WIS

PROJECT ID: 1600-15-70

WITH: N/A

COUNTY: WAUPACA & SHAWANO

DECEMBER 2025

ORDER OF SHEETS

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

TOTAL SHEETS = 436

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CLINTONVILLE - WITTENBERG

CTH C TO GOLLNOW ROAD

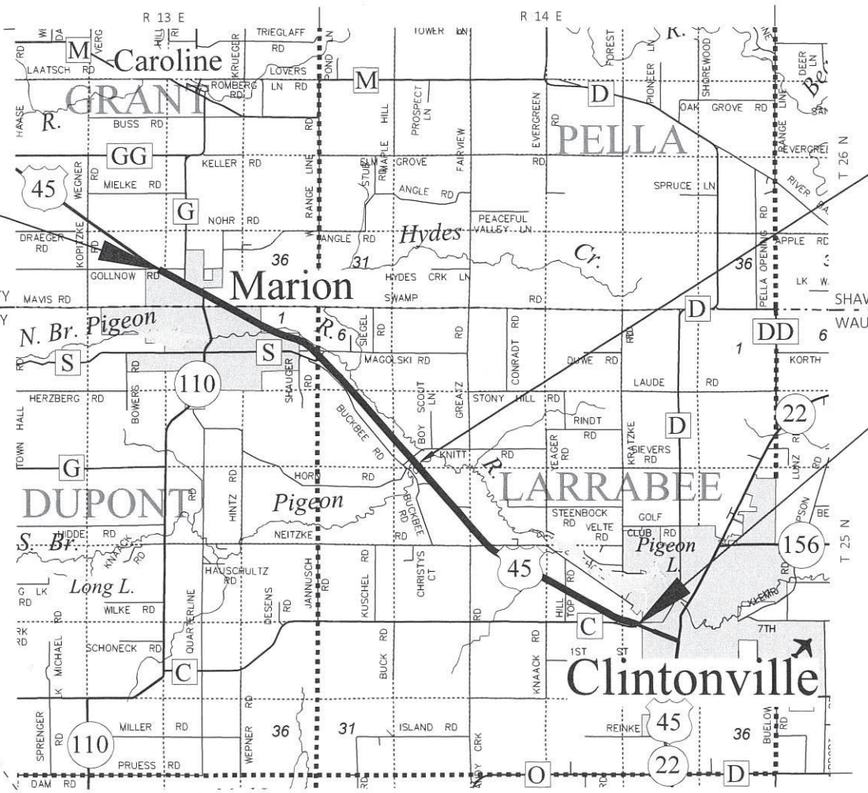
USH 45

WAUPACA & SHAWANO COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1600-15-70	WISC 2026118	1

STATE PROJECT NUMBER

1600-15-70



END PROJECT
STA 565+00.00

STA 335+71 TO STA 336+27
STRUCTURE B-68-51

BEGIN PROJECT
STA 148+80.00
X=618040.381
Y=437090.334

DESIGN DESIGNATION

A.A.D.T.	2028	=	5,900
A.A.D.T.	2048	=	6,500
D.H.V.		=	1,100
D.D.		=	50/50
T.		=	12.7%
DESIGN SPEED		=	60 MPH
ESALS		=	1,900,000

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300' EB'	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
WOODED OR SHRUB AREA		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 7.883 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 2018-WI.

ORIGINAL PLANS PREPARED BY

AYRES

WISCONSIN PROFESSIONAL ENGINEER
JOHN A. BANECK
E-37477
MADISON, WI

8/20/2025 (Date) John A. Baneck (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NC REGION & AYRES ASSOCIATES
Designer	AYRES ASSOCIATES
Project Manager	PRESTON BOHN
Regional Examiner	FRED SCHUNKE
Regional Supervisor	KEVIN KUJAWA

APPROVED FOR THE DEPARTMENT

DATE: 8/22/2025 Preston Bohn Digitally signed by Preston Bohn Date: 2025.08.22 15:40:51 -05'00' (Signature)

E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_010101_TI.DWG PLOT DATE : 8/20/2025 2:45 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME :

GENERAL NOTES

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

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

GRADING IS NOT ALLOWED IN WETLAND AREAS. DO NOT STORE EQUIPMENT OR MATERIAL IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES & CONTACTS
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
GRUBBING PLAN
PLAN DETAILS
PLAN GRADES
EROSION CONTROL
SIGNING AND PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
ALIGNMENT DIAGRAM

UTILITY CONTACTS

SETH SCHOUNARD
ALLIANT ENERGY - ELECTRICITY
708 NORTHEAST 7TH STREET
MARION, WI 54950
(715) 754-4331
SETHSCHOUNARD@ALLIANTENERGY.COM

SETH SCHOUNARD
ALLIANT ENERGY - GAS/PETROLEUM
708 NORTHEAST 7TH STREET
MARION, WI 54950
(715) 754-4331
SETHSCHOUNARD@ALLIANTENERGY.COM

GARRET PICK
ATC MANAGEMENT - ELECTRIC TRANSMISSION
801 O'KEEFE ROAD
DE PERE, WI 54115
(262) 352-2819
GPICK@ATCLLC.COM

RYAN BIRDSALL
CENTURYLINK COMMUNICATIONS, LLC - COMMUNICATION LINE
3235 INTERTECH DRIVE, SUITE 600
BROOKFIELD, WI 53045
(608) 444-2493
RYAN.BIRDSALL@LUMEN.COM

BILL PARMENTER
SPECTRUM COMMUNICATIONS - COMMUNICATION LINE
853 MCINTOSH STREET
WAUSAU, WI 54403
(608) 301-6189
BILL.PARMENTER@CHARTER.COM

CHRISTOPHER POLLACK
FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
521 NORTH 4TH STREET
WAUSAU, WI 54403
(715) 847-1240
CHRISTOPHER.POLLACK@FTR.COM

JOHN BORK
MARION UTILITIES - WATER
217 NORTH MAIN STREET
MARION, WI 54950
(715) 754-2124
JBORK@CITYOFMARIONWI.GOV

JOHN BORK
MARION UTILITIES - SEWER
217 NORTH MAIN STREET
MARION, WI 54950
(715) 754-2124
JBORK@CITYOFMARIONWI.GOV

HEATH MARTINSON
WE ENERGIES - GAS/PETROLEUM
800 SOUTH LYNNDALE DRIVE
APPLETON, WI 54914
(920) 380-3341 (WORK)
(920) 984-0274 (MOBILE)
HEATH.MARTINSON@WE-ENERGIES.COM

ERIC BECKER
WIN TECHNOLOGY - COMMUNICATION LINE
4955 BULLIS FARM ROAD
EAU CLAIRE, WI 54701
(715) 797-2724 (MOBILE)
ERIC.BECKER@WINTECHNOLOGY.COM

MARCUS DAVIDSON
WITTENBERG TELEPHONE COMPANY - COMMUNICATION LINE
104 WEST WALKER STREET
WITTENBERG, WI 54499
(715) 253-2111 (WORK)
(715) 881-1360 (MOBILE)
MARCUS@CIRRINITY.NET

OTHER CONTACTS

MARTY DILLENBURG (PRIMARY CONTACT)
WISCONSIN DNR LIAISON - WAUPACA COUNTY
OSHKOSH SERVICE CENTER
625 EAST COUNTY ROAD Y, SUITE 70
OSHKOSH, WI 54901-9731
(920) 410-7428
MARTY.DILLENBURG@WISCONSIN.GOV

JIM DOPERALSKI (SECONDARY CONTACT)
WISCONSIN DNR LIAISON - SHAWANO COUNTY
DNR NORTHEAST REGION HEADQUARTERS
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
(920) 412-0165
JAMES.DOPERALSKI@WISCONSIN.GOV

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 = 184.76 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 4.13 ACRES

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

2

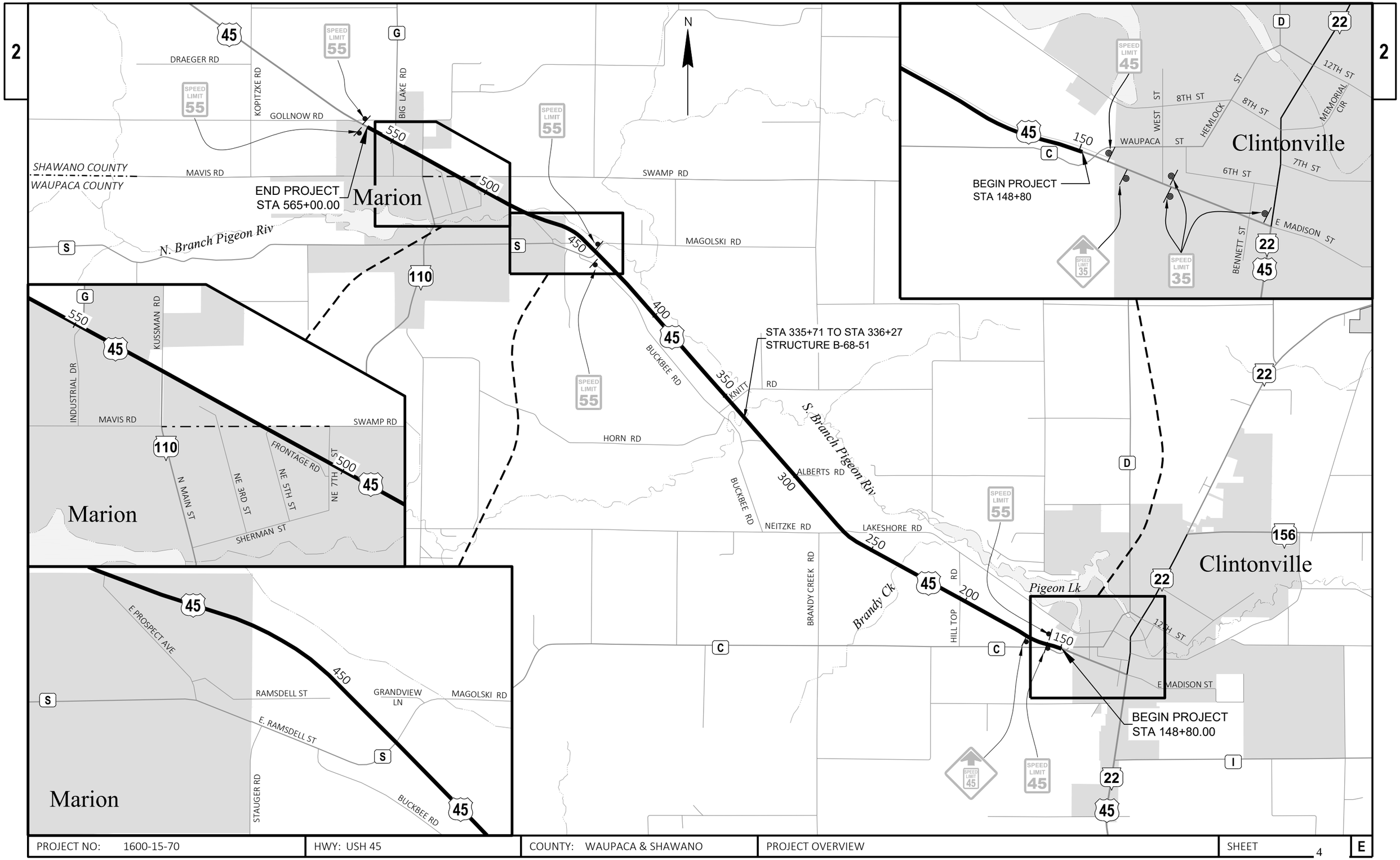
Pavement Core Locations and Results

Core	Northing	Easting	Latitude	Longitude	Station	Offset	HMA Thickness (in)	Material Below / note
C-01	437257.1	617597.3	44.619700	-88.775970	153+52.49	19' Rt	10.25	base
C-02	437480.9	616711.9	44.620315	-88.779370	162+62.32	36' Lt	4	base
C-03	438040.2	615852.3	44.621850	-88.782670	172+83.52	21.5' Rt	5	base
C-04	438455.8	614975.7	44.622991	-88.786036	182+51.68	36' Lt	6.5	base / crack at 3.75"
C-05	439027.5	614042.3	44.624560	-88.789620	193+44.88	19' Rt	4.625	base
C-06	439317.5	613397.8	44.625356	-88.792095	200+49.53	35.5' Lt	6.5	base
C-07	439975.0	612310.6	44.627160	-88.796270	213+18.84	21' Rt	4.5	base
C-08	440368.5	611474.2	44.628240	-88.799482	222+41.53	34.5' Lt	5.25	base
C-09	440929.8	610558.2	44.629780	-88.803000	233+14.48	19.5' Rt	6.125	base
C-10	441323.1	609723.1	44.630859	-88.806207	242+35.92	35.5' Lt	5.875	base
C-11	441888.5	608805.9	44.632410	-88.809730	253+11.89	21.5' Rt	4	base
C-12	442351.5	607957.9	44.633680	-88.812987	262+74.69	36' Lt	5.5	base
C-13	443237.4	607215.2	44.636110	-88.815840	274+26.70	21.5' Rt	6	base
C-14	443832.1	606620.1	44.637741	-88.818126	282+66.07	35.5' Lt	5.375	base
C-15	444615.6	606010.0	44.639890	-88.820470	292+57.53	20' Rt	5.5	base
C-16	445331.7	605308.2	44.641854	-88.823166	302+58.53	37.5' Lt	5.625	base
C-17	446114.2	604695.6	44.644000	-88.825520	312+50.82	18' Rt	5.125	base
C-18	446920.0	603914.3	44.646210	-88.828522	323+71.85	37.5' Lt	6.375	base
C-19	447612.8	603378.8	44.648110	-88.830580	332+45.76	17.5' Rt	5.625	base
C-20	448328.3	602676.4	44.650072	-88.833279	342+46.87	38' Lt	6.625	base
C-21	449111.6	602062.2	44.652220	-88.835640	352+40.71	18' Rt	5.875	base
C-22	449827.5	601359.4	44.654183	-88.838341	362+42.39	37.5' Lt	7	base
C-23	450610.4	600743.1	44.656330	-88.840710	372+37.31	16' Rt	6.625	base
C-24	451325.6	600041.8	44.658291	-88.843406	382+37.48	39' Lt	4.875	base
C-25	452113.0	599426.9	44.660450	-88.845770	392+34.86	19' Rt	6.375	base
C-26	452823.8	598725.6	44.662399	-88.848466	402+31.72	39' Lt	5.25	base
C-27	453535.4	598178.4	44.664350	-88.850570	411+27.47	20' Rt	6.375	base
C-28	454312.3	597397.4	44.666480	-88.853573	422+28.92	37.5' Lt	7	base
C-29	454983.4	596810.5	44.668320	-88.855830	431+18.97	16.5' Rt	5.625	base
C-30	455730.5	595996.0	44.670368	-88.858962	442+22.86	38' Lt	4.5	base
C-31	456457.2	595320.5	44.672360	-88.861560	452+13.25	18.5' Rt	5.75	base
C-32	456875.2	594392.2	44.673505	-88.865129	462+38.35	36' Lt	8.125	base
C-33	457227.6	593497.2	44.674470	-88.868570	471+98.87	20' Rt	7.375	base
C-34	457550.8	592573.1	44.675355	-88.872123	481+75.69	38' Lt	6.25	base
C-35	458071.0	591692.4	44.676780	-88.875510	491+96.11	18.5' Rt	7.5	base
C-36	458442.8	590900.3	44.677798	-88.878556	500+69.45	36' Lt	6.5	base / joint at 4.5"
C-37	459031.2	589939.8	44.679410	-88.882250	511+94.51	19' Rt	7.25	base
C-38	235025.6	788232.1	44.680424	-88.885297	520+65.65	45.5' Lt	6.5	base
C-39	235614.4	787278.7	44.682030	-88.888970	531+84.67	13' Rt	6.625	base
C-40	235984.7	786488.7	44.683038	-88.892012	540+55.45	41.5' Lt	5.875	base
C-41	236575.8	785531.5	44.684650	-88.895700	551+78.91	17.5' Rt	6.625	base
C-42	236958.9	784742.4	44.685693	-88.898739	560+55.65	21.5' Lt	6.25	base

1 Northings and eastings given in WCCS (Waupaca C-01 through C-37, Shawano C-38 through C-42, U.S. Survey Feet)

2 Cores obtained on October 26 and 27, 2020

3 "Material Below" column: All materials recovered in cores are listed here. The entire thickness of the lowest material was likely not recovered in each core. Where no thickness is given for the lowest material, that material type was observed in the bottom of the core hole or at the bottom of the recovered core.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_020201_PO.DWG
LAYOUT NAME - 01

PLOT DATE : 4/30/2025 11:46 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:4000 FT

WISDOT/CADDS SHEET 42

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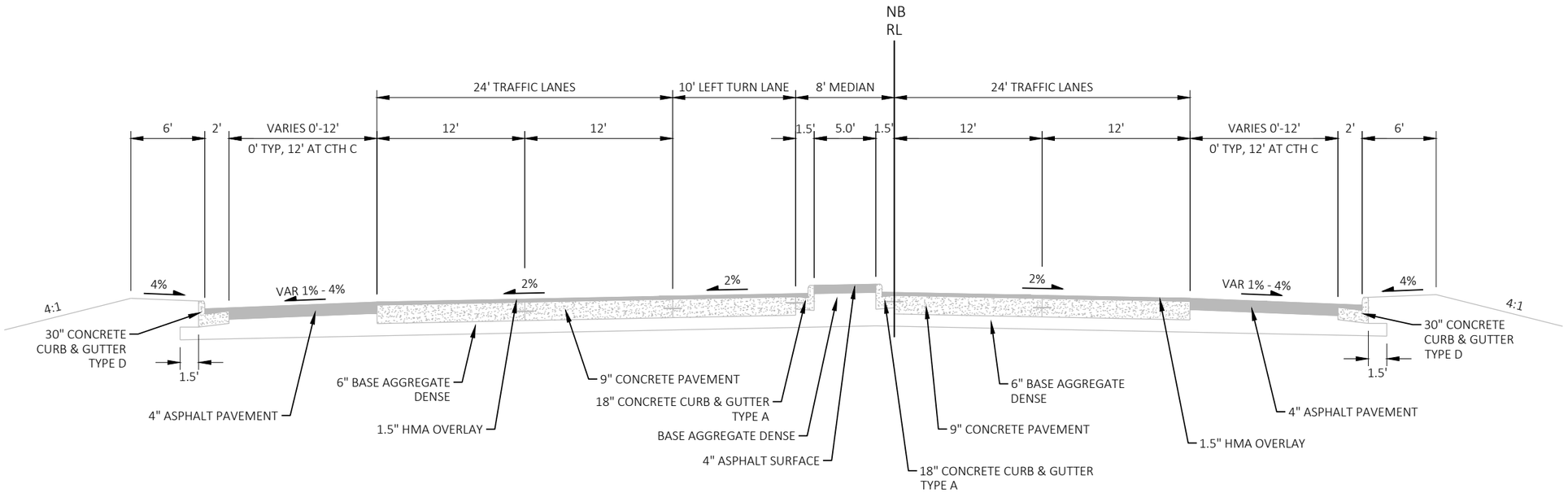


EXISTING TYPICAL SECTION - USH 45

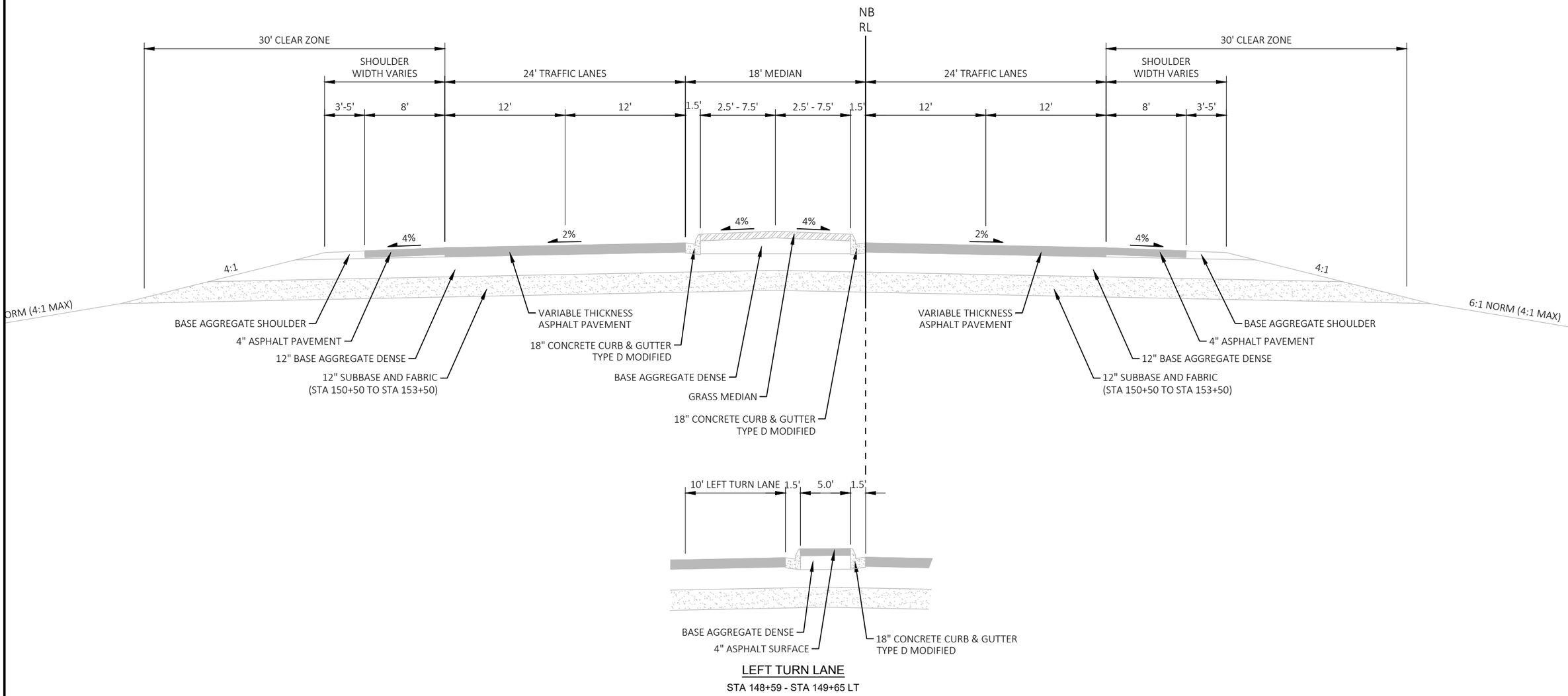
STA 147+63 - STA 148+80 RT
STA 147+63 - STA 148+59 LT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_020301_TS.DWG
LAYOUT NAME - E-01

PLOT DATE : 8/26/2025 1:11 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



LEFT TURN LANE

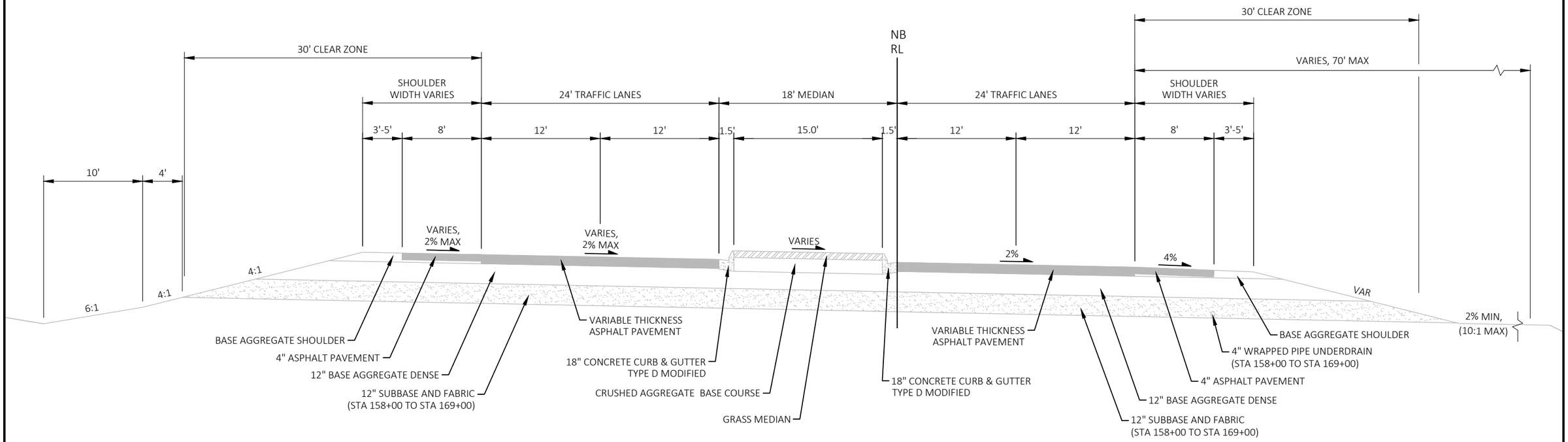
STA 148+59 - STA 149+65 LT

EXISTING TYPICAL SECTION - USH 45

STA 148+80 - STA 155+00 RT
STA 149+65 - STA 155+00 LT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 6	E

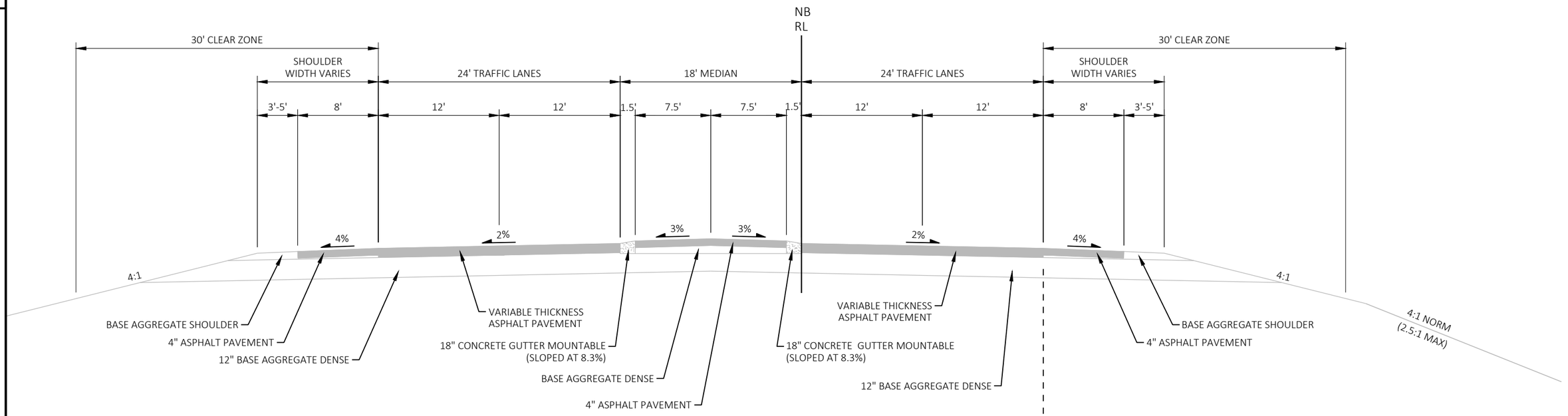
2



EXISTING TYPICAL SUPERELEVATED SECTION - USH 45

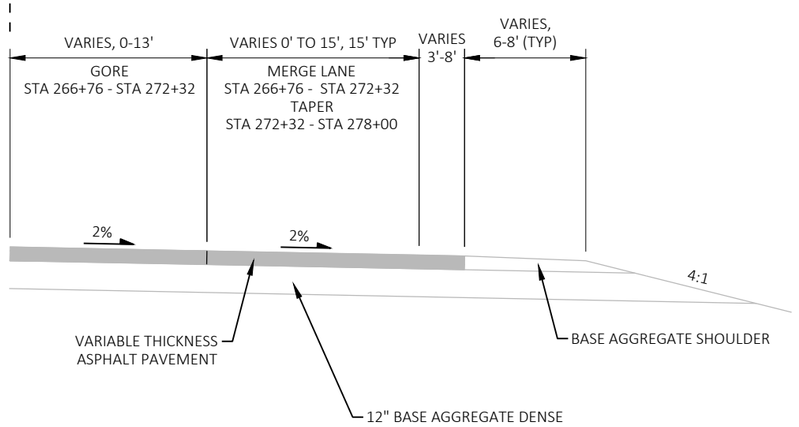
STA 155+00 - STA 169+03

2



EXISTING TYPICAL SECTION - USH 45

STA 169+03 - STA 254+16
STA 270+00 - STA 445+80
STA 464+69 - STA 558+85

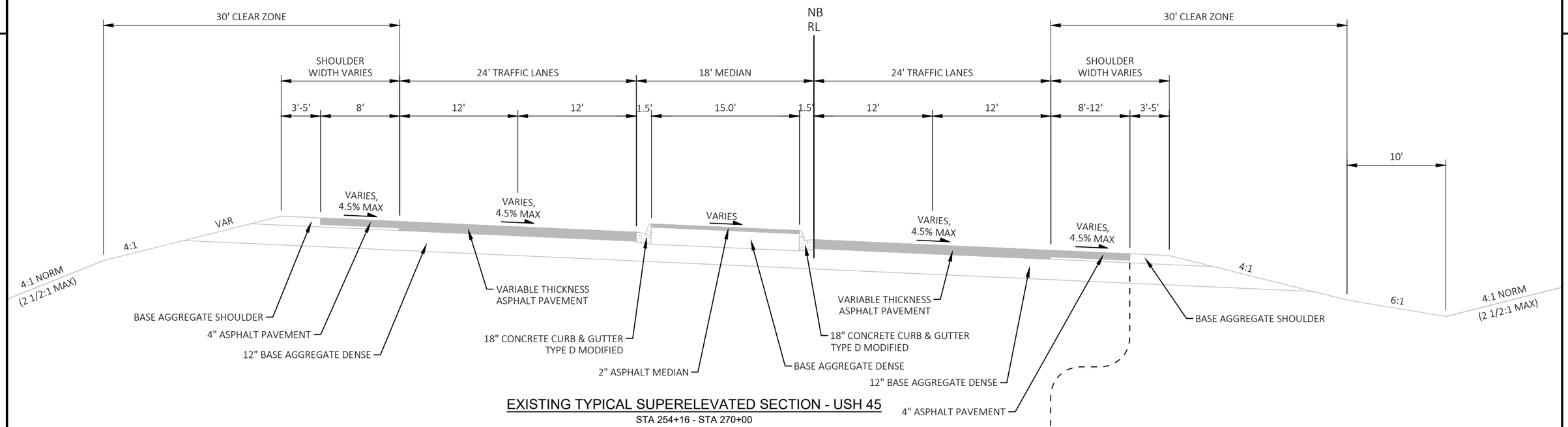


EXISTING TYPICAL 1/2 SECTION - USH 45 - MERGE LANE

STA 266+76 - STA 278+00 RT

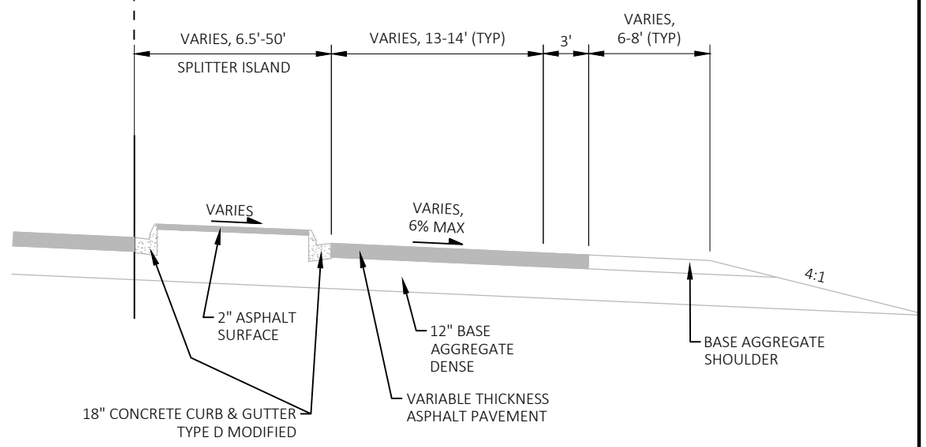
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 8	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_020301_TS.DWG
LAYOUT NAME - E-04
PLOT DATE : 8/26/2025 1:11 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SUPERELEVATED SECTION - USH 45

STA 254+16 - STA 270+00

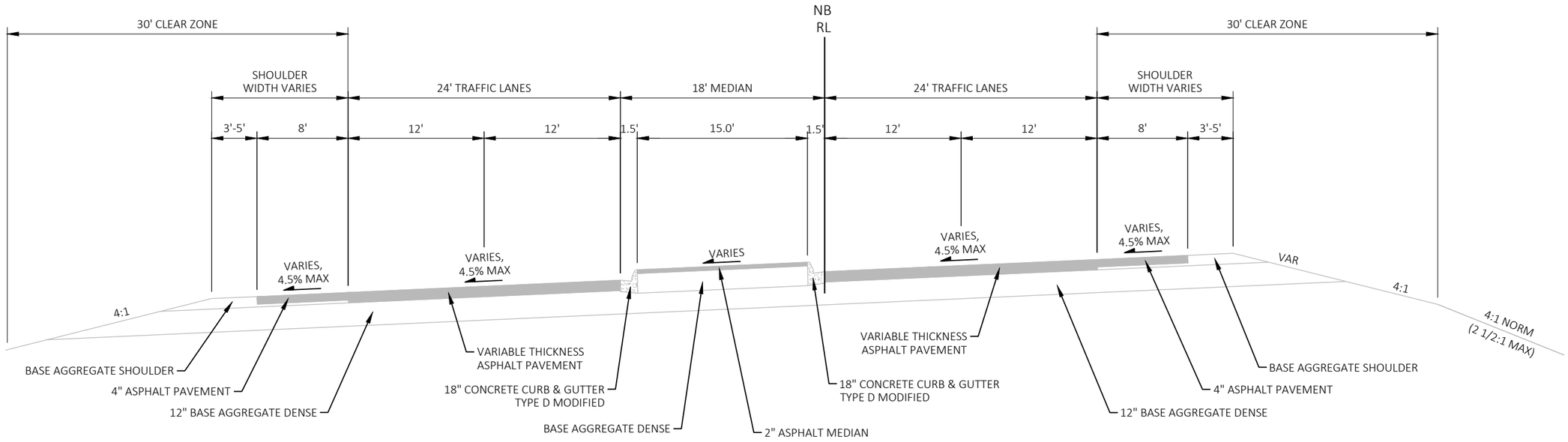


EXISTING TYPICAL 1/2 SECTION - USH 45 - MERGE LANE

STA 265+32 - STA 269+76 RT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 9	E

2

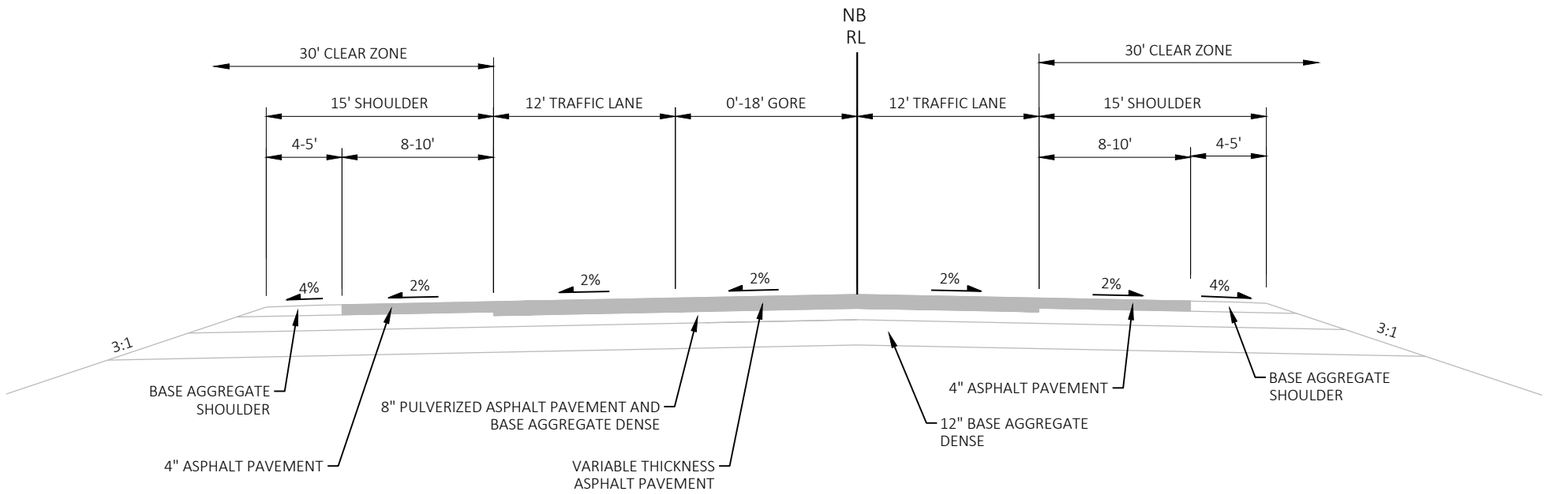


EXISTING TYPICAL SUPERELEVATED SECTION - USH 45

STA 445+80 - STA 464+69

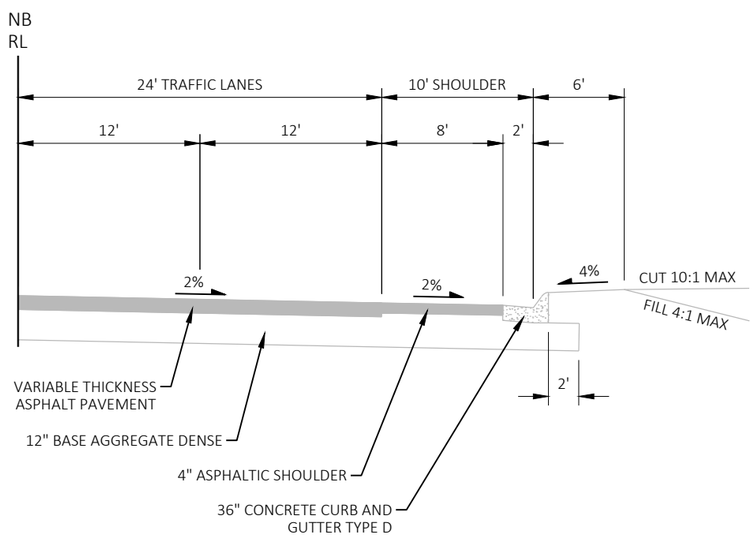
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 10	E

2



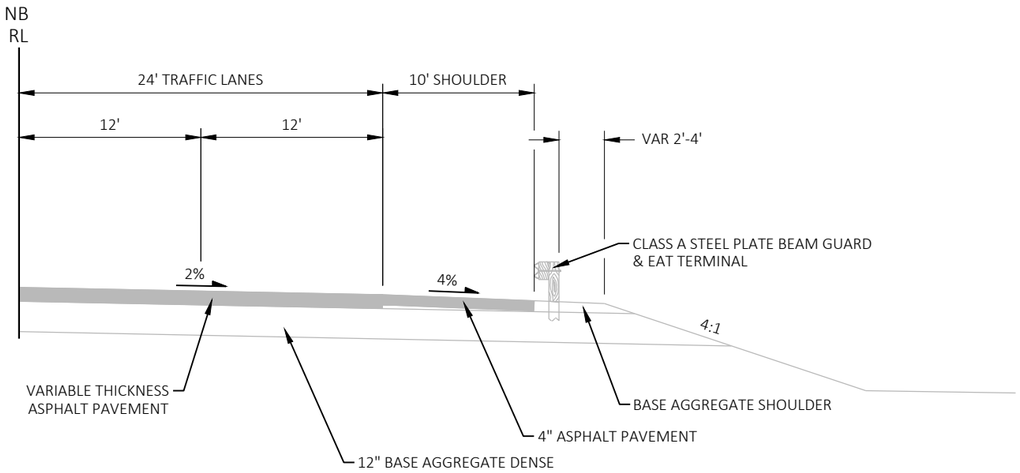
EXISTING TYPICAL SECTION - USH 45

STA 558+85 - STA 565+00



EXISTING TYPICAL 1/2 SECTION - USH 45 - CURB AND GUTTER

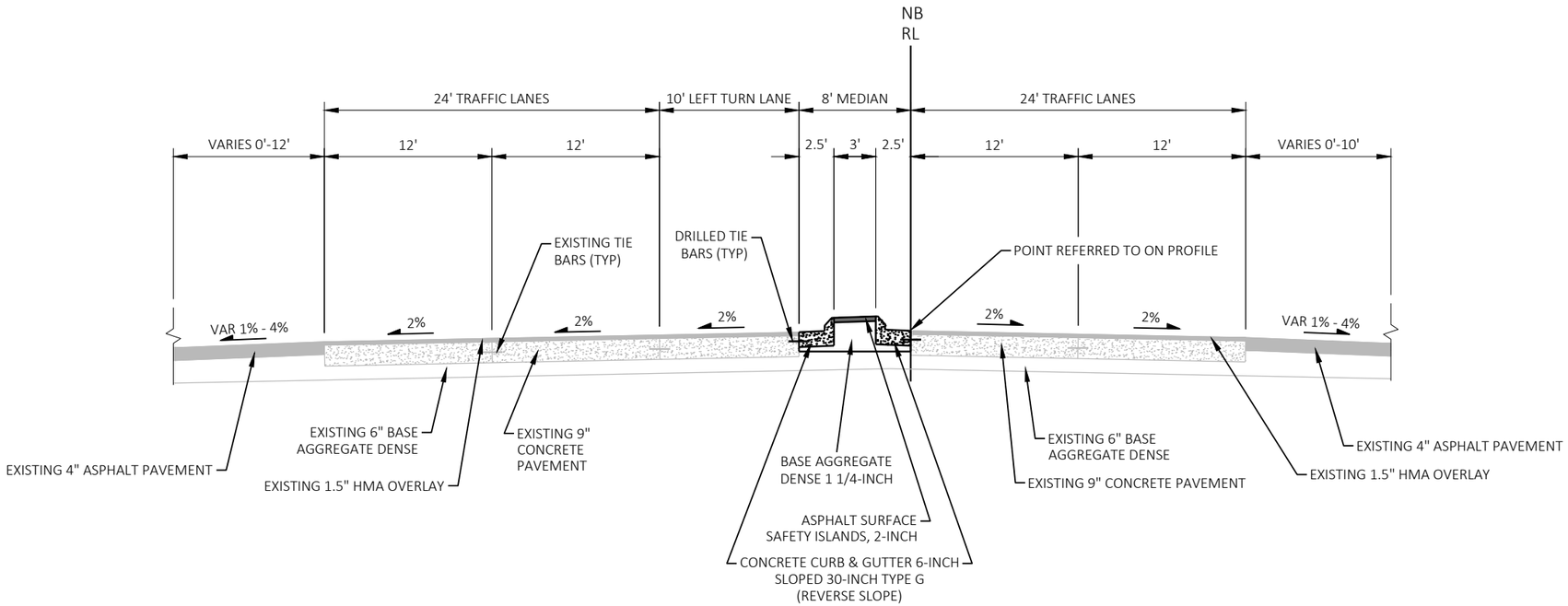
STA 418+80 - STA 422+32 RT
STA 534+68 - STA 538+82 RT



EXISTING TYPICAL 1/2 SECTION - USH 45 - GUARDRAIL

STA 334+71 - STA 335+56 LT (FACING SOUTH)
STA 334+83 - STA 335+69 RT
STA 336+27 - STA 337+12 LT (FACING SOUTH)
STA 336+39 - STA 337+25 RT
STA 376+52 - STA 378+06 LT (FACING SOUTH)
STA 479+05 - STA 480+58 RT
STA 480+62 - STA 482+66 LT (FACING SOUTH)
STA 523+93 - STA 525+48 RT
STA 525+53 - STA 527+33 LT (FACING SOUTH)
STA 543+65 - STA 545+44 LT (FACING SOUTH)
STA 544+18 - STA 545+72 RT

2



FINISHED TYPICAL SECTION - USH 45

STA 147+63 - STA 148+80 RT

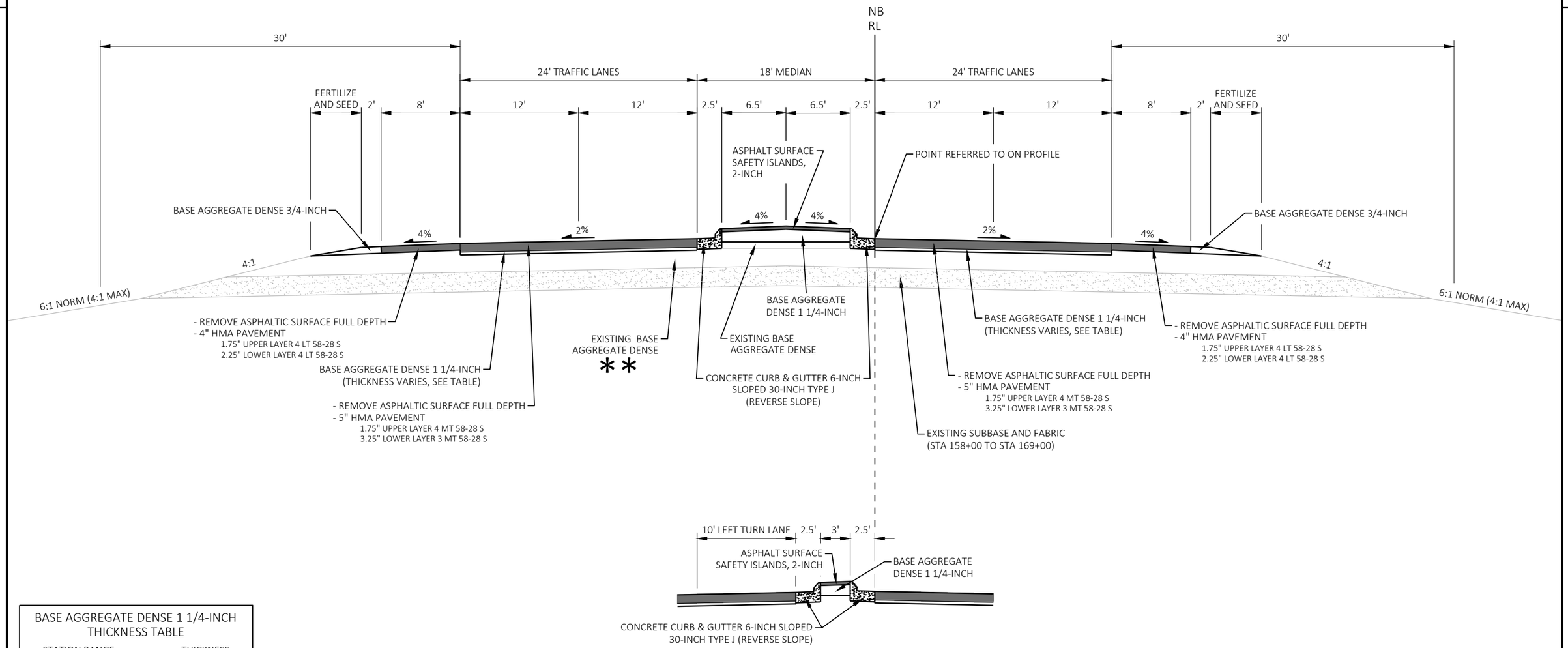
STA 147+63 - STA 148+59 LT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 12	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_020301_TS.DWG
LAYOUT NAME - F-01

PLOT DATE : 8/26/2025 1:12 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



LEFT TURN LANE

STA 148+59 - STA 149+65 LT

FINISHED TYPICAL SECTION - USH 45

STA 148+80 - STA 155+00 RT

STA 149+65 - STA 155+00 LT

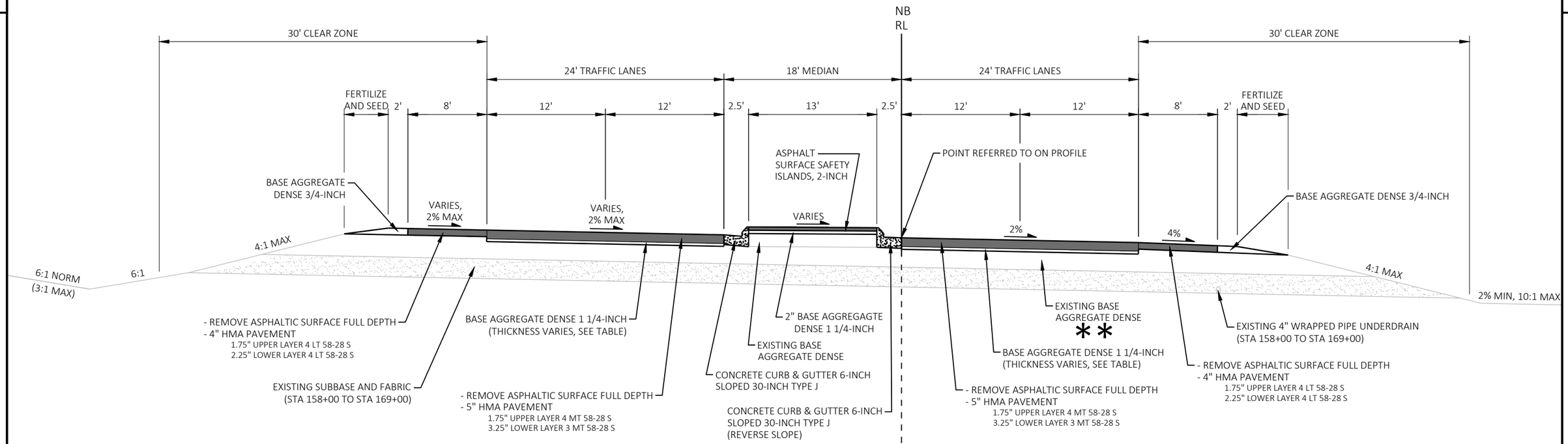
BASE AGGREGATE DENSE 1 1/4-INCH THICKNESS TABLE

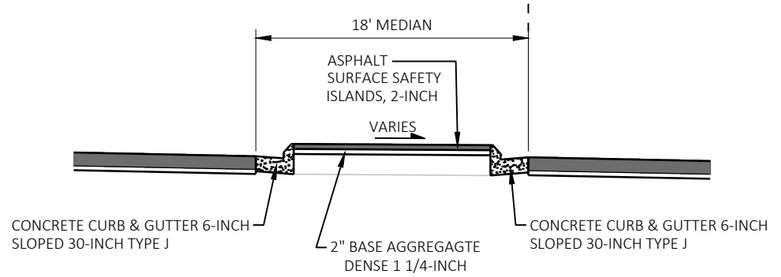
STATION RANGE	THICKNESS
148+80 - 186+00	1.50"
186+00 - 231+00	0.50"
231+00 - 276+00	0.50"
276+00 - 321+00	0.50"
321+00 - 351+50	1.25"
351+50 - 396+00	1.25"
396+00 - 441+00	1.25"
441+00 - 486+00	1.50"
486+00 - 531+00	2.00"
531+00 - 565+00	1.50"

NOTE: THIS TABLE REPRESENTS APPROXIMATE STATIONS AND AVERAGE THICKNESS REQUIRED. IT IS BASED ON DATA FROM CORES OF EXISTING ROAD.

** PREPARE FOUNDATION FOR BASE AGGREGATE
- SCARIFY EXISTING BASE AGGREGATE 2.5" DEEP

2





NORMAL SLOPE GUTTER
STA 157+50 - STA 163+50 RT

FINISHED TYPICAL SUPERELEVATED SECTION - USH 45
STA 155+00 - STA 169+03

** PREPARE FOUNDATION FOR BASE AGGREGATE
- SCARIFY EXISTING BASE AGGREGATE 2.5" DEEP

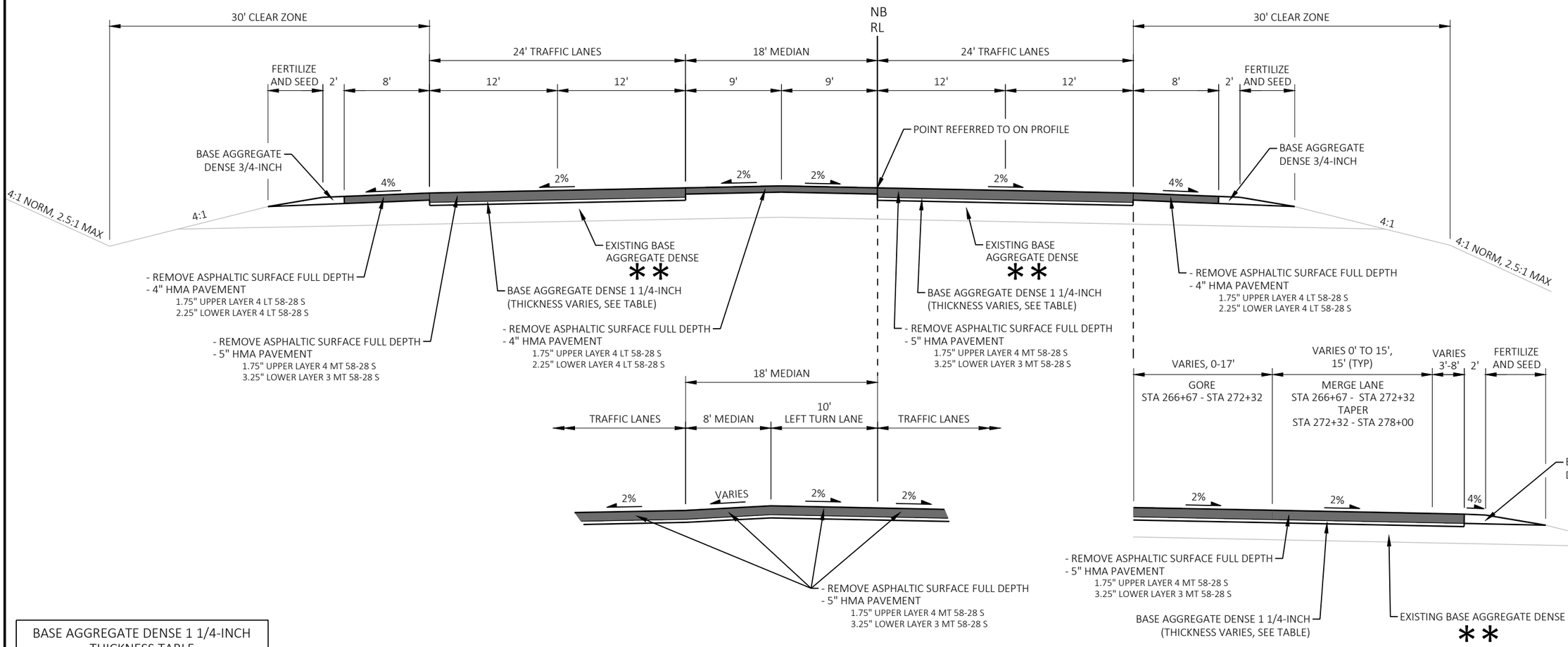
BASE AGGREGATE DENSE 1 1/4-INCH
THICKNESS TABLE

STATION RANGE	THICKNESS
148+80 - 186+00	1.50"
186+00 - 231+00	0.50"
231+00 - 276+00	0.50"
276+00 - 321+00	0.50"
321+00 - 351+50	1.25"
351+50 - 396+00	1.25"
396+00 - 441+00	1.25"
441+00 - 486+00	1.50"
486+00 - 531+00	2.00"
531+00 - 565+00	1.50"

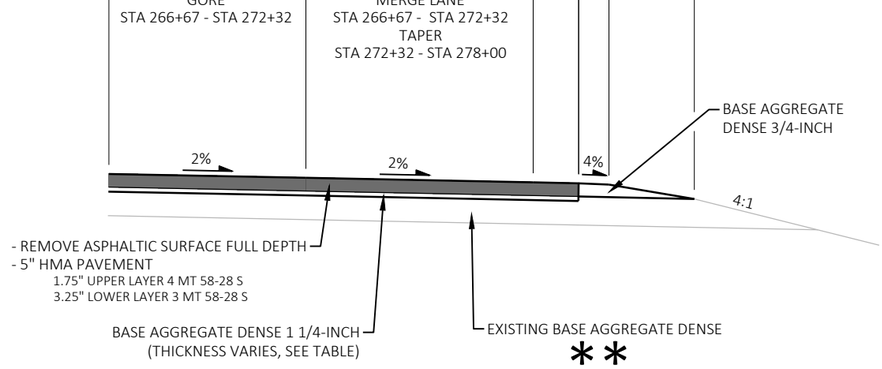
NOTE: THIS TABLE REPRESENTS APPROXIMATE STATIONS AND AVERAGE THICKNESS REQUIRED. IT IS BASED ON DATA FROM CORES OF EXISTING ROAD.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 14	E

2



LEFT TURN LANES AT SIDE ROADS
SEE CONSTRUCTION DETAIL



USH 45 - MERGE LANE - LAKESHORE RD
STA 266+67 - STA 278+00 RT

FINISHED TYPICAL SECTION - USH 45
STA 169+03 - STA 254+16
STA 270+00 - STA 445+80
STA 464+69 - STA 558+85

** PREPARE FOUNDATION FOR BASE AGGREGATE
- SCARIFY EXISTING BASE AGGREGATE 2.5" DEEP

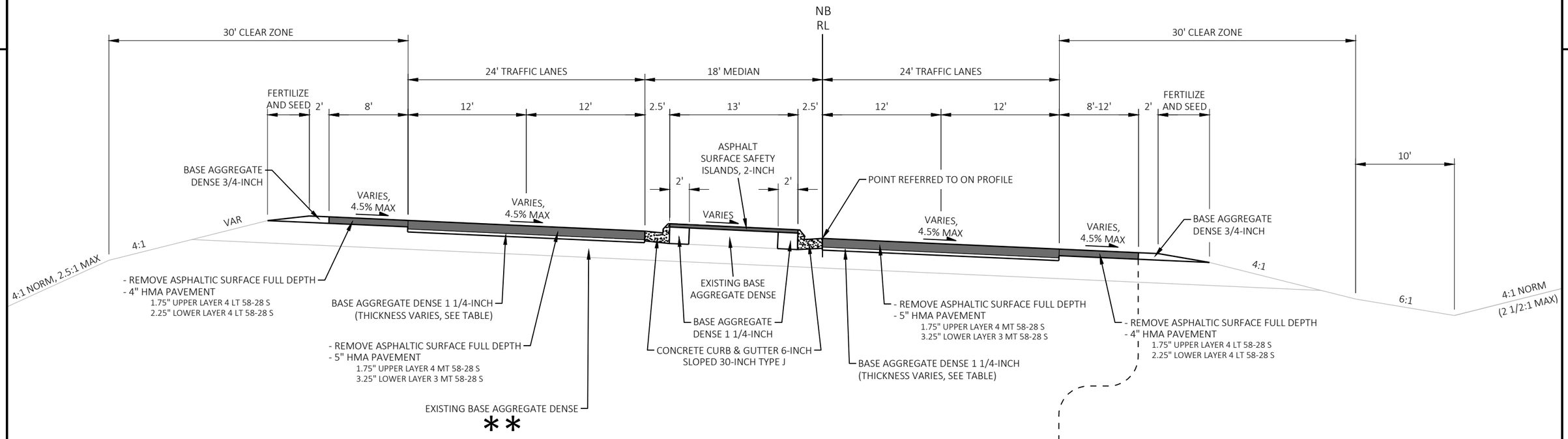
BASE AGGREGATE DENSE 1 1/4-INCH
THICKNESS TABLE

STATION RANGE	THICKNESS
148+80 - 186+00	1.50"
186+00 - 231+00	0.50"
231+00 - 276+00	0.50"
276+00 - 321+00	0.50"
321+00 - 351+50	1.25"
351+50 - 396+00	1.25"
396+00 - 441+00	1.25"
441+00 - 486+00	1.50"
486+00 - 531+00	2.00"
531+00 - 565+00	1.50"

NOTE: THIS TABLE REPRESENTS APPROXIMATE STATIONS AND AVERAGE THICKNESS REQUIRED. IT IS BASED ON DATA FROM CORES OF EXISTING ROAD.

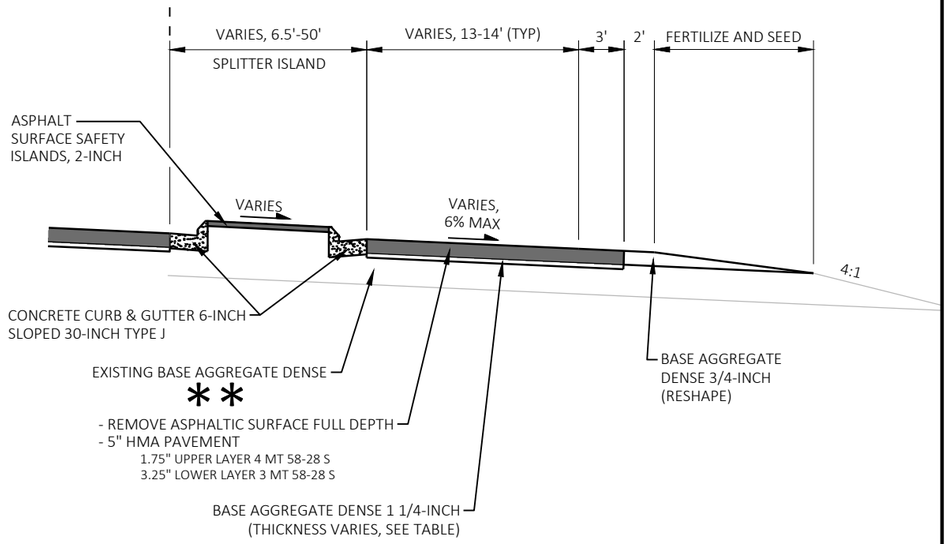
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 15	E

2



FINISHED TYPICAL SUPERELEVATED SECTION - USH 45

STA 254+16 - STA 270+00



EXISTING TYPICAL 1/2 SECTION - USH 45 - MERGE LANE

STA 265+32 - STA 266+67 RT

BASE AGGREGATE DENSE 1 1/4-INCH
THICKNESS TABLE

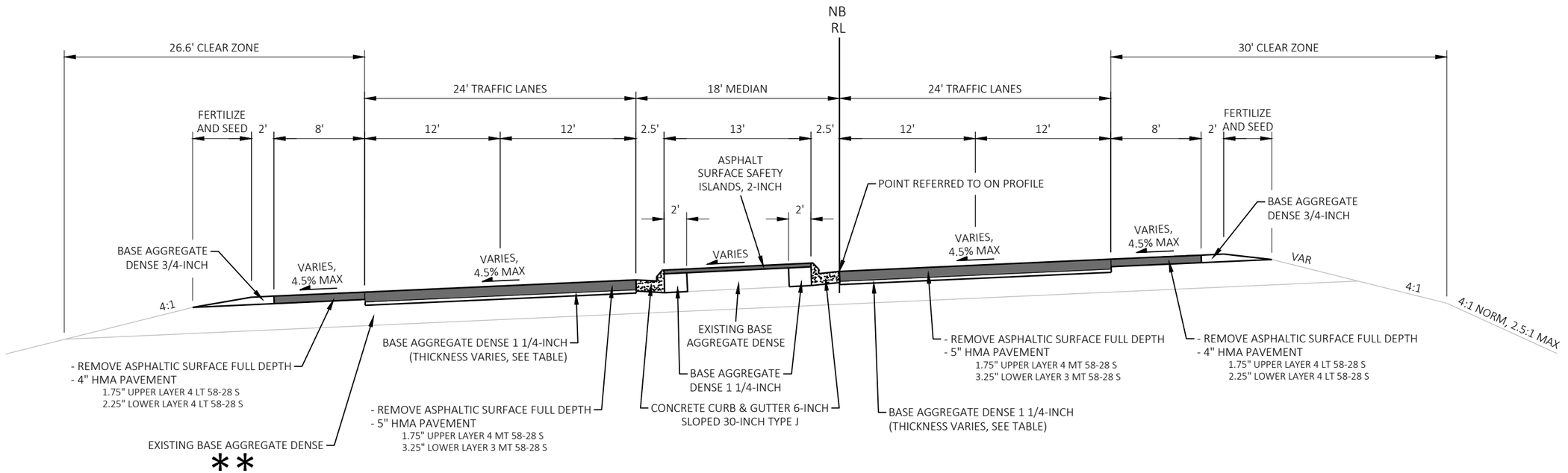
STATION RANGE	THICKNESS
148+80 - 186+00	1.50"
186+00 - 231+00	0.50"
231+00 - 276+00	0.50"
276+00 - 321+00	0.50"
321+00 - 351+50	1.25"
351+50 - 396+00	1.25"
396+00 - 441+00	1.25"
441+00 - 486+00	1.50"
486+00 - 531+00	2.00"
531+00 - 565+00	1.50"

NOTE: THIS TABLE REPRESENTS APPROXIMATE STATIONS AND AVERAGE THICKNESS REQUIRED. IT IS BASED ON DATA FROM CORES OF EXISTING ROAD.

** PREPARE FOUNDATION FOR BASE AGGREGATE
- SCARIFY EXISTING BASE AGGREGATE 2.5" DEEP

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TYPICAL SECTIONS	SHEET 16	E

2



FINISHED TYPICAL SUPERELEVATED SECTION - USH 45

STA 445+80 - STA 464+69

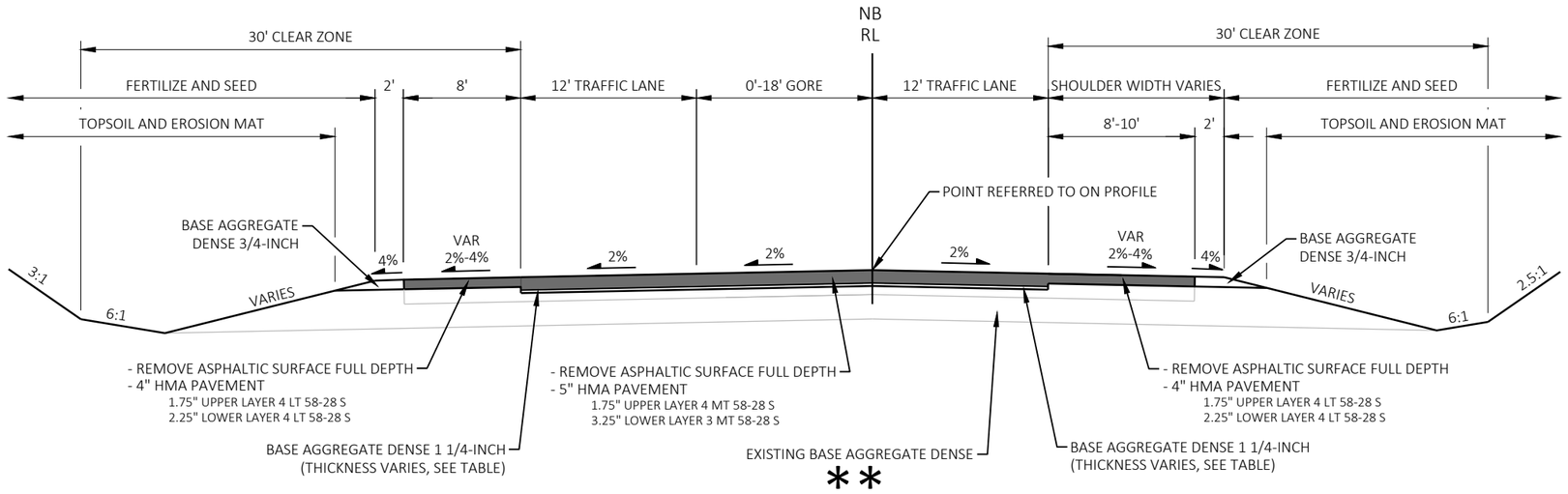
BASE AGGREGATE DENSE 1 1/4-INCH THICKNESS TABLE	
STATION RANGE	THICKNESS
148+80 - 186+00	1.50"
186+00 - 231+00	0.50"
231+00 - 276+00	0.50"
276+00 - 321+00	0.50"
321+00 - 351+50	1.25"
351+50 - 396+00	1.25"
396+00 - 441+00	1.25"
441+00 - 486+00	1.50"
486+00 - 531+00	2.00"
531+00 - 565+00	1.50"

NOTE: THIS TABLE REPRESENTS APPROXIMATE STATIONS AND AVERAGE THICKNESS REQUIRED. IT IS BASED ON DATA FROM CORES OF EXISTING ROAD.

** PREPARE FOUNDATION FOR BASE AGGREGATE
- SCARIFY EXISTING BASE AGGREGATE 2.5" DEEP

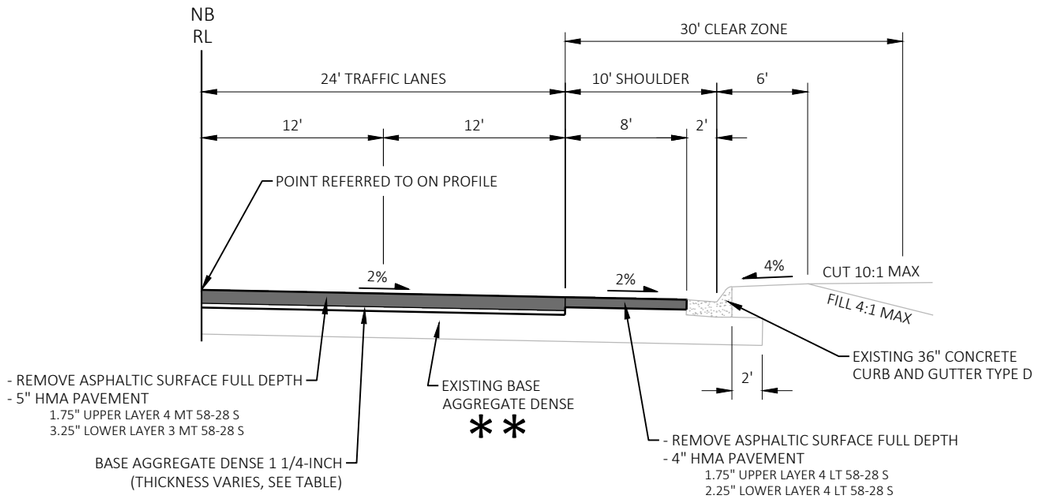
BASE AGGREGATE DENSE 1 1/4-INCH THICKNESS TABLE	
STATION RANGE	THICKNESS
148+80 - 186+00	1.50"
186+00 - 231+00	0.50"
231+00 - 276+00	0.50"
276+00 - 321+00	0.50"
321+00 - 351+50	1.25"
351+50 - 396+00	1.25"
396+00 - 441+00	1.25"
441+00 - 486+00	1.50"
486+00 - 531+00	2.00"
531+00 - 565+00	1.50"

NOTE: THIS TABLE REPRESENTS APPROXIMATE STATIONS AND AVERAGE THICKNESS REQUIRED. IT IS BASED ON DATA FROM CORES OF EXISTING ROAD.



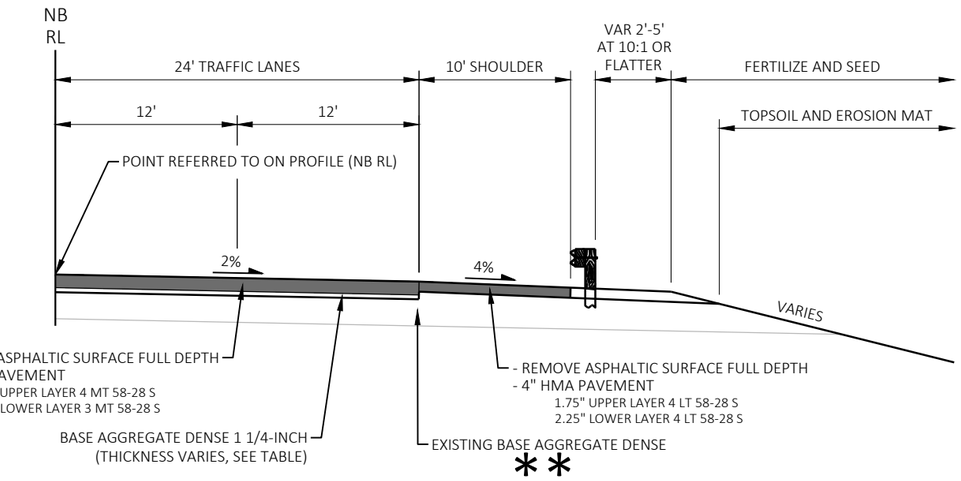
FINISHED TYPICAL SECTION - USH 45

STA 558+85 - STA 565+00



FINISHED TYPICAL 1/2 SECTION - USH 45 - CURB AND GUTTER

STA 418+80 - STA 422+32 RT

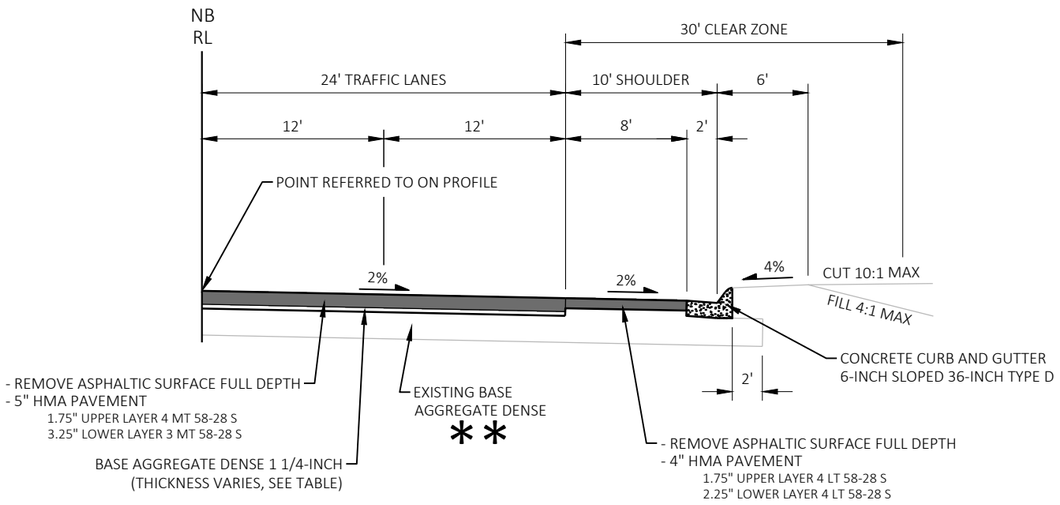


FINISHED TYPICAL 1/2 SECTION - USH 45 - REPLACE GUARDRAIL

STA 333+76 - STA 335+50 RT
STA 334+64 - STA 335+50 LT (FACING SOUTH)
STA 336+45 - STA 337+44 RT
STA 336+45 - STA 338+20 LT (FACING SOUTH)
STA 376+53 - STA 378+59 LT (FACING SOUTH)
STA 478+05 - STA 481+00 RT
STA 480+31 - STA 483+11 LT (FACING SOUTH)
STA 522+90 - STA 524+81 RT
STA 524+98 - STA 525+89 LT (FACING SOUTH)
STA 525+41 - STA 526+32 RT
STA 526+49 - STA 528+39 LT (FACING SOUTH)
STA 543+24 - STA 546+06 RT
STA 543+44 - STA 546+25 LT (FACING SOUTH)

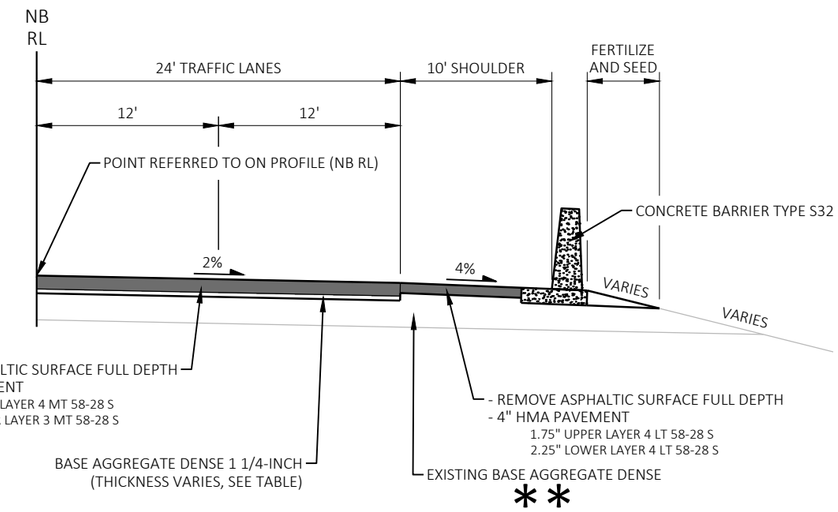
** PREPARE FOUNDATION FOR BASE AGGREGATE
- SCARIFY EXISTING BASE AGGREGATE 2.5" DEEP

2



FINISHED TYPICAL 1/2 SECTION - USH 45 - REPLACE CURB AND GUTTER

STA 543+68 - STA 538+82 RT



FINISHED TYPICAL 1/2 SECTION - USH 45 - CONCRETE BARRIER

STA 524+81 - STA 525+41 RT

STA 525+89 - STA 526+49 LT (FACING SOUTH)

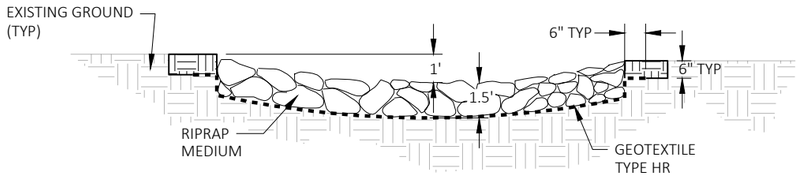
BASE AGGREGATE DENSE 1 1/4-INCH
THICKNESS TABLE

STATION RANGE	THICKNESS
148+80 - 186+00	1.50"
186+00 - 231+00	0.50"
231+00 - 276+00	0.50"
276+00 - 321+00	0.50"
321+00 - 351+50	1.25"
351+50 - 396+00	1.25"
396+00 - 441+00	1.25"
441+00 - 486+00	1.50"
486+00 - 531+00	2.00"
531+00 - 565+00	1.50"

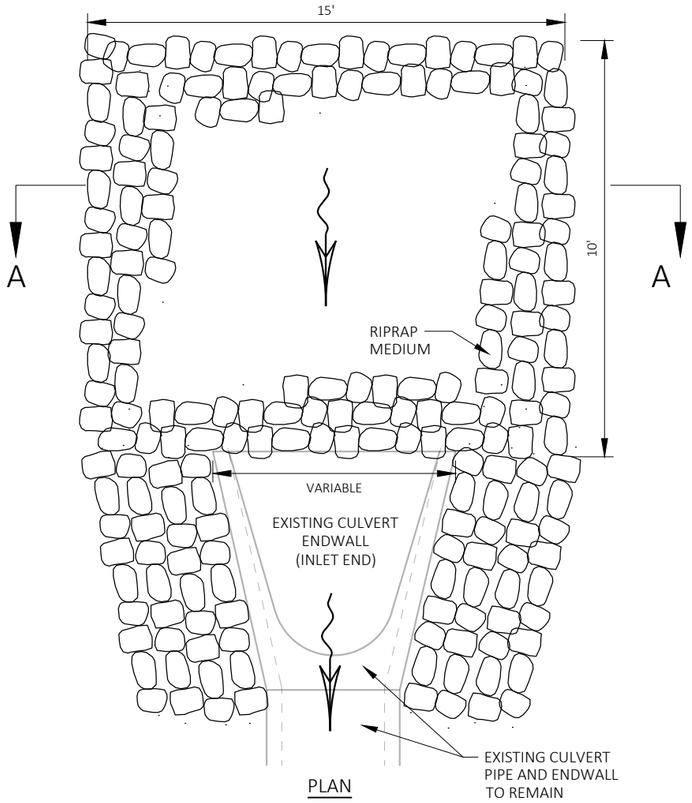
NOTE: THIS TABLE REPRESENTS APPROXIMATE STATIONS AND AVERAGE THICKNESS REQUIRED. IT IS BASED ON DATA FROM CORES OF EXISTING ROAD.

** PREPARE FOUNDATION FOR BASE AGGREGATE
- SCARIFY EXISTING BASE AGGREGATE 2.5" DEEP

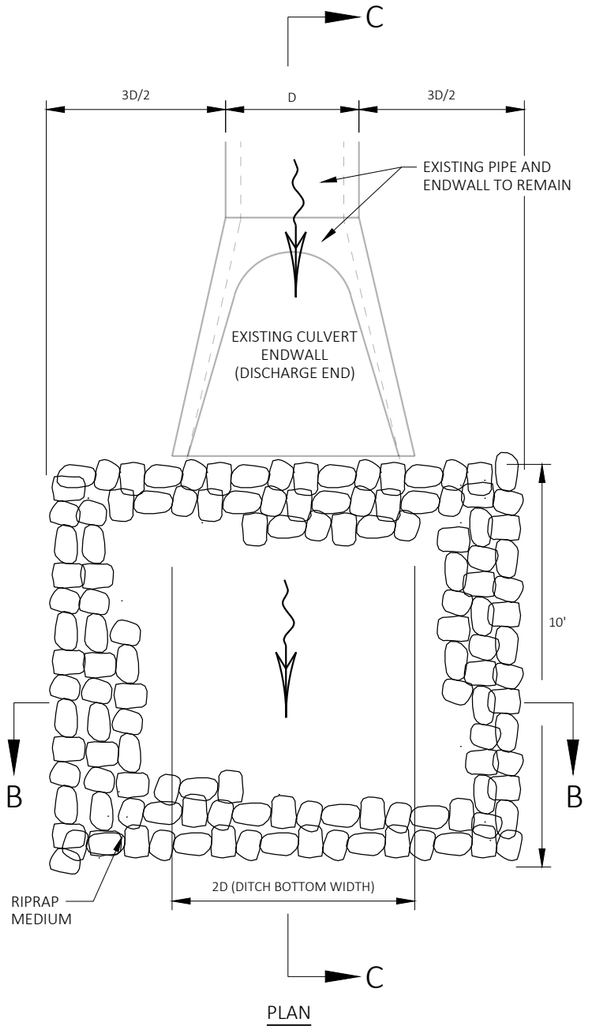
2



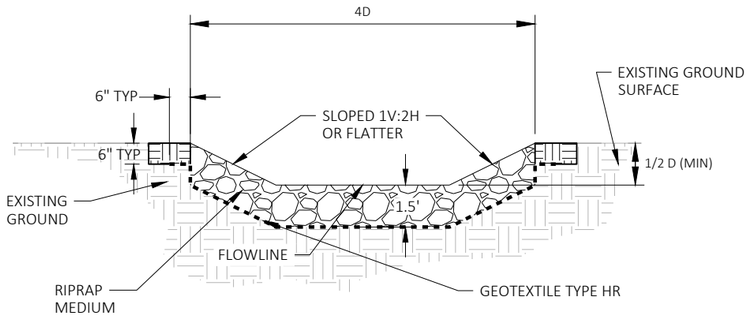
SECTION A-A



PLAN



PLAN



SECTION B-B

SECTION C-C

RIPRAP APRON SCOUR TREATMENT - INLET END OF CULVERTS

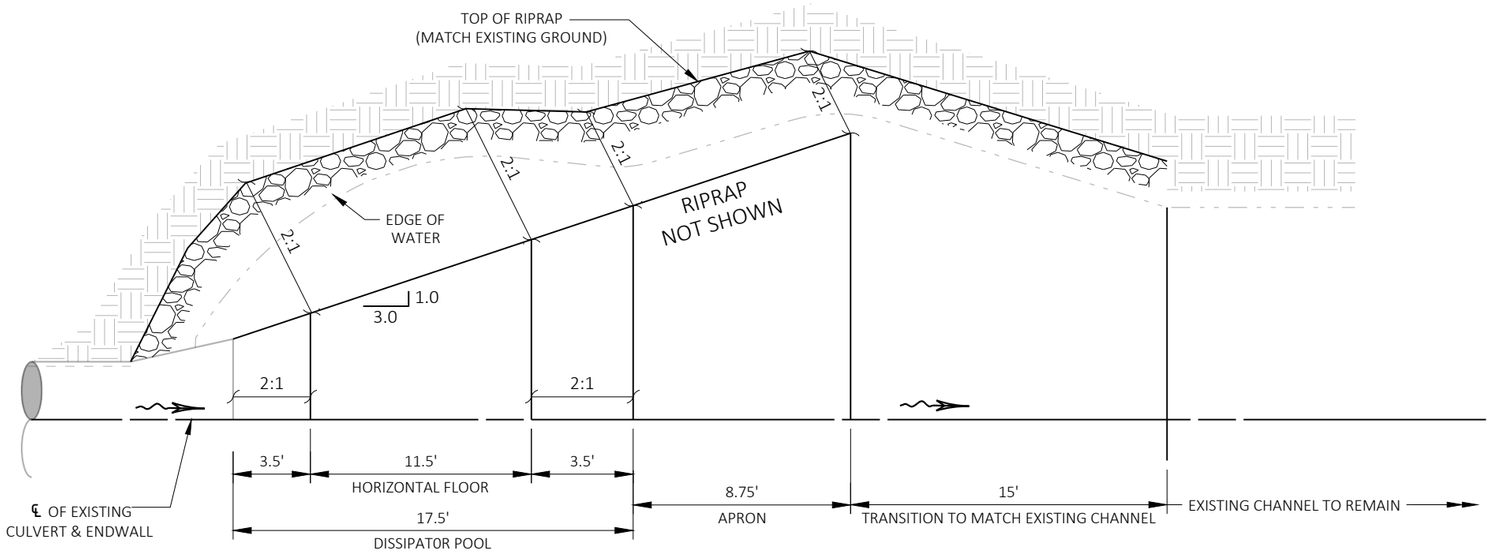
STA 160+09 LT (30"RCCP)
STA 182+90 LT (30" RCCP)
STA 188+81 LT (24" RCCP)

RIPRAP APRON SCOUR TREATMENT - DISCHARGE END OF CULVERT

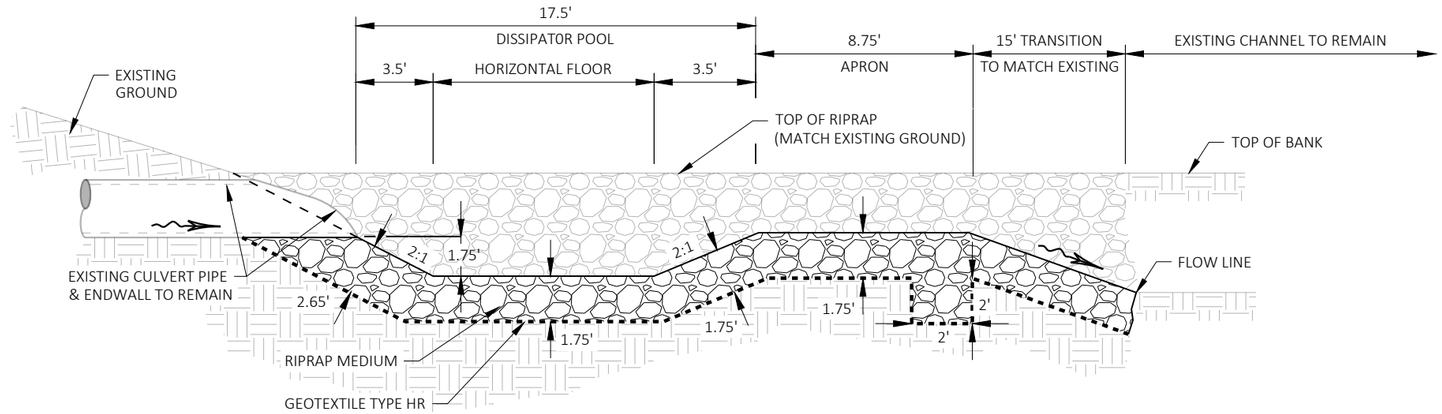
STA 160+09 RT (30"RCCP)

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CONSTRUCTION DETAILS	SHEET 20	E

2



PLAN VIEW

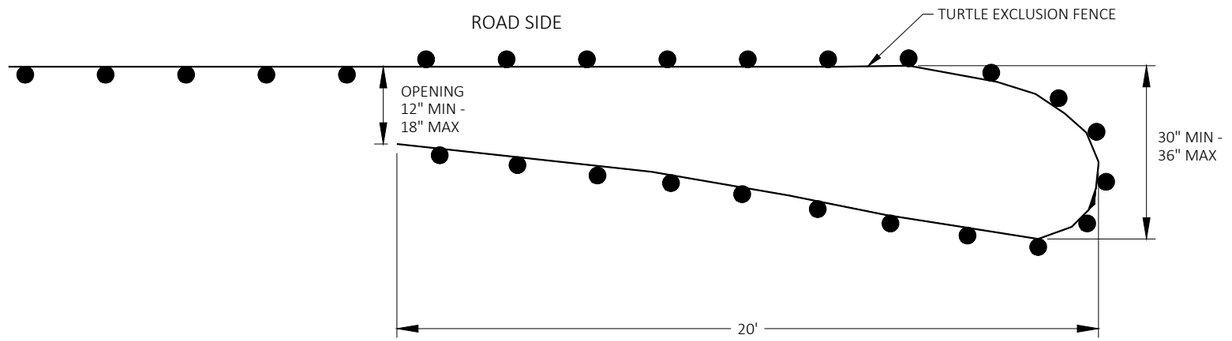


PROFILE VIEW

RIPRAP BASIN SCOUR TREATMENT - DISCHARGE END OF CULVERTS

STA 182+90 RT (30"RCCP)
STA 188+81 RT (24"RCCP)

2



PLAN VIEW

TURTLE EXCLUSION FENCE DETAIL

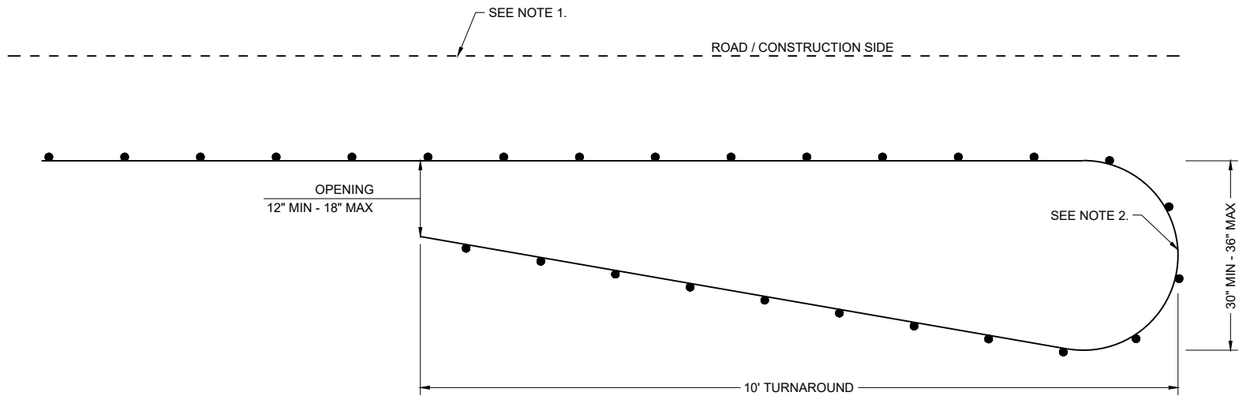
GENERAL NOTES:
POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND
AND TRENCHED IN ACCORDING TO TURTLE EXCLUSION FENCE REQUIREMENTS.

2

GENERAL NOTES:

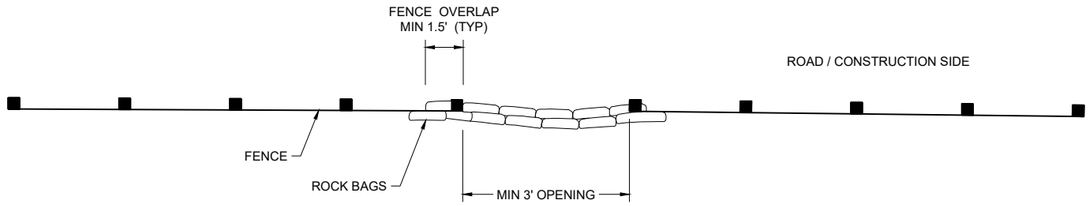
1. WHERE SILT FENCE IS REQUIRED, IT SHALL BE PLACED ON THE CONSTRUCTION SIDE OF THE EXCLUSION FENCING, OR COMBINED WITH THE EXCLUSION FENCING AS ALLOWED IN THE SPECIFICATIONS. STAKES ON THIS DETAIL ARE OPPOSITE OF STANDARD SILT FENCE FOR SEDIMENT CONTROL.
2. PLACE TURNAROUNDS AT ALL TERMINI ENDS OF THE EXCLUSION FENCING.
3. IF TEMPORARY ACCESS POINTS ARE NEEDED DURING CONSTRUCTION THAT REQUIRE OPENINGS IN THE EXCLUSION FENCING, ACCESS OPENINGS SHOULD BE TIGHTLY SECURED WITH BALES OF HAY OR STRAW WHENEVER CONSTRUCTION RELATED ACTIVITIES ARE NOT OCCURRING. REINSTALL EXCLUSION FENCING WHEN THE WORK REQUIRING THE TEMPORARY ACCESS OPENING IS COMPLETED.
4. THE FENCE CAP MAY BE A 6" UNDER DRAIN PIPE, SLIT DOWN THE CENTER AND PLACED OVER THE FENCE. COMMERCIALLY AVAILABLE SAFETY CAPS WITH A LIP MAY BE USED. OTHER DNR APPROVED METHODS TO PREVENT TURTLES FROM PASSING OVER THE TOP OF THE FENCE MAY BE USED.

   SECURELY FASTEN THE CAP TO PREVENT IT FROM BEING DISLODGED.

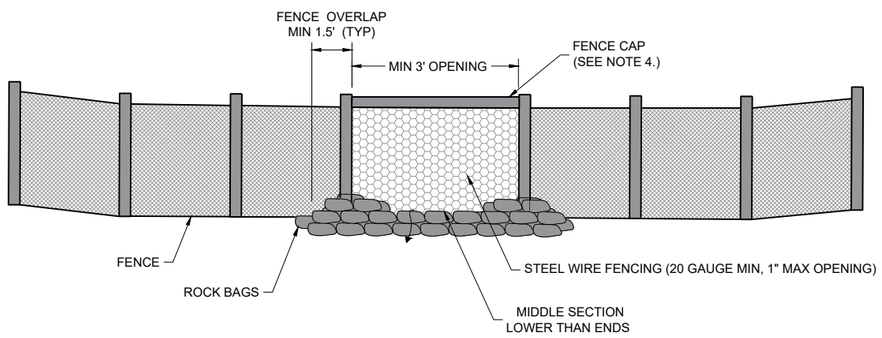


PLAN VIEW

CLIMBING TURTLE EXCLUSION FENCE DETAIL

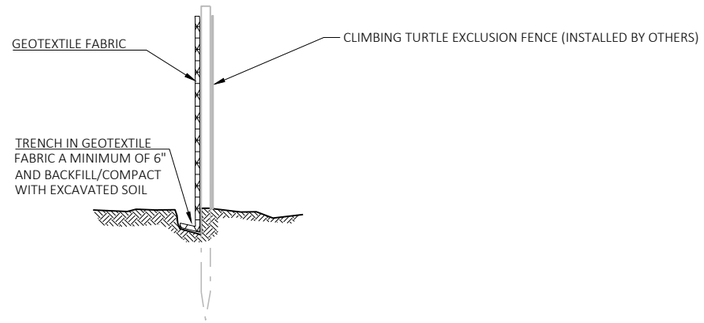


PLAN VIEW



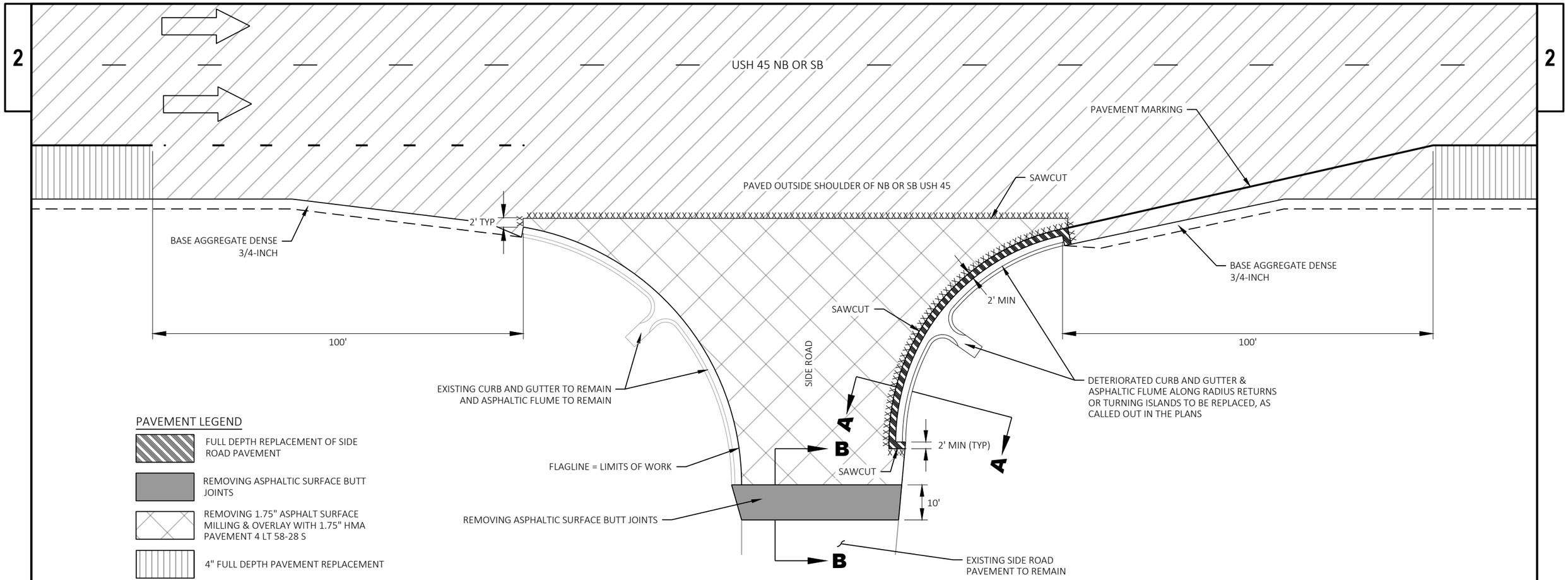
FRONT VIEW

TURTLE EXCLUSION FENCE DRAINAGE RELIEF DETAIL



SILT FENCE INSTALLED ON EXISTING TURTLE FENCING

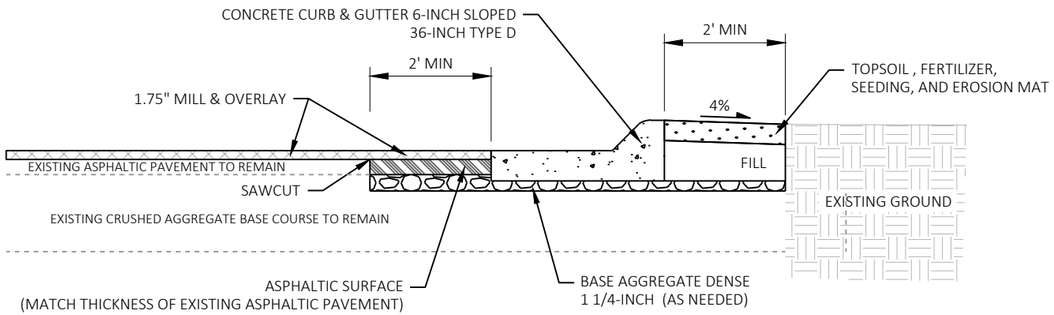
GENERAL NOTES:
1. ATTACH GEOTEXTILE FABRIC TO EXISTING CLIMBING TURTLE EXCLUSION FENCE POSTS. TRENCH INTO GROUND



PAVEMENT LEGEND

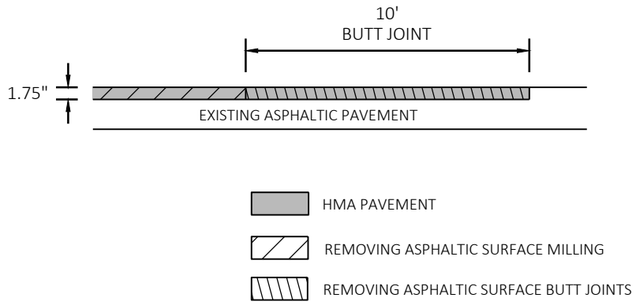
- FULL DEPTH REPLACEMENT OF SIDE ROAD PAVEMENT
- REMOVING ASPHALTIC SURFACE BUTT JOINTS
- REMOVING 1.75" ASPHALT SURFACE MILLING & OVERLAY WITH 1.75" HMA PAVEMENT 4 LT 58-28 S
- 4" FULL DEPTH PAVEMENT REPLACEMENT
- 5" FULL DEPTH PAVEMENT REPLACEMENT

SIDEROAD EXISTING PAVEMENT THICKNESS	
SIDEROAD	THICKNESS
HILLTOP RD	3"
LAKESHORE RD	4"
NIETZKE RD	4"
ALBERTS RD	3"
BUCKBEE ROAD	3"
KNITT RD	3"
CTH S	5"
MAGOLSKI RD	4"
E PROSPECT AVE	4"
NE 7TH ST	4"
NE 5TH ST	4"
STH 110	5"
KUSSMAN RD	3"
CTH G	4"
INDUSTRIAL DR	4"



SECTION A-A

SIDE ROAD CURB RADIUS

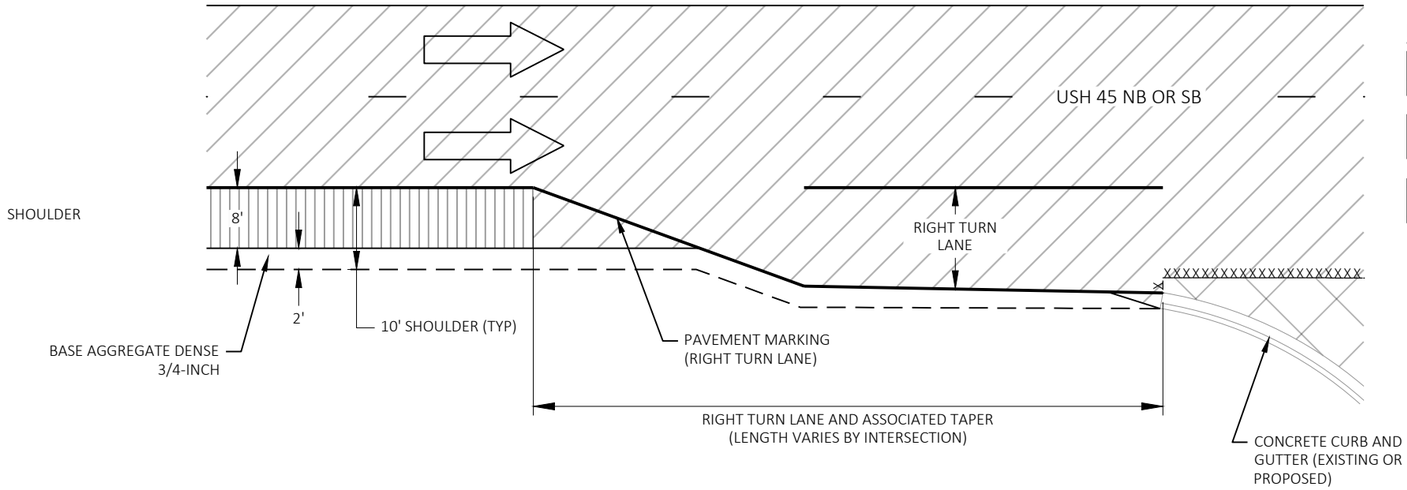


SECTION B-B

SIDE ROAD BUTT JOINT

SIDE ROAD PAVING DETAILS

2

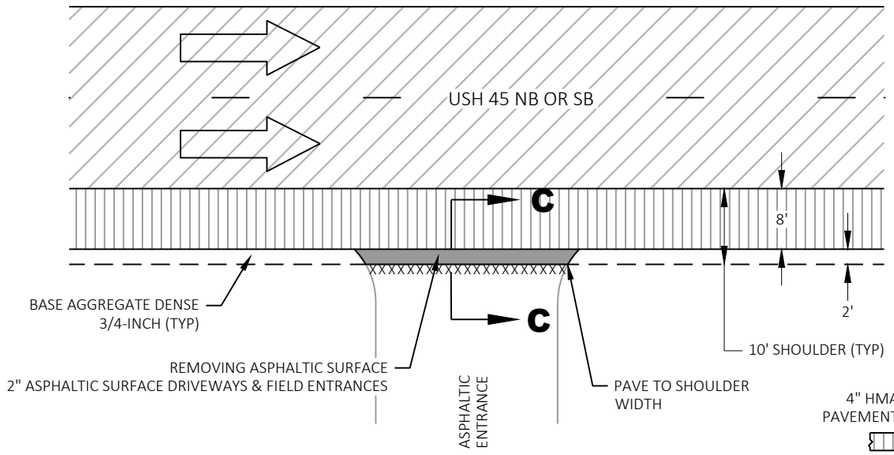


PAVEMENT LEGEND

- REMOVING 1.75" ASPHALT SURFACE MILLING & OVERLAY WITH 1.75" HMA PAVEMENT
- 4" FULL DEPTH PAVEMENT REPLACEMENT
- 5" FULL DEPTH PAVEMENT REPLACEMENT

RIGHT TURN LANE SHOULDER PAVING DETAIL

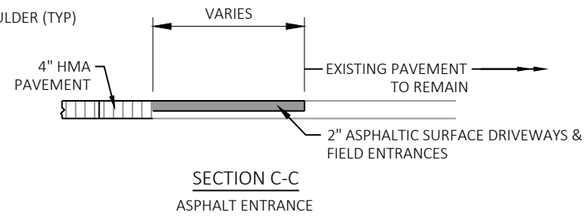
SEE PLAN DETAIL SHEETS FOR SPECIFIC PAVING THICKNESS LIMITS



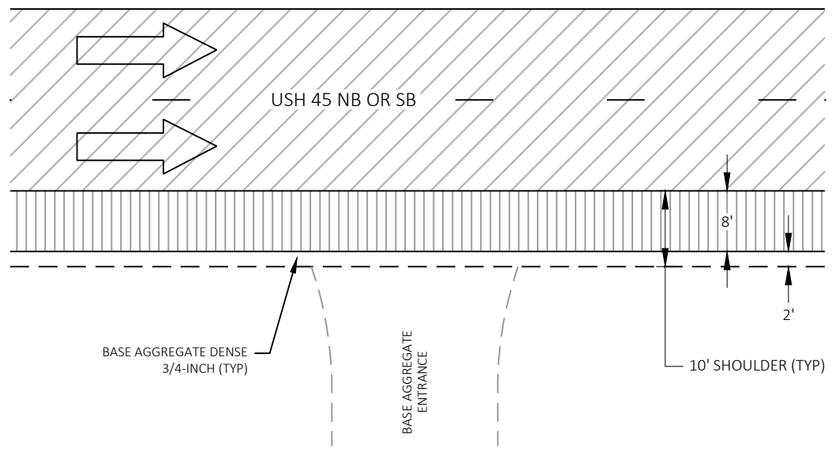
PAVEMENT LEGEND

- REMOVING ASPHALTIC SURFACE
- 4" FULL DEPTH PAVEMENT REPLACEMENT
- 5" FULL DEPTH PAVEMENT REPLACEMENT

ASPHALT ENTRANCES



SECTION C-C
ASPHALT ENTRANCE

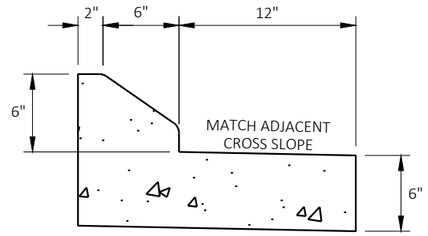


BASE AGGREGATE ENTRANCES

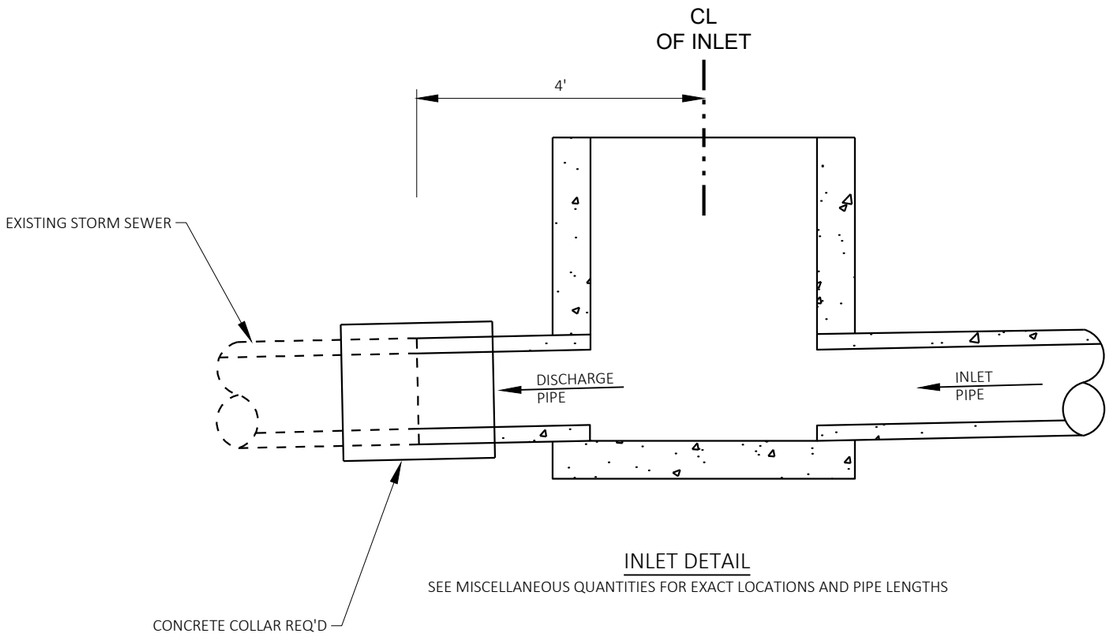
ENTRANCE PAVING

SEE PLAN AND PROFILE SHEETS FOR LOCATIONS AND TYPES OF ENTRANCES REQUIRED

2

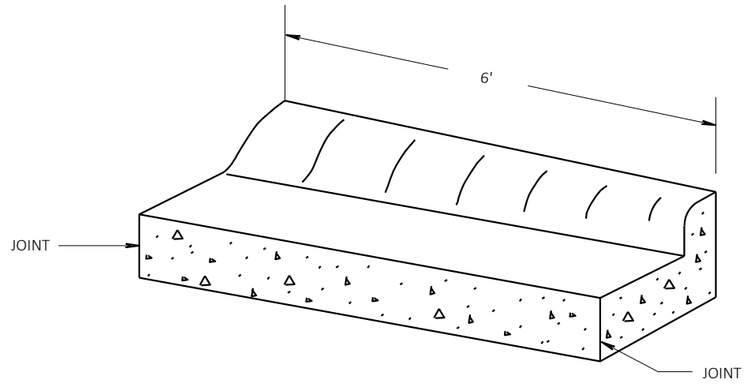


DETAIL FOR CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)



INLET DETAIL

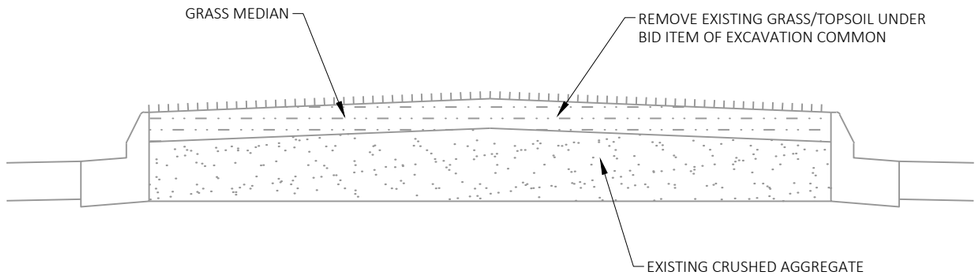
SEE MISCELLANEOUS QUANTITIES FOR EXACT LOCATIONS AND PIPE LENGTHS



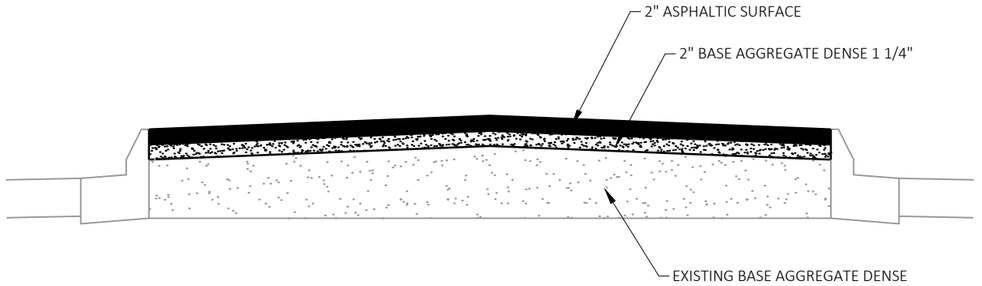
CURB TRANSITION DETAIL

CONC. C&G 6-INCH SLOPED 36-INCH TYPE D TO CONC. C&G 30-INCH TYPE D
(TO BE MEASURED & PAID FOR AS CONC. C&G 6-INCH SLOPED 36-INCH TYPE D)

2



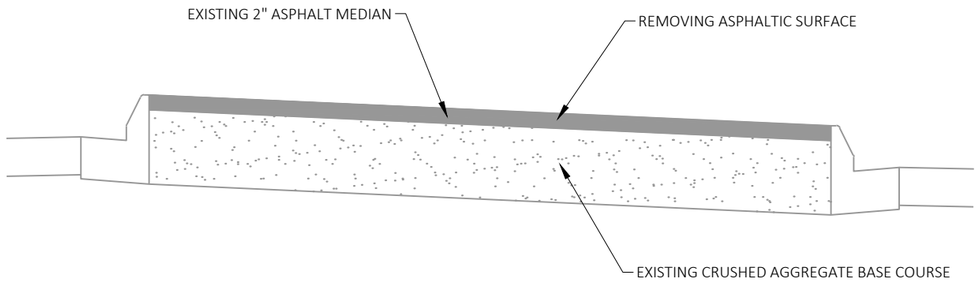
EXISTING



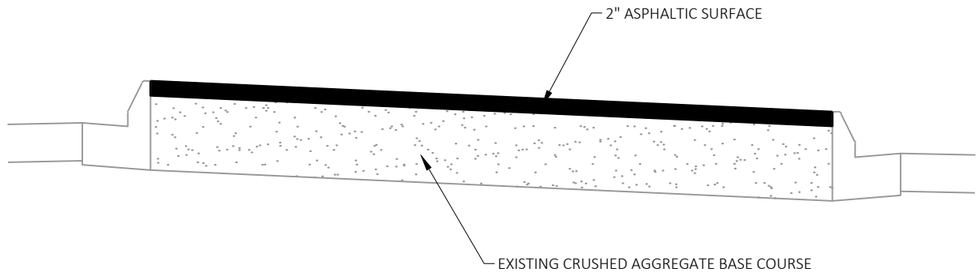
PROPOSED

DETAIL FOR REPLACEMENT OF GRASS MEDIAN

STA 156+00 - STA 169+03



EXISTING

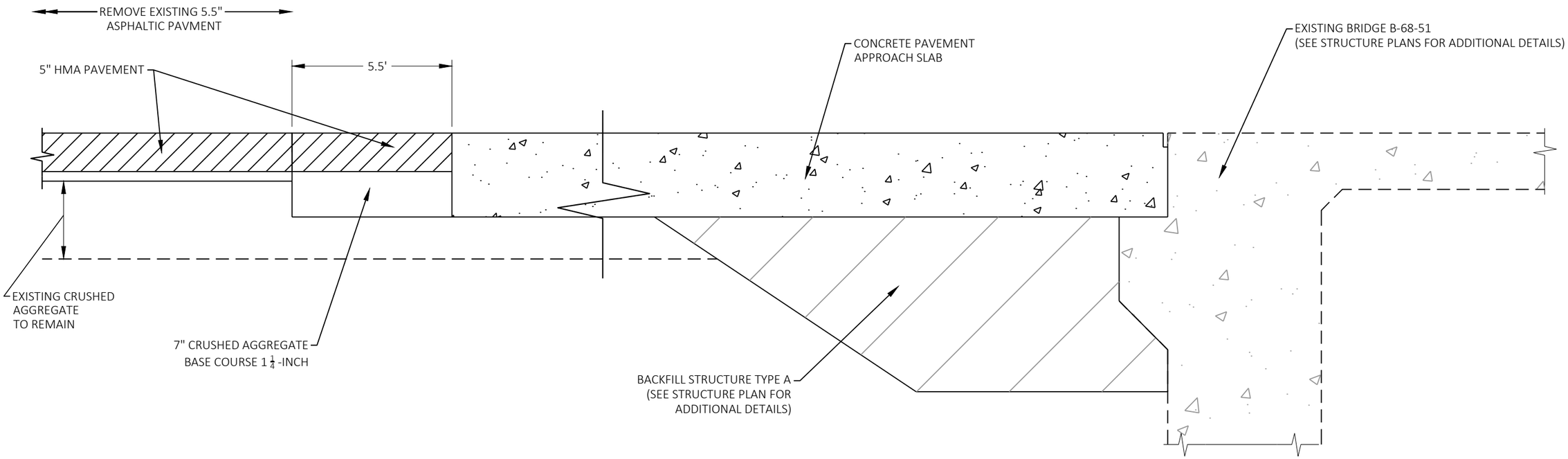


PROPOSED

DETAIL FOR REPLACEMENT OF ASPHALT MEDIAN

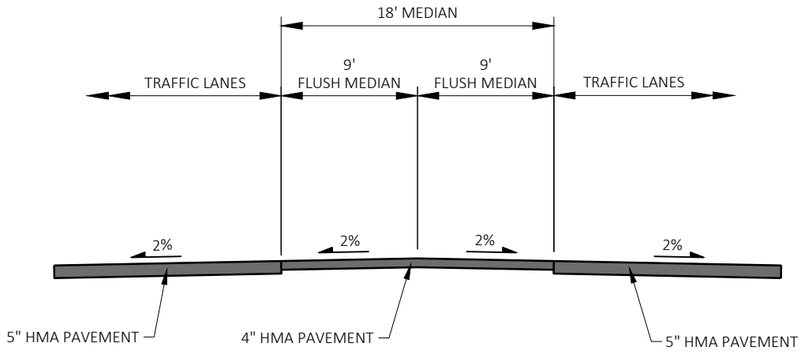
STA 254+16 - STA 270+00
STA 447+00 - STA 464+69

2

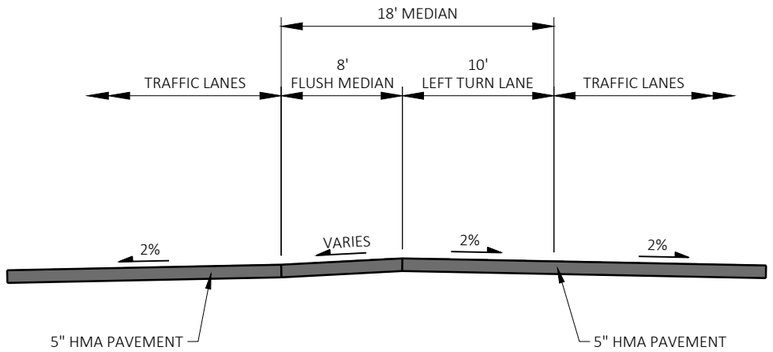


DETAIL FOR REPLACEMENT OF CONCRETE PAVEMENT APPROACH SLAB

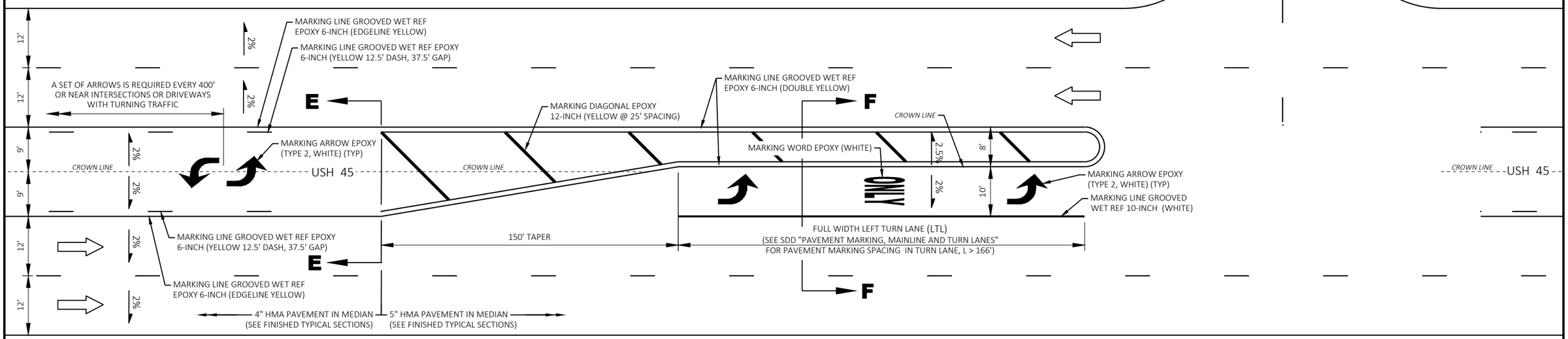
STA 335+50 - STA 335+71
STA 336+27 - STA 336+45



SECTION E-E



SECTION F-F



DETAIL FOR LEFT TURN LANES

WITHIN NORMAL CROWN MAINLINE USH 45

USH 45 APPROACH	SIDE ROAD	STATION	OFFSET	FULL WIDTH TURN LANE LENGTH (FEET)
NB & SB	HILL TOP ROAD	202+30	LT/RT	200
SB	ALBERTS ROAD	299+50	RT	200
NB	BUCKBEE ROAD	322+50	LT	300
NB & SB	KNITT ROAD	345+30	LT/RT	300
NB	CTH S	439+90	LT	350
SB	MAGOLSKI ROAD	440+00	RT	300
NB	PROSPECT AVENUE	475+50	LT	300
NB & SB	NE 7TH STREET	502+90	LT/RT	300
NB	NE 5TH STREET	513+90	LT	300
NB	STH 110	533+50	LT	350
SB	KUSSMAN ROAD	534+00	RT	300
NB	INDUSTRIAL DRIVE	548+90	LT	300
SB	CTH G	549+00	RT	350

2

2

SIDE ROAD

ROAD WORK AHEAD
W20-1A

STOP
READY TO STOP WHEN FLAGGED

COVER EXISTING SIGNS

500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER

ROAD CLOSED
R11-2
48"X30"

WORK ZONE

25'

WORK ZONE

USH 45

USH 45

TEMPORARY DOUBLE YELLOW CENTERLINE PAVEMENT MARKING

FLEXIBLE TUBULAR MARKERS SPACED AT 100'

100' OF FLEXIBLE TUBULAR MARKERS SPACED AT 25'

STOP
R1-1
36"X36"

CROSS TRAFFIC DOES NOT STOP
WO4-4P
36"X15"

INCLUDING FLAGS,
16" x 16" MIN (ORANGE)

TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

100' OF FLEXIBLE TUBULAR MARKERS SPACED AT 25'

TEMPORARY DOUBLE YELLOW CENTERLINE PAVEMENT MARKING

FLEXIBLE TUBULAR MARKERS SPACED AT 100'

500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER

STOP
READY TO STOP WHEN FLAGGED

COVER EXISTING R6-3 SIGN WITH:

CROSS TRAFFIC DOES NOT STOP
WO4-4P
36"X15"

SIDE ROAD

ROAD WORK AHEAD
W20-1A

LEGEND:

WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
or DIRECTION OF TRAFFIC	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
PAVEMENT MARKING REMOVAL	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

NOTES:
-STAGE 2 SHOWN. REPLICATE AND MIRROR TRAFFIC CONTROL CONFIGURATION FOR STAGE 3.
-CONSECUTIVE INTERSECTIONS CANNOT BE CLOSED.
-SEE SPECIAL PROVISIONS FOR AMISH COORDINATION.

