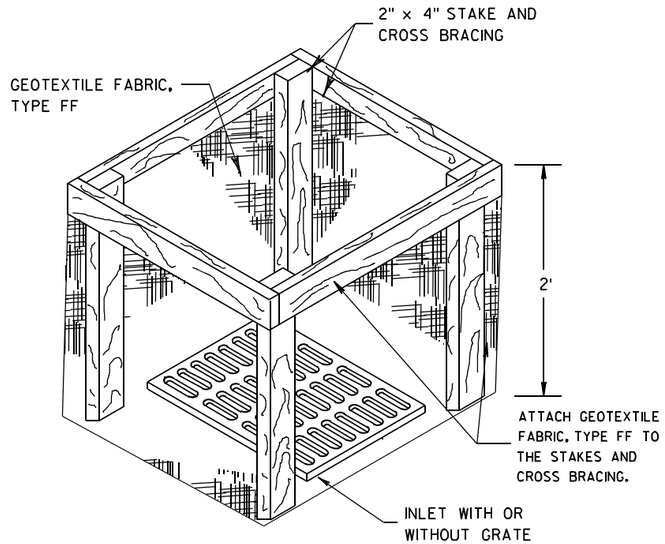
6

S.D.D. 8 E 9-6

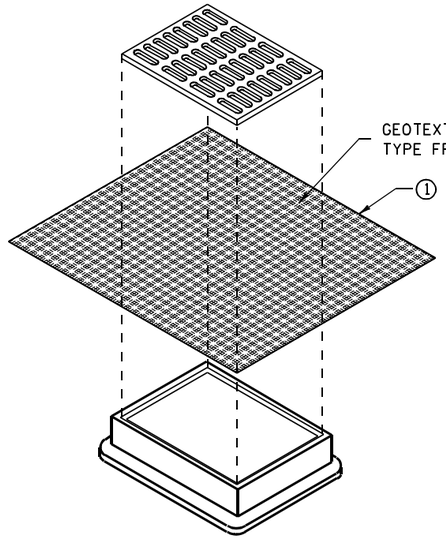
6

S.D.D. 8 E 9-6



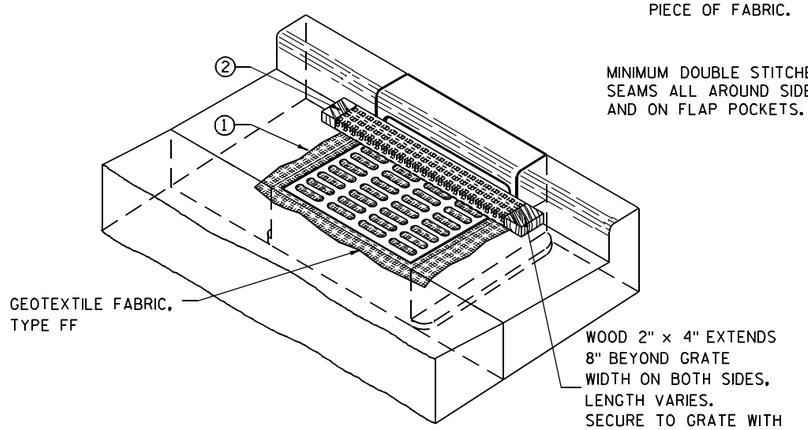


INLET PROTECTION, TYPE A

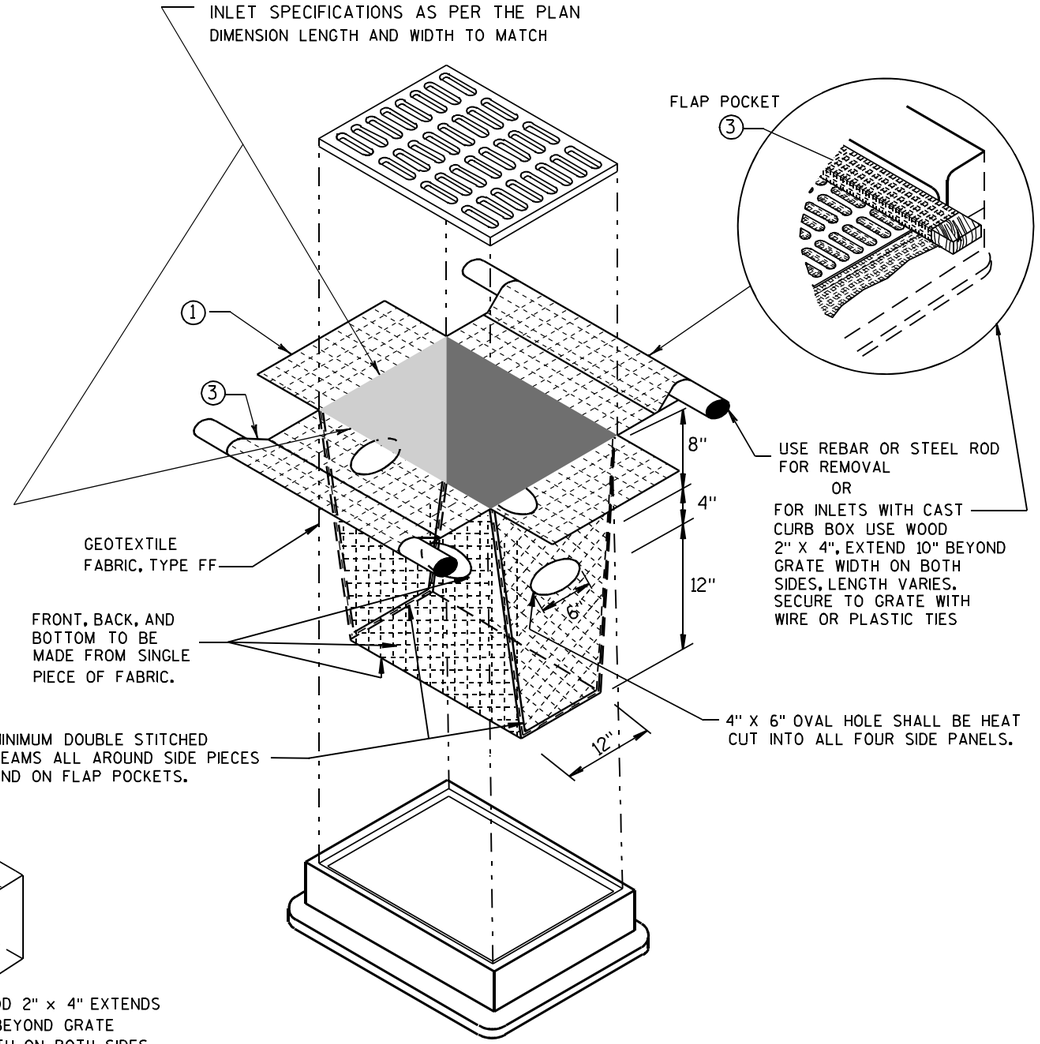


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

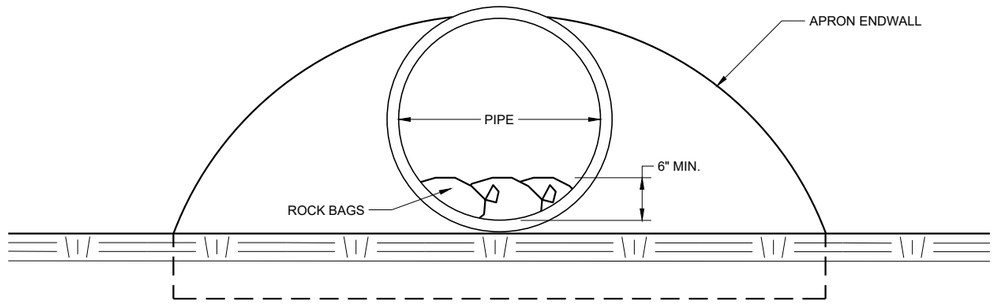
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

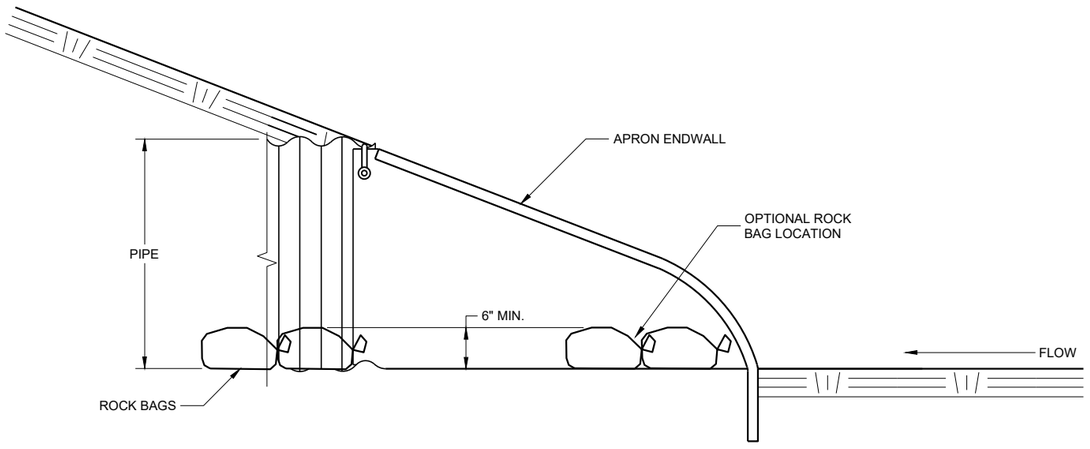
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
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	

6

SDD 08E15 - 01

METAL APRON ENDWALLS

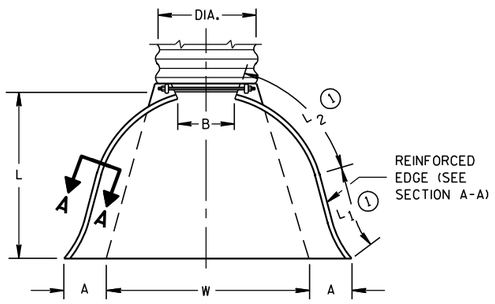
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

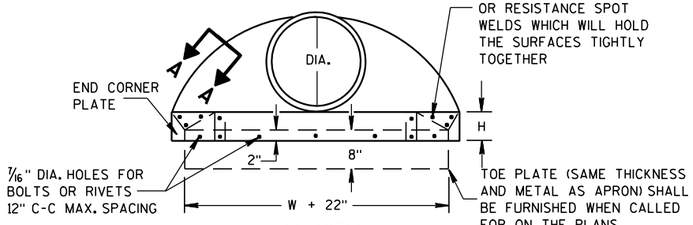
REINFORCED CONCRETE APRON ENDWALLS

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

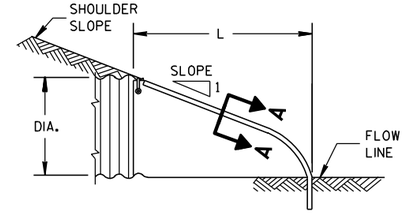
*MINIMUM
**MAXIMUM



PLAN VIEW

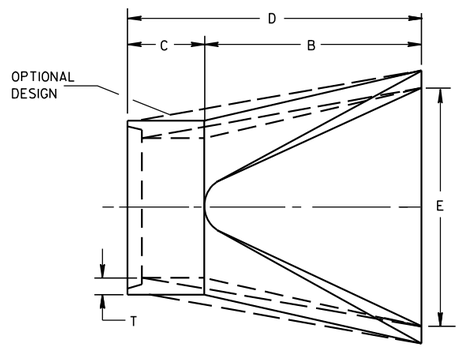


END VIEW

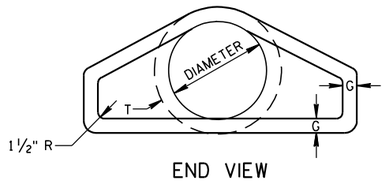


SIDE ELEVATION

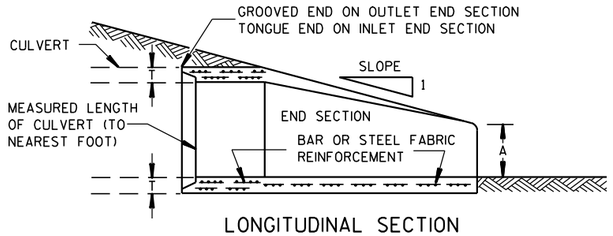
METAL ENDWALLS



PLAN

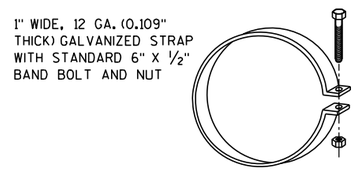


END VIEW



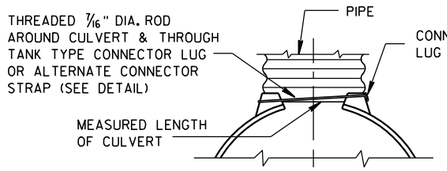
LONGITUDINAL SECTION

CONCRETE ENDWALLS

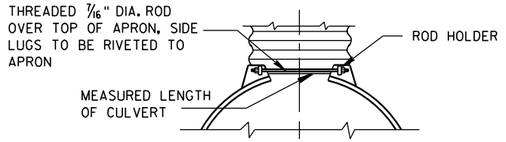


ALTERNATE FOR TYPE 1 CONNECTION

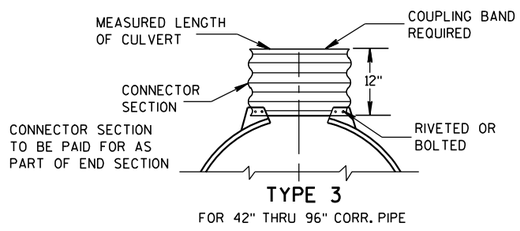
END SECTION CONNECTOR STRAP



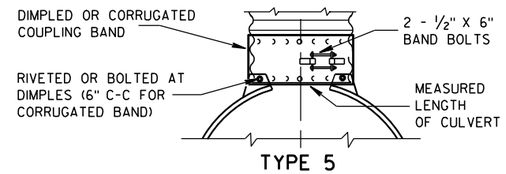
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

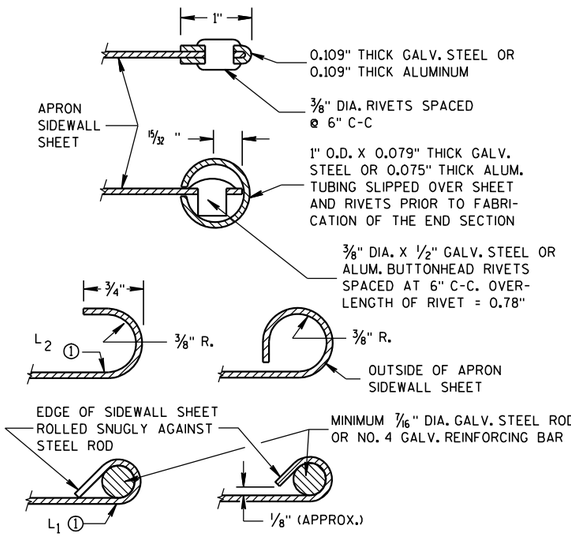
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

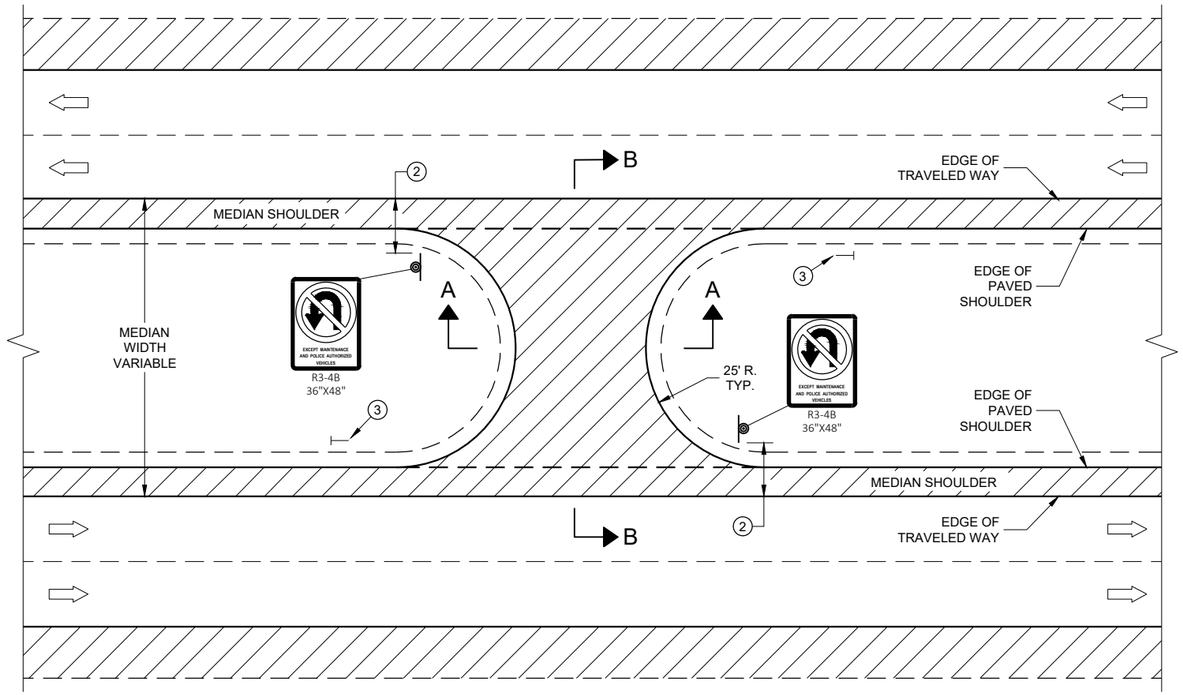
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

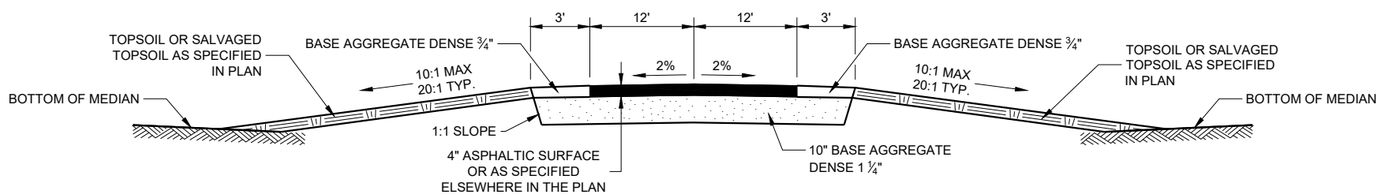
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

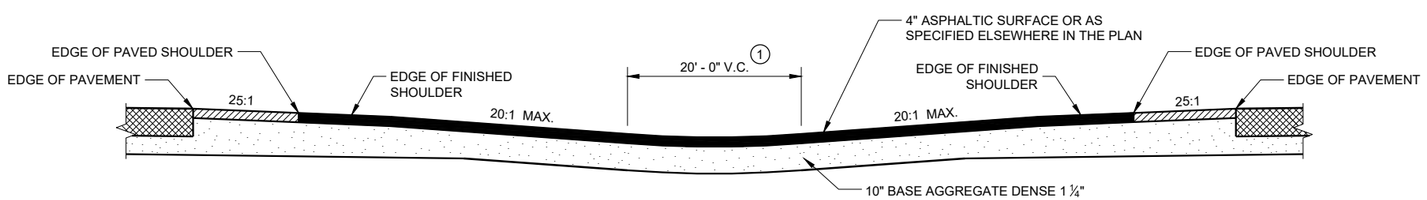
6
S.D.D. 8 F 1-11



PLAN VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.
2. SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.
3. INSTALL DELINEATOR. SEE STANDARD DETAIL DRAWING 15A4.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR
- DIRECTION OF TRAFFIC

MAINTENANCE CROSSOVER FOR FREEWAYS

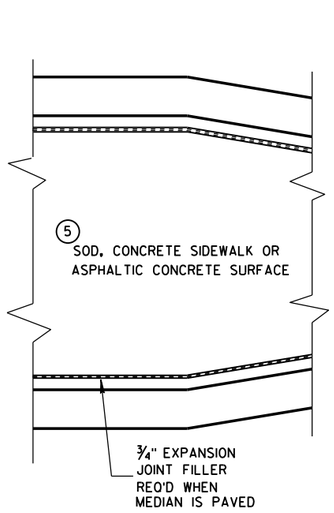
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

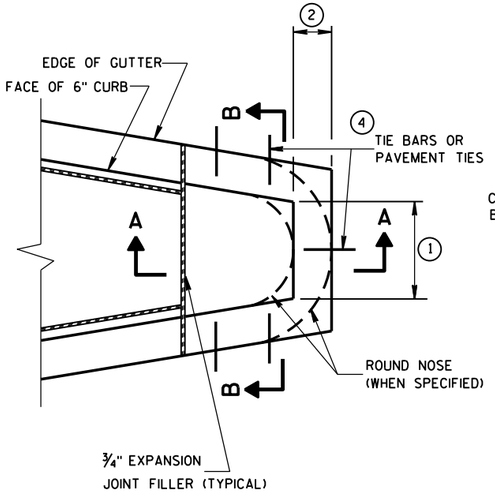
APPROVED
November 2019
DATE

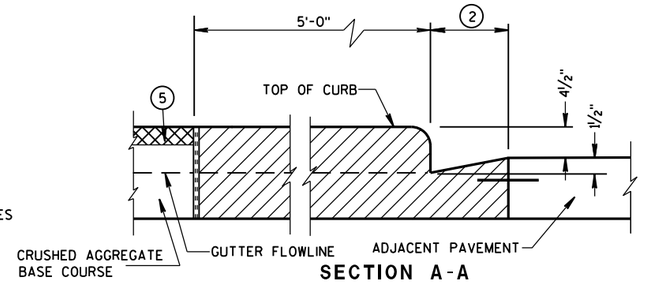
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

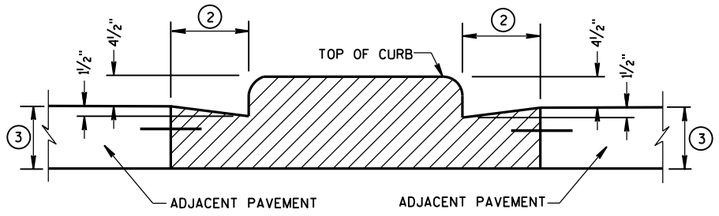
6
SDD 11A01 - 06







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE 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.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

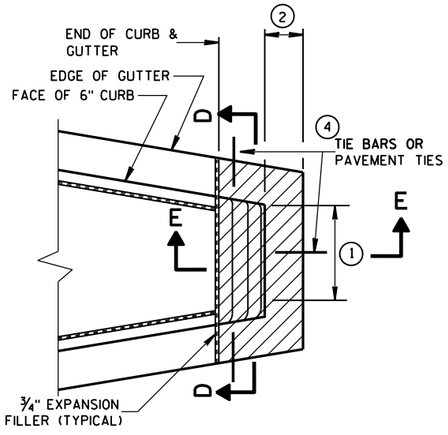
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

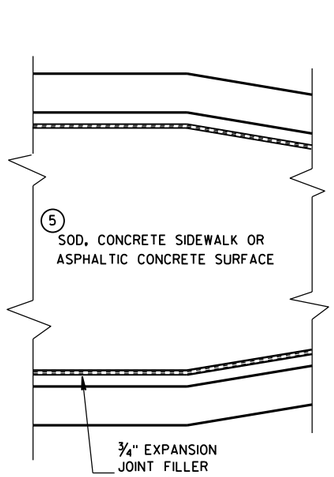
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

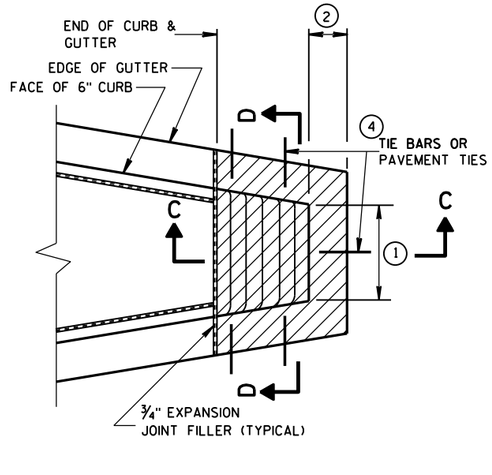
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

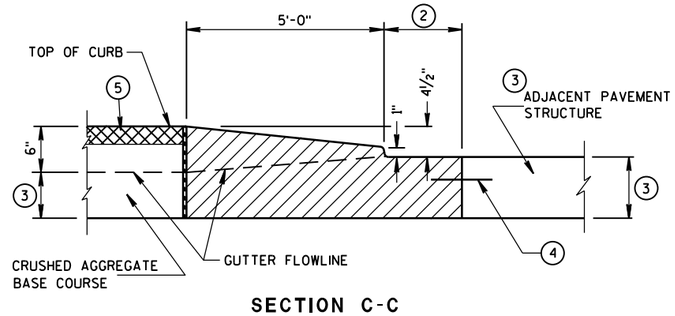
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



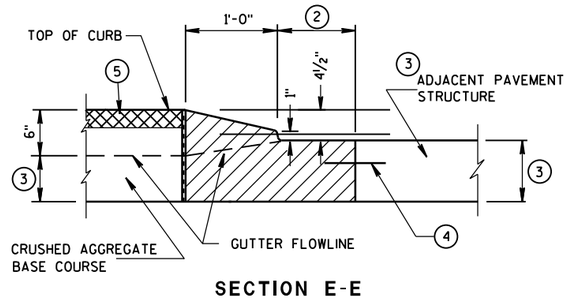




CONCRETE MEDIAN SLOPED NOSE TYPE 1

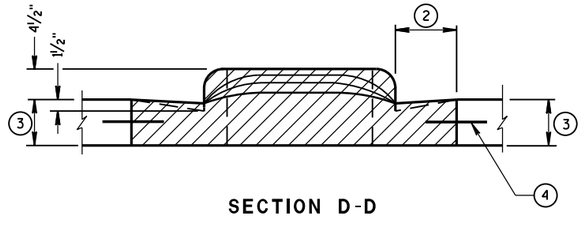


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

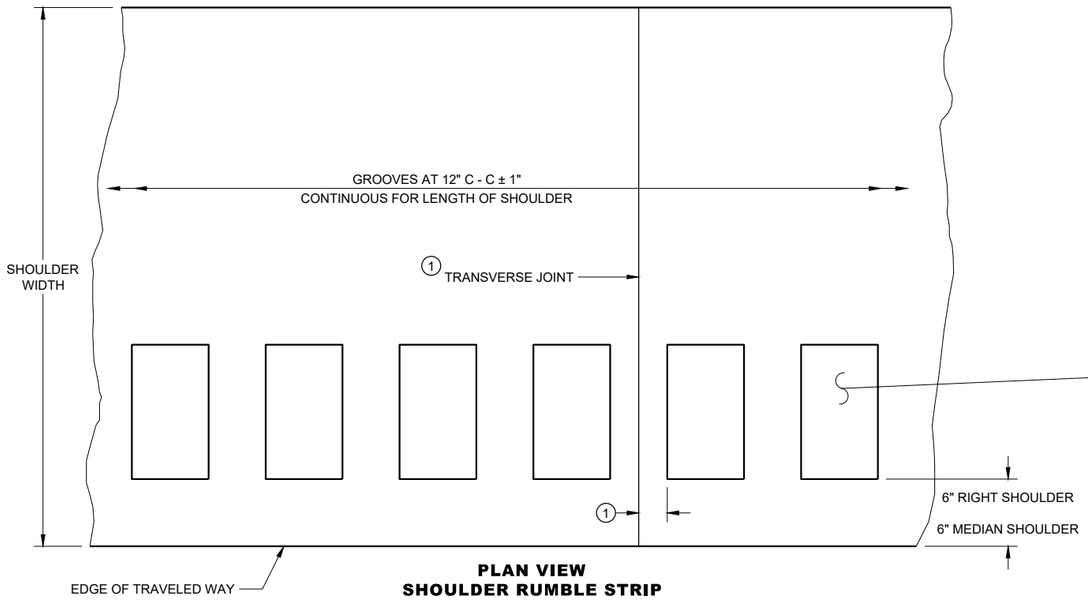
APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

GENERAL NOTES

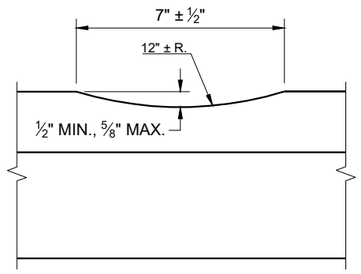
SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL AND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

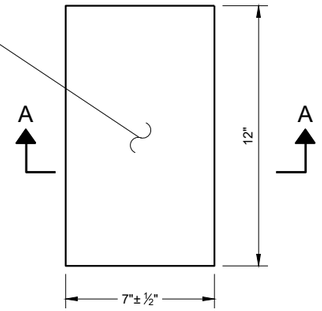
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES AWAY FROM TRANSVERSE JOINTS.



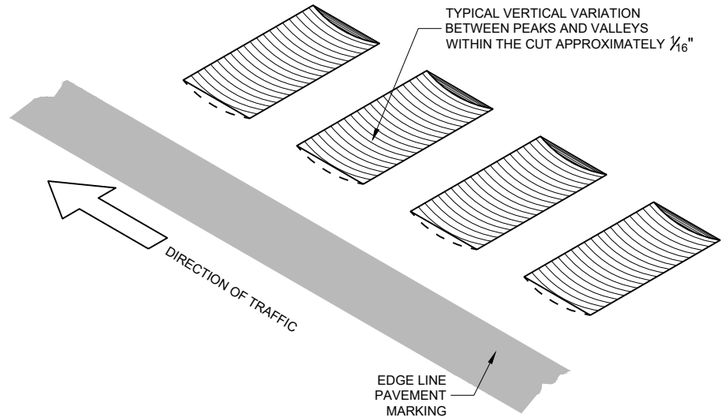
PLAN VIEW
SHOULDER RUMBLE STRIP



SECTION A - A

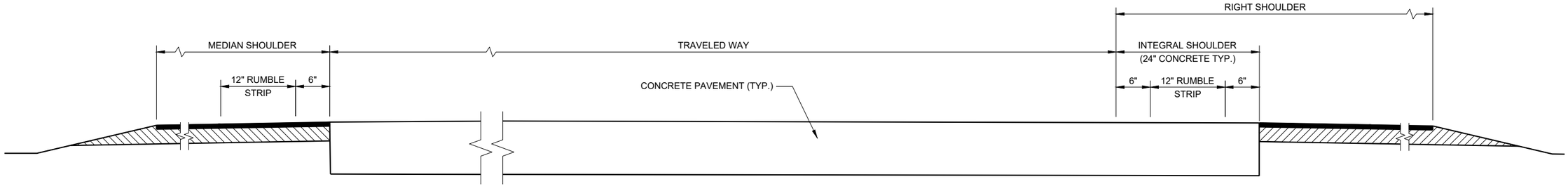


PLAN VIEW
(SINGLE GROOVE)



ISOMETRIC

PLACEMENT DETAIL FOR RUMBLE STRIP



SECTION VIEW

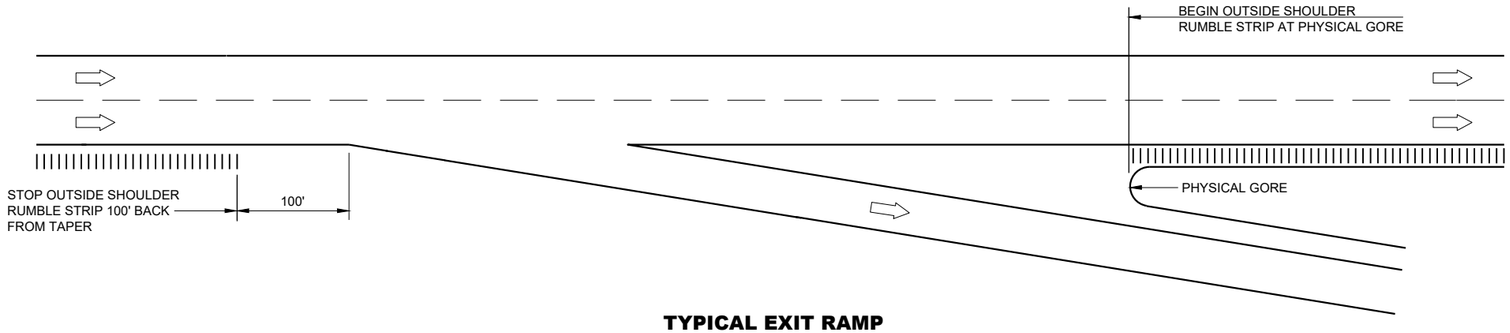
TYPICAL SHOULDER RUMBLE STRIPS
(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

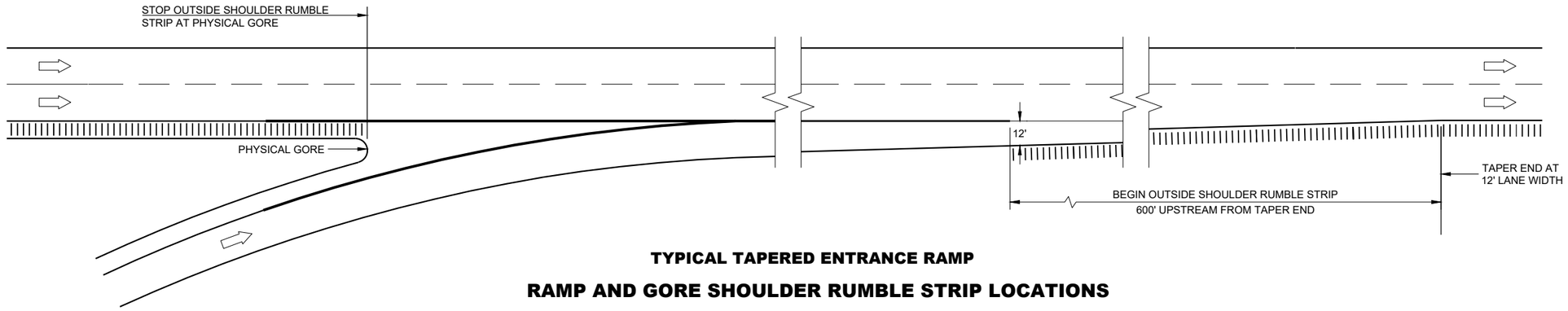
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13A05-06a



TYPICAL EXIT RAMP



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS

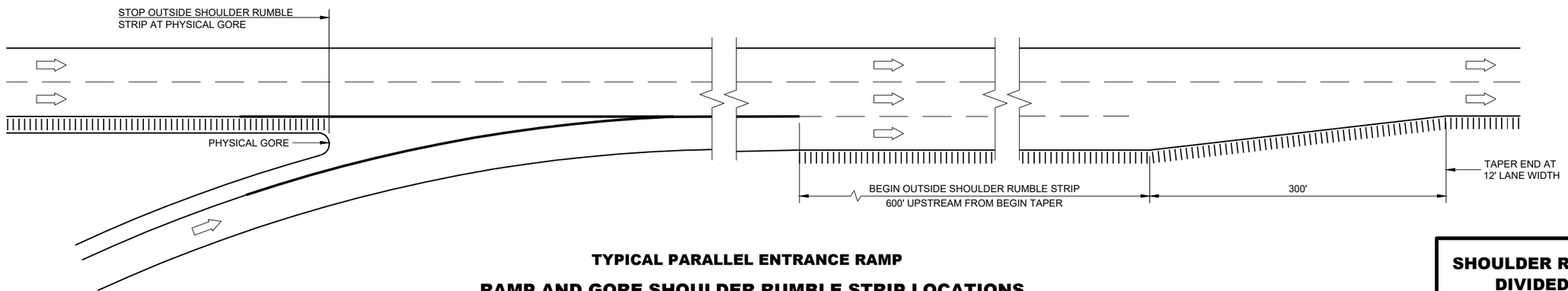
GENERAL NOTES

NO RUMBLE STRIP ON EXIT, DIRECTIONAL OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIALAND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

LEGEND

DIRECTION OF TRAFFIC



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

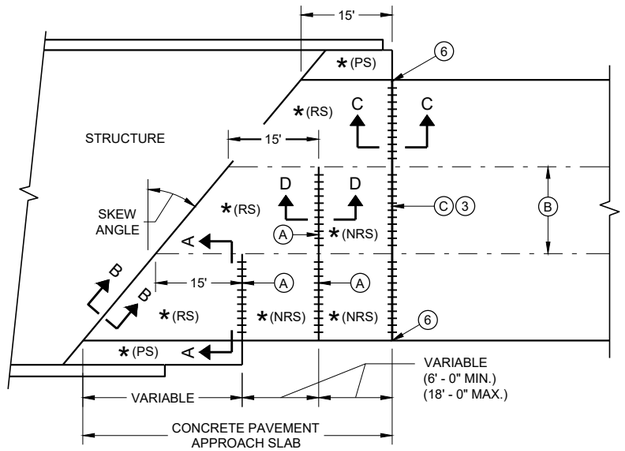
/S/ Rodney Taylor
ROADWAY DESIGN STANI
UNIT SUPERVISOR

FHWA

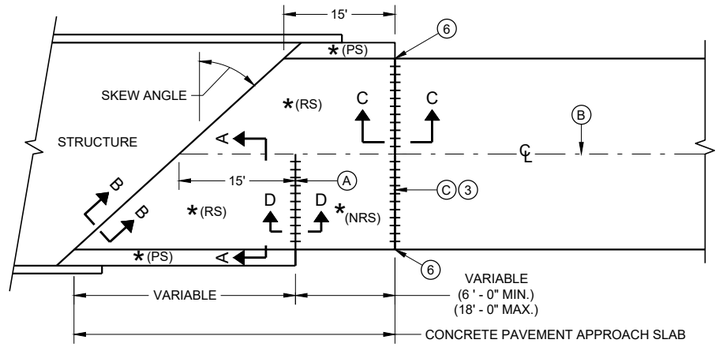
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SDD 13A05-06b

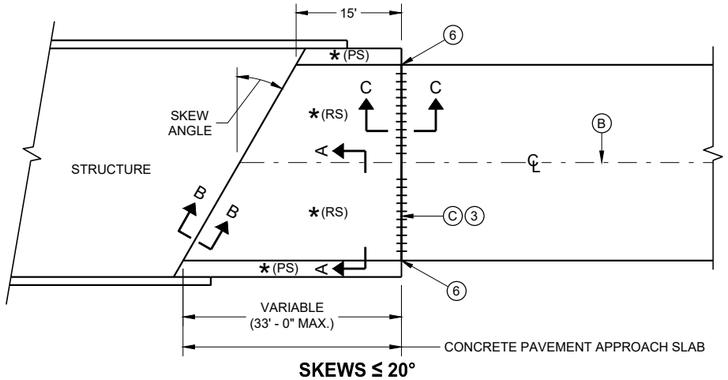
SDD 13A05-06b



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

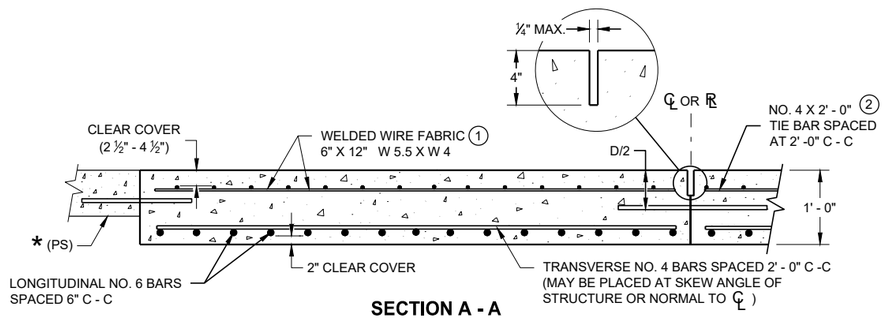
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

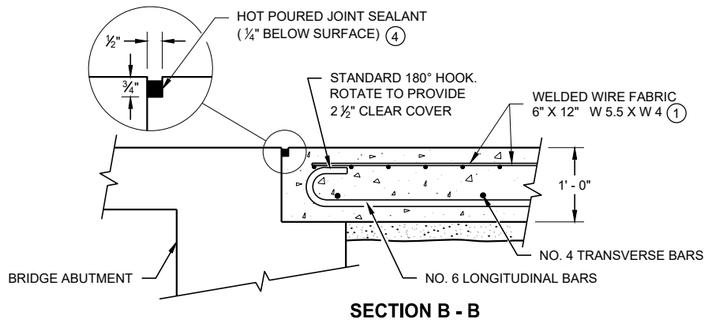
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

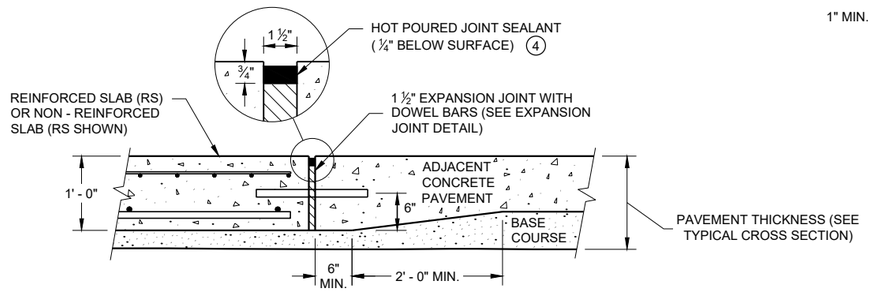
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

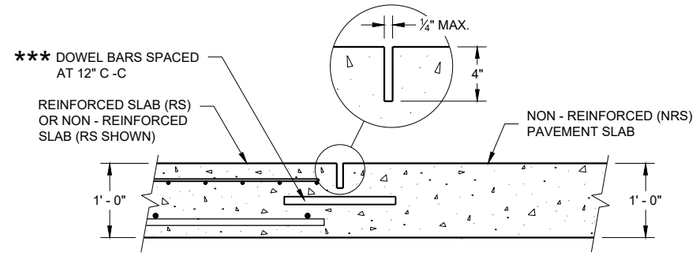
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

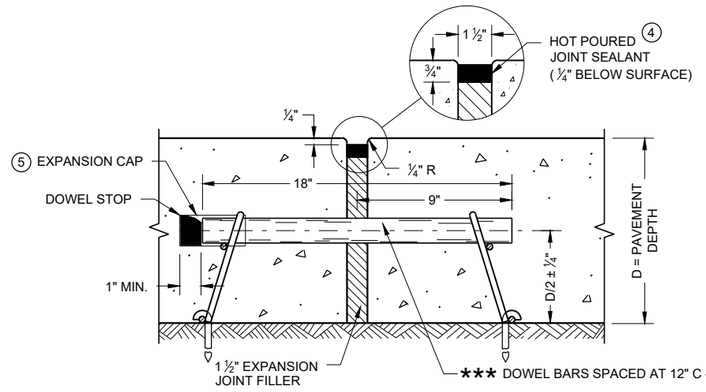
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

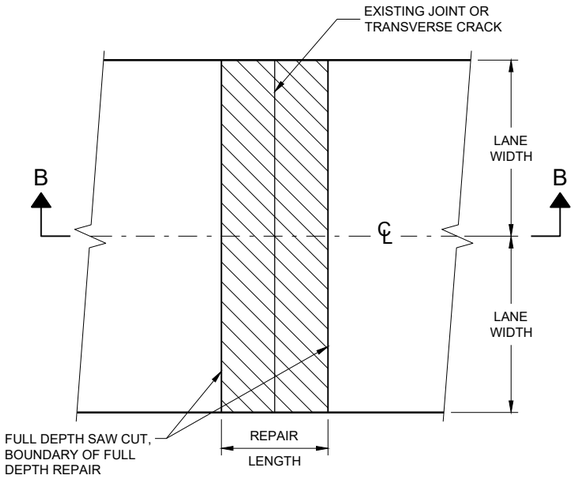
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

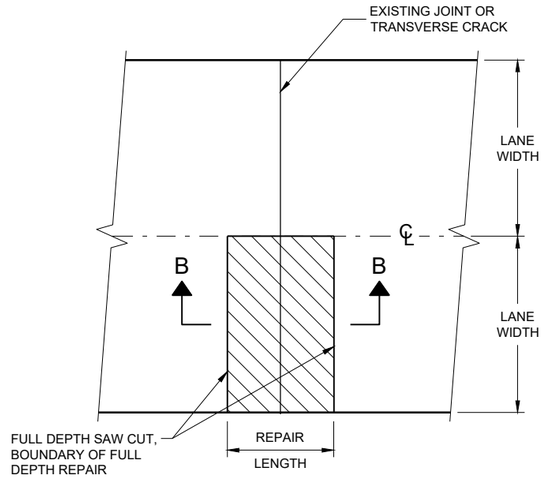
FHWA

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SDD 13B02 - 09a



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

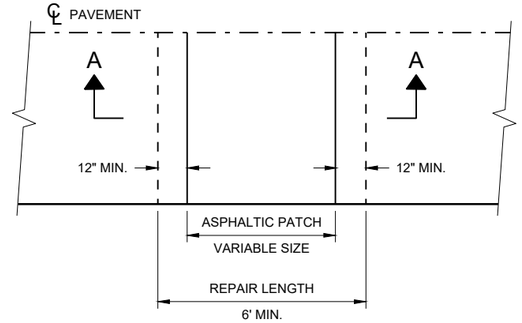
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

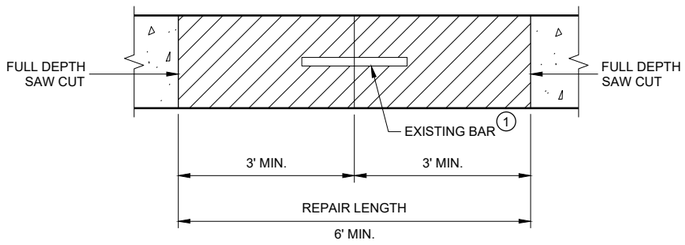
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.



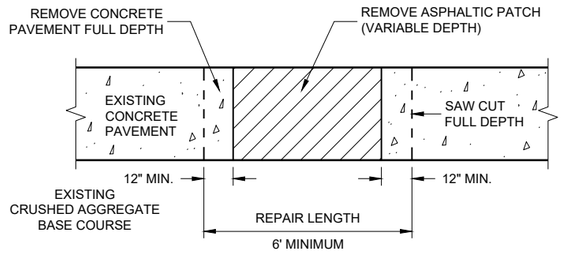
PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B

CONCRETE REMOVAL



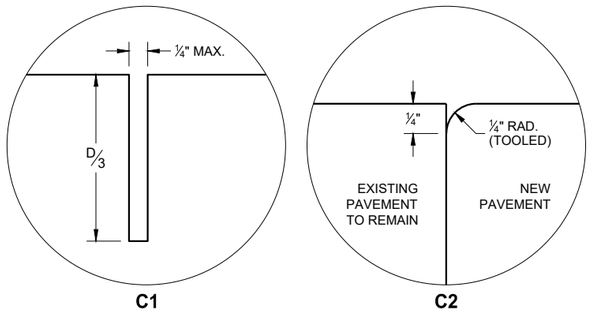
SECTION A - A

HMA PATCH REMOVAL

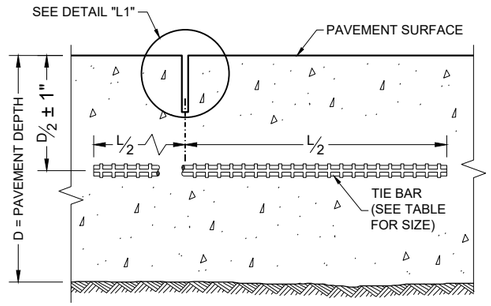
CONCRETE PAVEMENT REPAIR AND REPLACEMENT

SDD13C09 - 17a

6

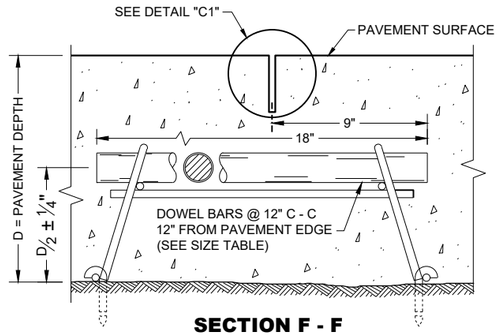


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

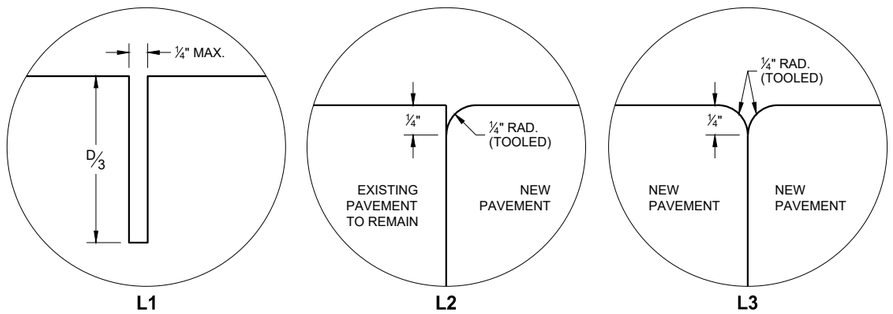
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

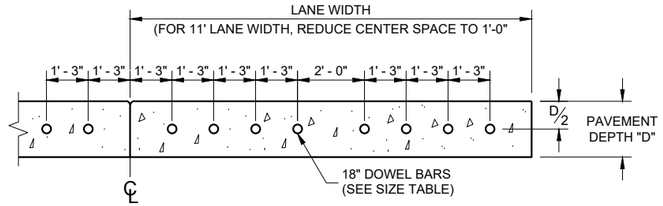
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

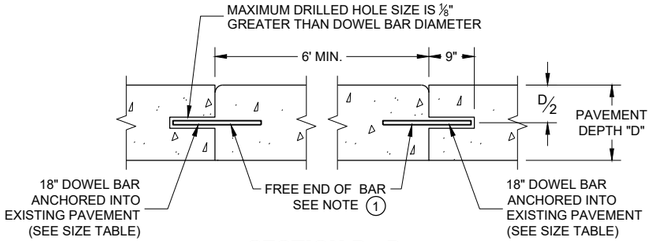


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

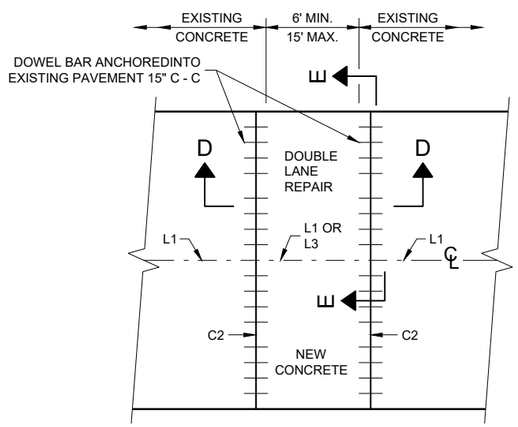
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

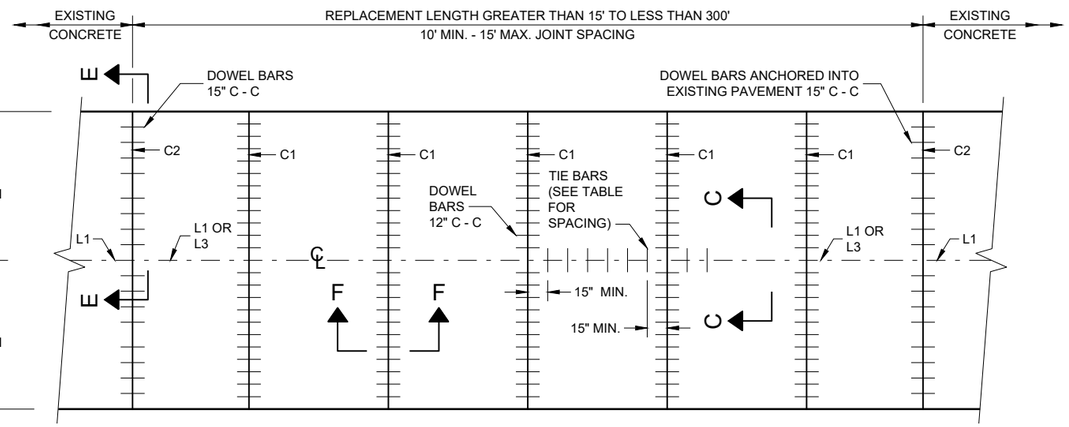
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	NONE	12'
7", 7 ½"	1"	1"	14'
8" & ABOVE	1 ¼"	1 ¼"	15'



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

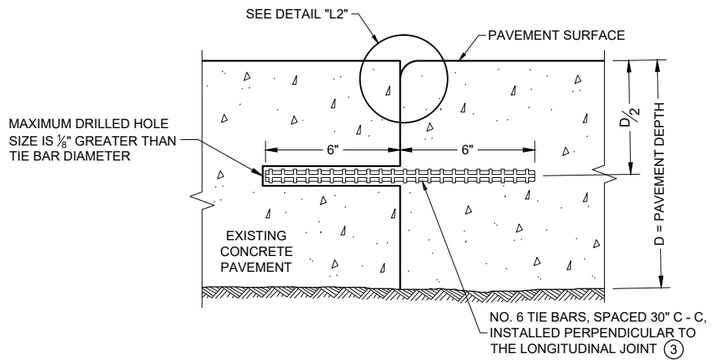
MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C09 - 17b
SDD 13C09 - 17b

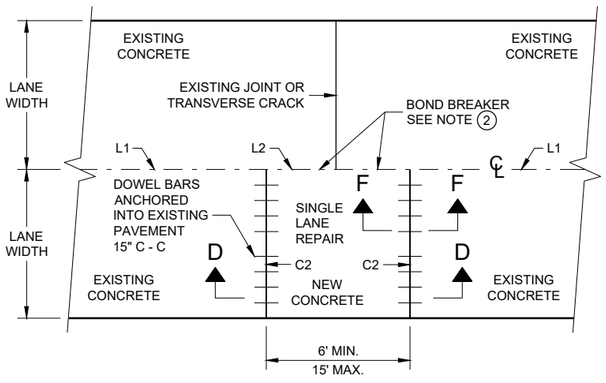


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

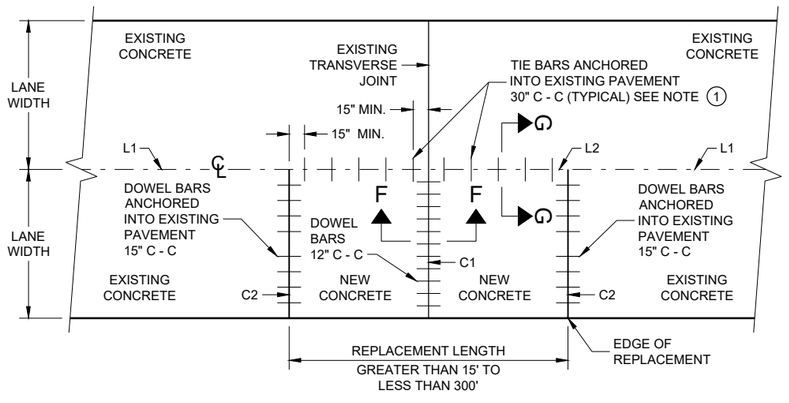
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIR AND REPLACEMENT

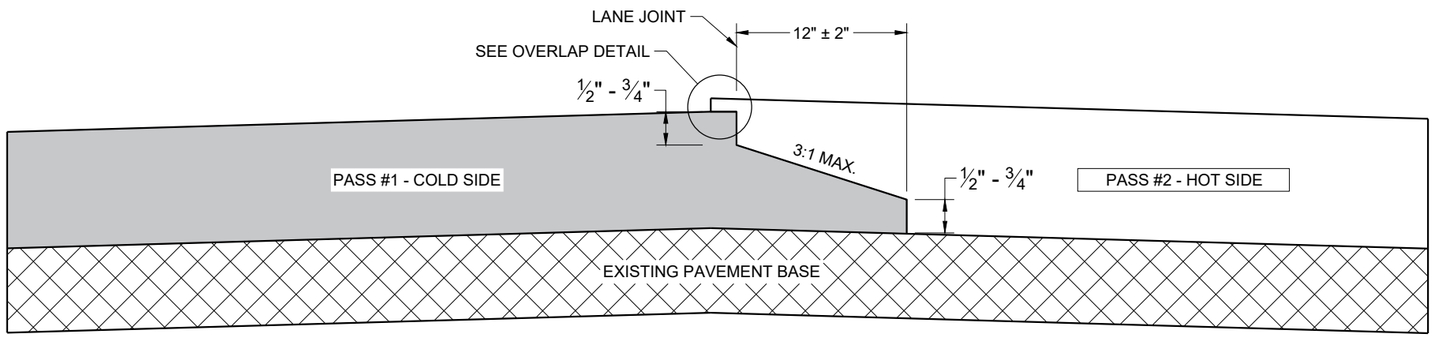
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

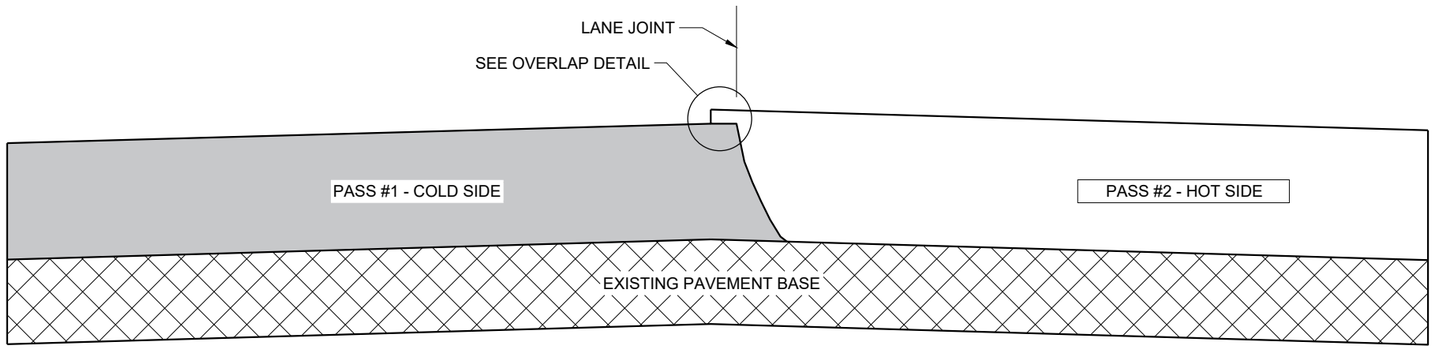
FHWA

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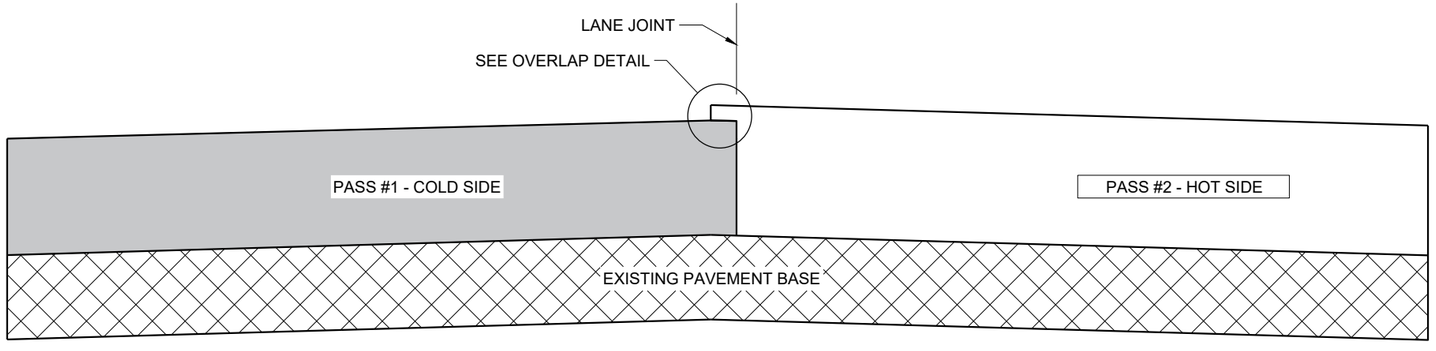
SDD 13C09 - 17c



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

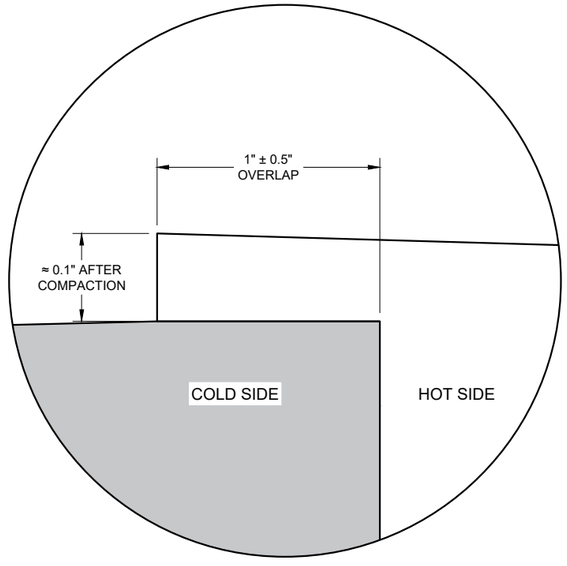
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

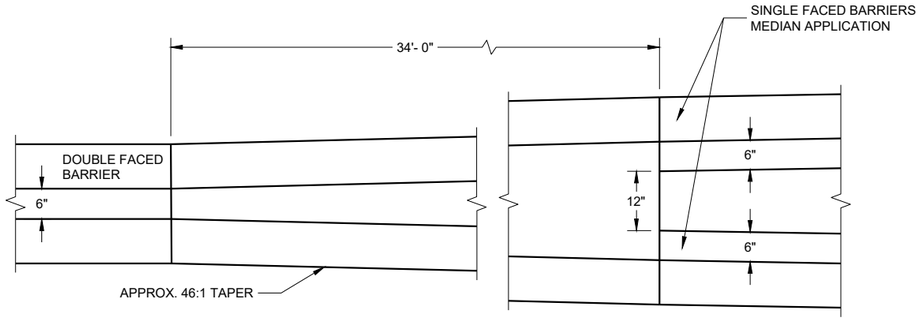
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

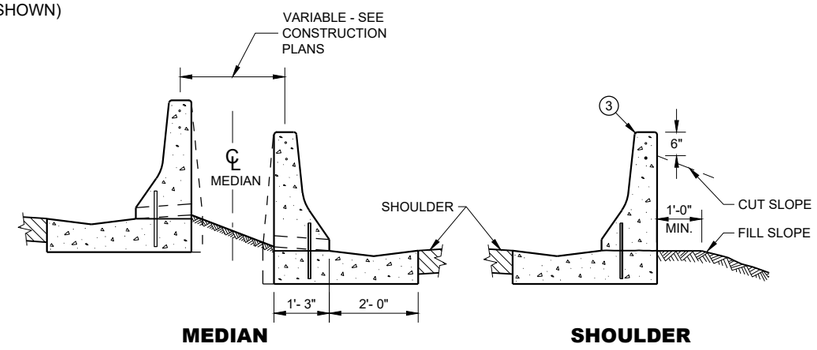


PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

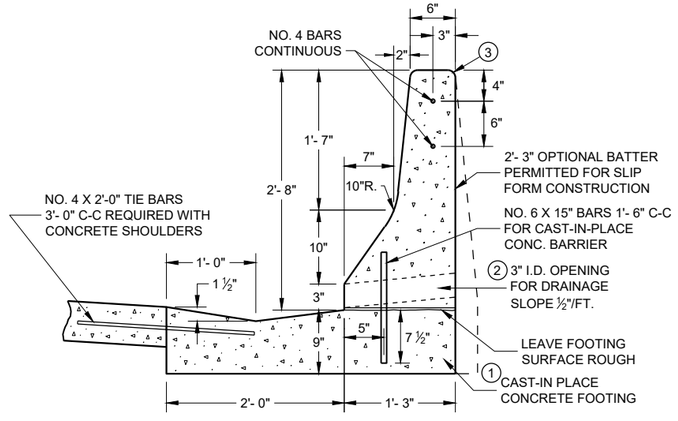
(FOOTINGS ARE NOT SHOWN)

HIGH SIDE CONCRETE BARRIER DETAIL



MEDIAN **SHOULDER**

TYPICAL APPLICATIONS



SECTION VIEW

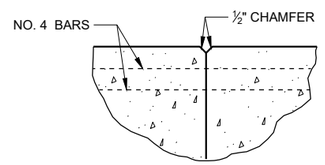
GENERAL NOTES

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

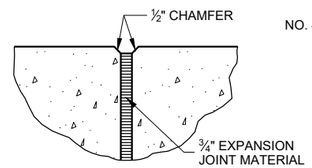
ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

4000 PSI AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

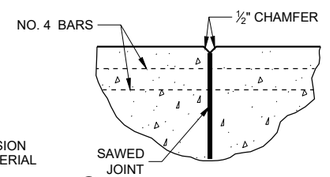
1. BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN THE CONTRACT.
2. OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.
3. 3/4 -INCH BEVEL OR 1-INCH RADIUS (TYPICAL).
4. NO. 4 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.



4 **CONSTRUCTION JOINT**



5 **EXPANSION JOINT**



6 **CONTRACTION JOINT**

JOINT DETAILS

CONCRETE BARRIER (DOUBLE FACED)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

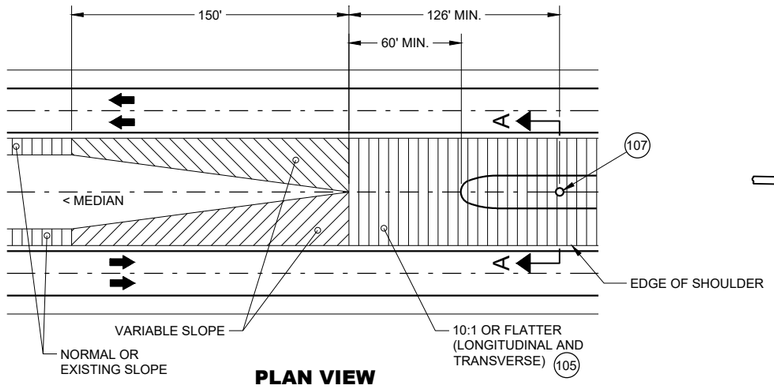
APPROVED
8/16/2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

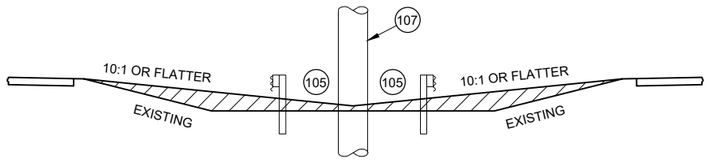
SDD 14B22 - 07a

6

SDD 14B22 - 07a



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

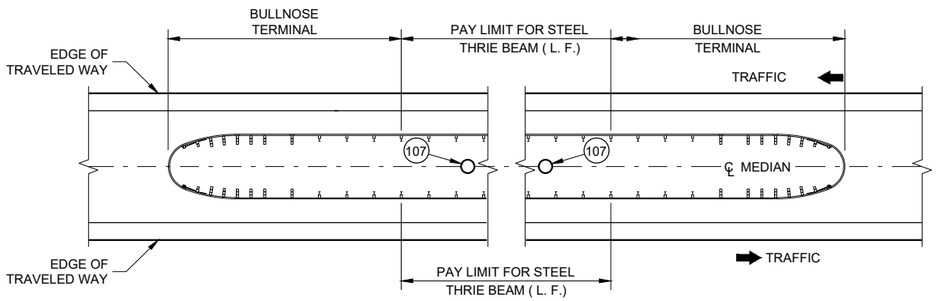
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

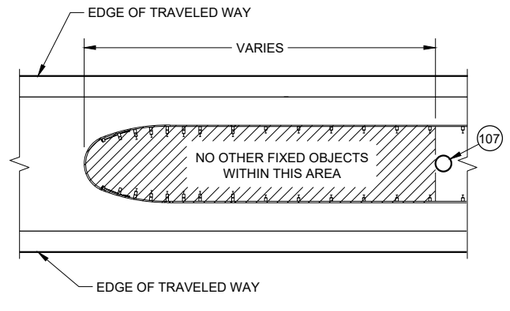
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

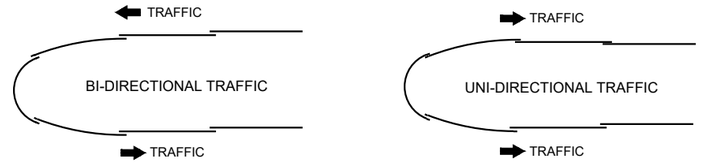
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



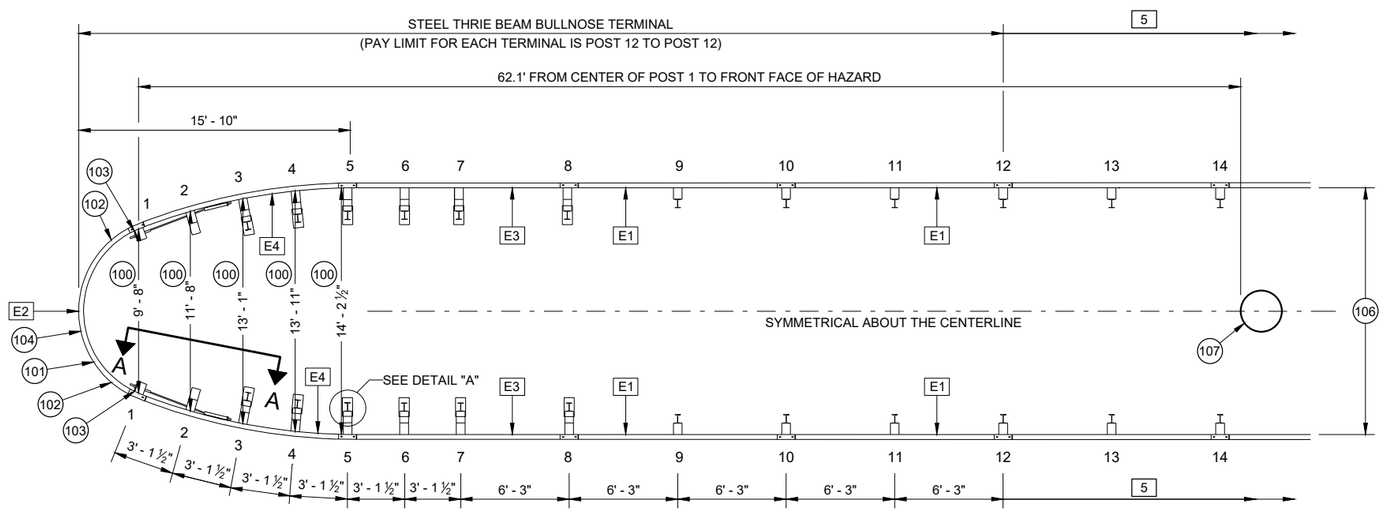
MEDIAN HAZARD PROTECTION PAY LIMITS



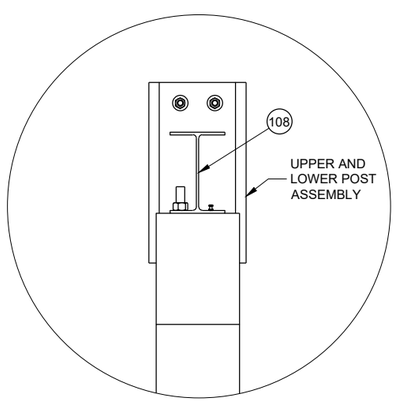
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



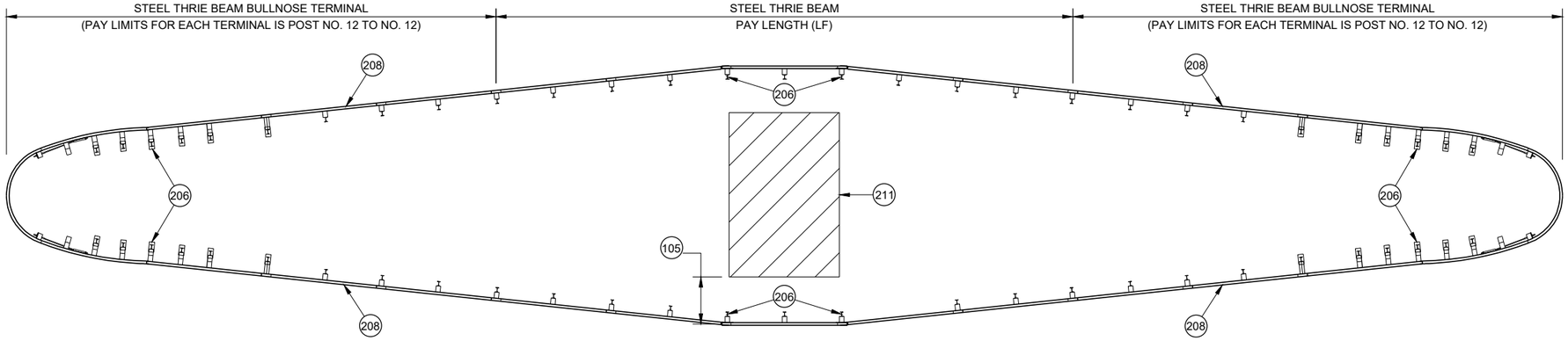
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B26 - 05a

SDD 14B26 - 05a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

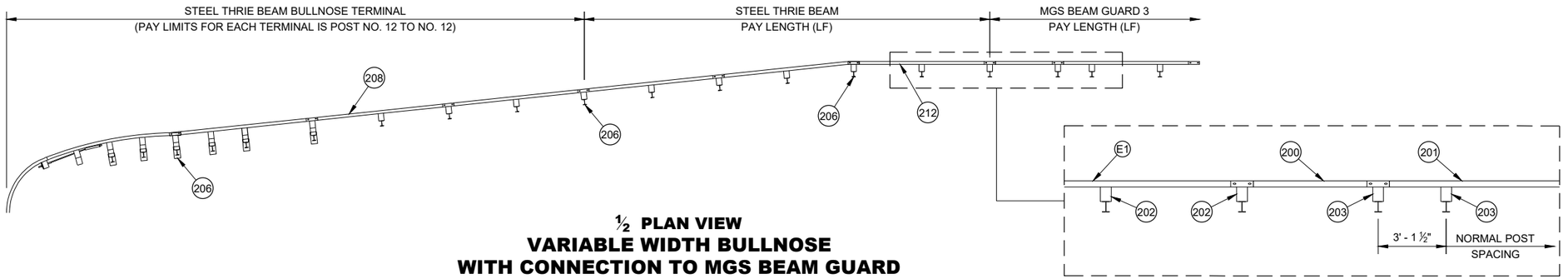
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

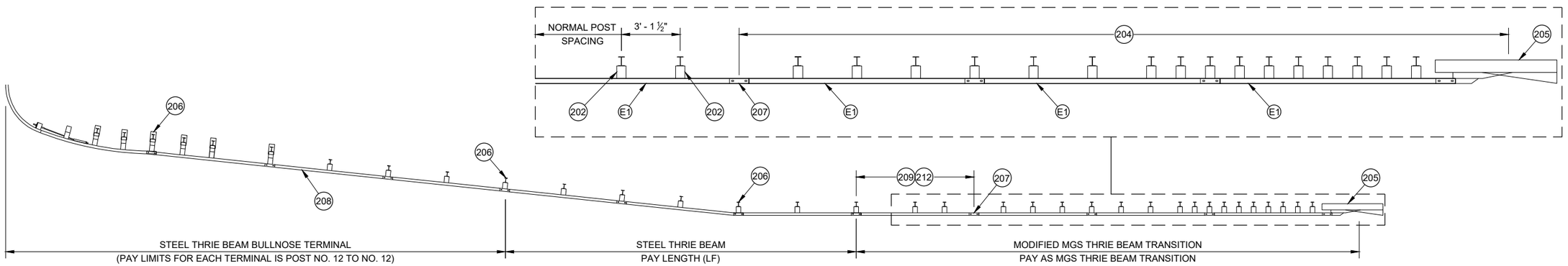
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO MGS BEAM GUARD



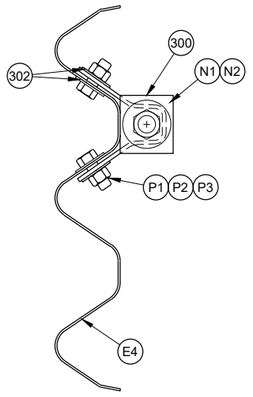
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

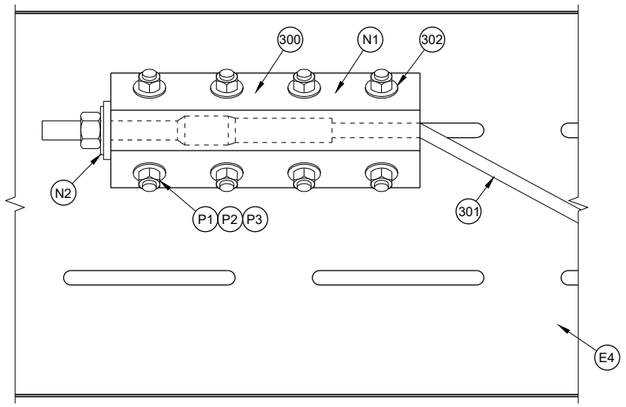
6

SDD 14B26 - 05b

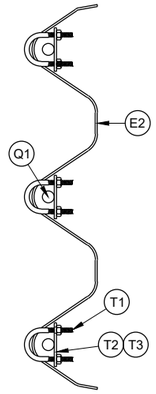


PROFILE VIEW

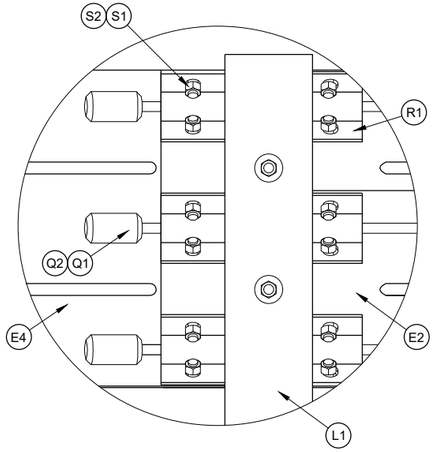
CABLE ANCHOR ASSEMBLY CONNECTION



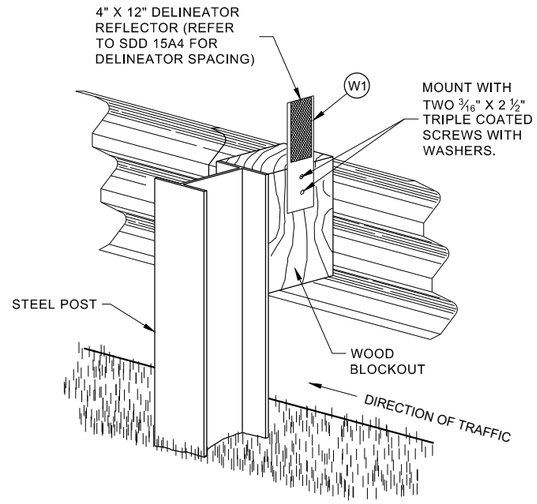
CABLE ANCHOR ASSEMBLY



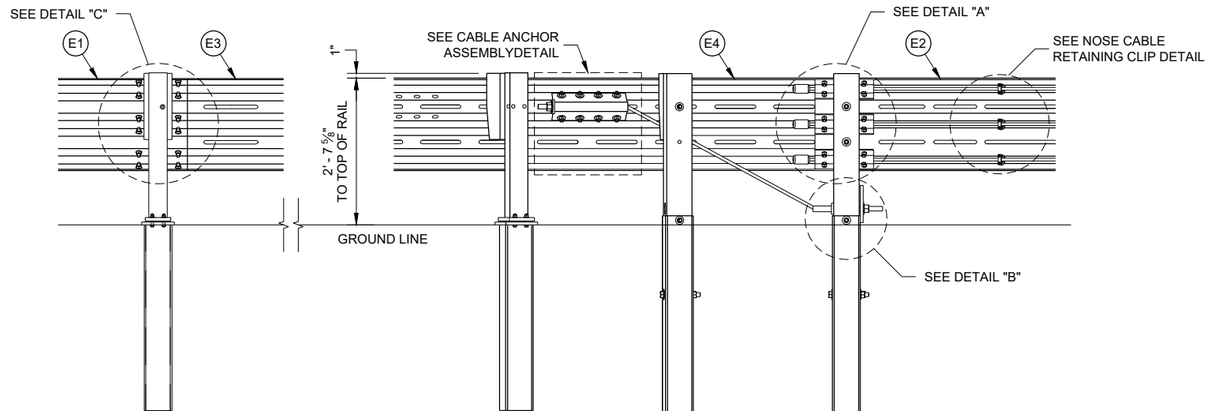
NOSE CABLE RETAINING CLIP



DETAIL "A"

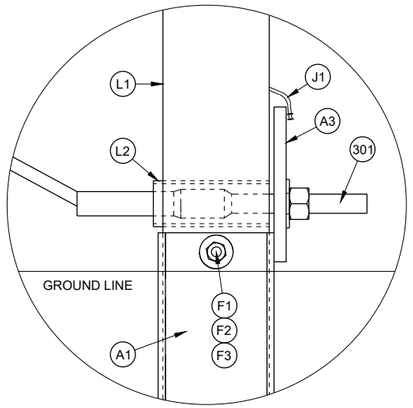


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

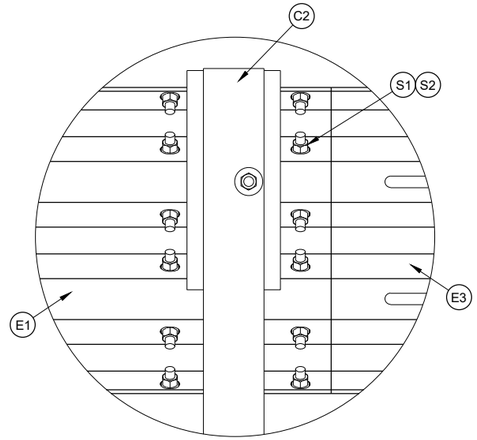


POST 8 **POST 3** **POST 2** **POST 1**

CROSS SECTION A - A



DETAIL "B"



DETAIL "C" THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

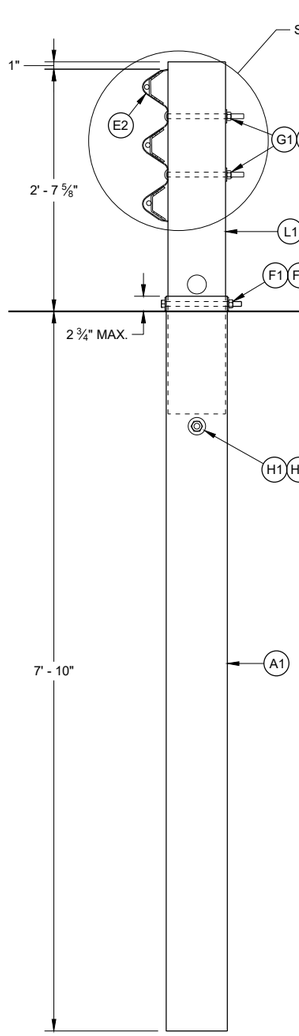
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

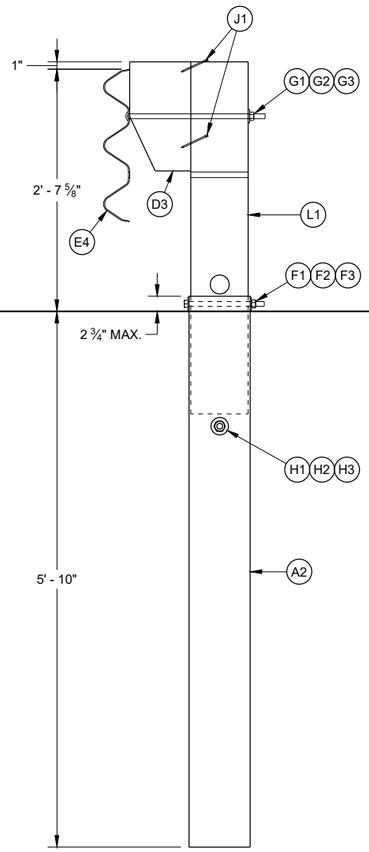
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

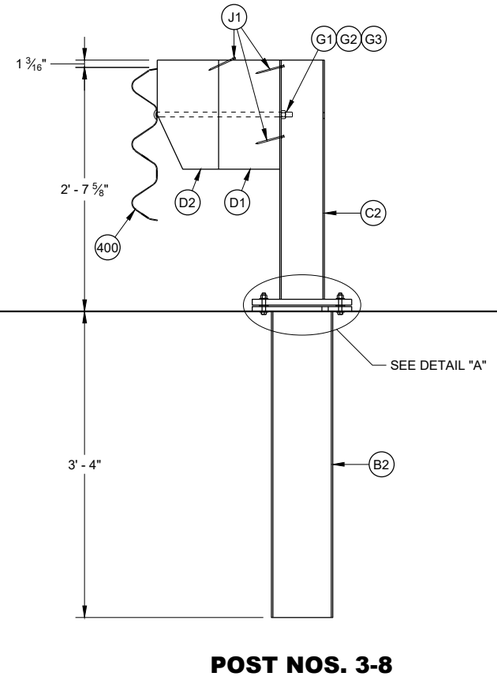
SDD 14B26 - 05c



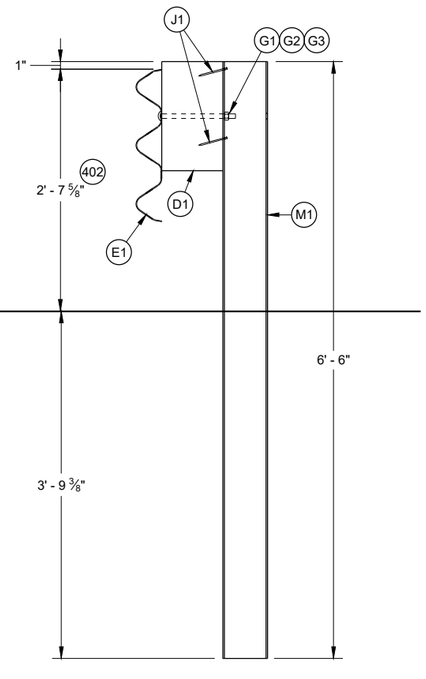
POST NO. 1



POST NO. 2



POST NOS. 3-8



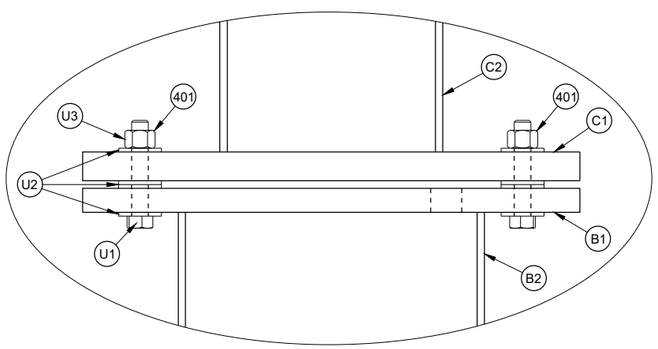
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

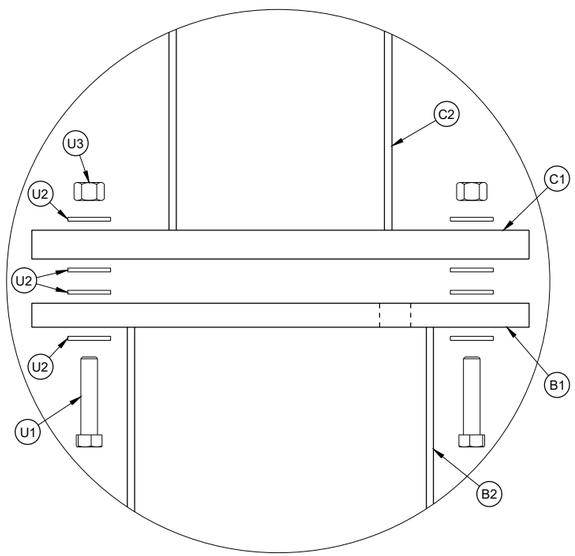
(400) RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

(401) TORQUE BOLD BETWEEN 60-75 FT-LB

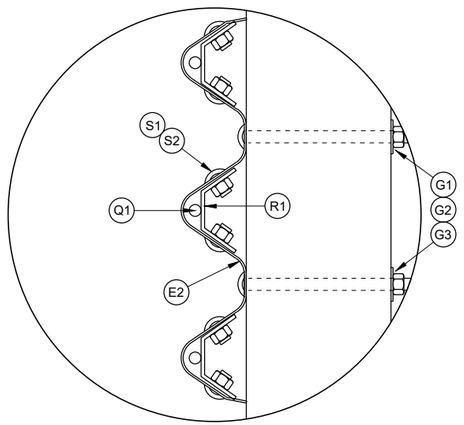
(402) HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



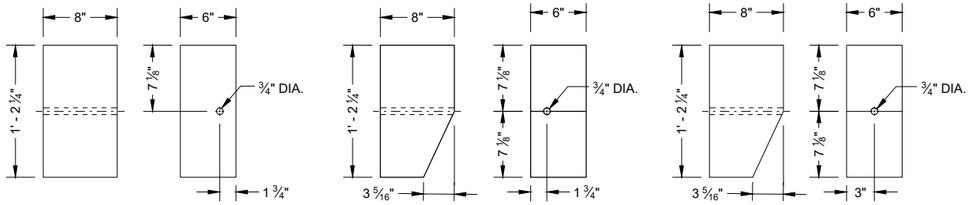
DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

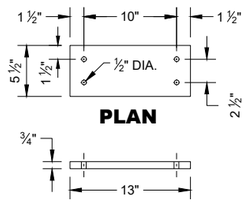
SDD 14B26 - 05d



ELEVATION PROFILE
BLOCKOUT (D1)

ELEVATION PROFILE
BLOCKOUT (D2)

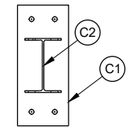
ELEVATION PROFILE
BLOCKOUT (D3)



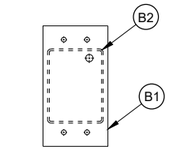
PLAN

PROFILE

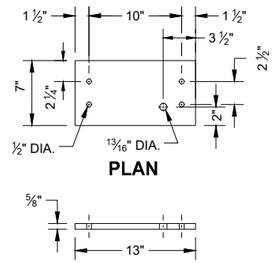
UPPER SHEAR PLATE (C1)



PLAN



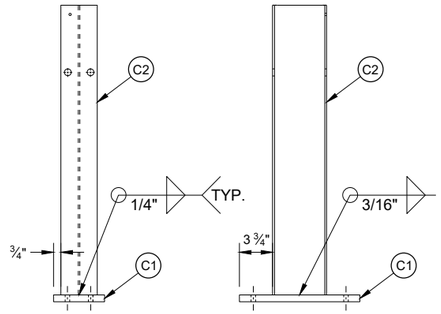
PLAN



PLAN

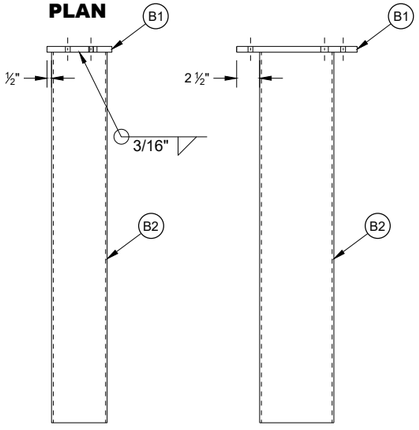
PROFILE

LOWER SHEAR PLATE (B1)



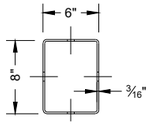
ELEVATION PROFILE

UPPER POST ASSEMBLY



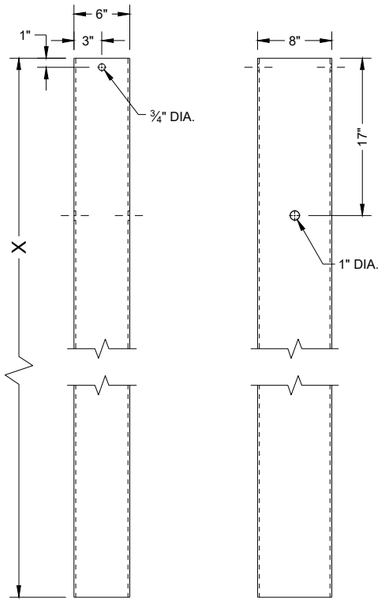
ELEVATION PROFILE

LOWER POST ASSEMBLY



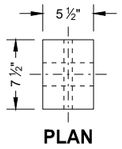
PLAN

PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 4"

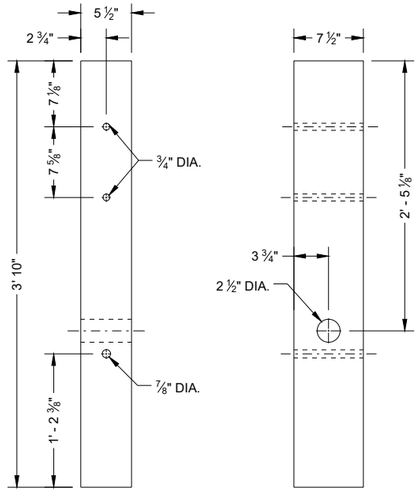


ELEVATION PROFILE

FOUNDATION TUBE

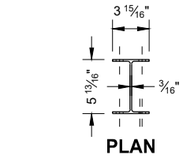


PLAN

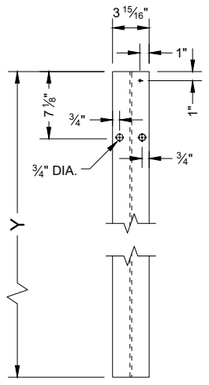


ELEVATION PROFILE

BCT POST (L1)



PLAN



ELEVATION

POST

PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 7 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

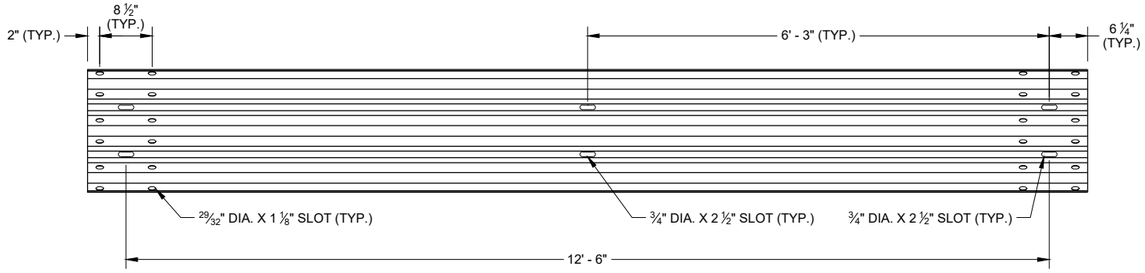
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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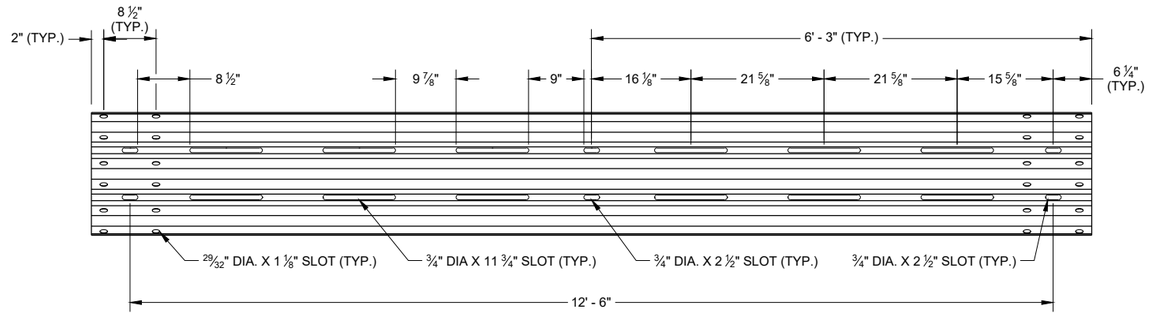
SDD 14B26 - 05e

6

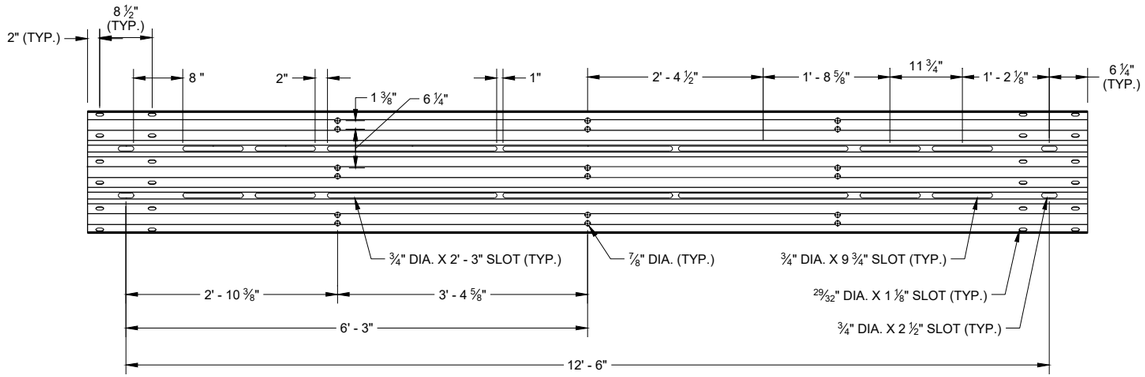
SDD 14B26 - 05e



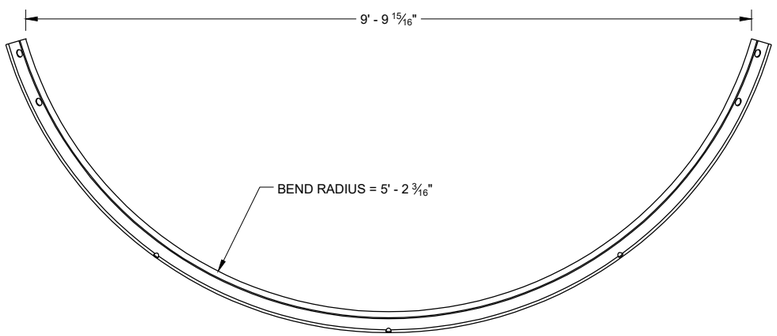
SLOTTED THRIE BEAM RAIL E1



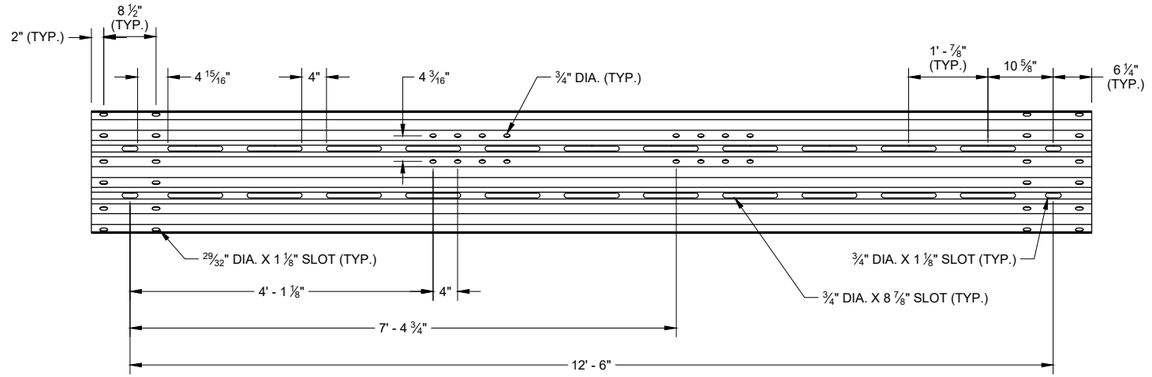
SLOTTED THRIE BEAM RAIL E3



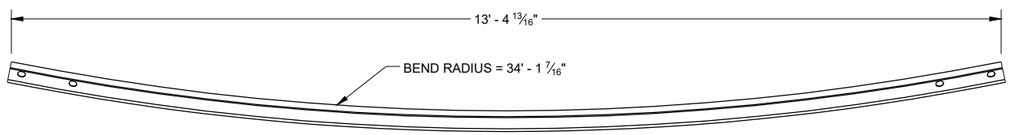
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4

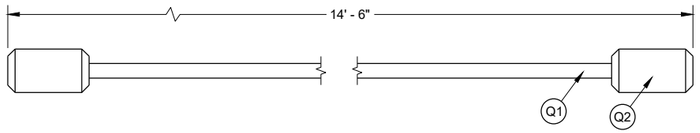


PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

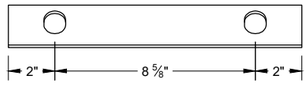
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

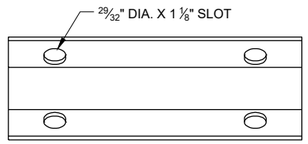
6
SDD 14B26 - 05f



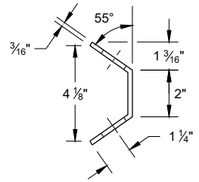
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

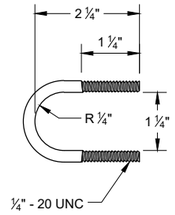


ELEVATION VIEW

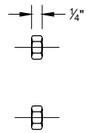


PROFILE VIEW

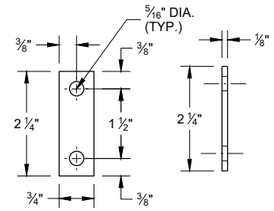
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

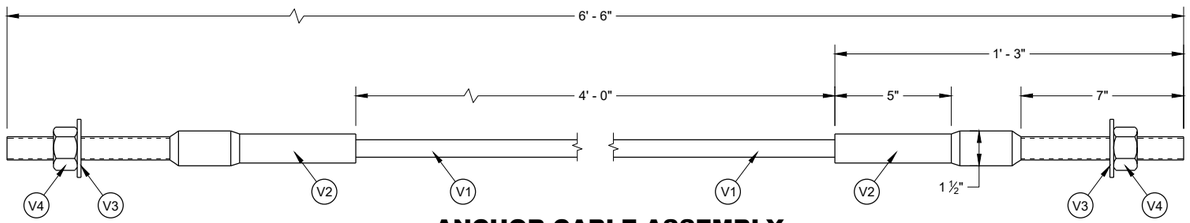


U - BOLT NUT (T3)

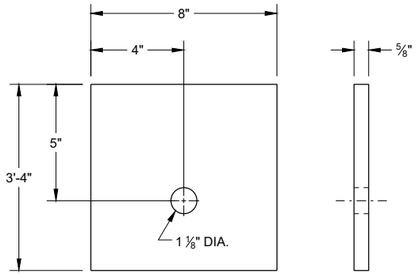


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

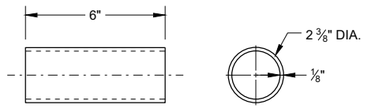


ANCHOR CABLE ASSEMBLY



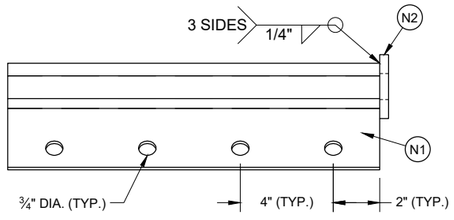
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

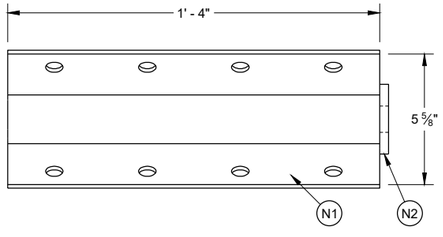


ELEVATION VIEW **PROFILE VIEW**

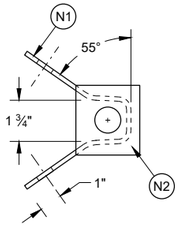
BCT POST SLEEVE (L2)



PLAN VIEW

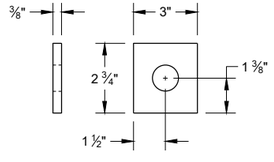


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B26 - 05g

BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT POST	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
B1	LOWER SLIP POST ASSEMBLY - 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
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST ASSEMBLY - 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
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
F2	5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
F3	GROUND STRUT AND YOKE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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
G1	5/8 " DIA. POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	POST BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	POST BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
H1	7/8" DIA. SOIL TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
M2	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
N1	ANCHOR BRACKET	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
N2	ANCHOR BRACKET - BEARING 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

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	ANCHOR BRACKET BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
P3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE ANCHOR BRACKET	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
S1	5/8" DIA. SPLICE BOLT - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
S2	SPLICE - BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
T2	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
T3	U-BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM 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
V1	¾" DIA. BCT CABLE	AASHTO M30 / ASTM A741 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN BREAKING STRENGTH OF 42.7 KIPS
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."
V3	1" DIA. ANCHOR CABLE-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V4	1" DIA. ANCHOR CABLE-NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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	REFLECTOR	SEE SDD 15A4

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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SDD 14B26 - 05h

(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.

