GRE

SEPTEMBER 2023

PROJECT ID: 6210-01-74, 1510-02-74

WITH: 6590-02-77

COUNTY: WAUPACA

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 = 166

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6210-01-74		
1510-02-74		

AURORAVILLE - FREMONT
ARNDT RD TO USH 10

STH 49

WAUPACA COUNTY

STATE PROJECT NUMBER
6210-01-74

WAUPACA - APPLETON
STH 49/STH 110 INTERCHANGE

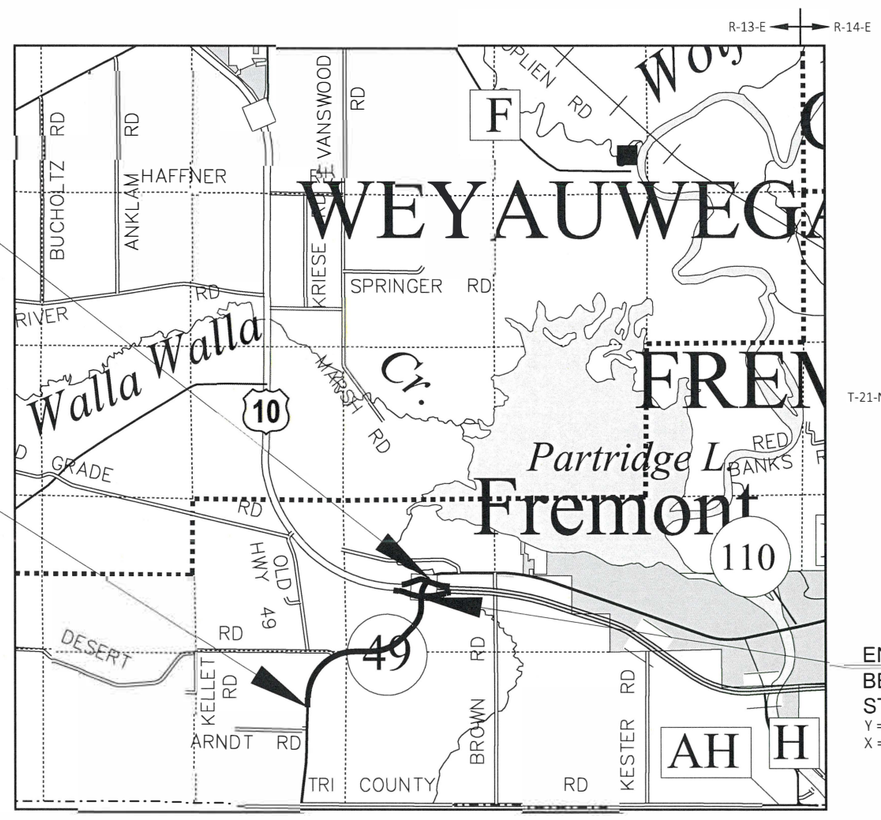
USH 10

WAUPACA COUNTY

STATE PROJECT NUMBER
1510-02-74

END PROJECT 1510-02-74
STA 298+27.39
Y = 307,597.836
X = 582,552.044

BEGIN PROJECT 6210-01-74
STA 228+00
Y = 303,161.848
X = 578,264.873



END PROJECT 6210-01-74
BEGIN PROJECT 1510-02-74
STA 290+75.16
Y = 306,939.457
X = 582,245.463

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINES = 1.188 MI (6210-01-47)
= 0.142 MI (1510-02-74)

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

DESIGN DESIGNATION 6210-01-74/1510-02-74

A.A.D.T.	(2029)	=	3,400
A.A.D.T.	(2049)	=	3,840
D.H.V.		=	390
D.D.		=	60/40
T.		=	18.4%
DESIGN SPEED		=	45 - 55 MPH
ESALS		=	970,000

CONVENTIONAL SYMBOLS

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

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

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

ORIGINAL PLANS PREPARED BY

BECHER HOPPE

WISCONSIN AARON J. WALLNER E-46054-6 WAUSAU, WI PROFESSIONAL ENGINEER

DATE: 10-25-22 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	BECHER-HOPPE ASSOCIATES, INC.
Designer	BECHER-HOPPE ASSOCIATES, INC.
Project Manager	KURT VOGEL, P.E.
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	ROBERT WAGNER, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 6/28/2023 (Signature)

E

GENERAL NOTES

BEARINGS ON THE PLAN ARE TRUE BEARINGS TO THE NEAREST SECOND.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES. THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH LANDMARK MAY EXIST.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMITS THAT ARE NOT SHOWN.

R/W APPROXIMATED ON PLAN SHEETS BASED ON WAUPACA COUNTY GIS AND AS-BUILT DATA.

SECTION 2 ORDER

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT DIAGRAM

AS-BUILTS

PROJECT 1510-08-75 (1998)*
PROJECT 1510-08-77 (1999)*
PROJECT 6210-01-73 (2010)

*PROJECTS CONSTRUCTED USING METRIC STANDARD MEASUREMENTS

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 STRIP- TURF	.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 SLOPE- TURF			.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 = 49.4 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.10 ACRES

UTILITY CONTACTS

COMMUNICATIONS

CENTURYLINK
KEVIN ZICKERT
224 INDUSTRIAL DR
NORTH PRAIRIE, WI 53153
PHONE: (262) 392-520
EMAIL: relocations@centurylink.com

ELECTRICITY

WE ENERGIES
ZACH DUGA
800 S LYNNDALE DR
APPLETON, WI 54912
PHONE: (920) 380-3458
CELL: (920) 450-9314
EMAIL: Zachary.Duga@we-energies.com

DNR LIASON

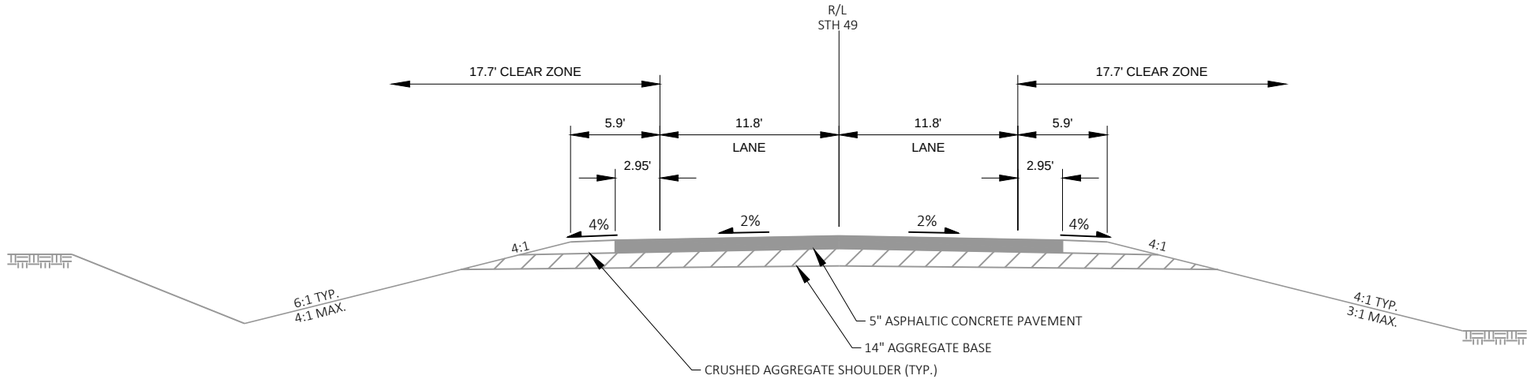
DEPARTMENT OF NATURAL RESOURCES
CASEY JONES
DNR OSHKOSH SERVICE CENTER
625 E CTY RD Y, SUITE 700
OSHKOSH, WI 54901
PHONE: (715) 213-6571
EMAIL: casey.jones@wisconsin.gov

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

2

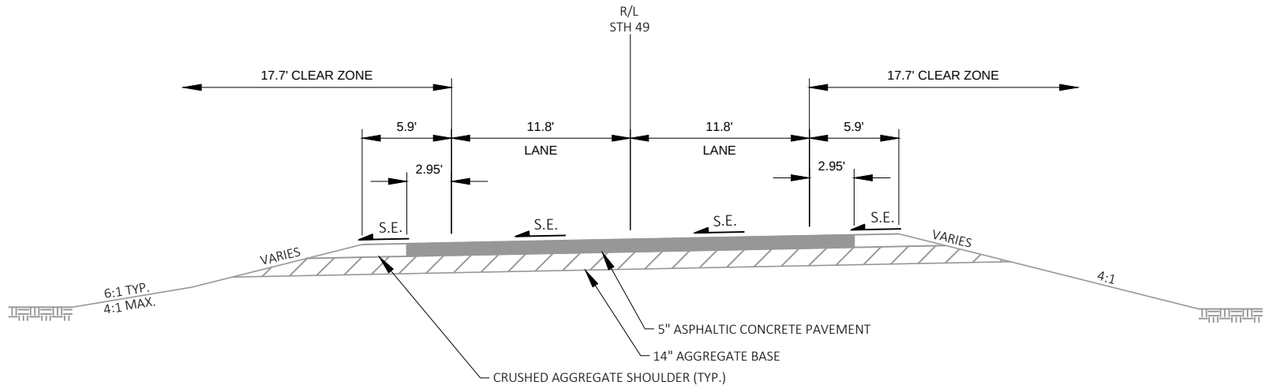
PROJECT NO: 6210-01-74/1510-02-74	HWY: STH 49/USH 10	COUNTY: WAUPACA	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:21 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44



EXISTING TYPICAL SECTION STH 49

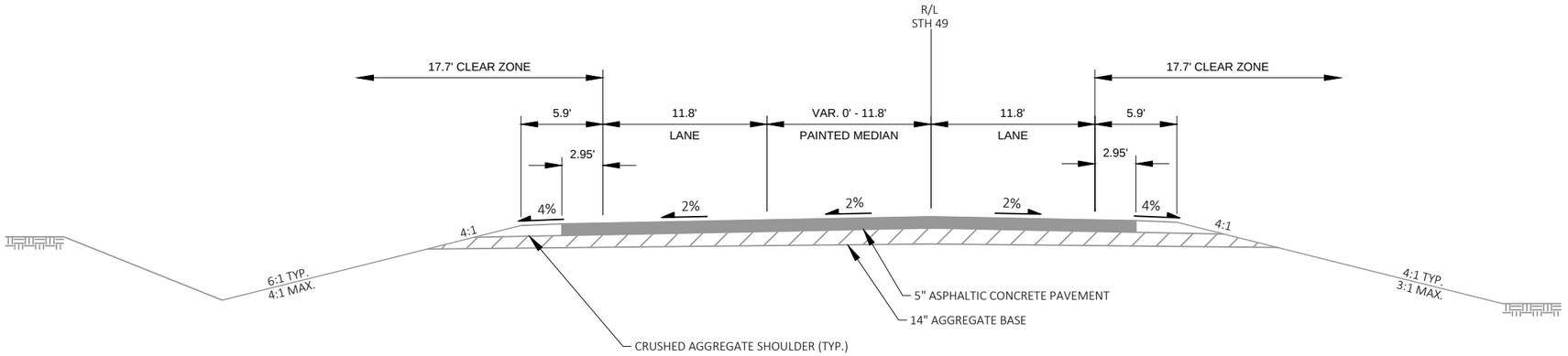
STA 228+00 - STA 231+30.88
STA 256+44.73 - STA 263+01.66
STA 274+34.44 - STA 275+77



EXISTING TYPICAL SUPERELEVATED SECTION STH 49

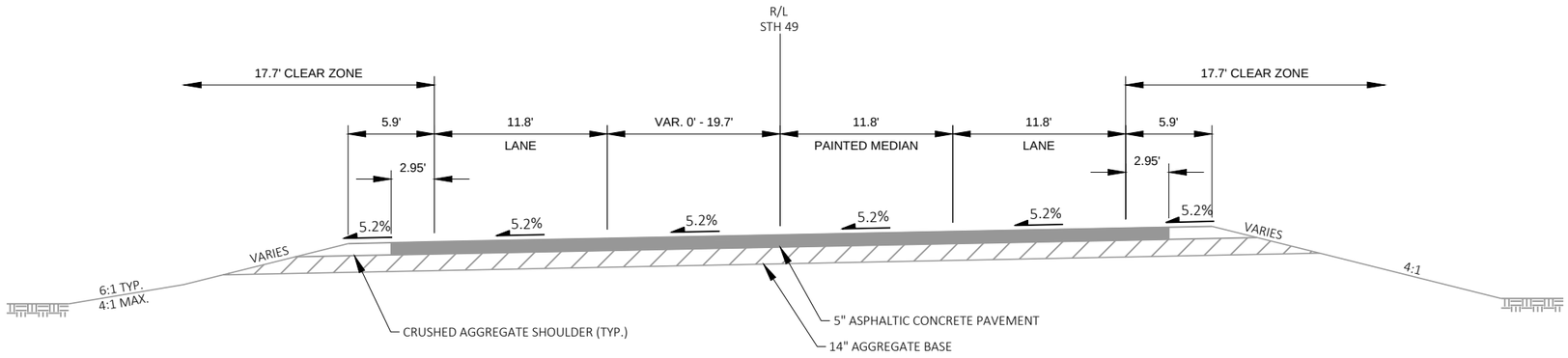
STA 231+30.88 - STA 256+44.73
STA 263+01.66 - STA 274+34.44

PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 4	E



EXISTING TYPICAL SECTION STH 49

STA 275+77 - STA 280+29.92



EXISTING TYPICAL SECTION STH 49

STA 280+29.92 - STA 283+68

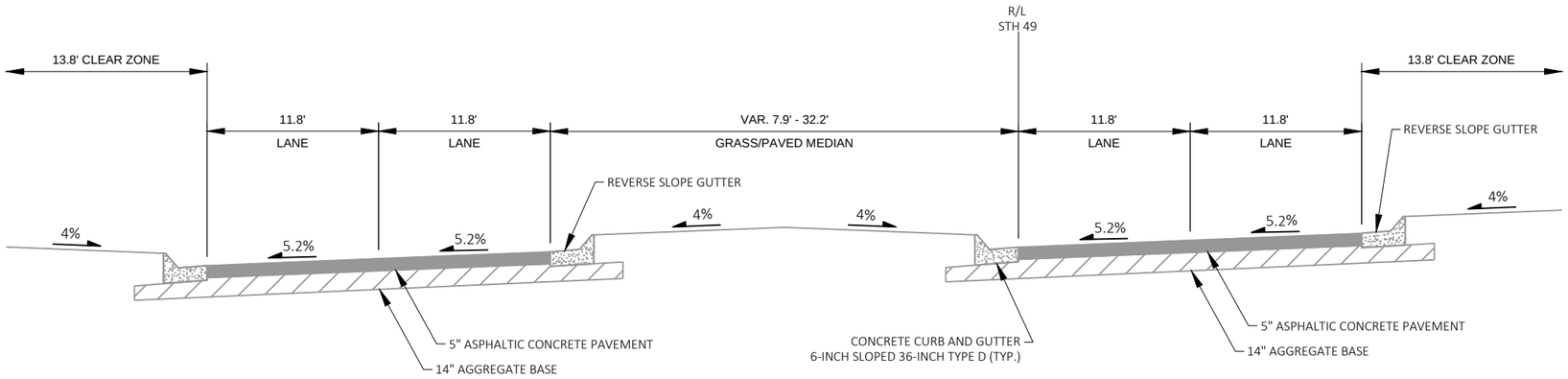
PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/6/2023 9:22 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT

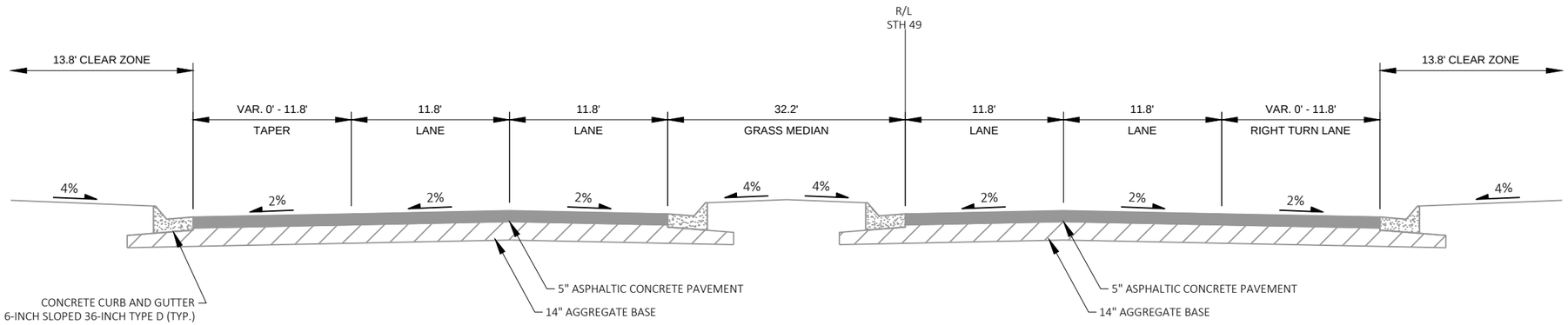
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION STH 49

STA 283+68 - STA 287+64.19

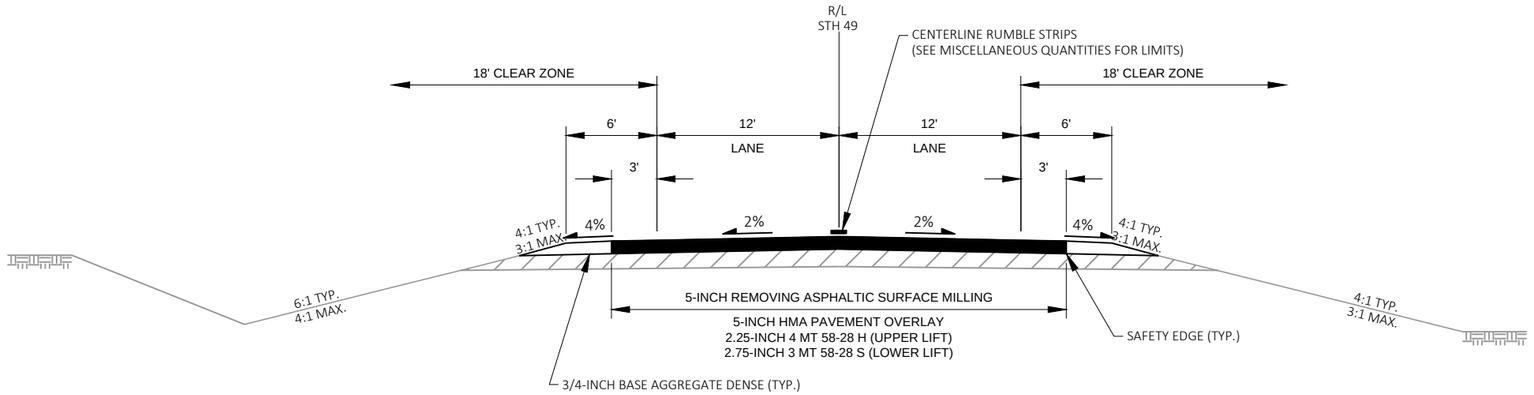


EXISTING TYPICAL SECTION STH 49

STA 287+64.19 - STA 290+76.50

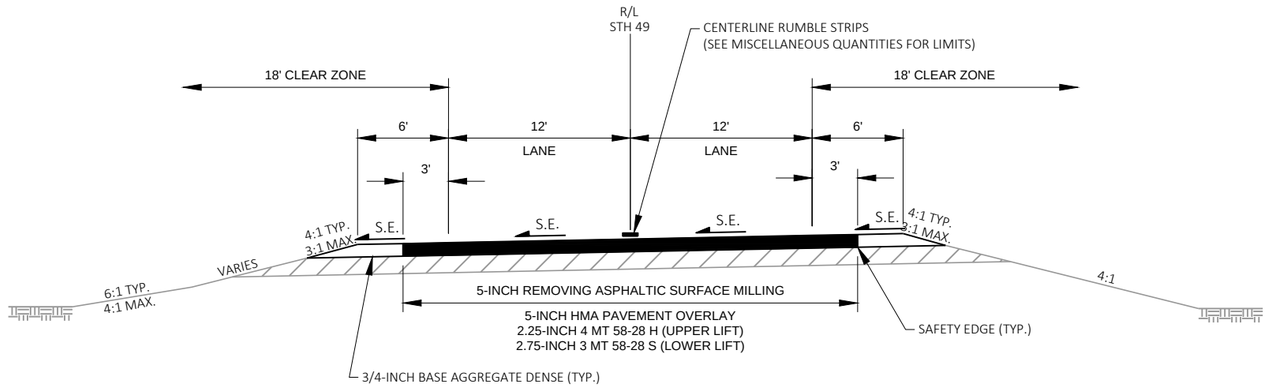
PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 03
PLOT DATE : 7/6/2023 9:22 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION STH 49

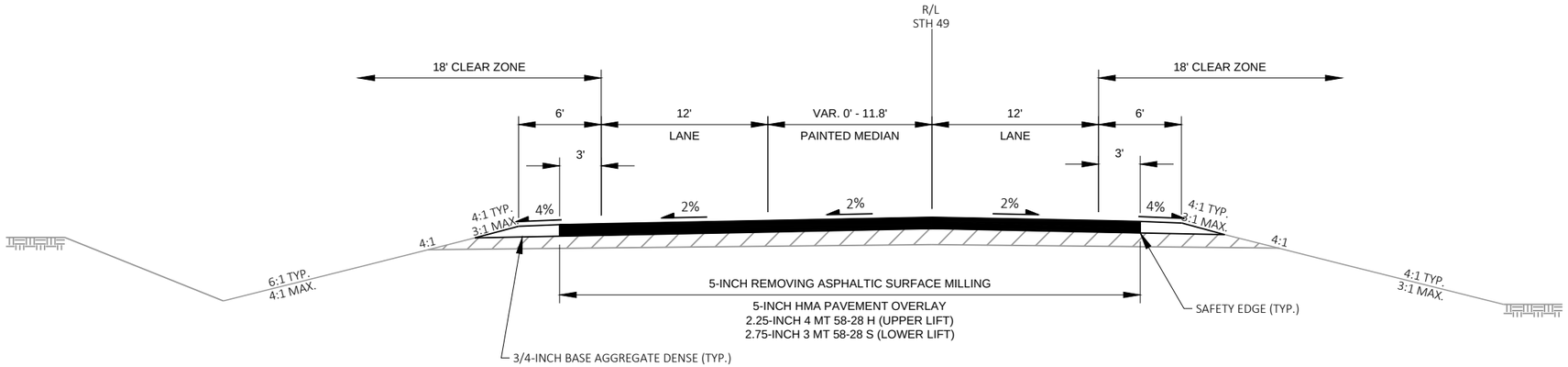
STA 228+00 - STA 231+30.88
STA 256+44.73 - STA 263+01.66
STA 274+34.44 - STA 275+77



FINISHED TYPICAL SUPERELEVATED SECTION STH 49

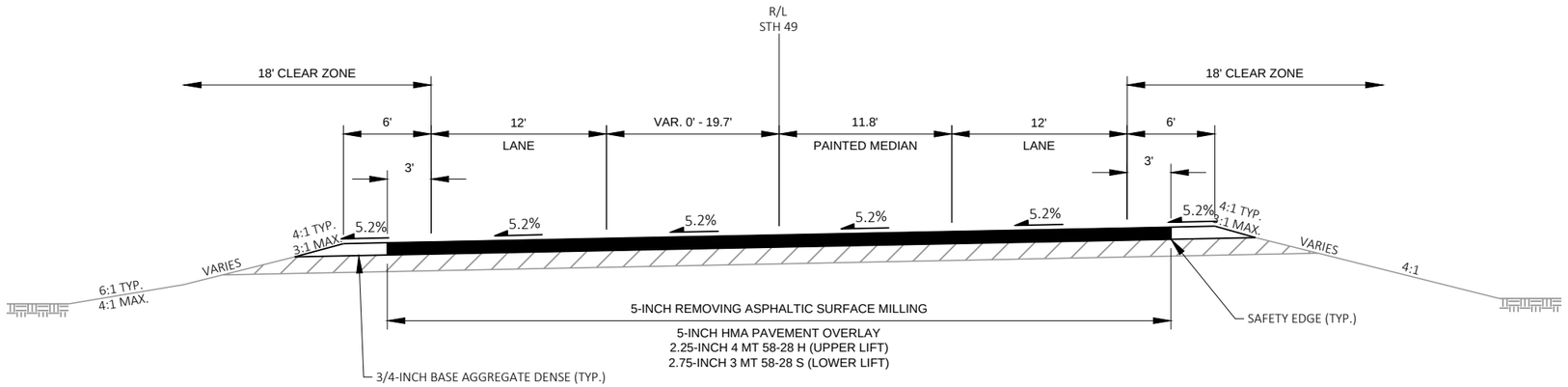
STA 231+30.88 - STA 256+44.73
STA 263+01.66 - STA 274+34.44

PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 7	E



FINISHED TYPICAL SECTION STH 49

STA 275+77 - STA 280+29.92

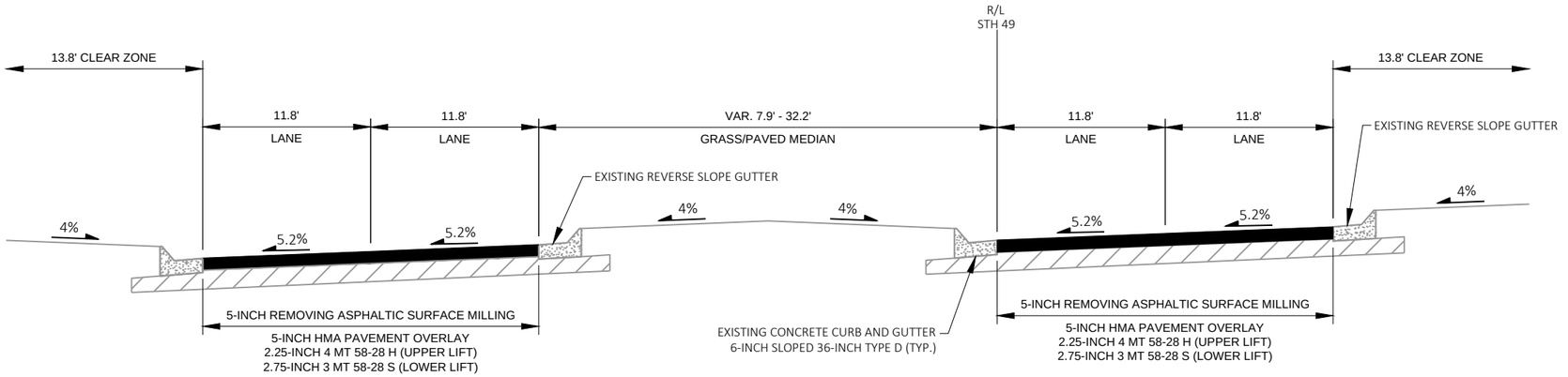


FINISHED TYPICAL SECTION STH 49

STA 280+29.92 - STA 283+68

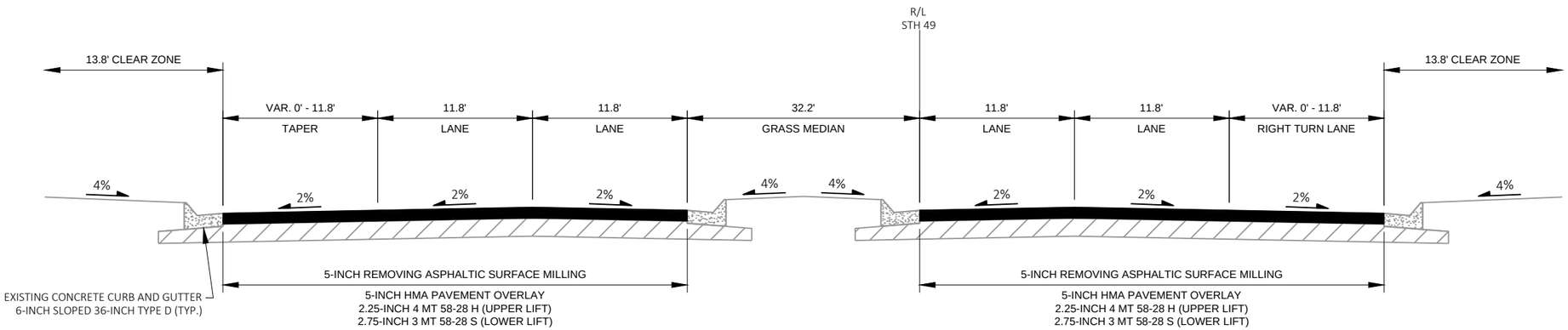
PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 8	E

2



FINISHED TYPICAL SECTION STH 49

STA 283+68 - STA 287+64.19



FINISHED TYPICAL SECTION STH 49

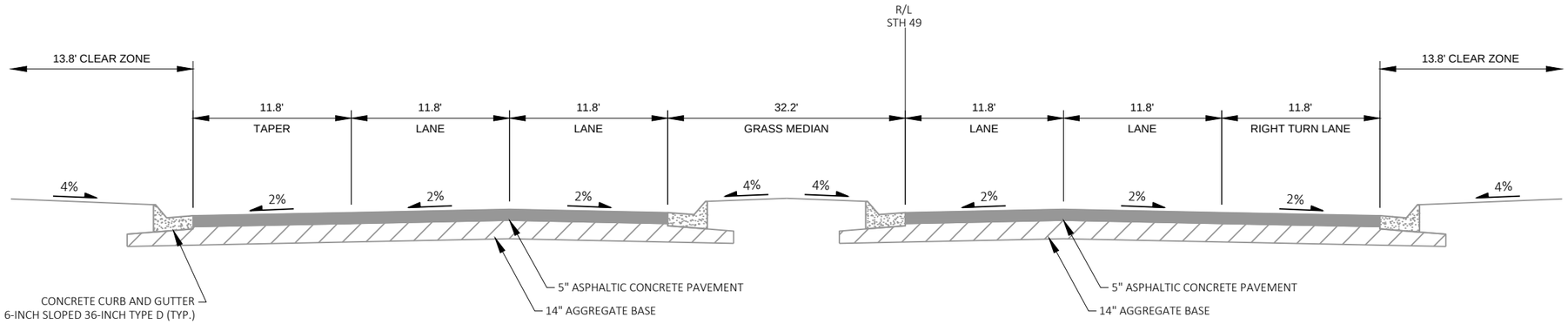
STA 287+64.19 - STA 290+76.50

PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 9	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 06

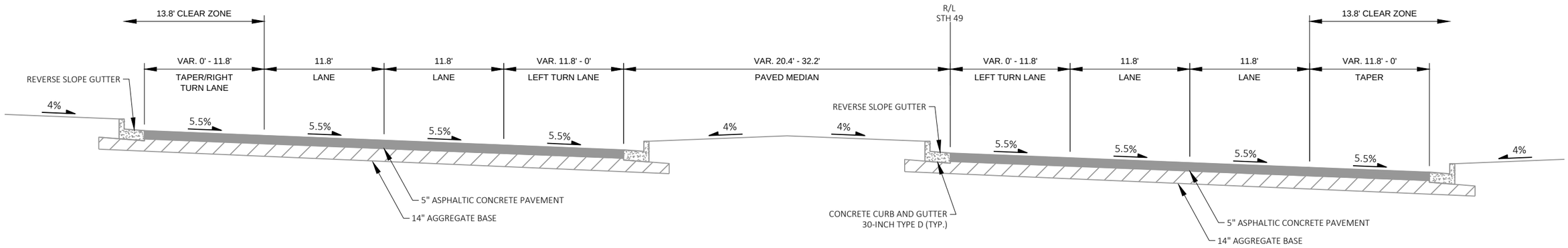
PLOT DATE : 7/6/2023 9:22 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



EXISTING TYPICAL SECTION STH 49/STH 110

STA 290+76.50 - STA 291+20

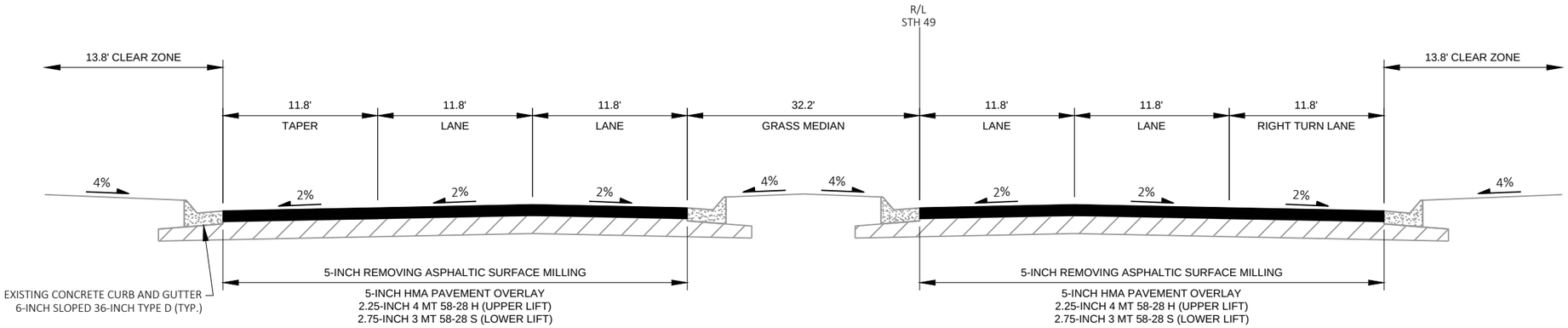


EXISTING TYPICAL SECTION STH 49/STH 110

STA 291+20 - STA 297+31.46

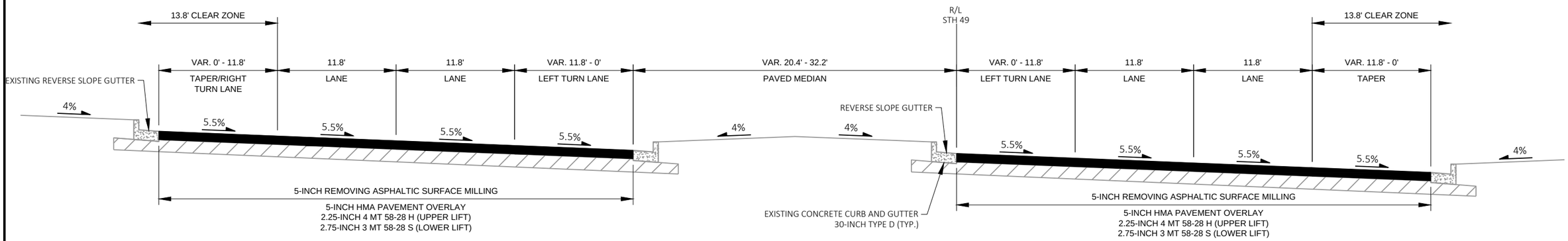
PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 10	E

2



FINISHED TYPICAL SECTION STH 49/STH 110

STA 290+76.50 - STA 291+20



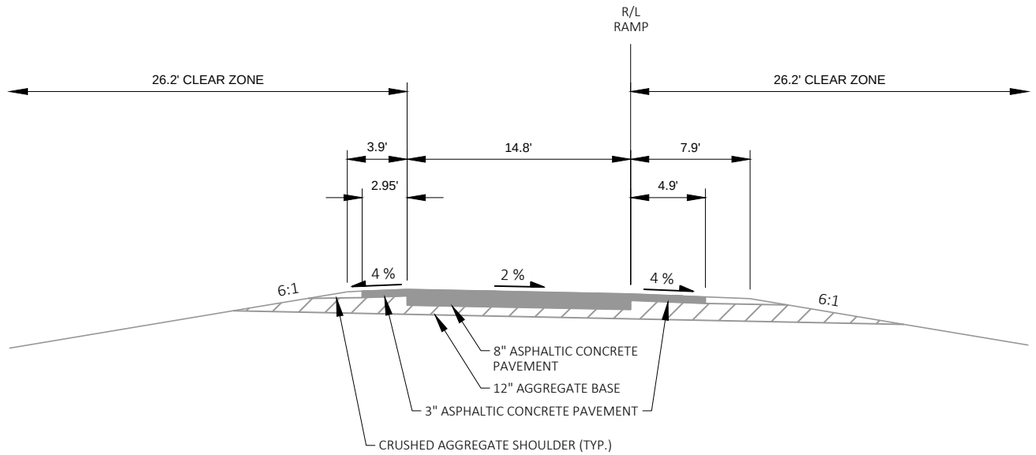
FINISHED TYPICAL SECTION STH 49/STH 110

STA 291+20 - STA 297+31.46

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 11	E

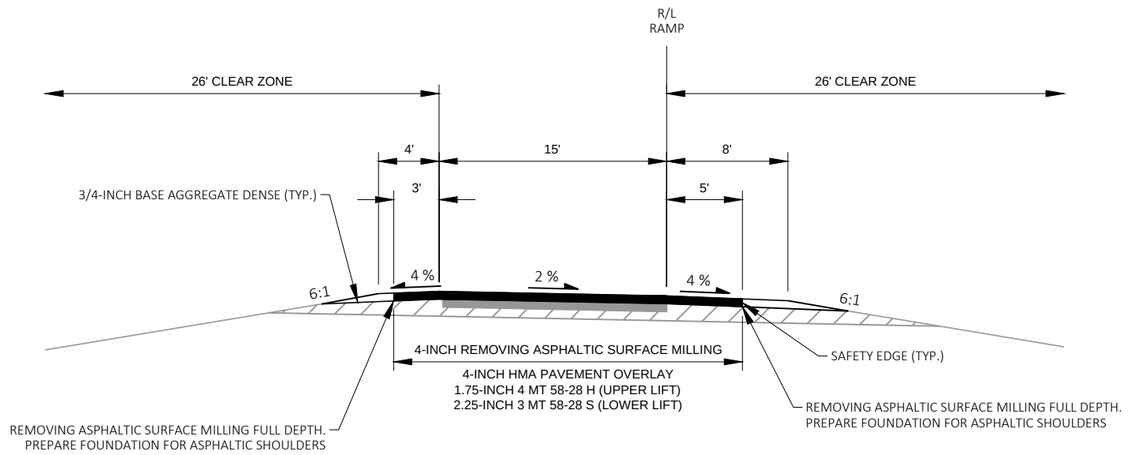
FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 08
PLOT DATE : 7/6/2023 9:23 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



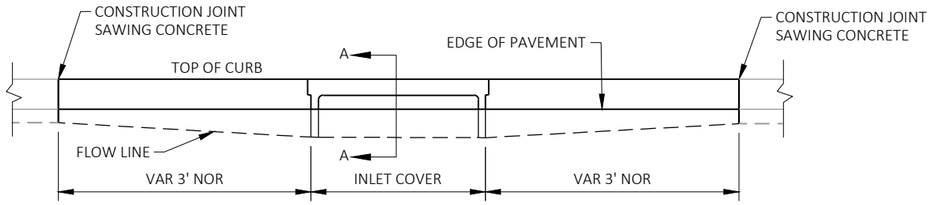
EXISTING TYPICAL SECTION USH 10 RAMP

STA 12+83.30 - STA 21+22.07 (RAMP 49-1)
STA 30+72 - STA 40+03 (RAMP 49-2)
STA 50+58.52 - STA 60+34 (RAMP 49-3)
STA 70+18.56 - STA 77+95.07 (RAMP 49-4)

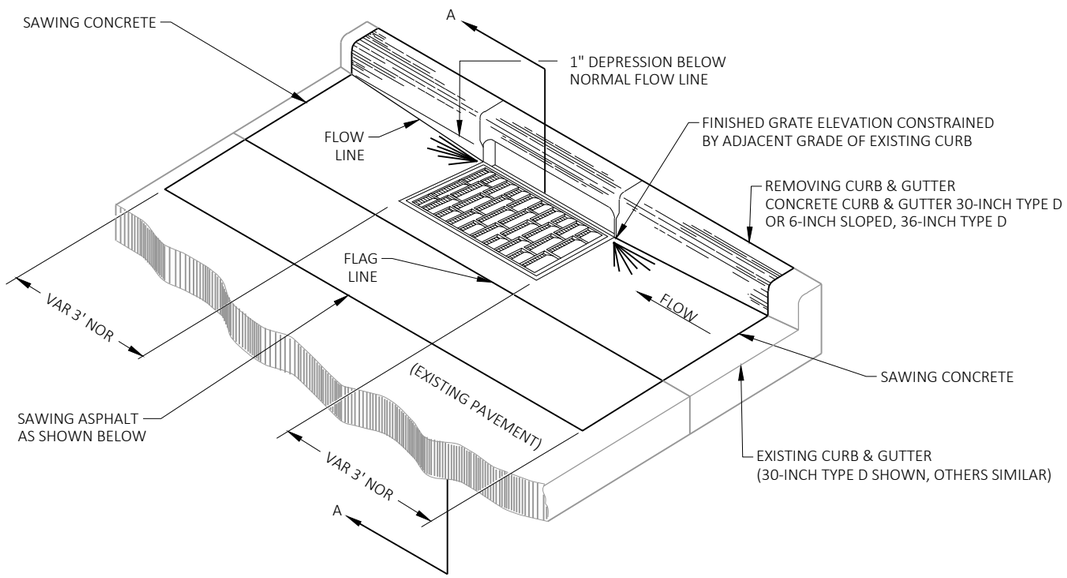


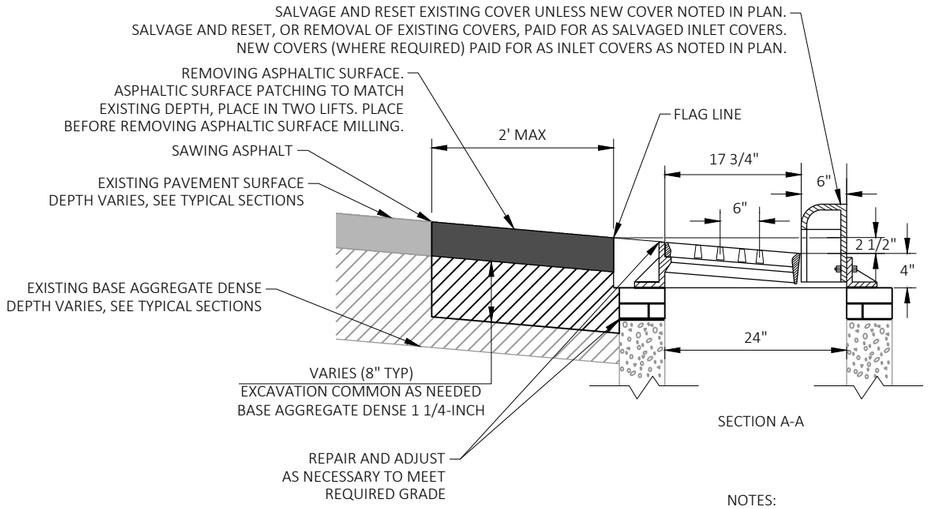
FINISHED TYPICAL SECTION USH 10 RAMP

STA 12+83.30 - STA 21+22.07 (RAMP 49-1)
STA 30+72 - STA 40+03 (RAMP 49-2)
STA 50+58.52 - STA 60+34 (RAMP 49-3)
STA 70+18.56 - STA 77+95.07 (RAMP 49-4)



ELEVATION

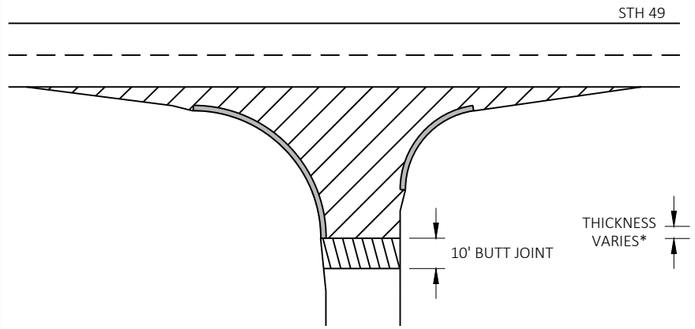




NOTES:
ADJUST INLETS PRIOR TO FINAL ASPHALT OVERLAY.
REMOVING ASPHALTIC SURFACE TO BE PAID FOR AS EXCAVATION COMMON.

ADJUSTING INLET COVERS DETAIL

(TYPE 3-H INLET SHOWN, OTHERS SIMILAR)

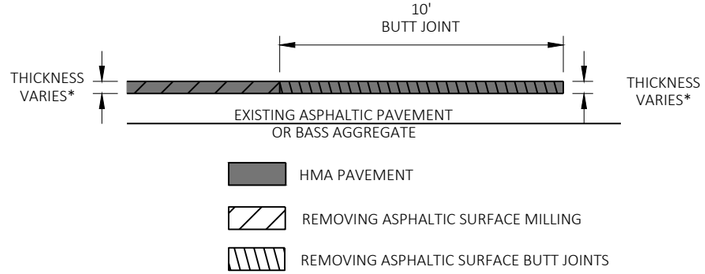


NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS

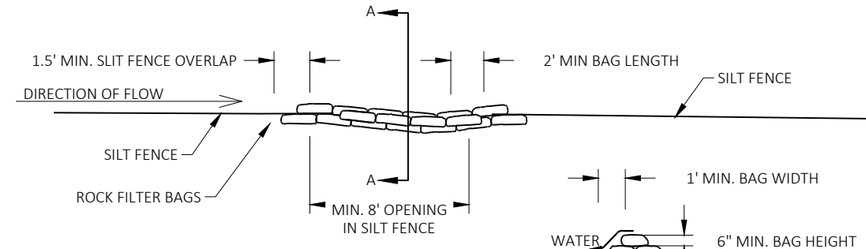
WITH CURB AND GUTTER

DESERT RD



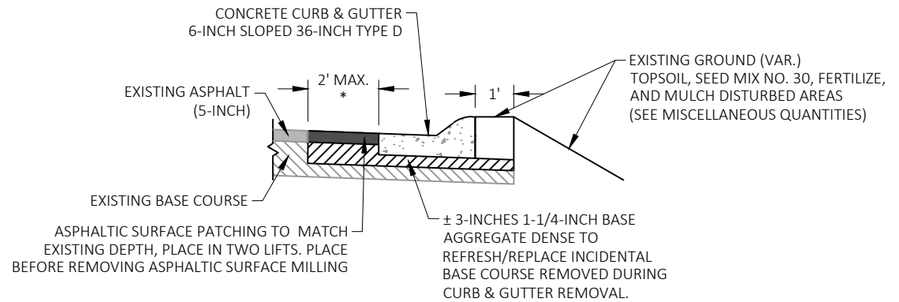
BUTT JOINT

*5"	*4"	*2.25"
BEGINNING OF PROJECT	RAMP 49-1	DESERT RD
	RAMP 49-2	
	RAMP 49-3	
	RAMP 49-4	



NOTE:
17 ROCK BAGS MINIMUM PER 8' OPENING.

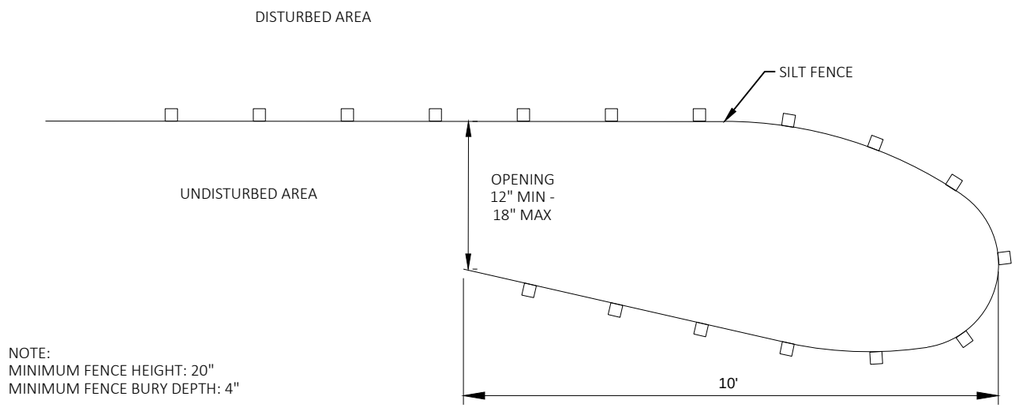
ROCK BAGS USED FOR SILT FENCE RELIEF



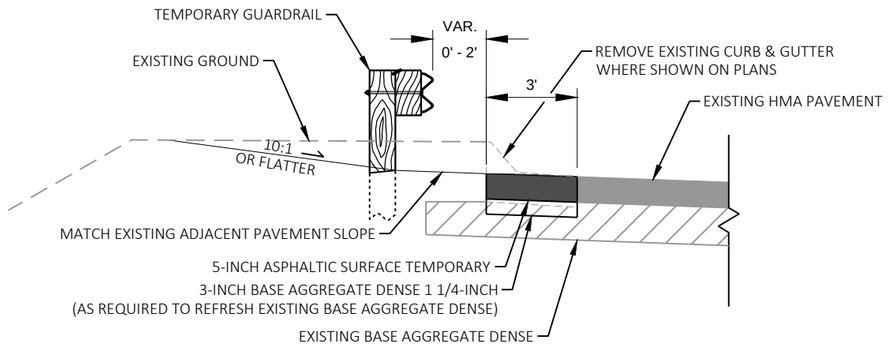
*REMOVING ASPHALTIC SURFACE AND BASE AGGREGATE TO BE PAID FOR AS EXCAVATION COMMON

CONCRETE CURB & GUTTER REPLACEMENT DETAIL

PROJECT NO: 6210-01-74/1510-02-74	HWY: STH 49	COUNTY: WAUPACA	CONSTRUCTION DETAILS	SHEET 13	E

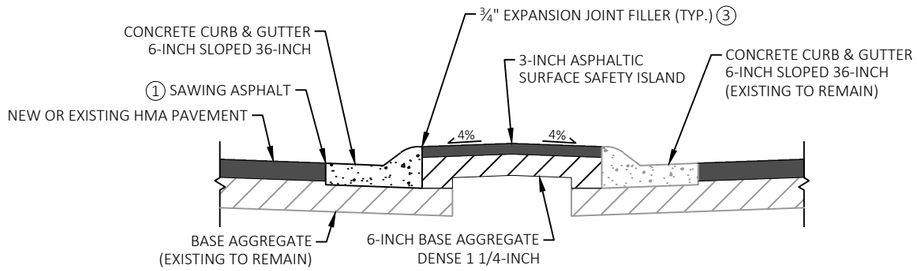


AMPHIBIAN AND REPTILE EXCLUSION FENCING DETAIL



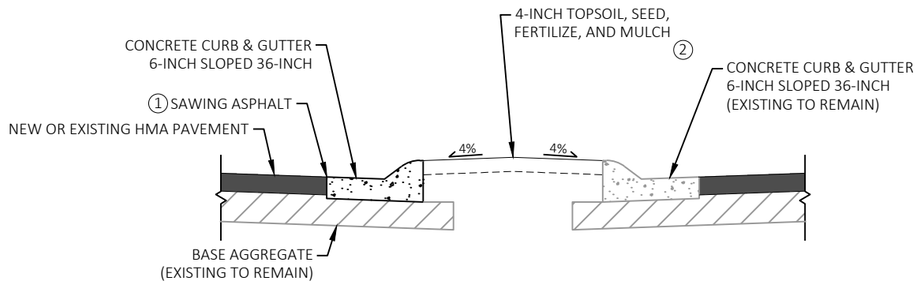
TEMPORARY PAVEMENT & TEMPORARY GUARDRAIL

(OUTSIDE INSTALLATION SHOWN, MEDIAN INSTALLATION SIMILAR)



ASPHALTIC SURFACE SAFETY ISLAND

STA 283+65 LT - STA 285+21 LT
STA 310+80 RT - STA 314+74 RT



GRASS MEDIAN

STA 285+21 LT - STA 286+08 LT
STA 290+25 LT - STA 291+23 LT
STA 297+15 LT - STA 299+05 LT

NOTES:

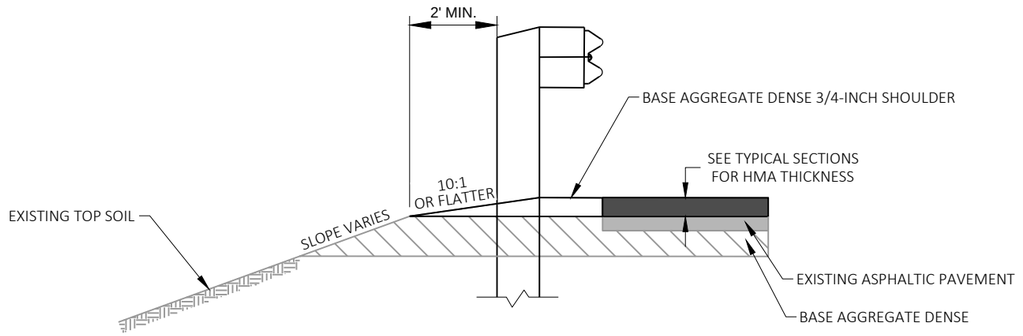
① PROVIDE SAWCUT PRIOR TO REMOVING ASPHALTIC SURFACE TEMPORARY. PLACE REPLACEMENT CURB AND GUTTER USING THE SAWCUT EDGE TO FORM THE FLANGE.

② FULL WIDTH GRASS MEDIAN RESTORATION SHOWN. WIDTH OF RESTORATION VARIES. MATCH EXISTING UNDISTURBED GRASS SURFACE. SEE PLAN DETAILS FOR MORE INFORMATION.

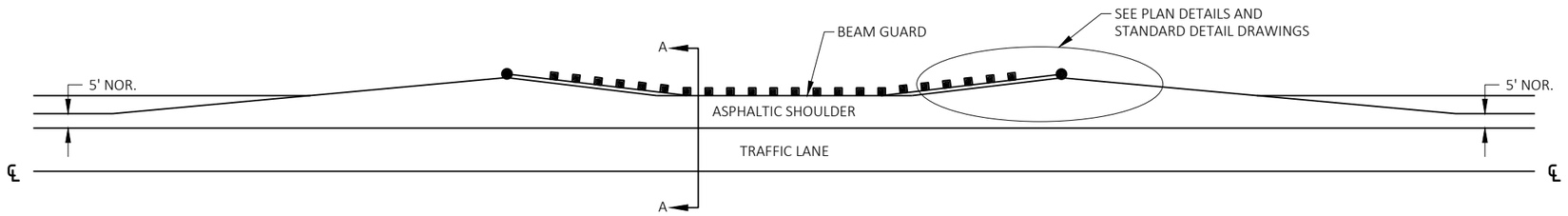
③ PLACE JOINT FILLER AS SHOWN ON SDD "CONCRETE MEDIAN NOSE".

MEDIAN RESTORATION DETAILS

2



SECTION A-A

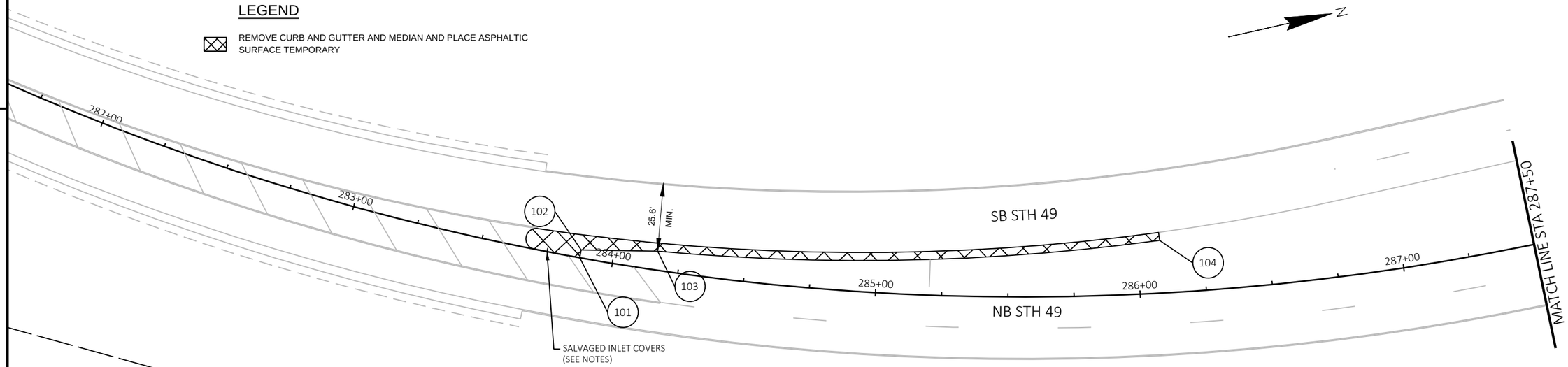


DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD

2

LEGEND

REMOVE CURB AND GUTTER AND MEDIAN AND PLACE ASPHALTIC SURFACE TEMPORARY



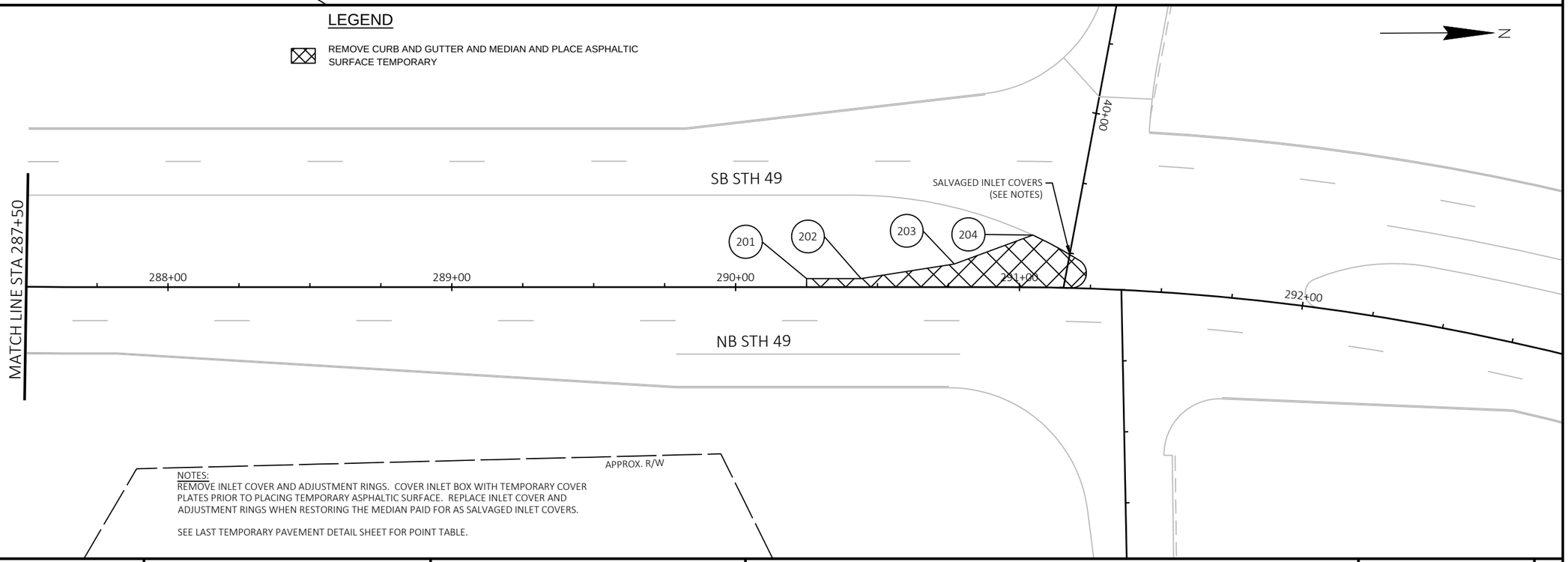
NOTES:
REMOVE INLET COVER AND ADJUSTMENT RINGS. COVER INLET BOX TEMPORARY COVER PLATES PRIOR TO PLACING TEMPORARY ASPHALTIC SURFACE. REPLACE INLET COVER AND ADJUSTMENT RINGS WHEN RESTORING THE MEDIAN PAID FOR AS SALVAGED INLET COVERS.

SEE LAST TEMPORARY PAVEMENT DETAIL SHEET FOR POINT TABLE.

2

LEGEND

REMOVE CURB AND GUTTER AND MEDIAN AND PLACE ASPHALTIC SURFACE TEMPORARY

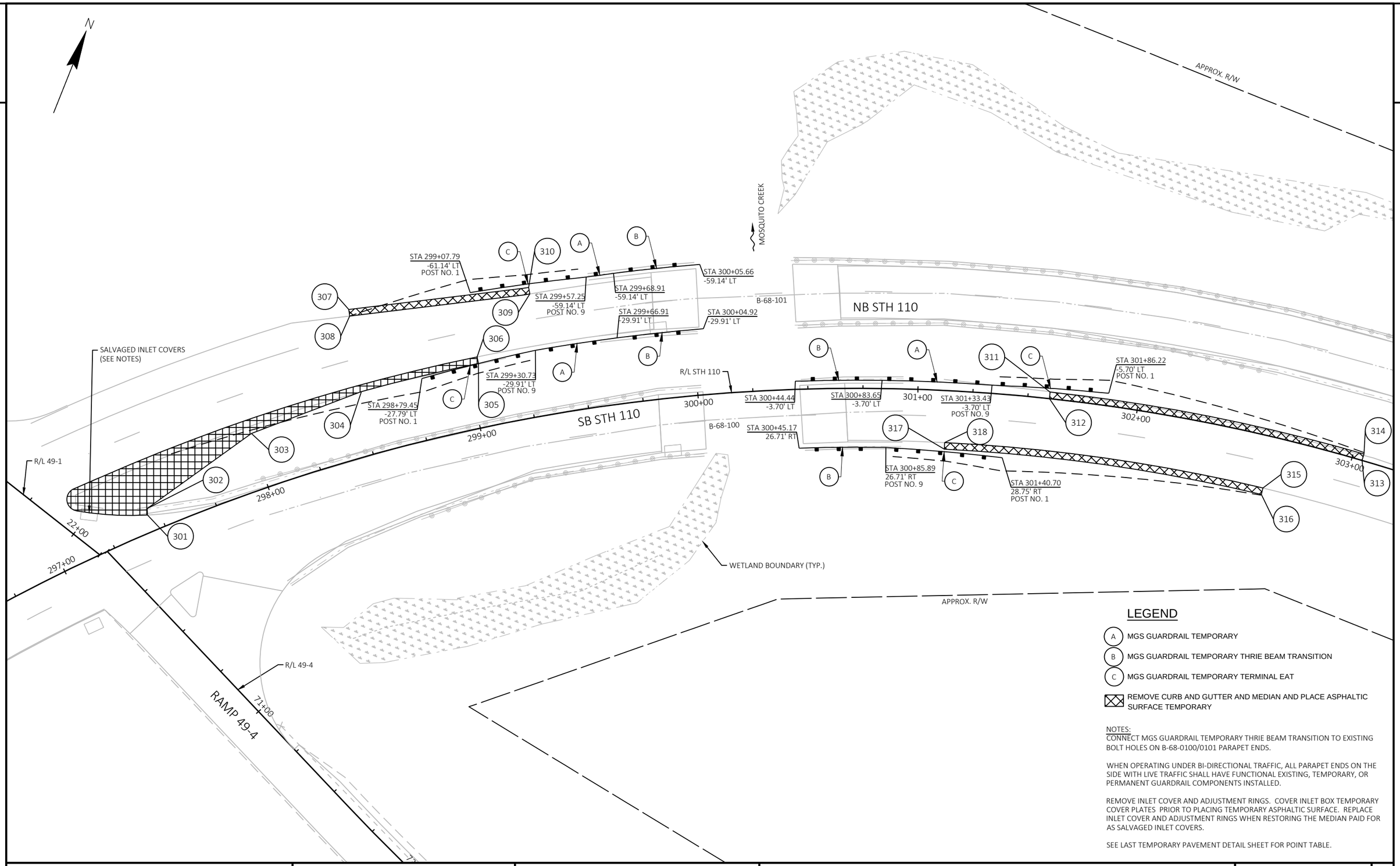


NOTES:
REMOVE INLET COVER AND ADJUSTMENT RINGS. COVER INLET BOX WITH TEMPORARY COVER PLATES PRIOR TO PLACING TEMPORARY ASPHALTIC SURFACE. REPLACE INLET COVER AND ADJUSTMENT RINGS WHEN RESTORING THE MEDIAN PAID FOR AS SALVAGED INLET COVERS.

SEE LAST TEMPORARY PAVEMENT DETAIL SHEET FOR POINT TABLE.

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	PLAN DETAILS: TEMPORARY PAVEMENT DETAILS	SHEET 16	E

2



LEGEND

- (A) MGS GUARDRAIL TEMPORARY
- (B) MGS GUARDRAIL TEMPORARY THRIE BEAM TRANSITION
- (C) MGS GUARDRAIL TEMPORARY TERMINAL EAT
- REMOVE CURB AND GUTTER AND MEDIAN AND PLACE ASPHALTIC SURFACE TEMPORARY

NOTES:

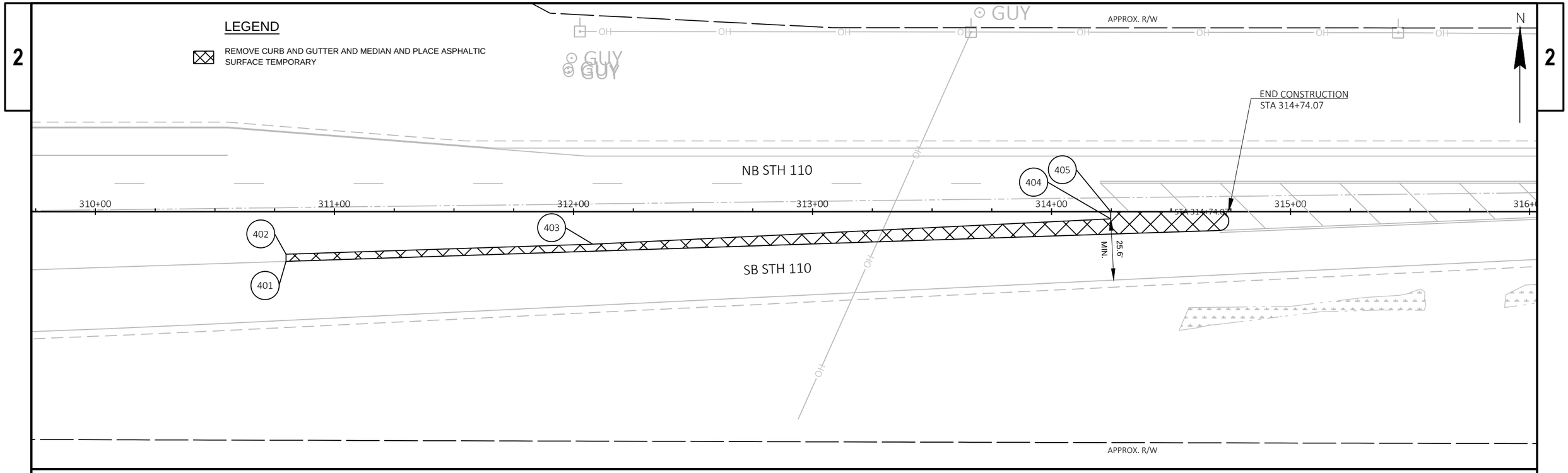
CONNECT MGS GUARDRAIL TEMPORARY THRIE BEAM TRANSITION TO EXISTING BOLT HOLES ON B-68-0100/0101 PARAPET ENDS.

WHEN OPERATING UNDER BI-DIRECTIONAL TRAFFIC, ALL PARAPET ENDS ON THE SIDE WITH LIVE TRAFFIC SHALL HAVE FUNCTIONAL EXISTING, TEMPORARY, OR PERMANENT GUARDRAIL COMPONENTS INSTALLED.

REMOVE INLET COVER AND ADJUSTMENT RINGS. COVER INLET BOX TEMPORARY COVER PLATES PRIOR TO PLACING TEMPORARY ASPHALTIC SURFACE. REPLACE INLET COVER AND ADJUSTMENT RINGS WHEN RESTORING THE MEDIAN PAID FOR AS SALVAGED INLET COVERS.

SEE LAST TEMPORARY PAVEMENT DETAIL SHEET FOR POINT TABLE.

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	PLAN DETAILS: B-68-0100/0101 TEMPORARY GUARDRAIL	SHEET 17	E



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
101	283+87.54	0.00	582170.244	306261.774
102	283+87.54	3.00 LT	582167.479	306262.938
103	284+16.30	7.21 LT	582174.265	306291.043
104	286+08.45	19.91 LT	582211.985	306476.767
201	290+25.00	3.00 LT	582242.342	306889.308
202	290+44.19	3.00 LT	582242.389	306908.492
203	290+77.04	8.14 LT	582237.330	306941.360
204	291+04.56	18.35 LT	582227.231	306969.092
301	297+44.53	7.75 LT	582484.734	307548.283
302	297+45.54	10.56 LT	582483.490	307551.014
303	298+00.72	25.50 LT	582514.915	307600.144
304	298+52.30	28.91 LT	582554.286	307636.218
305	299+05.10	28.91 LT	582598.947	307667.713
306	299+05.11	31.91 LT	582597.302	307670.221
307	298+56.36	66.34 LT	582535.242	307668.725
308	298+55.96	63.37 LT	582536.676	307666.090

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
309	299+32.51	55.53 LT	582609.018	307705.624
310	299+32.50	58.53 LT	582607.449	307708.181
311	301+59.84	3.00 LT	582844.996	307751.465
312	301+59.84	0.00	582845.800	307748.575
313	303+04.76	0.00	582988.110	307774.928
314	303+04.76	3.00 LT	582987.826	307777.915
315	302+63.80	23.62 RT	582950.861	307746.662
316	302+63.80	26.62 RT	582951.294	307743.694
317	301+13.28	26.62 RT	582809.904	307709.624
318	301+13.28	23.62 RT	582808.937	307712.464
401	310+79.70	20.80 RT	583764.043	307777.295
402	310+79.70	17.80 RT	583764.042	307780.296
403	312+08.05	13.55 RT	583892.383	307784.593
404	314+24.73	3.00 RT	584109.068	307795.224
405	314+24.73	0.00 RT	584109.067	307798.220

2

LEGEND

REJECT GUTTER

XXXXXXX PROVIDE SAWCUT PRIOR TO REMOVING ASPHALTIC SURFACE TEMPORARY. USE THE SAWCUT EDGE TO FORM THE FLAG OF THE REPLACEMENT CURB AND GUTTER.

NOTES:
MATCH EXISTING CURB & GUTTER AND EDGE OF PAVEMENT.

SEE CONSTRUCTION DETAILS FOR ASPHALTIC SURFACE SAFETY ISLAND DETAILS.

SEE EROSION CONTROL PLANS FOR GRASS MEDIAN RESTORATION DETAILS.

FLOW ARROWS DENOTE FLOW DIRECTION OF THE CURB AND GUTTER AND ARE OFFSET FOR CLARITY.

N

283+00

R4'

+70
4.9' LT

+70
3.0' LT

+88
3.0' LT

284+00

R832'

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D
(MATCH EXISTING)

SB STH 49

+08
19.9' LT

285+00

286+00

287+00

MATCH LINE STA 287+50

RECONSTRUCTING INLETS
REPLACE SALVAGED INLET COVER
ELEV: 763.59

ASPHALTIC SURFACE SAFETY ISLAND

NB STH 49

STA 285+21
END ASPHALTIC SURFACE SAFETY ISLAND
BEGIN GRASS MEDIAN

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D
(MATCH EXISTING)

N

40+00

SB STH 49

R150'

RECONSTRUCTING INLETS
REPLACE SALVAGED INLET COVER
ELEV: 762.60

+19
7.2' LT

+01
16.8' LT

CONCRETE MEDIAN
SLOPED NOSE TYPE 2

R5'

+25
3.0' LT

291+00

292+00

+18
3.0' LT

MATCH LINE STA 287+50

288+00

289+00

290+00

NB STH 49

51+00

LEGEND

REJECT GUTTER

XXXXXXX PROVIDE SAWCUT PRIOR TO REMOVING ASPHALTIC SURFACE TEMPORARY. USE THE SAWCUT EDGE TO FORM THE FLAG OF THE REPLACEMENT CURB AND GUTTER.

NOTES:
MATCH EXISTING CURB & GUTTER AND EDGE OF PAVEMENT.

SEE CONSTRUCTION DETAILS FOR ASPHALTIC SURFACE SAFETY ISLAND DETAILS.

SEE EROSION CONTROL PLANS FOR GRASS MEDIAN RESTORATION DETAILS.

FLOW ARROWS DENOTE FLOW DIRECTION OF THE CURB AND GUTTER AND ARE OFFSET FOR CLARITY.

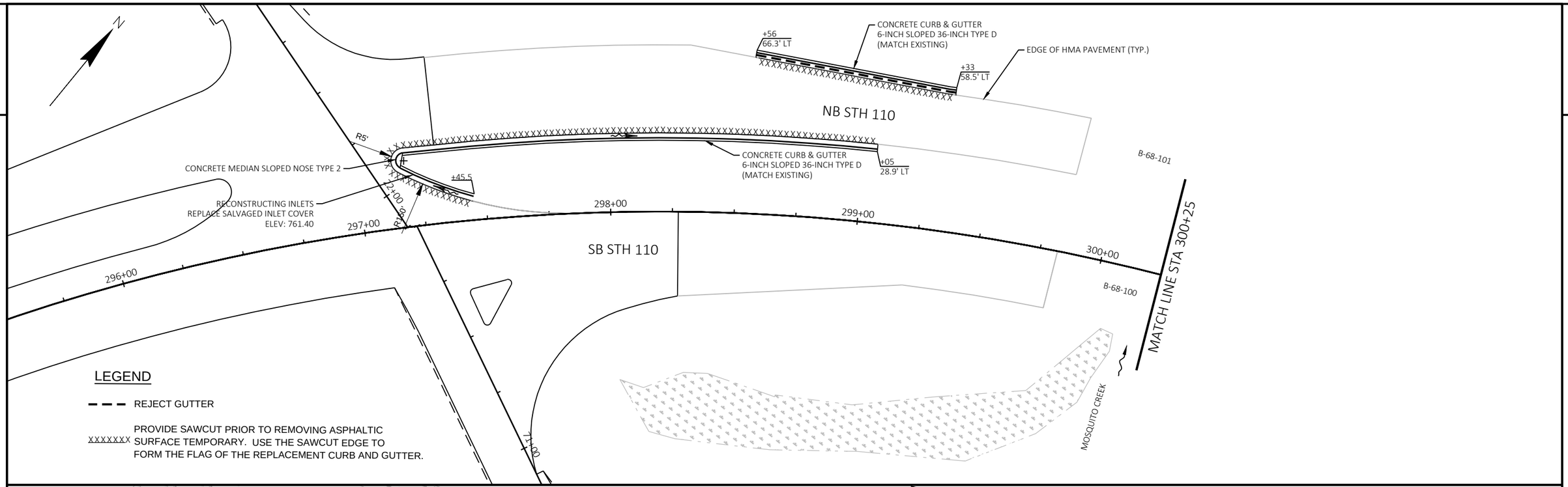
PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	PLAN DETAILS: STH 49 MEDIAN RESTORATION	SHEET 19	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 9:33 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:40 FT

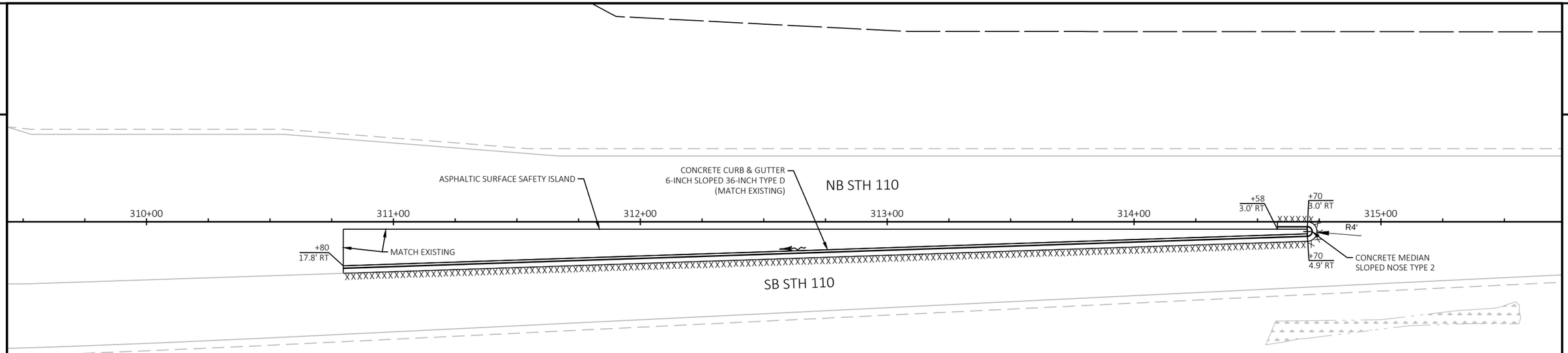
WISDOT/CADDS SHEET 44

2



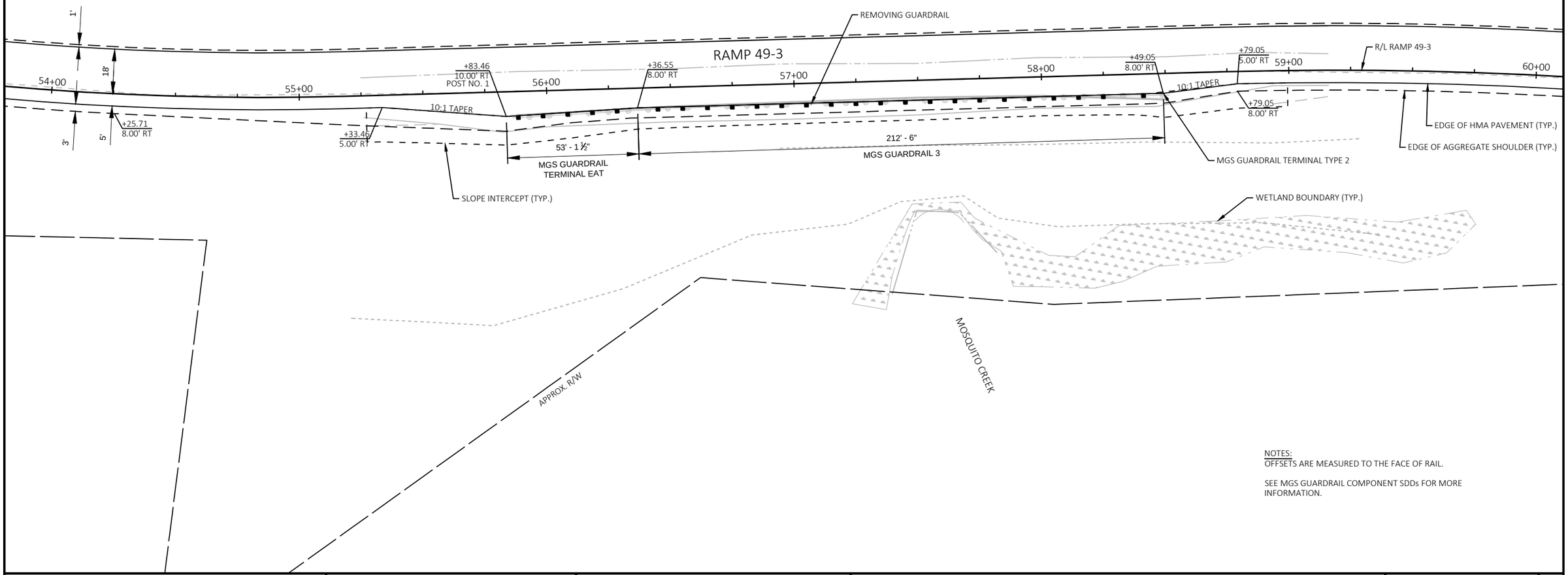
PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	PLAN DETAILS: STH 110 MEDIAN RESTORATION	SHEET 20	E

2


ASPHALTIC SURFACE SAFETY ISLAND
CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D
(MATCH EXISTING)
NB STH 110
310+00
311+00
312+00
313+00
314+00
315+00
+58
3.0' RT
+70
3.0' RT
XXXXXX
R4'
+80
17.8' RT
MATCH EXISTING
+70
4.9' RT
CONCRETE MEDIAN
SLOPED NOSE TYPE 2
XXXXX

2

N



NOTES:
OFFSETS ARE MEASURED TO THE FACE OF RAIL.

SEE MGS GUARDRAIL COMPONENT SDDs FOR MORE INFORMATION.

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	PLAN DETAILS: RAMP 49-3 GUARDRAIL	SHEET 22	E

2

2

LEGEND

TOPSOIL, SEEDING, FERTILIZER, AND MULCH

SILT FENCE

ROCK BAGS (FOR SILT FENCE RELIEF)

SLOPE INTERCEPT

INLET PROTECTION TYPE C

SURFACE WATER FLOW

N

283+00

284+00

285+00

286+00

287+00

SB STH 49

NB STH 49

SLOPE INTERCEPT (TYP.)

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D (TYP.)

MATCH LINE STA 287+50

MATCH LINE STA 287+50

288+00

289+00

290+00

291+00

292+00

SB STH 49

NB STH 49

SLOPE INTERCEPT (TYP.)

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D (TYP.)

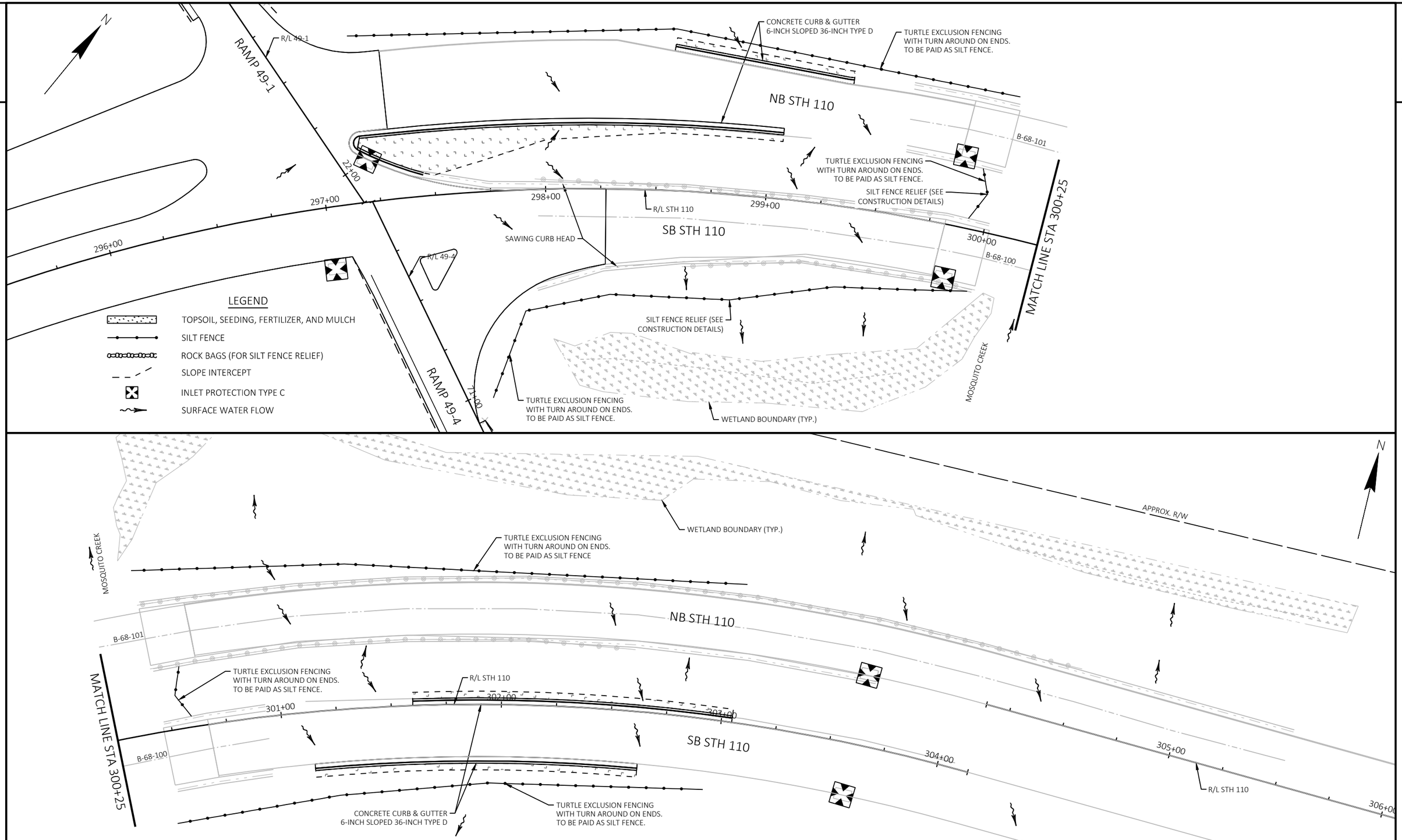
40+00

51+00

N

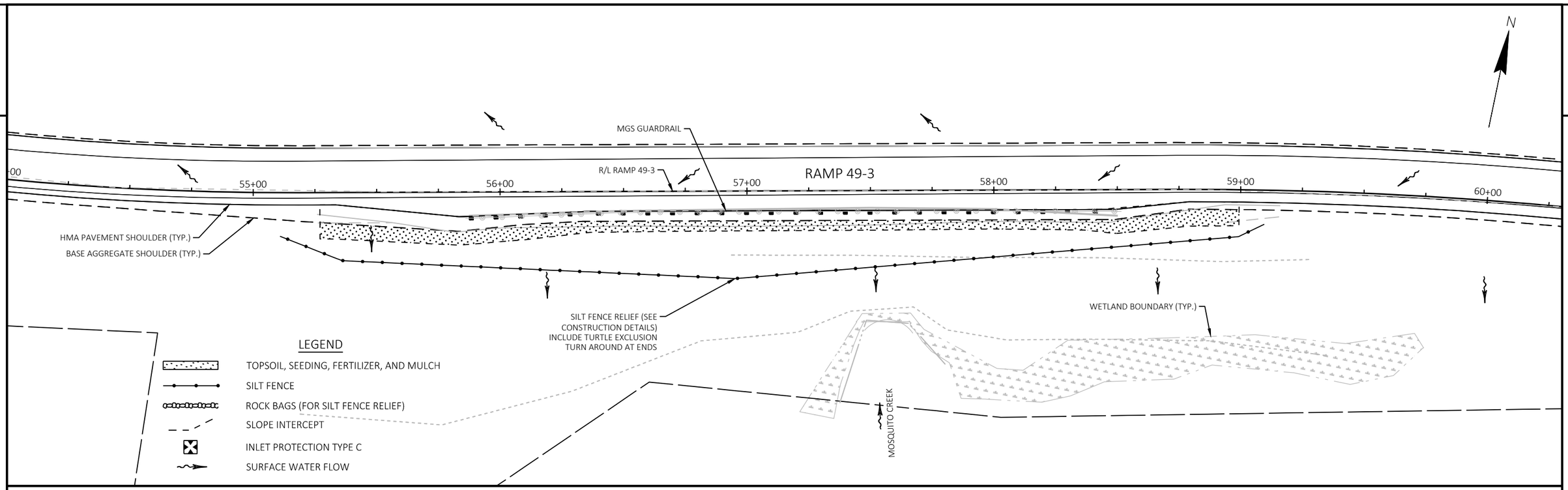
PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	EROSION CONTROL DETAILS	SHEET 23	E

2



PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	EROSION CONTROL DETAILS	SHEET 24	E

2



PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	EROSION CONTROL DETAILS	SHEET 25	E

2

TRAFFIC CONTROL NOTES (APPLIES TO ALL STAGES)

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

DURING STAGING, ALL EXISTING SIGNS SHALL REMAIN IN THE FIELD EXCEPT AS NOTED ON THE STAGING PLANS.

STOP SIGNS THAT ARE MOVED SHALL HAVE TWO ORANGE FLAGS (16" X 16") ATTACHED TO THE MOVED STOP SIGN.

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

PAVEMENT MARKING WHICH MAY CONFLICT WITH TRAFFIC CONTROL SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

SEE SPECIAL PROVISIONS FOR TRAFFIC AND STAGING REQUIREMENTS.

STAGE 1A

1. CLOSE THE OUTSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND SHIFT TRAFFIC TO THE INSIDE LANES.
2. CONSTRUCT SPOT CURB & GUTTER REPAIRS ALONG THE OUTSIDE LANES OF STH 49.
3. ADJUST INLETS ALONG THE OUTSIDE LANES OF STH 49.
4. INSTALL MGS GUARDRAIL TEMPORARY AT THE PARAPET ENDS OF B-68-100/101 ALONG THE OUTSIDE OF STH 110.

STAGE 1B

1. CLOSE THE INSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND SHIFT TRAFFIC TO THE OUTSIDE LANES.
2. CONSTRUCT SPOT CURB & GUTTER REPAIRS IN THE MEDIAN.
3. ADJUST INLETS IN THE MEDIAN.
4. REMOVE THE CURB & GUTTER IN THE STH 49 AND STH 110 MEDIAN AND PLACE TEMPORARY ASPHALTIC SURFACE AS SHOWN IN THE PLANS.
5. INSTALL MGS GUARDRAIL TEMPORARY AT THE PARAPET ENDS OF B-68-100/101 IN THE MEDIAN OF STH 110.

STAGE 2A

1. SHIFT TRAFFIC TO THE SOUTHBOUND LANES OF STH 49 AND THE NORTHBOUND LANES OF STH 110 USING TWO-WAY BI-DIRECTIONAL TRAFFIC THROUGH THE USH 10 INTERCHANGE.
2. REMOVE PAVEMENT IN THE NORTHBOUND LANES OF STH 49 WITHIN THE INTERCHANGE AREA.

STAGE 2B

1. CLOSE THE EB ENTRANCE RAMP (RAMP 49-3) AND THE WB EXIT RAMP (RAMP 49-4) FOR A MAXIMUM OF 10 CALENDAR DAYS. SEE SPECIAL PROVISIONS FOR ADDITIONAL RESTRICTIONS ON RAMP CLOSURES. RAMP TRAFFIC WILL FOLLOW THE RAMP DETOURS.
2. CONSTRUCT THE NORTHBOUND STH 49 PAVEMENT, REMOVE AND CONSTRUCT THE CLOSED RAMP PAVEMENTS, INSTALL AGGREGATE SHOULDERS ON THE RAMPS, AND INSTALL MGS GUARDRAIL ALONG RAMP 49-3.

STAGE 3A

1. SHIFT TRAFFIC TO THE NORTHBOUND LANES OF STH 49 AND THE SOUTHBOUND LANES OF STH 110 USING TWO-WAY BI-DIRECTIONAL TRAFFIC THROUGH THE USH 10 INTERCHANGE.
2. REMOVE THE SOUTHBOUND LANES OF STH 49 WITHIN THE INTERCHANGE AREA.

STAGE 3B

1. CLOSE THE WB ENTRANCE RAMP (RAMP 49-1) AND THE EB EXIT RAMP (RAMP 49-2) FOR A MAXIMUM OF 10 CALENDAR DAYS. SEE SPECIAL PROVISIONS FOR ADDITIONAL RESTRICTIONS ON RAMP CLOSURES. RAMP TRAFFIC WILL FOLLOW THE RAMP DETOURS.
2. CONSTRUCT THE SOUTHBOUND STH 49 PAVEMENT, REMOVE AND CONSTRUCT THE CLOSED RAMP PAVEMENTS, AND INSTALL AGGREGATE SHOULDERS ON THE RAMPS.

STAGE 4A

1. CLOSE THE INSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND SHIFT TRAFFIC TO THE OUTSIDE LANES.
2. REMOVE THE TEMPORARY PAVEMENT IN THE MEDIAN AND RECONSTRUCT THE CONCRETE CURB & GUTTER AND MEDIAN SURFACE.
3. REMOVE THE MEDIAN MGS GUARDRAIL TEMPORARY AND REPLACE THE CURB & GUTTER.

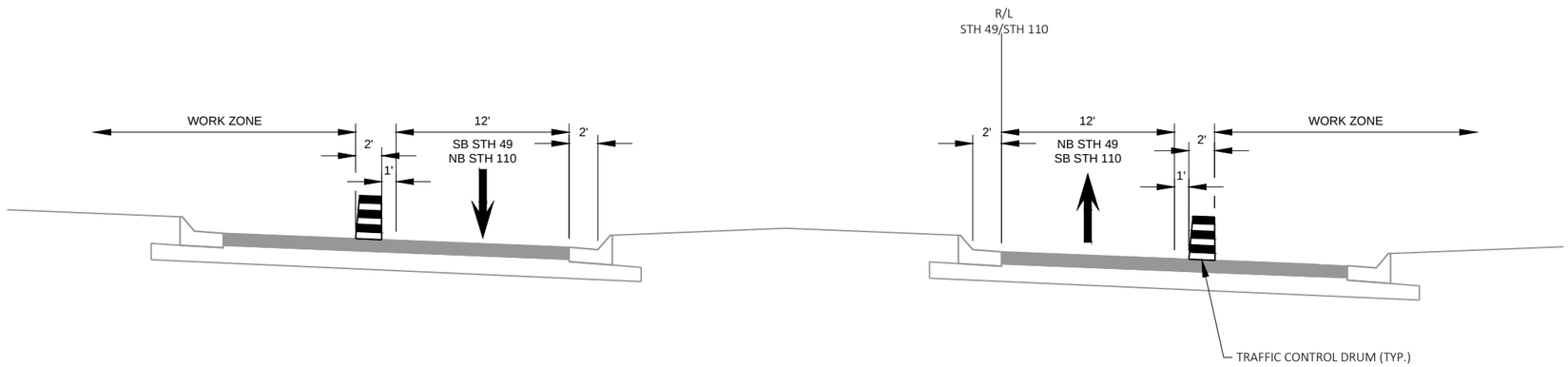
STAGE 4B

1. CLOSE THE OUTSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND SHIFT TRAFFIC TO THE INSIDE LANES.
2. REMOVE THE MGS GUARDRAIL TEMPORARY ON THE OUTSIDE AND REPLACE THE CURB AND GUTTER.

MILLING AND PAVING OPERATIONS

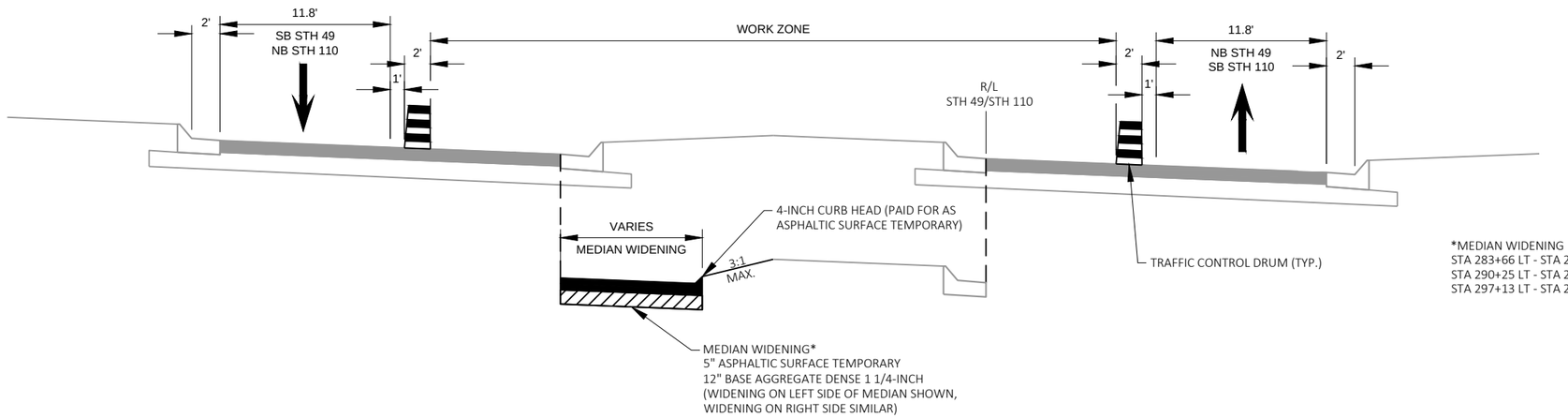
1. PROVIDE ADVANCE WARNING SIGNS AS SHOWN ON THE TRAFFIC CONTROL OVERVIEW PLANS.
2. PAVEMENT MILLING AND PAVING OUTSIDE OF THE INTERCHANGE AREA WILL BE ACCOMPLISHED USING S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION".
3. MILLING AND PAVING OPERATIONS MAY OCCUR CONCURRENTLY WITH THE STAGED INTERCHANGE WORK.

2



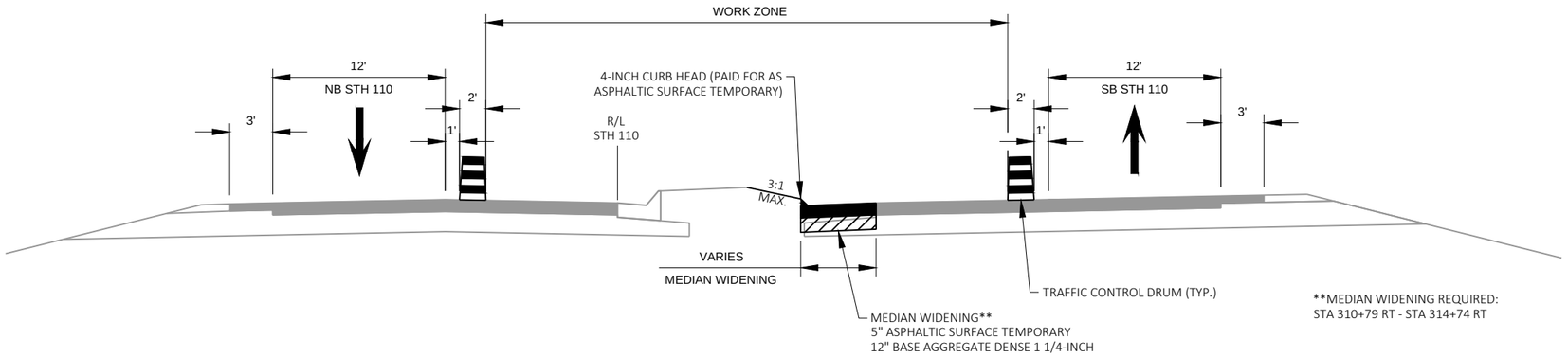
TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 1A

STA 280+30 - STA 314+75



TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 1B

STA 283+66 - STA 308+48



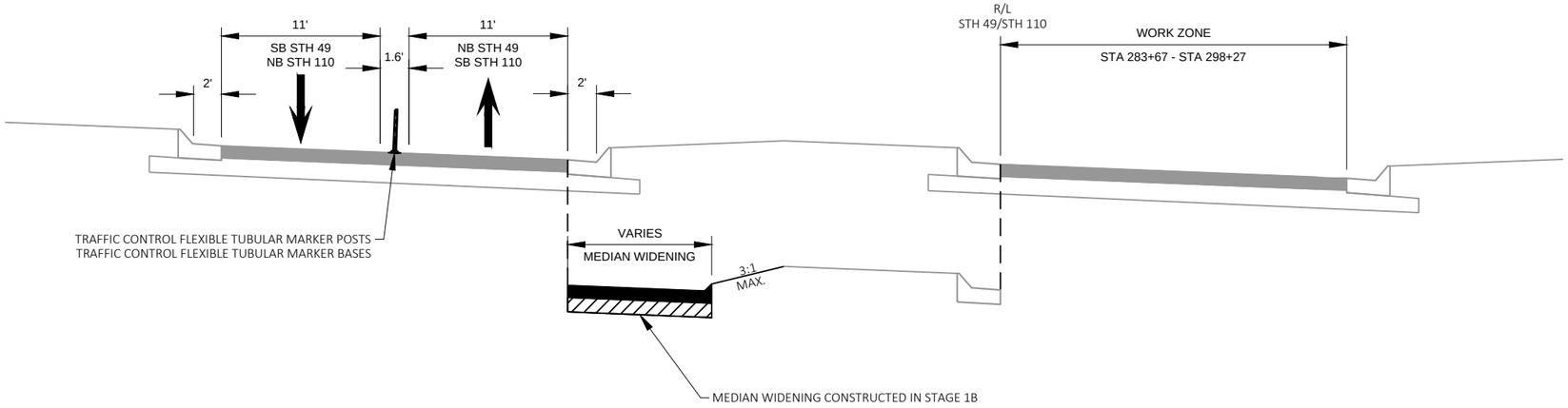
TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 1B

STA 308+48 - 314+74

PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTRL TYPICAL SECTIONS: STAGE 1A/STAGE 1B	SHEET 27	E

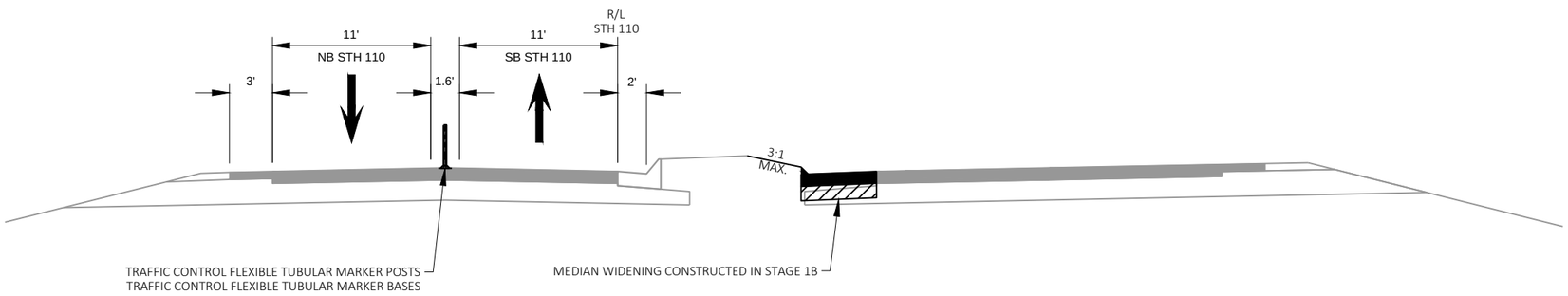
FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 9:41 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 2A/2B

STA 283+66 - STA 308+48

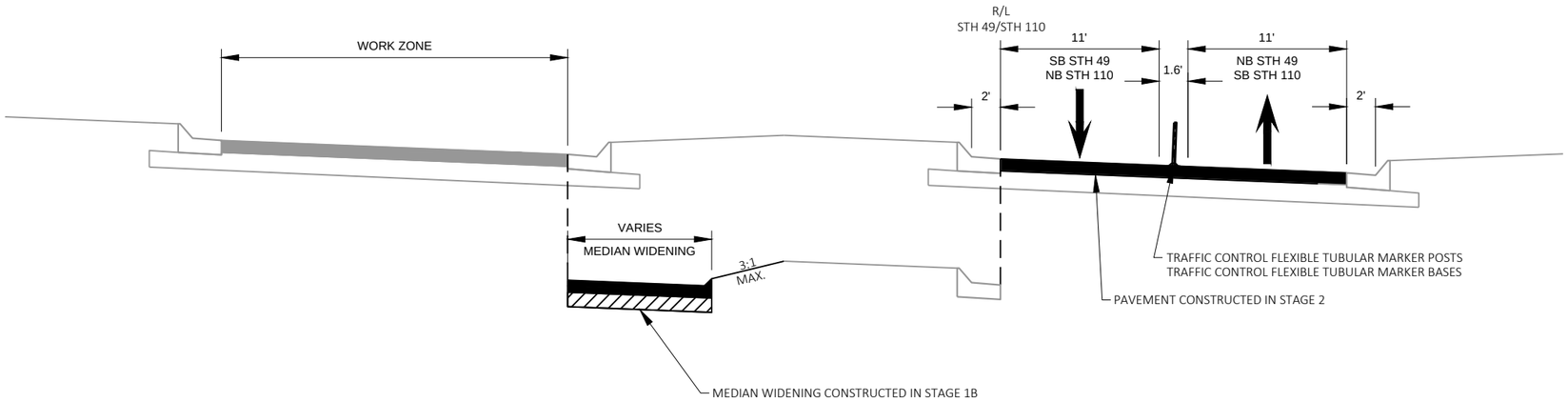


TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 2A/2B

STA 308+48 - 314+74

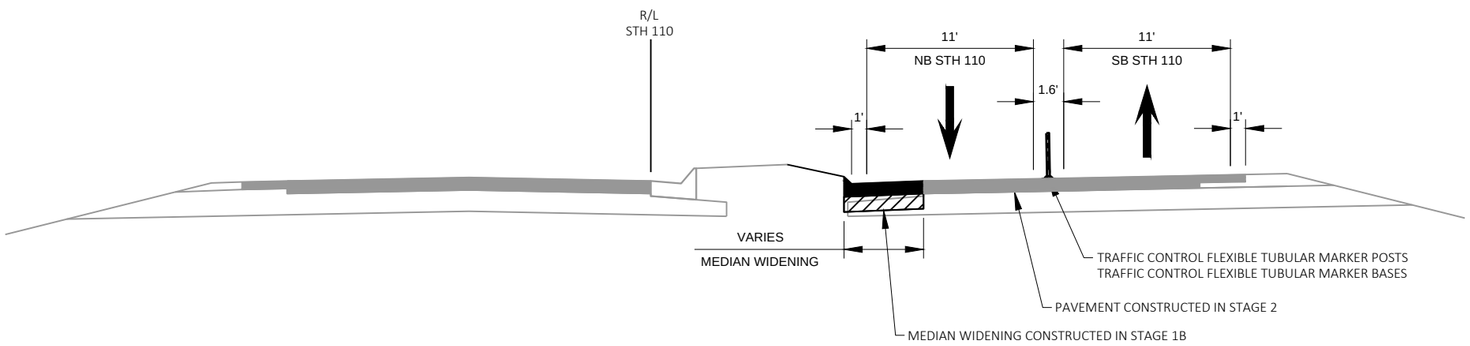
PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL TYPICAL SECTIONS: STAGE 2A/STAGE 2B	SHEET 28	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 03
PLOT DATE : 7/6/2023 9:41 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



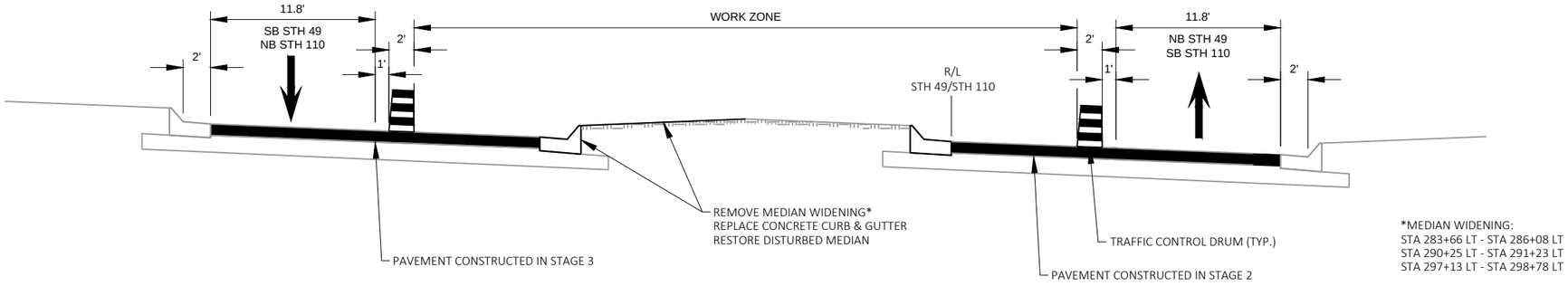
TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 3A/3B

STA 283+66 - STA 308+48



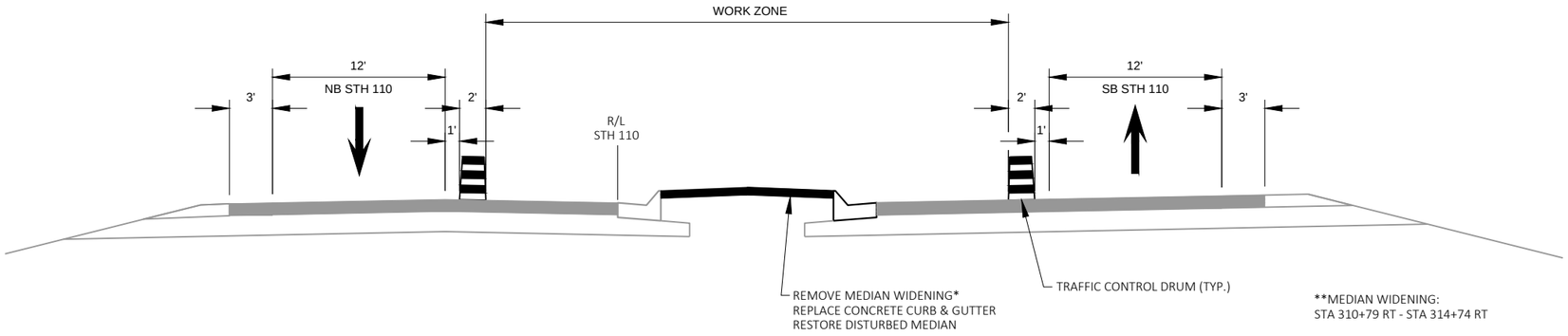
TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 3A/3B

STA 308+48 - 314+74



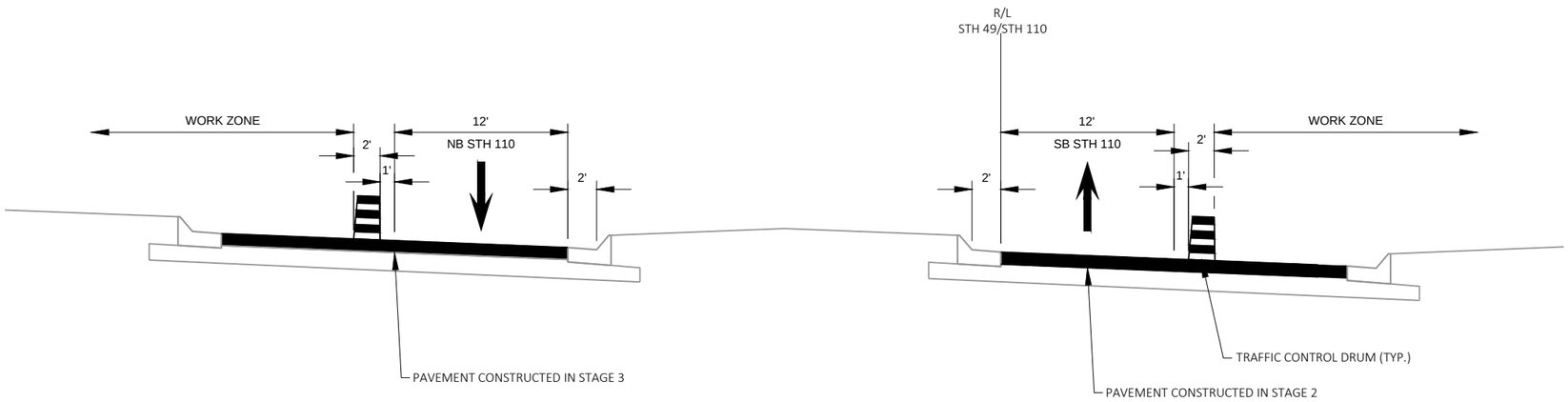
TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 4A

STA 283+66 - STA 308+48



TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 4A

STA 308+48 - 314+74



TRAFFIC CONTROL TYPICAL SECTION STH49/STH 110 - STAGE 4B

STA 283+66 - STA 308+48

PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL TYPICAL SECTIONS: STAGE 4A/STAGE 4B	SHEET 30	E

2

2

N

OLD HWY 49

DESERT RD

ARNDT RD

RAILROAD GRADE RD

USH 10

STH 49

STH 110

MOSQUITO CREEK

BROWN RD.

BEGIN PROJECT 6210-01-74
STA 228+00

END PROJECT 6210-01-74
BEGIN PROJECT 1510-02-74
STA 290+75.16

END PROJECT 1510-02-74
STA 298+27.39

RAMP 49-1

RAMP 49-2

RAMP 49-3

RAMP 49-4

225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300

15 20 35 40 55 60 75 80

HWY 49
ROAD WORK
BEGINS XXX-XX

G20-57
72"X36"

SIGN TO BE INSTALLED 7 DAYS
PRIOR TO CONSTRUCTION
START AND REMOVED ONCE
CONSTRUCTION BEGINS

HWY 49
ROAD WORK
BEGINS XXX-XX

G20-57
72"X36"

SIGN TO BE INSTALLED 7 DAYS
PRIOR TO CONSTRUCTION
START AND REMOVED ONCE
CONSTRUCTION BEGINS

ROAD WORK AHEAD
W20-1A
①

ROAD WORK 1000 FT
W20-1C
②

ROAD WORK 500 FT
W20-1D
③

ROAD WORK NEXT 1.3 MILES
G20-1
60"X24"
④

END ROAD WORK
G20-2A
48"X24"
⑤

49
M1-6
24"X24"
⑥

110
M1-6
24"X24"
⑦

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES" FOR TRAFFIC CONTROL SIGNING WHEN MILLED PAVEMENT IS PRESENT IN WORK ZONE.

SEE S.D.D. "TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL" FOR TRAFFIC CONTROL SIGNING WHEN LOOSE GRAVEL SURFACE IS PRESENT IN WORK ZONE.

SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR WORK ZONE TRAFFIC CONTROL LAYOUT.

SEE S.D.D. "MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY" FOR TRAFFIC CONTROL WHILE STRIPING.

ADVANCE WARNING SIGNS SHOWN ON THIS SHEET ARE FOR USE DURING MILLING, PAVING, AND PAVEMENT MARKING OPERATIONS. SEE STAGING DETAIL SHEETS FOR ADVANCE WARNING AND ADDITIONAL DEVICES FOR TRAFFIC CONTROL DURING STAGED CONSTRUCTION.

PROJECT NO: 6210-01-74/1510-02-74	HWY: STH 49/USH 10	COUNTY: WAUPACA	TRAFFIC CONTROL: ADVANCE WARNING OVERVIEW	SHEET 31	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\025101-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 9:44 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:600 FT

WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

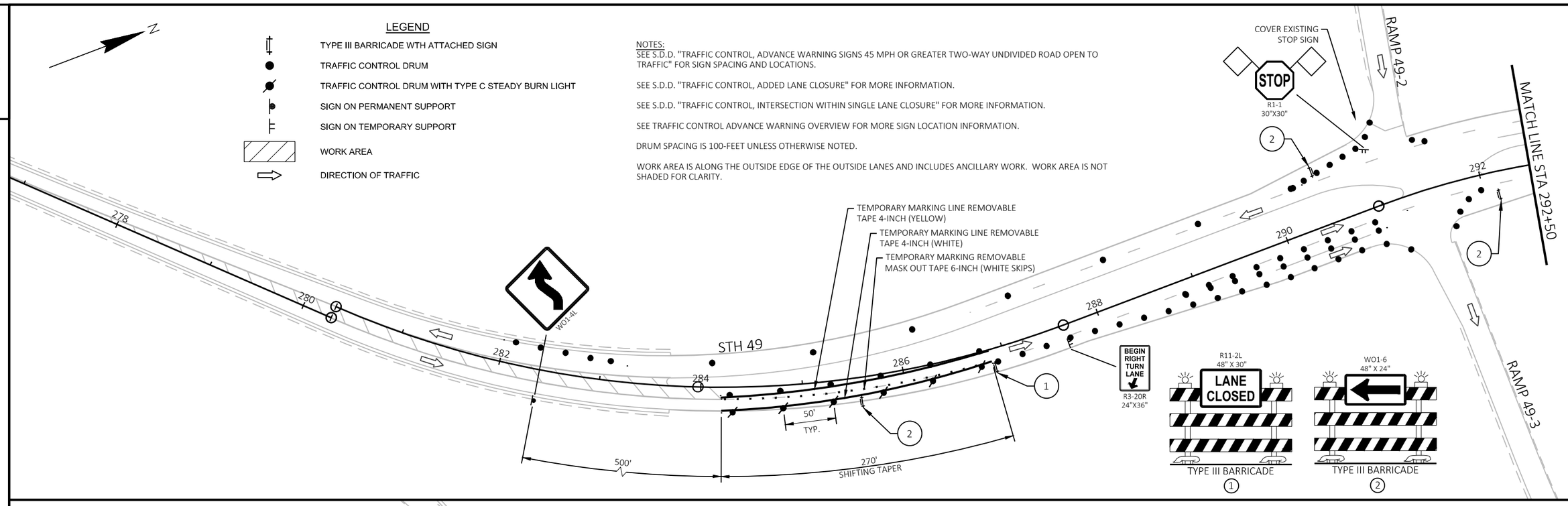
SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

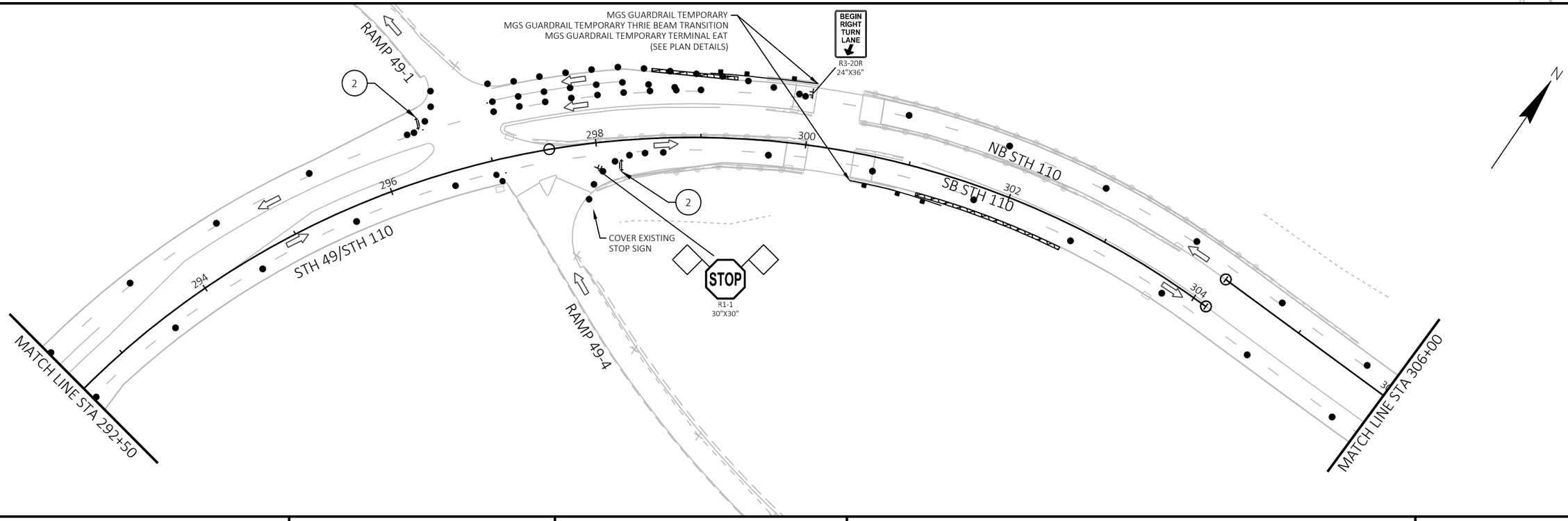
SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

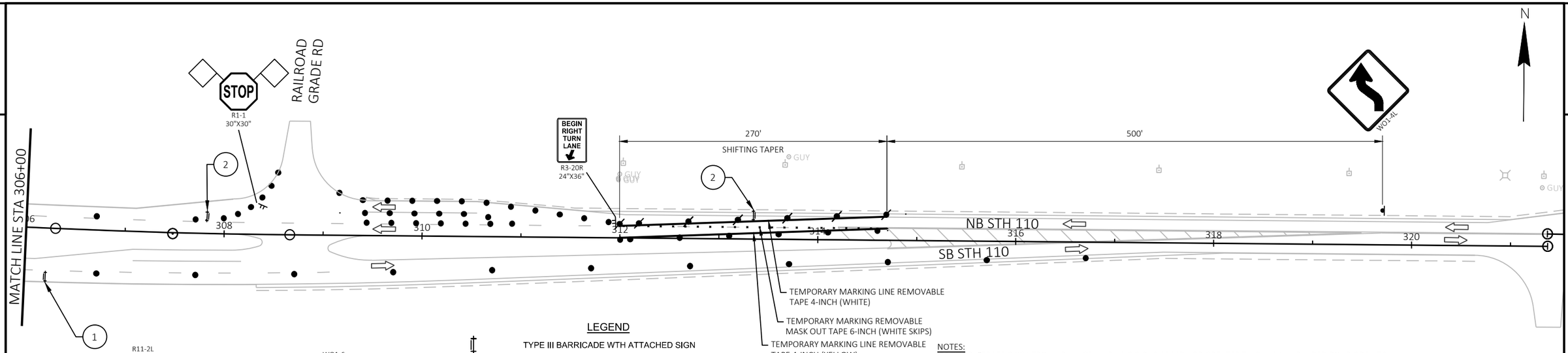
WORK AREA IS ALONG THE OUTSIDE EDGE OF THE OUTSIDE LANES AND INCLUDES ANCILLARY WORK. WORK AREA IS NOT SHADED FOR CLARITY.

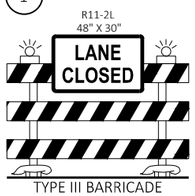


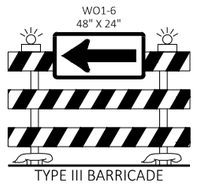


PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1A	SHEET 32	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026001-S1A.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:45 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44







LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

NOTES:

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

WORK AREA IS ALONG THE OUTSIDE EDGE OF THE OUTSIDE LANES AND INCLUDES ANCILLARY WORK. WORK AREA IS NOT SHADED FOR CLARITY.

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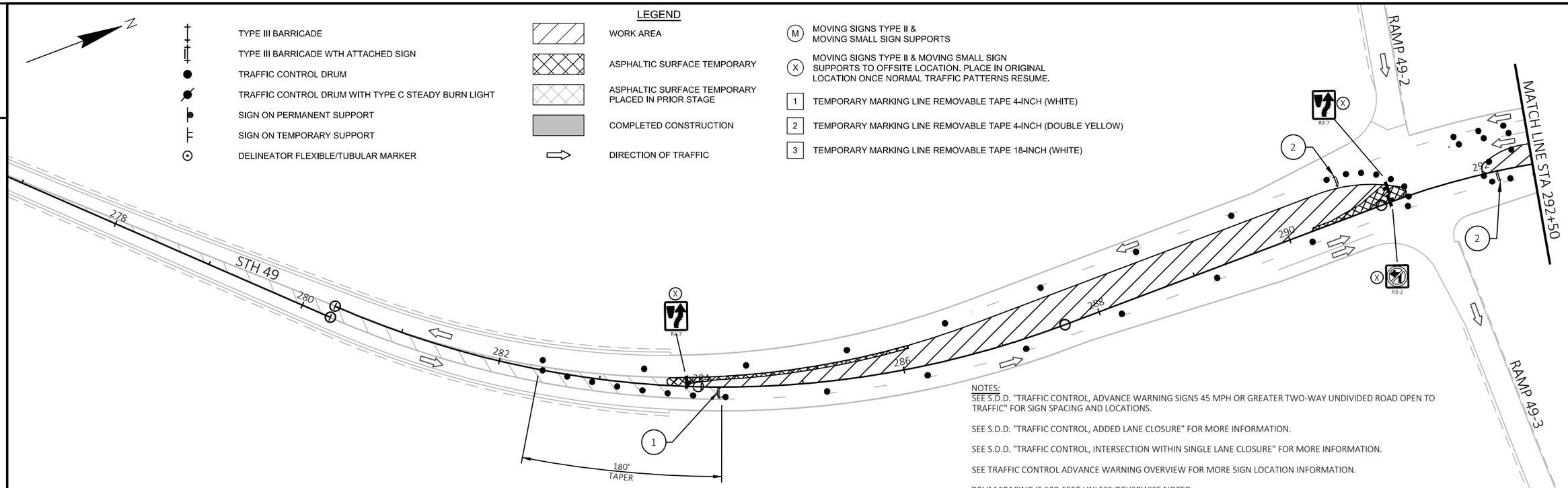
PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1A	SHEET 33	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026001-S1A.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 9:46 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



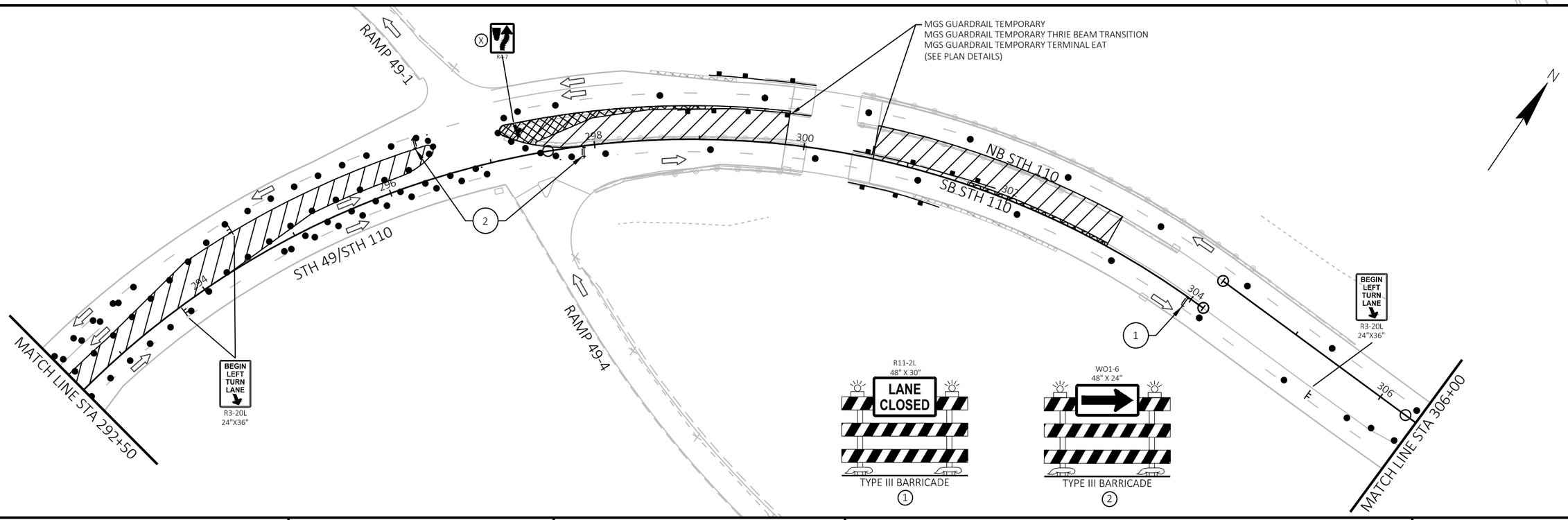
NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.



PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1B	SHEET 34	E

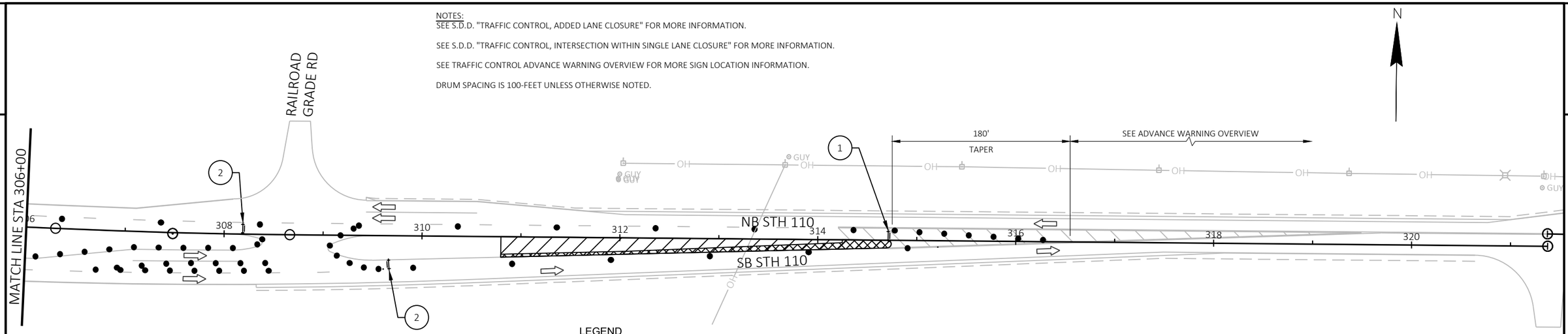
FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026001-S1B.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:47 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

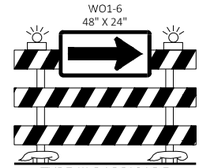
DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)

TYPE III BARRICADE (1)



TYPE III BARRICADE (2)

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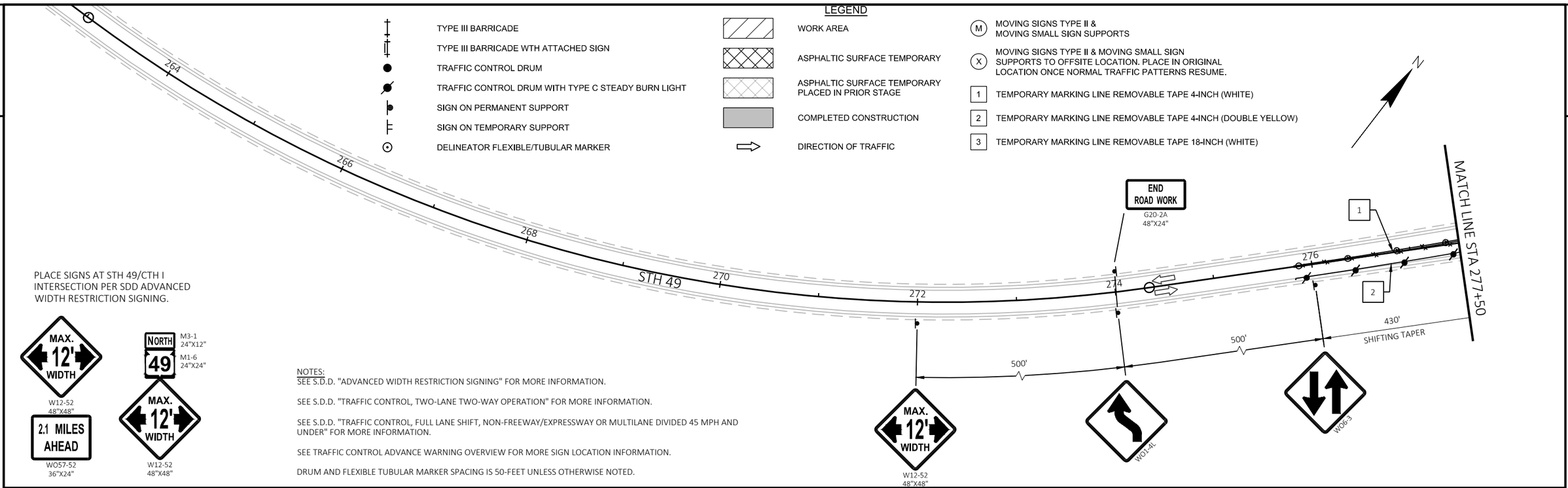
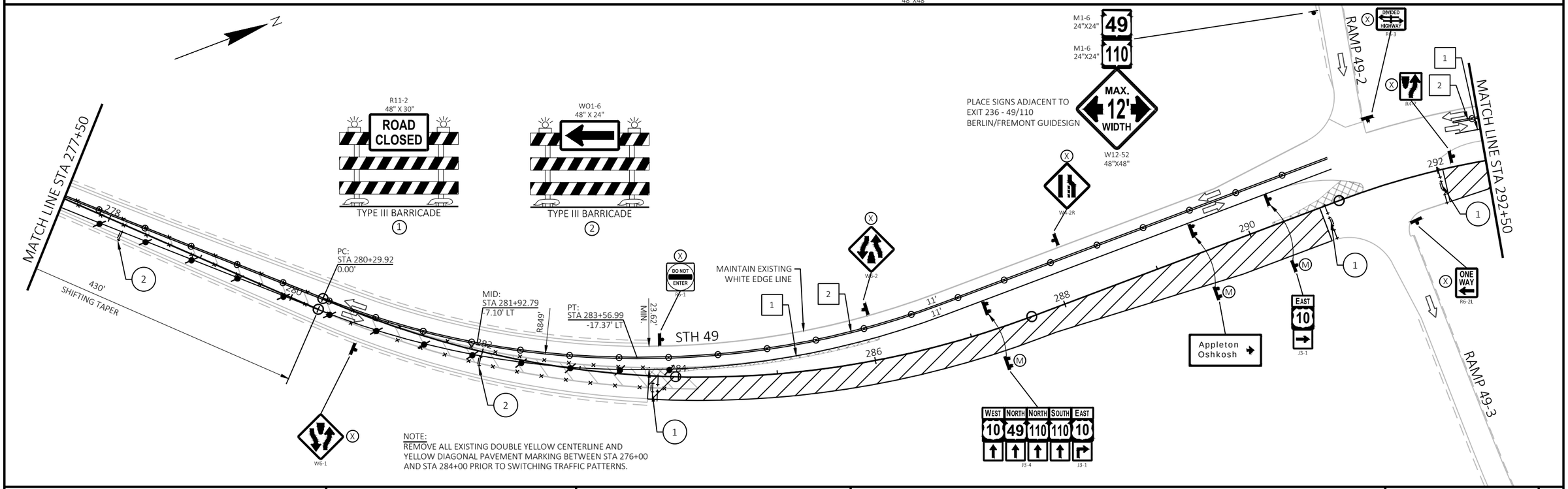
2





PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 2A	SHEET 36	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026002-S2A.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:48 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

MAINTAIN EXISTING WHITE EDGE LINE
1
2
11'
11'
294
296
298
300
302
304
306
MATCH LINE STA 292+50
STH 49/STH 110
NB STH 110
SB STH 110
RAMP 49-1
RAMP 49-4
MATCH LINE STA 306+00

LANE ENDS MERGE LEFT
ONE WAY
R6-2L
Fremont
Weyauwega
Waupaca
WEST 10 NORTH 110 NORTH 49
J2-3
WEST 10 NORTH 110 NORTH 49 SOUTH 110
J3-4
R3-1
STOP
R1-1
DIVIDED HIGHWAY
R6-3
SOUTH 110
J4-1
SPEED LIMIT 45
R2-1
W4-2R
M1-6 24"X24" 49
M1-6 24"X24" 110
PLACE SIGNS ADJACENT TO EXIT 236 - 49/110 BERLIN/FREMONT GUIDESIGN
MAX. 12' WIDTH
W12-52 48"X48"
Railroad Grade Rd

LEGEND

TYPE III BARRICADE	WORK AREA	(M)	MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
TYPE III BARRICADE WTH ATTACHED SIGN	ASPHALTIC SURFACE TEMPORARY	(X)	MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
TRAFFIC CONTROL DRUM	ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE	1	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	COMPLETED CONSTRUCTION	2	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC	3	TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)
SIGN ON TEMPORARY SUPPORT			
DELINEATOR FLEXIBLE/TUBULAR MARKER			

MATCH LINE STA 306+00
MAINTAIN EXISTING WHITE EDGE LINE
RAILROAD GRADE RD
NB STH 110
SB STH 110
308
310
312
314
316
318
320
500'
500'
MAINTAIN EXISTING DOUBLE YELLOW CENTERLINE
SEE PAVEMENT MARKING NOTE
BROWN RD.
W6-2
DO NOT ENTER
R5-1
W6-1
W06-3
MAX. 12' WIDTH
W12-52 48"X48"
ROAD WORK AHEAD
W20-1A

PAVEMENT MARKING NOTE:
REMOVE SB STH 110 YELLOW CENTERLINE BETWEEN STA 314+75 AND STA 319+75 AND YELLOW DIAGONAL PAVEMENT MARKING BETWEEN STA 314+20 AND STA 319+00 PRIOR TO SWITCHING TRAFFIC PATTERNS. MAINTAIN THE NB STH 110 YELLOW CENTERLINE.

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

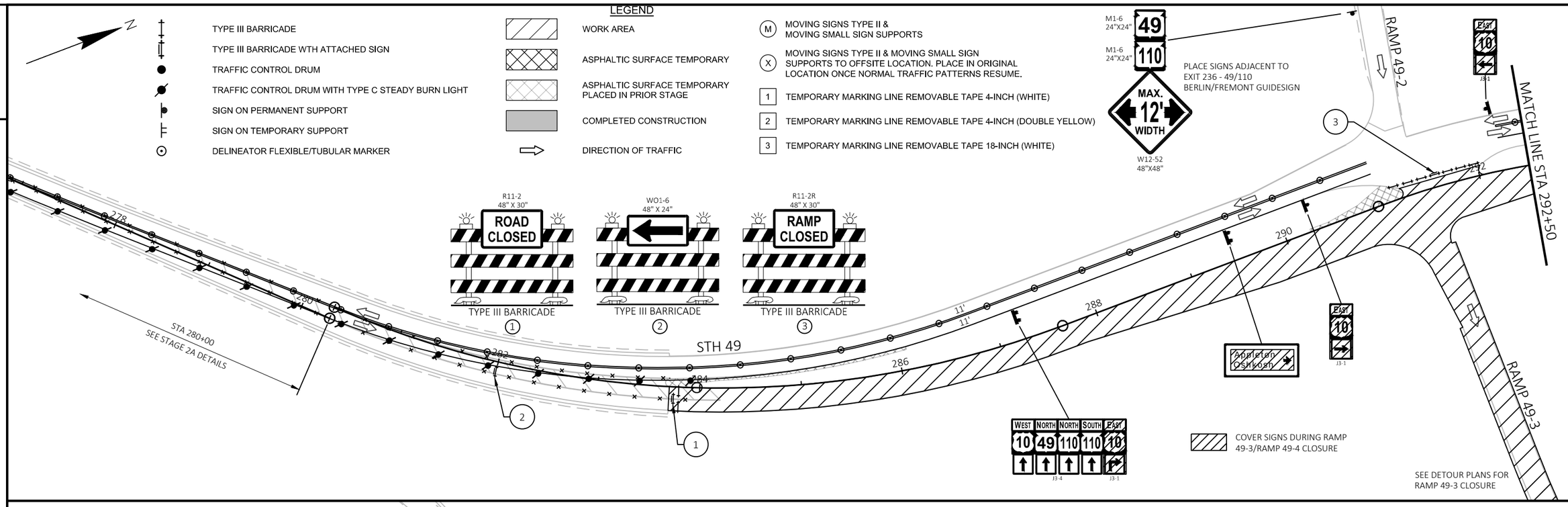
PLACE SIGNS AT STH 110/CTH H (TUSTIN RD) INTERSECTION PER SDD ADVANCED WIDTH RESTRICTION SIGNING.
MAX. 12' WIDTH
W12-52 48"X48"
NORTH 110
M3-1 24"X12"
M1-6 24"X24"
MAX. 12' WIDTH
W12-52 48"X48"
1.7 MILES AHEAD
WO57-52 36"X24"

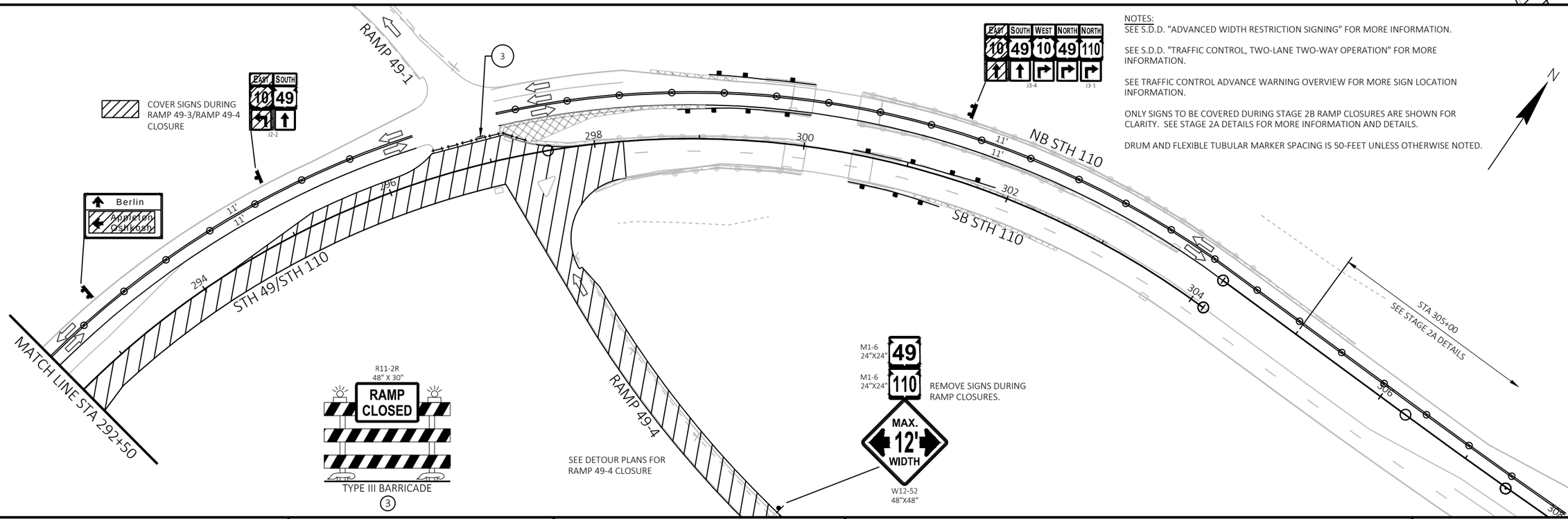
PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 2A	SHEET 37	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)





NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

ONLY SIGNS TO BE COVERED DURING STAGE 2B RAMP CLOSURES ARE SHOWN FOR CLARITY. SEE STAGE 2A DETAILS FOR MORE INFORMATION AND DETAILS.

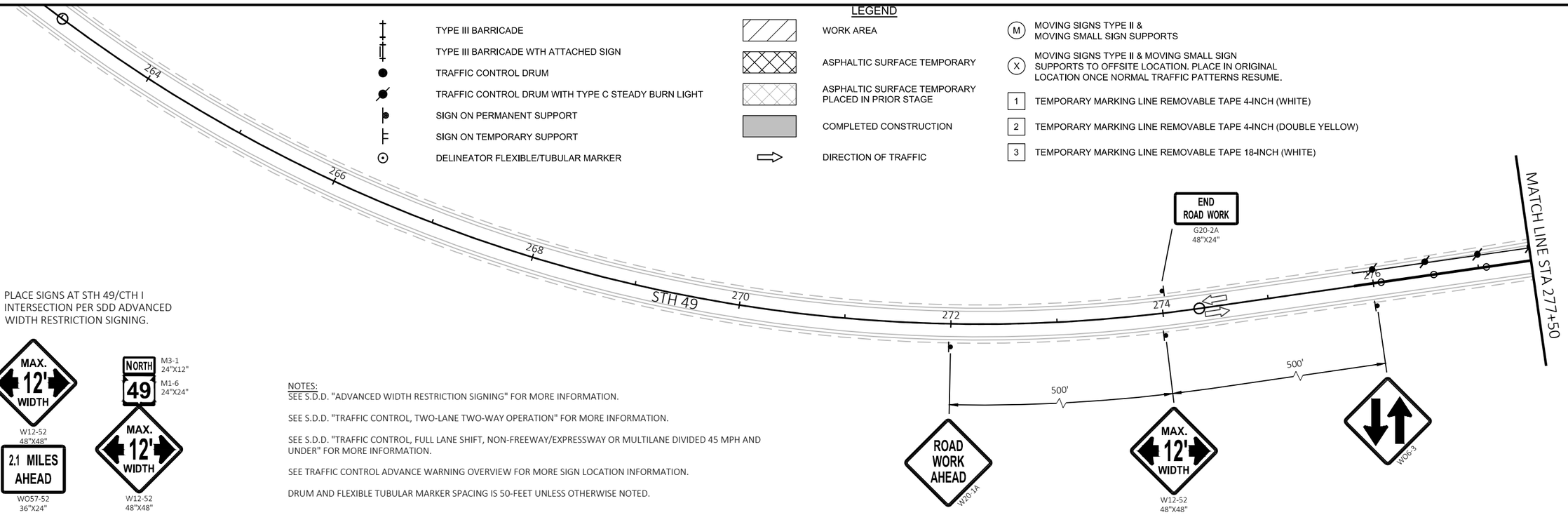
DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.

PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 2B	SHEET 38	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026002-S2B.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:50 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



PLACE SIGNS AT STH 49/CTH I INTERSECTION PER SDD ADVANCED WIDTH RESTRICTION SIGNING.

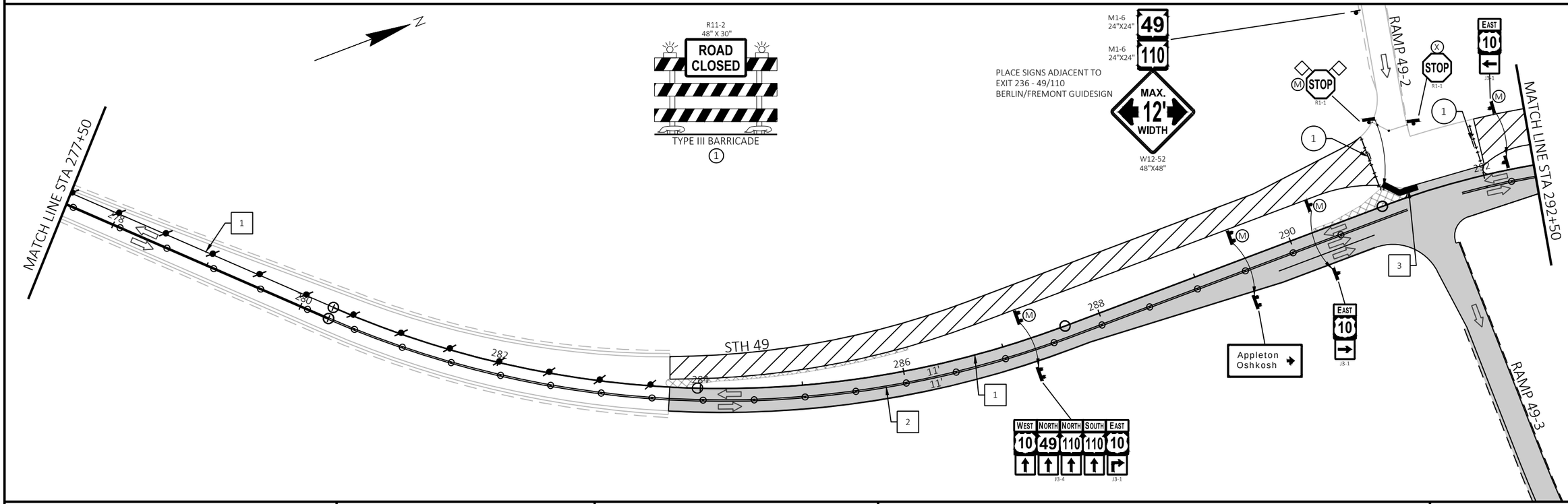
NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.



PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 3A	SHEET 39	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026003-S3A.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:51 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.

RAMP 49-1

WEST NORTH NORTH 10 49 110 J2-3

Weyauwega Waupaca

EAST SOUTH 10 49 J2-2

EAST SOUTH WEST NORTH NORTH 10 49 10 49 110 J3-4 J3-1

NB STH 110

298 300 302 304 306

Berlin
Appleton Oshkosh

STH 49/STH 110

294 296

WEST NORTH NORTH 10 110 49 J2-3

STOP R1-1

REPLACE R1-1
MOVED IN STAGE 2

SOUTH 110 J4-1

SB STH 110

11' 11'

SPEED LIMIT 45 R2-1

JCT JCT 10 49 J1-2

Fremont
Weyauwega Waupaca

RAMP 49-4

MATCH LINE STA 292+50

WEST NORTH NORTH SOUTH 10 110 49 110 J3-4

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

M1-6
24"X24"
49
M1-6
24"X24"
110
MAX. 12' WIDTH
W12-52
48"X48"

PLACE SIGNS ADJACENT TO
EXIT 236 - 49/110
BERLIN/FREMONT GUIDESIGN

Railroad Grade Rd

MATCH LINE STA 306+00

N

RAILROAD GRADE RD

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

W01-6
48" X 24"
TYPE III BARRICADE
2

W06-3 W01-4L MAX. 12' WIDTH W12-52 ROAD WORK AHEAD W20-1A

500' 500' 500'

W1-2L

STOP R1-1

SPEED LIMIT 45 R2-1

Railroad Grade Rd

MATCH LINE STA 306+00

NB STH 110

308 310 312 314 316 318 320

SB STH 110

MIN. 23.62'

PLACE SIGNS AT STH 110/CTH H (TUSTIN RD) INTERSECTION PER SDD ADVANCED WIDTH RESTRICTION SIGNING.

MAX. 12' WIDTH W12-52 48"X48"

NORTH 110 M3-1 24"X12" M1-6 24"X24"

MAX. 12' WIDTH W12-52 48"X48"

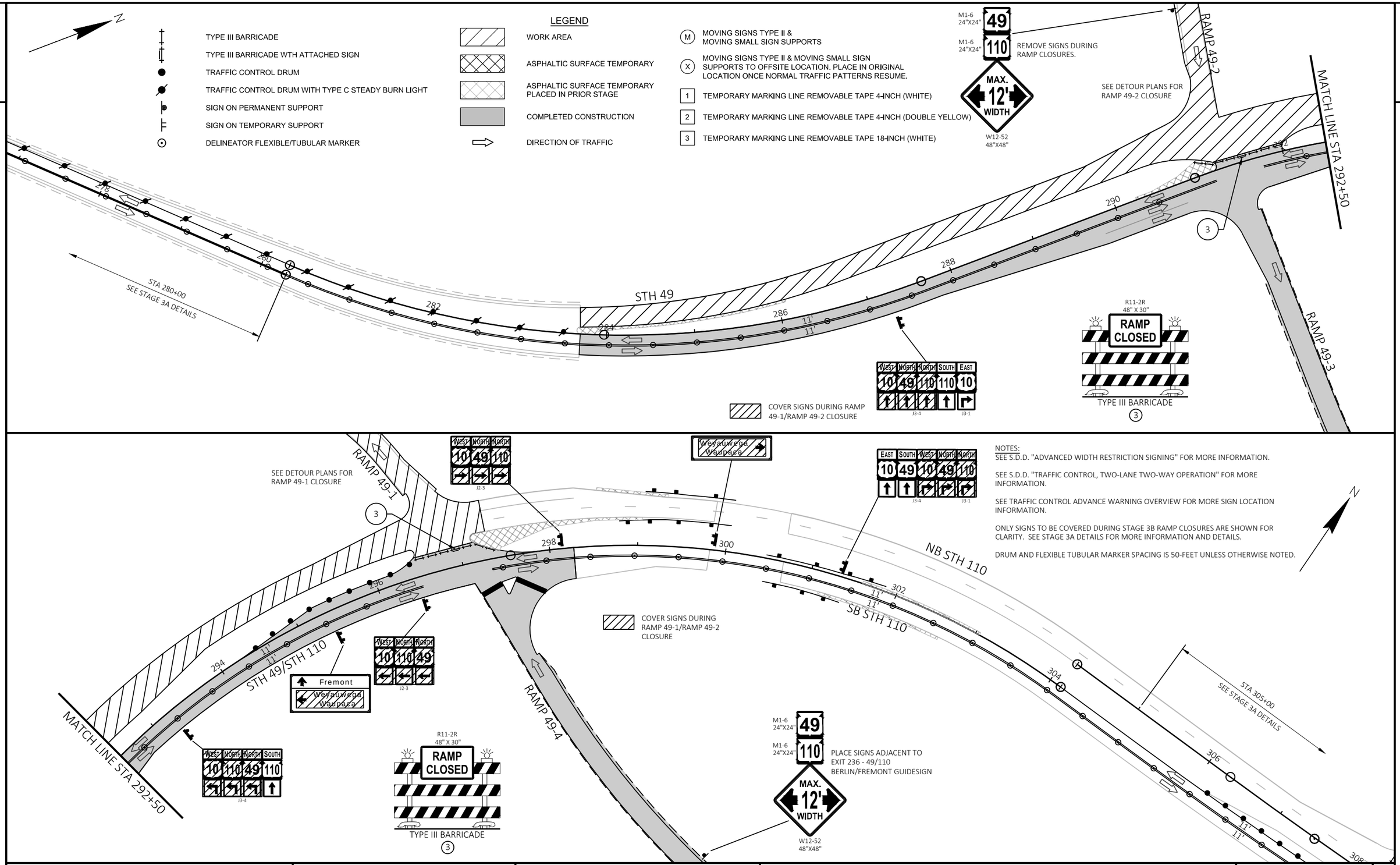
1.7 MILES AHEAD WO57-52 36"X24"

BROWN RD.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 3A	SHEET 40	E



NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

ONLY SIGNS TO BE COVERED DURING STAGE 3B RAMP CLOSURES ARE SHOWN FOR CLARITY. SEE STAGE 3A DETAILS FOR MORE INFORMATION AND DETAILS.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.

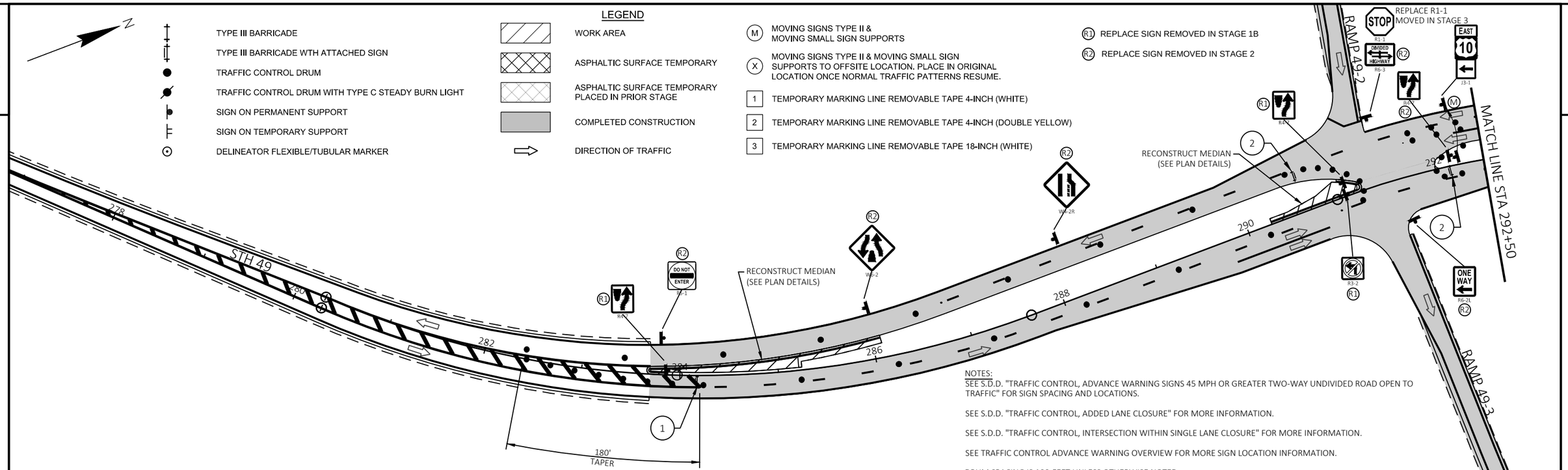
PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 3B	SHEET 41	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026003-S3B.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:53 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)
- (R1) REPLACE SIGN REMOVED IN STAGE 1B
- (R2) REPLACE SIGN REMOVED IN STAGE 2



NOTES:

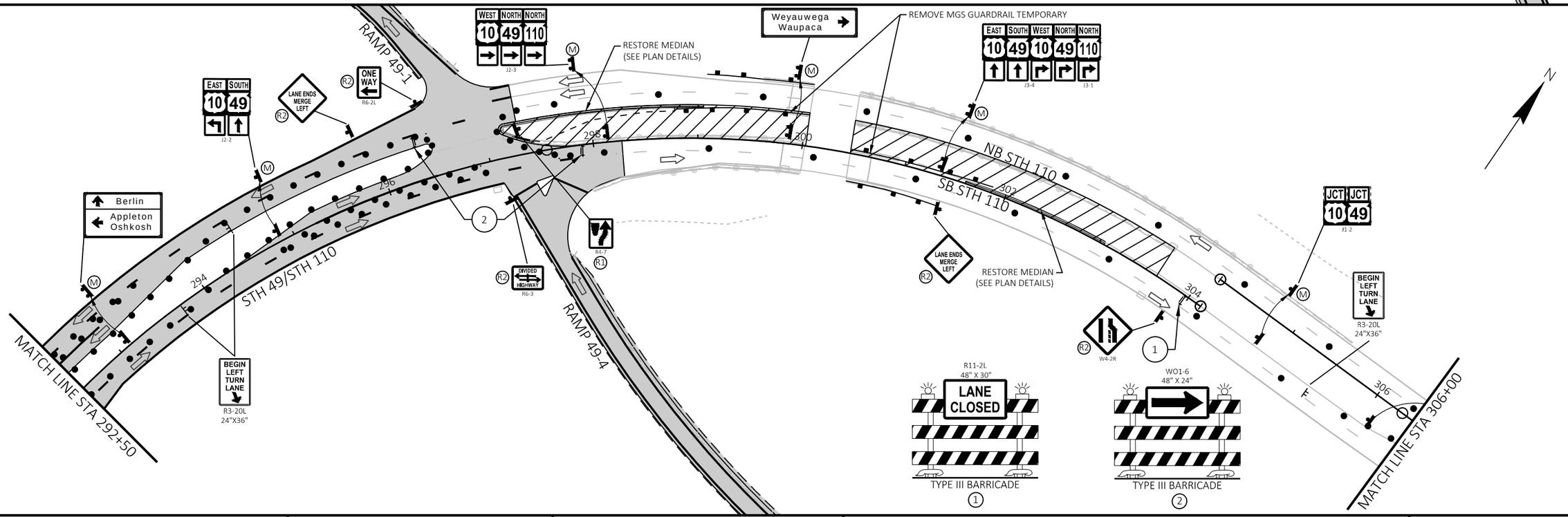
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

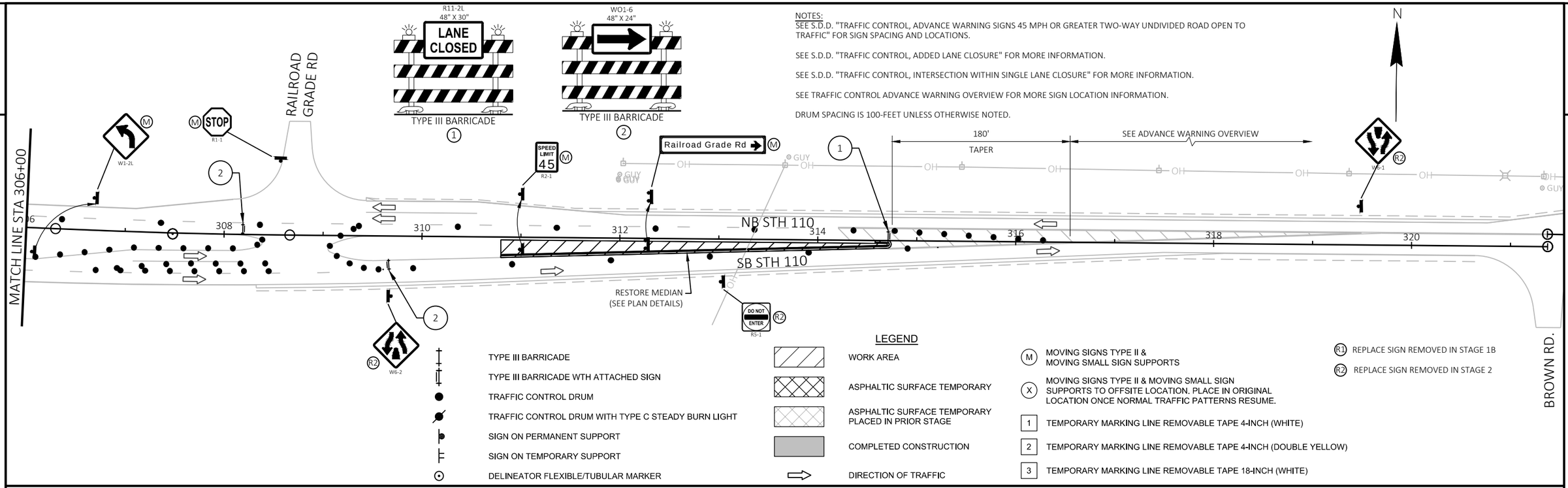
SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.



PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4A	SHEET 42	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026004-S4A.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:55 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

TYPE III BARRICADE

TYPE III BARRICADE WTH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

DELINEATOR FLEXIBLE/TUBULAR MARKER

LEGEND

WORK AREA

ASPHALTIC SURFACE TEMPORARY

ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE

COMPLETED CONSTRUCTION

DIRECTION OF TRAFFIC

(M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS

(X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.

1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)

(R1) REPLACE SIGN REMOVED IN STAGE 1B

(R2) REPLACE SIGN REMOVED IN STAGE 2

PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4A	SHEET 43	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026004-S4A.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 9:55 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

N

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

RAMP 49-2

MATCH LINE STA 292+50

278 280 282 284 286 288 290 292

STH 49

WO1-4L

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH (WHITE SKIPS)

BEGIN RIGHT TURN LANE
R3-20R
24"X36"

500'

270'
SHIFTING TAPER

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE
1

WO1-6
48" X 24"
TYPE III BARRICADE
2

RAMP 49-3

REMOVE MGS GUARDRAIL TEMPORARY

REPLACE CURB & GUTTER (SEE PLAN DETAILS)

BEGIN RIGHT TURN LANE
R3-20R
24"X36"

RAMP 49-1

294 296 298 300 302 304 306

STH 49/STH 110

NB STH 110

SB STH 110

CONSTRUCT PERMANENT MGS GUARDRAIL (SEE PLAN DETAILS)

CONSTRUCT PERMANENT MGS GUARDRAIL (SEE PLAN DETAILS)

REPLACE CURB & GUTTER (SEE PLAN DETAILS)

RAMP 49-4

MATCH LINE STA 292+50

MATCH LINE STA 306+00

PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4B	SHEET 44	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026004-S4B.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:56 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

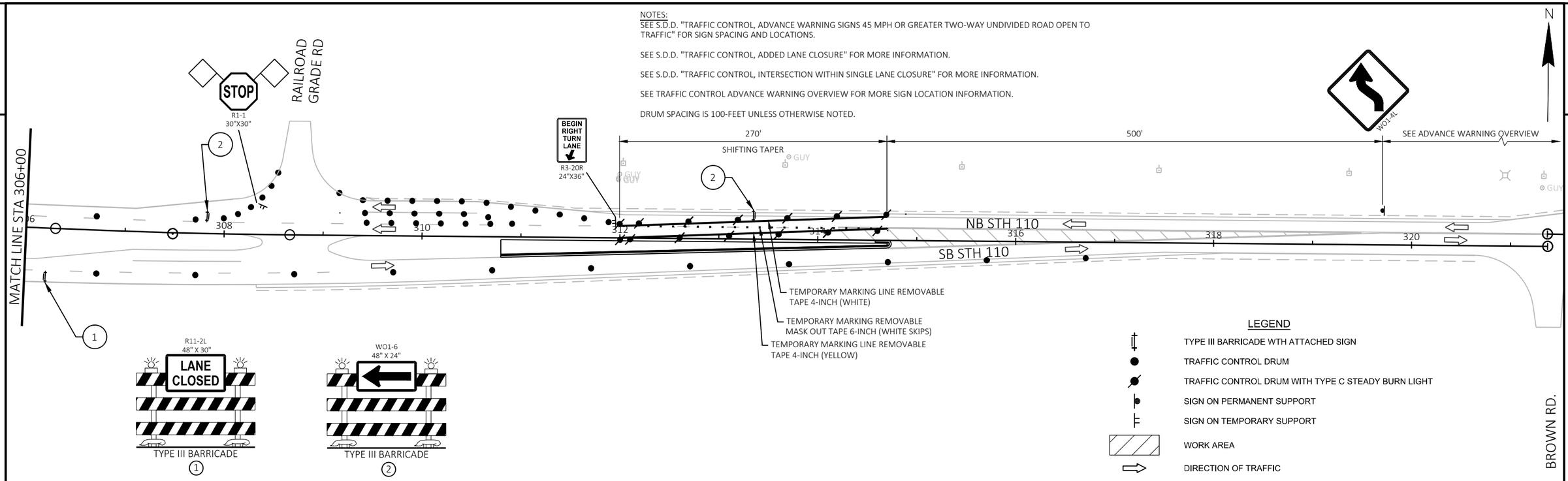
NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

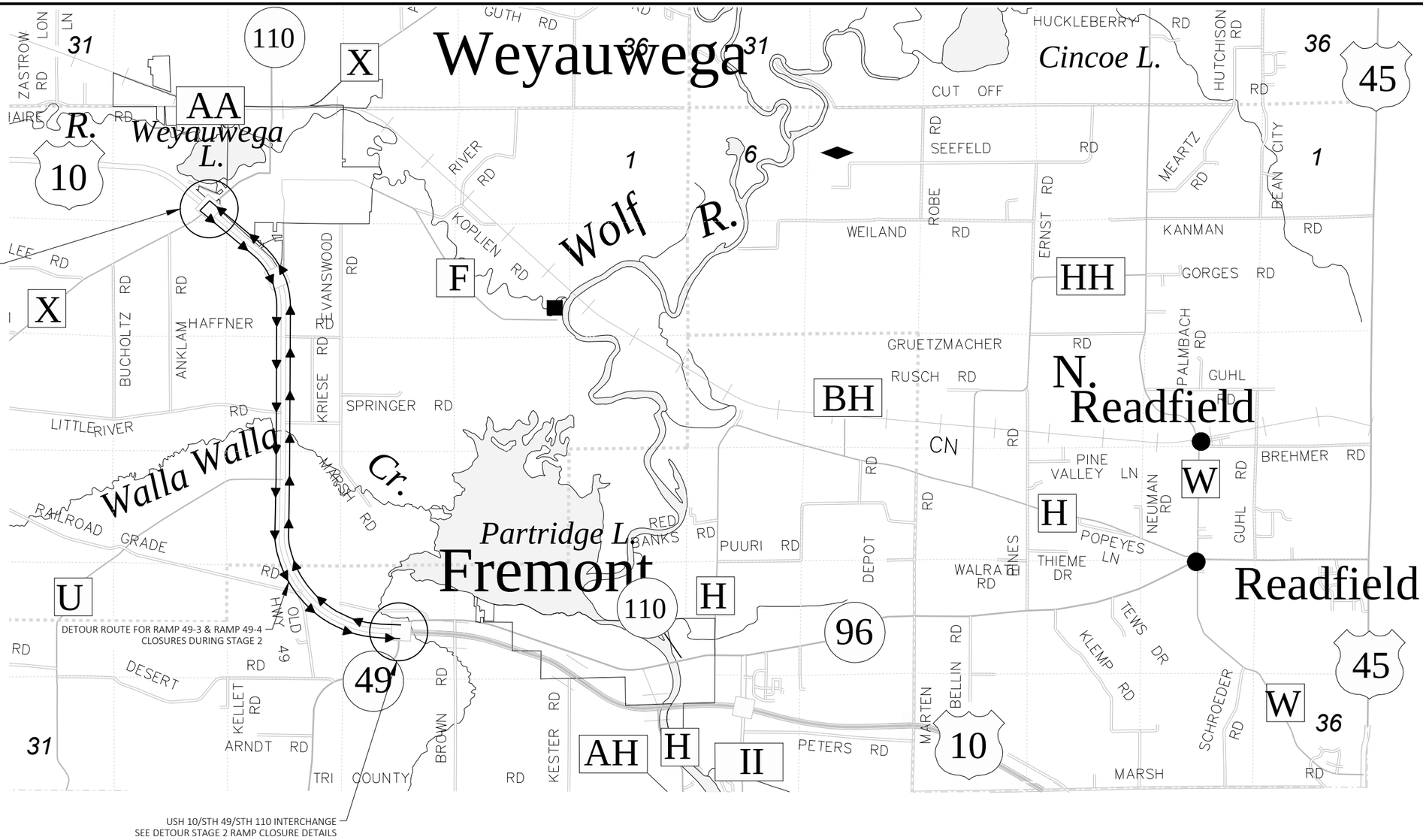


LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

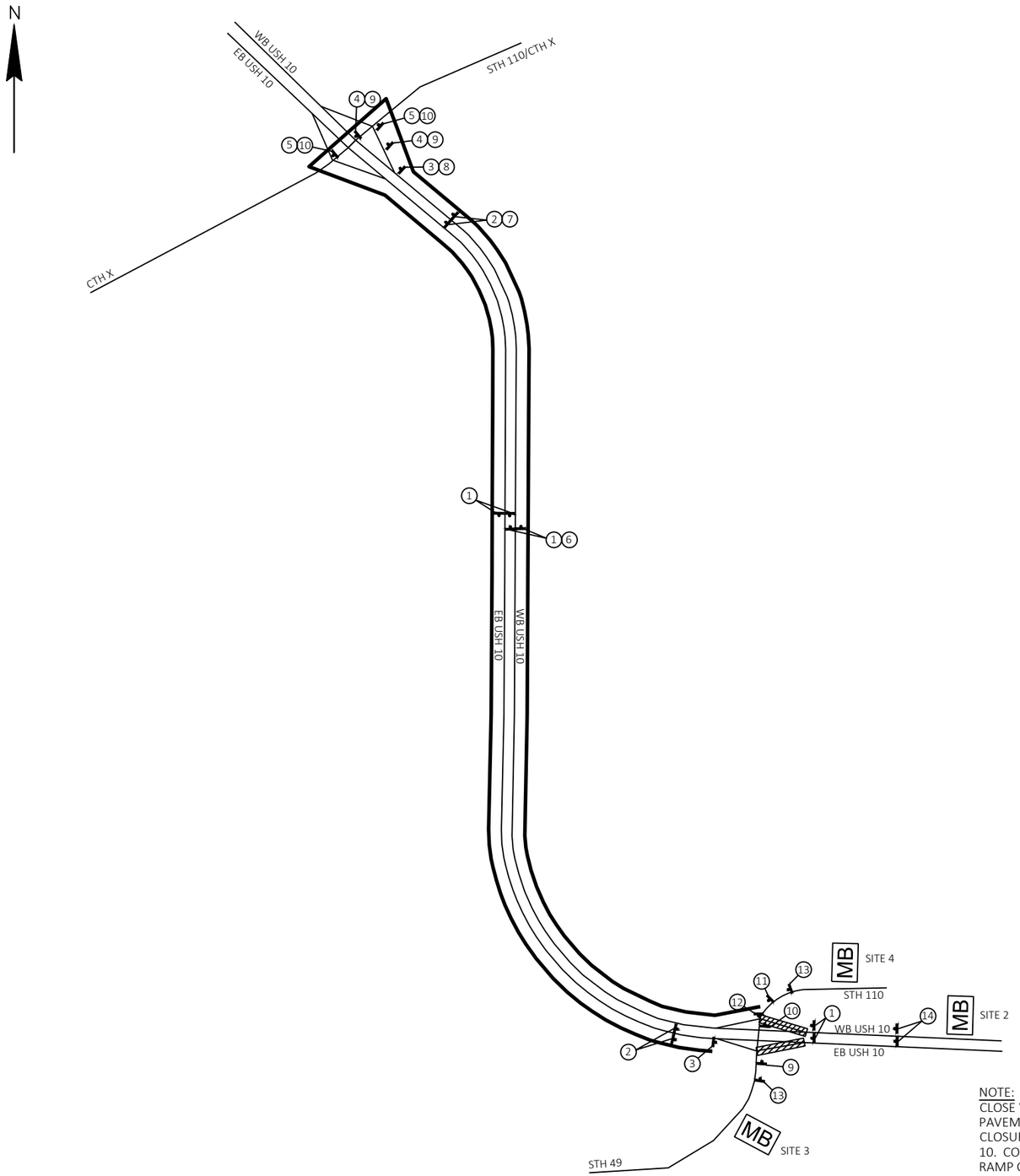
PROJECT NO: 1510-02-74/6210-01-74	HWY: USH 10/STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4B	SHEET 45	E

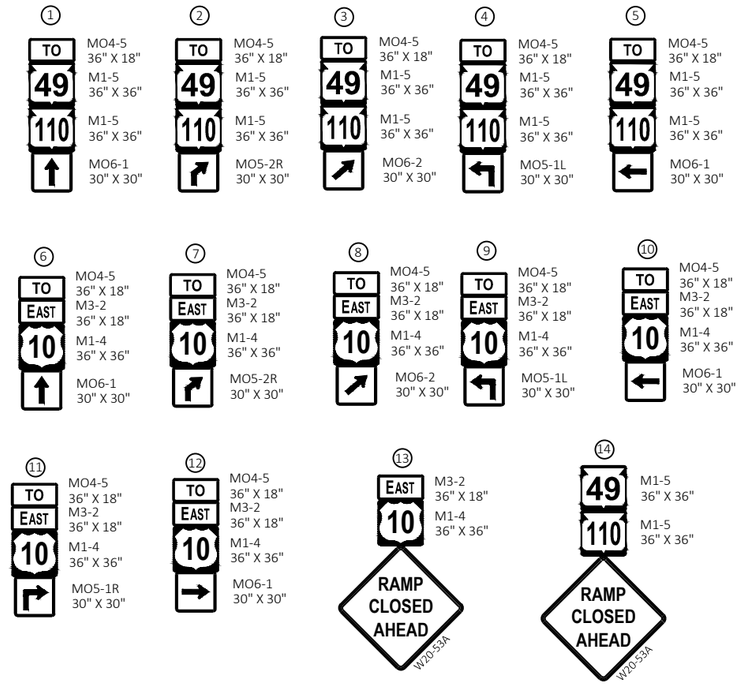
FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\026004-S4B.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 9:56 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	DETOUR - STAGE 2 RAMP CLOSURES (RAMPS 49-3 & 49-4)	SHEET 46	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:57 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42





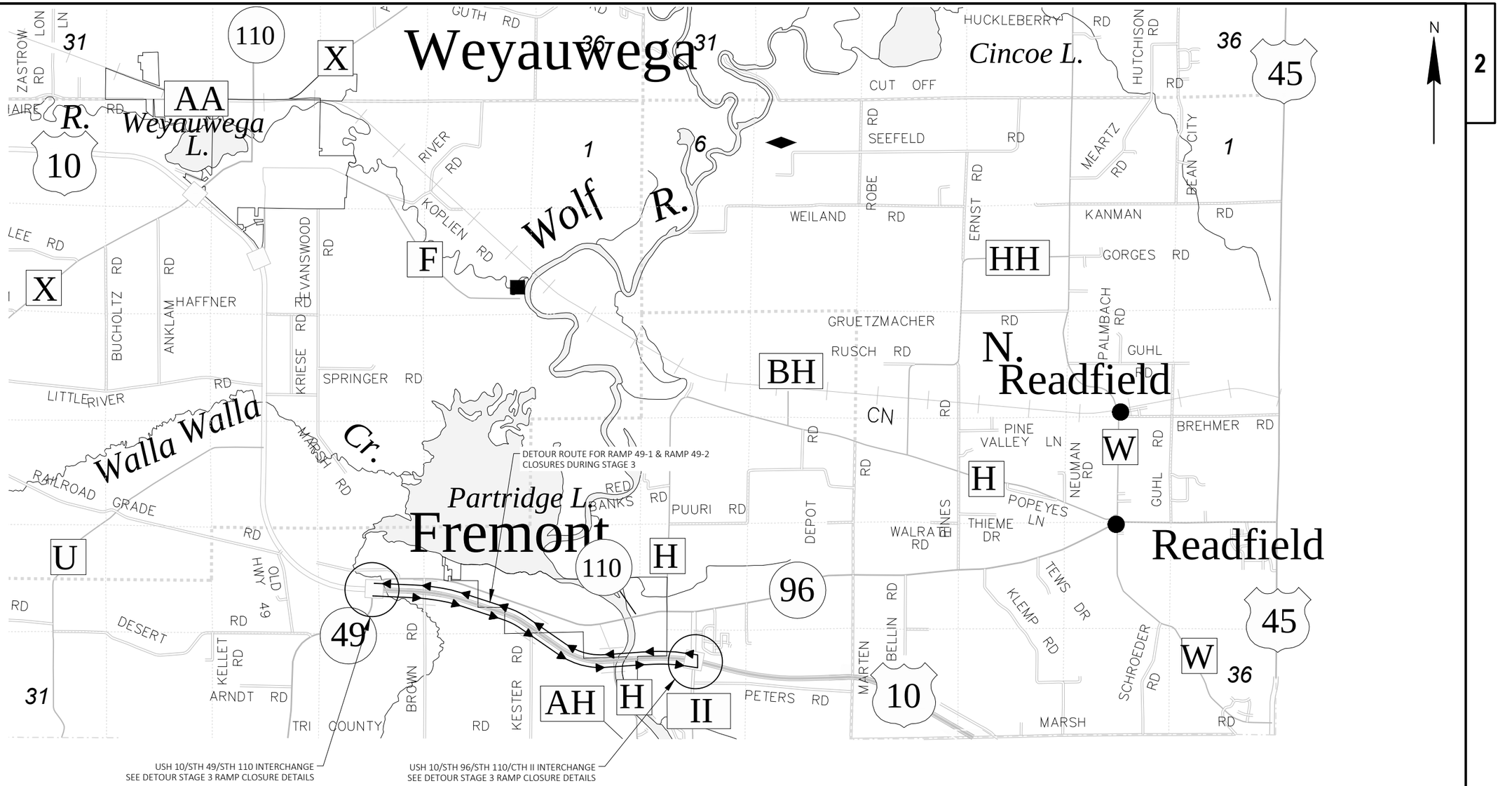
MB PORTABLE CHANGEABLE MESSAGE BOARD

PLACE PCMS 7 DAYS PRIOR TO RAMP CLOSURES		
SITE NO. LOCATION	PHASE 1 (3 SEC)	PHASE 2 (3 SEC)
SITE 2 WB USH 10	EXIT 264 RAMP TO CLOSE	DATE TO DATE
SITES 3 AND 4	HWY 10 EB RAMP TO CLOSE	DATE TO DATE

PCMS MESSAGE DURING DETOUR		
SITE NO. LOCATION	PHASE 1 (3 SEC)	PHASE 2 (3 SEC)
SITE 2 WB USH 10	EXIT 264 RAMP CLOSED	USE 10 WB TO EXIT 260A
SITES 3 AND 4	HWY 10 EB RAMP CLOSED	USE 10 WB TO EXIT 260A

NOTE:
CLOSE WB USH 10 EXIT RAMP. PLACE SIGNS, DRUMS, & TEMPORARY PAVEMENT MARKINGS PER S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE. COVER TWO GUIDE SIGNS PRIOR TO EXIT ALONG WB USH 10. COVER EXIT SIGN AT GORE PER S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE.

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	DETOUR - RAMP 49-3 & RAMP 49-4 CLOSURE DETAILS	SHEET 47	E



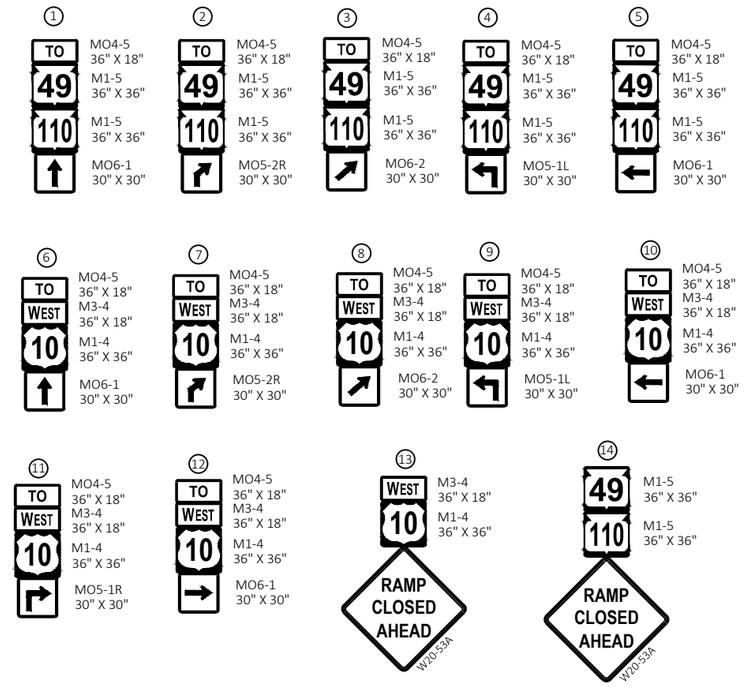
PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	DETOUR - STAGE 3 RAMP CLOSURES (RAMPS 49-1 & 49-2)	SHEET 48	E

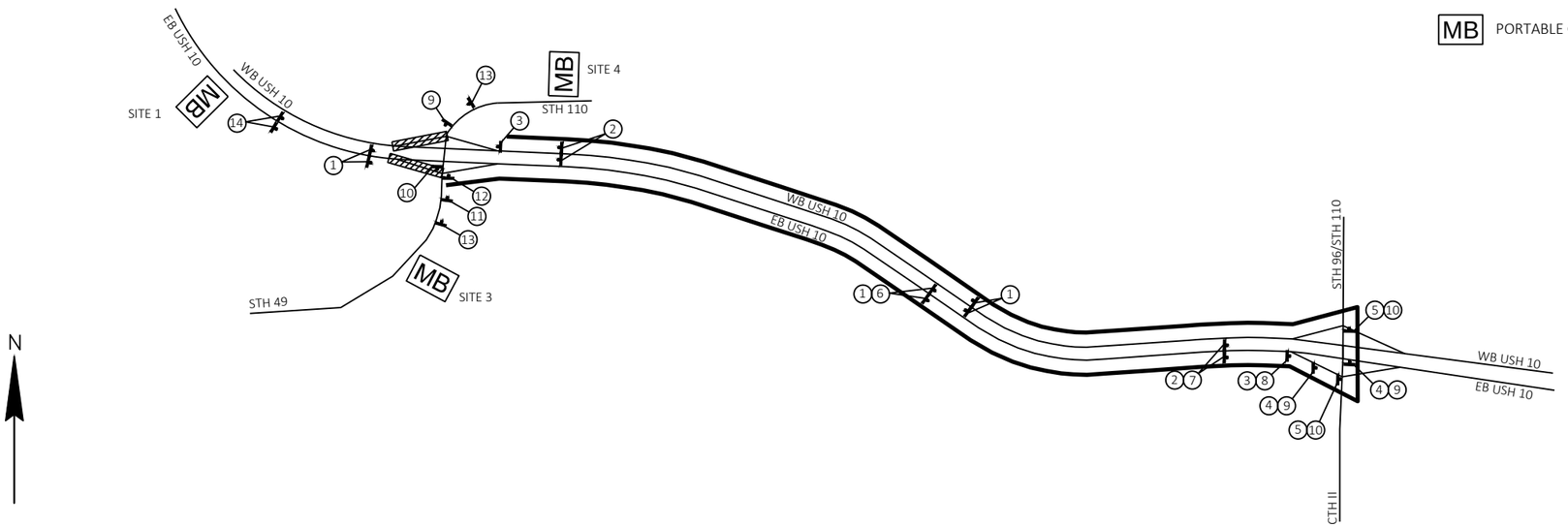
FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 9:59 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:1 MI

PLACE PCMS 7 DAYS PRIOR TO RAMP CLOSURES		
SITE NO. LOCATION	PHASE 1 (3 SEC)	PHASE 2 (3 SEC)
SITE 2 WB USH 10	EXIT 264 RAMP TO CLOSE	DATE TO DATE
SITES 3 AND 4	HWY 10 WB RAMP TO CLOSE	DATE TO DATE

PCMS MESSAGE DURING DETOUR		
SITE NO. LOCATION	PHASE 1 (3 SEC)	PHASE 2 (3 SEC)
SITE 2 WB USH 10	EXIT 264 RAMP CLOSED	USE 10 EB TO EXIT 267
SITES 3 AND 4	HWY 10 WB RAMP CLOSED	USE 10 EB TO EXIT 267

NOTE:
CLOSE EB USH 10 EXIT RAMP. PLACE SIGNS, DRUMS, & TEMPORARY PAVEMENT MARKINGS PER S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE. COVER TWO GUIDE SIGNS PRIOR TO EXIT ALONG WB USH 10. COVER EXIT SIGN AT GORE PER S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE.