DETAIL FOR SIDE ROAD INTERSECTION ACCESS

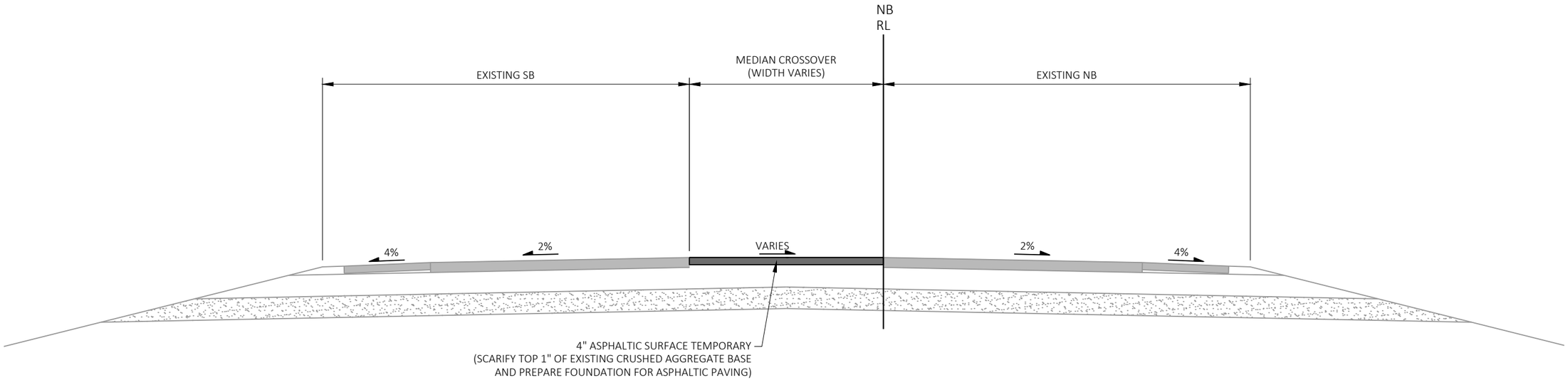
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CONSTRUCTION DETAILS	SHEET 30	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021001_CD.DWG
LAYOUT NAME - 12

PLOT DATE : 8/28/2025 7:46 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT_1

WISDOT/CADDS SHEET 42

2



STAGE 1 TYPICAL SECTION - USH 45 - SOUTH CROSSSOVER

STA 147+50 - STA 160+00

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 1 - CONSTRUCTION DETAILS	SHEET 31	E

2

N

CTH C

FO

USH 45 SB

146+00

147+00

148+00

149+00

150+00

151+00

152+00

153+00

USH 45 SB

USH 45 NB

USH 45 NB

FO

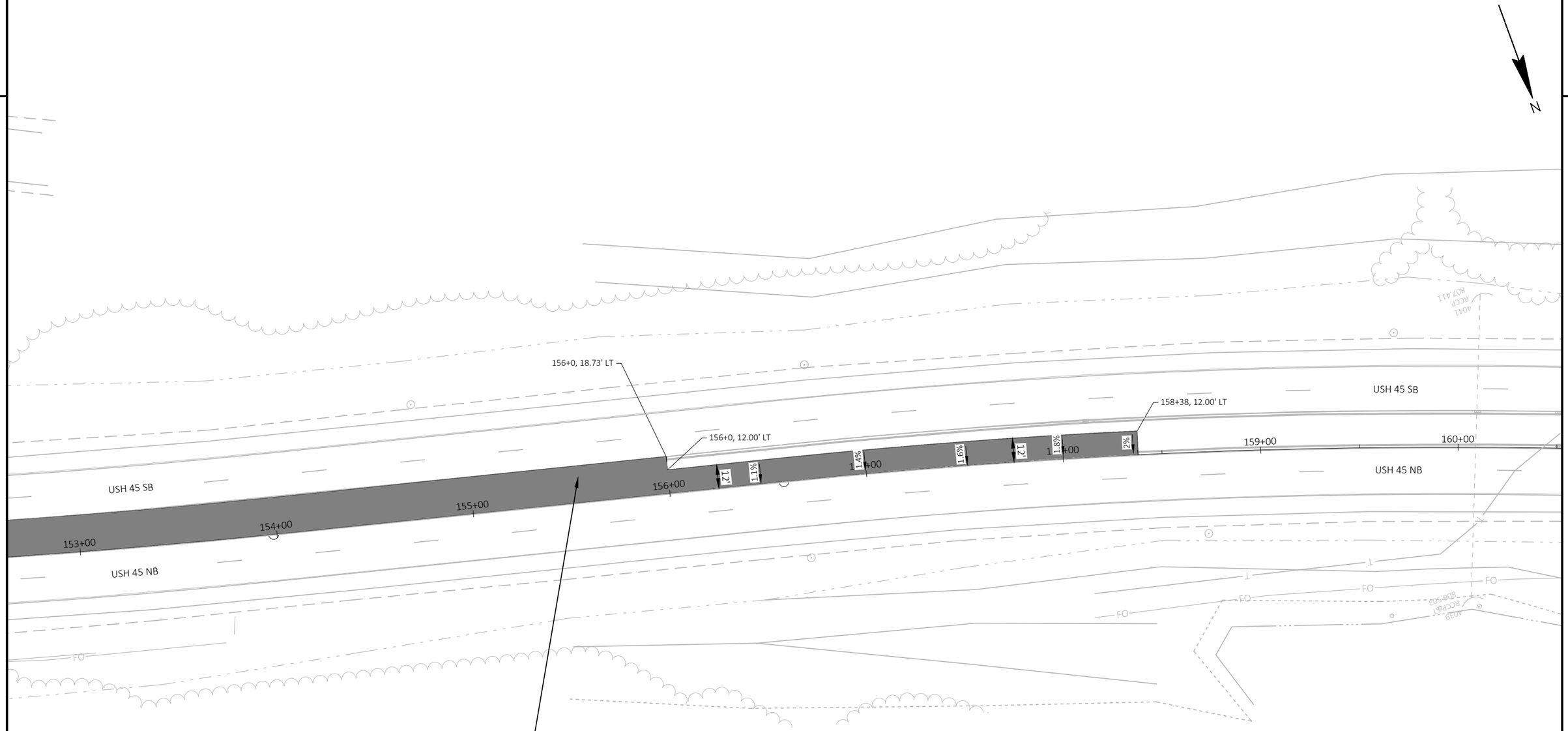
CTH C/WAUPACA ST

-REMOVE EXISTING CONCRETE CURB & GUTTER (INCLUDING SLOPE NOSES).
-REMOVE GRASS AND PAVED MEDIAN.
-PLACE ASPHALTIC SURFACE TEMPORARY, MATCHING EXISTING PAVEMENT.
(4" ASPHALTIC SURFACE TEMPORARY OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH)

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 1 - CONSTRUCTION DETAILS	SHEET 32	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021011_CD-S1.DWG
LAYOUT NAME - 14600 - 15300
PLOT DATE : 8/26/2025 12:04 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 1 - CONSTRUCTION DETAILS	SHEET 33	E

2

2

N

NEITZKE RD

USH 45 SB

USH 45 NB

262+00

263+00

264+00

265+00

266+00

267+00

268+00

269+00

265+97,
35.80' RT

265+91,
38.47' RT

265+23,
66.06' RT

265+26,
64.84' RT

LAKESHORE RD

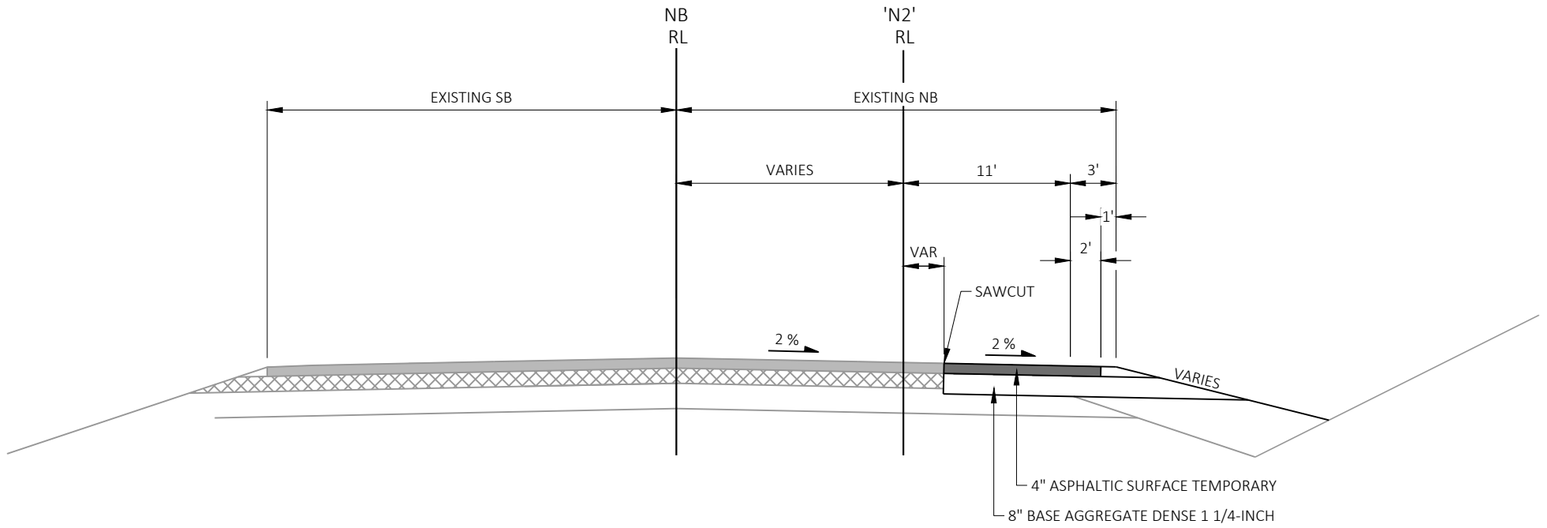
-REMOVE EXISTING CONCRETE CURB & GUTTER (INCLUDING SLOPE NOSE).
-REMOVE PAVED MEDIAN.
-PLACE ASPHALTIC SURFACE TEMPORARY, MATCHING EXISTING PAVEMENT.
(4" ASPHALTIC SURFACE TEMPORARY OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH)

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 1 - CONSTRUCTION DETAILS	SHEET 34	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021012_CD-S1.DWG
LAYOUT NAME - 26200 - 26950

PLOT DATE : 8/26/2025 12:02 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



STAGE 1 TYPICAL SECTION - USH 45 - NB SHOULDER WIDENING

STA 558+43 - STA 566+47

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 1 - CONSTRUCTION DETAILS	SHEET 35	E

2

N

USH 45 SB

USH 45 NB

557+00 558+00 559+00 560+00 561+00 562+00 563+00 564+00

557'N2'

558'N2'

559'N2'

560'N2'

561'N2'

562'N2'

563'N2'

564'N2'

VAR

13'

2%

1'

10'

2'

558+43'N2', 13.35' RT

558+53'N2', 13.00' RT

564+50, 0.00' RT

-REMOVING SMALL PIPE CULVERTS
-CULVERT PIPE TEMPORARY 24-INCH

-PLACE ASPHALTIC SURFACE TEMPORARY, MATCHING ADJACENT PAVEMENT.
(4" ASPHALTIC SURFACE TEMPORARY OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH)

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 1 - CONSTRUCTION DETAILS	SHEET 36	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021013_CD-S1.DWG
LAYOUT NAME - 55700 - 56400

PLOT DATE : 8/26/2025 12:07 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

REMOVE EXISTING RUMBLE STRIPS
- REMOVE ASPHALTIC SURFACE MILLING 2' WIDE BY 2" DEEP
- REPLACE WITH HMA PAVEMENT 4 MT 58-28 S

GOLLNOW RD

USH 45 SB

USH 45 NB

564+50, 0.00' RT

564+00

565+00

566+00

566+90, 0.00' RT

567+00

568+00

569+00

570+00

USH 45

VAR

13'

564'N2'

565'N2'

2%

566'N2'

567'N2'

568'N2'

1'

2'

10'

566+37'N2', 13.00' RT

566+47'N2', 13.55' RT

-PLACE ASPHALTIC SURFACE TEMPORARY, MATCHING ADJACENT PAVEMENT.
(4" ASPHALTIC SURFACE TEMPORARY OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH)

GOLLNOW RD

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 1 - CONSTRUCTION DETAILS	SHEET 37	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021013_CD-S1.DWG
LAYOUT NAME - 56400 - 57050

PLOT DATE : 8/26/2025 12:07 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

503+0,
66.15' LT

NE 7TH ST

R83'

R31'

502+23,
88.54' LT

501+78,
52.99' LT

1'

N

USH 45

499+00 500+00 501+00 502+00 503+00 504+00 505+00 506+00

USH 45

-REMOVE EXISTING CONCRETE CURB & GUTTER.
-PLACE ASPHALTIC SURFACE TEMPORARY, MATCHING ADJACENT PAVEMENT.
(4" ASPHALTIC SURFACE TEMPORARY OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH)

NE 7TH ST

STH 110

-REMOVE EXISTING CONCRETE CURB & GUTTER (INCLUDING SLOPE NOSES).
-REMOVE PAVED MEDIAN.
-PLACE ASPHALTIC SURFACE TEMPORARY, MATCHING ADJACENT PAVEMENT.
(4" ASPHALTIC SURFACE TEMPORARY OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH)

USH 45

530+00 531+00 532+00 533+00 534+00 535+00 536+00 537+00

USH 45

KUSSMAN RD

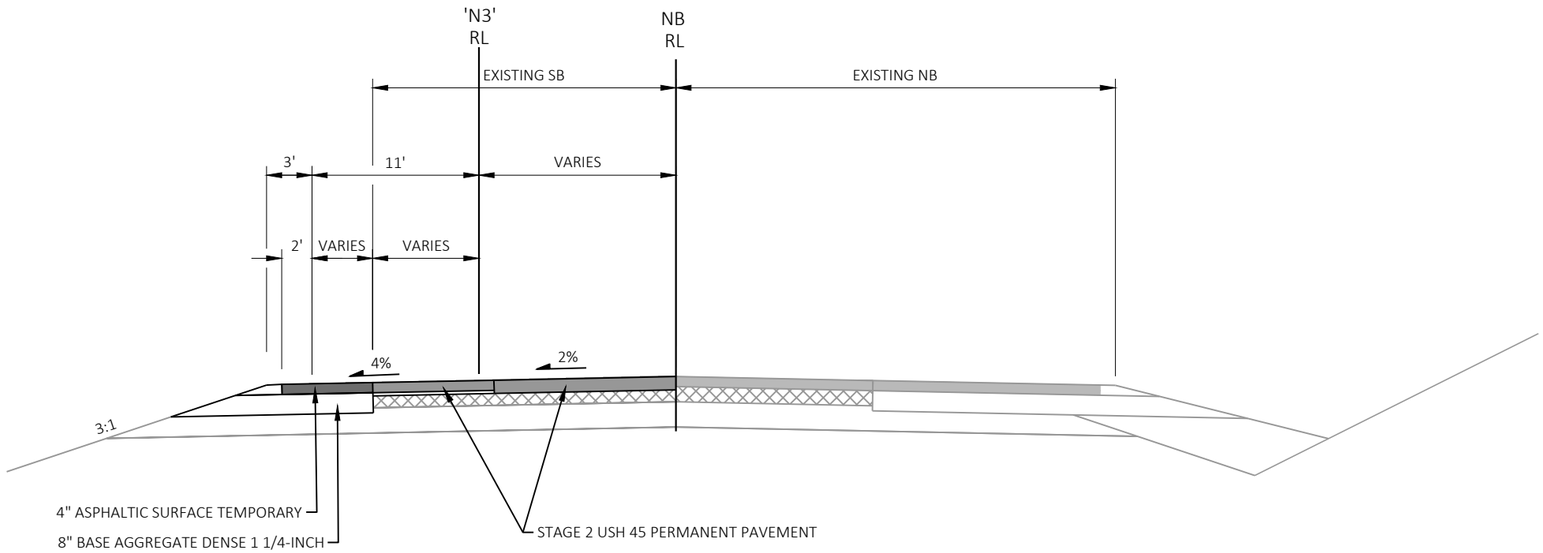
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 2 - CONSTRUCTION DETAILS	SHEET 38	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021021_CD-S2.DWG
LAYOUT NAME - 49900-50600 and 53000-53700

PLOT DATE : 8/26/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



STAGE 2 TYPICAL SECTION - USH 45 - SB SHOULDER WIDENING

STA 560+66 - STA 566+72

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 2 - CONSTRUCTION DETAILS	SHEET 39	E

2

2

PLACE SPHALTIC SURFACE TEMPORARY, MATCHING ADJACENT PAVEMENT.
(4" ASPHALTIC SURFACE TEMPORARY OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH)

PERMANENT PAVEMENT
(STAGE 2)

560+66,
35.21' LT

565+00,
22.30' LT

565+0,
20.30' LT

566+72,
20.23' LT

560'N3'

561'N3'

562'N3'

563'N3'

564'N3'

565'N3'

566'N3'

567'N3'

USH 45

560+00

561+00

562+00

563+00

564+00

565+00

566+00

567+00

GOLLNOW RD

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 2 - CONSTRUCTION DETAILS	SHEET 40	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021022_CD-S2.DWG
LAYOUT NAME - 56000-56700

PLOT DATE : 8/26/2025 12:34 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

WETLAND BOUNDARY

STA 159+86.89
-101.17' LT

STA 160+35.67
-100.73' LT

GRUBBING AREA

SLOPE INTERCEPT (TYP)

STA 159+85.96
-68.38' LT

STA 160+34.93
-67.12' LT

FRONTIER

EXISTING R/W

USH 45

158+00

159+00

160+00

161+00

162+00

163+00

USH 45

FRONTIER

STA 159+83.36
72.61' RT

STA 160+26.29
72.11' RT

WIN LLC

STA 159+83.78
102.73' RT

STA 160+27.11
102.22' RT

SLOPE INTERCEPT (TYP)

GRUBBING AREA

WETLAND BOUNDARY

WIN LLC

EXISTING R/W

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	GRUBBING PLAN	SHEET 41	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021101_GP.DWG
LAYOUT NAME - 160+09

PLOT DATE : 10/16/2025 9:53 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

WETLAND BOUNDARY

EXISTING R/W

STA 182+76.55
-100.09' LT

STA 183+22.01
-100.08' LT

GRUBBING AREA

SLOPE INTERCEPT (TYP)

FRONTIER

STA 182+72.35
-64.66' LT

STA 183+21.95
-62.39' LT

FRONTIER

USH 45

180+00 181+00 182+00 183+00 184+00 185+00 186+00

USH 45

STA 182+61.99
47.37' RT

STA 183+05.89
52.57' RT

GRUBBING AREA

WIN LLC

STA 183+15.21
84.92' RT

STA 182+39.14
84.91' RT

SLOPE INTERCEPT (TYP)

WETLAND BOUNDARY

EXISTING R/W

STA 182+59.27
115.00' RT

STA 182+96.28
115.00' RT

PROPOSED R/W

PROPOSED TLE

WIN LLC

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	GRUBBING PLAN	SHEET 42	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021101_GP.DWG
LAYOUT NAME - 182+90

PLOT DATE : 10/16/2025 9:54 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STA 188+35.53
-115.67' LT

STA 188+84.82
-124.02' LT

EXISTING R/W

GRUBBING AREA

WETLAND BOUNDARY

STA 188+90.86
-87.82' LT

STA 188+41.56
-79.47' LT

SLOPE INTERCEPT (TYP)

FRONTIER

FRONTIER

USH 45

186+00 187+00 188+00 189+00 190+00 191+00 192+00

USH 45

STA 188+67.90
56.85' RT

STA 189+11.27
49.50' RT

WIN LLC

WIN LLC

SLOPE INTERCEPT (TYP)

STA 189+44.13
85.06' RT

STA 188+53.56
85.04' RT

EXISTING R/W

GRUBBING AREA

WETLAND BOUNDARY

STA 189+15.99
122.00' RT

STA 188+81.56
122.00' RT

PROPOSED R/W

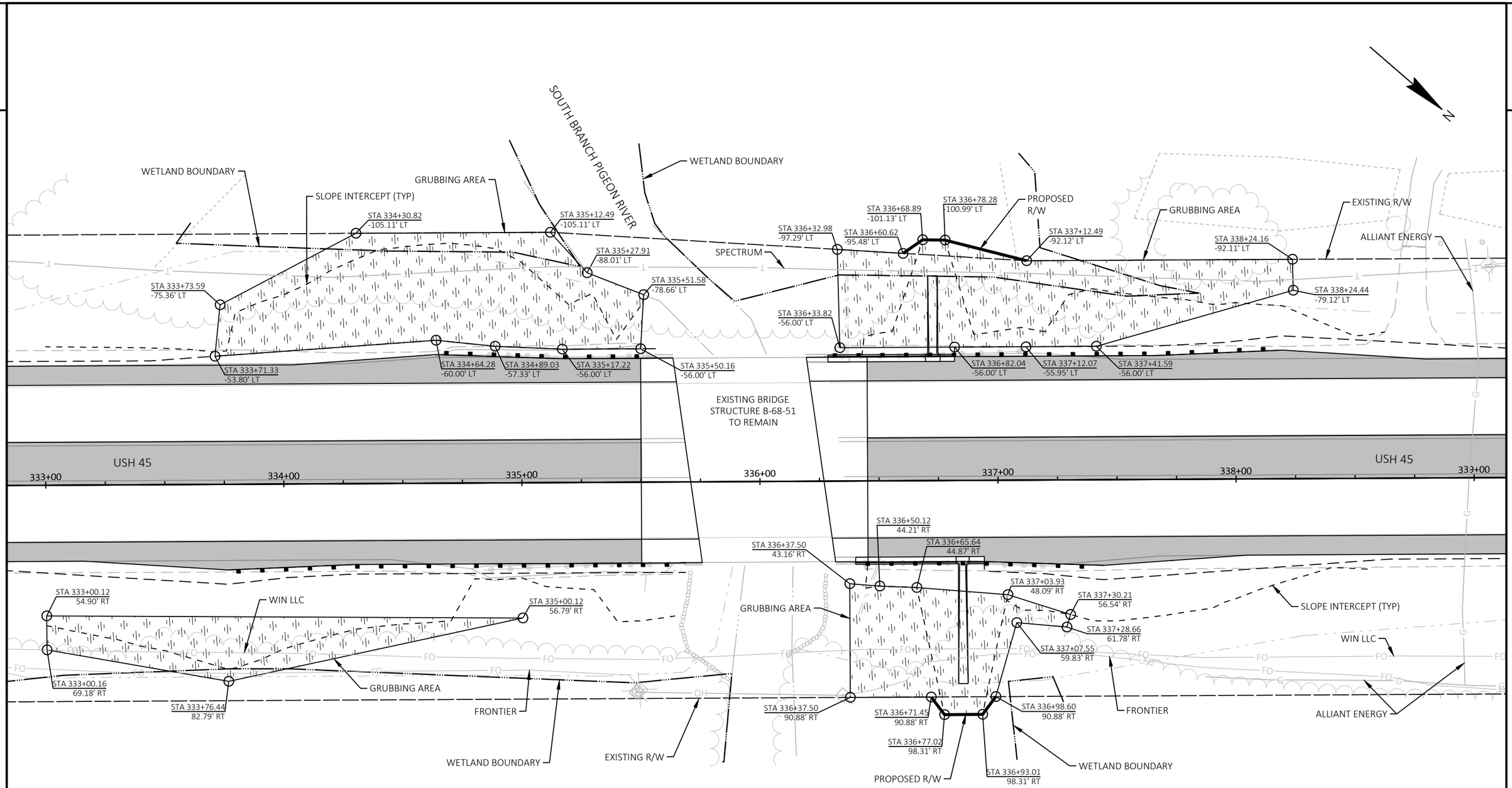
PROPOSED TLE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	GRUBBING PLAN	SHEET 43	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021101_GP.DWG
LAYOUT NAME - 188+81

PLOT DATE : 10/16/2025 9:54 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	GRUBBING PLAN	SHEET 44	E

2

2

EXISTING R/W

SPECTRUM

WITTENBERG TELEPHONE COMPANY

SLOPE INTERCEPT (TYP)

WETLAND BOUNDARY

WETLAND BOUNDARY

SPECTRUM

WITTENBERG TELEPHONE COMPANY

GRUBBING AREA

STA 480+64.32
-86.40' LT

STA 481+54.63
-82.49' LT

STA 480+63.92
-57.40' LT

STA 480+96.40
-55.85' LT

STA 481+30.30
-55.85' LT

STA 481+53.95
-55.65' LT

EXISTING STRUCTURE B-68-52
TO REMAIN
(TWIN CELL 11' X 7' RCBC)

USH 45

USH 45

477+00

478+00

479+00

480+00

481+00

482+00

483+00

STA 477+30.06
36.60' RT

STA 481+92.09
36.89' RT

WIN LLC

SPECTRUM

STA 477+29.96
69.34' RT

SLOPE INTERCEPT (TYP)

GRUBBING AREA

WETLAND BOUNDARY

NORTH BRANCH PIGEON RIVER

WETLAND BOUNDARY

ALLIANT ENERGY

SPECTRUM

STA 481+93.43
70.76' RT

WIN LLC

EXISTING R/W

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	GRUBBING PLAN	SHEET 45	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021101_GP.DWG
LAYOUT NAME - 480+75

PLOT DATE : 10/16/2025 9:55 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

SPECTRUM
WITTENBERG TELEPHONE COMPANY
ALLIANT ENERGY
ATC
SLOPE INTERCEPT (TYP)
USH 45
STA 526+09.55 -99.95' LT
GRUBBING AREA
FRONTIER
WETLAND BOUNDARY
EXISTING R/W
WITTENBERG TELEPHONE COMPANY
FRONTIER
ALLIANT ENERGY
STA 527+86.25 -99.96' LT
STA 526+00.89 -58.25' LT
EXISTING 91" X 58" RCHECP TO REMAIN
STA 527+86.25 -56.00' LT
SPECTRUM
519+00
520+00
521+00
522+00
523+00
524+00
525+00
526+00
527+00
528+00
529+00
530+00
ALLIANT ENERGY
FRONTIER
STA 525+21.45 45.57' RT
STA 527+67.16 41.10' RT
CITY OF MARION
USH 45
STA 520+00.17 48.23' RT
STA 520+00.15 90.16' RT
SLOPE INTERCEPT (TYP)
GRUBBING AREA
CENTURY LINK
WETLAND BOUNDARY
STA 525+07.79 90.34' RT
STA 526+09.32 70.00' RT
STA 527+67.69 70.00' RT
FRONTIER
ALLIANT ENERGY
CENTURY LINK
EXISTING R/W

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	GRUBBING PLAN	SHEET 46	E

2

2

N

ATC

FRONTIER

SLOPE INTERCEPT (TYP)

EXISTING R/W

WITTENBERG TELEPHONE COMPANY

PC: 558+58.88

PT: 561+98.75

PC: 562+35.39

PT: 566+65.04

USH 45

558+00 to 567+00 RT

556+00 557+00 558+00 559+00 560+00 561+00 562+00 563+00 564+00 565+00 566+00 567+00

STA 558+00.08
28.29' RT

STA 562+65.84
27.11' RT

STA 563+66.42
27.03' RT

STA 564+99.76
36.00' RT

USH 45

STA 566+79.27
39.68' RT

STA 557+99.96
59.97' RT

STA 563+07.21
54.70' RT

STA 564+41.61
58.33' RT

STA 566+53.06
85.27' RT

STA 566+81.54
83.82' RT

EXISTING R/W

CENTURY LINK

GRUBBING AREA

STA 562+06.25
68.96' RT

SLOPE INTERCEPT (TYP)

PROPOSED R/W

GALLNOW RD

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	GRUBBING PLAN	SHEET 47	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021101_GP.DWG
LAYOUT NAME - 558+00

PLOT DATE : 10/16/2025 9:55 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:75 FT

WISDOT/CADDS SHEET 42

2

N

FRONTIER

CTH C

USH 45

144+00

145+00

146+00

147+00

148+00

149+00

143+38,
24.12' RT

147+63,
8.00' LT

147+67,
4.00' LT

148+59,
8.00' LT

149+02,
50.00' LT

PC: 149+01.06

147+63,
0.00'

148+80,
0.00'

R2.17'

BAD

NOSE-1

HMA-4

30-G(R)

30-J(R)

HMA-5

A-SURF

WIN LLC

34'

24'

2'

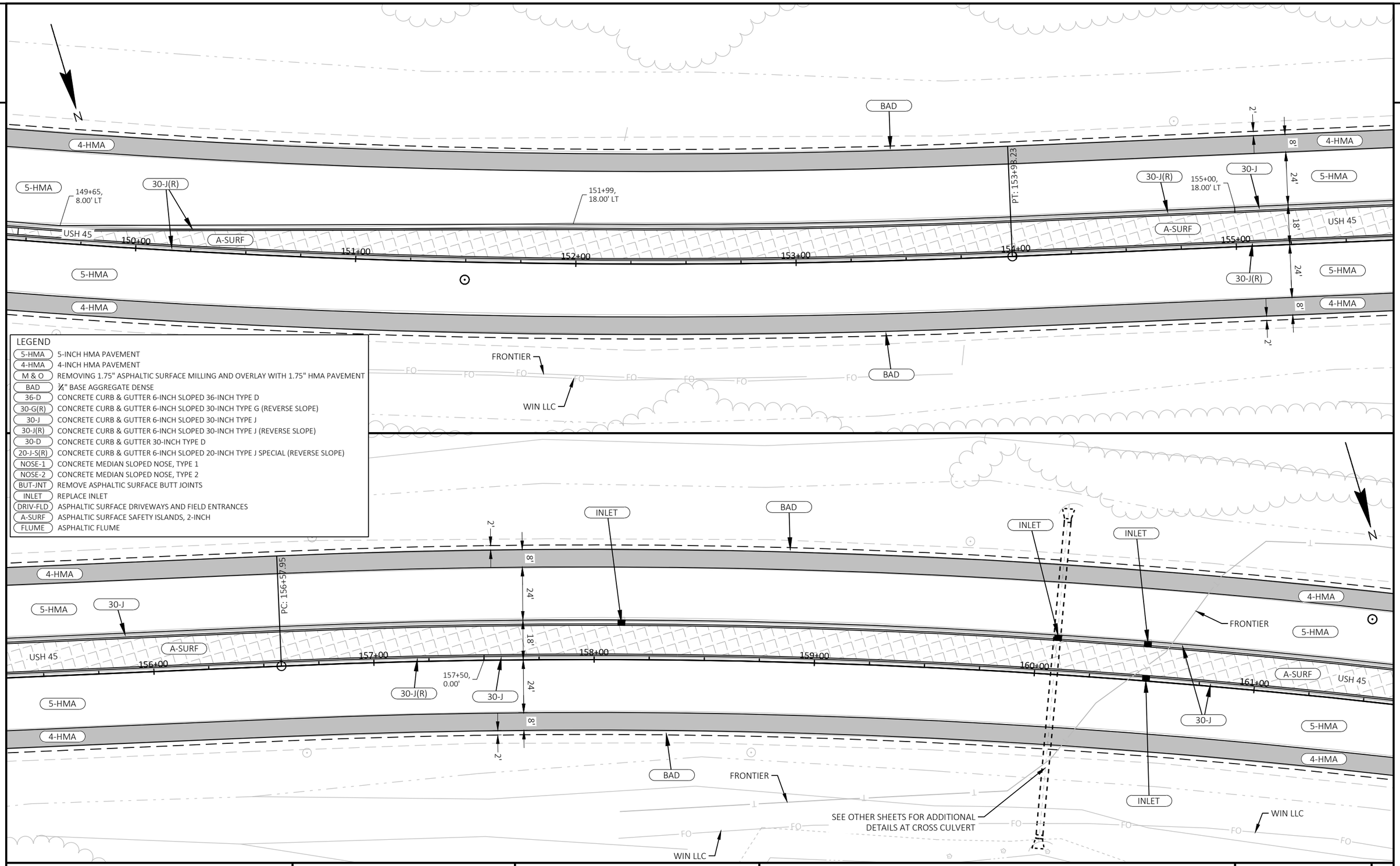
8"

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 48	E

2



LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 49 E

2

2

N

SLOPE INTERCEPT: RIPRAP APRON
SCOUR TREATMENT REQ'D
(SEE CONSTRUCTION DETAIL)

EXISTING R/W

WETLAND BOUNDARY

FRONTIER

BAD

4-HMA

5-HMA

A-SURF

USH 45

158+00

159+00

160+00

161+00

162+00

163+00

FRONTIER

2'

8"

24"

18"

STA 160+09
EXISTING 30" CPRC TO REMAIN

5-HMA

4-HMA

BAD

FRONTIER

WIN LLC

FO

WETLAND BOUNDARY

WIN LLC

SLOPE INTERCEPT: RIPRAP APRON
SCOUR TREATMENT REQ'D
(SEE CONSTRUCTION DETAIL)

EXISTING R/W

LEGEND

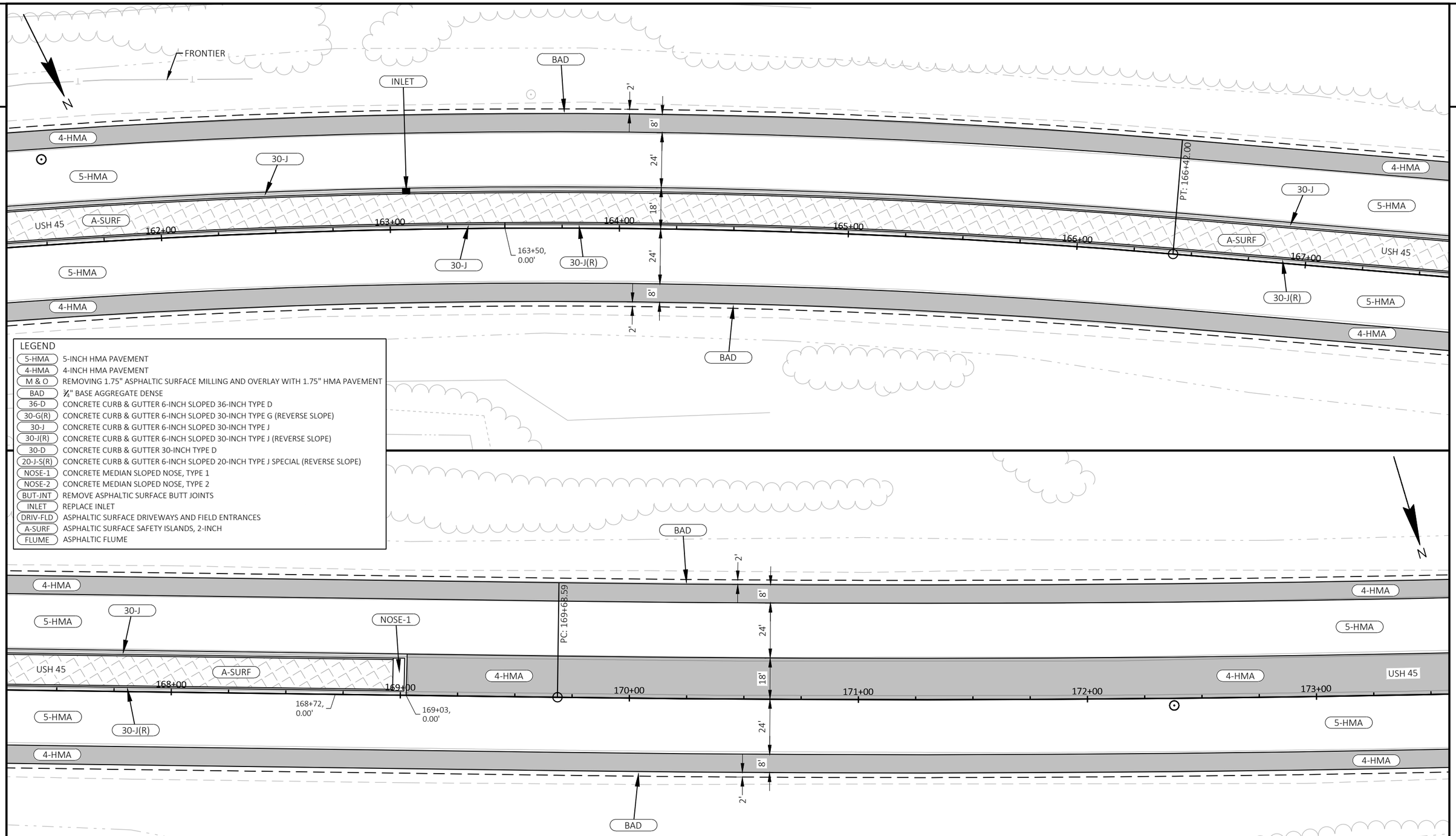
5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 160+09 - 30-INCH CPRC	SHEET 50	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021205_PD.DWG
LAYOUT NAME - 160+09 - 30-INCH CPRC

PLOT DATE : 10/16/2025 2:07 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 51	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021201_PD.DWG
LAYOUT NAME - 03
PLOT DATE : 10/16/2025 10:54 AM
PLOT BY : DALTON, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

SLOPE INTERCEPT: RIPRAP APRON
SCOUR TREATMENT REQ'D
(SEE CONSTRUCTION DETAIL)

WETLAND BOUNDARY

EXISTING R/W

FRONTIER

BAD

4-HMA

5-HMA

USH 45

180+00 181+00 182+00 183+00 184+00 185+00 186+00

STA 182+90
EXISTING 30" CPRC TO REMAIN

2'

8'

24'

18'

24'

8'

2'

FO

O POST

SLOPE INTERCEPT: RIPRAP BASIN
SCOUR TREATMENT REQ'D
(SEE CONSTRUCTION DETAIL)

WIN LLC

TLE

R/W

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 182+90 - 30-INCH CPRC	SHEET 52	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021205_PD.DWG
LAYOUT NAME - 182+90 - 30-INCH CPRC

PLOT DATE : 10/16/2025 2:08 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

SLOPE INTERCEPT: RIPRAP APRON
SCOUR TREATMENT REQ'D
(SEE CONSTRUCTION DETAIL)

EXISTING R/W

WETLAND BOUNDARY

FRONTIER

FRONTIER

BAD

4-HMA

5-HMA

USH 45

4-HMA

186+00

187+00

188+00

189+00

190+00

191+00

USH 45

192+00

5-HMA

STA 188+81
EXISTING 24" CPRC TO REMAIN

4-HMA

BAD

2'

8'

24'

18'

24'

8'

2'

FO

EXISTING R/W

WETLAND BOUNDARY

WIN LLC

TLE

R/W

SLOPE INTERCEPT: RIPRAP BASIN
SCOUR TREATMENT REQ'D
(SEE CONSTRUCTION DETAIL)

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 188+81 - 24-INCH CPRC	SHEET 53 E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021205_PD.DWG
LAYOUT NAME - 188+81 - 24-INCH CPRC

PLOT DATE : 10/16/2025 2:08 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

HILL TOP RD

BUT-JNT

FLUME

LEFT TURN LANE REQ'D
(SEE CONSTRUCTION DETAIL)

FRONTIER

BAD

M & O

200+71,
50.00' LT

10'

2'

8'

4-HMA

5-HMA

200+46,
42.00' LT

24'

18'

USH 45

199+62,
10.00' LT

198+00

199+00

200+00

201+00

202+00

203+00

204+00

198+12,
0.00'

201+07,
24.00' RT

201+62,
10.00' LT

203+14,
8.00' LT

203+71,
42.00' LT

34'

203+34,
37.18' RT

204+09,
32.00' RT

WIN LLC

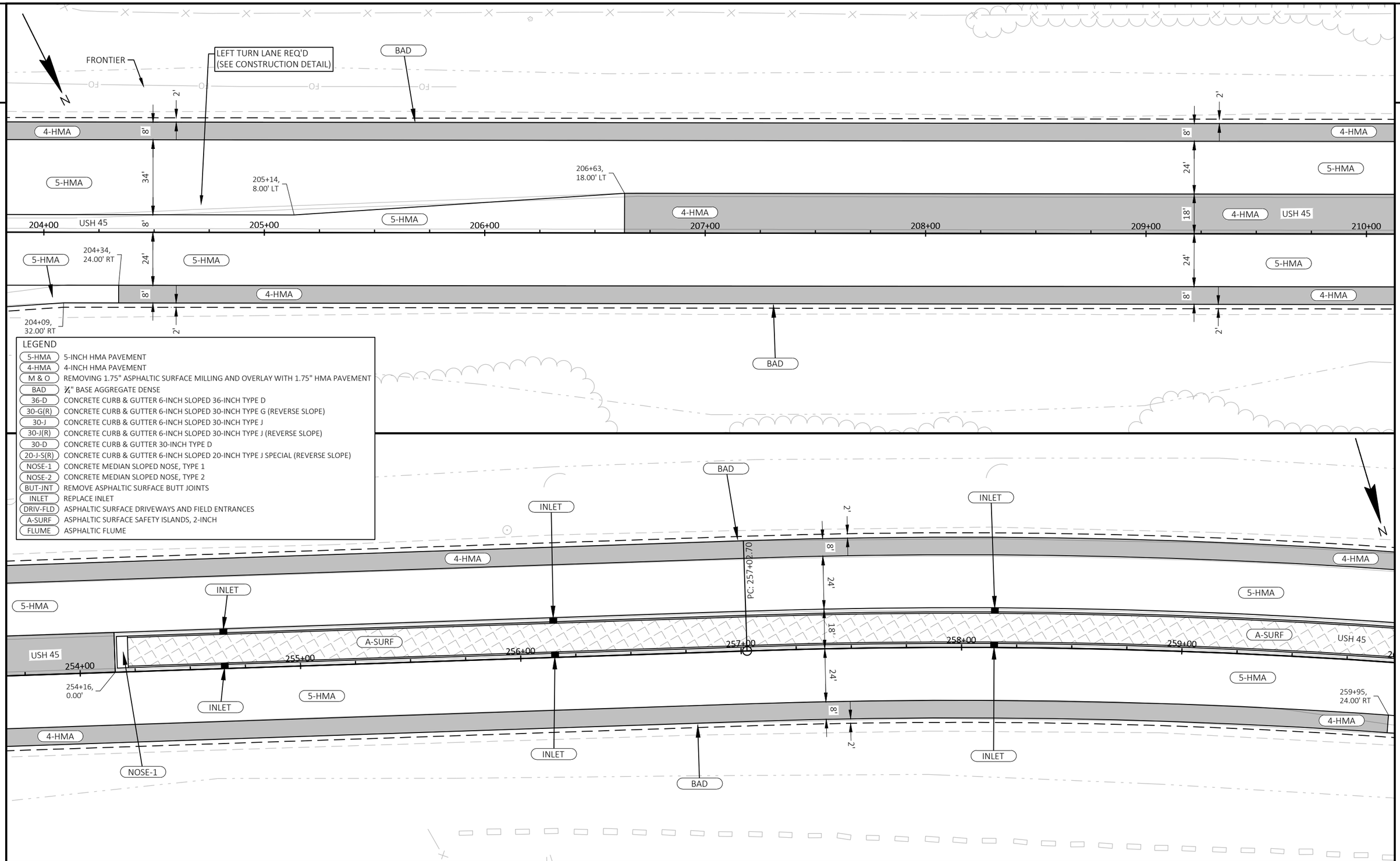
FO

MP

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 54	E

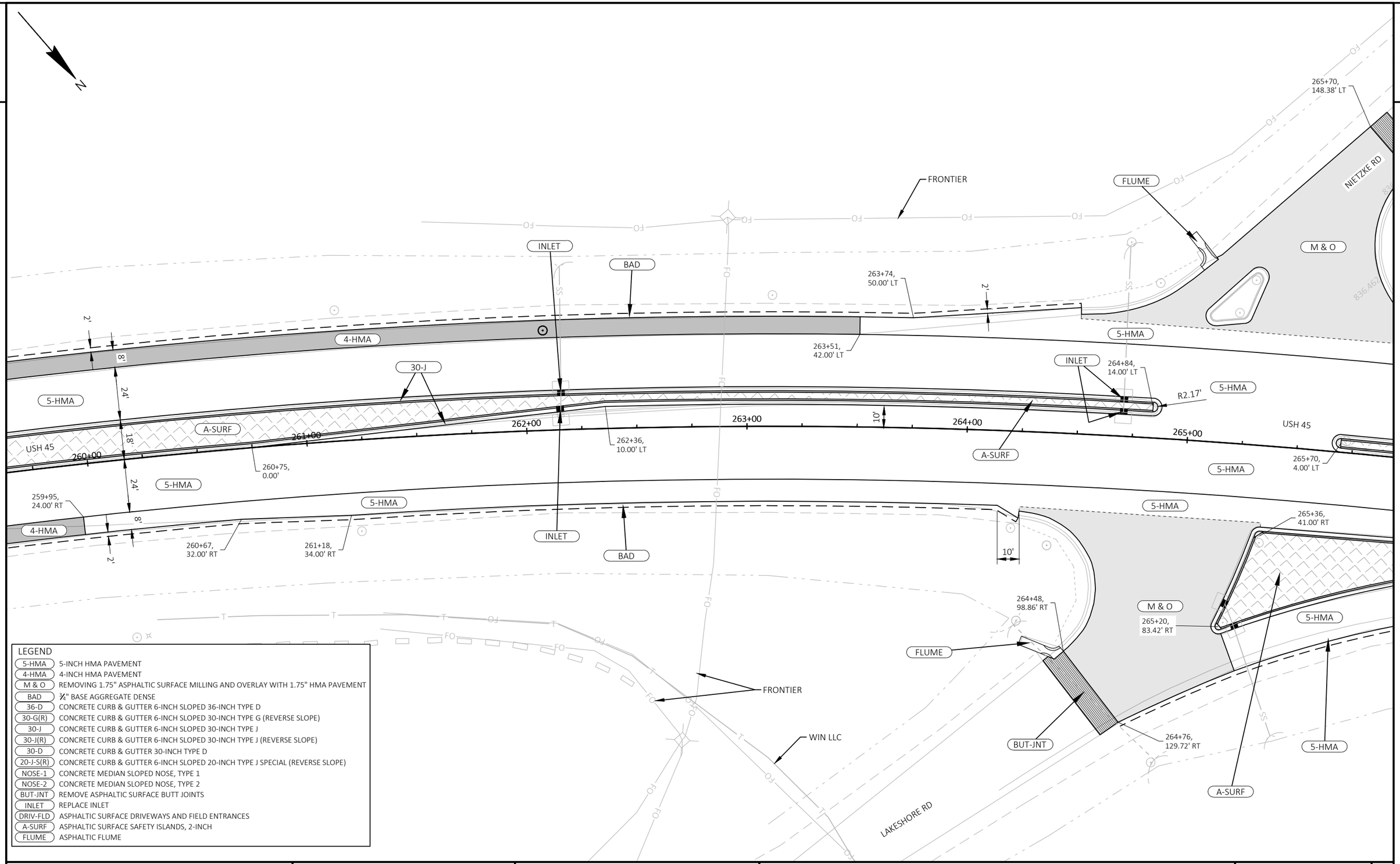


LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 55	E

2



LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 56	E

2

2

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

N

NIETZKE RD

FRONTIER

265+70, 148.38' LT

BUT-JNT

FLUME

265+88, 129.93' LT

ALLIANT ENERGY

FRONTIER

EXISTING SAFETY ISLAND TO REMAIN

M & O

BAD

263+74, 50.00' LT

263+51, 42.00' LT

4-HMA

5-HMA

FRONTIER

30-J

INLET

264+84, 14.00' LT

NOSE-1

A-SURF

265+70, 4.00' LT

PT: 267+14.87

INLET

267+70, 8.00' LT

30-J

USH 45

263+00

264+00

265+00

266+00

267+00

268+00

R2.17'

R4'

R3'

NOSE-2

265+36, 41.00' RT

266+67, 38.08' RT

267+45, 48.00' RT

264+48, 98.86' RT

265+20, 83.42' RT

264+76, 129.72' RT

FLUME

BUT-JNT

FRONTIER

WIN LLC

WE ENERGIES

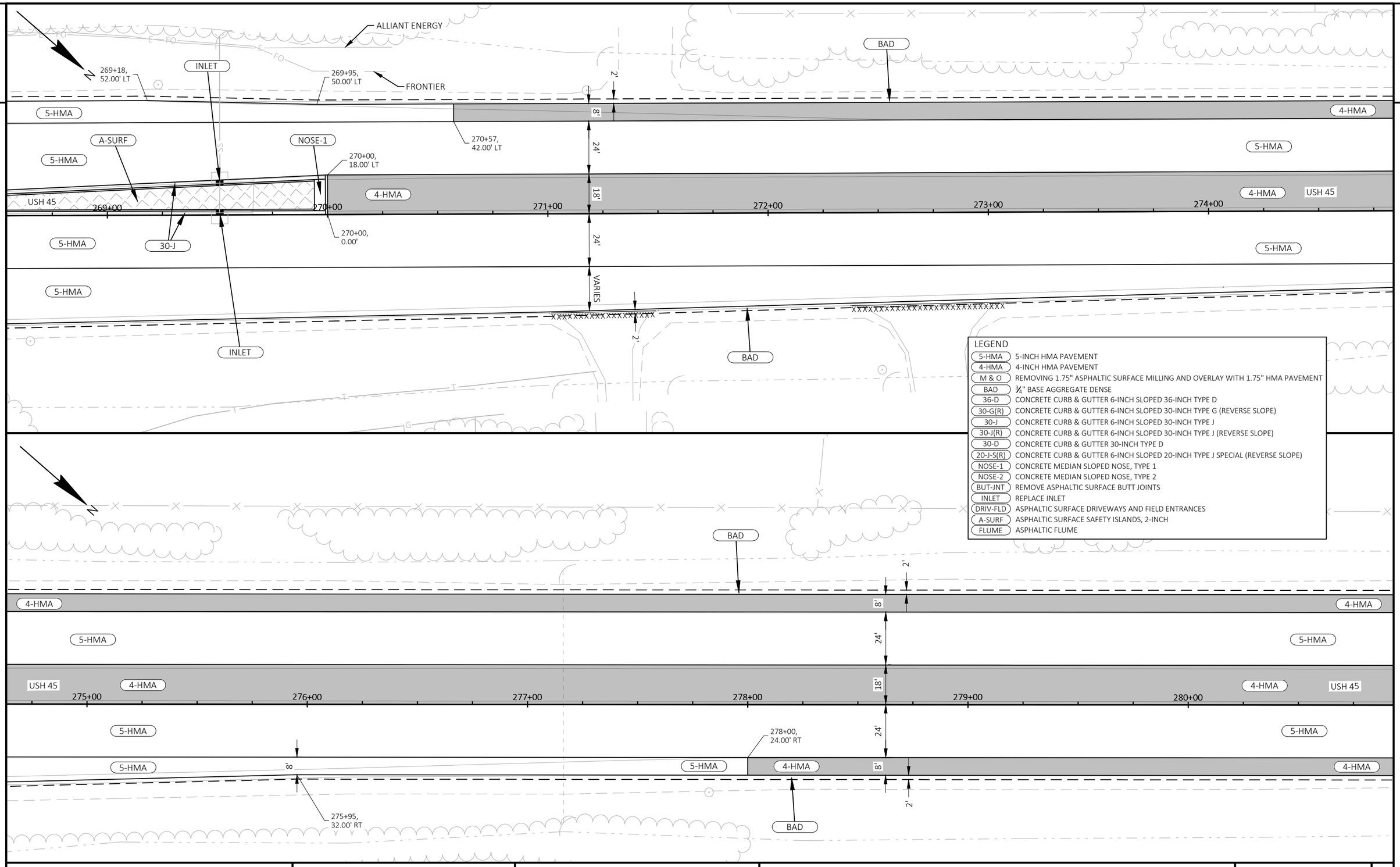
LAKESHORE RD

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 57	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021201_PD.DWG
LAYOUT NAME - 07

PLOT DATE : 10/16/2025 10:55 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

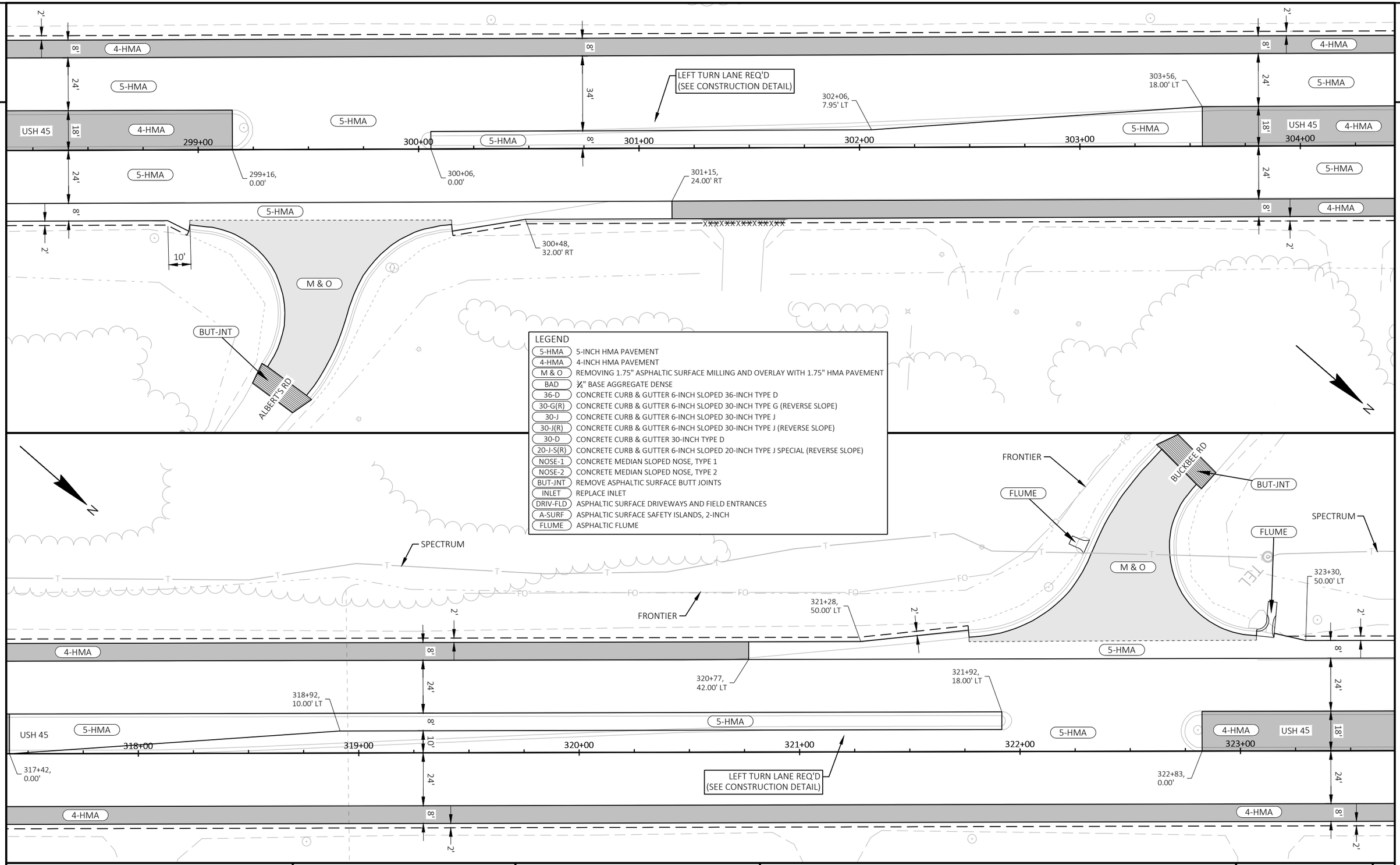
WISDOT/CADDS SHEET 42



LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

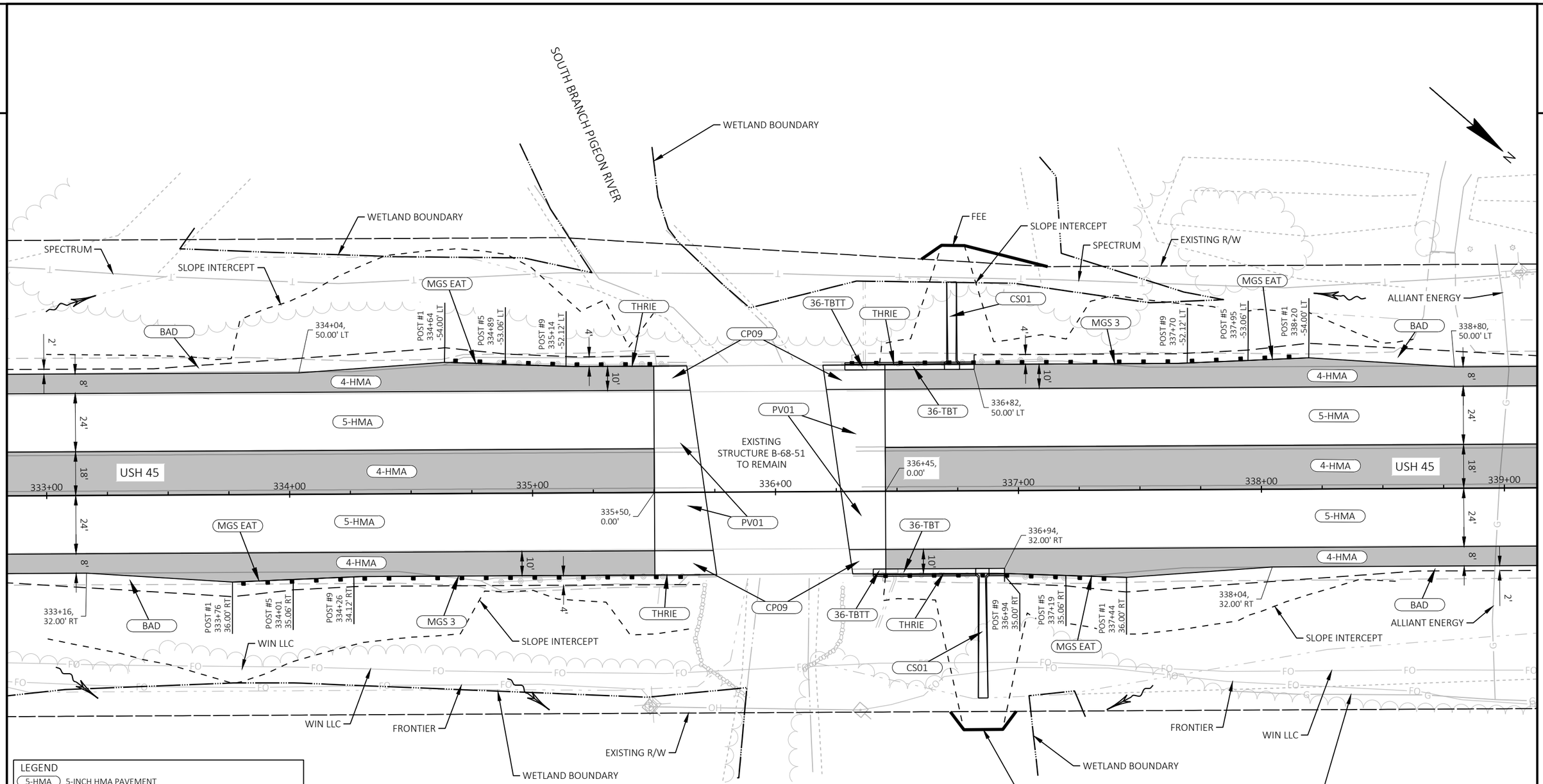
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 58 E



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 59	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021201_PD.DWG
LAYOUT NAME - 09
PLOT DATE : 10/16/2025 10:57 AM
PLOT BY : DALTON, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

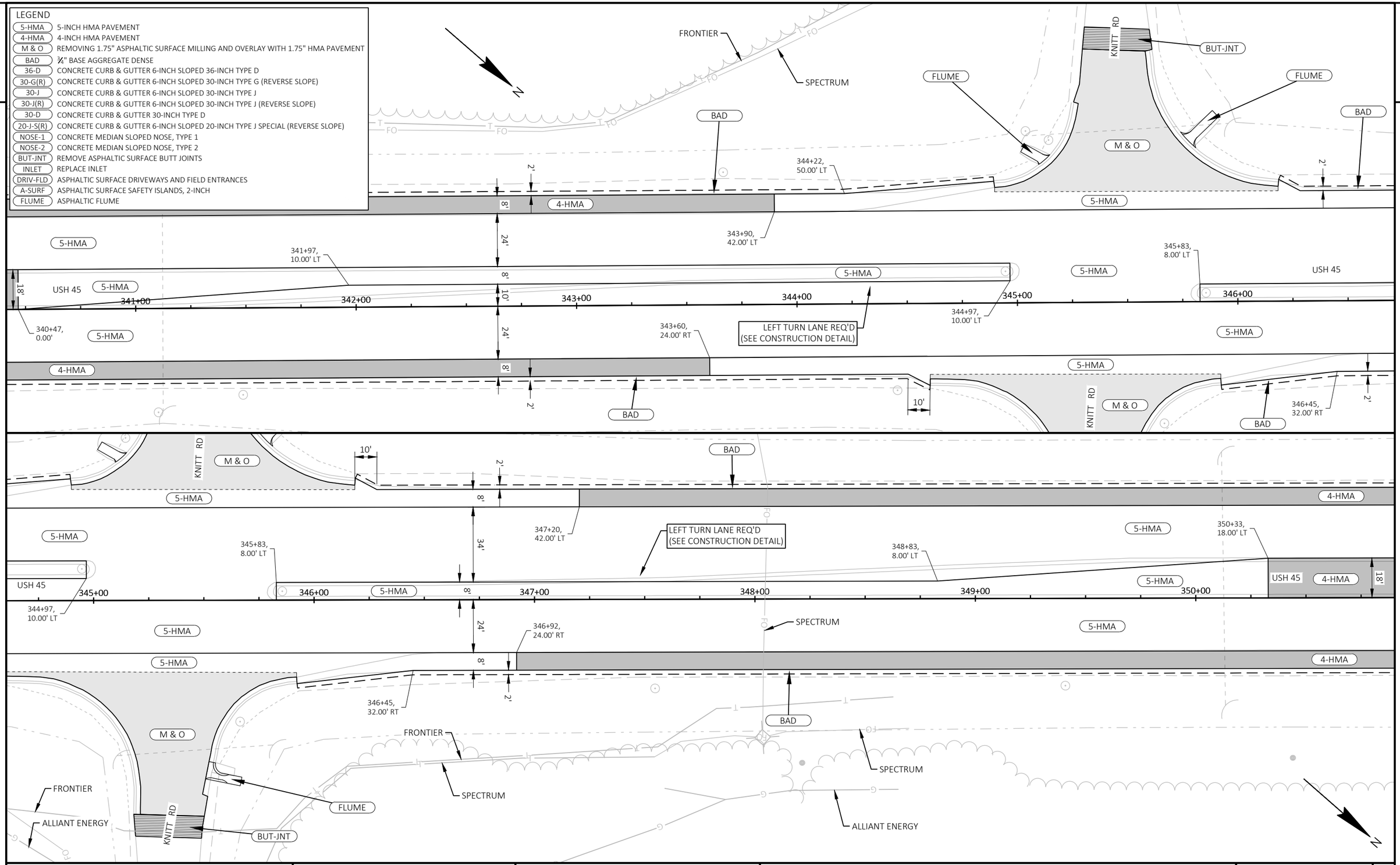
5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
BAD	¾" BASE AGGREGATE DENSE
MGS EAT	MGS GUARDRAIL TERMINAL EAT
MGS 3	MGS GUARDRAIL 3
MGS 3 L	MGS GUARDRAIL 3 L
THRIE	MGS THRIE BEAM TRANSITION
CS01	CONCRETE SURFACE DRAINS
PV01	CONCRETE PAVEMENT APPROACH SLAB
CP09	CONCRETE PAVEMENT 9-INCH
CB32	CONCRETE BARRIER TYPE S32 WITH THRIE BEAM ANCHOR
36-TBT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
36-TBTT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 336+00 - GUARDRAIL	SHEET 60	E

2

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 61 E

2

2

N

SPECTRUM

WETLAND BOUNDARY

SLOPE INTERCEPT

BAD

EXISTING R/W

WETLAND BOUNDARY

SPECTRUM

POST #1
376+53
-54.00' LT

POST #5
376+78
-53.06' LT

POST #9
377+03
-52.12' LT

POST #9
378+09
-52.12' LT

POST #5
378+34
-53.06' LT

POST #1
378+59
-54.00' LT

2'

8'

4-HMA

24'

5-HMA

18'

4-HMA

USH 45

USH 45

375+00

376+00

377+00

378+00

379+00

380+00

24'

5-HMA

8'

4-HMA

2'

BAD

4'

10'

MGS EAT

MGS 3

MGS EAT

STA 377+16
EXISTING 48" CPRC TO REMAIN

SPECTRUM

EXISTING R/W

ALLIANT ENERGY

LEGEND

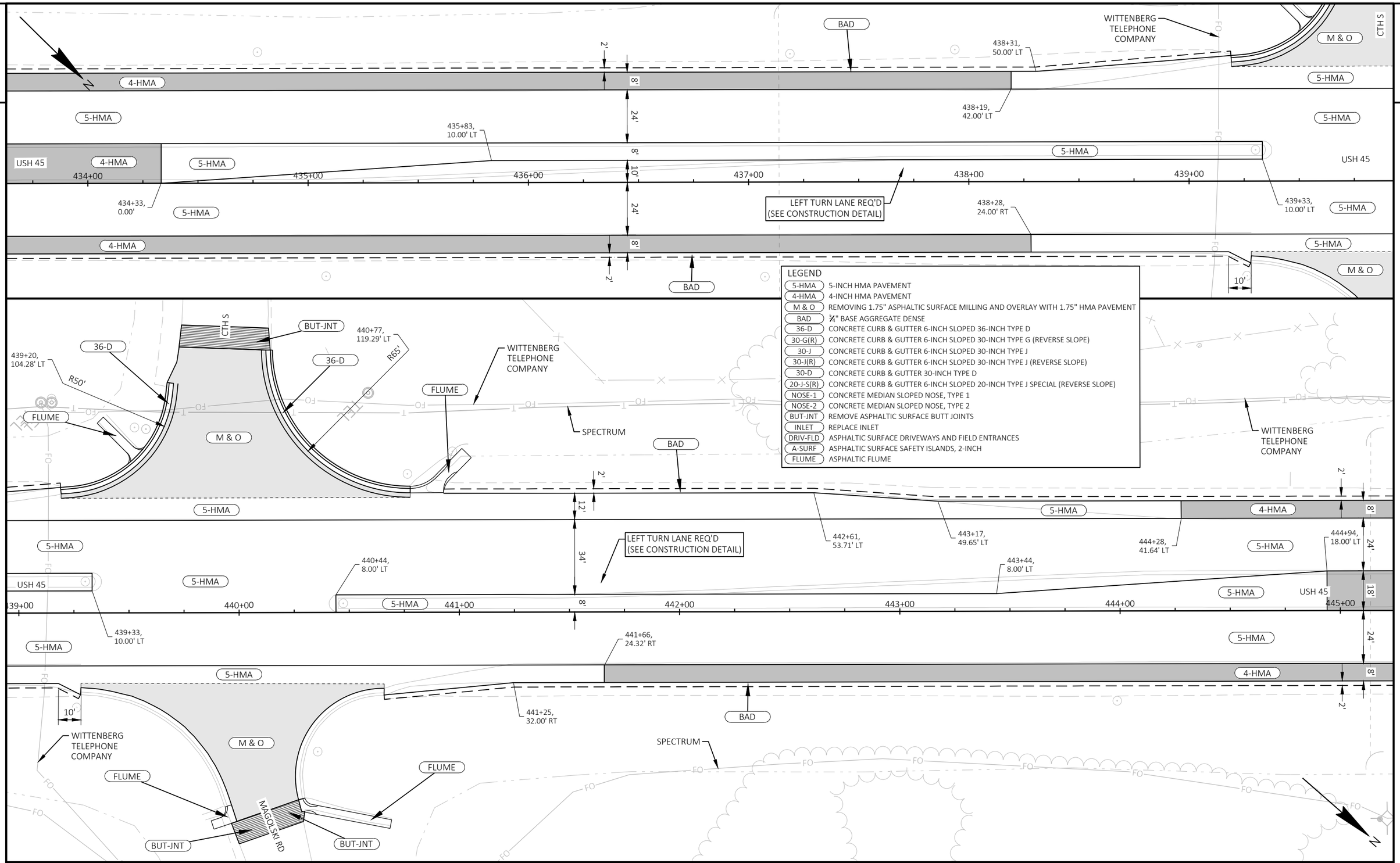
5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
BAD	¾" BASE AGGREGATE DENSE
MGS EAT	MGS GUARDRAIL TERMINAL EAT
MGS 3	MGS GUARDRAIL 3
MGS 3 L	MGS GUARDRAIL 3 L
THRIE	MGS THRIE BEAM TRANSITION
CS01	CONCRETE SURFACE DRAINS
PV01	CONCRETE PAVEMENT APPROACH SLAB
CP09	CONCRETE PAVEMENT 9-INCH
CB32	CONCRETE BARRIER TYPE S32 WITH THRIE BEAM ANCHOR
36-TBT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
36-TBTT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 377+00 - GUARDRAIL	SHEET 62	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021205_PD.DWG
LAYOUT NAME - 377+00 - GUARDRAIL

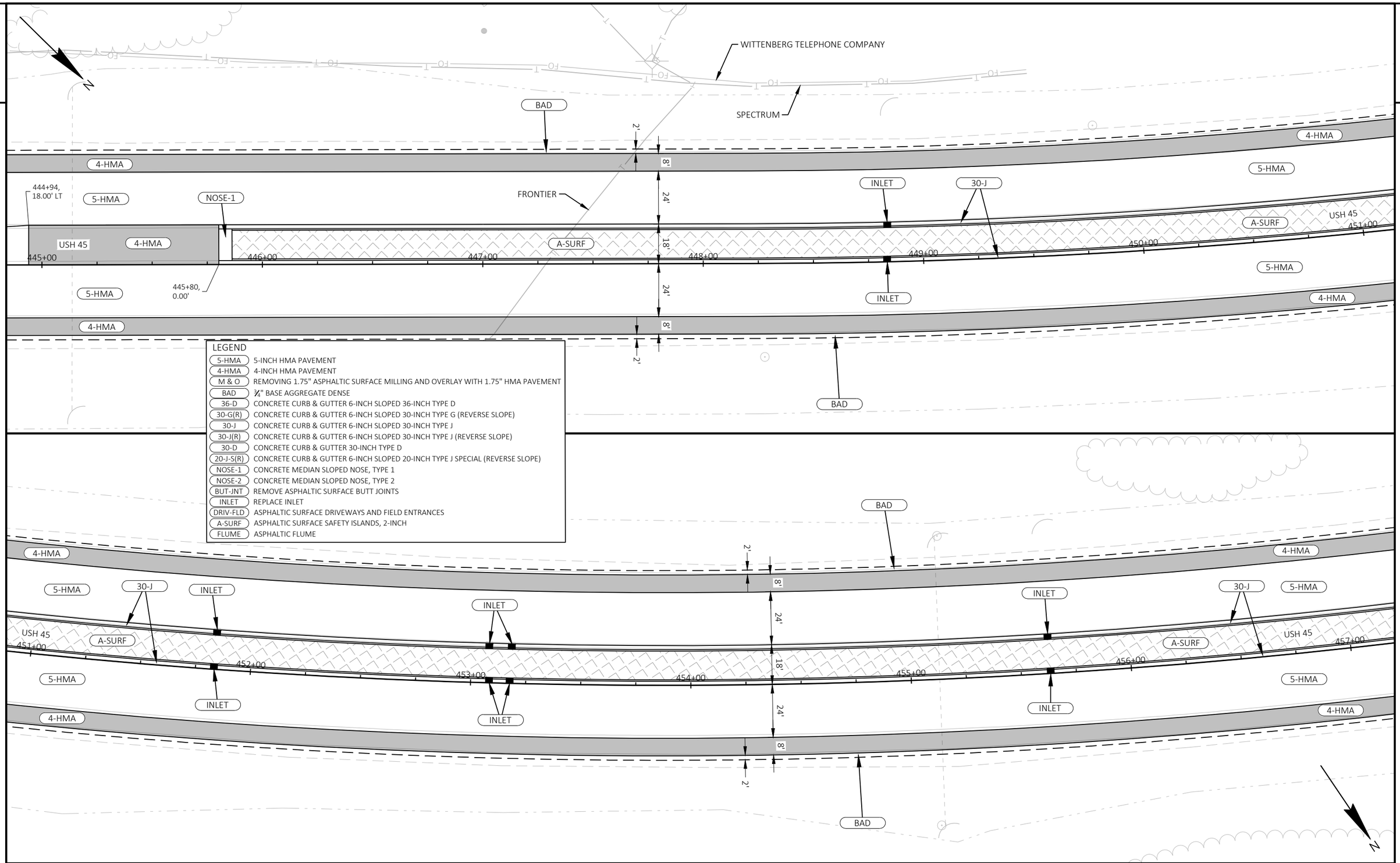
PLOT DATE : 10/16/2025 2:09 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



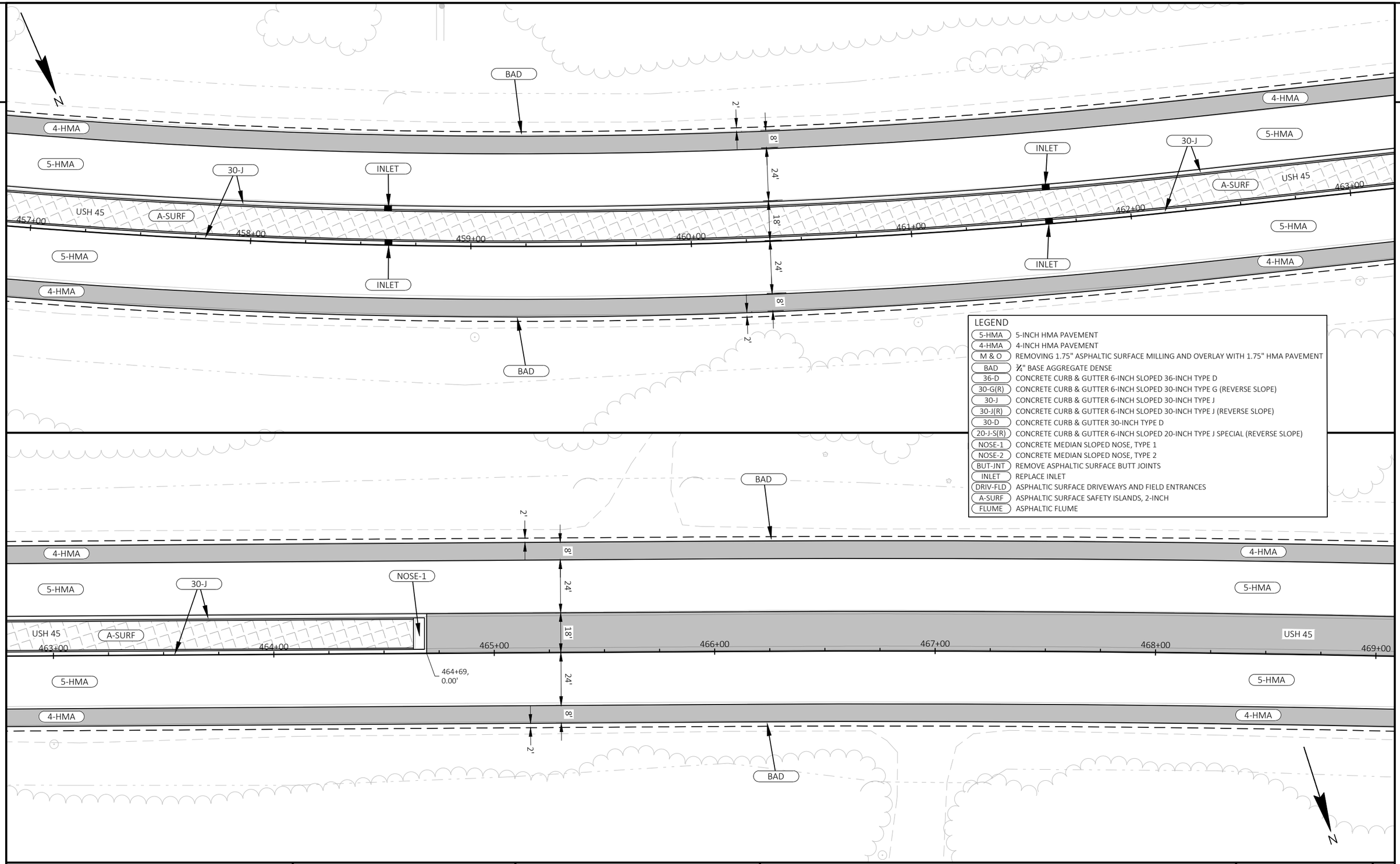
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 63	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021202_PD.DWG
LAYOUT NAME - 11
PLOT DATE : 10/16/2025 12:11 PM
PLOT BY : DALTON, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 65	E

2

N

E PROSPECT AVE

ALLIANT ENERGY

SPECTRUM

WITTENBERG TELEPHONE COMPANY

ALLIANT ENERGY

ALLIANT ENERGY

WITTENBERG TELEPHONE COMPANY

WIN LLC

SPECTRUM

FLUME

BUT-JNT

FLUME

M & O

474+57, 50.00' LT

4-HMA

5-HMA

2'

8'

24'

8'

10'

8'

2'

4-HMA

5-HMA

471+93, 10.00' LT

473+93, 42.00' LT

474+93, 10.00' LT

18'

USH 14

5-HMA

471+00

472+00

473+00

474+00

475+00

476+00

5-HMA

USH 14

18'

470+43, 0.00'

LEFT TURN LANE REQ'D (SEE CONSTRUCTION DETAIL)

476+29, 0.00'

5-HMA

4-HMA

4-HMA

WIN LLC

SPECTRUM

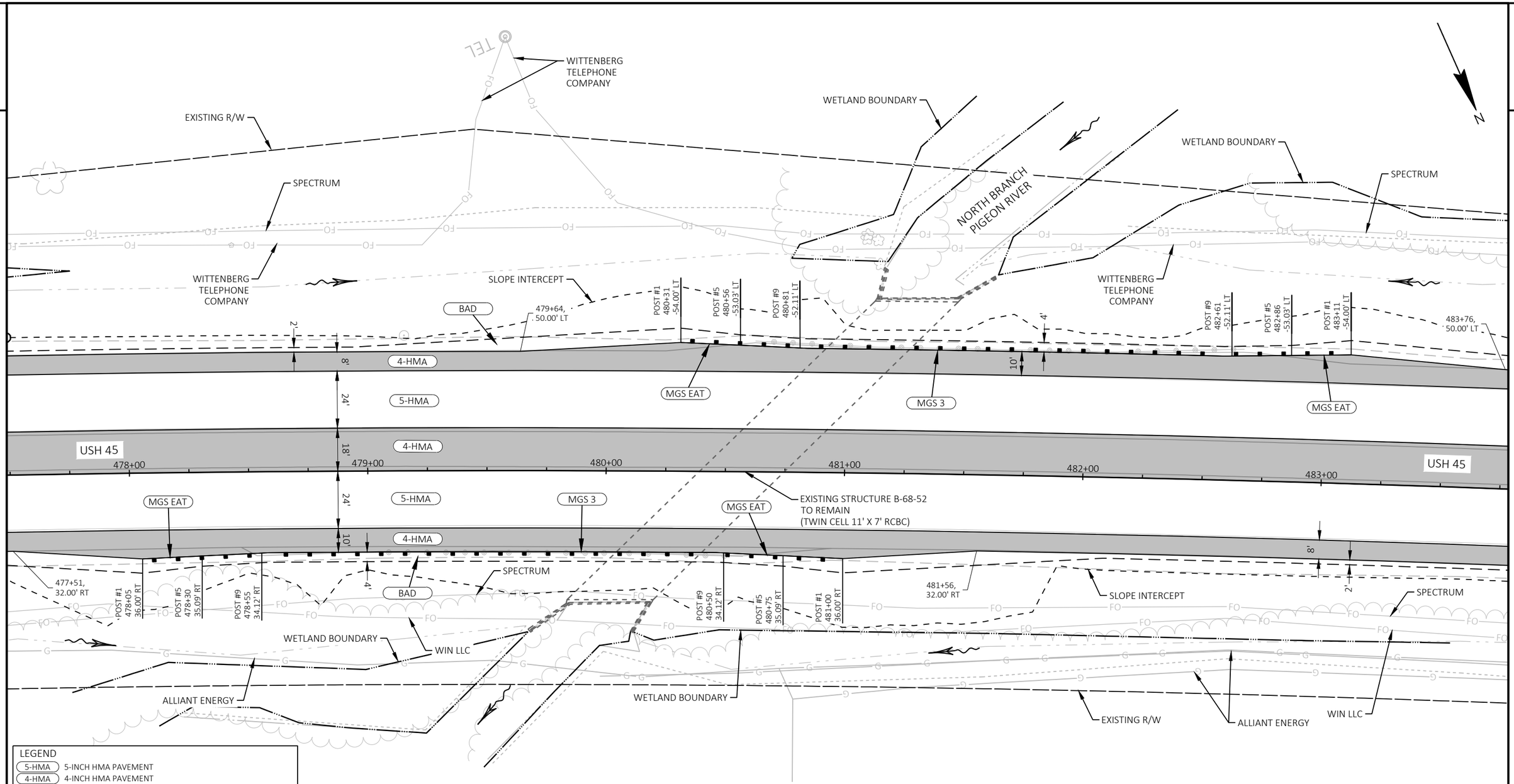
ALLIANT ENERGY

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 66	E

2



LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
BAD	¾" BASE AGGREGATE DENSE
MGS EAT	MGS GUARDRAIL TERMINAL EAT
MGS 3	MGS GUARDRAIL 3
MGS 3 L	MGS GUARDRAIL 3 L
THRIE	MGS THRIE BEAM TRANSITION
CS01	CONCRETE SURFACE DRAINS
PV01	CONCRETE PAVEMENT APPROACH SLAB
CP09	CONCRETE PAVEMENT 9-INCH
CB32	CONCRETE BARRIER TYPE S32 WITH THRIE BEAM ANCHOR
36-TBT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
36-TBTT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 480+75 - GUARDRAIL	SHEET 67	E

2

2

N

SPECTRUM

WITTENBERG TELEPHONE COMPANY

2'
8'
24'
18'
24'
8'
2'

4-HMA
5-HMA
USH 14
485+00
486+00
487+00
488+00
489+00
490+00
491+00

FRONTIER

ALLIANT ENERGY

LEGEND	
5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

N

ACCESS TO FORMER WAYSIDE TO REMAIN

SPECTRUM

WITTENBERG TELEPHONE COMPANY

2'
8'
24'
18'
24'
8'
2'

4-HMA
5-HMA
USH 14
494+00
495+00
496+00
497+00
498+00
499+00
499+17, 10.07' LT
497+67, 0.00'

LEFT TURN LANE REQ'D (SEE CONSTRUCTION DETAIL)

WIN LLC

FRONTIER

SPECTRUM

ALLIANT ENERGY

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 68	E

2

N

FRONTIER
SPECTRUM
WITTENBERG TELEPHONE COMPANY
BAD
4-HMA
8'
2'
5-HMA
24'
499+17, 10.07' LT
ALLIANT ENERGY
18'
USH 45
498+00
499+00
500+00
10'
501+00
502+00
503+00
497+67, 0.00'
500+92, 42.00' LT
LEFT TURN LANE REQ'D (SEE CONSTRUCTION DETAIL)
501+58, 24.00' RT
502+17, 10.00' LT
BUT-JNT
FLUME
30-D
36-D
NE 7TH ST
501+94, 82.65' LT
R30'
502+24, 79.35' LT
501+59, 50.00' LT
M & O
TRANSITION CURB AND GUTTER TYPE
ALLIANT ENERGY
FRONTIER
SPECTRUM
WITTENBERG TELEPHONE COMPANY
10'
CITY OF MARION
USH 45
503+00
504+00
505+00
506+00
507+00
508+00
504+35, 42.00' LT
503+74, 8.00' LT
34'
506+74, 8.00' LT
508+24, 18.00' LT
ATC
505+00, 24.00' RT
504+24, 32.00' RT
WIN LLC
CENTURYLINK
NE 7TH ST

LEGEND	
5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 69	E

2

2

N

WATER ST

NE 5TH ST

BUT-JNT

WITTENBERG TELEPHONE COMPANY

SPECTRUM

ALLIANT ENERGY

ATC

SPECTRUM

ALLIANT ENERGY

WITTENBERG TELEPHONE COMPANY

ATC

513+60, 100.11' LT

M & O

BAD

2'

512+98, 50.00' LT

10'

2'

BAD

4-HMA

5-HMA

5-HMA

512+37, 42.00' LT

5-HMA

24'

510+44, 10.00' LT

8'

5-HMA

5-HMA

18'

USH 14

5-HMA

509+00

510+00

511+00

10'

512+00

513+00

513+44, 10.00' LT

514+00

USH 14

4-HMA

18'

5

508+95, 0.00'

5-HMA

24'

LEFT TURN LANE REQ'D (SEE CONSTRUCTION DETAIL)

514+32, 0.00'

5-HMA

FRONTIER

SPECTRUM

1'

8'

4-HMA

4-HMA

BAD

ALLIANT ENERGY

CENTURYLINK

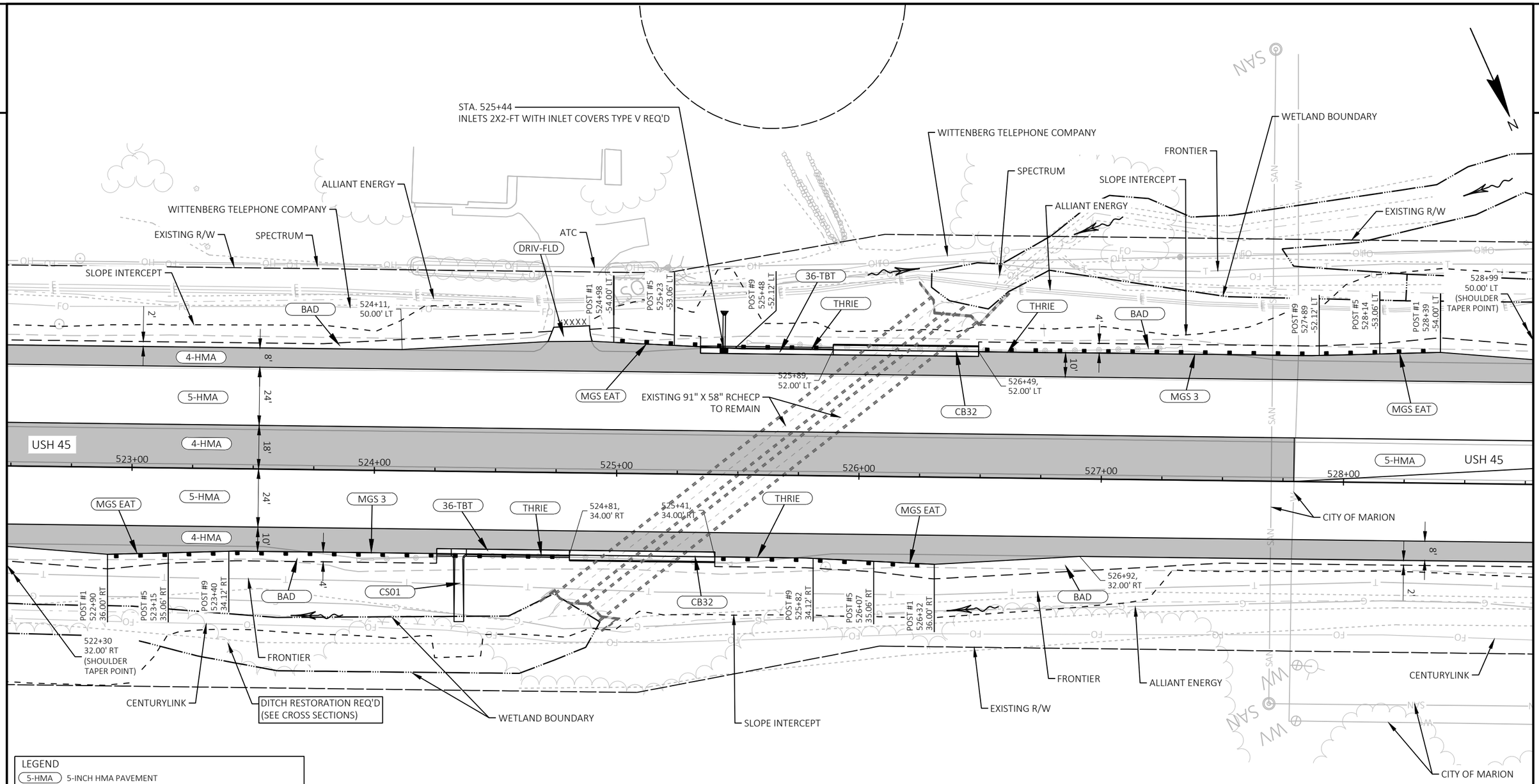
SPECTRUM

FRONTIER

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 70	E



LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
BAD	¾" BASE AGGREGATE DENSE
MGS EAT	MGS GUARDRAIL TERMINAL EAT
MGS 3	MGS GUARDRAIL 3
MGS 3 L	MGS GUARDRAIL 3 L
THRIE	MGS THRIE BEAM TRANSITION
CS01	CONCRETE SURFACE DRAINS
PV01	CONCRETE PAVEMENT APPROACH SLAB
CP09	CONCRETE PAVEMENT 9-INCH
CB32	CONCRETE BARRIER TYPE S32 WITH THRIE BEAM ANCHOR
36-TBT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
36-TBTT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 525+50 - GUARDRAIL	SHEET 71	E

LEGEND	
5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

SEE OTHER SHEETS FOR DETAILS AT GUARDRAIL INSTALLATIONS

WITTENBERG TELEPHONE COMPANY

FRONTIER

SPECTRUM

ALLIANT ENERGY

CITY OF MARION

USH 45

527+79, 0.00'

528+99, 50.00' LT

529+29, 10.00' LT

528+00

529+00

530+00

531+00

532+00

533+00

WITTENBERG TELEPHONE COMPANY

ALLIANT ENERGY

ATC

FRONTIER

531+46, 50.00' LT

531+46, 42.00' LT

532+04, 95.19' LT

R80'

531+97, 83.26' LT

R103'

FRONTIER

BAD

BUT-JNT

USH 110

30-D

FLUME

532+79, 122.87' LT

533+24, 140.22' LT

FRONTIER

WITTENBERG TELEPHONE COMPANY

NOSE-2

R2.5'

533+01, 102.59' LT

FLUME

M & O

TRANSITION CURB AND GUTTER TYPE

20-J-S(R)

36-D

533+00, 56.82' LT

533+24, 57.68' LT

R2.5'

R3.5'

5-HMA

4-HMA

NOSE-2

A-SURF

20-J-S(R)

NOSE-2

USH 45

532+46, 54.21' LT

532+79, 10.00' LT

532+23, 24.00' RT

533+24, 57.

M & O

10'

536+09, 54.00' LT

537+06, 50.00' LT

537+59, 42.00' LT

538+95, 18.00' LT

537+45, 8.00' LT

534+45, 8.00' LT

PRIVATE SANITARY LATERAL

FRONTIER

ALLIANT ENERGY

USH 45

+00

534+00

535+00

536+00

537+00

538+00

539+00

534+68, 33.82' RT

535+68, 32.00' RT

535+92, 35.00' RT

538+14, 35.00' RT

538+82, 32.00' RT

CENTURYLINK

FLUME

M & O

FRONTIER

ALLIANT ENERGY

KUSSMAN RD

BUT-JNT

R35'

534+68, 68.84' RT

36-D

DRIV-FLD

FRONTIER

CITY OF MARION

ALLIANT ENERGY

ALLIANT ENERGY

36-D

537+51, 32.00' RT

CENTURYLINK

DRIV-FLD

BAD

FRONTIER

N

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 72	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021202_PD.DWG
LAYOUT NAME - 18
PLOT DATE : 10/16/2025 12:15 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

ALLIANT ENERGY

ATC

WITTENBERG TELEPHONE COMPANY

EXISTING R/W

FRONTIER

WETLAND BOUNDARY

SLOPE INTERCEPT

112.5' MGS GUARDRAIL 3 L

542+84, 50.00' LT

BAD

POST #1 543+44 -54.00' LT

POST #5 543+69 -53.06' LT

POST #9 543+94 -52.12' LT

POST #9 545+75 -52.12' LT

POST #5 546+00 -53.06' LT

POST #1 546+25 -54.00' LT

546+79, 50.41' LT

2'

8'

24'

18'

4'

10'

4-HMA

5-HMA

USH 45

542+00

543+00

544+00

545+00

546+00

547+00

MGS EAT

MGS 3 L

MGS 3

EXISTING 83" X 53" RCHECP TO REMAIN

LEFT TURN LANE REQ'D (SEE CONSTRUCTION DETAIL)

11'

6'

542+64, 32.00' RT

POST #1 543+24 36.00' RT

POST #5 543+49 35.06' RT

POST #9 543+74 34.12' RT

POST #9 545+56 34.12' RT

POST #5 545+81 35.06' RT

POST #1 546+06 36.00' RT

546+35, 35.00' RT

EXISTING R/W

CENTURYLINK

WETLAND BOUNDARY

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
BAD	¾" BASE AGGREGATE DENSE
MGS EAT	MGS GUARDRAIL TERMINAL EAT
MGS 3	MGS GUARDRAIL 3
MGS 3 L	MGS GUARDRAIL 3 L
THRIE	MGS THRIE BEAM TRANSITION
CS01	CONCRETE SURFACE DRAINS
PV01	CONCRETE PAVEMENT APPROACH SLAB
CP09	CONCRETE PAVEMENT 9-INCH
CB32	CONCRETE BARRIER TYPE S32 WITH THRIE BEAM ANCHOR
36-TBT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
36-TBTT	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS - 544+50 - GUARDRAIL	SHEET 73	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021205_PD.DWG
LAYOUT NAME - 544+50 - GUARDRAIL

PLOT DATE : 10/16/2025 2:10 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

SEE OTHER SHEETS FOR DETAILS AT GUARDRAIL INSTALLATIONS

FRONTIER

BAD

546+79, 50.41' LT

547+67, 52.28' LT

2'

BUT-JNT

548+61, 102.96' LT

549+00, 104.47' LT

FLUME

INDUSTRIAL DR

M & O

4-HMA

5-HMA

WITTENBERG TELEPHONE COMPANY

547+10, 42.00' LT

24'

545+17, 10.00' LT

18'

USH 45

8'

10'

544+00

545+00

546+00

547+00

548+00

549+00

549+31, 8.00' LT

543+66, 0.00'

544+69, 24.00' RT

548+17, 10.00' LT

LEFT TURN LANE REQ'D (SEE CONSTRUCTION DETAIL)

11'

36-D

10'

551+59, 53.00' LT

552+59, 50.00' LT

552+83, 42.00' LT

552+81, 8.00' LT

554+31, 17.00' LT

34'

549+31, 8.00' LT

550+00

551+00

552+00

553+00

554+00

PRIVATE SANITARY LATERAL

550+89, 24.00' RT

550+33, 32.00' RT

R60'

POINT 1900 (RADIUS POINT)

EXISTING SAFETY ISLAND TO REMAIN

CENTURYLINK

WITTENBERG TELEPHONE COMPANY

548+93, 139.86' RT

CTH G/ BIG LAKE RD

BUT-JNT

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
1900	547+94.33	95.63 RT	460826.676	586818.766

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 74	E

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
2000	555+40.99	4976.00 LT	456736.405	583728.689
2001	560+00.83	5012.00 RT	465767.646	588023.364

POINT 2000
(RADIUS POINT)

R5000'

ATC

FRONTIER

WITTENBERG
TELEPHONE
COMPANY

554+31,
17.00' LT

555+41,
24.00' RT

557+04,
29.34' RT

557+91,
17.78' RT

558+81,
14.10' RT

558+85,
0.00'

558+85,
8.00' LT

558+85,
32.00' LT

558+92,
24.00' RT

560+01,
12.00' RT

560+75,
34.89' LT

565+00,
13.12' LT

USH 45

554+00 555+00 556+00 557+00 558+00 559+00 560+00 561+00 562+00 563+00 564+00 565+00 566+00

4-HMA 5-HMA M & O BAD 36-D 30-G(R) 30-J 30-J(R) 30-D 20-J-S(R) NOSE-1 NOSE-2 BUT-JNT INLET DRIV-FLD A-SURF FLUME

CENTURYLINK

STA 559+28, RT
RECONSTRUCT FIELD ENTRANCE
50' - 24-INCH CPCS REQ'D
2 - APRON ENDWALLS REQ'D

POINT 2001
(RADIUS POINT)

END PROJECT
STA 565+00

LEGEND

5-HMA	5-INCH HMA PAVEMENT
4-HMA	4-INCH HMA PAVEMENT
M & O	REMOVING 1.75" ASPHALTIC SURFACE MILLING AND OVERLAY WITH 1.75" HMA PAVEMENT
BAD	¾" BASE AGGREGATE DENSE
36-D	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
30-G(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G (REVERSE SLOPE)
30-J	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
30-J(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J (REVERSE SLOPE)
30-D	CONCRETE CURB & GUTTER 30-INCH TYPE D
20-J-S(R)	CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL (REVERSE SLOPE)
NOSE-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
NOSE-2	CONCRETE MEDIAN SLOPED NOSE, TYPE 2
BUT-JNT	REMOVE ASPHALTIC SURFACE BUTT JOINTS
INLET	REPLACE INLET
DRIV-FLD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
A-SURF	ASPHALTIC SURFACE SAFETY ISLANDS, 2-INCH
FLUME	ASPHALTIC FLUME

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN DETAILS	SHEET 75	E

2

CTH C

WAUPACA ST

USH 45

145 146 147

48 49 50

819.19 819.08 818.97 818.86 818.75 818.64 818.53 818.42 818.28 818.10 817.93 817.75 817.48

819.00 818.88 818.76 818.64 818.52 818.42 818.31 818.21 818.11 818.00 817.90 817.80 817.69 817.59

MATCH LINE STA 151+00

MATCH LINE STA 157+00

N

51 52 53 54 55 56

817.22 816.95 816.91 816.88 816.84 816.80 816.76 816.72 816.69 816.65 816.57 816.49 816.40 816.32 816.24 816.16 816.08 816.00 815.91 815.83 815.75 815.67 815.59 815.50

817.59 817.49 817.38 817.28 817.18 817.07 816.97 816.87 816.76 816.66 816.56 816.45 816.35 816.25 816.14 816.04 815.94 815.83 815.73 815.63 815.52 815.42 815.32 815.21 815.11

152 153 154 155 156

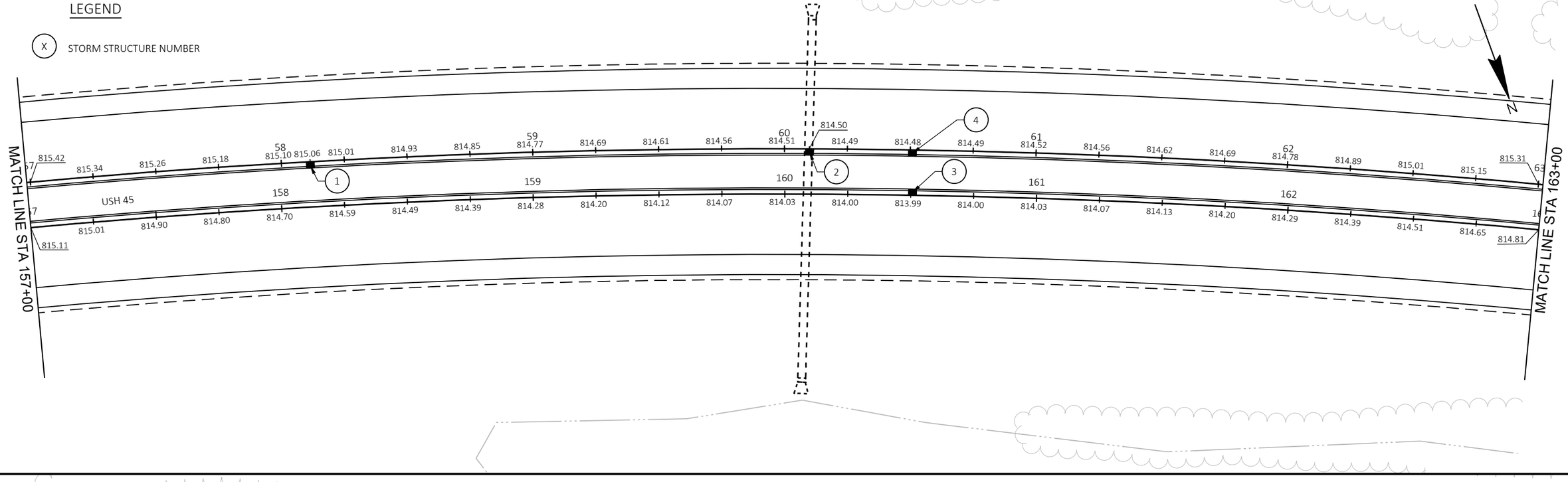
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 76	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021229-gr
PLOT DATE : 8/27/2025 8:42 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

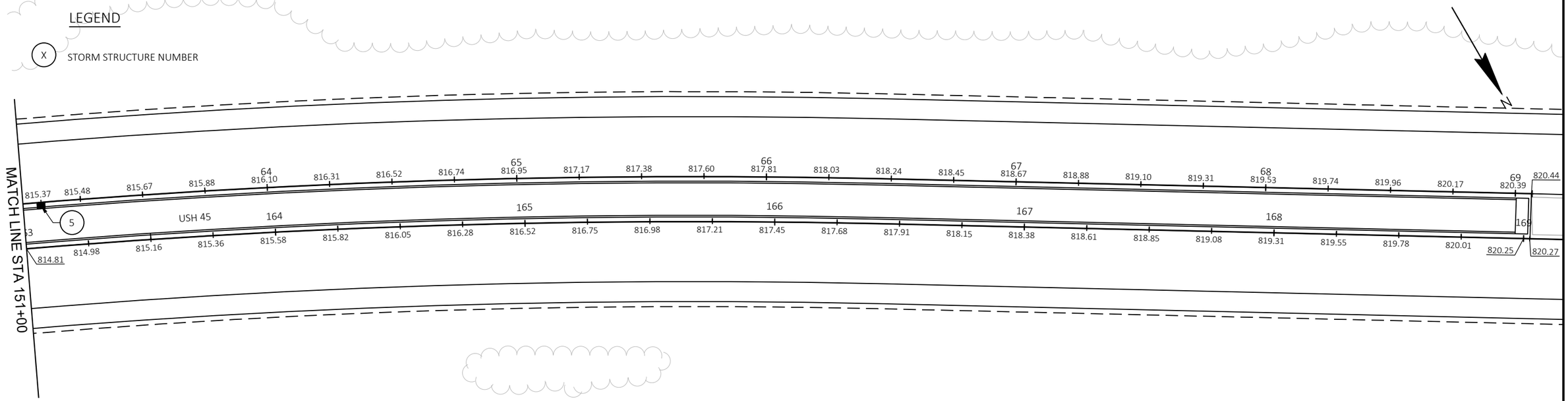
LEGEND

X STORM STRUCTURE NUMBER



LEGEND

X STORM STRUCTURE NUMBER



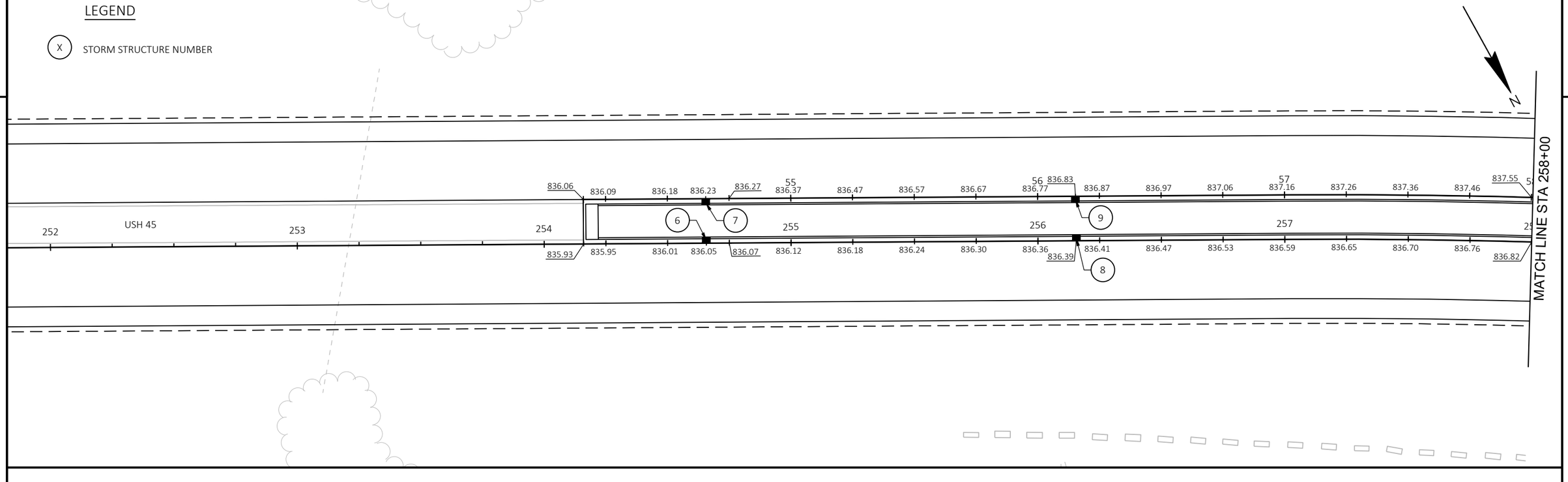
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 77	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021230-gr
PLOT DATE : 8/27/2025 8:42 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

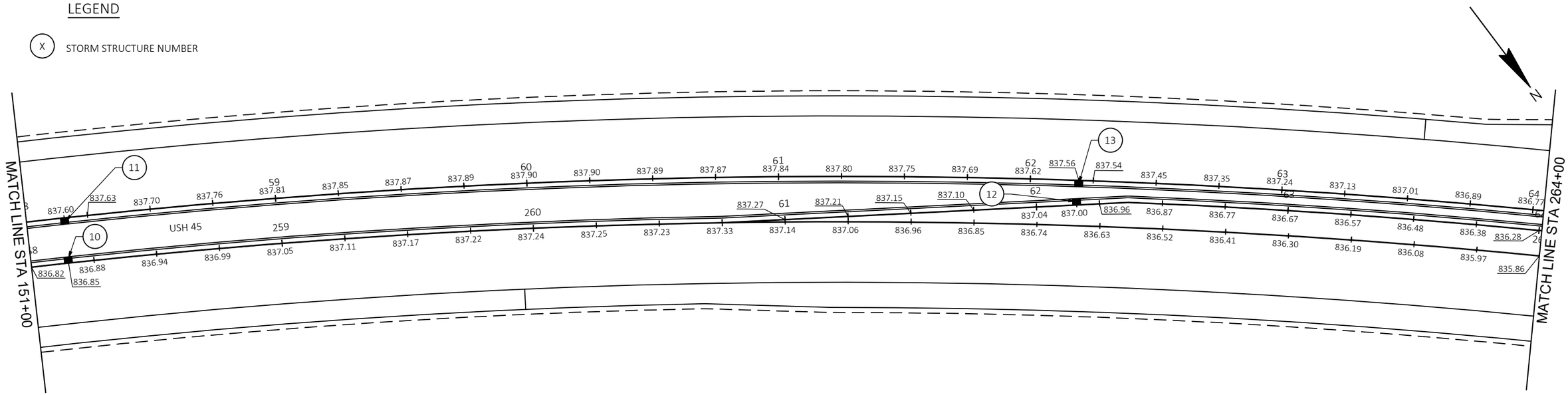
X STORM STRUCTURE NUMBER



2

LEGEND

X STORM STRUCTURE NUMBER



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 78	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021231-gr
PLOT DATE : 8/27/2025 8:42 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

X STORM STRUCTURE NUMBER

NIETZKE RD

MATCH LINE STA 264+00

USH 45

LAKESHORE RD

N

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 79	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021232-gr

PLOT DATE : 8/27/2025 8:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

SOUTH BRANCH PIGEON RIVER

825.87
825.71
826.27
826.31
825.56
825.53
826.43
826.47
826.09
825.90

333
USH 45
334
335
336
337
338
339

827.09
826.95
826.64
826.54

826.43
826.29
825.97
825.90
826.27
826.12
825.76
825.71
825.56
825.46

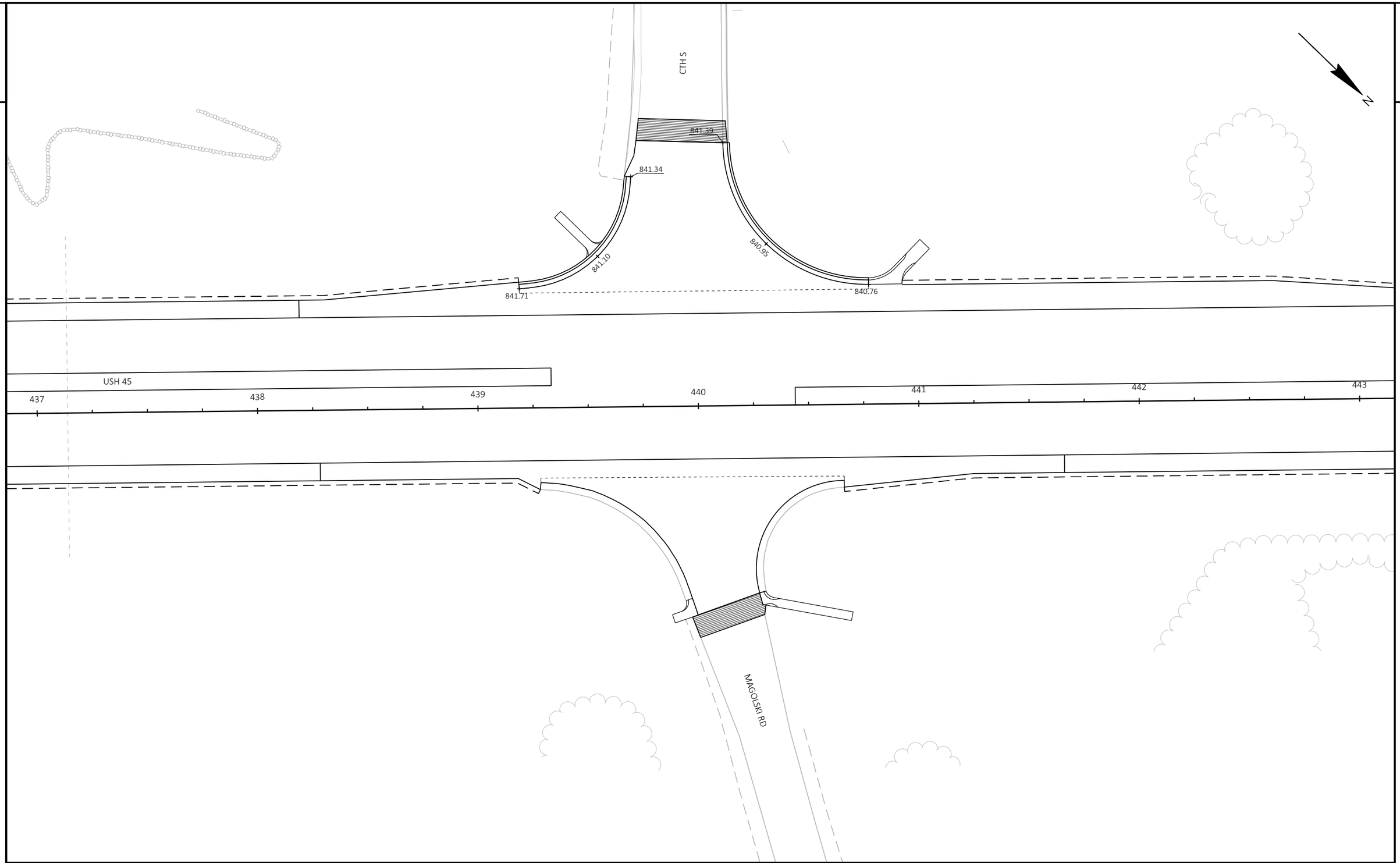
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 80	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021233-gr

PLOT DATE : 8/27/2025 8:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 81	E

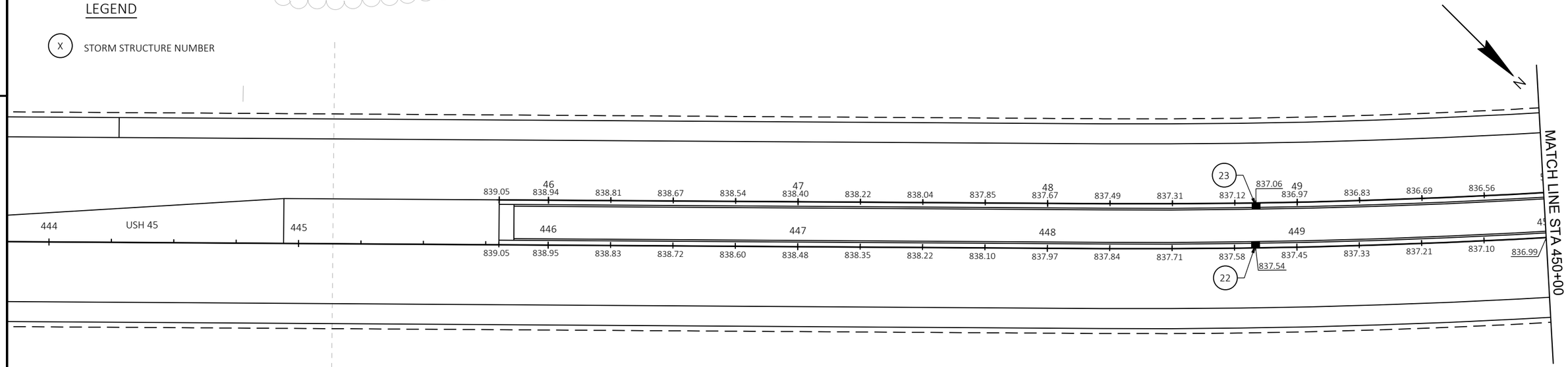
FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021234-gr

PLOT DATE : 8/27/2025 8:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

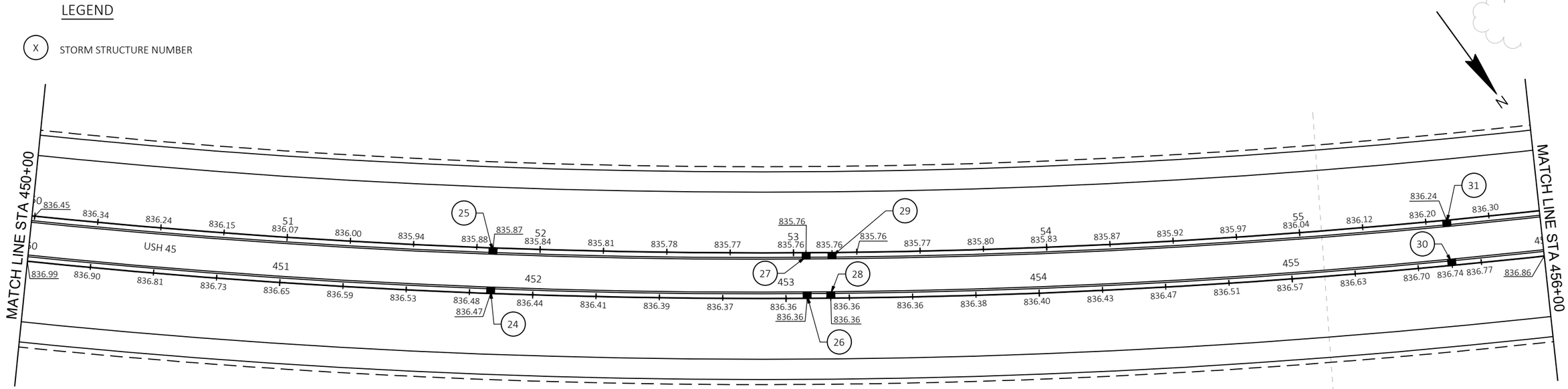
X STORM STRUCTURE NUMBER



2

LEGEND

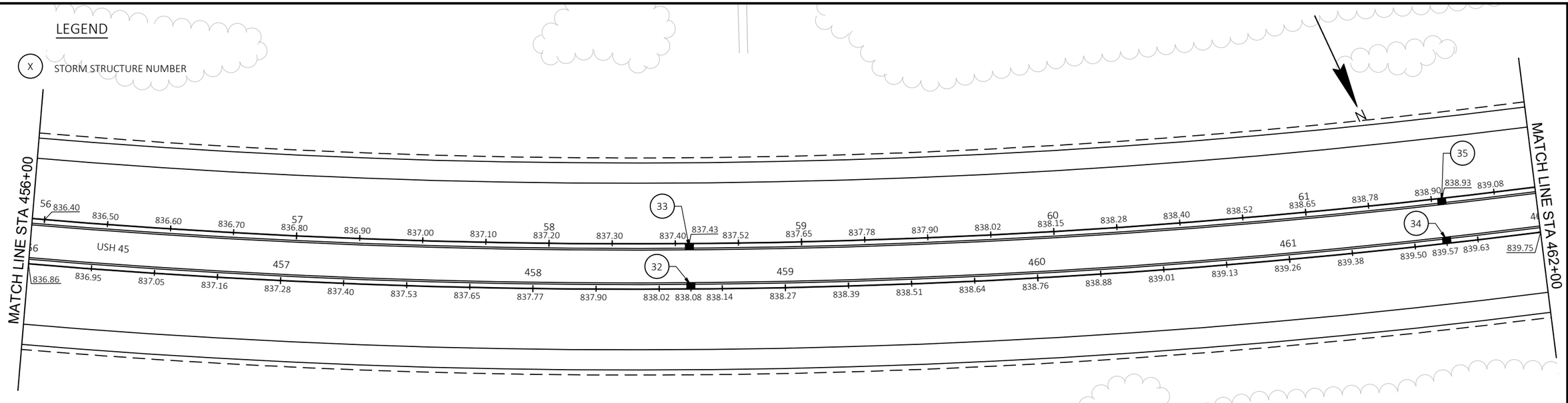
X STORM STRUCTURE NUMBER

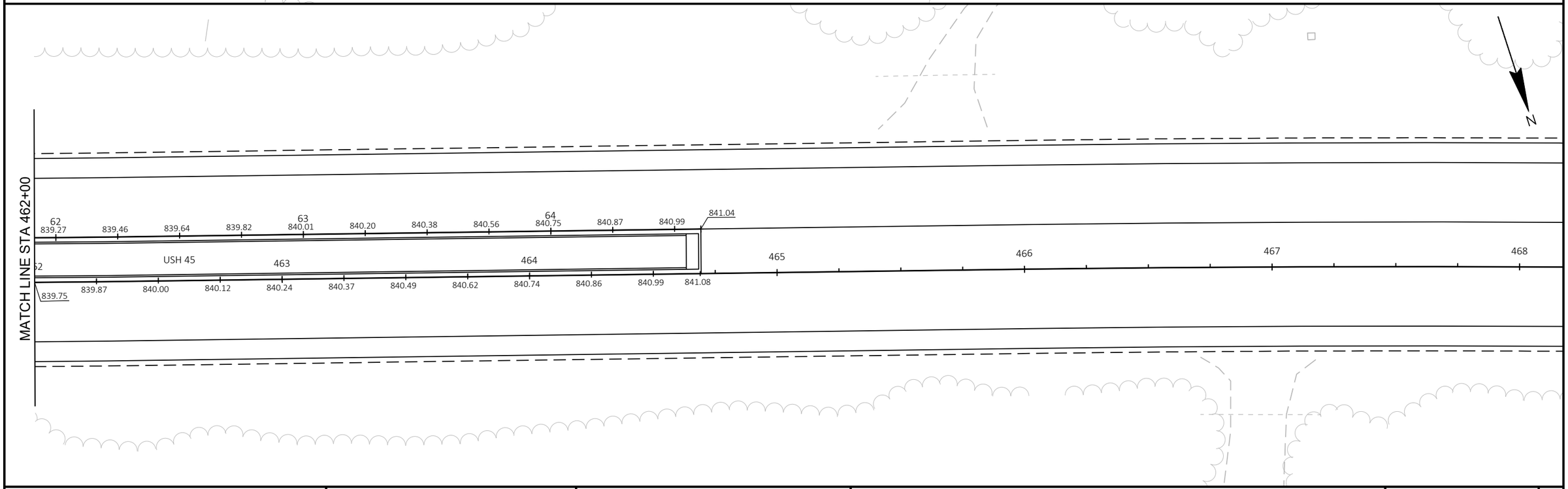


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 82	E

LEGEND

X STORM STRUCTURE NUMBER





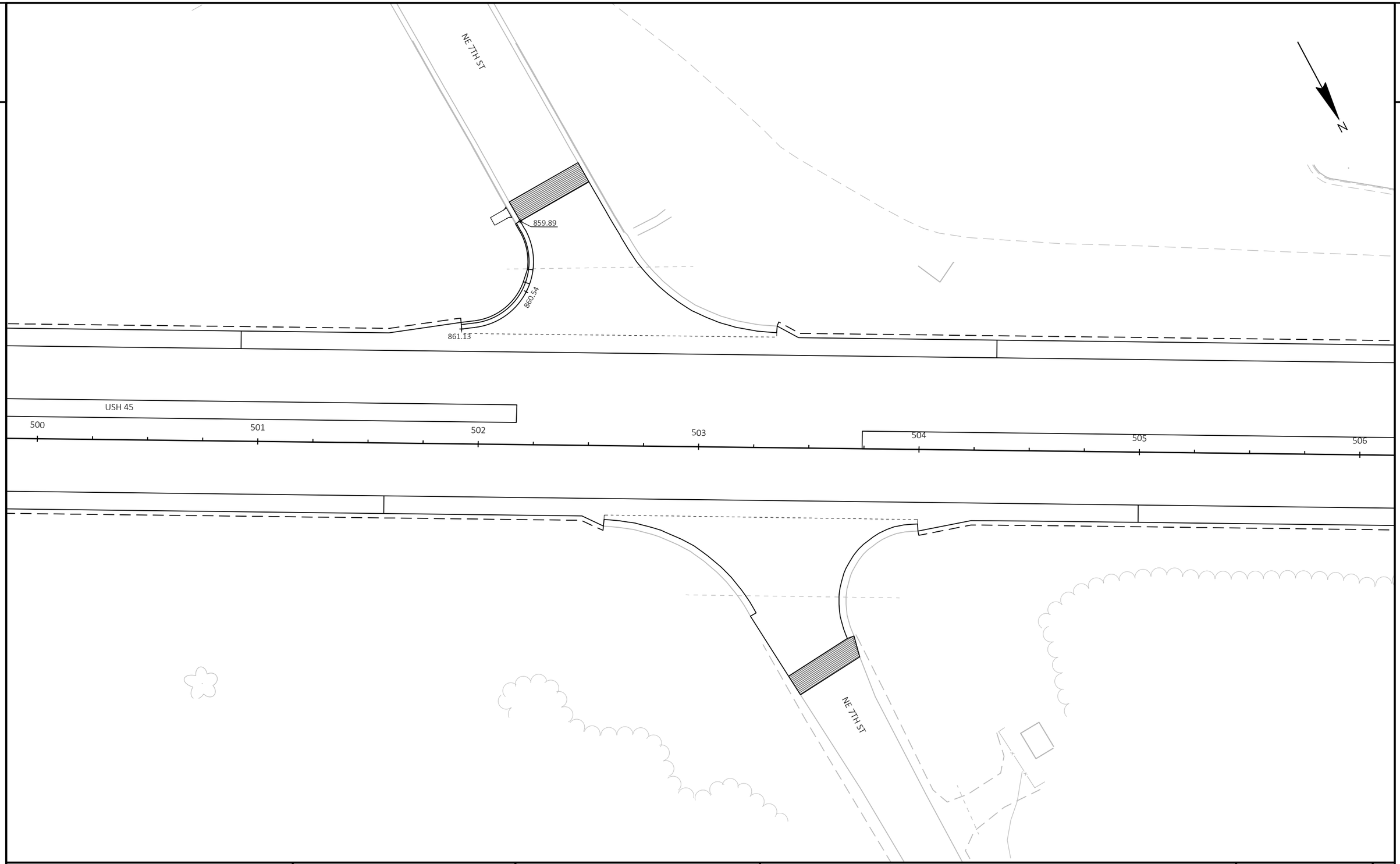
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 83	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021236-gr

PLOT DATE : 8/27/2025 8:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 84	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021237-gr
PLOT DATE : 8/27/2025 8:43 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

X STORM STRUCTURE NUMBER

N

37

36

869.72

868.73 868.97 869.35 869.55 870.45

868.88 870.10

522 USH 45 523 524 525 526 527 528

868.07

867.11 867.42 867.75 867.82 868.39 868.60

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 85	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021238-gr

PLOT DATE : 8/27/2025 8:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

STH 110

N

878.13
878.75
878.67
878.49
878.76
879.02
878.95
879.07
879.05
879.31
879.32
879.43

533
USH 45
534
535
536
537
538
539

880.55
880.57
880.67
880.78
880.89
880.99
881.10
881.20
881.31
881.41
881.52
881.62
881.73
881.83
881.94
882.04
882.15
882.25
882.29
880.00
881.32
881.46

KUSSMAN RD

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 86	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021239-gr
PLOT DATE : 8/27/2025 8:43 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

INDUSTRIAL DR

N

546 USH 45 547 548 549 550 551 552

892.94

893.20

893.43

BIG LAKE RD

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN GRADES	SHEET 87	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_021229_GR.DWG
LAYOUT NAME - 021240-gr

PLOT DATE : 8/27/2025 8:43 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

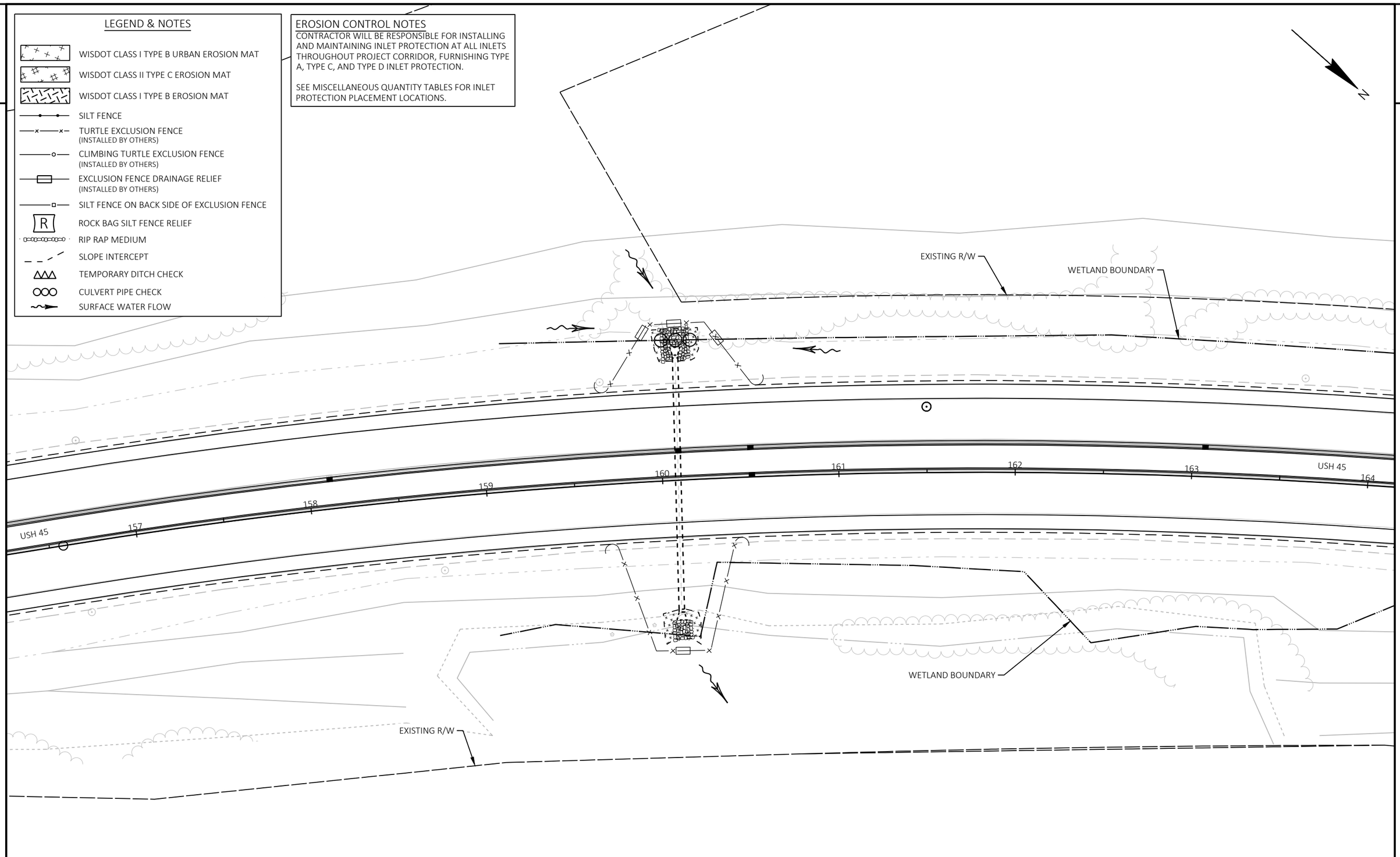
LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- ROCK BAG SILT FENCE RELIEF (R)
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.



2

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 88	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-01

PLOT DATE : 8/28/2025 10:18 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

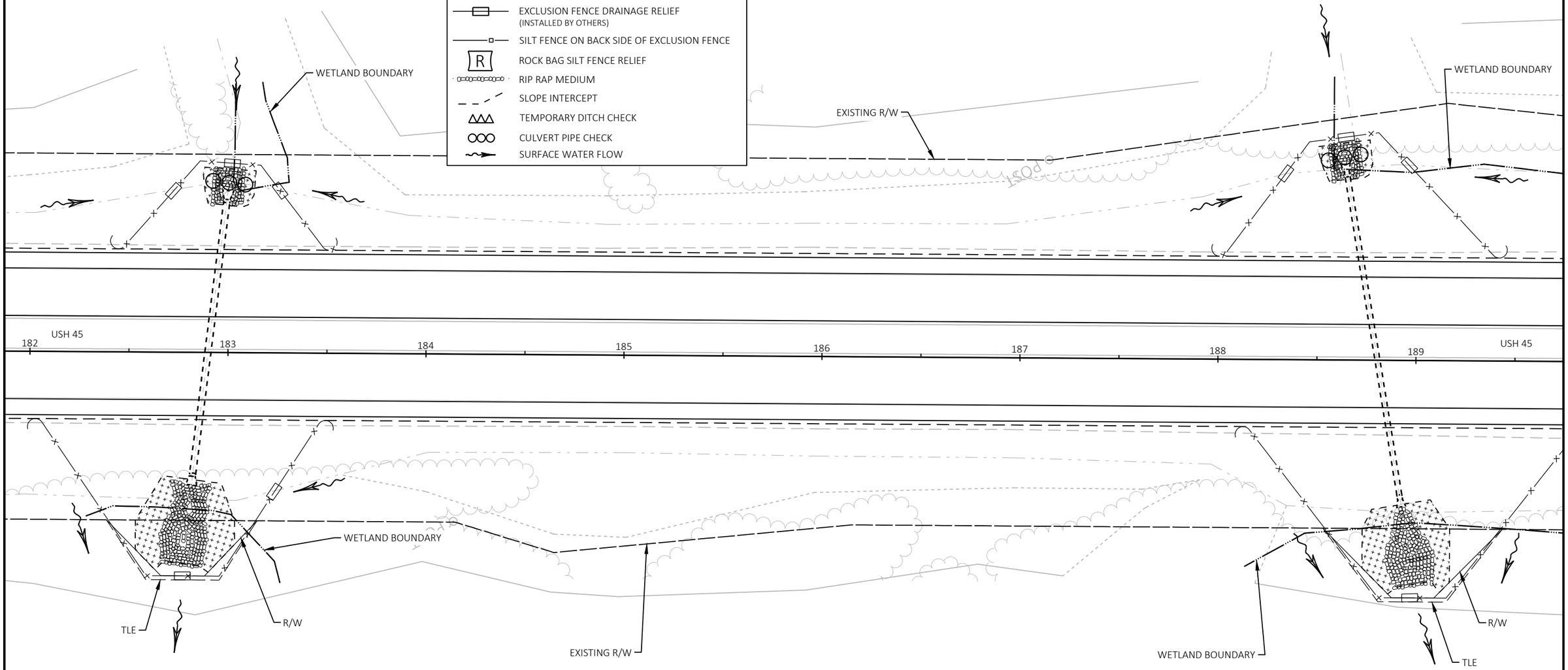
EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.

LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 89	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-02

PLOT DATE : 8/28/2025 10:18 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND & NOTES

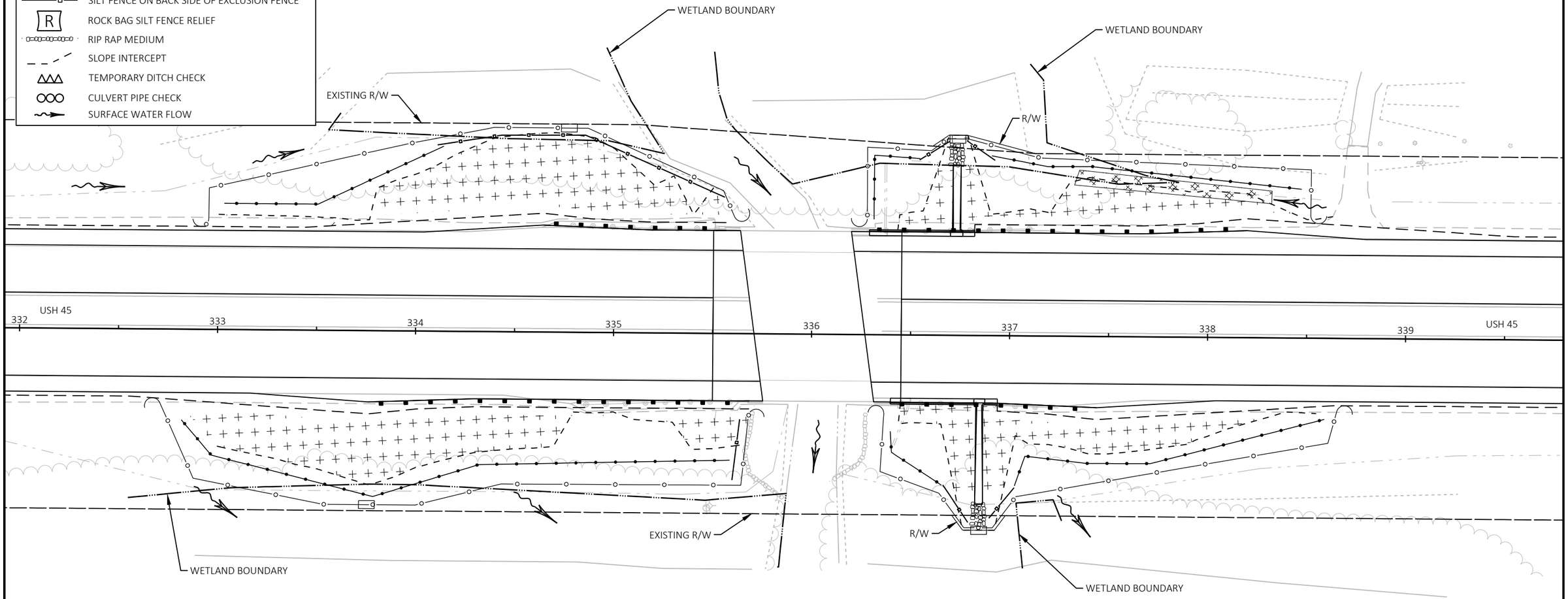
- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- R — ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.

N



2

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 90	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-03

PLOT DATE : 8/28/2025 8:30 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

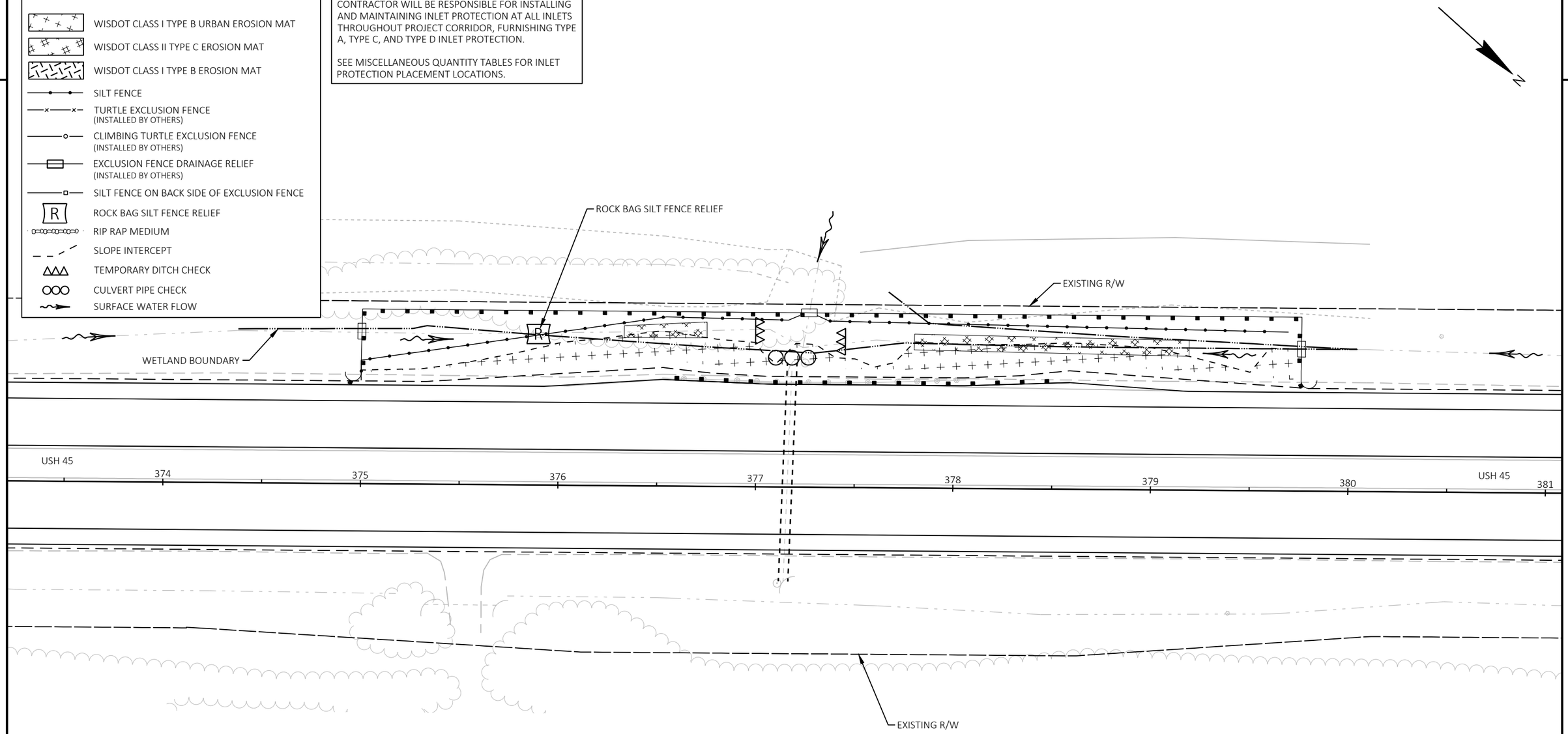
LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 91	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-04

PLOT DATE : 8/28/2025 10:18 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- R — ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.

N

EXISTING R/W

WETLAND BOUNDARY

USH 45

477 478 479 480 481 482 483 484

USH 45

G G G G

WETLAND BOUNDARY

EXISTING R/W

2

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 92	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-05

PLOT DATE : 8/28/2025 10:18 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

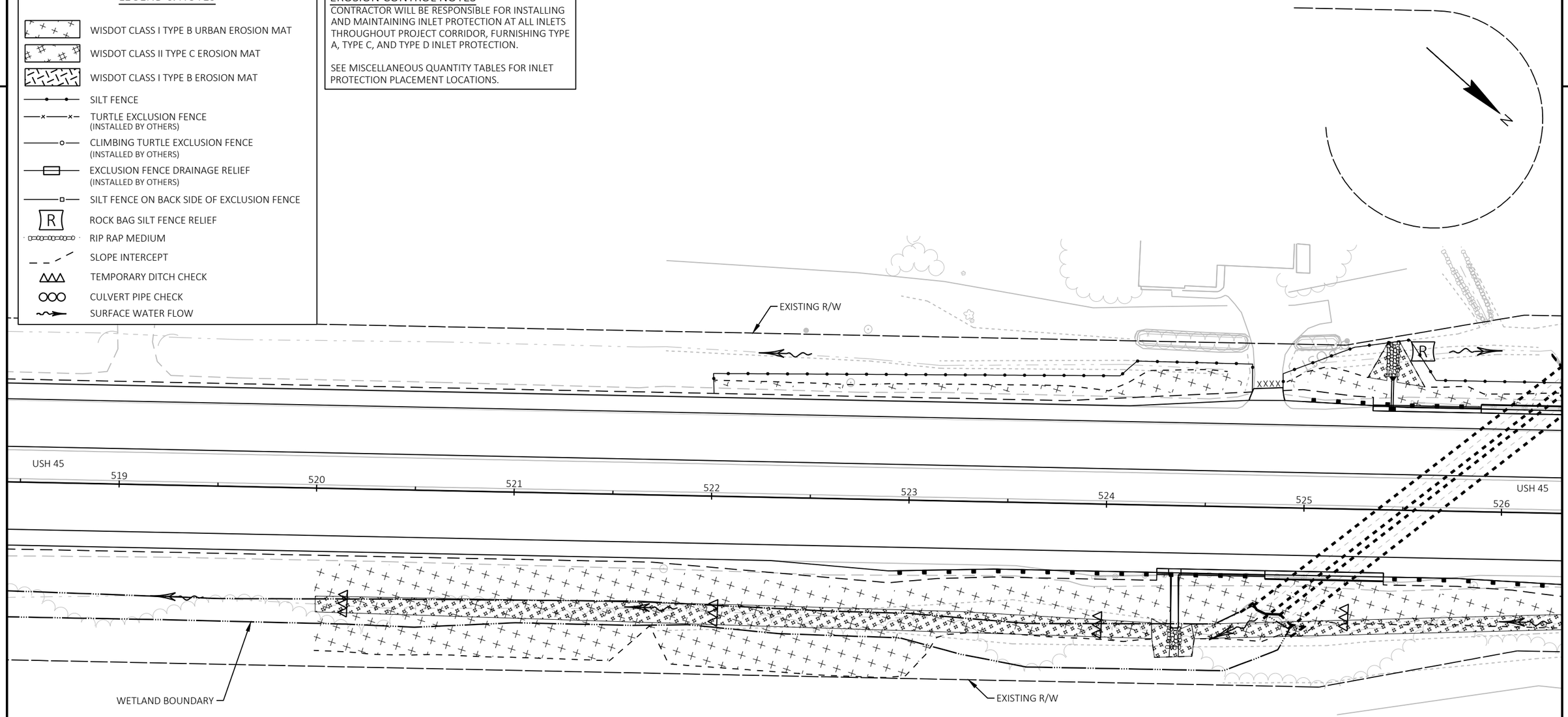
LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- R — ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.



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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 93	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-06

PLOT DATE : 8/28/2025 10:19 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

EXISTING R/W

STH 110

N

WETLAND BOUNDARY

R

R

USH 45

526

527

528

529

530

531

532

533

USH 45

EXISTING R/W

LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- R — ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 94	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-07

PLOT DATE : 8/28/2025 10:19 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

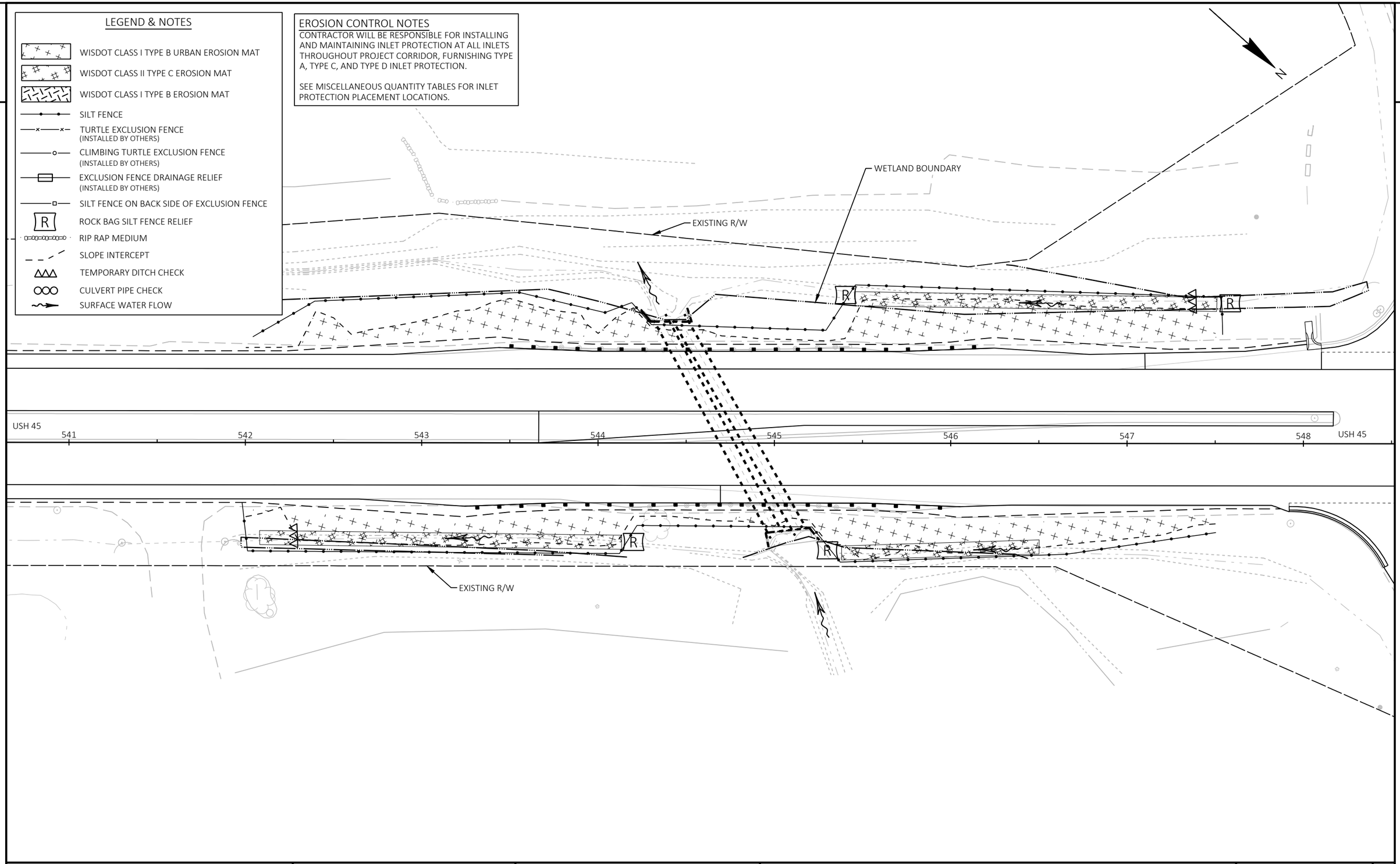
LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- R — ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 95	E

2

2

N

EXISTING R/W

USH 45

553 554 555 556 557 558 559 560

USH 45

EXISTING R/W

LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- R ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 96	E

2

2

N

EXISTING R/W

R

USH 45

561

562

563

564

565

566

567

568

USH 45

EXISTING R/W

R/W

GOLNOW RD

LEGEND & NOTES

- WISDOT CLASS I TYPE B URBAN EROSION MAT
- WISDOT CLASS II TYPE C EROSION MAT
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- CLIMBING TURTLE EXCLUSION FENCE (INSTALLED BY OTHERS)
- EXCLUSION FENCE DRAINAGE RELIEF (INSTALLED BY OTHERS)
- SILT FENCE ON BACK SIDE OF EXCLUSION FENCE
- R — ROCK BAG SILT FENCE RELIEF
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING INLET PROTECTION AT ALL INLETS THROUGHOUT PROJECT CORRIDOR, FURNISHING TYPE A, TYPE C, AND TYPE D INLET PROTECTION.