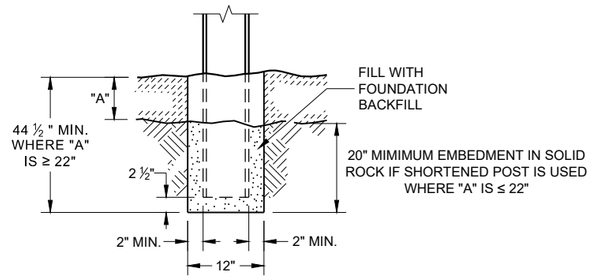
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

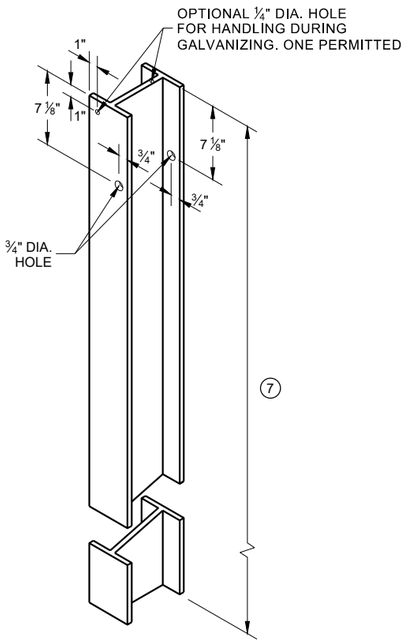
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

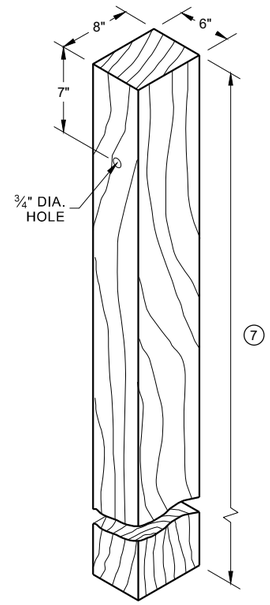
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



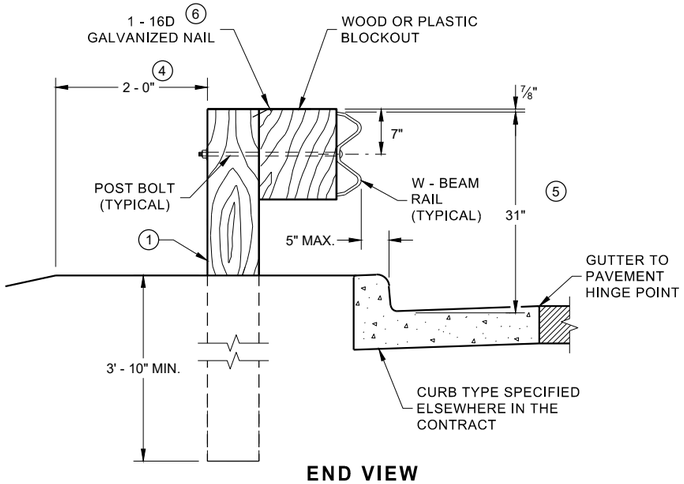
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



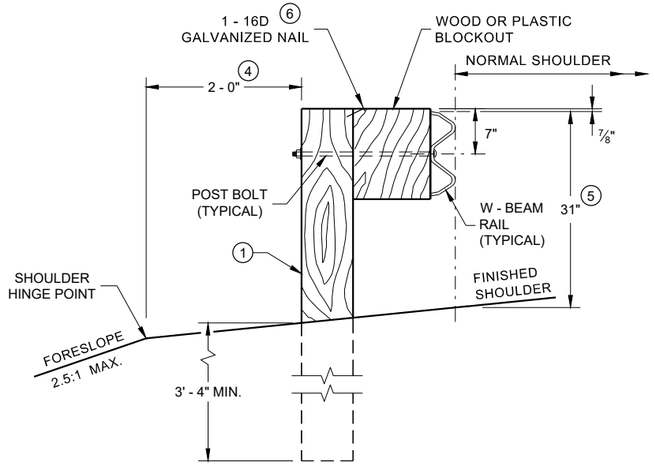
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



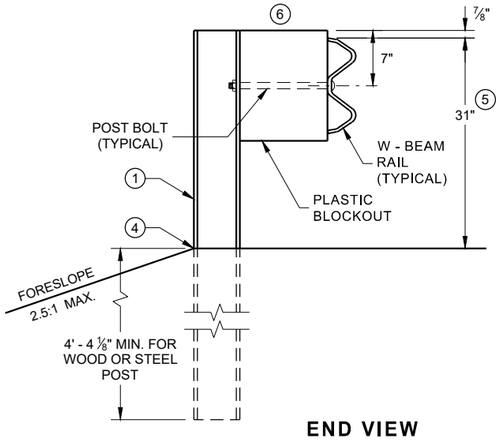
WOOD POST (6" X 8") NOMINAL (1)



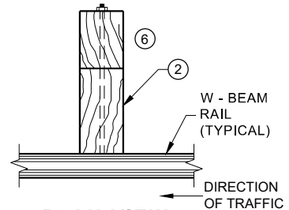
END VIEW
LOCATED ALONG A CURBED ROADWAY



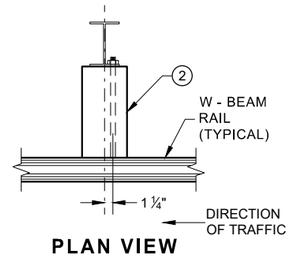
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



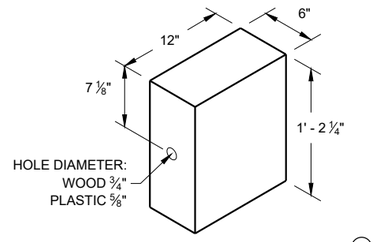
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW WOOD POST, BLOCKOUT & BEAM



PLAN VIEW STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

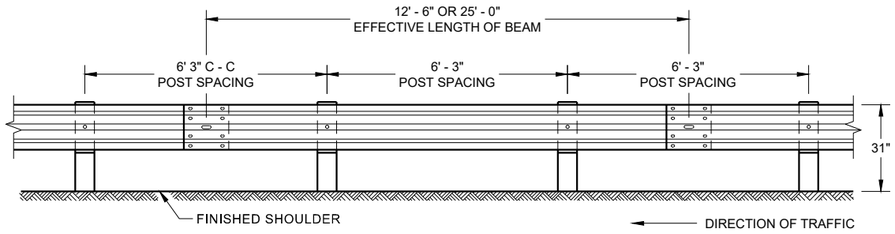
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

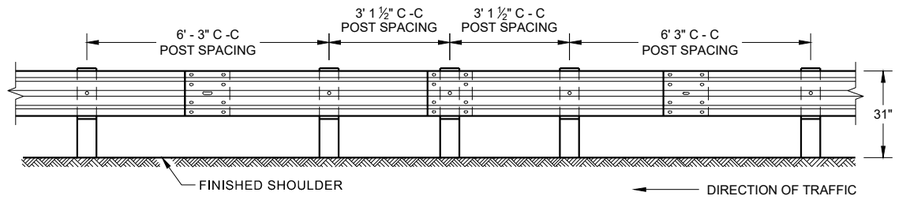
SDD 14B42 - 07a

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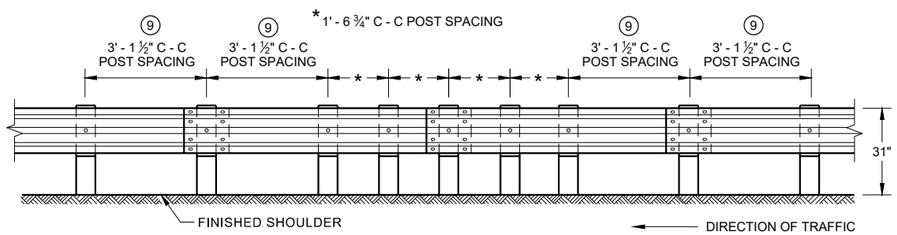
SDD 14B42 - 07a



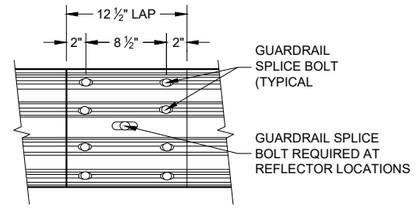
FRONT VIEW
POST SPACING STANDARD INSTALLATION



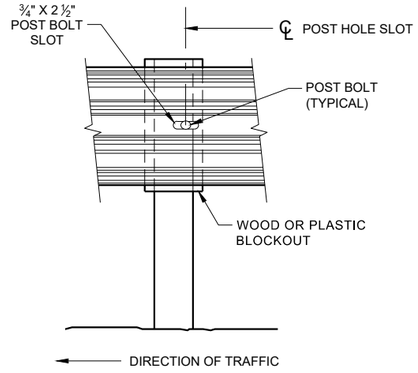
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



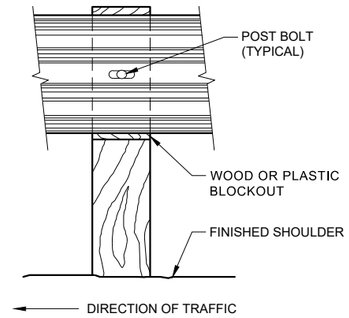
FRONT VIEW
QUARTER POST SPACING (QS)



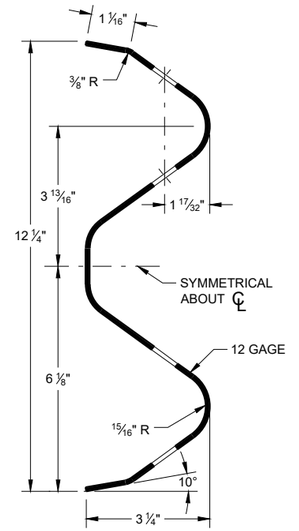
FRONT VIEW
MID-SPAN BEAM SPLICE



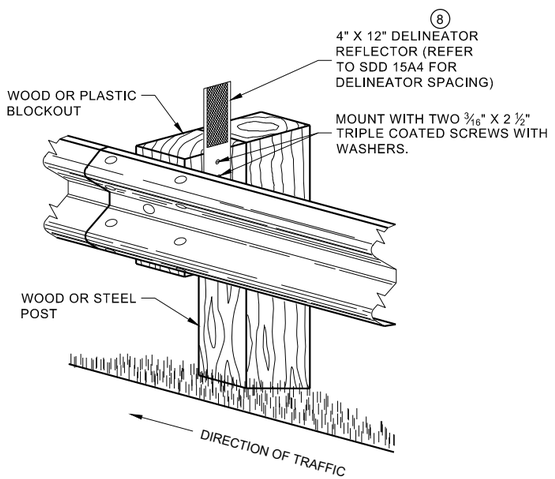
FRONT VIEW AT STEEL POST



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.

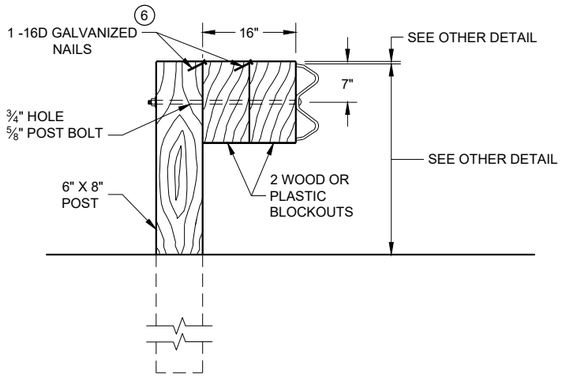
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

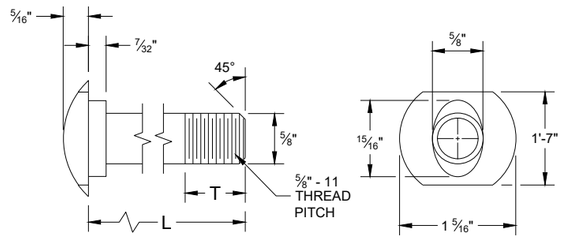


DETAIL FOR 16" BLOCKOUT DEPTH

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.

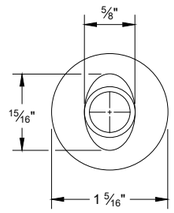
NOTE:

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.

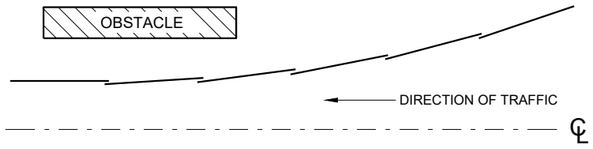


POST BOLT TABLE

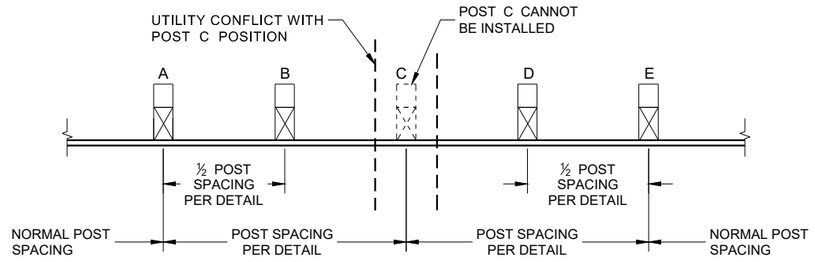
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



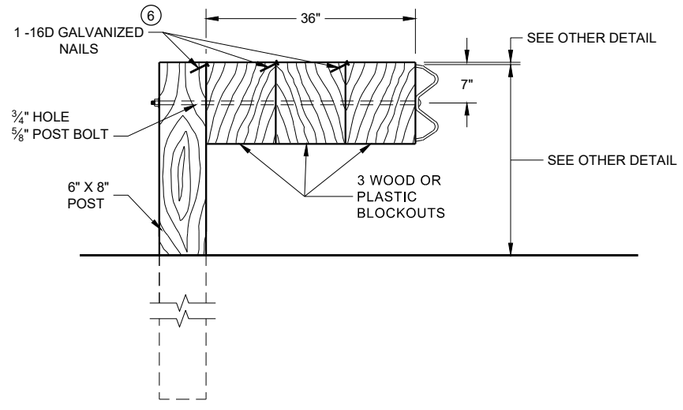
ALTERNATE BOLT HEAD



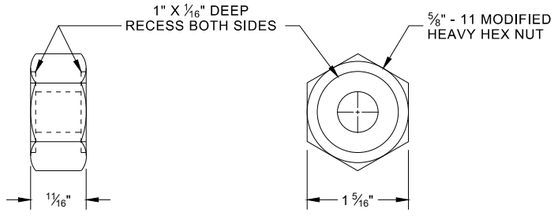
PLAN VIEW
BEAM LAPPING DETAIL



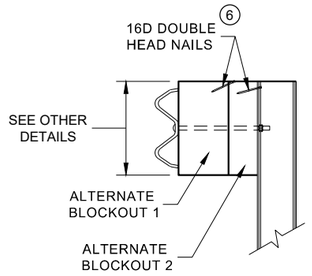
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



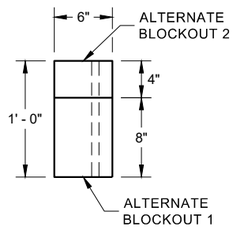
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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.

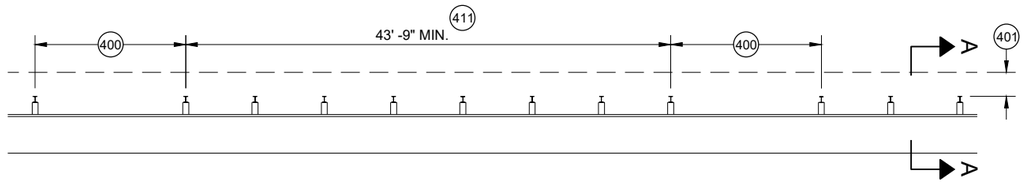
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

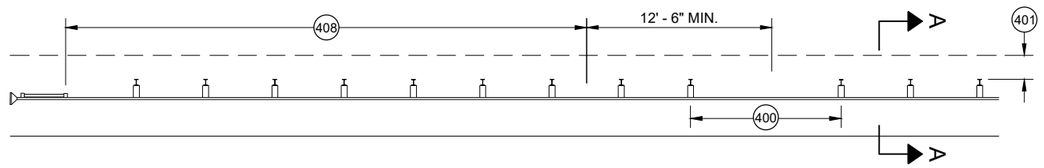
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

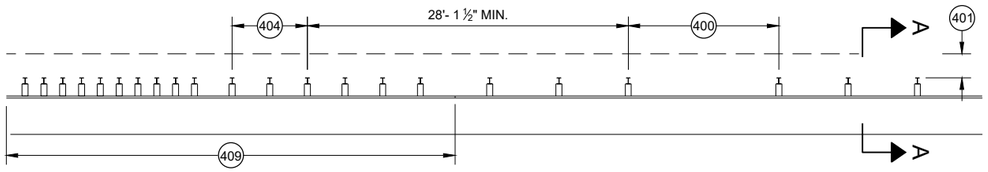
SDD 14B42 - 07c



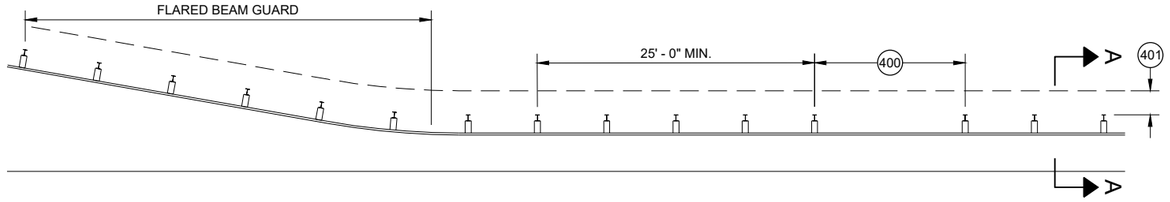
MISSING POST IN MGS GUARDRAIL



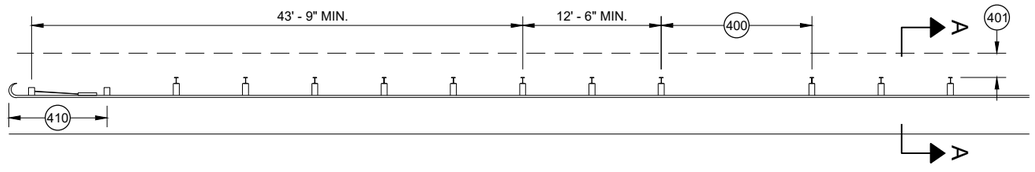
MISSING POST IN MGS GUARDRAIL NEAR EAT



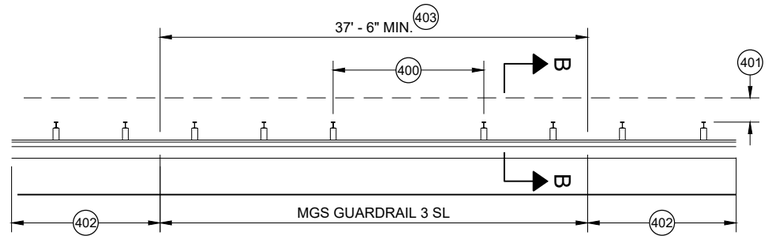
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

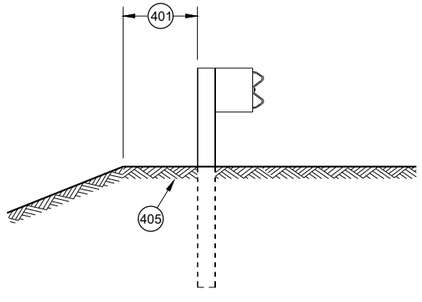


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

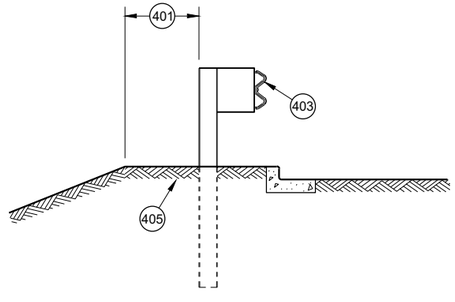


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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

(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.

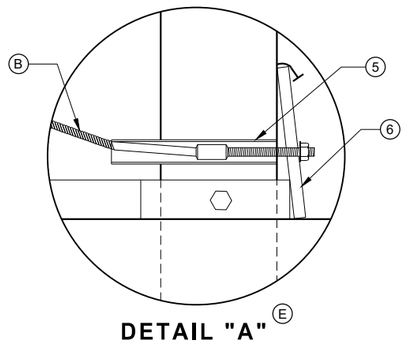
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

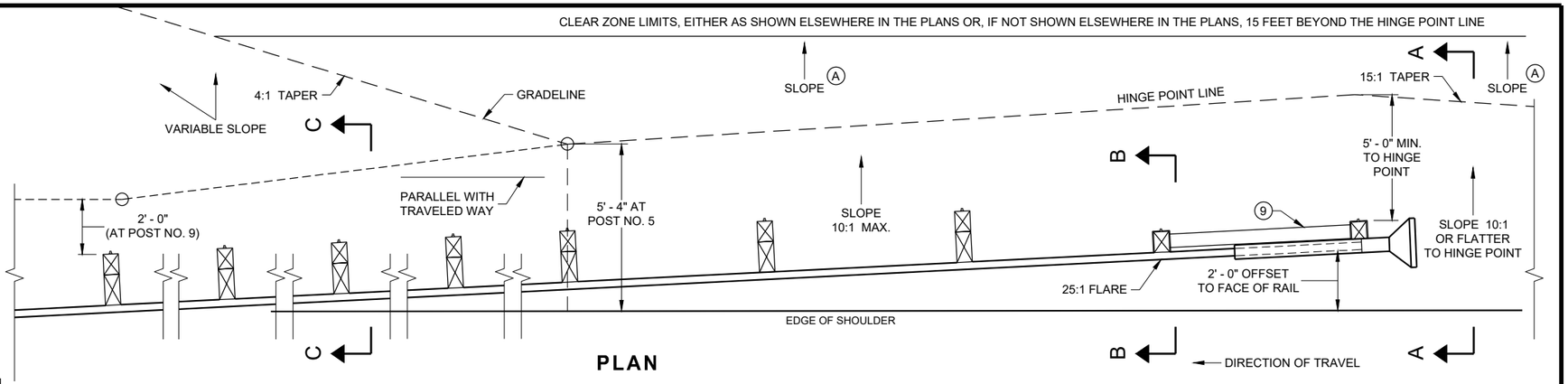
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

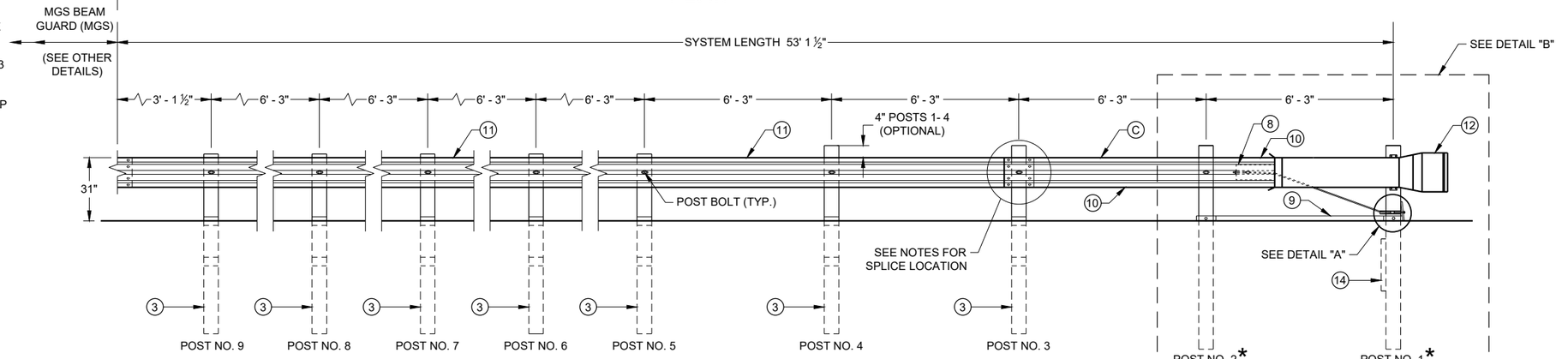
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



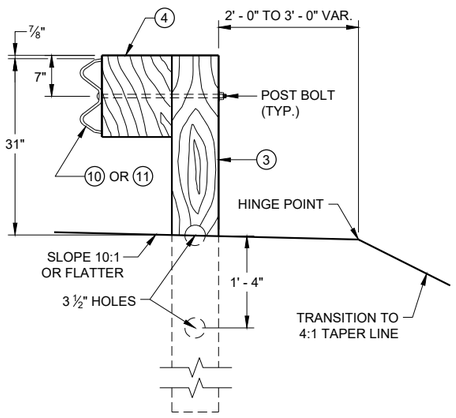
DETAIL "A" (E)



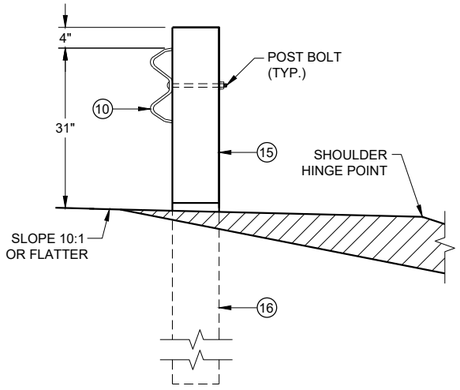
PLAN



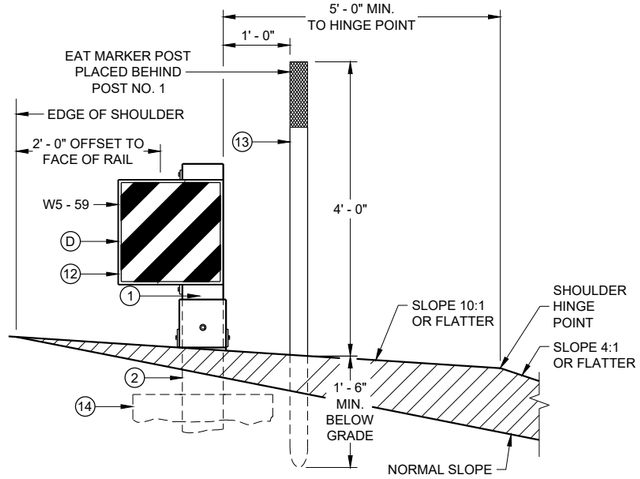
ELEVATION



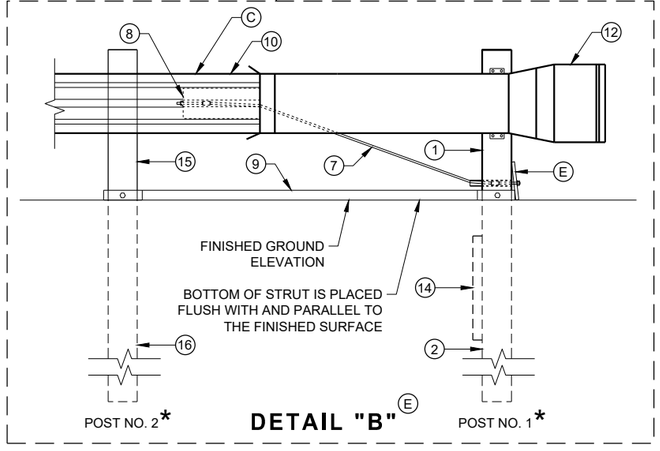
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



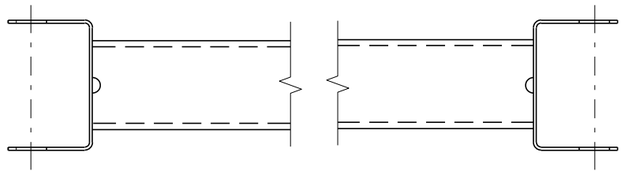
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

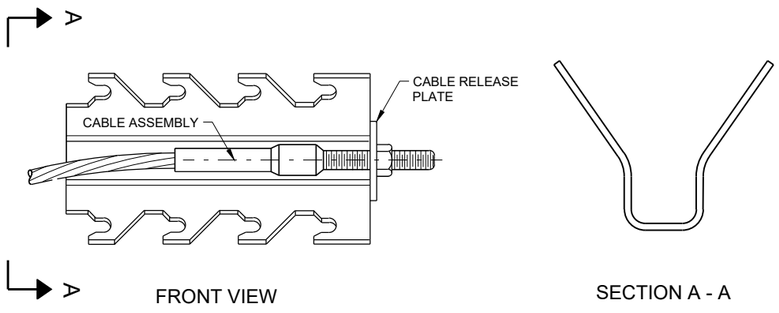
SDD 14B44 - 04a



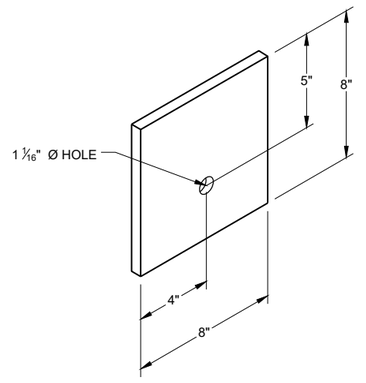
GENERIC GROUND STRUT ⑨ Ⓔ

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 Ⓔ



BEARING PLATE ⑥ Ⓔ

6

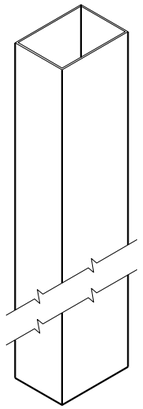
6

SDD 14B44 - 04b

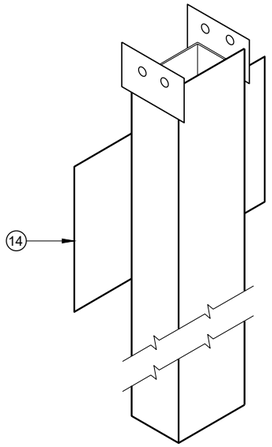
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

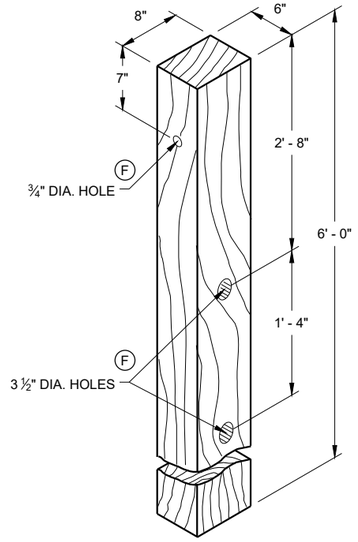
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



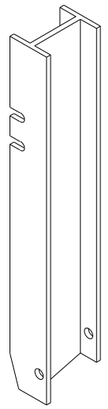
UPPER POST NO. 1 (1) (E)



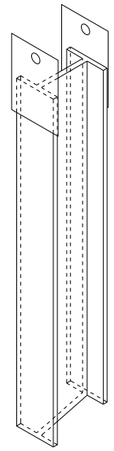
LOWER POST NO. 1 (2) (E)



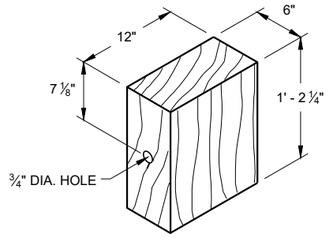
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



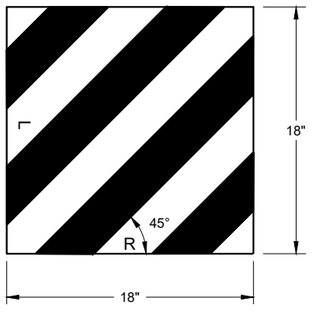
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

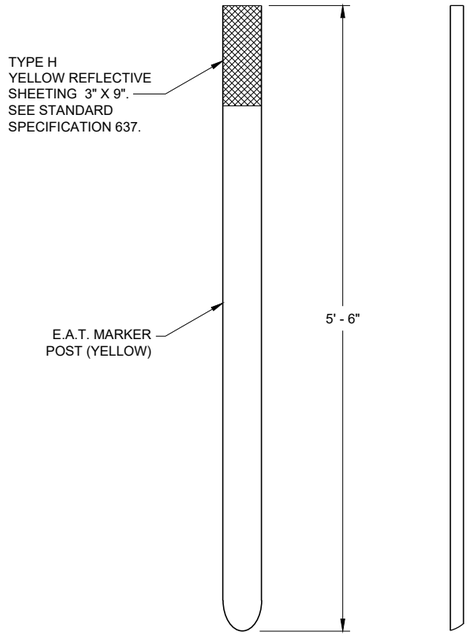


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



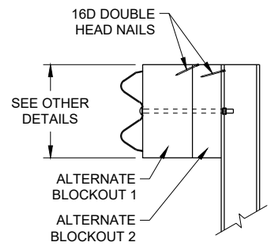
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

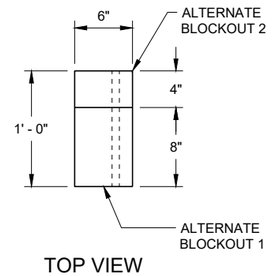


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

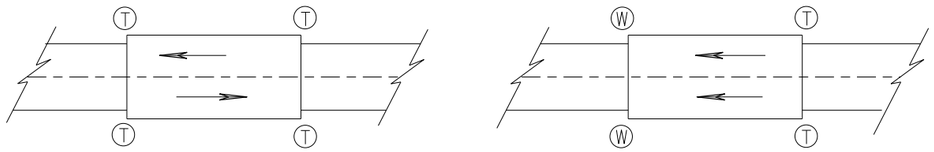
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

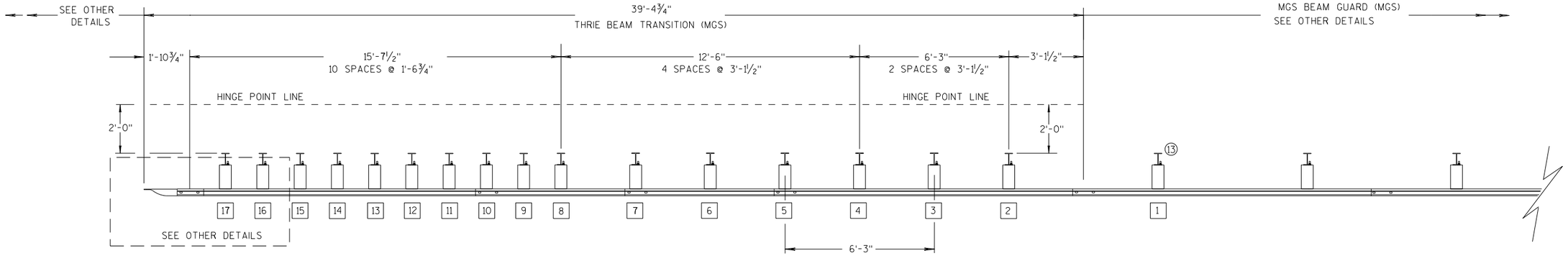
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

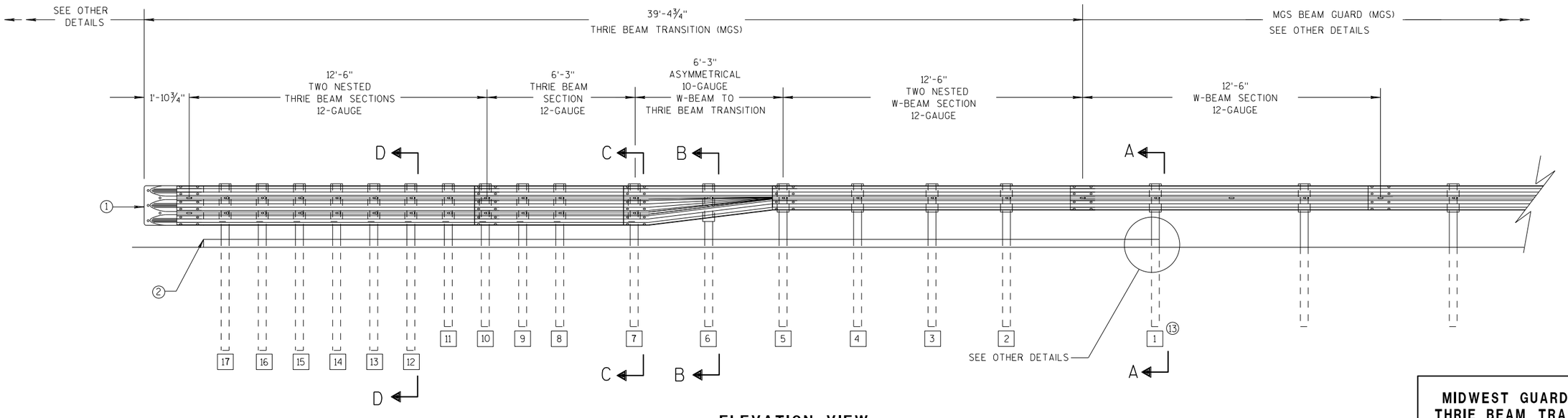
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

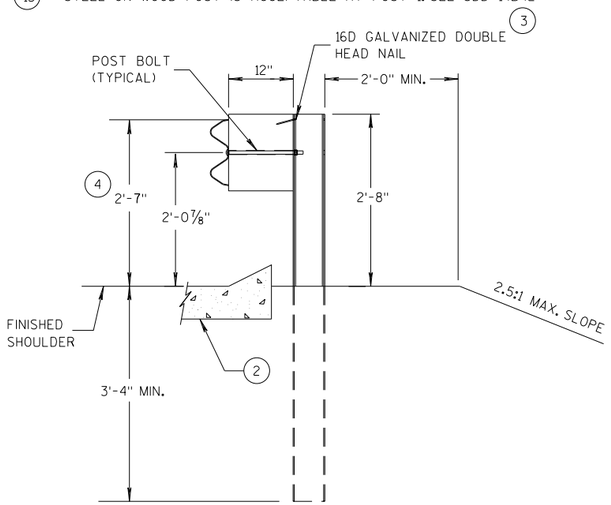
GENERAL NOTES

(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.

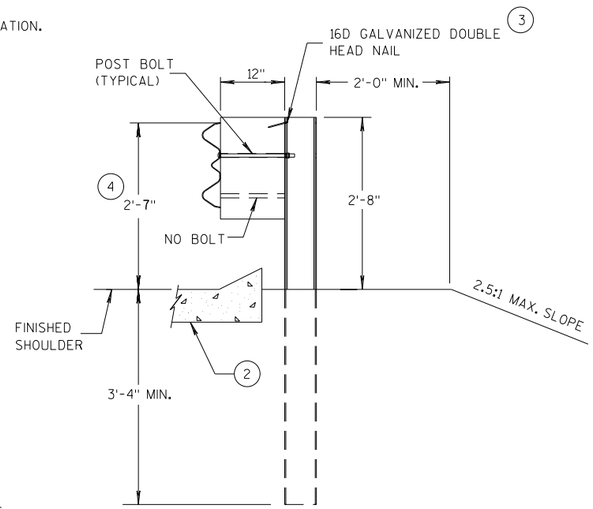
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



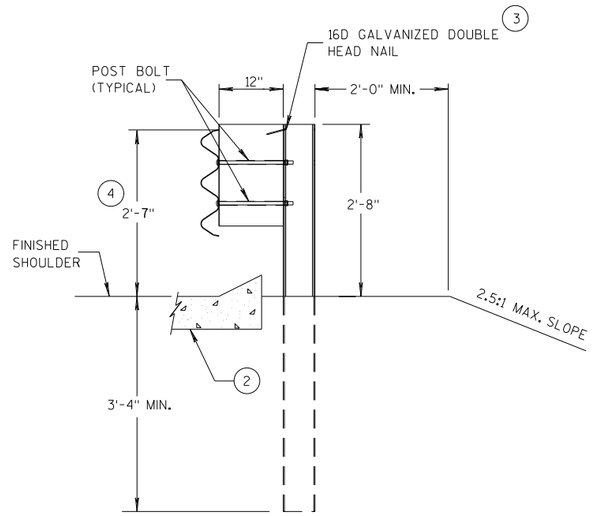
SECTION A-A (13)

POSTS 1-5



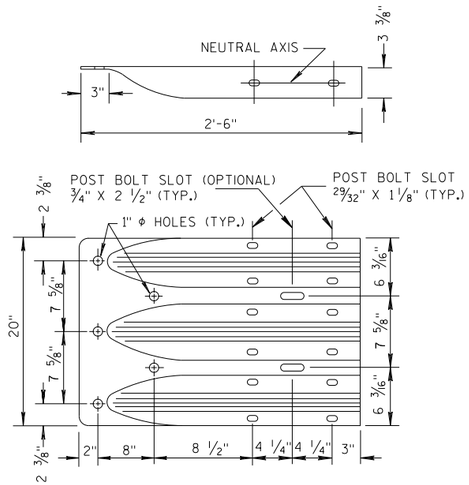
SECTION B-B

POST 6

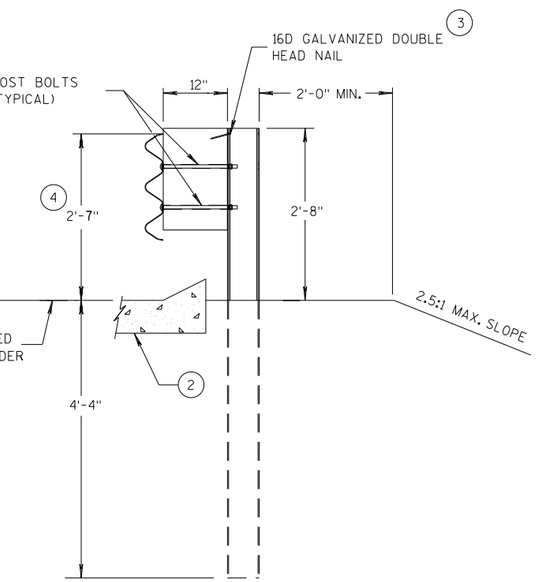


SECTION C-C

POSTS 7-11

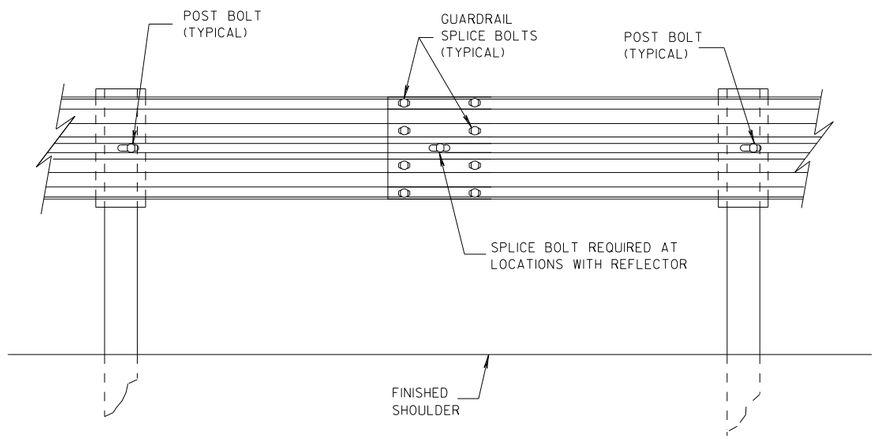


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

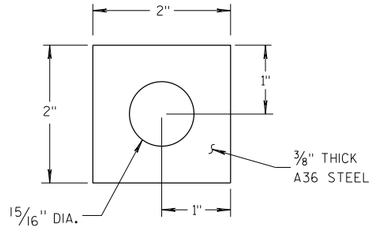
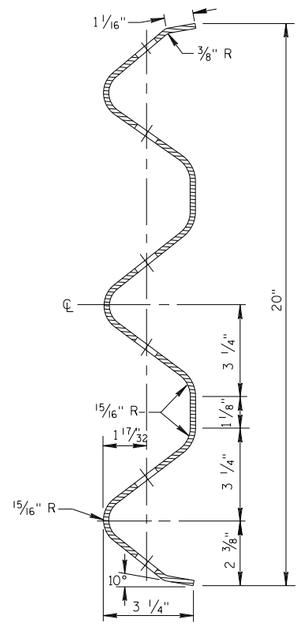


PLATE WASHER DETAIL



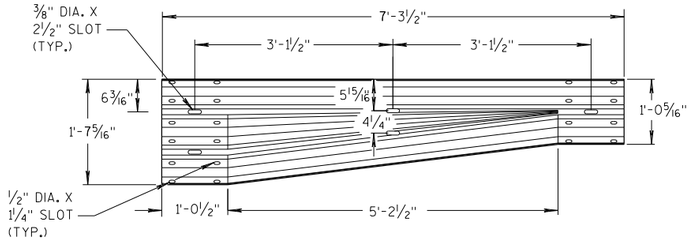
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

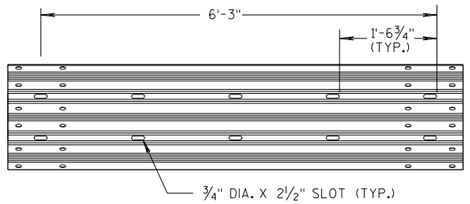
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

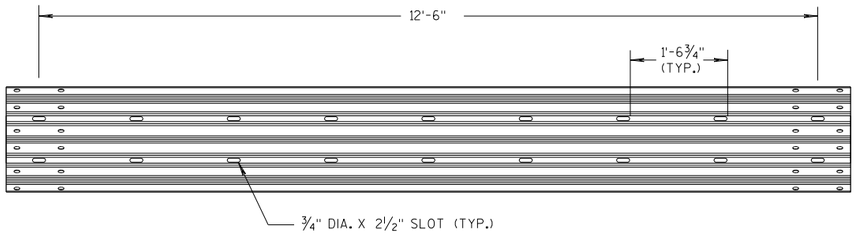
S.D.D. 14 B 45-5b



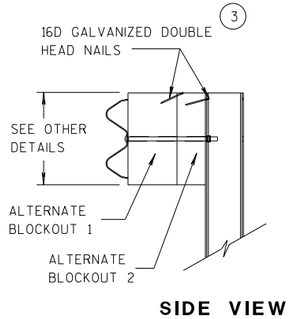
W-BEAM TO THRIE BEAM TRANSITION SECTION



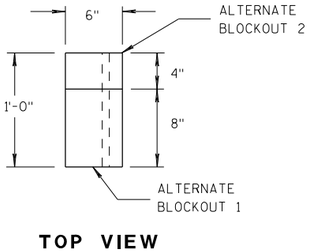
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

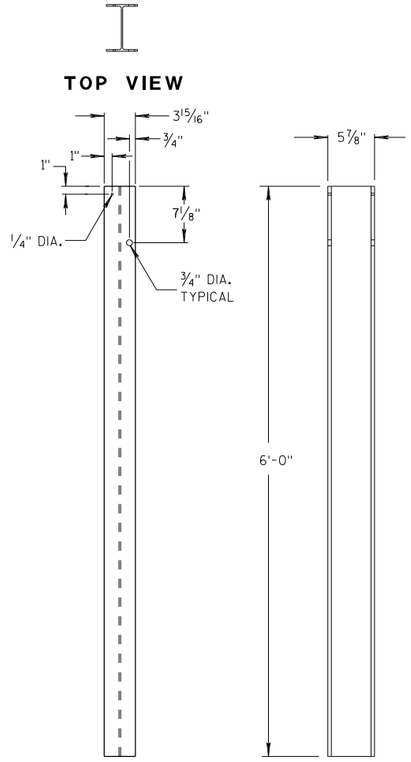


SIDE VIEW



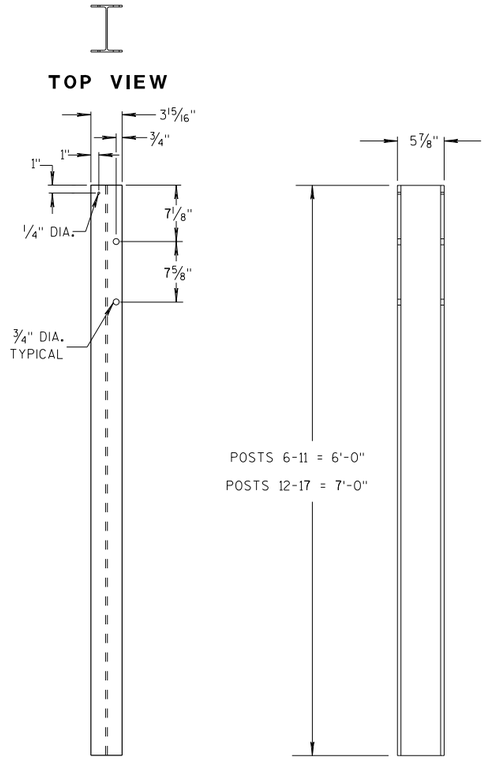
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



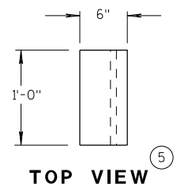
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

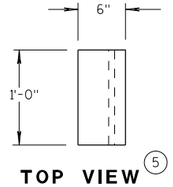


FRONT VIEW SIDE VIEW

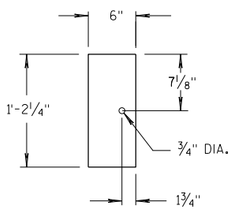
STEEL POSTS 6-17



TOP VIEW (5)

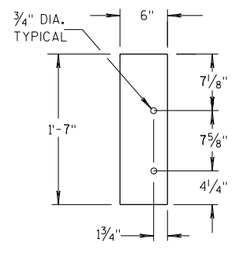


TOP VIEW (5)



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.

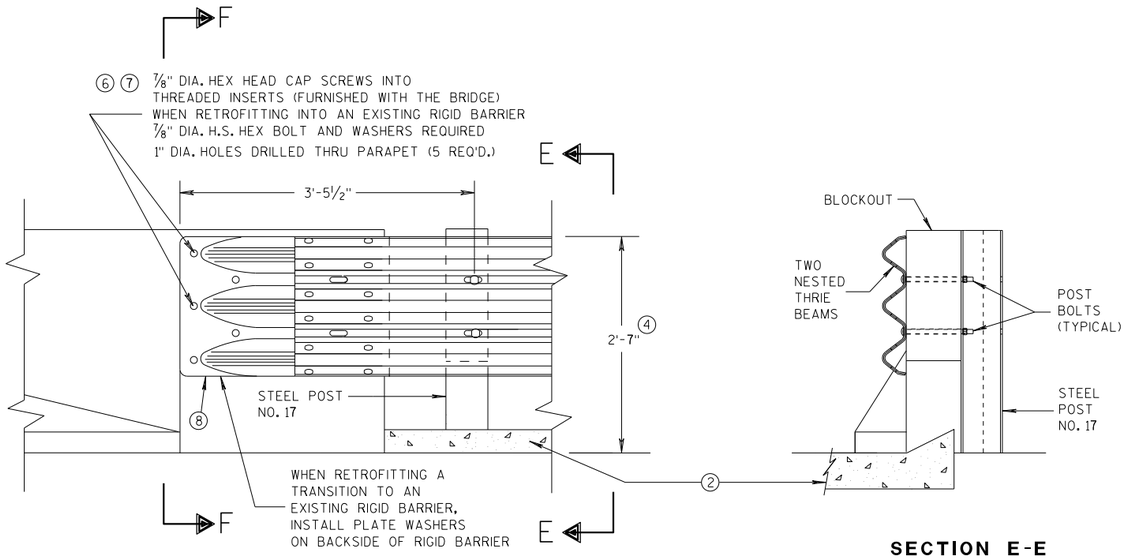
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

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.

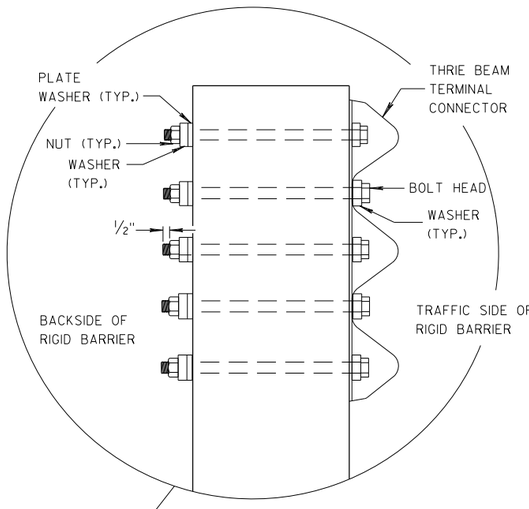
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

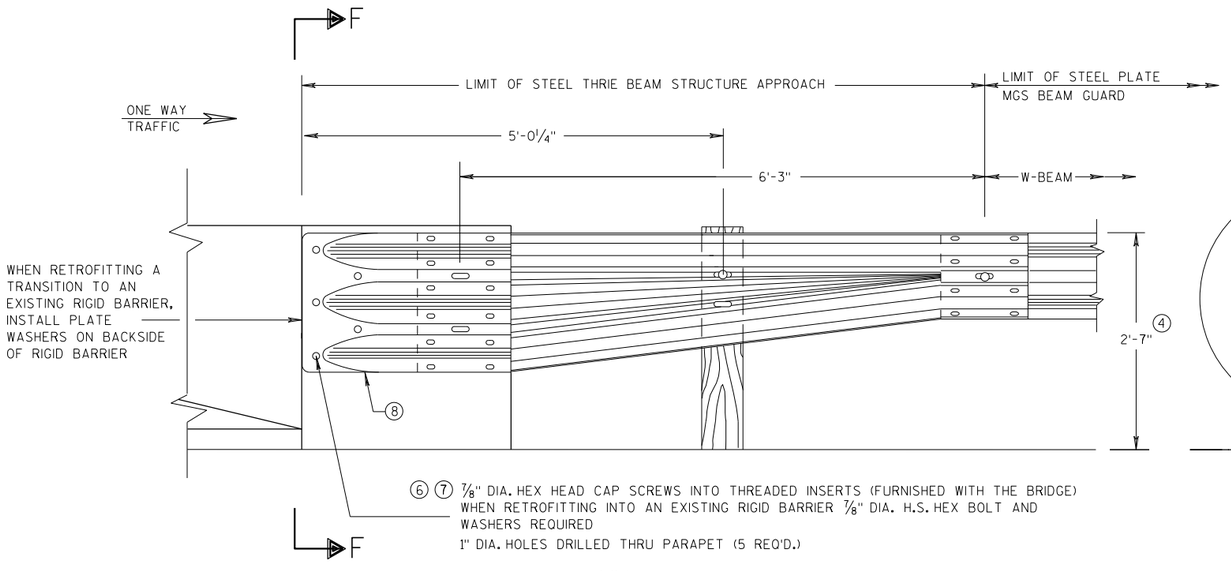
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

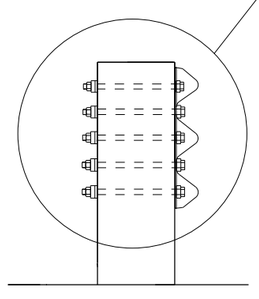
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

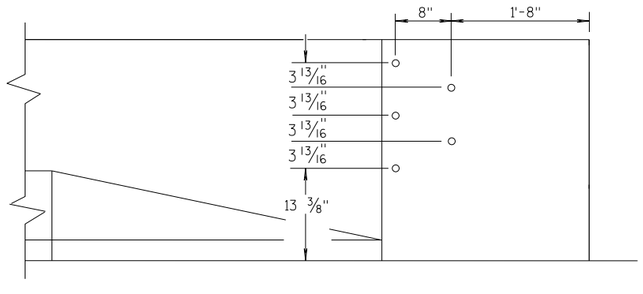




FRONT VIEW



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 UNIT SUPERVIS NT
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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.

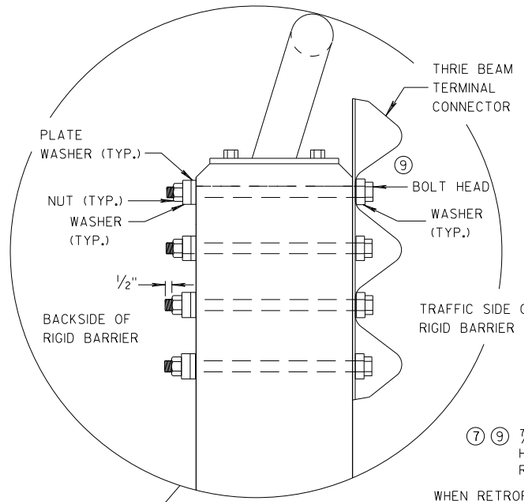
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

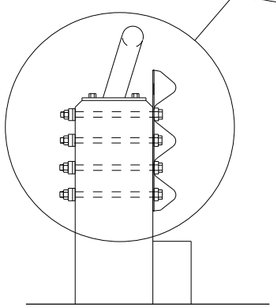
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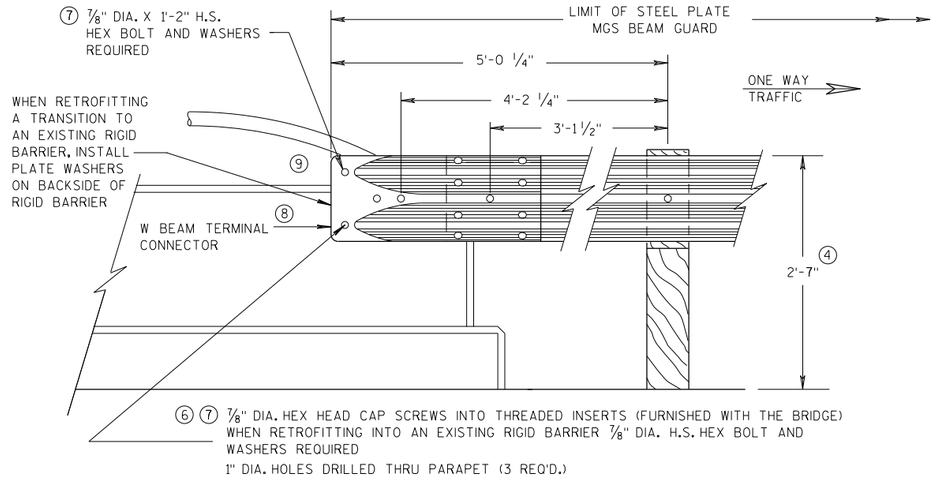
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





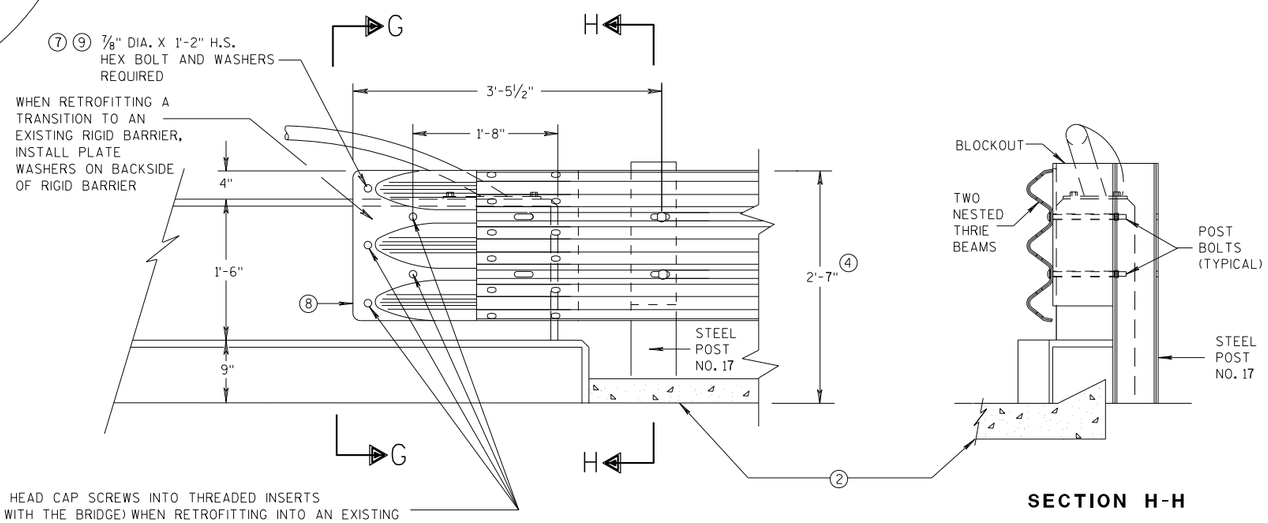
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

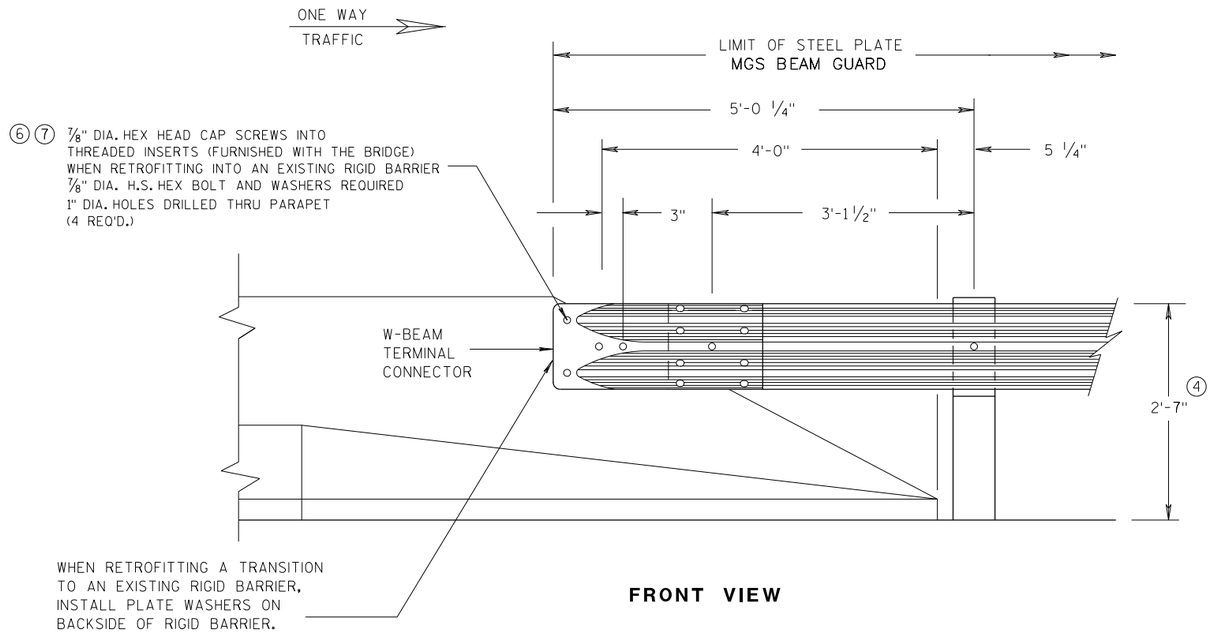
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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

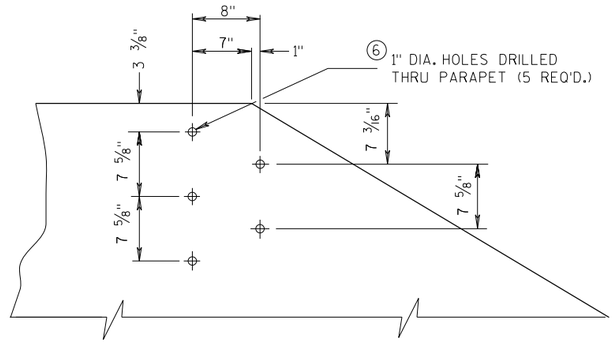
GENERAL NOTES

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

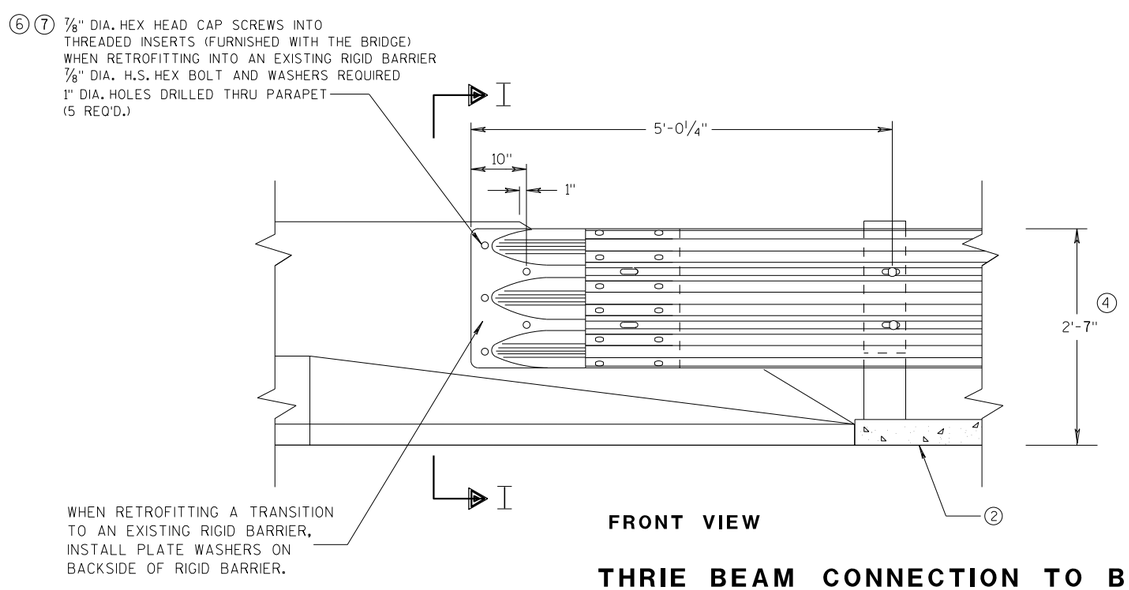
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

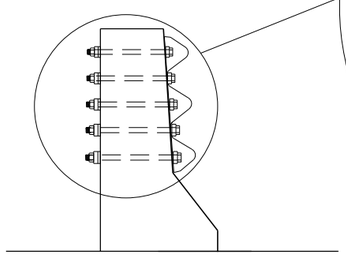
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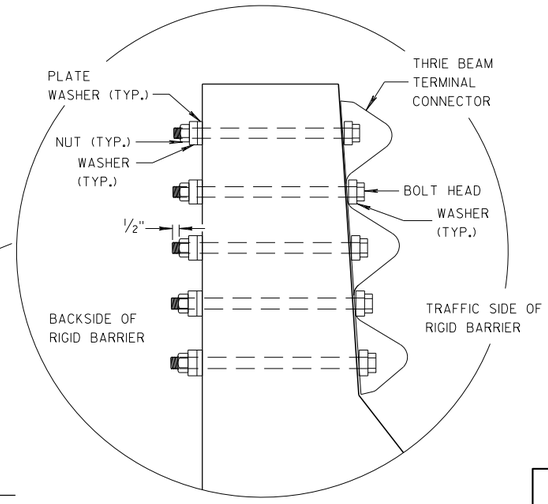
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



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

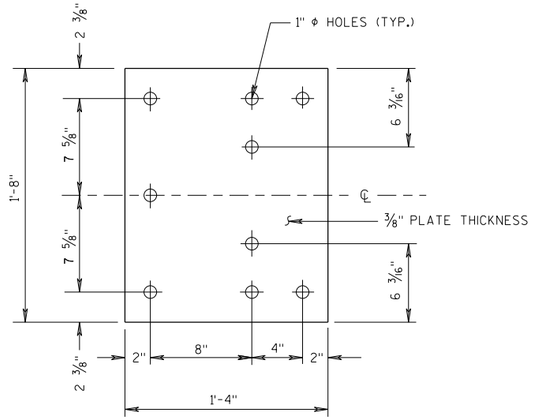
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FHWA

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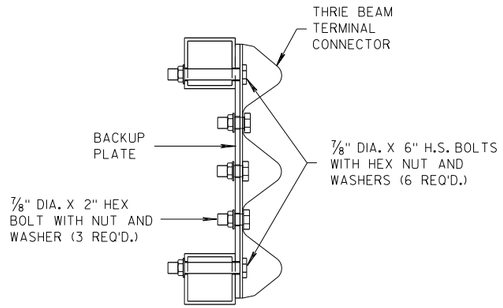
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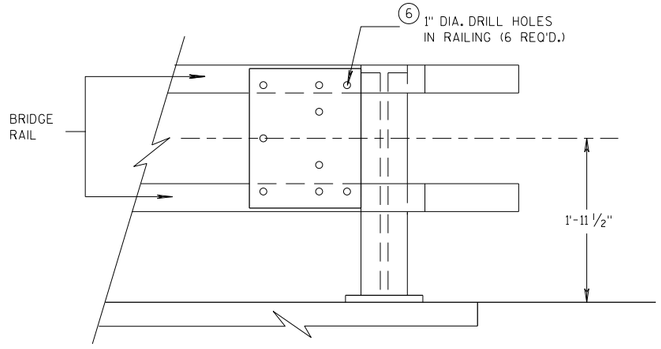
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BACK-UP PLATE DETAIL



SECTION J-J

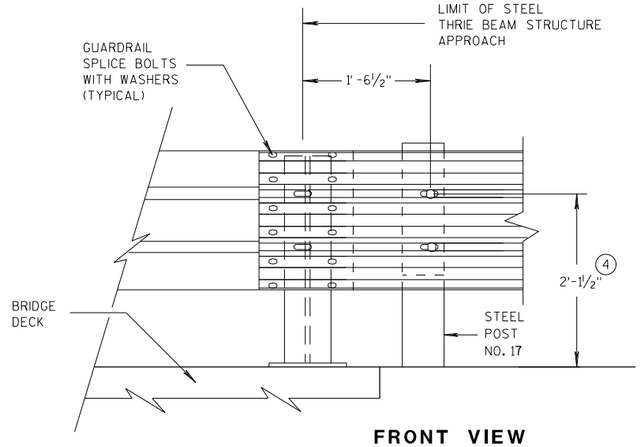


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

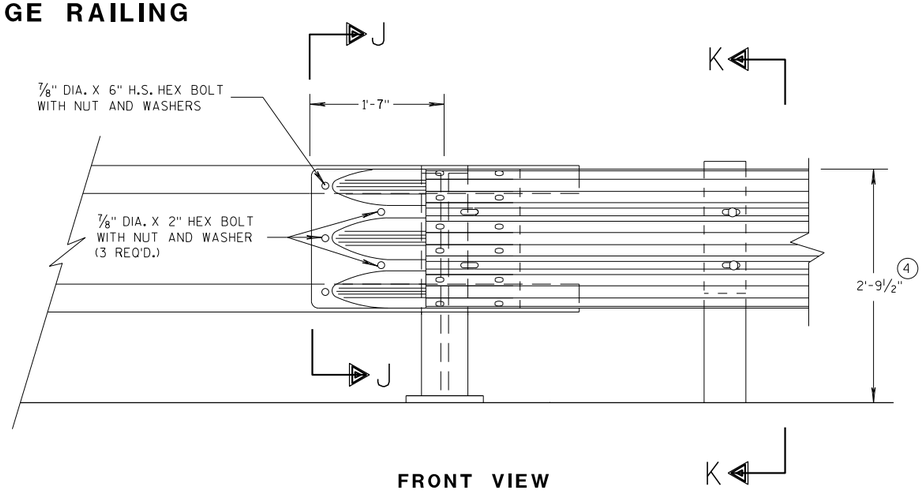
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

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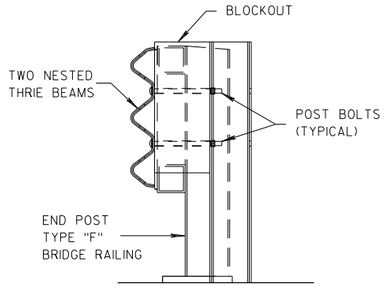


FRONT VIEW

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

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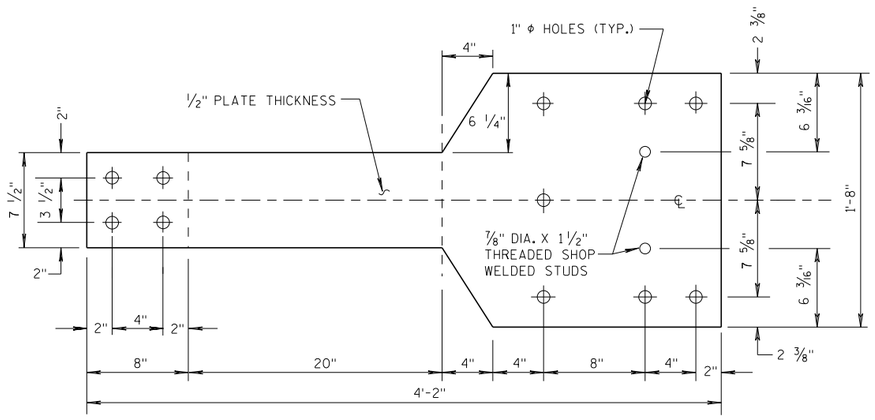
S.D.D. 14 B 45-5g

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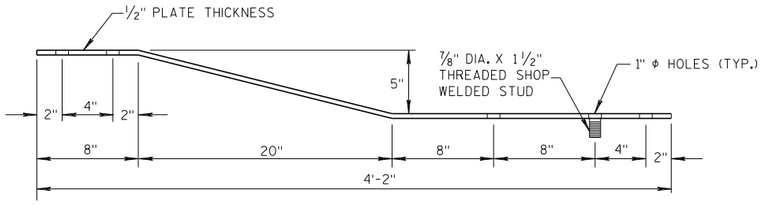
S.D.D. 14 B 45-5g

GENERAL NOTES

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

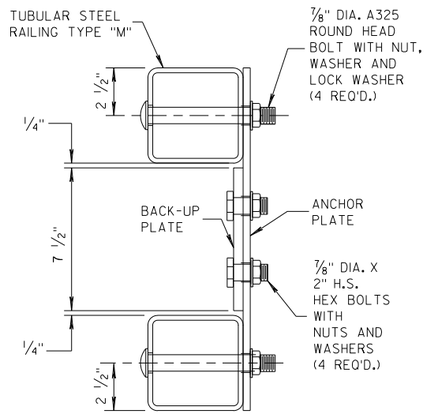


FRONT VIEW

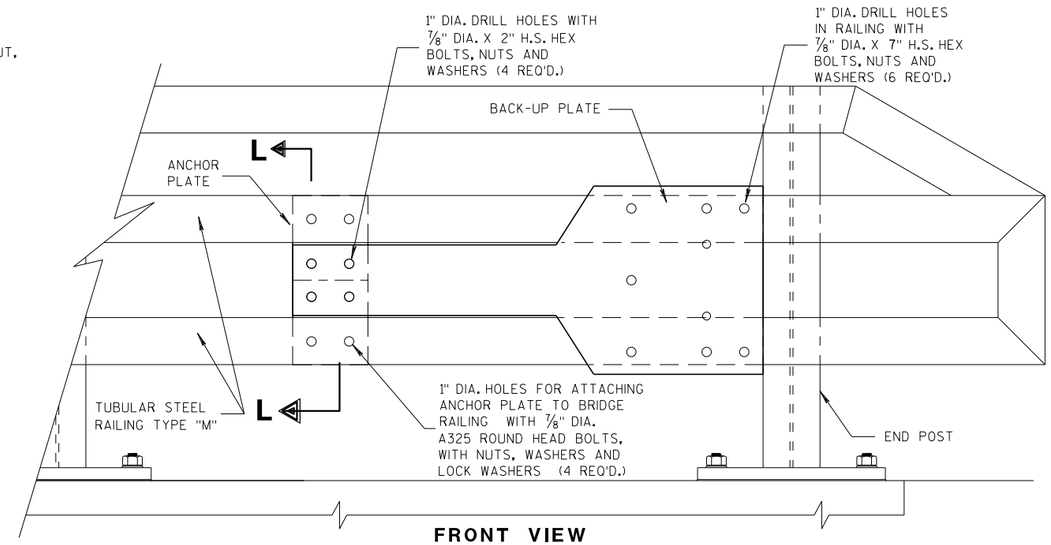


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"



SECTION L-L

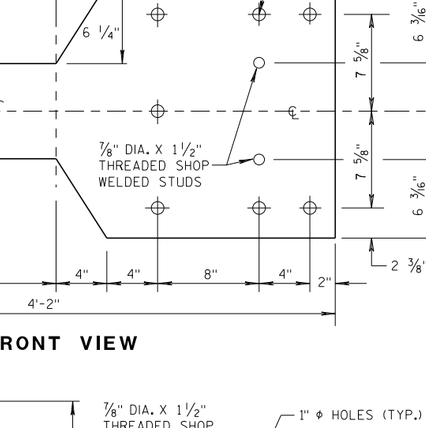


FRONT VIEW

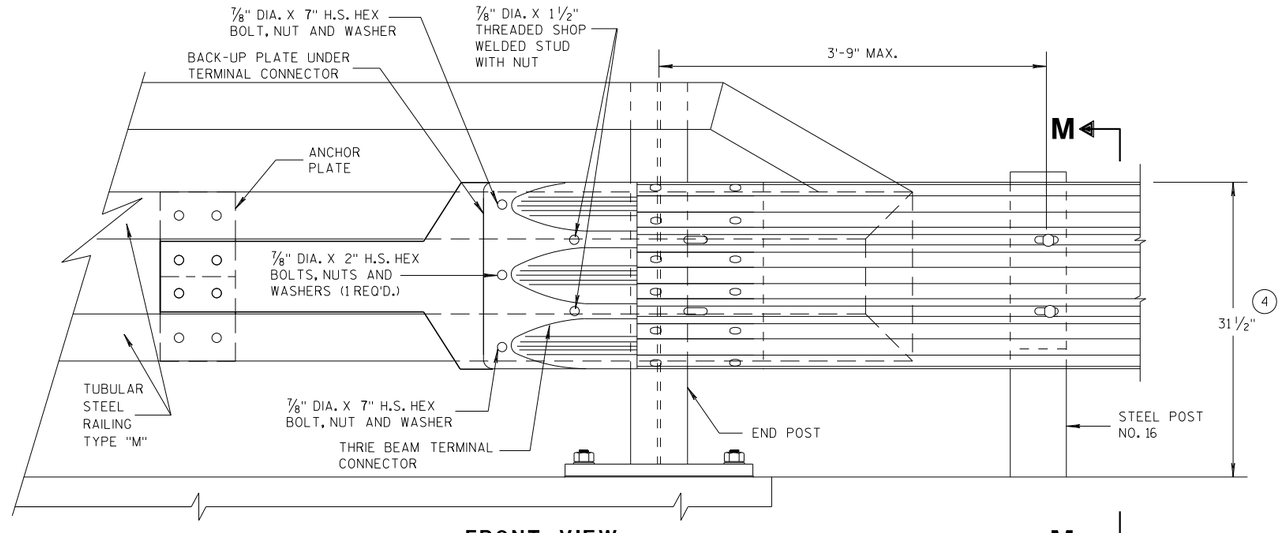
ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

FRONT VIEW

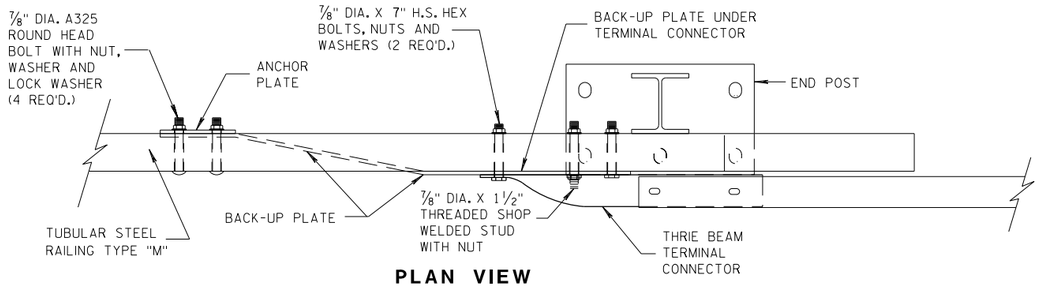
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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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.

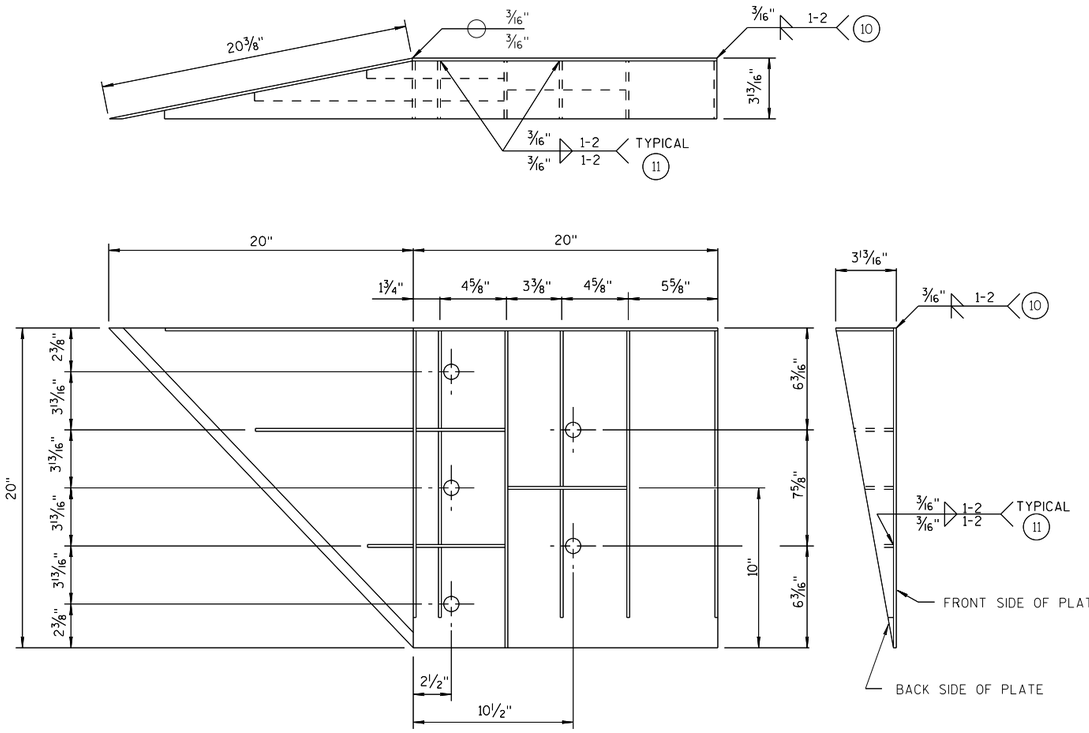
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

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".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

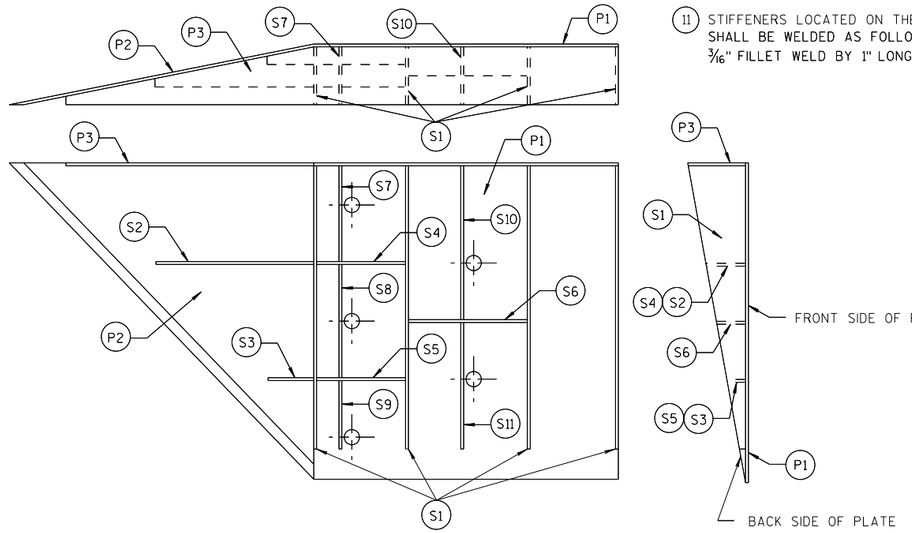


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

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

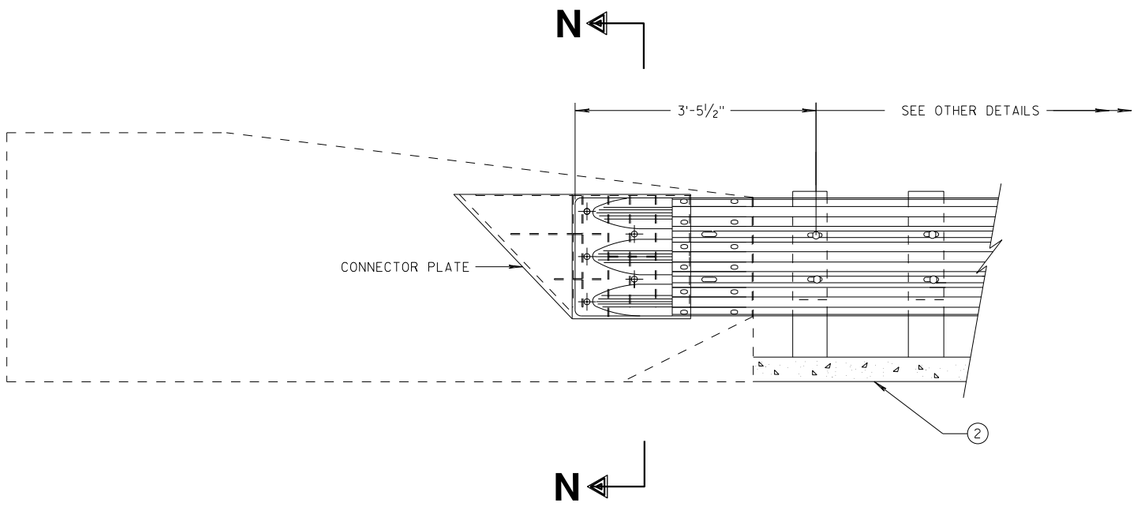
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

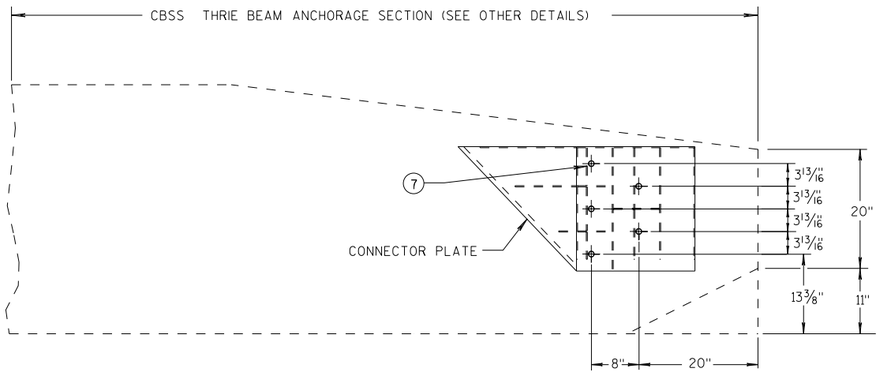
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



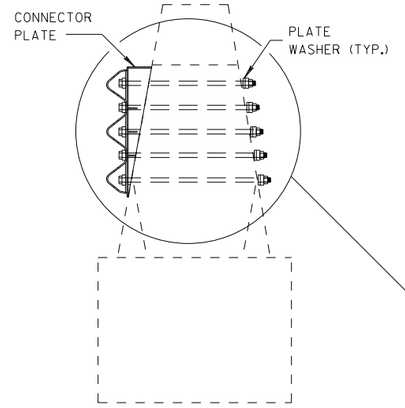
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

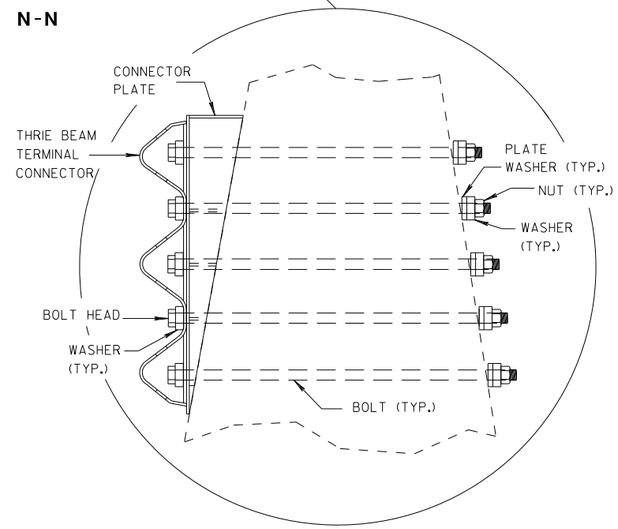
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

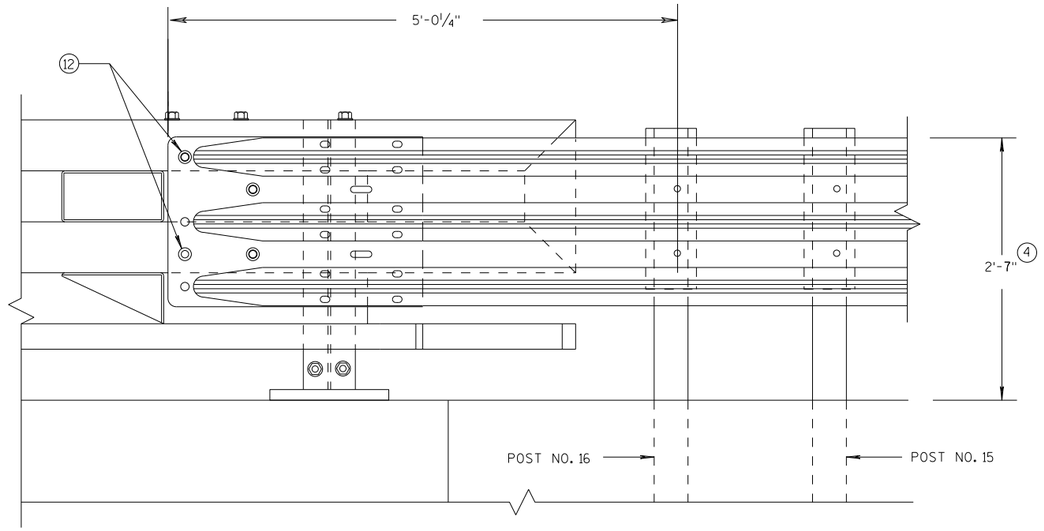
STATE OF WISCONSIN
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UNIT SUPERVIS

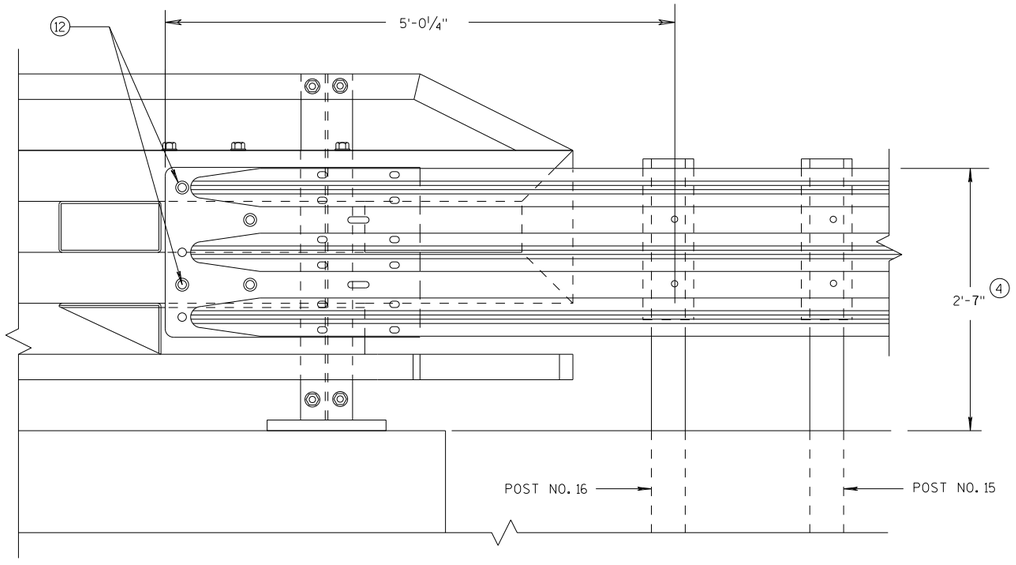
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ELEVATION OF DETAIL AT NY3 END POST

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
UNIT SUPERVIS
FHWA

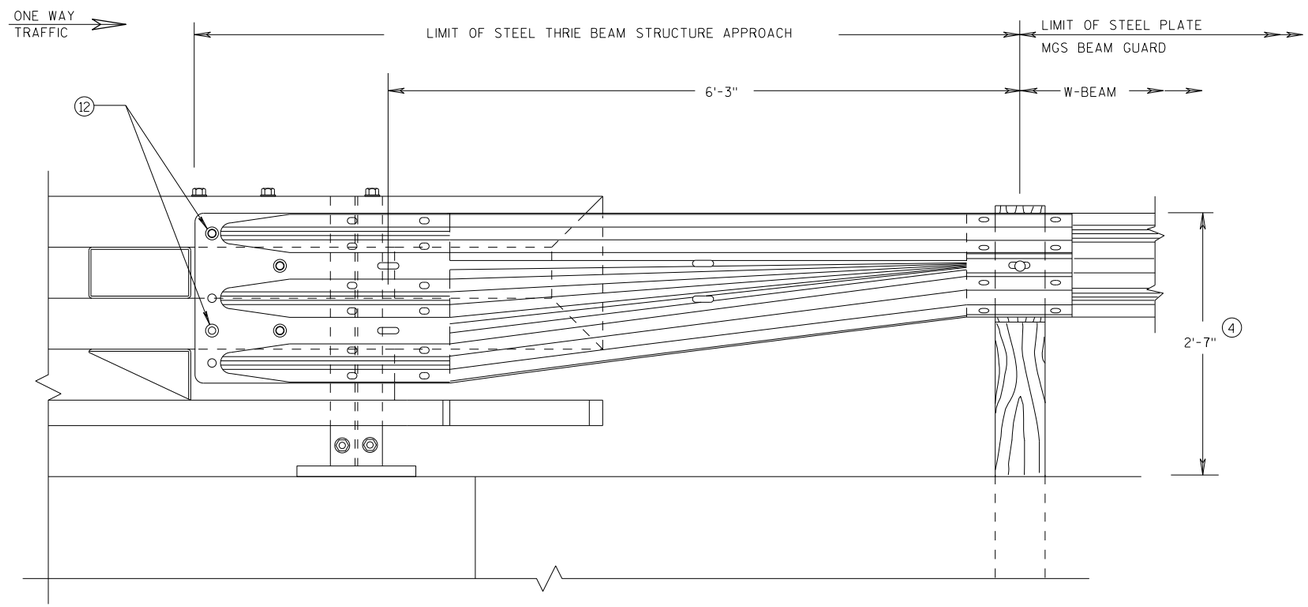
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S.D.D. 14 B 45-5k

6

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



FRONT VIEW

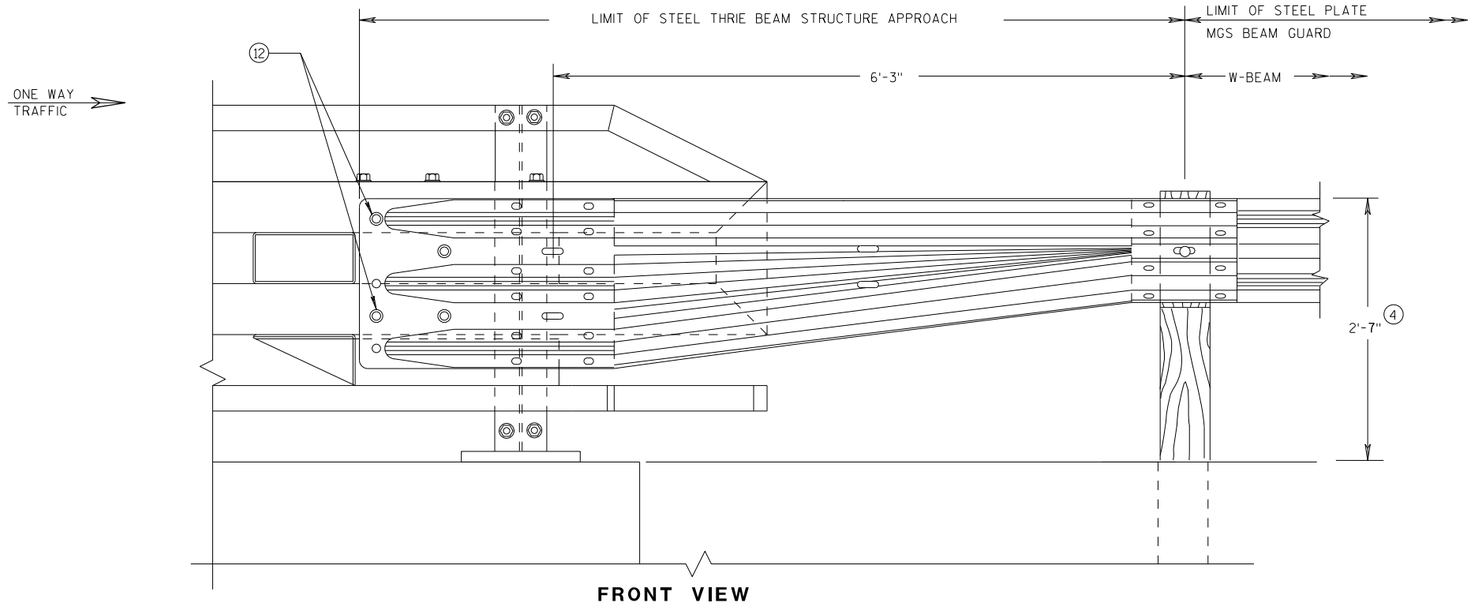
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(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
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

151

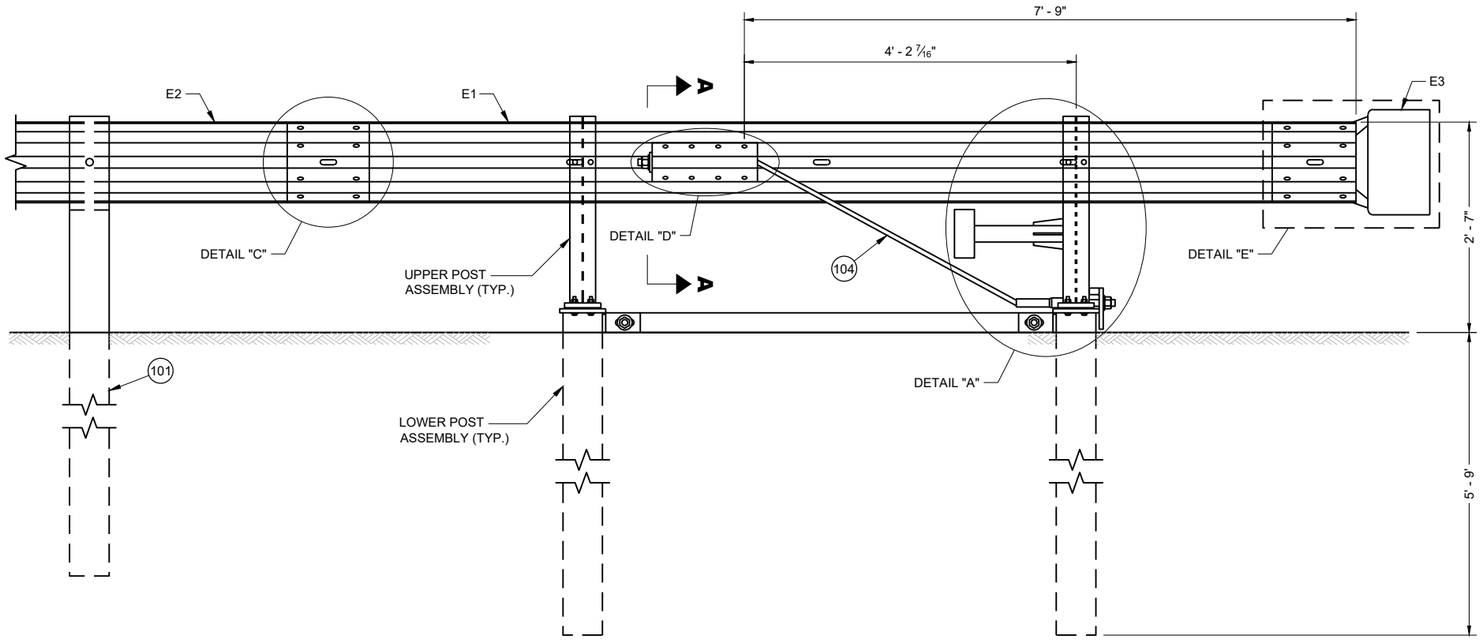
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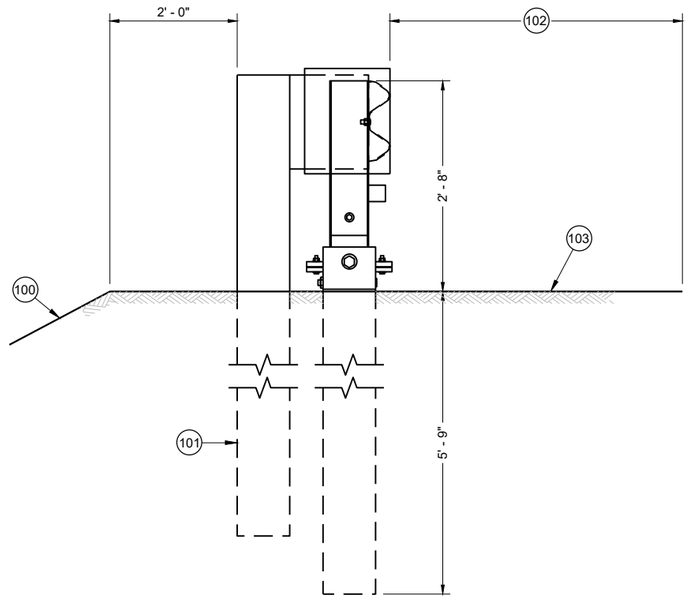
S.D.D. 14 B 45-5L

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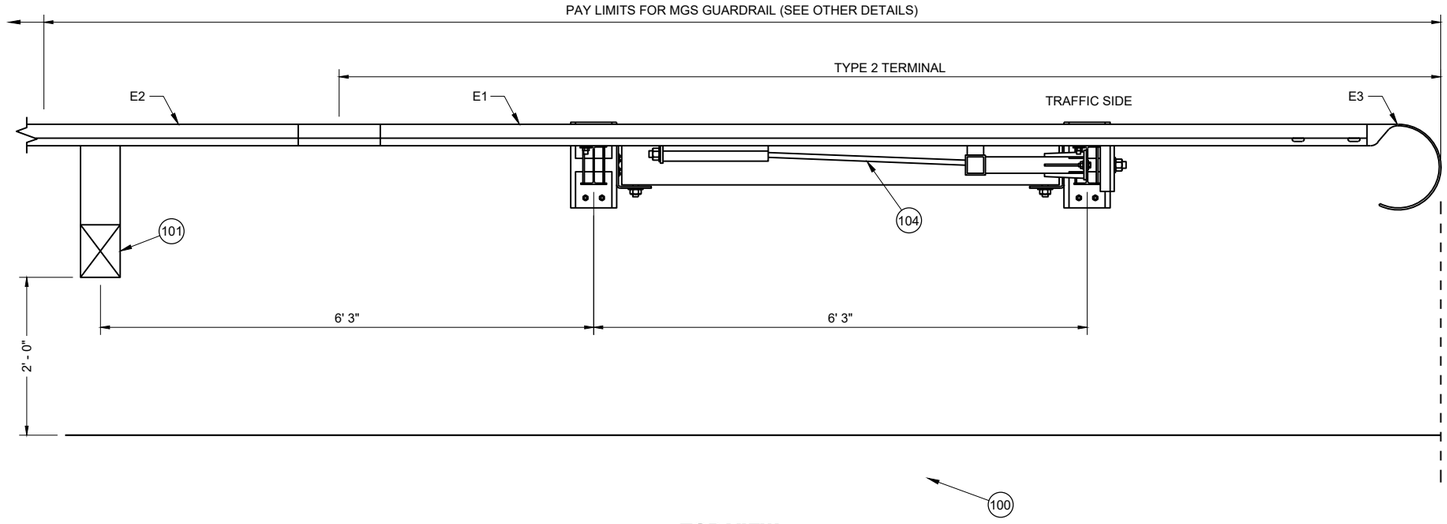
S.D.D. 14 B 45-5L



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

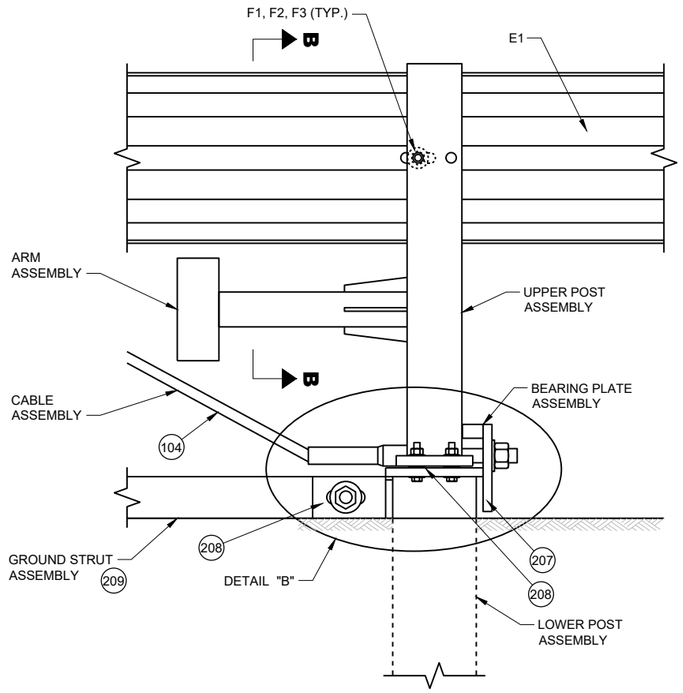
(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

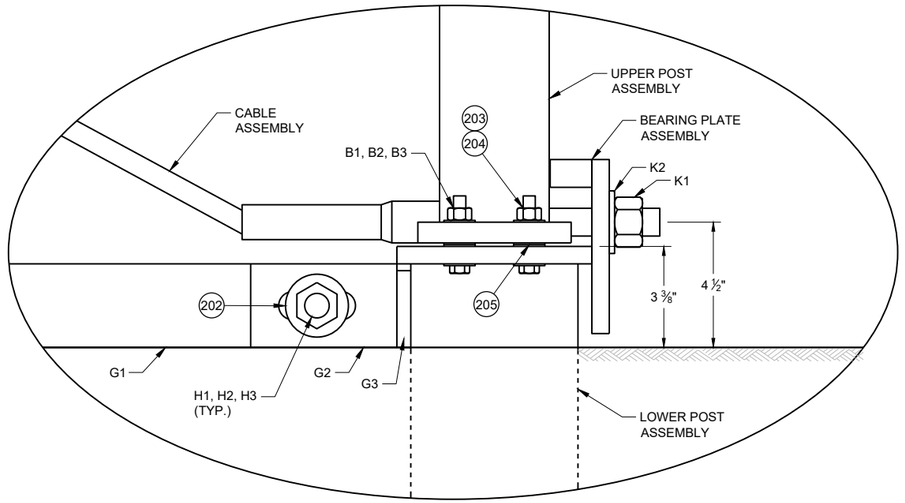
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