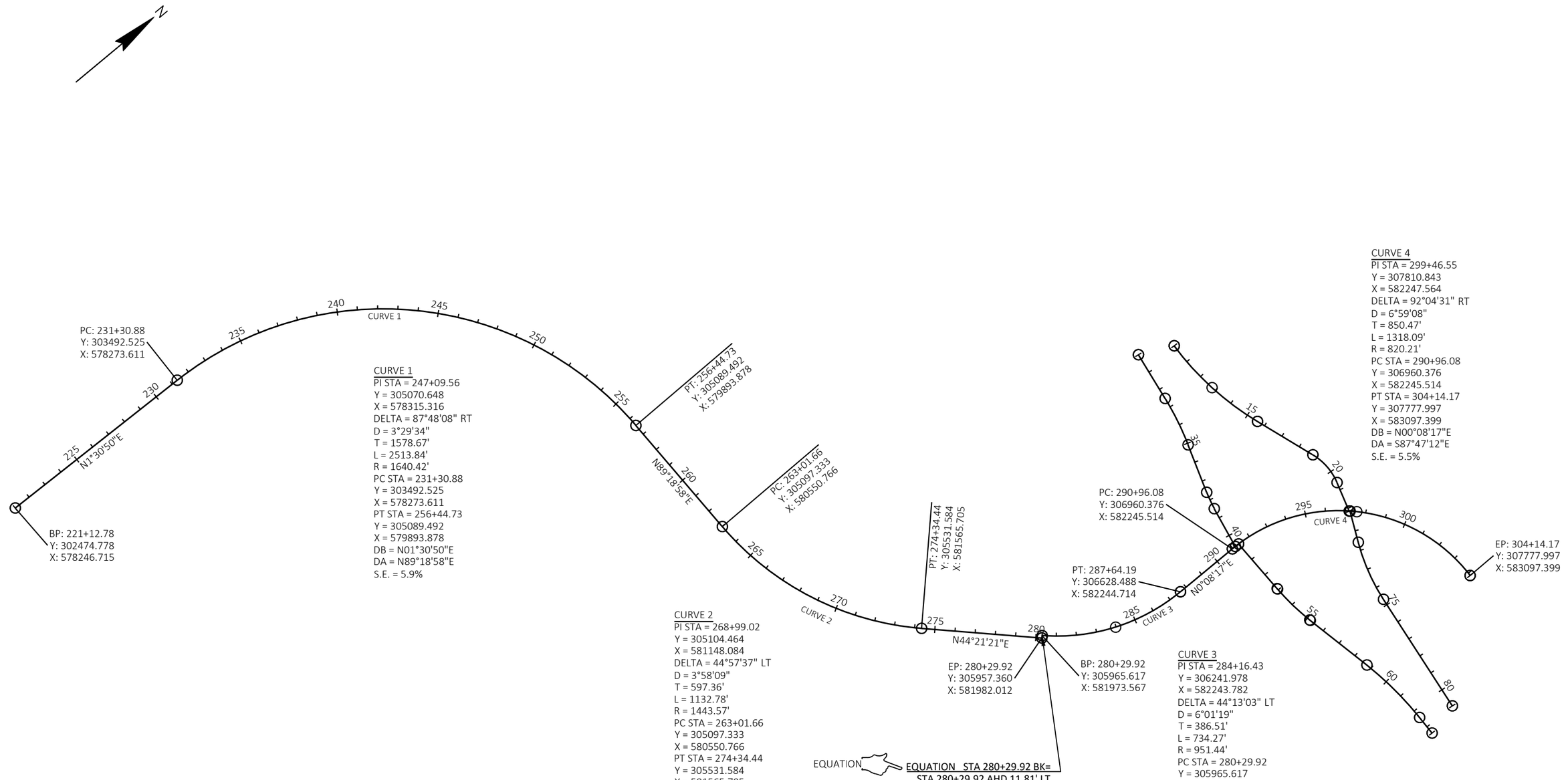




MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	DETOUR - RAMP 49-1 & RAMP 49-2 CLOSURE DETAILS	SHEET 49	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 10:00 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT

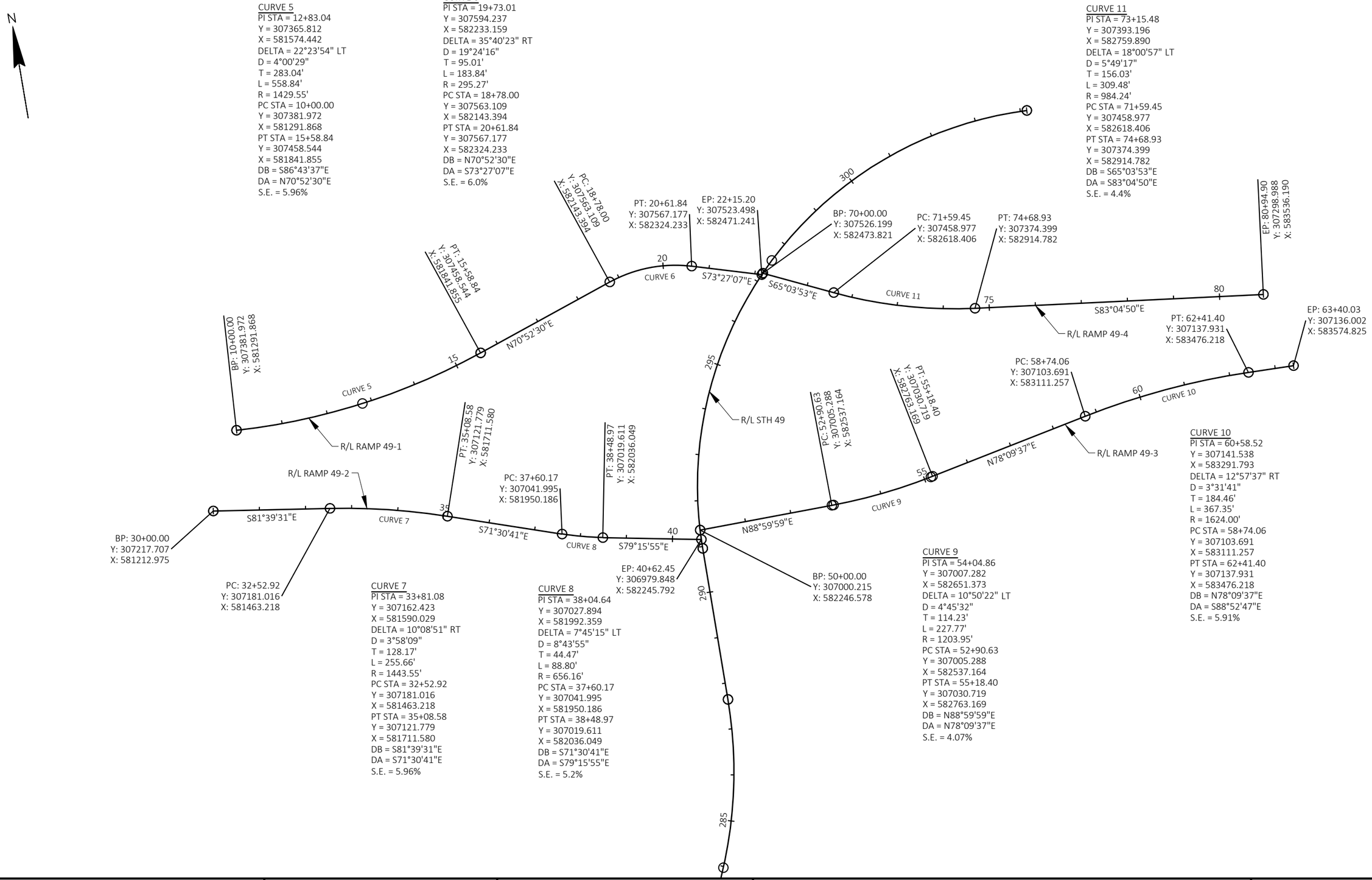


PROJECT NO: 6210-01-74/1510-02-74	HWY: STH 49/USH 10	COUNTY: WAUPACA	ALIGNMENT DIAGRAM: STH 49	SHEET 50	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 10:01 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	ALIGNMENT DIAGRAM: RAMPS	SHEET 51	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 02

PLOT DATE : 7/6/2023 10:01 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

					1510-02-74	6210-01-74
Line	Item	Item Description	Unit	Total	Qty	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	166.000	102.000	64.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	39,296.000	14,902.000	24,394.000
0006	204.0150	Removing Curb & Gutter	LF	1,101.000	1,051.000	50.000
0010	204.0165	Removing Guardrail	LF	264.000	264.000	
0014	205.0100	Excavation Common	CY	335.000	335.000	
0016	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1510-02-74	EACH	1.000	1.000	
0018	211.0101	Prepare Foundation for Asphaltic Paving (project) 02. 6210-01-74	EACH	1.000		1.000
0022	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	70.000	70.000	
0024	213.0100	Finishing Roadway (project) 01. 1510-02-74	EACH	1.000	1.000	
0026	213.0100	Finishing Roadway (project) 02. 6210-01-74	EACH	1.000		1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,433.000	513.000	920.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	189.000	162.000	27.000
0034	455.0605	Tack Coat	GAL	3,439.000	1,727.000	1,712.000
0036	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000		1.000
0038	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000		1.000
0040	460.2000	Incentive Density HMA Pavement	DOL	4,510.000	2,030.000	2,480.000
0042	460.2005	Incentive Density PWL HMA Pavement	DOL	3,030.000	490.000	2,540.000
0044	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	4,080.000	430.000	3,650.000
0046	460.2010	Incentive Air Voids HMA Pavement	DOL	3,840.000	670.000	3,170.000
0048	460.6223	HMA Pavement 3 MT 58-28 S	TON	5,919.000	2,052.000	3,867.000
0050	460.6424	HMA Pavement 4 MT 58-28 H	TON	4,794.000	1,630.000	3,164.000
0052	465.0110	Asphaltic Surface Patching	TON	349.000	147.000	202.000
0054	465.0125	Asphaltic Surface Temporary	TON	54.000	54.000	
0056	465.0305	Asphaltic Surface Safety Islands	TON	17.000	17.000	
0060	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	4,357.000		4,357.000
0062	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	49.000	49.000	
0064	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	455.000	405.000	50.000
0072	611.8115	Adjusting Inlet Covers	EACH	4.000	4.000	
0074	611.8120.S	Cover Plates Temporary	EACH	3.000	3.000	
0076	611.9710	Salvaged Inlet Covers	EACH	3.000	3.000	
0082	614.1000	MGS Guardrail Temporary	LF	100.000	100.000	
0084	614.1100	MGS Guardrail Temporary Thrie Beam Transition	LF	157.600	157.600	
0086	614.1200	MGS Guardrail Temporary Terminal EAT	EACH	4.000	4.000	
0088	614.2300	MGS Guardrail 3	LF	212.500	212.500	
0092	614.2610	MGS Guardrail Terminal EAT	EACH	1.000	1.000	
0094	614.2620	MGS Guardrail Terminal Type 2	EACH	1.000	1.000	
0096	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1510-02-74	EACH	1.000	1.000	
0098	618.0100	Maintenance And Repair of Haul Roads (project) 02. 6210-01-74	EACH	1.000		1.000
0102	619.1000	Mobilization	EACH	0.700	0.400	0.300
0104	620.0300	Concrete Median Sloped Nose	SF	53.000	53.000	
0106	624.0100	Water	MGAL	28.000	10.000	18.000
0108	625.0100	Topsoil	SY	221.000	171.000	50.000
0110	627.0200	Mulching	SY	221.000	171.000	50.000
0112	628.1504	Silt Fence	LF	402.000	402.000	
0114	628.1520	Silt Fence Maintenance	LF	402.000	402.000	
0116	628.1905	Mobilizations Erosion Control	EACH	3.000	2.000	1.000
0118	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	1.000	1.000
0122	628.7015	Inlet Protection Type C	EACH	7.000	6.000	1.000
0124	628.7570	Rock Bags	EACH	67.000	42.000	25.000

Line	Item	Item Description	Unit	Total	1510-02-74 Qty	6210-01-74 Qty
0126	629.0210	Fertilizer Type B	CWT	0.700	0.600	0.100
0128	630.0130	Seeding Mixture No. 30	LB	23.000	13.000	10.000
0132	630.0500	Seed Water	MGAL	11.000	10.000	1.000
0138	638.2102	Moving Signs Type II	EACH	65.000	65.000	
0144	638.4000	Moving Small Sign Supports	EACH	87.000	87.000	
0146	642.5001	Field Office Type B	EACH	0.700	0.400	0.300
0148	643.0300	Traffic Control Drums	DAY	10,554.000	10,004.000	550.000
0152	643.0420	Traffic Control Barricades Type III	DAY	1,370.000	1,370.000	
0154	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	187.000	187.000	
0156	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	187.000	187.000	
0158	643.0705	Traffic Control Warning Lights Type A	DAY	2,740.000	2,740.000	
0160	643.0715	Traffic Control Warning Lights Type C	DAY	1,774.000	1,774.000	
0162	643.0900	Traffic Control Signs	DAY	7,976.000	6,000.000	1,976.000
0164	643.0910	Traffic Control Covering Signs Type I	EACH	16.000	16.000	
0166	643.0920	Traffic Control Covering Signs Type II	EACH	8.000	8.000	
0168	643.1000	Traffic Control Signs Fixed Message	SF	36.000		36.000
0170	643.1050	Traffic Control Signs PCMS	DAY	126.000	126.000	
0172	643.3105	Temporary Marking Line Paint 4-Inch	LF	1,033.000		1,033.000
0174	643.3120	Temporary Marking Line Epoxy 4-Inch	LF	383.000		383.000
0176	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	13,810.000	13,810.000	
0178	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	38.000	38.000	
0180	643.3960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	136.000	136.000	
0182	643.5000	Traffic Control	EACH	0.800	0.600	0.200
0190	646.1020	Marking Line Epoxy 4-Inch	LF	12,826.000		12,826.000
0192	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	20,934.000	8,241.000	12,693.000
0194	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	503.000	203.000	300.000
0196	646.5020	Marking Arrow Epoxy	EACH	7.000	3.000	4.000
0198	646.5120	Marking Word Epoxy	EACH	1.000		1.000
0200	646.6120	Marking Stop Line Epoxy 18-Inch	LF	115.000	100.000	15.000
0202	646.7120	Marking Diagonal Epoxy 12-Inch	LF	429.000		429.000
0206	646.8120	Marking Curb Epoxy	LF	115.000	115.000	
0208	646.8220	Marking Island Nose Epoxy	EACH	3.000	3.000	
0210	646.9000	Marking Removal Line 4-Inch	LF	4,262.000	4,262.000	
0214	646.9200	Marking Removal Line Wide	LF	795.000	795.000	
0218	648.0100	Locating No-Passing Zones	MI	0.910		0.910
0224	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	380.000	380.000	
0226	650.8000	Construction Staking Resurfacing Reference	LF	10,563.000	4,288.000	6,275.000
0232	650.9911	Construction Staking Supplemental Control (project) 01. 1510-02-74	EACH	1.000	1.000	
0234	650.9911	Construction Staking Supplemental Control (project) 02. 6210-01-74	EACH	1.000		1.000
0240	690.0150	Sawing Asphalt	LF	613.000	541.000	72.000
0242	690.0250	Sawing Concrete	LF	64.000	54.000	10.000
0244	740.0440	Incentive IRI Ride	DOL	6,510.000	1,140.000	5,370.000

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REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
228+00	-	228+10	MAINLINE	33	B.O.P.
249+00	-	249+50	DESERT ROAD	31	
			TOTAL 6210-01-74	64	
12+83	-	12+93	LT/RT	26	RAMP 49-1
30+72	-	30+82	LT/RT	26	RAMP 49-2
60+24	-	60+34	LT/RT	26	RAMP 49-3
77+85	-	77+95	LT/RT	26	RAMP 49-4
			TOTAL 1510-01-74	102	
			ITEM TOTAL	167	

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
228+10	-	247+80	MAINLINE	6,565	DEPTH VARIES-SEE PLANS FOR DETAILS
247+80	-	252+72	MAINLINE & DESERT RD INTERSECTION	2,406	DEPTH VARIES-SEE PLANS FOR DETAILS
252+72	-	283+70	MAINLINE	11,428	DEPTH VARIES-SEE PLANS FOR DETAILS
283+70	-	290+75	NB STH 49	2,124	5-INCH DEPTH
283+70	-	290+75	SB STH 49	1,871	5-INCH DEPTH
			TOTAL 6210-01-74	24,394	
12+93	-	21+41	RAMP 49-1	2,219	4-INCH DEPTH
30+82	-	40+05	RAMP 49-2	2,463	4-INCH DEPTH
50+36	-	60+24	RAMP 49-3	2,738	4-INCH DEPTH
70+25	-	77+85	RAMP 49-4	2,211	4-INCH DEPTH
290+75	-	298+17	NB STH 49	2,693	5-INCH DEPTH
290+75	-	297+21	SB STH 49	2,579	5-INCH DEPTH
			TOTAL 1510-01-74	14,902	
			ITEM TOTAL	39,296	

REMOVING CURB AND GUTTER

STATION	TO	STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	REMARKS
UNDISTRIBUTED			LT/RT	50	SPOT REPAIRS AS DIRECTED BY ENGINEER
			TOTAL 6210-01-74	50	
283+66	-	286+08	LT	260	STH 49 MEDIAN WIDENING
290+25	-	291+23	LT	120	STH 49 MEDIAN WIDENING
292+02	-	292+11	LT	6	ADJUSTING INLET
292+87	-	292+96	LT	6	ADJUSTING INLET
296+41	-	296+50	LT	6	ADJUSTING INLET
296+95	-	297+04	RT	6	ADJUSTING INLET
297+14	-	299+05	LT	228	STH 110 MEDIAN WIDENING
311+19	-	314+74	RT	369	STH 110 MEDIAN WIDENING
UNDISTRIBUTED				50	SPOT REPAIRS AS DIRECTED BY THE ENGINEER
			TOTAL 1510-02-74	1,051	
			ITEM TOTAL	1,101	

EXCAVATION COMMON

STAGE	STATION	TO	STATION	LOCATION	205.0100 EXCAVATION COMMON CY	REMARKS
		-			-	
				TOTAL 6210-01-74	0	
1A/1B	283+66	-	286+09	LT	32	STH 49 MEDIAN TEMPORARY PAVEMENT
	290+25	-	291+23	LT	61	STH 49 MEDIAN TEMPORARY PAVEMENT
	292+87	-	292+96	LT	2	ADJUSTING INLET COVERS
	296+41	-	296+50	LT	2	ADJUSTING INLET COVERS
	296+95	-	297+04	RT	2	ADJUSTING INLET COVERS
	297+14	-	298+78	LT	120	STH 110 MEDIAN TEMPORARY PAVEMENT
	310+79	-	314+75	RT	67	STH 110 MEDIAN TEMPORARY PAVEMENT
	55+33		56+37	RT	49	MGS EAT
				TOTAL 1510-02-74	335	
				ITEM TOTAL	335	

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PREPARE FOUNDATION FOR ASPHALTIC PAVING

STATION	TO	STATION	LOCATION	211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (02. 6210-01-74) EACH	211.0101.02 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 1510-02-74) EACH
228+00	-	290+75	LT/RT	1	-
			TOTAL 6210-01-74	1	0
290+75	-	298+27	LT/RT	-	1
			TOTAL 1510-02-74	0	1

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	REMARKS
12+83	-	21+03	LT/RT	16	RAMP 49-1
30+72	-	39+99	LT/RT	19	RAMP 49-2
50+58	-	60+34	LT/RT	20	RAMP 49-3
70+19	-	77+95	LT/RT	16	RAMP 49-4
			TOTAL 1510-02-74	70	

BASE AGGREGATE DENSE 3/4-INCH

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL	REMARKS
228+00	-	250+00	LT/RT	521	10	MAINLINE
250+00	-	283+75	LT/RT	399	8	MAINLINE
			TOTAL 6210-01-74	920	18	
12+83	-	21+75	LT	88	2	RAMP 49-1
12+83	-	21+03	RT	40	1	RAMP 49-1
30+72	-	39+99	LT	46	1	RAMP 49-2
30+72	-	39+53	RT	87	2	RAMP 49-2
50+58	-	60+33	LT	48	1	RAMP 49-3
50+86	-	60+33	RT	94	2	RAMP 49-3
70+19	-	77+95	RT	77	2	RAMP 49-4
71+25	-	77+95	LT	33	1	RAMP 49-4
			TOTAL 1510-02-74	513	10	
			ITEM TOTAL	1,433	29	

BASE AGGREGATE DENSE 1 1/4-INCH

STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	REMARKS
283+63	-	286+09	LT	64	STH 49 MEDIAN
290+25	-	291+23	LT	63	STH 49 MEDIAN
283+64	-	283+73	MEDIAN INLET	2	ADJUSTING INLET
UNDISTRIBUTED			LT/RT	25	SPOT REPAIRS AS DIRECTED BY ENGINEER
			TOTAL 6210-01-74	27	
283+63	-	286+09	LT	64	STH 49 MEDIAN
290+25	-	291+23	LT	63	STH 49 MEDIAN
291+17	-	291+26	LT	2	ADJUSTING INLET
292+02	-	292+11	LT	2	ADJUSTING INLET
292+87	-	292+96	LT	2	ADJUSTING INLET
296+41	-	296+50	LT	2	ADJUSTING INLET
296+95	-	297+04	RT	2	ADJUSTING INLET
UNDISTRIBUTED			LT/RT	25	SPOT CURB & GUTTER REPAIRS AS DIRECTED BY THE ENGINEER
			TOTAL 1510-02-74	162	
			ITEM TOTAL	189	

HMA PAVEMENT

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6424 HMA PAVEMENT 4 MT 58-28 H TON	REMARKS
228+00	-	247+80	LT/RT	462	1,043	854	MAINLINE
247+80	-	252+72	LT/RT	171	385	315	MAINLINE & DESERT RD INTERSECTION
252+72	-	283+70	LT/RT	800	1,807	1,478	MAINLINE
283+70	-	290+75	RT	149	336	275	NB STH 49
283+70	-	290+75	LT	131	296	242	SB STH 49
PROJECT 6210-01-74				-	-	-	
			TOTAL 6210-01-74	1,712	3,867	3,164	
12+93	-	21+41	LT/RT	157	285	-	RAMP 49-1 LOWER LAYER
12+93	-	21+41	LT/RT	157	-	222	RAMP 49-1 UPPER LAYER
30+82	-	40+05	LT/RT	174	316	-	RAMP 49-2 LOWER LAYER
30+82	-	40+05	LT/RT	174	-	246	RAMP 49-2 UPPER LAYER
50+36	-	60+31	LT/RT	193	351	-	RAMP 49-3 LOWER LAYER
50+36	-	60+31	LT/RT	193	-	273	RAMP 49-3 UPPER LAYER
70+25	-	77+95	LT/RT	155	281	-	RAMP 49-4 LOWER LAYER
70+25	-	77+95	LT/RT	155	-	219	RAMP 49-4 UPPER LAYER
290+75	-	298+27	NB STH 49	188	418	342	MAINLINE
290+75	-	297+31	SB STH 49	181	401	328	MAINLINE
			TOTAL 1510-02-74	1,727	2,052	1,630	
			ITEM TOTAL	3,439	5,919	4,794	

PROJECT 6210-01-74

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
DRIVING LANES	228+00 - 290+75	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	2,540	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
DRIVING LANES	228+00 - 290+75	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	3,105	2.75-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
3-FOOT SHOULDERS, TURN LANES, SIDE ROADS	228+00 - 290+75	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	624	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3-FOOT SHOULDERS, TURN LANES, SIDE ROADS	228+00 - 290+75	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	762	2.75-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIOUS		PATCHING	VARIES	ASPHALTIC SURFACE PATCHING	202	VARIES	QMP PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

PROJECT 1510-02-74

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
DRIVING LANES	290+75 - 298+27	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	479	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
DRIVING LANES	290+75 - 298+27	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	586	2.75-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
TURN LANES, SIDE ROADS	290+75 - 298+27	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	191	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
TURN LANES, SIDE ROADS	290+75 - 298+27	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	233	2.75-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
RAMPS	VARIES	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	960	1.75-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
RAMPS	VARIES	LOWER LAYER	EXISTING MILLED SURFACE	3 MT 58-28 S	1,233	2.25-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIOUS		PATCHING	VARIES	ASPHALTIC SURFACE PATCHING	147	VARIES	QMP PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

ASPHALTIC SURFACE PATCHING

STATION	TO	STATION	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	REMARKS
228+00	-	247+80	LT/RT	50	BASE REPAIRS & TEMPORARY RAMPING
247+80	-	252+72	LT/RT	25	BASE REPAIRS & TEMPORARY RAMPING
252+72	-	283+70	LT/RT	50	BASE REPAIRS & TEMPORARY RAMPING
283+70	-	290+75	RT	25	BASE REPAIRS & TEMPORARY RAMPING
283+70	-	290+75	LT	25	BASE REPAIRS & TEMPORARY RAMPING
283+64	-	283+73	LT	2	ADJUSTING INLET
UNDISTRIBUTED			PROJECT	25	SPOT REPAIRS AS DIRECTED BY ENGINEER
			TOTAL 6210-01-74	202	
12+93	-	21+41	LT/RT	25	RAMP 49-1
30+82	-	40+05	LT/RT	25	RAMP 49-2
50+36	-	60+31	LT/RT	25	RAMP 49-3
70+25	-	77+95	LT/RT	25	RAMP 49-4
291+25	-	298+21	LT/RT	25	MAINLINE STH 49
291+17	-	291+26	LT	2	RECONSTRUCTING INLET
292+02	-	292+11	LT	2	RECONSTRUCTING INLET
292+87	-	292+96	LT	2	RECONSTRUCTING INLET
296+41	-	296+50	LT	2	RECONSTRUCTING INLET
296+95	-	297+04	RT	2	RECONSTRUCTING INLET
297+17	-	297+26	LT	2	RECONSTRUCTING INLET
UNDISTRIBUTED				10	SPOT REPAIRS AS DIRECTED BY THE ENGINEER
			TOTAL 1510-02-74	147	
			ITEM TOTAL	349	

ASPHALTIC SURFACE TEMPORARY

STATION	TO	STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
	-			-	
			TOTAL 6210-01-74	0	
283+63	-	286+09	LT	27	STH 49 MEDIAN
290+25	-	291+23	LT	27	STH 49 MEDIAN
			TOTAL 1510-02-74	54	
			ITEM TOTAL	54	

ASPHALTIC SURFACE SAFETY ISLANDS

STATION	TO	STATION	LOCATION	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS TON	REMARKS
	-			-	
			TOTAL 6210-01-74	0	
283+70	-	285+21	LT	17	STH 49 MEDIAN
			TOTAL 1510-02-74	17	
			ITEM TOTAL	17	

ASPHALT RUMBLE STRIPS

STATION	TO	STATION	LOCATION	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	REMARKS
228+00	-	247+17	CL	1,917	MAINLINE
251+17	-	275+57	CL	2,440	MAINLINE
			TOTAL 6210-01-74	4,357	

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CONCRETE CURB & GUTTER

STATION	TO	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	REMARKS
UNDISTRIBUTED			LT/RT	-	50	-	SPOT REPAIR AS DIRECTED BY ENGINEER
			TOTAL 6210-01-74	0	50	0	
283+66	-	286+08	LT	-	260	260	STH 49 MEDIAN
290+25	-	291+23	LT	-	120	120	STH 49 MEDIAN
292+02	-	292+11	LT	6	-	-	ADJUSTING INLET
292+87	-	292+96	LT	6	-	-	ADJUSTING INLET
296+41	-	296+50	LT	6	-	-	ADJUSTING INLET
296+95	-	297+04	RT	6	-	-	ADJUSTING INLET
UNDISTRIBUTED			LT/RT	25	25	-	SPOT REPAIRS AS DIRECTED BY ENGINEER
			TOTAL 1510-02-74	49	405	380	
			ITEM TOTAL	49	455	380	

MGS GUARDRAIL TEMPORARY

STATION	TO	STATION	LOCATION	614.1000 MGS GUARDRAIL TEMPORARY LF	614.1100 MGS GUARDRAIL TEMPORARY THRIE BEAM TRANSITION LF	614.1200 MGS GUARDRAIL TEMPORARY TERMINAL EAT EACH	REMARKS
	-			-	-	-	
			TOTAL 6210-01-74	0	0	0	
298+79	-	299+30	LT			1	
299+08	-	299+57	LT	-	-	1	
299+30	-	299+68	LT	37.5	-	-	
299+57	-	299+70	LT	12.5	-	-	
299+69	-	300+08	LT	-	39.4	-	
299+69	-	300+08	LT	-	39.4	-	
300+45	-	300+84	LT	-	39.4	-	
300+45	-	300+84	RT	-	39.4	-	
300+83	-	301+33	LT	50	-	-	
300+84	-	301+41	RT	-	-	1	
301+33	-	301+86	LT	-	-	1	
			TOTAL 1510-02-74	100	157.6	4	
			ITEM TOTAL	100	157.6	4	

3

SALVAGED INLET COVERS

STATION	LOCATION	611.971 SALVAGED INLET COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH	611.8120.S COVER PLATES TEMPORARY EACH	REMARKS
		-	-	-	
	TOTAL 6210-01-74	0	0	0	
283+70	LT	1	-	1	STH 49 MEDIAN
291+19	LT	1	-	1	STH 49 MEDIAN
292+07	LT	-	1	-	
292+91	LT	-	1	-	
296+46	LT	-	1	-	
297+00	RT	-	1	-	
297+22	LT	1	-	1	STH 110 MEDIAN
	TOTAL 1510-02-74	3	4	3	
	ITEM TOTAL	3	4	3	

MGS GUARDRAIL

STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	REMARKS
	-			-	-	-	-	
			TOTAL 6210-01-74	0	0	0	0	
55+84	-	58+48	RT	264	-	-	-	RAMP 49-3
55+84	-	56+37	RT	-	-	1	-	RAMP 49-3
56+37	-	58+50	RT	-	212.5	-	-	RAMP 49-3
58+50			RT	-	-	-	1	RAMP 49-3
			TOTAL 1510-02-74	264	212.5	1	1	
			ITEM TOTAL	264	212.5	1	1	

CONCRETE MEDIAN SLOPED NOSE

STATION	TO	STATION	LOCATION	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	REMARKS
	-			-	
			TOTAL 6210-01-74	0	
283+66	-	283+70	LT	24	TYPE 2
291+18	-	291+24	LT	29	TYPE 2
			TOTAL 1510-02-74	53	
			ITEM TOTAL	53	

EROSION CONTROL

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7570 ROCK BAGS EACH	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.05 SEED WATER MGAL	REMARKS
283+70			LT	-	-	-	-	-	-	1	-	-	-	-	
			PROJECT 6210-01-74	-	-	-	-	1	1	-	-	-	-	-	
			UNDISTRIBUTED	50	50	-	-	-	-	-	25	0.1	10.0	1.0	
			TOTAL 6210-01-74	50	50	0	0	1	1	1	25	0.1	10.0	1.0	
55+10	-	59+10	RT	25	25	402	402	-	-	-	17	0.1	1	-	RAMP 49-3 GUARDRAIL
285+21	-	286+08	LT	19	19	-	-	-	-	-	-	0.1	0.5	-	STH 49 MEDIAN RESTORATION
290+25	-	291+20	LT	72	72	-	-	-	-	-	-	0.1	1.0	-	STH 49 MEDIAN RESTORATION
291+20			LT	-	-	-	-	-	-	1	-	-	-	-	
292+07			LT	-	-	-	-	-	-	1	-	-	-	-	
292+91			LT	-	-	-	-	-	-	1	-	-	-	-	
296+46			LT	-	-	-	-	-	-	1	-	-	-	-	
297+00			RT	5	5	-	-	-	-	1	-	0.1	0.5	-	INLET ADJUSTMENT
297+22			LT	-	-	-	-	-	-	1	-	-	-	-	
			PROJECT 1510-02-74	-	-	-	-	2	1	-	-	-	-	-	
			UNDISTRIBUTED	50	50	-	-	-	-	-	25	0.2	10.0	10.0	
			TOTAL 1510-02-74	171	171	402	402	2	1	6	42	0.6	13	10	
			ITEM TOTAL	221	221	402	402	3	2	7	67	0.7	23.0	11.0	

3

MOVING SIGNS

STATION	TO	STATION	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
	-			-	-	
			TOTAL 6210-01-74	0	0	
283+75	-	297+50	LT/RT	4	4	STAGE 1B
283+75	-	320+00	LT/RT	26	31	STAGE 2
283+75	-	320+00	LT/RT	23	35	STAGE 3
283+75	-	320+00	LT/RT	12	17	STAGE 4A/STAGE 4B
			TOTAL 6210-01-74	65	87	
			ITEM TOTAL	65	87	

MARKING REMOVAL

STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	REMARKS
	-			-	-	
			TOTAL 6210-01-74	0	0	
275+81	-	284+20	LT/RT	3,262	429	STAGE 2 - STH 49
297+18	-	297+40	RT	-	26	STAGE 2 - RAMP 49-4
314+21	-	319+70	LT	1,000	303	STAGE 2 - STH 110
291+13	-	291+43	LT	-	37	STAGE 3 - RAMP 49-2
			TOTAL 1510-02-74	4,262	795	
			ITEM TOTAL	4,262	795	

3

TRAFFIC CONTROL

LOCATION	STAGE	ESTIMATED DURATION (DAYS)	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 DAY	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING S NUMBER OF CYCLES	643.0920 NUMBER OF SIGNS	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 DAY	REMARKS
STH 49/STH 110	ADVANCE WARNING	100	-	-	-	-	-	-	-	-	-	-	18	1,800		-			-		36	-	-	IN USE FOR DURATION OF PROJECT
STH 49	MILLING/PAVING	22	25	550	-	-	-	-	-	-	-	-	8	176		-			-		-	-	-	SIGNS USED FOR TRAFFIC ON GRAVEL/MILLED SURFACES
UNDISTRIBUTED (PROJECT 6210-01-74)		100	-	-	-	-	-	-	-	-	-	-	-	-		-			-		-	-	-	
		TOTALS 6210-01-74		550		0	0	0		0		0		1,976		0			0		36		0	
USH 10/STH 49/STH 110	1A	9	187	1,683	9	81	-	-	18	162	26	234	17	153		-			-		-	-	-	
USH 10/STH 49/STH 110	1B	9	187	1,683	9	81	-	-	18	162	-	-	12	108		-			-		-	-	-	
USH 10/STH 49/STH 110	2A	5	33	165	25	125	81	81	50	250	17	85	40	200		-			-		-	-	-	
RAMPS 49-3 & 49-4	2B	14	33	462	24	336	-	-	48	672	17	238	31	434	4	1	4	3	1	3	-	-	-	
EXIT RAMP CLOSURE	2B	14	35	490	4	56	-	-	8	112	-	-	13	182	1	1	1	1	1	1	-	3	63	WB USH 10 (RAMP 49-4 CLOSURE)
RAMP CLOSURE DETOUR	2B	14	-	-	-	-	-	-	-	-	-	-	128	1,792		-			-		-	-	-	DETOUR SIGNS
USH 10/STH 49/STH 110	3A	5	49	245	23	115	81	81	46	230	49	245	50	250		-			-		-	-	-	
RAMPS 49-1 & 49-2	3B	14	49	686	23	322	-	-	46	644	49	686	42	588	10	1	10	3	1	3	-	-	-	
EXIT RAMP CLOSURE	3B	14	34	476	4	56	-	-	8	112	-	-	13	182	1	1	1	1	1	1	-	3	63	EB USH 10 (RAMP 49-2 CLOSURE)
RAMP CLOSURE DETOUR	3B	14	-	-	-	-	-	-	-	-	-	-	128	1,792		-			-		-	-	-	DETOUR SIGNS
USH 10/STH 49/STH 110	4A	11	187	2,057	9	99	-	-	18	198	-	-	12	132		-			-		-	-	-	
USH 10/STH 49/STH 110	4B	11	187	2,057	9	99	-	-	18	198	26	286	17	187		-			-		-	-	-	
UNDISTRIBUTED (PROJECT 1510-02-74)		78	-	-	-	-	25	25	-	-	-	-	-	-		-			-		-	-	-	
		TOTALS 1510-02-74		10,004		1,370	187	187		2,740		1,774		6,000	16			8			0		126	
		ITEM TOTALS		10,554		1,370	187	187		2,740		1,774		7,976	16			8			36		126	

3

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH LF	646.3040 MARKING LINE GROOVED WET REF EPOXY 8-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY LF	REMARKS
228+00	-	290+75	RT	-	6,285	-	-	-	-	-	-	-	
228+00	-	275+82	CL	9,564	-	-	-	-	-	-	-	-	
228+00	-	248+48	LT	-	2,062	-	-	-	-	-	-	-	
249+80	-	251+80	LT	-	-	200	2	1	15	-	-	-	
249+80	-	290+75	LT	-	4,082	-	-	-	-	-	-	-	
275+82	-	284+20	LT/RT	3,262	-	-	-	-	-	429	-	-	
284+20	-	290+75	RT	-	164	-	-	-	-	-	-	-	
286+75	-	290+75	LT	-	100	-	-	-	-	-	-	-	
289+75	-	290+75	RT	-	-	100	2	-	-	-	-	-	
			TOTAL 6210-01-74	12,826	12,693	300	4	1	15	429	0	0	
12+83	-	21+22	LT	-	840	-	-	-	-	-	-	-	WHITE EDGE LINE
12+83	-	21+03	RT	-	814	-	-	-	-	-	-	-	YELLOW EDGE LINE
30+72	-	39+91	LT	-	921	-	-	-	-	-	-	-	YELLOW EDGE LINE
30+72	-	39+57	RT	-	886	-	-	-	-	-	-	-	WHITE EDGE LINE
39+82	-	39+92	LT/RT	-	-	-	-	-	37	-	-	-	
50+58	-	60+33	LT	-	974	-	-	-	-	-	-	-	YELLOW EDGE LINE
50+77	-	60+33	RT	-	957	-	-	-	-	-	-	-	WHITE EDGE LINE
70+34	-	70+67	LT/RT	-	-	-	-	-	63	-	-	-	
70+34	-	77+95	RT	-	766	-	-	-	-	-	-	-	YELLOW EDGE LINE
71+24	-	77+95	LT	-	672	-	-	-	-	-	-	-	WHITE EDGE LINE
283+66	-	283+70	LT	-	-	-	-	-	-	-	10	1	STH 49 MEDIAN
290+75	-	298+27	RT	-	188	-	-	-	-	-	-	-	
290+75	-	297+30	LT	-	164	-	-	-	-	-	-	-	
291+18	-	291+24	LT	-	-	-	-	-	-	-	52	1	STH 49 MEDIAN
291+42	-	296+47	LT	-	540	-	-	-	-	-	-	-	
291+75	-	297+08	RT	-	519	-	-	-	-	-	-	-	
292+25	-	293+00	LT	-	-	78	1	-	-	-	-	-	
295+23	-	296+48	LT/RT	-	-	125	2	-	-	-	-	-	
297+14	-	297+19	LT	-	-	-	-	-	-	-	53	1	STH 110 MEDIAN
			TOTAL 1510-02-74	0	8,241	203	3	0	100	0	115	3	
			ITEM TOTAL	12,826	20,934	503	7	1	115	429	115	3	

LOCATING NO-PASSING ZONES

STATION	TO	STATION	LOCATION	648.0100 LOCATING NO-PASSING ZONES MI	REMARKS
228+00	-	275+82	CL	0.91	END AT BEGINNING OF 2- TO 4-LANE TRANSITION
			TOTAL 6210-01-74	0.91	
			ITEM TOTAL	0.91	

TEMPORARY MARKING

STATION	TO	STATION	LOCATION	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH* LF	643.312 TEMPORARY MARKING LINE EPOXY 4-INCH* LF	643.315 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF	643.385 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	643.396 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH LF	REMARKS
228+00	-	275+82	CL	765	383	-	-	-	
275+82	-	284+20	LT/RT	268	-	-	-	-	
			TOTAL 6210-01-74	1,033	383	0	0	0	
284+19	-	286+86	RT	-	-	540	-	68	STAGE 1A
275+82	-	291+00	LT/RT	-	-	4,522	-	-	STAGE 2
292+25	-	296+37	LT	-	-	1,294	-	-	STAGE 2
		WB USH 10		-	-	180	-	-	EXIT RAMP CLOSURE
275+82	-	291+38	LT/RT	-	-	4,628	38	-	STAGE 3
291+75	-	297+08	RT	-	-	1,906	-	-	STAGE 3
		EB USH 10		-	-	200	-	-	EXIT RAMP CLOSURE
284+19	-	286+86	RT	-	-	540	-	68	STAGE 4B
			TOTAL 1510-02-74	0	0	13,810	38	136	
			ITEM TOTAL	1,033	383	13,810	38	136	

*NOTE: MARK THE CENTERLINE ON THE MILLED SURFACE AND INTERMEDIATE LAYERS.
MARK TEMPORARY EPOXY ON THE SURFACE.
MARK PERMANENT EPOXY AFTER CENTERLINE RUMBLE STRIPS HAVE BEEN INSTALLED IN PROJECT 6210-01-74.

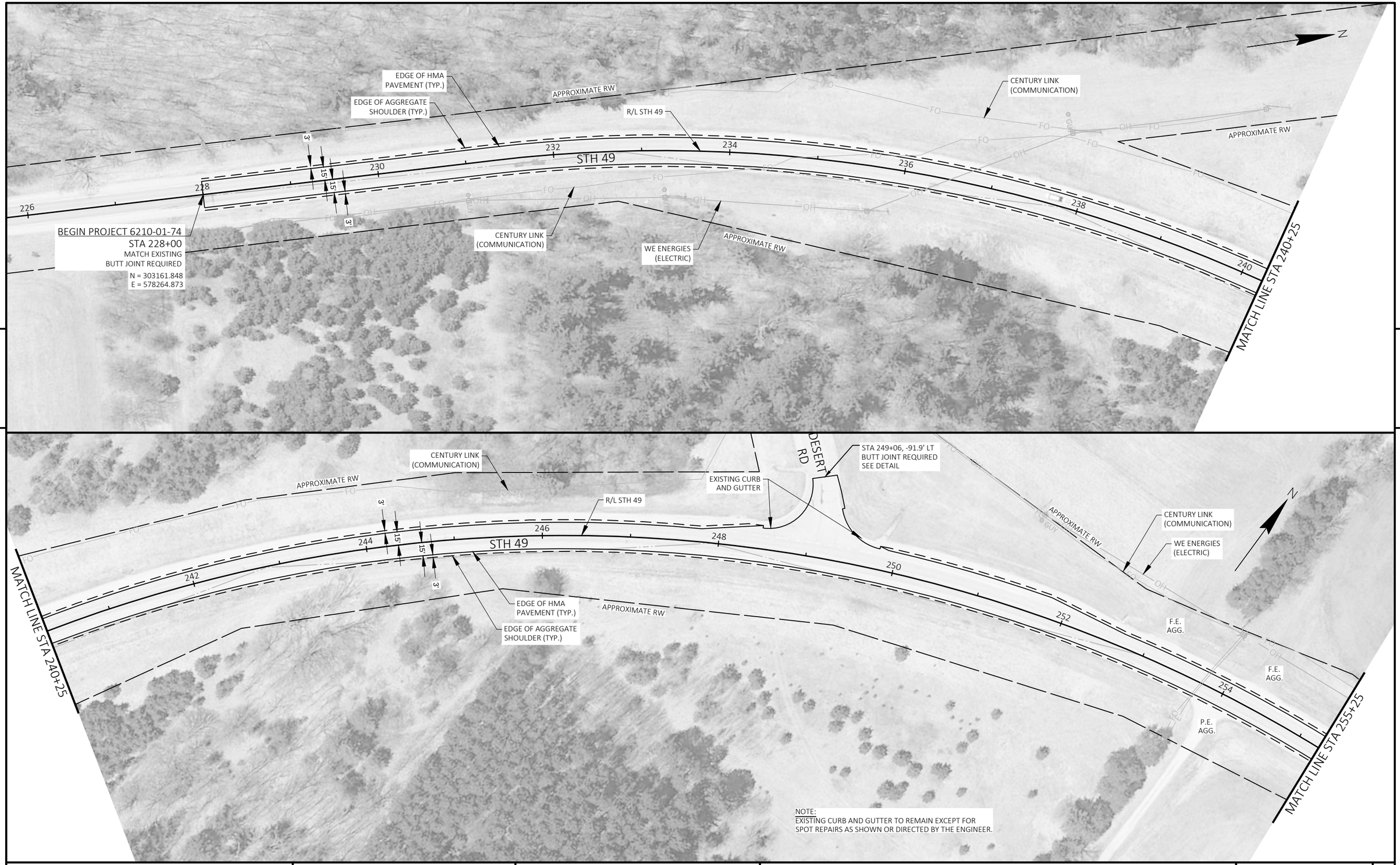
CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	REMARKS
228+00	-	290+75	MAINLINE	6,275	PROJECT LIMITS
			TOTAL 0010	6,275	
12+93	-	21+41	RAMP 49-1	848	
30+82	-	40+05	RAMP 49-2	923	
50+36	-	60+31	RAMP 49-3	995	
70+25	-	77+95	RAMP 49-4	770	
290+75	-	298+27	MAINLINE	752	
		PROJECT 1510-02-74		-	
			TOTAL 0010	4,288	
			ITEM TOTAL	10,563	

NOTE: OTHER CONSTRUCTION STAKING ITEMS SHOWN ELSEWHERE IN MISCELLANEOUS QUANTI

SAWING

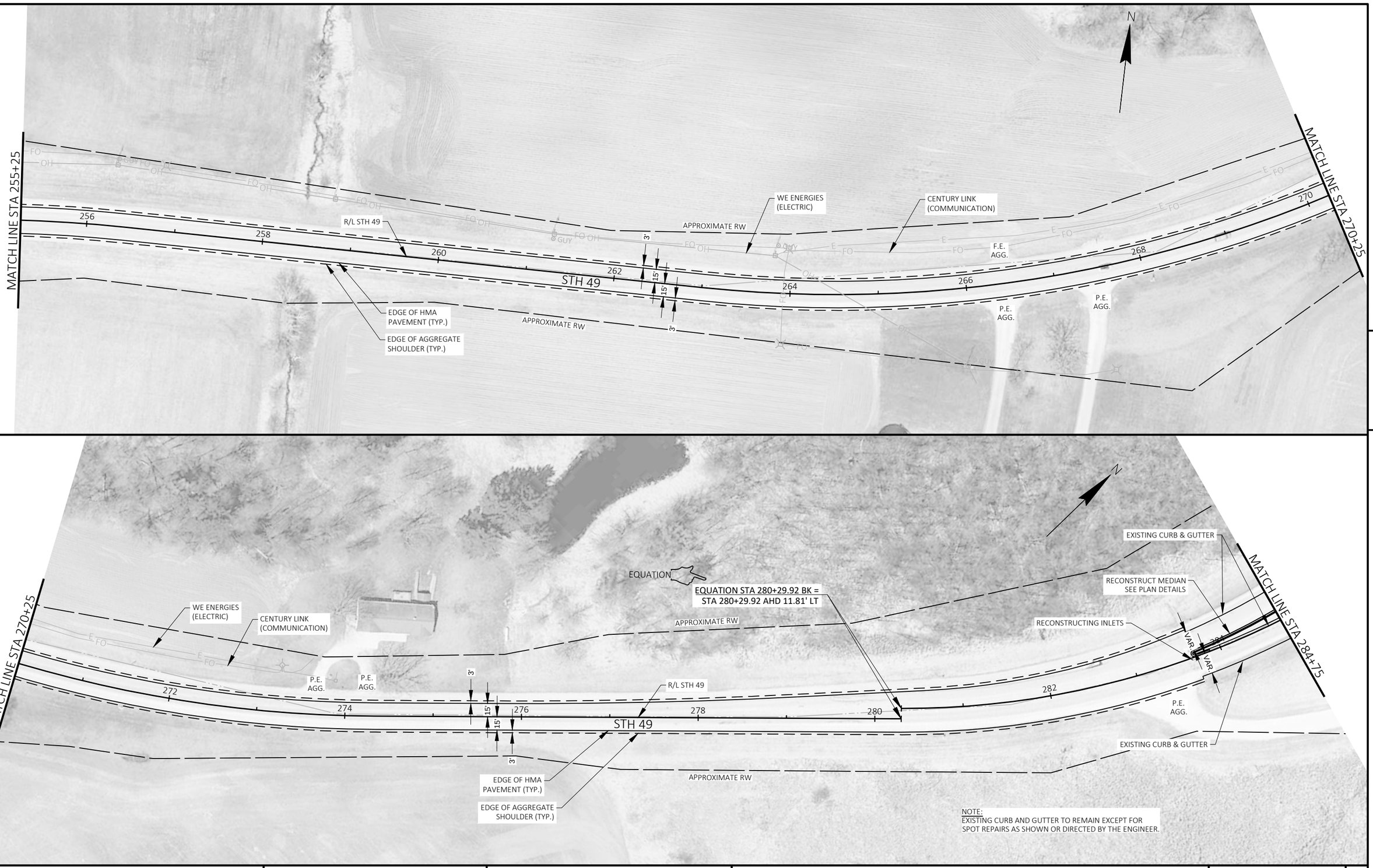
STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
UNDISTRIBUTED				72	10	SPOT CURB AND GUTTER REPAIRS AS DIRECTED BY ENGINEER
			TOTAL 6210-01-74	72	10	
283+66	-	286+08	LT	265	6	REMOVING STH 49 MEDIAN TEMP ASPHALT
290+25	-	291+23	LT	129	6	REMOVING STH 49 MEDIAN TEMP ASPHALT
292+87	-	292+96	LT	13	6	ADJUSTING INLET
296+41	-	296+50	LT	13	6	ADJUSTING INLET
296+95	-	297+04	RT	13	6	ADJUSTING INLET
UNDISTRIBUTED			LT/RT	108	24	SPOT CURB AND GUTTER REPAIRS AS DIRECTED BY ENGINEER
			TOTAL 1510-02-74	541	54	
			ITEM TOTAL	613	64	



5

PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	PLAN: STH 49	SHEET 63	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 10:03 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6210-01-74	HWY: STH 49	COUNTY: WAUPACA	PLAN: STH 49	SHEET 64	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 02

PLOT DATE : 7/6/2023 10:03 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE STA 284+75

APPROXIMATE RW

RECONSTRUCT MEDIAN
SEE PLAN DETAILS

EXISTING CURB & GUTTER

RECONSTRUCT MEDIAN
SEE PLAN DETAILS

286 288 290

23.6'

23.6'

EXISTING CURB & GUTTER

EDGE OF HMA
PAVEMENT (TYP.)

R/L STH 49

END PROJECT 6210-01-74
BEGIN PROJECT 1510-02-74
STA 290+75.16
N = 306939.457
E = 582245.463

NOTE:
EXISTING CURB AND GUTTER TO REMAIN EXCEPT FOR
SPOT REPAIRS AS SHOWN OR DIRECTED BY THE ENGINEER.

APPROXIMATE RW

RAMP 49-2

40

ADJUSTING INLET COVERS

RECONSTRUCTING INLETS

SB STH 49

292

NB STH 49

294

296

ADJUSTING INLET COVERS

EB USH 10

WB USH 10

52 RAMP 49-3

RECONSTRUCTING INLETS

2 - ADJUSTING INLET COVERS

28 RAMP 49-1

72

RAMP 49-4

APPROXIMATE RW

RECONSTRUCT MEDIAN
SEE PLAN DETAILS

NB STH 110

END PROJECT 1510-02-74
STA 298+27.39
N = 307597.836
E = 582552.044

298

SB STH 110

58 57 56

BEGIN PROJECT 6590-02-77
STA 298+27.39

300

MATCH LINE STA 300+25

WETLAND BOUNDARY (TYP.)

N

APPROXIMATE RW

RAILROAD GRADE RD

REPLACE CURB & GUTTER
SEE PLAN DETAILS

WETLAND BOUNDARY (TYP.)

END CONSTRUCTION
STA 314+74.04

202 202

302 304 306 308 310 312 314

NB STH 110

SB STH 110

RECONSTRUCT MEDIAN
SEE PLAN DETAILS

APPROXIMATE RW

MATCH LINE STA 300+25

5

PROJECT NO: 6210-01-74/1510-02-74	HWY: STH 49	COUNTY: WAUPACA	PLAN: STH 49/STH 110	SHEET 65	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 03
PLOT DATE : 7/6/2023 10:04 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

N

APPROXIMATE RW

APPROXIMATE RW

BEGIN CONSTRUCTION
STA 12+83.30
MATCH EXISTING
BUTT JOINT REQUIRED
N = 307393.837
E = 581574.458

R/L RAMP 49-1

RAMP 49-1

12 14 16 18 20 22

3" 23" 1"

EDGE OF HMA PAVEMENT (TYP.)

EDGE OF AGGREGATE SHOULDER (TYP.)

WB USH 10

EB USH 10

WB USH 10

NB STH 110

SB STH 110

WETLAND BOUNDARY (TYP.)

202 57 58 3 56 300 298

296 294

R/L STH 49

RAMP 49-4

72

R/L RAMP 49-4

RAMP 49-2

32

5

5

57 58 3 56 300

WETLAND BOUNDARY (TYP.)

APPROXIMATE RW

NB STH 110

SB STH 110

298

N

APPROXIMATE RW

20 RAMP 49-1 22

R/L RAMP 49-4

72 74 76 78 80

3" 23" 1"

RAMP 49-4

EDGE OF HMA PAVEMENT (TYP.)

EDGE OF AGGREGATE SHOULDER (TYP.)

END CONSTRUCTION
STA 77+95.07
MATCH EXISTING
BUTT JOINT REQUIRED
N = 307335.108
E = 583238.547

WB USH 10

R/L STH 49

296

EB USH 10

60 62

APPROXIMATE RW

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	PLAN: RAMPS 49-1/49-4	SHEET 66	E

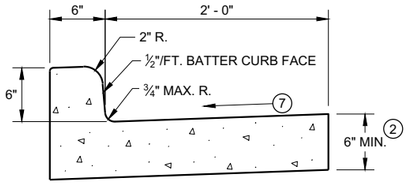
PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	PLAN: RAMP 49-2/49-3	SHEET 67	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 05
PLOT DATE : 7/6/2023 10:04 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

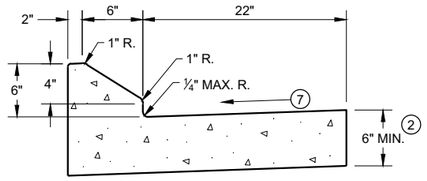
Standard Detail Drawing List

08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-14B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
11B02-02	CONCRETE MEDIAN NOSE
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
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)
14B47-04A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-04B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-04C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-04D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-04E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-04F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-04G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C08-22C	PAVEMENT MARKING (TURN LANES)
15C08-22D	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
15C18-07A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-07B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-08B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-08C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-10	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15D06-05	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D16-05	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-06A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D20-06B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-04A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D50-02A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-02B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

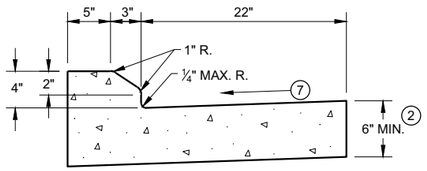
6



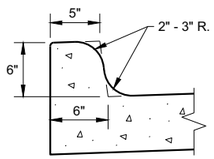
TYPES A (1) & D



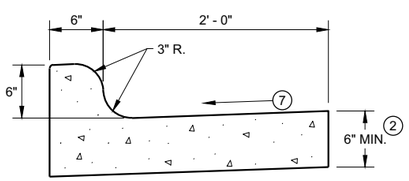
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

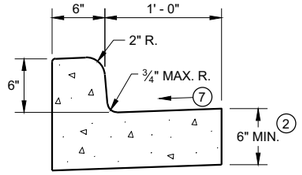


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



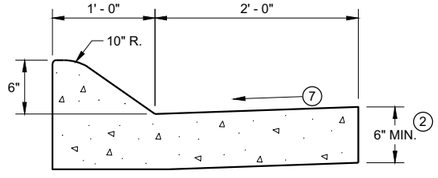
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

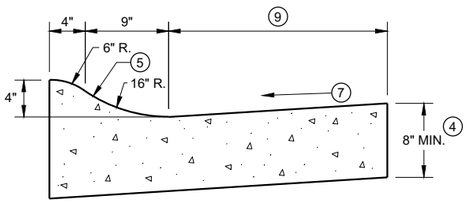
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

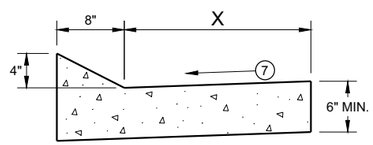
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

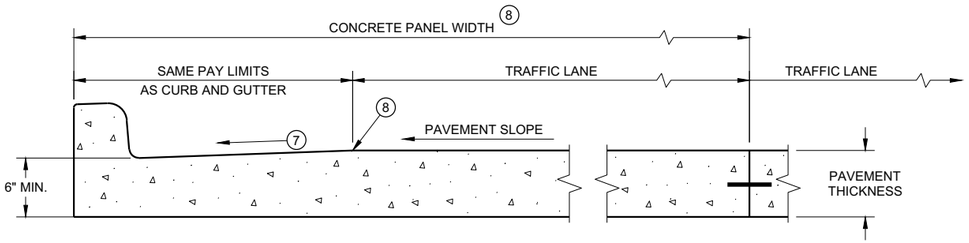


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

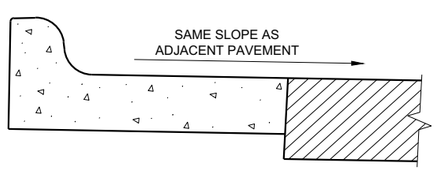
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

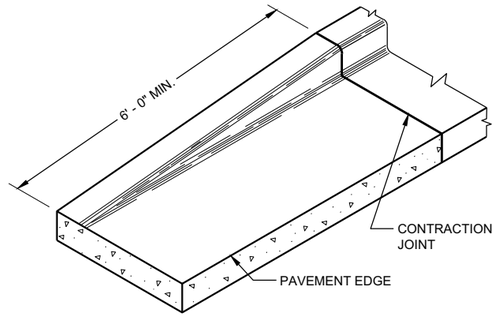
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(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

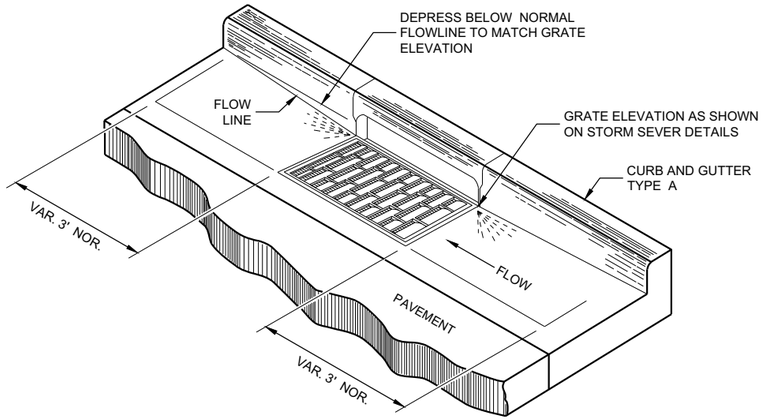
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 22a



END SECTIONCURB 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.

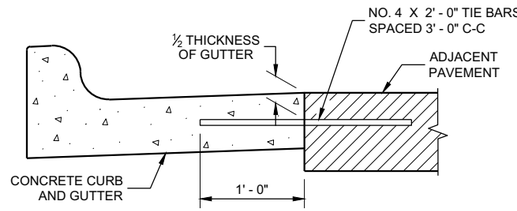
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

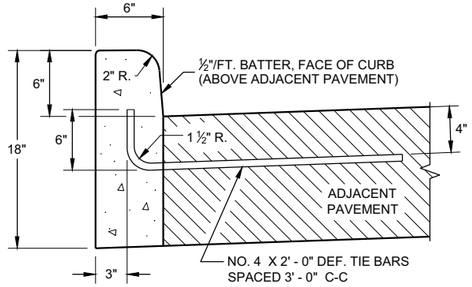
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

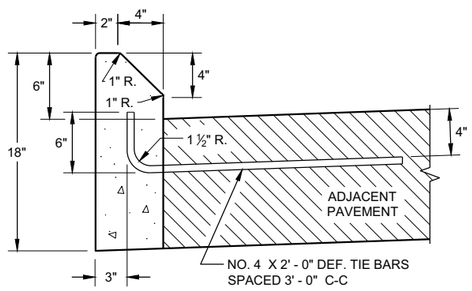
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

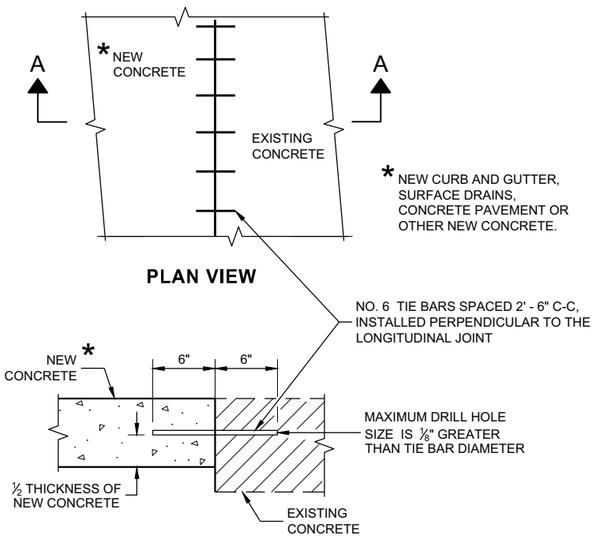


TYPES A (1) & D



TYPES G (1) & J

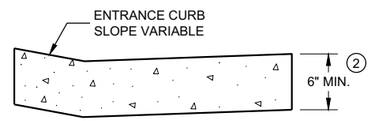
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

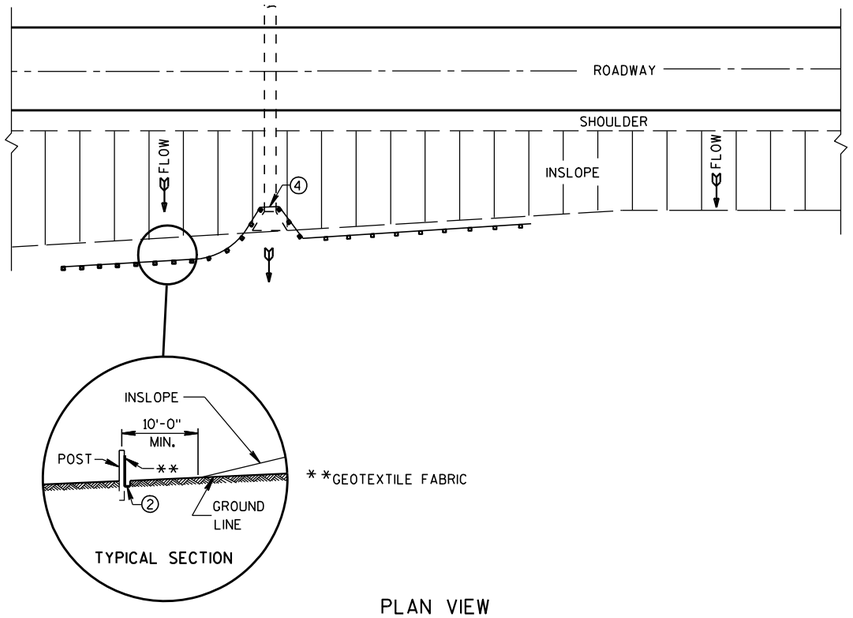
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

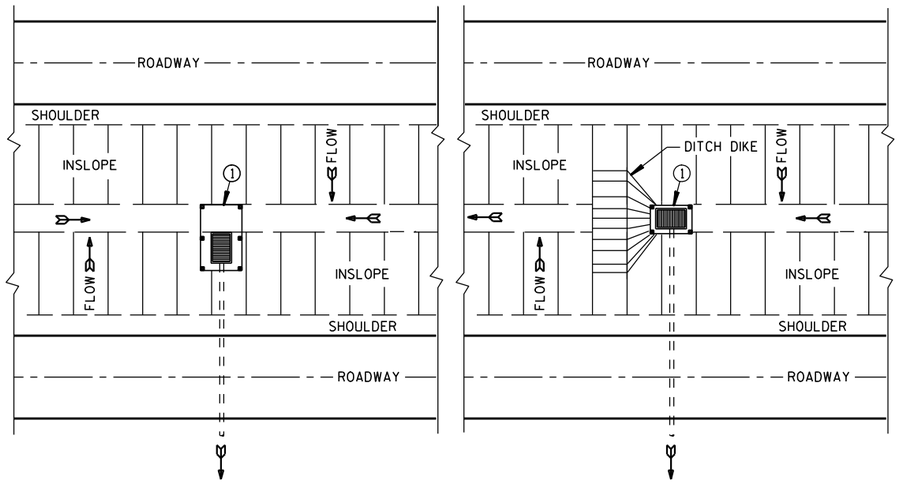
6

SDD08D01 - 22b



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



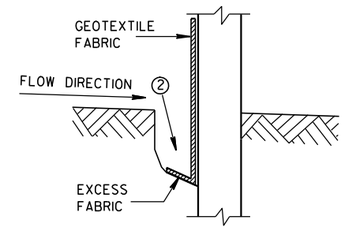
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

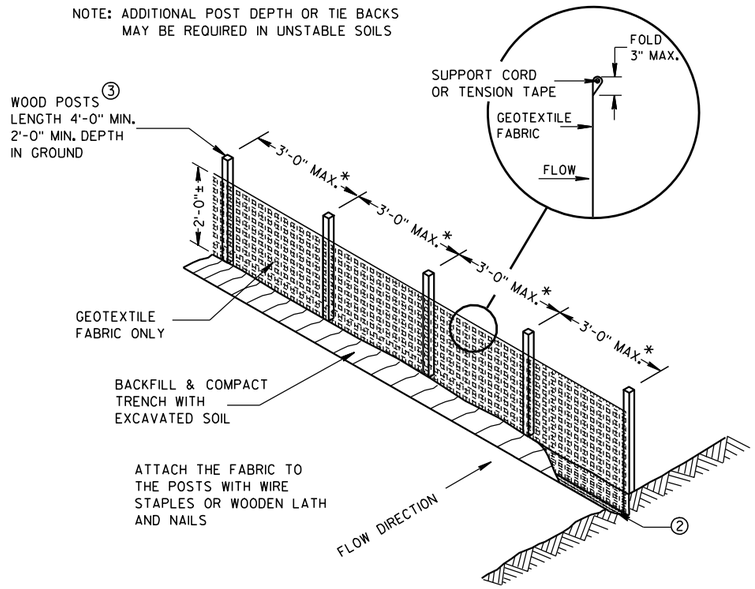
GENERAL NOTES

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

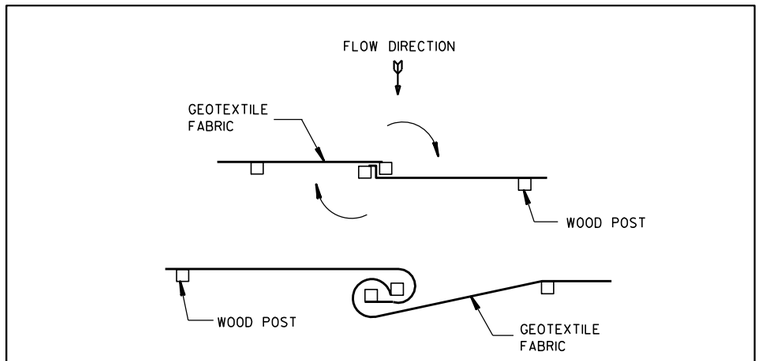
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



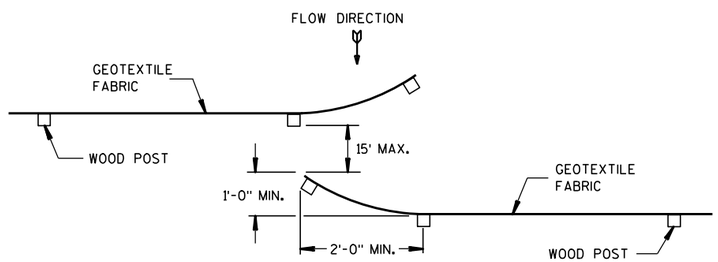
TRENCH DETAIL



SILT FENCE

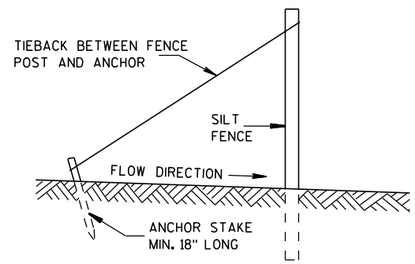


TWIST METHOD



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

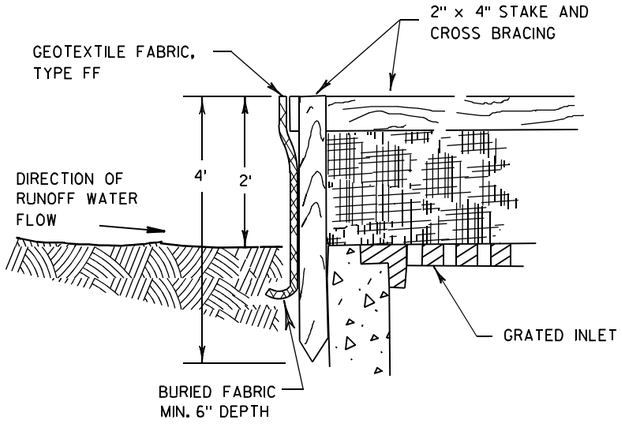
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

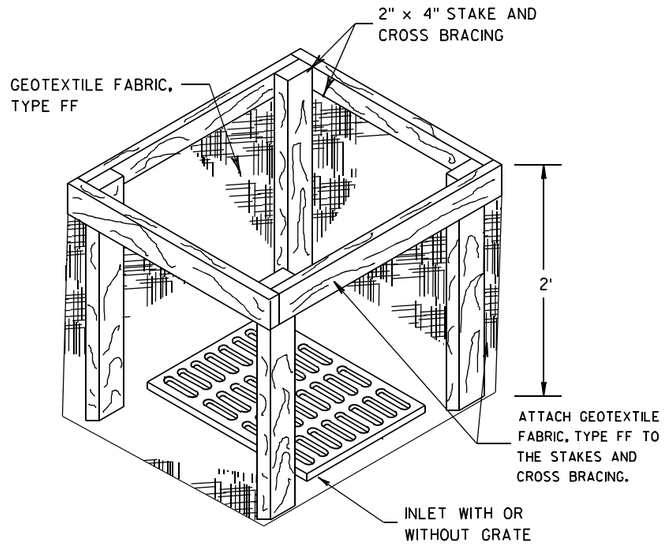
6

S.D.D. 8 E 9-6

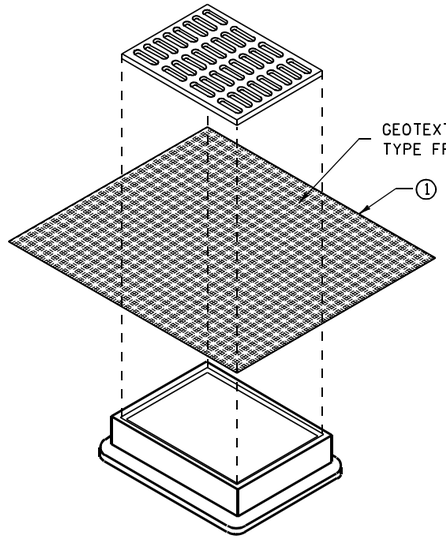
6

S.D.D. 8 E 9-6



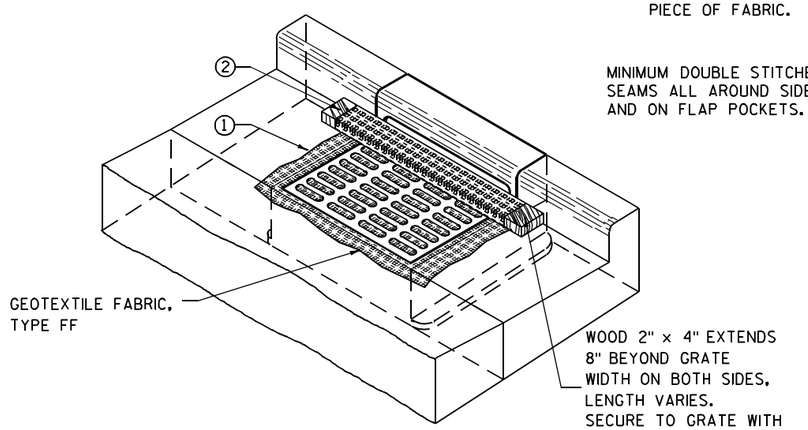


INLET PROTECTION, TYPE A

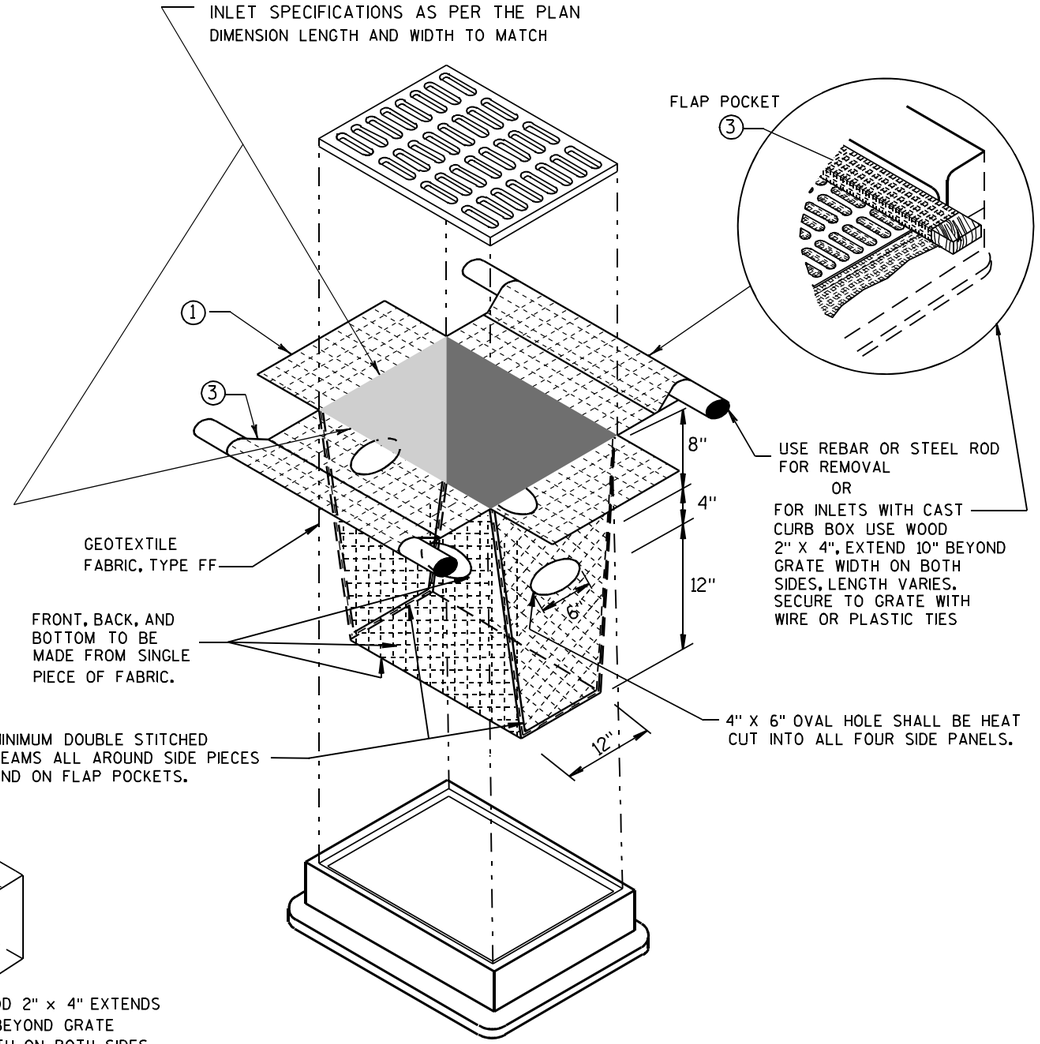


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

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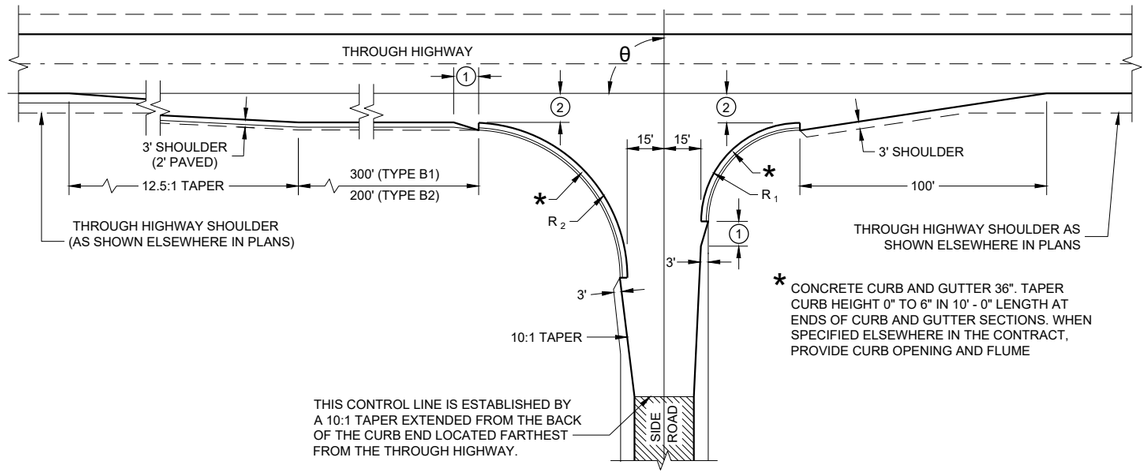
S.D.D. 8 E 10-2



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

TYPE "B1" AND "B2"

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

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

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

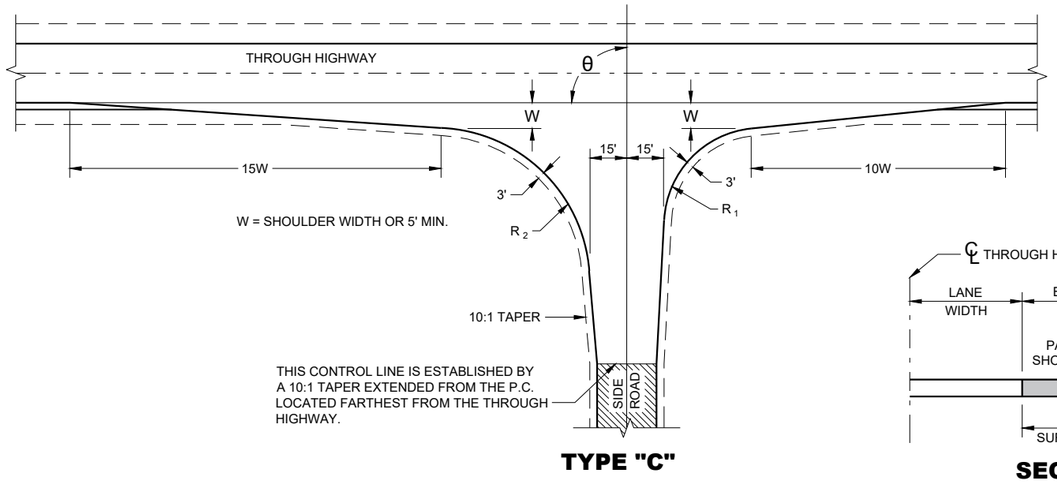
(1) 10-FT TYPICAL.

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

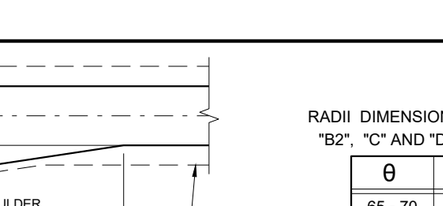
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

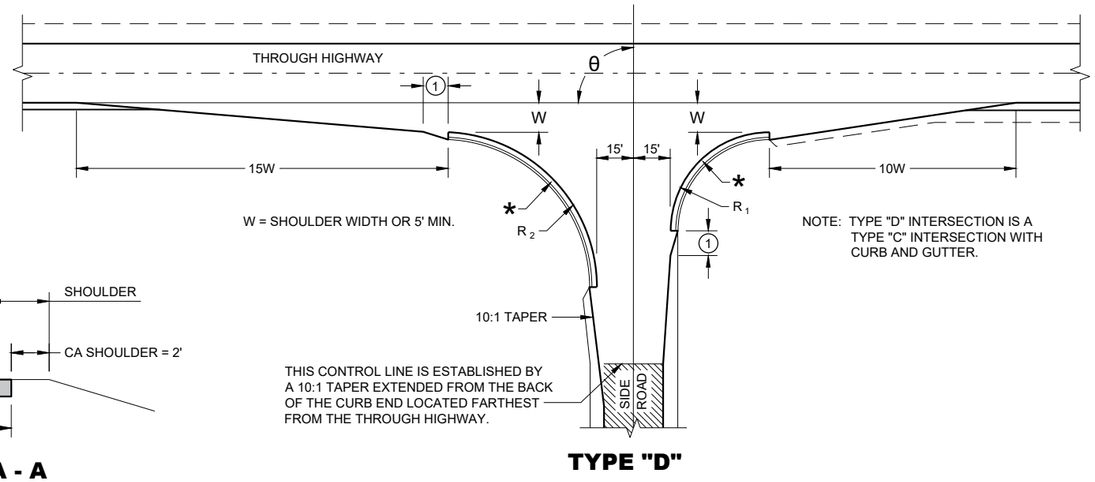
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

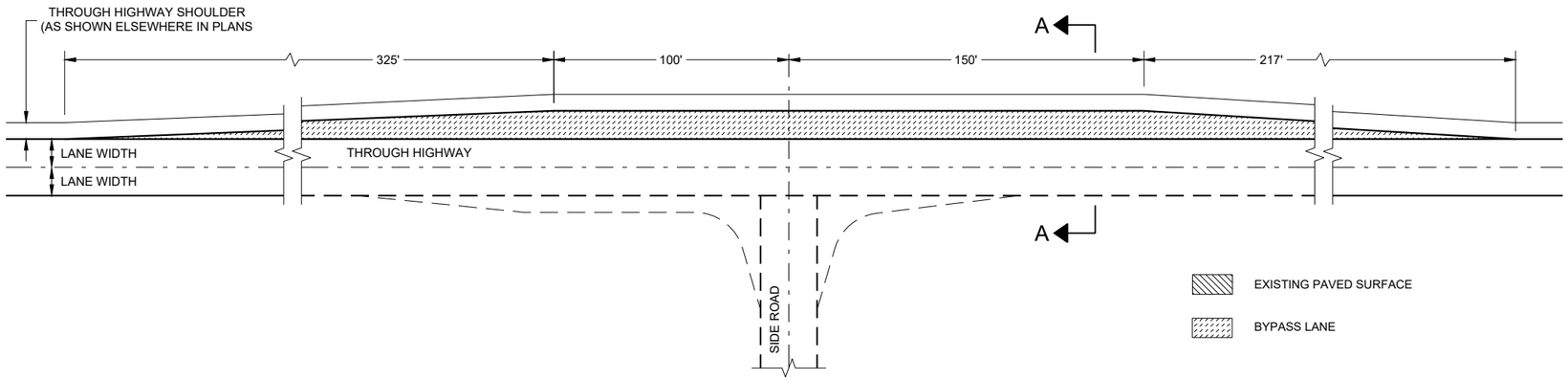


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



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

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 09A01 - 14a

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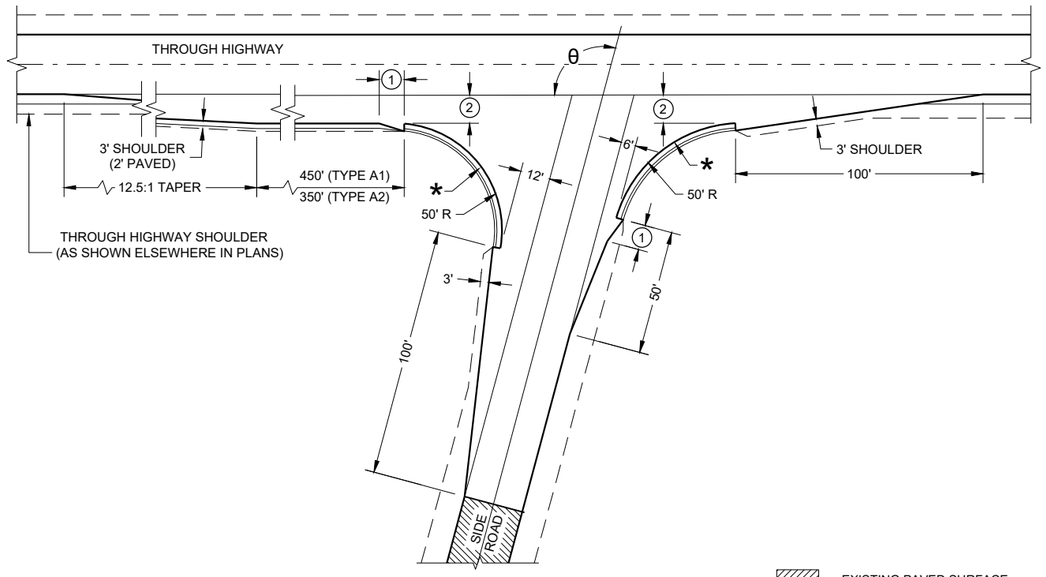
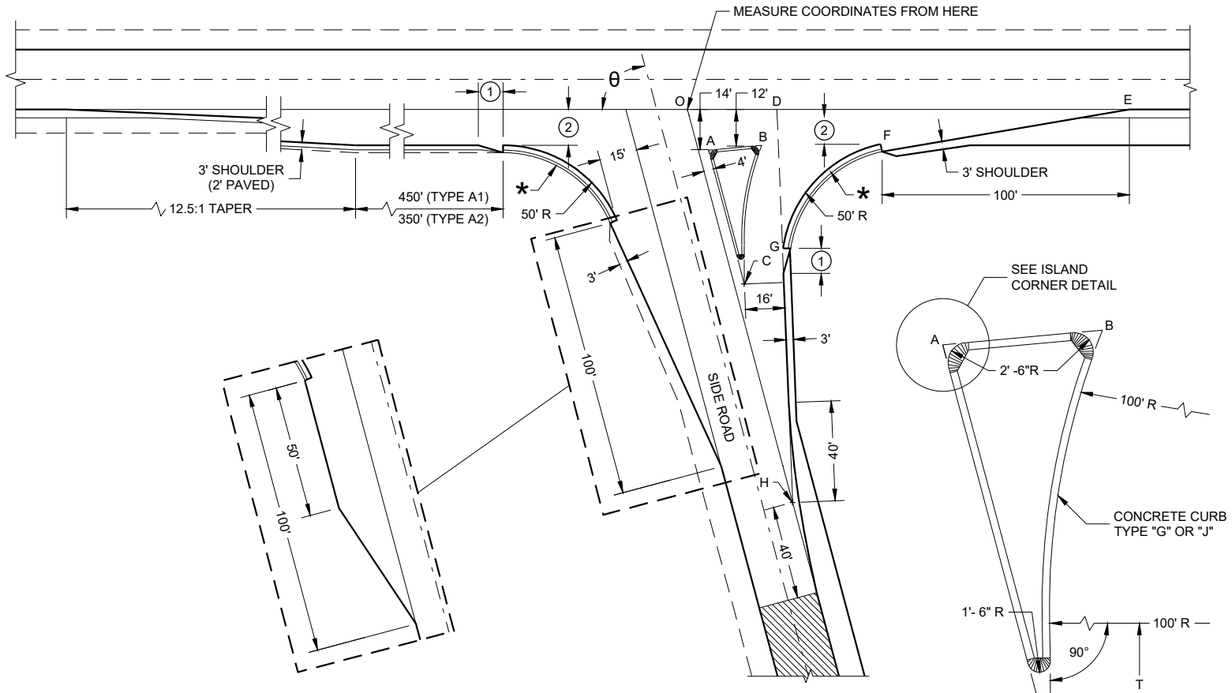
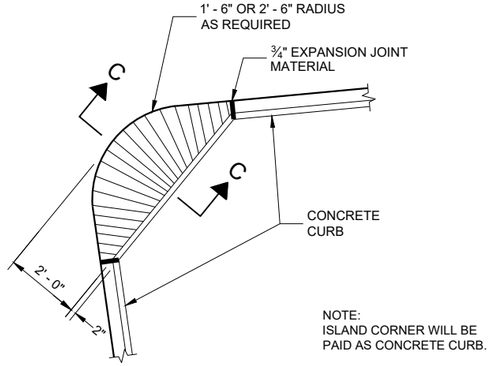


θ = MORE THAN 80°

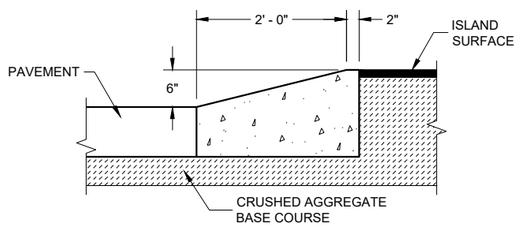


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

θ = ACUTE ANGLES 80° OR LESS



PLAN VIEW



SECTION C - C

ISLAND CORNER DETAIL

(TO BE CONSTUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT 'O') X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE 'A1" AND "A2" SIDE ROAD INTERSECTION DETAILS

AT GRADE SIDE ROAD INTERSECTIONS
TYPES "A1" AND "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 09A01 - 14b

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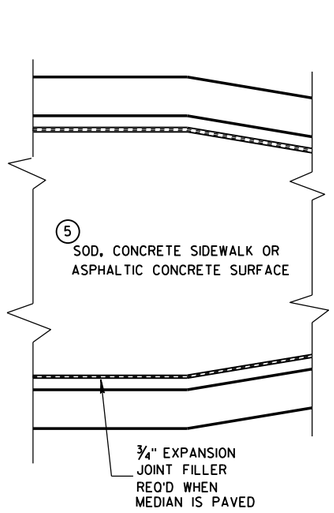
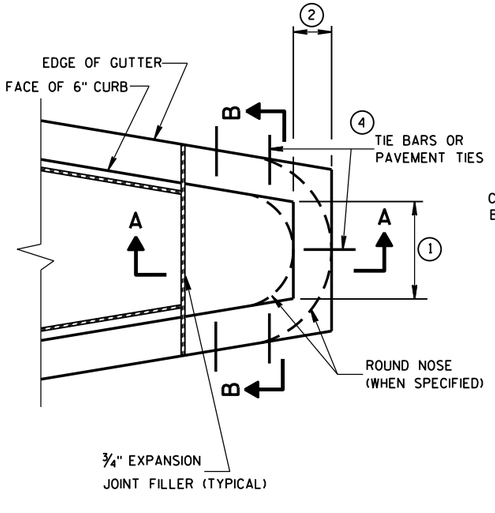
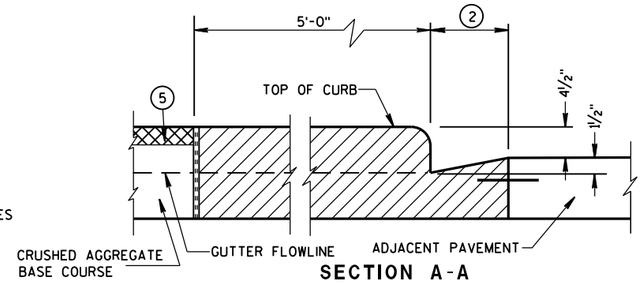
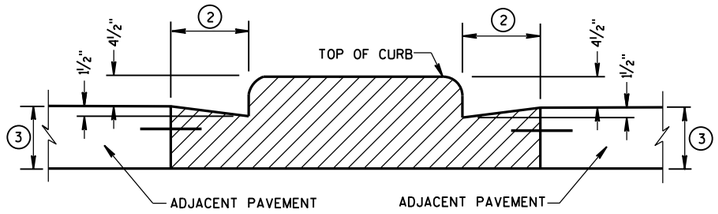
SDD 09A01 - 14b







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.

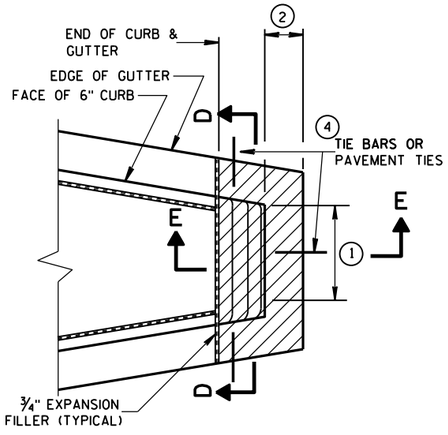
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

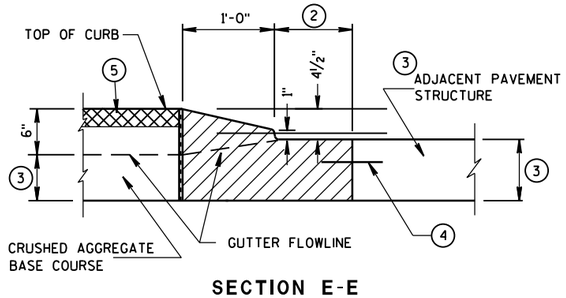
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

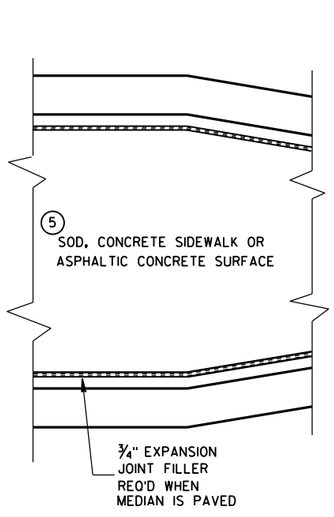
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

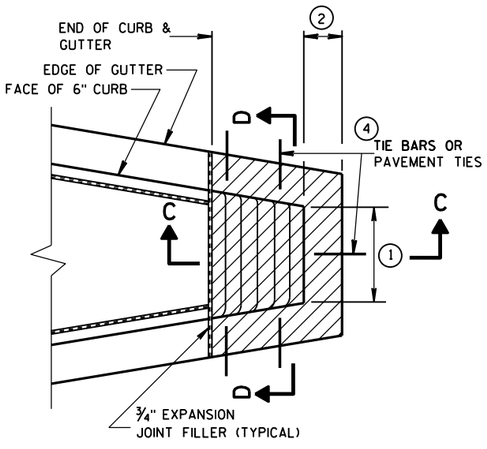


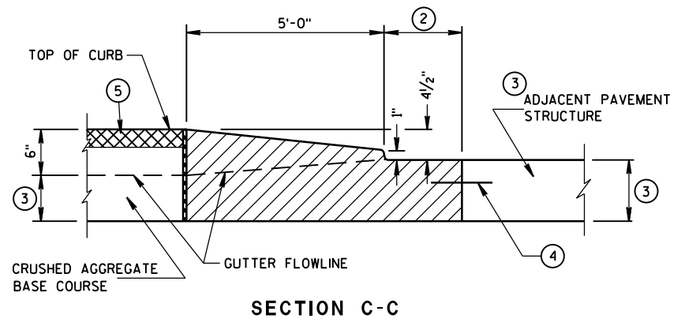


SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2

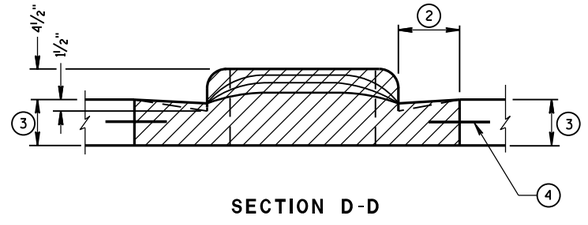






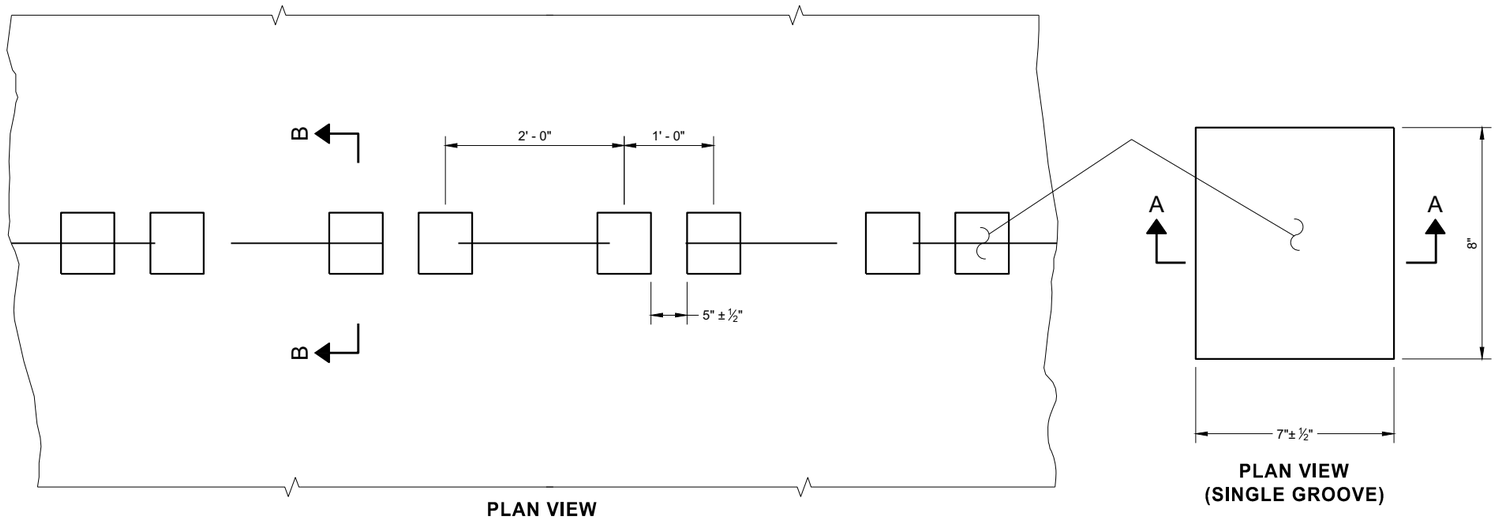
SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/2006 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

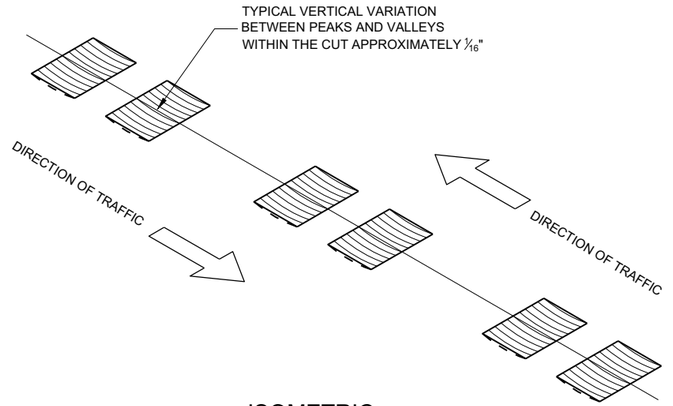
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

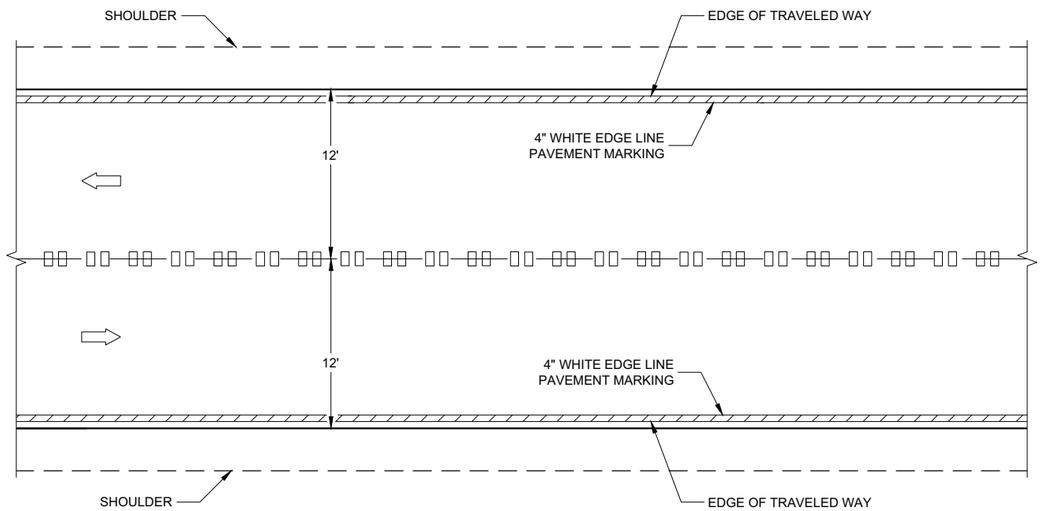
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

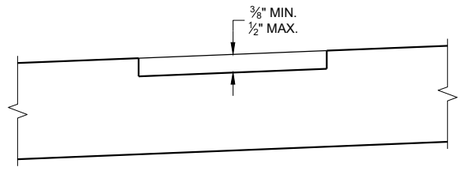
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



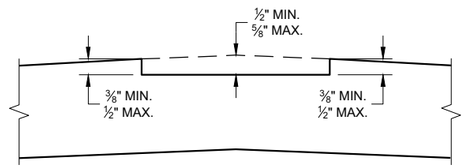
ISOMETRIC



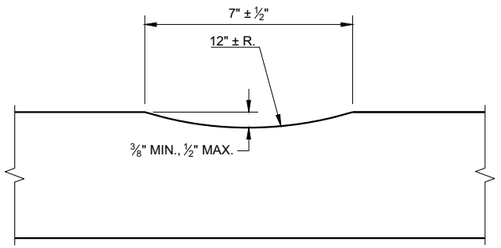
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A11 - 03a

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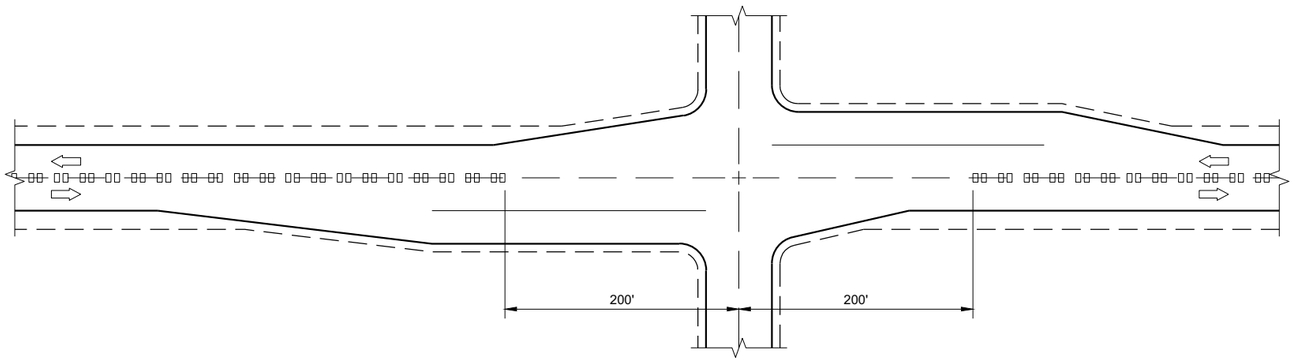
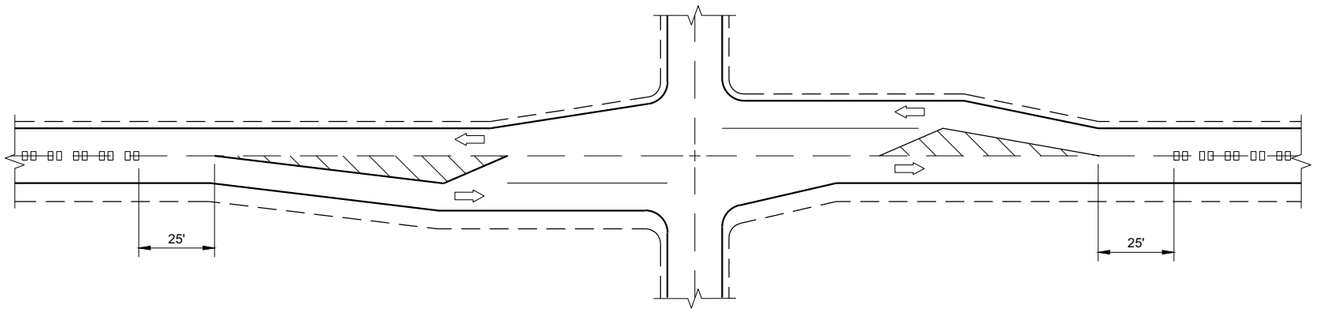
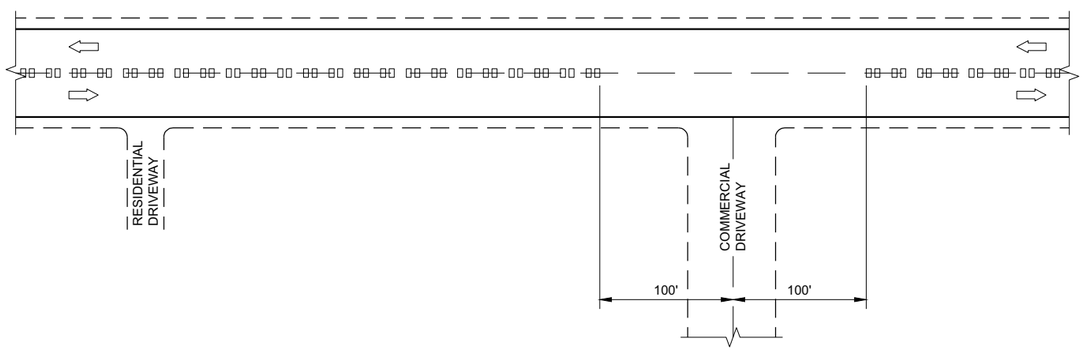
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



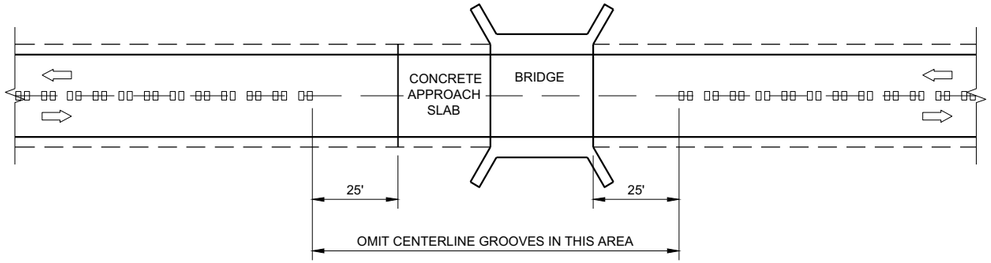
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



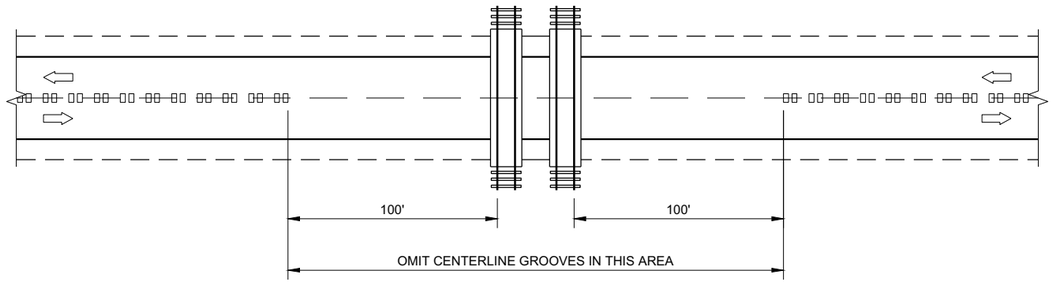
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

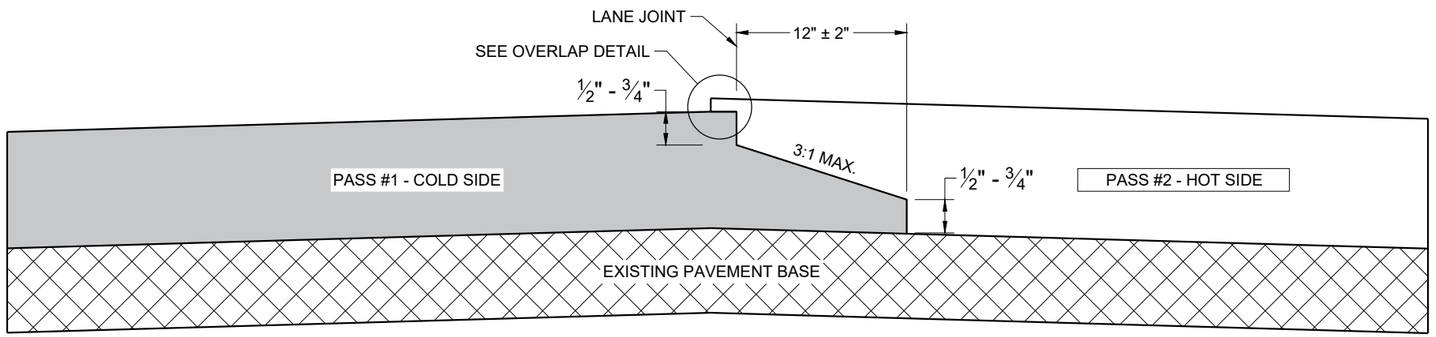
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

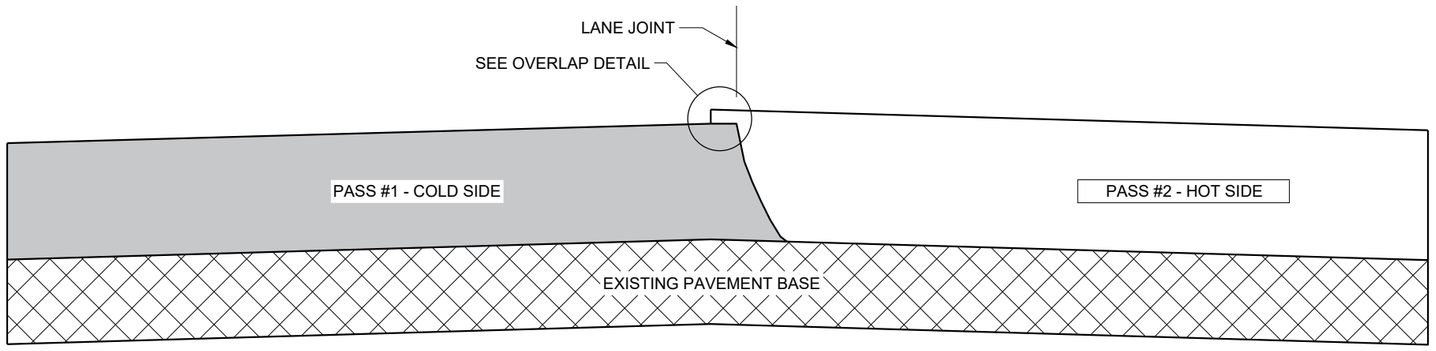
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

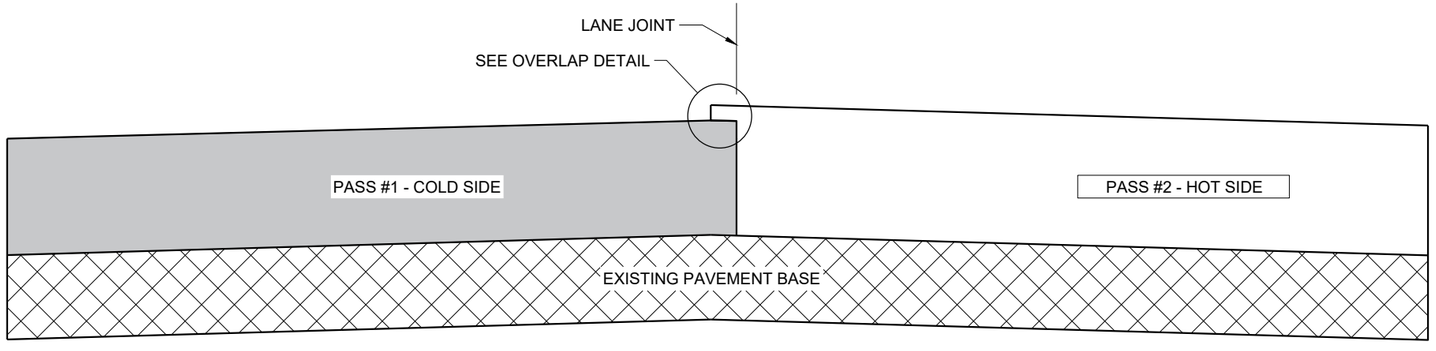
6
SDD13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

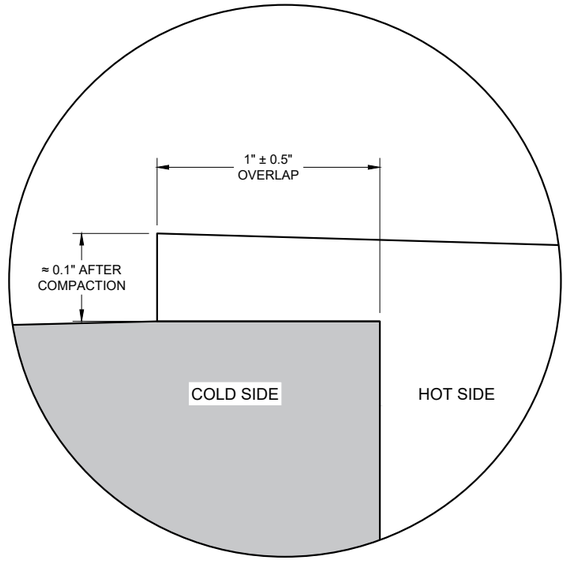
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

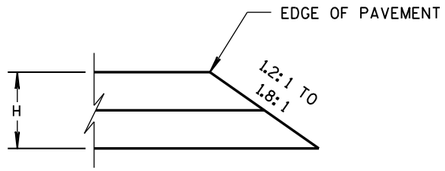
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

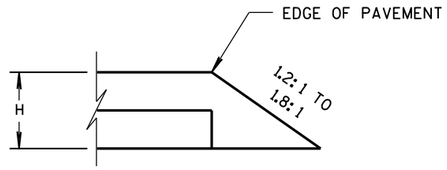
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



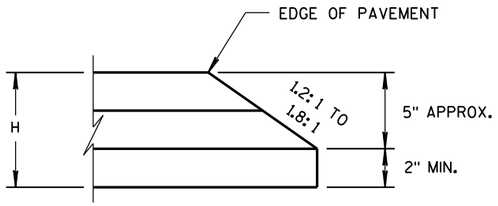
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



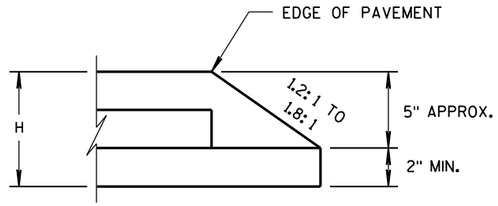
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

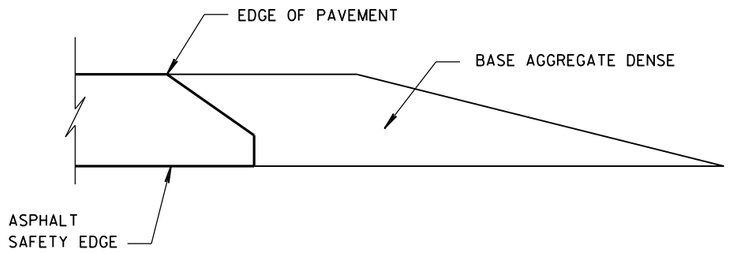
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

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

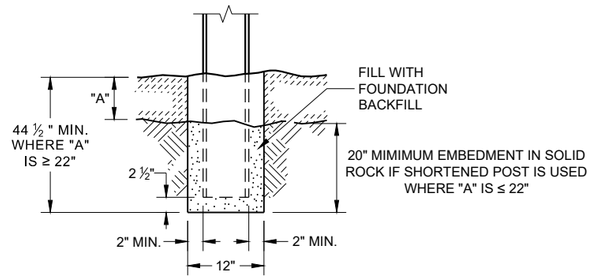
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

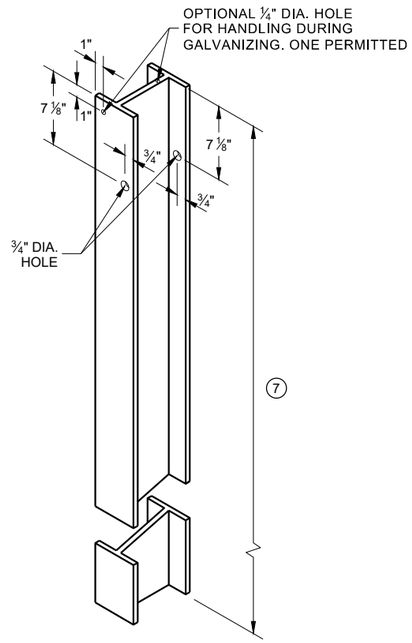
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

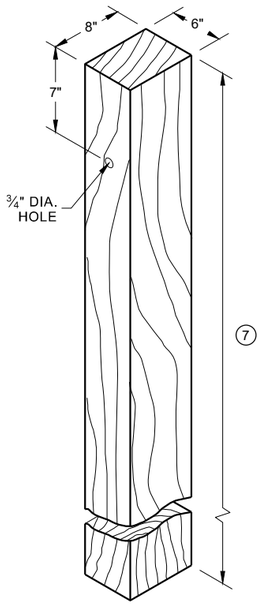
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



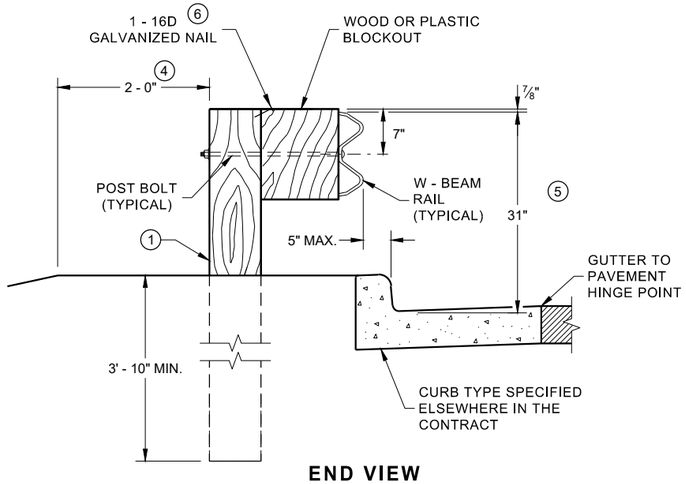
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



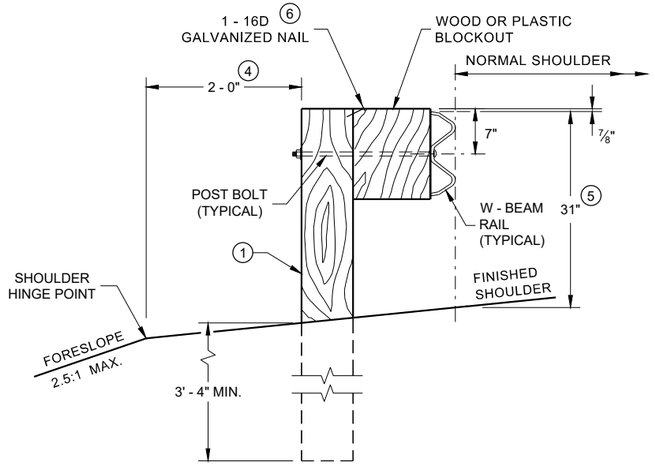
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



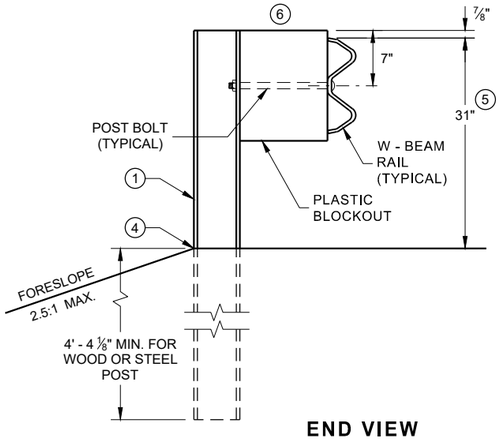
WOOD POST (6" X 8") NOMINAL (1)



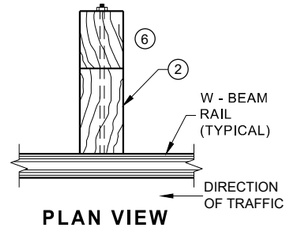
END VIEW
LOCATED ALONG A CURBED ROADWAY



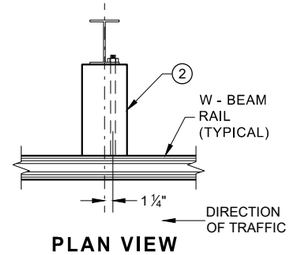
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



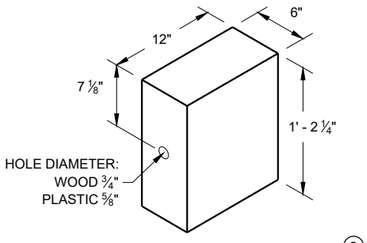
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

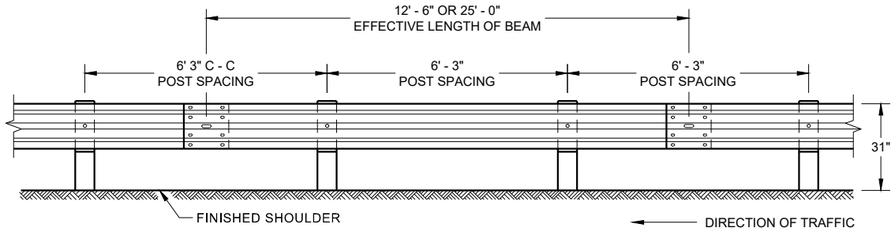
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

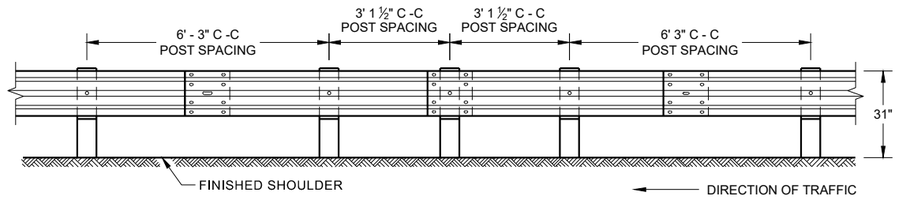
SDD 14B42 - 07a

6

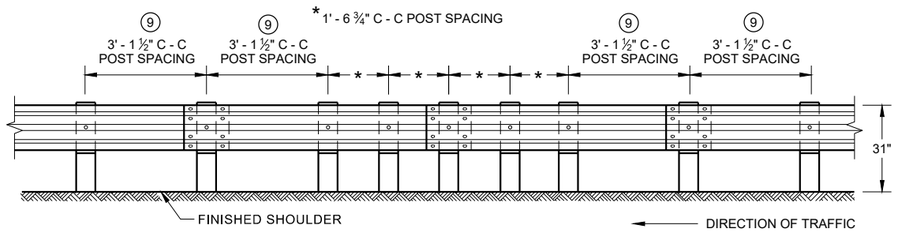
SDD 14B42 - 07a



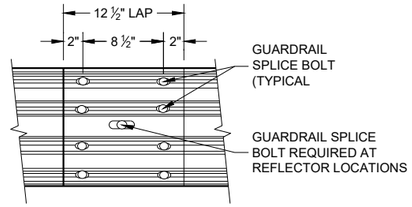
FRONT VIEW
POST SPACING STANDARD INSTALLATION



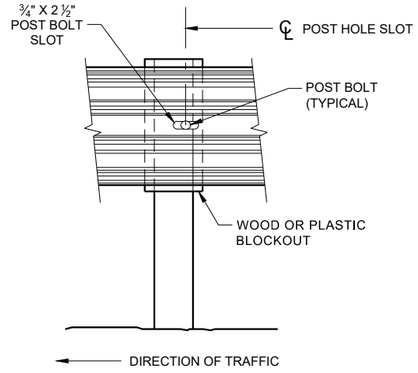
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



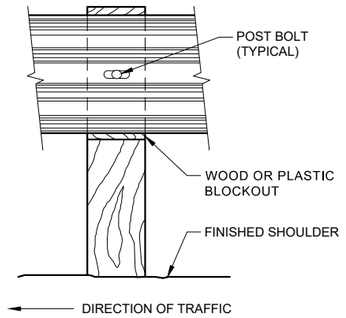
FRONT VIEW
QUARTER POST SPACING (QS)



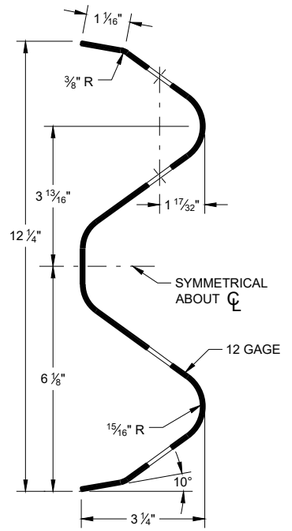
FRONT VIEW
MID-SPAN BEAM SPLICE



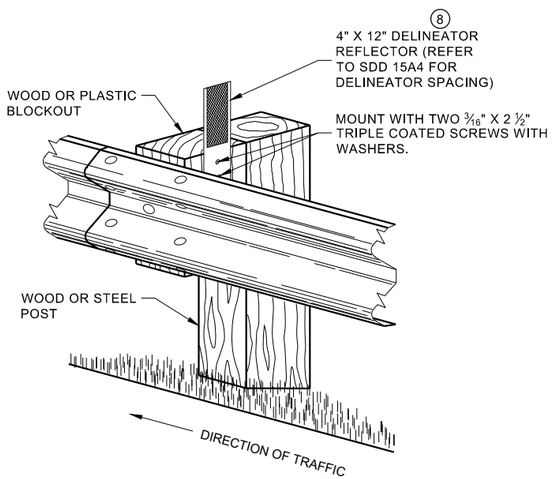
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

GENERAL NOTES

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

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

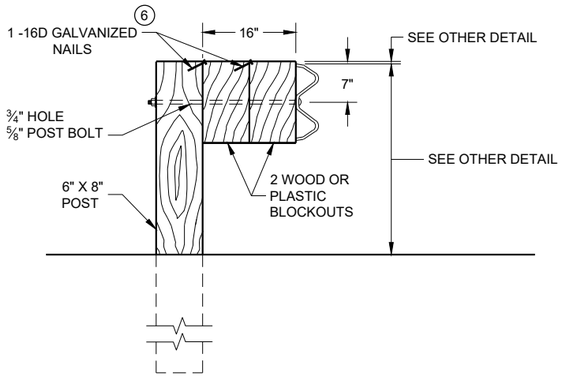
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B42 - 07b

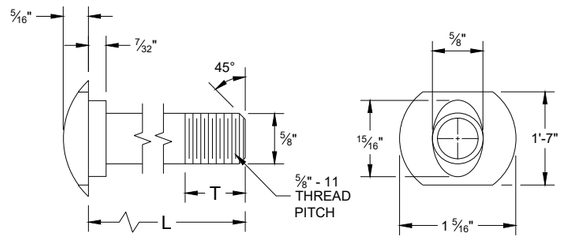


DETAIL FOR 16" BLOCKOUT DEPTH

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

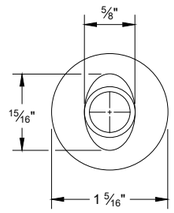
NOTE:

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.

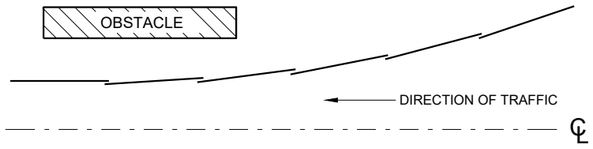


POST BOLT TABLE

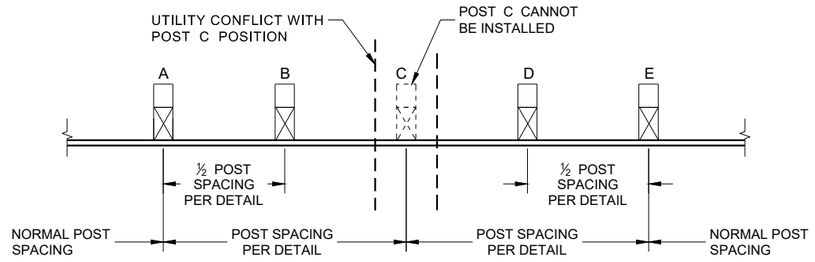
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



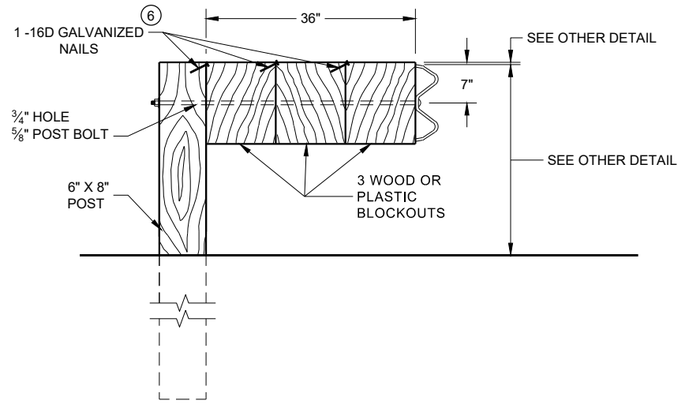
ALTERNATE BOLT HEAD



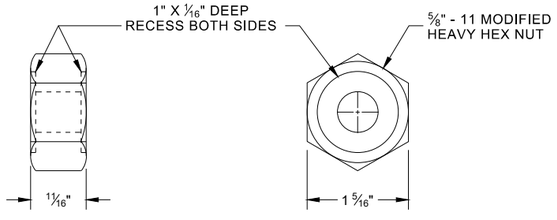
PLAN VIEW
BEAM LAPPING DETAIL



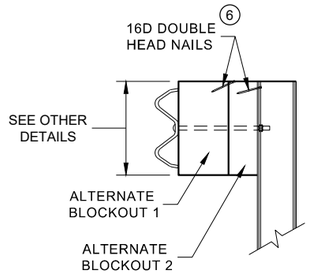
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



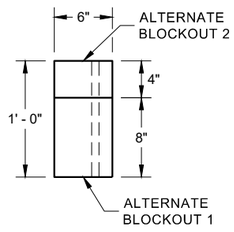
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

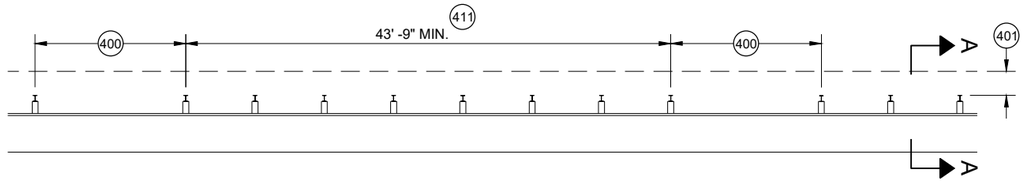
ALTERNATE WOOD BLOCKOUT DETAIL

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.

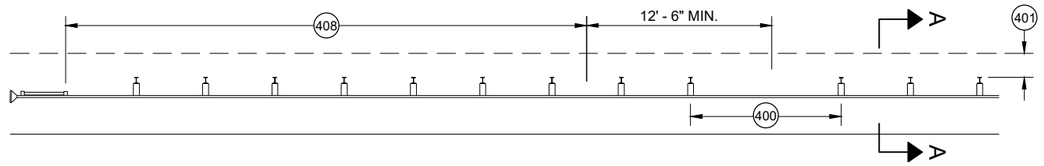
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

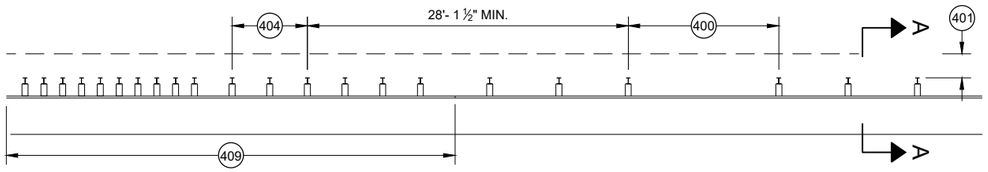
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



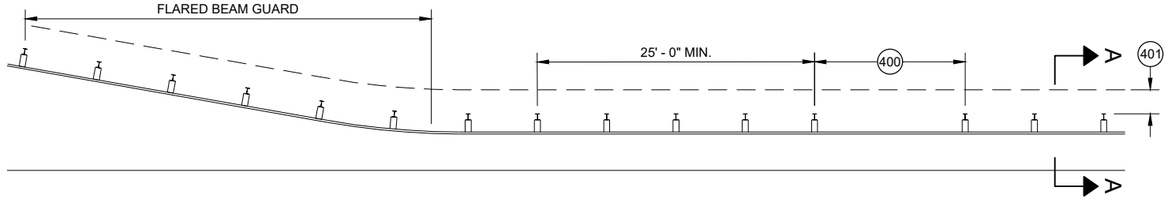
MISSING POST IN MGS GUARDRAIL



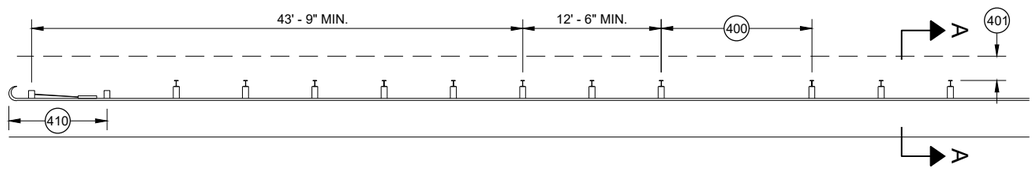
MISSING POST IN MGS GUARDRAIL NEAR EAT



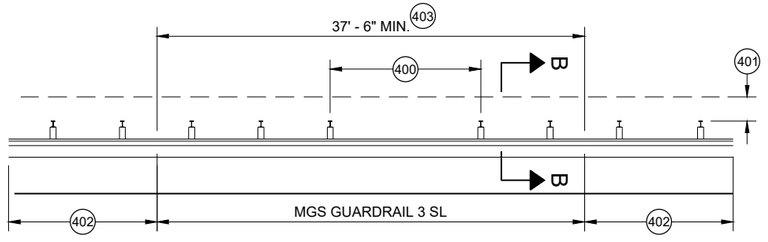
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

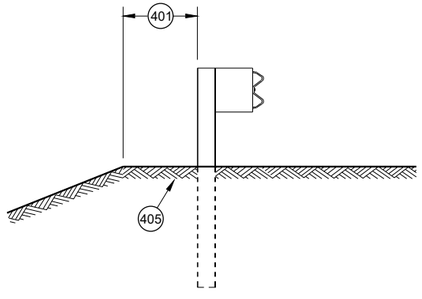


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

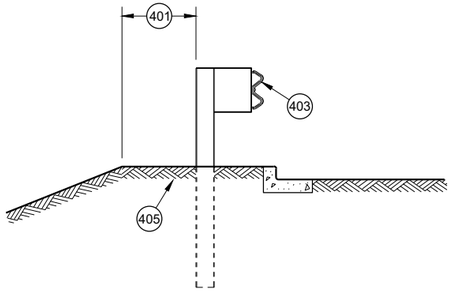


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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

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.

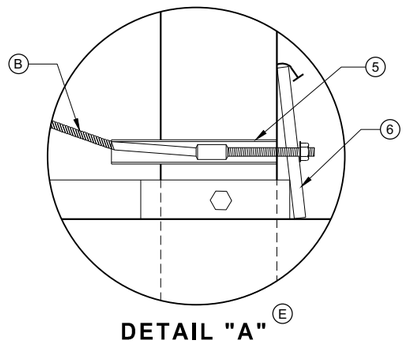
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

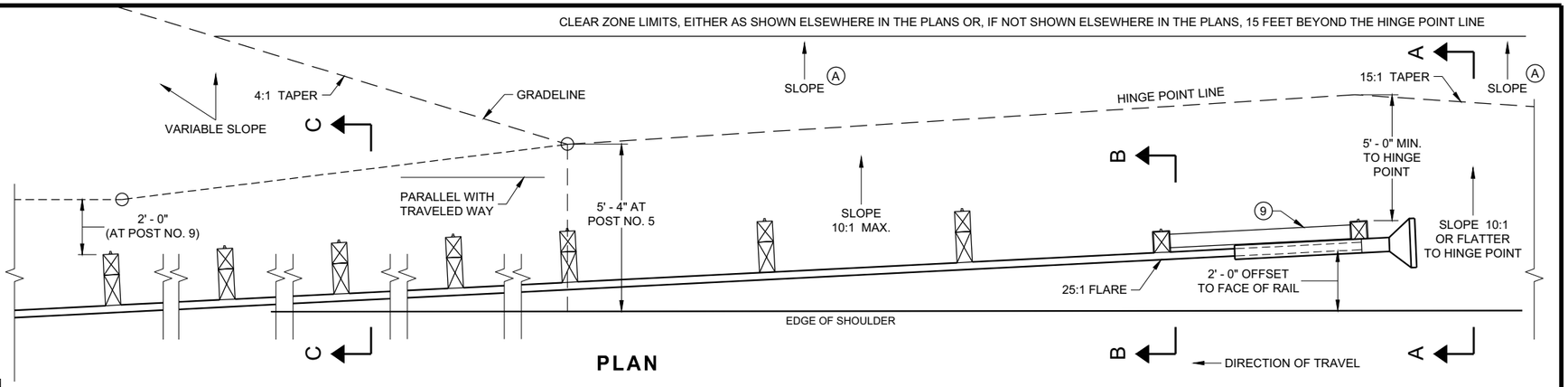
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

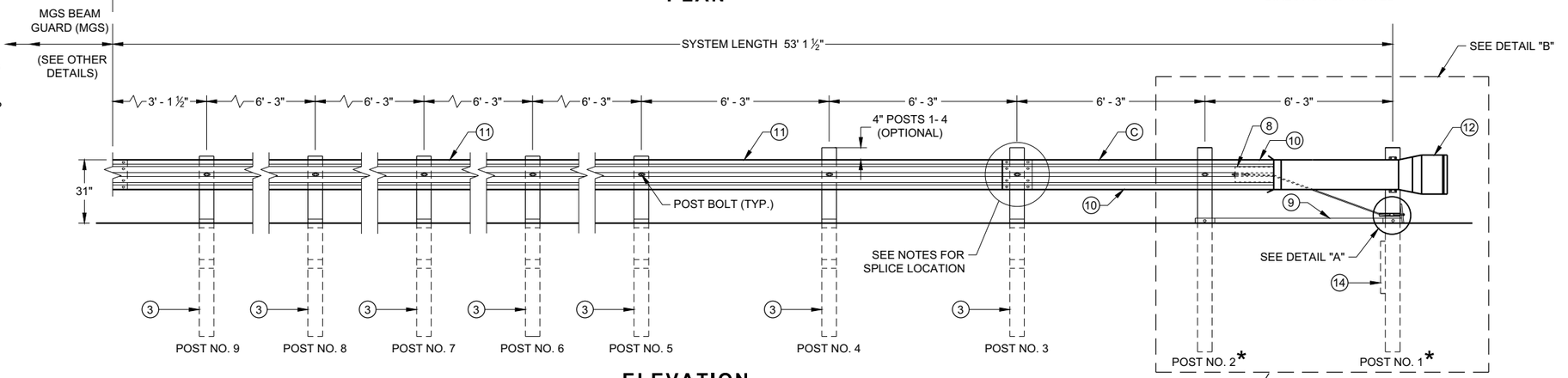
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

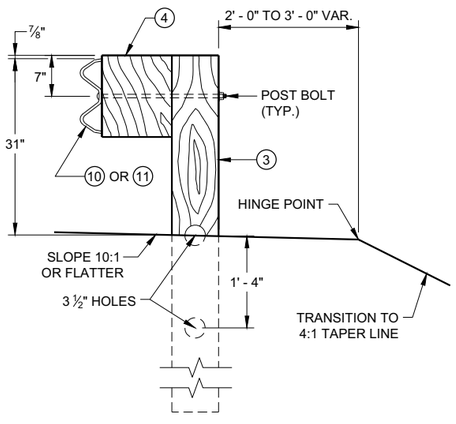
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



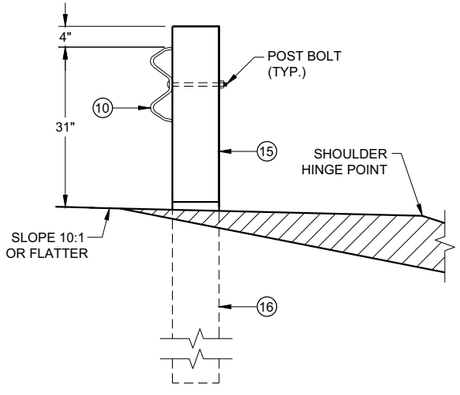
DETAIL "A" (E)



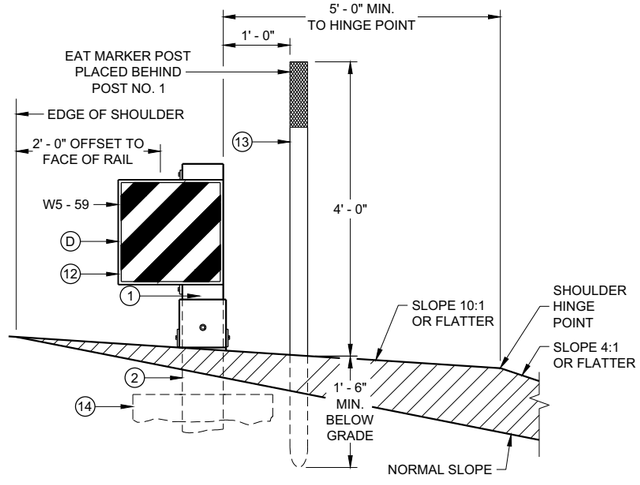




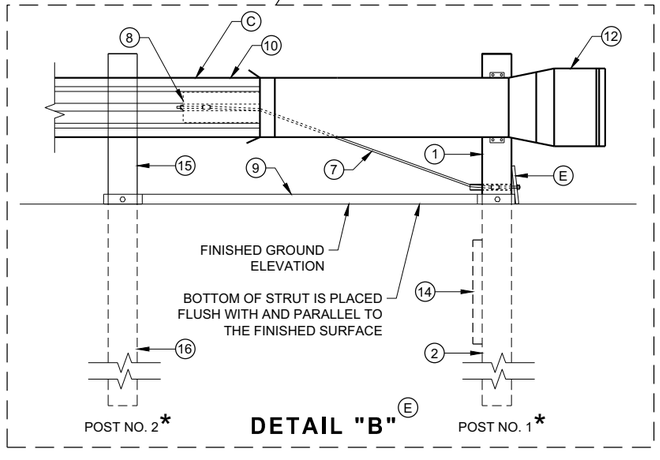
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*

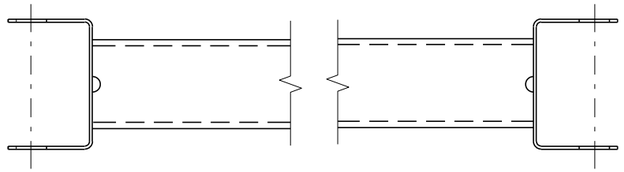


MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

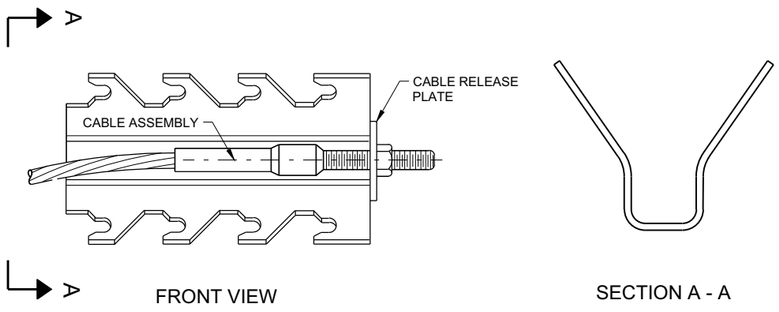
SDD 14B44 - 04a



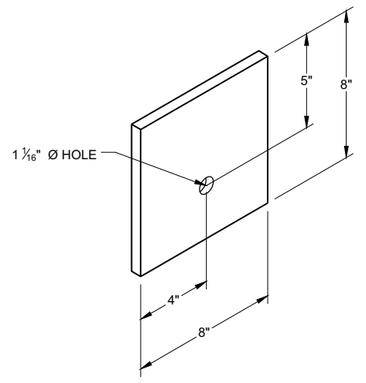
GENERIC GROUND STRUT ⑨ Ⓔ

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 ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

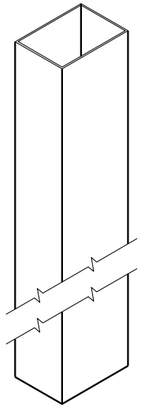
6

SDD 14B44 - 04b

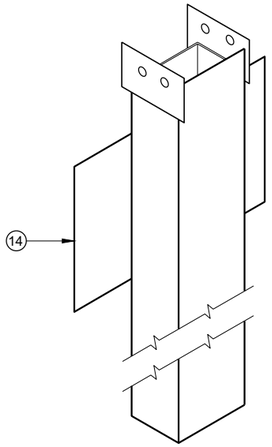
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

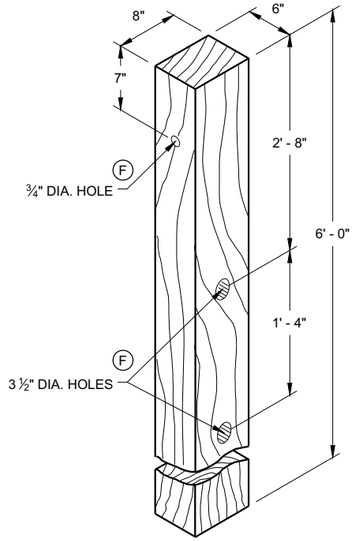
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



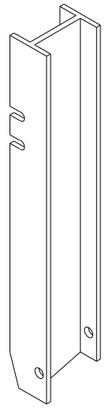
UPPER POST NO. 1 (1) (E)



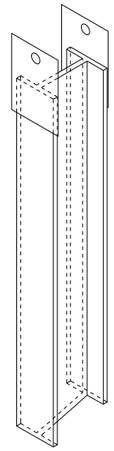
LOWER POST NO. 1 (2) (E)



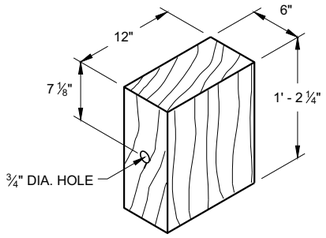
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



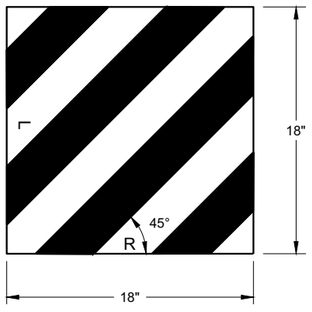
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

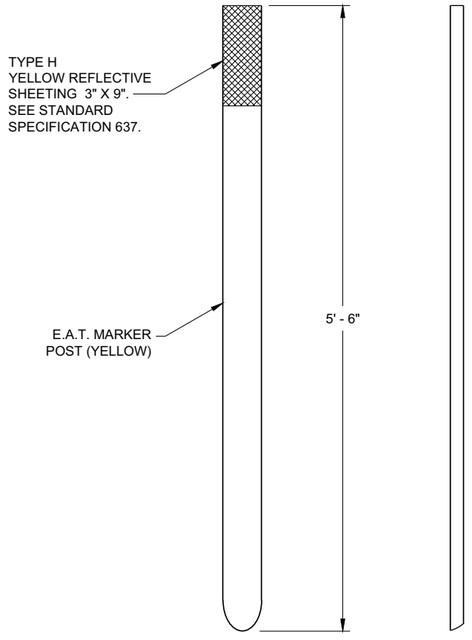


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



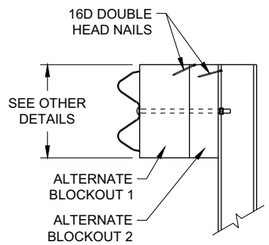
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

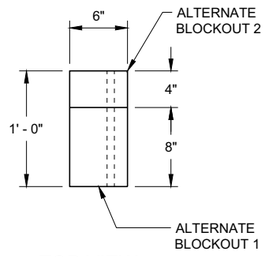


FRONT VIEW SIDE VIEW

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

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SDD 14B44 - 04c
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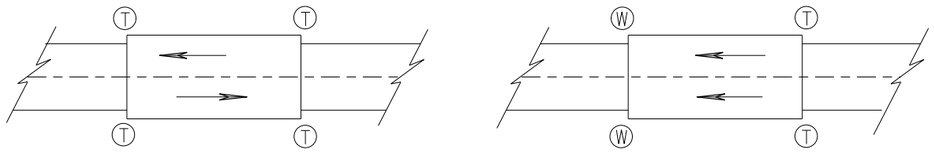


TWO WAY TRAFFIC

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.

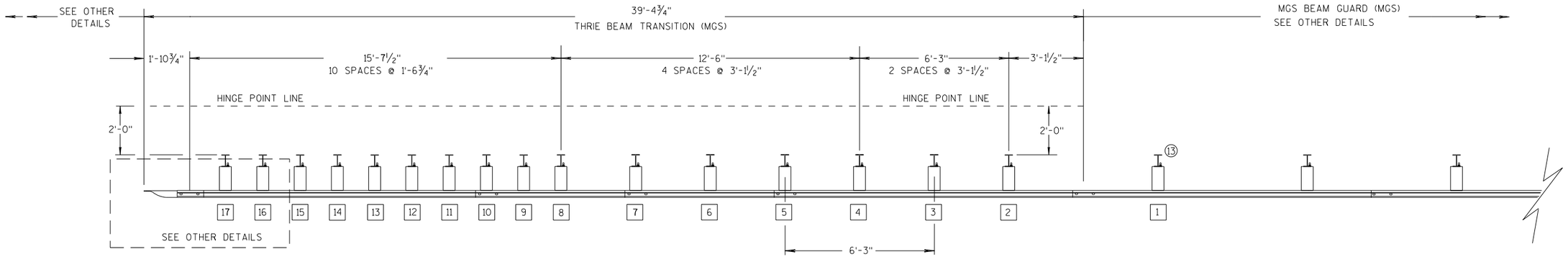
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

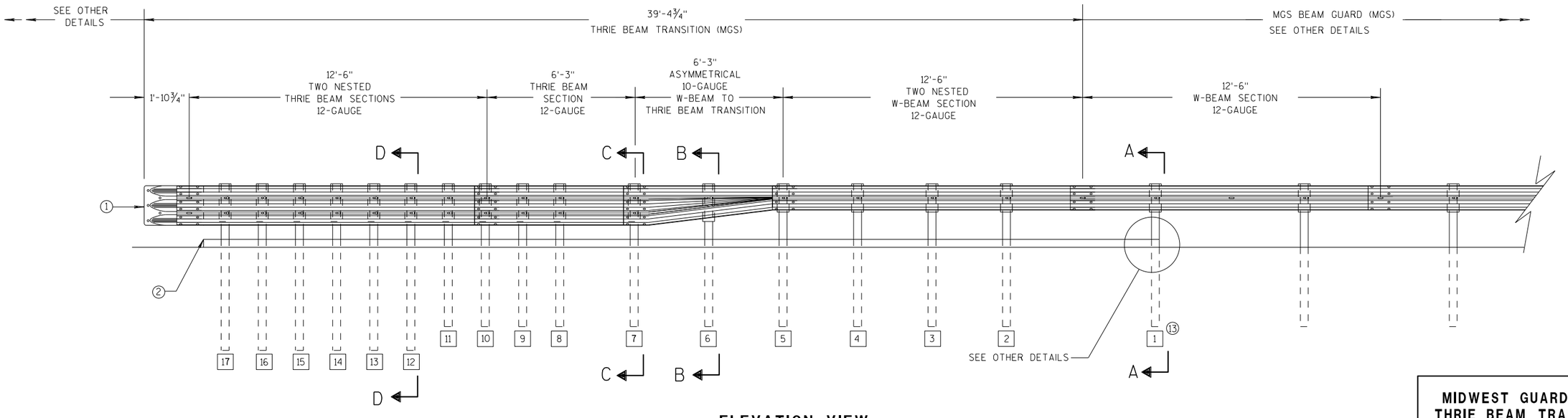
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

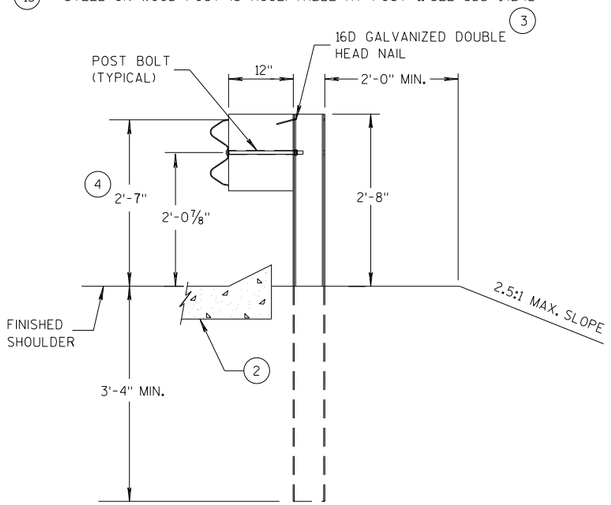
GENERAL NOTES

(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.

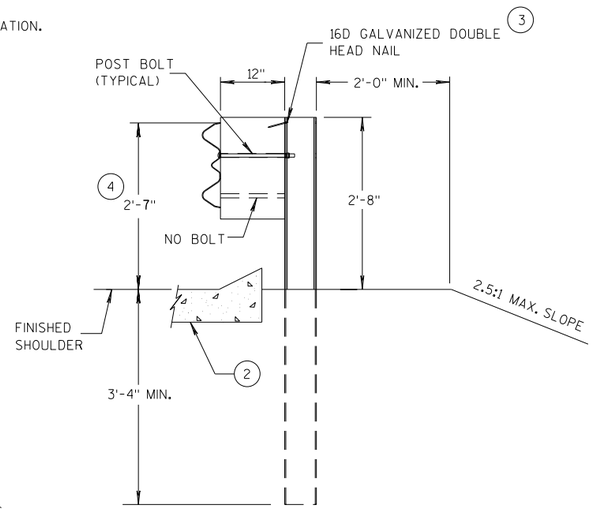
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



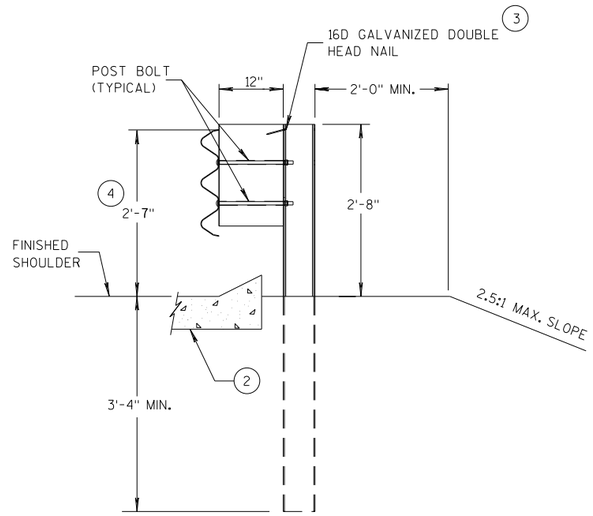
SECTION A-A (13)

POSTS 1-5



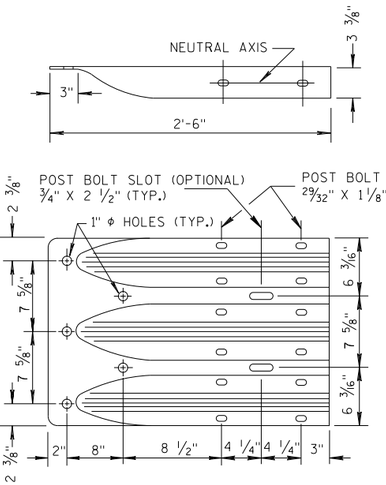
SECTION B-B

POST 6

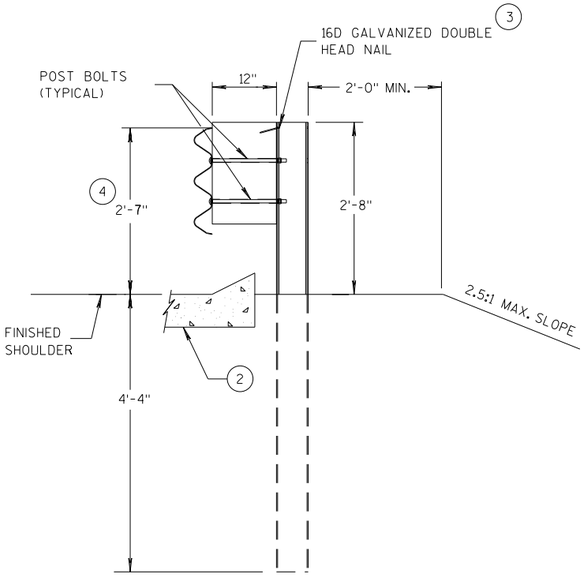


SECTION C-C

POSTS 7-11

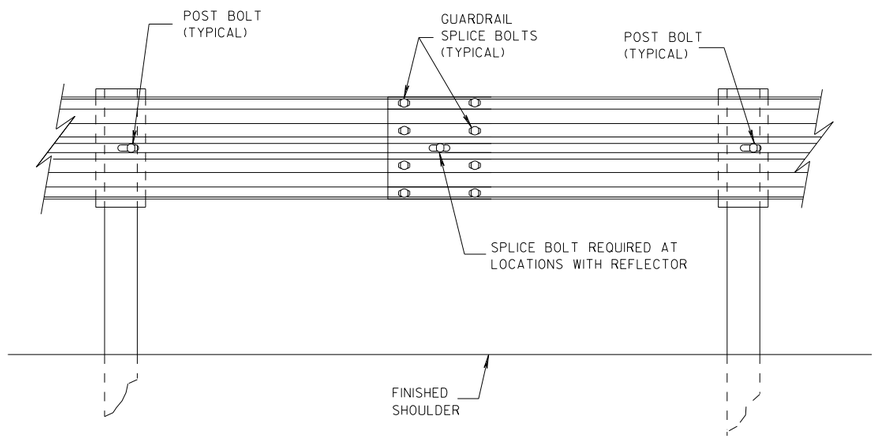


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

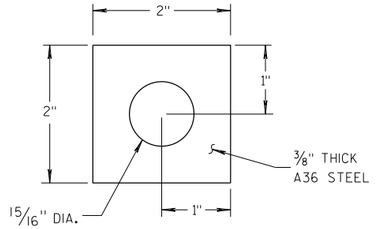
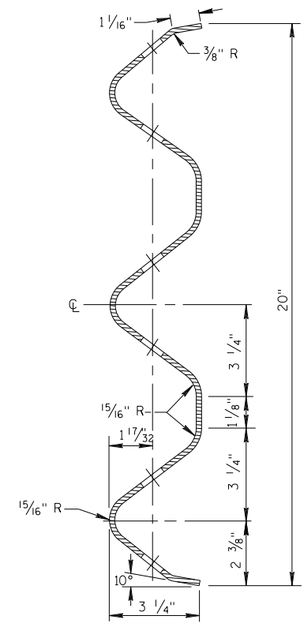


PLATE WASHER DETAIL



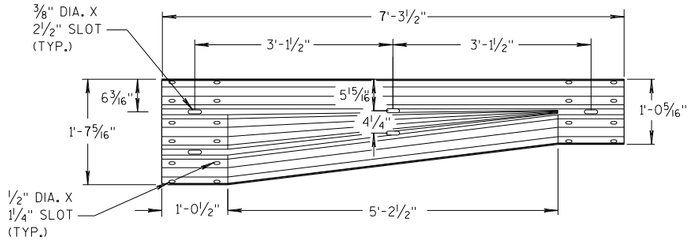
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

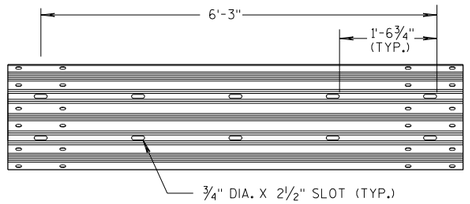
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

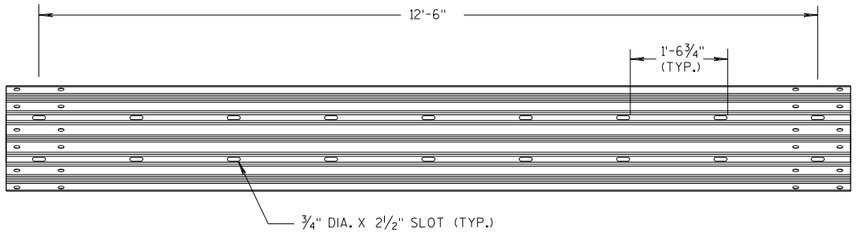
S.D.D. 14 B 45-5b



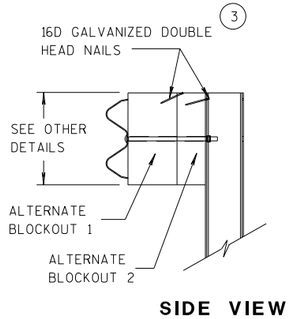
W-BEAM TO THRIE BEAM TRANSITION SECTION



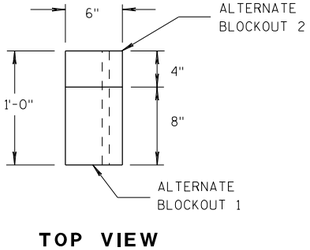
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

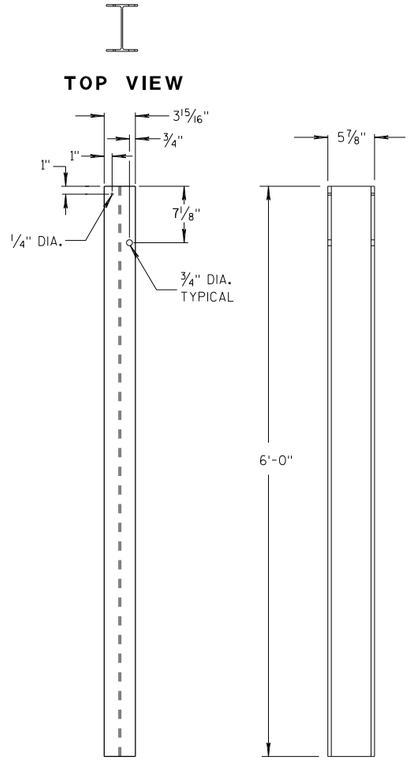


SIDE VIEW



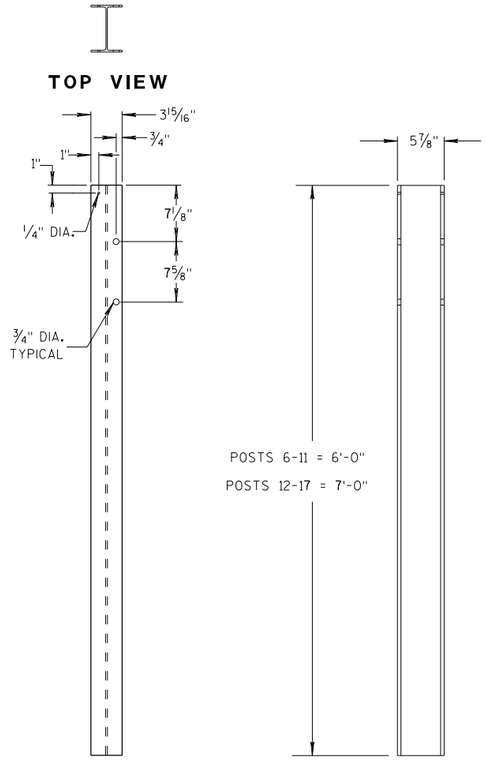
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



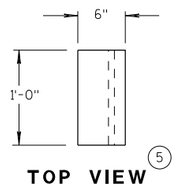
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

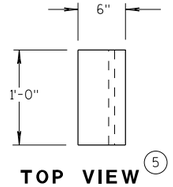


FRONT VIEW SIDE VIEW

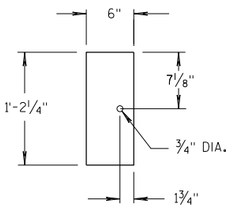
STEEL POSTS 6-17



TOP VIEW (5)

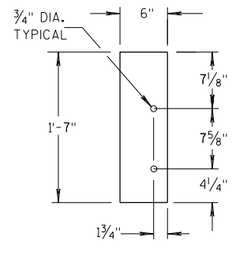


TOP VIEW (5)



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.

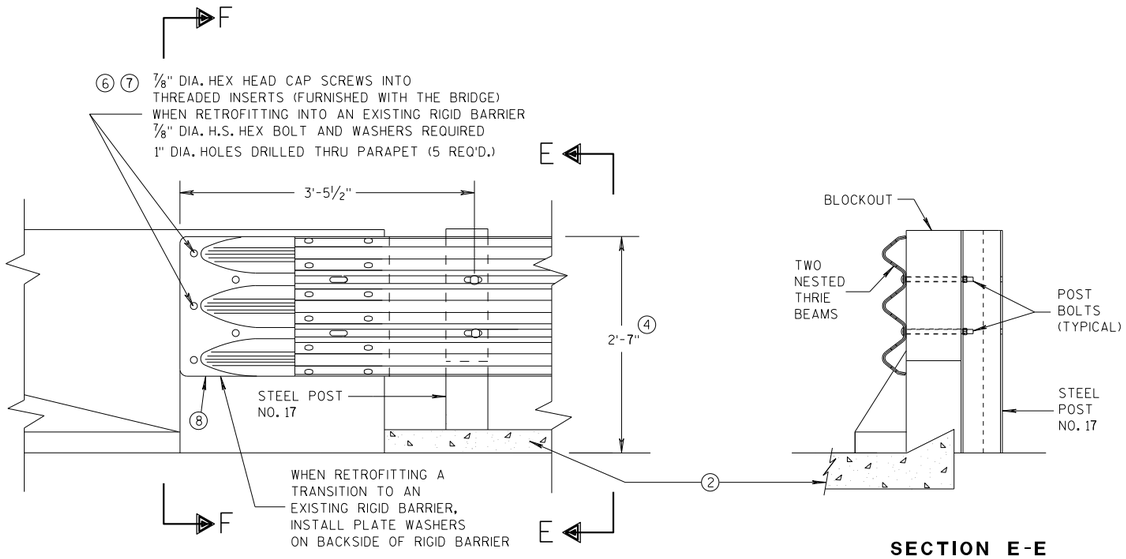
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

(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 TRANSPOR

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.

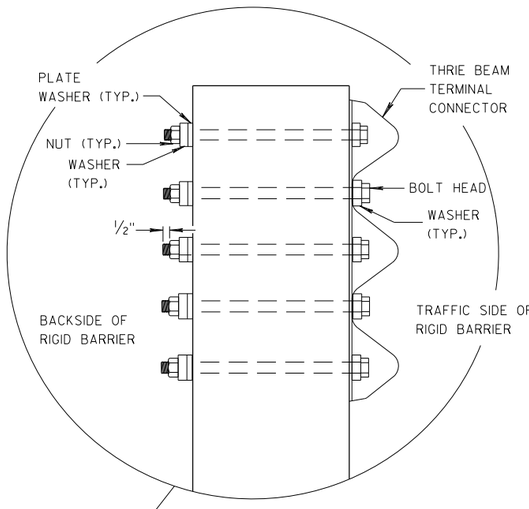
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

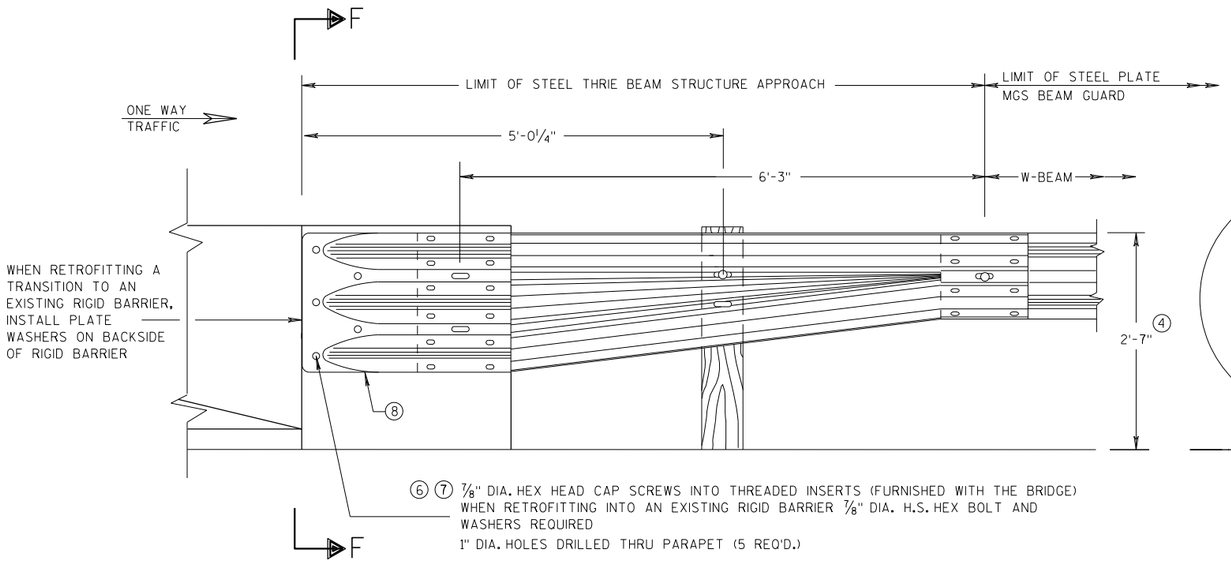
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

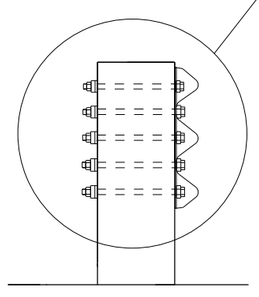
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

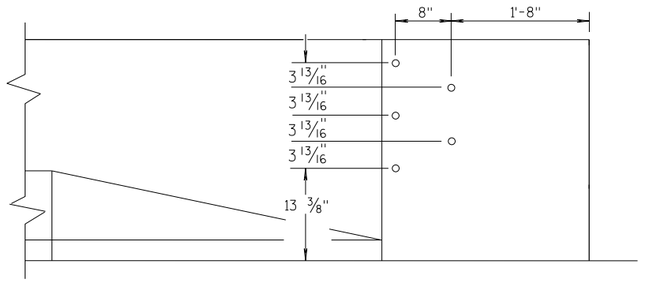




FRONT VIEW



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 SUPERVI
NT
FHWA

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

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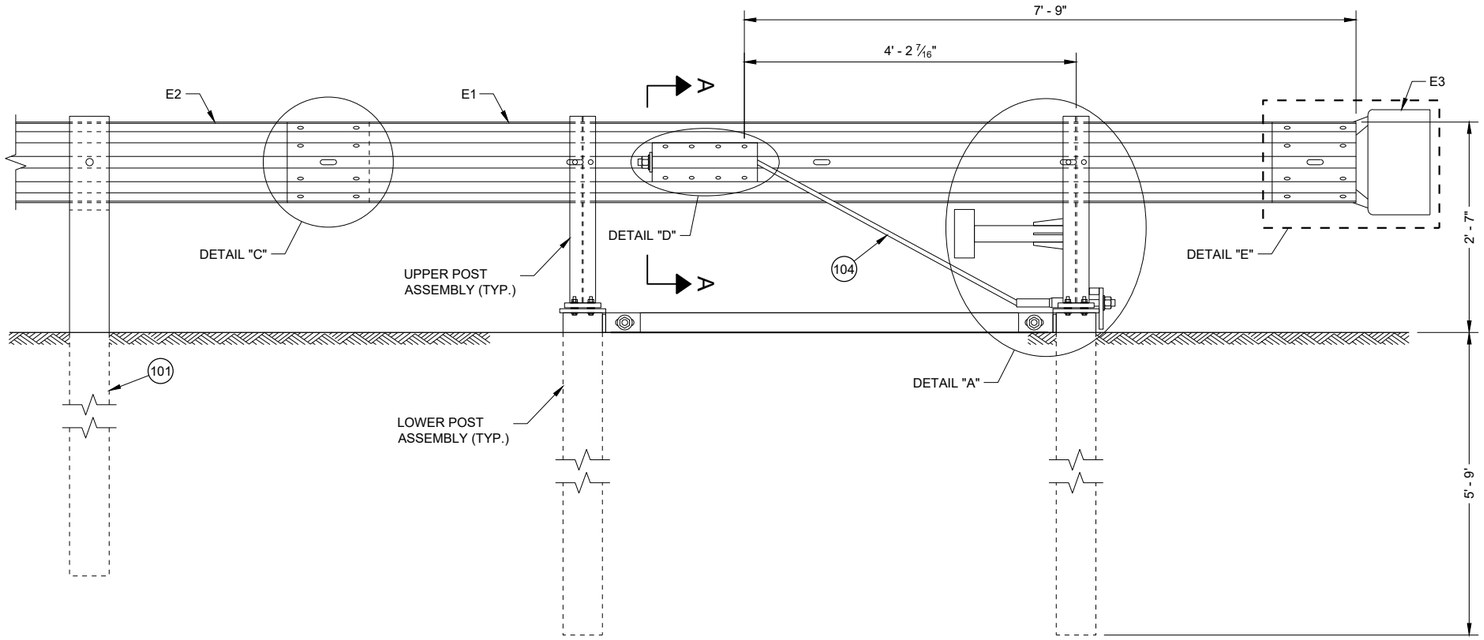
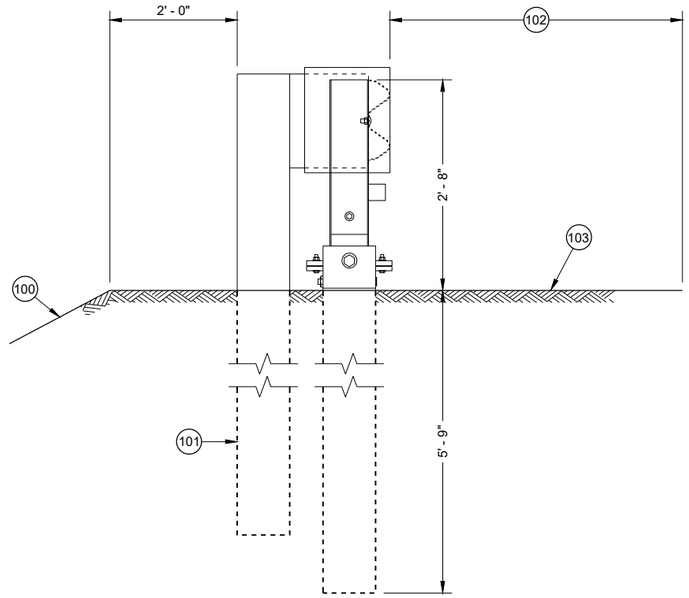
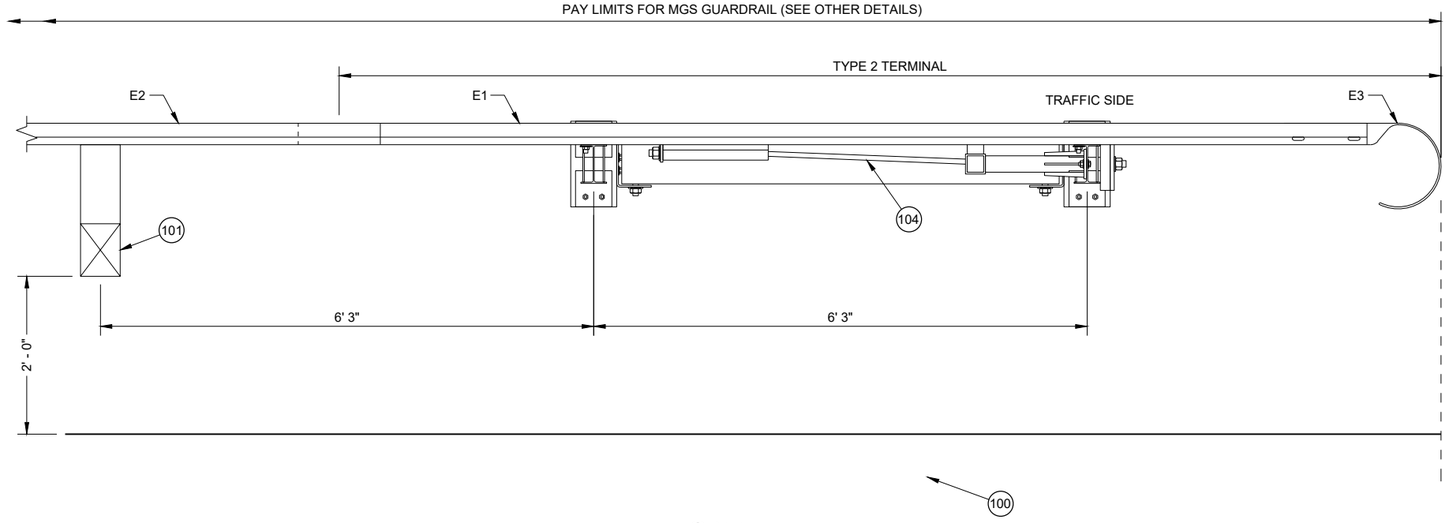
S.D.D. 14 B 45-5d



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.

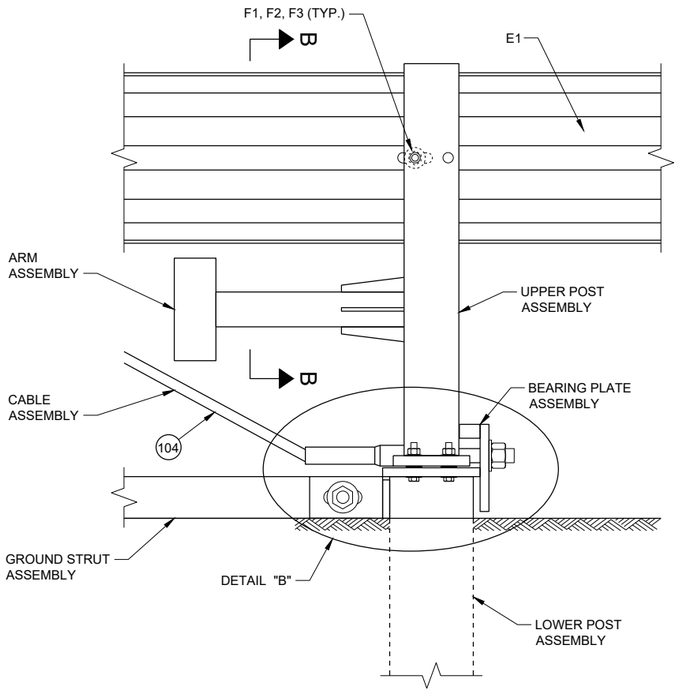
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

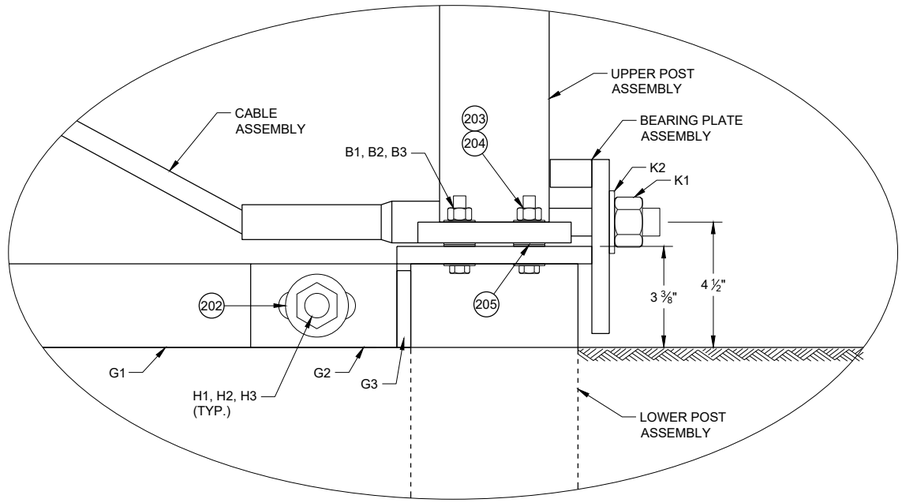
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B47 - 04a



DETAIL "A"



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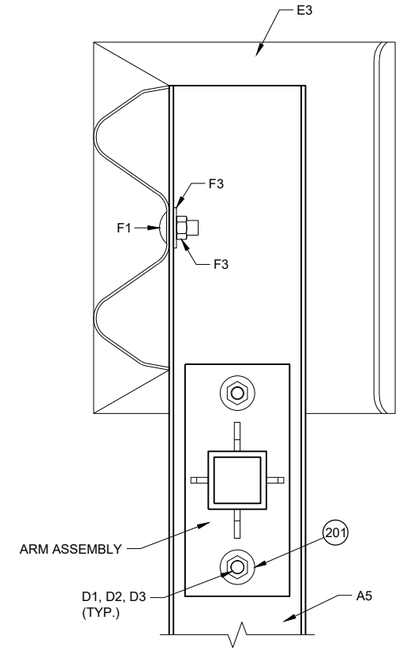
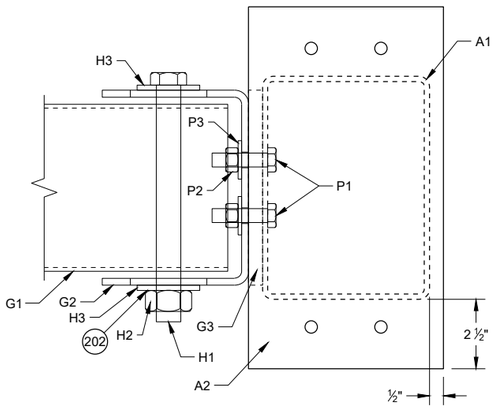
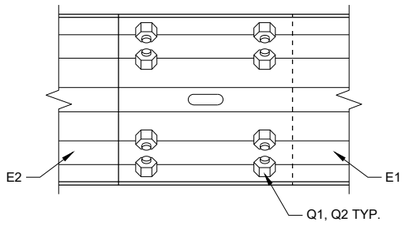


SECTION B - B

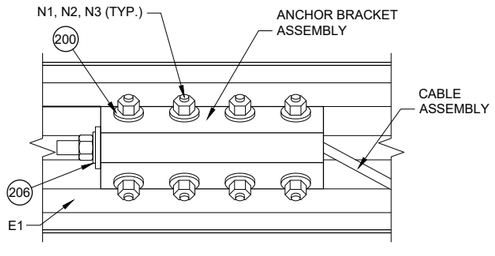


TOP VIEW

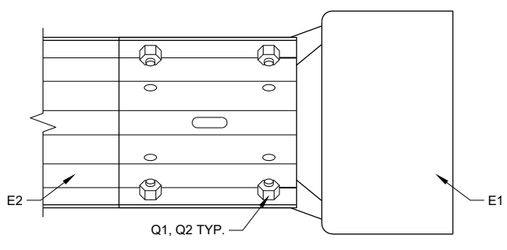
GROUND STRUT CONNECTION DETAIL



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.