SEE MISCELLANEOUS QUANTITY TABLES FOR INLET PROTECTION PLACEMENT LOCATIONS.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	EROSION CONTROL	SHEET 97	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022001-EC.DWG
LAYOUT NAME - EC-10

PLOT DATE : 8/28/2025 10:20 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

EXISTING R/W

USH 45

554+00

556+00

558+00

560+00

USH 45

USH 45

EXISTING R/W

LEGEND

- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CLVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 1 - NORTH END EROSION CONTROL	SHEET 98	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022002_S2-EC.DWG
LAYOUT NAME - EC-01

PLOT DATE : 8/27/2025 9:46 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

EXISTING R/W

USH 45

562+00

564+00

566+00

568+00

USH 45

USH 45

EXISTING R/W

PROPOSED R/W

GALLNOW RD

LEGEND

- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CLVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 1 - NORTH END EROSION CONTROL	SHEET 99	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022002_S2-EC.DWG
LAYOUT NAME - EC-02

PLOT DATE : 8/27/2025 9:46 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

EXISTING R/W

USH 45

USH 45

554 555 556 557 558 559 560 561

USH 45

EXISTING R/W

LEGEND

- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CLVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 2 - NORTH END EROSION CONTROL	SHEET 100	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022003_S3-EC.DWG
LAYOUT NAME - EC-01

PLOT DATE : 5/1/2025 12:01 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

EXISTING R/W

USH 45

561 562 563 564 565 566 567 USH 45 568

USH 45

EXISTING R/W

PROPOSED R/W

LEGEND

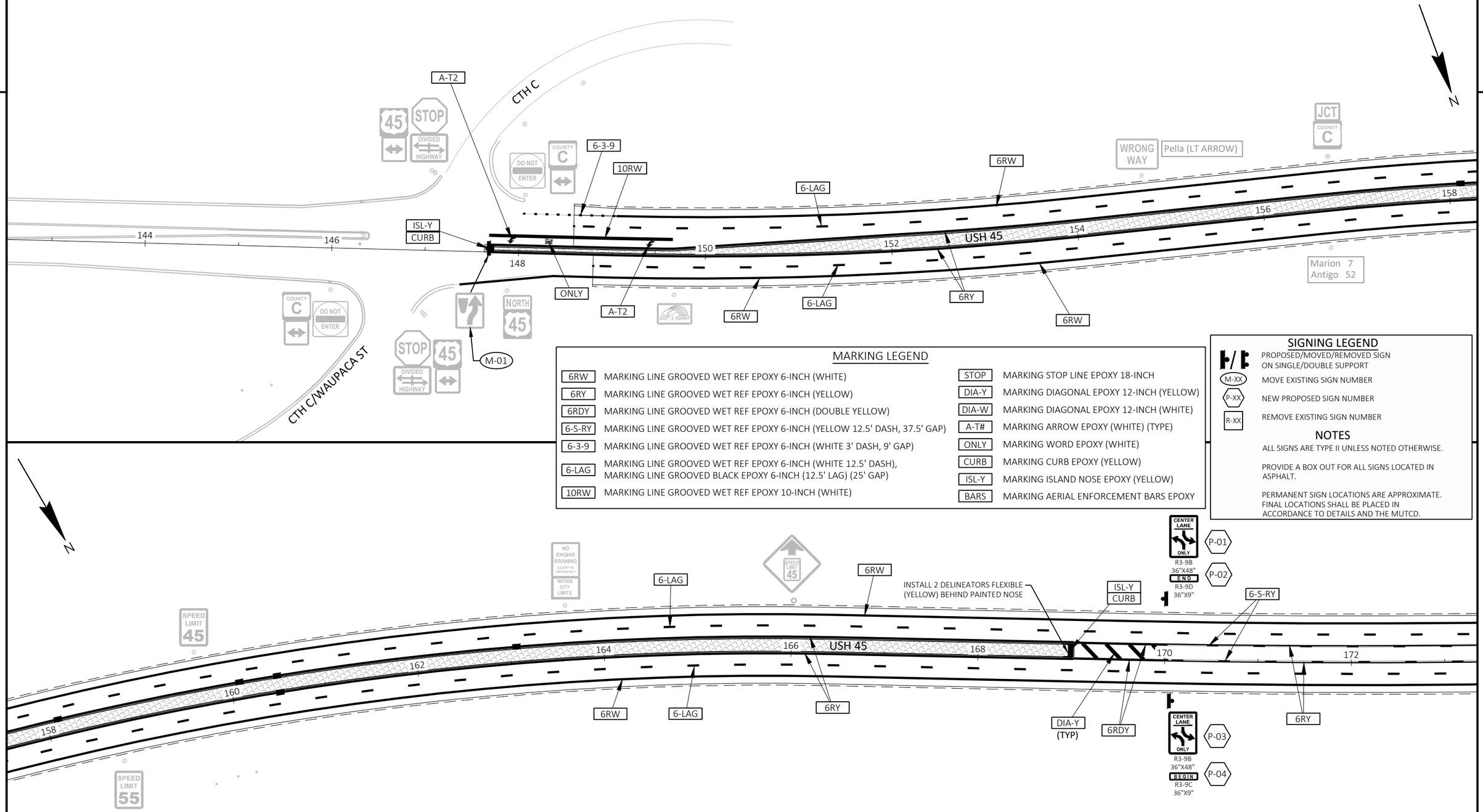
- WISDOT CLASS I TYPE B EROSION MAT
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CLVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 2 - NORTH END EROSION CONTROL	SHEET 101	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_022003_S3-EC.DWG
LAYOUT NAME - EC-02

PLOT DATE : 5/1/2025 12:01 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42



MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

SIGNING LEGEND

- P/R — PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

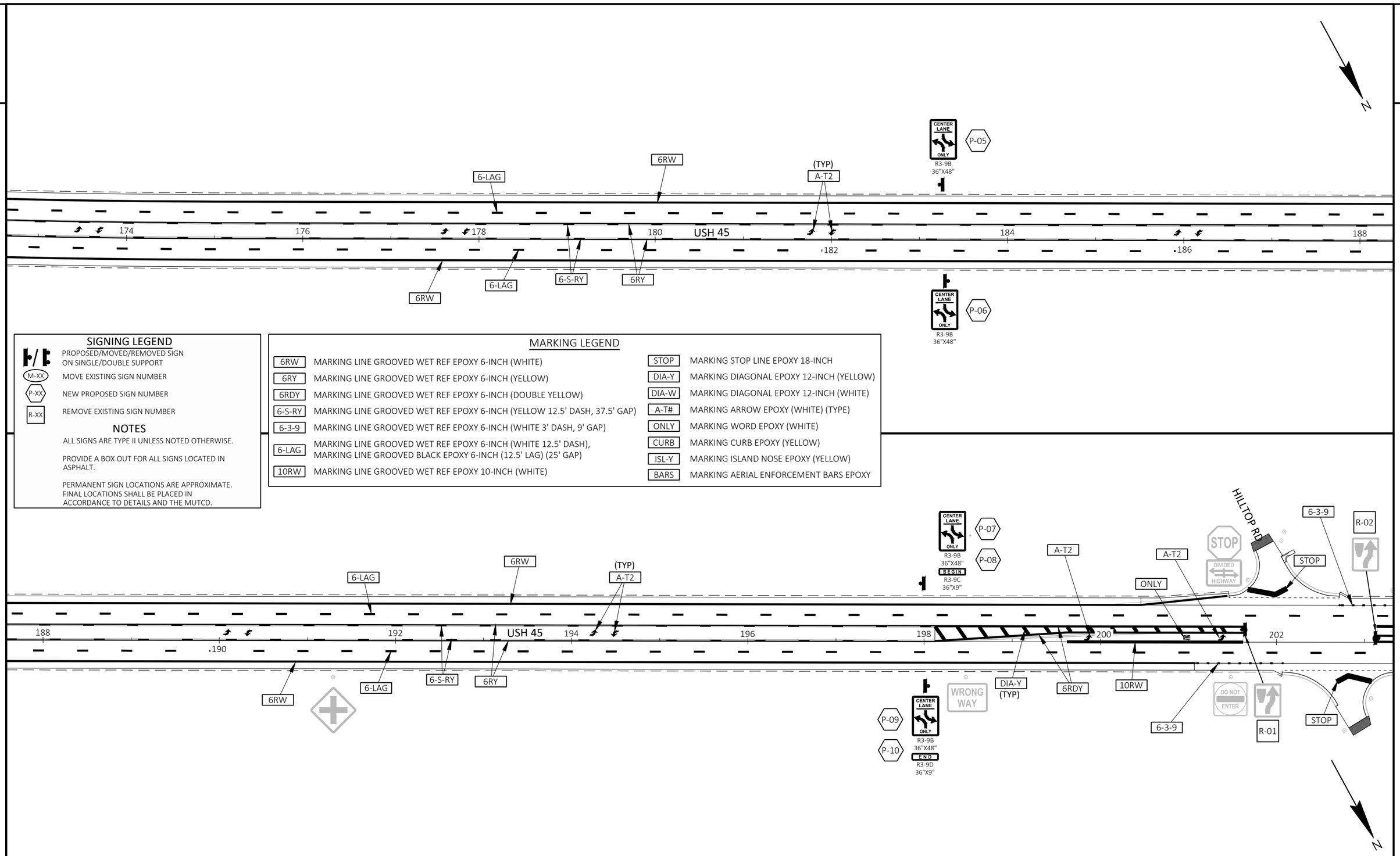
NOTES

ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 102	E



SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

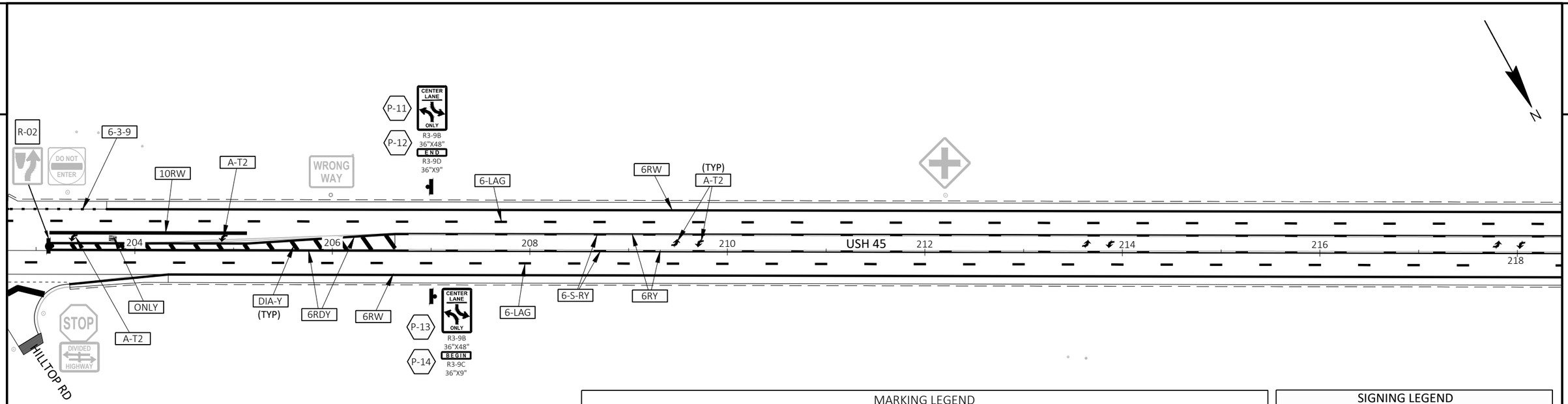
PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 103	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023202-pspm
PLOT DATE : 7/31/2025 12:00 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

SIGNING LEGEND

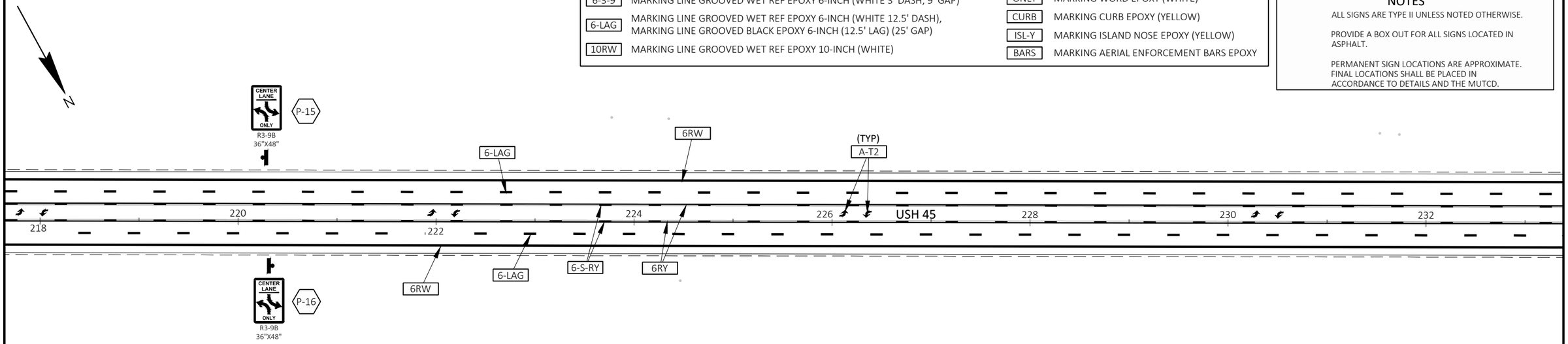
- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

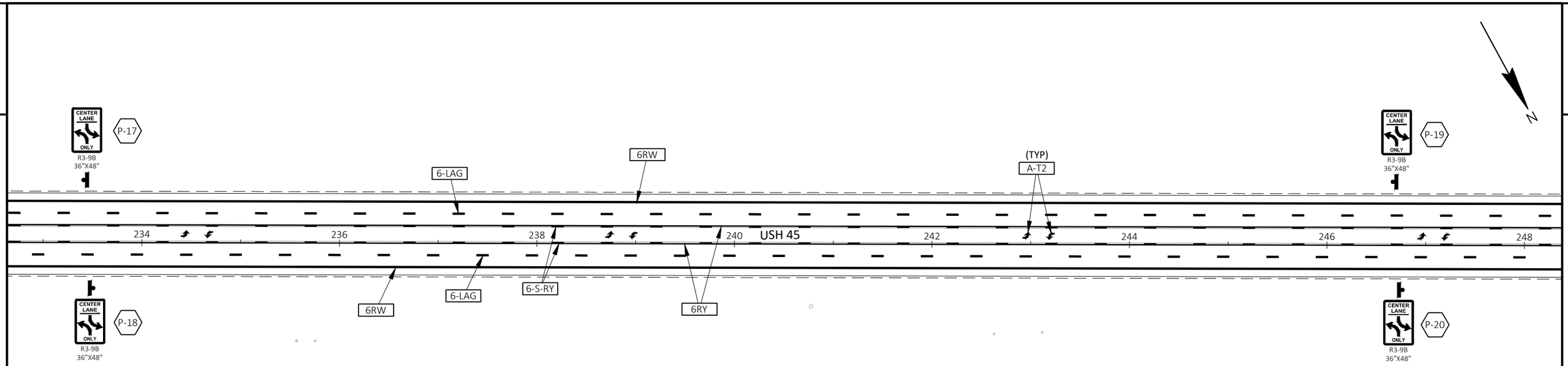
NOTES

ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.





SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

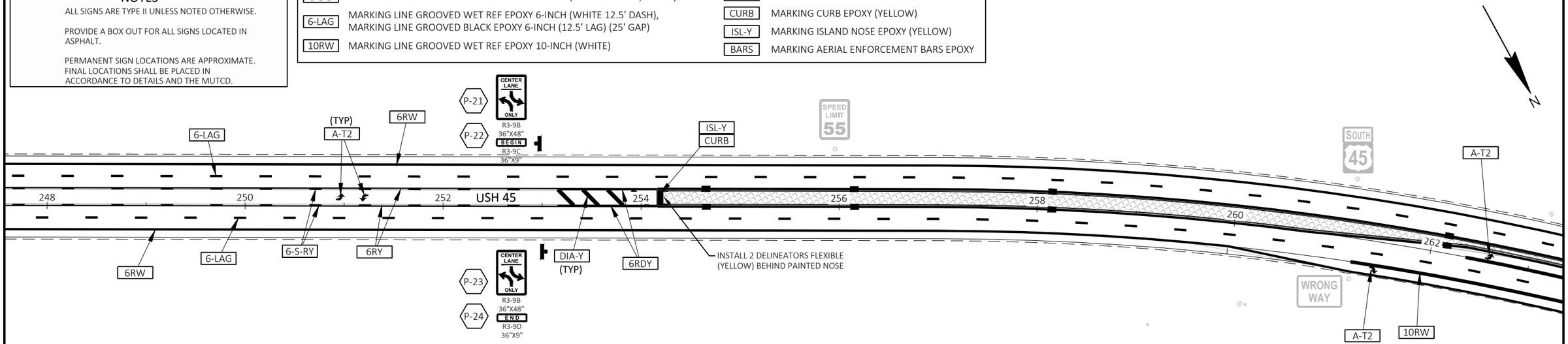
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

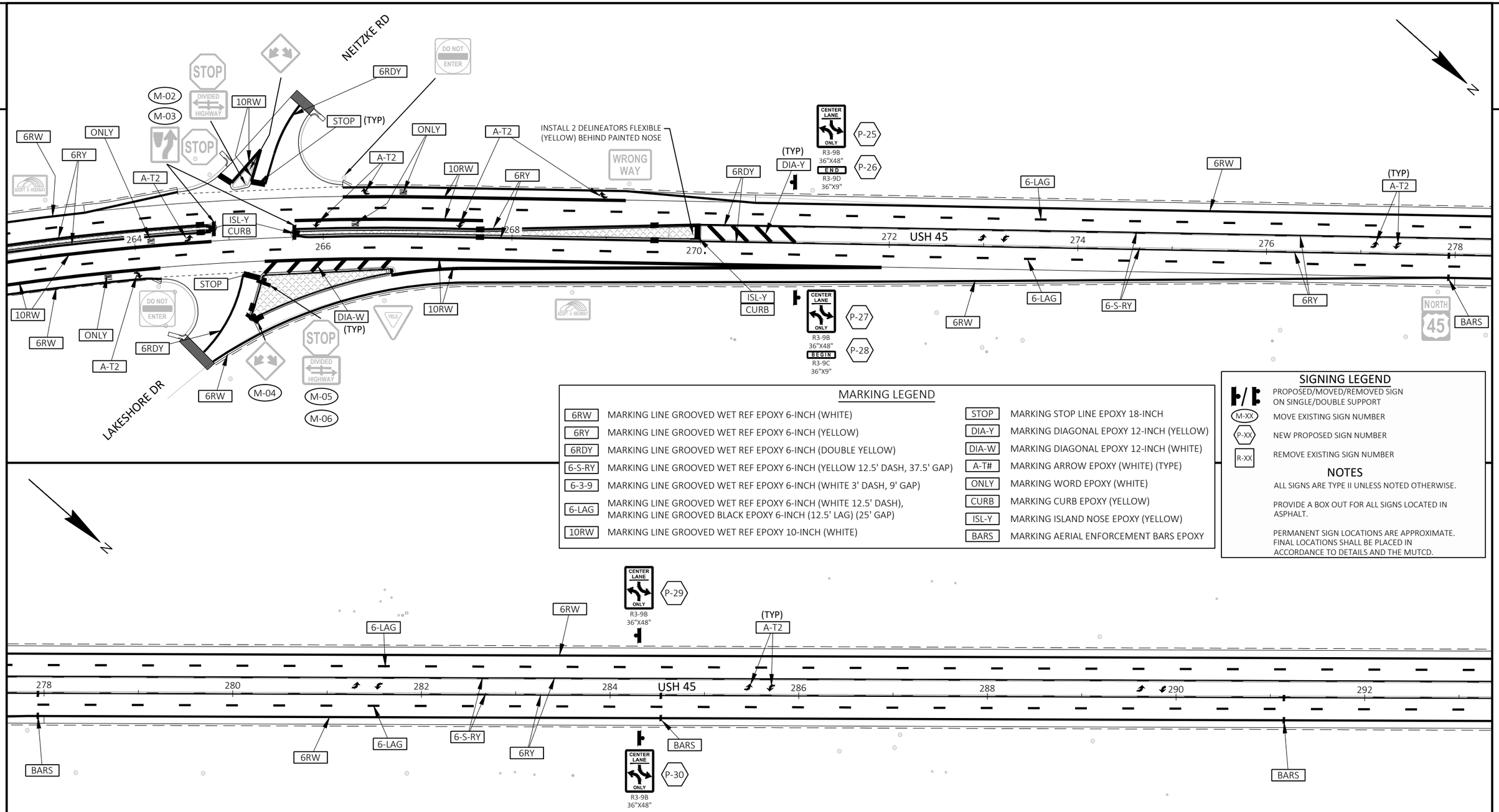


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 105	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023204-pspm

PLOT DATE : 7/31/2025 12:01 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

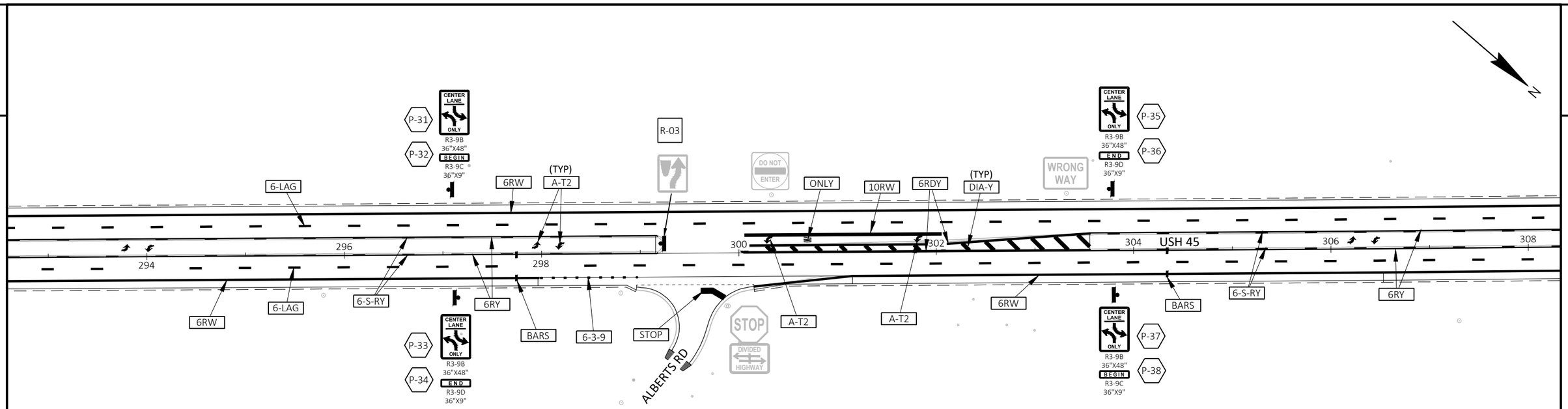
NOTES

ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 106	E



SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

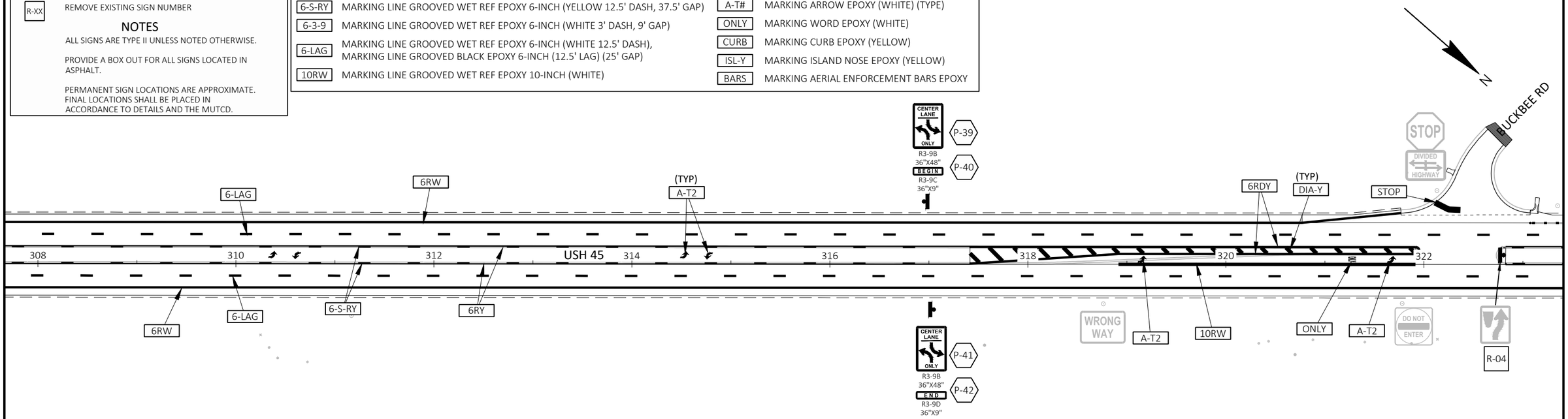
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

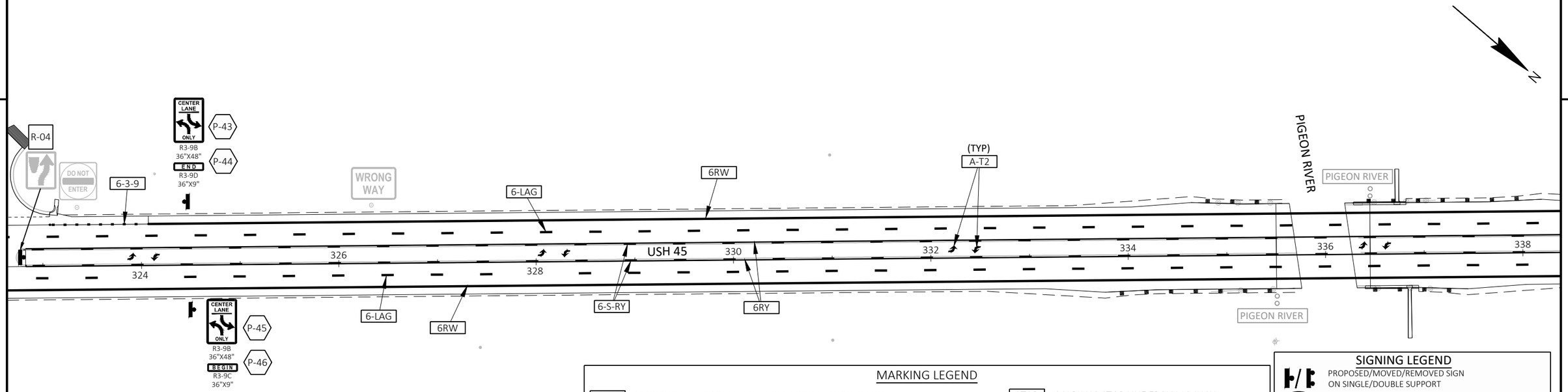


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 107	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023206-pspm

PLOT DATE : 7/31/2025 12:02 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

SIGNING LEGEND

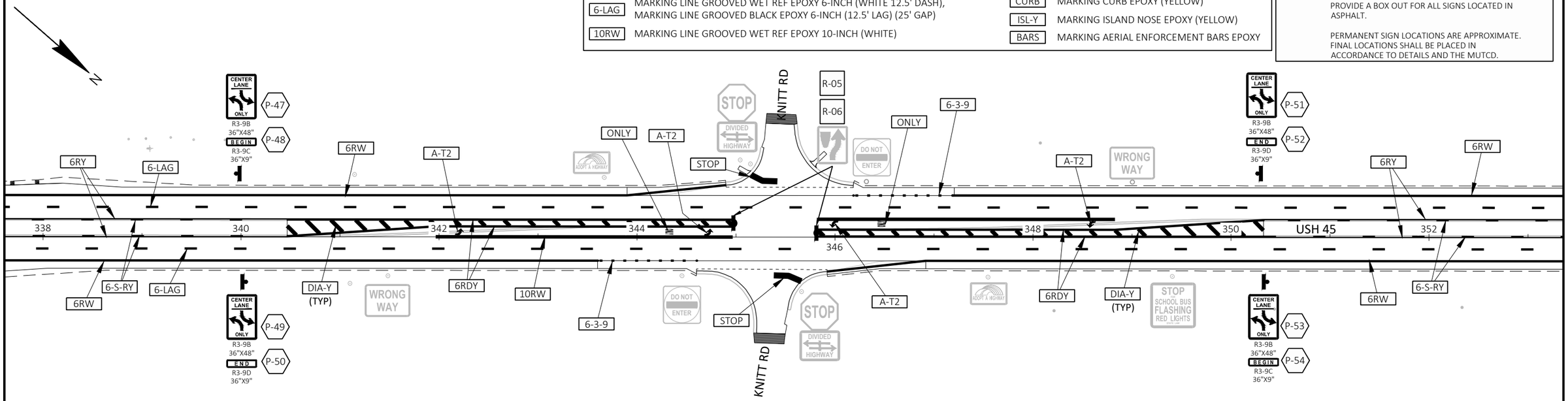
- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

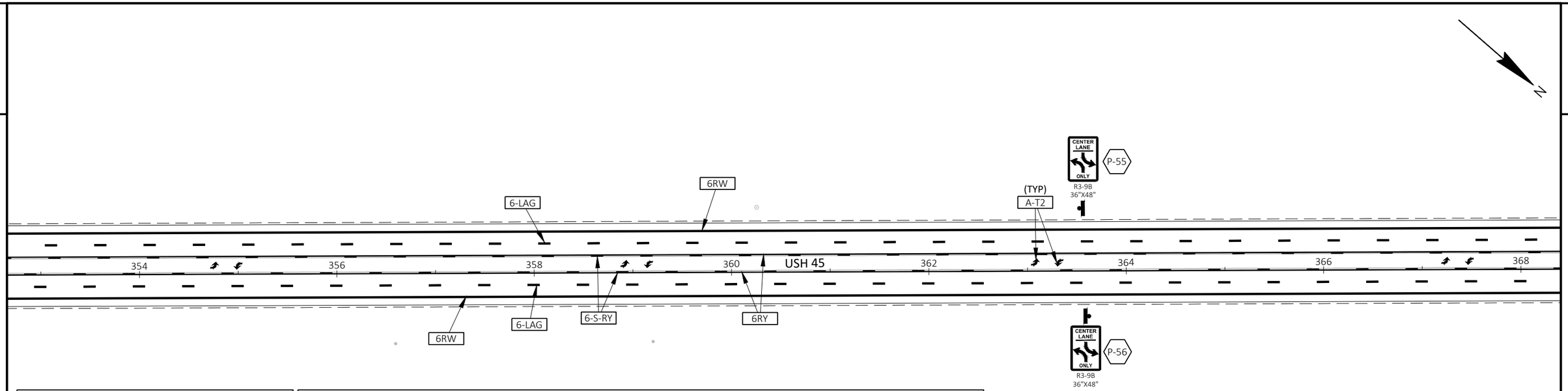
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 108	E



SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

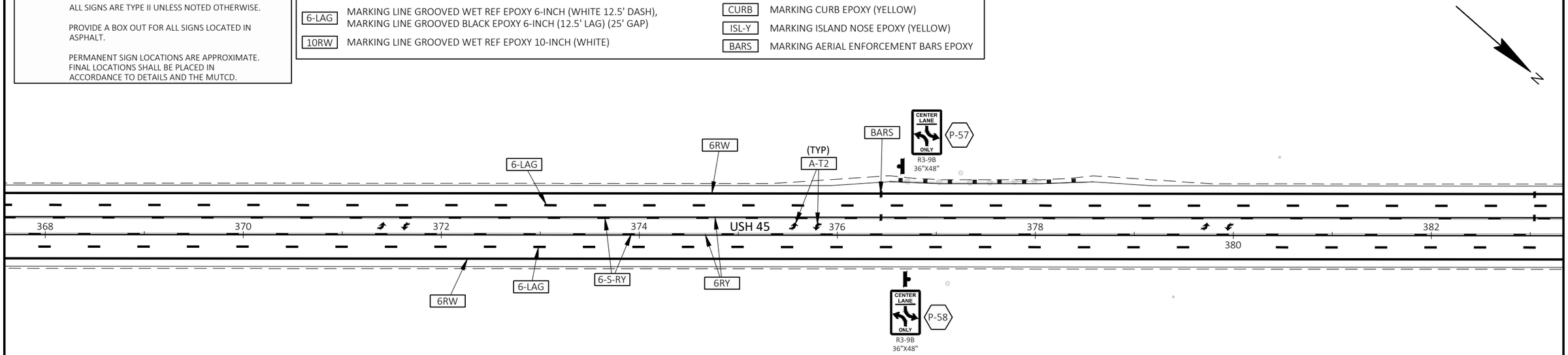
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

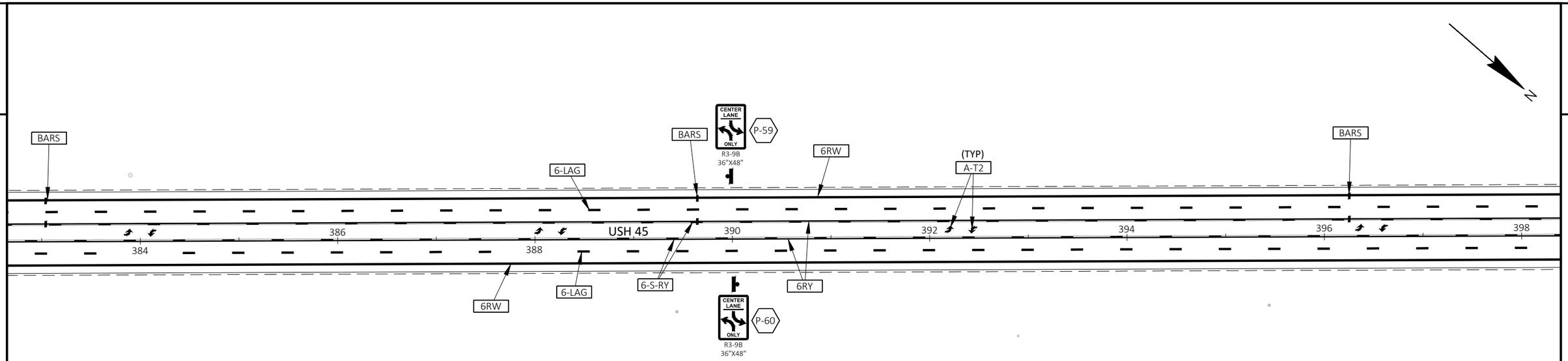
MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 109	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023208-pspm
PLOT DATE : 7/31/2025 12:02 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

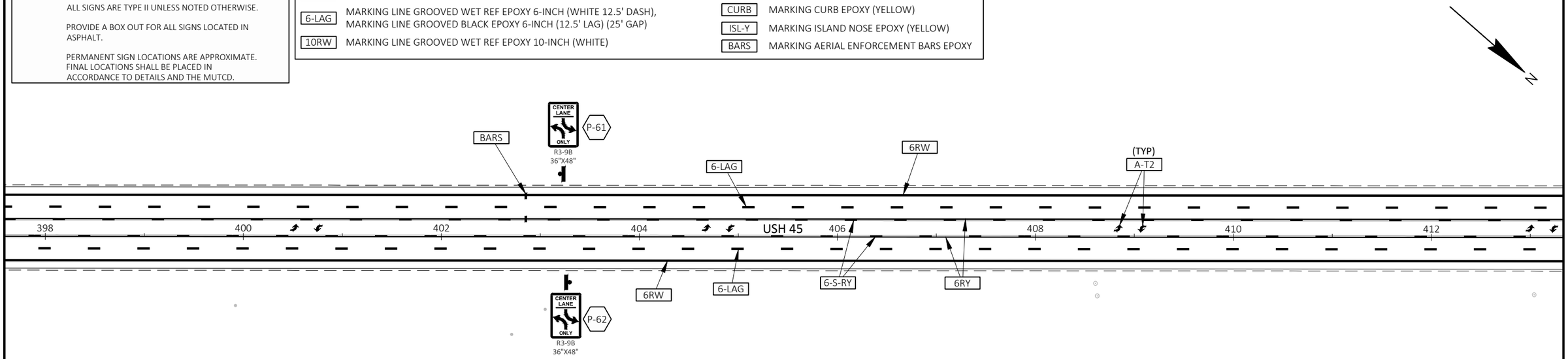
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY



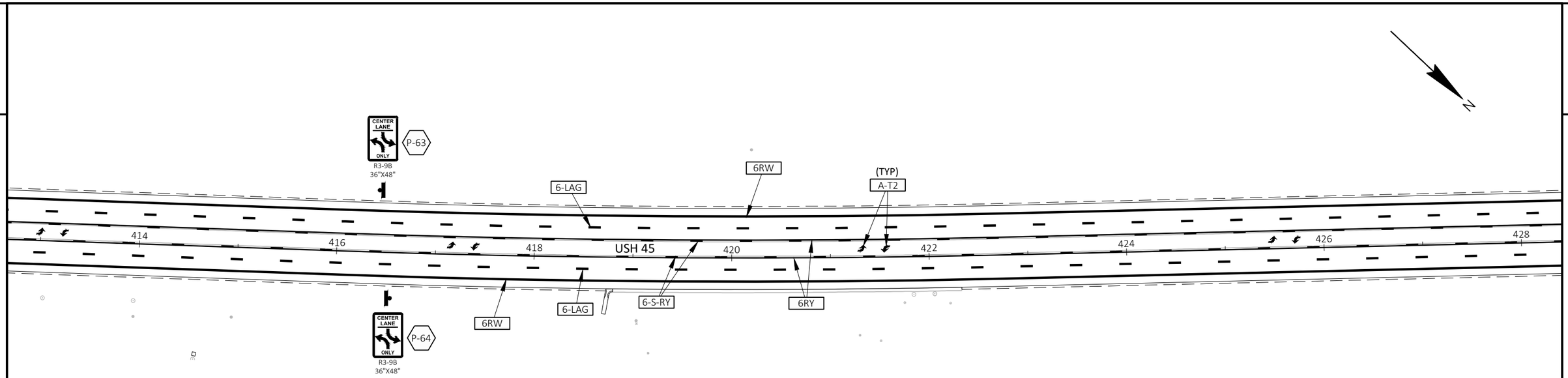
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 110	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023209-pspm

PLOT DATE : 7/31/2025 12:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

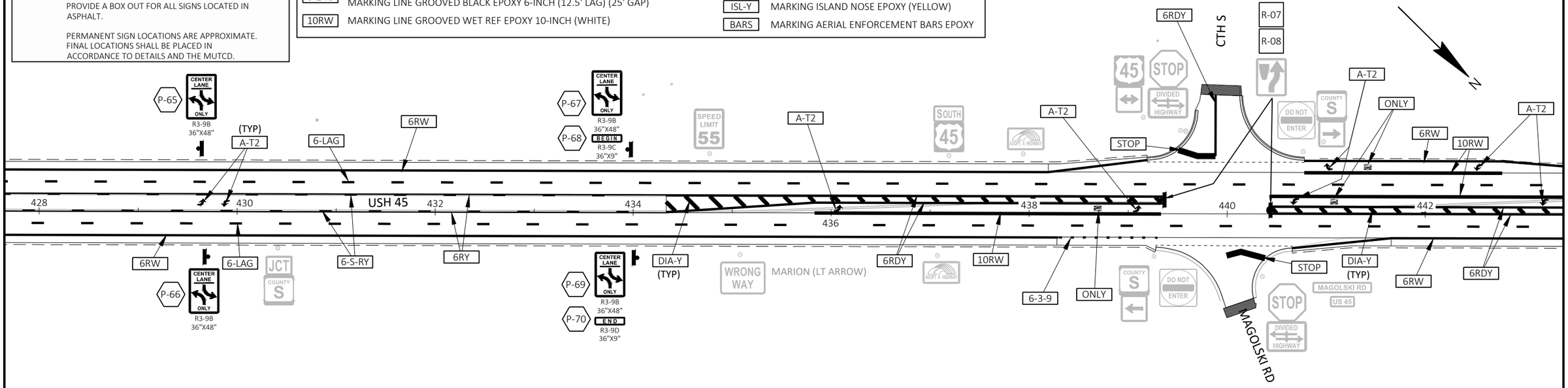
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

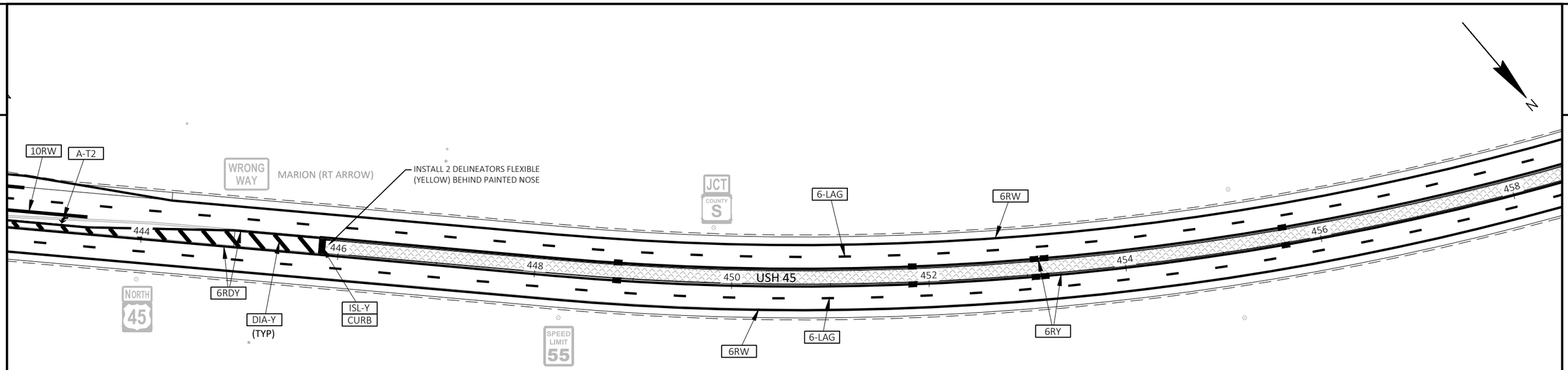
MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 111	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023210-pspm
PLOT DATE : 7/31/2025 12:03 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



2

SIGNING LEGEND

- P/E — PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

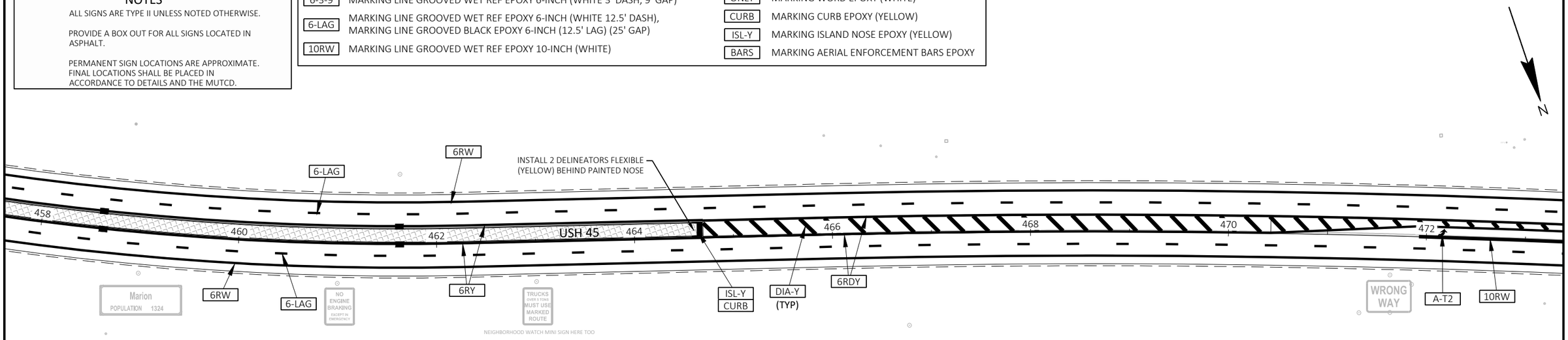
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

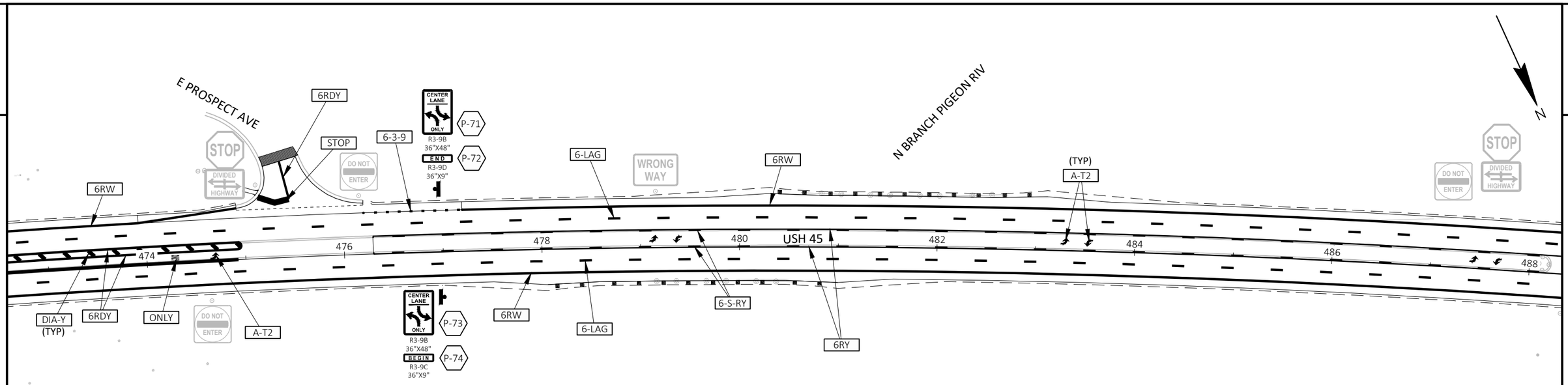
MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 112	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023211-pspm
PLOT DATE : 7/31/2025 12:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

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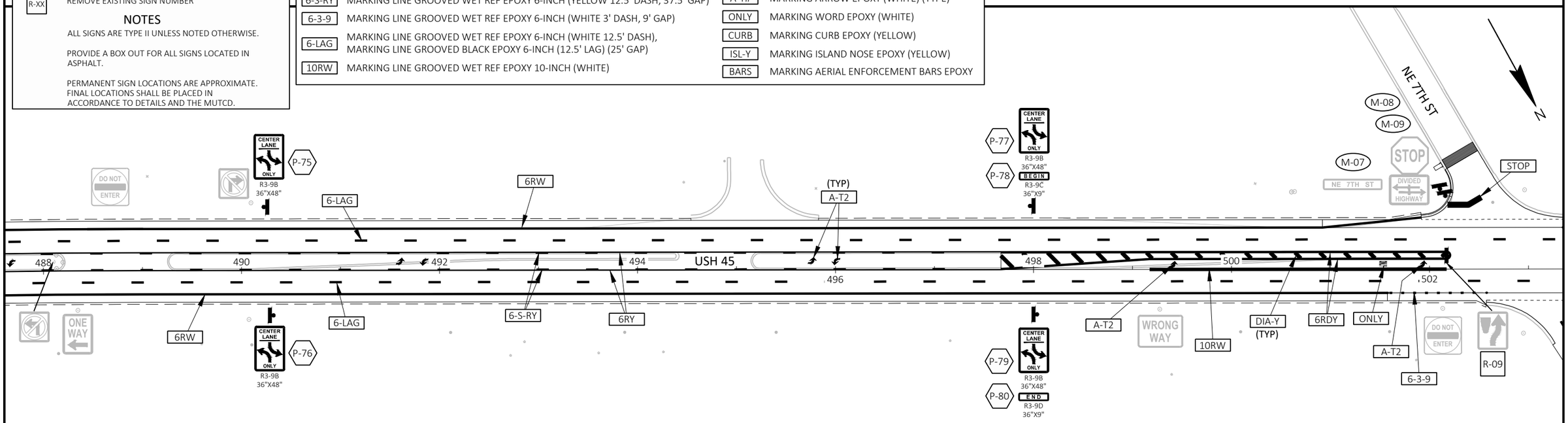
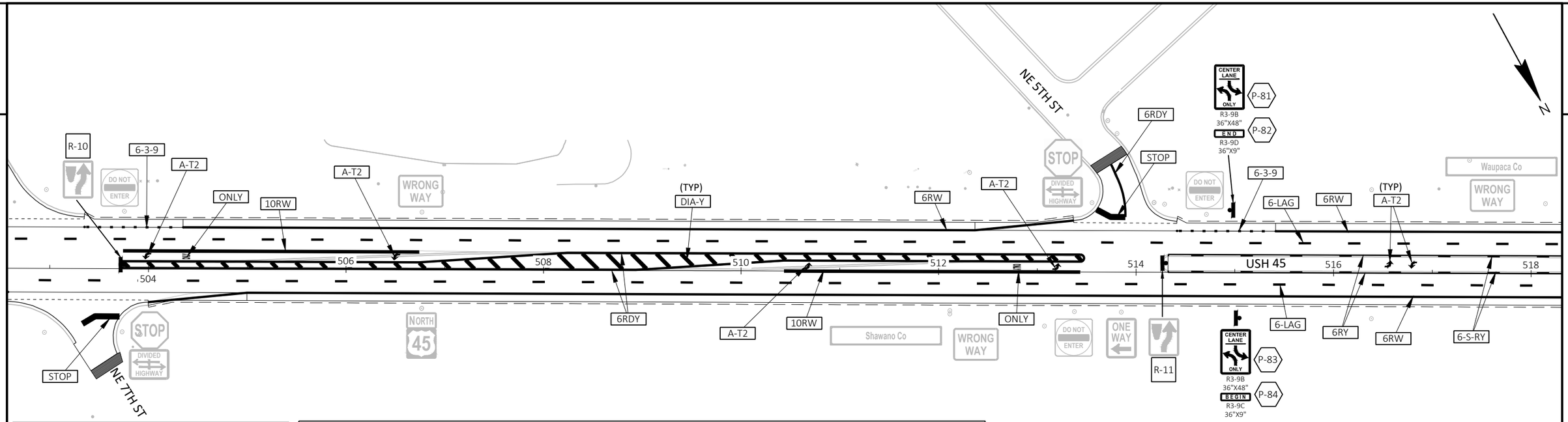
MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY





SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- (M-XX) MOVE EXISTING SIGN NUMBER
- (P-XX) NEW PROPOSED SIGN NUMBER
- [R-XX] REMOVE EXISTING SIGN NUMBER

NOTES

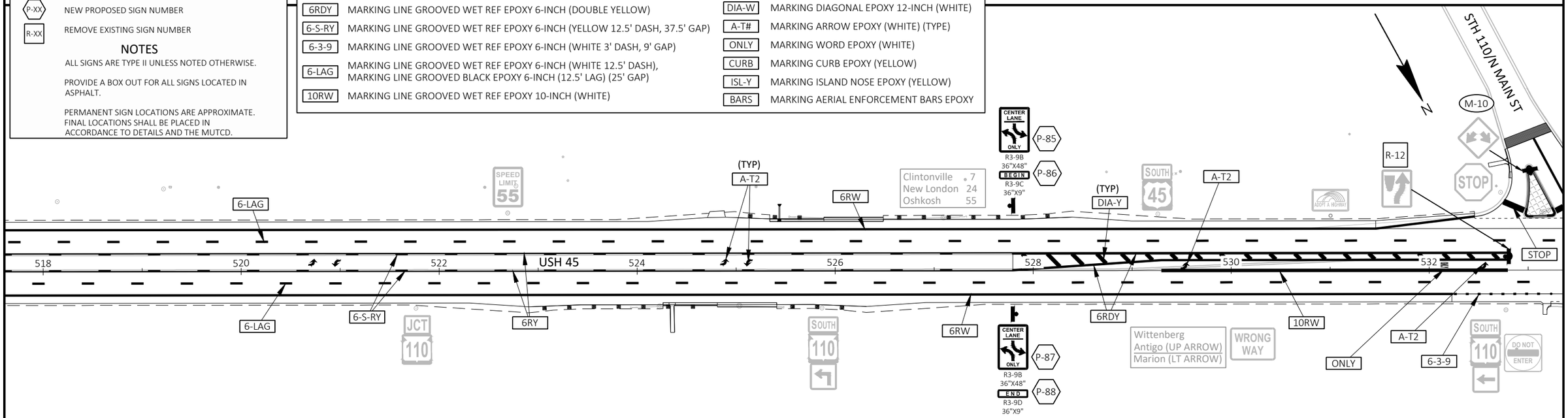
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

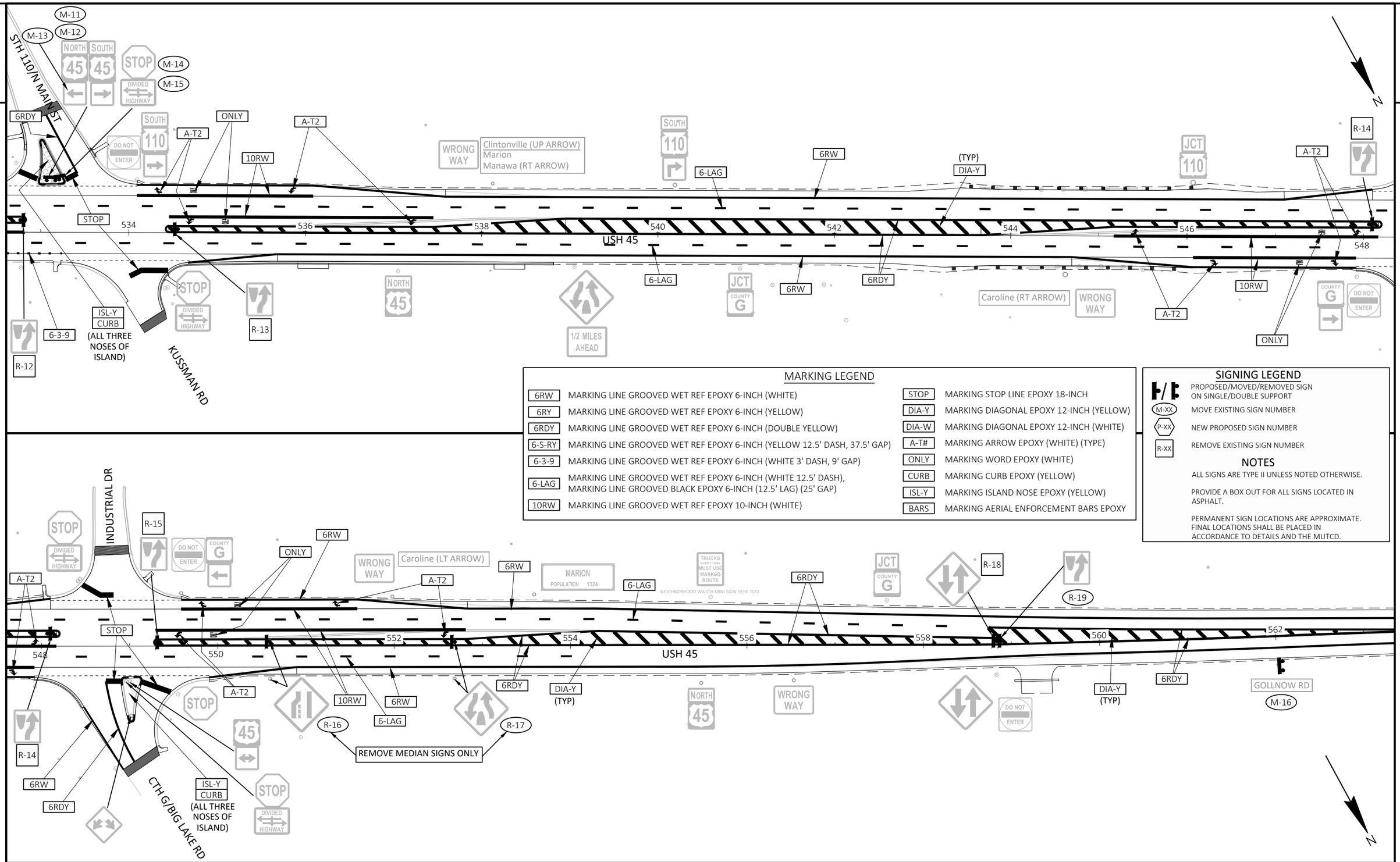
PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 114	E



MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY

SIGNING LEGEND

- PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT
- M-XX — MOVE EXISTING SIGN NUMBER
- P-XX — NEW PROPOSED SIGN NUMBER
- R-XX — REMOVE EXISTING SIGN NUMBER

NOTES

ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 115	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_023201_PSPM.DWG
LAYOUT NAME - 023214-pspm
PLOT DATE : 7/31/2025 12:04 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

SIGNING LEGEND

F/E PROPOSED/MOVED/REMOVED SIGN ON SINGLE/DOUBLE SUPPORT

M-XX MOVE EXISTING SIGN NUMBER

P-XX NEW PROPOSED SIGN NUMBER

R-XX REMOVE EXISTING SIGN NUMBER

NOTES

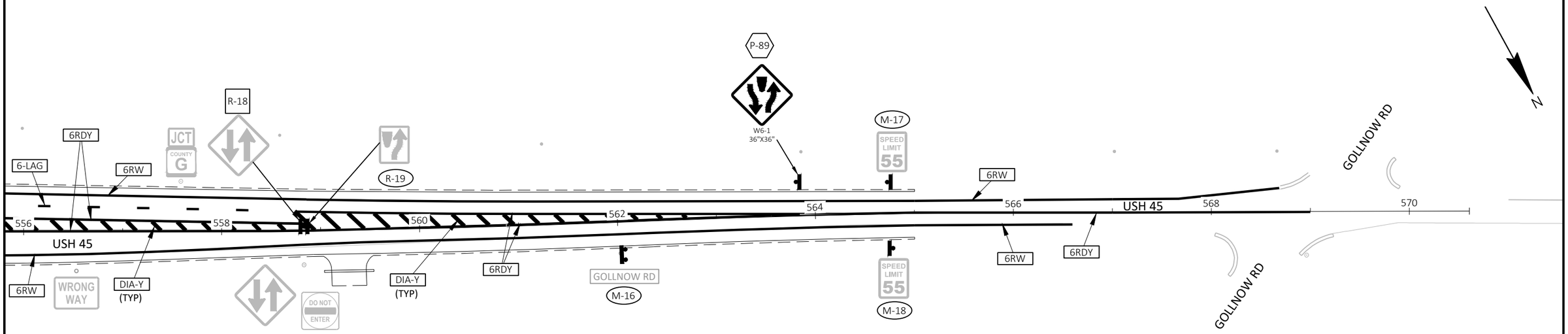
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

PROVIDE A BOX OUT FOR ALL SIGNS LOCATED IN ASPHALT.

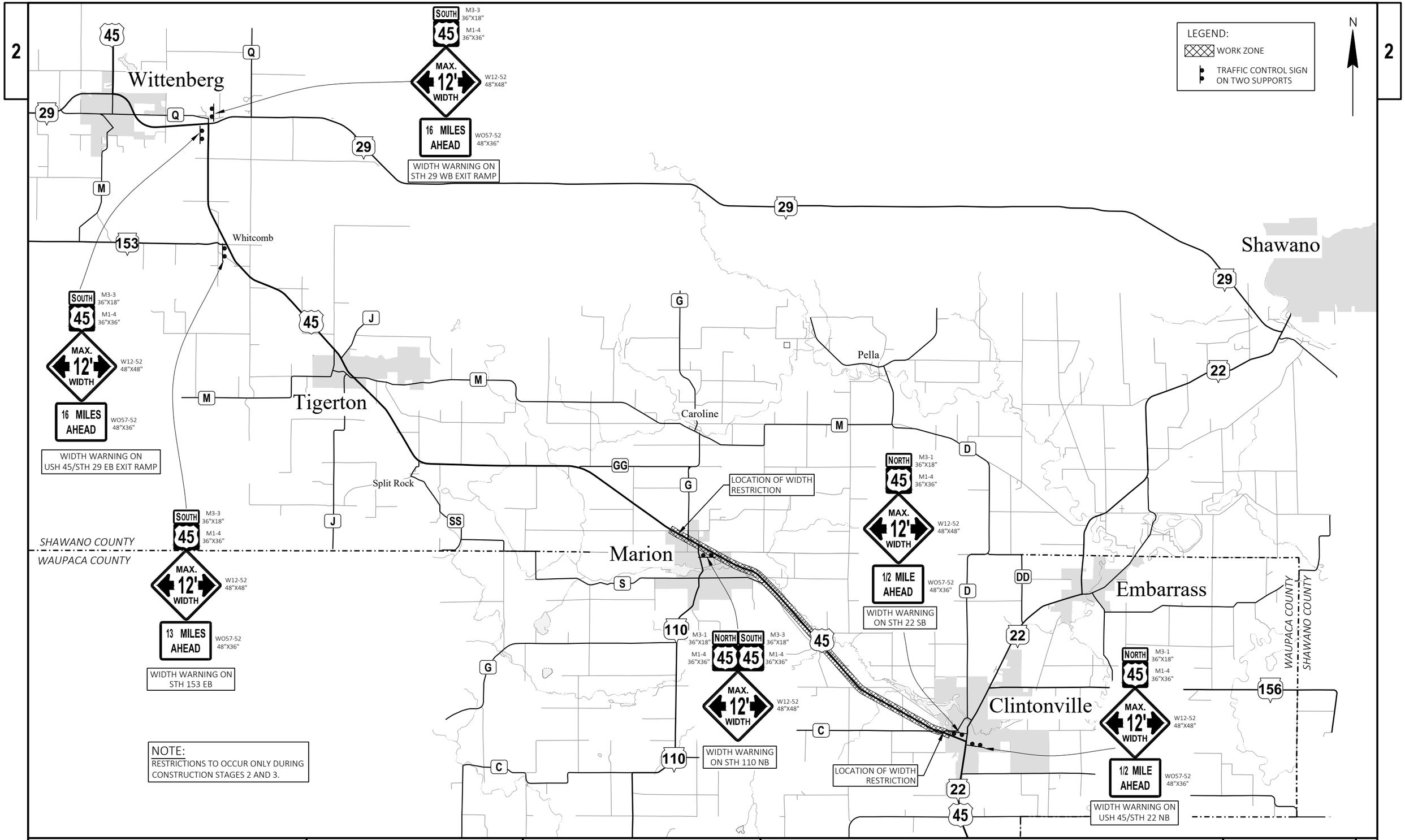
PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.

MARKING LEGEND

6RW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
6RDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6-S-RY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW 12.5' DASH, 37.5' GAP)
6-3-9	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 3' DASH, 9' GAP)
6-LAG	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE 12.5' DASH), MARKING LINE GROOVED BLACK EPOXY 6-INCH (12.5' LAG) (25' GAP)
10RW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH
DIA-Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DIA-W	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
A-T#	MARKING ARROW EPOXY (WHITE) (TYPE)
ONLY	MARKING WORD EPOXY (WHITE)
CURB	MARKING CURB EPOXY (YELLOW)
ISL-Y	MARKING ISLAND NOSE EPOXY (YELLOW)
BARS	MARKING AERIAL ENFORCEMENT BARS EPOXY



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	SIGNING & PAVEMENT MARKING	SHEET 116	E



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - ADVANCED WARNING SIGNING - WIDTH RESTRICTIONS	SHEET 117	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_025101_TC - AWS.DWG
LAYOUT NAME - - WIDTH RESTRICTIONS
PLOT DATE : 5/1/2025 1:51 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:2 MI
WISDOT/CADDS SHEET 42

2

HWY 45
ROAD WORK
BEGINS XXX-XX

G20-57
72"X36"
SIGN TO BE PLACED 7 DAYS PRIOR TO CONSTRUCTION AND REMOVED ONCE WORK BEGINS.

-CONSTRUCT TEMPORARY PAVEMENT WIDENING ALONG NB SHOULDER.
-REMOVE CENTERLINE RUMBLE STRIPS.

END PROJECT

REMOVE PORTION OF RAISED TURNING ISLAND AND REPLACE WITH TEMPORARY PAVEMENT FOR WB TO NB RIGHT TURN MOVEMENT

BEGIN PROJECT

CONSTRUCT TEMPORARY MEDIAN CROSSOVER

LEGEND:
- WORK ZONE
- TWO WAY TRAFFIC
- TRAFFIC CONTROL SIGN ON PERMANENT SUPPORTS

N

DRAEGER RD
KOPITZKE RD
GOLLNOW RD
BIG LAKE RD
MAVIS RD
SWAMP RD
SHAWANO COUNTY
WAUPACA COUNTY
Marion
N. Branch Pigeon Riv
MAGOLSKI RD
BUCKBEE RD
KNITT RD
HORN RD
ALBERTS RD
S. Branch Pigeon Riv
NEITZKE RD
LAKESHORE RD
BRANDY CREEK RD
Brandy Ck
HILL TOP RD
Pigeon Lk
Clintonville
E MADISON ST

550 500 450 400 350 300 250 200 150

45 110 22 156 S C D DD I

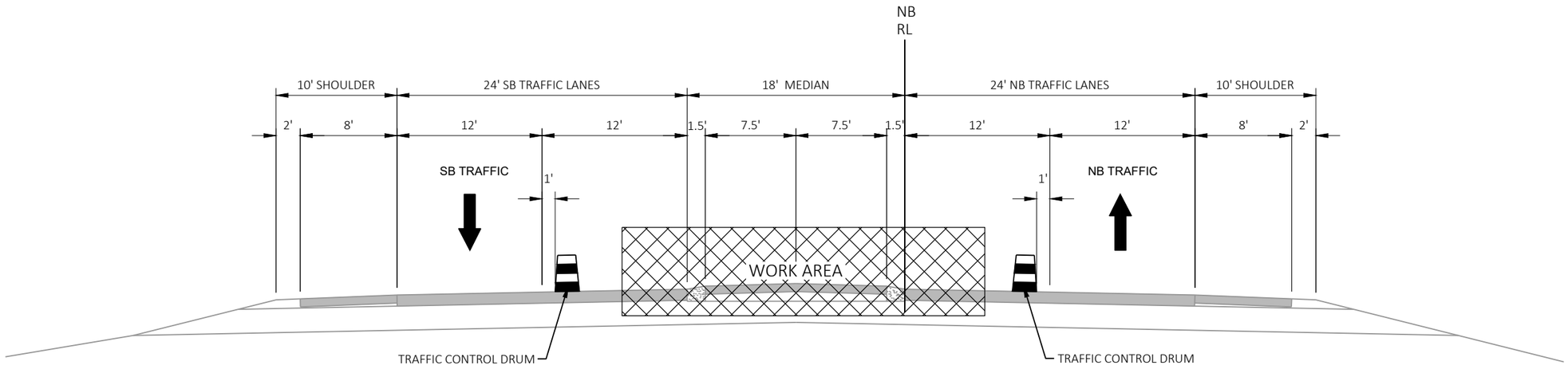
HWY 45
ROAD WORK
BEGINS XXX-XX

G20-57
72"X36"
SIGN TO BE PLACED 7 DAYS PRIOR TO CONSTRUCTION AND REMOVED ONCE WORK BEGINS.

FOLLOW SDDS	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
	TRAFFIC CONTROL, LANE CLOSURE
	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

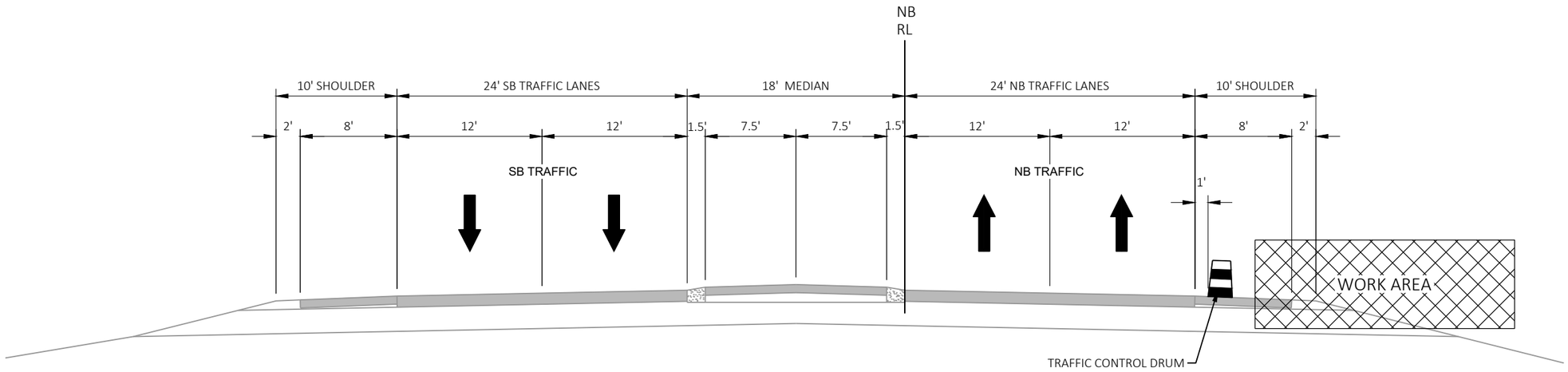
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 1 - OVERVIEW	SHEET 118	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026101_S1.DWG
LAYOUT NAME - - OVERVIEW
PLOT DATE : 8/26/2025 11:43 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:4000 FT
WISDOT/CADDS SHEET 42



STAGE 1 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - MEDIAN CONSTRUCTION

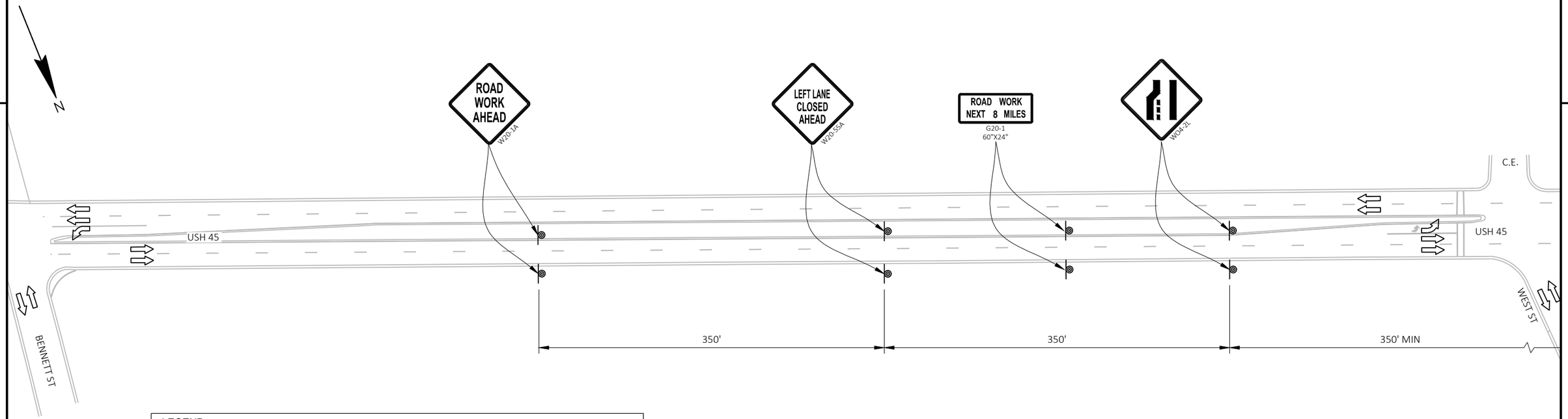
STA 138+00 TO STA 158+00



STAGE 1 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - SHOULDER CONSTRUCTION

STA 264+50 TO STA 268+00
STA 557+00 TO STA 568+00

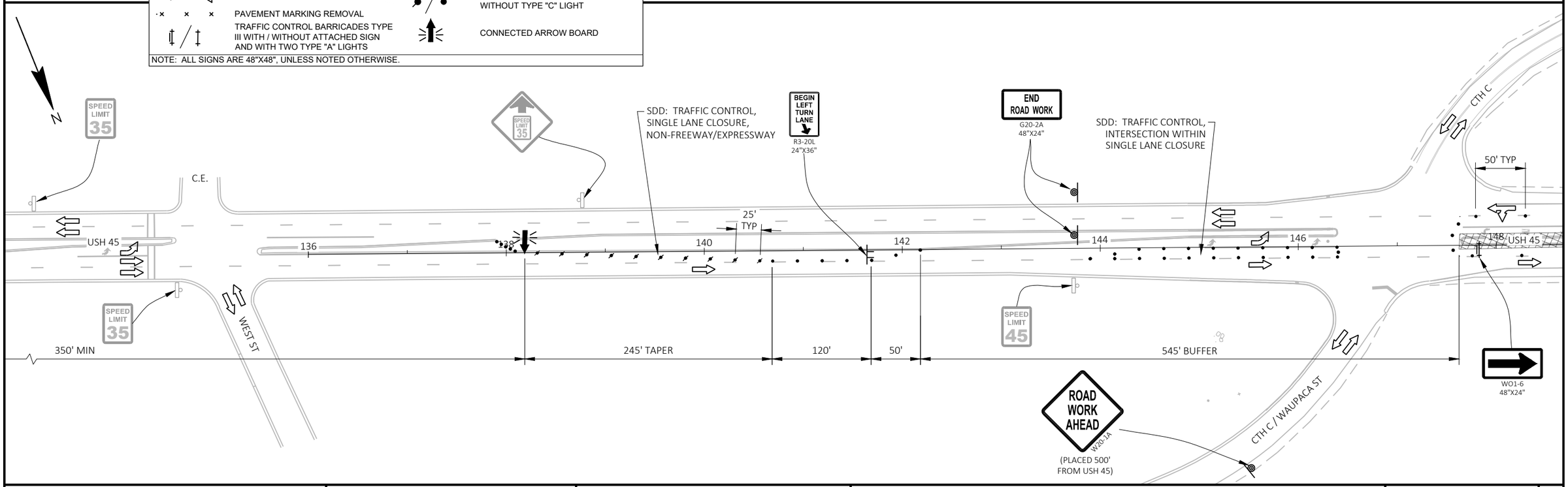
2



LEGEND:

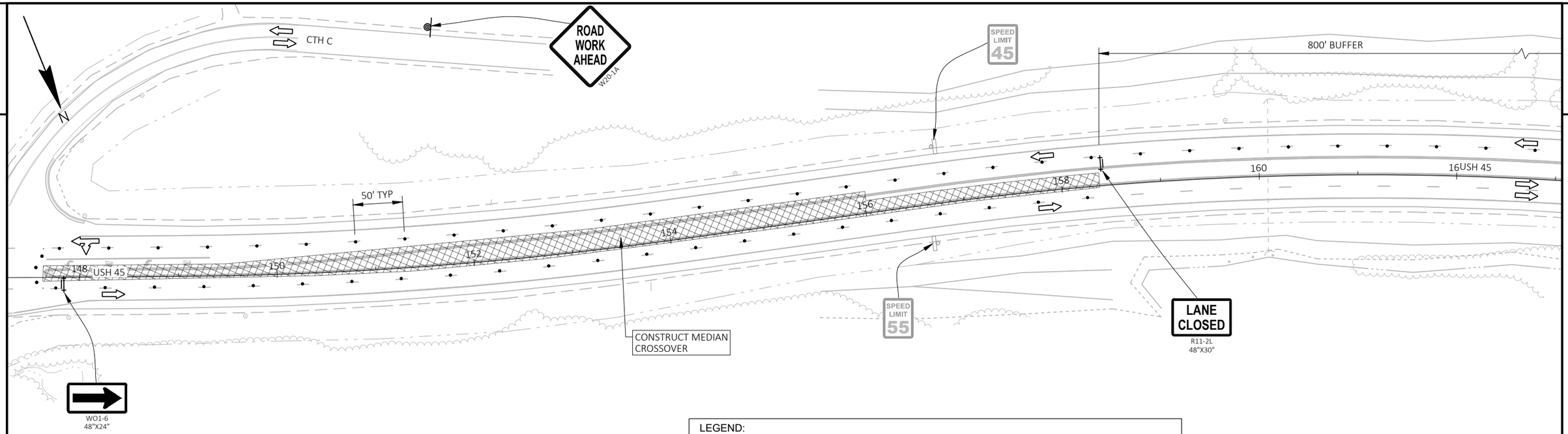
WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
or DIRECTION OF TRAFFIC	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
PAVEMENT MARKING REMOVAL	CONNECTED ARROW BOARD
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 1	SHEET 120	E

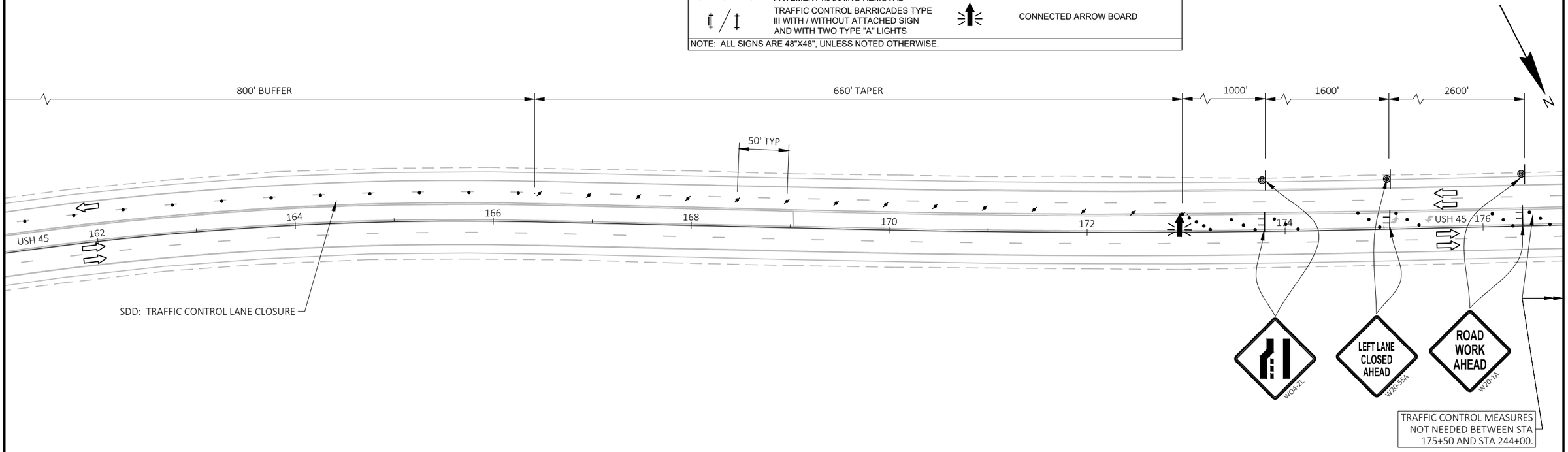
FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026102_S1.DWG
LAYOUT NAME - 01
PLOT DATE : 8/26/2025 11:51 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 42



LEGEND:

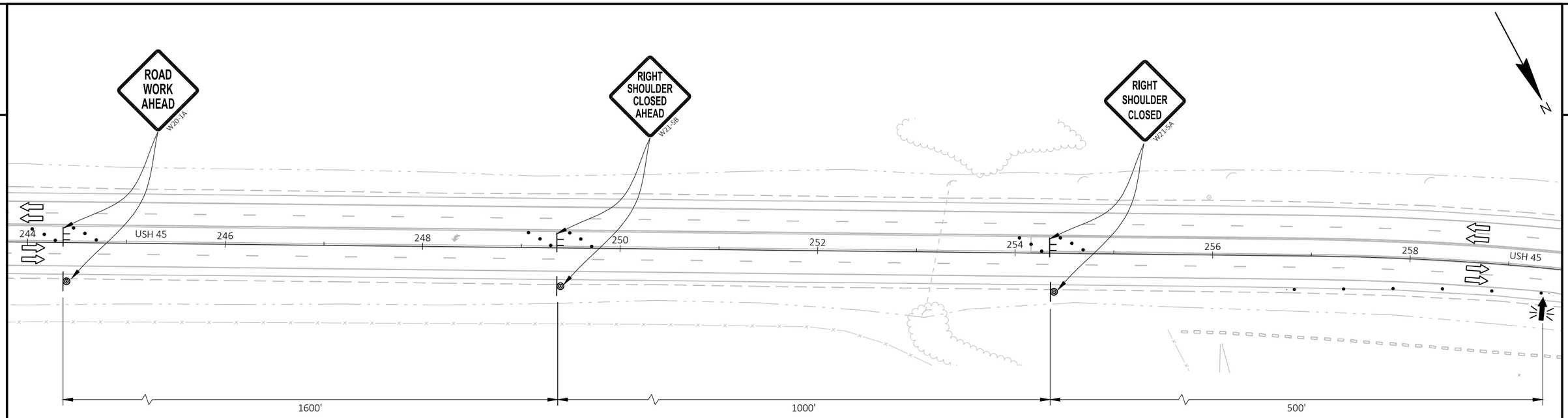
	WORK AREA
or	DIRECTION OF TRAFFIC
	PAVEMENT MARKING REMOVAL
	TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	CONNECTED ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 1	SHEET 121	E

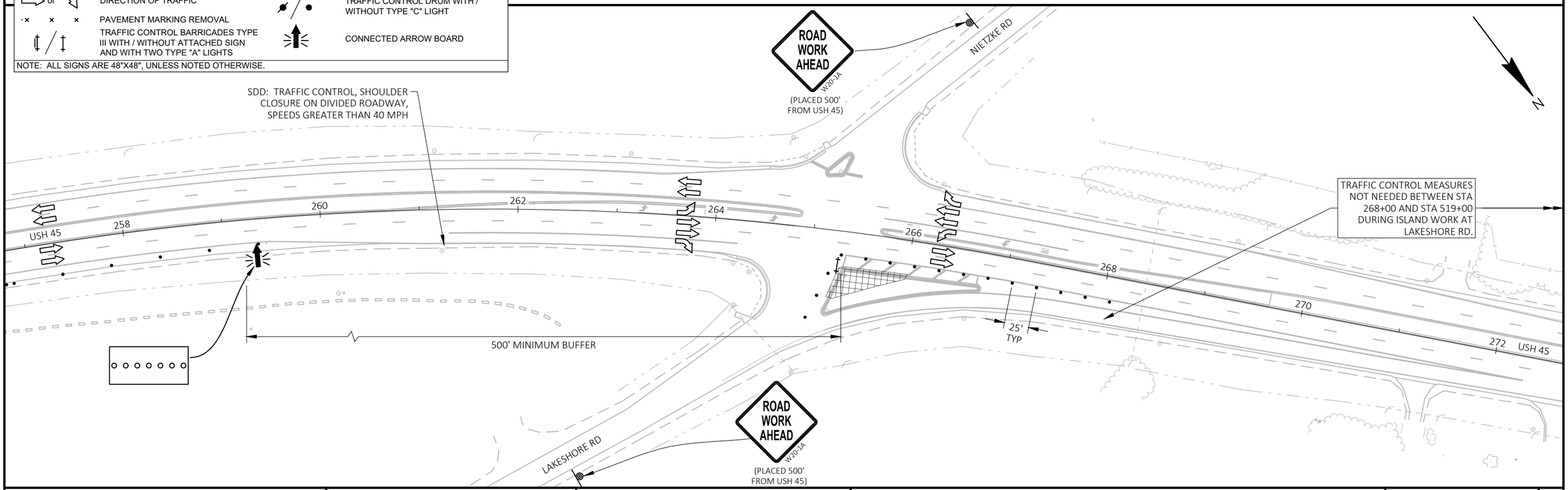
2



LEGEND:

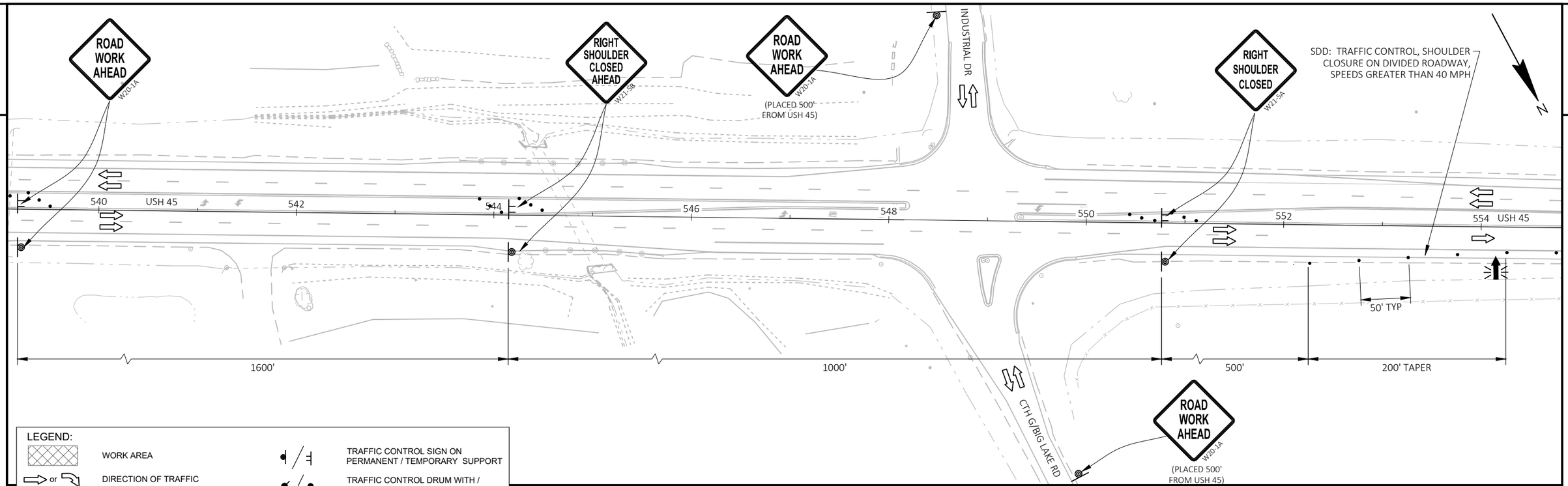
- WORK AREA
- DIRECTION OF TRAFFIC (or)
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- CONNECTED ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 1 - SHOULDER WORK AT LAKSHORE DR	SHEET 122	E

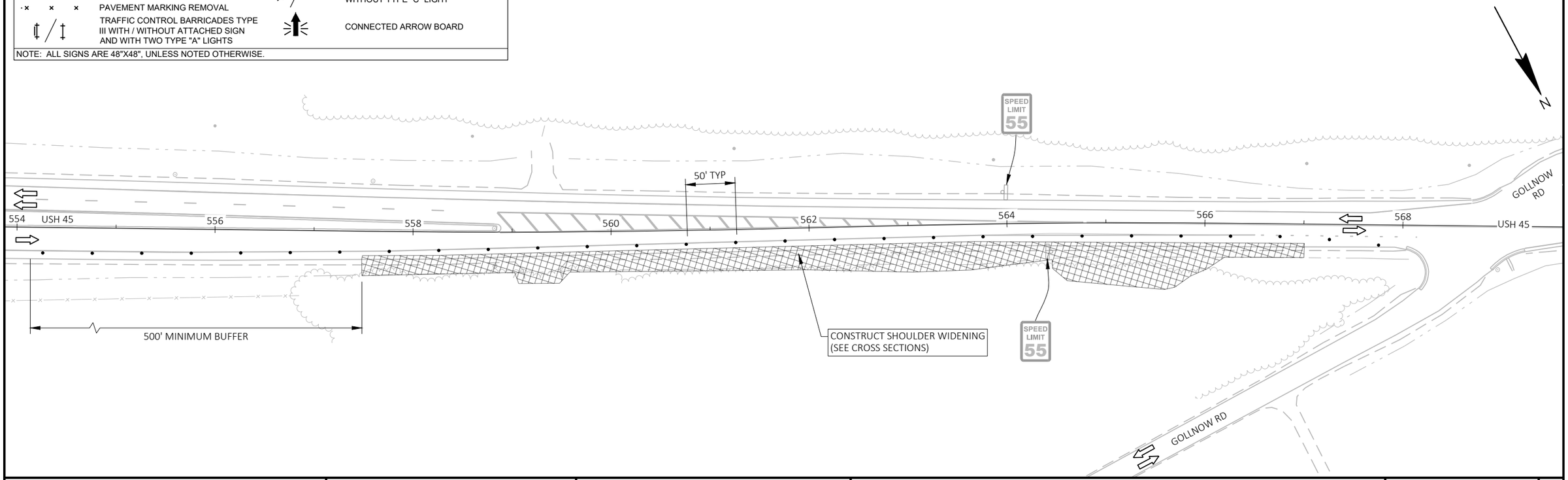
FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026102_S1.DWG
LAYOUT NAME - 05
PLOT DATE : 8/26/2025 11:52 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



LEGEND:

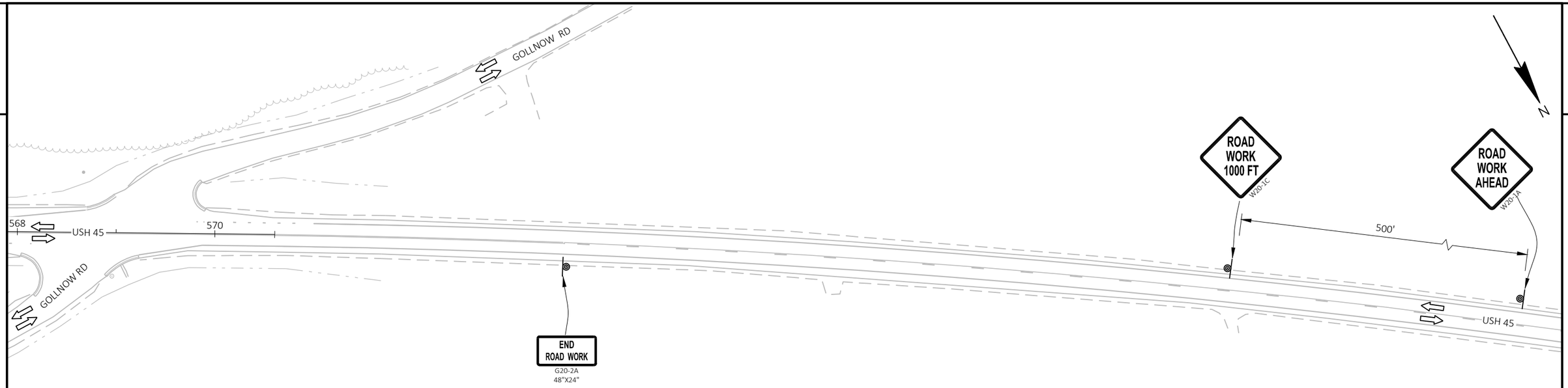
- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- CONNECTED ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 1	SHEET 123	E

2

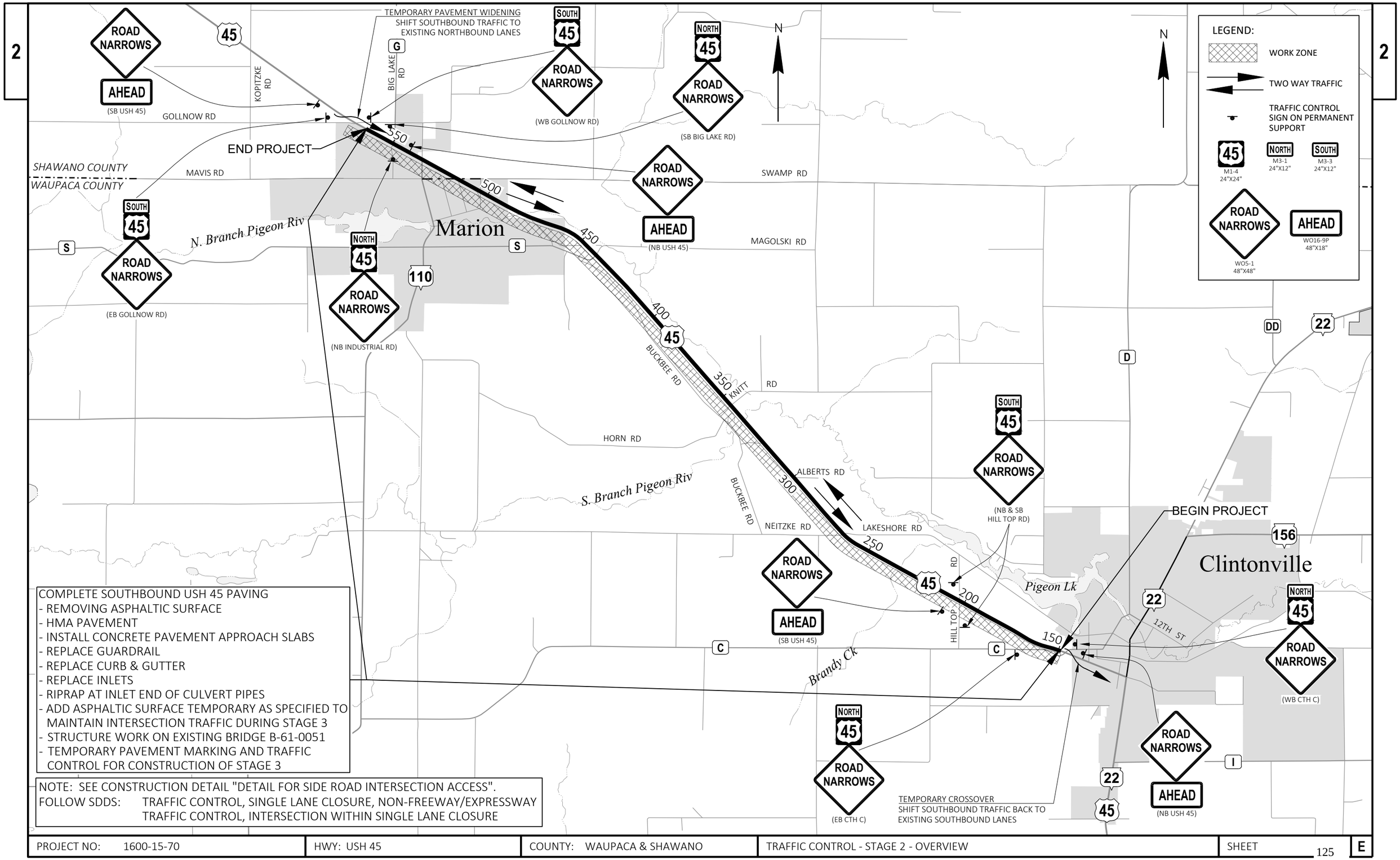


LEGEND:

WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
DIRECTION OF TRAFFIC	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
PAVEMENT MARKING REMOVAL	CONNECTED ARROW BOARD
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 1	SHEET 124	E



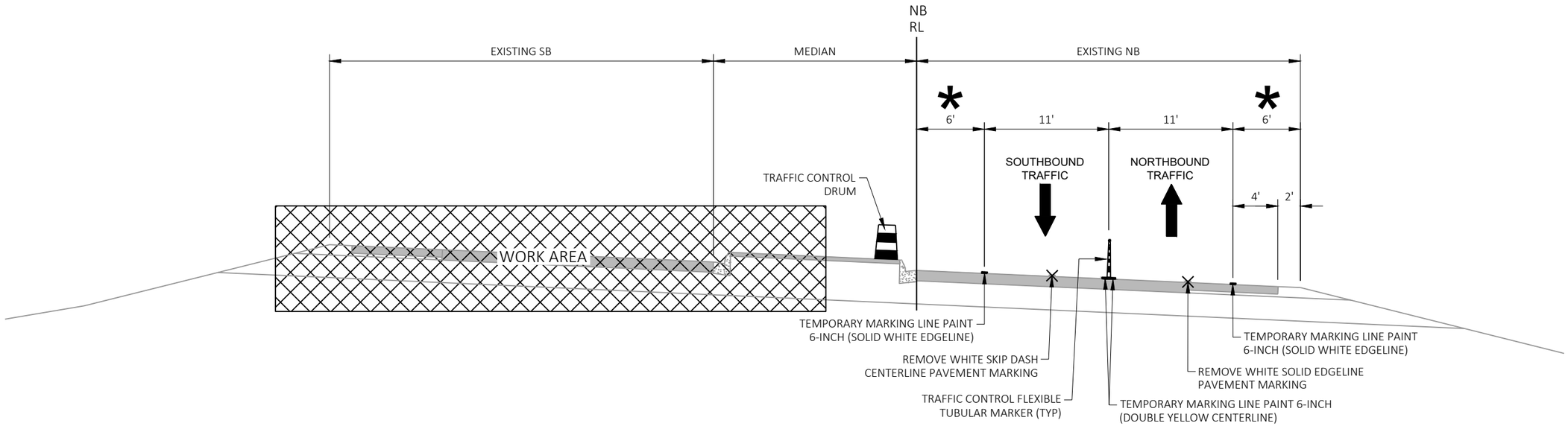
COMPLETE SOUTHBOUND USH 45 PAVING
- REMOVING ASPHALTIC SURFACE
- HMA PAVEMENT
- INSTALL CONCRETE PAVEMENT APPROACH SLABS
- REPLACE GUARDRAIL
- REPLACE CURB & GUTTER
- REPLACE INLETS
- RIPRAP AT INLET END OF CULVERT PIPES
- ADD ASPHALTIC SURFACE TEMPORARY AS SPECIFIED TO MAINTAIN INTERSECTION TRAFFIC DURING STAGE 3
- STRUCTURE WORK ON EXISTING BRIDGE B-61-0051
- TEMPORARY PAVEMENT MARKING AND TRAFFIC CONTROL FOR CONSTRUCTION OF STAGE 3

NOTE: SEE CONSTRUCTION DETAIL "DETAIL FOR SIDE ROAD INTERSECTION ACCESS".
FOLLOW SDDS: TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 2 - OVERVIEW	SHEET 125	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026201_S2.DWG
LAYOUT NAME - - OVERVIEW
PLOT DATE : 8/26/2025 12:12 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:4000 FT
WISDOT/CADDS SHEET 42

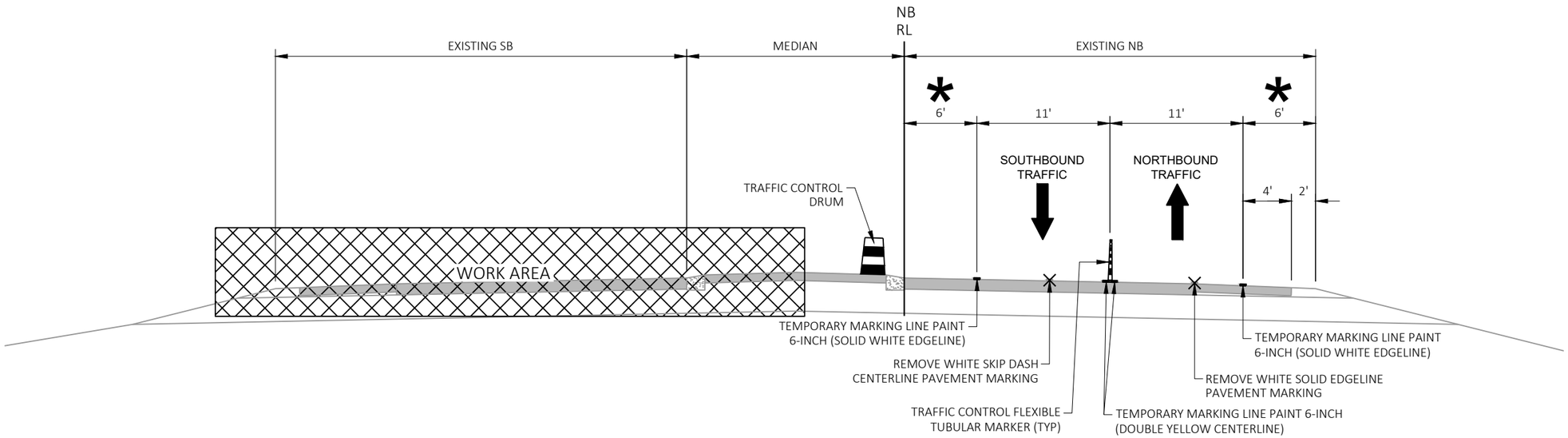
2



STAGE 2 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - RAISED MEDIAN AREAS

SOUTHBOUND CONSTRUCTION - TRAFFIC ON EXISTING NORTHBOUND

* SHOULDERS TO ACCOMMODATE BUGGY TRAFFIC

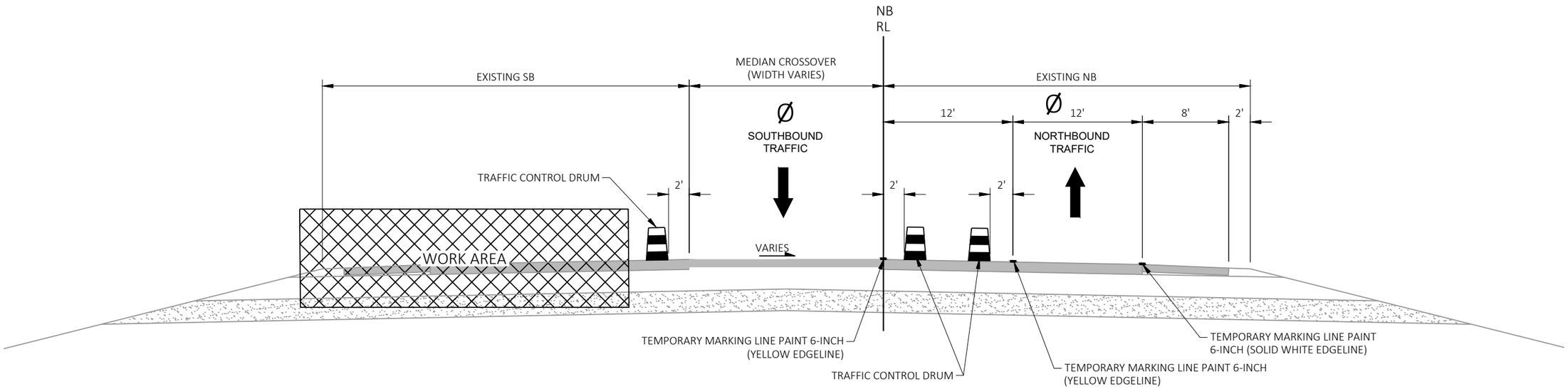


STAGE 2 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - TWO-WAY LEFT TURN LANE AREAS

SOUTHBOUND CONSTRUCTION - TRAFFIC ON EXISTING NORTHBOUND

* SHOULDERS TO ACCOMMODATE BUGGY TRAFFIC

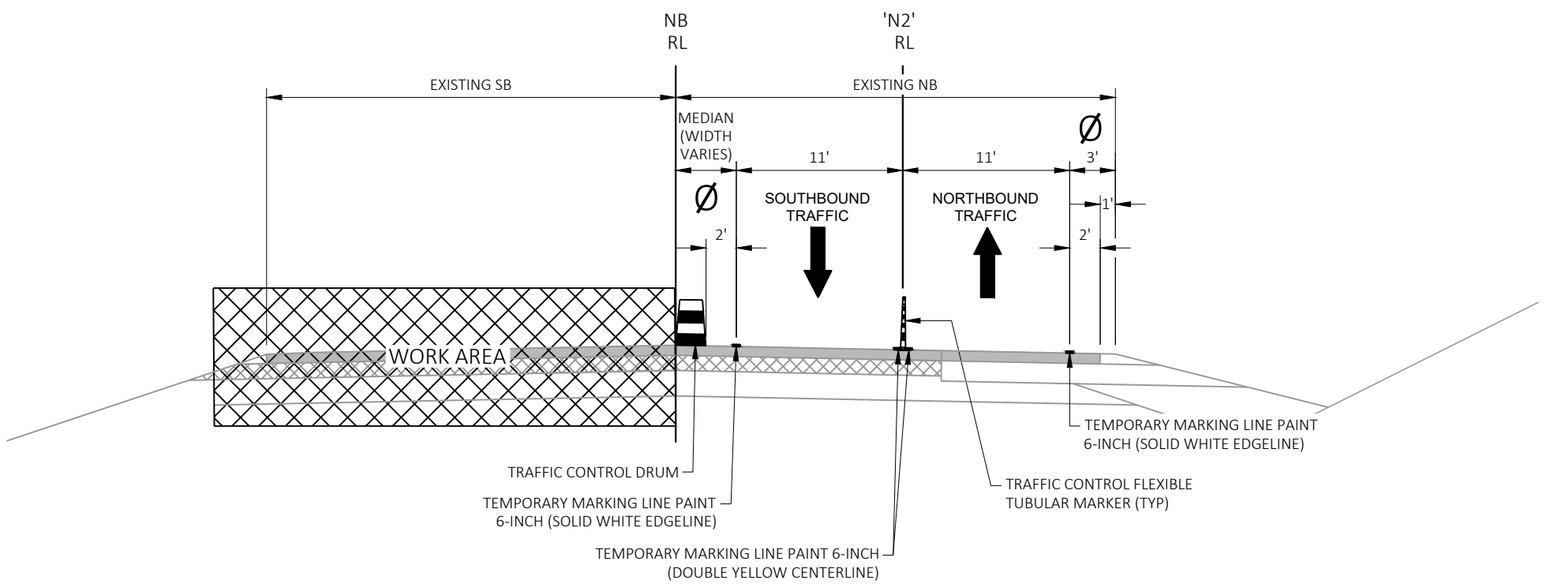
2



STAGE 2 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - SOUTH CROSSSOVER

STA 147+50 - STA 160+00

Ø SHOULDERS WITHIN THE LIMITS OF THE CROSSOVER ARE NOT ADEQUATE TO ACCOMMODATE BUGGY TRAFFIC

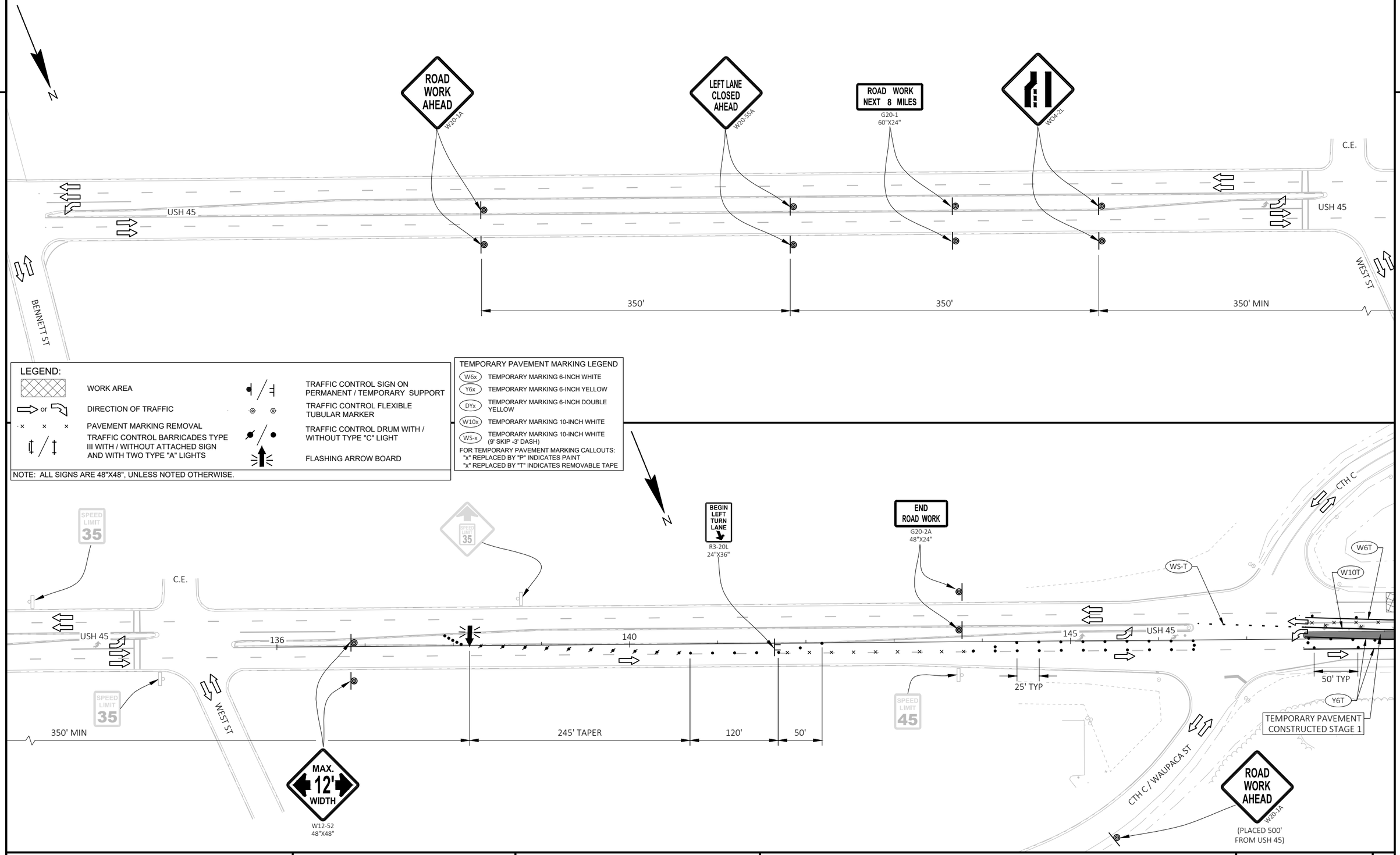


STAGE 2 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - NB SHOULDER WIDENING

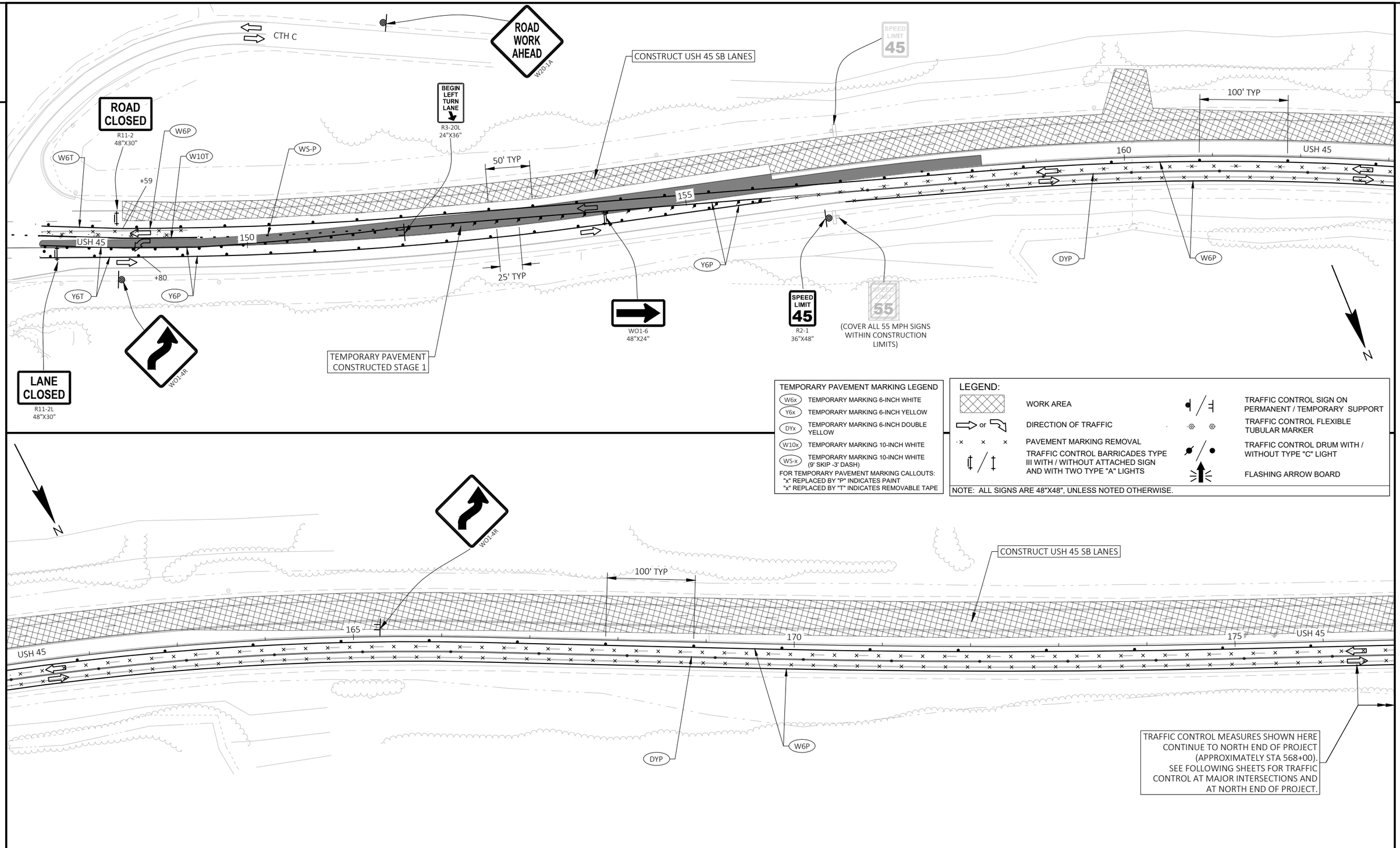
STA 558+43 - STA 566+48

Ø SHOULDERS WITHIN THE LIMITS OF NB SHOULDER WIDENING ARE NOT ADEQUATE TO ACCOMMODATE BUGGY TRAFFIC

2



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 2	SHEET 128	E



TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

LEGEND:

	WORK AREA
or	DIRECTION OF TRAFFIC
	PAVEMENT MARKING REMOVAL
	TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 2	SHEET 129	E

2

N

NIETZKE RD

SPEED LIMIT 45
R2-1
36"X48"

100' TYP

SEE CONSTRUCTION DETAIL "DETAIL FOR SIDE ROAD INTERSECTION ACCESS". APPLY TO ALL SIDEROADS WITHIN CONSTRUCTION LIMITS.

260

265

270

USH 45

25' TYP

STOP
CROSS TRAFFIC DOES NOT STOP
WO4-4P
36"X15"
(MOVE SIGNS. REINSTALL ORIGINAL SIGNS ON NEW POST AT END OF STAGE 3. SEE CONSTRUCTION DETAIL "DETAIL FOR SIDE ROAD INTERSECTION ACCESS")

W6P

DYP

TEMPORARY PAVEMENT CONSTRUCTED STAGE 1

LANE CLOSED
R11-2L
48"X30"

SPEED LIMIT 45
R2-1
36"X48"

LAKESHORE RD

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

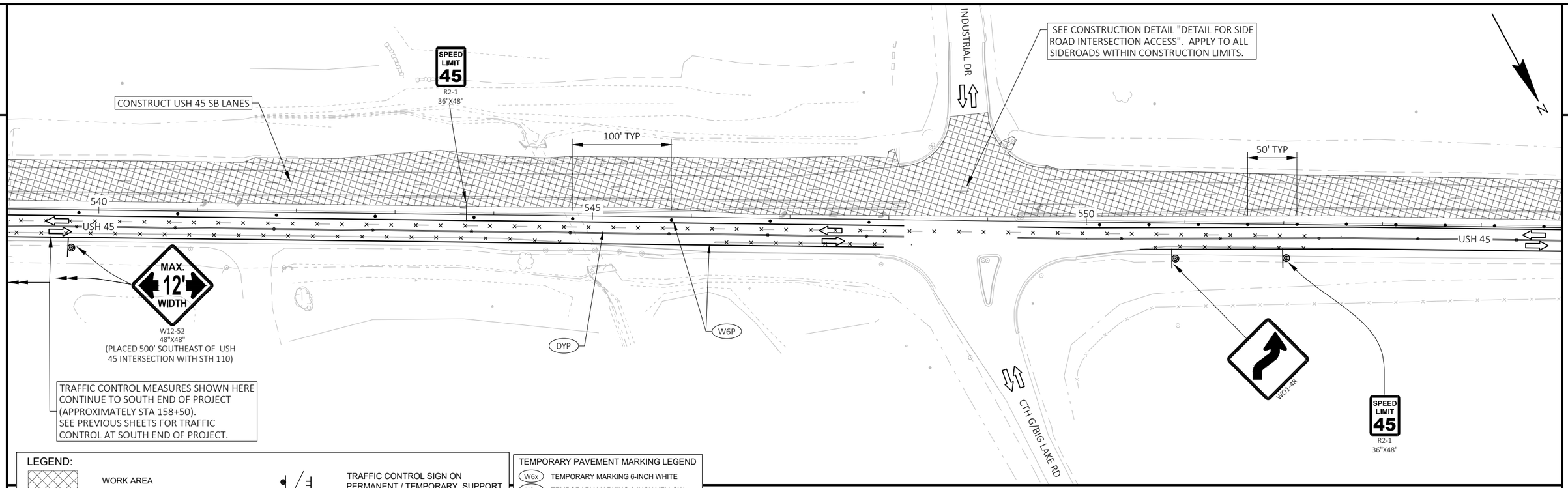
LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 2	SHEET 130	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026201_S2.DWG
LAYOUT NAME - 03
PLOT DATE : 8/29/2025 9:56 AM
PLOT BY : DALTON, RYAN
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



LEGEND:

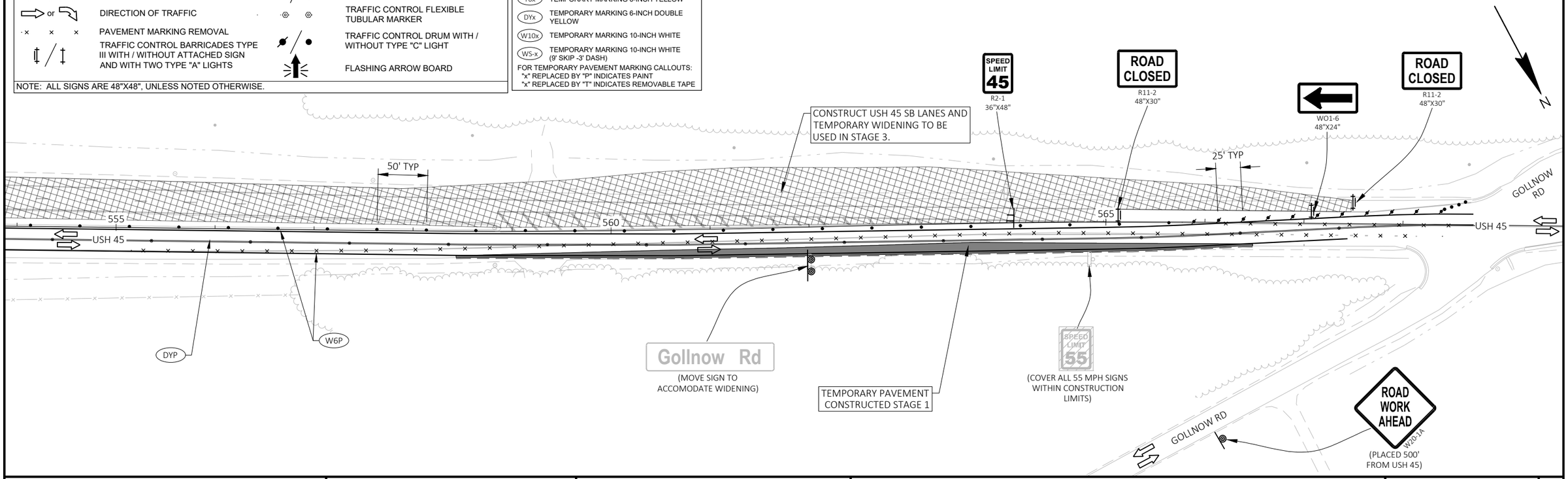
- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

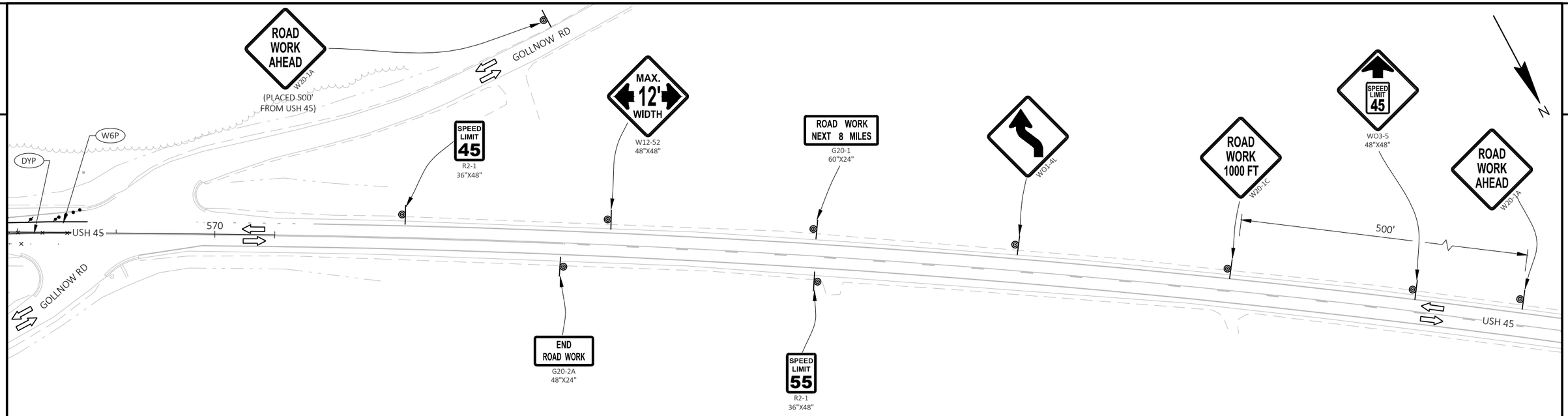
TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 2	SHEET 131	E



LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 2	SHEET 132	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026201_S2.DWG
LAYOUT NAME - 05
PLOT DATE : 8/26/2025 12:14 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ############
WISDOT/CADDS SHEET 42

2

2

N

CTH C

215' TAPER, 8' SHIFT
(40 MPH)

CONSTRUCT OUTSIDE
SB LANE & SHOULDER

W10T

W6T

W6P

WS-T

146+45, 18.50' LT

50' TYP

+59

USH 45 SB

148'S2'

149'S2'

11'

11'

11'

11'

142+00

143+00

144+00

145+00

146+00

147+00

148+00

149+00

25' TYP

USH 45 NB

NB MEDIAN LANE CLOSED

Y6T

+80

Y6P

TEMPORARY PAVEMENT
CONSTRUCTED STAGE 1

CTH C/WAUPACA ST

LEGEND:

WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
or DIRECTION OF TRAFFIC	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
PAVEMENT MARKING REMOVAL	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

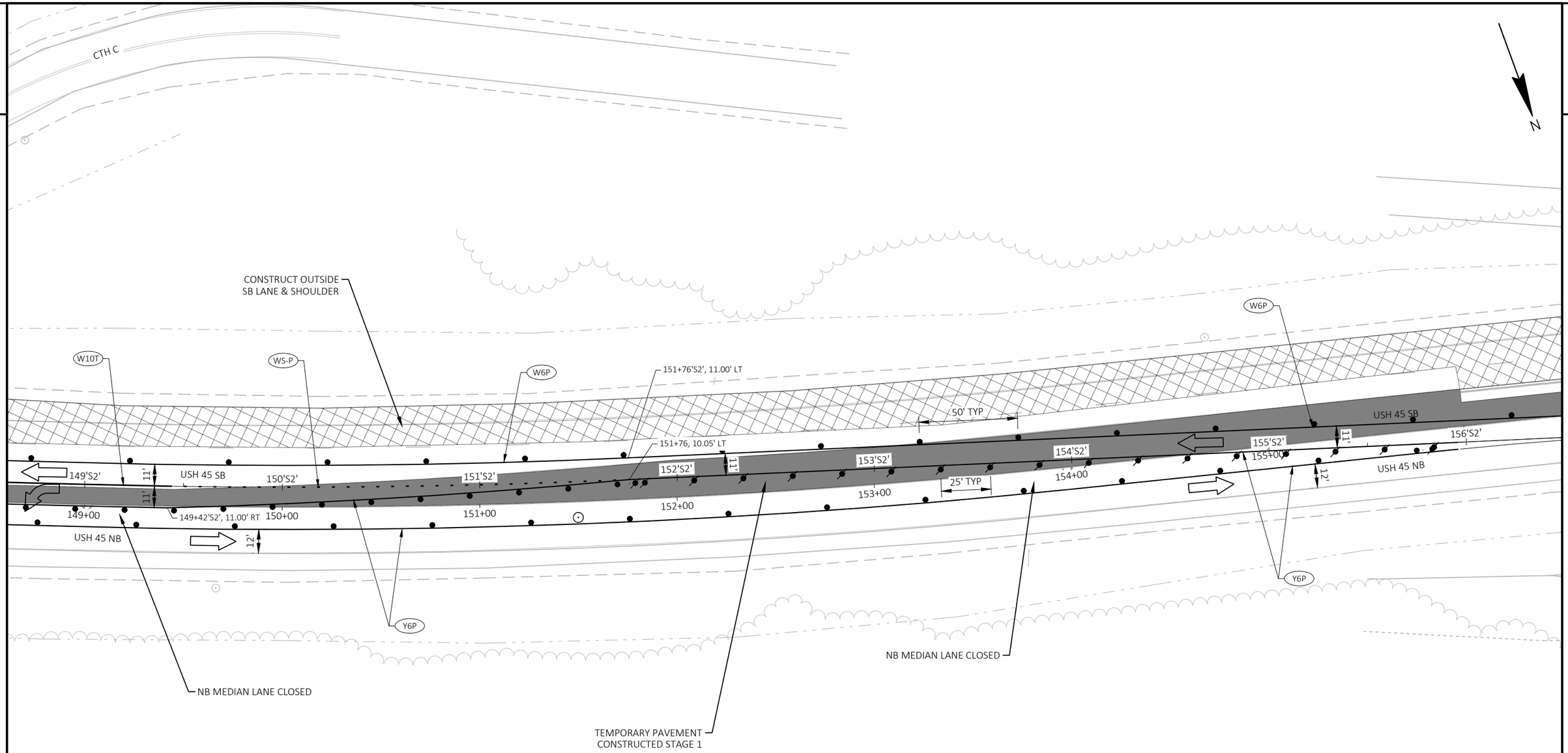
FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 2 - TRAFFIC CONTROL DETAILS (CROSSOVER)	SHEET 133	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026202_S2.DWG
LAYOUT NAME - 14200 - 14900

PLOT DATE : 4/29/2025 11:37 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



TEMPORARY PAVEMENT MARKING LEGEND	
W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

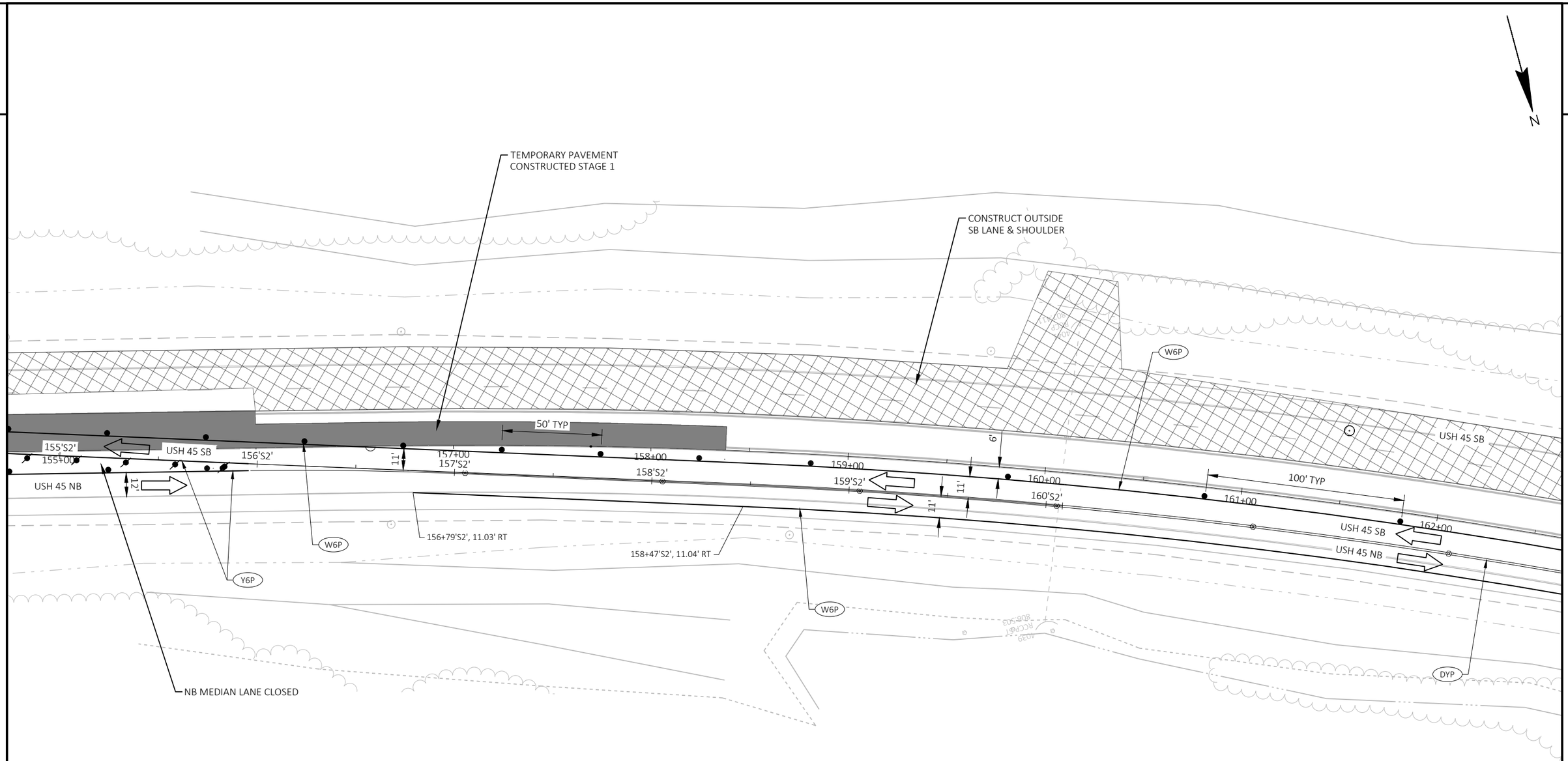
LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 2 - TRAFFIC CONTROL DETAILS (CROSSOVER)	SHEET 134	E

2



TEMPORARY PAVEMENT MARKING LEGEND	
W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

LEGEND:

WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
DIRECTION OF TRAFFIC	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
PAVEMENT MARKING REMOVAL	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	FLASHING ARROW BOARD

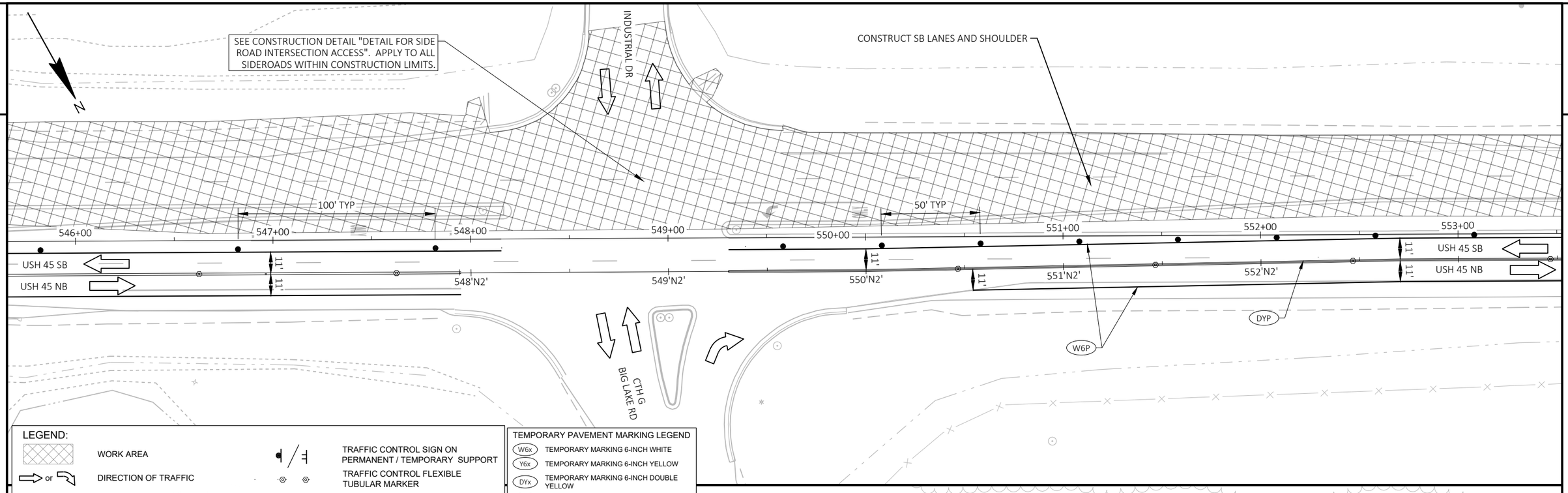
NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 2 - TRAFFIC CONTROL DETAILS (CROSSOVER)	SHEET 135	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026202_S2.DWG
LAYOUT NAME - 15500 - 16050

PLOT DATE : 4/29/2025 11:38 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND:

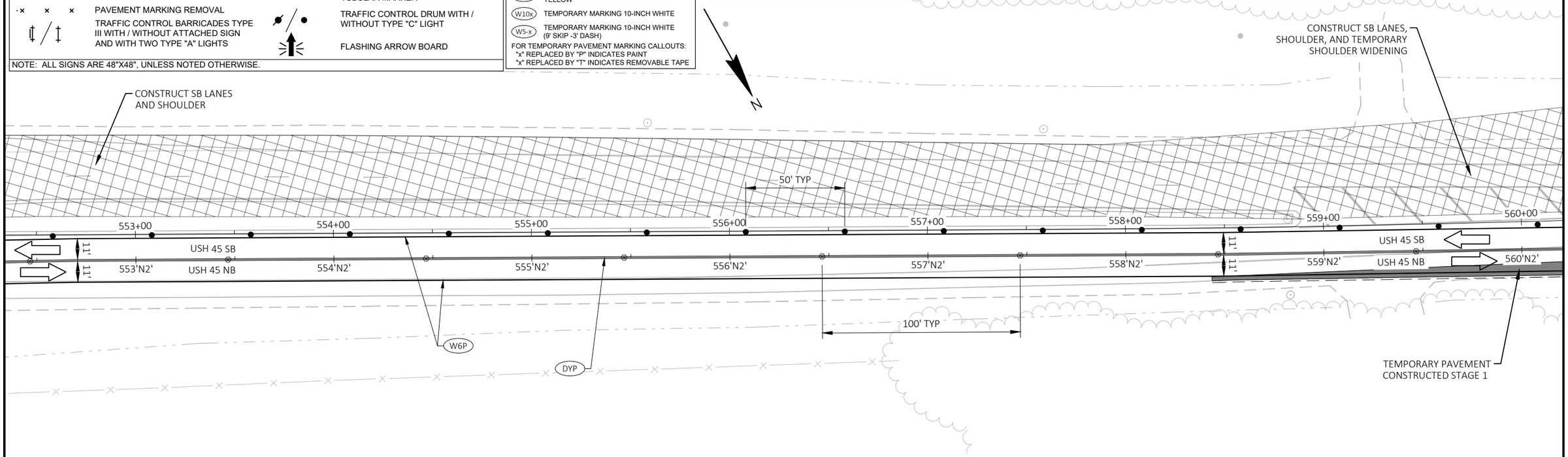
WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
or DIRECTION OF TRAFFIC	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
PAVEMENT MARKING REMOVAL	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 2 - TRAFFIC CONTROL DETAILS (NB SHOULDER WIDENING)	SHEET 136	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026203_S2.DWG
LAYOUT NAME - 54600 - 56000
PLOT DATE : 4/30/2025 7:33 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

CONSTRUCT SB LANE, SHOULDER, AND
TEMPORARY SHOULDER WIDENING

50' TYP

25' TYP

559+00 560+00 561+00 562+00 563+00 564+00 565+00 566+00

USH 45 SB

USH 45 NB

11'

11'

560'N2' 561'N2' 562'N2' 563'N2' 564'N2' 565'N2'

USH 45 SB

USH 45 NB

566'N2'

100' TYP

DYP

W6P

TEMPORARY PAVEMENT
CONSTRUCTED STAGE 1

LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 2 - TRAFFIC CONTROL DETAILS (NB SHOULDER WIDENING)	SHEET 137	E

2

N

CONSTRUCT SB LANE, SHOULDER, AND
TEMPORARY SHOULDER WIDENING

GOLLNOW RD

50' TYP

25' TYP

565+00

566+00

567+00

568+00

569+00

570+00

USH 45

USH 45 SB

USH 45 NB

565'N2'

566'N2'

567'N2'

568'N2'

11'

11'

11'

11'

100' TYP

W6P
EAST OF
STA 565+00

DYP
EAST OF
STA 565+00

DYT
WEST OF
STA 565+00

W6T
WEST OF
STA 565+00

TEMPORARY PAVEMENT
CONSTRUCTED STAGE 1

GOLLNOW RD

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC (or)
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	STAGE 2 - TRAFFIC CONTROL DETAILS (NB SHOULDER WIDENING)	SHEET 138	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026203_S2.DWG
LAYOUT NAME - 56500 - 57300
PLOT DATE : 4/30/2025 7:34 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

ROAD NARROWS AHEAD (SB USH 45)

45

G

TEMPORARY PAVEMENT WIDENING
SHIFT NORTHBOUND TRAFFIC BACK TO EXISTING NORTHBOUND LANES

KOPITZKE RD

BIG LAKE RD

SOUTH 45 ROAD NARROWS (WB GALLNOW RD)

NORTH 45 ROAD NARROWS (SB BIG LAKE RD)

GOLLNOW RD

END PROJECT

550

SHAWANO COUNTY
WAUPACA COUNTY

MAVIS RD

SWAMP RD

Marion

500

ROAD NARROWS AHEAD (NB USH 45)

SOUTH 45 ROAD NARROWS (EB GALLNOW RD)

N. Branch Pigeon Riv

S

NORTH 45 ROAD NARROWS (NB INDUSTRIAL RD)

110

450

MAGOLSKI RD

400

45

BUCKBEE RD

350

KNITT RD

HORN RD

300

ALBERTS RD

S. Branch Pigeon Riv

BUCKBEE RD

NEITZKE RD

LAKESHORE RD

250

SOUTH 45 ROAD NARROWS (NB & SB HILL TOP RD)

ROAD NARROWS AHEAD (SB USH 45)

45

200

HILL TOP RD

Brandy Ck

Pigeon Lk

BEGIN PROJECT

156

Clintonville

22

12TH ST

NORTH 45 ROAD NARROWS (WB CTH C)

C

150

E MADISON ST

BRANDY CREEK RD

NORTH 45 ROAD NARROWS (EB CTH C)

TEMPORARY CROSSOVER
SHIFT NORTHBOUND TRAFFIC TO RECONSTRUCTED SOUTHBOUND LANES

22

45

ROAD NARROWS AHEAD (NB USH 45)

I

D

DD

22

N

LEGEND:

- WORK ZONE
- TWO WAY TRAFFIC
- TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT

45 M1-4 24"X24"

NORTH M3-1 24"X12"

SOUTH M3-3 24"X12"

ROAD NARROWS WO5-1 48"X48"

AHEAD WO16-9P 48"X18"

COMPLETE NORTHBOUND USH 45 PAVING
- REMOVING ASPHALTIC SURFACE
- HMA PAVEMENT
- ASPHALTIC SURFACE SAFETY ISLANDS
- INSTALL CONCRETE PAVEMENT APPROACH SLABS
- REPLACE GUARDRAIL
- REPLACE CURB & GUTTER
- REPLACE INLETS
- RIPRAP AT INLET END OF CULVERT PIPES
- STRUCTURE WORK ON EXISTING BRIDGE B-61-0051
- PAVEMENT MARKING

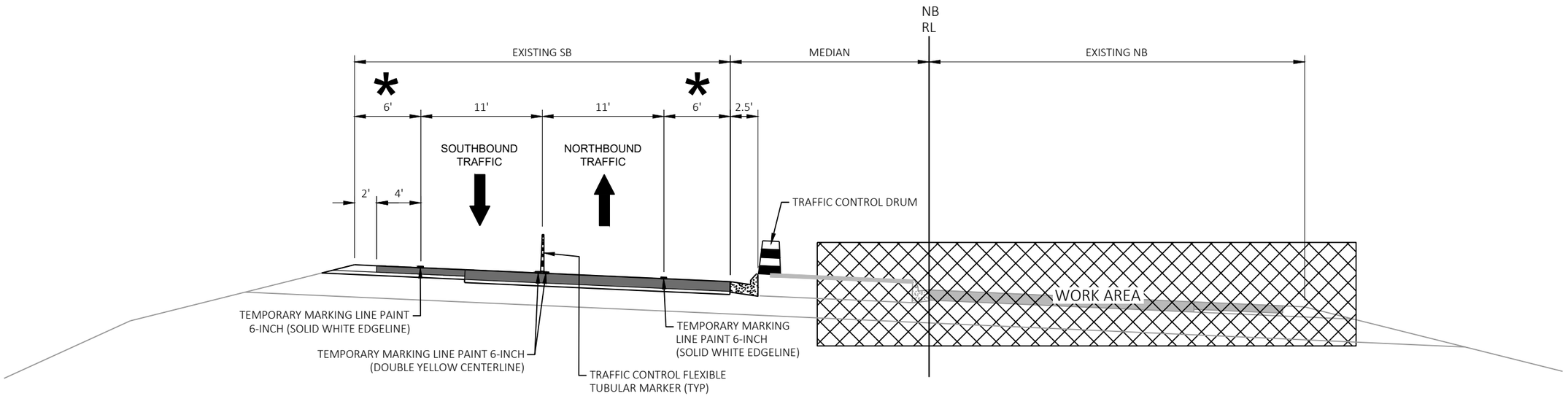
NOTE: SEE CONSTRUCTION DETAIL "DETAIL FOR SIDE ROAD INTERSECTION ACCESS".
FOLLOW SDDS TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 3 - OVERVIEW	SHEET 139	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026301_S3.DWG
LAYOUT NAME - - OVERVIEW

PLOT DATE : 8/26/2025 12:39 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:4000 FT