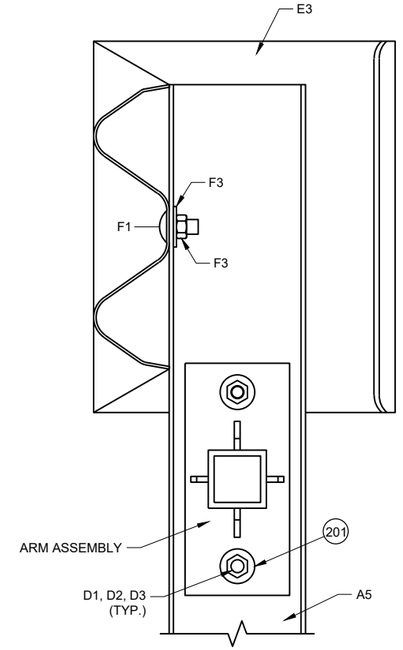
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



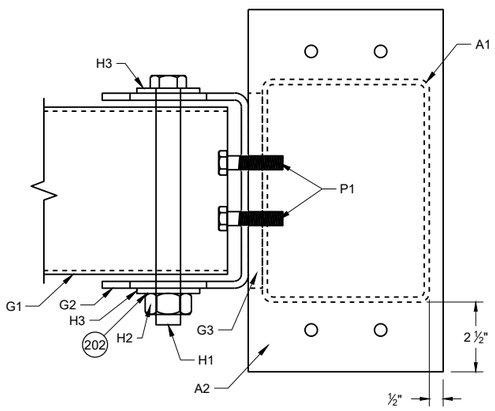
DETAIL "A"



DETAIL "B"

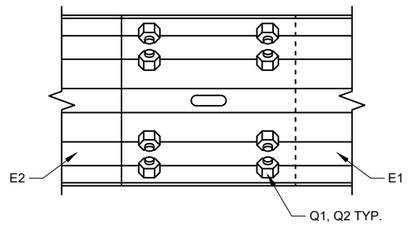


SECTION B - B

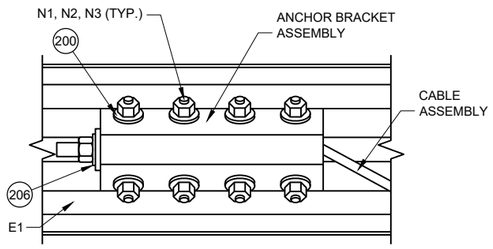


TOP VIEW

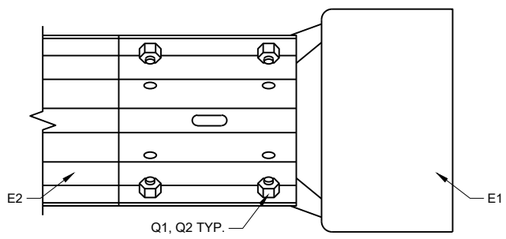
GROUND STRUT CONNECTION DETAIL



DETAIL "C"



DETAIL "D"



DETAIL "E"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

207 NO MATERIAL IS TO BE PLACED AGAINST THE VERTICAL FACES OF BEARING PLATE.

208 PREVENT OR REMOVE MATERIALS THAT BLOCK ACCESS TO BOLTS FOR POST ASSEMBLIES AND GROUND STRUT.

209 PREVENT OR REMOVE MATERIALS THAT IMPEDE REMOVAL OF GROUND STRUT.

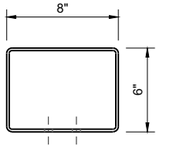
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

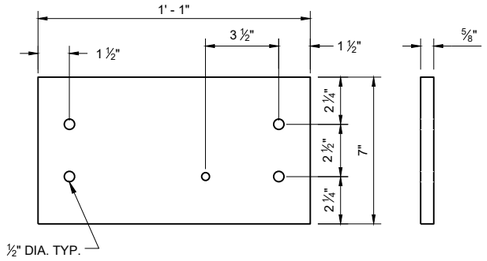
6
SDD 14B47-06b

GENERAL NOTES

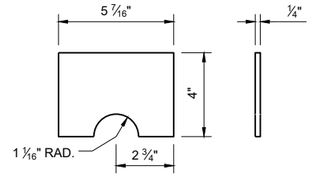
(300) TAP FOR 1/2" AFTER GALVANIZATION



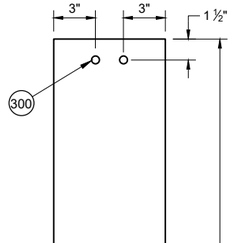
TOP VIEW



LOWER PLATE (A2)

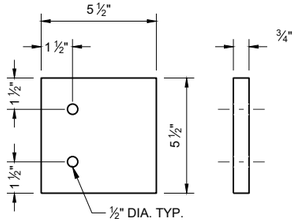


POST GUSSET (A3)

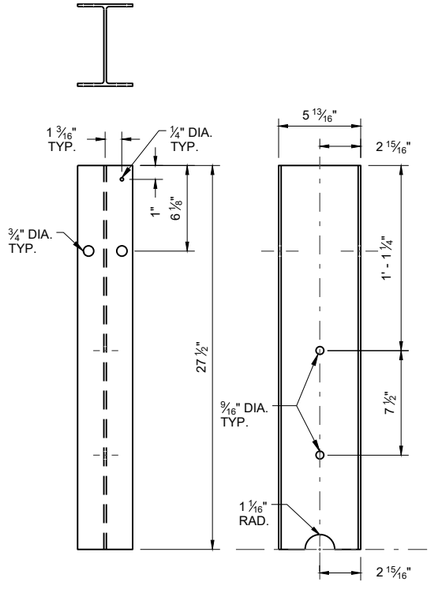


SIDE VIEW

FOUNDATION TUBE (A1)

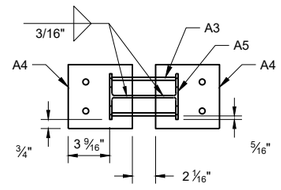


UPPER PLATE (A4)

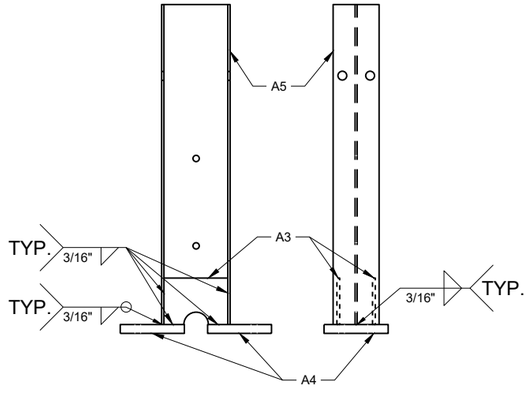


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

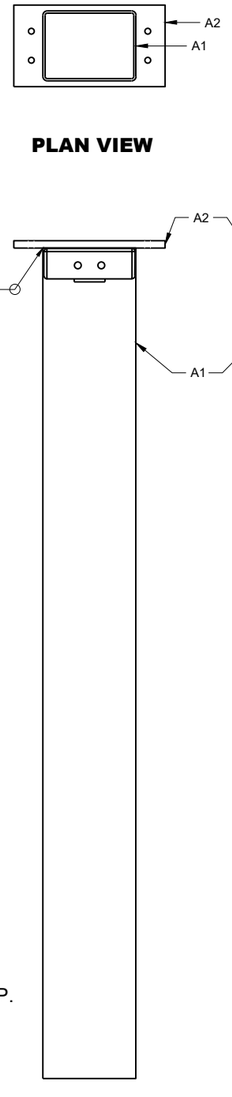


PLAN VIEW



SIDE VIEW FRONT VIEW

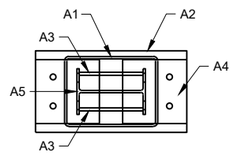
UPPER POST ASSEMBLY

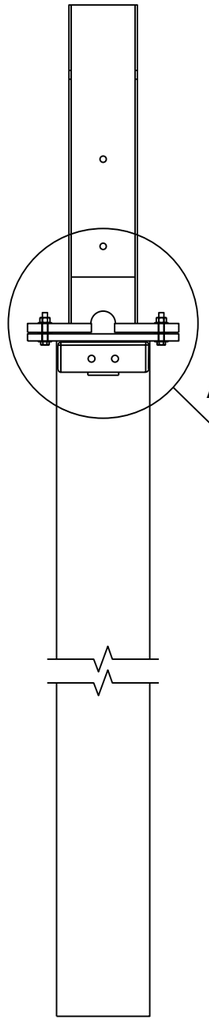


PLAN VIEW

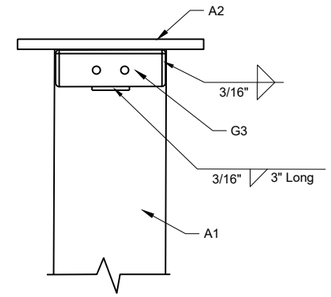
FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY

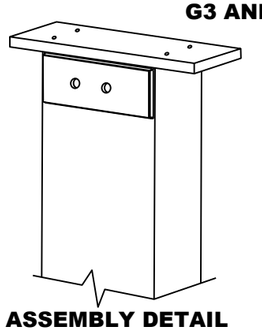




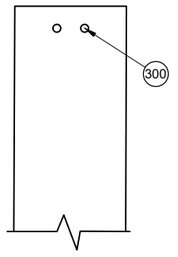
ASSEMBLED POST



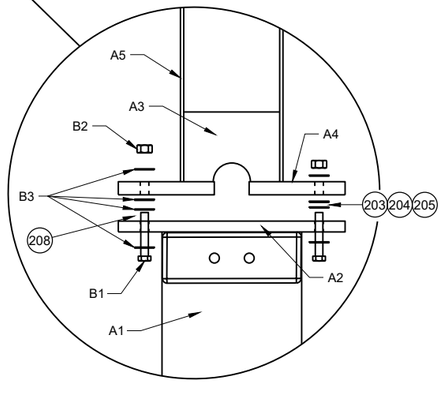
WELDING DETAIL G3 AND A1



ASSEMBLY DETAIL ISOMETRIC



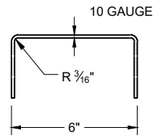
A1



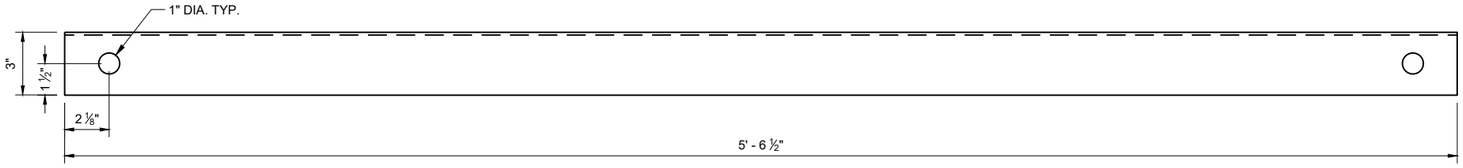
POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

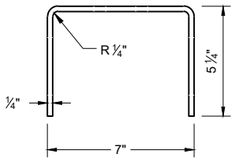


SIDE VIEW

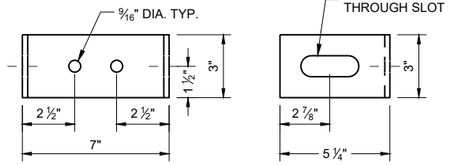


FRONT VIEW

GROUND STRUT CHANNEL (G1)

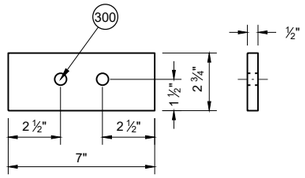


TOP VIEW

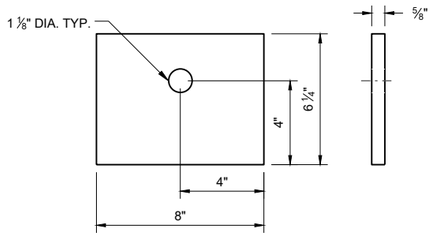


FRONT VIEW SIDE VIEW

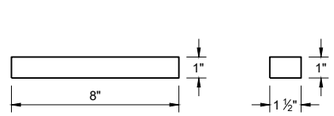
GROUND STRUT CONNECTOR (G2)



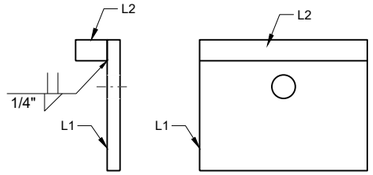
GROUND STRUT PLATE (G3)



BEARING PLATE (L1)

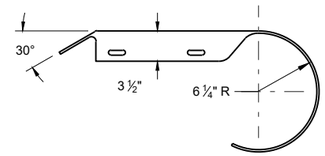


BEARING PLATE FLANGE (L2)

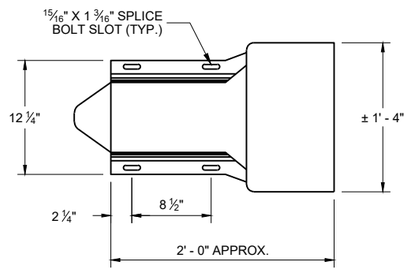


SIDE VIEW FRONT VIEW

BEARING PLATE ASSEMBLY



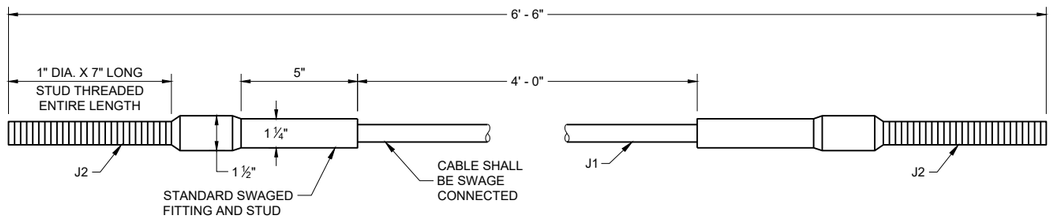
PLAN VIEW



ELEVATION VIEW

ROUNDED BUFFER END (E3)

TYPE 2 GUARDRAIL (E1)



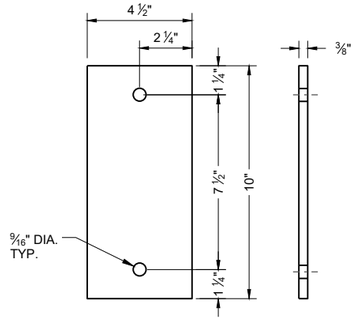
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

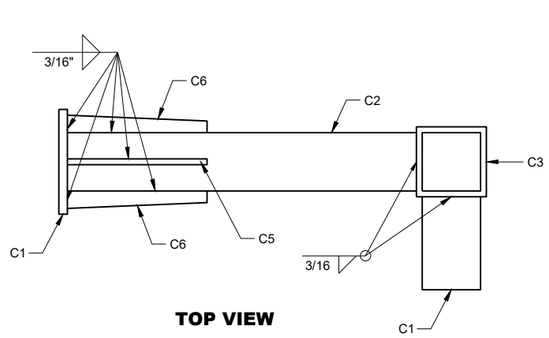
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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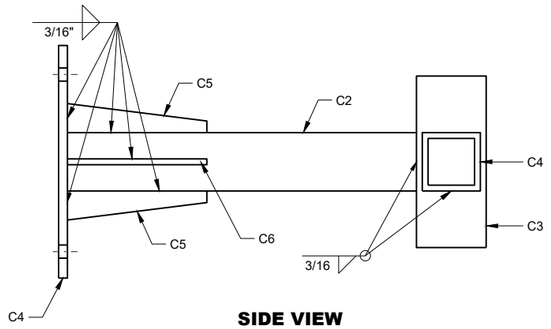
SDD 14B47-06d



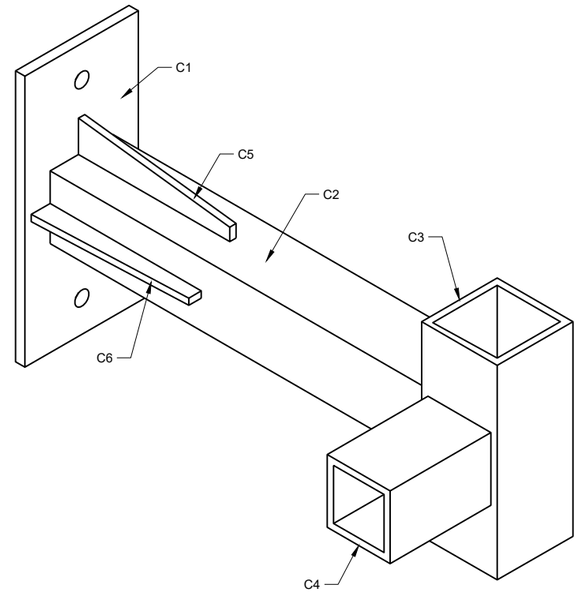
ARM PLATE (C1)



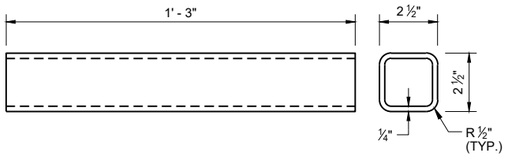
TOP VIEW
ARM ASSEMBLY



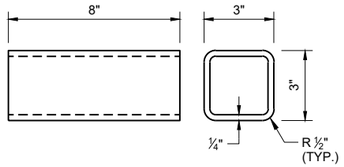
SIDE VIEW
ARM ASSEMBLY



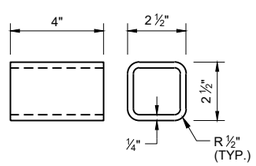
ISOMETRIC VIEW
ARM ASSEMBLY



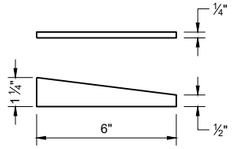
ARM TUBE 1 (C2)



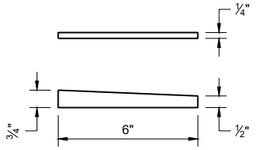
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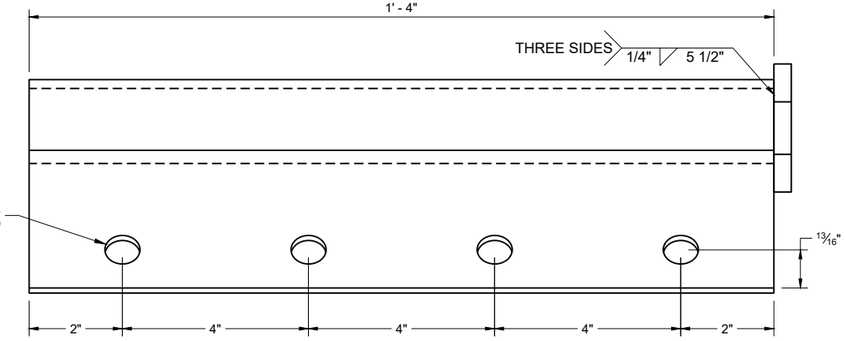
ARM TUBE 3 (C4)

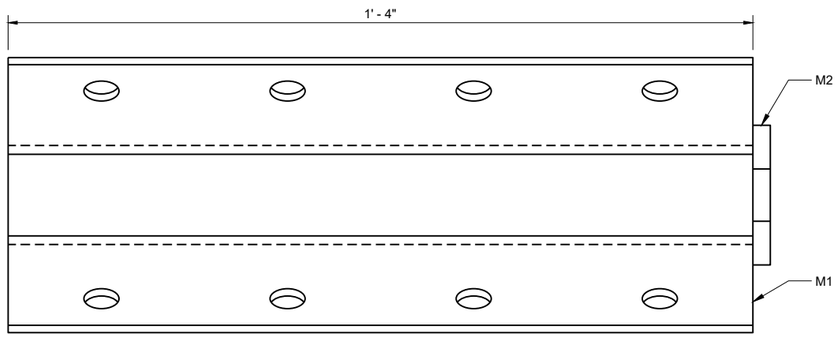


ARM GUSSET PLATE 1 (C5)

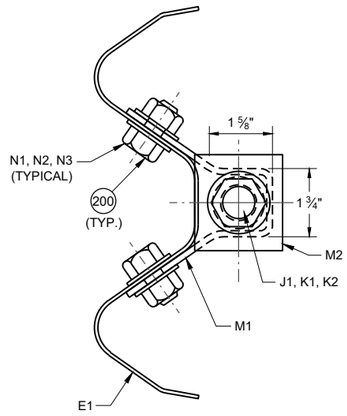


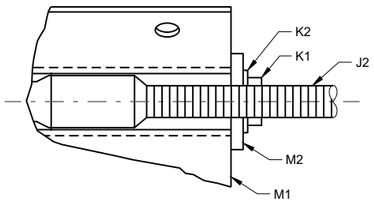
ARM GUSSET PLATE 2 (C6)



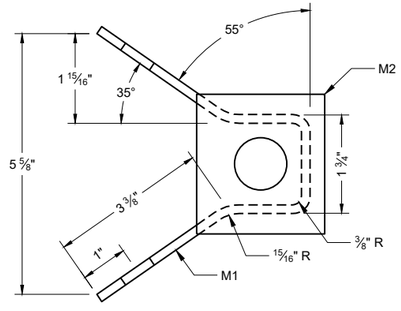


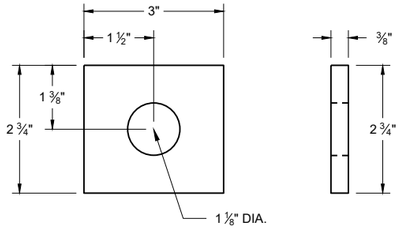
ANCHOR BRACKET (M1, M2)





SECTION A - A





ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47-06e

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER 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	5/8" THICKNESS
A3	POST GUSSET	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	1/4" THICKNESS
A4	UPPER 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	3/4" THICKNESS
A5	TYPE 2 POST	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, w6x9 or w6x8.5	
B1	BREAKAWAY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX 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.	7/16" DIA.
B2	BREAKAWAY BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/16" DIA.
B3	BREAKAWAY BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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	
C1	ARM ASSEMBLY 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	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET 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	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET 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	1/4" THICKNESS
D1	ARM ASSEMBLY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	1/2" DIA.
D2	ARM ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	1/2" DIA.
D3	ARM ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	POST BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
F3	POST BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
G1	GROUND STRUT CHANNEL	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	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	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	1/4" THICKNESS
G3	GROUND STRUT 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	1/2" THICKNESS

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47-06f

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	3/4" DIA.
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING 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	5/8" THICKNESS
L2	BEARING PLATE FLANGE	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	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	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	
M2	BEAM GUARD ANCHOR 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	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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	1/2" DIA.
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. 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 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

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SDD 14B47-06g

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

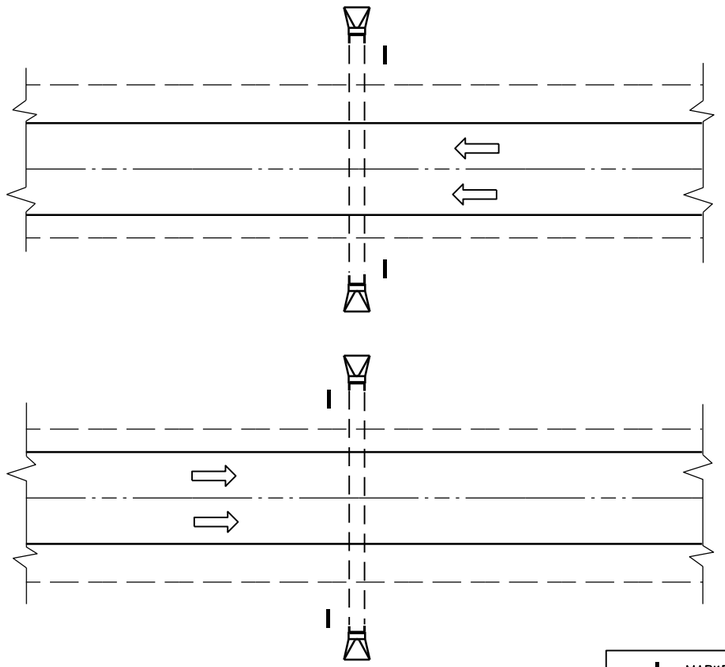
APPROVED
December 2024
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

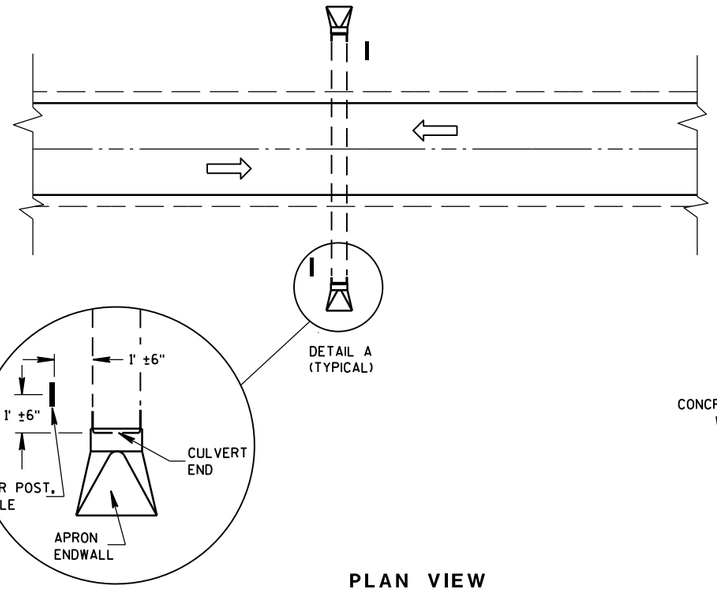
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SDD 14B47-06g



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

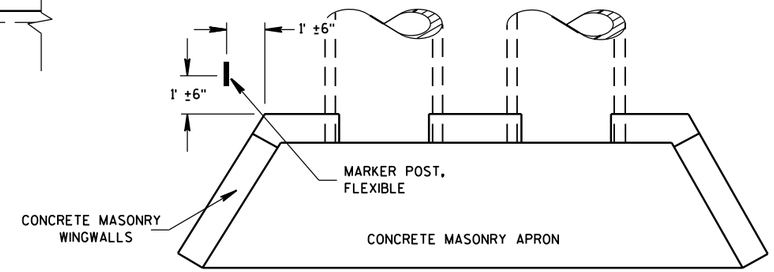
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

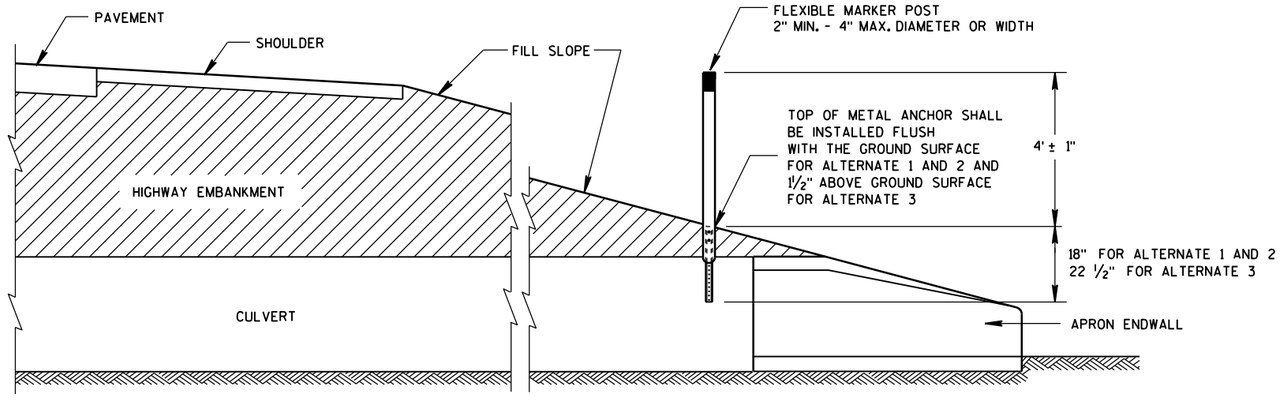
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

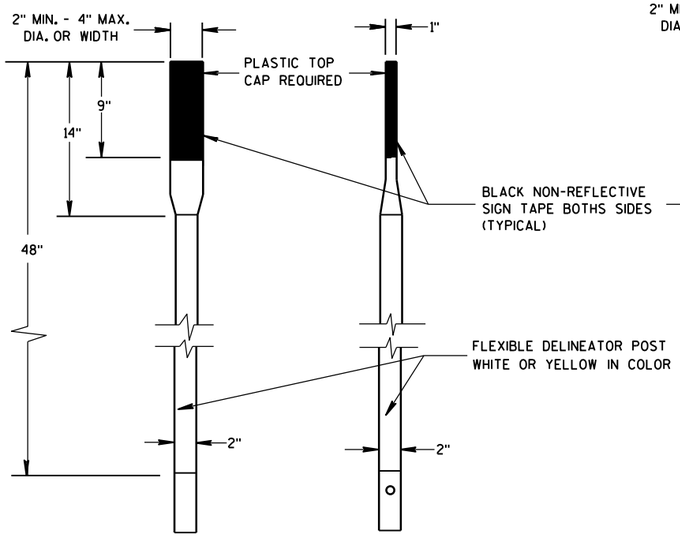
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DEPARTMENT OF TRANSPOI

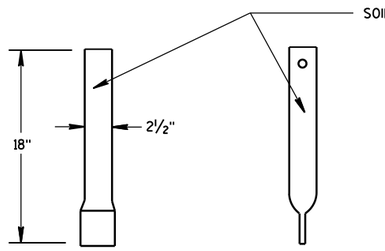
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S.D.D. 15 A 3-2a

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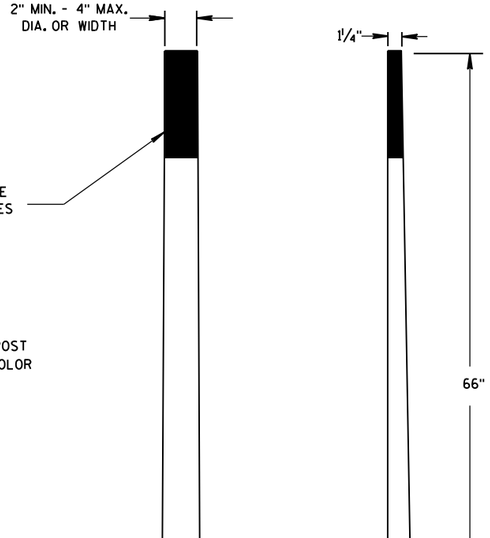
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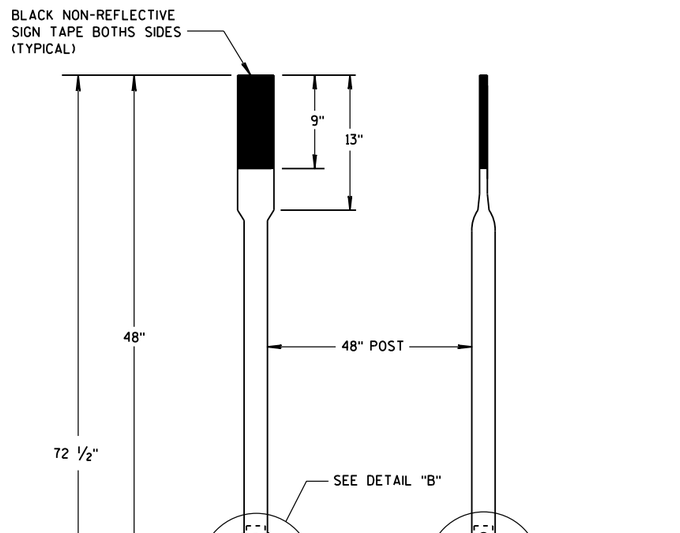
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

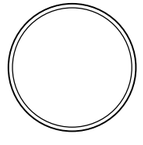
ALTERNATE 2



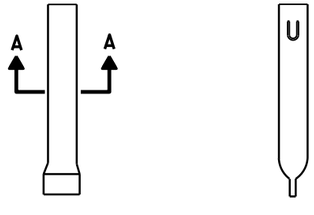
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

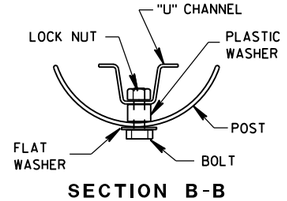


SECTION A-A

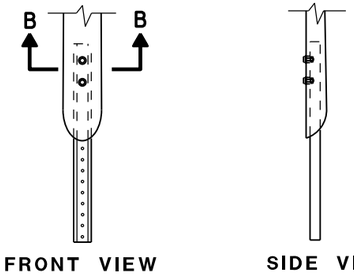


FRONT VIEW SIDE VIEW

ALTERNATE 1

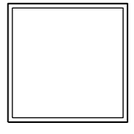


SECTION B-B

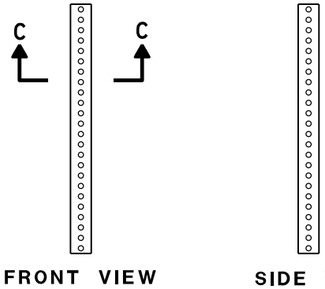


FRONT VIEW SIDE VIEW

ALTERNATE 2



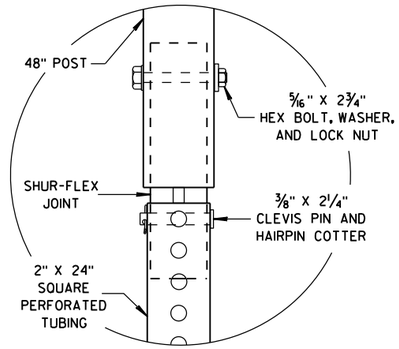
SECTION C-C



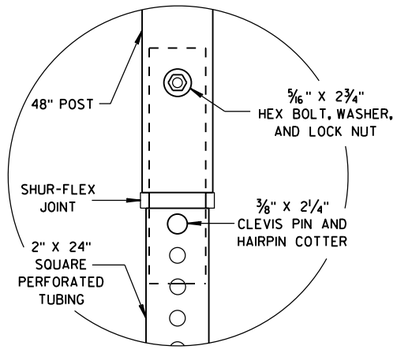
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

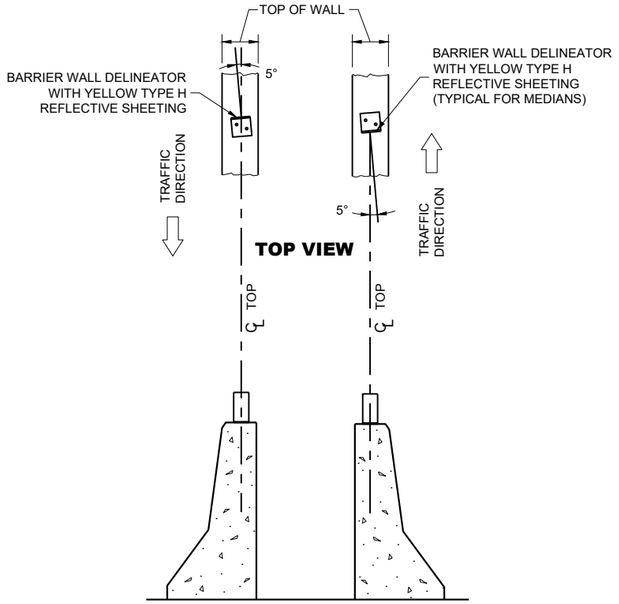
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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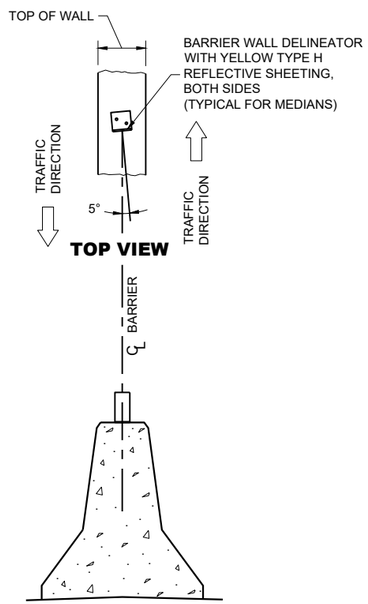
S.D.D. 15 A 3-2b

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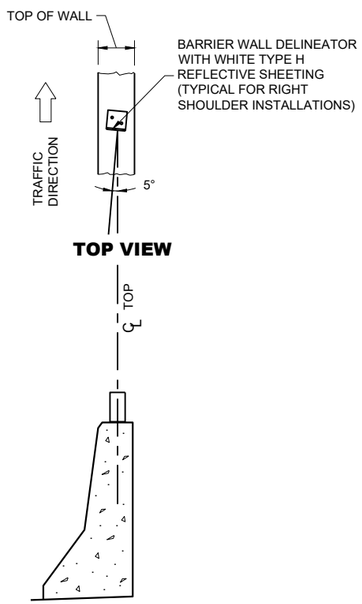
S.D.D. 15 A 3-2b



SIDE VIEW
DOUBLE BARRIERS IN MEDIAN

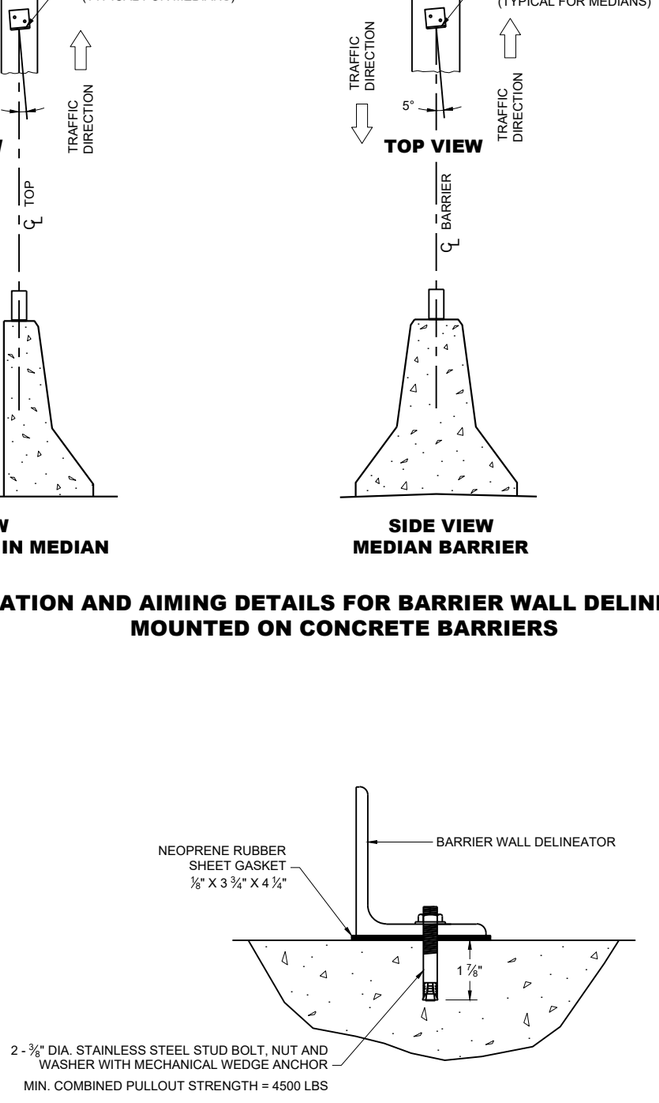


SIDE VIEW
MEDIAN BARRIER

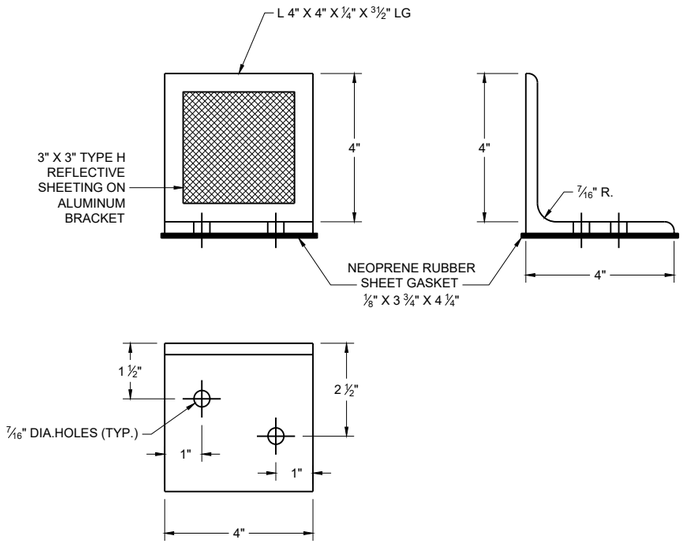


SIDE VIEW
TO RIGHT OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR BARRIER WALL DELINEATOR MOUNTED ON CONCRETE BARRIERS



BARRIER WALL DELINEATOR
MOUNTING DETAIL



BARRIER WALL DELINEATOR

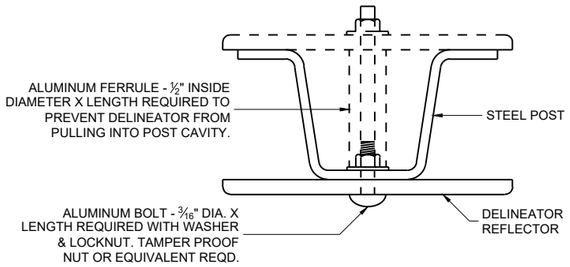
REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

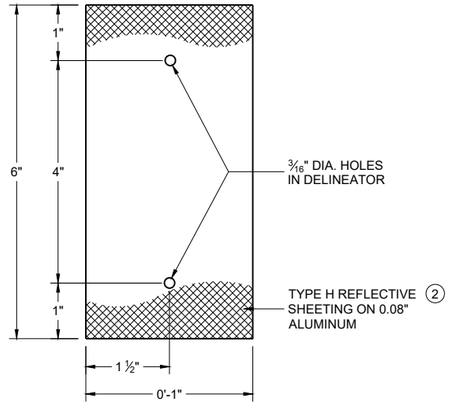
BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

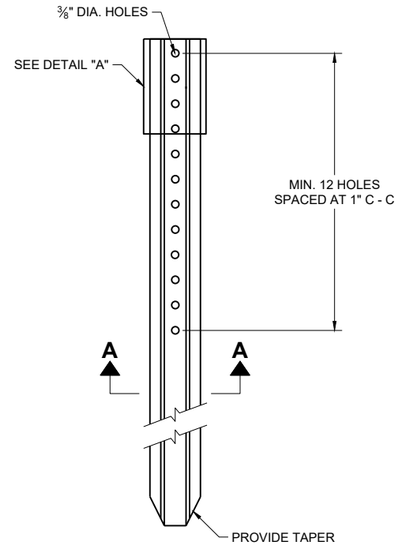
APPROVED
March 2024 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA



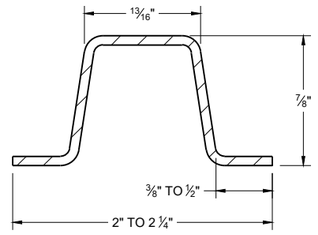
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



DELINEATOR POST



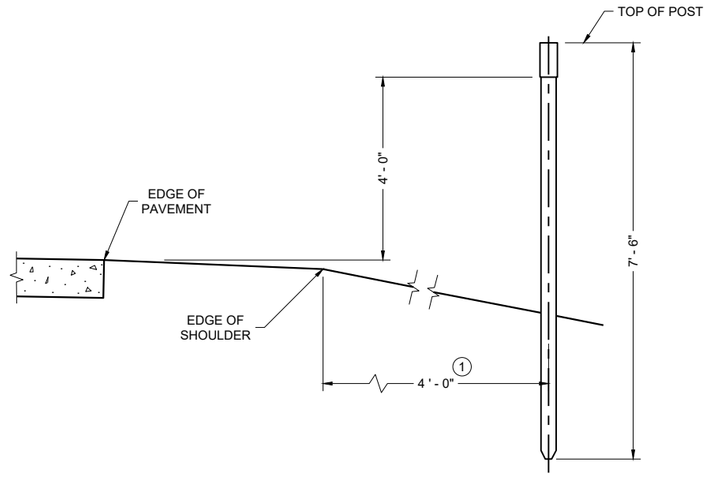
SECTION A - A

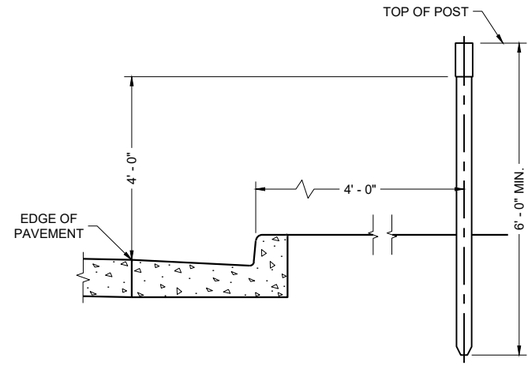
WEIGHT 1.12 LBS PER FT. \ 0.1 LB.

REFLECTOR SPACING TABLE

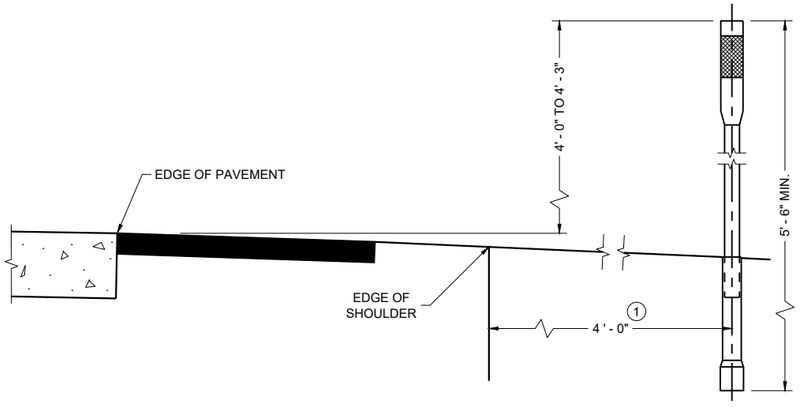
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

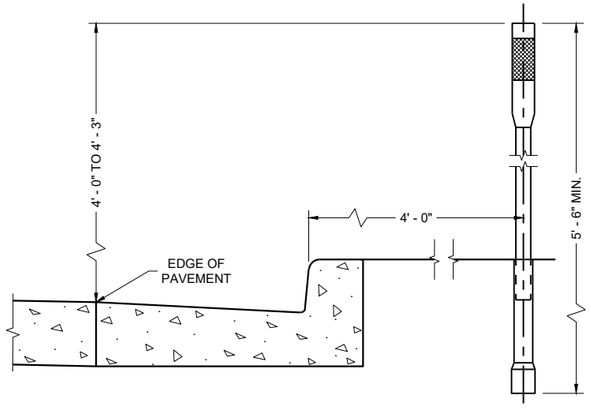
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





TYPICAL INSTALLATIONS OF DELINEATOR POSTS





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

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

(1) DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

(2) FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

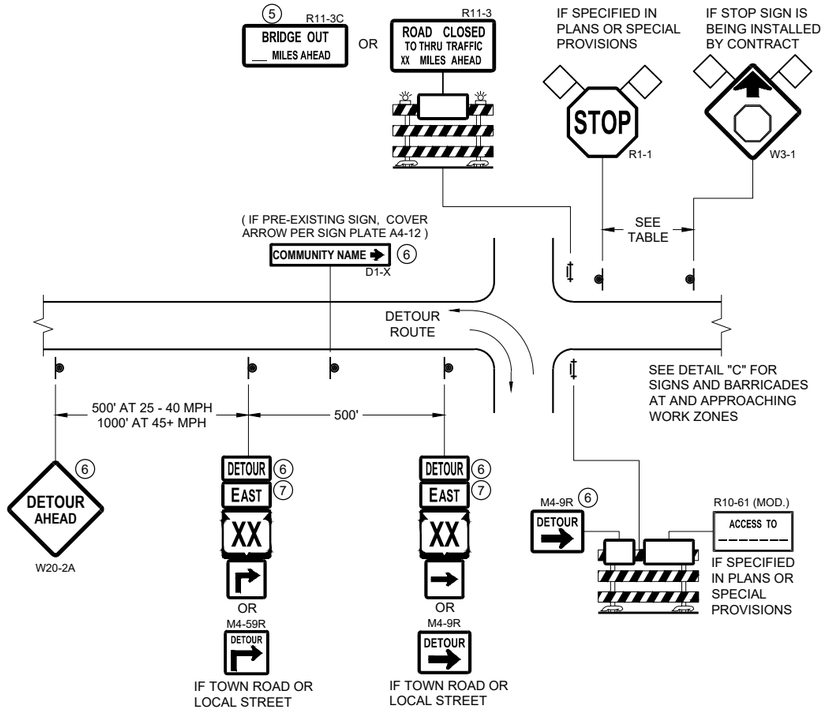
DELINEATOR POST WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

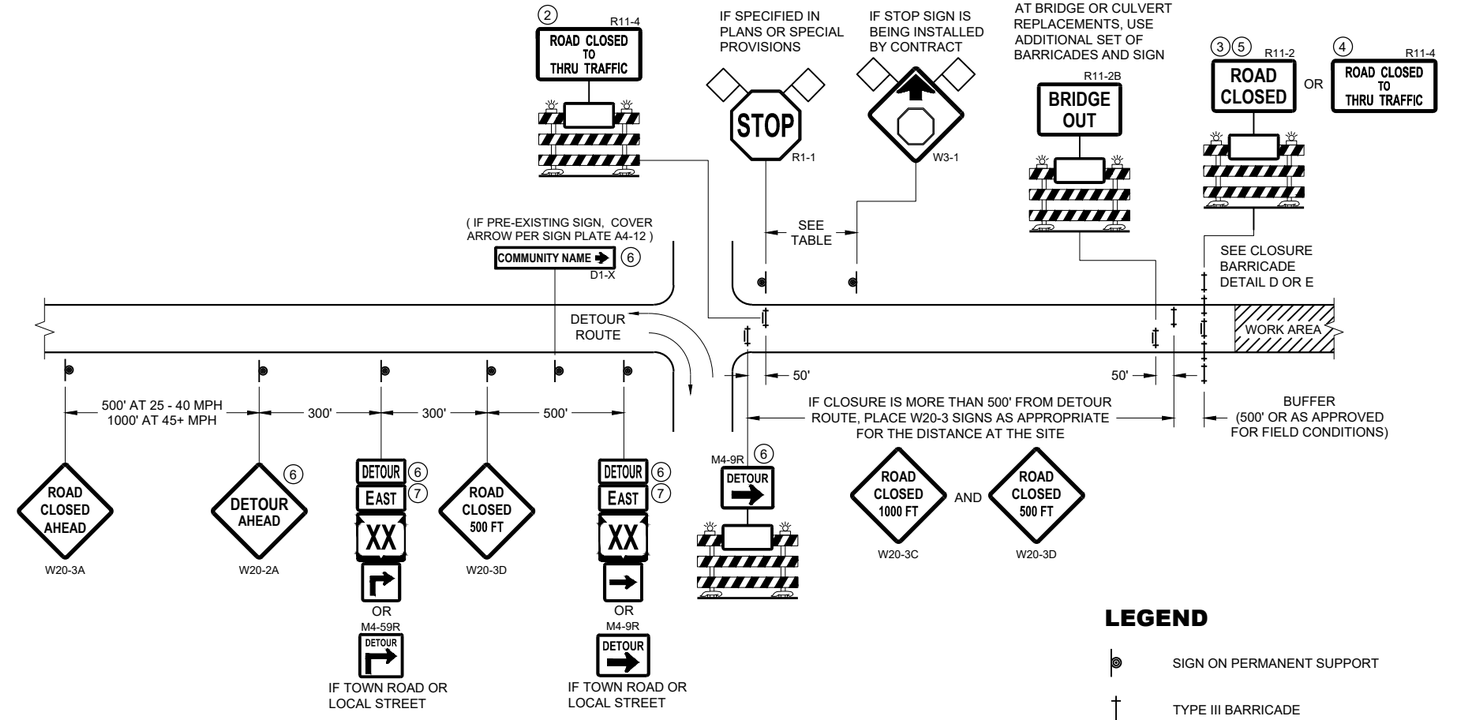
FHWA

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SDD 15A04-08c



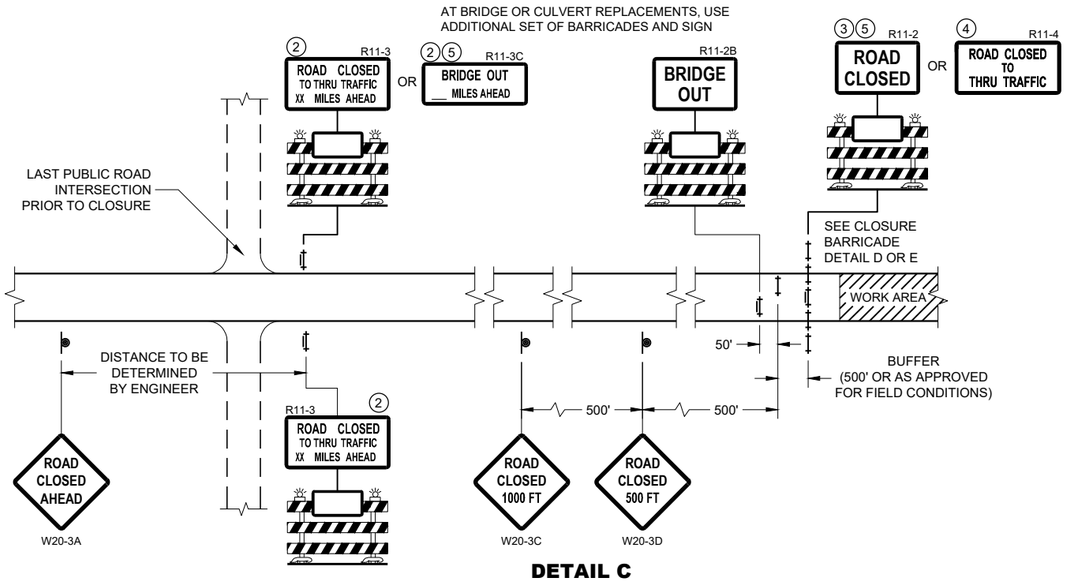
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

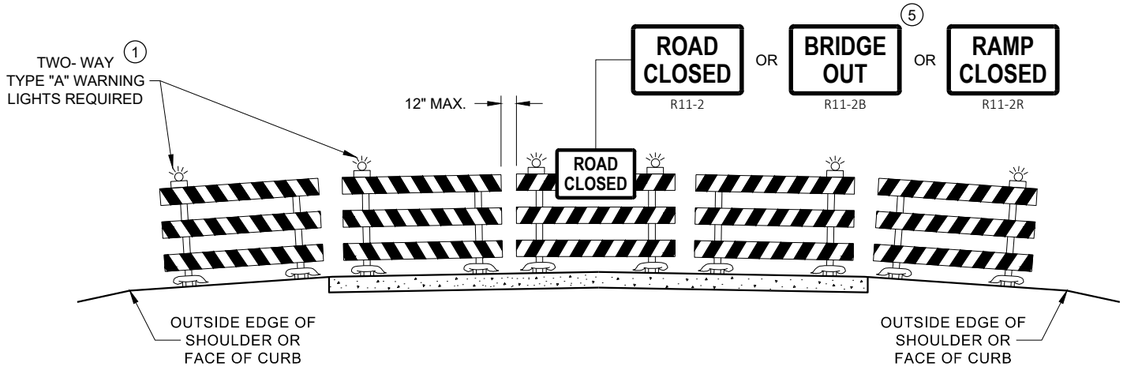
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

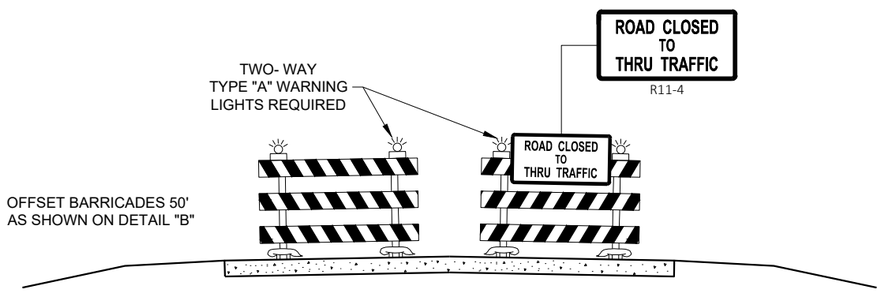
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SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

6

SDD 15C02 - 09b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4; OR XX — M1 - 6; OR COUNTY X — M1 - 5A
- M05 - 1; OR M06 - 1; OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR 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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

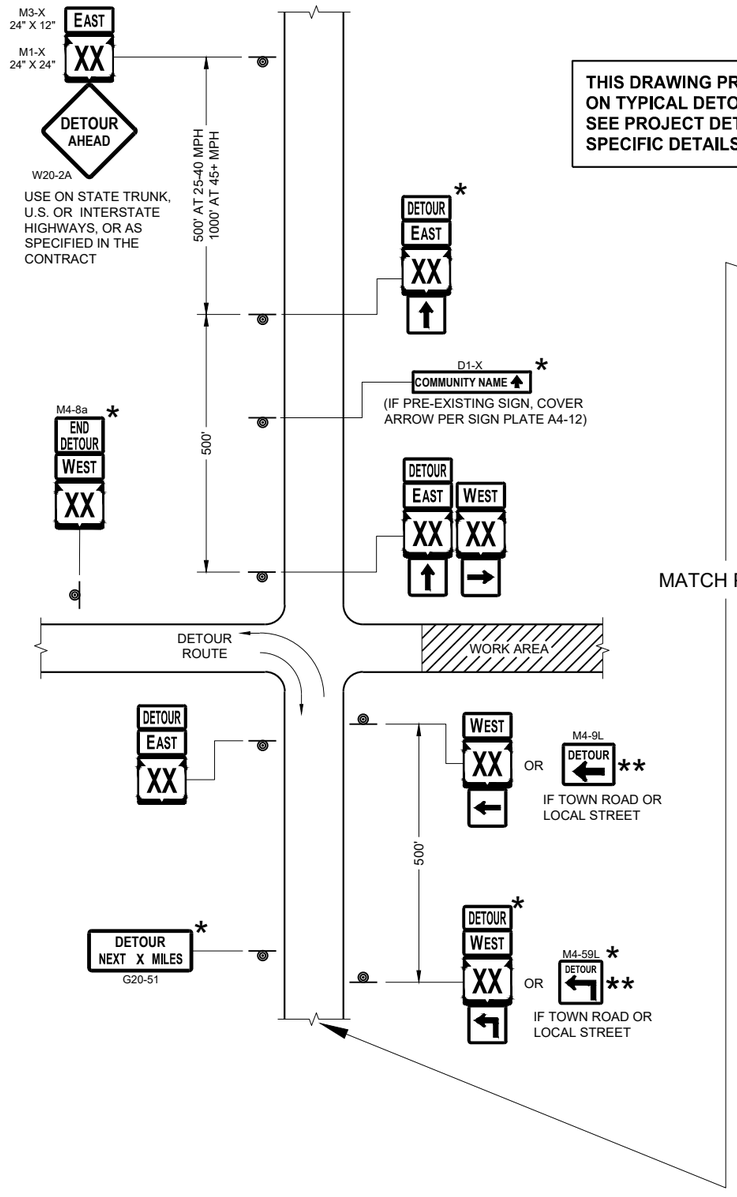
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

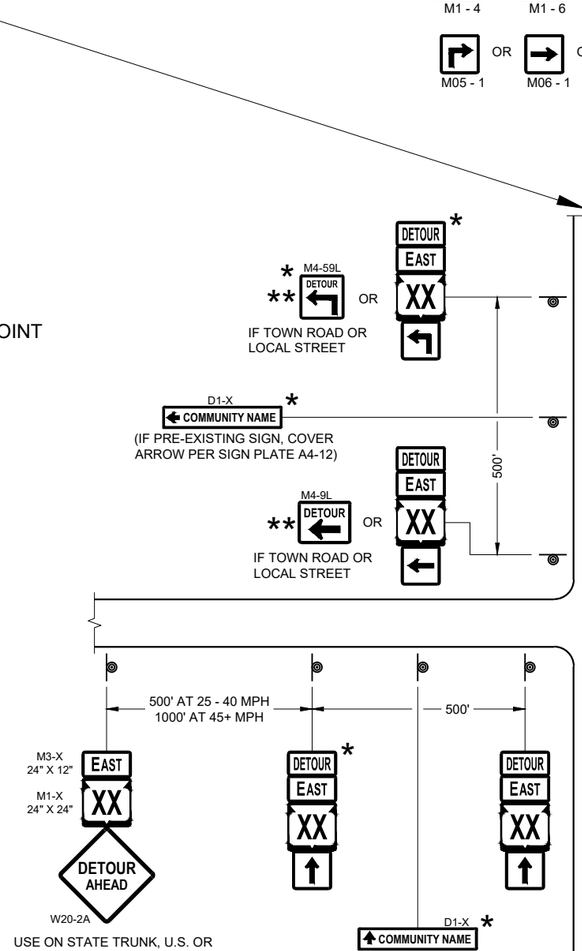
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

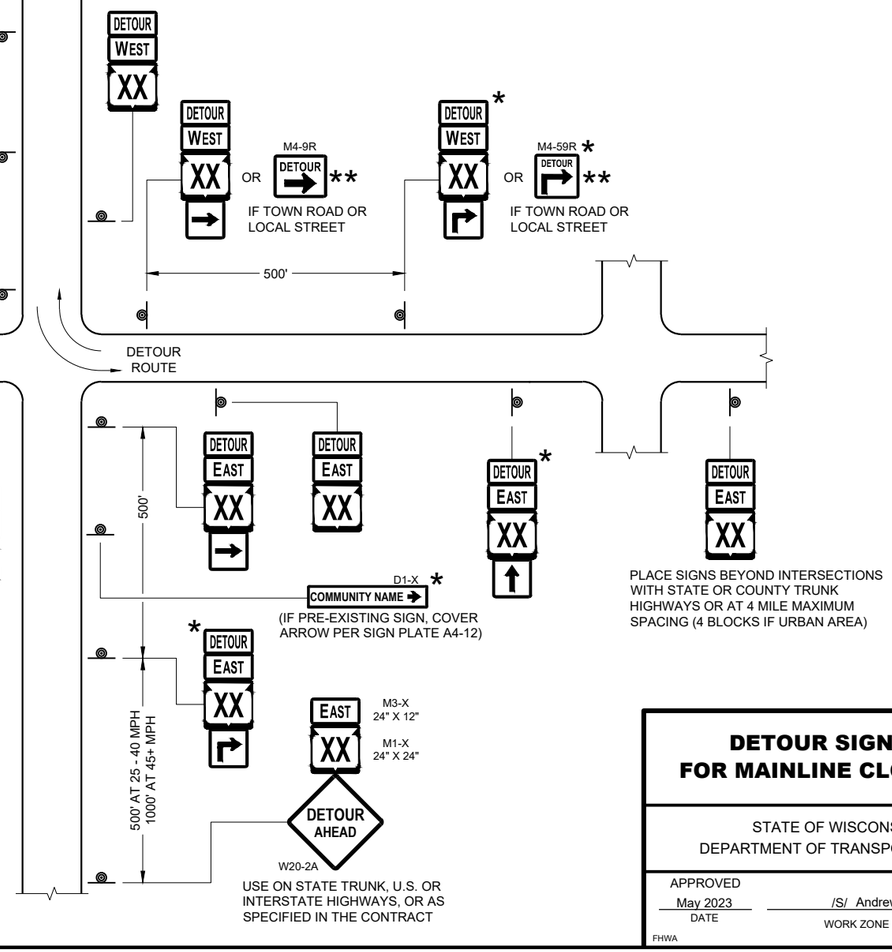
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



MATCH POINT





SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

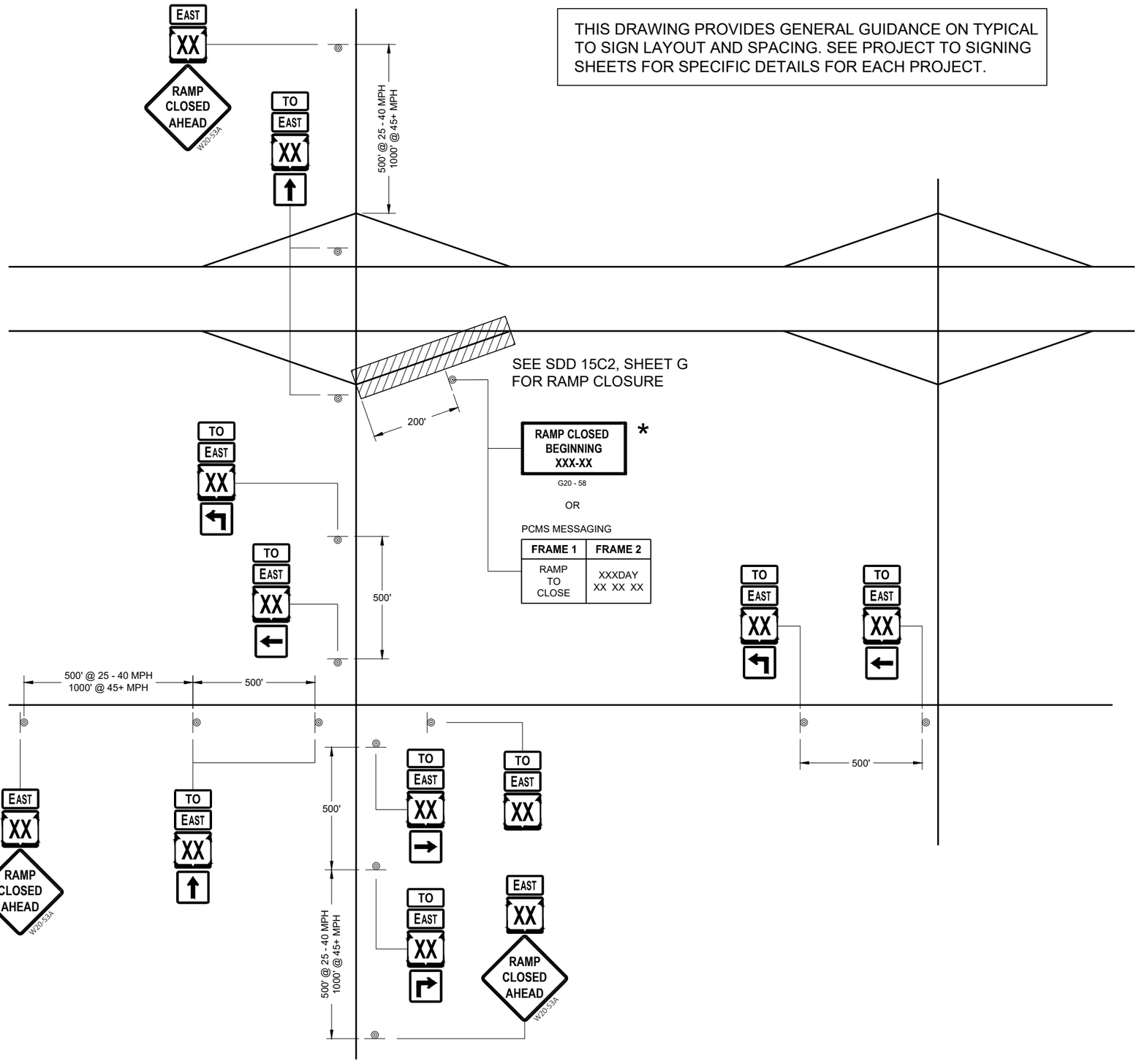
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15C02 - 09c



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

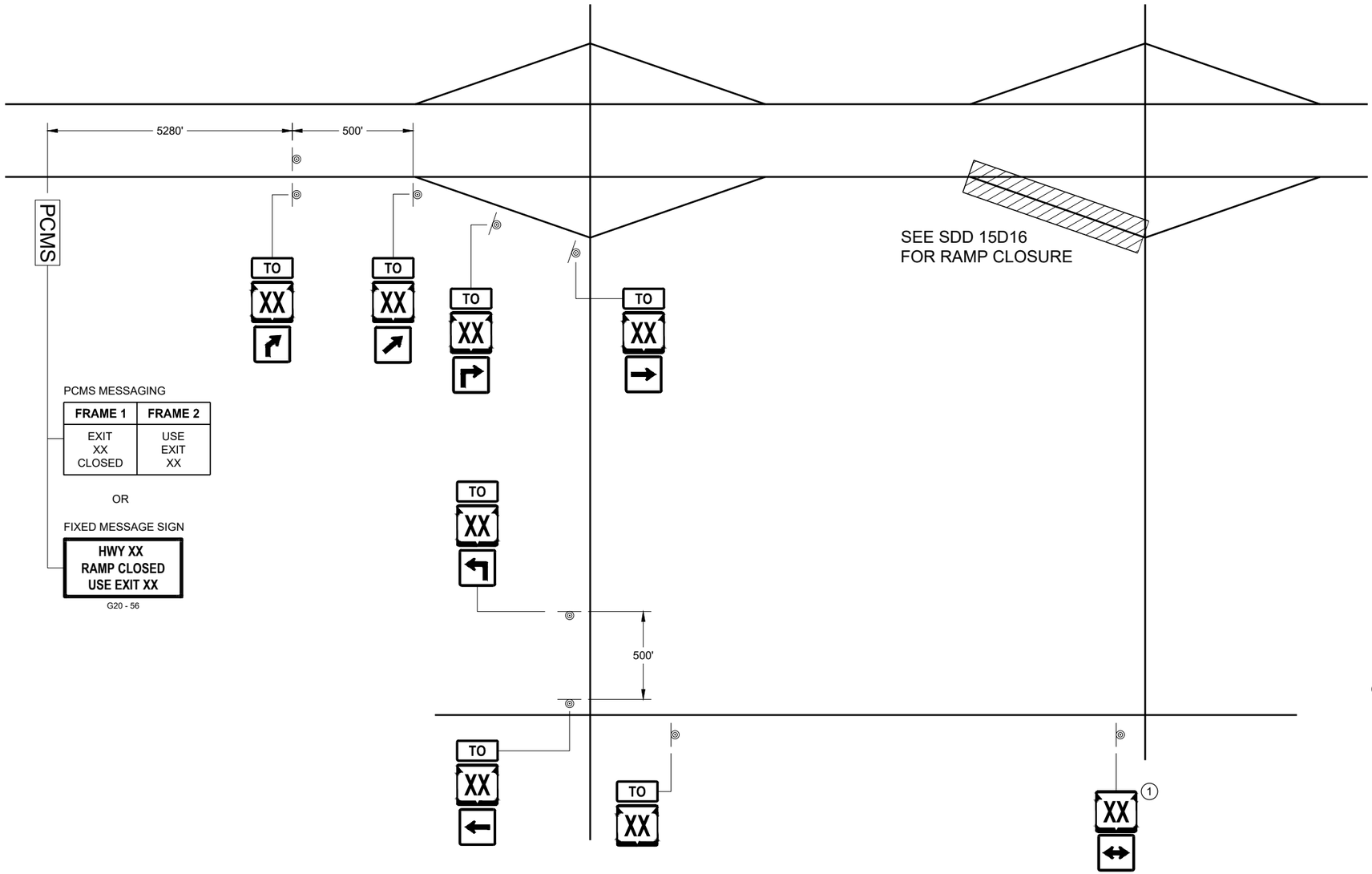
FHWA

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SDD 15C02 - 09d

SDD 15C02 - 09d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 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.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

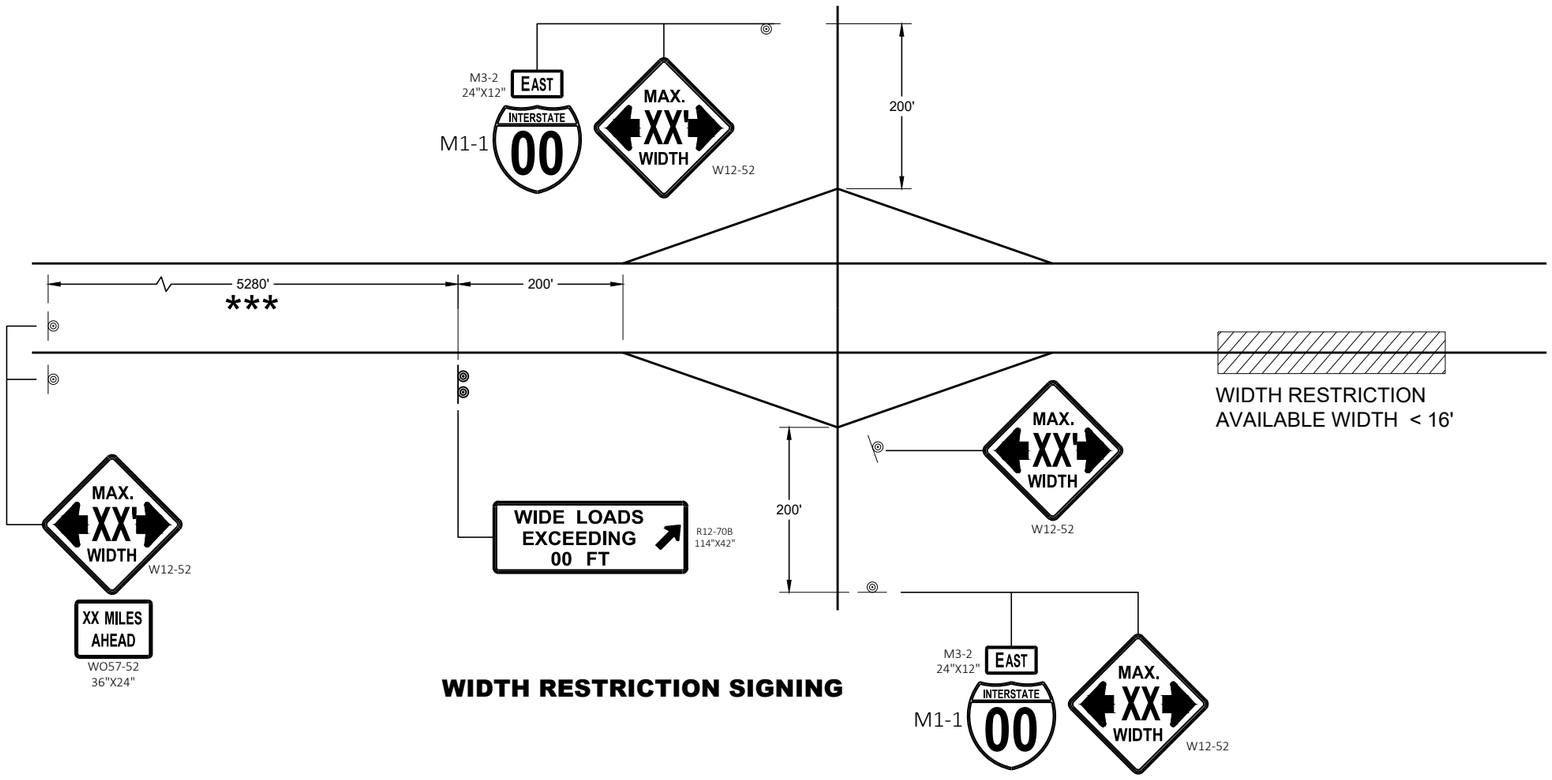
(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

OFF RAMP LANE CLOSURE

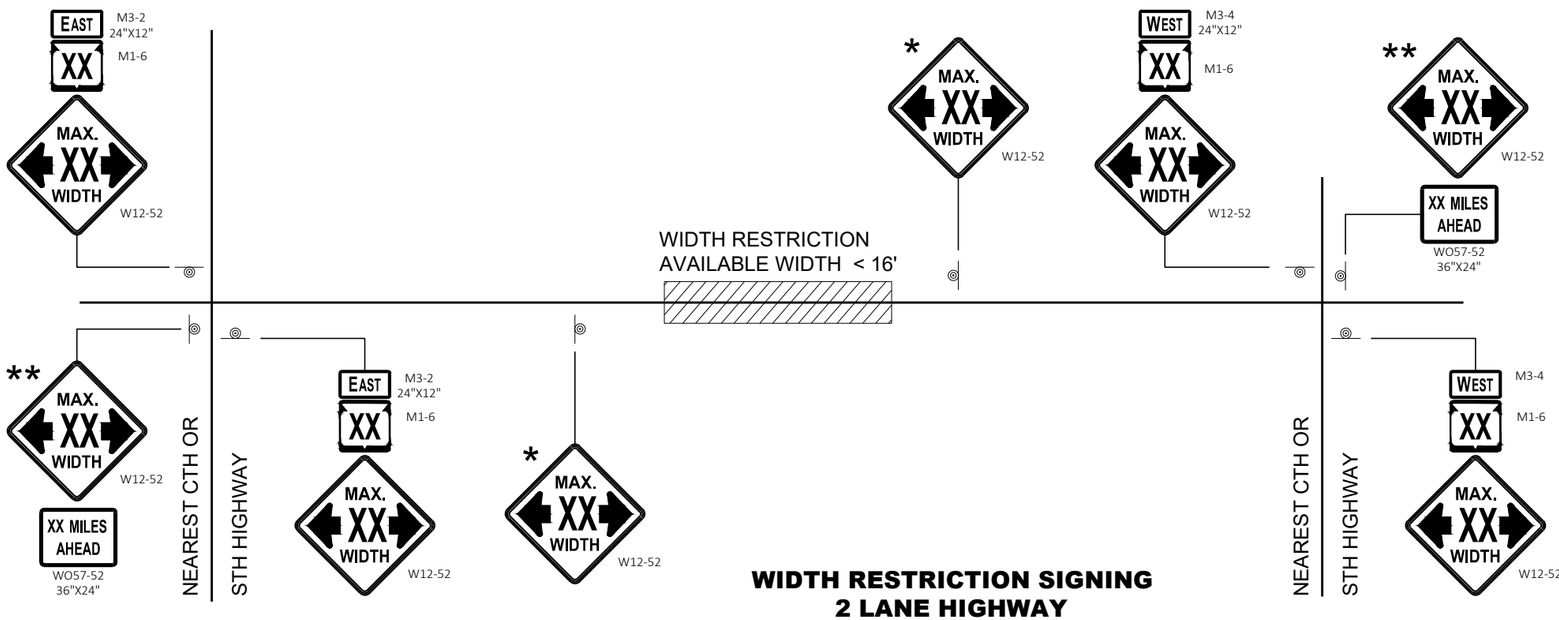
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DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA

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SDD 15C02 - 09e



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

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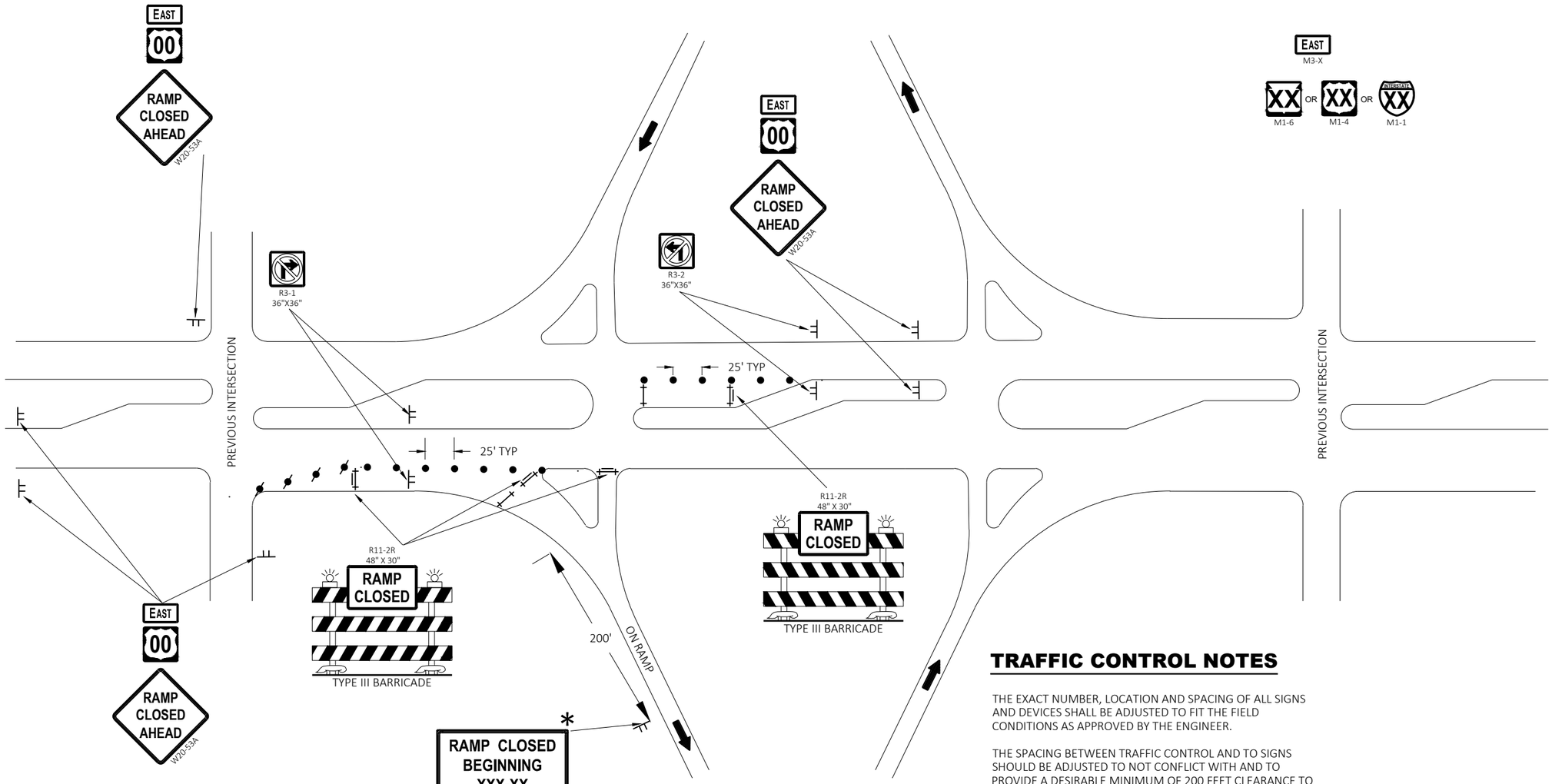
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LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT THE FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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 THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT SHALL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

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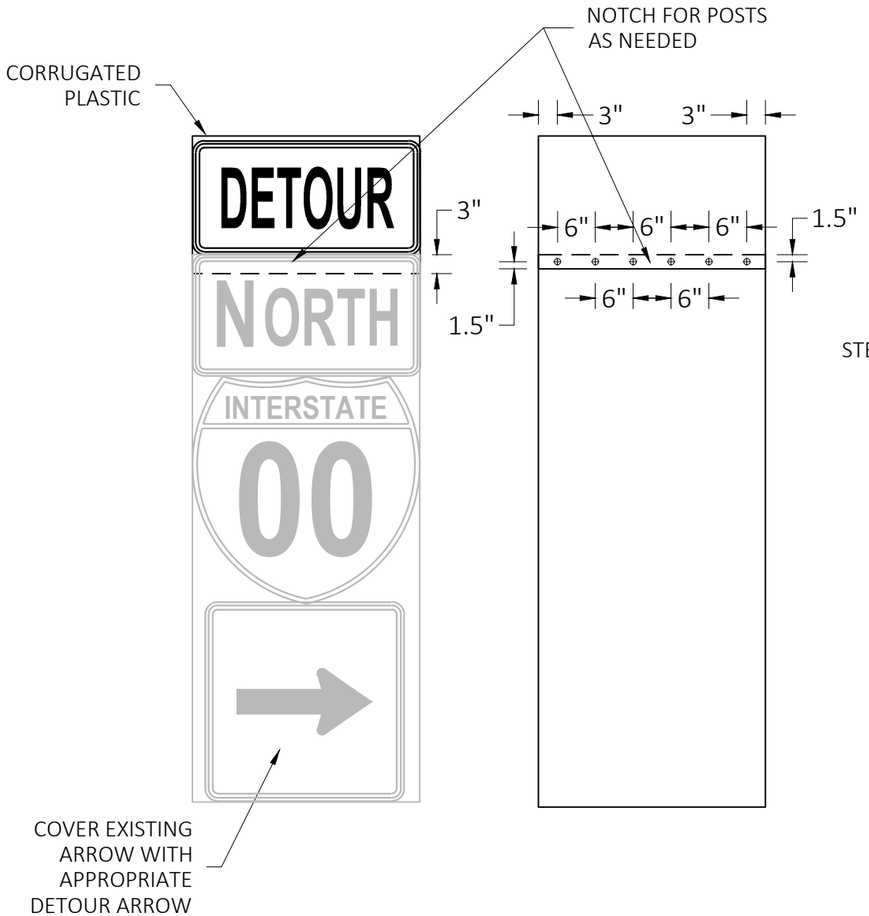
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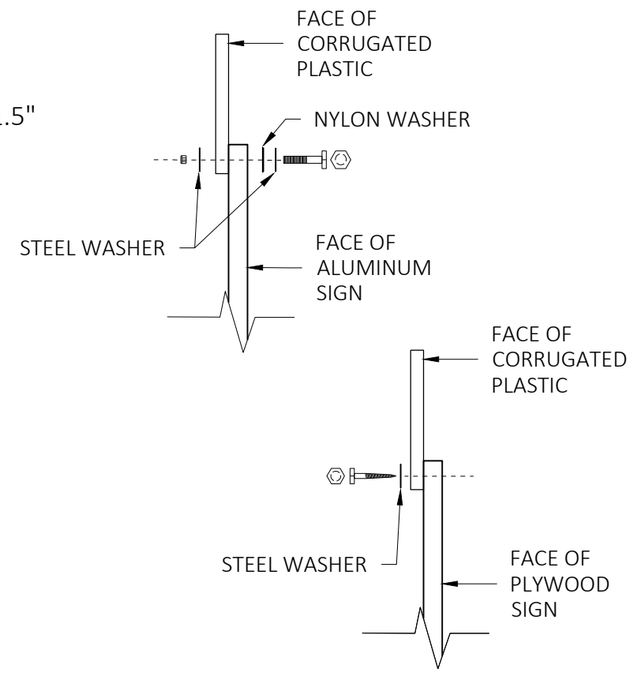
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FRONT SIDE

BACK SIDE

SIDE VIEW





GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS 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, SC3

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.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
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

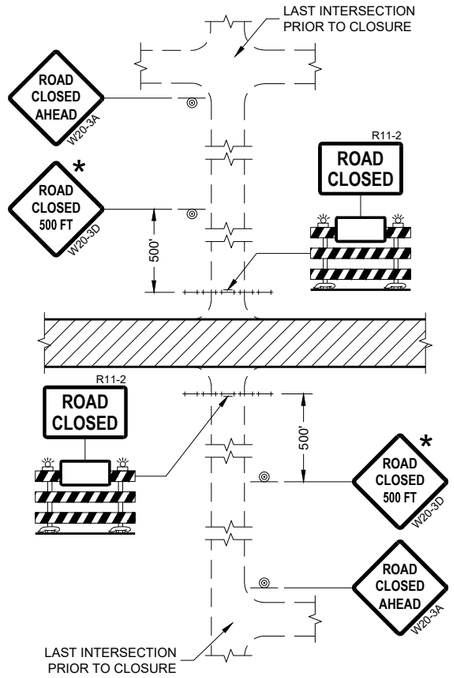
MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

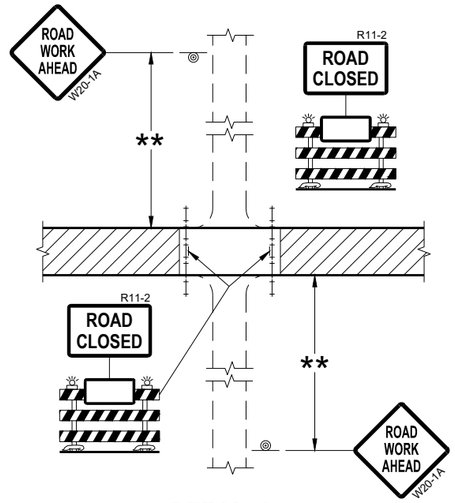
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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SDD 15C02-09h



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

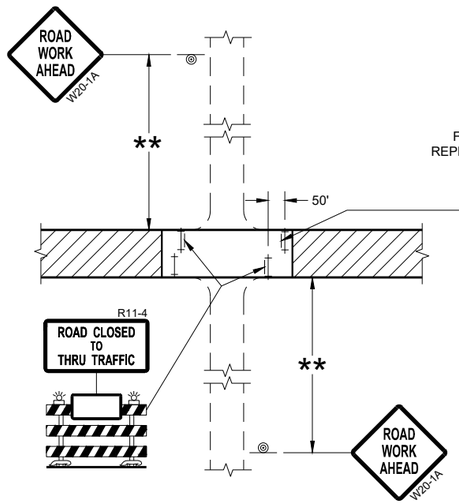
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

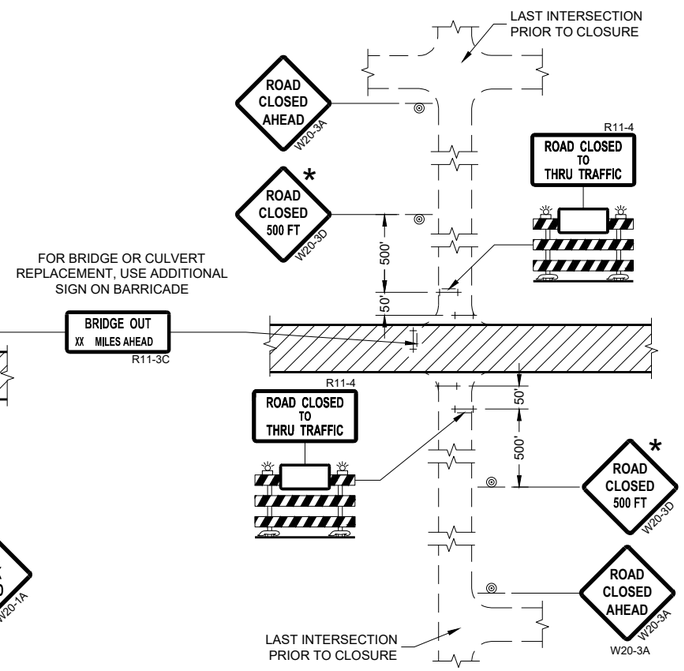
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.





DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
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APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

SDD 15C03 - 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.

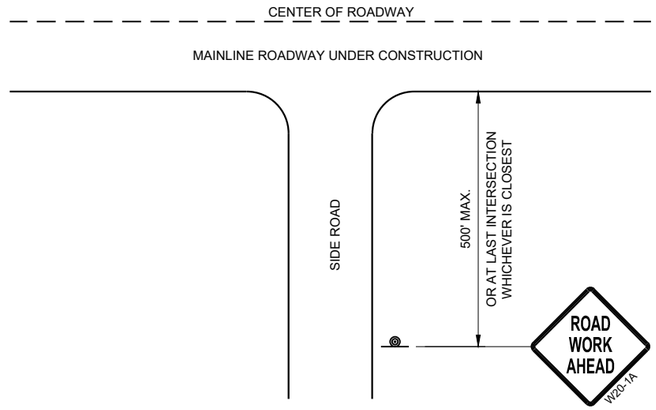
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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.



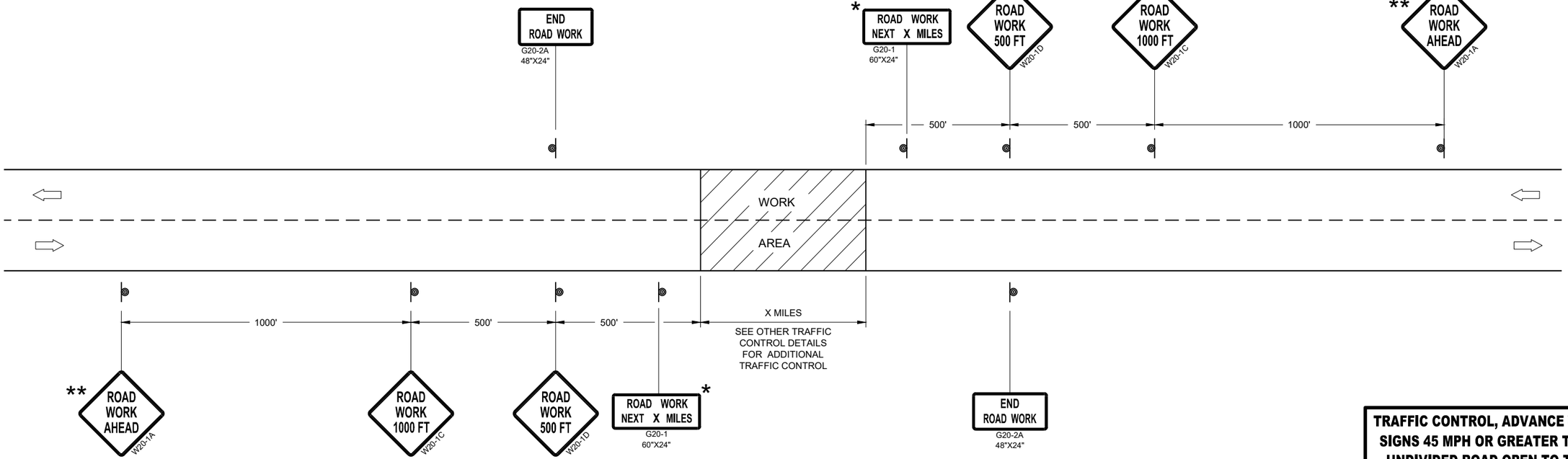
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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

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July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15C04 - 05

GENERAL NOTES

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

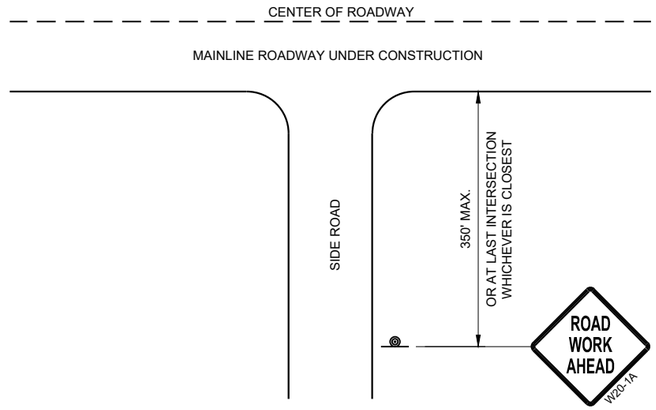
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.



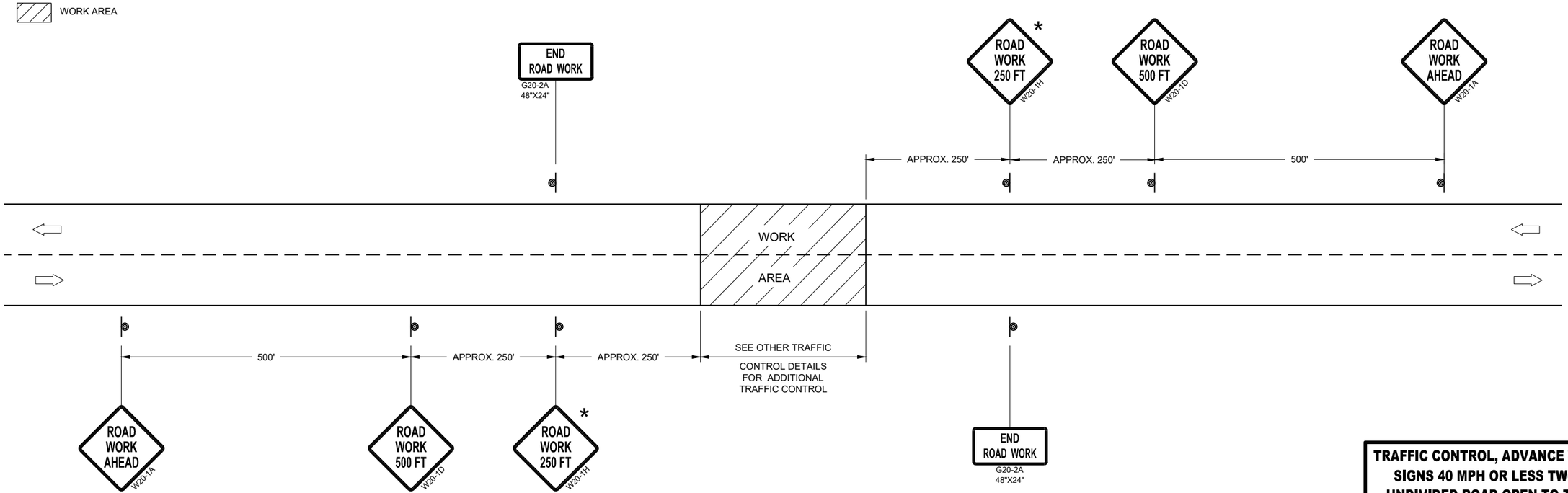
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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

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July 2018
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/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15C05 - 05

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.

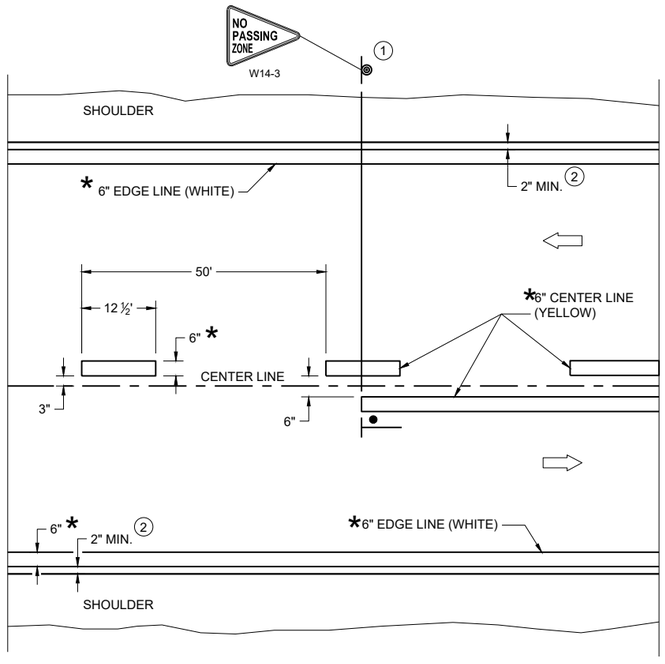
LEGEND

"T" MARKING

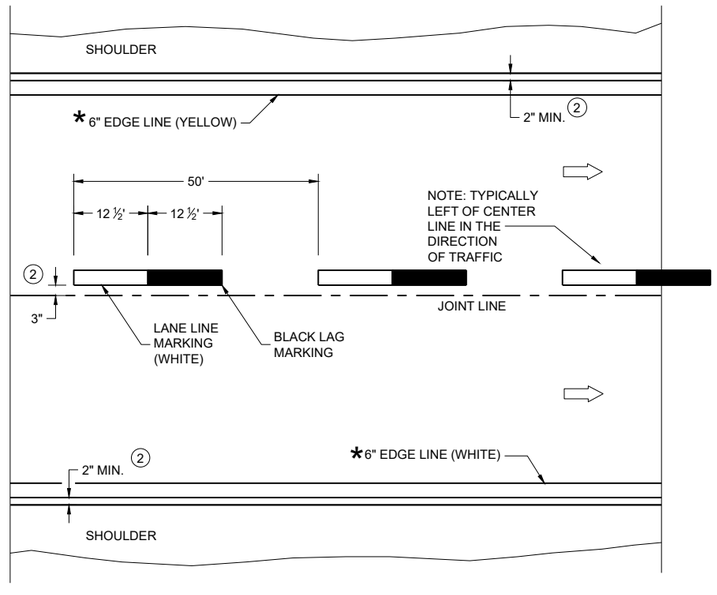
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

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SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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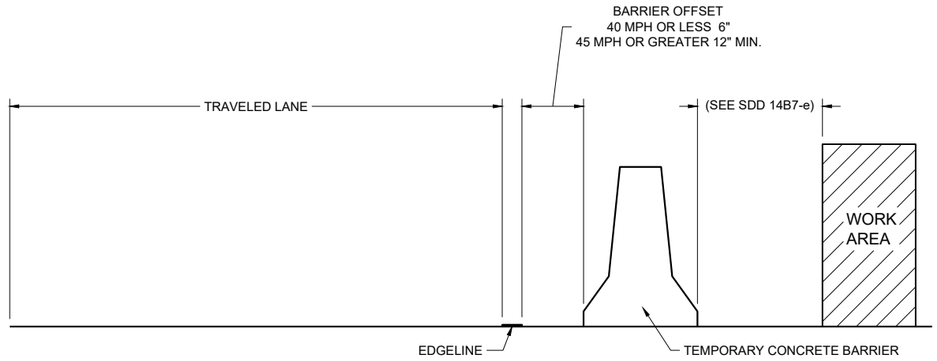
May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

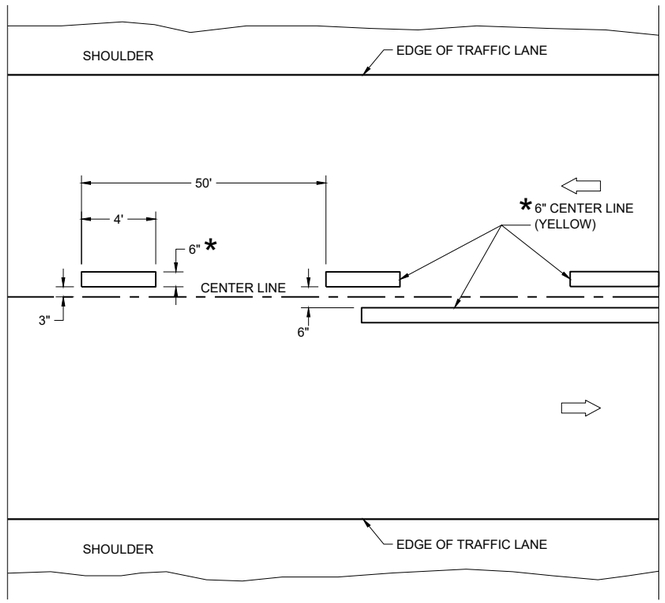
GENERAL NOTES

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

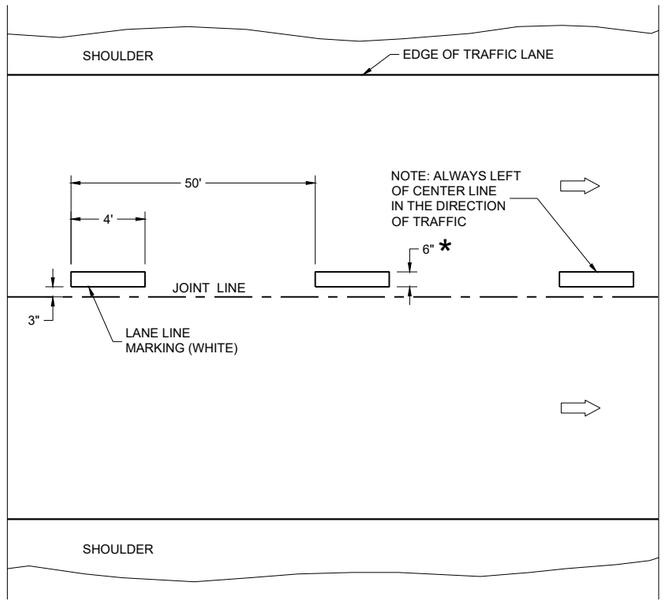
LEGEND

DIRECTION OF TRAFFIC

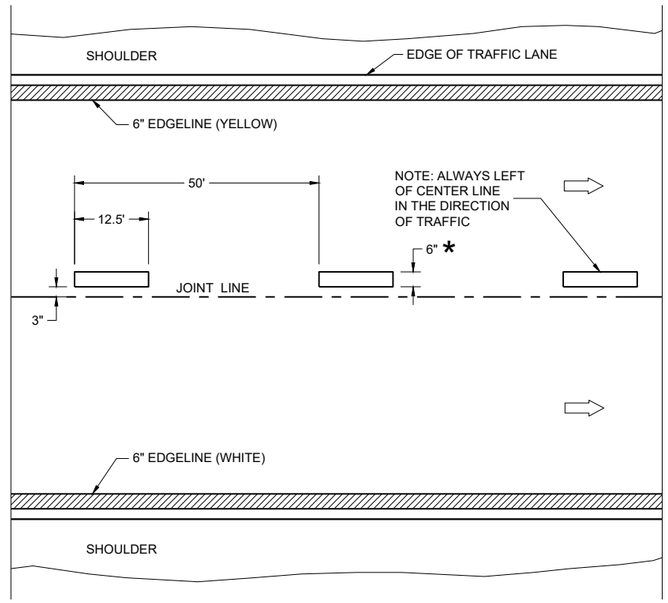
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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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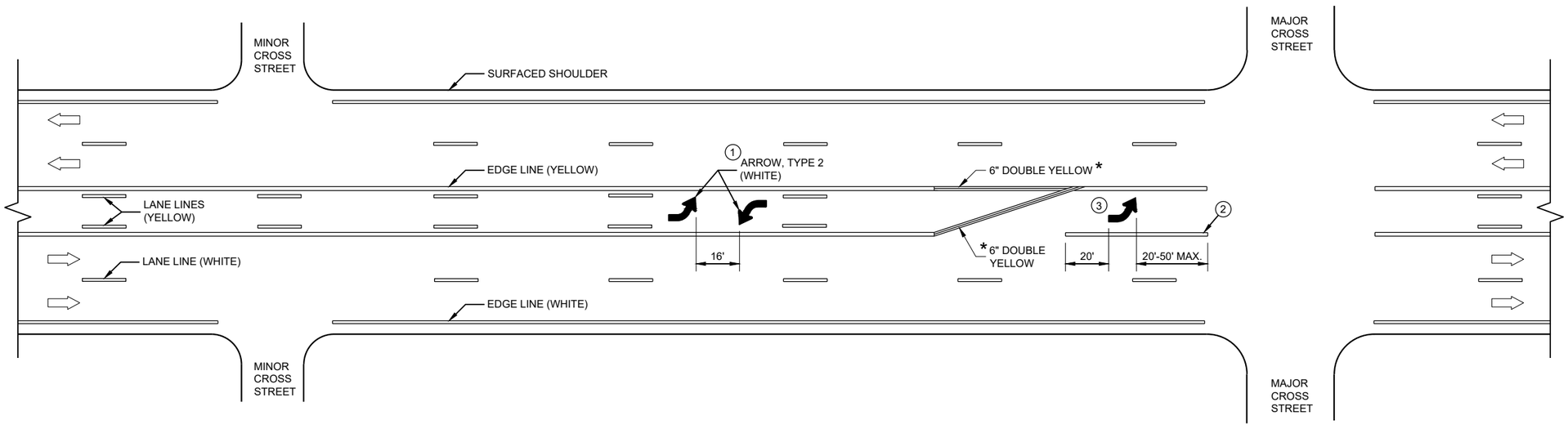
SDD 15C08-23b

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



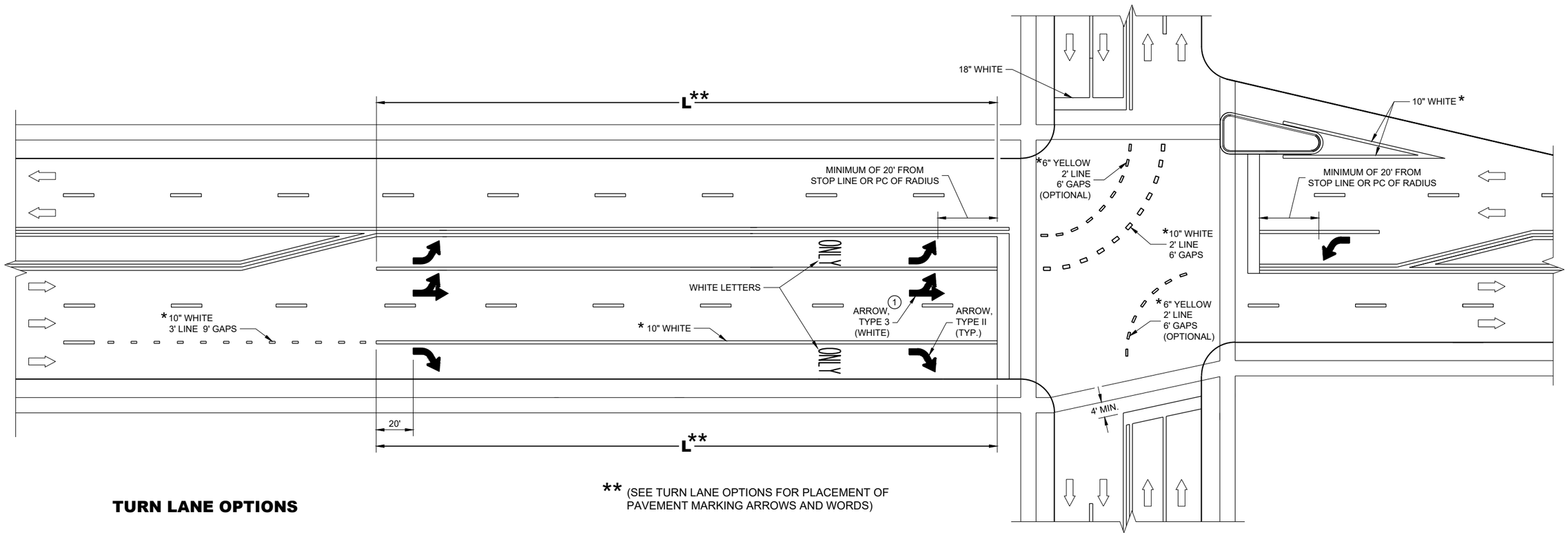
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 176

SDD 15C08-23c

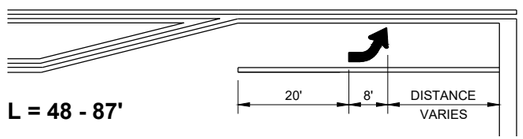
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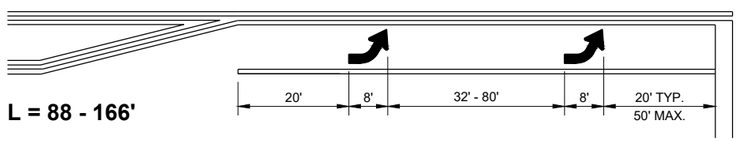
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

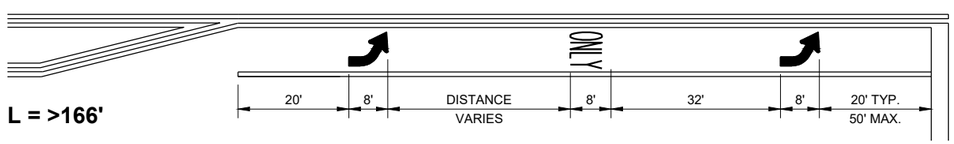
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



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

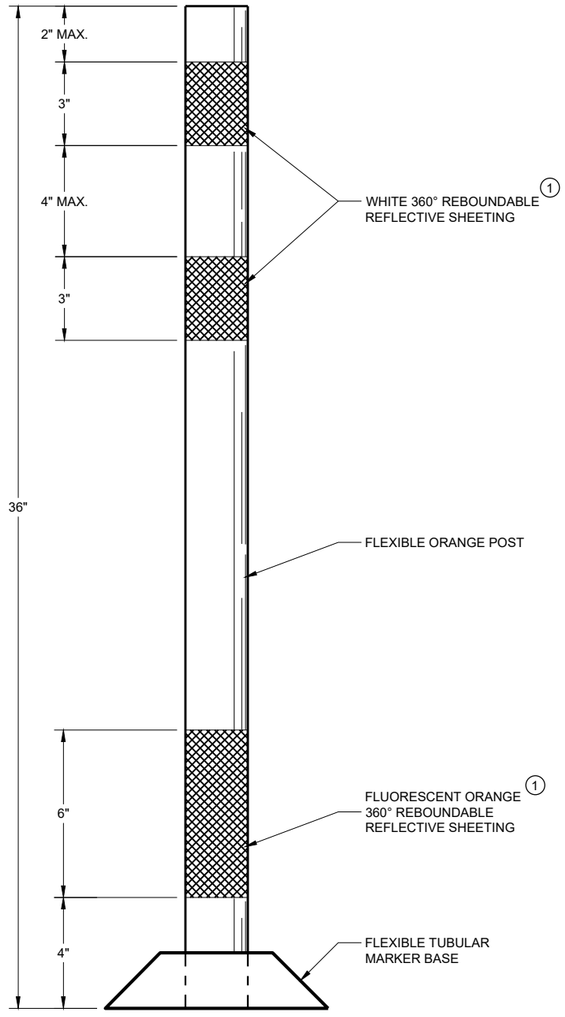
L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C08-23d



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

SDD 15C11 - 10a

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

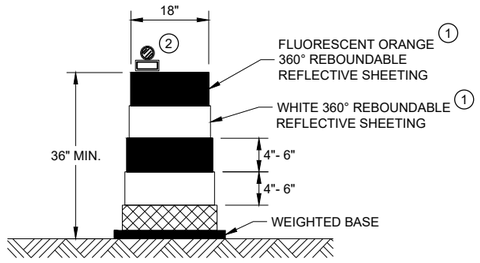
FHWA

6

SDD 15C11 - 10a

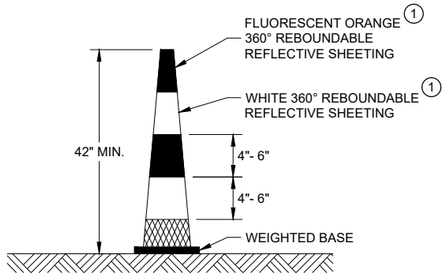
GENERAL NOTES

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

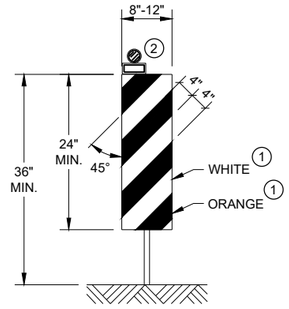
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

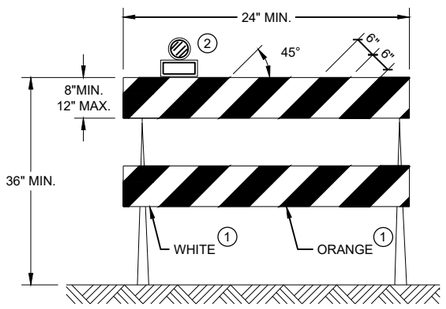
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



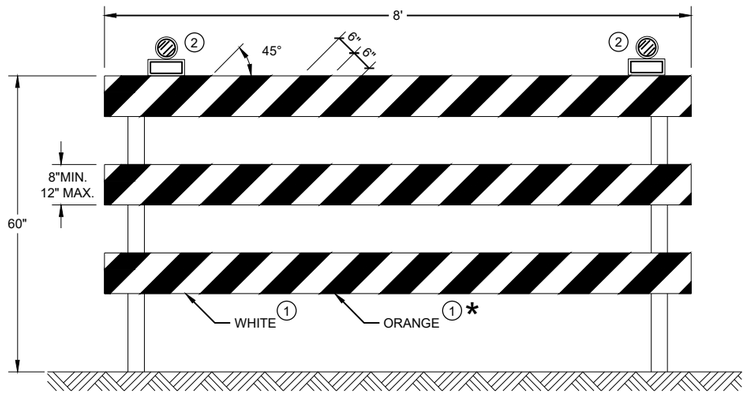
VERTICAL PANEL

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

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SDD 15C11 - 10b

6

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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.