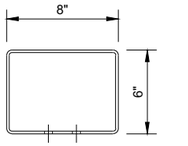
(206) INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

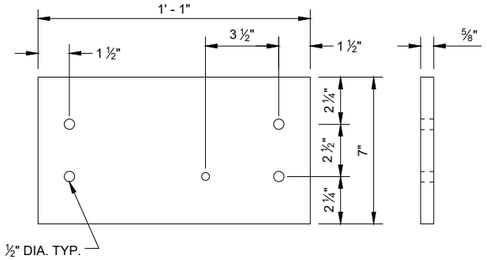
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

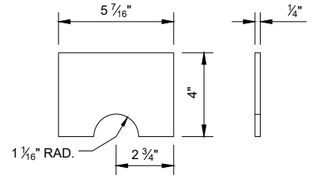
SDD 14B47 - 04b



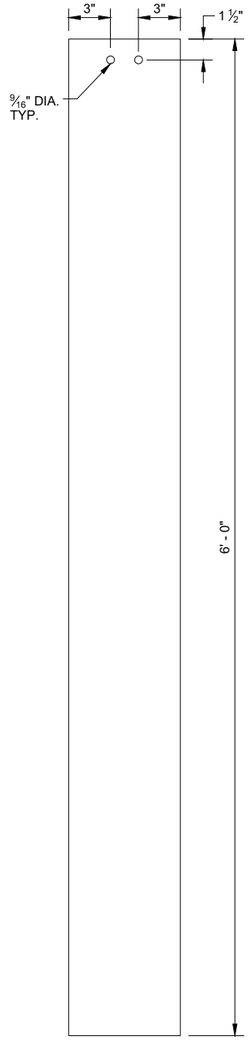
TOP VIEW



LOWER PLATE (A2)

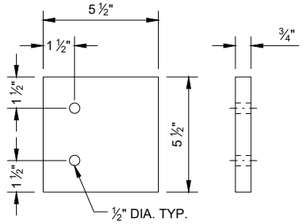


POST GUSSET (A3)

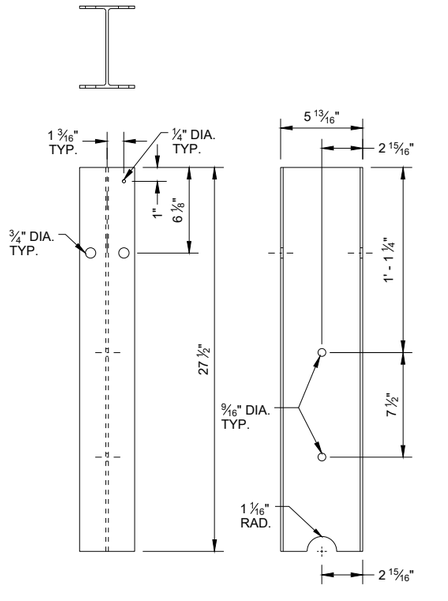


SIDE VIEW

FOUNDATION TUBE (A1)

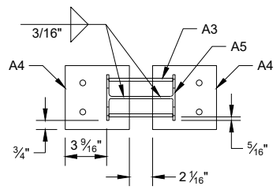


UPPER PLATE (A4)

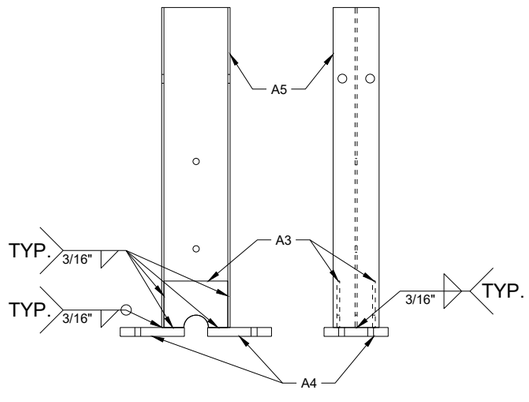


FRONT VIEW **SIDE VIEW**

TYPE 2 POST (A5)

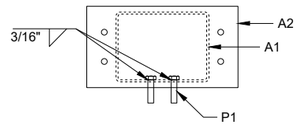


PLAN VIEW

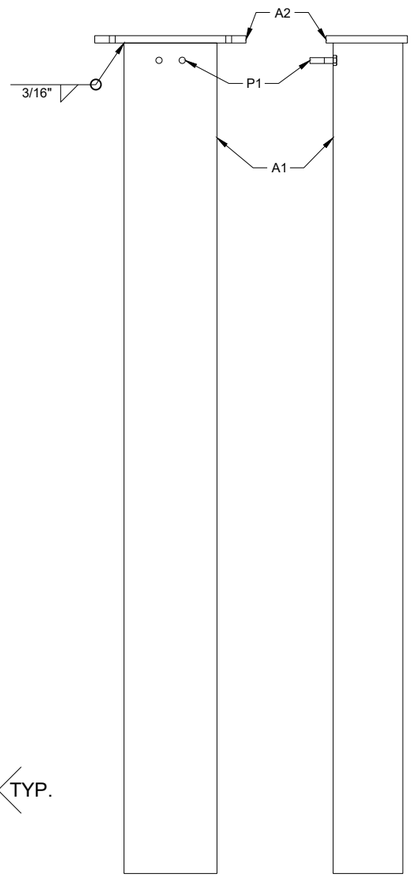


SIDE VIEW **FRONT VIEW**

UPPER POST ASSEMBLY

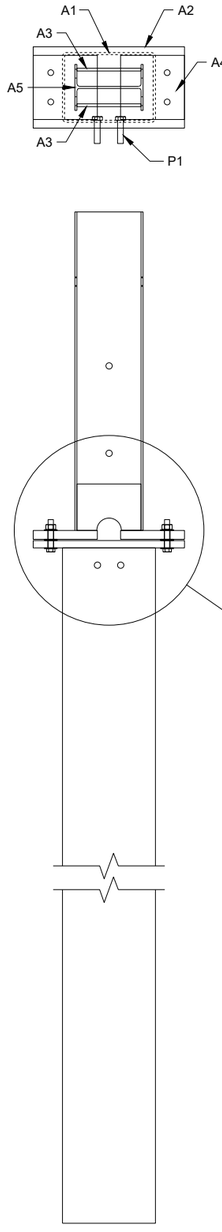


PLAN VIEW

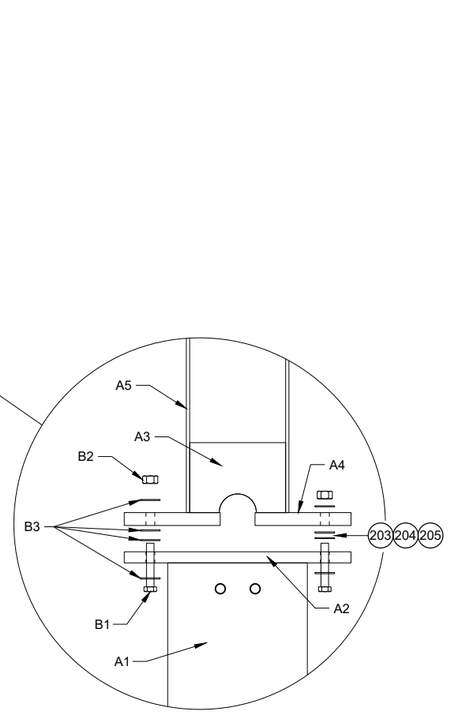


FRONT VIEW **SIDE VIEW**

LOWER POST ASSEMBLY



ASSEMBLED POST



POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B47 - 04c

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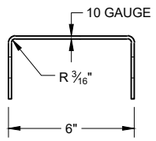
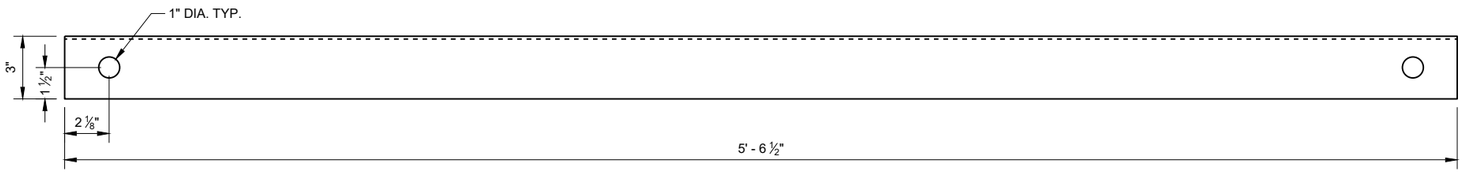
SDD 14B47 - 04c

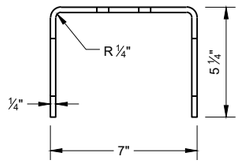


SIDE VIEW

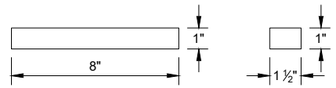


FRONT VIEW

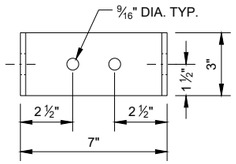
GROUND STRUT CHANNEL (G1)



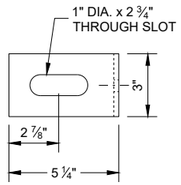
TOP VIEW



BEARING PLATE FLANGE (L2)

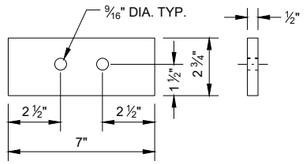


FRONT VIEW

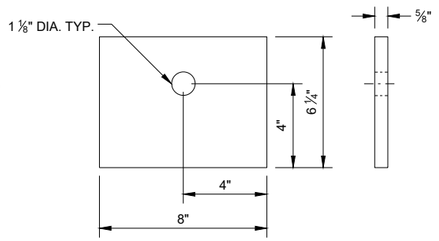


SIDE VIEW

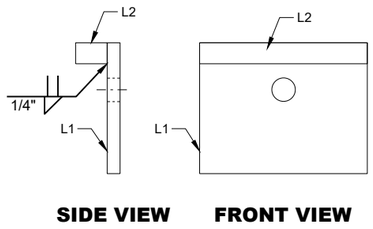
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)



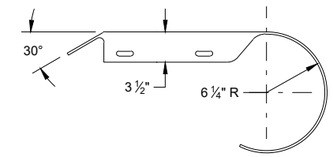
BEARING PLATE (L1)



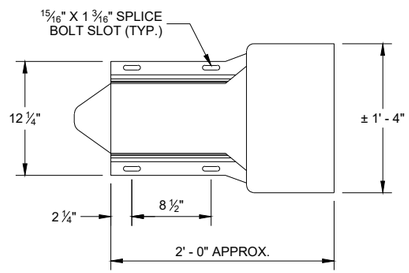
SIDE VIEW

FRONT VIEW

BEARING PLATE ASSEMBLY

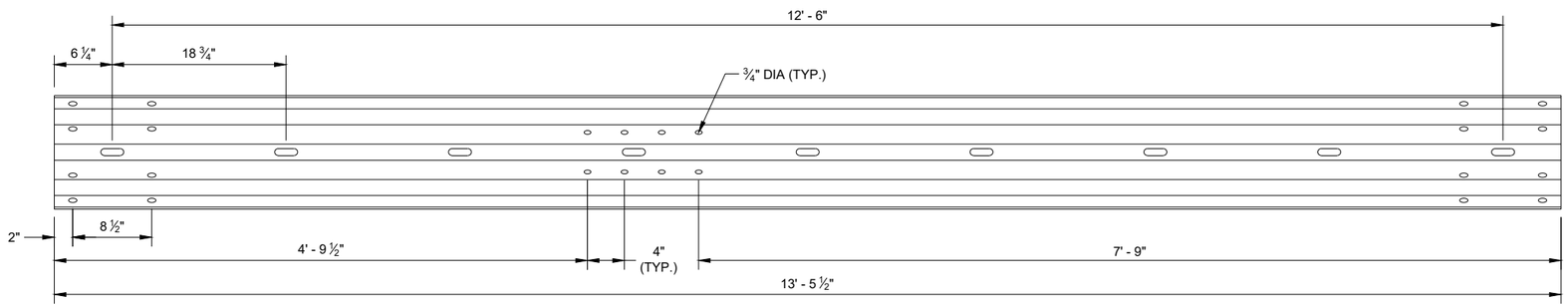


PLAN VIEW

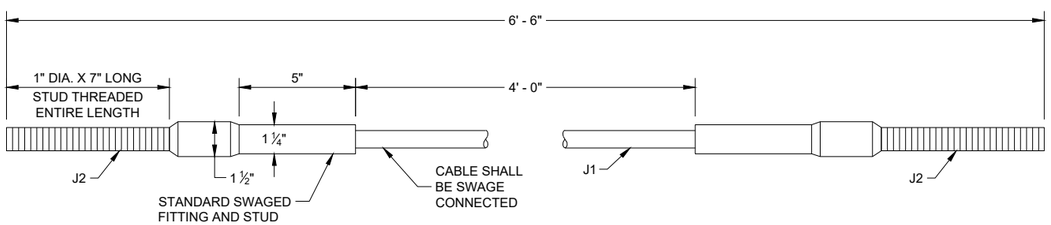


ELEVATION VIEW

ROUNDED BUFFER END (E3)



TYPE 2 GUARDRAIL (E1)



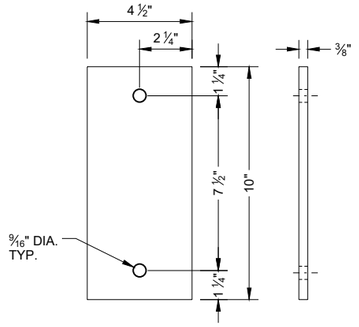
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

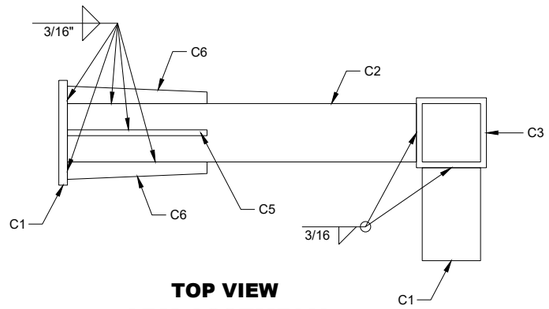
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

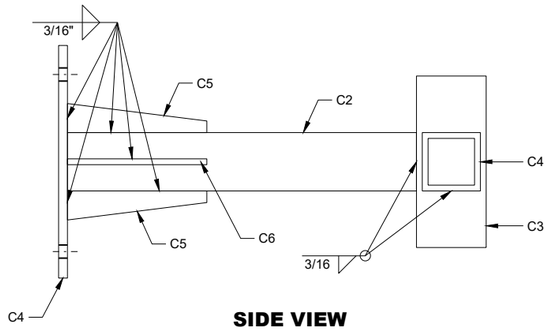
SDD 14B47 - 04d



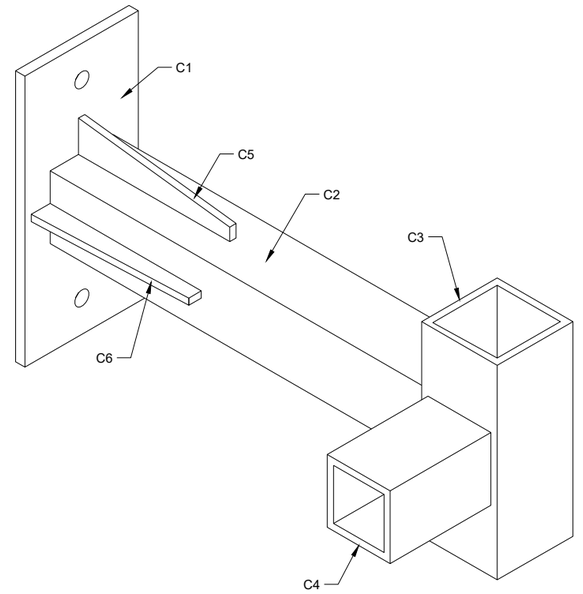
ARM PLATE (C1)



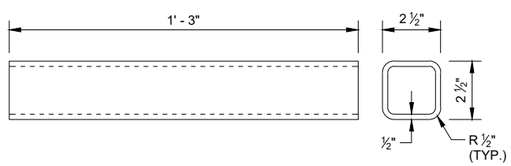
TOP VIEW
ARM ASSEMBLY



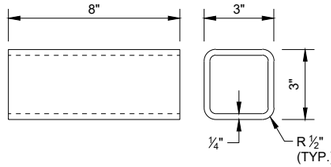
SIDE VIEW
ARM ASSEMBLY



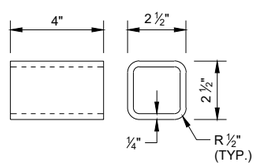
ISOMETRIC VIEW
ARM ASSEMBLY



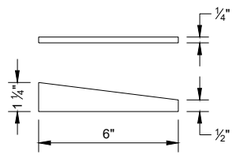
ARM TUBE 1 (C2)



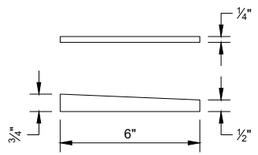
ARM TUBE 2 (C3)



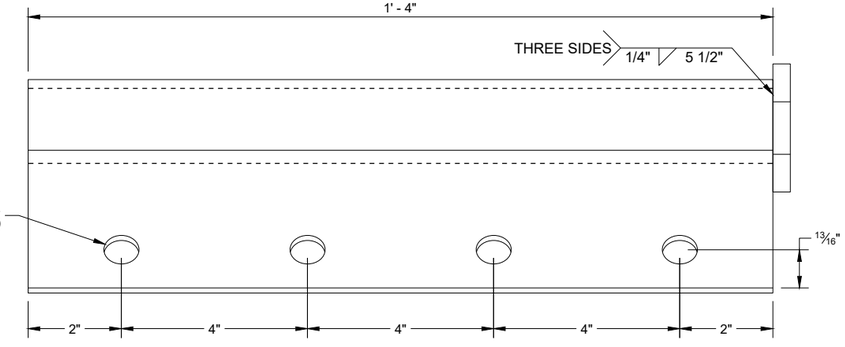
ARM TUBE 3 (C4)

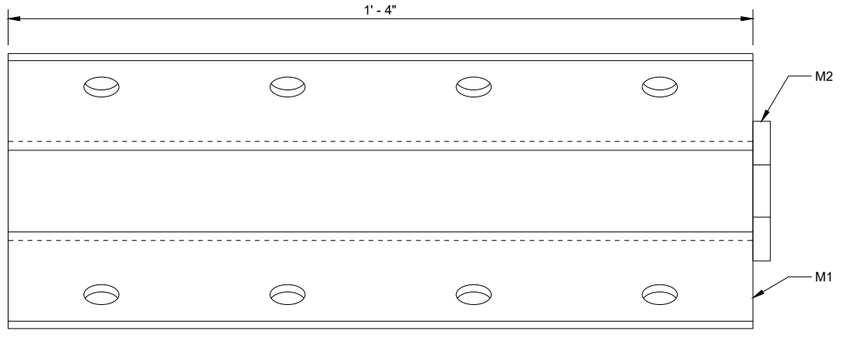


ARM GUSSET PLATE 1 (C5)

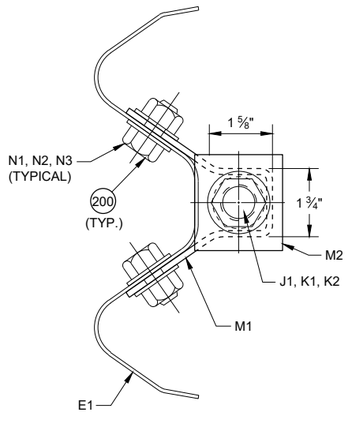


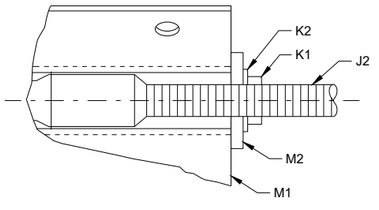
ARM GUSSET PLATE 2 (C6)



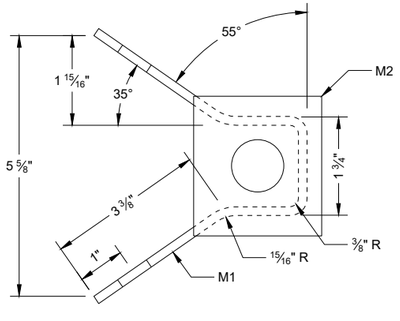


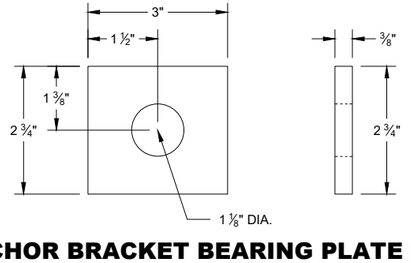
ANCHOR BRACKET (M1, M2)





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 - 04e

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

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SDD 14B47 - 04f

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MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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.
P2	FOUNDATION TUBE 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 (HARDENED WASHER ONLY)	1/2" DIA.
P3	FOUNDATION TUBE 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	
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 - 04g

SDD 14B47 - 04g

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

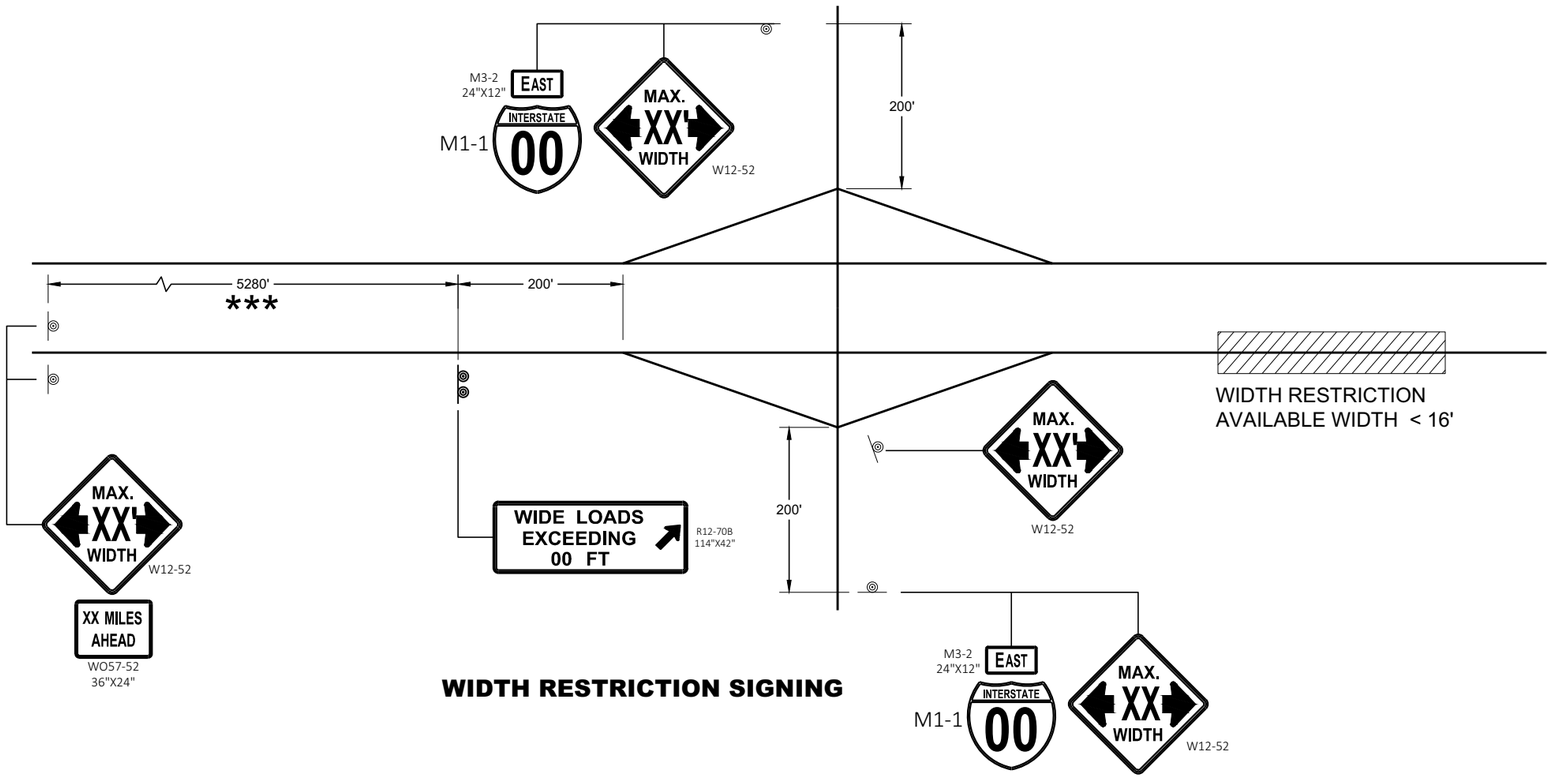
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



WIDTH RESTRICTION SIGNING

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.

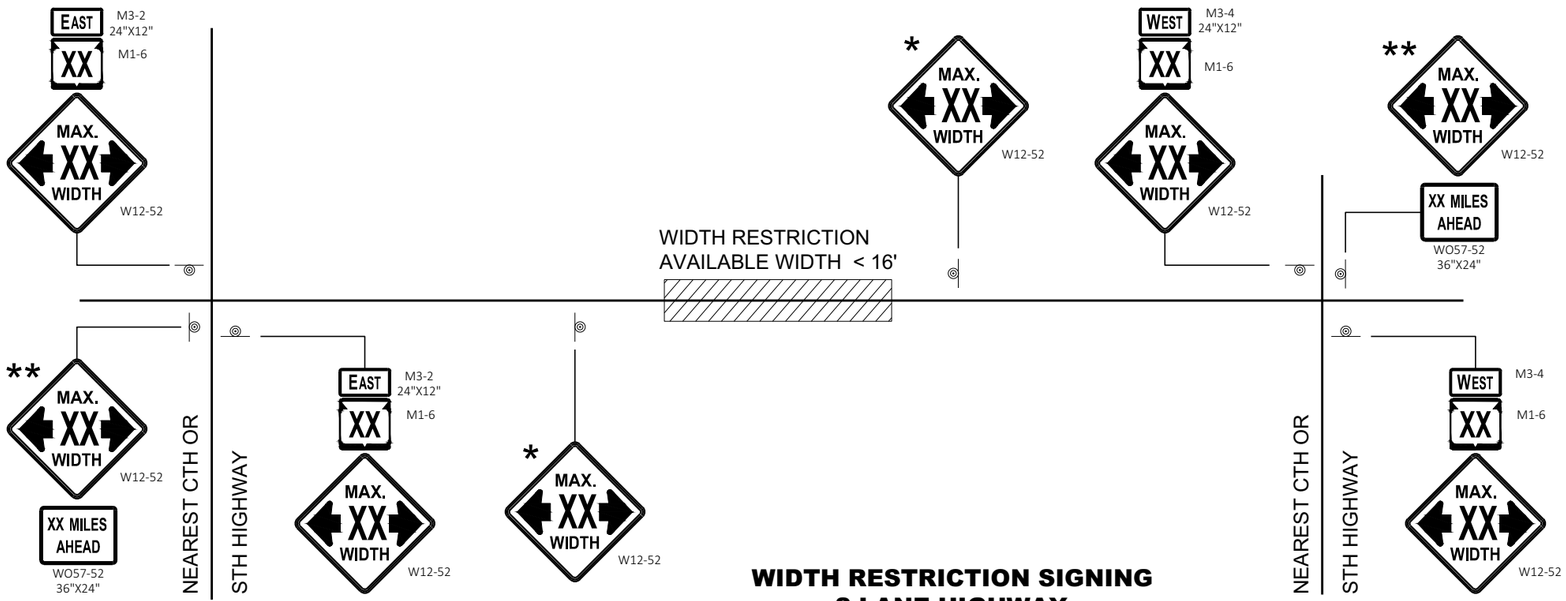
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* 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



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C02 - 08f

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

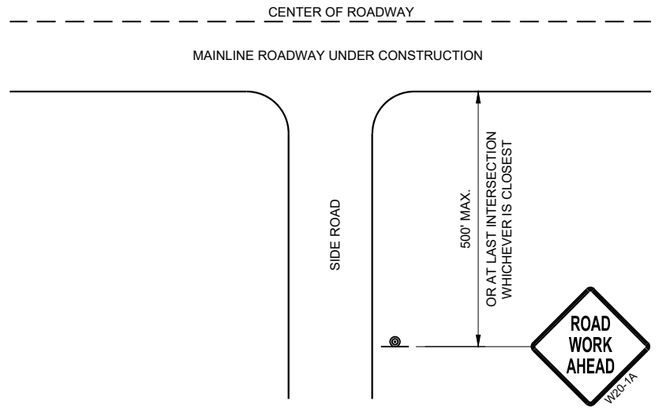
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



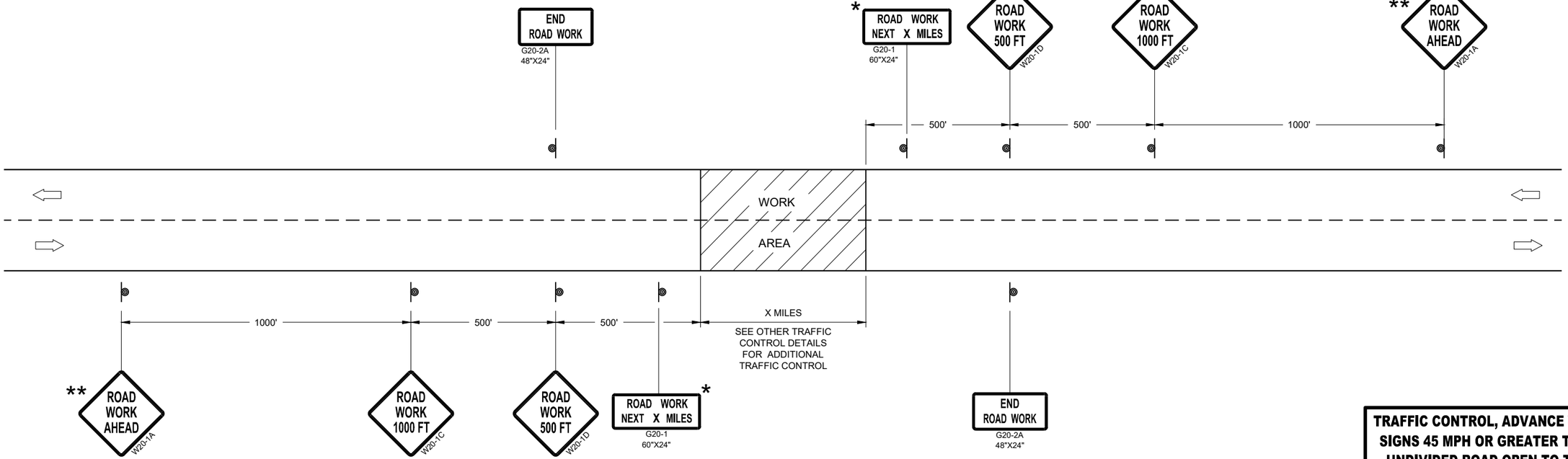
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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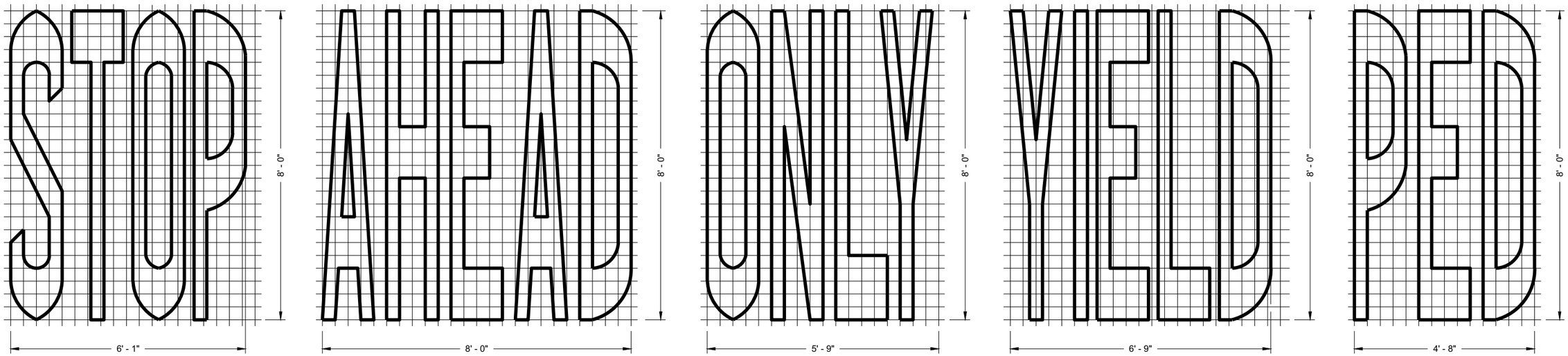
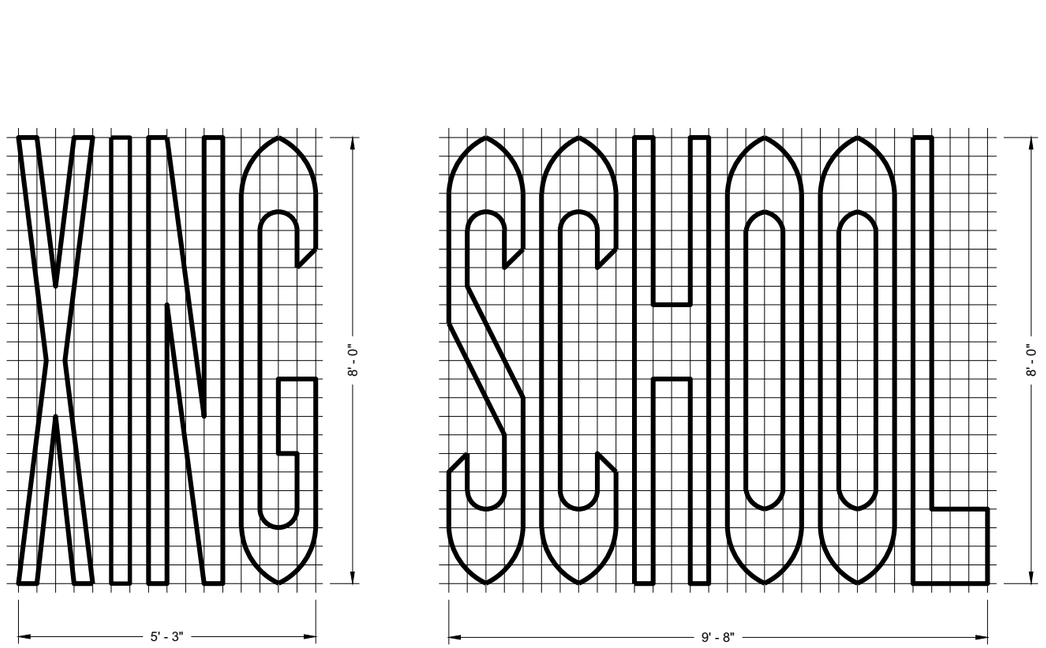
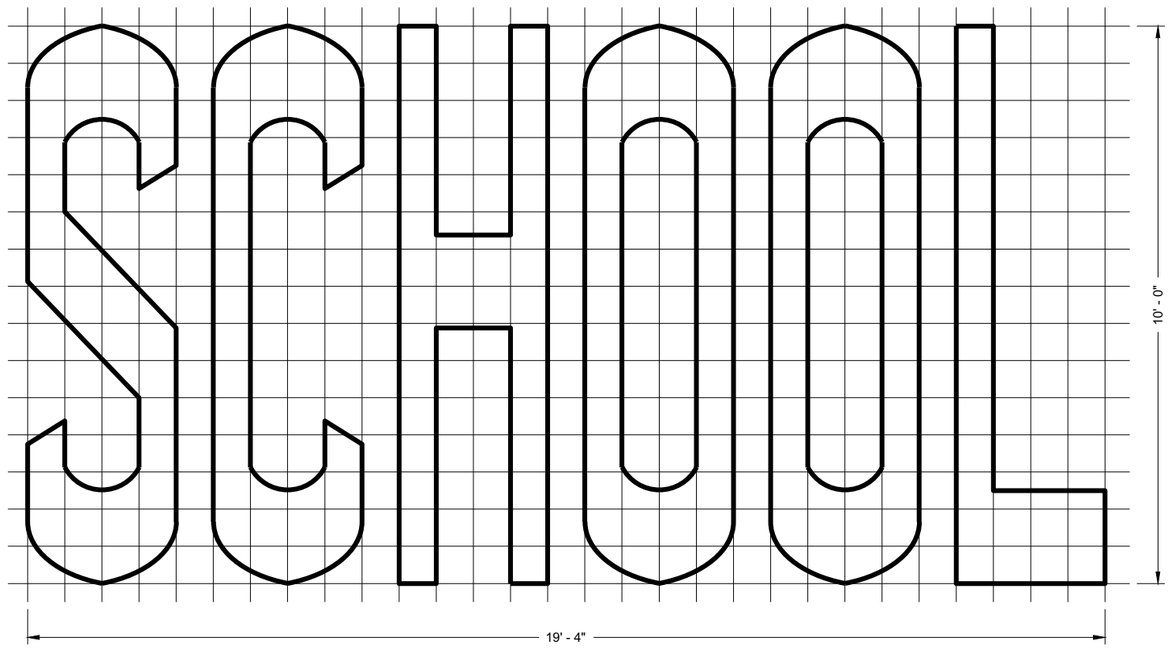
SDD 15C04 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF
ENGINEER

FHWA

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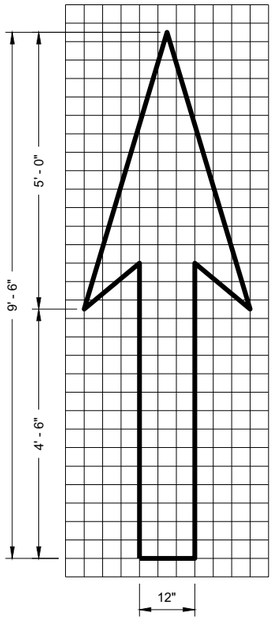
SDD 15C07 - 15b

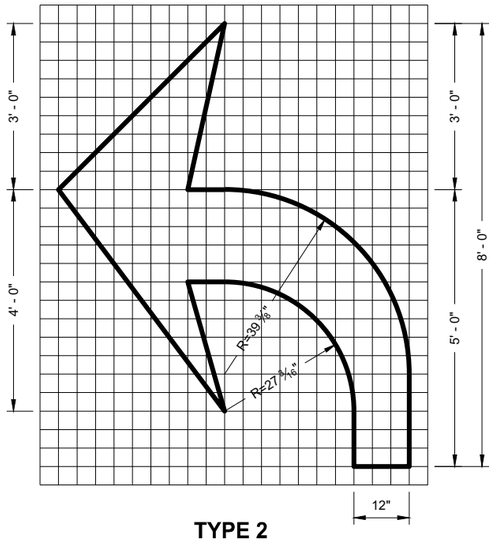
SDD 15C07 - 15b

GENERAL NOTES

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



TYPE 1



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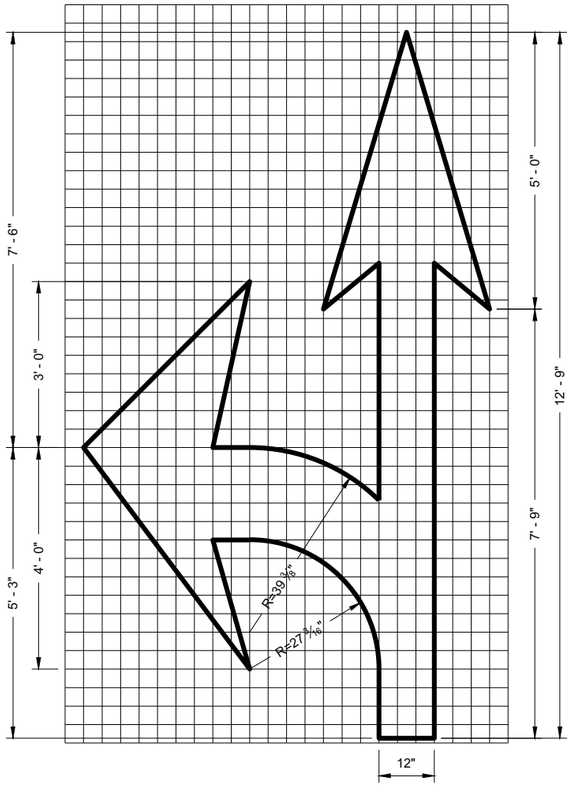

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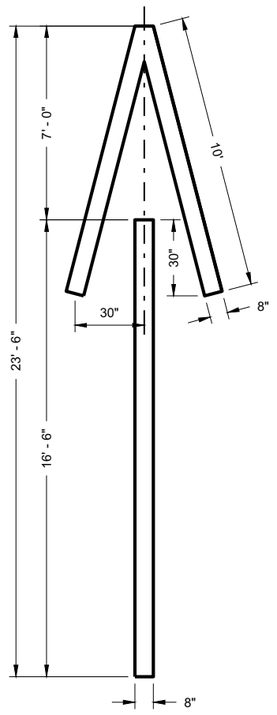

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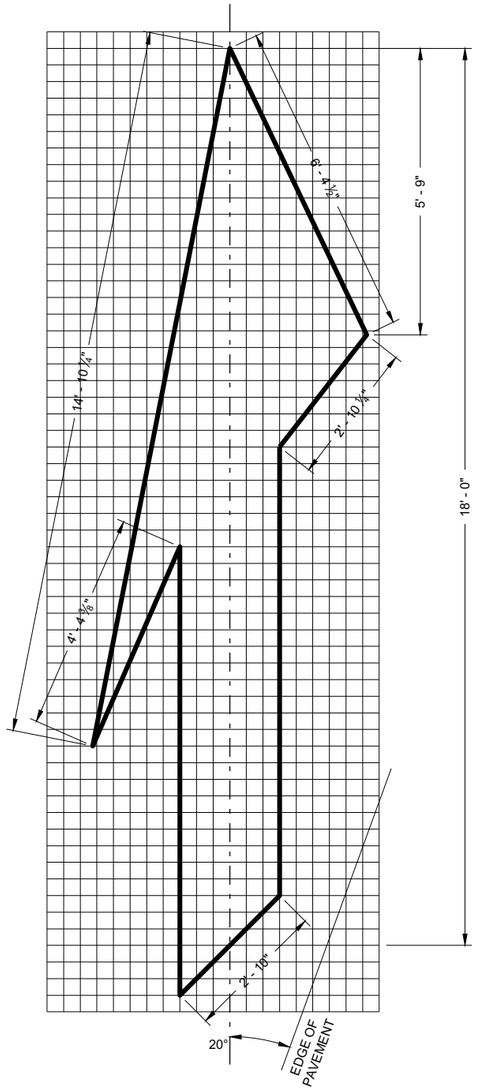
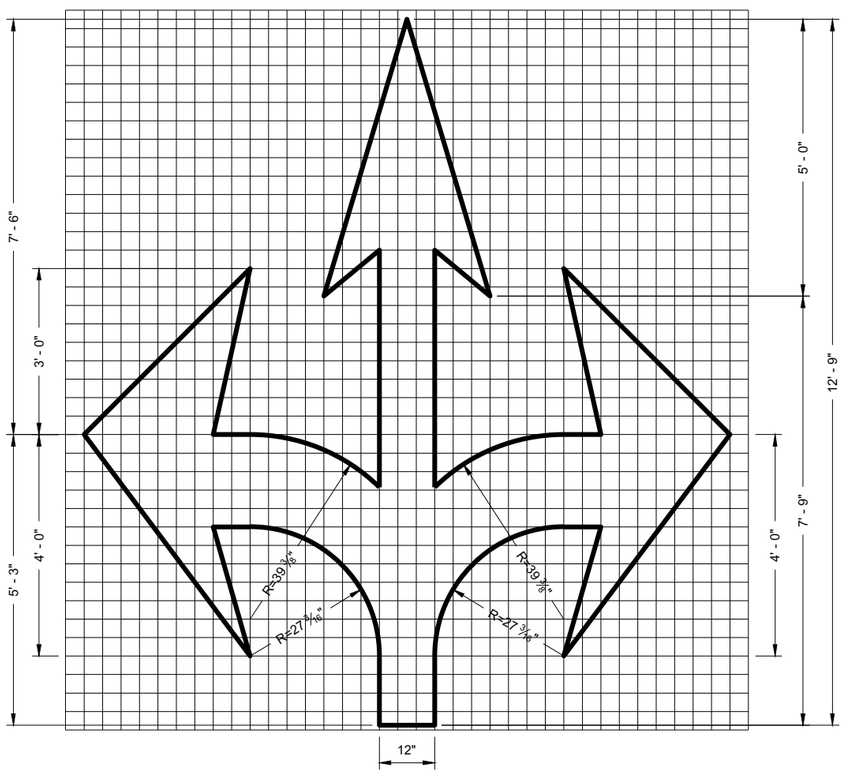
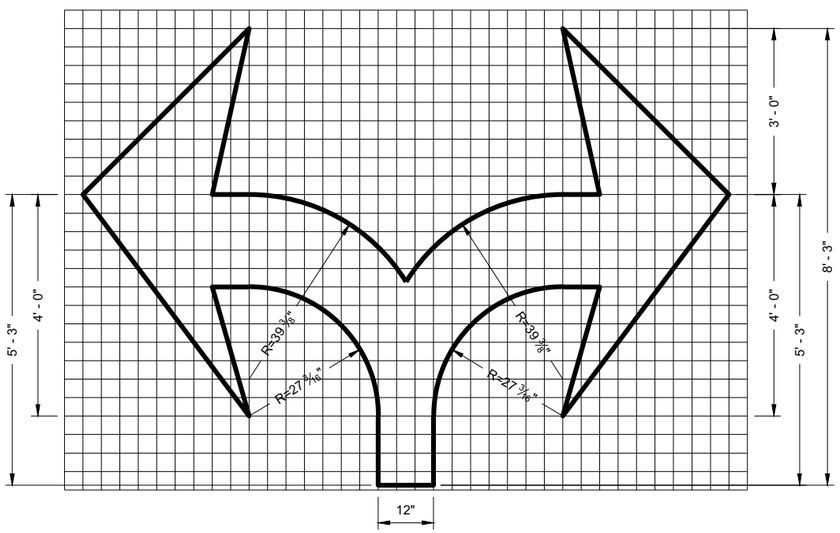


TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

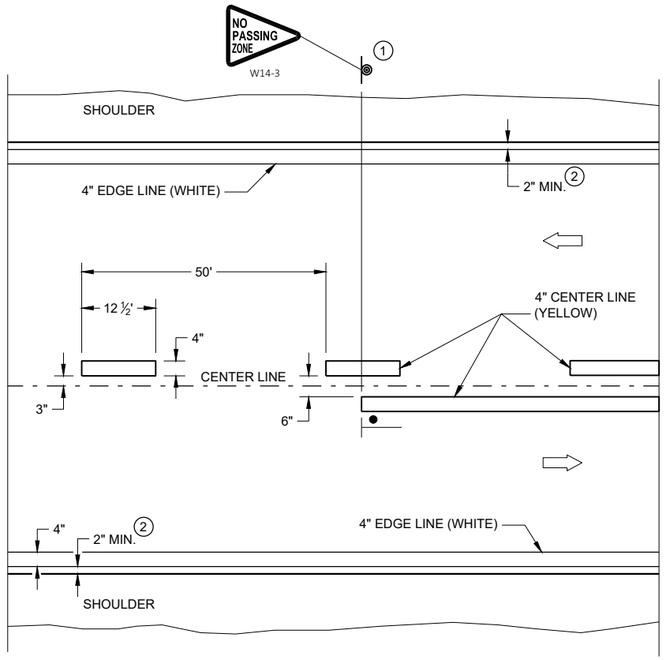
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

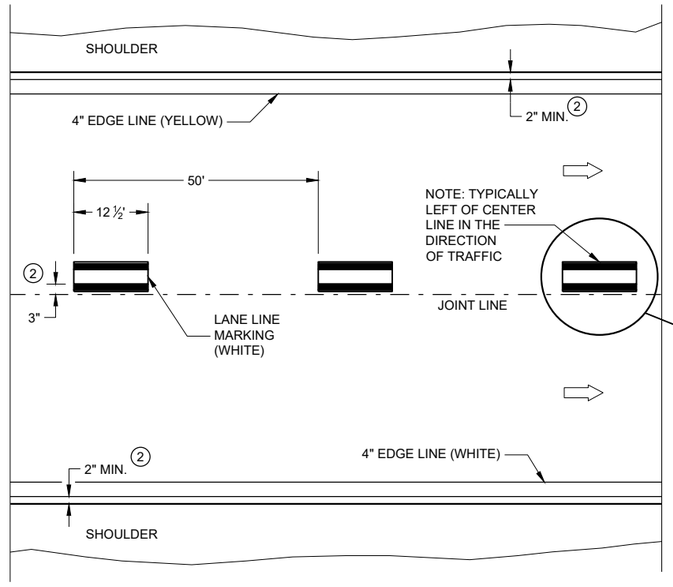
"T" MARKING

SIGN ON PERMANENT SUPPORT

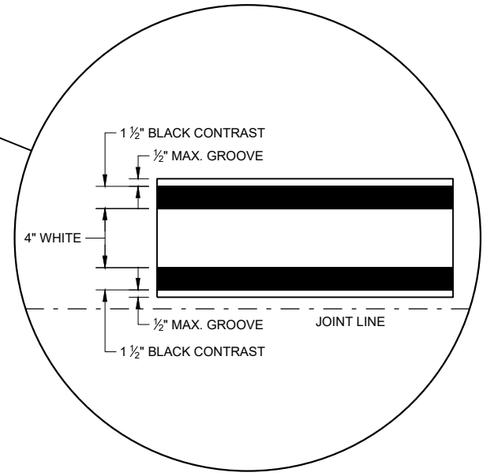
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

6

SDD 15C08 - 22a

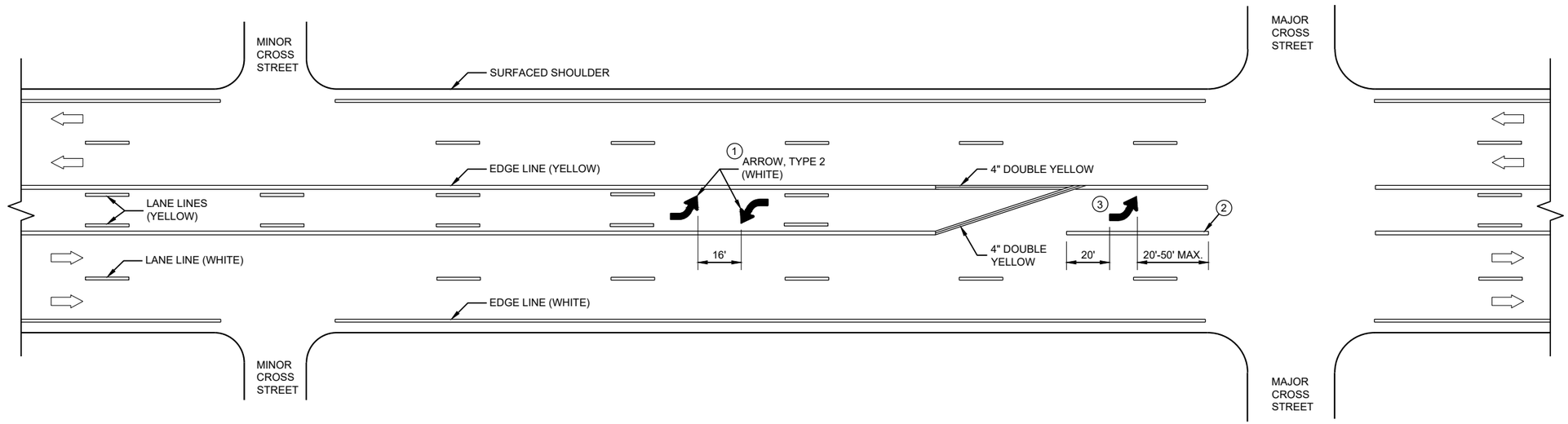
6

SDD 15C08 - 22a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

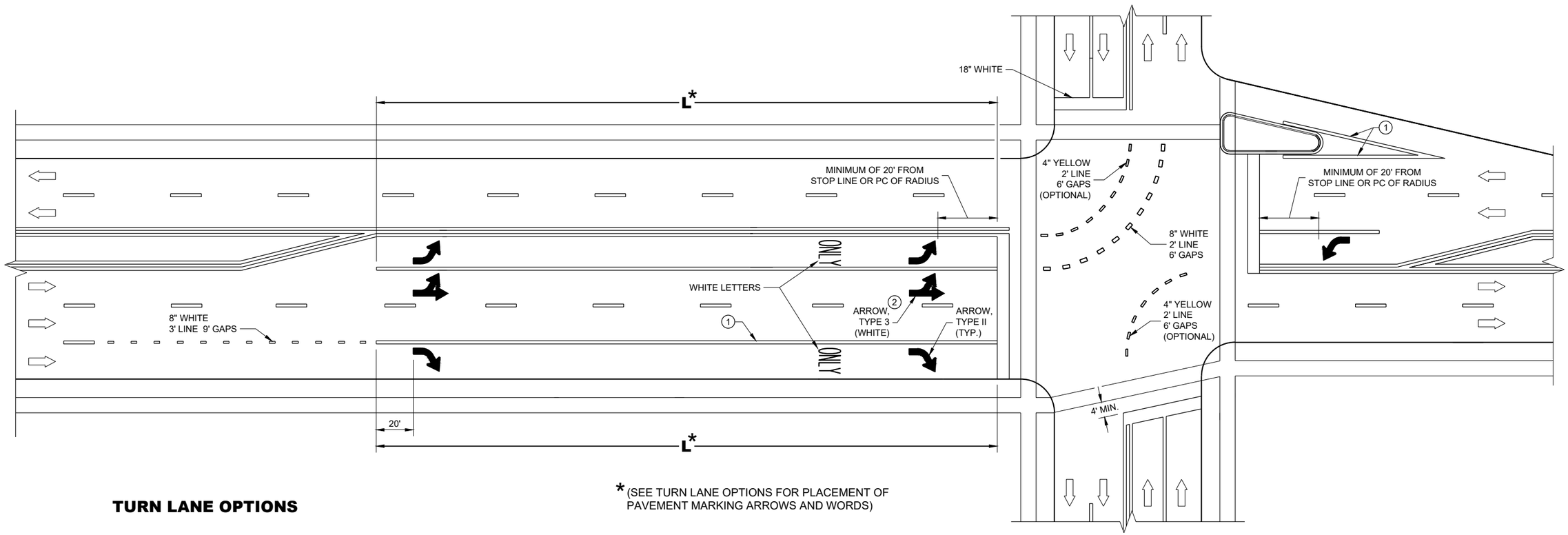
SDD 15C08 - 22c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

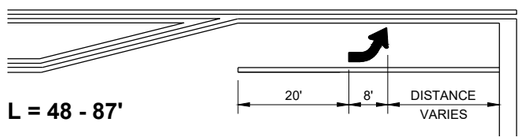
SDD 15C08 - 22c



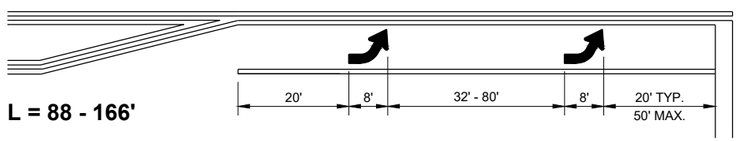
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

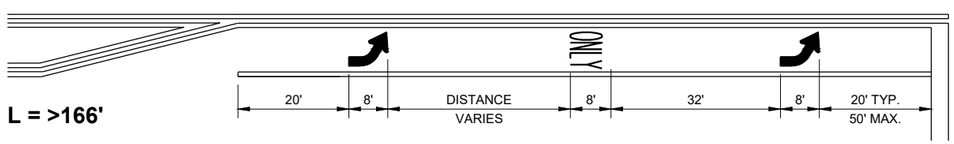
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. 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

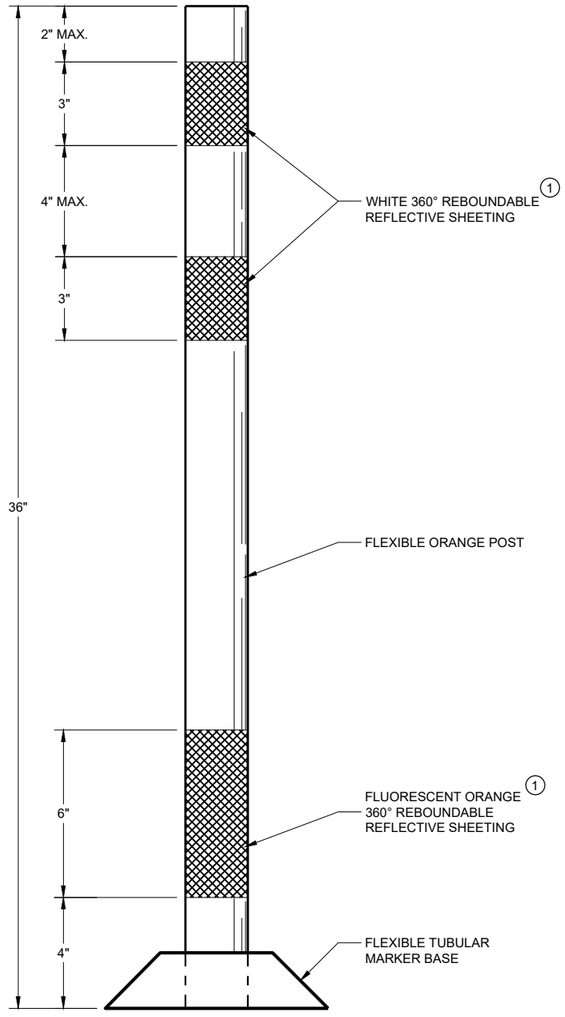
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 22d



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.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

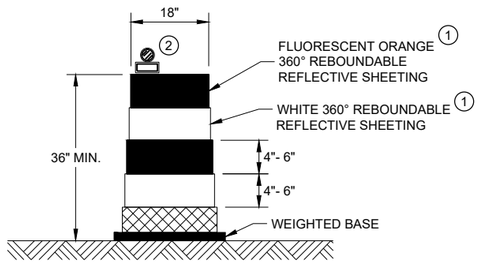
APPROVED
November 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C11 - 10a

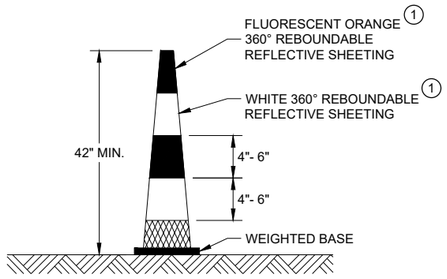
GENERAL NOTES

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

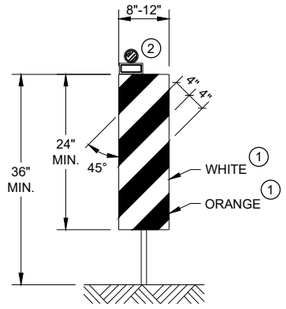
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

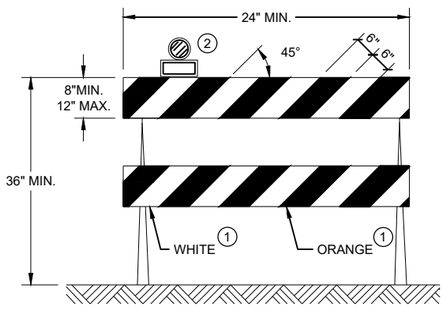
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



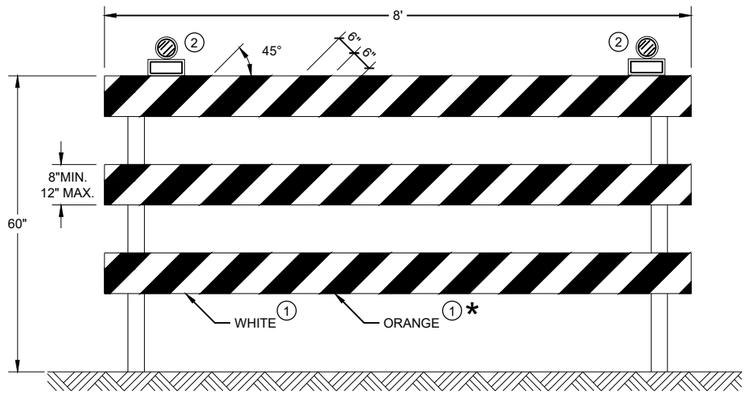
VERTICAL PANEL

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

FHWA

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

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.

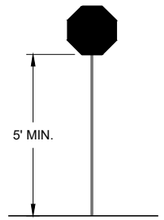
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



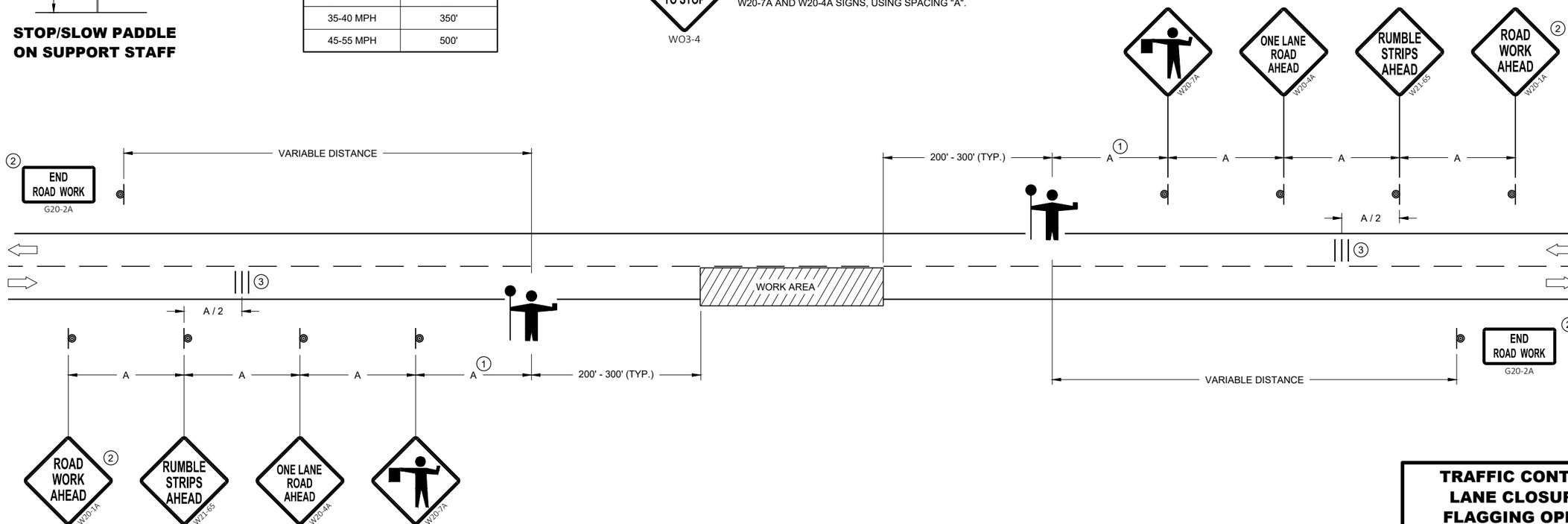
STOP/SLOW PADDLE ON SUPPORT STAFF

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

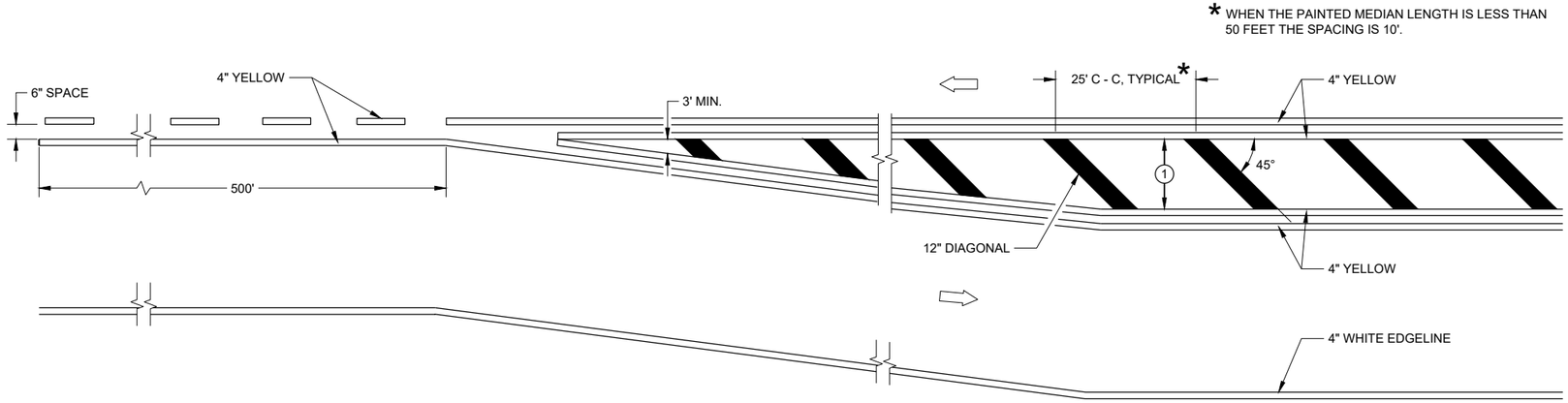
FHWA

6

SDD 15C12 - 09a

6

SDD 15C12 - 09a

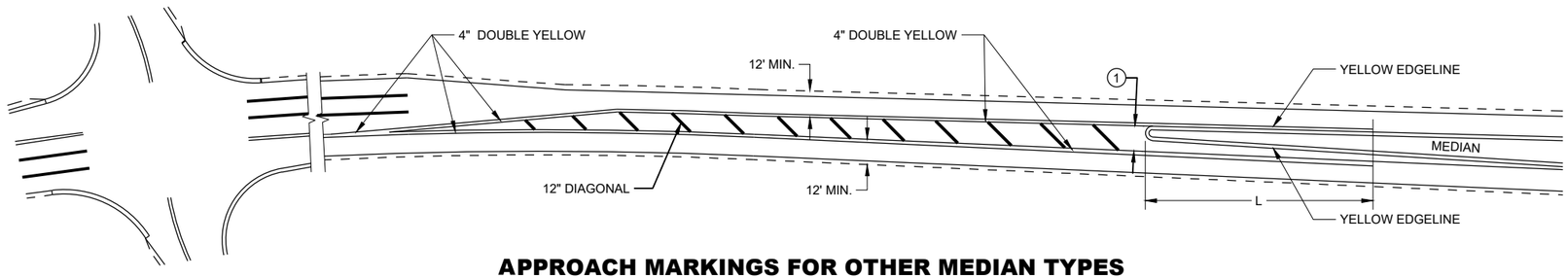


MEDIAN ISLAND DETAIL

GENERAL NOTES

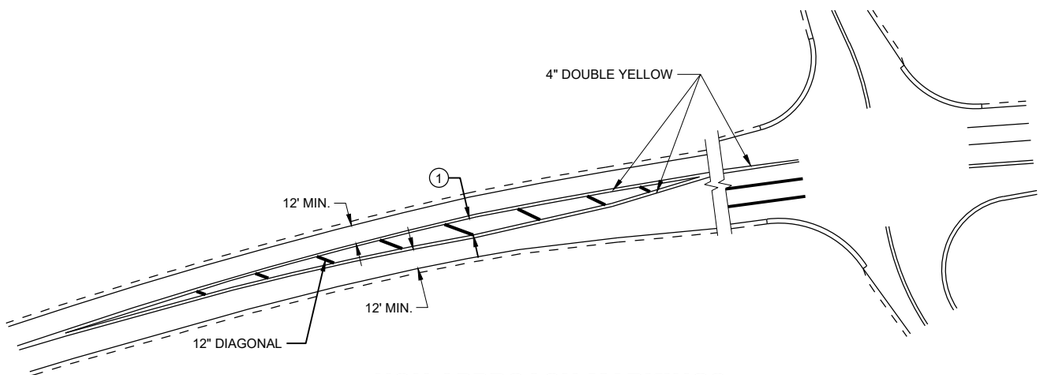
1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



NON-APPROACH MARKINGS

6

SDD 15C18 - 07a

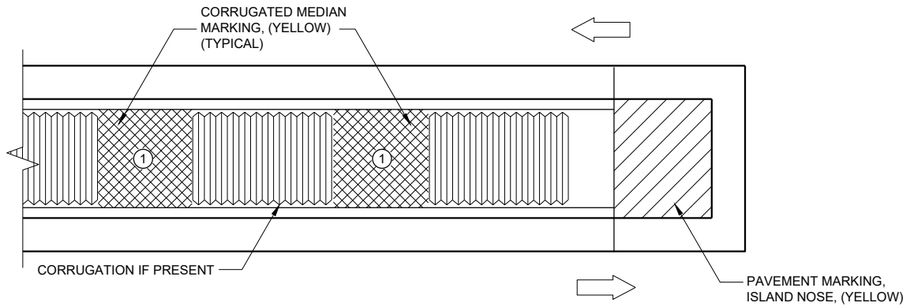
MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

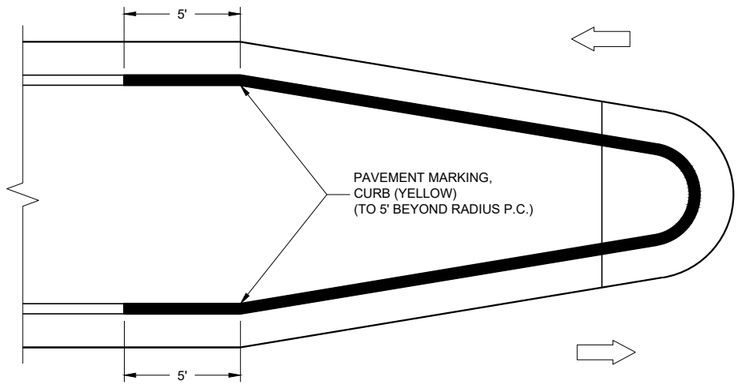
APPROVED
November 2022 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

6

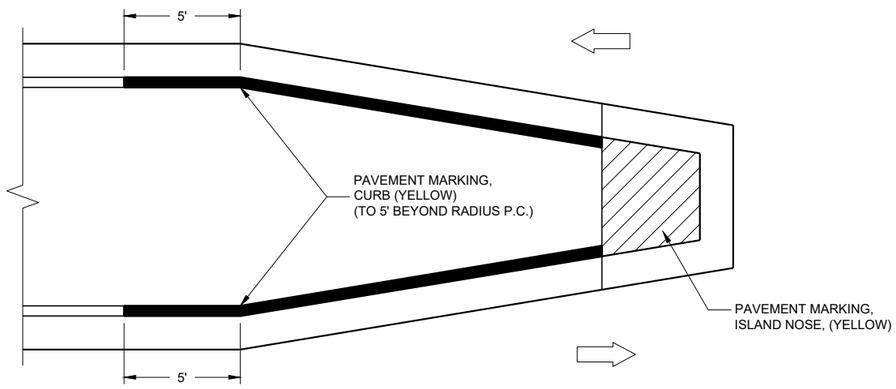
SDD 15C18 - 07a



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

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAR ENGINEER

FHWA

6

SDD 15C18 - 07b

6

SDD15C18 - 07b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

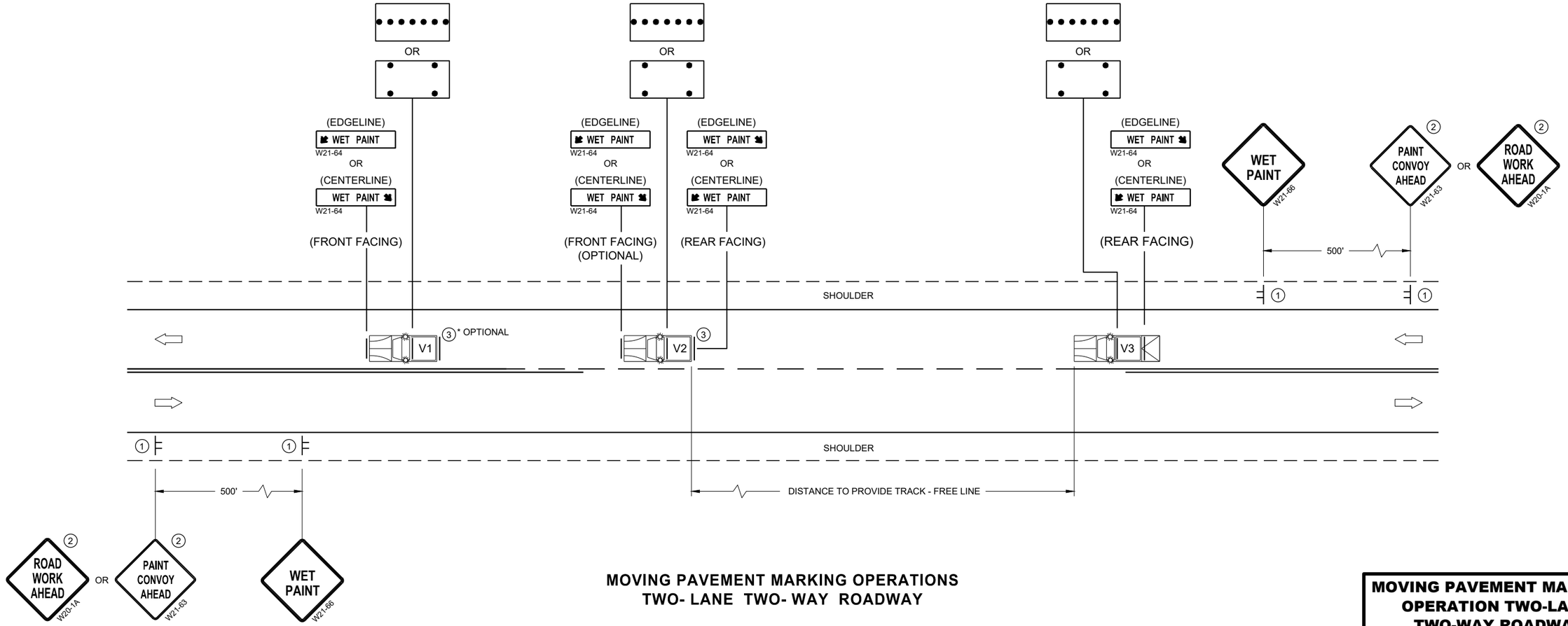
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

FHWA

6

SDD 15C19-08a

6

SDD 15C19-08a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. 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.

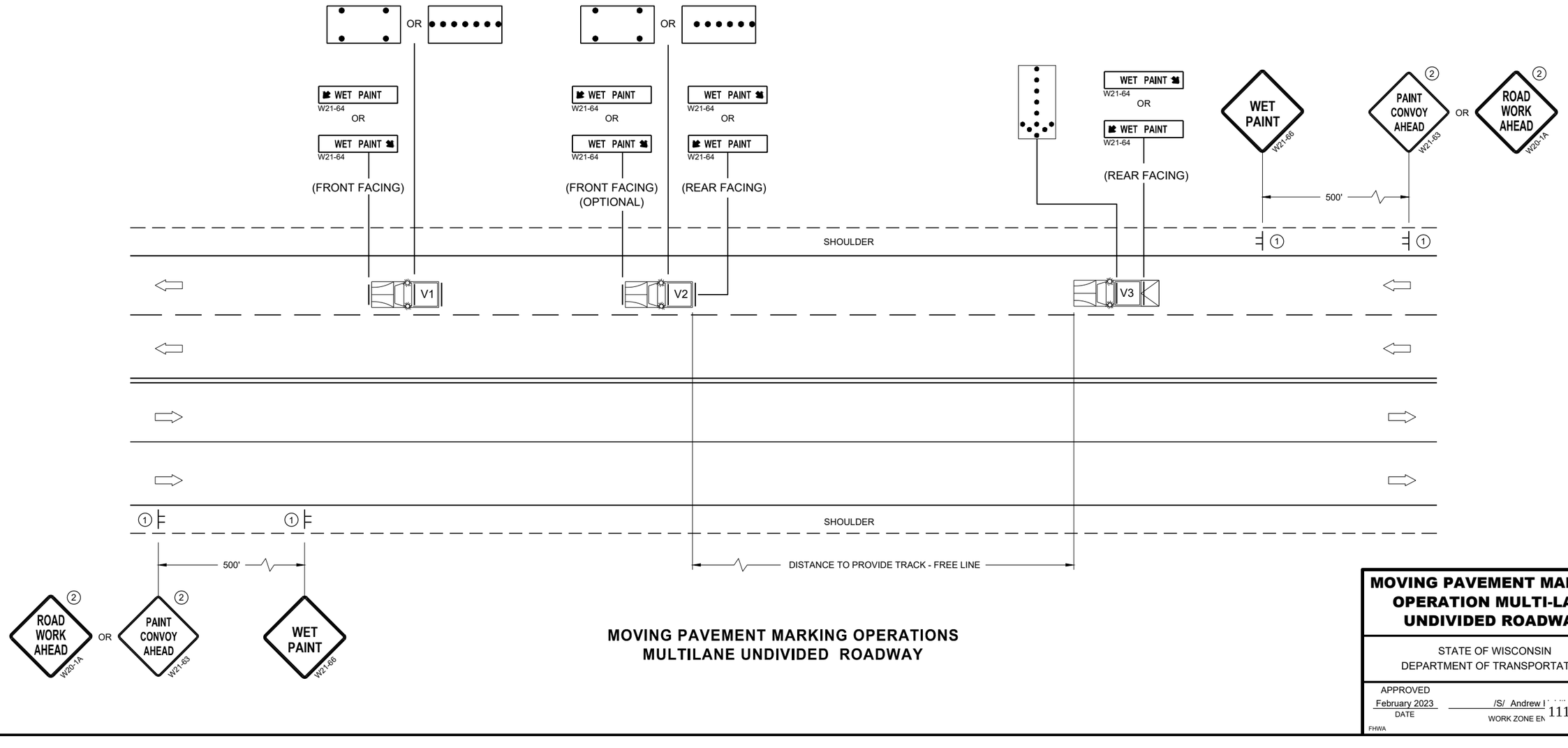
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES 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 HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS MULTILANE UNDIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

FHWA

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SDD 15C19-08b

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SDD 15C19-08b

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE

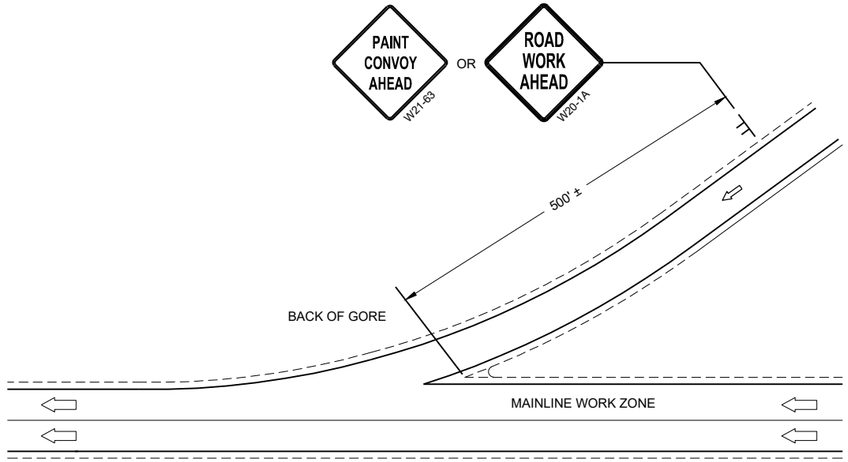
TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. 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.

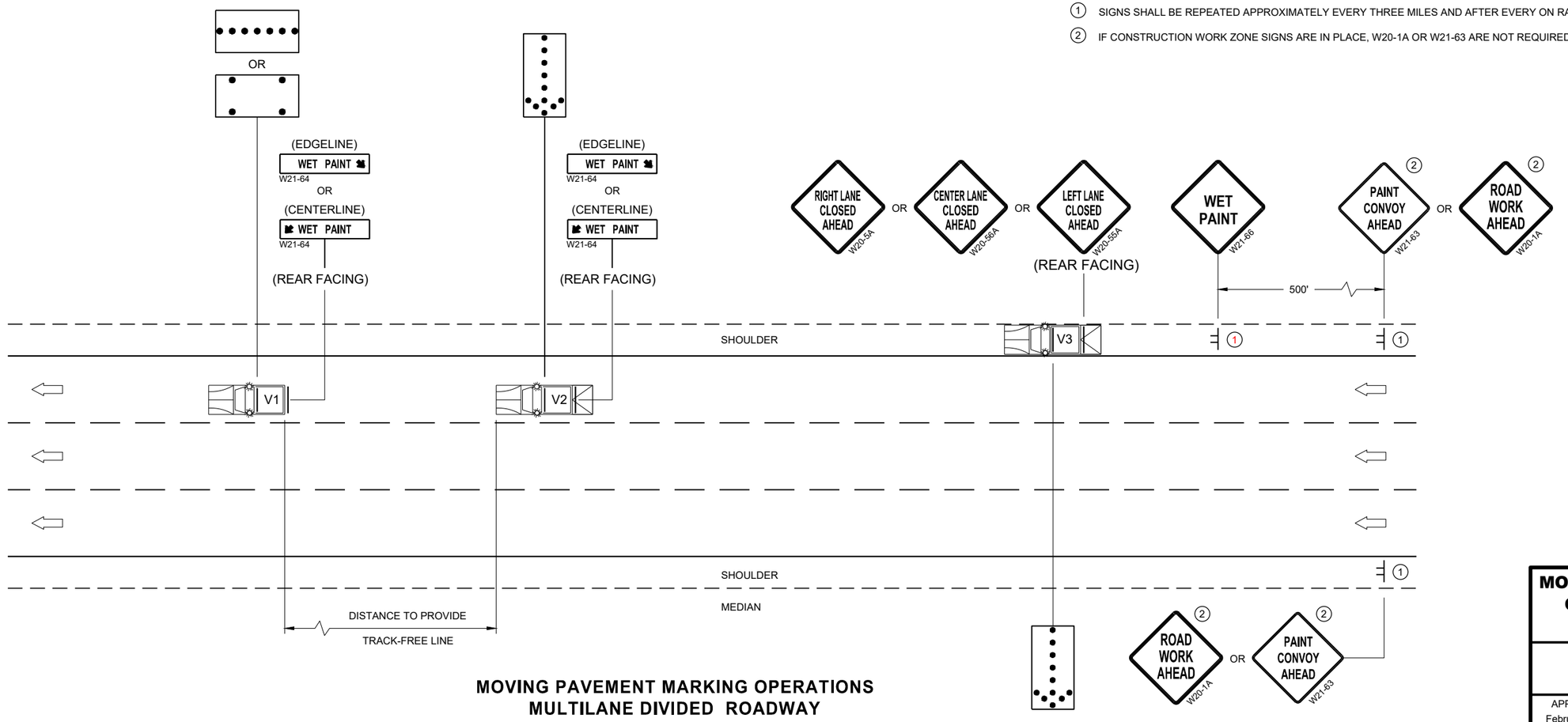
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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
February 2023
DATE

/S/ Andrew [illegible]
WORK ZONE EN

FHWA

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SDD 15C19-08c

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SDD 15C19-08c

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

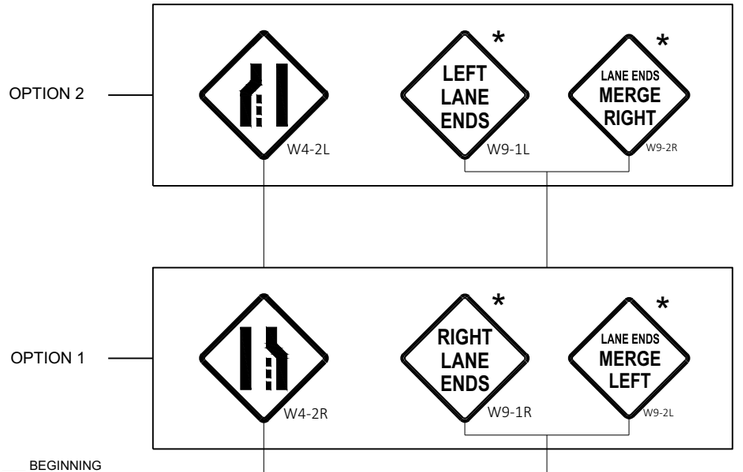
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

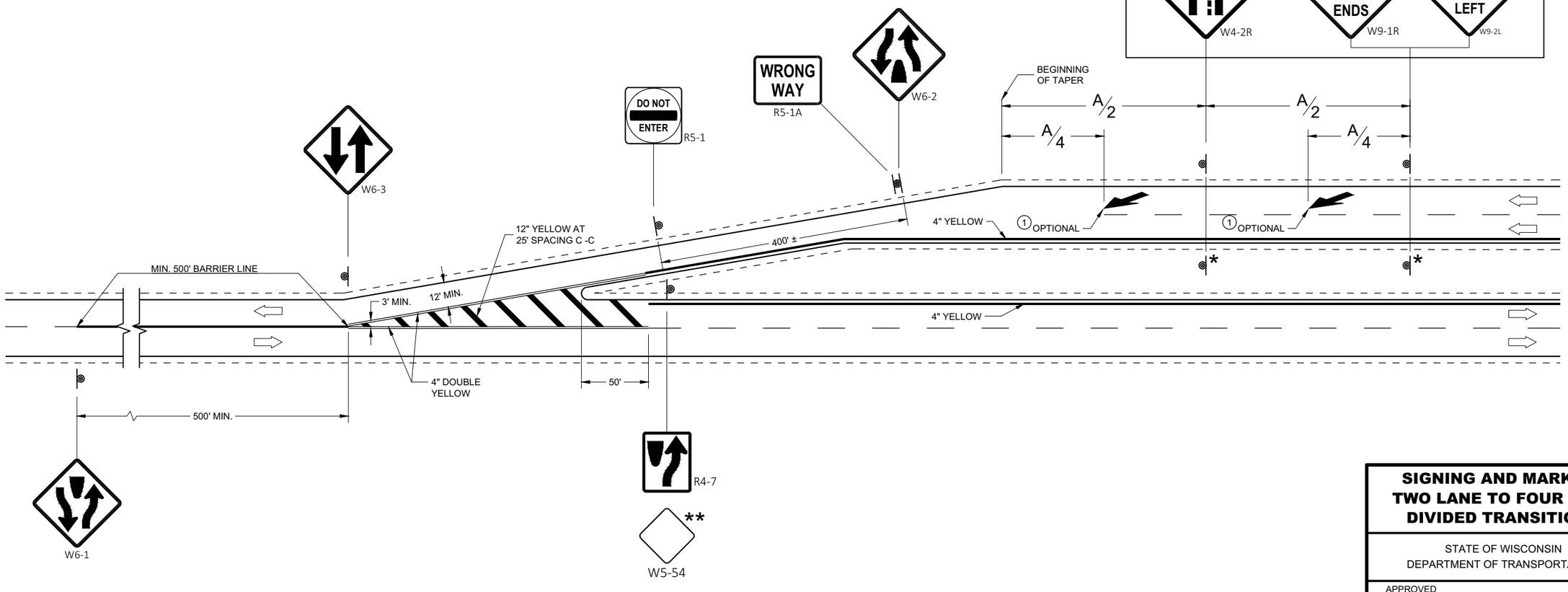
SIGN MOUNTED ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'





SIGNING AND MARKING TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAR ENGINEER

FHWA

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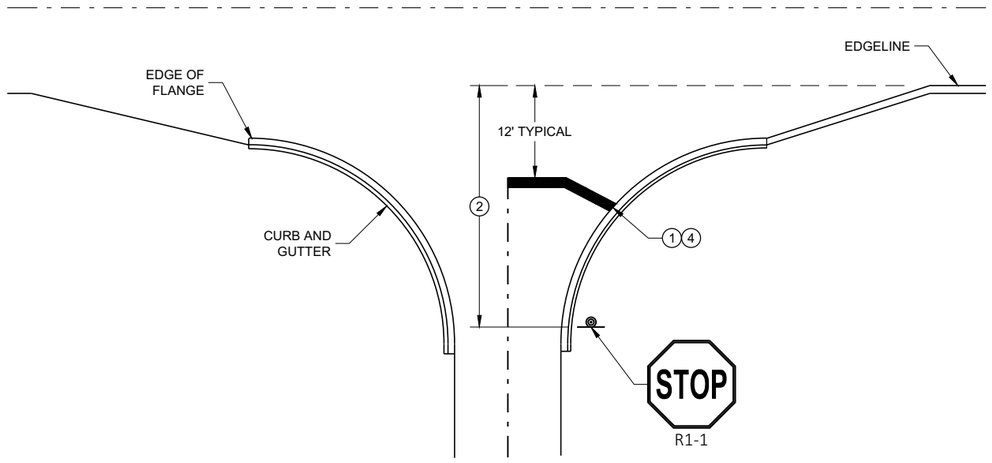
SDD 15C21 - 10

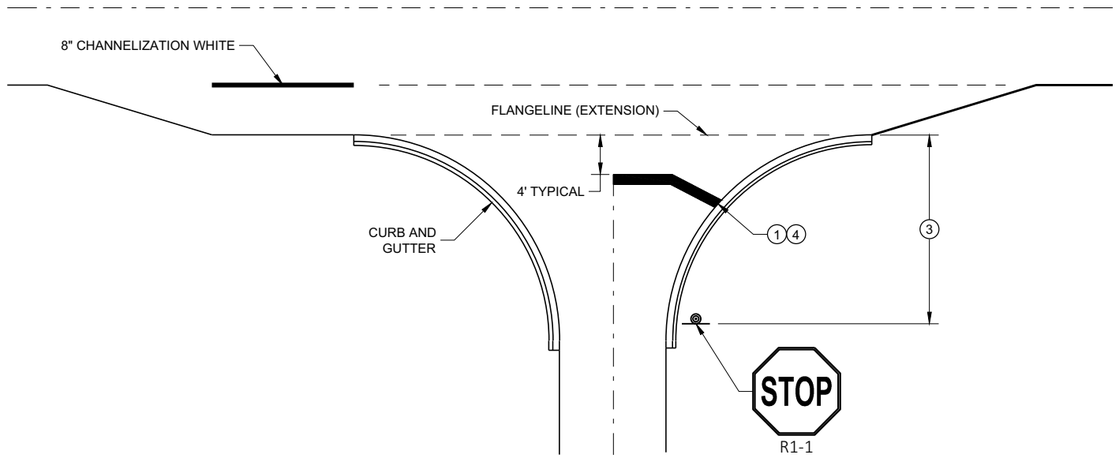
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

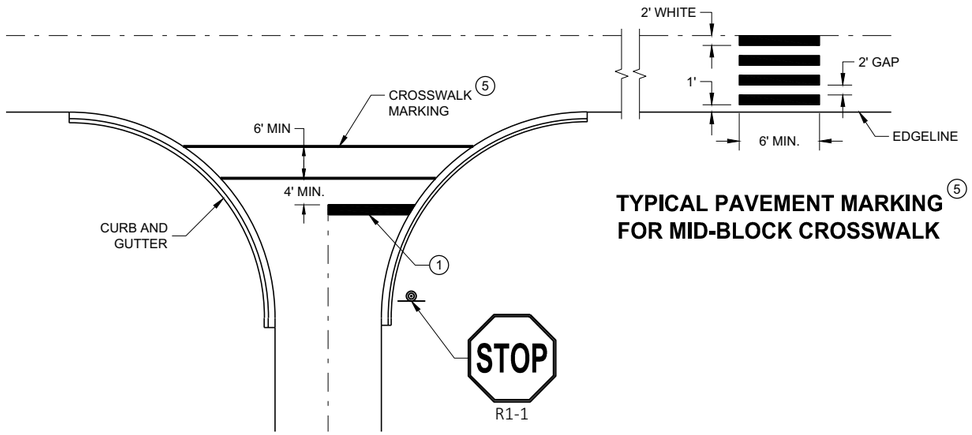
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

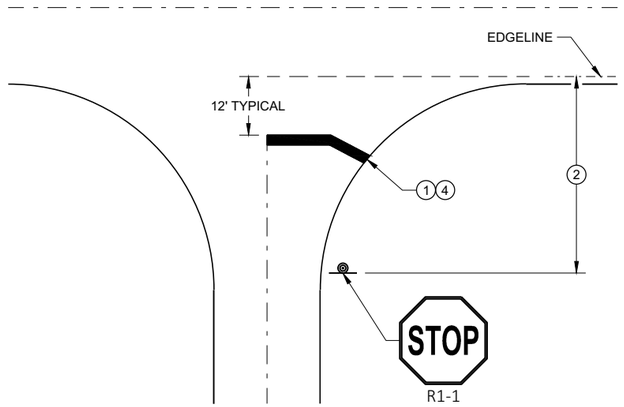


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS 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
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33 - 04

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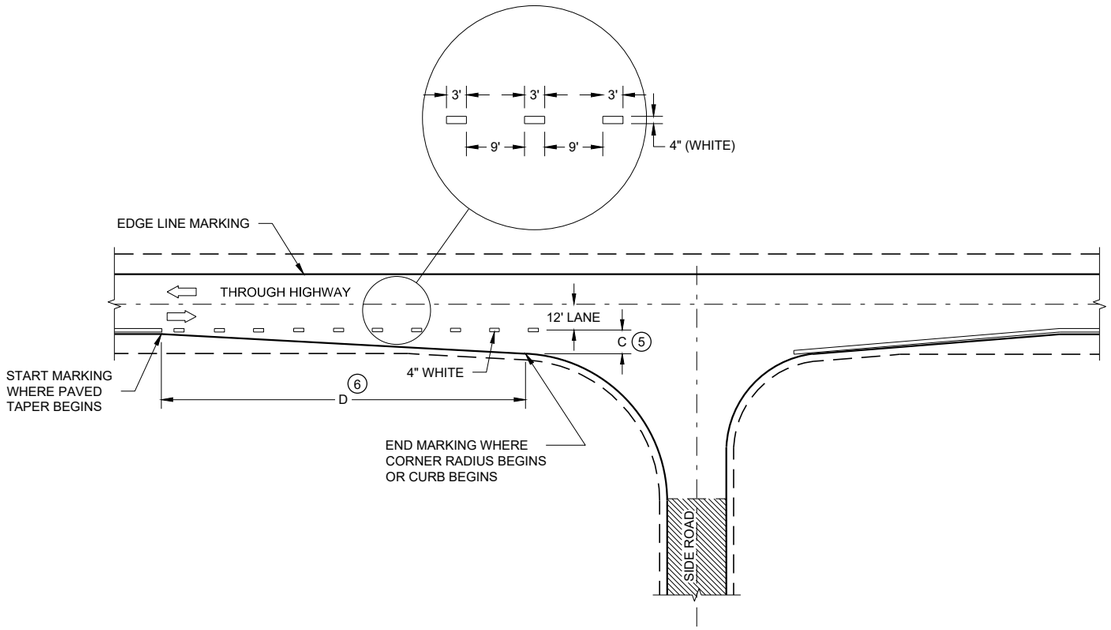
SDD 15C33 - 04



MINOR INTERSECTION

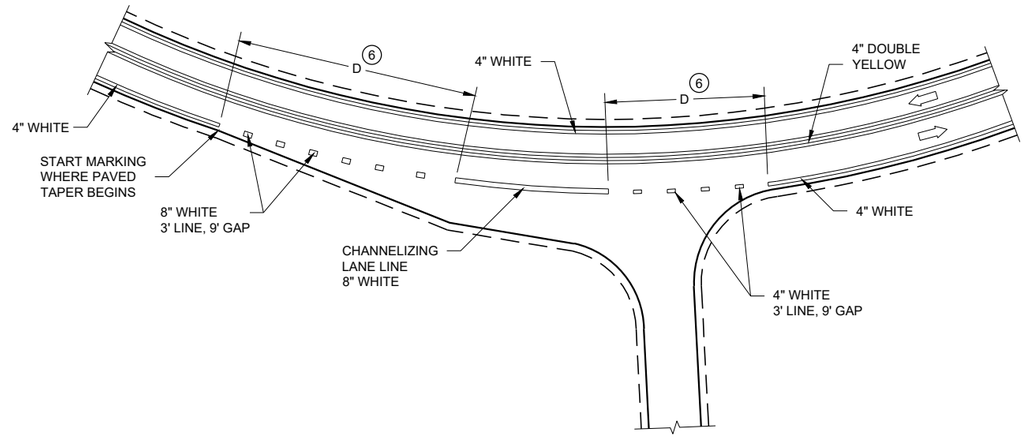
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

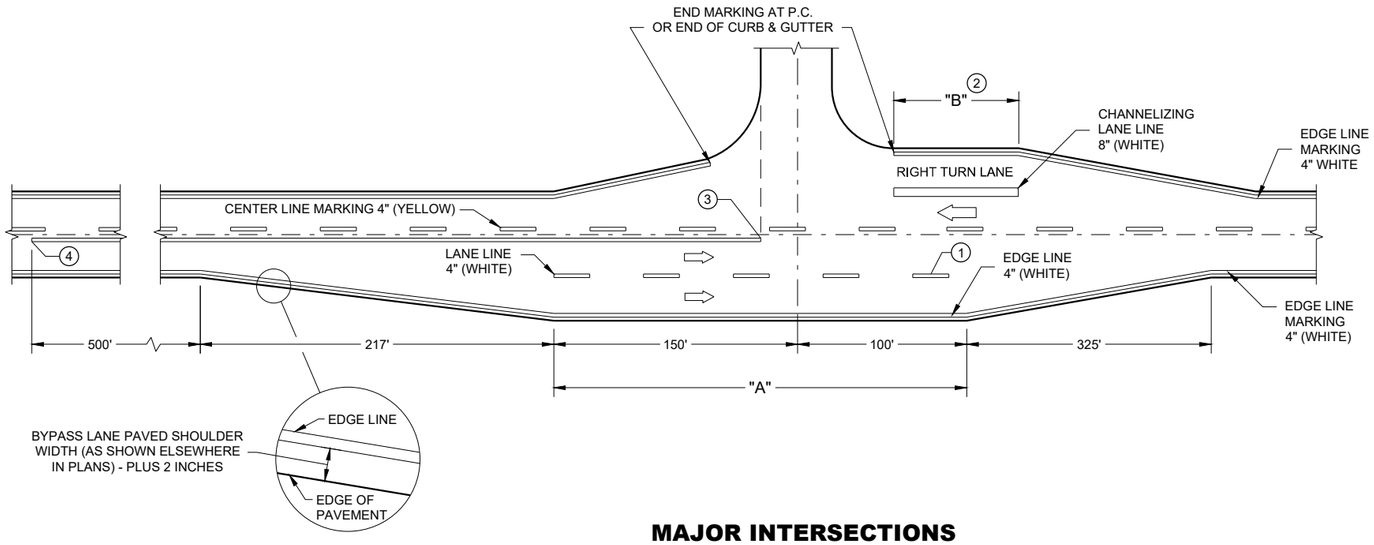
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 15C35 - 05a

LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

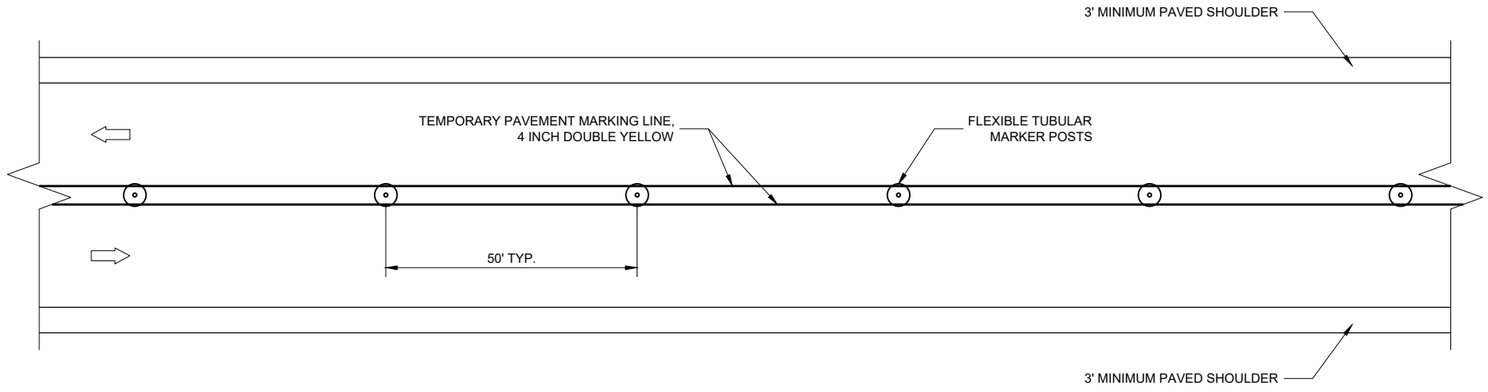
THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING LINE, 4 INCH DOUBLE YELLOW.

1. THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

2. CONVENTIONAL: 24" X 30"
   FREEWAY AND EXPRESSWAY: 36" X 48"



TWO LANE, TWO WAY OPERATION

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SDD 15D06 - 05

SDD 15D06 - 05

TRAFFIC CONTROL
TWO LANE TWO WAY
OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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.

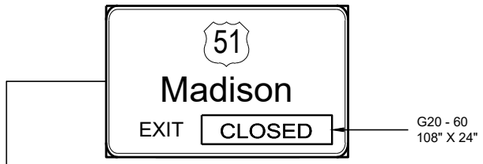
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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.

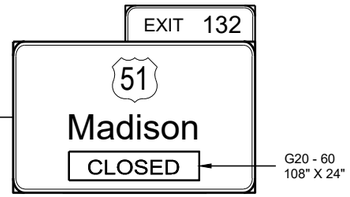
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(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

COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"

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
February 2022
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15D16 - 05

6
SDD 15D16 - 05

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

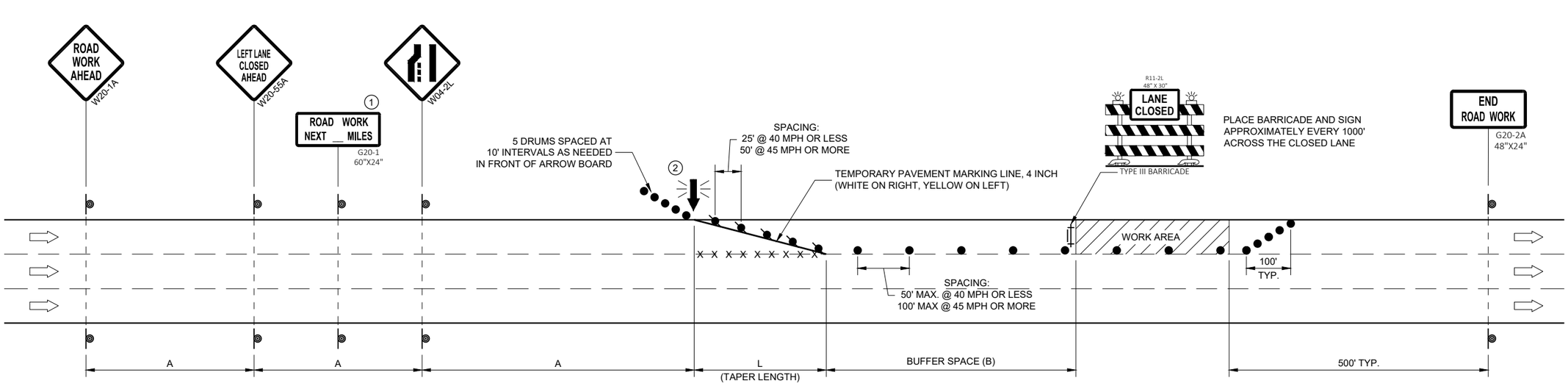
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD15D20 - 06a

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

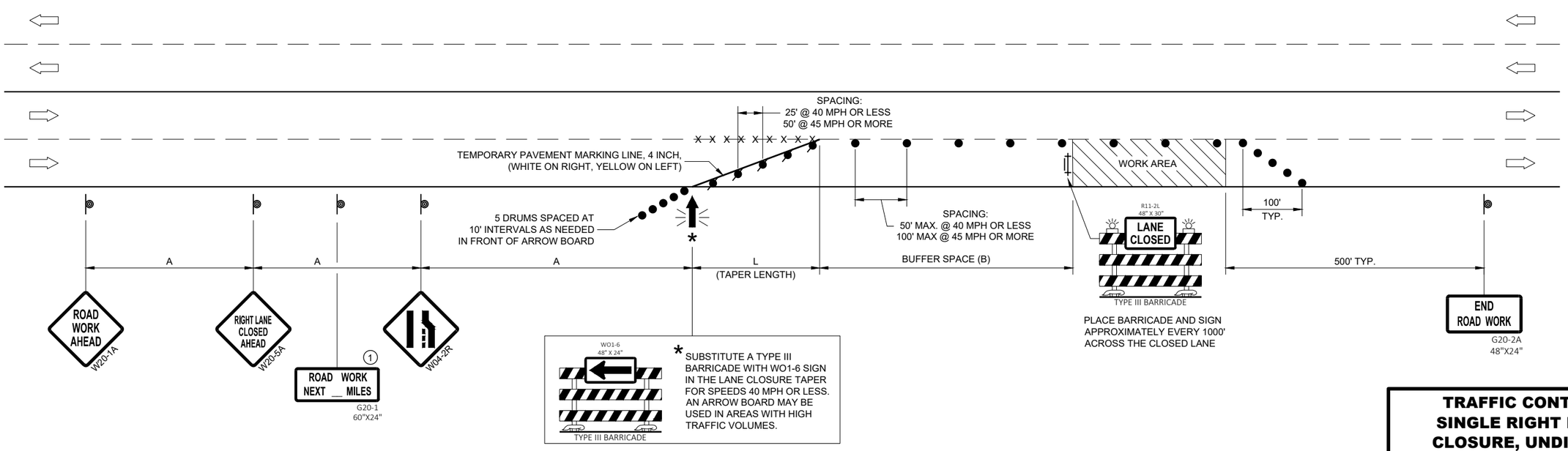
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

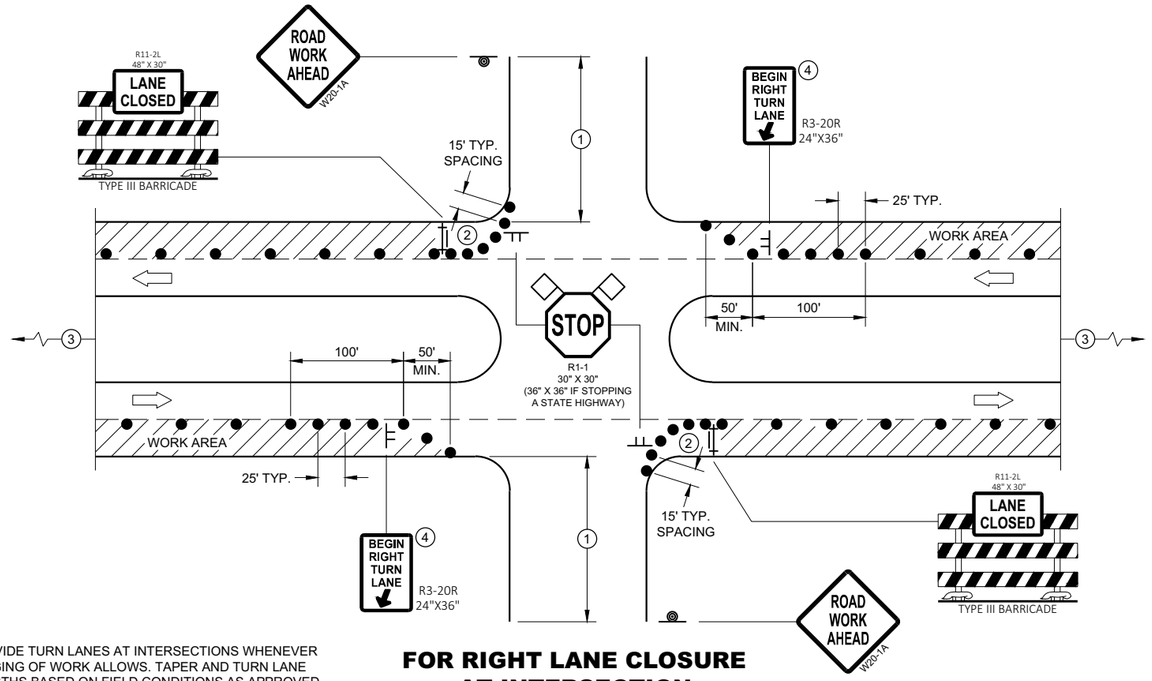
APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

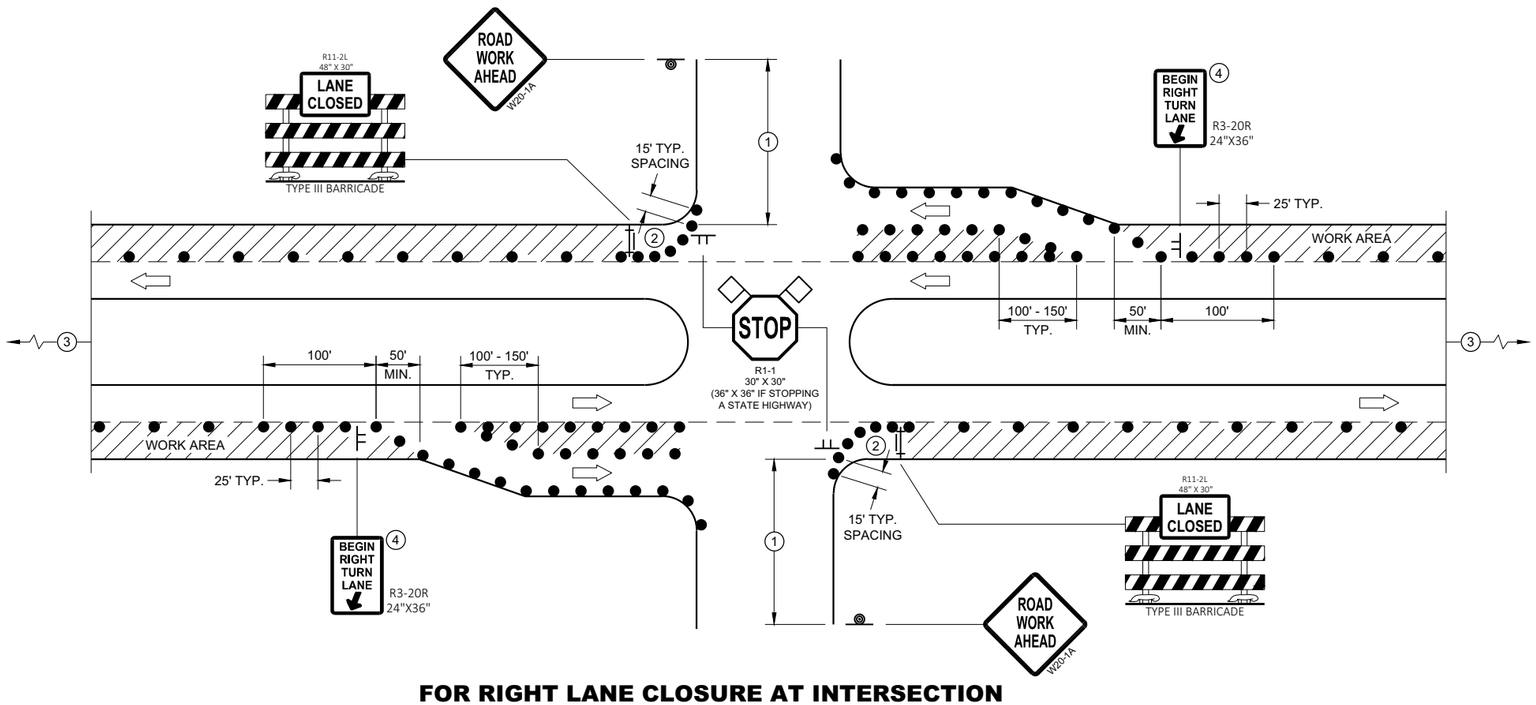
SDD 15D20 - 06b

SDD 15D20 - 06b



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE 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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

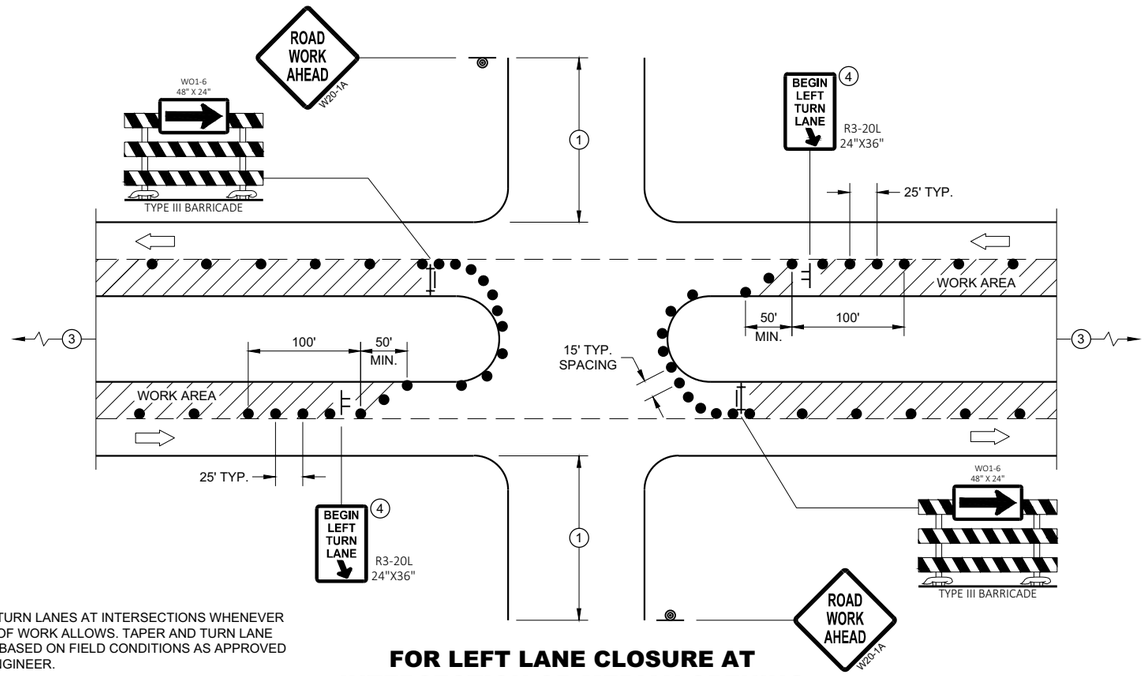
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a

6

SDD 15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE 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.

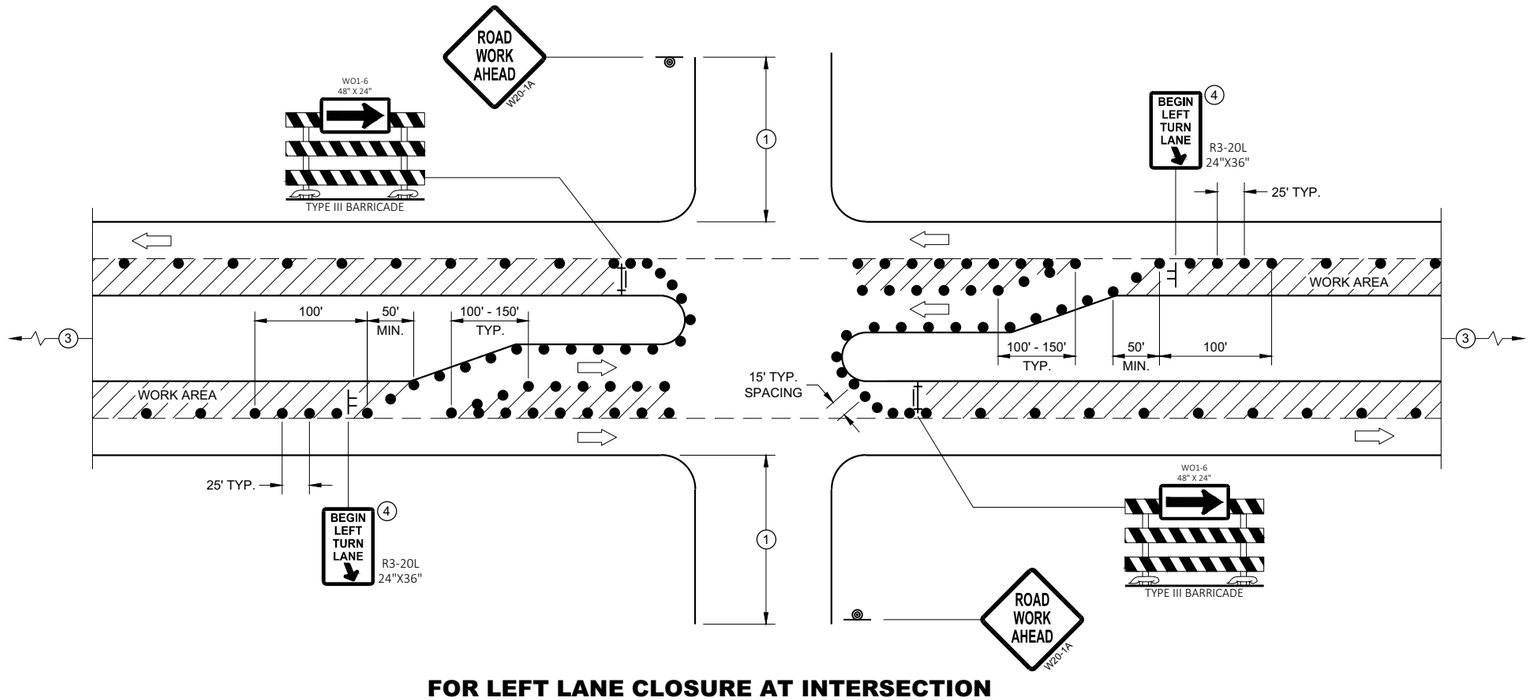
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

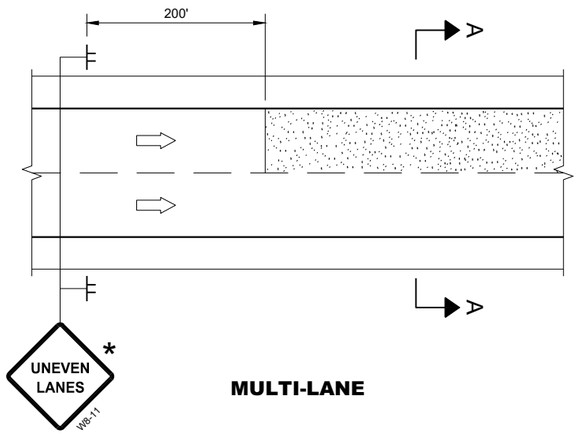
FHWA

6

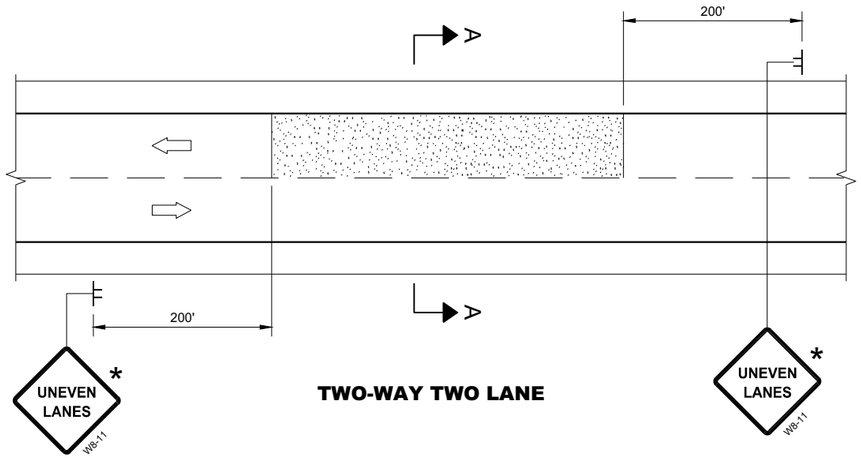
SDD 15D21 - 07b

6

SDD 15D21 - 07b



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

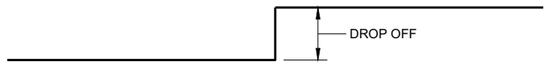
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

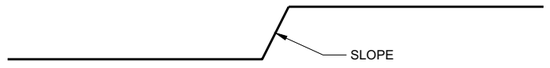
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

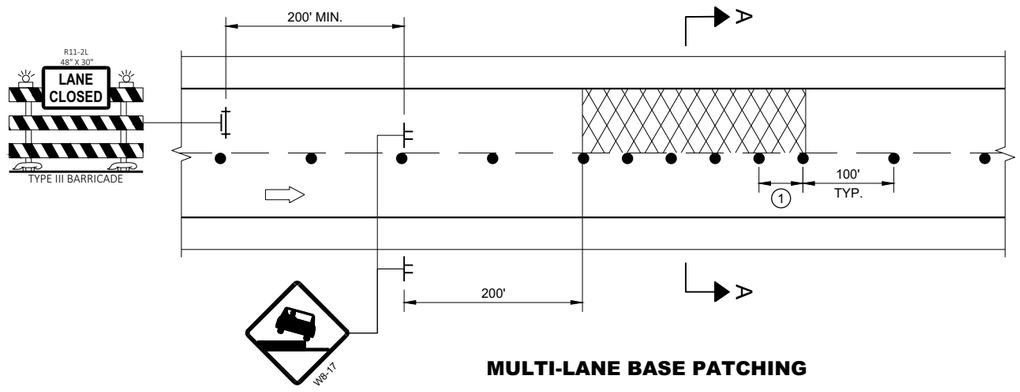


SECTION A - A

OR

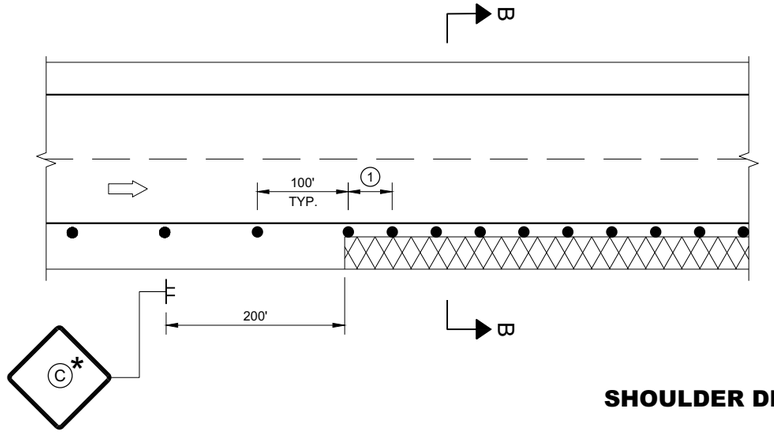


SECTION A - A

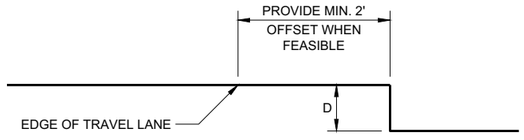


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D39 - 02

SDD 15D39 - 02

6

6

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

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.

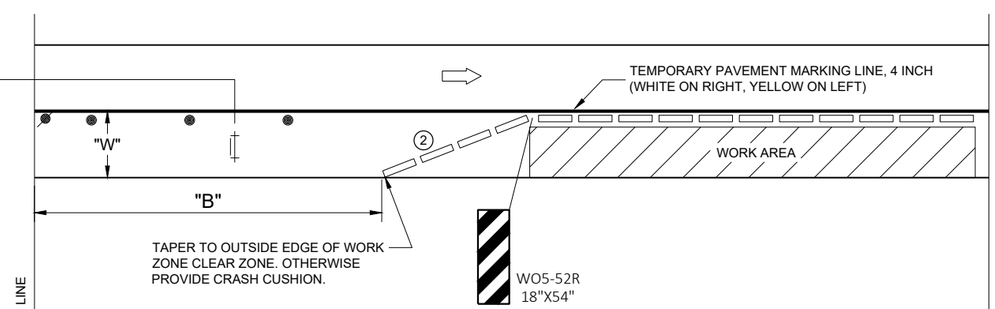
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER
SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 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 IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

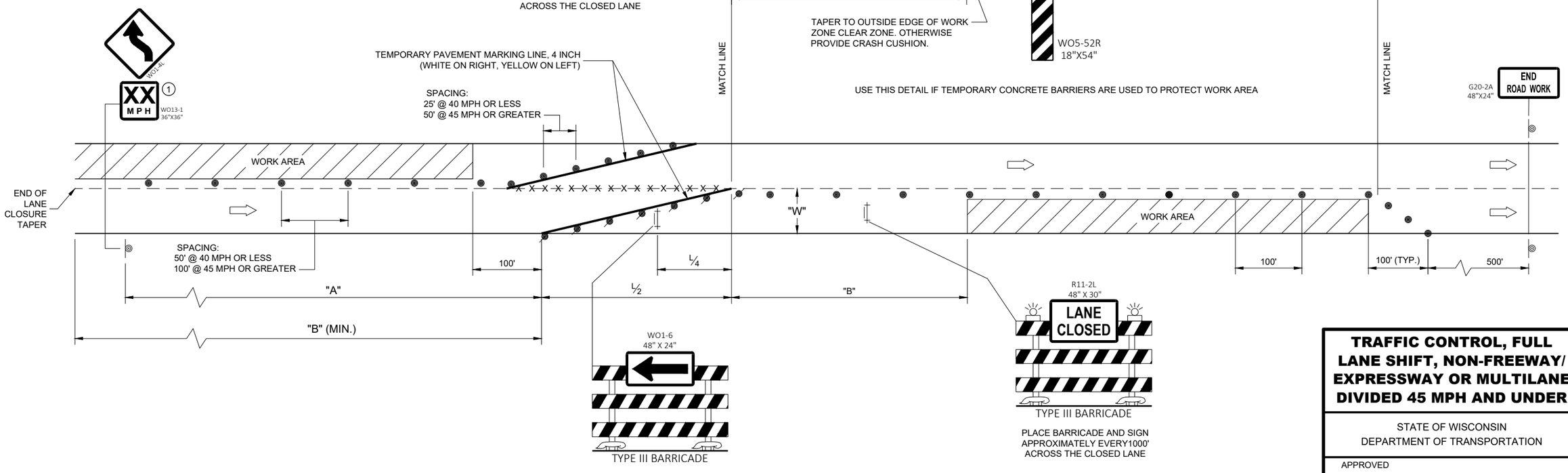
(2) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	143	120
40	350	133	147	160	173	187	170
45	500	225	248	270	293	315	220

PLACE BARRICADE AND SIGN APPROXIMATELY EVERY1000' ACROSS THE CLOSED LANE



USE THIS DETAIL IF TEMPORARY CONCRETE BARRIERS ARE USED TO PROTECT WORK AREA



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY1000' ACROSS THE CLOSED LANE

TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D40 - 04a

SDD 15D40 - 04a

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

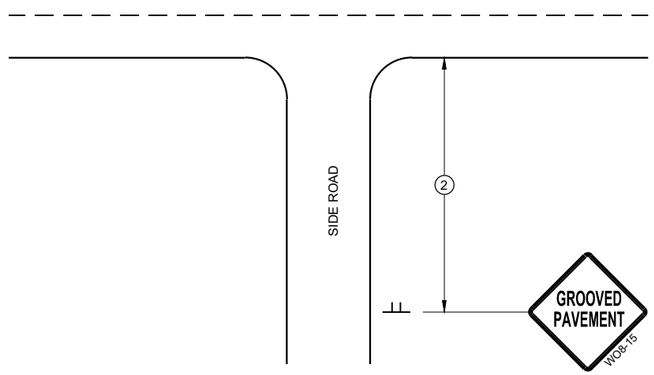
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

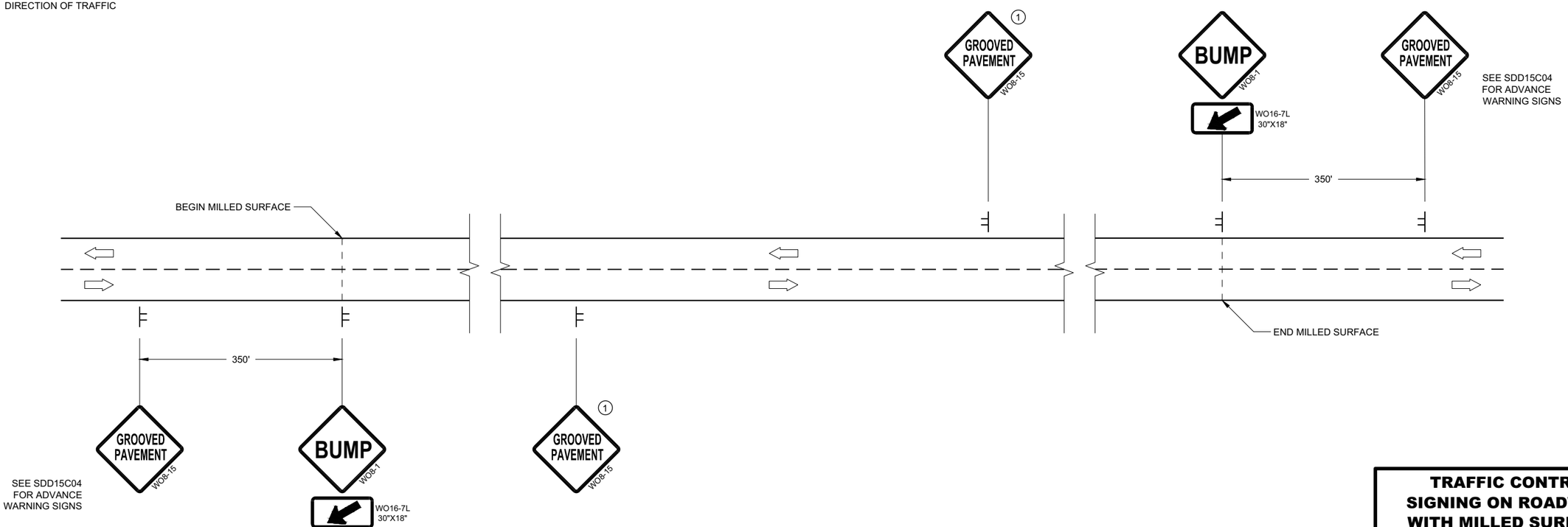
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

(1) PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

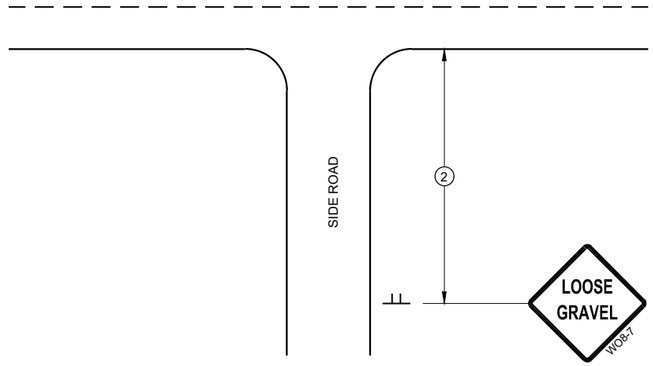
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

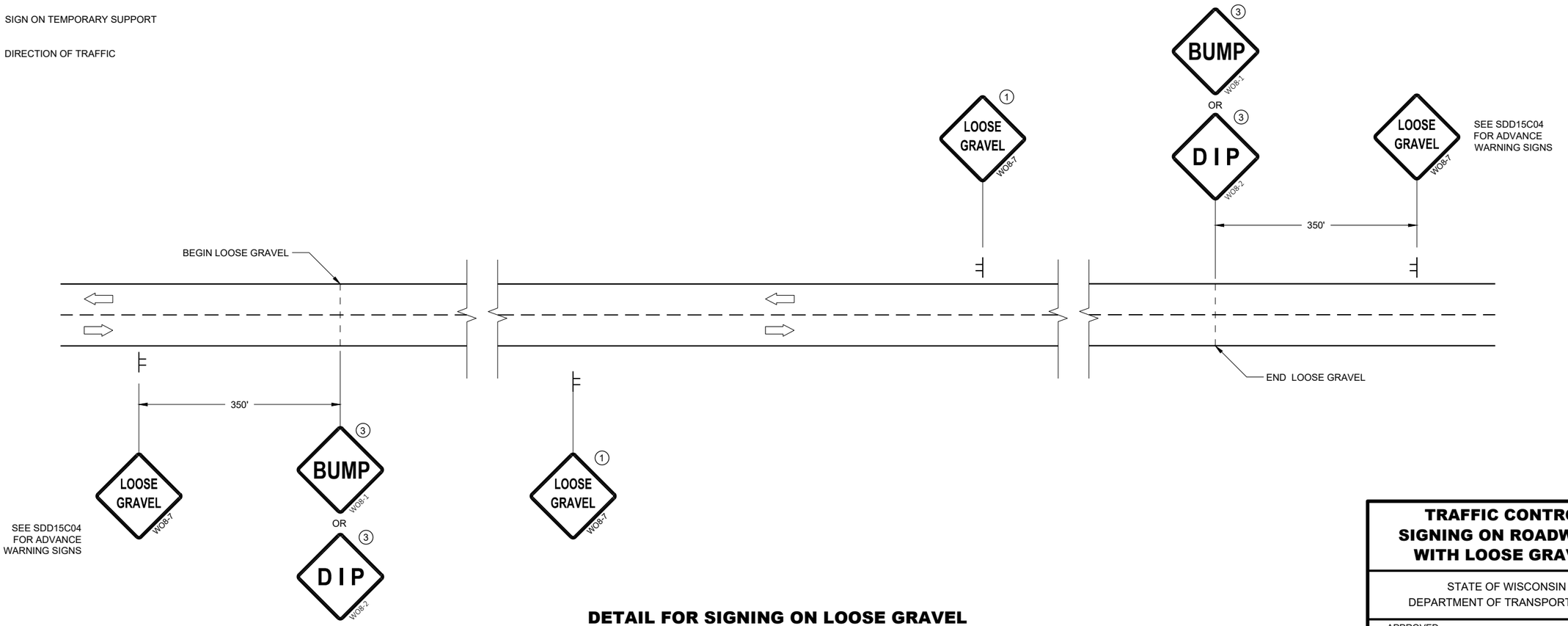
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D45 - 03

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

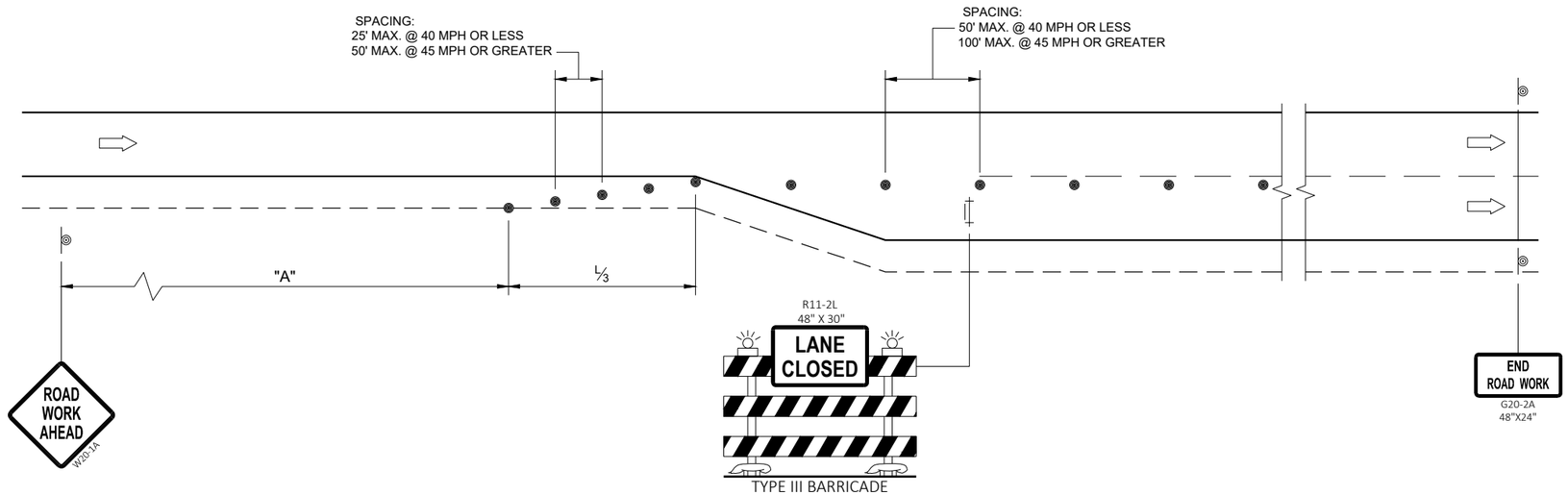
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D50 - 02a

6

SDD 15D50 - 02a

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

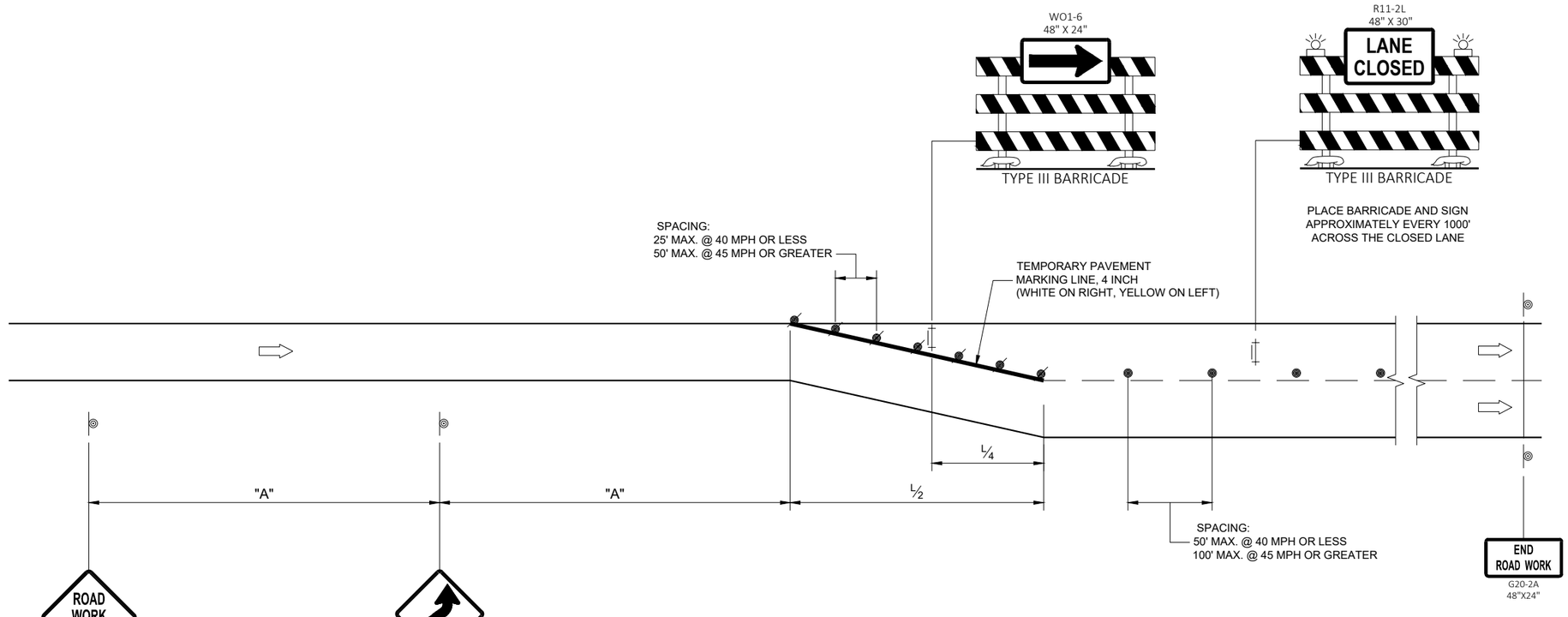
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

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



TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

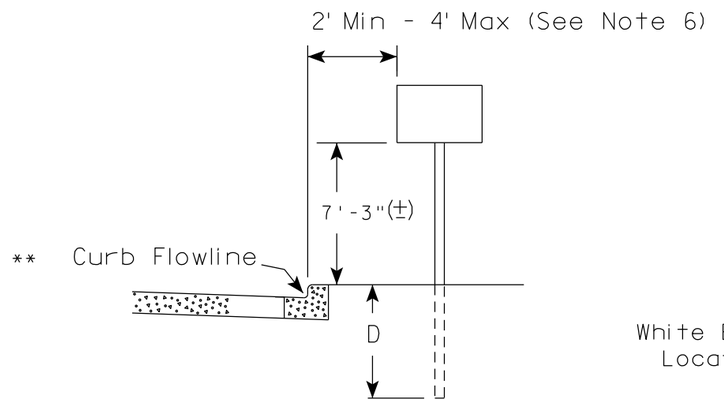
6

SDD 15D50 - 02b

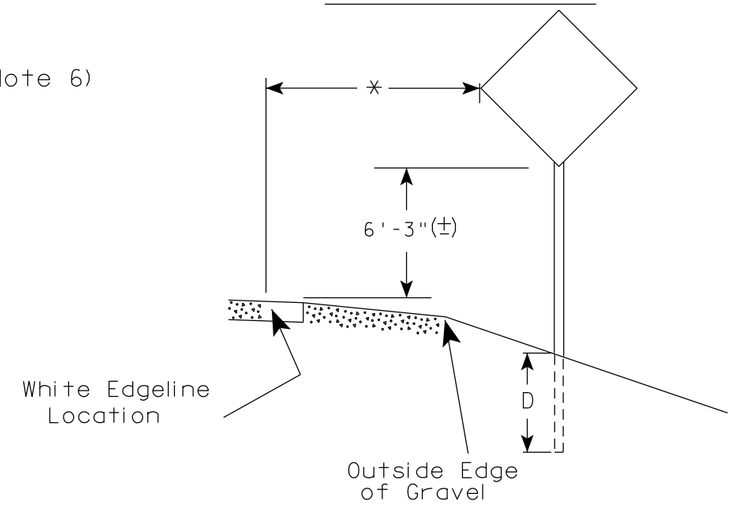
6

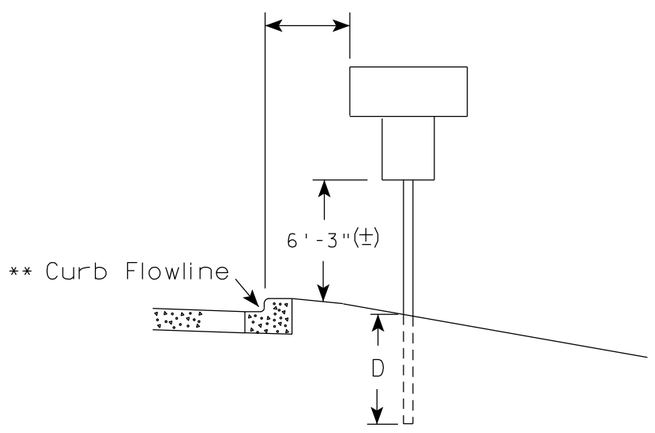
SDD 15D50 - 02b

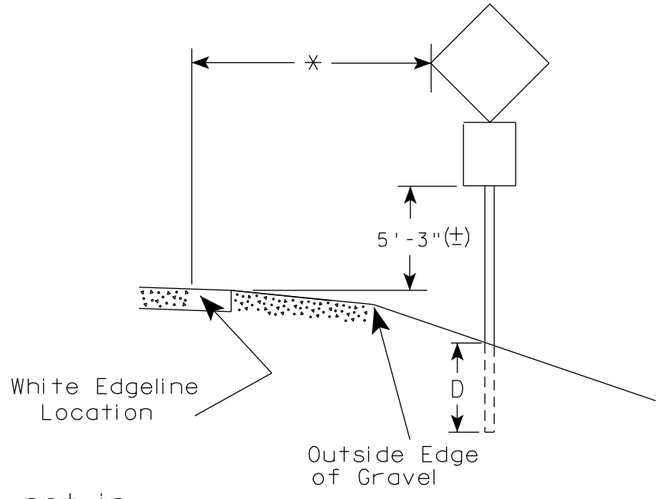
URBAN AREA



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.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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" (±). 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. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

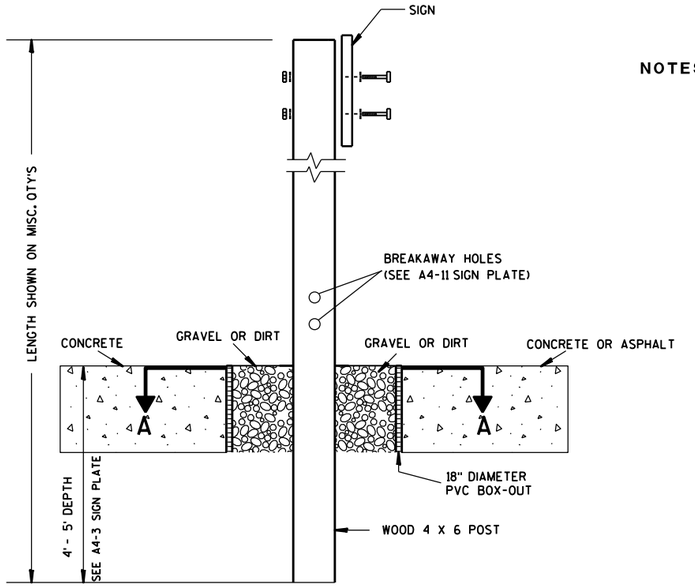
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

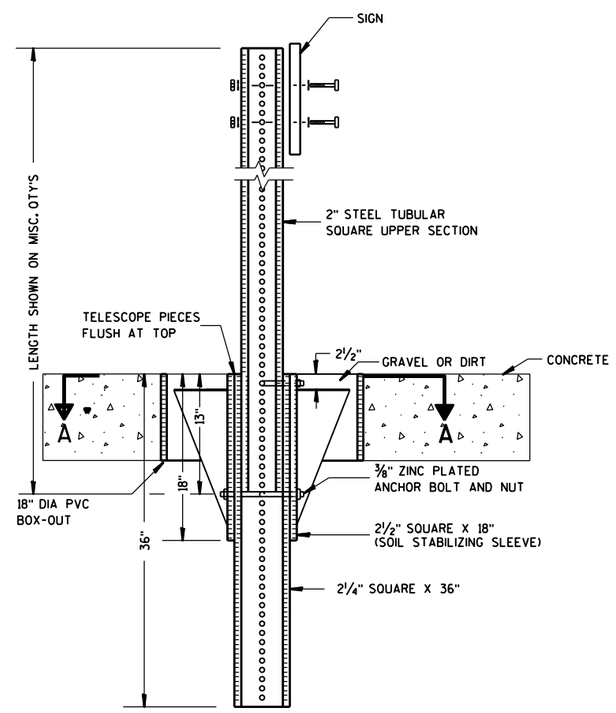
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 128	E



ELEVATION VIEW

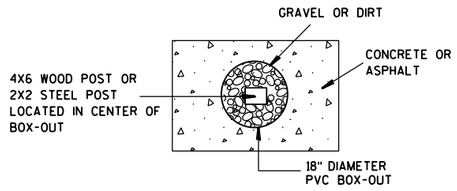
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

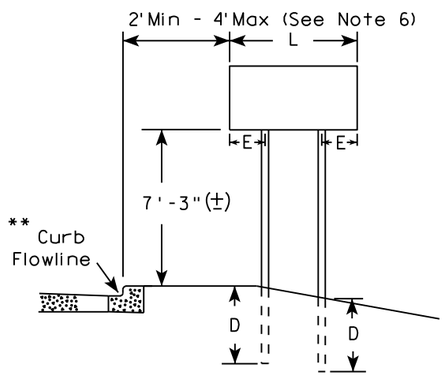
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

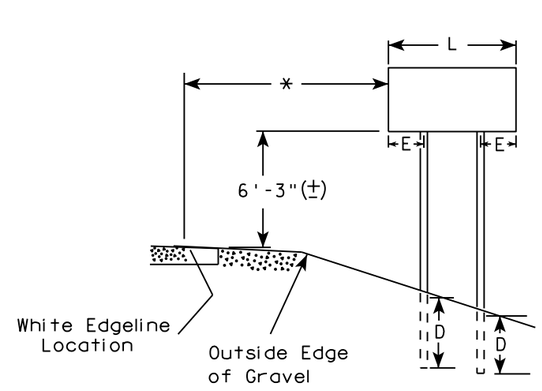
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

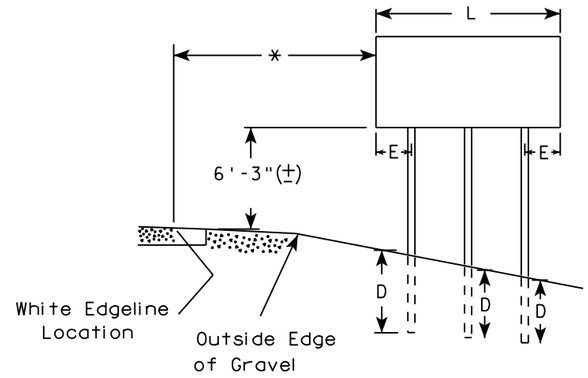
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

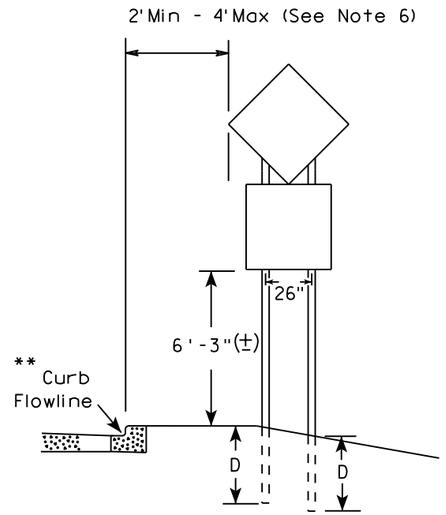
URBAN AREA



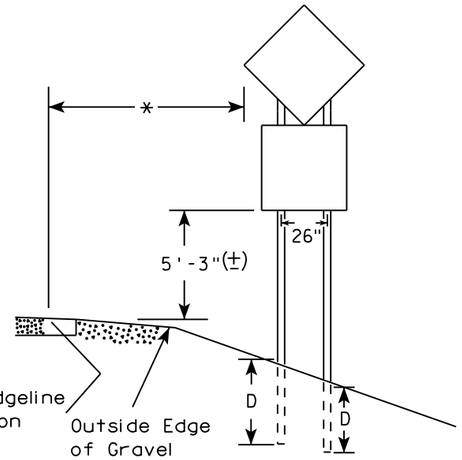
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-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" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-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" (±).

* 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'

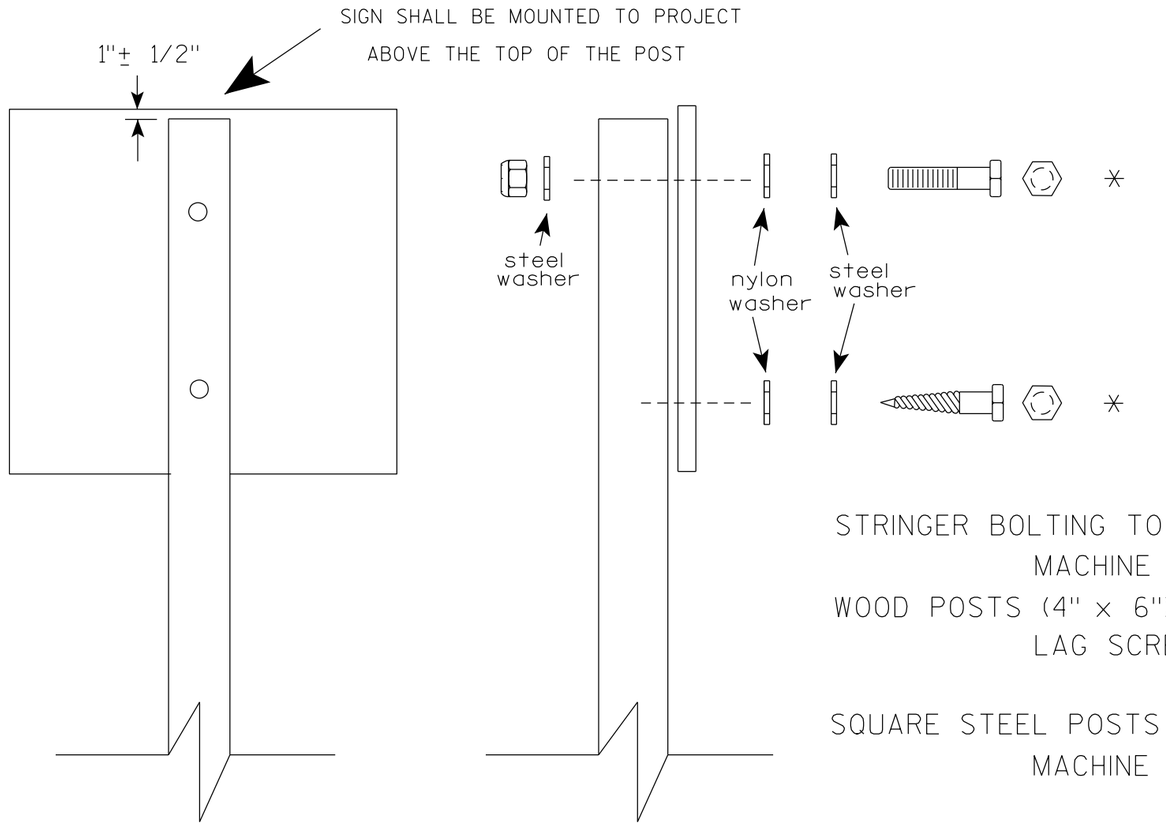
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 130	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

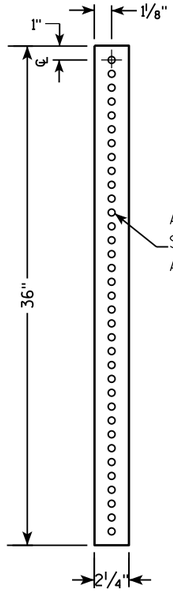
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

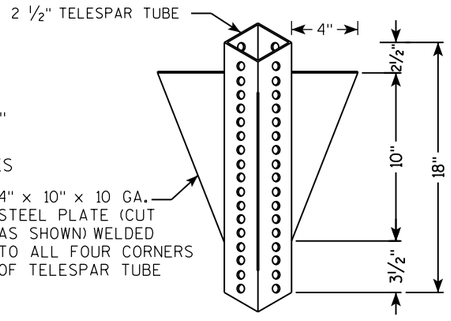
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

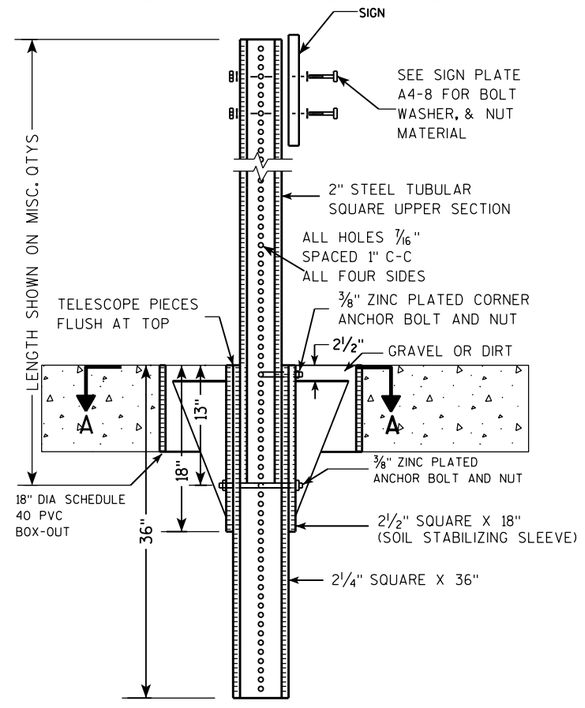
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



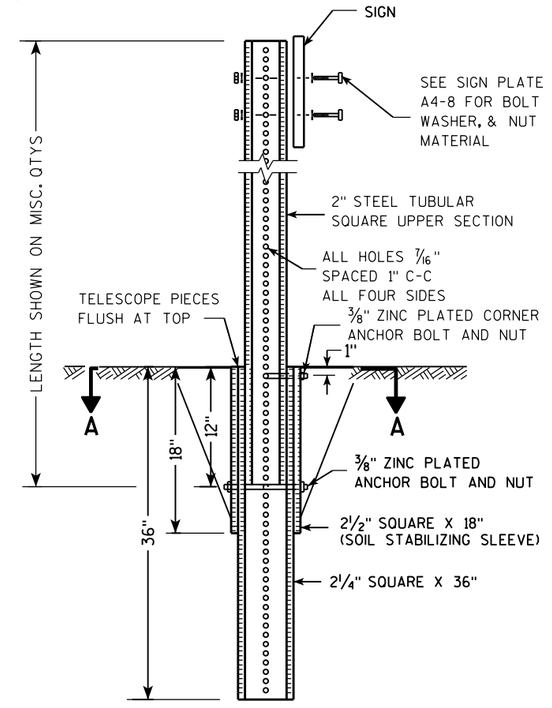
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

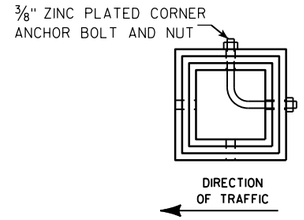


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

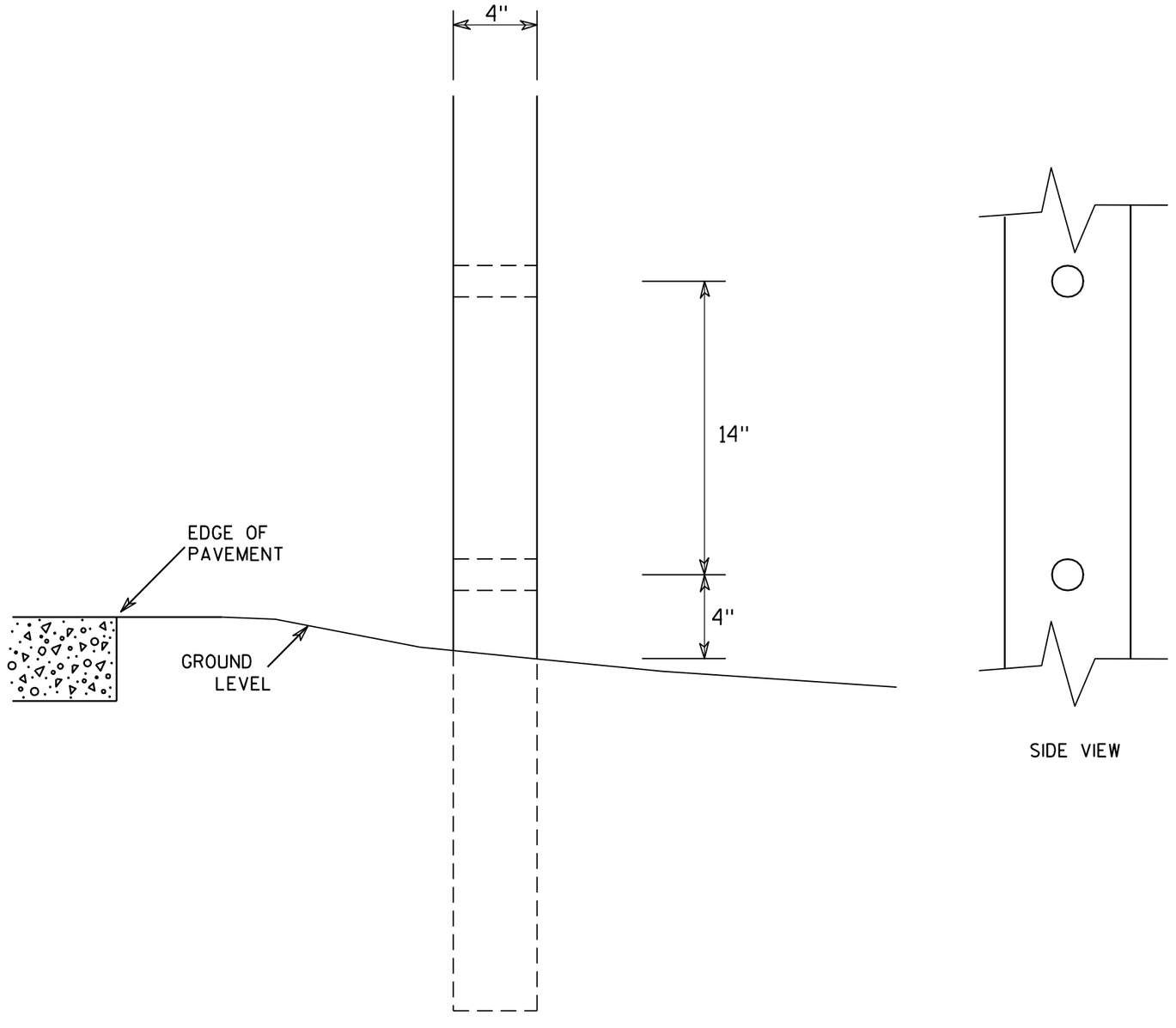
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 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

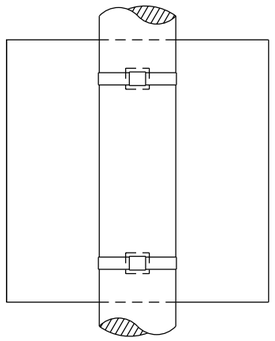
APPROVED Chester J Spang for State Traffic Engineer

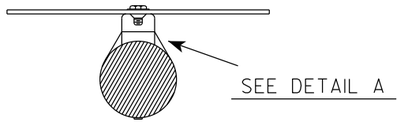
DATE 3/27/97 PLATE NO. A4-11.2

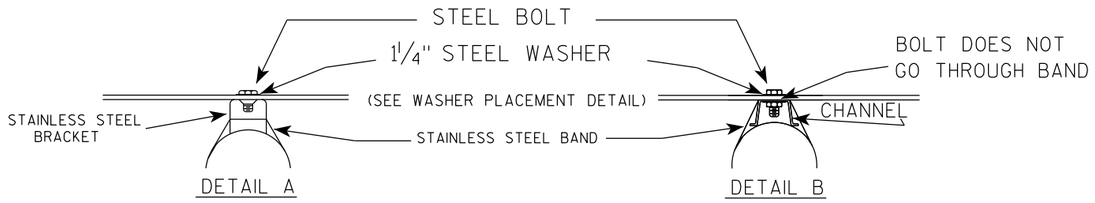
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 133	E

BANDING

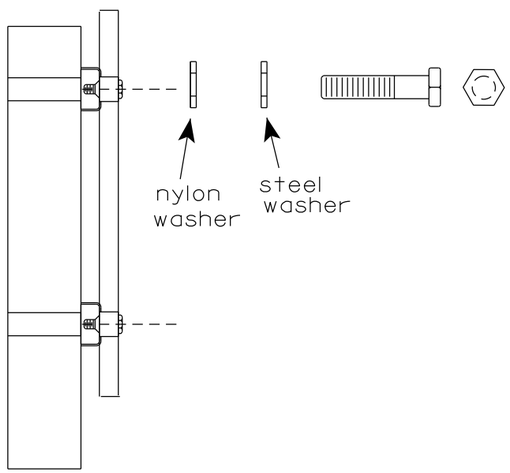
SINGLE SIGN







WASHER PLACEMENT

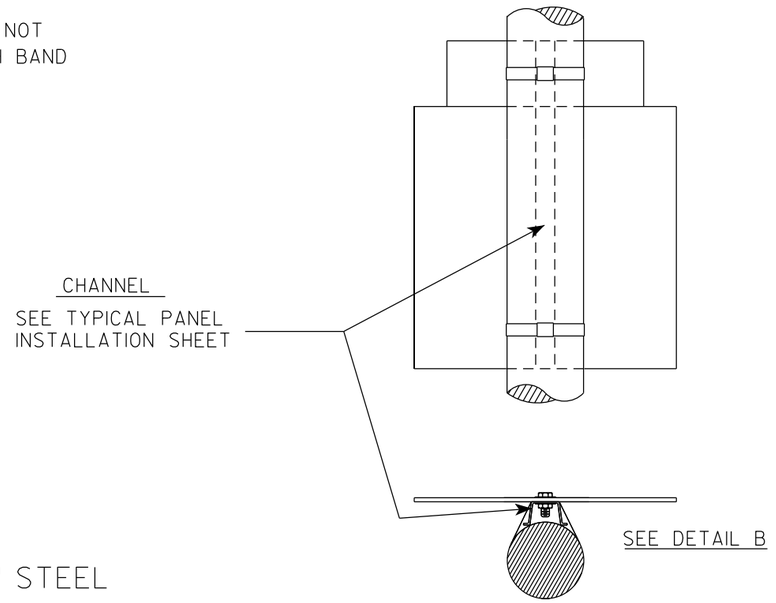


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

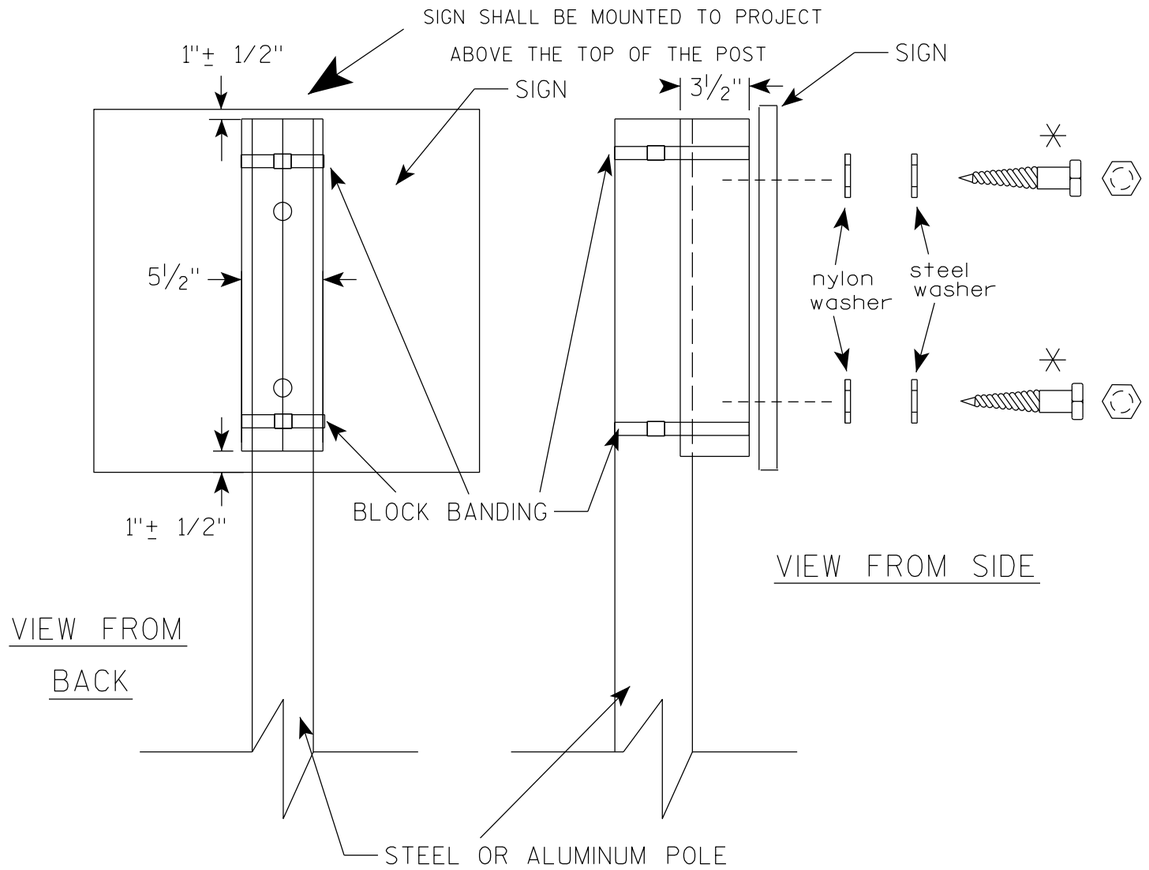
DATE 6/10/19 PLATE NO. A5-9.4

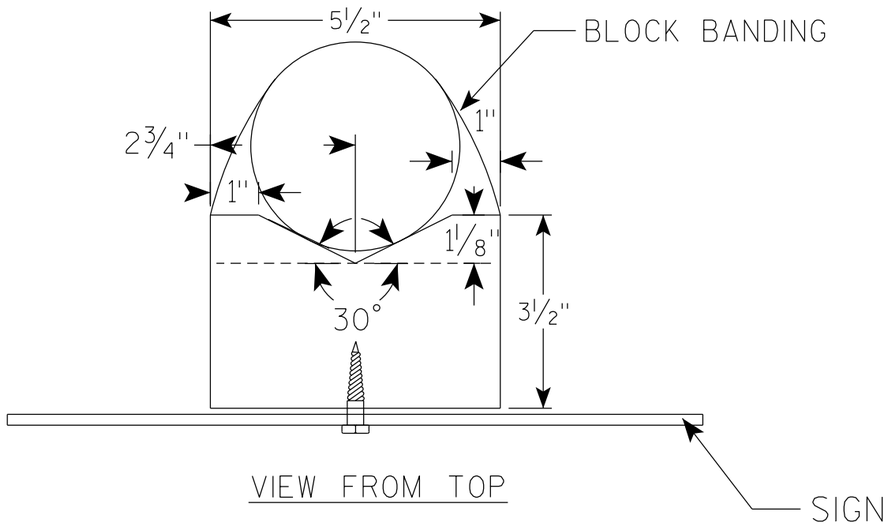
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 134	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

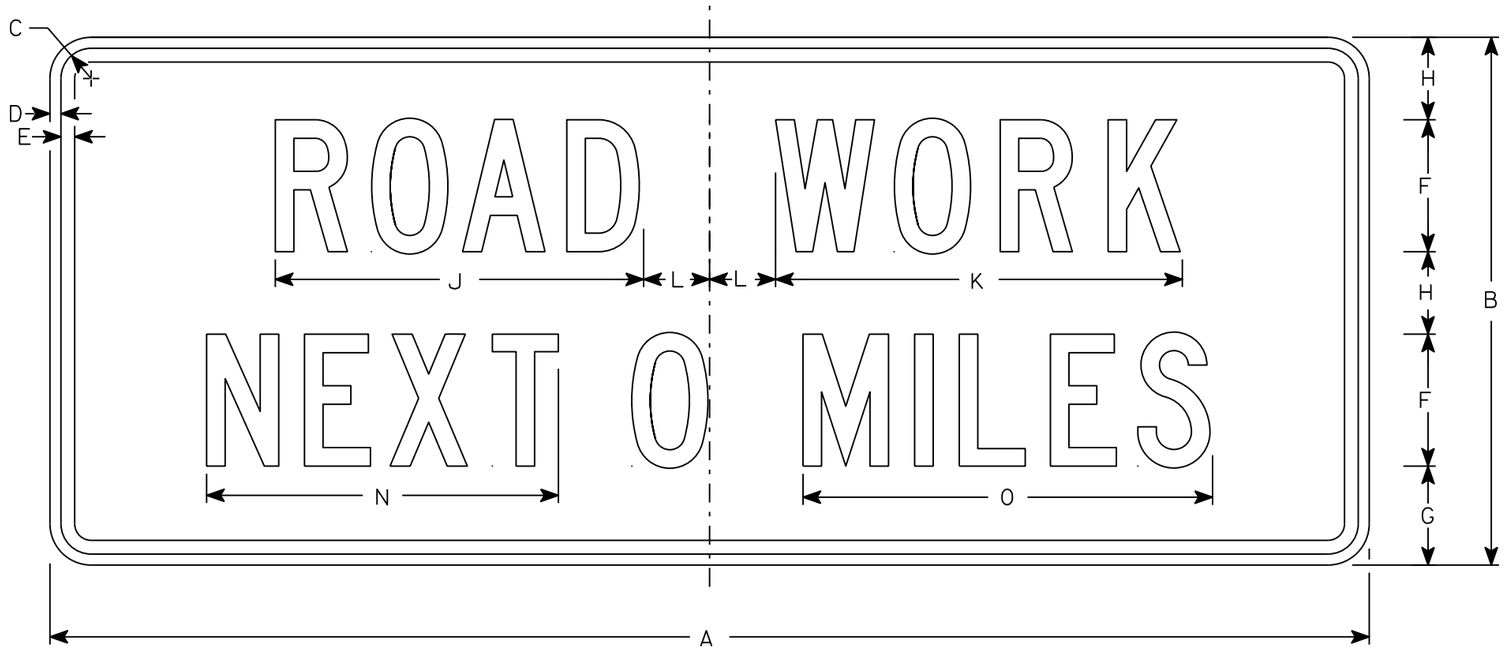
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 135 E



G20-1

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. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

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	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
5																											

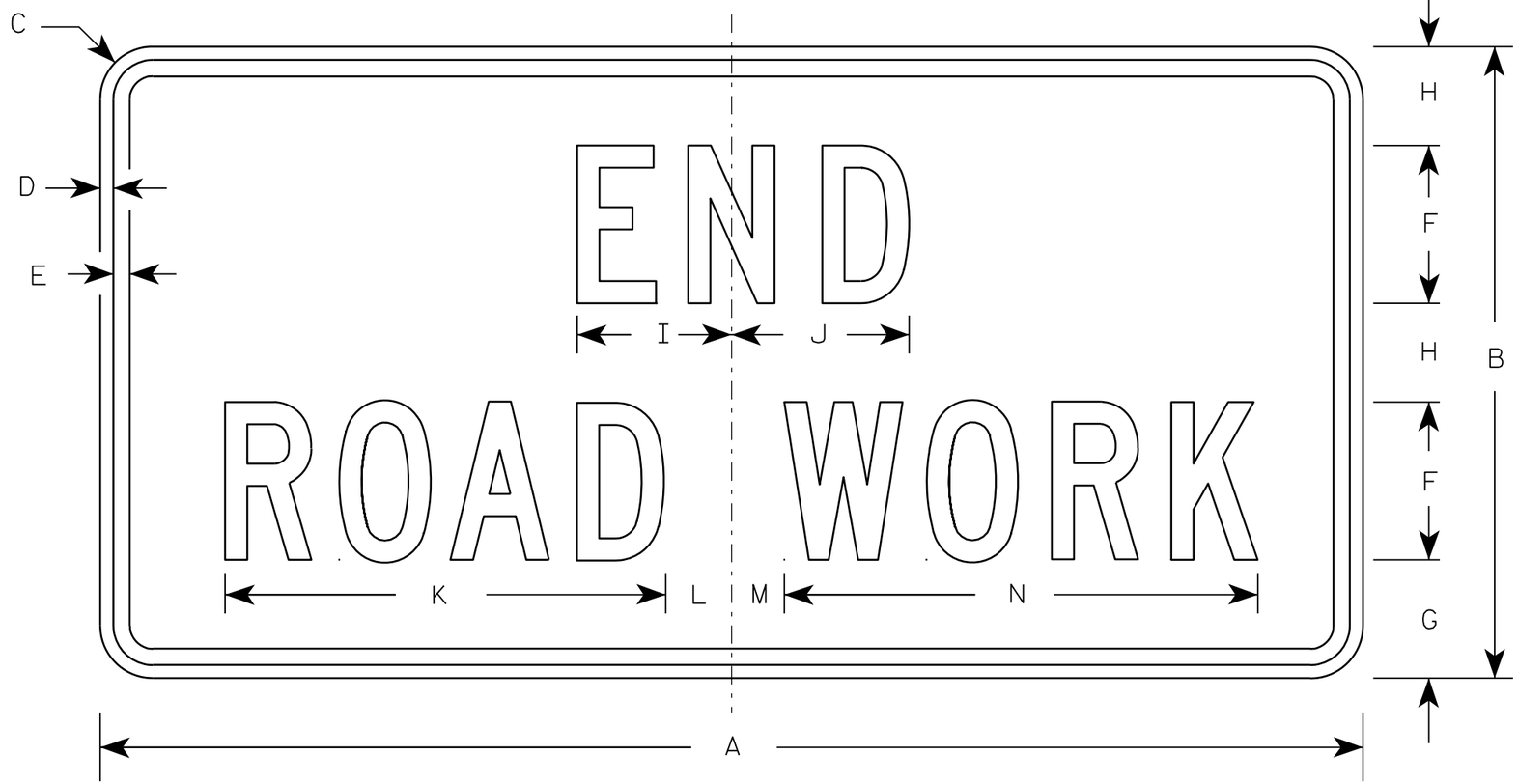
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 136 | E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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.	Area m2
1	36	18	1 1/8	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	0.41
2	48	24	1 1/2	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	0.72
3	48	24	1 1/2	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	0.72
4	48	24	1 1/2	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	0.72
5	48	24	1 1/2	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	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

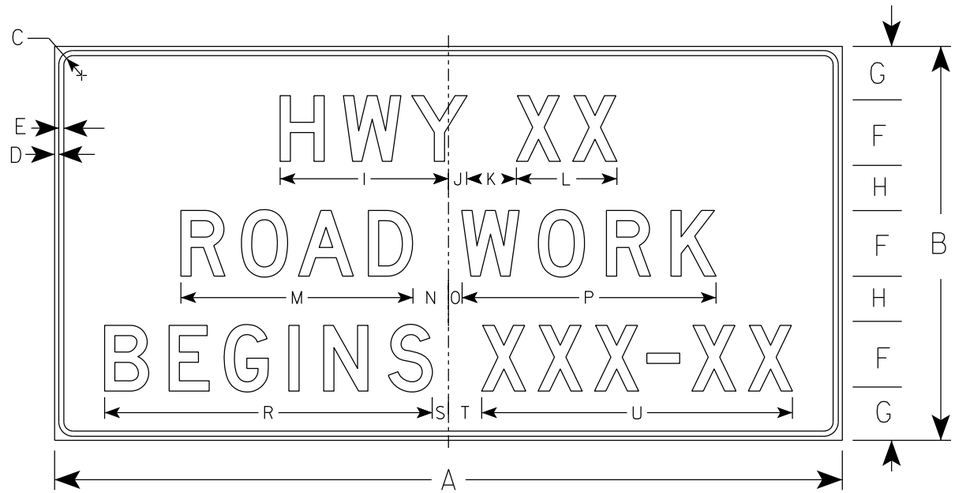
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 137	E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	23 1/4		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

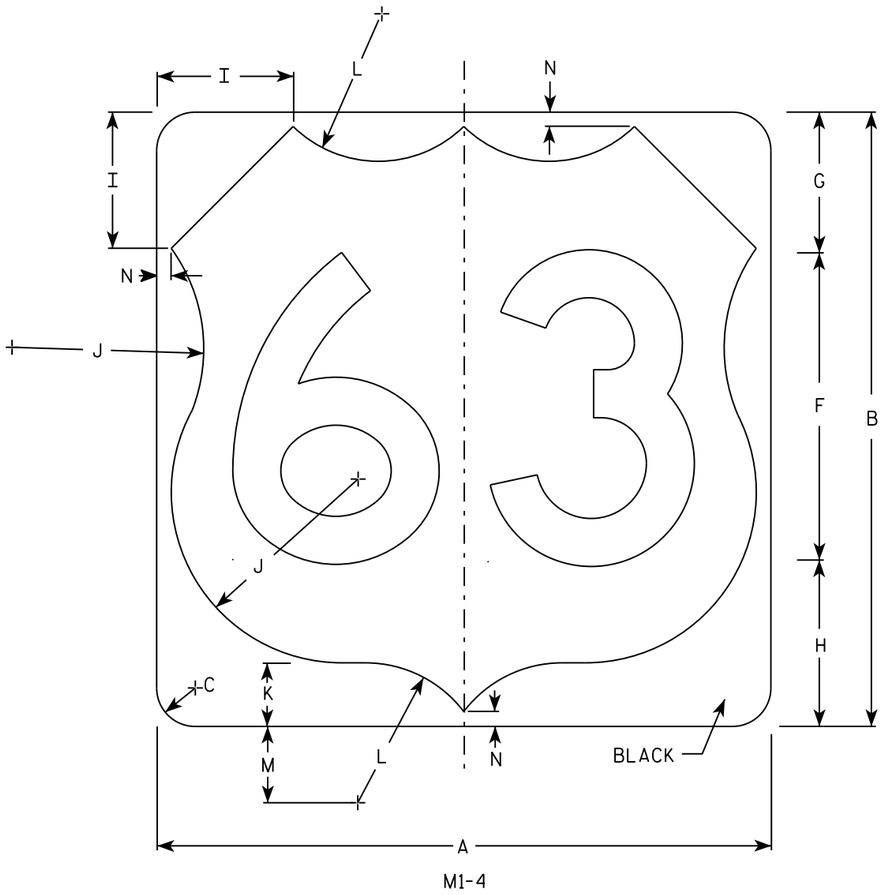
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/22/19 PLATE NO. G20-57.3

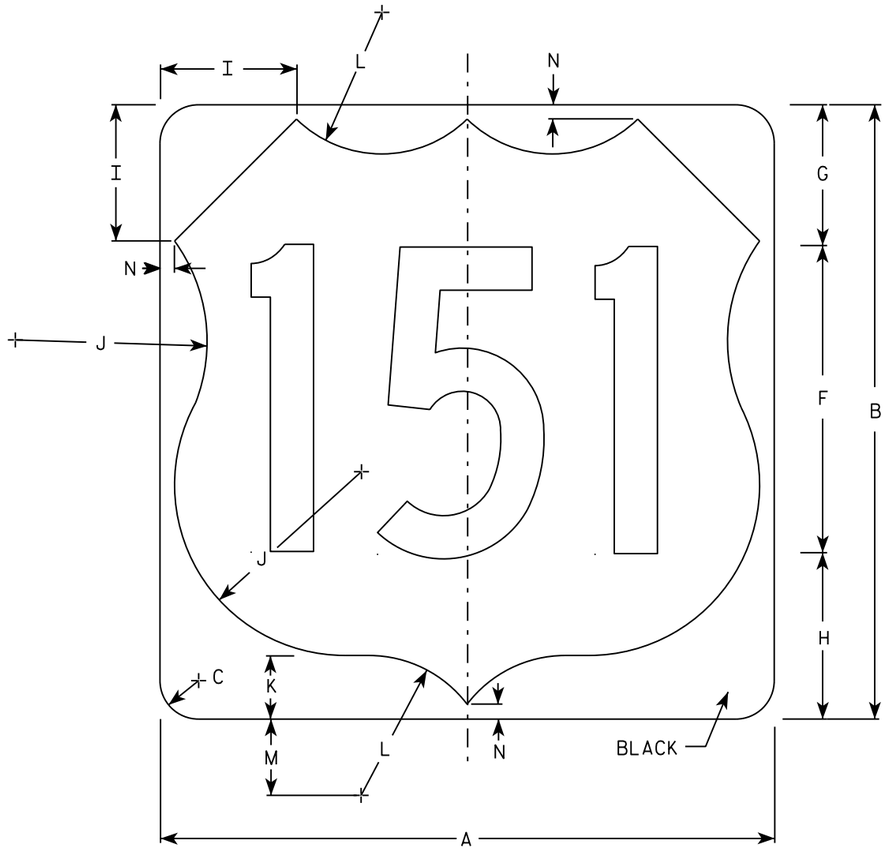
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 138	E

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
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.



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
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

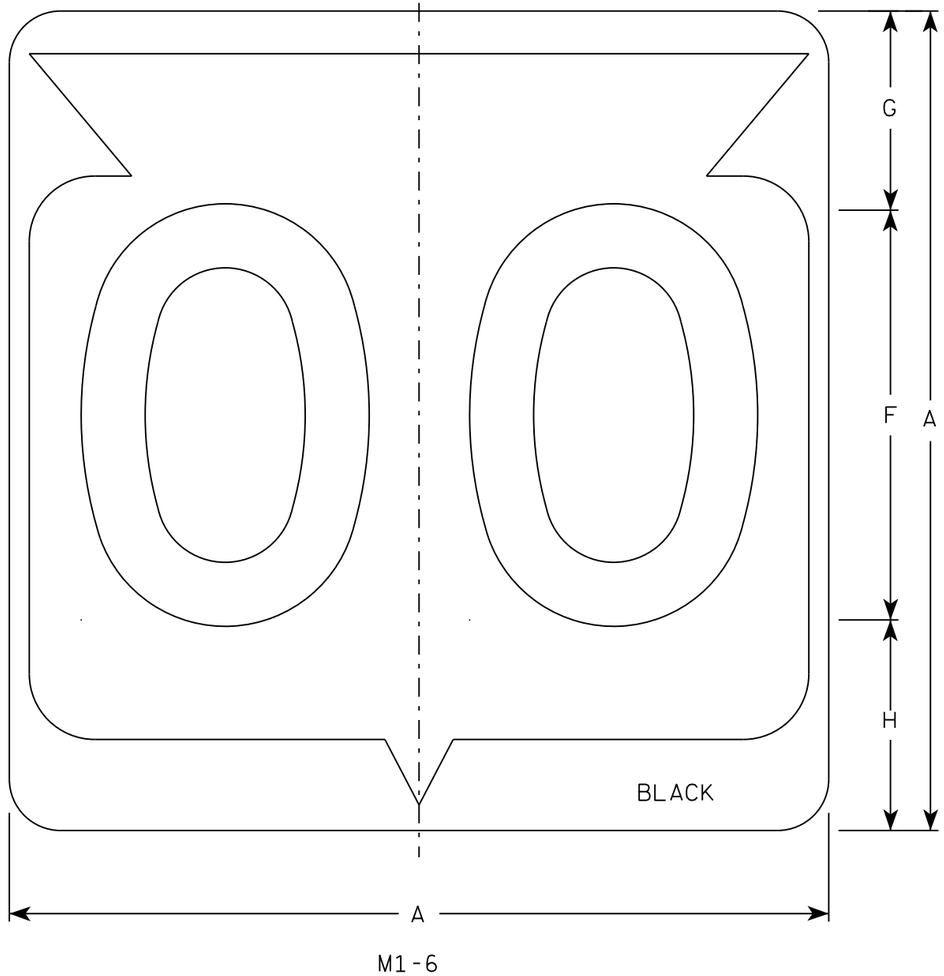
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

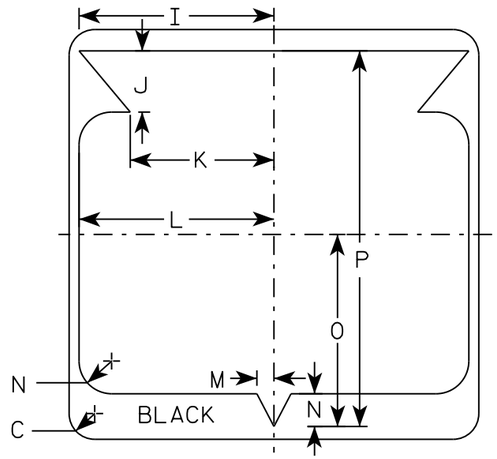
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 139	E



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
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		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

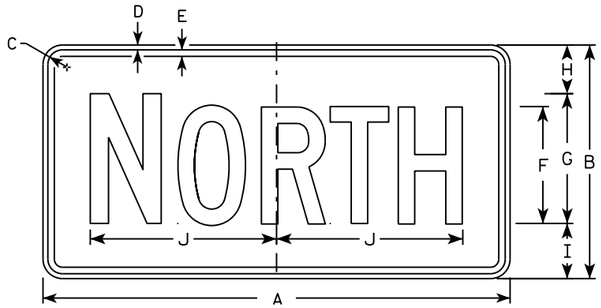
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

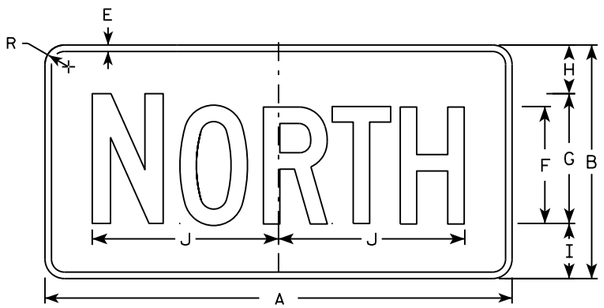
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 140	E



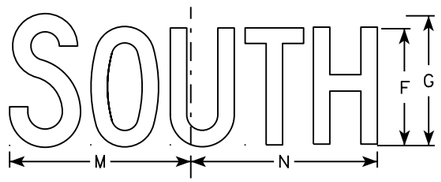
M3-1
MM3-1
MP3-1



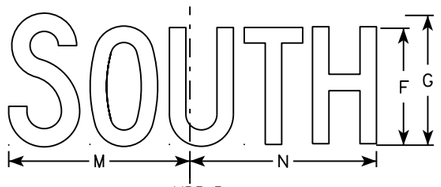
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

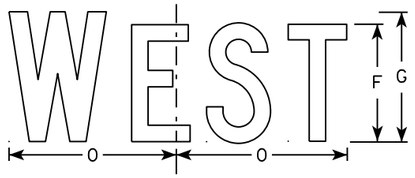
MB3-2
MK3-2
MN3-2



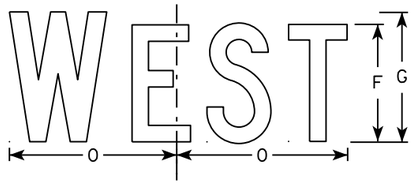
M3-3
MM3-3
MP3-3



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
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																											
2	24	12	1 1/8	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			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

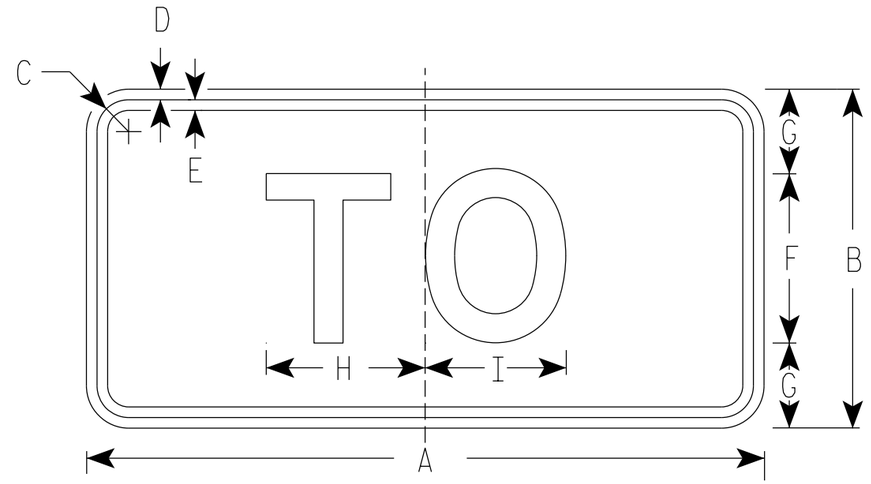
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

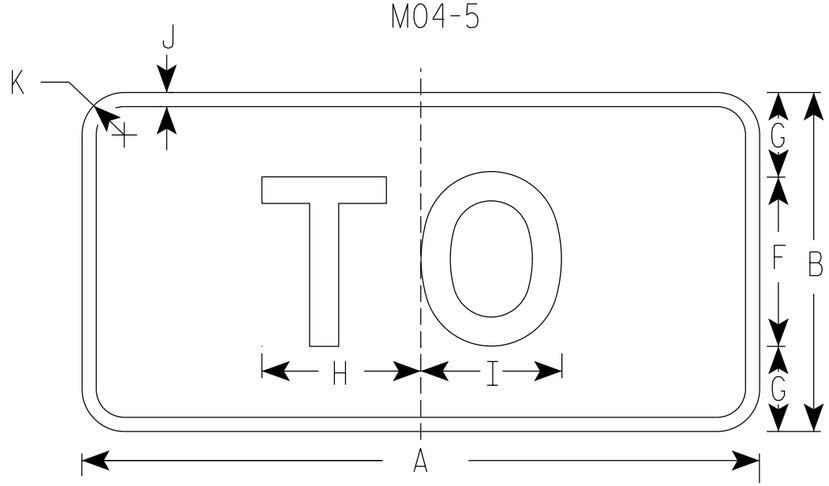
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

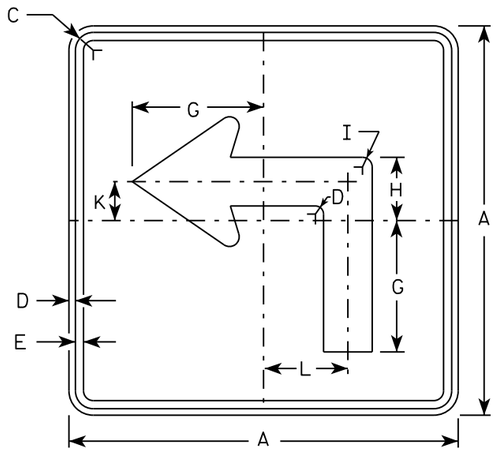
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

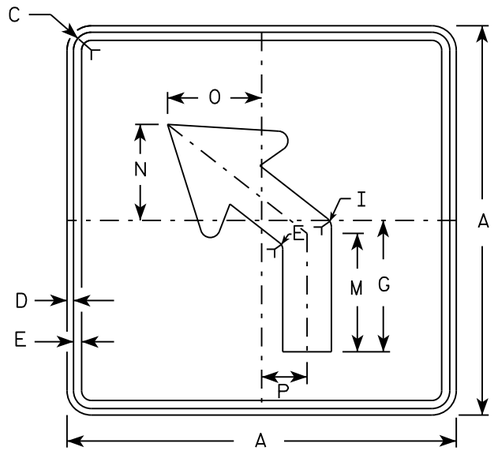
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

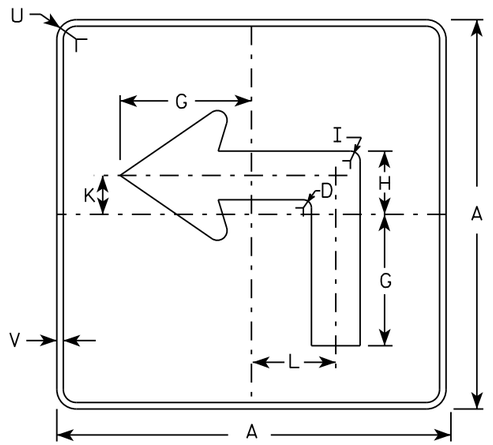
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 142 | E



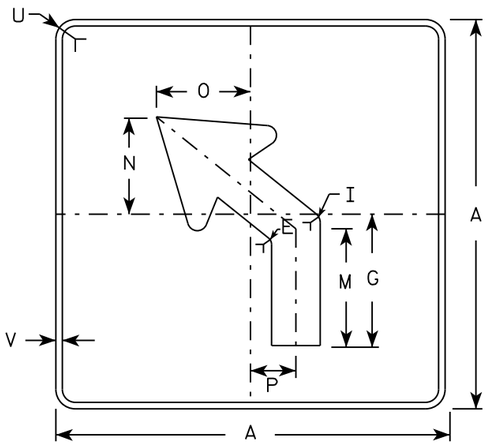
M5-1L
MM5-1L
MO5-1L
MP5-1L



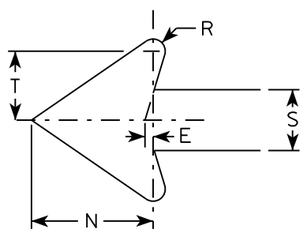
M5-2L
MM5-2L
MO5-2L
MP5-2L



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 - Type H Reflective
   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.