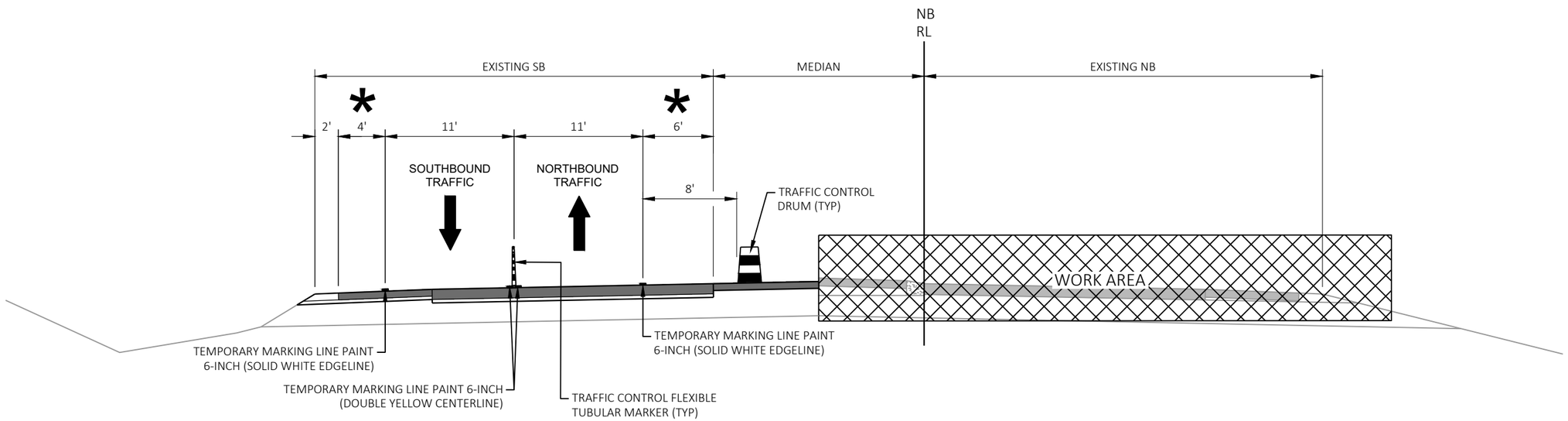
WISDOT/CADDS SHEET 42



STAGE 3 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - RAISED MEDIAN AREAS

NORTHBOUND CONSTRUCTION - TRAFFIC ON RECONSTRUCTED SOUTHBOUND

* SHOULDERS TO ACCOMMODATE BUGGY TRAFFIC

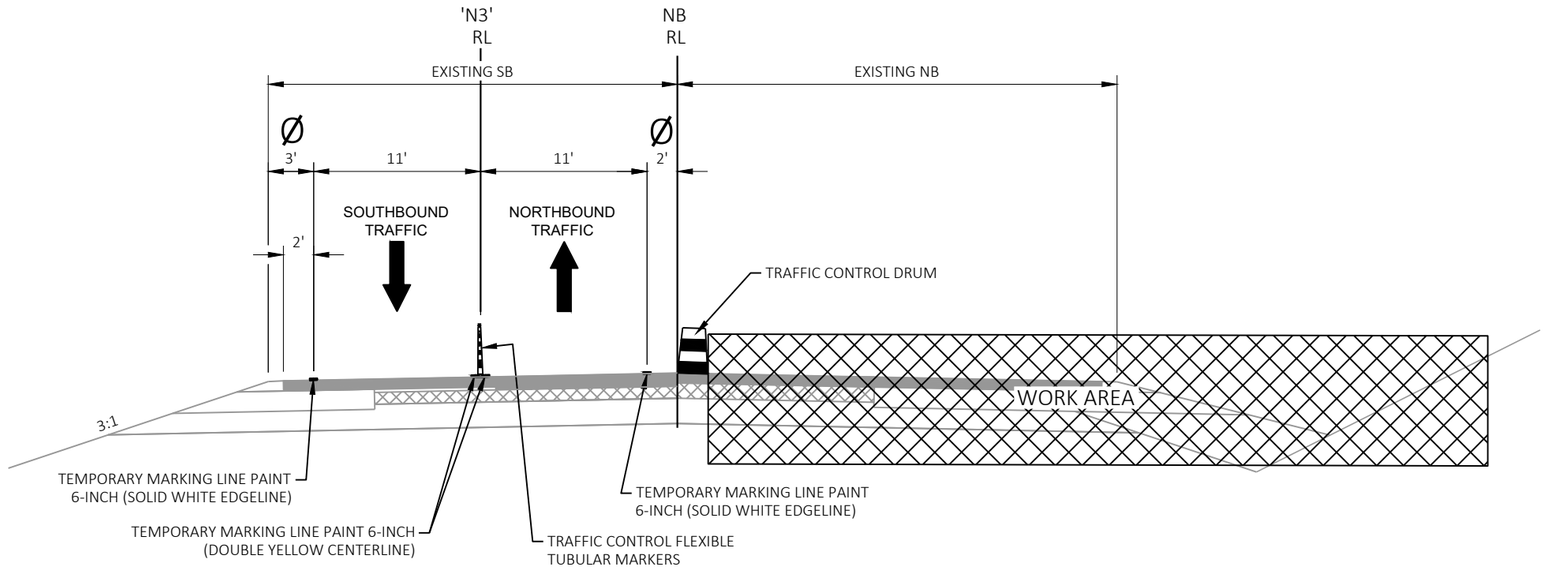


STAGE 3 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - TWO-WAY LEFT TURN LANE AREAS

NORTHBOUND CONSTRUCTION - TRAFFIC ON RECONSTRUCTED SOUTHBOUND

* SHOULDER TO ACCOMMODATE BUGGY TRAFFIC

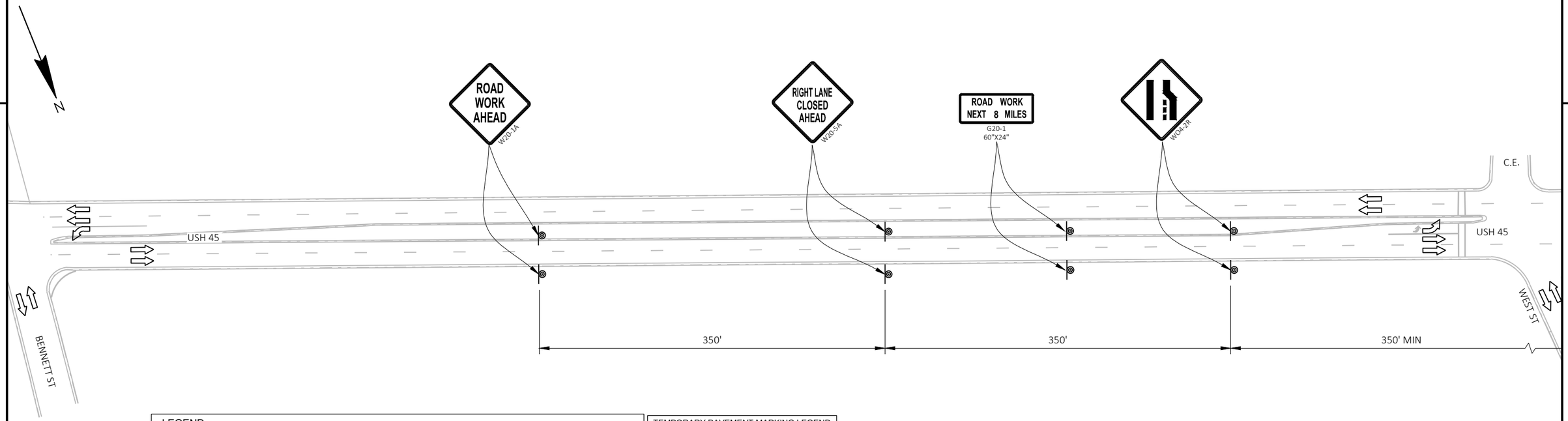
2



STAGE 3 TRAFFIC CONTROL TYPICAL SECTION - USH 45 - SB SHOULDER WIDENING

STA 559+00 - STA 568+00

Ø SHOULDERS WITHIN THE LIMITS OF SB SHOULDER WIDENING ARE NOT ADEQUATE TO ACCOMMODATE BUGGY TRAFFIC



LEGEND:

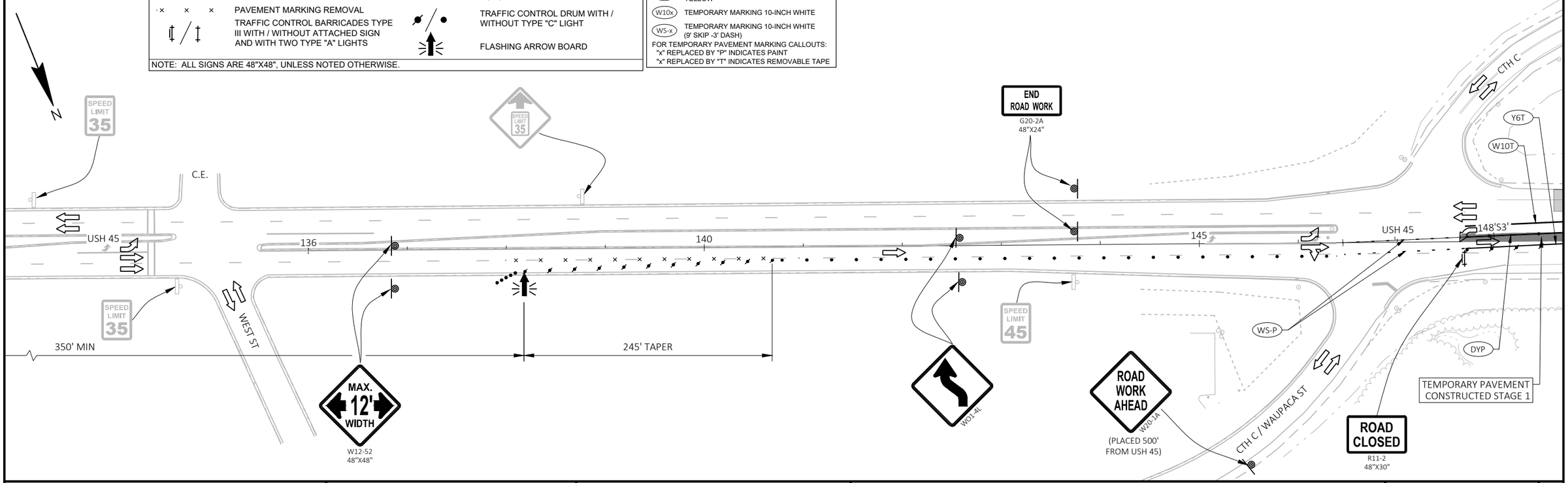
WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
or DIRECTION OF TRAFFIC	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
PAVEMENT MARKING REMOVAL	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

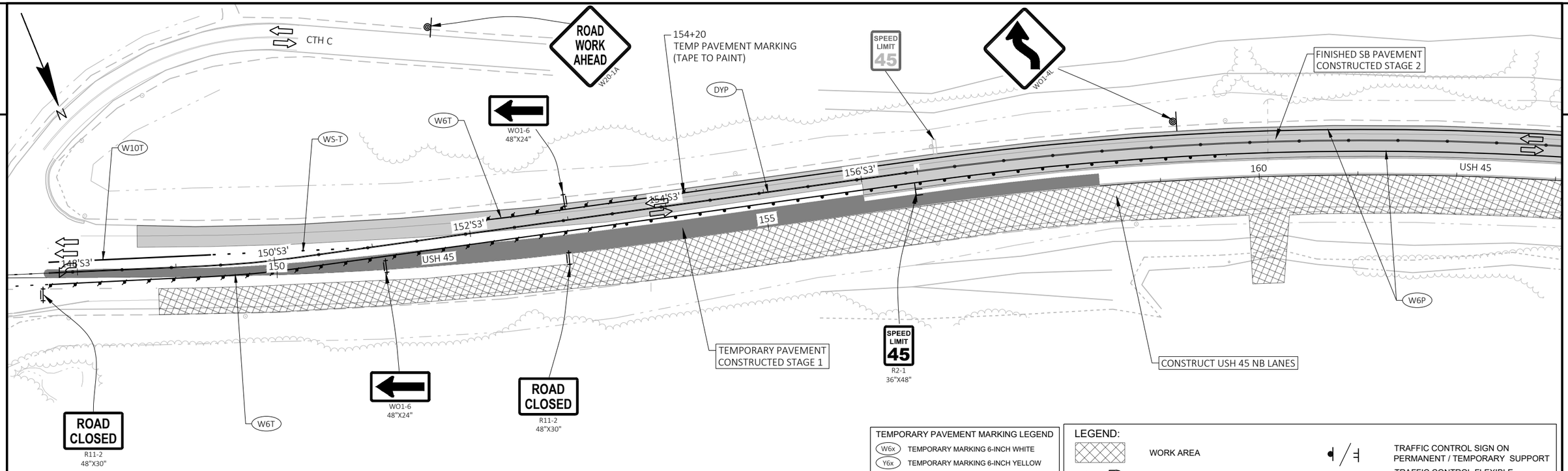
TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 3	SHEET 142	E



TEMPORARY PAVEMENT MARKING LEGEND

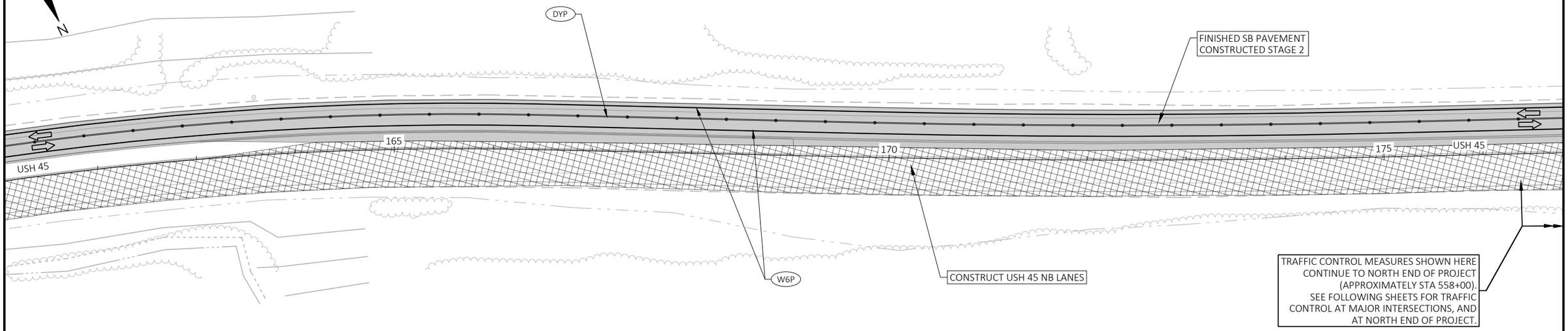
W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

LEGEND:

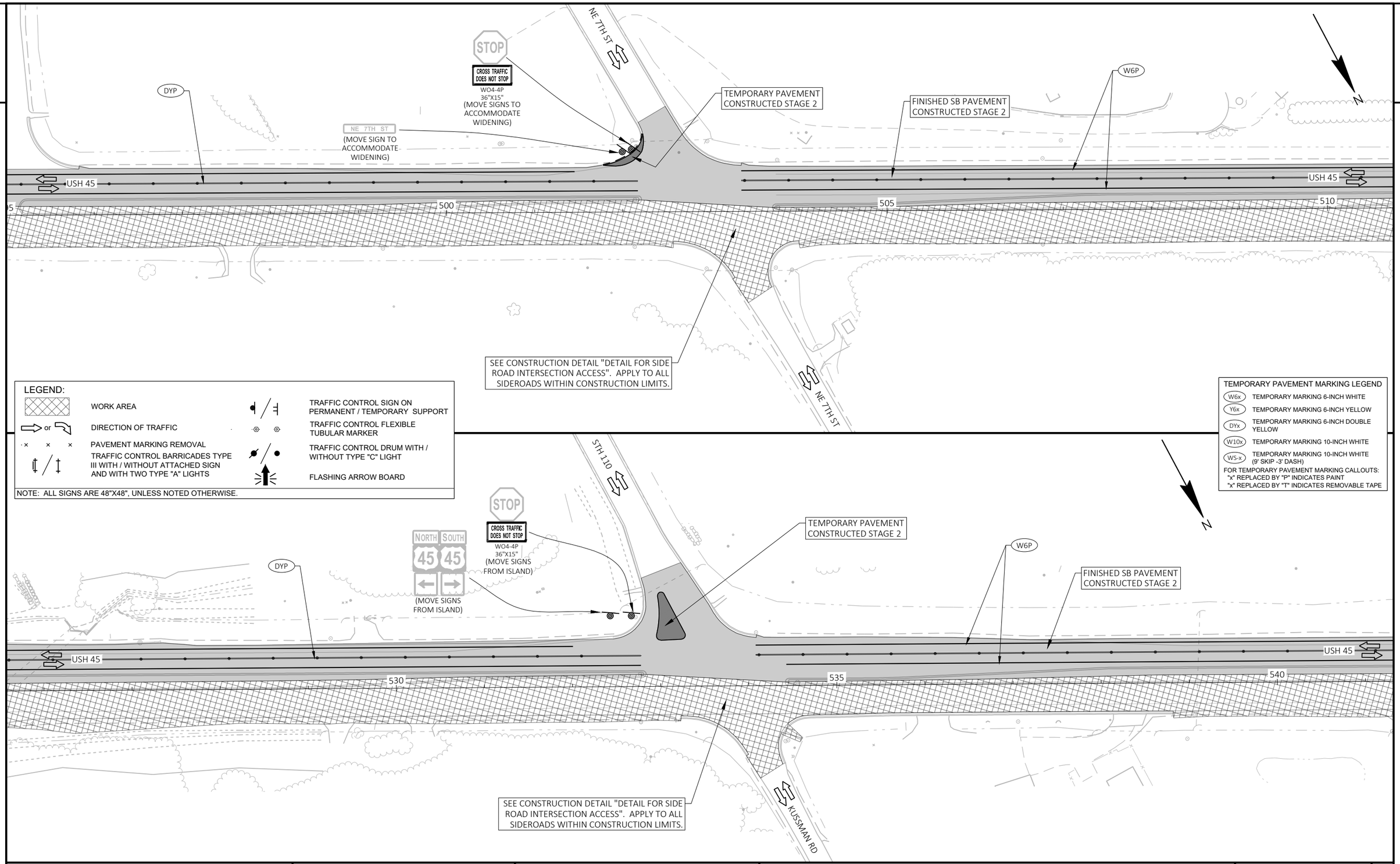
- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 3	SHEET 143	E

2



LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

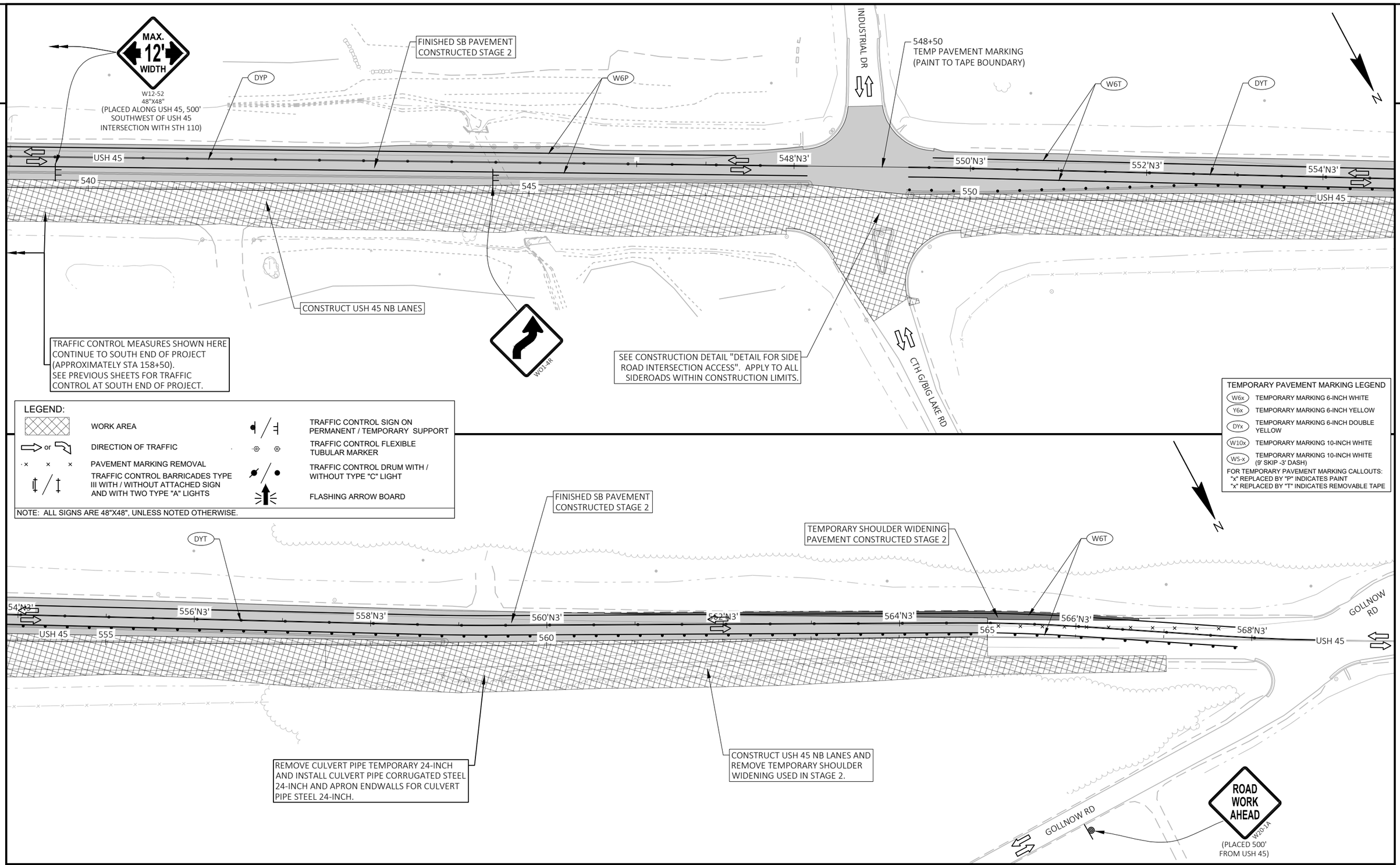
TEMPORARY PAVEMENT MARKING LEGEND

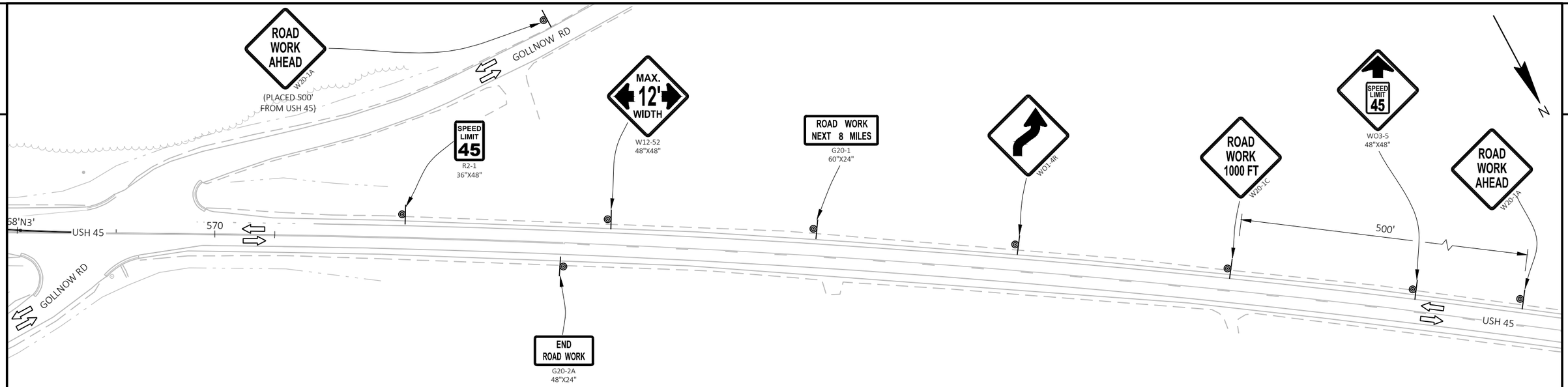
- W6x TEMPORARY MARKING 6-INCH WHITE
- Y6x TEMPORARY MARKING 6-INCH YELLOW
- DYx TEMPORARY MARKING 6-INCH DOUBLE YELLOW
- W10x TEMPORARY MARKING 10-INCH WHITE
- WS-x TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 3	SHEET 144	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026301_S3.DWG
LAYOUT NAME - 03
PLOT DATE : 8/26/2025 12:40 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42


MAX. 12' WIDTH
W12-52
48"X48"
(PLACED ALONG USH 45, 500' SOUTHWEST OF USH 45 INTERSECTION WITH STH 110)
DYP
FINISHED SB PAVEMENT CONSTRUCTED STAGE 2
W6P
INDUSTRIAL DR
548+50
TEMP PAVEMENT MARKING
(PAINT TO TAPE BOUNDARY)
W6T
DYT
N
USH 45
540
545
548'N3'
550'N3'
550
552'N3'
554'N3'
USH 45
CONSTRUCT USH 45 NB LANES
W01-4R
TRAFFIC CONTROL MEASURES SHOWN HERE CONTINUE TO SOUTH END OF PROJECT (APPROXIMATELY STA 158+50).
SEE PREVIOUS SHEETS FOR TRAFFIC CONTROL AT SOUTH END OF PROJECT.
SEE CONSTRUCTION DETAIL "DETAIL FOR SIDE ROAD INTERSECTION ACCESS". APPLY TO ALL SIDEROADS WITHIN CONSTRUCTION LIMITS.
CTH G/BIG LAKE RD
LEGEND:
WORK AREA
DIRECTION OF TRAFFIC
PAVEMENT MARKING REMOVAL
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
FLASHING ARROW BOARD
NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.
TEMPORARY PAVEMENT MARKING LEGEND
W6x TEMPORARY MARKING 6-INCH WHITE
Y6x TEMPORARY MARKING 6-INCH YELLOW
DYx TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x TEMPORARY MARKING 10-INCH WHITE
WS-x TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)
FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE
N
DYT
FINISHED SB PAVEMENT CONSTRUCTED STAGE 2
TEMPORARY SHOULDER WIDENING PAVEMENT CONSTRUCTED STAGE 2
W6T
54'N3'
556'N3'
558'N3'
560'N3'
562'N3'
564'N3'
566'N3'
568'N3'
USH 45
555
560
565
USH 45
GOLLNOW RD
GOLLNOW RD
REMOVE CULVERT PIPE TEMPORARY 24-INCH AND INSTALL CULVERT PIPE CORRUGATED STEEL 24-INCH AND APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH.
CONSTRUCT USH 45 NB LANES AND REMOVE TEMPORARY SHOULDER WIDENING USED IN STAGE 2.
ROAD WORK AHEAD
W20-1A
(PLACED 500' FROM USH 45)



LEGEND:

WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
or DIRECTION OF TRAFFIC	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
PAVEMENT MARKING REMOVAL	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

2

2

N

CTH C

FINISHED PAVEMENT
CONSTRUCTED STAGE 3

WST

W10T

WST

149+35'S3', 11.00' LT

USH 45 SB

USH 45 SB

148'S3'

149'S3'

11' @ 11'

USH 45 NB

147'S3'

142+00

143+00

144+00

145+00

146+00

147+00

148+00

149+00

12'

25' TYP

USH 45 NB

50' TYP

DYT

W6T

TEMPORARY PAVEMENT
CONSTRUCTED STAGE 1

CONSTRUCT OUTSIDE
NB LANE & SHOULDER

CTH C/WAUPACA ST

FO

LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

TEMPORARY PAVEMENT MARKING LEGEND

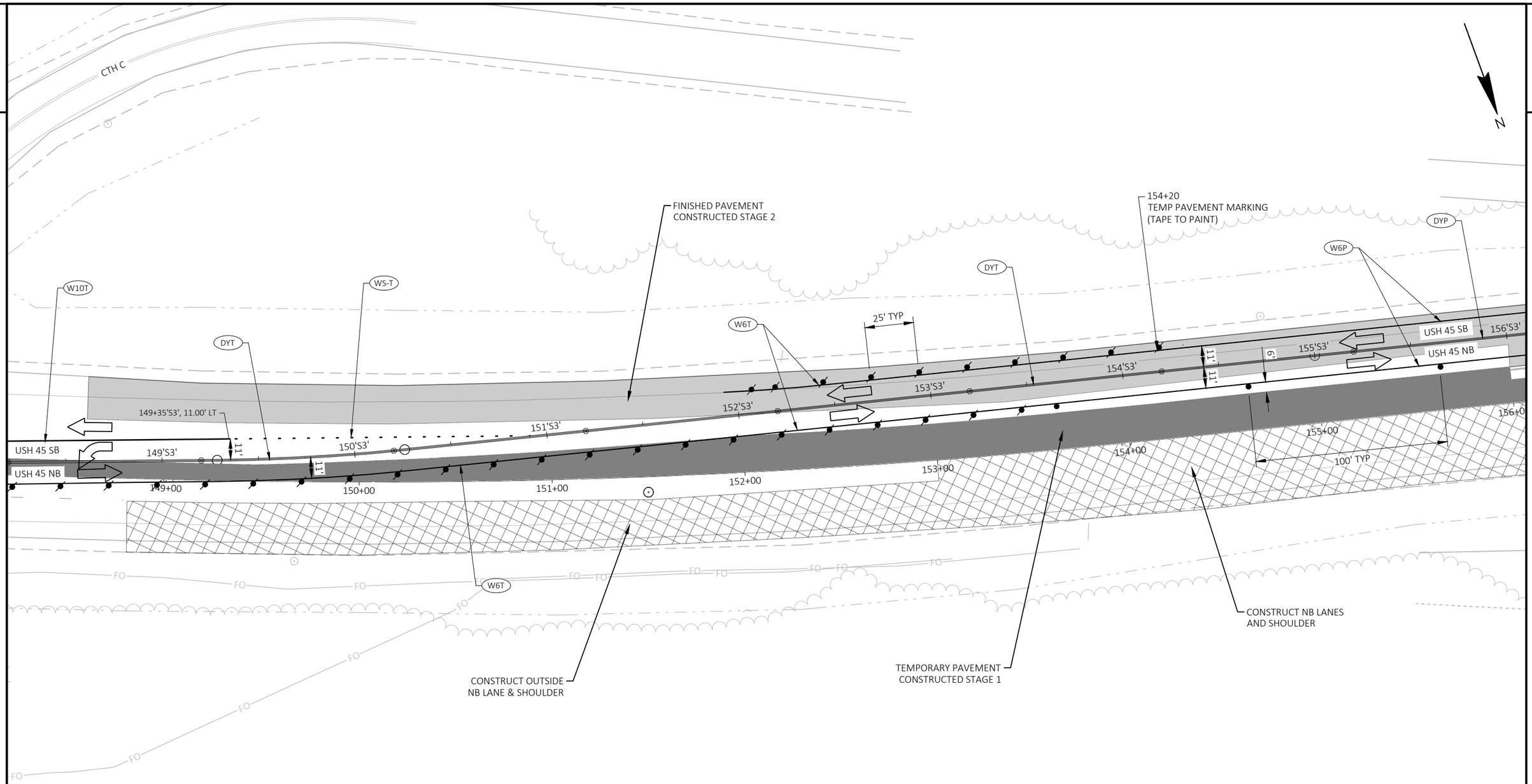
W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 3 - TRAFFIC CONTROL DETAILS (CROSSOVER)	SHEET 147	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026302_S3.DWG
LAYOUT NAME - 14200 - 14900
PLOT DATE : 4/29/2025 12:37 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

LEGEND:

	WORK AREA
or	DIRECTION OF TRAFFIC
	PAVEMENT MARKING REMOVAL
	TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 3 - TRAFFIC CONTROL DETAILS (CROSSOVER)	SHEET 148	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026302_S3.DWG
LAYOUT NAME - 14850- 15550
PLOT DATE : 4/29/2025 12:38 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

FINISHED PAVEMENT
CONSTRUCTED STAGE 2

DYP

100' TYP

155'S3'

USH 45 SB

USH 45 NB

156'S3'

11'

11'

6'

155+00

156+00

157+00

158+00

159+00

160+00

161+00

162+00

USH 45 SB

USH 45 NB

W6P

TEMPORARY PAVEMENT
CONSTRUCTED STAGE 1

CONSTRUCT NB LANES
AND SHOULDER

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

LEGEND:

WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
or DIRECTION OF TRAFFIC	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
PAVEMENT MARKING REMOVAL	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 3 - TRAFFIC CONTROL DETAILS (CROSSOVER)	SHEET 149	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026302_S3.DWG
LAYOUT NAME - 15500 - 16050

PLOT DATE : 4/29/2025 12:38 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

INDUSTRIAL DR

FINISHED PAVEMENT CONSTRUCTED STAGE 2

W6P

DYP

50' TYP

100' TYP

N

USH 45 SB

USH 45 NB

549'N3'

550'N3'

551'N3'

552'N3'

553'N3'

554'N3'

11'

11'

11'

11'

USH 45 SB

USH 45 NB

548+00

549+00

550+00

551+00

552+00

553+00

554+00

555+00

CONSTRUCT NB LANES & SHOULDER

CTH G/ INDUSTRIAL DR

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

N

INDUSTRIAL DR

FINISHED PAVEMENT CONSTRUCTED STAGE 2

DYP

W6P

100' TYP

50' TYP

TEMPORARY PAVEMENT CONSTRUCTED STAGE 2

USH 45 SB

USH 45 NB

N3'

557'N3'

558'N3'

559'N3'

560'N3'

561'N3'

562'N3'

563'N3'

11'

11'

11'

11'

USH 45 SB

USH 45 NB

556+00

557+00

558+00

559+00

560+00

561+00

562+00

563+00

CONSTRUCT NB LANES & SHOULDER

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 3 - TRAFFIC CONTROL DETAILS (SB SHOULDER WIDENING)	SHEET 150	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026303_S3.DWG
LAYOUT NAME - 54800+56300

PLOT DATE : 4/29/2025 12:43 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

FINISHED PAVEMENT
CONSTRUCTED STAGE 2

TEMPORARY PAVEMENT
CONSTRUCTED STAGE 2

100' TYP

GOLLNOW RD

563'N3'

USH 45 SB

USH 45 NB

11'

11'

564'N3'

565'N3'

566'N3'

567'N3'

11'

11'

568'N3'

USH 45 SB

USH 45 NB

563+00

564+00

565+00

566+00

567+00

568+00

569+00

570+00

567+84, 8.80' RT

DYP
EAST OF
STA 565+00

W6P
EAST OF
STA 565+00

DYT
WEST OF
STA 565+00

25' TYP

W6T
WEST OF
STA 565+00

CONSTRUCT NB LANES AND SHOULDER

GOLLNOW RD

TEMPORARY PAVEMENT MARKING LEGEND

W6x	TEMPORARY MARKING 6-INCH WHITE
Y6x	TEMPORARY MARKING 6-INCH YELLOW
DYx	TEMPORARY MARKING 6-INCH DOUBLE YELLOW
W10x	TEMPORARY MARKING 10-INCH WHITE
WS-x	TEMPORARY MARKING 10-INCH WHITE (9' SKIP -3' DASH)

FOR TEMPORARY PAVEMENT MARKING CALLOUTS:
"x" REPLACED BY "P" INDICATES PAINT
"x" REPLACED BY "T" INDICATES REMOVABLE TAPE

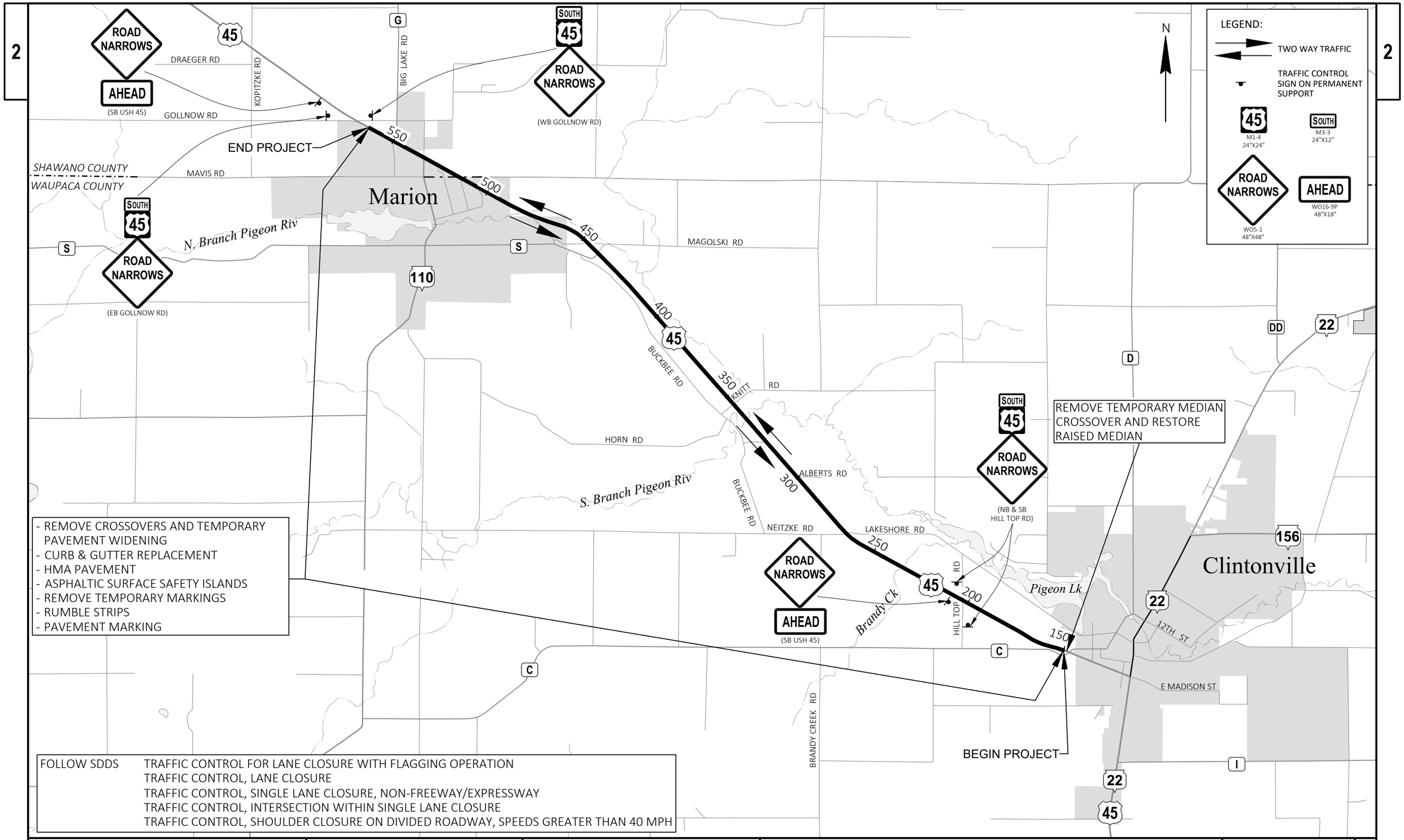
LEGEND:

	WORK AREA
or	DIRECTION OF TRAFFIC
	PAVEMENT MARKING REMOVAL
	TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
	FLASHING ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA	STAGE 3 - TRAFFIC CONTROL DETAILS (SB SHOULDER WIDENING)	SHEET 151	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026303_S3.DWG
LAYOUT NAME - 56300-57000
PLOT DATE : 4/29/2025 12:43 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



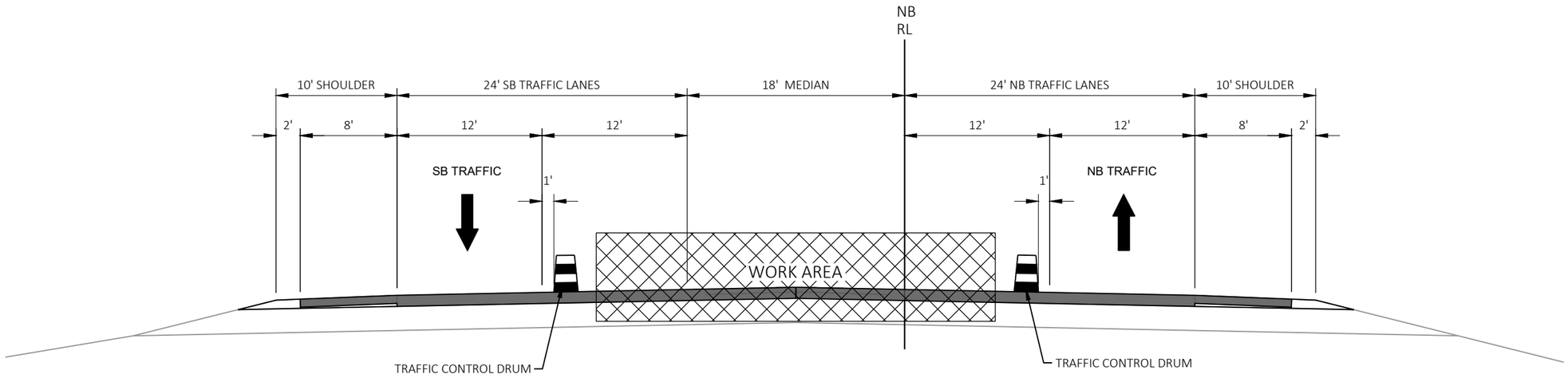
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 4 - OVERVIEW	SHEET 152	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026401_S4.DWG
LAYOUT NAME - - OVERVIEW

PLOT DATE : 8/26/2025 12:47 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:4000 FT

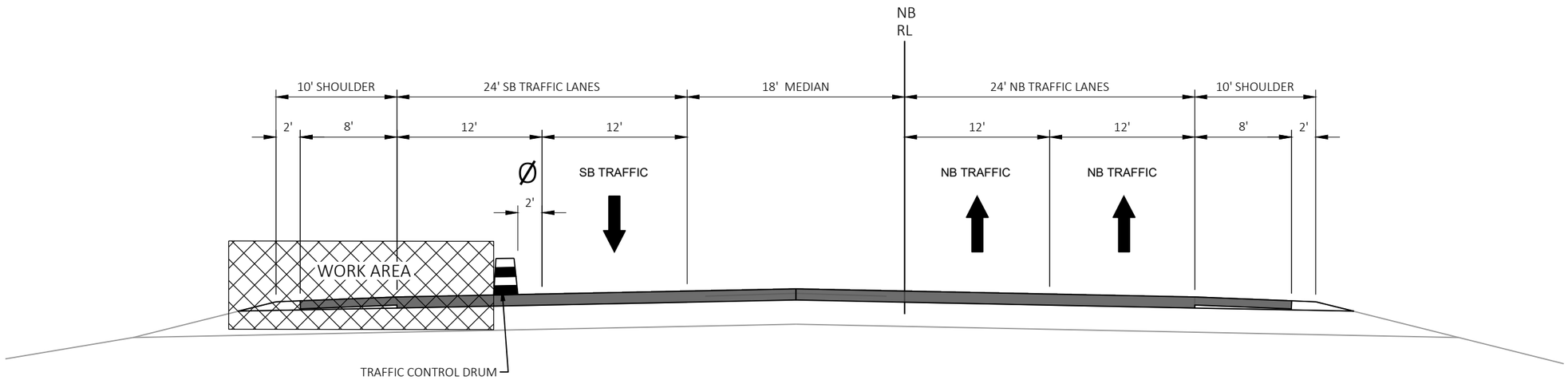
WISDOT/CADDS SHEET 42

2



STAGE 4A TRAFFIC CONTROL TYPICAL SECTION - USH 45

CLOSE MEDIAN LANES TO ACCOMMODATE MEDIAN WORK AND
INSIDE LANE HMA PAVEMENT

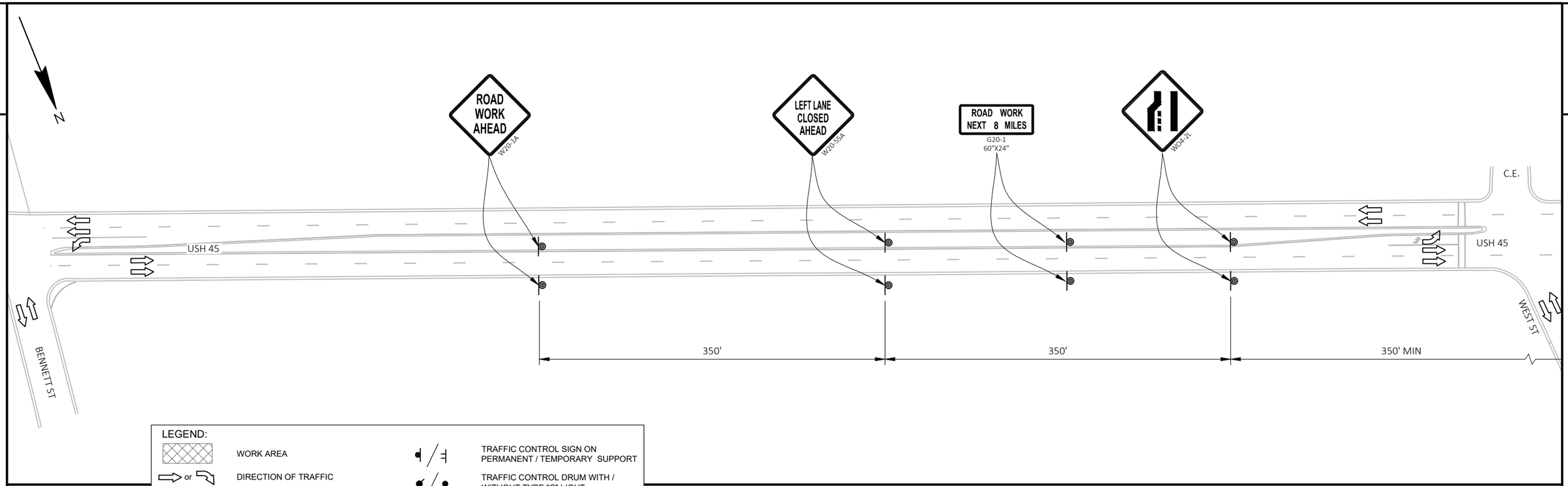


STAGE 4B TRAFFIC CONTROL TYPICAL SECTION - USH 45

CLOSE OUTSIDE LANES AND SHOULDERS TO ACCOMMODATE
TUBULAR MARKERS, TEMPORARY MARKING REMOVAL, SHOULDER
RESTORATION, CURB REPLACEMENT, AND FINISHING WORK

Ø SHOULDERS WITHIN THE LIMITS OF STAGE 4B CONSTRUCTION
ARE NOT ADEQUATE TO ACCOMMODATE BUGGY TRAFFIC

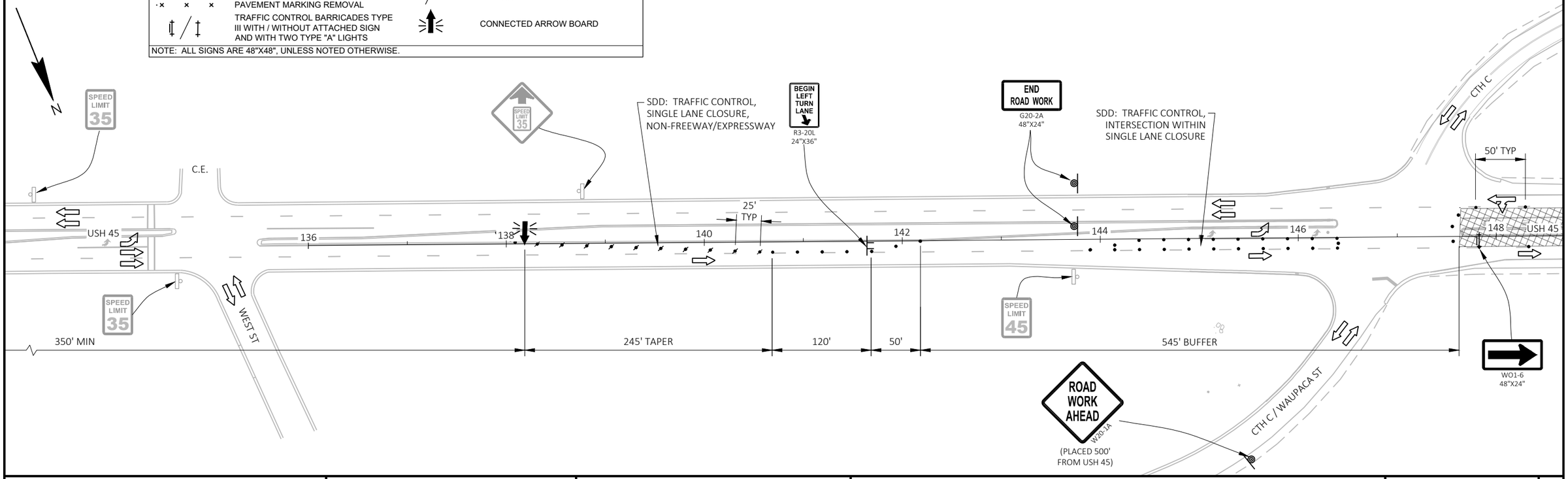
2



LEGEND:

- WORK AREA
- DIRECTION OF TRAFFIC
- PAVEMENT MARKING REMOVAL
- TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
- CONNECTED ARROW BOARD

NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.

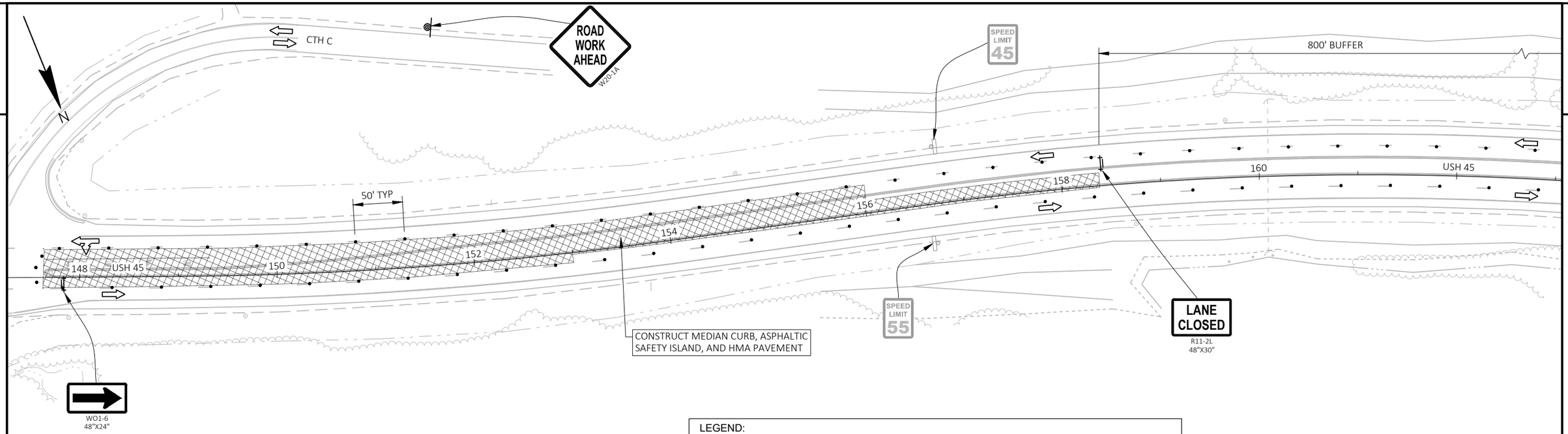


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 4	SHEET 154	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_026402_S4.DWG
LAYOUT NAME - 01

PLOT DATE : 8/26/2025 12:51 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

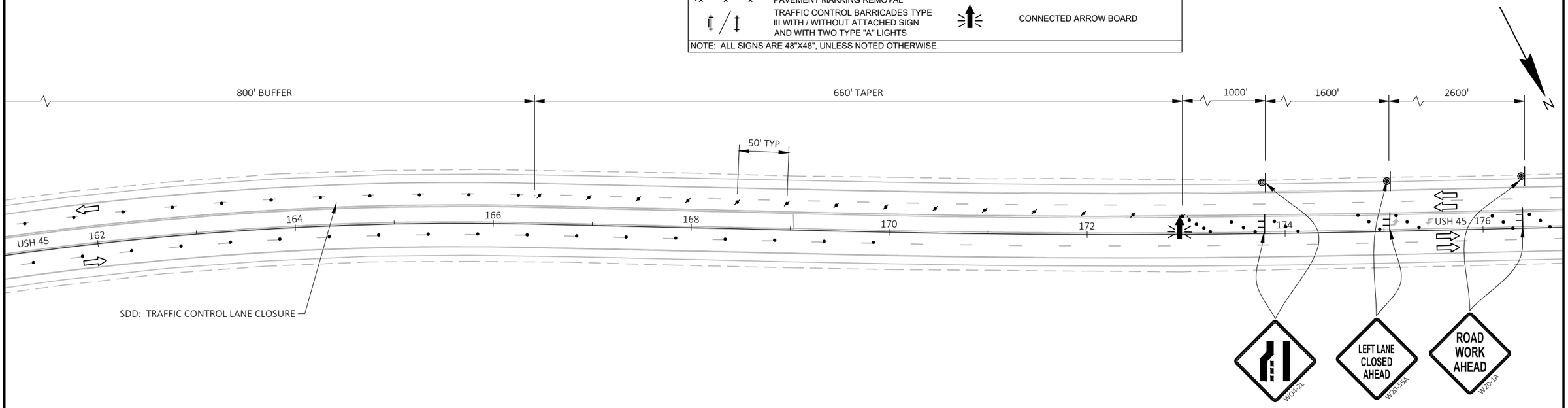
WISDOT/CADDS SHEET 42



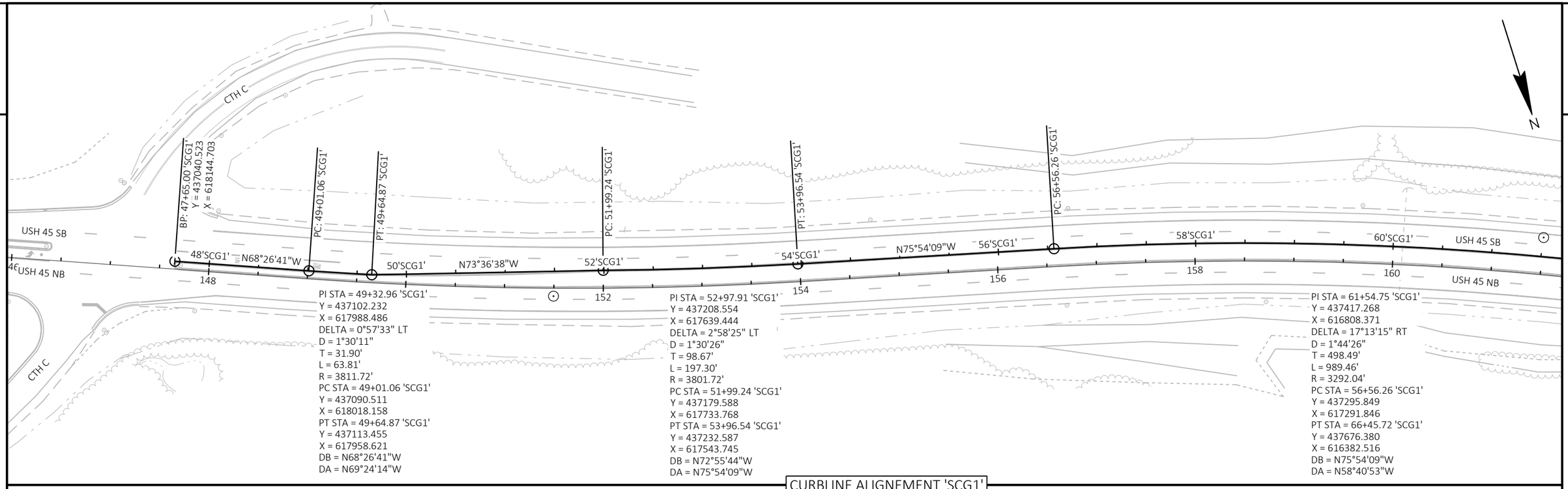
LEGEND:

WORK AREA	TRAFFIC CONTROL SIGN ON PERMANENT / TEMPORARY SUPPORT
DIRECTION OF TRAFFIC	TRAFFIC CONTROL DRUM WITH / WITHOUT TYPE "C" LIGHT
PAVEMENT MARKING REMOVAL	CONNECTED ARROW BOARD
TRAFFIC CONTROL BARRICADES TYPE III WITH / WITHOUT ATTACHED SIGN AND WITH TWO TYPE "A" LIGHTS	

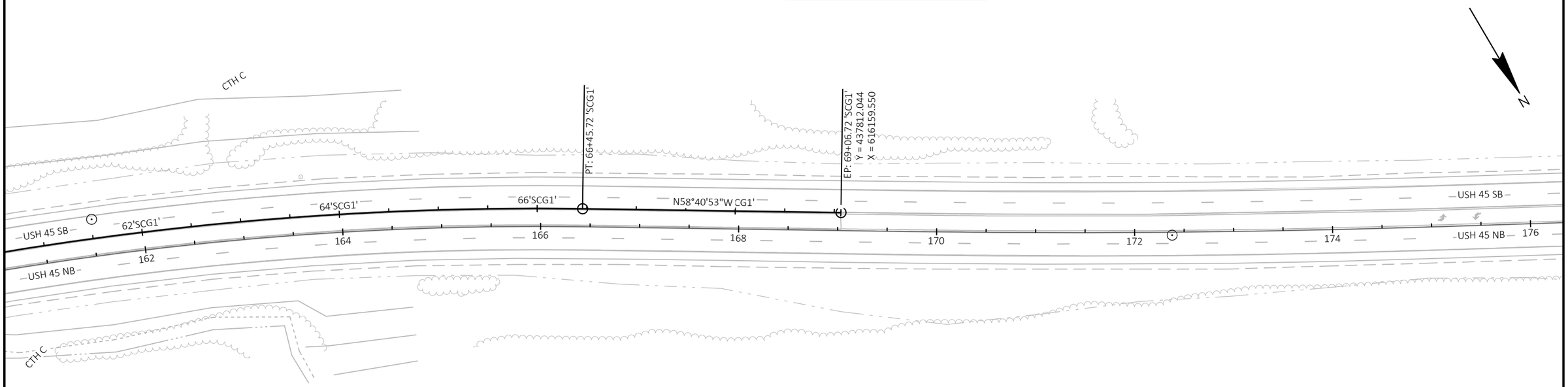
NOTE: ALL SIGNS ARE 48"X48", UNLESS NOTED OTHERWISE.



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	TRAFFIC CONTROL - STAGE 4	SHEET 155	E



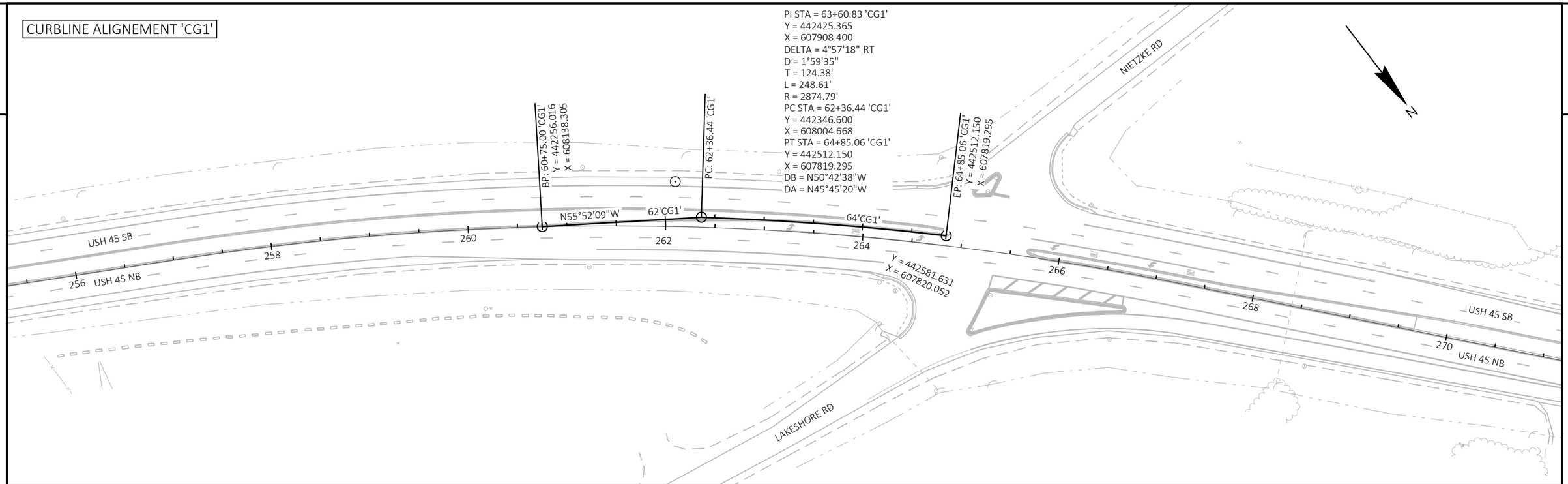
CURBLINE ALIGNEMENT 'SCG1'



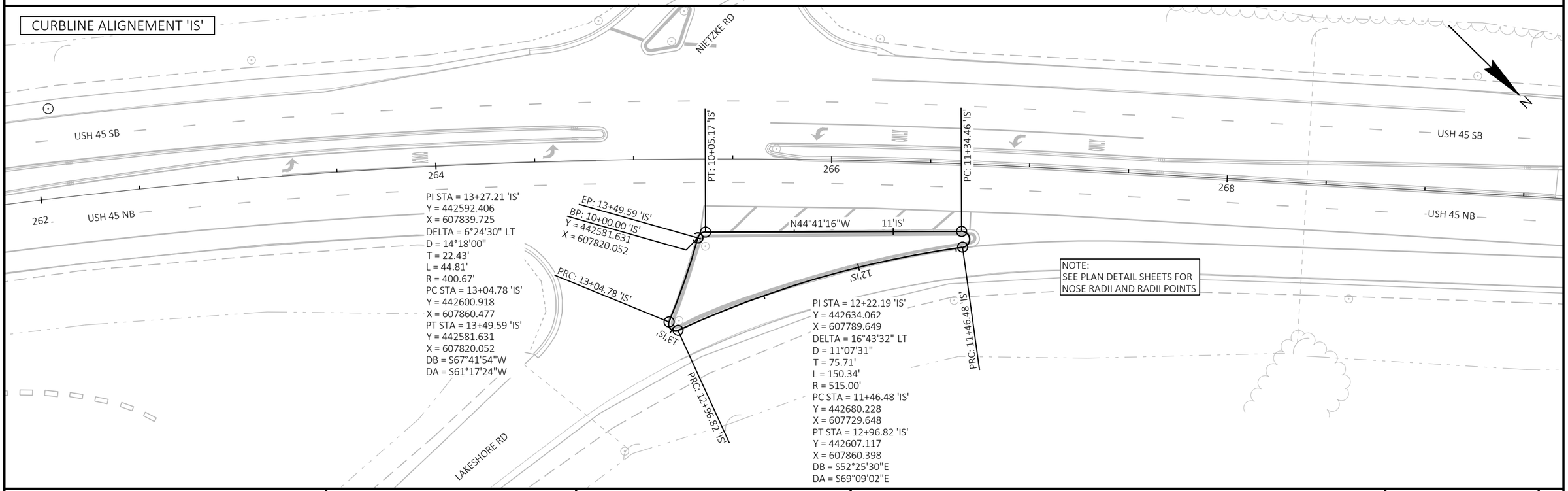
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	ALIGNMENT DIAGRAM	SHEET 156	E

2

CURBLINE ALIGNEMENT 'CG1'



CURBLINE ALIGNEMENT 'IS'



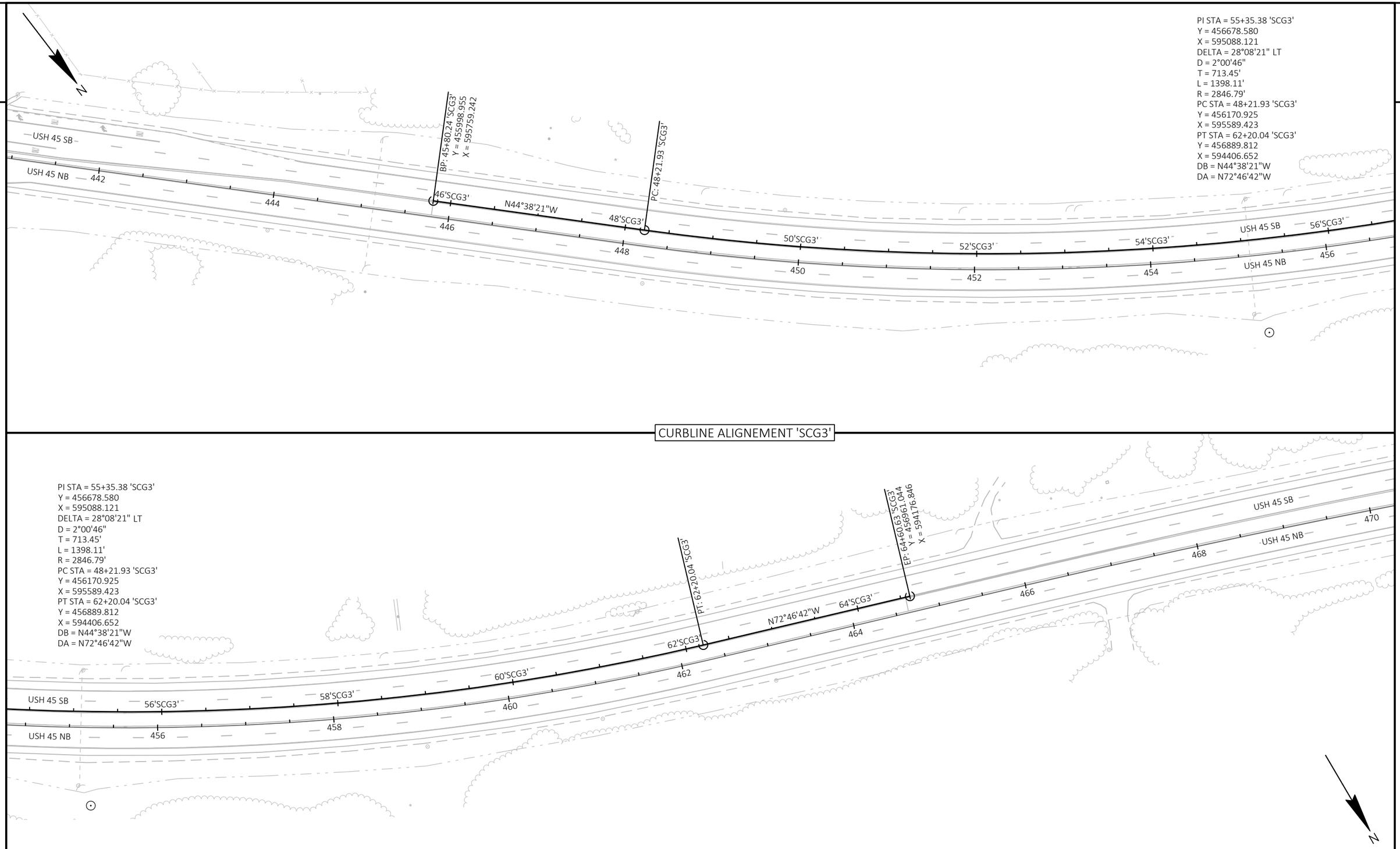
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	ALIGNMENT DIAGRAM	SHEET 157	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_027201_AD.DWG
LAYOUT NAME - 02

PLOT DATE : 1/30/2025 1:13 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

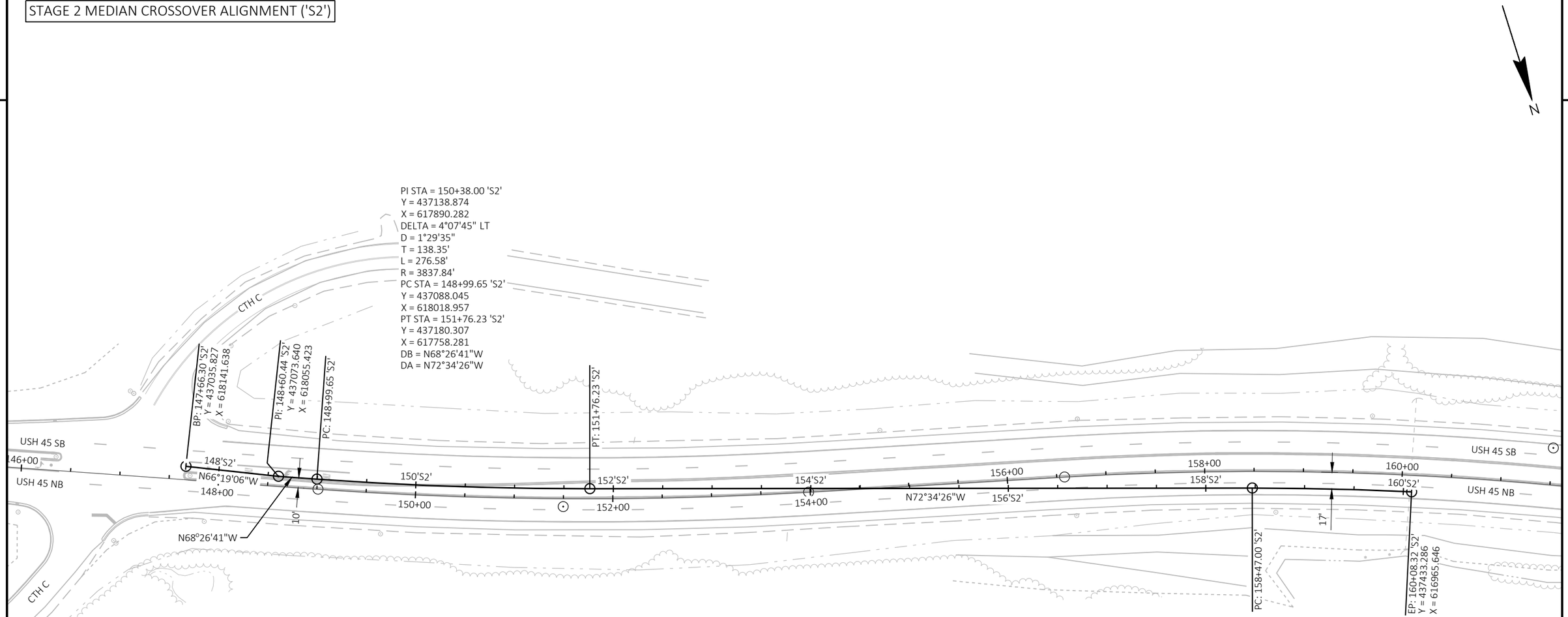
2



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	ALIGNMENT DIAGRAM	SHEET 158	E

2

STAGE 2 MEDIAN CROSSOVER ALIGNMENT ('S2')



PI STA = 159+27.68 'S2'
Y = 437405.344
X = 617041.328
DELTA = 2°50'16" RT
D = 1°45'33"
T = 80.68'
L = 161.32'
R = 3257.04'
PC STA = 158+47.00 'S2'
Y = 437381.184
X = 617118.301
PT STA = 160+08.32 'S2'
Y = 437433.286
X = 616965.646
DB = N72°34'26"W
DA = N69°44'10"W

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	ALIGNMENT DIAGRAM	SHEET 159	E

2

2

INDUSTRIAL DR

USH 45 SB

USH 45 NB

544+00 546+00 548+00 550+00 552+00 554+00 556+00 558+00

17'

13'

548'N2' N61°18'18"W 550'N2' N62°09'09"W 552'N2' 554'N2' N61°18'18"W 556'N2' 558'N2'

BP: 547+94.15 'N2'
Y = 460757.723
X = 586780.982

PI: 550+00.07 'N2'
Y = 460856.594
X = 586600.353

PI: 552+70.52 'N2'
Y = 460982.927
X = 586361.222

PI: 558+49.38 'N2'
Y = 461260.861
X = 585853.456

CTH G

STAGE 2 SHOULDER WIDENING ALIGNMENT ('N2')

GOLLNOW RD

USH 45 SB

USH 45 NB

558+00 560+00 562+00 564+00 566+00 568+00 570+00

18'

558'N2' N61°53'04"W 560'N2' 562'N2' N62°52'50"W 564'N2' 566'N2' N64°51'45"W 568'N2'

USH 45

PI: 558+49.38 'N2'
Y = 461260.861
X = 585853.456

PI: 560+63.54 'N2'
Y = 461361.785
X = 585664.565

PC: 565+13.06 'N2'

PT: 565+78.79 'N2'

PC: 567+55.05 'N2'

EP: 568+71.28 'N2'
Y = 461723.075
X = 584942.243

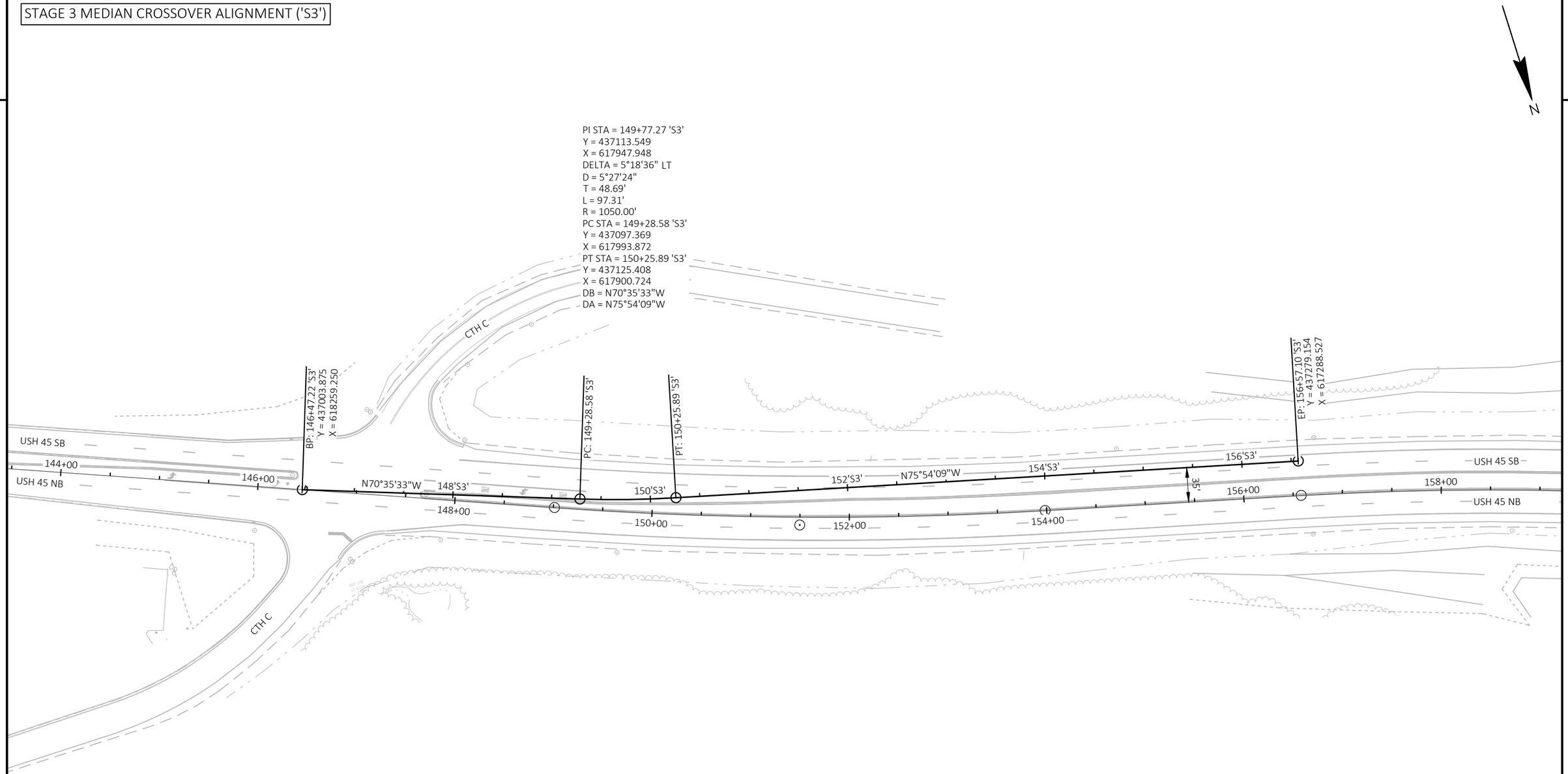
PI STA = 565+45.93 'N2'
Y = 461581.680
X = 585235.212
DELTA = 1°58'55" LT
D = 3°00'56"
T = 32.87'
L = 65.73'
R = 1900.00'
PC STA = 565+13.06 'N2'
Y = 461566.698
X = 585264.466
PT STA = 565+78.79 'N2'
Y = 461595.642
X = 585205.457
DB = N62°52'50"W
DA = N64°51'45"W

PI STA = 568+13.18 'N2'
Y = 461695.212
X = 584993.260
DELTA = 3°30'17" RT
D = 3°00'56"
T = 58.13'
L = 116.22'
R = 1900.00'
PC STA = 567+55.05 'N2'
Y = 461670.519
X = 585045.884
PT STA = 568+71.28 'N2'
Y = 461723.075
X = 584942.243
DB = N64°51'45"W
DA = N61°21'28"W

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	ALIGNMENT DIAGRAM	SHEET 160	E

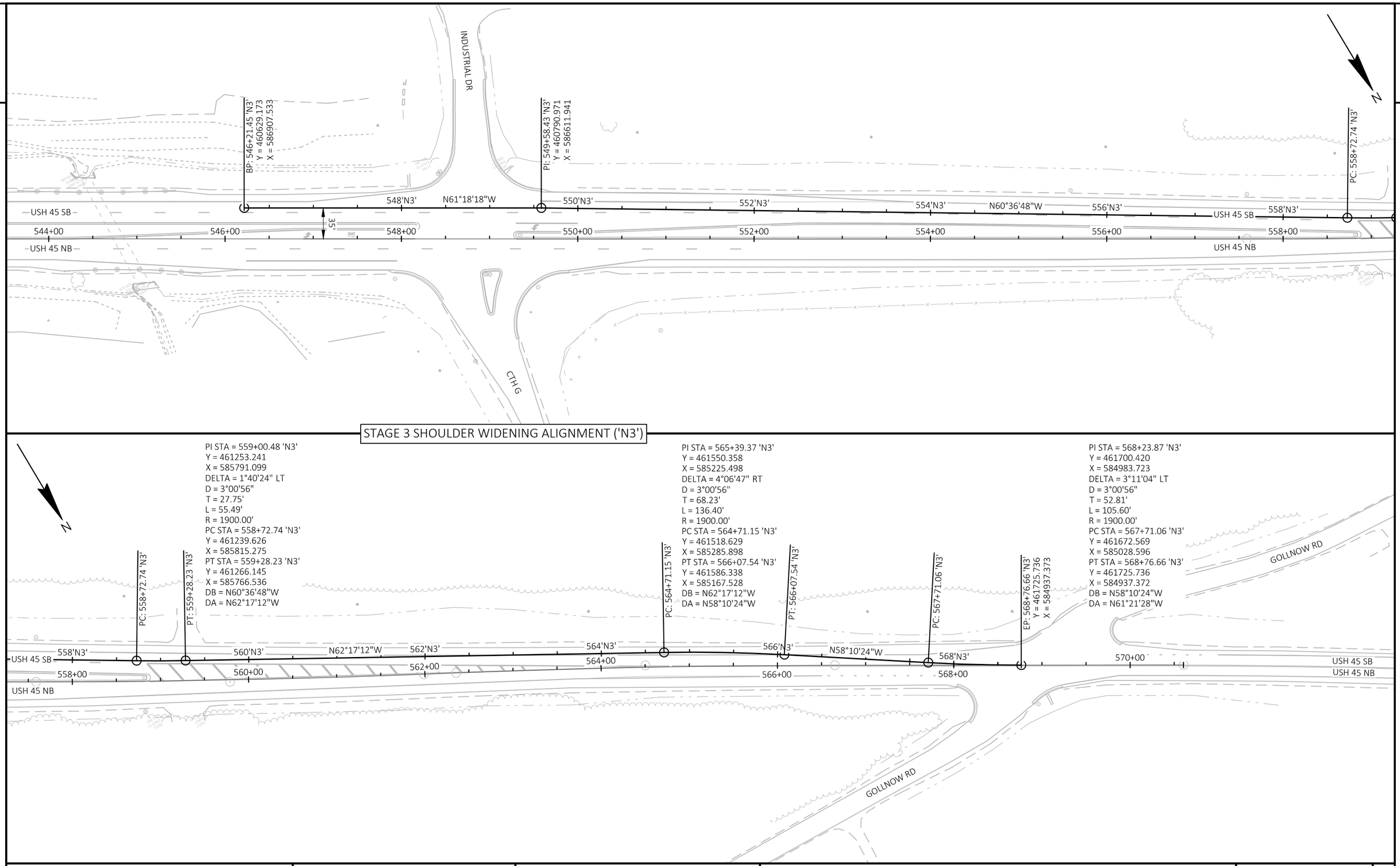
STAGE 3 MEDIAN CROSSOVER ALIGNMENT ('S3')

2



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	ALIGNMENT DIAGRAM	SHEET 161	E

2



STAGE 3 SHOULDER WIDENING ALIGNMENT ('N3')

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	ALIGNMENT DIAGRAM	SHEET 162	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_027203_AD.DWG
LAYOUT NAME - 02

PLOT DATE : 1/30/2025 1:58 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

Estimate Of Quantities

1600-15-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	48.000	48.000
0004	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0006	204.0100	Removing Concrete Pavement	SY	380.000	380.000
0008	204.0110	Removing Asphaltic Surface	SY	363,200.000	363,200.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	690.000	690.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	8,100.000	8,100.000
0014	204.0140	Removing Gutter	LF	68,700.000	68,700.000
0016	204.0150	Removing Curb & Gutter	LF	12,430.000	12,430.000
0018	204.0165	Removing Guardrail	LF	1,600.000	1,600.000
0020	204.0180	Removing Delineators and Markers	EACH	10.000	10.000
0022	204.0220	Removing Inlets	EACH	35.000	35.000
0024	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	120.000	120.000
0026	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	125.000	125.000
0028	204.0245	Removing Storm Sewer (size) 03. 30-Inch	LF	8.000	8.000
0030	204.9060.S	Removing (item description) 01. Remove Asphaltic Flume	EACH	24.000	24.000
0032	205.0100	Excavation Common	CY	3,286.000	3,286.000
0034	206.1001	Excavation for Structures Bridges (structure) 01. B-68-0051	EACH	1.000	1.000
0036	208.0100	Borrow	CY	565.000	565.000
0038	210.1500	Backfill Structure Type A	TON	120.000	120.000
0040	211.0500	Prepare Foundation for Base Aggregate	STA	800.000	800.000
0042	213.0100	Finishing Roadway (project) 01. 1600-15-70	EACH	1.000	1.000
0044	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,900.000	3,900.000
0046	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	19,700.000	19,700.000
0048	415.0090	Concrete Pavement 9-Inch	SY	82.000	82.000
0050	415.0410	Concrete Pavement Approach Slab	SY	286.000	286.000
0052	416.0610	Drilled Tie Bars	EACH	94.000	94.000
0054	450.4000	HMA Cold Weather Paving	TON	150.000	150.000
0056	455.0605	Tack Coat	GAL	26,500.000	26,500.000
0058	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0060	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0062	460.2000	Incentive Density HMA Pavement	DOL	17,760.000	17,760.000
0064	460.2005	Incentive Density PWL HMA Pavement	DOL	61,723.000	61,723.000
0066	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	16,530.000	16,530.000
0068	460.2010	Incentive Air Voids HMA Pavement	DOL	69,812.000	69,812.000
0070	460.5224	HMA Pavement 4 LT 58-28 S	TON	27,860.000	27,860.000
0072	460.6223	HMA Pavement 3 MT 58-28 S	TON	45,350.000	45,350.000
0074	460.6224	HMA Pavement 4 MT 58-28 S	TON	24,430.000	24,430.000
0076	465.0105	Asphaltic Surface	TON	50.000	50.000
0078	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	175.000	175.000
0080	465.0125	Asphaltic Surface Temporary	TON	650.000	650.000
0082	465.0305	Asphaltic Surface Safety Islands	TON	825.000	825.000
0084	465.0315	Asphaltic Flumes	SY	320.000	320.000
0086	465.0510	Asphaltic Rumble Strips, Shoulder Divided Roadway	LF	73,000.000	73,000.000
0088	465.0560	Asphaltic Rumble Strips, Centerline	LF	240.000	240.000
0090	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	180.000	180.000
0092	509.1500	Concrete Surface Repair	SF	360.000	360.000
0094	520.2024	Culvert Pipe Temporary 24-Inch	LF	50.000	50.000
0096	520.8000	Concrete Collars for Pipe	EACH	25.000	25.000
0098	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	1.000	1.000

1600-15-70

Line	Item	Item Description	Unit	Total	Qty
0100	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	2.000	2.000
0102	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	50.000	50.000
0104	530.0112	Culvert Pipe Corrugated Polyethylene 12-Inch	LF	18.000	18.000
0106	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	55.000	55.000
0108	601.0413	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	LF	198.000	198.000
0110	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	11,230.000	11,230.000
0112	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	785.000	785.000
0114	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	196.000	196.000
0116	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	22.000	22.000
0118	602.3010	Concrete Surface Drains	CY	10.000	10.000
0120	603.1132	Concrete Barrier Type S32	LF	120.000	120.000
0122	606.0200	Riprap Medium	CY	120.000	120.000
0124	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	140.000	140.000
0126	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	169.000	169.000
0128	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	8.000	8.000
0130	611.0630	Inlet Covers Type HM-GJ	EACH	30.000	30.000
0132	611.0633	Inlet Covers Type HM-GJ-S	EACH	5.000	5.000
0134	611.0654	Inlet Covers Type V	EACH	1.000	1.000
0136	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
0138	611.3225	Inlets 2x2.5-FT	EACH	1.000	1.000
0140	611.3230	Inlets 2x3-FT	EACH	35.000	35.000
0142	614.2300	MGS Guardrail 3	LF	938.000	938.000
0144	614.2340	MGS Guardrail 3 L	LF	225.000	225.000
0146	614.2500	MGS Thrie Beam Transition	LF	315.000	315.000
0148	614.2610	MGS Guardrail Terminal EAT	EACH	18.000	18.000
0150	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1600-15-70	EACH	1.000	1.000
0152	619.1000	Mobilization	EACH	1.000	1.000
0154	620.0300	Concrete Median Sloped Nose	SF	1,160.000	1,160.000
0156	624.0100	Water	MGAL	344.000	344.000
0158	625.0100	Topsoil	SY	19,320.000	19,320.000
0160	628.1504	Silt Fence	LF	8,660.000	8,660.000
0162	628.1520	Silt Fence Maintenance	LF	17,330.000	17,330.000
0164	628.1905	Mobilizations Erosion Control	EACH	14.000	14.000
0166	628.1910	Mobilizations Emergency Erosion Control	EACH	9.000	9.000
0168	628.2004	Erosion Mat Class I Type B	SY	7,410.000	7,410.000
0170	628.2008	Erosion Mat Urban Class I Type B	SY	9,810.000	9,810.000
0172	628.2027	Erosion Mat Class II Type C	SY	2,100.000	2,100.000
0174	628.7005	Inlet Protection Type A	EACH	37.000	37.000
0176	628.7015	Inlet Protection Type C	EACH	37.000	37.000
0178	628.7020	Inlet Protection Type D	EACH	11.000	11.000
0180	628.7504	Temporary Ditch Checks	LF	420.000	420.000
0182	628.7555	Culvert Pipe Checks	EACH	90.000	90.000
0184	628.7570	Rock Bags	EACH	180.000	180.000
0186	629.0210	Fertilizer Type B	CWT	87.000	87.000
0188	630.0120	Seeding Mixture No. 20	LB	760.000	760.000
0190	630.0130	Seeding Mixture No. 30	LB	4,790.000	4,790.000
0192	630.0200	Seeding Temporary	LB	80.000	80.000
0194	630.0500	Seed Water	MGAL	460.000	460.000
0196	633.0200	Delineators Flexible	EACH	10.000	10.000

1600-15-70

Line	Item	Item Description	Unit	Total	Qty
0198	633.5200	Markers Culvert End	EACH	16.000	16.000
0200	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	2.000	2.000
0202	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	56.000	56.000
0204	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	14.000	14.000
0206	637.2210	Signs Type II Reflective H	SF	753.000	753.000
0208	638.2102	Moving Signs Type II	EACH	24.000	24.000
0210	638.2602	Removing Signs Type II	EACH	19.000	19.000
0212	638.3000	Removing Small Sign Supports	EACH	33.000	33.000
0214	642.5201	Field Office Type C	EACH	1.000	1.000
0216	643.0300	Traffic Control Drums	DAY	133,160.000	133,160.000
0218	643.0420	Traffic Control Barricades Type III	DAY	12,540.000	12,540.000
0220	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	1,657.000	1,657.000
0222	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	1,657.000	1,657.000
0224	643.0705	Traffic Control Warning Lights Type A	DAY	25,080.000	25,080.000
0226	643.0715	Traffic Control Warning Lights Type C	DAY	10,590.000	10,590.000
0228	643.0810	Traffic Control Connected Arrow Boards	DAY	252.000	252.000
0230	643.0900	Traffic Control Signs	DAY	20,608.000	20,608.000
0232	643.0920	Traffic Control Covering Signs Type II	EACH	42.000	42.000
0234	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0236	643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY	696.000	696.000
0238	643.3165	Temporary Marking Line Paint 6-Inch	LF	331,220.000	331,220.000
0240	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	2,400.000	2,400.000
0242	643.3265	Temporary Marking Line Paint 10-Inch	LF	480.000	480.000
0244	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	290.000	290.000
0246	643.5000	Traffic Control	EACH	1.000	1.000
0248	645.0120	Geotextile Type HR	SY	190.000	190.000
0250	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	20,400.000	20,400.000
0252	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	216,400.000	216,400.000
0254	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	7,830.000	7,830.000
0256	646.5020	Marking Arrow Epoxy	EACH	164.000	164.000
0258	646.5120	Marking Word Epoxy	EACH	24.000	24.000
0260	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	20.000	20.000
0262	646.6120	Marking Stop Line Epoxy 18-Inch	LF	650.000	650.000
0264	646.7120	Marking Diagonal Epoxy 12-Inch	LF	5,060.000	5,060.000
0266	646.8120	Marking Curb Epoxy	LF	680.000	680.000
0268	646.8220	Marking Island Nose Epoxy	EACH	17.000	17.000
0270	646.9000	Marking Removal Line 4-Inch	LF	52,070.000	52,070.000
0272	646.9100	Marking Removal Line 8-Inch	LF	3,000.000	3,000.000
0274	646.9200	Marking Removal Line Wide	LF	300.000	300.000
0276	646.9300	Marking Removal Special Marking	EACH	33.000	33.000
0278	650.4000	Construction Staking Storm Sewer	EACH	37.000	37.000
0280	650.4500	Construction Staking Subgrade	LF	2,555.000	2,555.000
0282	650.5000	Construction Staking Base	LF	2,475.000	2,475.000
0284	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	12,625.000	12,625.000
0286	650.7000	Construction Staking Concrete Pavement	LF	80.000	80.000
0288	650.7500	Construction Staking Concrete Barrier	LF	120.000	120.000
0290	650.8000	Construction Staking Resurfacing Reference	LF	79,840.000	79,840.000
0292	650.9911	Construction Staking Supplemental Control (project) 01. 1600-15-70	EACH	1.000	1.000
0294	650.9920	Construction Staking Slope Stakes	LF	9,050.000	9,050.000

1600-15-70

Line	Item	Item Description	Unit	Total	Qty
0296	690.0150	Sawing Asphalt	LF	8,300.000	8,300.000
0298	690.0250	Sawing Concrete	LF	600.000	600.000
0300	715.0603	Incentive Strength Concrete Barrier	DOL	90.000	90.000
0302	740.0440	Incentive IRI Ride	DOL	62,298.000	62,298.000
0304	999.2105.S	Maintaining Climbing Turtle Exclusion Fence	LF	2,000.000	2,000.000
0306	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000
0308	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,800.000	4,800.000
0310	SPV.0060	Special 01. Maintaining Bat Deterrent System Station 336+00	EACH	1.000	1.000
0312	SPV.0090	Special 01. Concrete Curb & Gutter 6-Inch Sloped 20-Inch Type J Special	LF	140.000	140.000
0314	SPV.0090	Special 02. Maintaining Exclusion Fence	LF	1,330.000	1,330.000
0316	SPV.0090	Special 03. Installing and Maintaining Silt Fence On Turtle Exclusion Fence	LF	270.000	270.000

3

GRUBBING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	201.0205 GRUBBING STA
	1					
0010		558+00	-	567+00	RT	9
					SUBTOTAL	9
	2					
0010		159+00	-	161+00	LT	2
0010		182+00	-	184+00	LT	2
0010		188+00	-	190+00	LT	2
0010		333+00	-	339+00	LT	6
0010		480+00	-	482+00	LT	2
0010		526+00	-	528+00	LT	2
					SUBTOTAL	16
	3					
0010		159+00	-	161+00	RT	2
0010		182+00	-	184+00	RT	2
0010		188+00	-	190+00	RT	2
0010		333+00	-	335+00	RT	2
0010		336+00	-	338+00	RT	2
0010		477+00	-	482+00	RT	5
0010		520+00	-	528+00	RT	8
					SUBTOTAL	23
					TOTAL 0010	48

BASE AGGREGATE DENSE

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
	1								
0010		147+63	-	566+50	MEDIAN/RT	-	1,009	10	STAGING TEMP WORK
0010		549+00	-	565+00	RT	18	-	0.2	STAGING TEMP WORK
					SUBTOTAL	18	1,009	10	
	2								
0010		148+80	-	186+00	LT	-	1,220	15.5	
0010		186+00	-	231+00	LT	-	355	7	
0010		231+00	-	276+00	LT	-	535	9	
0010		276+00	-	321+00	LT	-	350	7	
0010		321+00	-	351+50	LT	-	645	10.5	
0010		351+50	-	396+00	LT	-	835	12.5	
0010		396+00	-	441+00	LT	-	890	12.5	
0010		441+00	-	486+00	LT	-	1,085	15	
0010		486+00	-	531+00	LT	-	1,530	19	
0010		531+00	-	565+00	LT	-	1,180	32.5	
0010		501+00	-	567+00	LT	-	185	2	STAGING TEMP WORK
0010		148+80	-	336+00	LT	839	-	8.4	
0010		336+00	-	549+00	LT	1,033	-	10.3	
0010		549+00	-	565+00	LT	16	-	0.2	STAGING TEMP WORK
					SUBTOTAL	1,888	8,810	161.2	
	3								
0010		148+80	-	186+00	RT	-	1,220	15.5	
0010		186+00	-	231+00	RT	-	355	7	
0010		231+00	-	276+00	RT	-	535	9	
0010		276+00	-	321+00	RT	-	350	7	
0010		321+00	-	351+50	RT	-	645	10.5	
0010		351+50	-	396+00	RT	-	835	12.5	
0010		396+00	-	441+00	RT	-	890	12.5	
0010		441+00	-	486+00	RT	-	1,085	15	
0010		486+00	-	531+00	RT	-	1,530	19	
0010		531+00	-	565+00	RT	-	1,236	32.5	
0010		148+80	-	336+00	RT	849	-	8.7	
0010		336+00	-	549+00	RT	998	-	10.0	
					SUBTOTAL	1,847	8,681	159.2	

BASE AGGREGATE DENSE (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
	4								
0010		147+63		169+03	LT	-	1,000	10.0	MEDIAN REPLACEMENT
0010		147+63		156+00	LT/RT	-	200	2.0	PAVEMENT REPLACEMENT
0010		549+00	-	565+00	LT	147	-	1.5	STAGING RESTORATION
					SUBTOTAL	147	1,200	13.5	
					TOTAL 0010	3,900	19,700	344	

PREPARE FOUNDATION

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	211.0500 PREPARE FOUNDATION FOR BASE AGGREGATE STA
	2					
0010		148+80	-	336+00	LT	187
0010		336+00	-	526+00	LT	190
0010		335+00	-	337+00	LT	-
0010		526+00	-	565+00	LT	6
0010		526+00	-	565+00	LT	-
					SUBTOTAL	383
	3					
0010		148+80	-	336+00	RT	187
0010		336+00	-	526+00	RT	190
0010		335+00	-	337+00	RT	-
0010		526+00	-	565+00	RT	40
					SUBTOTAL	417
					TOTAL 0010	800

3

REMOVALS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0140 REMOVING GUTTER LF	204.0150 REMOVING CURB & GUTTER LF	204.0165 REMOVING GUARDRAIL LF	204.0180 REMOVING DELINEATORS AND MARKERS EACH	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (SIZE) (01. 12-INCH) LF	204.0245.02 REMOVING STORM SEWER (SIZE) (02. 15-INCH) LF	204.0245.03 REMOVING STORM SEWER (SIZE) (03. 30-INCH) LF	204.9060.S.01 REMOVING (ITEM DESCRIPTION) (01. REMOVE ASPHALTIC FLUME) EACH	REMARKS
	1																			
0010		148+80	-	565+00	LT/RT	-	-	360	-	-	-	2452	-	-	-	-	-	-	-	REMOVALS FOR TEMP CROSSOVER AND WIDENING WORK
0010		559+00	-	559+60	RT	1	-	-	-	-	-	-	-	-	-	-	-	-	-	REMOVAL FOR TEMP WIDENING WORK
0010		564+50	-	566+90	CENTERLINE	-	-	-	-	54	-	-	-	-	-	-	-	-	-	EXISTING RUMBLE STRIPS 2' WIDE, 2" DEPTH
					SUBTOTAL	1	0	360	0	54	0	2452	0	0	0	0	0	0	0	
	2																			
0010		148+58	-	335+71	LT	-	-	92,716	-	-	-	-	-	6	-	-	-	-	5	INCLUDES TWLTL AREA
0010		148+58	-	335+71	LT	-	-	-	-	-	14,785	2,711	-	-	-	-	-	-	-	SB TWLTL SIDE ONLY
0010		334+71	-	337+12	LT	-	-	-	-	-	-	-	170	-	-	-	-	-	-	SE AND SW GUARDRAIL
0010		335+50	-	335+70	LT	-	79	-	-	-	-	-	-	-	-	-	-	-	-	SOUTH ABUTMENT
0010		336+27	-	336+45	LT	-	108	-	-	-	-	-	-	-	-	-	-	-	-	NORTH ABUTMENT
0010		336+27	-	565+00	LT	-	-	115,733	-	-	-	-	-	4	-	-	-	-	11	INCLUDES TWLTL AREA
0010		336+27	-	565+00	LT	-	-	-	-	-	19,541	2,104	-	-	-	-	-	-	-	SB TWLTL SIDE ONLY
0010		376+52	-	378+06	LT	-	-	-	-	-	-	-	154	-	-	-	-	-	-	SOUTH GUARDRAIL
0010		480+62	-	482+66	LT	-	-	-	-	-	-	-	206	-	-	-	-	-	-	SOUTH GUARDRAIL
0010		525+53	-	527+33	LT	-	-	-	-	-	-	-	192	-	-	-	-	-	-	SOUTH GUARDRAIL
0010		524+85	-	525+35	LT	-	4	-	-	-	-	-	-	-	-	-	-	-	-	CONCRETE AROUND MAILBOX
0010		529+40	-	529+90	LT	1	-	-	-	-	-	-	-	-	-	-	-	-	-	FOR DRIVEWAY REMOVAL/DITCH REGRADING
0010		543+64	-	545+44	LT	-	-	-	-	-	-	-	199	-	-	-	-	-	-	SOUTH GUARDRAIL
0010		147+64	-	169+03	USH 45	-	-	-	-	-	-	-	-	-	4	-	16	8	-	STAGE 2 TOTAL
0010		254+15	-	269+66	USH 45	-	-	-	-	-	-	-	-	-	7	-	47	-	-	STAGE 2 TOTAL
0010		445+80	-	464+64	USH 45	-	-	-	-	-	-	-	-	-	7	60	-	-	-	STAGE 2 TOTAL
					SUBTOTAL	1	191	208,449	0	0	34,326	4,815	921	10	18	60	63	8	16	

REMOVALS (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0140 REMOVING GUTTER LF	204.0150 REMOVING CURB & GUTTER LF	204.0165 REMOVING GUARDRAIL LF	204.0180 REMOVING DELINEATORS AND MARKERS EACH	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (SIZE) (01. 12-INCH) LF	204.0245.02 REMOVING STORM SEWER (SIZE) (02. 15-INCH) LF	204.0245.03 REMOVING STORM SEWER (SIZE) (03. 30-INCH) LF	204.9060.S.01 REMOVING (ITEM DESCRIPTION) (01. REMOVE ASPHALTIC FLUME) EACH	REMARKS
	3																			
0010		148+80	-	335+71	RT	-	-	68,270	-	-	-	-	-	-	-	-	-	-	1	
0010		148+80	-	335+71	RT	-	-	-	-	-	14,785	2,711	-	-	-	-	-	-	-	REMAIN NB TWLTL CURB
0010		334+83	-	337+25	RT	-	-	-	-	-	-	-	171	-	-	-	-	-	-	NE AND NW GUARDRAIL
0010		335+50	-	335+70	RT	-	108	-	-	-	-	-	-	-	-	-	-	-	-	SOUTH ABUTMENT
0010		336+27	-	336+45	RT	-	81	-	-	-	-	-	-	-	-	-	-	-	-	NORTH ABUTMENT
0010		336+27	-	565+00	RT	-	-	84,430	-	-	-	-	-	-	-	-	-	-	7	
0010		336+27	-	565+00	RT	-	-	-	-	-	19,589	2,452	-	-	-	-	-	-	-	REMAIN NB TWLTL CURB
0010		479+05	-	480+58	RT	-	-	-	-	-	-	-	160	-	-	-	-	-	-	NORTH GUARDRAIL
0010		523+92	-	525+49	RT	-	-	-	-	-	-	-	174	-	-	-	-	-	-	NORTH GUARDRAIL
0010		544+17	-	545+73	RT	-	-	-	-	-	-	-	174	-	-	-	-	-	-	NORTH GUARDRAIL
0010		147+64	-	169+03	USH 45	-	-	-	-	-	-	-	-	-	1	-	16	-	-	STAGE 3 TOTAL
0010		254+15	-	269+66	USH 45	-	-	-	-	-	-	-	-	-	9	-	47	-	-	STAGE 3 TOTAL
0010		445+80	-	464+64	USH 45	-	-	-	-	-	-	-	-	-	7	60	-	-	-	STAGE 3 TOTAL
0010		148+80	-	565+00	RT	-	-	-	298	3,616	-	-	-	-	-	-	-	-	-	NB SIDE ROADS
					SUBTOTAL	0	189	152,700	298	3,616	34,374	5,163	679	0	17	60	63	0	8	
	4																			
0010		148+58	-	156+00	LT	-	-	1,175	-	-	-	-	-	-	-	-	-	-	-	LT REMAINING MAINLINE SECTION
0010		148+80	-	153+00	RT	-	-	516	-	-	-	-	-	-	-	-	-	-	-	RT REMAINING MAINLINE SECTION
0010		148+80	-	565+00	LT	-	-	-	392	4,273	-	-	-	-	-	-	-	-	-	SB SIDE ROADS
0011		147+57	-	148+80	LT/RT	-	-	-	-	157	-	-	-	-	-	-	-	-	-	SOUTH END MEDIAN REPLACEMENT MILLING
					SUBTOTAL	0	0	1,691	392	4,430	0	0	0	0	0	0	0	0	0	
					TOTAL 0010	2	380	363,200	690	8,100	68,700	12,430	1,600	10	35	120	125	8	24	

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EARTHWORK SUMMARY

CATEGORY 0010

SUBSTAGE	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION CUT (2)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
STAGE 1	147+00 - 159+00	USH 45 MEDIAN	853	85	768	0	0	768	768	0	SOUTH CROSSOVER
	558+40 - 566+50	USH 45 NB	364	20	344	226	283	62	62	0	NB TEMPORARY WIDENING
		STAGE 1 SUBTOTALS	1,217	105	1,112	226	283	830	830	0	
STAGE 2	332+99 - 338+56	USH 45 SB	104	25	79	216	270	-191	0	191	GUARDRAIL
	374+99 - 379+76	USH 45 SB	0	0	0	125	156	-156	0	156	GUARDRAIL
	476+99 - 484+51	USH 45 SB	31	0	31	51	64	-33	0	33	GUARDRAIL
	519+99 - 530+51	USH 45 SB	147	0	147	182	228	-81	0	81	GUARDRAIL
	541+99 - 547+51	USH 45 SB	0	0	0	178	223	-223	0	-151	GUARDRAIL
	559+75 - 567+01	USH 45 SB	139	5	134	50	63	72	0	0	SB TEMPORARY WIDENING
		STAGE 2 SUBTOTALS	421	30	391	802	1,004	-612	0	310	
STAGE 3	332+99 - 338+56	USH 45 NB	97	25	72	150	188	-116	0	0	GUARDRAIL
	476+99 - 484+51	USH 45 NB	23	0	23	115	144	-121	0	0	GUARDRAIL
	519+99 - 530+51	USH 45 NB	447	0	447	131	164	283	283	0	GUARDRAIL
	541+99 - 547+51	USH 45 NB	3	0	3	212	265	-262	0	0	GUARDRAIL
	558+41 - 567+01	USH 45 SB	497	47	450	8	10	440	440	0	NB TEMPORARY WIDENING REMOVAL
		STAGE 3 SUBTOTALS	1,067	72	995	616	771	224	723	0	
STAGE 4	558+41 - 567+01	USH 45 NB	88	42	46	241	301	-255	0	255	SB TEMPORARY WIDENING REMOVAL
	147+00 - 159+00	USH 45 MEDIAN	282	188	94	0	0	94	94	0	SOUTH CROSSOVER REMOVAL
	156+00 - 169+03	USH 45 MEDIAN	211	0	211	0	0	211	211	0	USH 45 MEDIAN
		STAGE 4 SUBTOTALS	581	230	351	241	301	50	305	255	
		GRAND TOTAL	3,286	437	2,849	1,885	2,359	492	1,858	565	

NOTES:

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

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(13) EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE SUBSTAGE. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

ASPHALTIC ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS TON	465.0315 ASPHALTIC FLUMES SY	REMARKS
	1															
0010		147+63	-	158+38	LT/RT	-	-	-	-	-	-	-	379	-	-	SOUTH CROSSOVER
0010		265+25	-	266+75	RT	-	-	-	-	-	-	-	24	-	-	LAKESHORE/NIETZKE ROAD ISLAND
0010		558+40	-	566+50	RT	-	-	-	-	-	-	-	146	-	-	NORTH CROSSOVER/WIDENING
0010		564+50	-	566+90	CENTERLINE	-	-	-	-	7	-	-	-	-	-	PAVING RUMBLE STRIPS 2' WIDE, 2" DEPTH
					SUBTOTAL	0	0	0	0	7	0	0	549	0	0	
	2															
0010		148+58	-	335+71	LT	-	5,920	6,618	9,793	5,273	-	-	-	-	-	MT MIXES FOR MAINLINE, LT MIX FOR SHLDR/TWLTL
0010		336+27	-	565+00	LT	-	5,871	7,212	12,727	6,853	-	-	-	-	-	MT MIXES FOR MAINLINE, LT MIX FOR SHLDR/TWLTL
0010		502+00	-	502+50	LT	-	-	-	-	-	-	-	8	-	-	NE 7TH STREET SE RADIUS
0010		533+00	-	533+50	LT	-	-	-	-	-	-	-	27	-	-	STH 110 SPLITTER ISLAND
0010		560+00	-	566+75	LT	-	-	-	-	-	-	-	66	-	-	NORTH CROSSOVER/WIDENING
0010		148+58	-	565+00	LT	-	-	-	-	-	-	25	-	-	214	LT DRIVEWAYS AND LT FLUMES
0010		148+58	-	565+00	LT	-	-	-	-	-	12	-	-	-	-	CTH S C&G RADII REPLACE
					SUBTOTAL	0	11,790	13,830	22,520	12,126	12	25	101	0	214	
	3															
0010		148+58	-	335+71	RT	-	-	-	-	-	-	-	-	35	-	LAKESHORE/NIETZKE ROAD ISLAND
0010		148+58	-	335+71	RT	-	7,215	6,461	9,793	5,273	-	-	-	-	-	MT MIXES FOR MAINLINE, LT MIX FOR SHLDR/TWLTL
0010		336+27	-	565+00	RT	-	7,290	7,456	12,727	6,853	-	-	-	-	-	MT MIXES FOR MAINLINE, LT MIX FOR SHLDR/TWLTL
0010		148+58	-	565+00	RT	-	-	-	-	-	-	-	-	470	-	LAKESHORE & CTH S SAFETY ISLANDS
0010		148+58	-	565+00	RT	-	-	-	-	-	-	150	-	-	106	RT DRIVEWAYS AND RT FLUMES
0010		148+58	-	565+00	RT	-	-	-	-	-	35	-	-	-	-	LAKESHORE, KUSSMAN & USH 45, BIG LAKE C&G RADII REPLACE
					SUBTOTAL	0	14,504	13,917	22,520	12,126	35	150	0	505	106	

ASPHALTIC ITEMS (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS TON	465.0315 ASPHALTIC FLUMES SY	REMARKS
	4															
0010		533+00	-	533+50	LT	-	-	-	-	-	-	-	-	10	-	STH 110 SPLITTER ISLAND
0010		148+58	-	565+00	LT/RT	30	79	113	-	-	-	-	-	-	-	STH 110 AND 7TH STREET SIDEROADS
0010		148+58	-	565+00	LT/RT	-	-	-	-	-	-	-	-	310	-	SOUTH SAFETY ISLAND
0010		148+58	-	565+00	LT/RT	-	-	-	-	-	-	-	-	-	-	SIDE ROADS BASE PATCHING
0010		148+58	-	156+00	LT/RT	120	126	-	310	171	-	-	-	-	-	REMAINING MAINLINE
0010		148+58	-	565+00	LT	-	-	-	-	-	3	-	-	-	-	STH 110 C&G RADII REPLACE
					SUBTOTAL	150	205	113	310	171	3	0	0	320	0	
					TOTAL 0010	150	26,500	27,860	45,350	24,430	50	175	650	825	320	

PWL MIXTURE USE TABLE

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	148+59 TO 565+00	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	40,120	3.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	148+59 TO 565+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	21,600	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
TURN LANES & INTERSECTIONS	148+59 TO 565+00	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	5,260	3.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2), NOT ELIGIBLE FOR INCENTIVE
TURN LANES & INTERSECTIONS	148+59 TO 565+00	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	2,830	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2), NOT ELIGIBLE FOR INCENTIVE
8 FOOT SHOULDER	148+59 TO 565+00	LOWER LAYER	BASE AGGREGATE	4 LT 58-28 S	8,450	2.25"	QMP (SS 460.2.8)	INCENTIVE DENSITY HMA PAVEMENT 460.2000
8 FOOT SHOULDER	148+59 TO 565+00	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	6,580	1.75"	QMP (SS 460.2.8)	INCENTIVE DENSITY HMA PAVEMENT 460.2000
18 FOOT MEDIAN TWLTL	148+59 TO 565+00	LOWER LAYER	BASE AGGREGATE	4 LT 58-28 S	6,720	2.25"	QMP (SS 460.2.8)	INCENTIVE DENSITY HMA PAVEMENT 460.2000
18 FOOT MEDIAN TWLTL	148+59 TO 565+00	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	5,220	1.75"	QMP (SS 460.2.8)	INCENTIVE DENSITY HMA PAVEMENT 460.2000
INTERSECTIONS	-	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 LT 58-28 S	780	1.75"	QMP (SS 460.2.8)	DEPARTMENT ACCEPTANCE (SS 460.3.3.2), NOT ELIGIBLE FOR INCENTIVE
INTERSECTIONS	-	LOWER LAYER	BASE AGGREGATE	ASPHALTIC SURFACE	50	VARIES	(SS 465)	ACCEPTANCE BY ORDINARY COMPACTION

RUMBLE STRIPS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	465.0510 ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY LF	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF
	3						
0010		148+80	-	336+00	RT	15020	-
0010		336+00	-	526+00	RT	18250	-
0010		562+00	-	565+00	RT	2430	-
					SUBTOTAL	35,700	0
	4						
0010		148+80	-	336+00	LT	16270	-
0010		336+00	-	526+00	LT	18380	-
0010		562+00	-	565+00	LT	2650	-
0010		564+50	-	566+90	CENTERLINE	-	240
					SUBTOTAL	37,300	240
					TOTAL 0010	73,000	240

3

STORM & CULVERT PIPE

CATEGORY	STAGE	STRUCTURE	TO	STRUCTURE	LOCATION	520.2024 CULVERT PIPE TEMPORARY 24-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH EACH	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	530.0112 CULVERT PIPE CORRUGATED POLYETHYLENE 12-INCH LF	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	INLET ELEVATION	OUTLET ELEVATION	PIPE SLOPE '/'
	1															
0010		-	-	STA 559+28	USH 45 RT	50	-	-	-	-	-	-	-	912.50	910.63	0.037
					SUBTOTAL	50	0	0	0	0	0	0	0			
	2															
0010		1	-	EXIST (W)	USH 45	-	1	-	-	-	-	4	-	809.00	EXIST	-
0010		EXIST (N)	-	2	USH 45	-	1	-	-	-	-	-	4	EXIST	807.00	-
0010		2	-	EXIST (S)	USH 45	-	1	-	-	-	-	-	4	807.00	EXIST	-
0010		EXIST (E)	-	2	USH 45	-	1	-	-	-	-	4	-	EXIST	807.90	-
0010		2	-	EXIST (W)	USH 45	-	1	-	-	-	-	4	-	807.90	EXIST	-
0010		3	-	4	USH 45	-	-	-	-	-	-	16	-	808.80	808.40	0.025
0010		EXIST (W)	-	4	USH 45	-	1	-	-	-	-	4	-	EXIST	808.40	-
0010		4	-	EXIST (E)	USH 45	-	1	-	-	-	-	4	-	808.40	EXIST	-
0010		EXIST (W)	-	4	USH 45	-	1	-	-	-	-	4	-	EXIST	808.40	-
0010		5	-	EXIST (E)	USH 45	-	1	-	-	-	-	4	-	809.60	EXIST	-
0010		7	-	EXIST (S)	USH 45	-	1	-	-	-	-	4	-	829.55	EXIST	-
0010		9	-	EXIST (S)	USH 45	-	1	-	-	-	-	4	-	830.40	EXIST	-
0010		11	-	EXIST (S)	USH 45	-	1	-	-	-	-	4	-	831.45	EXIST	-
0010		13	-	EXIST (S)	USH 45	-	1	-	-	-	-	4	-	833.40	EXIST	-
0010		15	-	EXIST (S)	USH 45	-	1	-	-	-	-	4	-	832.05	EXIST	-
0010		19	-	EXIST (S)	USH 45	-	1	-	-	-	-	4	-	826.63	EXIST	-
0010		21	-	EXIST (S)	USH 45	-	1	-	-	-	-	4	-	827.50	EXIST	-
0010		23	-	EXIST (S)	USH 45	-	1	-	-	-	4	-	-	832.45	EXIST	-
0010		25	-	EXIST (S)	USH 45	-	1	-	-	-	4	-	-	831.20	EXIST	-
0010		27	-	EXIST (S)	USH 45	-	1	-	-	-	4	-	-	831.35	EXIST	-
0010		29	-	EXIST (S)	USH 45	-	1	-	-	-	4	-	-	831.20	EXIST	-
0010		31	-	EXIST (S)	USH 45	-	1	-	-	-	4	-	-	831.20	EXIST	-
0010		33	-	EXIST (S)	USH 45	-	1	-	-	-	4	-	-	832.50	EXIST	-
0010		33	-	EXIST (S)	USH 45	-	1	-	-	-	4	-	-	834.70	EXIST	-
0010		36	-	37	USH 45	-	-	-	-	18	-	-	-	864.95	864.80	0.008
					SUBTOTAL	0	23	0	0	18	28	72	8			

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STORM & CULVERT PIPE (CONTINUED)

CATEGORY	STAGE	STRUCTURE	TO	STRUCTURE	LOCATION	520.2024 CULVERT PIPE TEMPORARY 24-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH EACH	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	530.0112 CULVERT PIPE CORRUGATED POLYETHYLENE 12-INCH LF	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	INLET ELEVATION	OUTLET ELEVATION	PIPE SLOPE '/'
	3															
0010		6	-	7	USH 45	-	-	-	-	-	-	16	-	830.00	829.55	0.028
0010		8	-	9	USH 45	-	-	-	-	-	-	16	-	830.75	830.40	0.022
0010		10	-	11	USH 45	-	-	-	-	-	-	16	-	831.90	831.45	0.028
0010		12	-	13	USH 45	-	-	-	-	-	-	8	-	833.60	833.40	0.025
0010		14	-	15	USH 45	-	-	-	-	-		6	-	832.25	832.05	0.033
0010		16	-	17	USH 45	-	1	-	-	-	-	11	-	826.95	826.75	0.018
0010		17	-	EXIST (N)	USH 45	-	1	-	-	-	-	4	-	832.05	EXIST	-
0010		18	-	19	USH 45	-	-	-	-	-	-	6	-	827.00	826.65	0.058
0010		20	-	21	USH 45	-	-	-	-	-	-	14	-	828.00	827.50	0.036
0010		22	-	23	USH 45	-	-	-	-	-	16	-	-	832.70	832.45	0.016
0010		24	-	25	USH 45	-	-	-	-	-	16	-	-	831.40	831.20	0.012
0010		26	-	27	USH 45	-	-	-	-	-	16	-	-	831.70	831.35	0.022
0010		28	-	29	USH 45	-	-	-	-	-	16	-	-	831.60	831.20	0.025
0010		30	-	31	USH 45	-	-	-	-	-	16	-	-	831.55	831.20	0.022
0010		32	-	33	USH 45	-	-	-	-	-	16	-	-	833.00	832.50	0.031
0010		34	-	35	USH 45	-	-	-	-	-	16	-	-	835.30	834.70	0.037
0010		-	-	STA 559+28	USH 45 RT	-	-	2	50	-	-	-	-	912.27	910.54	0.035
					SUBTOTAL	0	2	2	50	0	112	97	0			
					TOTAL 0010	50	25	2	50	18	140	169	8			

CONCRETE ITEMS

CATEGORY	STAGE 3	STATION	TO	STATION	LOCATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.0610 DRILLED TIE BARS EACH	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0413 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G LF	601.0415 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF	603.1132 CONCRETE BARRIER TYPE S32 LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	SPV.0090.01 SPECIAL (01. CONCRETE CURB & GUTTER 6-INCH SLOPED 20-INCH TYPE J SPECIAL) LF	REMARKS
	2																	
0010		148+80	-	336+00	LT	27	80	3	-	-	-	-	-	-	-	-	-	CONCRETE APPROACH SLAB AREA AT BRIDGE
0010		148+80	-	336+00	LT	-	-	-	-	-	3,560	-	-	-	-	-	-	SOUTH AND LAKESHORE RAISED MEDIAN ISLANDS
0010		336+00	-	526+00	LT	-	-	-	-	-	-	180	-	-	-	-	-	CTH S RADIUS
0010		336+00	-	526+00	LT	15	63	3	-	-	-	-	92	16	-	-	-	CONCRETE APPROACH SLAB AREA AT BRIDGE
0010		336+00	-	526+00	LT	-	-	-	-	-	1,885	-	-	-	-	-	-	RAISED MEDIAN ISLAND NORTH OF CTH S
0010		525+89	-	526+49	LT	-	-	-	-	-	-	-	-	-	60	30	-	
0010		526+00	-	565+00	LT	-	-	-	-	-	-	-	-	-	-	-	-	
					SUBTOTAL	42	143	6	0	0	5,445	180	92	16	60	30	0	
	3																	
0010		148+80	-	336+00	RT	16	63	3	-	-	-	-	-	-	-	-	-	CONCRETE APPROACH SLAB AREA AT BRIDGE
0010		148+80	-	336+00	RT	-	-	-	-	-	3,900	-	-	-	-	-	-	SOUTH AND LAKESHORE RAISED MEDIAN ISLANDS
0010		336+00	-	526+00	RT	24	80	3	-	-	-	-	104	6	-	-	-	CONCRETE APPROACH SLAB AREA AT BRIDGE
0010		336+00	-	526+00	RT	-	-	-	-	-	1,885	-	-	-	-	-	-	RAISED MEDIAN ISLAND NORTH OF CTH S
0010		524+81	-	525+41	RT	-	-	-	-	-	-	-	-	-	60	30	-	
0010		526+00	-	565+00	RT	-	-	-	-	-	-	553	-	-	-	-	-	BIG LAKE & KUSSMAN ROAD RADII, EXTENSION ALONG NB US 45 AT KUSSMAN
					SUBTOTAL	40	143	6	0	0	5,785	553	104	6	60	30	0	
	4																	
0010		148+80	-	336+00	MEDIAN	-	-	82	-	198	-	-	-	-	-	-	-	SOUTH RAISED MEDIAN ISLAND REPLACEMENT
0010		336+00	-	526+00	LT	-	-	-	25	-	-	40	-	-	-	-	-	NE 7TH STREET SE RADIUS
0010		526+00	-	565+00	LT	-	-	-	30	-	-	12	-	-	-	-	140	STH 110 SE RADII AND SPLITTER ISLAND
0010		-	-	147+70	MEDIAN	-	-	-	-	-	-	-	-	-	-	100	-	
0010		-	-	169+00	MEDIAN	-	-	-	-	-	-	-	-	-	-	200	-	
0010		-	-	254+20	MEDIAN	-	-	-	-	-	-	-	-	-	-	200	-	
0010		-	-	270+00	MEDIAN	-	-	-	-	-	-	-	-	-	-	200	-	
0010		-	-	445+85	MEDIAN	-	-	-	-	-	-	-	-	-	-	200	-	
0010		-	-	464+65	MEDIAN	-	-	-	-	-	-	-	-	-	-	200	-	
					SUBTOTAL	0	0	82	55	198	0	52	0	0	0	1,100	140	
					TOTAL 0010	82	286	94	55	198	11,230	785	196	22	120	1,160	140	

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RIPRAP

CATEGORY	STAGE	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
	2				
0010		160+09	LT	9	18
0010		182+90	LT	9	18
0010		188+81	LT	9	18
0010		336+85	LT	9	18
0010		524+35	LT	3	6
		UNDISTRIBUTED		11	2
			SUBTOTAL	50	80
	3				
0010		160+09	RT	4	8
0010		182+90	RT	15	30
0010		188+81	RT	15	30
0010		336+85	RT	9	18
0010		524+35	RT	9	18
		UNDISTRIBUTED		18	6
			SUBTOTAL	70	110
			TOTAL 0010	120	190

CONCRETE DRAIN

CATEGORY	STAGE	STATION	LOCATION	602.3010 CONCRETE SURFACE DRAINS CY
	2			
0010		336+85	LT	3
			SUBTOTAL	3
	3			
0010		336+85	RT	4
0010		524+35	RT	3
			SUBTOTAL	7
			TOTAL 0010	10

GUARDRAIL ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2340 MGS GUARDRAIL 3 L LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
	2								
0010		334+64	-	335+56	LT	-	-	39	1
0010		336+27	-	338+19	LT	100	-	39	1
0010		376+53	-	378+59	LT	100	-	-	2
0010		480+31	-	483+11	LT	175	-	-	2
0010		524+98	-	525+89	LT	-	-	39	1
0010		526+49	-	528+39	LT	100	-	39	1
0010		543+44	-	546+25	LT	-	112.5	-	2
					SUBTOTAL	475	113	158	10
	3								
0010		333+76	-	335+67	RT	100	-	39	1
0010		336+38	-	337+44	RT	13	-	39	1
0010		478+05	-	481+00	RT	188	-	-	2
0010		522+90	-	524+81	RT	100	-	39	1
0010		525+41	-	526+32	RT	-	-	39	1
0010		543+24	-	546+06	RT	63	112.5	-	2
					SUBTOTAL	463	113	158	8
					TOTAL 0010	938	225	315	18

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STORM STRUCTURES

CATEGORY	STAGE	STRUCTURE NO.	STATION	OFFSET	LOCATION	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	611.0630 INLET COVERS TYPE HM-GJ EACH	611.0633 INLET COVERS TYPE HM-GJ-S EACH	611.0654 INLET COVERS TYPE V EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.3225 INLETS 2X2.5-FT EACH	611.3230 INLETS 2X3-FT EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM ELEVATION
	2																
0010		1	158+12.3	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	815.01
0010		2	160+09.7	16.70 LT	USH 45	-	1	-	-	1	-	1	1	1	1	1	814.45
0010		4	160+50.4	16.70 LT	USH 45	-	-	1	-	-	-	1	1	1	1	1	814.43
0010		5	163+07.2	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	815.32
0010		7	254+65.5	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.18
0010		9	256+15.3	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.78
0010		11	258+15.0	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	837.55
0010		13	262+16.0	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	837.51
0010		15	264+70.5	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	1	1	836.36
0010		19	267+66.2	6.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	834.65
0010		21	269+51.0	14.57 LT	USH 45	-	1	-	-	-	-	1	1	1	1	1	833.93
0010		23	448+83.9	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	837.01
0010		25	451+83.7	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	835.82
0010		27	453+08.0	16.70 LT	USH 45	-	-	1	-	-	-	1	1	1	1	1	835.71
0010		29	453+18.3	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	1	1	835.71
0010		31	455+62.9	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.19
0010		33	458+62.1	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	837.38
0010		35	461+62.5	16.70 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	838.88
0010		36	525+43.7	51.30 LT	USH 45	-	-	-	1	-	1	-	1	1	-	1	868.83
0010		37	525+43.7	65.73 LT	USH 45	1	-	-	-	-	-	-	1	1	-	1	864.80
					SUBTOTAL	1	16	2	1	1	1	18	20	20	6	20	

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STORM STRUCTURES (CONTINUED)

CATEGORY	STAGE	STRUCTURE NO.	STATION	OFFSET	LOCATION	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	611.0630 INLET COVERS TYPE HM-GJ EACH	611.0633 INLET COVERS TYPE HM-GJ-S EACH	611.0654 INLET COVERS TYPE V EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.3225 INLETS 2X2.5-FT EACH	611.3230 INLETS 2X3-FT EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM ELEVATION
	3																
0010		3	160+50.7	1.30 LT	USH 45	-	-	1	-	-	-	1	1	1	1	1	813.94
0010		6	254+65.7	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.00
0010		8	256+15.6	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.34
0010		10	258+14.8	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.80
0010		12	262+15.4	9.53 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.95
0010		14	264+70.5	11.30 LT	USH 45	-	1	-	-	-	-	1	1	1	1	1	835.95
0010		16	265+22.3	72.86 RT	USH 45	-	1	-	-	-	-	1	1	1	-	1	832.83
0010		17	265+27.6	82.48 RT	USH 45	-	-	1	-	-	-	1	1	1	-	1	832.45
0010		18	267+66.0	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	834.42
0010		20	269+51.1	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	1	1	833.87
0010		22	448+83.4	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	837.49
0010		24	451+83.3	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.42
0010		26	453+08.3	1.30 LT	USH 45	-	-	1	-	-	-	1	1	1	1	1	836.31
0010		28	453+17.7	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	1	1	836.31
0010		30	455+63.4	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	836.69
0010		32	458+62.6	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	838.03
0010		34	461+62.7	1.30 LT	USH 45	-	1	-	-	-	-	1	1	1	-	1	839.52
					SUBTOTAL	0	14	3	0	0	0	17	17	17	5	17	
					TOTAL 0010	1	30	5	1	1	1	35	37	37	11	37	

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EROSION CONTROL

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
	1																			
0010		558+40	-	566+50	RT	1,600	70	140	1,600	-	-	75	2	-	1.1	-	-	44	36	NORTH END NB TEMP SHOULDER WIDENING
				UNDISTRIBUTED		400	18	35	400	0	0	19	1	0	0.3	0	0	11	9	
					SUBTOTAL	2,000	88	175	2,000	0	0	94	3	0	1.4	0	0	55	45	
	2																			
0010				160+09	LT	19	-	-	-	19	-	-	5	-	0.1	1	-	-	1	
0010				182+90	LT	17	-	-	-	17	-	-	5	-	0.1	1	-	-	1	
0010				188+81	LT	17	-	-	-	17	-	-	3	-	0.1	1	-	-	1	
0010		332+95	-	338+64	LT	858	330	660	-	780	78	-	-	-	0.7	44	-	-	22	
0010		375+00	-	379+76	LT	648	474	948	-	492	156	30	10	16	0.5	30	-	-	15	
0010		447+00	-	484+52	LT	238	790	1,580	-	238	-	-	-	-	0.2	11	-	-	6	
0010		522+00	-	532+78	LT	1,116	930	1,860	-	867	249	30	44	48	0.8	53	-	-	27	
0010		542+00	-	547+53	LT	871	620	1,240	-	688	183	15	-	32	0.6	40	-	-	20	
0010		560+00	-	567+00	LT	726	712	1,424	726	-	-	15	-	16	0.5	-	-	20	17	NORTH END SB TEMP SHOULDER WIDENING
0010		148+58	-	565+00	LT	-	-	-	-	-	-	-	-	-	29.2	-	2,082	-	-	BASE AGG DENSE FORESLOPE SEEDING
				UNDISTRIBUTED		1,127	964	1,928	182	779	167	23	17	28	8.2	45	312	5	28	
					SUBTOTAL	5,637	4,820	9,640	908	3,897	833	113	85	140	41.0	226	2,394	25	138	

EROSION CONTROL (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
	3																			
0010				160+09	RT	21	65	130	-	21	-	-	-	-	0.1	1	-	-	1	
0010				182+90	RT	117	97	194	-	117	-	-	-	-	0.1	6	-	-	3	
0010				188+81	RT	108	118	236	-	108	-	-	-	-	0.1	5	-	-	3	
0010		332+74	-	338+61	RT	820	501	1002	-	820	-	-	-	-	0.6	39	-	-	20	
0010		476+97	-	484+52	RT	551	790	1580	-	551	-	-	-	-	0.4	25	-	-	13	
0010		520+00	-	529+11	RT	3,176	-	-	-	2450	726	75	-	-	2.1	143	-	-	72	
0010		541+98	-	547+51	RT	948	610	1220	-	666	282	15	-	32	0.6	43	-	-	22	
0010		558+40	-	566+50	RT	1,882	70	140	1,882	-	-	75	2	-	1.2	85	-	-	43	
0010		148+58	-	565+00	RT	-	-	-	-	-	-	-	-	-	29.2	-	2,081	-	-	BASE AGG DENSE FORESLOPE SEEDING
				UNDISTRIBUTED		1,906	563	1,126	471	1,179	259	48	1	8	8.6	87	315	0	44	
					SUBTOTAL	9,530	2,814	5,628	2,353	5,913	1,267	213	3	40	43.0	434	2,396	0	221	
	4																			
0010		560+00	-	567+00	LT	1,721	748	1496	1,721	-	-	-	-	-	1.1	78	-	-	39	
				UNDISTRIBUTED		432	191	391	429	0	0	0	0	0	0.5	22	0	0	17	
					SUBTOTAL	2,153	939	1,887	2,150	0	0	0	0	0	1.6	100	0	0	56	
					TOTAL 0010	19,320	8,660	17,330	7,410	9,810	2,100	420	90	180	87	760	4,790	80	460	

EROSION CONTROL MOBILIZATIONS

CATEGORY	PROJECT WIDE	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	USH 45	14	9
	TOTAL 0010	14	9

SIGNING ITEMS

CATEGORY	STAGE	STATION	LOCATION	SIGN NO.	SIGN CODE	W X H	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
	1													
0010		147+66	MEDIAN	M-01	-	-	-	1	-	-	1	-	1	MOVE FOR S1 CONST. NEW POST FOR REINSTALL IN S4
0010		264+90	MEDIAN	M-02	-	-	-	1	-	-	1	-	1	MOVE FOR S2 CONST. NEW POST FOR REINSTALL IN S4
0010		265+15	RT	M-04	-	-	1	-	-	-	1	-	1	MOVE FOR S2 CONST. NEW POST FOR REINSTALL IN S4
0010		265+30	RT	M-05	-	-	-	1	-	-	2	-	1	MOVE FOR S1 CONST. MOVE TO TEMP SUPPORT FOR S2 CONST. IN S4, MOVE FROM TEMP SUPPORT TO NEW PERM SUPPORT
0010		265+30	RT	M-06	-	-	-	-	-	-	1	-	-	MOVE FOR S1 CONST. REINSTALL IN S4 ON M-05 NEW POST
0010		265+85	MEDIAN	M-03	-	-	-	1	-	-	1	-	1	MOVE FOR S2 CONST. NEW POST FOR REINSTALL IN S4
0010		502+05	LT	M-07	-	-	-	1	-	-	1	-	1	MOVE FOR S3 CONST. NEW POST FOR REINSTALL IN S4
0010		502+07	LT	M-08	-	-	-	1	-	-	2	-	1	MOVE FOR S2 CONST. MOVE TO TEMP SUPPORT FOR S3 CONST. IN S4, MOVE FROM TEMP SUPPORT TO NEW PERM SUPPORT
0010		502+07	LT	M-09	-	-	-	-	-	-	1	-	-	MOVE FOR S3 CONST. REINSTALL IN S4 ON M-08 NEW POST
0010		533+05	LT	M-10	-	-	1	-	-	-	1	-	1	MOVE FOR S2 CONST. NEW POST FOR REINSTALL IN S4
0010		533+08	LT	M-11	-	-	-	-	1	-	2	-	1	MOVE FOR S2 CONST. MOVE TO TEMP SUPPORT FOR S3 CONST. IN S4, MOVE FROM TEMP SUPPORT TO NEW PERM SUPPORT
0010		533+08	LT	M-12	-	-	-	-	1	-	2	-	1	MOVE WITH M-11 TO ALL LOCATIONS
0010		533+08	LT	M-13	-	-	-	-	-	-	2	-	-	MOVE WITH M-11 TO ALL LOCATIONS
0010		533+10	LT	M-14	-	-	-	1	-	-	2	-	1	MOVE FOR S2 CONST. MOVE TO TEMP SUPPORT FOR S3 CONST. IN S4, MOVE FROM TEMP SUPPORT TO NEW PERM SUPPORT
0010		533+10	LT	M-15	-	-	-	-	-	-	1	-	-	MOVE FOR S2 CONST. REINSTALL IN S4 ON M-14 NEW POST
0010		562+00	RT	M-16	-	-	-	2	-	-	1	-	2	MOVE FOR S1 CONST. NEW POSTS FOR REINSTALL IN S4
0010		564+75	LT	M-17	-	-	-	1	-	-	1	-	1	MOVE FOR S2 CONST. NEW POST FOR REINSTALL IN S4
0010		564+75	RT	M-18	-	-	-	1	-	-	1	-	1	MOVE FOR S1 CONST. NEW POSTS FOR REINSTALL IN S4
			SUBTOTAL				2	11	2	0	24	0	15	
	4													
0010		170+00	LT	P-01	R3-9B	36" X 48"	-	1	-	12.00	-	-	-	
0010		170+00	LT	P-02	R3-9D	36" X 9"	-	-	-	2.25	-	-	-	
0010		170+00	RT	P-03	R3-9B	36" X 48"	-	1	-	12.00	-	-	-	
0010		170+00	RT	P-04	R3-9C	36" X 9"	-	-	-	2.25	-	-	-	
0010		183+24	LT	P-05	R3-9B	36" X 48"	-	1	-	12.00	-	-	-	
0010		183+24	RT	P-06	R3-9B	36" X 48"	-	1	-	12.00	-	-	-	
0010		198+00	LT	P-07	R3-9B	36" X 48"	-	1	-	12.00	-	-	-	
0010		198+00	LT	P-08	R3-9C	36" X 9"	-	-	-	2.25	-	-	-	
0010		198+00	RT	P-09	R3-9B	36" X 48"	-	1	-	12.00	-	-	-	
0010		198+00	RT	P-10	R3-9D	36" X 9"	-	-	-	2.25	-	-	-	
0010		201+50	MEDIAN	R-01	-	-	-	-	-	-	-	1	1	
0010		203+05	MEDIAN	R-02	-	-	-	-	-	-	-	1	1	
0010		207+00	LT	P-11	R3-9B	36" X 48"	-	-	1	12.00	-	-	-	
0010		207+00	LT	P-12	R3-9D	36" X 9"	-	-	-	2.25	-	-	-	
0010		207+00	RT	P-13	R3-9B	36" X 48"	-	-	1	12.00	-	-	-	
0010		207+00	RT	P-14	R3-9C	36" X 9"	-	-	-	2.25	-	-	-	

SIGNING ITEMS (CONTINUED)

CATEGORY	STAGE	STATION	LOCATION	SIGN NO.	SIGN CODE	W X H	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
	4													
0010		220+28	LT	P-15	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		220+28	RT	P-16	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		233+43	LT	P-17	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		233+43	RT	P-18	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		246+72	LT	P-19	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		246+72	RT	P-20	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		253+00	LT	P-21	R3-9B	36"X48"	-	-	1	12.00	-	-	-	
0010		253+00	LT	P-22	R3-9C	36"X9"	-	-	-	2.25	-	-	-	
0010		253+00	RT	P-23	R3-9B	36"X48"	-	-	1	12.00	-	-	-	
0010		253+00	RT	P-24	R3-9D	36"X9"	-	-	-	2.25	-	-	-	
0010		271+00	LT	P-25	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		271+00	LT	P-26	R3-9D	36"X9"	-	-	-	2.25	-	-	-	
0010		271+00	RT	P-27	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		271+00	RT	P-28	R3-9C	36"X9"	-	-	-	2.25	-	-	-	
0010		284+30	LT	P-29	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		284+30	RT	P-30	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		296+08	LT	P-31	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		296+08	LT	P-32	R3-9C	36"X9"	-	-	-	2.25	-	-	-	
0010		296+08	RT	P-33	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		296+08	RT	P-34	R3-9D	36"X9"	-	-	-	2.25	-	-	-	
0010		299+10	MEDIAN	R-03	-	-	-	-	-	-	-	1	1	
0010		303+78	LT	P-35	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		303+78	LT	P-36	R3-9D	36"X9"	-	-	-	2.25	-	-	-	
0010		303+78	RT	P-37	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		303+78	RT	P-38	R3-9C	36"X9"	-	-	-	2.25	-	-	-	
0010		315+00	LT	P-39	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		315+00	LT	P-40	R3-9C	36"X9"	-	-	-	2.25	-	-	-	
0010		315+00	RT	P-41	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		315+00	RT	P-42	R3-9D	36"X9"	-	-	-	2.25	-	-	-	
0010		322+90	MEDIAN	R-04	-	-	-	-	-	-	-	1	1	
0010		324+48	LT	P-43	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		324+48	LT	P-44	R3-9D	36"X9"	-	-	-	2.25	-	-	-	
0010		324+48	RT	P-45	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		324+48	RT	P-46	R3-9C	36"X9"	-	-	-	2.25	-	-	-	
0010		340+00	LT	P-47	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		340+00	LT	P-48	R3-9C	36"X9"	-	-	-	2.25	-	-	-	
0010		340+00	RT	P-49	R3-9B	36"X48"	-	1	-	12.00	-	-	-	
0010		340+00	RT	P-50	R3-9D	36"X9"	-	-	-	2.25	-	-	-	