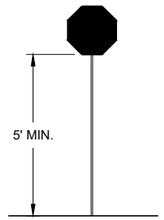
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

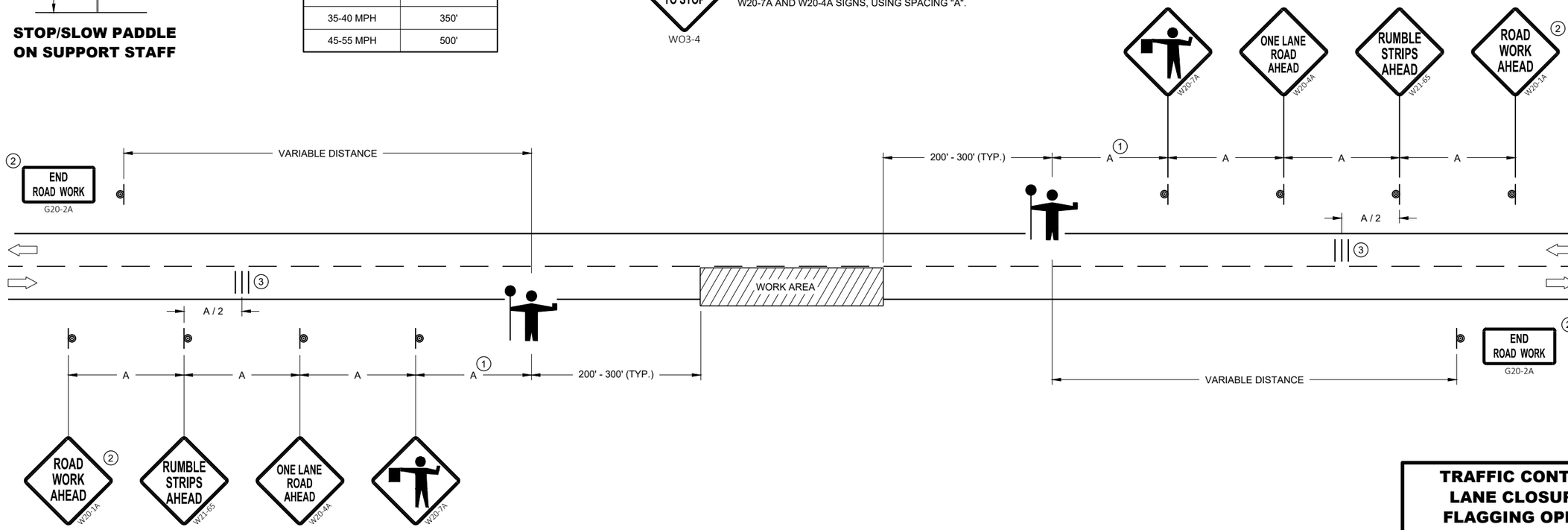
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

6

SDD 15C12 - 09a

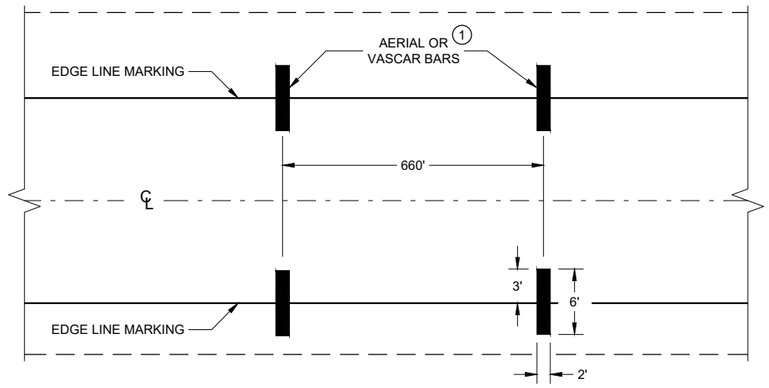
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SDD 15C12 - 09a

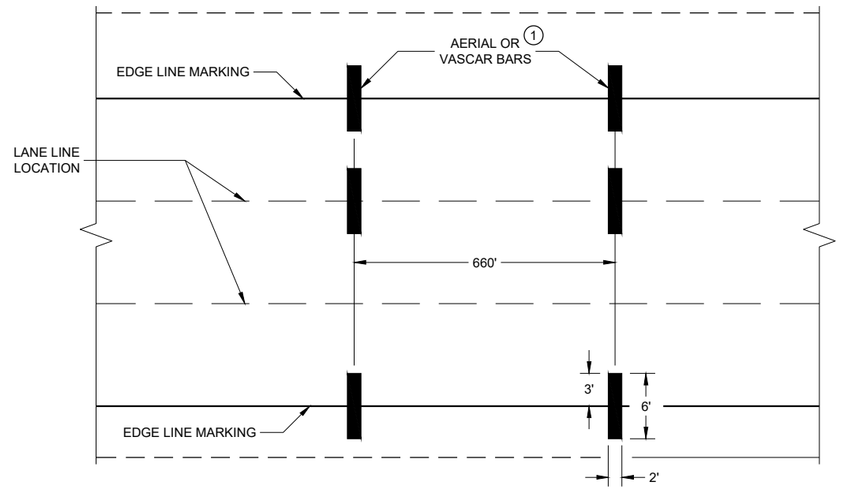
GENERAL NOTES

(1) PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
February 2021 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MAR ENGINEER

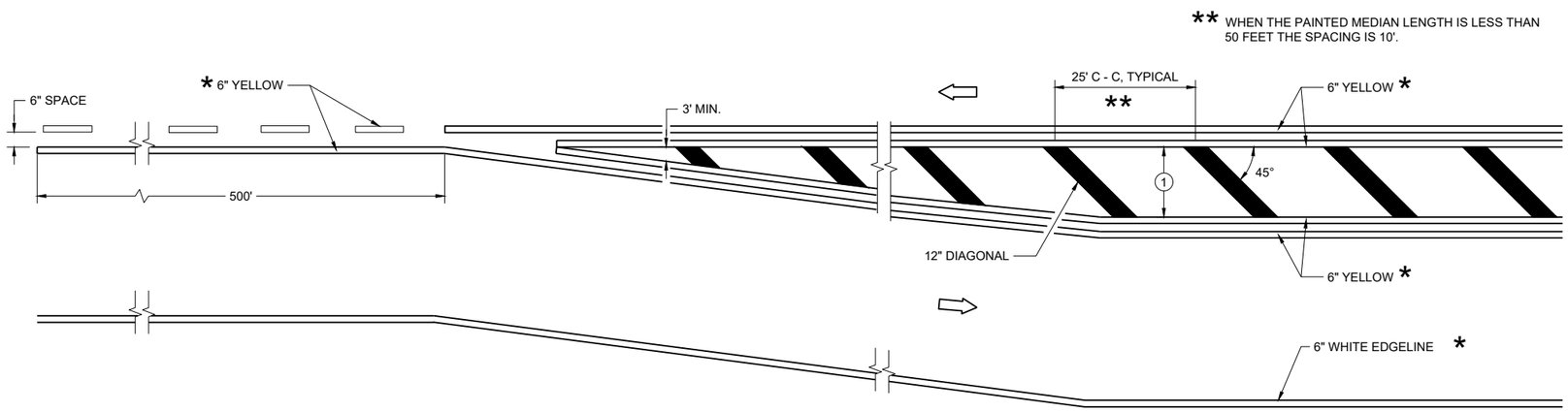
FHWA

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SDD 15C14 - 04

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SDD 15C14 - 04



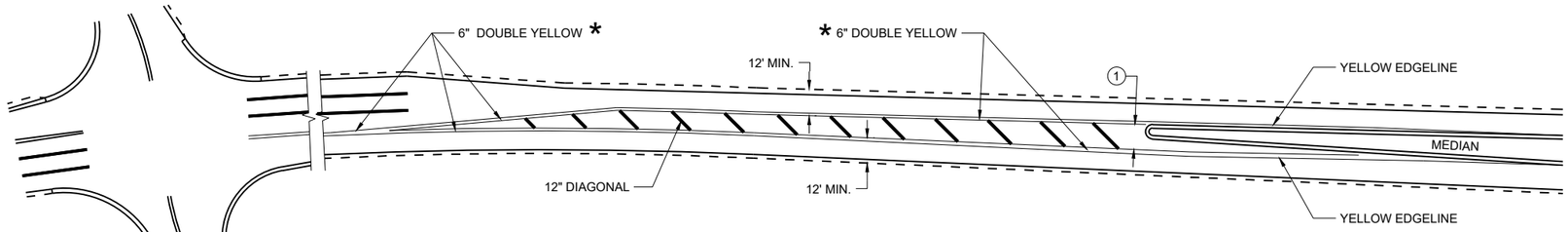
MEDIAN ISLAND DETAIL

GENERAL NOTES

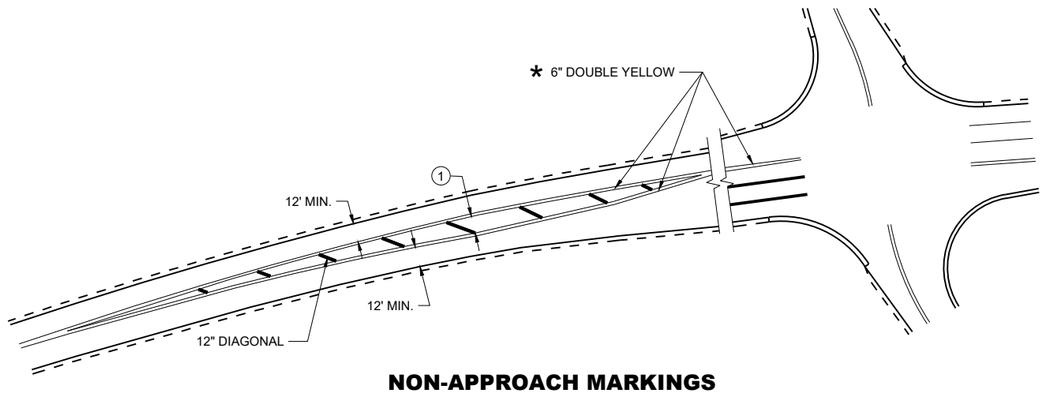
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

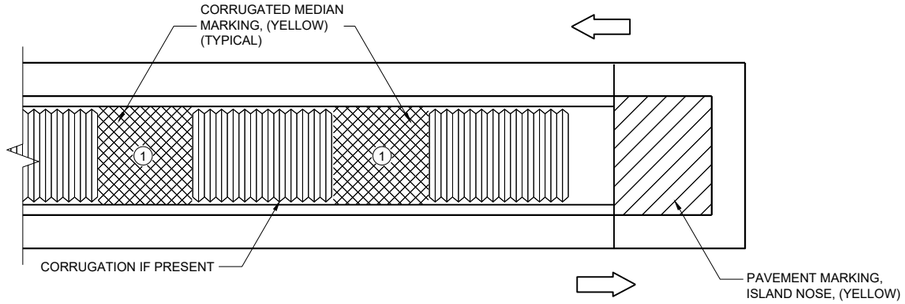
APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

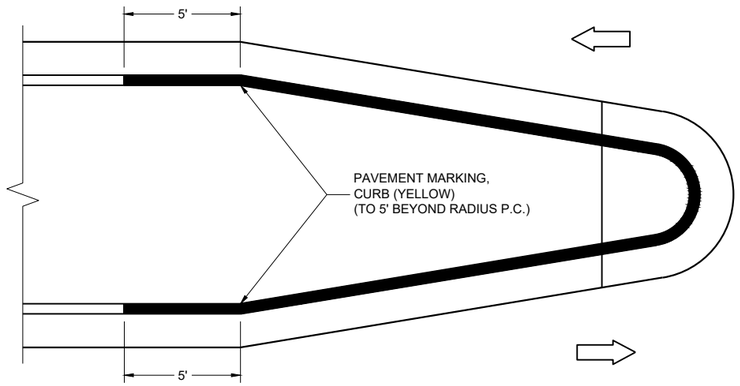
FHWA

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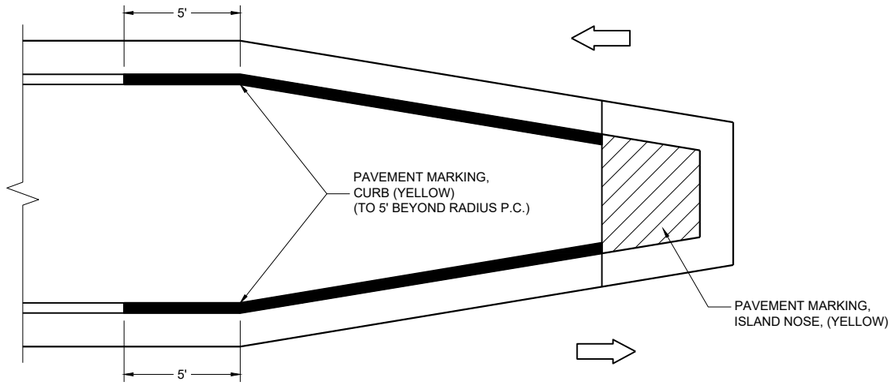
SDD 15C18-09a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

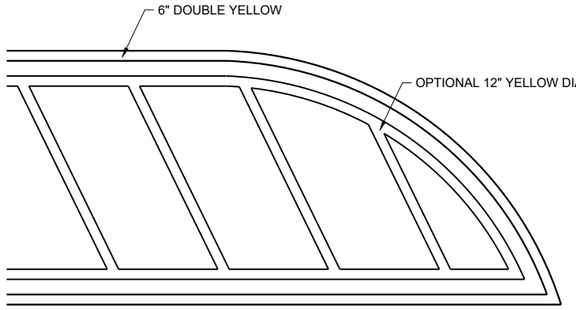
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C18-09b

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

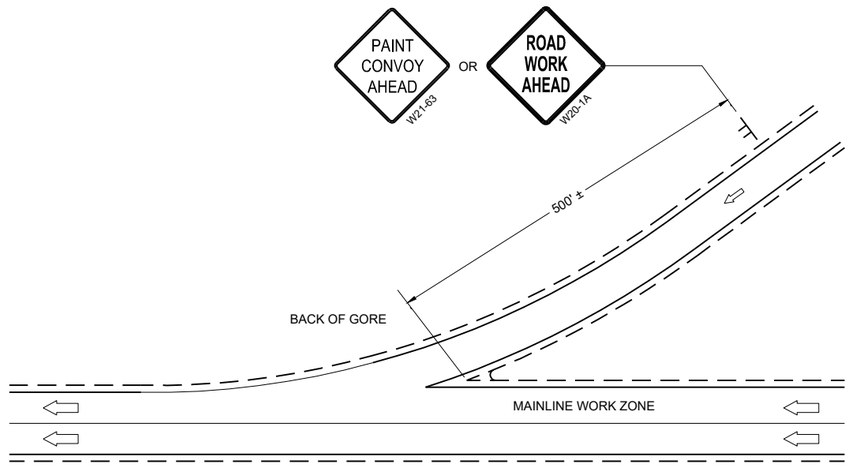
V3 TRAIL VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)



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. 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.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

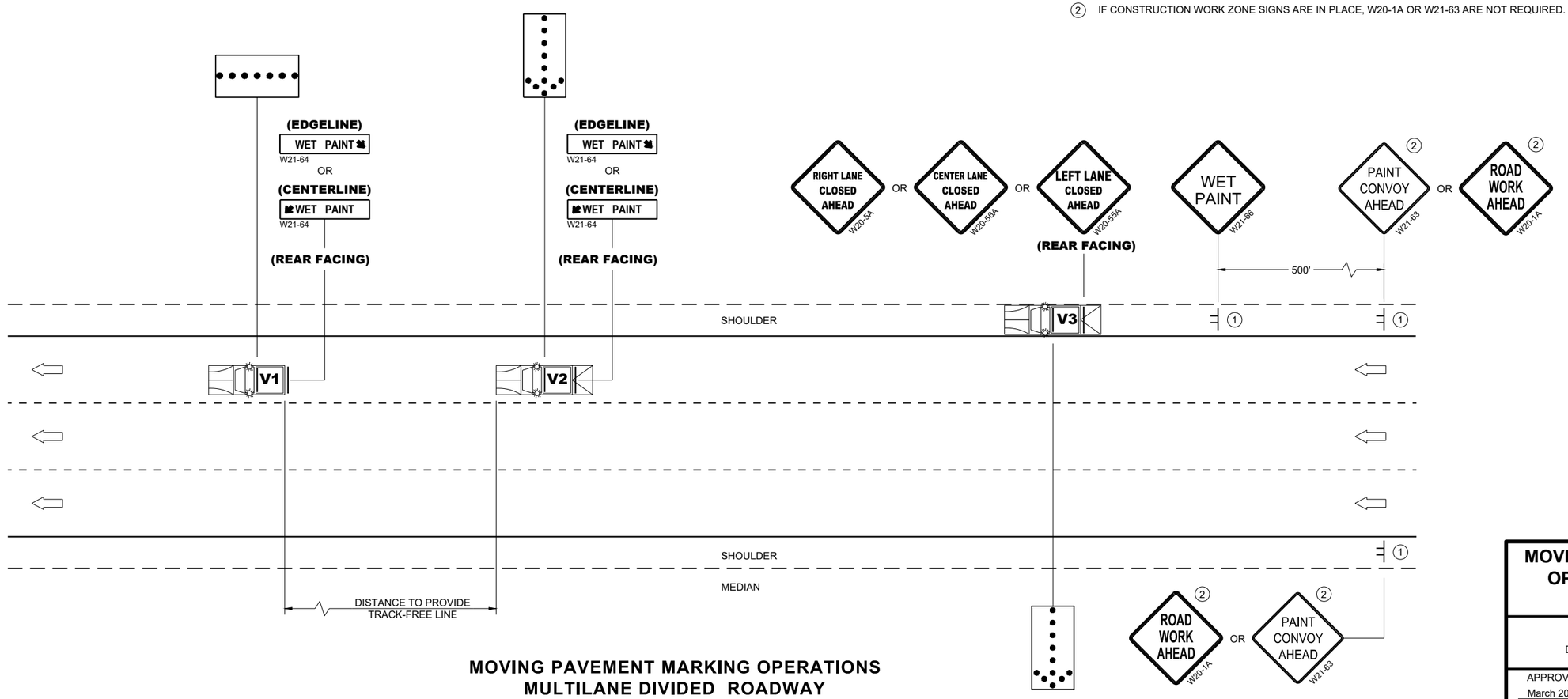
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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 HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

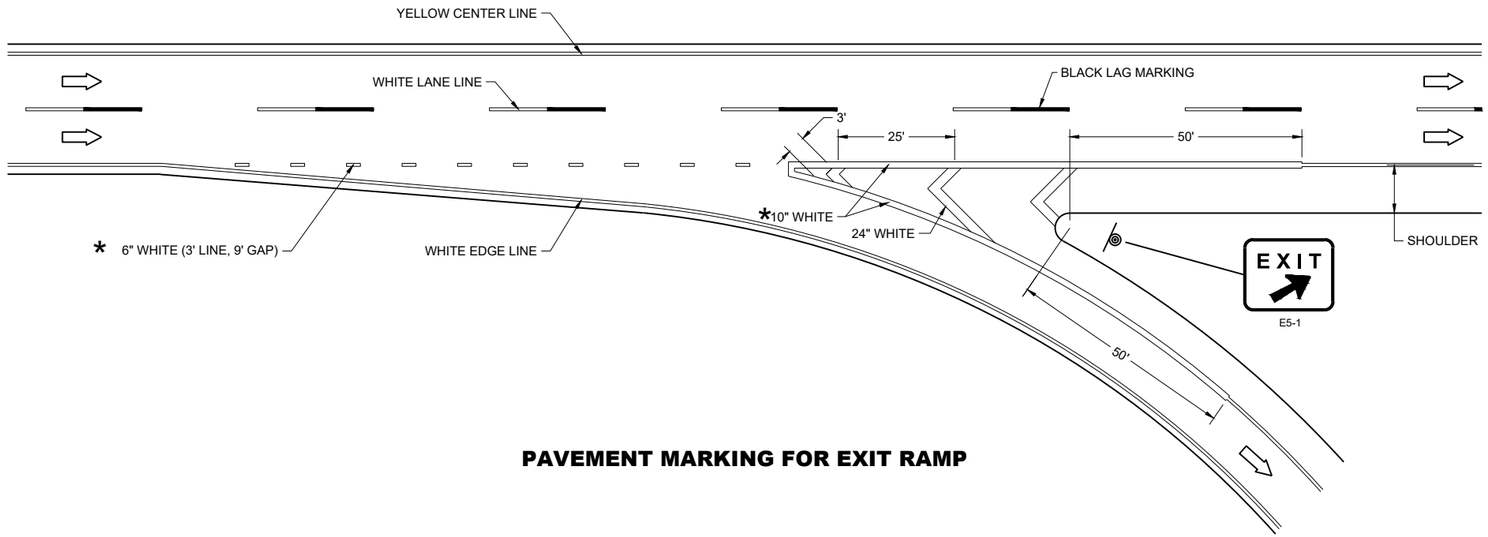
FHWA

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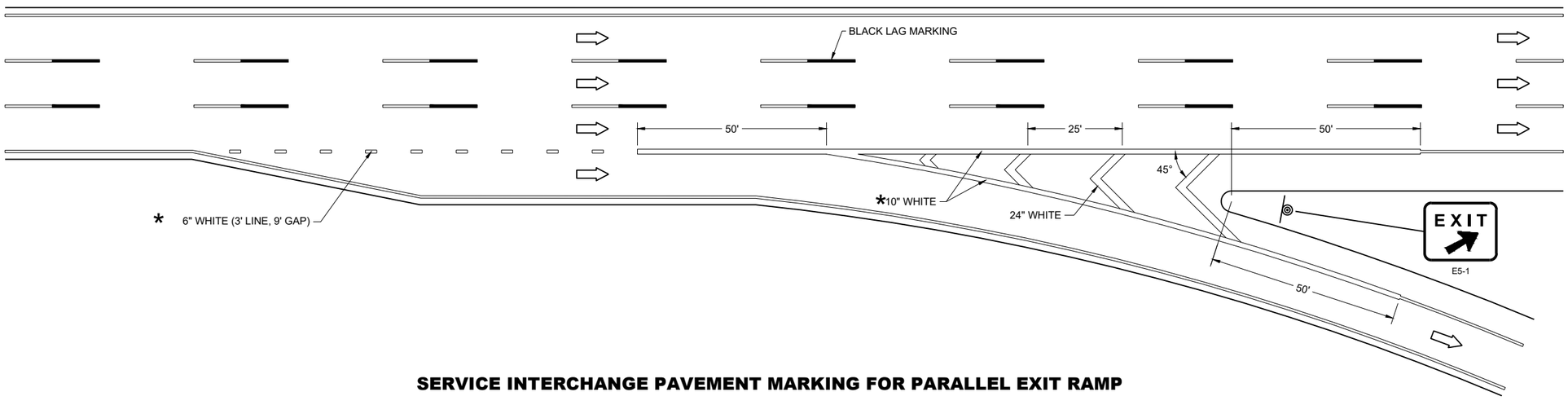
SDD 15C19-9c

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SDD 15C19-9c



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

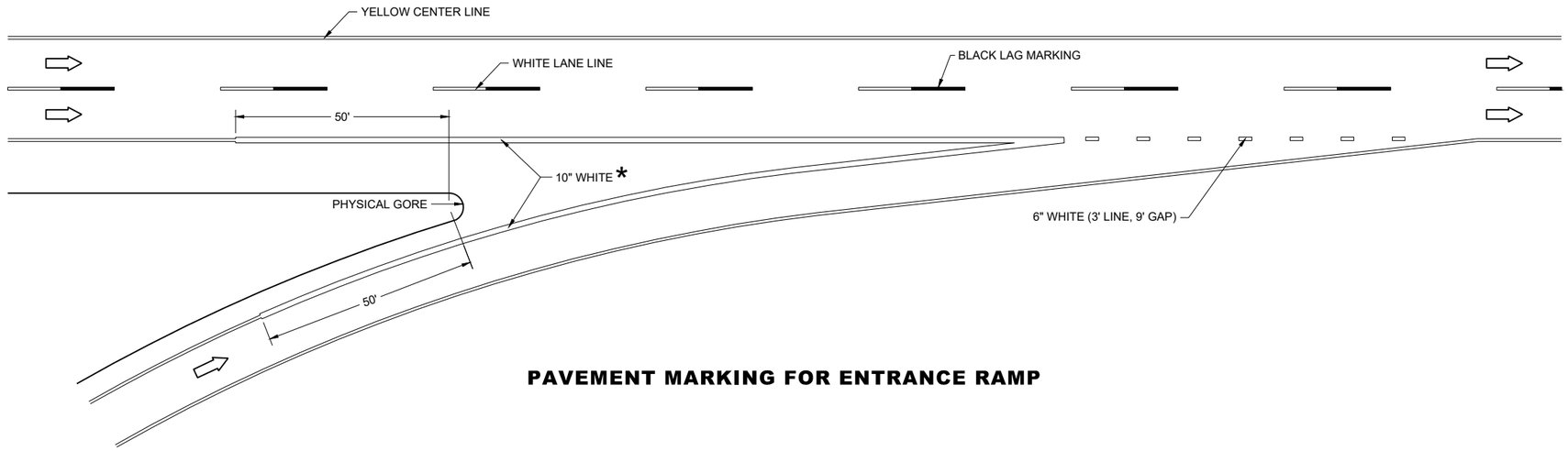
PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15C31-08a

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

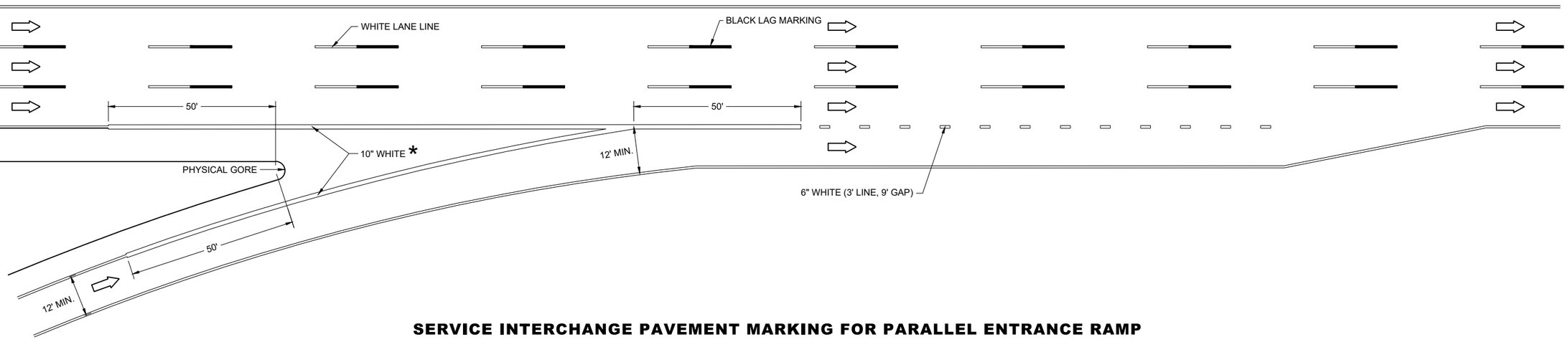


PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

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SDD 15C31-08c

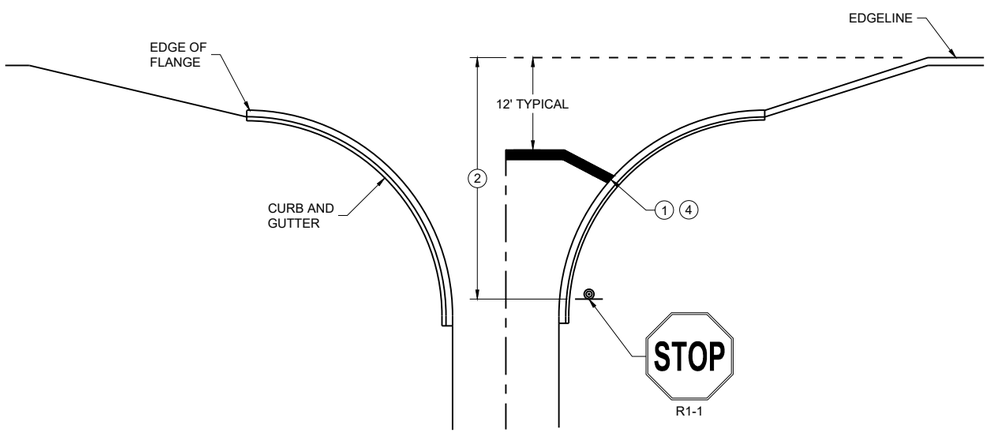
PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

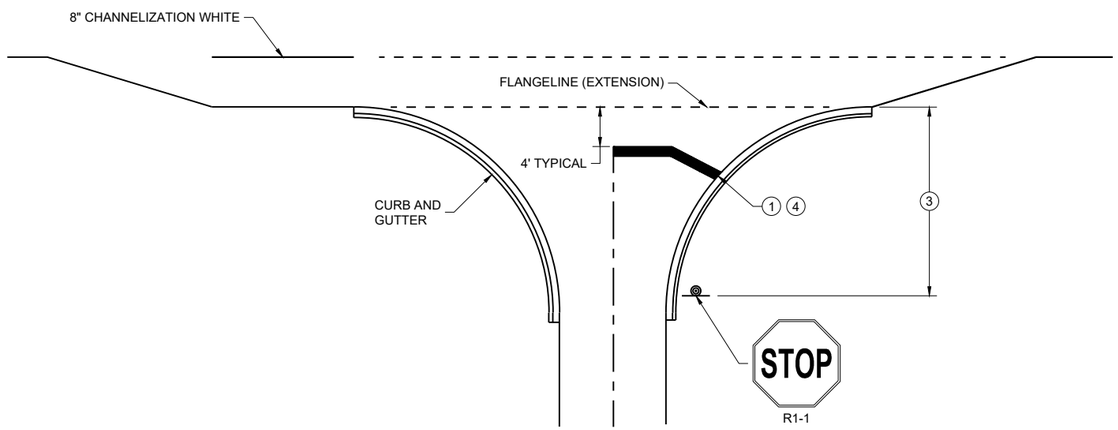
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

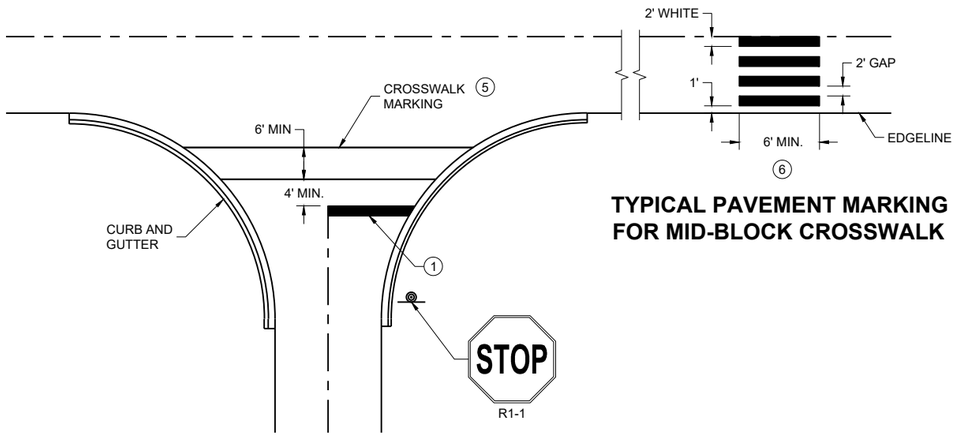
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

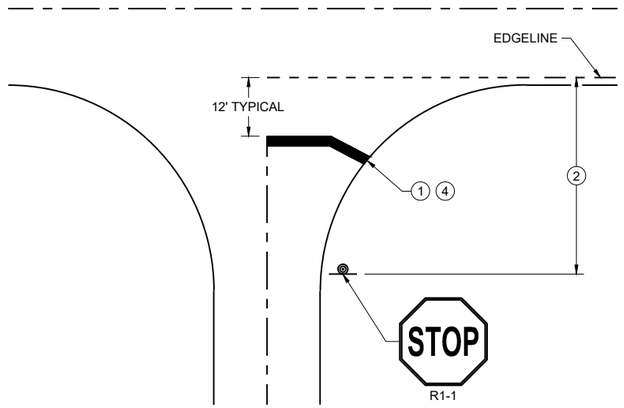


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

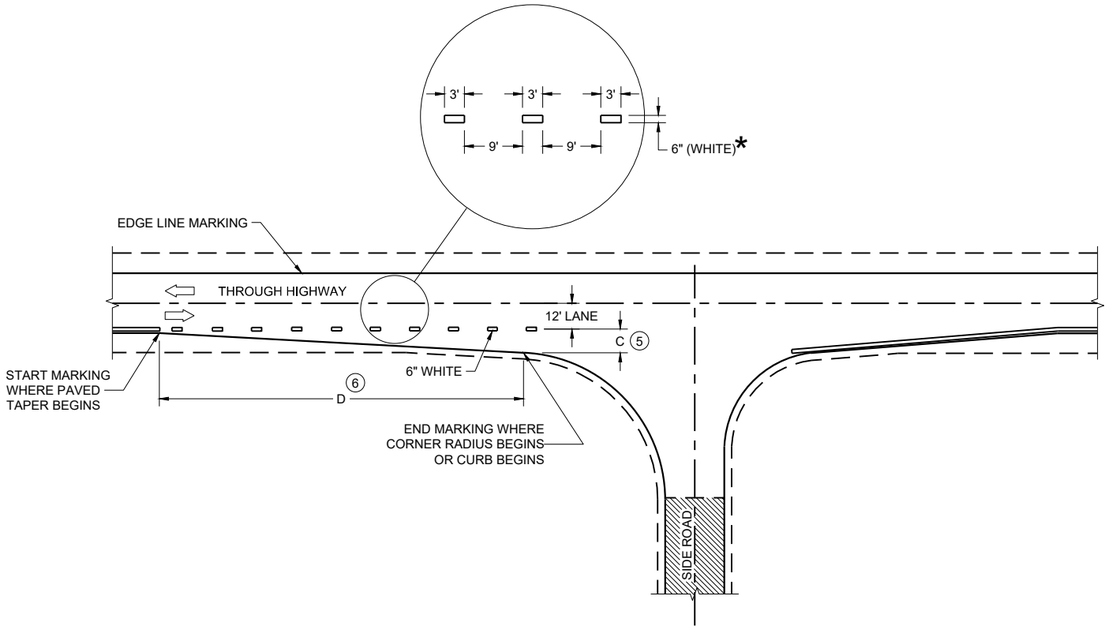
March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

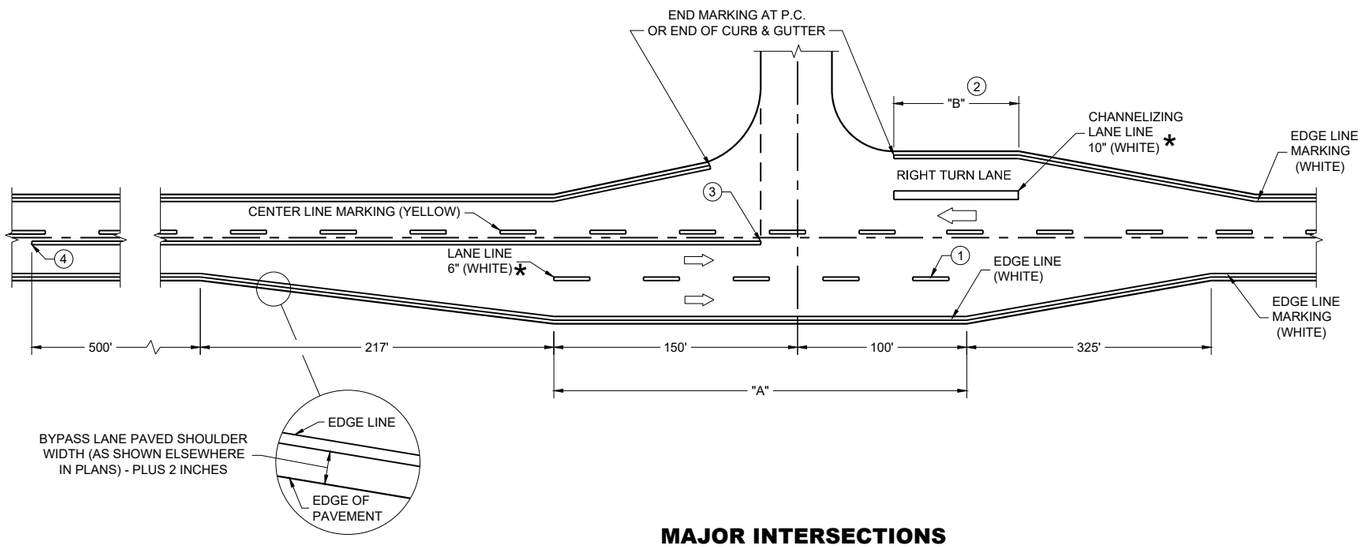
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SDD 15C33-05



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

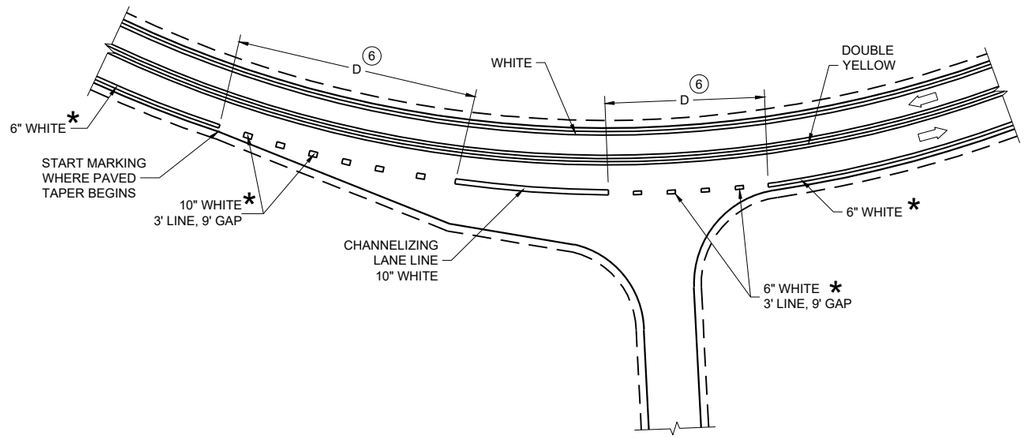
GENERAL NOTES

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

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

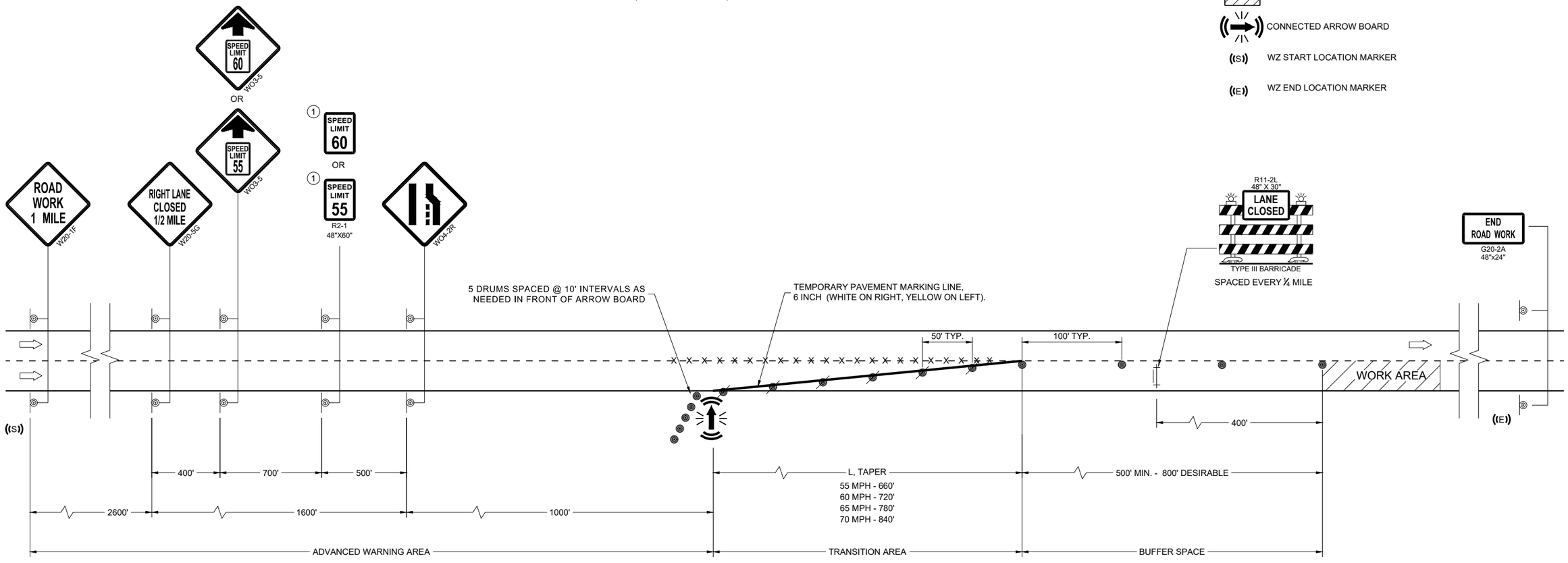
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

6
SDD 15D12-14b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)
- ((S)) — WZ START LOCATION MARKER
- ((E)) — WZ END LOCATION MARKER

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING FBS AND DEVICES 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 MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS 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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

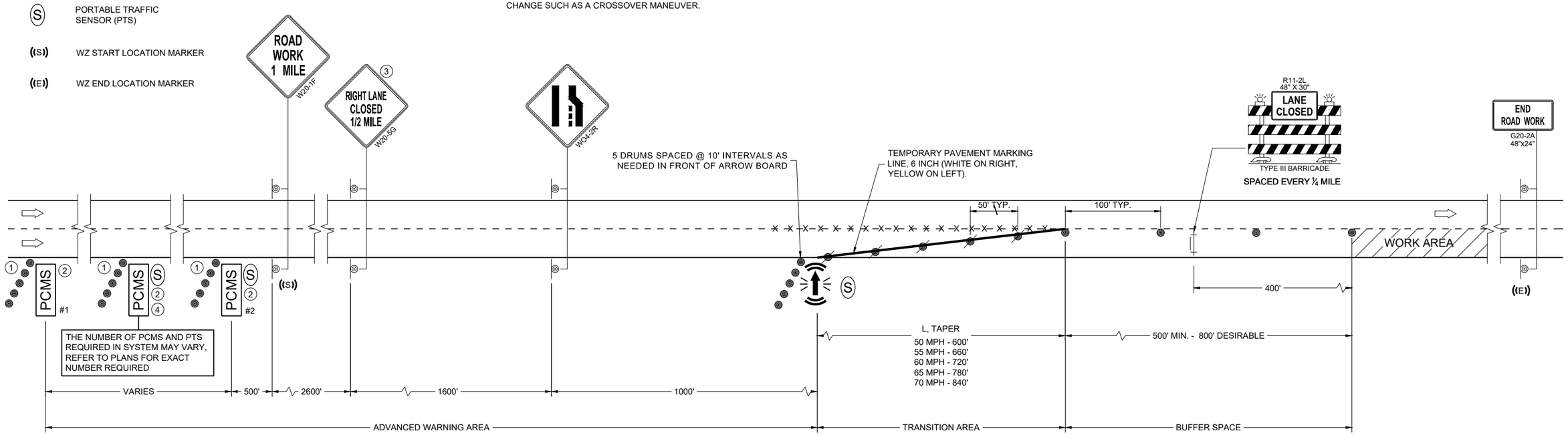
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON PCMS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
2. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE PCMS ON BOTH SIDES OF THE ROADWAY.
3. IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.
4. PLACE PCMS EVERY ONE MILE BETWEEN PCMS #1 AND PCMS #2, OR AS THE ENGINEER DIRECTS. THE NUMBER OF PCMS MAY BE MORE THAN SHOWN ON THIS DETAIL.
5. PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE OR ARROW MERGE MODE.



⑤ PCMS MESSAGING

SPEEDS 0 MPH TO 19 MPH		SPEEDS 20 MPH TO 39 MPH		SPEEDS 40 MPH AND GREATER
FRAME 1	FRAME 2	FRAME 1	FRAME 2	
STOPPED TRAFFIC AHEAD	EXPECT DELAYS	SLOW TRAFFIC AHEAD	PREPARE TO STOP	(FLASHING CAUTION MODE)

TRAFFIC CONTROL, LANE CLOSURE, TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Erin Schwark — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

SDD 15D12-14e

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SDD 15D12-14e

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

IF THE SPEED LIMIT WILL CHANGE BASED ON THE PRESENCE OF WORKERS, USE THE TAPER LENGTH THAT MATCHES THE HIGHER OF THE TWO SPEEDS FOR A CONTINUOUS LANE CLOSURE.

(1) EXISTING POST MOUNTED SPEED LIMIT SIGNS SHOULD BE COVERED OR REMOVED.

(2) PLACE DSLT IN ADVANCE WARNING AREA AND THROUGHOUT PROJECT LIMITS. IF THE LANE CLOSURE MOVES DOWNSTREAM, LEAVE DSLT IN PLACE.

(3) AT EXISTING POST MOUNTED SPEED LIMIT SIGN AFTER THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. IF THERE IS NOT AN EXISTING SIGN, PLACE 1,500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP

(4) IF WORK AREA STARTS LESS THAN 1,000 FEET FROM END OF LANE CLOSURE TAPER, OMIT DIGITAL SPEED LIMIT TRAILER AT THAT LOCATION.

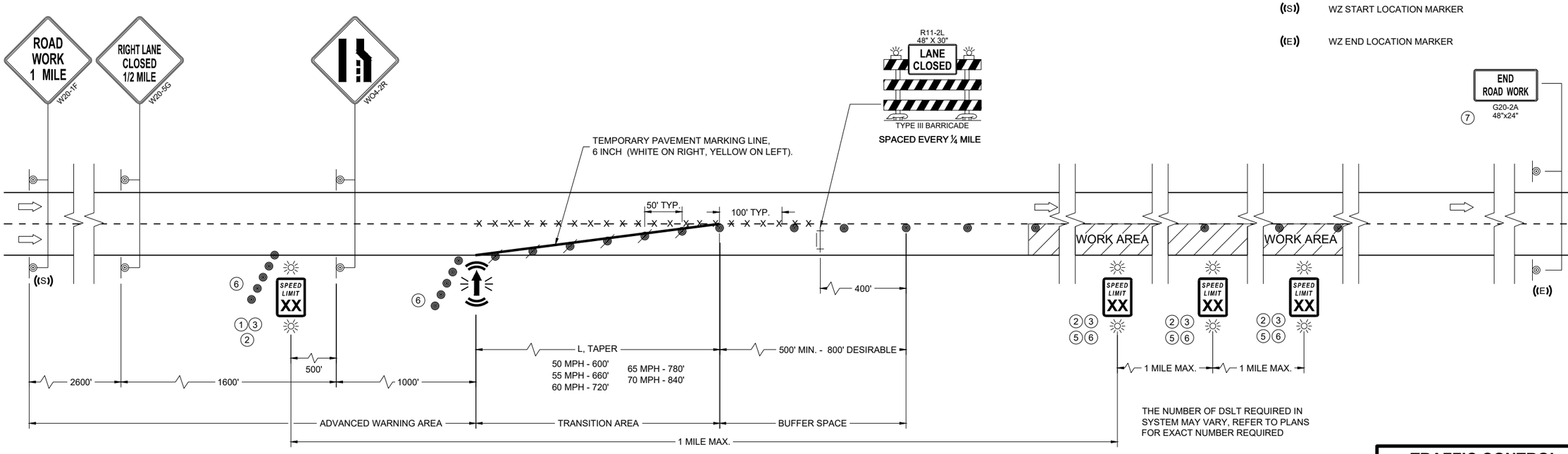
(5) PLACE A DIGITAL SPEED LIMIT TRAILER A MINIMUM OF EVERY ONE MILE. MODIFY PLACEMENT AS DIRECTED BY ENGINEER WHEN DIGITAL SPEED LIMIT TRAILER IS LOCATED IN CLOSE PROXIMITY TO AN ACCELERATION LANE OF AN ENTRANCE RAMP.

(6) 5 DRUMS SPACED @ 10' INTERVALS AS NEEDED.

(7) INCLUDE NON-DIGITAL R2-1 RESUME SPEED LIMIT SIGNS 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END ROAD WORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- DIGITAL SPEED LIMIT TRAILER (DSLT)
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER



TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6 SDD 15D12-14g

6 SDD 15D12-14g

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

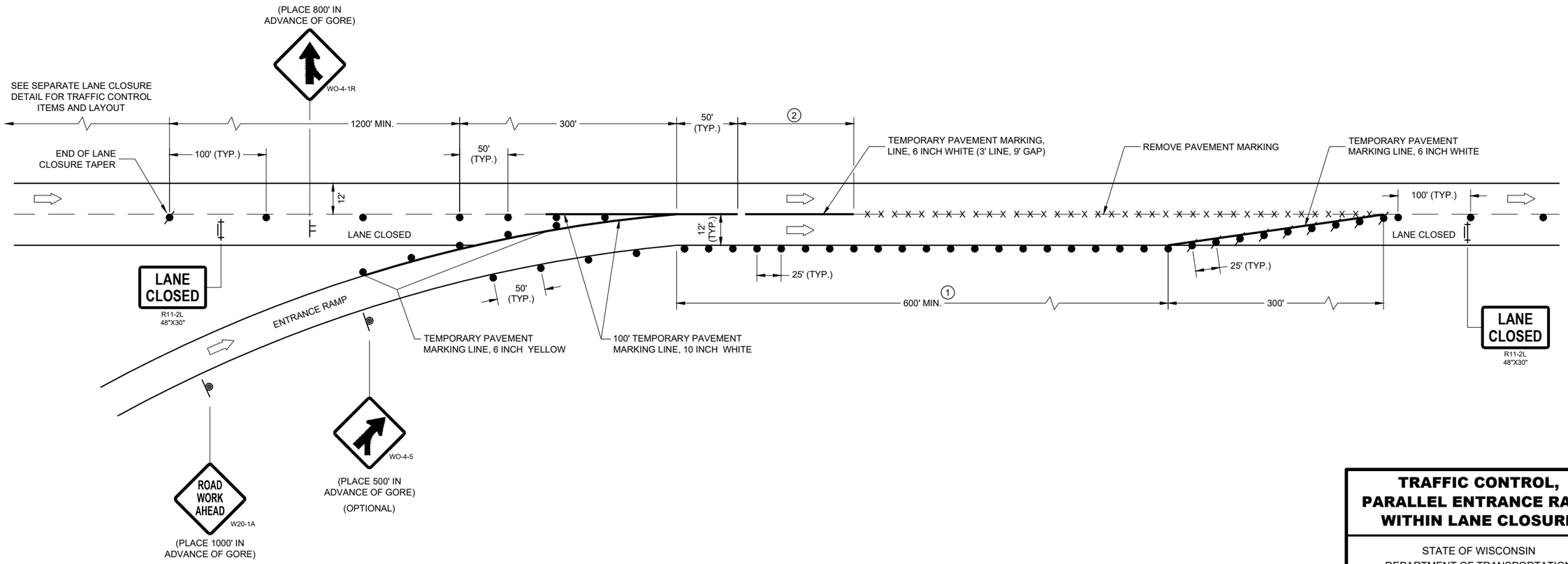
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REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D15-07a

6

SDD 15D15-07a

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

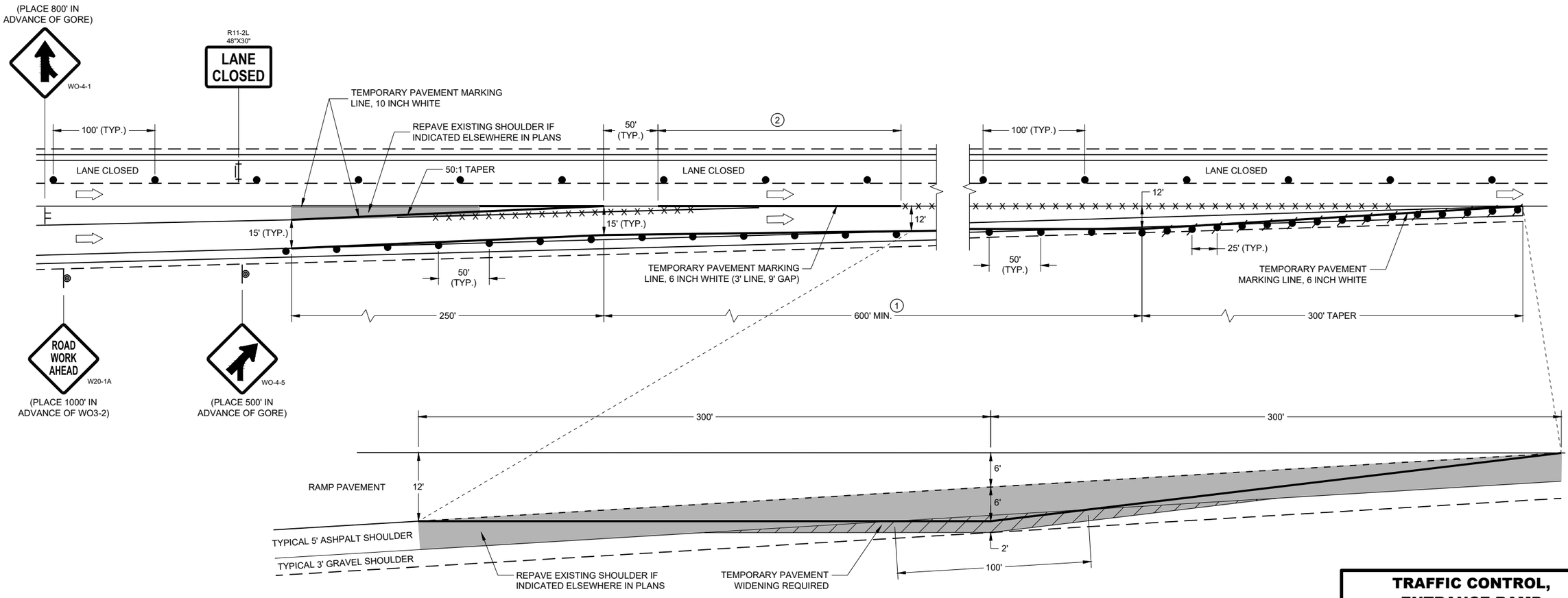
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15-07b

6

SDD 15D15-07b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

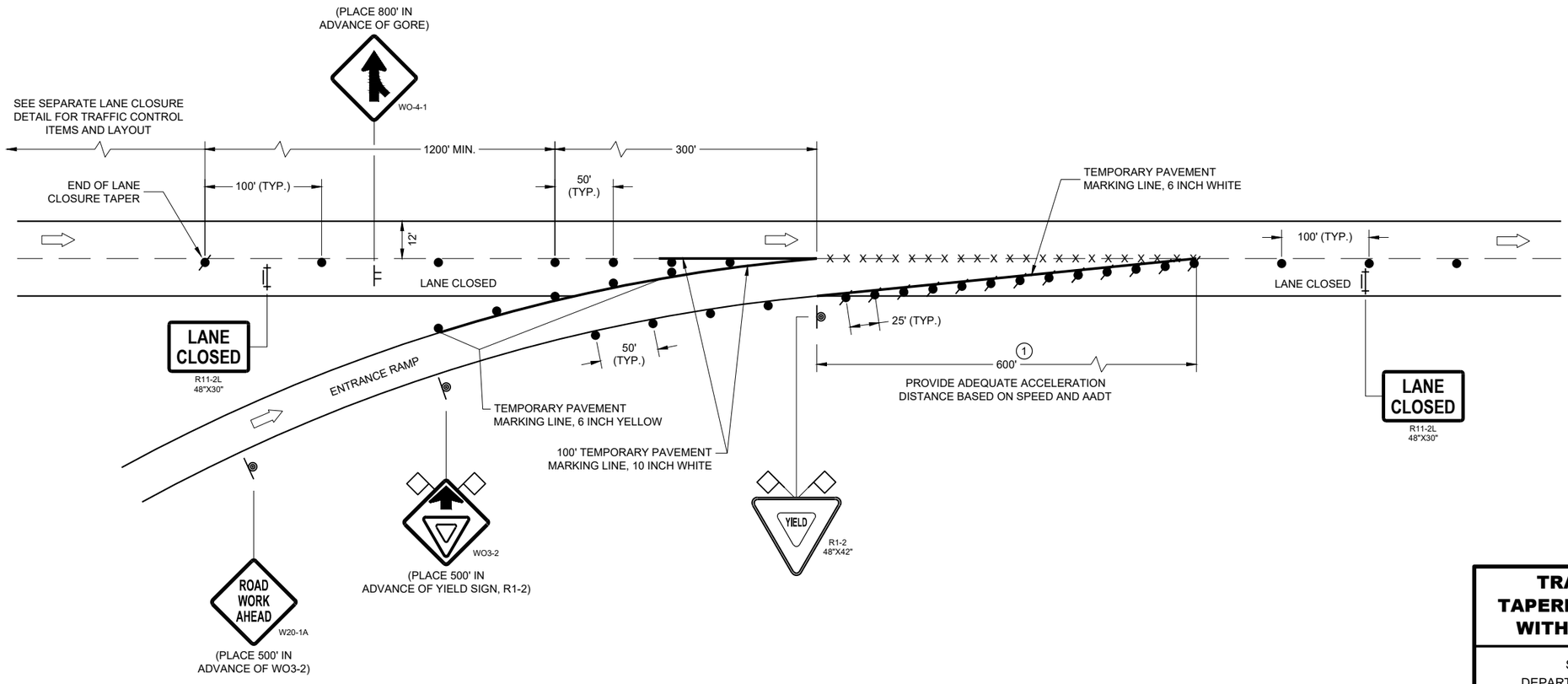
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15D15-07c

6

SDD 15D15-07c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

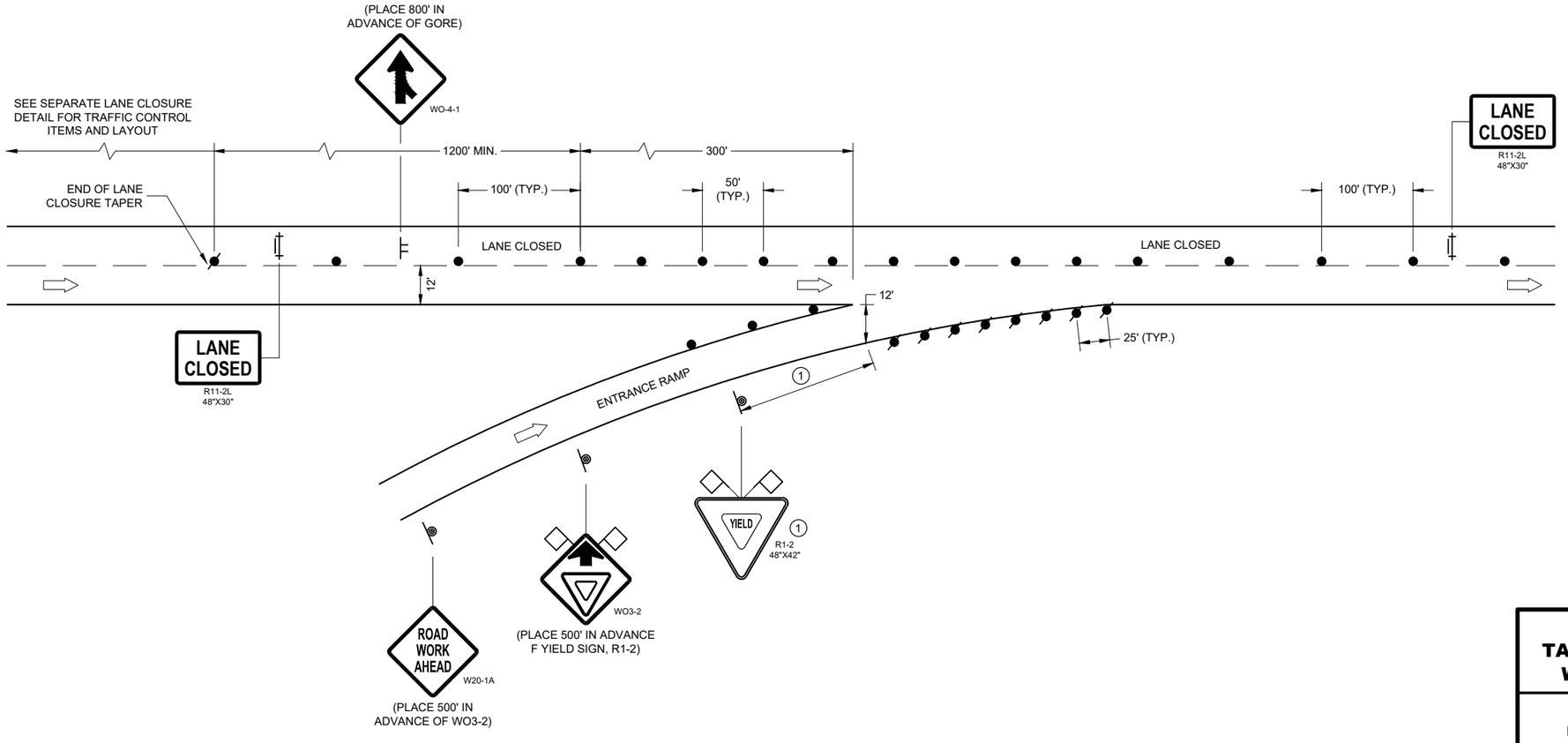
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D15-07d

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SDD 15D15-07d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

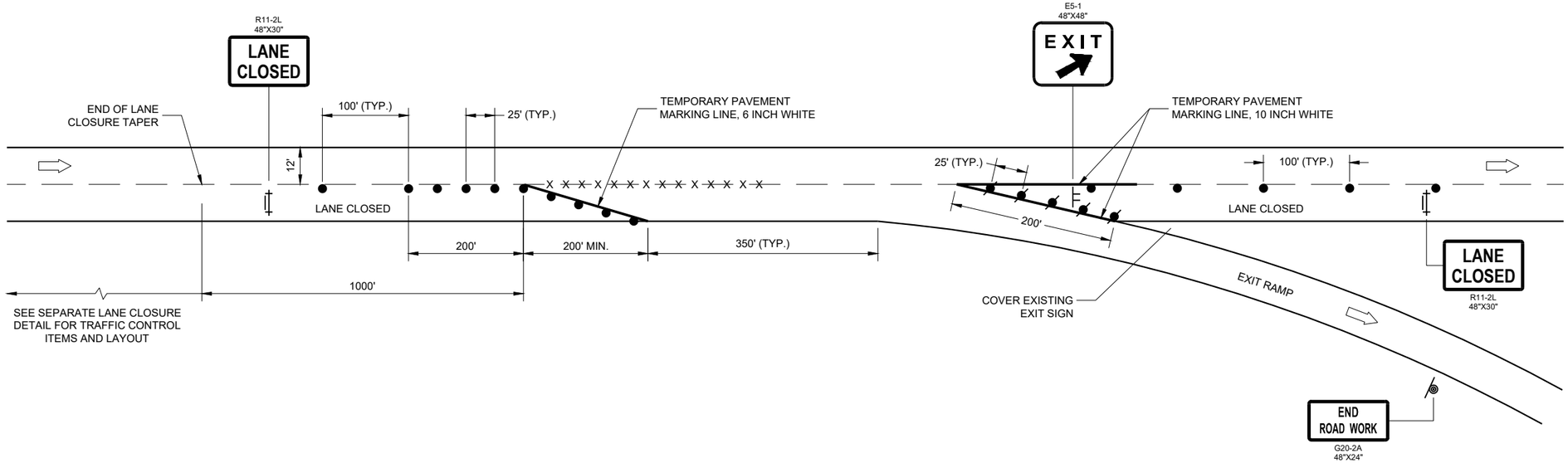
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.



TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D15-07e

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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 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 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

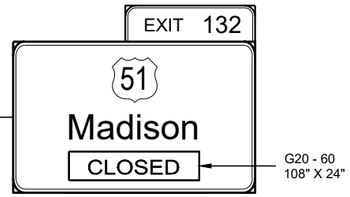
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

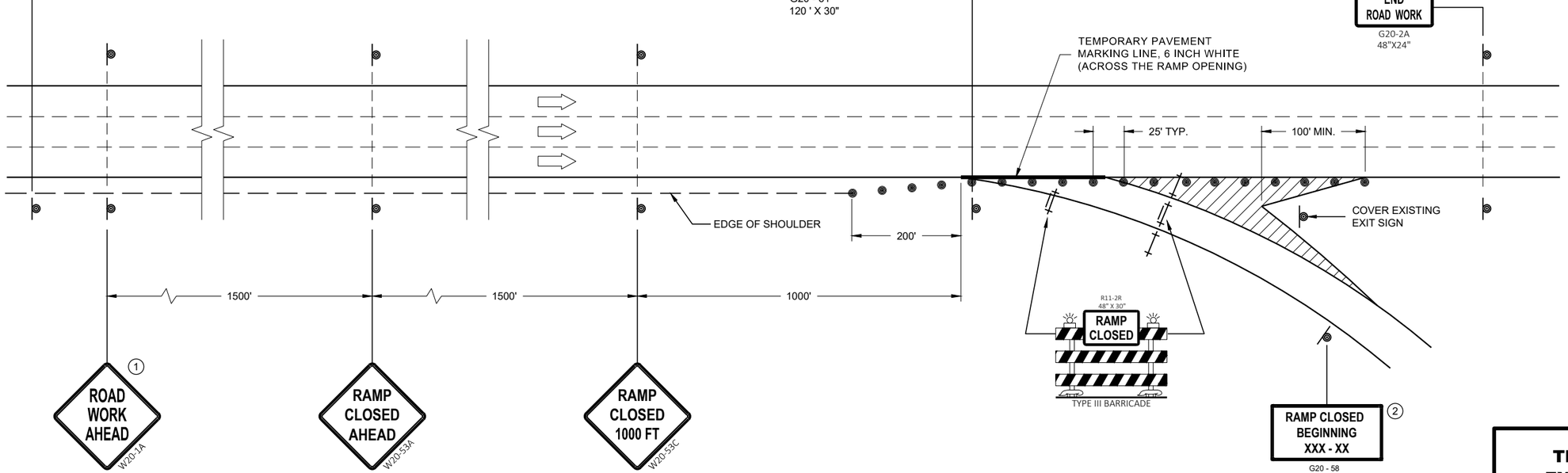


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



G20 - 61
120 ' X 30"

COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

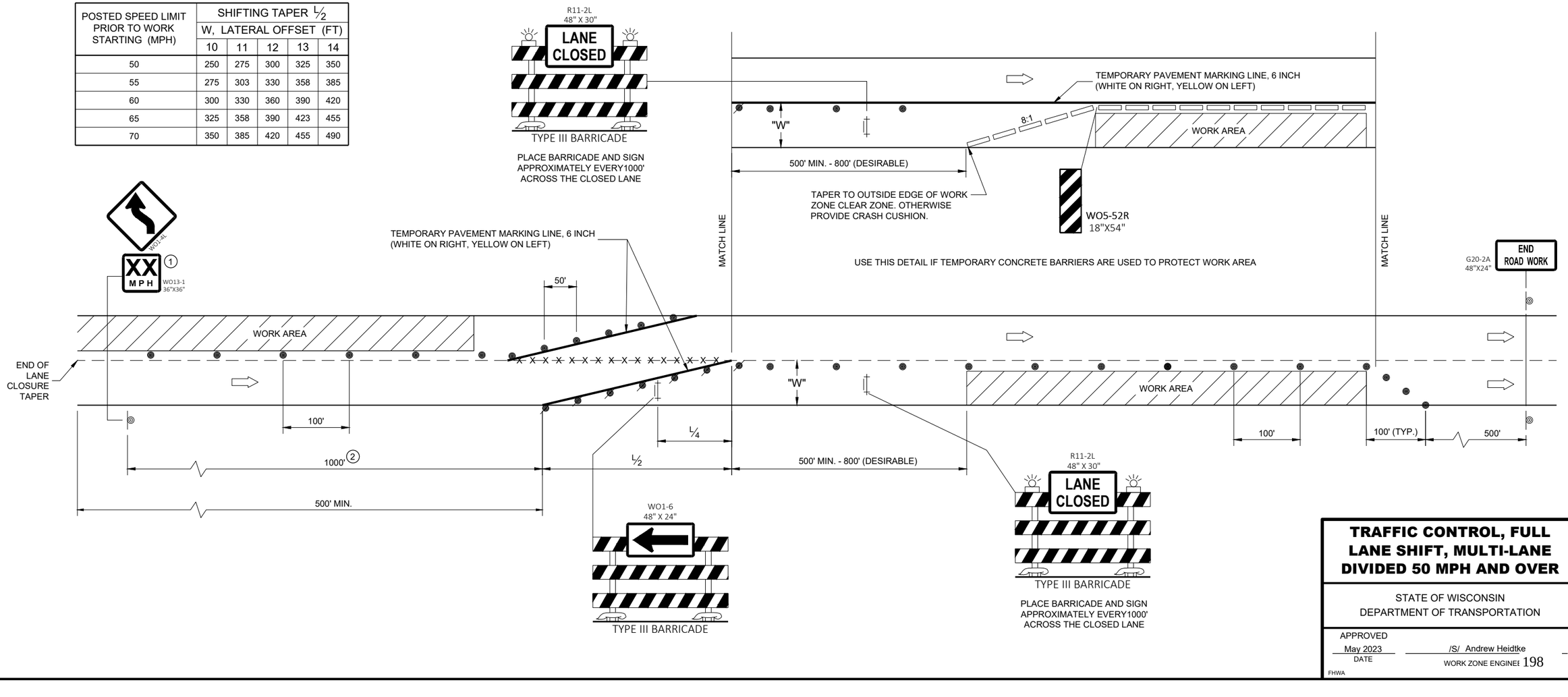
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ½ THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) IF BEGINNING OF LANE SHIFT IS 1200' OF LESS FROM THE END OF THE LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.



TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D40-05b

6

SDD 15D40-05b

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

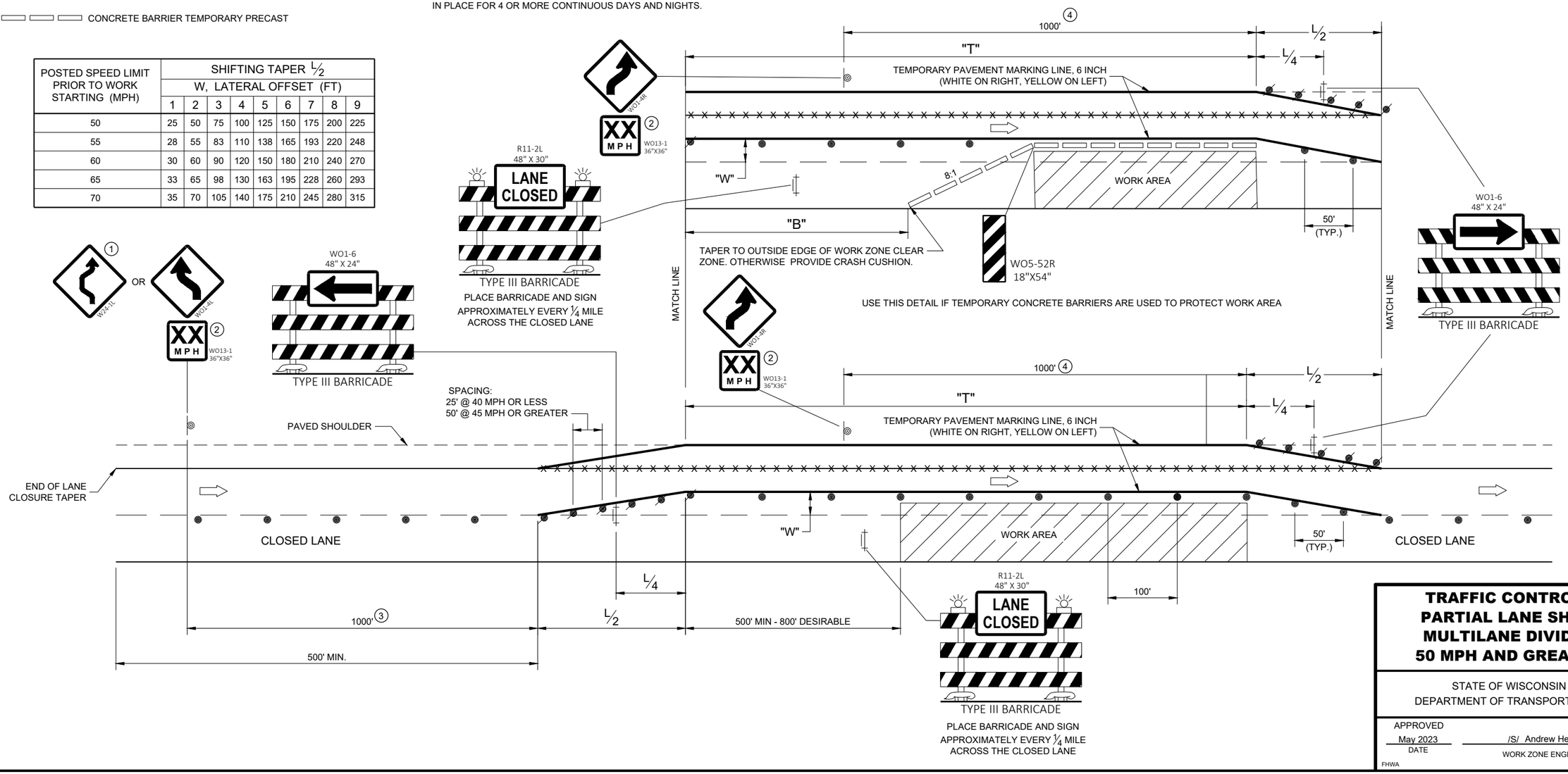
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

1. USE ONLY WHEN T<600', OMIT WO1-4R.
2. IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
3. IF THE BEGINNING OF LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.
4. IF THE BEGINNING OF THE SECOND LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF THE FIRST LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE FIRST LANE CLOSURE TAPER.



TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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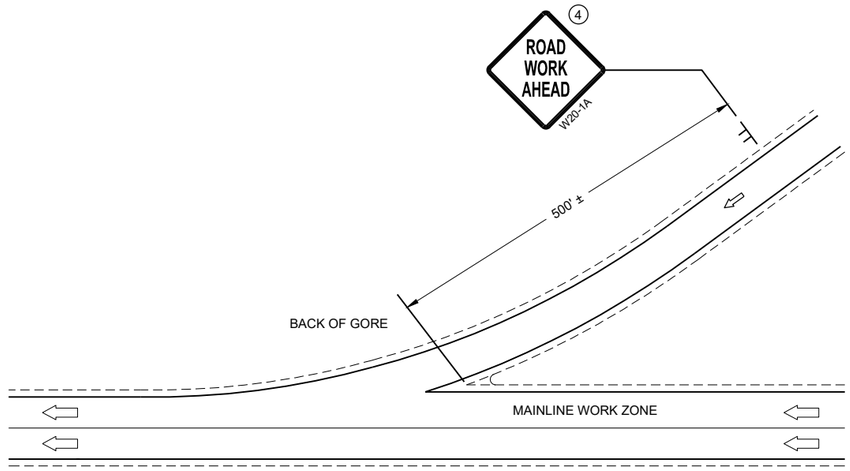
SDD 15D40-05d

6

SDD 15D40-05d

LEGEND

- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- ● TRAFFIC CONTROL DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- WORK AREA



GENERAL NOTES

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

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. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

WHEN WORK ACTIVITY BLOCKS THE RIGHT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

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

(1) DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO 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 AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.

(3) WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.

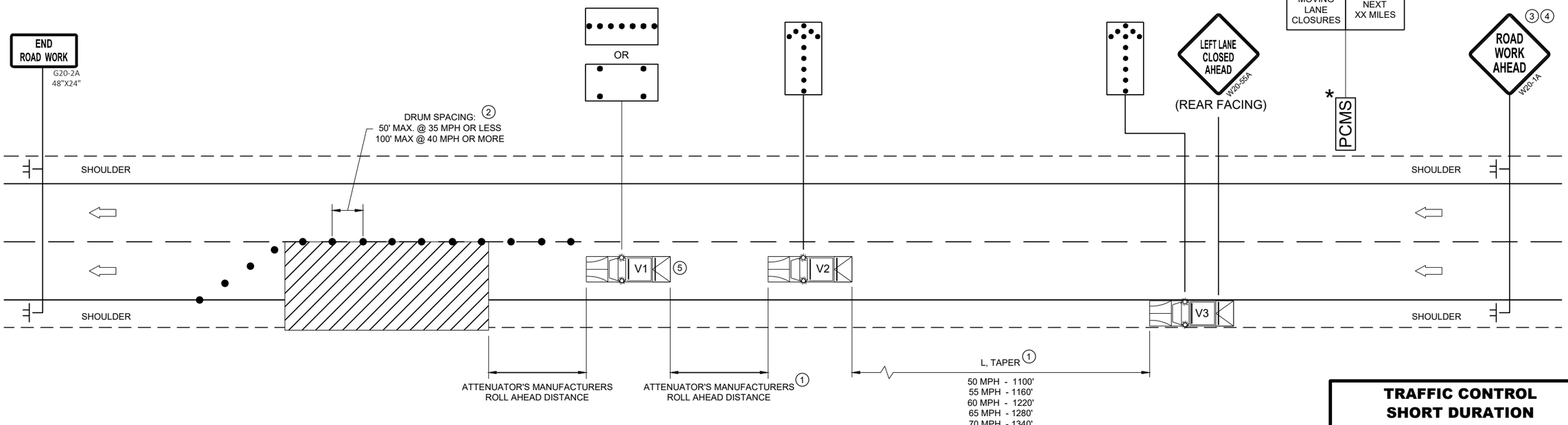
(4) SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(5) SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL

PCMS MESSAGING

FRAME 1	FRAME 2
MOVING LANE CLOSURES	NEXT XX MILES



TRAFFIC CONTROL SHORT DURATION MOBILE OPERATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

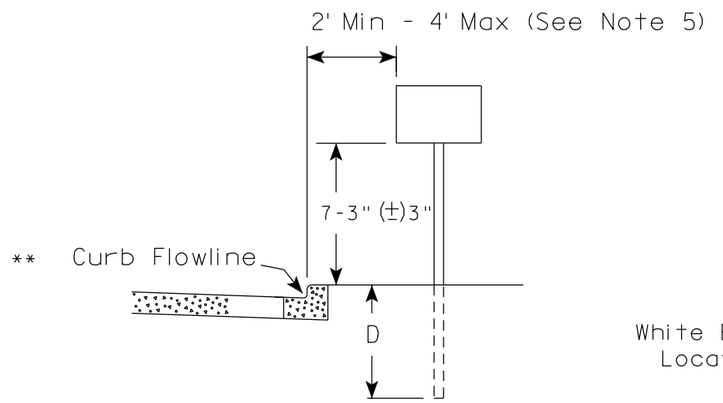
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SDD 15D43 - 02

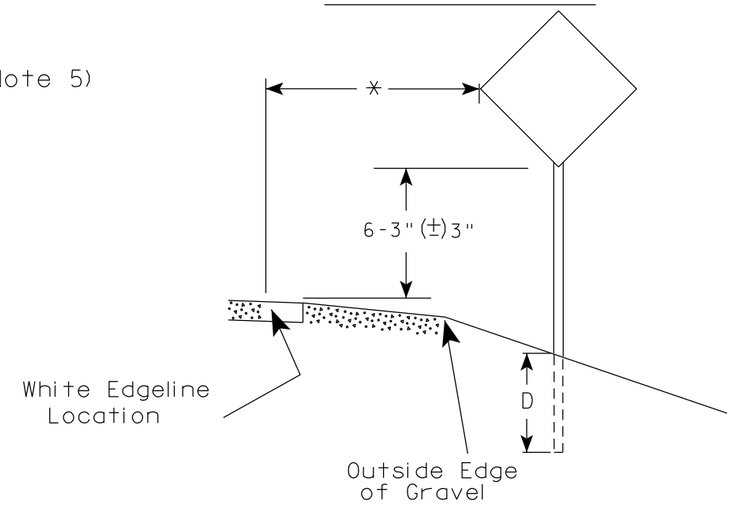
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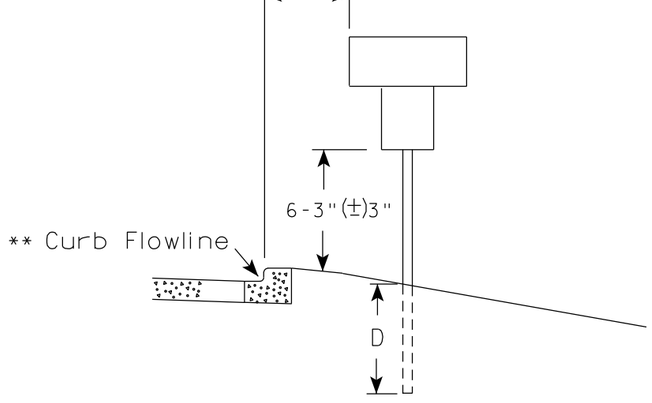
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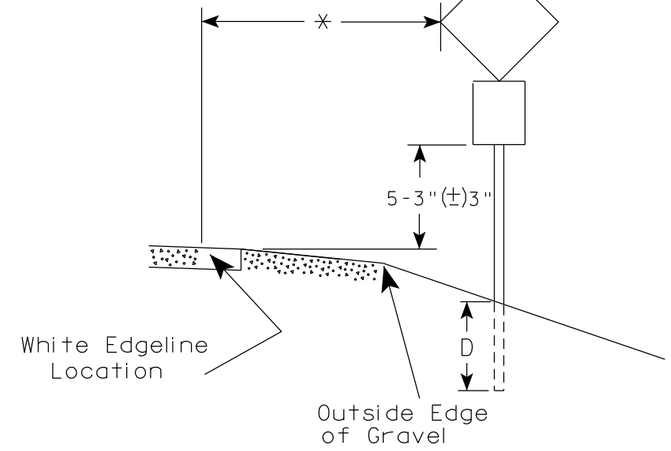
URBAN AREA



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'

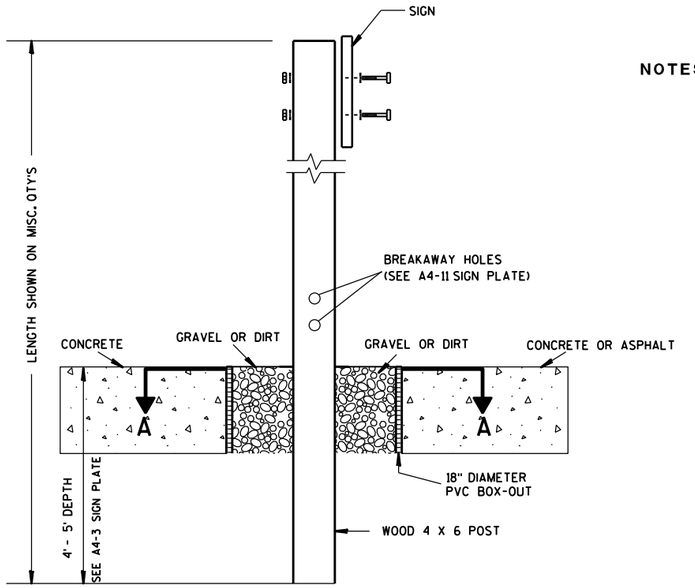
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

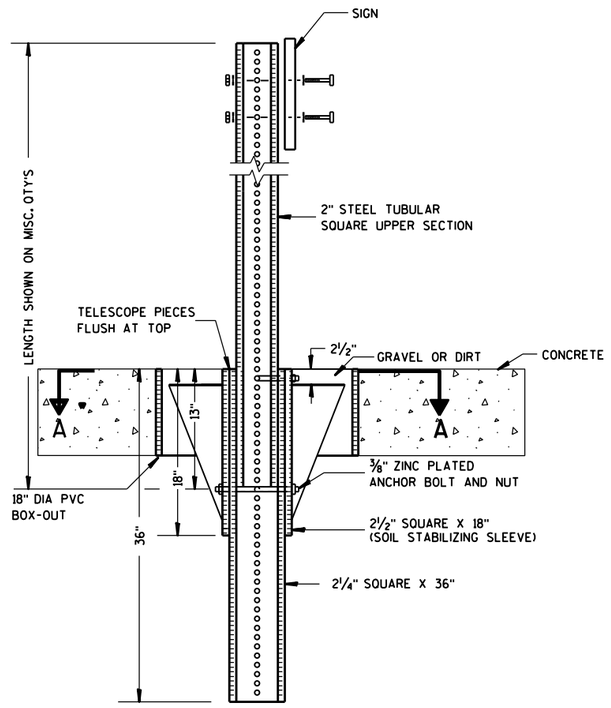
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 201	E



ELEVATION VIEW

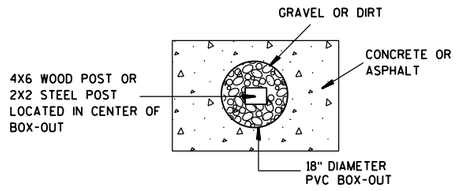
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

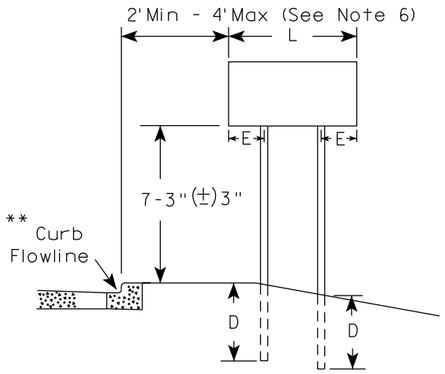
APPROVED Matthew R Rauch
for State Traffic Engineer

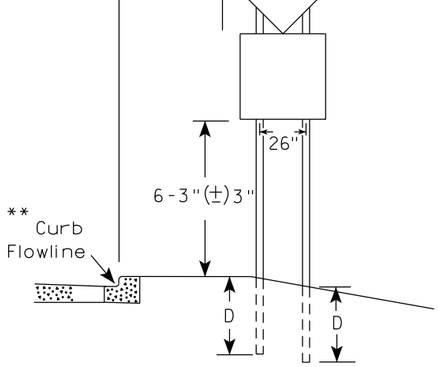
DATE 1/27/14 PLATE NO. A4-3B.1

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

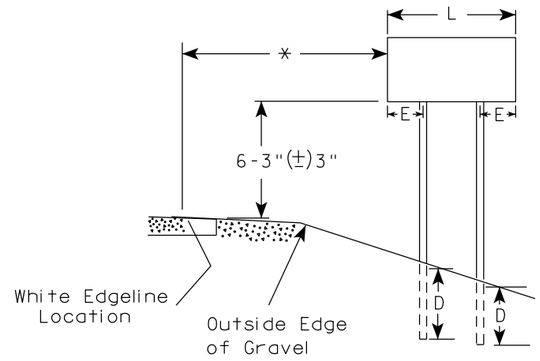
URBAN AREA

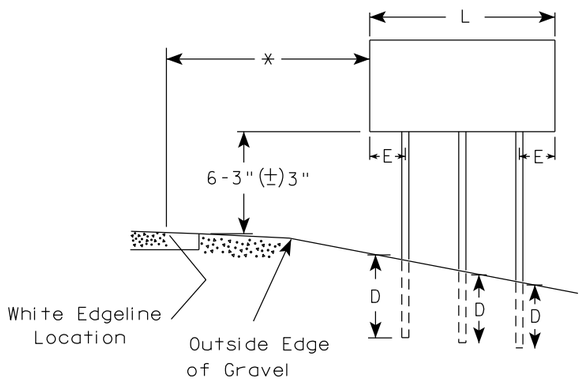


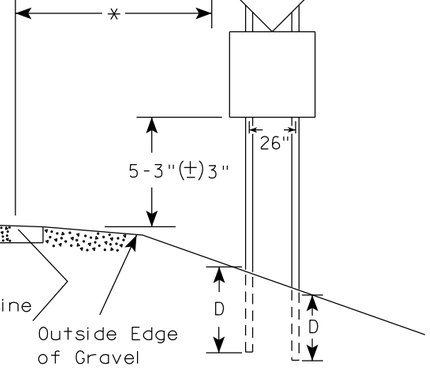


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







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'

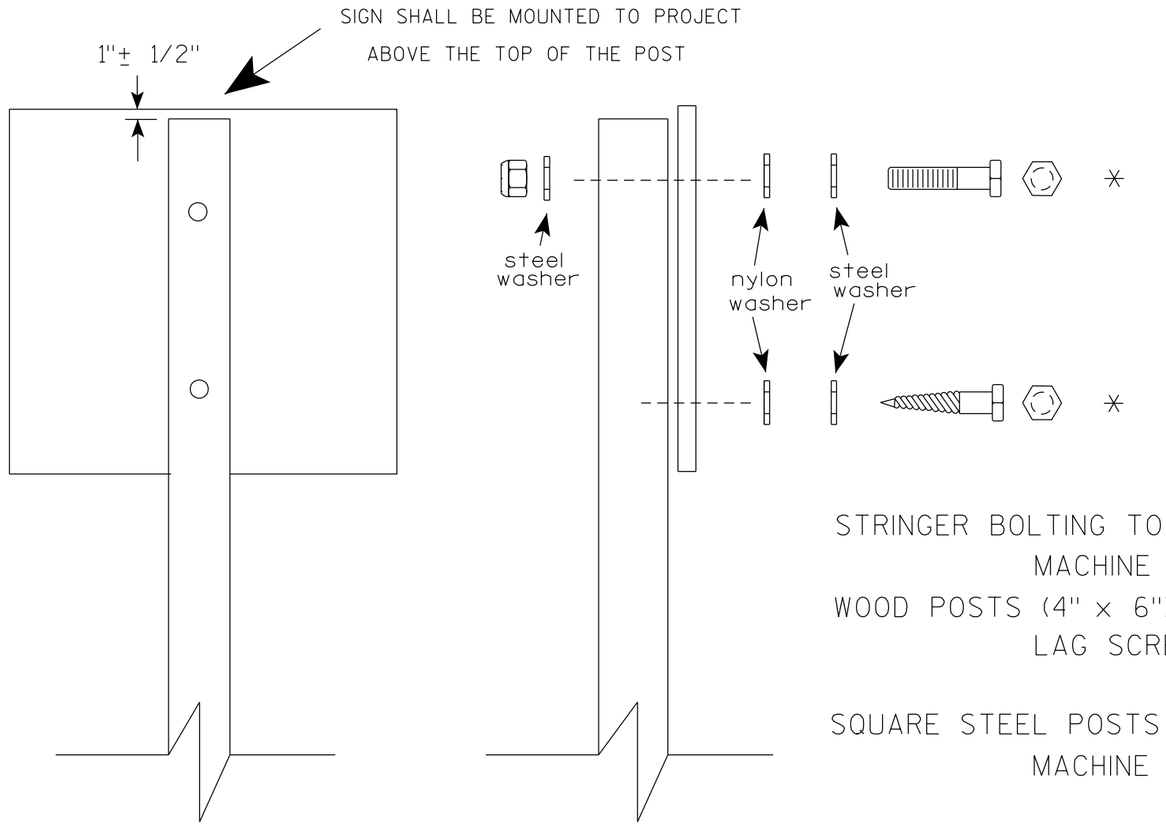
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 203	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

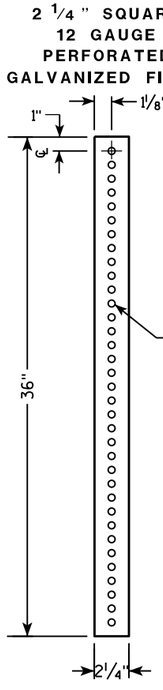
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

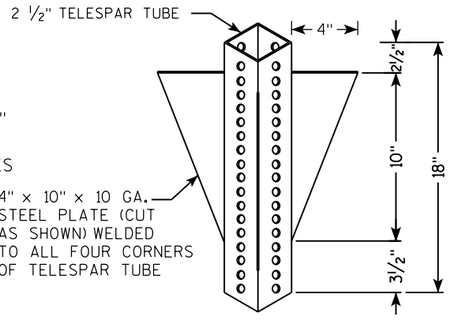
SHEET NO: 204 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

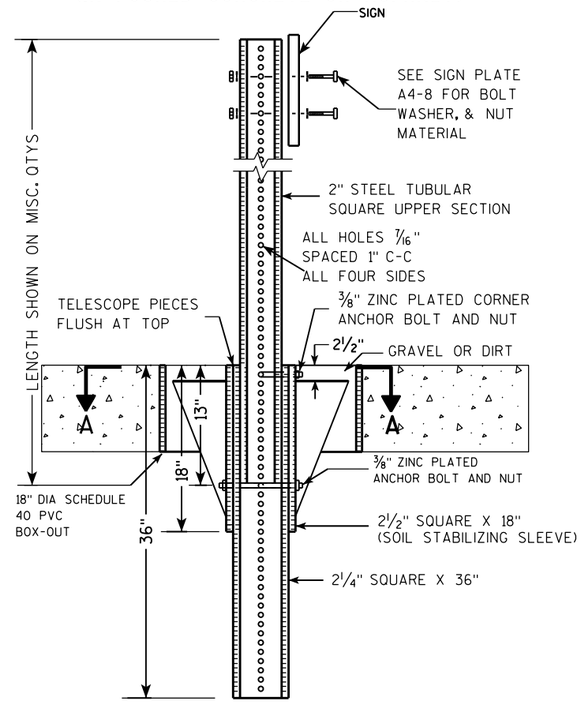
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



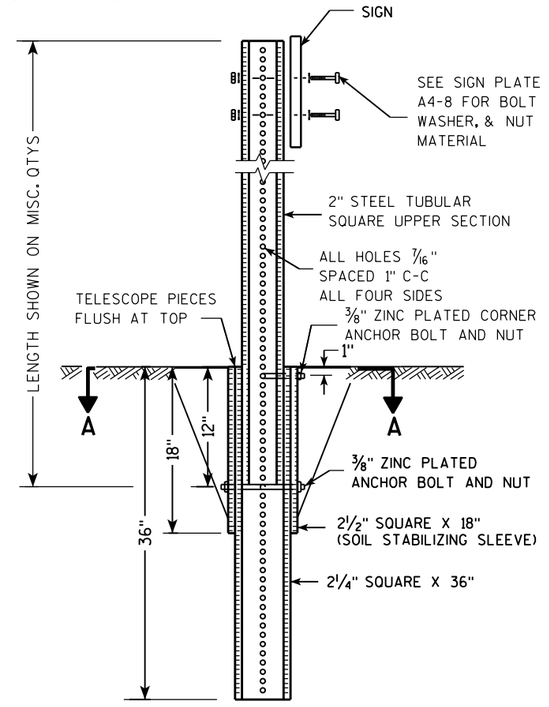
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

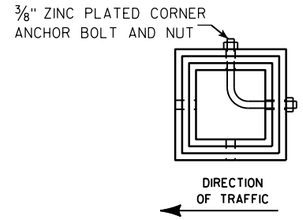


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

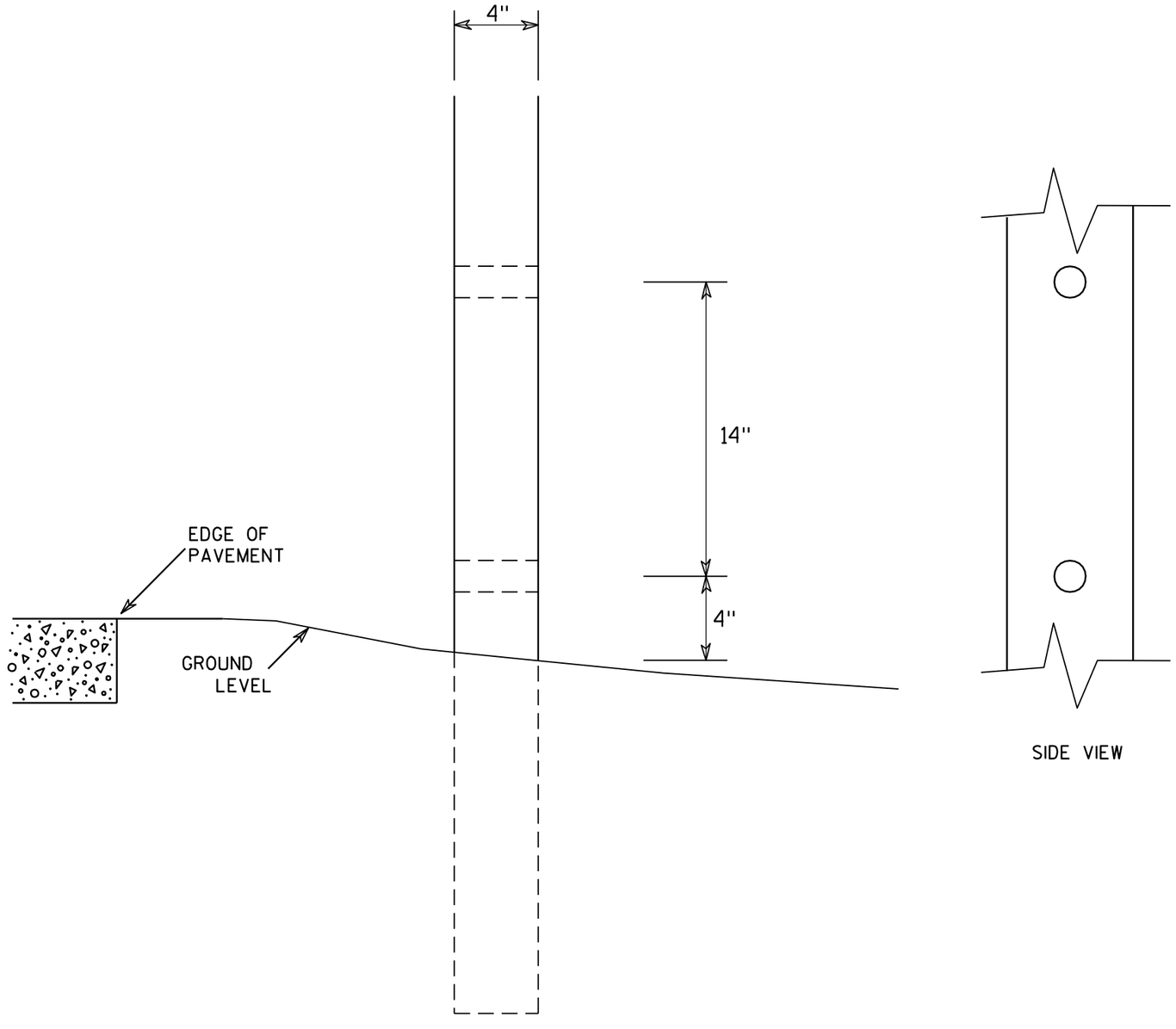
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 205 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