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	21		1 1/8	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 1/2	1/2					3.06
3	30		1 3/8	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 7/8	1/2					6.25
4	30		1 3/8	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 7/8	1/2					6.25
5	30		1 3/8	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 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

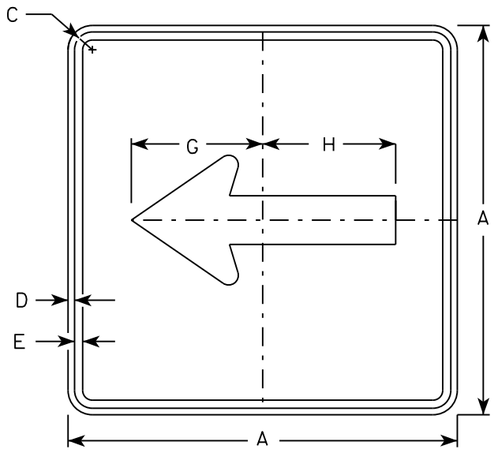
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

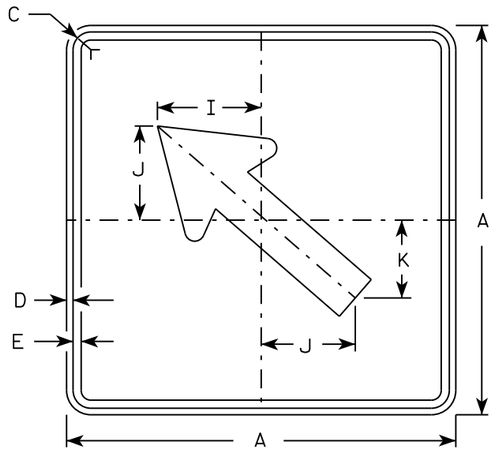
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



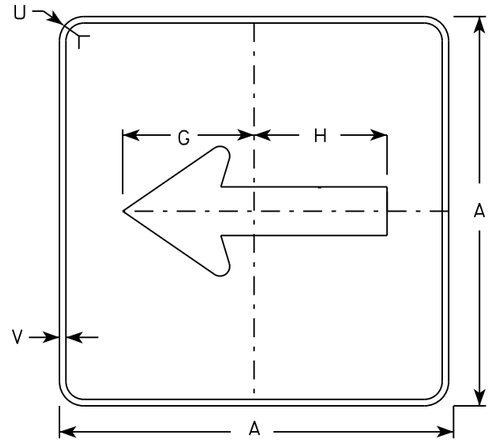
M6-1
MM6-1
MO6-1
MP6-1



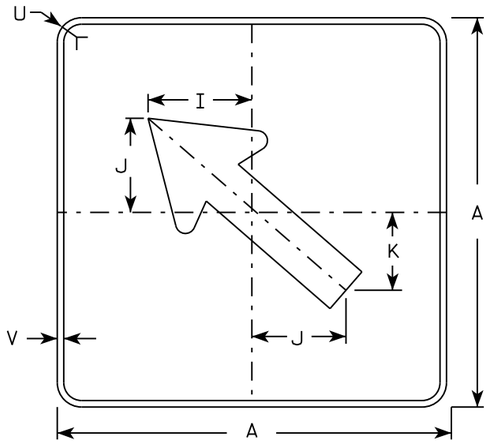
M6-2
MM6-2
MO6-2
MP6-2

NOTES

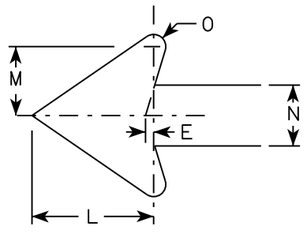
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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	21		1 1/8	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 1/2	1/2						3.06
3	30		1 3/8	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 7/8	1/2						6.25
4	30		1 3/8	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 7/8	1/2						6.25
5	30		1 3/8	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 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

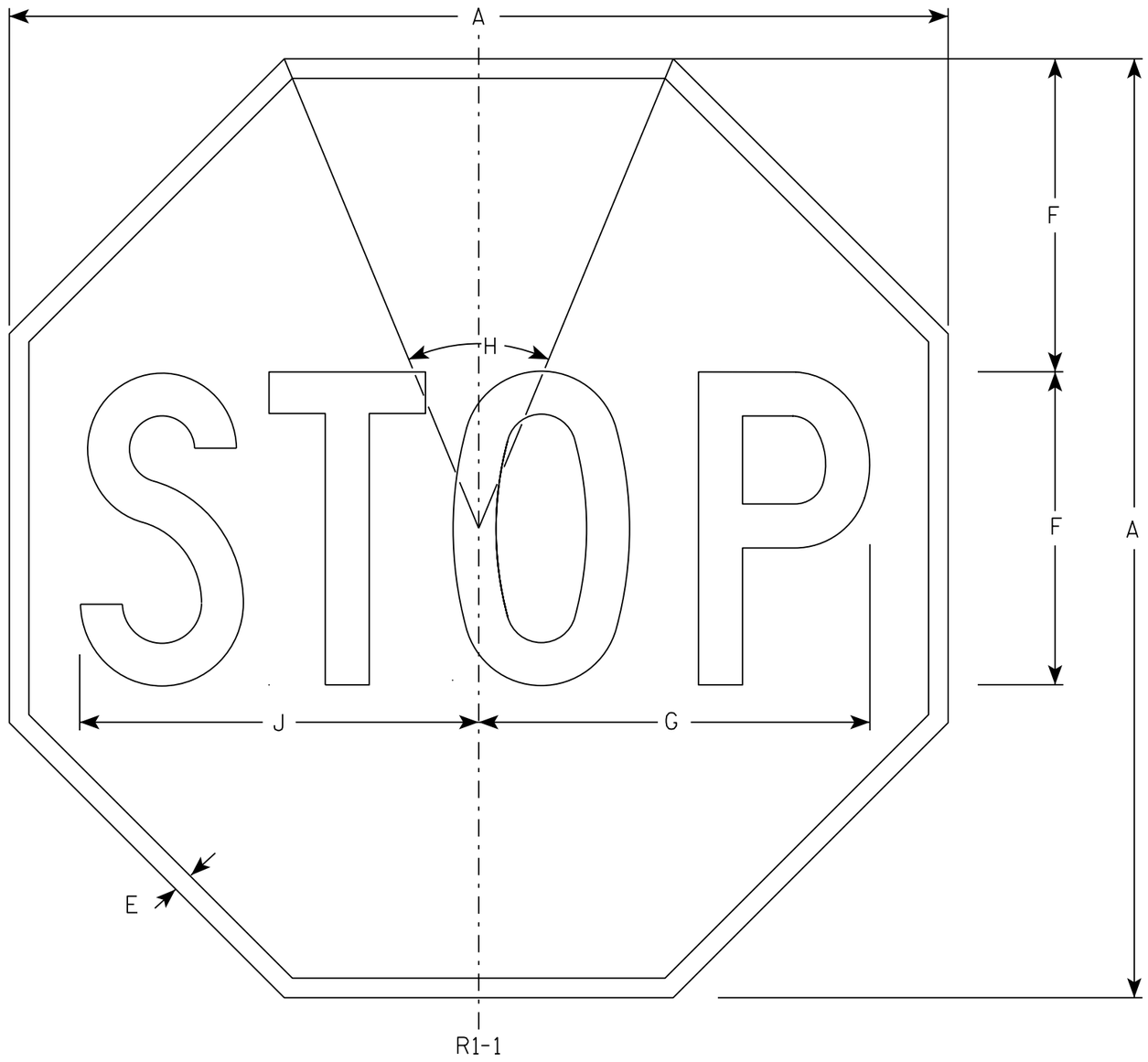
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 144 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message 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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

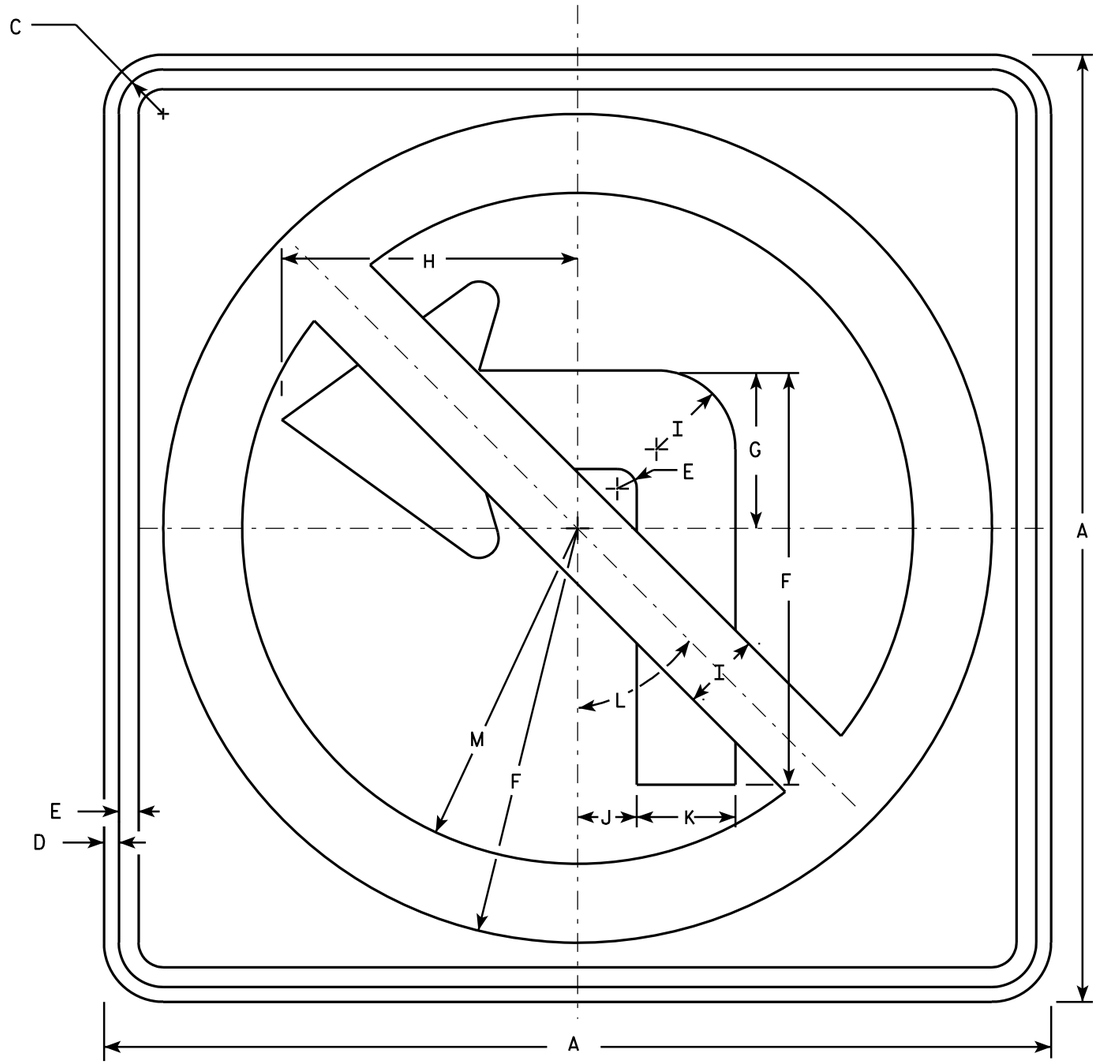
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

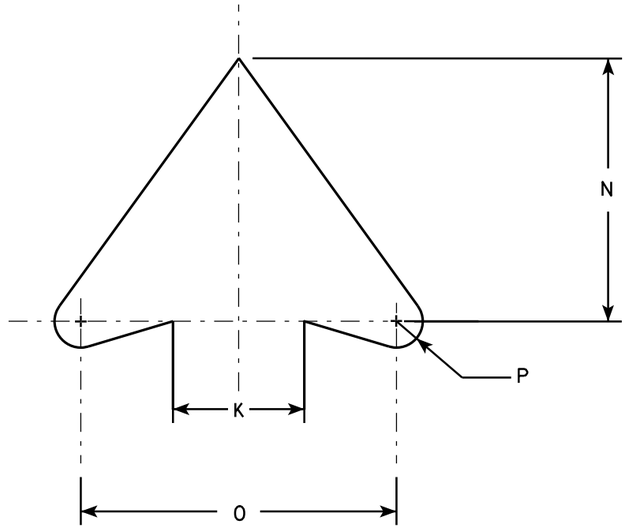
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 145	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

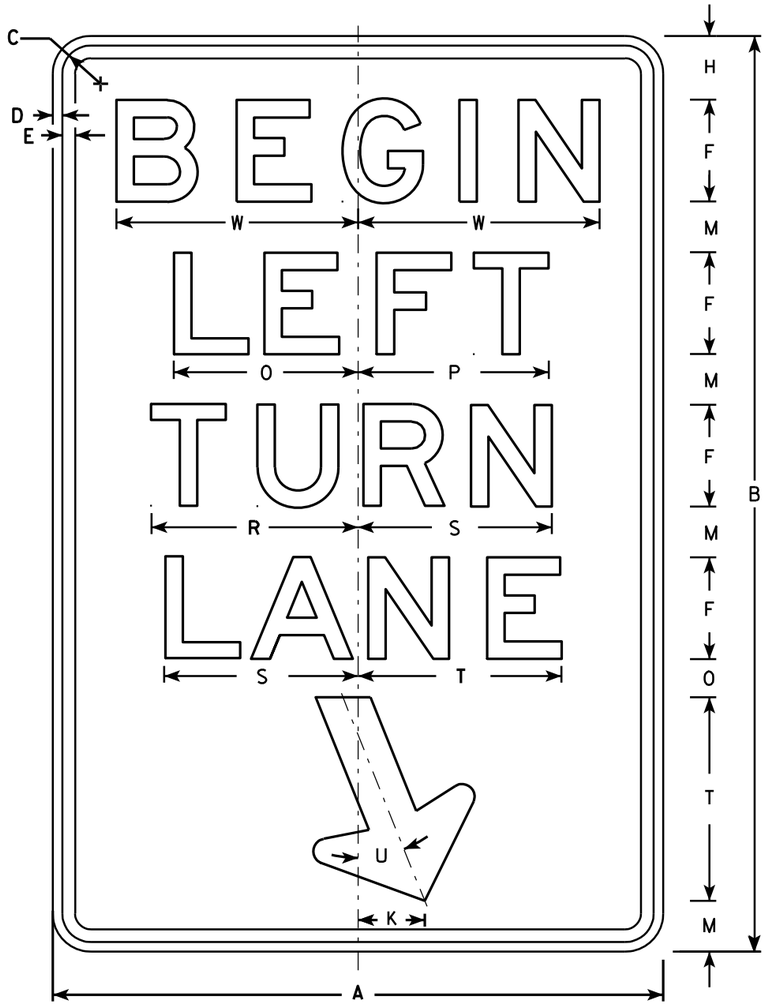
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

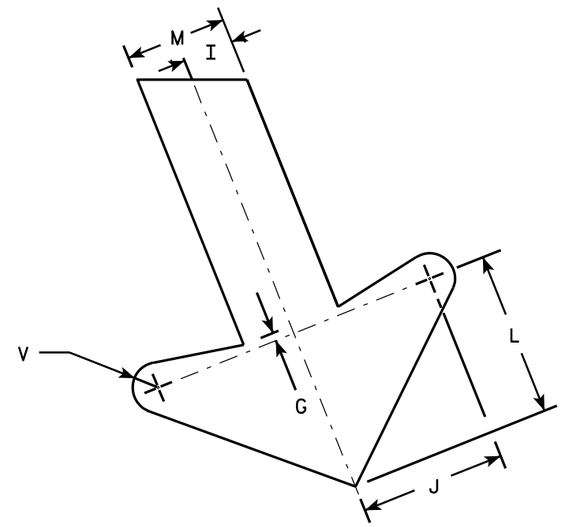
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 146	E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
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.



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	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

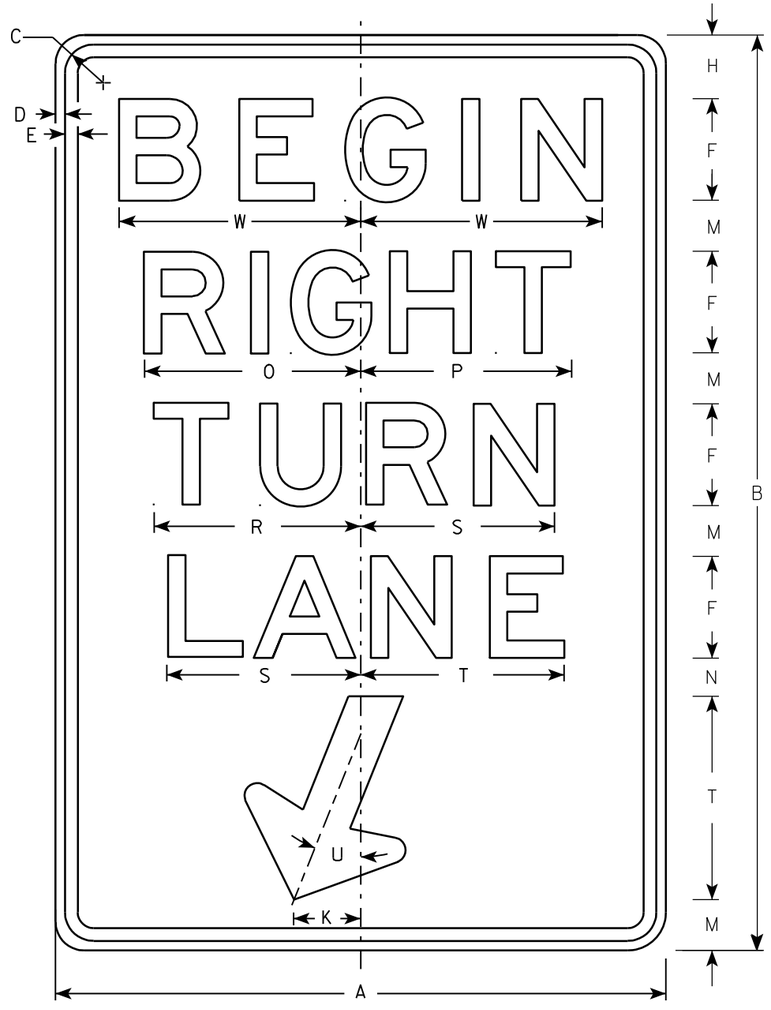
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

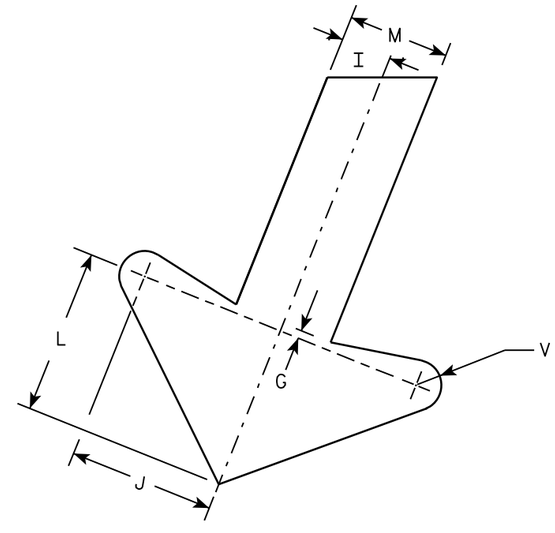
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 147 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
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.



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	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

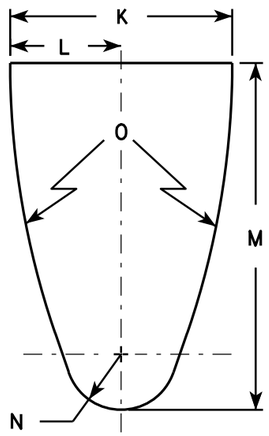
STANDARD SIGN
R3-20R

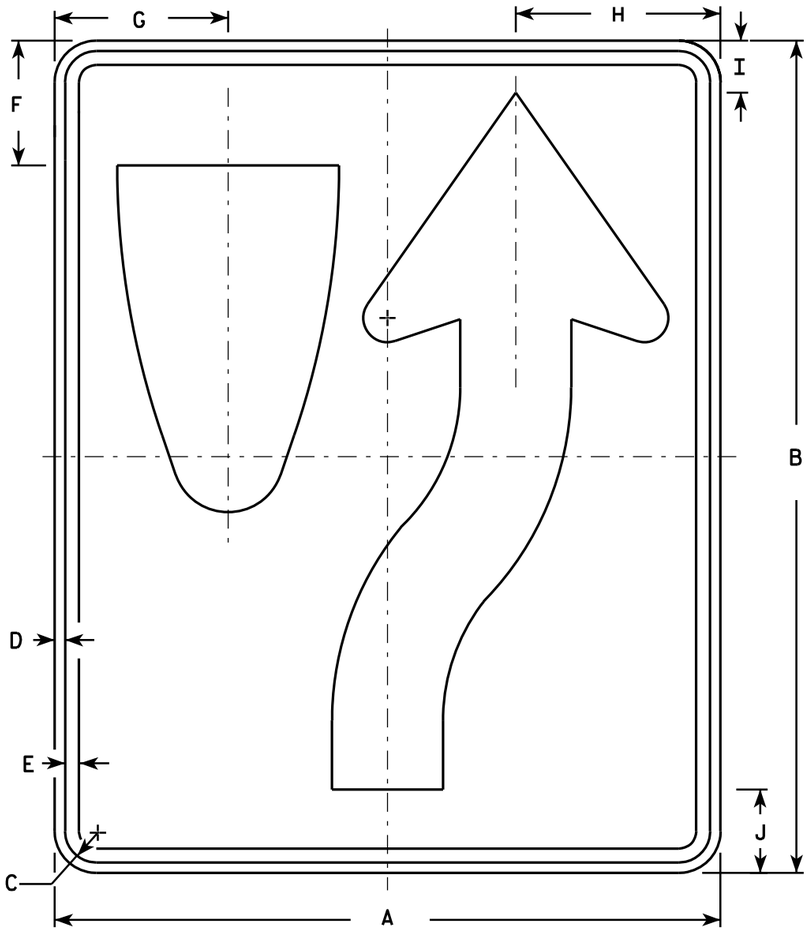
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 148 | E

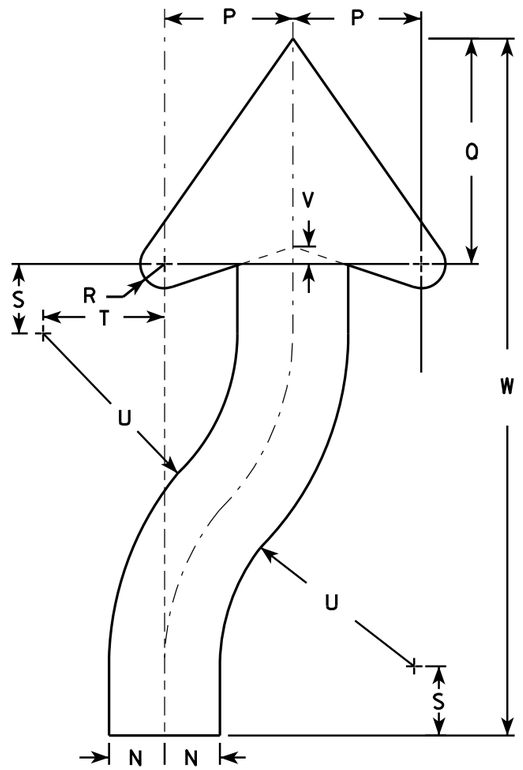




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

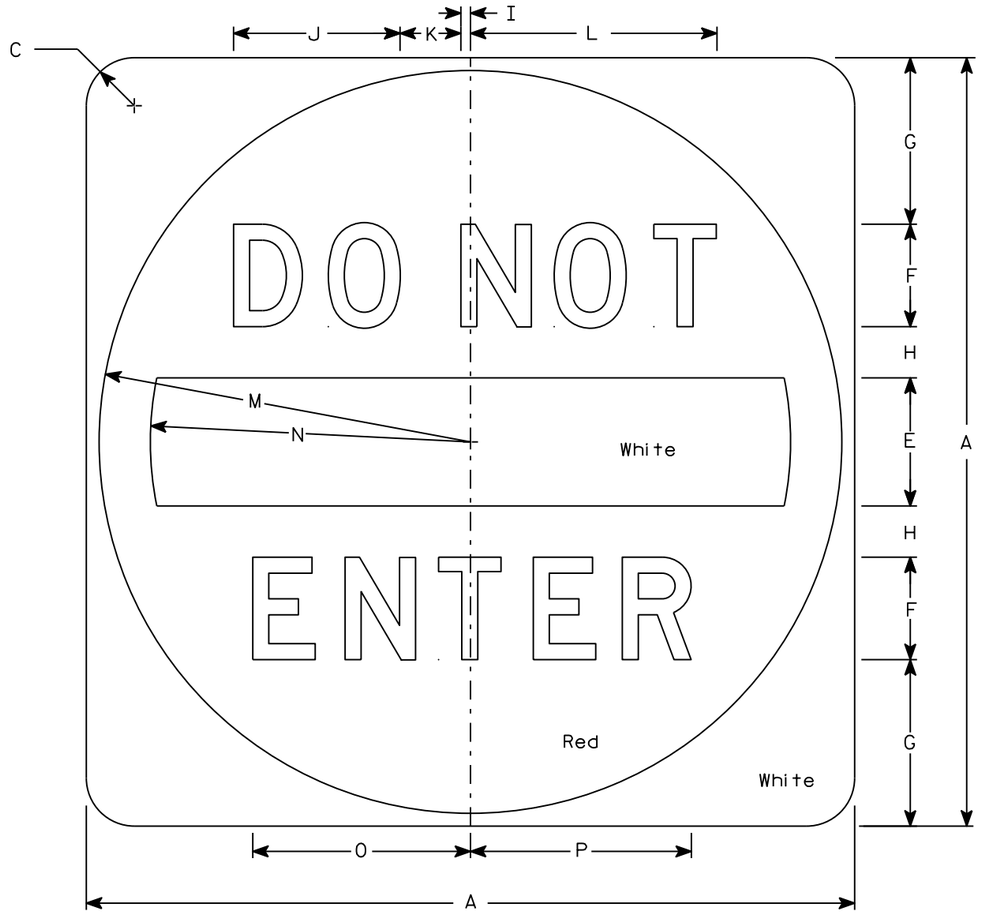
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 149	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

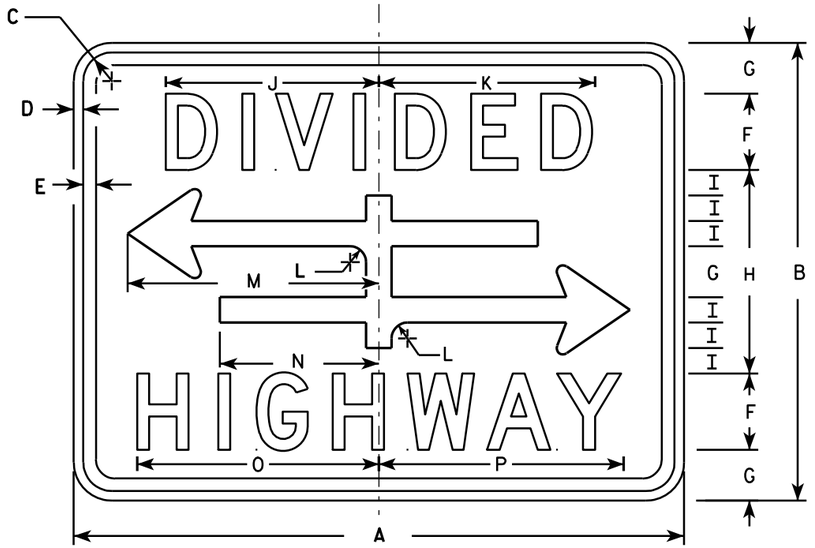
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

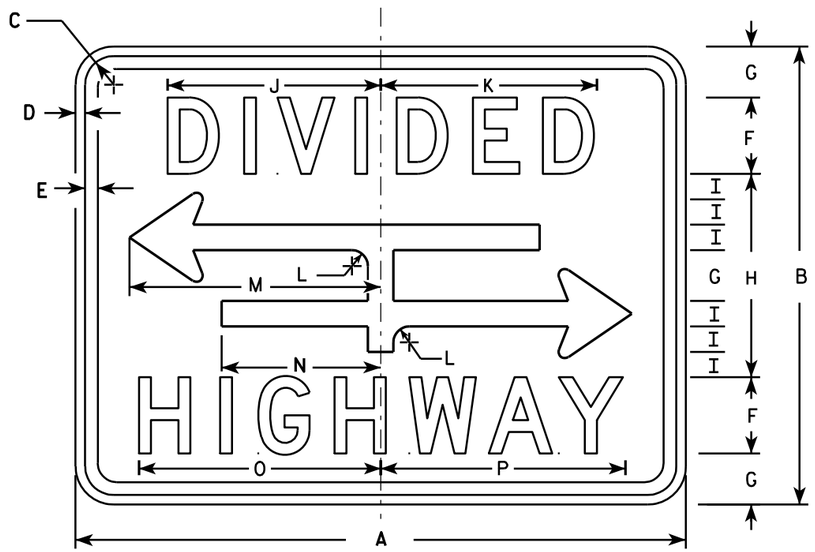
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 150 | E



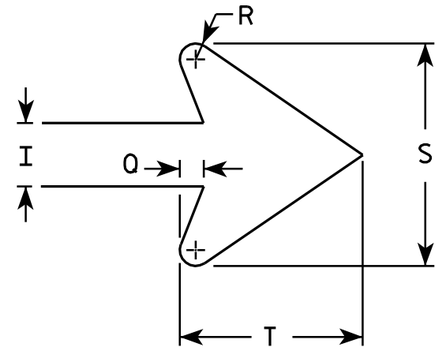
R6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.



R6-3A



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	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

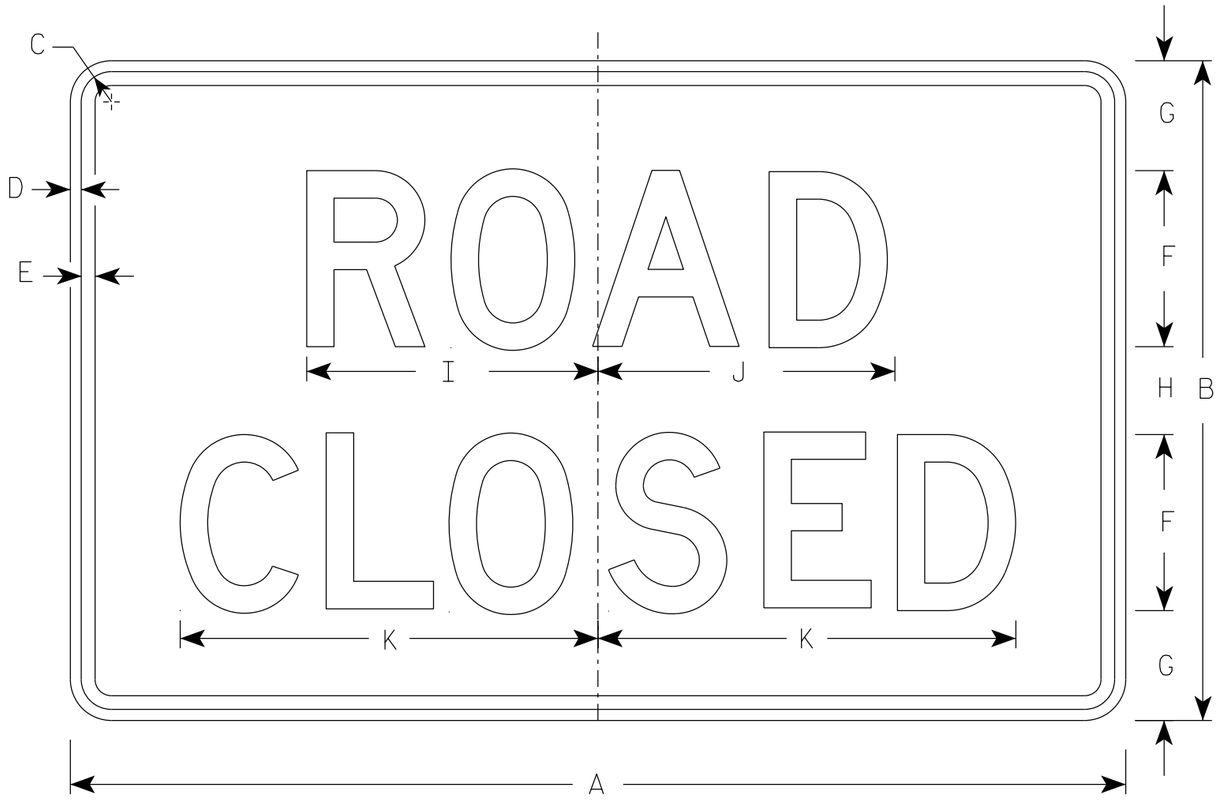
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

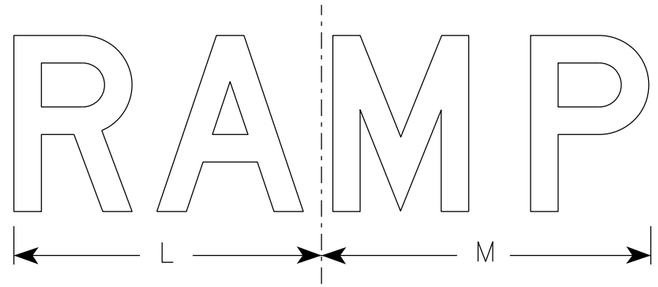
SHEET NO: 151 E



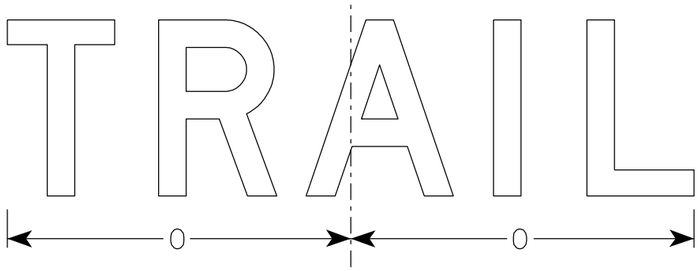
R11-2

NOTES

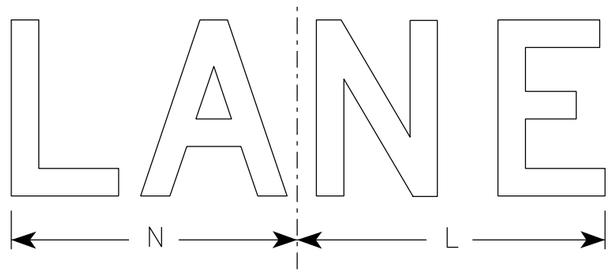
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 3/8	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 3/8	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 3/8	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 3/8	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 3/8	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

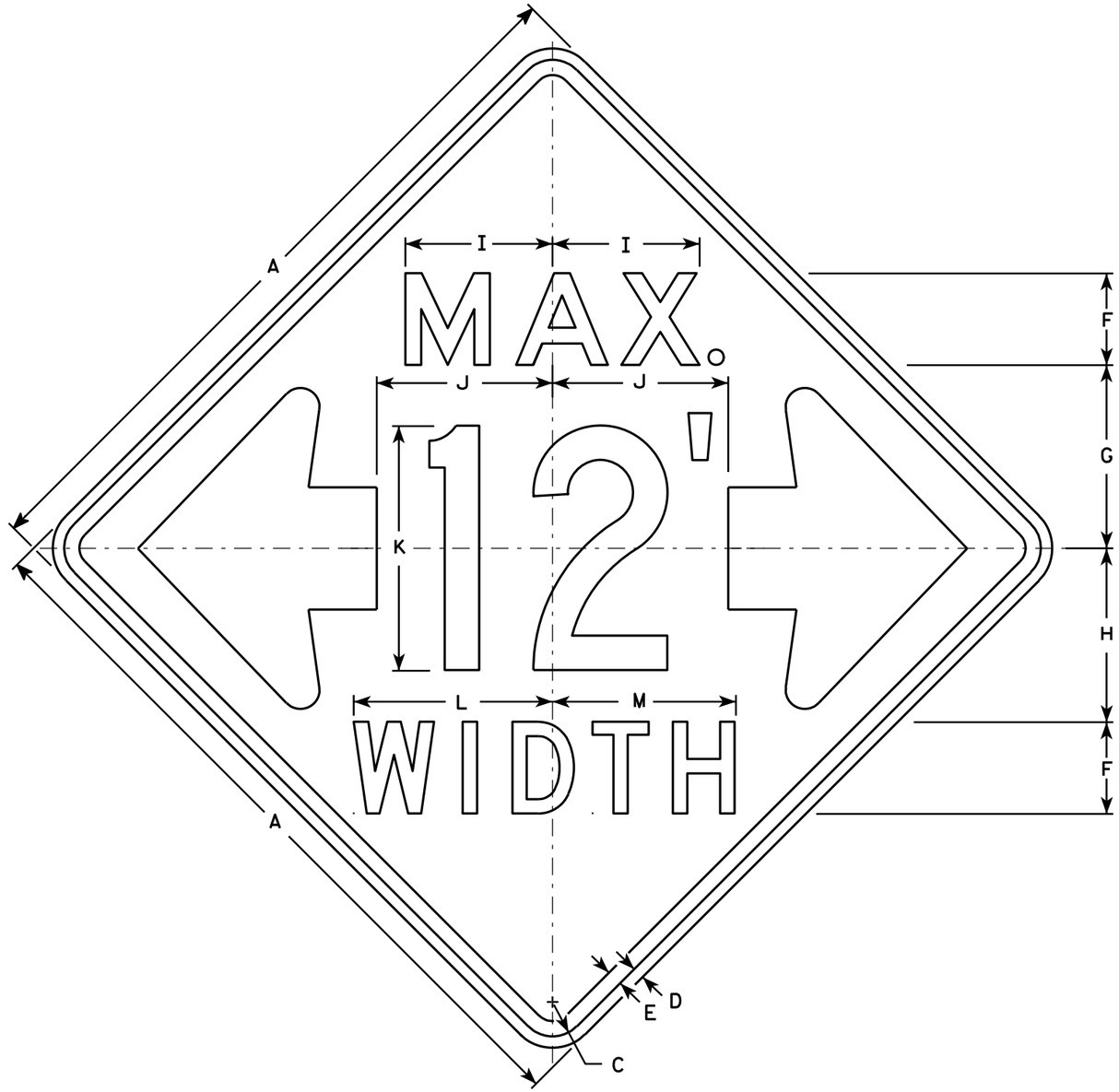
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

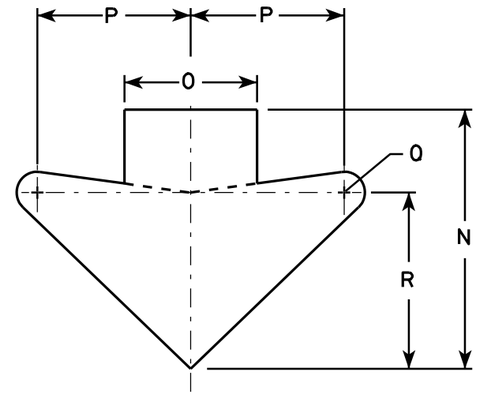
7



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. 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		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

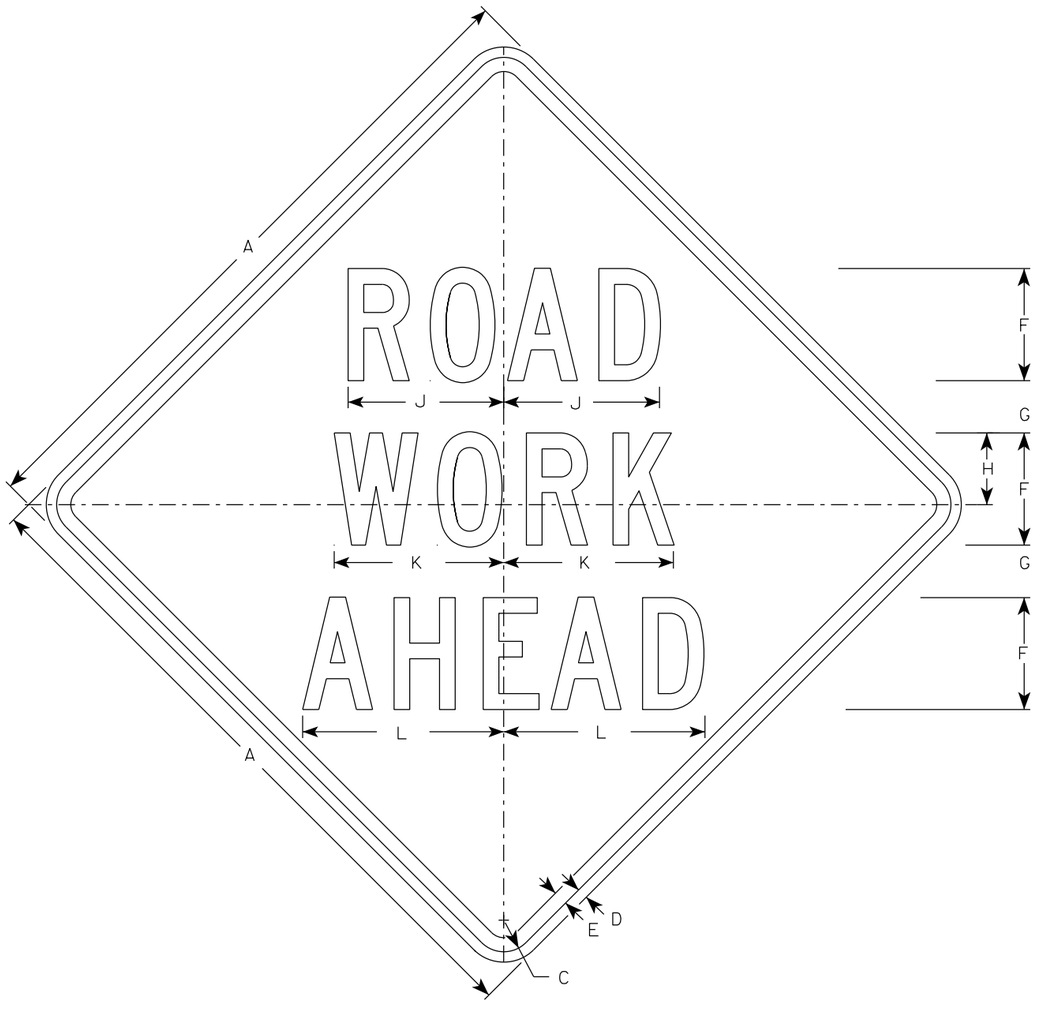
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 153 | E

7

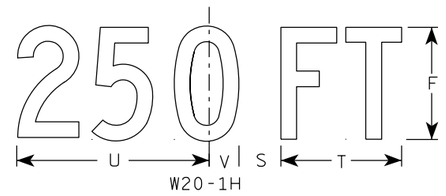
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42

NOTES

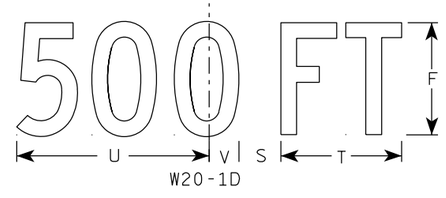
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

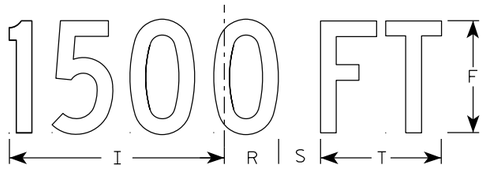


W20-1H

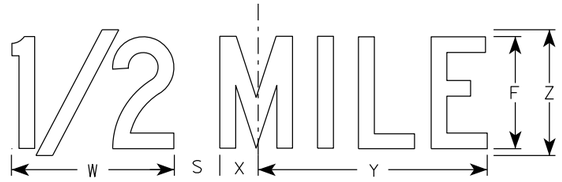


W20-1D

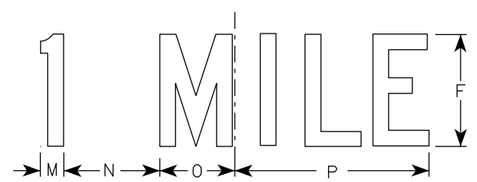
W20-1C



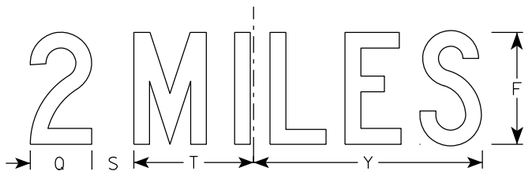
W20-1B



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		1 5/8	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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

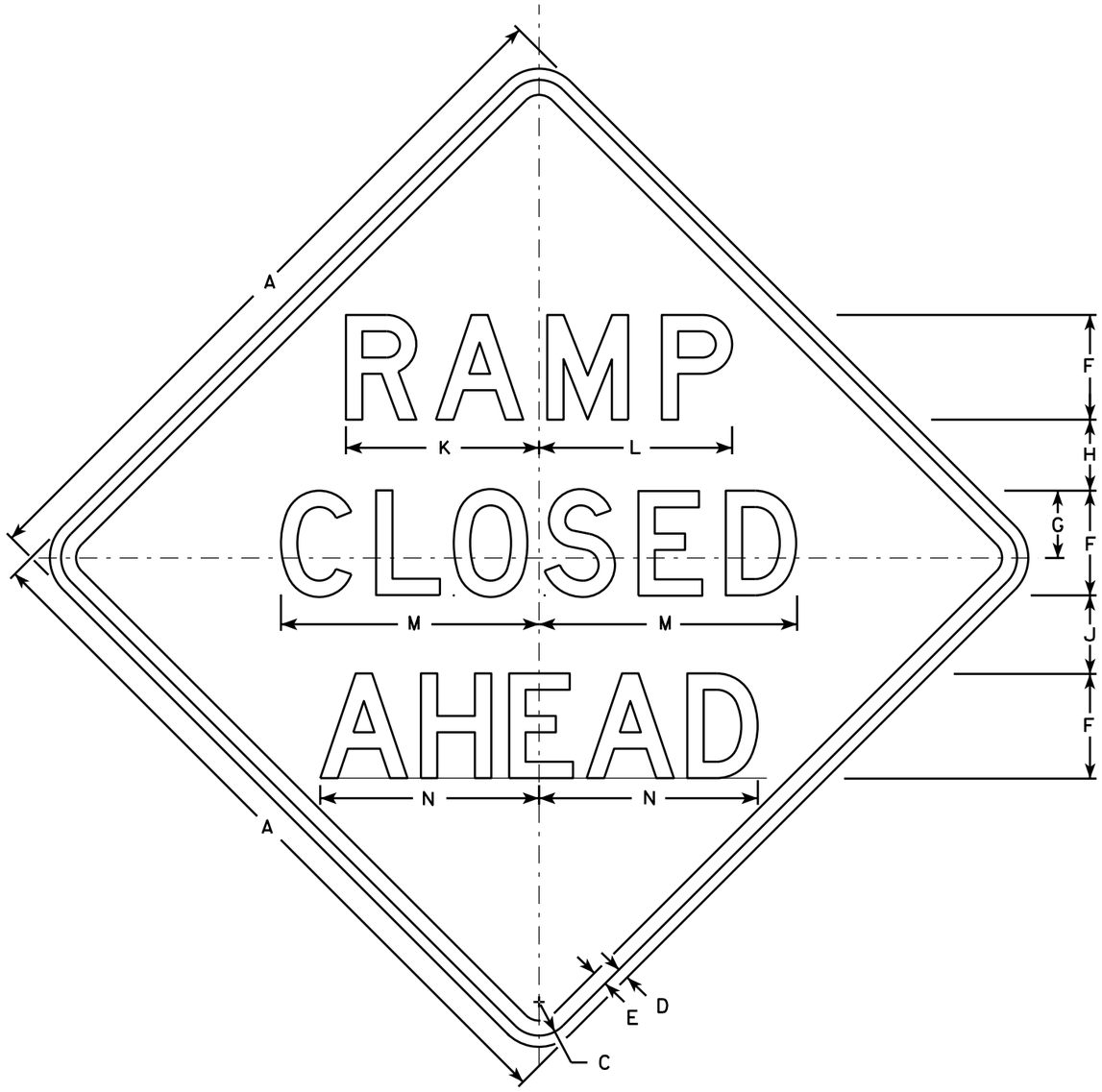
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

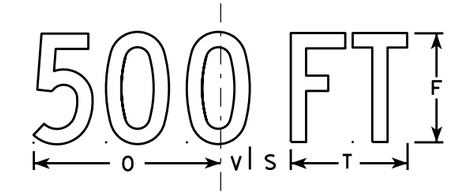
DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

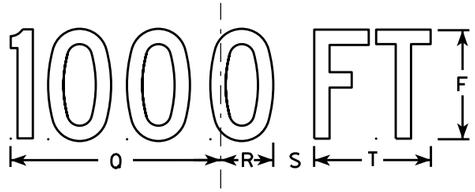
SHEET NO: E



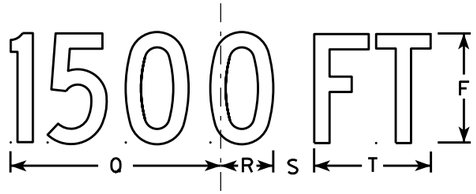
W20-53A



W20-53D



W20-53C



W20-53B

W20-53G

W20-53F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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		1 5/8	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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

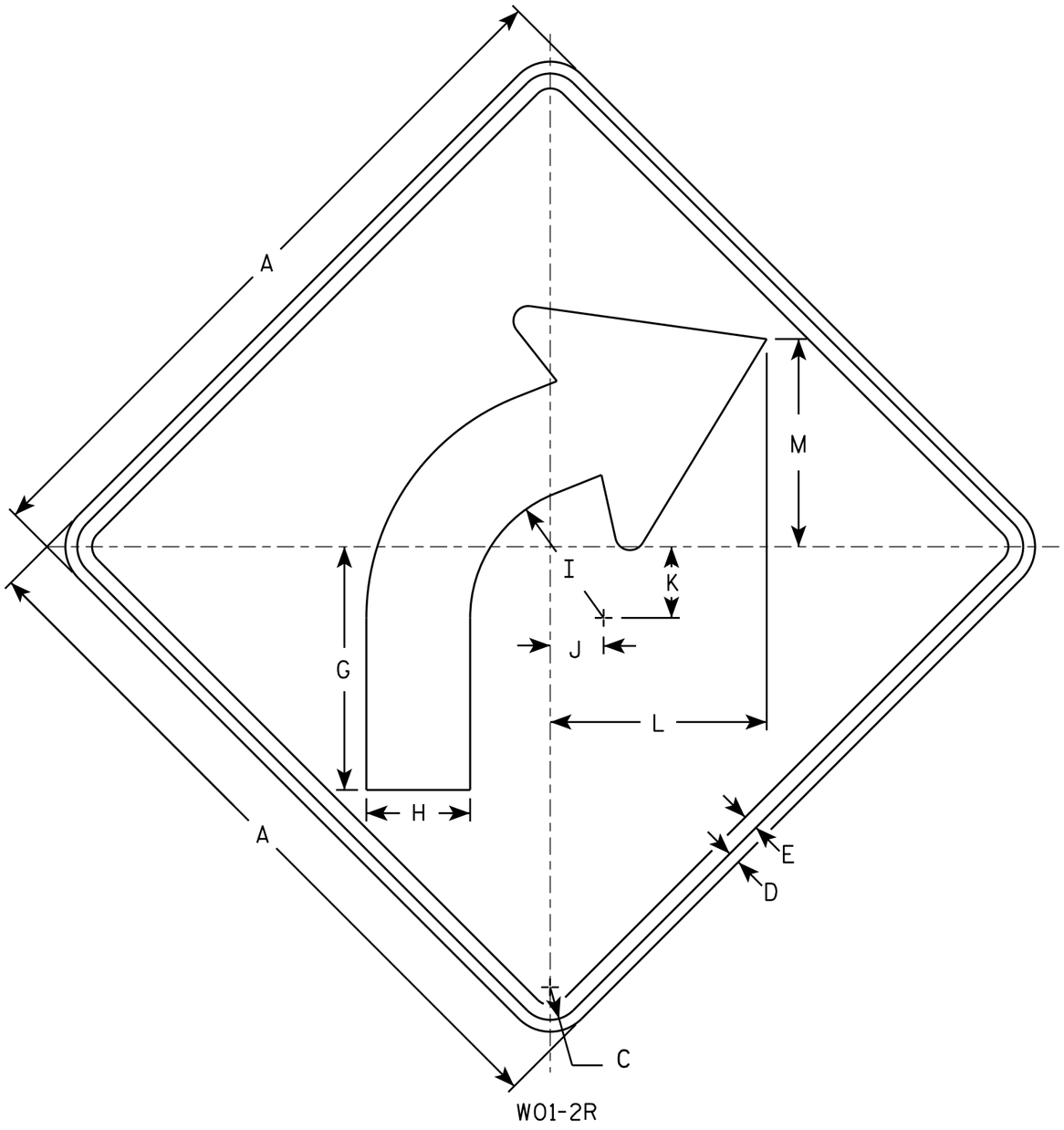
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

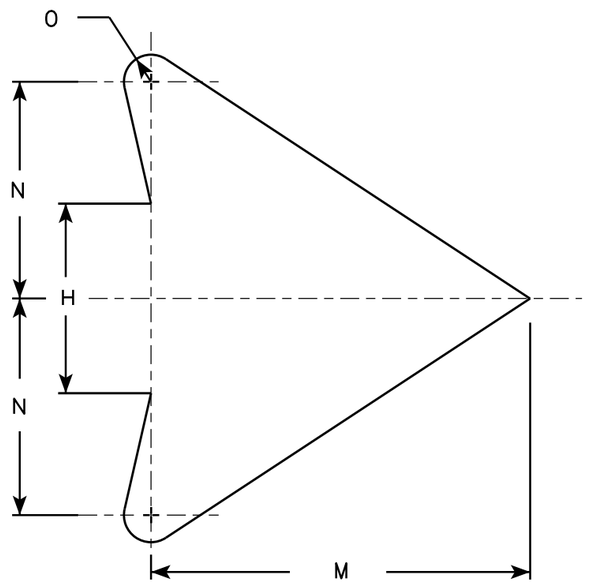
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42



W01-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-2L is the same as W01-2R except the arrow is reversed along the vertical centerline.



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	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												4.0
2S	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
2M	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
3	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
4	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W01-2

WISCONSIN DEPT OF TRANSPORTATION

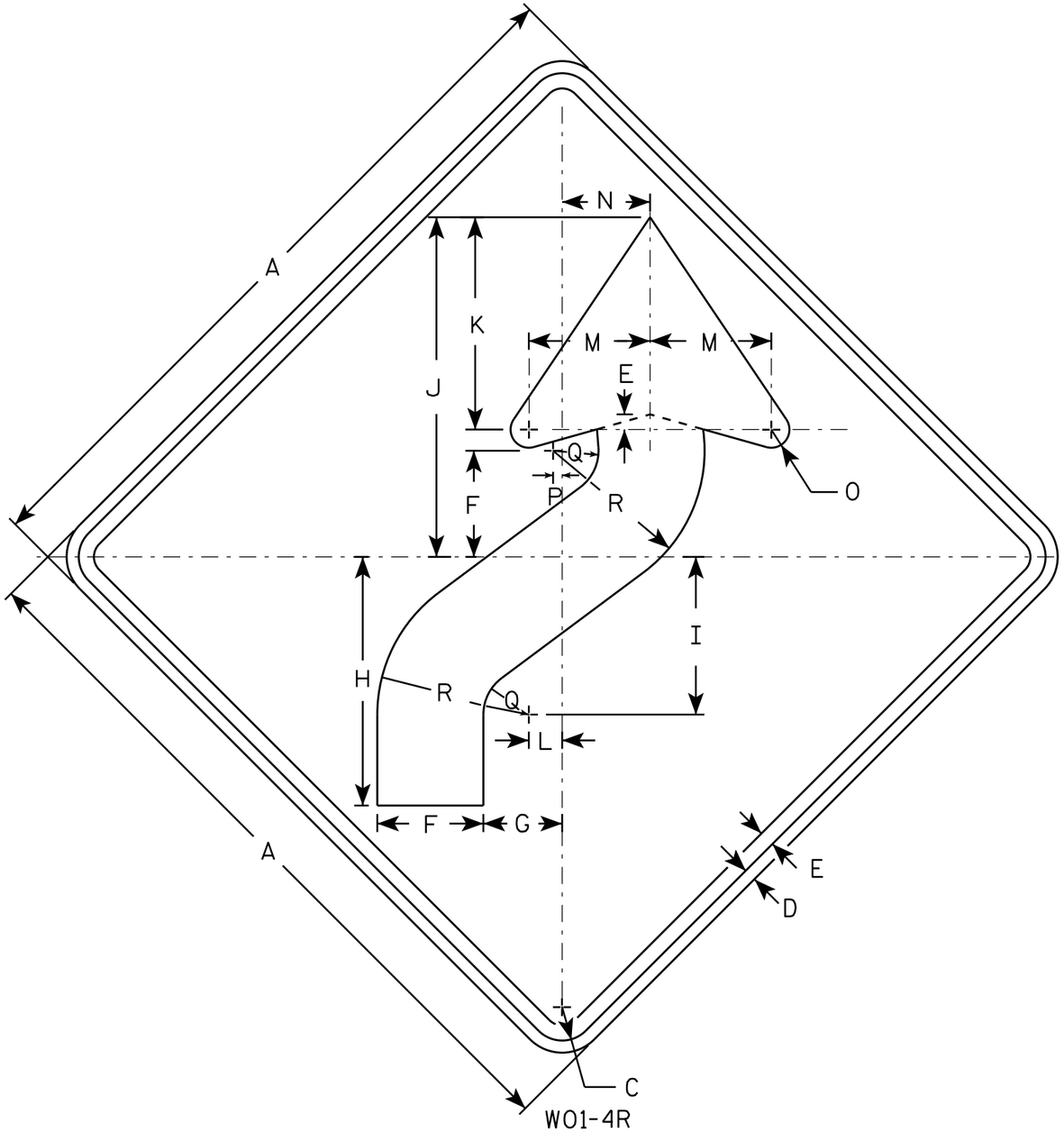
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W012.DGN PLOT DATE : 28-FEB-2014 11:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.992871:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

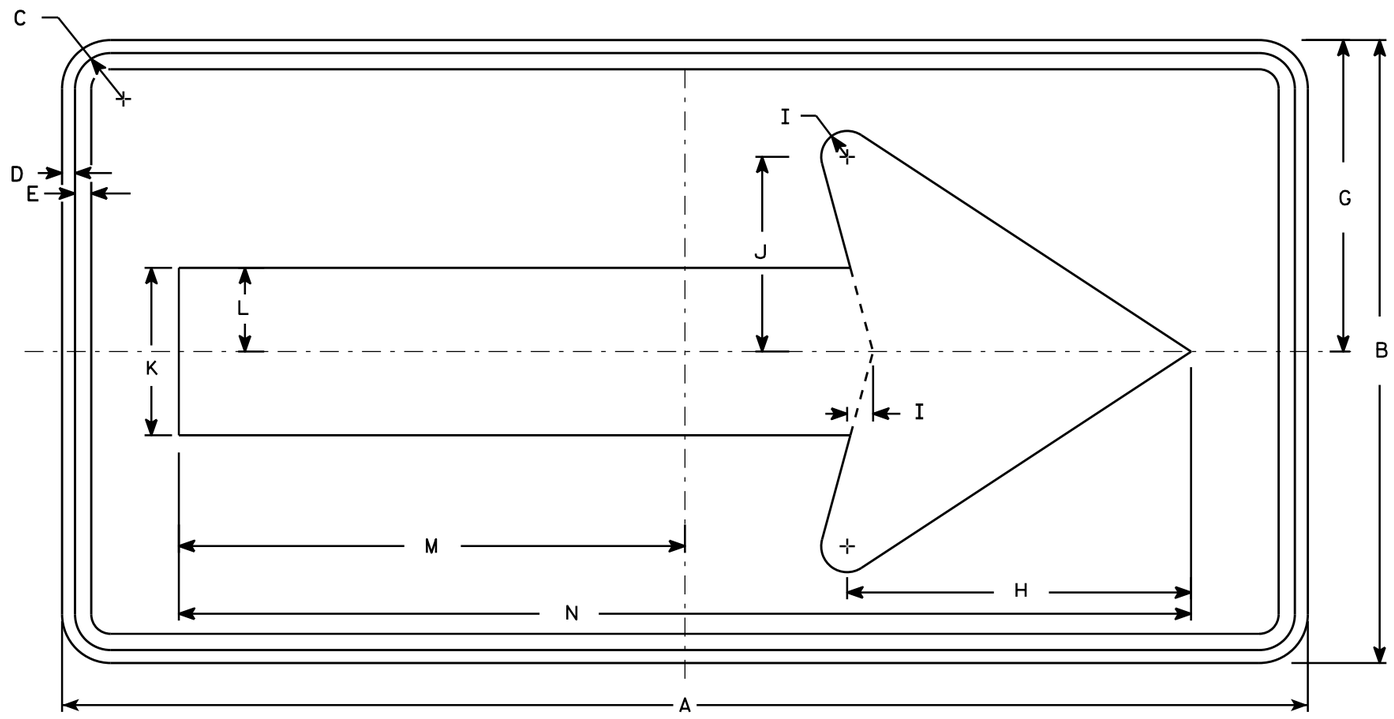
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 3/8	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 3/8	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 3/8	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 3/8	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 3/8	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
W01-6

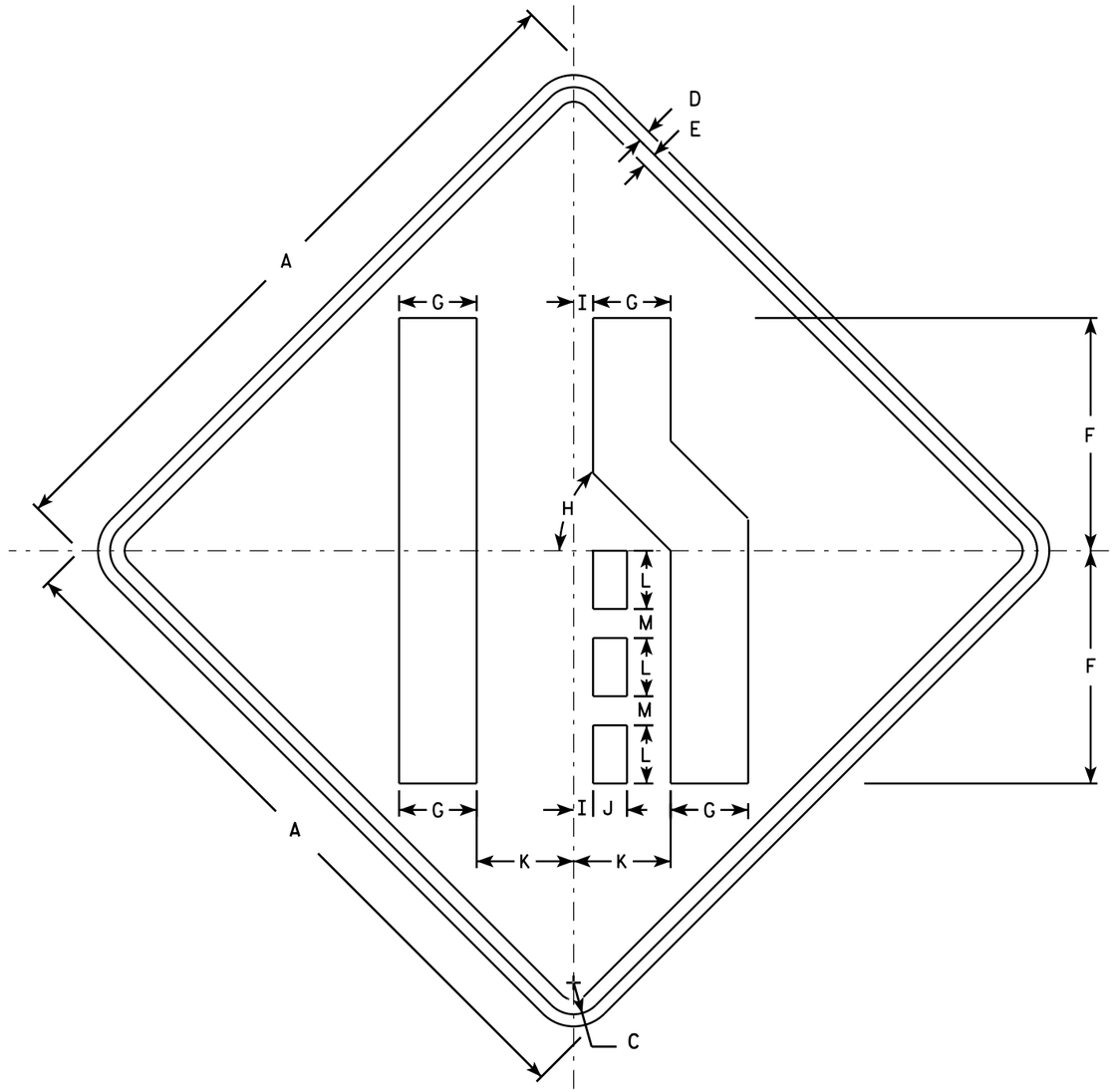
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	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

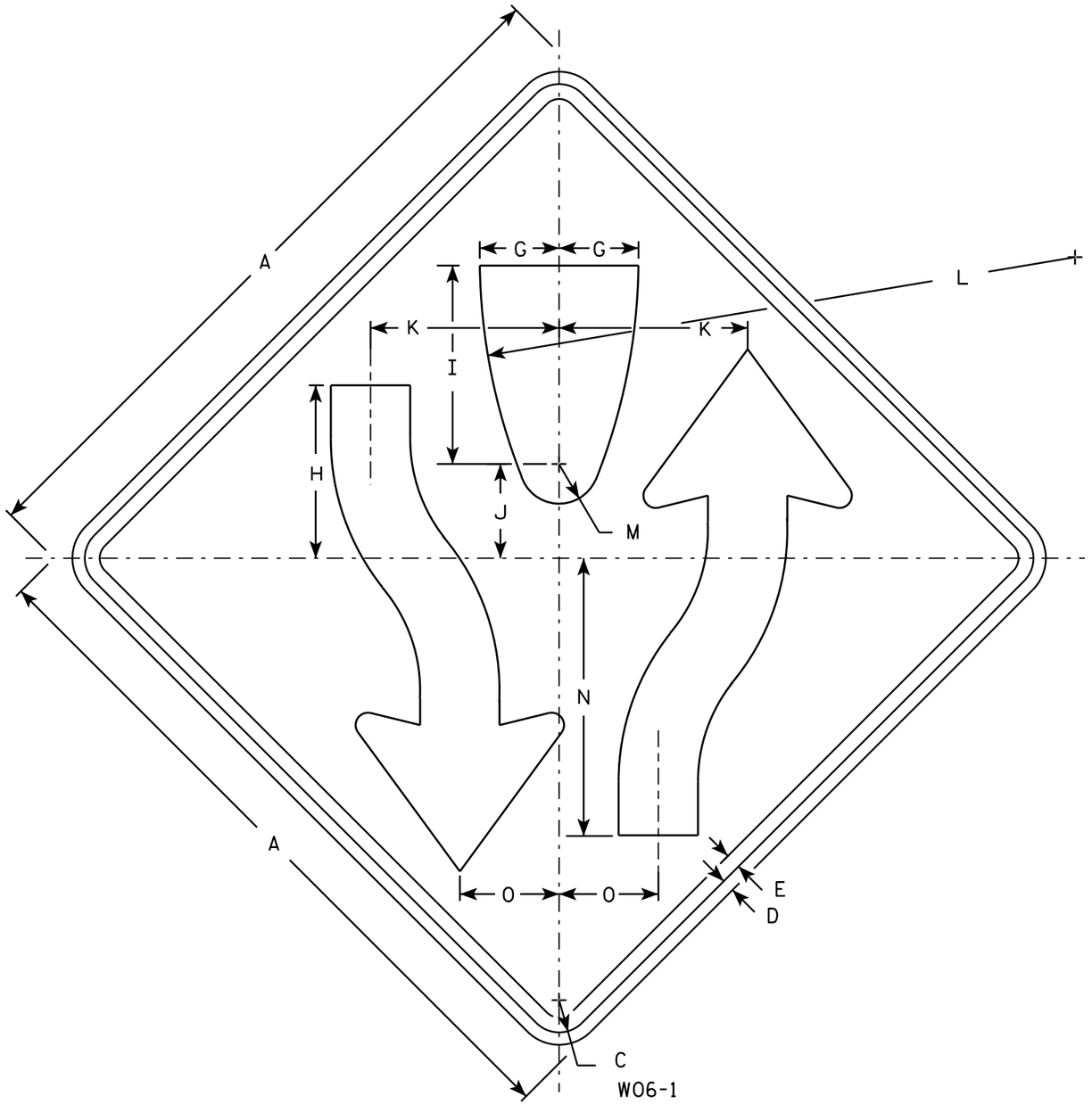
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 159 W04-2.1

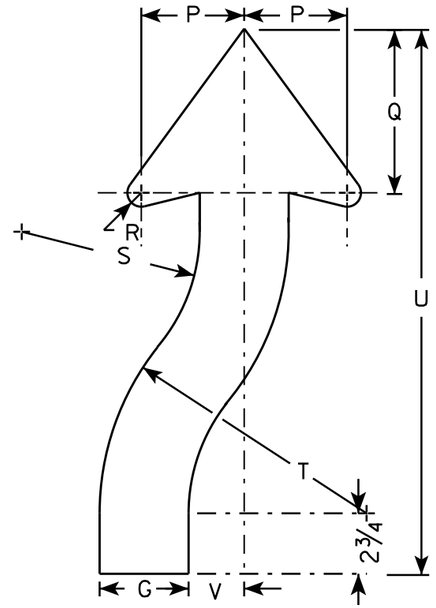
PROJECT NO:

SHEET NO: E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. W06-2 same as W06-1 but is rotated 180° when mounted.



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	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2S	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
2M	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
3	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

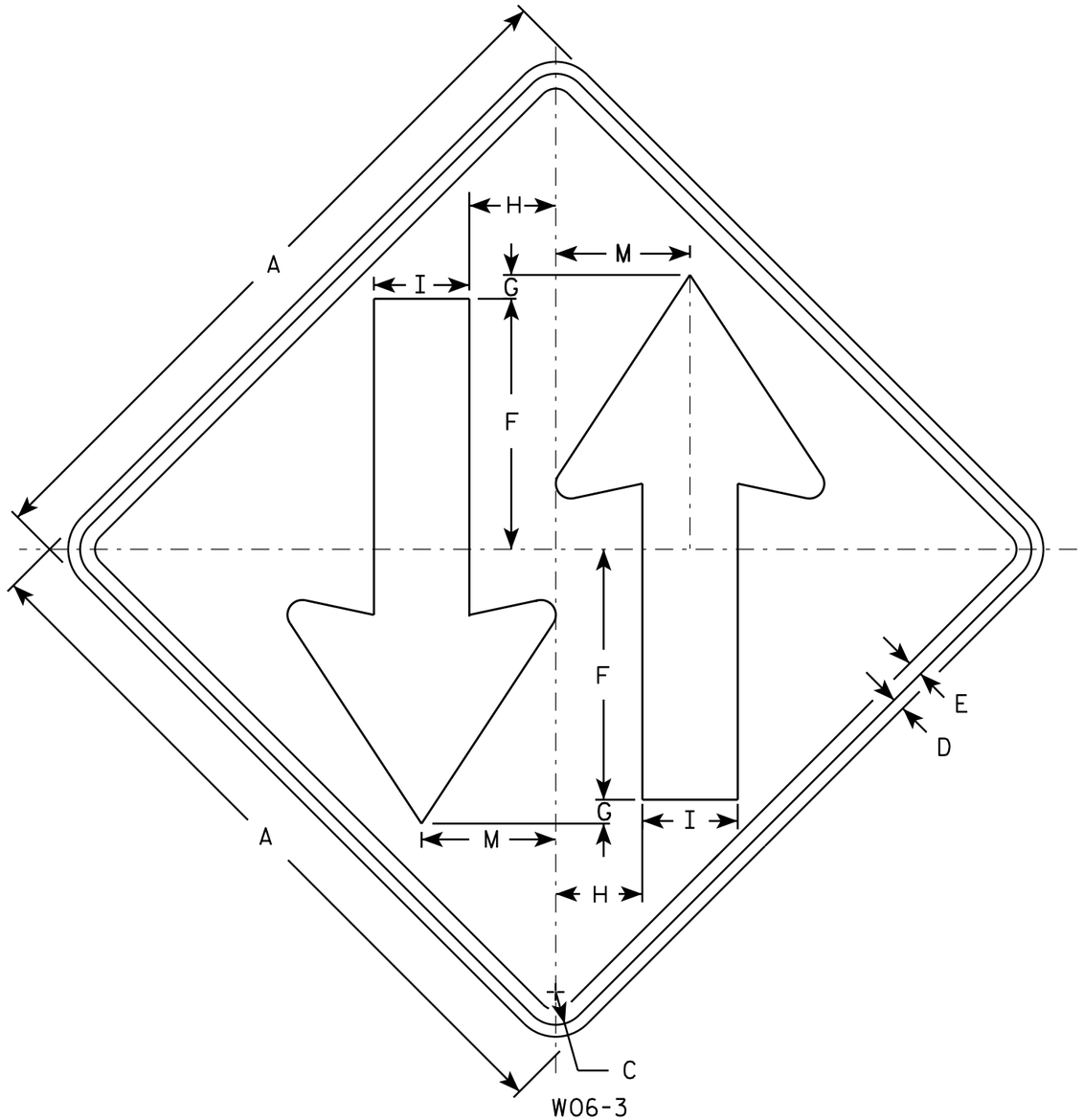
STANDARD SIGN
W06-1 & W06-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W06-1.1

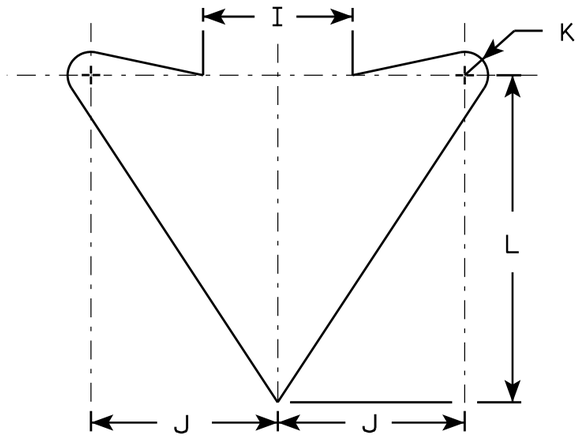
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W06-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.



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	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

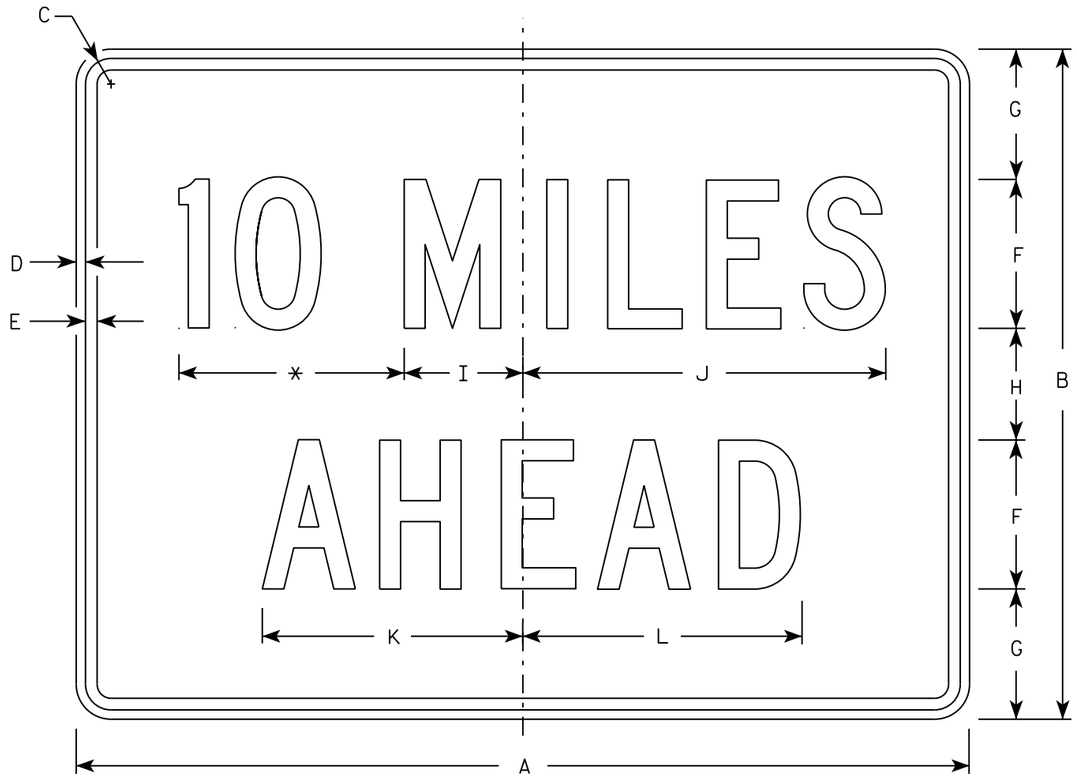
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

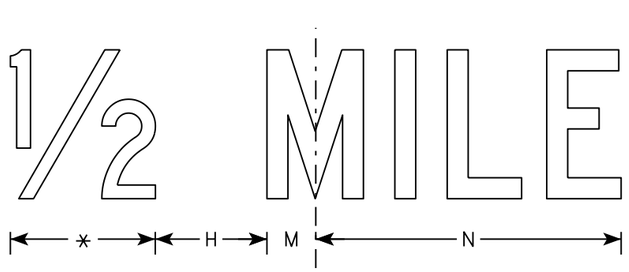
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 161 W06-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	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 1/8	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	1 3/8	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	1 3/8	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	1 3/8	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	1 3/8	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	1 3/8	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 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	E

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.15 NOTE 4	MASS ORDINATE NOTE 5
55+33	---	18	0	0	0	---	---	---	---	---	---	---
55+83	50	12	0	0	0	28	0	0	0	28	0	28
56+10	27	11	0	0	0	12	0	0	0	39	0	39
56+37	27	9	0	0	0	10	0	0	0	49	0	49
				COLUMN TOTALS		49	0	0	0			

NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.15
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

9

9

PROJECT NO: 1510-02-74	HWY: USH 10	COUNTY: WAUPACA	RAMP 49-3 EARTHWORK TABLES	SHEET:	E

FILE NAME : P:\2021\2021.023 - WisDOT-Auroraville-Fremont (6210-01-04)\62100104\SheetsPlan\090100-ew.ppt PLOT DATE : 7/6/2023 12:35 PM PLOT BY : DANIEL J. GERLING PLOT NAME : _____

POST #5

769.42
9.01

4.0%

2.0:1

767.85
19.87

56+10

POST #1

769.30
10.00

4.0%

2.0:1

767.70
21.40

55+83

BEGIN TAPER

768.75
5.01

4.0%

2.0:1

767.12
17.92

55+33

10 FT

10 FT

9

9

PROJECT NO: 1510-02-74	HWY: USH 110	COUNTY: WAUPACA	CROSS SECTIONS: RAMP 49-3	SHEET 164	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 10:06 AM PLOT BY : JUSTIN N. HAASE PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

9

9

PROJECT NO: 1510-02-74	HWY: USH 110	COUNTY: WAUPACA	CROSS SECTIONS: RAMP 49-3	SHEET 165	E

FILE NAME : P:\2021\2021.023 - WISDOT-AURORAVILLE-FREMONT (6210-01-04)\62100104\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/6/2023 10:06 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

GRE

SEPTEMBER 2023

PROJECT ID: 6590-02-77

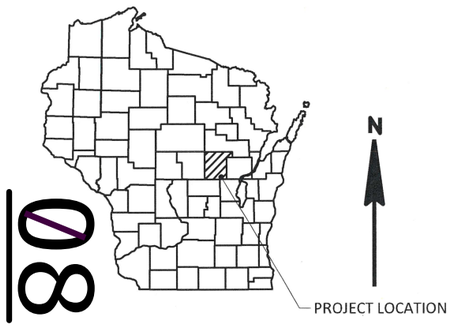
WITH: 1510-02-74, 6210-01-74

COUNTY: WAUPACA

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 = 206



DESIGN DESIGNATION 6590-02-77

A.A.D.T.	(2029)	=	4,230
A.A.D.T.	(2049)	=	4,920
D.H.V.		=	600
D.D.		=	60/40
T.		=	7.8%
DESIGN SPEED		=	45 - 55 MPH
ESALS		=	600,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

FREMONT - MARION

USH 10 TO STH 96

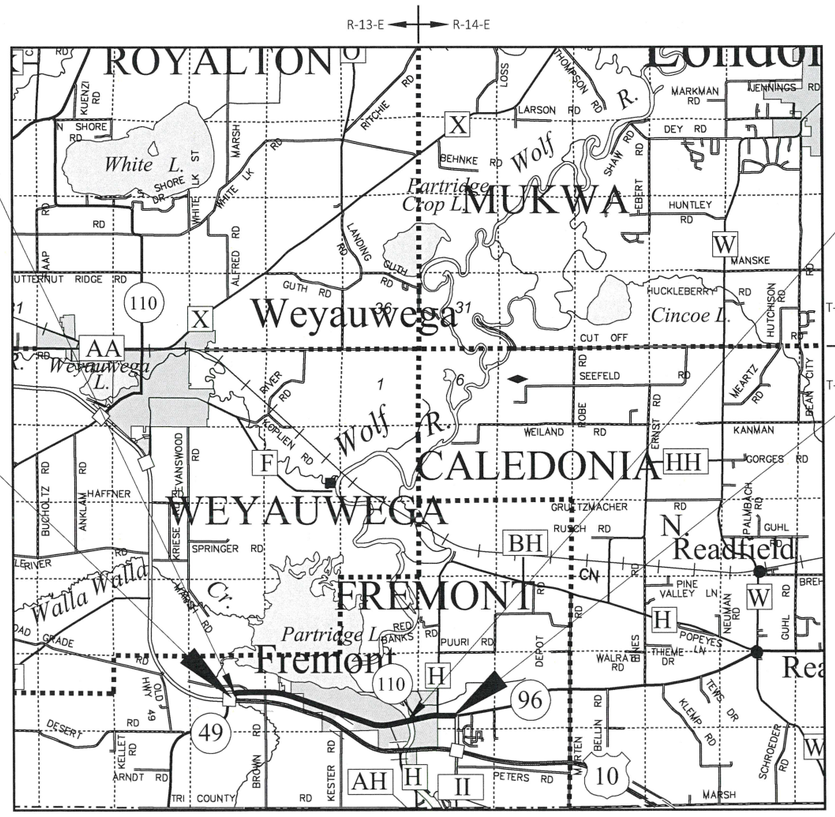
STH 110

WAUPACA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6590-02-77	———	———

STATE PROJECT NUMBER

6590-02-77



NET EXCEPTION TO CL LENGTH
STA 299+82 - STA 300+67
B-68-0100/B-68-0101

BEGIN PROJECT
STA 297+31.46
Y = 307,533.523
X = 582,480.934

NET EXCEPTION TO CL LENGTH
STA 421+99 - STA 429+17
B-68-0031

END PROJECT
STA 458+31.23
Y = 306,168.058
X = 598,088.129

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 2.897 MI

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

BECHER HOPPE

WISCONSIN
AARON J. WALLNER
E-46054-6
WAUSAU, WI
PROFESSIONAL ENGINEER

DATE: 10-25-22 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	BECHER-HOPPE ASSOCIATES, INC.
Designer	BECHER-HOPPE ASSOCIATES, INC.
Project Manager	KURT VOGEL, P.E.
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	ROBERT WAGNER, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 6/28/2023 (Signature)

E

GENERAL NOTES

BEARINGS ON THE PLAN ARE TRUE BEARINGS TO THE NEAREST SECOND.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH LANDMARK MAY EXIST.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMITS THAT ARE NOT SHOWN.

NO TREES OR SHURBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

RESHAPE, SEED, AND FERTILIZE ANY PREVIOUSLY GRASSED AREAS THAT ARE DISTURBED BY OPERATIONS OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

THE ALIGNMENTS ARE BASED ON BEST FITTING THE AERIAL AND AS-BUILT PLANS. ADJUSTMENTS MAY BE NEEDED TO FIT ACTUAL FIELD CONDITIONS WHEN DIRECTED BY THE ENGINEER. ADJUSTMENTS ARE INCIDENTAL TO THE ITEM "RESURFACING REFERENCE".

MATCH EXISTING SUPERELEVATIONS ALONG HORIZONTAL CURVES. STAKING SUPERELEVATION TRANSITIONS IN THE FIELD SHALL BE INCIDENTAL TO THE PROJECT IF NEEDED.

R/W APPROXIMATED ON PLAN SHEETS BASED ON WAUPACA COUNTY GIS AND AS-BUILT DATA AND IS SHOWN FOR GRAPHICAL PURPOSES ONLY.

SECTION 2 ORDER

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
CURB RAMP DETAILS
EROSION CONTROL
PAVEMENT MARKING & PERMANENT SIGNING
TRAFFIC CONTROL
ALIGNMENT DIAGRAM
CONTROL POINTS

AS-BUILTS

PROJECT 1510-04-40 (1987)
PROJECT 1513-02-71 (1992)
PROJECT 1510-08-75 (1998)*
PROJECT 1510-08-77 (1999)*
PROJECT 6841-00-70 (2008)

*PROJECTS CONSTRUCTED USING METRIC STANDARD MEASUREMENTS

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 STRIP-TURF	.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 SLOPE-TURF			.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 = 59.5 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.44 ACRES

DNR LIASON

DEPARTMENT OF NATURAL RESOURCES
CASEY JONES
625 E COUNTY ROAD Y
SUITE 700
OSHKOSH, WI 54901
PHONE: (715) 213-6571
EMAIL: Casey.Jones@wisconsin.gov

UTILITY CONTACTS

COMMUNICATIONS

CENTURYLINK
SCOTT HEINZELMAN
144 N PEARL ST
BERLIN, WI 54923
PHONE: (608) 716-5964
MOBILE: (920) 757-4802
EMAIL: Scott.Heinzelman@lumen.com

NET LEC, LLC
RICK VINCENT
450 SECURITY BLVD
GREEN BAY, WI 54313
PHONE: (920) 617-7316
EMAIL: Rick.Vincent@nsight.com

ELECTRICITY

WE ENERGIES
ZACH DUGA
800 S LYNNDALE DR
APPLETON, WI 54914
PHONE: (920) 380-3458
CELL: (920) 450-9314
EMAIL: Zachary.Duga@we-energies.com

GAS/PETROLEUM

WE ENERGIES
CODY BECKMAN
800 S LYNNDALE DR
APPLETON, WI 54914
PHONE: (920) 380-3422
CELL: (920) 428-1038
EMAIL: Cody.Beckman@we-energies.com

SANITARY SEWER

VILLAGE OF FREMONT
MICHELLE MCCLONE
P.O. BOX 278
FREMONT, WI 54940
PHONE: (920) 446-2411
EMAIL: fremontvillage@centurytel.net

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

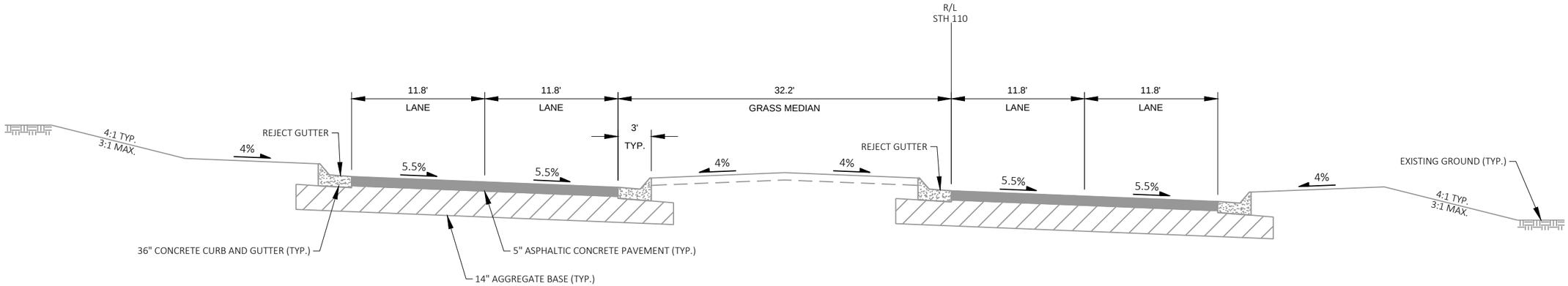
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 10:28 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:600 FT

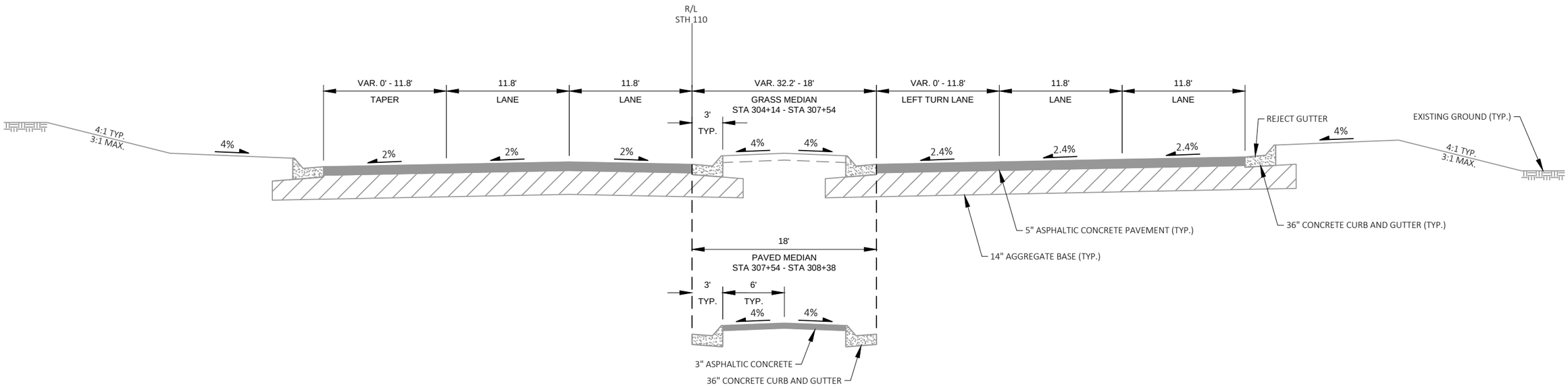
WISDOT/CADDS SHEET 44

2



EXISTING TYPICAL SECTION STH 110

STA 297+13.46 - STA 299+82
STA 300+66.81- STA 304+14



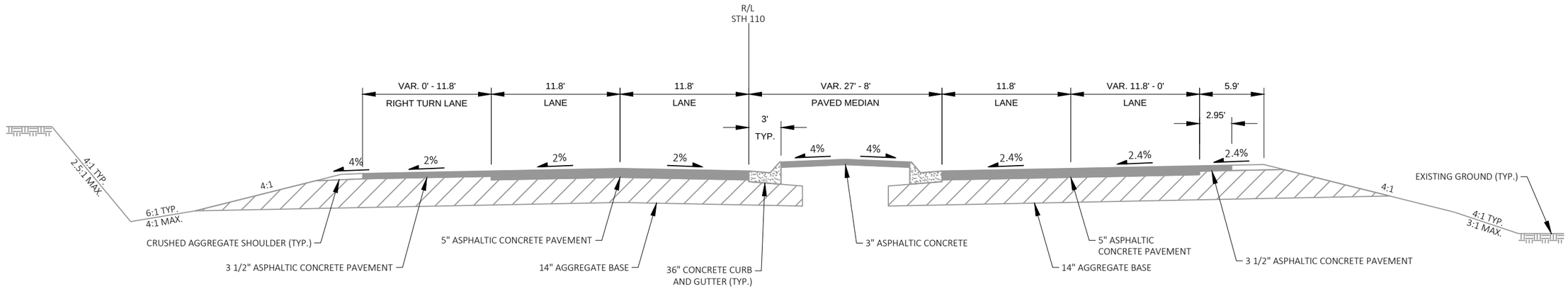
EXISTING TYPICAL SECTION STH 110

STA 304+14 - STA 308+38

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EXISTING TYPICAL SECTIONS	SHEET 4	E

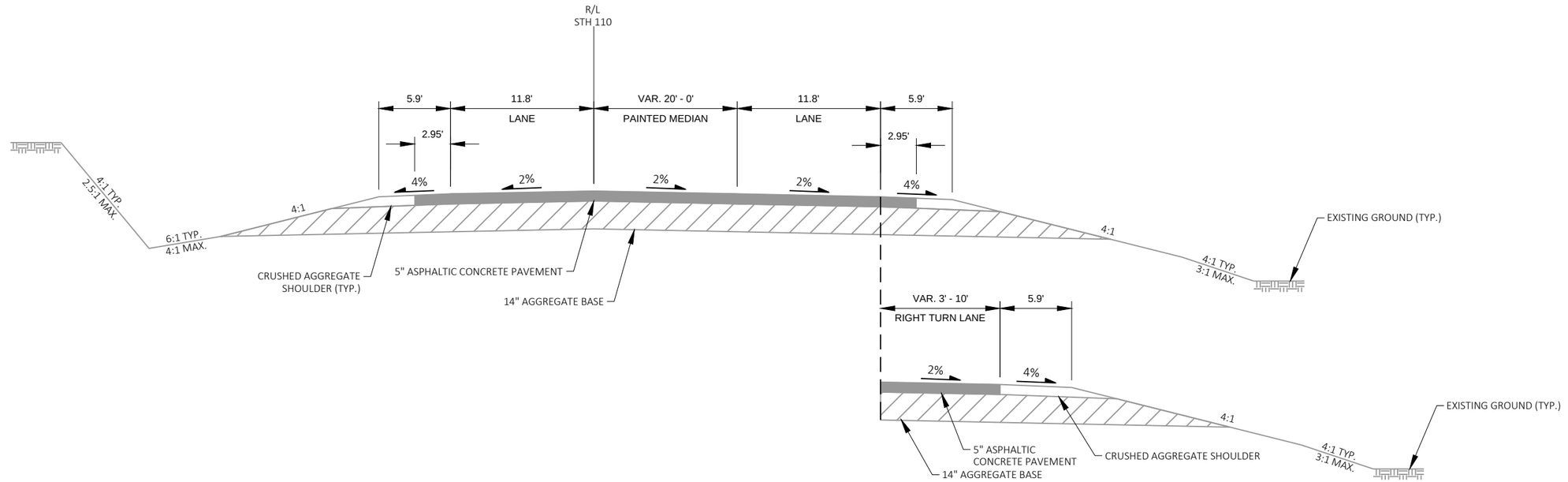
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 10:29 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



EXISTING TYPICAL SECTION STH 110

STA 308+48 - STA 314+74



STA 318+11 RT - STA 320+64 RT

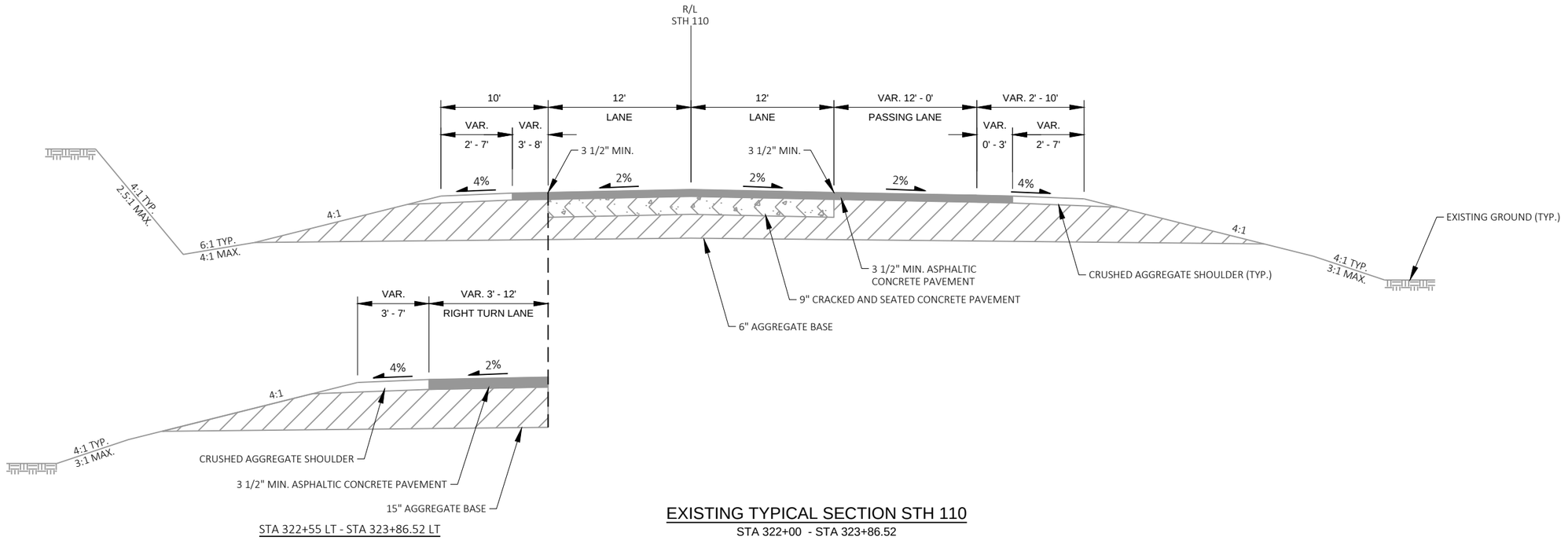
EXISTING TYPICAL SECTION STH 110

STA 314+74 - STA 322+00

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EXISTING TYPICAL SECTIONS	SHEET 5	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 02

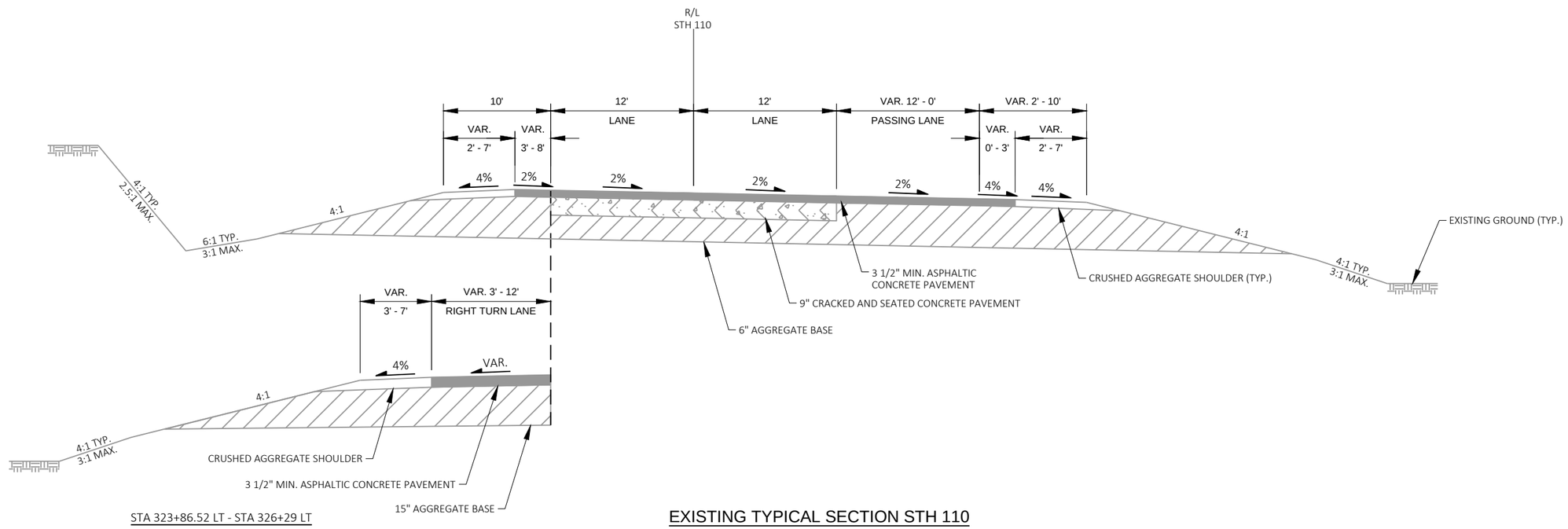
PLOT DATE : 7/6/2023 10:29 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT



STA 322+55 LT - STA 323+86.52 LT

EXISTING TYPICAL SECTION STH 110

STA 322+00 - STA 323+86.52
STA 341+56.41 - STA 398+98.50

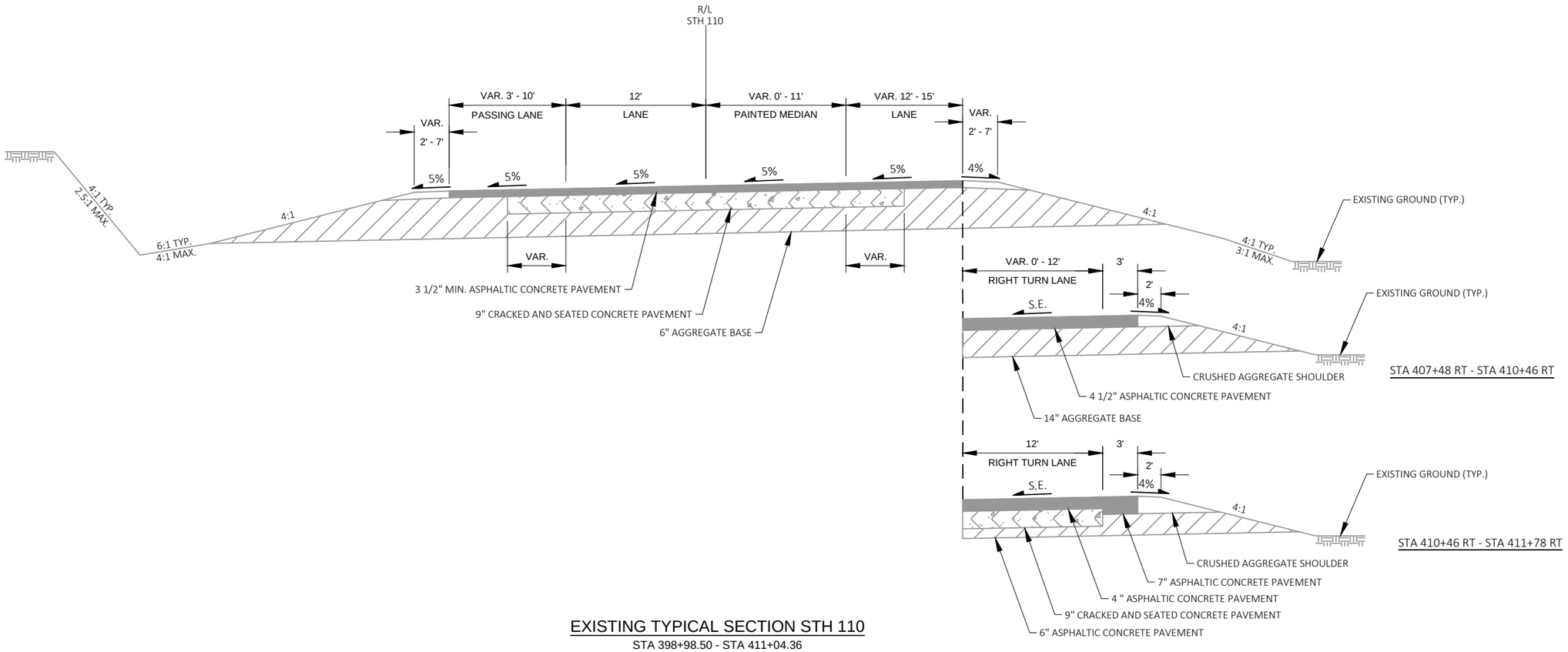


STA 323+86.52 LT - STA 326+29 LT

EXISTING TYPICAL SECTION STH 110

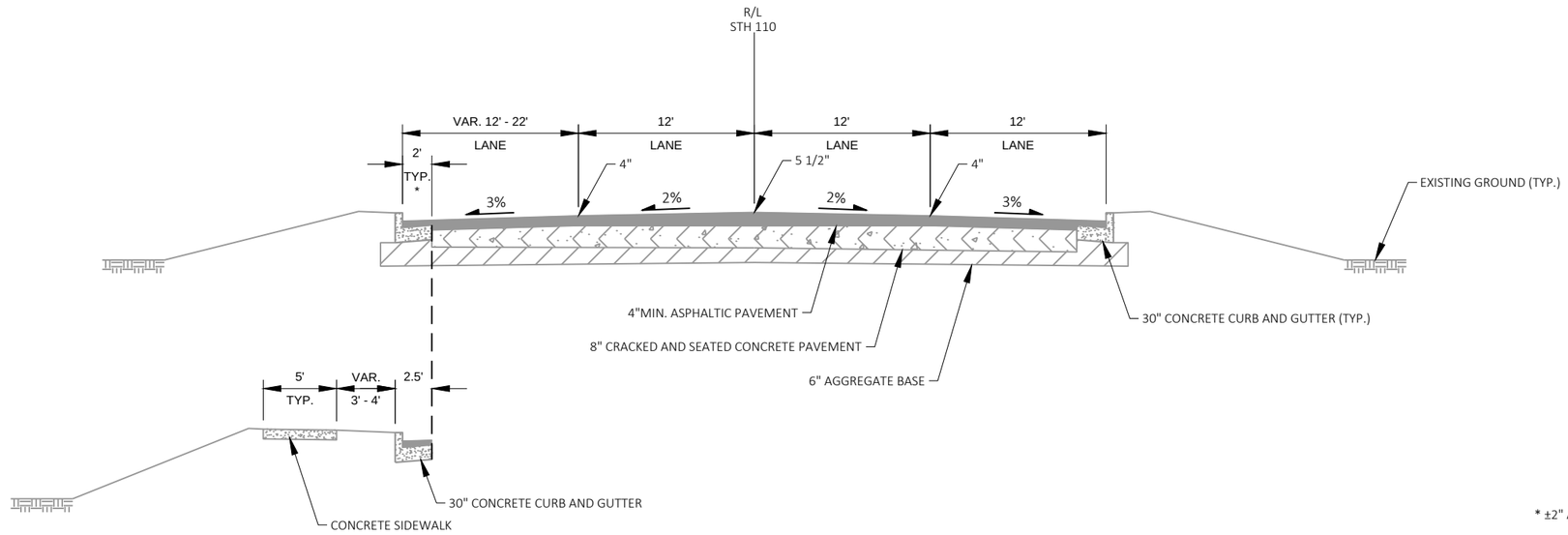
STA 323+86.52 - STA 341+56.41

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EXISTING TYPICAL SECTIONS	SHEET 6	E



EXISTING TYPICAL SECTION STH 110

STA 398+98.50 - STA 411+04.36



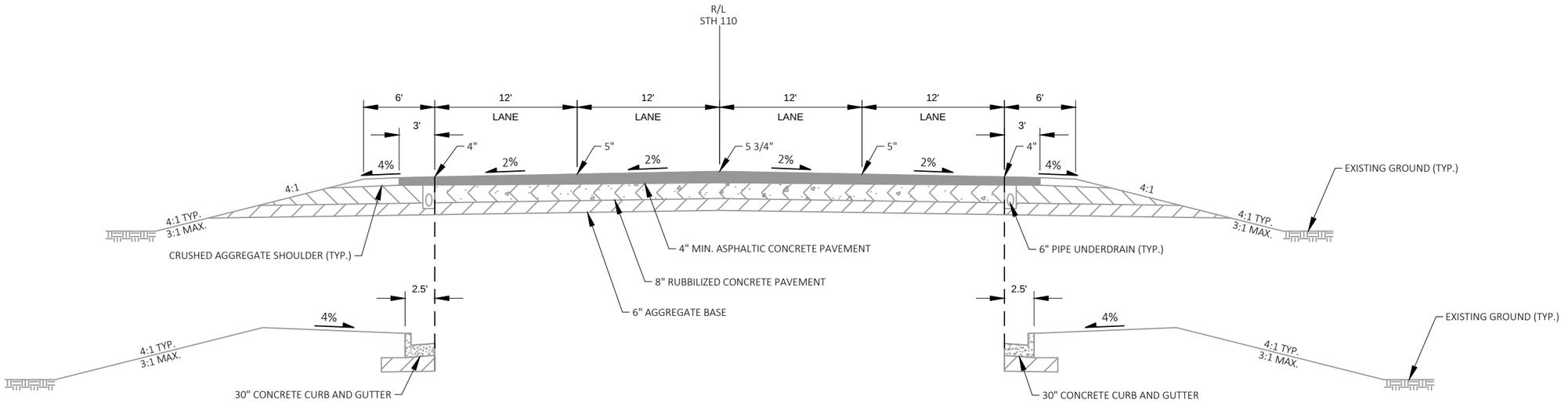
EXISTING TYPICAL SECTION STH 110

STA 411+04.36 - STA 421+99
STA 429+17 - STA 435+00

* ±2" ASPHALTIC PAVEMENT IN GUTTER (TYP.)

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EXISTING TYPICAL SECTIONS	SHEET 7	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\6590207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 04
PLOT DATE : 7/6/2023 10:30 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

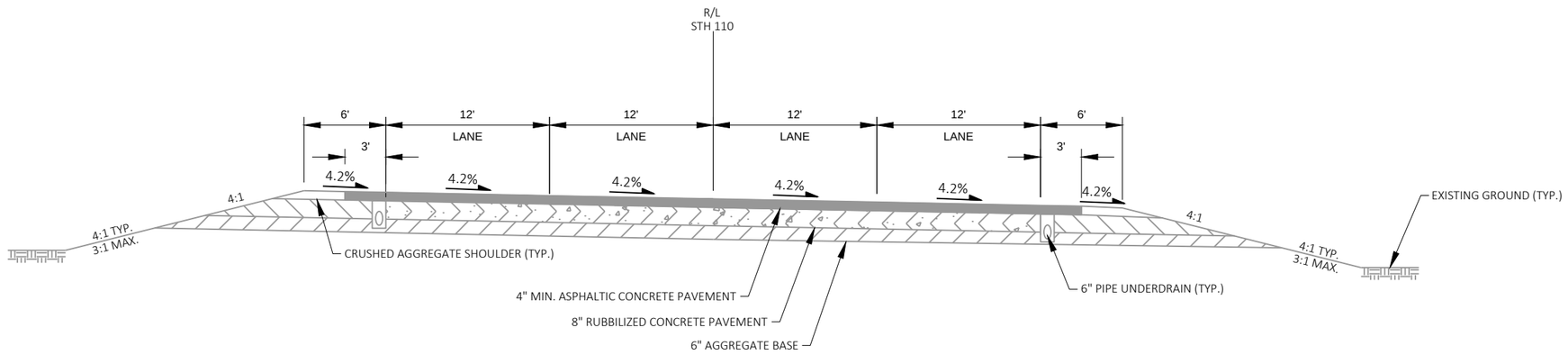


STA 486+83 LT - STA 458+32 LT

STA 456+67 RT - STA 458+32 RT

EXISTING TYPICAL SECTION STH 110

STA 435+00 - STA 438+14.63
STA 444+90.88 - STA 458+31.23

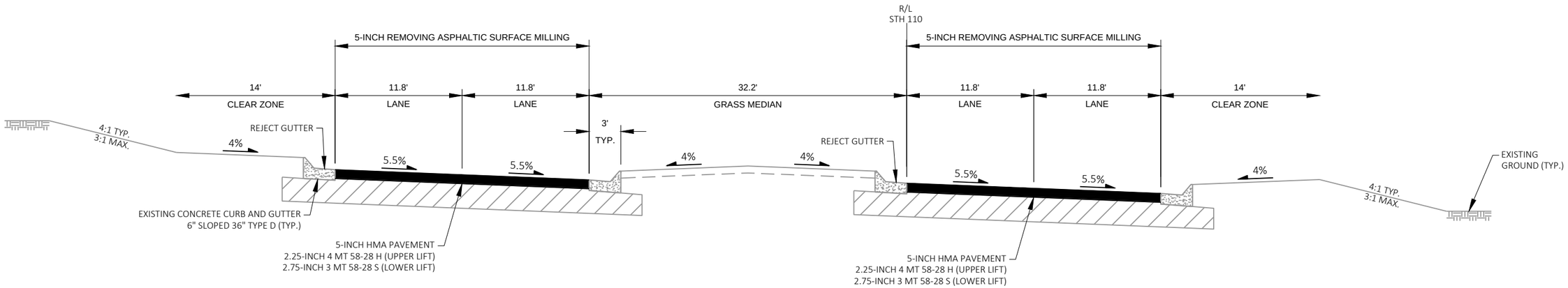


EXISTING TYPICAL SECTION STH 110

STA 438+14.63 - STA 444+90.88

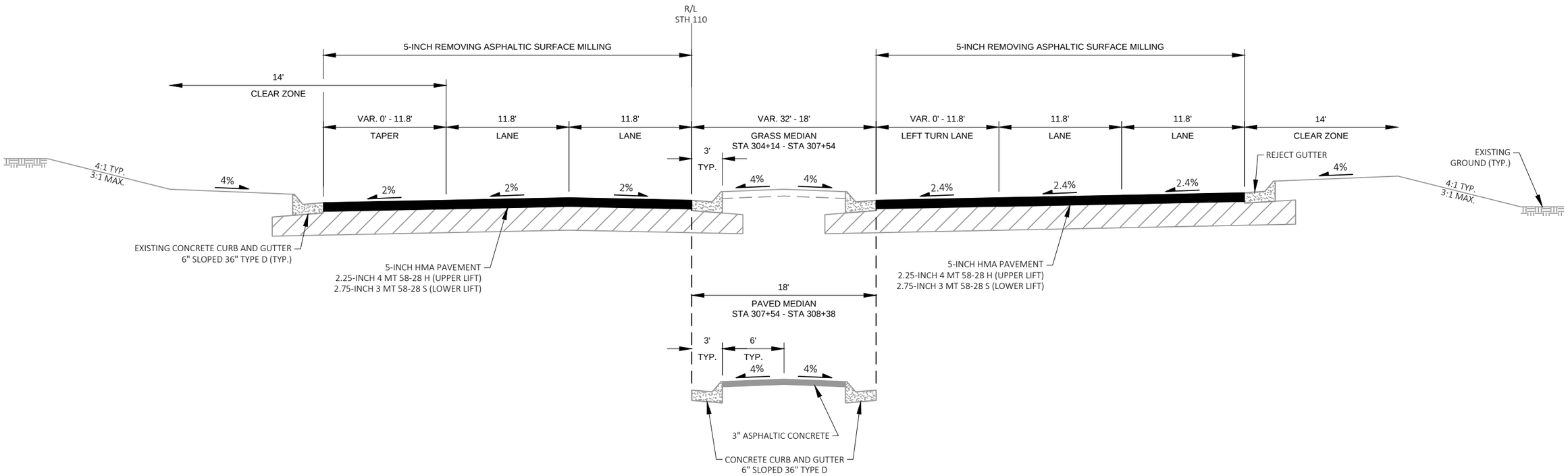
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EXISTING TYPICAL SECTIONS	SHEET 8	E

2



FINISHED TYPICAL SECTION STH 110

STA 297+31.46 - STA 299+82
STA 300+66.81 - STA 304+14

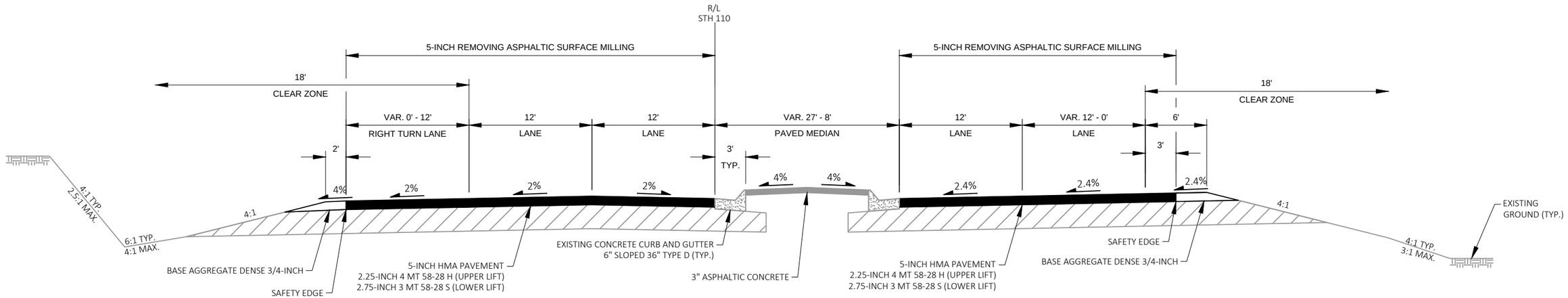


FINISHED TYPICAL SECTION STH 110

STA 304+14 - STA 308+38

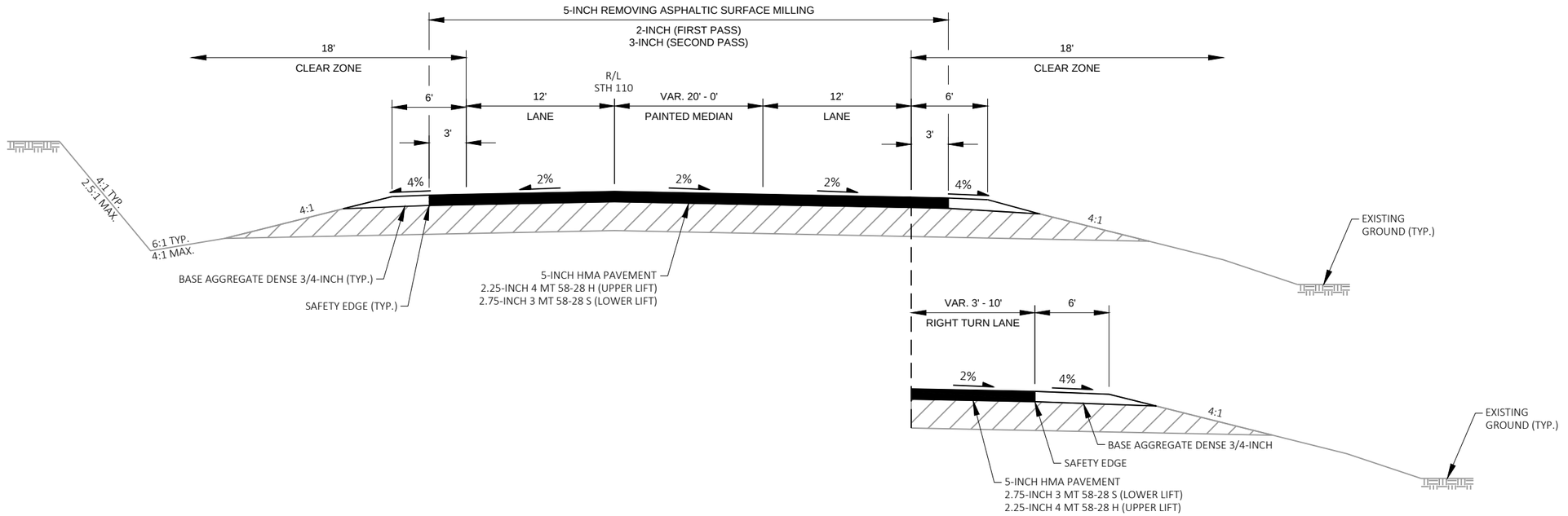
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	FINISHED TYPICAL SECTIONS	SHEET 9	E

2



FINISHED TYPICAL SECTION STH 110

STA 308+38 - STA 314+74



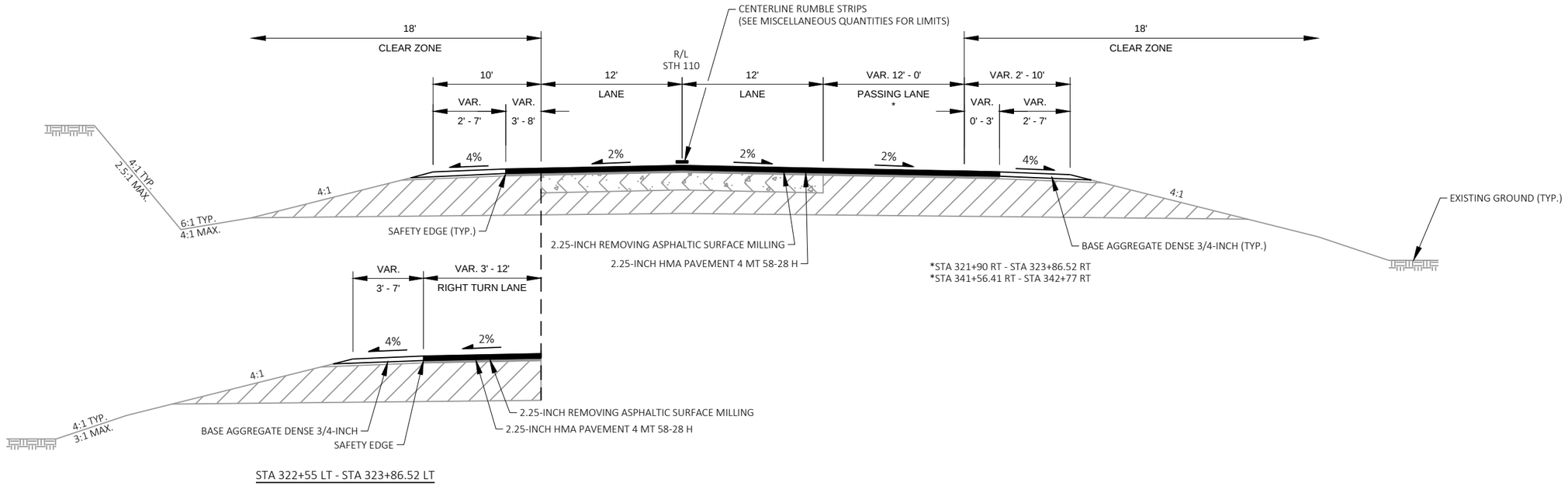
STA 318+11 RT - STA 320+64 RT

FINISHED TYPICAL SECTION STH 110

STA 314+74 - STA 322+00

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	FINISHED TYPICAL SECTIONS	SHEET 10	E

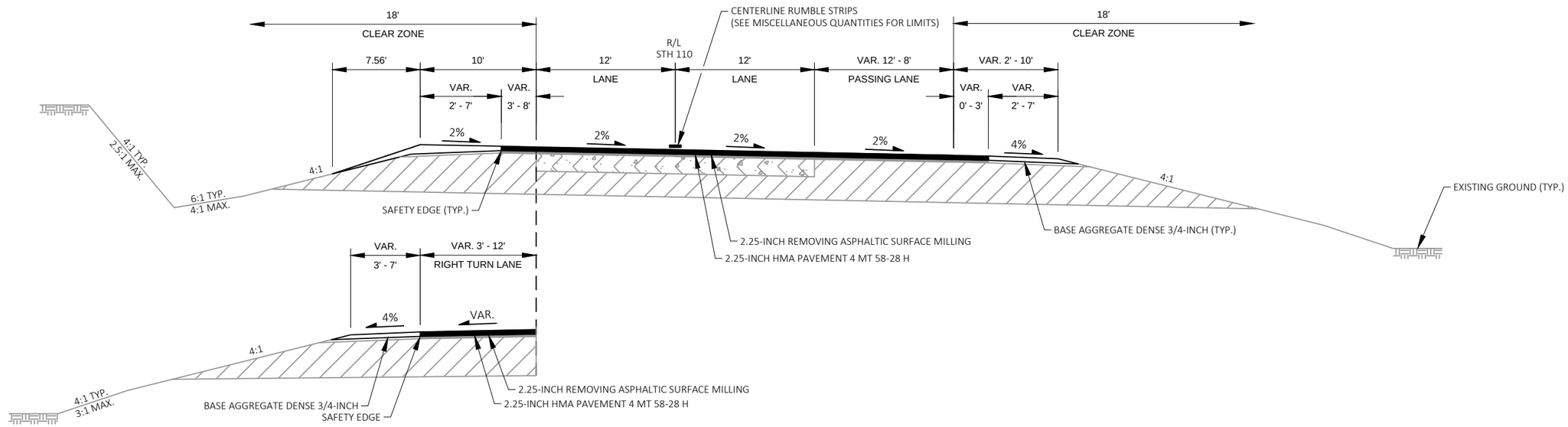
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 07
PLOT DATE : 7/6/2023 10:31 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



STA 322+55 LT - STA 323+86.52 LT

FINISHED TYPICAL SECTION STH 110

STA 322+00 - STA 323+86.52
STA 341+56.41 - STA 398+98.50



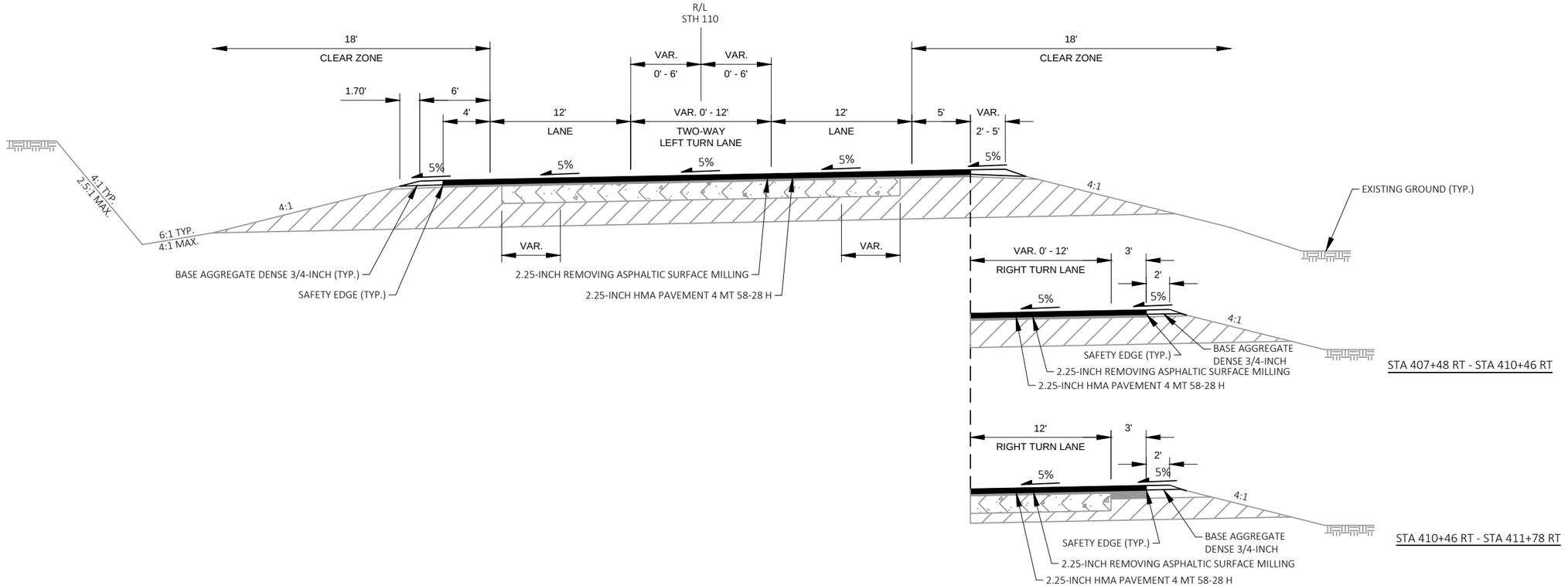
STA 323+86.52 LT - STA 326+29 LT

FINISHED TYPICAL SECTION STH 110

STA 323+86.52 - STA 341+56.41

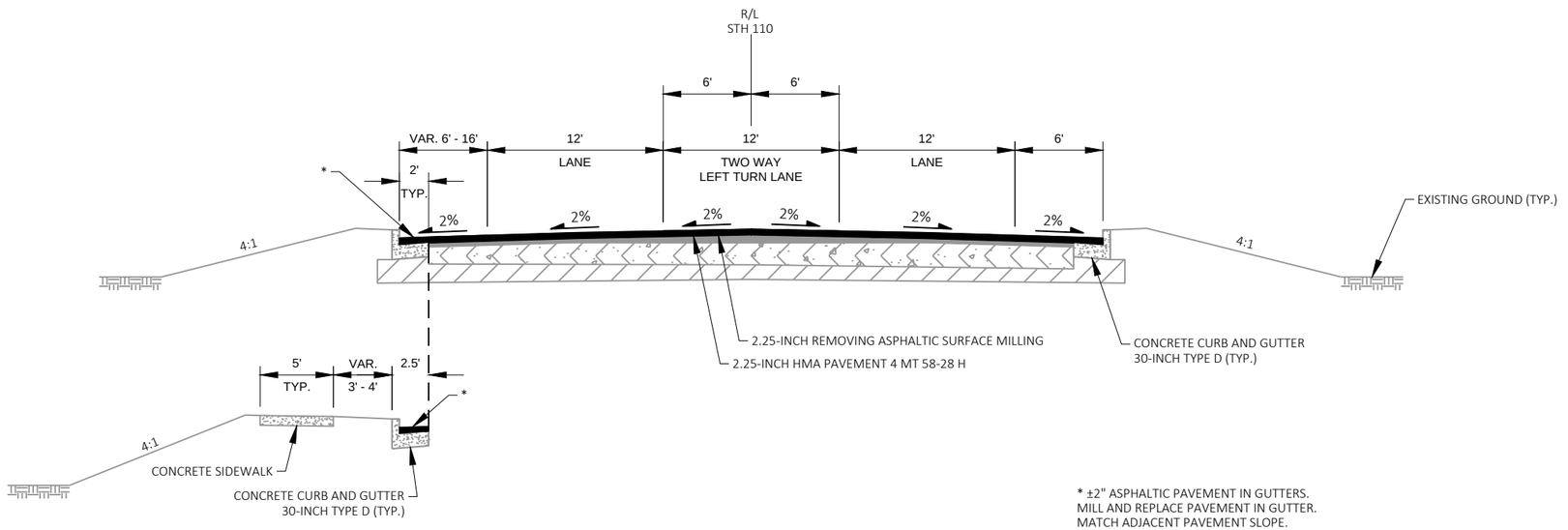
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	FINISHED TYPICAL SECTIONS	SHEET 11	E

2



FINISHED TYPICAL SECTION STH 110

STA 398+98.50 - STA 411+78



* ±2" ASPHALTIC PAVEMENT IN GUTTERS.
MILL AND REPLACE PAVEMENT IN GUTTER.
MATCH ADJACENT PAVEMENT SLOPE.

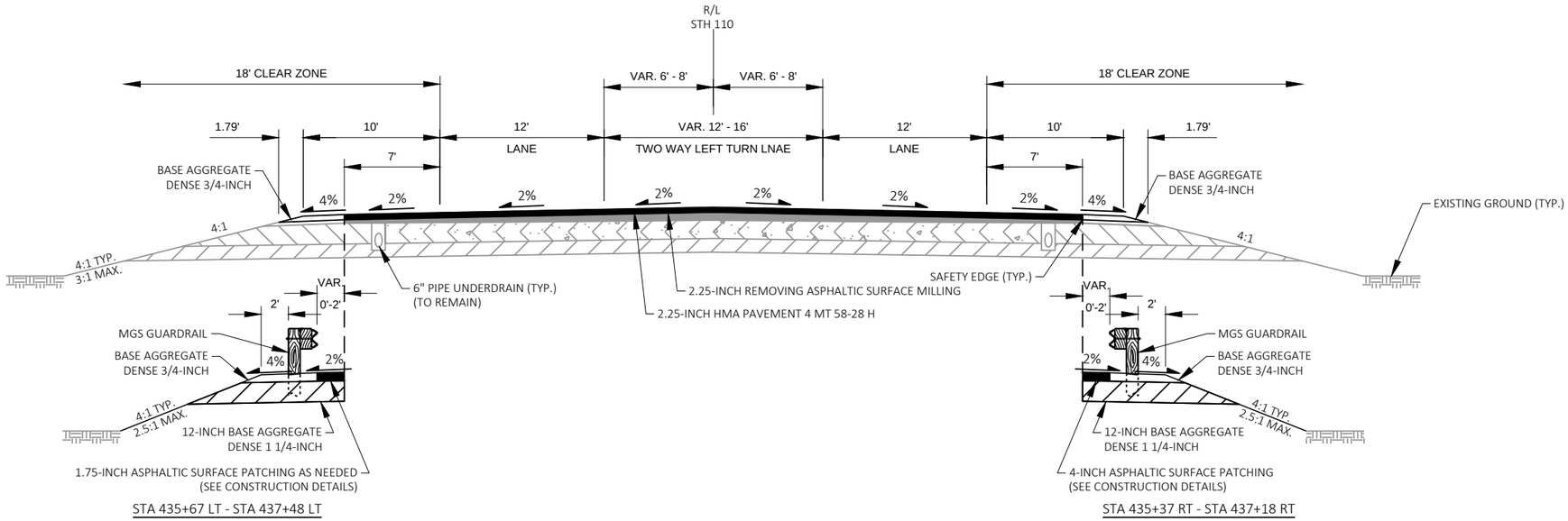
STA 418+38 LT - STA 421+99 LT
STA 429+17 LT - STA 434+90 LT

FINISHED TYPICAL SECTION STH 110

STA 411+78 - STA 421+99
STA 429+17 - STA 435+00

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	FINISHED TYPICAL SECTIONS	SHEET 12	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\6590207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 09
PLOT DATE : 7/6/2023 10:32 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

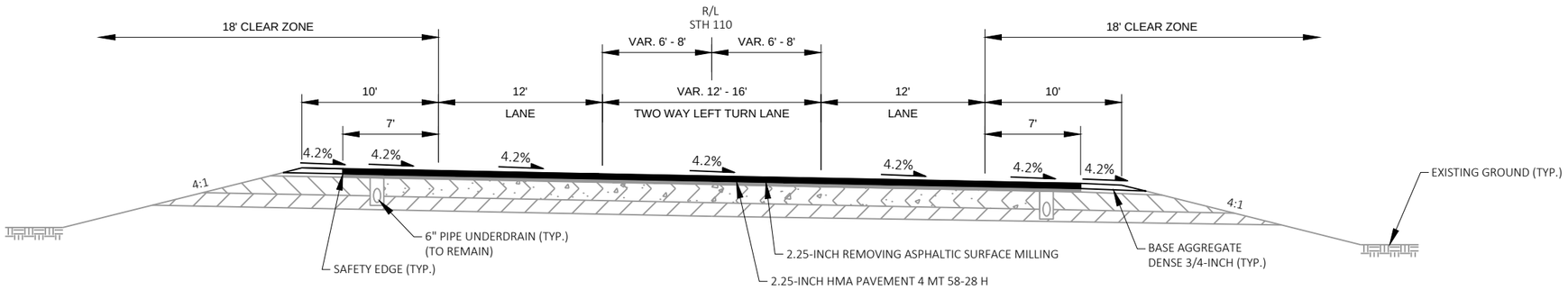


STA 435+67 LT - STA 437+48 LT

STA 435+37 RT - STA 437+18 RT

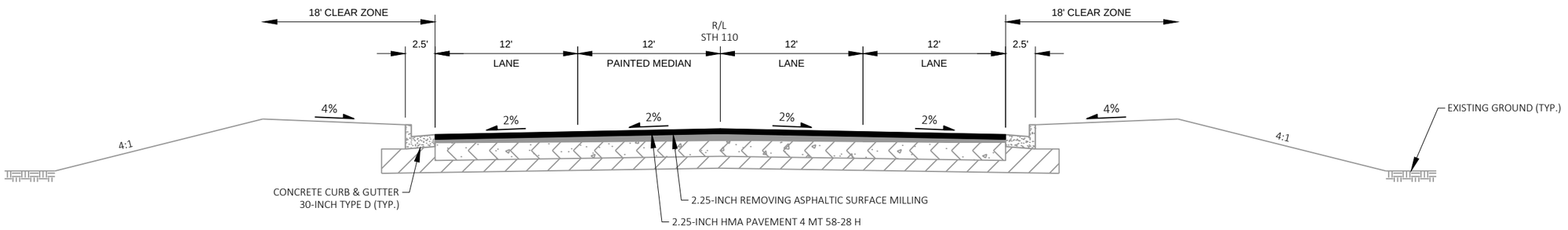
FINISHED TYPICAL SECTION STH 110

STA 435+00 - STA 438+14.63
STA 444+90.88 - STA 456+68



FINISHED TYPICAL SECTION STH 110

STA 438+14.63 - STA 444+90.88



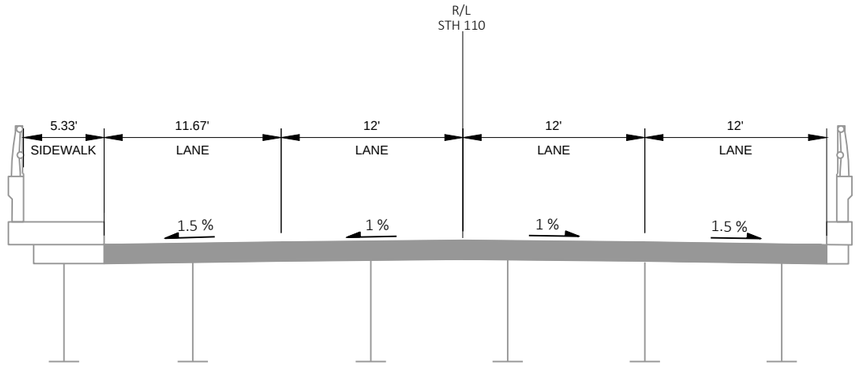
FINISHED TYPICAL SECTION STH 110

STA 456+68 - STA 458+31.23

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	FINISHED TYPICAL SECTIONS	SHEET 13	E

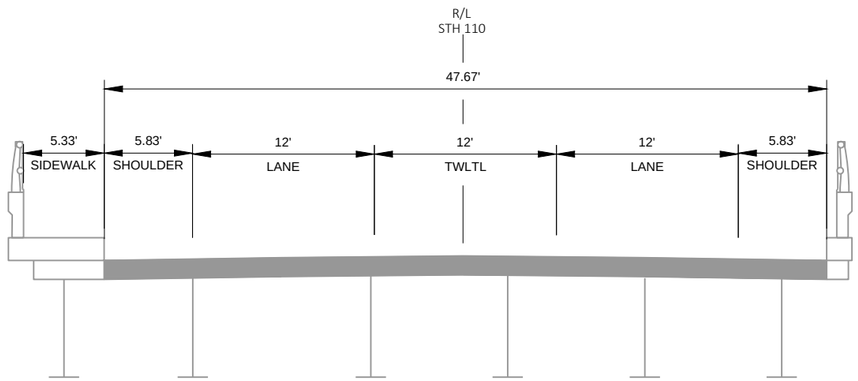
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 10
PLOT DATE : 7/6/2023 10:33 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION STRUCTURE B-68-31

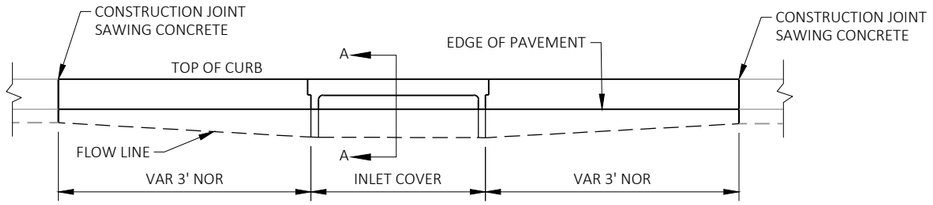
STA 421+99 - STA 429+17



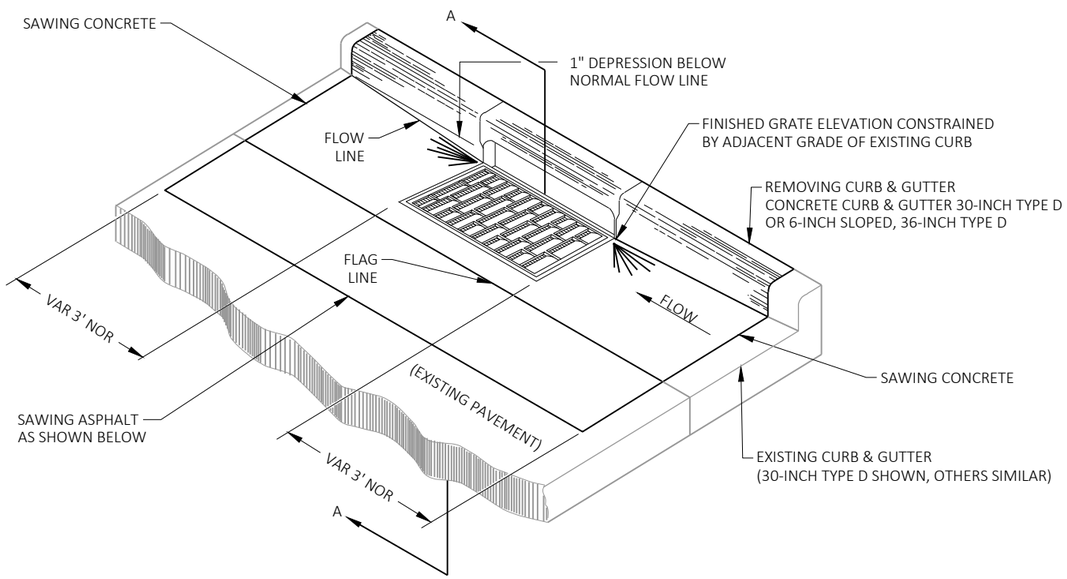
FINISHED TYPICAL SECTION STRUCTURE B-68-31

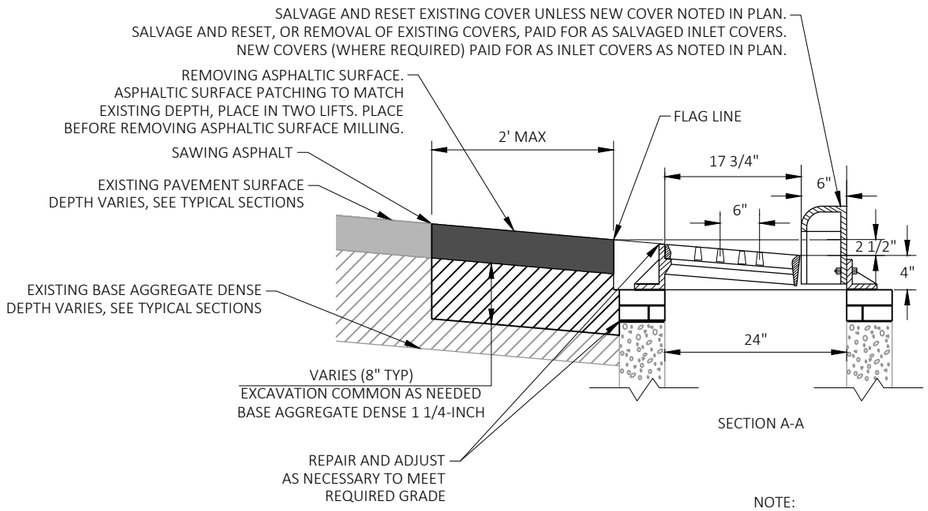
STA 421+99 - STA 429+17
(PAVEMENT MARKING ONLY)

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	B-68-0031 TYPICAL SECTIONS	SHEET 14	E



ELEVATION

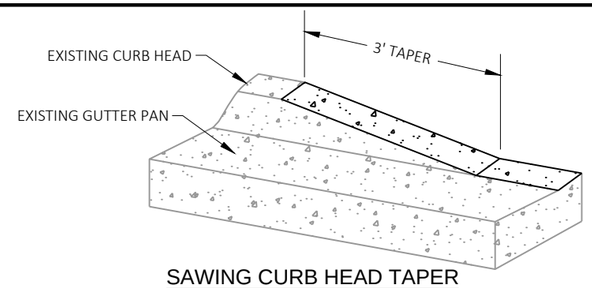




NOTE:
ADJUST INLETS PRIOR TO
FINAL ASPHALT OVERLAY

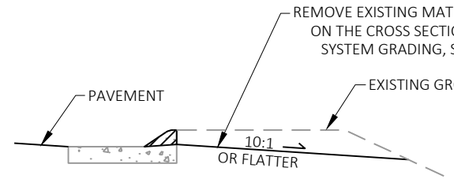
ADJUSTING INLET COVERS DETAIL

(TYPE 3-H INLET SHOWN, OTHERS SIMILAR)

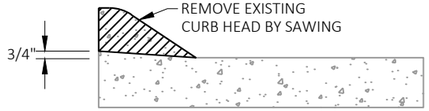


SAWING CURB HEAD TAPER

ISOMETRIC VIEW

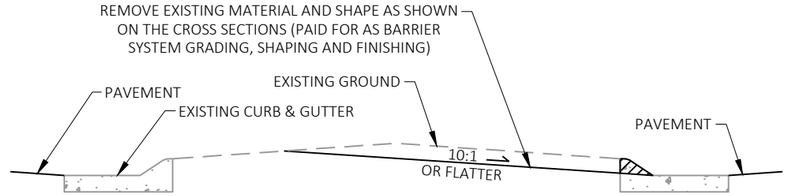


SAWING CURB HEAD GRADING AND SHAPING

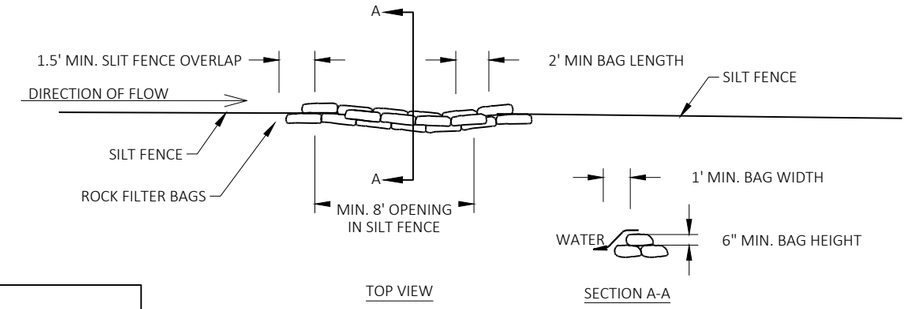


SAWING CURB HEAD

B-68-100/101 BEAM GUARD EATS



SAWING CURB HEAD GRADING AND SHAPING - MEDIAN

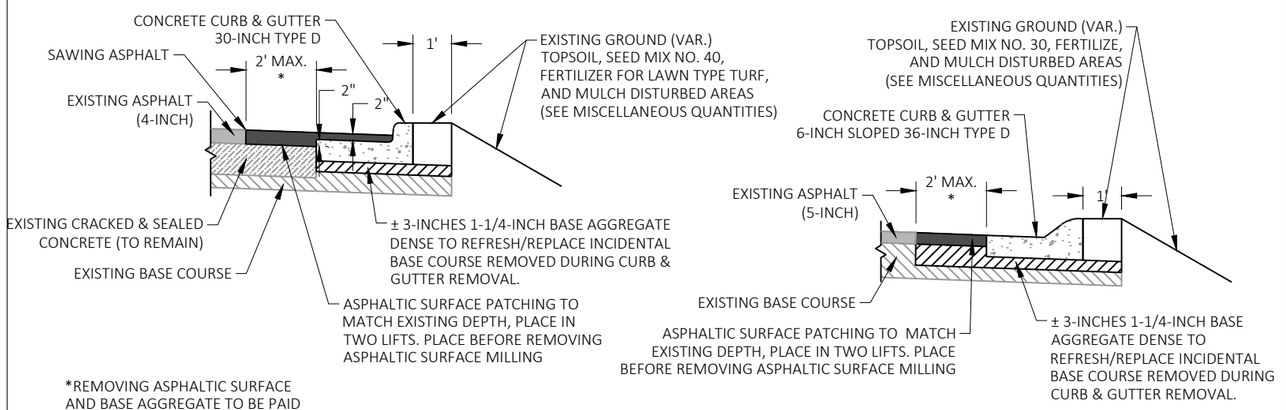


TOP VIEW

SECTION A-A

NOTE:
17 ROCK BAGS MINIMUM
PER 8' OPENING.

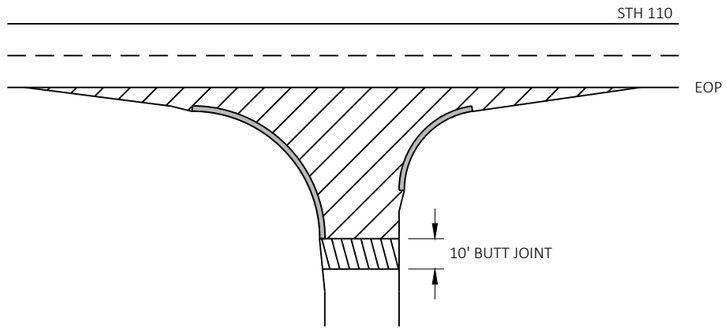
ROCK BAGS USED FOR SILT FENCE RELIEF



*REMOVING ASPHALTIC SURFACE
AND BASE AGGREGATE TO BE PAID
FOR AS EXCAVATION COMMON

CONCRETE CURB & GUTTER REPLACEMENT DETAIL

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CONSTRUCTION DETAILS	SHEET 15	E



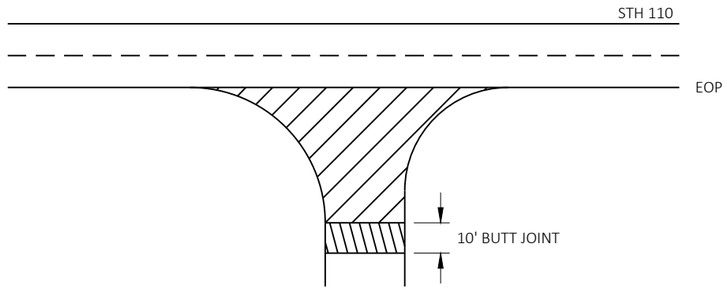
REMOVING ASPHALTIC SURFACE MILLING 2.25-INCH

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

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

SIDE ROADS
WITH CURB AND GUTTER

RAILROAD GRADE ROAD
BROWN ROAD
WOLF RIVER DRIVE
CTH H (TUSTIN ROAD)
W MAIN STREET
RIVERVIEW DRIVE (NORTH & SOUTH)
E MAIN STREET
CTH H (NORTH)



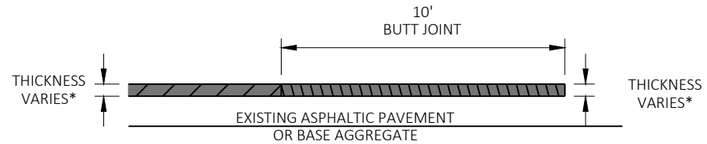
REMOVING ASPHALTIC SURFACE MILLING 2.25-INCH

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

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

SIDE ROADS AND PAVED DRIVEWAYS
WITHOUT CURB AND GUTTER

OAK STREET (NORTH & SOUTH)
WEST STREET (NORTH & SOUTH)



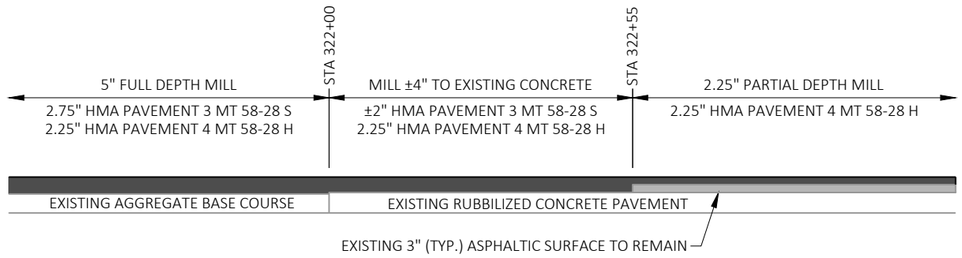
HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING

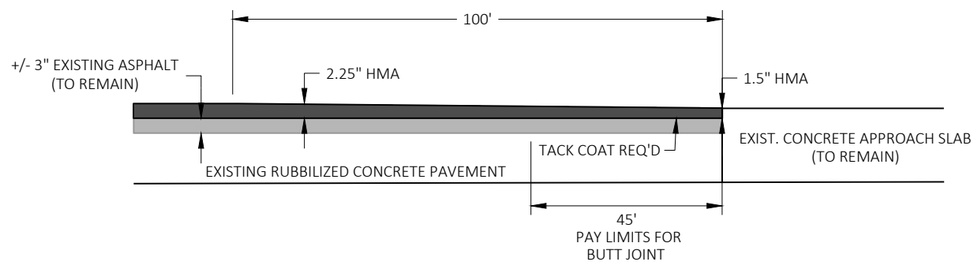
REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINT

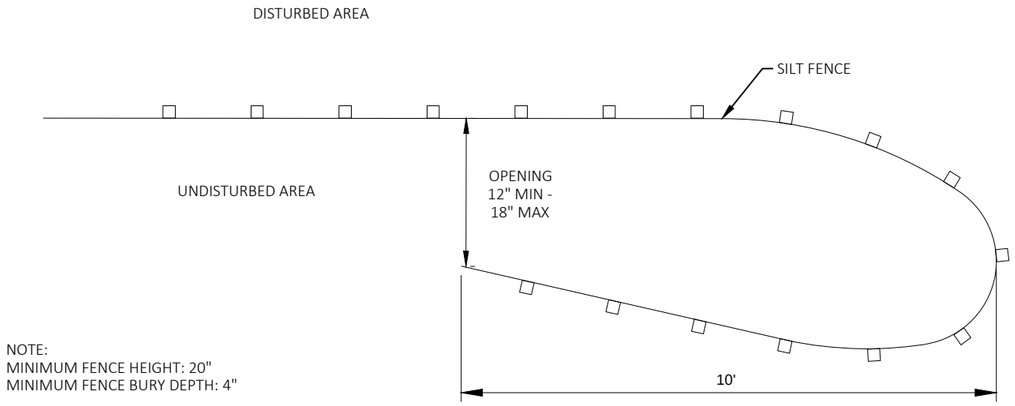
*2.25"	*5"
WOLF RIVER DRIVE	BEGINNING OF PROJECT
OAK STREET (NORTH & SOUTH)	B-68-0100/B-68-0101 APPROACHES
WEST STREET (NORTH & SOUTH)	RAILROAD GRADE ROAD
CTH H (TUSTIN ROAD)	BROWN ROAD
W MAIN STREET	
RIVERVIEW DRIVE (NORTH & SOUTH)	
E MAIN STREET	
CTH H (NORTH)	
END OF PROJECT	



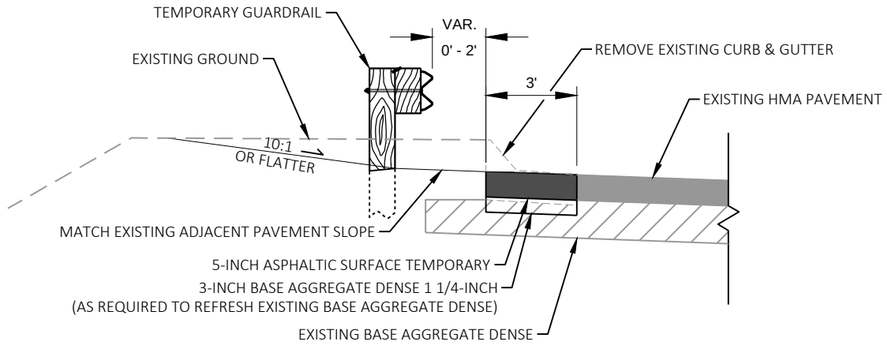
DETAIL OF MAINLINE MILLING DEPTH TRANSITION
STA 322+00 - STA 322+55



MAINLINE BUTT JOINT DETAIL AT B-68-0031
STA 421+54 - STA 421+99
STA 429+17 - STA 429+62

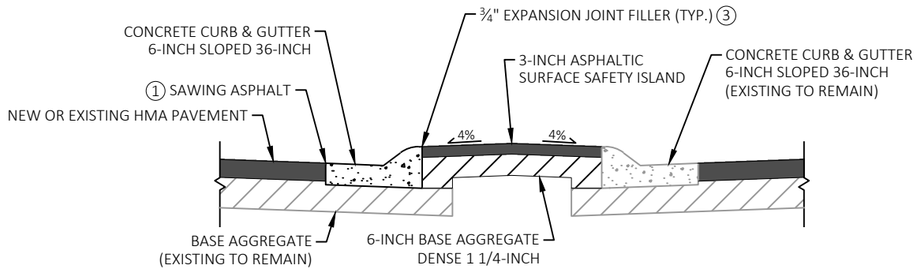


AMPHIBIAN AND REPTILE EXCLUSION FENCING DETAIL



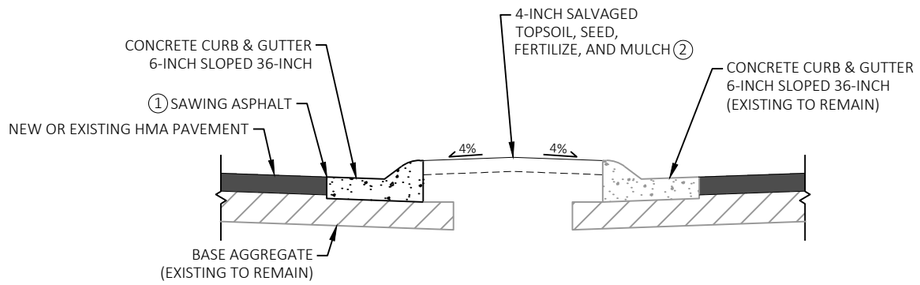
TEMPORARY PAVEMENT & TEMPORARY GUARDRAIL

(OUTSIDE INSTALLATION SHOWN, MEDIAN INSTALLATION SIMILAR)



ASPHALTIC SURFACE SAFETY ISLAND

STA 283+65 LT - STA 285+21 LT
STA 310+80 RT - STA 314+74 RT



GRASS MEDIAN

STA 285+21 LT - STA 286+08 LT
STA 290+25 LT - STA 291+23 LT
STA 297+15 LT - STA 299+05 LT

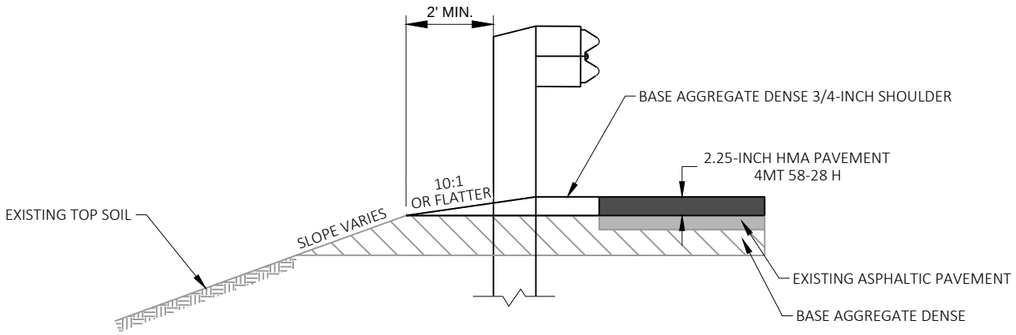
NOTES:

① PROVIDE SAWCUT PRIOR TO REMOVING ASPHALTIC SURFACE TEMPORARY. PLACE REPLACEMENT CURB AND GUTTER USING THE SAWCUT EDGE TO FORM THE FLANGE.

② FULL WIDTH GRASS MEDIAN RESTORATION SHOWN. WIDTH OF RESTORATION VARIES. MATCH EXISTING UNDISTURBED GRASS SURFACE. SEE PLAN DETAILS FOR MORE INFORMATION.

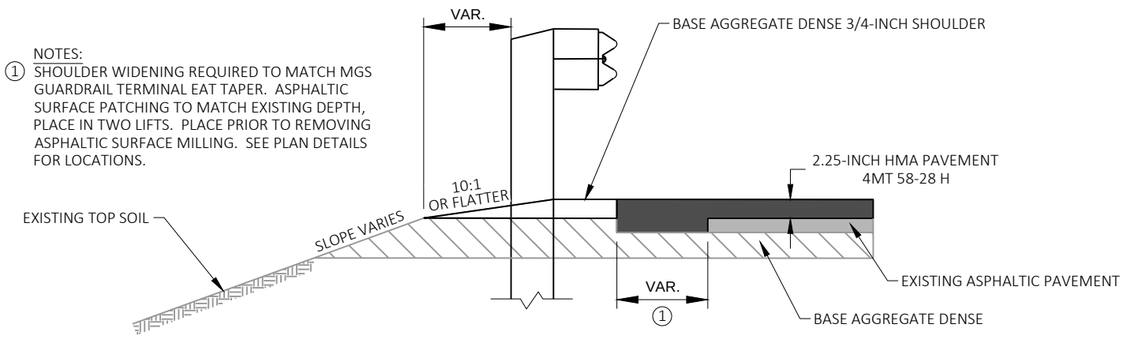
③ PLACE JOINT FILLER AS SHOWN ON SDD "CONCRETE MEDIAN NOSE".

MEDIAN RESTORATION DETAILS

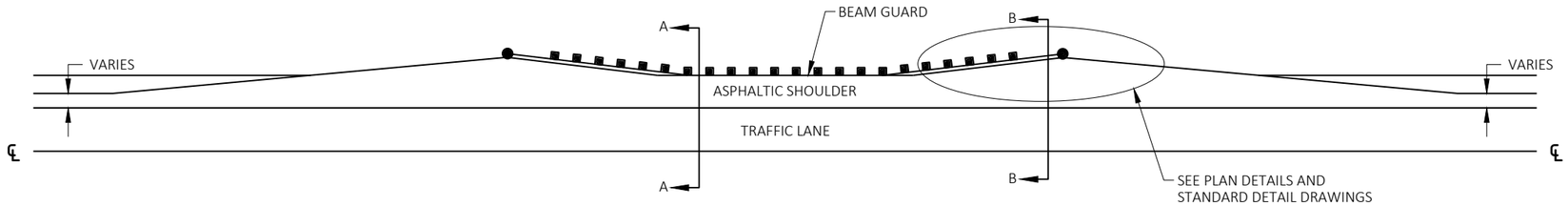


SECTION A-A

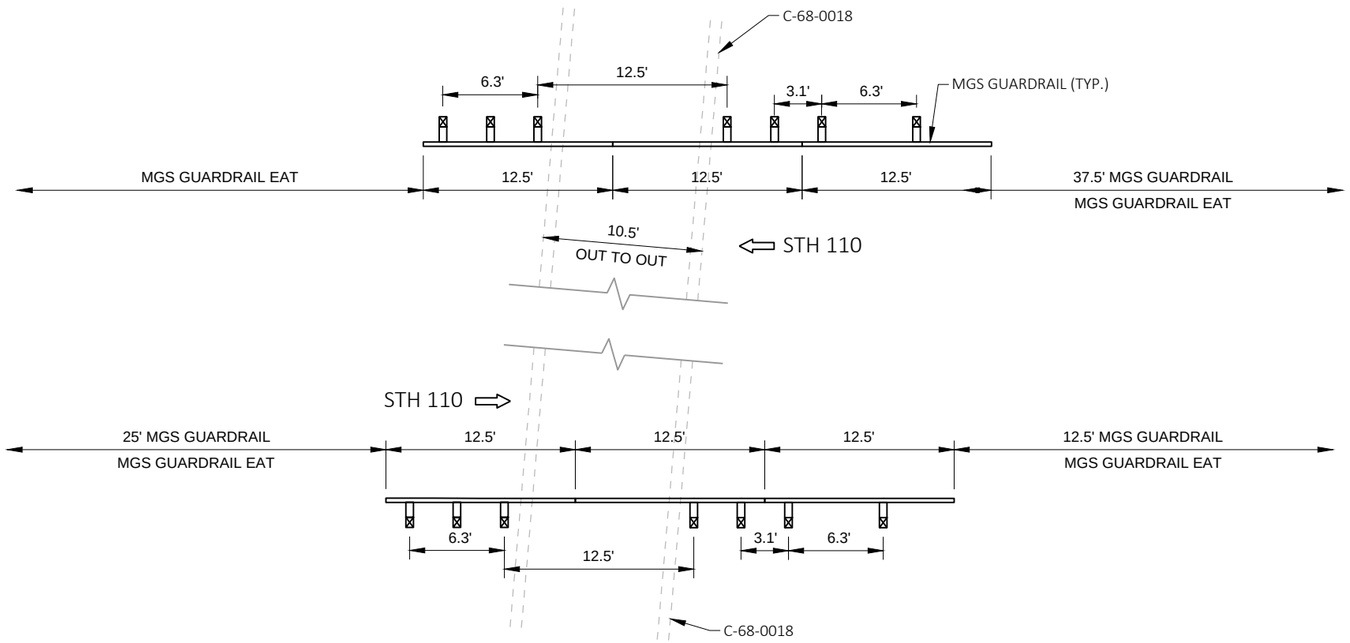
NOTES:
① SHOULDER WIDENING REQUIRED TO MATCH MGS GUARDRAIL TERMINAL EAT TAPER. ASPHALTIC SURFACE PATCHING TO MATCH EXISTING DEPTH, PLACE IN TWO LIFTS. PLACE PRIOR TO REMOVING ASPHALTIC SURFACE MILLING. SEE PLAN DETAILS FOR LOCATIONS.



SECTION B-B



DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD AT C-68-0018

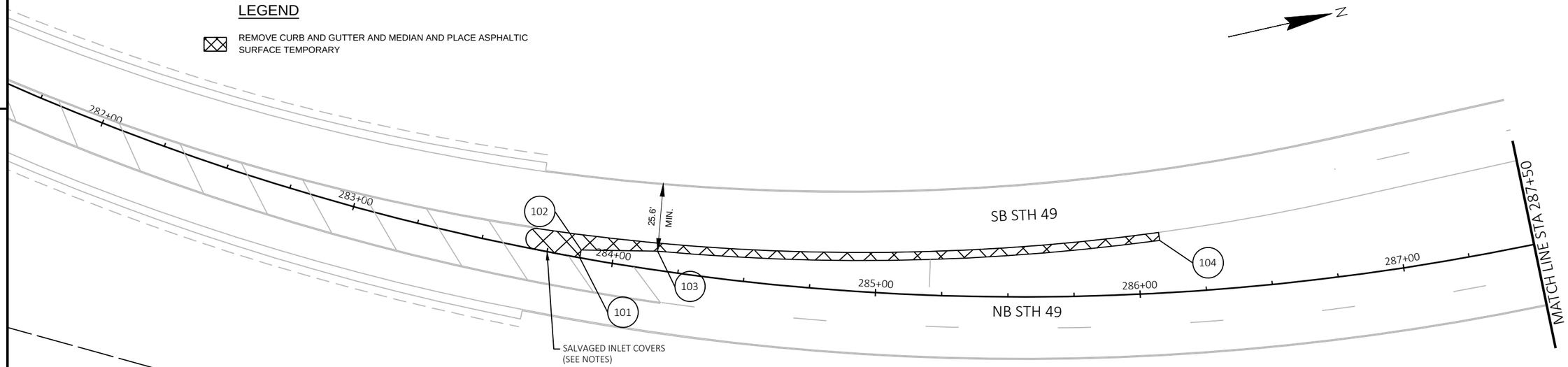


DETAIL FOR MISSING GUARDRAIL POSTS AT C-68-0018

2

LEGEND

REMOVE CURB AND GUTTER AND MEDIAN AND PLACE ASPHALTIC SURFACE TEMPORARY



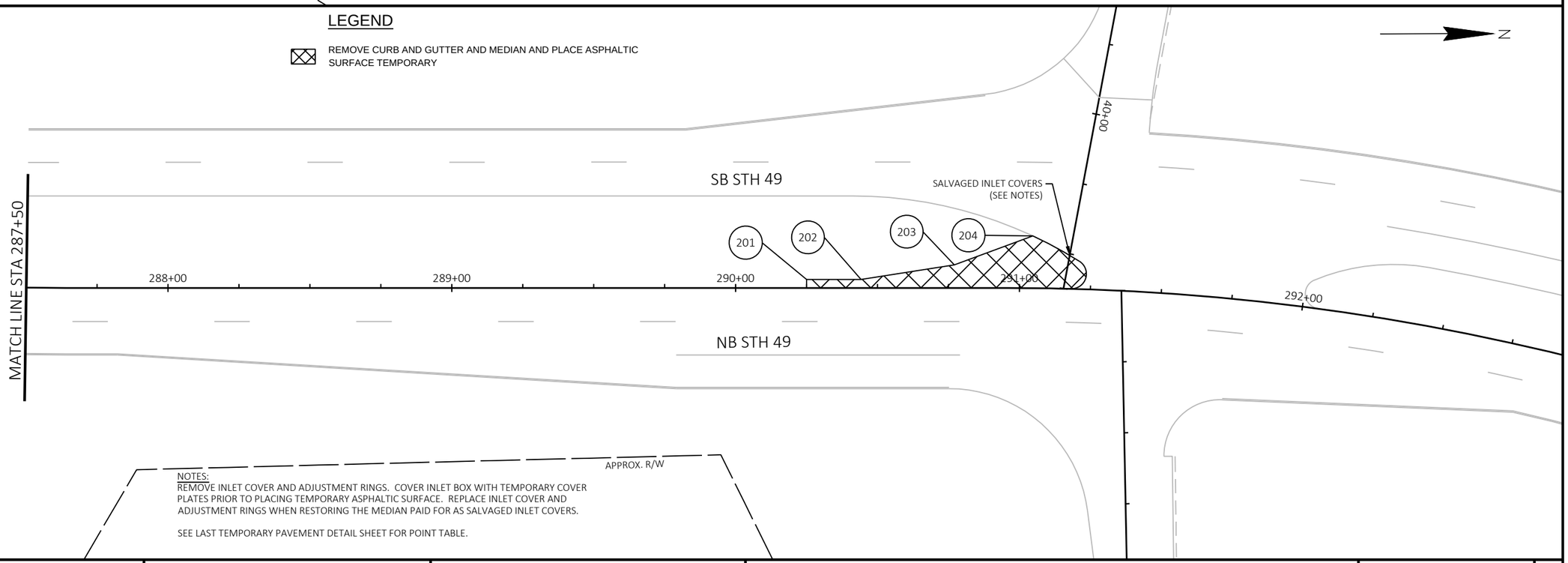
NOTES:
REMOVE INLET COVER AND ADJUSTMENT RINGS. COVER INLET BOX TEMPORARY COVER PLATES PRIOR TO PLACING TEMPORARY ASPHALTIC SURFACE. REPLACE INLET COVER AND ADJUSTMENT RINGS WHEN RESTORING THE MEDIAN PAID FOR AS SALVAGED INLET COVERS.

SEE LAST TEMPORARY PAVEMENT DETAIL SHEET FOR POINT TABLE.

2

LEGEND

REMOVE CURB AND GUTTER AND MEDIAN AND PLACE ASPHALTIC SURFACE TEMPORARY

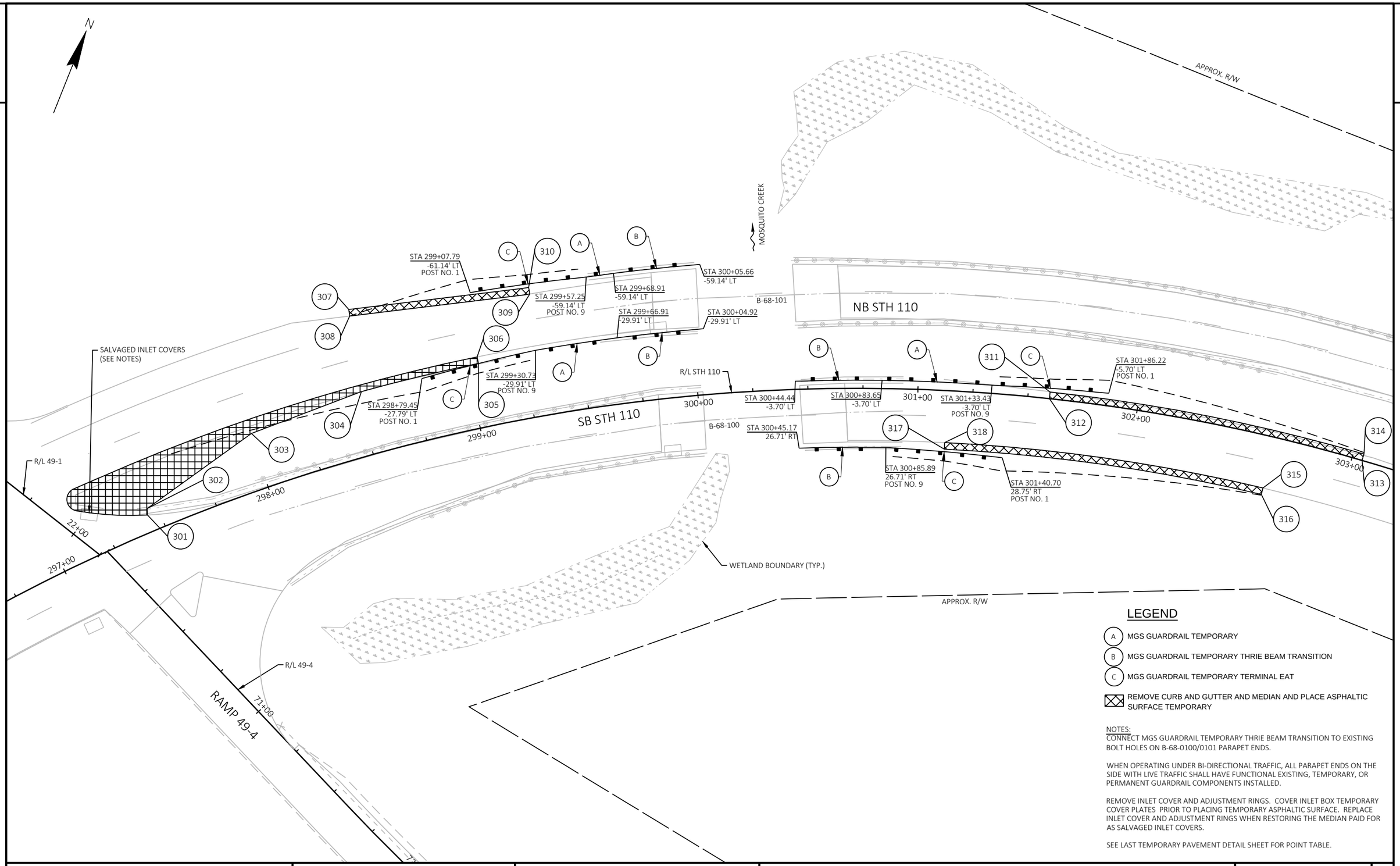


NOTES:
REMOVE INLET COVER AND ADJUSTMENT RINGS. COVER INLET BOX WITH TEMPORARY COVER PLATES PRIOR TO PLACING TEMPORARY ASPHALTIC SURFACE. REPLACE INLET COVER AND ADJUSTMENT RINGS WHEN RESTORING THE MEDIAN PAID FOR AS SALVAGED INLET COVERS.

SEE LAST TEMPORARY PAVEMENT DETAIL SHEET FOR POINT TABLE.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN DETAILS: TEMPORARY PAVEMENT DETAILS	SHEET 19	E

2



LEGEND

- (A) MGS GUARDRAIL TEMPORARY
- (B) MGS GUARDRAIL TEMPORARY THRIE BEAM TRANSITION
- (C) MGS GUARDRAIL TEMPORARY TERMINAL EAT
- REMOVE CURB AND GUTTER AND MEDIAN AND PLACE ASPHALTIC SURFACE TEMPORARY

NOTES:

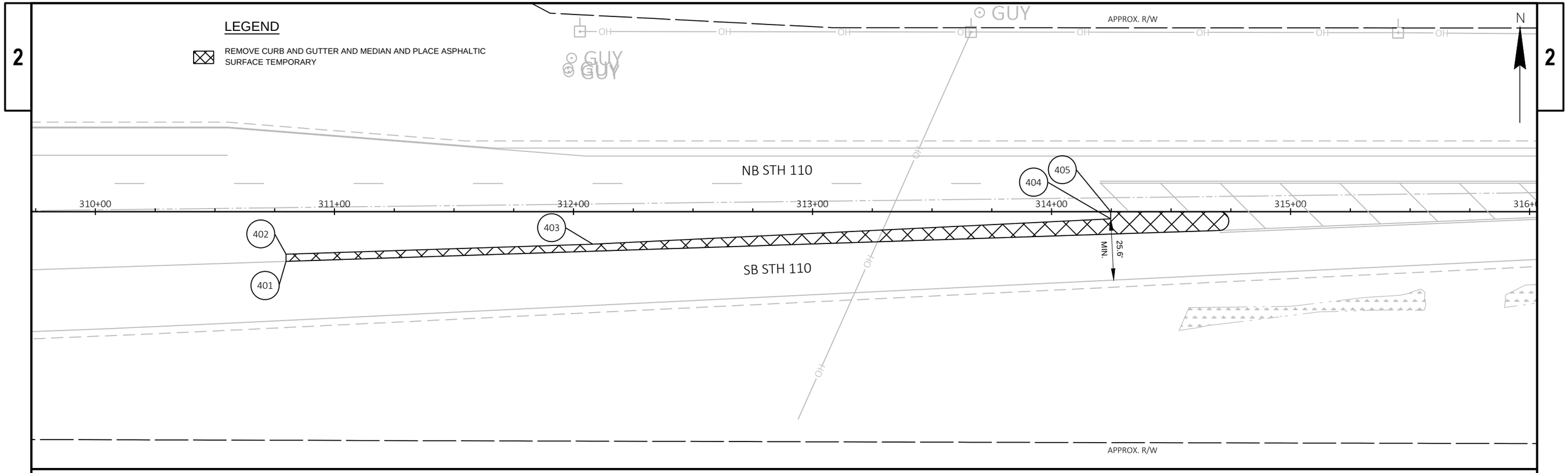
CONNECT MGS GUARDRAIL TEMPORARY THRIE BEAM TRANSITION TO EXISTING BOLT HOLES ON B-68-0100/0101 PARAPET ENDS.

WHEN OPERATING UNDER BI-DIRECTIONAL TRAFFIC, ALL PARAPET ENDS ON THE SIDE WITH LIVE TRAFFIC SHALL HAVE FUNCTIONAL EXISTING, TEMPORARY, OR PERMANENT GUARDRAIL COMPONENTS INSTALLED.

REMOVE INLET COVER AND ADJUSTMENT RINGS. COVER INLET BOX TEMPORARY COVER PLATES PRIOR TO PLACING TEMPORARY ASPHALTIC SURFACE. REPLACE INLET COVER AND ADJUSTMENT RINGS WHEN RESTORING THE MEDIAN PAID FOR AS SALVAGED INLET COVERS.

SEE LAST TEMPORARY PAVEMENT DETAIL SHEET FOR POINT TABLE.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN DETAILS: B-68-0100/0101 TEMPORARY GUARDRAIL	SHEET 20	E



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
101	283+87.54	0.00	582170.244	306261.774
102	283+87.54	3.00 LT	582167.479	306262.938
103	284+16.30	7.21 LT	582174.265	306291.043
104	286+08.45	19.91 LT	582211.985	306476.767
201	290+25.00	3.00 LT	582242.342	306889.308
202	290+44.19	3.00 LT	582242.389	306908.492
203	290+77.04	8.14 LT	582237.330	306941.360
204	291+04.56	18.35 LT	582227.231	306969.092
301	297+44.53	7.75 LT	582484.734	307548.283
302	297+45.54	10.56 LT	582483.490	307551.014
303	298+00.72	25.50 LT	582514.915	307600.144
304	298+52.30	28.91 LT	582554.286	307636.218
305	299+05.10	28.91 LT	582598.947	307667.713
306	299+05.11	31.91 LT	582597.302	307670.221
307	298+56.36	66.34 LT	582535.242	307668.725
308	298+55.96	63.37 LT	582536.676	307666.090

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
309	299+32.51	55.53 LT	582609.018	307705.624
310	299+32.50	58.53 LT	582607.449	307708.181
311	301+59.84	3.00 LT	582844.996	307751.465
312	301+59.84	0.00	582845.800	307748.575
313	303+04.76	0.00	582988.110	307774.928
314	303+04.76	3.00 LT	582987.826	307777.915
315	302+63.80	23.62 RT	582950.861	307746.662
316	302+63.80	26.62 RT	582951.294	307743.694
317	301+13.28	26.62 RT	582809.904	307709.624
318	301+13.28	23.62 RT	582808.937	307712.464
401	310+79.70	20.80 RT	583764.043	307777.295
402	310+79.70	17.80 RT	583764.042	307780.296
403	312+08.05	13.55 RT	583892.383	307784.593
404	314+24.73	3.00 RT	584109.068	307795.224
405	314+24.73	0.00 RT	584109.067	307798.220

2

LEGEND

REJECT GUTTER

XXXXXXX PROVIDE SAWCUT PRIOR TO REMOVING ASPHALTIC SURFACE TEMPORARY. USE THE SAWCUT EDGE TO FORM THE FLAG OF THE REPLACEMENT CURB AND GUTTER.

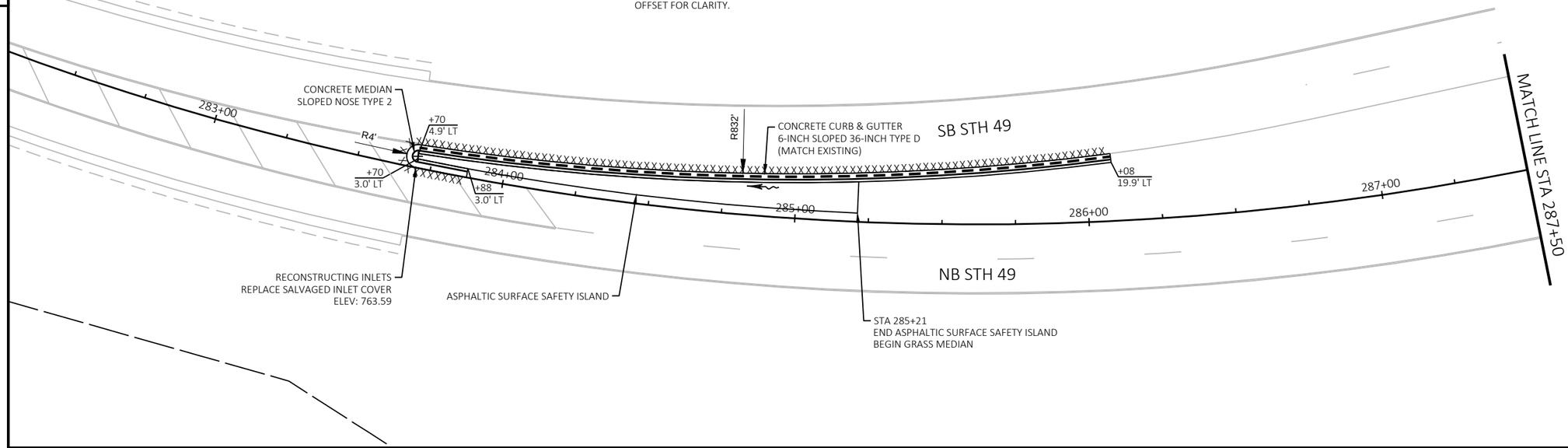
NOTES:
MATCH EXISTING CURB & GUTTER AND EDGE OF PAVEMENT.