3

SIGNING ITEMS (CONTINUED)

CATEGORY	STAGE	STATION	LOCATION	SIGN NO.	SIGN CODE	W X H	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
	4													
0010		345+00	MEDIAN	R-05	-	-	-	-	-	-	-	1	1	
0010		345+90	MEDIAN	R-06	-	-	-	-	-	-	-	1	1	
0010		350+32	LT	P-51	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		350+32	LT	P-52	R3-9D	36"X 9"	-	-	-	2.25	-	-	-	
0010		350+32	RT	P-53	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		350+32	RT	P-54	R3-9C	36"X 9"	-	-	-	2.25	-	-	-	
0010		363+53	LT	P-55	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		363+53	RT	P-56	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		376+65	LT	P-57	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		376+65	RT	P-58	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		390+00	LT	P-59	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		390+00	RT	P-60	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		403+24	LT	P-61	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		403+24	RT	P-62	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		416+48	LT	P-63	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		416+48	RT	P-64	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		429+64	LT	P-65	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		429+64	RT	P-66	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		434+00	LT	P-67	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		434+00	LT	P-68	R3-9C	36"X 9"	-	-	-	2.25	-	-	-	
0010		434+00	RT	P-69	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		434+00	RT	P-70	R3-9D	36"X 9"	-	-	-	2.25	-	-	-	
0010		439+20	MEDIAN	R-07	-	-	-	-	-	-	-	1	1	
0010		440+40	MEDIAN	R-08	-	-	-	-	-	-	-	1	1	
0010		477+00	LT	P-71	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		477+00	LT	P-72	R3-9D	36"X 9"	-	-	-	2.25	-	-	-	
0010		477+00	RT	P-73	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		477+00	RT	P-74	R3-9C	36"X 9"	-	-	-	2.25	-	-	-	
0010		490+27	LT	P-75	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		490+27	RT	P-76	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	

3

SIGNING ITEMS (CONTINUED)

CATEGORY	STAGE	STATION	LOCATION	SIGN NO.	SIGN CODE	W X H	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
	4													
0010		498+00	LT	P-77	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		498+00	LT	P-78	R3-9C	36"X 9"	-	-	-	2.25	-	-	-	
0010		498+00	RT	P-79	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		498+00	RT	P-80	R3-9D	36"X 9"	-	-	-	2.25	-	-	-	
0010		502+07	MEDIAN	R-09	-	-	-	-	-	-	-	1	1	
0010		503+90	MEDIAN	R-10	-	-	-	-	-	-	-	1	1	
0010		514+20	MEDIAN	R-11	-	-	-	-	-	-	-	1	1	
0010		515+00	LT	P-81	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		515+00	LT	P-82	R3-9D	36"X 9"	-	-	-	2.25	-	-	-	
0010		515+00	RT	P-83	R3-9B	36"X 48"	-	1	-	12.00	-	-	-	
0010		515+00	RT	P-84	R3-9C	36"X 9"	-	-	-	2.25	-	-	-	
0010		527+79	LT	P-85	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		527+79	LT	P-86	R3-9C	36"X 9"	-	-	-	2.25	-	-	-	
0010		527+79	RT	P-87	R3-9B	36"X 48"	-	-	1	12.00	-	-	-	
0010		527+79	RT	P-88	R3-9D	36"X 9"	-	-	-	2.25	-	-	-	
0010		532+90	MEDIAN	R-12	-	-	-	-	-	-	-	1	1	
0010		534+50	MEDIAN	R-13	-	-	-	-	-	-	-	1	1	
0010		548+00	MEDIAN	R-14	-	-	-	-	-	-	-	1	1	
0010		549+20	MEDIAN	R-15	-	-	-	-	-	-	-	1	1	
0010		550+50	MEDIAN	R-16	-	-	-	-	-	-	-	1	1	
0010		552+70	MEDIAN	R-17	-	-	-	-	-	-	-	1	1	
0010		558+90	MEDIAN	R-18	-	-	-	-	-	-	-	1	1	
0010		558+90	MEDIAN	R-19	-	-	-	-	-	-	-	1	-	
0010		563+85	LT	P-89	W6-1	36"X 36"	-	1	-	9.00	-	-	-	
		SUBTOTAL					0	45	12	753	0	19	18	
		TOTAL 0010					2	56	14	753	24	19	33	

3

TRAFFIC CONTROL

				643.0300		643.0420		643.0500	643.0600	643.0705		643.0715		643.0810		643.0900		643.0920	643.1000	643.1220		
CATEGORY	STAGE	LOCATION	APPRX. SERVICE PERIOD DAYS	TRAFFIC CONTROL DRUMS QTY	DAY	TRAFFIC CONTROL BARRICADES TYPE III QTY	DAY	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	TRAFFIC CONTROL WARNING LIGHTS TYPE A QTY	DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE C QTY	DAY	TRAFFIC CONTROL CONNECTED ARROW BOARDS QTY	DAY	TRAFFIC CONTROL SIGNS QTY	DAY	TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	TRAFFIC CONTROL CONNECTED WORK ZONE START AND END LOCATION MARKERS QTY	DAY	REMARKS
	1																					
0010		ADV. SIGNING	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	ROADWORK BEGINS SIGNS
		SIDEROADS	24	8	192	-	-	-	-	-	-	-	-	-	-	11	264	-	-	-	-	
		USH 45 NORTHBOUND	24	287	6888	4	96	-	-	8	192	42	1008	3	72	38	912	-	-	4	96	
		USH 45 SOUTHBOUND	24	145	3480	2	48	-	-	4	96	43	1032	-	-	17	408	-	-	-	-	
	2																					
0010		WIDTH RESTRICTION	59	-	-	-	-	-	-	-	-	-	-	-	-	25	1475	-	-	-	-	
		SIDEROADS	59	-	-	100	5900	-	-	200	11800	-	-	-	-	78	4602	21	-	-	-	
		USH 45 NORTHBOUND	59	558	32922	6	354	-	-	12	708	50	2950	1	59	18	1062	4	-	4	236	
		USH 45 SOUTHBOUND	59	112	6608	8	472	815	815	16	944	-	-	-	-	17	1003	-	-	-	-	
	3																					
0010		WIDTH RESTRICTION	61	-	-	-	-	-	-	-	-	-	-	-	-	25	1525	-	-	-	-	
		SIDEROADS	61	-	-	80	4880	-	-	160	9760	-	-	-	-	75	4575	14	-	-	-	
		USH 45 NORTHBOUND	61	312	19032	6	366	842	842	12	732	-	-	1	61	23	1403	-	-	4	244	
		USH 45 SOUTHBOUND	61	558	34038	4	244	-	-	8	488	50	3050	-	-	19	1159	3	-	-	-	
	4																					
0010		SIDEROADS	30	8	240	-	-	-	-	-	-	-	-	-	-	17	510	-	-	-	-	
		USH 45 NORTHBOUND	30	505	14610	4	120	-	-	8	240	42	1260	2	60	38	1140	-	-	4	120	
		USH 45 SOUTHBOUND	30	487	15150	2	60	-	-	4	120	43	1290	-	-	19	570	-	-	-	-	
		TOTAL 0010		133,160		12,540		1,657	1,657	25,080		10,590		252		20,608		42	36	16	696	

TEMPORARY MARKING

CATEGORY	STAGE	LOCATION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) LF	643.3265 TEMPORARY MARKING LINE PAINT 10-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	REMARKS
	1								
0010		USH 45	82540	83380	800	400	270	-	FOR STAGE 2 CONSTRUCTION
		SUBTOTAL	165,920		1,200		270	0	
	2								
0010		USH 45	82560	82740	800	400	210	-	FOR STAGE 3 CONSTRUCTION
0010		USH 45	-	-	-	-	-	160	MEDIAN STOP BARS FOR SIDE ROADS
		SUBTOTAL	165,300		1,200		210	160	
	3								
0010		USH 45	-	-	-	-	-	128	MEDIAN STOP BARS FOR SIDE ROADS
		SUBTOTAL	0		0		0	128	
		TOTAL 0010	331,220		2,400		480	290	

PAVEMENT MARKING CURB

CATEGORY	STAGE	STATION	LOCATION	633.0200 DELINEATORS FLEXIBLE EACH	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
	4					
0010		147+70	MEDIAN	-	10	1
		169+00	MEDIAN	2	10	1
		254+22	MEDIAN	2	10	1
		264+82	MEDIAN	-	10	1
		265+70	MEDIAN	-	10	1
		LAKESHORE DR ISLAND	RT	-	335	3
		269+94	MEDIAN	2	10	1
		446+50	MEDIAN	2	10	1
		464+69	MEDIAN	2	10	1
		STH 110 ISLAND	LT	-	135	3
		CTH G ISLAND	RT	-	130	3
			TOTAL 0010	10	680	17

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 MARKERS CULVERT END EACH
	2		
0010	160+09	LT	1
0010	182+90	LT	1
0010	188+81	LT	1
0010	377+15	LT	1
0010	480+50	LT	2
0010	525+50	LT	1
0010	544+80	LT	1
		SUBTOTAL	8
	3		
0010	160+09	RT	1
0010	182+90	RT	1
0010	188+81	RT	1
0010	377+15	RT	1
0010	480+50	RT	2
0010	525+50	RT	1
0010	544+80	RT	1
		SUBTOTAL	8
		TOTAL 0010	16

3

PAVEMENT MARKING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF
	3										
0010		143+38	-	146+05	USH 45 NORTHBOUND		-	155	-	-	-
		147+68	-	170+03	MEDIAN	DIAGONAL	-	-	-	-	92
		147+38	-	202+07	USH 45 NORTHBOUND	EDGELINE	-	5355	-	-	-
		148+80	-	554+46	USH 45 NORTHBOUND	LANE LINE	10142	10142	-	-	-
		198+08	-	201+62	MEDIAN	DIAGONAL	-	-	-	-	148
					HILLTOP RD		-	-	-	43	-
		199+62	-	201+62	USH 45 NORTHBOUND	CHANNELIZING	-	-	200	-	-
		203+14	-	206+64	MEDIAN	DIAGONAL	-	-	-	-	147
		203+34	-	264+25	USH 45 NORTHBOUND	EDGELINE	-	6085	-	-	-
		253+16	-	264+81	MEDIAN	DIAGONAL	-	-	-	-	92
					LAKESHORE DR		-	188	-	18	-
		261+22	-	264+25	USH 45 NORTHBOUND	CHANNELIZING	-	-	300	-	-
		263+22	-	264+81	USH 45 NORTHBOUND	CHANNELIZING	-	-	160	-	-
		265+70	-	271+05	MEDIAN	DIAGONAL	-	-	-	-	92
					ALBERTS RD		-	-	-	27	-
				298+96	USH 45 NORTHBOUND	EDGELINE/CHANNELIZING	-	3318	1174	-	91
		300+05	-	303+55	MEDIAN	DIAGONAL	-	-	-	-	92
		300+15	-	344+60	USH 45 NORTHBOUND	EDGELINE	-	4334	-	-	-
		317+42	-	321+92	MEDIAN	DIAGONAL	-	-	-	-	200
		318+91	-	321+91	USH 45 NORTHBOUND	CHANNELIZING	-	-	300	-	-
		340+42	-	344+97	MEDIAN	DIAGONAL	-	-	-	-	200
					KNITT RD		-	-	-	29	-
		341+97	-	344+97	USH 45 NORTHBOUND	CHANNELIZING	-	-	300	-	-
		345+83	-	350+34	MEDIAN	DIAGONAL	-	-	-	-	200
		345+92	-	439+28	USH 45 NORTHBOUND	EDGELINE	-	9226	-	-	-
		434+33	-	439+33	MEDIAN	DIAGONAL	-	-	-	-	206
		435+83	-	439+33	USH 45 NORTHBOUND	CHANNELIZING	-	-	350	-	-
					MAGOLSKI RD		-	-	-	41	-
						SUBTOTAL	10,142	38,840	2,784	160	1,560

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PAVEMENT MARKING (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF
	3										
		440+44	-	474+92	MEDIAN	DIAGONAL	-	-	-	-	1107
		440+65	-	502+57	USH 45 NORTHBOUND	EDGELINE	-	6088	-	-	-
		471+92	-	474+92	USH 45 NORTHBOUND		-	-	300	-	-
		497+66	-	502+17	MEDIAN	DIAGONAL	-	-	-	-	200
		499+17	-	502+17	USH 45 NORTHBOUND	CHANNELIZING	-	-	300	-	-
					7TH ST		-	-	-	40	-
		503+74	-	513+44	MEDIAN	DIAGONAL	-	-	-	-	450
		504+00	-	533+23	USH 45 NORTHBOUND	EDGELINE	-	2812	-	-	-
		510+42	-	513+44	USH 45 NORTHBOUND	CHANNELIZING	-	-	300	-	-
		527+79	-	532+79	MEDIAN	DIAGONAL	-	-	-	-	210
		529+29	-	532+79	USH 45 NORTHBOUND	CHANNELIZING	-	-	350	-	-
					KUSSMAN RD		-	-	-	45	-
		534+09	-	547+92	USH 45 NORTHBOUND	EDGELINE	-	1403	-	-	-
		534+45	-	548+17	MEDIAN	DIAGONAL	-	-	-	-	810
		534+67	-	547+92	USH 45 NORTHBOUND	EDGELINE	-	1326	-	-	-
		545+17	-	548+17	USH 45 NORTHBOUND	CHANNELIZING	-	-	300	-	-
		546+07	-	547+92	USH 45 NORTHBOUND	CHANNELIZING	-	-	185	-	-
					CTH G/BIG LAKE RD		-	280	-	54	-
		549+31	-	569+00	MEDIAN	DIAGONAL	-	-	-	-	723
		549+90	-	566+60	USH 45 NORTHBOUND	EDGELINE	-	1671	-	-	-
						SUBTOTAL	0	13,580	1,735	139	3,500

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PAVEMENT MARKING (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF
	4										
		147+68	-	149+43	USH 45 SOUTHBOUND	CHANNELIZING	-	-	175	-	-
		147+68	-	170+03	MEDIAN	EDGELINE	-	4672	-	-	-
		148+03	-	201+44	USH 45 SOUTHBOUND	EDGELINE		5234	-	-	-
		148+58	-	558+74	USH 45 SOUTHBOUND	LANE LINE	10258	10255	-	-	-
		170+03	-	198+08	TWLTL		-	7022	-	-	-
		198+08	-	201+62	MEDIAN		-	723	-	-	-
					HILLTOP RD		-	-	-	48	-
		202+71	-	264+50	USH 45 SOUTHBOUND	EDGELINE	-	6078	-	-	-
		203+14	-	205+14	USH 45 SOUTHBOUND	CHANNELIZING	-	-	200	-	-
		203+14	-	206+64	MEDIAN		-	1427	-	-	-
		206+64	-	253+16	TWLTL		-	11634	-	-	-
		253+16	-	264+81	MEDIAN		-	2537	-	-	-
					NEITZKE RD		-	184	86	31	-
		265+70	-	267+69	USH 45 SOUTHBOUND	CHANNELIZING	-	-	200	-	-
		265+70	-	271+05	MEDIAN		-	1263	-	-	-
		266+21	-	269+20	USH 45 SOUTHBOUND	CHANNELIZING	-	-	300	-	-
		266+21	-	321+77	USH 45 SOUTHBOUND	EDGELINE	-	5559	-	-	-
		271+05	-	273+10	TWLTL		-	7044	-	-	-
		300+05	-	303+55	MEDIAN		-	1424	-	-	-
		300+05	-	302+05	USH 45 SOUTHBOUND	CHANNELIZING	-	-	200	-	-
		303+55	-	317+39	TWLTL		-	4594	-	-	-
		317+42	-	321+92	MEDIAN		-	1826	-	-	-
					BUCKBEE RD		-	-	-	28	-
		322+82	-	340+42	TWLTL		-	4410	-	-	-
		323+07	-	344+90	USH 45 SOUTHBOUND	EDGELINE	-	2072	-	-	-
		340+42	-	344+97	MEDIAN		-	1822	-	-	-
					KNITT RD		-	-	-	28	-
						SUBTOTAL	10,258	79,780	1,161	135	0

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PAVEMENT MARKING (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF
	4										
		345+83	-	348+83	USH 45 SOUTHBOUND	CHANNELIZING	-	-	300	-	-
		345+83	-	350+34	MEDIAN		-	1822	-	-	-
		346+18	-	439+19	USH 45 SOUTHBOUND	EDGELINE	-	9187	-	-	-
		350+34	-	434+33	TWLTL		-	21000	-	-	-
		434+33	-	439+33	MEDIAN		-	2022	-	-	-
					CTH S		-	124	-	39	-
		440+44	-	443+44	USH 45 SOUTHBOUND	CHANNELIZING	-	-	300	-	-
		440+44	-	474+92	MEDIAN		-	10294	-	-	-
		440+78	-	442+78	USH 45 SOUTHBOUND	CHANNELIZING	-	-	200	-	-
		440+78	-	474+92	USH 45 SOUTHBOUND	EDGELINE	-	3400	-	-	-
					PROSPECT AVE		-	80	-	33	-
		476+20	-	501+92	USH 45 SOUTHBOUND	EDGELINE	-	2521	-	-	-
		476+29	-	497+66	TWLTL		-	5350	-	-	-
		497+66	-	502+17	MEDIAN		-	1822	-	-	-
					7TH ST		-	-	-	36	-
		503+35	-	513+36	USH 45 SOUTHBOUND	EDGELINE	-	891	-	-	-
		503+74	-	506+74	USH 45 SOUTHBOUND	CHANNELIZING	-	-	300	-	-
		503+74	-	513+44	MEDIAN		-	3924	-	-	-
					5TH ST		-	112	-	31	-
		514+32	-	527+79	TWLTL		-	3368	-	-	-
		514+43	-	548+10	USH 45 SOUTHBOUND	EDGELINE	-	1694	-	-	-
		527+79	-	532+79	MEDIAN		-	2026	-	-	-
					STH 110/N MAIN ST		-	152	-	38	-
		534+09	-	536+09	USH 45 SOUTHBOUND	CHANNELIZING	-	-	200	-	-
		534+45	-	537+45	USH 45 SOUTHBOUND	CHANNELIZING	-	-	300	-	-
		534+45	-	548+17	MEDIAN		-	5532	-	-	-
					INDUSTRIAL DR		-	-	-	39	-
		549+31	-	552+81	USH 45 SOUTHBOUND	CHANNELIZING	-	-	350	-	-
		549+31	-	569+00	MEDIAN		-	6904	-	-	-
		549+58	-	551+58	USH 45 SOUTHBOUND	CHANNELIZING	-	-	200	-	-
		549+58	-	568+69	USH 45 SOUTHBOUND	EDGELINE	-	1933	-	-	-
						SUBTOTAL	0	84,200	2,150	216	0
						TOTAL 0010	20,400	216,400	7,830	650	5,060

PAVEMENT MARKING EACH

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.5420 MARKING AERIAL ENFORCEMENT BAR EPOXY EACH
	3							
0010		199+62	-	201+62	USH 45 NORTHBOUND	2	1	--
		261+22	-	264+25	USH 45 NORTHBOUND	2	1	--
		263+22	-	264+81	USH 45 NORTHBOUND	2	1	--
				277+93	USH 45 NORTHBOUND	--	--	2
				284+54	USH 45 NORTHBOUND	--	--	2
				291+14	USH 45 NORTHBOUND	--	--	2
				297+74	USH 45 NORTHBOUND	--	--	2
				304+33	USH 45 NORTHBOUND	--	--	2
		318+91	-	321+91	USH 45 NORTHBOUND	2	1	--
		341+97	-	344+97	USH 45 NORTHBOUND	2	1	--
		435+83	-	439+33	USH 45 NORTHBOUND	2	1	--
		471+92	-	474+92	USH 45 NORTHBOUND	2	1	--
		499+17	-	502+17	USH 45 NORTHBOUND	2	1	--
		510+42	-	513+44	USH 45 NORTHBOUND	2	1	--
		529+29	-	532+79	USH 45 NORTHBOUND	2	1	--
		545+17	-	548+17	USH 45 NORTHBOUND	2	1	--
		546+07	-	547+92	USH 45 NORTHBOUND	2	1	--
					SUBTOTAL	24	12	10

MARKING REMOVAL

CATEGORY	STAGE	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
	1								
0010		148+80	-	336+00	USH 45 NORTHBOUND	23,420	1,905	162	8
		336+00	-	526+00	USH 45 NORTHBOUND	23,763	650	88	15
		526+00	-	565+00	USH 45 NORTHBOUND	4,888	445	50	10
					TOTAL 0010	52,070	3,000	300	33

PAVEMENT MARKING EACH (CONTINUED)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.5420 MARKING AERIAL EACH
	4							
0010		147+68	-	149+43	USH 45 SOUTHBOUND	2	1	--
		170+03	-	198+08	TWLTL	12	--	--
		203+14	-	205+14	USH 45 SOUTHBOUND	2	1	--
		206+64	-	253+16	TWLTL	22	--	--
		265+70	-	267+69	USH 45 SOUTHBOUND	2	1	--
		266+21	-	269+20	USH 45 SOUTHBOUND	2	1	--
		271+05	-	273+10	TWLTL	14	--	--
		300+05	-	302+05	USH 45 SOUTHBOUND	2	1	--
		303+55	-	317+39	TWLTL	6	--	--
		322+82	-	324+02	TWLTL	8	--	--
		345+83	-	348+83	USH 45 SOUTHBOUND	2	1	--
		350+34	-	434+33	TWLTL	38	--	--
				376+44	USH 45 SOUTHBOUND	--	--	2
				383+05	USH 45 SOUTHBOUND	--	--	2
				389+64	USH 45 SOUTHBOUND	--	--	2
				396+25	USH 45 SOUTHBOUND	--	--	2
				402+86	USH 45 SOUTHBOUND	--	--	2
		440+44	-	443+44	USH 45 SOUTHBOUND	2	1	--
		440+78	-	442+78	USH 45 SOUTHBOUND	2	1	--
		476+29	-	497+66	TWLTL	10	--	--
		503+74	-	506+74	USH 45 SOUTHBOUND	2	1	--
		514+32	-	527+79	TWLTL	6	--	--
		534+09	-	536+09	USH 45 SOUTHBOUND	2	1	--
		534+45	-	537+45	USH 45 SOUTHBOUND	2	1	--
		549+31	-	552+81	USH 45 SOUTHBOUND	2	1	--
					SUBTOTAL	140	12	10
					TOTAL 0010	164	24	20

3

STAKING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.7500 CONSTRUCTION STAKING CONCRETE BARRIER LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 1600-15-70) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
	1													
0010		148+80	-	336+00	LT/RT	1075	1075	-	-	-	-	1	-	SOUTH MEDIAN CROSSOVER
0010		336+00	-	526+00	LT/RT	-	-	-	-	-	-	-	-	
0010		526+00	-	565+00	LT/RT	800	800	-	-	-	-	-	800	NB TEMP WIDENING
					SUBTOTAL	1875	1875	0	0	0	0	1	800	
	2													
0010		148+80	-	336+00	LT	-	-	-	-	-	18,720	-	275	
0010		336+00	-	526+00	LT	-	-	428	-	60	19,000	-	1,950	
0010		335+00	-	337+00	LT	40	-	-	40	-	-	-	-	CONCRETE APPROACH SLABS
0010		526+00	-	565+00	LT	-	-	106	-	-	500	-	1,250	
0010		526+00	-	565+00	LT	600	600	-	-	-	-	-	600	SB TEMP WIDENING
					SUBTOTAL	640	600	534	40	60	38220	0	4075	
	3													
0010		148+80	-	336+00	RT	-	-	340	-	-	18,720	-	275	
0010		336+00	-	526+00	RT	-	-	110	-	60	19,000	-	1,650	
0010		335+00	-	337+00	RT	40	-	-	40	-	-	-	-	CONCRETE APPROACH SLABS
0010		526+00	-	565+00	RT	-	-	553	-	-	3,900	-	2,250	
					SUBTOTAL	40	0	1003	40	60	41620	0	4175	
	4													
0010		148+80	-	336+00	LT/RT	-	-	7,318	-	-	-	-	-	
0010		336+00	-	526+00	LT/RT	-	-	3,770	-	-	-	-	-	
0010		526+00	-	565+00	LT/RT	-	-	-	-	-	-	-	-	
					SUBTOTAL	0	0	11,088	0	0	0	0	0	
					TOTAL 0010	2,555	2,475	12,625	80	120	79,840	1	9,050	

SAWING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
	1							
0010		148+80	-	159+00	MEDIAN	2200	300	TEMP MEDIAN CROSSOVER AREA
0010		148+80	-	336+00	RT	70	-	LAKESHORE DRIVE SPLITTER ISLAND
0010		526+00	-	565+00	RT	810	-	TEMP NB SHOULDER WIDENING
					SUBTOTAL	3080	300	
	2							
0010		148+80	-	336+00	LT	490	-	DRIVEWAYS, SIDEROADS, SB PROJECT LIMIT
0010		336+00	-	526+00	LT	1158	-	DRIVEWAYS, SIDEROADS
0010		526+00	-	565+00	LT	392	-	DRIVEWAYS, SIDEROADS, SB PROJECT LIMIT
					SUBTOTAL	2040	0	
	3							
0010		148+80	-	336+00	RT	810	-	DRIVEWAYS, SIDEROADS, NB PROJECT LIMIT
0010		336+00	-	526+00	RT	940	-	DRIVEWAYS, SIDEROADS
0010		526+00	-	565+00	RT	600	-	DRIVEWAYS, SIDEROADS, NB PROJECT LIMIT
					SUBTOTAL	2,350	0	
	4							
0010		148+80	-	159+00	MEDIAN	-	300	TEMP MEDIAN CROSSOVER AREA
0010		336+00	-	526+00	LT	70	-	TEMP NE 7TH STREET WIDENING
0010		526+00	-	565+00	LT	760	-	STH 110 SPLITTER ISLAND, TEMP SB SHOULDER WIDENING
					SUBTOTAL	830	300	
					TOTAL 0010	8,300	600	

BAT DETERRENT SYSTEM

CATEGORY	STATION	LOCATION	SPV.0060.01 SPECIAL (01. MAINTAINING BAT DETERRENT SYSTEM STATION 336+00) EACH
0010	336+00	STRUCTURE B-68-0051	1
		TOTAL 0010	1

TURTLE EXCLUSION FENCING

CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	999.2105.S MAINTAINING CLIMBING TURTLE EXCLUSION FENCE LF	SPV.0090.02 SPECIAL (02. MAINTAINING EXCLUSION FENCE) LF	SPV.0090.03 SPECIAL (03. INSTALLING AND MAINTAINING SILT FENCE ON TURTLE EXCLUSION FENCE) LF
0010	USH 45	159+75	-	160+50	LT	-	165	-
0010	USH 45	159+75	-	160+50	RT	-	200	-
0010	USH 45	182+00	-	183+50	RT	-	265	-
0010	USH 45	182+50	-	183+50	LT	-	175	-
0010	USH 45	188+00	-	189+50	LT	-	235	-
0010	USH 45	188+00	-	190+00	RT	-	290	-
0010	USH 45	333+00	-	336+00	LT	345	-	152
0010	USH 45	333+00	-	336+00	RT	400	-	31
0010	USH 45	336+00	-	338+50	LT	330	-	35
0010	USH 45	336+00	-	338+50	RT	340	-	43
0010	USH 45	375+00	-	380+00	LT	585	-	-
					TOTAL 0010	2,000	1,330	270

TRANSPORTATION PROJECT PLAT NO: 1600-15-20-4.01

THAT PART OF THE SOUTHEAST ¼ OF THE SOUTHWEST ¼, SECTION 8 AND THAT PART OF THE NORTHEAST ¼ OF THE NORTHWEST ¼, SECTION 17, ALL IN TOWNSHIP 25 NORTH, RANGE 14 EAST, TOWN OF LARRABEE, WAUPACA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45, CLINTONVILLE TO WITTENBERG, CTH C TO GOLLNOW ROAD, WAUPACA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

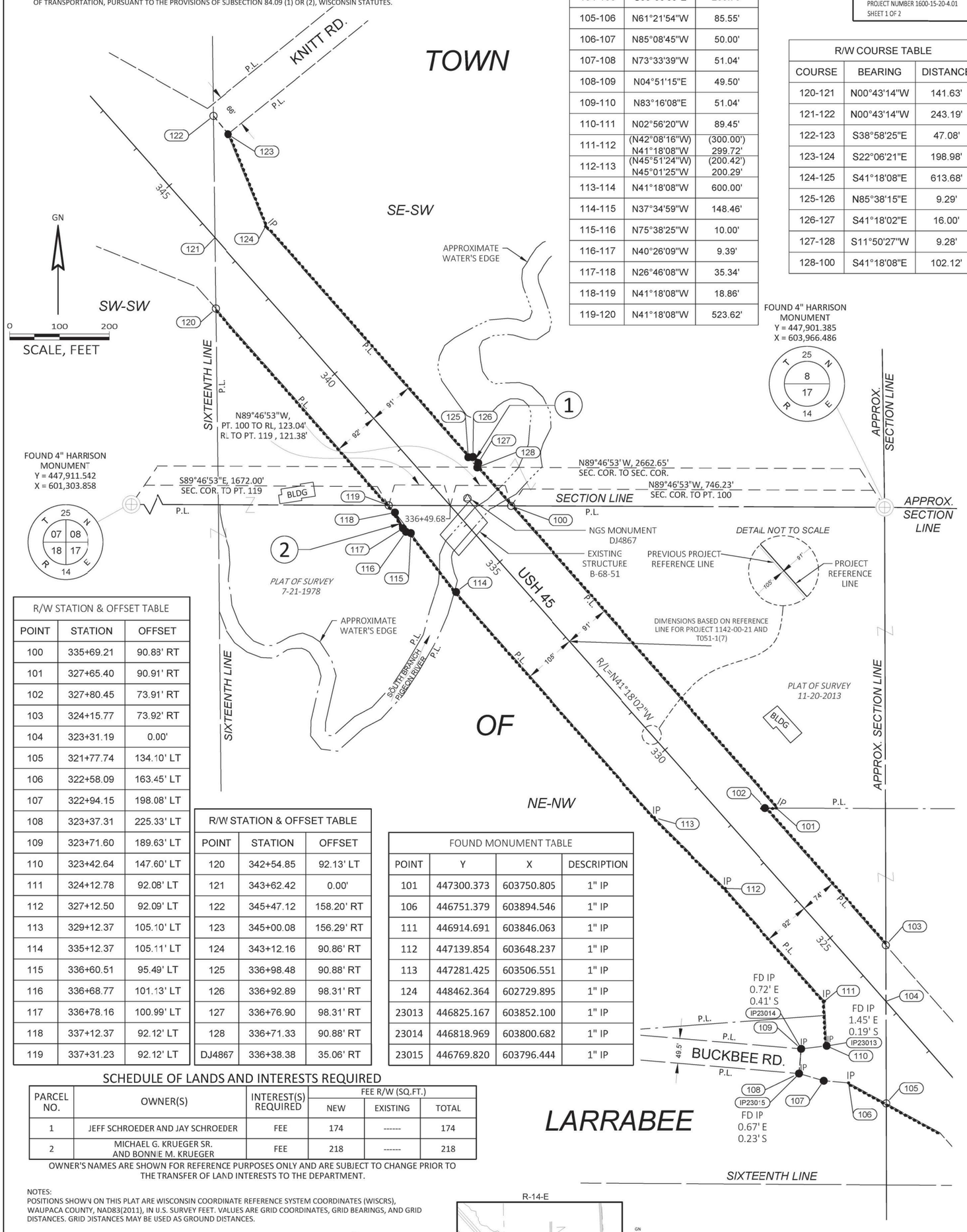
Doc No: 928257
Recorded on
2/13/2025 2:21 PM
JEREMY SCHOENIKE
WAUPACA COUNTY
REGISTER OF DEEDS
Fee Amount:

This document has been electronically recorded

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1600-15-20-4.01
SHEET 1 OF 2

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	S41°18'08"E	803.82'
101-102	N89°47'12"W	22.70'
102-103	S41°18'08"E	364.67'
103-104	S00°09'05"E	112.33'
104-105	S00°09'05"E	203.79'
105-106	N61°21'54"W	85.55'
106-107	N85°08'45"W	50.00'
107-108	N73°33'39"W	51.04'
108-109	N04°51'15"E	49.50'
109-110	N83°16'08"E	51.04'
110-111	N02°56'20"W	89.45'
111-112	(N42°08'16"W) N41°18'08"W	(300.00') 299.72'
112-113	(N45°51'24"W) N45°01'25"W	(200.42') 200.29'
113-114	N41°18'08"W	600.00'
114-115	N37°34'59"W	148.46'
115-116	N75°38'25"W	10.00'
116-117	N40°26'09"W	9.39'
117-118	N26°46'08"W	35.34'
118-119	N41°18'08"W	18.86'
119-120	N41°18'08"W	523.62'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
120-121	N00°43'14"W	141.63'
121-122	N00°43'14"W	243.19'
122-123	S38°58'25"E	47.08'
123-124	S22°06'21"E	198.98'
124-125	S41°18'08"E	613.68'
125-126	N85°38'15"E	9.29'
126-127	S41°18'02"E	16.00'
127-128	S11°50'27"W	9.28'
128-100	S41°18'08"E	102.12'



R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
100	335+69.21	90.83' RT
101	327+65.40	90.91' RT
102	327+80.45	73.91' RT
103	324+15.77	73.92' RT
104	323+31.19	0.00'
105	321+77.74	134.10' LT
106	322+58.09	163.45' LT
107	322+94.15	198.08' LT
108	323+37.31	225.33' LT
109	323+71.60	189.63' LT
110	323+42.64	147.60' LT
111	324+12.78	92.08' LT
112	327+12.50	92.09' LT
113	329+12.37	105.10' LT
114	335+12.37	105.11' LT
115	336+60.51	95.49' LT
116	336+68.77	101.13' LT
117	336+78.16	100.99' LT
118	337+12.37	92.12' LT
119	337+31.23	92.12' LT

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
120	342+54.85	92.13' LT
121	343+62.42	0.00'
122	345+47.12	158.20' RT
123	345+00.08	156.29' RT
124	343+12.16	90.86' RT
125	336+98.48	90.88' RT
126	336+92.89	98.31' RT
127	336+76.90	98.31' RT
128	336+71.33	90.88' RT
DJ4867	336+38.38	35.06' RT

FOUND MONUMENT TABLE			
POINT	Y	X	DESCRIPTION
101	447300.373	603750.805	1" IP
106	446751.379	603894.546	1" IP
111	446914.691	603846.063	1" IP
112	447139.854	603648.237	1" IP
113	447281.425	603506.551	1" IP
124	448462.364	602729.895	1" IP
23013	446825.167	603852.100	1" IP
23014	446818.969	603800.682	1" IP
23015	446769.820	603796.444	1" IP

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W (SQ.FT.)		
			NEW	EXISTING	TOTAL
1	JEFF SCHROEDER AND JAY SCHROEDER	FEE	174	------	174
2	MICHAEL G. KRUEGER SR. AND BONNIE M. KRUEGER	FEE	218	------	218

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), WAUPACA COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

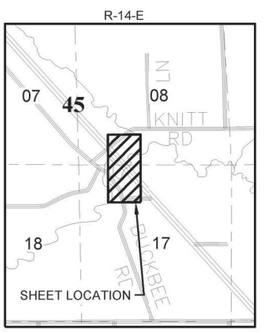
EXISTING ACCESS CONTROL ALONG USH 45 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECTS 1142-00-21 AND T051-1(7).

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTRACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
USH 45: PREVIOUS PROJECT NUMBERS 1142-00-21 AND T051-1(7), PLAT OF SURVEY 11-20-2013, PLAT OF SURVEY 7-21-1978
BUCKBEE ROAD: PREVIOUS PROJECT NUMBER 1142-00-21 AND T051-1(7)
KNITT ROAD: PREVIOUS PROJECT NUMBER 1142-00-21 AND T051-1(7)

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.



I, DOUGLAS A. DJOCK, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

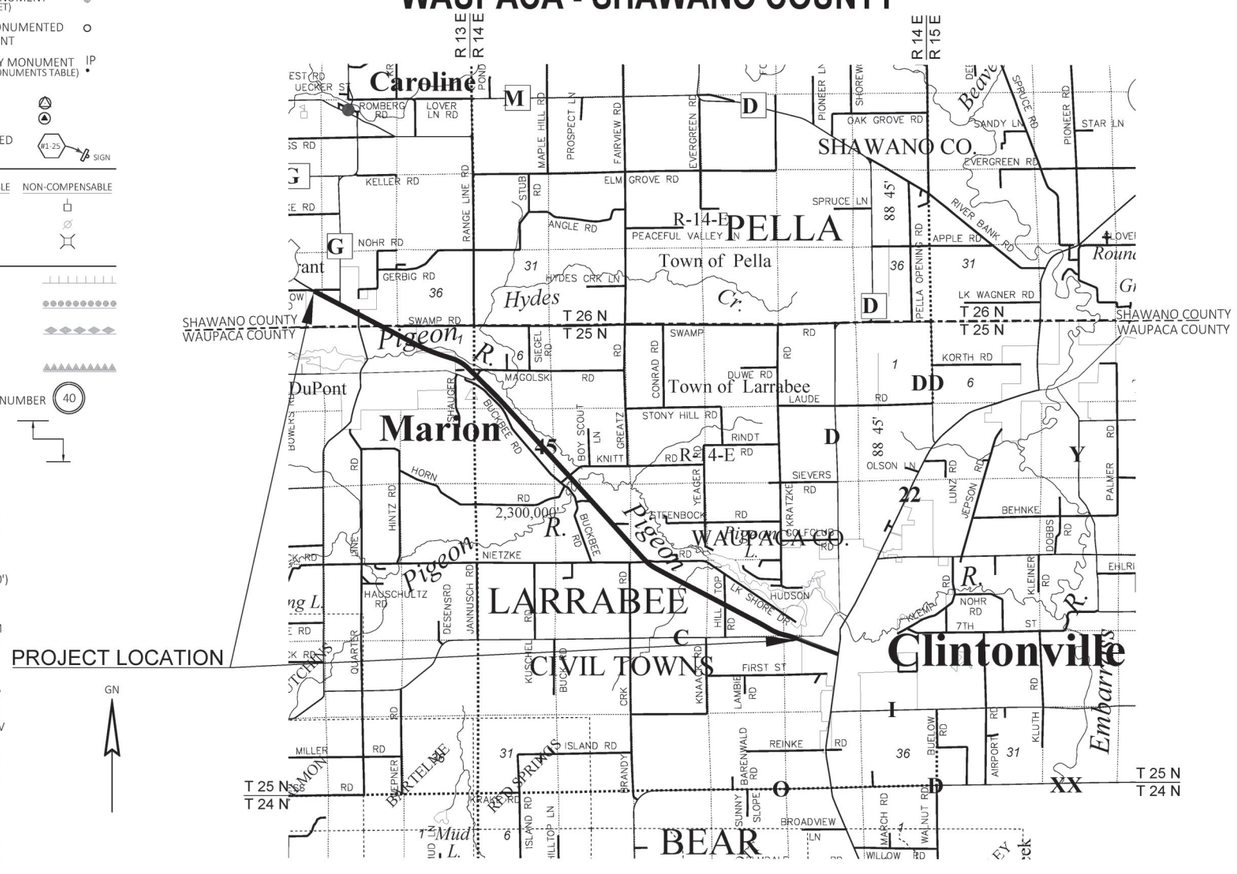
SIGNATURE: Douglas A Djock DATE: 2/7/2025
PRINT NAME: DOUGLAS A. DJOCK
REGISTRATION NUMBER: S-3222
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION - NORTH CENTRAL REGION.
SIGNATURE: Kevin A. Kujawa DATE: 02/13/2025
PRINT NAME: Kevin A. Kujawa

AYRES

WISCONSIN DOUGLAS A. DJOCK S-3222 EAU CLAIRE, WI LAND SURVEYOR

1600-15-20-4.01
PLOT SCALE : 1:100
PLOT NAME :
PLOT BY : AYRES ASSOCIATES
PLOT DATE : 2/12/2025 11:19 AM
PLOT DATE :
PLOT DATE :
FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\RW\16001520_401_RECOVER.DWG
APPRAISAL PLAT DATE : 2/7/2025

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
1600-15-20
CLINTONVILLE - WITTENBERG
CTH C TO GOLLNOW ROAD
UTH 45
WAUPACA - SHAWANO COUNTY



THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1600-15-20.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), WAUPACA COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
PERMITTED SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND SURVEY MONUMENT (SEE FOUND MONUMENTS TABLE)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	○
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	✱	✱

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	⊠

PROJECT NUMBER 1600-15-20-4.01
SHEET 2 OF 2

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\RW\16001520_400.DWG
PLOT DATE : 2/7/2025 1:56 PM
PLOT BY : D'JOCK, DOUGLAS
PLOT NAME : _____

1600-15-20-4.01

4

TRANSPORTATION PROJECT PLAT NO: 1600-15-20-4.02

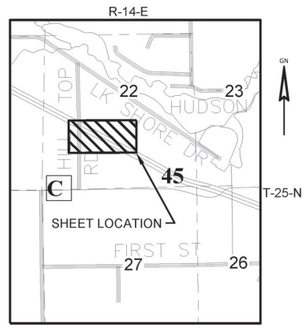
THAT PART OF THE NORTHEAST ¼ OF THE SOUTHWEST ¼ AND THAT PART OF THE NORTHWEST ¼ OF THE SOUTHEAST ¼ OF SECTION 22 IN TOWNSHIP 25 NORTH, RANGE 14 EAST, TOWN OF LARRABEE, WAUPACA COUNTY, WISCONSIN.

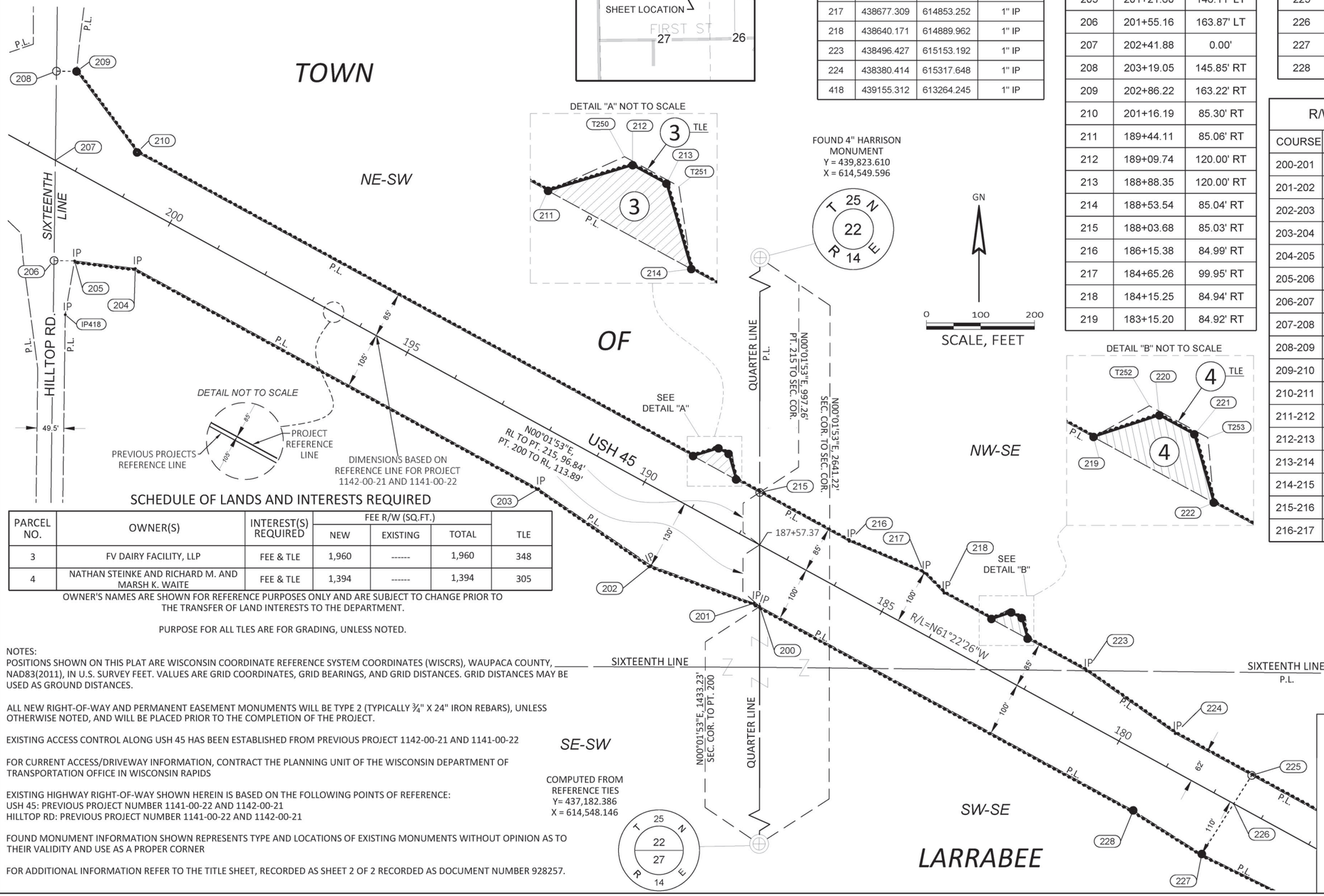
RELOCATION ORDER USH 45, CLINTONVILLE TO WITTENBERG, CTH C TO GOLLNOW ROAD, WAUPACA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.





DETAIL "A" NOT TO SCALE

FOUND 4" HARRISON MONUMENT
Y = 439,823.610
X = 614,549.596

DETAIL "B" NOT TO SCALE

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W (SQ.FT.) NEW	EXISTING	TOTAL	TLE
3	FV DAIRY FACILITY, LLP	FEE & TLE	1,960	------	1,960	348
4	NATHAN STEINKE AND RICHARD M. AND MARSH K. WAITE	FEE & TLE	1,394	------	1,394	305

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PURPOSE FOR ALL TLES ARE FOR GRADING, UNLESS NOTED.

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), WAUPACA COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING ACCESS CONTROL ALONG USH 45 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 1142-00-21 AND 1141-00-22

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTRACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
USH 45: PREVIOUS PROJECT NUMBER 1141-00-22 AND 1142-00-21
HILLTOP RD: PREVIOUS PROJECT NUMBER 1141-00-22 AND 1142-00-21

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATIONS OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPER CORNER

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 RECORDED AS DOCUMENT NUMBER 928257.

COMPUTED FROM REFERENCE TIES
Y= 437,182.386
X = 614,548.146

T 25 N
22
27
R 14 E

FOUND MONUMENT TABLE			
POINT	Y	X	DESCRIPTION
200	438615.614	614548.933	1" IP
201	438621.540	614538.081	1" IP
202	438691.161	614347.996	1" IP
203	438833.274	614139.915	1" IP
204	439240.708	613393.810	1" IP
205	439254.854	613281.486	1" IP
216	438736.089	614714.316	1" IP
217	438677.309	614853.252	1" IP
218	438640.171	614889.962	1" IP
223	438496.427	615153.192	1" IP
224	438380.414	615317.648	1" IP
418	439155.312	613264.245	1" IP

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
200	187+02.83	100.00' LT
201	187+15.19	99.99' LT
202	189+15.40	129.95' LT
203	191+66.13	104.90' LT
204	200+16.23	104.72' LT
205	201+21.60	146.11' LT
206	201+55.16	163.87' LT
207	202+41.88	0.00'
208	203+19.05	145.85' RT
209	202+86.22	163.22' RT
210	201+16.19	85.30' RT
211	189+44.11	85.06' RT
212	189+09.74	120.00' RT
213	188+88.35	120.00' RT
214	188+53.54	85.04' RT
215	188+03.68	85.03' RT
216	186+15.38	84.99' RT
217	184+65.26	99.95' RT
218	184+15.25	84.94' RT
219	183+15.20	84.92' RT

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
220	182+88.85	113.00' RT
221	182+66.80	113.00' RT
222	182+39.12	84.91' RT
223	181+15.33	84.88' RT
224	179+15.39	61.84' RT
225	177+53.99	61.80' RT
226	177+58.10	0.00'
227	177+65.43	110.19' LT
228	179+15.43	100.16' LT

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
200-201	N61° 21' 43"W	12.36'
201-202	(N70° 44' 22"W) N69° 53' 03"W	(202.24') 202.43'
202-203	(N56° 29' 53"W) N55° 40' 05"W	(251.25') 251.98'
203-204	(N62° 12' 31"W) N61° 21' 43"W	(850.00') 850.10'
204-205	(N83° 45' 54"W) N82° 49' 20"W	(113.05') 113.21'
205-206	N89° 15' 33"W	37.97'
206-207	N00° 44' 27"E	185.40'
207-208	N00° 44' 27"E	165.00'
208-209	S89° 15' 33"E	37.14'
209-210	S36° 45' 20"E	187.03'
210-211	S61° 21' 43"E	1172.08'
211-212	N73° 09' 06"E	49.01'
212-213	S61° 22' 26"E	21.39'
213-214	S16° 14' 58"E	49.34'
214-215	S61° 21' 43"E	49.86'
215-216	S61° 21' 43"E	188.30'
216-217	(S67° 55' 09"E) S67° 04' 06"E	(150.75') 150.86'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
217-218	(S45° 30' 34"E) S44° 40' 06"E	(52.20') 52.22'
218-219	S61° 21' 43"E	100.05'
219-220	N71° 48' 06"E	38.50'
220-221	S61° 22' 26"E	22.05'
221-222	S15° 56' 49"E	39.44'
222-223	S61° 21' 43"E	123.79'
223-224	(S55° 38' 54"E) S54° 47' 59"E	(201.32') 201.26'
224-225	S61° 21' 43"E	161.40'
225-226	S32° 25' 47"W	61.94'
226-227	S32° 25' 47"W	110.44'
227-228	N57° 32' 52"W	150.33'
228-200	N61° 21' 43"W	787.40'

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T250	189+15.98	122.00' RT
T251	188+81.54	122.00' RT
T252	182+96.26	115.00' RT
T253	182+59.26	115.00' RT

Doc No: 929365
Recorded on
4/2/2025 1:12 PM
JEREMY SCHOENIKE
WAUPACA COUNTY
REGISTER OF DEEDS
Fee Amount:

This document has been electronically recorded

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1600-15-20-4.02
SHEET 1 OF 1

I, DOUGLAS A. D'JOCK, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

AYRES

WISCONSIN
DOUGLAS A. D'JOCK
S-3222
EAU CLAIRE, WI
LAND SURVEYOR

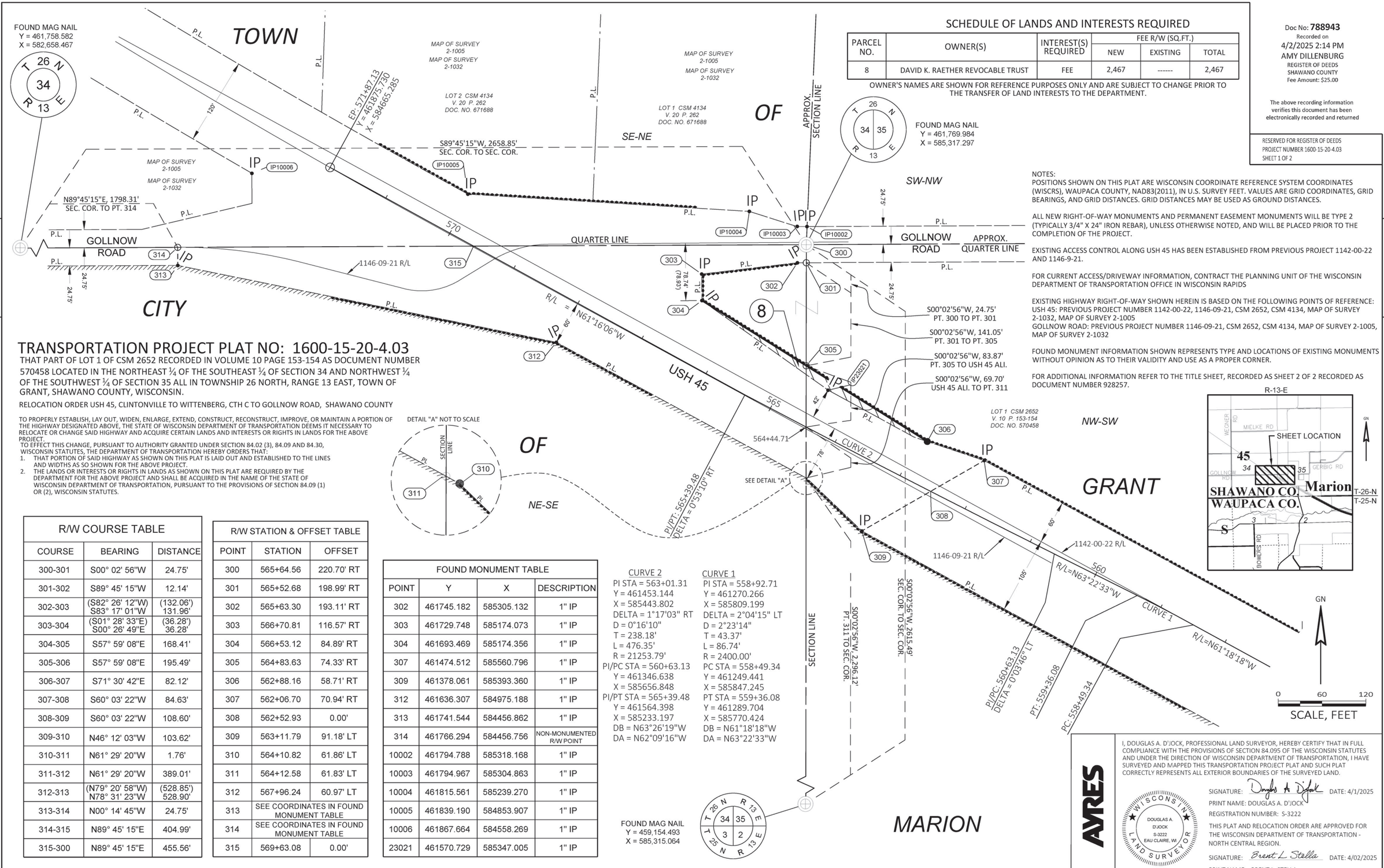
SIGNATURE: Douglas A D'Jock DATE: 4/1/2025
PRINT NAME: DOUGLAS A. D'JOCK
REGISTRATION NUMBER: S-3222

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION - NORTH CENTRAL REGION.

SIGNATURE: Brent L Stella DATE: 4/02/2025
PRINT NAME: BRENT L. STELLA

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\RW\16001520_402.DWG
APPRAISAL PLAT DATE : 4/1/2025
PLOT DATE : 4/2/2025 8:51 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1:100
1600-15-20-4.02

4



TRANSPORTATION PROJECT PLAT NO: 1600-15-20-4.03

THAT PART OF LOT 1 OF CSM 2652 RECORDED IN VOLUME 10 PAGE 153-154 AS DOCUMENT NUMBER 570458 LOCATED IN THE NORTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 34 AND NORTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 35 ALL IN TOWNSHIP 26 NORTH, RANGE 13 EAST, TOWN OF GRANT, SHAWANO COUNTY, WISCONSIN.

RELOCATION ORDER USH 45, CLINTONVILLE TO WITTENBERG, CTH C TO GOLLNOW ROAD, SHAWANO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W (SQ.FT.)		
			NEW	EXISTING	TOTAL
8	DAVID K. RAETHER REVOCABLE TRUST	FEE	2,467	------	2,467

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

Doc No: **788943**
Recorded on
4/2/2025 2:14 PM
AMY DILLENBURG
REGISTER OF DEEDS
SHAWANO COUNTY
Fee Amount: $25.00

The above recording information verifies this document has been electronically recorded and returned

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1600-15-20-4.03
SHEET 1 OF 2

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), WAUPACA COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBAR), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING ACCESS CONTROL ALONG USH 45 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 1142-00-22 AND 1146-9-21.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTRACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
USH 45: PREVIOUS PROJECT NUMBER 1142-00-22, 1146-09-21, CSM 2652, CSM 4134, MAP OF SURVEY 2-1032, MAP OF SURVEY 2-1005
GOLLNOW ROAD: PREVIOUS PROJECT NUMBER 1146-09-21, CSM 2652, CSM 4134, MAP OF SURVEY 2-1005, MAP OF SURVEY 2-1032

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATIONS OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPER CORNER.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 RECORDED AS DOCUMENT NUMBER 928257.

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
300-301	S00° 02' 56"W	24.75'
301-302	S89° 45' 15"W	12.14'
302-303	(S82° 26' 12"W) S83° 17' 01"W	(132.06') 131.96'
303-304	(S01° 28' 33"E) S00° 26' 49"E	(36.28') 36.28'
304-305	S57° 59' 08"E	168.41'
305-306	S57° 59' 08"E	195.49'
306-307	S71° 30' 42"E	82.12'
307-308	S60° 03' 22"W	84.63'
308-309	S60° 03' 22"W	108.60'
309-310	N46° 12' 03"W	103.62'
310-311	N61° 29' 20"W	1.76'
311-312	N61° 29' 20"W	389.01'
312-313	(N79° 20' 58"W) N78° 31' 23"W	(528.85') 528.90'
313-314	N00° 14' 45"W	24.75'
314-315	N89° 45' 15"E	404.99'
315-300	N89° 45' 15"E	455.56'

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
300	565+64.56	220.70' RT
301	565+52.68	198.99' RT
302	565+63.30	193.11' RT
303	566+70.81	116.57' RT
304	566+53.12	84.89' RT
305	564+83.63	74.33' RT
306	562+88.16	58.71' RT
307	562+06.70	70.94' RT
308	562+52.93	0.00'
309	563+11.79	91.18' LT
310	564+10.82	61.86' LT
311	564+12.58	61.83' LT
312	567+96.24	60.97' LT
313	SEE COORDINATES IN FOUND MONUMENT TABLE	
314	SEE COORDINATES IN FOUND MONUMENT TABLE	
315	569+63.08	0.00'

FOUND MONUMENT TABLE			
POINT	Y	X	DESCRIPTION
302	461745.182	585305.132	1" IP
303	461729.748	585174.073	1" IP
304	461693.469	585174.356	1" IP
307	461474.512	585560.796	1" IP
309	461378.061	585393.360	1" IP
312	461636.307	584975.188	1" IP
313	461741.544	584456.862	1" IP
314	461766.294	584456.756	NON-MONUMENTED R/W POINT
10002	461794.788	585318.168	1" IP
10003	461794.967	585304.863	1" IP
10004	461815.561	585239.270	1" IP
10005	461839.190	584853.907	1" IP
10006	461867.664	584558.269	1" IP
23021	461570.729	585347.005	1" IP

CURVE 2
PI STA = 563+01.31
Y = 461453.144
X = 585443.802
DELTA = 1°17'03" RT
D = 0°16'10"
T = 238.18'
L = 476.35'
R = 21253.79'
PI/PC STA = 560+63.13
Y = 461346.638
X = 585656.848
PI/PT STA = 565+39.48
Y = 461564.398
X = 585233.197
DB = N63°26'19"W
DA = N62°09'16"W

CURVE 1
PI STA = 558+92.71
Y = 461270.266
X = 585809.199
DELTA = 2°04'15" LT
D = 2°23'14"
T = 43.37'
L = 86.74'
R = 2400.00'
PC STA = 558+49.34
Y = 461249.441
X = 585847.245
PT STA = 559+36.08
Y = 461289.704
X = 585770.424
DB = N61°18'18"W
DA = N63°22'33"W

FOUND MAG NAIL
Y = 459,154.493
X = 585,315.064

I, DOUGLAS A. D'JOCK, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Douglas A D'Jock DATE: 4/1/2025
PRINT NAME: DOUGLAS A. D'JOCK
REGISTRATION NUMBER: S-3222

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION - NORTH CENTRAL REGION.

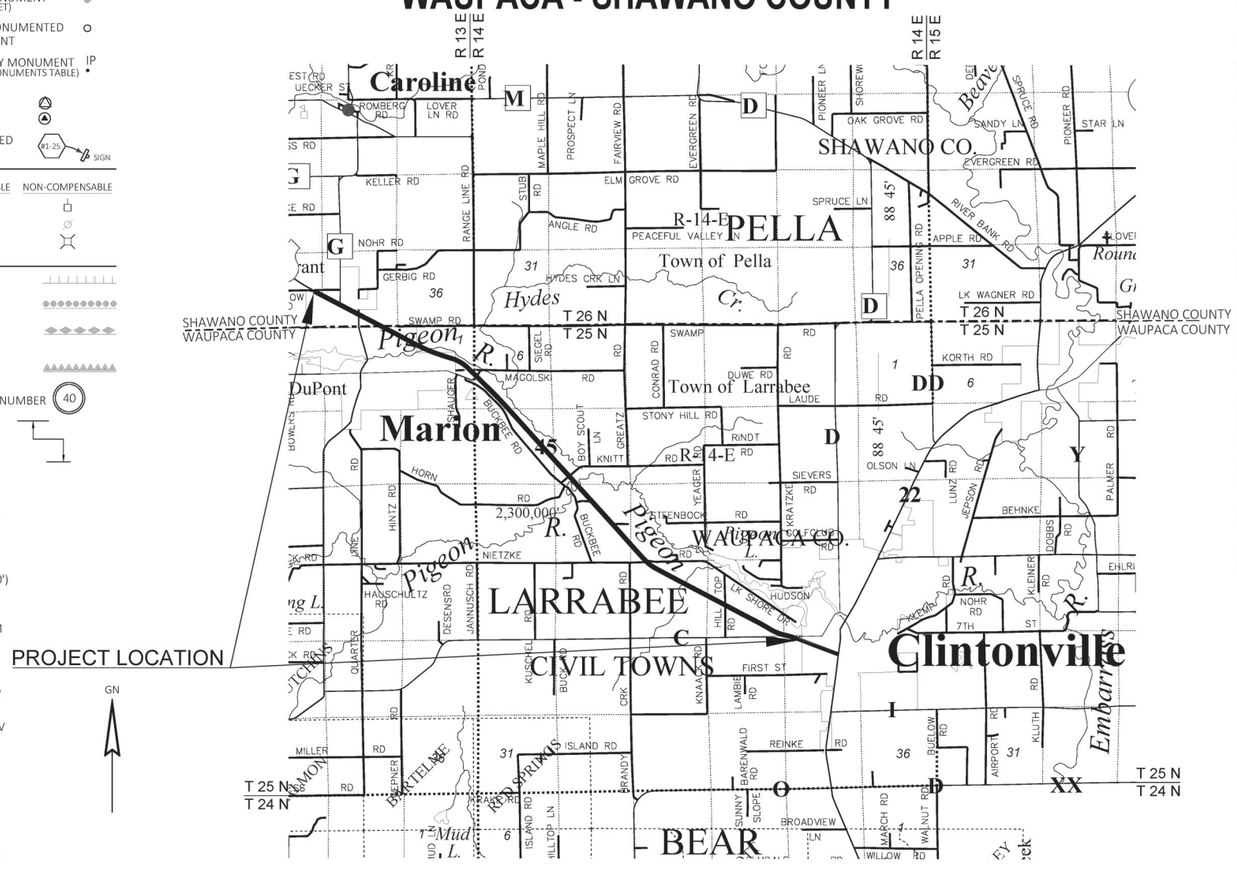
SIGNATURE: Brent L Stella DATE: 4/02/2025
PRINT NAME: BRENT L. STELLA

AYRES

WISCONSIN LAND SURVEYOR — DOUGLAS A. D'JOCK S-3222 EAU CLAIRE, WI

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\RW\16001520_403.DWG
APPRAISAL PLAT DATE : 4/1/2025
PLOT DATE : 4/2/2025 1:10 PM
PLOT BY : AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1:60

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
1600-15-20
CLINTONVILLE - WITTENBERG
CTH C TO GOLLNOW ROAD
USH 45
WAUPACA - SHAWANO COUNTY



THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1600-15-20.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), WAUPACA COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND SURVEY MONUMENT (SEE FOUND MONUMENTS TABLE)
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
PERMITTED SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	○
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	✱	⌀

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	⊠

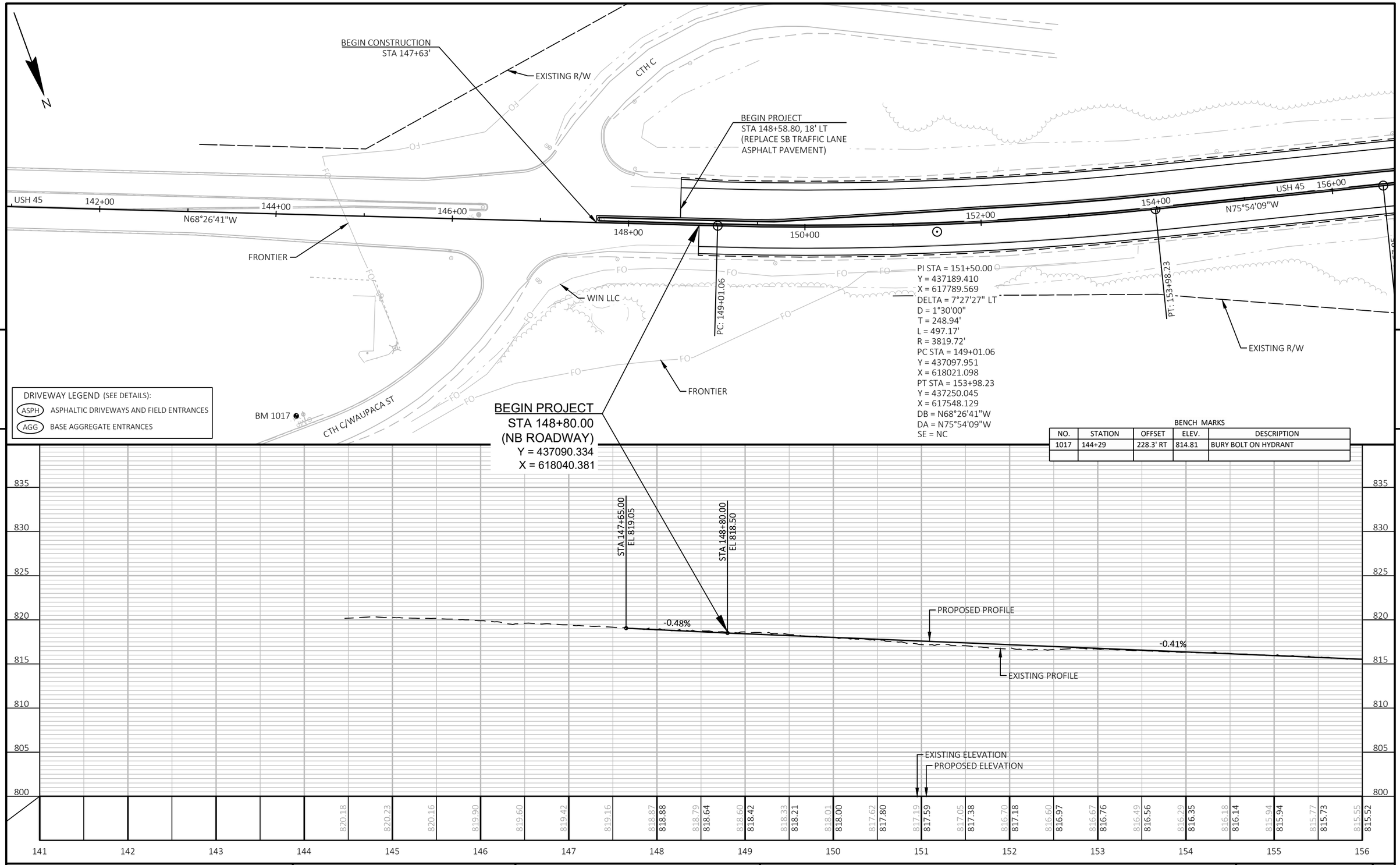
LAYOUT SCALE 0 1 MI.

PROJECT NUMBER 1600-15-20-4.03
SHEET 2 OF 2

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\RW\16001520_400.DWG
PLOT DATE : 3/11/2025 9:20 AM
PLOT BY : D'JOCK, DOUGLAS
PLOT NAME : _____

1600-15-20-4.03

4



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 199 E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 01
PLOT DATE : 8/27/2025 9:19 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

DRIVEWAY LEGEND (SEE DETAILS):

ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

AGG BASE AGGREGATE ENTRANCES

N

EXISTING R/W

FRONTIER

WETLAND BOUNDARY

BM 1016

156+00

158+00

160+00

162+00

164+00

166+00

168+00

170+00

USH 45

N58°40'53"W

PC: 156+57.95

PC: 169+68.59

PT: 166+42.00

WIN LLC

FRONTIER

WETLAND BOUNDARY

INVERT EL.= 809.8' (APPROXIMATE)

PI STA = 161+53.72
Y = 437434.062
X = 616815.398
DELTA = 17°13'15" RT
D = 1°45'00"
T = 495.76'
L = 984.05'
R = 3274.04'
PC STA = 156+57.95
Y = 437313.307
X = 617296.230
PT STA = 166+42.00
Y = 437691.757
X = 616391.872
DB = N75°54'09"W
DA = N58°40'53"W
SE = RC (MATCH EXISTING)
LR = 150' (MATCH EXISTING)

INVERT EL.= 810.6' (APPROXIMATE)

WETLAND BOUNDARY

EXISTING UNDERDRAIN OUTFALL TO REMAIN (LOCATION APPROXIMATE)

EXISTING R/W

INVERT EL.= 813.3' (APPROXIMATE)

4" WRAPPED PIPE UNDERDRAIN TO REMAIN (LOCATION APPROXIMATE)

PI STA = 172+37.89
Y = 438001.495
X = 615882.813
DELTA = 2°41'33" LT
D = 0°30'00"
T = 269.30'
L = 538.50'
R = 11459.16'
PC STA = 169+68.59
Y = 437861.514
X = 616112.874
PT STA = 175+07.09
Y = 438130.515
X = 615646.429
DB = N58°40'53"W
DA = N61°22'26"W
SE = NC

BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1016	160+38	83.2' LT	811.08	RR SPIKE IN TREE

VCL = 520.00

K = 386.25

LP STA 160+49.67
LP EL 813.99

VPC STA 158+90.00
VPC EL 814.32

VPI STA 161+50.00
VPI EL 813.25

VPT STA 164+10.00
VPT EL 815.68

STA 169+02.50
EL 820.27

0.93%

PROPOSED PROFILE

EXISTING PROFILE

EXISTING ELEVATION

PROPOSED ELEVATION

| | | | |

DRIVEWAY LEGEND (SEE DETAILS):

ASPH — ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

AGG — BASE AGGREGATE ENTRANCES

WETLANDS

EXISTING R/W

FRONTIER

WETLANDS

USH 45 172+00 174+00 176+00 178+00 180+00 182+00 184+00 USH 45 186+00

N61°22'26"W

PI STA = 172+37.89
Y = 438001.495
X = 615882.813
DELTA = 2°41'33" LT
D = 0°30'00"
T = 269.30'
L = 538.50'
R = 11459.16'
PC STA = 169+68.59
Y = 437861.514
X = 616112.874
PT STA = 175+07.09
Y = 438130.515
X = 615646.429
DB = N58°40'53"W
DA = N61°22'26"W
SE = NC

PT: 175+07.09

EXISTING R/W

BM 1015

WETLANDS

FEE

TLE

WIN LLC

BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1015	183+01	767' RT	821.12	NAIL IN TREE

EXISTING PROFILE

EXISTING ELEVATION

845 840 835 830 825 820 815 810

821.97 822.36 822.72 823.11 823.45 823.75 824.09 824.49 824.88 825.10 825.57 825.94 826.29 826.66 827.01 827.39 827.78 828.12 828.53 828.91 829.27 829.61 829.98 830.31 830.63 830.95 831.31 831.57 831.83 832.10 832.33

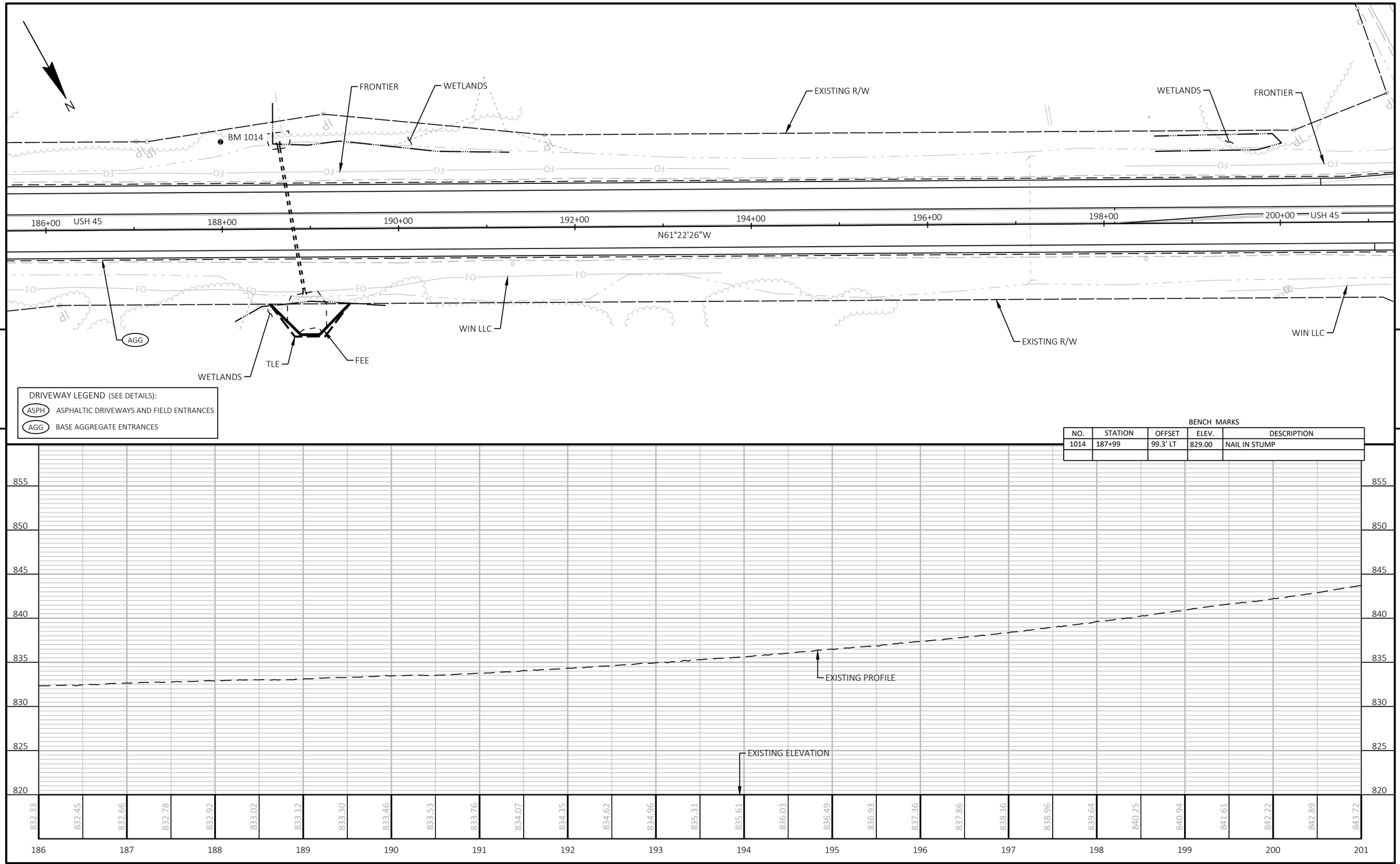
171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 201	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 03

PLOT DATE : 8/27/2025 9:20 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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DRIVEWAY LEGEND (SEE DETAILS):

(ASPH) ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

(AGG) BASE AGGREGATE ENTRANCES

BENCH MARKS

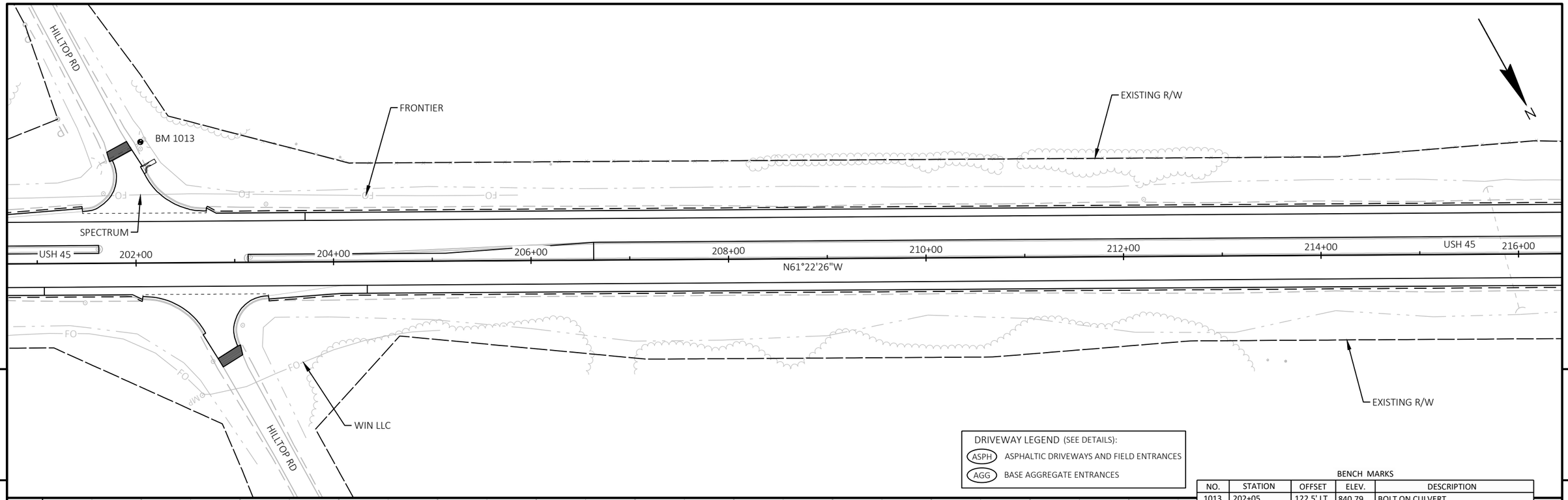
NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1014	187+99	99.3' LT	829.00	NAIL IN STUMP

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 202	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 04

PLOT DATE : 8/27/2025 9:20 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



BENCH MARKS

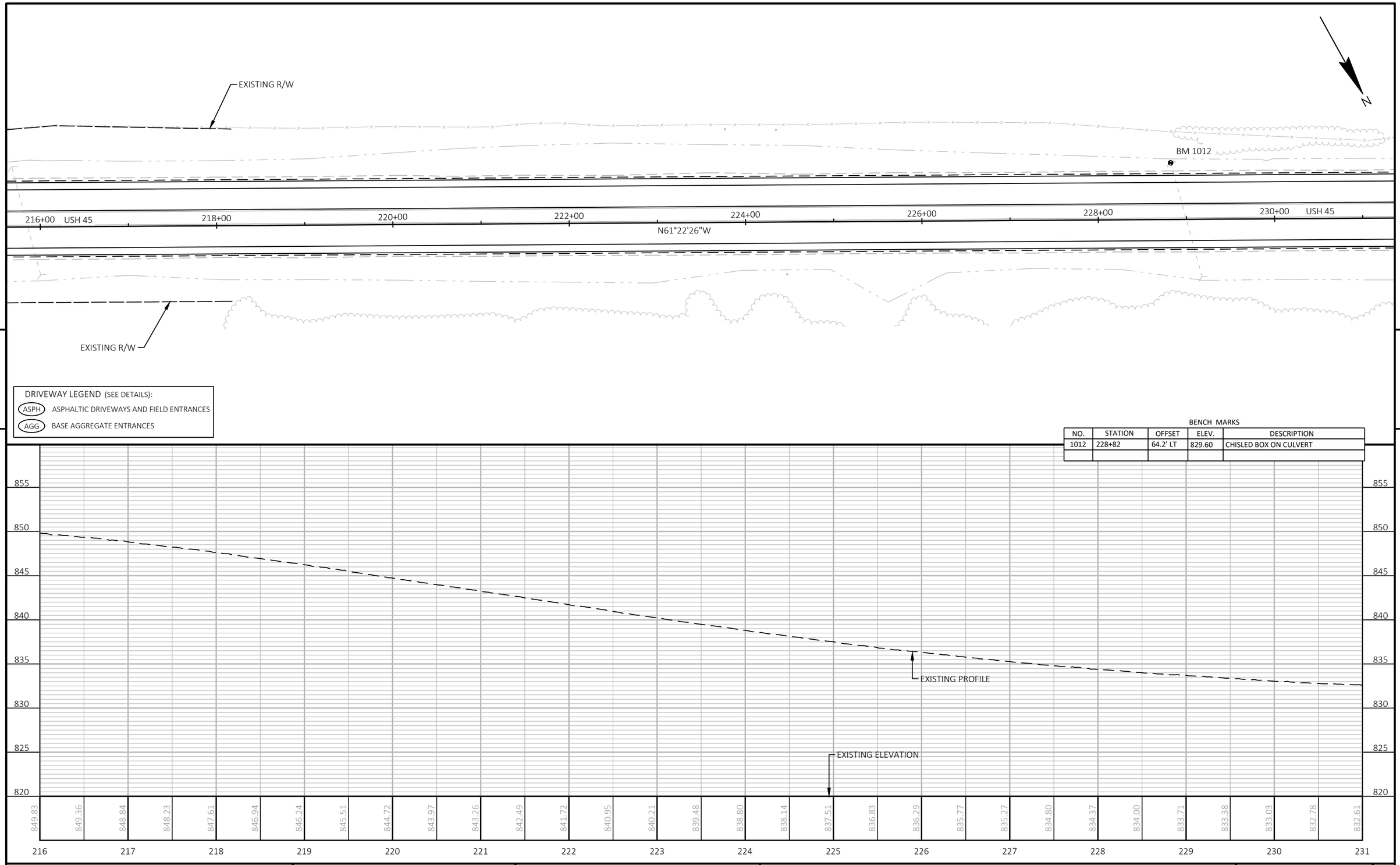
NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1013	202+05	122.5' LT	840.79	BOLT ON CULVERT

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 203	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 05

PLOT DATE : 8/27/2025 9:20 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



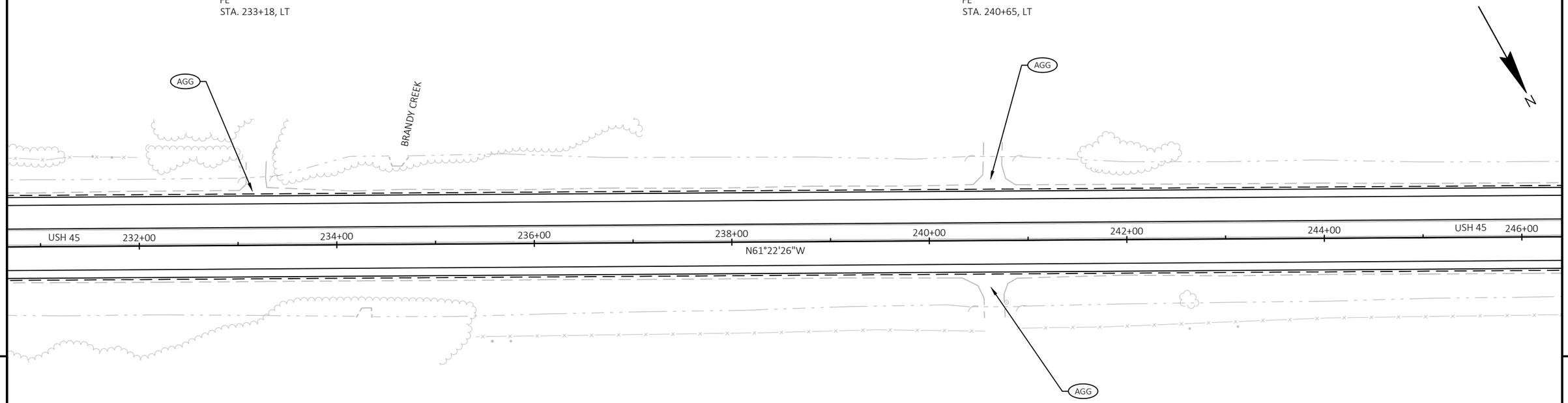
5 5

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 204	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 06
PLOT DATE : 8/27/2025 9:20 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

FE
STA. 233+18, LT

FE
STA. 240+65, LT



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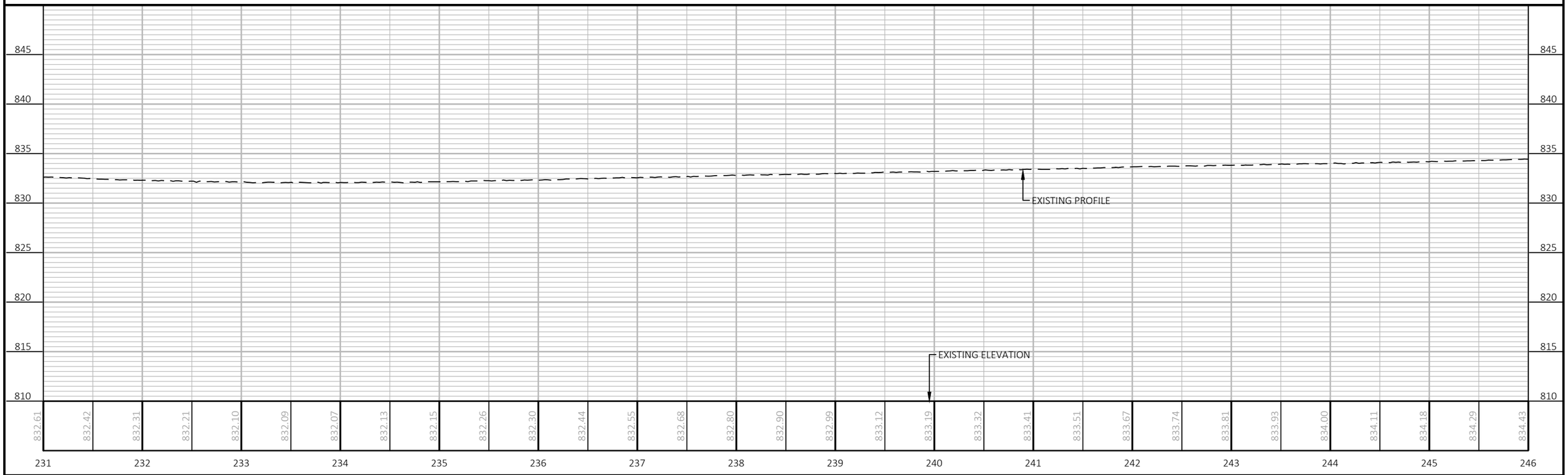
5

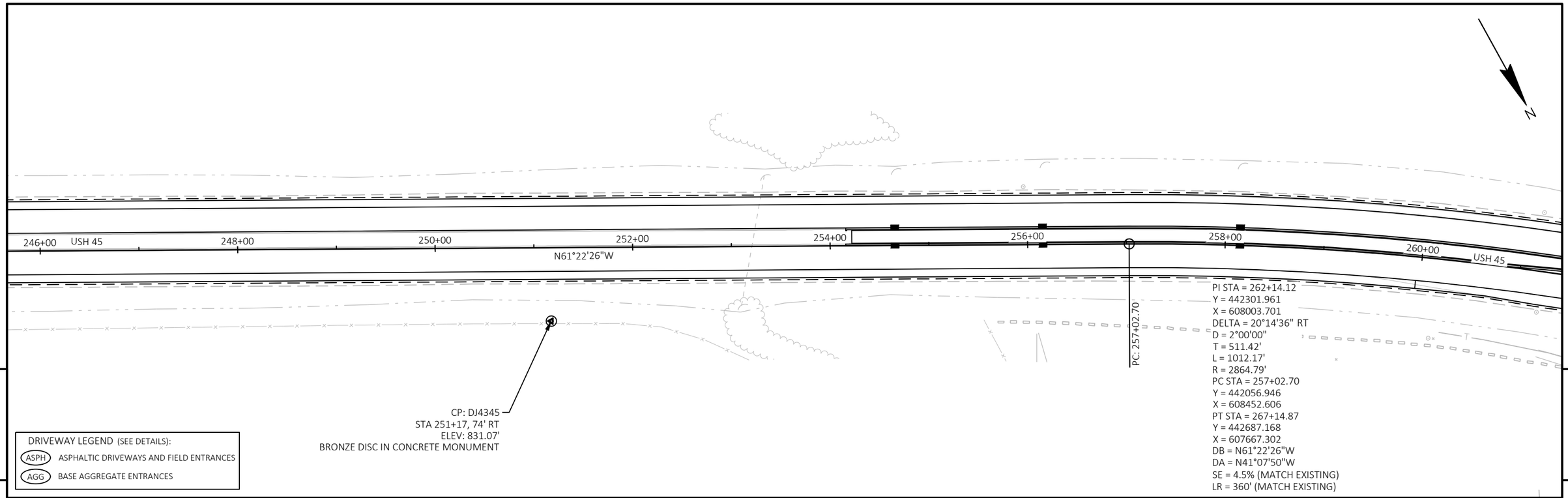
DRIVEWAY LEGEND (SEE DETAILS):
ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES
AGG BASE AGGREGATE ENTRANCES

FE
STA. 240+65, RT

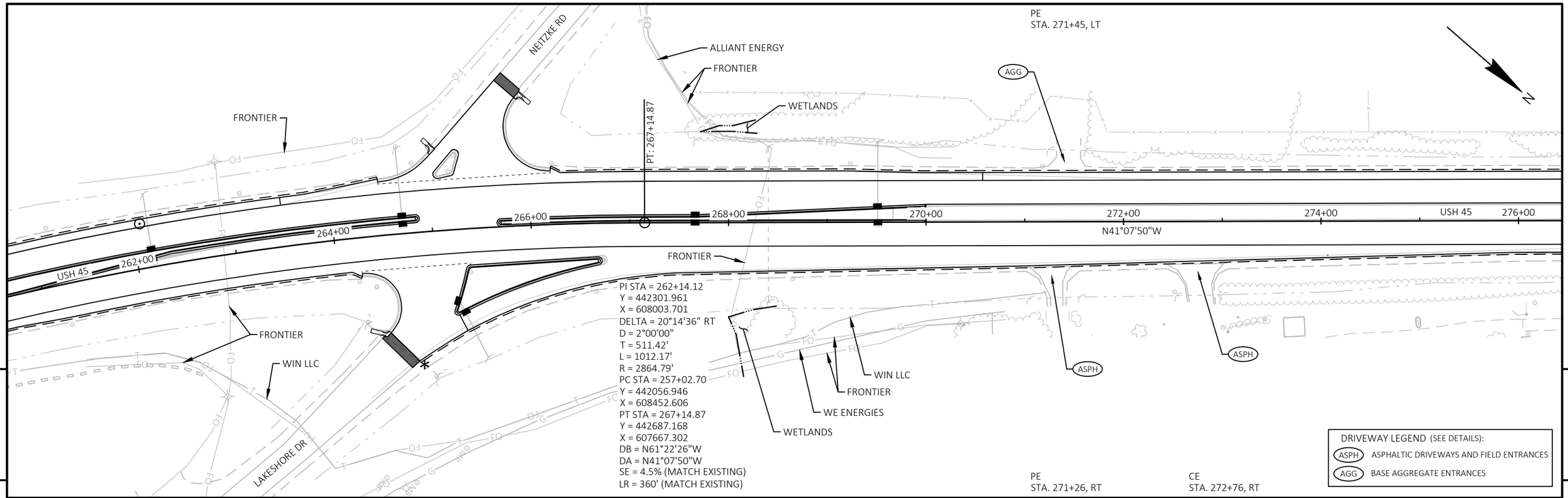


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 205	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 07
PLOT DATE : 8/27/2025 9:21 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

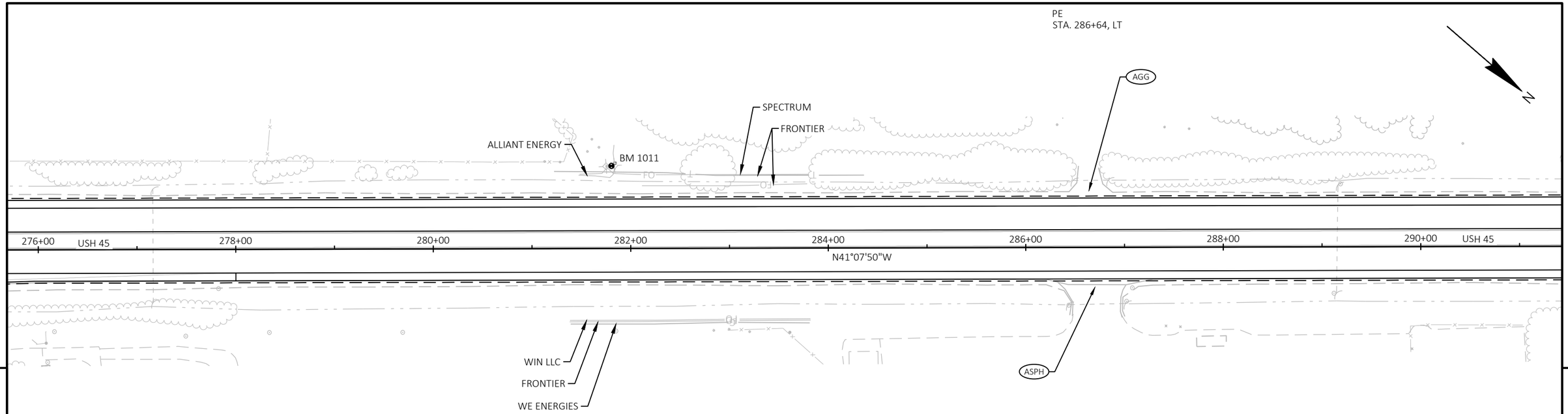


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 206	E



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 207	E

PE
STA. 286+64, LT



5

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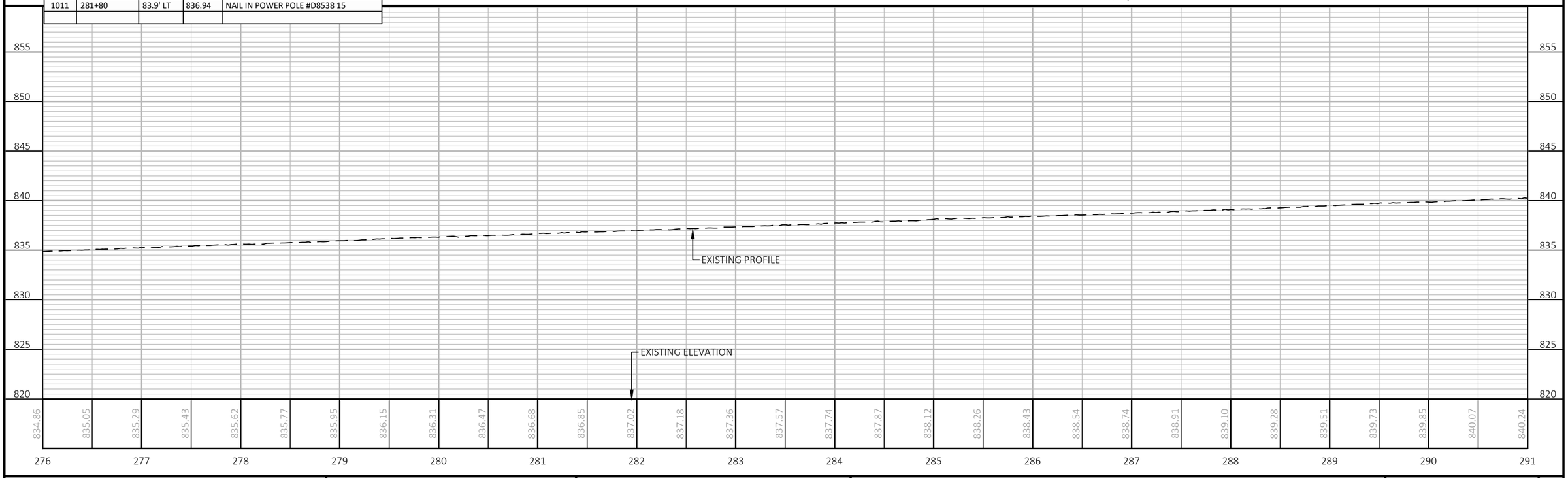
DRIVEWAY LEGEND (SEE DETAILS):
ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES
AGG BASE AGGREGATE ENTRANCES

BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1011	281+80	83.9' LT	836.94	NAIL IN POWER POLE #D8538 15

CE
STA. 286+72, RT



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 208	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 10
PLOT DATE : 8/27/2025 9:21 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

PE
STA. 296+04, LT

FE
STA. 296+77, LT

AGG

AGG

N

USH 45

292+00

294+00

296+00

298+00

N41°07'50"W

300+00

302+00

304+00

USH 45

306+00

PC: 305+63.83

AGG

AGG

ASPH

AGG

AGG

5

5

PE
STA. 292+44, RT

PE
STA. 297+69, RT

ALBERTS RD

PE
STA. 301+47, RT

PE
STA. 302+56, RT

FE
STA. 304+25, RT

DRIVEWAY LEGEND (SEE DETAILS):

ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

AGG BASE AGGREGATE ENTRANCES

855
850
845
840
835
830
825
820

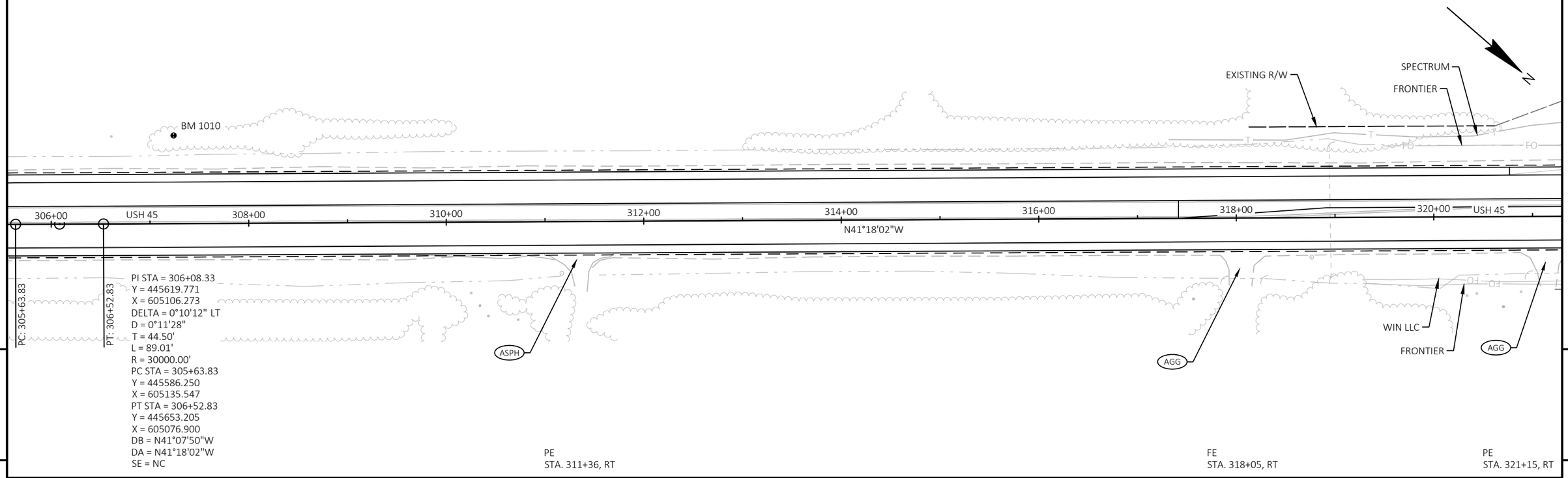
EXISTING PROFILE

EXISTING ELEVATION

840.24 840.41 840.53 840.77 840.94 841.10 841.23 841.44 841.59 841.80 841.99 842.16 842.31 842.48 842.67 842.85 843.02 843.21 843.60 843.66 843.71 843.81 843.93 844.00 844.07 844.08 844.06 844.10 844.05 843.95 843.85

291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 209	E



5

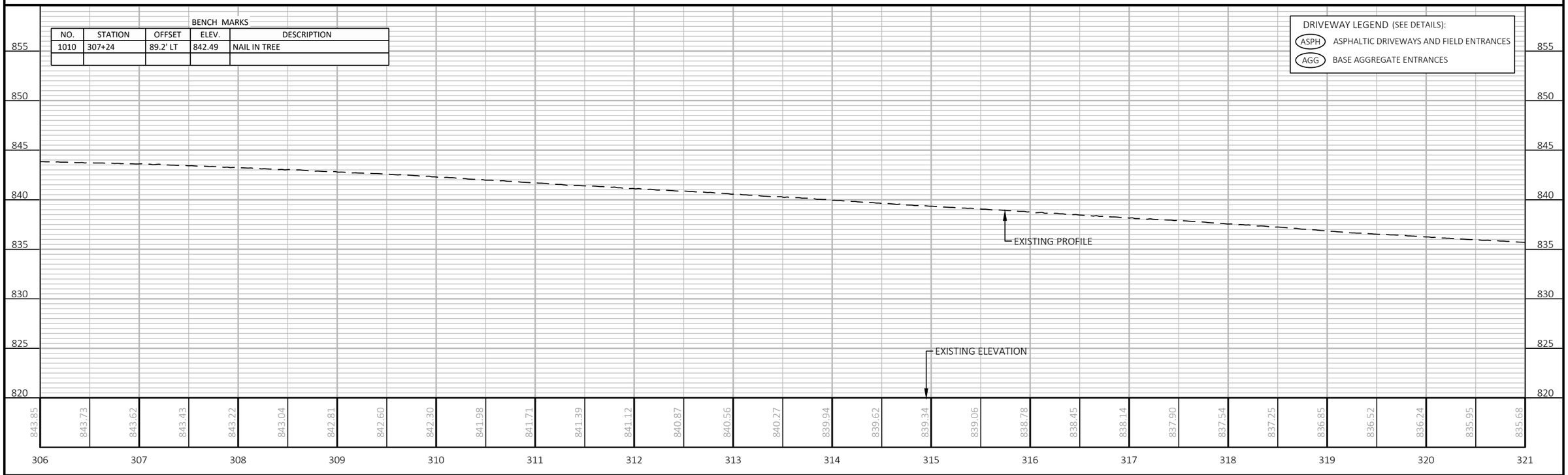
5

BENCH MARKS

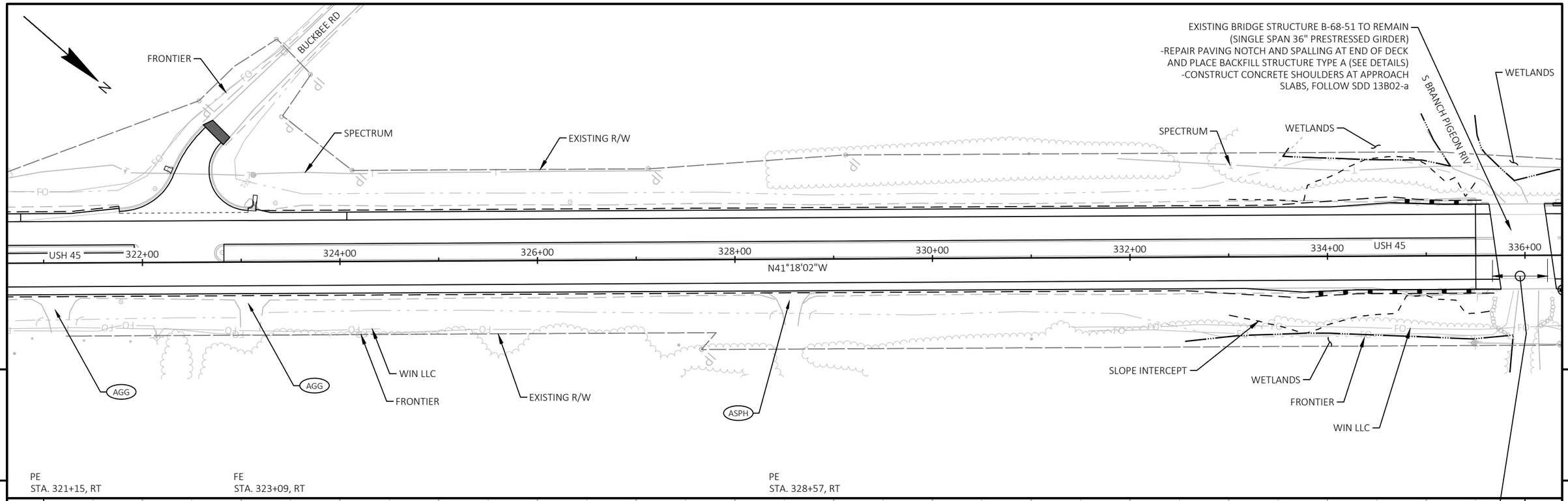
NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1010	307+24	89.2' LT	842.49	NAIL IN TREE

DRIVEWAY LEGEND (SEE DETAILS):

- (ASPH) ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES
- (AGG) BASE AGGREGATE ENTRANCES



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 210	E



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 211	E

PE
STA. 338+74, LT

WETLANDS
FEE
SLOPE INTERCEPT
SPECTRUM
AGG
ALLIANT ENERGY
FRONTIER
KNITT RD
SPECTRUM
EXISTING R/W
SPECTRUM

336+00 USH 45 338+00 340+00 342+00 344+00 346+00 348+00 350+00 USH 45

N41°18'02"W

WETLANDS
FEE
WETLANDS
ALLIANT ENERGY
WIN LLC
FRONTIER
EXISTING R/W
WIN LLC
SPECTRUM
WETLANDS
ALLIANT ENERGY
FRONTIER
KNITT RD

S BRANCH PIGEON RIV

CP: 5003
STA 336+38, 35' RT
ELEV: 828.48'
ALUMINUM DISC IN TOP OF BRIDGE STRUCTURE
WALL AT NW CORNER OF BRIDGE

DRIVEWAY LEGEND (SEE DETAILS):
ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES
AGG BASE AGGREGATE ENTRANCES

5

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STRUCTURE B-68-51
STA 335+71 - STA 336+27

840 835 830 825 820 815 810 805

0.38%

EXISTING PROFILE

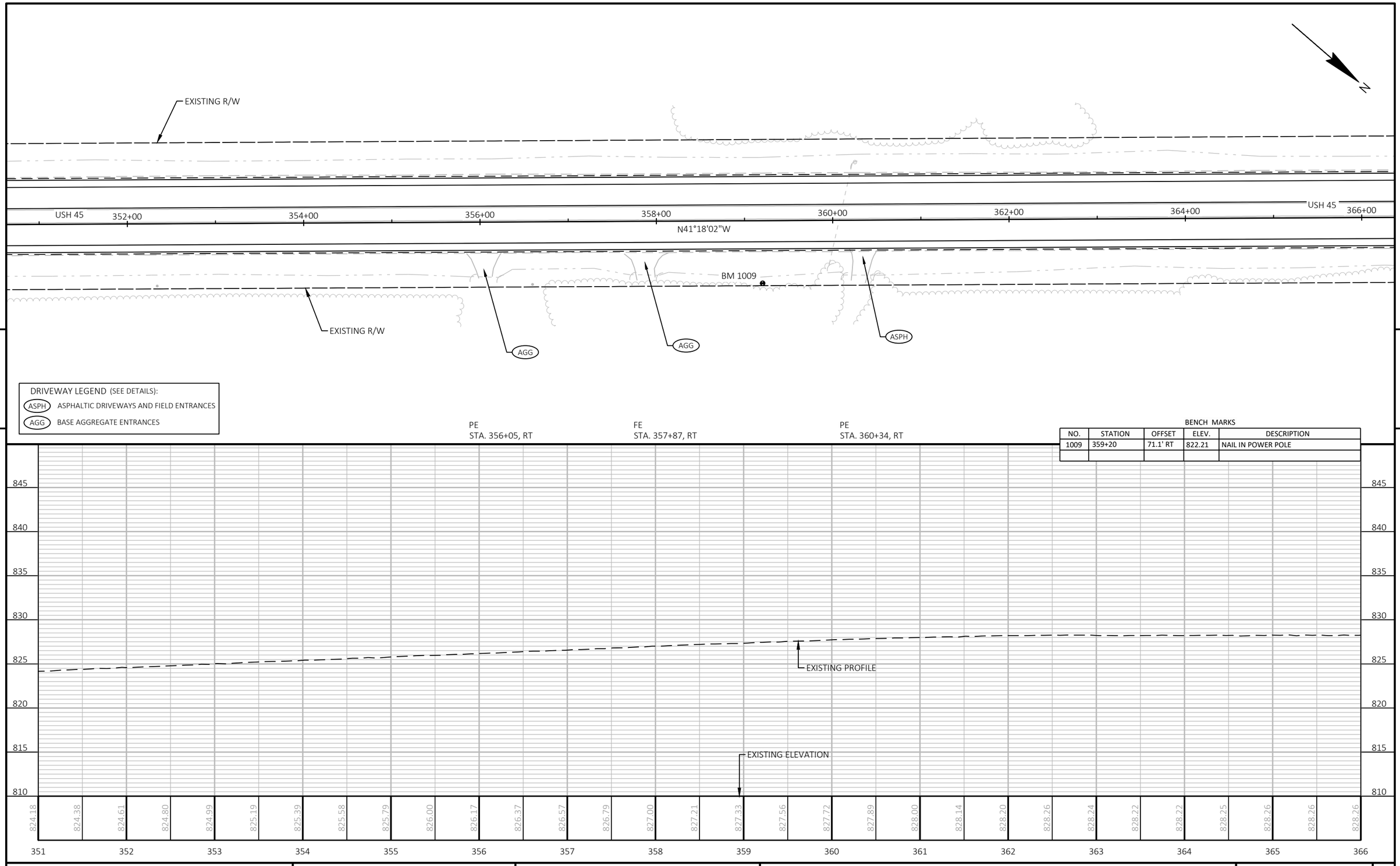
EXISTING ELEVATION

826.29 826.09 825.83 825.65 825.43 825.26 825.14 825.04 824.95 824.84 824.81 824.57 824.53 824.38 824.30 824.18 824.15 824.07 823.90 823.86 823.75 823.66 823.57 823.54 823.59 823.69 823.75 823.86 823.93 824.18

336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 212	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050101_PP.DWG
LAYOUT NAME - 14
PLOT DATE : 8/27/2025 9:23 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



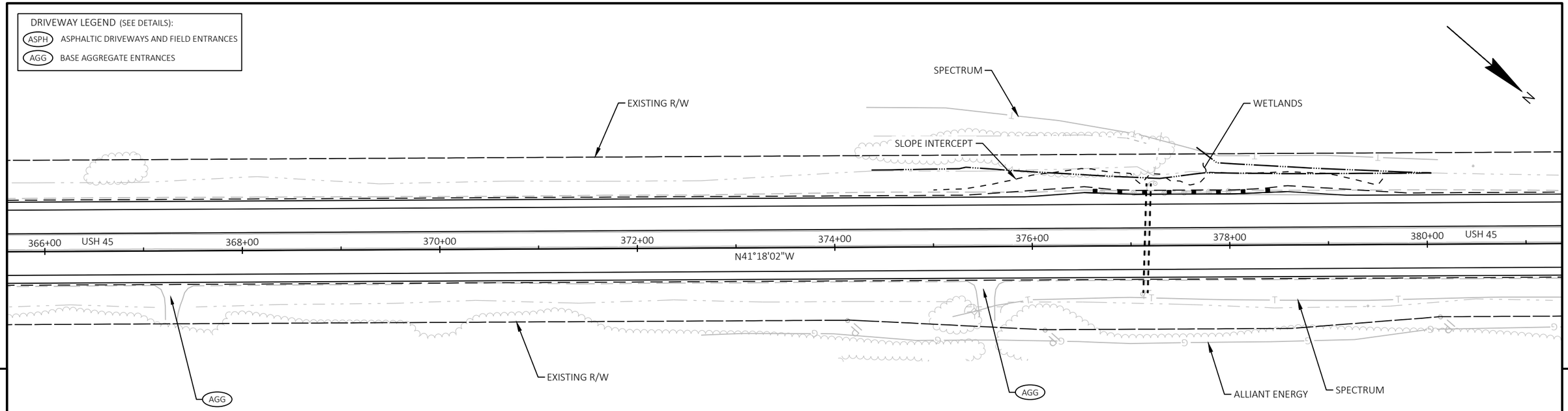
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 213	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 15
PLOT DATE : 8/27/2025 8:50 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

DRIVEWAY LEGEND (SEE DETAILS):

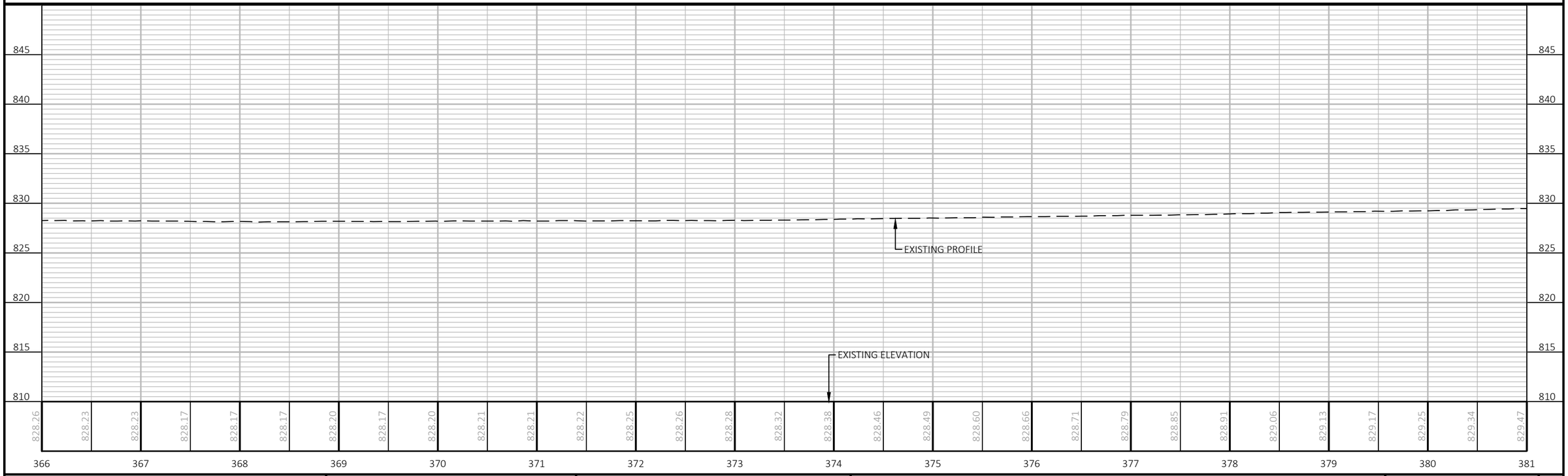
ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

AGG BASE AGGREGATE ENTRANCES



FE
STA. 367+29, RT

PE
STA. 375+53, RT



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 214	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 16

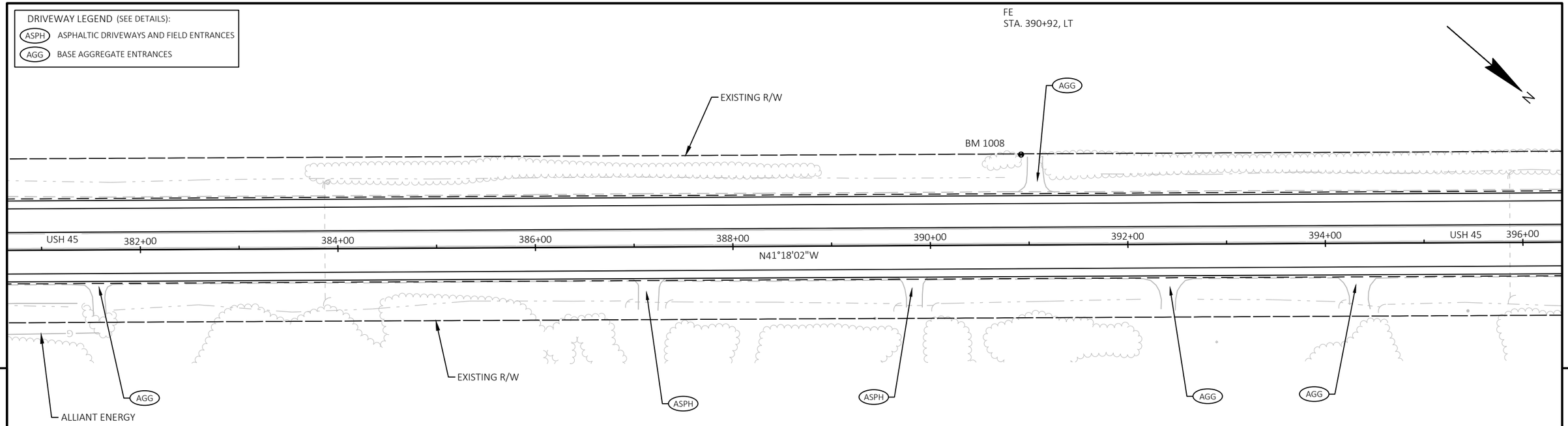
PLOT DATE : 8/27/2025 8:51 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

DRIVEWAY LEGEND (SEE DETAILS):

ASPH — ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

AGG — BASE AGGREGATE ENTRANCES



FE STA. 381+57, RT

PE STA. 387+14, RT

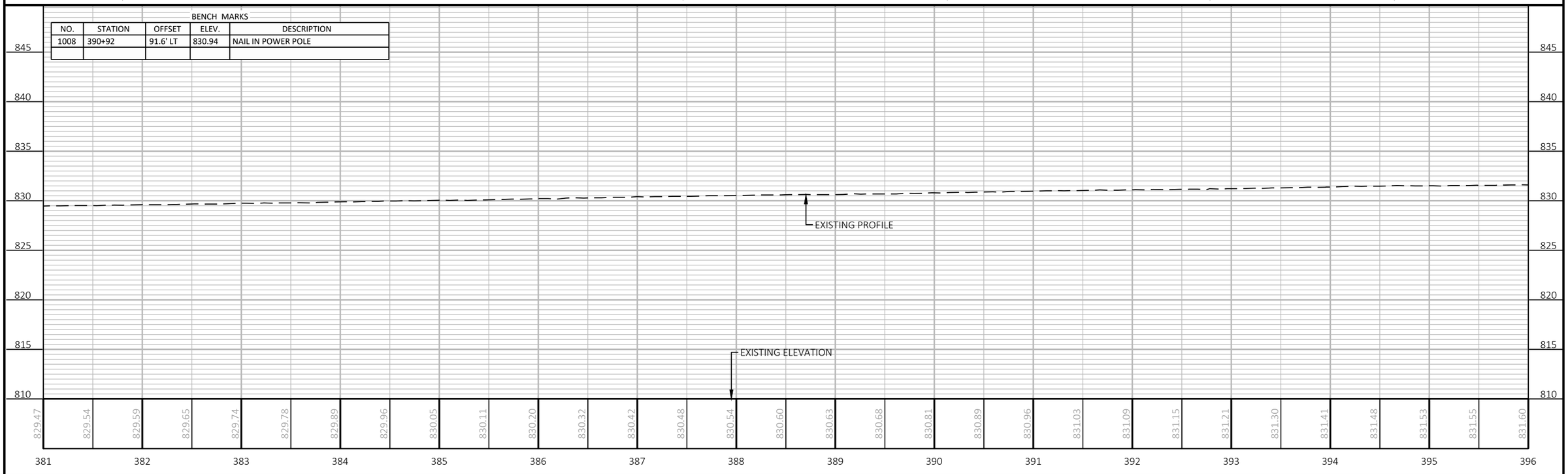
PE STA. 389+84, RT

FE STA. 392+41, RT

FE STA. 394+34, RT

BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1008	390+92	91.6' LT	830.94	NAIL IN POWER POLE

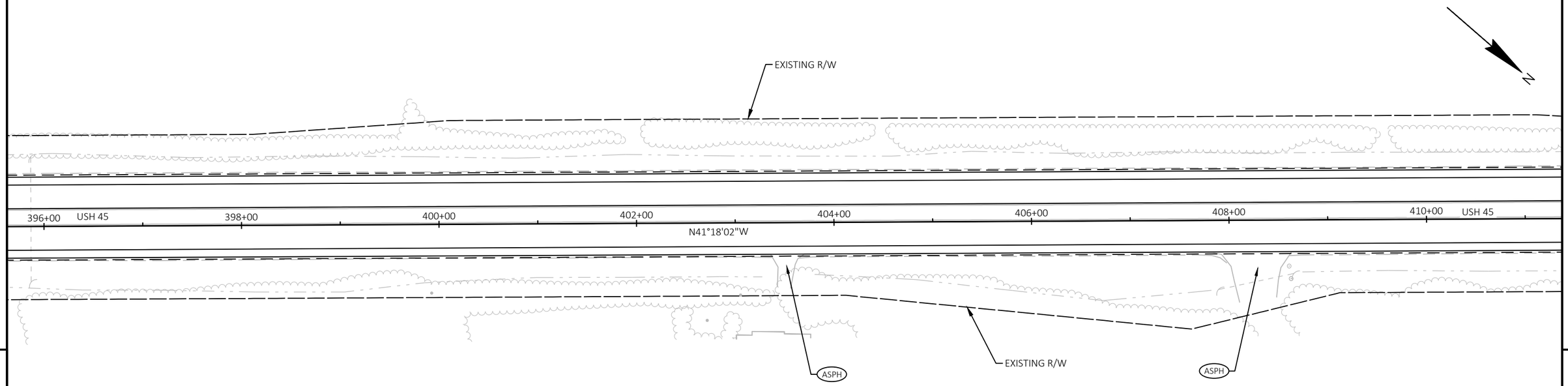


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 215	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 17

PLOT DATE : 8/27/2025 8:51 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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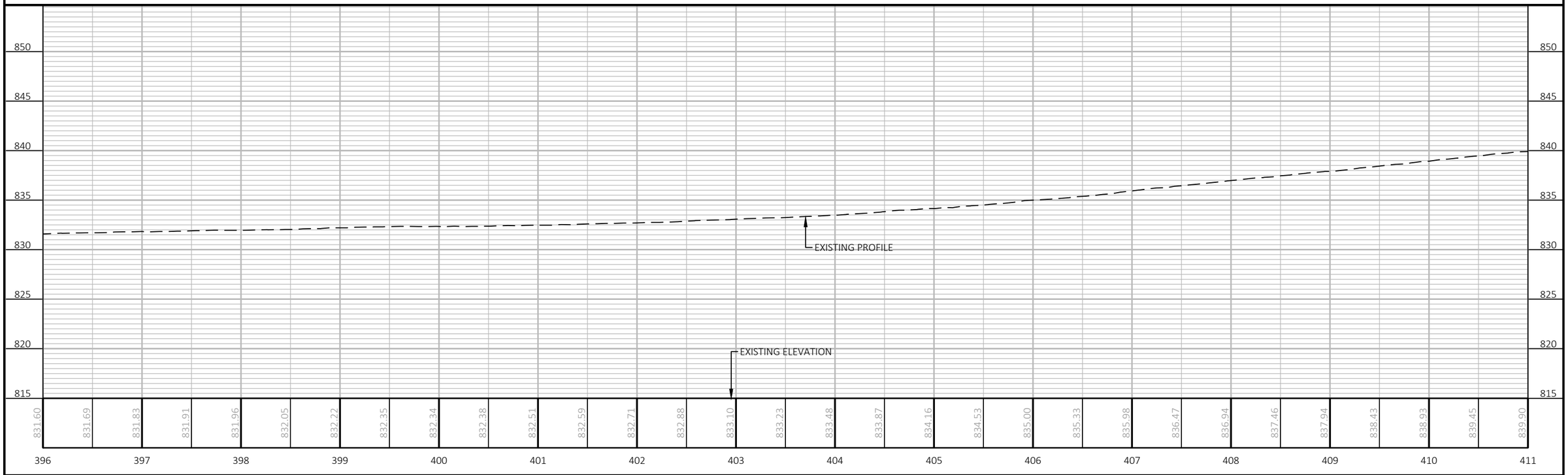
DRIVEWAY LEGEND (SEE DETAILS):

ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

AGG BASE AGGREGATE ENTRANCES

PE
STA. 403+51, RT

PARK ENTRANCE
STA. 408+28, RT



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 216	E

DRIVEWAY LEGEND (SEE DETAILS):
- ASPH — ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES
- AGG — BASE AGGREGATE ENTRANCES

EXISTING R/W

PC: 416+07.23

PT: 422+74.98

ALLIANT ENERGY

USH 45 412+00 414+00 416+00 418+00 420+00 422+00 424+00 426+00

N41°18'02"W

N44°38'21"W

USH 45

EXISTING R/W

ASPH

ASPH

BM 1007

SPECTRUM

FRONTIER

ALLIANT ENERGY

REPLACE ASPHALT FLUME

ASPHALT ENTRANCE TO REMAIN

PI STA = 419+41.20
Y = 454133.675
X = 597626.480
DELTA = 3°20'19" LT
D = 0°30'00"
T = 333.97'
L = 667.75'
R = 11459.16'
PC STA = 416+07.23
Y = 453882.779
X = 597846.902
PT STA = 422+74.98
Y = 454371.308
X = 597391.820
DB = N41°18'02"W
DA = N44°38'21"W
SE = NC

EXISTING CURB & GUTTER TO REMAIN

BASE AGGREGATE ENTRANCE TO REMAIN

EXISTING R/W

PARK ENTRANCE
STA. 413+44, RT

PE
STA. 415+17, RT

CE
STA. 419+67, RT

FE
STA. 421+96, RT

BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1007	417+15	64.7' RT	840.08	NAIL IN POWER POLE #25-14-6

865 860 855 850 845 840 835 830

EXISTING PROFILE

EXISTING ELEVATION

839.90 840.38 840.88 841.29 841.80 842.32 842.79 843.22 843.61 843.94 844.24 844.49 844.65 844.87 845.01 845.18 845.38 845.52 845.76 845.94 846.10 846.32 846.44 846.67 846.83 847.05 847.18 847.38 847.54 847.64 847.74

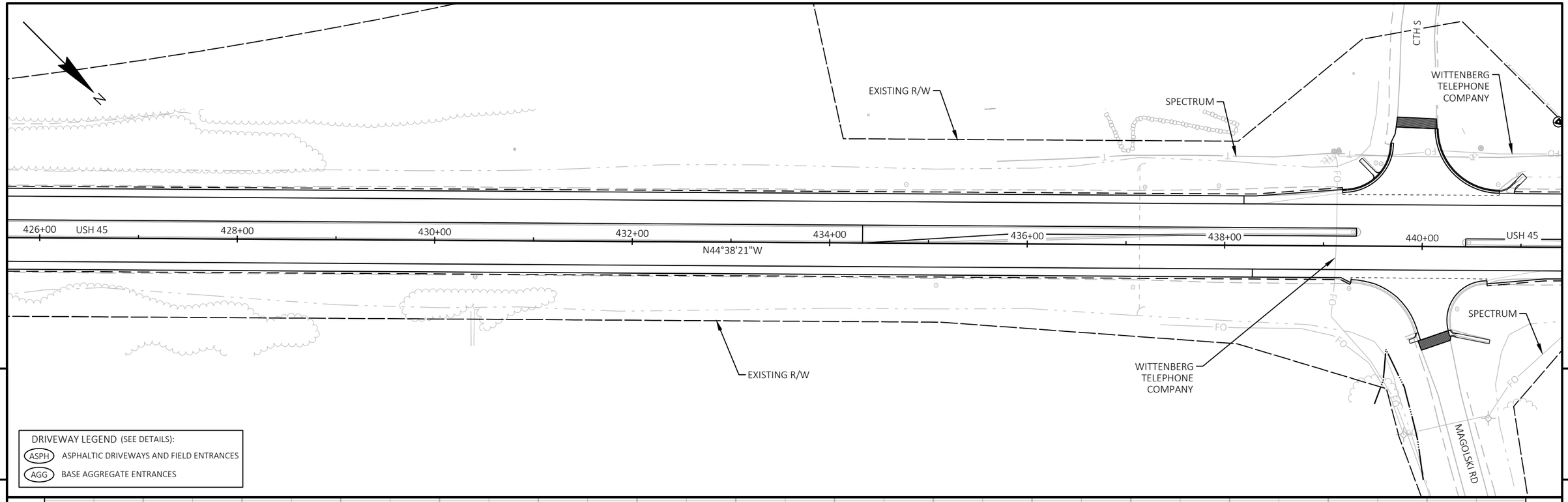
411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 217	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 19

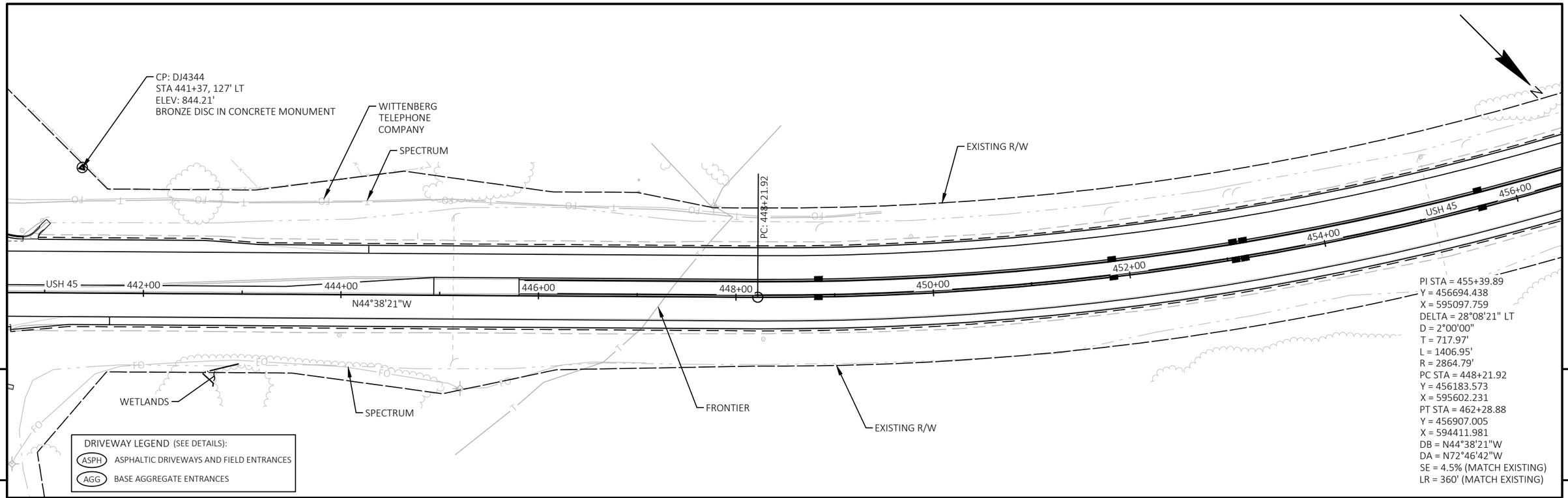
PLOT DATE : 8/27/2025 8:51 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

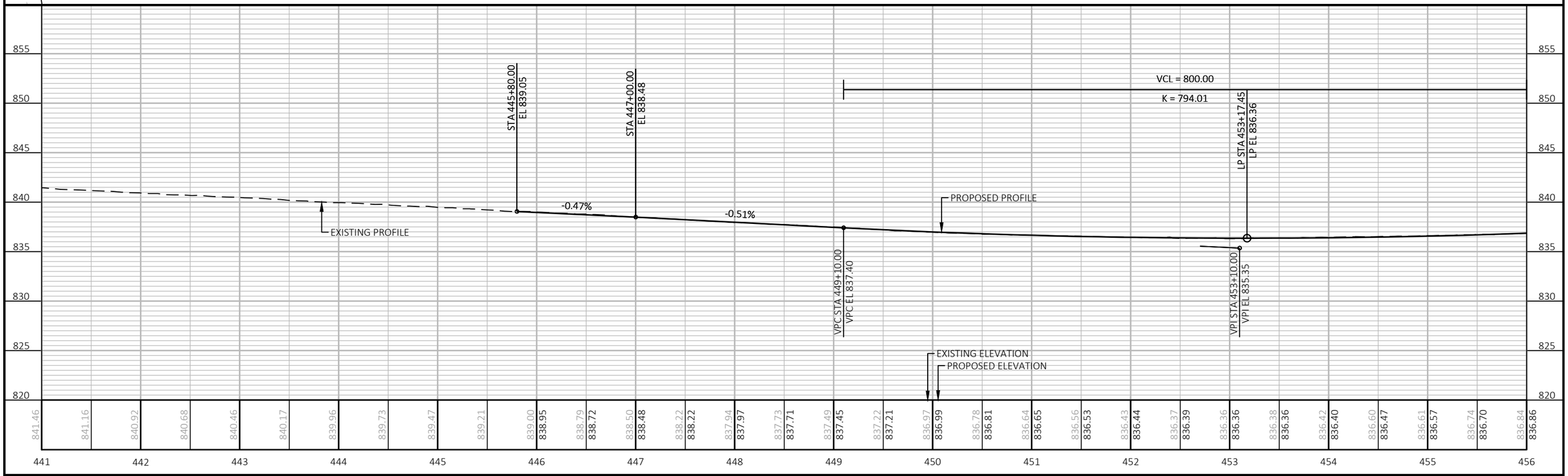
WISDOT/CADDS SHEET 44



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 218	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 20
PLOT DATE : 8/27/2025 8:52 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 219	E

PI STA = 455+39.89
Y = 456694.438
X = 595097.759
DELTA = 28°08'21" LT
D = 2°00'00"
T = 717.97'
L = 1406.95'
R = 2864.79'
PC STA = 448+21.92
Y = 456183.573
X = 595602.231
PT STA = 462+28.88
Y = 456907.005
X = 594411.981
DB = N44°38'21"W
DA = N72°46'42"W
SE = 4.5% (MATCH EXISTING)
LR = 360' (MATCH EXISTING)

FE
STA. 465+67, LT

ALLIANT ENERGY
SPECTRUM
WITTENBERG TELEPHONE COMPANY

EXISTING R/W

BM 1006

PT: 462+28.88

PC: 466+01.90

AGG

456+00 USH 45 458+00 460+00 462+00 464+00 466+00 468+00 470+00 USH 45

N72°46'42"W

EXISTING R/W

AGG

SPECTRUM

PI STA = 477+53.07
Y = 457358.271
X = 592956.122
DELTA = 11°28'24" RT
D = 0°30'00"
T = 1151.17'
L = 2294.65'
R = 11459.16'
PC STA = 466+01.90
Y = 457017.445
X = 594055.683
PT STA = 488+96.54
Y = 457911.001
X = 591946.326
DB = N72°46'42"W
DA = N61°18'18"W
SE = NC

PE
STA. 466+95, RT

BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1006	458+85	108.6' LT	835.13	NE BOLT ON BILLBOARD

DRIVEWAY LEGEND (SEE DETAILS):
ASPH ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES
AGG BASE AGGREGATE ENTRANCES

VCL = 800.00
K = 794.01

STA 464+69.00
EL 841.08

0.49%

EXISTING PROFILE

PROPOSED PROFILE

VPT STA 457+10.00
VPT EL 837.33

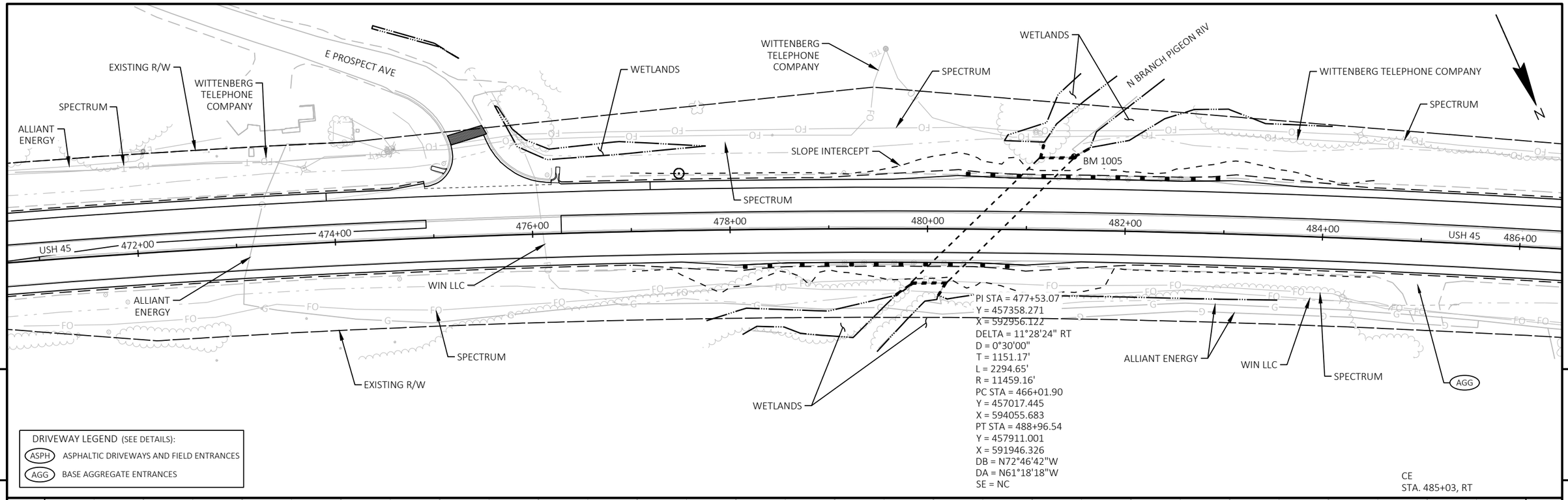
EXISTING ELEVATION
PROPOSED ELEVATION

855 850 845 840 835 830 825 820

836.84 836.86 837.10 837.05 837.27 837.28 837.52 837.53 837.77 837.77 837.95 838.02 838.22 838.27 838.51 838.51 838.74 838.76 839.10 839.01 839.27 839.26 839.66 839.50 839.85 839.75 840.08 840.00 840.36 840.24 840.63 840.49 840.88 840.74 841.02 840.99 841.30 841.56 841.80 842.03 842.28 842.44 842.61 842.72 842.82 842.92 842.94 842.94 842.96