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

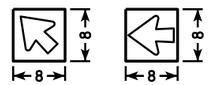
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

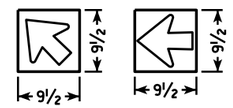
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 206	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES

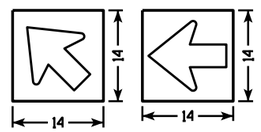




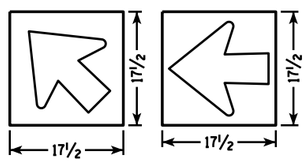










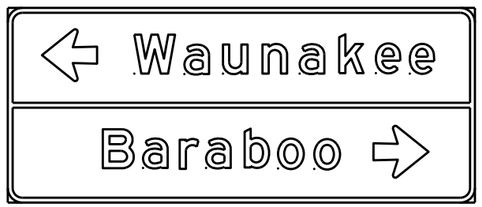


GENERAL NOTES

1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. There shall be a minmum of 2 fasteners used per arrow sign.
3. There shall be a spacer consisting of a 0.08" nylon washer between the back of the arrow sign and the face of the permanent sign.
4. Arrows are per standard plate A1-2
5. Use separate arrow sign for each destination
6. Tilt arrow is always at 45 degrees
7. Arrow is centered on arrow sign

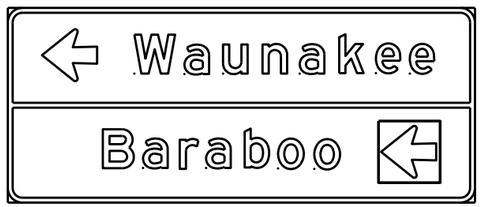
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

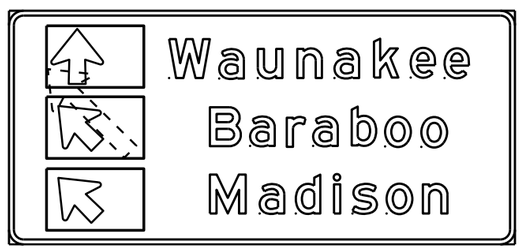
BEFORE





AFTER





DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

A4-12.2

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A412.DGN PLOT DATE : 08-OCT-2014 11:50 PLOT BY : mscsja

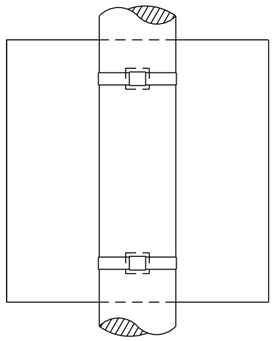
WISDOT/CADDS SHEET 42

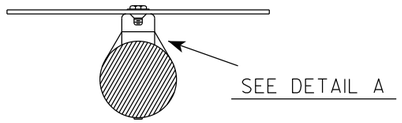
7

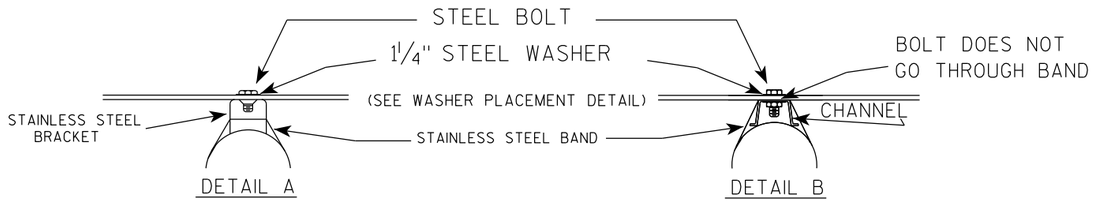
7

BANDING

SINGLE SIGN



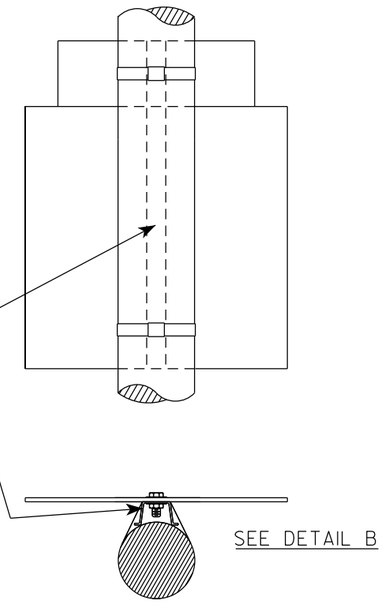




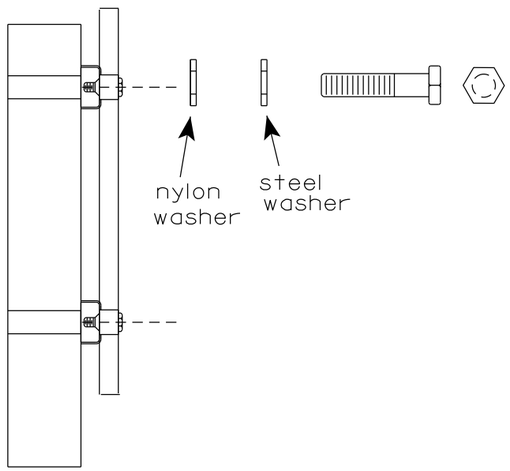
GENERAL NOTES

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

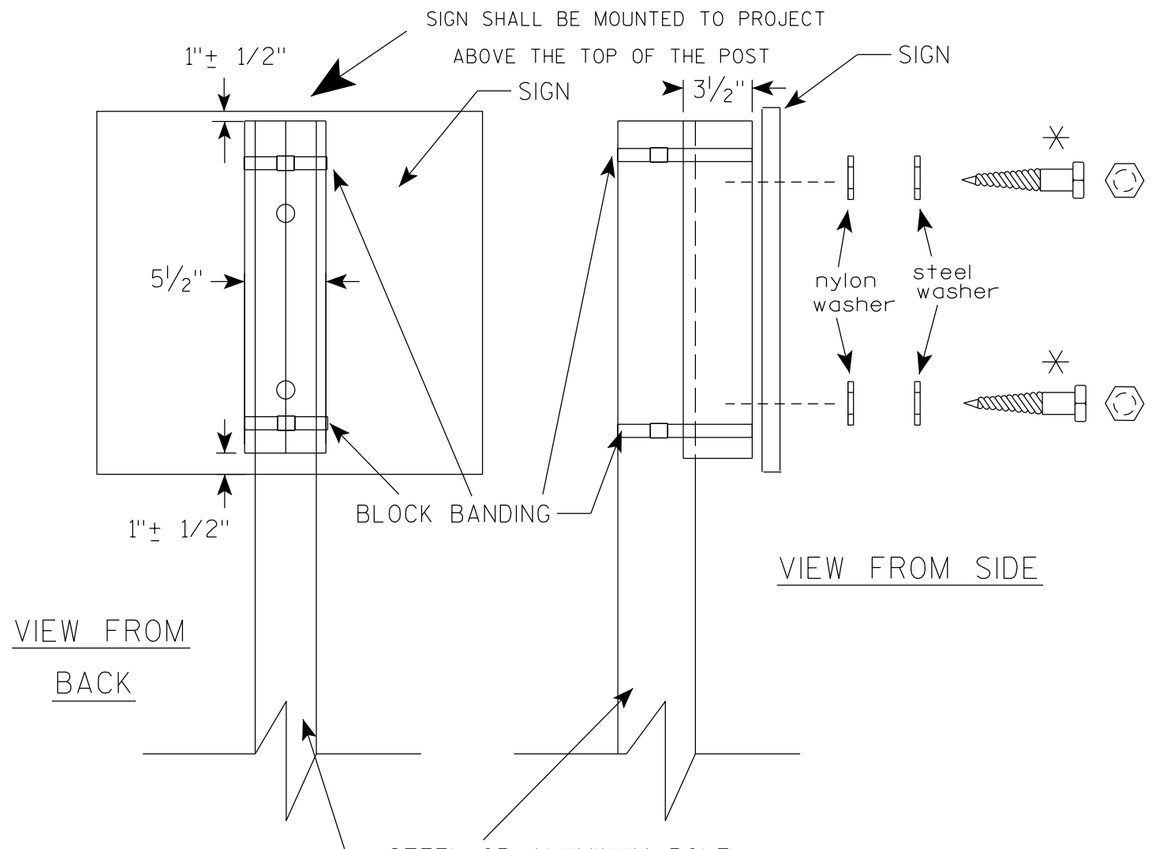
WISCONSIN DEPT OF TRANSPORTATION

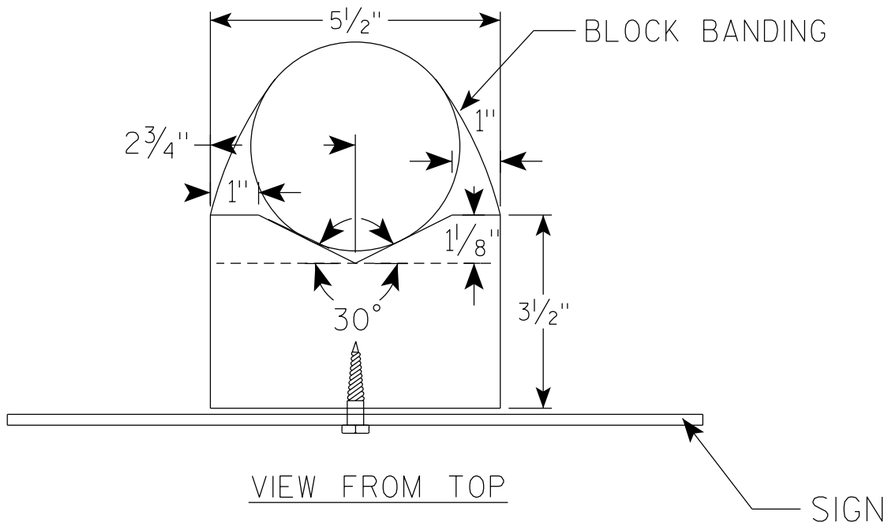
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 208	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





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)

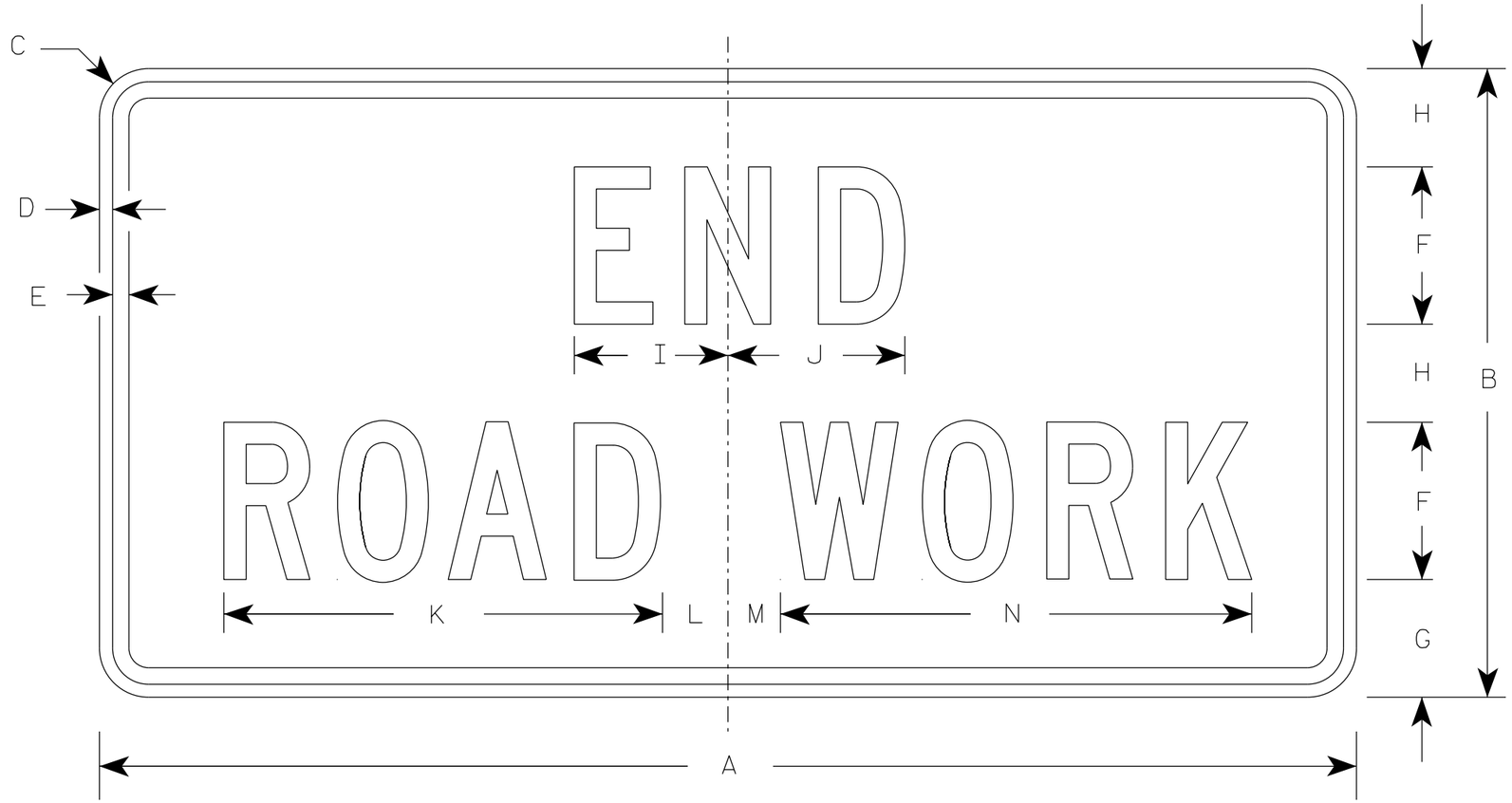
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 209 E



G20-2A

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	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

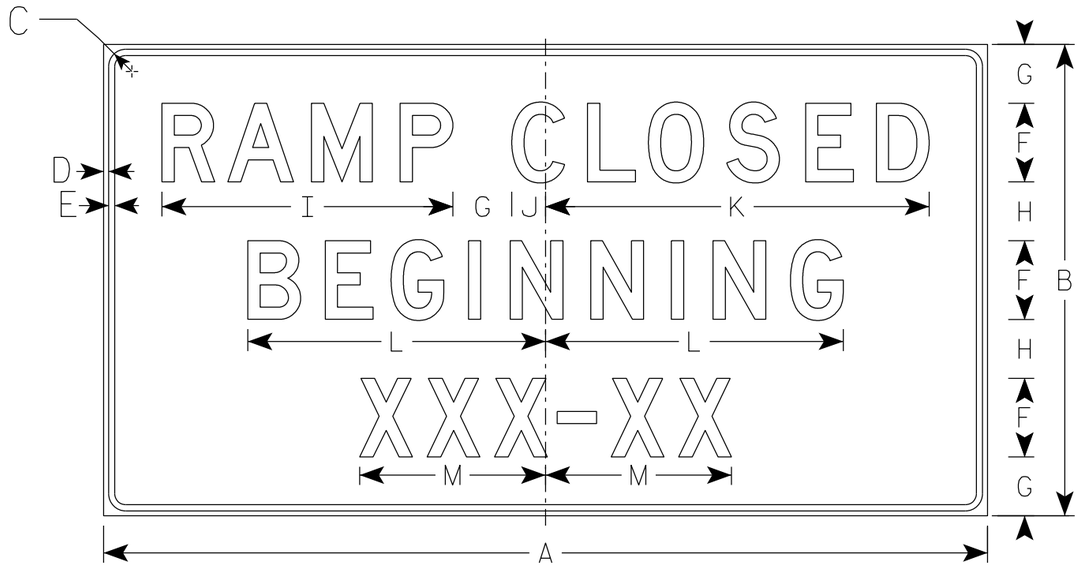
DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 210 E

7

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



G20-58

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	72	36	1 5/8	5/8	3/4	6	5	4	22 1/4	2 3/8	29 1/2	22 3/4	14 1/4														18.0
3	90	48	1 5/8	5/8	3/4	8	6	6	29 5/8	3 3/8	39	30 3/8	19														30.0
4																											
5																											

STANDARD SIGN
G20-58

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/19/2020 PLATE NO. G20-58.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 211 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum



G20-60

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																											
4	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/15 PLATE NO G20-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E



G20-61

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																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

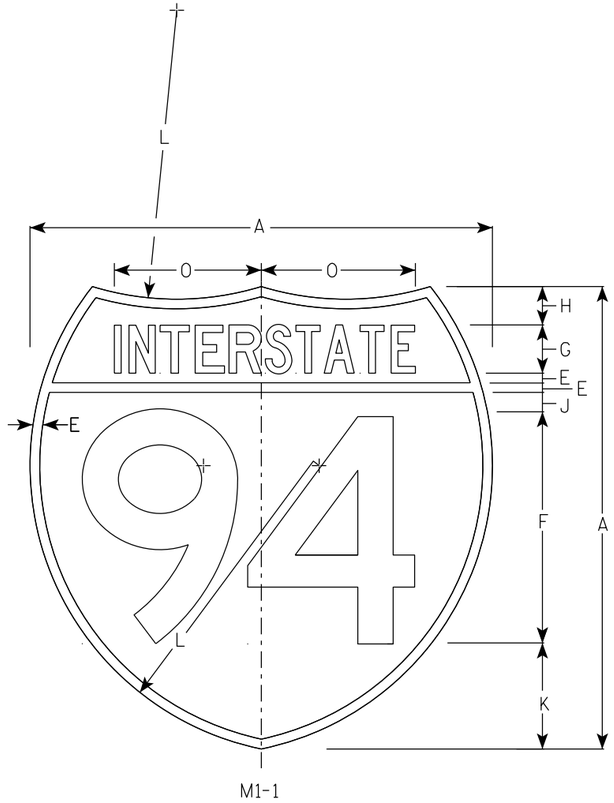
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

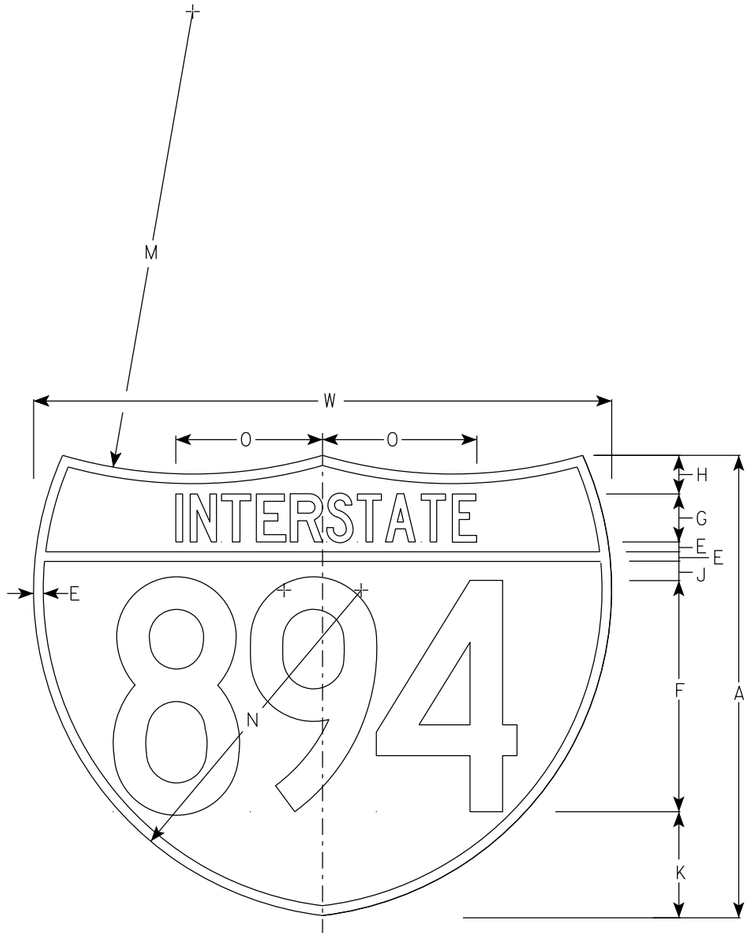
DATE 5/07/15 PLATE NO G20-61.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42



M1-1



M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - 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	M1-1 Area sq. ft.	M1-1A Area sq. ft.
1																											
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
2M	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79

INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

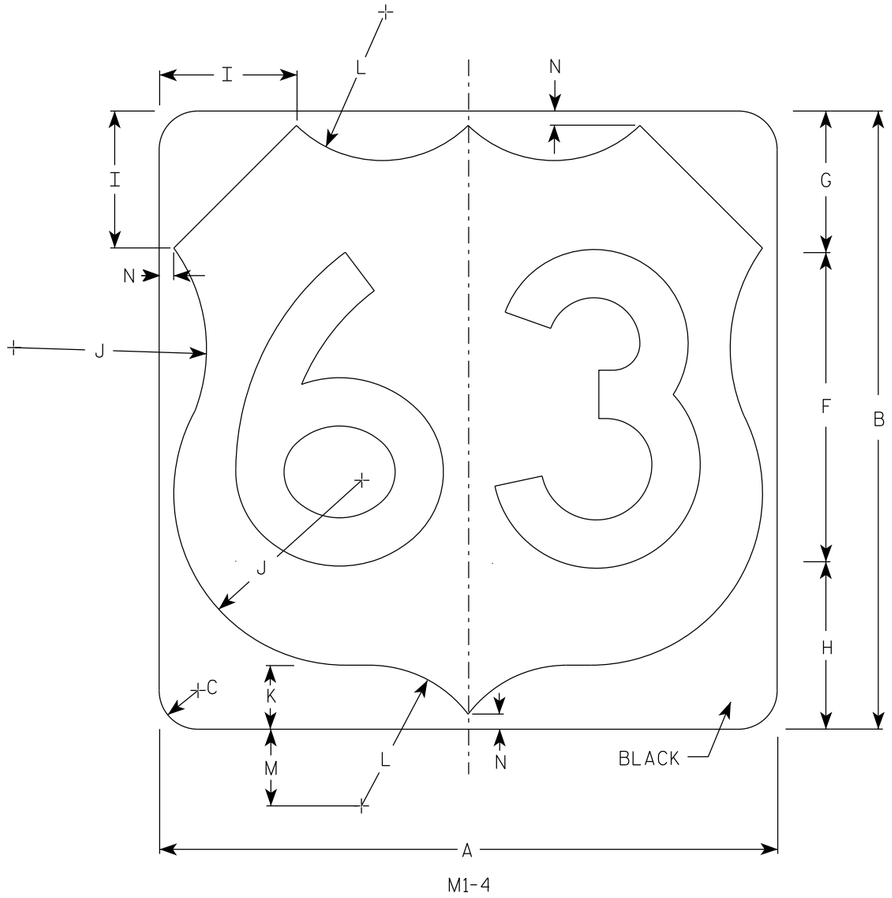
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

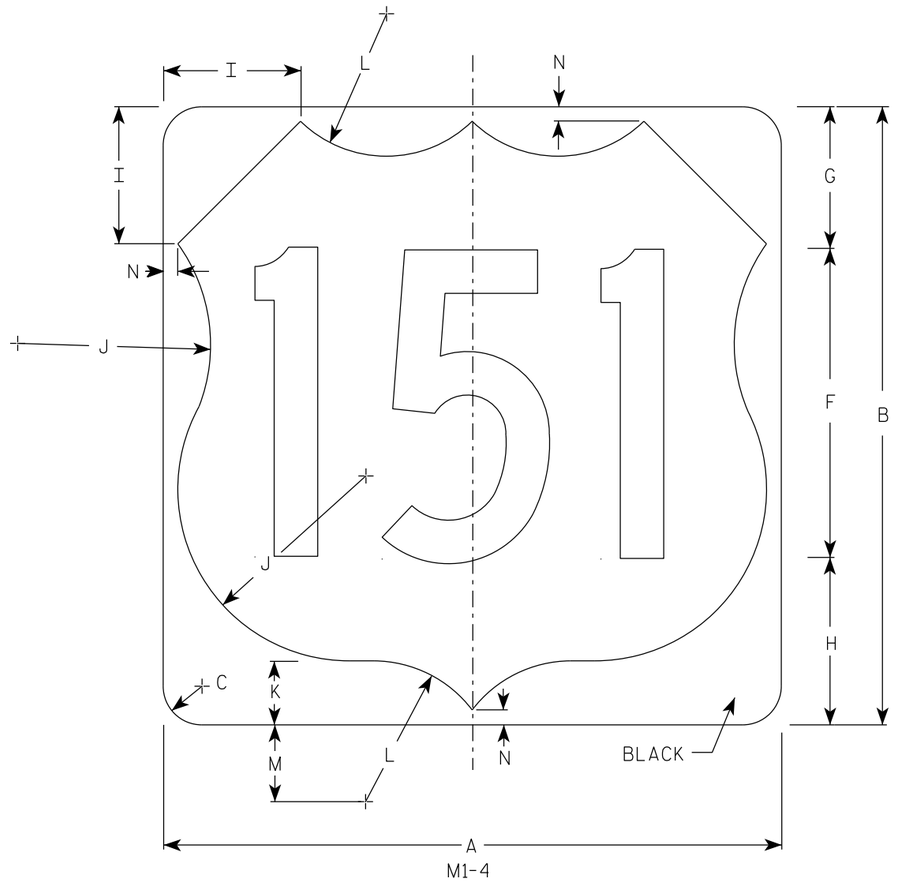
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 214 | E

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



M1-4



M1-4

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	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
2M	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

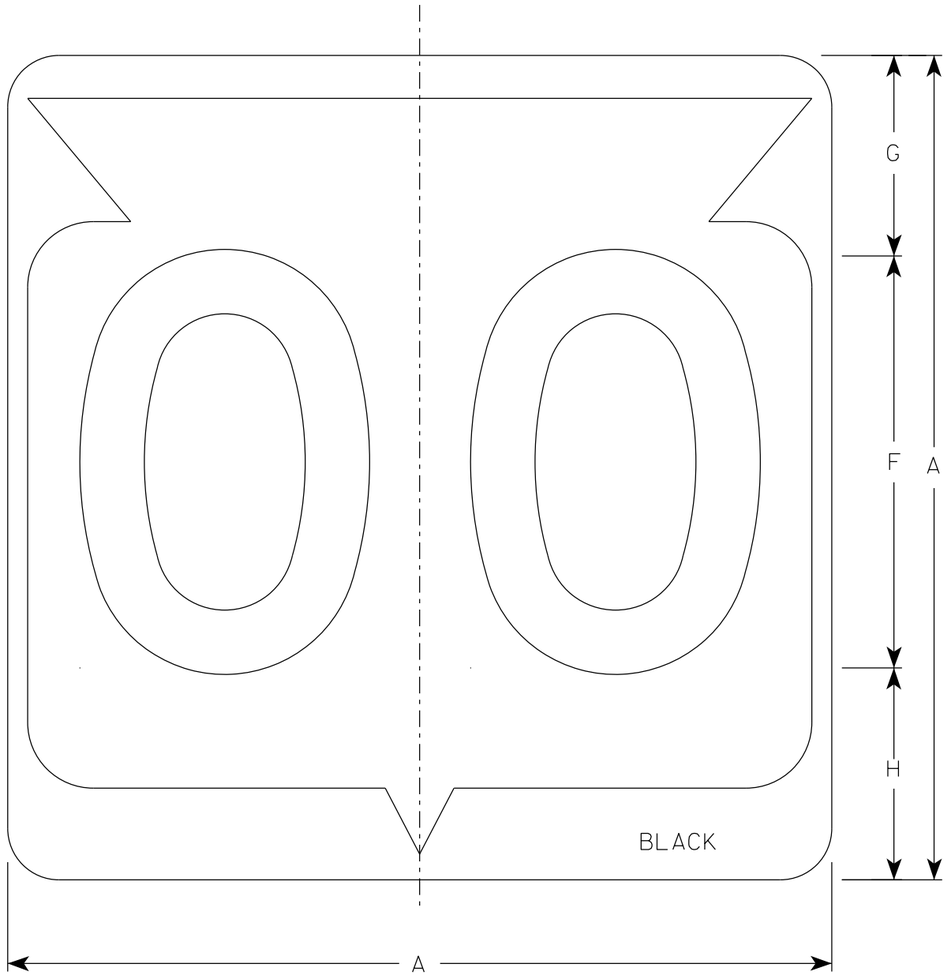
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

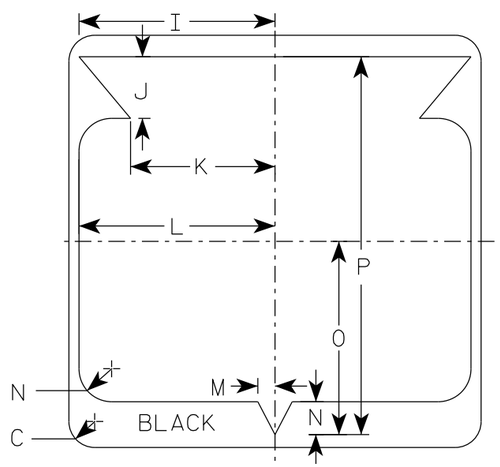
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 215 | E



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

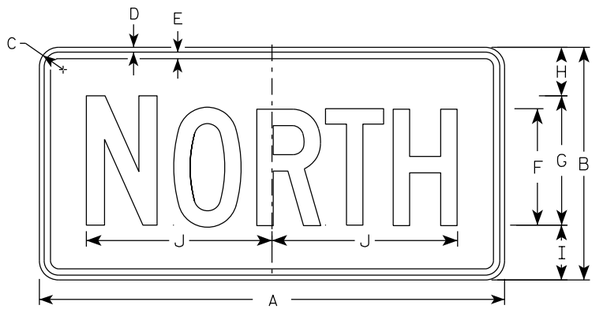
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

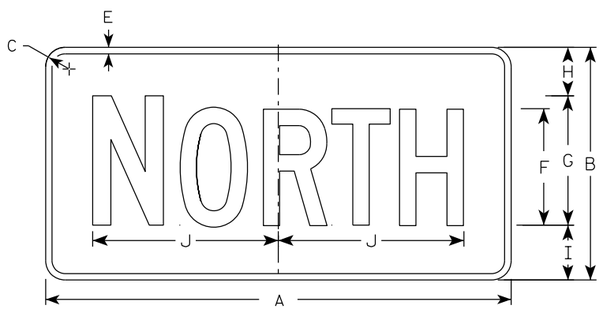
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

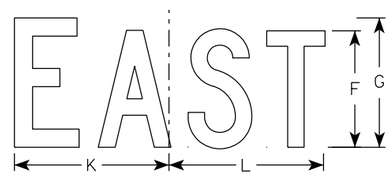
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 216	E



M3-1
MM3-1
MP3-1



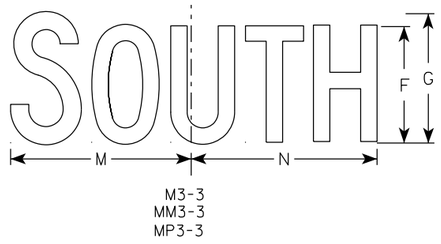
MB3-1
MK3-1
MN3-1



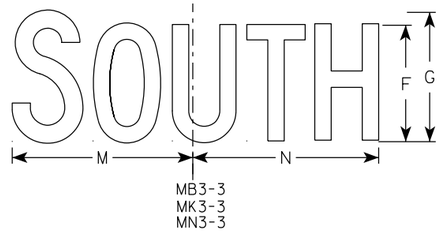
M3-2
MM3-2
MP3-2



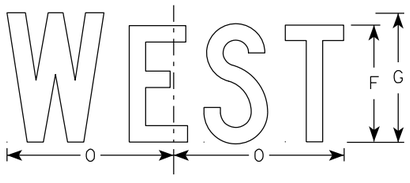
MB3-2
MK3-2
MN3-2



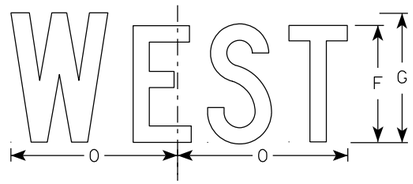
M3-3
MM3-3
MP3-3



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

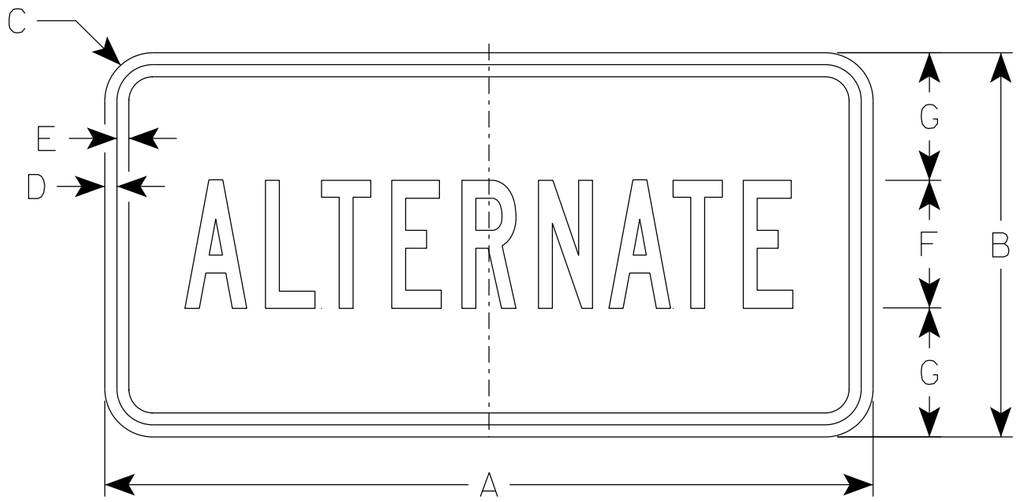
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

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: 217 | E



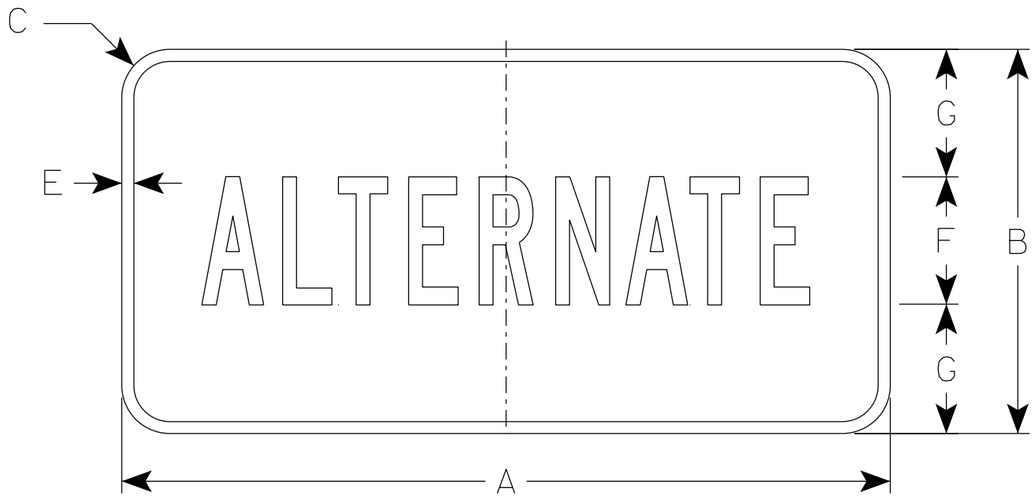
M4-1
MO4-1

NOTES

1. Sign is Type II - Type H Reflective except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
3. Message Series - B
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. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F Reflective
   Message - Black



MB4-1

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	4	4	9 3/4	9 1/2																		2.00
2M	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
3	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5

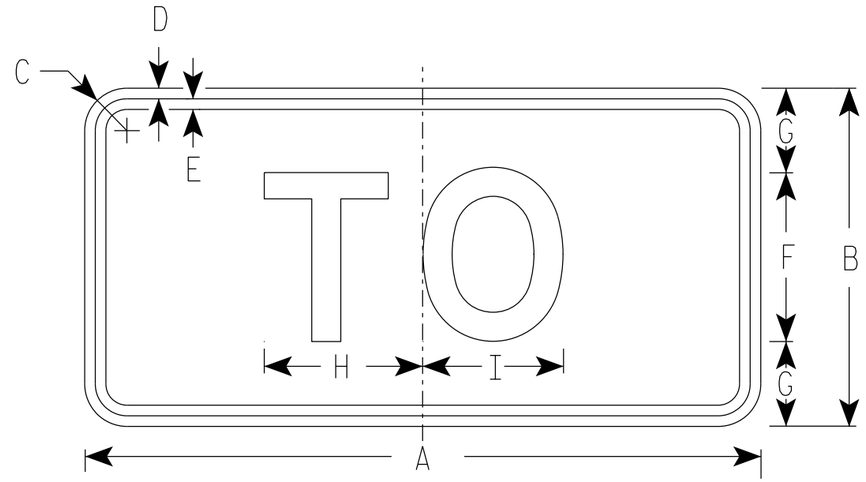
STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

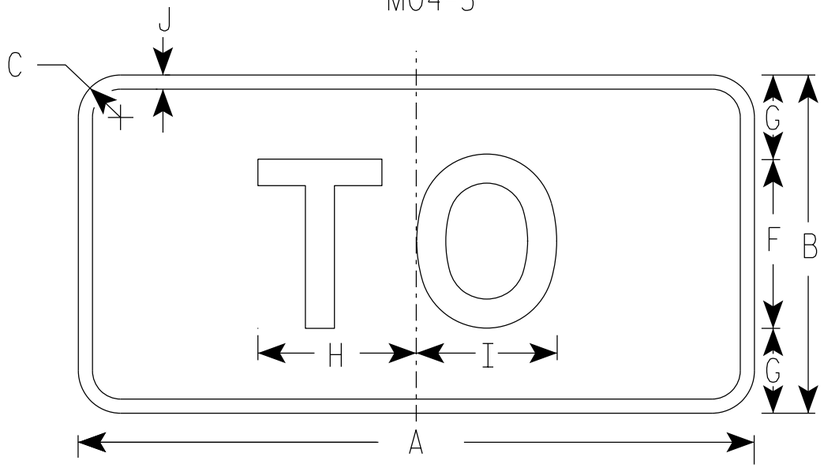
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 218 | E



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   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																											
2S	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
2M	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
3	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
4	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
5	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

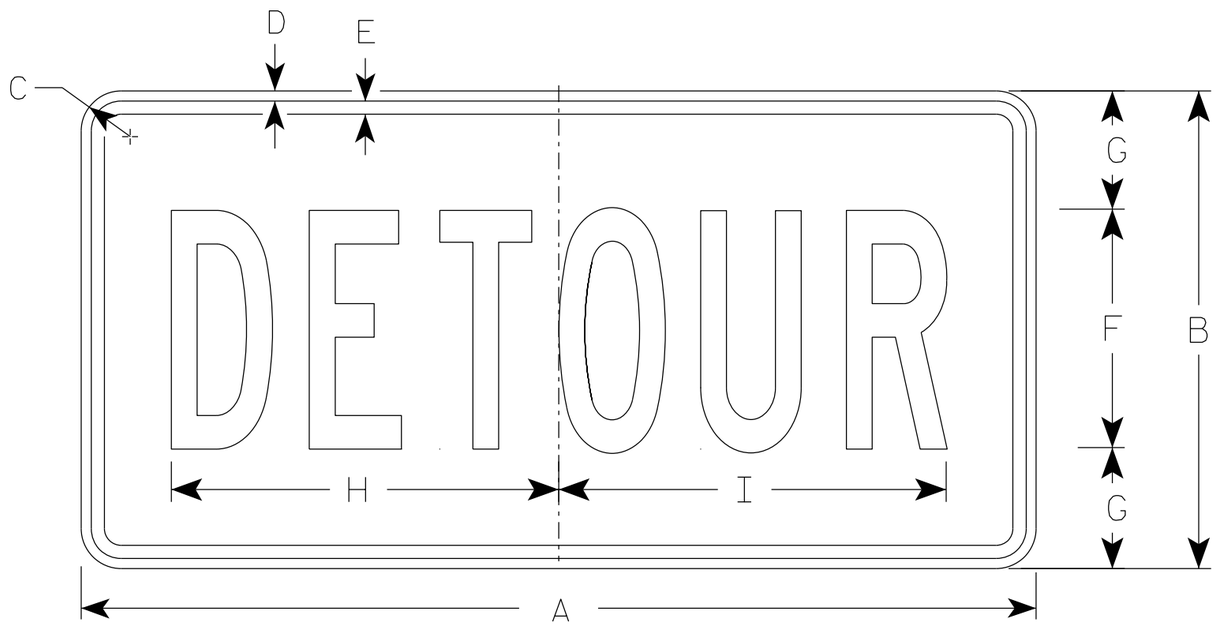
DATE 2/8/2023 PLATE NO. M4-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 219 E

7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
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.



M4-8

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	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

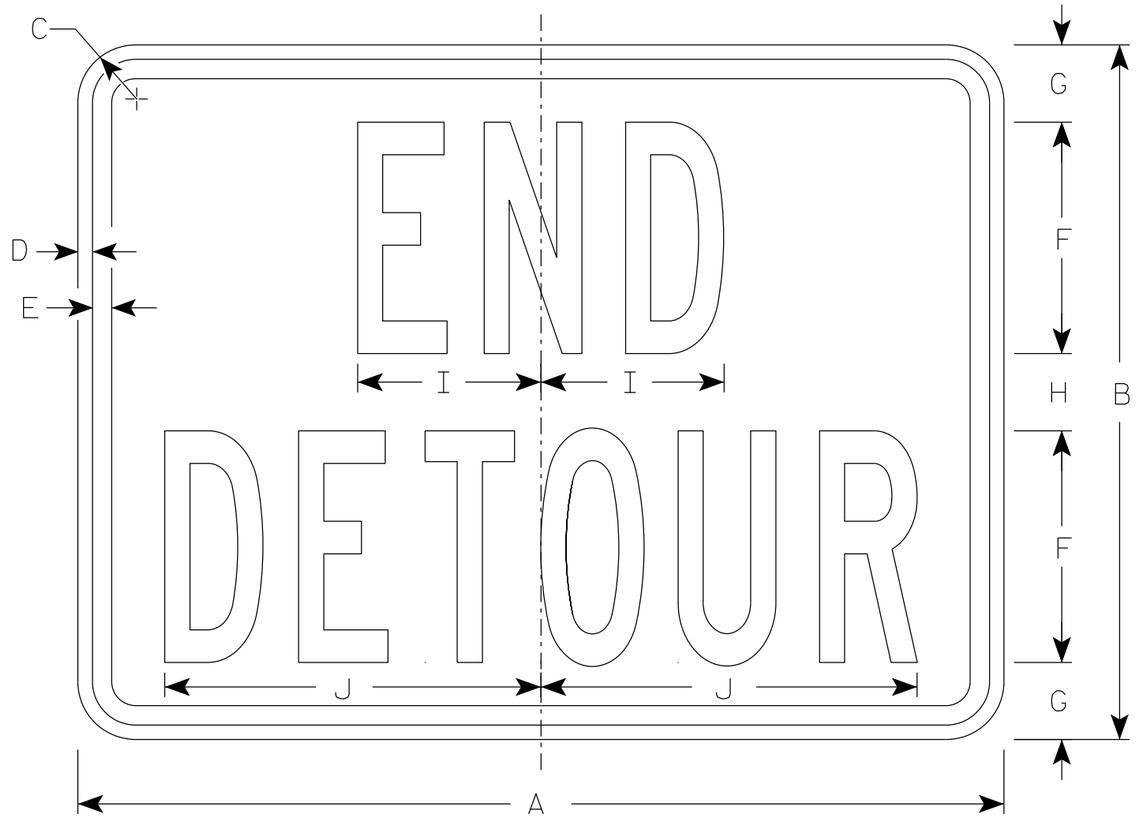
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 220	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
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																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

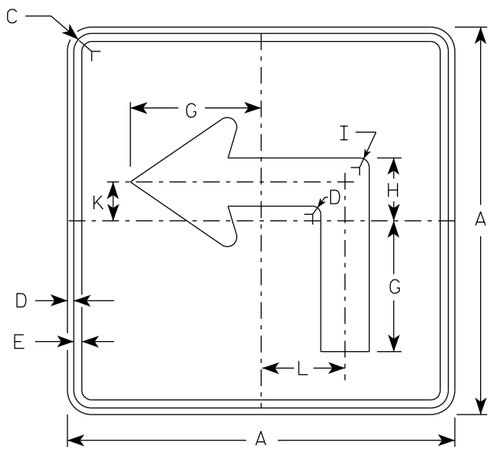
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

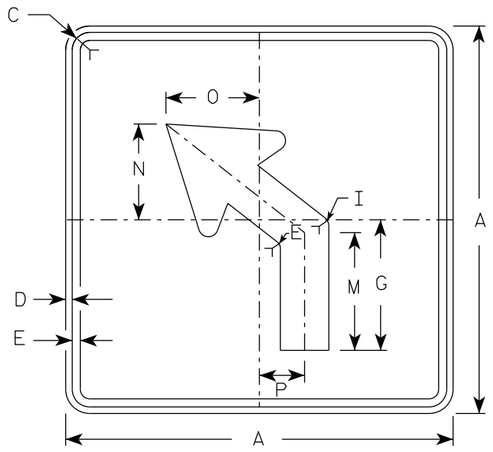
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

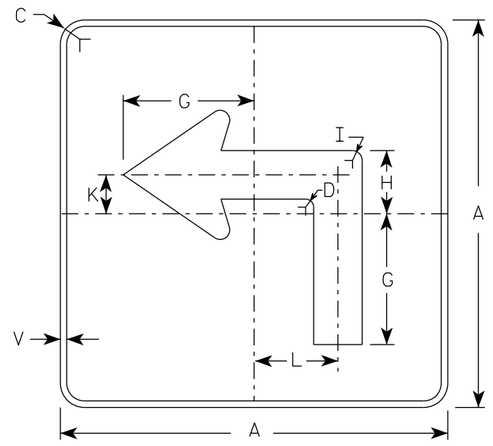
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 221 | E



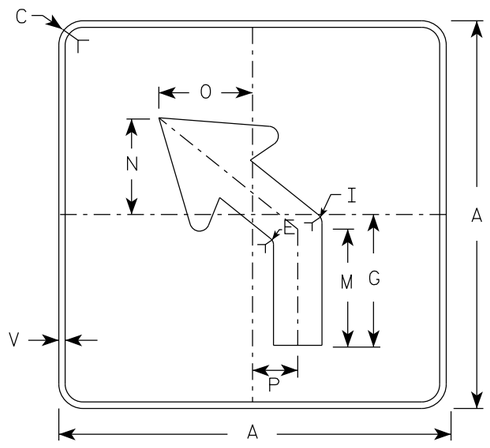
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

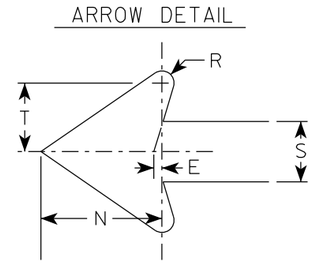


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   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. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

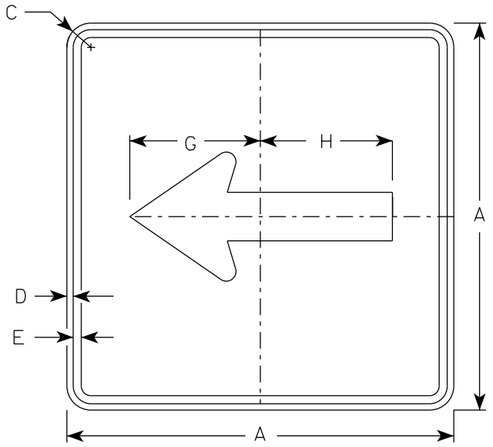
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

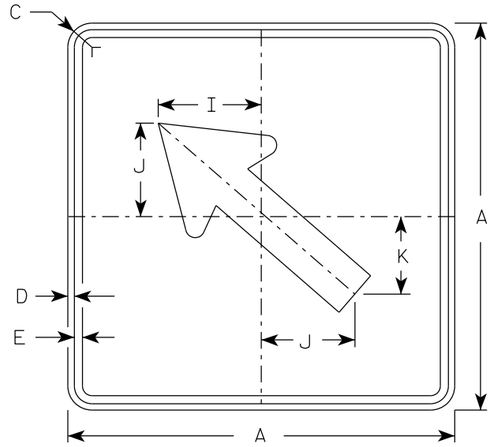
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

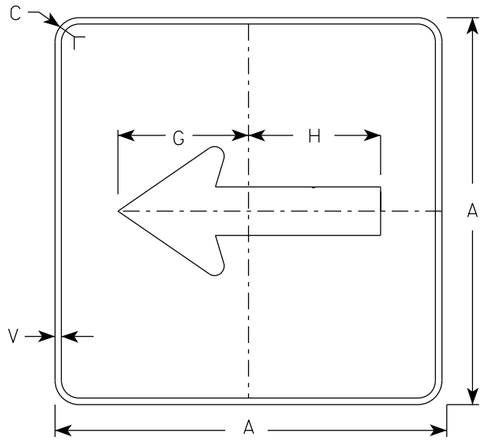
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 222 | E



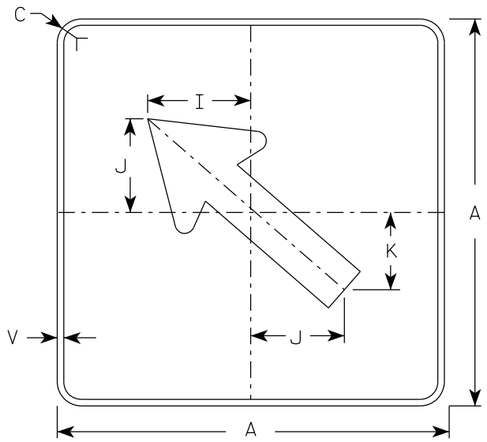
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

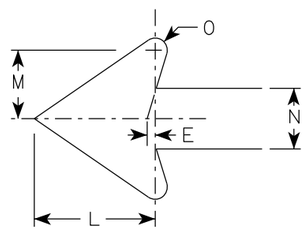


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   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. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

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	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

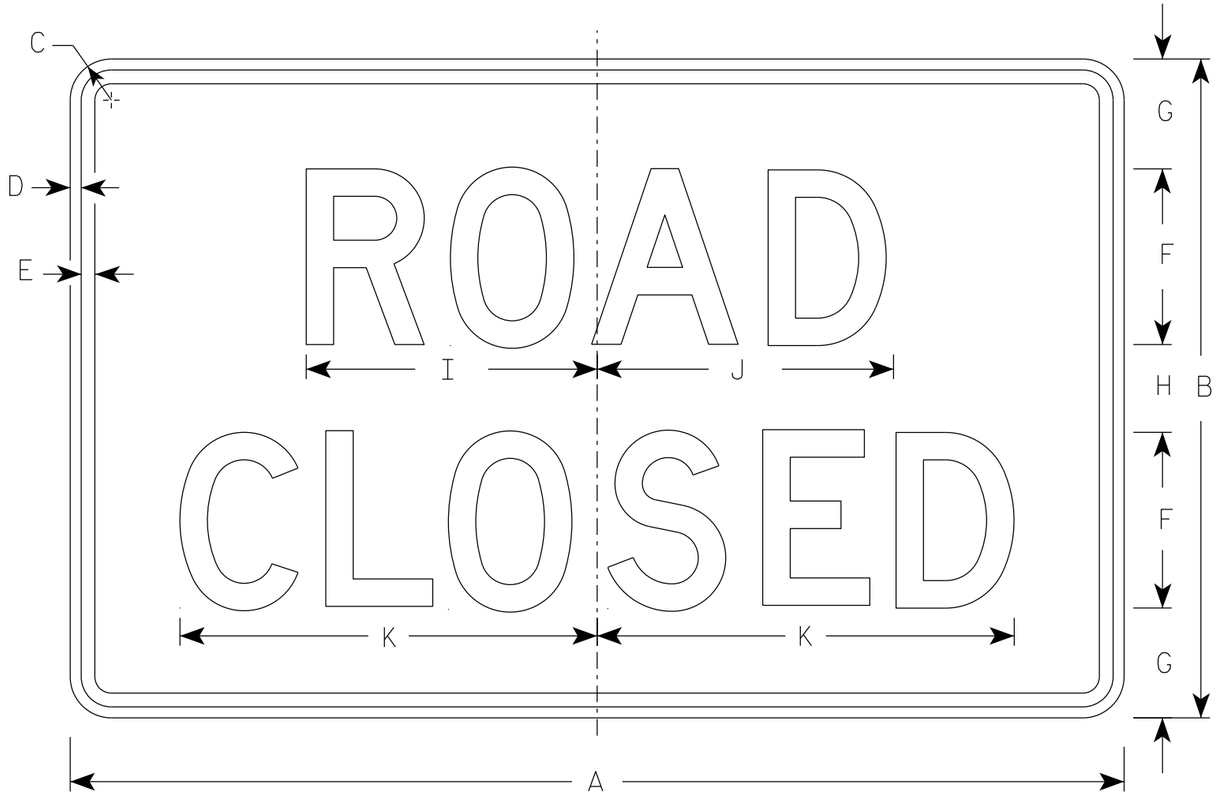
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 223 | E

7

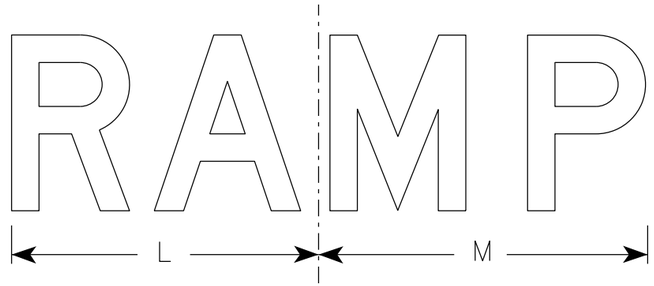
7



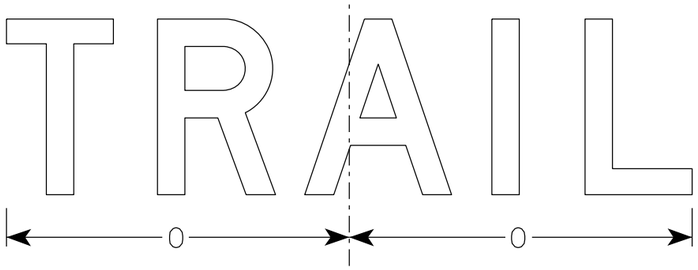
R11-2

NOTES

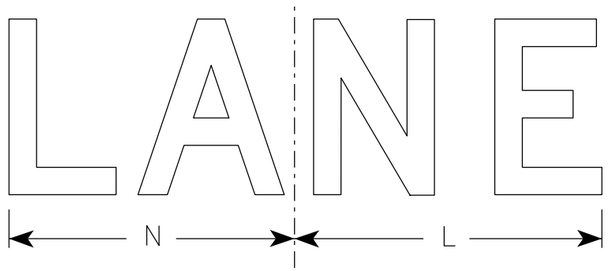
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

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	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

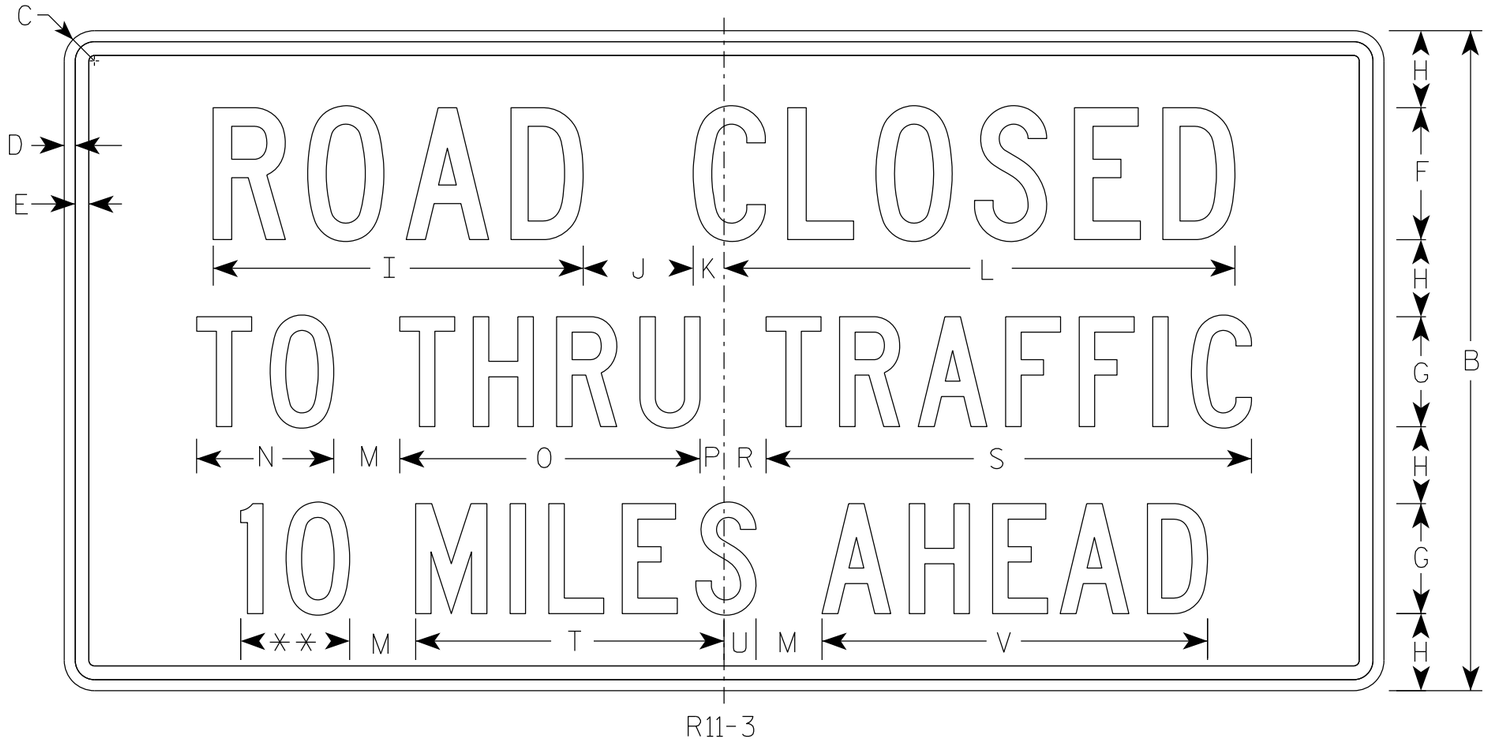
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 224 E

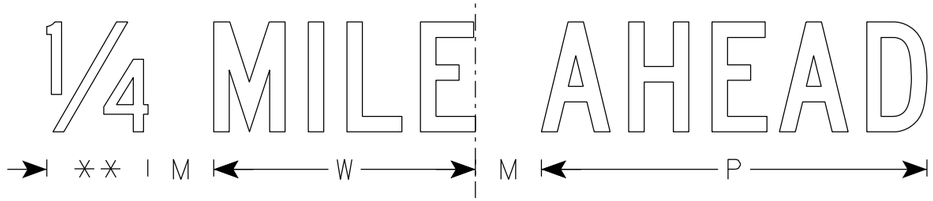
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   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 nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** 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	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

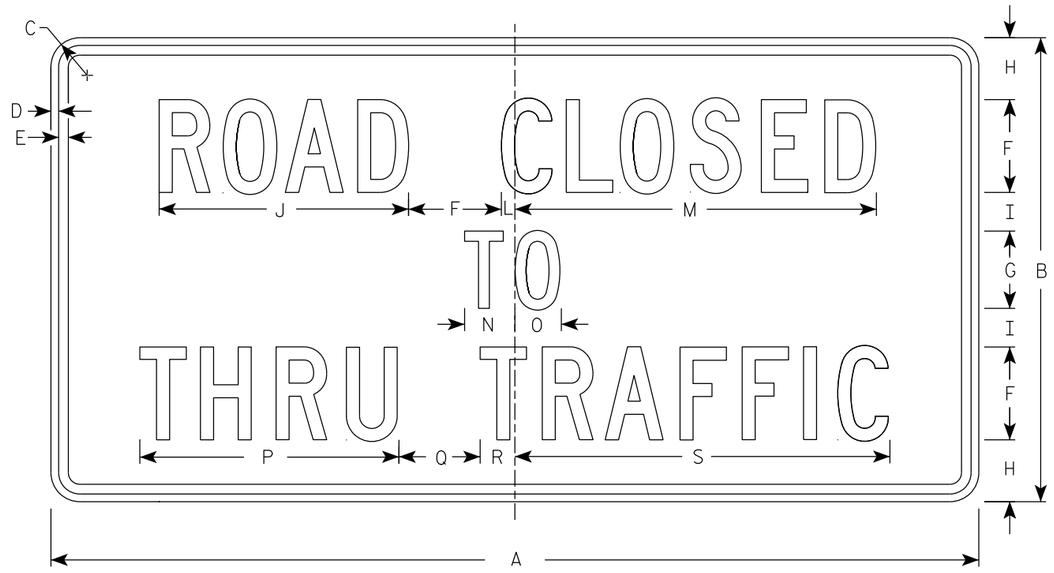
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 225 | E



R11-4

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   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																											
2S	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

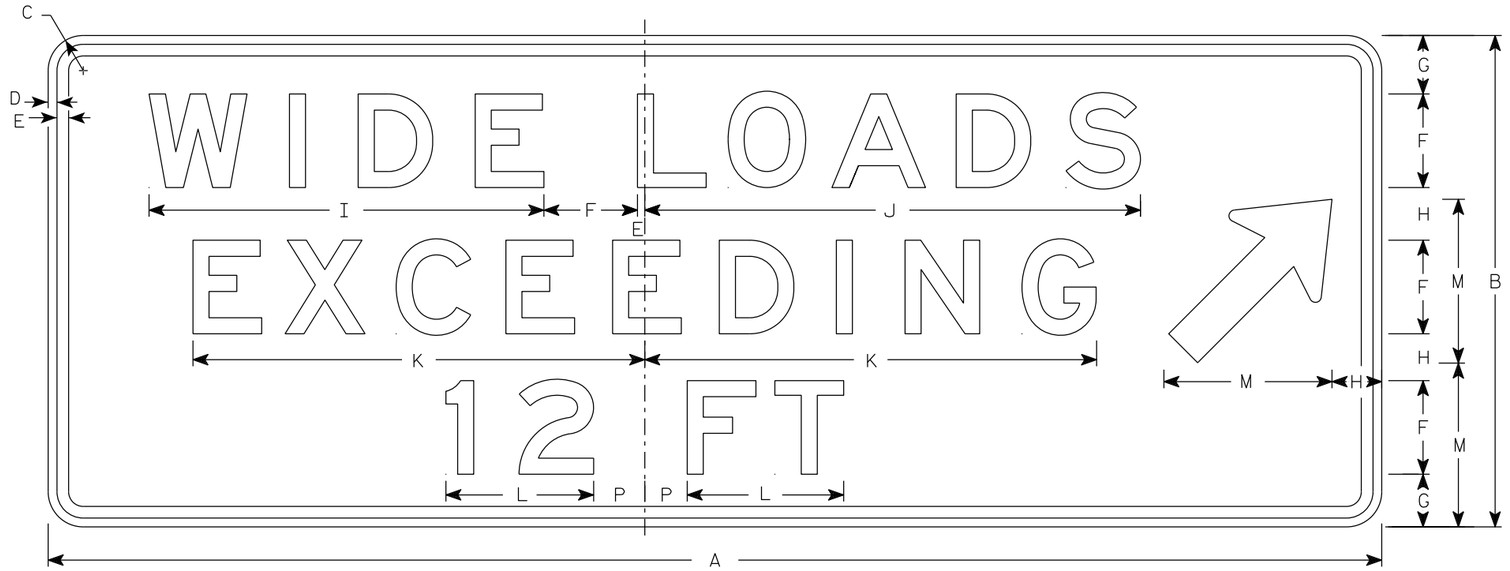
DATE 2/5/24 PLATE NO. R11-4.4

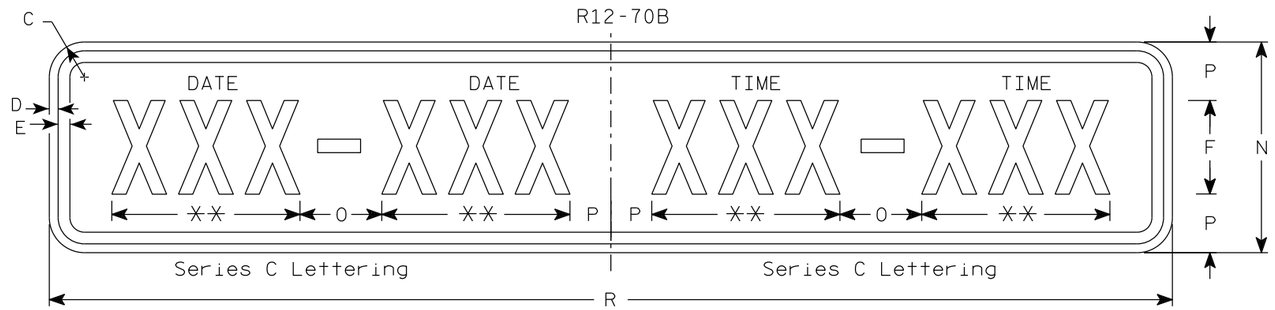
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 226 | E

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

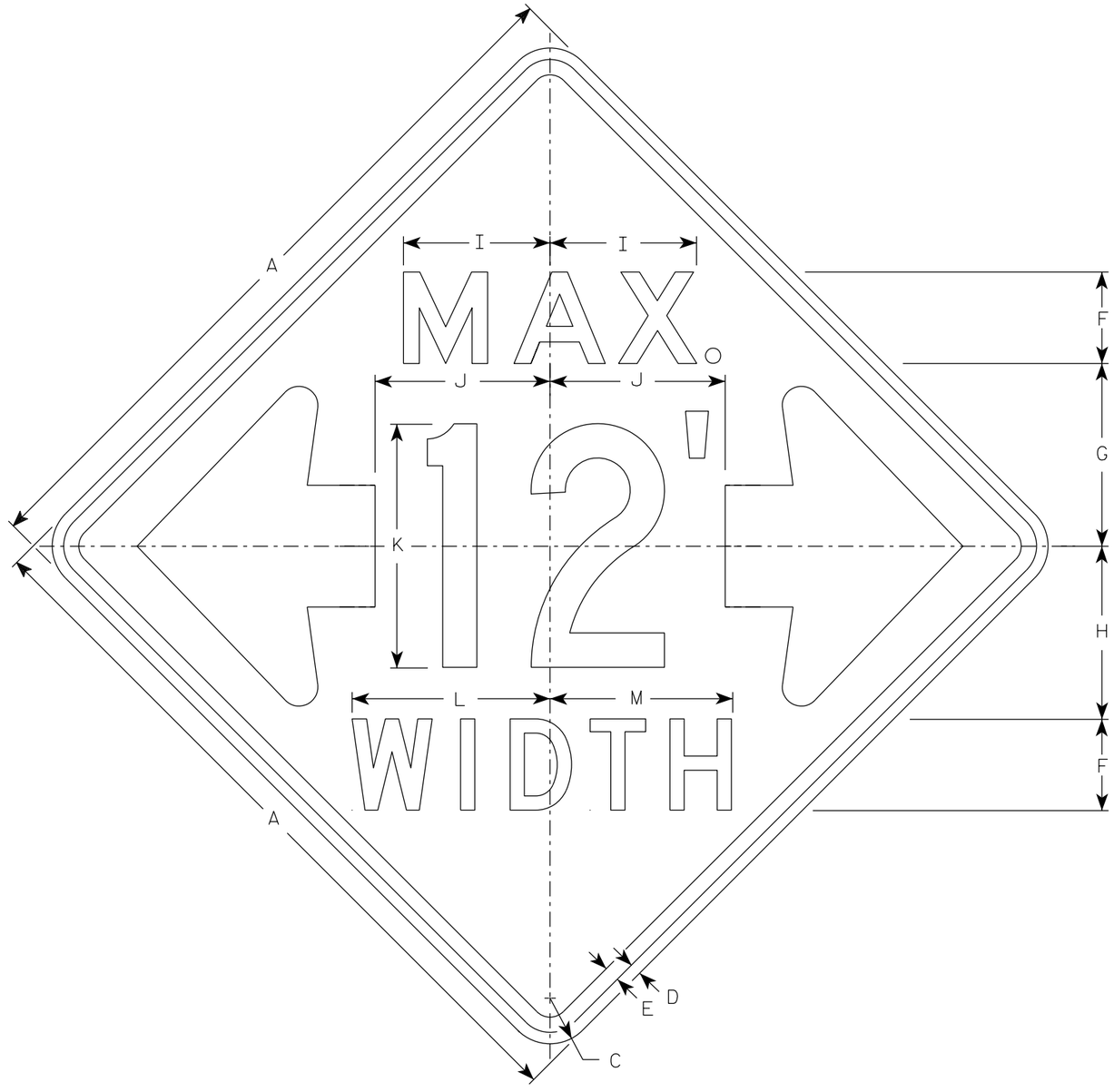
TYPICAL SIGN
R12-70B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/24 PLATE NO. R12-70B.4

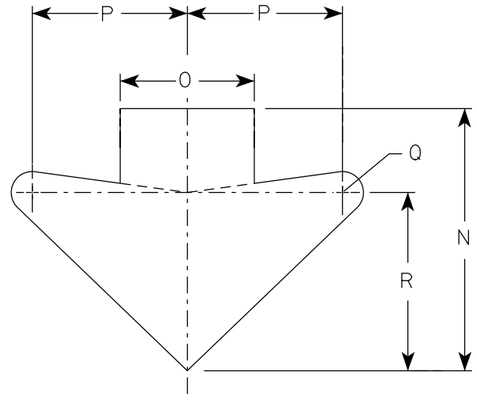
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 227 | E



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	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

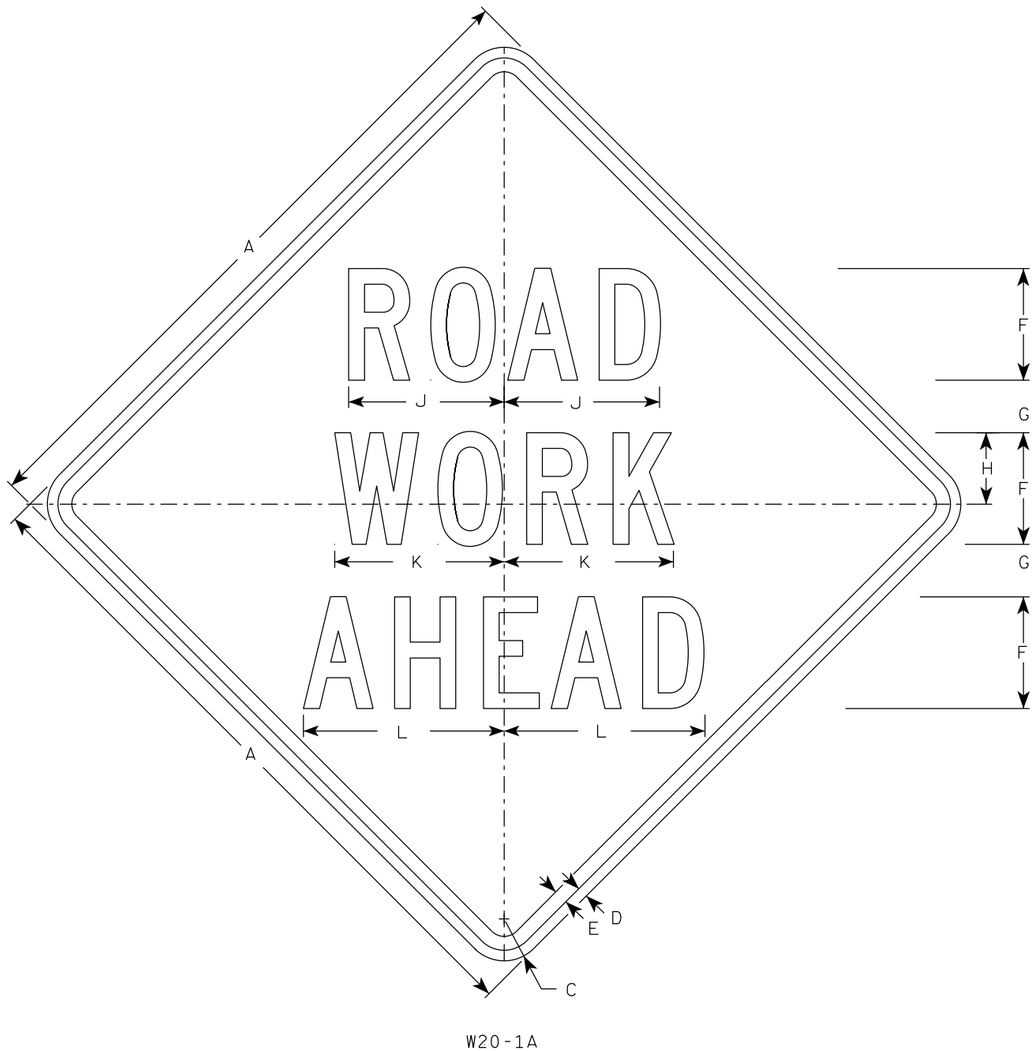
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

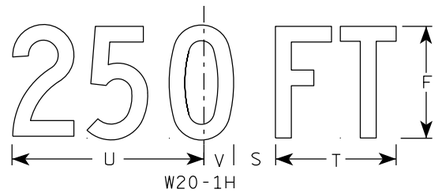
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

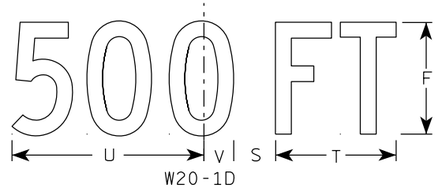
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 228 | E



W20-1A



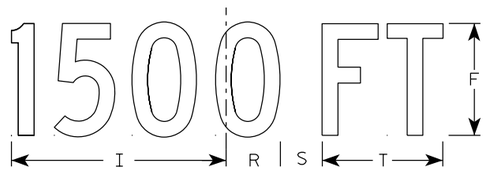
W20-1H



W20-1D



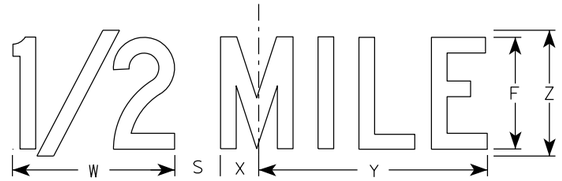
W20-1C



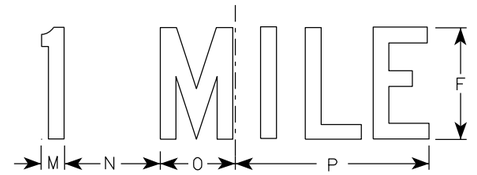
W20-1B

NOTES

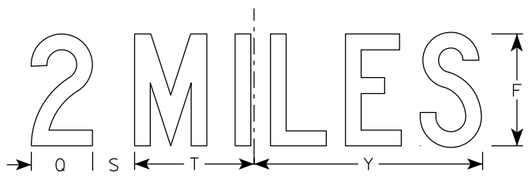
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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

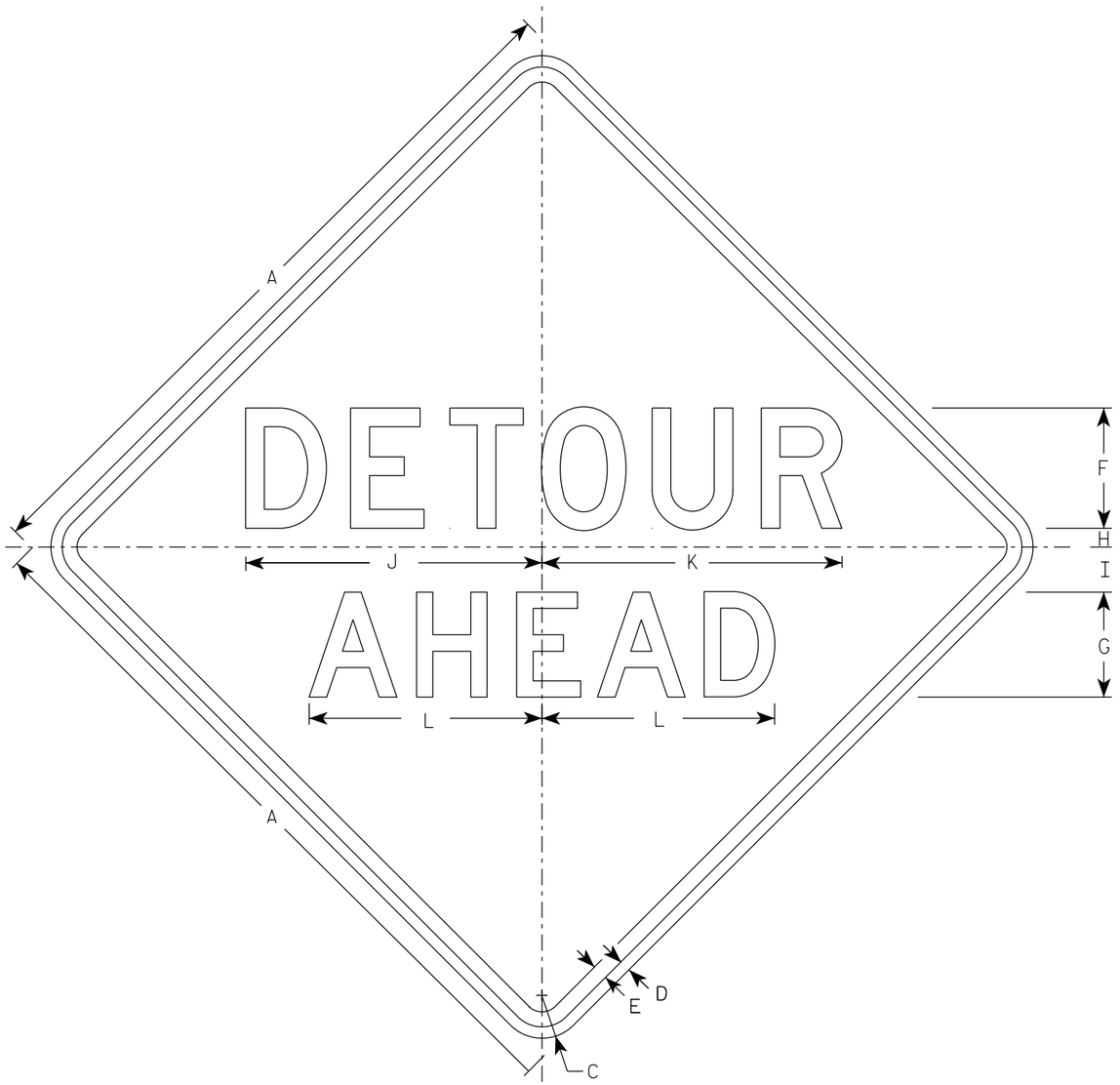
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

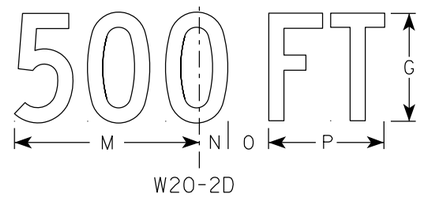
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

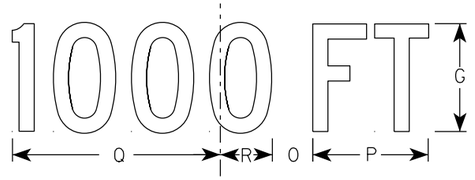
SHEET NO: 229 E



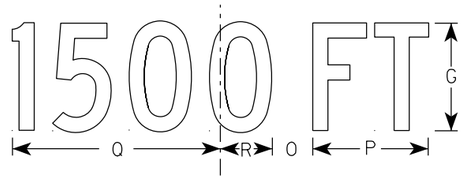
W20-2A



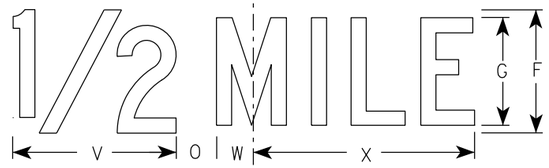
W20-2D



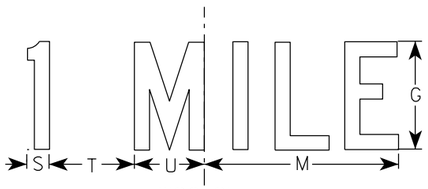
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
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. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

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	6	5	1	2 1/4	14 3/4	15	11 5/8	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	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

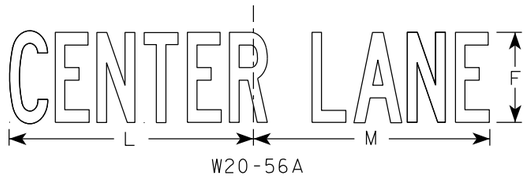
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

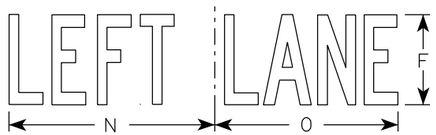
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

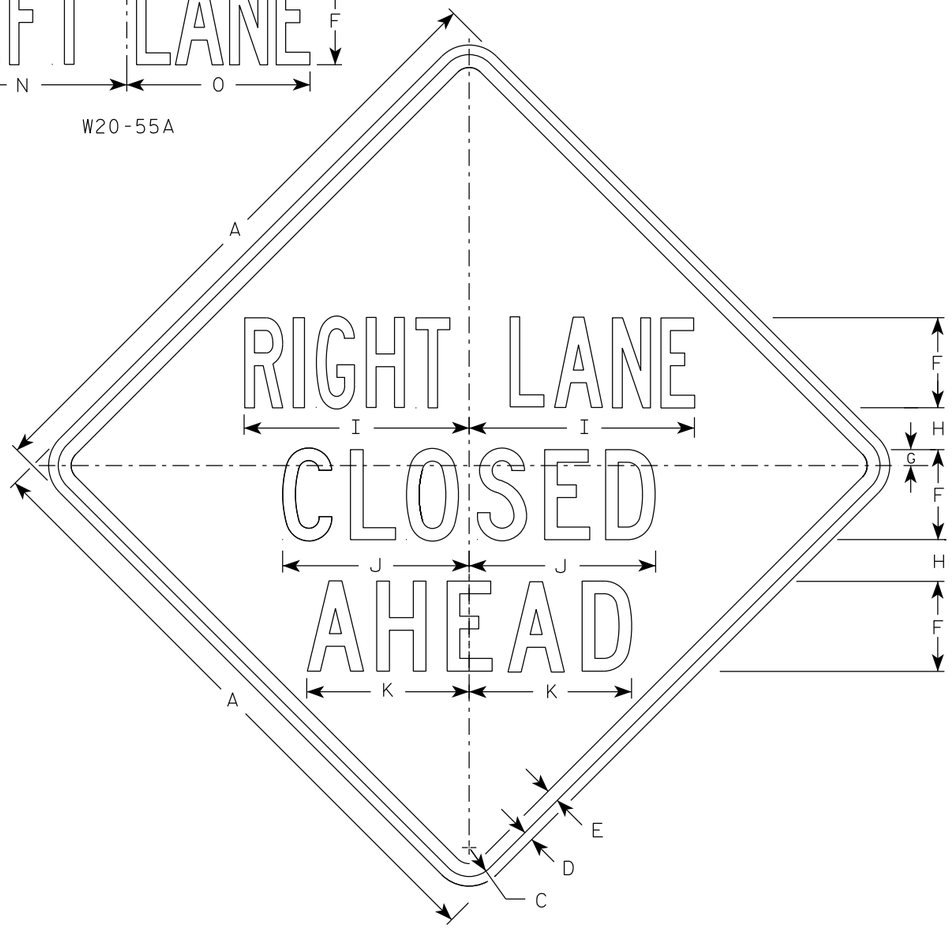
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



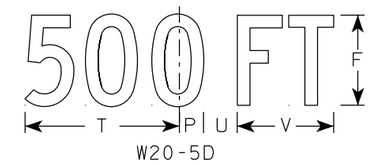
W20-56A



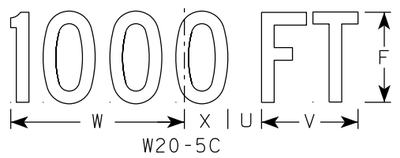
W20-55A



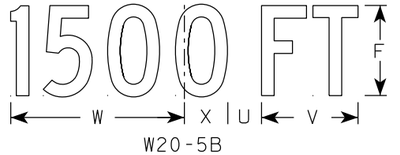
W20-5A



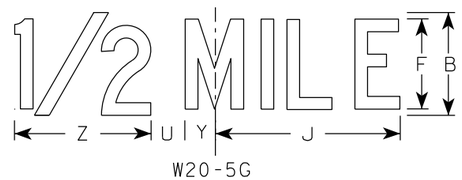
W20-5D



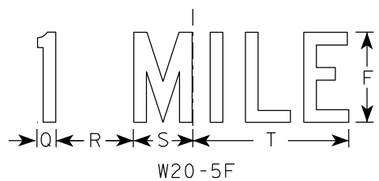
W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
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. " _____ LANE" is Series B.
   All other copy is 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	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

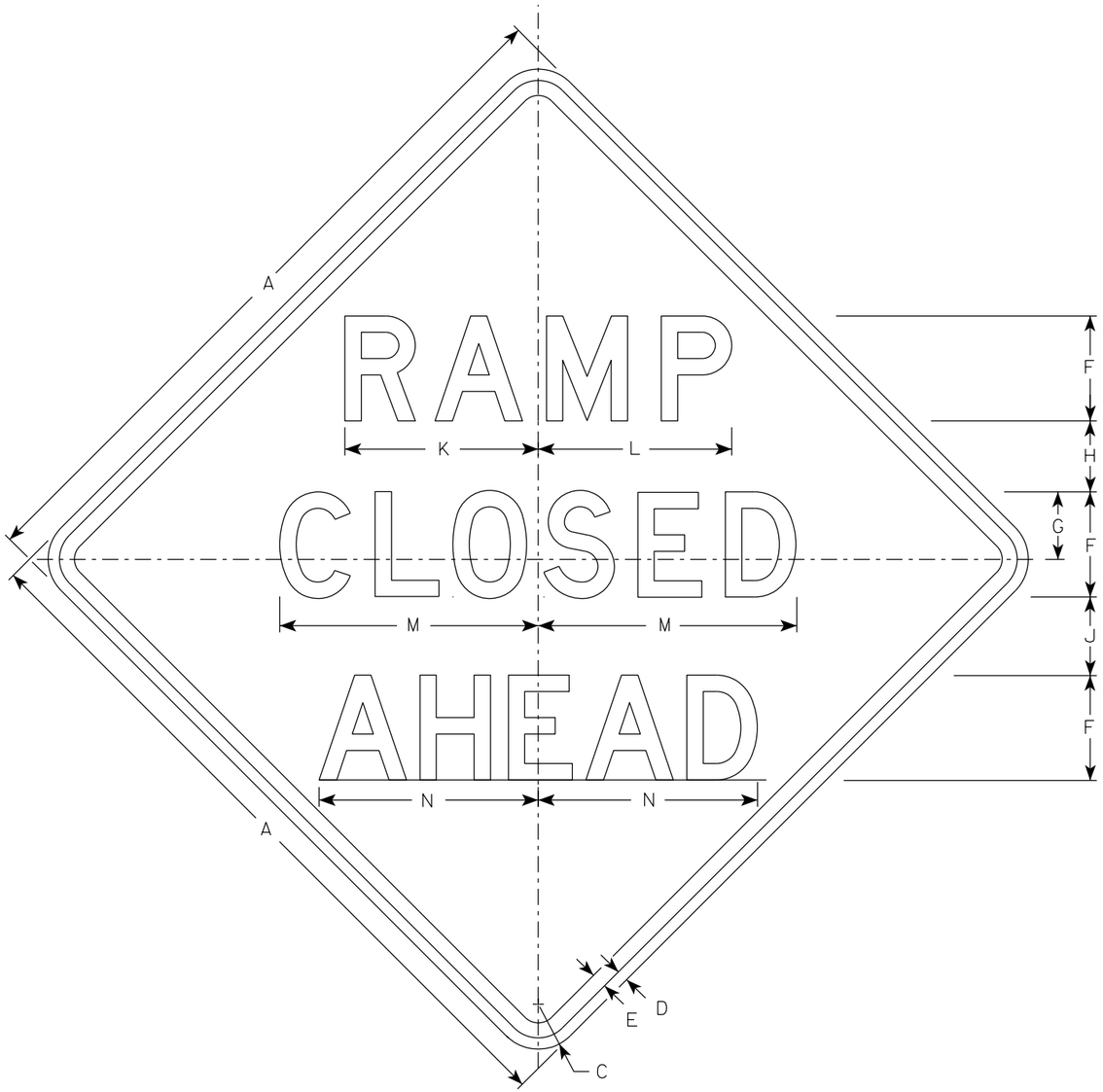
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

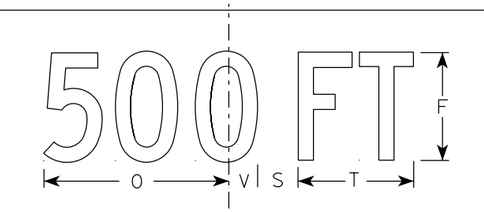
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

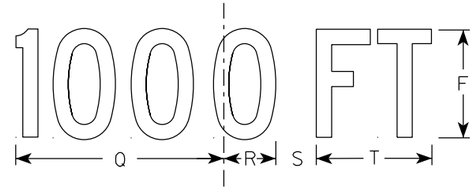
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 231	E



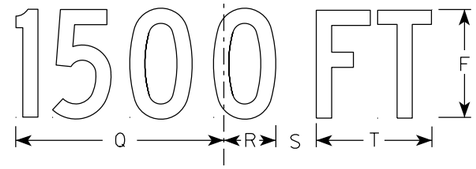
W20-53A



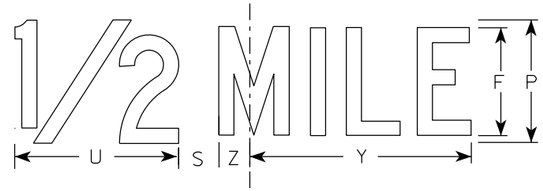
W20-53D



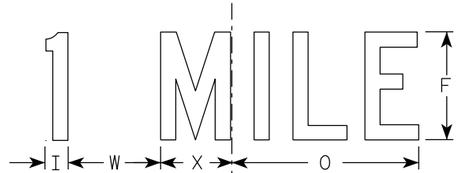
W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
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. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

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	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

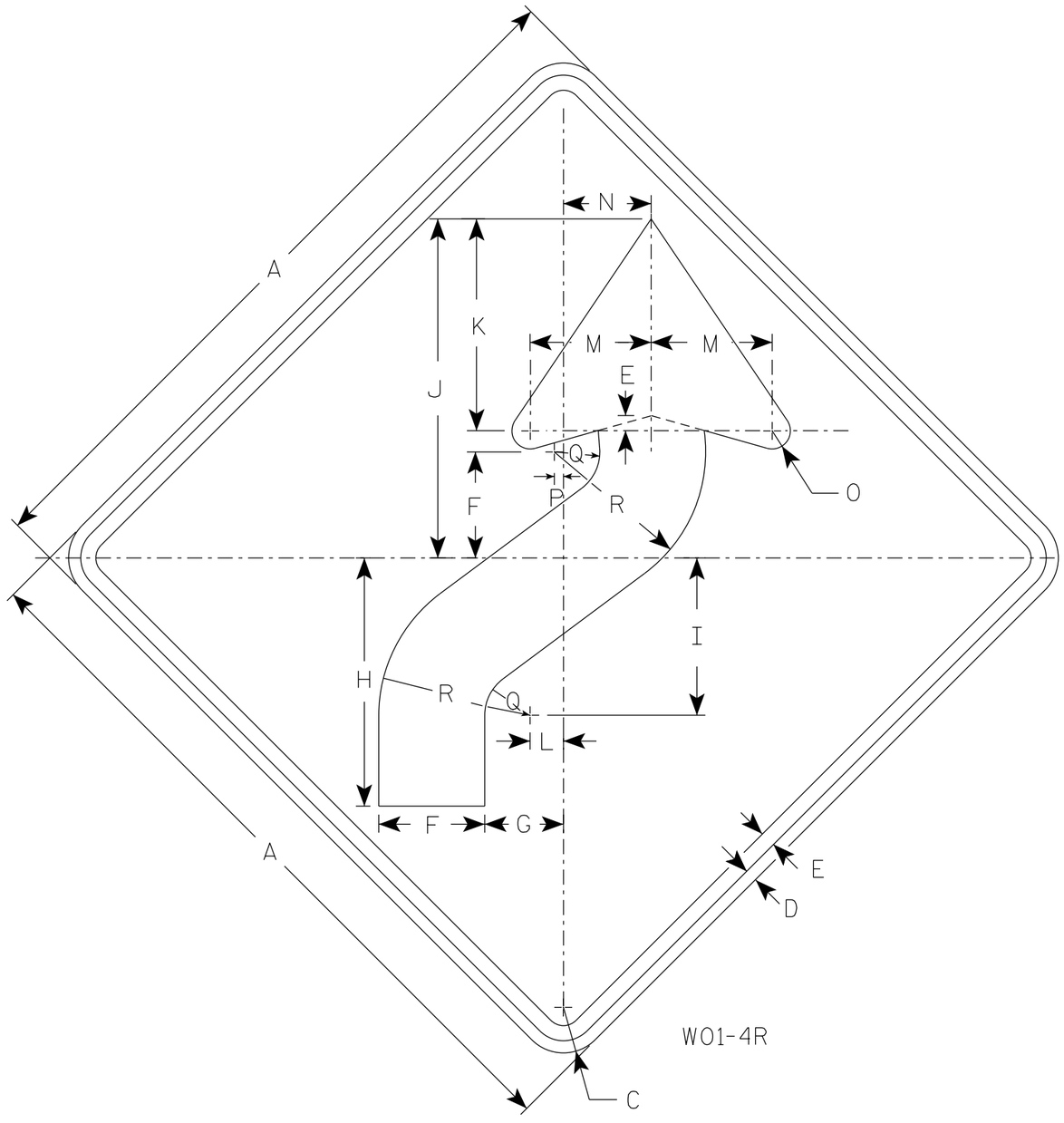
STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



WO1-4R

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. WO1-4L is the same as WO1-4R 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

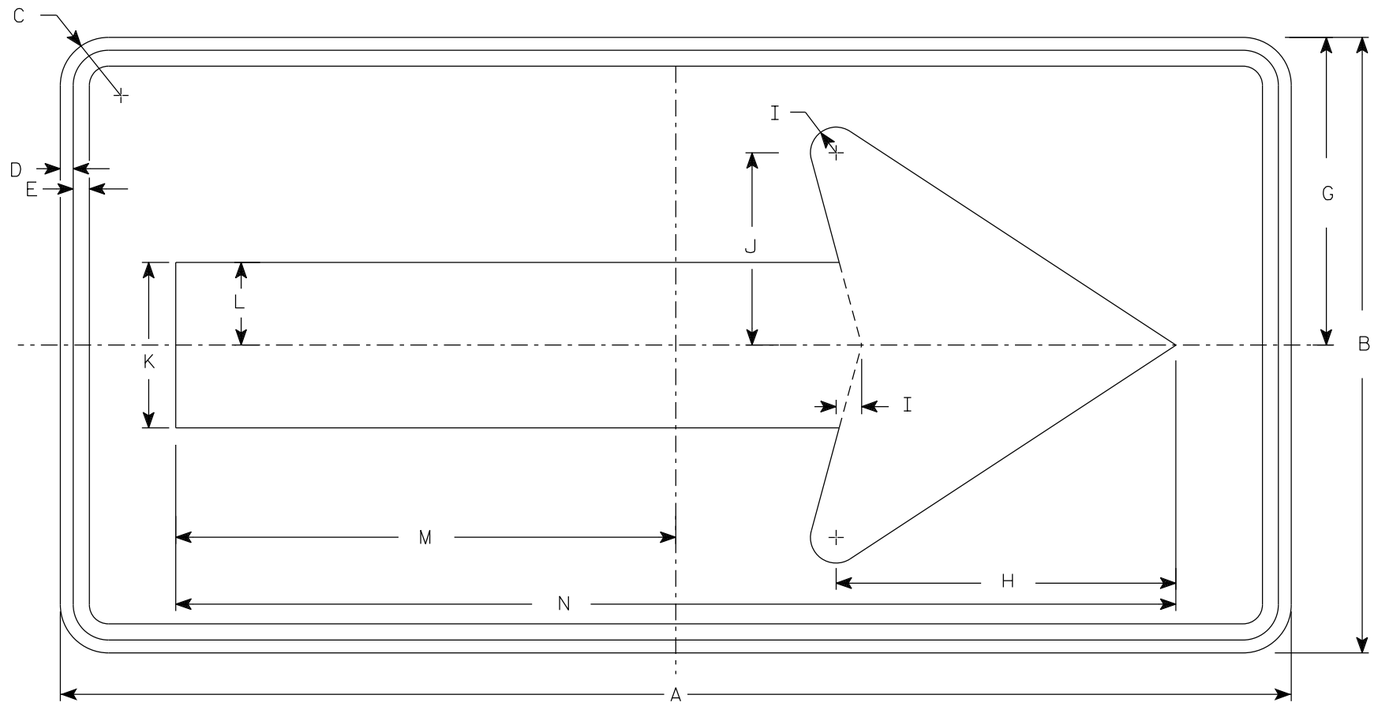
STANDARD SIGN
WO1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 233 | 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

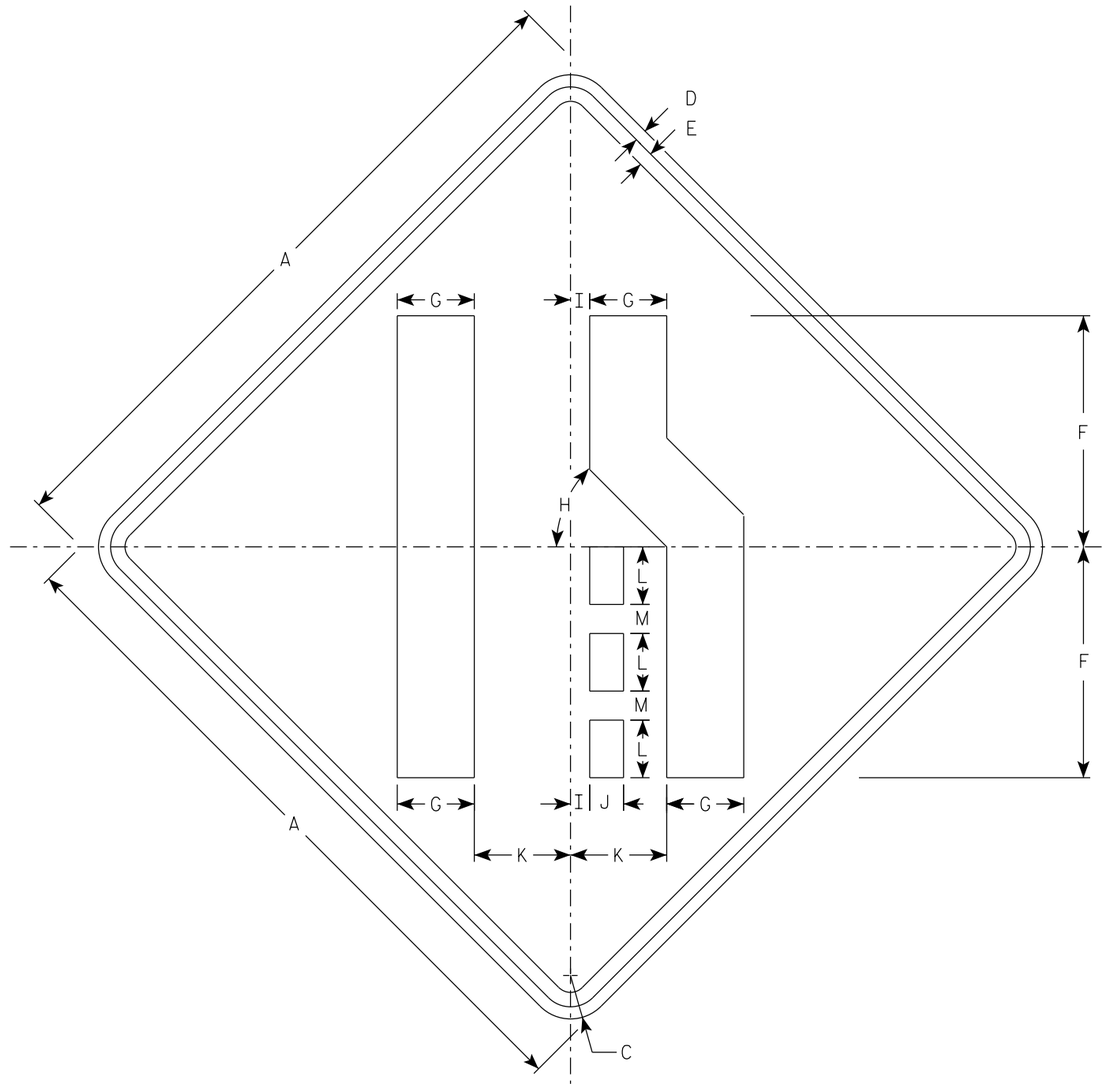
STANDARD SIGN
WO1-6

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



W04-2R

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. W04-2L is the same as W04-2R except the symbol 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	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

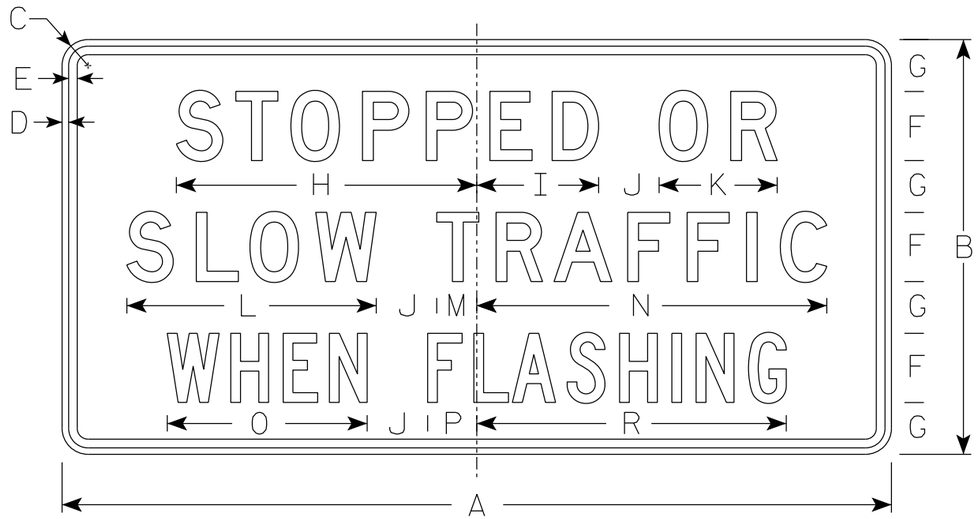
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 235 E



W08-76

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - Lines 1 and 2 are series D
   Line 3 is 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																											
2																											
3																											
4	96	48	3	3/4	1	8	6	34 3/4	14 1/8	7	13 5/8	28 7/8	4 5/8	40 1/2	23 1/8	5 3/4		35 7/8									32.0
5																											

STANDARD SIGN

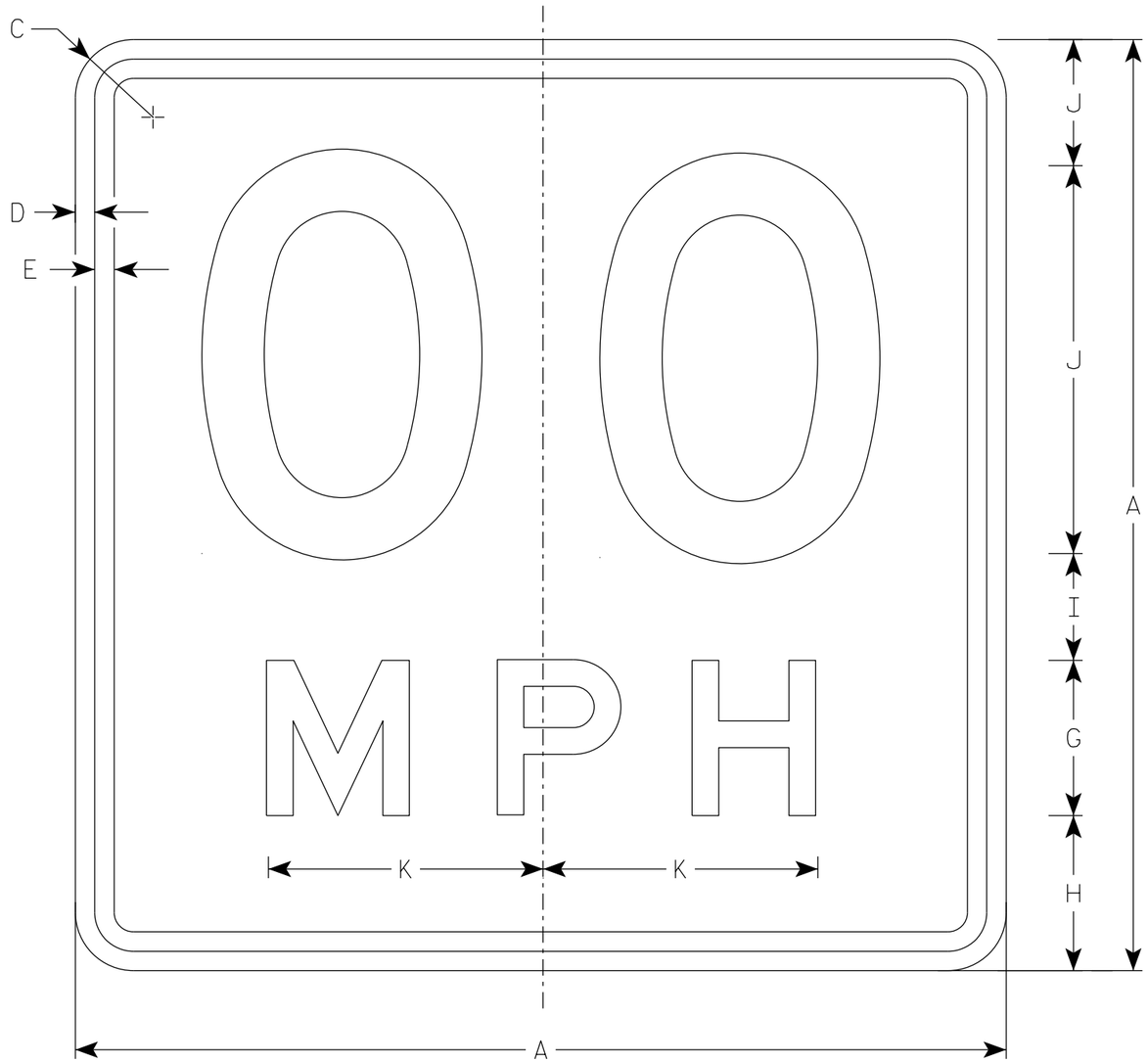
W08-76

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/2024 PLATE NO. W08-76.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 236 | E



W013-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
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 and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

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	10	4	4	2 3/4	3 1/4	7 1/8																4.0
2S	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
2M	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
3	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
4	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0
5	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.0

STANDARD SIGN

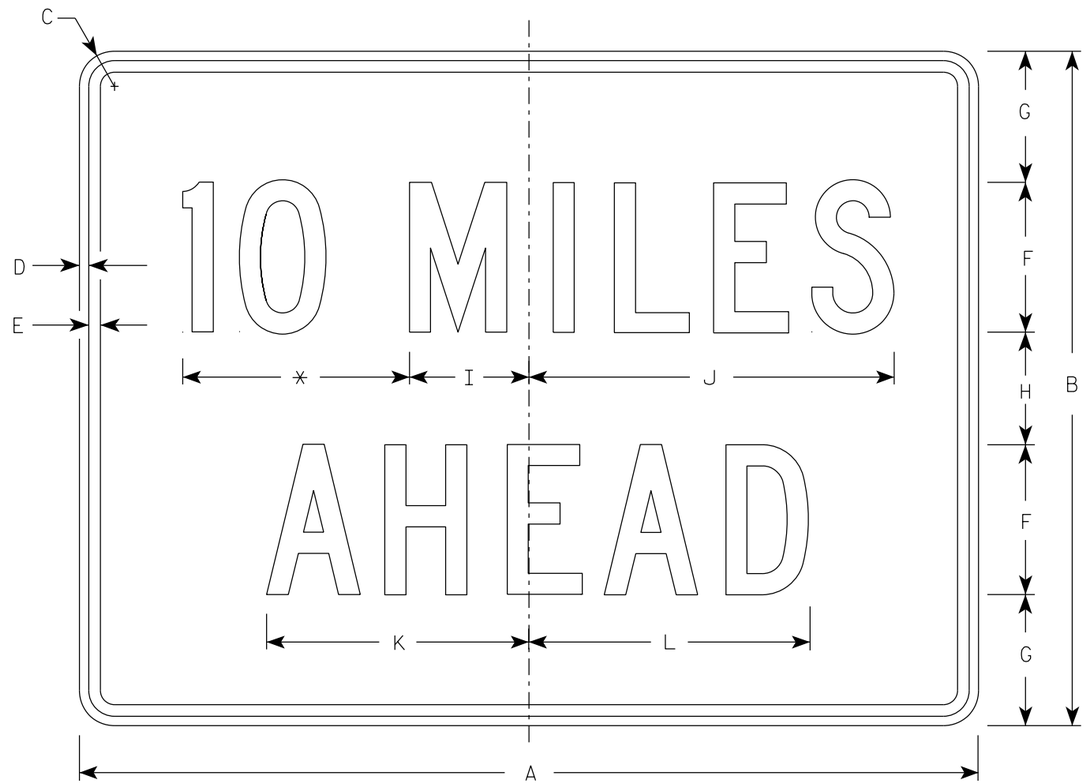
W013-1

WISCONSIN DEPT OF TRANSPORTATION

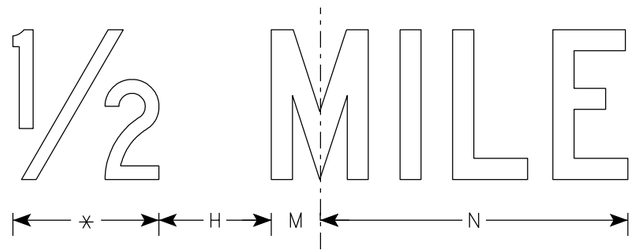
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W013-1.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 237	E



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

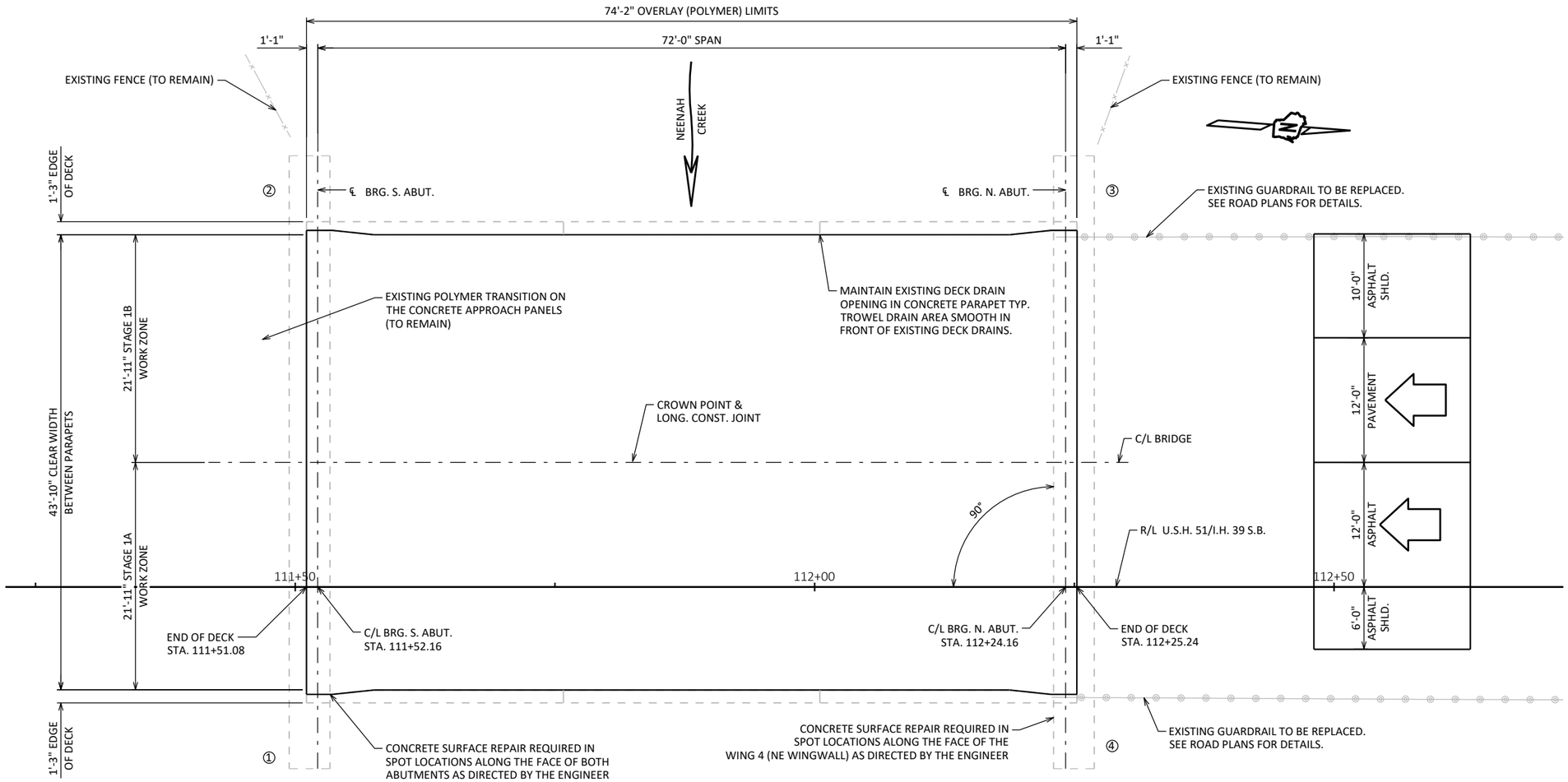
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W057-52.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 238 E

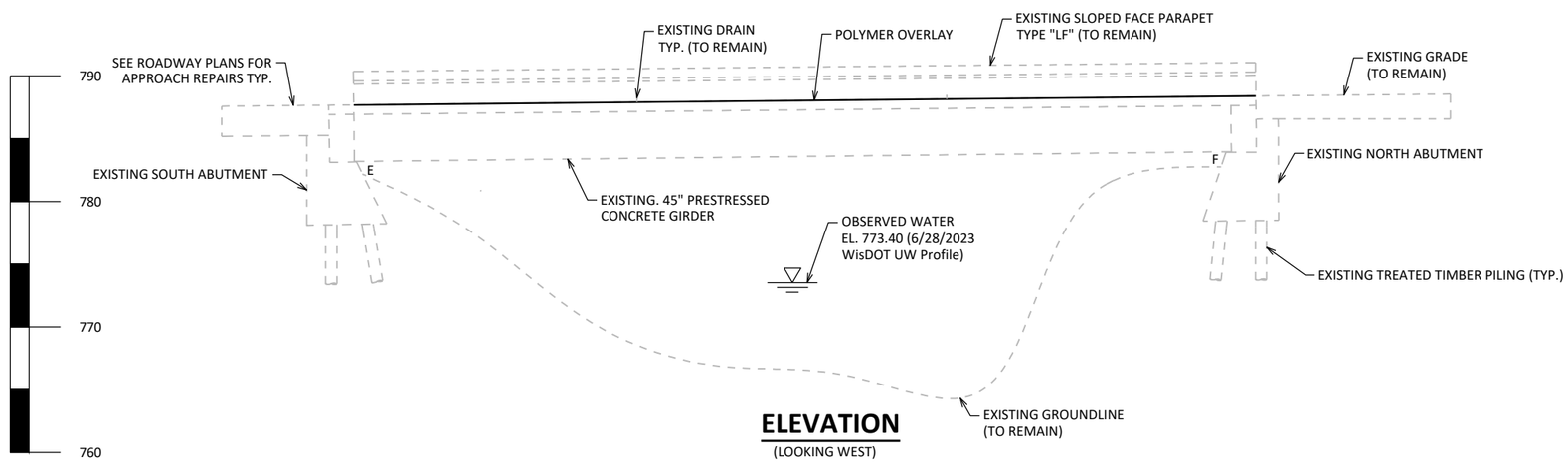
STATE PROJECT NUMBER

1166-04-84



PLAN

(REHAB - POLYMER OVERLAY ON EXISTING SINGLE SPAN PRESTRESSED CONCRETE GIRDER BRIDGE)



ELEVATION

(LOOKING WEST)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS19
OPERATING RATING: HS33
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 210 (KIPS)

TRAFFIC DATA

IH 39 SB

A.A.D.T (2026) = 6,700 - 9,300 (S.B. LANES ONLY)
A.A.D.T (2046) = 6,700 - 10,800 (S.B. LANES ONLY)
DESIGN SPEED = 75 MPH

MATERIAL PROPERTIES:

CONCRETE MASONRY, DECK REPAIR ——— f'_c = 4,000 PSI
CONCRETE MASONRY, ALL OTHER ——— f'_c = 4,000 PSI
CONCRETE MASONRY, SUBSTRUCTURES ——— f'_c = 3,500 PSI

◯– INDICATE WING NUMBER
F.F. - FRONT FACE
B.F. - BACK FACE
E. - EXPANSION BEARING
F. - FIXED BEARING
S.B. - SOUTH BOUND

SCOPE OF WORK:

- THIN POLYMER OVERLAY ON BRIDGE DECK
- CONCRETE DECK PATCHING
- CONCRETE SURFACE REPAIRS AT LOCATIONS ON THE ABUTMENTS & WINGWALLS AS DIRECTED BY THE ENGINEER.