SEE CONSTRUCTION DETAILS FOR ASPHALTIC SURFACE SAFETY ISLAND DETAILS.

SEE EROSION CONTROL PLANS FOR GRASS MEDIAN RESTORATION DETAILS.

FLOW ARROWS DENOTE FLOW DIRECTION OF THE CURB AND GUTTER AND ARE OFFSET FOR CLARITY.

N



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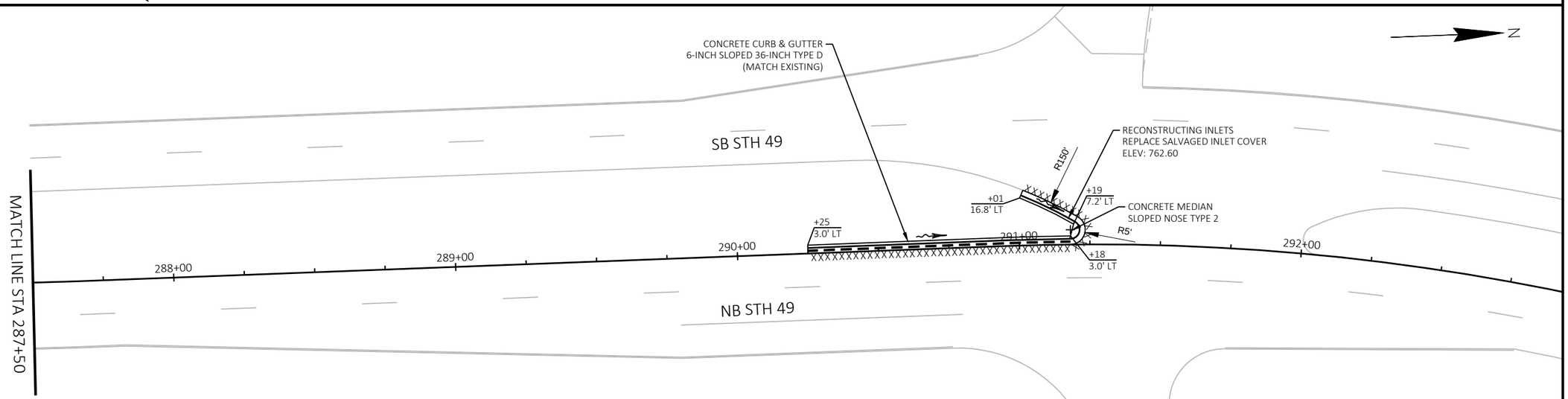


N

LEGEND

REJECT GUTTER

XXXXXXX PROVIDE SAWCUT PRIOR TO REMOVING ASPHALTIC SURFACE TEMPORARY. USE THE SAWCUT EDGE TO FORM THE FLAG OF THE REPLACEMENT CURB AND GUTTER.

NOTES:
MATCH EXISTING CURB & GUTTER AND EDGE OF PAVEMENT.

SEE CONSTRUCTION DETAILS FOR ASPHALTIC SURFACE SAFETY ISLAND DETAILS.

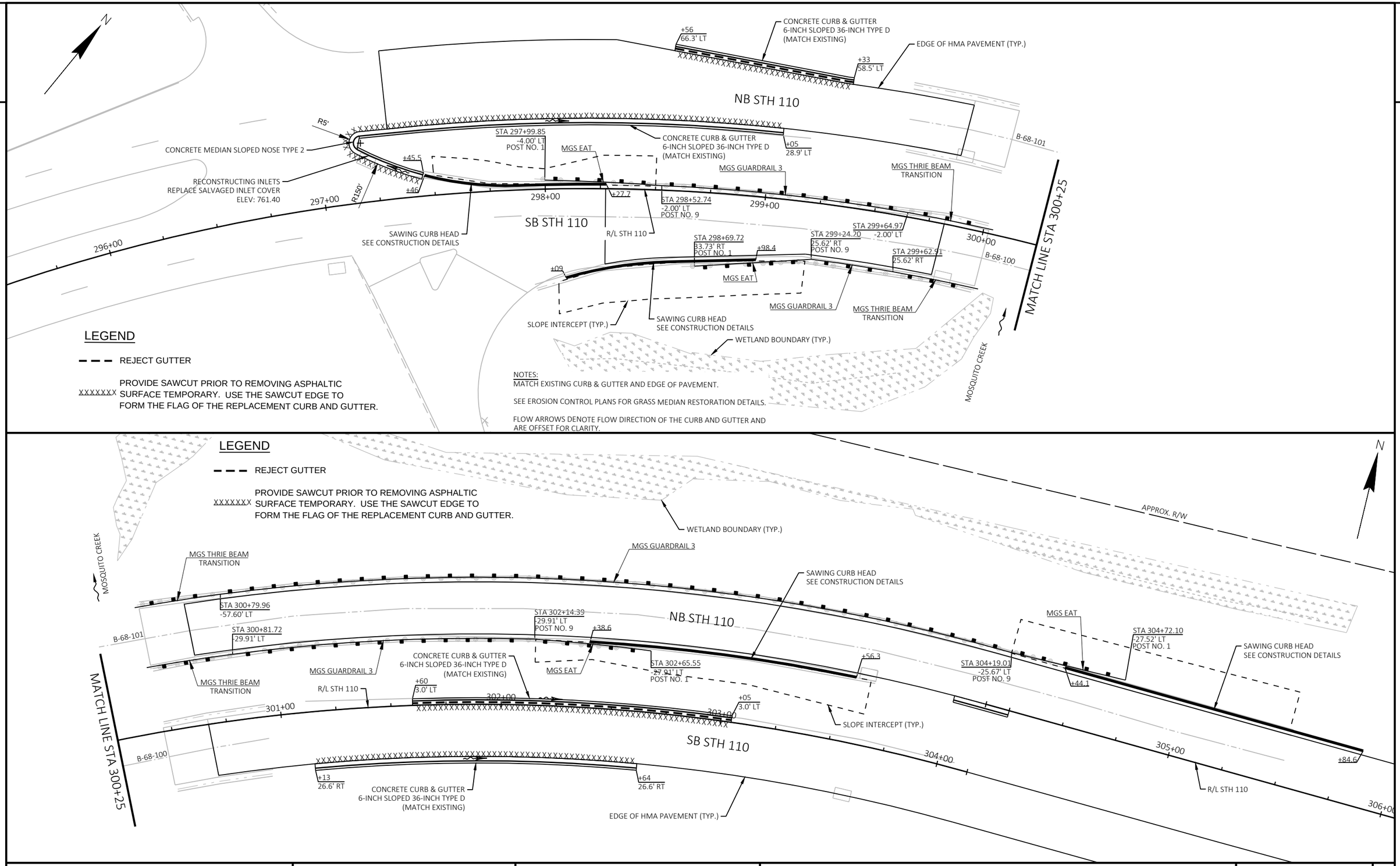
SEE EROSION CONTROL PLANS FOR GRASS MEDIAN RESTORATION DETAILS.

FLOW ARROWS DENOTE FLOW DIRECTION OF THE CURB AND GUTTER AND ARE OFFSET FOR CLARITY.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN DETAILS: STH 49 MEDIAN RESTORATION	SHEET 22	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 10:42 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

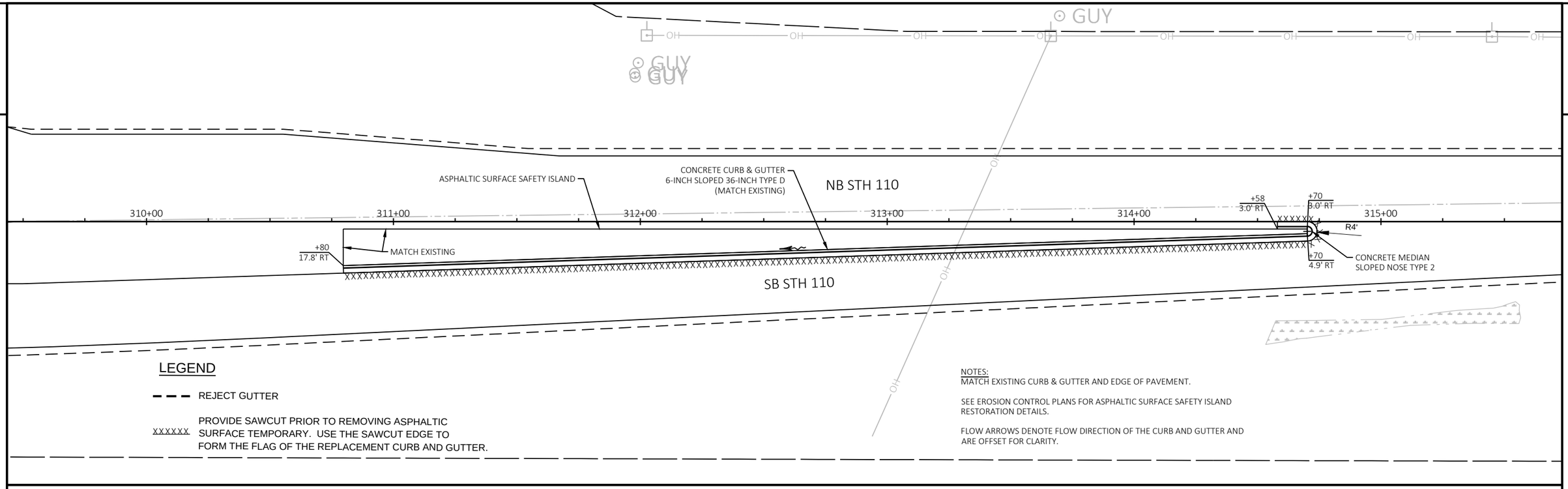
2



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN DETAILS: B-68-100/101 GUARDRAIL & MEDIAN RESTORATION	SHEET 23	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\6590207\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 10:42 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



LEGEND

REJECT GUTTER

XXXXXX PROVIDE SAWCUT PRIOR TO REMOVING ASPHALTIC SURFACE TEMPORARY. USE THE SAWCUT EDGE TO FORM THE FLAG OF THE REPLACEMENT CURB AND GUTTER.

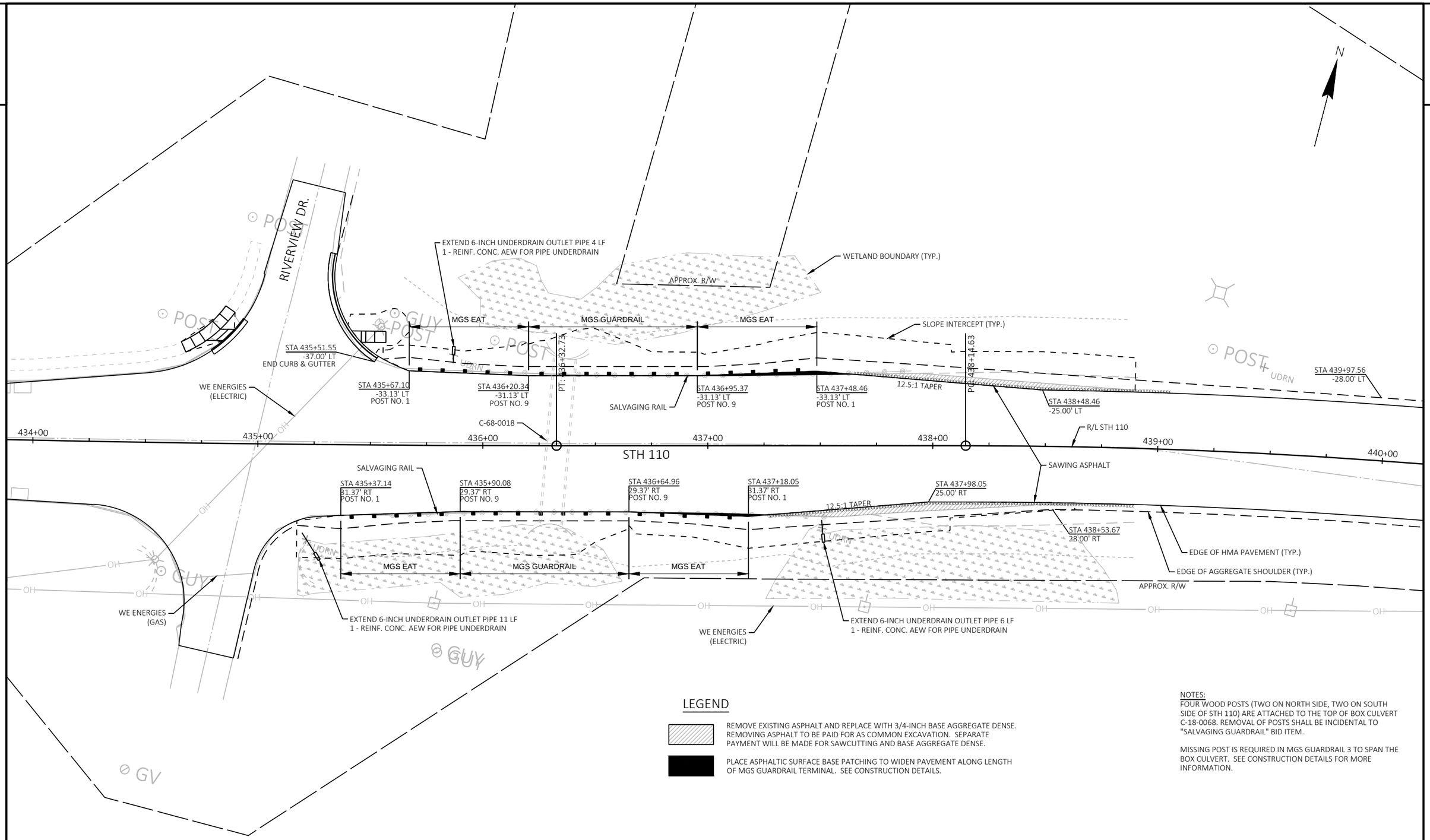
NOTES:
MATCH EXISTING CURB & GUTTER AND EDGE OF PAVEMENT.

SEE EROSION CONTROL PLANS FOR ASPHALTIC SURFACE SAFETY ISLAND RESTORATION DETAILS.

FLOW ARROWS DENOTE FLOW DIRECTION OF THE CURB AND GUTTER AND ARE OFFSET FOR CLARITY.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN DETAILS: STH 110 MEDIAN RESTORATION	SHEET 24	E

2



LEGEND

REMOVE EXISTING ASPHALT AND REPLACE WITH 3/4-INCH BASE AGGREGATE DENSE. REMOVING ASPHALT TO BE PAID FOR AS COMMON EXCAVATION. SEPARATE PAYMENT WILL BE MADE FOR SAWCUTTING AND BASE AGGREGATE DENSE.

PLACE ASPHALTIC SURFACE BASE PATCHING TO WIDEN PAVEMENT ALONG LENGTH OF MGS GUARDRAIL TERMINAL. SEE CONSTRUCTION DETAILS.

NOTES:
FOUR WOOD POSTS (TWO ON NORTH SIDE, TWO ON SOUTH SIDE OF STH 110) ARE ATTACHED TO THE TOP OF BOX CULVERT C-18-0068. REMOVAL OF POSTS SHALL BE INCIDENTAL TO "SALVAGING GUARDRAIL" BID ITEM.

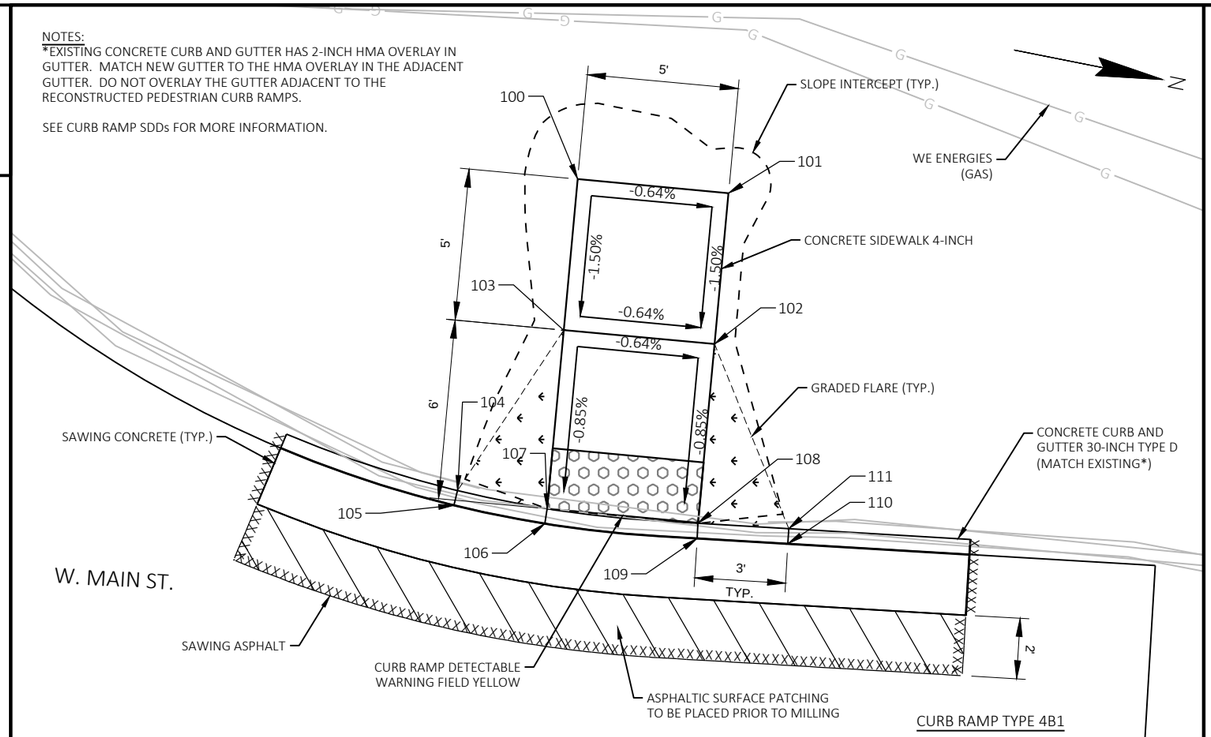
MISSING POST IS REQUIRED IN MGS GUARDRAIL 3 TO SPAN THE BOX CULVERT. SEE CONSTRUCTION DETAILS FOR MORE INFORMATION.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN DETAILS: C-68-0018 GUARDRAIL	SHEET 25	E

2

NOTES:
*EXISTING CONCRETE CURB AND GUTTER HAS 2-INCH HMA OVERLAY IN GUTTER. MATCH NEW GUTTER TO THE HMA OVERLAY IN THE ADJACENT GUTTER. DO NOT OVERLAY THE GUTTER ADJACENT TO THE RECONSTRUCTED PEDESTRIAN CURB RAMPS.

SEE CURB RAMP SDDs FOR MORE INFORMATION.



CURB RAMP TYPE 4B1

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
100	417+78.69	63.31 LT	305734.087	594075.905	755.10	XYZ
101	417+79.14	68.29 LT	305739.060	594075.387	755.07	XYZ
102	417+84.12	67.83 LT	305739.578	594080.360	754.99	XYZ
103	417+83.67	62.85 LT	305734.605	594080.878	755.03	XYZ
104	417+88.96	59.36 LT	305732.200	594086.753	0.00	XYZ
105	417+89.45	59.24 LT	305732.178	594087.253	0.00	XYZ
106	417+90.05	62.24 LT	305735.236	594087.262	0.00	XYZ
107	417+89.56	62.32 LT	305735.217	594086.763	754.98	XYZ
108	417+90.03	67.29 LT	305740.193	594086.266	754.94	XYZ
109	417+90.53	67.26 LT	305740.261	594086.761	0.00	XYZ
110	417+90.70	70.26 LT	305743.234	594086.351	0.00	XYZ
111	417+90.20	70.29 LT	305743.166	594085.855	0.00	XYZ

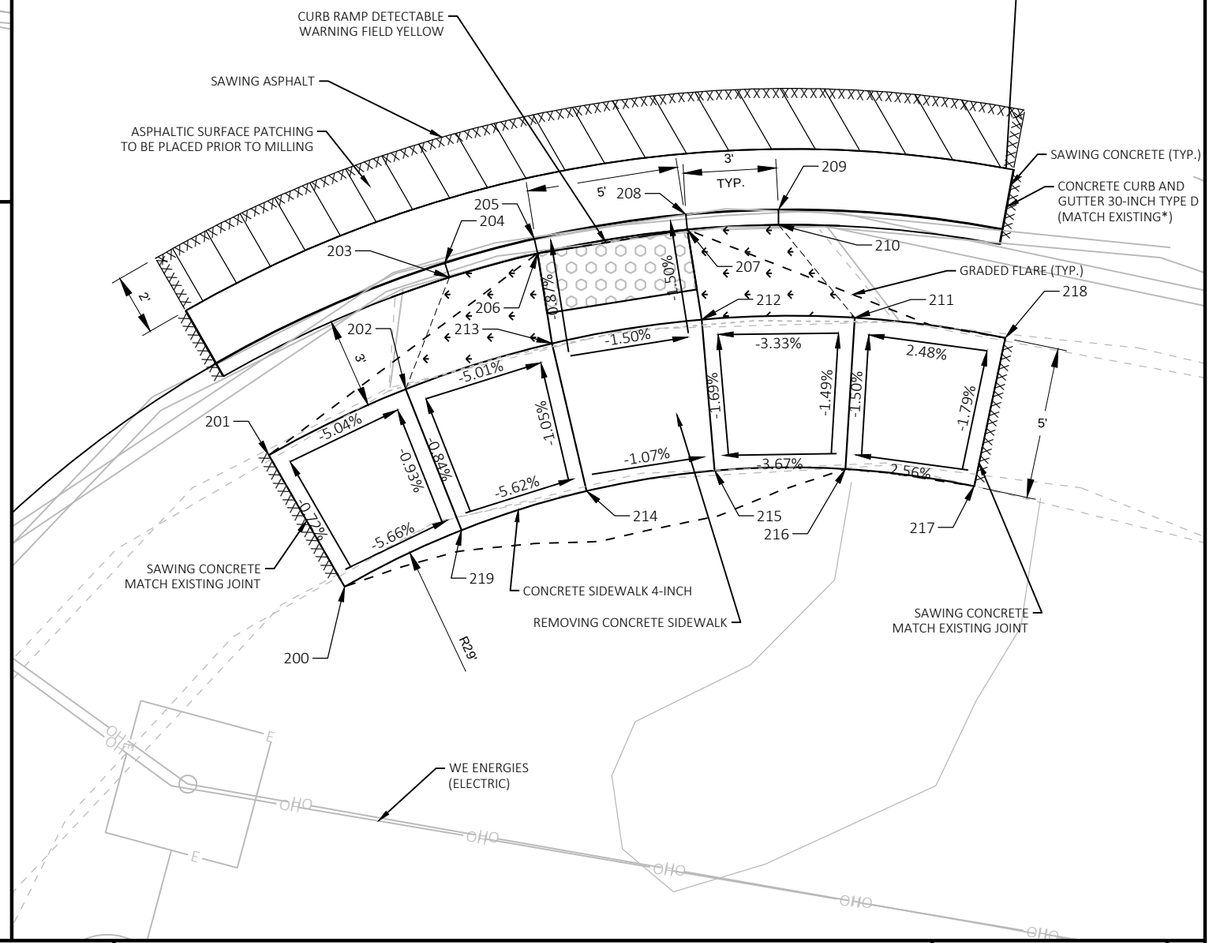
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
200	418+52.16	57.88 LT	305742.968	594149.039	755.73	XYZ
201	418+47.83	55.37 LT	305739.676	594145.275	755.69	XYZ
202	418+45.64	59.89 LT	305743.679	594142.257	755.44	XYZ
203	418+41.95	61.32 LT	305744.370	594138.356	0.00	XYZ
204	418+41.47	61.17 LT	305744.129	594137.918	0.00	XYZ
205	418+40.67	64.12 LT	305746.868	594136.558	0.00	XYZ
206	418+41.15	64.23 LT	305747.072	594137.014	755.16	XYZ
207	418+40.36	69.16 LT	305751.762	594135.280	755.07	XYZ
208	418+39.86	69.12 LT	305751.620	594134.801	0.00	XYZ
209	418+39.70	72.17 LT	305754.584	594134.053	0.00	XYZ
210	418+40.20	72.18 LT	305754.687	594134.542	0.00	XYZ
211	418+43.26	74.70 LT	305757.749	594137.056	755.28	XYZ
212	418+43.33	69.64 LT	305752.804	594138.101	755.11	XYZ
213	418+44.12	64.71 LT	305748.115	594139.835	755.19	XYZ
214	418+48.99	65.86 LT	305750.184	594144.387	755.24	XYZ
215	418+48.30	70.08 LT	305754.190	594142.893	755.19	XYZ
216	418+48.25	74.40 LT	305758.421	594142.011	755.35	XYZ
217	418+48.81	78.65 LT	305762.700	594141.736	755.24	XYZ
218	418+43.92	79.66 LT	305762.752	594136.744	755.15	XYZ
219	418+50.29	61.73 LT	305746.391	594146.458	755.48	XYZ
220	418+77.70	72.64 LT	305762.391	594171.243	0.00	RP (OFF SHEET)

NOTES:
*EXISTING CONCRETE CURB AND GUTTER HAS 2-INCH HMA OVERLAY IN GUTTER. MATCH NEW GUTTER TO THE HMA OVERLAY IN THE ADJACENT GUTTER. DO NOT OVERLAY THE GUTTER ADJACENT TO THE RECONSTRUCTED PEDESTRIAN CURB RAMPS.

SEE CURB RAMP SDDs FOR MORE INFORMATION.

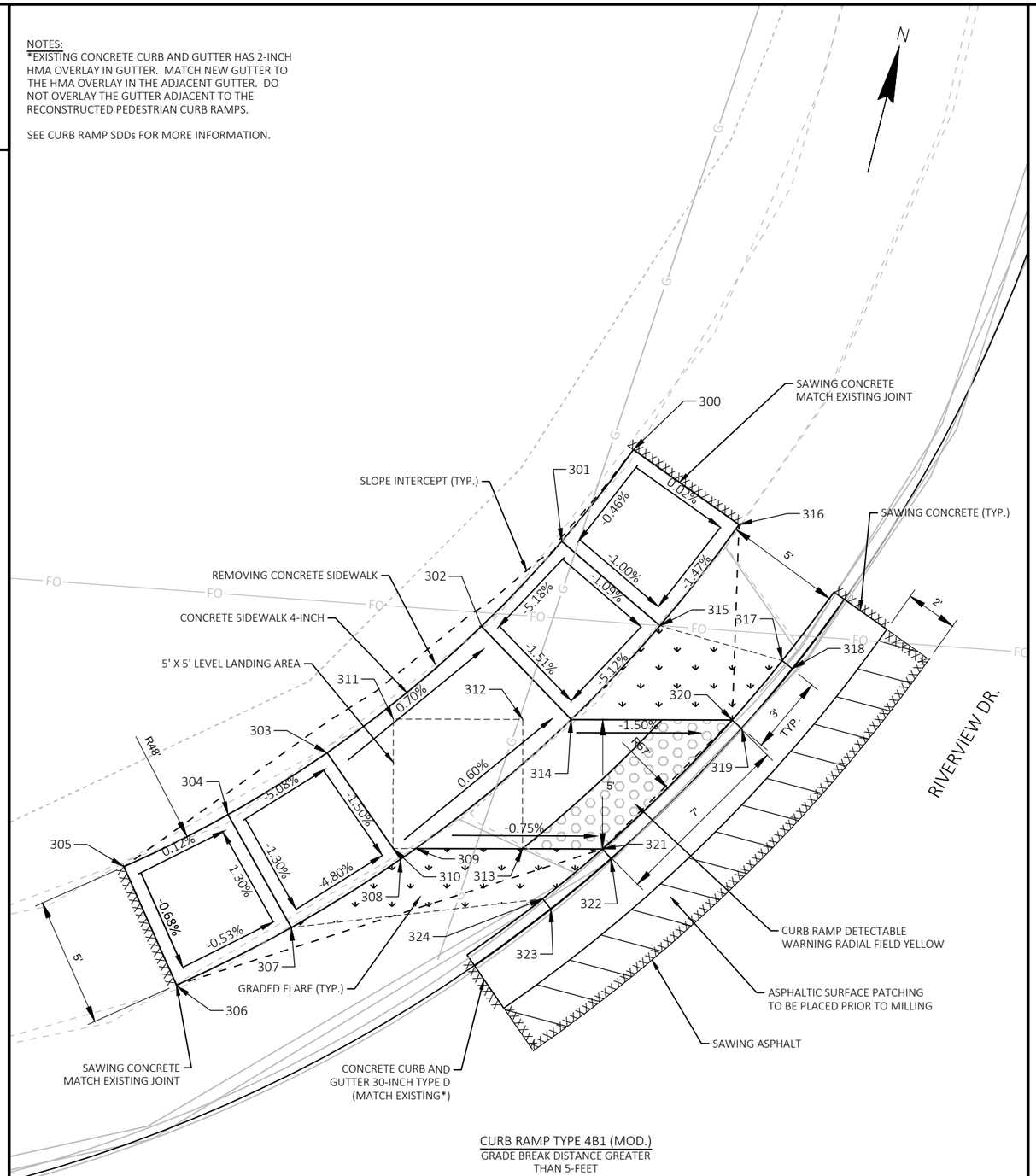
2

CURB RAMP TYPE 7B



NOTES:
*EXISTING CONCRETE CURB AND GUTTER HAS 2-INCH HMA OVERLAY IN GUTTER. MATCH NEW GUTTER TO THE HMA OVERLAY IN THE ADJACENT GUTTER. DO NOT OVERLAY THE GUTTER ADJACENT TO THE RECONSTRUCTED PEDESTRIAN CURB RAMPS.

SEE CURB RAMP SDDs FOR MORE INFORMATION.



CURB RAMP TYPE 4B1 (MOD.)
GRADE BREAK DISTANCE GREATER THAN 5-FEET

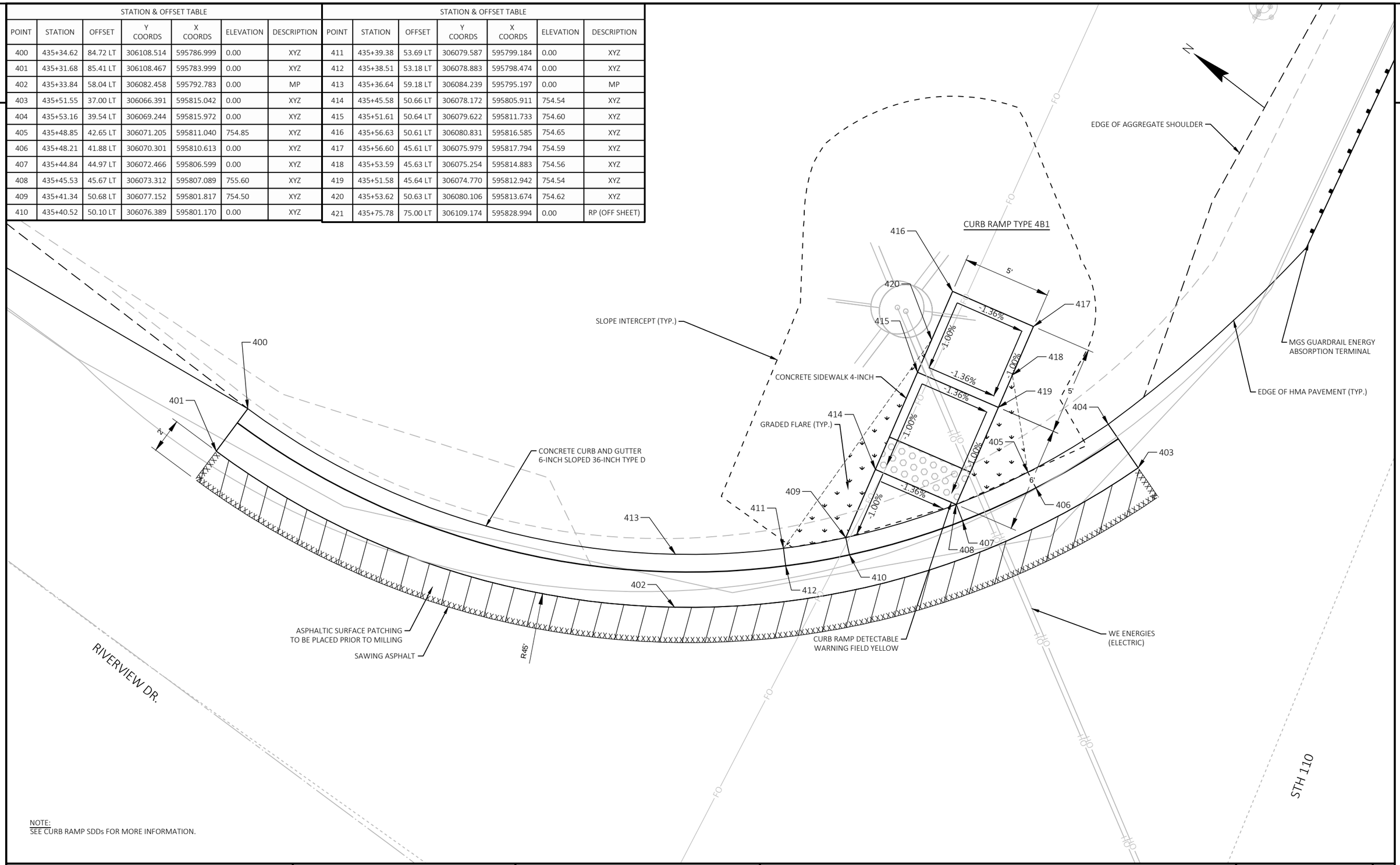
STH 110

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
300	434+84.99	61.18 LT	306073.716	595744.890	754.98	XYZ
301	434+82.23	57.63 LT	306069.607	595743.073	754.96	XYZ
302	434+79.13	54.33 LT	306065.668	595740.868	754.73	XYZ
303	434+73.16	49.42 LT	306059.473	595736.277	754.70	XYZ
304	434+69.32	47.00 LT	306056.218	595733.151	754.93	XYZ
305	434+65.30	44.97 LT	306053.283	595729.748	754.93	XYZ
306	434+67.38	40.37 LT	306049.315	595732.859	754.89	XYZ
307	434+71.81	42.66 LT	306052.589	595736.590	754.87	XYZ
308	434+76.04	45.32 LT	306056.183	595740.042	754.63	XYZ
309	434+76.62	45.73 LT	306056.724	595740.509	754.59	XYZ
310	434+75.73	45.73 LT	306056.511	595739.652	754.64	XYZ
311	434+75.72	50.73 LT	306061.363	595738.444	754.68	XYZ
312	434+80.75	50.74 LT	306062.571	595743.295	754.66	XYZ
313	434+80.76	45.74 LT	306057.720	595744.504	754.56	XYZ
314	434+82.63	50.75 LT	306063.024	595745.111	754.65	XYZ
315	434+86.05	54.38 LT	306067.372	595747.546	754.91	XYZ
316	434+89.11	58.30 LT	306071.910	595749.553	754.98	XYZ
317	434+90.81	53.06 LT	306067.225	595752.461	0.00	XYZ
318	434+91.20	52.74 LT	306067.017	595752.916	0.00	XYZ
319	434+89.25	50.42 LT	306064.297	595751.590	0.00	XYZ
320	434+88.88	50.75 LT	306064.527	595751.146	754.56	XYZ
321	434+83.86	45.75 LT	306058.467	595747.505	754.54	XYZ
322	434+84.19	45.37 LT	306058.184	595747.917	0.00	XYZ
323	434+81.87	43.42 LT	306055.736	595746.136	0.00	XYZ
324	434+81.56	43.82 LT	306056.040	595745.740	0.00	XYZ
325	434+45.40	88.70 LT	306091.057	595700.132	0.00	RP (OFF SHEET)

2

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
400	435+34.62	84.72 LT	306108.514	595786.999	0.00	XYZ
401	435+31.68	85.41 LT	306108.467	595783.999	0.00	XYZ
402	435+33.84	58.04 LT	306082.458	595792.783	0.00	MP
403	435+51.55	37.00 LT	306066.391	595815.042	0.00	XYZ
404	435+53.16	39.54 LT	306069.244	595815.972	0.00	XYZ
405	435+48.85	42.65 LT	306071.205	595811.040	754.85	XYZ
406	435+48.21	41.88 LT	306070.301	595810.613	0.00	XYZ
407	435+44.84	44.97 LT	306072.466	595806.599	0.00	XYZ
408	435+45.53	45.67 LT	306073.312	595807.089	755.60	XYZ
409	435+41.34	50.68 LT	306077.152	595801.817	754.50	XYZ
410	435+40.52	50.10 LT	306076.389	595801.170	0.00	XYZ

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
411	435+39.38	53.69 LT	306079.587	595799.184	0.00	XYZ
412	435+38.51	53.18 LT	306078.883	595798.474	0.00	XYZ
413	435+36.64	59.18 LT	306084.239	595795.197	0.00	MP
414	435+45.58	50.66 LT	306078.172	595805.911	754.54	XYZ
415	435+51.61	50.64 LT	306079.622	595811.733	754.60	XYZ
416	435+56.63	50.61 LT	306080.831	595816.585	754.65	XYZ
417	435+56.60	45.61 LT	306075.979	595817.794	754.59	XYZ
418	435+53.59	45.63 LT	306075.254	595814.883	754.56	XYZ
419	435+51.58	45.64 LT	306074.770	595812.942	754.54	XYZ
420	435+53.62	50.63 LT	306080.106	595813.674	754.62	XYZ
421	435+75.78	75.00 LT	306109.174	595828.994	0.00	RP (OFF SHEET)



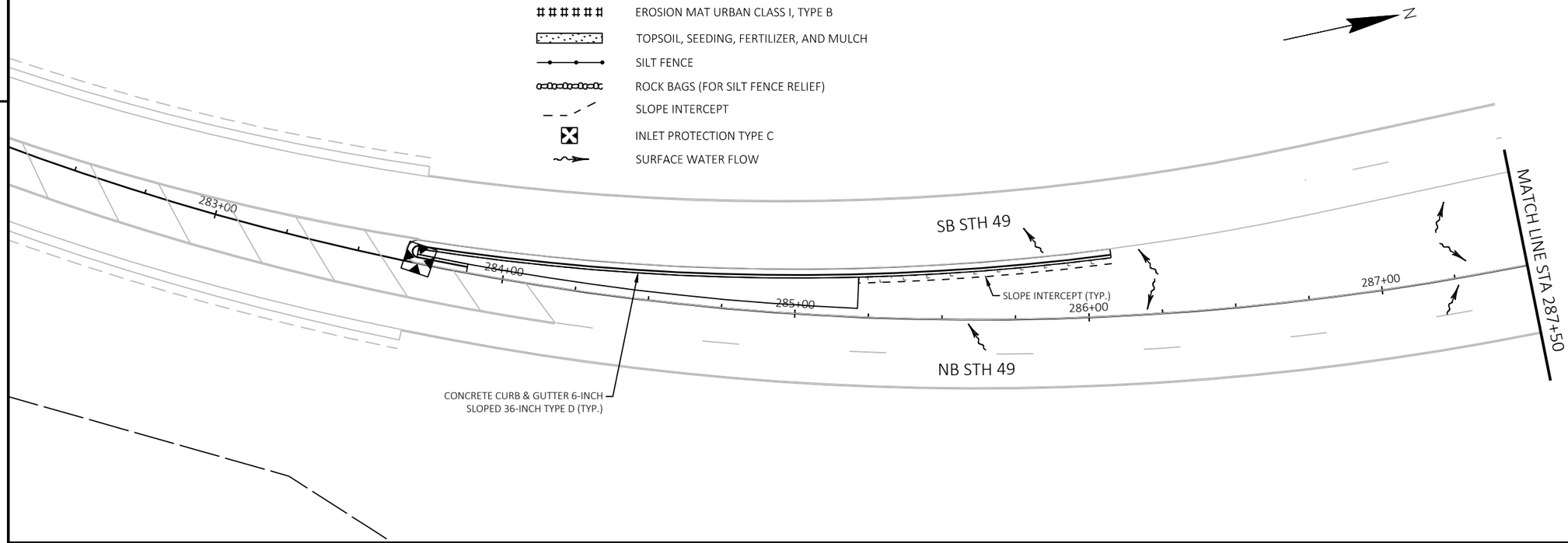
NOTE:
SEE CURB RAMP SDDs FOR MORE INFORMATION.

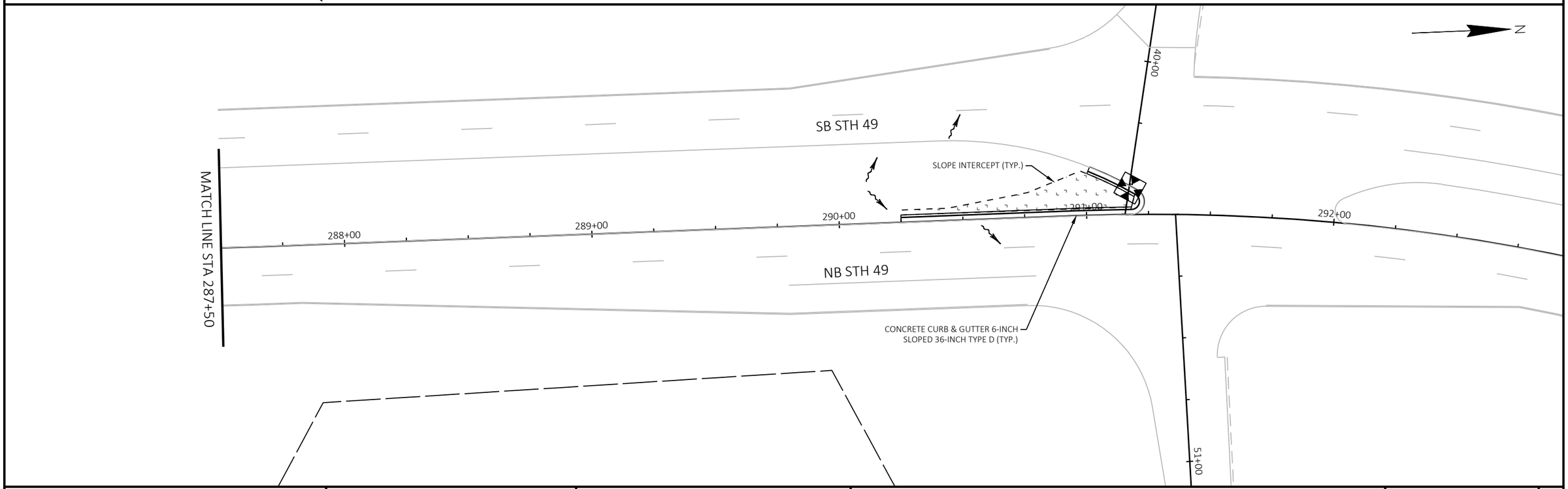
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CURB RAMP DETAILS	SHEET 28	E

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- TOPSOIL, SEEDING, FERTILIZER, AND MULCH
- SILT FENCE
- ROCK BAGS (FOR SILT FENCE RELIEF)
- SLOPE INTERCEPT
- INLET PROTECTION TYPE C
- SURFACE WATER FLOW

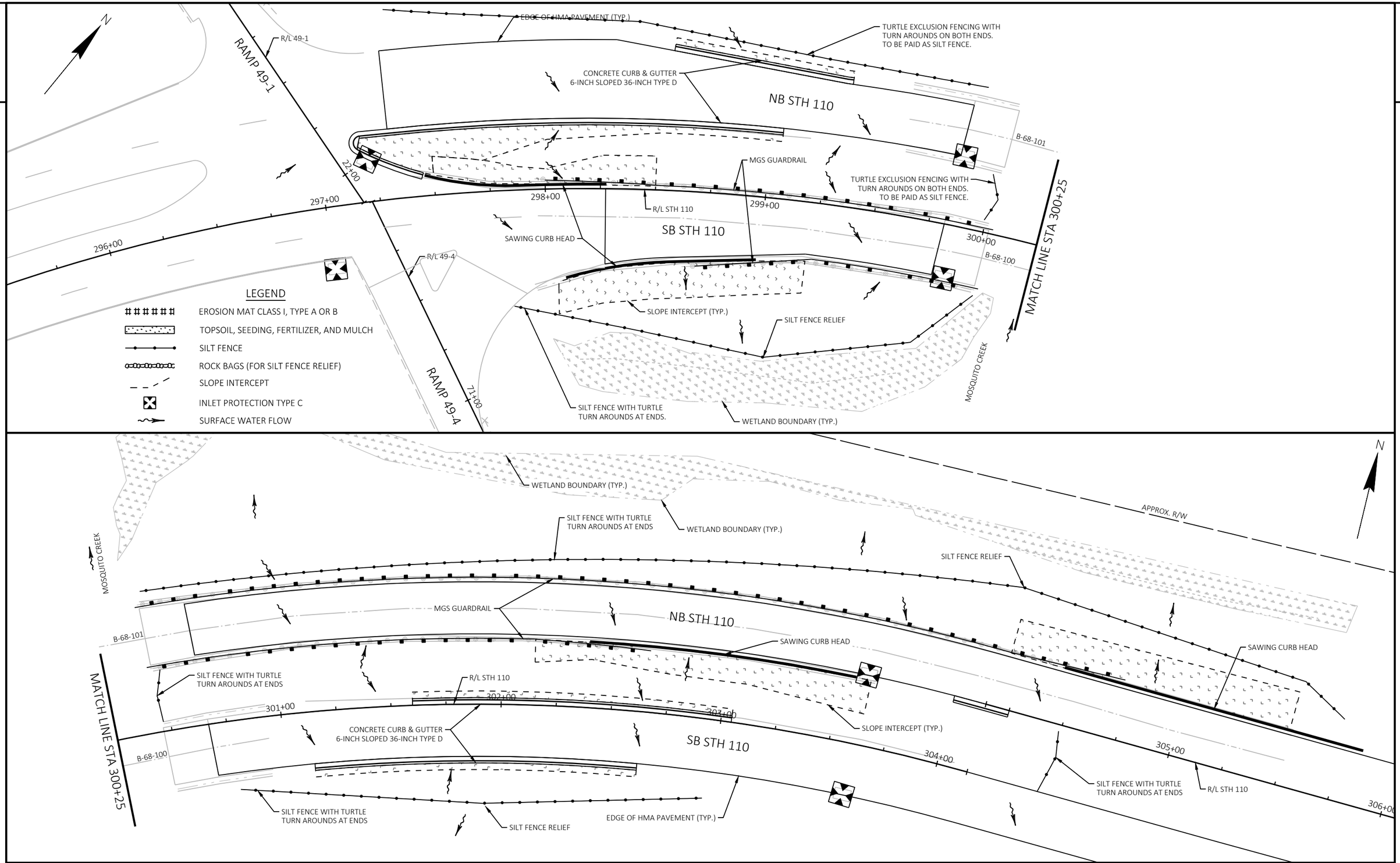




PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EROSION CONTROL DETAILS	SHEET 29	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01
PLOT DATE : 7/11/2023 9:18 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

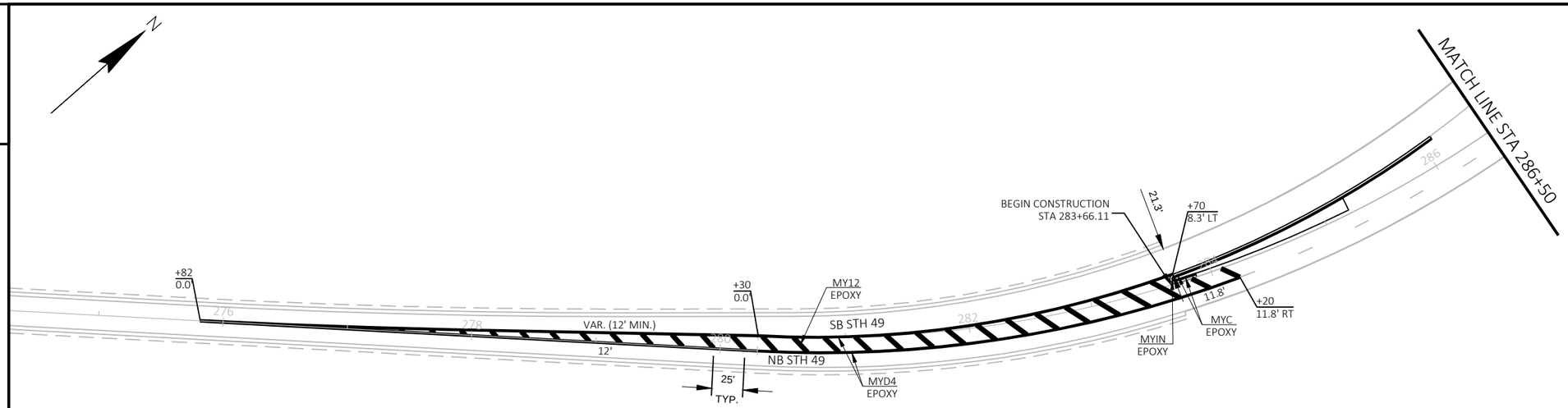


PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EROSION CONTROL DETAILS	SHEET 30	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02
PLOT DATE : 7/11/2023 9:30 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EROSION CONTROL DETAILS	SHEET 31	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 03
PLOT DATE : 7/11/2023 9:20 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PAVEMENT MARKING LEGEND

MW4	MARKING LINE 4-INCH (WHITE)
MY4	MARKING LINE 4-INCH (YELLOW)
MDY4	MARKING LINE 4-INCH (YELLOW) (DOUBLE SOLID)
MYD4	MARKING LINE 4-INCH (YELLOW) (2' LINE, 6' GAP)
MWD4	MARKING LINE 4-INCH (WHITE) (3' LINE, 9' GAP)
MWS4	MARKING LINE 4-INCH (WHITE) (12.5' LINE, 37.5' GAP)
MYS4	MARKING LINE 4-INCH (YELLOW) (12.5' LINE, 37.5' GAP)
MW8	MARKING LINE 8-INCH (WHITE)
MSLW18	MARKING STOP LINE 18-INCH (WHITE)
MY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW24	MARKING CHEVRON 24-INCH (WHITE)
MCWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
MYIN	MARKING ISLAND NOSE (YELLOW)
MYC	MARKING CURB (YELLOW)
MA	MARKING ARROW (SEE TYPES)
MW	MARKING WORD ("ONLY")
EPOXY	EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
GCWRE	GROOVED CONTRAST WET REFLECTIVE EPOXY

PAVEMENT MARKING ARROW TYPE 2 (LT/RT)

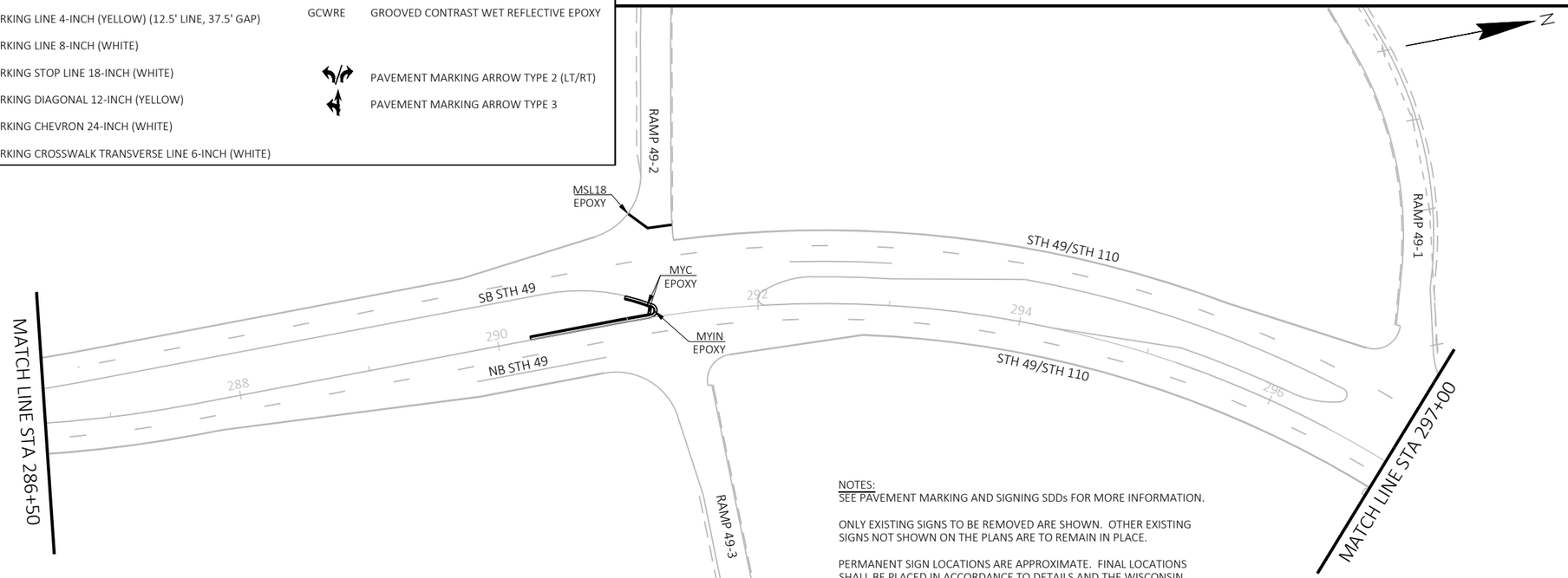
PAVEMENT MARKING ARROW TYPE 3

NOTES:
SEE PAVEMENT MARKING AND SIGNING SDDs FOR MORE INFORMATION.

ONLY EXISTING SIGNS TO BE REMOVED ARE SHOWN. OTHER EXISTING SIGNS NOT SHOWN ON THE PLANS ARE TO REMAIN IN PLACE.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE WISCONSIN MUTCD.

EXISTING NO PASSING ZONE PENNANTS SHALL BE MOVED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONES BID ITEM.



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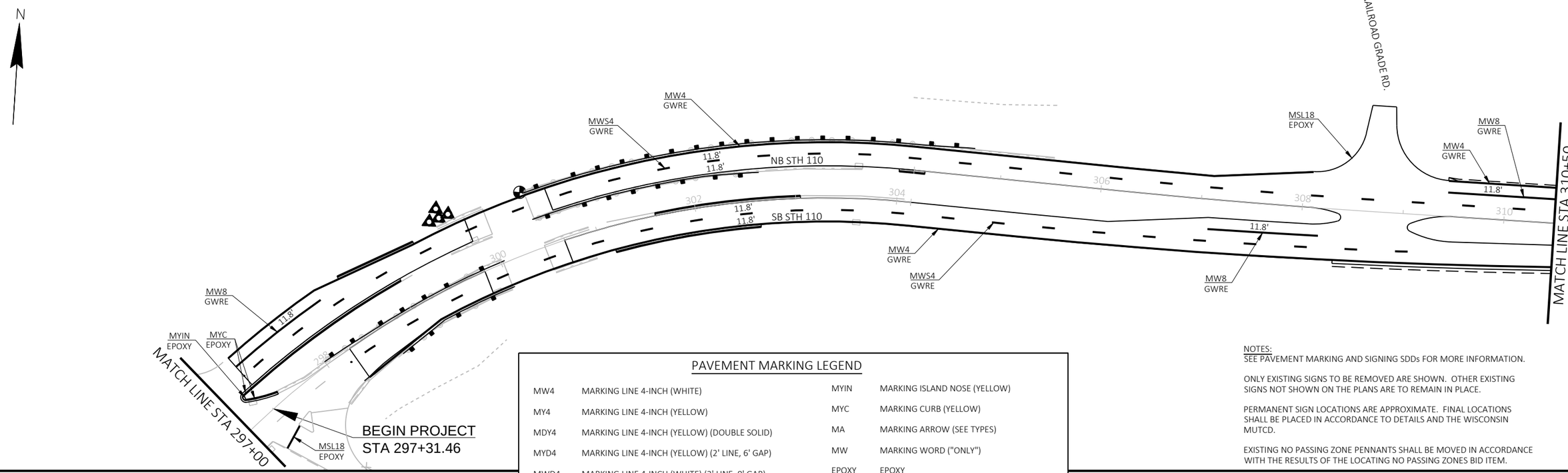

PAVEMENT MARKING LEGEND

MW4	MARKING LINE 4-INCH (WHITE)	MYIN	MARKING ISLAND NOSE (YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)	MYC	MARKING CURB (YELLOW)
MDY4	MARKING LINE 4-INCH (YELLOW) (DOUBLE SOLID)	MA	MARKING ARROW (SEE TYPES)
MYD4	MARKING LINE 4-INCH (YELLOW) (2' LINE, 6' GAP)	MW	MARKING WORD ("ONLY")
MWD4	MARKING LINE 4-INCH (WHITE) (3' LINE, 9' GAP)	EPOXY	EPOXY
MWS4	MARKING LINE 4-INCH (WHITE) (12.5' LINE, 37.5' GAP)	GWRE	GROOVED WET REFLECTIVE EPOXY
MYS4	MARKING LINE 4-INCH (YELLOW) (12.5' LINE, 37.5' GAP)	GCWRE	GROOVED CONTRAST WET REFLECTIVE EPOXY
MW8	MARKING LINE 8-INCH (WHITE)		
MSLW18	MARKING STOP LINE 18-INCH (WHITE)		PAVEMENT MARKING ARROW TYPE 2 (LT/RT)
MY12	MARKING DIAGONAL 12-INCH (YELLOW)		PAVEMENT MARKING ARROW TYPE 3
MW24	MARKING CHEVRON 24-INCH (WHITE)		
MCWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)		

NOTES:
SEE PAVEMENT MARKING AND SIGNING SDDs FOR MORE INFORMATION.

ONLY EXISTING SIGNS TO BE REMOVED ARE SHOWN. OTHER EXISTING SIGNS NOT SHOWN ON THE PLANS ARE TO REMAIN IN PLACE.

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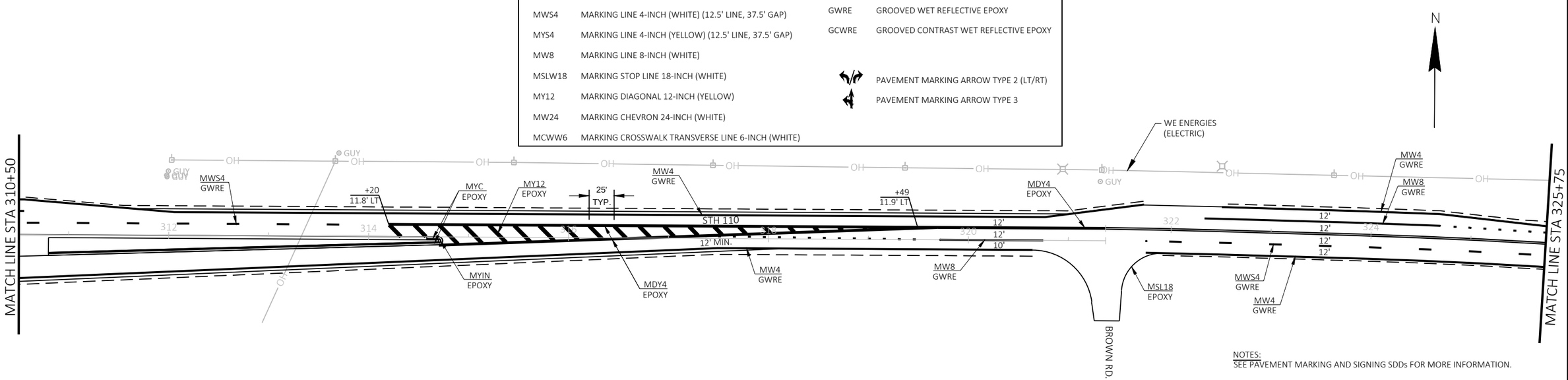

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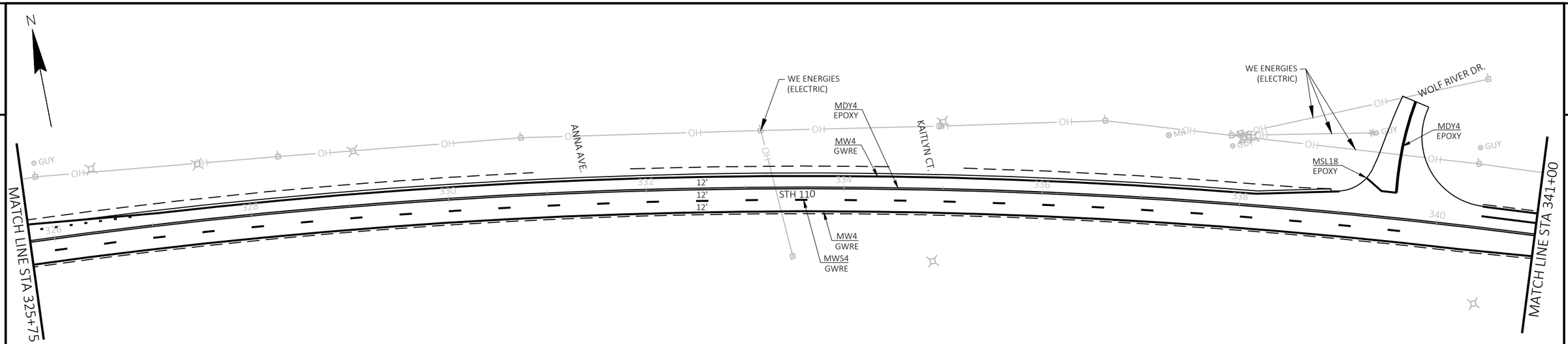

PAVEMENT MARKING LEGEND

MW4	MARKING LINE 4-INCH (WHITE)
MY4	MARKING LINE 4-INCH (YELLOW)
MDY4	MARKING LINE 4-INCH (YELLOW) (DOUBLE SOLID)
MYD4	MARKING LINE 4-INCH (YELLOW) (2' LINE, 6' GAP)
MWD4	MARKING LINE 4-INCH (WHITE) (3' LINE, 9' GAP)
MWS4	MARKING LINE 4-INCH (WHITE) (12.5' LINE, 37.5' GAP)
MYS4	MARKING LINE 4-INCH (YELLOW) (12.5' LINE, 37.5' GAP)
MW8	MARKING LINE 8-INCH (WHITE)
MSLW18	MARKING STOP LINE 18-INCH (WHITE)
MY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW24	MARKING CHEVRON 24-INCH (WHITE)
MCWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
MYIN	MARKING ISLAND NOSE (YELLOW)
MYC	MARKING CURB (YELLOW)
MA	MARKING ARROW (SEE TYPES)
MW	MARKING WORD ("ONLY")
EPOXY	EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
GCWRE	GROOVED CONTRAST WET REFLECTIVE EPOXY

PAVEMENT MARKING ARROW TYPE 2 (LT/RT)

PAVEMENT MARKING ARROW TYPE 3

NOTES:
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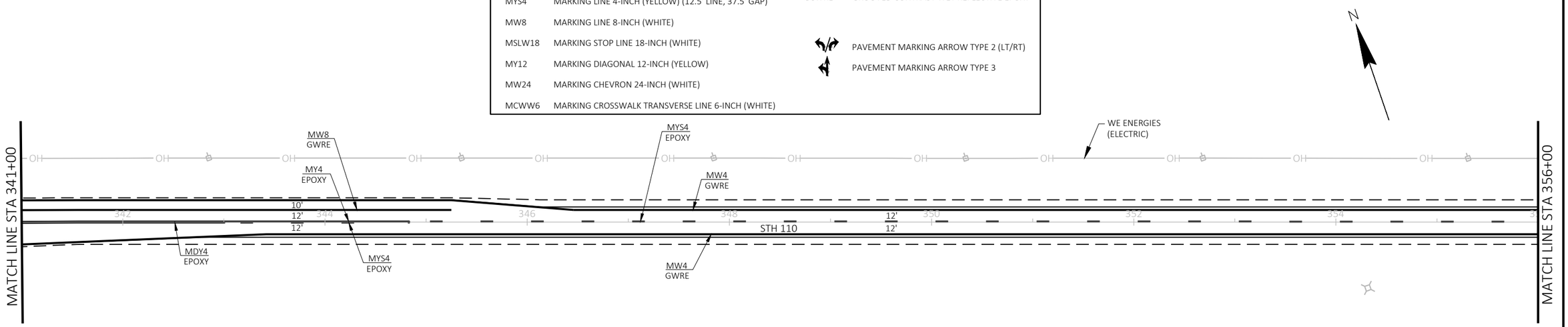

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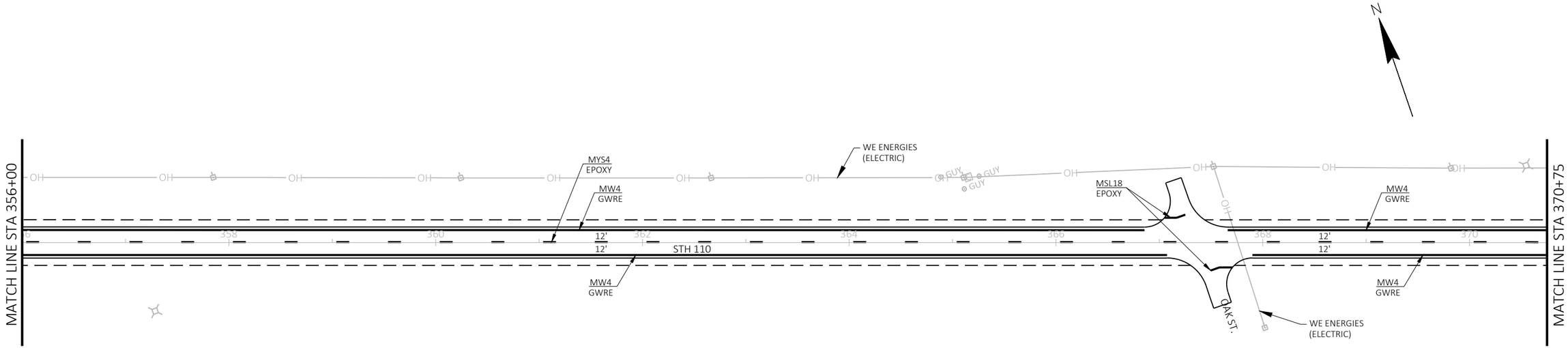
2



PAVEMENT MARKING LEGEND

MW4	MARKING LINE 4-INCH (WHITE)
MY4	MARKING LINE 4-INCH (YELLOW)
MDY4	MARKING LINE 4-INCH (YELLOW) (DOUBLE SOLID)
MYD4	MARKING LINE 4-INCH (YELLOW) (2' LINE, 6' GAP)
MWD4	MARKING LINE 4-INCH (WHITE) (3' LINE, 9' GAP)
MWS4	MARKING LINE 4-INCH (WHITE) (12.5' LINE, 37.5' GAP)
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MSLW18	MARKING STOP LINE 18-INCH (WHITE)
MY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW24	MARKING CHEVRON 24-INCH (WHITE)
MCWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
MYIN	MARKING ISLAND NOSE (YELLOW)
MYC	MARKING CURB (YELLOW)
MA	MARKING ARROW (SEE TYPES)
MW	MARKING WORD ("ONLY")
EPOXY	EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
GCWRE	GROOVED CONTRAST WET REFLECTIVE EPOXY

PAVEMENT MARKING ARROW TYPE 2 (LT/RT)

PAVEMENT MARKING ARROW TYPE 3

NOTES:
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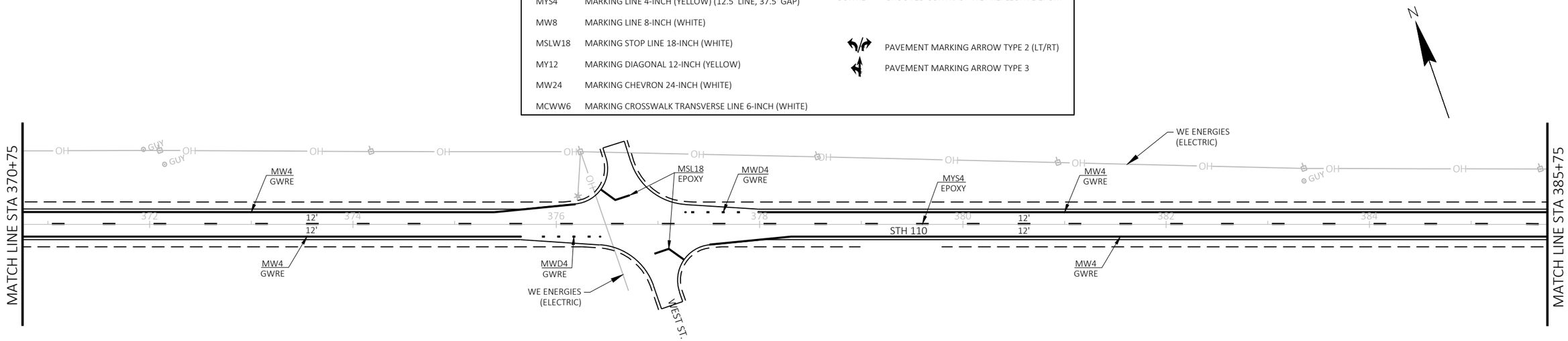

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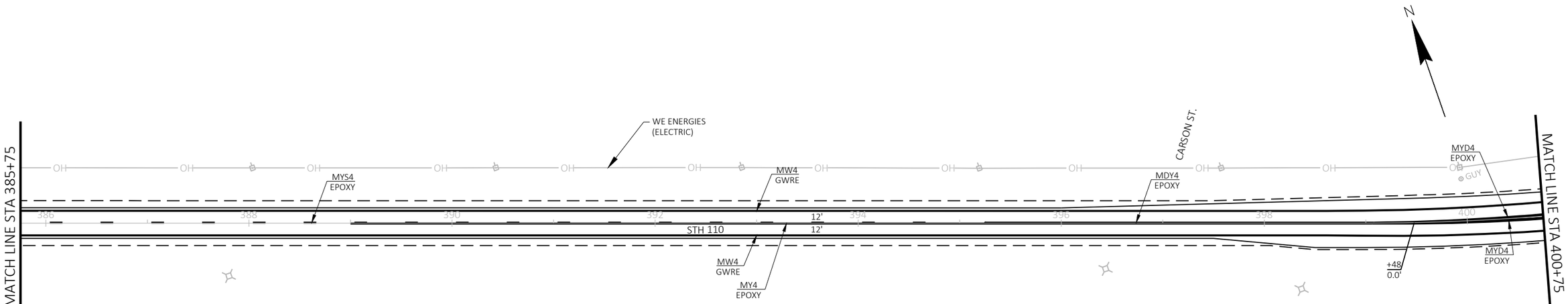

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST
- EXISTING CANTILEVER SIGN BRIDGE
- X.XX — EXISTING SIGN TO BE REMOVED
- X.XX — PROPOSED SIGN

PAVEMENT MARKING LEGEND

MW4	MARKING LINE 4-INCH (WHITE)
MY4	MARKING LINE 4-INCH (YELLOW)
MDY4	MARKING LINE 4-INCH (YELLOW) (DOUBLE SOLID)
MYD4	MARKING LINE 4-INCH (YELLOW) (2' LINE, 6' GAP)
MWD4	MARKING LINE 4-INCH (WHITE) (3' LINE, 9' GAP)
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MYS4	MARKING LINE 4-INCH (YELLOW) (12.5' LINE, 37.5' GAP)
MW8	MARKING LINE 8-INCH (WHITE)
MSLW18	MARKING STOP LINE 18-INCH (WHITE)
MY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW24	MARKING CHEVRON 24-INCH (WHITE)
MCWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
MYIN	MARKING ISLAND NOSE (YELLOW)
MYC	MARKING CURB (YELLOW)
MA	MARKING ARROW (SEE TYPES)
MW	MARKING WORD ("ONLY")
EPOXY	EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
GCWRE	GROOVED CONTRAST WET REFLECTIVE EPOXY

PAVEMENT MARKING ARROW TYPE 2 (LT/RT)

PAVEMENT MARKING ARROW TYPE 3

NOTES:
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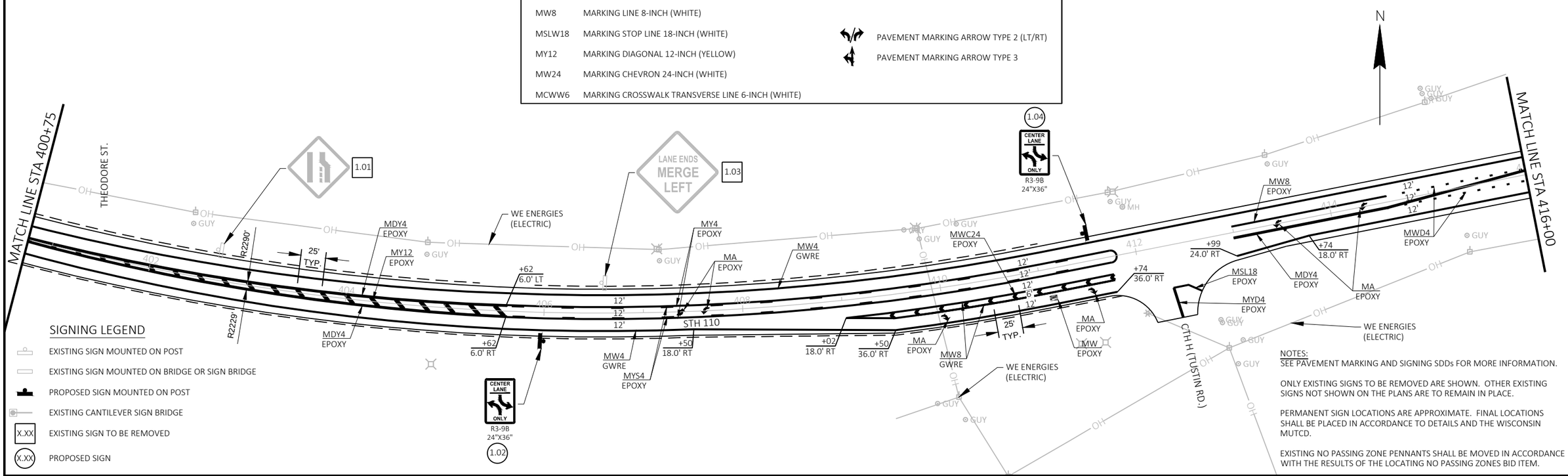

SIGNING LEGEND

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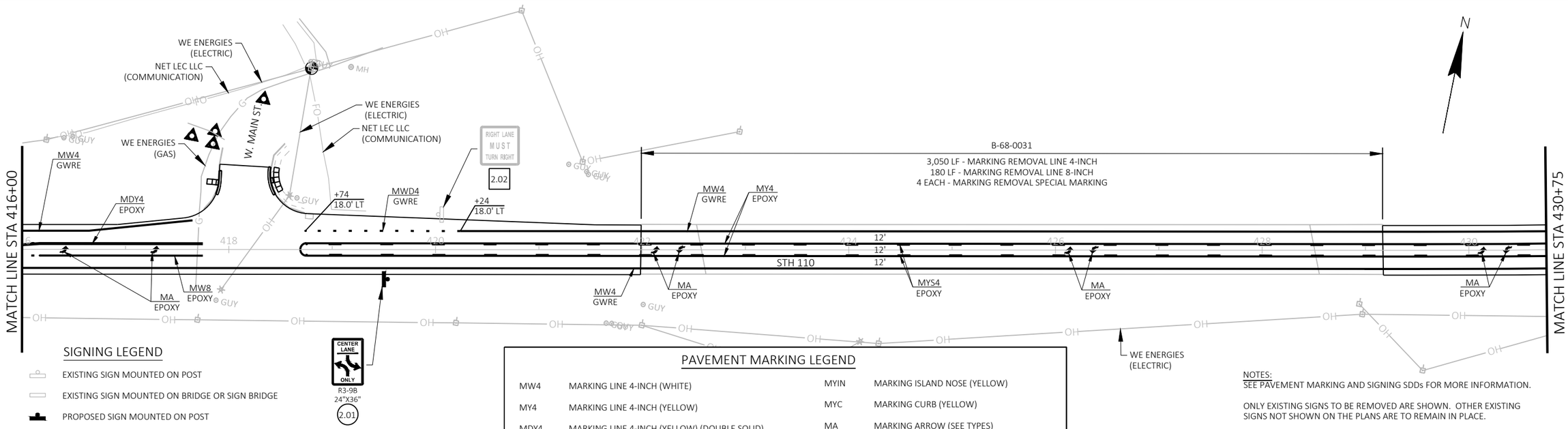
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PAVEMENT MARKING	SHEET 36	E



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PAVEMENT MARKING ARROW TYPE 2 (LT/RT)

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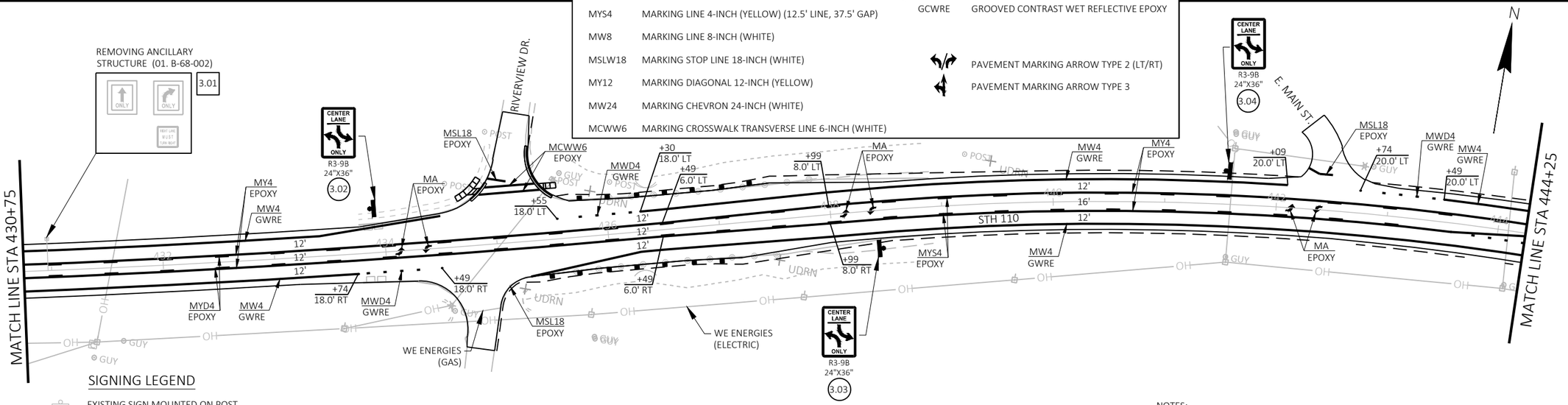

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST
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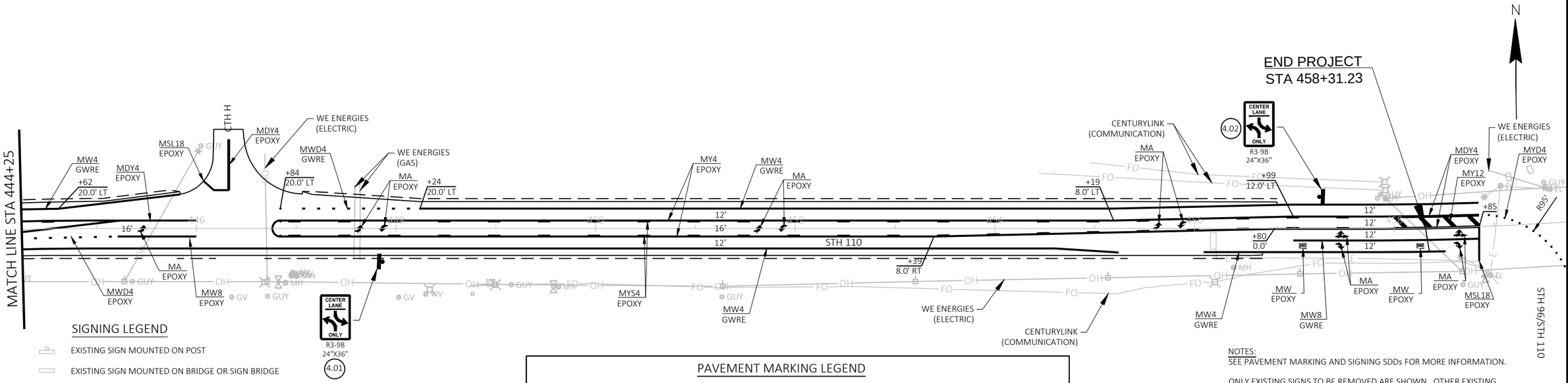
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PAVEMENT MARKING	SHEET 37	E



SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST
- EXISTING CANTILEVER SIGN BRIDGE
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PAVEMENT MARKING LEGEND

MW4	MARKING LINE 4-INCH (WHITE)
MY4	MARKING LINE 4-INCH (YELLOW)
MDY4	MARKING LINE 4-INCH (YELLOW) (DOUBLE SOLID)
MYD4	MARKING LINE 4-INCH (YELLOW) (2' LINE, 6' GAP)
MWD4	MARKING LINE 4-INCH (WHITE) (3' LINE, 9' GAP)
MWS4	MARKING LINE 4-INCH (WHITE) (12.5' LINE, 37.5' GAP)
MYS4	MARKING LINE 4-INCH (YELLOW) (12.5' LINE, 37.5' GAP)
MW8	MARKING LINE 8-INCH (WHITE)
MSLW18	MARKING STOP LINE 18-INCH (WHITE)
MY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW24	MARKING CHEVRON 24-INCH (WHITE)
MCWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
MYIN	MARKING ISLAND NOSE (YELLOW)
MYC	MARKING CURB (YELLOW)
MA	MARKING ARROW (SEE TYPES)
MW	MARKING WORD ("ONLY")
EPOXY	EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
GCWRE	GROOVED CONTRAST WET REFLECTIVE EPOXY

PAVEMENT MARKING ARROW TYPE 2 (LT/RT)

PAVEMENT MARKING ARROW TYPE 3

NOTES:
SEE PAVEMENT MARKING AND SIGNING SDDs FOR MORE INFORMATION.

ONLY EXISTING SIGNS TO BE REMOVED ARE SHOWN. OTHER EXISTING SIGNS NOT SHOWN ON THE PLANS ARE TO REMAIN IN PLACE.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE WISCONSIN MUTCD.

EXISTING NO PASSING ZONE PENNANTS SHALL BE MOVED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONES BID ITEM.

THIS FRAME INTENTIONALLY LEFT BLANK

2

TRAFFIC CONTROL NOTES (APPLIES TO ALL STAGES)

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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

DURING STAGING, ALL EXISTING SIGNS SHALL REMAIN IN THE FIELD EXCEPT AS NOTED ON THE STAGING PLANS.

STOP SIGNS THAT ARE MOVED SHALL HAVE TWO ORANGE FLAGS (16" X 16") ATTACHED TO THE MOVED STOP SIGN.

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

PAVEMENT MARKING WHICH MAY CONFLICT WITH TRAFFIC CONTROL SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

SEE SPECIAL PROVISIONS FOR TRAFFIC AND STAGING REQUIREMENTS.

STAGE 1A

1. CLOSE THE OUTSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND THE OUTSIDE LANES OF STH 110 BETWEEN TUSTIN ROAD AND STH 96 AND SHIFT TRAFFIC TO THE INSIDE LANES.
2. CONSTRUCT SPOT CURB & GUTTER REPAIRS ALONG THE OUTSIDE LANES OF STH 110.
3. ADJUST INLET COVERS ALONG THE OUTSIDE LANES OF STH 110.
4. REMOVE AND RECONSTRUCT THE PEDESTRIAN CURB RAMPS ON WEST MAIN STREET AND RIVERVIEW DRIVE.
5. INSTALL MGS GUARDRAIL TEMPORARY AT THE PARAPET ENDS OF B-68-100/101 ALONG THE OUTSIDE OF STH 110.

STAGE 1B

1. CLOSE THE INSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND SHIFT TRAFFIC TO THE OUTSIDE LANES.
2. CONSTRUCT SPOT CURB & GUTTER REPAIRS IN THE MEDIAN.
3. ADJUST INLET COVERS IN THE MEDIAN.
4. REMOVE THE CURB & GUTTER IN THE MEDIAN AND PLACE TEMPORARY ASPHALTIC SURFACE AS SHOWN IN THE PLANS.
5. INSTALL MGS GUARDRAIL TEMPORARY AT THE PARAPET ENDS OF B-68-100/101 IN THE MEDIAN.

STAGE 2

1. SHIFT TRAFFIC TO THE SOUTHBOUND LANES OF STH 49 AND THE NORTHBOUND LANES OF STH 110 USING TWO-WAY BI-DIRECTIONAL TRAFFIC THROUGH THE USH 10 INTERCHANGE.
2. CONSTRUCT THE SOUTHBOUND LANES OF STH 110 WITHIN THE INTERCHANGE AREA.

STAGE 3

1. SHIFT TRAFFIC TO THE NORTHBOUND LANES OF STH 49 AND THE SOUTHBOUND LANES OF STH 110 USING TWO-WAY BI-DIRECTIONAL TRAFFIC THROUGH THE USH 10 INTERCHANGE.
2. REPLACE CONCRETE CURB & GUTTER ALONG NORTHBOUND STH 110 REMOVED IN STAGES 1A/1B.
3. CONSTRUCT THE NORTHBOUND LANES OF STH 110 WITHIN THE INTERCHANGE AREA.

STAGE 4A

1. CLOSE THE INSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND SHIFT TRAFFIC TO THE OUTSIDE LANES.
2. REMOVE THE TEMPORARY PAVEMENT IN THE MEDIAN AND RECONSTRUCT THE CONCRETE CURB & GUTTER AND MEDIAN SURFACE.
3. REMOVE THE MGS GUARDRAIL TEMPORARY IN THE MEDIAN.
4. SAW THE CURB HEAD AND INSTALL PERMANENT MGS GUARDRAIL IN THE MEDIAN WHERE THE PLANS SHOW.

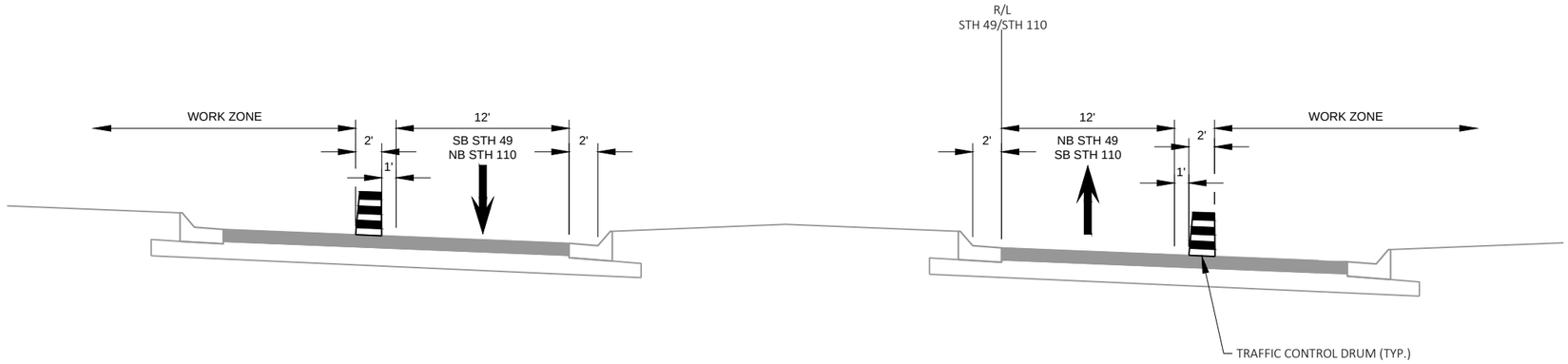
STAGE 4B

1. CLOSE THE OUTSIDE LANES OF STH 49 AND STH 110 THROUGH THE USH 10 INTERCHANGE AND SHIFT TRAFFIC TO THE INSIDE LANES.
2. CLOSE THE SHOULDERS OF STH 110 NEAR THE C-68-0018 BOX CULVERT.
3. REMOVE THE MGS GUARDRAIL TEMPORARY ON THE OUTSIDE AND REPLACE THE CURB AND GUTTER.
4. SAW THE CURB HEAD AND INSTALL PERMANENT MGS GUARDRAIL ON THE OUTSIDE WHERE THE PLANS SHOW.
5. INSTALL NEW MGS GUARDRAIL AT THE C-68-0018 BOX CULVERT AS SHOWN IN THE PLANS.

MILLING AND PAVING OPERATIONS

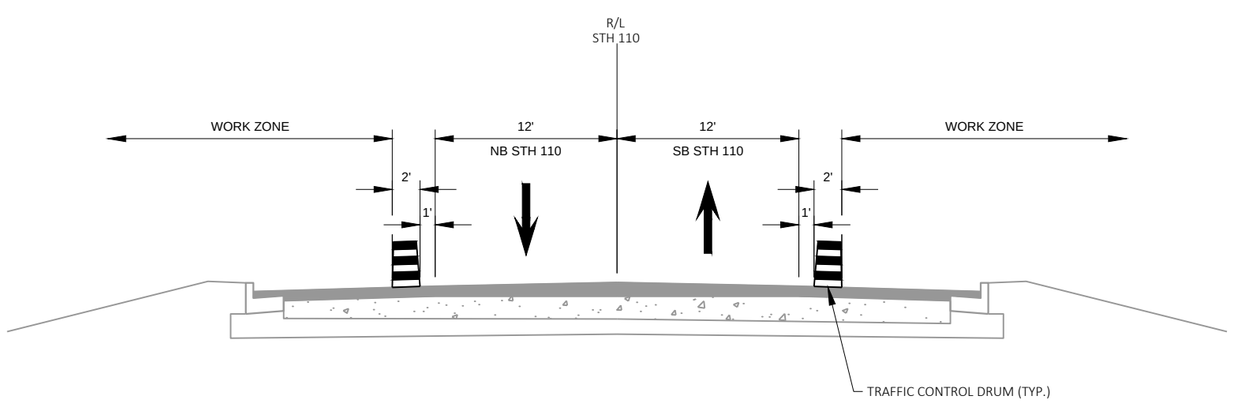
1. PROVIDE ADVANCE WARNING SIGNS AS SHOWN ON THE TRAFFIC CONTROL OVERVIEW PLANS.
2. PAVEMENT MILLING AND PAVING OUTSIDE OF THE INTERCHANGE AREA WILL BE ACCOMPLISHED USING S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION".
3. PAVEMENT MILLING AND PAVING SHALL BE COMPLETED AFTER COMPLETION OF CURB AND GUTTER REPAIRS AND CURB RAMP CONSTRUCTION IN STAGE 1A AND BEFORE C-68-0018 GUARDRAIL REPLACEMENT IN STAGE 4B.

2



TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 1A

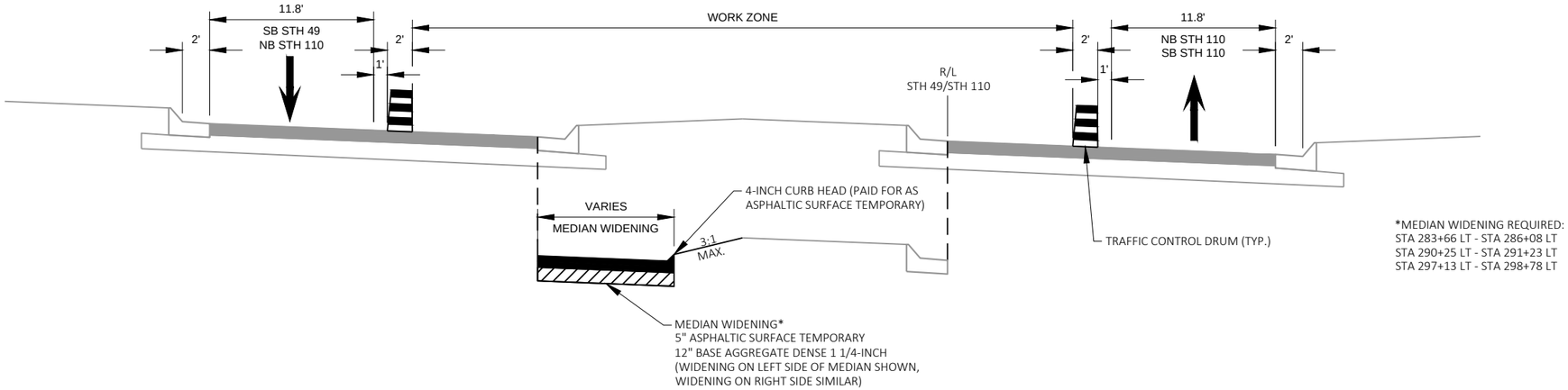
STA 284+20 - STA 308+48



TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 1A

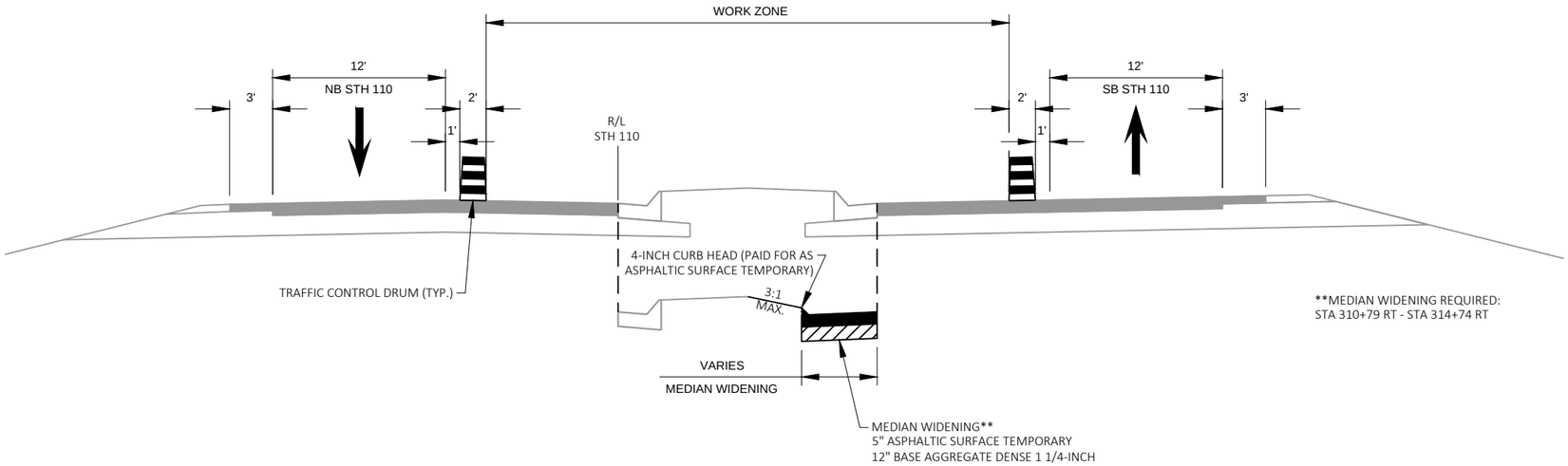
STA 411+00 - STA 435+00

2



TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 1B

STA 283+66 - STA 308+48



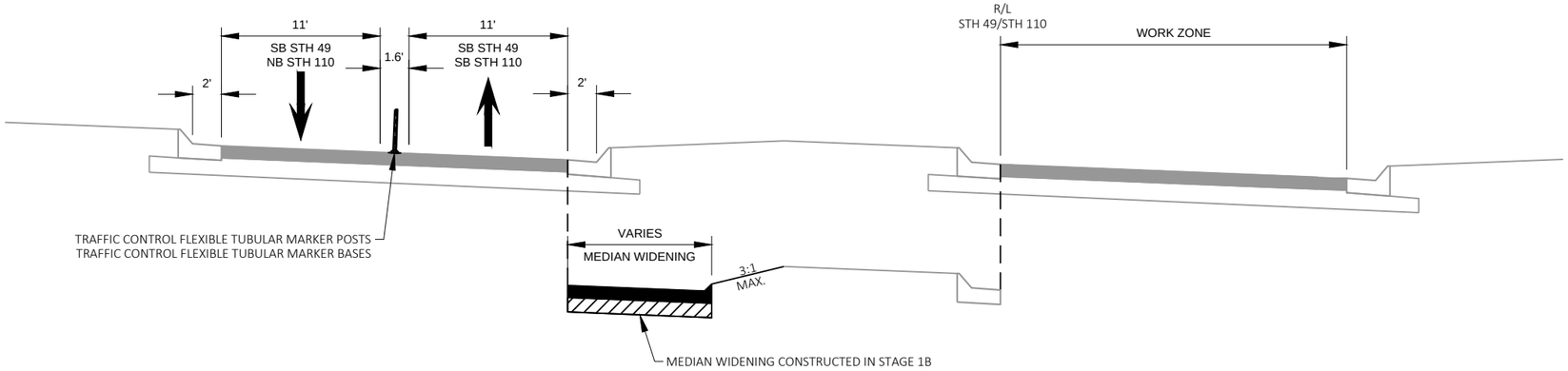
TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 1B

STA 308+48 - 314+74

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL TYPICAL SECTIONS: STAGE 1B	SHEET 41	E

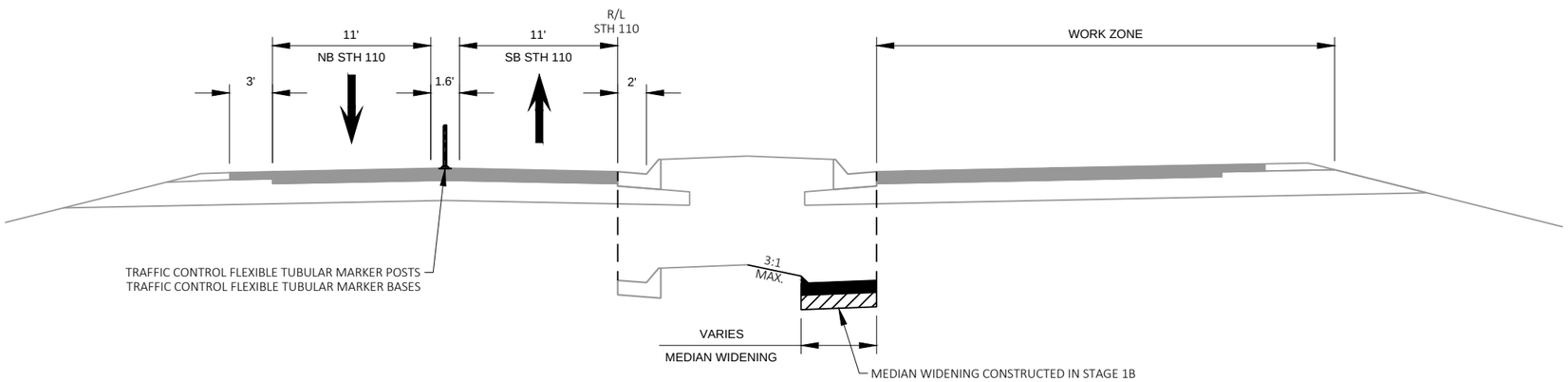
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 03
PLOT DATE : 7/6/2023 11:40 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



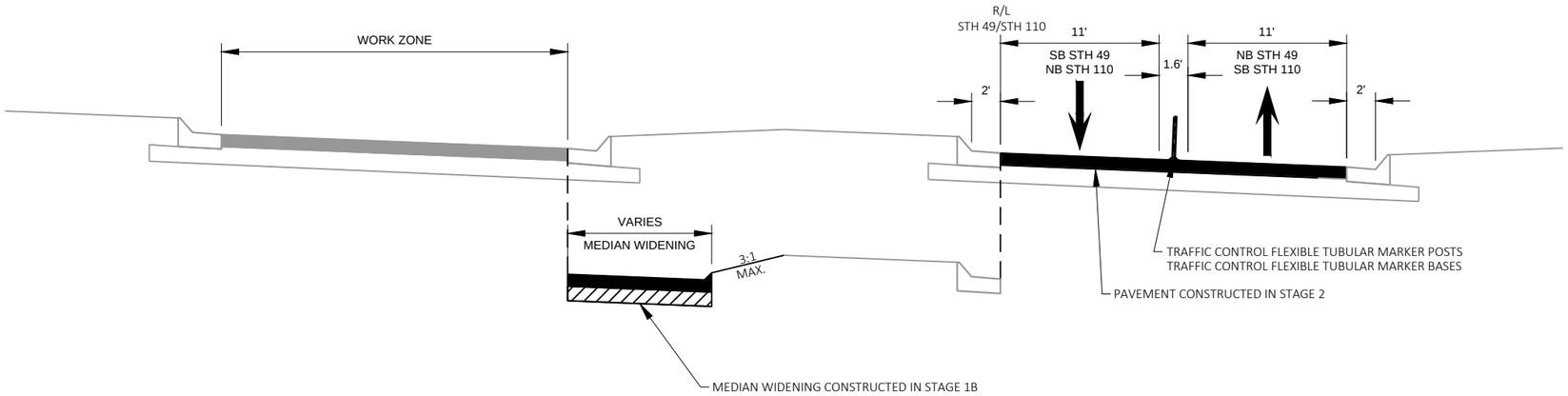
TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 2

STA 283+66 - STA 308+48



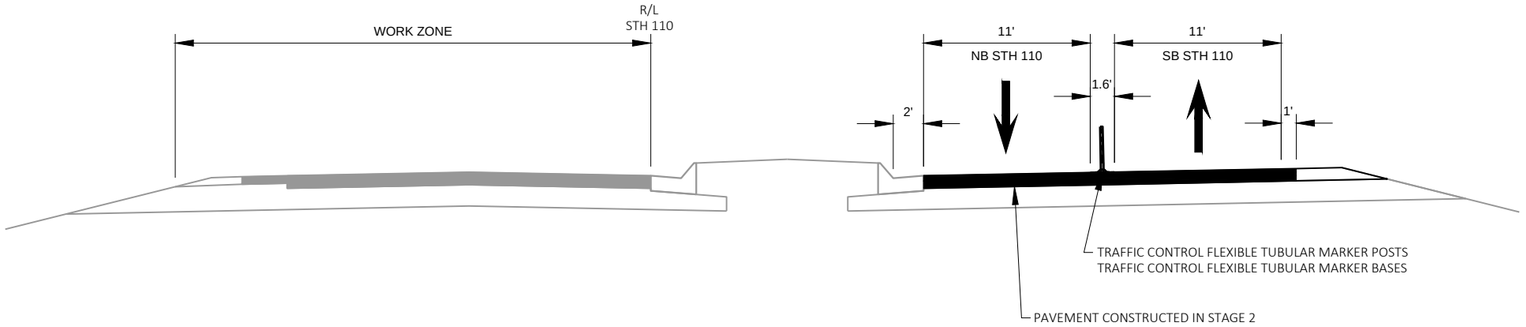
TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 2

STA 308+48 - 314+74



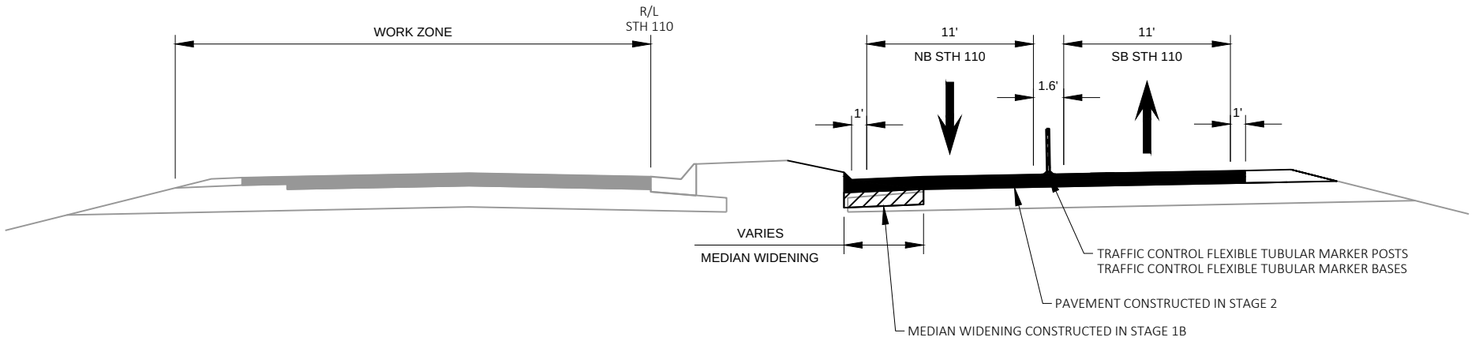
TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 3

STA 283+66 - STA 308+48



TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 3

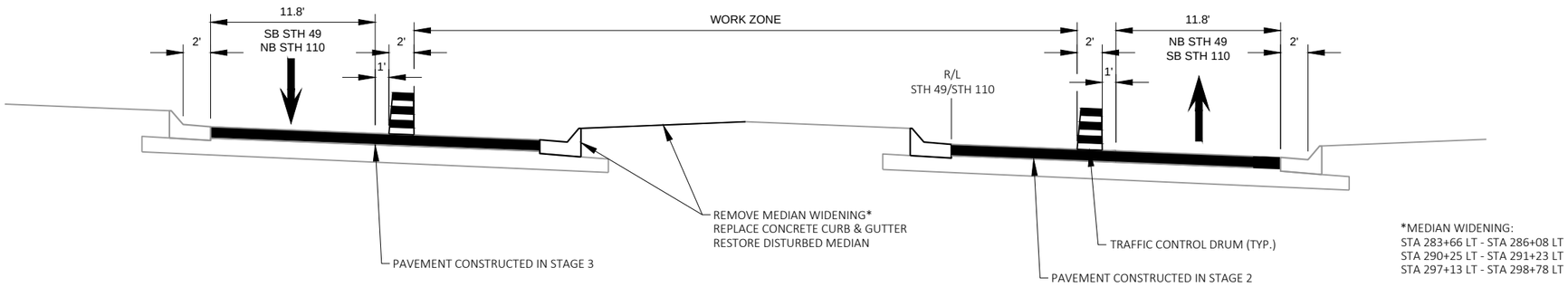
STA 308+48 - STA 310+79



TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 3

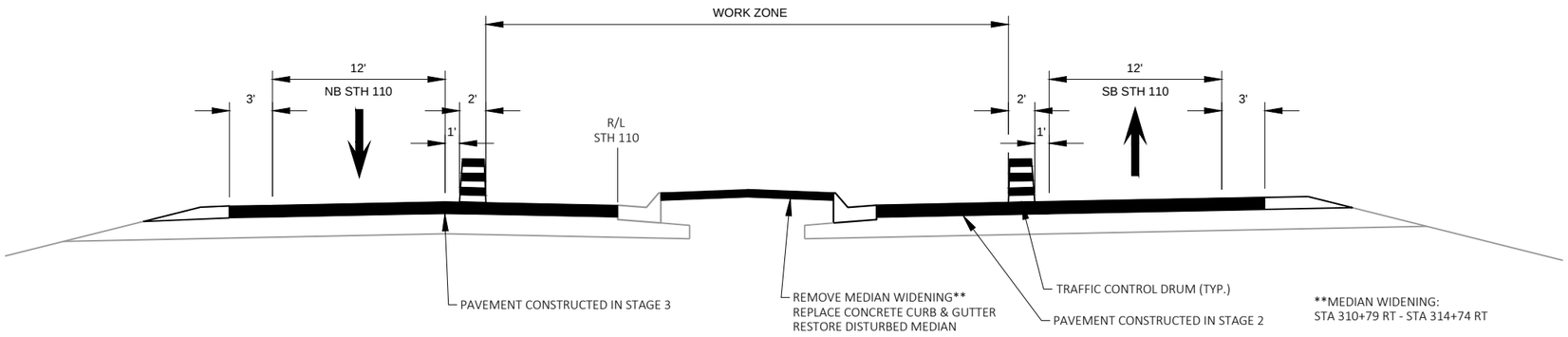
STA 310+79 - STA 314+74

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL TYPICAL SECTIONS: STAGE 3	SHEET 43	E



TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 4A

STA 283+66 - STA 308+48

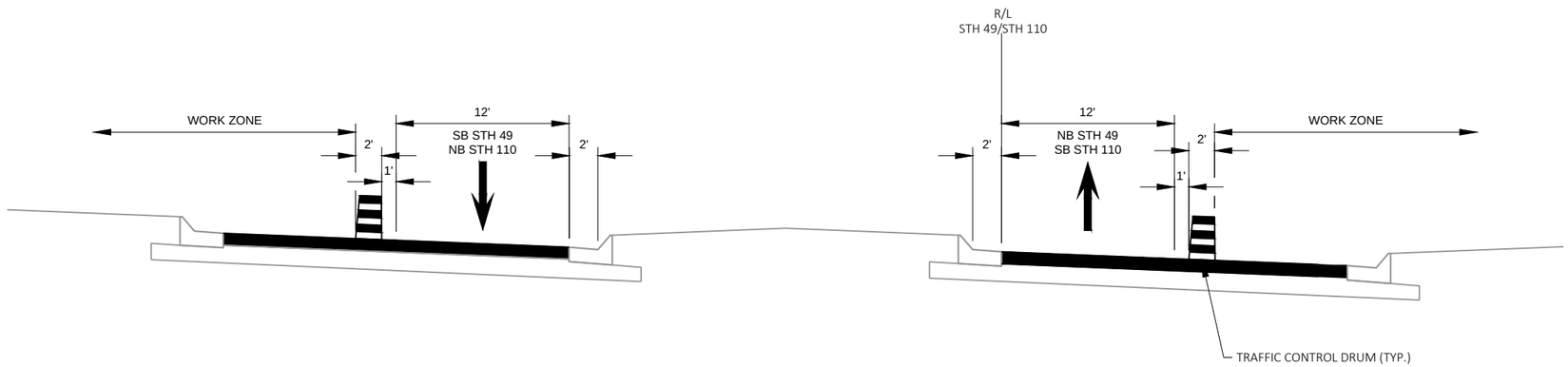


TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 4A

STA 308+48 - 314+74

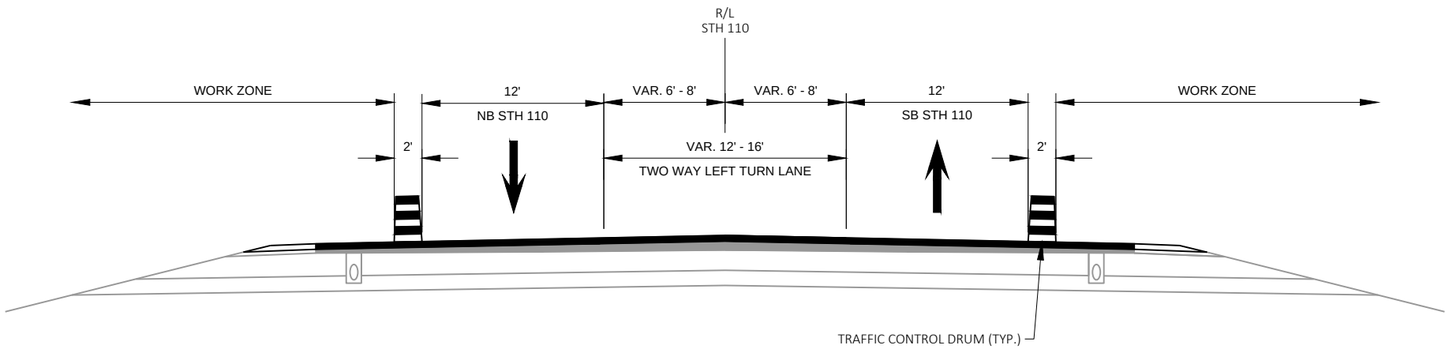
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL TYPICAL SECTIONS: STAGE 4A	SHEET 44	E

2



TRAFFIC CONTROL TYPICAL SECTION STH 49/STH 110 - STAGE 4B

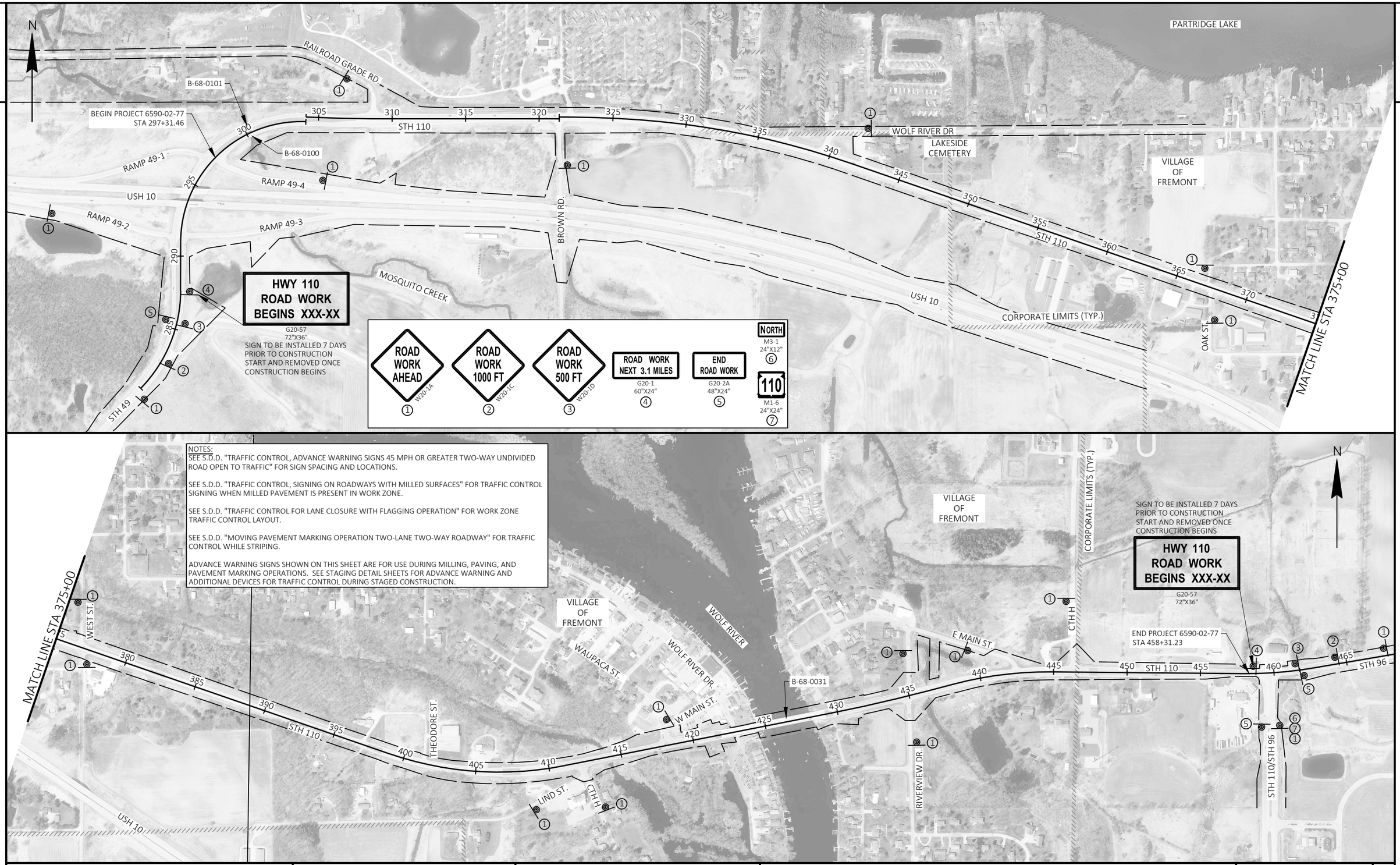
STA 283+66 - STA 308+48



TRAFFIC CONTROL TYPICAL SECTION STH 110 - STAGE 4B

STA 430+00 - STA 444+00

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL TYPICAL SECTIONS: STAGE 4B	SHEET 45	E



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: ADVANCE WARNING OVERVIEW	SHEET 46	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\025101-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 11:49 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:600 FT

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

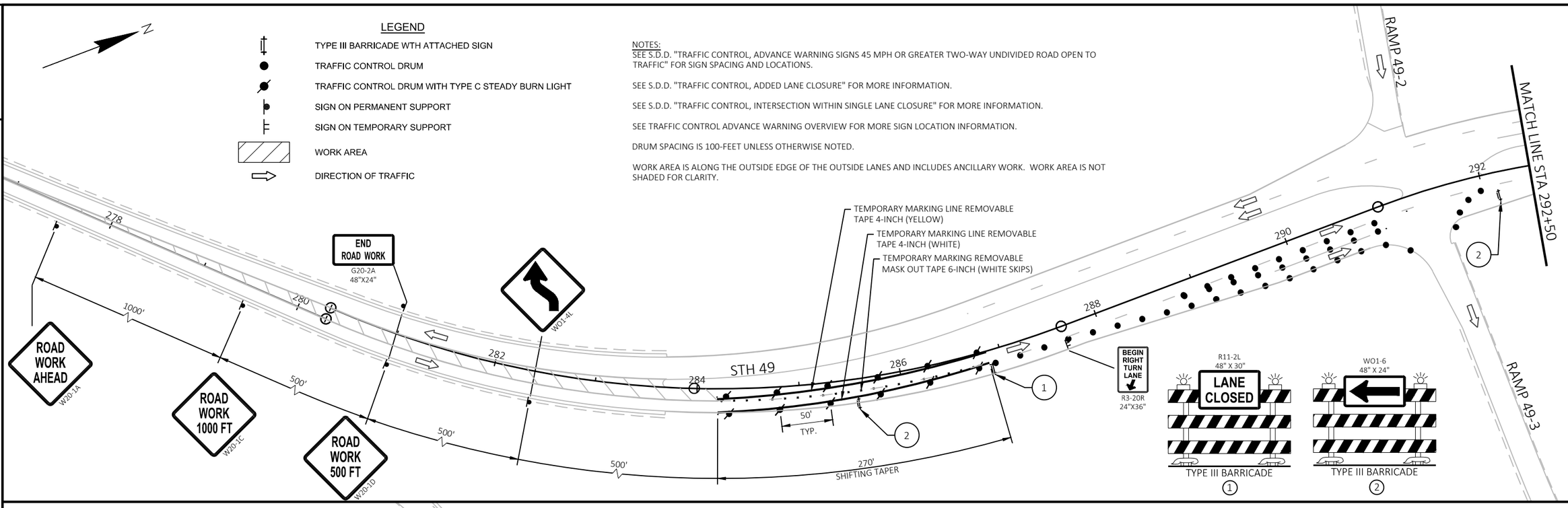
SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

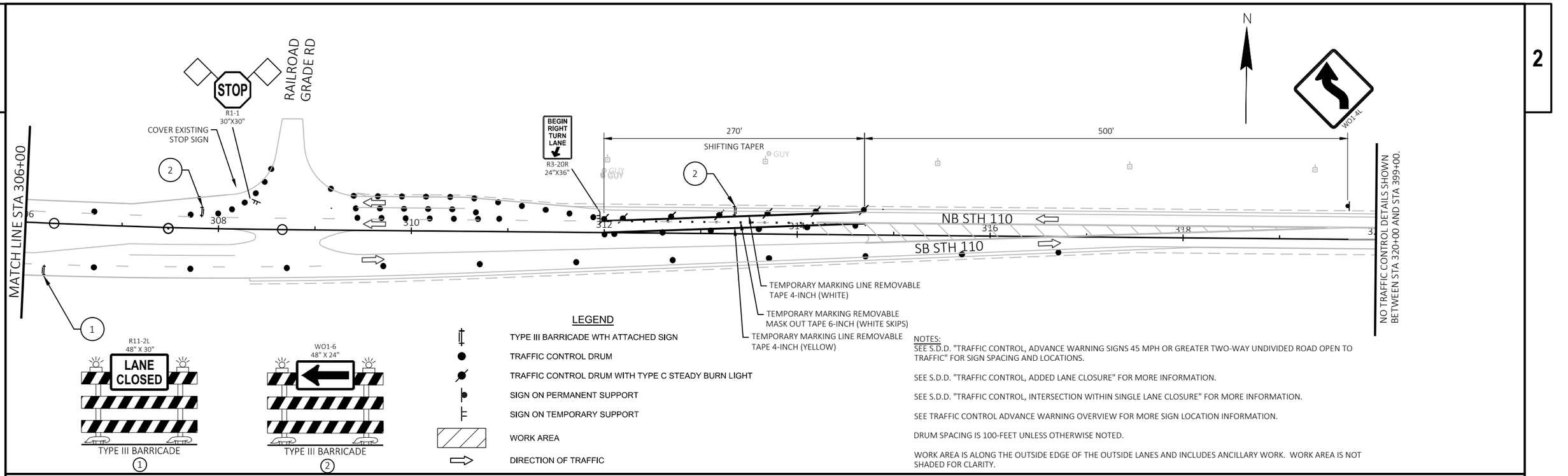
DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

WORK AREA IS ALONG THE OUTSIDE EDGE OF THE OUTSIDE LANES AND INCLUDES ANCILLARY WORK. WORK AREA IS NOT SHADED FOR CLARITY.



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1A	SHEET 47	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026001-S1A.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 11:50 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



NOTES:

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

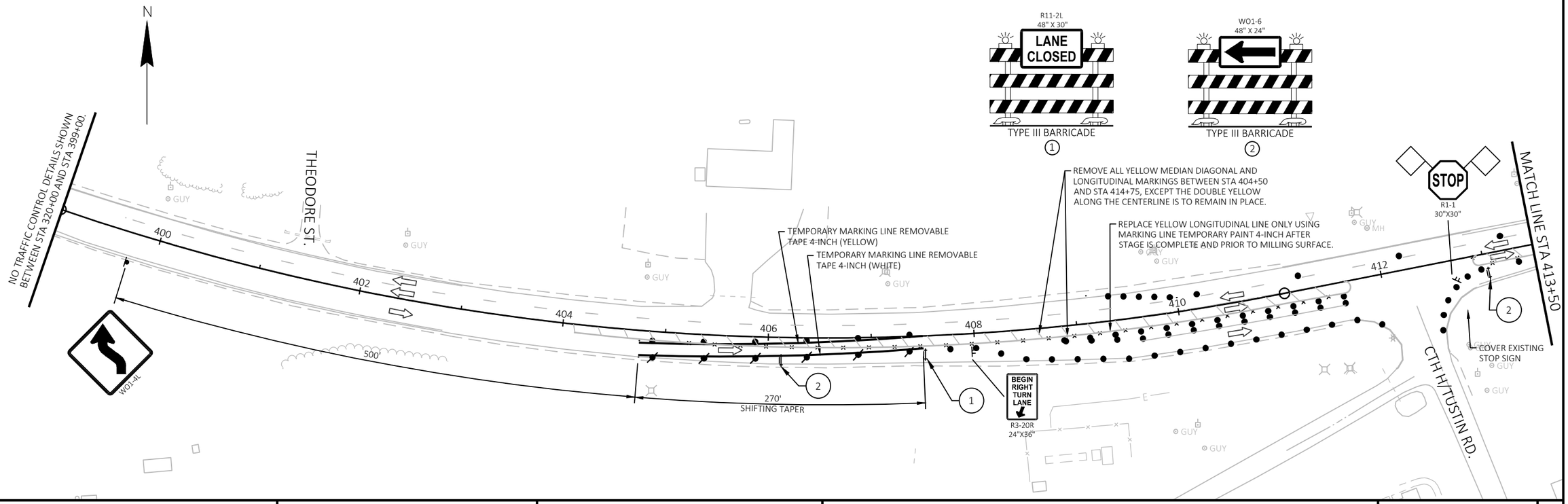
SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

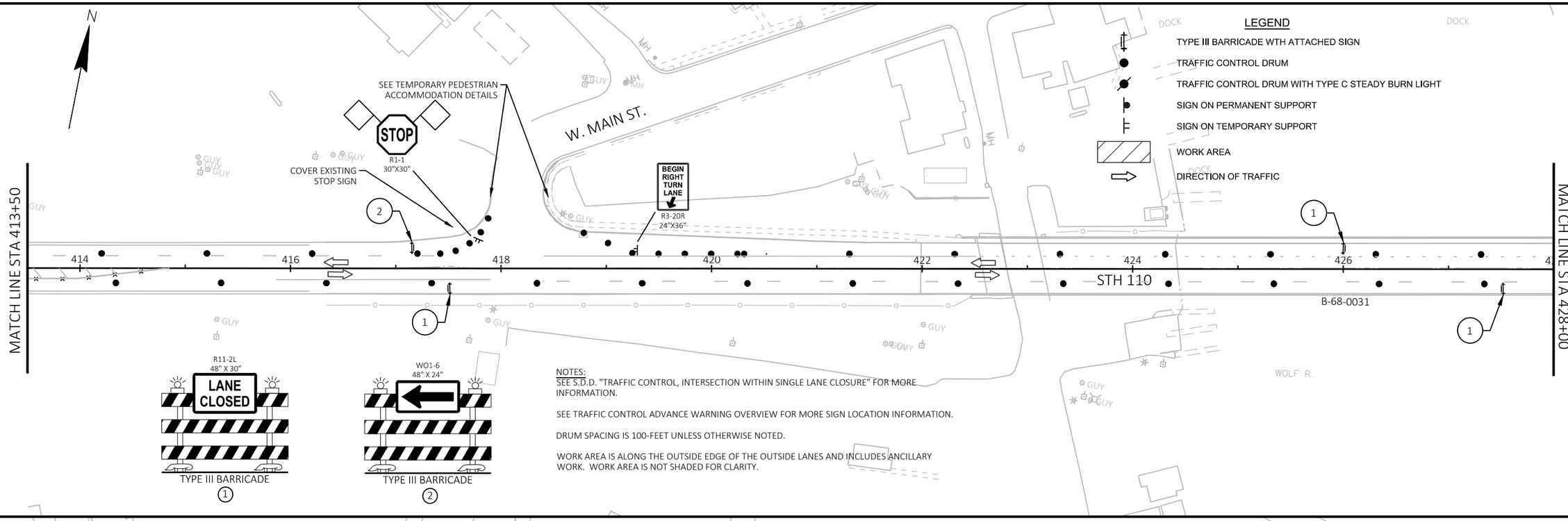
SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

WORK AREA IS ALONG THE OUTSIDE EDGE OF THE OUTSIDE LANES AND INCLUDES ANCILLARY WORK. WORK AREA IS NOT SHADED FOR CLARITY.



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1A	SHEET 48	E



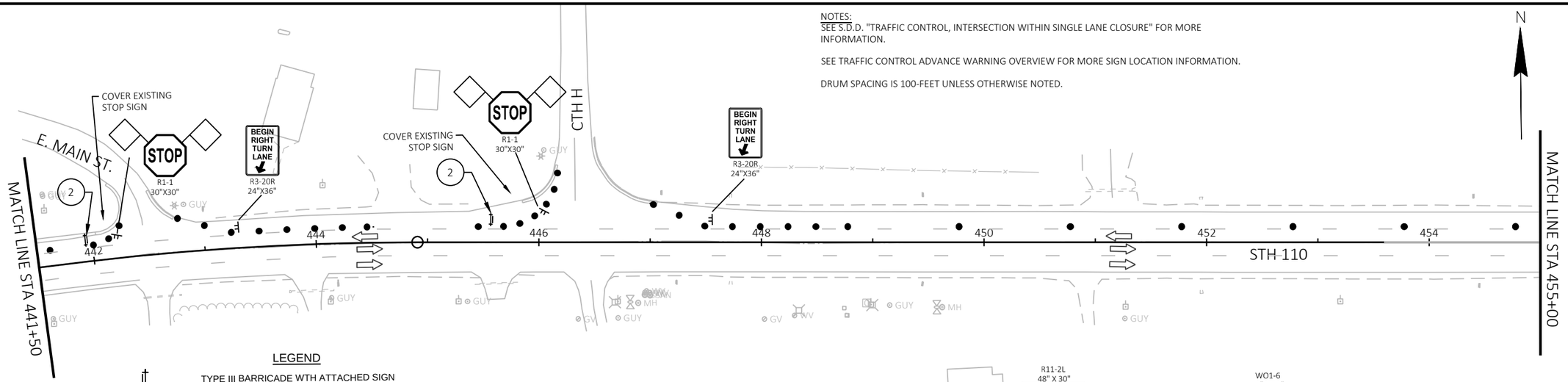
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1A	SHEET 49	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026001-S1A.DWG
LAYOUT NAME - 03
PLOT DATE : 7/6/2023 11:51 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

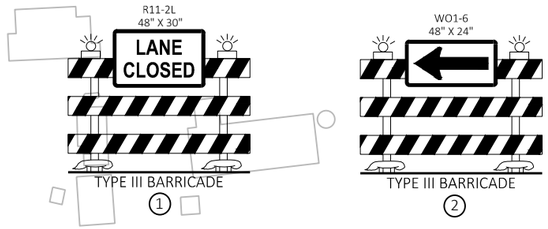
SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

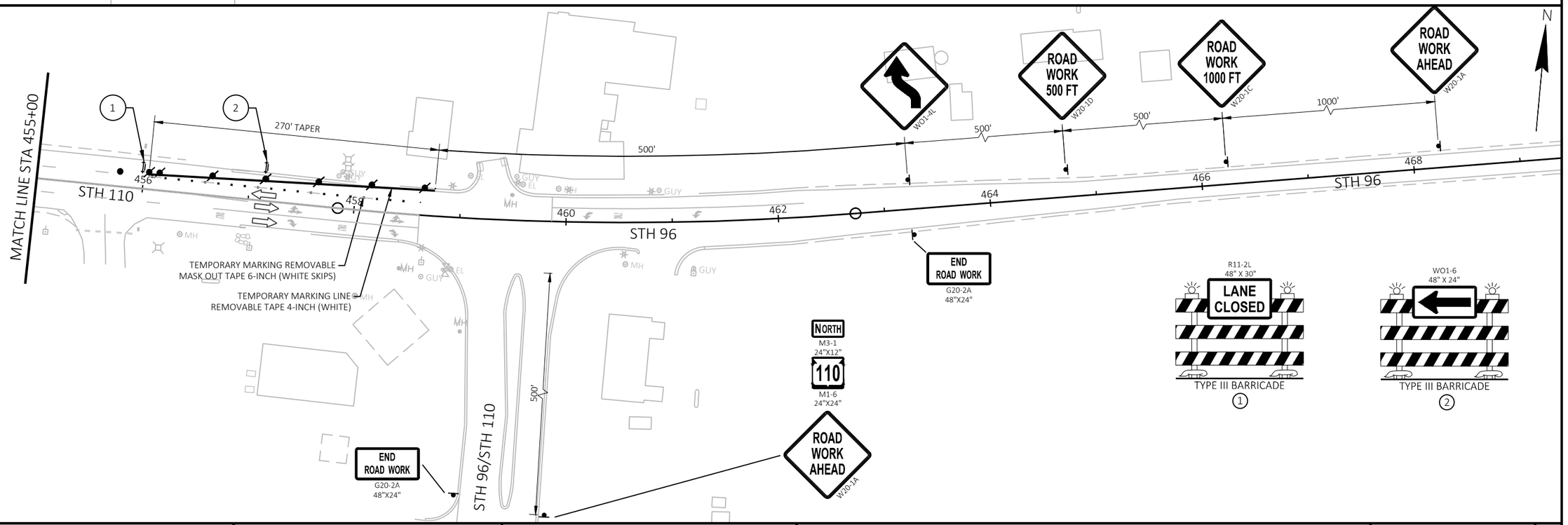
DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.



LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC





PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1A	SHEET 50	E

2

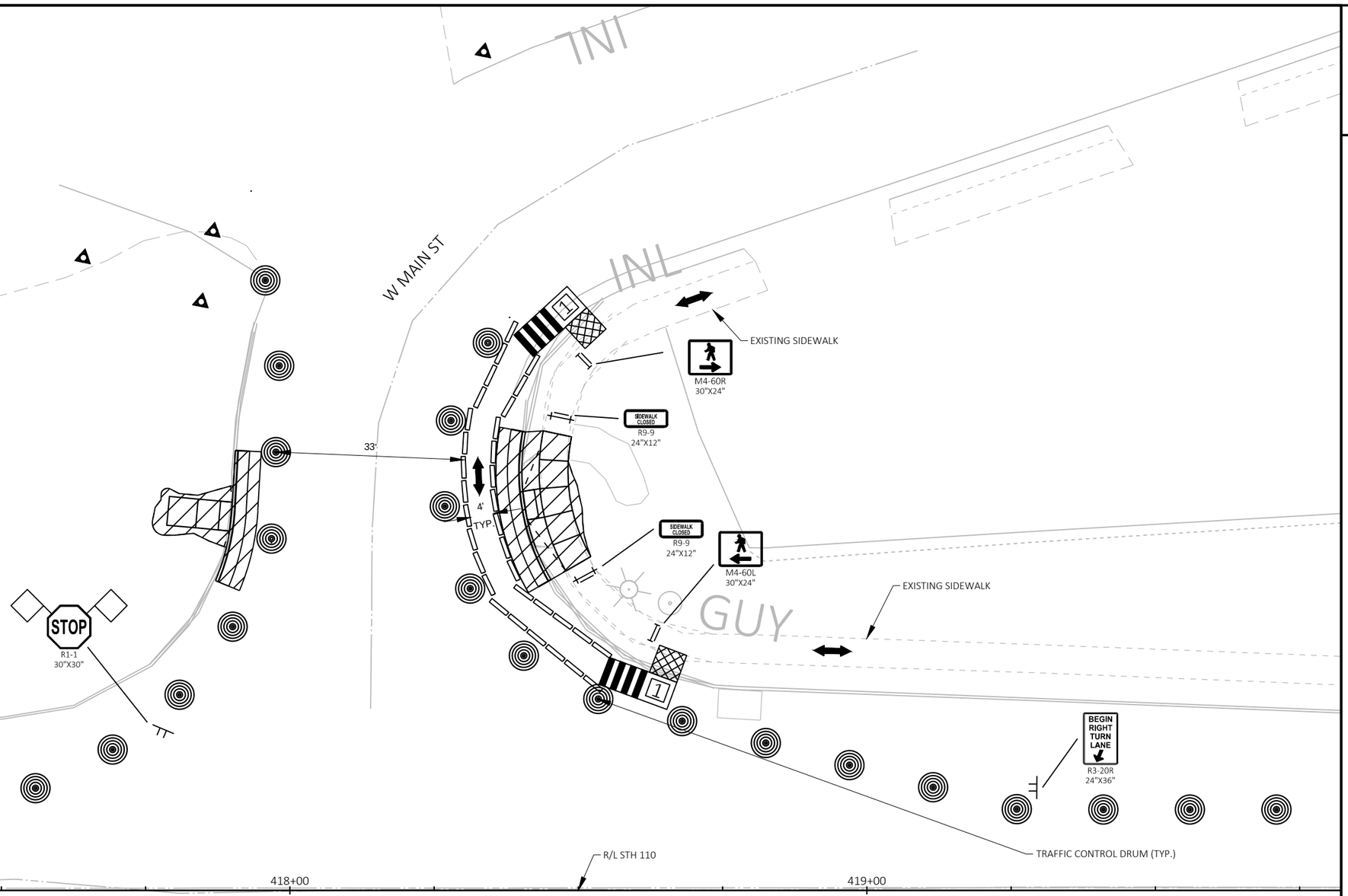
N

LEGEND

1	TEMPORARY CURB RAMP PARALLEL TO CURB
	TEMPORARY PEDESTRIAN SURFACE MATTING
	TYPE III BARRICADE WTH ATTACHED SIGN
	TYPE II BARRICADE WTH ATTACHED SIGN
	TEMPORARY PEDESTRIAN BARRICADE
	DIRECTION OF PEDESTRIAN TRAFFIC
	WORK ZONE
	SIGN ON TEMPORARY SUPPORT

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE INFORMATION.

CONSTRUCTION OF PEDESTRIAN CURB RAMPS OCCURS DURING STAGE 1A WHILE OUTSIDE STH 110 LANES ARE CLOSED. SEE TRAFFIC CONTROL DETAILS FOR MORE INFORMATION.



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: TEMPORARY PEDESTRIAN ACCOMMODATIONS	SHEET 51	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\6590207\SHEETSPLAN\026001-S1A-PED.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 11:53 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

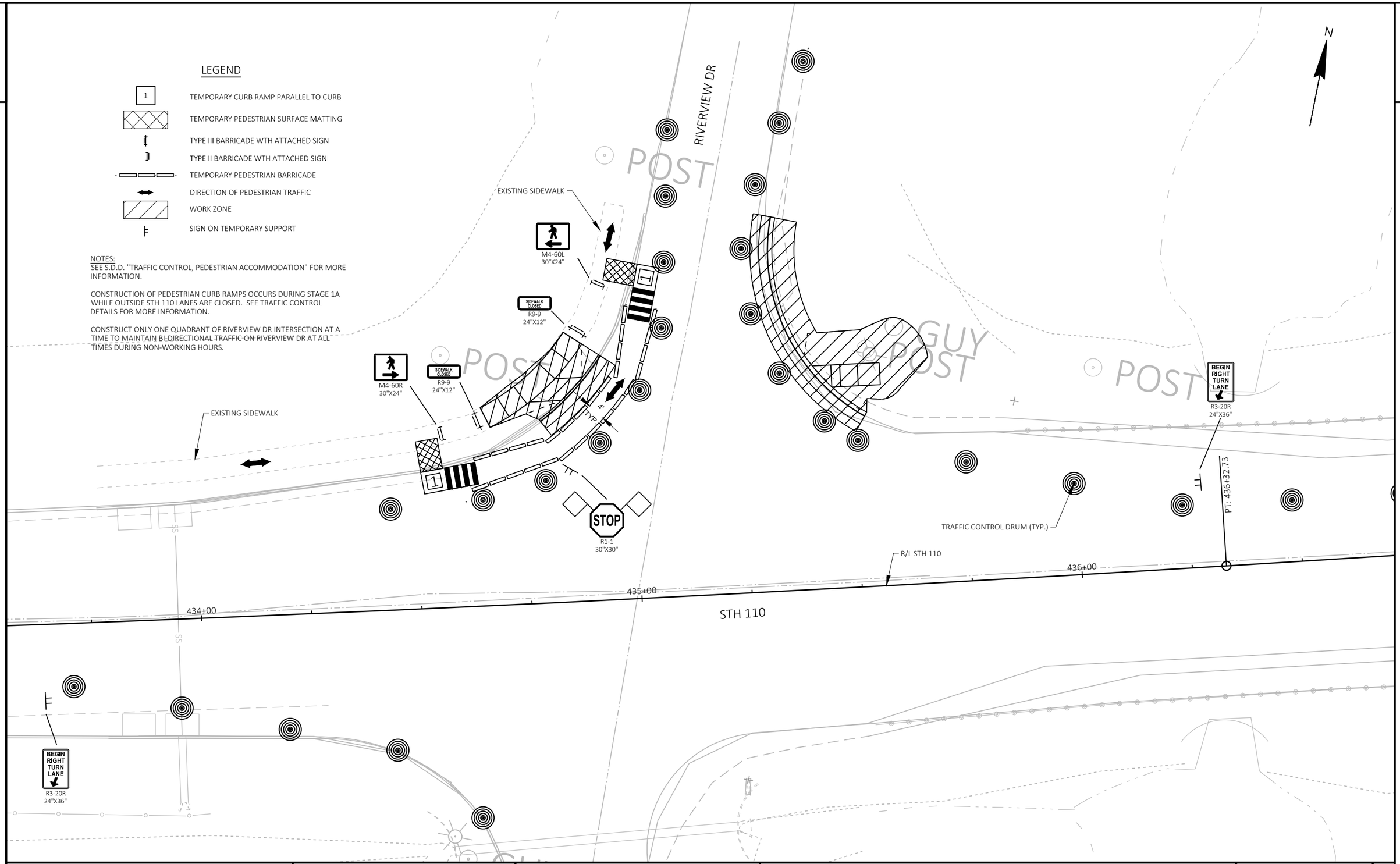
LEGEND

- TEMPORARY CURB RAMP PARALLEL TO CURB
- TEMPORARY PEDESTRIAN SURFACE MATTING
- TYPE III BARRICADE WTH ATTACHED SIGN
- TYPE II BARRICADE WTH ATTACHED SIGN
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF PEDESTRIAN TRAFFIC
- WORK ZONE
- SIGN ON TEMPORARY SUPPORT

NOTES:
SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE INFORMATION.

CONSTRUCTION OF PEDESTRIAN CURB RAMPS OCCURS DURING STAGE 1A WHILE OUTSIDE STH 110 LANES ARE CLOSED. SEE TRAFFIC CONTROL DETAILS FOR MORE INFORMATION.

CONSTRUCT ONLY ONE QUADRANT OF RIVERVIEW DR INTERSECTION AT A TIME TO MAINTAIN BI-DIRECTIONAL TRAFFIC ON RIVERVIEW DR AT ALL TIMES DURING NON-WORKING HOURS.

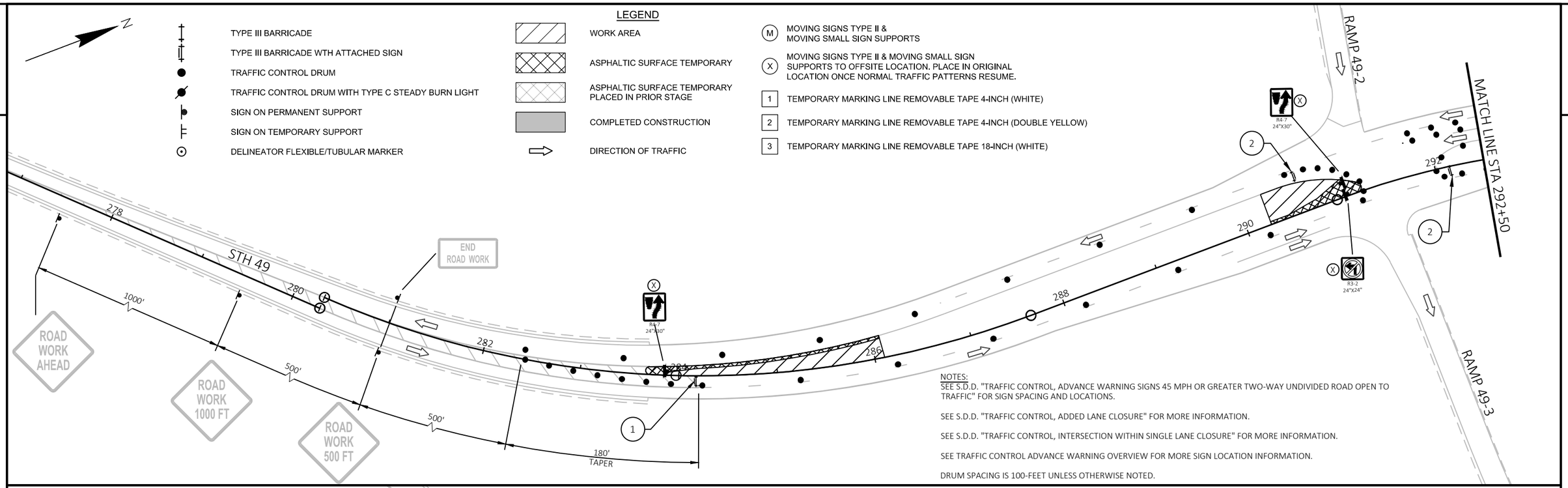


PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: TEMPORARY PEDESTRIAN ACCOMMODATIONS	SHEET 52	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026001-S1A-PED.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 11:54 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:20 FT

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



NOTES:

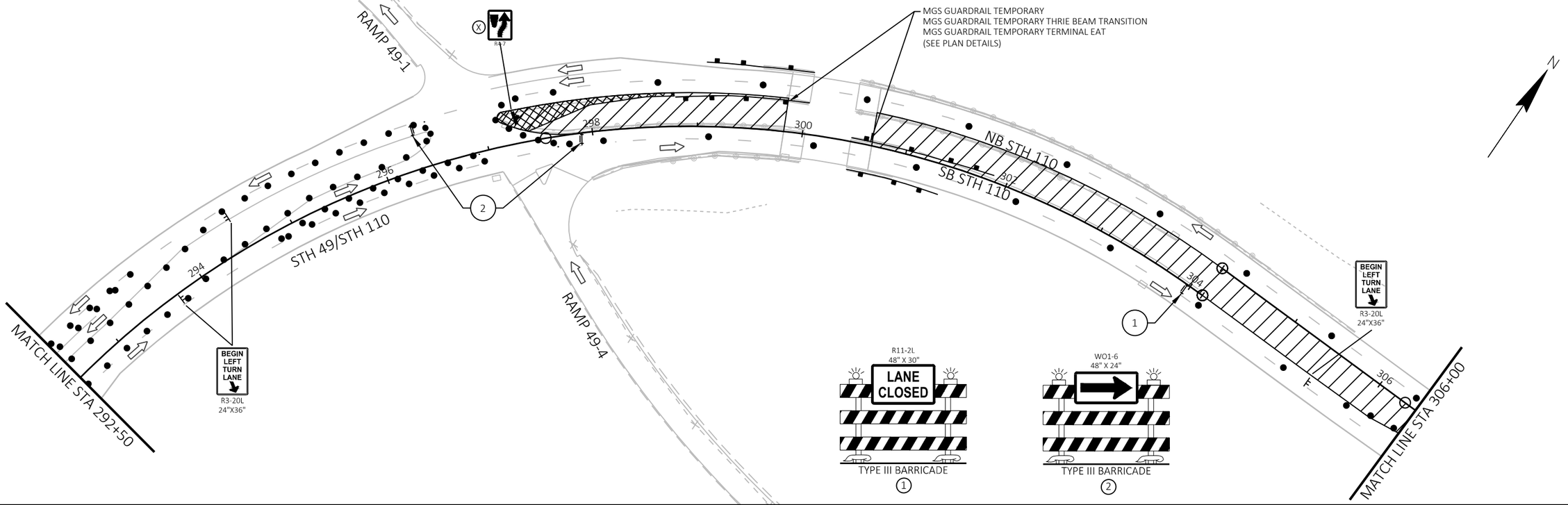
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1B	SHEET 53	E

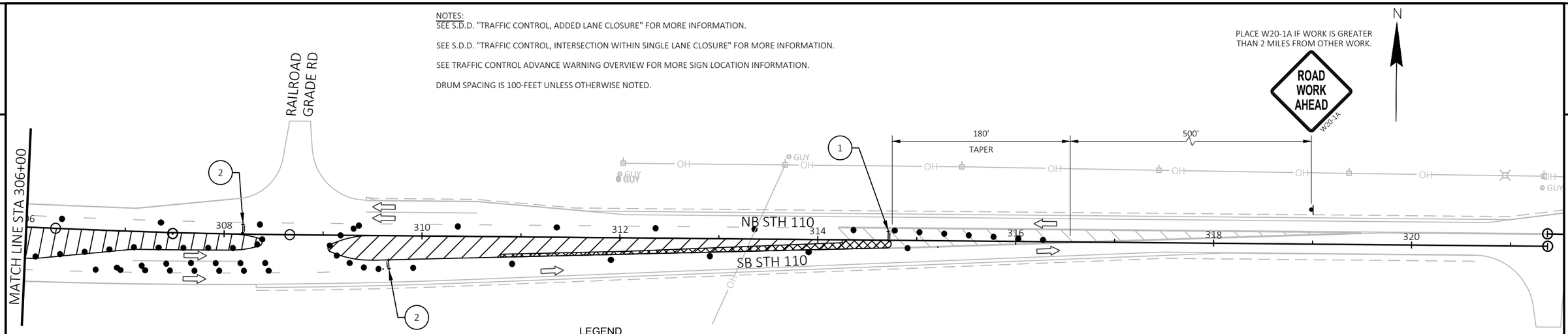
NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

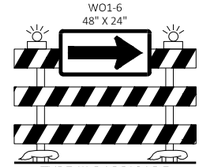
PLACE W20-1A IF WORK IS GREATER THAN 2 MILES FROM OTHER WORK.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)

TYPE III BARRICADE (1)



TYPE III BARRICADE (2)

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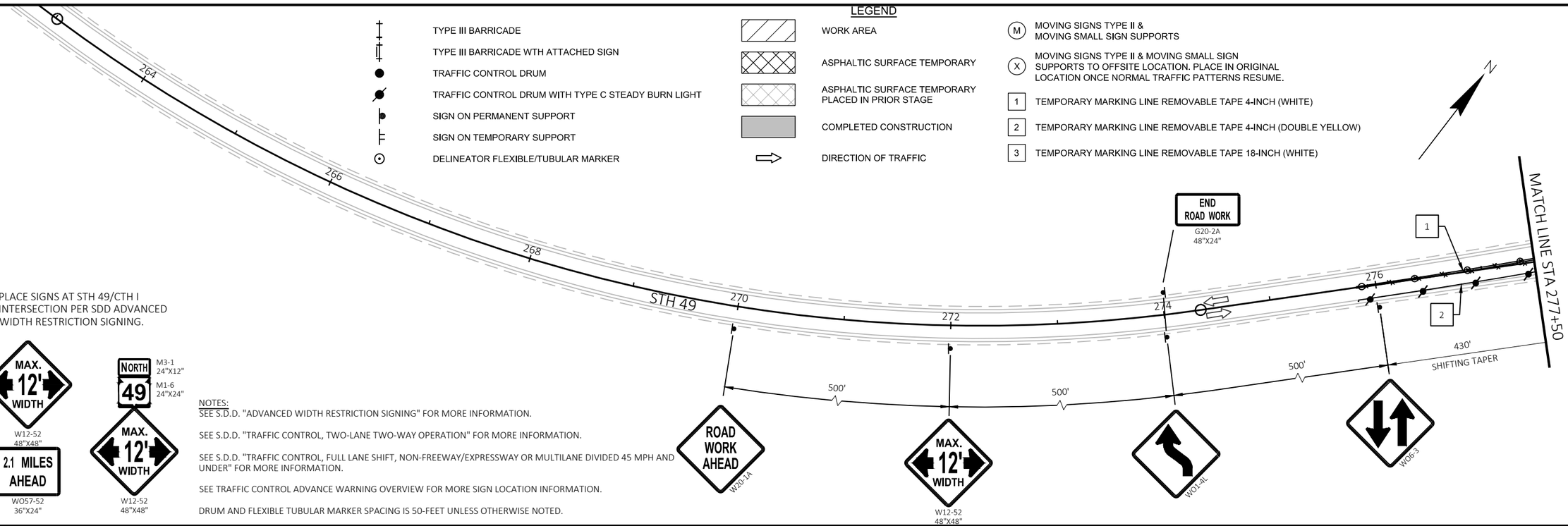
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 1B	SHEET 54	E

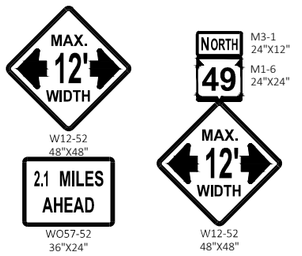
2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- [1] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- [2] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- [3] TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



PLACE SIGNS AT STH 49/CTH I INTERSECTION PER SDD ADVANCED WIDTH RESTRICTION SIGNING.



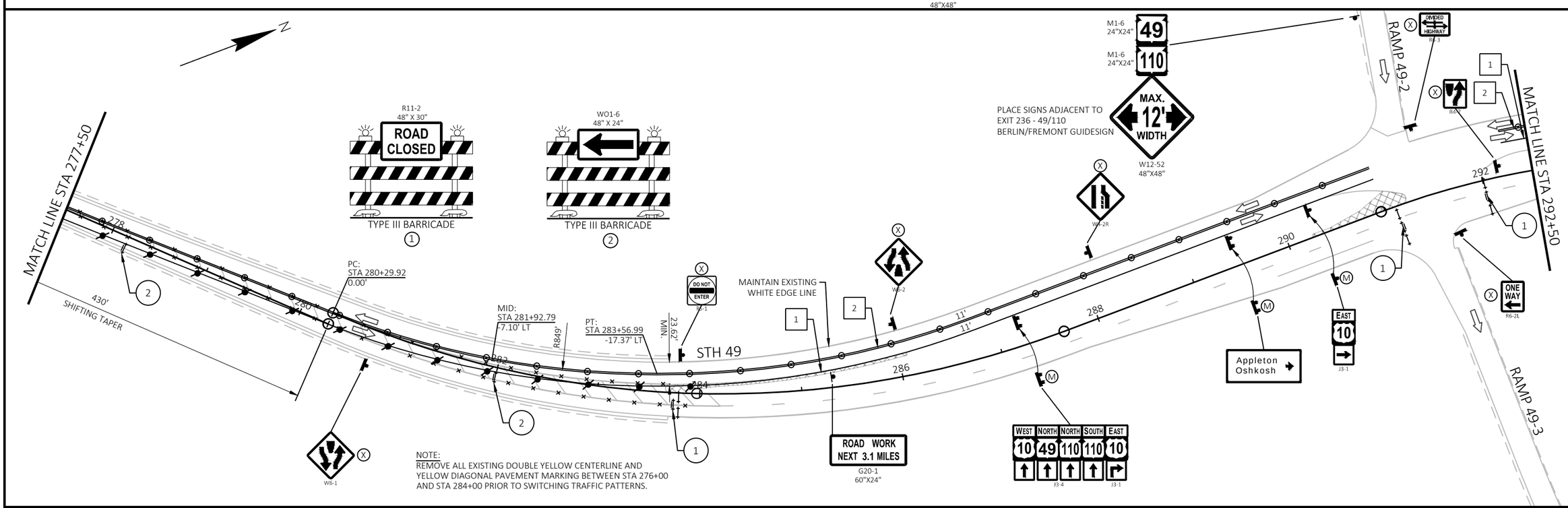
NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.



NOTE:
REMOVE ALL EXISTING DOUBLE YELLOW CENTERLINE AND YELLOW DIAGONAL PAVEMENT MARKING BETWEEN STA 276+00 AND STA 284+00 PRIOR TO SWITCHING TRAFFIC PATTERNS.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 2	SHEET 55	E

NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

MAINTAIN EXISTING WHITE EDGE LINE
1
2
11'
11'
294
296
298
300
302
304
306
STH 49/STH 110
NB STH 110
SB STH 110
MATCH LINE STA 292+50
MATCH LINE STA 306+00
RAMP 49-1
RAMP 49-4
3
LANE ENDS MERGE LEFT
ONE WAY
R6-2L
STOP
R1-1
DIVIDED HIGHWAY
R6-3
SOUTH 110
J4-1
WEST 10 NORTH 110 NORTH 49
J2-3
WEST 10 NORTH 110 NORTH 49 SOUTH 110
J3-4
Fremont
Weyauwega
Waupaca
SPEED LIMIT 45
R2-1
W4-2R
M1-6 24"X24" 49
M1-6 24"X24" 110
PLACE SIGNS ADJACENT TO EXIT 236 - 49/110 BERLIN/FREMONT GUIDESIGN
MAX. 12' WIDTH
W12-52 48"X48"
Railroad Grade Rd

LEGEND

TYPE III BARRICADE	WORK AREA	(M)	MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
TYPE III BARRICADE WTH ATTACHED SIGN	ASPHALTIC SURFACE TEMPORARY	(X)	MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
TRAFFIC CONTROL DRUM	ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE	1	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	COMPLETED CONSTRUCTION	2	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
SIGN ON PERMANENT SUPPORT	DIRECTION OF TRAFFIC	3	TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)
SIGN ON TEMPORARY SUPPORT			
DELINEATOR FLEXIBLE/TUBULAR MARKER			

MAINTAIN EXISTING WHITE EDGE LINE
MATCH LINE STA 306+00
RAILROAD GRADE RD
NB STH 110
SB STH 110
308
310
312
314
316
318
320
11'
11'
MAINTAIN EXISTING DOUBLE YELLOW CENTERLINE
SEE PAVEMENT MARKING NOTE
DO NOT ENTER
R5-1
W6-2

PAVEMENT MARKING NOTE:
REMOVE SB STH 110 YELLOW CENTERLINE BETWEEN STA 314+75 AND STA 319+75 AND YELLOW DIAGONAL PAVEMENT MARKING BETWEEN STA 314+20 AND STA 319+00 PRIOR TO SWITCHING TRAFFIC PATTERNS. MAINTAIN THE NB STH 110 YELLOW CENTERLINE.

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

W6-3
MAX. 12' WIDTH
W12-52 48"X48"
ROAD WORK AHEAD
W20-1A
W6-1
500'
500'
BROWN RD.

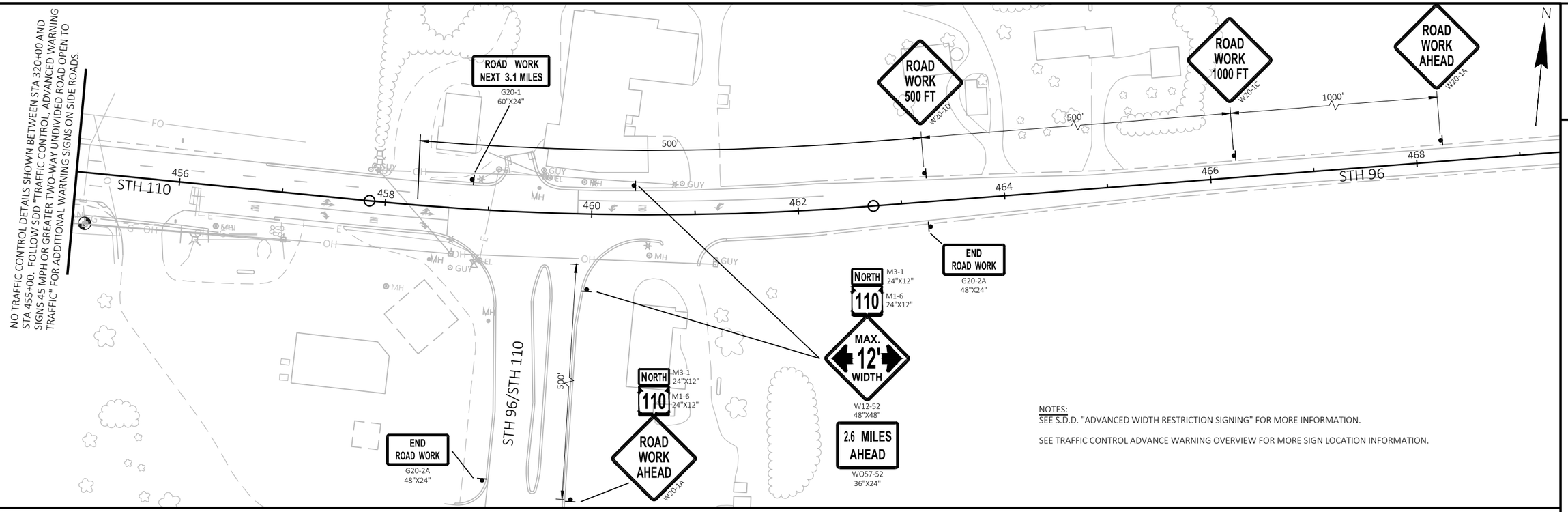
PLACE SIGNS AT STH 110/CTH H (TUSTIN RD) INTERSECTION PER SDD ADVANCED WIDTH RESTRICTION SIGNING.

MAX. 12' WIDTH
W12-52 48"X48"
NORTH 110
M3-1 24"X12"
M1-6 24"X24"
1.7 MILES AHEAD
WO57-52 36"X24"
MAX. 12' WIDTH
W12-52 48"X48"

N

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 2	SHEET 56	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026002-S2.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 11:57 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44



NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- [1] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- [2] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- [3] TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 2	SHEET 57	E

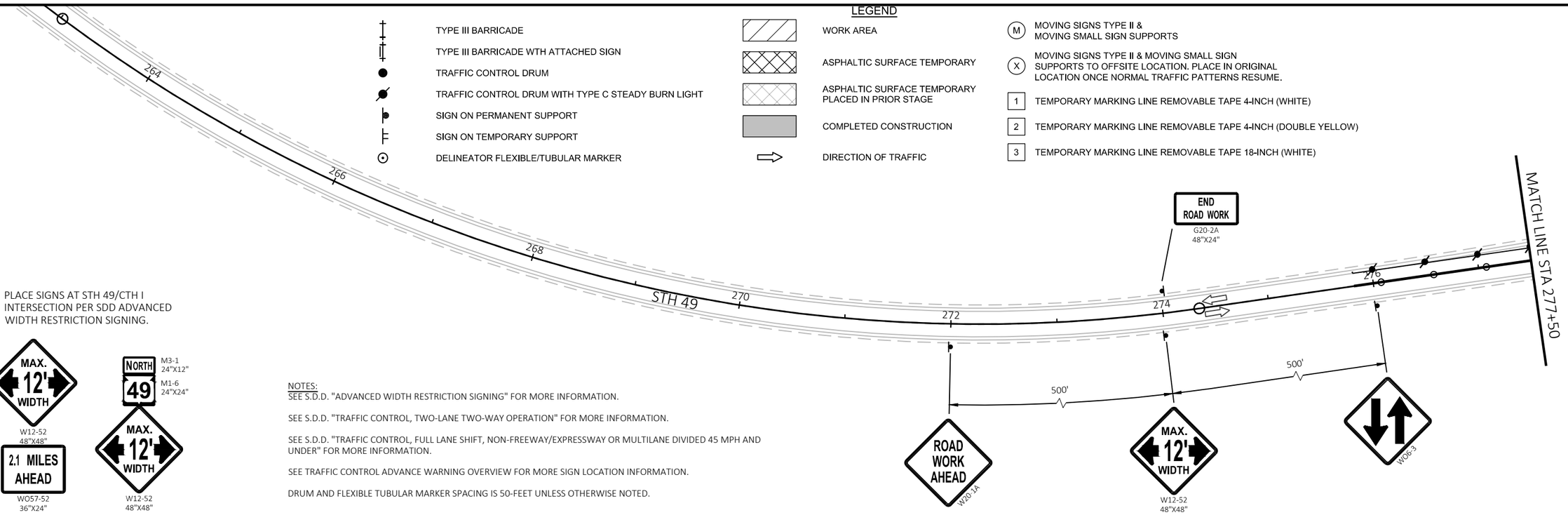
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026002-S2.DWG
LAYOUT NAME - 03
PLOT DATE : 7/6/2023 11:58 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- 1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- 2 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- 3 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



PLACE SIGNS AT STH 49/CTH I INTERSECTION PER SDD ADVANCED WIDTH RESTRICTION SIGNING.

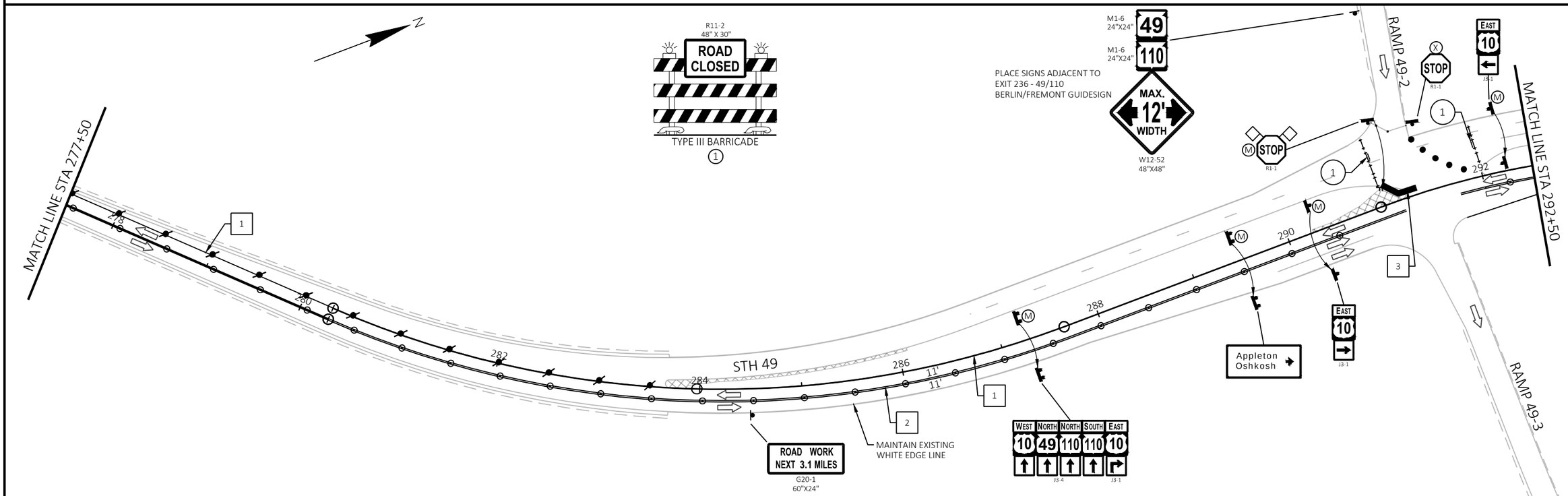
NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 3	SHEET 58	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026003-S3.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 11:59 AM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, TWO-LANE TWO-WAY OPERATION" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM AND FLEXIBLE TUBULAR MARKER SPACING IS 50-FEET UNLESS OTHERWISE NOTED.

RAMP 49-1

WEST NORTH NORTH 10 49 110 J2-3

Weyauwega Waupaca

EAST SOUTH 10 49 J2-2

EAST SOUTH WEST NORTH NORTH 10 49 10 49 110 J3-4 J3-1

NB STH 110

SB STH 110

Berlin
Appleton Oshkosh

STH 49/STH 110

Fremont
Weyauwega Waupaca

WEST NORTH NORTH 10 110 49 J2-3

STOP R1-1

REPLACE R1-1
MOVED IN STAGE 2

SOUTH 110 J4-1

SPEED LIMIT 45 R2-1

JCT JCT 10 49 J1-2

Railroad Grade Rd

RAMP 49-4

MATCH LINE STA 292+50

WEST NORTH NORTH SOUTH 10 110 49 110 J3-4

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

M1-6 24"X24" 49
M1-6 24"X24" 110
MAX. 12' WIDTH
W12-52 48"X48"

PLACE SIGNS ADJACENT TO
EXIT 236 - 49/110
BERLIN/FREMONT GUIDESIGN

MATCH LINE STA 306+00

W1-2L

RAILROAD GRADE RD

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
1

W01-6
48" X 24"
TYPE III BARRICADE
2

W06-3

W01-4L

MAX. 12' WIDTH
W12-52

ROAD WORK AHEAD
W20-1A

500' 500' 500'

PLACE SIGNS AT STH 110/CTH H (TUSTIN RD) INTERSECTION PER SDD ADVANCED WIDTH RESTRICTION SIGNING.

MAX. 12' WIDTH
W12-52 48"X48"

NORTH 110
M3-1 24"X12"
M1-6 24"X24"

1.7 MILES AHEAD
WO57-52 36"X24"

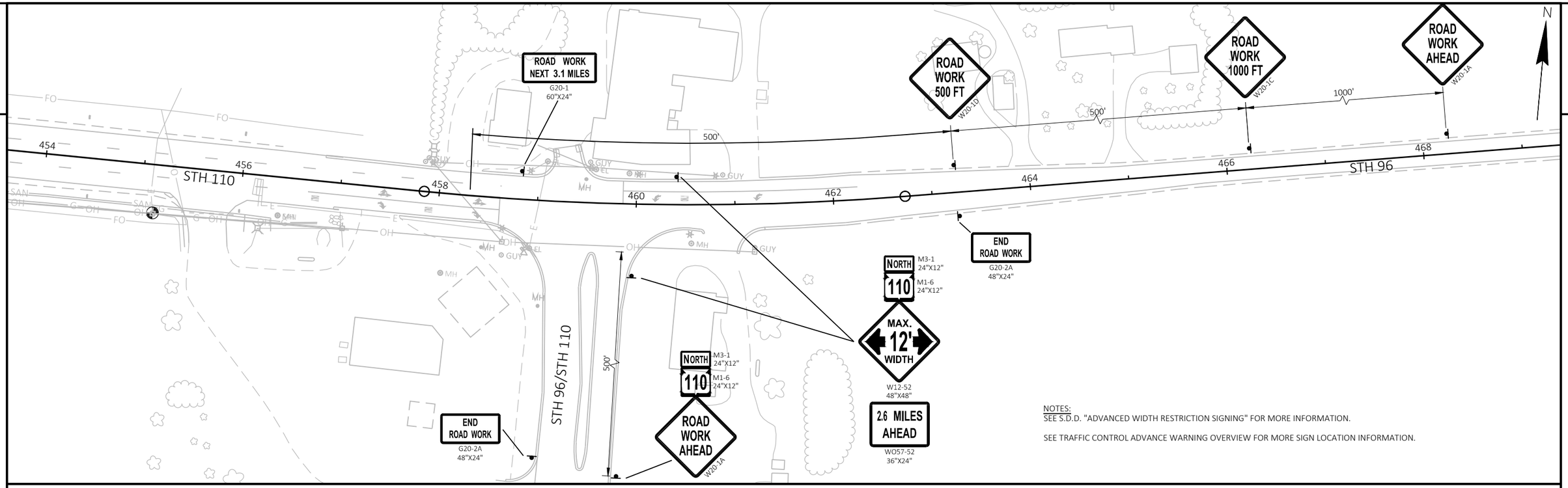
MAX. 12' WIDTH
W12-52 48"X48"

BROWN RD.

LEGEND

TYPE III BARRICADE	WORK AREA	(M)	MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
TYPE III BARRICADE WTH ATTACHED SIGN	ASPHALTIC SURFACE TEMPORARY	(X)	MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
TRAFFIC CONTROL DRUM	ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE	1	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	COMPLETED CONSTRUCTION	2	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
SIGN ON PERMANENT SUPPORT		3	TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)
SIGN ON TEMPORARY SUPPORT			
DELINEATOR FLEXIBLE/TUBULAR MARKER	DIRECTION OF TRAFFIC		

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 3	SHEET 59	E



NOTES:
SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

LEGEND

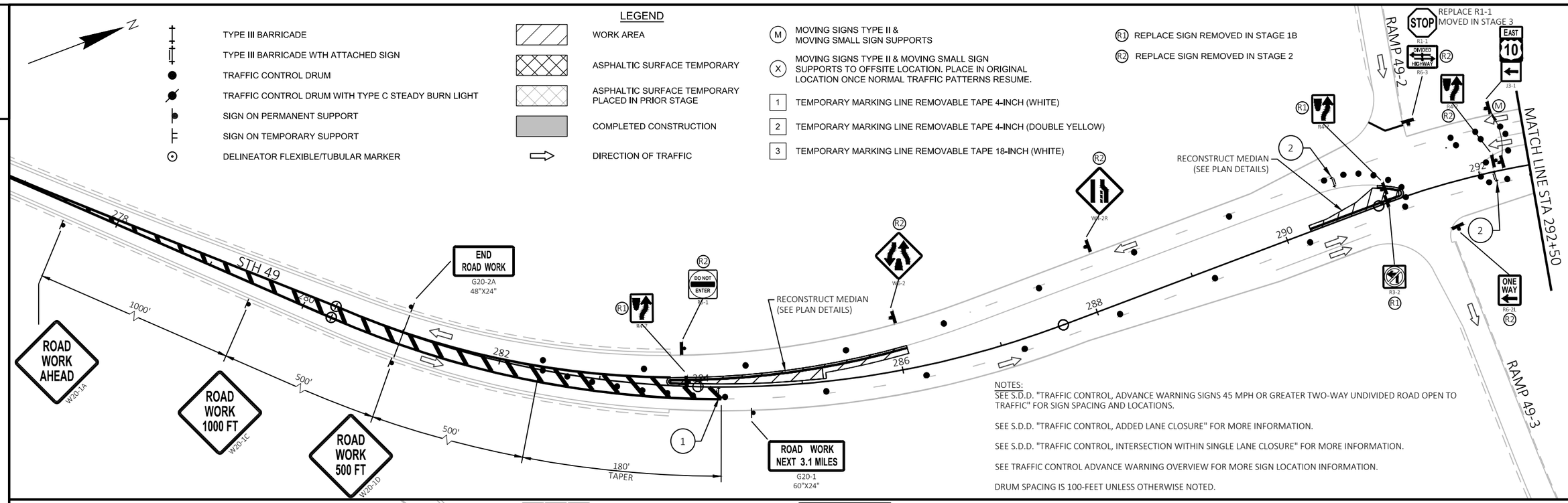
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- [1] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- [2] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- [3] TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 3	SHEET 60	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026003-S3.DWG
LAYOUT NAME - 03
PLOT DATE : 7/6/2023 11:59 AM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
- ASPHALTIC SURFACE TEMPORARY PLACED IN PRIOR STAGE
- COMPLETED CONSTRUCTION
- DIRECTION OF TRAFFIC
- (M) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS
- (X) MOVING SIGNS TYPE II & MOVING SMALL SIGN SUPPORTS TO OFFSITE LOCATION. PLACE IN ORIGINAL LOCATION ONCE NORMAL TRAFFIC PATTERNS RESUME.
- [1] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- [2] TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- [3] TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)
- (R1) REPLACE SIGN REMOVED IN STAGE 1B
- (R2) REPLACE SIGN REMOVED IN STAGE 2



NOTES:

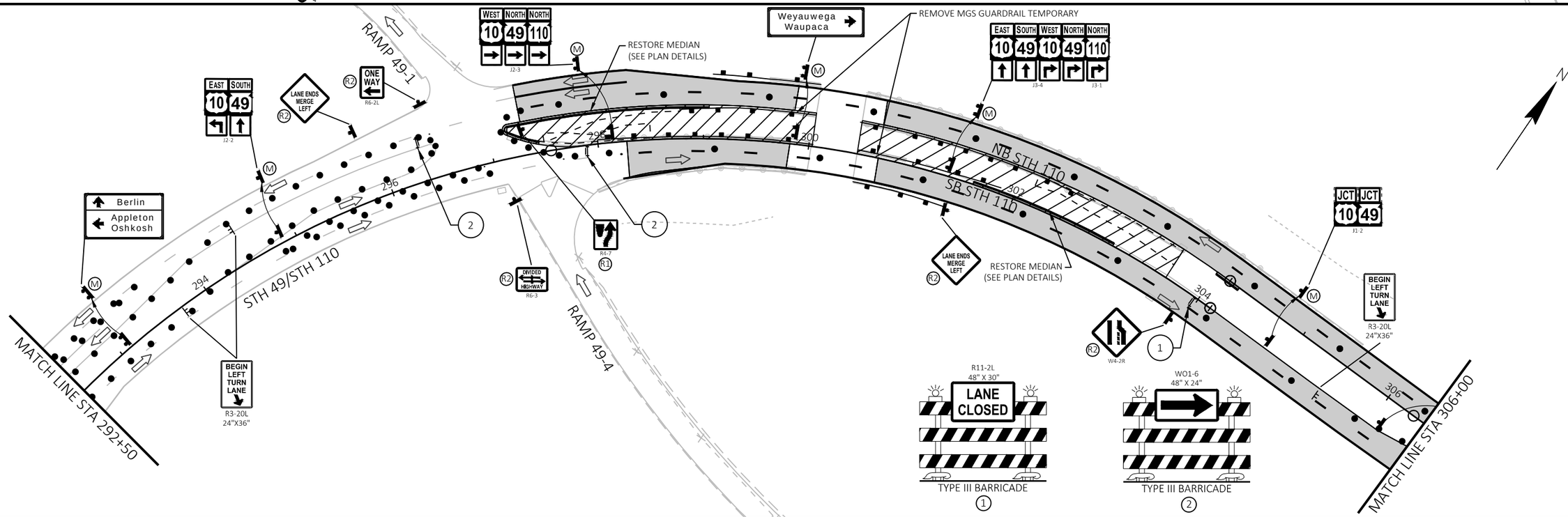
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

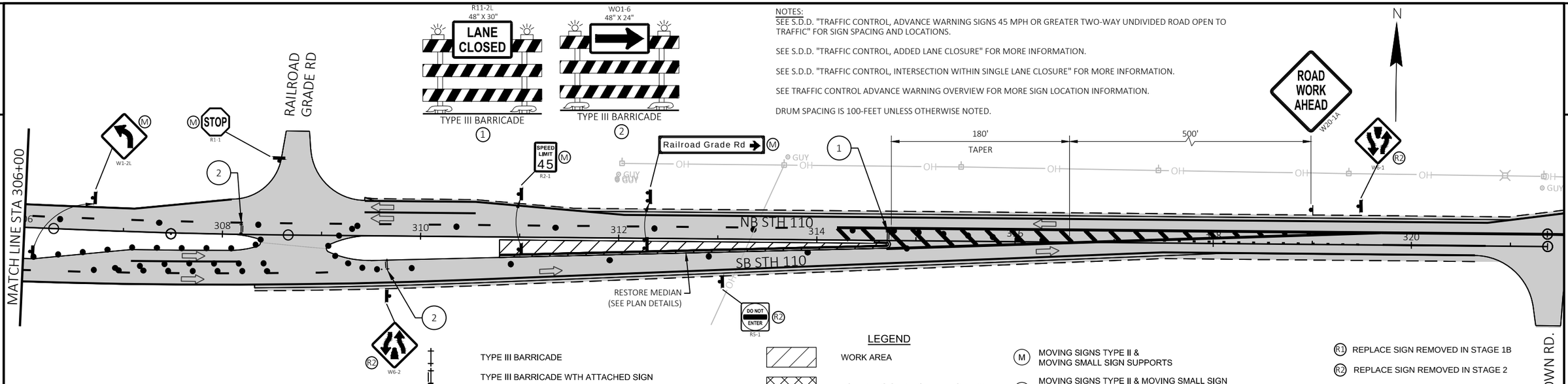
SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4A	SHEET 61	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026004-S4A.DWG
LAYOUT NAME - 01
PLOT DATE : 7/6/2023 12:00 PM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



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PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4A	SHEET 62	E

2

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

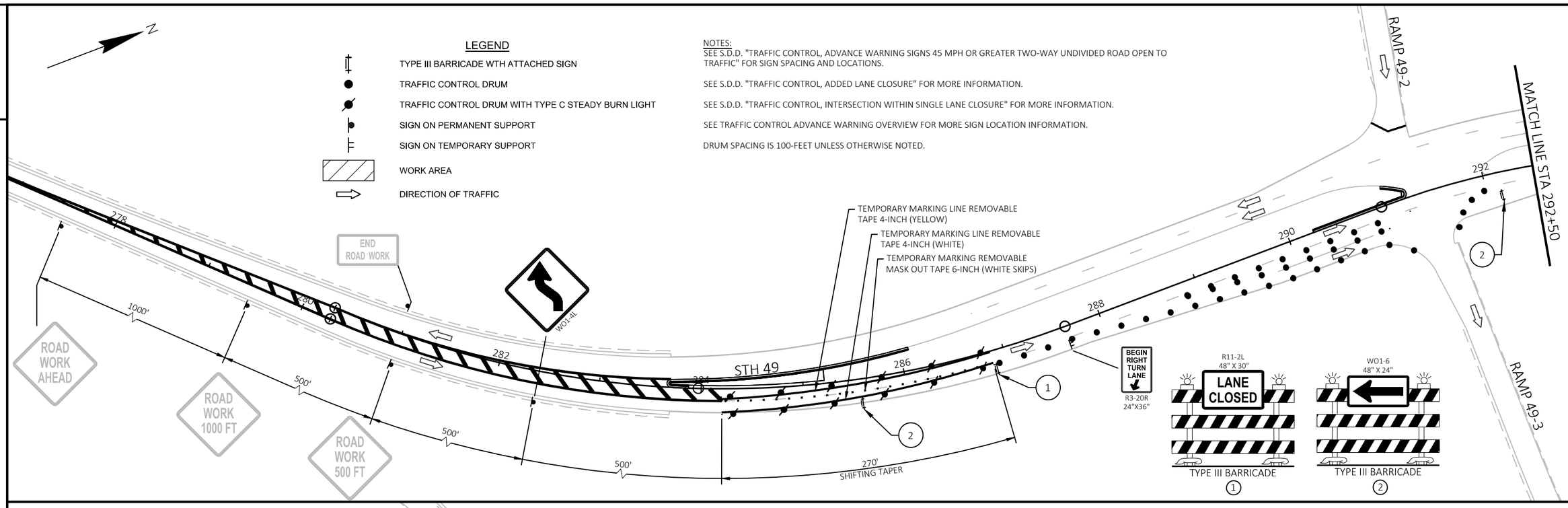
NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

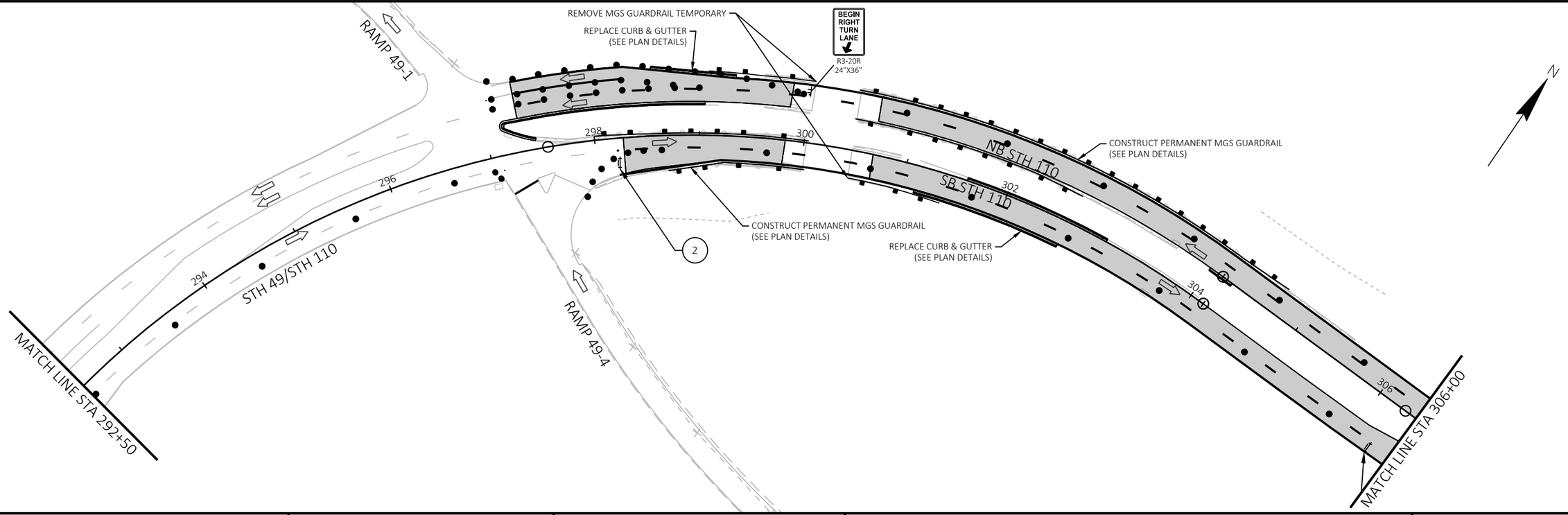
SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.





PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4B	SHEET 63	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026004-S4B.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 12:03 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:100 FT

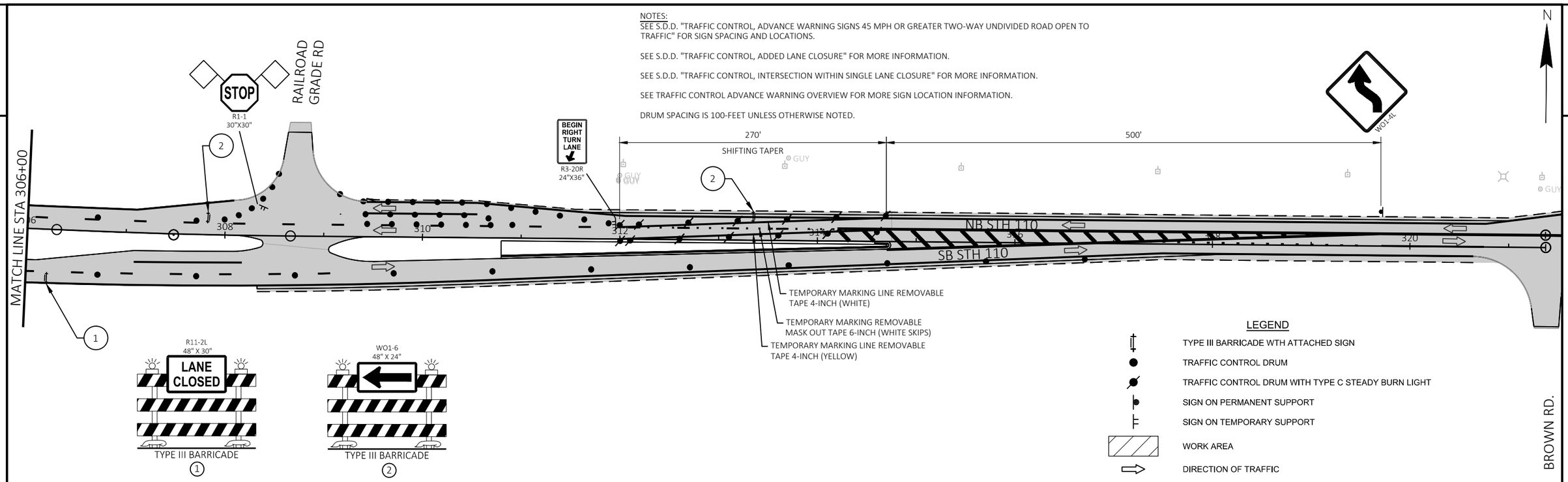
NOTES:
SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING AND LOCATIONS.

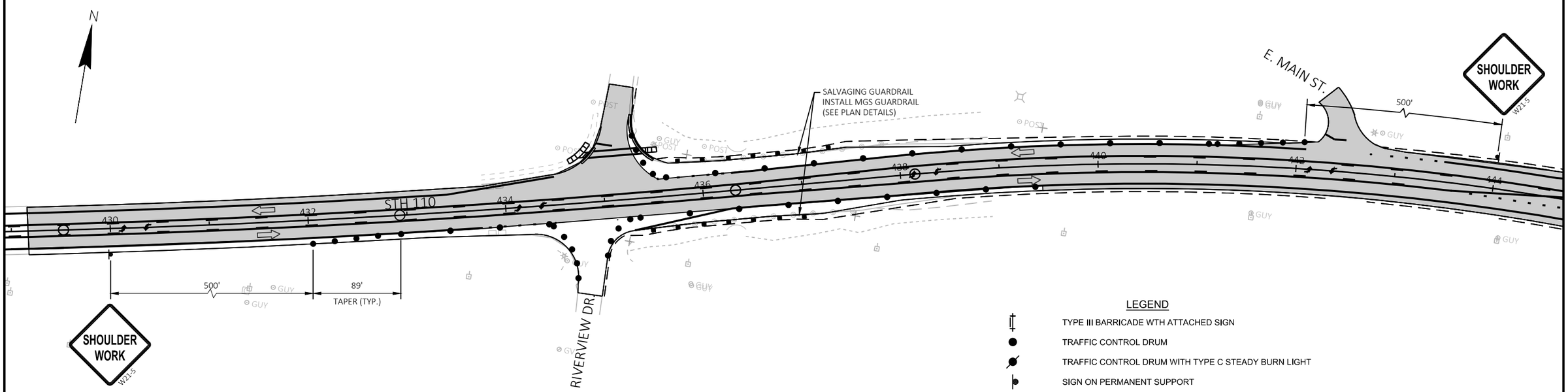
SEE S.D.D. "TRAFFIC CONTROL, ADDED LANE CLOSURE" FOR MORE INFORMATION.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" FOR MORE INFORMATION.

SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.





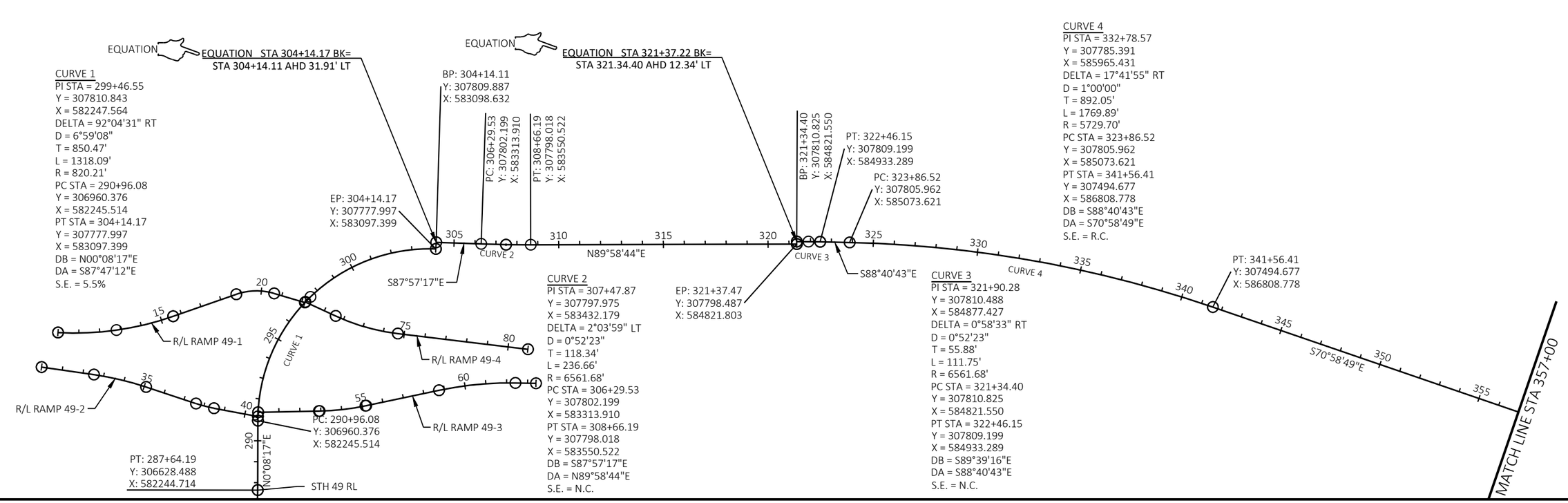
NOTES:
SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR MORE INFORMATION.

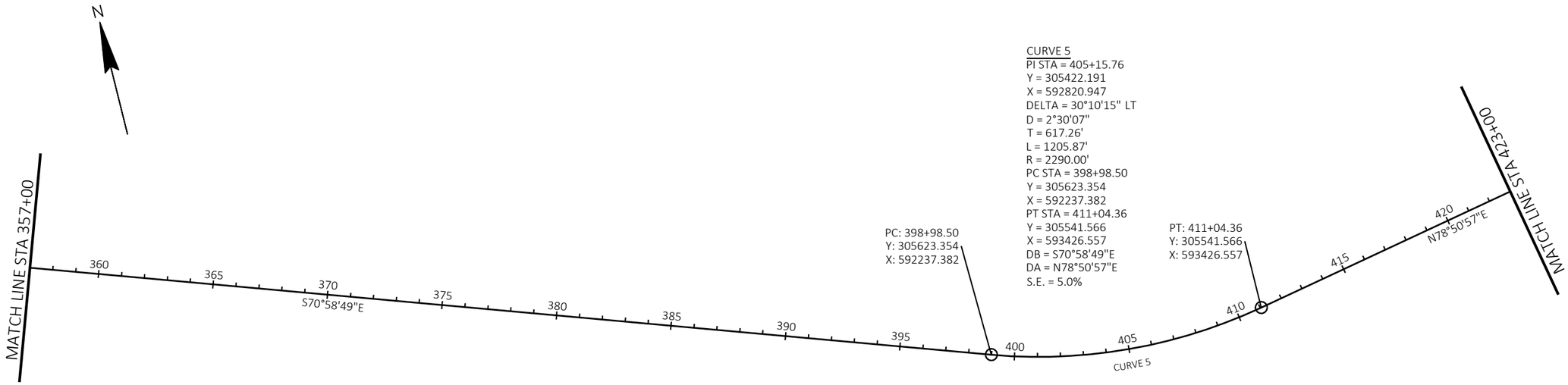
SEE TRAFFIC CONTROL ADVANCE WARNING OVERVIEW FOR MORE SIGN LOCATION INFORMATION.

DRUM SPACING IS 100-FEET UNLESS OTHERWISE NOTED.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL: STAGE 4B	SHEET 64	E

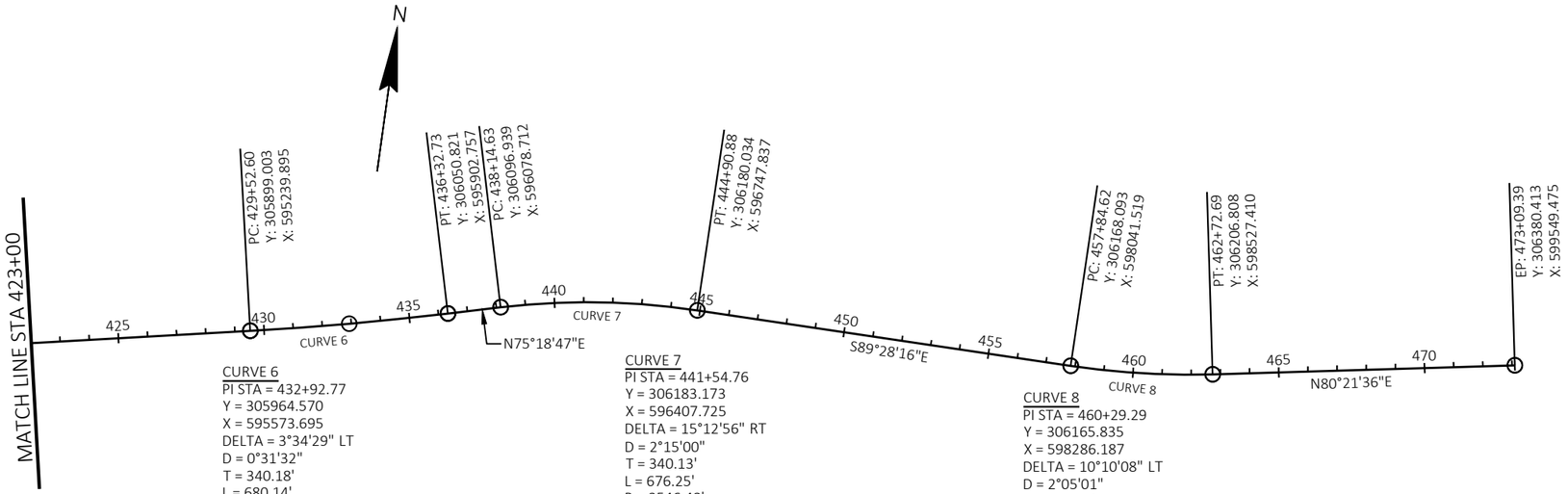
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\026004-S4B.DWG
LAYOUT NAME - 02
PLOT DATE : 7/6/2023 12:03 PM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	ALIGNMENT DIAGRAM: STH 110/STH 49	SHEET 65	E

2



CURVE 6
PI STA = 432+92.77
Y = 305964.570
X = 595573.695
DELTA = 3°34'29" LT
D = 0°31'32"
T = 340.18'
L = 680.14'
R = 10901.38'
PC STA = 429+52.60
Y = 305899.003
X = 595239.895
PT STA = 436+32.73
Y = 306050.821
X = 595902.757
DB = N78°53'14"E
DA = N75°18'45"E
S.E. = N.C.

CURVE 7
PI STA = 441+54.76
Y = 306183.173
X = 596407.725
DELTA = 15°12'56" RT
D = 2°15'00"
T = 340.13'
L = 676.25'
R = 2546.48'
PC STA = 438+14.63
Y = 306096.939
X = 596078.712
PT STA = 444+90.88
Y = 306180.034
X = 596747.837
DB = N75°18'47"E
DA = S89°28'16"E
S.E. = 4.2%

CURVE 8
PI STA = 460+29.29
Y = 306165.835
X = 598286.187
DELTA = 10°10'08" LT
D = 2°05'01"
T = 244.68'
L = 488.07'
R = 2750.00'
PC STA = 457+84.62
Y = 306168.093
X = 598041.519
PT STA = 462+72.69
Y = 306206.808
X = 598527.410
DB = S89°28'16"E
DA = N80°21'36"E

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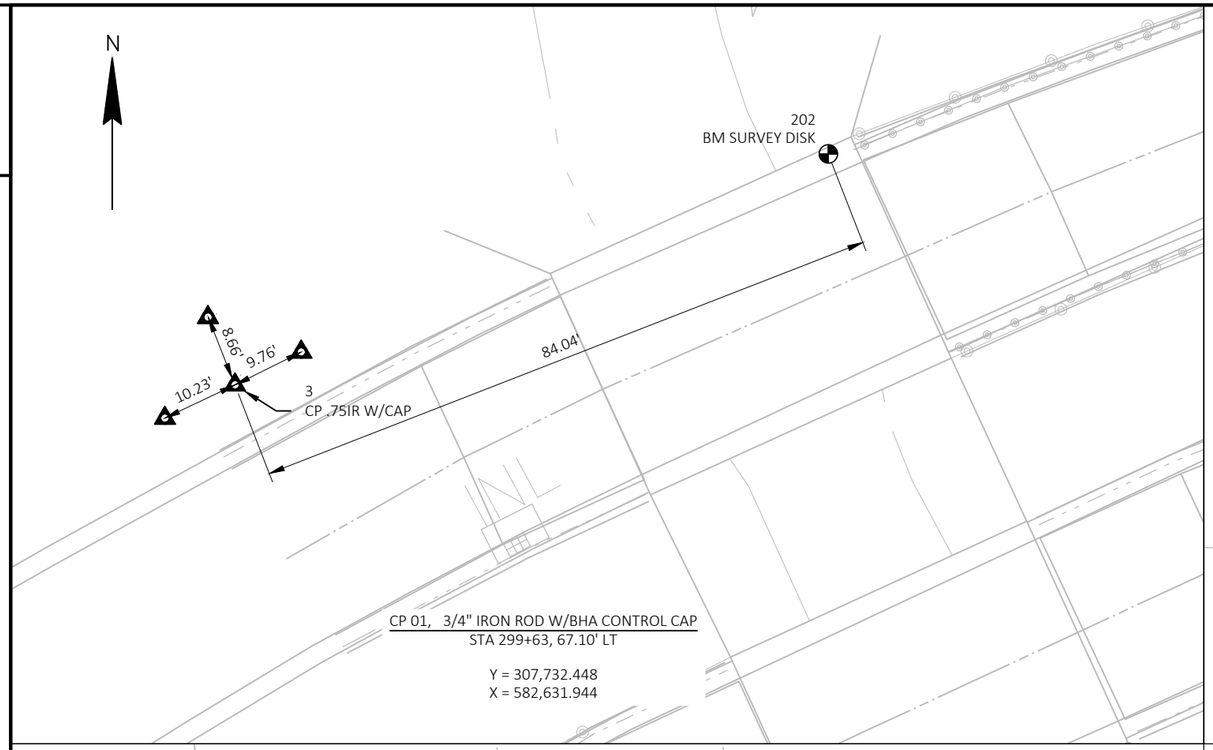
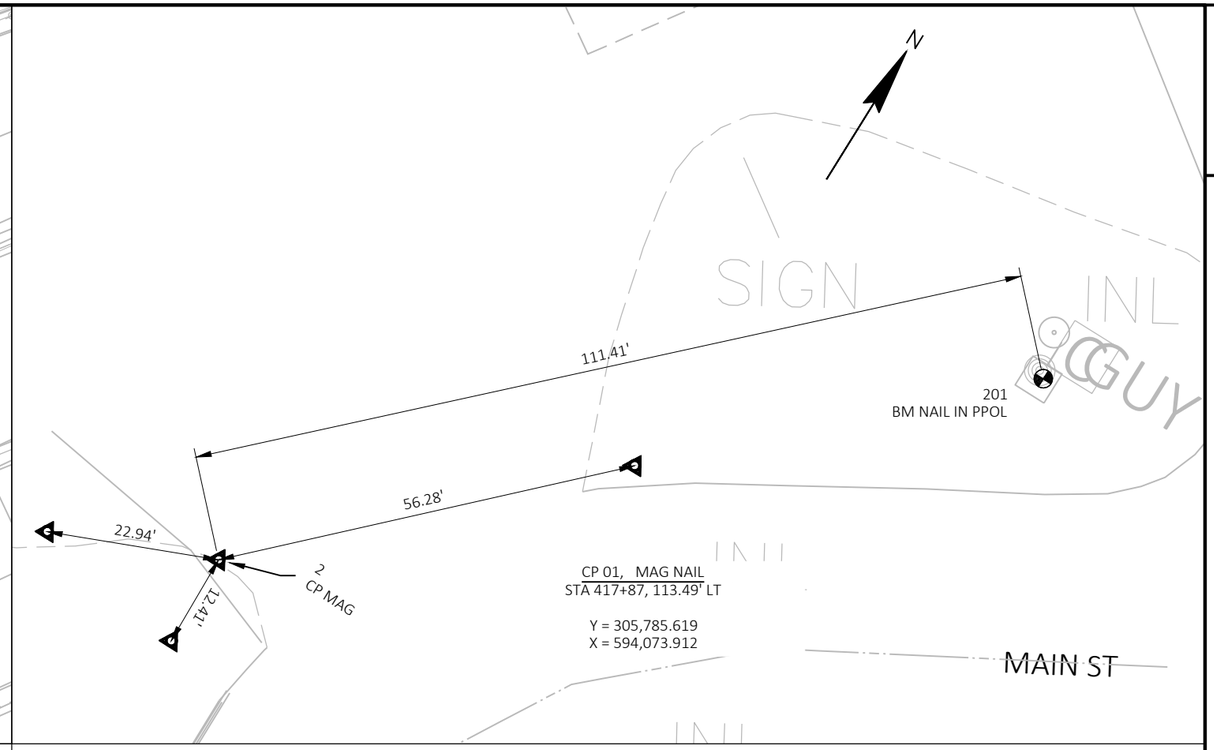


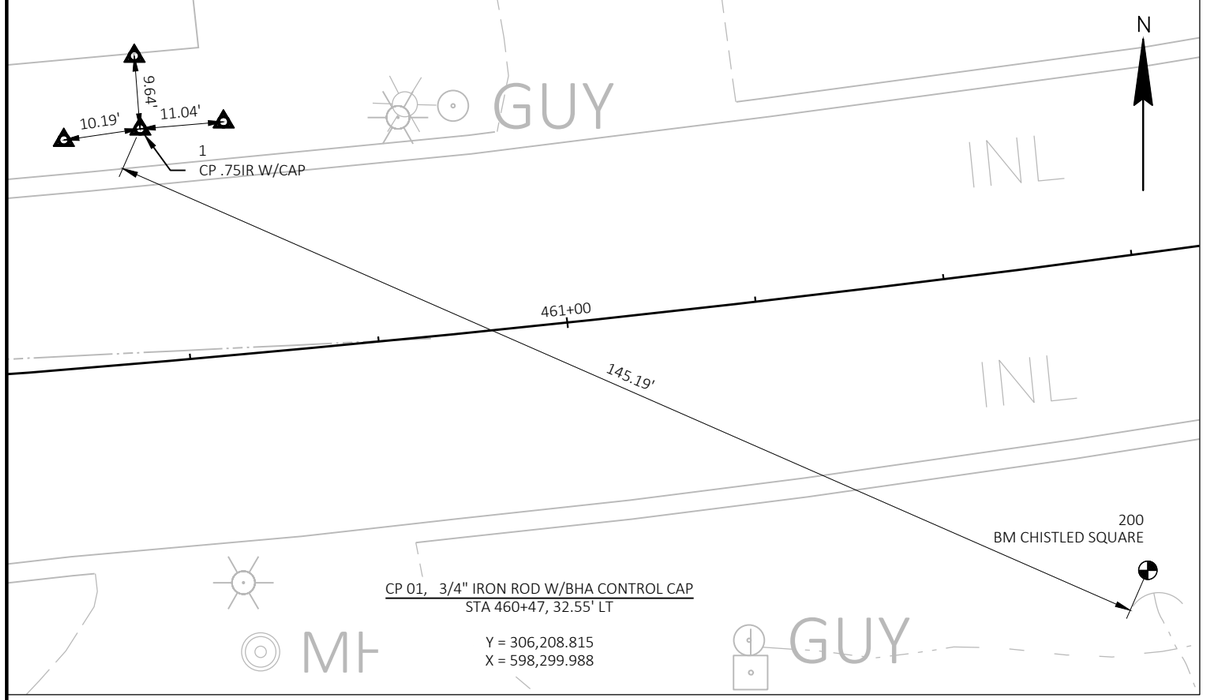
CP 01, 3/4" IRON ROD W/BHA CONTROL CAP
STA 299+63, 67.10' LT

Y = 307,732.448
X = 582,631.944



CP 01, MAG NAIL
STA 417+87, 113.49' LT

Y = 305,785.619
X = 594,073.912



CP 01, 3/4" IRON ROD W/BHA CONTROL CAP
STA 460+47, 32.55' LT

Y = 306,208.815
X = 598,299.988

6590-02-77

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,059.000	1,059.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	79,187.000	79,187.000
0006	204.0150	Removing Curb & Gutter	LF	1,271.000	1,271.000
0008	204.0155	Removing Concrete Sidewalk	SY	40.000	40.000
0010	204.0165	Removing Guardrail	LF	1,364.000	1,364.000
0012	204.0246	Removing Ancillary Structure (structure) 03. S-68-002	EACH	1.000	1.000
0014	205.0100	Excavation Common	CY	618.000	618.000
0020	211.0101	Prepare Foundation for Asphaltic Paving (project) 03. 6590-02-77	EACH	1.000	1.000
0028	213.0100	Finishing Roadway (project) 03. 6590-02-77	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,156.000	2,156.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	616.000	616.000
0034	455.0605	Tack Coat	GAL	5,367.000	5,367.000
0040	460.2000	Incentive Density HMA Pavement	DOL	1,480.000	1,480.000
0042	460.2005	Incentive Density PWL HMA Pavement	DOL	7,050.000	7,050.000
0044	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	7,710.000	7,710.000
0046	460.2010	Incentive Air Voids HMA Pavement	DOL	6,556.000	6,556.000
0048	460.6223	HMA Pavement 3 MT 58-28 S	TON	2,280.000	2,280.000
0050	460.6424	HMA Pavement 4 MT 58-28 H	TON	9,747.000	9,747.000
0052	465.0110	Asphaltic Surface Patching	TON	388.000	388.000
0054	465.0125	Asphaltic Surface Temporary	TON	137.000	137.000
0056	465.0305	Asphaltic Surface Safety Islands	TON	51.000	51.000
0058	465.0315	Asphaltic Flumes	SY	3.000	3.000
0060	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	6,282.000	6,282.000
0062	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	250.000	250.000
0064	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	1,020.000	1,020.000
0066	602.0405	Concrete Sidewalk 4-Inch	SF	398.000	398.000
0068	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	30.000	30.000
0070	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	15.000	15.000
0074	611.8120.S	Cover Plates Temporary	EACH	20.000	20.000
0076	611.9710	Salvaged Inlet Covers	EACH	20.000	20.000
0078	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	21.000	21.000
0080	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	3.000	3.000
0082	614.1000	MGS Guardrail Temporary	LF	100.000	100.000
0084	614.1100	MGS Guardrail Temporary Thrie Beam Transition	LF	157.600	157.600
0086	614.1200	MGS Guardrail Temporary Terminal EAT	EACH	4.000	4.000
0088	614.2300	MGS Guardrail 3	LF	800.000	800.000
0090	614.2500	MGS Thrie Beam Transition	LF	157.600	157.600
0092	614.2610	MGS Guardrail Terminal EAT	EACH	8.000	8.000
0100	618.0100	Maintenance And Repair of Haul Roads (project) 03. 6590-02-77	EACH	1.000	1.000
0102	619.1000	Mobilization	EACH	0.300	0.300
0104	620.0300	Concrete Median Sloped Nose	SF	51.000	51.000
0106	624.0100	Water	MGAL	54.000	54.000
0108	625.0100	Topsoil	SY	2,015.000	2,015.000
0110	627.0200	Mulching	SY	2,015.000	2,015.000
0112	628.1504	Silt Fence	LF	2,971.000	2,971.000
0114	628.1520	Silt Fence Maintenance	LF	2,971.000	2,971.000
0116	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0118	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0120	628.2008	Erosion Mat Urban Class I Type B	SY	671.000	671.000

6590-02-77

Line	Item	Item Description	Unit	Total	Qty
0122	628.7015	Inlet Protection Type C	EACH	25.000	25.000
0124	628.7570	Rock Bags	EACH	78.000	78.000
0126	629.0210	Fertilizer Type B	CWT	1.900	1.900
0128	630.0130	Seeding Mixture No. 30	LB	34.000	34.000
0130	630.0140	Seeding Mixture No. 40	LB	3.000	3.000
0132	630.0500	Seed Water	MGAL	10.000	10.000
0134	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	8.000	8.000
0136	637.2210	Signs Type II Reflective H	SF	48.000	48.000
0138	638.2102	Moving Signs Type II	EACH	2.000	2.000
0140	638.2602	Removing Signs Type II	EACH	6.000	6.000
0142	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0144	638.4000	Moving Small Sign Supports	EACH	2.000	2.000
0146	642.5001	Field Office Type B	EACH	0.300	0.300
0148	643.0300	Traffic Control Drums	DAY	15,158.000	15,158.000
0150	643.0410	Traffic Control Barricades Type II	DAY	56.000	56.000
0152	643.0420	Traffic Control Barricades Type III	DAY	1,223.000	1,223.000
0154	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	187.000	187.000
0156	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	187.000	187.000
0158	643.0705	Traffic Control Warning Lights Type A	DAY	1,576.000	1,576.000
0160	643.0715	Traffic Control Warning Lights Type C	DAY	1,539.000	1,539.000
0162	643.0900	Traffic Control Signs	DAY	6,146.000	6,146.000
0168	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0172	643.3105	Temporary Marking Line Paint 4-Inch	LF	3,754.000	3,754.000
0174	643.3120	Temporary Marking Line Epoxy 4-Inch	LF	650.000	650.000
0176	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	16,179.000	16,179.000
0178	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	40.000	40.000
0180	643.3960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	204.000	204.000
0182	643.5000	Traffic Control	EACH	0.200	0.200
0184	644.1430	Temporary Pedestrian Surface Plate	SF	120.000	120.000
0186	644.1601	Temporary Pedestrian Curb Ramp	DAY	56.000	56.000
0188	644.1810	Temporary Pedestrian Barricade	LF	262.000	262.000
0190	646.1020	Marking Line Epoxy 4-Inch	LF	20,487.000	20,487.000
0192	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	35,887.000	35,887.000
0194	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	1,785.000	1,785.000
0196	646.5020	Marking Arrow Epoxy	EACH	31.000	31.000
0198	646.5120	Marking Word Epoxy	EACH	3.000	3.000
0200	646.6120	Marking Stop Line Epoxy 18-Inch	LF	425.000	425.000
0202	646.7120	Marking Diagonal Epoxy 12-Inch	LF	555.000	555.000
0204	646.7220	Marking Chevron Epoxy 24-Inch	LF	76.000	76.000
0206	646.8120	Marking Curb Epoxy	LF	10.000	10.000
0208	646.8220	Marking Island Nose Epoxy	EACH	1.000	1.000
0210	646.9000	Marking Removal Line 4-Inch	LF	5,794.000	5,794.000
0212	646.9100	Marking Removal Line 8-Inch	LF	180.000	180.000
0214	646.9200	Marking Removal Line Wide	LF	740.000	740.000
0216	646.9300	Marking Removal Special Marking	EACH	4.000	4.000
0218	648.0100	Locating No-Passing Zones	MI	1.530	1.530
0220	650.4500	Construction Staking Subgrade	LF	561.000	561.000
0222	650.5000	Construction Staking Base	LF	561.000	561.000
0224	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,500.000	1,500.000

6590-02-77

Line	Item	Item Description	Unit	Total	Qty
0226	650.8000	Construction Staking Resurfacing Reference	LF	16,100.000	16,100.000
0228	650.9000	Construction Staking Curb Ramps	EACH	4.000	4.000
0230	650.9500	Construction Staking Sidewalk (project) 03. 6590-02-77	EACH	1.000	1.000
0236	650.9911	Construction Staking Supplemental Control (project) 03. 6590-02-77	EACH	1.000	1.000
0238	650.9920	Construction Staking Slope Stakes	LF	330.000	330.000
0240	690.0150	Sawing Asphalt	LF	1,855.000	1,855.000
0242	690.0250	Sawing Concrete	LF	176.000	176.000
0244	740.0440	Incentive IRI Ride	DOL	14,060.000	14,060.000
0246	SPV.0030	Special 03. Fertilizer For Lawn Type Turf	CWT	0.600	0.600
0248	SPV.0090	Special 03. Sawing Curb Head	LF	433.000	433.000
0250	SPV.0180	Special 03. Preparing Topsoil For Lawn Type Turf	SY	147.000	147.000

3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

204.0115
REMOVING ASPHALTIC
SURFACE BUTT JOINTS

STATION	TO	STATION	LOCATION	SY	REMARKS
299+73	-	299+83	NB STH 110	26	B-38-101 BRIDGE APPROACH
299+73	-	299+83	SB STH 110	26	B-38-100 BRIDGE APPROACH
300+65	-	300+75	NB STH 110	26	B-38-101 BRIDGE APPROACH
300+66	-	300+76	SB STH 110	26	B-38-100 BRIDGE APPROACH
308+65	-	308+90	LT	27	RAILROAD GRADE RD
321+22	-	321+47	RT	29	BROWN RD FIRST PASS
321+22	-	321+47	RT	29	BROWN RD SECOND PASS
339+42	-	339+67	LT	32	WOLF RIVER DRIVE
367+10	-	367+21	LT	18	OAK STREET (NORTH)
367+48	-	367+70	RT	20	OAK STREET (SOUTH)
376+45	-	376+71	LT	24	WEST STREET (NORTH)
377+00	-	377+25	RT	24	WEST STREET (SOUTH)
412+04	-	412+51	RT	48	CTH H (TUSTIN ROAD)
417+91	-	418+37	LT	51	W MAIN STREET
421+55	-	422+00	MAINLINE	240	B-68-0031 BRIDGE APPROACH
429+17	-	429+62	MAINLINE	240	B-68-0031 BRIDGE APPROACH
434+67	-	434+92	RT	28	RIVERVIEW DRIVE (SOUTH)
435+12	-	435+37	LT	28	RIVERVIEW DRIVE (NORTH)
442+18	-	442+43	LT	27	E MAIN STREET
446+17	-	446+48	LT	33	CTH H (NORTH)
457+27	-	458+27	MAINLINE	53	E.O.P.
			TOTAL 0010	1,059	

REMOVING CURB & GUTTER

204.0150
REMOVING
CURB & GUTTER

STATION	TO	STATION	LOCATION	LF	REMARKS
297+14	-	299+05	LT	228	STH 110 MEDIAN WIDENING
298+56	-	299+32	LT	82	NB STH 110 TEMPORARY GUARDRAIL
299+75	-	299+84	LT	6	ADJUSTING INLET
299+80	-	299+83	RT	3	ADJUSTING INLET
301+13	-	302+64	RT	146	SB STH 110 TEMPORARY GUARDRAIL
301+60	-	303+05	LT	145	SB STH 110 TEMPORARY GUARDRAIL
303+55	-	303+64	LT	6	ADJUSTING INLET
304+00	-	304+25	LT	25	SPOT REPAIR
307+96	-	308+05	RT	6	ADJUSTING INLET
309+43	-	309+51	RT	6	ADJUSTING INLET
311+19	-	314+74	RT	369	STH 110 MEDIAN WIDENING
412+18	-	412+27	LT	6	ADJUSTING INLET
415+76	-	415+91	LT	9	ADJUSTING INLETS
415+77	-	415+92	RT	9	ADJUSTING INLETS
417+90			LT	24	PEDESTRIAN CURB RAMP
418+41			LT	27	PEDESTRIAN CURB RAMP
418+71	-	418+80	RT	6	ADJUSTING INLET
418+72	-	418+81	LT	6	ADJUSTING INLET
421+41	-	421+50	LT/RT	12	ADJUSTING INLETS
430+39	-	430+48	LT/RT	12	ADJUSTING INLETS
433+85	-	434+00	LT/RT	18	ADJUSTING INLETS
434+89			LT	20	PEDESTRIAN CURB RAMP
UNDISTRIBUTED			LT/RT	100	SPOT REPAIR AS DIRECTED BY ENGINEER
			TOTAL 0010	1,271	

REMOVING ASPHALTIC SURFACE MILLING

204.0120
REMOVING ASPHALTIC
SURFACE MILLING

STATION	TO	STATION	LOCATION	SY	REMARKS
297+41	-	299+73	NB STH 110	900	5-INCH DEPTH
298+37	-	299+73	SB STH 110	451	5-INCH DEPTH
300+75	-	314+70	NB STH 110	4,717	5-INCH DEPTH
300+76	-	314+70	SB STH 110	3,990	5-INCH DEPTH
314+70	-	322+00	MAINLINE	3,682	2-INCH DEPTH FIRST PASS
314+70	-	322+00	MAINLINE	3,682	3-INCH DEPTH SECOND PASS
322+00	-	340+50	MAINLINE	9,028	2.25-INCH DEPTH
340+50	-	368+00	MAINLINE	9,926	2.25-INCH DEPTH
368+00	-	378+00	MAINLINE	3,985	2.25-INCH DEPTH
378+00	-	411+65	MAINLINE	14,478	2.25-INCH DEPTH
411+75	-	421+55	MAINLINE	6,236	2.25-INCH DEPTH
429+62	-	438+57	MAINLINE	5,957	2.25-INCH DEPTH
438+57	-	458+31	MAINLINE	12,154	2.25-INCH DEPTH
			TOTAL 0010	79,187	

REMOVING GUARDRAIL

204.0165
REMOVING
GUARDRAIL

STATION	TO	STATION	LOCATION	LF	REMARKS
297+93	-	300+02	LT	209	MEDIAN
298+61	-	300+02	RT	141	
300+43	-	302+57	LT	214	MEDIAN
300+43	-	304+54	LT	411	
435+43	-	437+28	RT	185	
435+67	-	437+71	RT	204	
			TOTAL 0010	1,364	

REMOVING CONCRETE SIDEWALK

204.0155
REMOVING CONCRETE
SIDEWALK

STATION	TO	STATION	LOCATION	SY	REMARKS
418+40	-	418+52	LT	18	W MAIN STREET
434+80	-	435+00	LT	22	RIVERVIEW DRIVE (NORTH)
			TOTAL 0010	40	

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

EARTHWORK SUMMARY

DIVISION	STAGE	STATION	TO	STATION	LOCATION	205.0100 EXCAVATION CUT (2) CY	205.0100 COMMON (1) EBS (3) CY	UNUSABLE PAVEMENT MATERIAL (4) CY	AVAILABLE MATERIAL (5) CY	UNEXPANDED FILL CY	EXPANDED FILL (6) CY	REMARKS
1	1A/1B	283+66	-	286+09	LT	32	0	-	-	-	-	STH 49 MEDIAN TEMPORARY PAVEMENT
		290+25	-	291+23	LT	61	0	-	-	-	-	STH 49 MEDIAN TEMPORARY PAVEMENT
		297+14	-	298+78	LT	120	0	-	-	-	-	STH 110 MEDIAN TEMPORARY PAVEMENT
		297+50	-	298+50	LT	8	0	-	-	-	-	BARRIER SYSTEM GRADING
		298+13	-	299+13	RT	37	0					BARRIER SYSTEM GRADING
		299+75	-	299+84	LT	2	0	-	-	-	-	ADJUSTING INLET
		299+80	-	299+83	RT	1	0	-	-	-	-	ADJUSTING INLET
		302+15	-	303+15	LT	11	0	-	-	-	-	BARRIER SYSTEM GRADING
		303+55	-	303+64	LT	2	0	-	-	-	-	ADJUSTING INLET
		304+21	-	305+21	LT	55	0	-	-	-	-	BARRIER SYSTEM GRADING
		307+96	-	308+05	RT	2	0	-	-	-	-	ADJUSTING INLET
		309+43	-	309+51	RT	2	0	-	-	-	-	ADJUSTING INLET
		310+79	-	314+75	RT	67	0	-	-	-	-	STH 110 MEDIAN TEMPORARY PAVEMENT
		412+18	-	412+27	LT	2	0	-	-	-	-	ADJUSTING INLET
		415+76	-	415+91	LT	3	0	-	-	-	-	ADJUSTING INLETS
		415+77	-	415+92	RT	3	0	-	-	-	-	ADJUSTING INLETS
		417+60	-	417+75	LT	5	0	-	-	-	-	W MAIN STREET CURB RAMP - NW QUADRANT
		418+30	-	418+50	LT	4	0	-	-	-	-	W MAIN STREET CURB RAMP - NE QUADRANT
		418+71	-	418+80	RT	2	0	-	-	-	-	ADJUSTING INLET
		418+72	-	418+81	LT	2	0	-	-	-	-	ADJUSTING INLET
		421+41	-	421+50	LT/RT	4	0	-	-	-	-	ADJUSTING INLETS
		430+39	-	430+48	LT/RT	4	0	-	-	-	-	ADJUSTING INLETS
		433+85	-	434+00	LT/RT	6	0	-	-	-	-	ADJUSTING INLETS
		434+80	-	435+00	LT	4	0	-	-	-	-	N RIVERVIEW DR CURB RAMP - NW QUADRANT
		435+30	-	435+50	LT	10	0	-	-	-	-	N RIVERVIEW DR CURB AND GUTTER AND CURB RAMP
2	4B	435+18	-	438+64	RT	94	0	0	94	51	59	C-68-0018 GUARDRAIL
		435+18	-	438+64	LT	79	0	0	79	25	29	C-68-0018 GUARDRAIL
					TOTALS	618	0	0	173	76	88	
					EXCAVATION COMMON	618						

(1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NO. 205.0100.
(2) UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH CUT MATERIAL.
(4) UNUSABLE PAVEMENT MATERIAL.
(5) AVAILABLE MATERIAL = CUT - UNUSABLE PAVEMENT MATERIAL.
(6) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR = 1.15.
(7) MASS ORDINATE = (AVAILABLE MATERIAL) - (EXPANDED FILL). PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

CURB RAMPS
C-68-18 GUARDRAIL

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

PREPARE FOUNDATION FOR ASPHALTIC PAVING

STATION	TO	STATION	LOCATION	211.0100.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (03. 6590-02-77) EACH
314+75	-	458+31	LT/RT	1
			TOTAL 0010	1

BASE AGGREGATE DENSE 3/4-INCH

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL*	REMARKS
308+33	-	317+47	RT	108	2	
309+43	-	321+92	LT	148	3	
317+47	-	320+64	RT	67	1	
321+92	-	341+56	RT	65	1	
322+56	-	338+90	LT	167	3	
340+45	-	345+25	LT	16	0.3	
341+56	-	367+30	RT	264	5	
345+25	-	367+03	LT	223	4	
367+43	-	376+06	LT	88	2	
367+30	-	376+25	RT	92	2	
377+33	-	397+48	LT	206	4	
377+63	-	398+05	RT	209	4	
397+48	-	411+05	LT	64	1	
398+05	-	411+77	RT	64	1	
435+18	-	438+54	RT	52	1	C-68-0018 GUARDRAIL
435+53	-	439+97	LT	68	1	C-68-0018 GUARDRAIL
438+54	-	456+68	RT	85	2	
439+97	-	442+17	LT	10	0.2	
442+85	-	445+83	LT	14	0.3	
447+06	-	456+82	LT	46	1	
UNDISTRIBUTED				100	2	
			TOTAL 0010	2,156	43	

*NOTE: ITEM SHOWN ELSEWHERE IN MISCELLANEOUS QUANTITIES.

BASE AGGREGATE DENSE 1 1/4-INCH

STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL*	REMARKS
297+14	-	299+05	LT	132	3	STH 110 MEDIAN
298+56	-	299+33	LT	18	0.4	NB STH 110
299+75	-	299+84	LT	2	-	ADJUSTING INLET
299+80	-	299+83	RT	2	-	ADJUSTING INLET
301+13	-	302+64	RT	32	1	SB STH 110
301+60	-	303+05	LT	32	1	SB STH 110
303+55	-	303+64	LT	2	-	ADJUSTING INLET
304+00	-	304+25	LT	5	-	SPOT CURB & GUTTER REPAIR
307+96	-	308+05	RT	2	-	ADJUSTING INLET
309+43	-	309+51	RT	2	-	ADJUSTING INLET
311+19	-	314+74	RT	97	2	STH 110 MEDIAN
412+18	-	412+27	LT	2	-	ADJUSTING INLET
415+76	-	415+91	LT	2	-	ADJUSTING INLETS
415+77	-	415+92	RT	2	-	ADJUSTING INLETS
417+90			LT	2	-	PEDESTRIAN CURB RAMP
418+41			LT	5	0.1	PEDESTRIAN CURB RAMP
418+71	-	418+80	RT	2	-	ADJUSTING INLET
418+72	-	418+81	LT	2	-	ADJUSTING INLET
421+41	-	421+50	LT/RT	4	-	ADJUSTING INLETS
430+39	-	430+48	LT/RT	4	-	ADJUSTING INLETS
433+85	-	434+00	LT/RT	4	-	ADJUSTING INLETS
434+89			LT	8	0.2	PEDESTRIAN CURB RAMP
435+18	-	437+84	RT	102	2	C-68-0018 GUARDRAIL
435+28	-	435+52	LT	12	-	RIVERVIEW DRIVE (NORTH)
435+53	-	438+48	LT	117	2	C-68-0018 GUARDRAIL
UNDISTRIBUTED			LT/RT	22	0.6	SPOT REPAIRS AS DIRECTED BY ENGINEER
			TOTAL 0010	616	11	

*NOTE: ITEM SHOWN ELSEWHERE IN MISCELLANEOUS QUANTITIES.

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

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HMA PAVEMENT

STATION	TO	STATION	LOCATION	* 455.0605 TACK COAT GAL	* 460.6223 HMA PAVEMENT T3 MT 58-28 S TON	460.6424 HMA PAVEMENT T4 MT 58-28 H TON	REMARKS
297+31	-	299+83	LT	63	149	114	
298+21	-	299+83	RT	34	75	62	
300+65	-	318+10	LT/RT	433	1,023	787	
300+66	-	318+10	RT	302	714	549	
318+10	-	321+82	LT/RT	135	319	245	
321+82	-	340+50	LT/RT	652	-	1,185	
340+50	-	368+00	LT/RT	695	-	1,262	
368+00	-	378+03	LT/RT	279	-	507	
378+03	-	411+66	LT/RT	1,013	-	1,840	
411+66	-	421+98	LT/RT	460	-	835	
429+18	-	438+56	LT/RT	437	-	793	
438+56	-	458+31	LT/RT	863	-	1,568	
PROJECT 6590-02-77				-	-	-	
		TOTAL 0010		5,367	2,280	9,747	

ASPHALTIC FLUMES

STATION	TO	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY	REMARKS
435+13	-	435+23	RIVERVIEW DRIVE NE QUAD	3	
			TOTAL 0010	3	

3

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
DRIVING LANES	297+31 - 322+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	1,340	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
DRIVING LANES	297+31 - 322+00	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	1,742	2.75-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
3-FOOT SHOULDERS, TURN LANES, INTERSECTIONS	297+31 - 322+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 H	429	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3-FOOT SHOULDERS, TURN LANES, INTERSECTIONS	297+31 - 322+00	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	560	2.75-INCH	QMP PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
DRIVING LANES, AUXILLARY LANE, & TWO-WAY LEFT TURN LANE	322+00 - 421+98	UPPER LAYER	EXISTING MILLED SURFACE	4 MT 58-28 H	4,080	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS, TURN LANES, & INTERSECTIONS	322+00 - 421+98	UPPER LAYER	EXISTING MILLED SURFACE	4 MT 58-28 H	1,516	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
DRIVING LANES & TWO-WAY LEFT TURN LANE	429+18 - 458+31	UPPER LAYER	EXISTING MILLED SURFACE	4 MT 58-28 H	1,630	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS, TURN LANES, & INTERSECTIONS	429+18 - 458+31	UPPER LAYER	EXISTING MILLED SURFACE	4 MT 58-28 H	731	2.25-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
VARIOUS		PATCHING	VARIES	ASPHALTIC SURFACE PATCHING	834	VARIES	QMP PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

ASPHALTIC SURFACE PATCHING

STATION	TO	STATION	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	REMARKS
297+31	-	322+00	LT/RT	20	TEMPORARY RAMPING
322+00	-	340+50	LT/RT	55	BASE REPAIRS & TEMPORARY RAMPING
340+50	-	378+03	LT/RT	85	BASE REPAIRS & TEMPORARY RAMPING
378+03	-	411+66	LT/RT	85	BASE REPAIRS & TEMPORARY RAMPING
411+66	-	438+56	LT/RT	55	BASE REPAIRS & TEMPORARY RAMPING
438+56	-	458+31	LT/RT	55	BASE REPAIRS & TEMPORARY RAMPING
299+75	-	299+84	LT	1	ADJUSTING INLET
299+80	-	299+83	RT	1	ADJUSTING INLET
303+55	-	303+64	LT	1	ADJUSTING INLET
304+00	-	304+25	LT	2	SPOT REPAIR
307+96	-	308+05	RT	1	ADJUSTING INLET
309+43	-	309+51	RT	1	ADJUSTING INLET
412+18	-	412+27	LT	1	ADJUSTING INLET
415+76	-	415+91	LT	1	ADJUSTING INLETS
415+77	-	415+92	RT	1	ADJUSTING INLETS
417+90			LT	2	PEDESTRIAN CURB RAMP
418+41			LT	2	PEDESTRIAN CURB RAMP
418+71	-	418+80	RT	1	ADJUSTING INLET
418+72	-	418+81	LT	1	ADJUSTING INLET
421+41	-	421+50	LT/RT	2	ADJUSTING INLETS
430+39	-	430+48	LT/RT	2	ADJUSTING INLETS
433+85	-	434+00	LT/RT	2	ADJUSTING INLETS
434+89			LT	2	PEDESTRIAN CURB RAMP
436+70	-	437+27	RT	2	MGS EAT SHOULDER PAVING
436+95	-	437+65	LT	2	MGS EAT SHOULDER PAVING
UNDISTRIBUTED			LT/RT	5	SPOT REPAIR AS DIRECTED BY ENGINEER
			TOTAL 0010	388	

ASPHALTIC SURFACE TEMPORARY

STATION	TO	STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
297+14	-	299+05	LT	56	STH 110 MEDIAN
298+56	-	299+33	LT	8	TEMPORARY GUARDRAIL EAT
301+13	-	302+64	RT	14	TEMPORARY GUARDRAIL EAT
301+60	-	303+05	LT	14	TEMPORARY GUARDRAIL EAT
311+19	-	314+74	RT	45	STH 110 MEDIAN
			TOTAL 0010	137	

ASPHALTIC SURFACE SAFETY ISLANDS

STATION	TO	STATION	LOCATION	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS TON	REMARKS
311+19	-	314+70	RT	51	STH 110 MEDIAN
			TOTAL 0010	51	

CONCRETE CURB & GUTTER 30-INCH TYPE D

STATION	TO	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	REMARKS
412+25	-	458+13	UNDISTRIBUTED	250	
			TOTAL 0010	250	

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

STATION	TO	STATION	LOCATION	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	REMARKS
297+14	-	299+05	LT	228	228	STH 110 MEDIAN
298+56	-	299+32	LT	82	82	NB STH 110
301+13	-	302+64	RT	146	146	SB STH 110
301+60	-	303+05	LT	145	145	SB STH 110
311+19	-	314+74	RT	369	369	STH 110 MEDIAN
297+50	-	314+75	UNDISTRIBUTED	50	530	
			TOTAL 0010	1020	1500	

ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL

STATION	TO	STATION	LOCATION	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE LF	REMARKS
322+75	-	337+50	CL	1,475	
341+50	-	365+40	CL	2,390	
369+40	-	374+82	CL	542	
380+50	-	399+25	CL	1,875	
			TOTAL 0010	6,282	

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NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

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CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9500 CONSTRUCTION STAKING SIDEWALK (PROJECT) 03. 6590-02-77 EACH	REMARKS
417+60	-	417+75	W MAIN ST	55	10	-	1	-	NEW CURB RAMP - NE QUADRANT
418+30	-	418+50	W MAIN ST	132	10	-	1	-	CURB RAMP REPLACEMENT - NW QUADRANT
434+80	-	435+00	RIVERVIEW DR (NORTH)	169	-	15	1	-	CURB RAMP REPLACEMENT - NE QUADRANT
435+30	-	435+50	RIVERVIEW DR (NORTH)	42	10	-	1	-	NEW CURB RAMP - NW QUADRANT
UNDISTRIBUTED								1	
			TOTAL 0010	398	30	15	4	1	

RECONSTRUCTING INLETS

STATION	LOCATION	611.8120.S COVER PLATES TEMPORARY EACH	611.9710 SALVAGED INLET COVERS EACH	REMARKS
299+80	LT	1	1	
299+80	RT	1	1	
303+61	LT	1	1	
308+00	RT	1	1	
309+49	RT	1	1	
412+15	LT	1	1	
415+79	LT	2	2	
415+79	RT	2	2	
418+79	LT	1	1	
418+79	RT	1	1	
421+50	LT	1	1	
421+50	RT	1	1	
430+45	LT	1	1	
430+45	RT	1	1	
433+90	LT	2	2	
433+90	RT	2	2	
TOTAL 0010		20	20	

PIPE UNDERDRAIN

STATION	LOCATION	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	REMARKS
435+28	RT	11	1	EXTEND EXISTING UNDERDRAIN
435+87	LT	4	1	EXTEND EXISTING UNDERDRAIN
437+51	RT	6	1	EXTEND EXISTING UNDERDRAIN
	TOTAL 0010	21	3	

NOTE: ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

MGS GUARDRAIL

STATION	TO	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	REMARKS
298+00	-	298+53	LT	-	-	1	SB STH 110
298+53	-	299+65	LT	112.5	-	-	SB STH 110
298+63	-	299+24	RT	-	-	1	SB STH 110
299+24	-	299+63	RT	37.5	-	-	SB STH 110
299+65	-	300+04	LT	-	39.40	-	SB STH 110
299+63	-	300+04	RT	-	39.40	-	SB STH 110
300+43	-	300+80	LT	-	39.40	-	NB STH 110
300+44	-	300+82	LT	-	39.40	-	NB STH 110
300+80	-	304+19	LT	362.5	-	-	NB STH 110
300+82	-	302+14	LT	137.5	-	-	NB STH 110
302+14	-	302+66	LT	-	-	1	NB STH 110
304+19	-	304+72	LT	-	-	1	NB STH 110
435+10	-	435+93	RT	-	-	1	
435+70	-	436+24	LT	-	-	1	
435+93	-	436+68	RT	75	-	-	
436+24	-	436+98	LT	75	-	-	
436+68	-	437+21	RT	-	-	1	
436+98	-	437+51	LT	-	-	1	
			TOTAL 0010	800	157.6	8	

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MGS GUARDRAIL TEMPORARY

STATION	TO	STATION	LOCATION	614.1000 MGS GUARDRAIL TEMPORARY LF	614.1100 MGS GUARDRAIL TEMPORARY THRIE LF	614.1200 MGS GUARDRAIL TEMPORARY EACH	REMARKS
298+79	-	299+30	LT			1	
299+08	-	299+57	LT	-	-	1	
299+30	-	299+68	LT	37.5	-	-	
299+57	-	299+70	LT	12.5	-	-	
299+69	-	300+08	LT	-	39.4	-	
299+69	-	300+08	LT	-	39.4	-	
300+45	-	300+84	LT	-	39.4	-	
300+45	-	300+84	RT	-	39.4	-	
300+83	-	301+33	LT	50	-	-	
300+84	-	301+41	RT	-	-	1	
301+33	-	301+86	LT	-	-	1	
			TOTAL 0010	100	157.6	4	

CONCRETE MEDIAN SLOPED NOSE

STATION	TO	STATION	LOCATION	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	REMARKS
297+14	-	297+19	LT	27	TYPE 2
314+70	-	314+74	RT	24	TYPE 2
			TOTAL 0010	51	

EROSION CONTROL & LANDSCAPING ITEMS

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7015 INLET PROTECTION TYPE C EACH	628.7570 ROCK BAGS EACH	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.05 SEED WATER MGAL	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY	REMARKS
297+18	-	299+04	LT	163	163	300	300	-	-	-	-	-	0.2	3.0	-	-	-	-	STH 110 MEDIAN RESTORATION
297+50	-	298+50	LT	131	131	300	300	-	-	-	-	17	0.1	2.0	-	-	-	-	BARRIER SYSTEM GRADING SHAPING AND FINISHING
299+80	-	309+49	LT/RT	15	15	-	-	-	-	-	-	-	0.1	0.5	-	-	-	-	ADJUSTING INLET COVERS
298+13	-	299+13	RT	191	191	-	-	-	-	-	-	-	0.1	3.0	-	-	-	-	BARRIER SYSTEM GRADING SHAPING AND FINISHING
298+56	-	299+32	LT	27	27	300	300	-	-	-	-	-	0.1	0.5	-	-	-	-	NB STH 110 CURB & GUTTER REPLACEMENT
301+13	-	302+64	RT	48	48	300	300	-	-	-	-	-	0.1	1.0	-	-	-	-	SB STH 110 CURB & GUTTER REPLACEMENT
301+60	-	303+05	LT	49	49	300	300	-	-	-	-	-	0.1	1.0	-	-	-	-	SB STH 110 CURB & GUTTER REPLACEMENT
302+15	-	303+15	LT	195	195	300	300	-	-	-	-	17	0.1	4.0	-	-	-	-	BARRIER SYSTEM GRADING SHAPING AND FINISHING
304+21	-	305+21	LT	248	248	-	-	-	-	-	-	-	0.2	4	-	-	-	-	BARRIER SYSTEM GRADING SHAPING AND FINISHING
412+15	-	433+90	LT/RT	45	45	300	300	-	-	-	-	-	-	-	1.0	-	0.1	45	ADJUSTING INLET COVERS
417+75	-	417+91	LT	5	5	40	40	-	-	-	-	-	-	-	0.2	-	0.1	5	W MAIN STREET CURB RAMP (NE)
418+37	-	418+54	LT	9	9	27	27	-	-	-	-	-	-	-	0.3	-	0.1	9	W MAIN STREET CURB RAMP (NW)
434+57	-	434+93	LT	13	13	37	37	-	-	-	-	-	-	-	0.3	-	0.1	13	N RIVERVIEW DR CURB RAMP (NE)
435+15	-	438+91	RT	292	292	382	382	-	-	292	-	17	0.2	6.0	-	-	-	-	C-68-0018 BOX CULVERT GUARDRAIL
435+30	-	435+67	LT	55	55	-	-	-	-	-	-	-	-	-	1.0	-	0.1	55	N RIVERVIEW DR CURB RAMP (NW)
435+56	-	439+05	LT	379	379	385	385	-	-	379	-	17	0.3	7.0	-	-	-	-	C-68-0018 BOX CULVERT GUARDRAIL
PROJECT 6590-02-77																	-	-	
UNDISTRIBUTED				150	150	-	-	2	3	-	25	10	0.3	2.0	0.2	10	0.1	20	
			TOTAL 0010	2,015	2,015	2,971	2,971	2	3	671	25	78	1.9	34.0	3.0	10.0	0.6	147	

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

PERMANENT SIGNING

STATION	OFFSET	SIGN NO.	CODE NO.	DESCRIPTION	SIZE IN		SIZE IN	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	204.0246.01 REMOVING ANCILLARY STRUCTURE (STRUCTURE) (01. S-68-002) EACH	REMARKS
402+67	LT	1.01	W4-2R	LANE REDUCTION TRANSITION SYMBOL - RIGHT	-	X	-	-	-	1	1	-	
406+00	RT	1.02	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
406+60	LT	1.03	W9-2L	LANE ENDS MERGE LEFT	-	X	-	-	-	1	1	-	
411+50	LT	1.04	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
419+50	RT	2.01	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
420+05	LT	2.02	R3-7R	RIGHT LANE MUST TURN RIGHT	-	X	-	-	-	1	-	-	
430+96	LT	3.01	-	-	-	X	-	-	-	3	-	1	
433+90	LT	3.02	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
438+43	RT	3.03	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
441+55	LT	3.04	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
447+85	RT	4.01	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
457+25	LT	4.02	R3-9B	CENTER LANE LEFT TURN ONLY SYMBOL	24	X	36	1	6.00	-	-	-	
				TOTAL 0010				8	48.00	6	2	1	

MOVING SIGNS

STATION	TO	STATION	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
		345+00	RT	1	1	MOVE BASED ON RESULTS OF LOCATING NO PASSING ZONES
		389+00	LT	1	1	MOVE BASED ON RESULTS OF LOCATING NO PASSING ZONES
			TOTAL 0010	2	2	

TRAFFIC CONTROL

LOCATION	STAGE	ESTIMATED DURATION (DAYS)	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE II EACH	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	REMARKS
STH 49/STH 110	ADVANCE WARNING	127	-	-	-	-	-	-	-	-	-	-	-	-	30	3,810	36	IN USE FOR DURATION OF PROJECT
STH 49/STH 110	1A	14	351	4,914	-	-	18	252	-	-	36	504	39	546	36	504	-	
STH 110	PEDESTRIAN ACCOMMODATIONS	14	10	140	4	56	4	56	-	-	-	-	-	-	8	112	-	
STH 49/STH 110	1B	18	187	3,366	-	-	9	162	-	-	18	324	-	-	13	234	-	
STH 49/STH 110	2	12	33	396	-	-	25	300	81	81	18	216	17	204	33	396	-	
STH 49/STH 110	3	11	68	748	-	-	25	275	81	81	16	176	49	539	34	374	-	
STH 110	MILLING/PAVING	50	25	1,250	-	-	-	-	-	-	-	-	-	-	8	400	-	SIGNS USED FOR TRAFFIC ON MILLED SURFACES
STH 49/STH 110	4A	12	187	2,244	-	-	9	108	-	-	18	216	-	-	13	156	-	
STH 49/STH 110	4B	10	210	2,100	-	-	7	70	-	-	14	140	25	250	16	160	-	
UNDISTRIBUTED (PROJECT 6590-02-77)			-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	
		TOTAL 0010		15,158		56		1,223	187	187		1,576		1,539		6,146	36	

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

TEMPORARY PEDESTRIAN ACCOMMODATIONS

STATION	TO	STATION	LOCATION	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	REMARKS
418+30	-	418+57	LT	-	-	142	W MAIN ST
418+38	-	418+55	LT	25	14	-	W MAIN ST
418+53	-	418+67	LT	25	14	-	W MAIN ST
434+51	-	434+64	LT	35	14	-	N RIVERVIEW DR
434+62	-	435+06	LT	-	-	120	N RIVERVIEW DR
434+94	-	435+07	LT	35	14	-	N RIVERVIEW DR
			TOTAL 0010	120	56	262	

LOCATING NO PASSING ZONES

STATION	TO	STATION	LOCATION	648.0100 LOCATING NO-PASSING ZONES MI	REMARKS
318+49	-	399+48	LT/RT	1.53	TWO LANE SECTION
			TOTAL 0010	1.53	

TEMPORARY MARKING

STATION	TO	STATION	LOCATION	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH* LF	643.3120 TEMPORARY MARKING LINE EPOXY 4-INCH* LF	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	643.3960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH LF	REMARKS
312+00	-	314+70	LT	-	-	540	-	68	STAGE 1A
404+75	-	407+50	RT	-	-	554	-	-	STAGE 1A
456+05	-	458+75	LT	-	-	270	-	68	STAGE 1A
296+98	-	320+00	LT	-	-	5,638	40	-	STAGE 2
297+32	-	320+00	LT/RT	-	-	8,637	-	-	STAGE 3
312+00	-	314+70	LT	-	-	540	-	68	STAGE 4B
297+31	-	314+20	LT	431	-	-	-	-	
298+20	-	309+61	RT	283	-	-	-	-	
314+20	-	340+30	LT/RT	454	-	-	-	-	
322+75	-	399+25	CL	-	650	-	-	-	
340+30	-	398+50	CL	506	-	-	-	-	
398+50	-	458+31	LT/RT	2,080	-	-	-	-	
			TOTAL 0010	3,754	650	16,179	40	204	

*NOTE: MARK THE CENTERLINE AND WHITE LANE LINES ON THE MILLED SURFACE AND INTERMEDIATE LAYERS
MARK TEMPORARY EPOXY ON THE SURFACE
MARK PERMANENT EPOXY AFTER CENTERLINE RUMBLE STRIPS HAVE BEEN INSTALLED

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH LF	646.3040 MARKING LINE GROOVED WET REF EPOXY 8-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.7220 MARKING CHEVRON EPOXY 24-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY LF	REMARKS
297+31	-	308+08	LT	-	1,126	-	-	-	-	-	-	-	-	
297+31	-	298+31	LT	-	-	105	-	-	-	-	-	-	-	
297+31	-	314+20	LT	-	431	-	-	-	-	-	-	-	-	
298+20	-	309+61	RT	-	283	-	-	-	-	-	-	-	-	
298+20	-	320+65	RT	-	2,230	-	-	-	-	-	-	-	-	
307+08	-	308+18	RT	-	-	110	-	-	-	-	-	-	-	
309+43	-	310+55	LT	-	-	112	-	-	-	-	-	-	-	
314+20	-	319+50	LT	1,060	1,060	-	-	-	-	-	-	-	-	
314+20	-	319+00	LT/RT	-	-	-	-	-	-	303	-	10	1	
314+70	-	319+50	LT/RT	960	-	-	-	-	-	-	-	-	-	
319+50	-	343+00	CL	-	4,666	-	-	-	-	-	-	-	-	
321+75	-	340+25	RT	-	463	-	-	-	-	-	-	-	-	
321+75	-	367+07	RT	-	4,525	-	-	-	-	-	-	-	-	
322+33	-	324+68	LT	-	-	235	-	-	-	-	-	-	-	
322+50	-	339+00	LT	-	1,654	-	-	-	-	-	-	-	-	
340+45	-	345+25	LT	-	-	480	-	-	-	-	-	-	-	
340+45	-	366+86	LT	-	2,642	-	-	-	-	-	-	-	-	
343+00	-	344+83	CL	229	-	-	-	-	-	-	-	-	-	
344+83	-	389+00	CL	1,104	-	-	-	-	-	-	-	-	-	
367+66	-	376+20	LT	-	854	-	-	-	-	-	-	-	-	
367+90	-	375+65	RT	-	775	-	-	-	-	-	-	-	-	
375+65	-	376+43	RT	-	20	-	-	-	-	-	-	-	-	
377+27	-	377+99	LT	-	18	-	-	-	-	-	-	-	-	
377+50	-	411+75	RT	-	3,436	-	-	-	-	-	-	-	-	
377+99	-	417+65	LT	-	3,958	-	-	-	-	-	-	-	-	
389+00	-	395+25	CL	781	-	-	-	-	-	-	-	-	-	
395+25	-	399+48	CL	846	-	-	-	-	-	-	-	-	-	
399+48	-	405+62	CL/LT/RT	2,457	-	-	-	-	-	-	-	-	-	
399+48	-	405+62	LT/RT	-	-	-	-	-	-	192	-	-	-	
405+62	-	411+75	LT/RT	1,533	-	-	-	-	-	-	-	-	-	
409+35	-	411+75	RT	-	-	483	-	-	-	-	76	-	-	
412+99	-	417+75	LT	595	-	-	-	-	-	-	-	-	-	
412+99	-	417+75	RT	595	-	-	-	-	-	-	-	-	-	
412+99	-	433+74	RT	-	2,076	-	-	-	-	-	-	-	-	
418+74	-	420+24	LT	-	38	-	-	-	-	-	-	-	-	
418+74	-	434+62	LT/RT	3,968	-	-	-	-	-	-	-	-	-	
420+24	-	434+50	LT	-	1,427	-	-	-	-	-	-	-	-	
433+74	-	434+49	RT	-	19	-	-	-	-	-	-	-	-	
435+28	-	455+23	RT	-	1,992	-	-	-	-	-	-	-	-	
435+39	-	444+50	LT/RT	2,273	-	-	-	-	-	-	-	-	-	
435+55	-	436+30	LT	-	19	-	-	-	-	-	-	-	-	
436+30	-	442+10	LT	-	582	-	-	-	-	-	-	-	-	
442+74	-	443+49	LT	-	19	-	-	-	-	-	-	-	-	
443+49	-	445+84	LT	-	237	-	-	-	-	-	-	-	-	
444+50	-	446+00	LT/RT	602	-	-	-	-	-	-	-	-	-	
445+25	-	446+00	RT	-	-	75	-	-	-	-	-	-	-	
446+84	-	448+24	LT	-	35	-	-	-	-	-	-	-	-	
446+84	-	458+00	LT/RT	2,790	-	-	-	-	-	-	-	-	-	
488+24	-	458+85	LT	-	1,061	-	-	-	-	-	-	-	-	
456+08	-	458+50	RT	-	242	-	-	-	-	-	-	-	-	
457+00	-	458+85	RT	-	-	185	-	-	-	-	-	-	-	
485+00	-	458+85	LT	340	-	-	-	-	-	60	-	-	-	
297+31	-	458+85		354	-	-	31	3	425	-	-	-	-	
			TOTAL 0010	20,487	35,887	1,785	31	3	425	555	76	10	1	

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

3

MARKING REMOVAL

STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH	REMARKS
404+10	-	411+43	RT	1,334	-	338	-	STAGE 1A
412+89	-	414+85	RT	410	-	73	-	STAGE 1A
297+18	-	297+40	RT	-	-	26	-	STAGE 2 - RAMP 49-4
314+21	-	319+70	LT	1,000	-	303	-	STAGE 2 - STH 110
421+99	-	429+18	LT/RT	3,050	180	-	4	B-38-0031
			TOTAL 0010	5,794	180	740	4	

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 6590-02-77) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
297+31	-	458+31	MAINLINE	-	-	16,100	1	-	PROJECT LIMITS
435+18	-	437+84	RT	266	266	-	-	-	C-68-0018 GUARDRAIL
435+53	-	438+48	LT	295	295	-	-	-	C-68-0018 GUARDRAIL
435+18	-	438+48	LT/RT	-	-	-	-	330	C-68-0018 GUARDRAIL
			TOTAL 0010	561	561	16,100	1	330	

NOTE: OTHER CONSTRUCTION STAKING ITEMS SHOWN ELSEWHERE IN MISCELLANEOUS QUANTITIES.

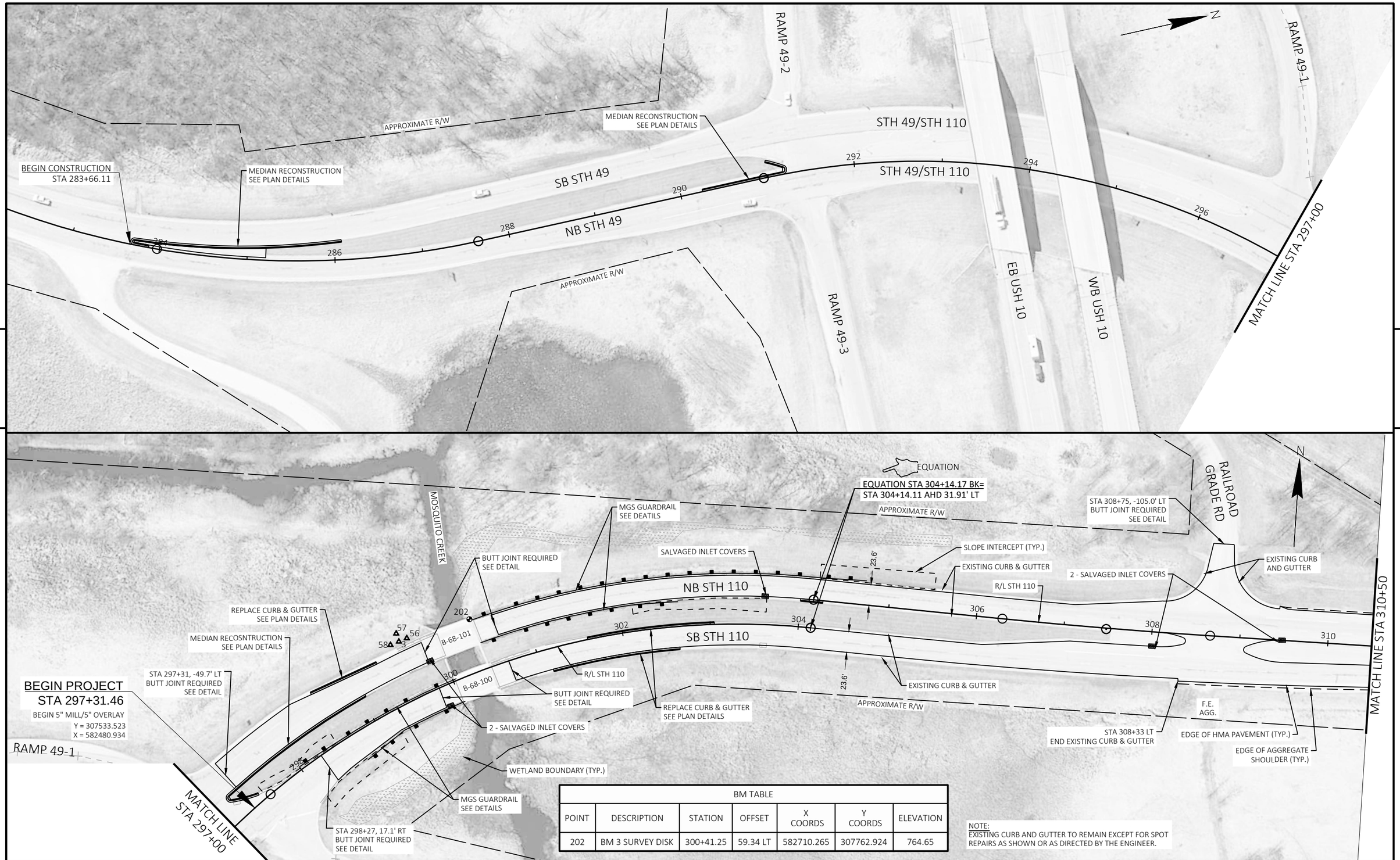
SAWING

STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
297+14	-	299+05	LT	239	6	REMOVING STH 110 MEDIAN TEMP ASPHALT
298+56	-	299+33	LT	82	6	REMOVING NB STH 110 OUTSIDE TEMP ASPHALT
299+75	-	299+84	LT	13	6	ADJUSTING INLET
299+80	-	299+83	RT	8	6	ADJUSTING INLET
301+13	-	302+64	RT	146	6	REMOVING SB STH 110 OUTSIDE TEMP ASPHALT
301+60	-	303+05	LT	145	6	REMOVING SB STH 110 MEDIAN TEMP ASPHALT
303+55	-	303+64	LT	13	6	ADJUSTING INLET
304+00	-	304+25	LT	29	6	SPOT CURB & GUTTER REPAIR
307+96	-	308+05	RT	13	6	ADJUSTING INLET
309+43	-	309+51	RT	13	6	ADJUSTING INLET
310+80	-	314+74	RT	415	6	REMOVING STH 110 MEDIAN TEMP ASPHALT
412+18	-	412+27	LT	13	5	ADJUSTING INLET
415+76	-	415+91	LT	20	5	ADJUSTING INLET
415+77	-	415+92	RT	20	5	ADJUSTING INLET
417+90			LT	26	5	PEDESTRIAN CURB RAMP
418+41			LT	34	5	PEDESTRIAN CURB RAMP
418+44	-	418+51	LT	-	10	SIDEWALK
418+71	-	418+80	RT	13	5	ADJUSTING INLET
418+72	-	418+81	LT	13	5	ADJUSTING INLET
421+41	-	421+50	LT/RT	32	10	ADJUSTING INLET
430+39	-	430+48	LT/RT	32	10	ADJUSTING INLET
433+85	-	434+00	LT/RT	34	10	ADJUSTING INLET
434+63	-	434+88	LT	-	10	SIDEWALK
434+89			LT	26	5	PEDESTRIAN CURB RAMP
435+27	-	435+53	LT	66	-	CUB & GUTTER NE QUADRANT RIVERVIEW DR
437+35	-	438+90	RT	155	-	MAINLINE
437+56	-	439+05	LT	150	-	MAINLINE
UNDISTRIBUTED			LT/RT	105	20	SPOT CURB & GUTTER REPAIR AS DIRECTED BY ENDGINEER
			TOTAL 0010	1,855	176	

SAWING CURB HEAD

STATION	TO	STATION	LOCATION	SPV.0090.01 SAWING CURB HEAD LF	REMARKS
297+46	-	298+28	LT	83	SB STH 110
298+09	-	298+98	RT	87	SB STH 110
302+39	-	303+56	LT	122	NB STH 110
304+44	-	305+85	LT	141	NB STH 110
			TOTAL 0010	433	

NOTE: ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.



BM TABLE						
POINT	DESCRIPTION	STATION	OFFSET	X COORDS	Y COORDS	ELEVATION
202	BM 3 SURVEY DISK	300+41.25	59.34 LT	582710.265	307762.924	764.65

NOTE:
EXISTING CURB AND GUTTER TO REMAIN EXCEPT FOR SPOT REPAIRS AS SHOWN OR AS DIRECTED BY THE ENGINEER.

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN	SHEET 82	E

MATCH LINE STA 310+50

WE ENERGIES (ELECTRIC)

EQUATION

EQUATION STA 321+37.22 BK=
STA 321+34.40 AHD 12.34' LT

APPROXIMATE R/W

C.E. ASPH.

R/L STH 110

312 314 316 318 320 322 324

NB STH 110

SB STH 110

STH 110

3' 26.6' 3' VAR. 3' 36.5' 3' 24' 24' 2' 6'

MEDIAN RECOSNTRUCTION
SEE PLAN DETAILS

EDGE OF HMA PAVEMENT (TYP.)

EDGE OF AGGREGATE SHOULDER (TYP.)

WETLAND BOUNDARY (TYP.)

R/L STH 110

APPROXIMATE R/W

STA 321+37, 92.4' RT
BUTT JOINT REQUIRED
SEE DETAIL

EXISTING CURB AND GUTTER

STA 322+00
END 5" MILL/5" OVERLAY
BEGIN 2.25" MILL/2.25" OVERLAY
SEE MILLING DEPTH TRANSITION DETAIL

MATCH LINE STA 325+75

BROWN RD.

NOTE:
EXISTING CURB AND GUTTER TO REMAIN EXCEPT FOR SPOT REPAIRS AS SHOWN OR AS DIRECTED BY THE ENGINEER.

N

5

5

MATCH LINE STA 325+75

WE ENERGIES (ELECTRIC)

VILLAGE OF FREMONT CORPORATE LIMITS (TYP.)

APPROXIMATE R/W

P.E. ASPH.

P.E. ASPH.

P.E. AGG.

P.E. AGG.

326 328 330 332 334 336 338 340

STH 110

7' 15' 24' 2'

R/L STH 110

STA 339+66, -119.4' LT
BUTT JOINT REQUIRED
SEE DETAIL

WE ENERGIES (ELECTRIC)

WOLF RIVER DR.

EXISTING CURB AND GUTTER

EDGE OF HMA PAVEMENT (TYP.)

EDGE OF AGGREGATE SHOULDER (TYP.)

APPROXIMATE R/W

MATCH LINE STA 341+00

NOTE:
EXISTING CURB AND GUTTER TO REMAIN EXCEPT FOR SPOT REPAIRS AS SHOWN OR AS DIRECTED BY THE ENGINEER.

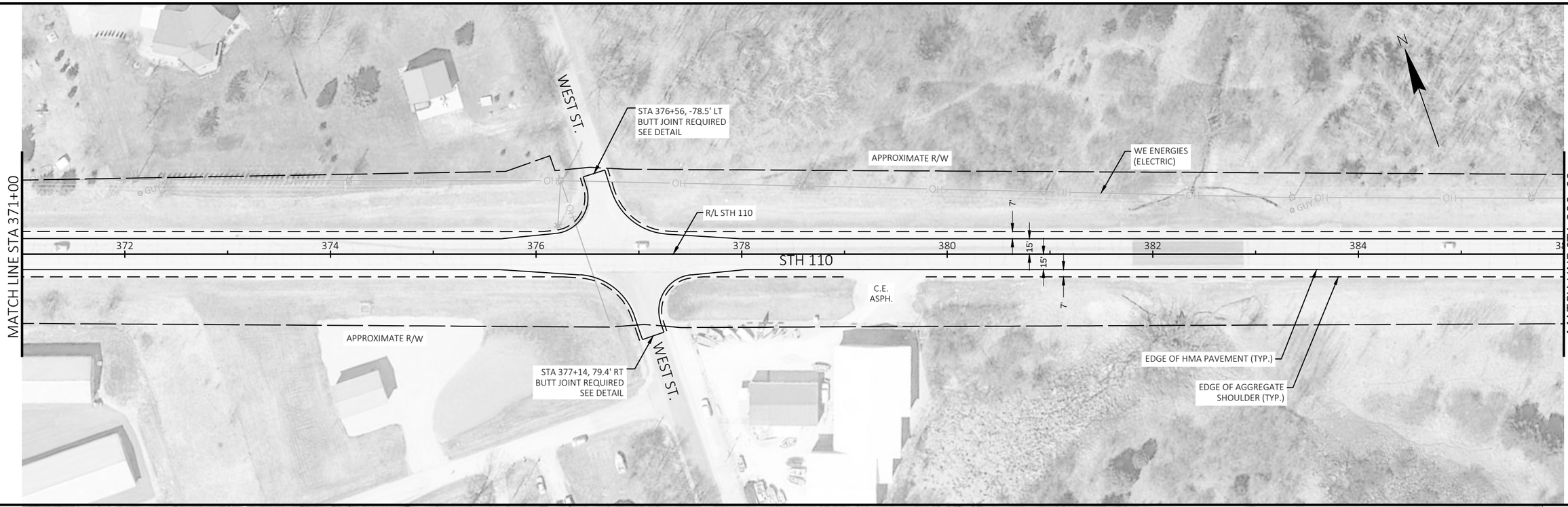
N

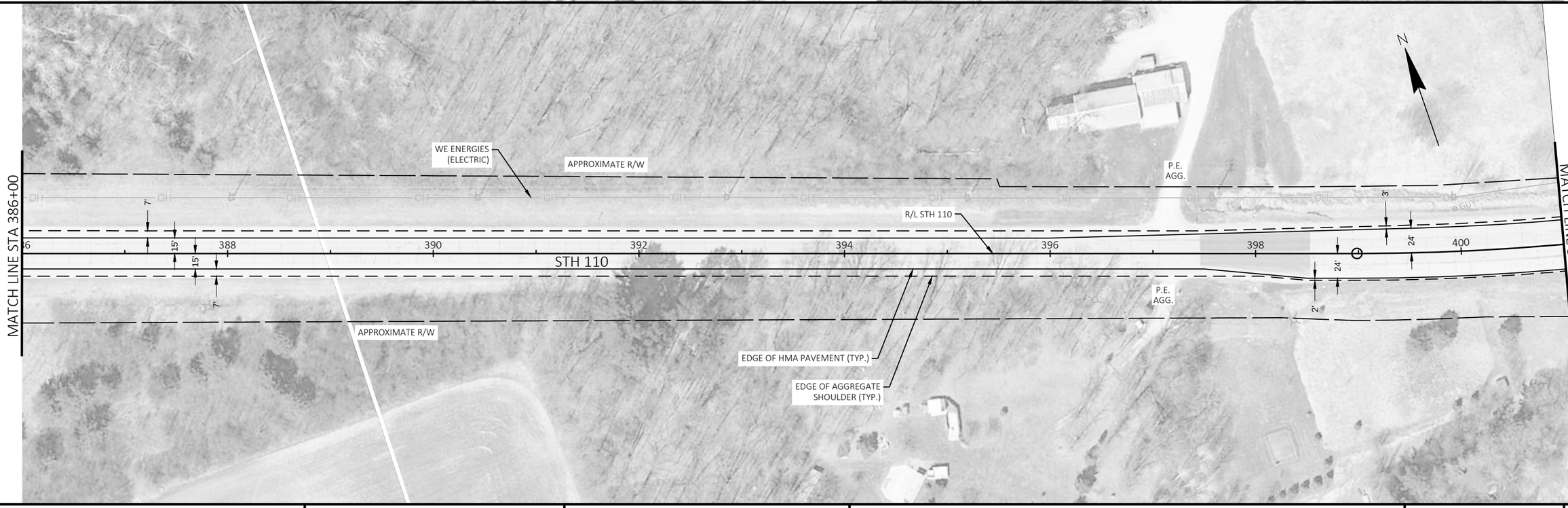
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN	SHEET 83	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 02

PLOT DATE : 7/6/2023 12:10 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : ##########

MATCH LINE STA 341+00
MATCH LINE STA 356+00
MATCH LINE STA 371+00
APPROXIMATE R/W
VILLAGE OF FREMONT
CORPORATE LIMITS (TYP.)
WE ENERGIES
(ELECTRIC)
R/L STH 110
STH 110
C.E.
AGG.
P.E.
AGG.
F.E.
AGG.
2'
22'
15'
7'
342
344
346
348
350
352
354
356
358
360
362
364
366
368
370
EDGE OF HMA PAVEMENT (TYP.)
EDGE OF AGGREGATE
SHOULDER (TYP.)
OAK ST.
STA 367+14, -60.2' LT
BUTT JOINT REQUIRED
SEE DETAIL
STA 367+61, 60.5' RT
BUTT JOINT REQUIRED
SEE DETAIL
N

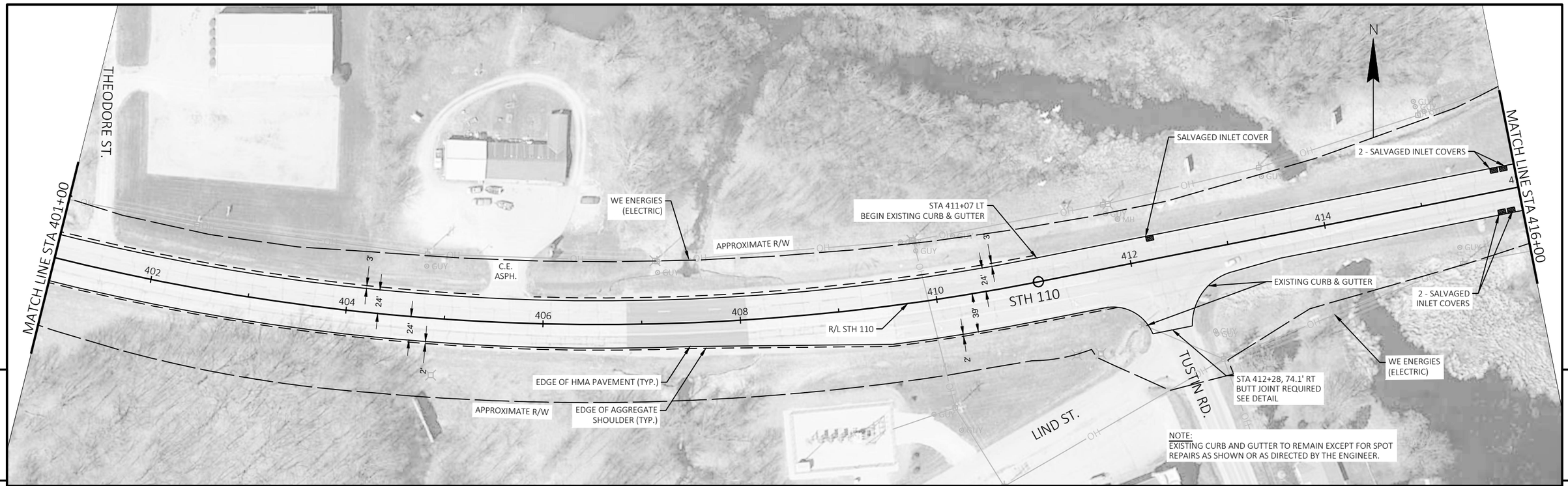




5

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN	SHEET 85 E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 04
PLOT DATE : 7/6/2023 12:14 PM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

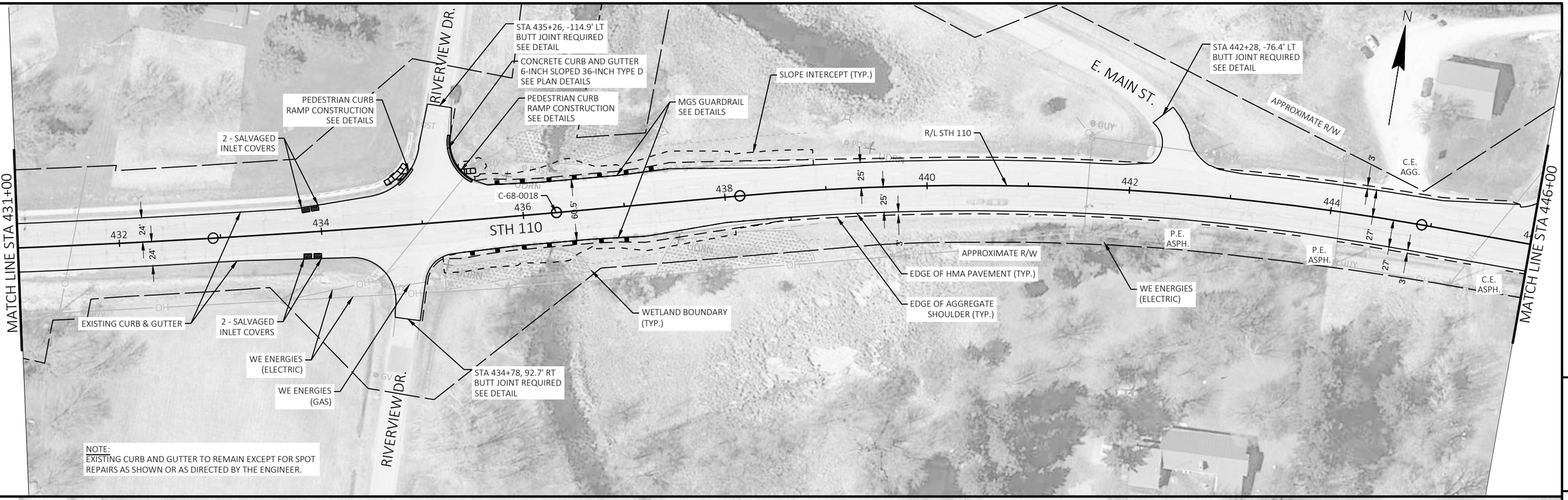


BM TABLE						
POINT	DESCRIPTION	STATION	OFFSET	X COORDS	Y COORDS	ELEVATION
201	BM 2 NAIL IN PPOL	418+79.92	175.25 LT	594153.578	305863.496	754.02

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN	SHEET 86	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 05

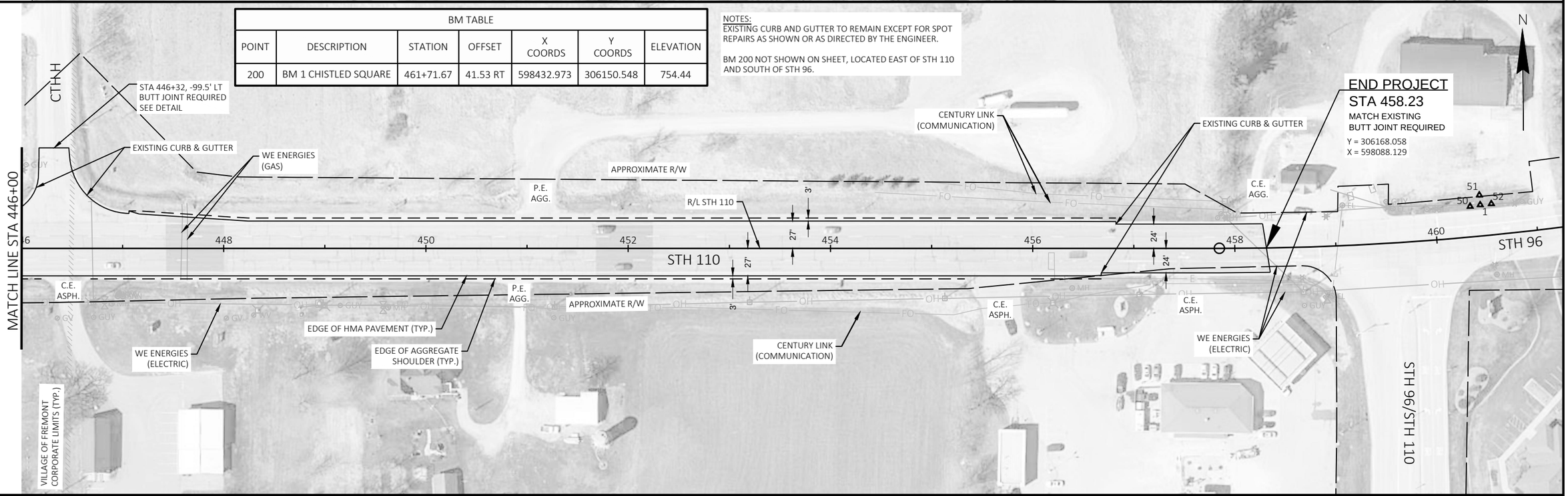
PLOT DATE : 7/6/2023 12:17 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : ##########



BM TABLE						
POINT	DESCRIPTION	STATION	OFFSET	X COORDS	Y COORDS	ELEVATION
200	BM 1 CHISTLED SQUARE	461+71.67	41.53 RT	598432.973	306150.548	754.44

NOTES:
EXISTING CURB AND GUTTER TO REMAIN EXCEPT FOR SPOT REPAIRS AS SHOWN OR AS DIRECTED BY THE ENGINEER.

BM 200 NOT SHOWN ON SHEET, LOCATED EAST OF STH 110 AND SOUTH OF STH 96.



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	PLAN	SHEET 87	E

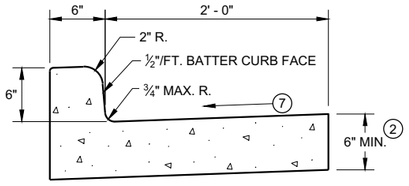
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 7/6/2023 12:18 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : ########### WISDOT/CADDS SHEET 44

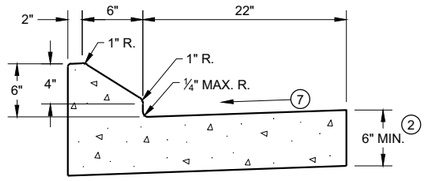
Standard Detail Drawing List

08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-14B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
11B02-02	CONCRETE MEDIAN NOSE
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
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)
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C08-22C	PAVEMENT MARKING (TURN LANES)
15C08-22D	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
15C18-07A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-07B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-08B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-08C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-10	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15D06-05	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D20-06A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D20-06B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-07B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-08A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-08C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-04A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D50-02A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-02B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

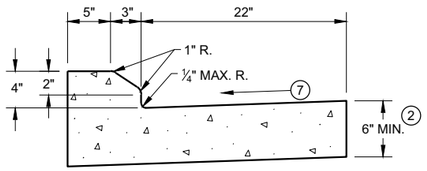
6



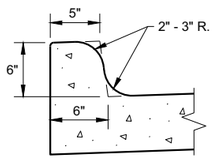
TYPES A (1) & D



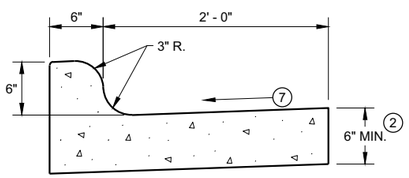
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

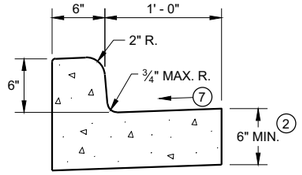


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



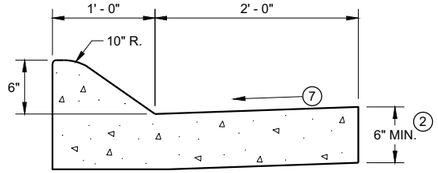
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

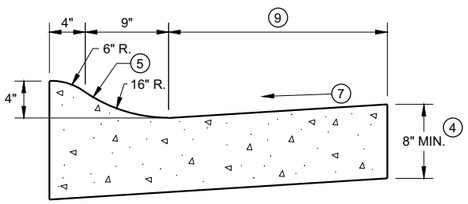
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

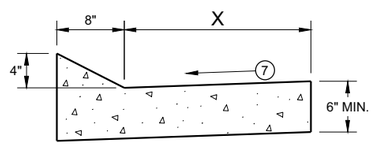
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

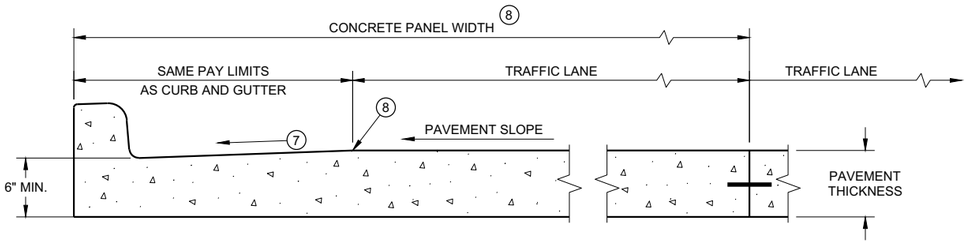


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

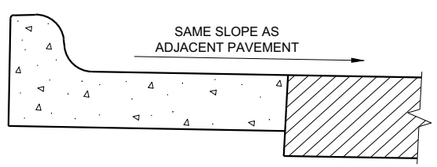
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

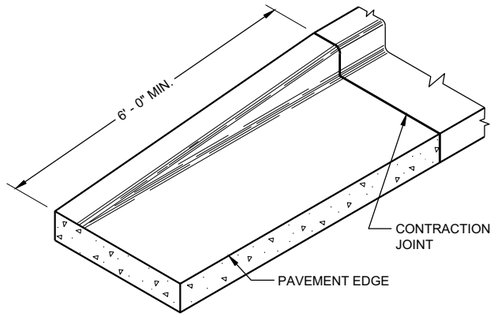
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

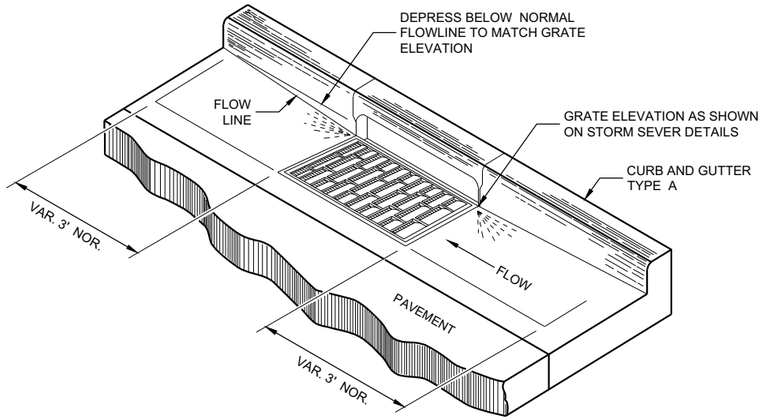
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 22a
SDD 08D01 - 22a



END SECTIONCURB 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.

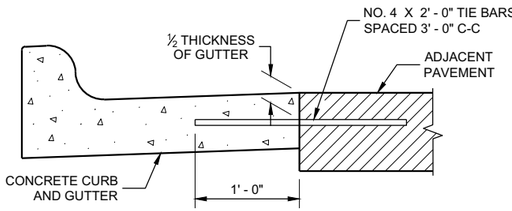
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

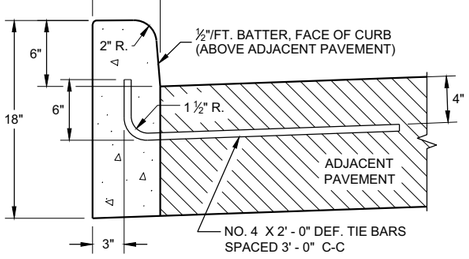
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

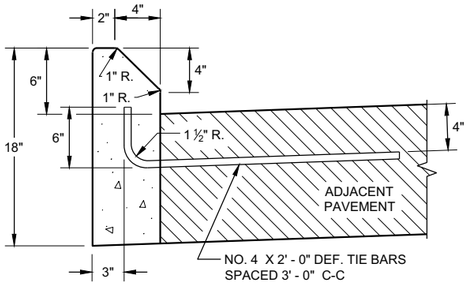
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

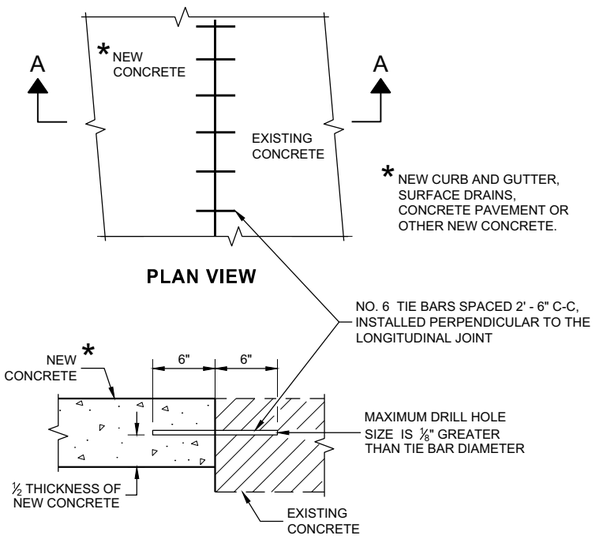


TYPES A (1) & D



TYPES G (1) & J

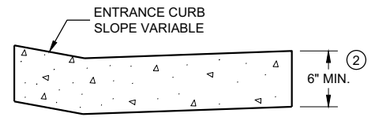
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

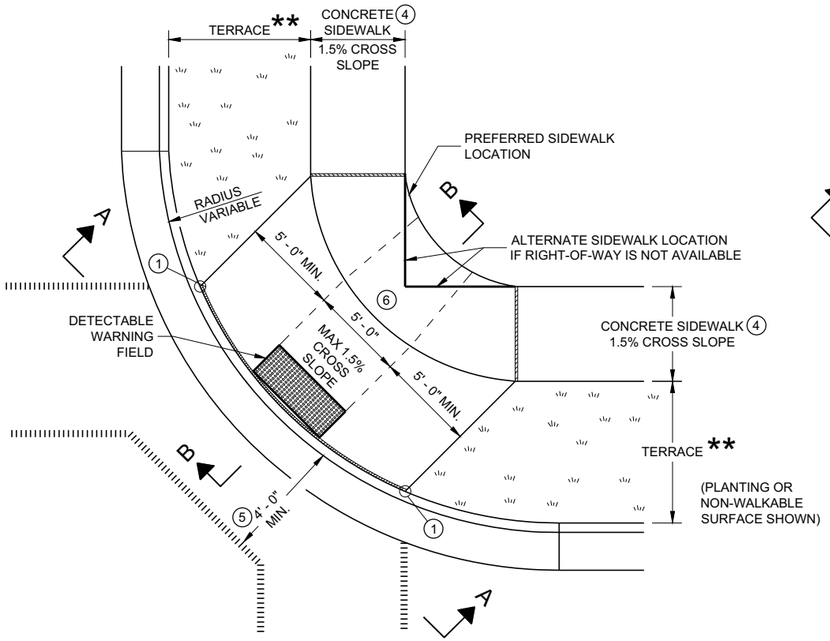
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

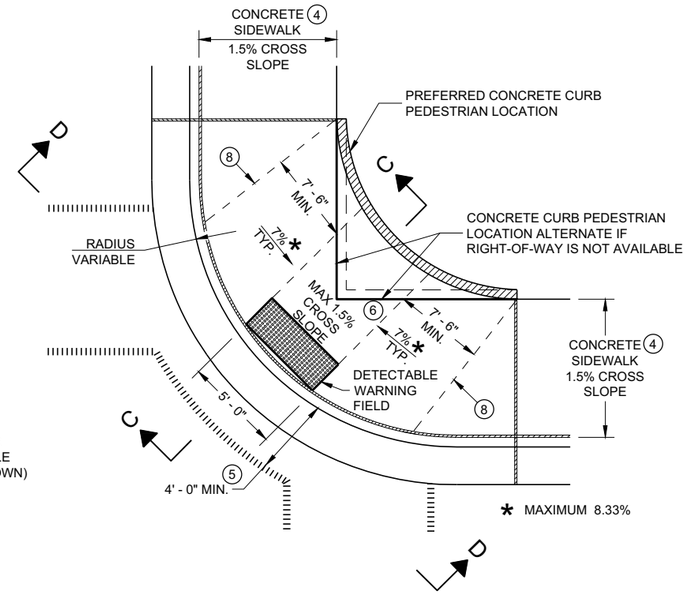
SDD08D01 - 22b
SDD08D01 - 22b



PLAN VIEW

CURB RAMP TYPE 1

(CENTER OF CORNER RADIUS)



PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

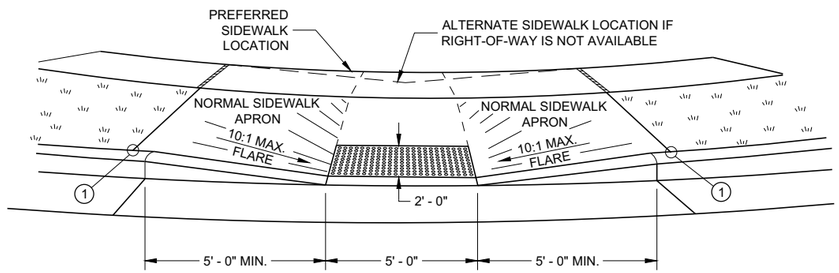
(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

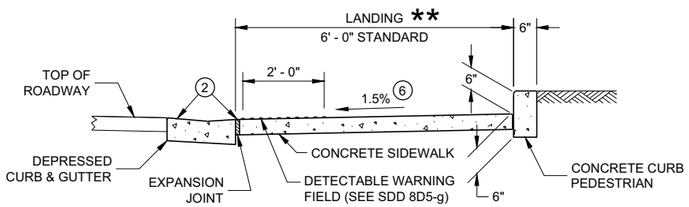
(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

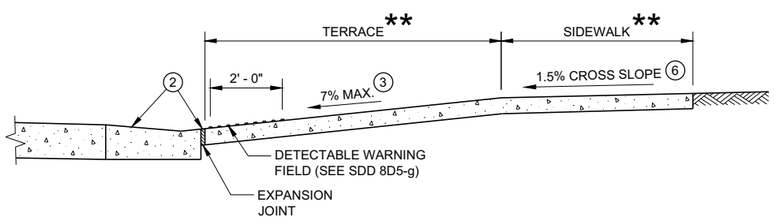


VIEW A - A FOR TYPE 1

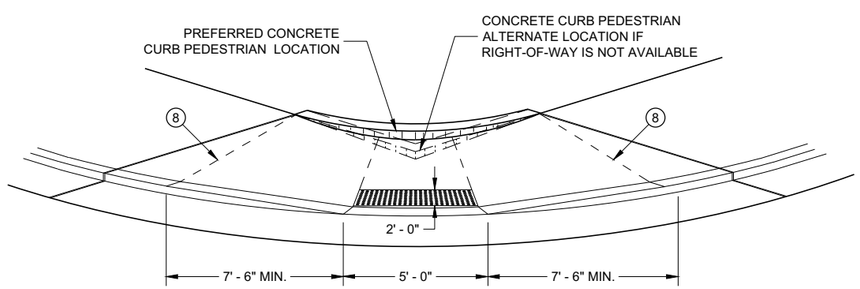


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

LEGEND

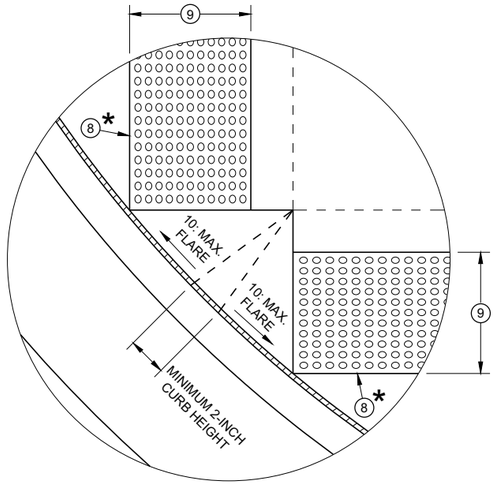
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

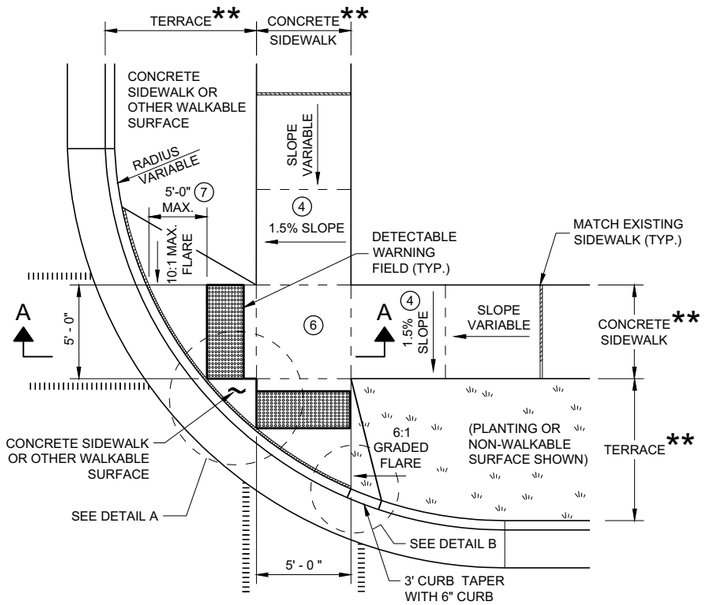
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20a

SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

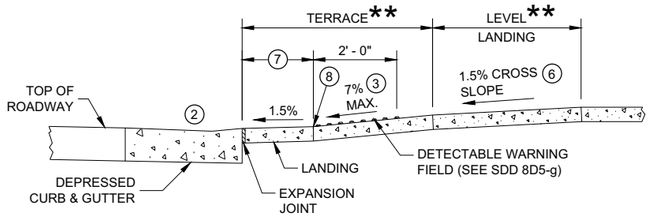
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

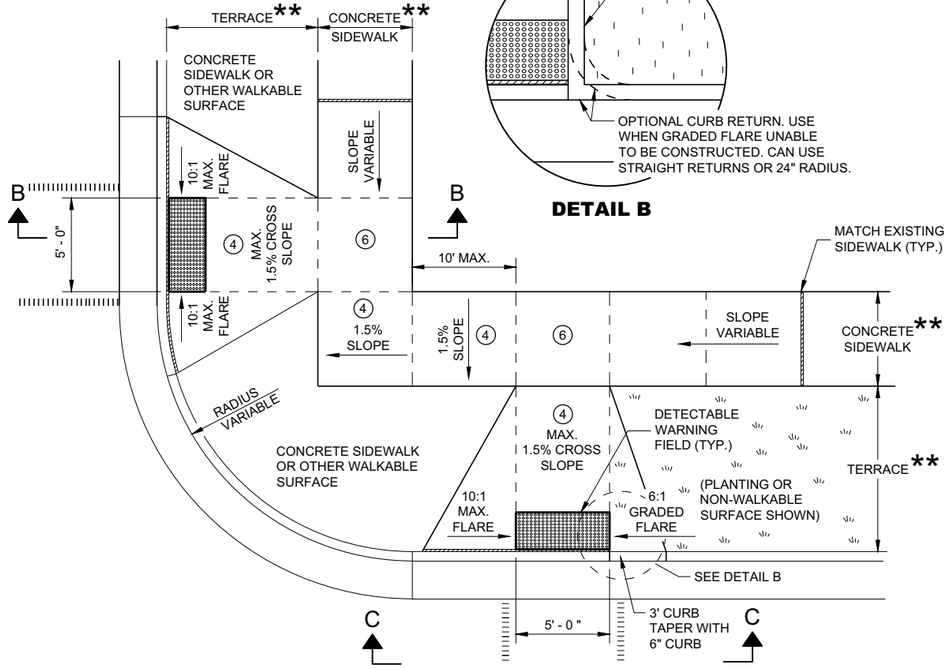
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



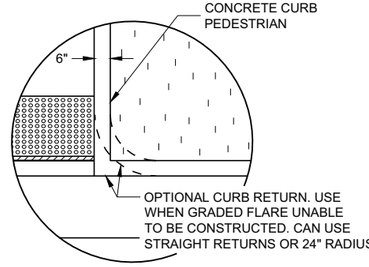
SECTION A - A FOR TYPE 2

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

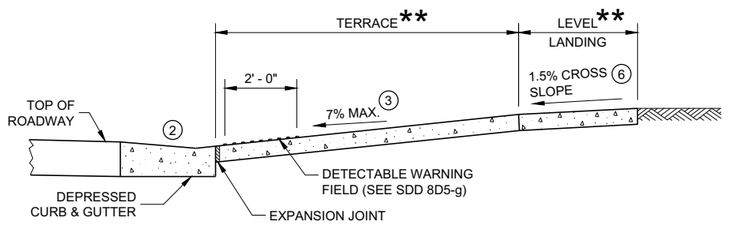
** WIDTH SHOWN ELSEWHERE IN THE PLANS



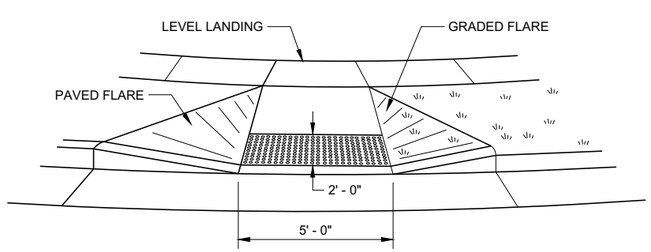
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



DETAIL B



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

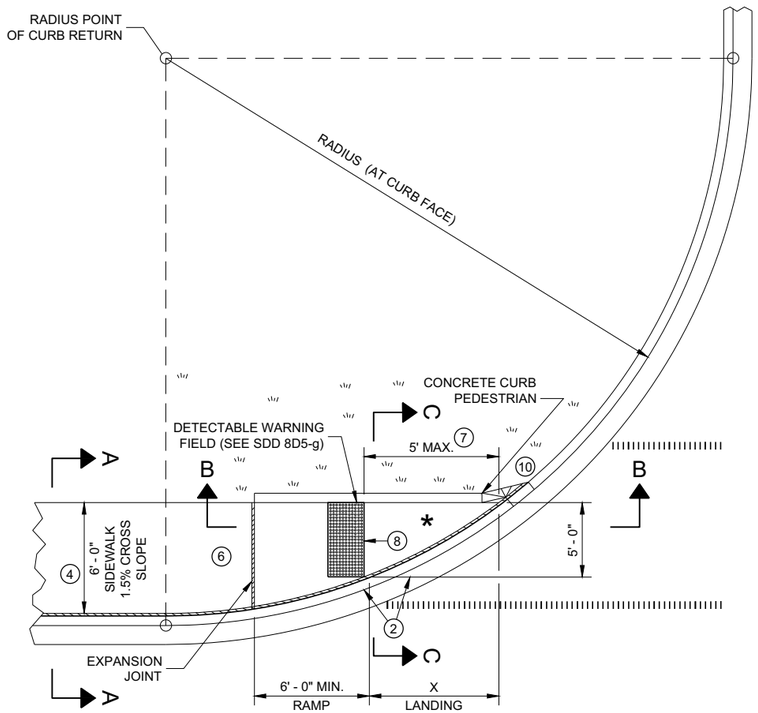
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

6

SDD 08D05 - 20b

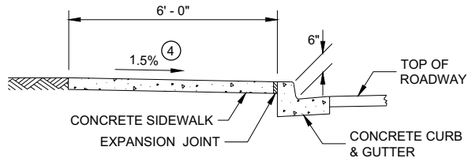


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

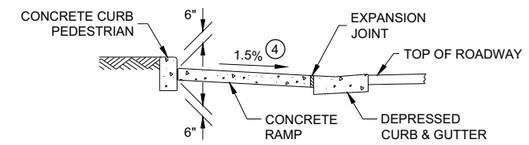
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

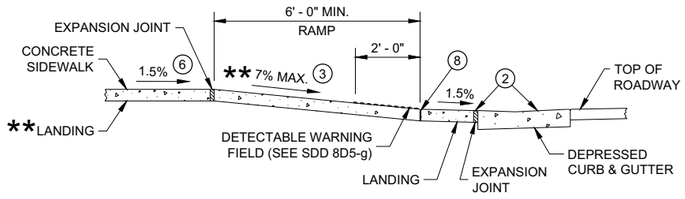
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



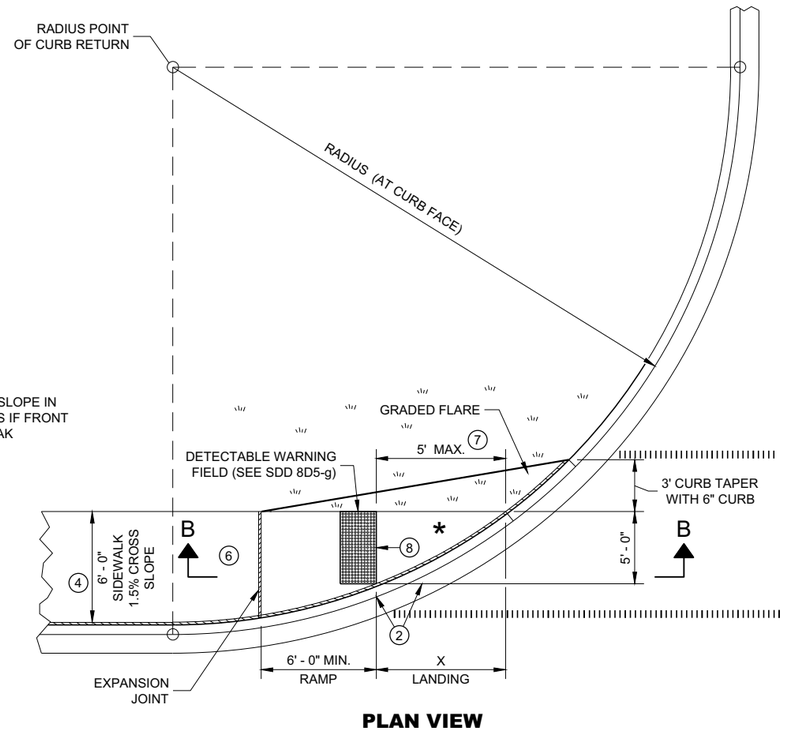
SECTION C - C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

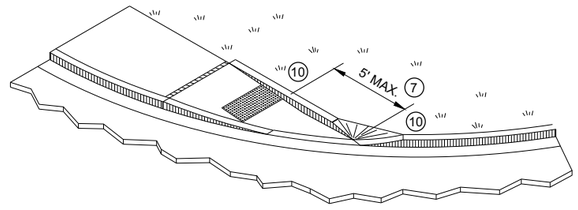
SECTION B - B FOR TYPE 4A AND TYPE 4A1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

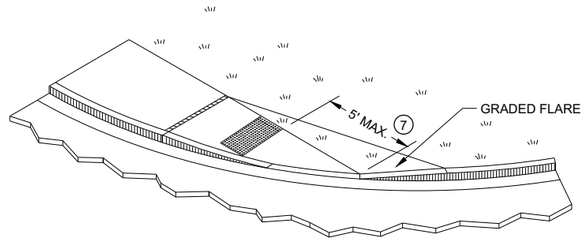


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



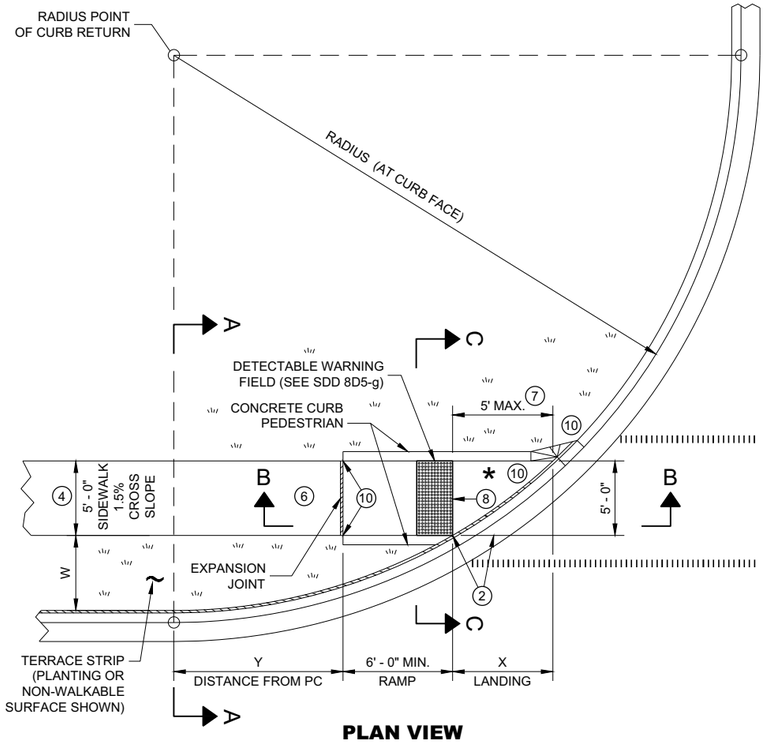
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

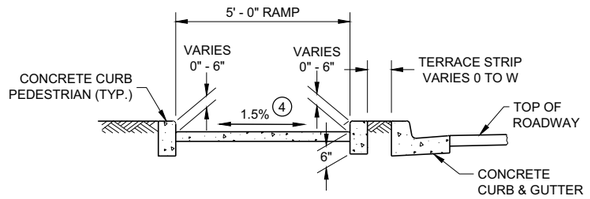


PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

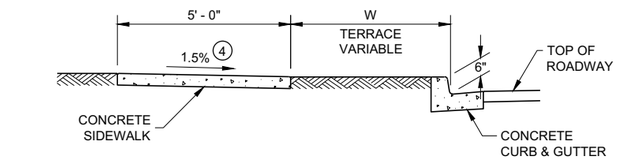
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

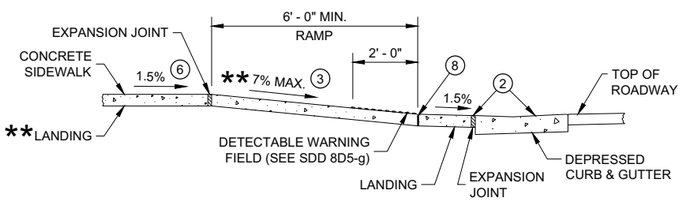
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

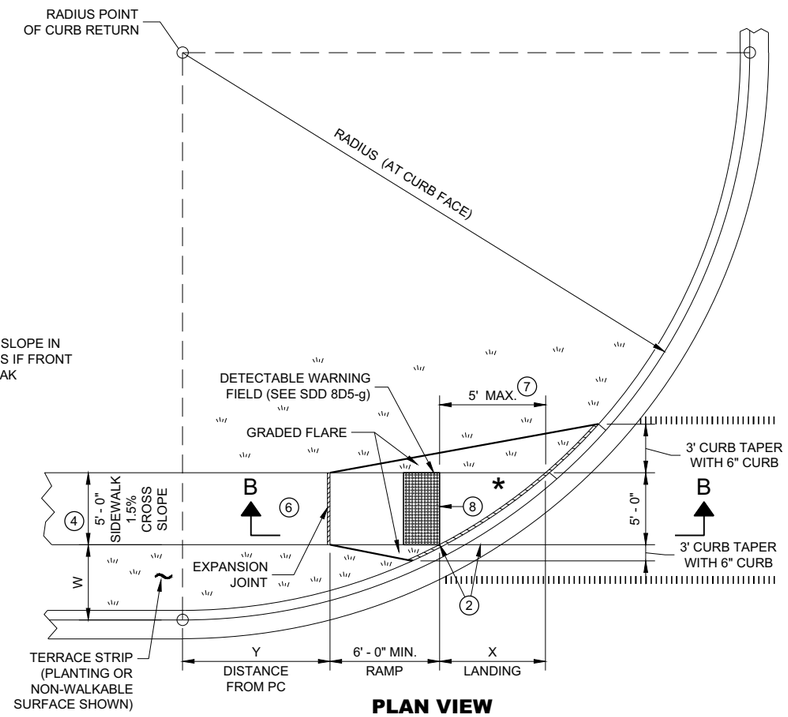


SECTION A - A FOR TYPE 4B



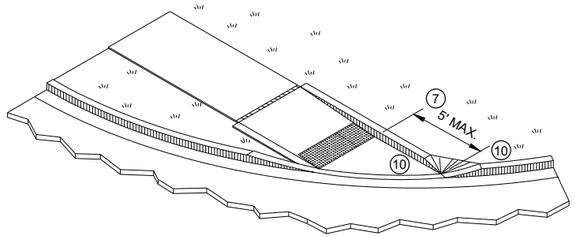
SECTION B - B FOR TYPE 4B AND TYPE 4B1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

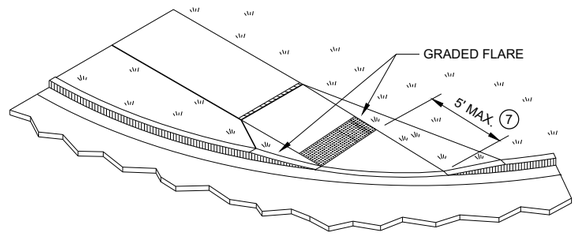


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



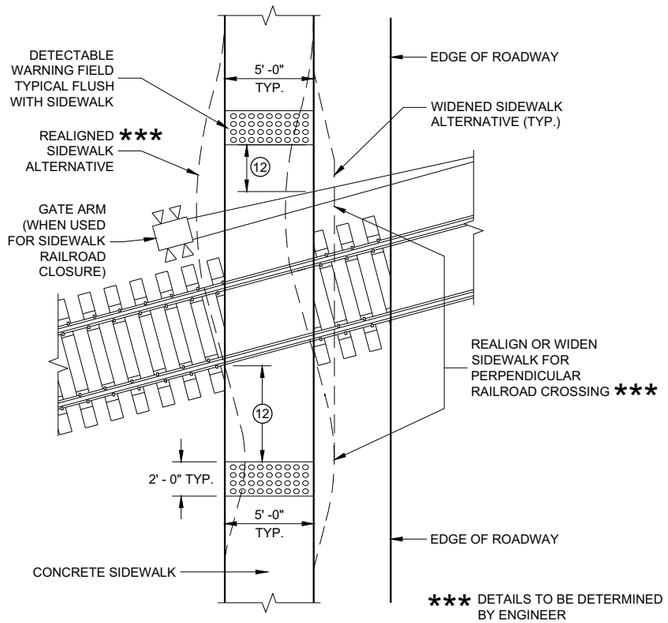
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

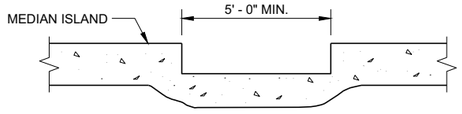
6

SDD 08D05 - 20d

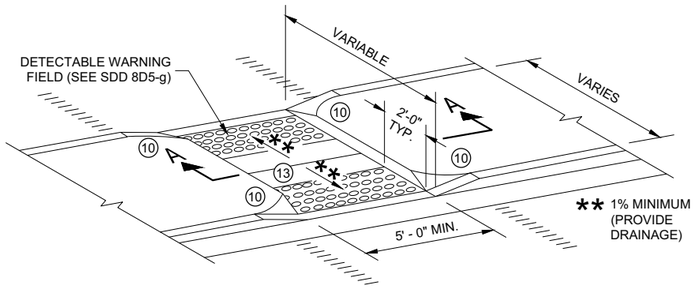


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

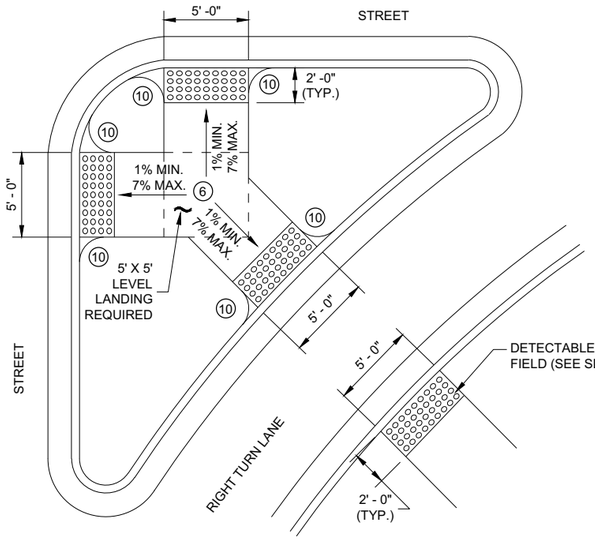
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

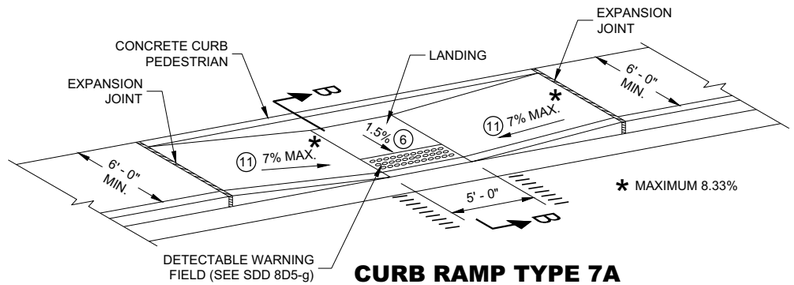
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

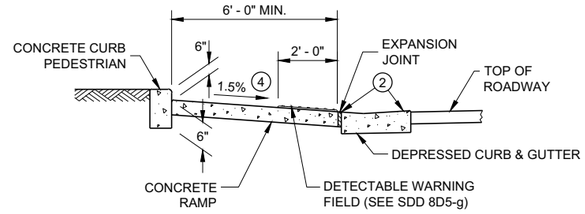
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

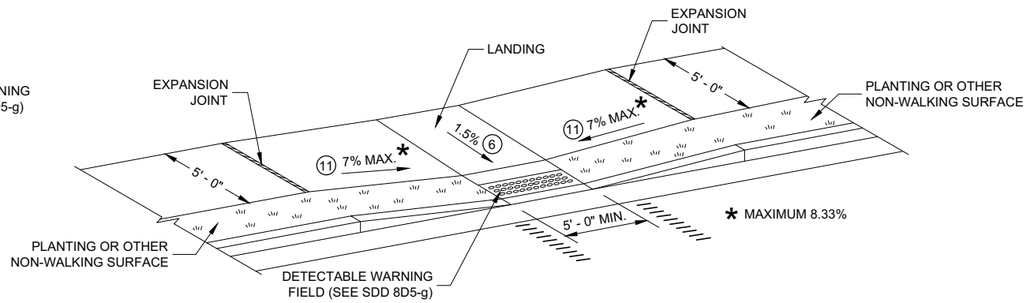


CURB RAMP TYPE 7A

MID BLOCK CROSSING



SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

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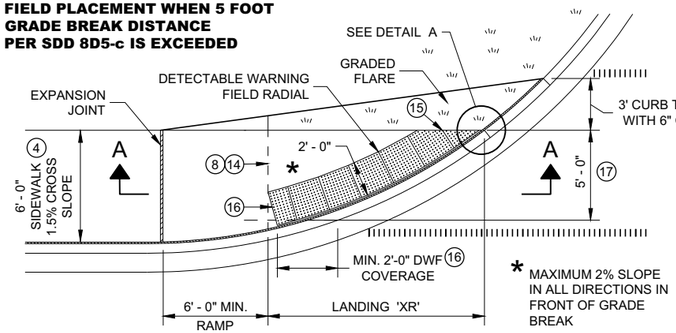
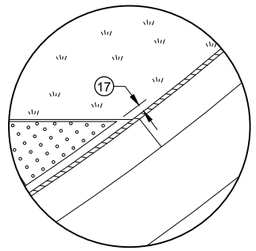
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



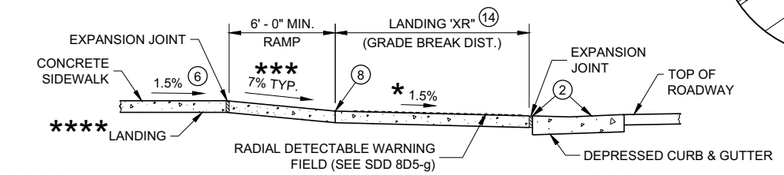
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

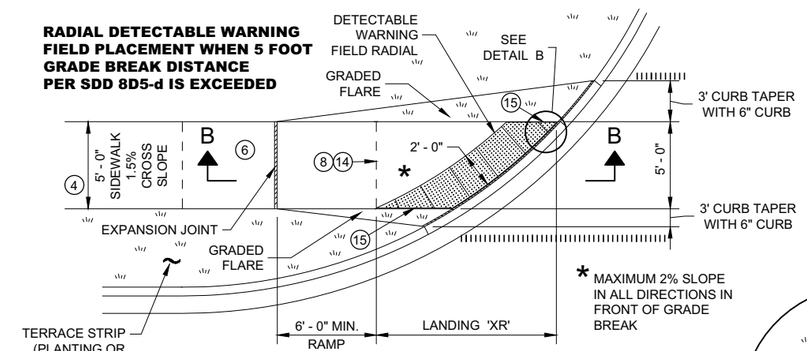


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

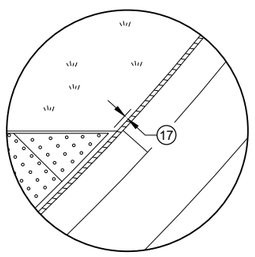
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



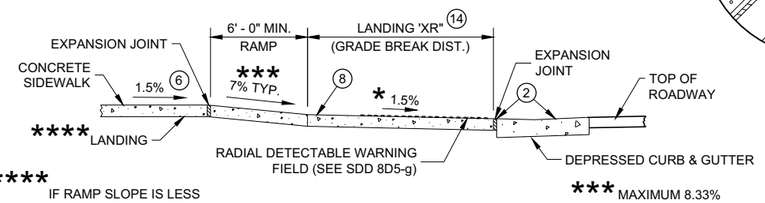
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

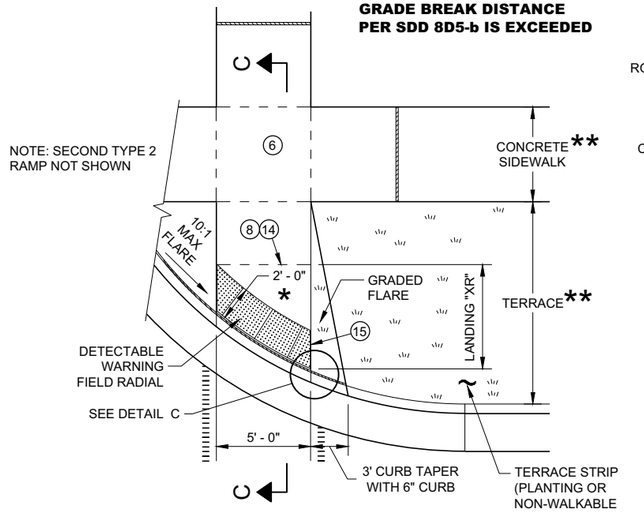
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

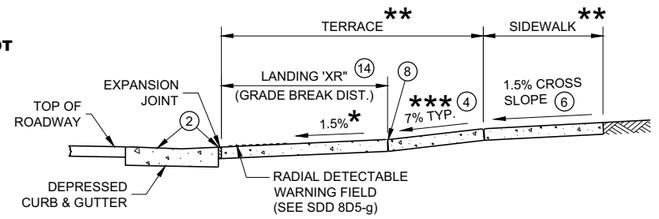


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

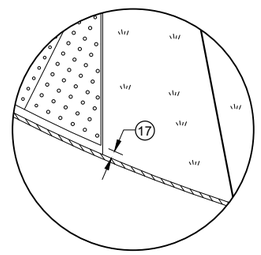


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



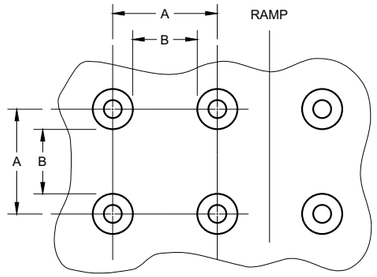
DETAIL C

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

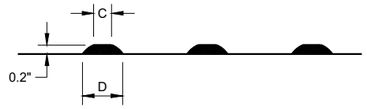
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

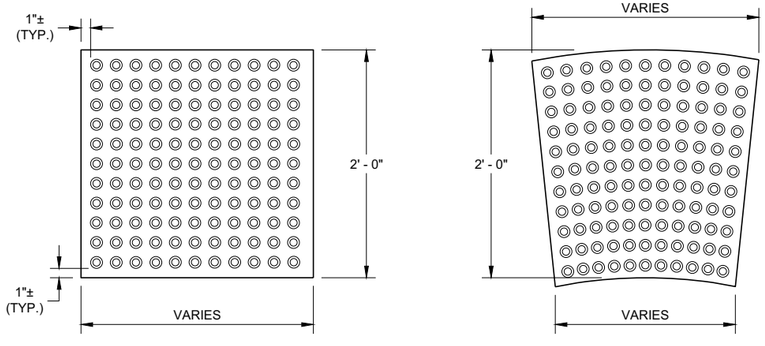


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

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

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

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

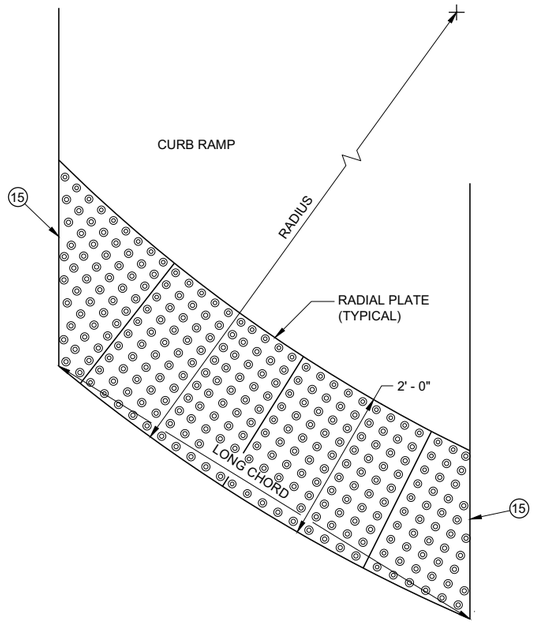
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

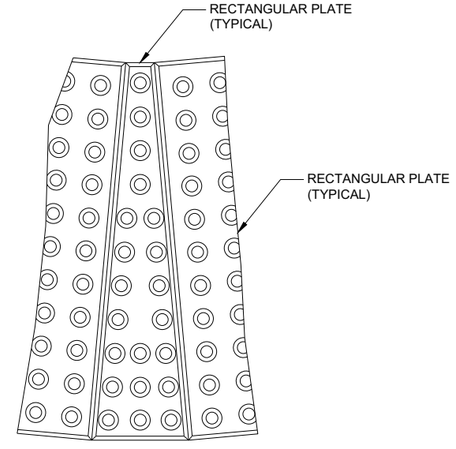
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

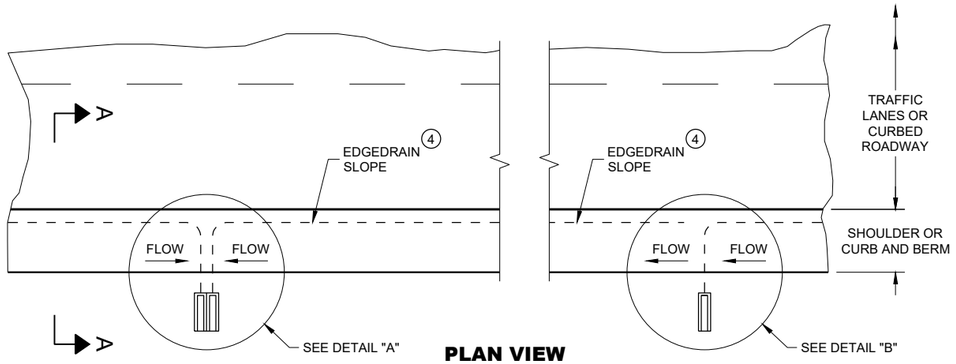
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE UNIT SUPERVISOR

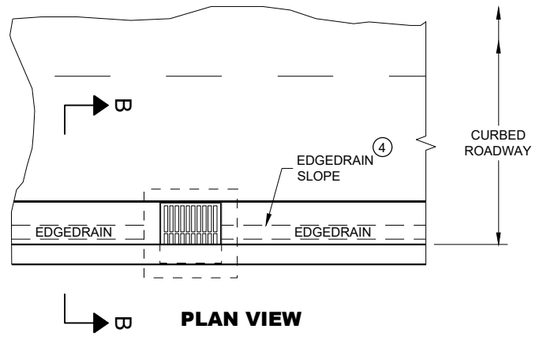
FHWA

6
SDD 08D05 - 20g



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS
(EDGEDRAIN CONNECTS TO ROADSIDE) (2)



PLAN VIEW

ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

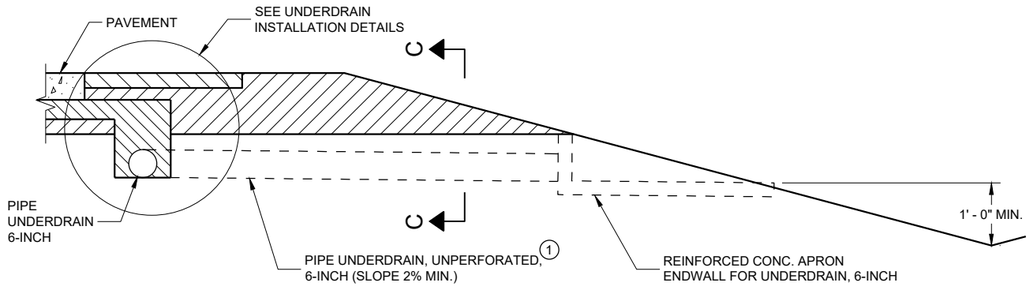
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

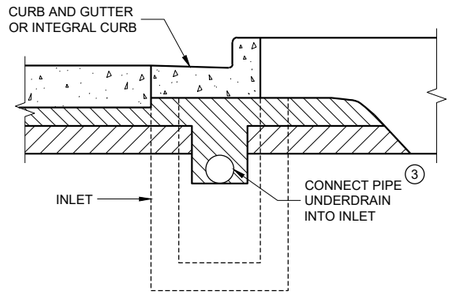
(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



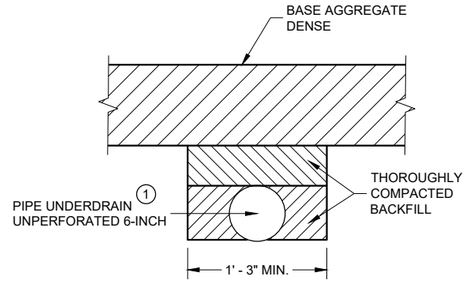
SECTION A - A

RURAL CROSS SECTION



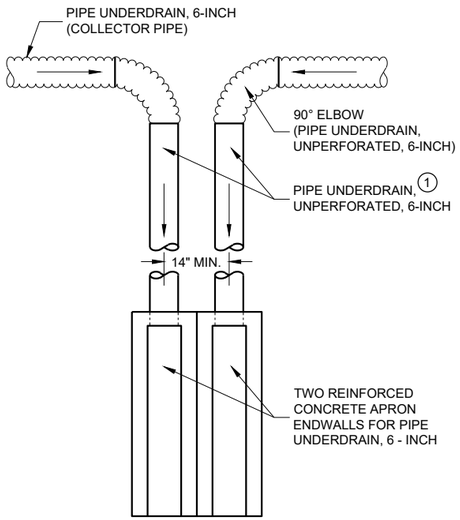
SECTION B - B

URBAN CROSS SECTION

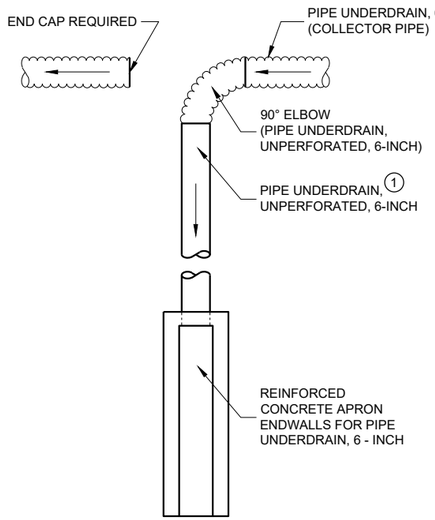


SECTION C - C

TRENCH FOR OUTFALL PIPE

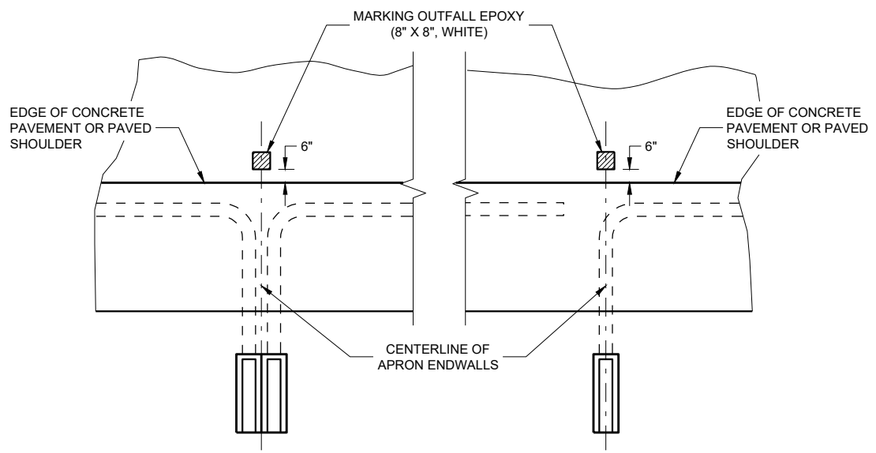


DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS



DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



LOW POINT LOCATIONS — INTERMEDIATE LOCATIONS

PAVEMENT MARKINGS FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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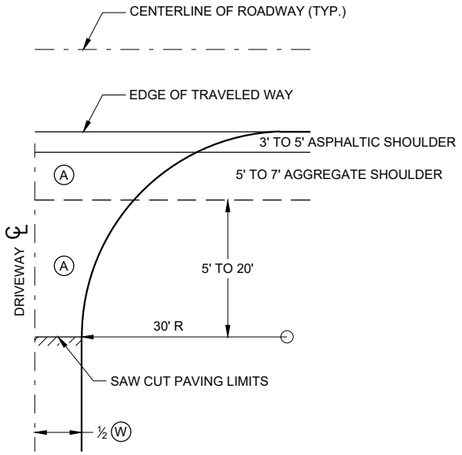
SDD08D15 - 05a

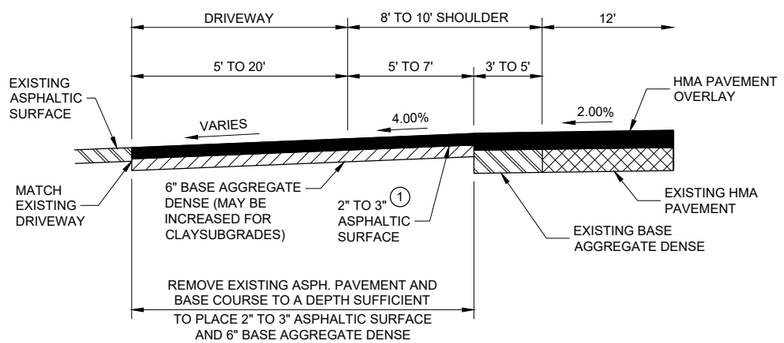
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



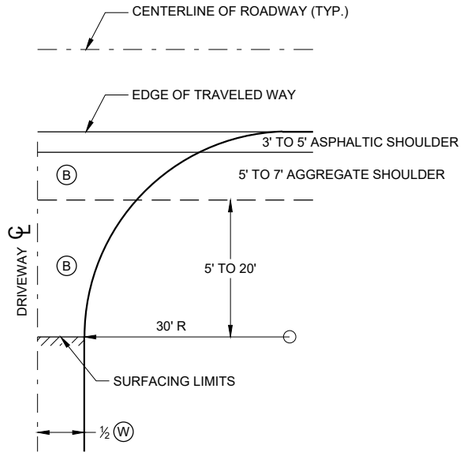
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

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

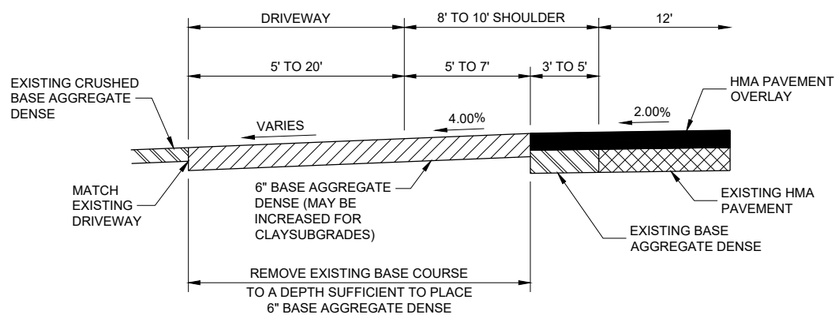
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

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



PLAN VIEW

HALF SECTION



PROFILE VIEW

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

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

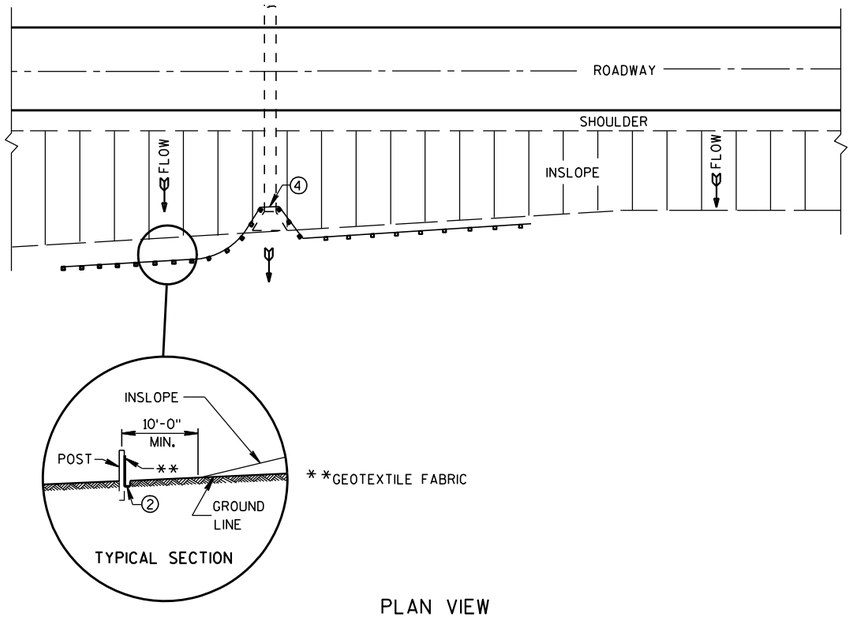
APPROVED
December 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

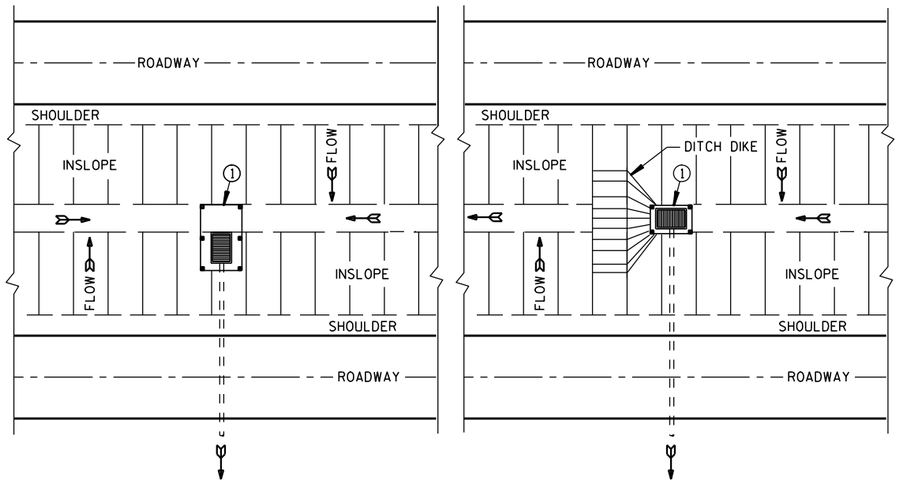
6

SDD 08D22 - 01



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



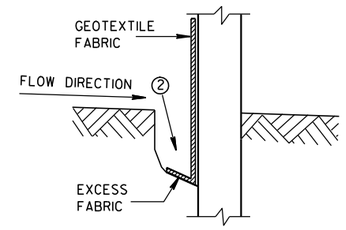
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

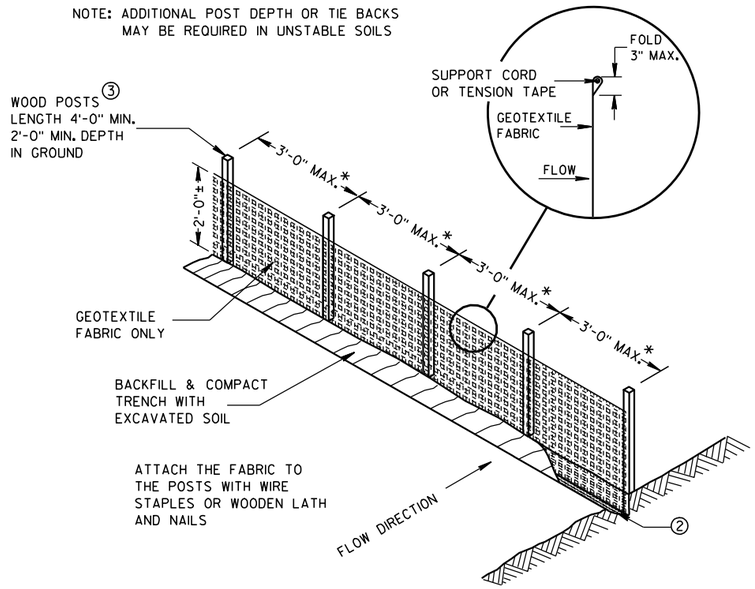
GENERAL NOTES

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

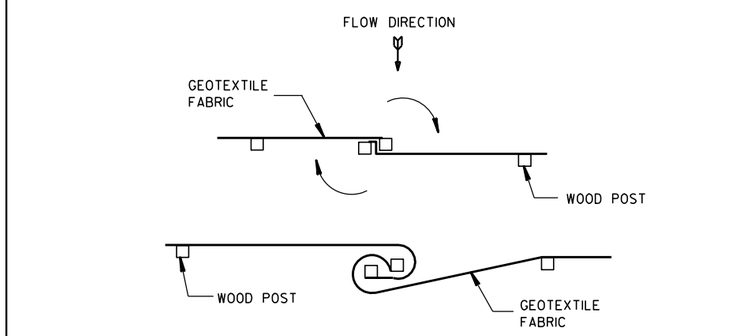
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



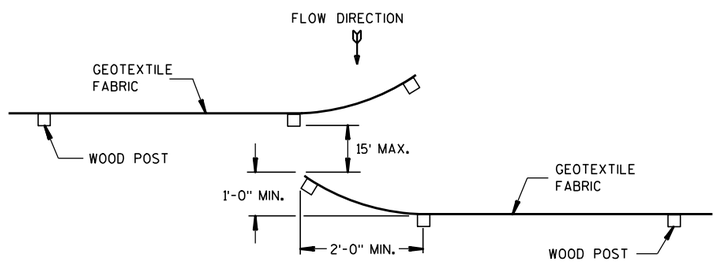
TRENCH DETAIL



SILT FENCE

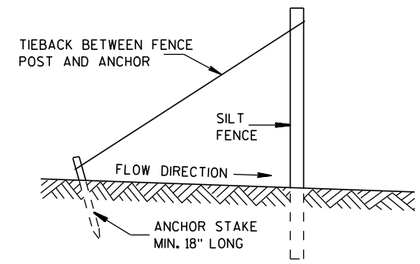


TWIST METHOD



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

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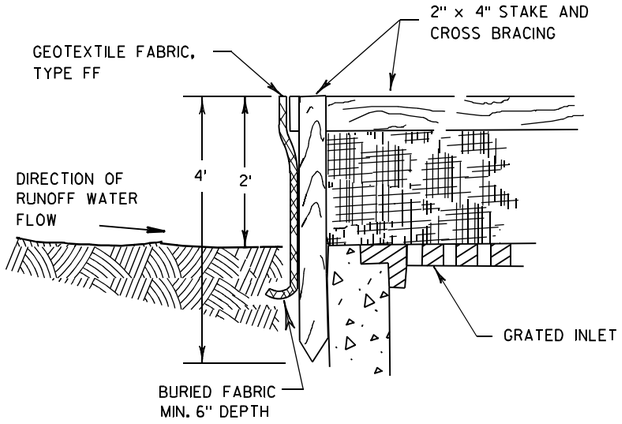
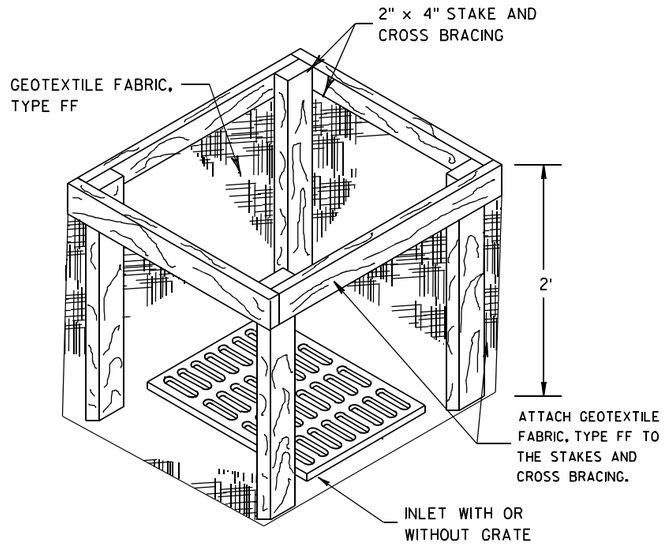
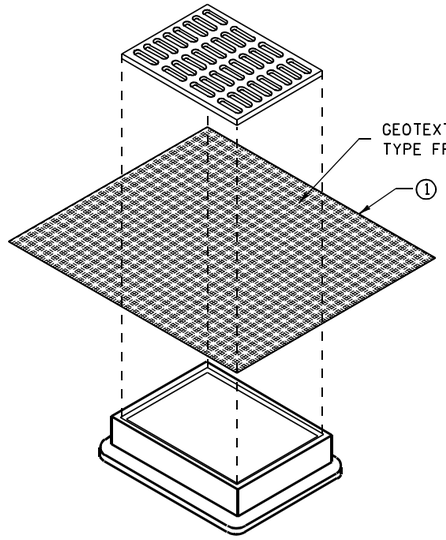
S.D.D. 8 E 9-6



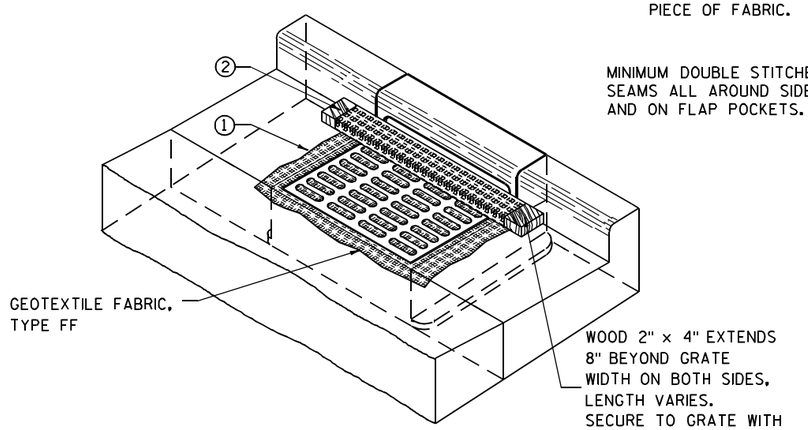


INLET PROTECTION, TYPE A

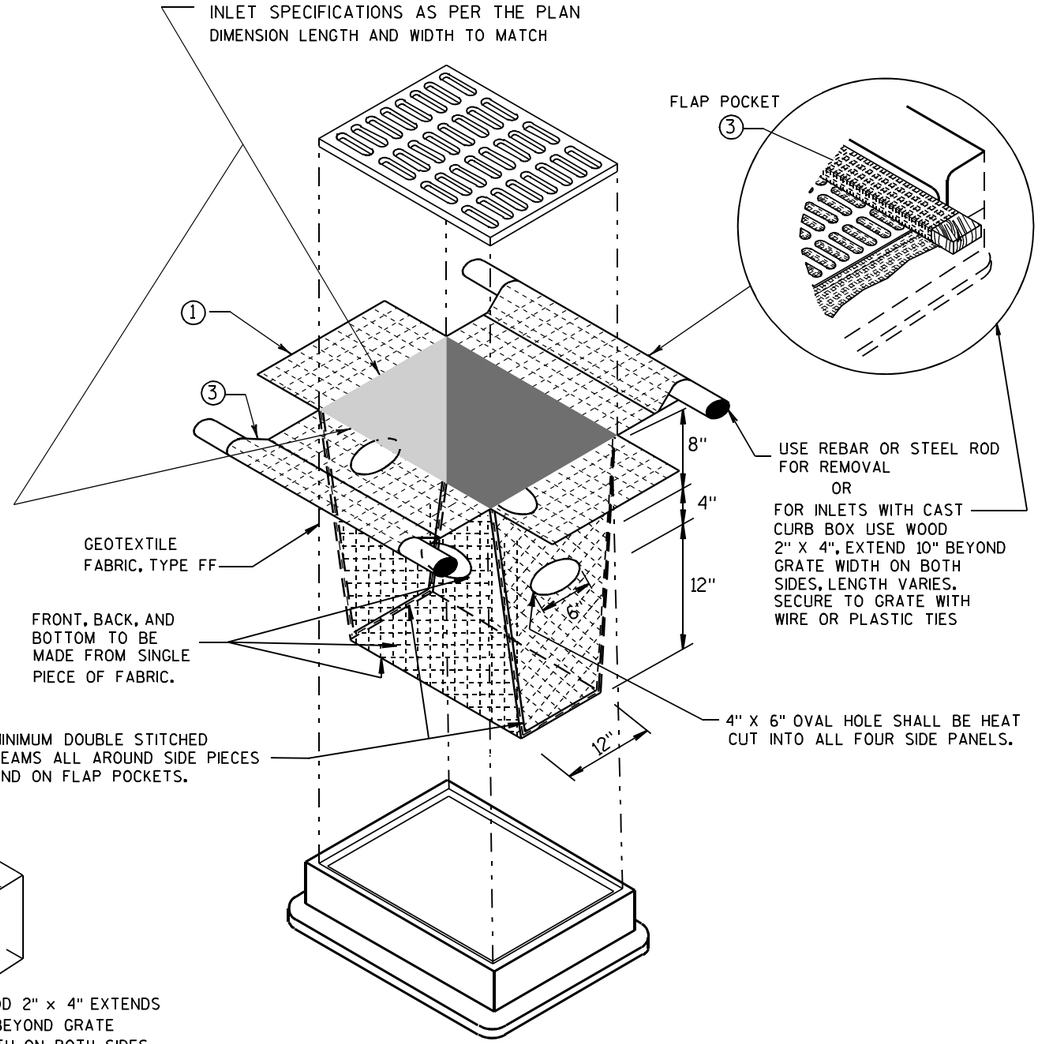


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

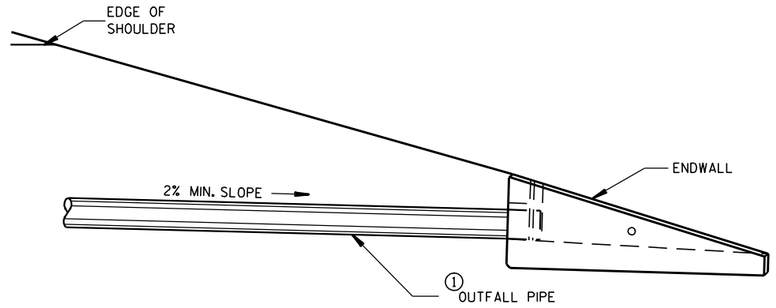
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

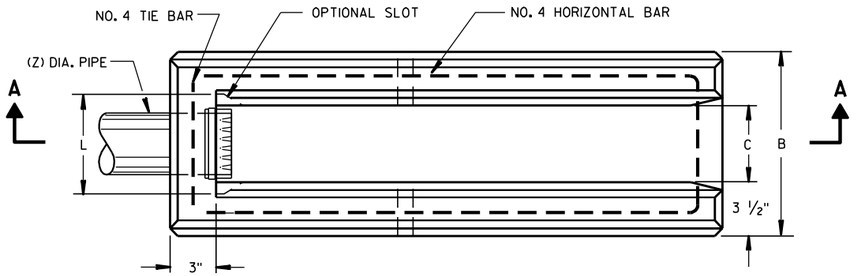
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

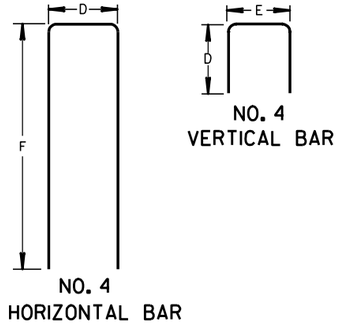
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

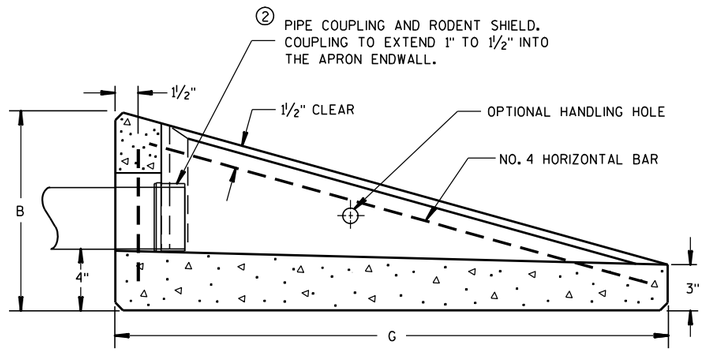
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



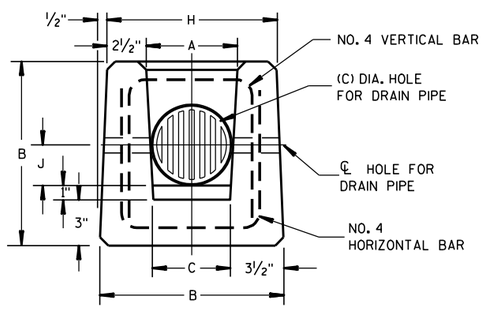
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

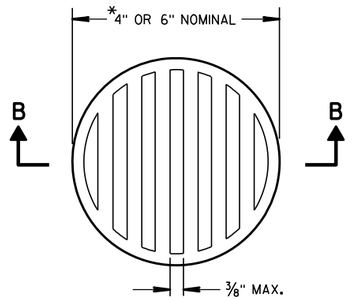


SECTION A-A

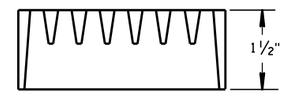


END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN



NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 6-4

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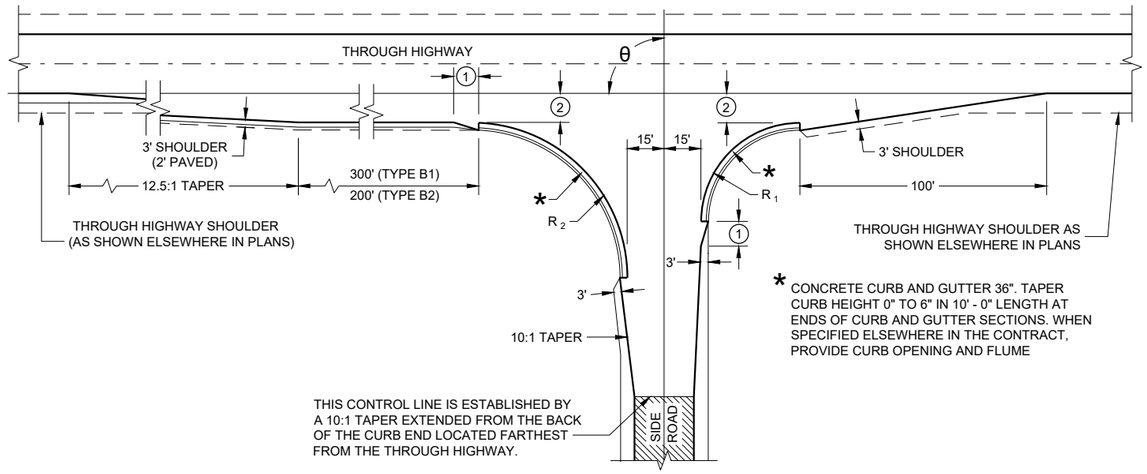
S.D.D. 8 F 6-4



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

TYPE "B1" AND "B2"

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

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

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

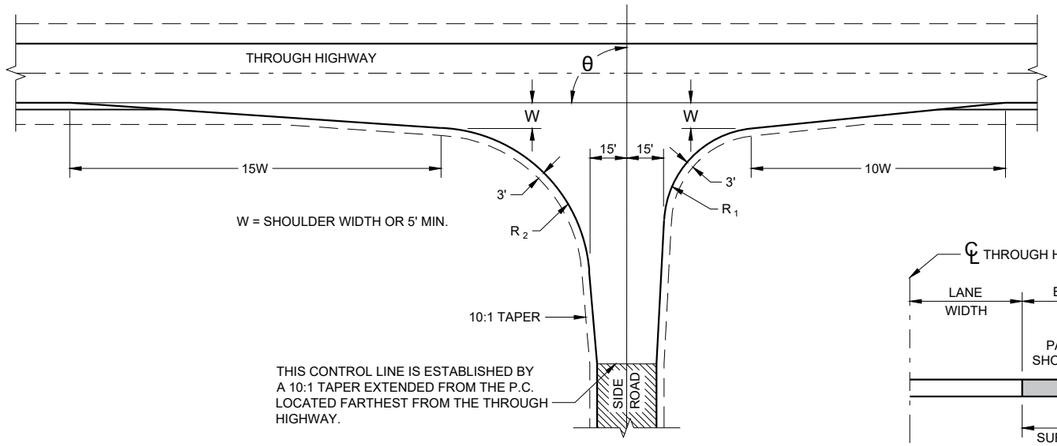
(1) 10-FT TYPICAL.

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

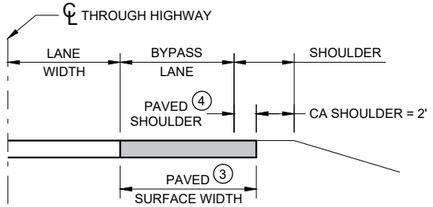
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

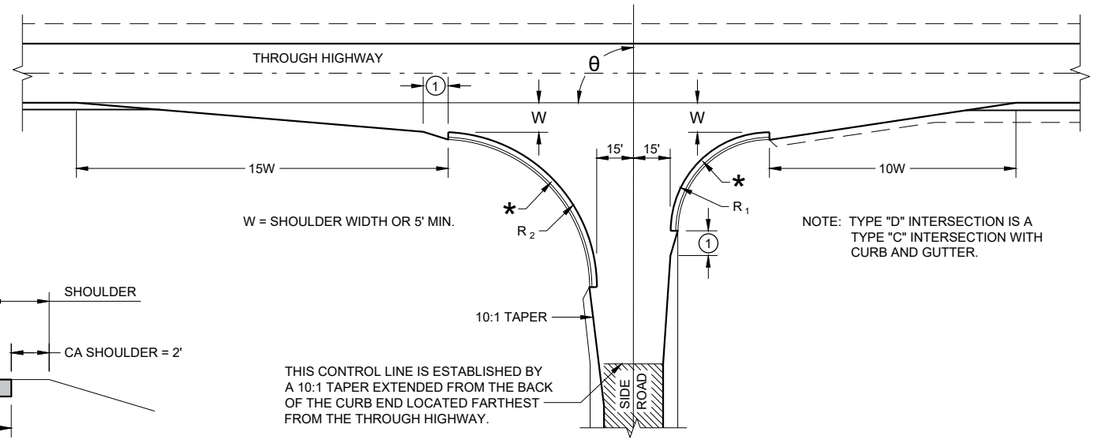
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

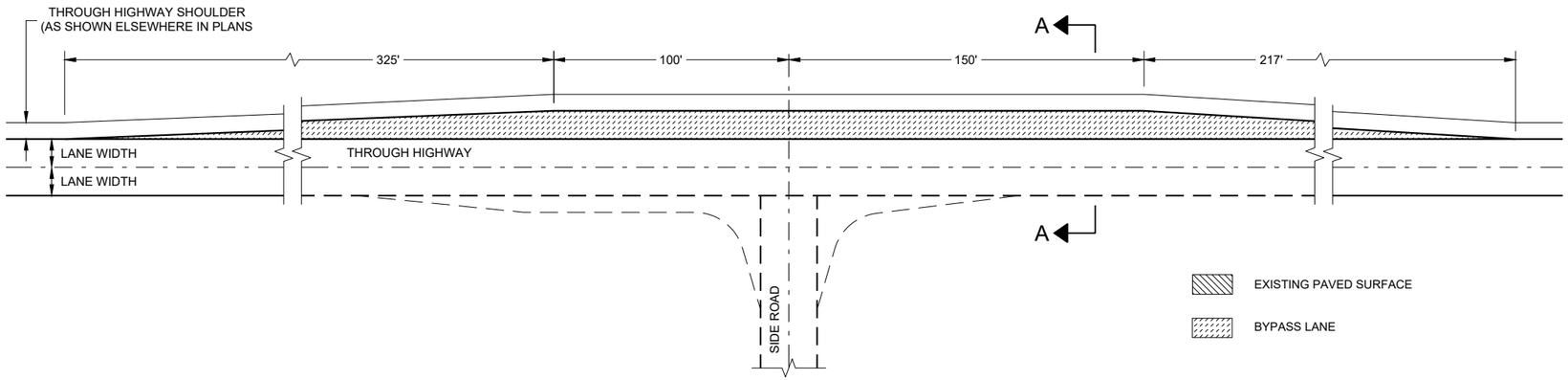


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



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

TYPE "D"

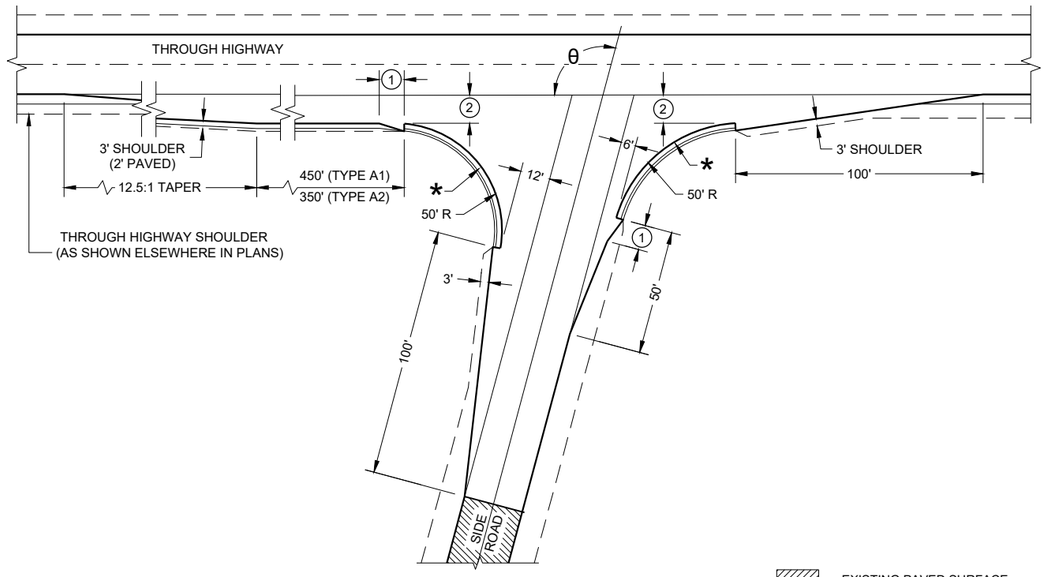


TEE INTERSECTION BYPASS LANE DETAIL

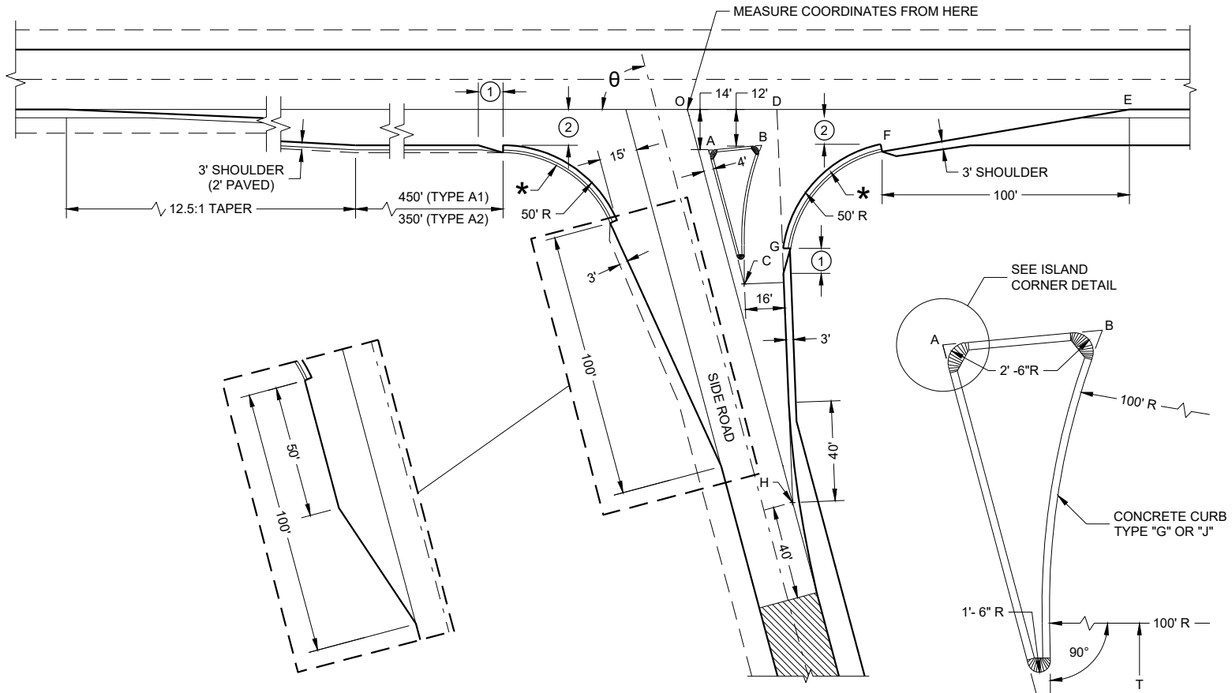
AT GRADE SIDE ROAD INTERSECTION TYPES "B1", "B2", "C", "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 09A01 - 14a

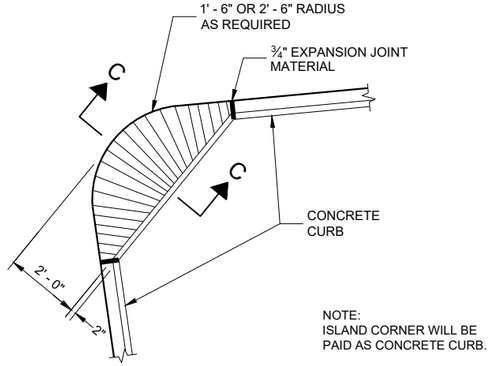


θ = MORE THAN 80°

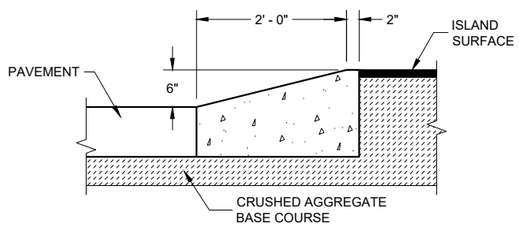


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

θ = ACUTE ANGLES 80° OR LESS



PLAN VIEW



SECTION C - C

ISLAND CORNER DETAIL

(TO BE CONSTUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT 'O') X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

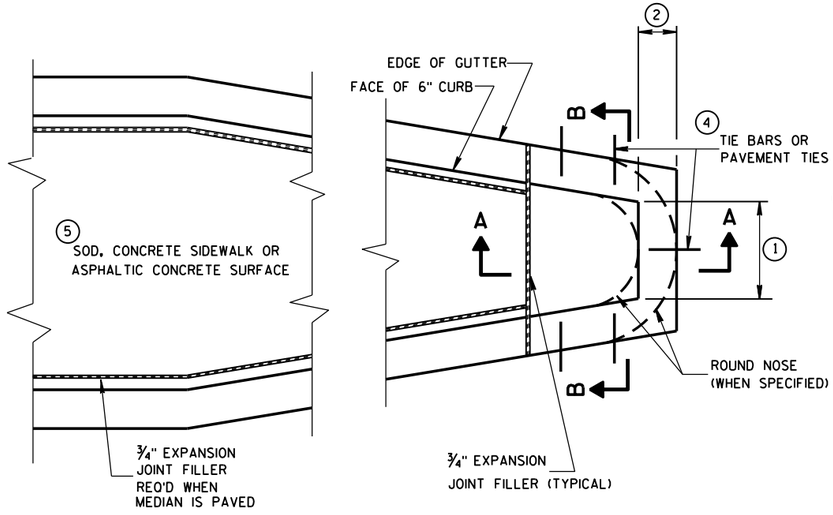
TYPE 'A1" AND "A2" SIDE ROAD INTERSECTION DETAILS

AT GRADE SIDE ROAD INTERSECTIONS
TYPES "A1" AND "A2"

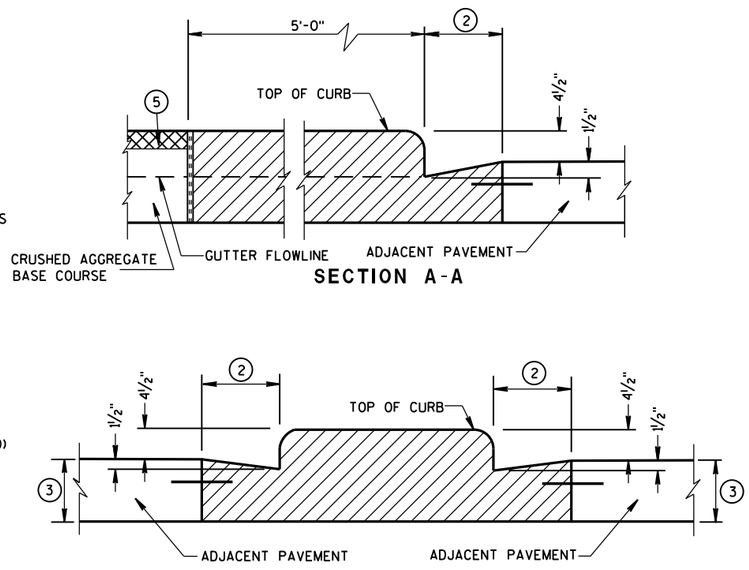
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 09A01 - 14b



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.