456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 220	E



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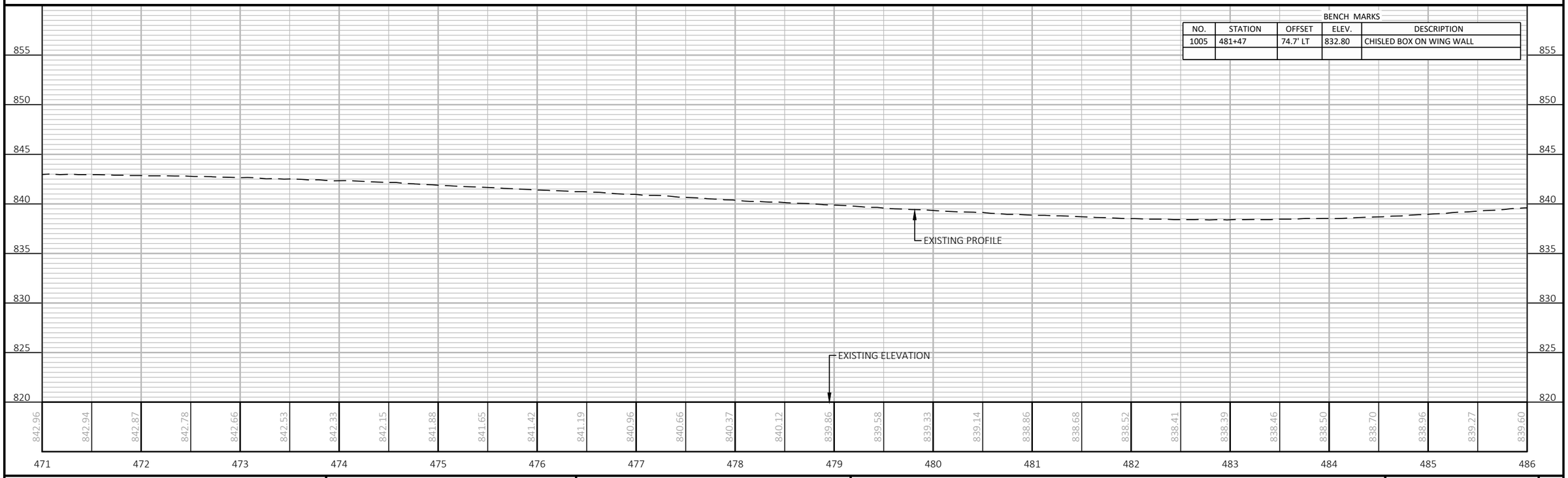
DRIVEWAY LEGEND (SEE DETAILS):

(ASPH) ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES

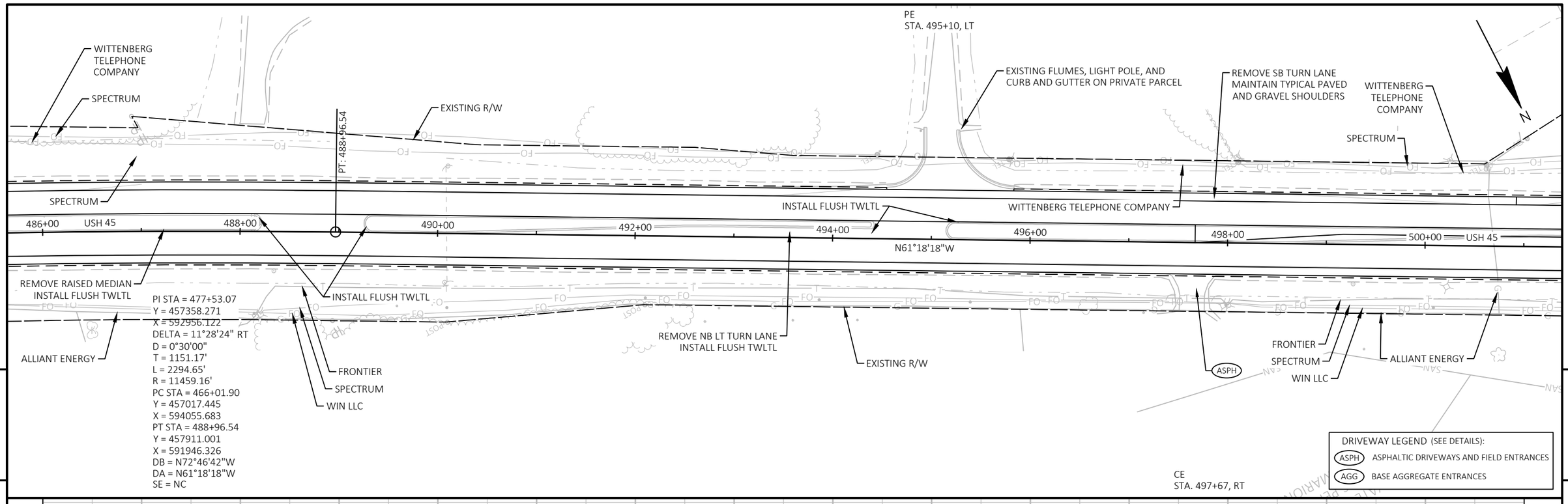
(AGG) BASE AGGREGATE ENTRANCES

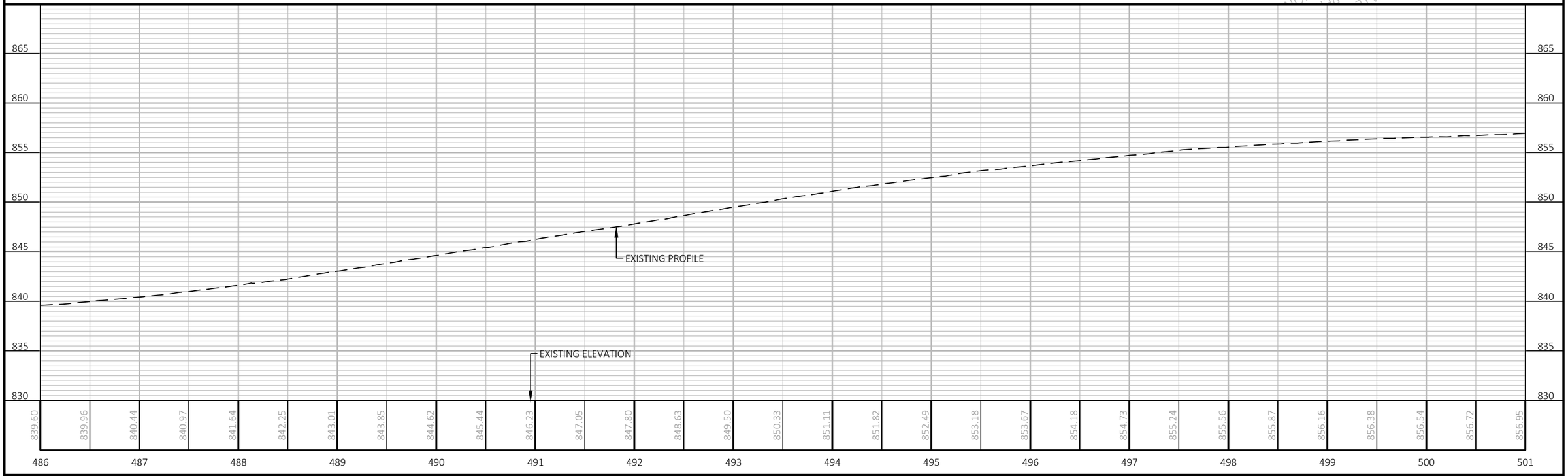
BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1005	481+47	74.7' LT	832.80	CHISLED BOX ON WING WALL



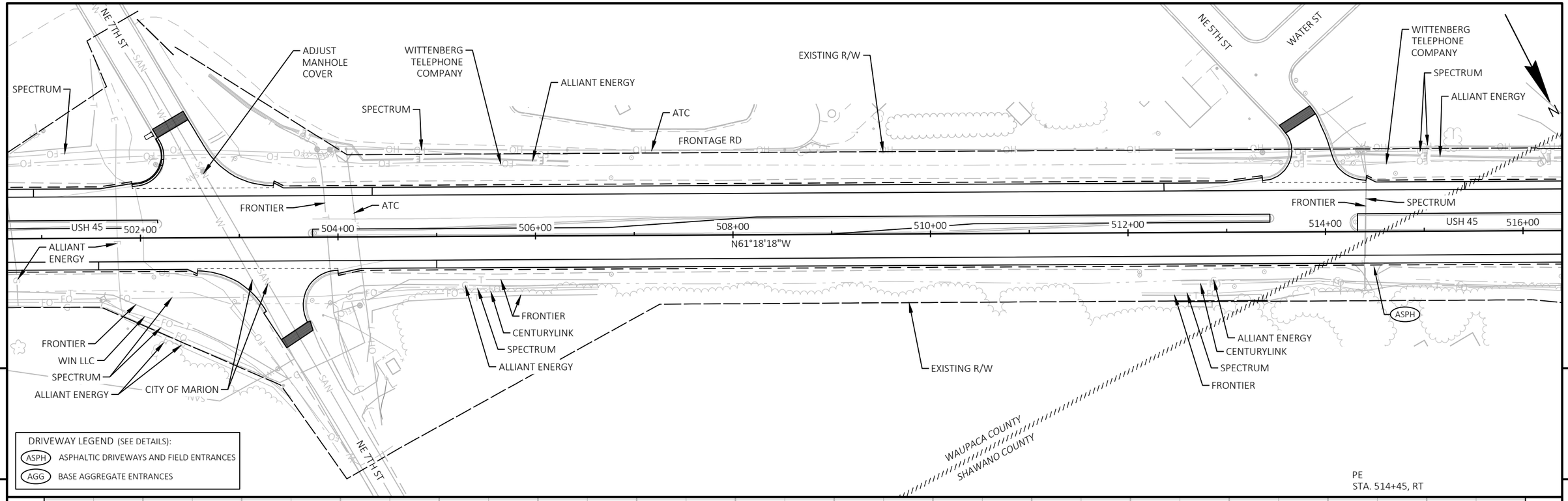
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 221	E



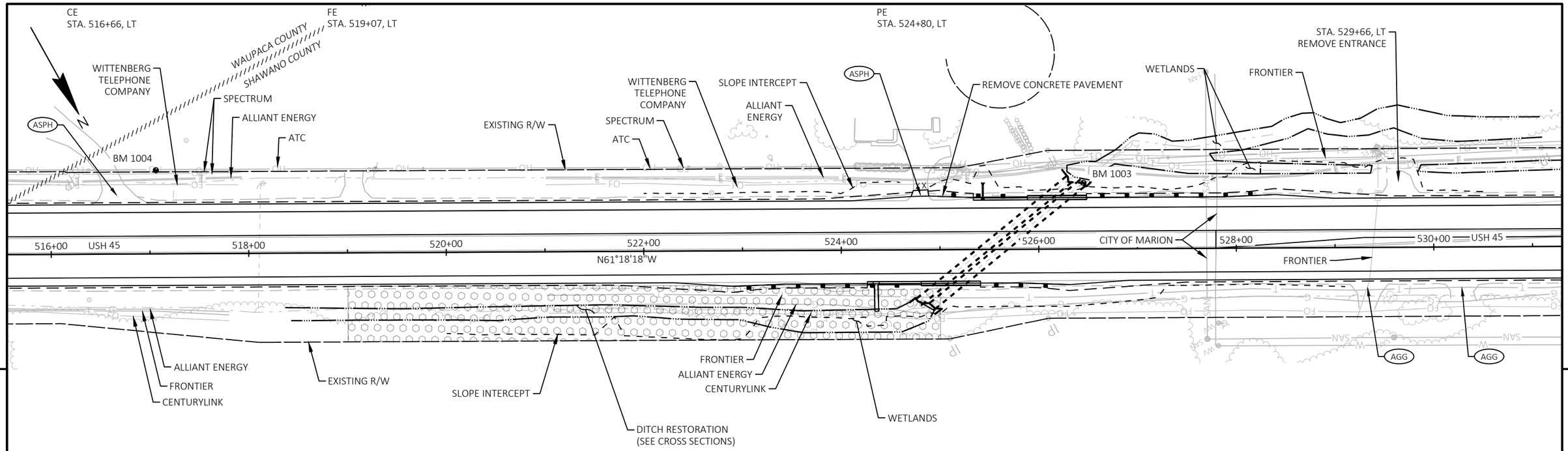


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 222	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 24
PLOT DATE : 8/27/2025 8:52 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 223	E



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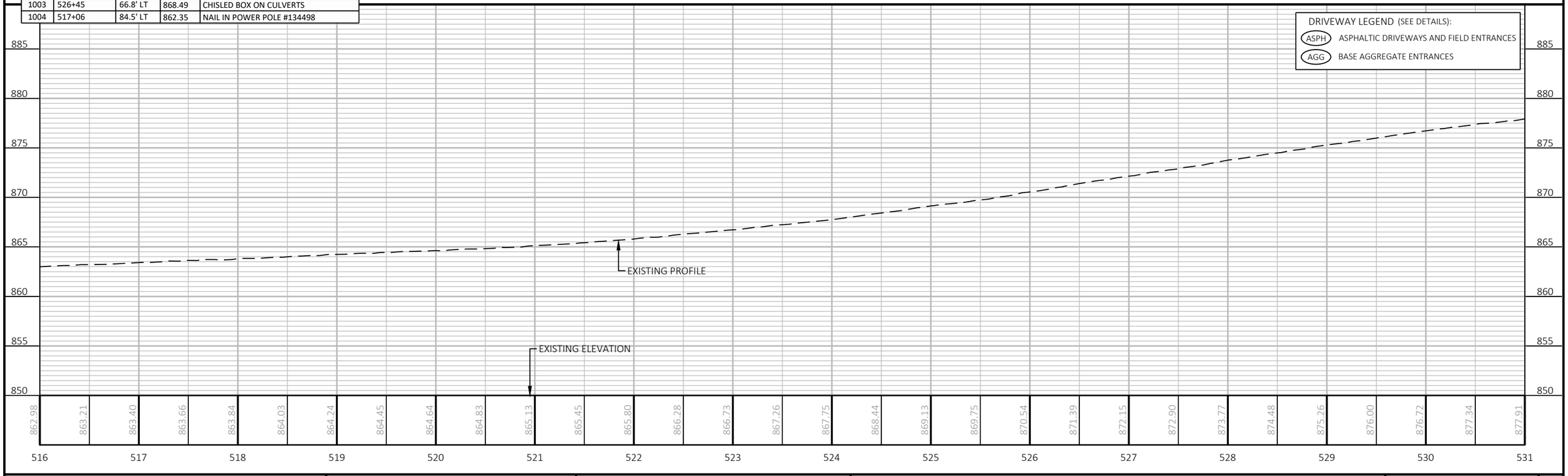
BENCH MARKS

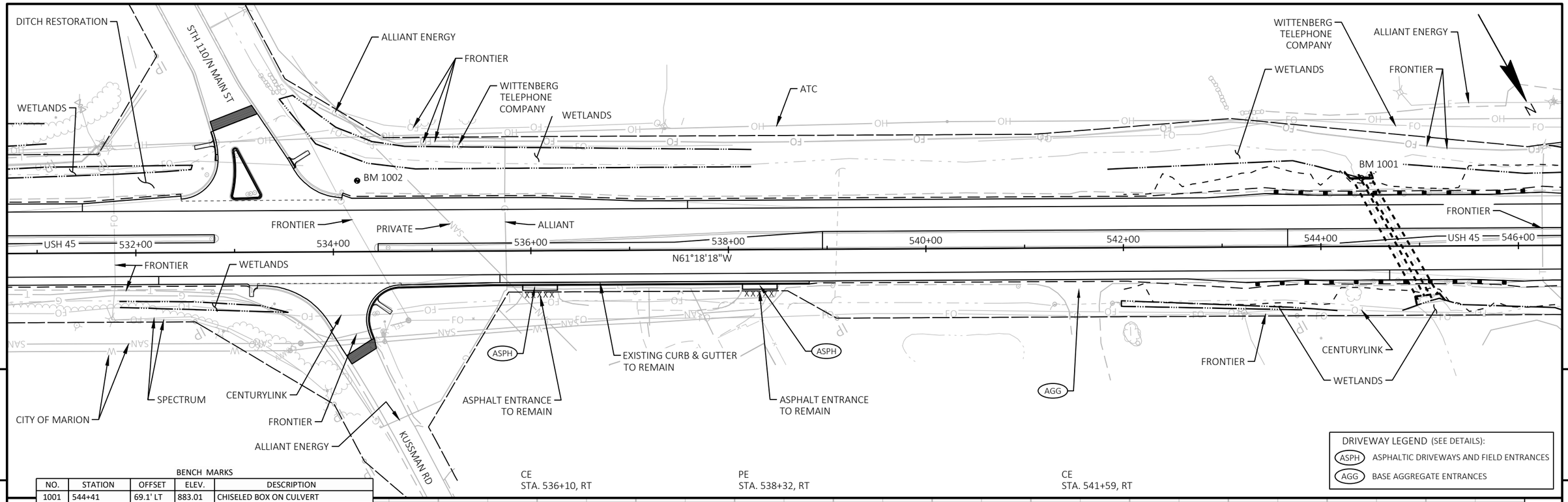
NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1003	526+45	66.8' LT	868.49	CHISLED BOX ON CULVERTS
1004	517+06	84.5' LT	862.35	NAIL IN POWER POLE #134498

FE
STA. 529+33, RT

FE
STA. 530+28, RT



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 224	E



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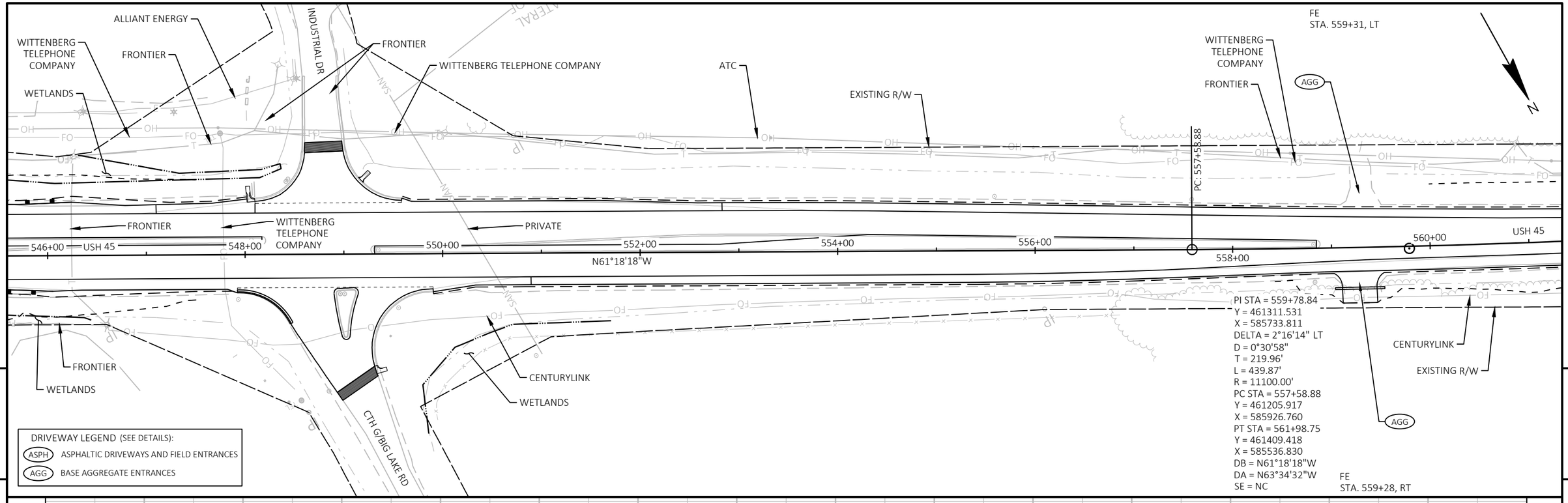
BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1001	544+41	69.1' LT	883.01	CHISELED BOX ON CULVERT
1002	534.24	71.8' LT	879.29	NAIL IN POWER POLE #114

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 225	E



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 226	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 28

PLOT DATE : 8/27/2025 8:53 AM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

PI STA = 564+50.24
Y = 461521.336
X = 585311.613
DELTA = 2°13'04" RT
D = 0°30'58"
T = 214.85'
L = 429.66'
R = 11100.00'
PC STA = 562+35.39
Y = 461425.722
X = 585504.020
PT STA = 566+65.04
Y = 461624.324
X = 585123.050
DB = N63°34'32"W
DA = N61°21'28"W
SE = NC

FRONTIER
WITTENBERG TELEPHONE COMPANY
ATC
PT: 561+98.75
PC: 562+35.39
SLOPE INTERCEPT
REPLACE CENTERLINE RUMBLE STRIPS (STA 564+50 - 566+90)
END CONSTRUCTION STA 566+90'
PT: 566+65.04
BM 1000
EXISTING R/W
WITTENBERG TELEPHONE COMPANY
FRONTIER
EP: 570+60.61
Y = 461813.936
X = 584775.885
GOLLNOW RD
N
USH 45
562+00
564+00
566+00
568+00
570+00
N63°34'32"W
N61°21'28"W
USH 45
CENTURYLINK
EXISTING R/W
SLOPE INTERCEPT
FEE
CENTURYLINK
GOLLNOW RD
END PROJECT
STA 565+00.00
MATCH EXISTING
SAWCUT REQ'D
EXISTING PROFILE
EXISTING ELEVATION

DRIVEWAY LEGEND (SEE DETAILS):
(ASPH) ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES
(AGG) BASE AGGREGATE ENTRANCES

BENCH MARKS

NO.	STATION	OFFSET	ELEV.	DESCRIPTION
1000	568+66	60.9' LT	945.93	NAIL IN POWER POLE #134478

955 950 945 940 935 930 925 920

921.92 923.82 925.69 927.58 929.28 930.98 932.74 934.60 936.38 938.05 939.59 940.93 942.15 943.40 944.51 945.30 945.90 946.46 946.88 947.22 947.56 947.70

561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	PLAN AND PROFILE: USH 45	SHEET 227	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_050102_PP.DWG
LAYOUT NAME - 29
PLOT DATE : 8/27/2025 8:54 AM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08A05-21D	INLET COVERS TYPE V, V-B, & VV-B
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-24A	CONCRETE CURB & GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D03-09A	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D03-09B	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-14B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
11B02-02	CONCRETE MEDIAN NOSE
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-14A	RURAL DOWELED CONCRETE PAVEMENT
13C11-14B	RURAL DOWELED CONCRETE PAVEMENT
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C19-03	HMA LONGITUDINAL JOINTS
14B32-11A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-02A	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-02B	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-02C	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-08A	FLEXIBLE DELINEATOR POST
15A04-08C	DELINEATOR POST WITH REFLECTIVE SHEETING
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-16A	PAVEMENT MARKING SYMBOLS

6

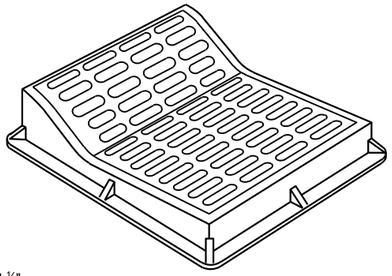
Standard Detail Drawing List

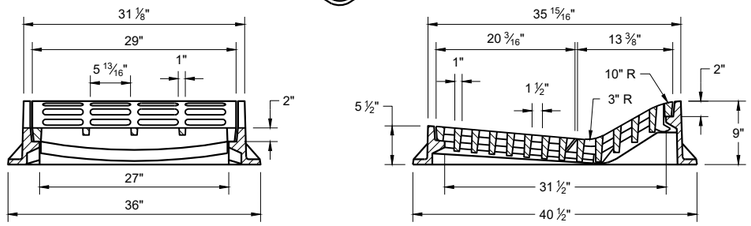
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C14-05	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-09A	MEDIAN ISLAND PAVEMENT MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-09C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-10A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-10B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C21-11	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D06-06	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D11-09	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-15A	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D12-15B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D20-10A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-10B	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
15D27-04	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL

GENERAL NOTES

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

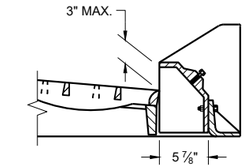
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

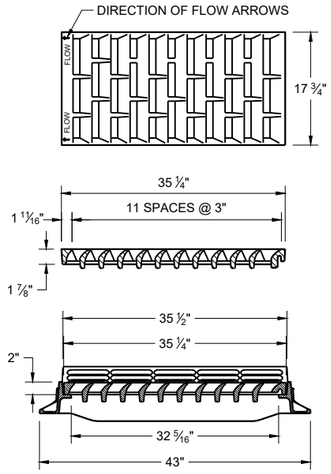


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

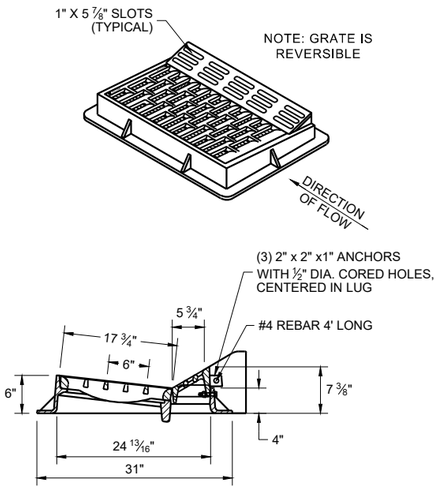
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



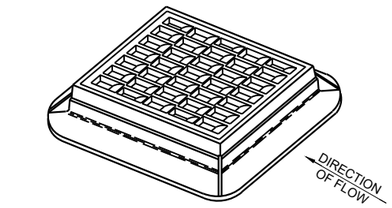
TYPE "HM"

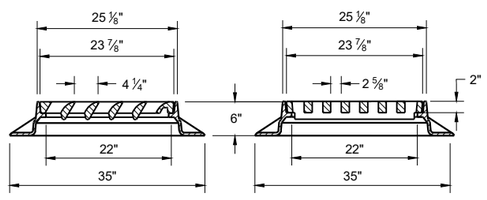
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



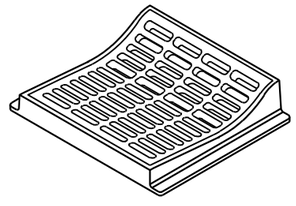
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

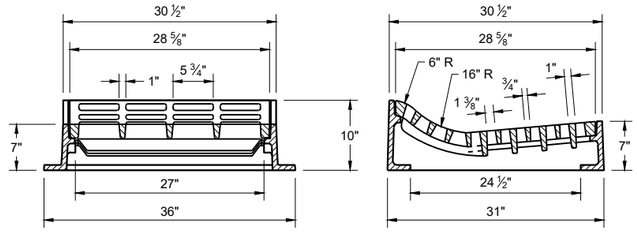
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

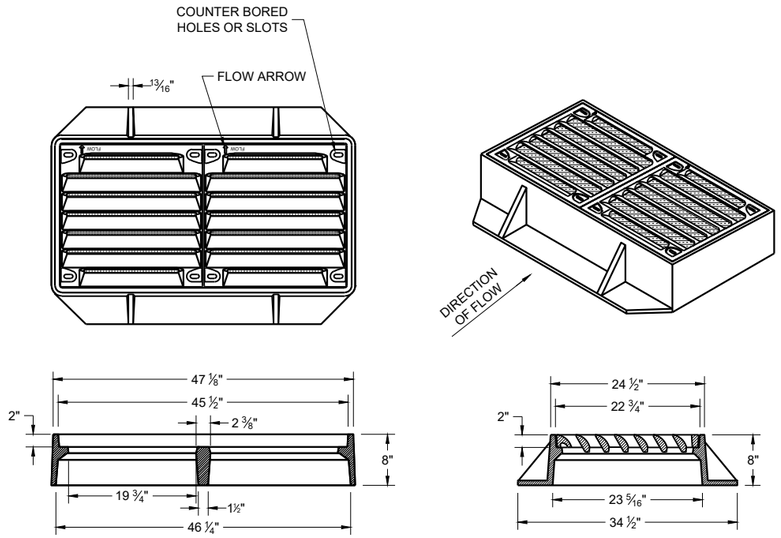
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

6
SDD 08A05-21c

GENERAL NOTES

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

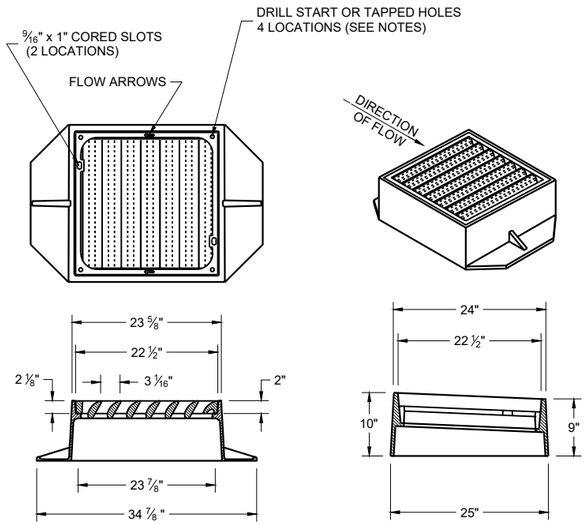
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

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

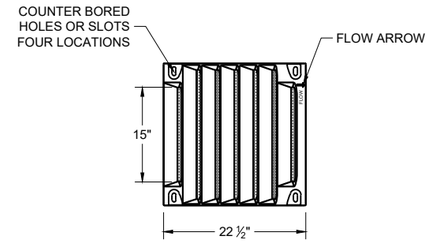
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
3/8" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

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

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
3/8" DIA. X 1/16" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



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

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

TAP 1/2" -13 HOLES IN FOUR LOCATIONS PER GRATE IN FRAME TO BOLT GRATE(S).
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - 1/2" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT OVERTIGHTEN.

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

STATE OF WISCONSIN
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December 2023 — DATE
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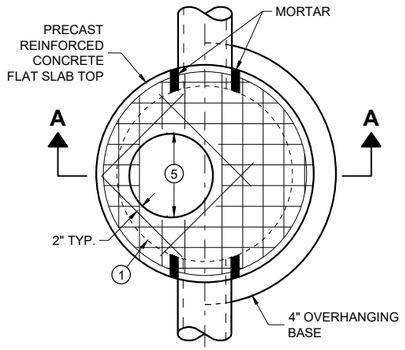
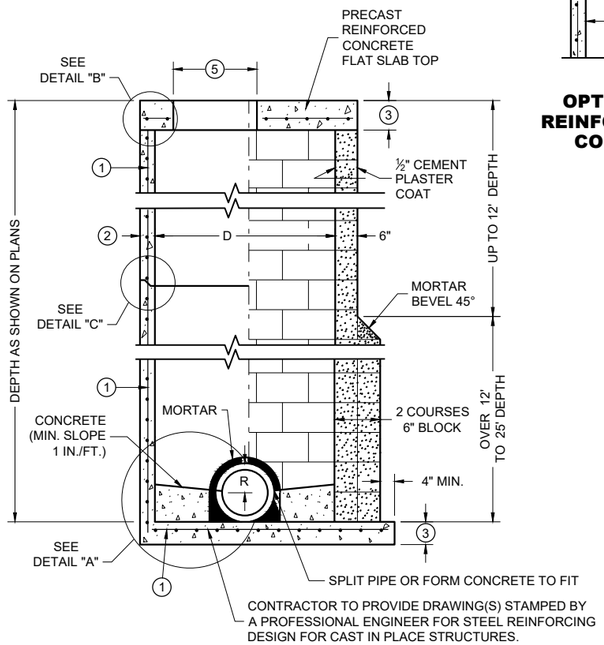
SDD 08A05-21d



PLAN VIEW

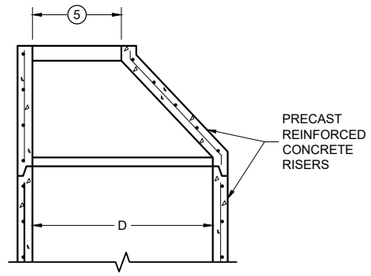
CIRCULAR OPENING



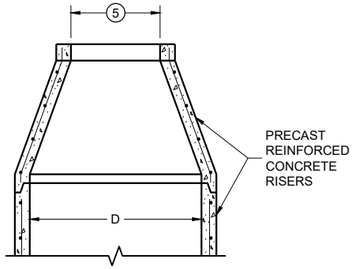
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

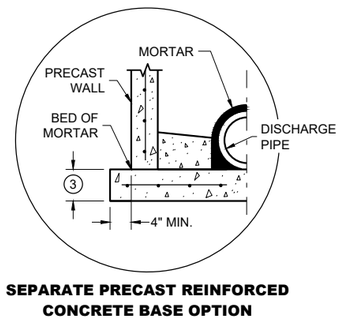
MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

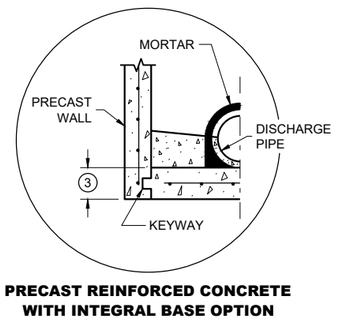
PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

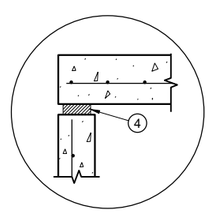


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

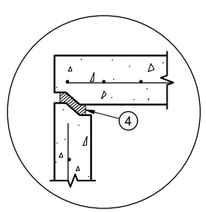


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

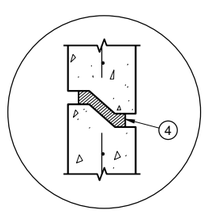
DETAIL "A"



TOP WITH PLAIN END JOINT

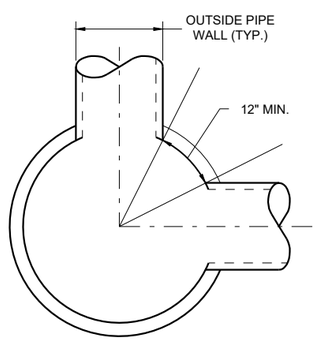


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

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



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

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

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

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

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

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

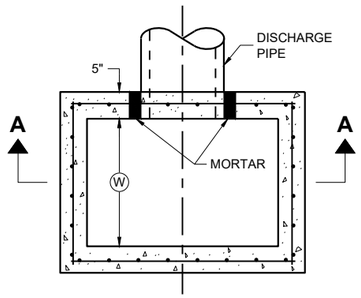
(5) SEE MANHOLE COVER OPENING MATRIX.

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

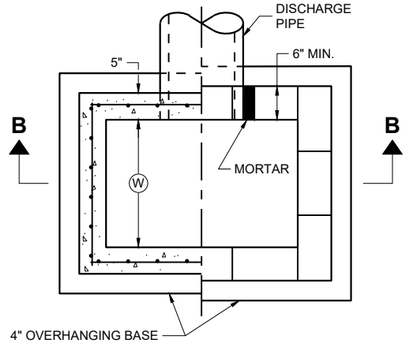
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

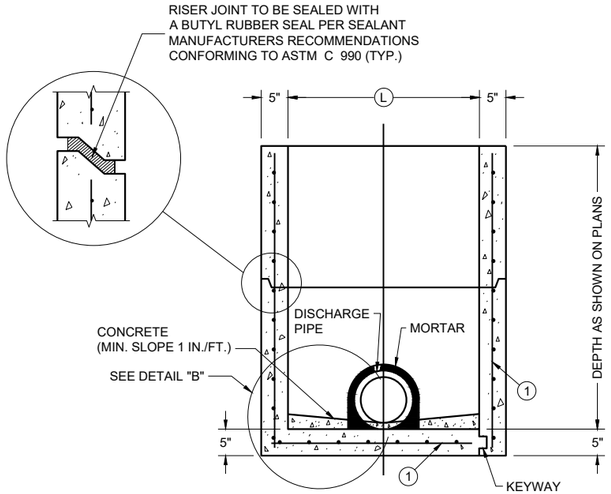
FHWA



PLAN VIEW



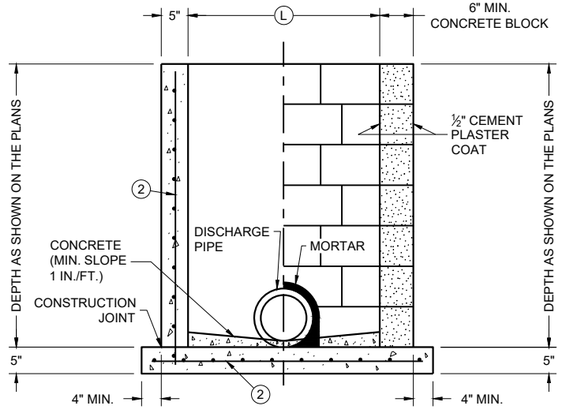
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

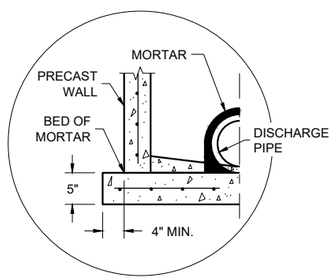
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

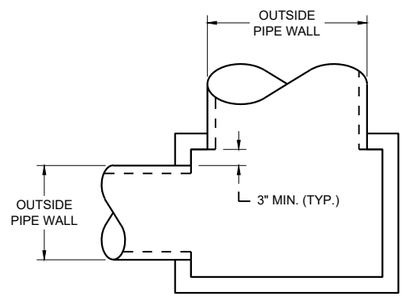
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

CATCH BASIN COVER MATRIX

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

PIPE MATRIX

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

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

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

STATE OF WISCONSIN
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APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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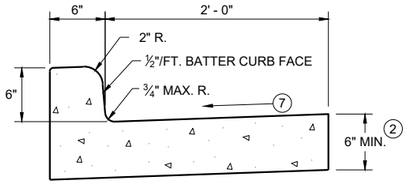
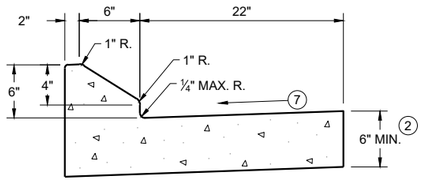
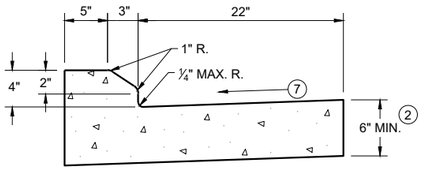


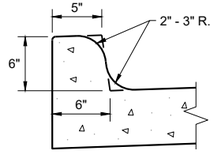
TYPES A (1) & D



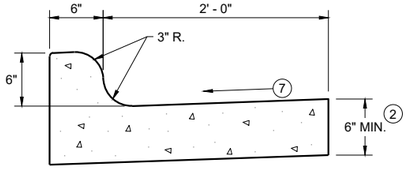
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

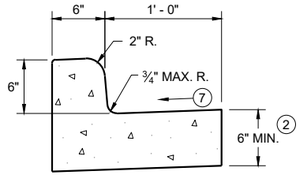


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



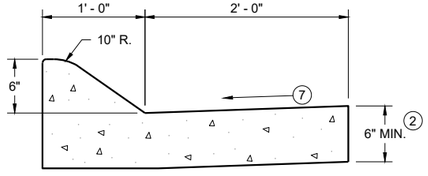
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

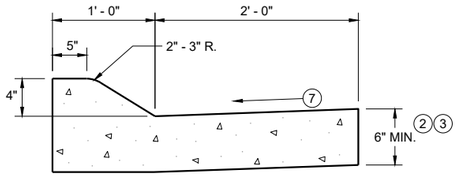


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

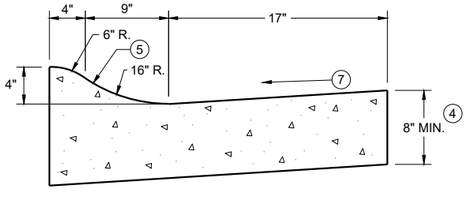


6" SLOPED CURB TYPES A (1) & D



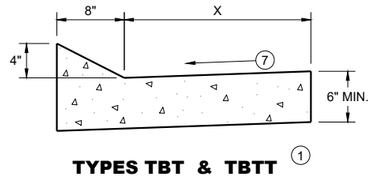
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

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

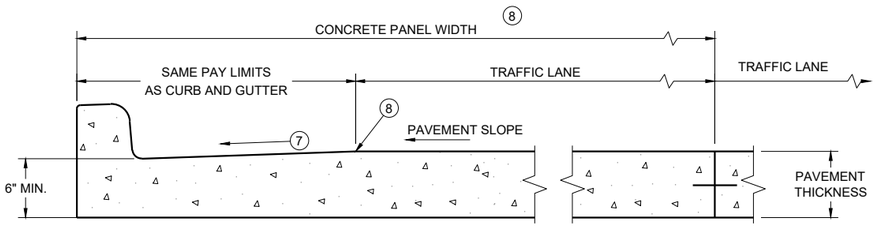


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

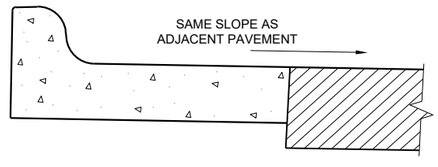
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

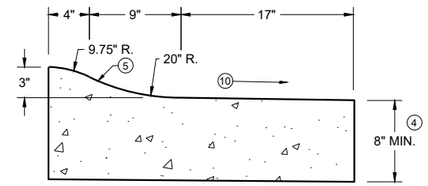
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(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.

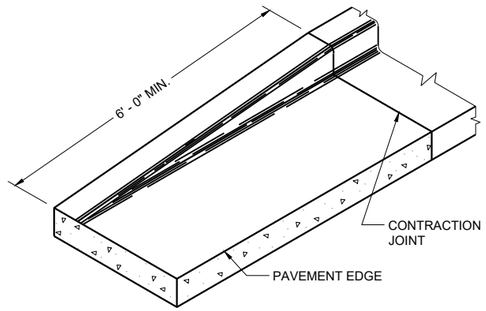
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



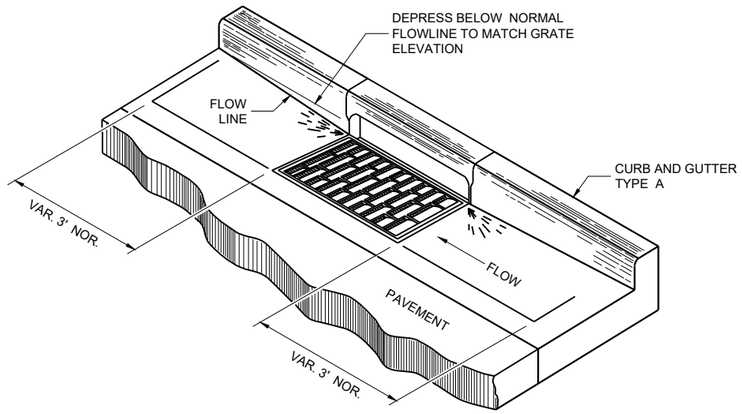
3" SLOPED CURB TYPES R (1) & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

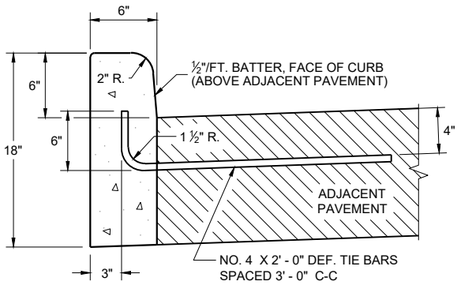
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

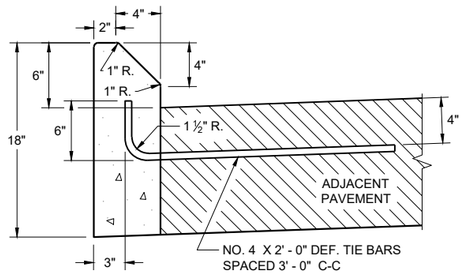
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

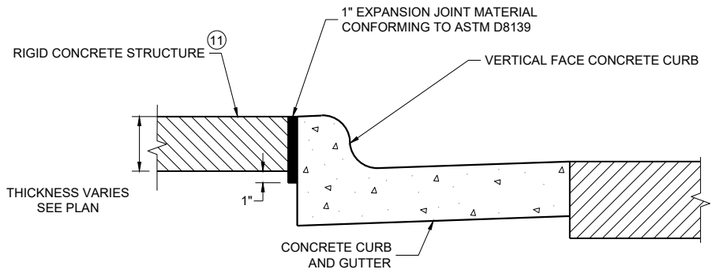


TYPES A (1) & D

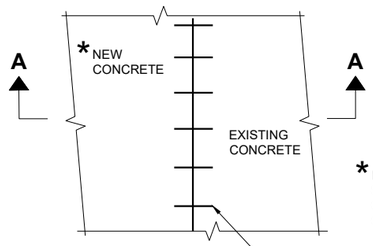


TYPES G (1) & J

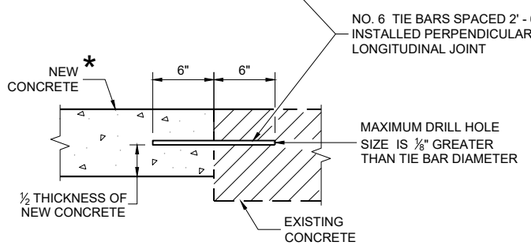
CONCRETE CURB



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

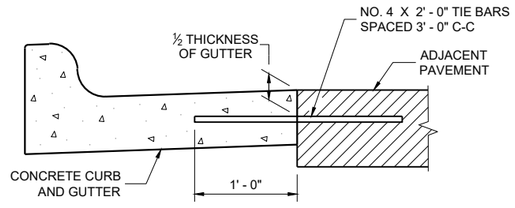


PLAN VIEW

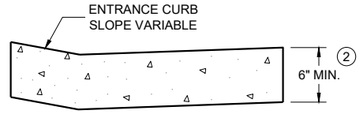


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

GENERAL NOTES

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

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

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

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

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

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

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

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

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

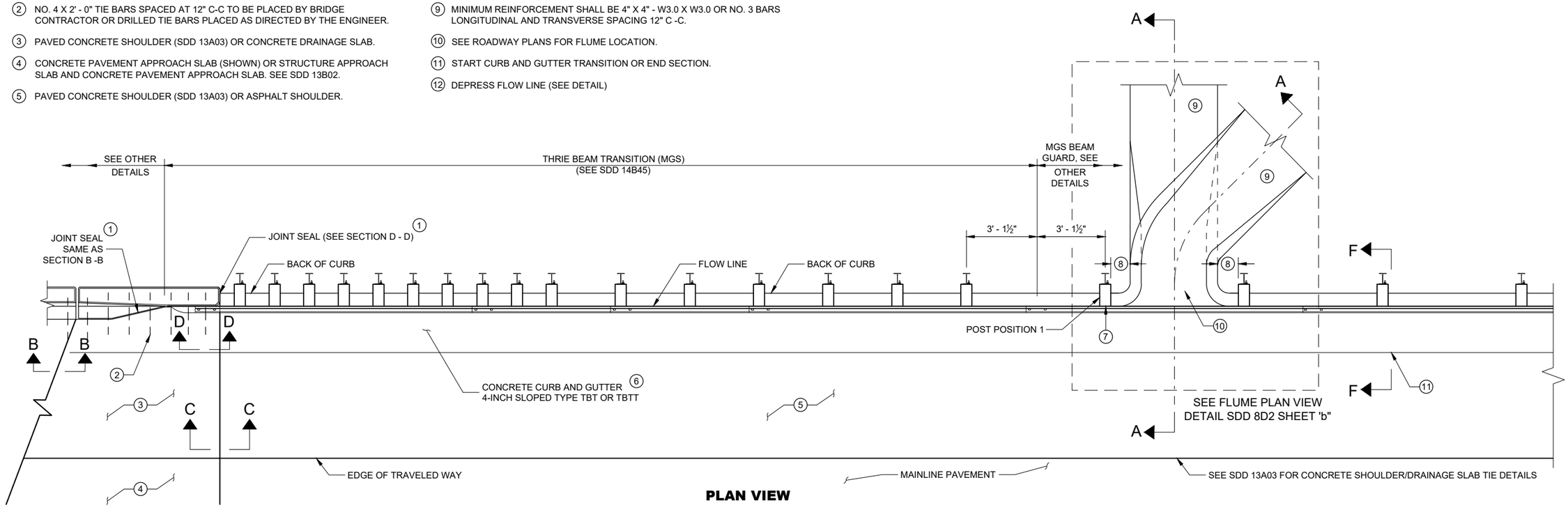
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

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

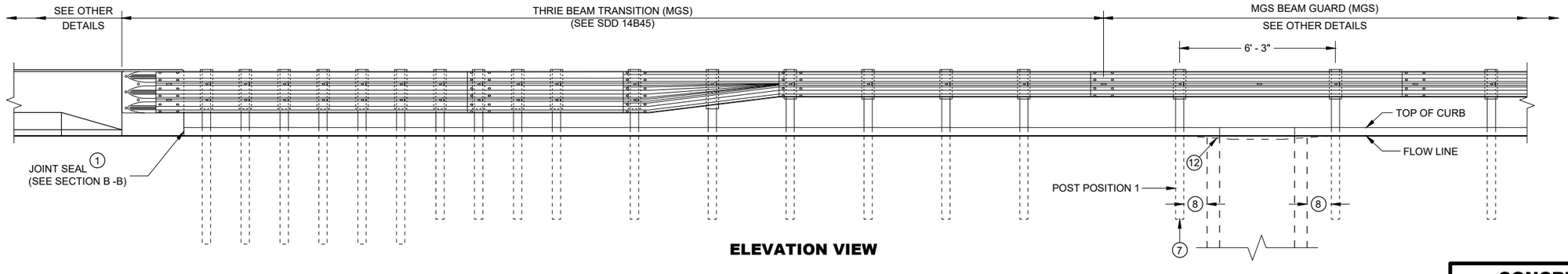
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

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

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

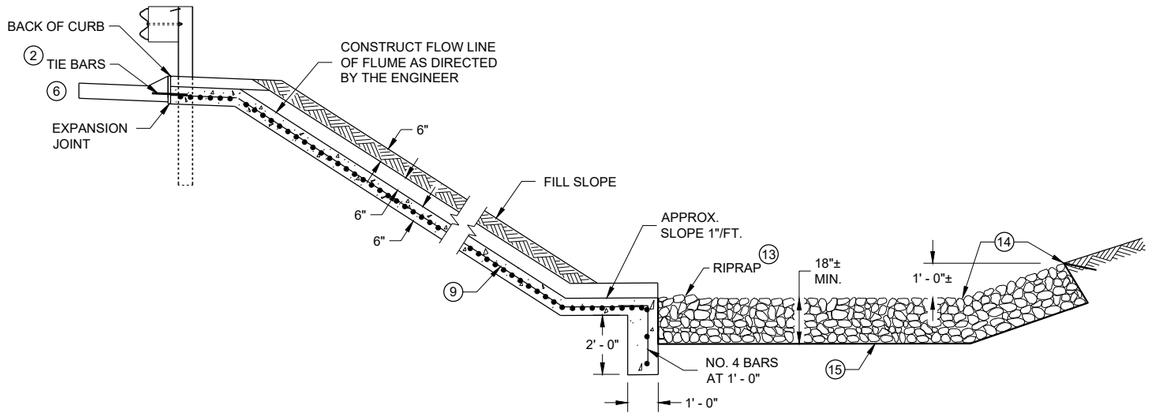
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

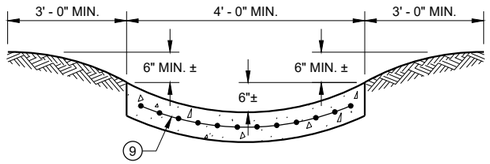
SDD 08D02 - 08a

6

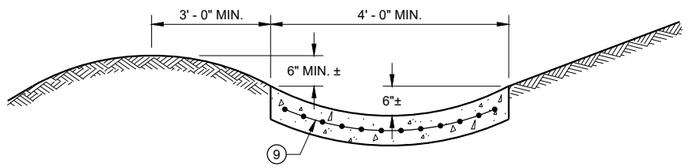
SDD 08D02 - 08a



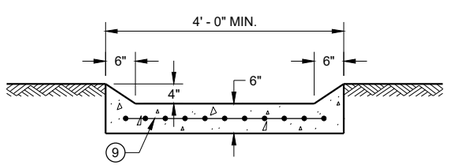
SECTION A - A



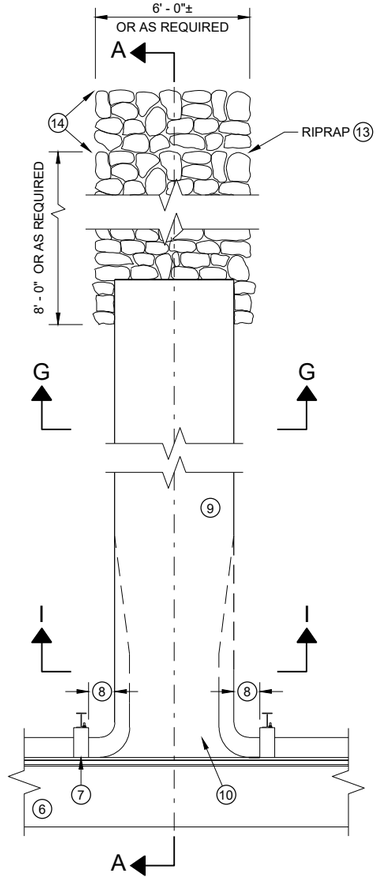
SECTION G - G



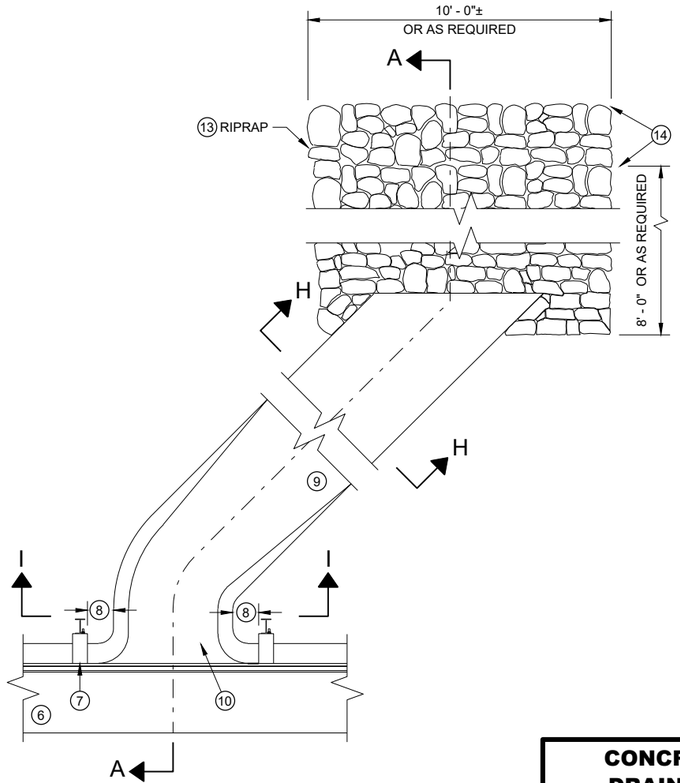
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

GENERAL NOTES

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

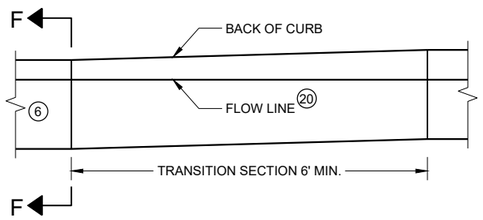
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

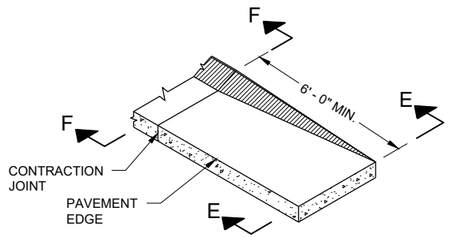
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

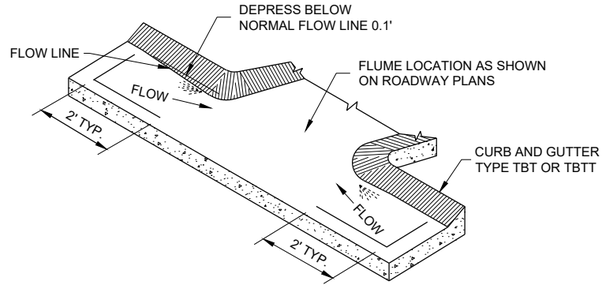
6
SDD 08D02 - 08b



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

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

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

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

(15) GEOTEXTILE TYPE HR.

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

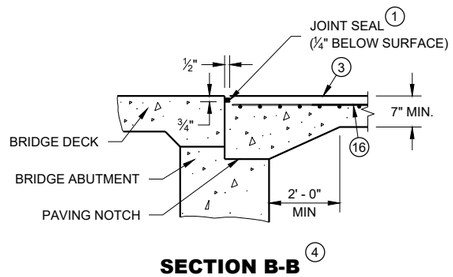
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

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

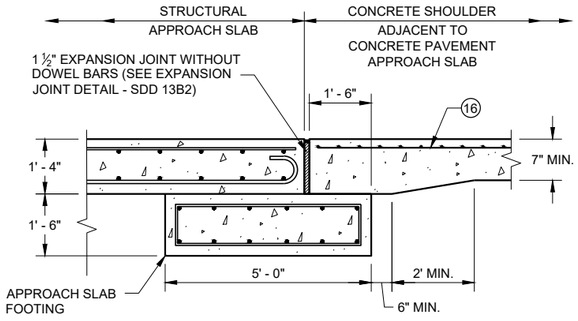
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

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

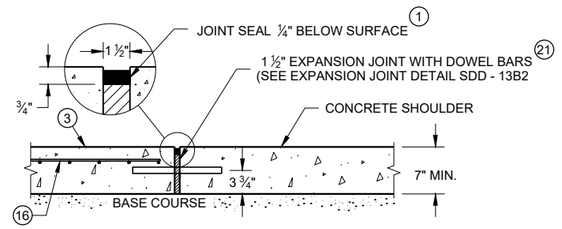
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



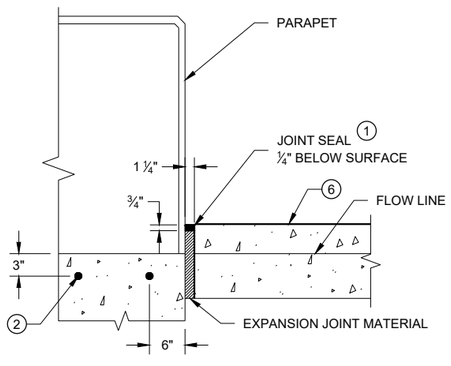
SECTION B-B (4)



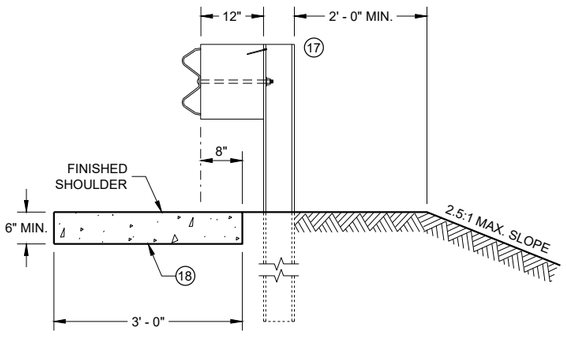
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



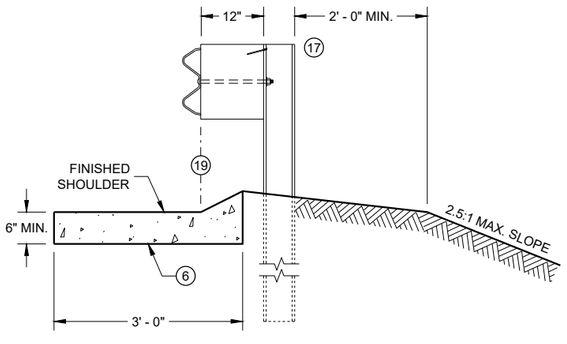
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

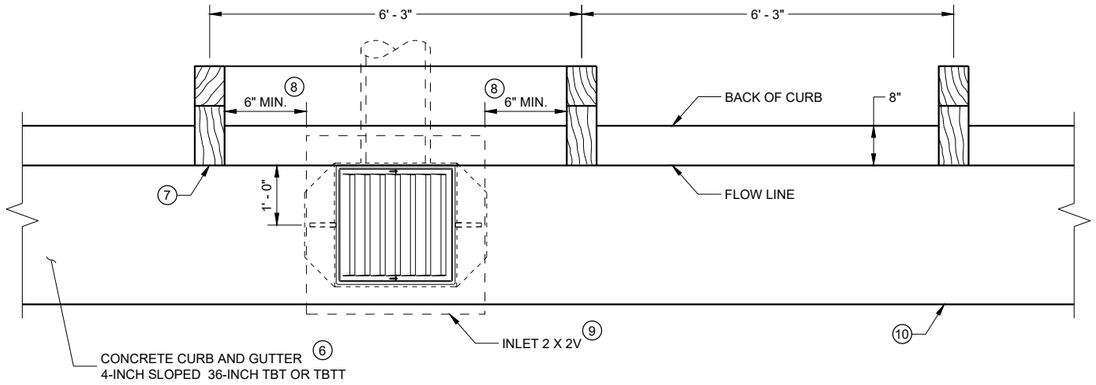
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

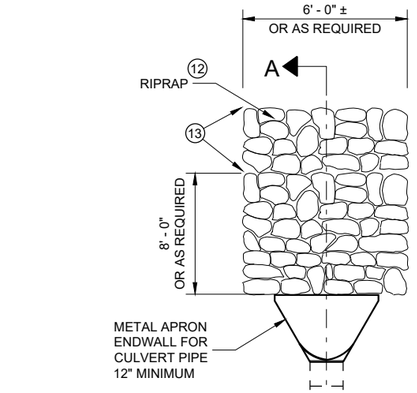
SDD 08D02 - 08c

6



INLET PLAN VIEW

(NOTE: RAIL NOT SHOWN FOR CLARITY)



GENERAL NOTES

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

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

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

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

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

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

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

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

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

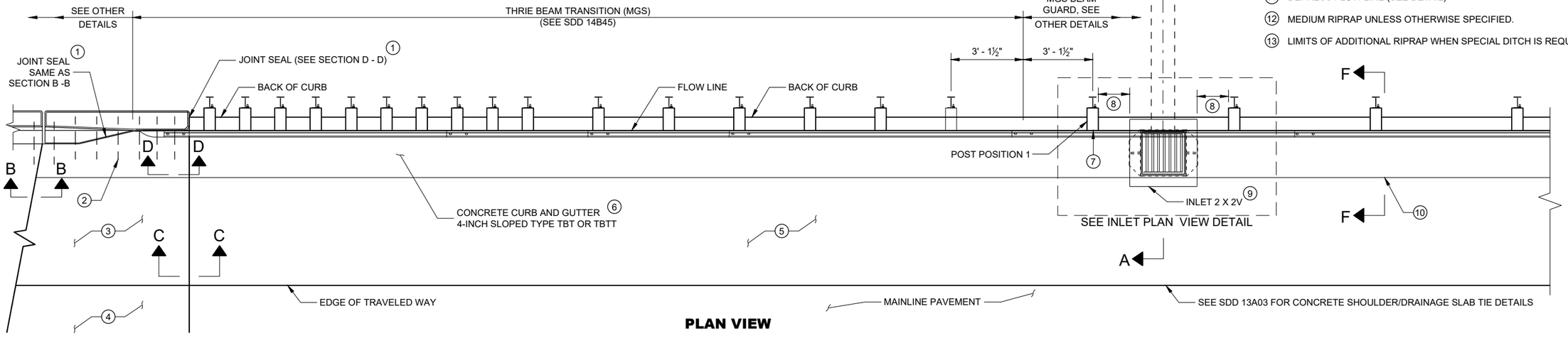
(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

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

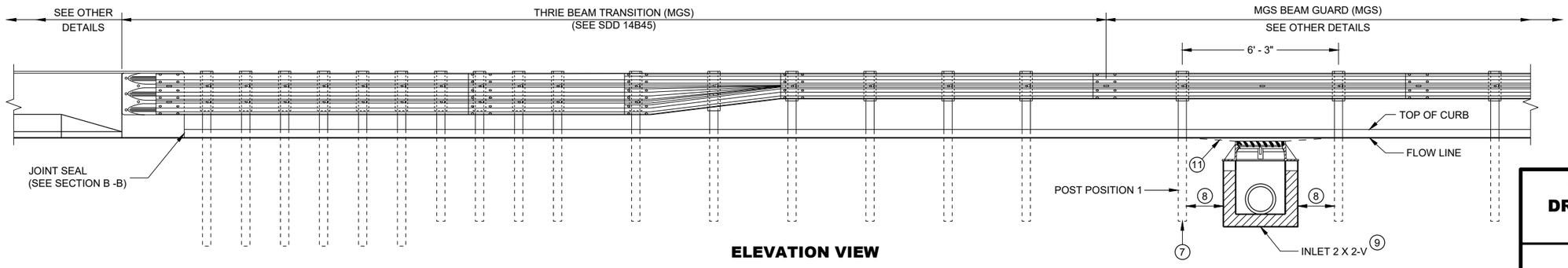
(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

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



PLAN VIEW



ELEVATION VIEW

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

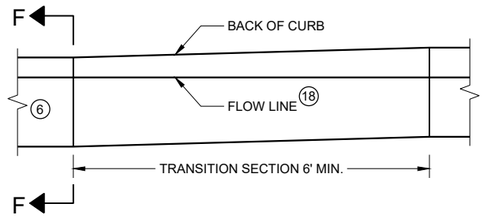
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

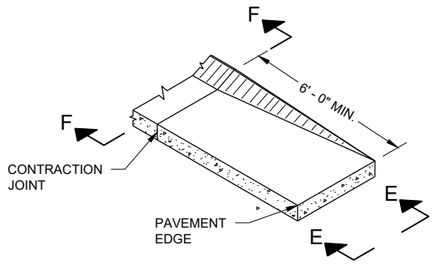
SDD 08D03 - 09a

6

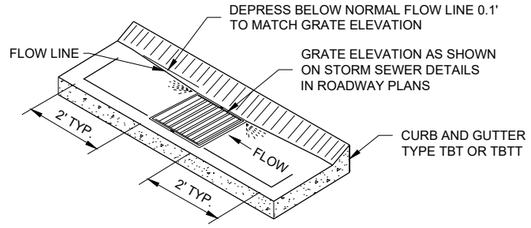
SDD 08D03 - 09a



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

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

(14) GEOTEXTILE TYPE HR.

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

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

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

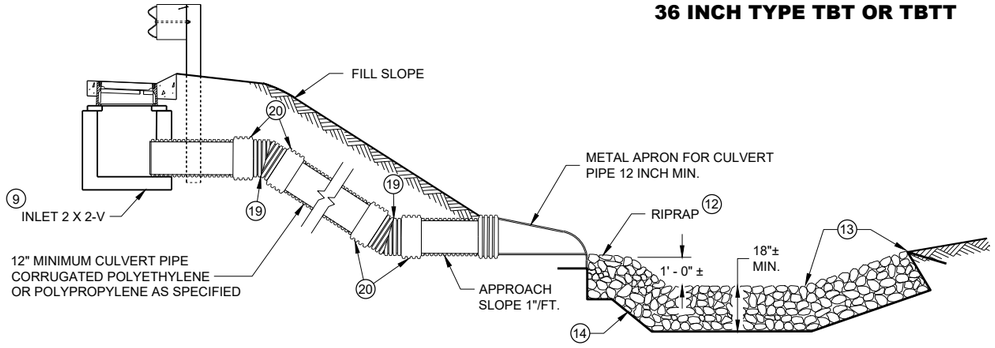
(18) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

(19) MANUFACTURER SUPPLIED BEND.

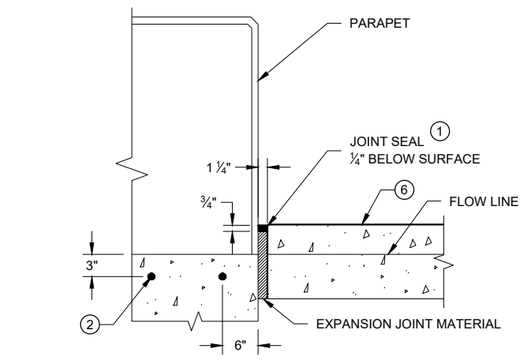
(20) MANUFACTURER SUPPLIED EXTERNAL MECHANICAL COUPLING OR A MANUFACTURER RECOMMENDED COUPLING WITH A MASTIC IMPREGNATED GEOTEXTILE WRAP AND MECHANICAL FASTENING BANDS.

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

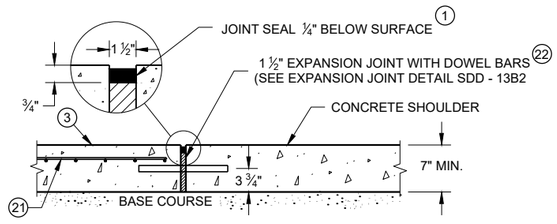
(22) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



SECTION A - A

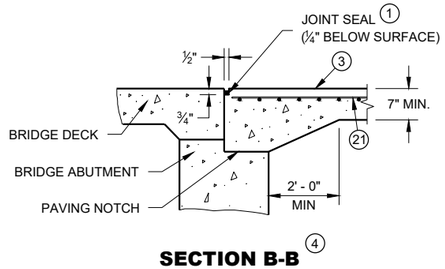


SECTION D - D

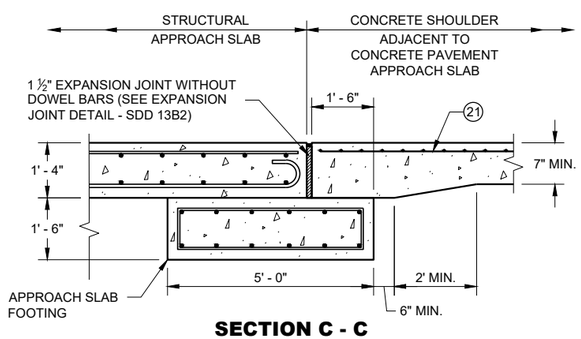


SECTION C - C

JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS

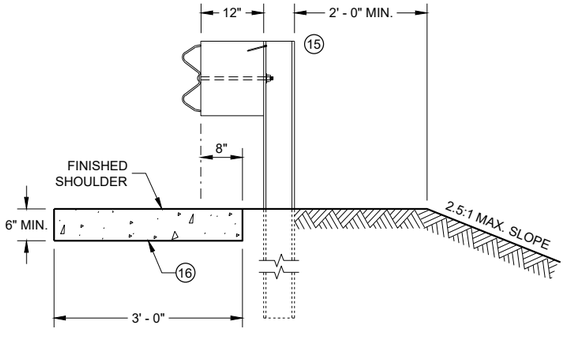


SECTION B-B 4

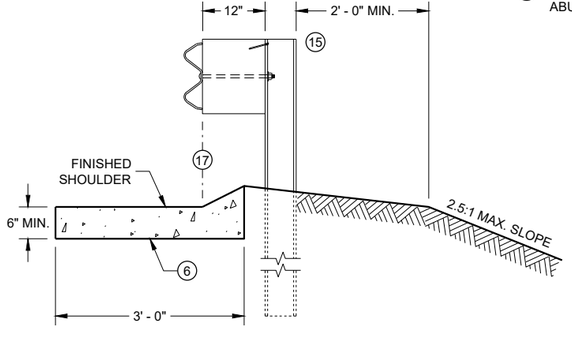


SECTION C - C

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



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

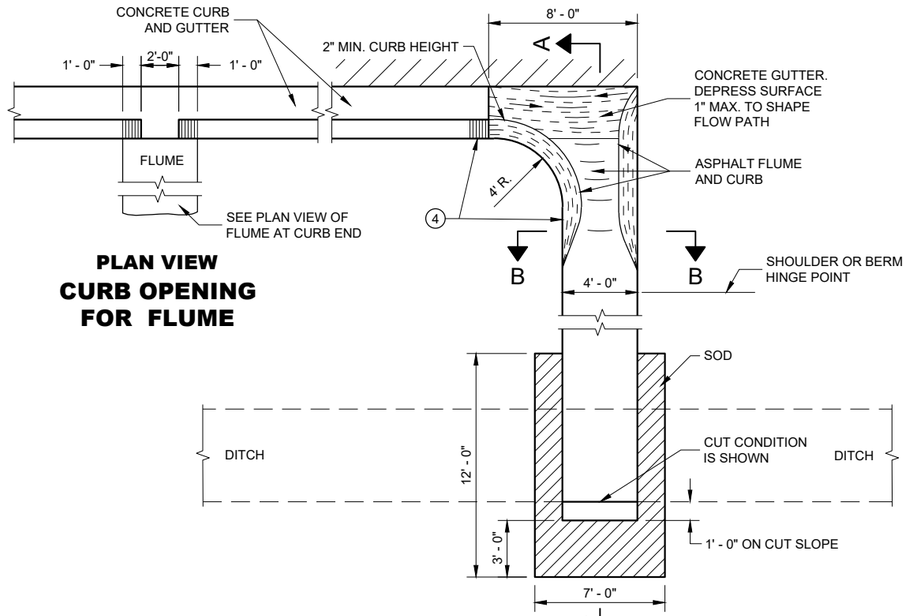
FHWA

6

SDD 08D03 - 09b

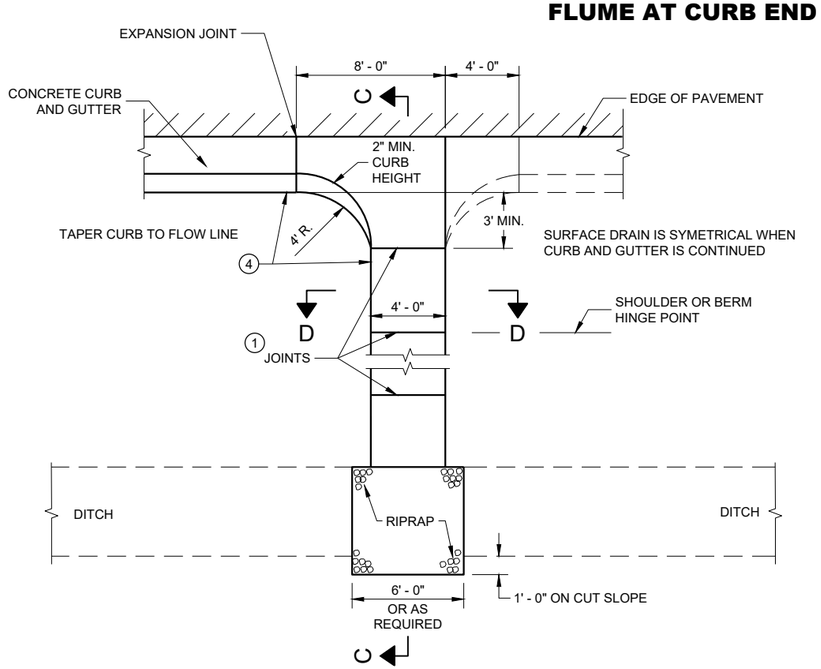
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



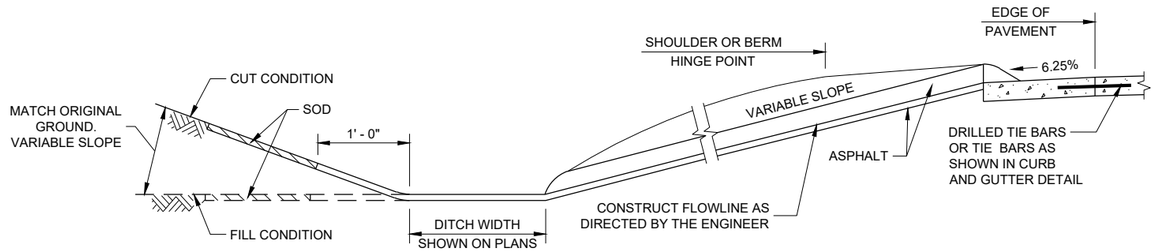
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

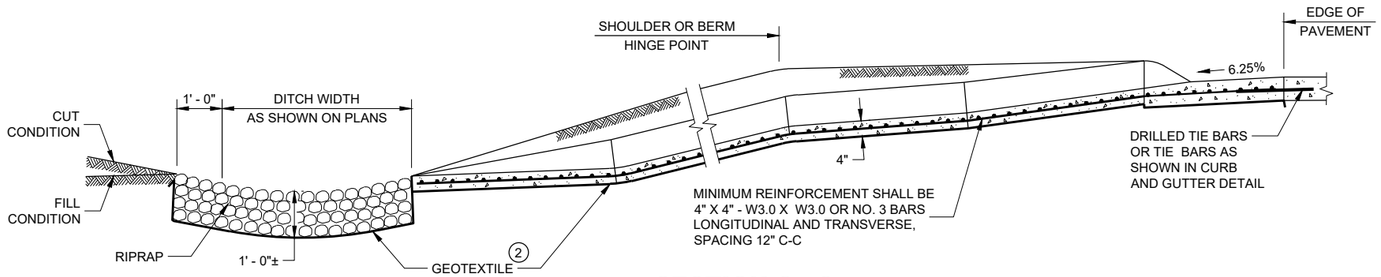
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

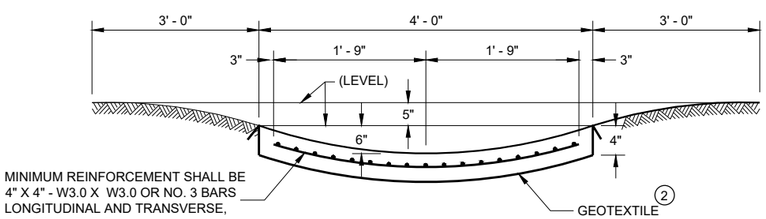


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

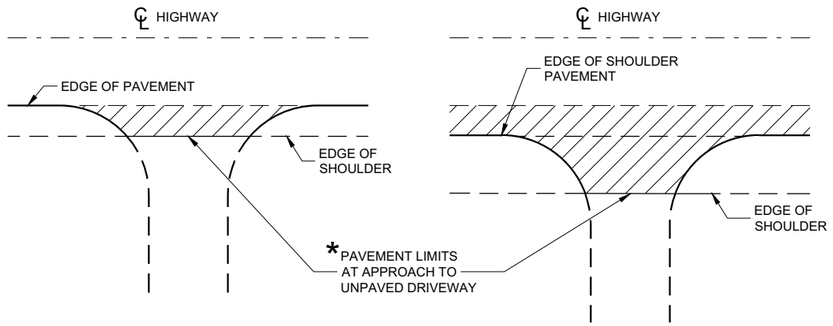
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

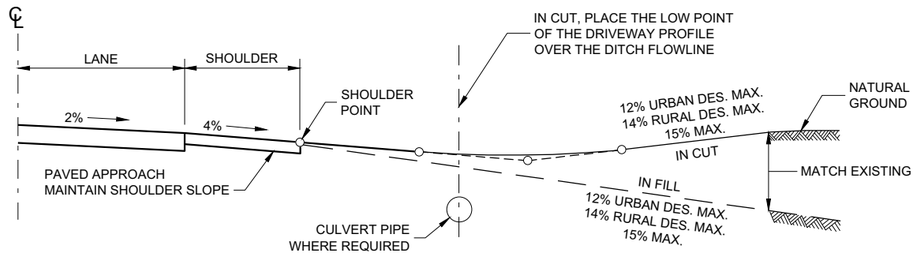
6
SDD 08D04 - 07



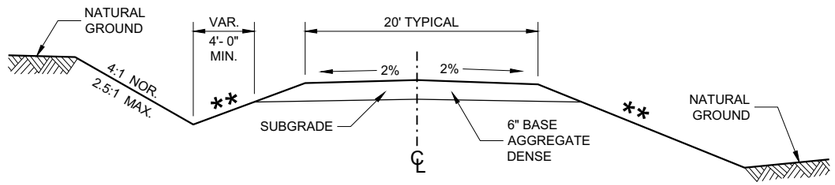
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

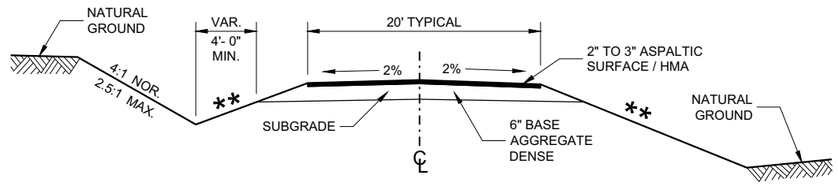


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

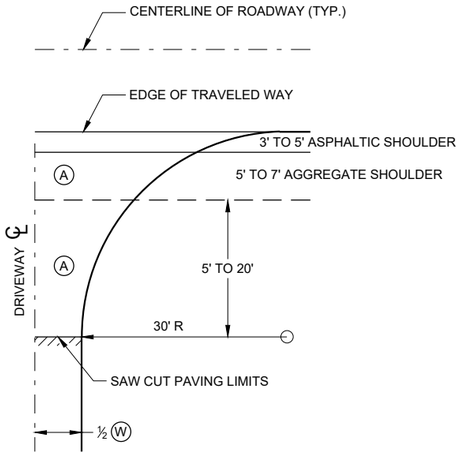
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

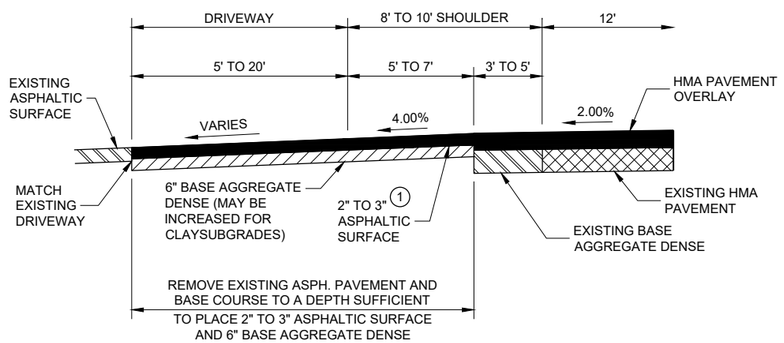
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



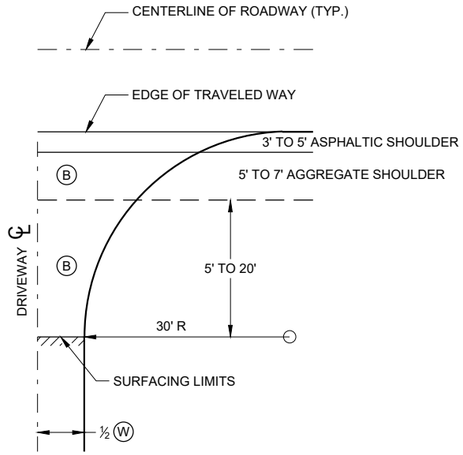
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

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

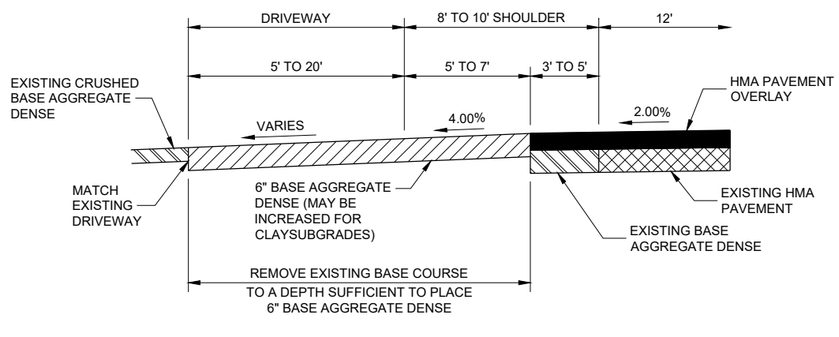
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(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

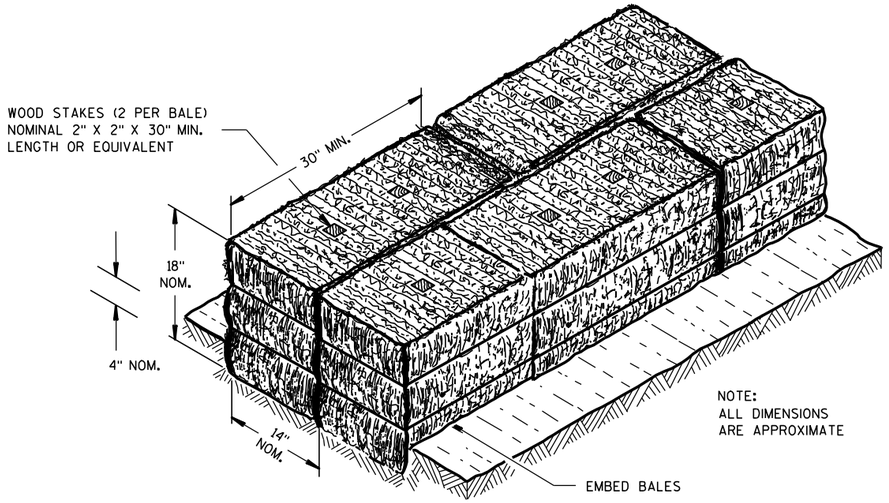
APPROVED
December 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

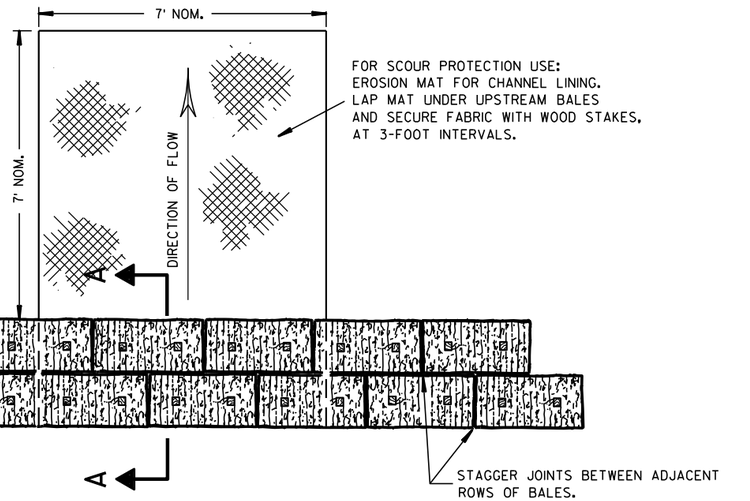
FHWA

6

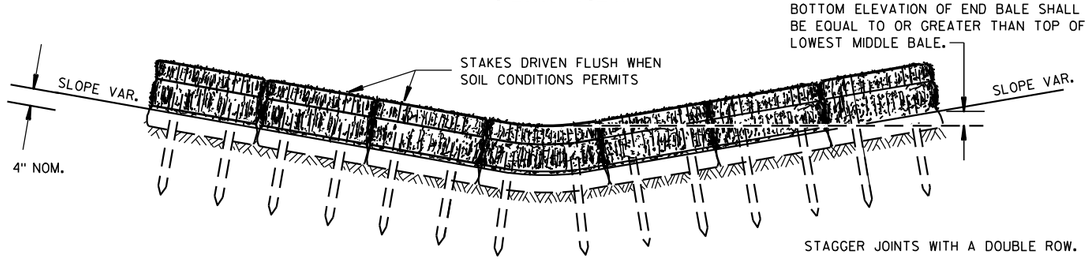
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



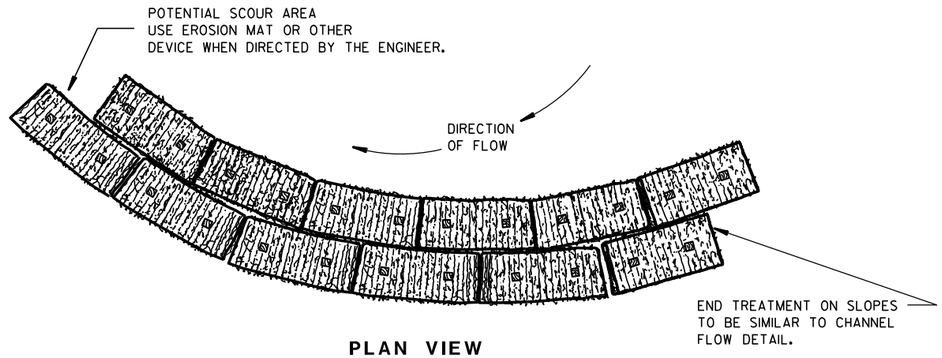
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

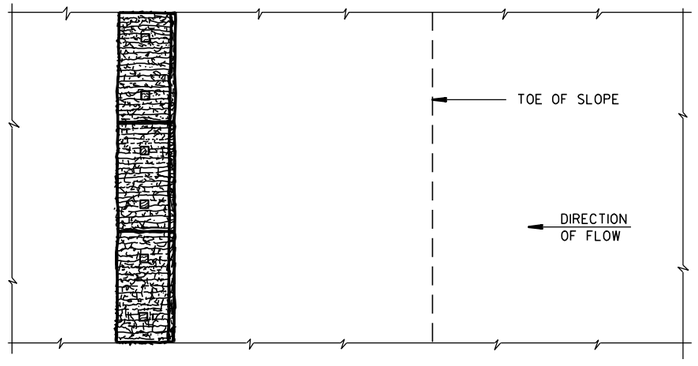
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

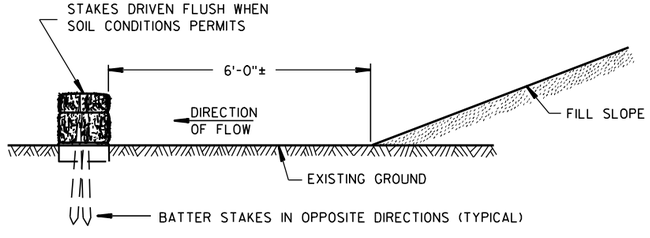


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

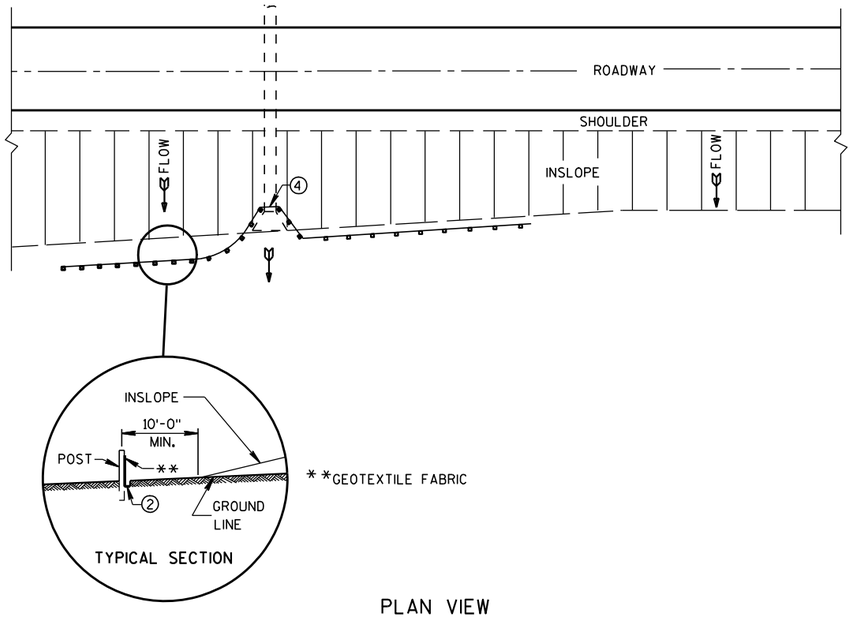
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

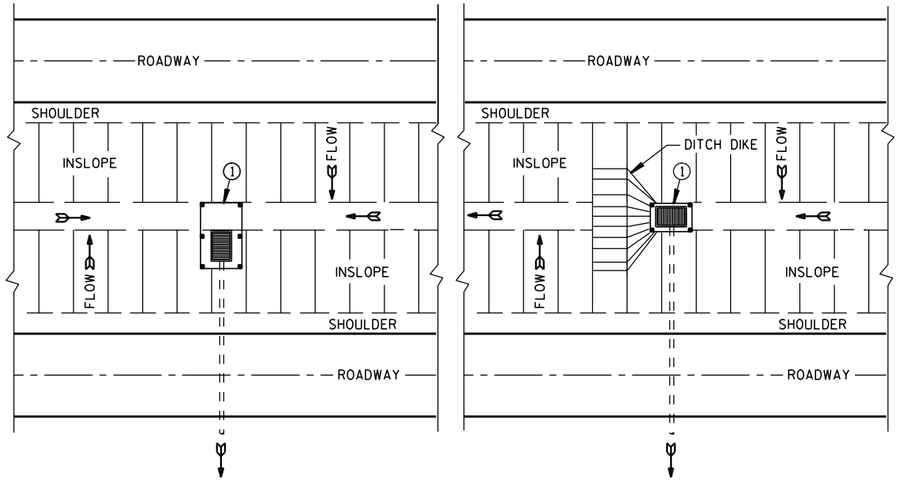
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



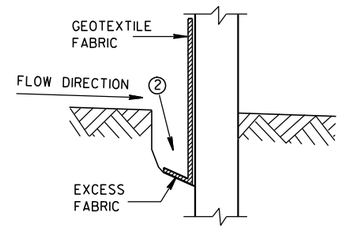
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

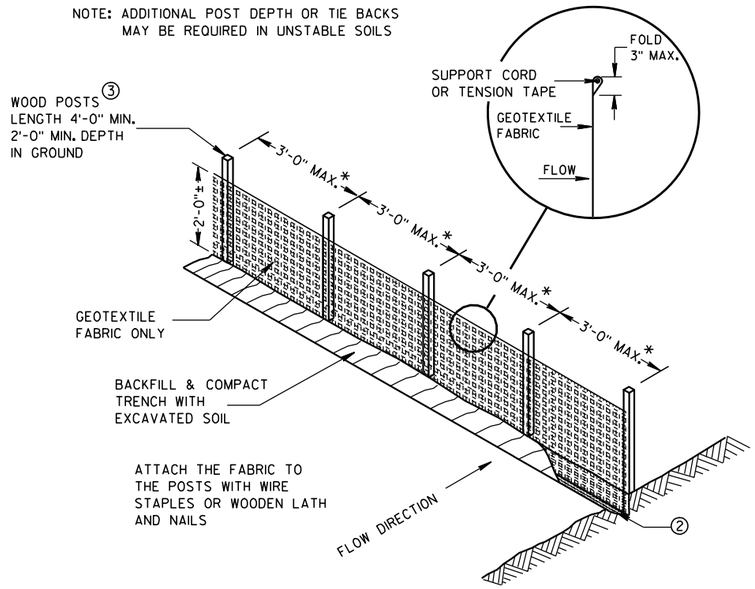
GENERAL NOTES

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

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

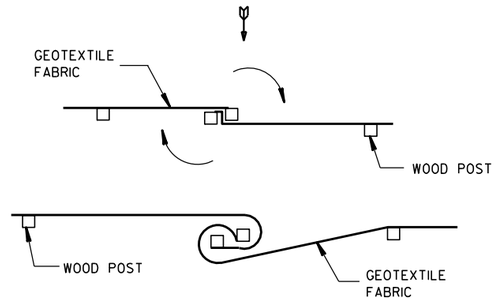


TRENCH DETAIL

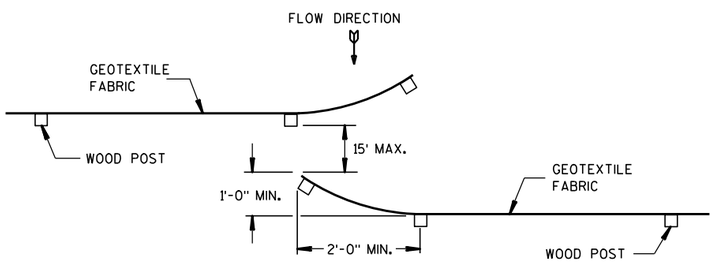


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

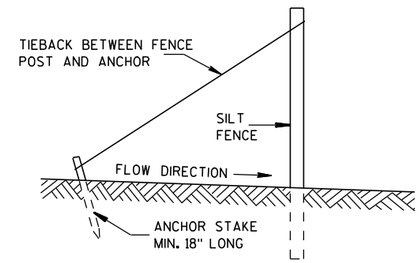


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

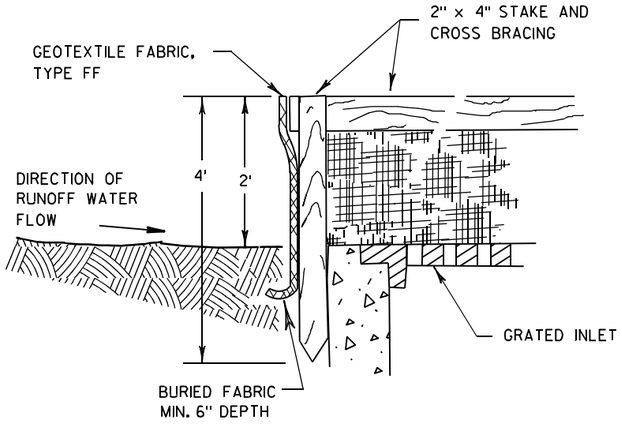
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

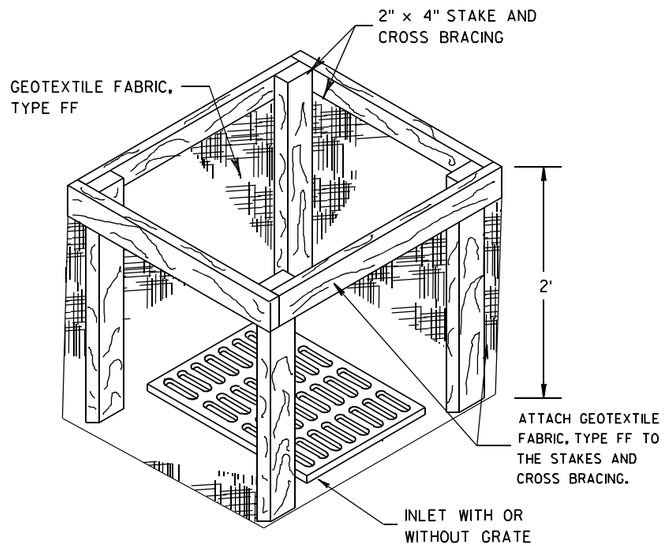
6

S.D.D. 8 E 9-6

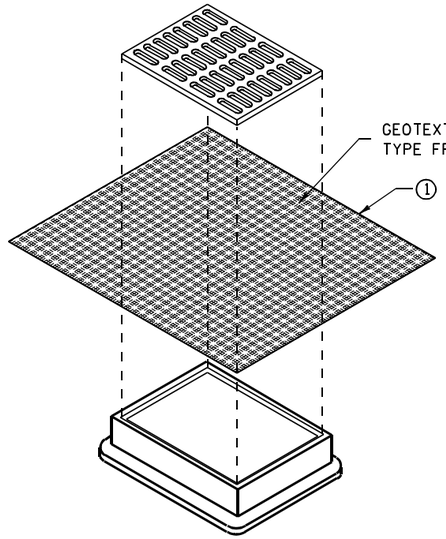
6

S.D.D. 8 E 9-6



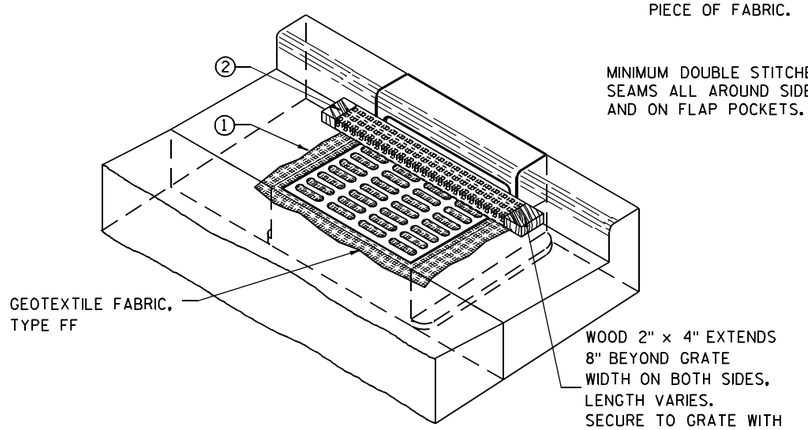


INLET PROTECTION, TYPE A

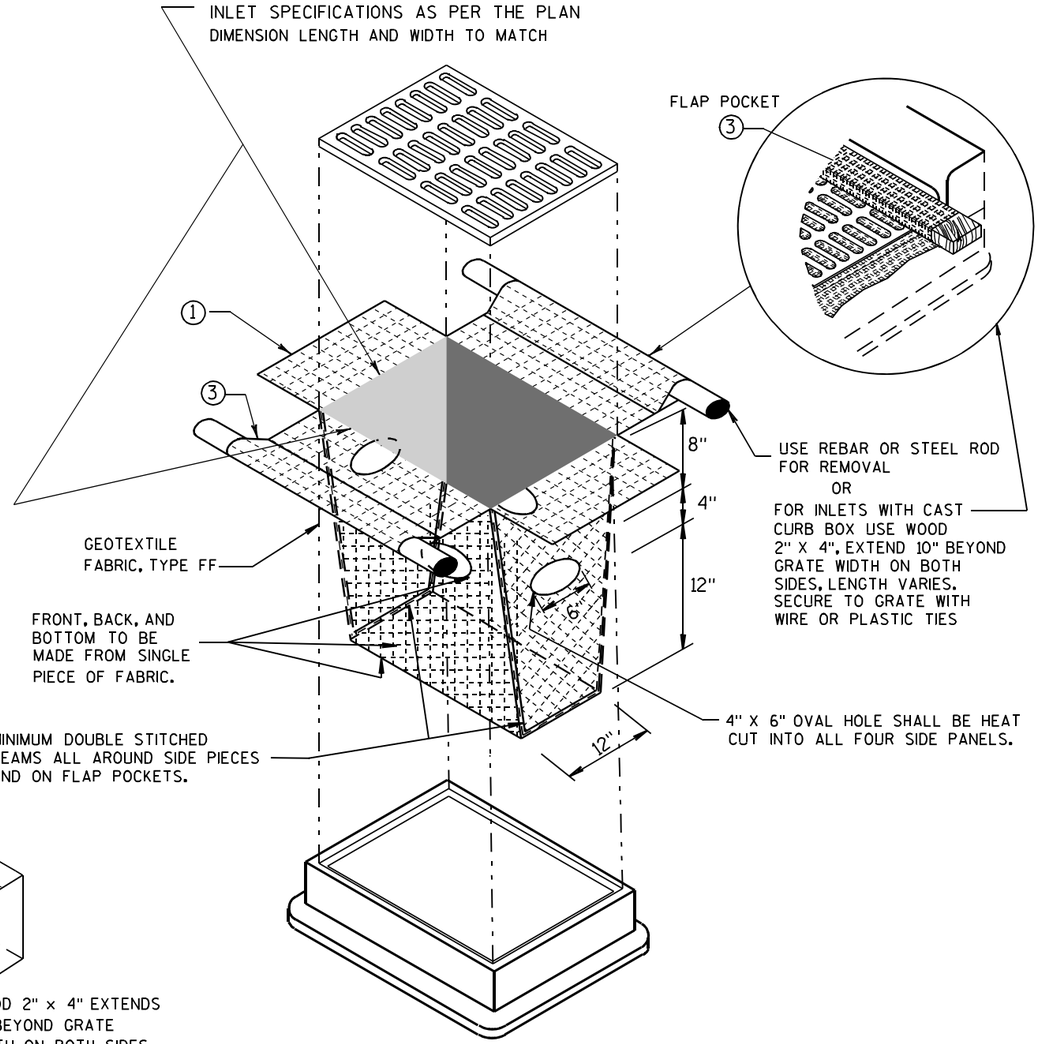


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

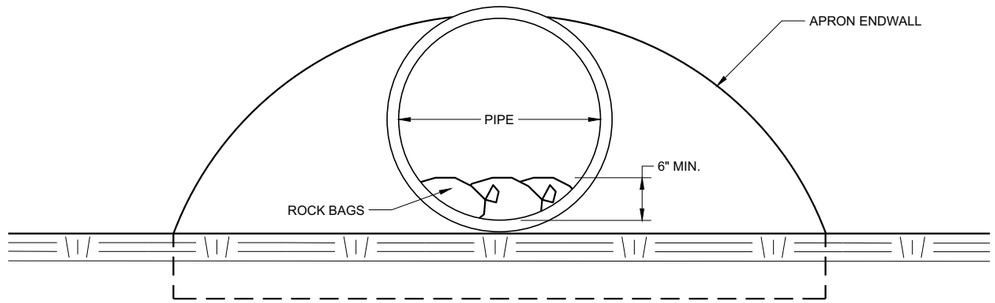
FHWA

6

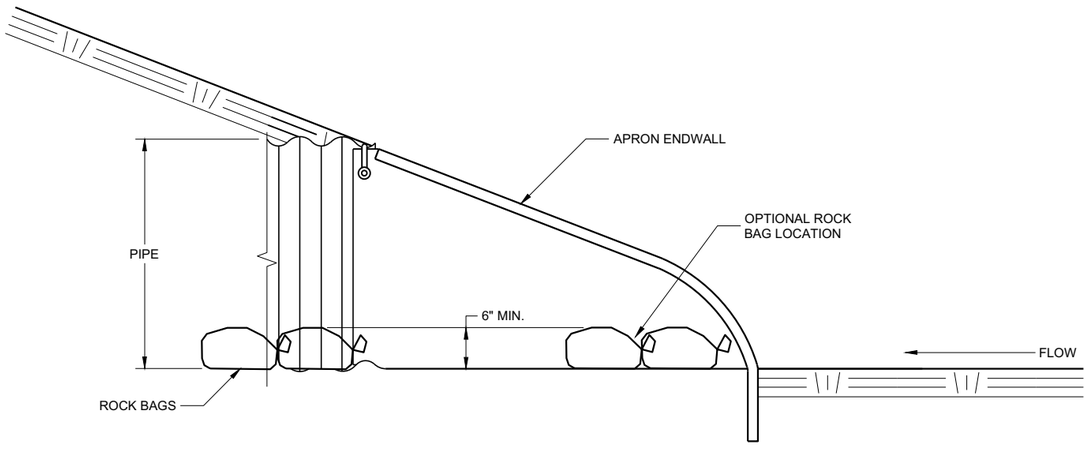
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

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

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SDD 08E15 - 01

METAL APRON ENDWALLS

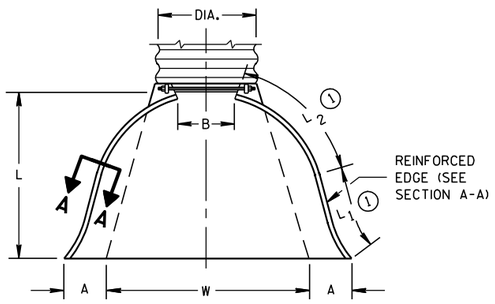
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

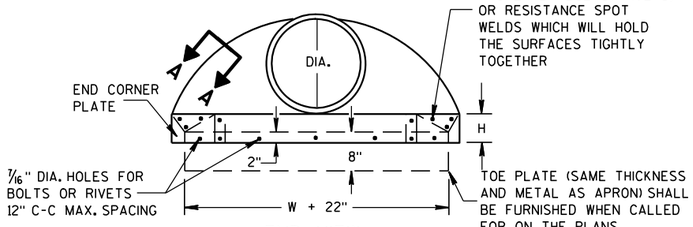
REINFORCED CONCRETE APRON ENDWALLS

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

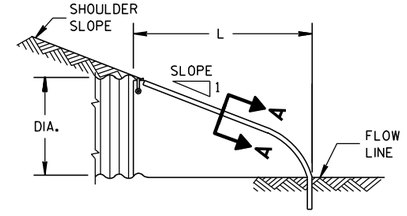
*MINIMUM
**MAXIMUM



PLAN VIEW

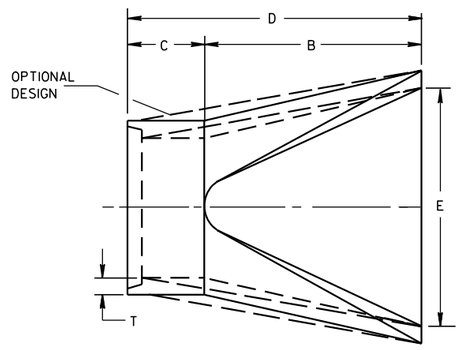


END VIEW

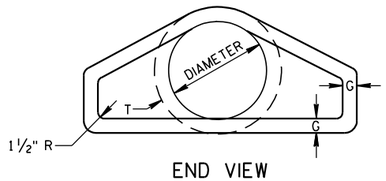


SIDE ELEVATION

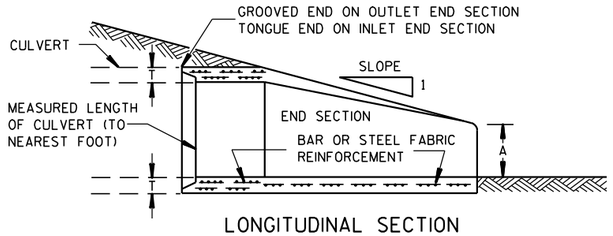
METAL ENDWALLS



PLAN

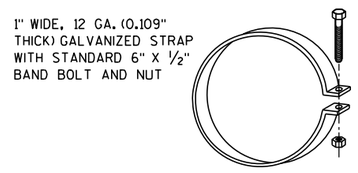


END VIEW



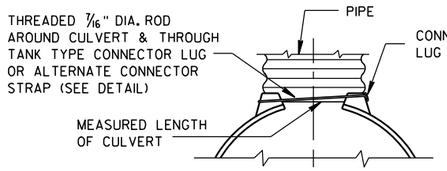
LONGITUDINAL SECTION

CONCRETE ENDWALLS

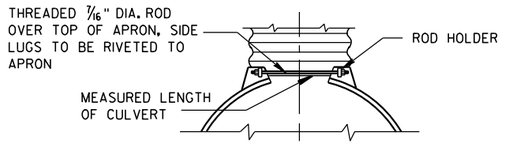


ALTERNATE FOR TYPE 1 CONNECTION

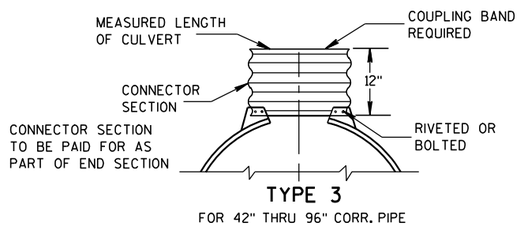
END SECTION CONNECTOR STRAP



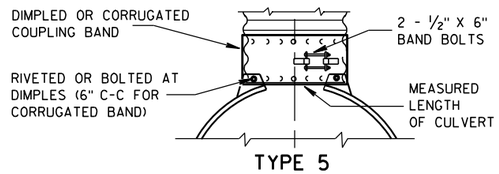
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

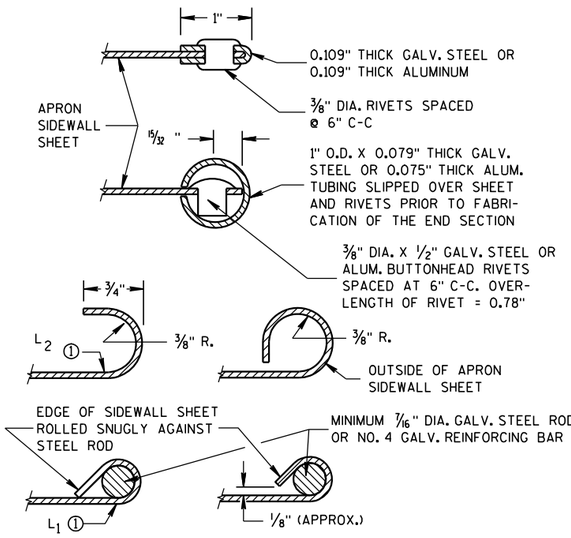
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

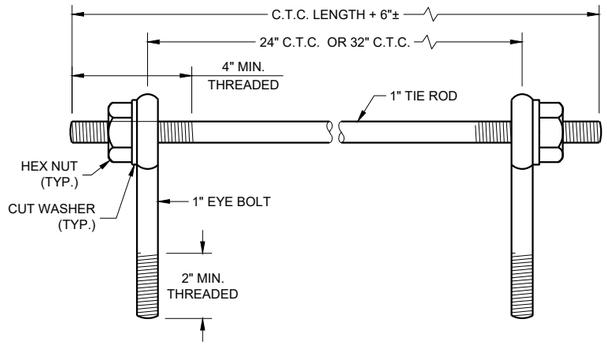
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

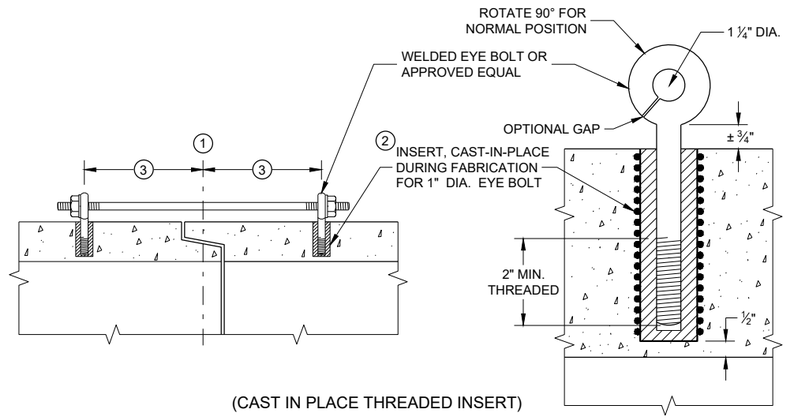
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

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

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

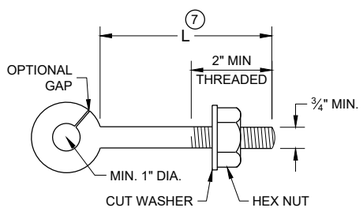
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

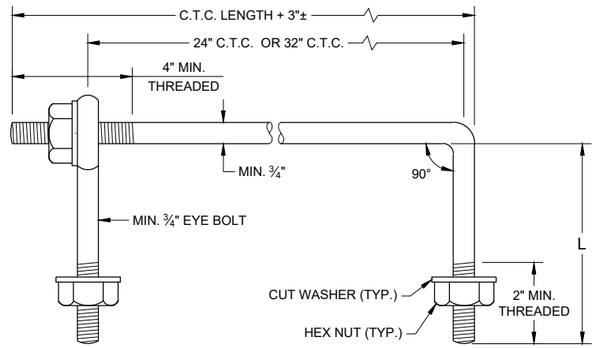
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

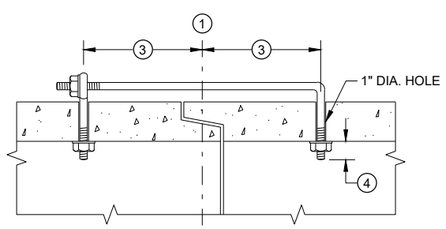


EYE BOLT (7)

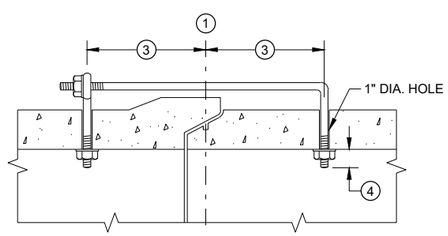
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

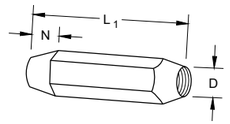
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

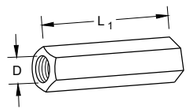
ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



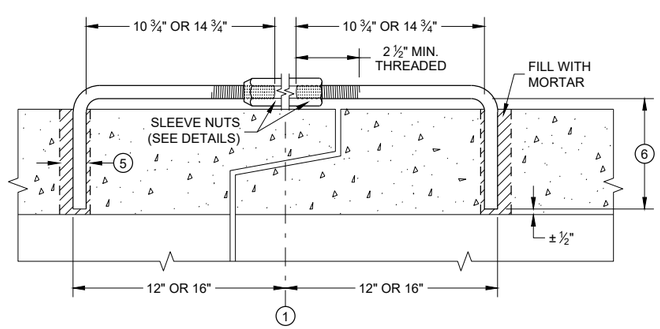
TAPERED



PLAIN

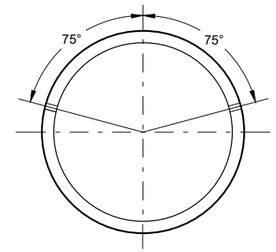
RIGHT AND LEFT THREADS

SLEEVE NUTS



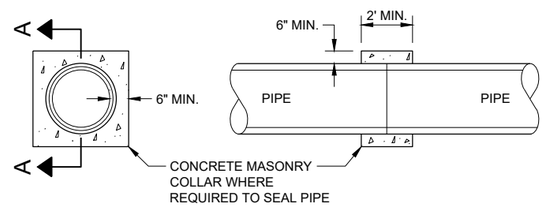
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

SDD 08F04 - 08

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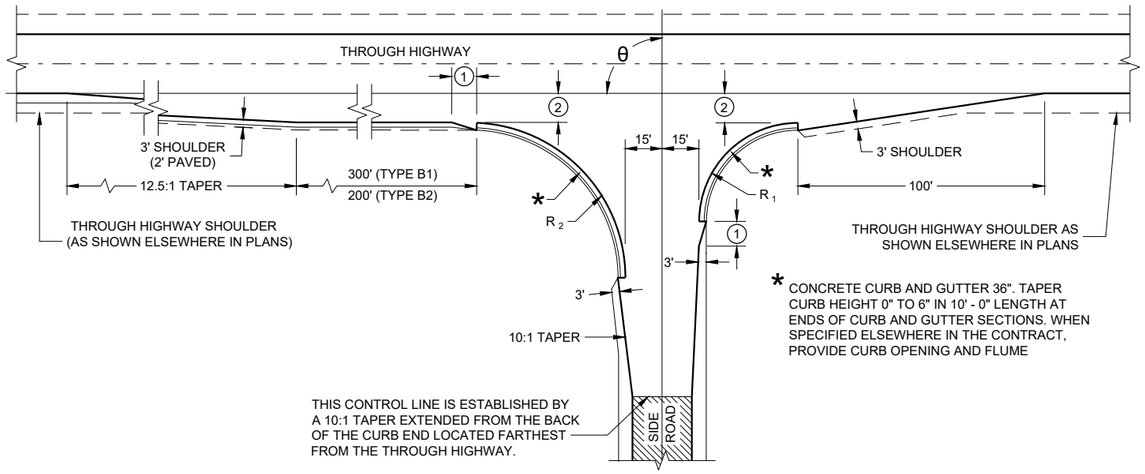


* CONCRETE CURB AND GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10' - 0" LENGTH AT ENDS OF CURB AND GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME

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.

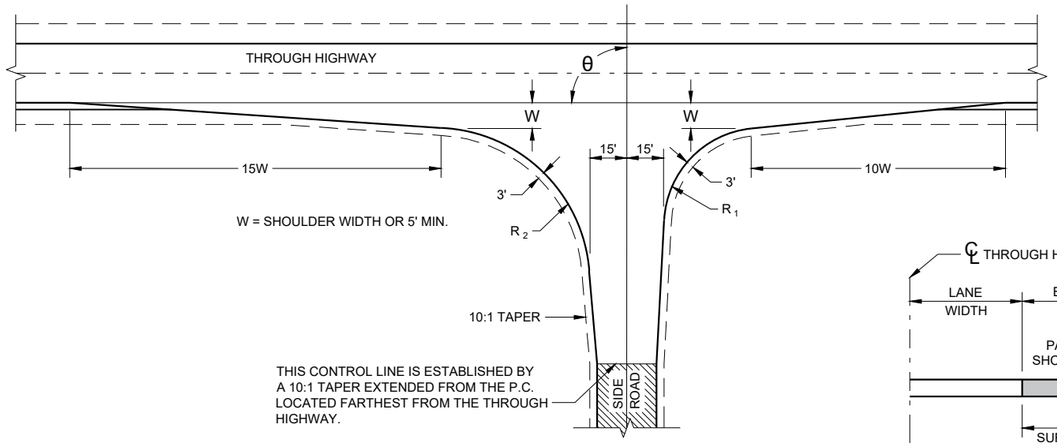
(1) 10-FT TYPICAL.