LIST OF DRAWINGS:

1. REHAB GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES

WISCONSIN
NATHAN J KINDT
E-48663
SUAMICO WIS.
PROFESSIONAL ENGINEER

Nathan J. Kindt
7-23-2025

CONSULTANT DESIGN CONTACT:
NATHAN KINDT
(920) 392-5155

BRIDGE OFFICE CONTACT:
AARON BONK
(608) 261-0261

NO.	DATE	REVISION	BY

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1702 PANKRATZ STREET, MADISON WI 53704
(608) 242-7779 www.msa-ps.com
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JTLR 07/23/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-39-6

USH 51/I39 SB OVER NEENAH CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
MARQUETTE	MOUNDVILLE

DESIGN SPEC. REHABILITATION-N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ANC	NRT	EKK	NJK

REHAB GENERAL PLAN

SHEET 1 OF 2
239

8

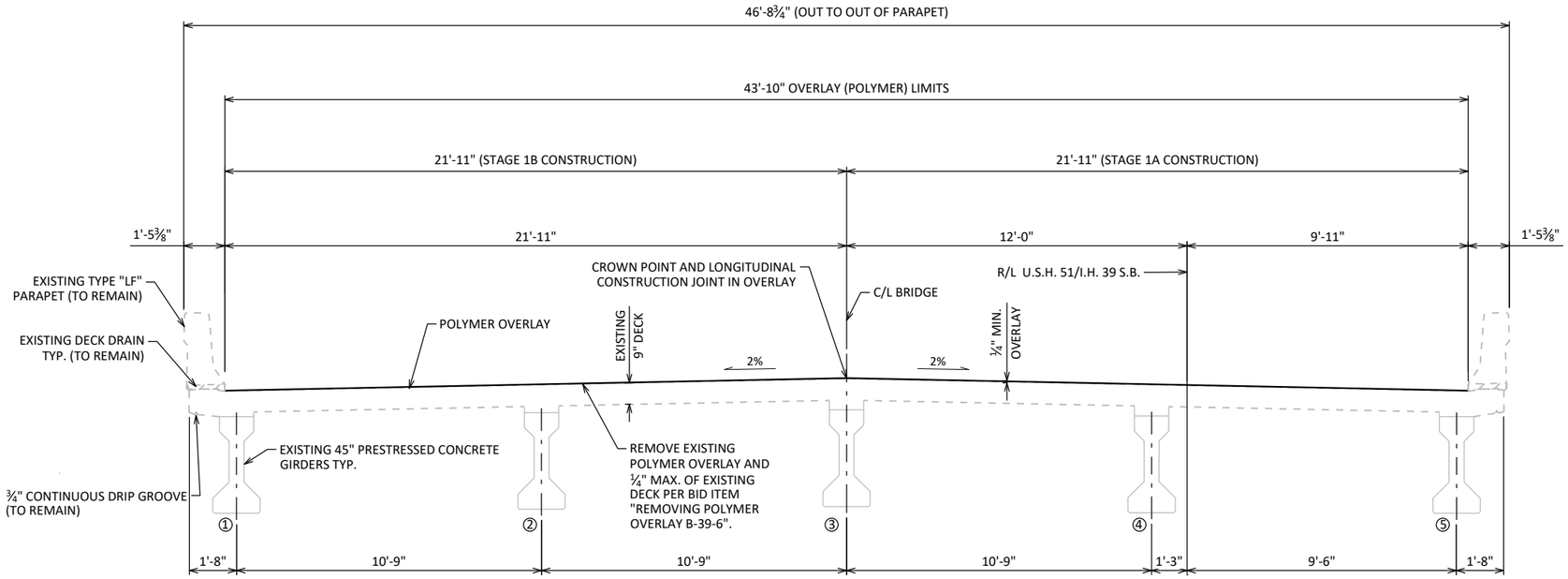
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G:\00\00093\00093777\CADD\SheetsPlan\Structures\B-39-006 - Polymer Overlay Replacement\93777_B-39-006_01.dwg

DATE: 7/23/2025 9:42 AM

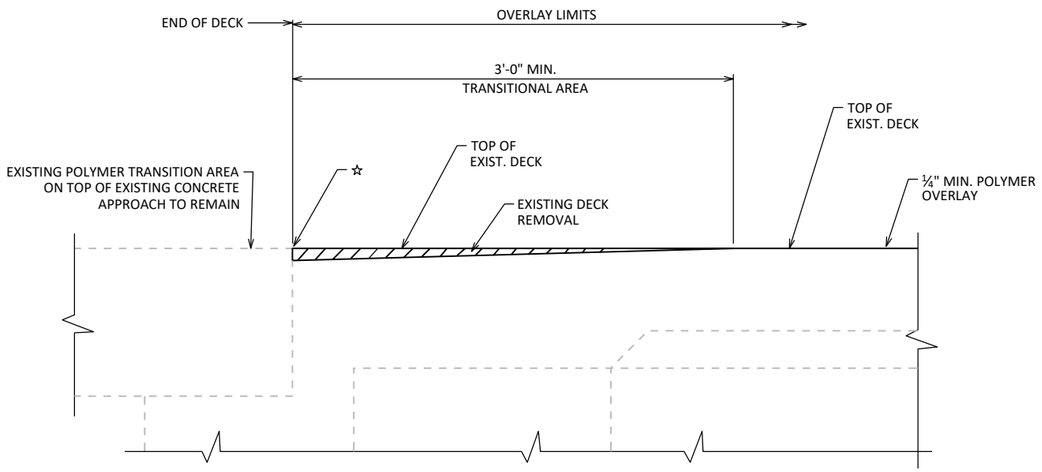
STATE PROJECT NUMBER

1166-04-84



CROSS SECTION THRU ROADWAY

(LOOKING NORTH)



SECTION THRU ABUTMENT TRANSITIONAL AREA ON DECK AT JOINT

(REMOVAL AND OVERLAY THICKNESS NOT TO SCALE)

☆ ¼" MIN. REMOVAL OF EXIST. DECK AT END OF TRANSITION

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

SEE ROAD PLANS FOR TRAFFIC CONTROL. STAGING OF SIDES MAY BE SWITCHED IF APPROVED BY THE ENGINEER.

DIMENSIONS SHOWN ARE BASED ON 2004 REHABILITATION PLANS, AVAILABLE FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN. SEE ROAD PLANS FOR LOCATIONS OF EXISTING AND PROPOSED UTILITIES AT BRIDGE LOCATION.

THIS PROJECT WILL REHABILITATE THE EXISTING STRUCTURE B-39-6, A SINGLE SPAN 74'-2" PRESTRESSED CONCRETE GIRDER BRIDGE FOUNDED ON CONCRETE SILL ABUTMENTS. ALL SUBSTRUCTURE UNITS ARE FOUNDED ON TREATED TIMBER PILES.

PIGMENTED SURFACE SEALER RESEAL SHALL BE APPLIED TO BOTH EXISTING CONCRETE PARAPETS. PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE INSIDE FACES, THE TOP FACE, AND THE ENDS OF THE PARAPETS. SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "PIGMENTED SURFACE SEALER RESEAL".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

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 DECK REPAIR ".

DECK REPAIRS SHALL BE FILLED PRIOR TO OVERLAY PLACEMENT. DECK REPAIRS USING A PORTLAND CEMENT BASED CONCRETE REQUIRES A MINIMUM CURE TIME OF 28 DAYS PRIOR TO OVERLAY PLACEMENT.

SHOT BLASTING, DECK SURFACE PREPARATIONS, AND TRANSITIONAL AREAS ARE INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

CONTRACTOR TO MAINTAIN EXISTING DECK DRAINS IN EXISTING TYPE "LF" CONCRETE PARAPETS.

DEBRIS CONTAINMENT BID ITEM TO BE USED ONLY FOR FULL-DEPTH DECK REPAIRS AND CONCRETE SURFACE REPAIRS OVER WATER. USE OF DEBRIS CONTAINMENT BID ITEM AT OTHER LOCATIONS SHALL NOT BE REQUIRED.

◯ GIRDER NUMBER.

TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	BID ITEM	UNIT	TOTAL
	203.0335	DEBRIS CONTAINMENT OVER WATERWAY B-39-6	EACH	1
	502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	61
∗∗	509.0301	PREPARATION DECKS TYPE 1	SY	10
∗∗	509.0302	PREPARATION DECKS TYPE 2	SY	4
	509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	100
∗	509.1500	CONCRETE SURFACE REPAIR	SF	10
∗∗	509.2000	FULL DEPTH DECK REPAIR	SY	1
	509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	1
	509.5100.S	POLYMER OVERLAY	SY	362
	509.9015.S	REMOVING POLYMER OVERLAY B-39-6	SY	362
	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2

∗ CONCRETE SURFACE REPAIRS SHALL BE USED TO REPAIR AREAS OF SPALLED, DELAMINATED, OR DETERIORATED CONCRETE AT LOCATIONS ON THE ABUTMENTS AND WINGWALLS TO LIMITS DETERMINED BY THE ENGINEER.

∗∗ QUANTITY LISTED IS AN ESTIMATE. COORDINATE FIELD IDENTIFICATION AND DETERMINATION OF ALL DECK REPAIR LOCATIONS WITH THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIR SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-6

DRAWN BY EKK | PLANS CK'D NJK

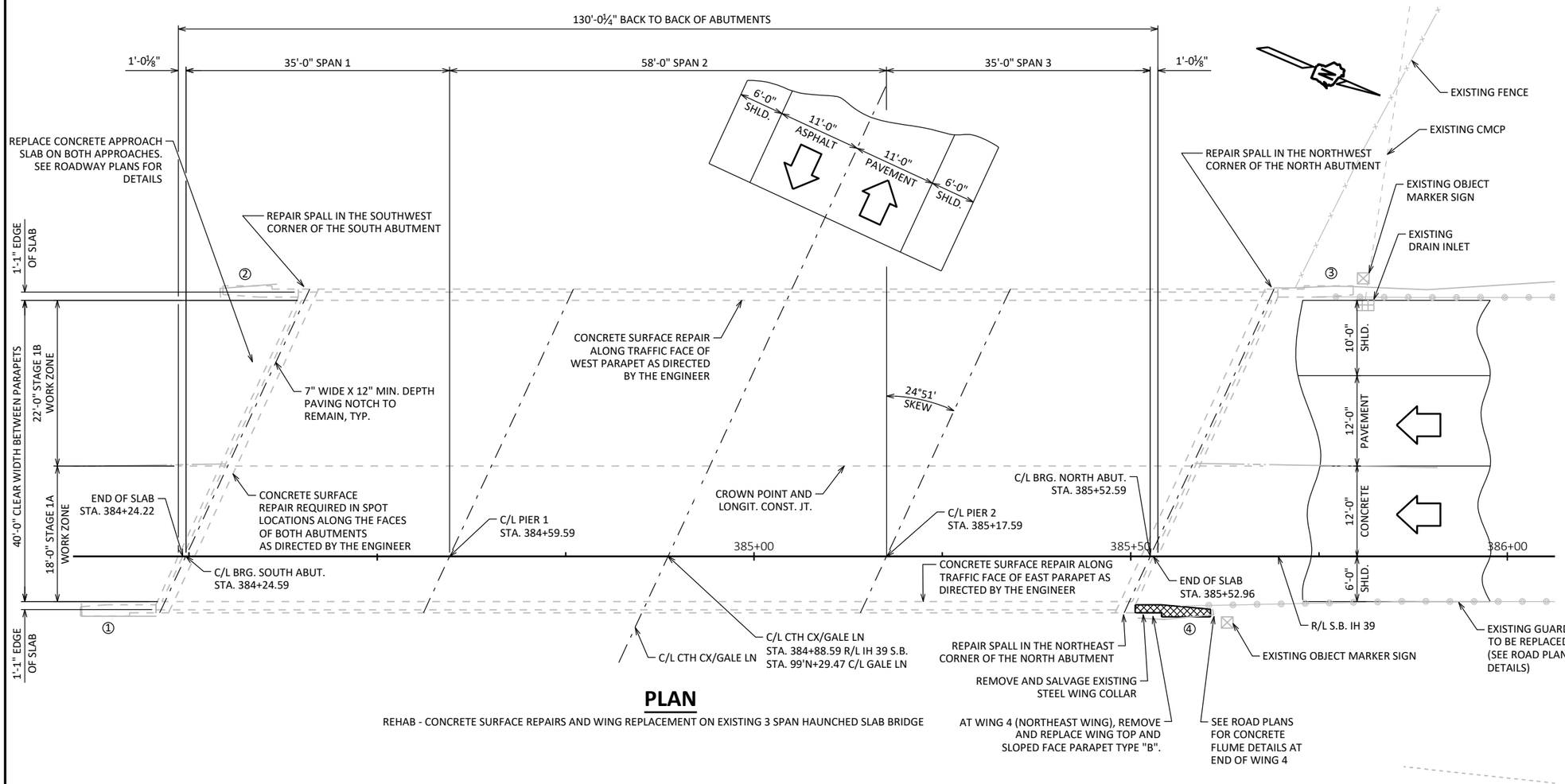
CROSS SECTION, QUANTITIES & NOTES

SHEET 2

240

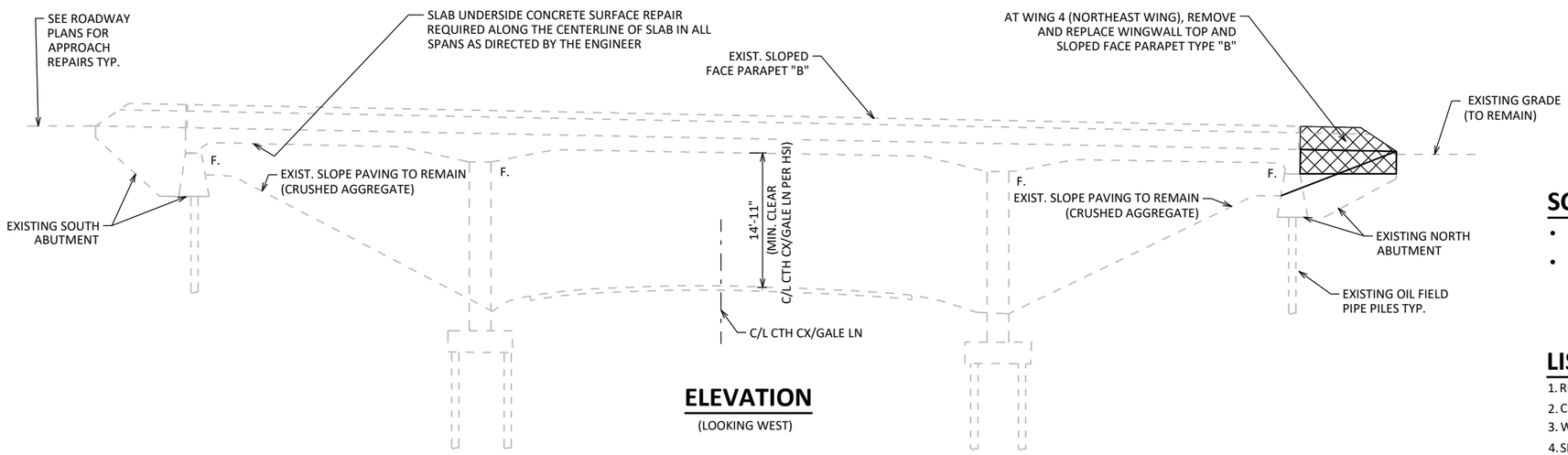
STATE PROJECT NUMBER

1166-04-84



PLAN

REHAB - CONCRETE SURFACE REPAIRS AND WING REPLACEMENT ON EXISTING 3 SPAN HAUNCHED SLAB BRIDGE



ELEVATION

(LOOKING WEST)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20*
INVENTORY RATING: HS21*
OPERATING RATING: HS36*
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 240 (KIPS)*

TRAFFIC DATA

IH 39 S.B.
A.A.D.T (2026) = 6,700 - 9,300 (S.B. LANES ONLY)
A.A.D.T (2046) = 6,700 - 10,800 (S.B. LANES ONLY)
DESIGN SPEED = 75 MPH

CTH CX/GALE LN
A.A.D.T (2021) = 510

MATERIAL PROPERTIES:

CONCRETE MASONRY, PARAPET —— f'_c = 4,000 PSI
CONCRETE MASONRY, SUPERSTRUCTURES —— f'_c = 4,000 PSI
CONCRETE MASONRY, SUBSTRUCTURES —— f'_c = 3,500 PSI

◯ –INDICATE WING NUMBER
F.F. - FRONT FACE
B.F. - BACK FACE
F. - FIXED BEARING
S.B. - SOUTH BOUND LANE
⁎ - PER 6/29/2024 RATING INFORMATION ON HSI

SCOPE OF WORK:

- REPLACE THE NORTHEAST WINGWALL TOP AND PARAPET
- CONCRETE SURFACE REPAIRS AT LOCATIONS ON THE ABUTMENTS, WINGWALLS, PARAPETSM AND UNDERSIDE OF CONCRETE SLAB AS DIRECTED BY THE ENGINEER.

LIST OF DRAWINGS:

1. REHAB GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. WING TOP REPLACEMENT
4. SLOPED FACE PARAPET "B"

WISCONSIN PROFESSIONAL ENGINEER
NATHAN J KINDT E-48663 SUAMICO WIS.
Nathan J. Kindt
7-16-2025

CONSULTANT DESIGN CONTACT:
NATHAN KINDT
(920) 392-5155

BRIDGE OFFICE CONTACT:
AARON BONK
(608) 261-0261

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 07/16/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-39-22

USH 51/IH 39 S.B. OVER CTH CX/GALE LN

COUNTY	TOWN/~~CITY/VILLAGE~~
MARQUETTE	MOUNDVILLE

DESIGN SPEC. REHABILITATION-N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
NJK	ANC	EKK	NJK

REHAB GENERAL PLAN

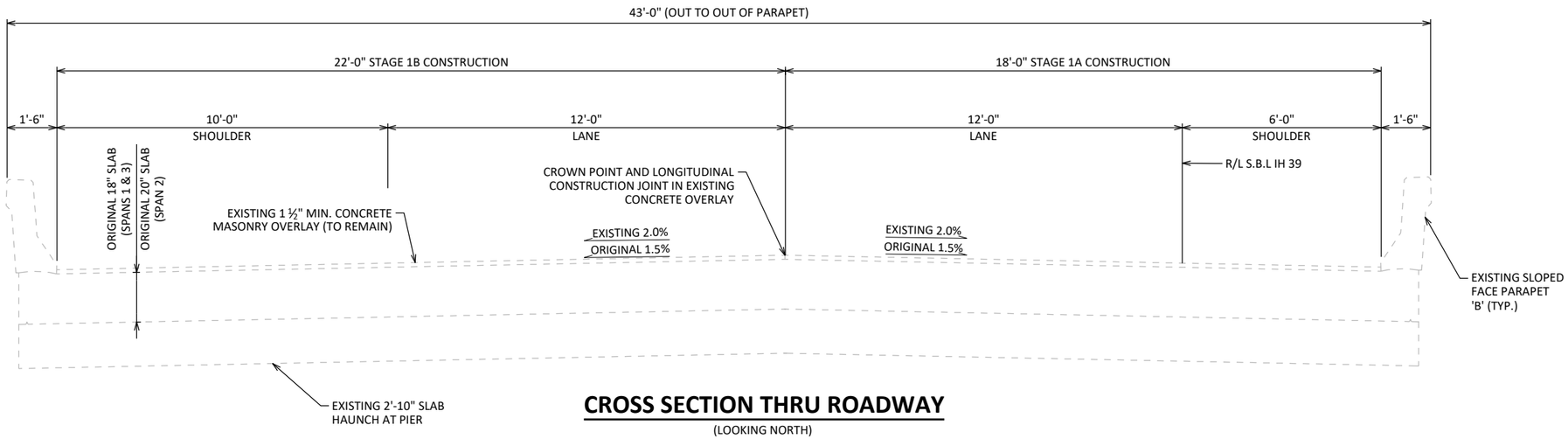
SHEET 1 OF 4
241

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STATE PROJECT NUMBER

1166-04-84



CROSS SECTION THRU ROADWAY

(LOOKING NORTH)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

SEE ROAD PLANS FOR TRAFFIC CONTROL. STAGING OF SIDES MAY BE SWITCHED IF APPROVED BY THE ENGINEER.

DIMENSIONS SHOWN ARE BASED ON THE 1984 AS-BUILT PLANS AND 2012 REHABILITATION PLANS. THE ORIGINAL PLANS ARE AVAILABLE FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN. SEE ROAD PLANS FOR LOCATIONS OF EXISTING AND PROPOSED UTILITIES AT BRIDGE LOCATION.

THIS PROJECT WILL REHABILITATE THE EXISTING STRUCTURE B-39-22, A THREE SPAN 130 FT. LONG HAUNCHED CONCRETE SLAB BRIDGE SET ON CONCRETE SILL ABUTMENTS AND CONCRETE COLUMN PIERS. ALL SUBSTRUCTURE UNITS ARE FOUNDED ON OIL FIELD PIPE PILES.

PIGMENTED SURFACE SEALER RESEAL SHALL BE APPLIED TO THE TOP AND ROADWAY FACE AND ENDS OF BOTH EXISTING CONCRETE PARAPETS. SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "PIGMENTED SURFACE SEALER RESEAL".

"PIGMENTED SURFACE SEALER RESEAL " BID ITEM SHALL BE APPLIED TO THE TOP AND ROADWAY FACE AND END OF THE NEW PARAPET AT WING REPLACEMENT.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A ½" DEEP SAWCUT.

DEBRIS CONTAINMENT BID ITEM TO BE USED ONLY FOR CONCRETE SURFACE REPAIRS OVER CTH CX. USE OF DEBRIS CONTAINMENT BID ITEM AT OTHER LOCATIONS SHALL NOT BE REQUIRED.

CONTRACTOR SHALL TAKE CARE WHEN REMOVING CONCRETE AROUND EXISTING REINFORCEMENT. CONTRACTOR SHALL SALVAGE AND INCORPORATE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES BAR SIZE.

BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURE. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

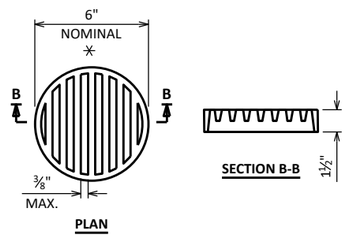
AT THE BACK FACE OF WING 4, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT WING 4.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL
203.0220	REMOVING STRUCTURE (STRUCTURE) B-39-22	EACH	1
203.0330	DEBRIS CONTAINMENT (STRUCTURE) B-39-22	EACH	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) B-39-22	EACH	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	2
502.0100	CONCRETE MASONRY BRIDGES	CY	1.9
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	121
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	26
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	370
⚹ 509.1500	CONCRETE SURFACE REPAIR	SF	80
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	2
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	24
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2
SPV.0165	SLAB UNDERSIDE CONCRETE SURFACE REPAIR	SF	132

⚹ CONCRETE SURFACE REPAIRS SHALL BE USED TO REPAIR AREAS OF SPALLED, DELAMINATED, OR DETERIORATED CONCRETE AT LOCATIONS ON THE ABUTMENTS, WINGWALLS, AND PARAPETS.

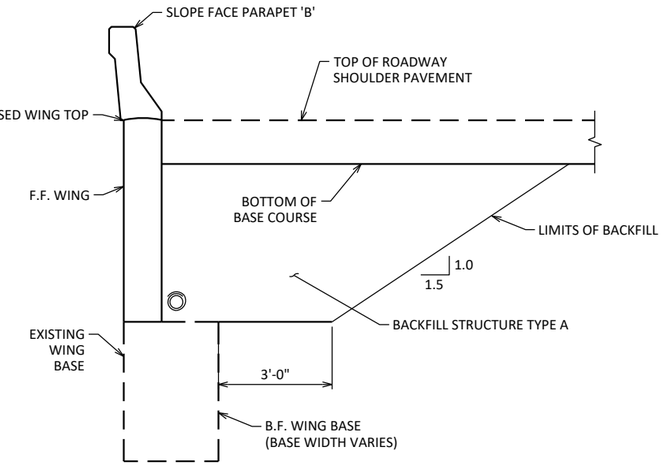


RODENT SHIELD DETAIL

⚹ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



STRUCTURE BACKFILL DETAIL

◎ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

(SECTION SHOWN IS AT B.F. OF ABUTMENT. WING BASE AND WING TOP WIDTH VARIES).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-22

DRAWN BY EKK | PLANS CK'D NJK

CROSS SECTION, QUANTITIES & NOTES

SHEET 2
242

8

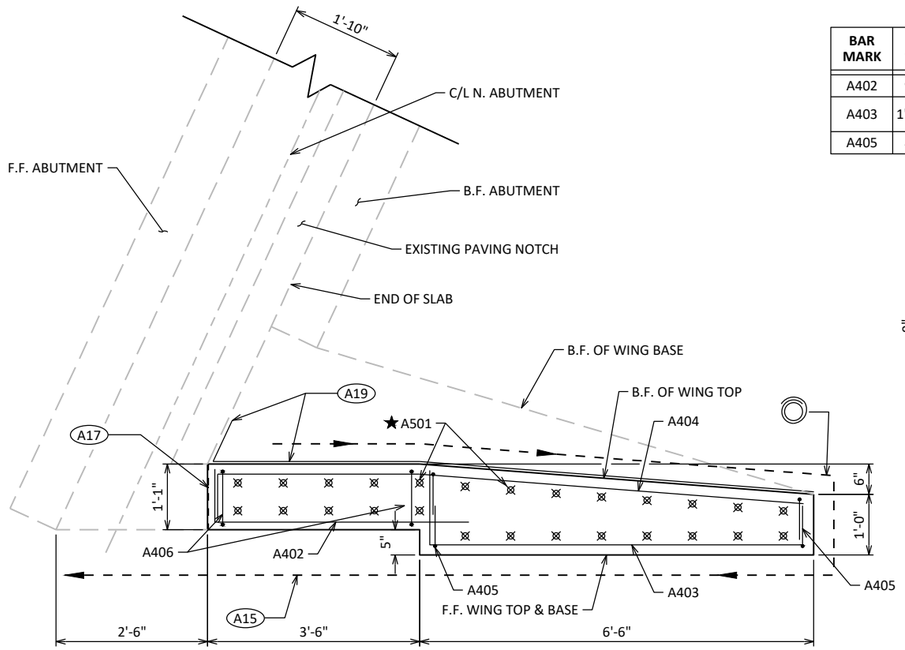
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STATE PROJECT NUMBER

1166-04-84

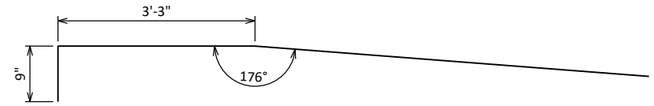


PLAN WING 4

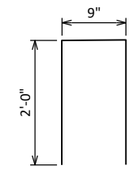
BAR MARK	A
A402	9"
A403	1'-2"
A405	8"



A402, A403, A405



A404



A406

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
A501	26	3'-0"		WING 4 - F.F. & B.F. - VERT. ANCHOR
A402	3	5'-6"	X	WING 4 - F.F. - HORIZ.
A403	3	7'-3"	X	WING 4 - F.F. - HORIZ.
A404	4	10'-4"	X	WING 4 - B.F. - HORIZ.
A405	10	2'-9"	X	WING 4 - F.F. & B.F. - VERT.
A406	4	4'-7"	X	WING 4 - STIRRUP - VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

EPOXY COAT ALL BAR STEEL REINFORCEMENT.

LEGEND

(A17) ½" FILLER (INCLUDED IN WING LENGTH). SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND FILLER ABOVE TOP OF WING AS NECESSARY TO MATCH EXISTING PARAPET JOINT ON BRIDGE SLAB.

◎ PIPE UNDERDRAIN WRAPPED 6-INCH. CAP THE END AT B.F. OF ABUTMENT AND SLOPE 0.5% MIN. TO PROVIDE SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END OF PIPE UNDERDRAIN. SEE DETAIL, SHEET 2.

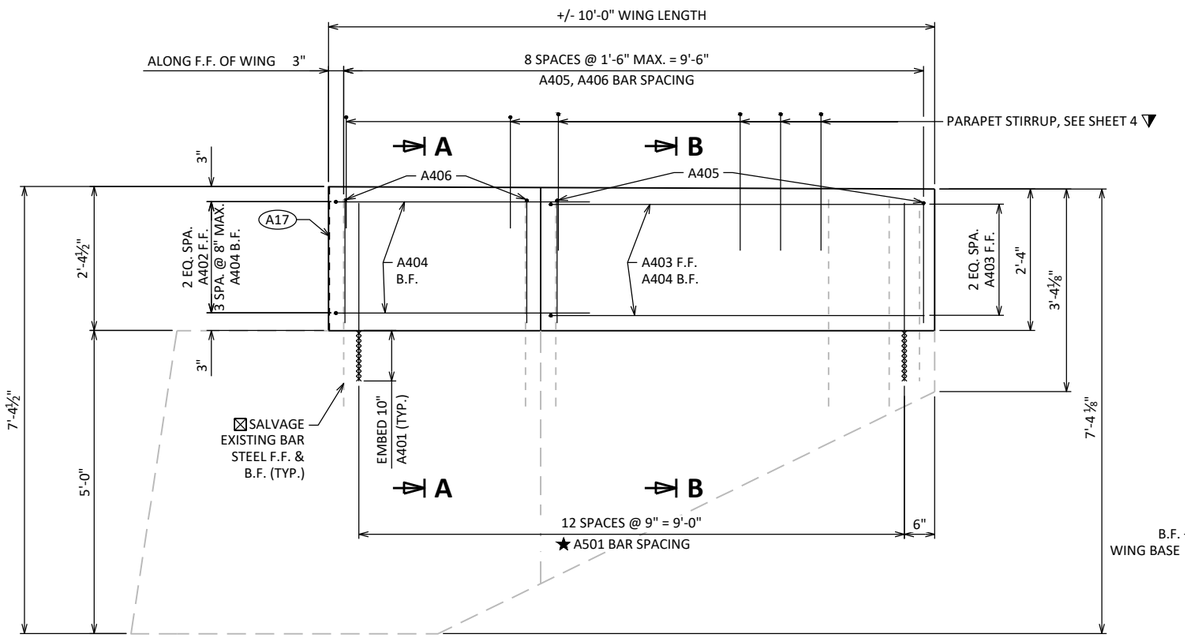
★ ADHESIVE ANCHORS NO. 5 BAR EMBED 10" IN CONCRETE. ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.

(A19) 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERTICAL JOINTS AT B.F.

☒ EXISTING BAR STEEL IS UNCOATED. COAT EXPOSED BAR STEEL WITH EPOXY IN ACCORDANCE WITH SECTION 505.2.4.2 OF THE STANDARD SPECIFICATION. INCIDENTAL TO CONCRETE MASONRY BRIDGES.

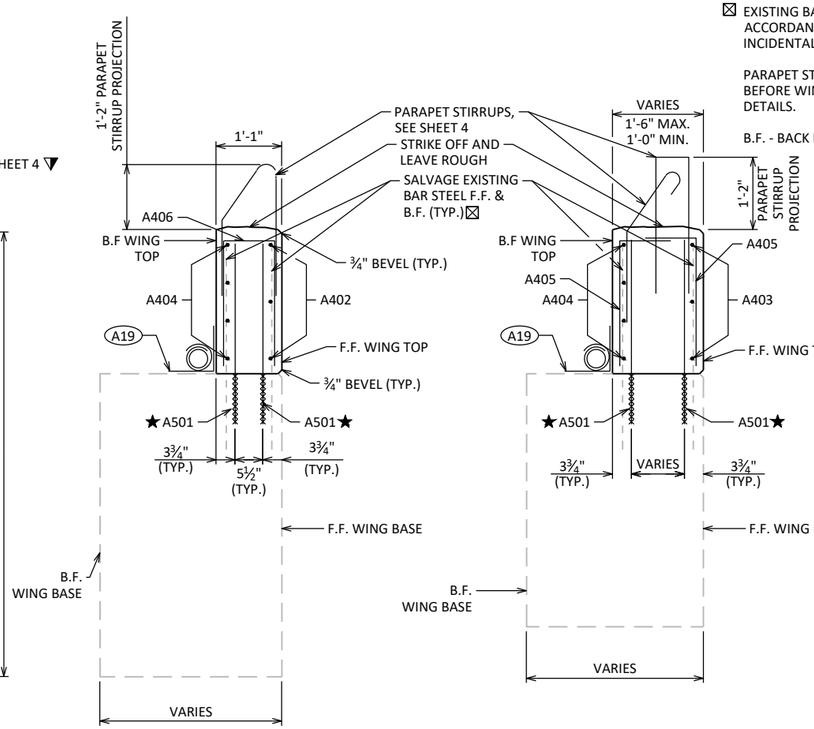
PARAPET STIRRUPS R401, R402, AND R403 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED. SEE SHEET 4 FOR PARAPET REINFORCEMENT DETAILS.

B.F. - BACK FACE F.F. - FRONT FACE



ELEVATION WING 4

CONCRETE SLAB NOT SHOWN FOR CLARITY



SECTION A-A THRU WING 4

SECTION B-B THRU WING 4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-39-22

DRAWN BY EKK | PLANS CK'D NJK

WING TOP REPLACEMENT

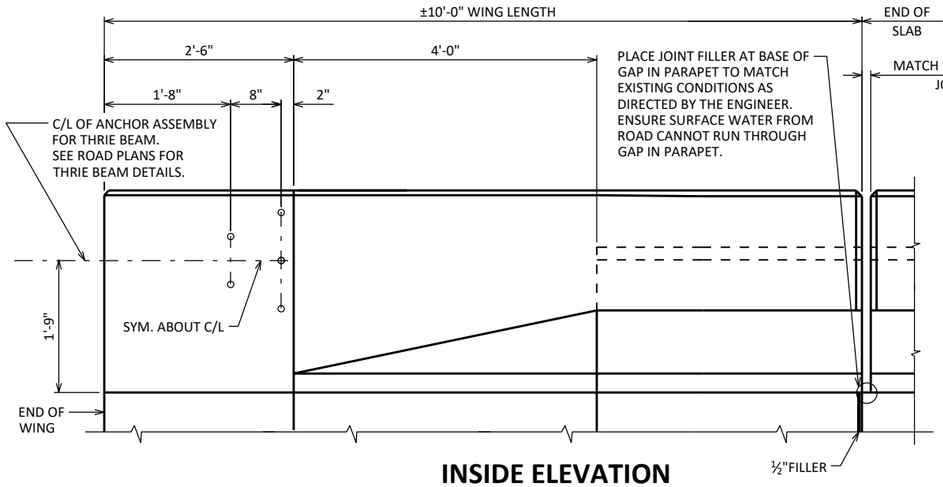
SHEET 3
243

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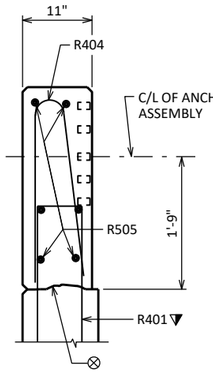
STATE PROJECT NUMBER

1166-04-84

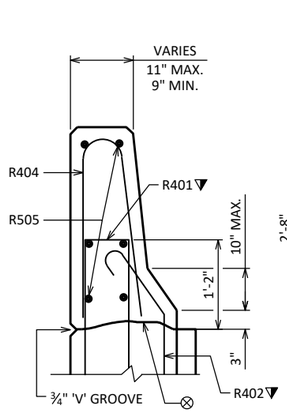


INSIDE ELEVATION

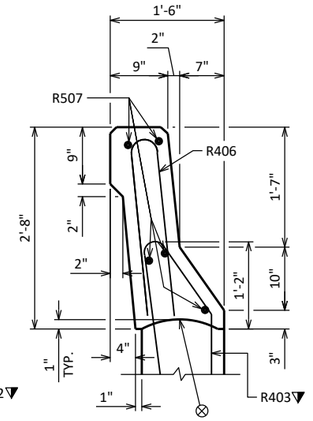
WING 4 PARAPET



SECTION A-A



SECTION B-B



SECTION C-C

BILL OF BARS

FOR PARAPET AT WING 4

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

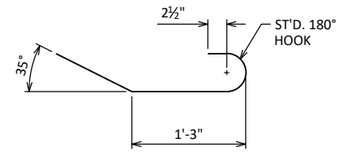
BAR MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
R401	15	4'-9"	X	PARAPET BOTTOM - STIRRUP - VERT.
R402	4	3'-1"	X	PARAPET BOTTOM - TIE - VERT.
R403	5	4'-9"	X	PARAPET BOTTOM - STIRRUP - VERT.
R404	15	4'-9"	X	PARAPET - END - TOP - STIRRUP - VERT.
R505	6	6'-2"		PARAPET - END - LONGITUDINAL
R406	5	4'-10"	X	PARAPET - TOP - STIRRUP - VERT.
R507	5	5'-4"		PARAPET - LONGIT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

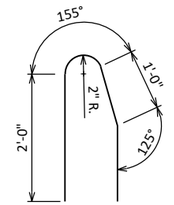
EPOXY COAT ALL BAR STEEL REINFORCEMENT.



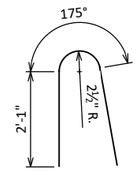
R401



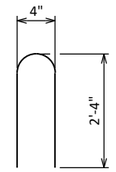
R402



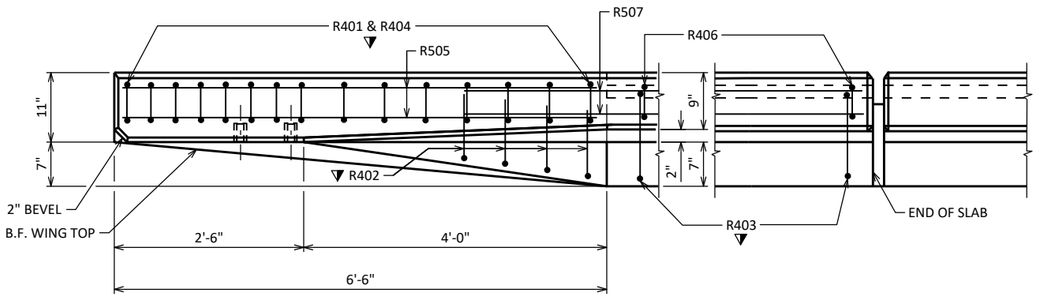
R403



R404

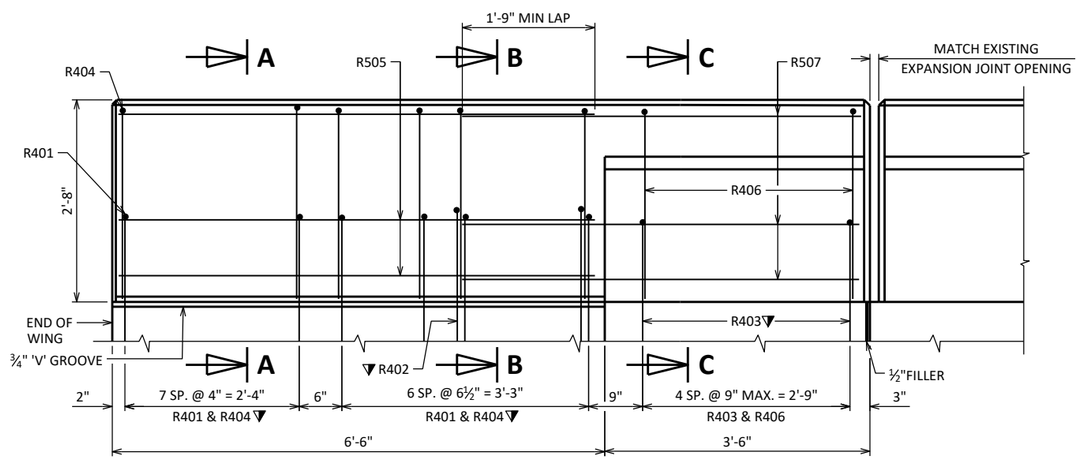


R406



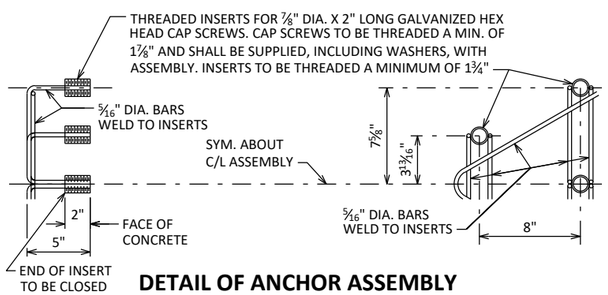
PLAN

WING 4 PARAPET



OUTSIDE ELEVATION

WING 4 PARAPET
(LOOKING THRU PARAPET)



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

LEGEND

⊗ CONST. JOINT - STRIKE OFF AS SHOWN

▼ R401, R402, AND R403 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

B.F. - BACK FACE F.F. - FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-39-22

DRAWN BY EKK | PLANS CK'D NJK

SLOPED FACE PARAPET "B"

SHEET 4
244

SCALE = 2.00

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STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT LEFT	FILL LEFT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
112+50	0.63	3.70	0	0	0	0	0
113+00	2.59	0.08	3	4	3	5	-2
113+50	2.37	0.01	5	0	8	5	3
114+00	1.23	0.20	3	0	11	5	6
114+15.60	1.18	0.07	1	0	12	5	7
114+40.60	1.17	0.52	1	0	13	5	8
114+65.60	0.72	5.72	1	3	14	9	5
115+00	1.57	2.27	1	5	15	16	-1
115+50	2.70	0.23	4	2	19	18	1
115+85.60	4.89	0.00	5	0	24	18	6
116+00	0.00	0.00	1	0	25	18	7
116+44.08	0.00	0.00	0	0	25	18	7

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT RIGHT	FILL RIGHT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
112+50	2.31	0.56	0	0	0	0	0
113+00	1.21	1.89	3	2	3	3	0
113+50	1.44	2.26	2	4	5	8	-3
114+00	2.67	0.05	4	2	9	10	-1
114+15.60	1.26	1.20	1	0	10	10	0
114+40.60	3.26	1.75	2	1	12	12	0
114+65.60	1.33	9.01	2	5	14	18	-4
115+00	2.21	12.55	2	14	16	36	-20
115+50	0.52	13.45	3	24	19	68	-49
115+85.60	0.00	11.11	0	16	19	88	-69
116+00	0.98	9.84	0	6	19	96	-77
116+44.08	0.80	1.77	1	9	20	108	-88

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
128+00	1.63	0.13	0	0	0	0	0
128+50	0.98	4.98	2	5	2	7	-5
129+00	0.94	6.34	2	10	4	20	-16
129+50	1.08	10.04	2	15	6	39	-33
130+00	1.33	4.57	2	14	8	57	-49
130+50	1.66	2.56	3	7	11	66	-55
131+00	1.94	1.50	3	4	14	72	-58
131+50	2.15	1.10	4	2	18	74	-56
132+00	2.28	0.80	4	2	22	77	-55
132+50	1.99	5.26	4	6	26	85	-59
133+00	1.76	6.03	3	10	29	98	-69
133+50	1.85	2.30	3	8	32	108	-76
134+00	1.95	0.02	4	2	36	111	-75

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT LEFT	FILL LEFT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
210+80	2.56	12.61	0	0	0	0	0
211+00	3.11	3.98	2	6	2	8	-6
211+50	4.26	0.00	7	4	9	13	-4
212+00	3.25	0.64	7	1	16	14	2
212+50	3.02	1.06	6	2	22	17	5
213+00	3.23	0.98	6	2	28	20	9
213+20.03	3.33	1.12	2	1	30	21	9
213+45.03	3.27	3.53	3	2	33	23	10
213+70.03	3.06	6.80	3	5	36	30	6
213+82.42	2.96	5.99	1	3	37	34	3
214+07.42	2.85	4.63	3	5	40	40	0
214+32.42	2.85	2.98	3	4	43	46	-3
214+50	2.93	1.53	2	1	45	47	-2
214+90.03	3.25	0.63	5	2	50	49	1
215+52.42	0.00	0.00	4	1	54	51	3

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT RIGHT	FILL RIGHT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
210+80	2.43	0.67	0	0	0	0	0
211+00	2.01	1.22	2	1	2	1	1
211+50	2.23	0.11	4	1	6	3	3
212+00	2.23	0.47	4	1	10	4	6
212+50	2.11	0.77	4	1	14	5	9
213+00	2.08	0.41	4	1	18	7	12
213+20.03	2.36	0.16	2	0	20	7	14
213+45.03	2.11	0.21	2	0	22	7	16
213+70.03	2.92	0.00	2	0	24	7	18
213+82.42	3.27	0.00	1	0	25	7	19
214+07.42	2.49	0.12	3	0	28	7	22
214+32.42	1.82	3.21	2	2	30	9	21
214+50	1.40	5.08	1	3	31	13	18
214+90.03	1.96	2.17	2	5	33	20	14
215+52.42	1.77	0.00	4	3	37	23	14

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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	EARTHWORK DATA	SHEET	E

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT LEFT	FILL LEFT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
319+75	3.08	1.54	0	0	0	0	0
320+00	3.28	0.98	3	1	3	1	2
320+50	4.24	0.00	7	1	10	3	7
321+00	4.05	0.31	8	0	18	3	15
321+50	3.45	2.40	7	3	25	7	19
322+06.60	3.84	2.44	8	5	33	13	20
322+31.60	3.74	8.66	4	5	37	20	18
322+56.60	3.69	14.36	3	11	40	34	6
322+62.65	3.68	12.51	1	3	41	38	3
322+87.65	3.66	6.17	3	9	44	49	-5
323+12.65	3.59	2.24	3	4	47	55	-8
323+50	3.52	0.03	5	2	52	57	-5
323+76.60	4.02	0.00	4	0	56	57	-1
324+00	0.00	0.00	2	0	58	57	1
324+32.65	0.00	0.00	0	0	58	57	1

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT RIGHT	FILL RIGHT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
319+75	2.82	0.10	0	0	0	0	0
320+00	2.36	0.25	2	0	2	0	2
320+50	2.89	0.00	5	0	7	0	7
321+00	1.93	0.23	4	0	11	0	11
321+50	2.20	0.72	4	1	15	1	14
322+06.60	1.61	1.69	4	3	19	5	14
322+31.60	2.19	0.65	2	1	21	7	15
322+56.60	2.26	0.25	2	0	23	7	17
322+62.65	2.47	0.00	1	0	24	7	18
322+87.65	2.31	0.07	2	0	26	7	20
323+12.65	2.36	1.59	2	1	28	8	20
323+50	1.92	1.48	3	2	31	10	21
323+76.60	1.75	0.91	2	1	33	12	21
324+00	1.45	0.59	1	1	34	13	21
324+32.65	1.11	0.00	2	0	36	13	23

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
441+50	0.36	1.42	0	0	0	0	0
442+00	0.28	1.20	1	2	1	3	-2
442+50	0.65	2.20	1	3	2	7	-5
443+00	0.25	2.53	1	4	3	12	-9
443+50	0.30	2.04	1	4	4	17	-13
444+00	0.11	2.90	0	5	4	23	-19
444+50	0.04	2.81	0	5	4	30	-26
445+00	0.13	2.69	0	5	4	36	-32
445+50	0.08	2.45	0	5	4	43	-39
445+75	0.08	0.35	0	1	4	44	-40
446+00	0.21	0.17	0	0	4	44	-40
446+12.30	0.31	0.57	0	0	4	44	-40

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT LEFT	FILL LEFT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
385+75	0.00	0.00	0	0	0	0	0
386+00	4.26	0.01	2	0	2	0	2
386+50	4.40	0.12	8	0	10	0	10
387+00	4.56	0.00	8	0	18	0	18
387+50	2.91	2.80	7	3	25	4	21
388+00	2.35	5.87	5	8	30	14	16
388+19.72	1.93	5.96	2	4	32	20	13
388+44.72	3.08	12.53	2	9	34	31	3
388+63.90	3.14	16.37	2	10	36	44	-8
388+69.72	3.17	17.47	1	4	37	49	-12
388+88.90	3.48	14.22	2	11	39	64	-25
389+13.90	3.93	8.92	3	11	42	78	-36
389+50	4.76	2.04	6	7	48	87	-39
389+89.72	3.49	0.00	6	2	54	90	-36
390+33.90	0.00	0.00	3	0	57	90	-33

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT RIGHT	FILL RIGHT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
385+75	3.53	0.00	0	0	0	0	0
386+00	3.77	0.00	3	0	3	0	3
386+50	2.67	0.00	6	0	9	0	9
387+00	2.38	0.04	5	0	14	0	14
387+50	3.24	0.84	5	1	19	1	18
388+00	3.48	0.00	6	1	25	3	22
388+19.72	2.28	1.64	2	1	27	4	23
388+44.72	2.32	1.09	2	1	29	5	24
388+63.90	2.32	0.13	2	0	31	5	26
388+69.72	2.29	0.23	0	0	31	5	26
388+88.90	2.29	1.19	2	1	33	7	27
389+13.90	1.68	5.32	2	3	35	10	25
389+50	0.42	4.80	1	7	36	20	17
389+89.72	2.48	1.00	2	4	38	25	13
390+33.90	1.67	0.00	3	1	41	26	15

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
504+75	0.04	0.00	0	0	0	0	0
505+00	1.15	0.00	1	0	1	0	1
505+50	0.94	0.03	2	0	3	0	3
506+00	2.00	0.00	3	0	6	0	6
506+50	1.37	0.04	3	0	9	0	9
507+00	1.57	0.01	3	0	12	0	12
507+16.72	1.59	0.07	1	0	13	0	13
507+41.72	1.23	3.90	1	2	14	3	11
507+66.72	1.05	8.72	1	6	15	10	5
508+00	1.24	0.70	1	6	16	18	-2
508+50	0.58	0.00	2	1	18	20	-2
508+86.72	0.14	0.00	0	0	18	20	-2

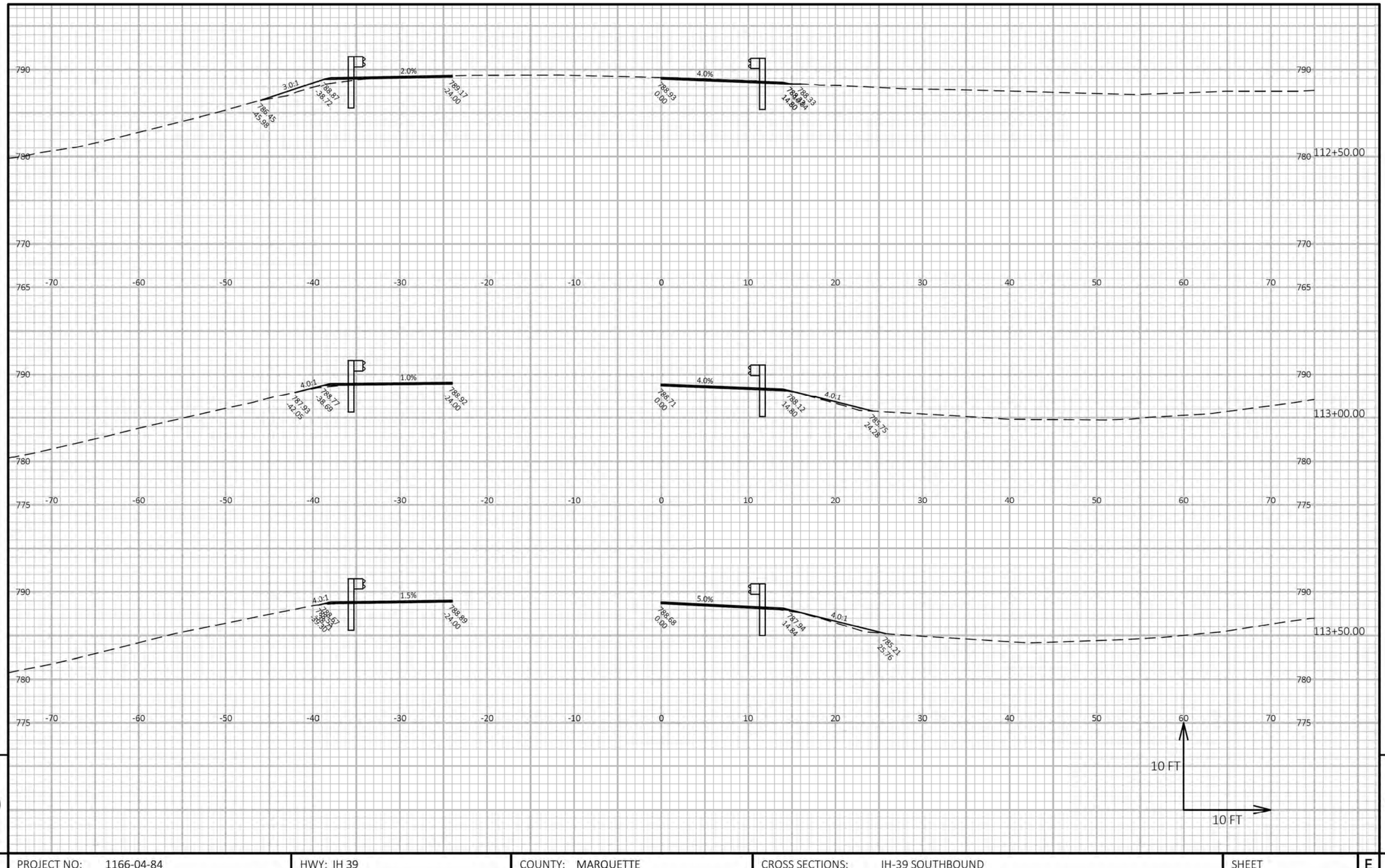
STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
511+25	3.54	0.36	0	0	0	0	0
511+50	0.78	2.78	2	1	2	1	1
512+00	0.78	3.70	1	6	3	9	-6
512+50	0.68	3.21	1	6	4	17	-13
513+00	0.70	3.32	1	6	5	25	-20
513+50	0.95	2.31	2	5	7	31	-24
514+00	0.74	1.64	2	4	9	36	-27
514+29.30	0.78	1.37	1	2	10	39	-29
514+54.30	1.15	2.04	1	2	11	42	-31
514+79.30	1.19	7.70	1	5	12	48	-36
515+00	1.13	0.93	1	3	13	52	-39
515+54.30	1.20	0.02	2	1	15	53	-38
515+99.30	1.33	0.00	2	0	17	53	-36

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT LEFT	FILL LEFT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
536+00	0.00	0.00	0	0	0	0	0
536+50	0.00	0.00	0	0	0	0	0
537+00	0.00	0.00	0	0	0	0	0
537+63.77	4.09	0.00	5	0	5	0	5
538+00	3.91	0.00	5	0	10	0	10
538+50	3.39	0.00	7	0	17	0	17
539+00	3.28	0.00	6	0	23	0	23
539+50	3.29	0.00	6	0	29	0	29
540+00	3.85	0.00	7	0	36	0	36
540+50	3.52	0.00	7	0	43	0	43
541+00	3.51	0.00	7	0	50	0	50
541+28.12	5.41	0.04	5	0	55	0	55
541+53.12	6.16	0.00	5	0	60	0	60
541+78.12	7.23	0.00	6	0	66	0	66
542+00	4.59	0.19	5	0	71	0	71
542+50	3.26	0.00	7	0	78	0	78
543+00	3.21	0.04	6	0	84	0	84

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT RIGHT	FILL RIGHT	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
536+00	1.51	0.65	0	0	0	0	0
536+50	1.85	2.88	3	3	3	4	-1
537+00	1.43	8.09	3	10	6	17	-11
537+63.77	2.76	0.02	5	10	11	30	-19
538+00	2.26	0.40	3	0	14	30	-16
538+50	2.86	0.00	5	0	19	30	-11
539+00	3.34	0.00	6	0	25	30	-5
539+50	2.96	0.00	6	0	31	30	1
540+00	2.04	0.01	5	0	36	30	6
540+50	2.78	0.00	4	0	40	30	10
541+00	0.75	0.09	3	0	43	30	13
541+28.12	0.93	0.19	1	0	44	30	14
541+53.12	1.09	0.00	1	0	45	30	15
541+78.12	1.58	0.00	1	0	46	30	16
542+00	1.41	0.00	1	0	47	30	17
542+50	0.00	0.00	1	0	48	30	18
543+00	0.00	0.00	0	0	48	30	18

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
572+50	0.09	6.27	0	0	0	0	0
573+00	0.30	16.25	0	21	0	27	-27
573+50	0.30	14.80	1	29	1	65	-64
574+00	0.37	12.03	1	25	2	98	-96
574+50	0.51	7.48	1	18	3	121	-118
575+00	0.44	5.87	1	12	4	137	-133
575+32.45	0.60	6.88	1	8	5	147	-142
575+50	0.64	7.20	0	5	5	153	-148
576+00	0.36	12.79	1	19	6	178	-172
576+50	0.43	9.61	1	21	7	205	-198
577+00	1.23	0.03	2	9	9	217	-208
577+50	1.41	0.06	2	0	11	217	-206
578+00	1.01	0.00	2	0	13	217	204
578+50	0.70	0.12	2	0	15	217	-202
579+00	1.05	4.25	2	4	17	222	-205
579+50	0.48	8.69	1	12	18	238	-220
580+00	0.65	0.81	1	9	19	250	-231
580+48.12	0.86	0.00	1	1	20	251	-231

STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
	CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.30	MASS ORDINATE
671+50	1.01	0.81	0	0	0	0	0
672+00	0.18	11.50	1	11	1	14	-13
672+50	0.60	29.69	1	38	2	64	-62
673+00	0.70	25.64	1	51	3	130	-127
673+50	0.74	23.69	1	46	4	190	-186
674+00	0.97	21.55	2	42	6	244	-238
674+50	0.64	22.36	1	41	7	298	-291
675+00	0.57	14.13	1	34	8	342	-334
675+50	0.73	5.52	1	18	9	365	-356
676+00	0.52	4.26	1	9	10	377	-367
676+50	0.60	5.63	1	9	11	389	-378
677+00	0.72	4.54	1	9	12	400	-388
677+50	0.39	4.64	1	8	13	411	-398
678+00	0.62	4.38	1	8	14	421	-407
678+50	0.76	3.85	1	8	15	432	-417
679+00	0.64	4.14	1	7	16	441	-425
679+50	0.73	3.32	1	7	17	450	-433
680+00	1.00	0.93	2	4	19	455	-436
680+50	1.00	6.59	2	7	21	464	-443
681+00	1.43	34.20	2	38	23	514	-491
681+25	1.38	37.44	1	33	24	556	-532
681+50	1.39	42.24	1	37	25	605	-580
682+00	1.06	15.66	2	54	27	675	-648
682+50	0.74	0.01	2	15	29	694	-665
682+70	1.70	0.00	1	0	30	694	-664

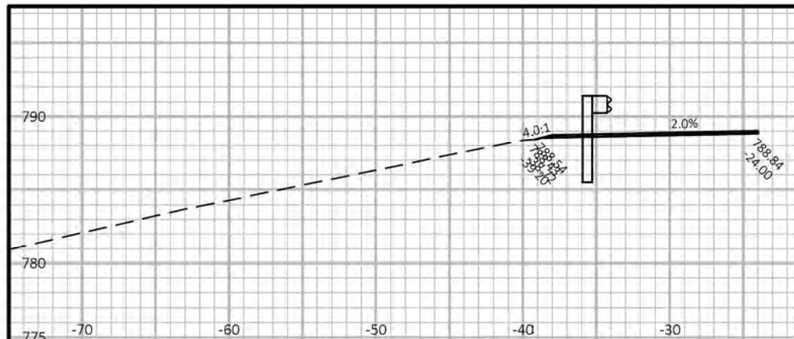


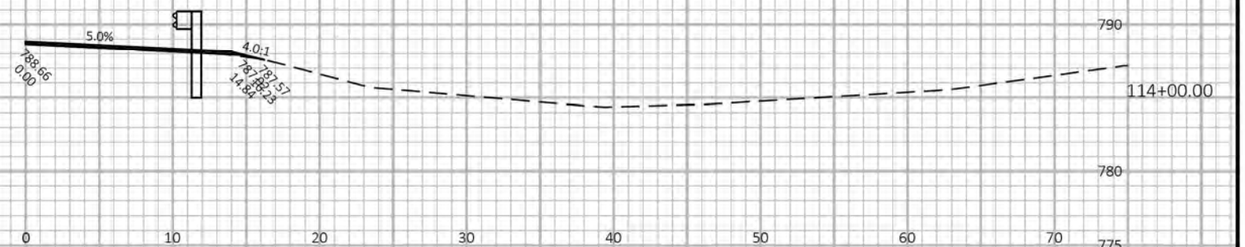
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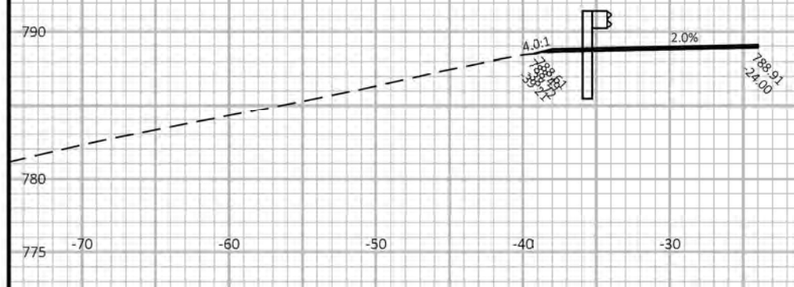
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

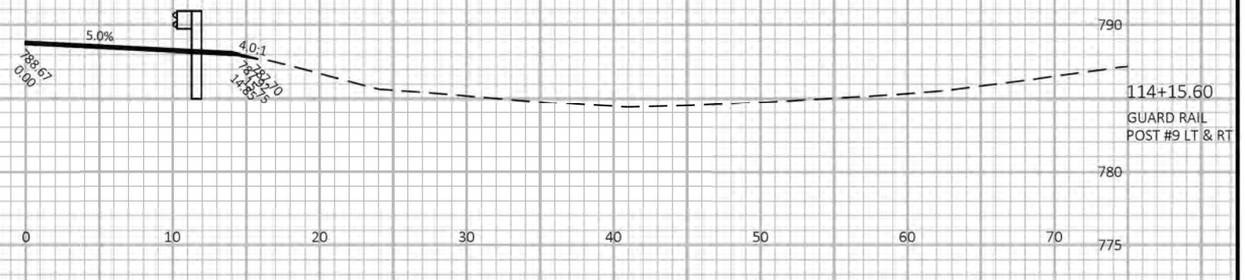
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LAYOUT NAME - GR 901

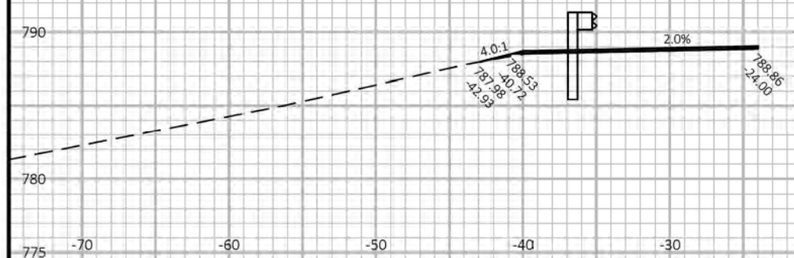
PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

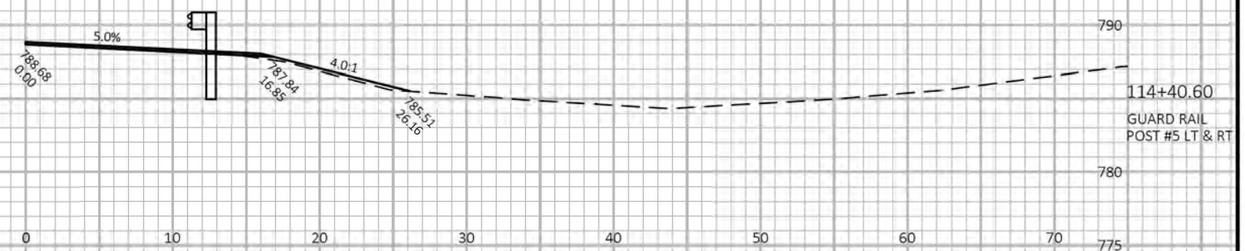


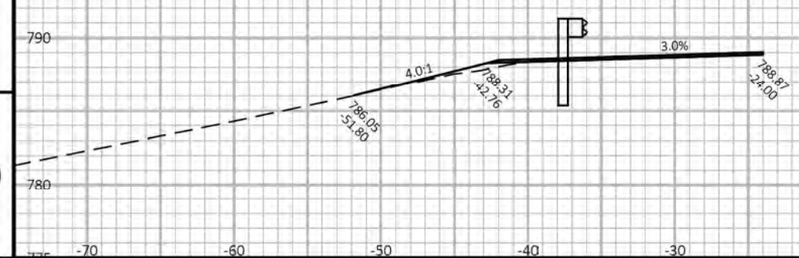


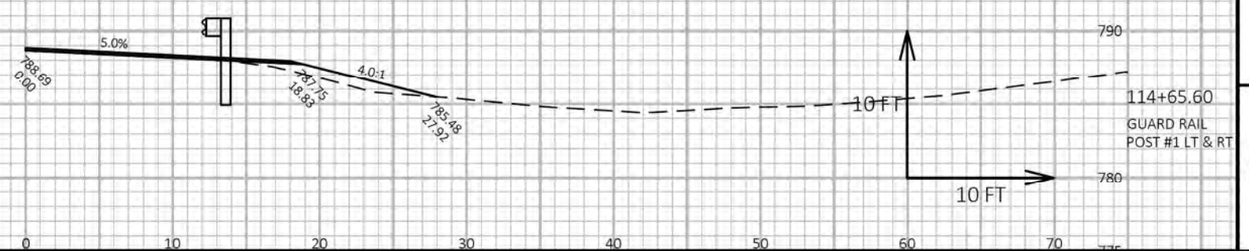












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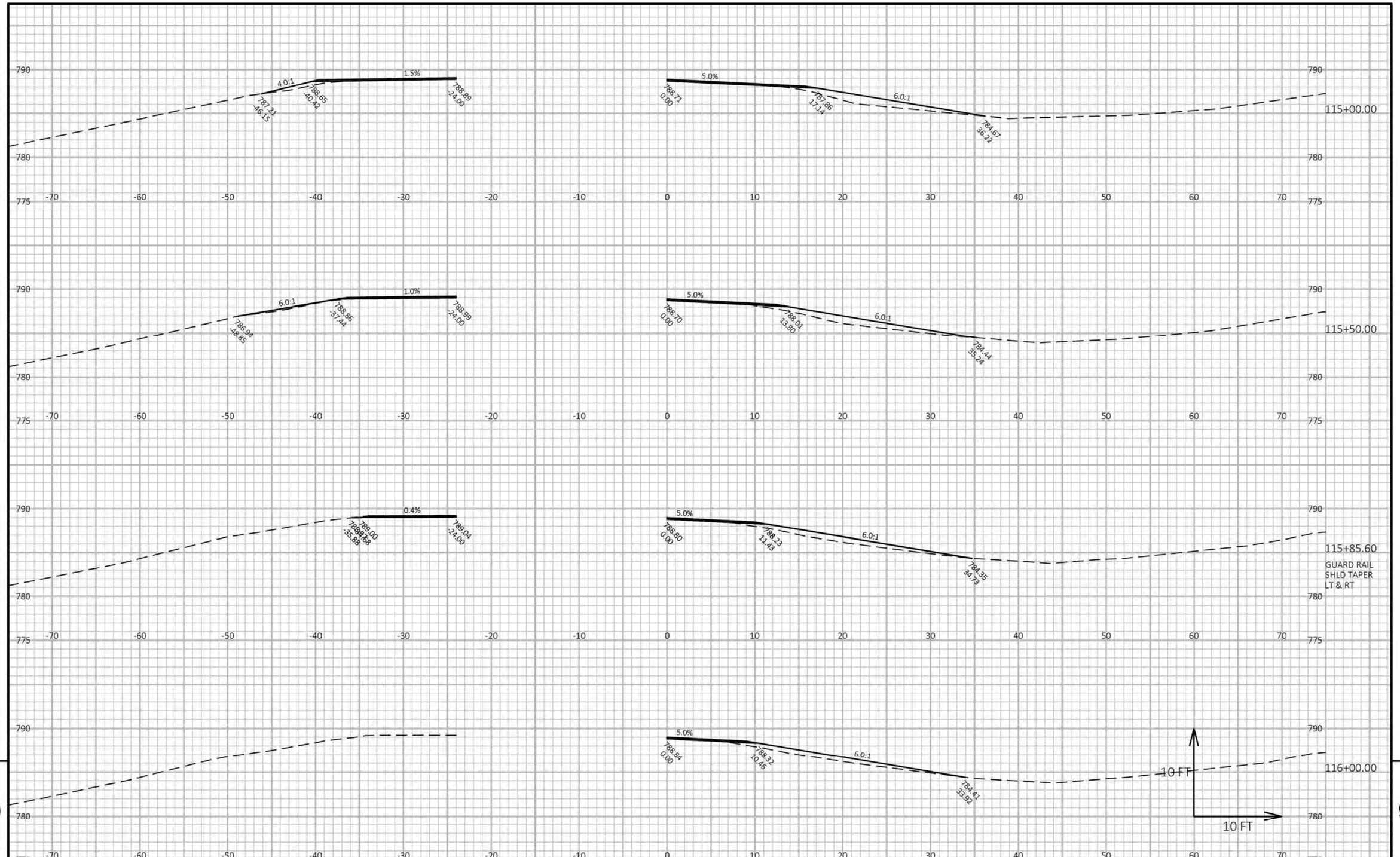
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 902

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CA



9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 903

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

790
780
775
-70
-60
-50
-40
-30
-20
-10
0
10
20
30
40
50
60
70
5.0%
6.0:1
788.78
0.00
788.41
7.43
786.32
19.99
116+44.08

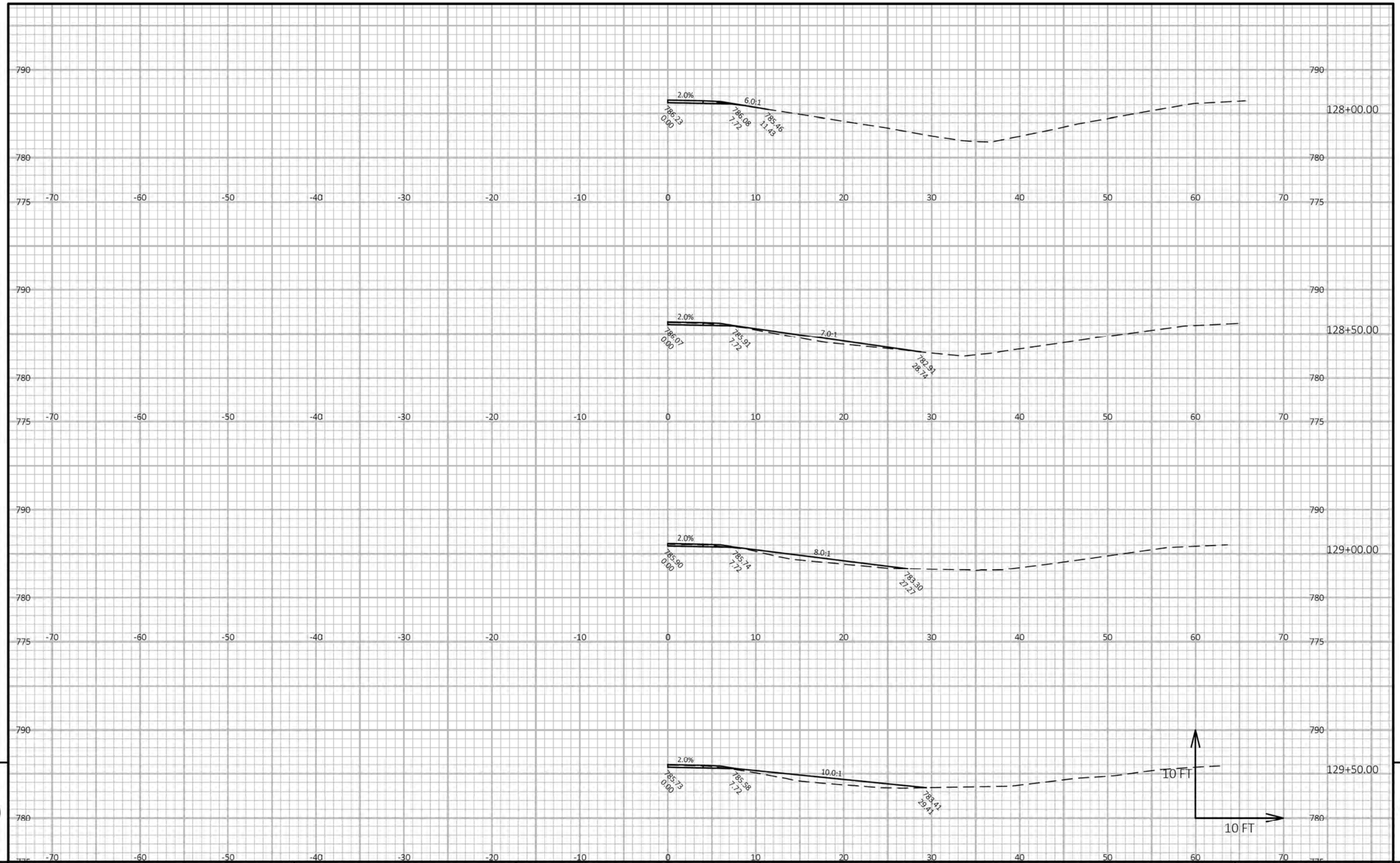
10 FT
10 FT

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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 904

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



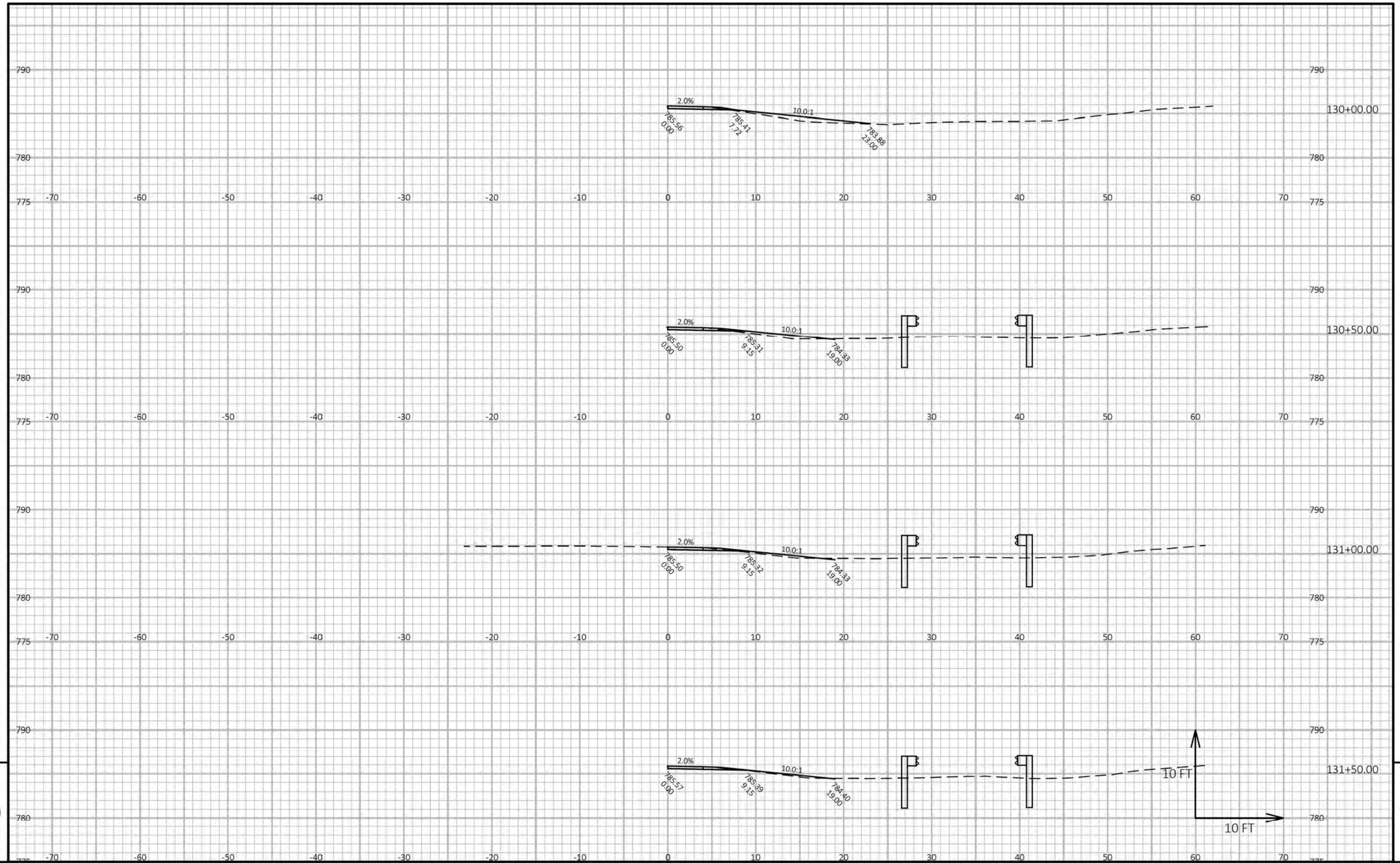
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR-906

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



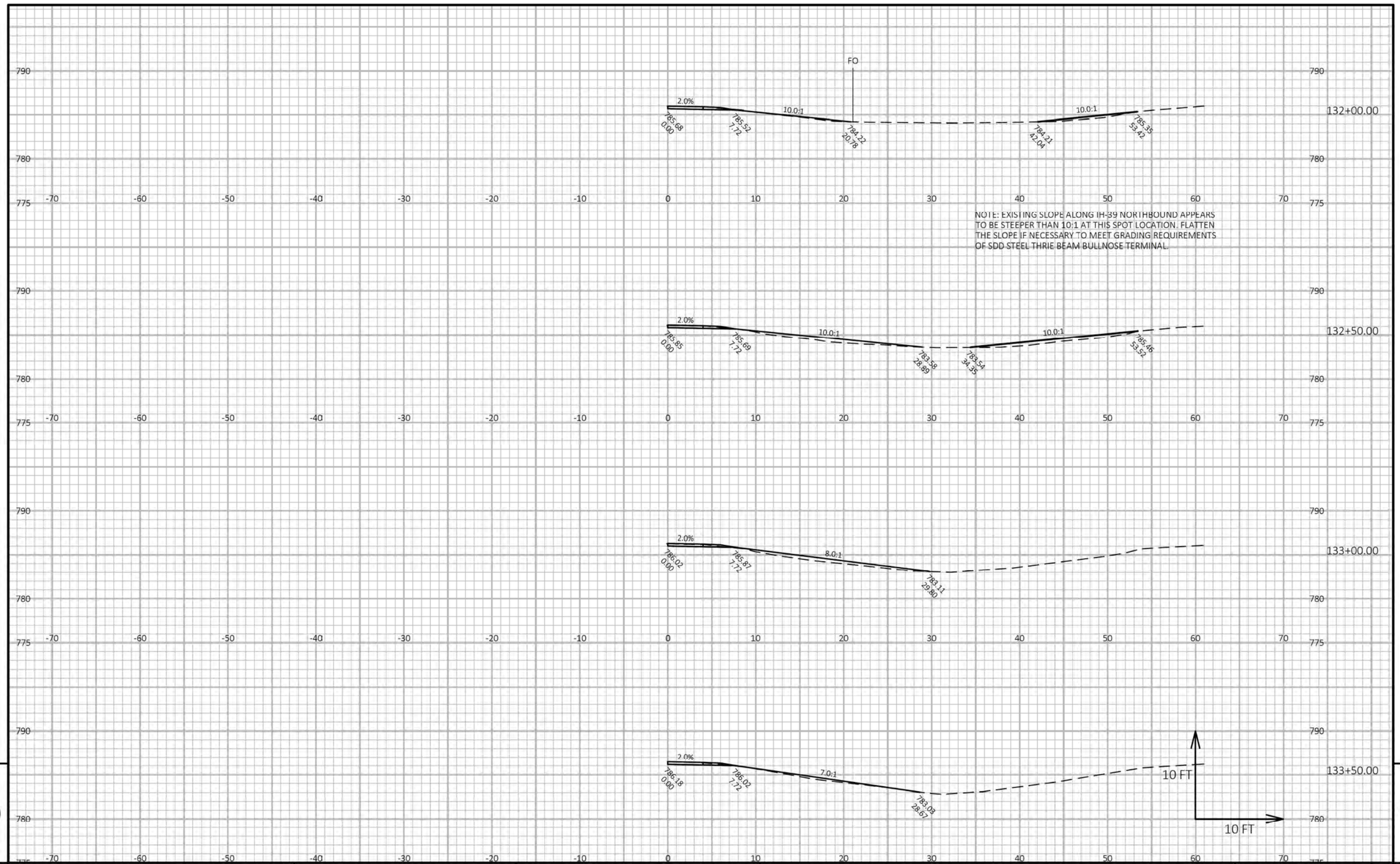
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR-907

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



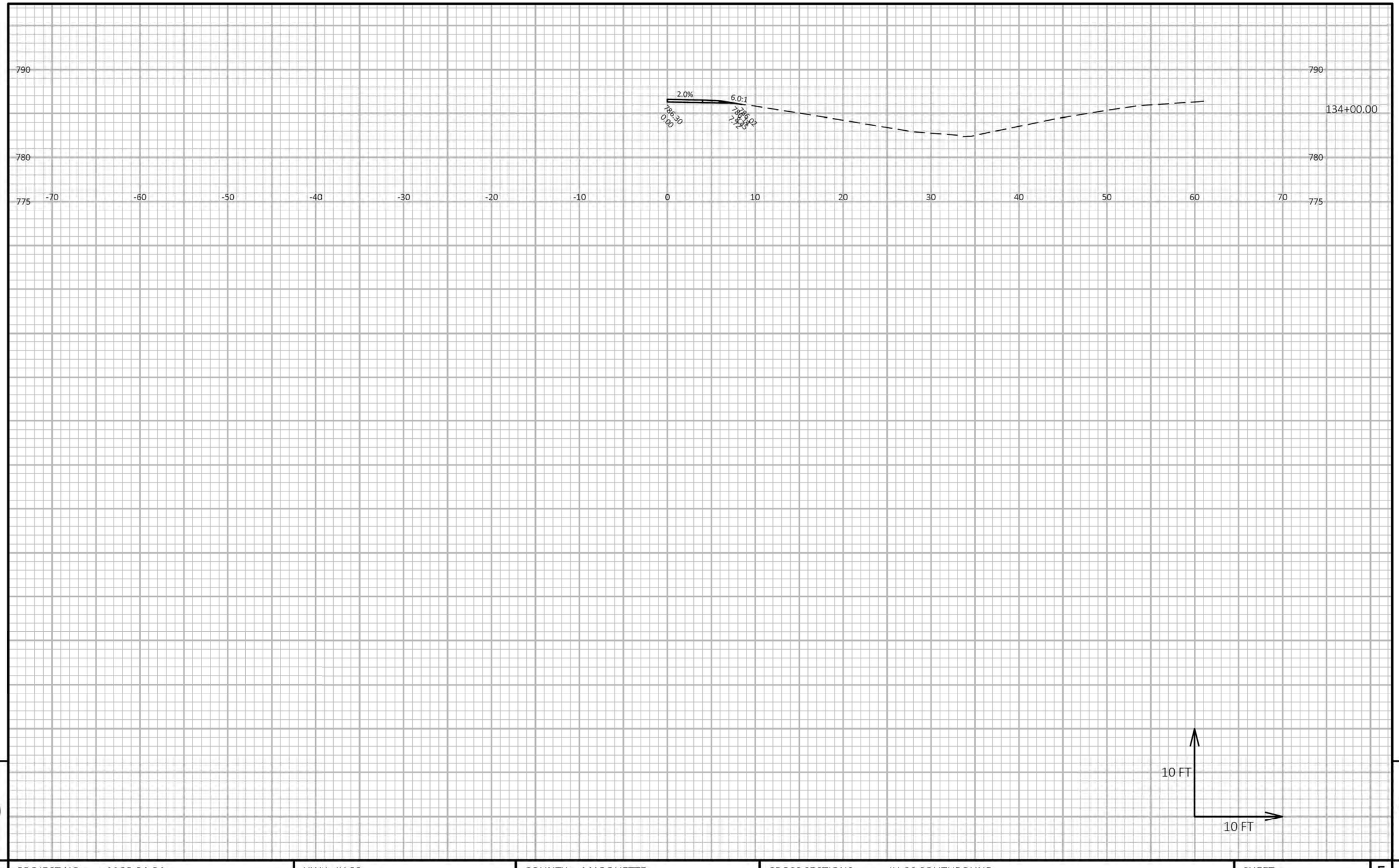
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR-908

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS

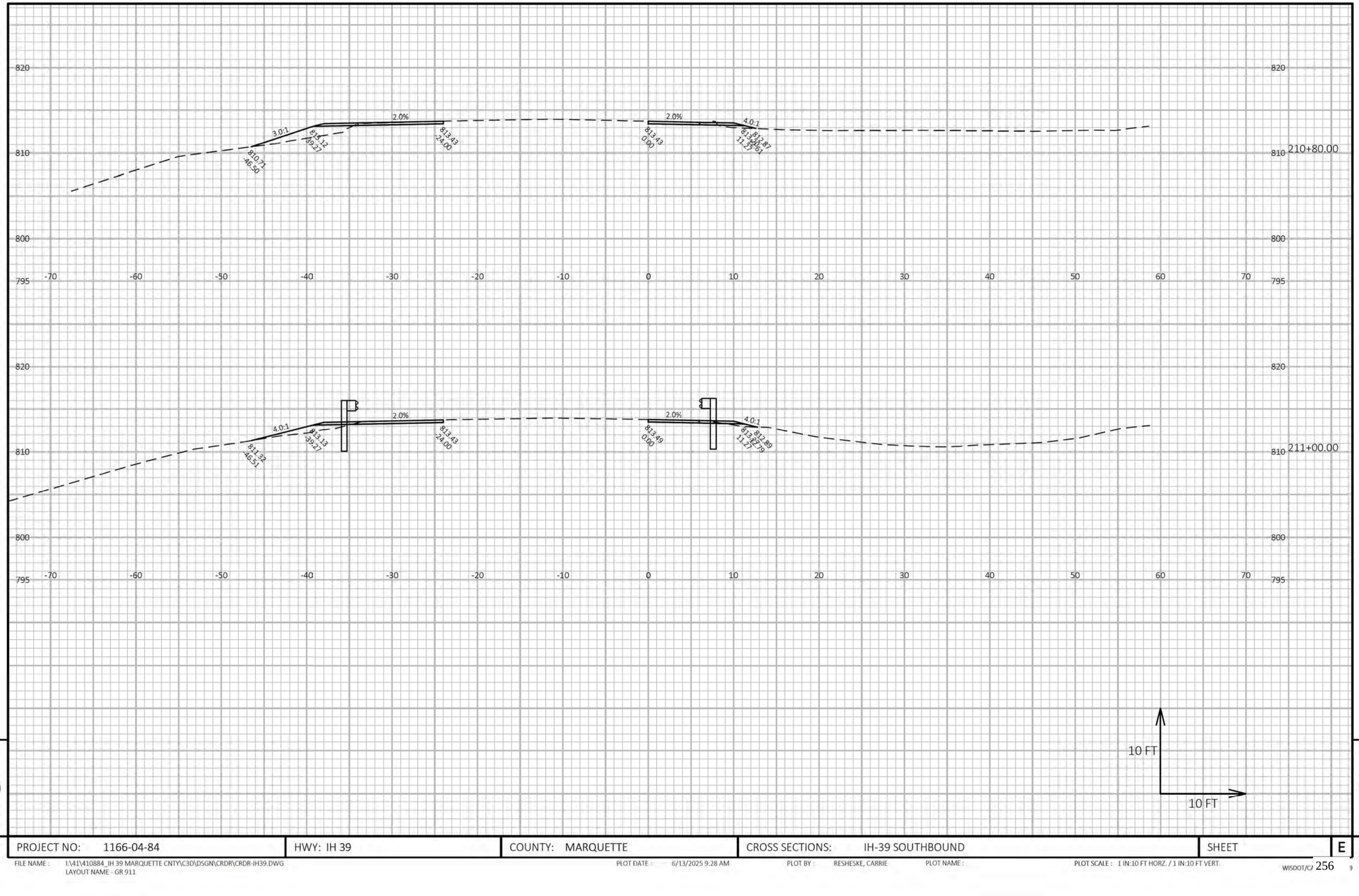


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR-909

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



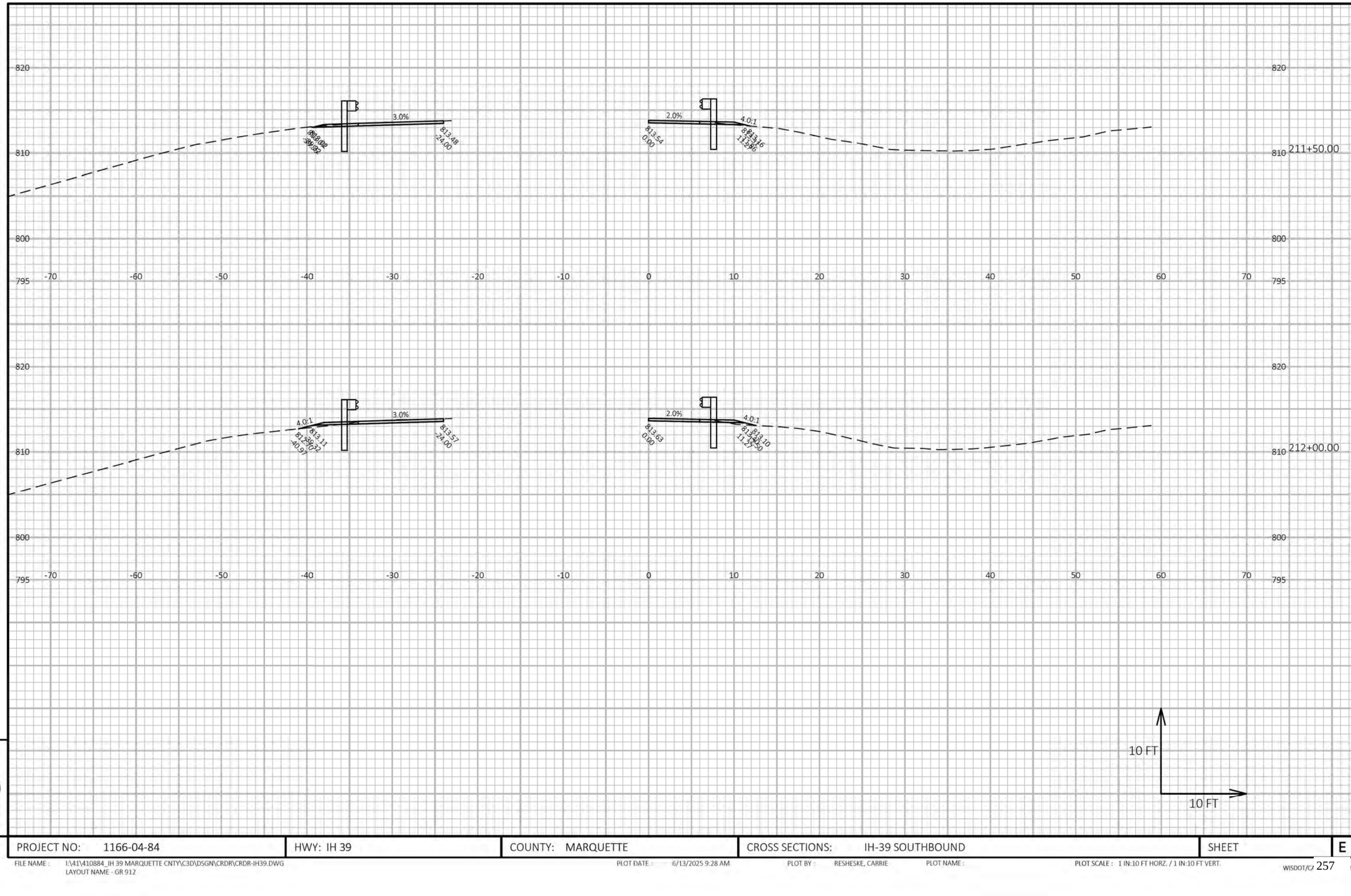
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 911