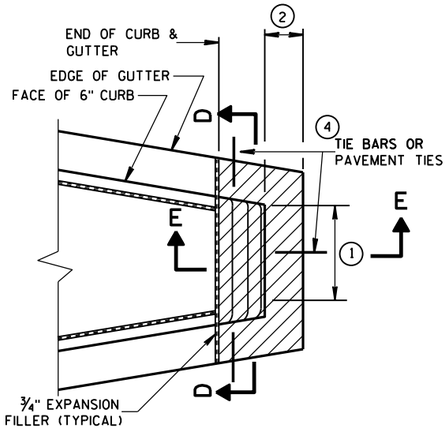
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

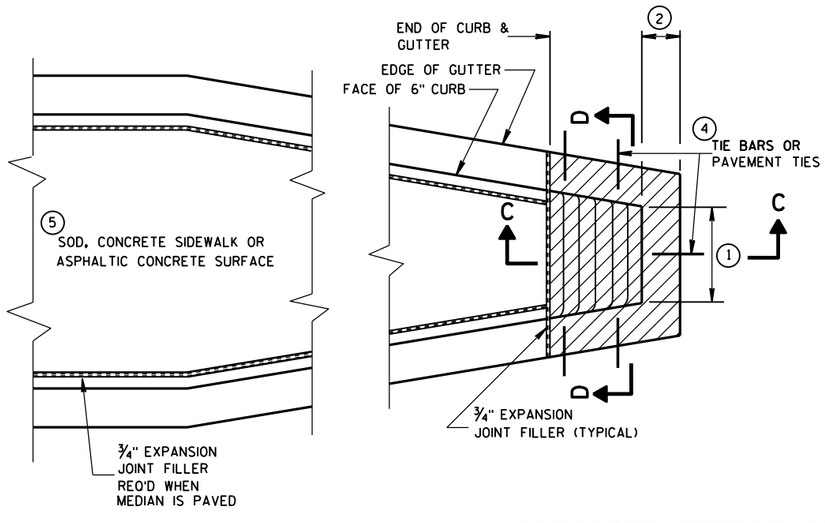
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

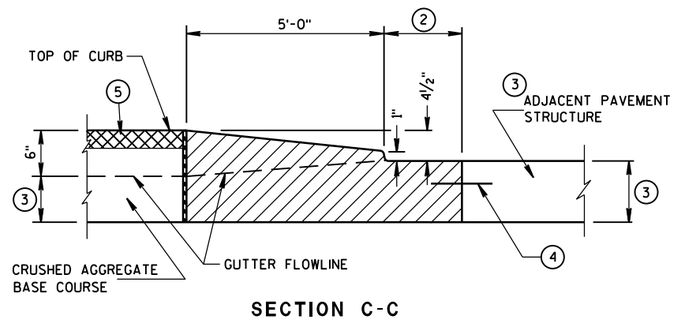
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

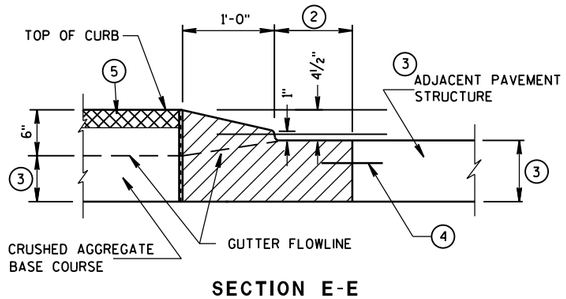
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



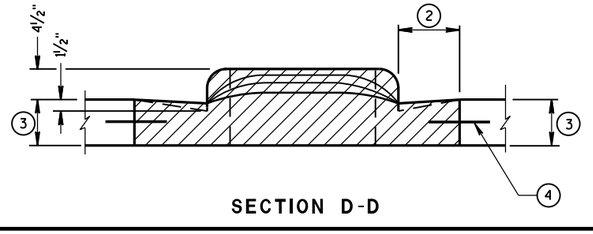


CONCRETE MEDIAN SLOPED NOSE TYPE 1





CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 11 B 2-2

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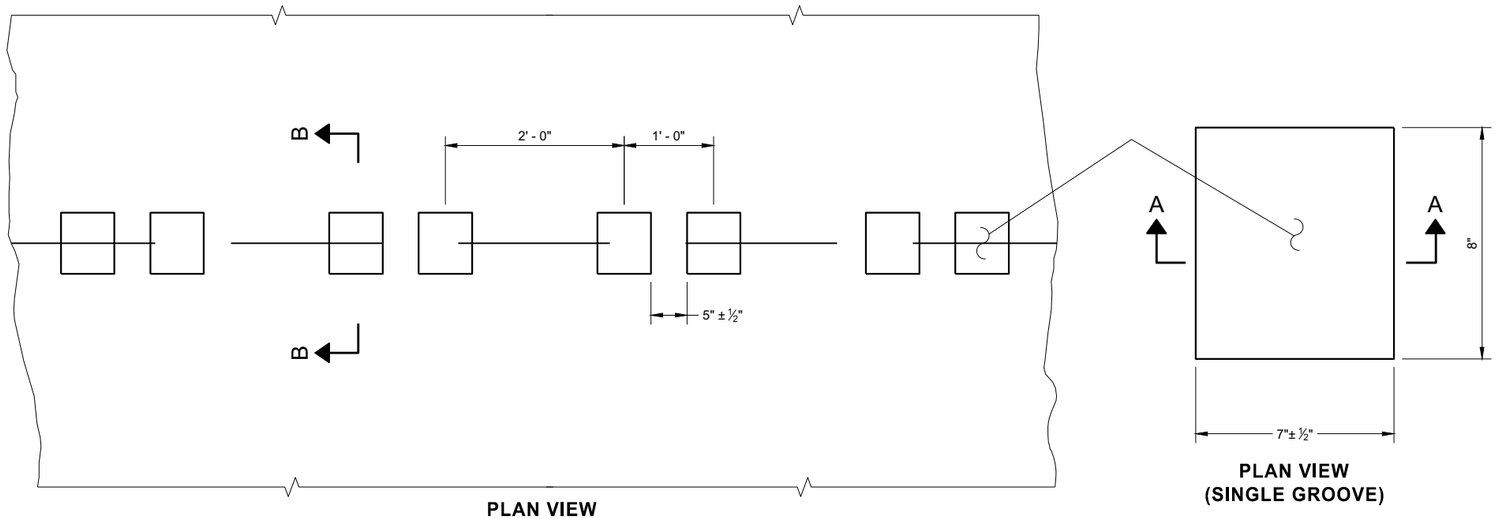
S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

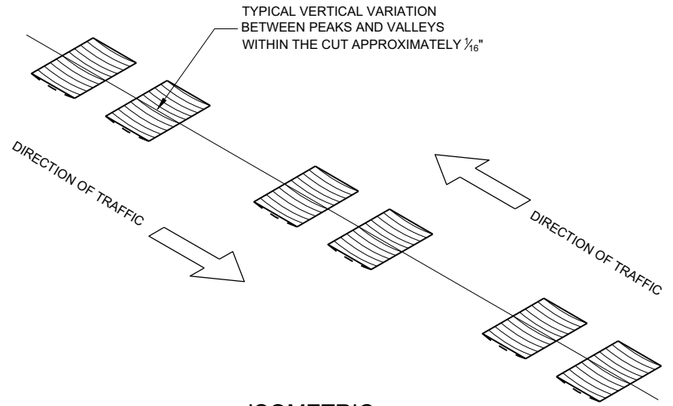
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

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



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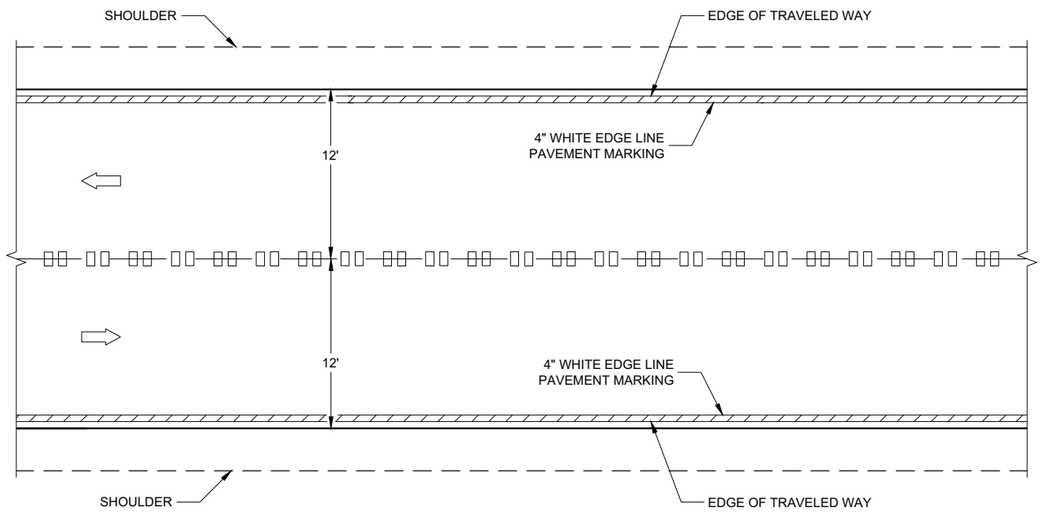
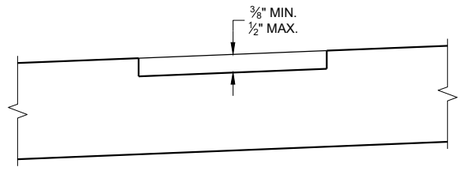
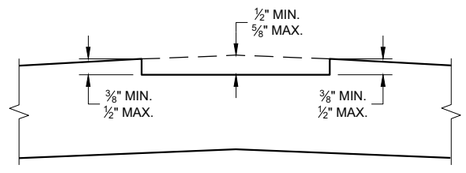


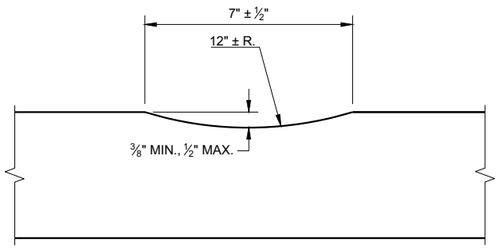
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

6

SDD 13A11 - 03a

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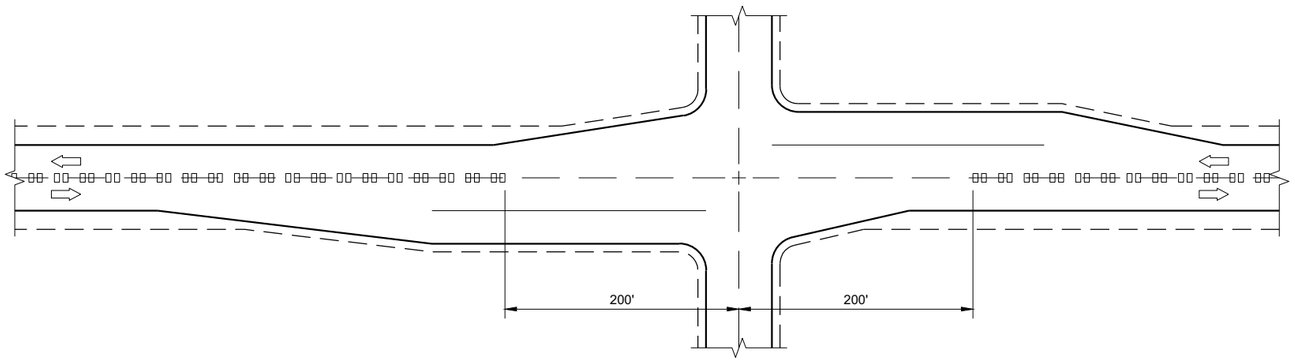
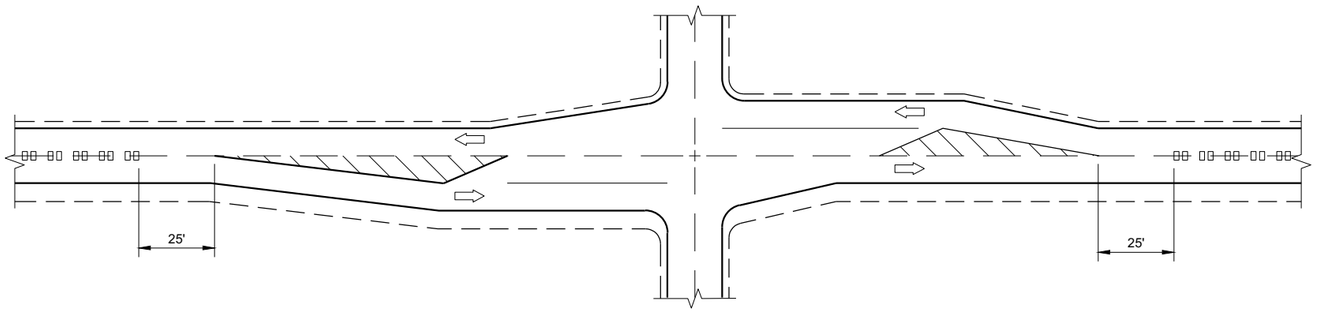
SDD 13A11 - 03a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

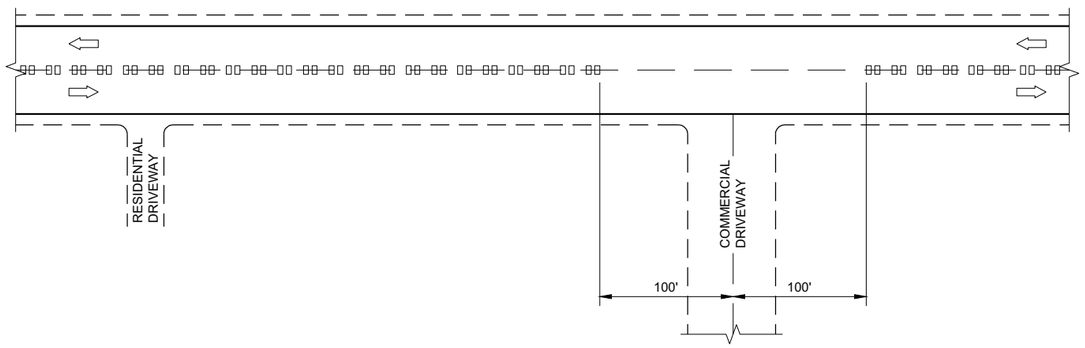
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



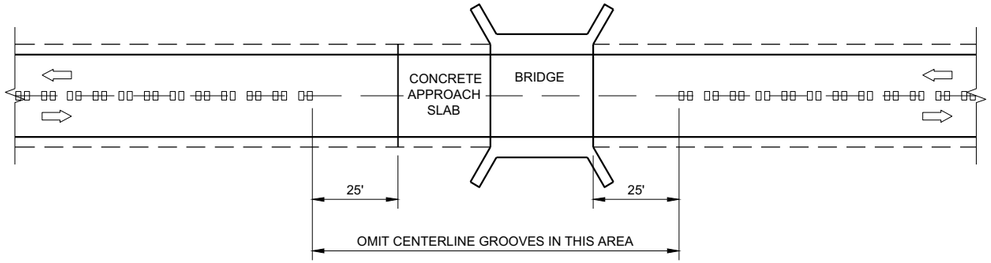
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



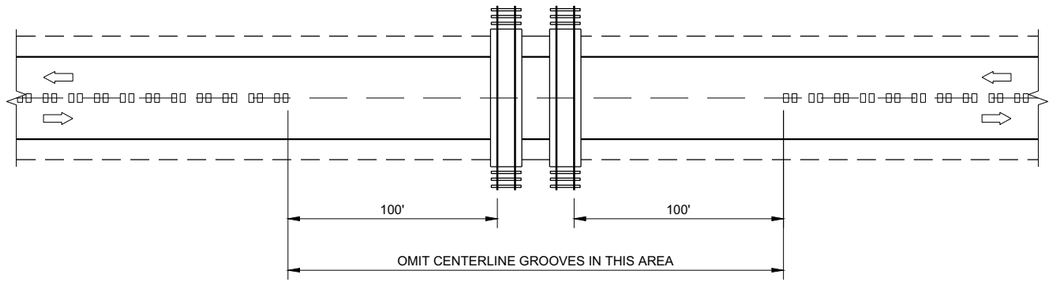
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

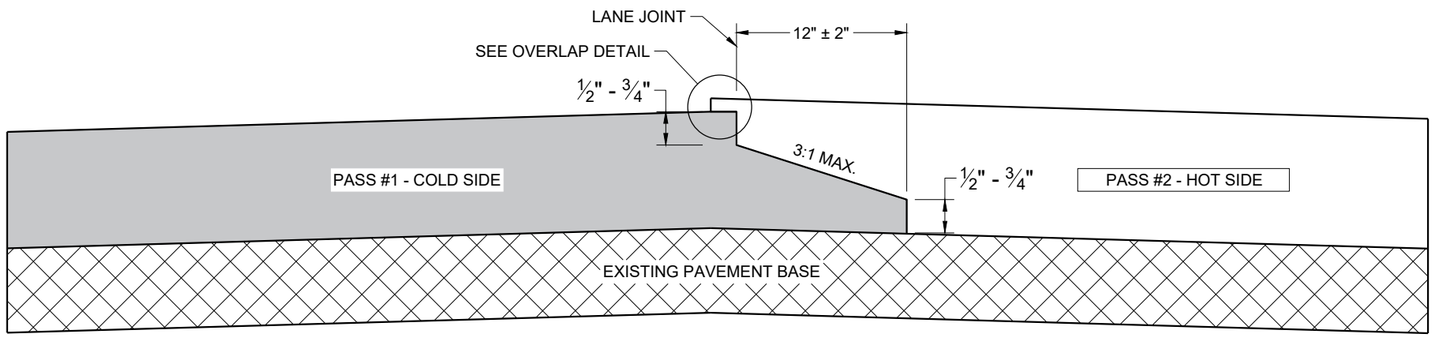
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

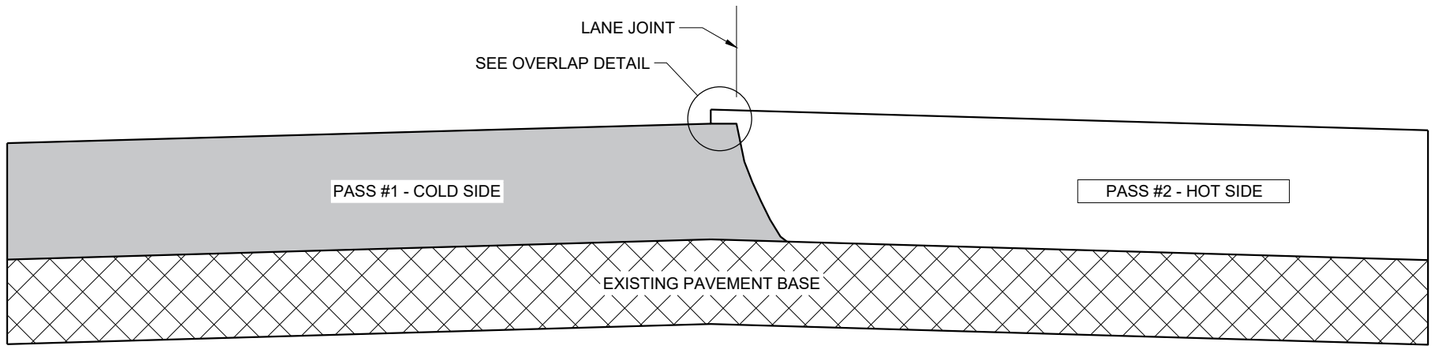
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

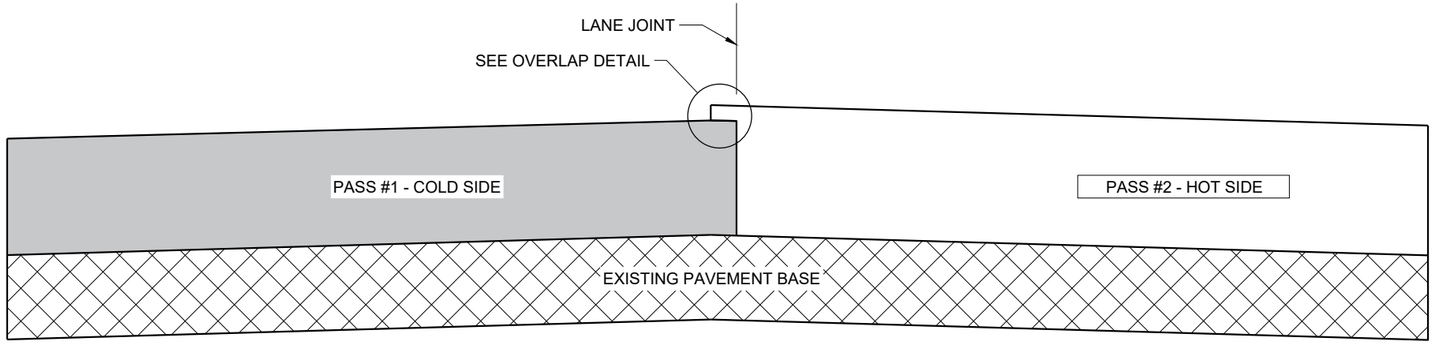
6
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

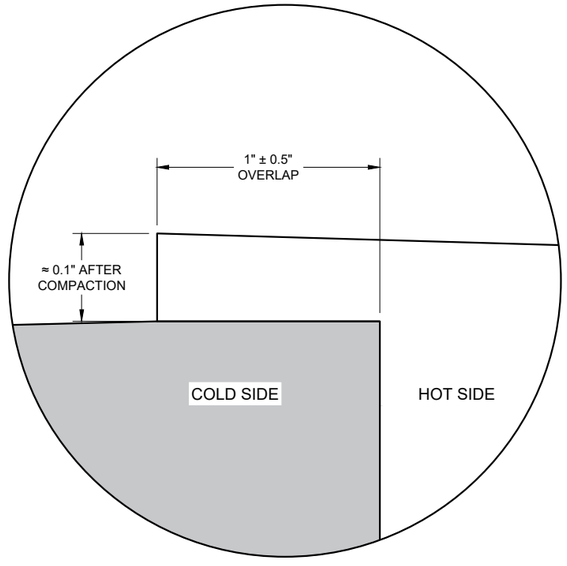
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

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SDD 13C19 - 03

SDD 13C19 - 03

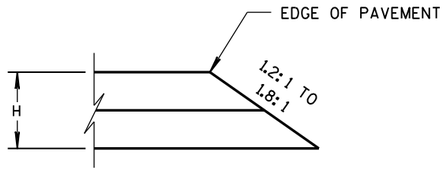
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

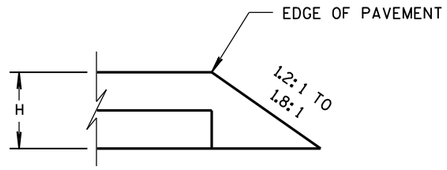
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



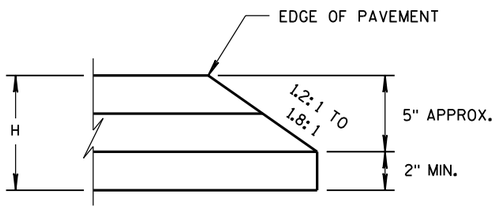
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



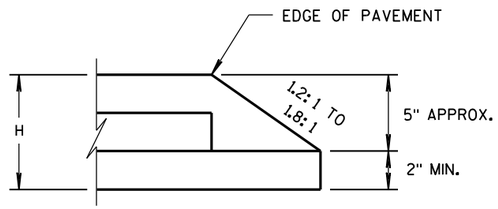
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

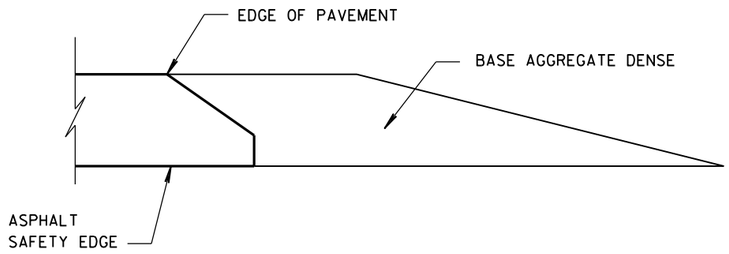
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(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.

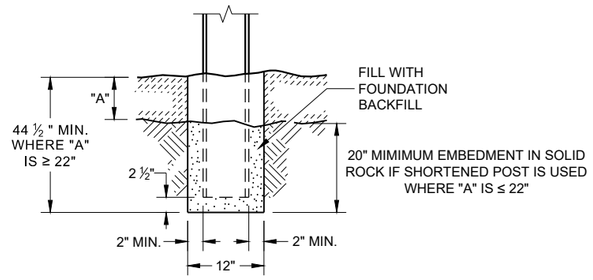
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

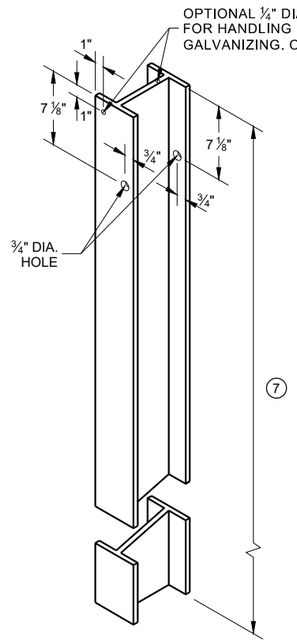
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

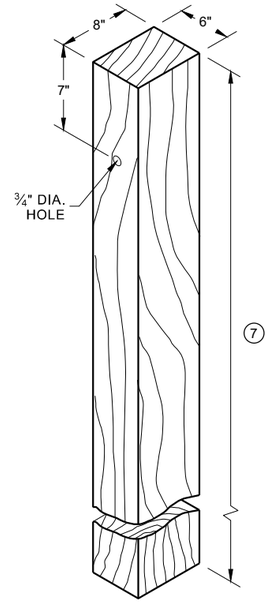
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



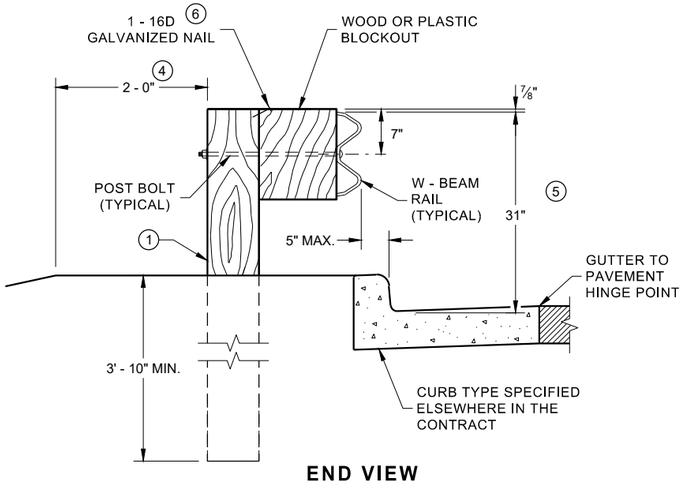
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



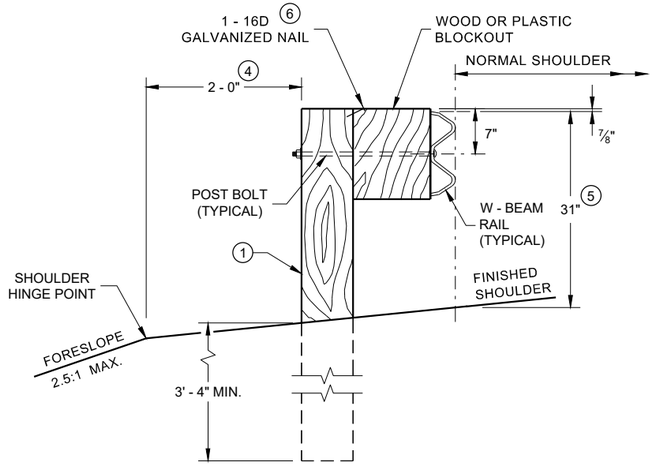
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



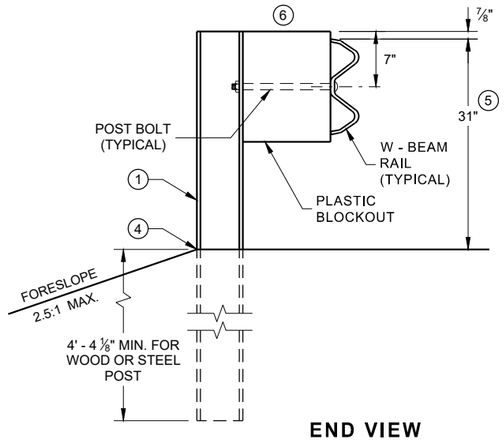
WOOD POST (6" X 8") NOMINAL (1)



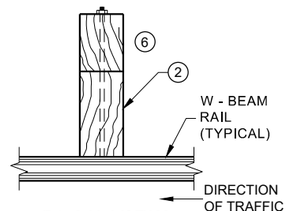
END VIEW
LOCATED ALONG A CURBED ROADWAY



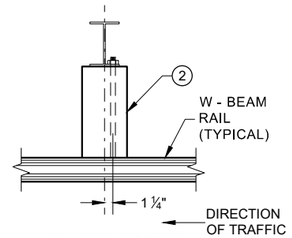
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



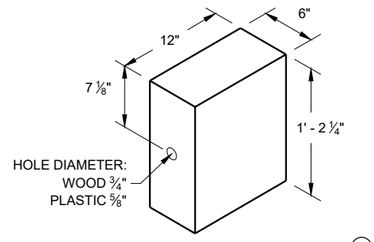
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM

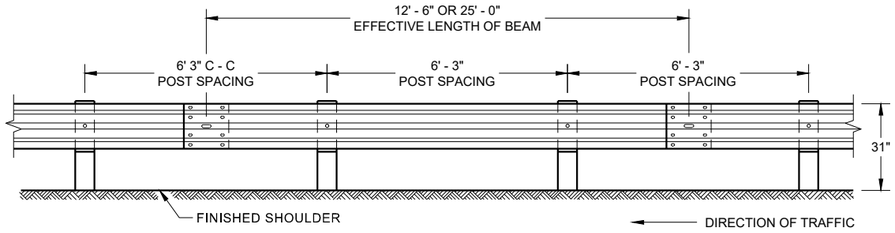


WOOD OR PLASTIC BLOCKOUT (2)

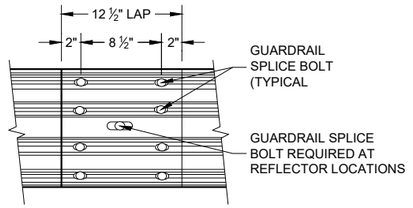
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a



FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
MID-SPAN BEAM SPLICE

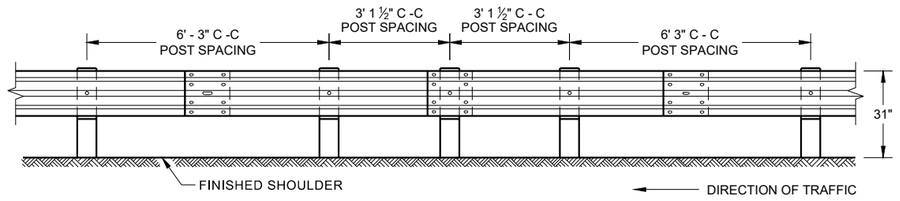
GENERAL NOTES

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

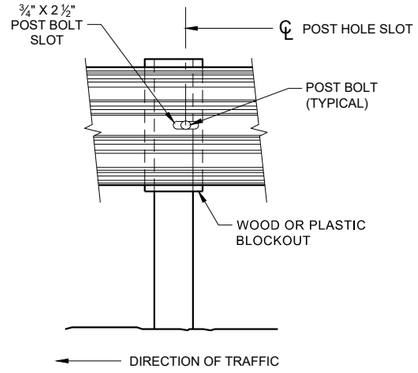
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.

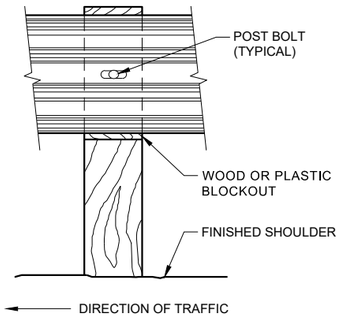
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



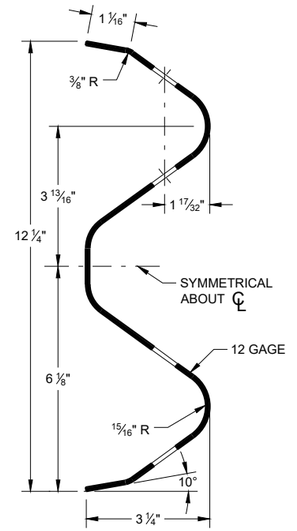
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



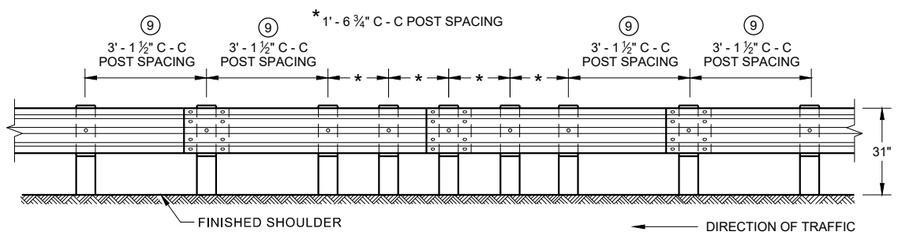
FRONT VIEW AT STEEL POST



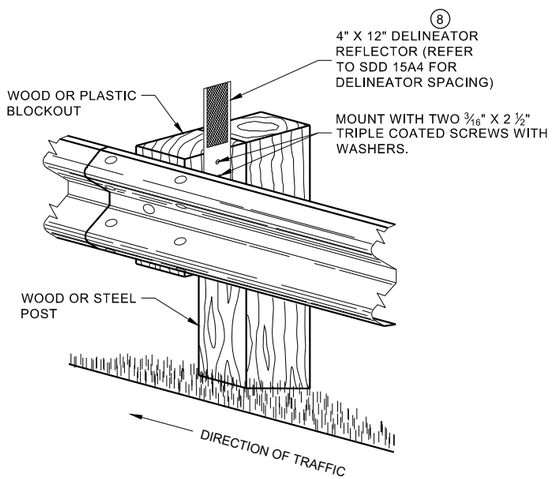
FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



FRONT VIEW
QUARTER POST SPACING (QS)



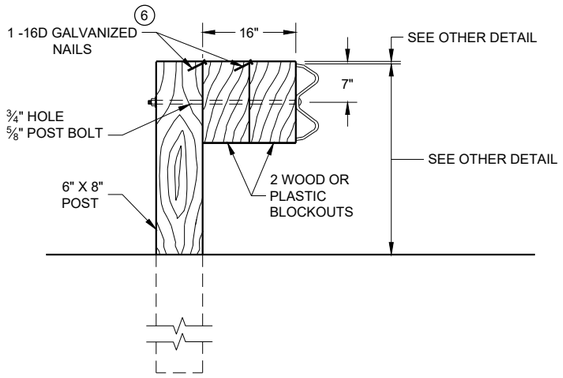
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

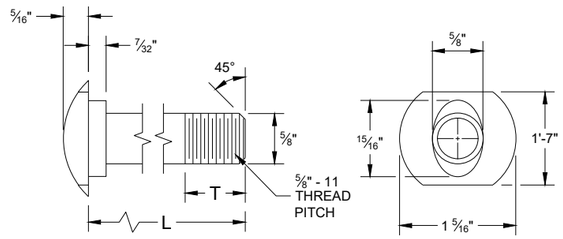


DETAIL FOR 16" BLOCKOUT DEPTH

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.

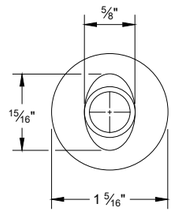
NOTE:

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.

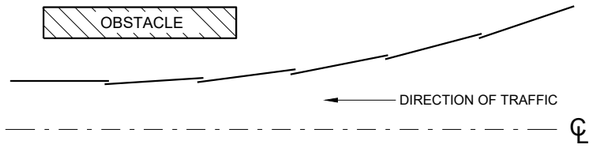


POST BOLT TABLE

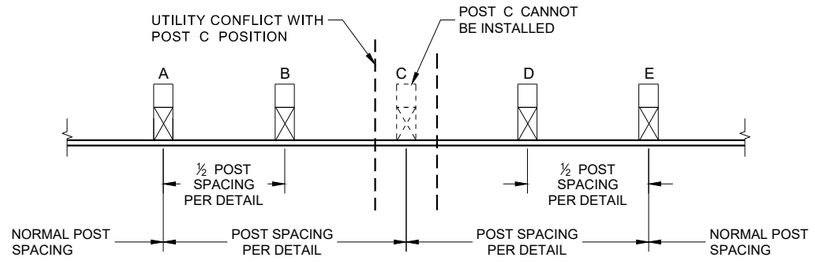
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



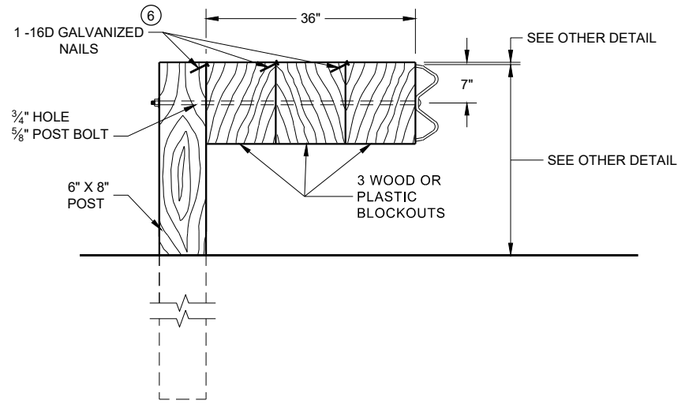
ALTERNATE BOLT HEAD



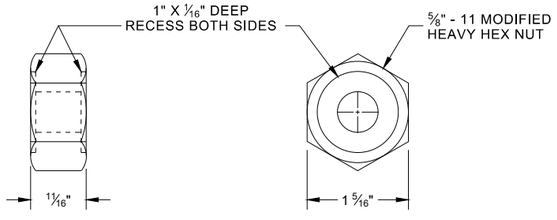
PLAN VIEW
BEAM LAPPING DETAIL



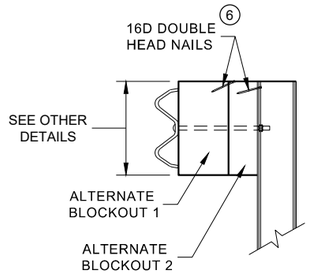
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



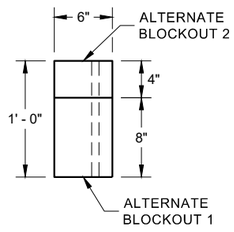
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

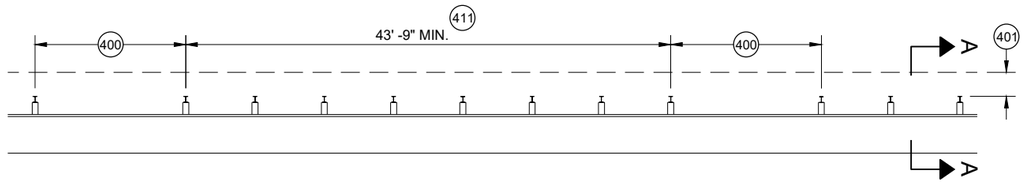
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

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.

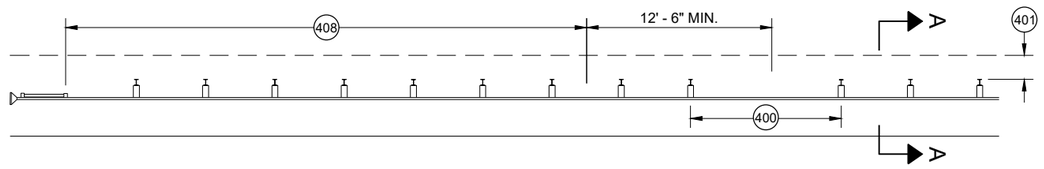
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

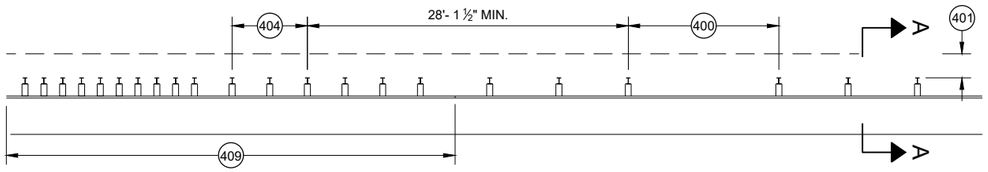
6
SDD 14B42 - 07c



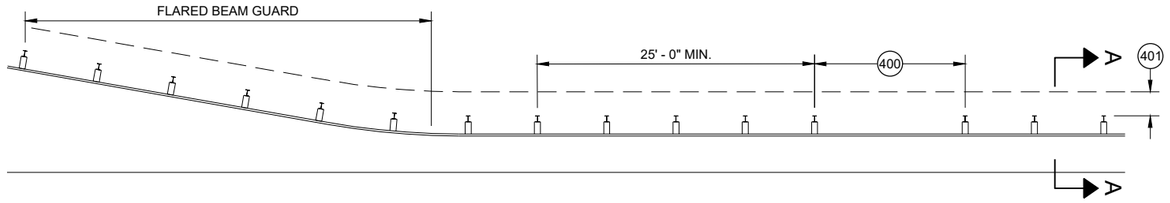
MISSING POST IN MGS GUARDRAIL



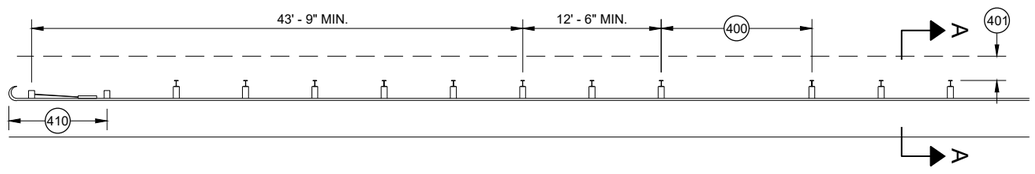
MISSING POST IN MGS GUARDRAIL NEAR EAT



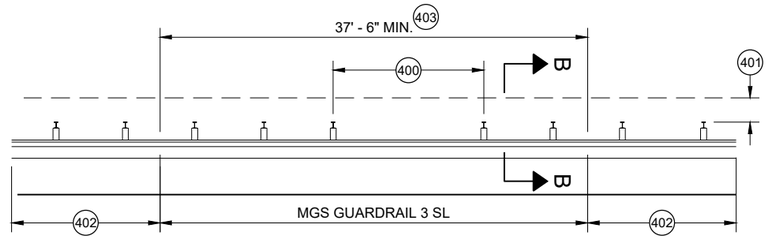
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

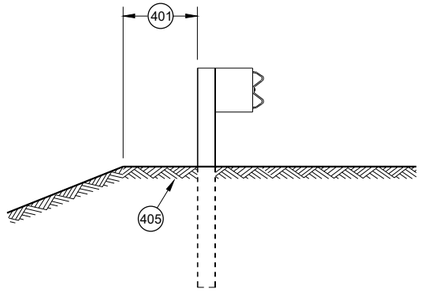


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

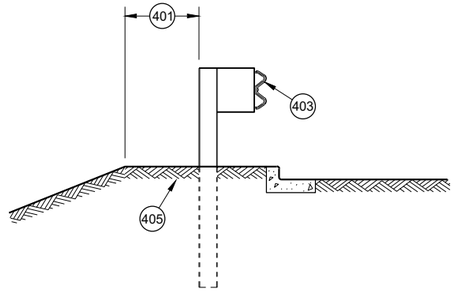


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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.

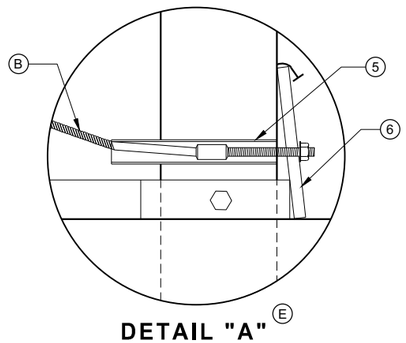
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

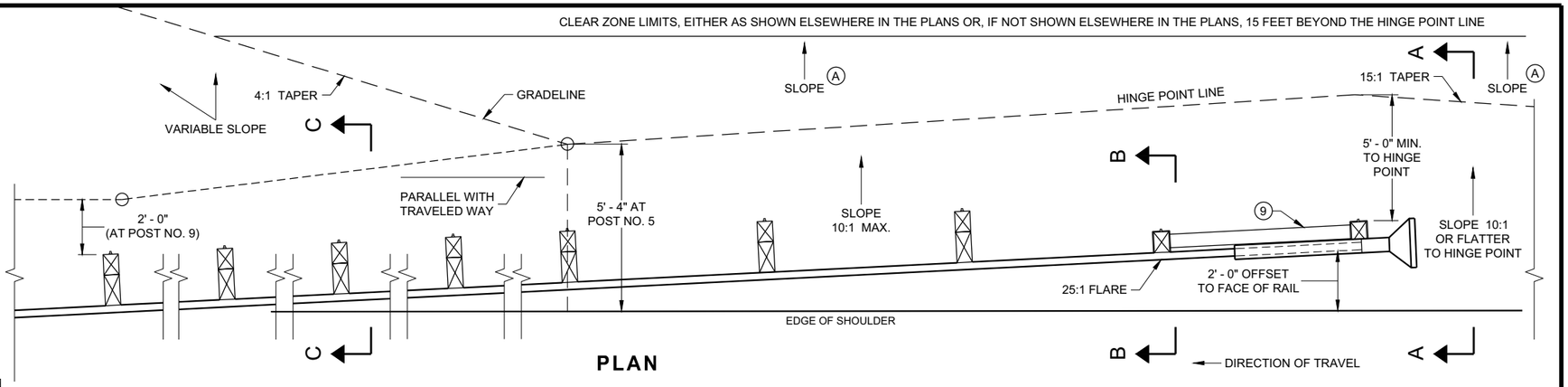
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

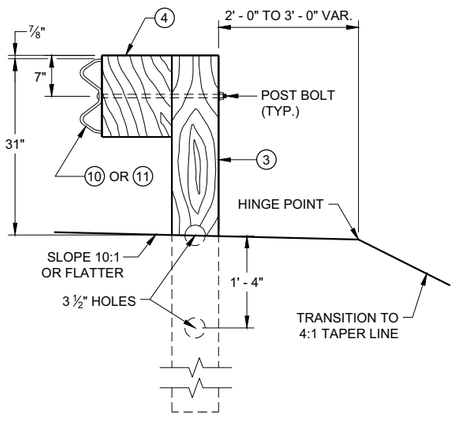
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

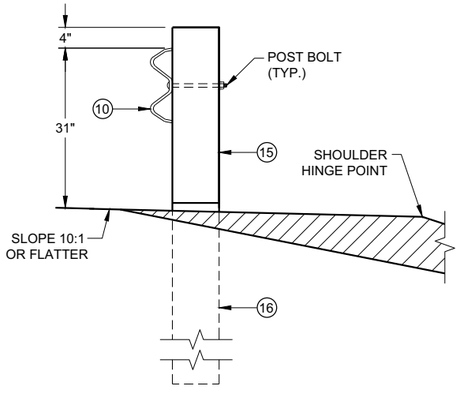


DETAIL "A" (E)

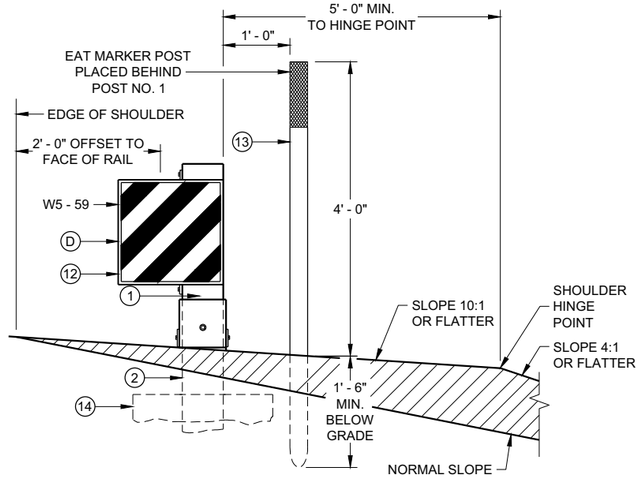




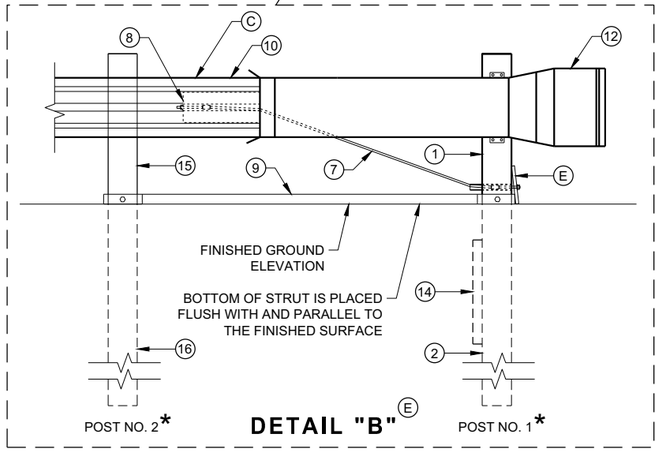
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*

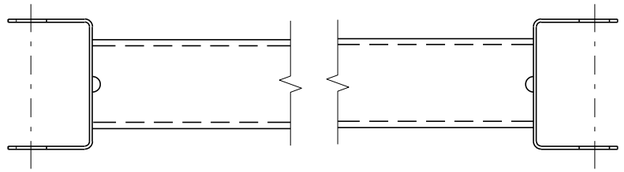


DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

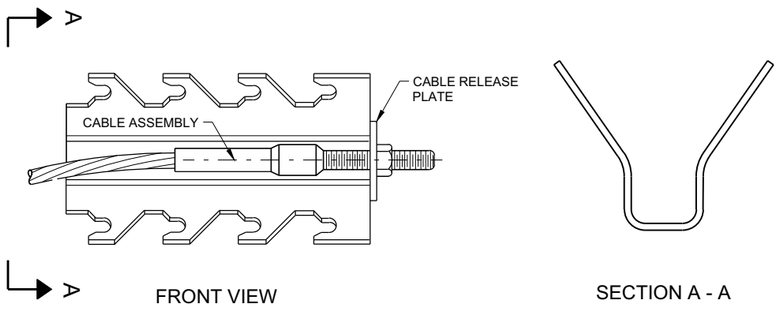
6
SDD 14B44 - 04a



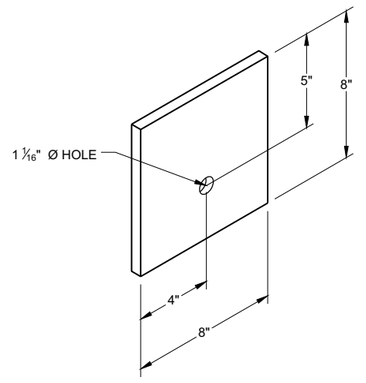
GENERIC GROUND STRUT ⑨ Ⓔ

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

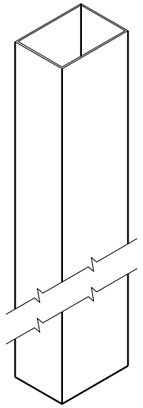
6

SDD 14B44 - 04b

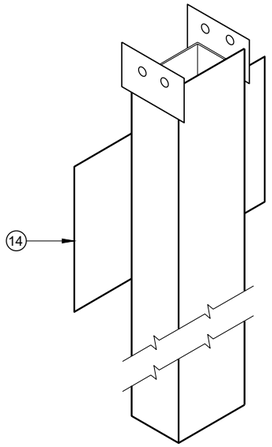
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

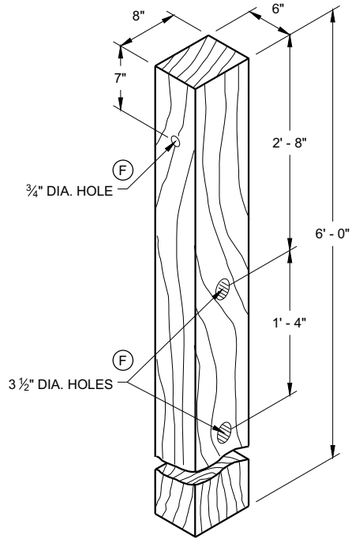
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



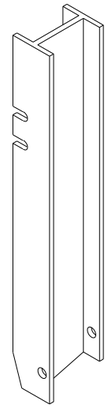
UPPER POST NO. 1 (1) (E)



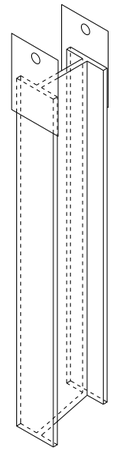
LOWER POST NO. 1 (2) (E)



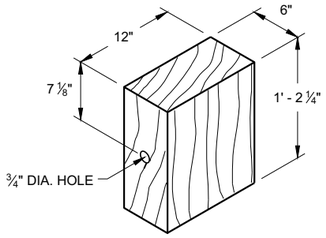
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



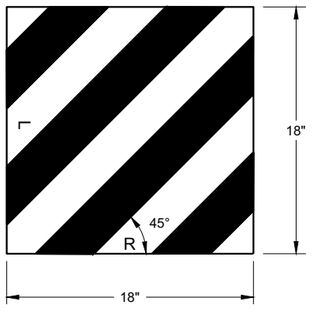
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

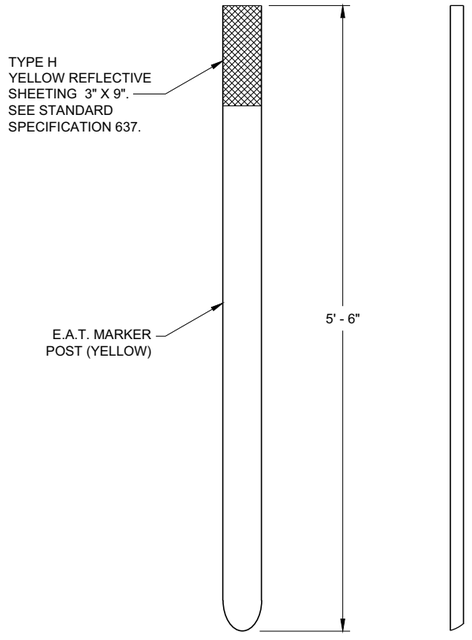


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



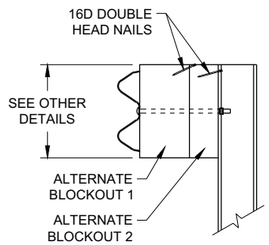
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

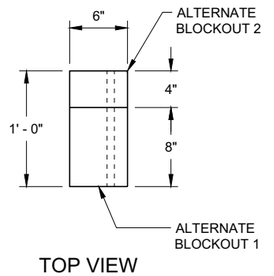


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

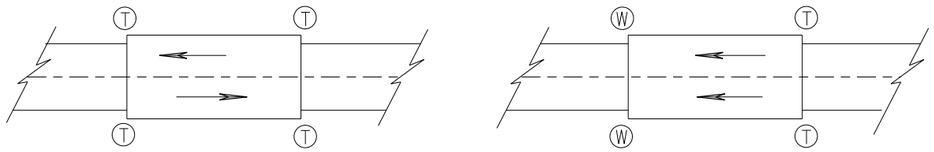
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

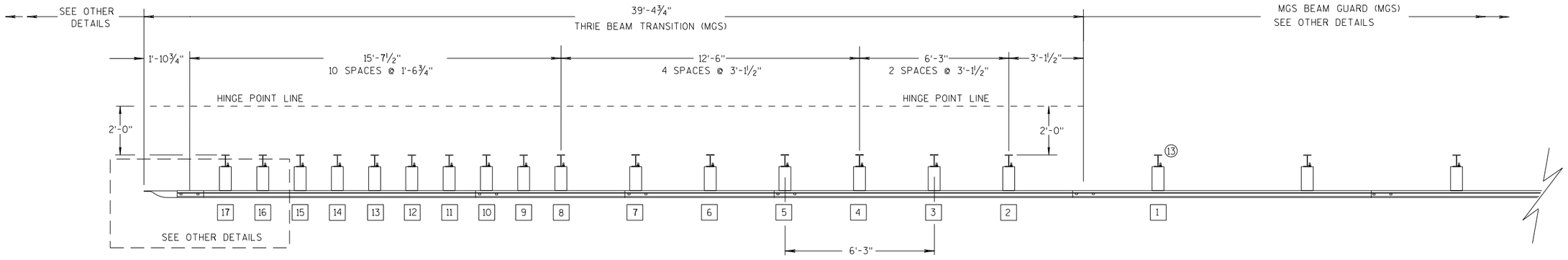
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

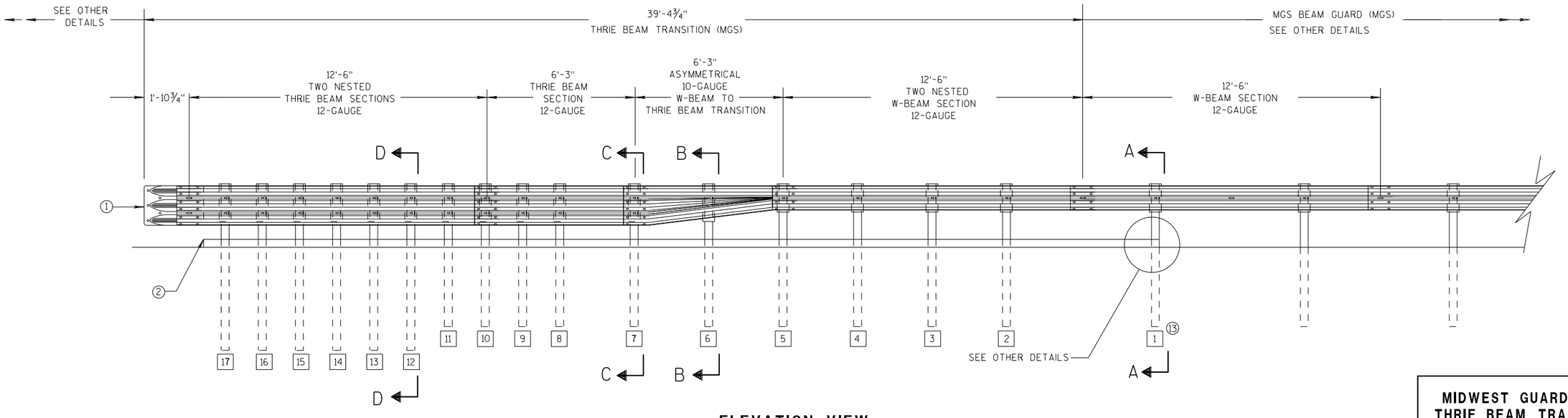
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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 TRANSPOF

6

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

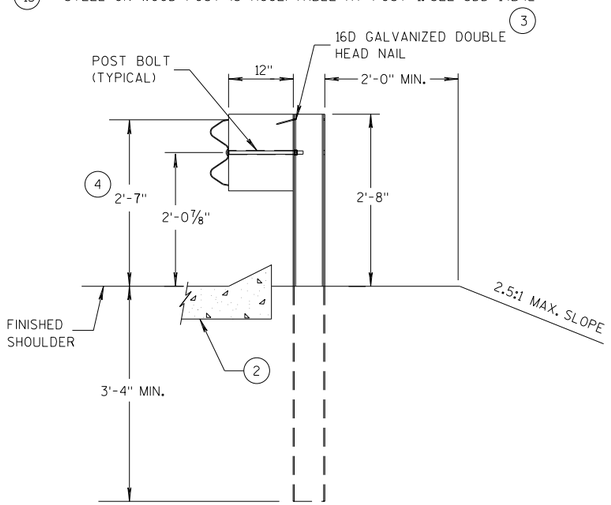
GENERAL NOTES

(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.

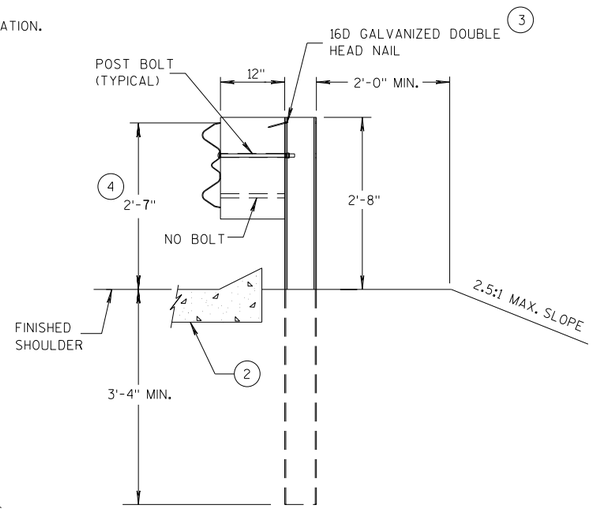
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



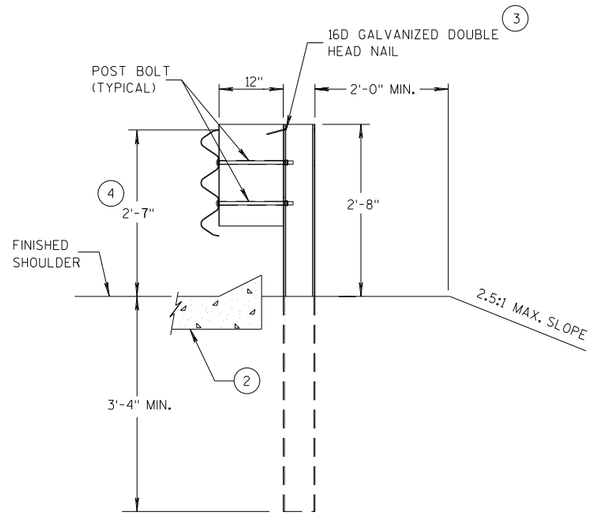
SECTION A-A (13)

POSTS 1-5



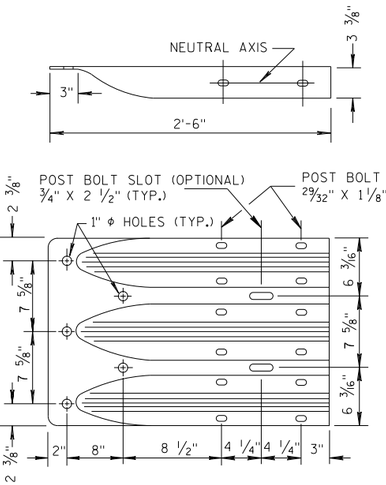
SECTION B-B

POST 6

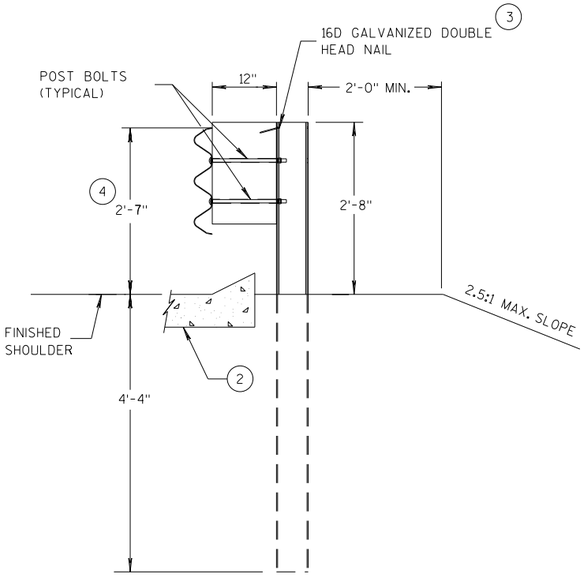


SECTION C-C

POSTS 7-11

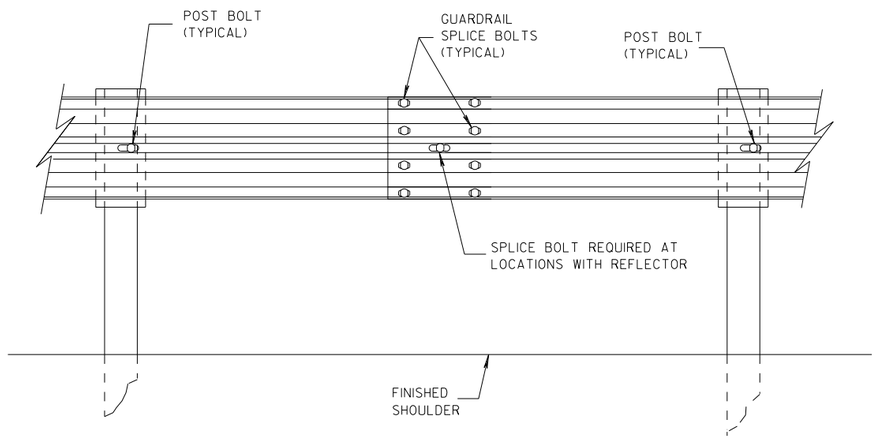


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

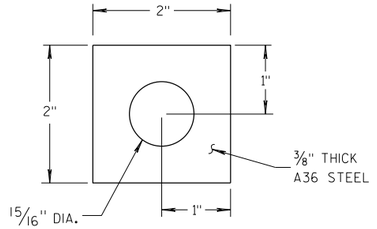
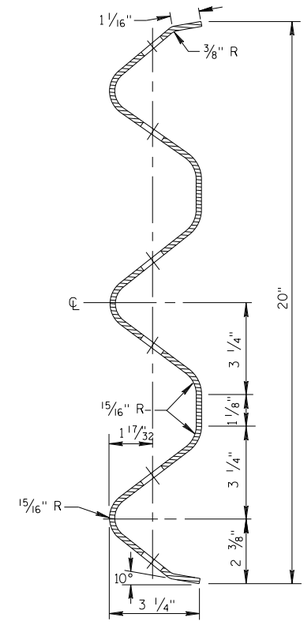


PLATE WASHER DETAIL



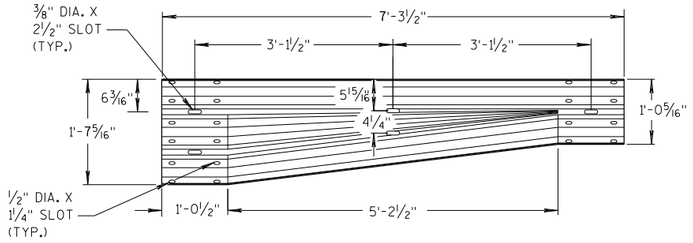
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

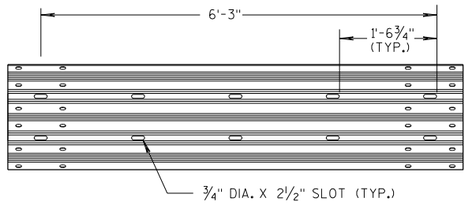
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

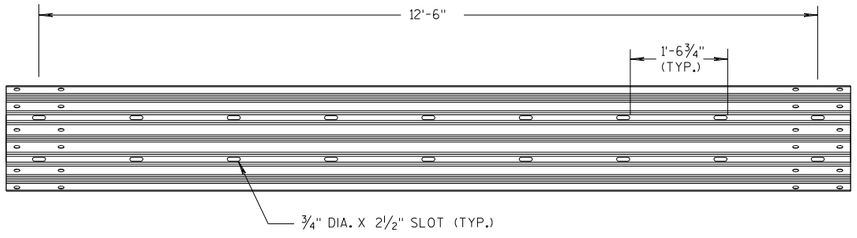
S.D.D. 14 B 45-5b



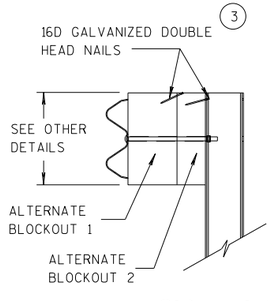
W-BEAM TO THRIE BEAM TRANSITION SECTION



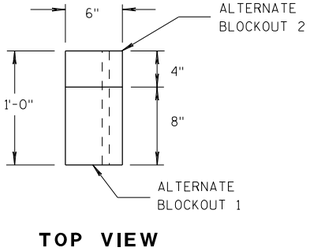
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

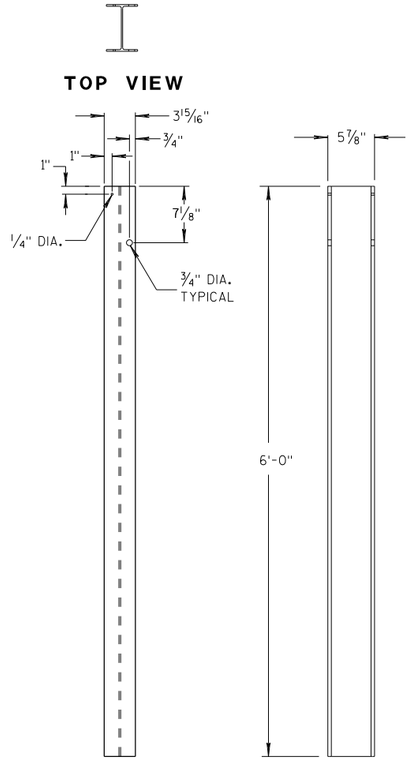


SIDE VIEW



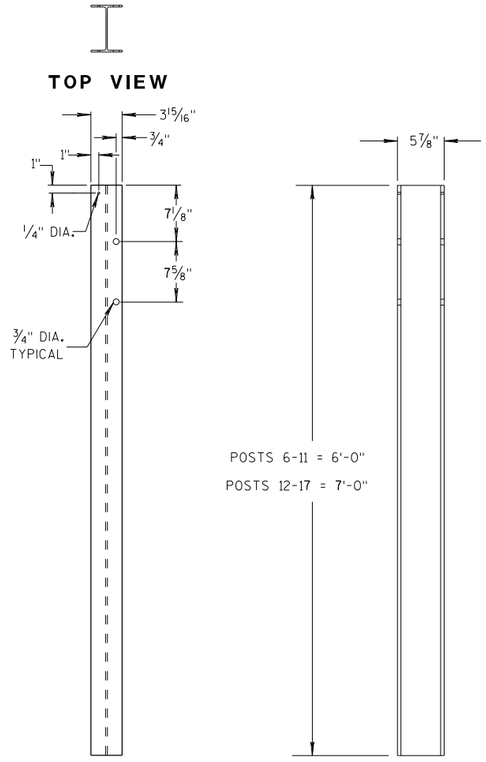
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



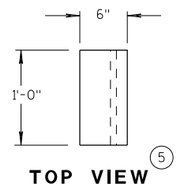
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

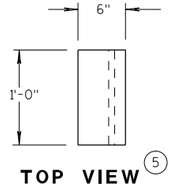


FRONT VIEW SIDE VIEW

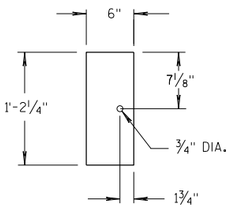
STEEL POSTS 6-17



TOP VIEW (5)

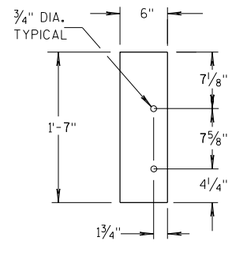


TOP VIEW (5)



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.

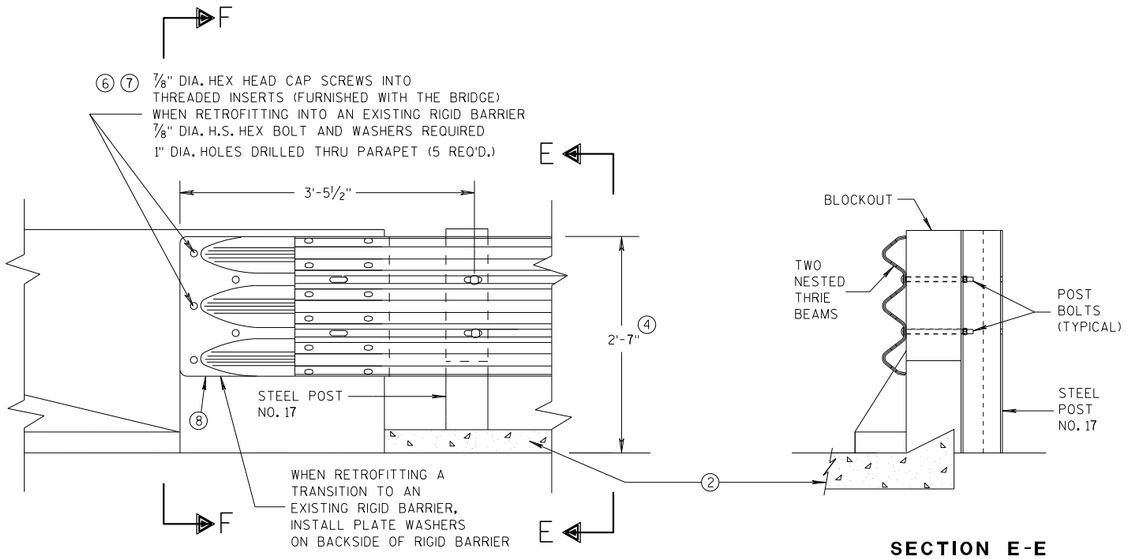
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

(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.

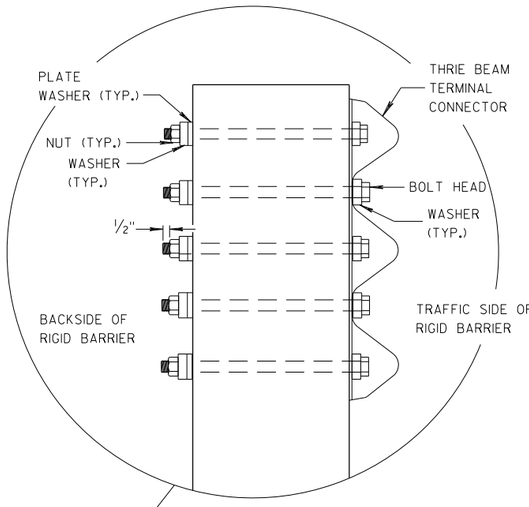
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

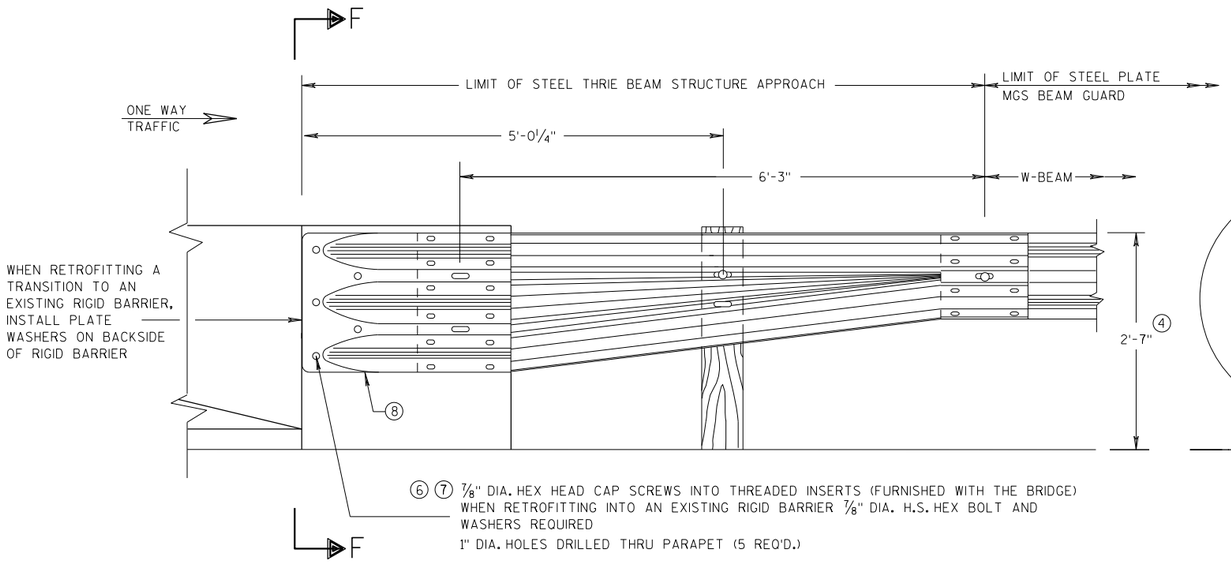
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

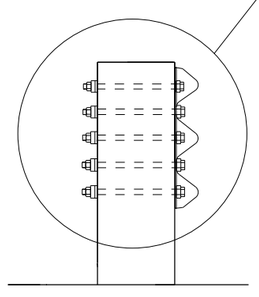
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

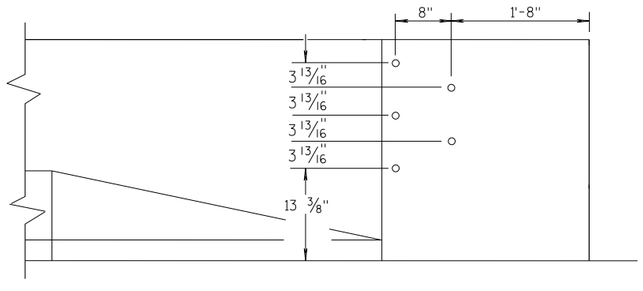




FRONT VIEW



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

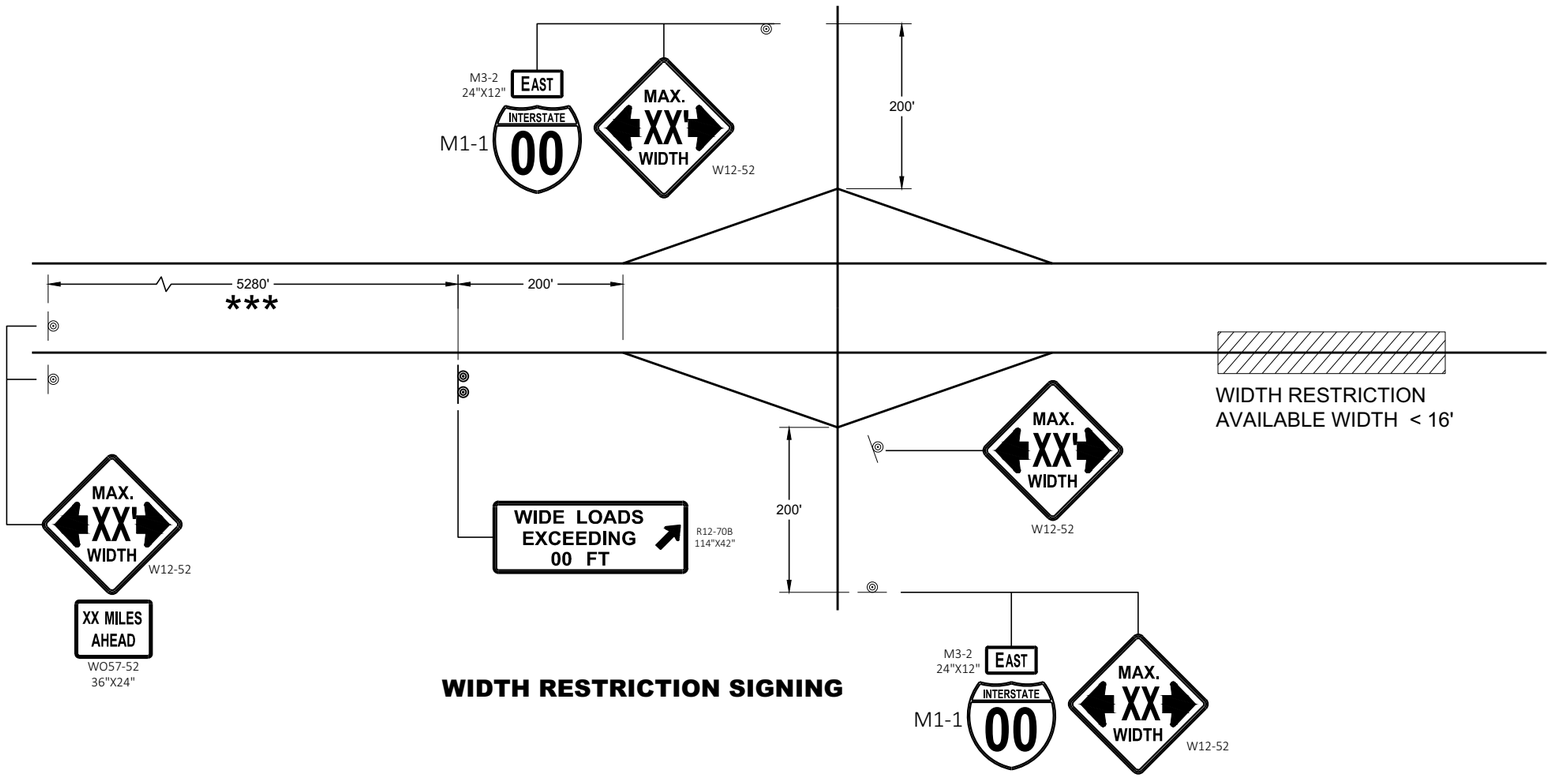
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[illegible] UNIT SUPERVIS[illegible]
FHWA

6

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

6

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



WIDTH RESTRICTION SIGNING

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.

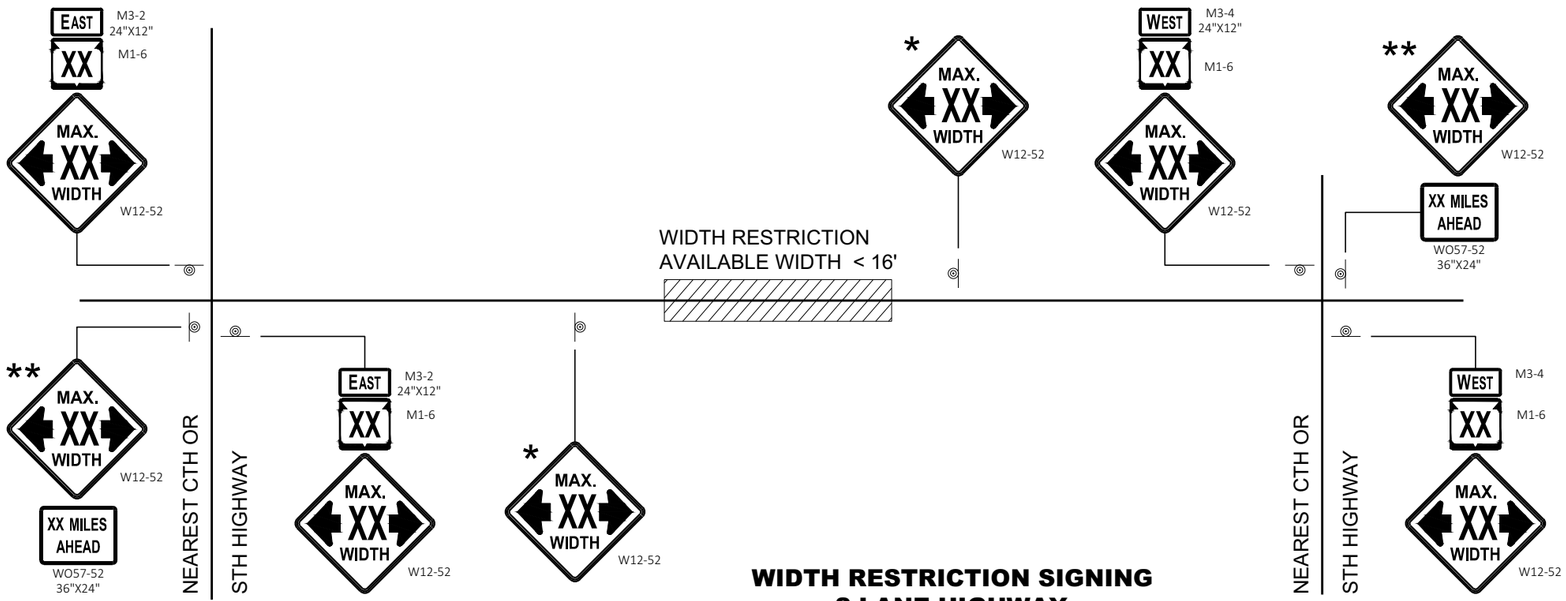
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* 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



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C02 - 08f

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

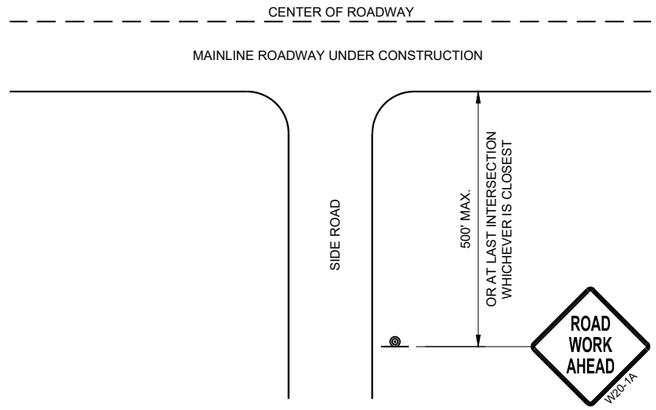
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



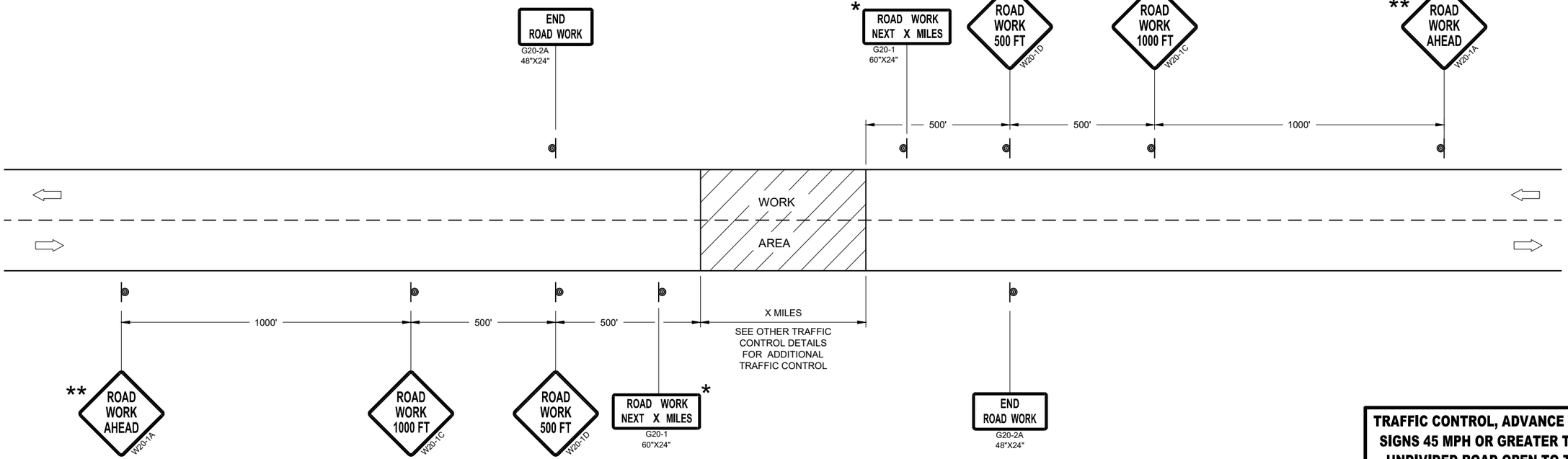
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

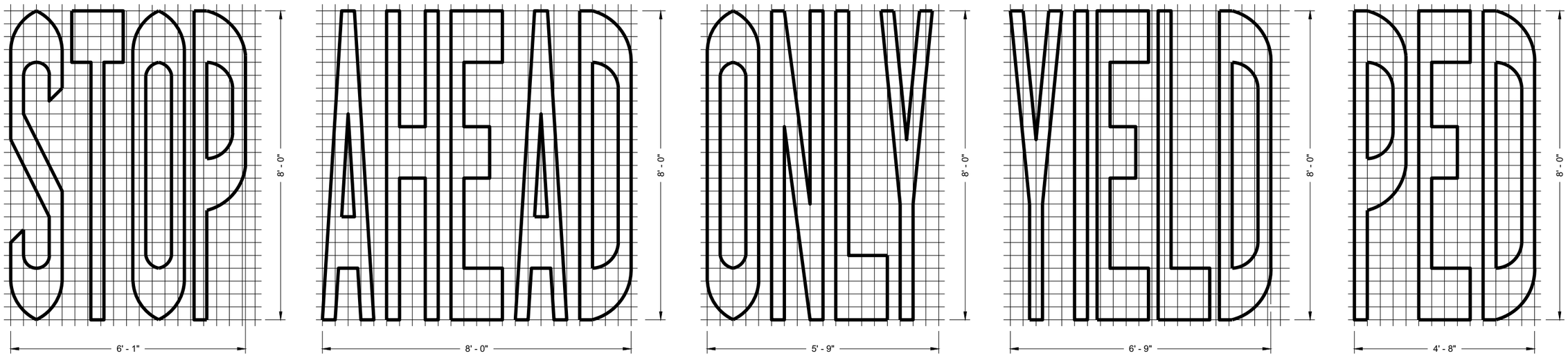
APPROVED
July 2018
DATE

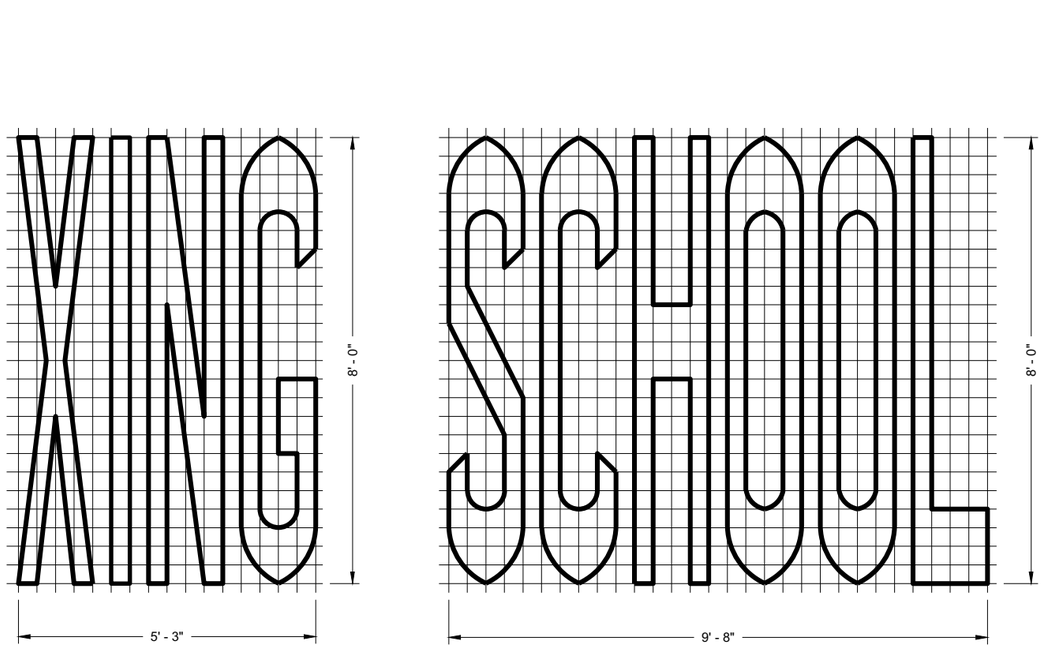
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

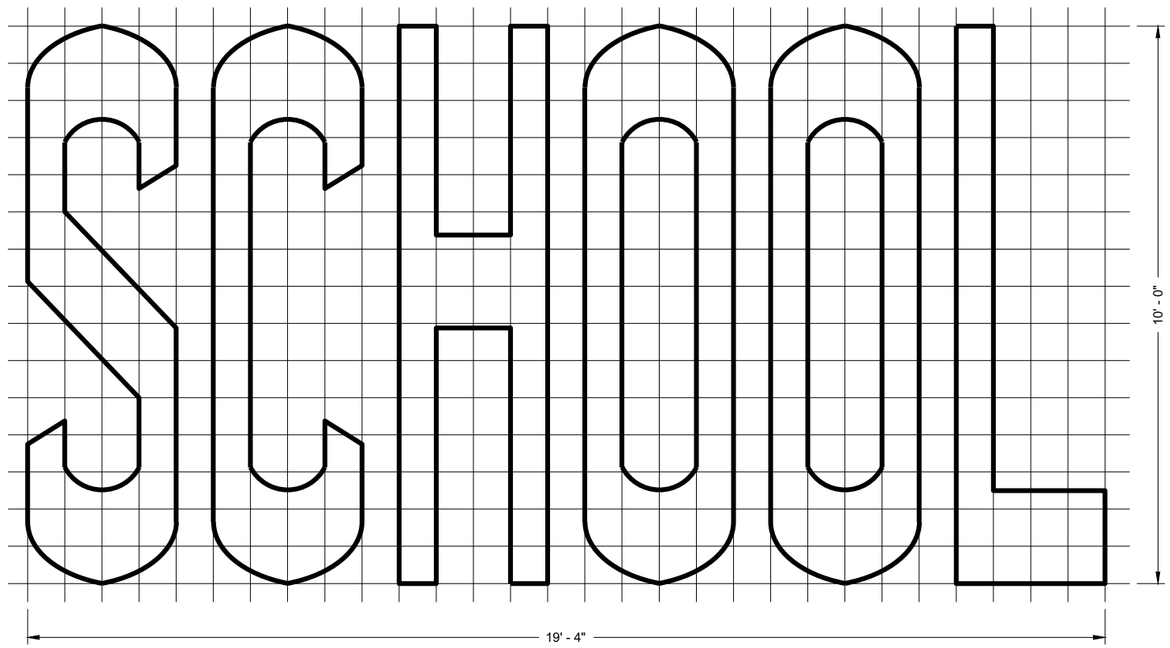
6

SDD 15C04 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

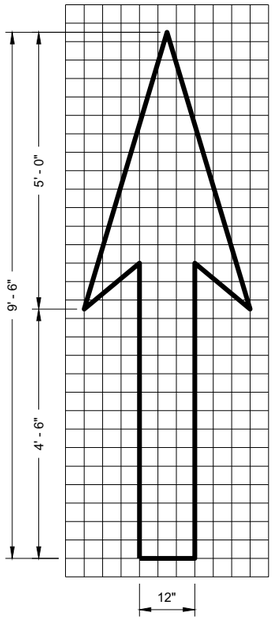
6

SDD 15C07 - 15b

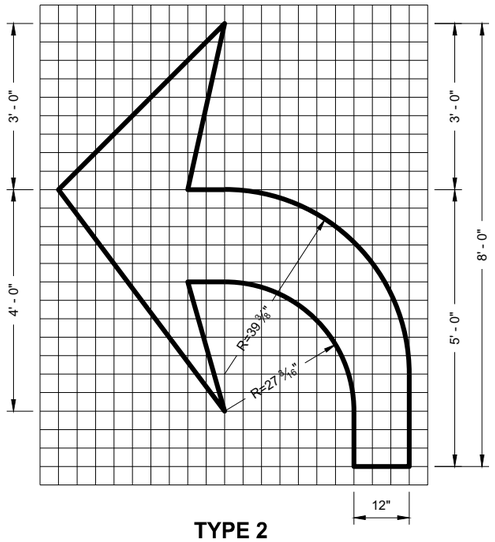
SDD 15C07 - 15b

GENERAL NOTES

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



TYPE 1



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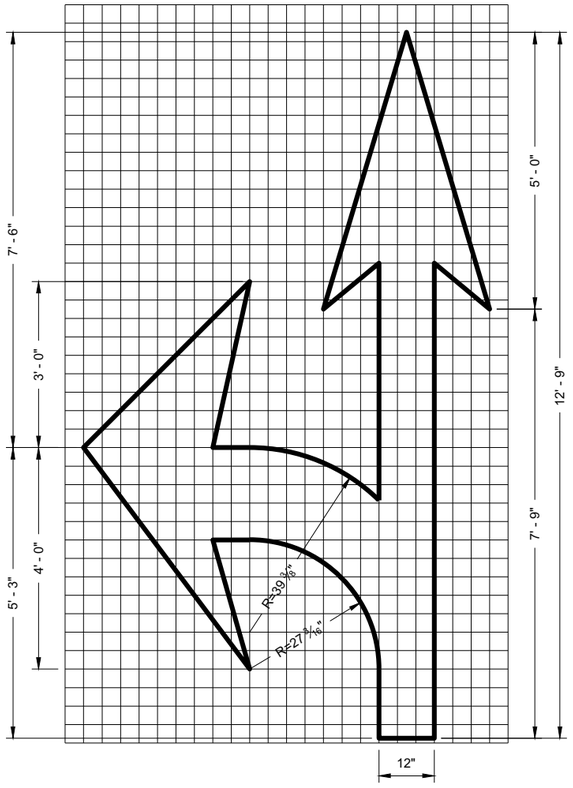

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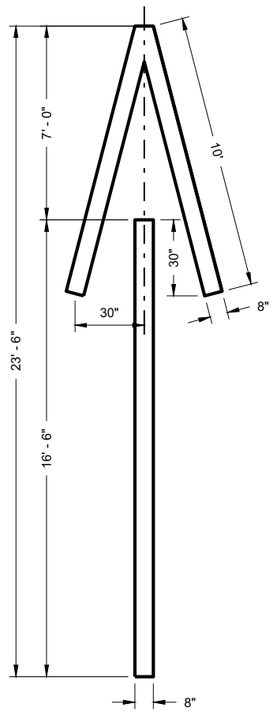
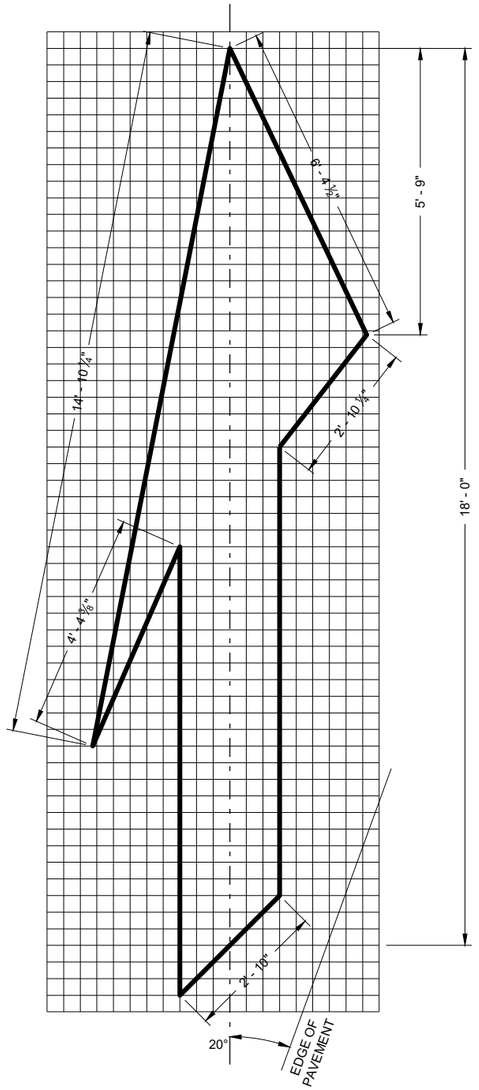
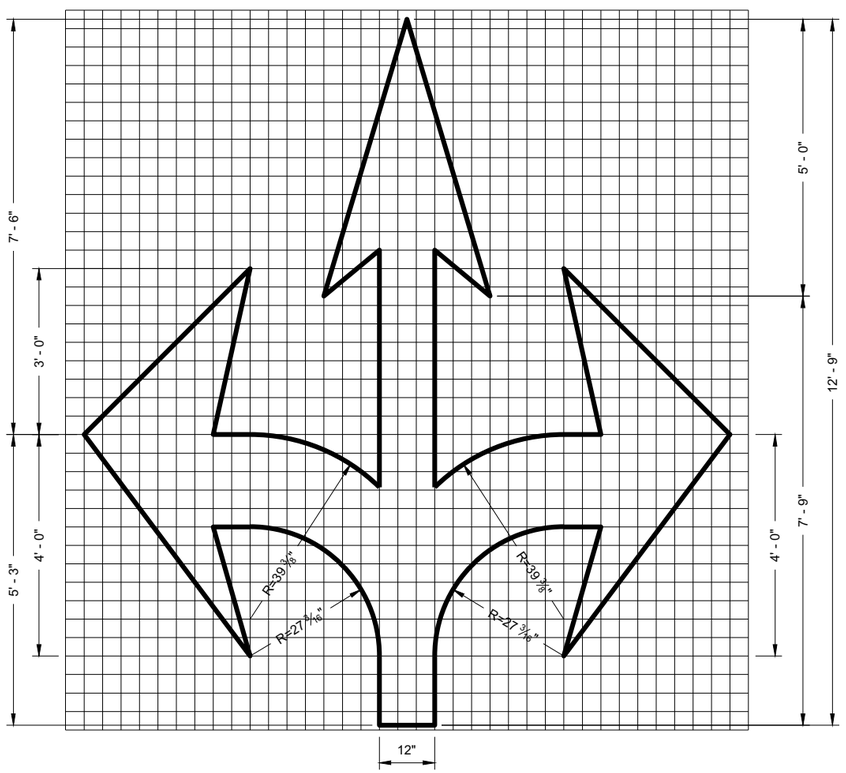


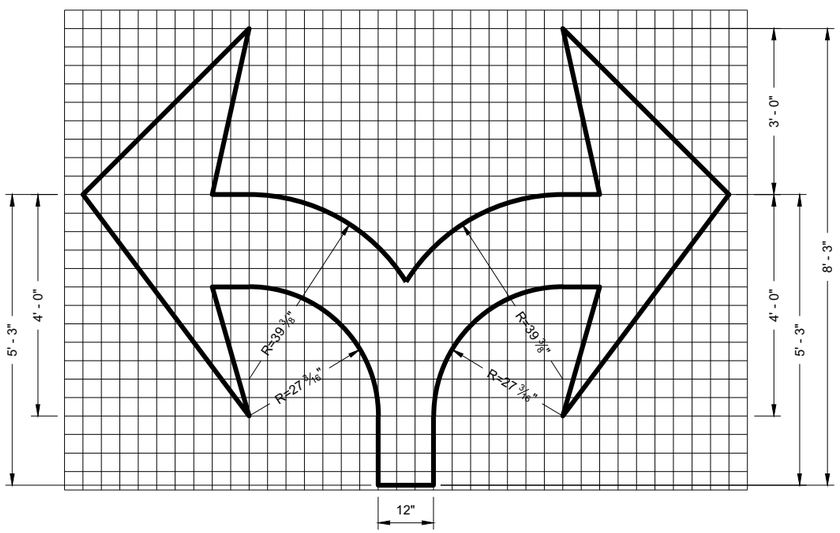
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

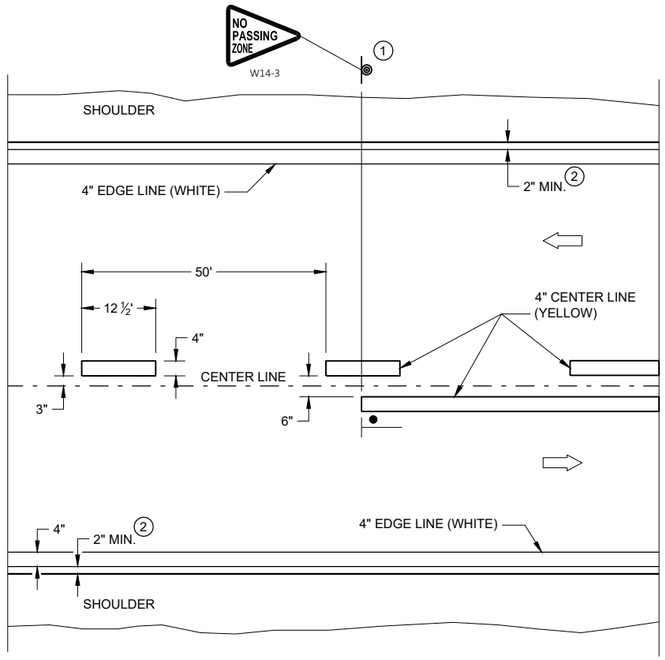
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

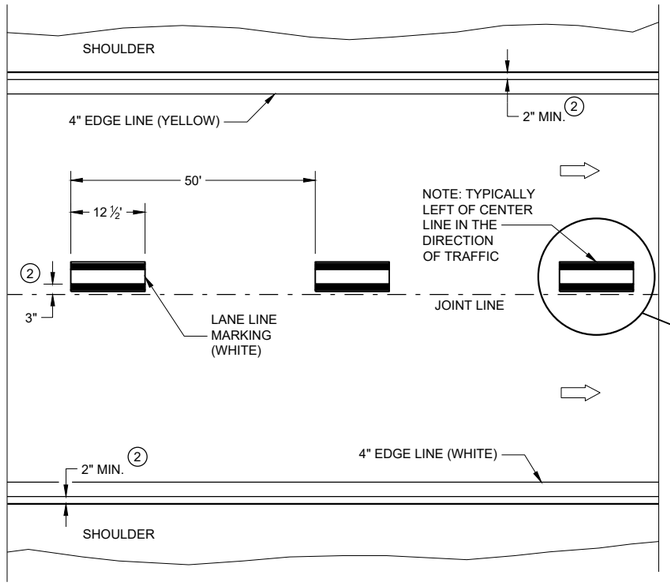
"T" MARKING

SIGN ON PERMANENT SUPPORT

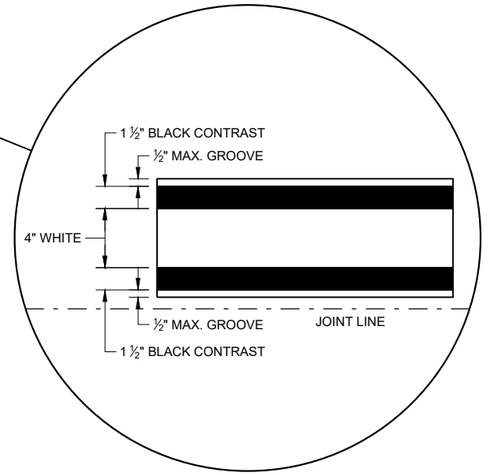
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

6

SDD 15C08 - 22a

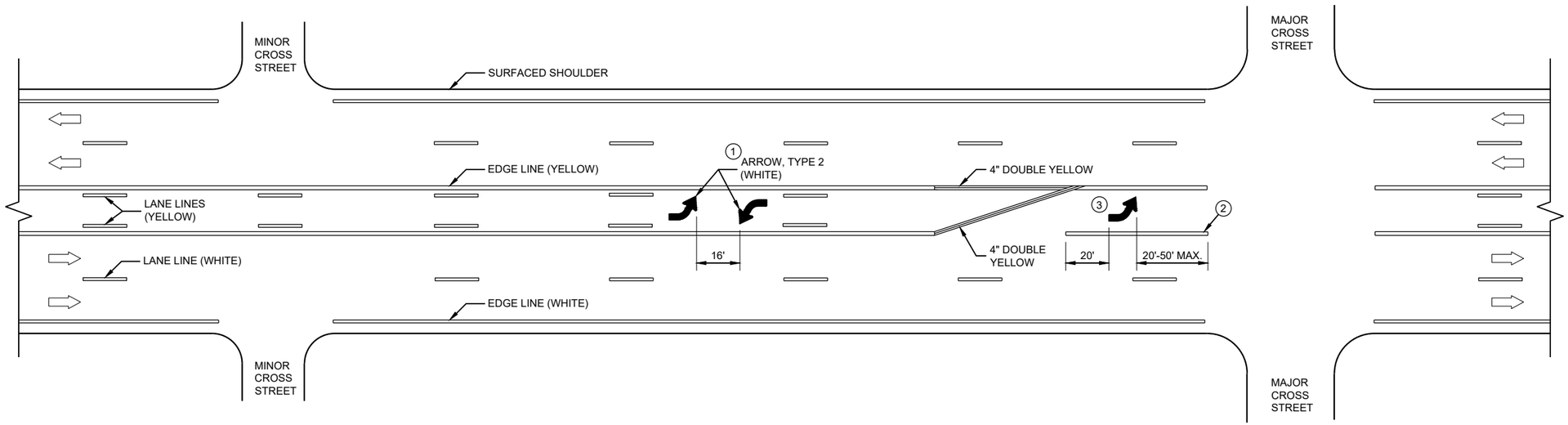
6

SDD 15C08 - 22a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

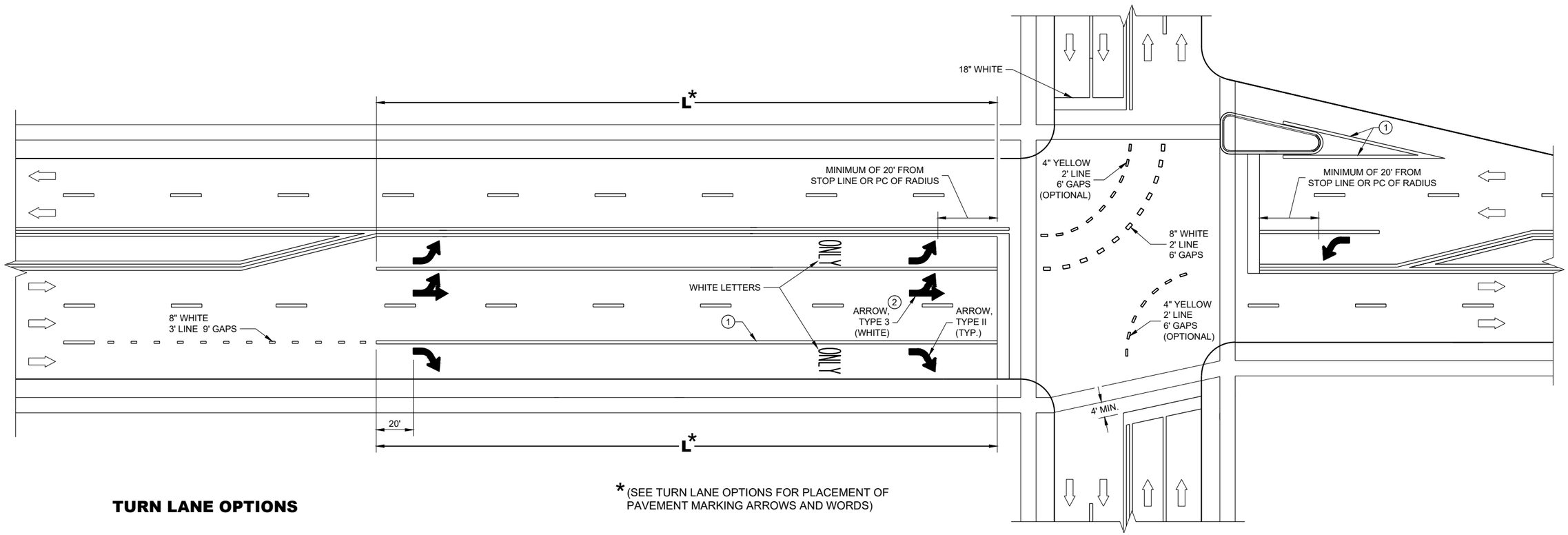
SDD 15C08 - 22c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

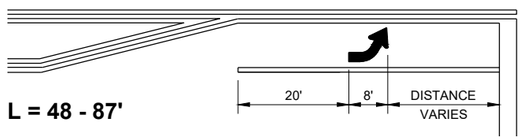
SDD 15C08 - 22c



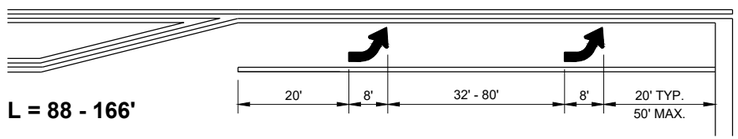
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

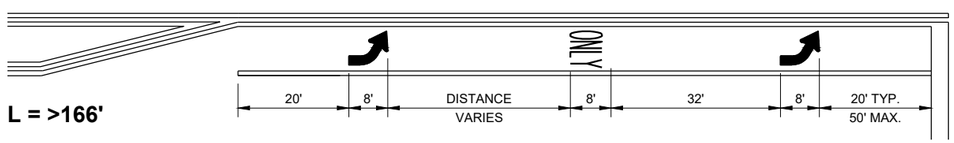
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. 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

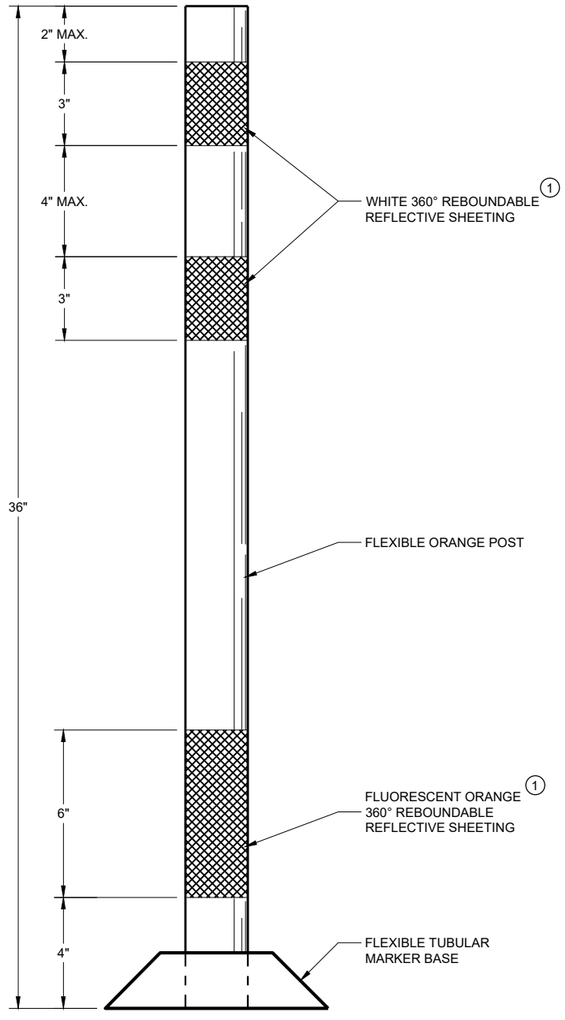
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 22d



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.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

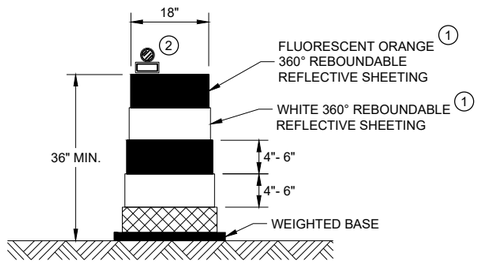
APPROVED
November 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C11 - 10a

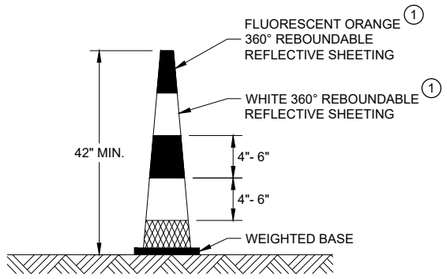
GENERAL NOTES

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

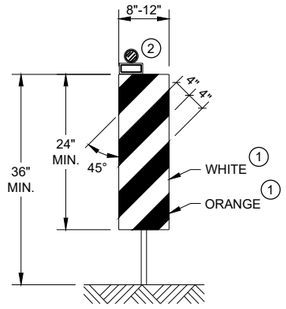
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

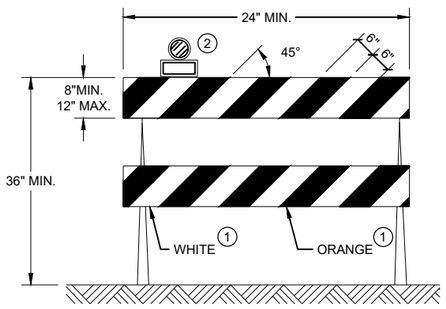
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



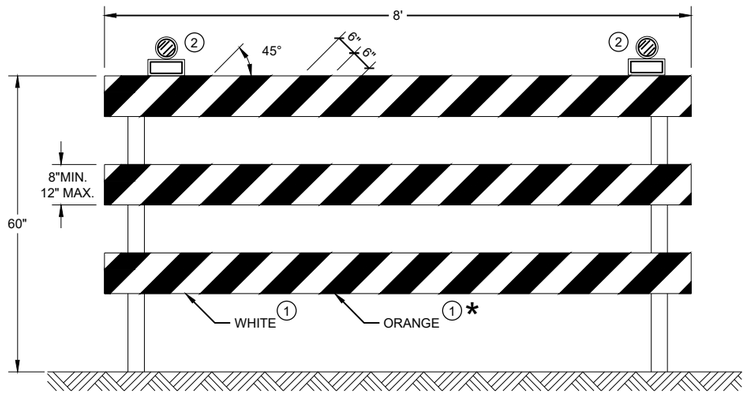
VERTICAL PANEL

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

FHWA

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

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.

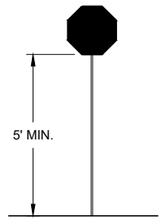
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



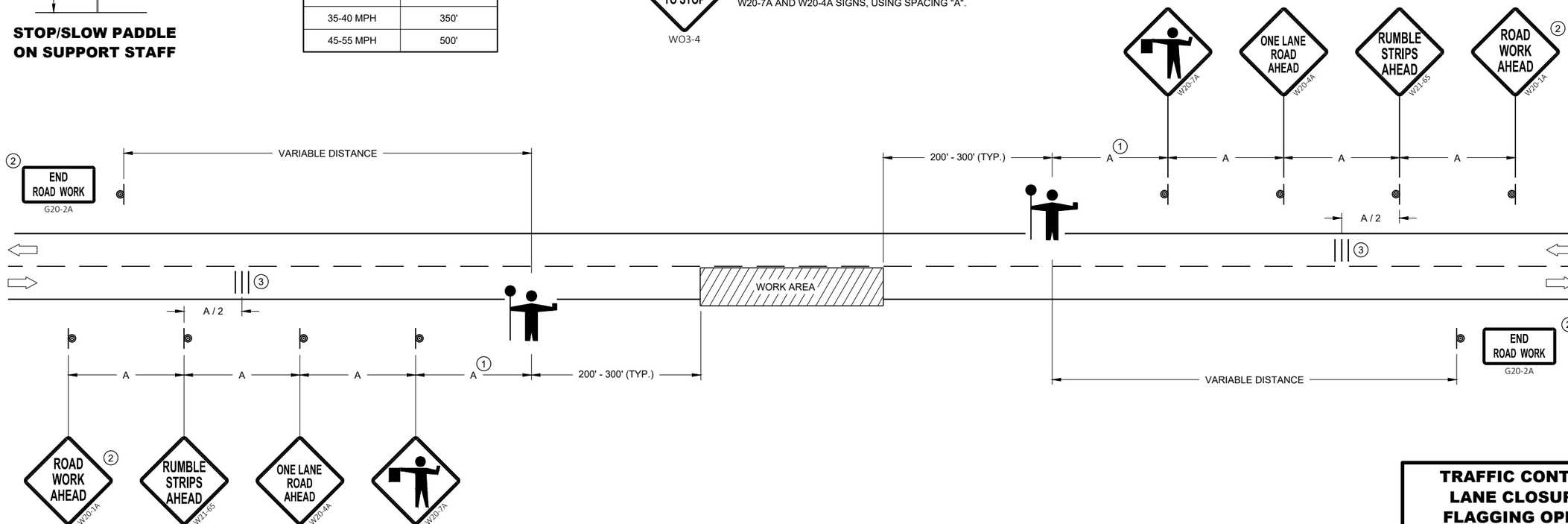
STOP/SLOW PADDLE ON SUPPORT STAFF

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

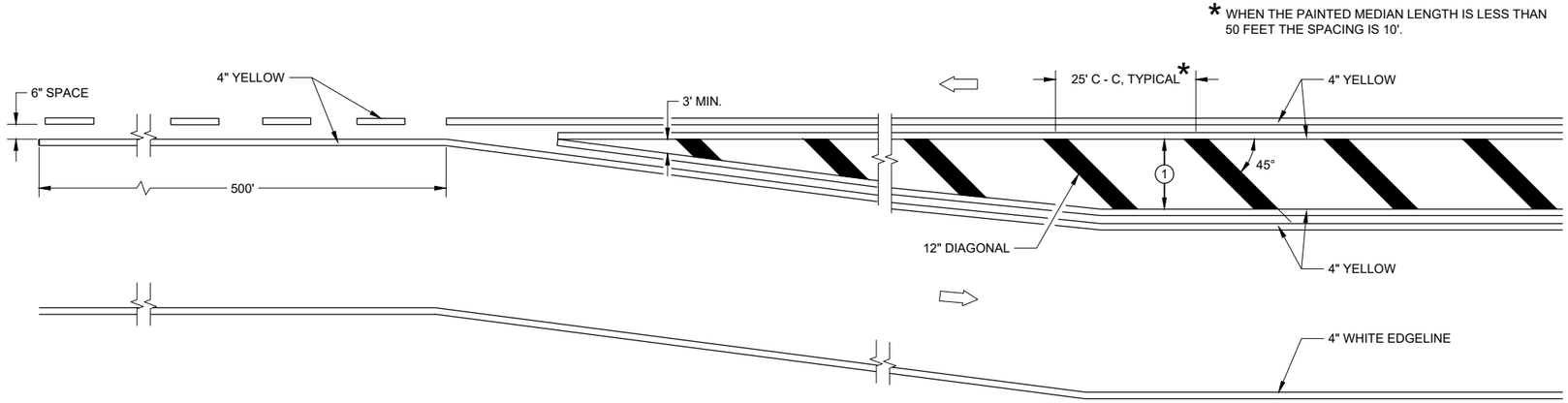
APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C12 - 09a

SDD 15C12 - 09a

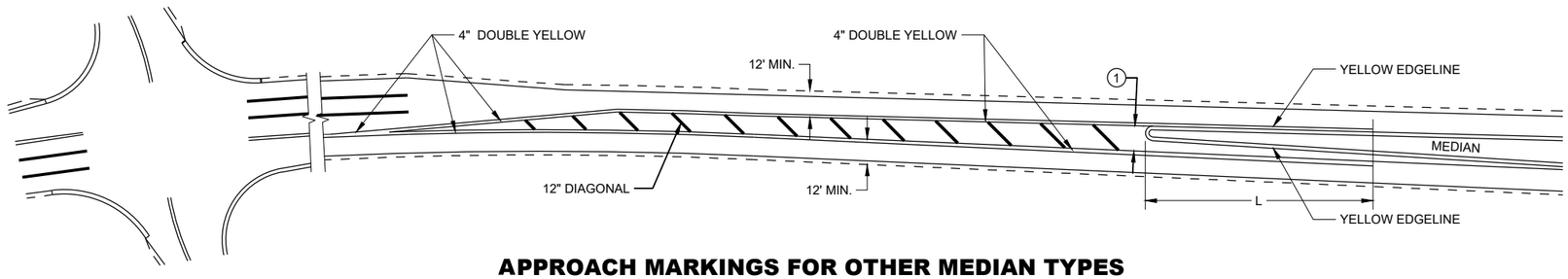


MEDIAN ISLAND DETAIL

GENERAL NOTES

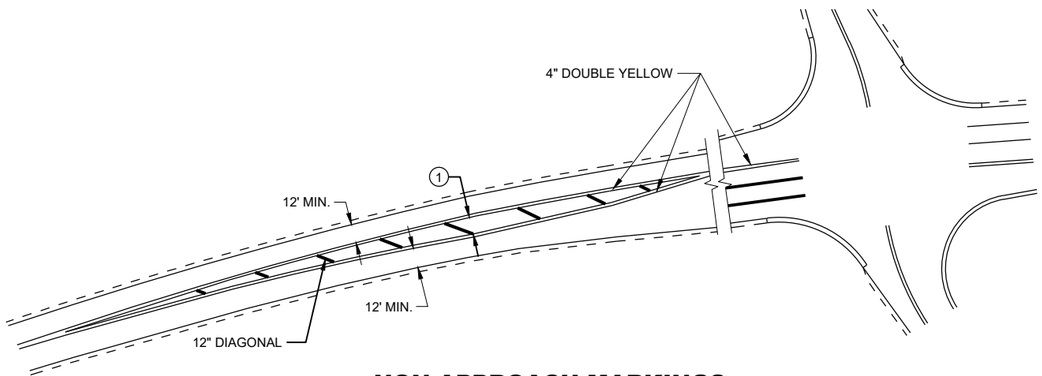
1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



NON-APPROACH MARKINGS

6

SDD 15C18 - 07a

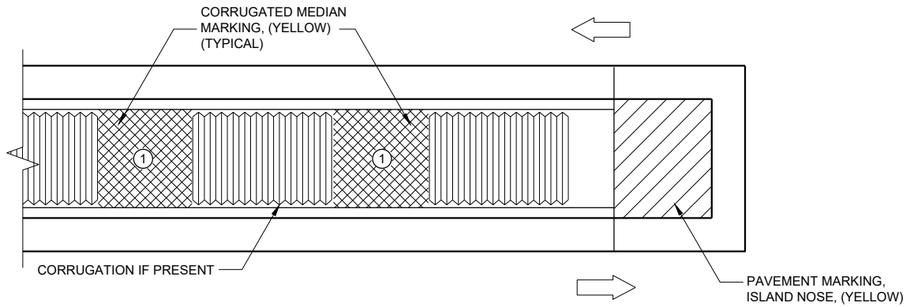
MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

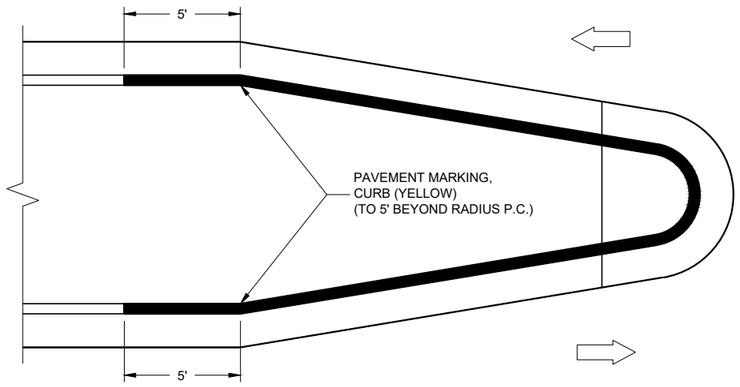
APPROVED
November 2022 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

6

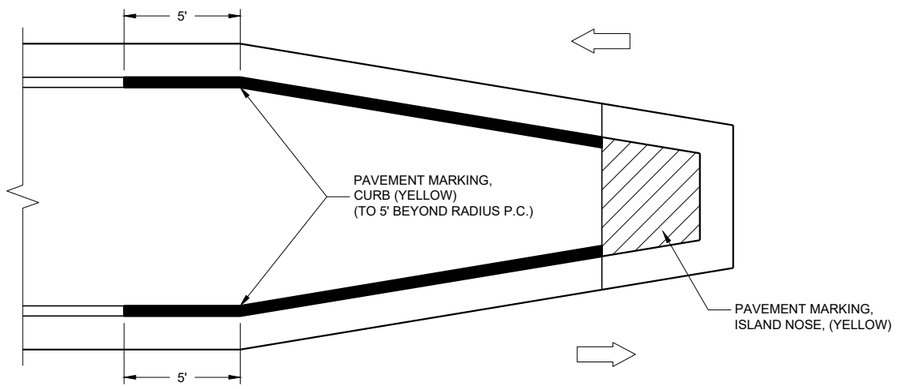
SDD 15C18 - 07a



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

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE
/S/ Jeannie Silver
STATE SIGNING AND MAF ENGINEER

FHWA

6
SDD15C18 - 07b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

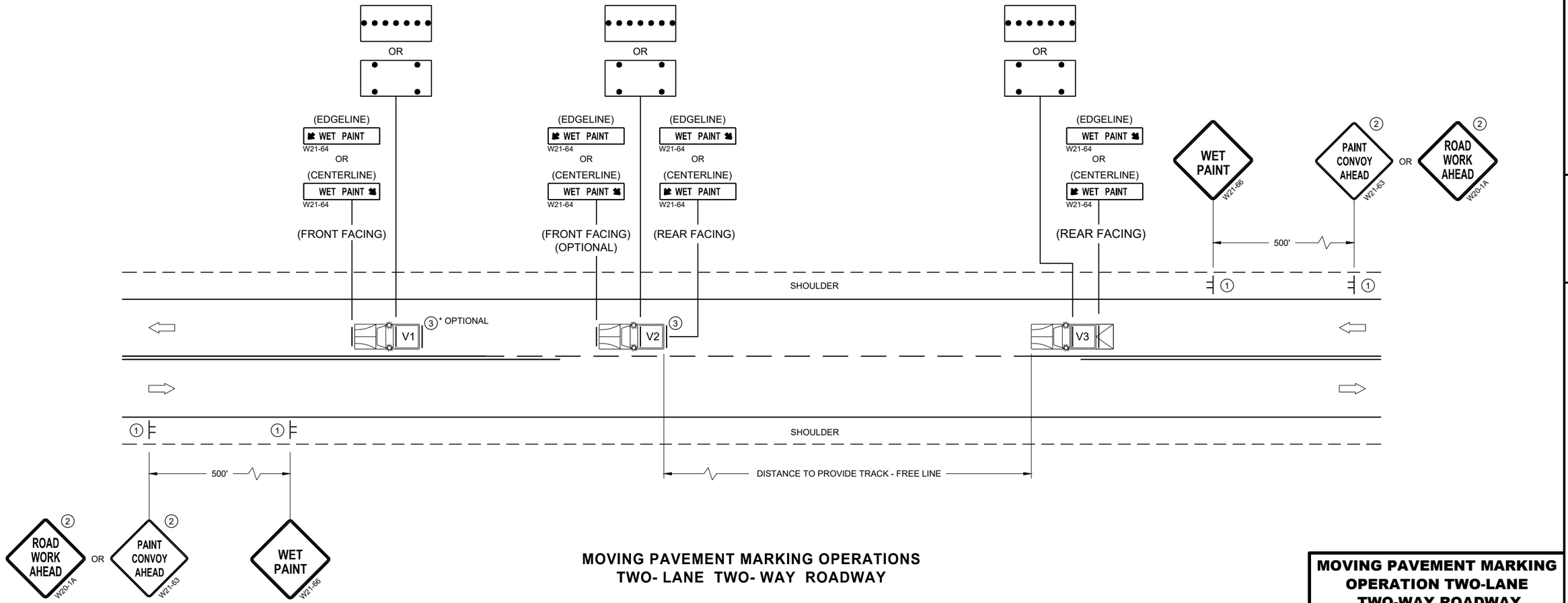
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I
WORK ZONE EN

FHWA

6

SDD 15C19-08a

6

SDD 15C19-08a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. 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.

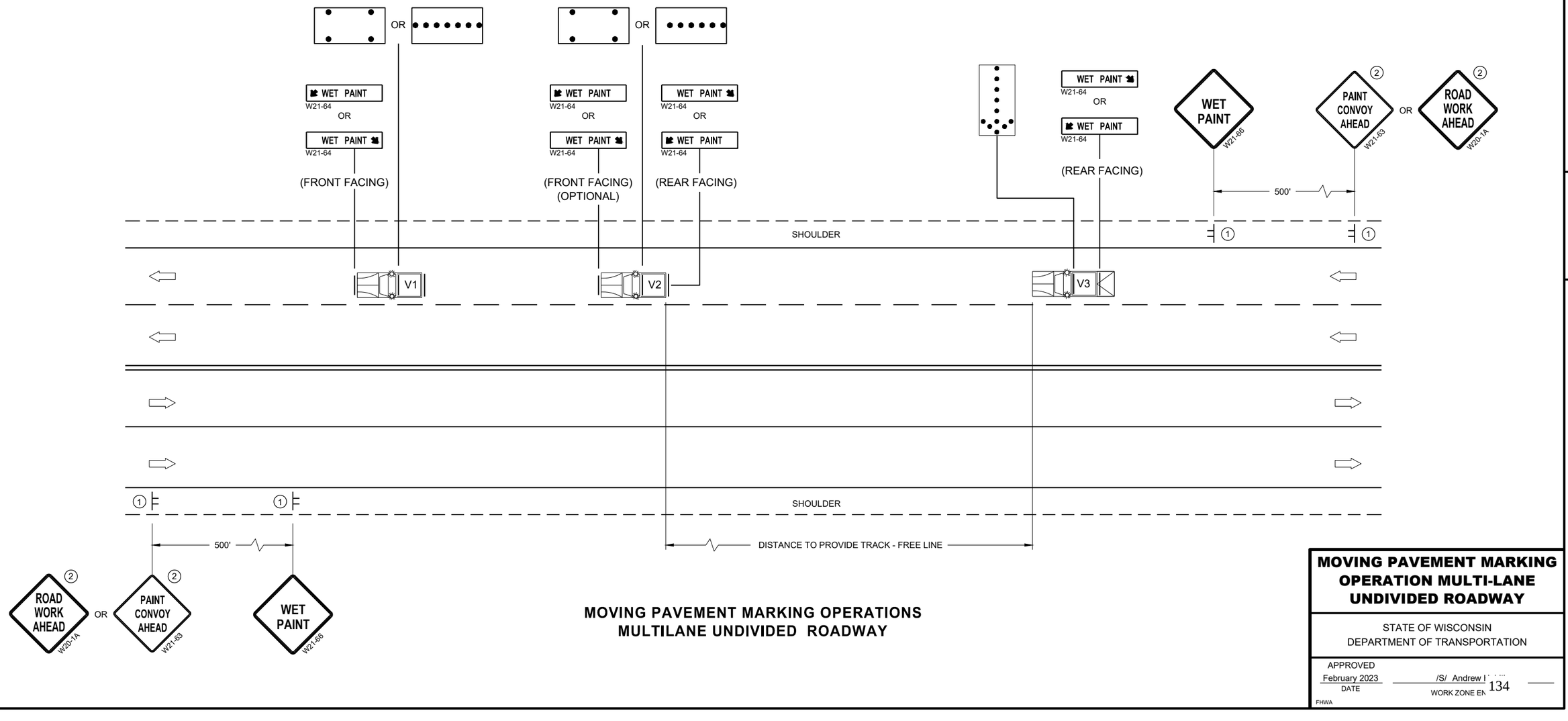
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES 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 HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE UNDIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN...

FHWA

6

SDD 15C19-08b

6

SDD 15C19-08b

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE

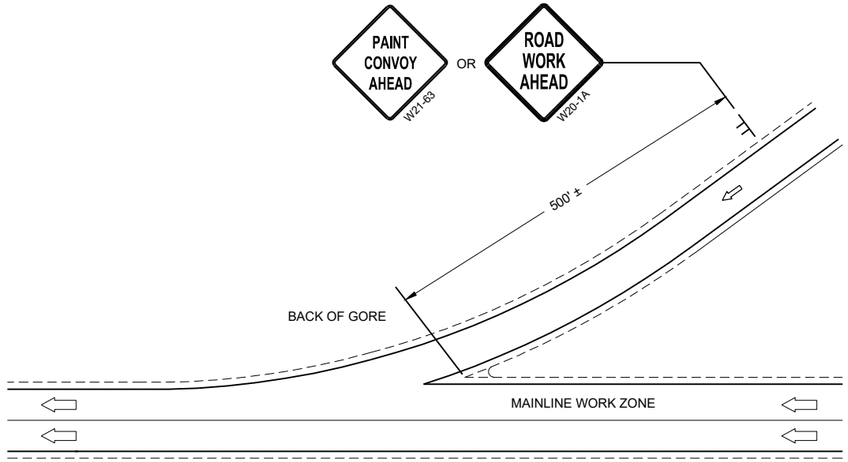
TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. 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.

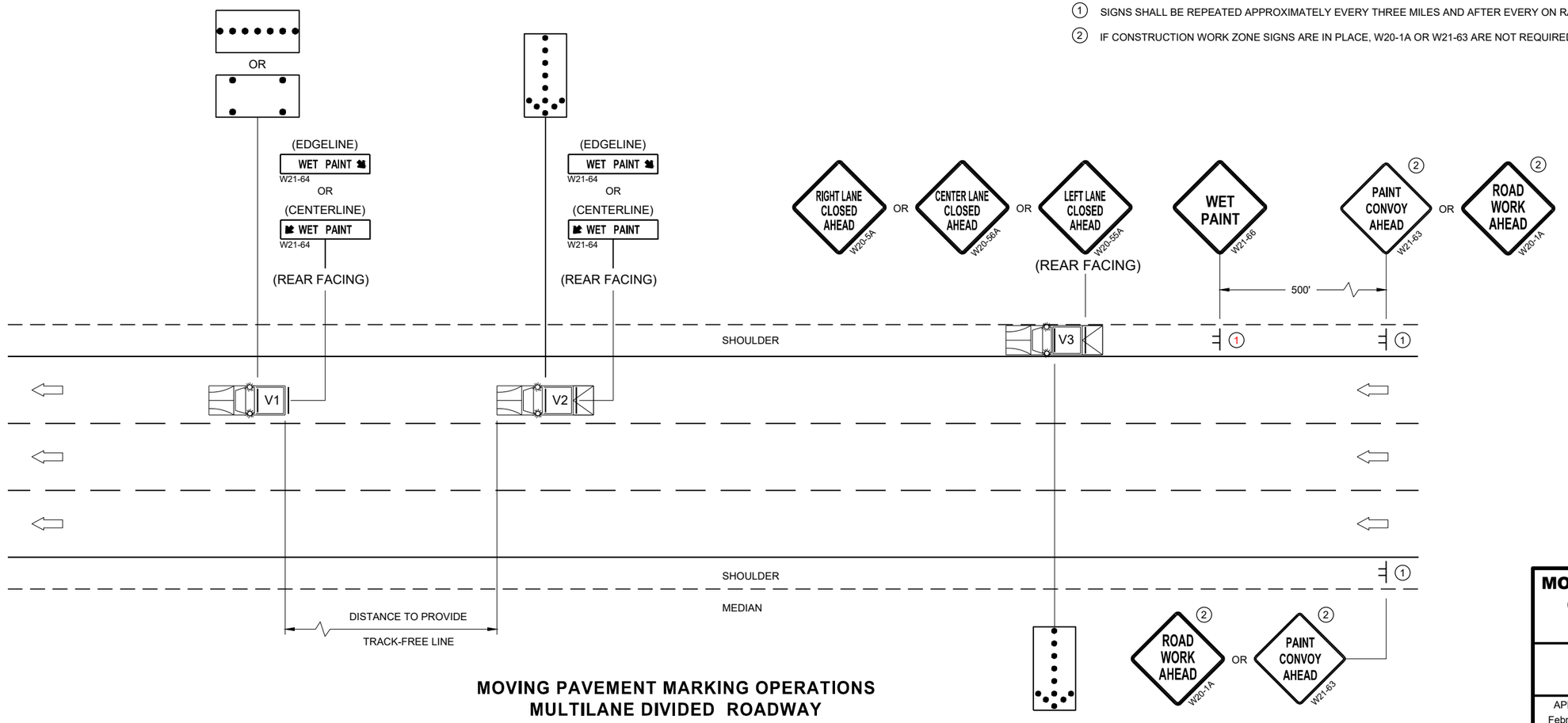
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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
February 2023
DATE

/S/ Andrew [illegible]
WORK ZONE EN

FHWA

6

SDD 15C19-08c

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SDD 15C19-08c

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

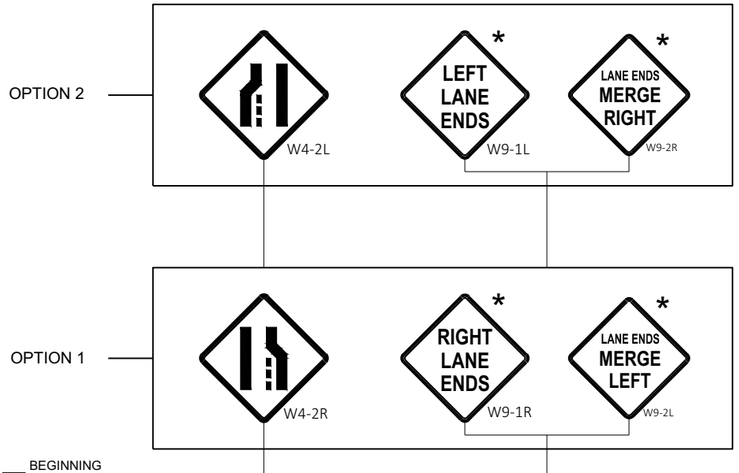
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

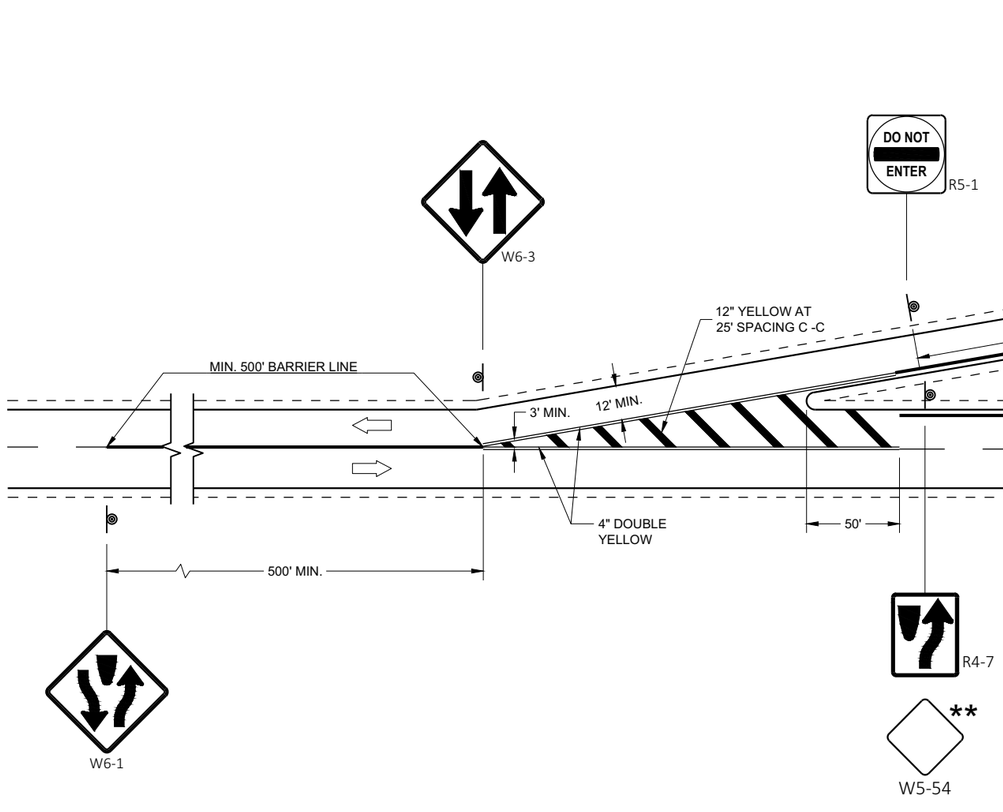
SIGN MOUNTED ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'





SIGNING AND MARKING TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C21 - 10

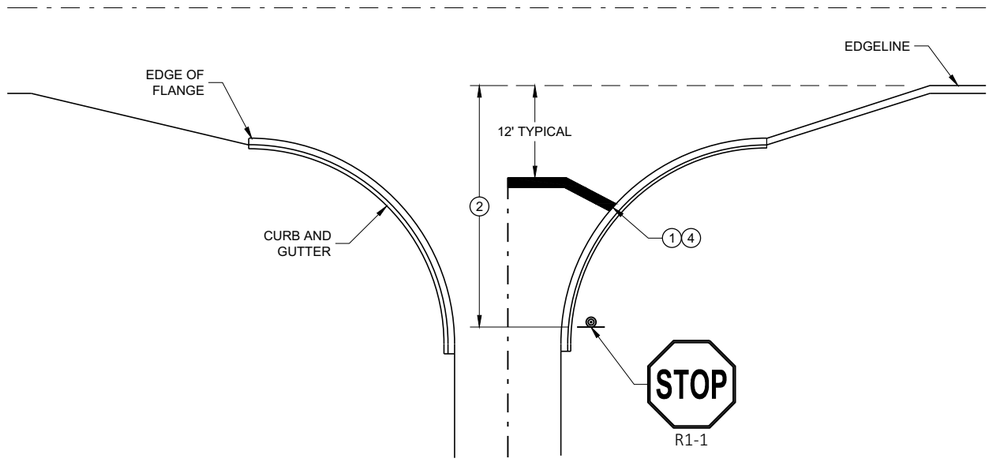
6

SDD 15C21 - 10

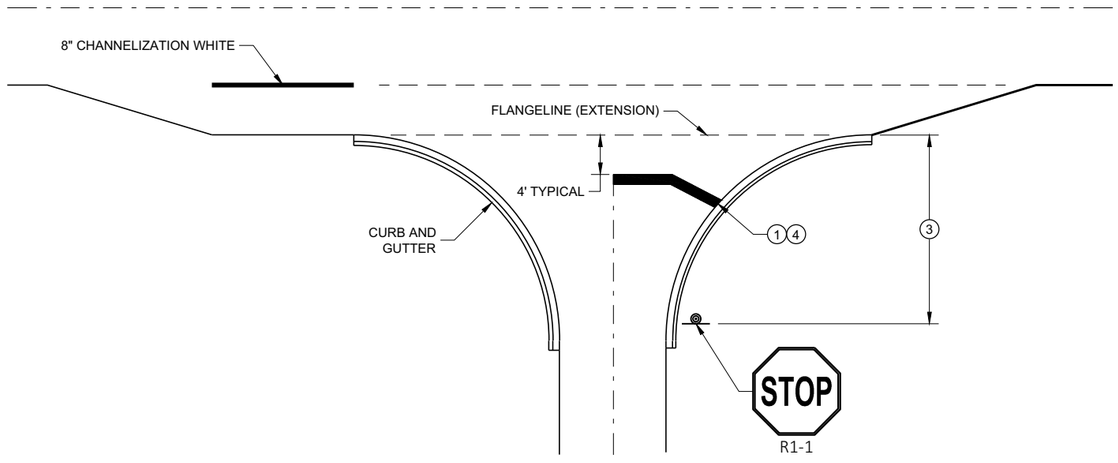
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

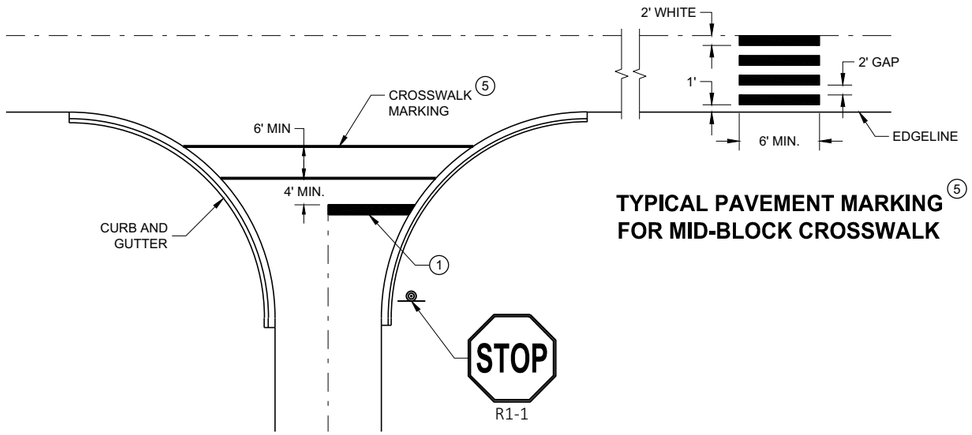
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

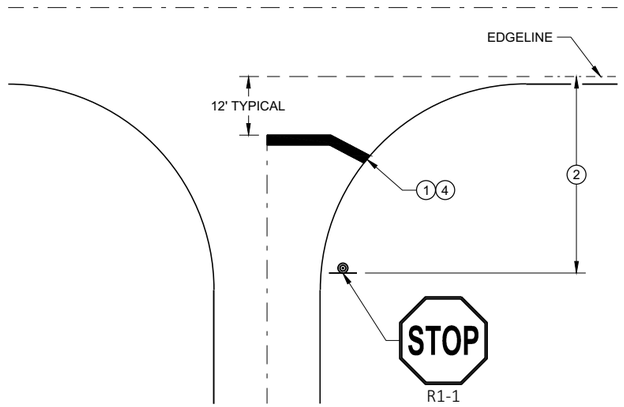


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS 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
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C33 - 04

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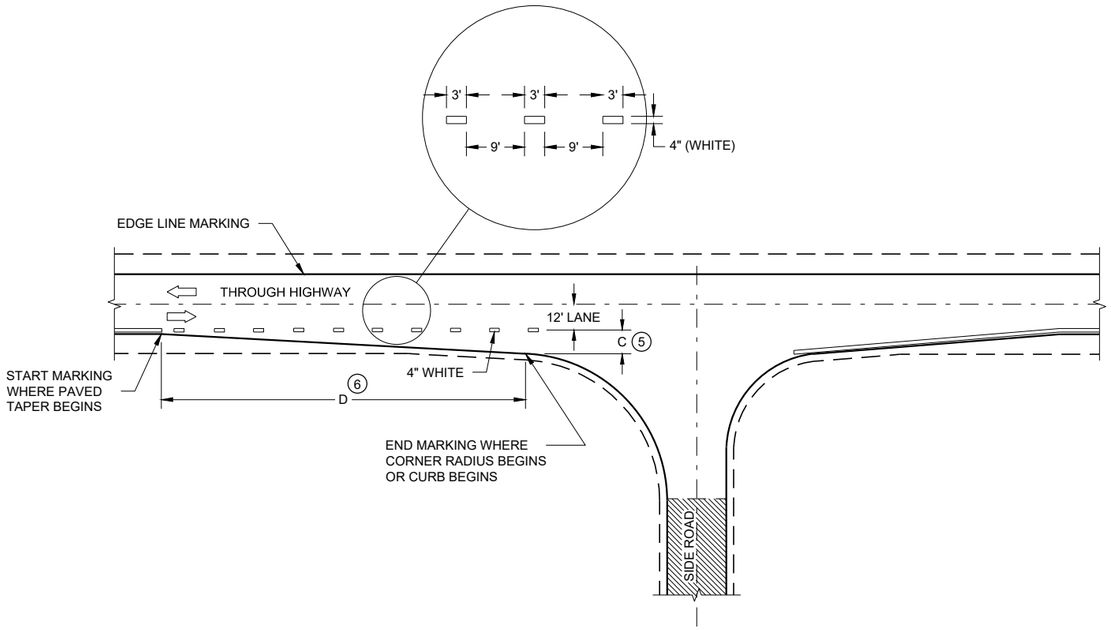
SDD 15C33 - 04



MINOR INTERSECTION

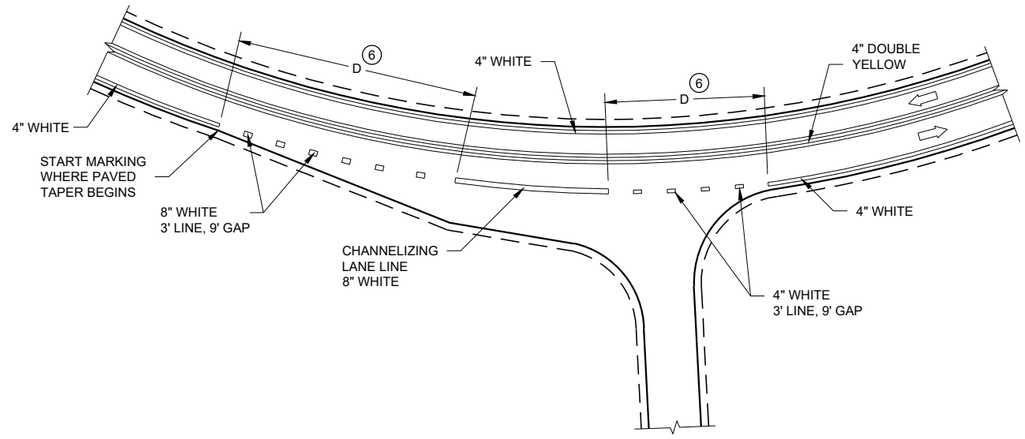
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

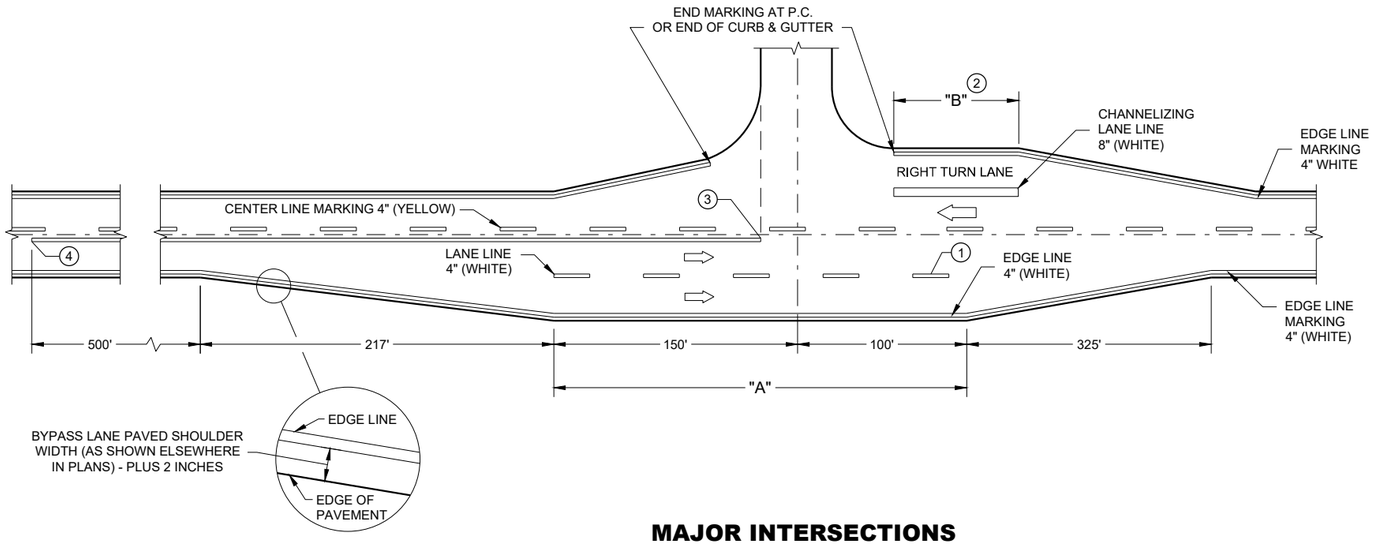
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 15C35 - 05a

SDD 15C35 - 05a

LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

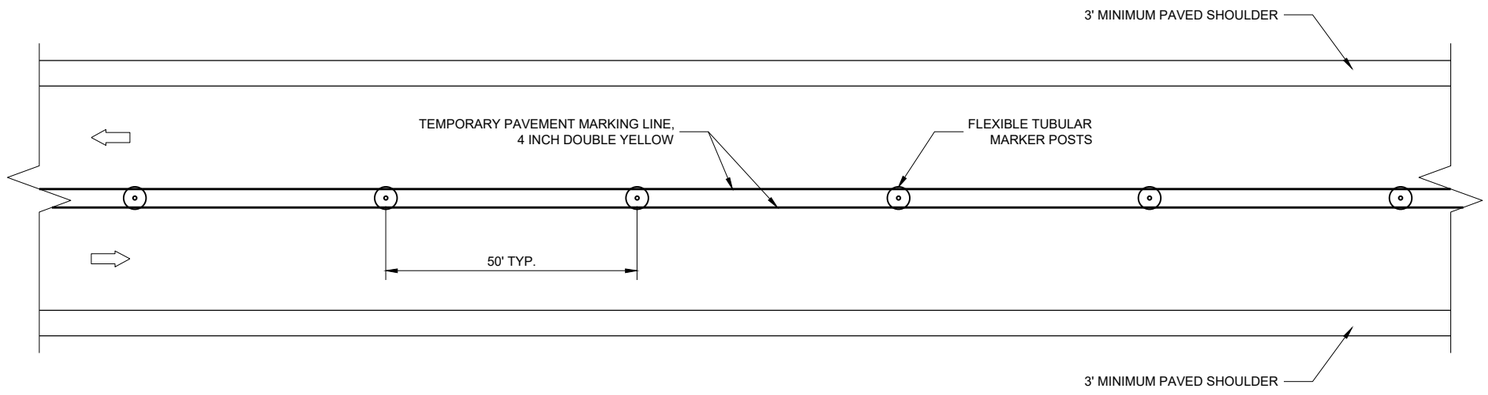
COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING LINE, 4 INCH DOUBLE YELLOW.

(1)

(2)

(1) THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

(2) CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TWO LANE, TWO WAY OPERATION

TRAFFIC CONTROL
TWO LANE TWO WAY
OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D06 - 05

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SDD 15D06 - 05

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

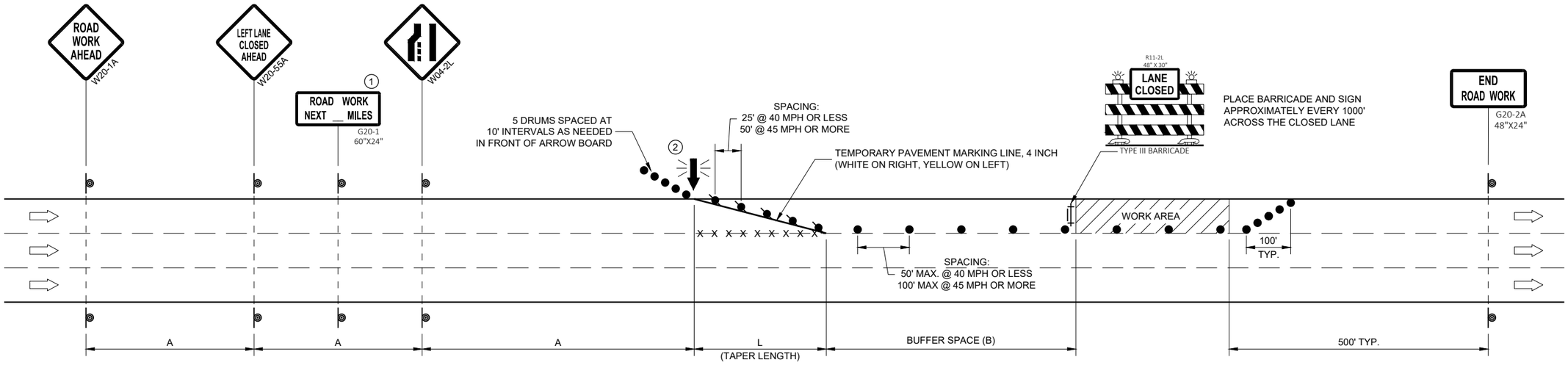
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D20 - 06a

6

SDD15D20 - 06a

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

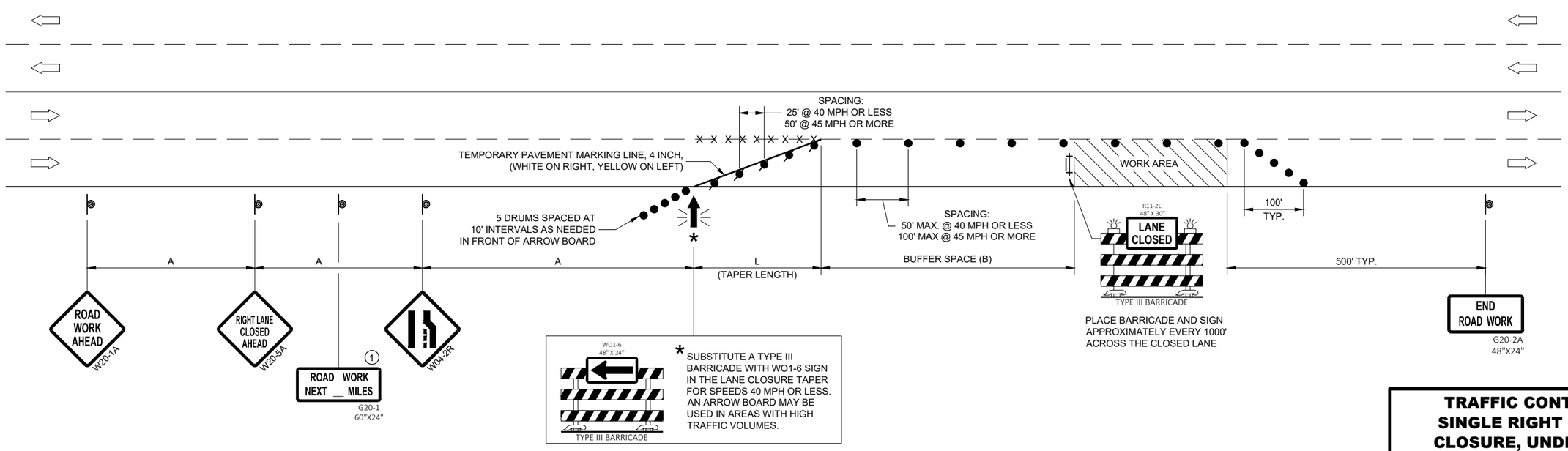
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D20 - 06b

SDD 15D20 - 06b

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

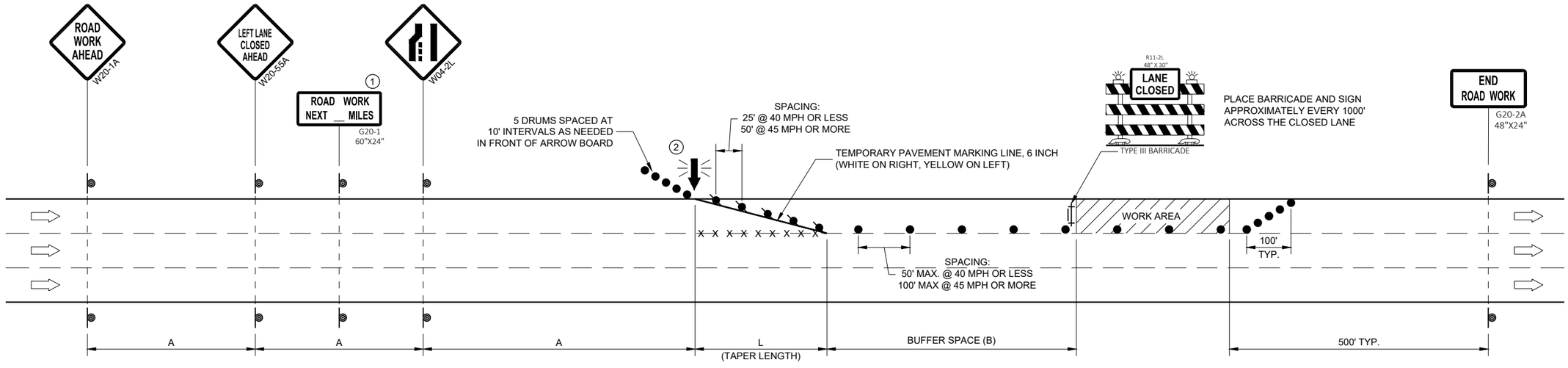
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D20-07a
SDD 15D20-07a

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

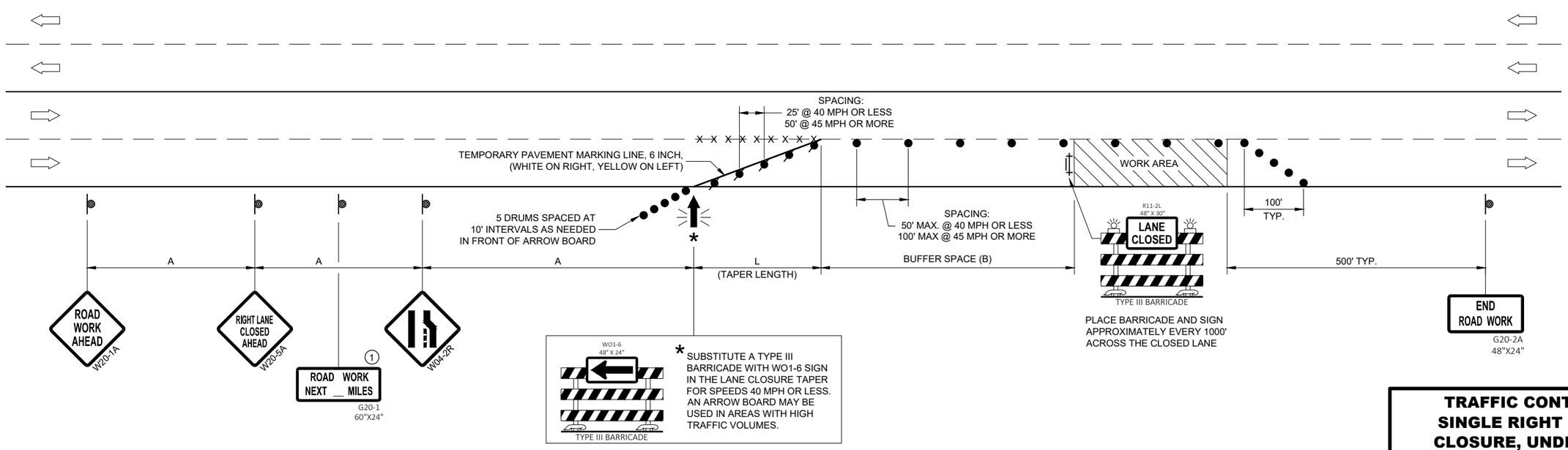
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-07b
SDD 15D20-07b

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

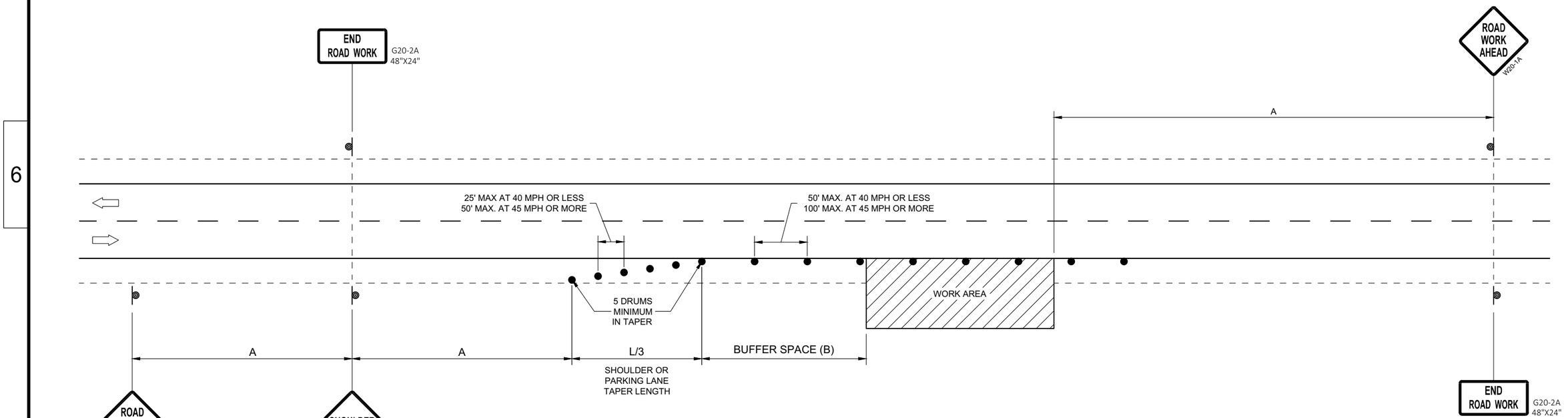
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D28 - 04

SDD 15D28 - 04

GENERAL NOTES

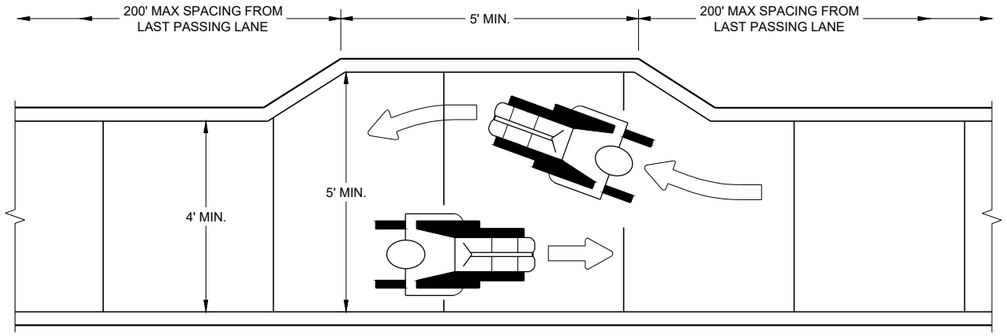
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

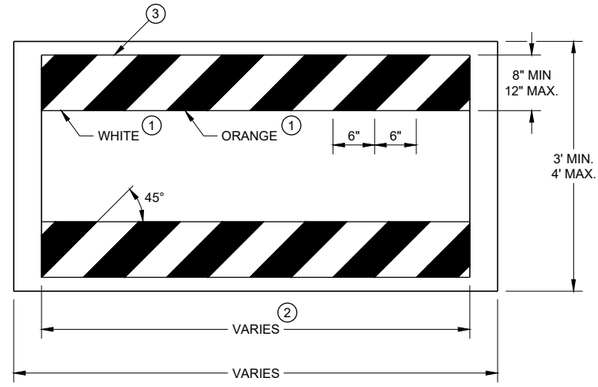
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

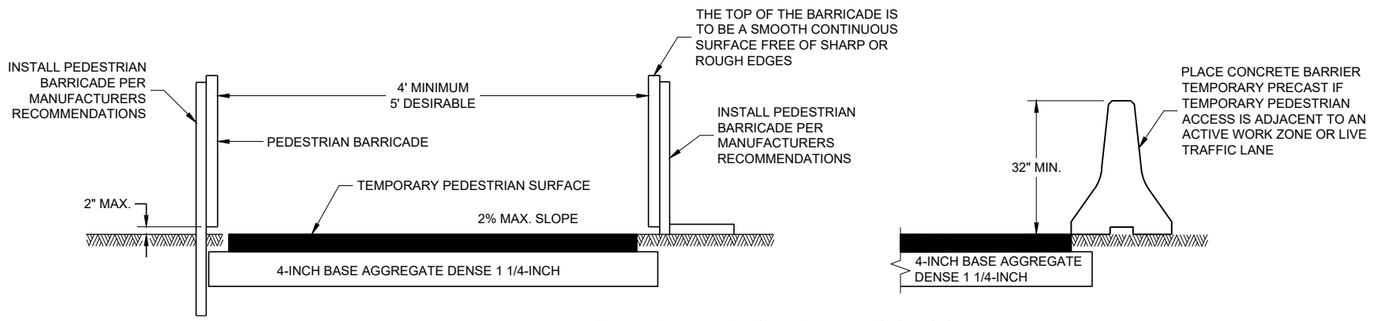
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



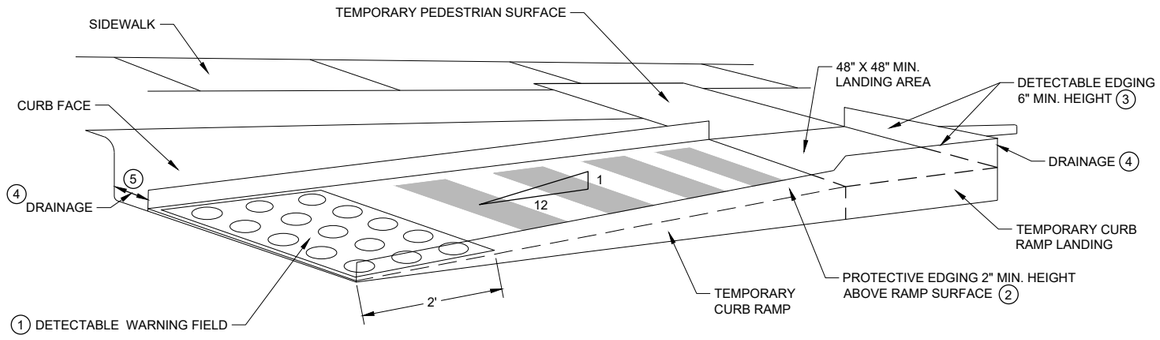
TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6
SDD 15D30 - 08a



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

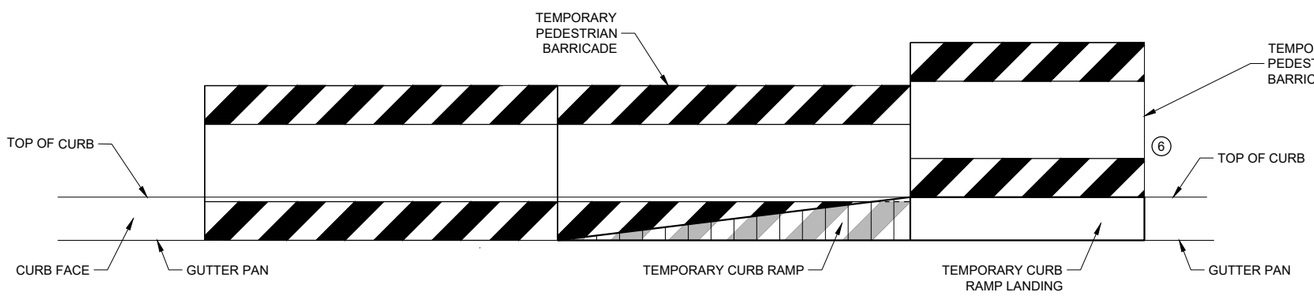
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

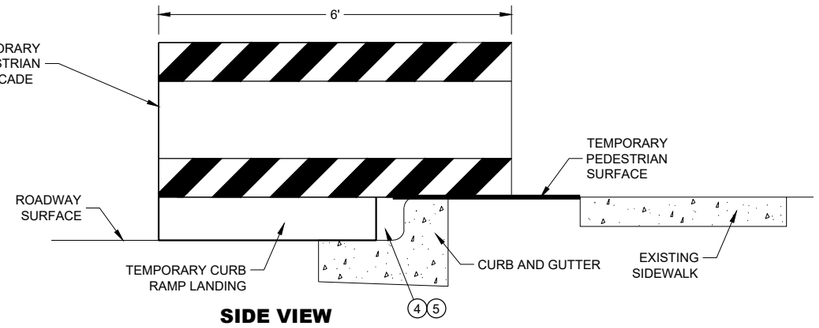
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

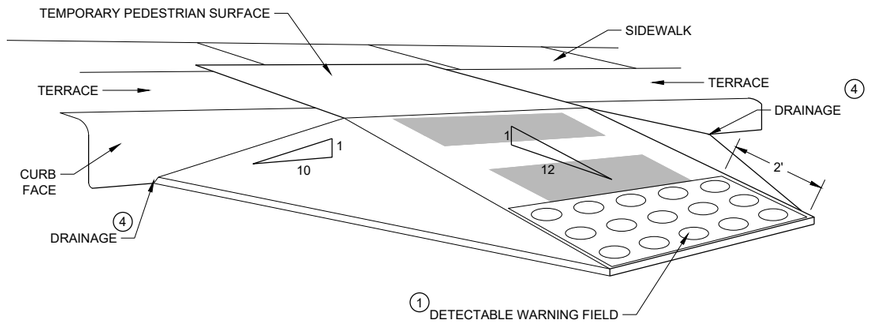
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

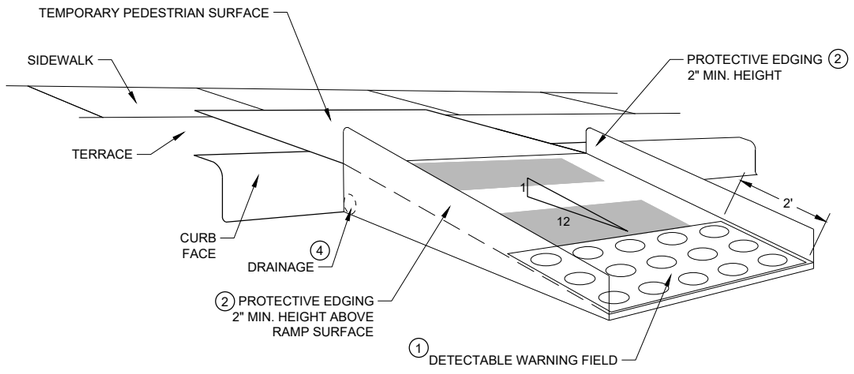
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 08b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

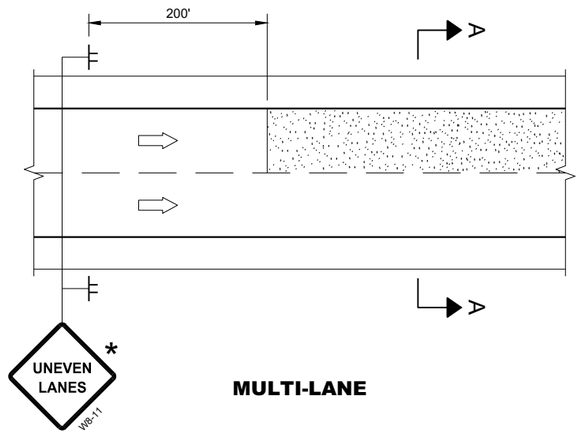
(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

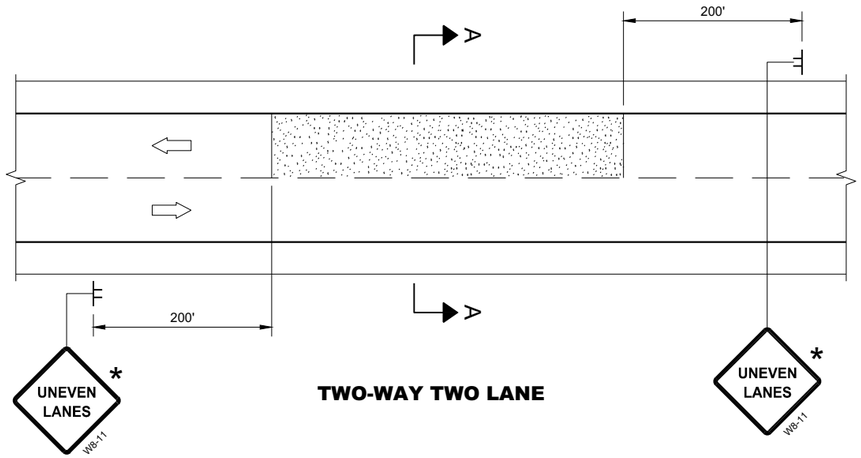
(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

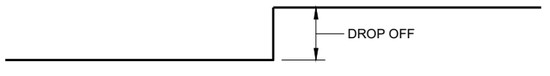
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

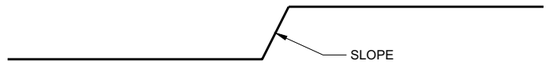
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

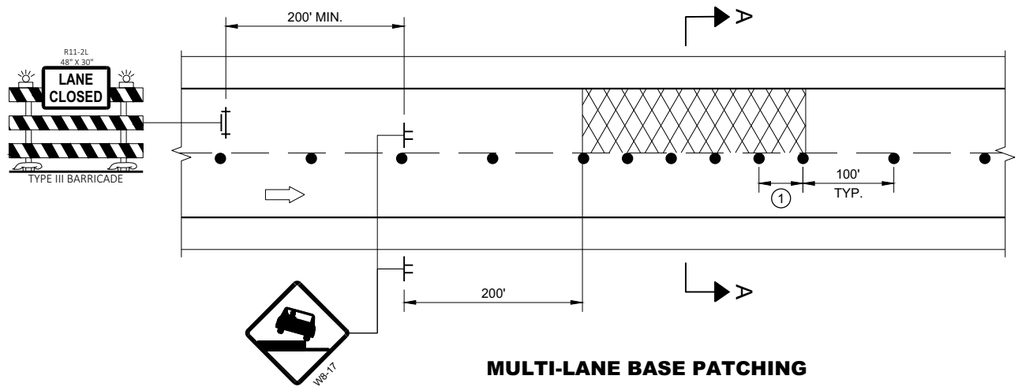


SECTION A - A

OR

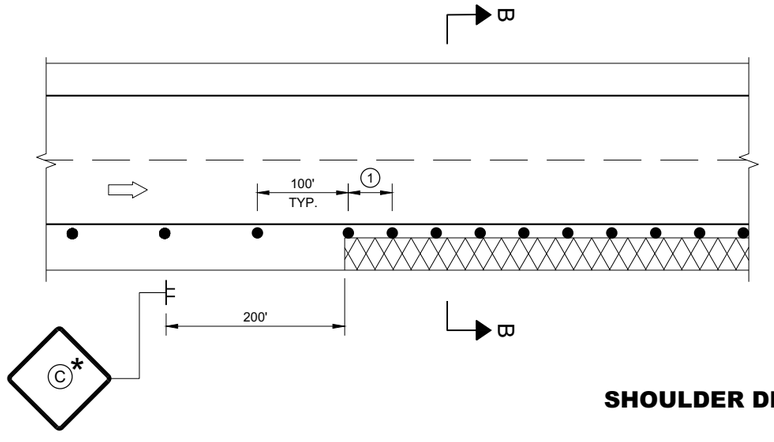


SECTION A - A

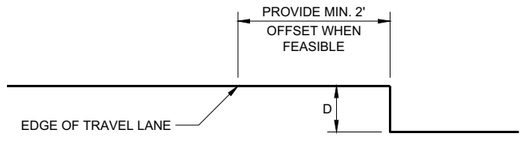


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

6

SDD 15D39 - 02

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

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.

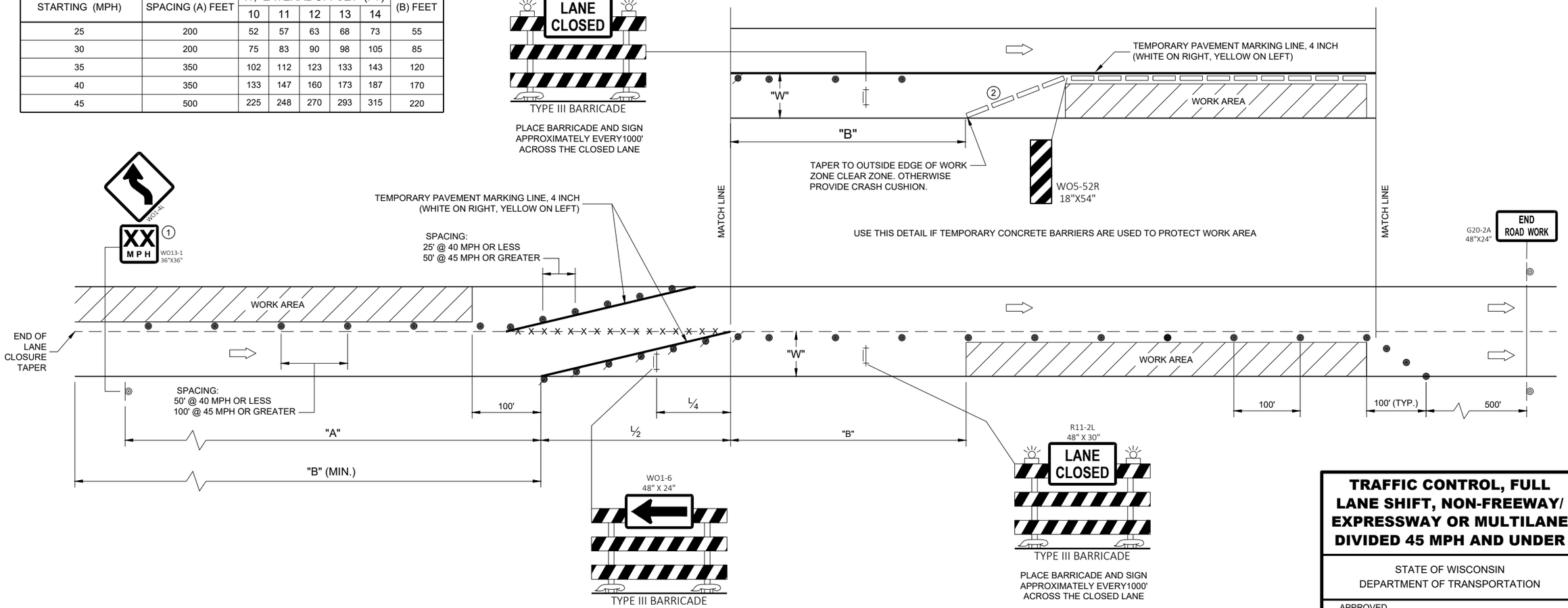
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER
SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 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 IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	143	120
40	350	133	147	160	173	187	170
45	500	225	248	270	293	315	220

PLACE BARRICADE AND SIGN APPROXIMATELY EVERY1000' ACROSS THE CLOSED LANE



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY1000' ACROSS THE CLOSED LANE

TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D40 - 04a

SDD 15D40 - 04a

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

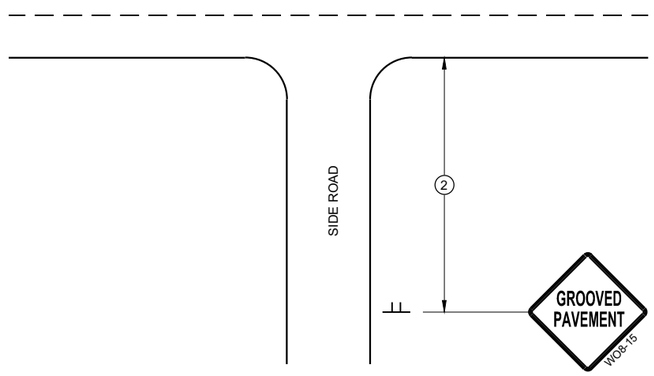
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

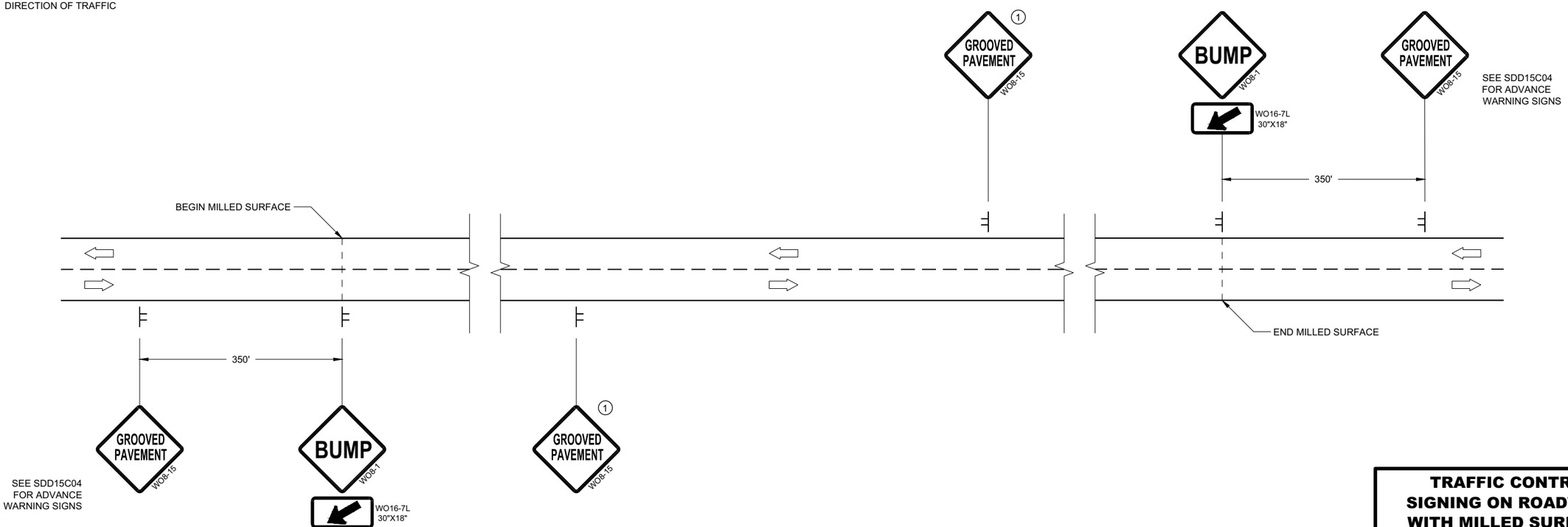
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D44 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

(1) PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

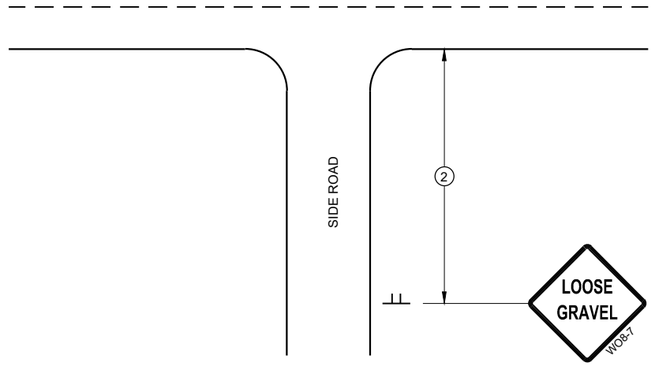
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

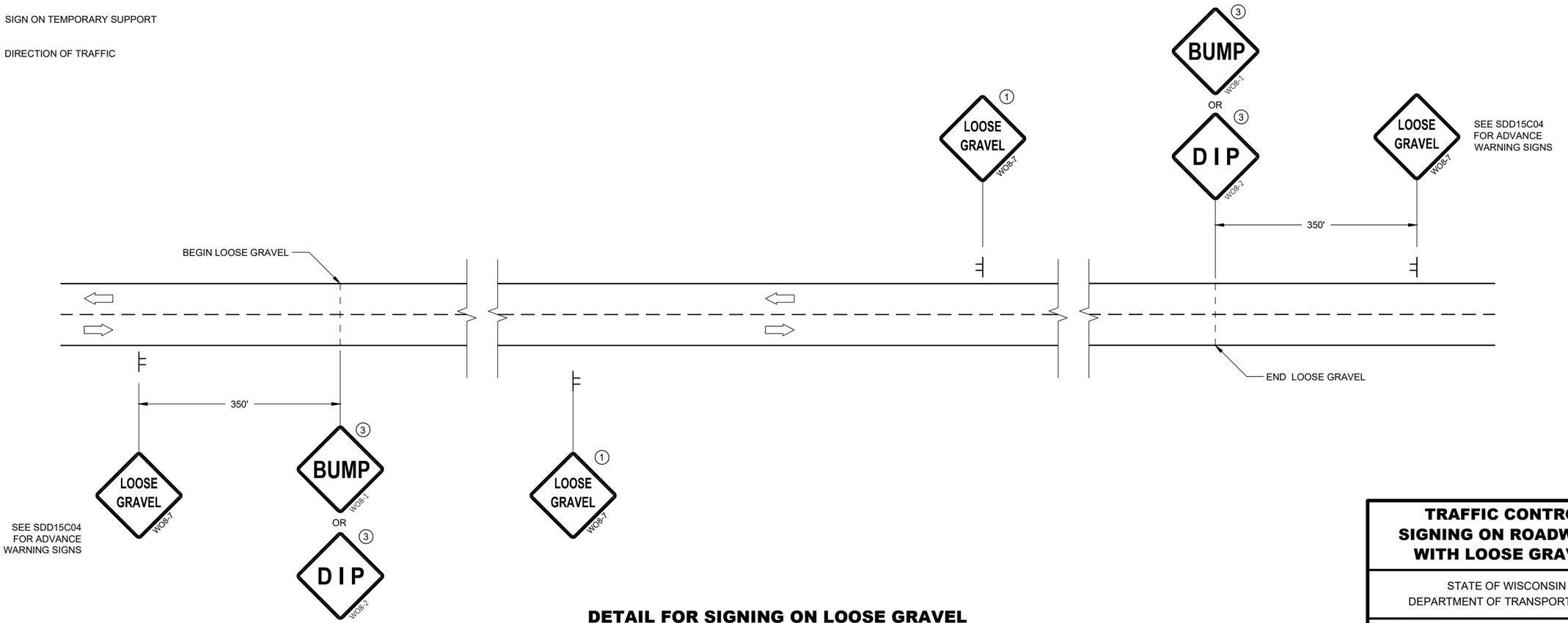
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D45 - 03

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

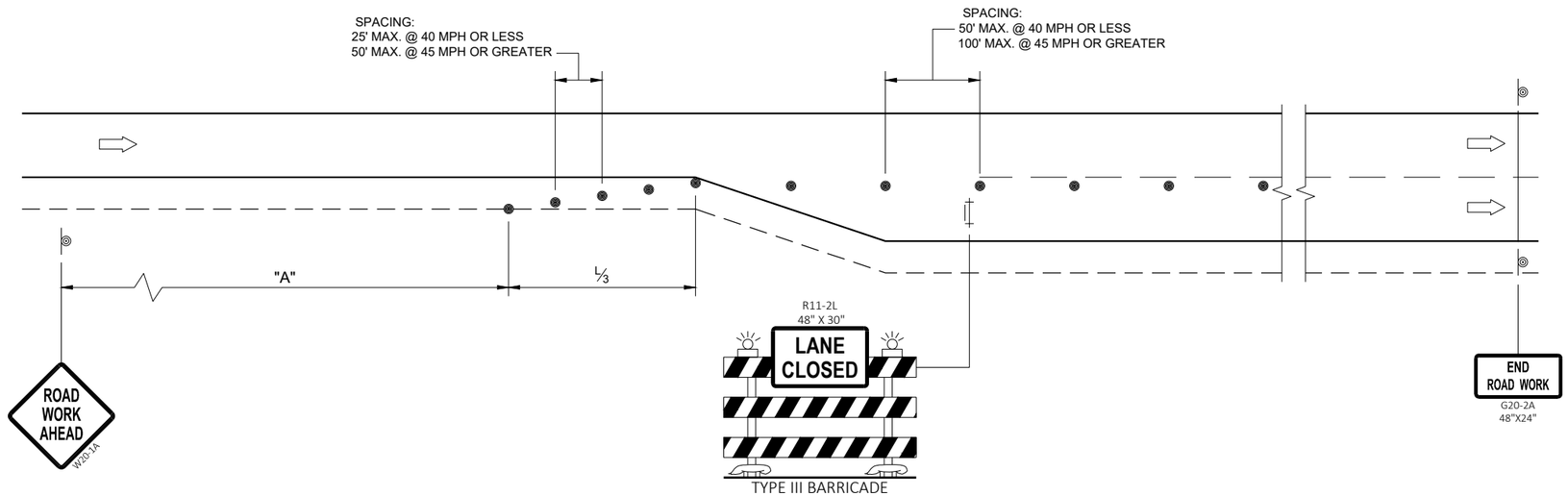
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

6

6

SDD 15D50 - 02a

SDD 15D50 - 02a

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

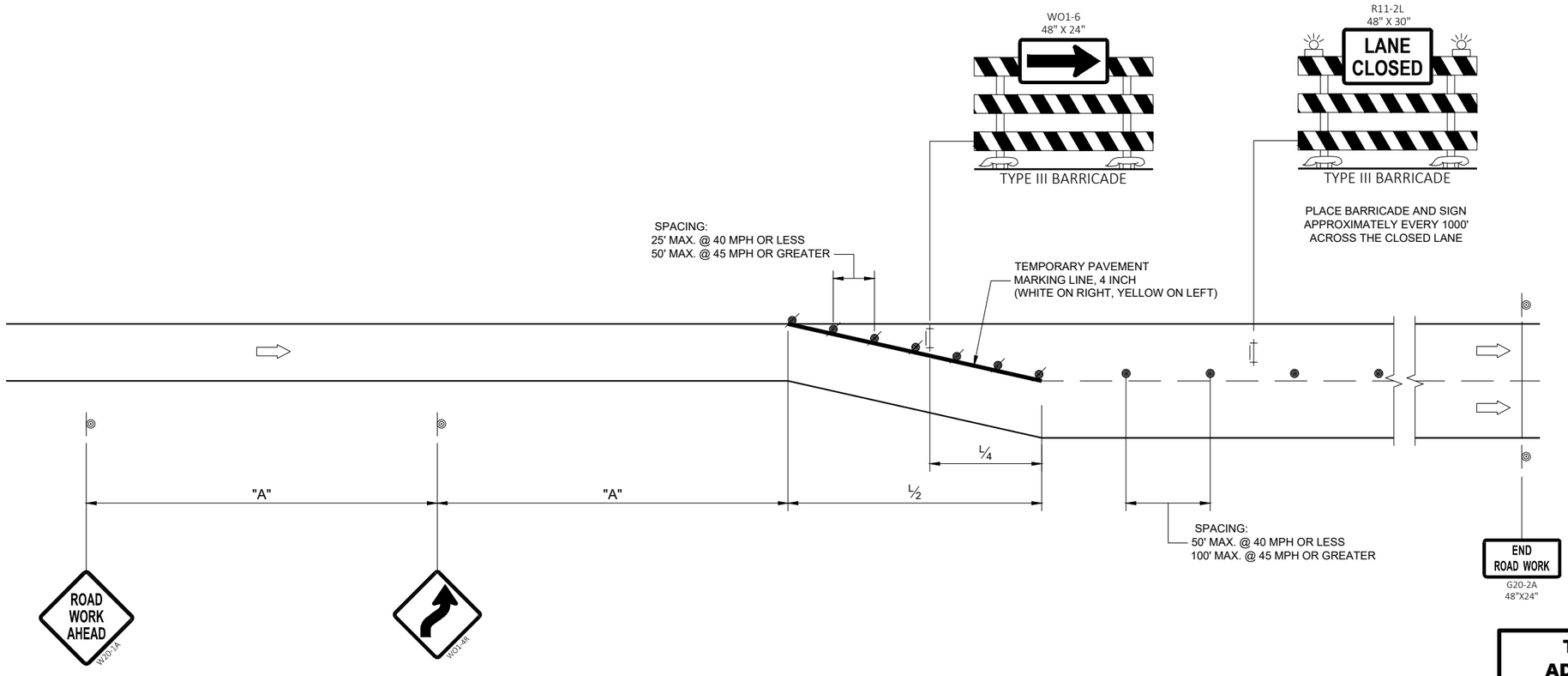
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

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



TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

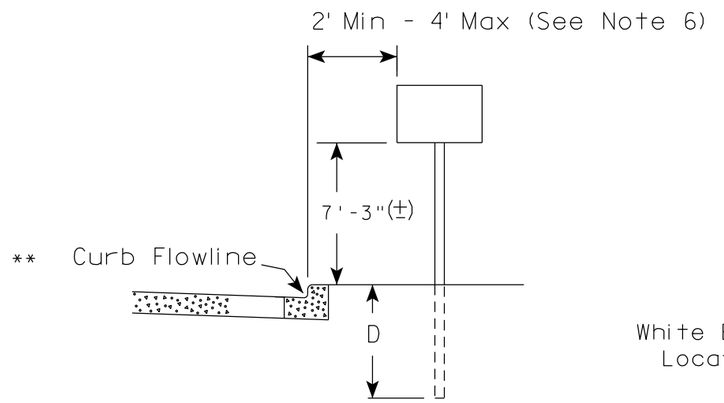
6

SDD 15D50 - 02b

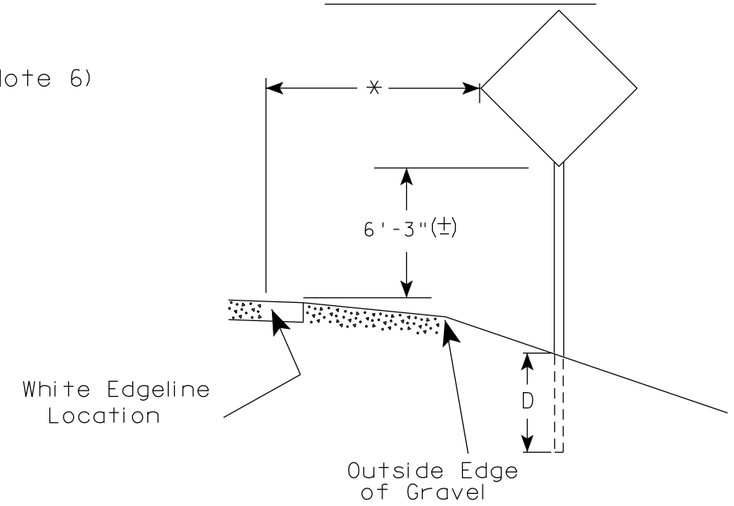
6

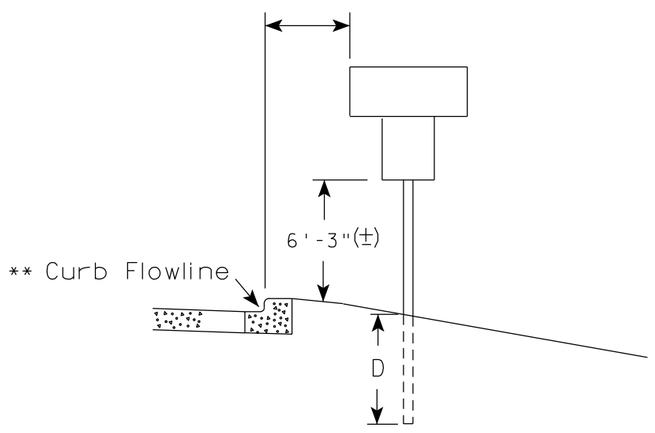
SDD15D50 - 02b

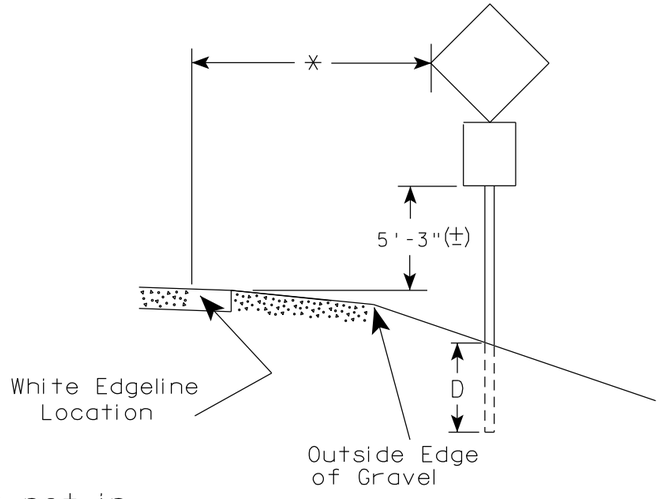
URBAN AREA



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.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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" (±). 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. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

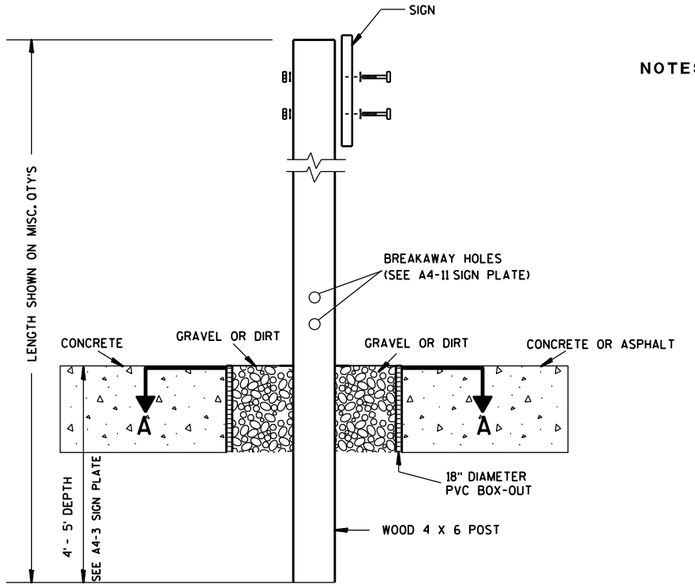
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

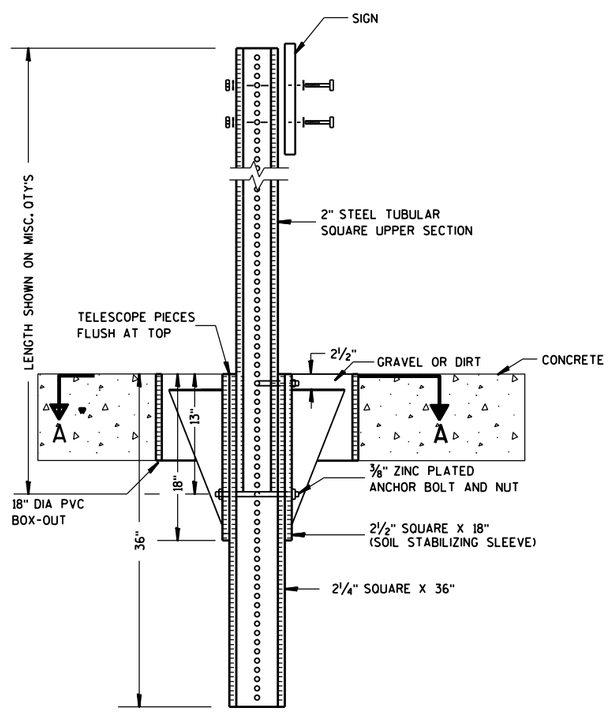
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 154	E



ELEVATION VIEW

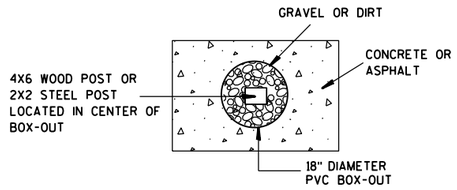
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

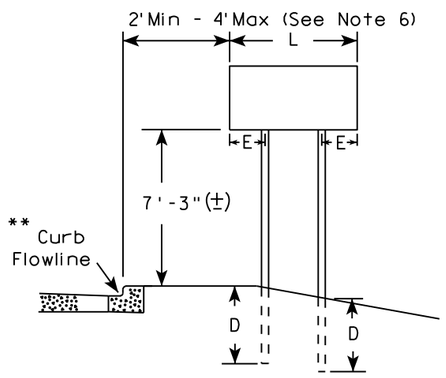
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

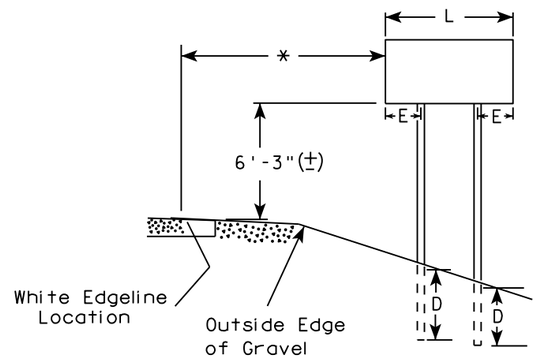
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

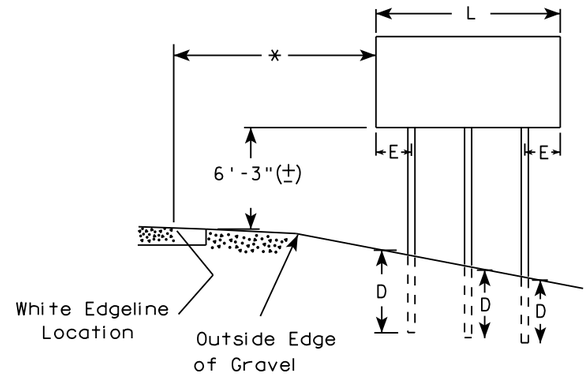
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

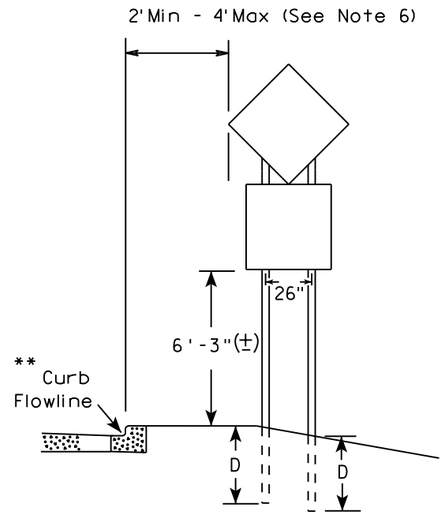
URBAN AREA



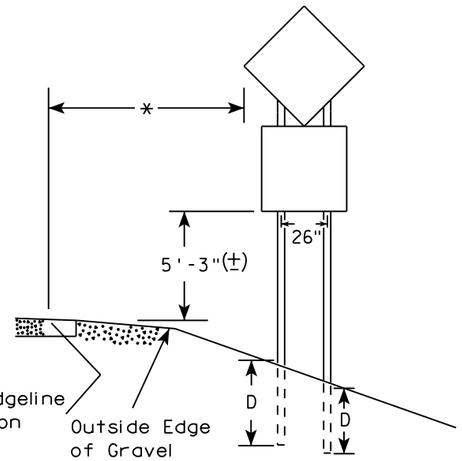
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-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" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-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" (±).