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

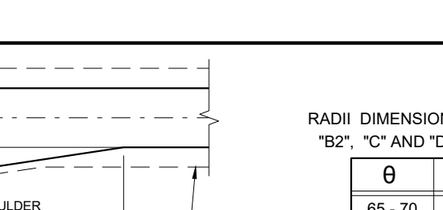
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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

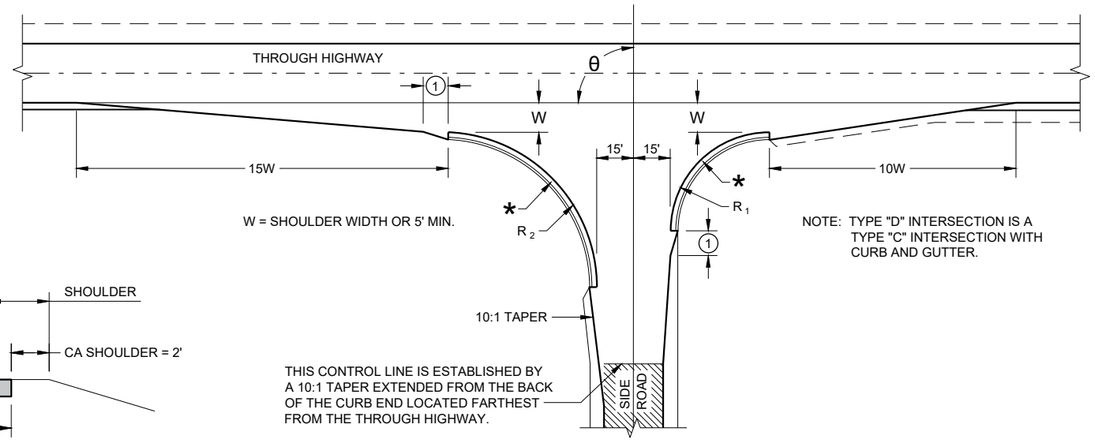
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

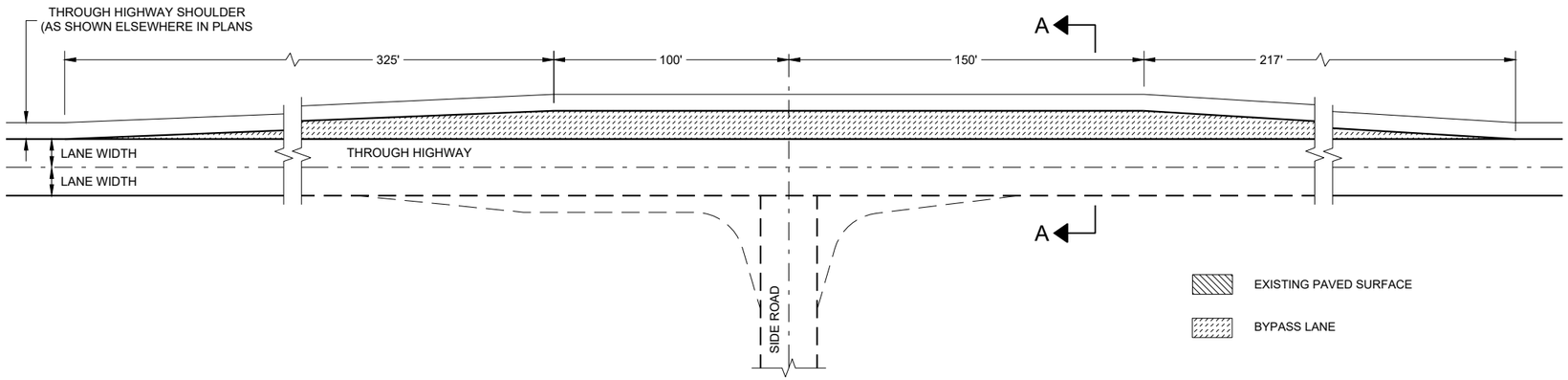


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



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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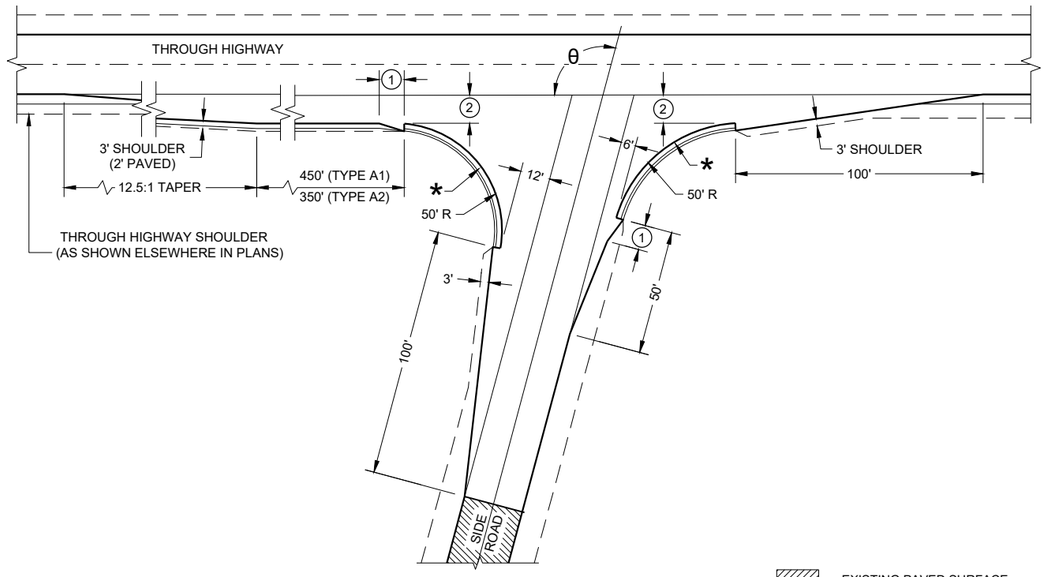
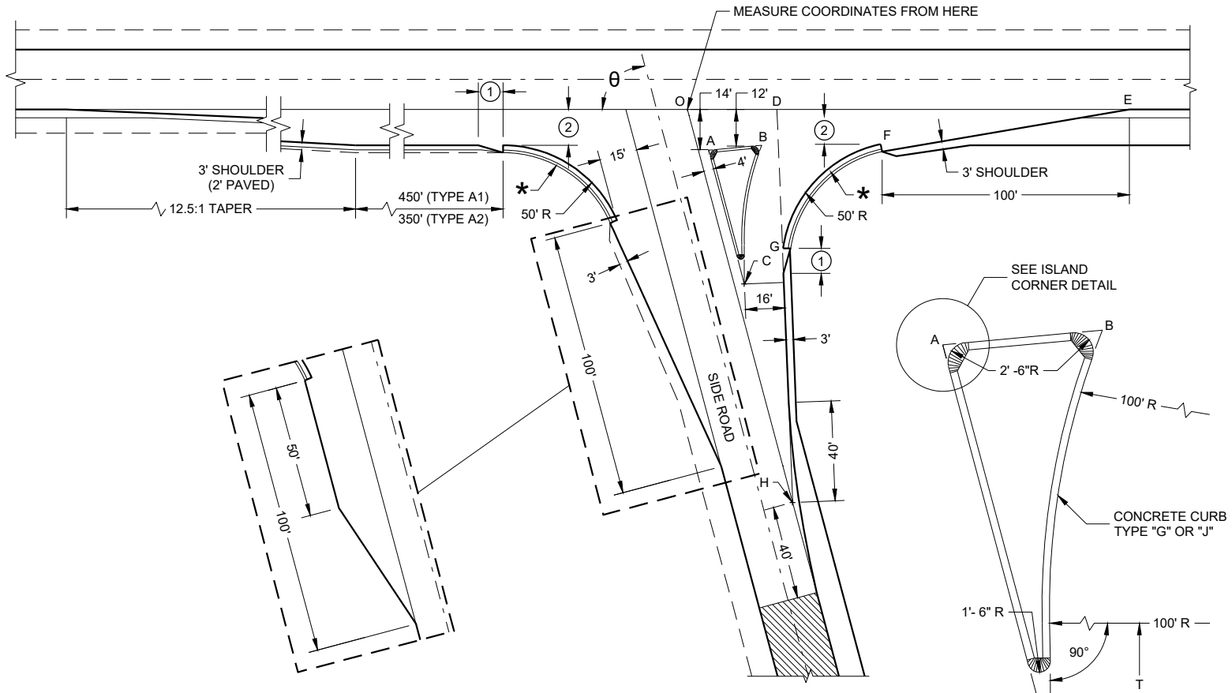
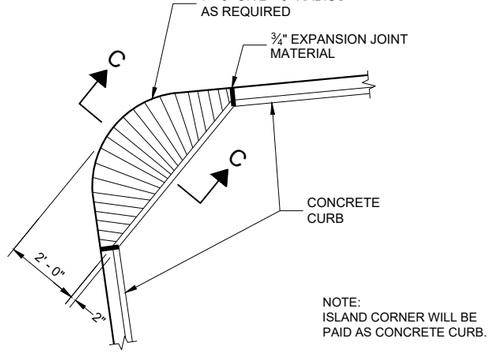


θ = MORE THAN 80°

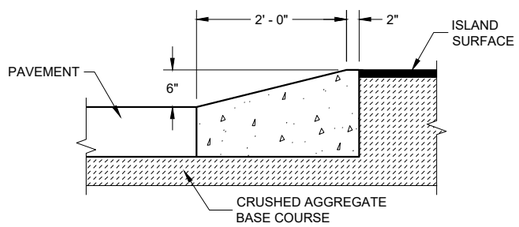


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

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

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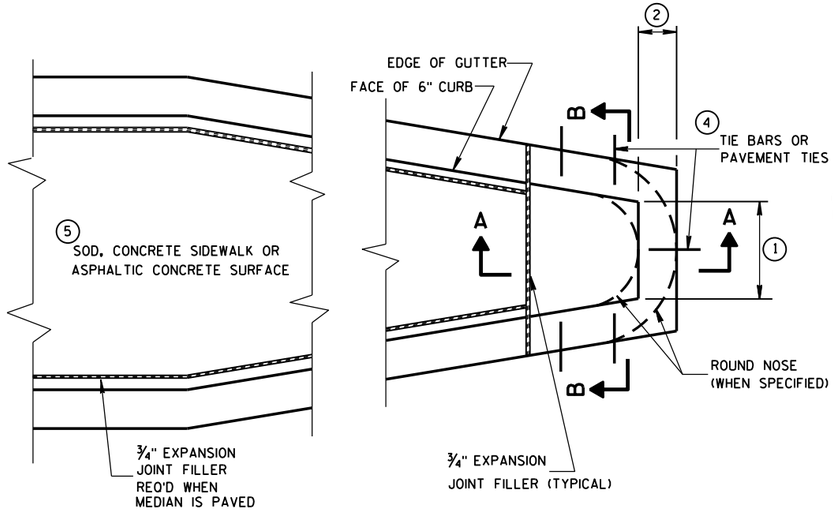
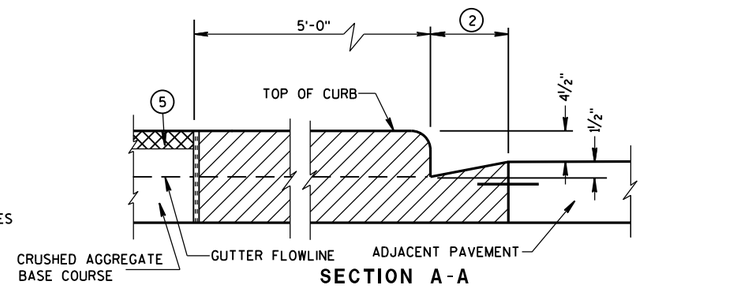
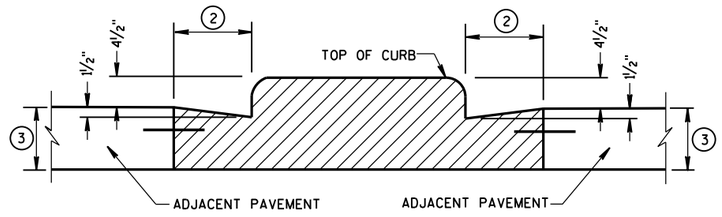




SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

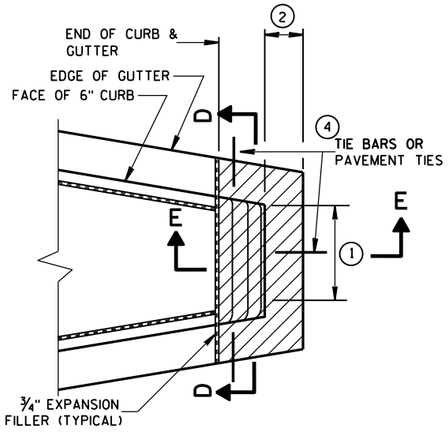
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

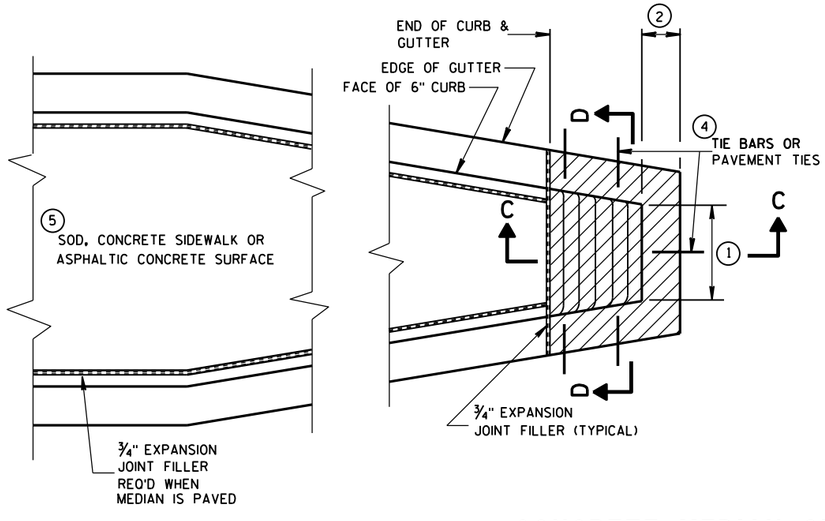
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

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

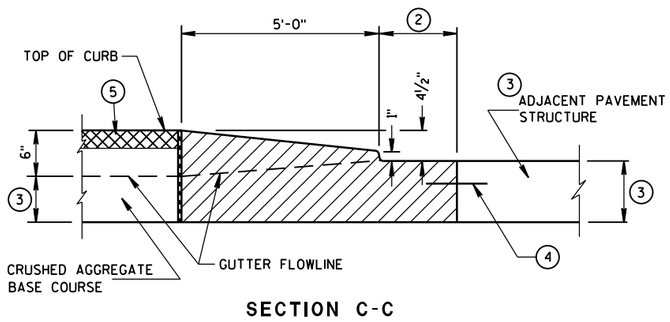
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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

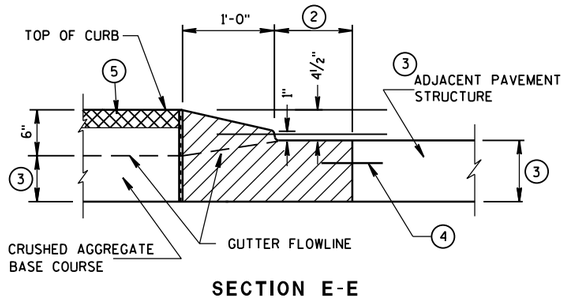




CONCRETE MEDIAN SLOPED NOSE TYPE 1

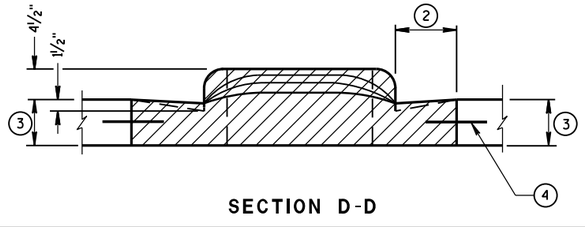


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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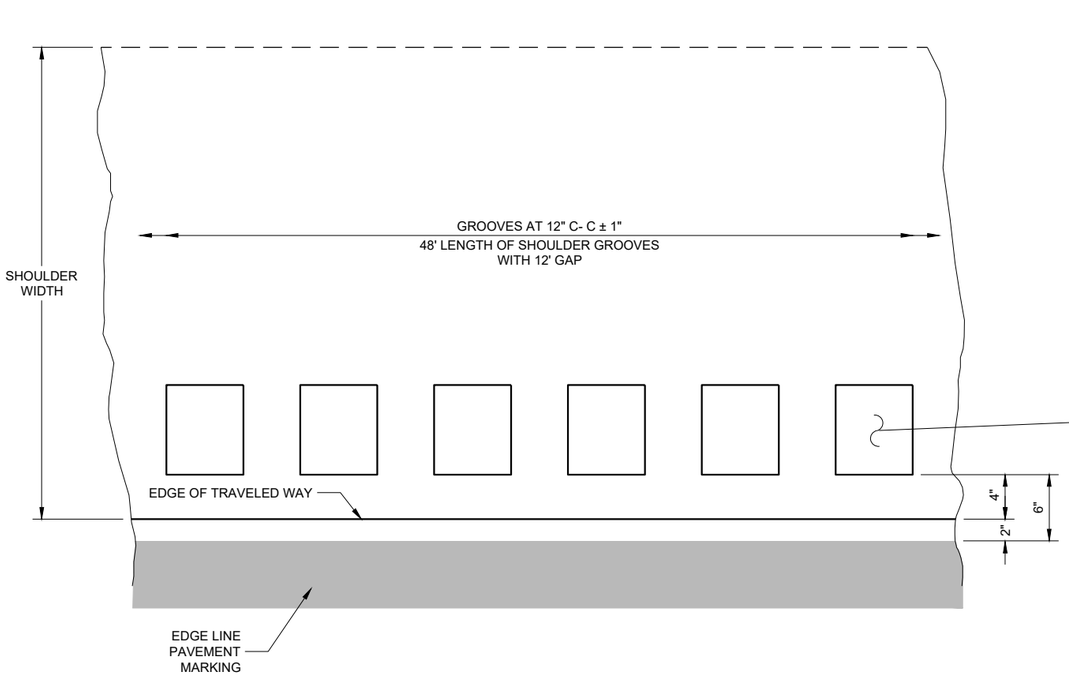
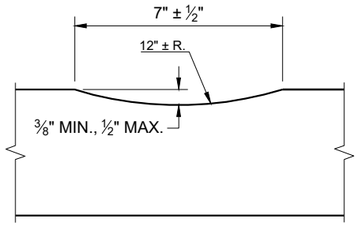
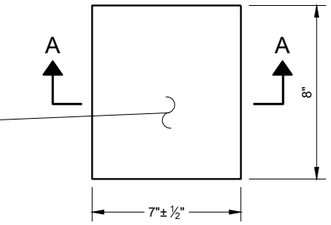
S.D.D. 11 B 2-2



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

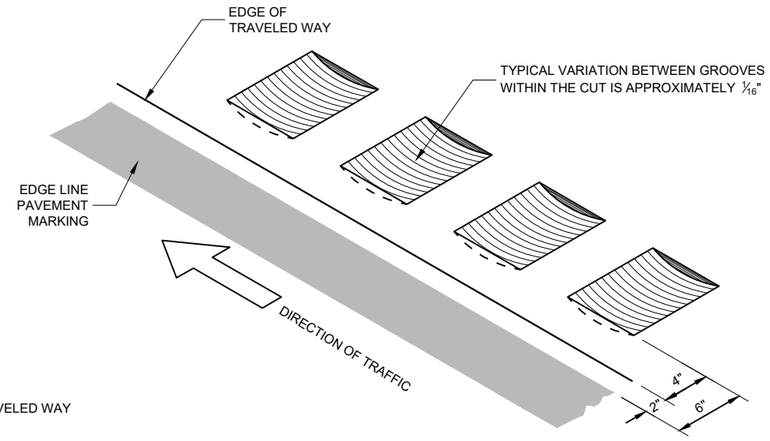


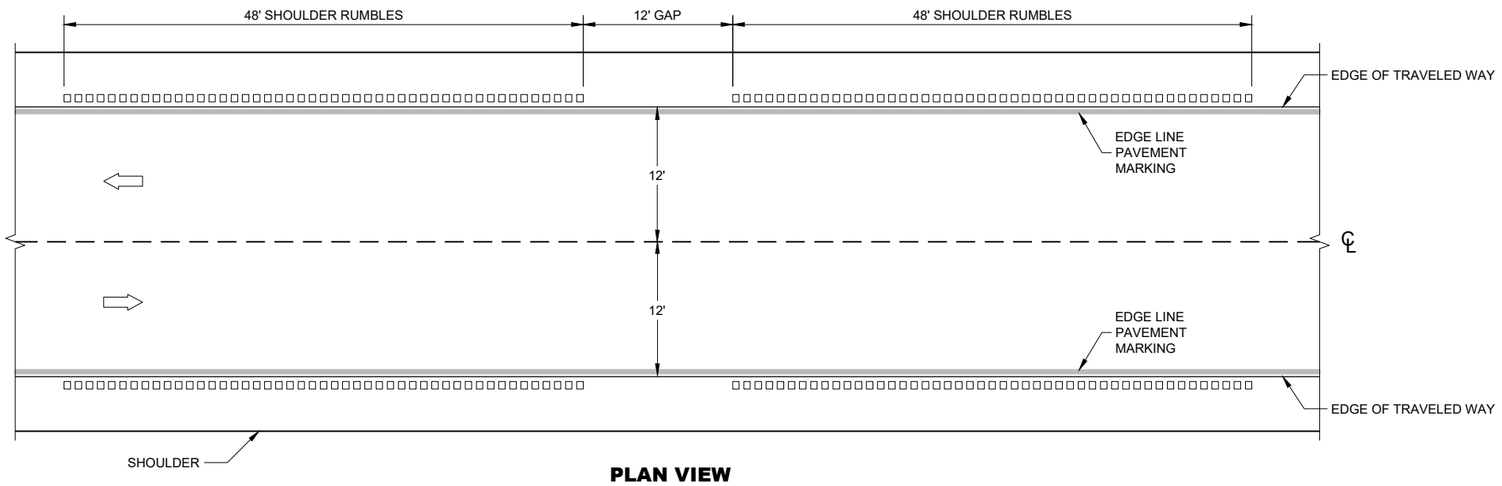
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

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





PLAN VIEW

SHOULDER RUMBLE STRIPS - ASPHALT

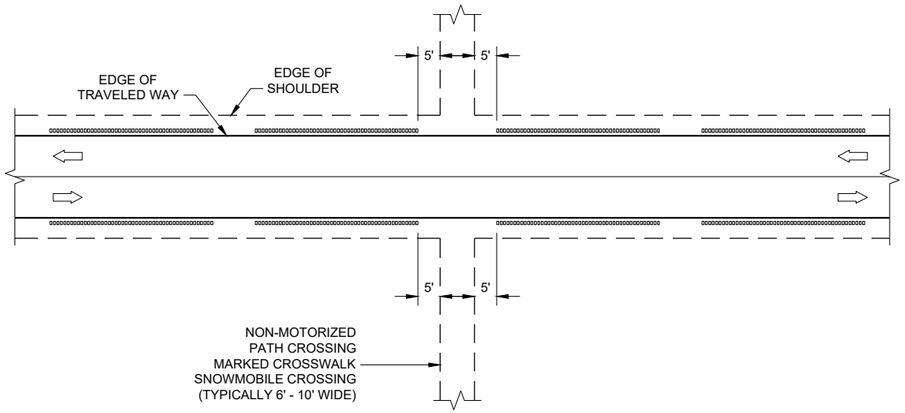
6

SDD 13A10 - 03a

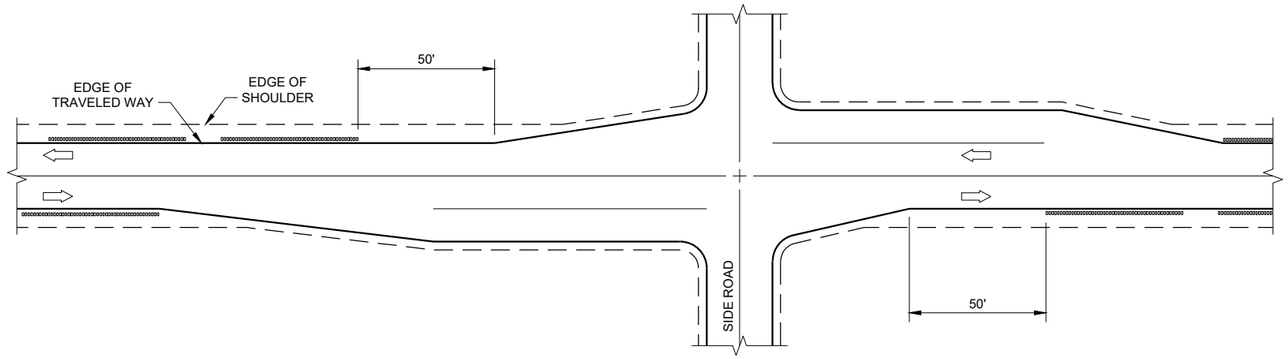
SHOULDER RUMBLE STRIPS ASPHALT

6

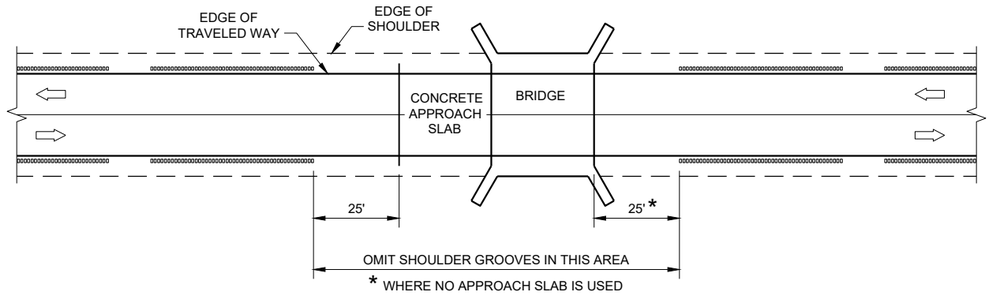
SDD 13A10 - 03a



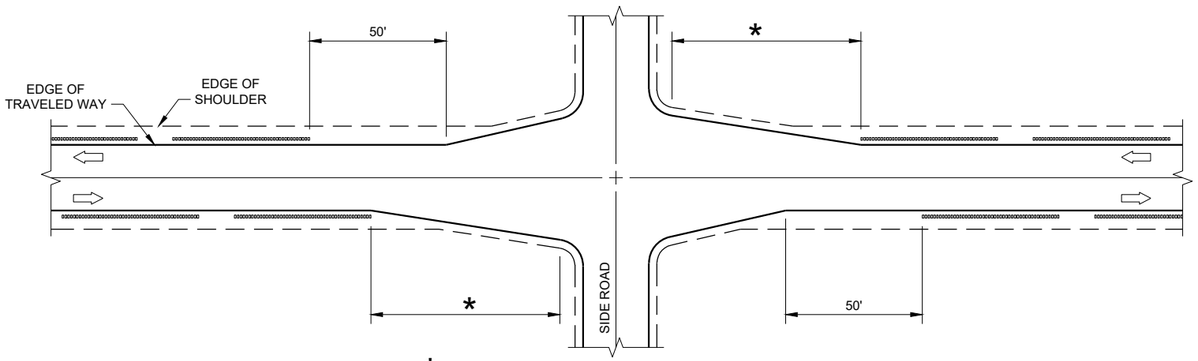
GROOVES AT MISCELLANEOUS CROSSINGS



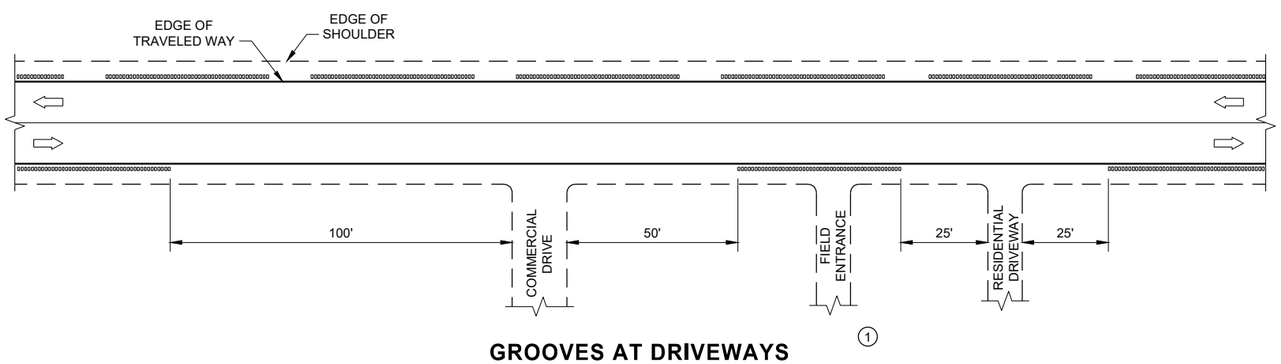
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

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

SHOULDER AND EDGE LINE RUMBLE STRIPS CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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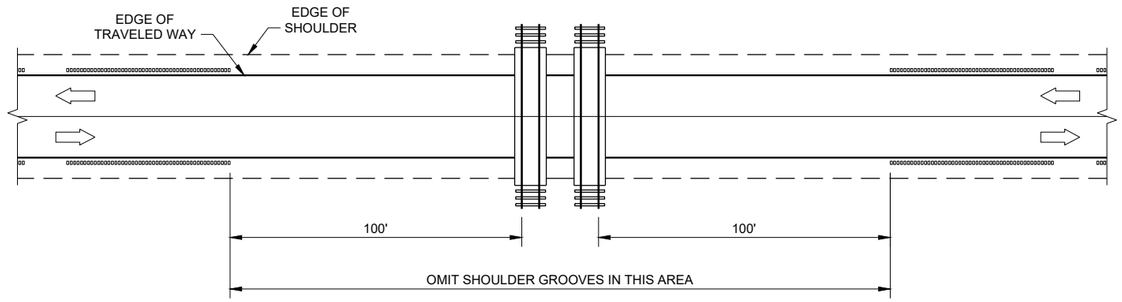
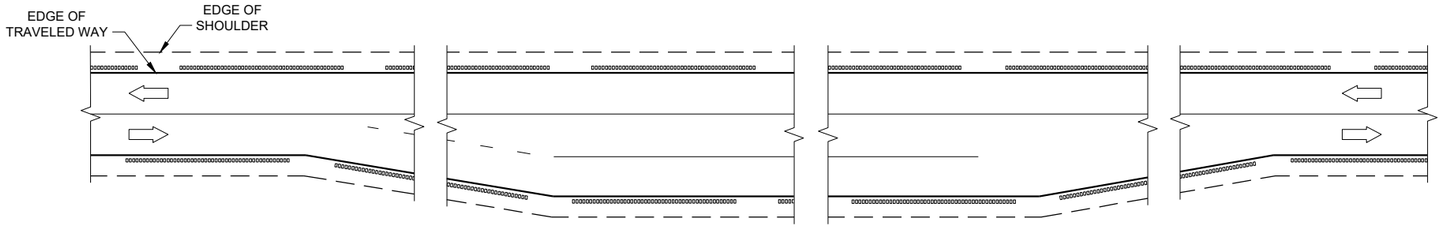
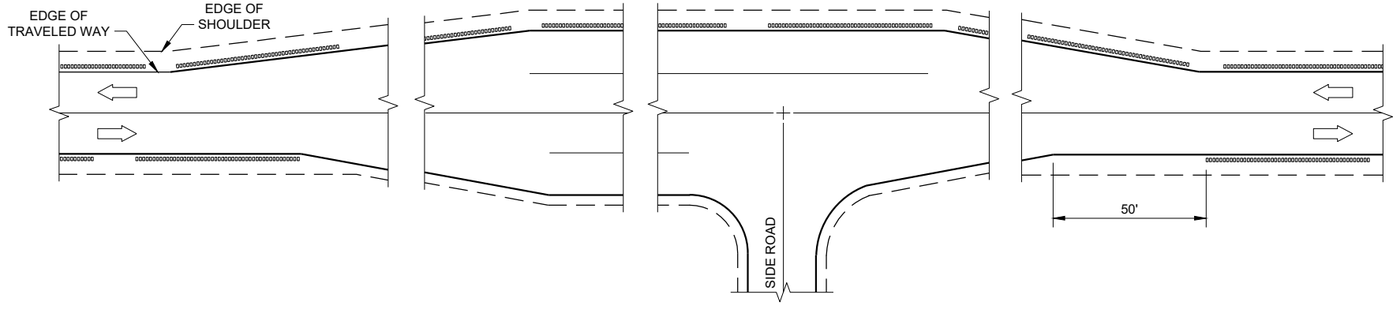
SDD 13A10 - 03g
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

SDD 13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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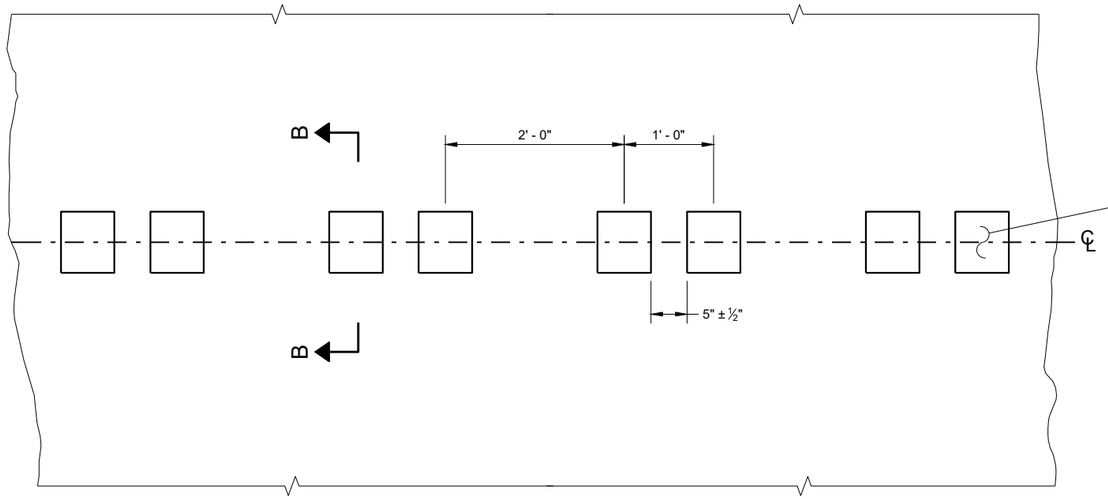
SDD 13A10 - 03h

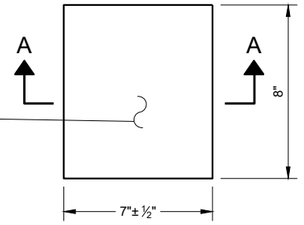
GENERAL NOTES

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

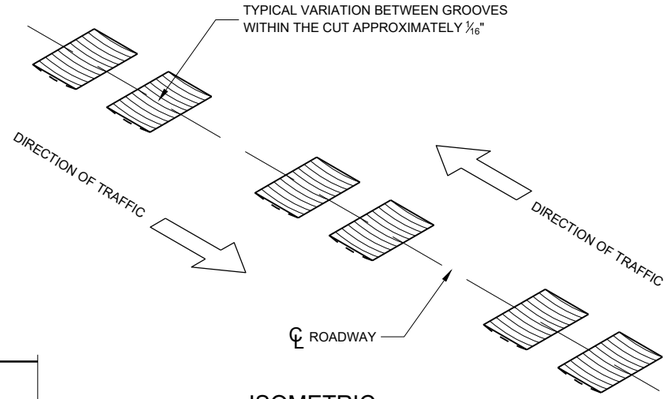
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



PLAN DETAIL VIEW



PLAN VIEW
(SINGLE GROOVE)



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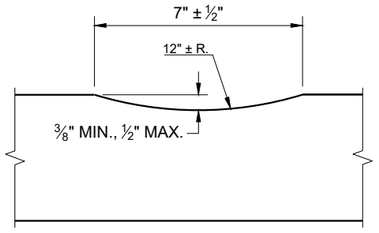
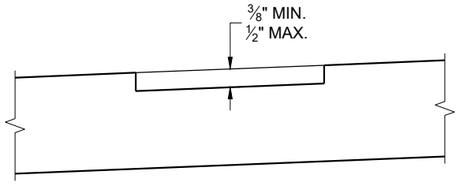
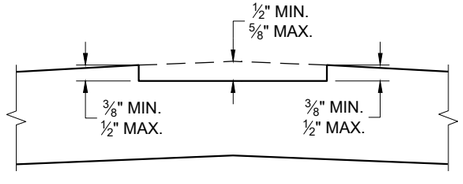


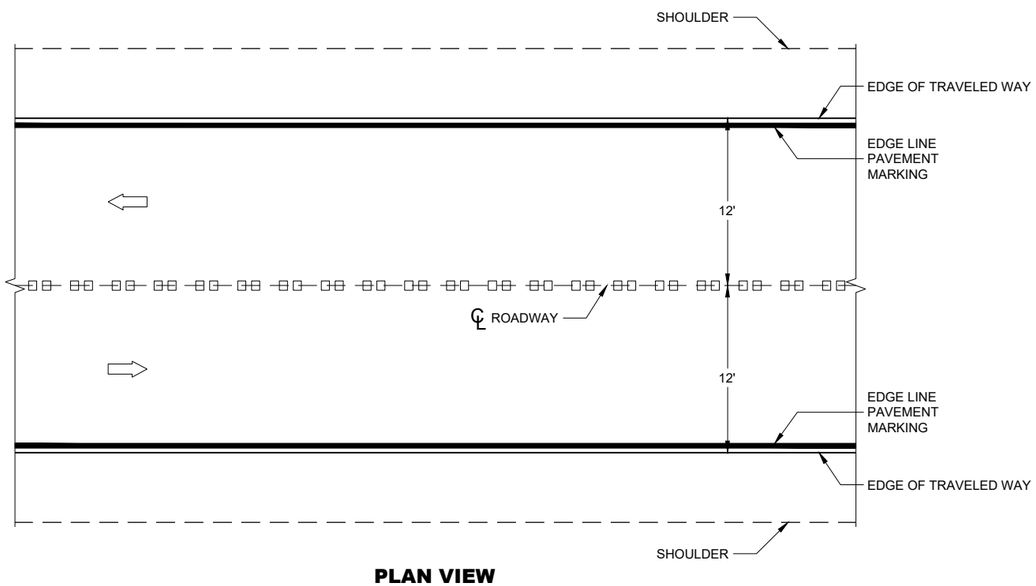
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

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SDD 13A11 - 04a

CENTERLINE RUMBLE STRIPS - ASPHALT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 256

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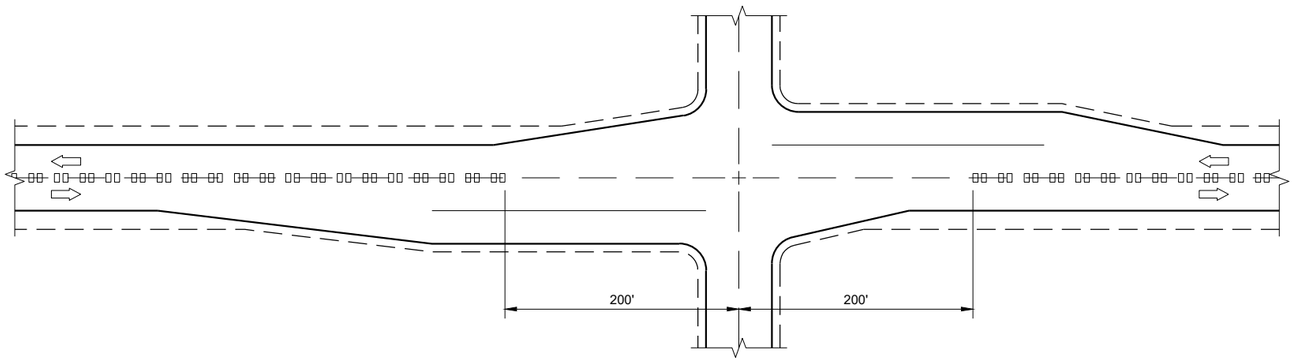
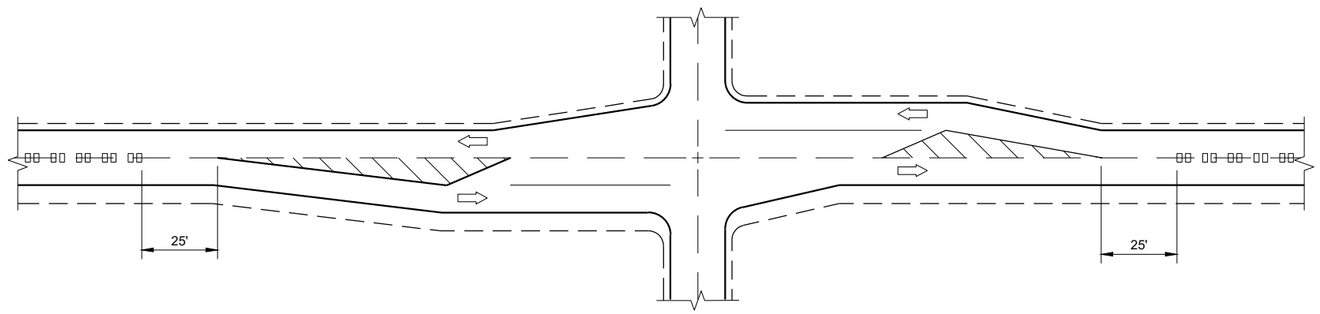
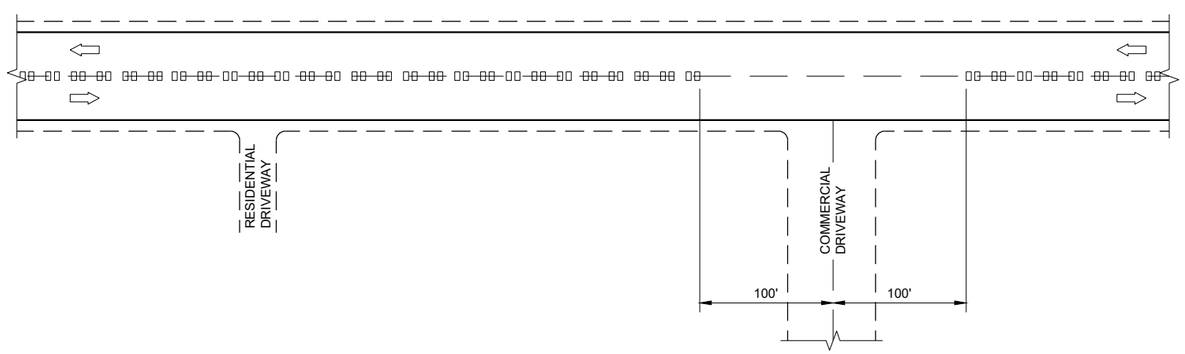
SDD13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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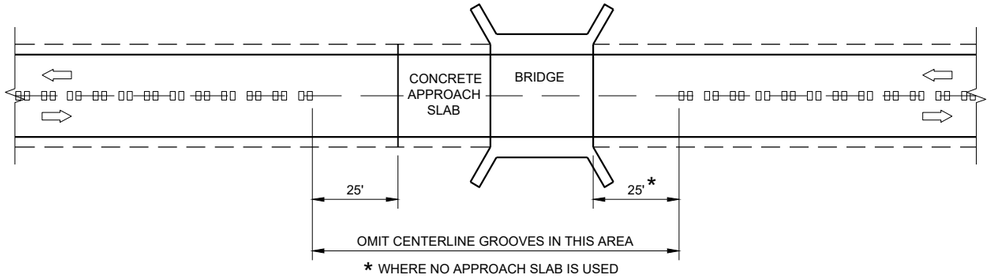
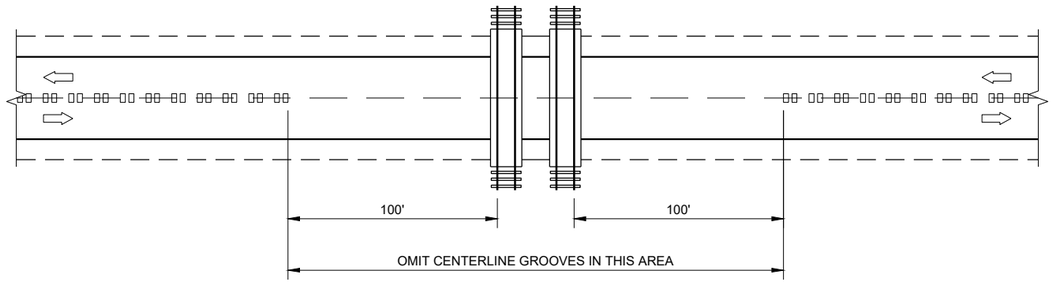


CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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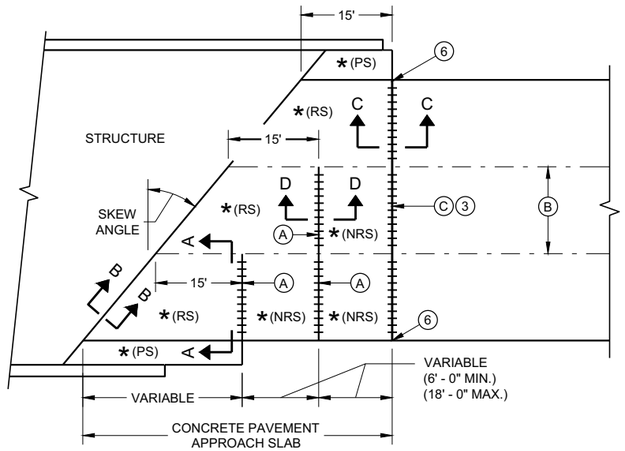
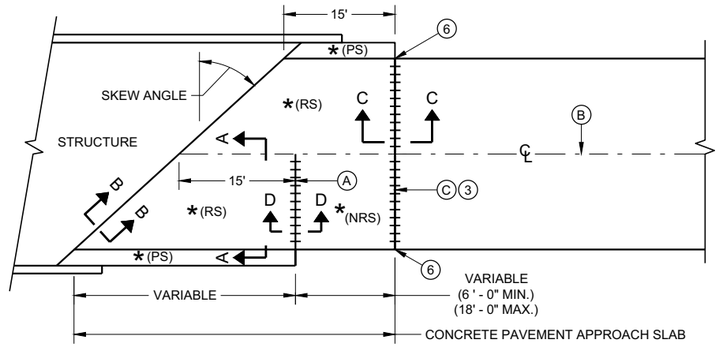
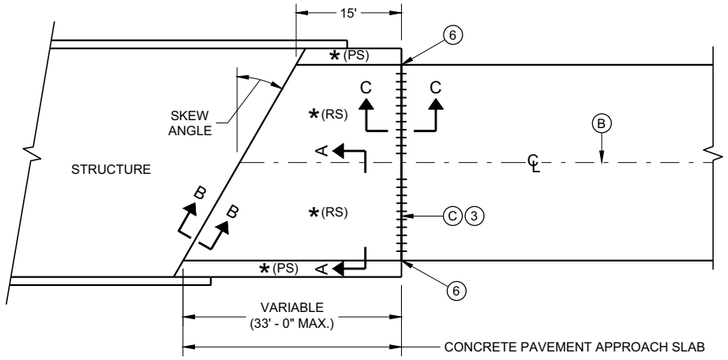


SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

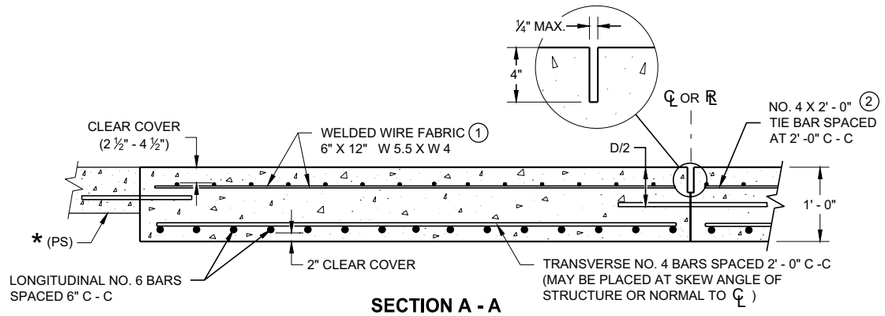
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

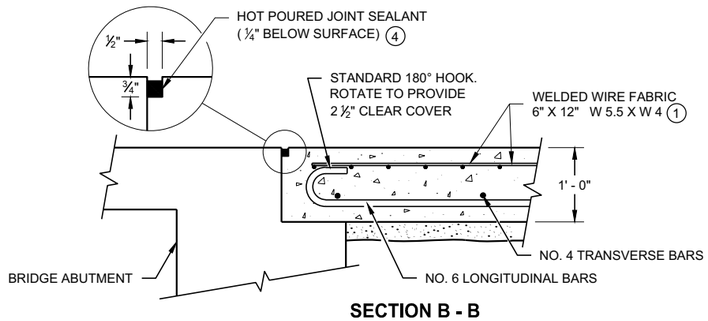
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

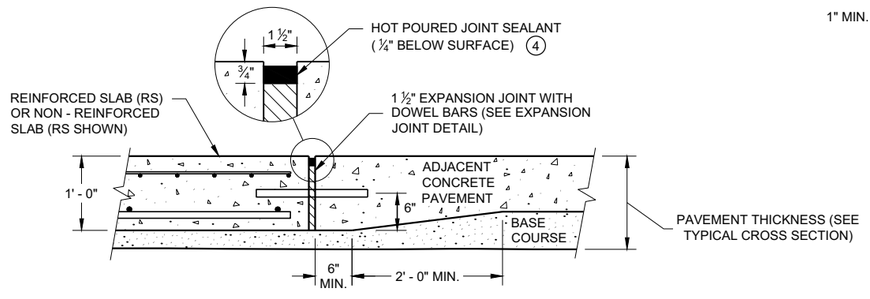
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

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

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

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

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

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

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

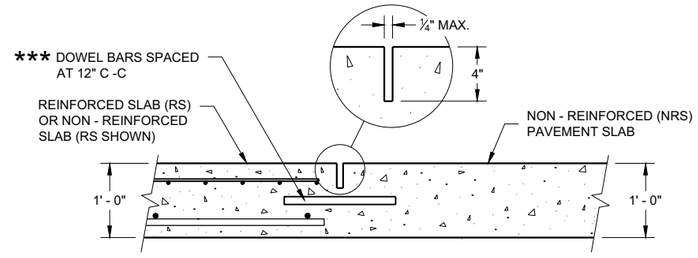
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

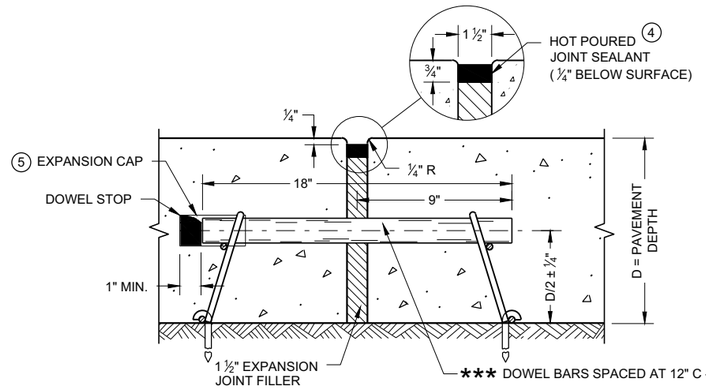
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

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



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

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

FHWA

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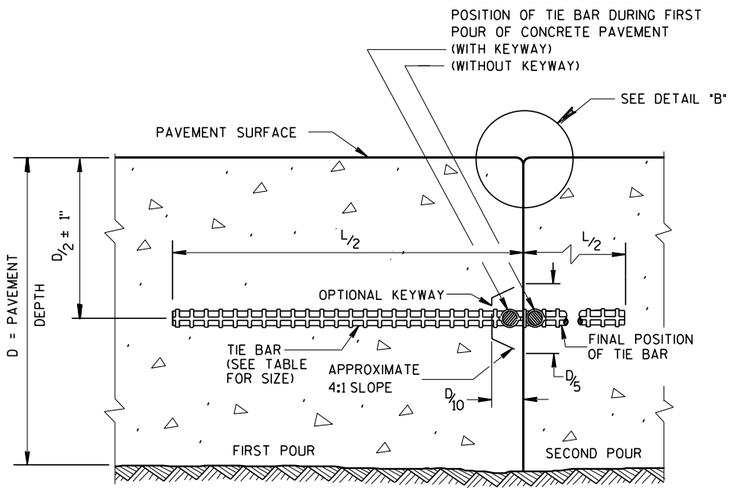
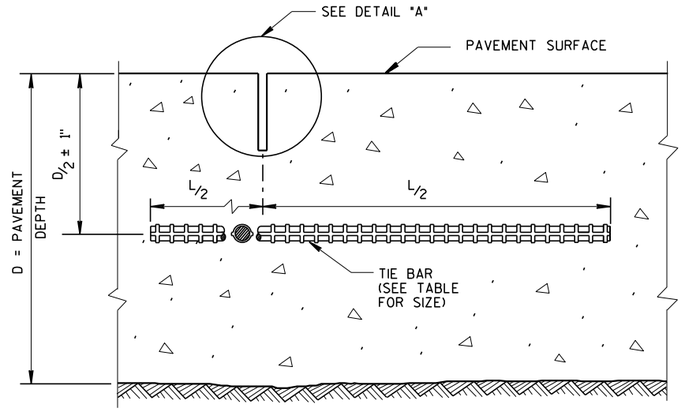


CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

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

PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Kemp PE
PAVEMENT SUPE
FHWA

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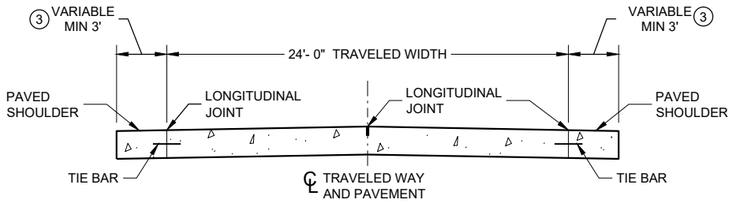
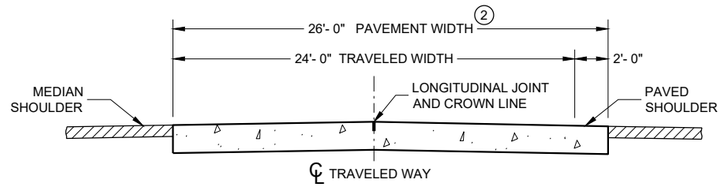
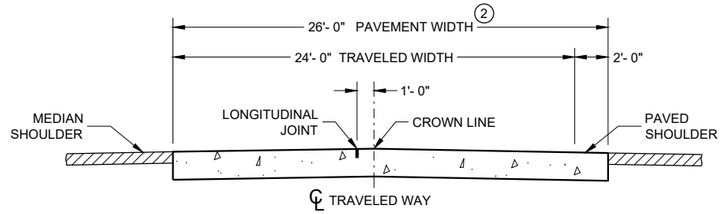


SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B



ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

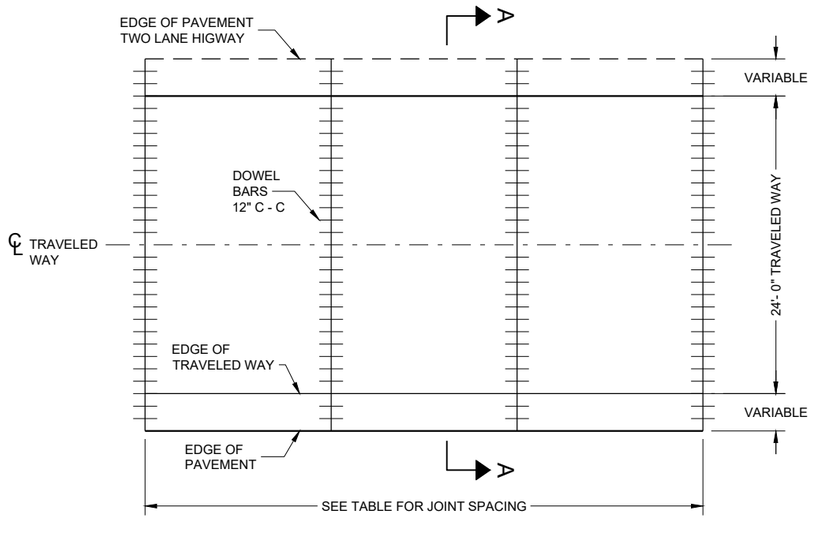
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

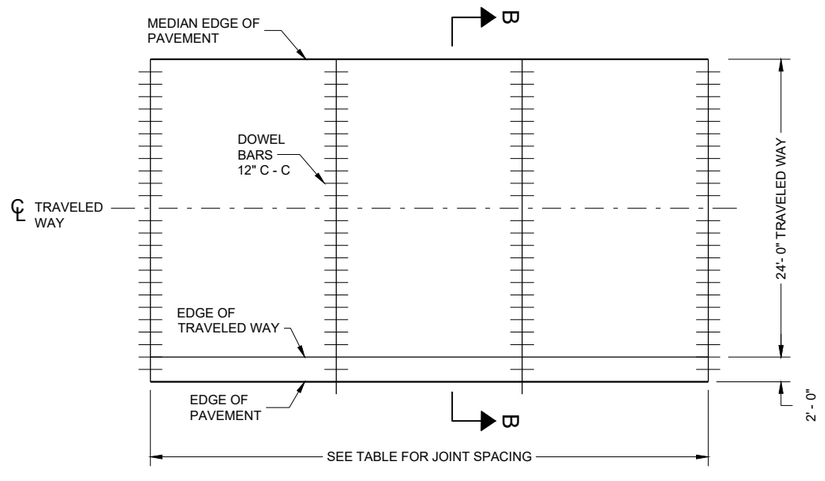
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT 260

SDD 13C11 - 14a

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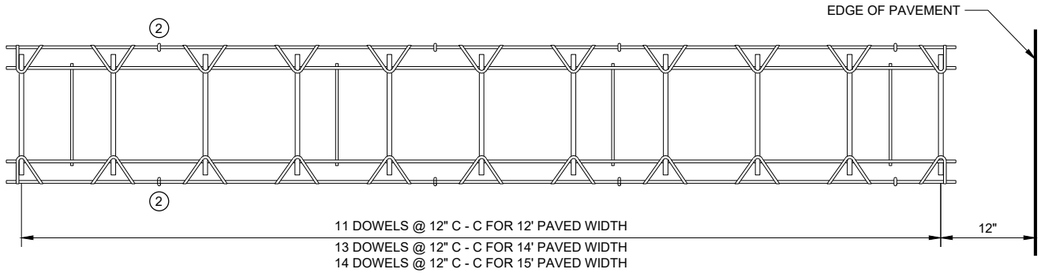


PLAN VIEW

SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY (1)

GENERAL NOTES

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

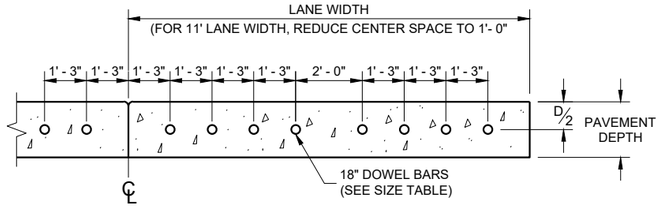
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

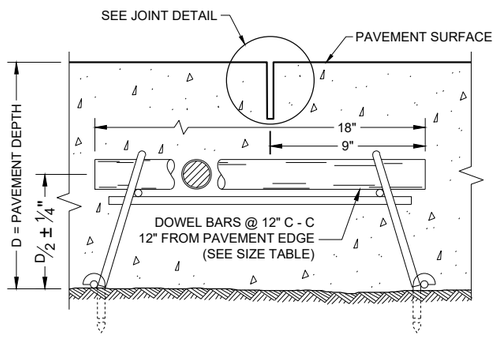
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

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

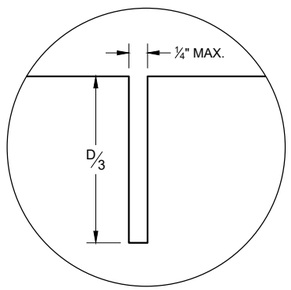
(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



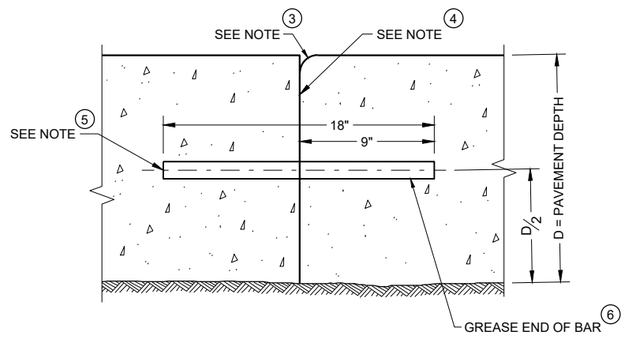
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

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SDD 13C11 - 14b

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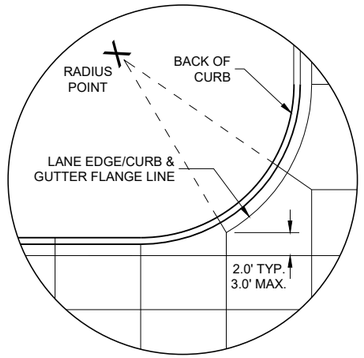
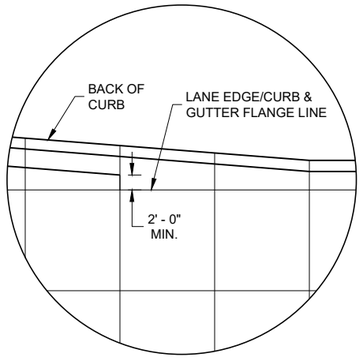
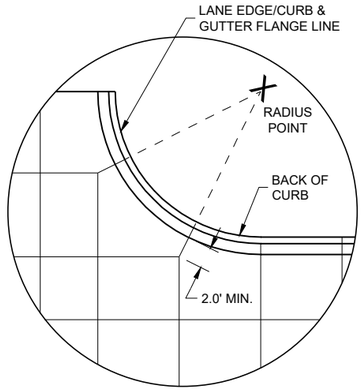


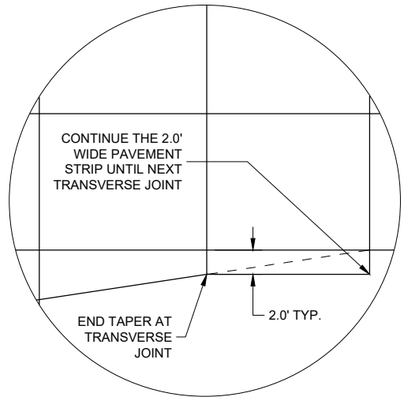
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

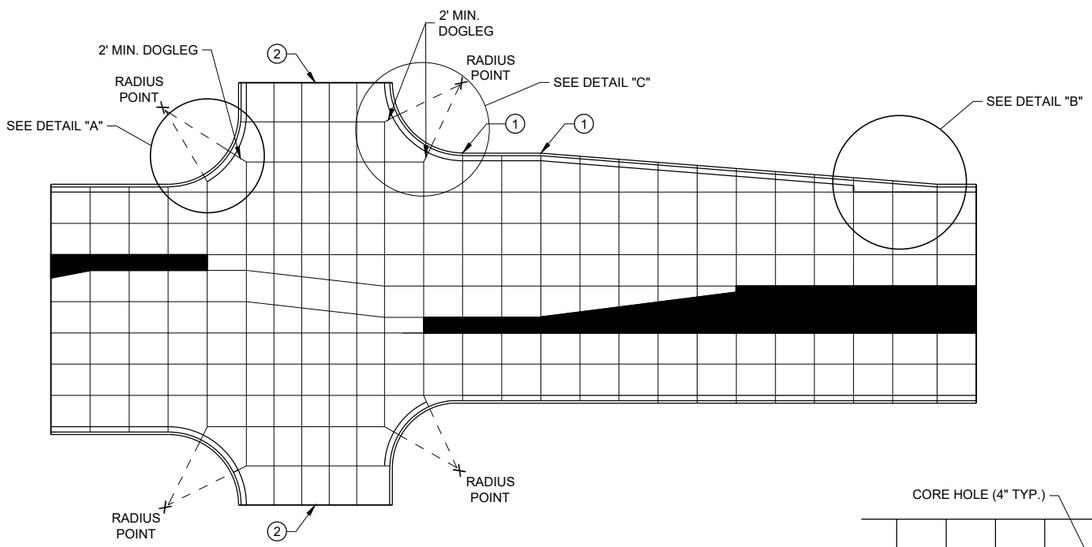
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.

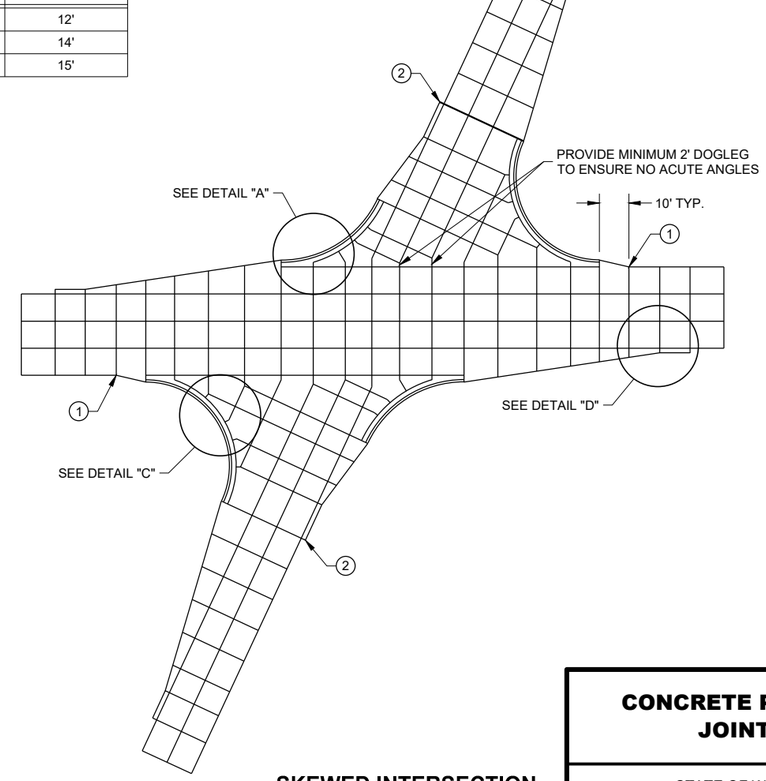
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



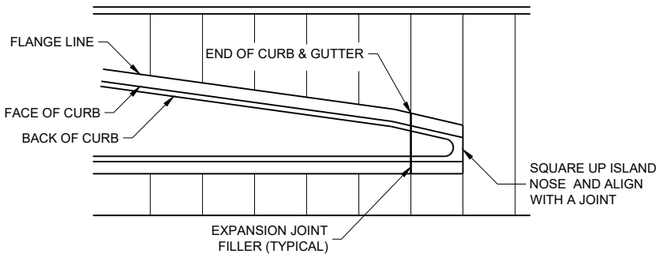
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

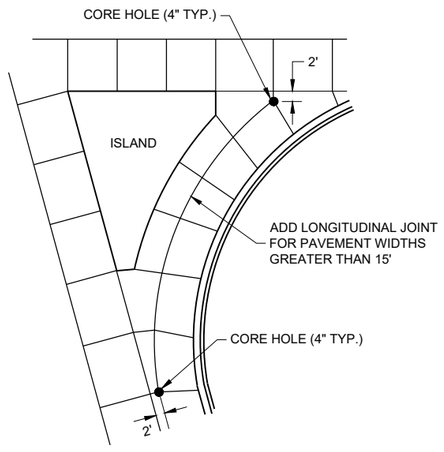
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08a

6

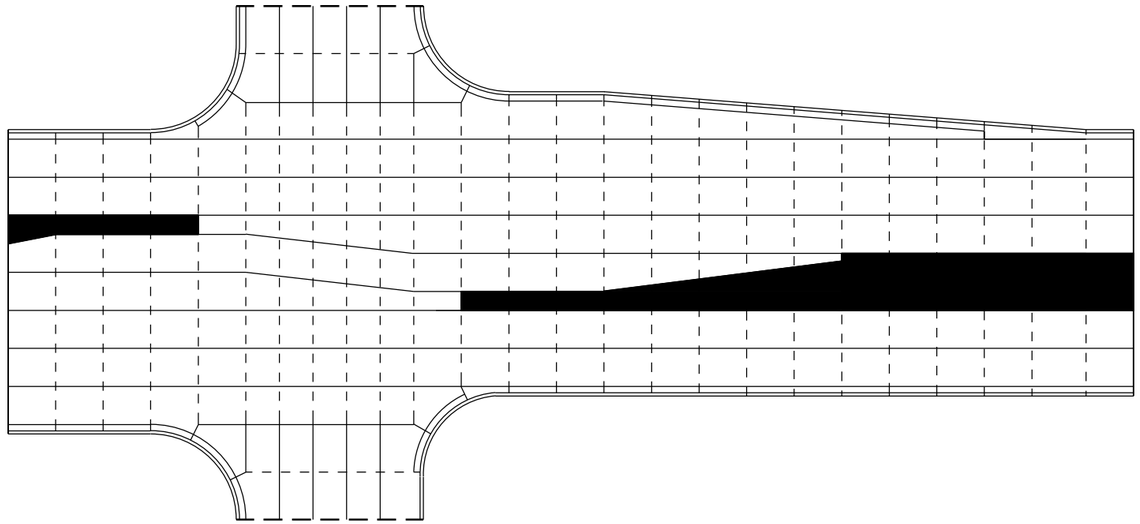
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

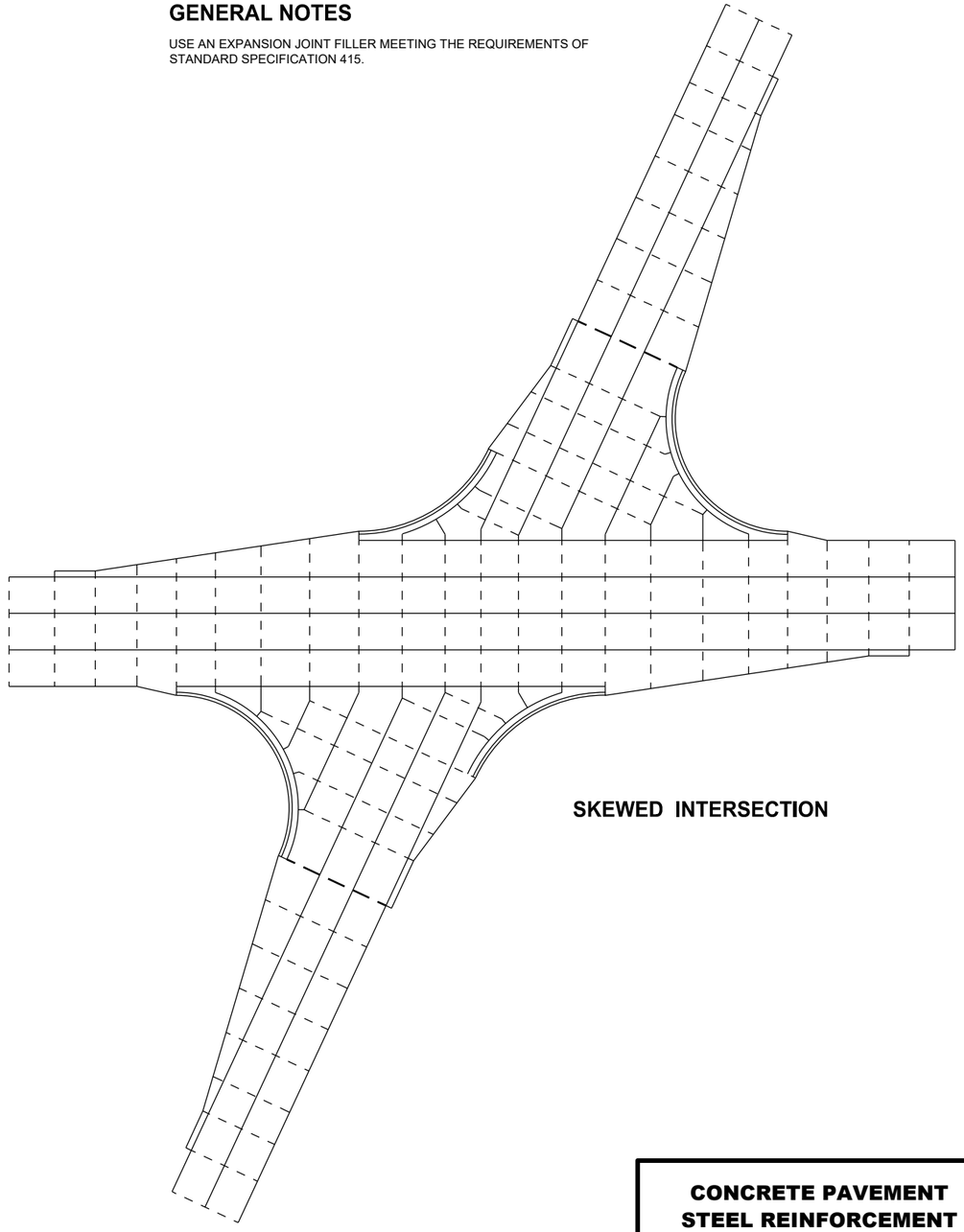
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

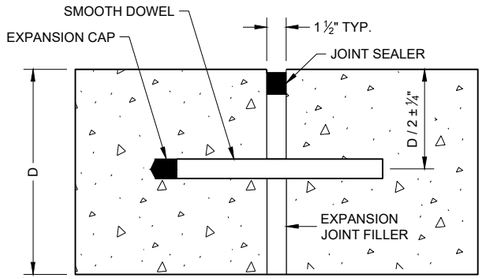
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

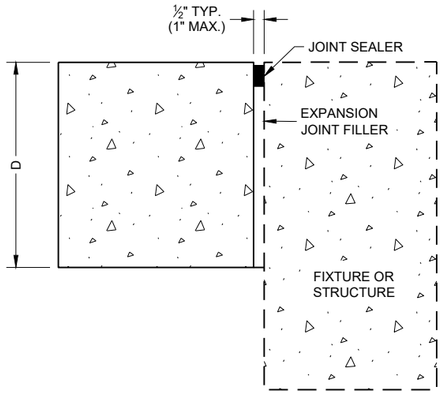
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

TIE BAR TABLE

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

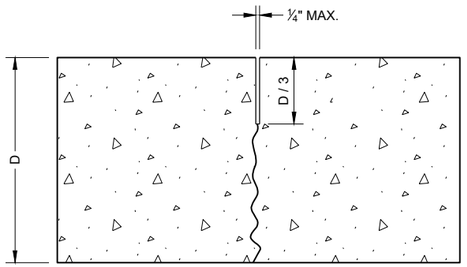
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

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

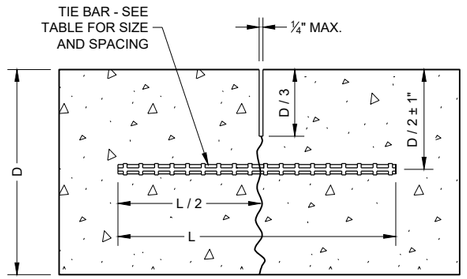
GENERAL NOTES

1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

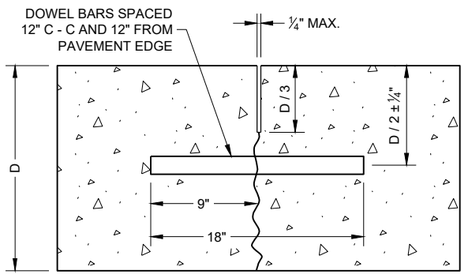
EXPANSION JOINTS



UNDOWELED TRANSVERSE

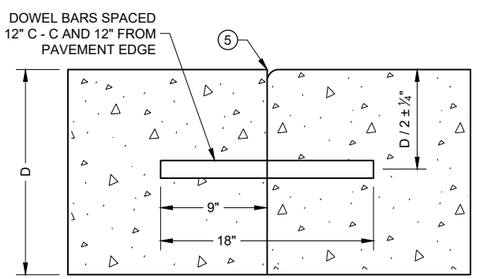


TIED LONGITUDINAL

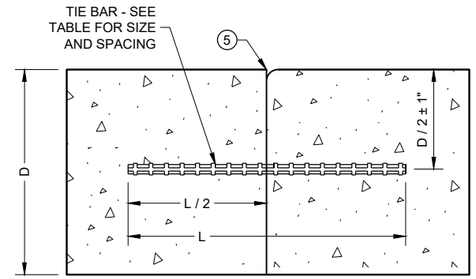


DOWELED TRANSVERSE

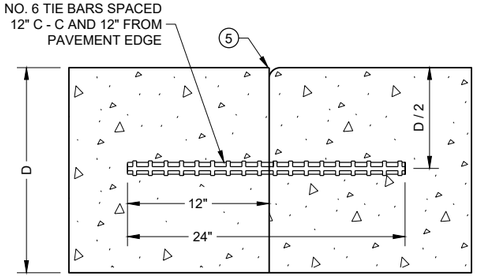
CONTRACTION JOINTS (2)



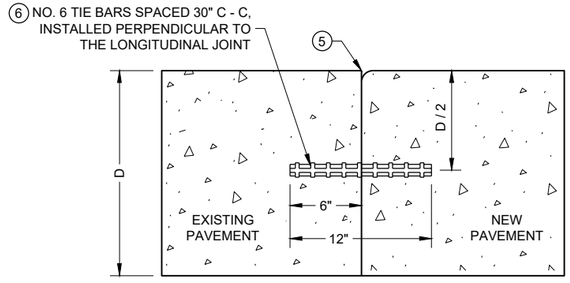
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



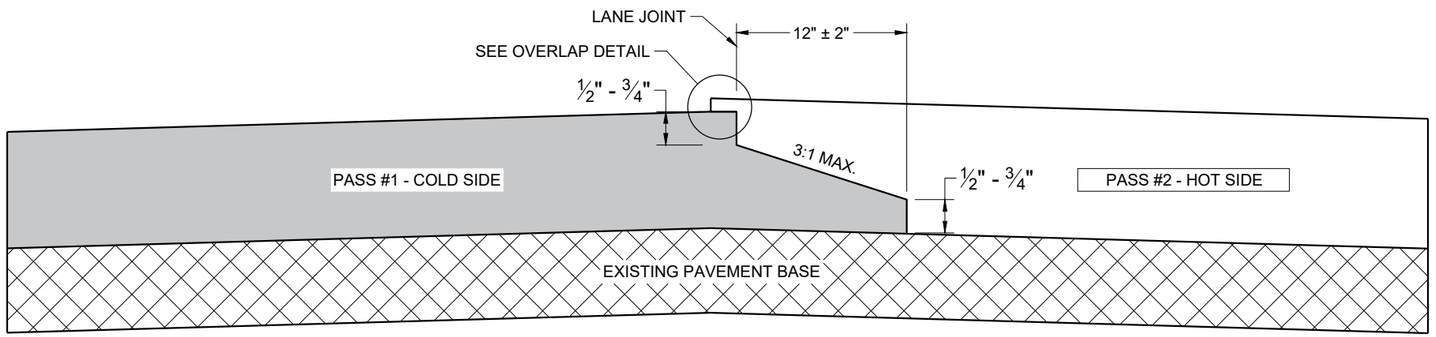
TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



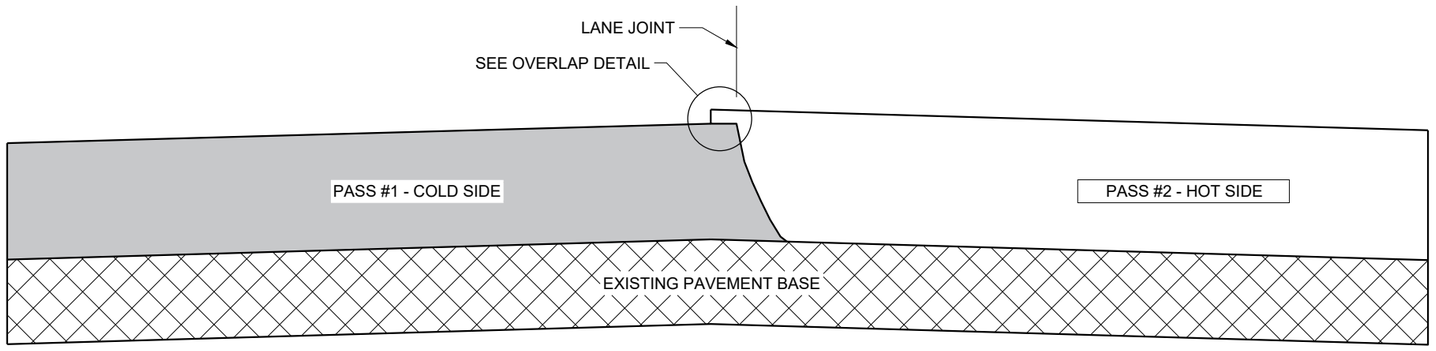
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

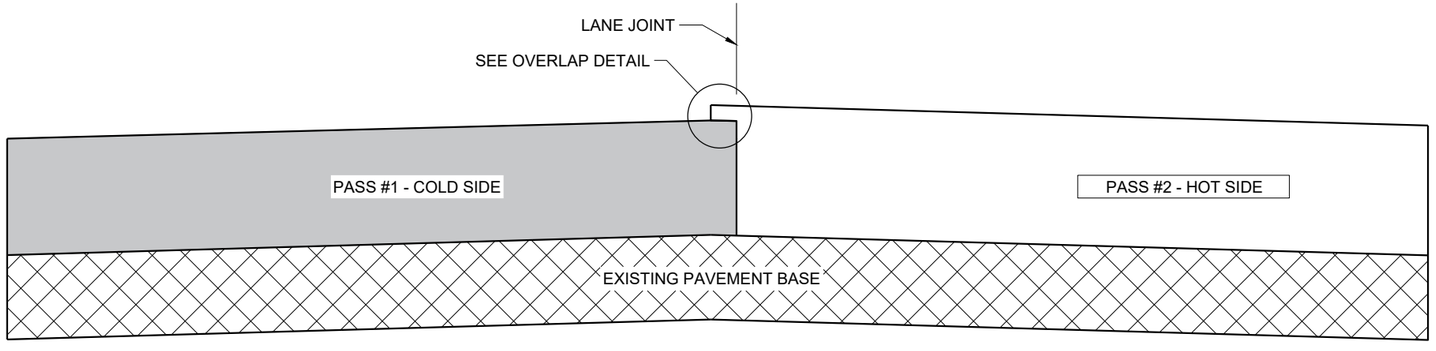
CONCRETE PAVEMENT JOINT TYPES



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

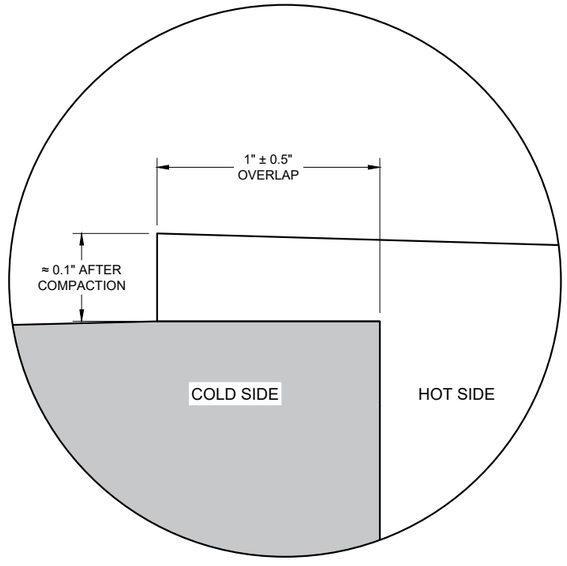
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

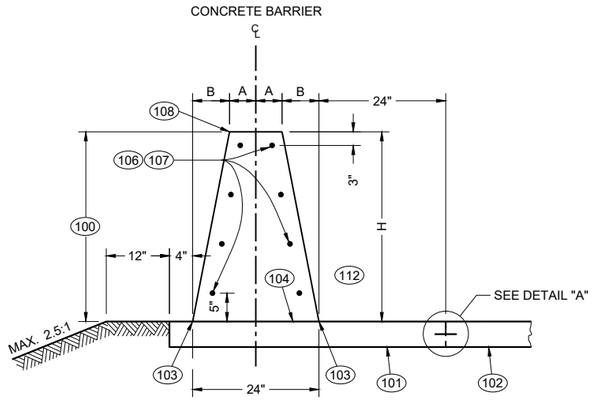
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

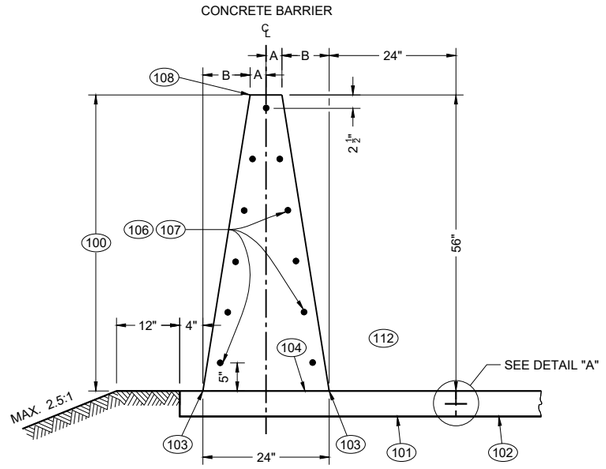
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER

(TYPE S32, TYPE S36, TYPE S42)

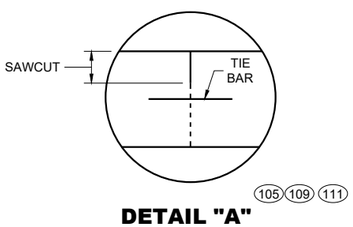


56 - INCH SINGLE SLOPE CONCRETE BARRIER

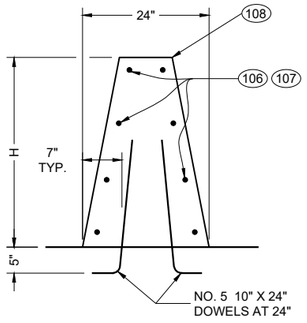
(TYPE S56)

TABLE "A"

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 ¼	5 ¾	8
42	5 ¼	6 ¾	10
56	3	9	11

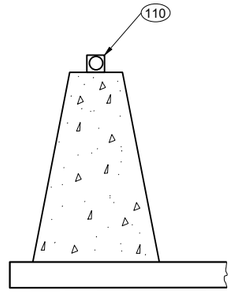


DETAIL "A"



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

(NON OUTER PARAPET APPLICATION)



DELINEATION

GENERAL NOTES

WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.

LOCATE EXPANSION JOINTS IN CONCRETE BARRIER SHALL AT ALL DECK AND PRINCIPAL WALL JOINTS. FILL EXPANSION JOINT WITH EXPANSION JOINT MATERIAL. SEAL THE EXPANSION JOINT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

2" CLEAR COVER TYPICAL

ANCHORS ARE REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN IN THIS SDD OR DETAIL SHOWN ON SDD 14B33. ANCHORS INCIDENTAL TO CBSS.

PROVIDE A 1" DEEP CONTRACTION JOINT IN BARRIER PAD AND BARRIER. JOINT IS TO MATCH ADJACENT CONCRETE JOINTS. NO DOWEL BARS ARE REQUIRED FOR BARRIER PAD. IF ADJACENT TO ASPHALT, CONTRACTION JOINT IS REQUIRED EVERY 15'.

ALL REBAR SHALL BE EPOXY COATED M31 TYPE S. SEE STANDARD SPECIFICATION 505.

CONCRETE BARRIER, UPPER CONCRETE BARRIER, LOWER CONCRETE BARRIER, CONCRETE BARRIER PAD, AND FOOTINGS ARE TERMS USED TO DESCRIBE PARTS OF SINGLE SLOPE CONCRETE BARRIER BID ITEMS. THESE PARTS ARE INCIDENTAL TO THE SINGLE SLOPE CONCRETE BARRIER BID ITEMS.

(100) CONCRETE BARRIER

(101) CONCRETE BARRIER PAD

(102) PAVEMENT

(103) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 ½", USE TYPE A SINGLE SLOPE BARRIER.

(104) OPTIONAL CONSTRUCTION JOINT.

(105) CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAT 10'.

(106) STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL IS 2' BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

(107) NO. 5 CONTINUOUS BARS EVENLY SPACED (SEE TABLE "A").

(108) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

(109) CONCRETE BARRIER PAD UNDER CBSS MAY BE PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED ⅓ DEPTH. CONCRETE BARRIER PAD AND SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE BARRIER PAD MINIMUM DEPTH IS 6", OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

(110) SEE SDD 15A04 FOR DELINEATOR DETAILS AND SPACING.

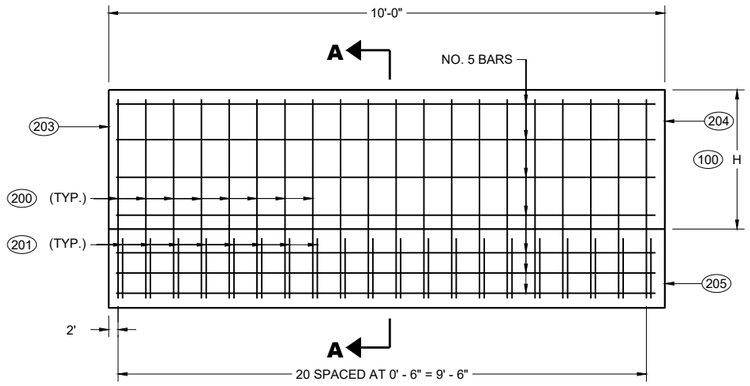
(111) SEE SDD 13C01 FOR DETAILS TYPING CONCRETE BARRIER TO ADJACENT CONCRETE

(112) TRAFFIC SIDE

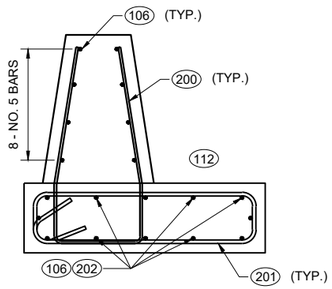
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

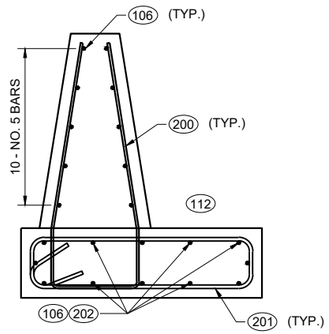
6
SDD 14B32-11a



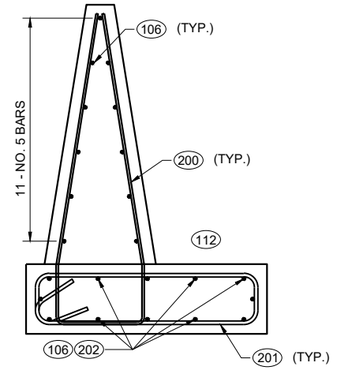
END ANCHOR SINGLE
SLOPE CONCRETE BARRIER



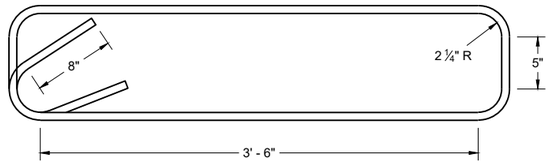
32" AND 36" CBSS



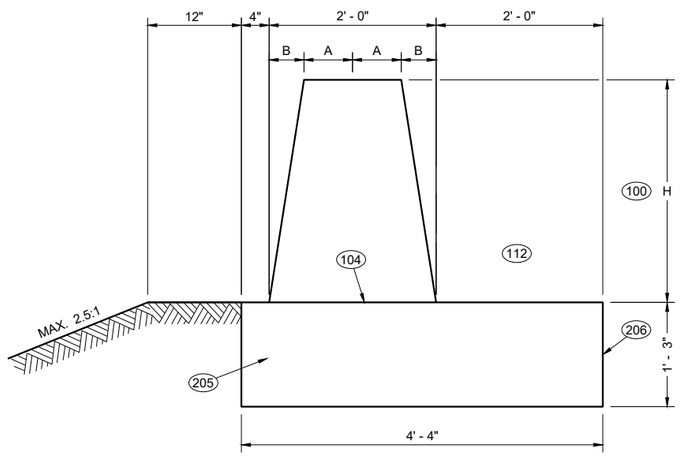
42" CBSS



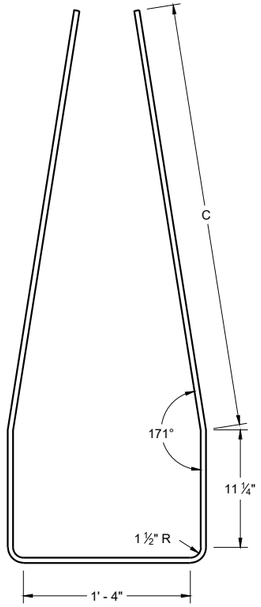
56" CBSS



STIRRUP BAR
BENDING DETAIL



SECTION A - A



V1 BAR
BENDING DETAIL

TABLE "B"

BARRIER HEIGHT H INCHES	C INCHES
32	2' - 6"
36	2' - 11"
42	3' - 4"
56	4' - 6 ½"

GENERAL NOTES

200 V1 BARS ARE NO. 5 BARS. (SEE BAR BENDING DETAIL)

201 STIRRUPS ARE NO. 6 BARS. (SEE BAR BENDING DETAIL)

202 TWELVE (12) NO. 5 BARS EVENLY SPACED

203 END OF INSTALLATION OR EXPANSION JOINT.

204 SEE COLD JOINT DETAIL TO CONNECT END ANCHOR SINGLE SLOPE CONCRETE BARRIER TO SINGLE SLOPE CONCRETE BARRIER.

205 FOOTING

206 DO NOT TIE TO FOOTING TO ADJACENT PAVEMENT.

6

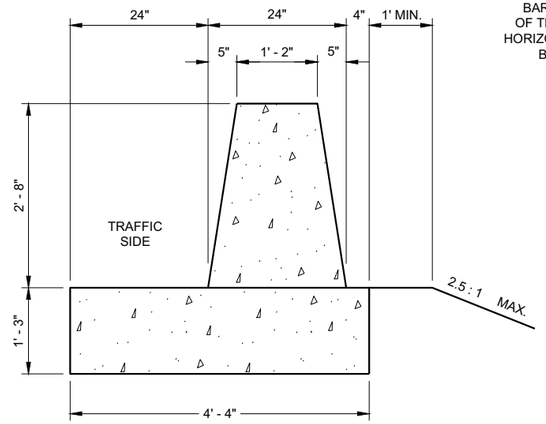
SDD 14B32-11b

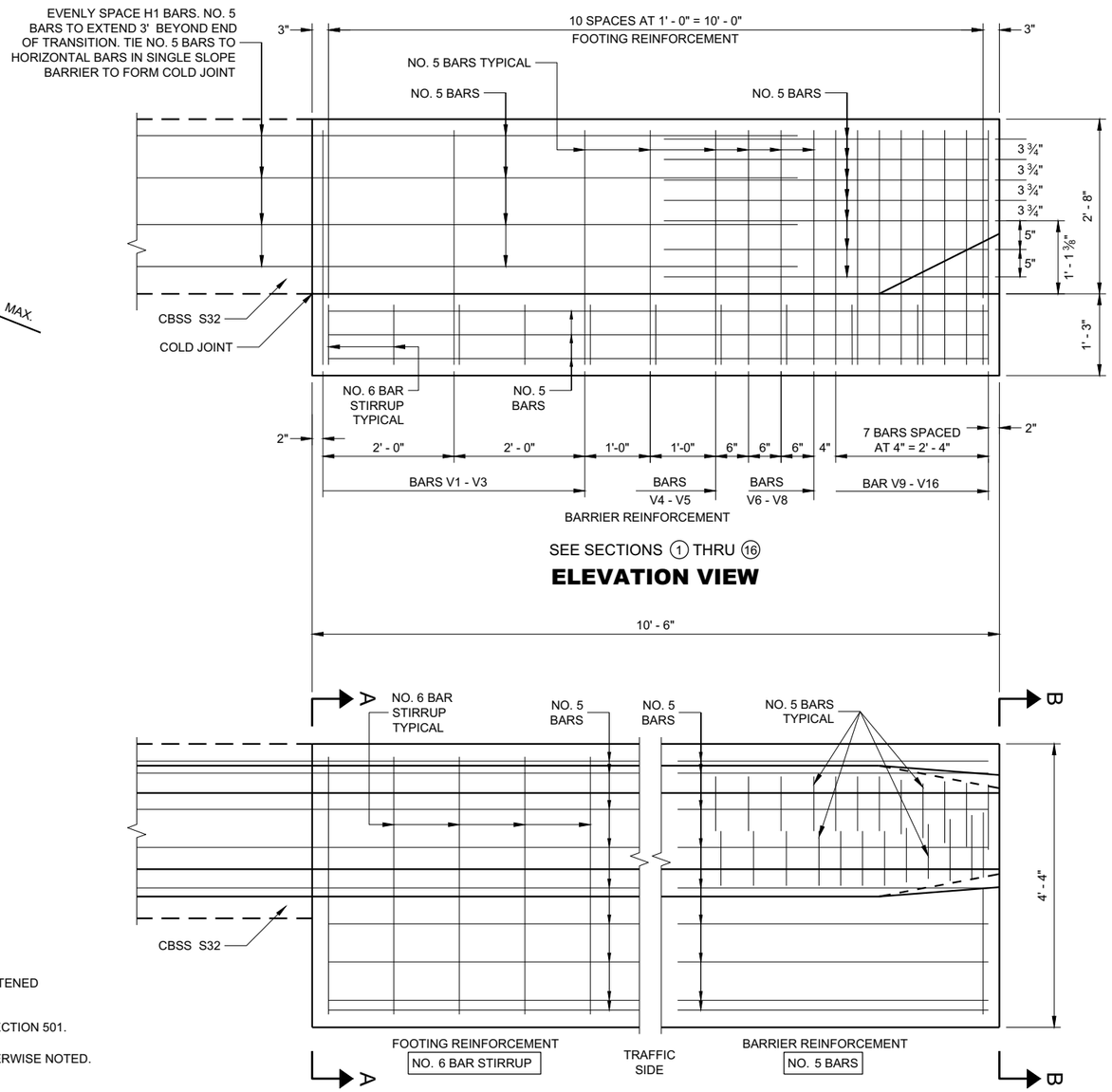
CONCRETE BARRIER
SINGLE SLOPE (CBSS)

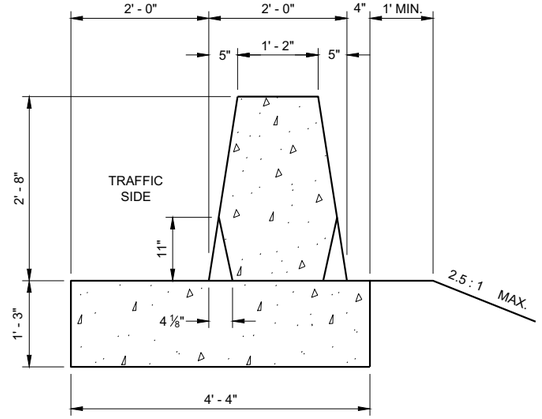
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

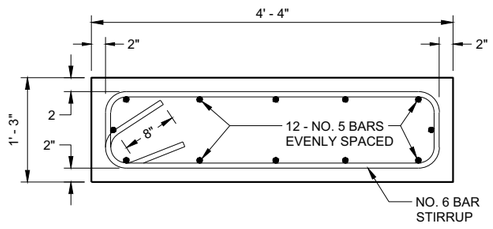
SDD 14B32-11b



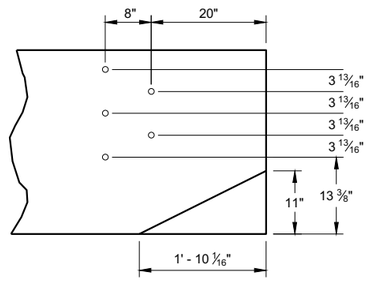




SECTION B - B



TYPICAL FOOTING



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE OF BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR

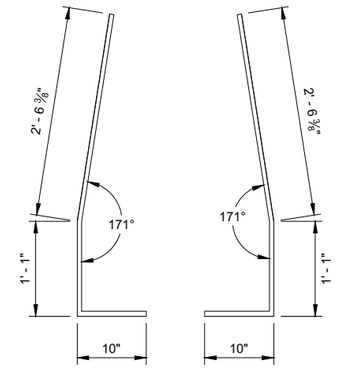
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

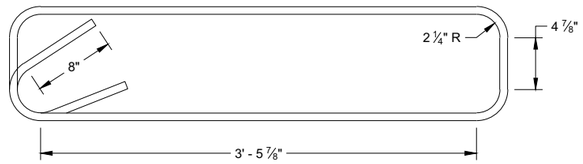
SDD 14B33 - 02a

6

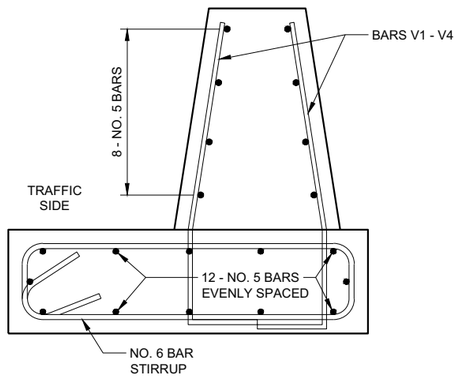
SDD 14B33 - 02a



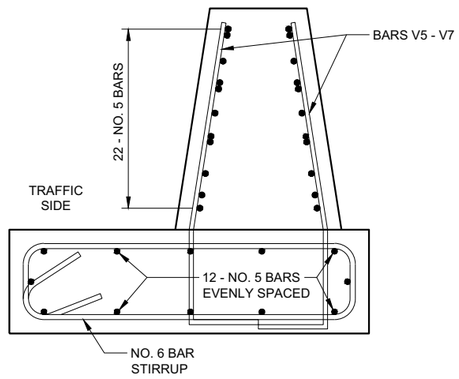
BAR BENDING DETAIL
BARS 1 - 11



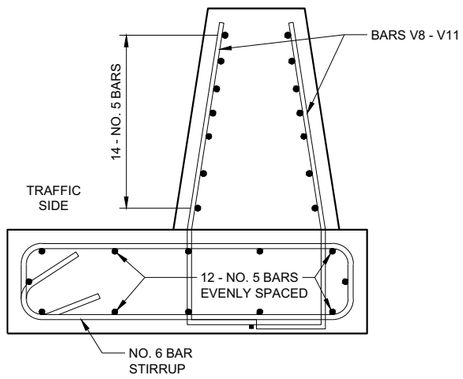
STIRRUP BAR
BENDING DETAIL



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

6

SDD 14B33 - 02b

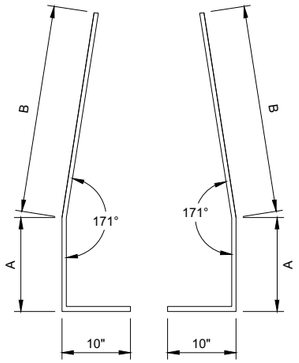
6

SDD 14B33 - 02b

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

BAR CHART
BAR POSITIONS
12 - 13

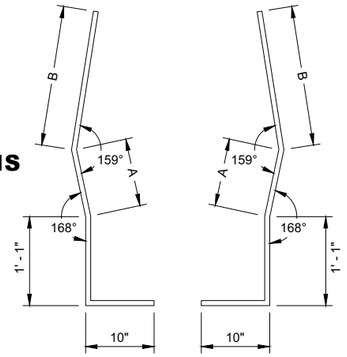
BAR	A	B
V12	1' - 3"	2' - 6"
V13	1' - 8"	2' - 1 ½"



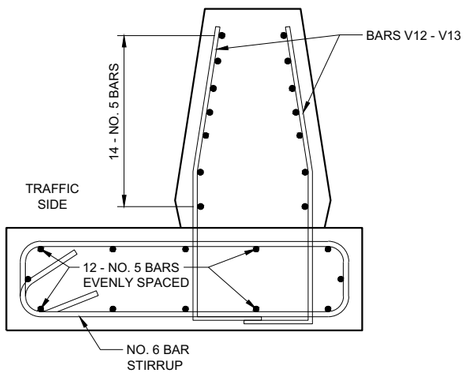
BAR BENDING DETAIL
SECTIONS V12- V13

BAR CHART
BAR POSITIONS
14 - 16

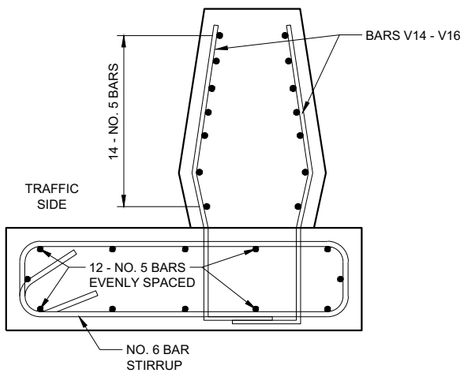
BAR	A	B
V14	6"	2' - 1"
V15	8"	1' - 11"
V16	10"	1' - 8 ½"



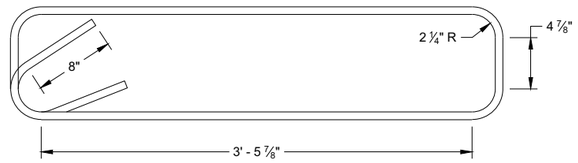
BAR BENDING DETAIL
SECTIONS V14 - V16



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B33 - 02c

SDD 14B33 - 02c

(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.

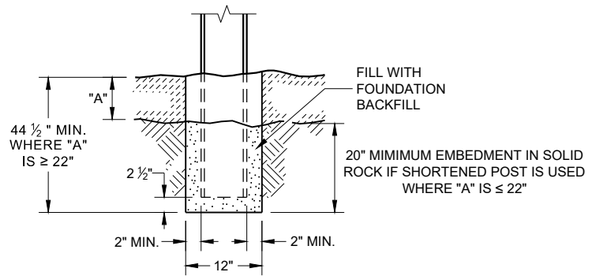
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

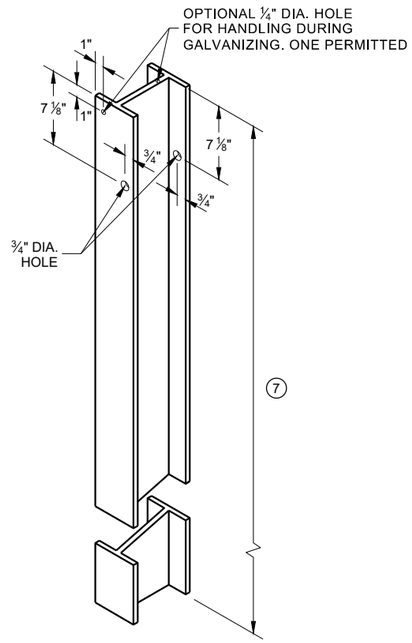
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

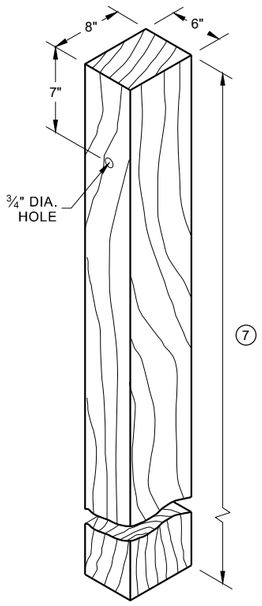
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



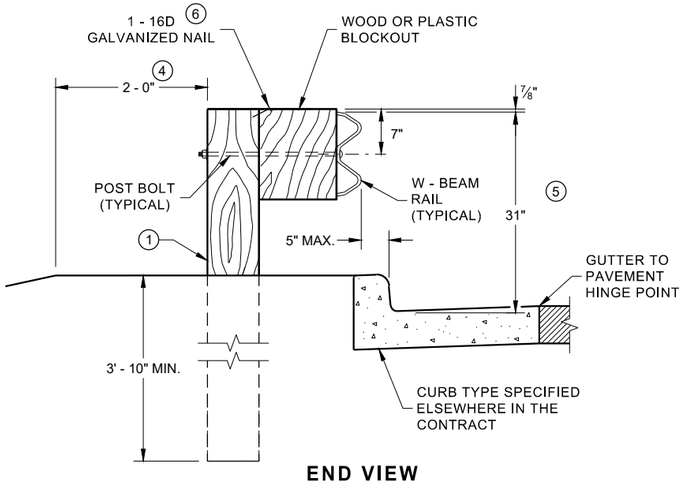
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



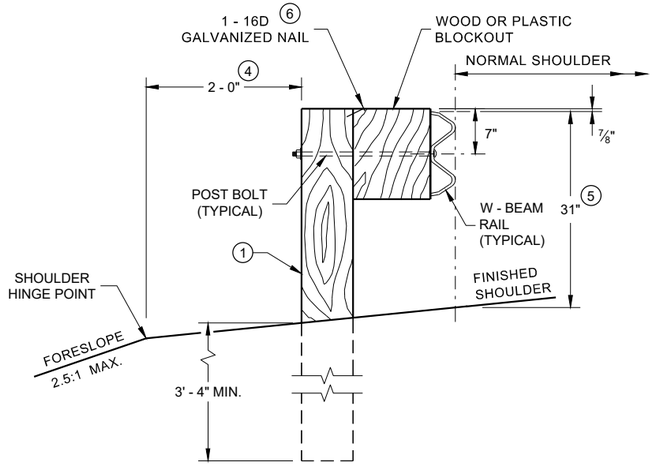
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



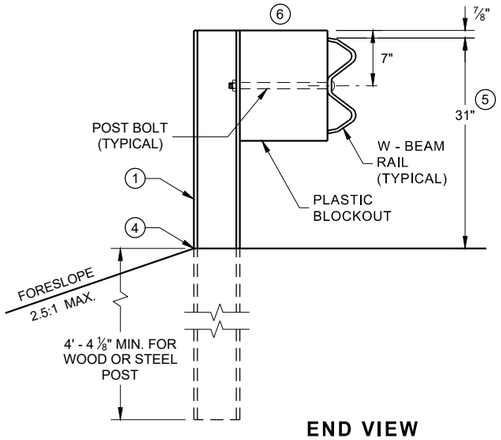
WOOD POST (6" X 8") NOMINAL (1)



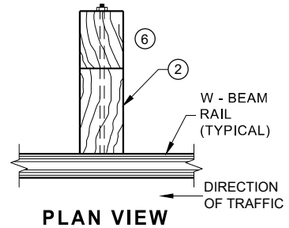
END VIEW
LOCATED ALONG A CURBED ROADWAY



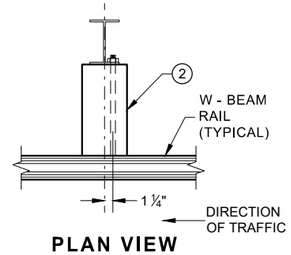
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



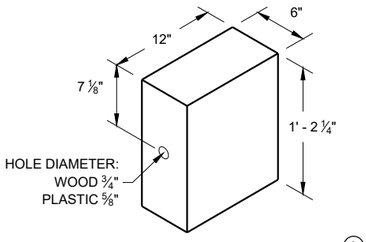
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

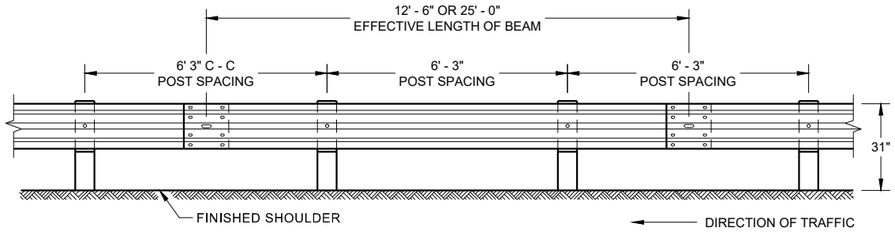
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

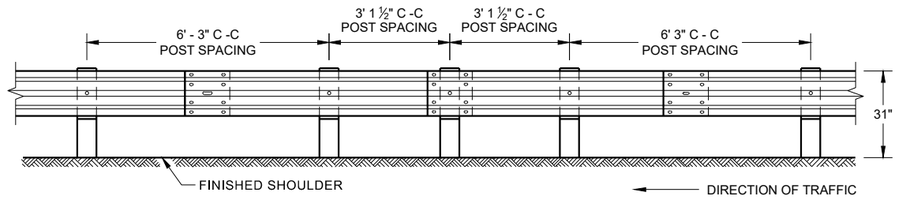
SDD 14B42 - 07a

6

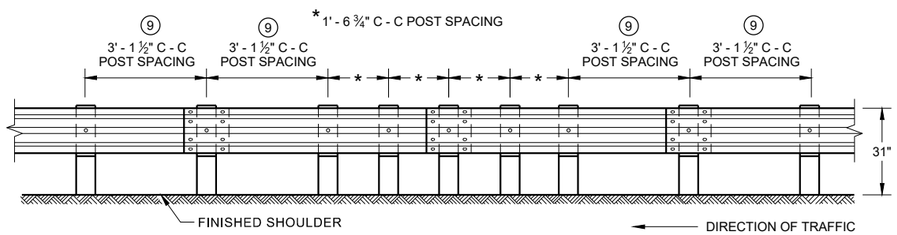
SDD 14B42 - 07a



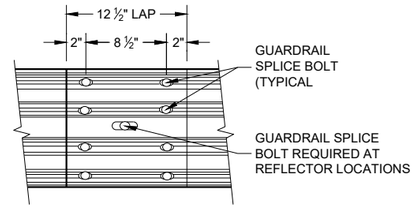
FRONT VIEW
POST SPACING STANDARD INSTALLATION



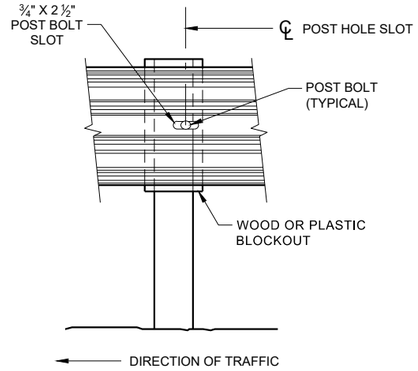
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



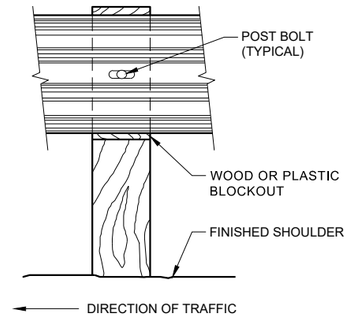
FRONT VIEW
QUARTER POST SPACING (QS)



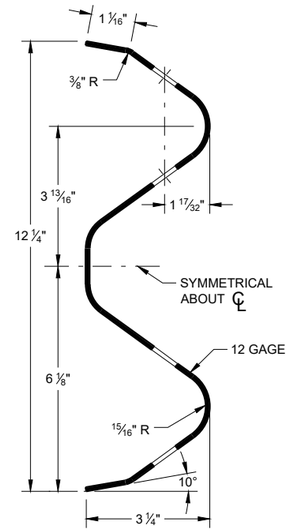
FRONT VIEW
MID-SPAN BEAM SPLICE



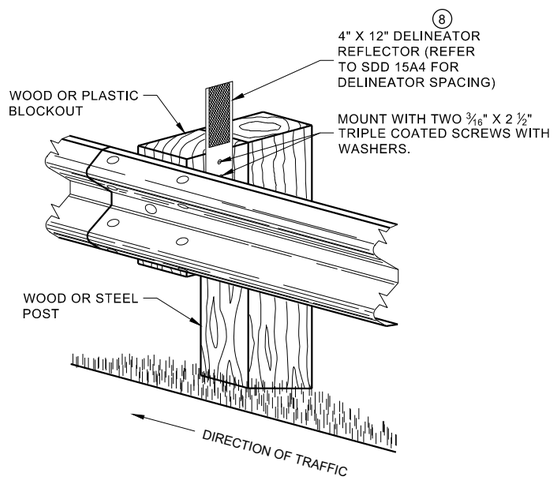
FRONT VIEW AT STEEL POST



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.

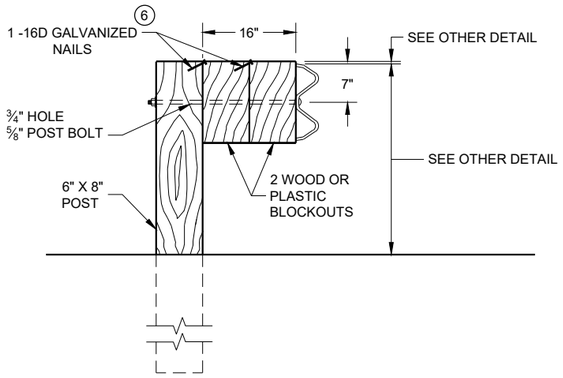
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

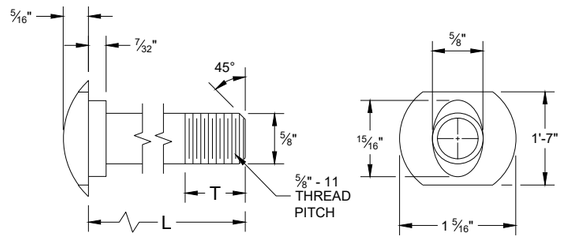


DETAIL FOR 16" BLOCKOUT DEPTH

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.

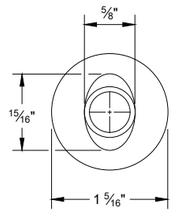
NOTE:

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.

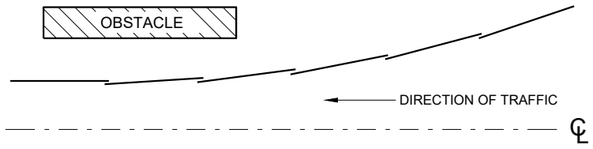


POST BOLT TABLE

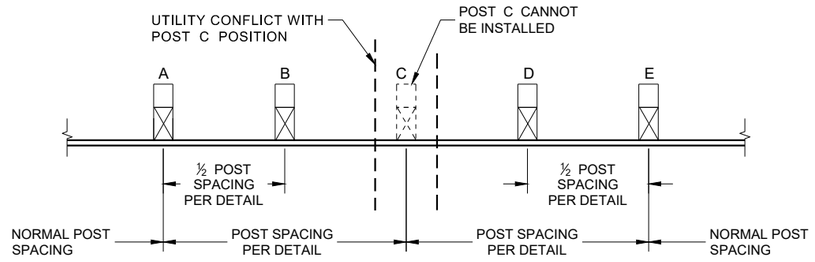
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



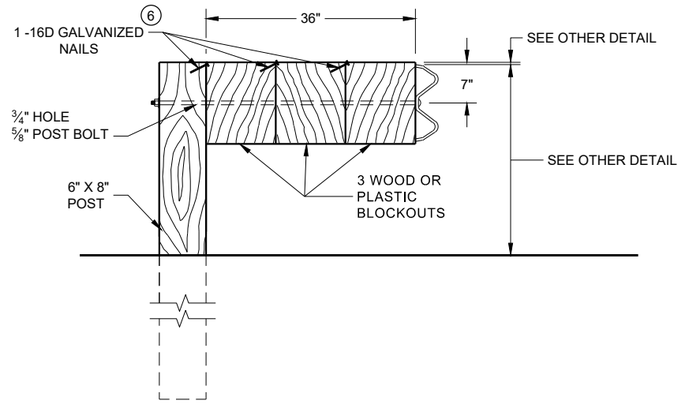
ALTERNATE BOLT HEAD



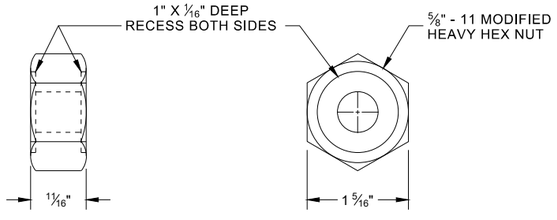
PLAN VIEW
BEAM LAPPING DETAIL



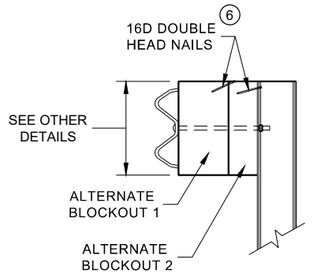
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



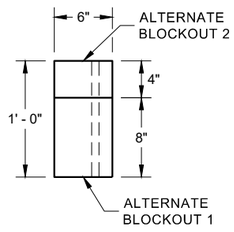
DETAIL FOR 36" BLOCKOUT DEPTH



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.

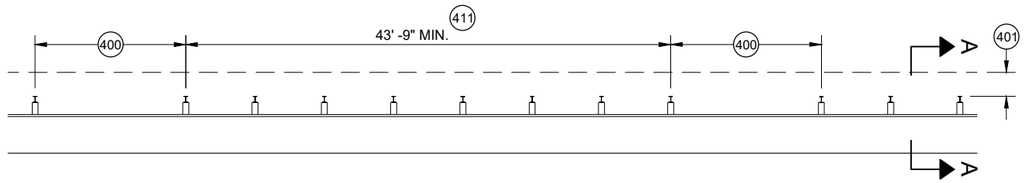
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

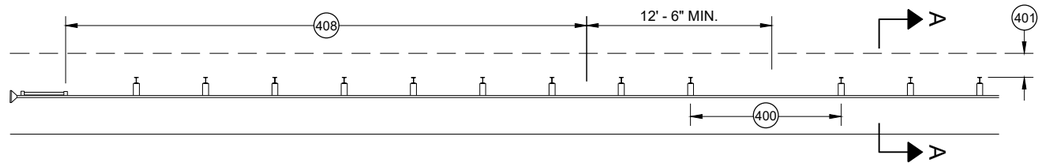
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

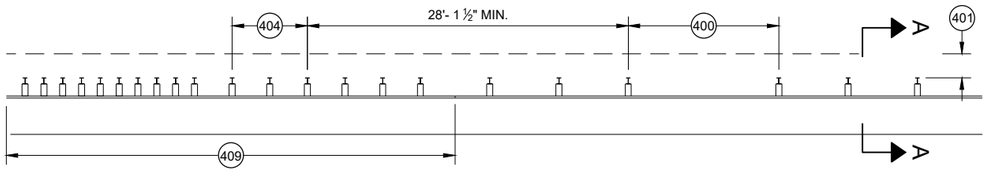
SDD 14B42 - 07c



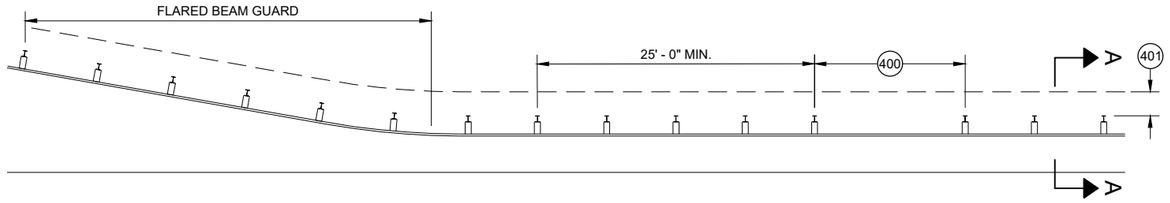
MISSING POST IN MGS GUARDRAIL



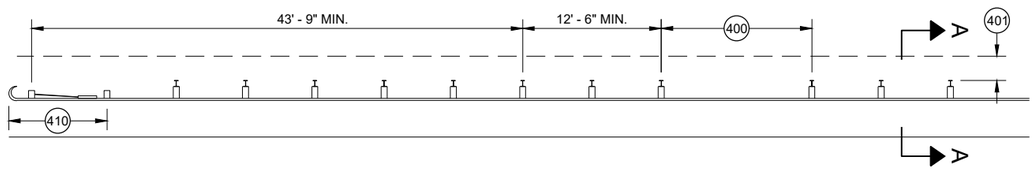
MISSING POST IN MGS GUARDRAIL NEAR EAT



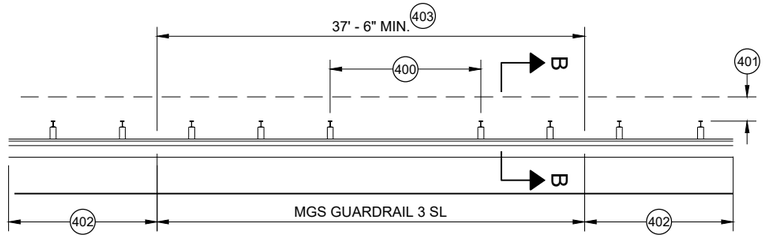
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

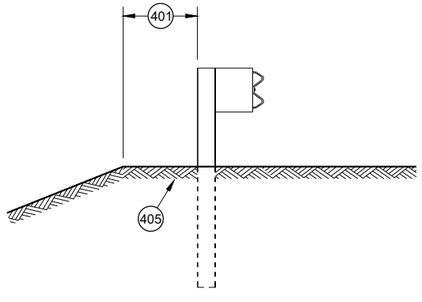


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

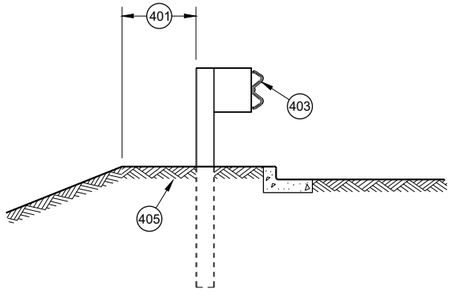


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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

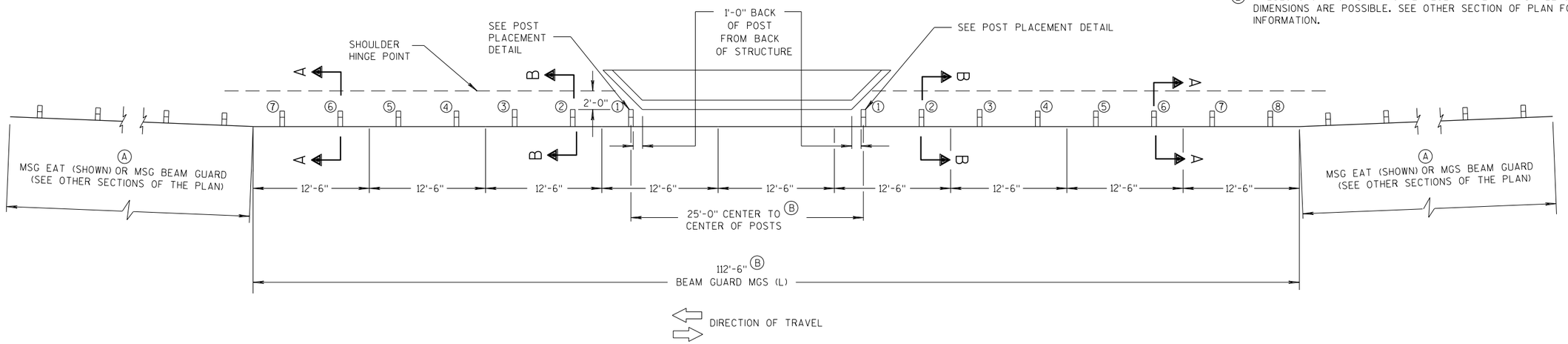
GENERAL NOTES

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

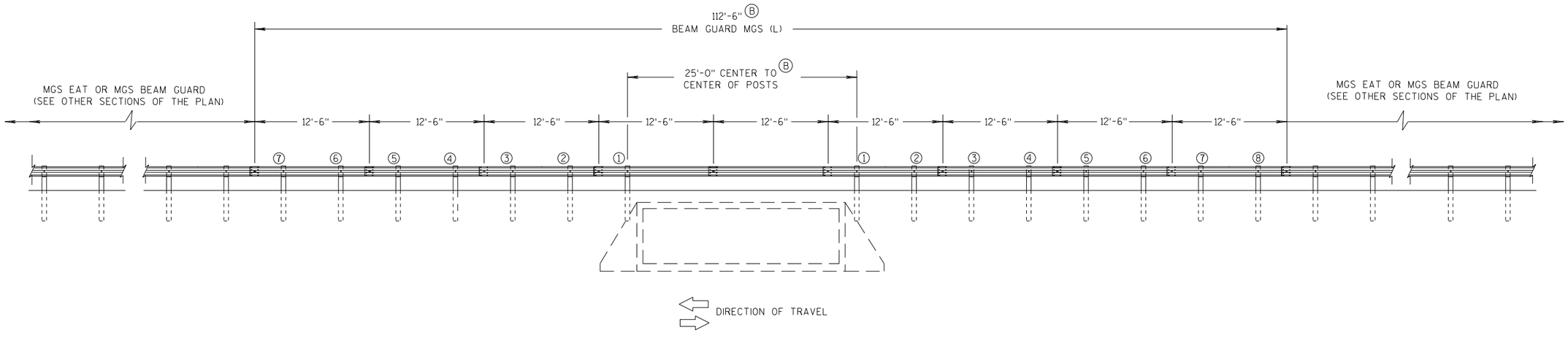
SEE SDD 14 B 42 FOR MORE DETAILS.

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

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



PLAN VIEW



ELEVATION VIEW

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

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 43-4a

GENERAL NOTES

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

SEE SDD 14 B 42 FOR MORE DETAILS.

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

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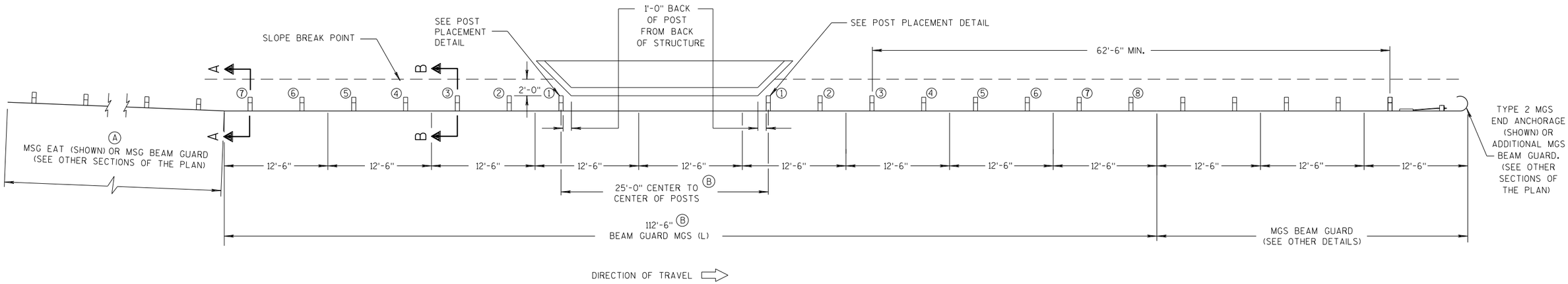
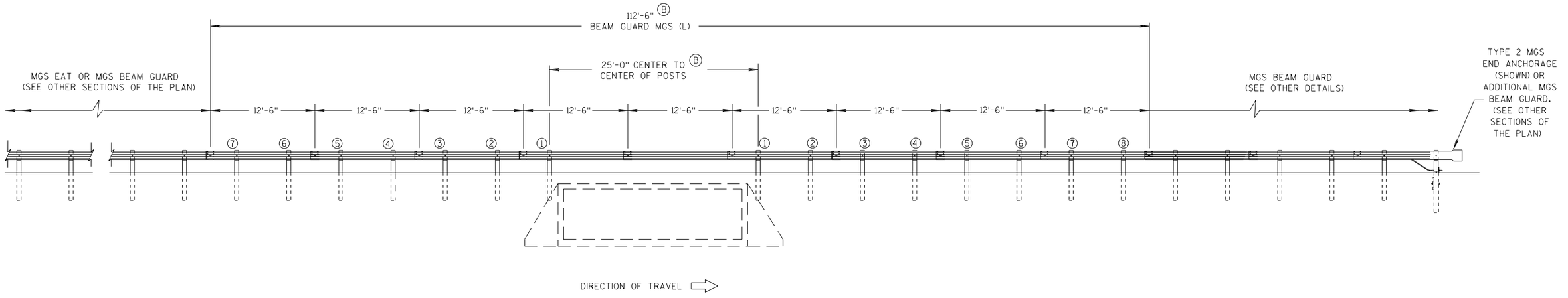


PLAN VIEW



ELEVATION VIEW

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

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	276

6

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

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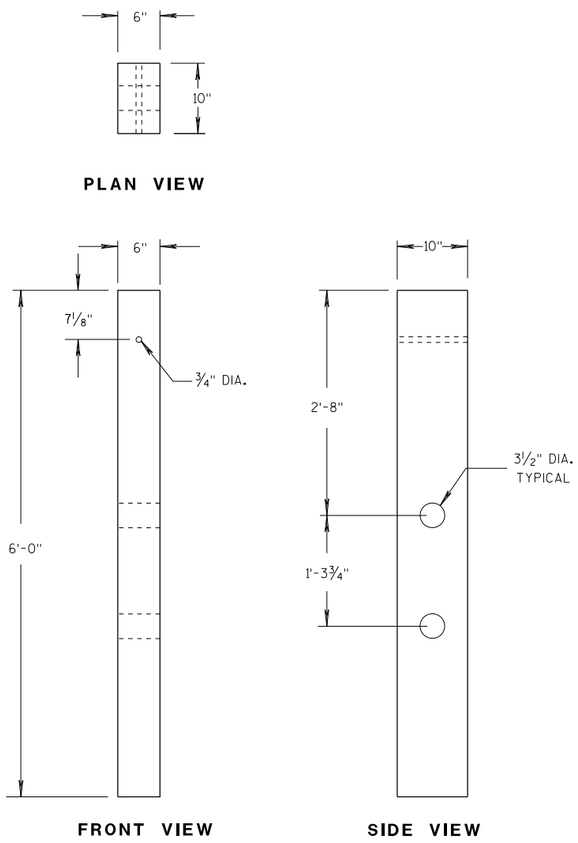
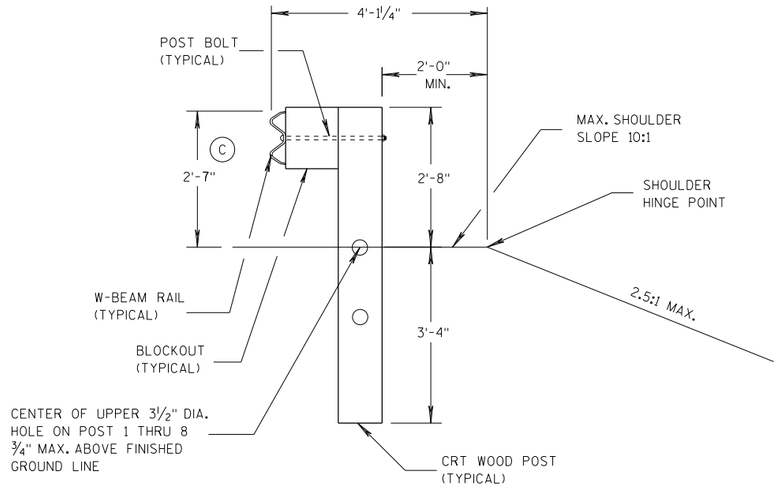
S.D.D. 14 B 43-4b



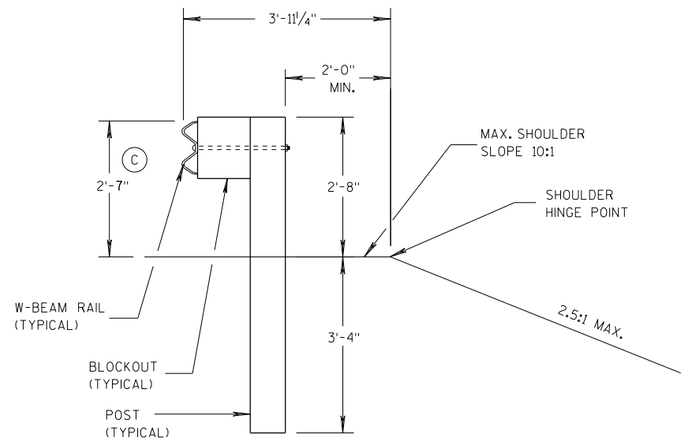
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



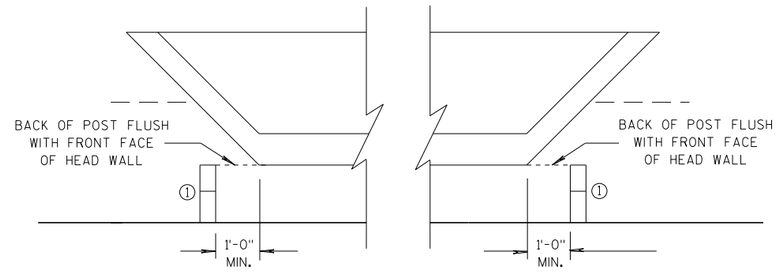
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

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



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS ENGINEER

D 277 NT

6

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

6

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

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

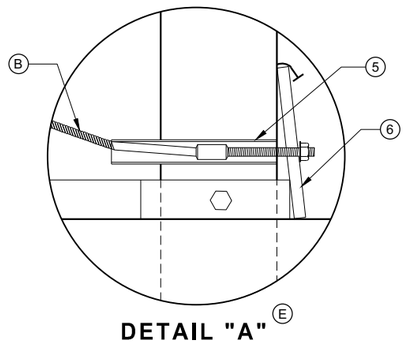
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

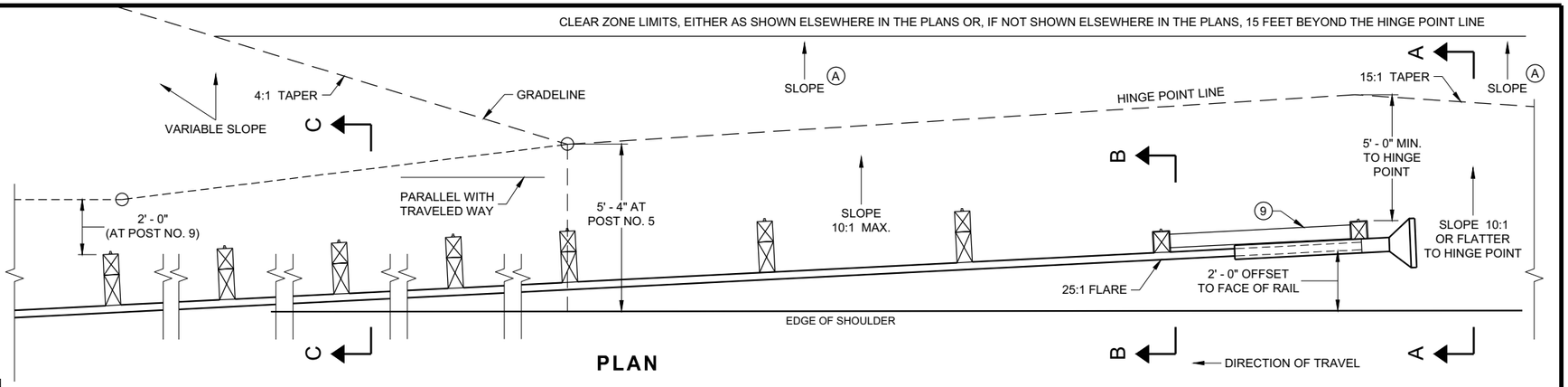
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

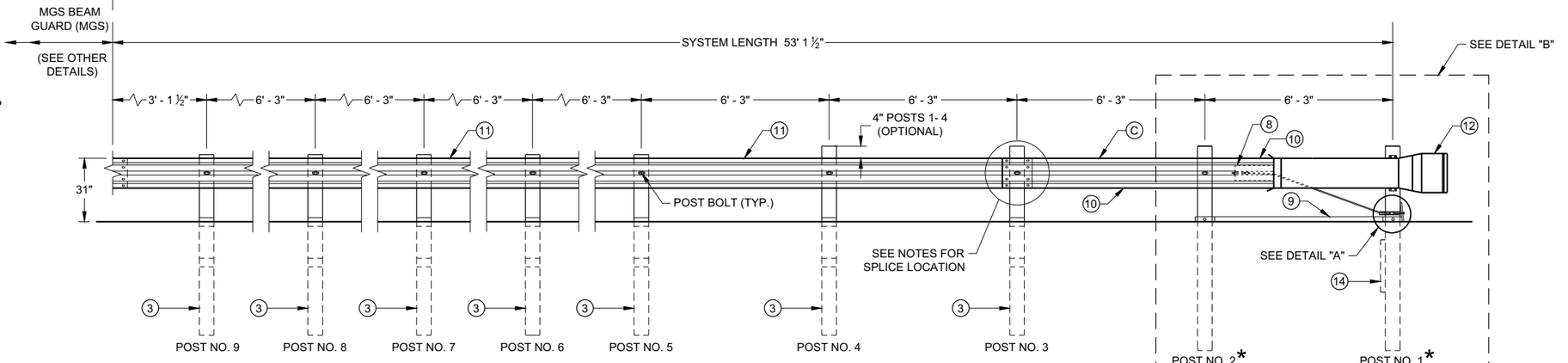
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



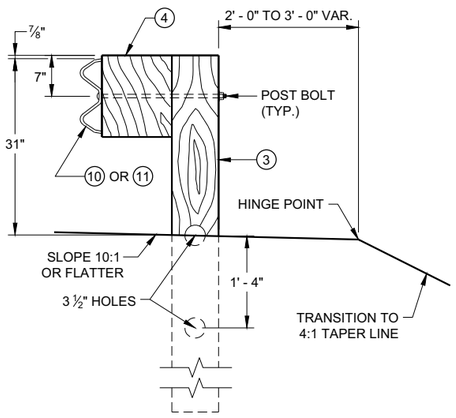
DETAIL "A" (E)



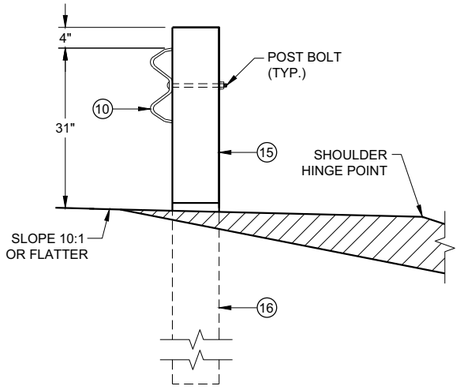
PLAN



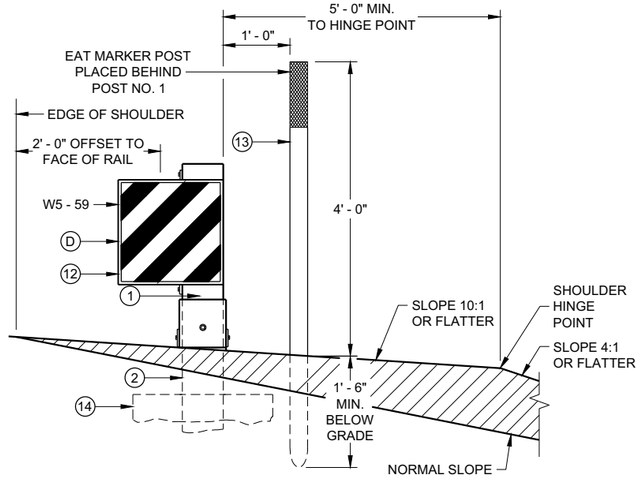
ELEVATION



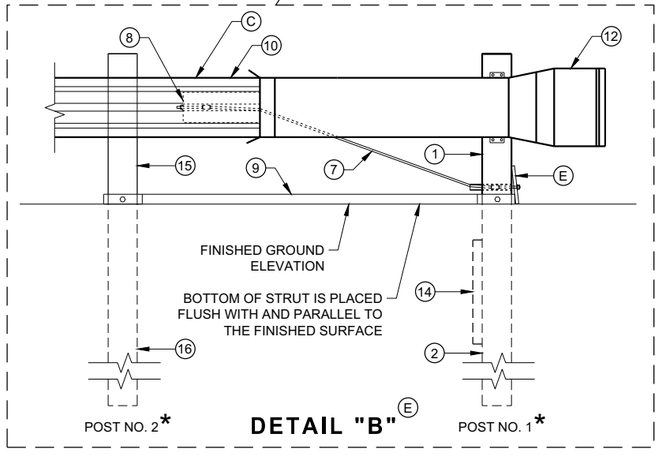
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



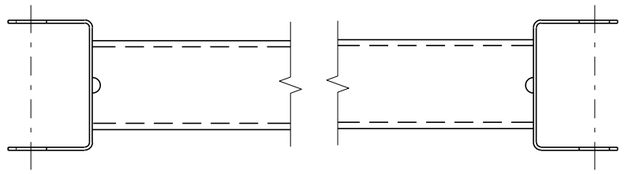
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

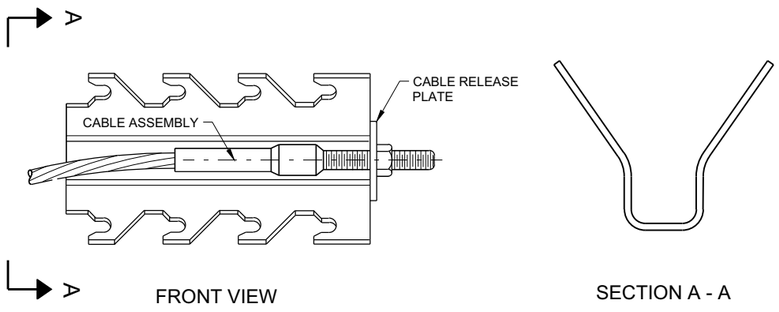
SDD 14B44 - 04a



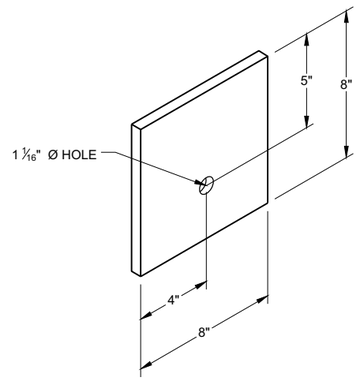
GENERIC GROUND STRUT (9) (E)

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

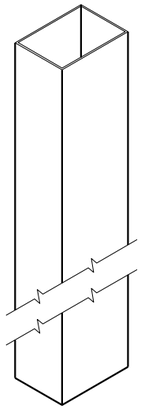
6

SDD 14B44 - 04b

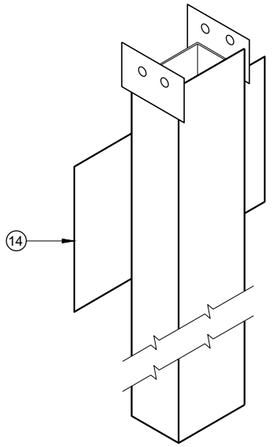
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

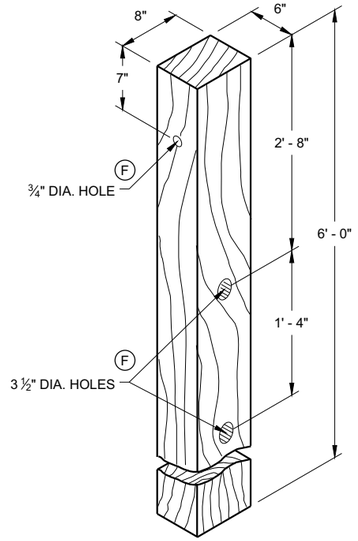
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



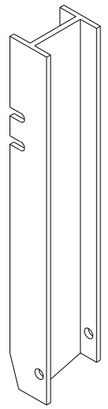
UPPER POST NO. 1 (1) (E)



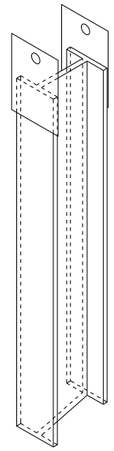
LOWER POST NO. 1 (2) (E)



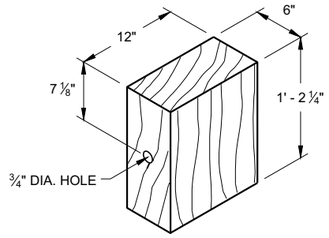
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



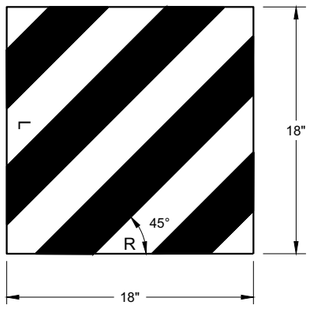
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

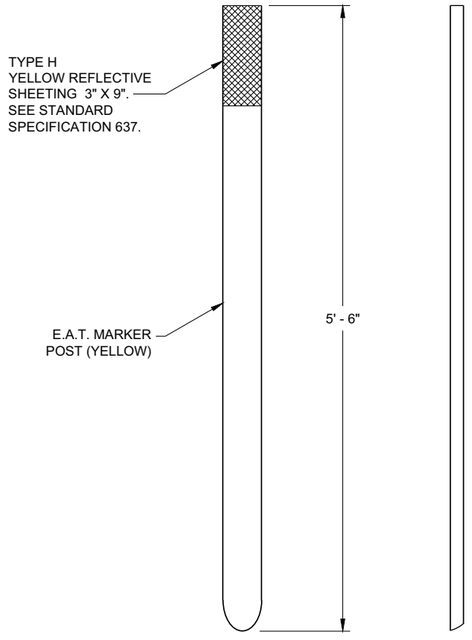


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



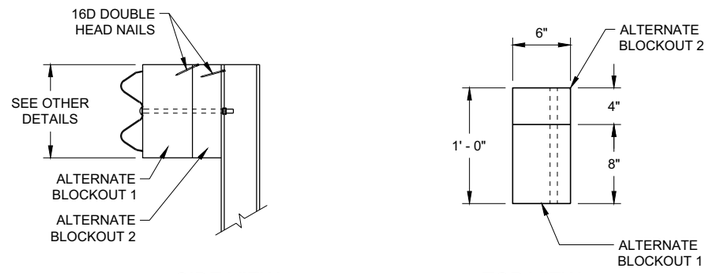
W5 - 59

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)

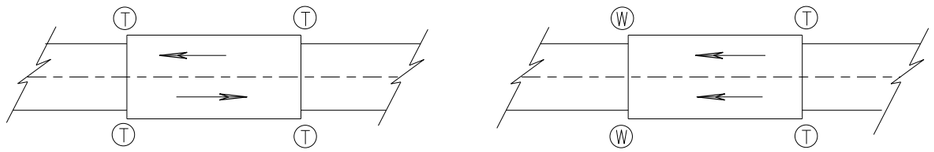
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

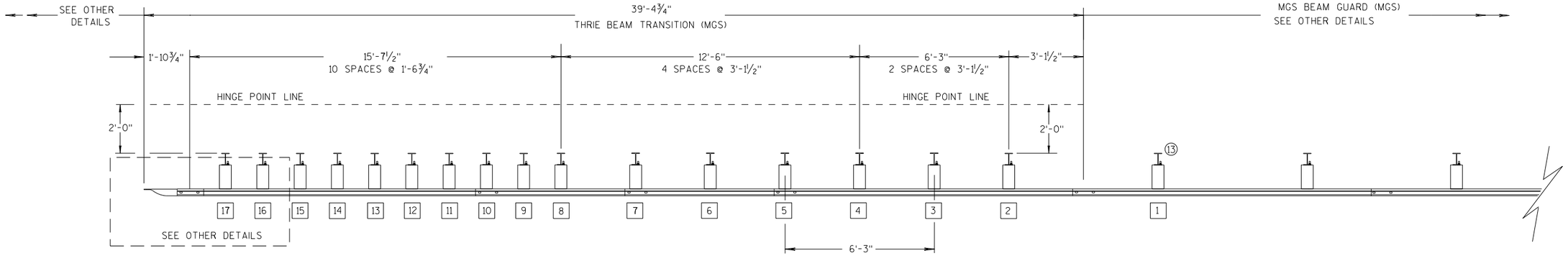
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

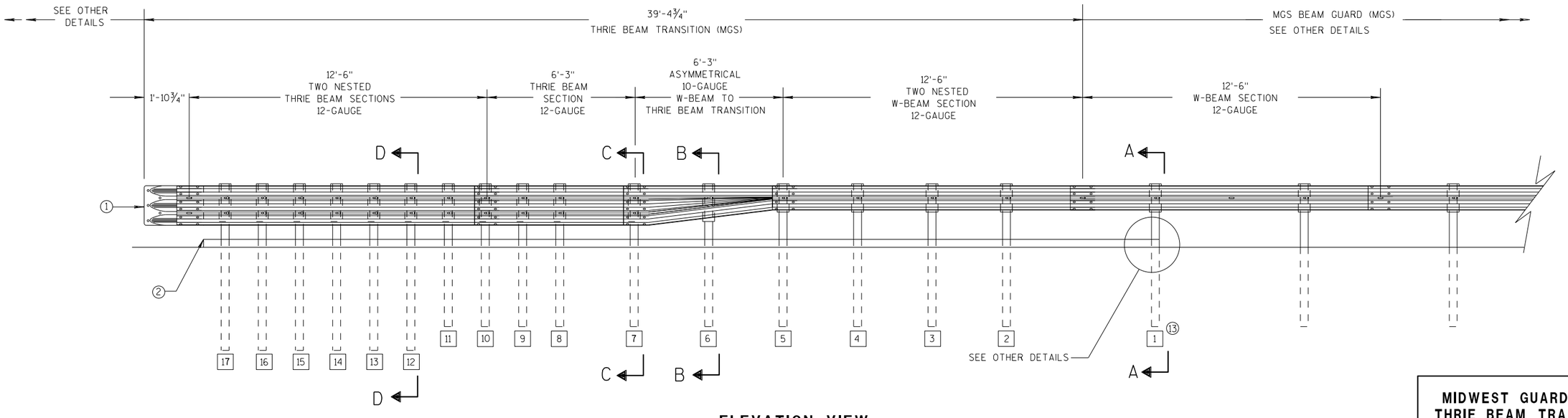
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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 TRANSPOR

6

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

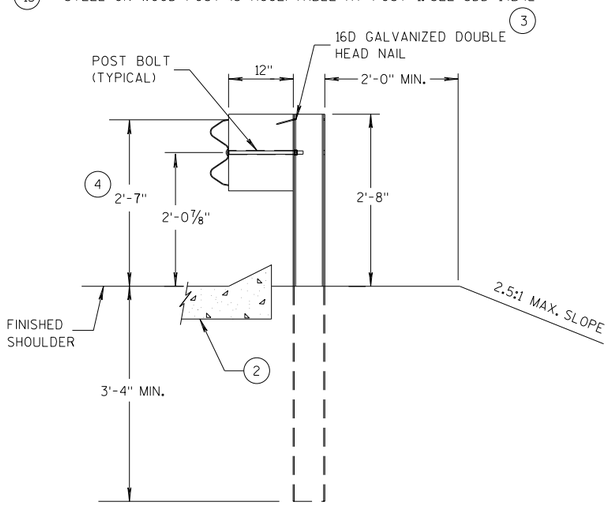
GENERAL NOTES

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

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

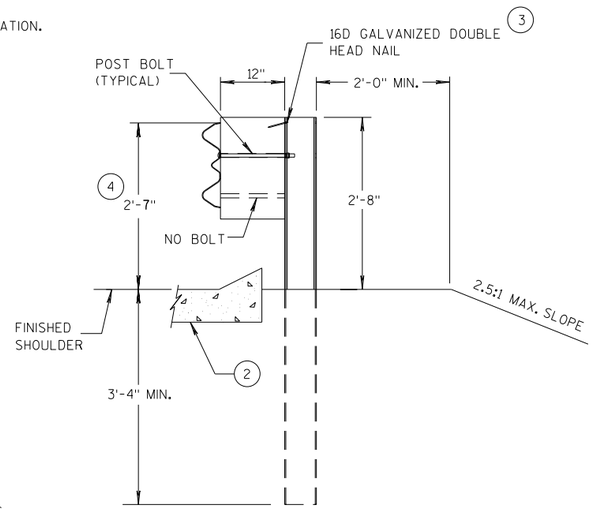
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



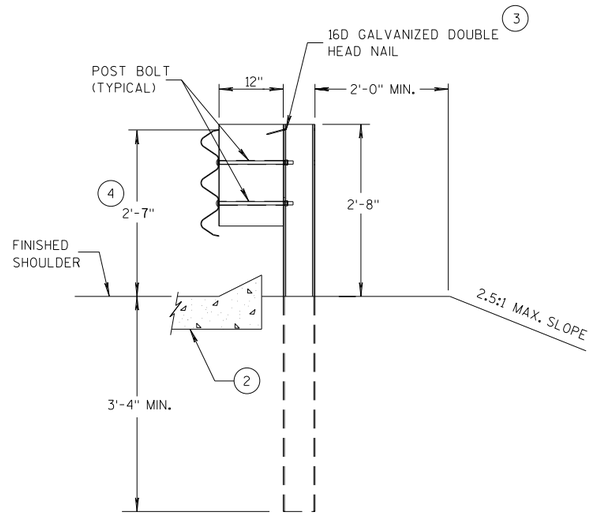
SECTION A-A (13)

POSTS 1-5



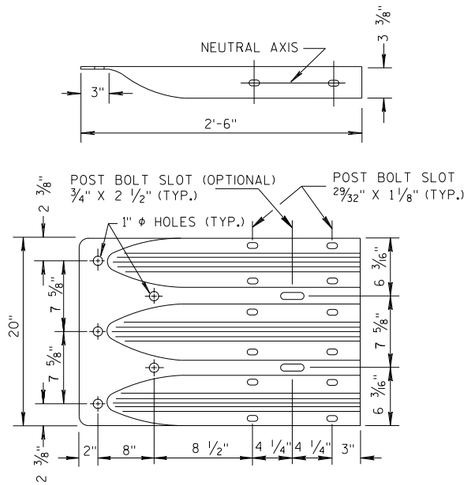
SECTION B-B

POST 6

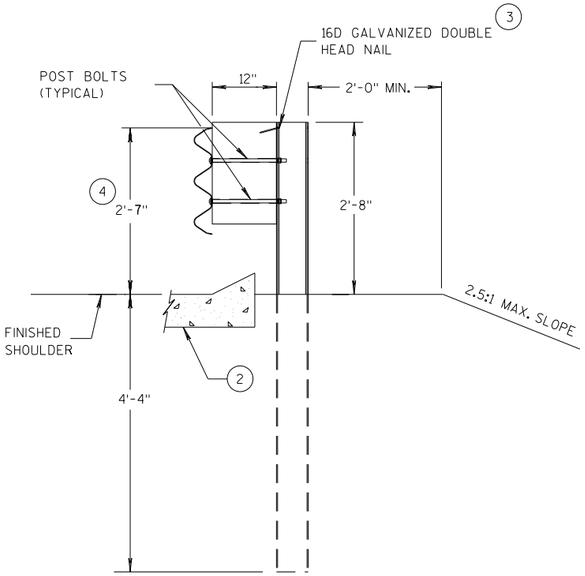


SECTION C-C

POSTS 7-11

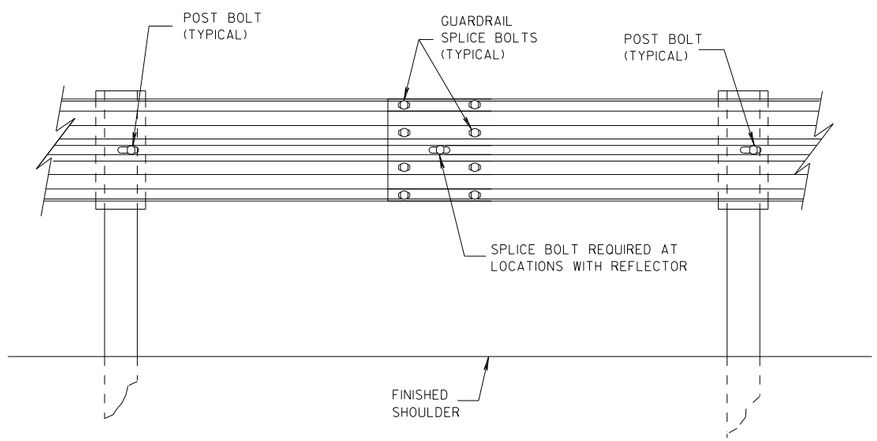


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

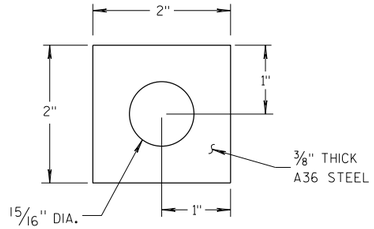
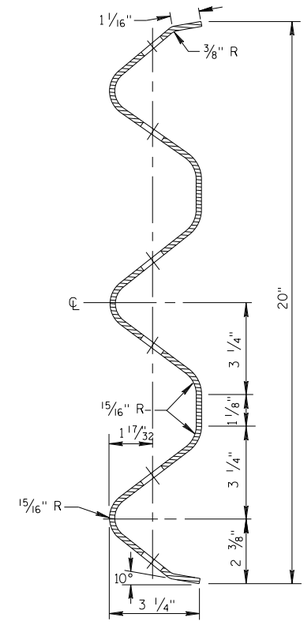


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 282

6

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

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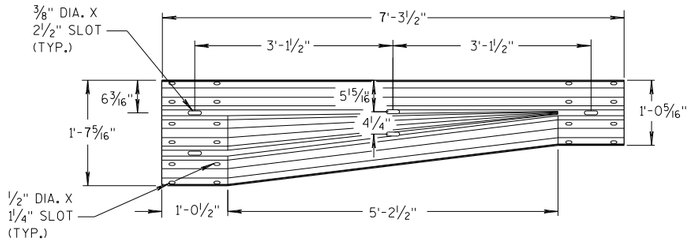
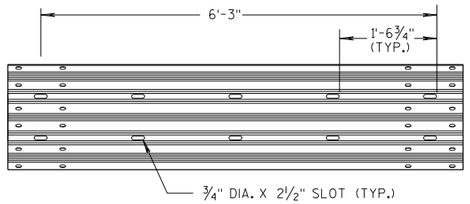
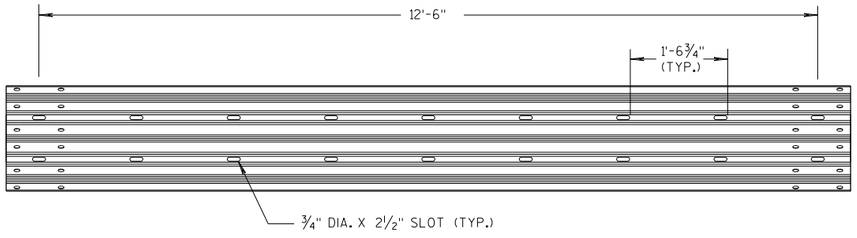
S.D.D. 14 B 45-5b



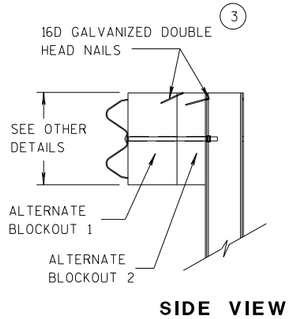
W-BEAM TO THRIE BEAM TRANSITION SECTION



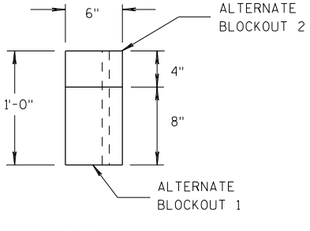
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

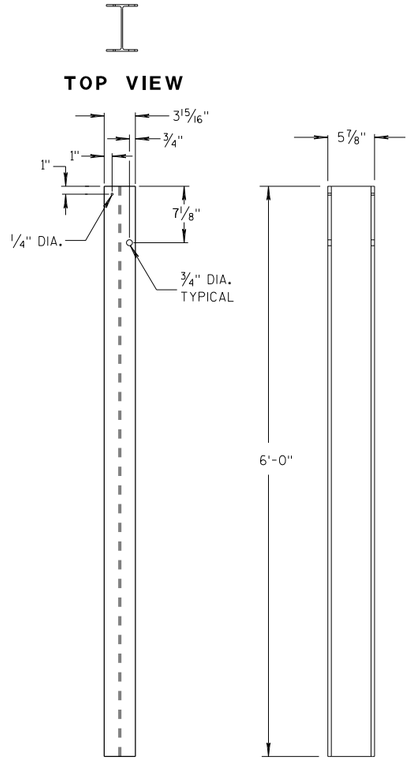


SIDE VIEW



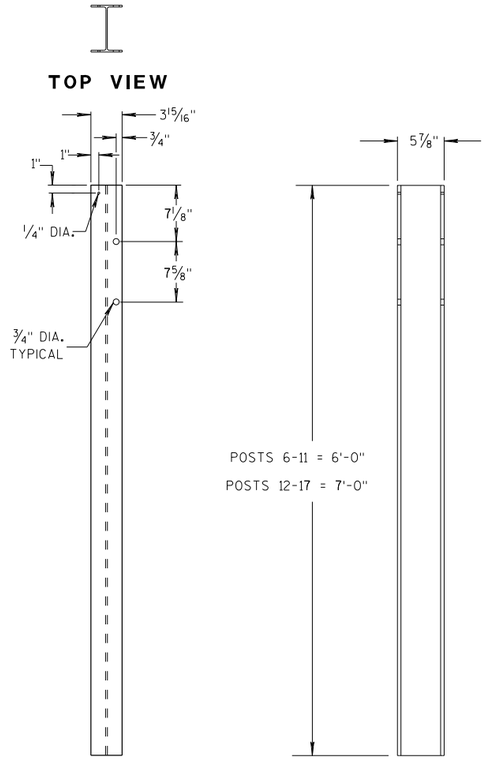
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



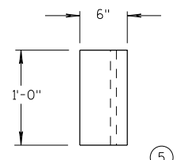
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

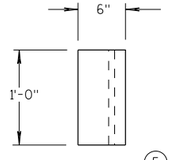


FRONT VIEW SIDE VIEW

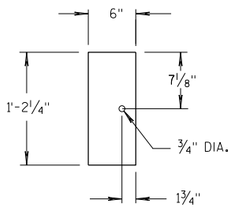
STEEL POSTS 6-17



TOP VIEW (5)

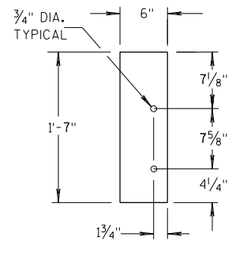


TOP VIEW (5)



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.