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



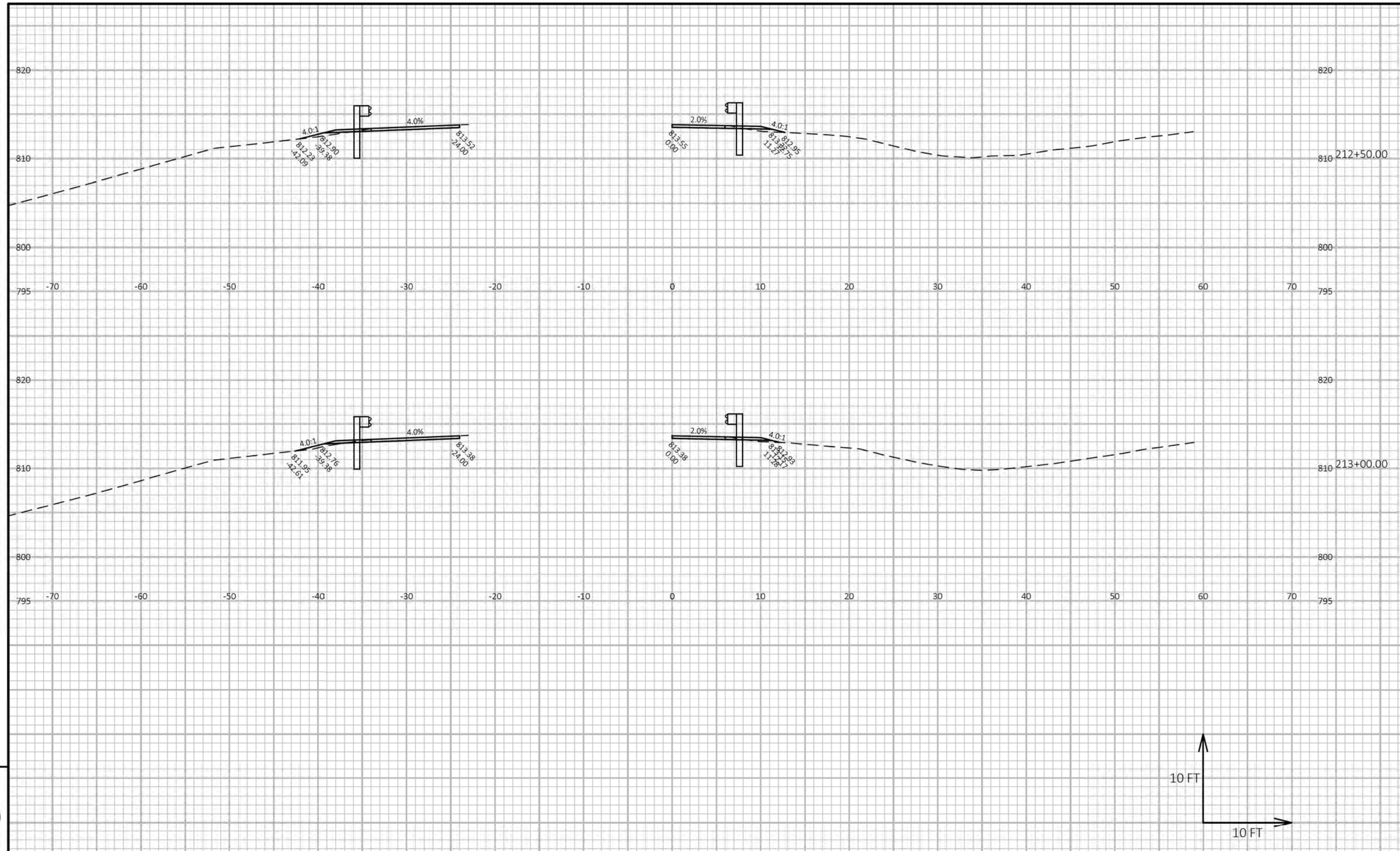
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 912

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



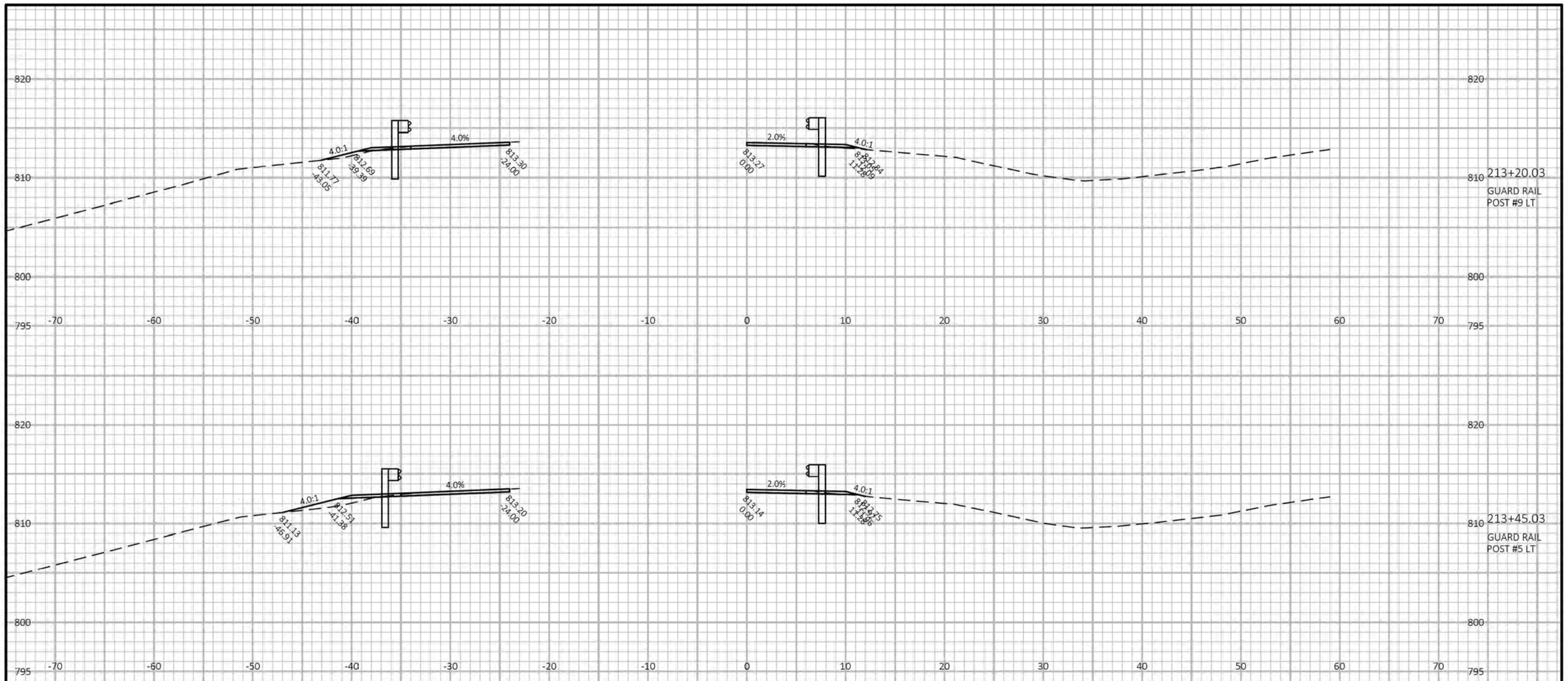
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 913

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



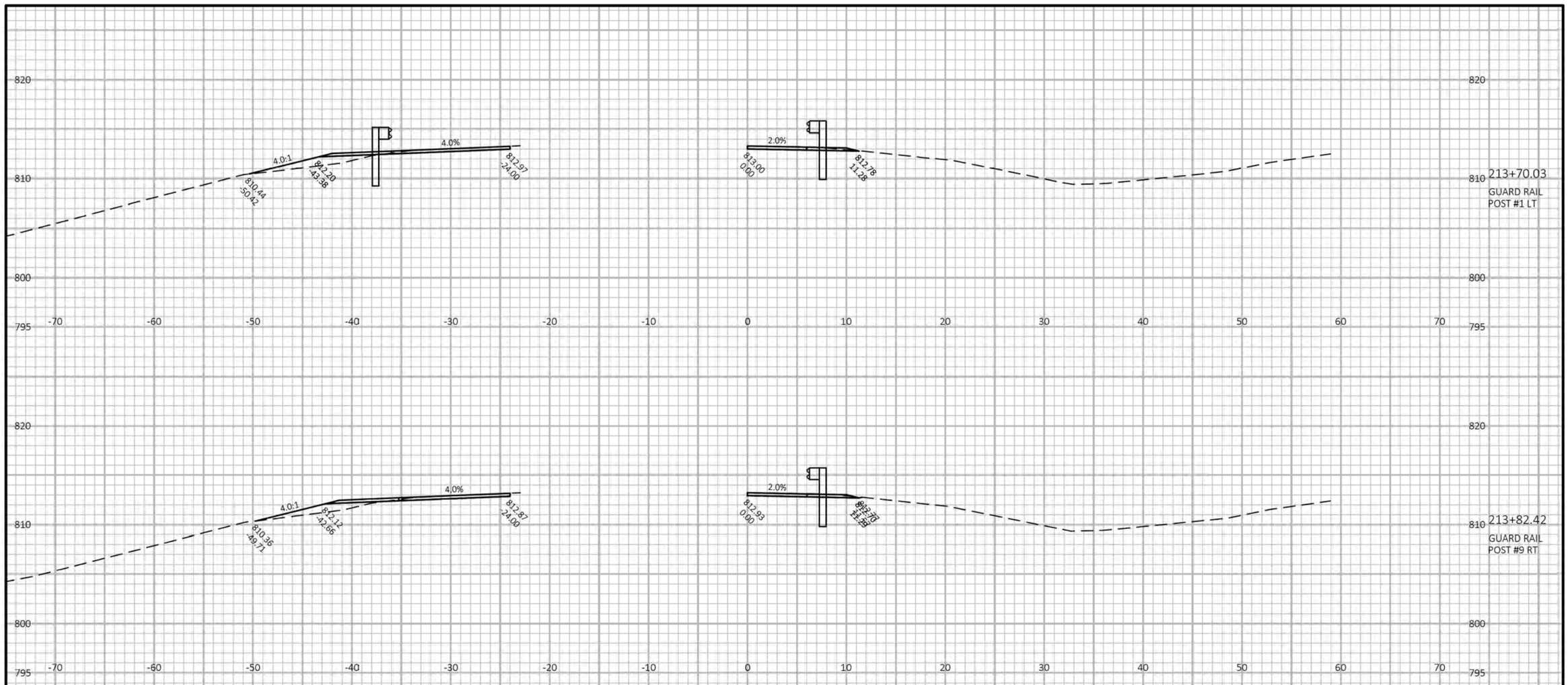
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 914

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

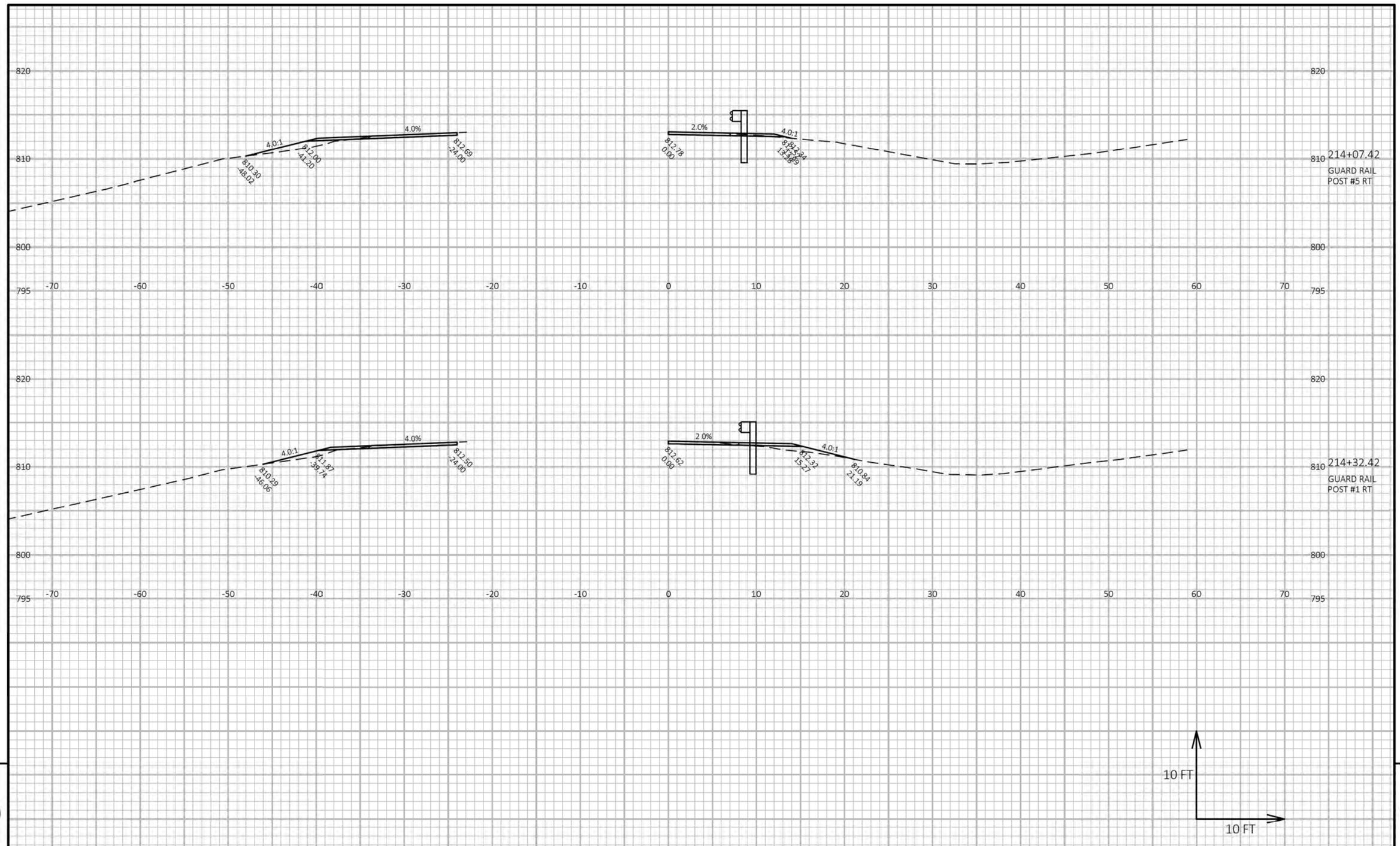


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 915

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

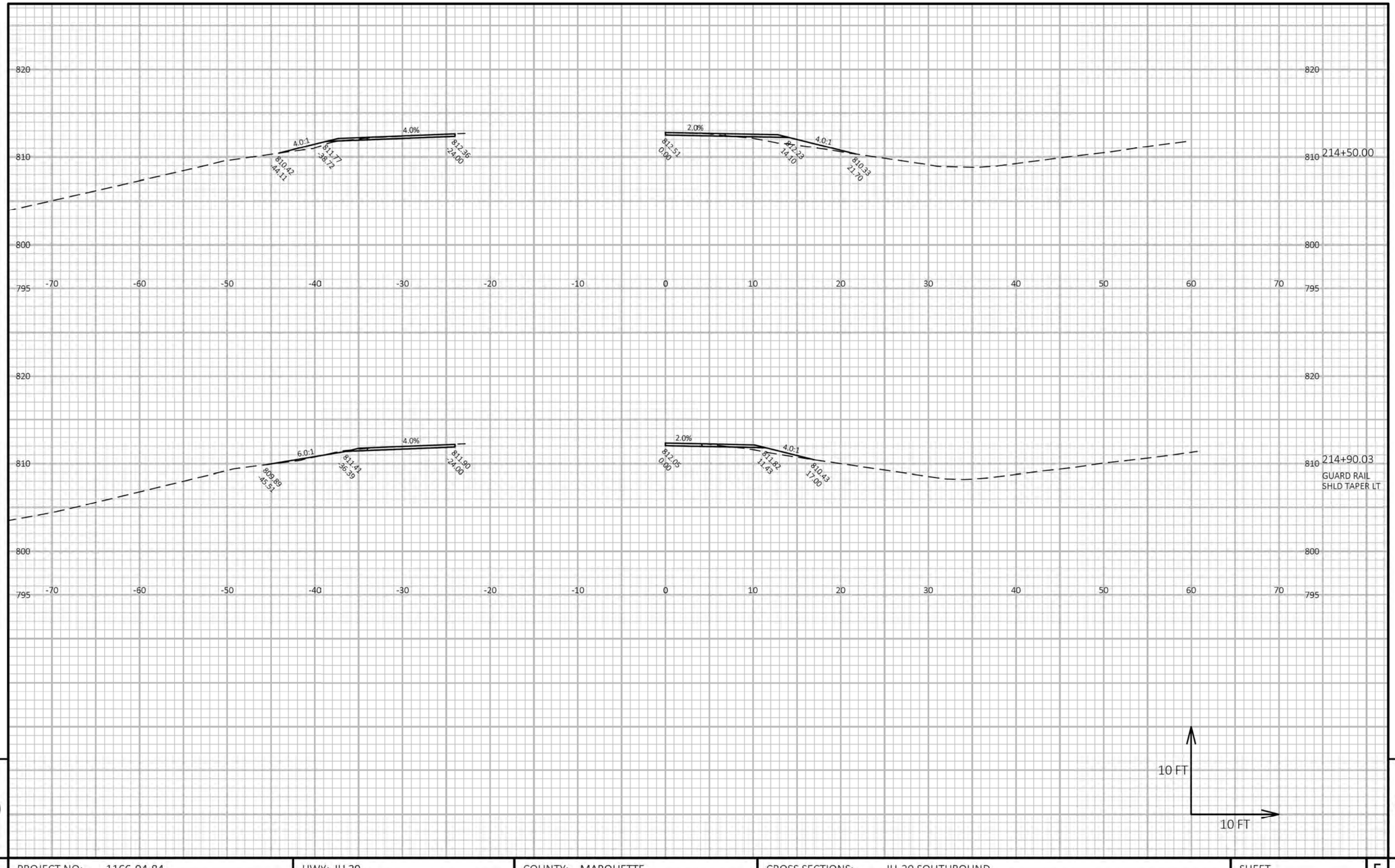


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 916

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 917

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

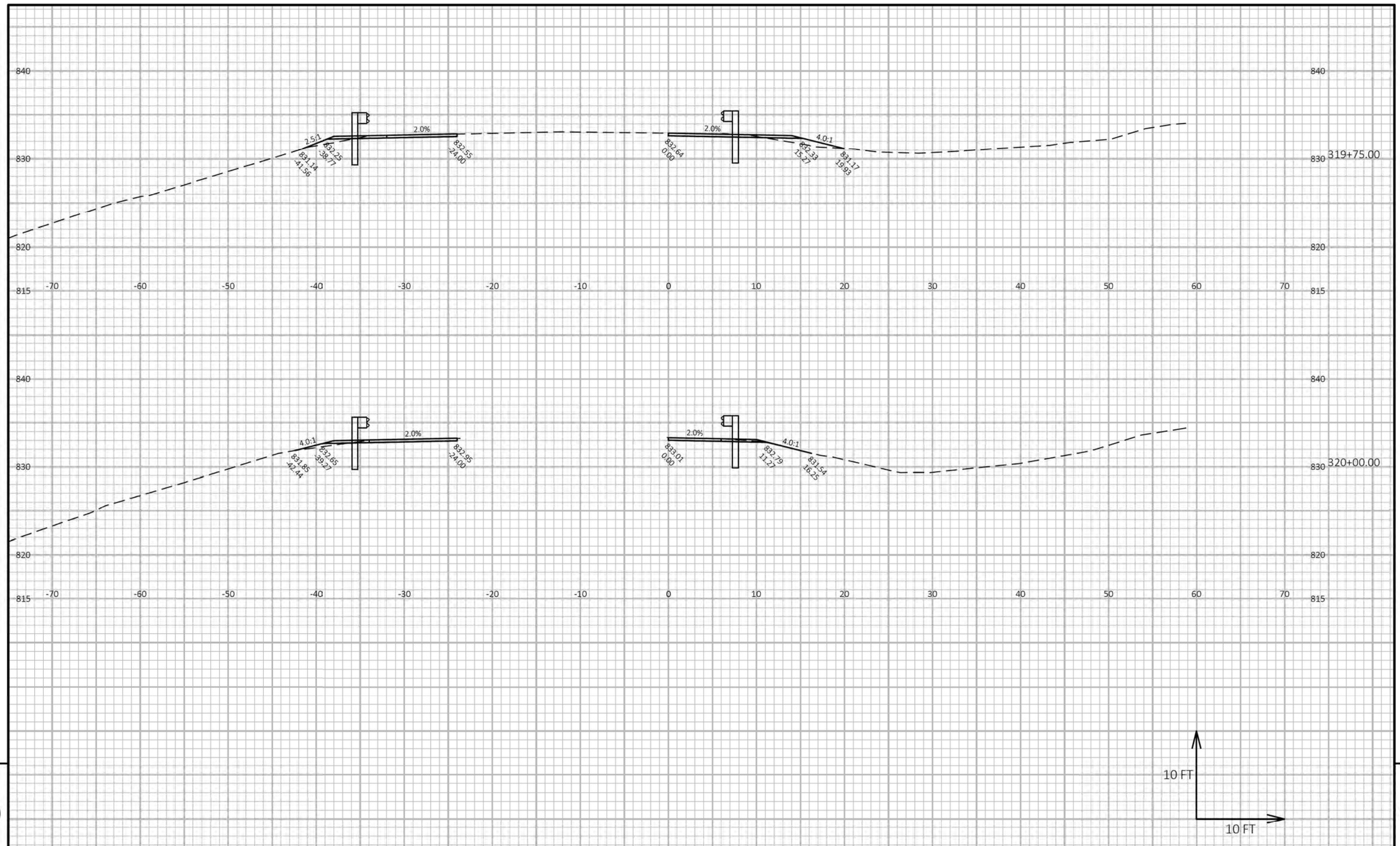
WISDOT/CA

9

820
810
800
795
-70
-60
-50
-40
-30
-20
-10
0
10
20
30
40
50
60
70
2.0%
811.31
0.00
811.76
215+52.42
GUARD RAIL
SHLD TAPER RT
10 FT
10 FT
9
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 918
PLOT DATE : 6/13/2025 9:28 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

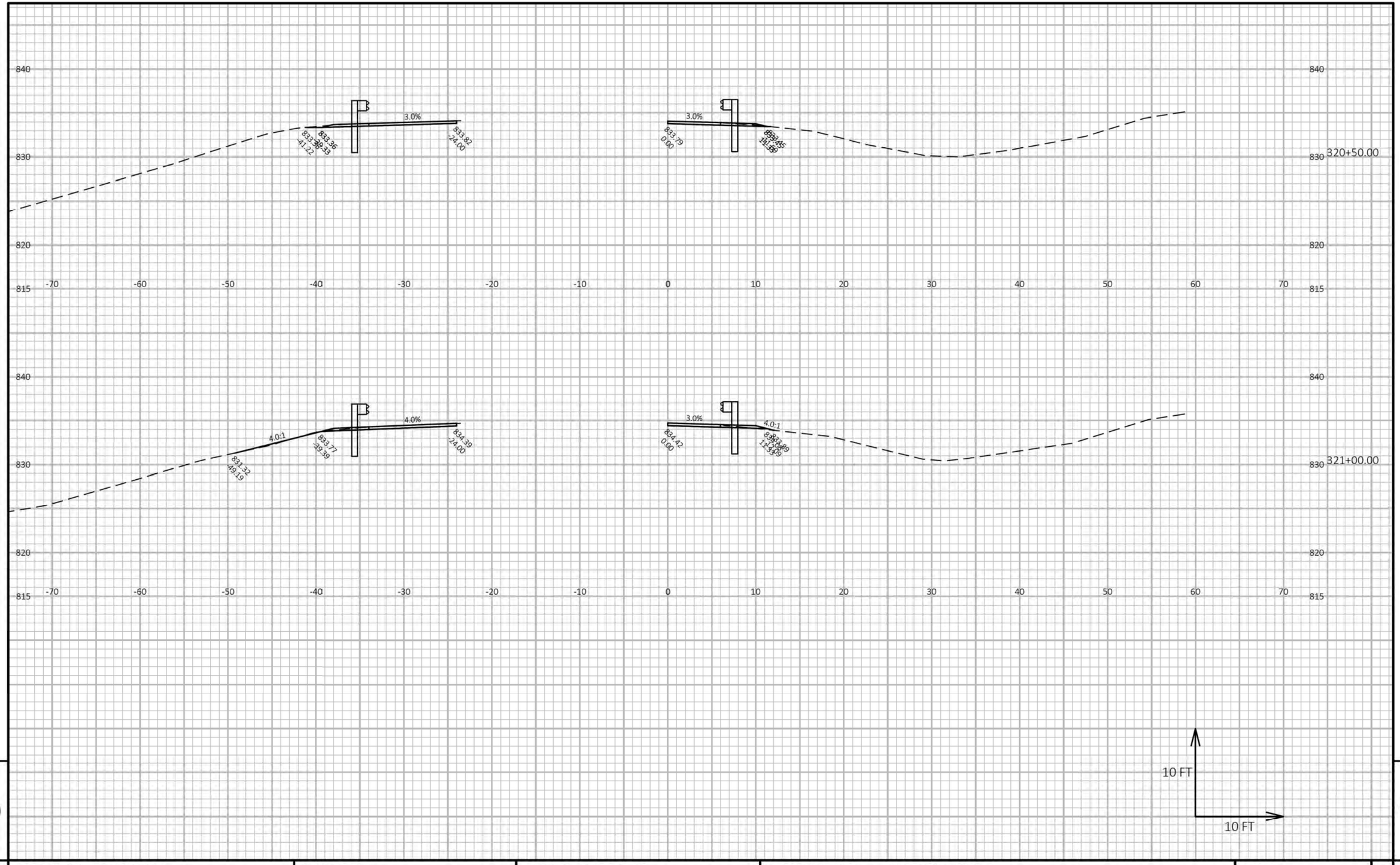


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 921

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

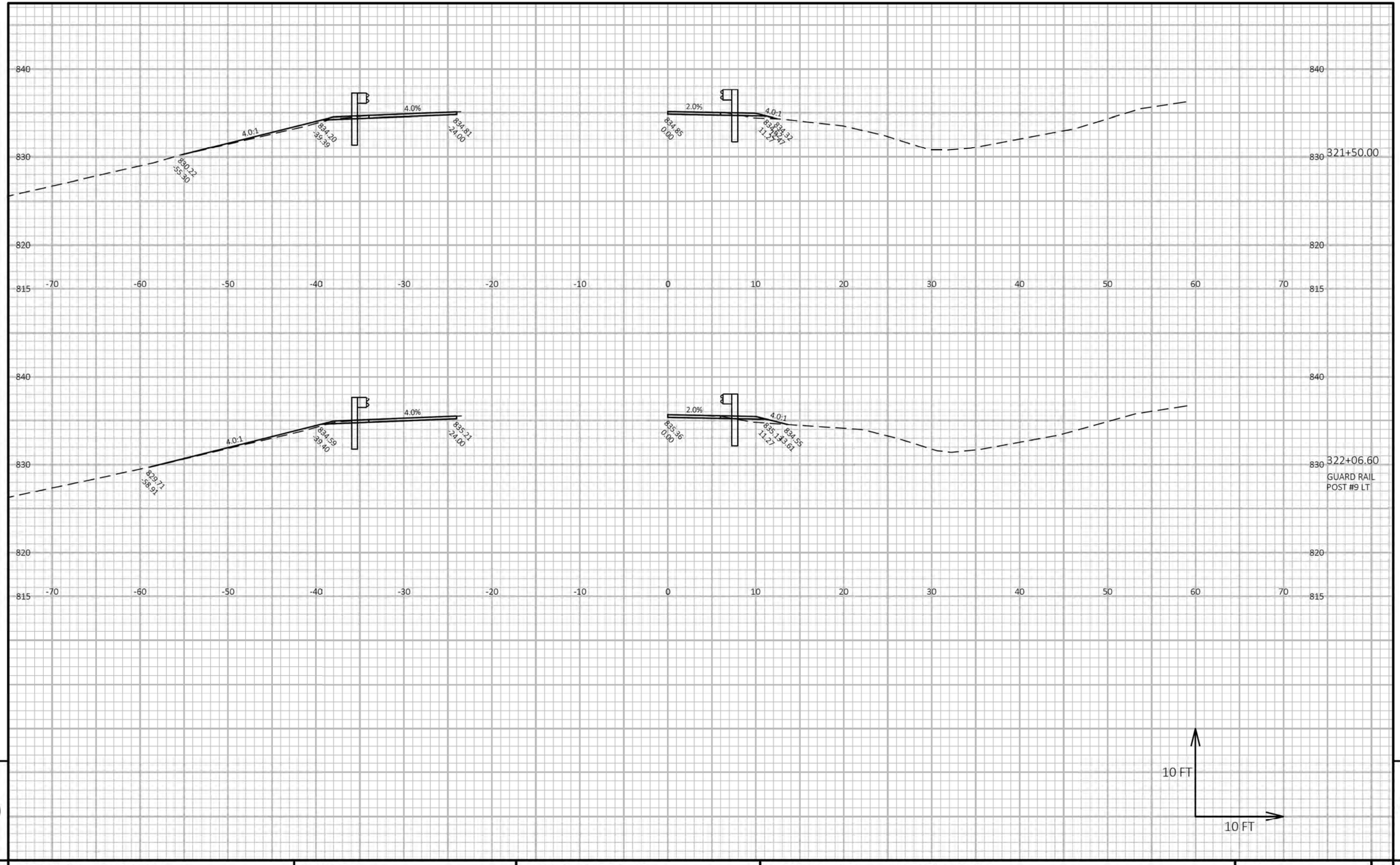


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 922

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

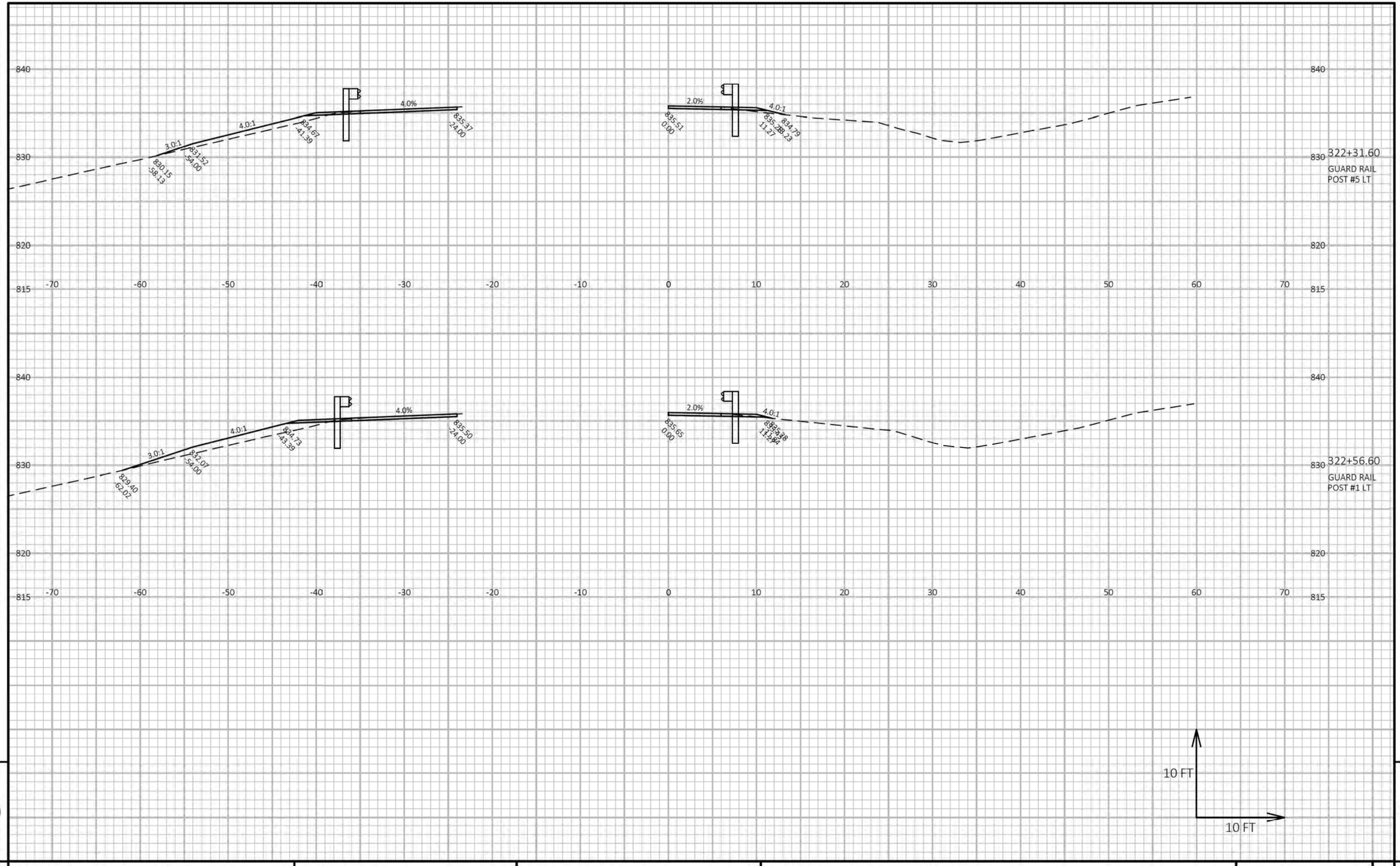


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 923

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



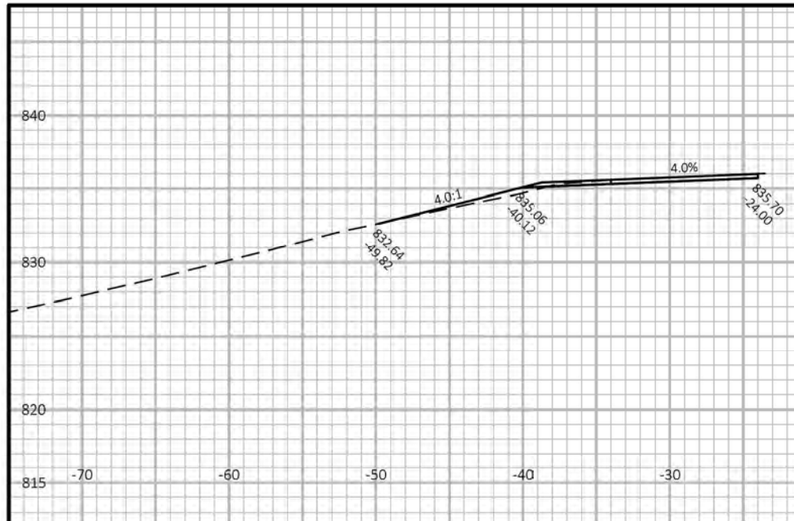
9

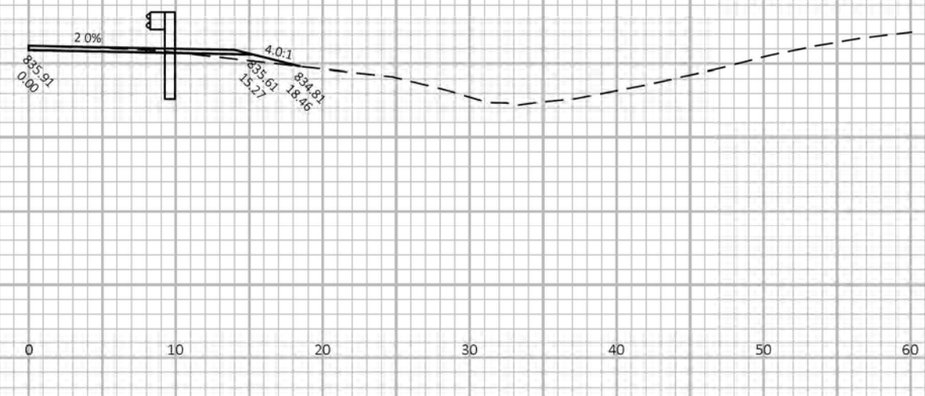
PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

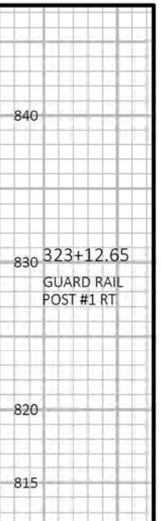
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 924

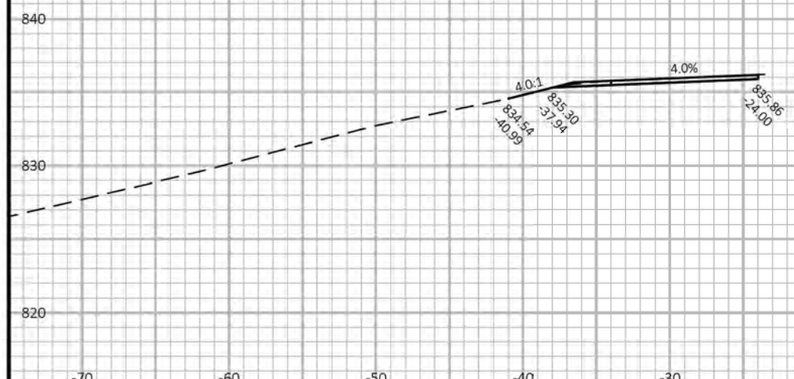
PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

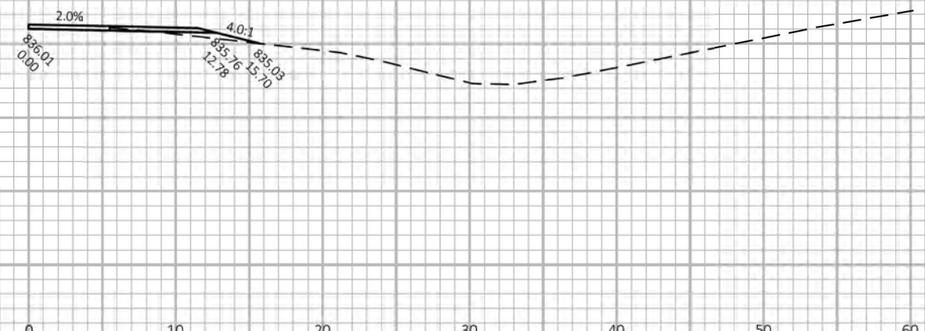
840
830
820
815
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70
3.0:1
4.0:1
4.0%
829.75
-60.79
832.01
-54.00
834.76
-43.04
835.52
-24.00
2.0%
4.0:1
835.68
0.00
322+62.65
GUARD RAIL
POST #9 RT
3.0:1
4.0:1
4.0%
831.80
-54.00
834.90
-41.58
835.61
-24.00
831.10
-56.10
2.0%
4.0:1
835.82
0.00
322+87.65
GUARD RAIL
POST #5 RT
10 FT
10 FT
9
9
PROJECT NO: 1166-04-84
HWY: IH 39
COUNTY: MARQUETTE
CROSS SECTIONS: IH-39 SOUTHBOUND
SHEET E
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 925
PLOT DATE : 6/13/2025 9:28 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS

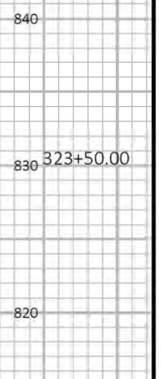


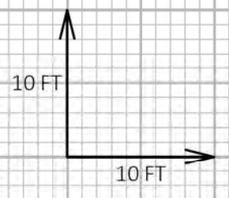












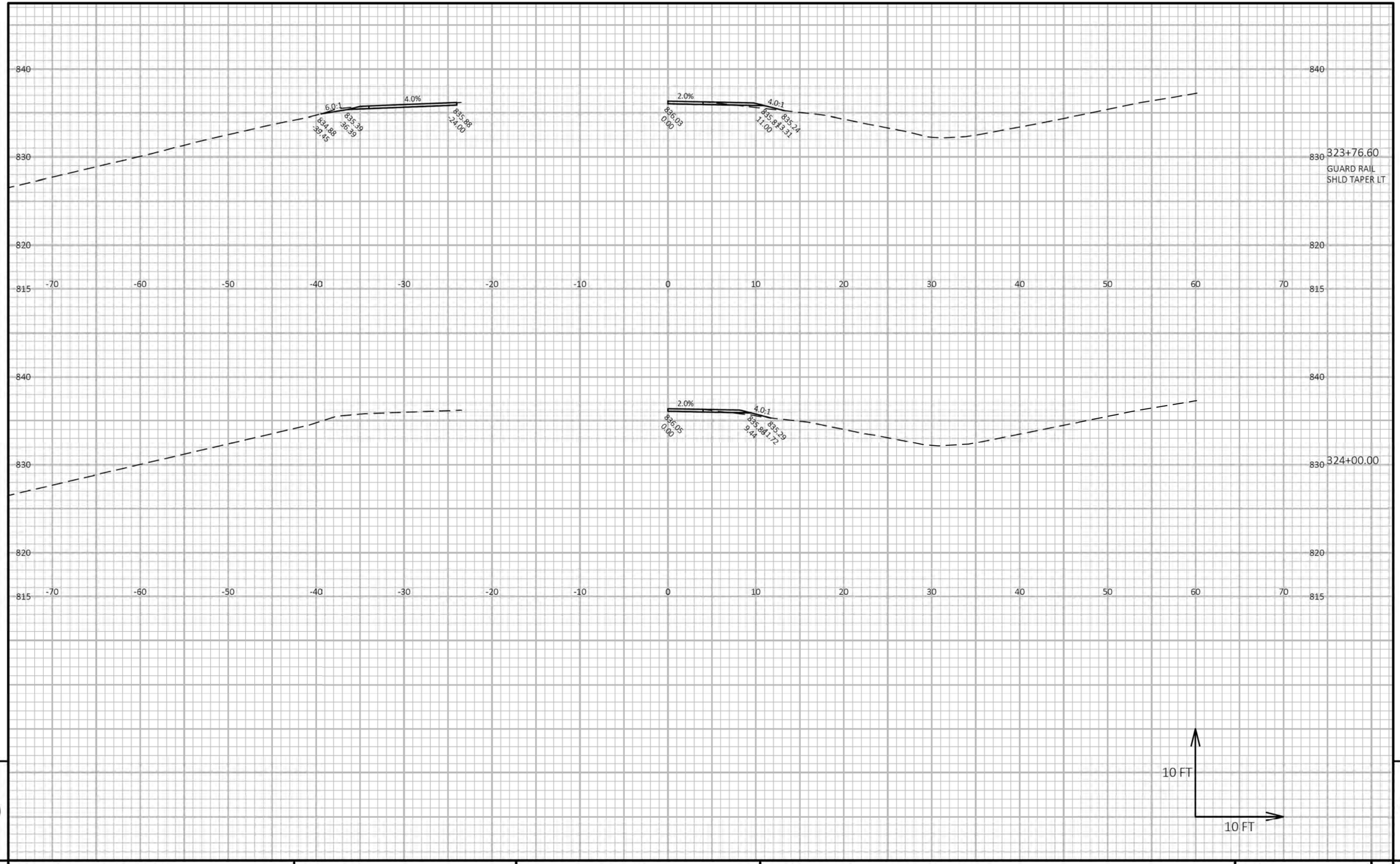
9

9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 926

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

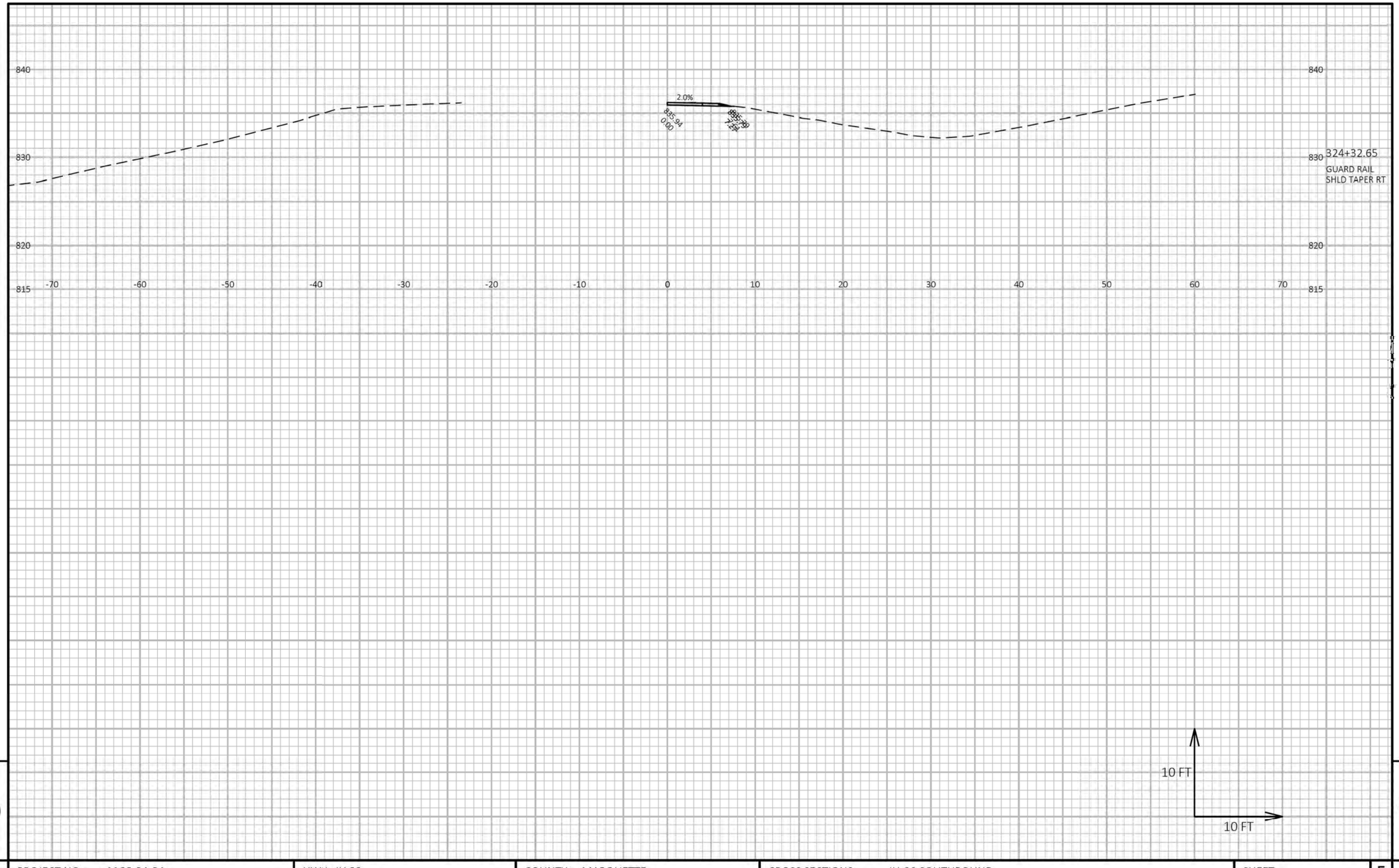


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 927

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

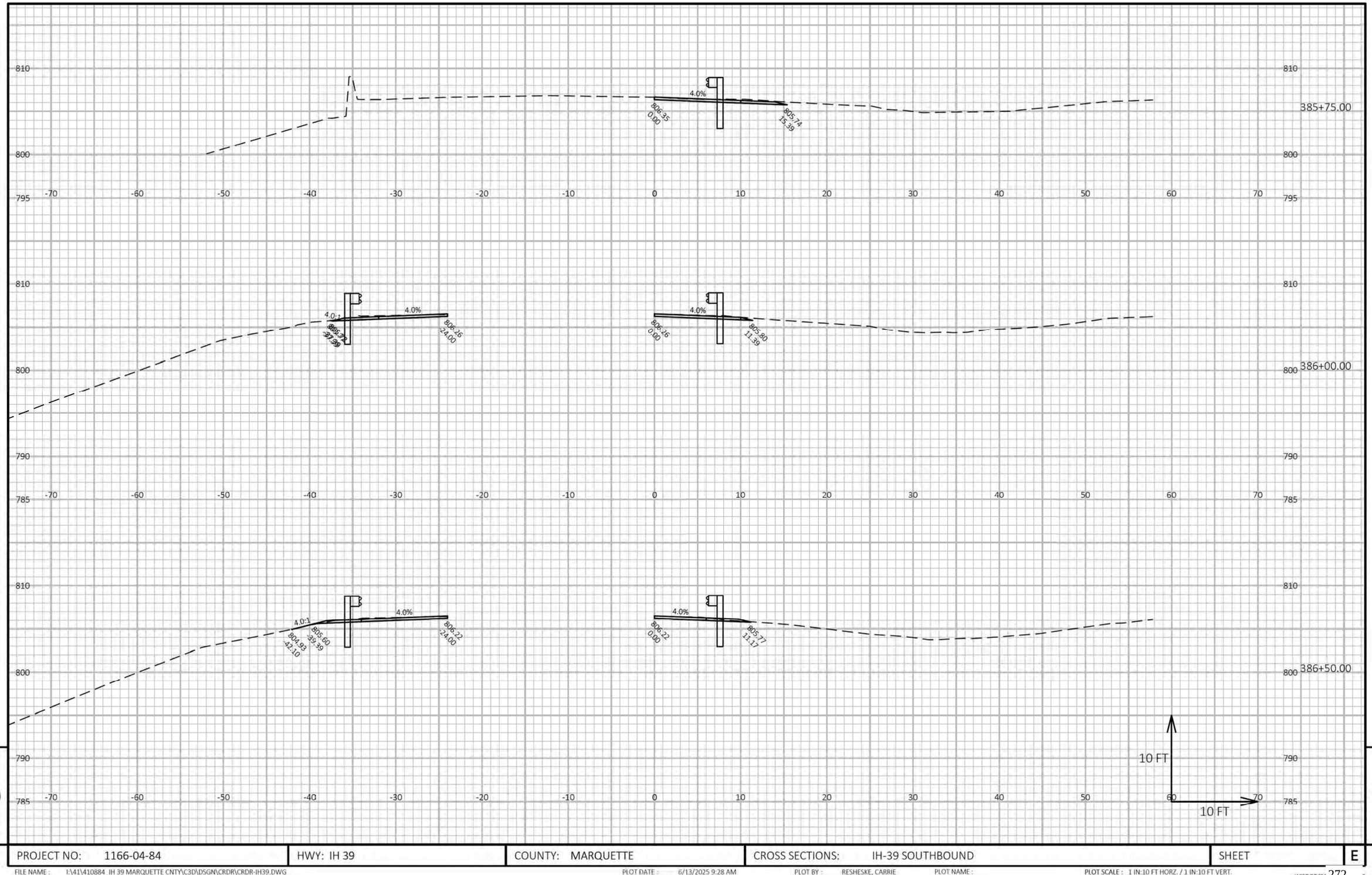


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 928

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

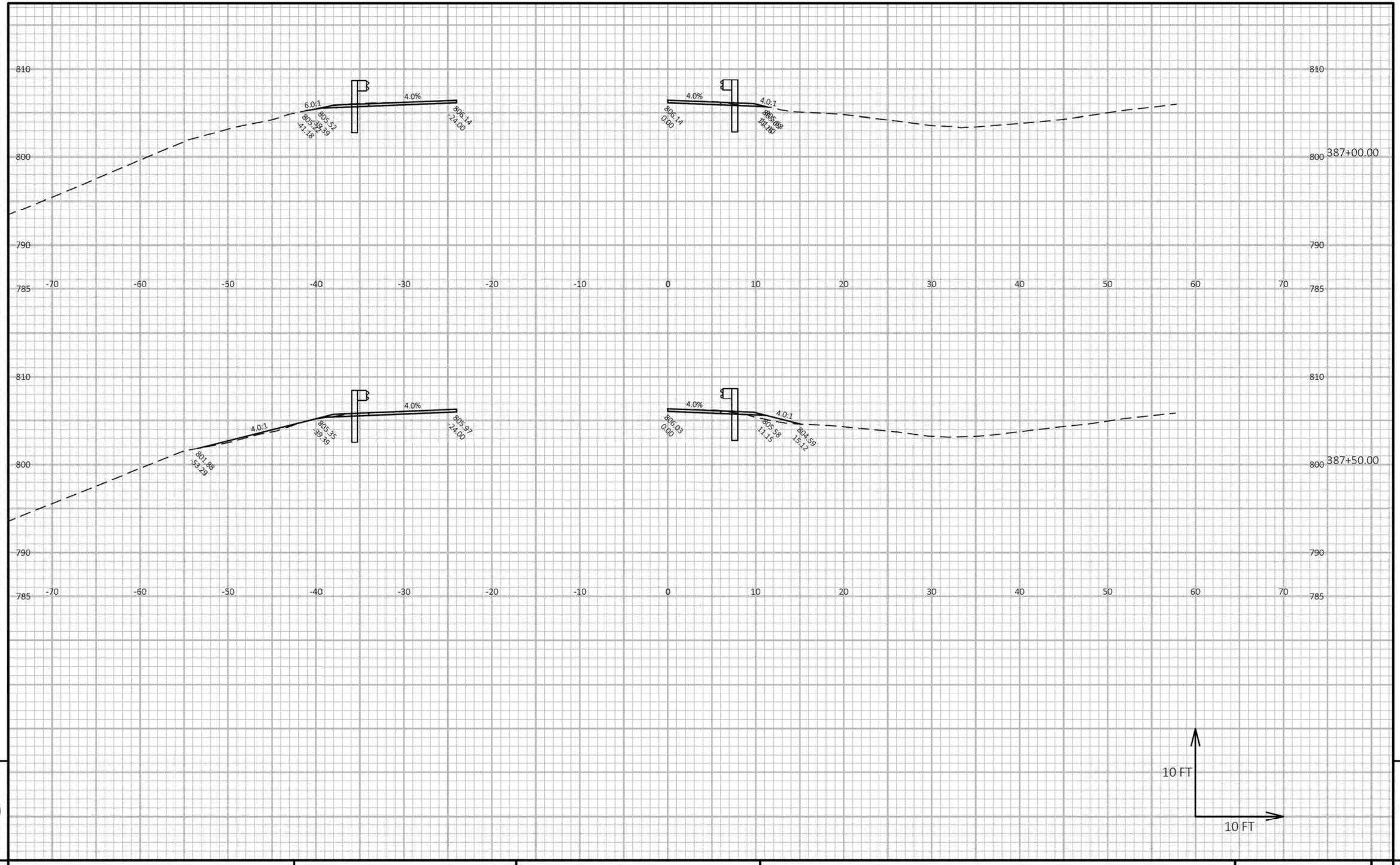


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 931

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

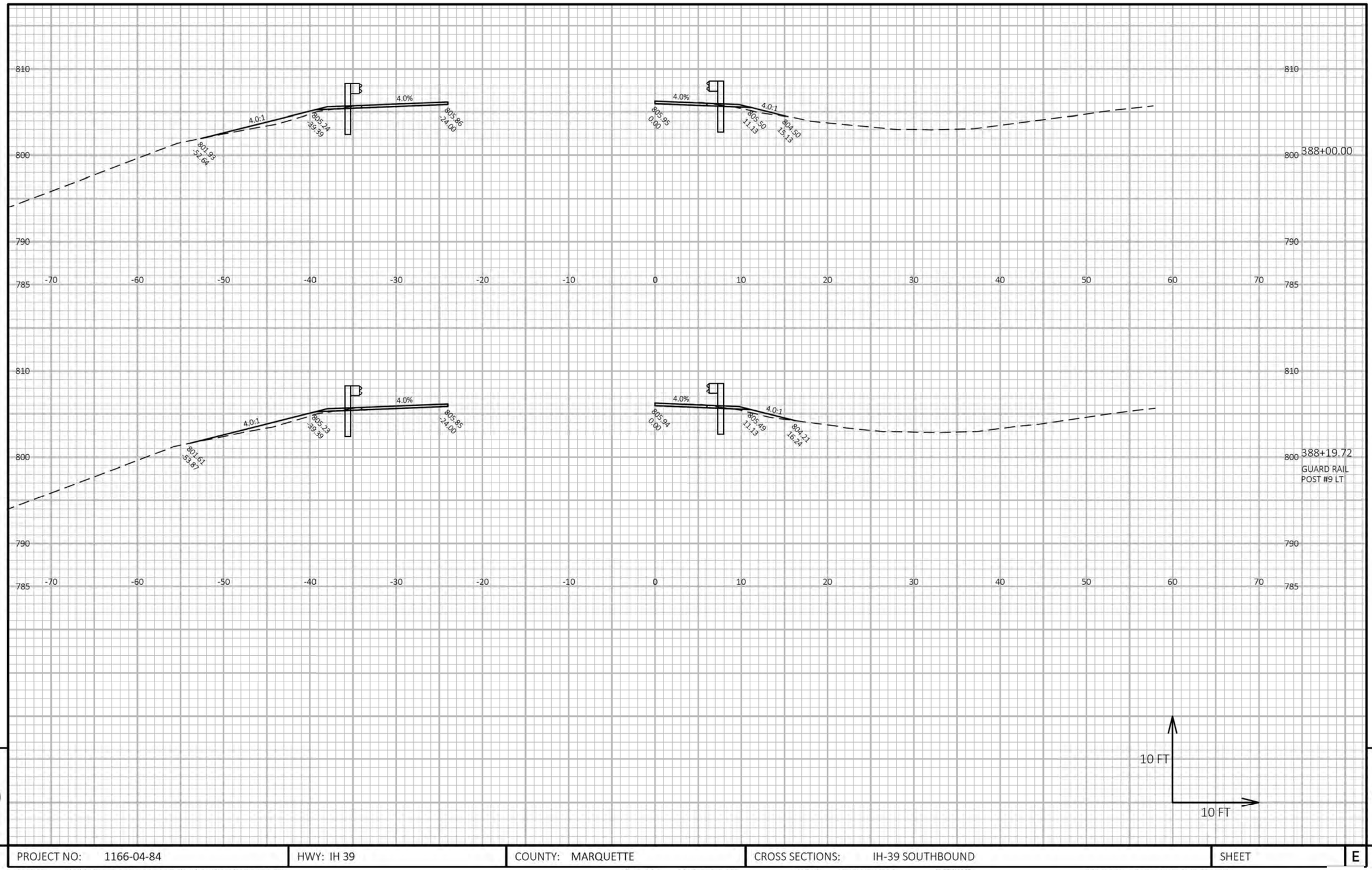


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 932

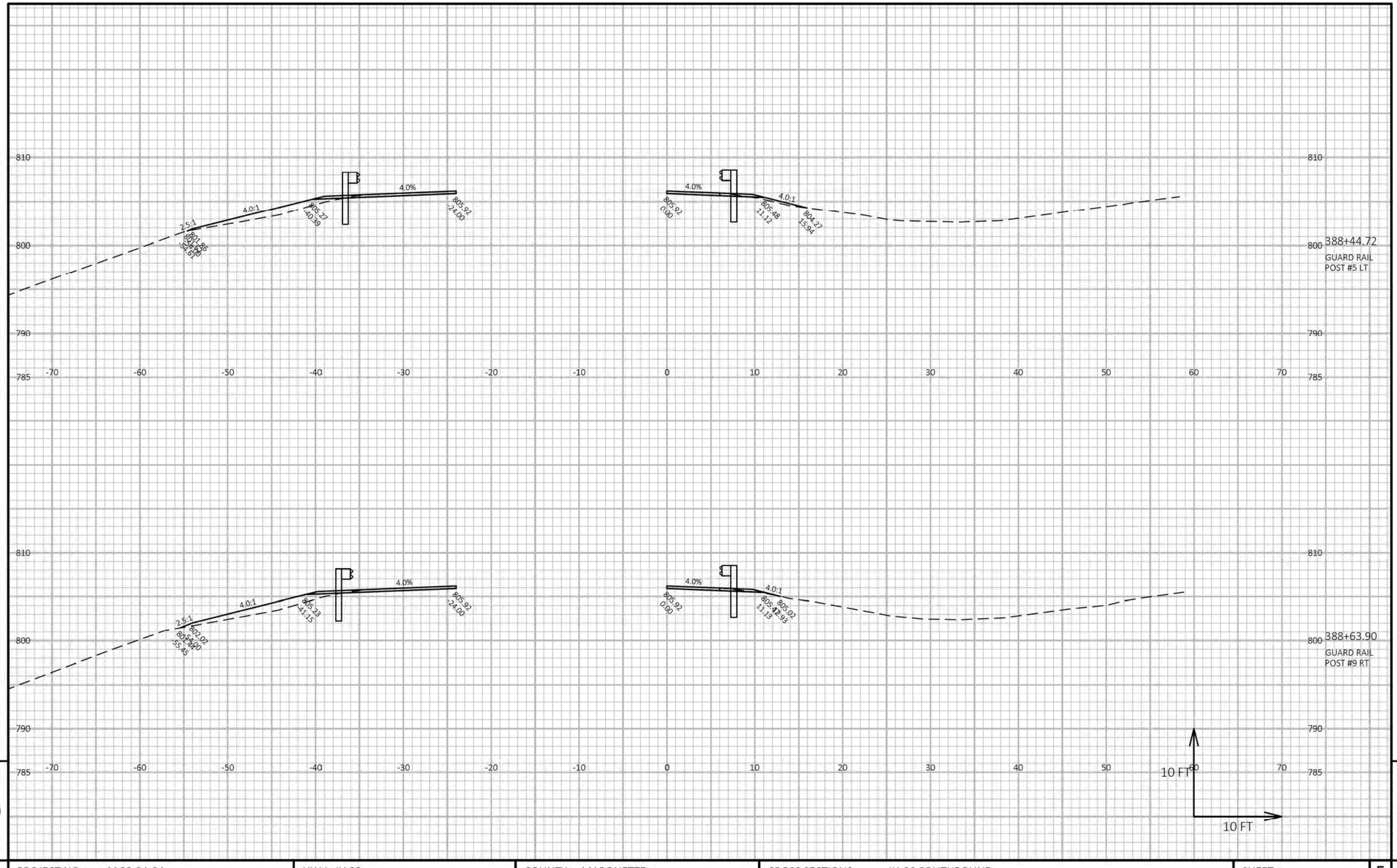
PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 933

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

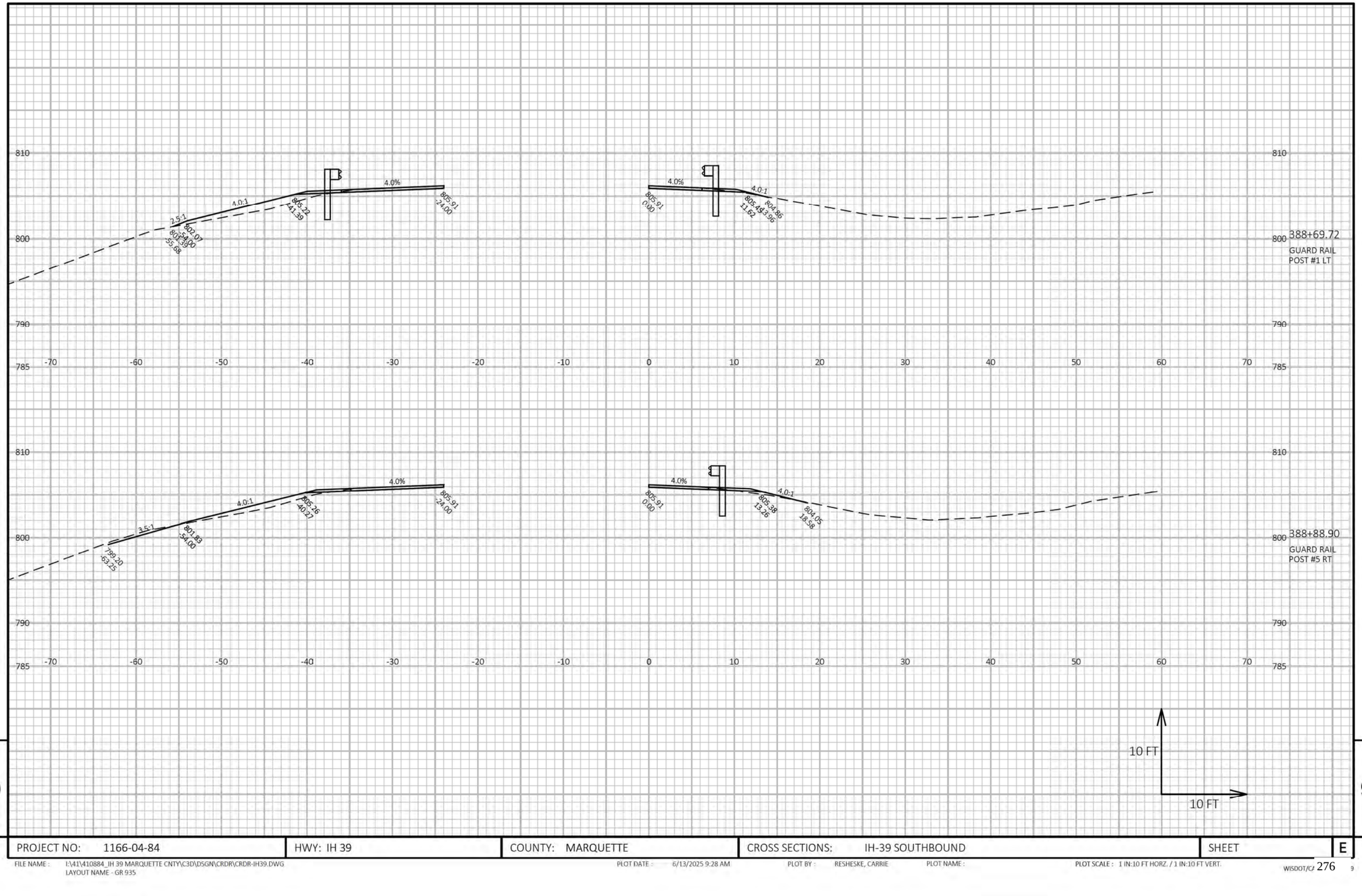


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 934

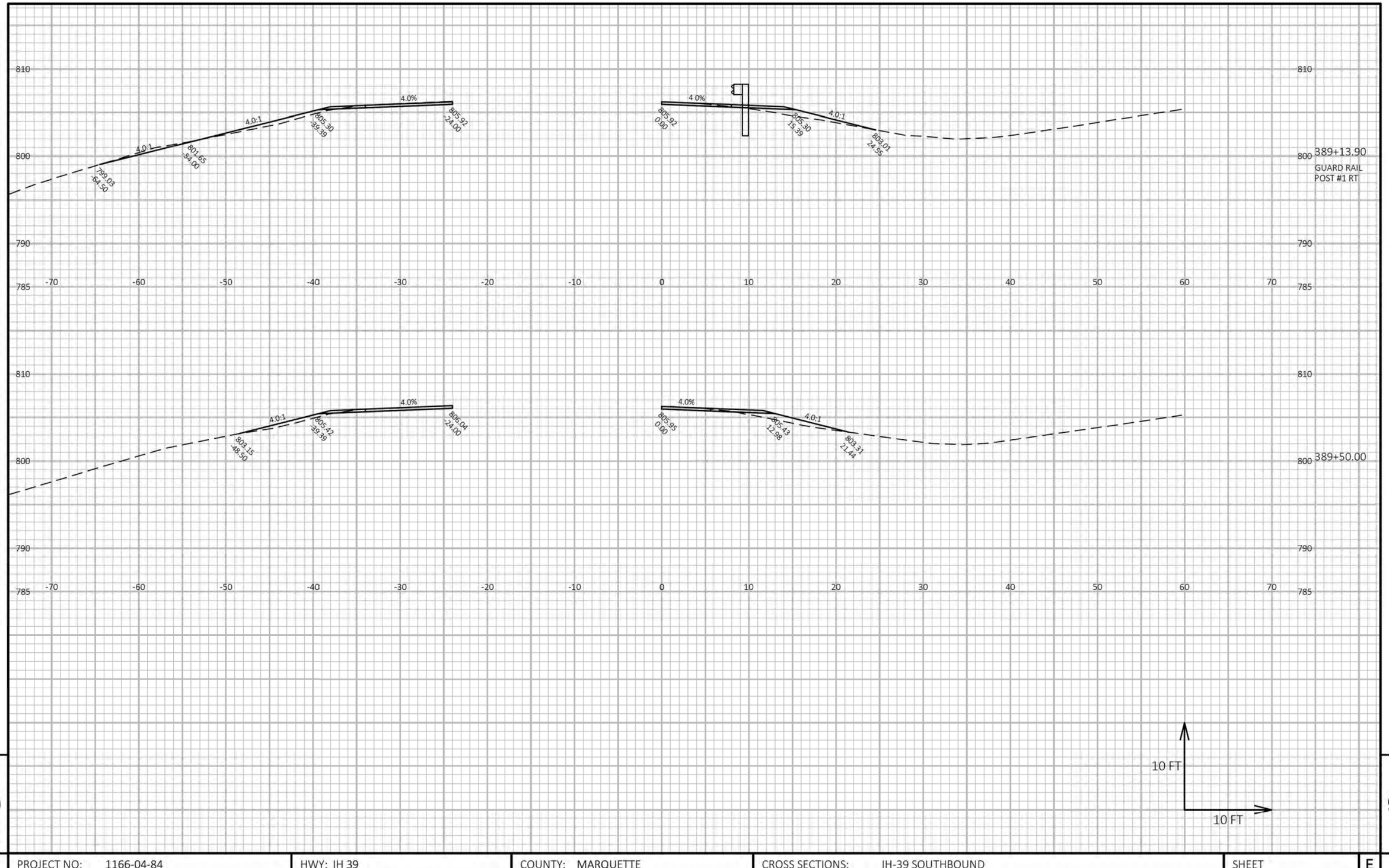
PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 935

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

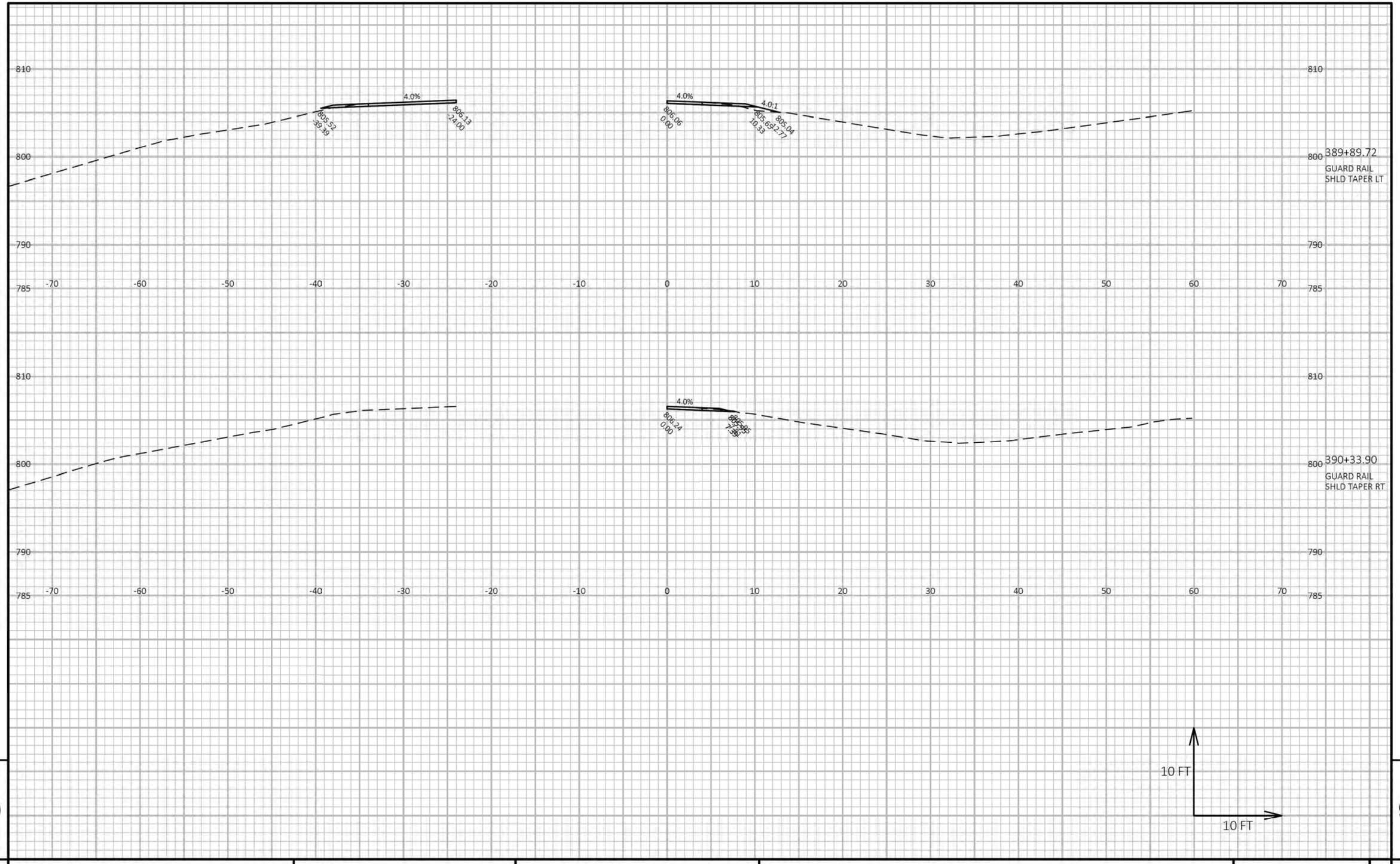


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 936

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



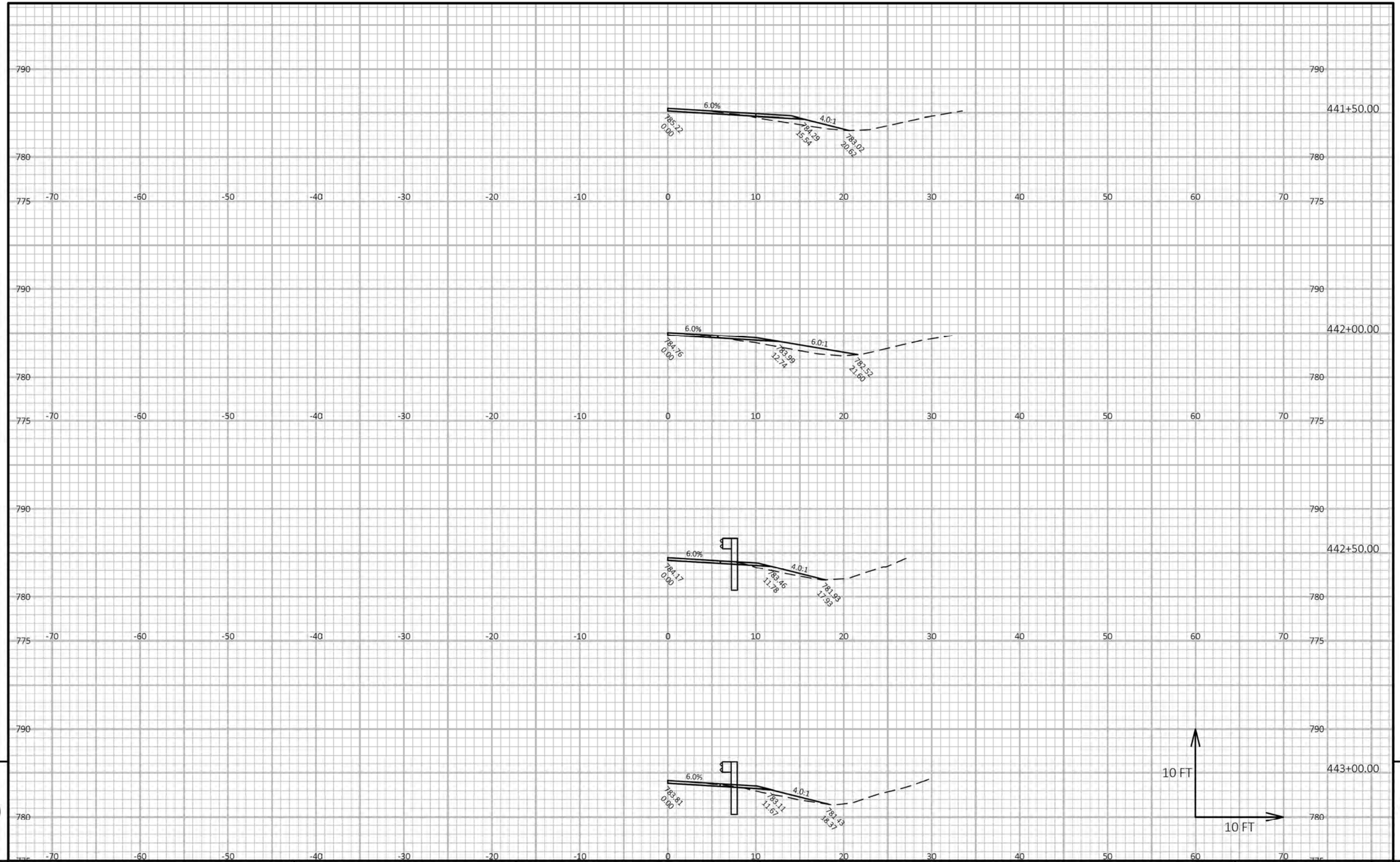
9

9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 937

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

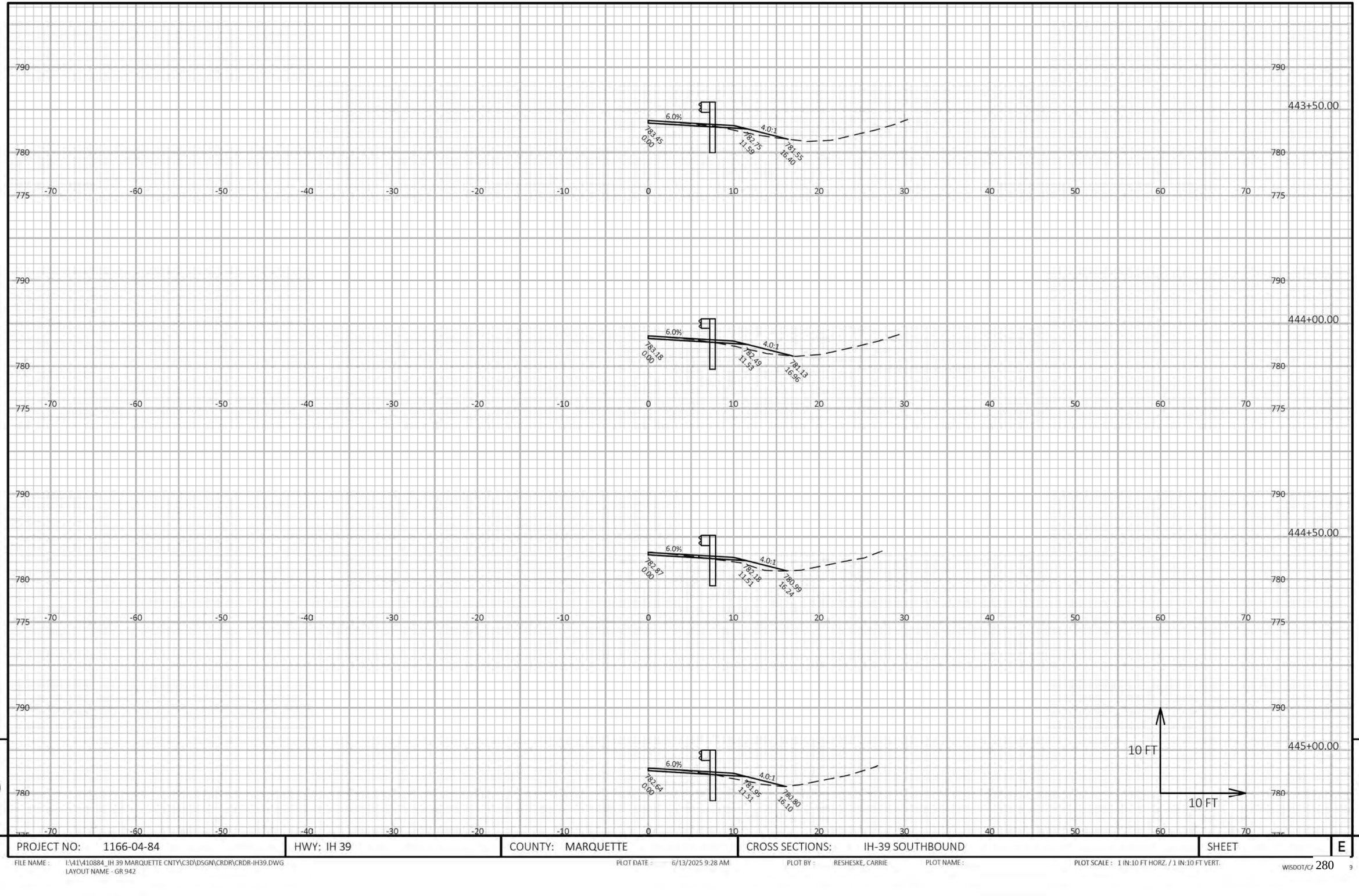


PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 941

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CA



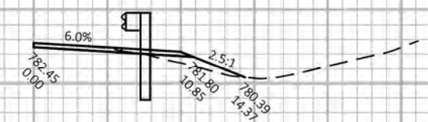
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

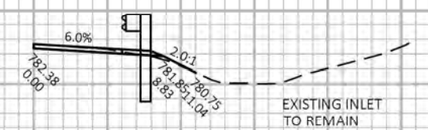
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 942

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

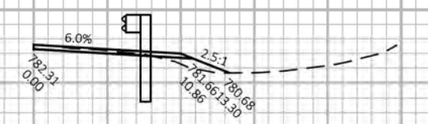
WISDOT/C



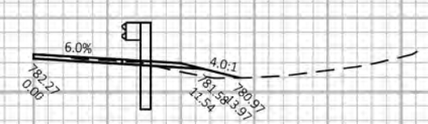
445+50.00



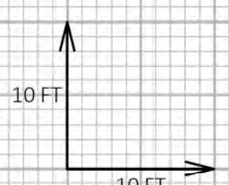
445+75.00



446+00.00



446+12



9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 943

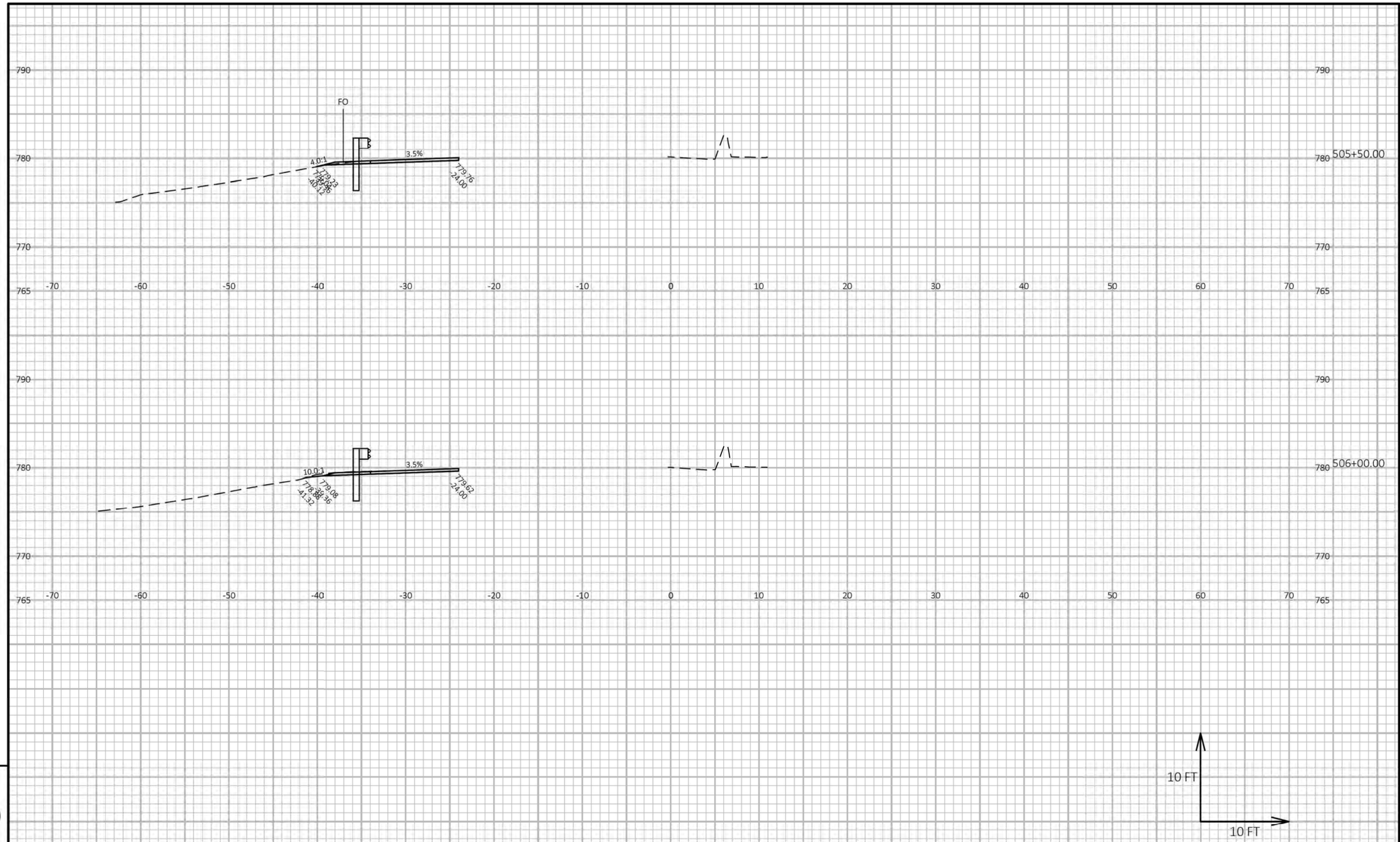
PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

790
780
770
765
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70
504+75.00
505+00.00
3.0%
779.57
-39.33
780.03
-24.00
10 FT
10 FT
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 951
PLOT DATE : 6/13/2025 9:28 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/C

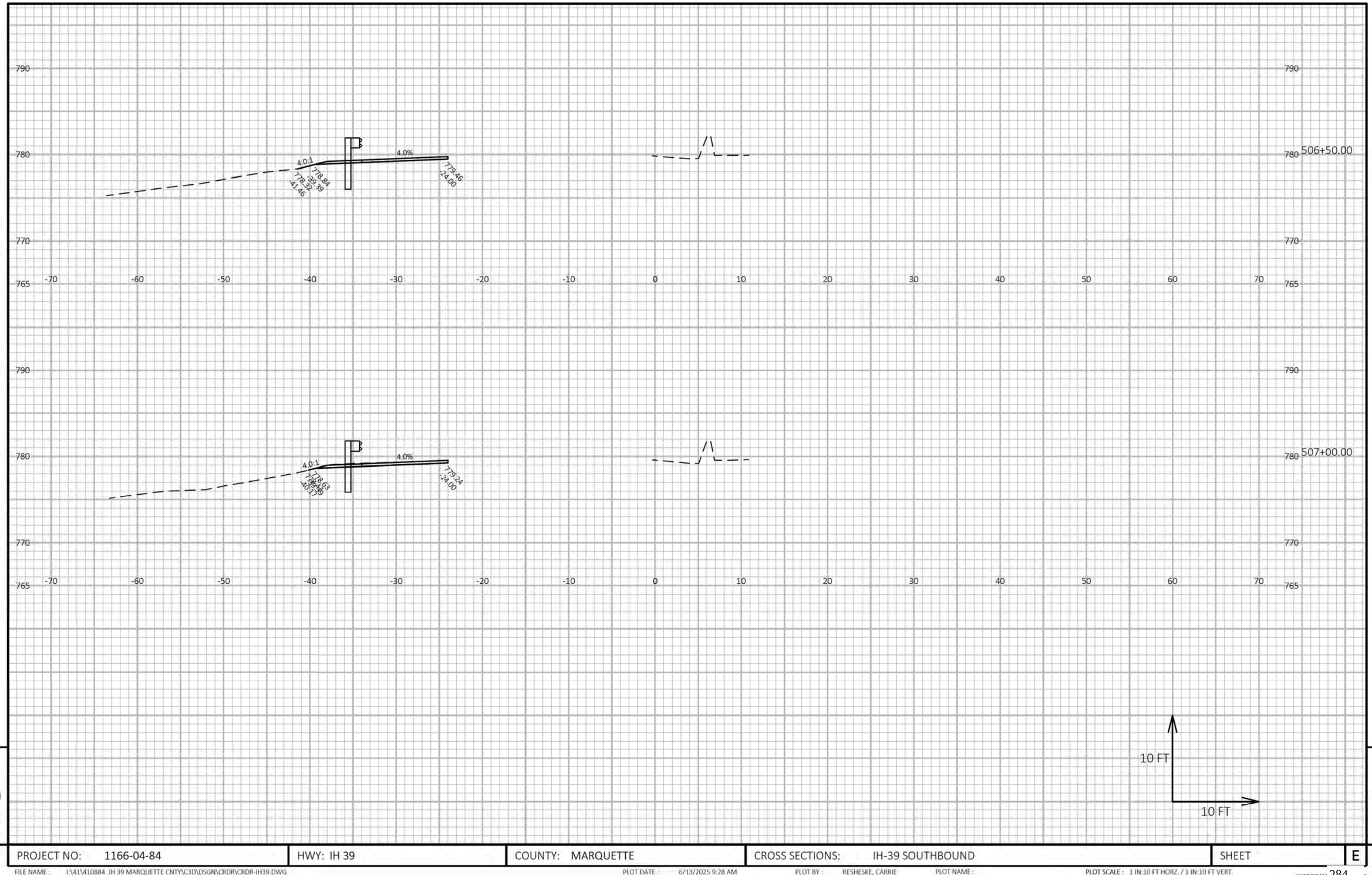


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 952

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

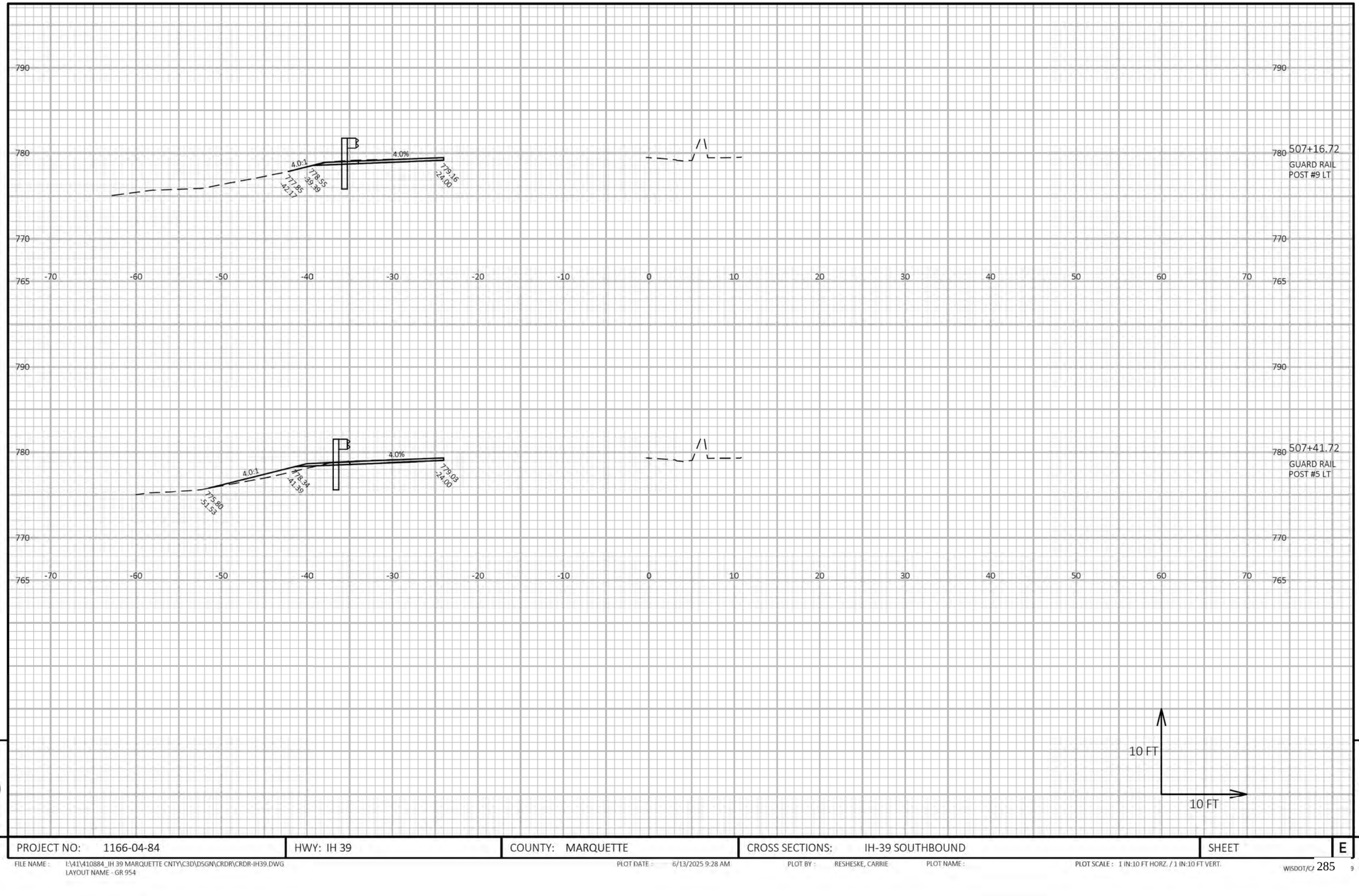


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 953

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

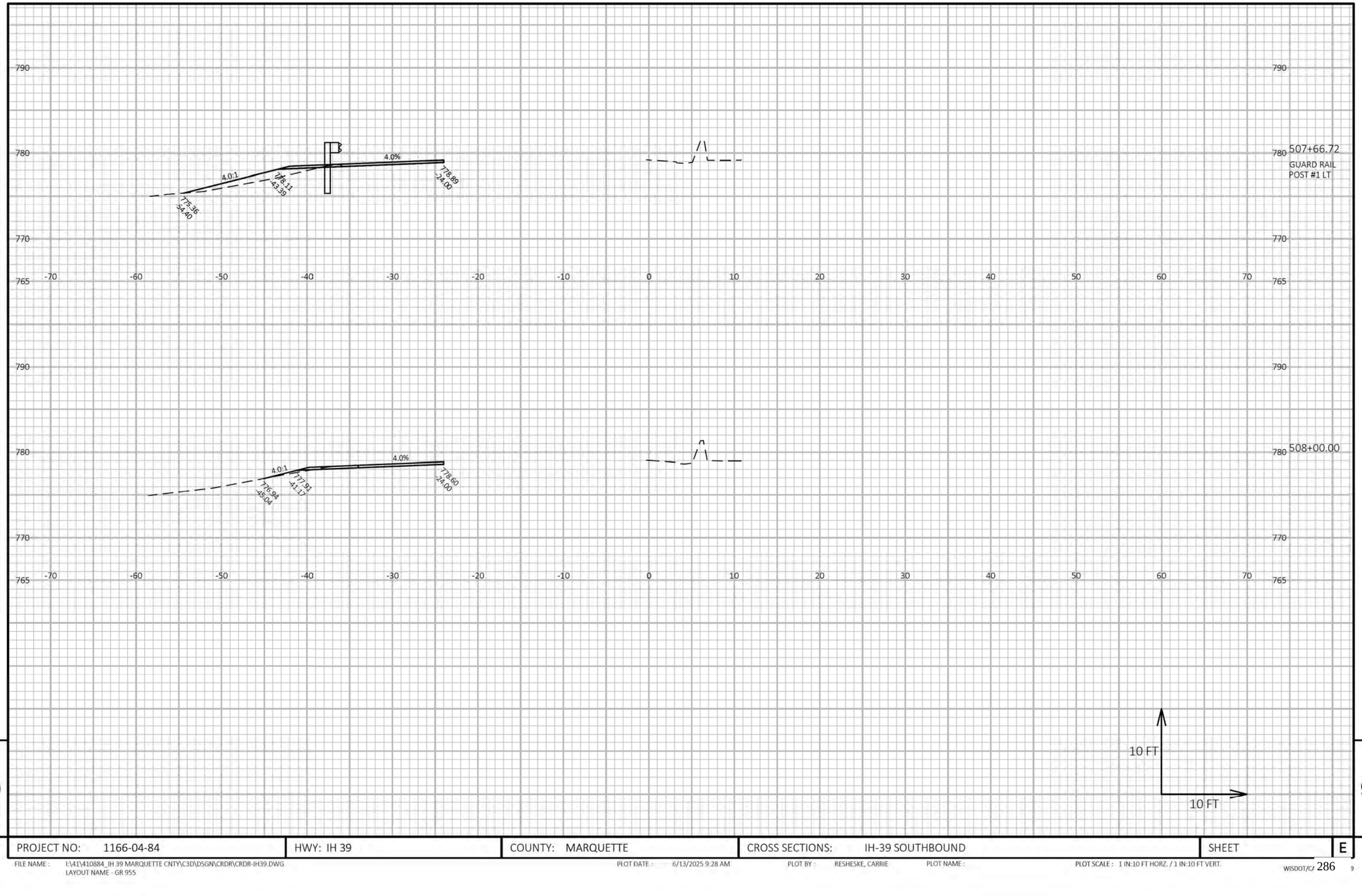


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 954

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 955

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

790
780
770
765
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

4.0%
777.57
-37.84
778.13
-24.00

508+50.00

EX
SS

4.0%
777.44
-35.49
777.89
-24.00

508+86.72
GUARD RAIL
SHLD TAPER LT

10 FT
10 FT

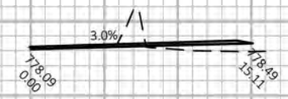
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

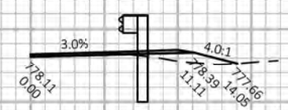
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 956
PLOT DATE : 6/13/2025 9:28 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

790
780
770
765
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

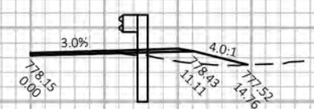




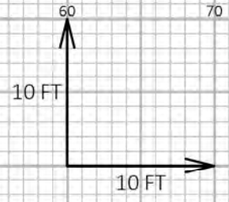
511+25.00



511+50.00



512+00.00

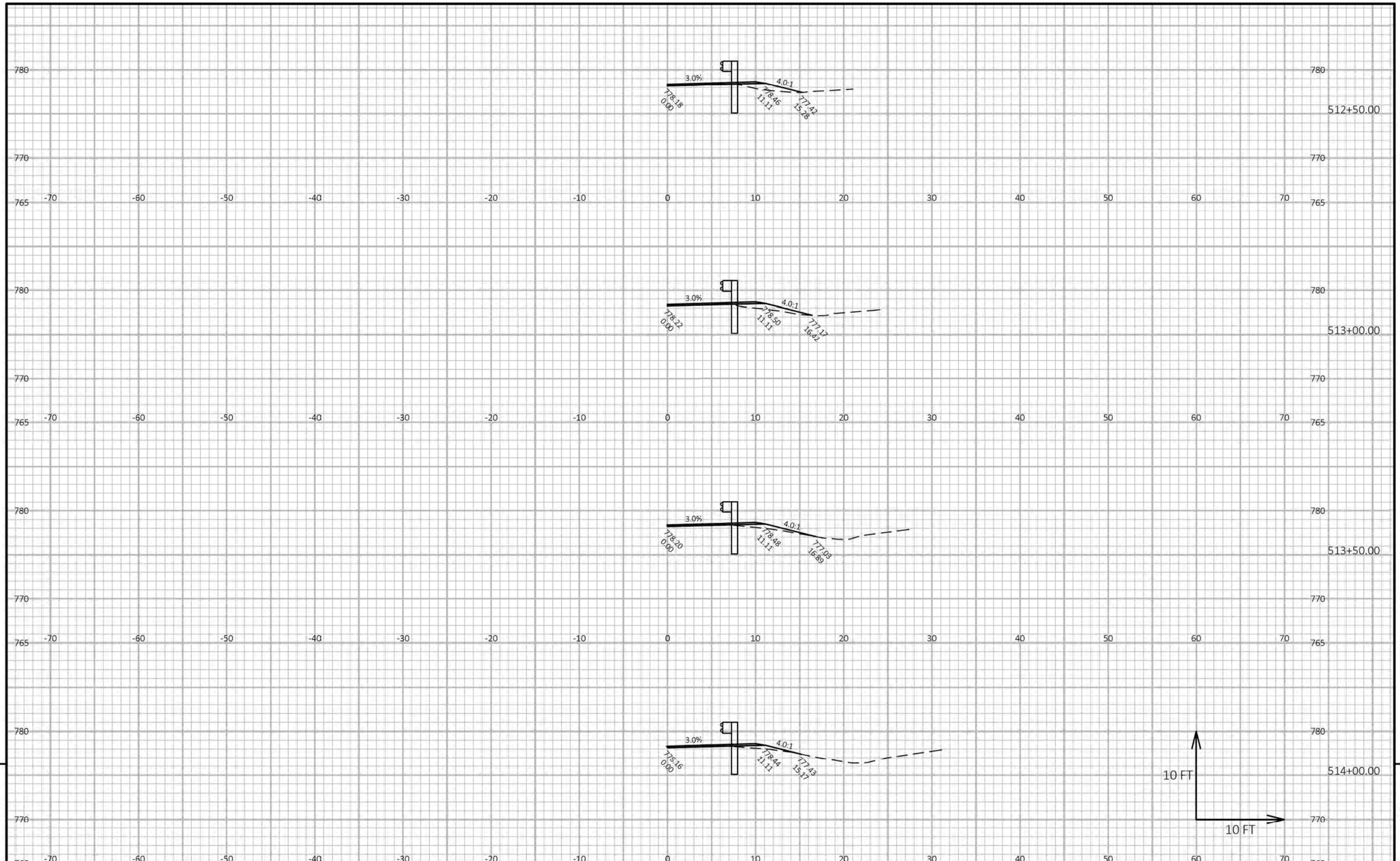


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 961

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



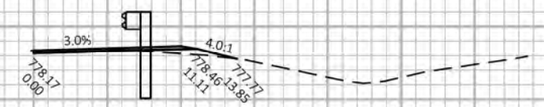
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

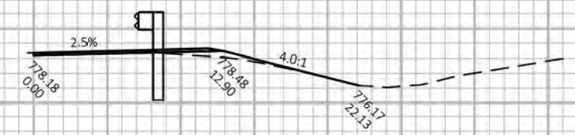
FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 962

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



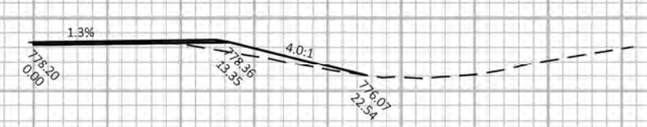
514+29.30
GUARD RAIL
POST #9 RT



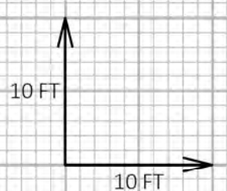
514+54.30
GUARD RAIL
POST #5 RT



514+79.30
GUARD RAIL
POST #1 RT



515+00.00



9

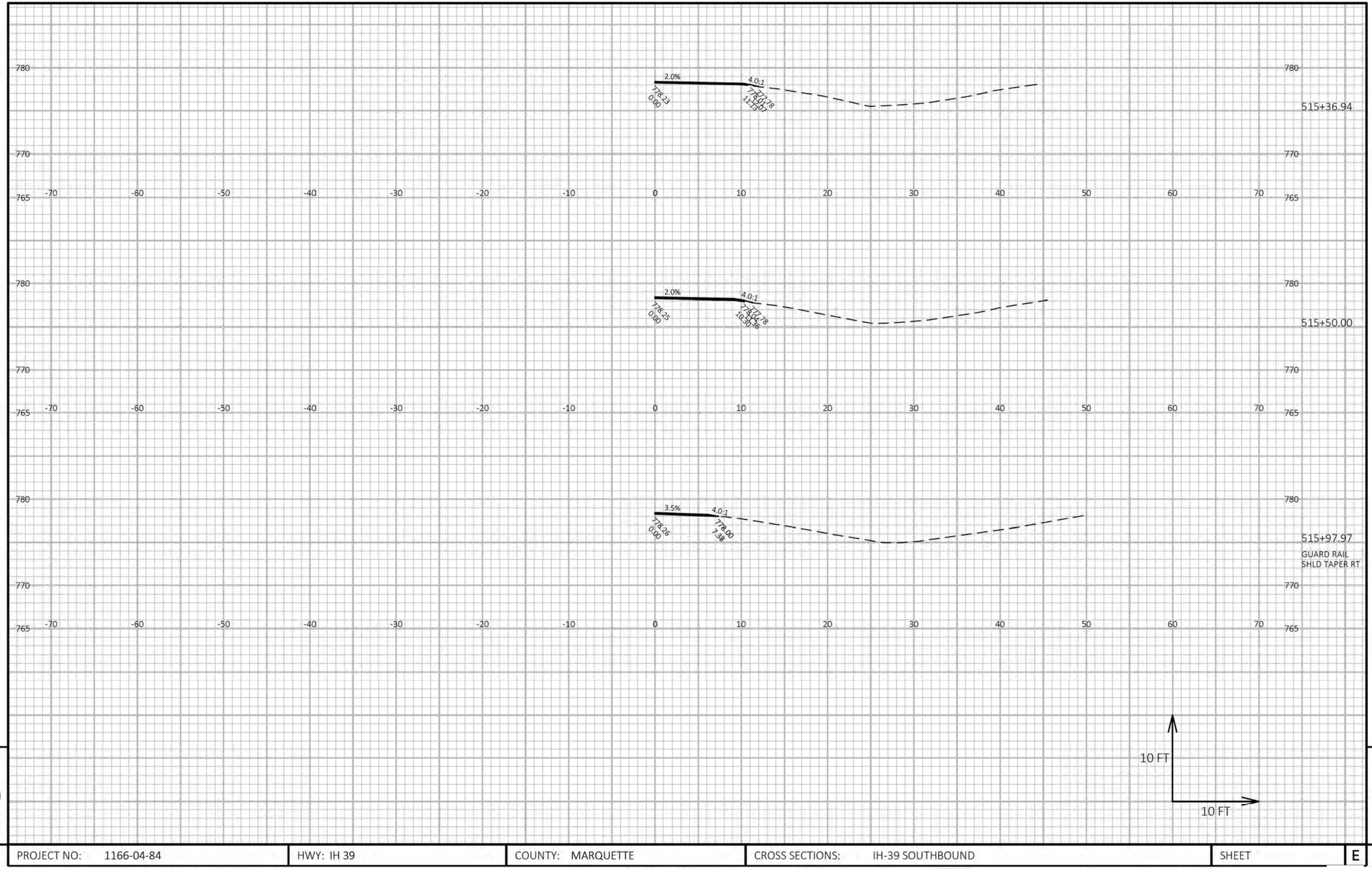
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 963