* 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'

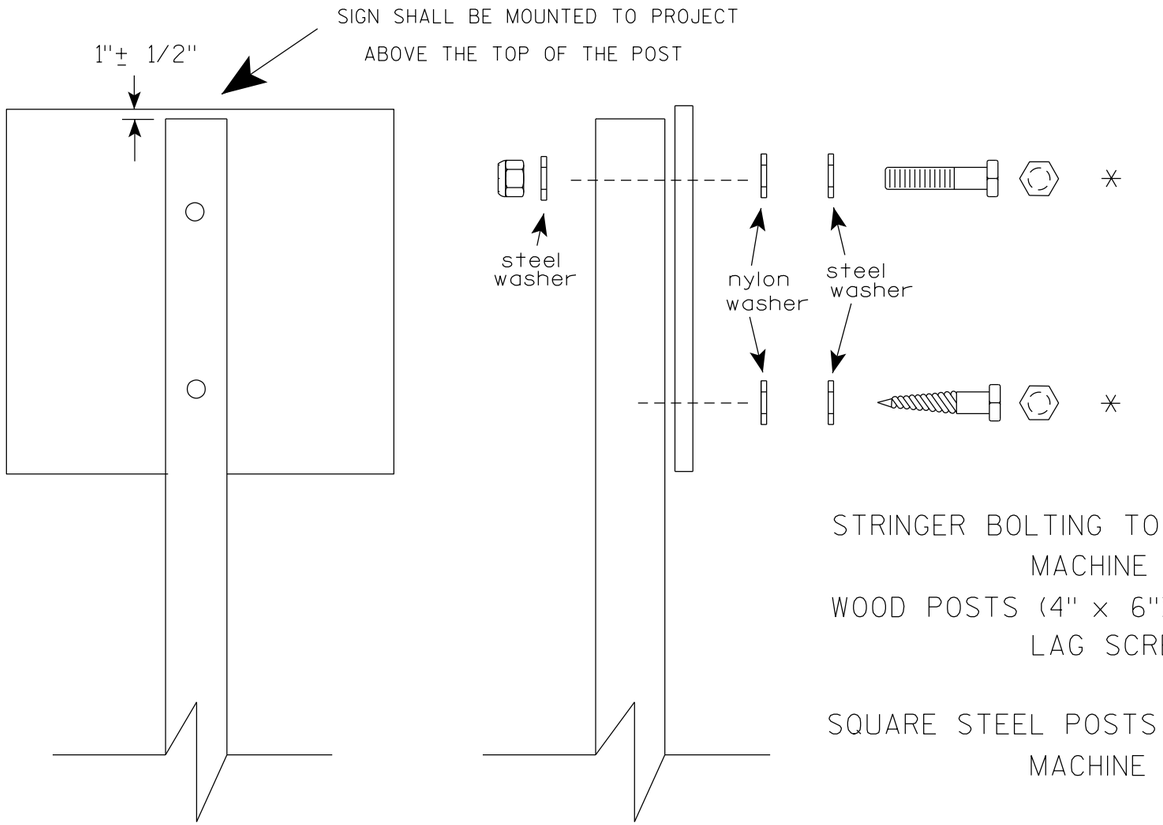
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 156	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

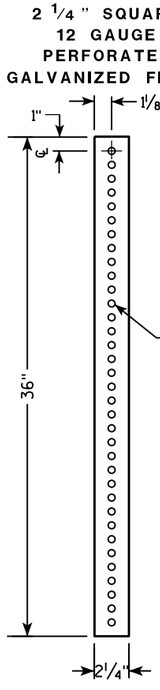
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

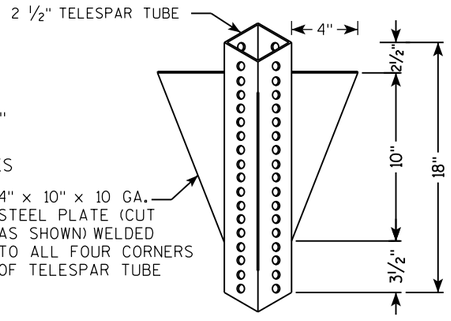
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

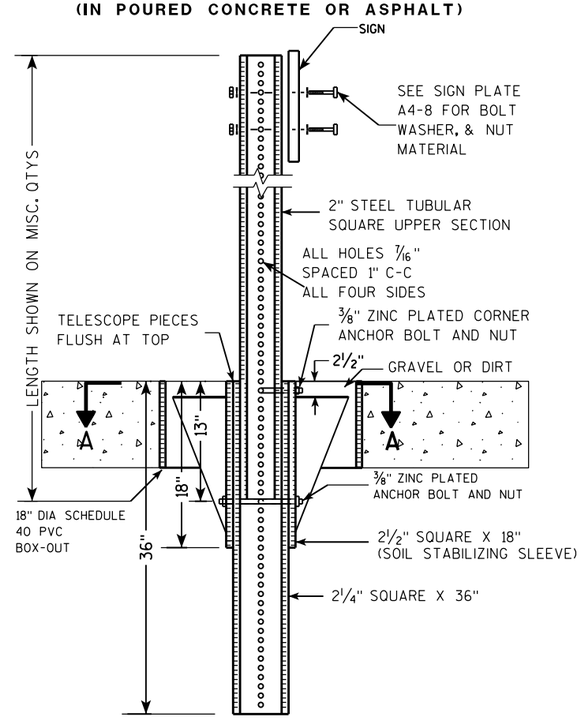
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



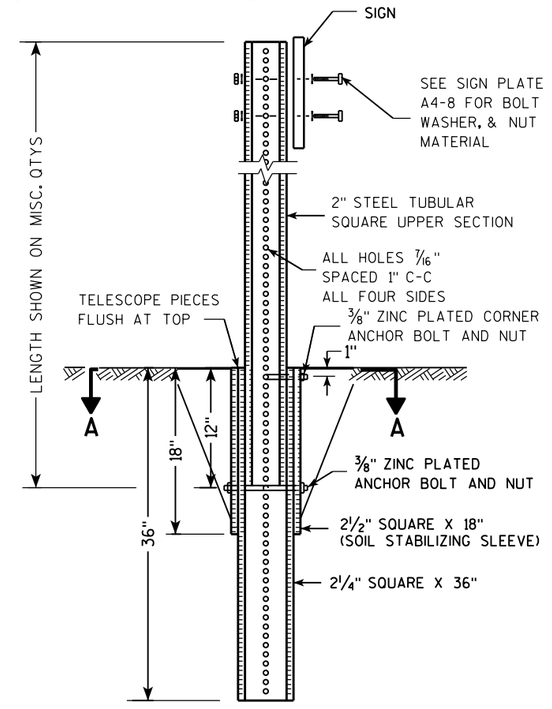
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

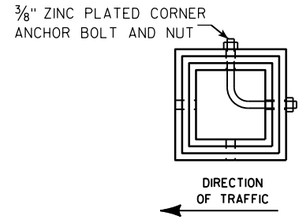


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

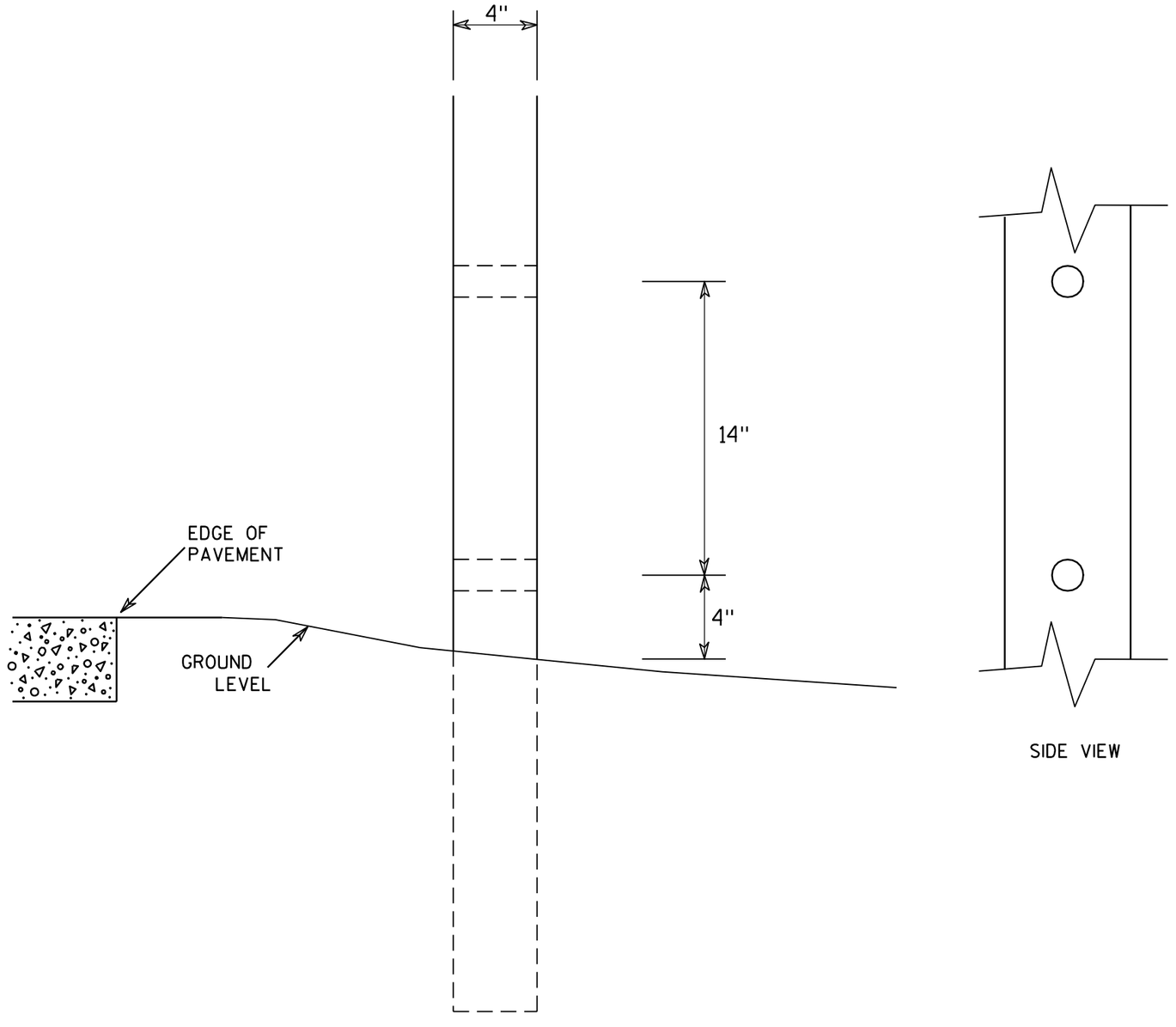
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 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

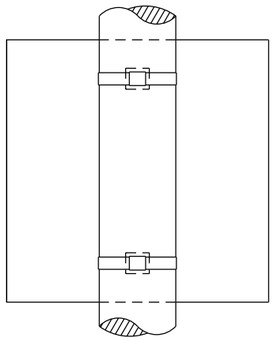
APPROVED Chester J Spang for State Traffic Engineer

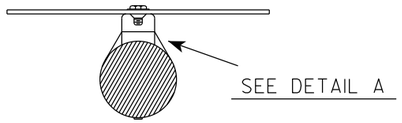
DATE 3/27/97 PLATE NO. A4-11.2

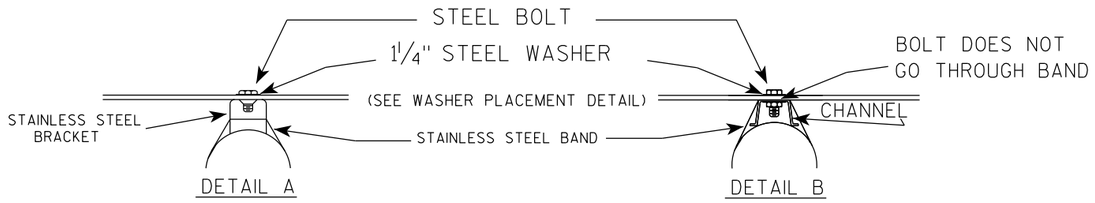
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 159	E

BANDING

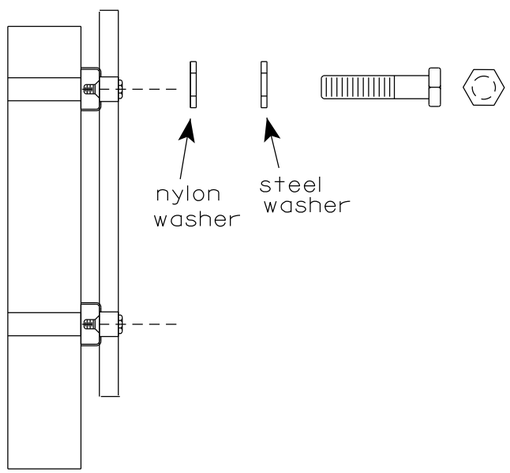
SINGLE SIGN







WASHER PLACEMENT

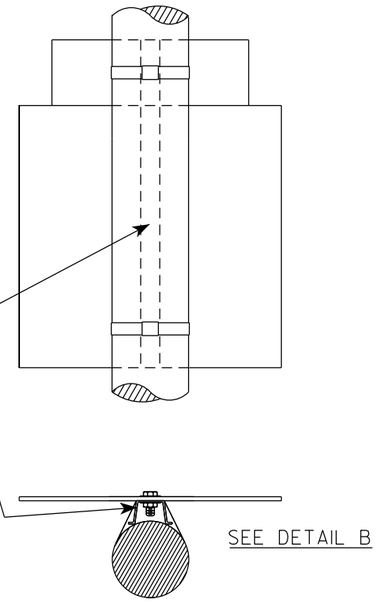


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

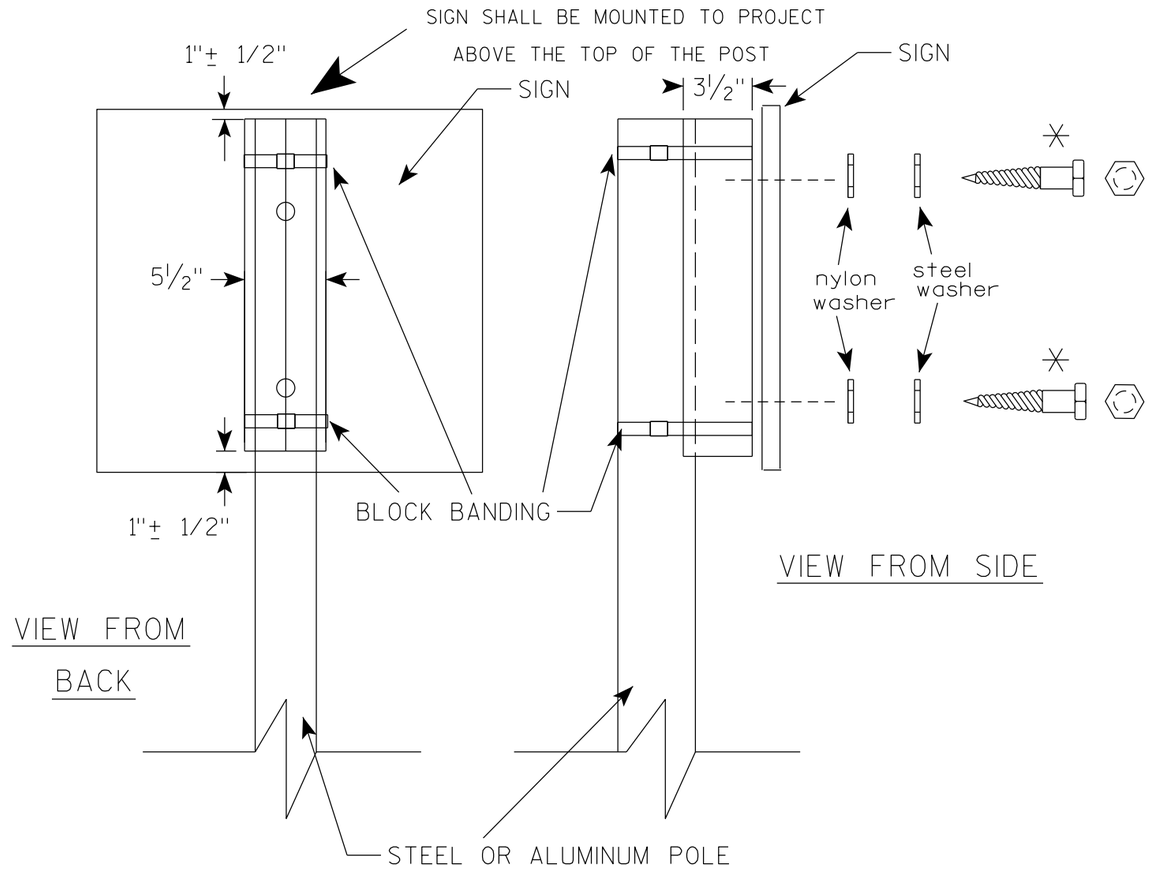
DATE 6/10/19 PLATE NO. A5-9.4

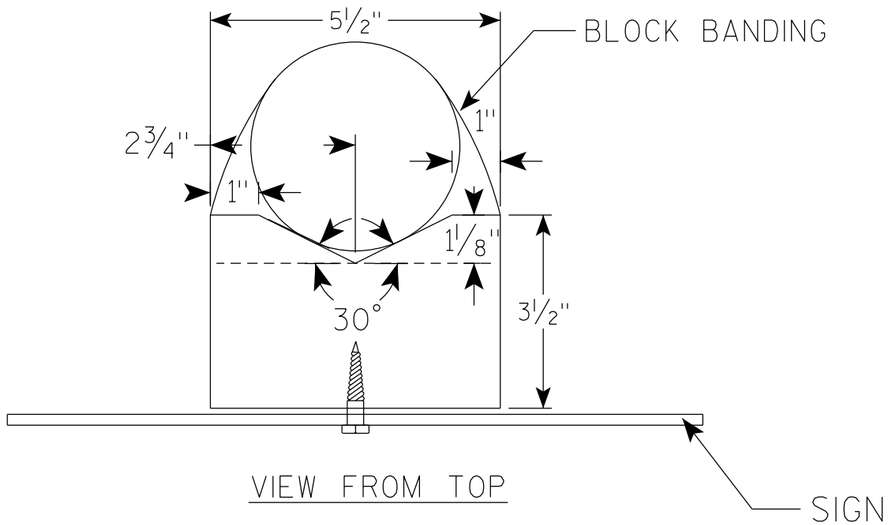
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 160	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

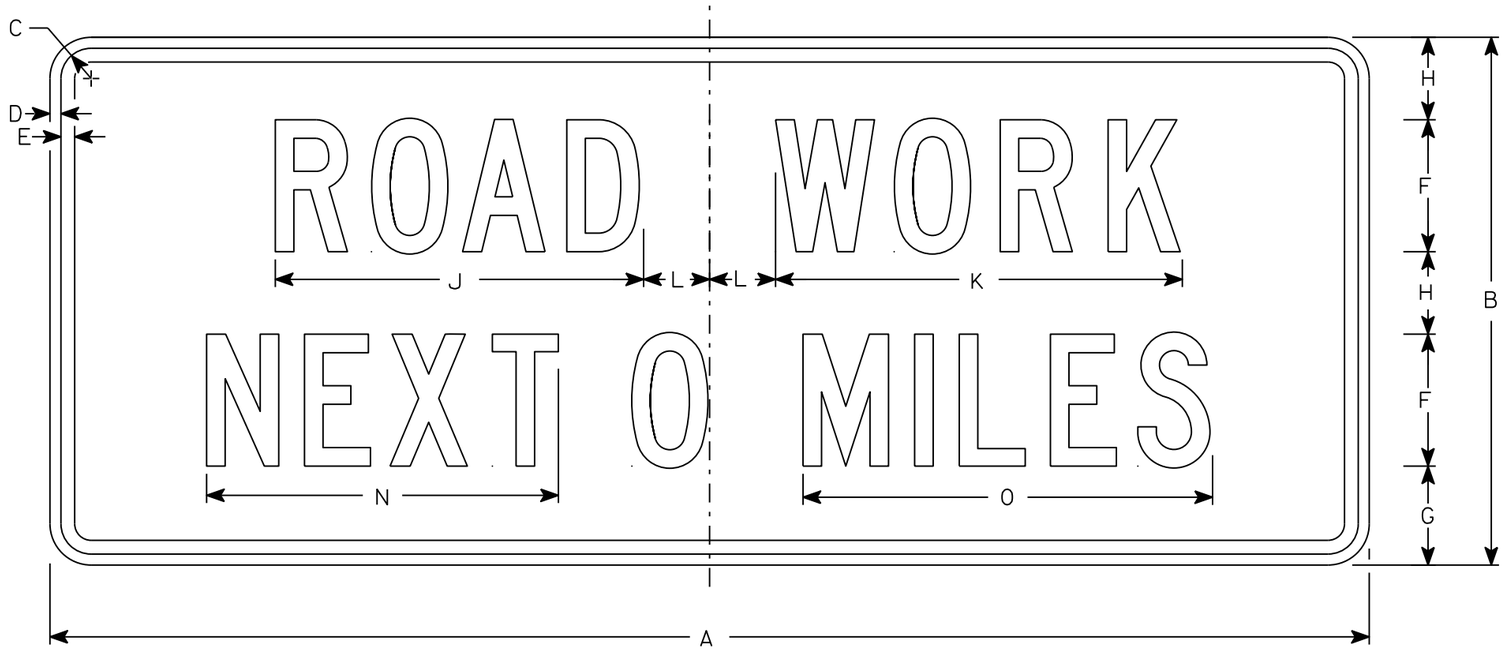
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 161 E



G20-1

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. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

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	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
5																											

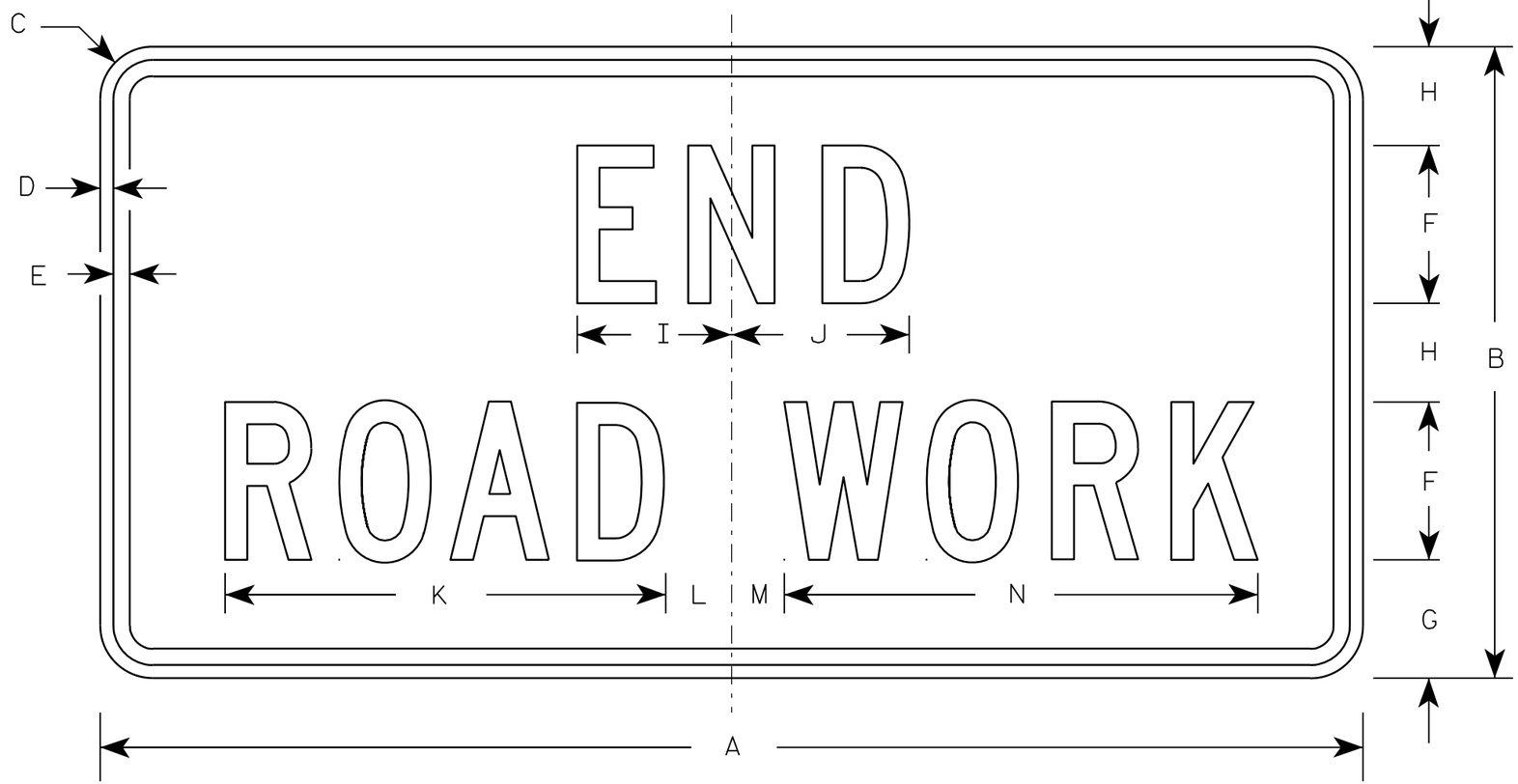
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 162 | E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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.	Area m2
1	36	18	1 1/8	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	0.41
2	48	24	1 1/2	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	0.72
3	48	24	1 1/2	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	0.72
4	48	24	1 1/2	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	0.72
5	48	24	1 1/2	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	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

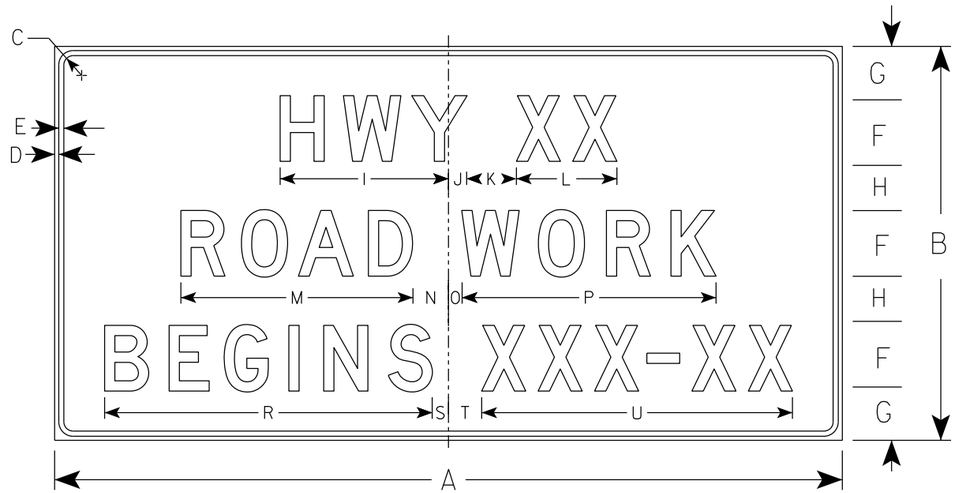
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 163	E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	23 1/4		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

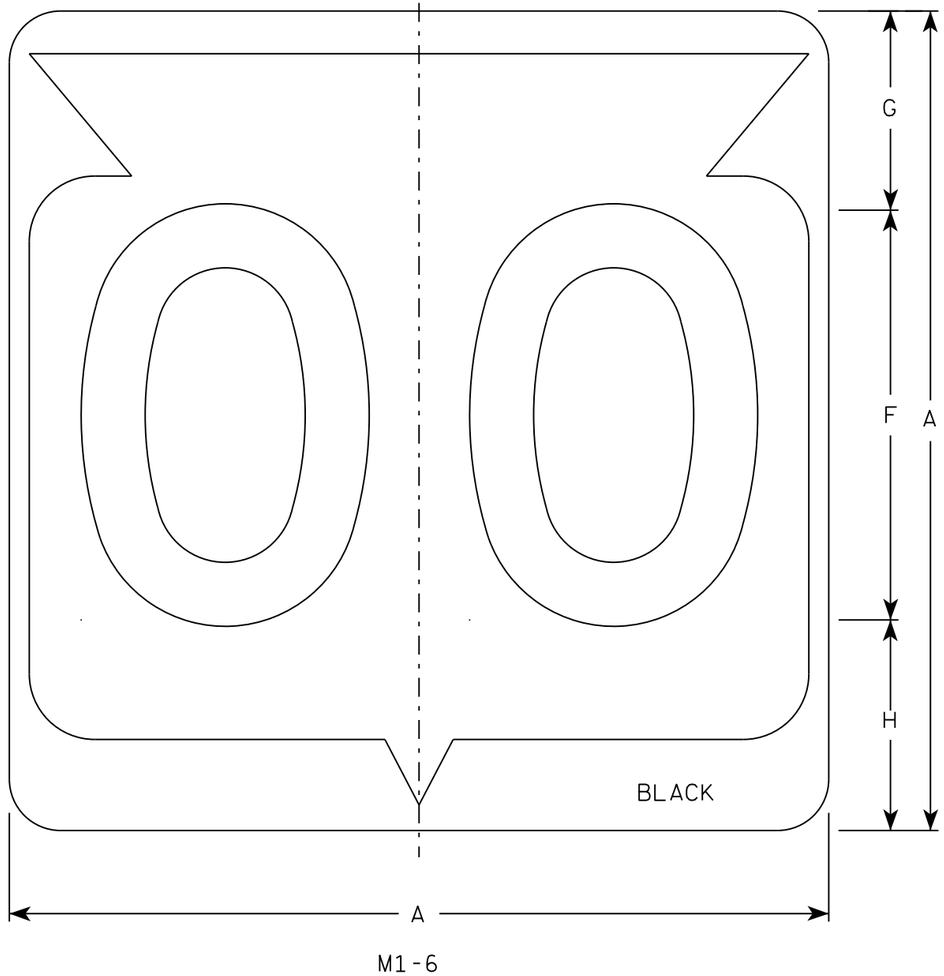
STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/22/19 PLATE NO. G20-57.3

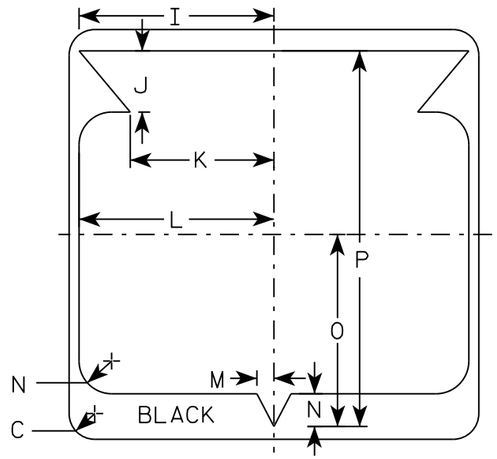
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 164	E



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
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		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

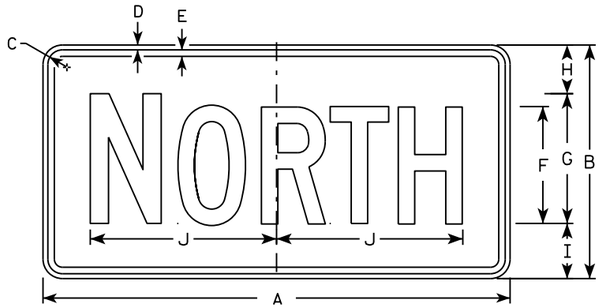
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

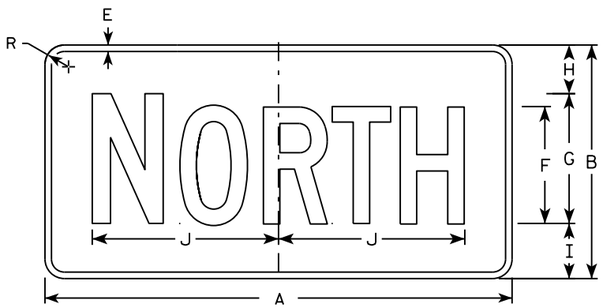
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 165	E



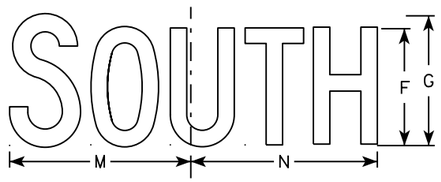
M3-1
MM3-1
MP3-1



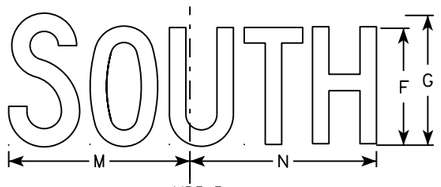
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

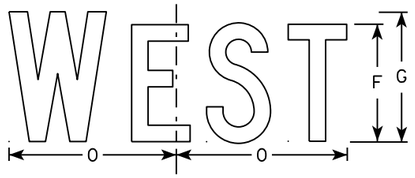
MB3-2
MK3-2
MN3-2



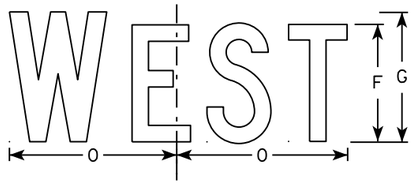
M3-3
MM3-3
MP3-3



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
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																											
2	24	12	1 1/8	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			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

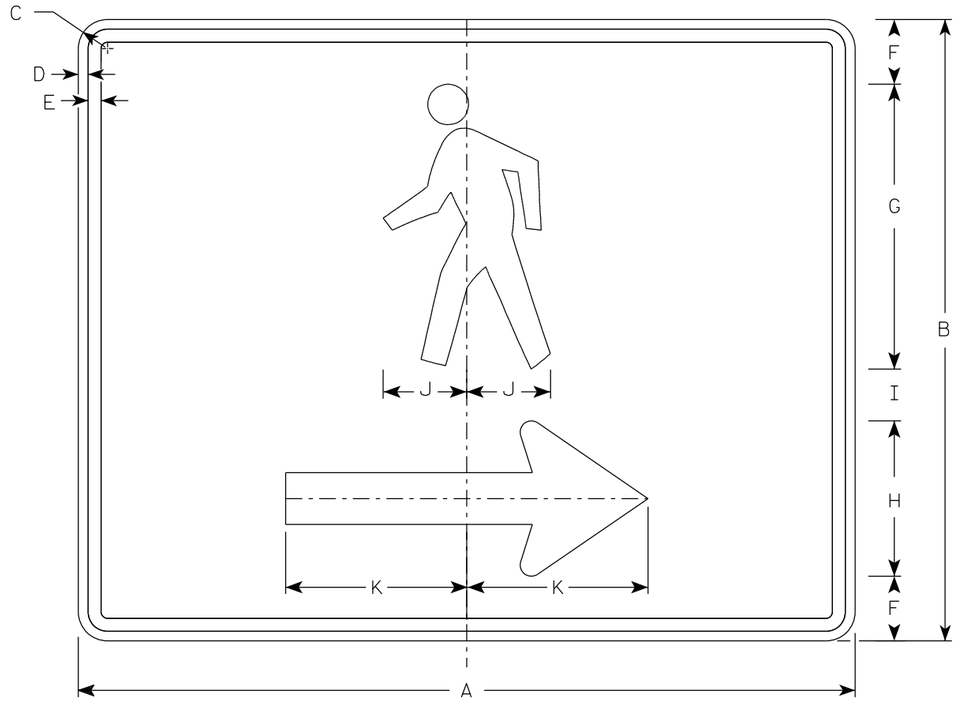
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

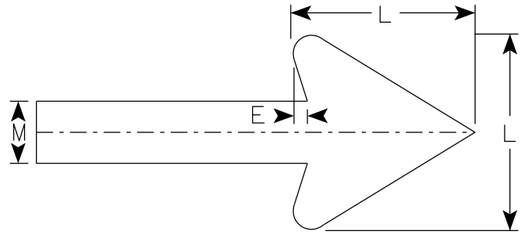
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



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																											
2	30	24	1 1/8	3/8	1/2	2 1/2	11	6	2	3 1/4	7	6	2														5.00
3																											
4																											
5																											

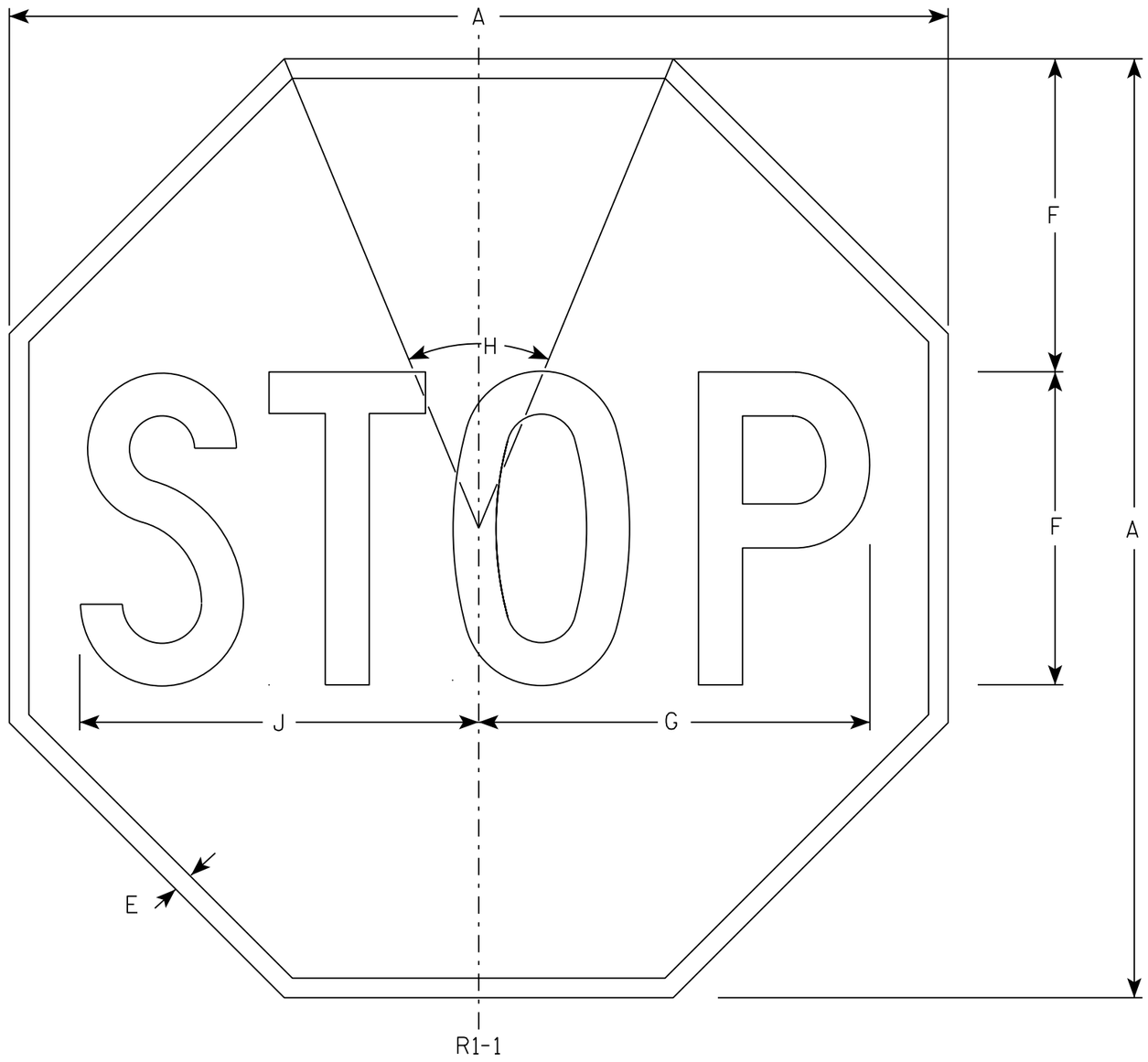
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/16/2021 PLATE NO. M4-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 167 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message 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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

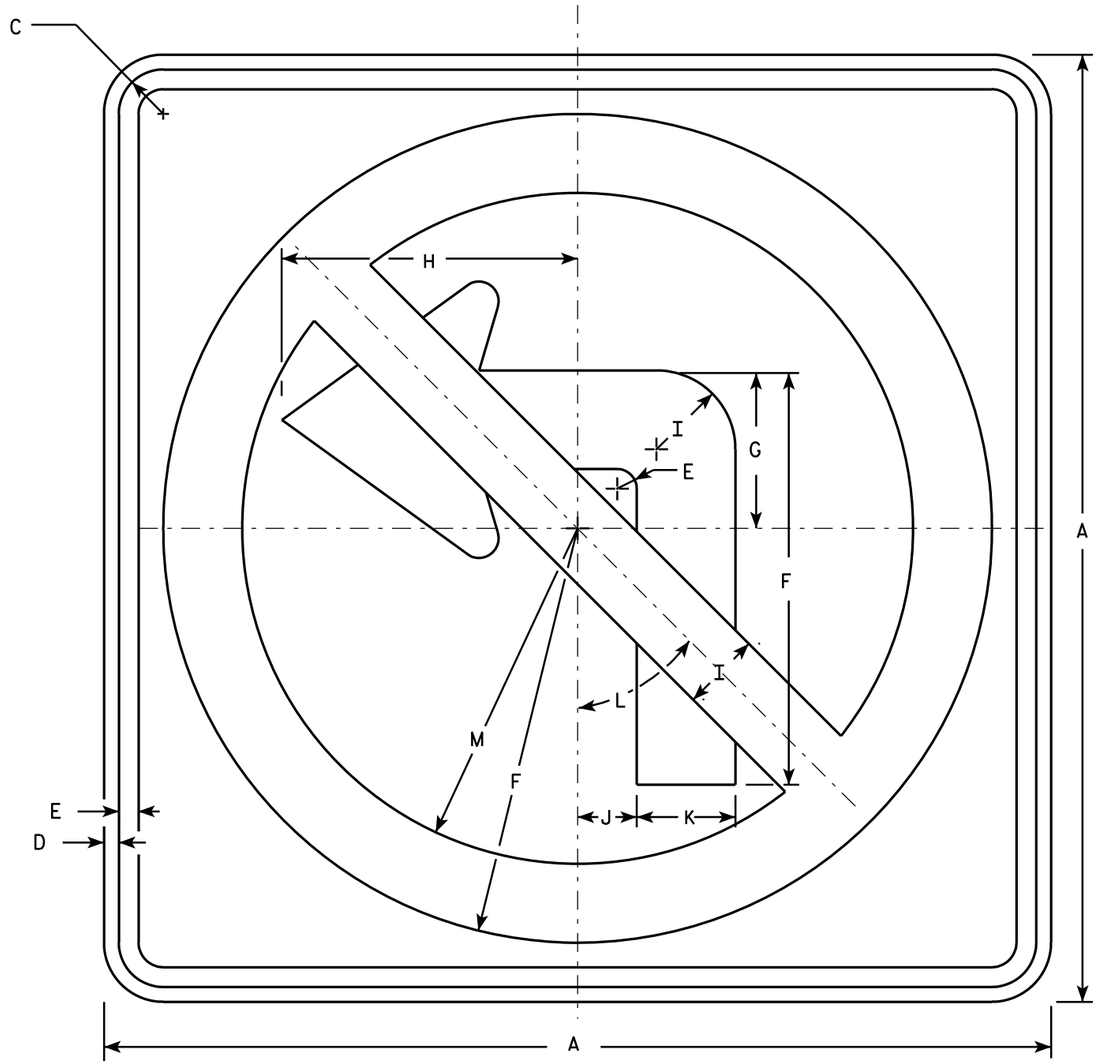
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

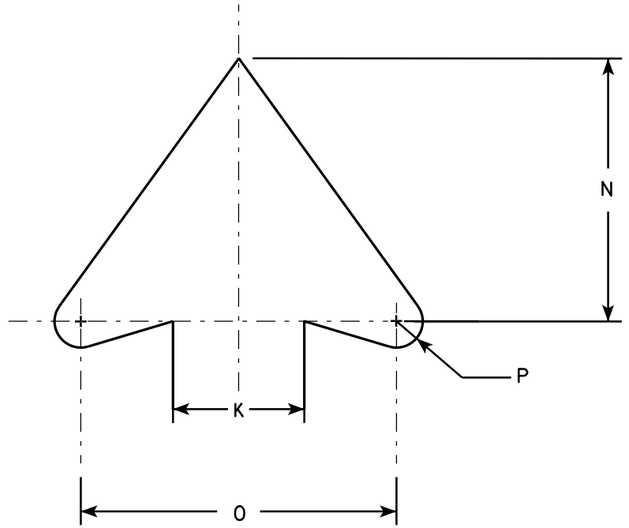
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 168	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

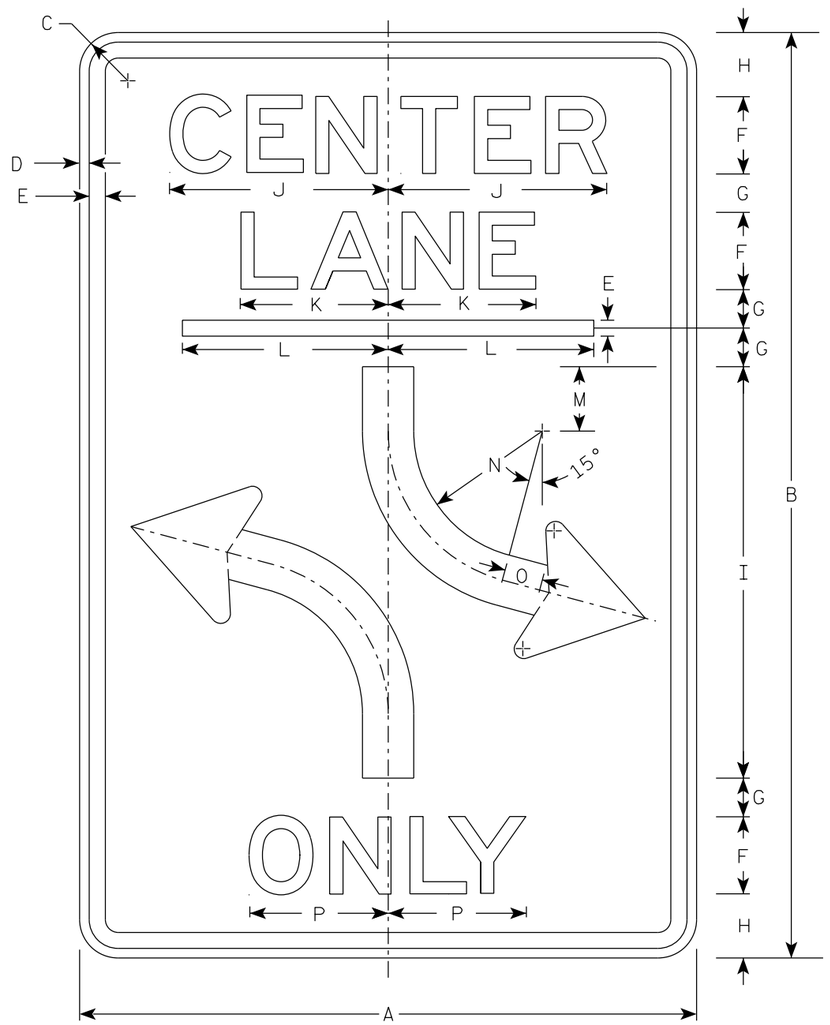
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

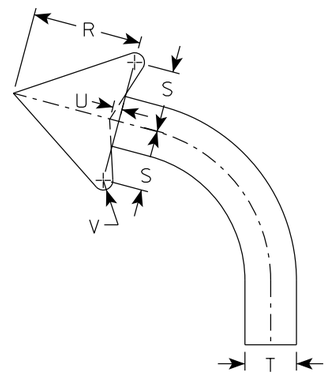
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 169	E



R3-9B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



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	24	36	1 ½	⅜	½	3	1 ½	2 ½	16	8 ½	5 ¾	8	2 ½	5	1 ½	5 ⅛		4 ⅜	2 ⅜	2	⅜	⅜					6.0
2M	24	36	1 ½	⅜	½	3	1 ½	2 ½	16	8 ½	5 ¾	8	2 ½	5	1 ½	5 ⅛		4 ⅜	2 ⅜	2	⅜	⅜					6.0
3	36	48	2 ¼	⅝	⅞	5	1 ½	3 ½	20	14 ⅛	9 ½	12	3	7 ⅜	2	9 ⅞		6 ⅛	3 ½	3	½	⅝					12.0
4																											
5																											

STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

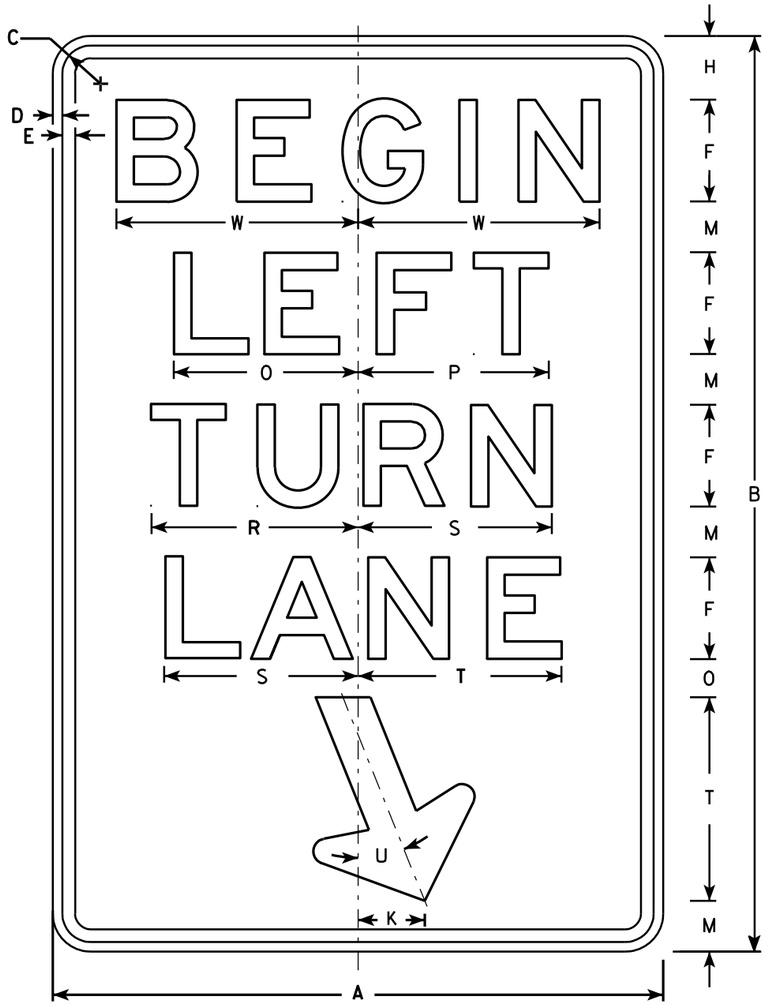
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2022 PLATE NO. R3-9B.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 170 | E

7

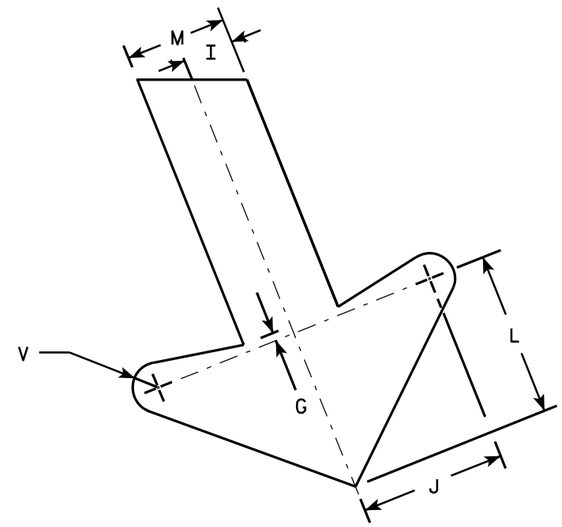
7



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
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.



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	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

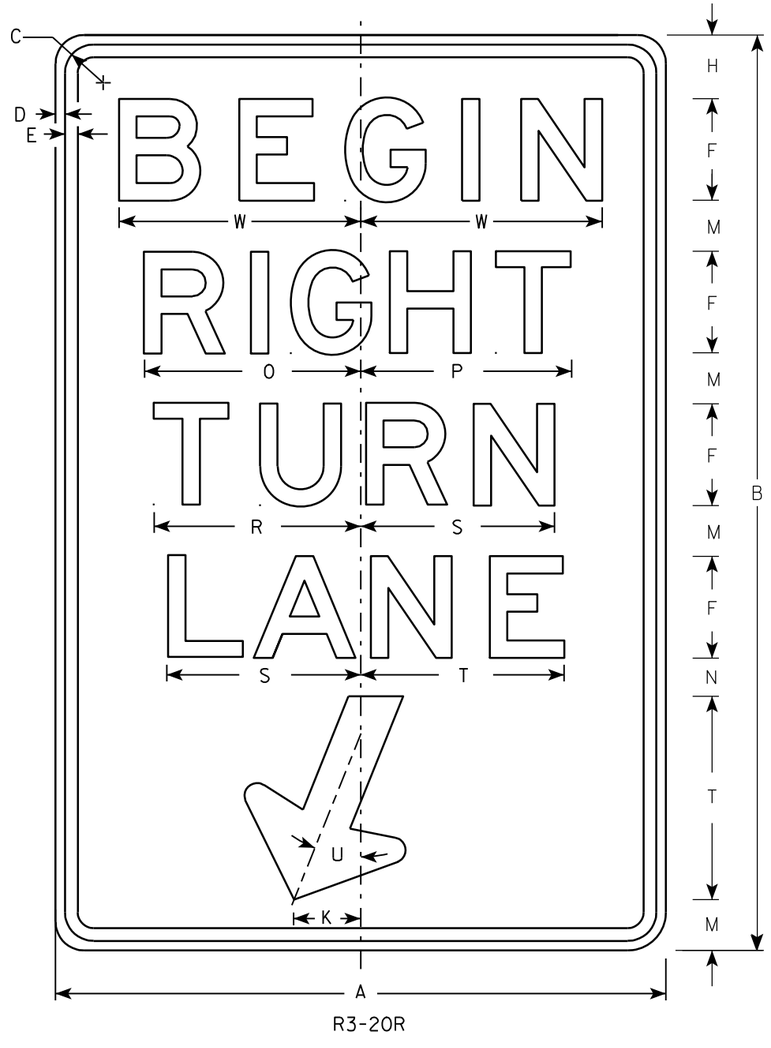
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

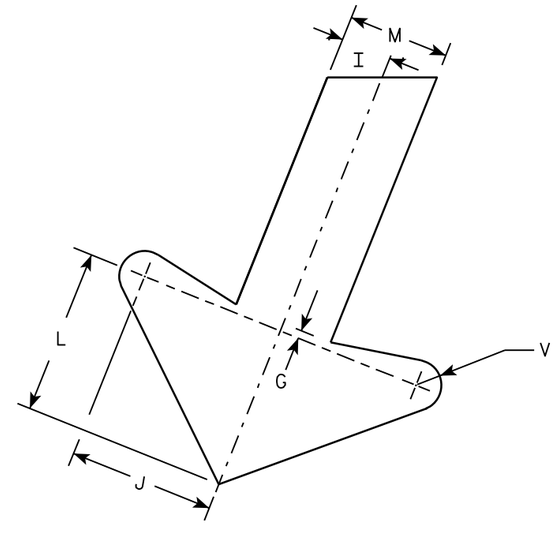
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 171 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
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.



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	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

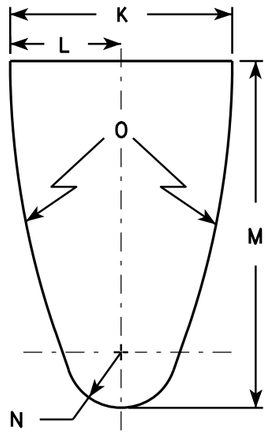
STANDARD SIGN
R3-20R

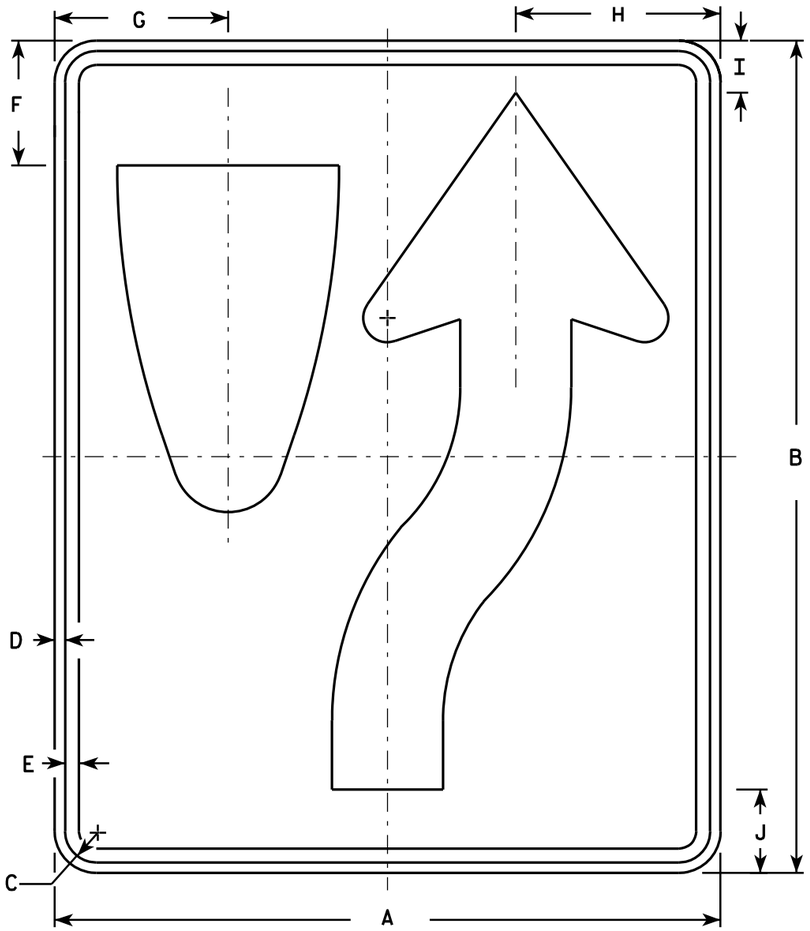
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 172 | E

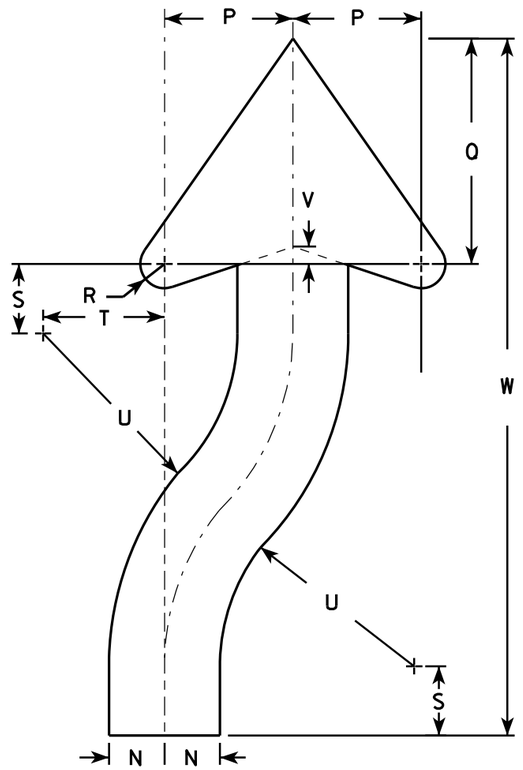




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

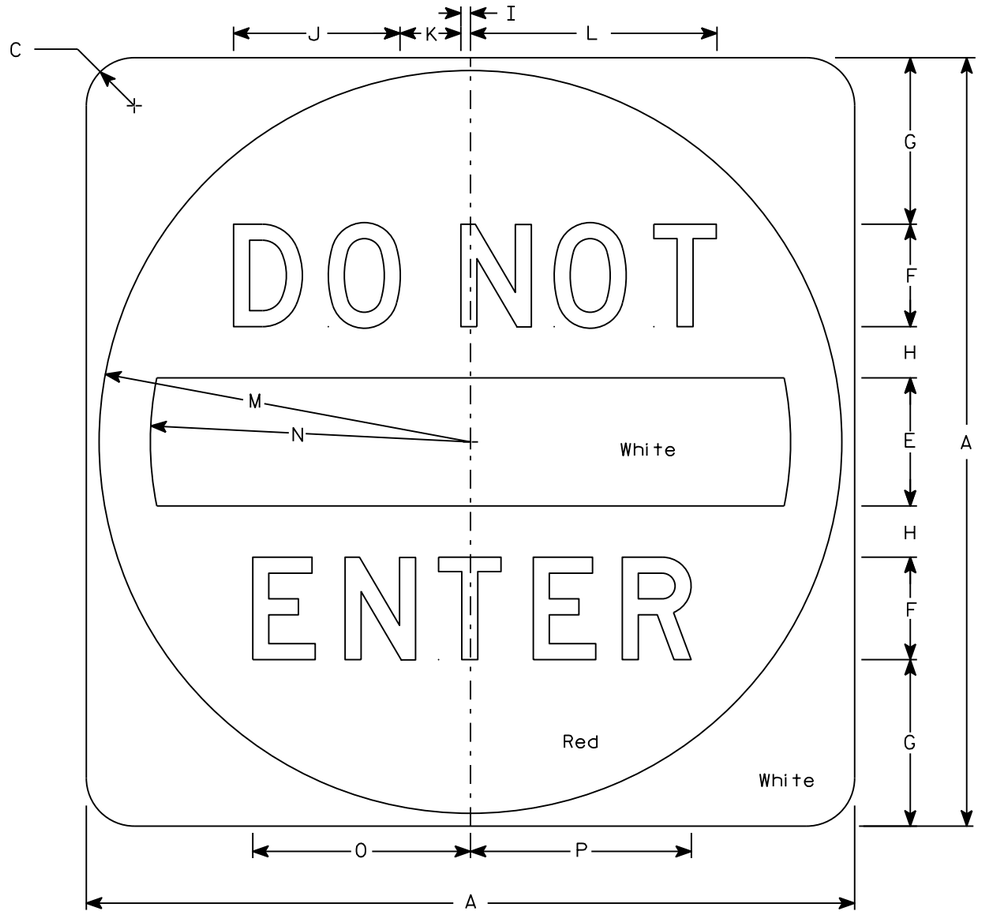
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 173	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

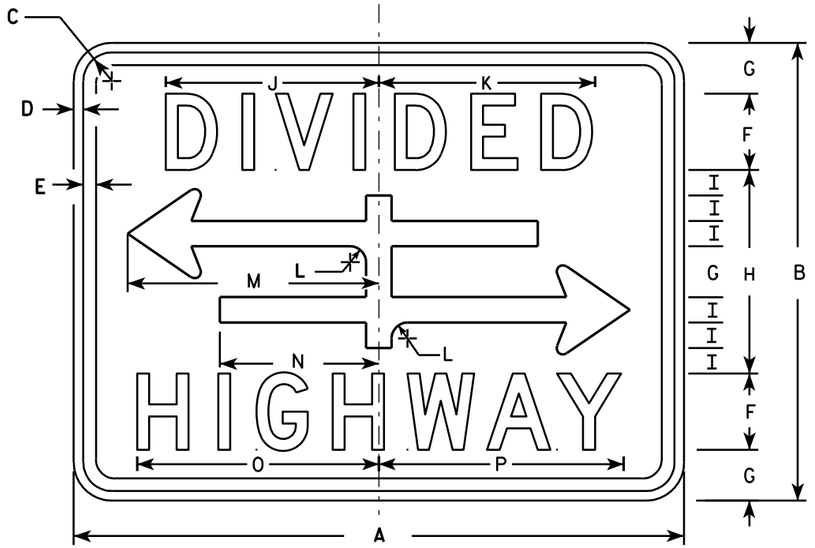
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

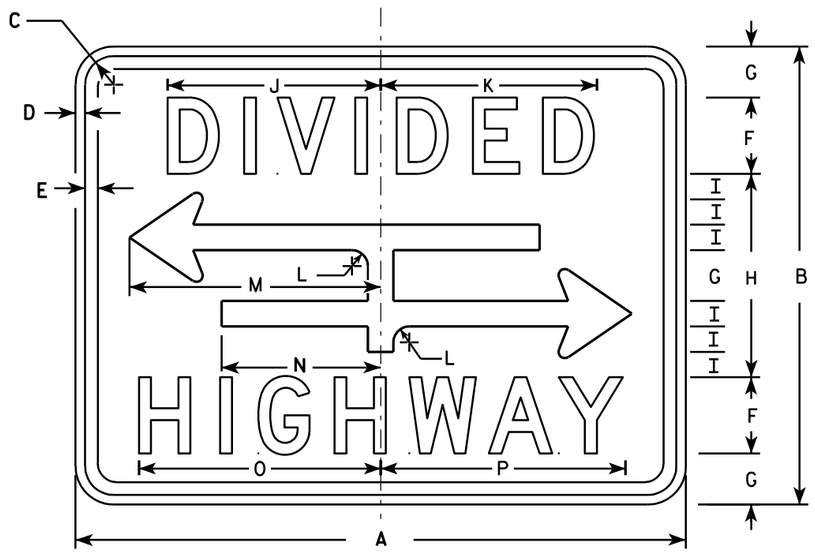
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 174 | E



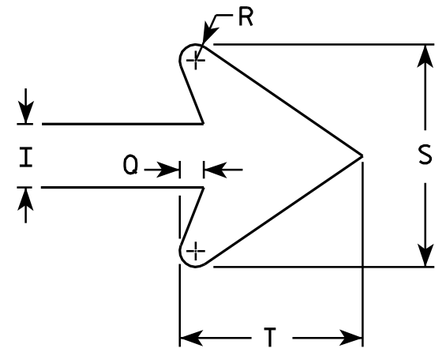
R6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.



R6-3A



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	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

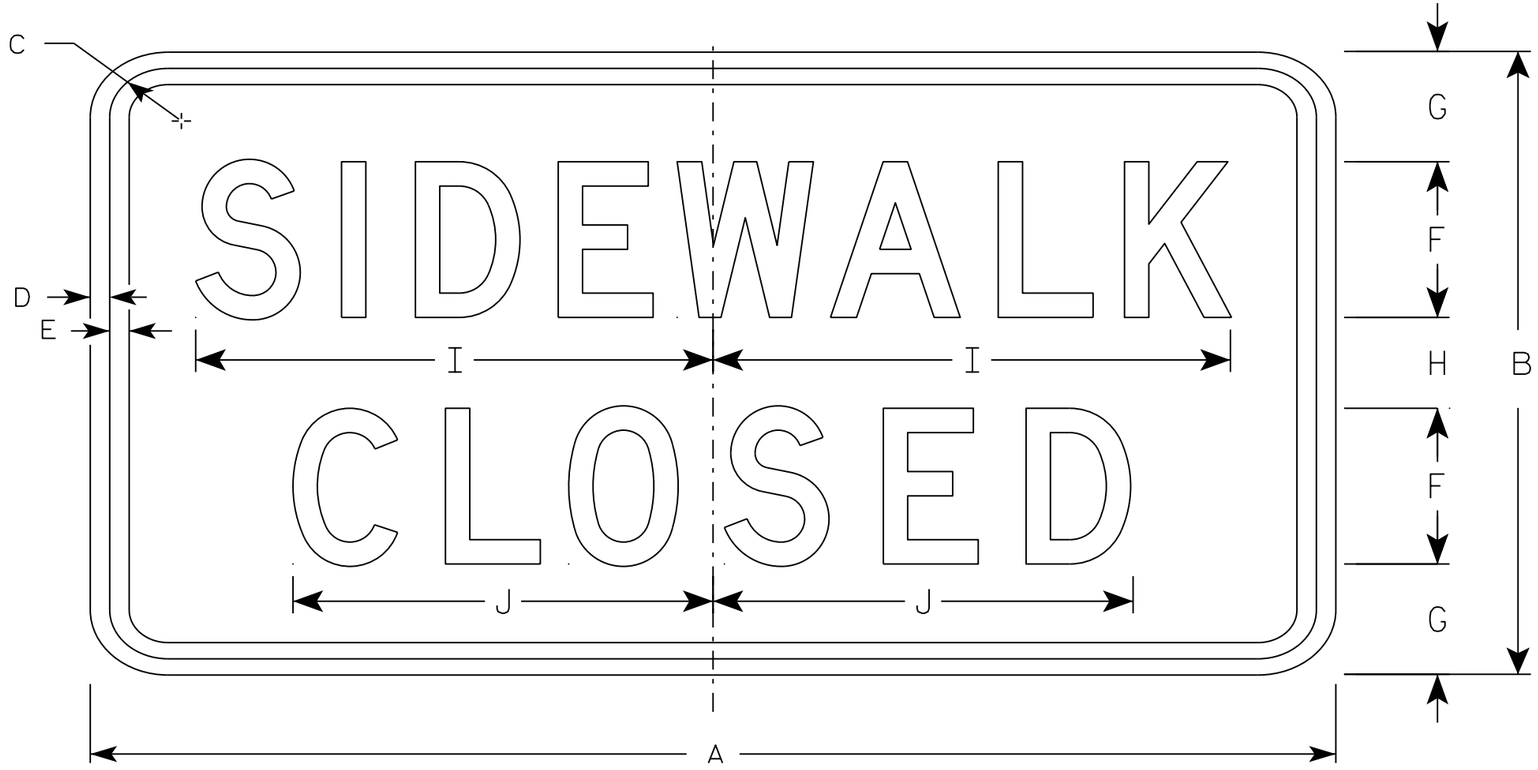
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 175 E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

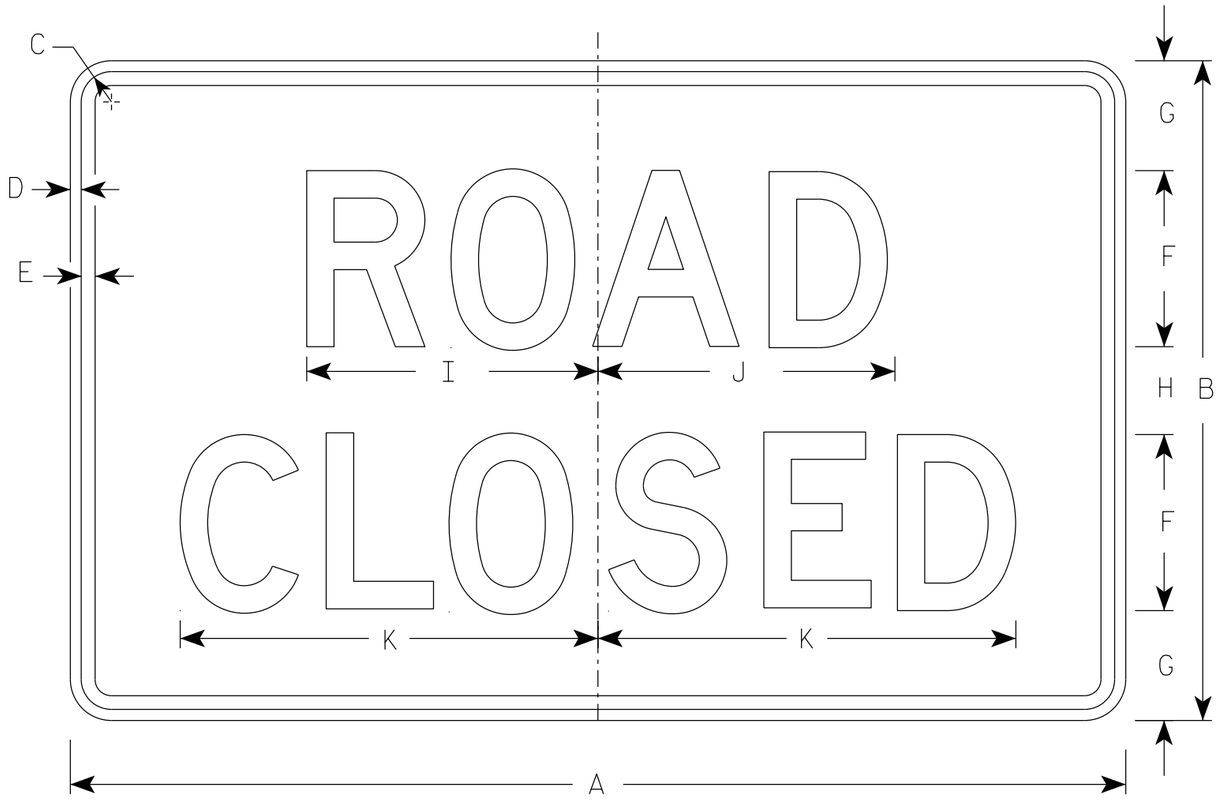
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 176 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

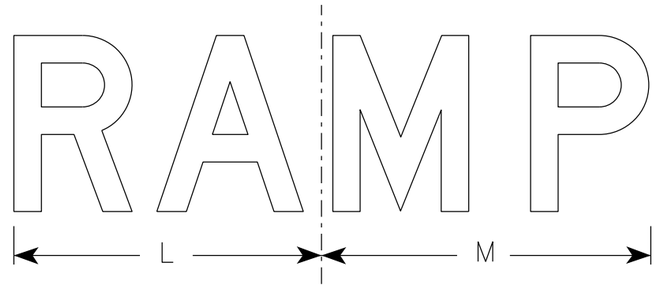
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



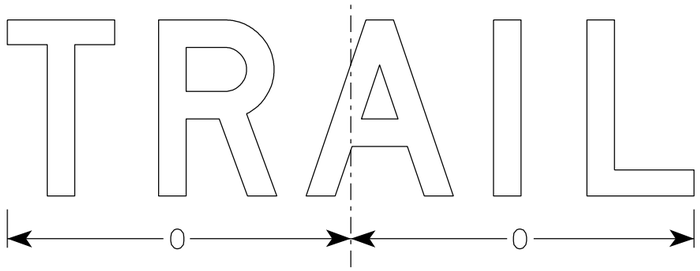
R11-2

NOTES

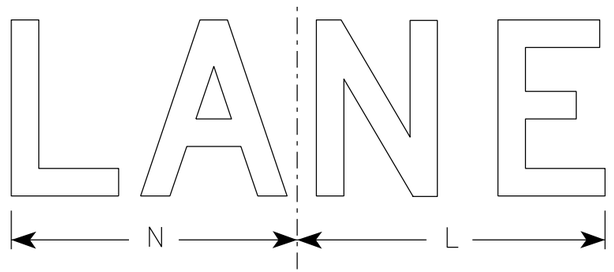
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 3/8	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 3/8	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 3/8	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 3/8	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 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

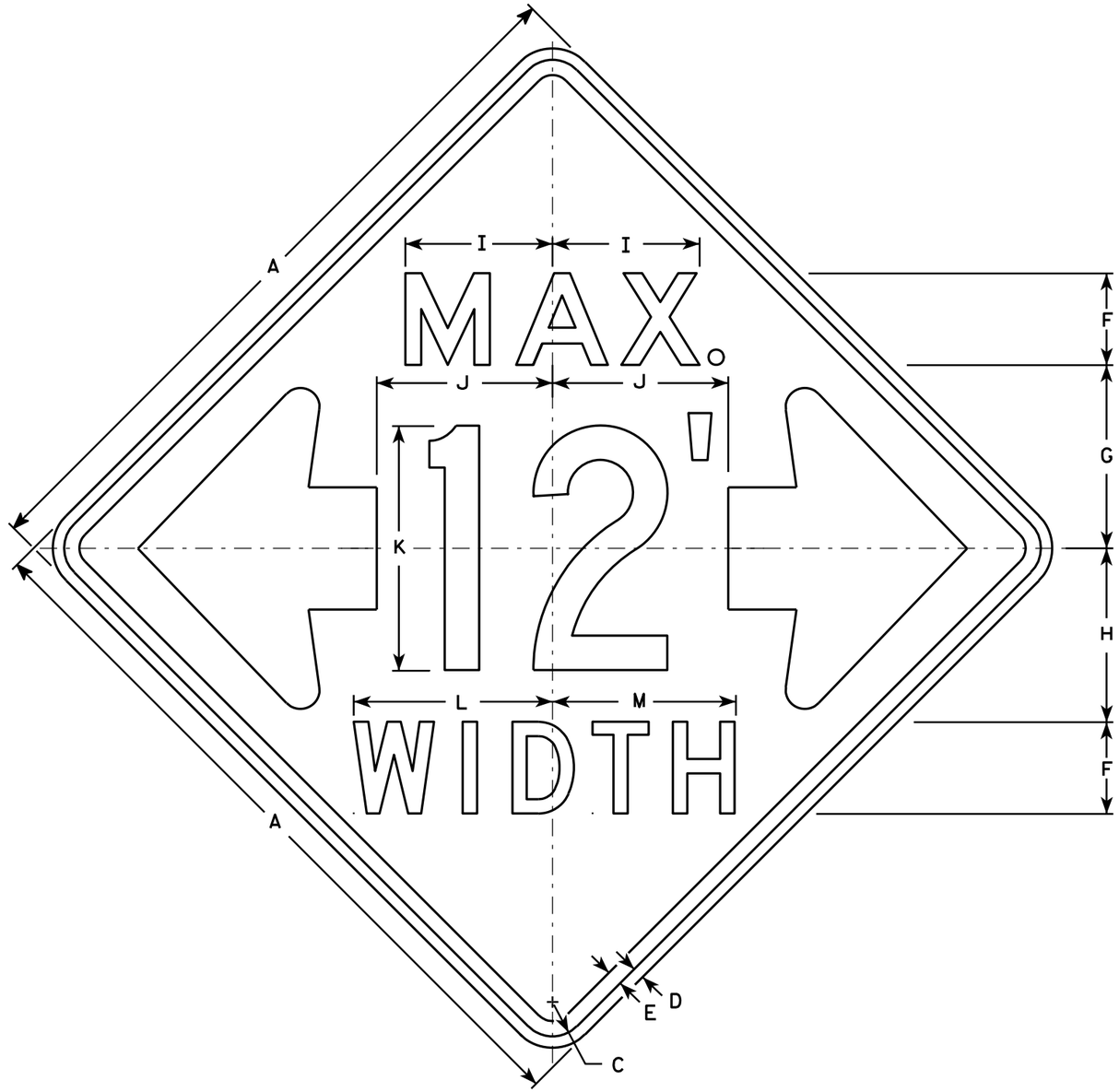
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

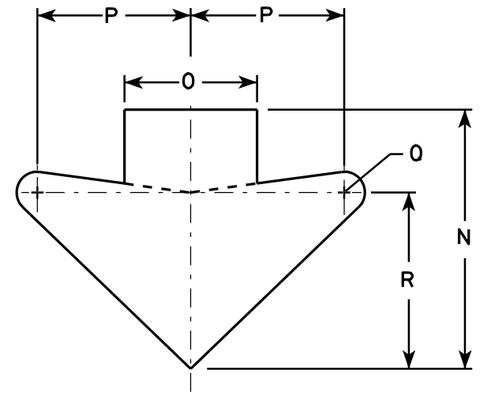
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 177 E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. 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		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

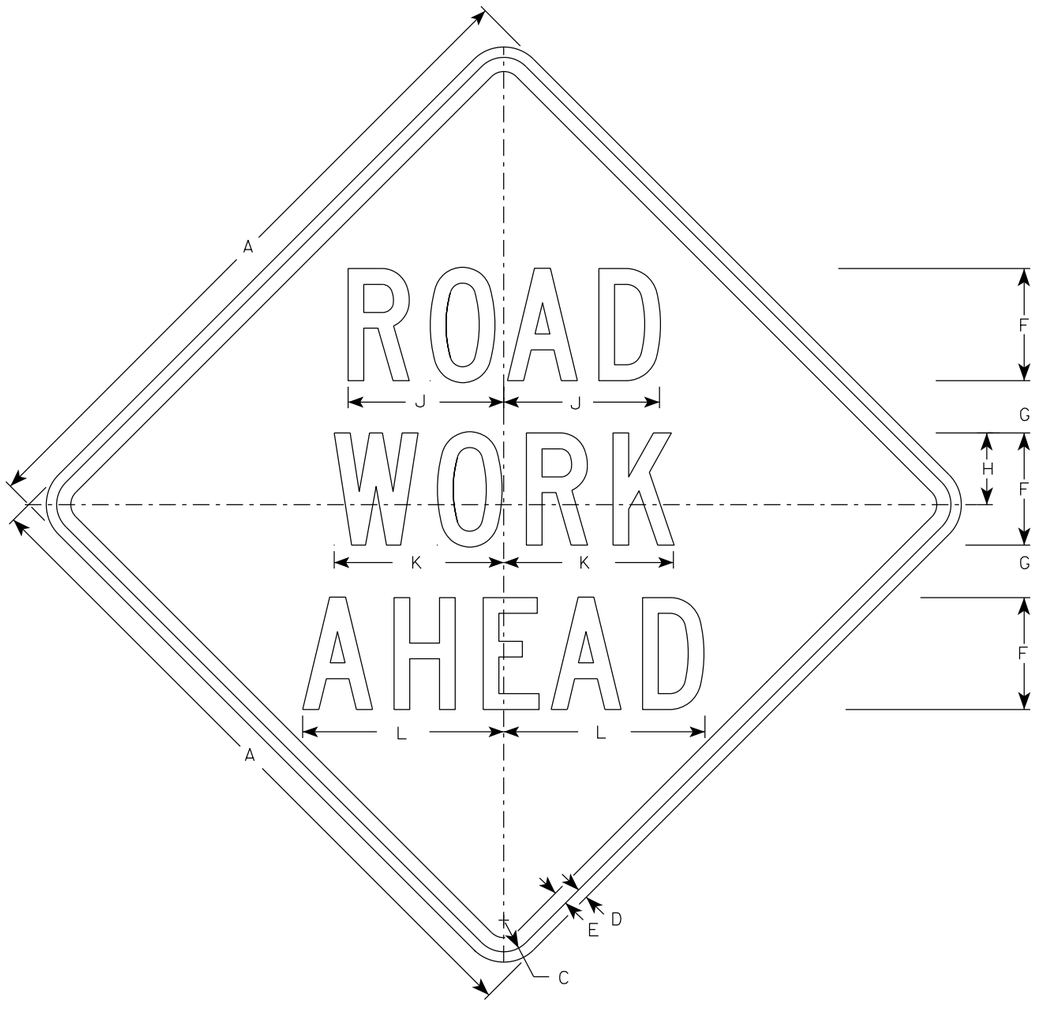
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

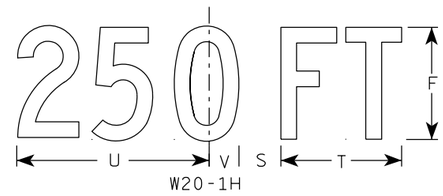
DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 178 | E

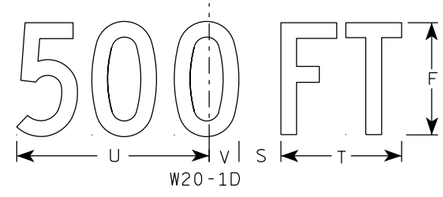
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



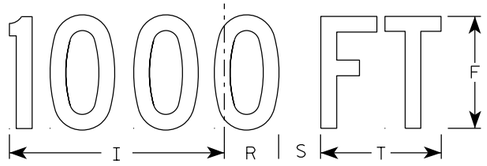
W20-1A



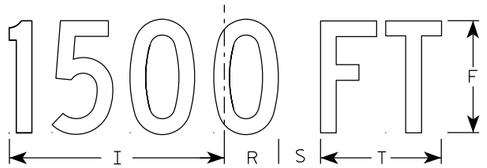
W20-1H



W20-1D



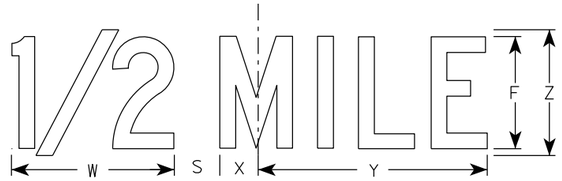
W20-1C



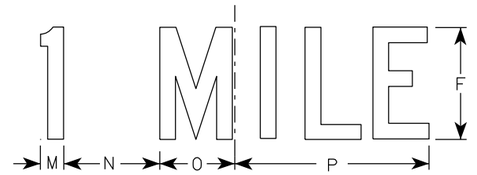
W20-1B

NOTES

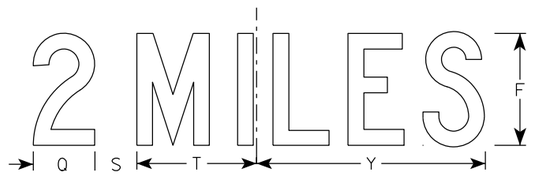
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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		1 5/8	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

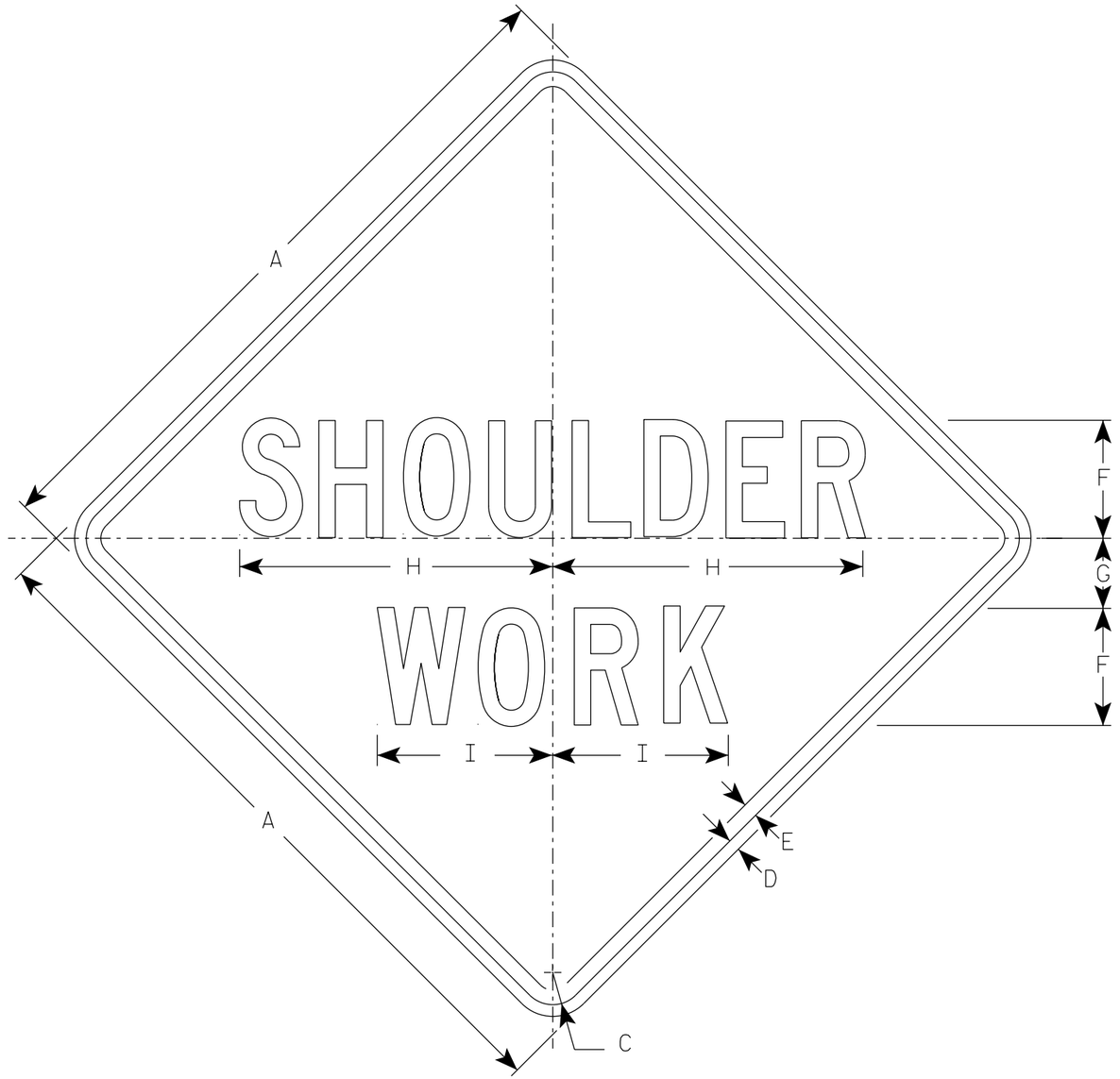
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7



W21-5

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		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
2S	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
2M	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
3	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

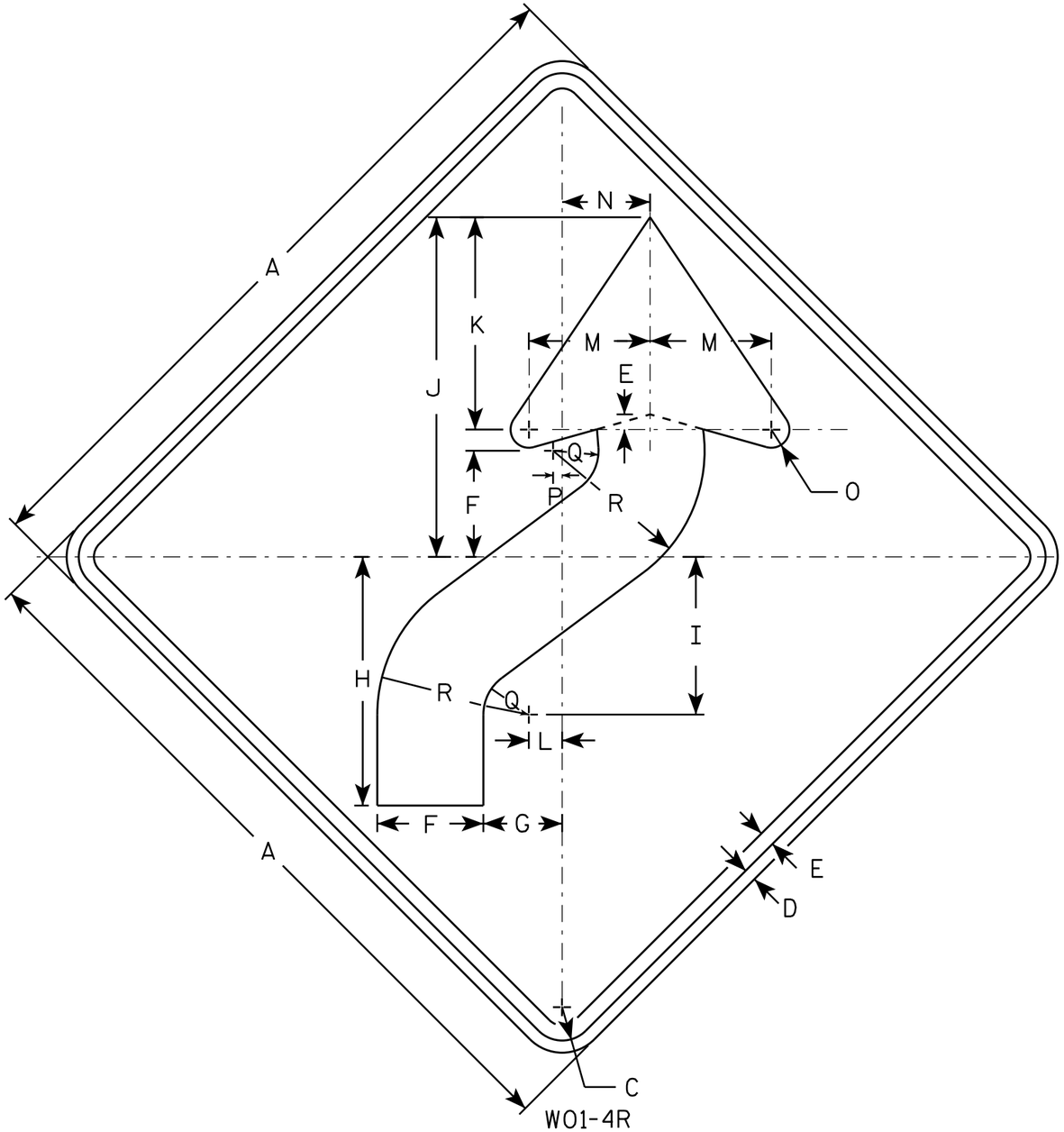
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/30/2020 PLATE NO. W21-5.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 180	E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

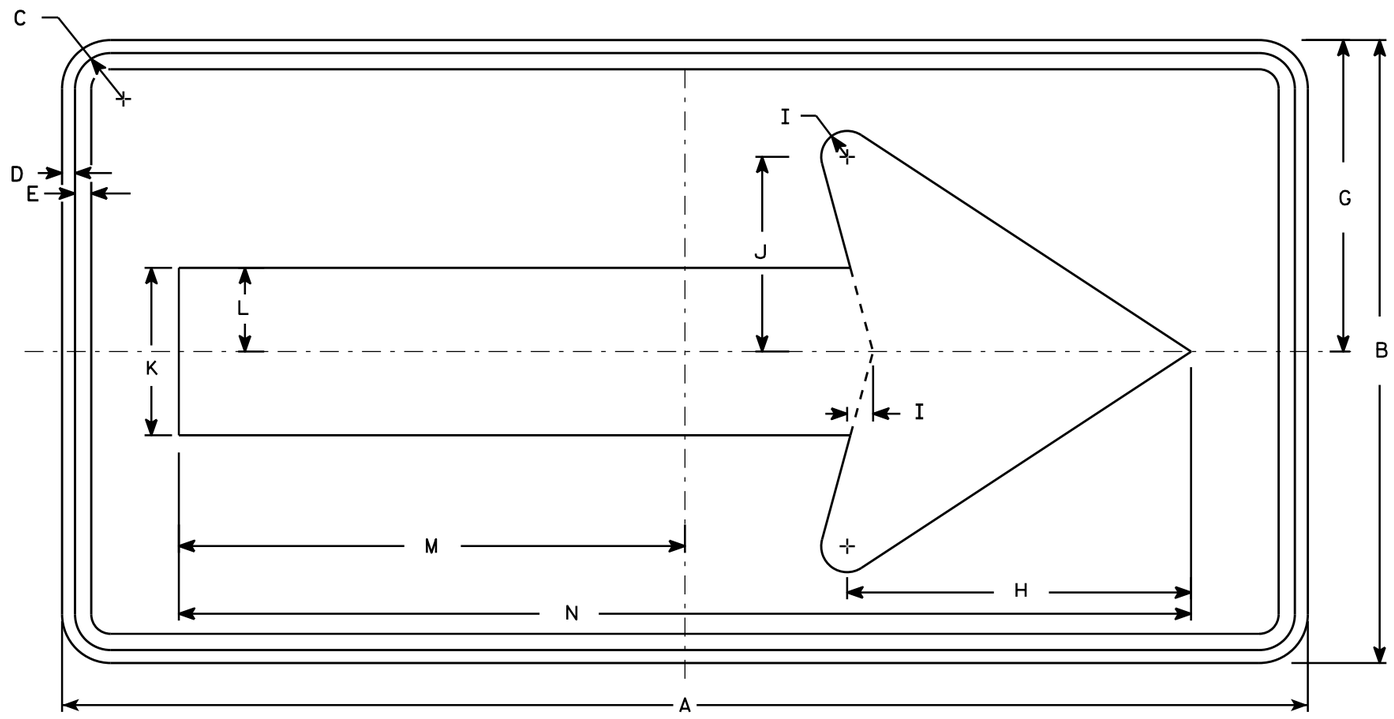
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 3/8	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 3/8	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 3/8	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 3/8	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 3/8	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
W01-6

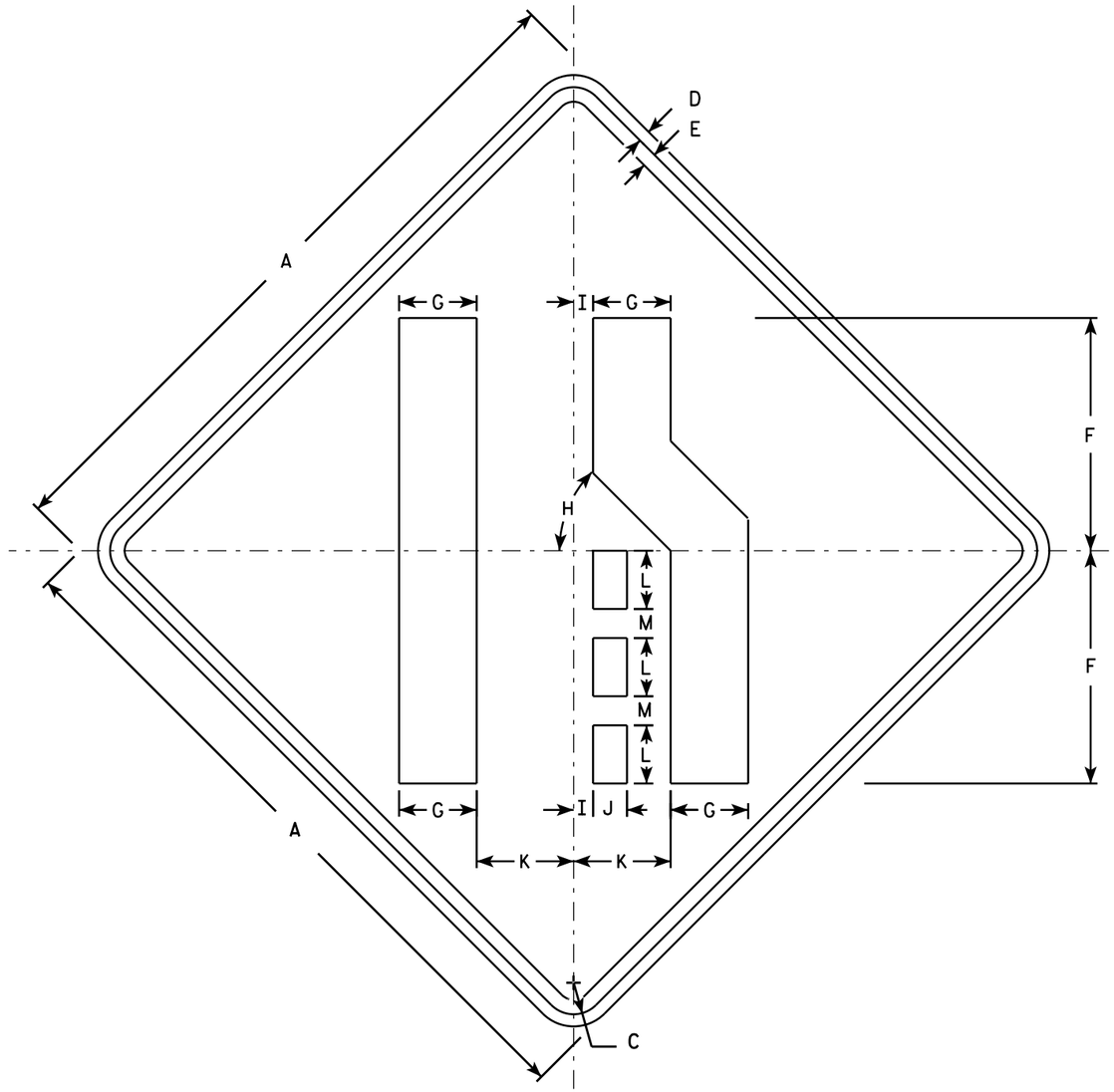
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

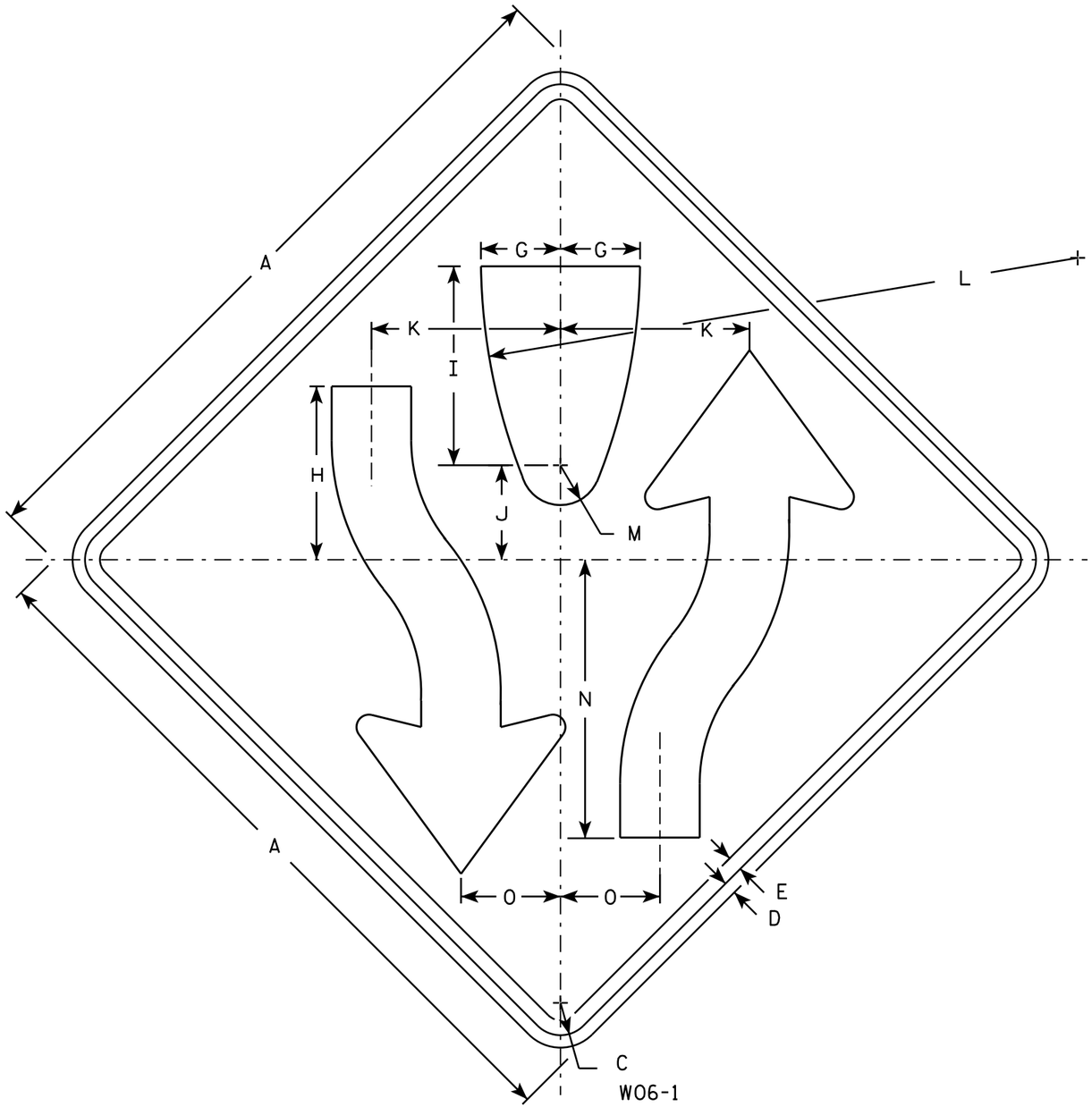
STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 183 W04-2.1

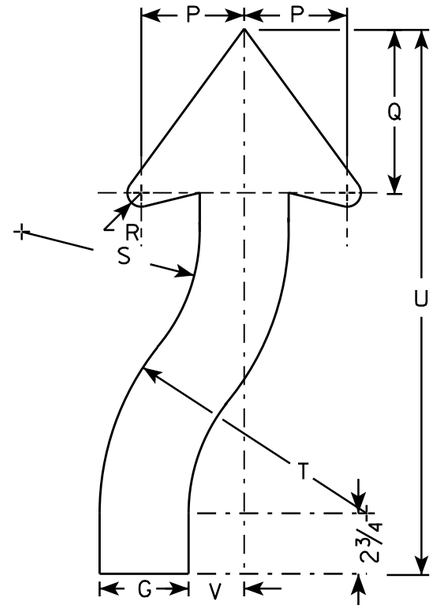
PROJECT NO: | SHEET NO: E



W06-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. W06-2 same as W06-1 but is rotated 180° when mounted.



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	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2S	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
2M	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
3	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W06-1 & W06-2

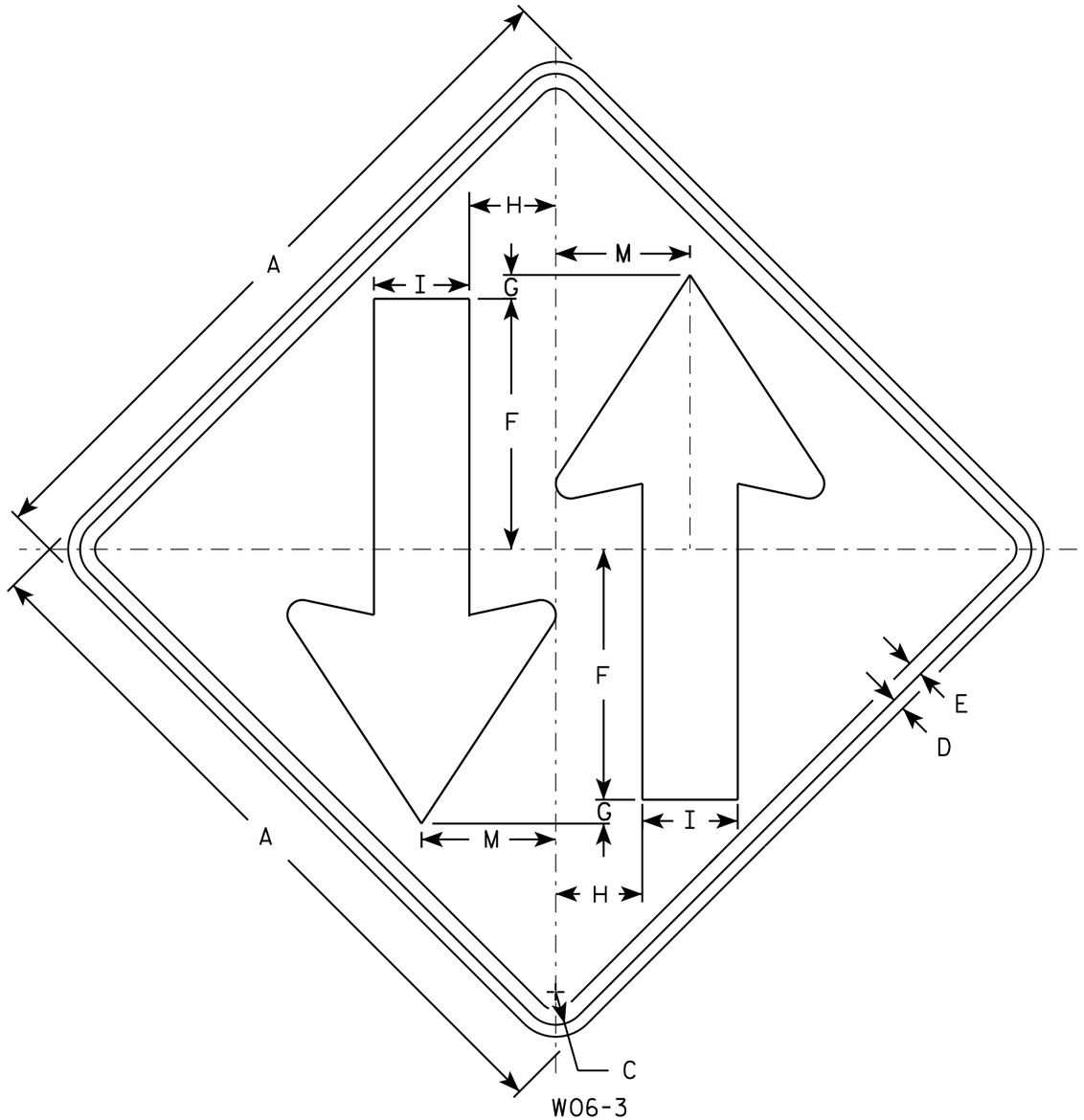
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W06-1.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

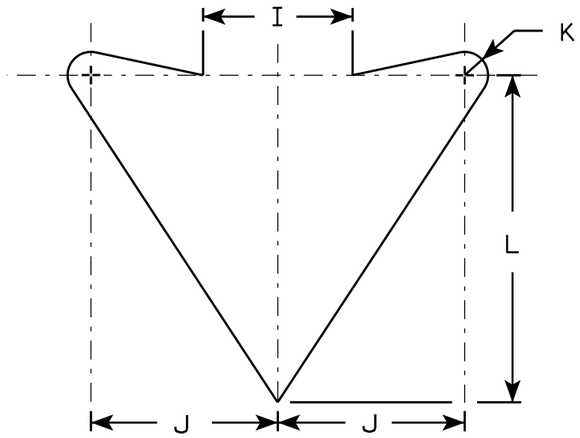
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W061.DGN PLOT DATE : 20-NOV-2013 12:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.810449:1.000000
WISDOT/CADDS SHEET 42



W06-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.



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	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

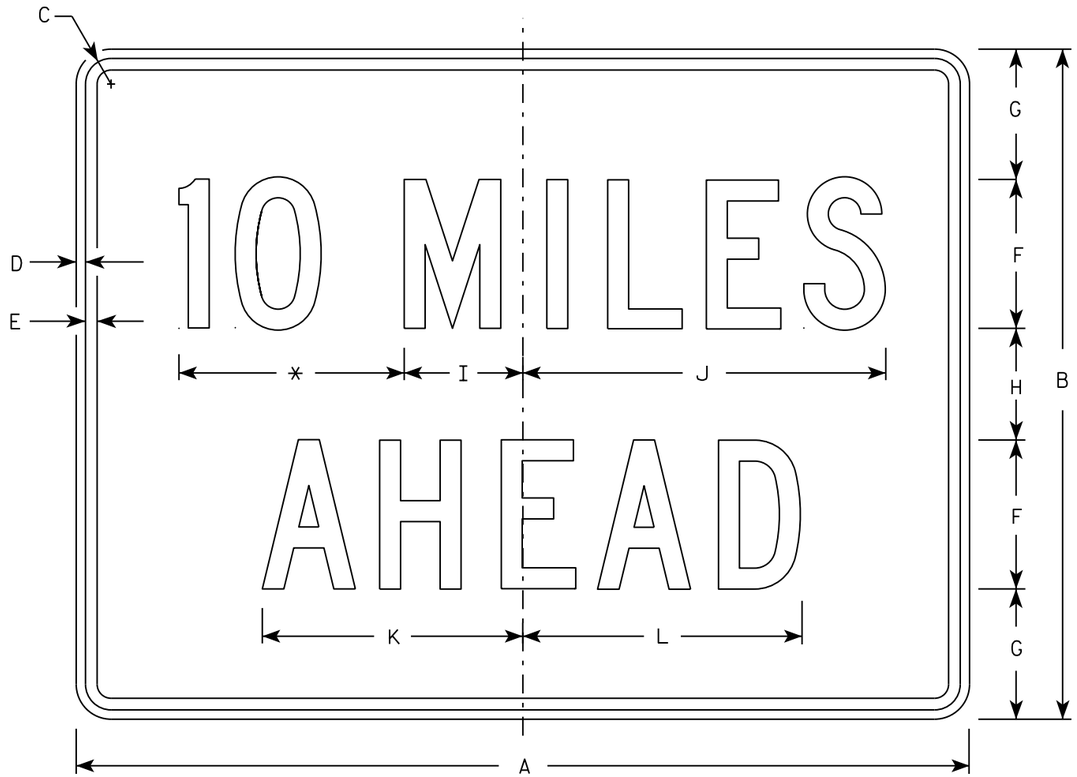
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

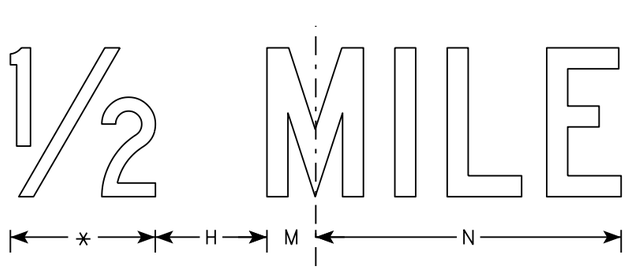
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 185 W06-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	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 1/8	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	1 3/8	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	1 3/8	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	1 3/8	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	1 3/8	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	1 3/8	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 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 186	E

B-68-0100 EAT GRADING LEFT

STATION	DISTANCE	AREA (SF) CUT	AREA (SF) UNUSABLE PAVEMENT MATERIAL	AREA (SF) FILL	AREA (SF) EBS	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) UNUSABLE PAVEMENT MATERIAL NOTE 2	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	INCREMENTAL VOL (CY) (UNADJUSTED) EBS	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.15 NOTE 4	MASS ORDINATE NOTE 5
297+50	---	2	0	0	0	---	---	---	---	---	---	---
297+67	17	2	0	0	0	1	0	0	0	1	0	1
297+88	21	2	0	0	0	2	0	0	0	3	0	3
298+00	12	2	0	0	0	1	0	0	0	4	0	4
298+26	26	4	0	0	0	3	0	0	0	7	0	7
298+53	26	0	0	0	0	2	0	0	0	8	0	8
				COLUMN TOTALS		8	0	0	0			

B-68-0100 EAT GRADING RIGHT

STATION	DISTANCE	AREA (SF) CUT	AREA (SF) UNUSABLE PAVEMENT MATERIAL	AREA (SF) FILL	AREA (SF) EBS	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) UNUSABLE PAVEMENT MATERIAL NOTE 2	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	INCREMENTAL VOL (CY) (UNADJUSTED) EBS	CUMULATIVE VOL (CY) CUT 1.00 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.15 NOTE 4	MASS ORDINATE NOTE 5
298+05	---	6	0	0	0	---	---	---	---	---	---	---
298+26	21	9	0	0	0	6	0	0	0	6	0	6
298+51	24	11	0	0	0	9	0	0	0	14	0	14
298+70	19	11	0	0	0	8	0	0	0	22	0	22
298+97	27	9	0	0	0	11	0	0	0	33	0	33
299+24	27	0	0	0	0	5	0	0	0	37	0	37
				COLUMN TOTALS		37	0	0	0			

NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.15
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

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PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	EARTHWORK TABLES	SHEET:	E

FILE NAME : P:\2021\2021.024 - WisDOT-Fremont-Marion (6590-02-07)\65900207\SheetsPlan\090100-ew.ppt PLOT DATE : 7/6/2023 12:25 PM PLOT BY : DANIEL J. GERLING PLOT NAME : _____

B-68-0101 EAT GRADING RIGHT

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.15 NOTE 4	MASS ORDINATE NOTE 5
302+14	---	0	0	0	0	---	---	---	---	---	---	---
302+40	26	1	0	0	0	0	0	0	0	0	0	0
302+66	26	1	0	0	0	1	0	0	0	1	0	1
302+75	9	1	0	0	0	0	0	0	0	2	0	2
303+09	34	2	0	0	0	2	0	0	0	4	0	4
303+63	54	5	0	0	0	7	0	0	0	11	0	11
				COLUMN TOTALS		11	0	0	0			

B-68-0101 EAT GRADING LEFT

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.15 NOTE 4	MASS ORDINATE NOTE 5
304+19	---	0	0	0	0	---	---	---	---	---	---	---
304+48	29	13	0	0	0	7	0	0	0	7	0	7
304+72	24	12	0	0	0	11	0	0	0	18	0	18
305+00	28	12	0	0	0	12	0	0	0	30	0	30
305+25	25	13	0	0	0	12	0	0	0	42	0	42
305+50	25	15	0	0	0	13	0	0	0	55	0	55
				COLUMN TOTALS		55	0	0	0			

NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.15
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

C-68-0018 GUARDRAIL GRADING RIGHT

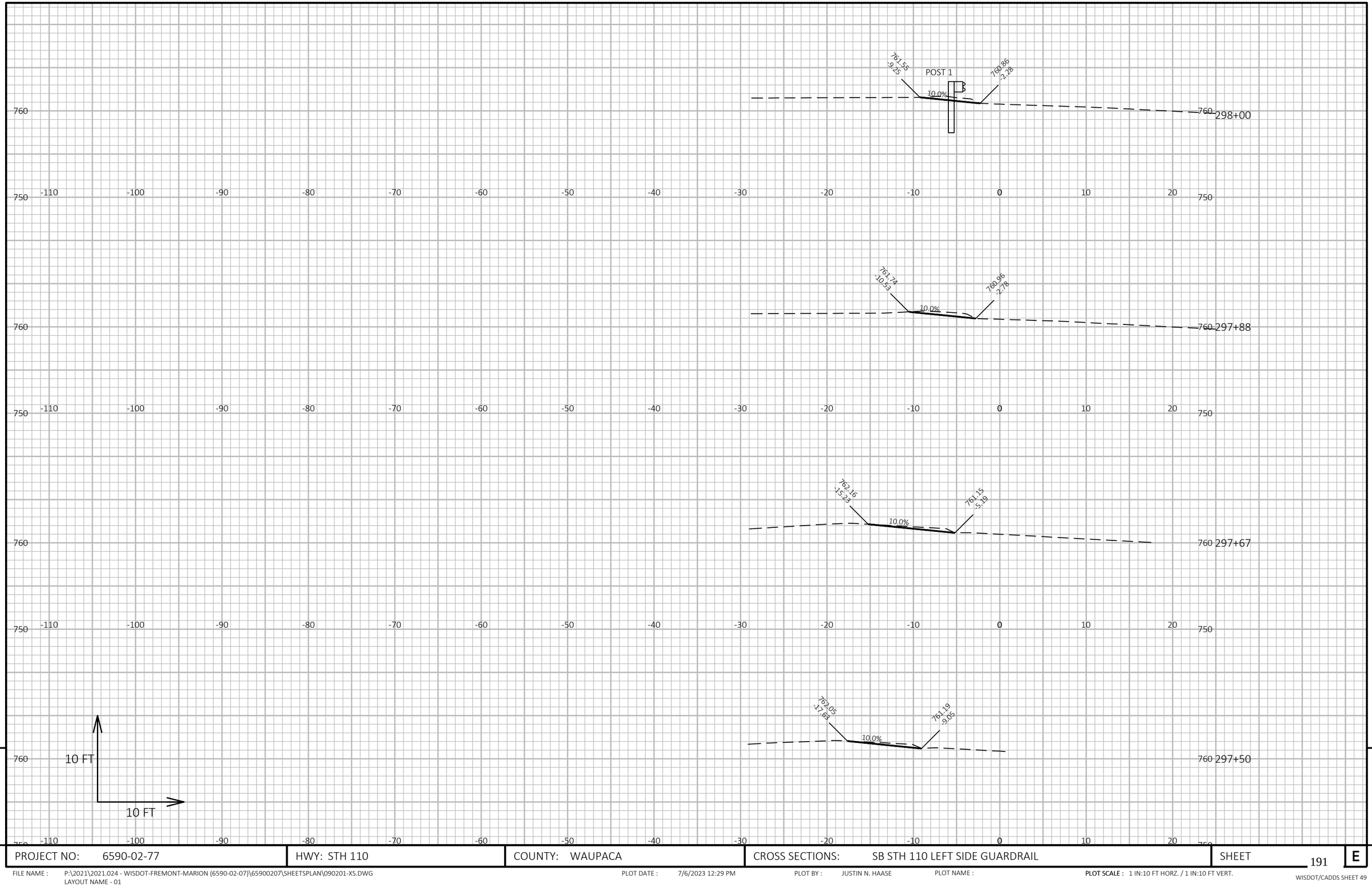
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.15 NOTE 4	MASS ORDINATE NOTE 5
435+18	---	10	0	0	0	---	---	---	---	---	---	---
435+37	19	4	0	9	0	5	0	3	0	5	4	1
435+55	18	4	0	7	0	3	0	5	0	8	10	-2
435+62	7	4	0	6	0	1	0	2	0	9	12	-3
435+67	5	4	0	6	0	1	0	1	0	10	13	-4
435+90	23	4	0	11	0	4	0	7	0	14	22	-8
435+92	2	4	0	7	0	0	0	1	0	14	23	-9
436+00	8	4	0	10	0	1	0	2	0	15	26	-10
436+20	20	2	0	22	0	2	0	12	0	17	39	-22
436+22	1	2	0	22	0	0	0	1	0	17	41	-23
436+50	28	2	0	5	0	2	0	14	0	20	57	-37
436+65	15	7	0	0	0	2	0	1	0	22	59	-37
436+75	10	7	0	0	0	2	0	0	0	25	59	-34
436+93	18	7	0	0	0	5	0	0	0	29	59	-29
436+95	2	7	0	0	0	1	0	0	0	30	59	-29
437+18	23	7	0	0	0	6	0	0	0	36	59	-23
437+25	7	9	0	0	0	2	0	0	0	38	59	-21
437+51	27	12	0	0	0	10	0	0	0	48	59	-11
437+98	47	16	0	0	0	24	0	0	0	73	59	13
438+48	50	5	0	0	0	19	0	0	0	91	59	32
438+64	15	4	0	0	0	2	0	0	0	94	59	35
				COLUMN TOTALS		94	0	51	0			

NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.15
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

C-68-0018 GUARDRAIL GRADING LEFT

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.15 NOTE 4	MASS ORDINATE NOTE 5
435+18	---	0	0	0	0	---	---	---	---	---	---	---
435+37	19	0	0	0	0	0	0	0	0	0	0	0
435+55	18	7	0	0	0	2	0	0	0	2	0	2
435+62	7	10	0	0	0	2	0	0	0	5	0	5
435+67	5	10	0	0	0	2	0	0	0	6	0	6
435+90	23	7	0	0	0	7	0	0	0	14	0	14
435+92	2	6	0	0	0	1	0	0	0	14	0	14
436+00	8	6	0	1	0	2	0	0	0	16	0	16
436+20	20	5	0	3	0	4	0	1	0	20	2	18
436+22	1	4	0	3	0	0	0	0	0	20	2	18
436+50	28	3	0	12	0	4	0	8	0	24	11	13
436+65	15	4	0	4	0	2	0	4	0	26	16	10
436+75	10	4	0	1	0	1	0	1	0	27	17	10
436+93	18	4	0	1	0	3	0	1	0	30	18	12
436+95	2	4	0	1	0	0	0	0	0	30	18	12
437+18	23	6	0	0	0	4	0	1	0	34	19	15
437+25	7	5	0	1	0	1	0	0	0	36	19	16
437+51	27	5	0	3	0	5	0	2	0	41	22	19
437+98	47	10	0	0	0	13	0	3	0	54	25	29
438+48	50	11	0	2	0	19	0	2	0	73	28	45
438+64	15	10	0	2	0	6	0	1	0	79	29	50
				COLUMN TOTALS		79	0	25	0			

NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.15
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

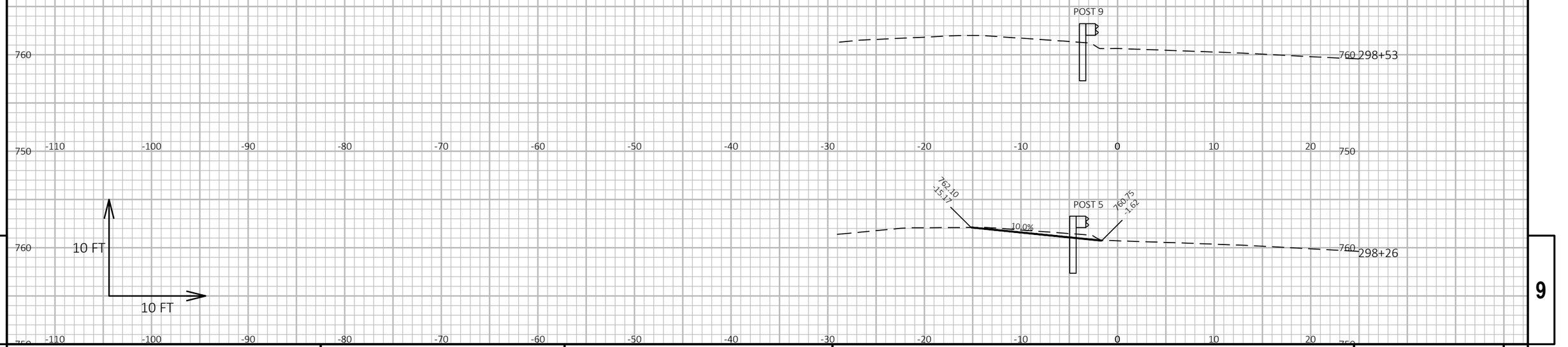


PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: SB STH 110 LEFT SIDE GUARDRAIL	SHEET 191	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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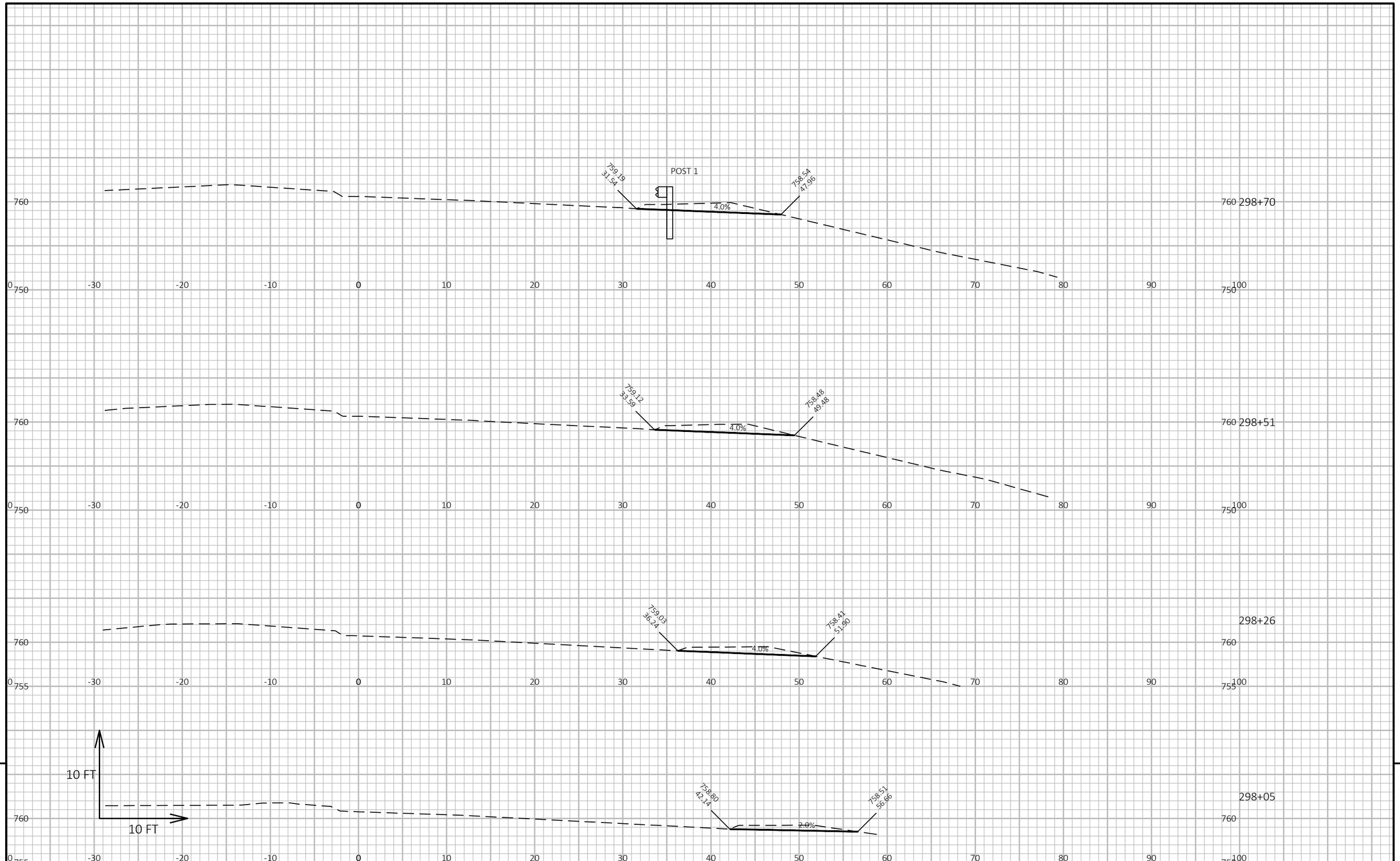
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: SB STH 110 LEFT SIDE GUARDRAIL	SHEET 192	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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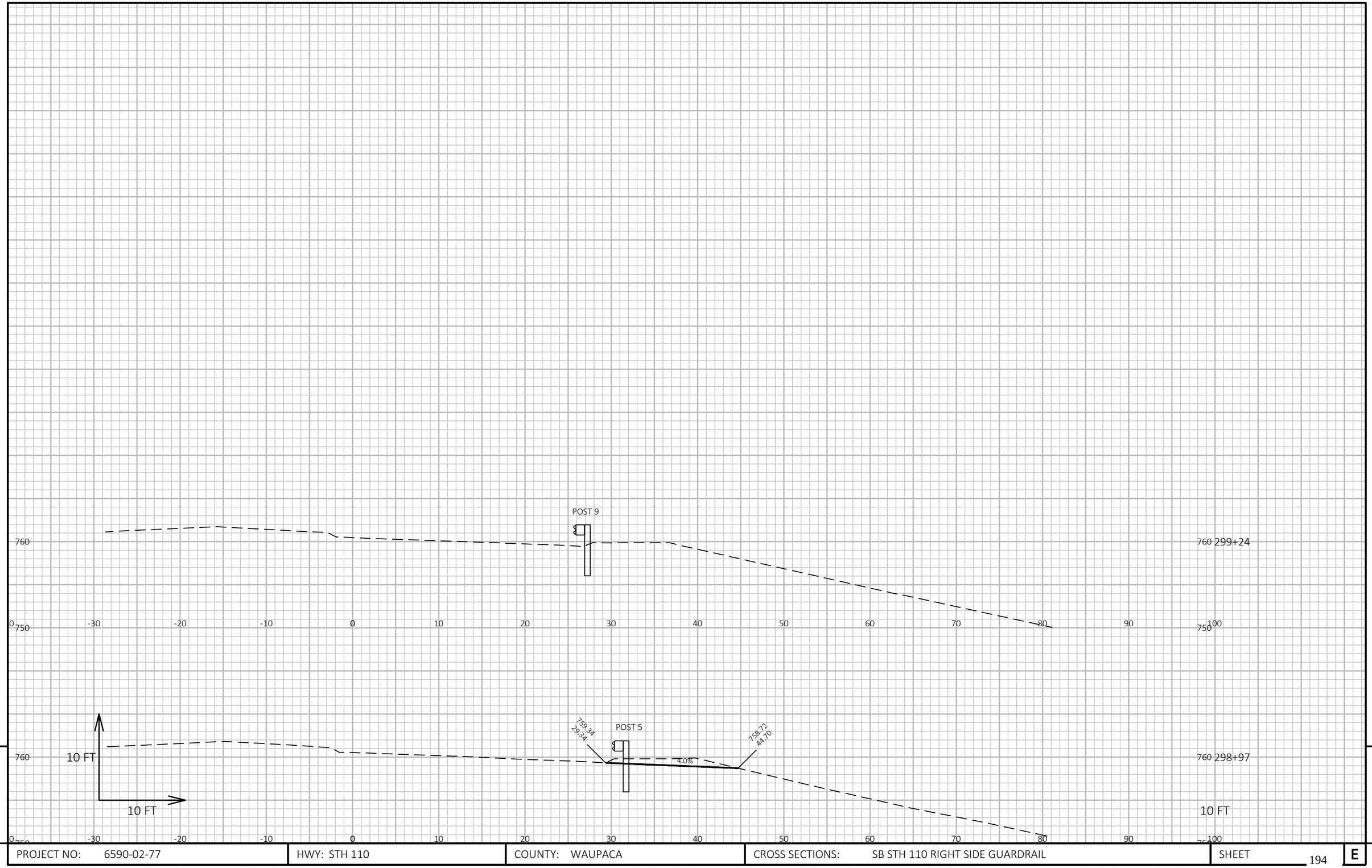
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: SB STH 110 RIGHT SIDE GUARDRAIL	SHEET 193	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: SB STH 110 RIGHT SIDE GUARDRAIL	SHEET 194	E

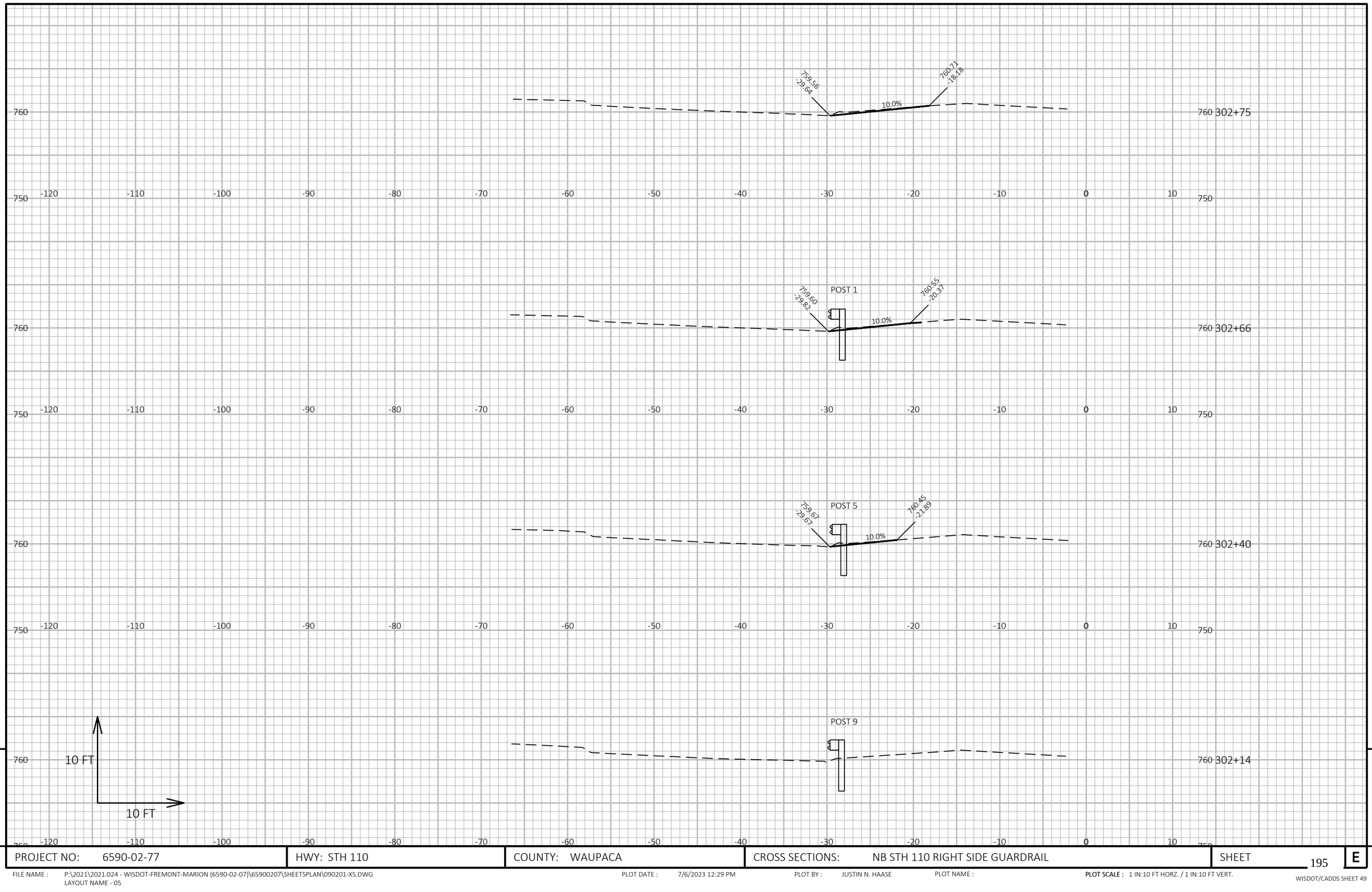
FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/6/2023 12:29 PM

PLOT BY : JUSTIN N. HAASE

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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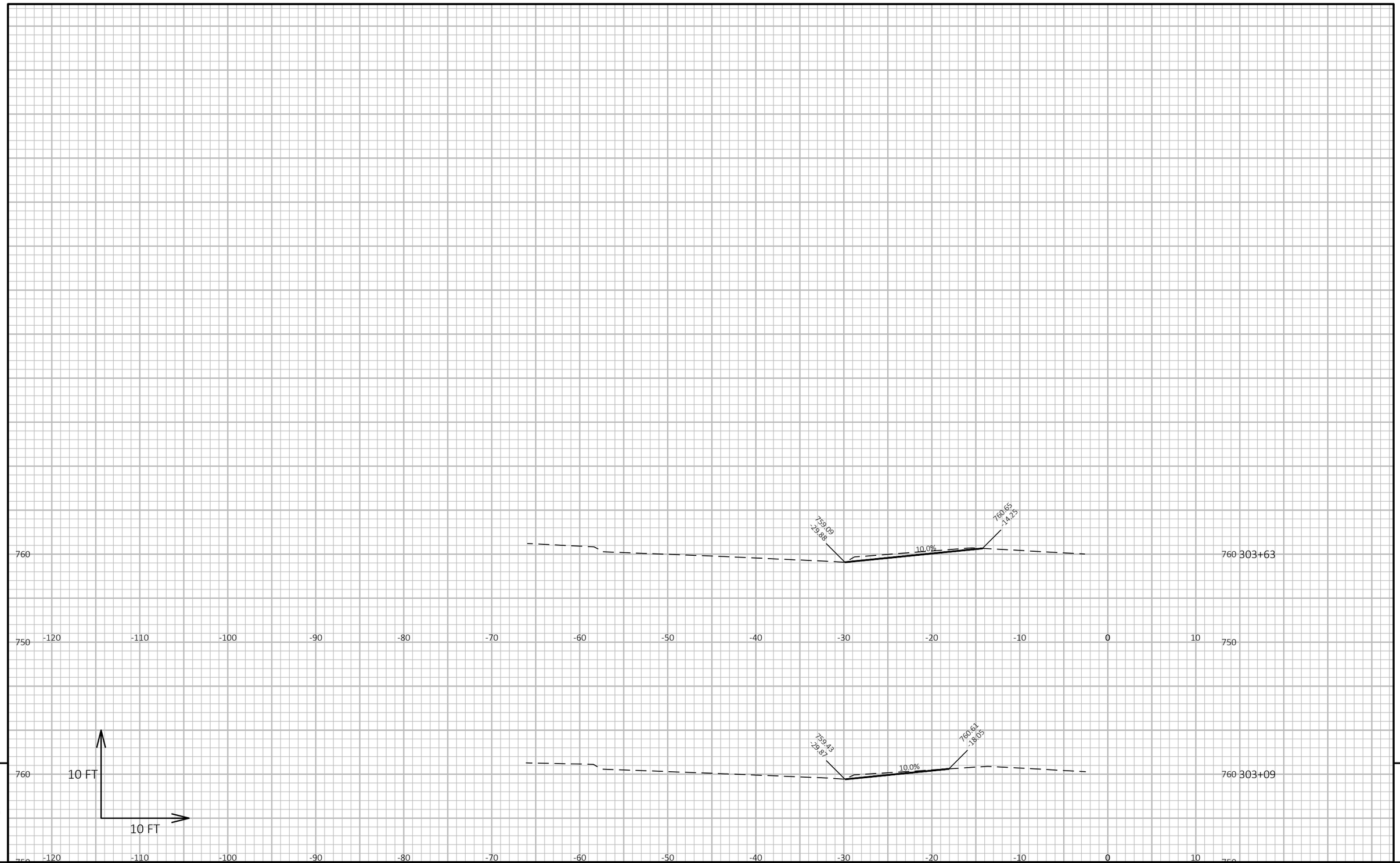
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: NB STH 110 RIGHT SIDE GUARDRAIL	SHEET 195	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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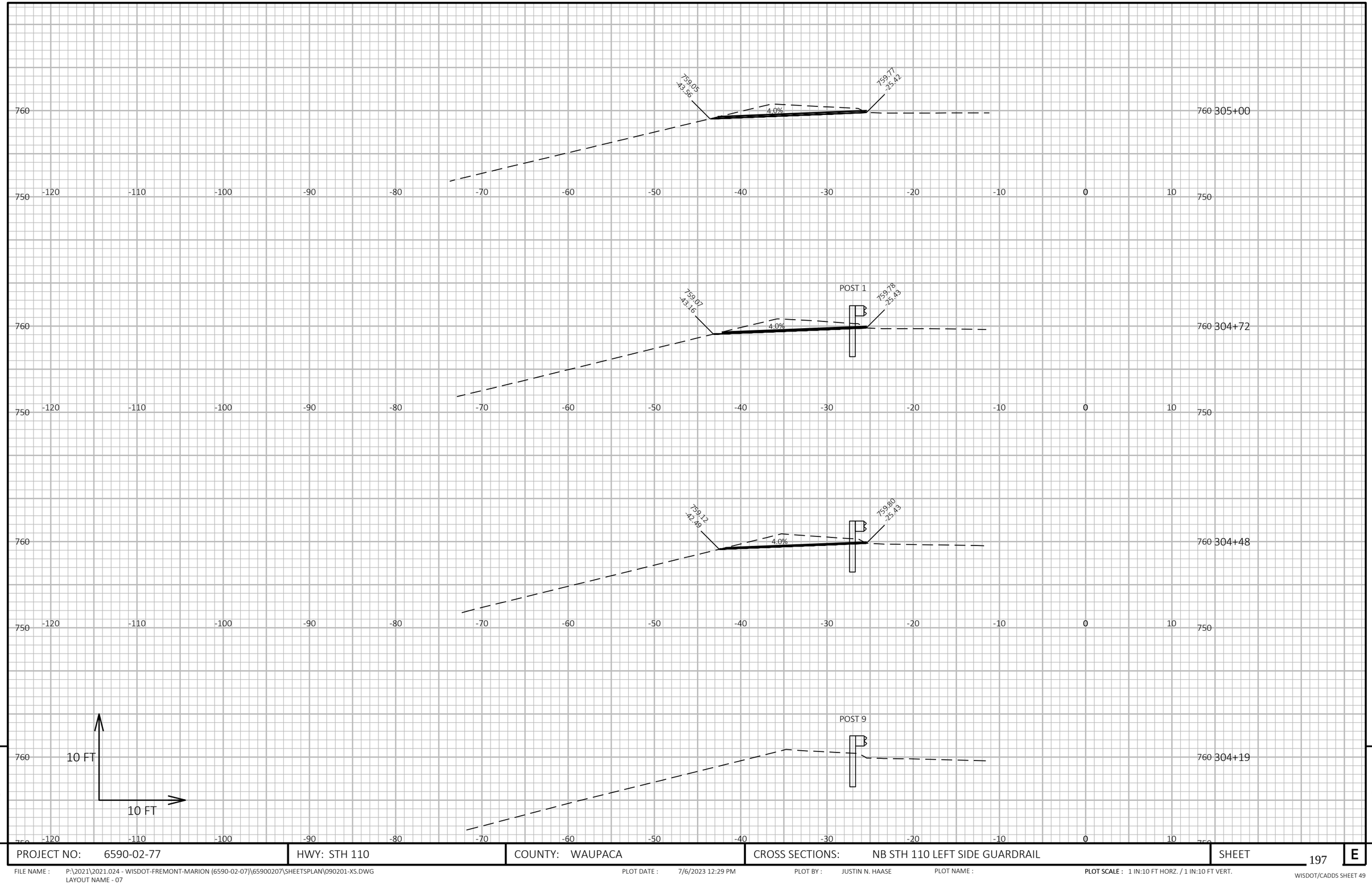
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: NB STH 110 RIGHT SIDE GUARDRAIL	SHEET 196	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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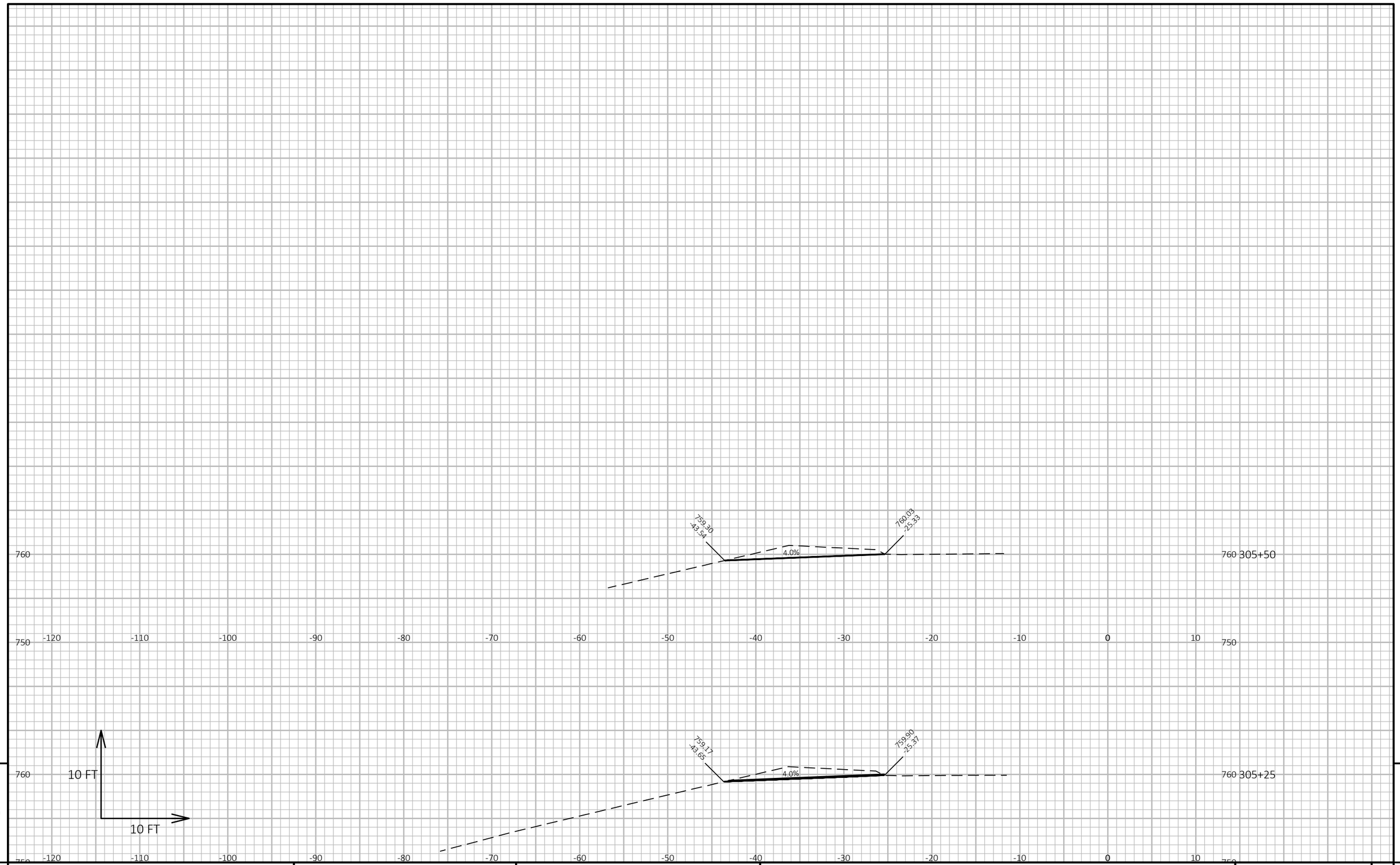
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: NB STH 110 LEFT SIDE GUARDRAIL	SHEET 197	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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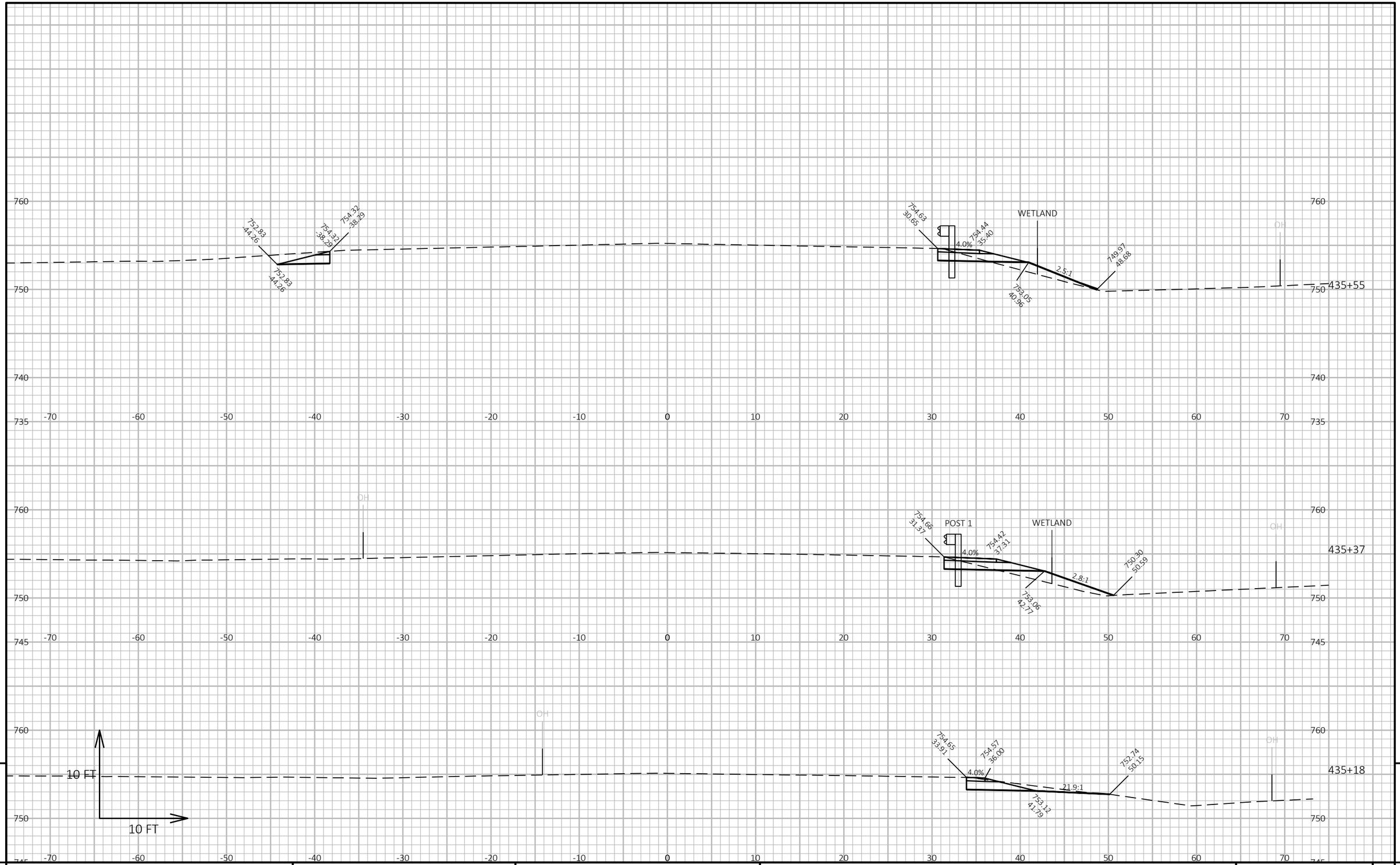
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: NB STH 110 LEFT SIDE GUARDRAIL	SHEET 198	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

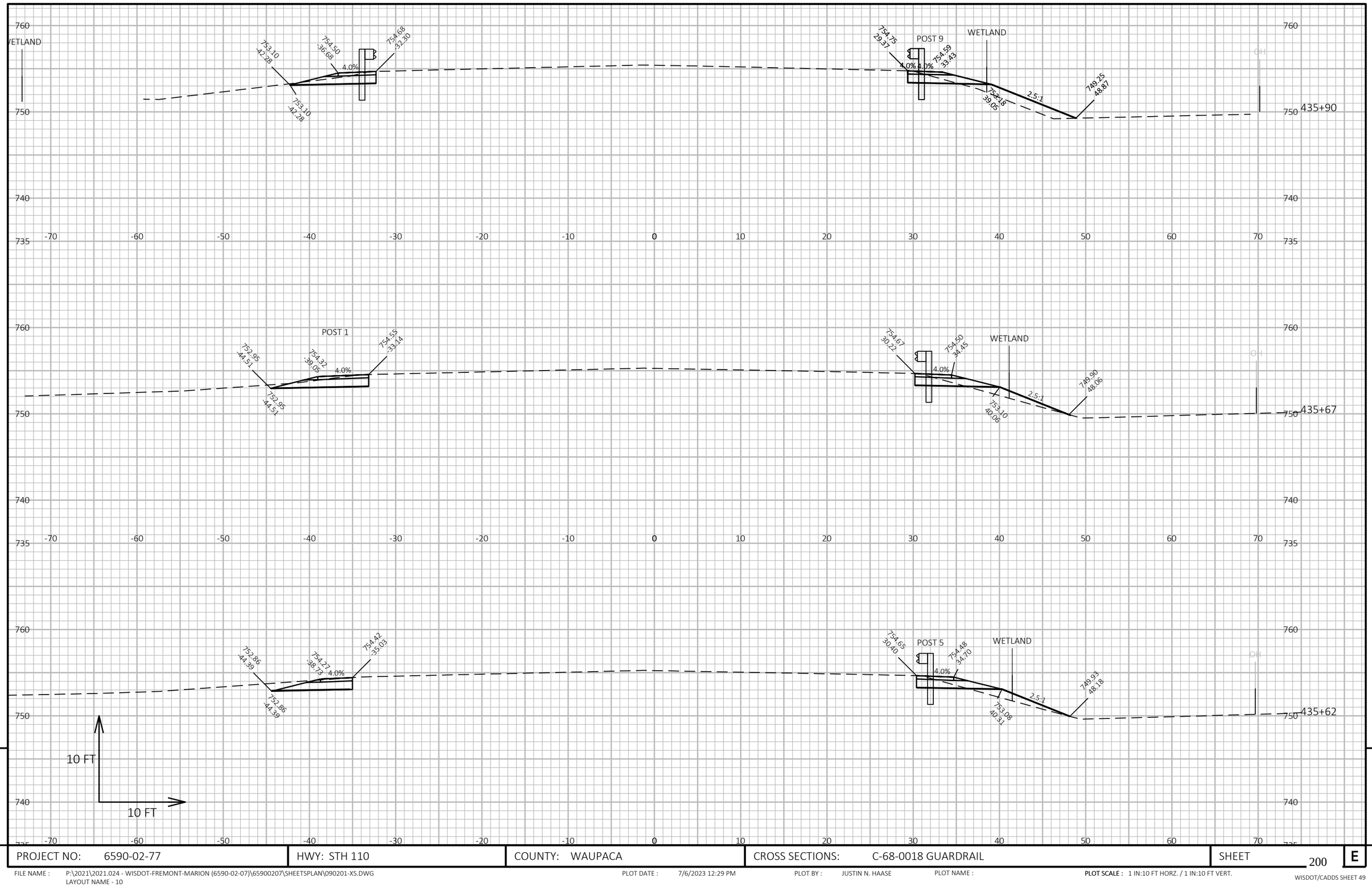


PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: C-68-0018 GUARDRAIL	SHEET 199	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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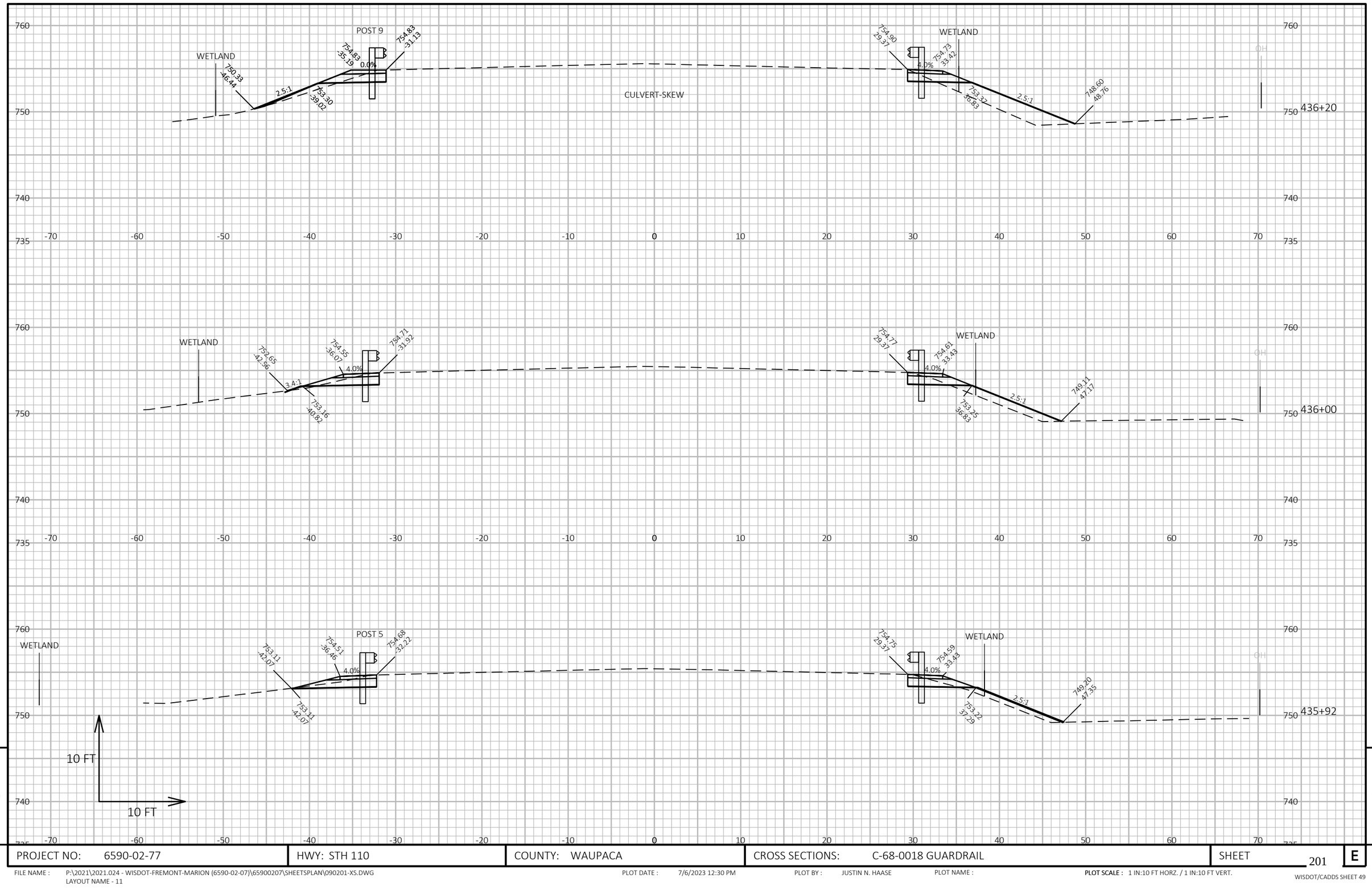
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: C-68-0018 GUARDRAIL	SHEET 200	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 7/6/2023 12:29 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



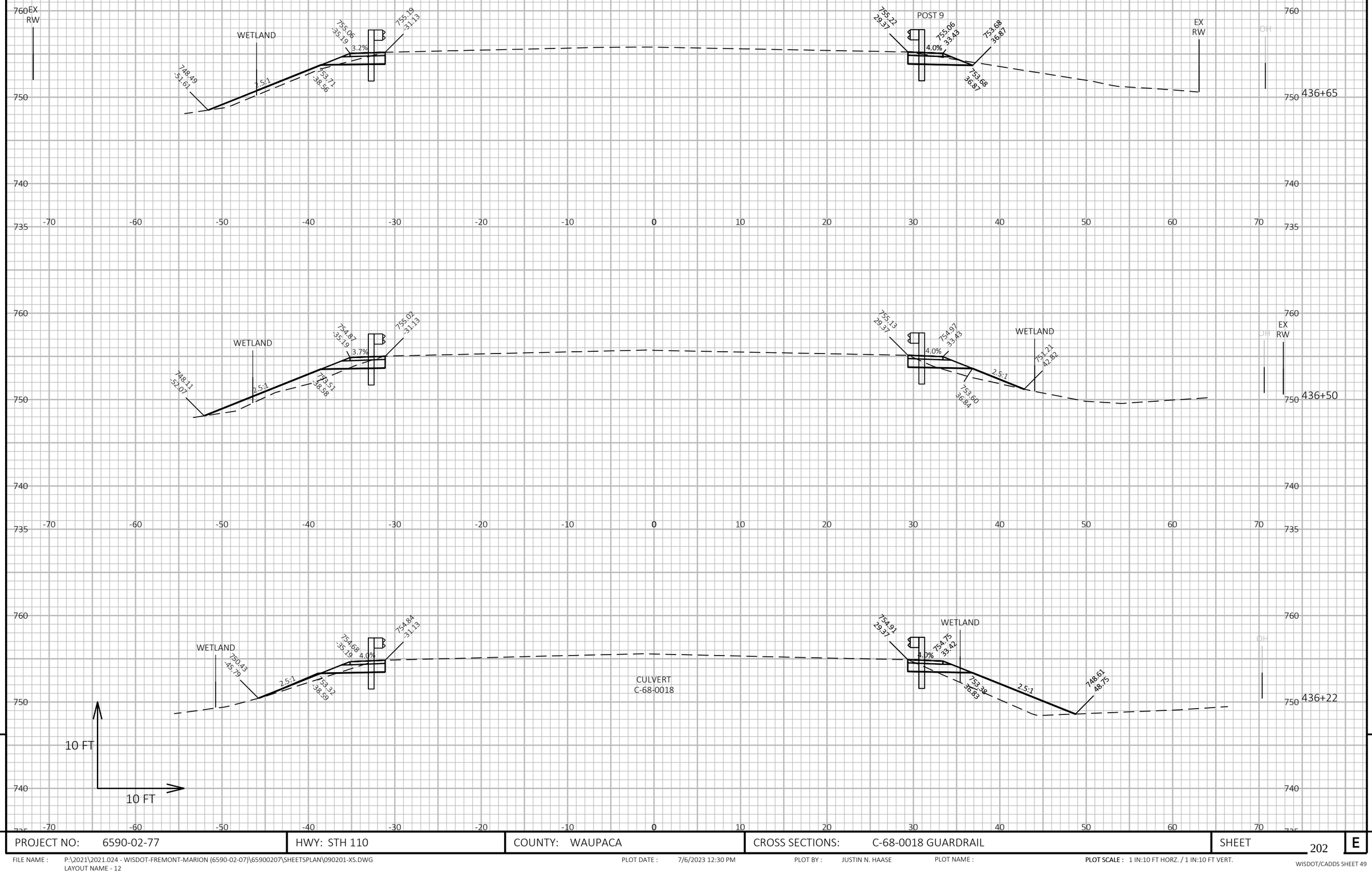
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: C-68-0018 GUARDRAIL	SHEET 201	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 7/6/2023 12:30 PM PLOT BY : JUSTIN N. HAASE PLOT NAME :

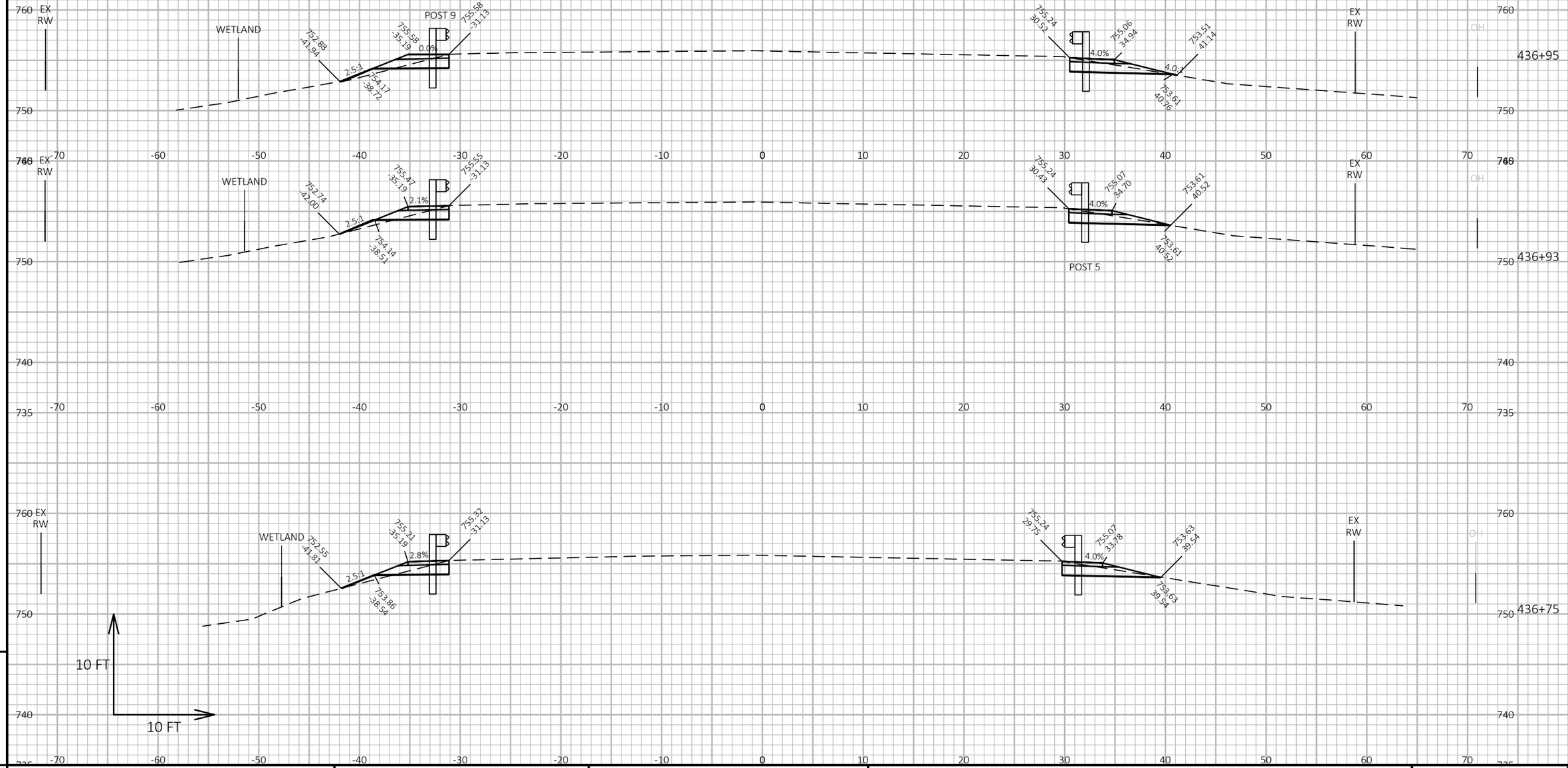
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: C-68-0018 GUARDRAIL	SHEET 202 E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12
PLOT DATE : 7/6/2023 12:30 PM
PLOT BY : JUSTIN N. HAASE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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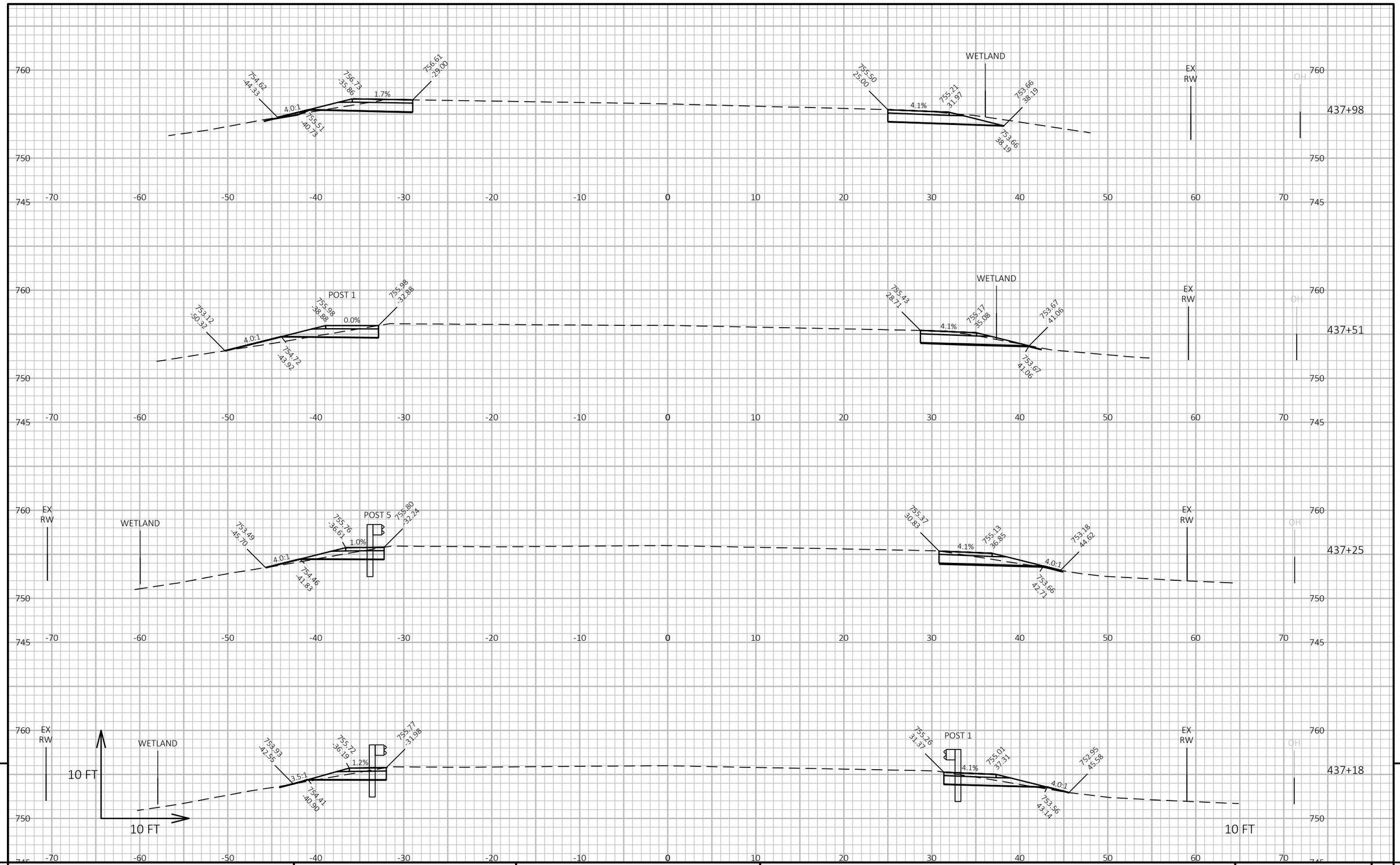
PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: C-68-0018 GUARDRAIL	SHEET 203	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/6/2023 12:30 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

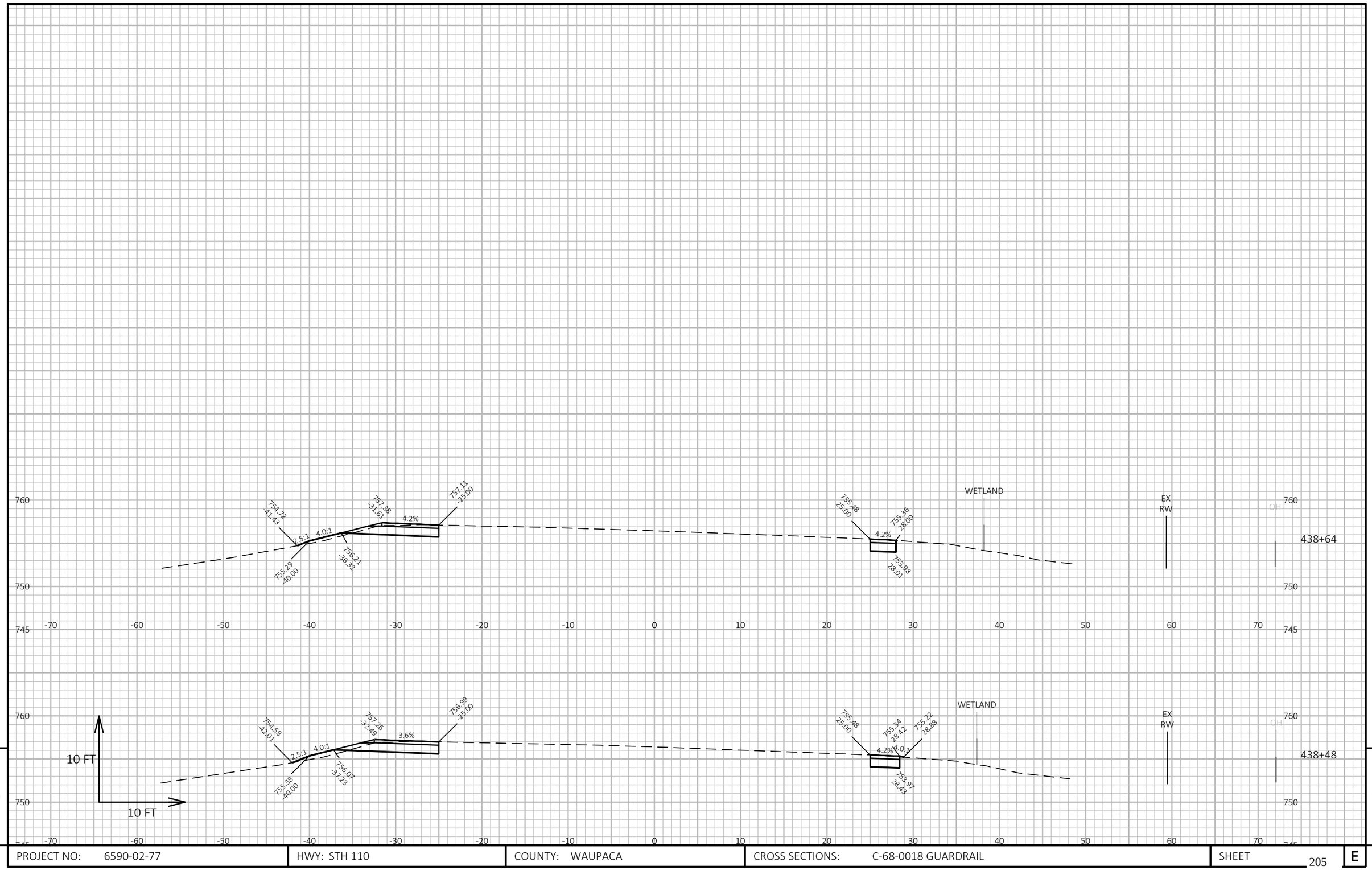


PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: C-68-0018 GUARDRAIL	SHEET 204	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 7/6/2023 12:30 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 6590-02-77	HWY: STH 110	COUNTY: WAUPACA	CROSS SECTIONS: C-68-0018 GUARDRAIL	SHEET 205	E

FILE NAME : P:\2021\2021.024 - WISDOT-FREMONT-MARION (6590-02-07)\65900207\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 7/6/2023 12:30 PM PLOT BY : JUSTIN N. HAASE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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