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS

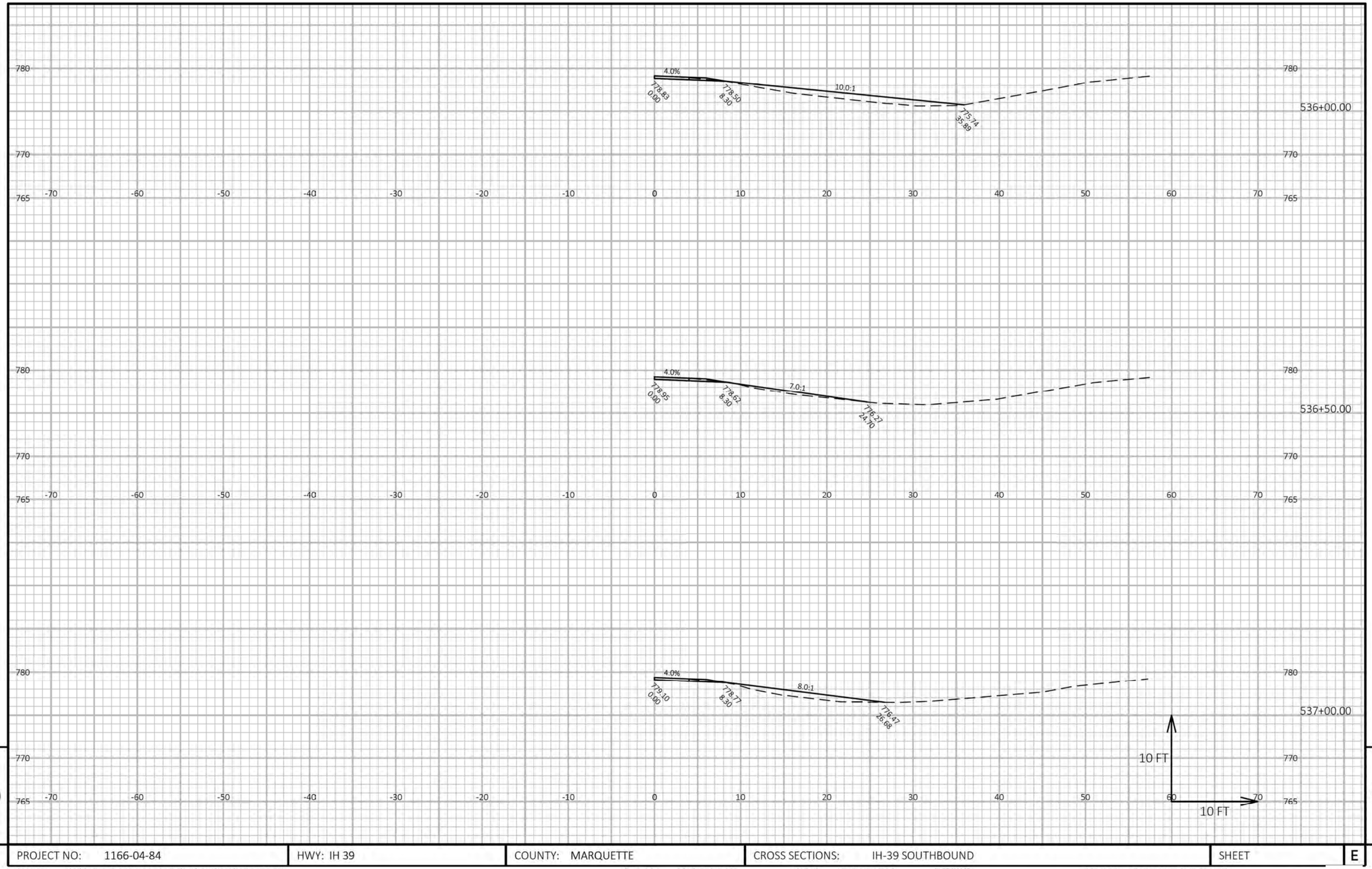


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 964

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



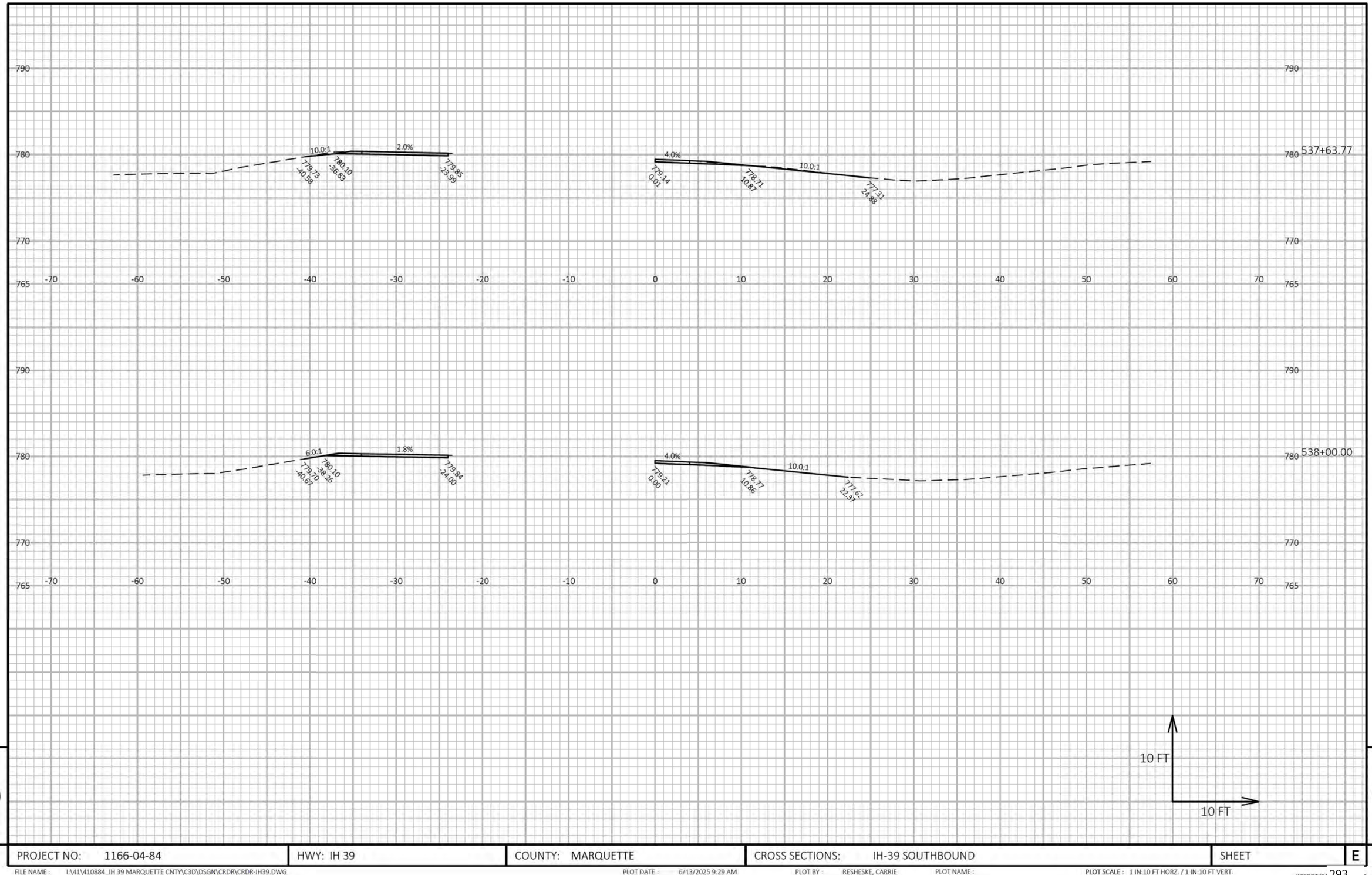
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 971

PLOT DATE : 6/13/2025 9:28 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

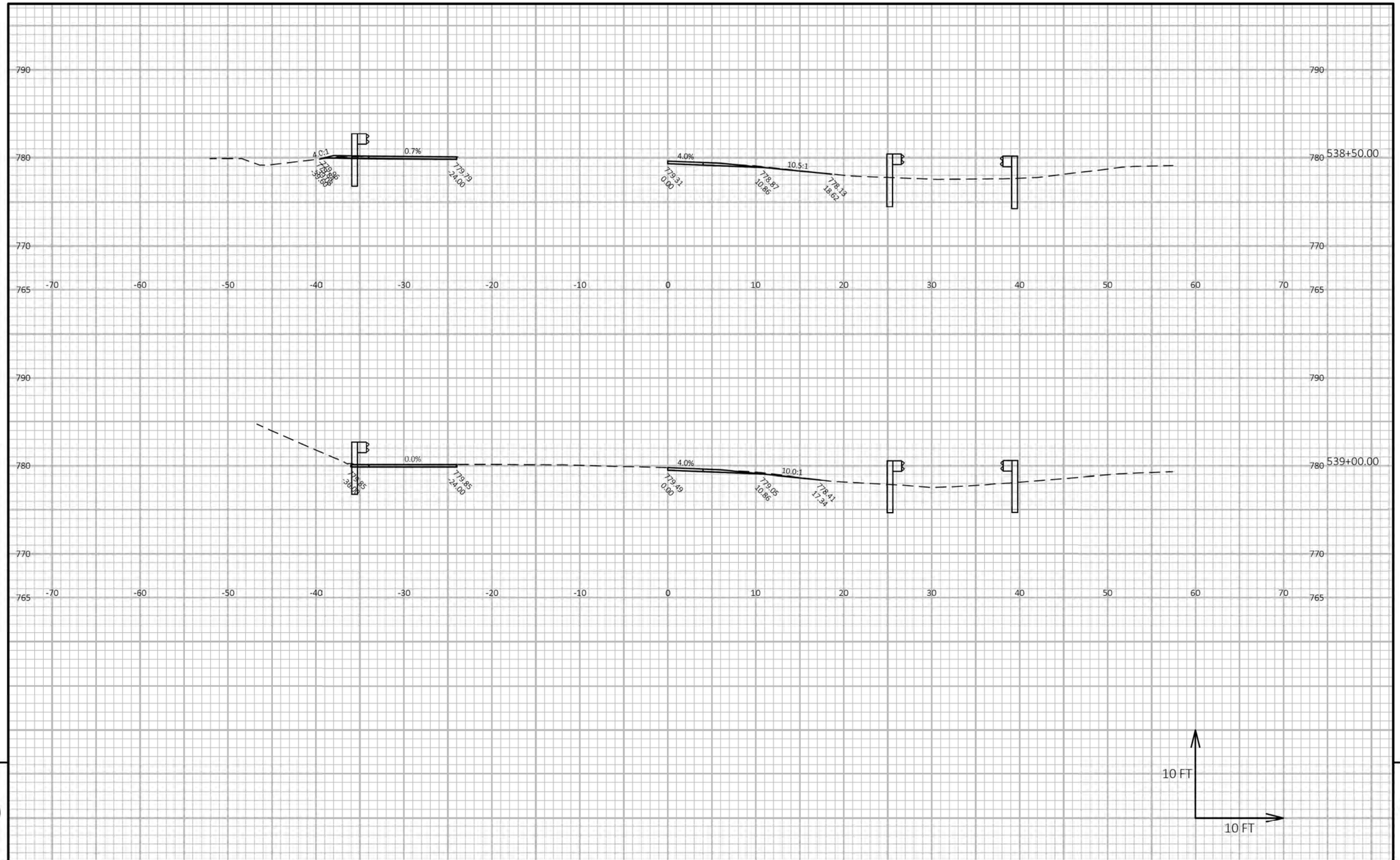


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 972

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

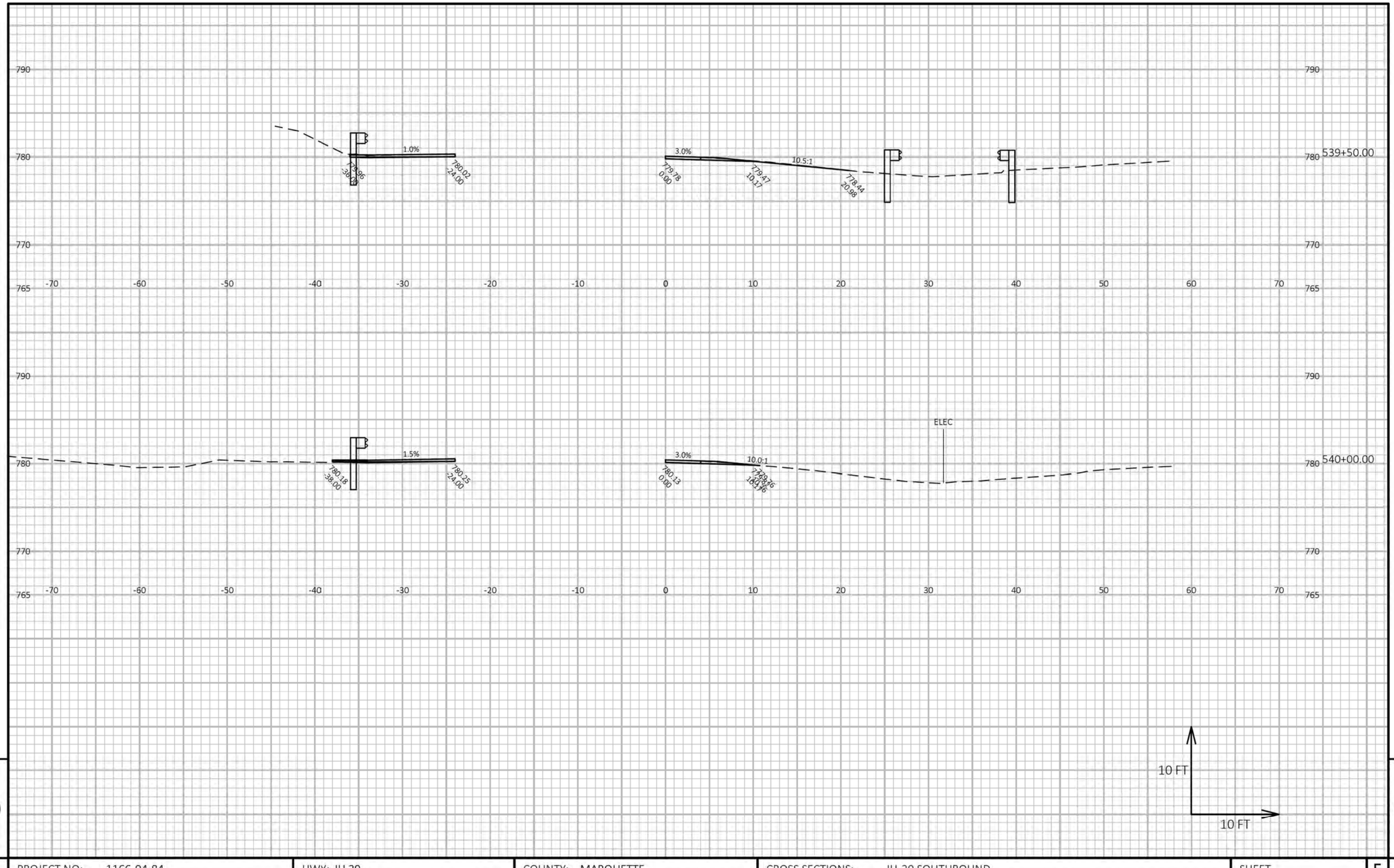


PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 973

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

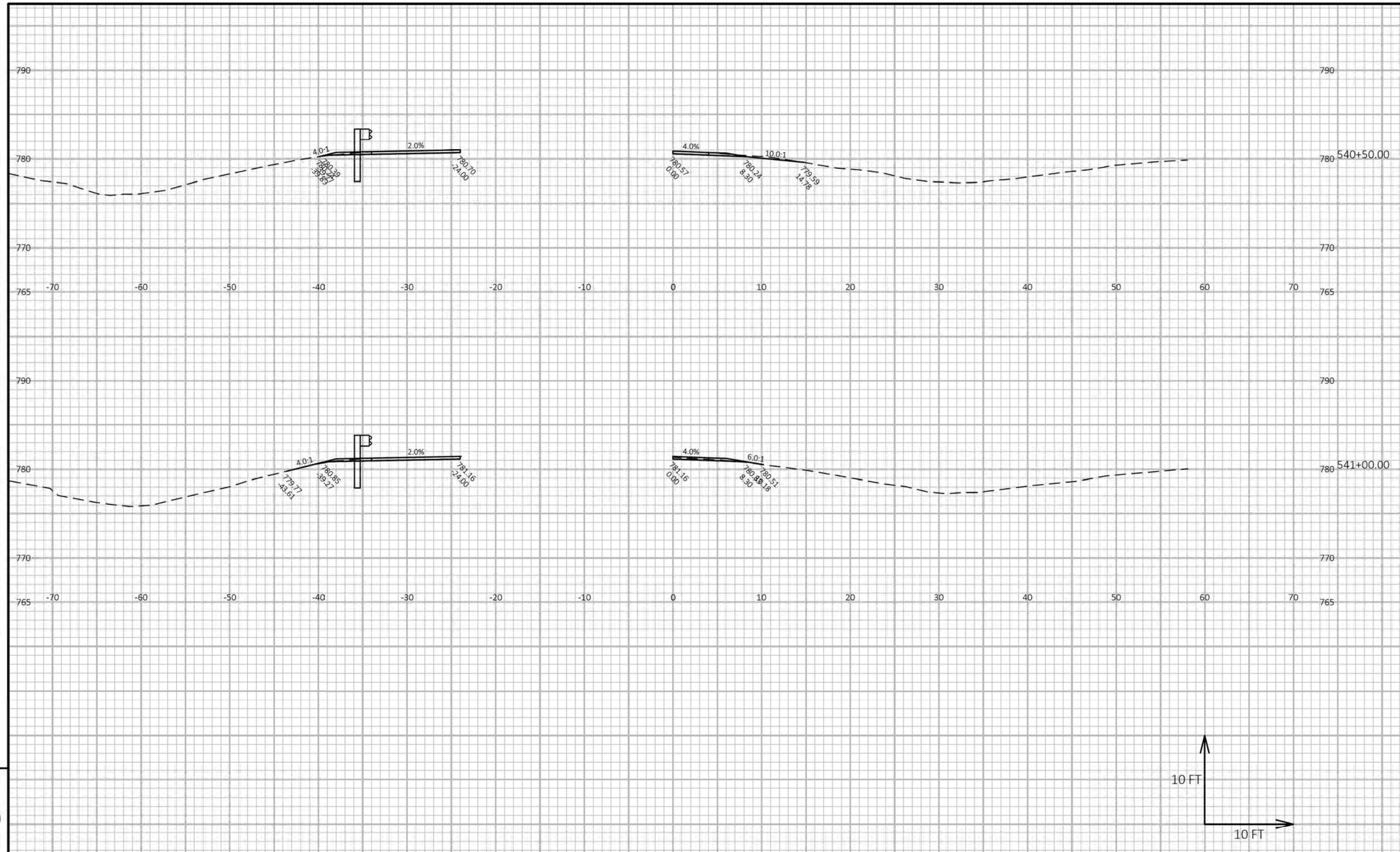


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 974

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

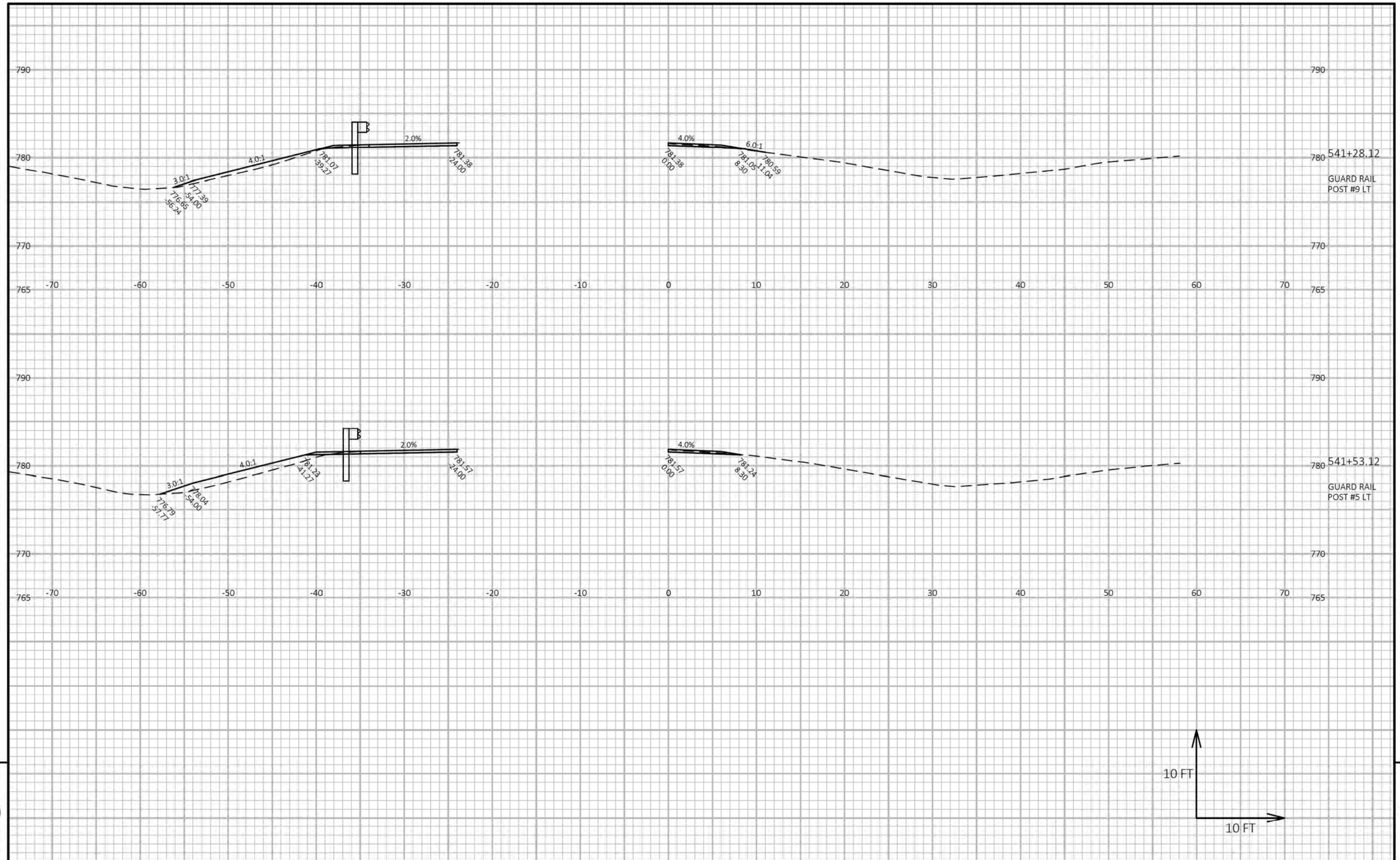


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 975

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

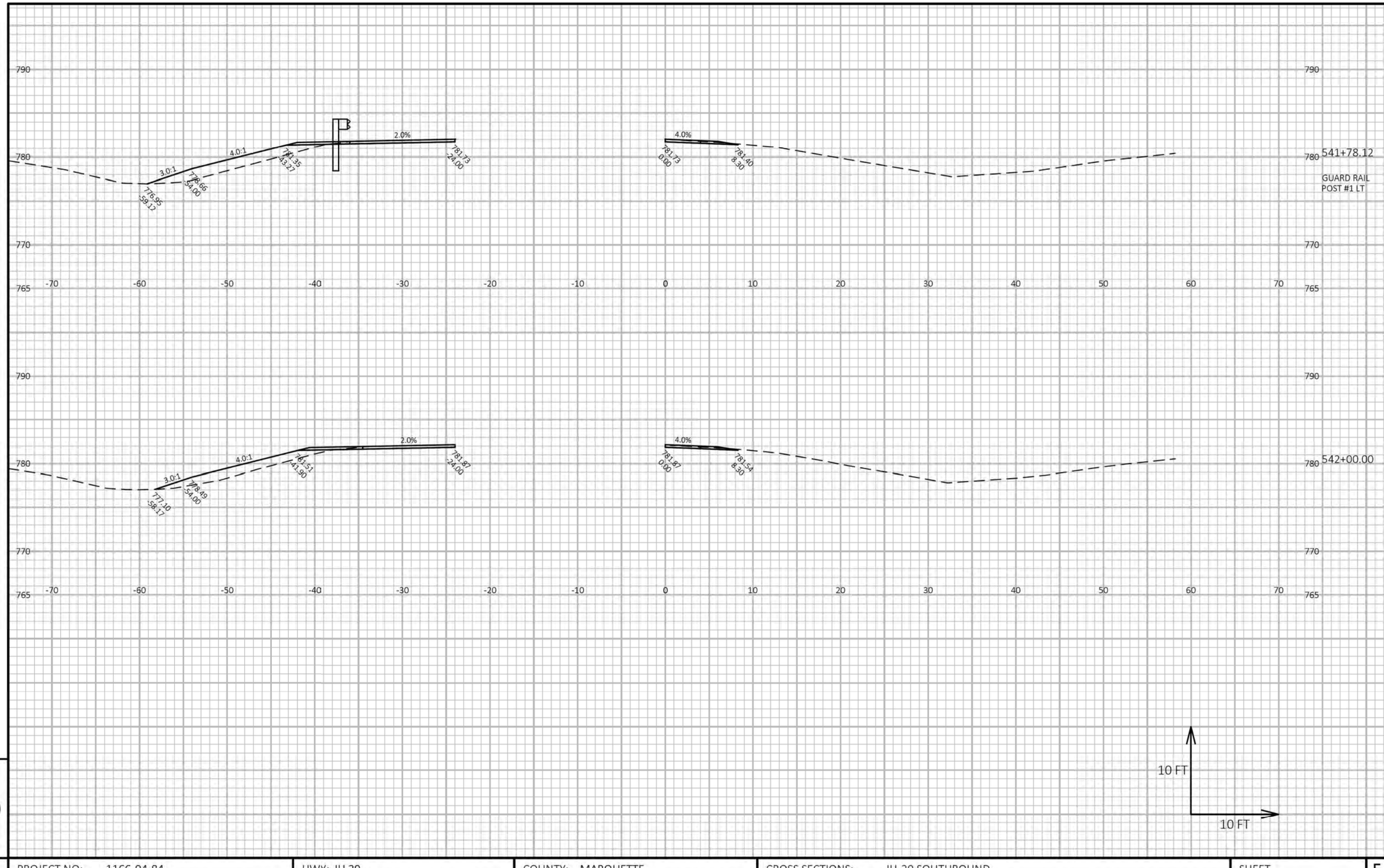
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 976

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

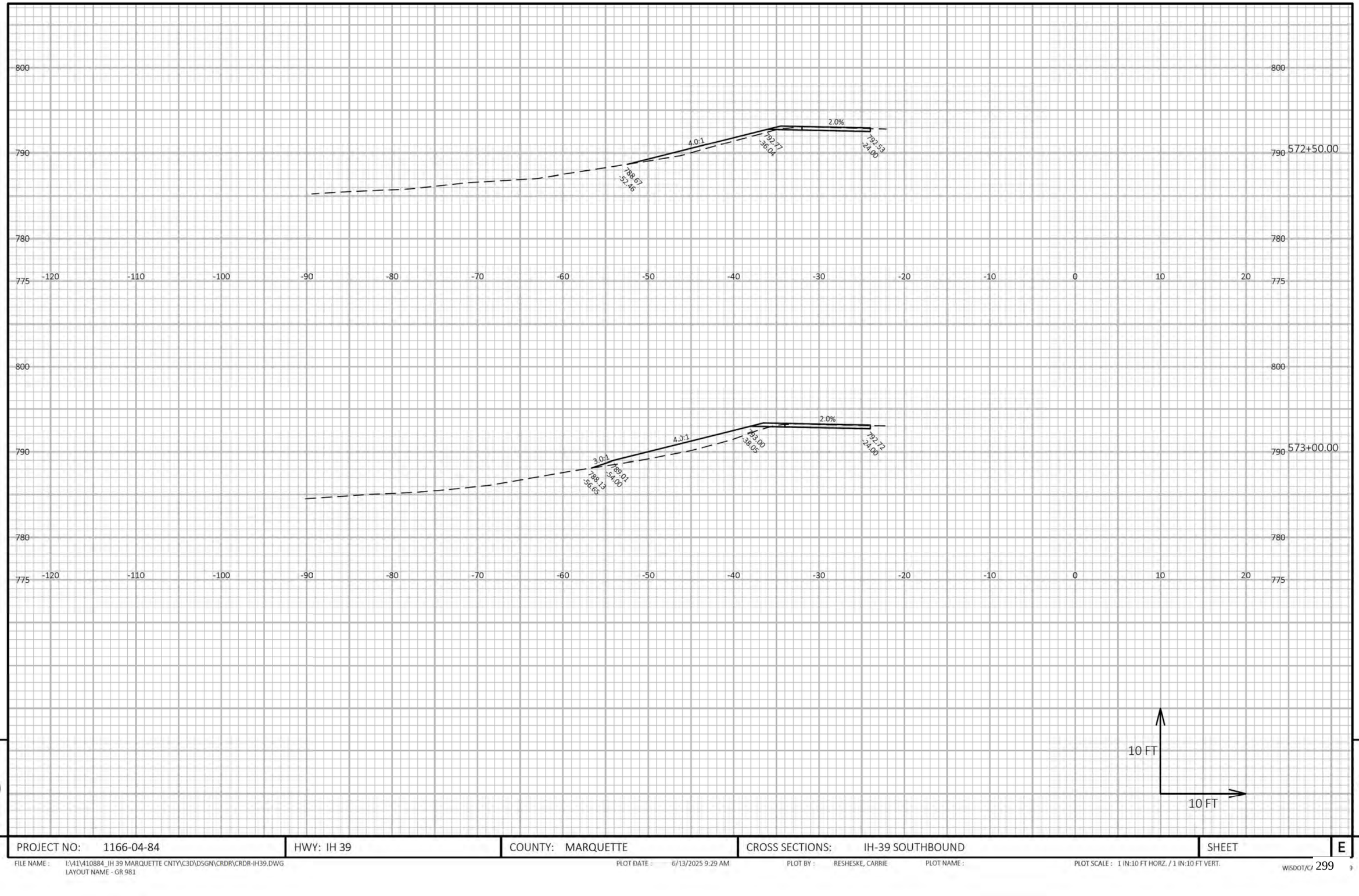


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 977

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

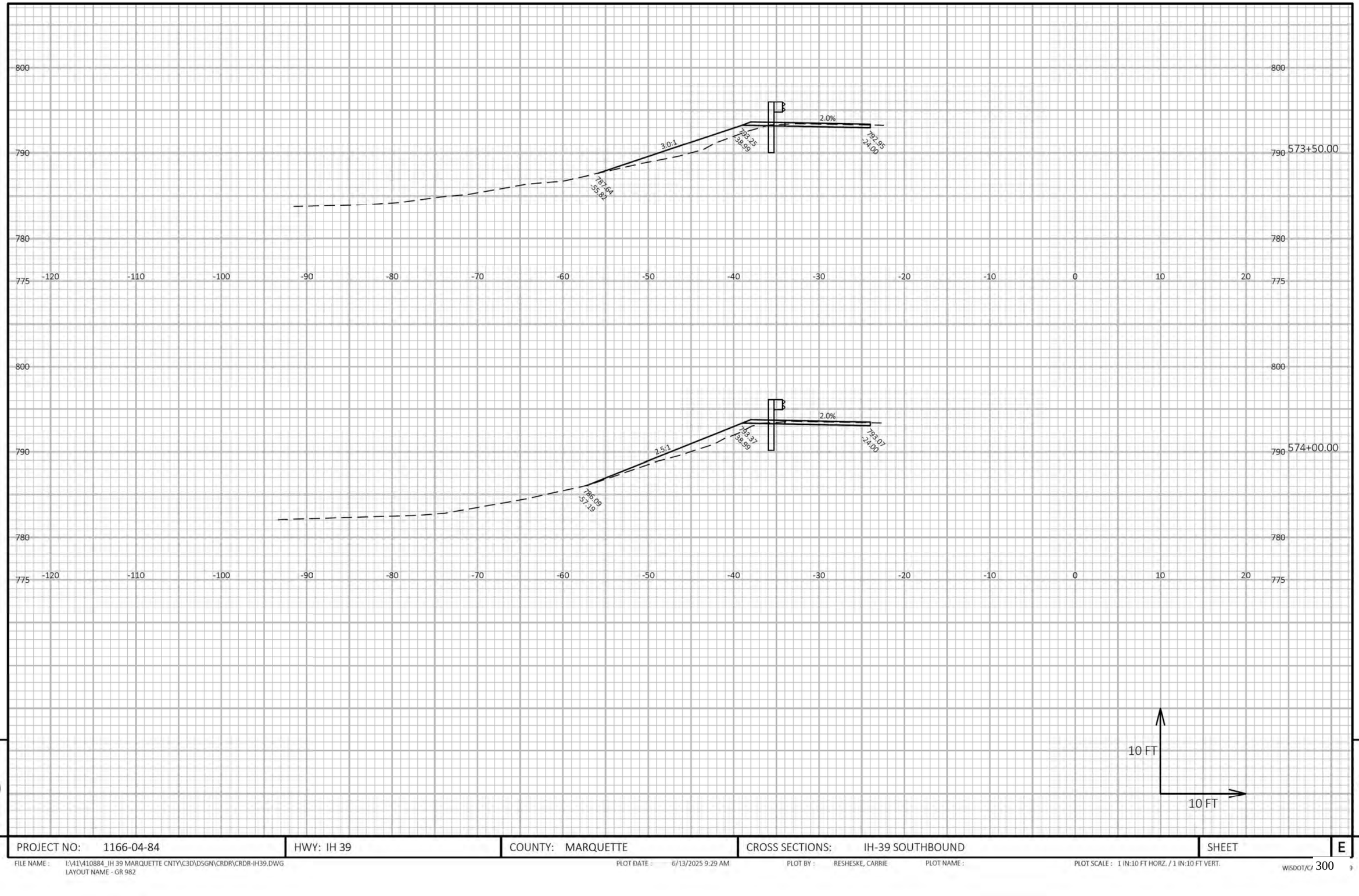
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 981

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



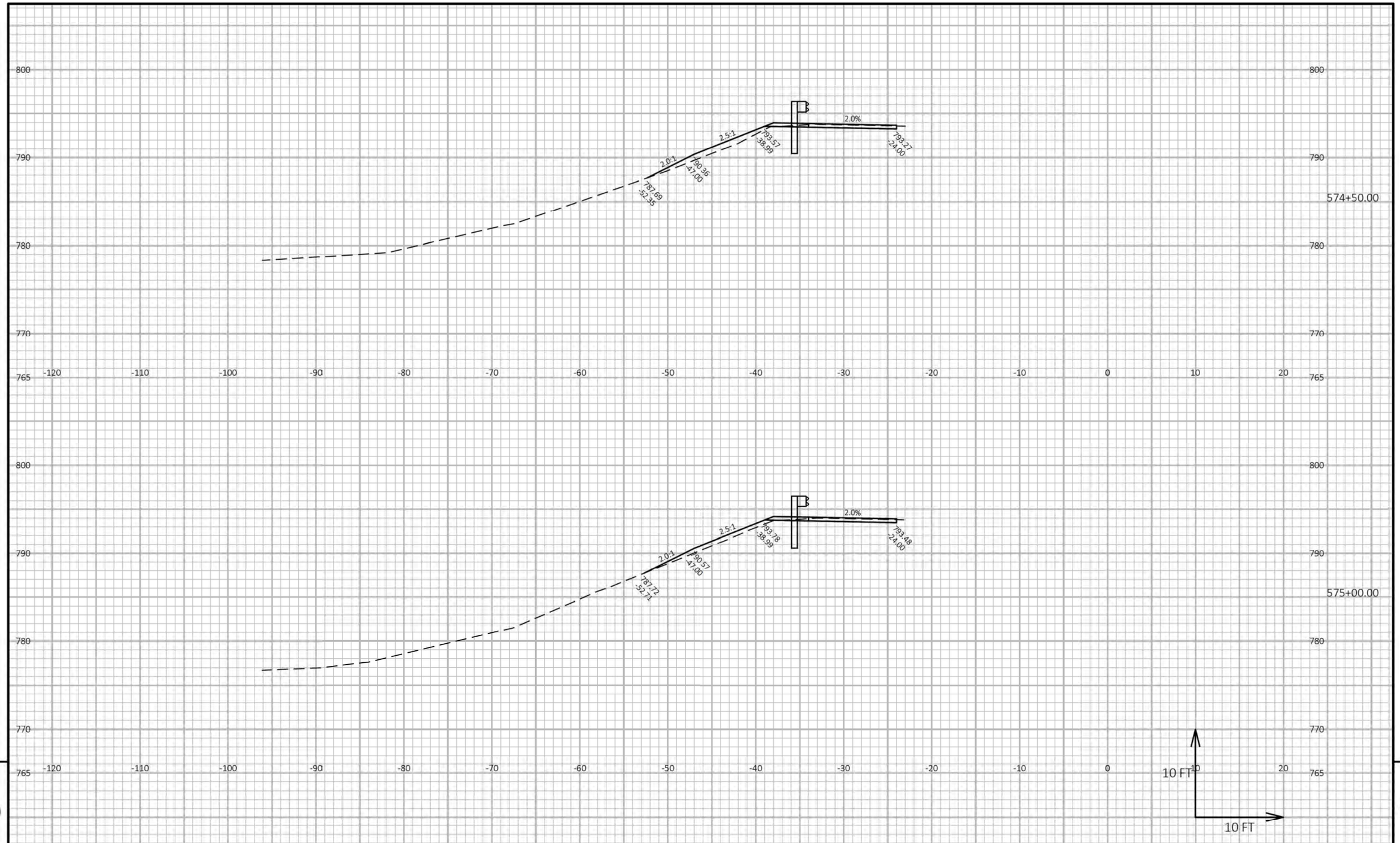
9

9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 982

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

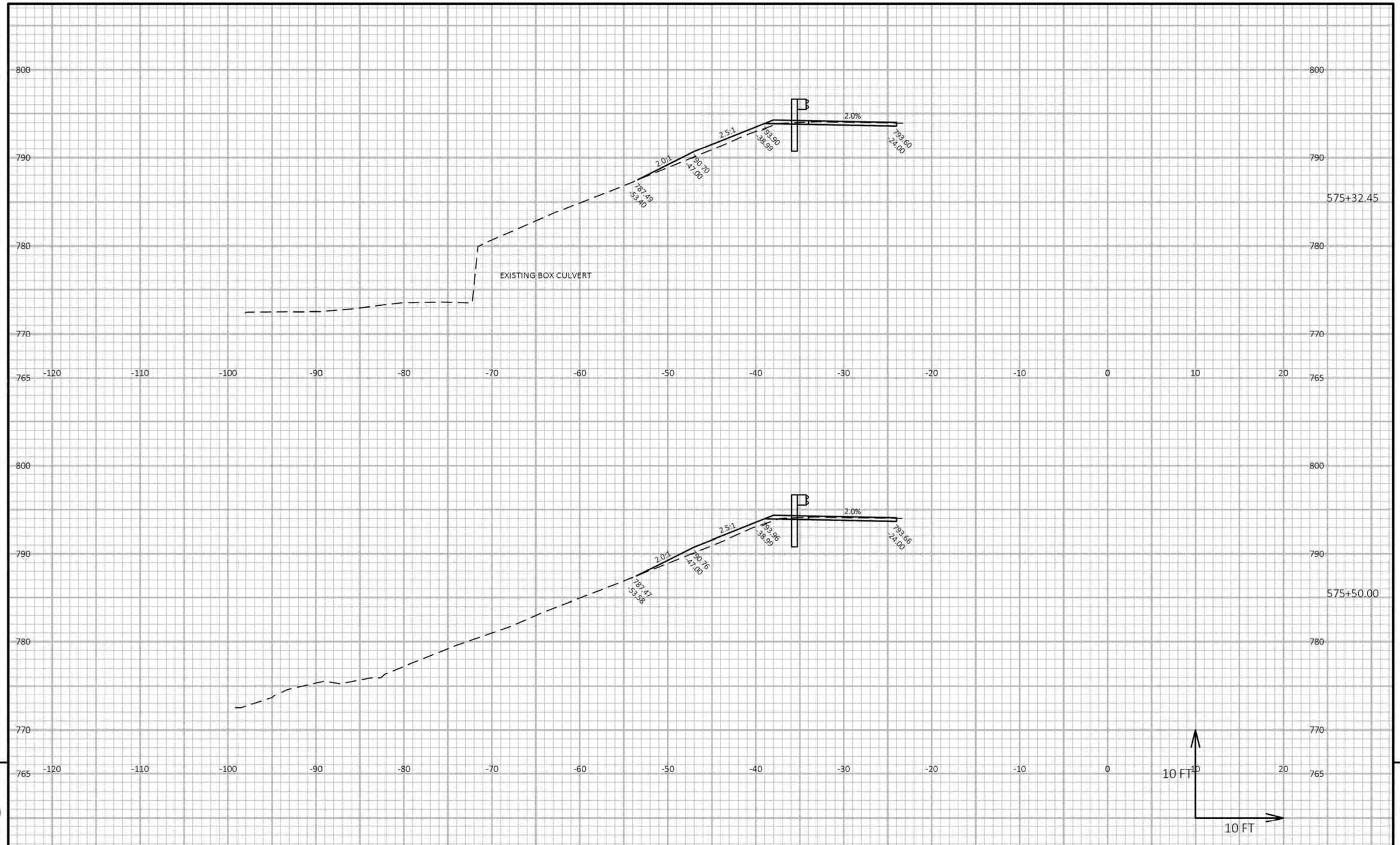


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 983

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

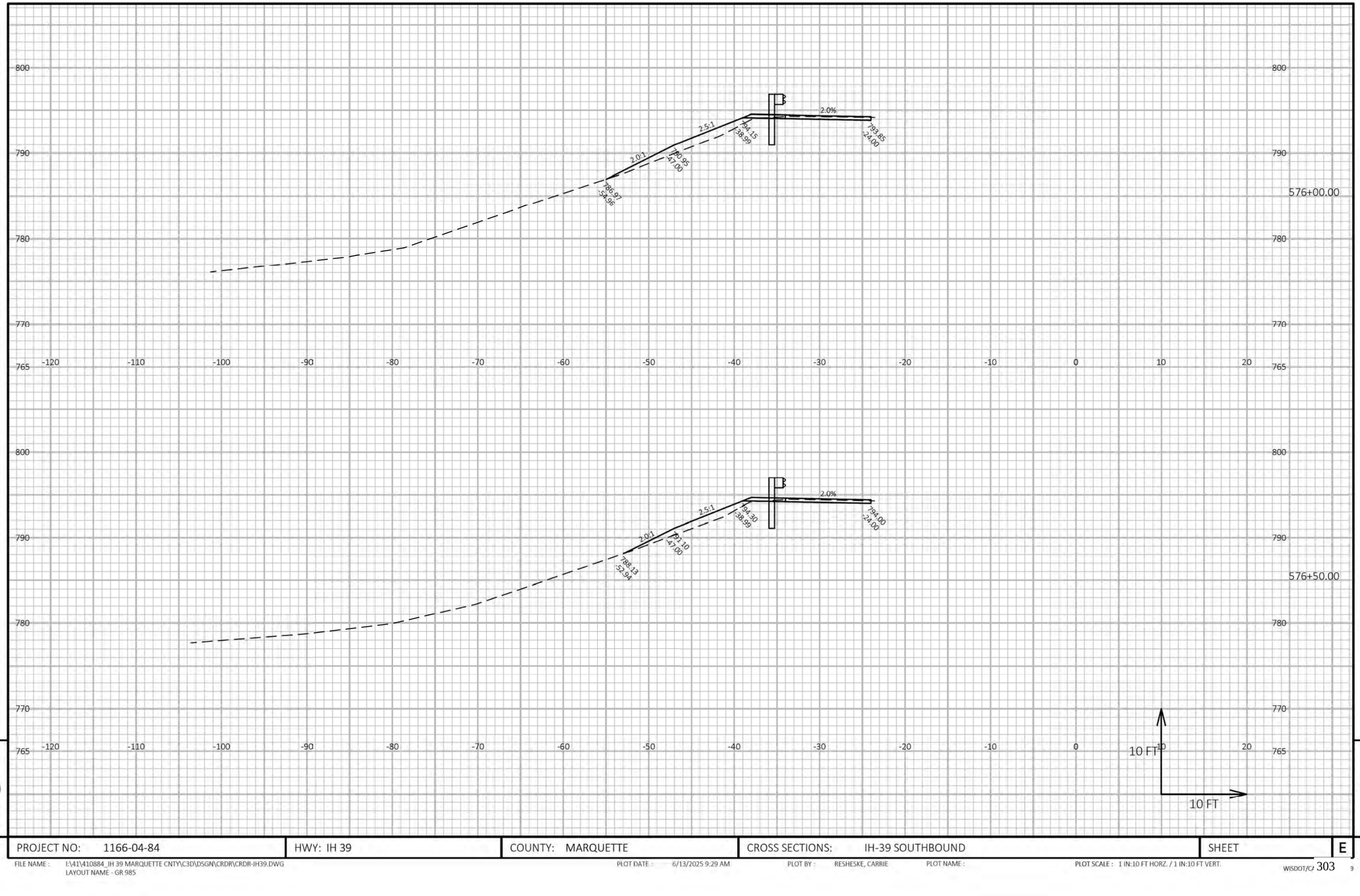


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 984

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

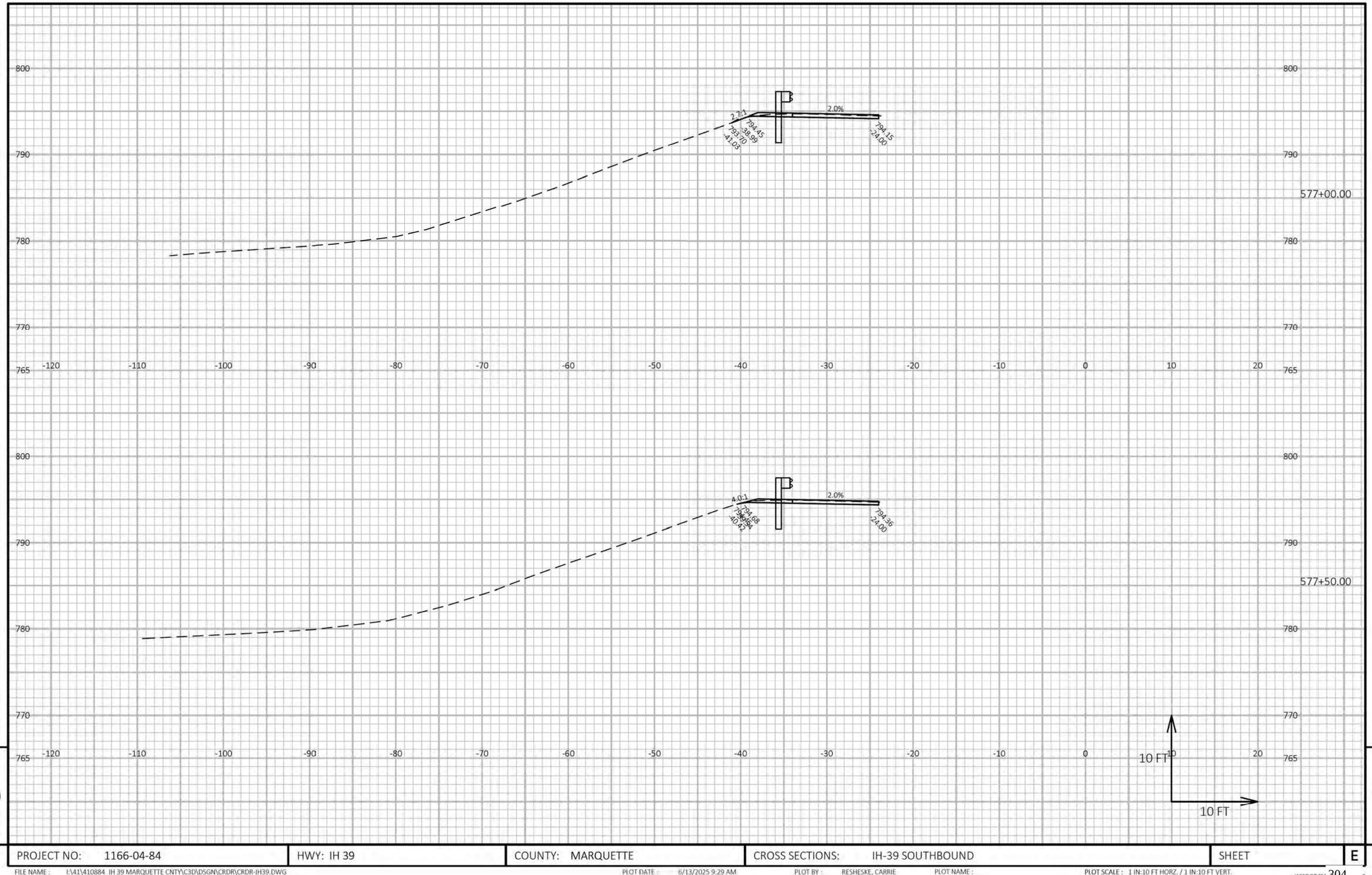


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 985

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

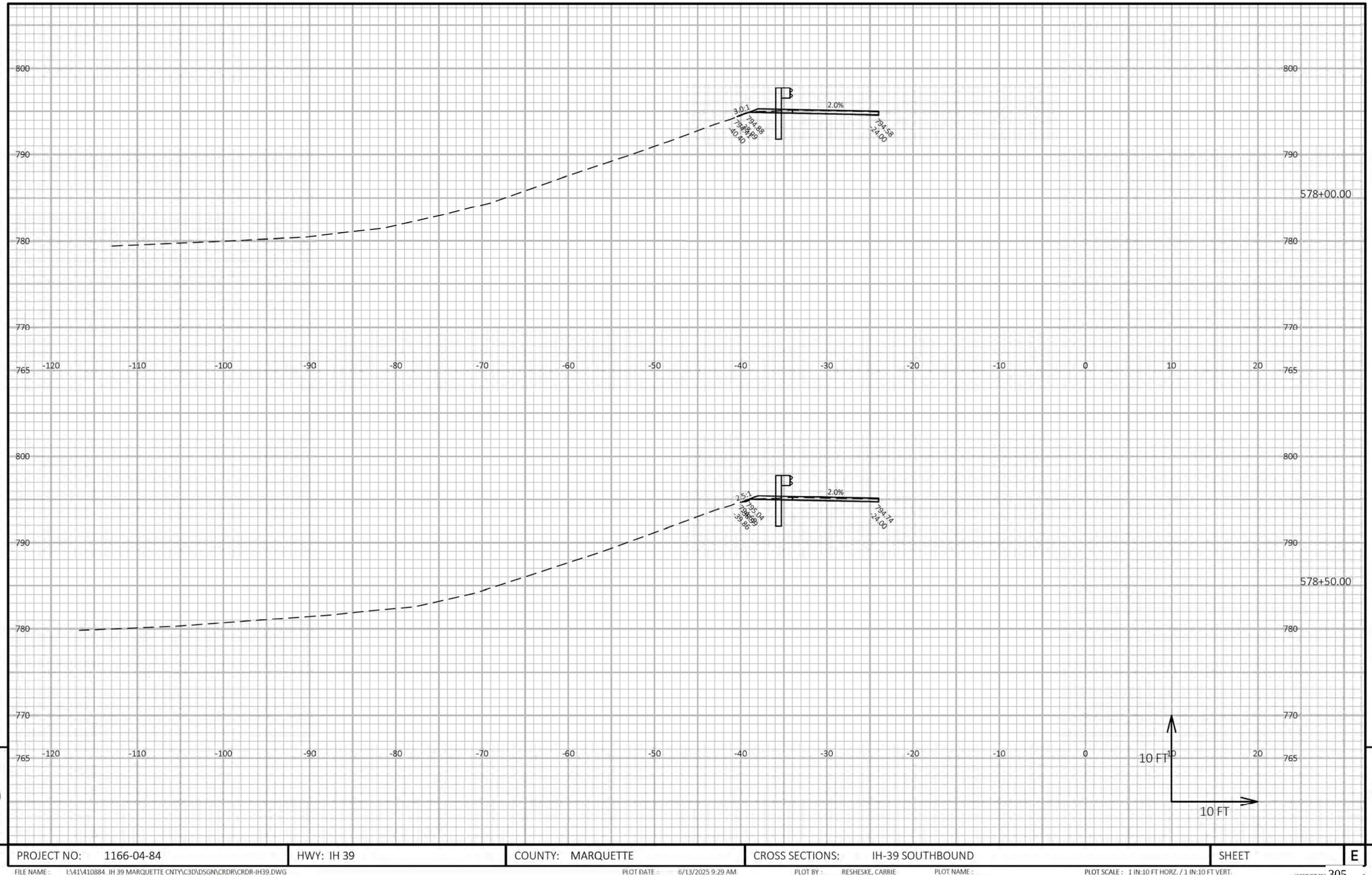


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 986

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

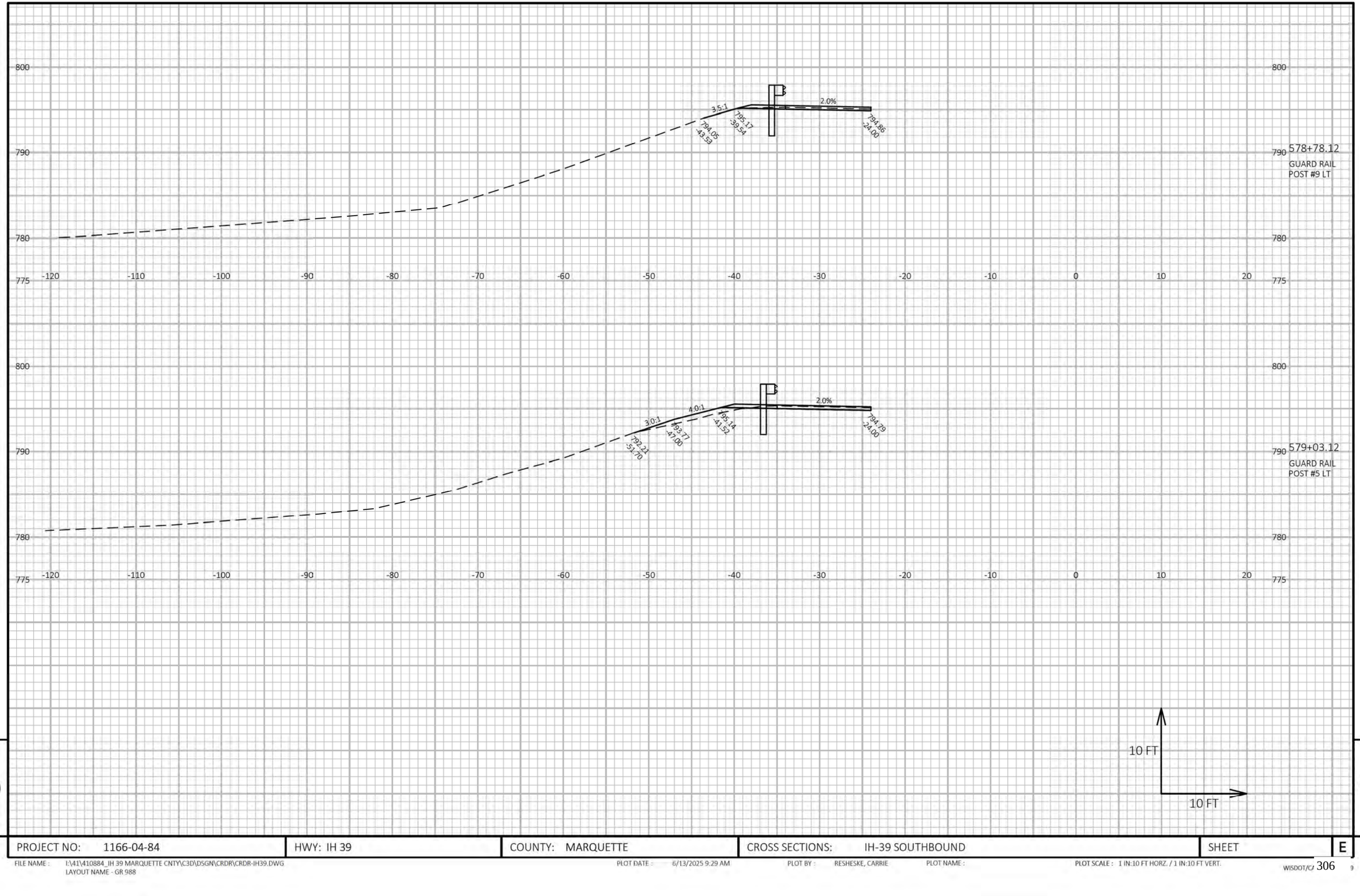


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 987

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

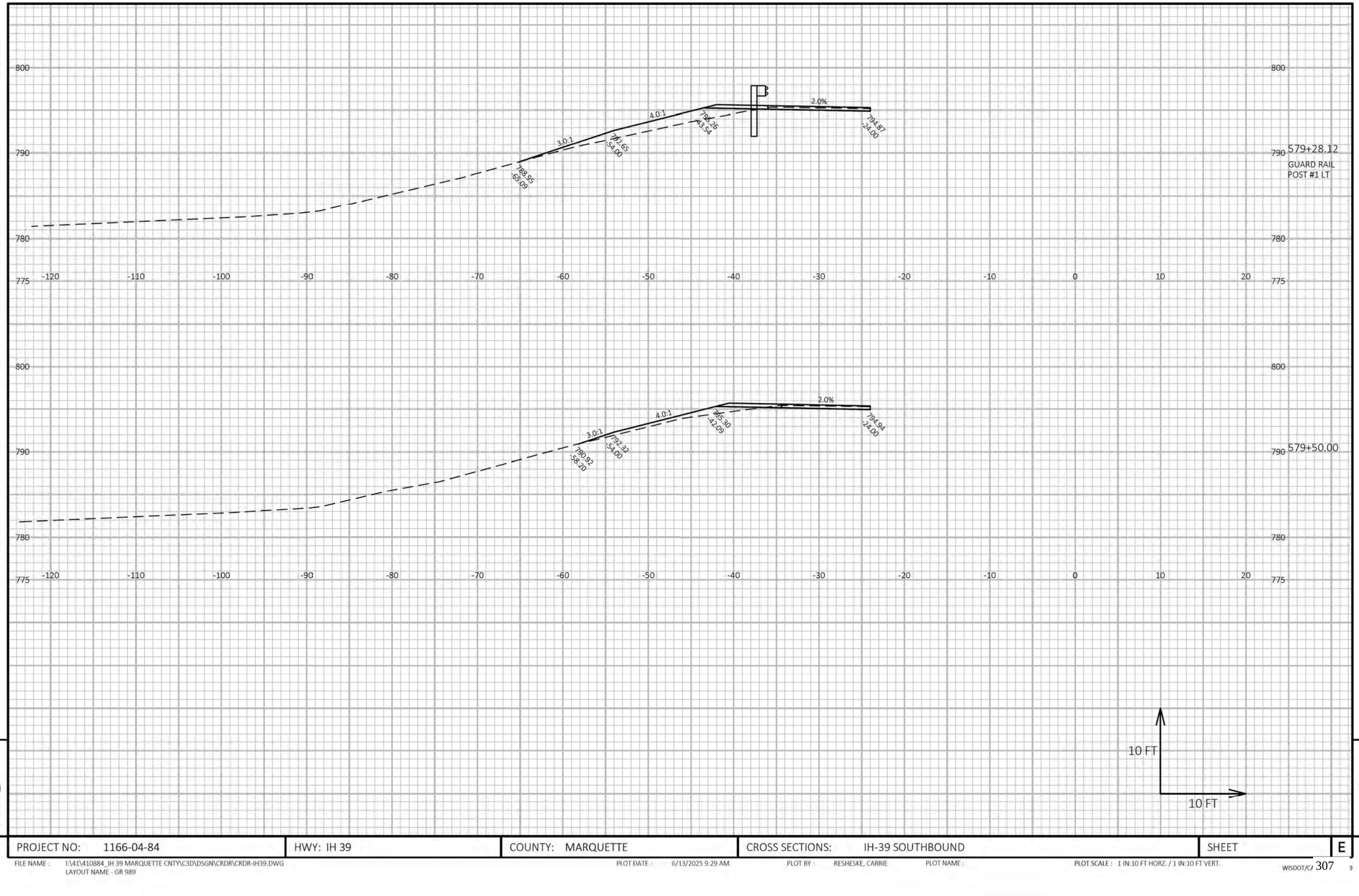


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 988

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

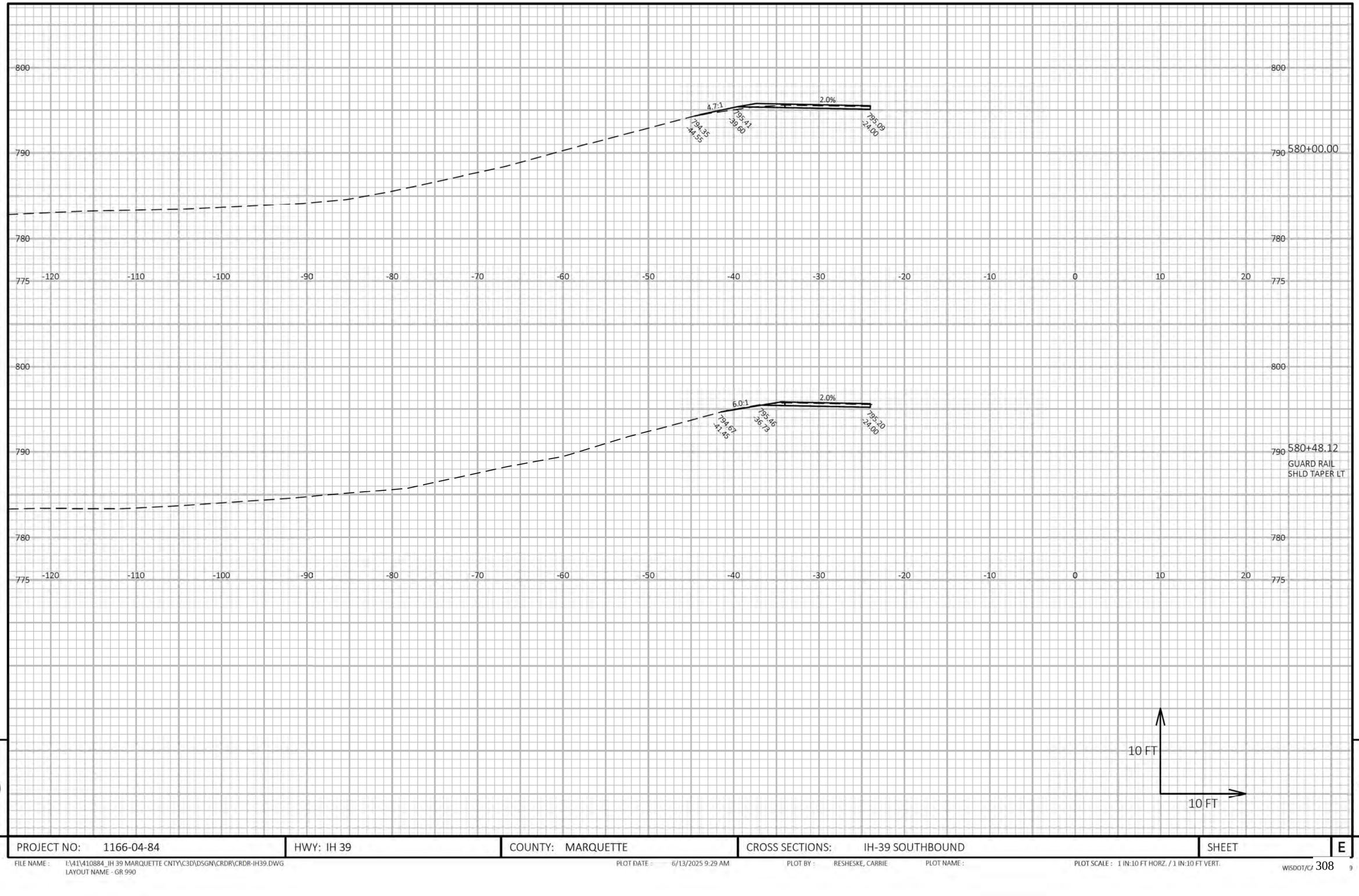


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 989

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



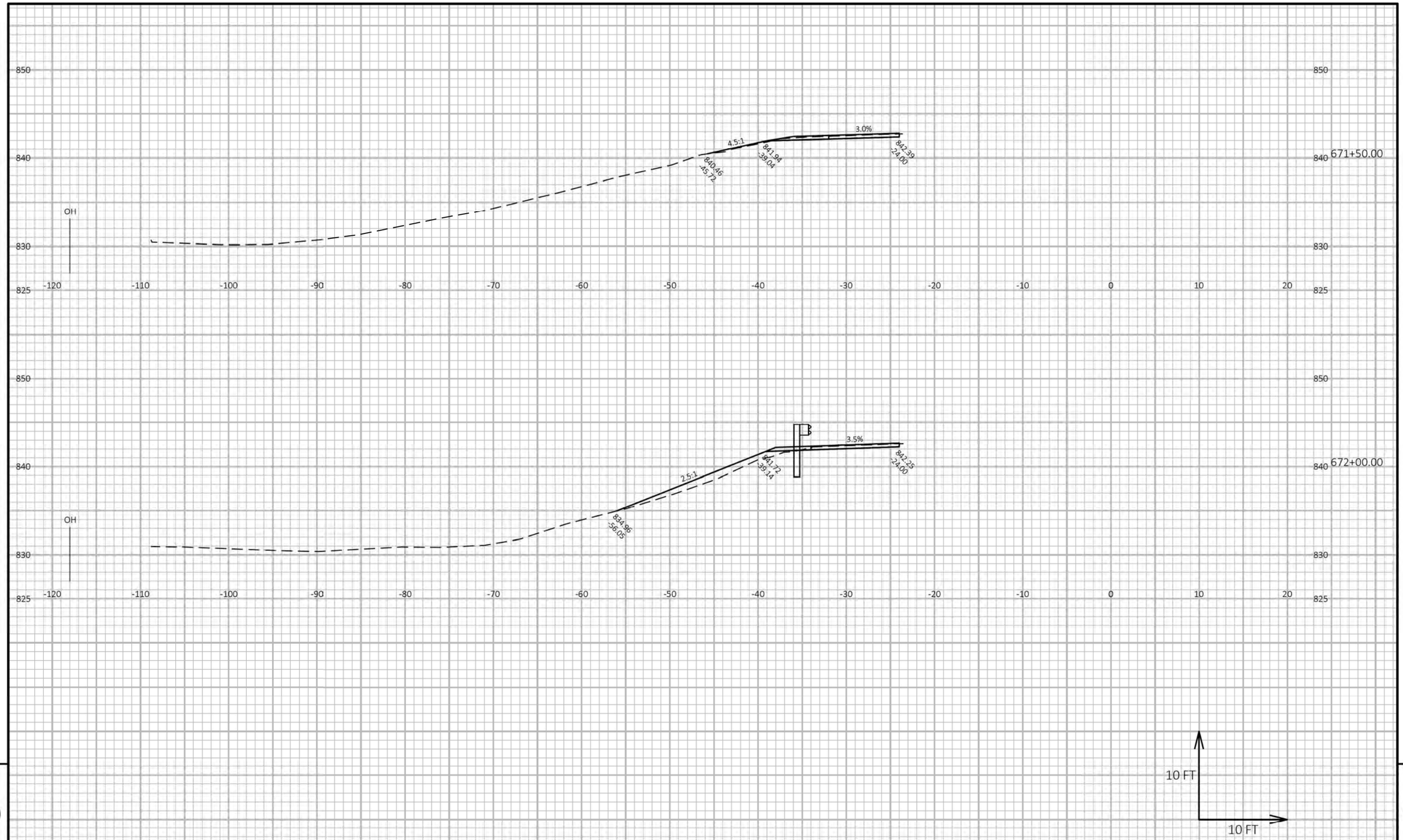
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 990

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C



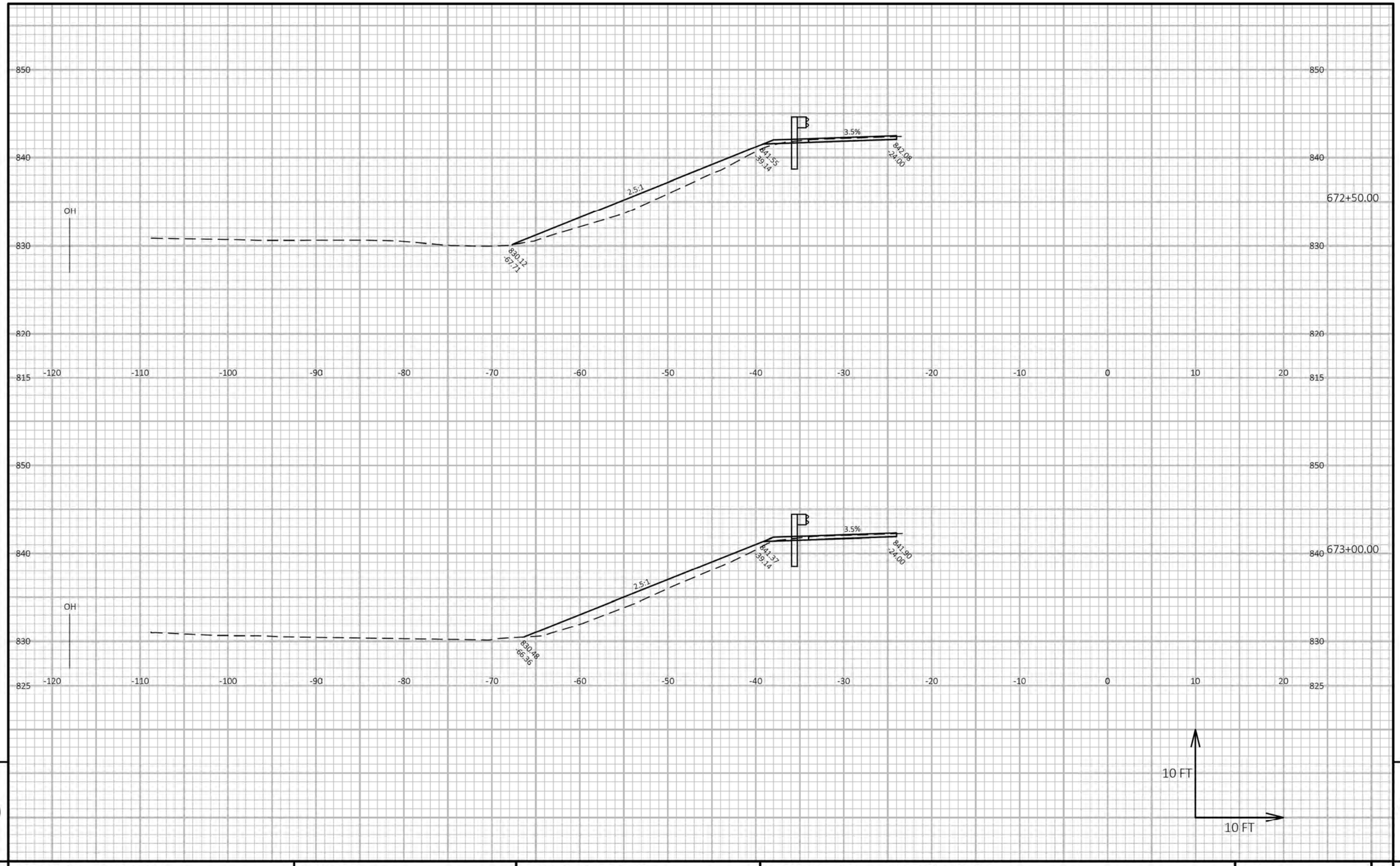
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 991

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

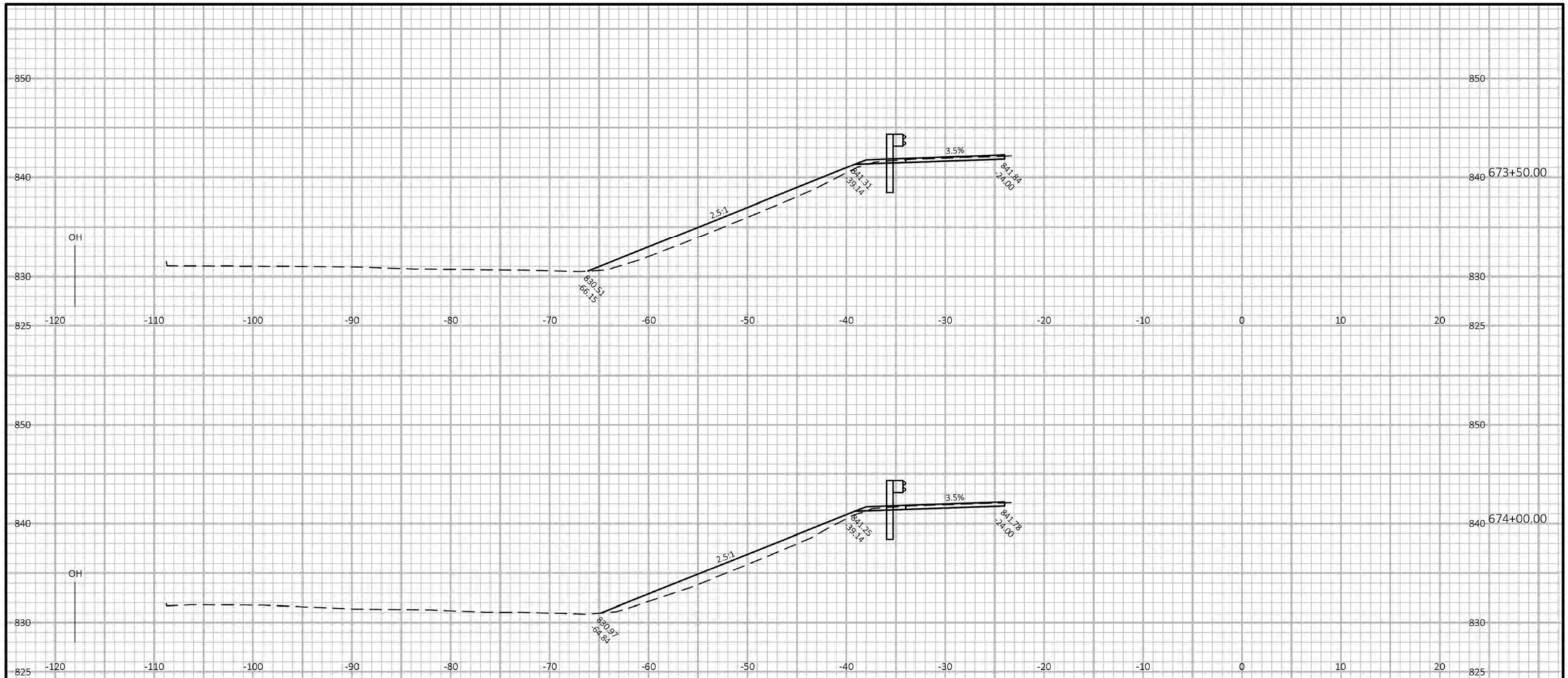


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 992

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



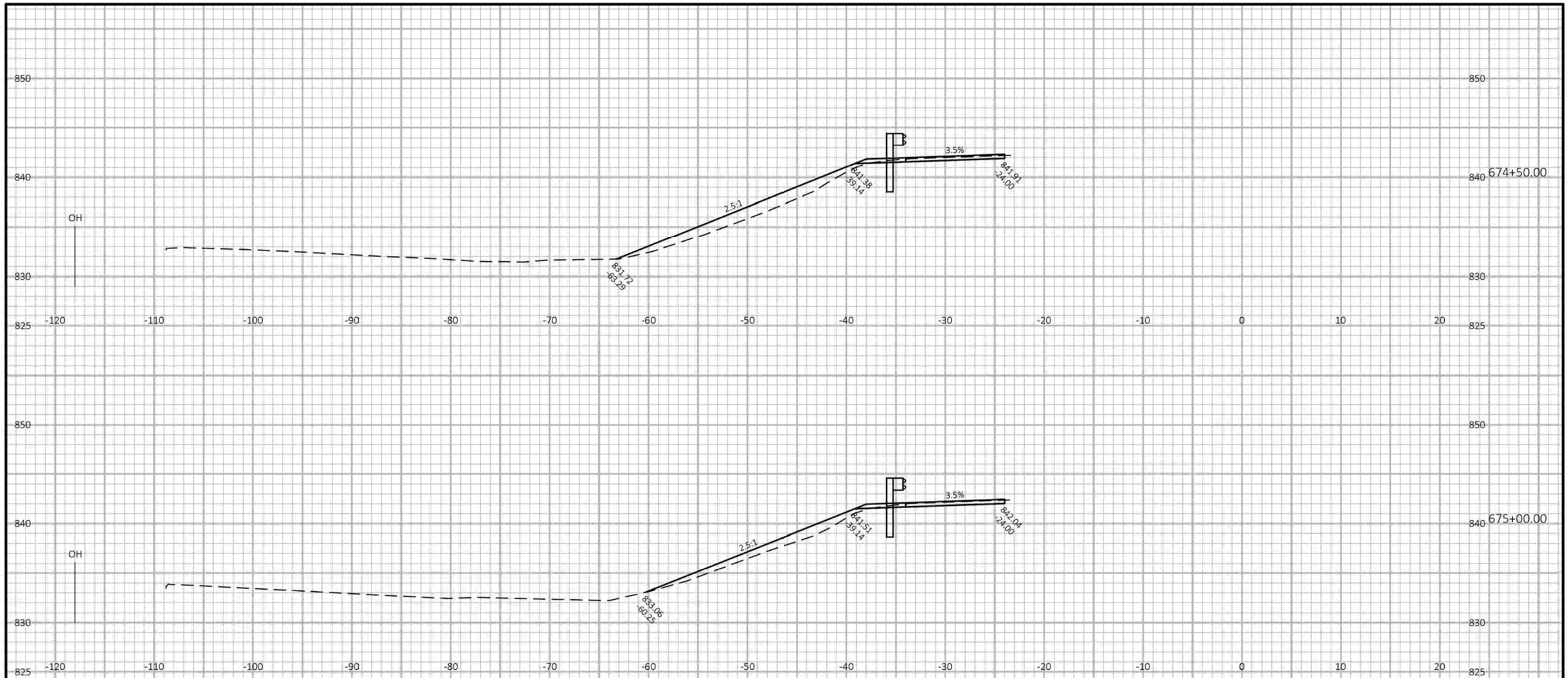
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 993

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

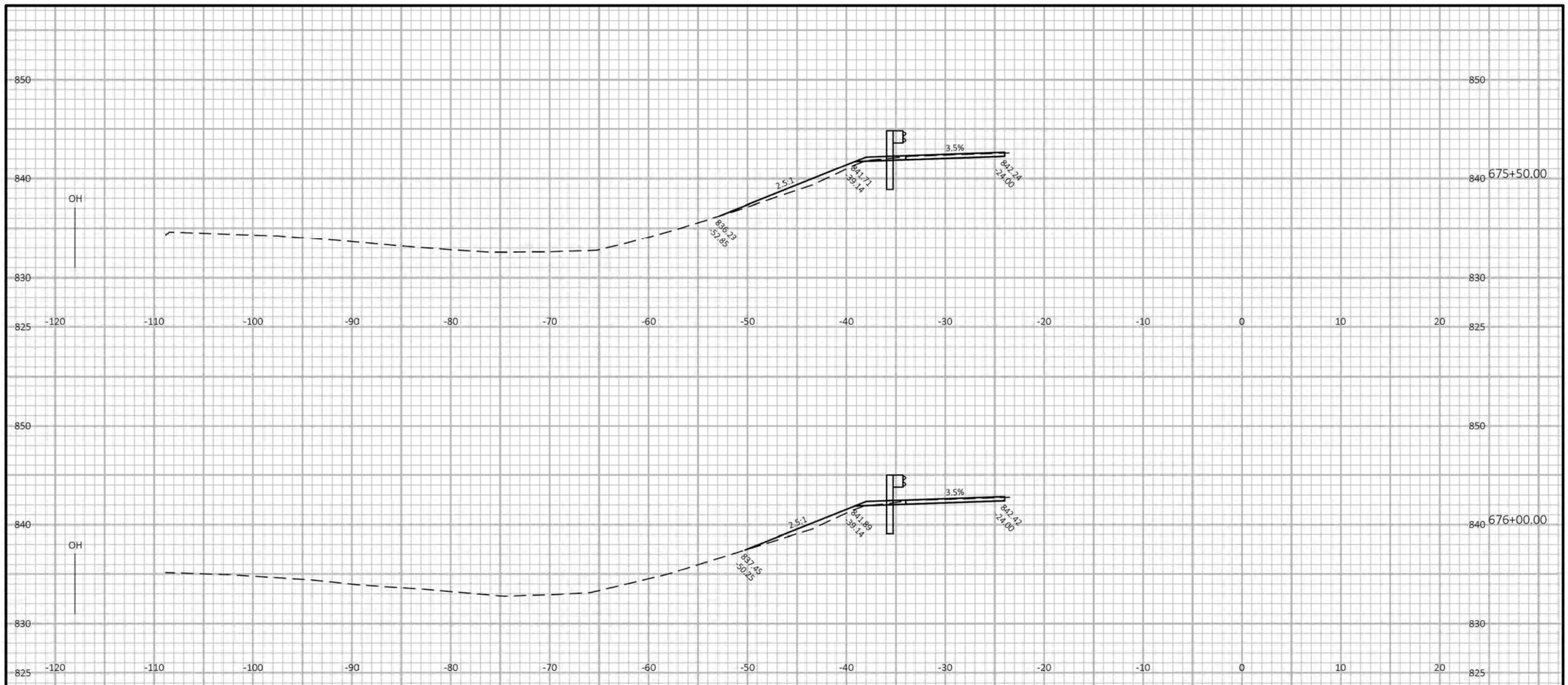


PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 994

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

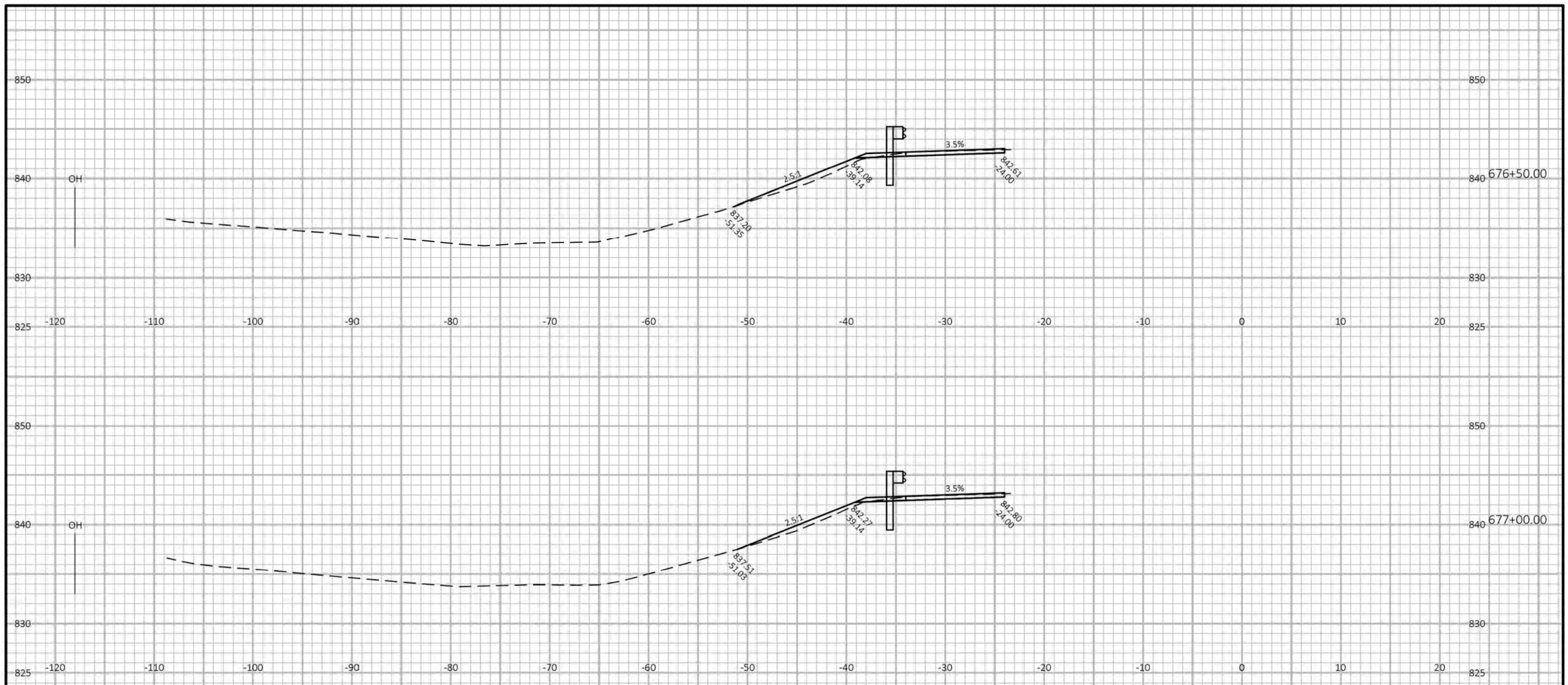


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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 995

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

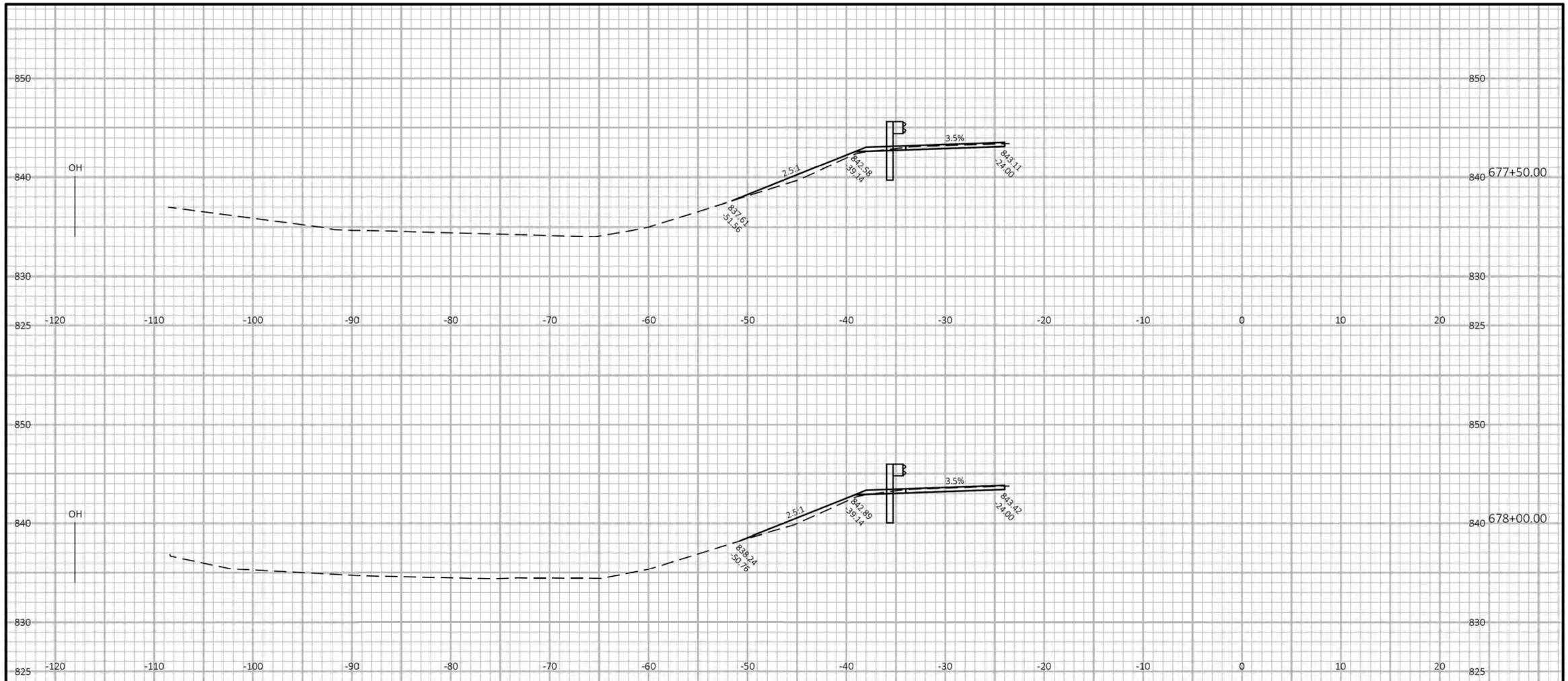


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 996

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



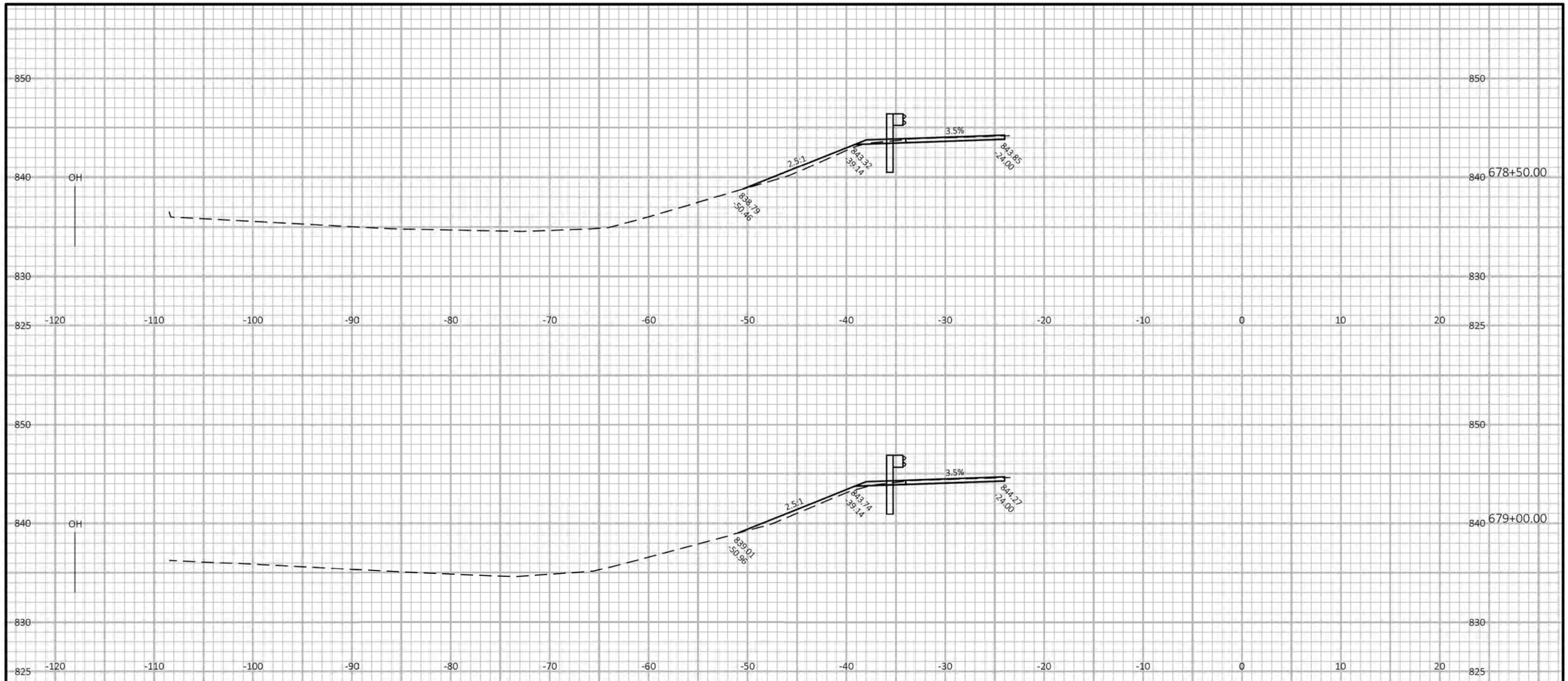
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PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 997

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CA



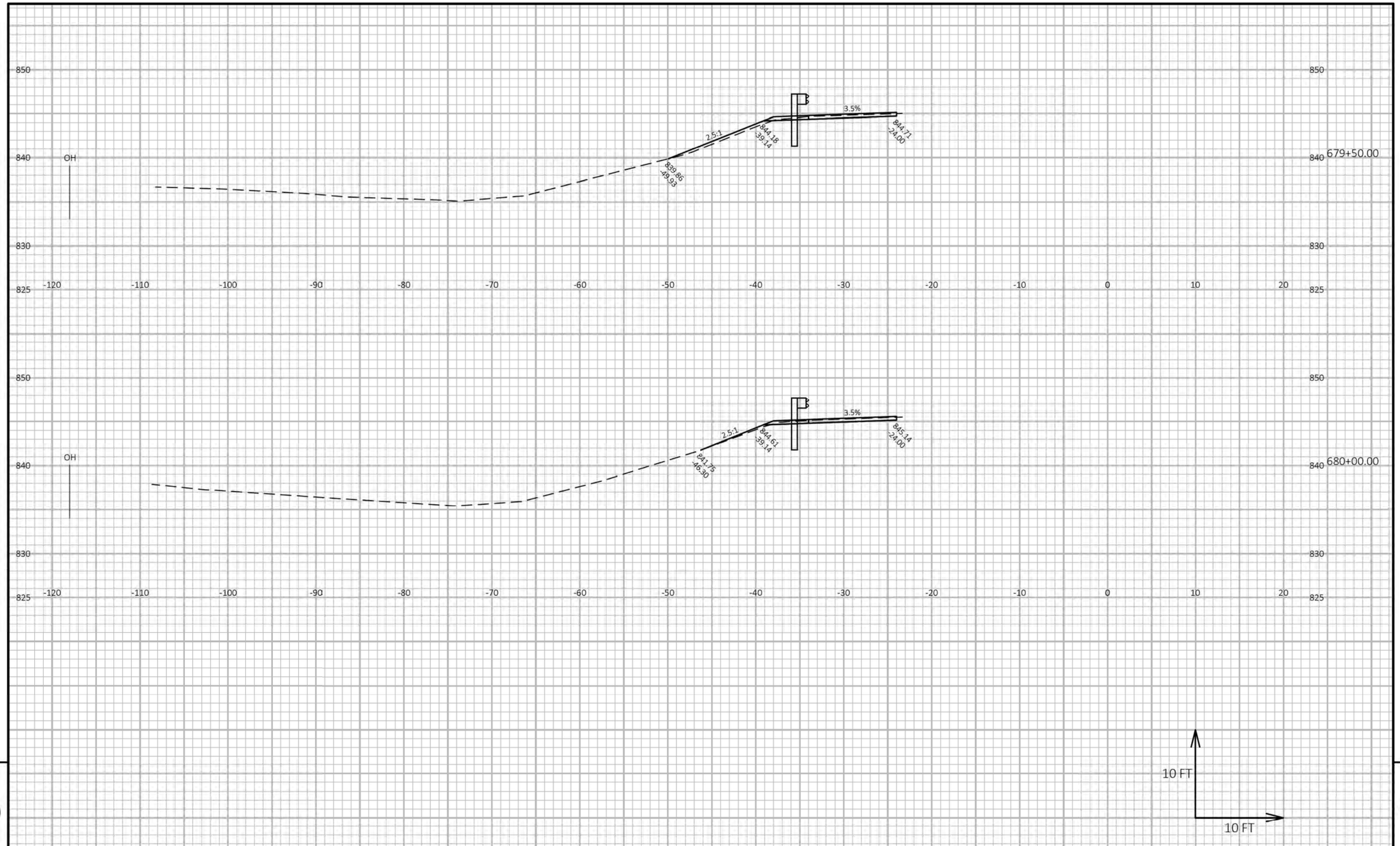
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 998

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CA



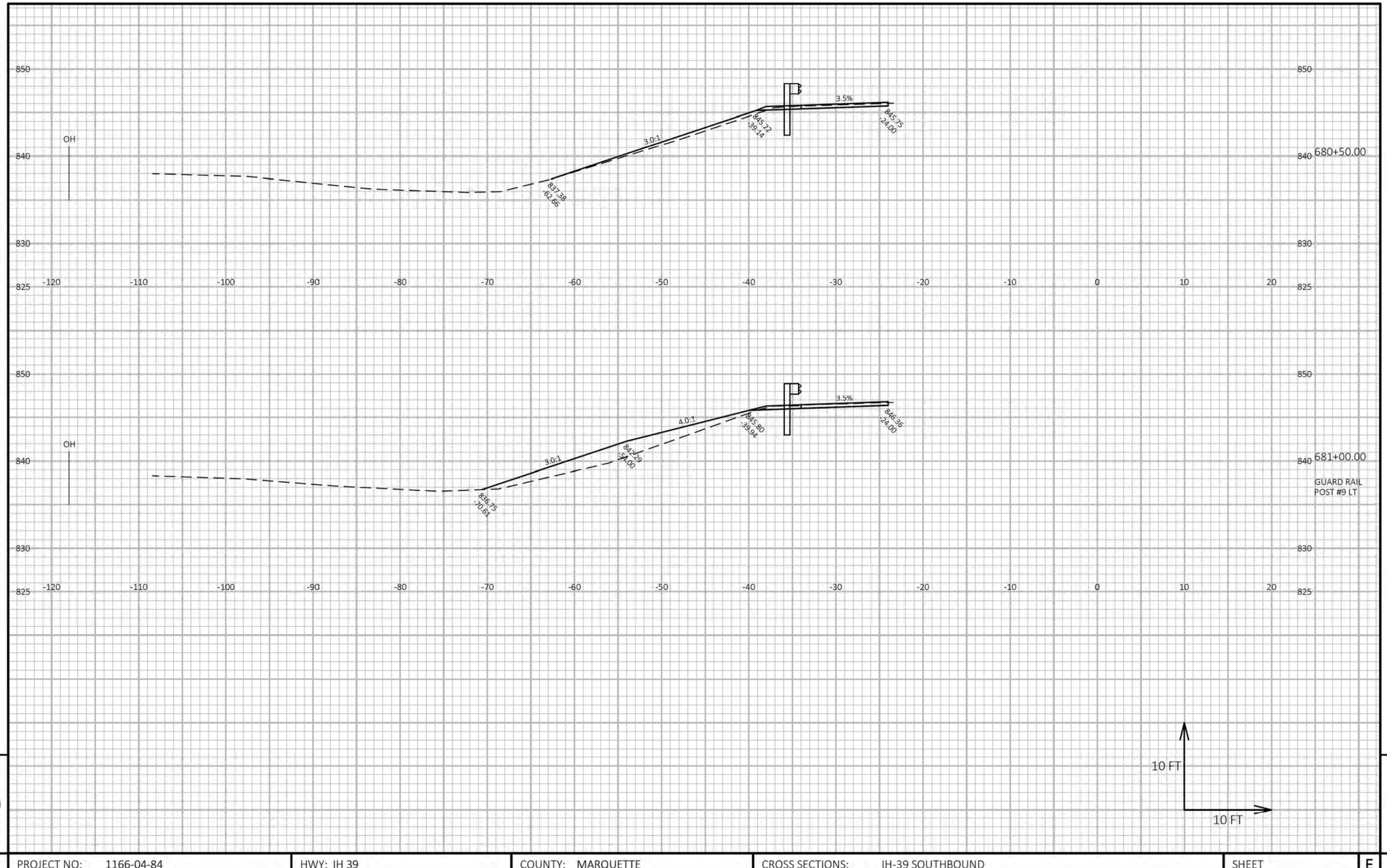
9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 999

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/C

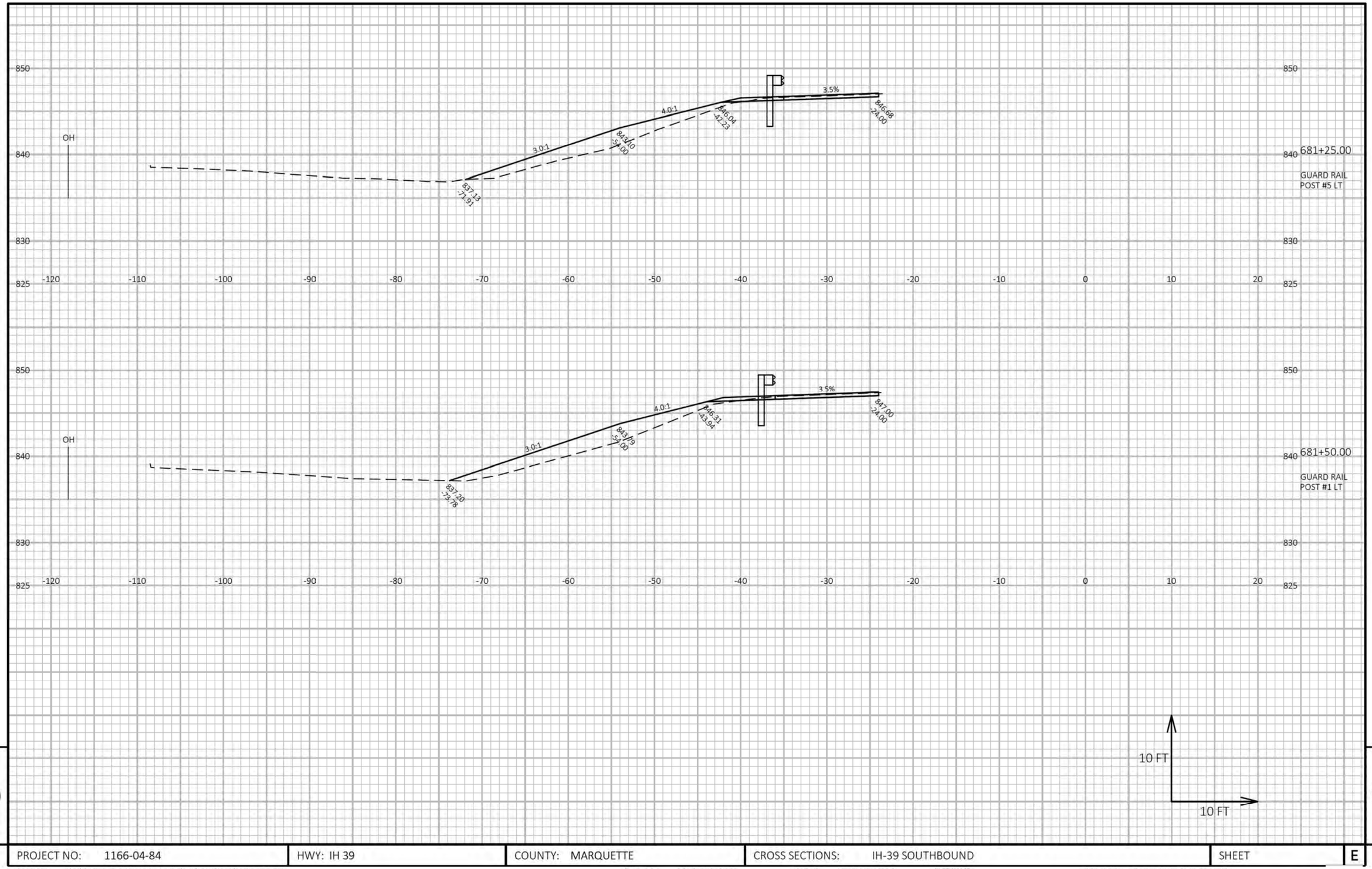


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 1000

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

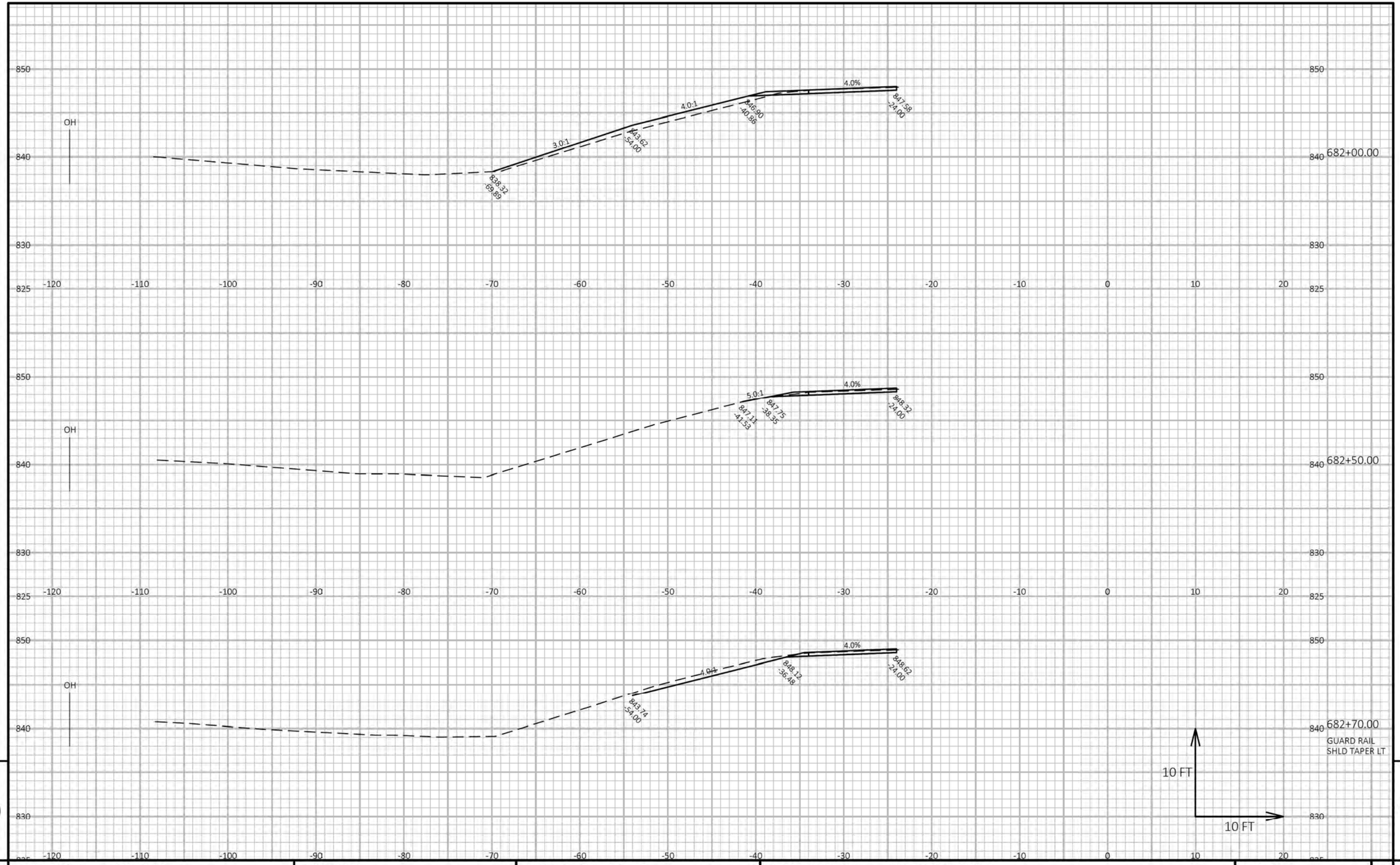


9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET	E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 1001

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

PROJECT NO: 1166-04-84	HWY: IH 39	COUNTY: MARQUETTE	CROSS SECTIONS: IH-39 SOUTHBOUND	SHEET E

FILE NAME : I:\41\410884_IH 39 MARQUETTE CNTY\C3D\DSGN\CRDR\CRDR-IH39.DWG
LAYOUT NAME - GR 1002

PLOT DATE : 6/13/2025 9:29 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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