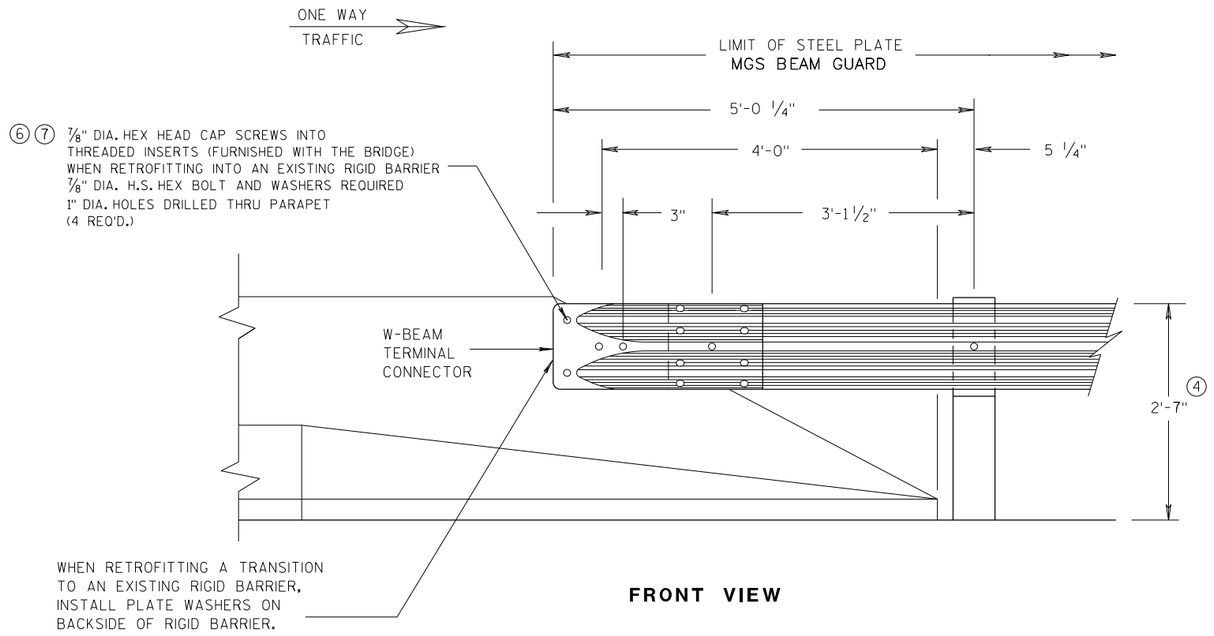
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

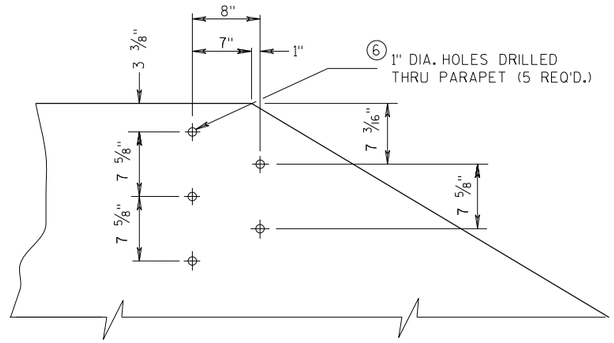
GENERAL NOTES

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

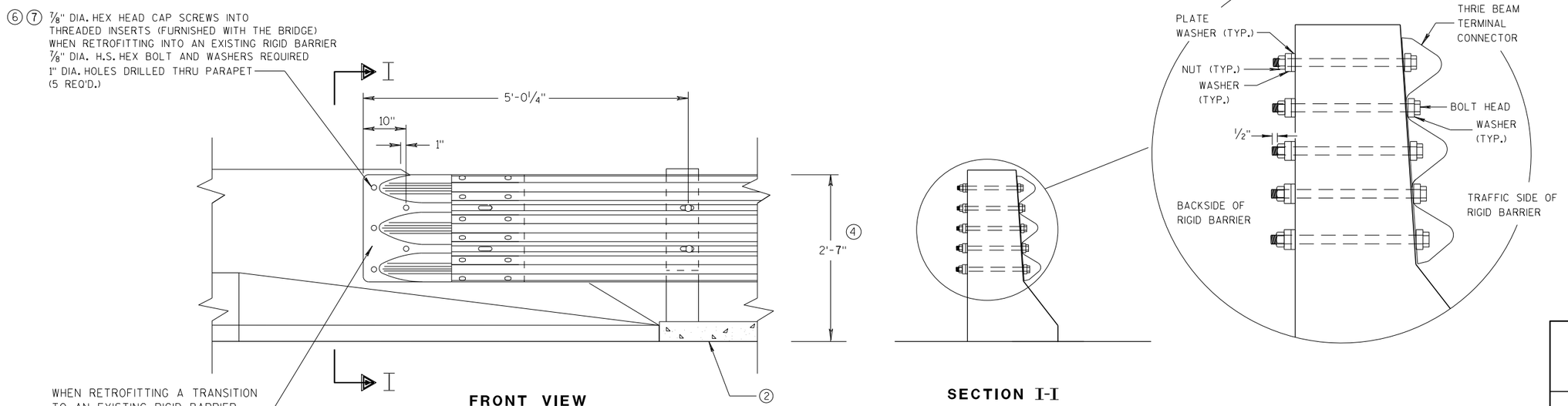
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

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.



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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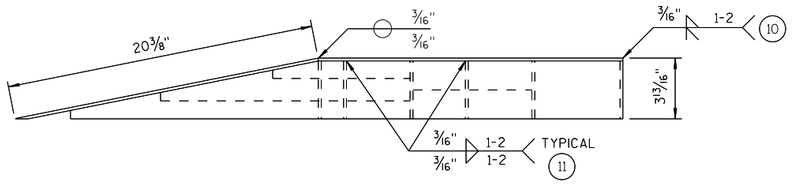
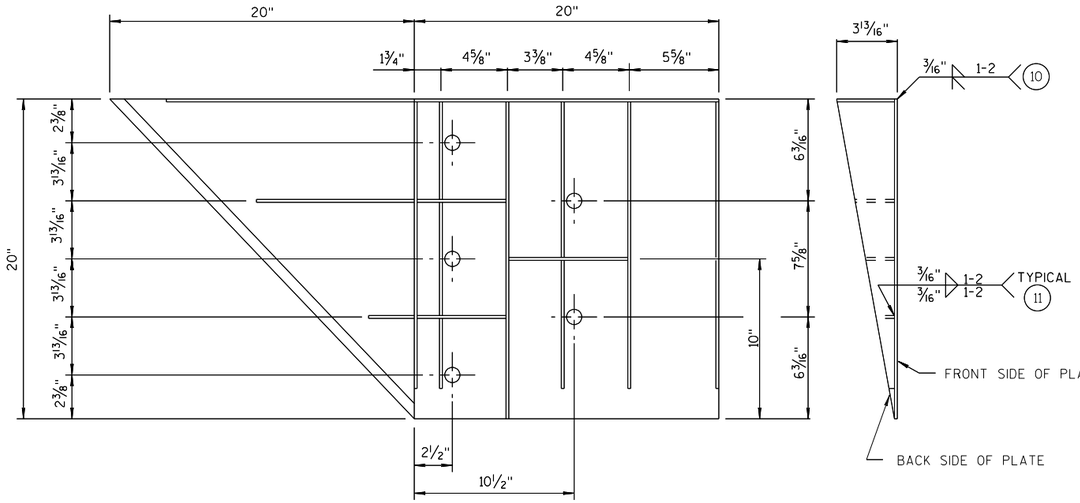
S.D.D. 14 B 45-5f





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

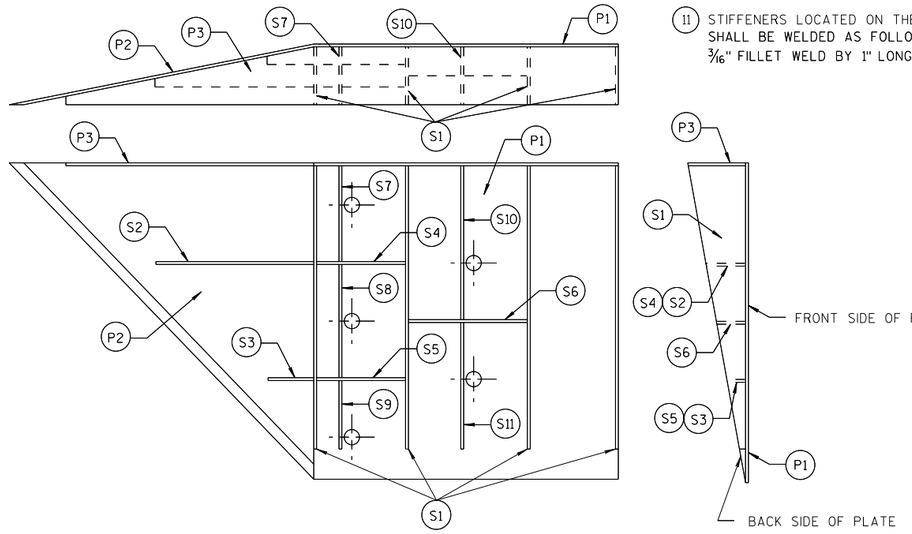


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

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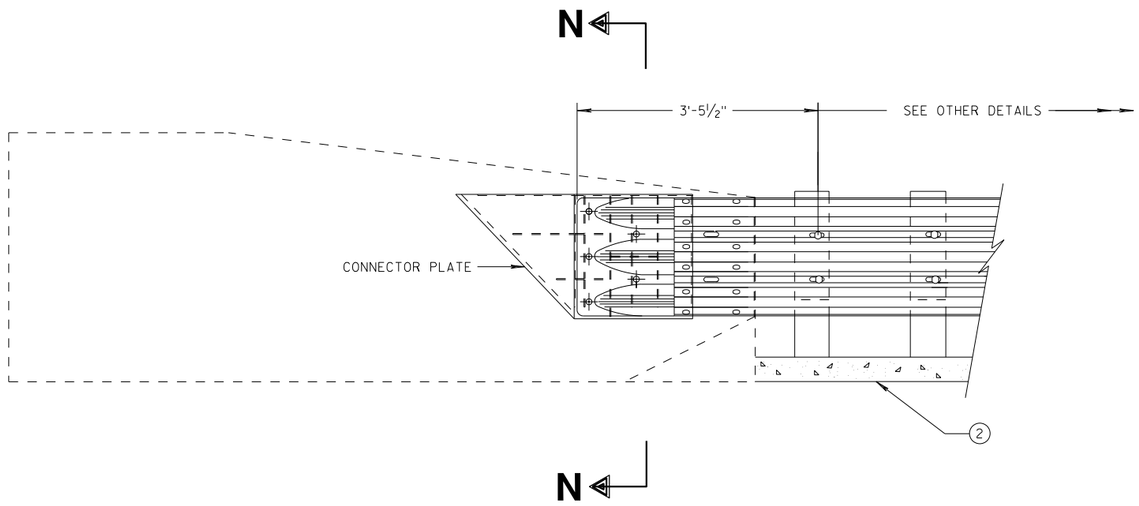
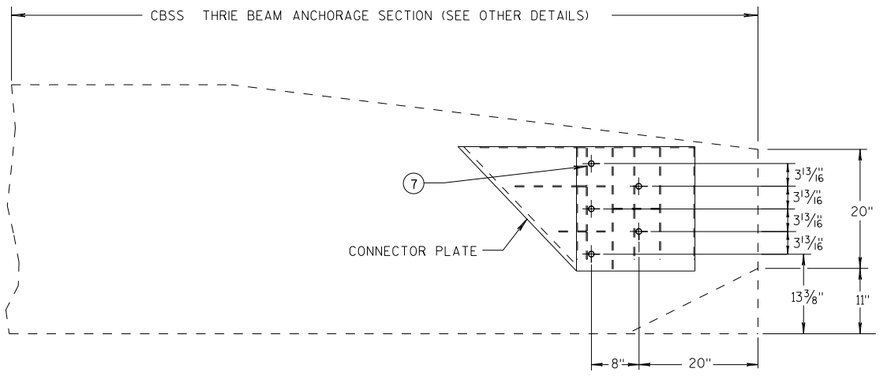
S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



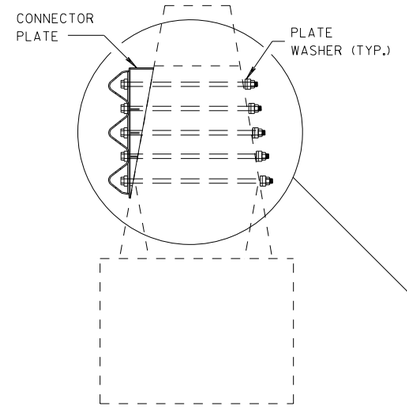
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

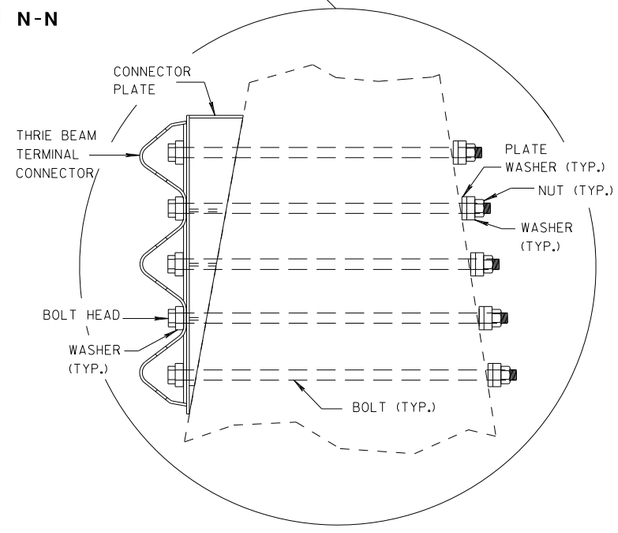
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DI[illegible]NT
UNIT SUPERVIS

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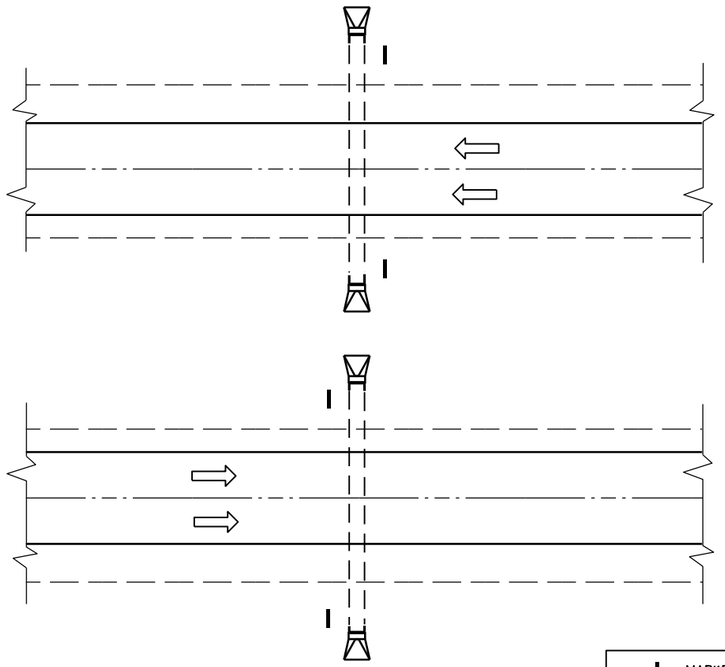
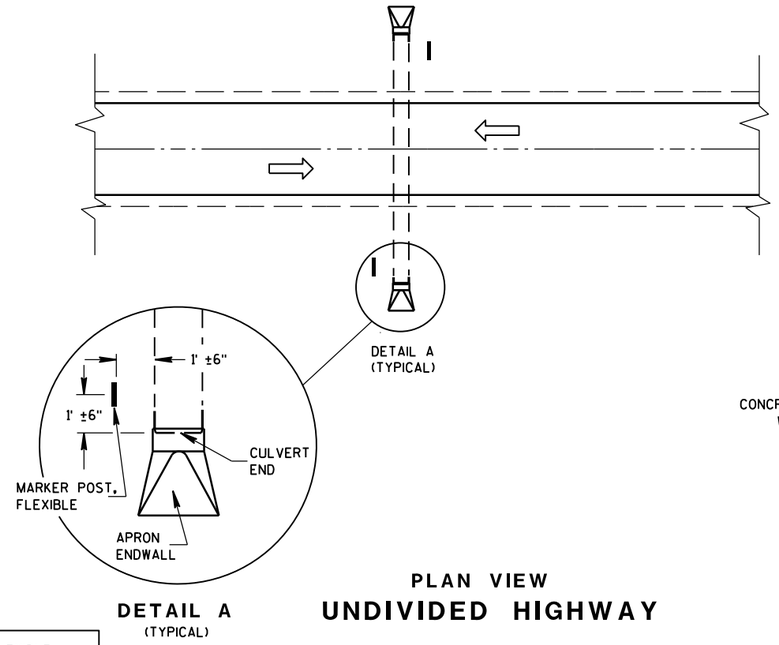
S.D.D. 14 B 45-5j



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

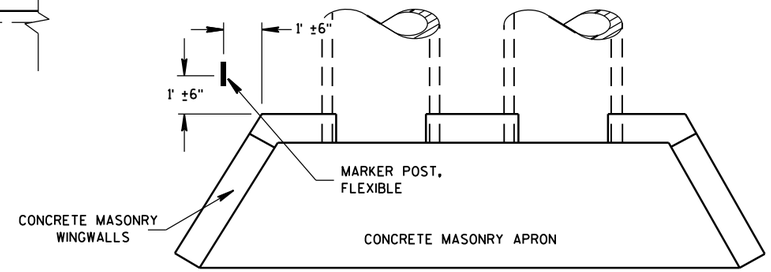
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

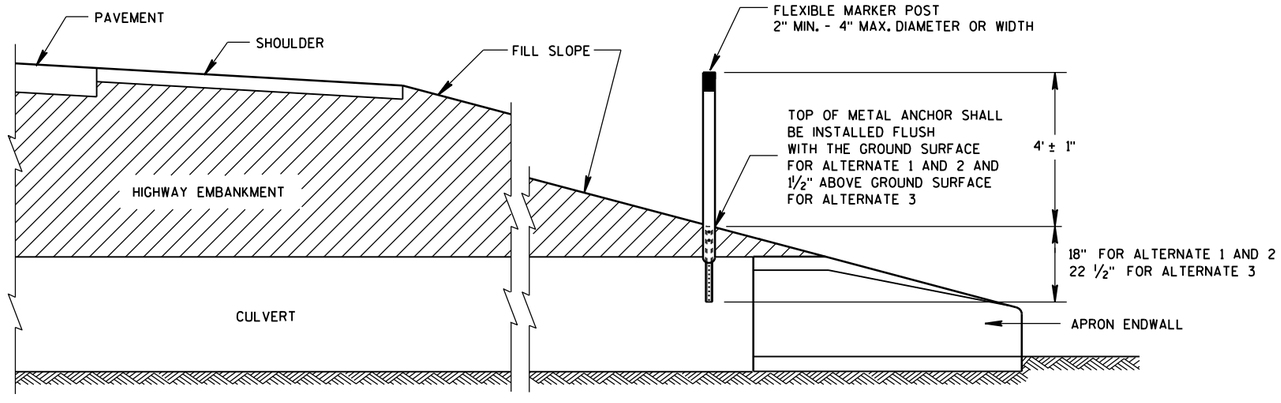
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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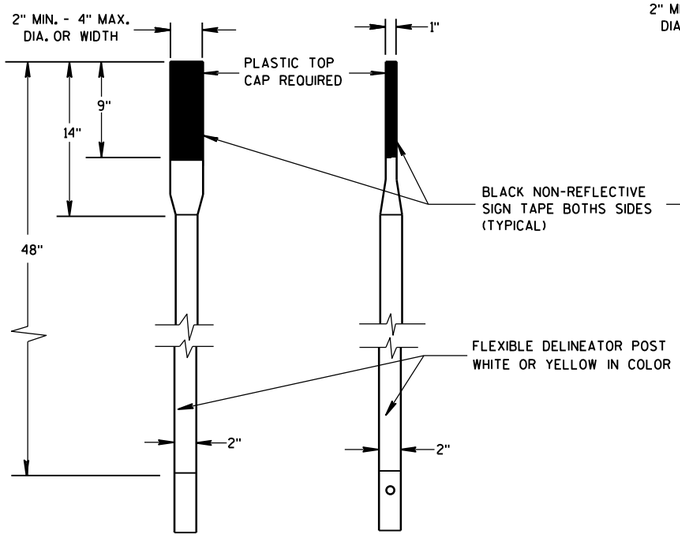
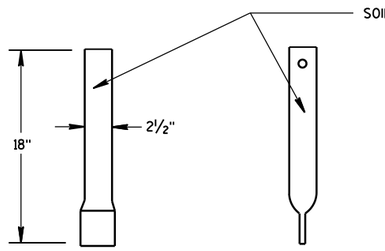
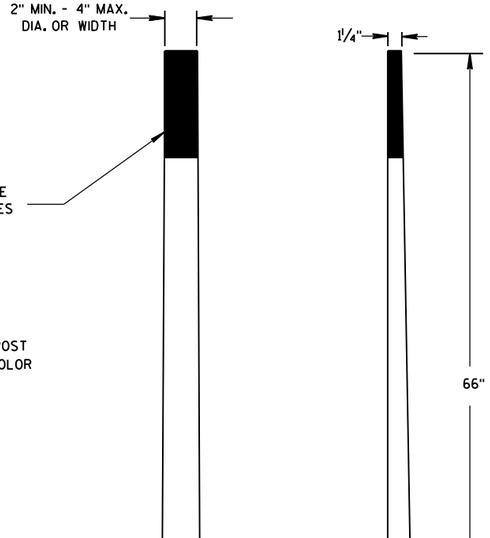
S.D.D. 15 A 3-2a





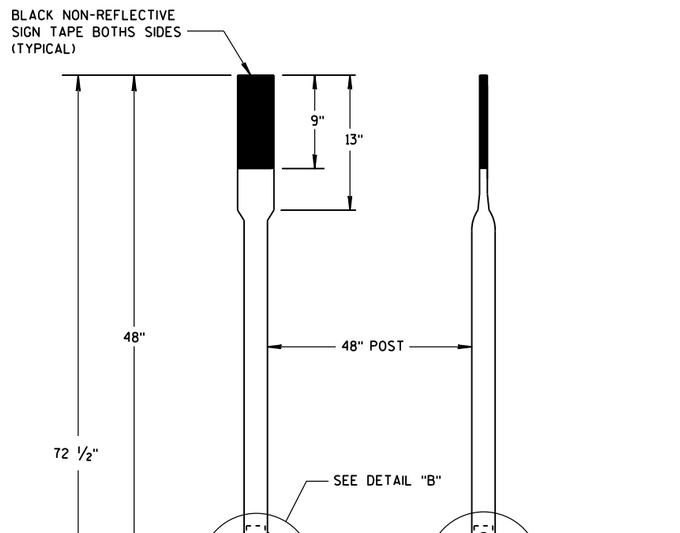
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

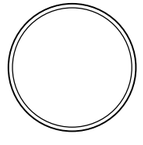
ALTERNATE 2



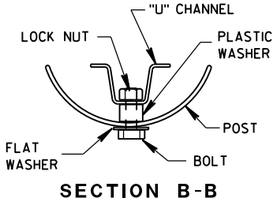
FRONT VIEW SIDE VIEW

ALTERNATE 3

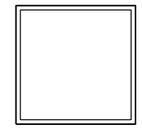
FLEXIBLE MARKER POSTS



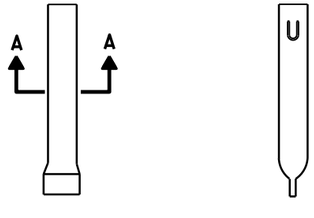
SECTION A-A



SECTION B-B

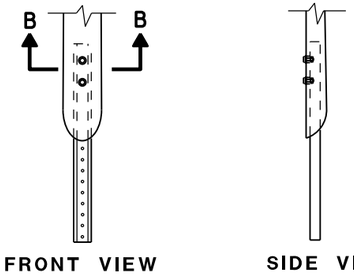


SECTION C-C



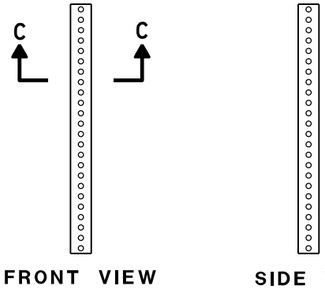
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

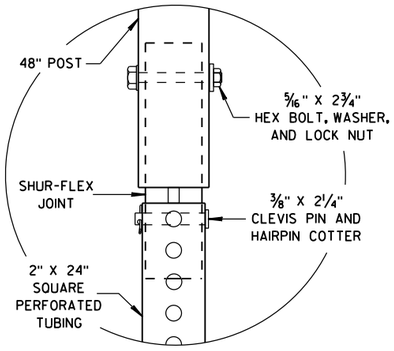
ALTERNATE 2



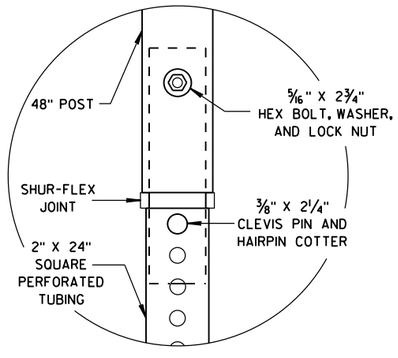
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
288
IGN
FHWA

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S.D.D. 15 A 3-2b

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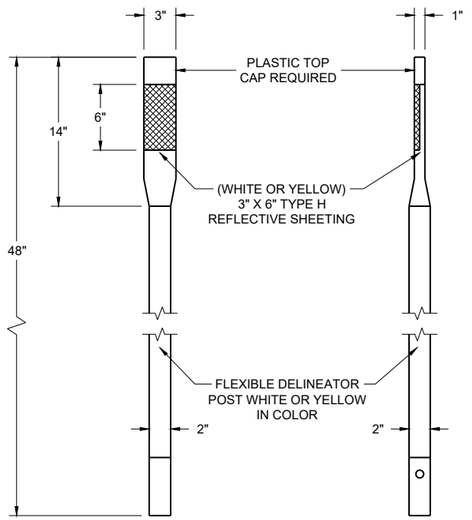
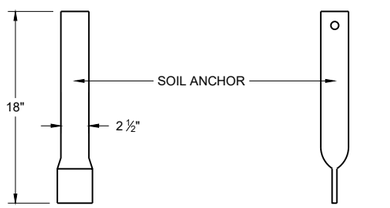
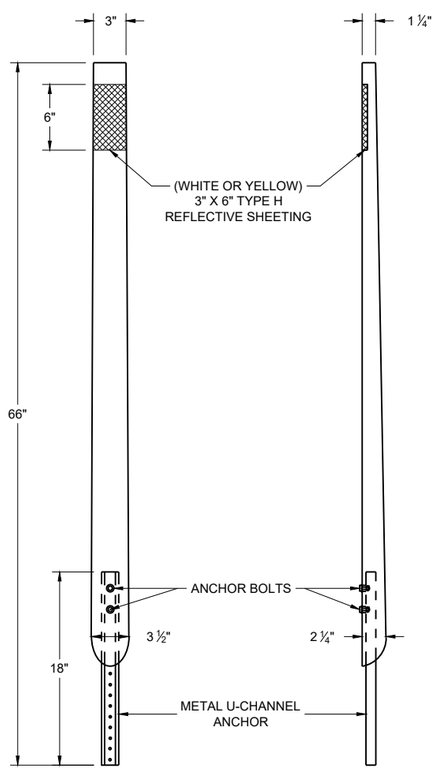
S.D.D. 15 A 3-2b





FRONT VIEW SIDE VIEW

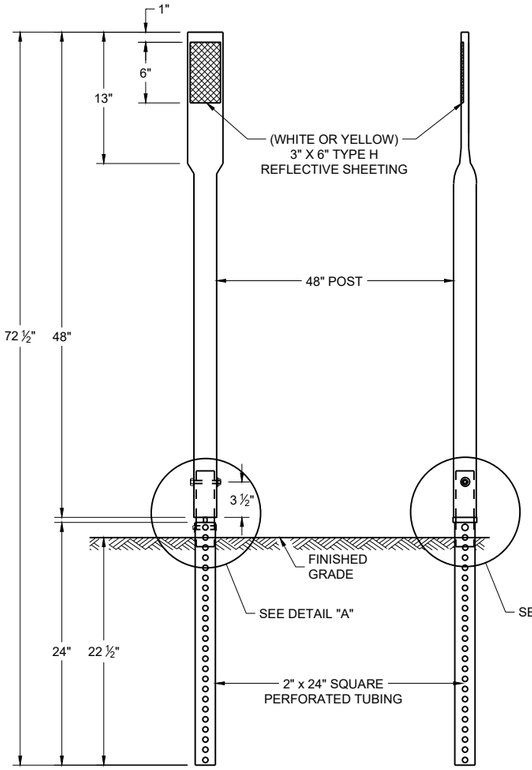
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE DELINEATOR POSTS

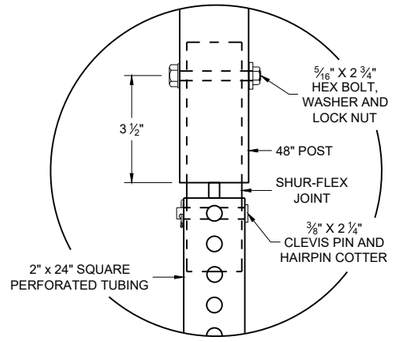


FRONT VIEW SIDE VIEW

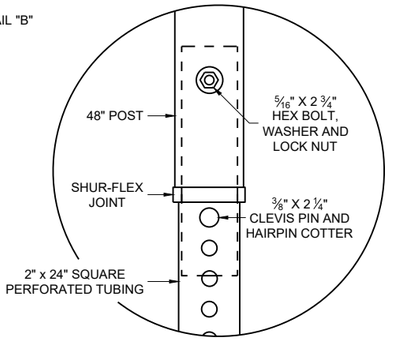
ALTERNATE 3

GENERAL NOTES

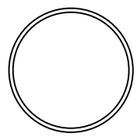
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



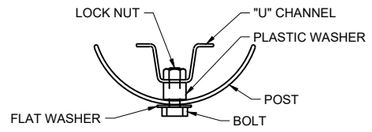
DETAIL A



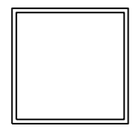
DETAIL B



SECTION A - A



SECTION B - B

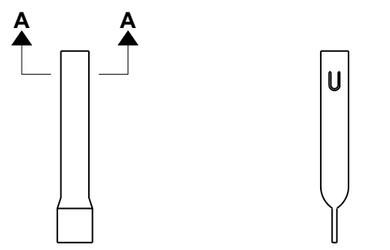


SECTION C - C

REFLECTOR SPACING TABLE

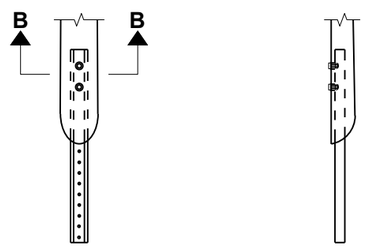
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER



FRONT VIEW SIDE VIEW

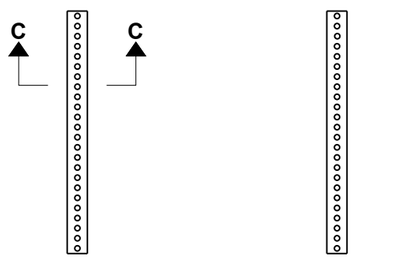
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

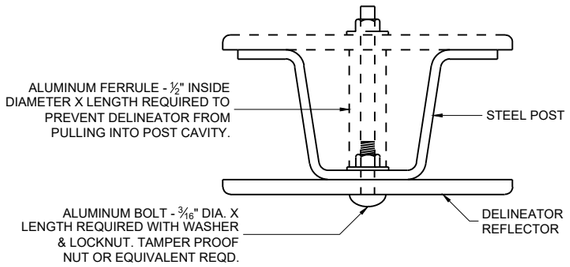
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

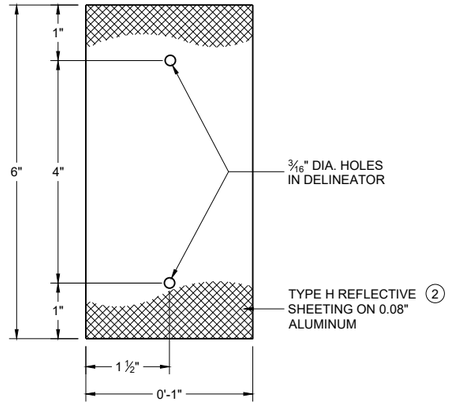
6

SDD 15A04-08a

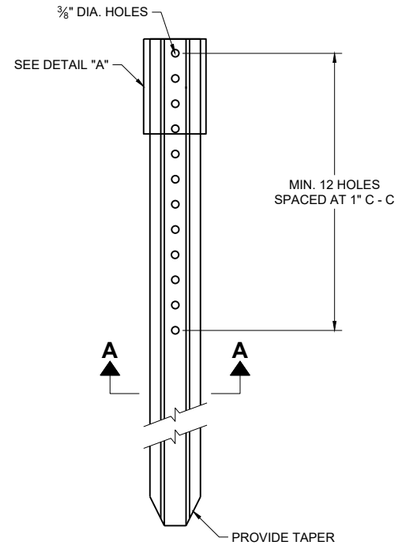
SDD 15A04-08a



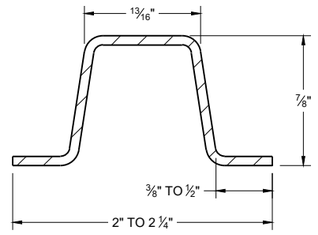
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



DELINEATOR POST



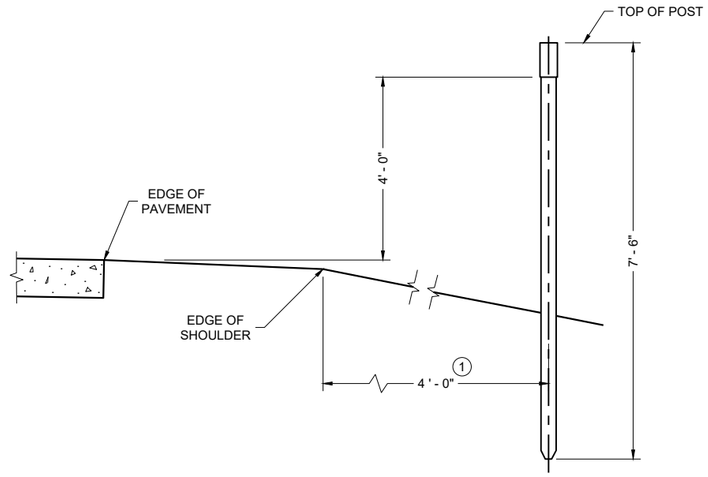
SECTION A - A

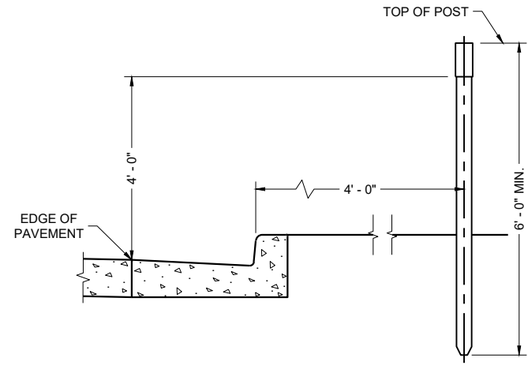
WEIGHT 1.12 LBS PER FT. \ 0.1 LB.

REFLECTOR SPACING TABLE

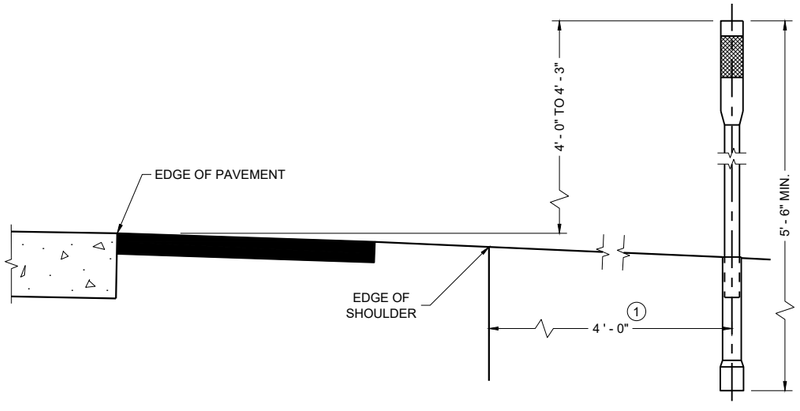
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

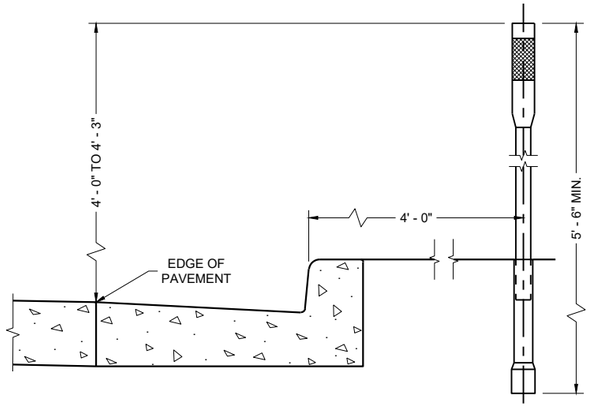
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





TYPICAL INSTALLATIONS OF DELINEATOR POSTS





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

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

(1) DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

(2) FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

DELINEATOR POST WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15A04-08c

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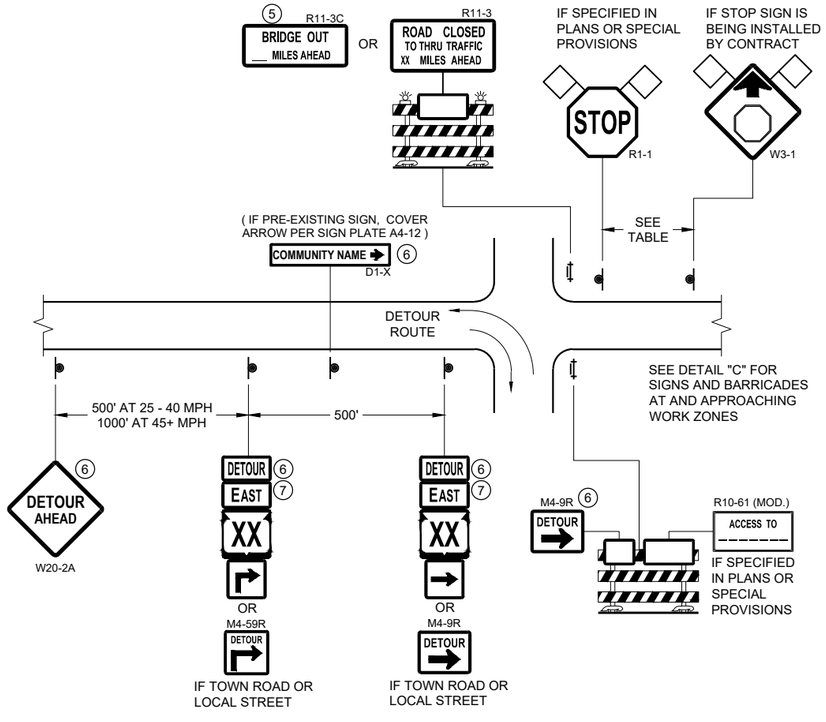
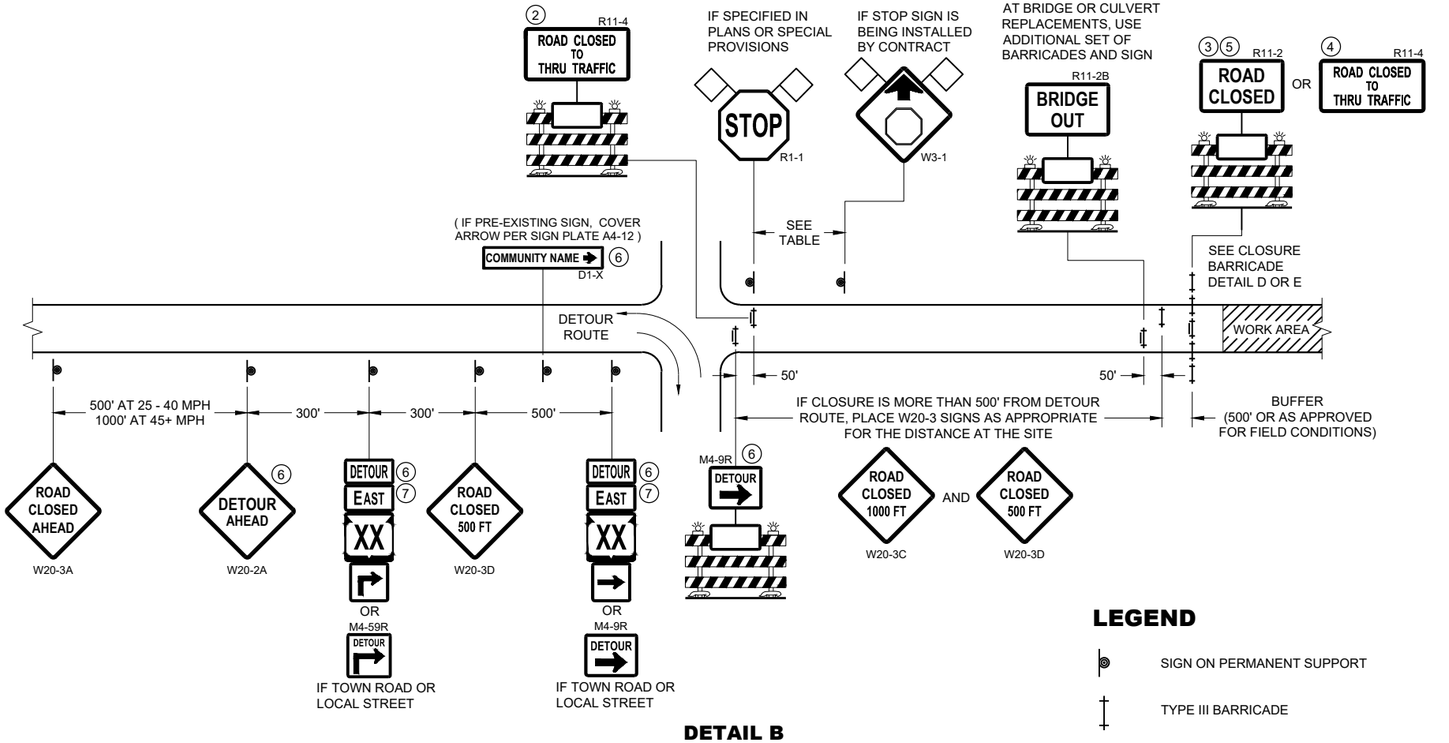
SDD 15A04-08c



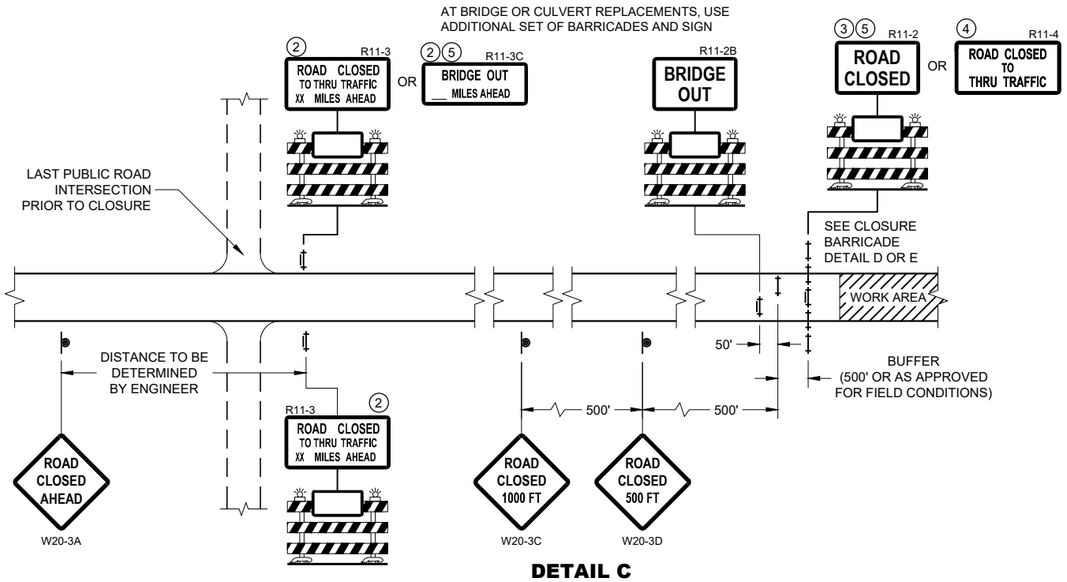
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C02 - 09a

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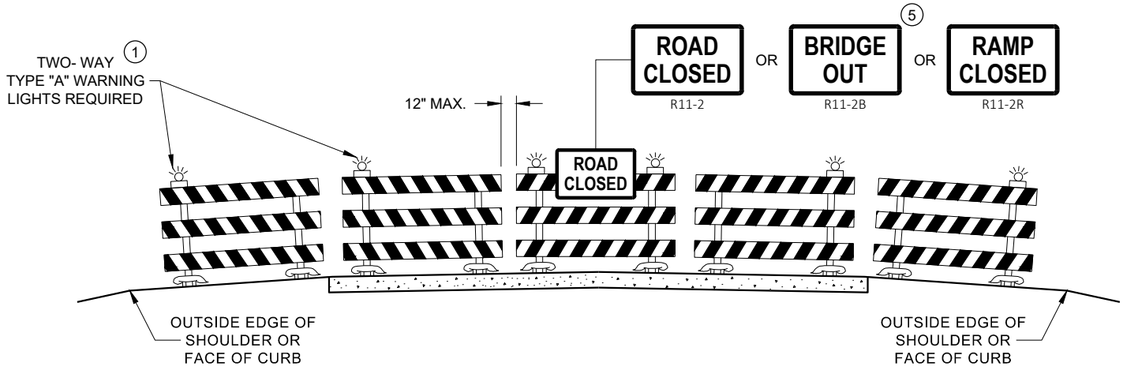
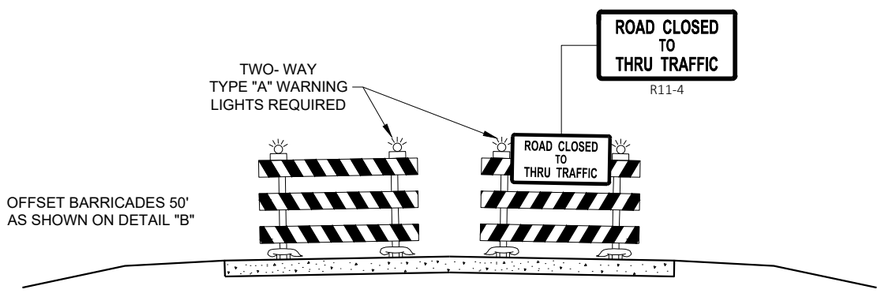
SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

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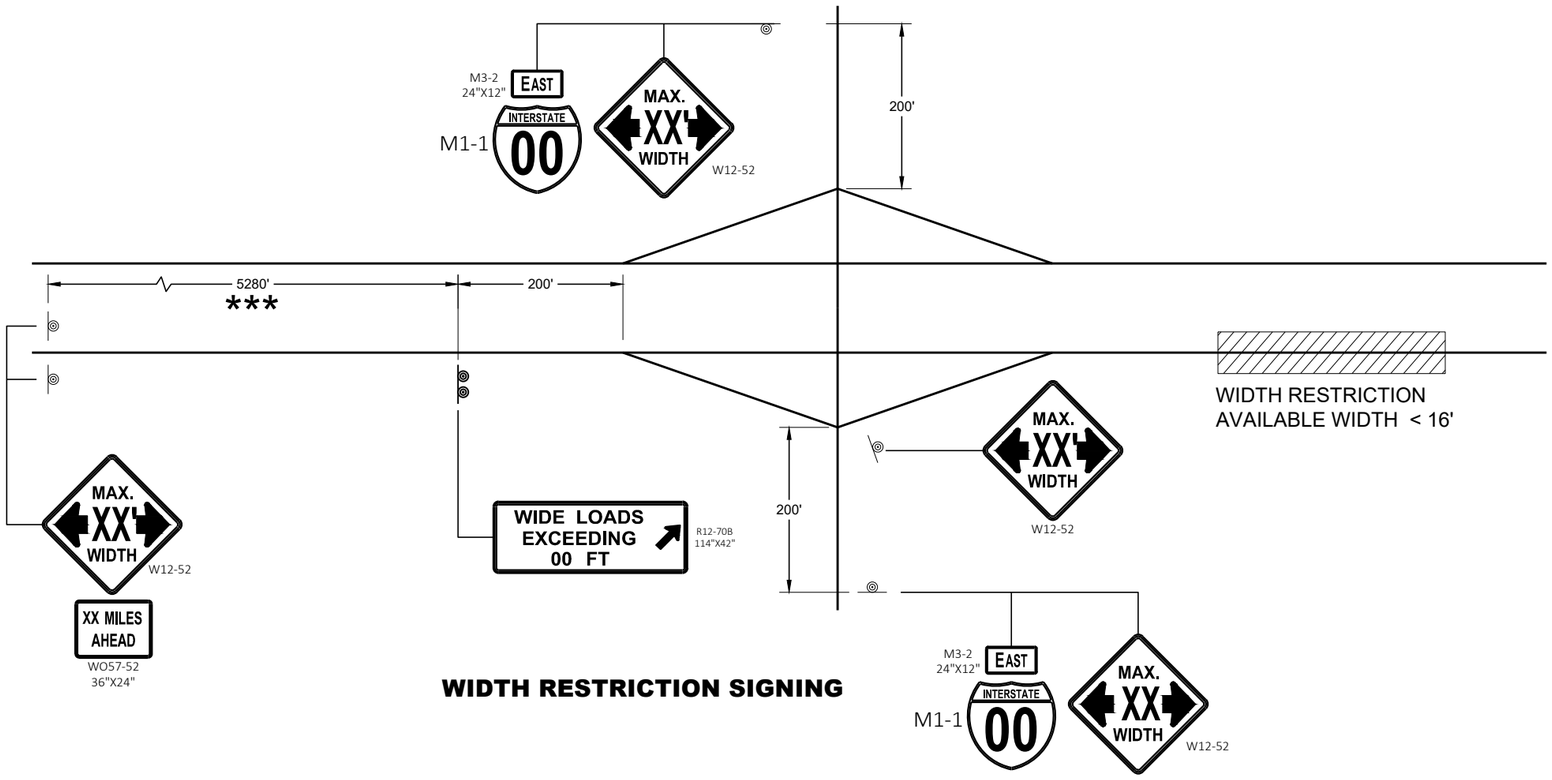
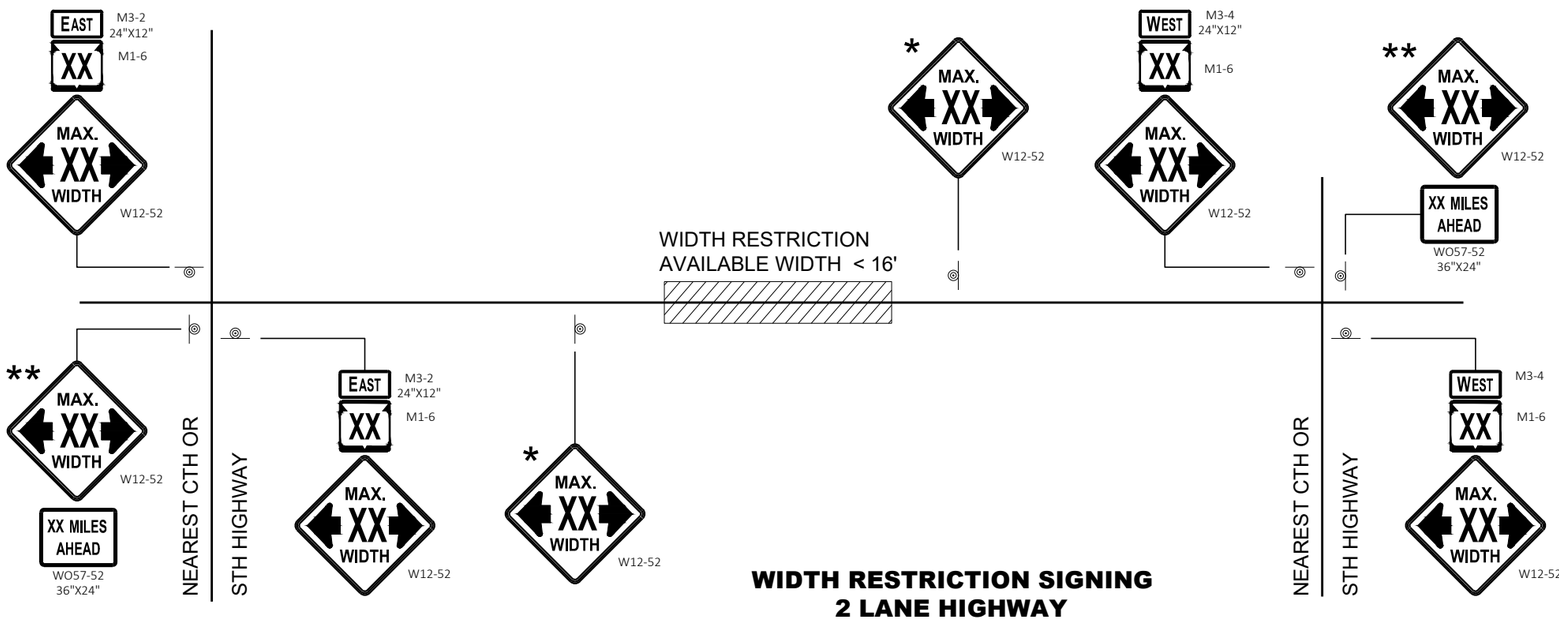
SDD 15C02 - 09b



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

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

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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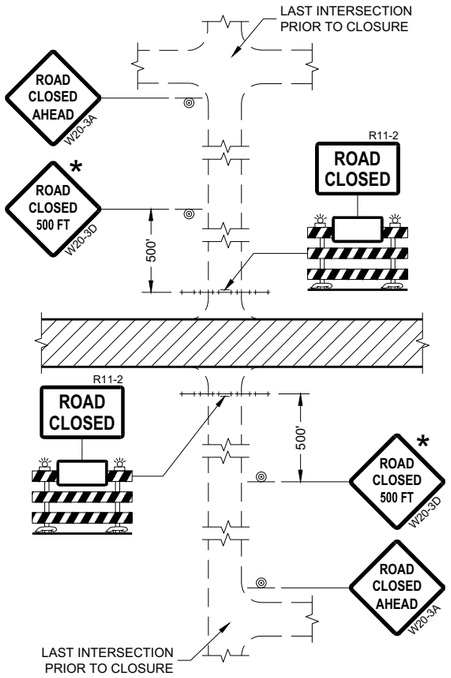
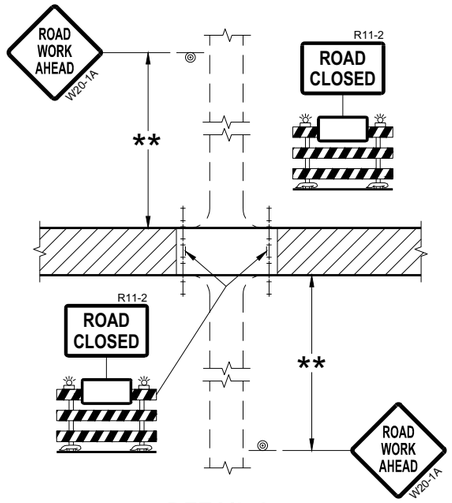
SDD 15C02 - 09f



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

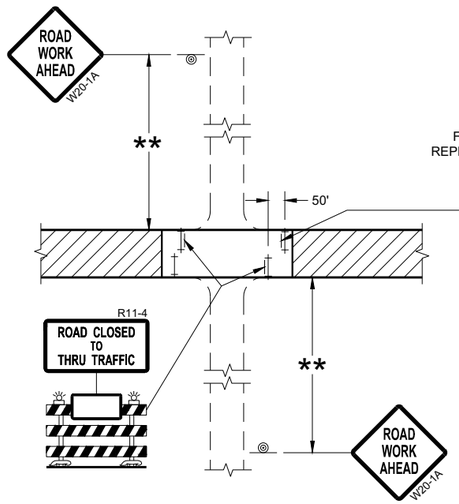
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C03 - 05

SDD 15C03 - 05

GENERAL NOTES

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

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

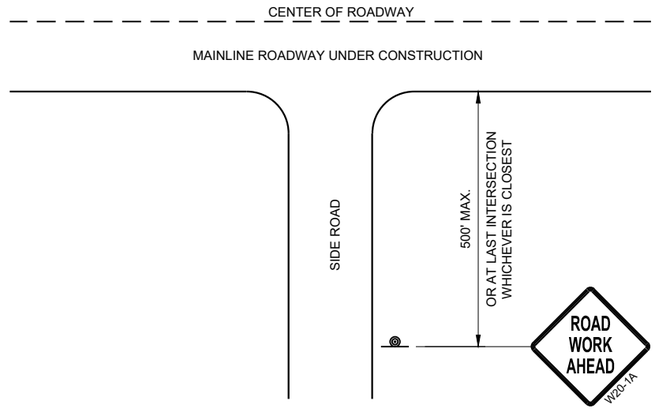
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



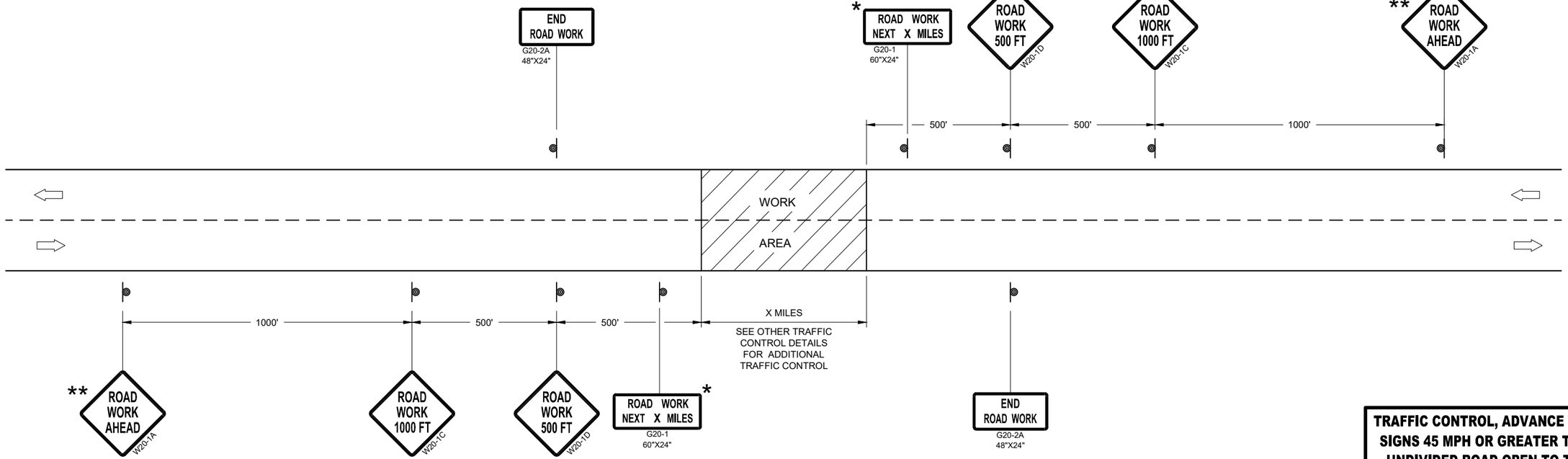
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

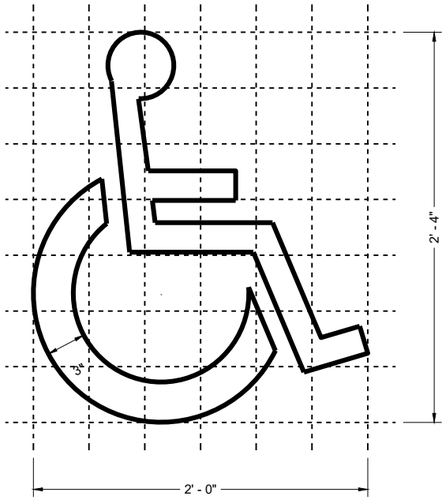
FHWA

6

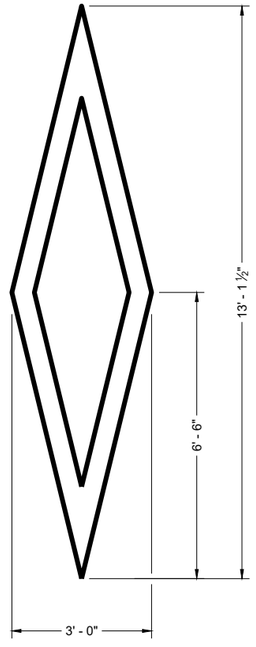
SDD 15C04 - 05

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.



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07-16a

SDD 15C07-16a

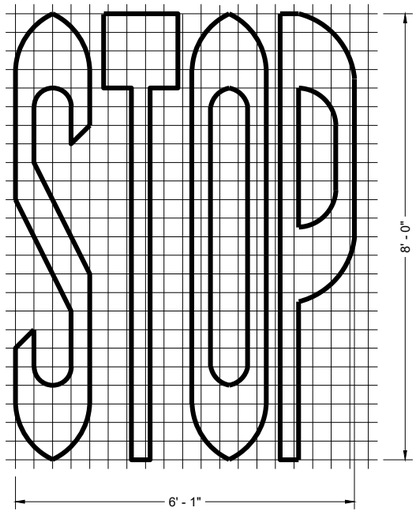
PAVEMENT MARKING SYMBOLS

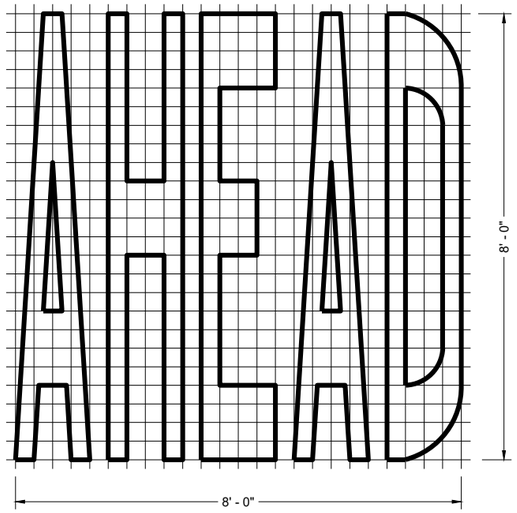
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

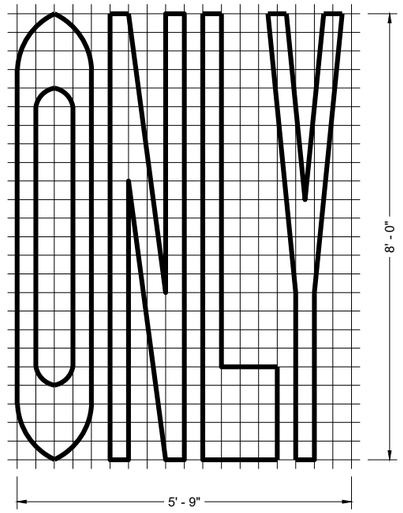
APPROVED
November 2024
DATE

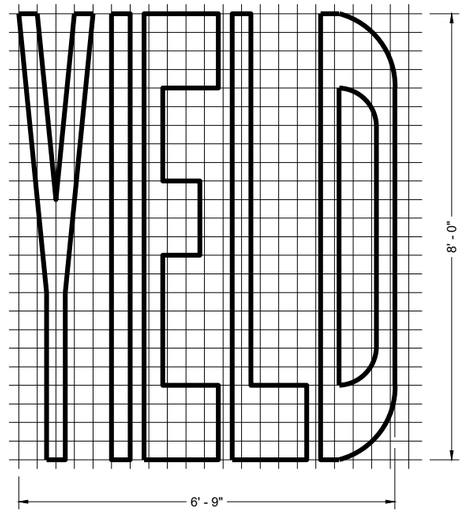
/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

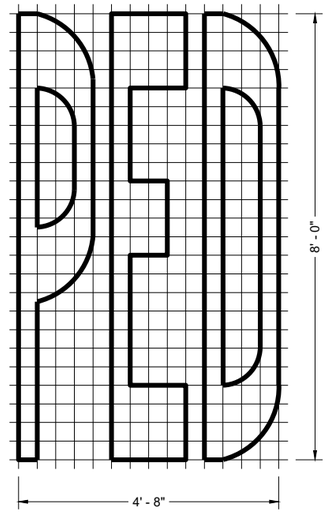
FHWA

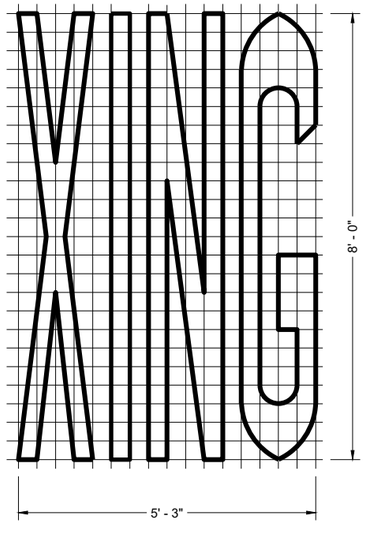


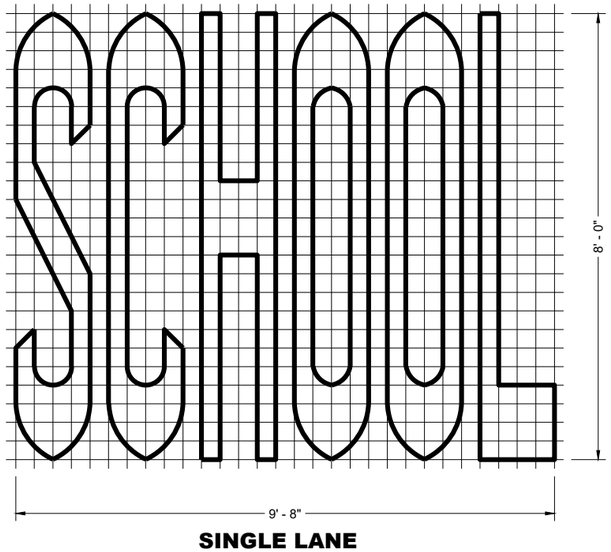




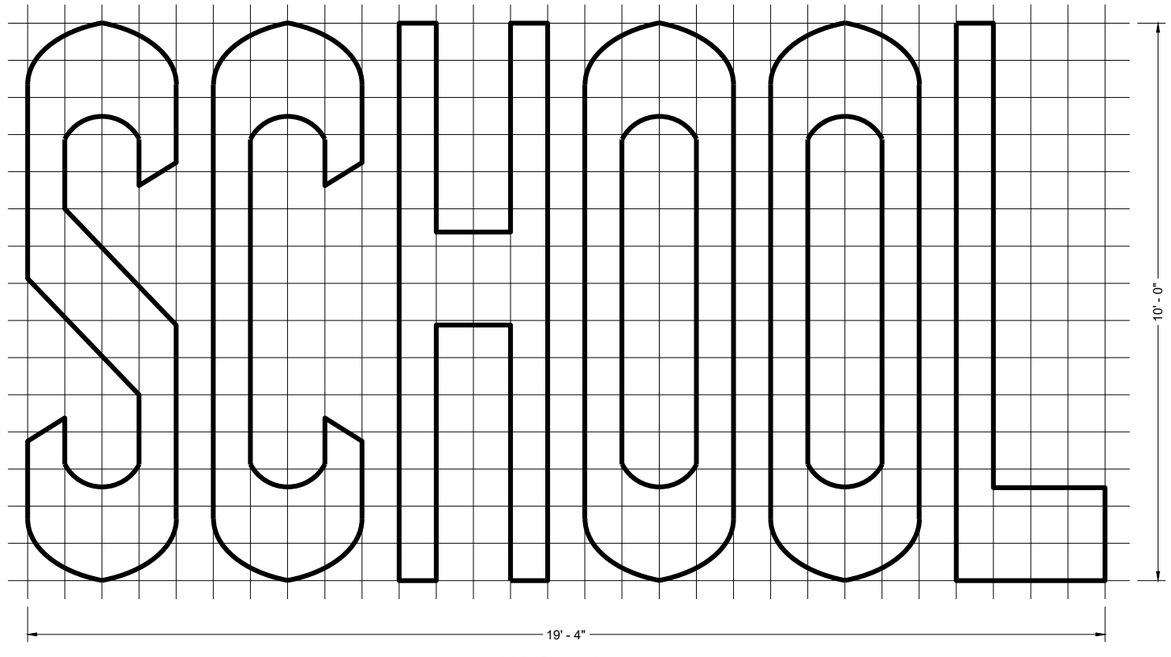








SINGLE LANE



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 2024 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07-16b

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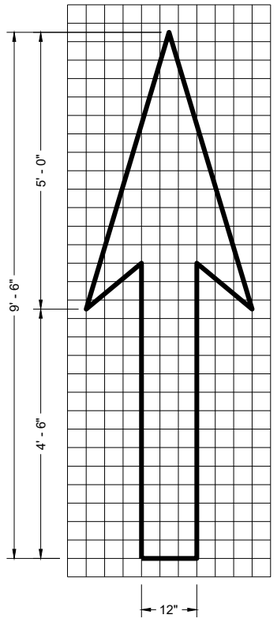
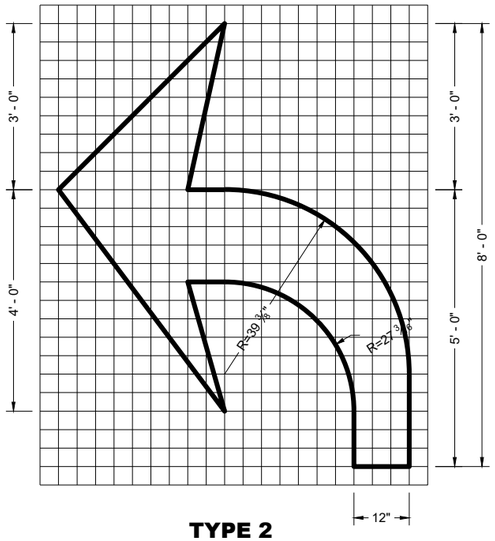
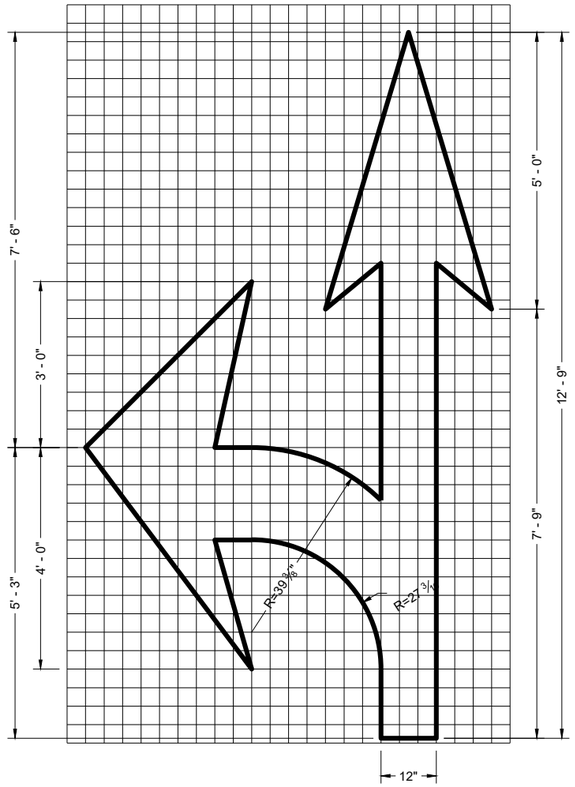
SDD 15C07-16b



TYPE 1



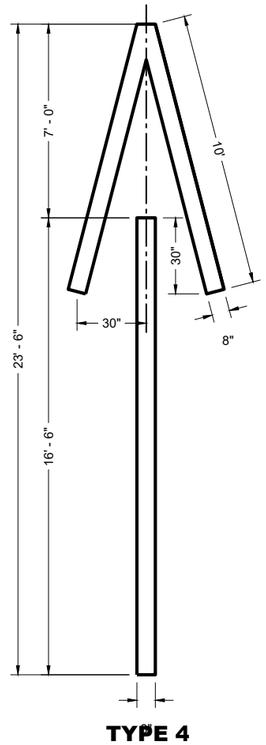
TYPE 2



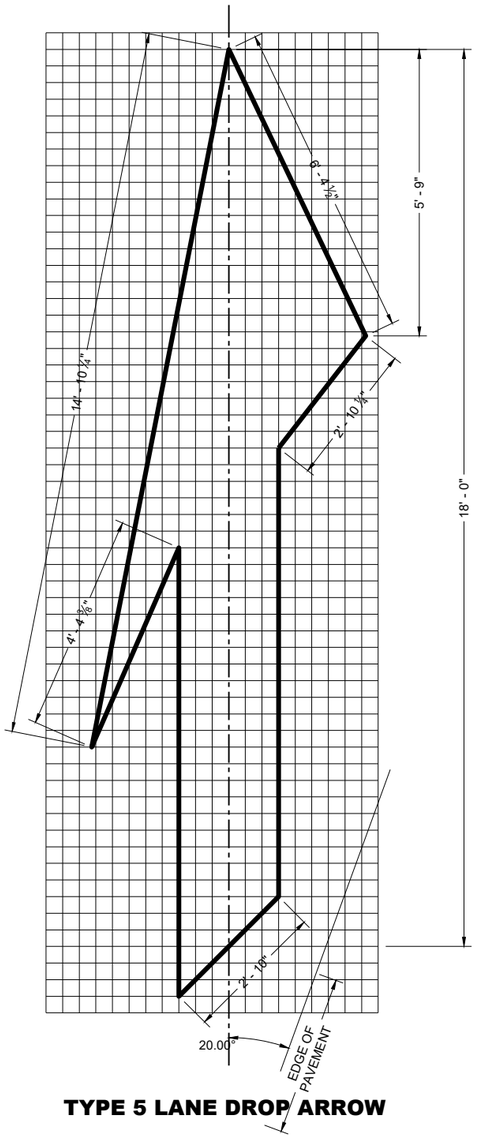
TYPE 3

GENERAL NOTES

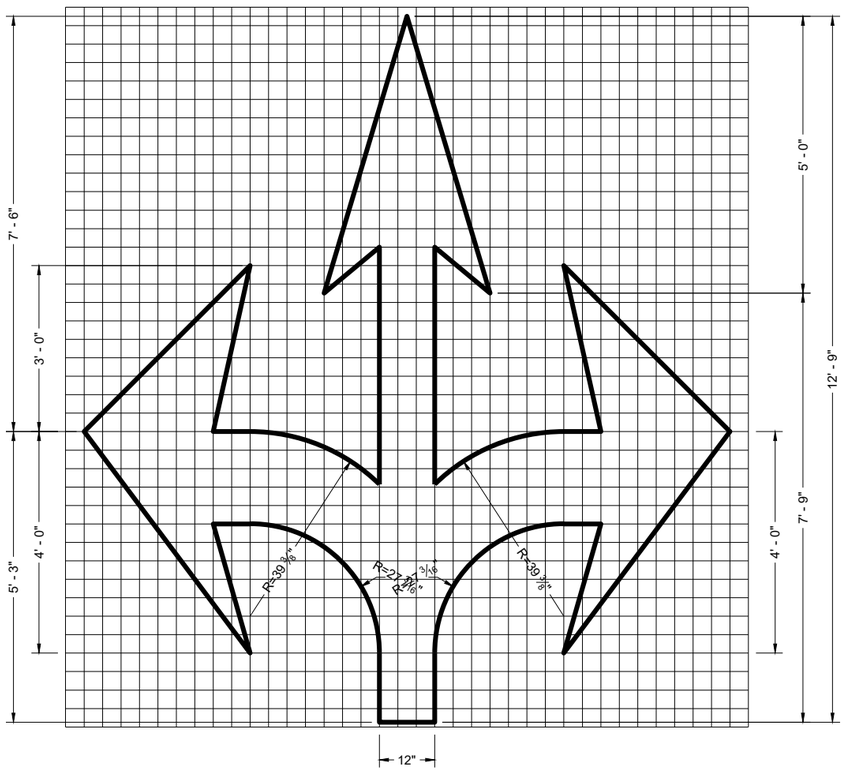
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



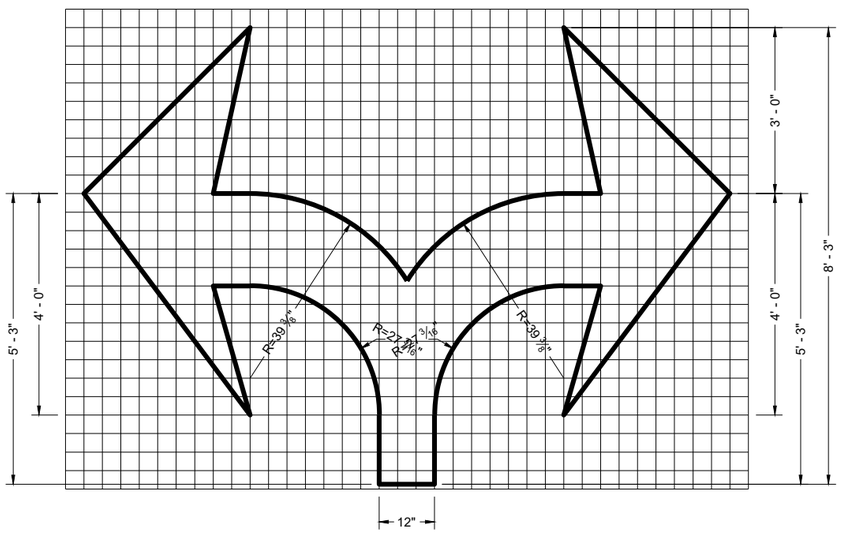
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C07-16c

SDD 15C07-16c

GENERAL NOTES

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

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

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

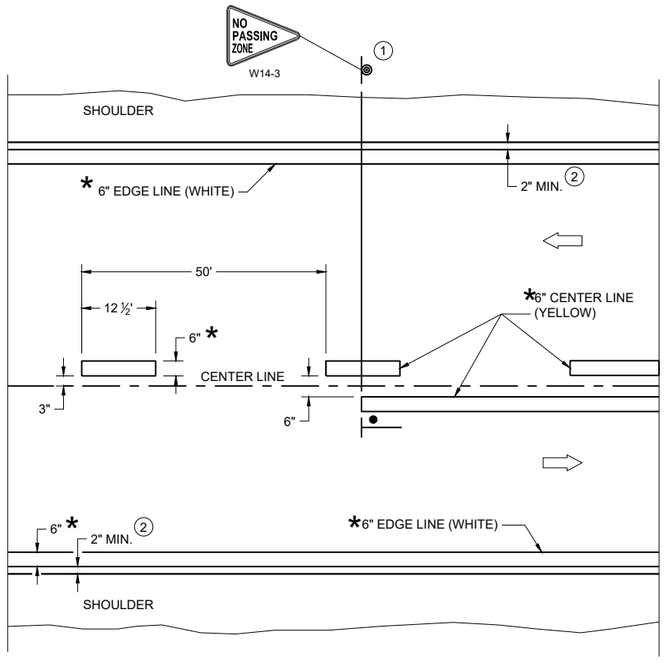
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

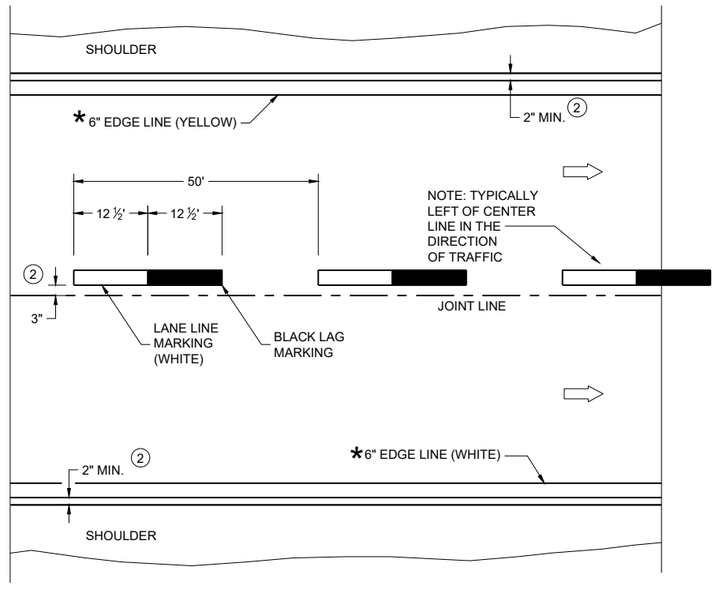
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

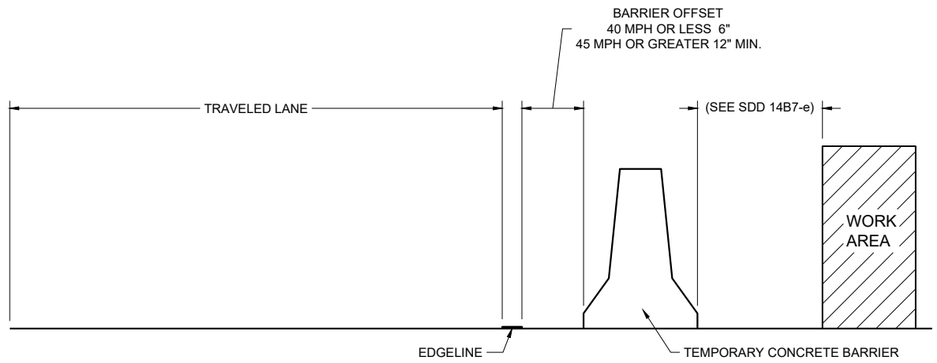
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24a

SDD 15C08-24a



TEMPORARY BARRIER OFFSET FROM EDGELINE

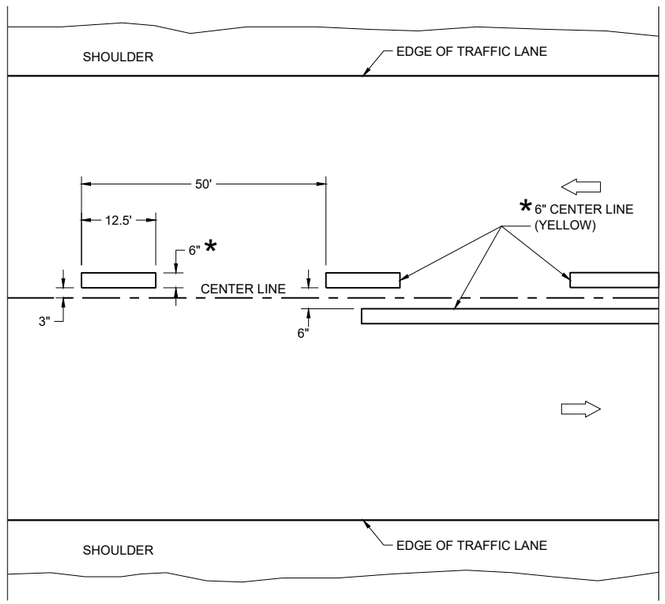
GENERAL NOTES

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

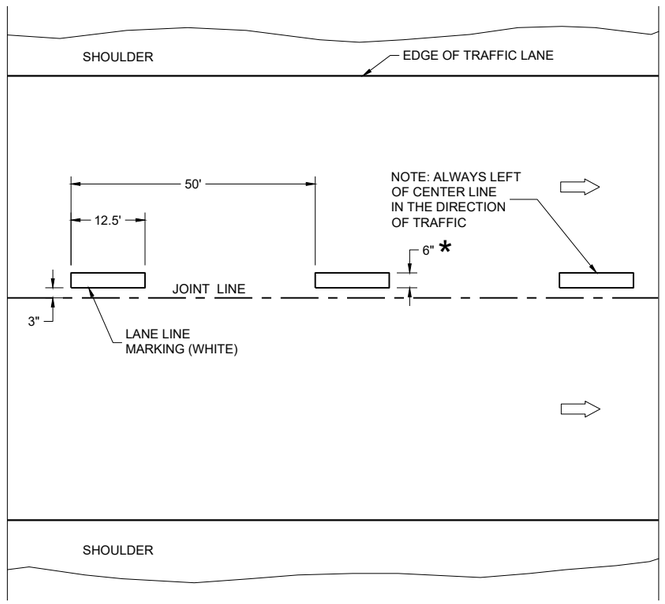
LEGEND

⇨ DIRECTION OF TRAFFIC

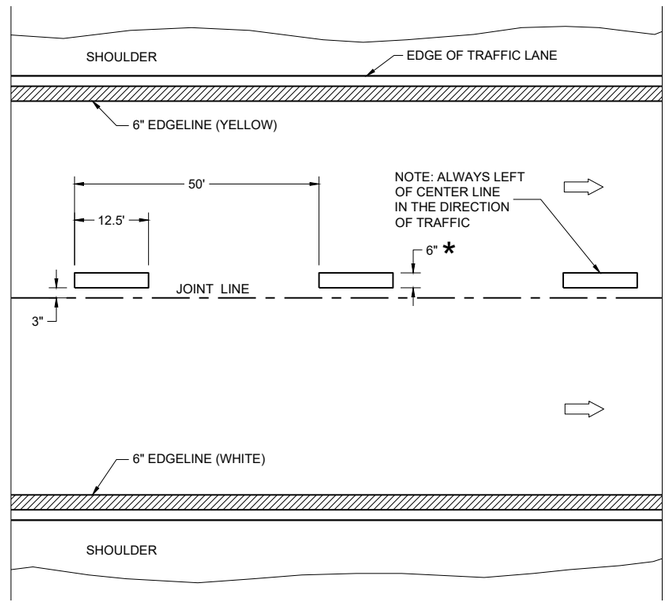
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24b

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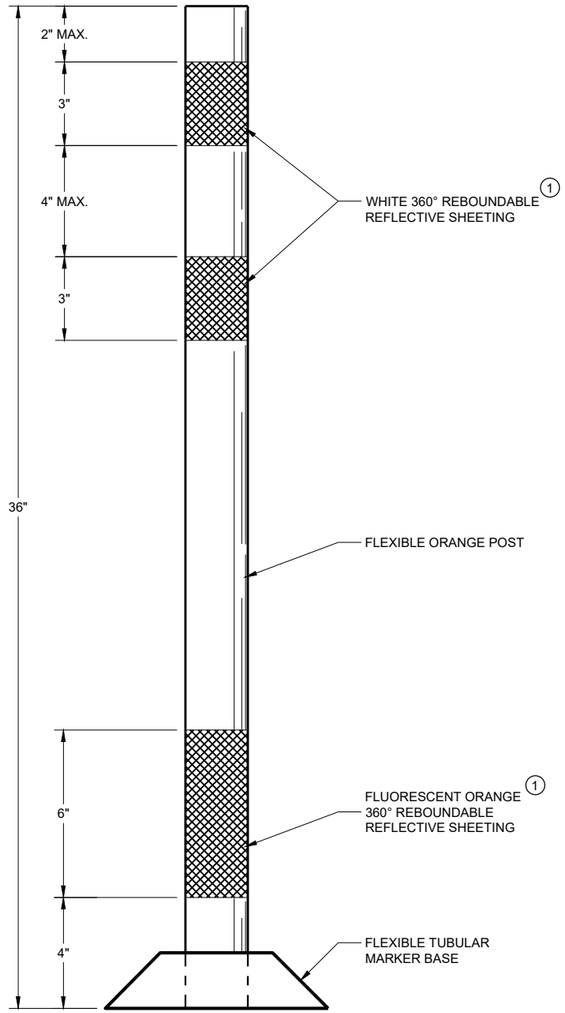
SDD 15C08-24b



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

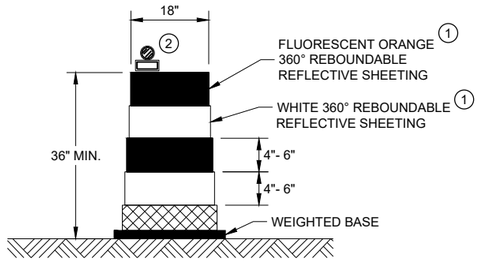
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C11 - 10a

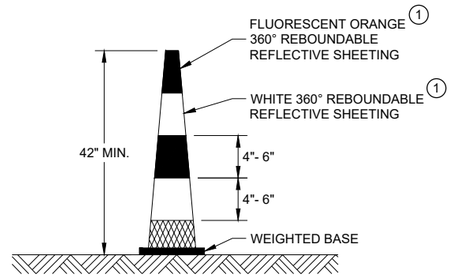
GENERAL NOTES

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

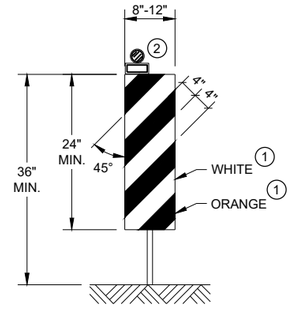
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

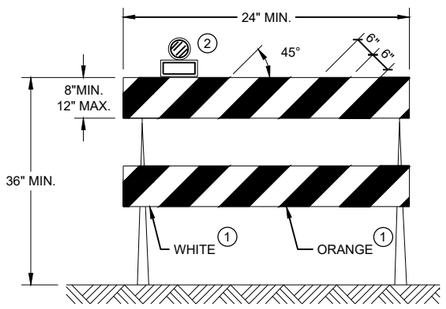
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



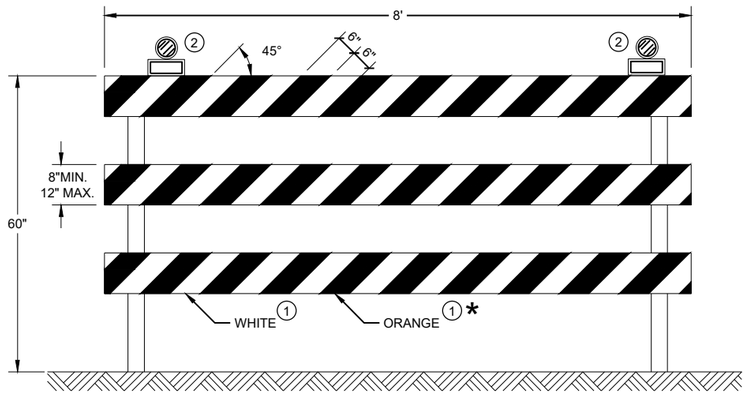
VERTICAL PANEL

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.

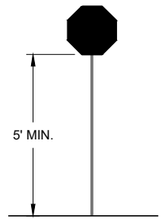
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



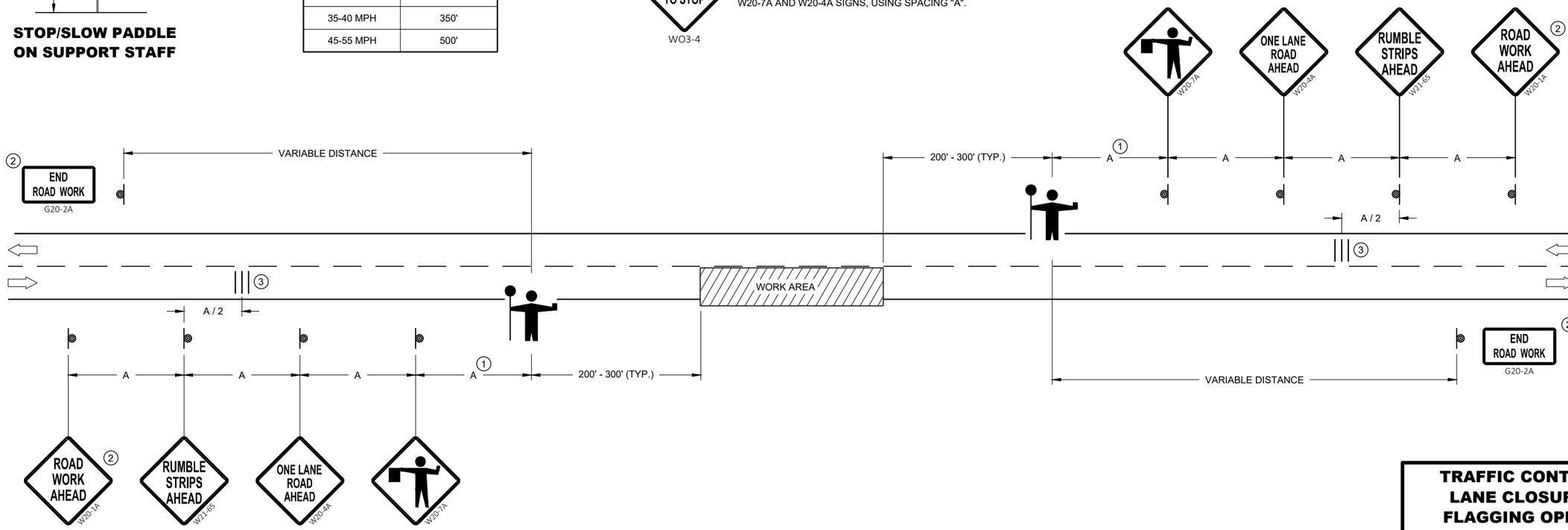
STOP/SLOW PADDLE ON SUPPORT STAFF

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 ENGINEER

FHWA

SDD 15C12 - 09a

SDD 15C12 - 09a

GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

(1) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

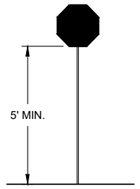
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

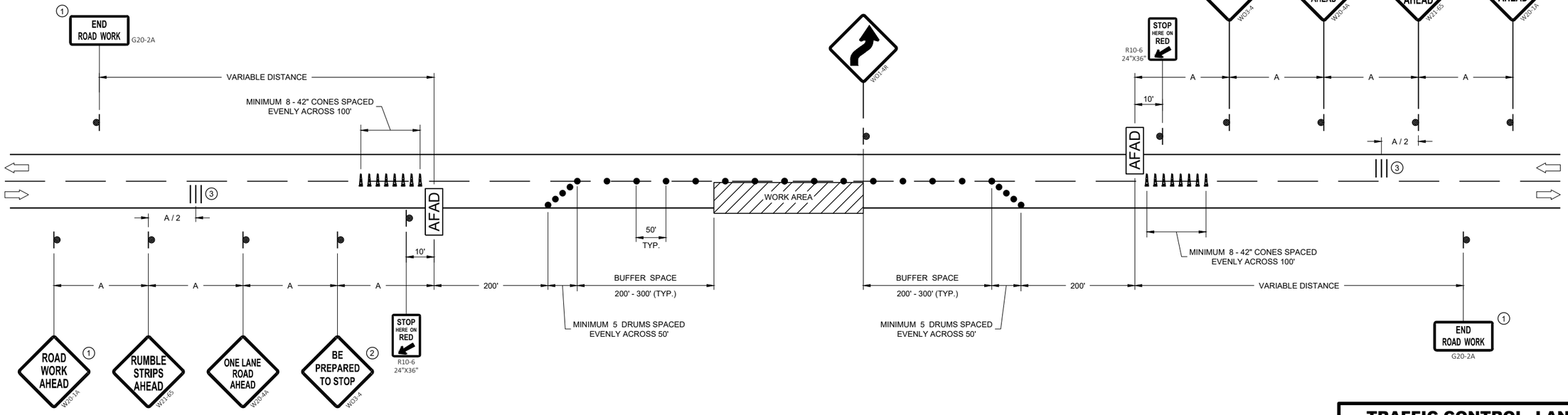
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

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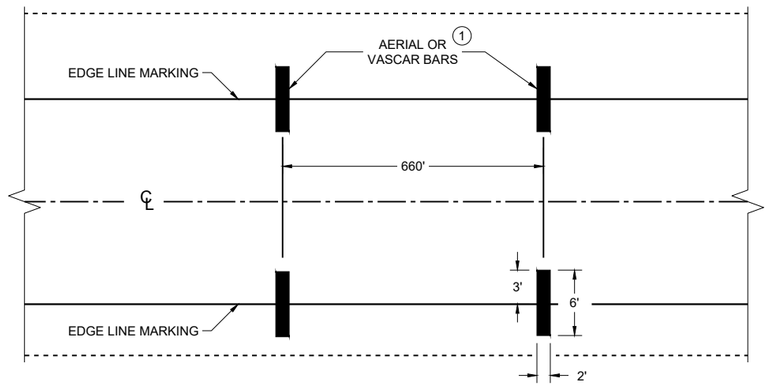
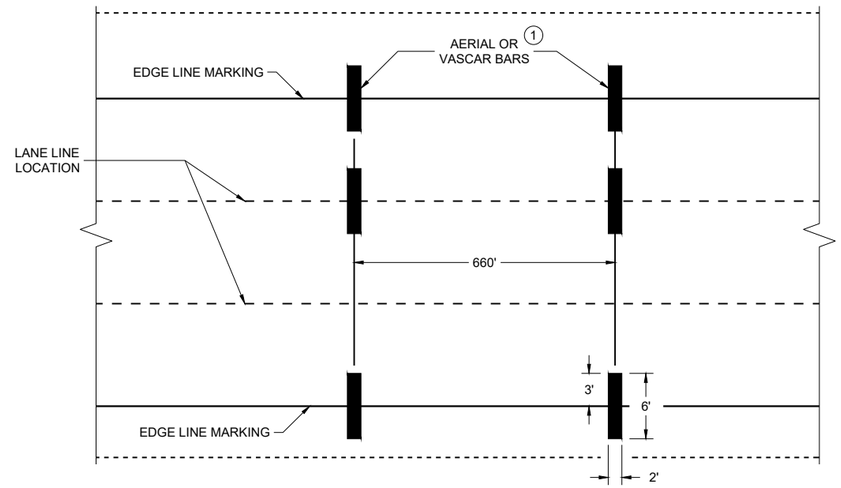
SDD 15C12 - 09b

GENERAL NOTES

(1) PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

AERIAL ENFORCEMENT BARS
PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

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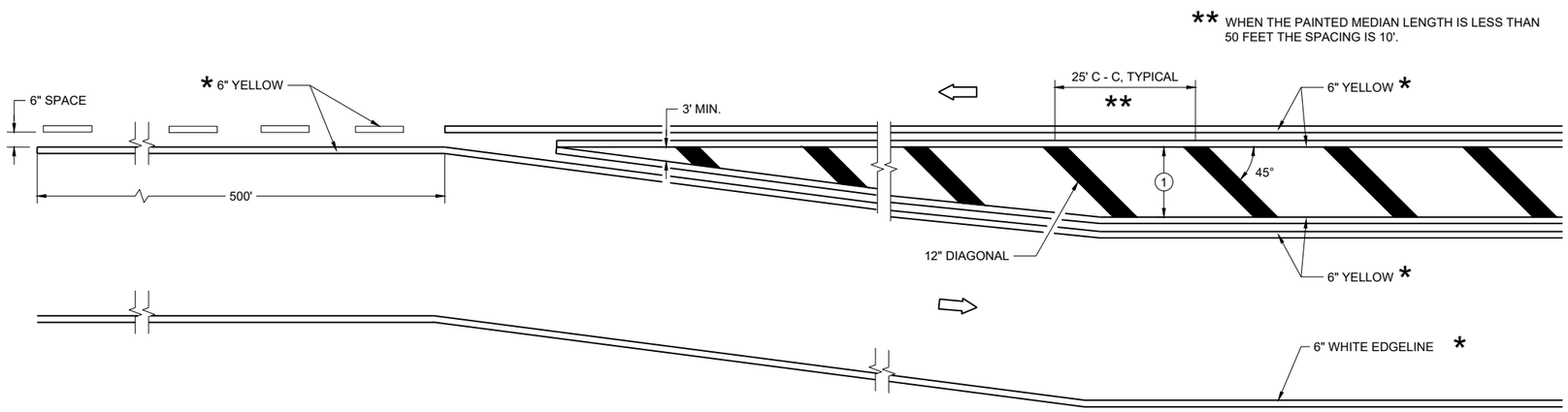


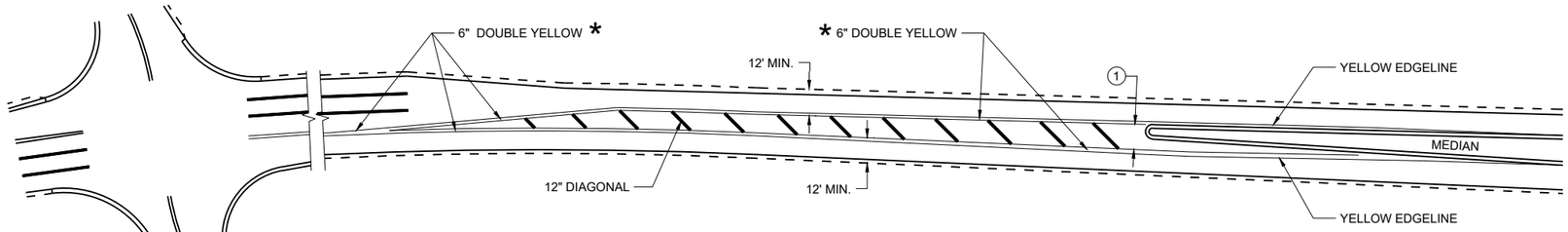
MEDIAN ISLAND DETAIL

GENERAL NOTES

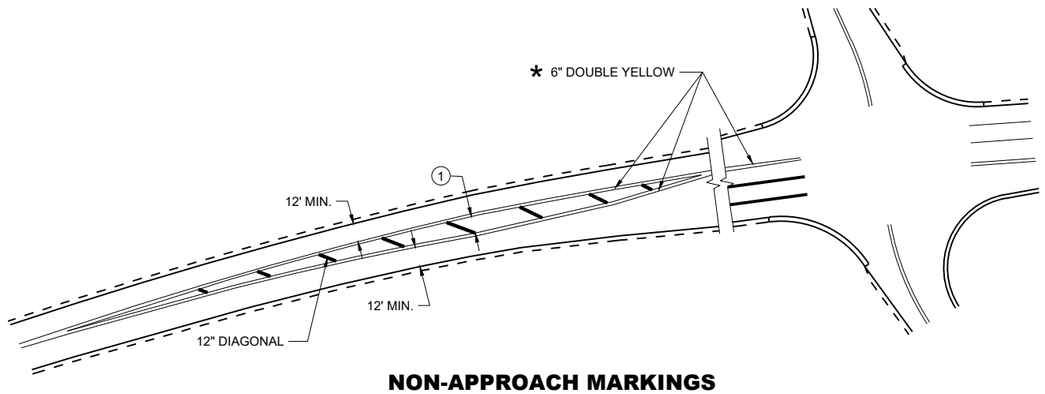
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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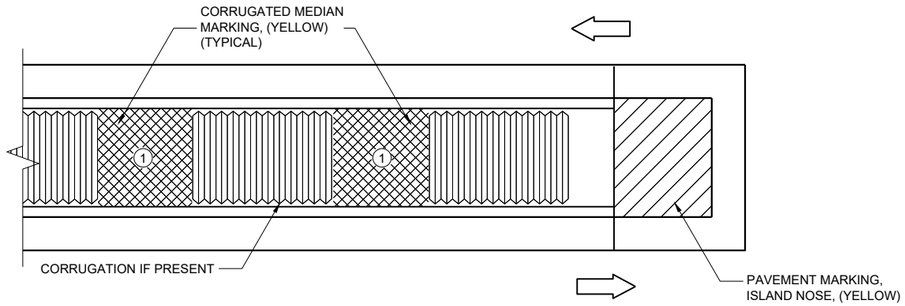
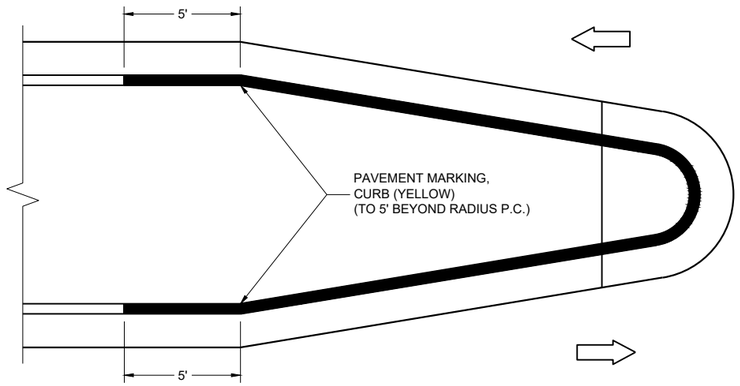
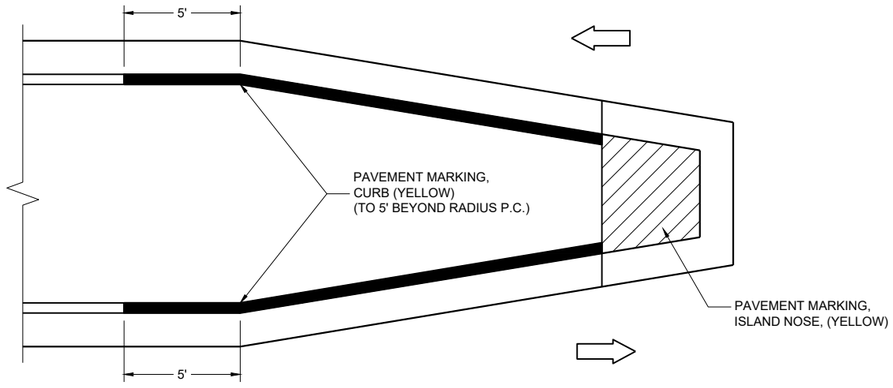


MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

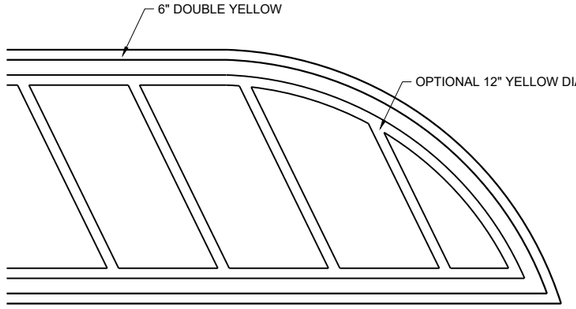
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED

GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

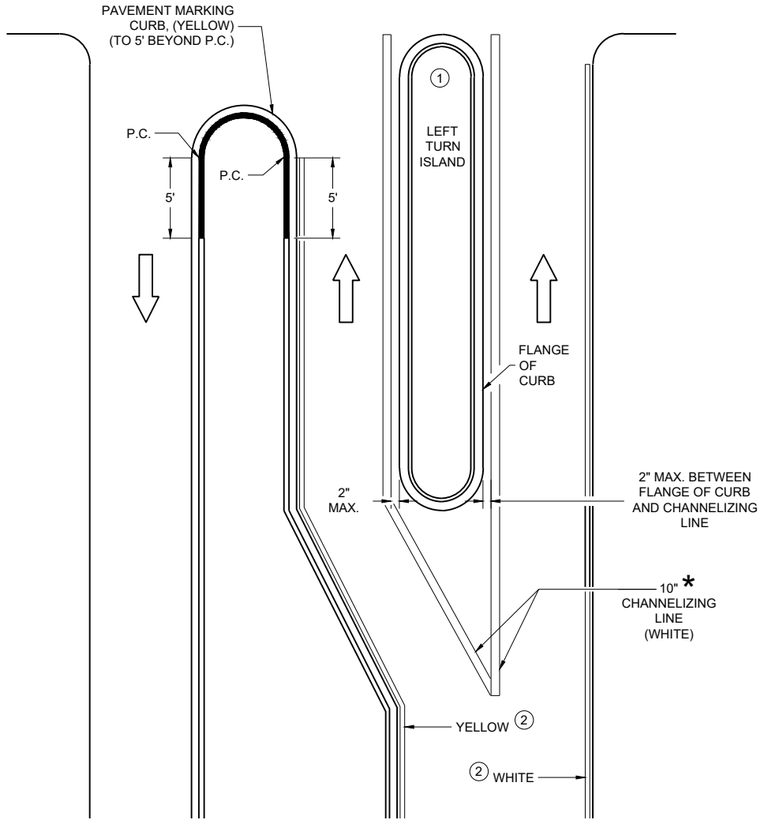
(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

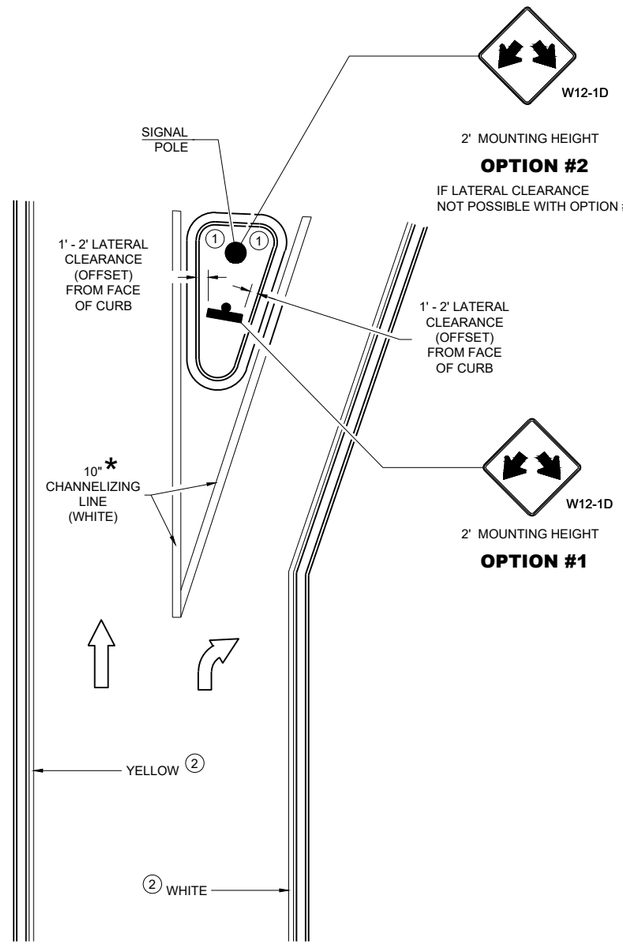
(3) CHEVRON MAY BE OMITTED IF LESS THAN 4" WIDE

DIRECTION OF TRAVEL

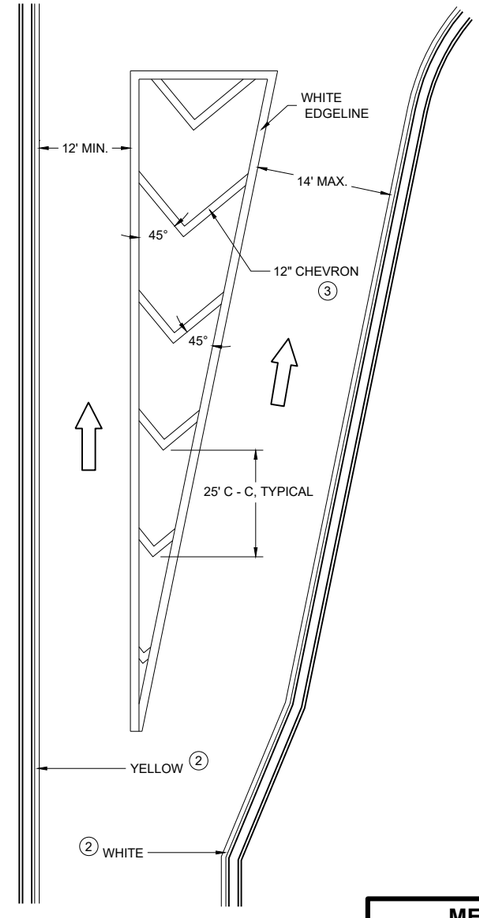
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND



TURN LANE DETAIL

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

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LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

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.

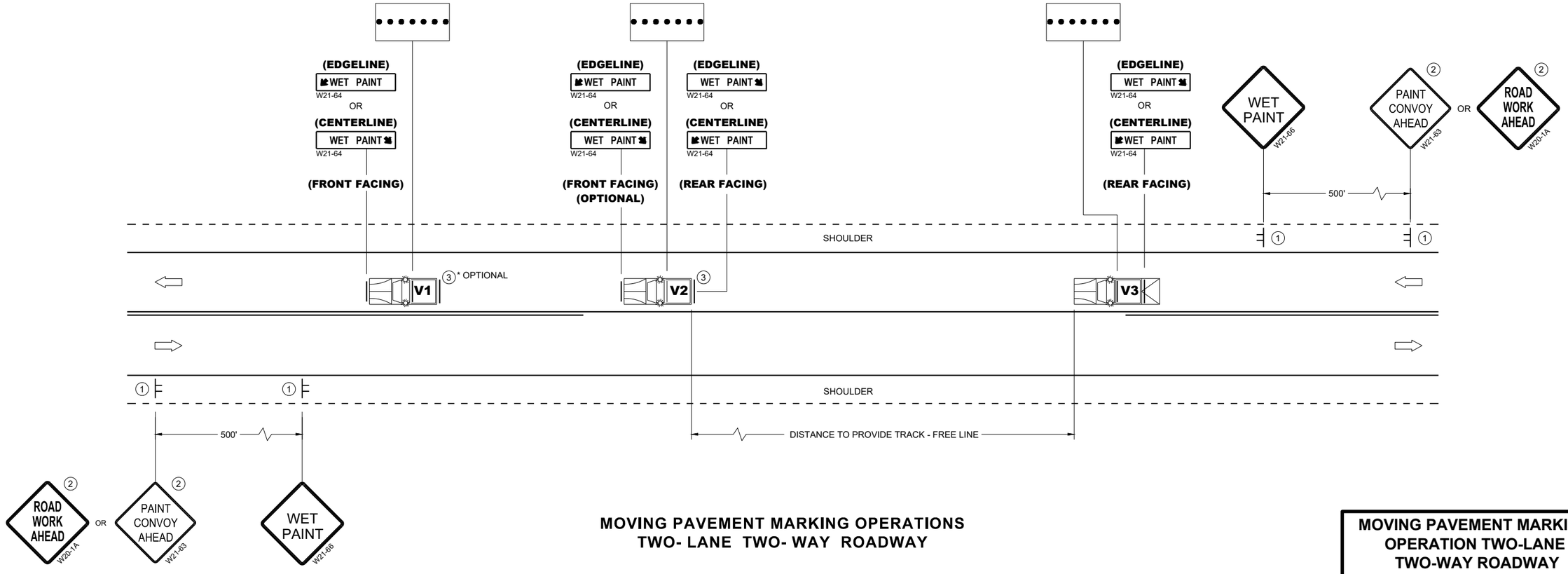
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

(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 2025 — DATE
/S/ Andrew Heidtke — STATE ELECTRICAL ENGINEER

FHWA

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LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

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.

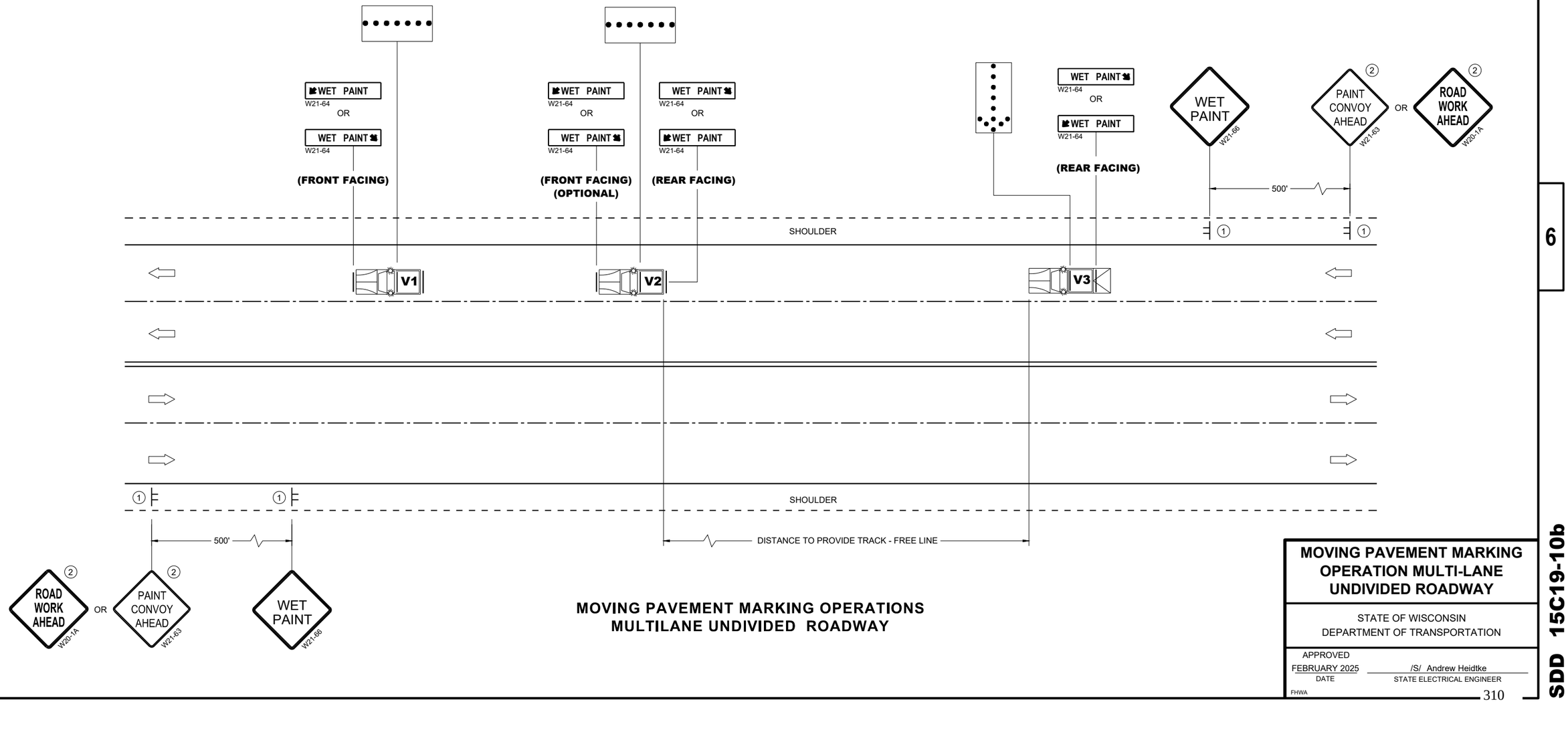
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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 AND AFTER EVERY MAJOR INTERSECTION.

(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 2025 — DATE
/S/ Andrew Heidtke — STATE ELECTRICAL ENGINEER

FHWA

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SDD 15C19-10b

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.

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

** 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

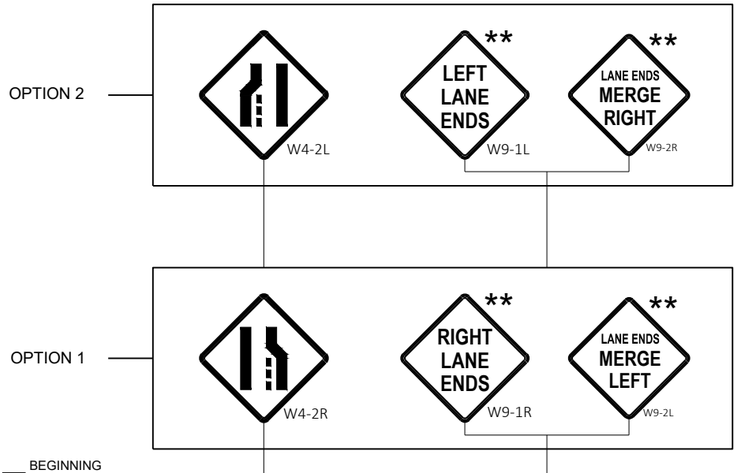
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

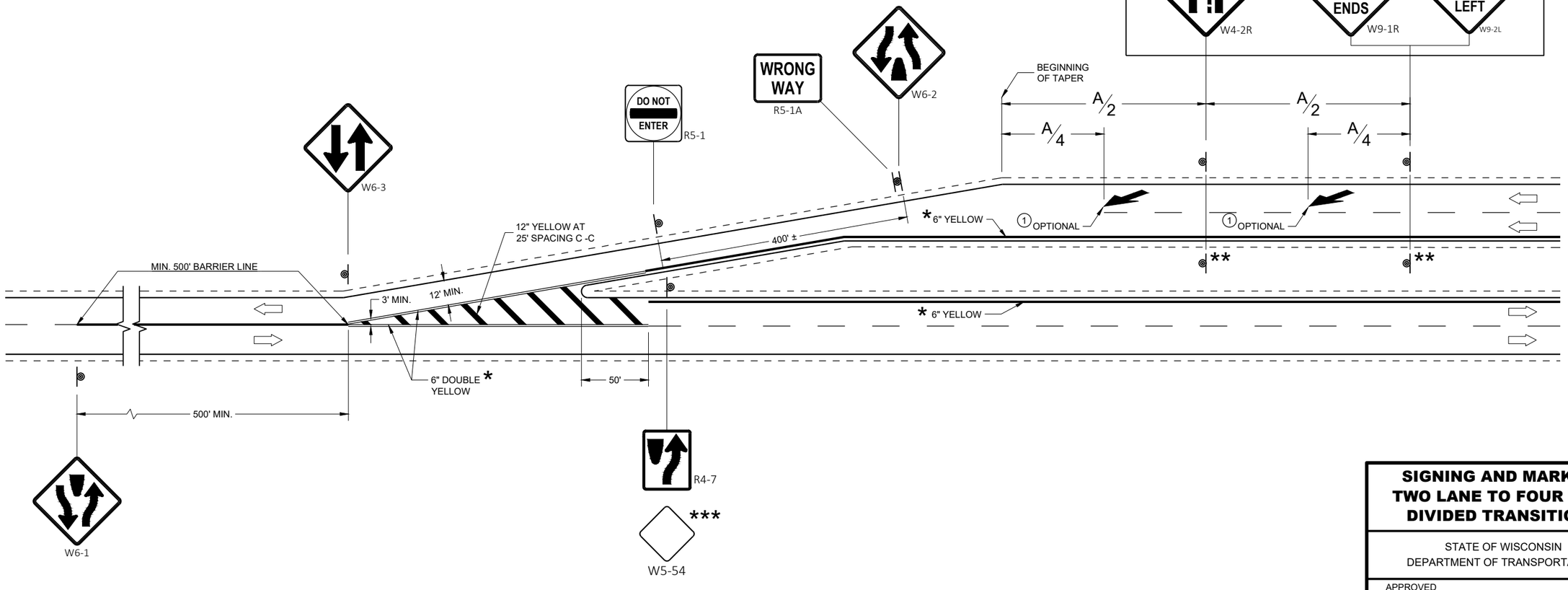
SIGN MOUNTED ON PERMANENT SUPPORT

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 2023 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER
FHWA

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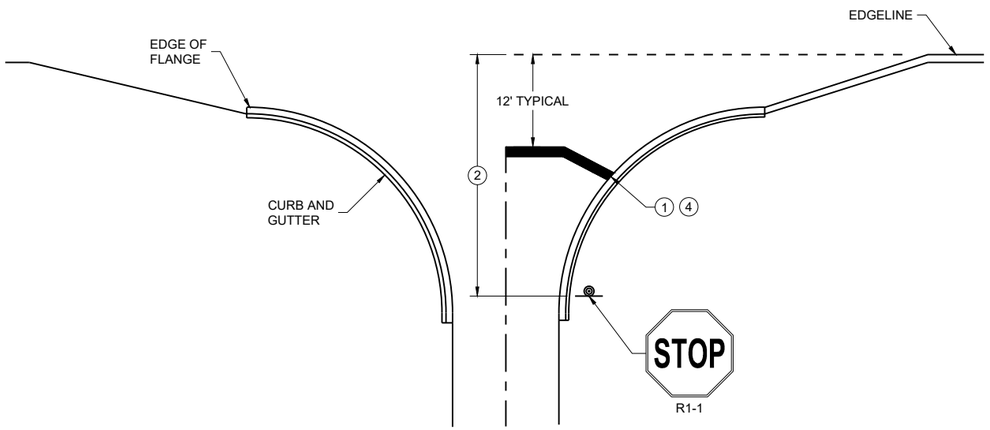
SDD 15C21-11

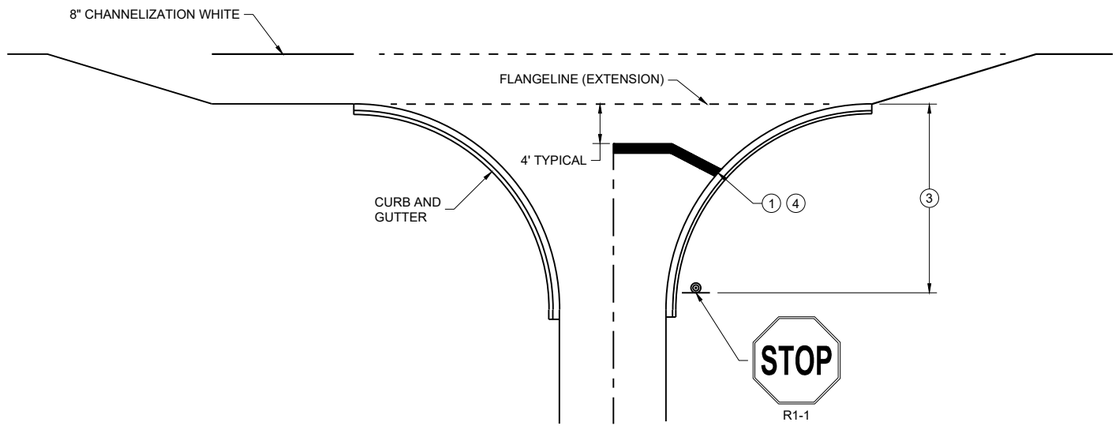
GENERAL NOTES

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

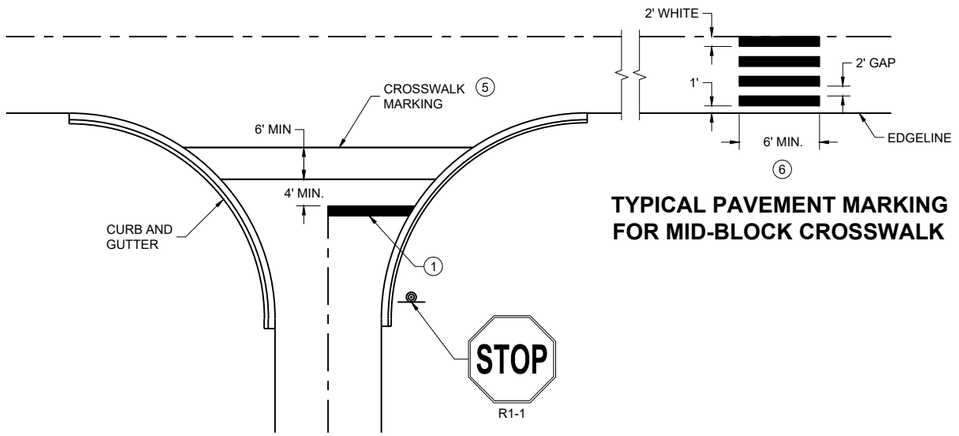
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

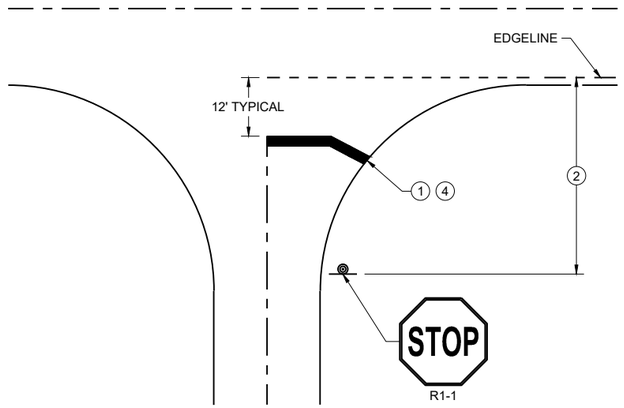


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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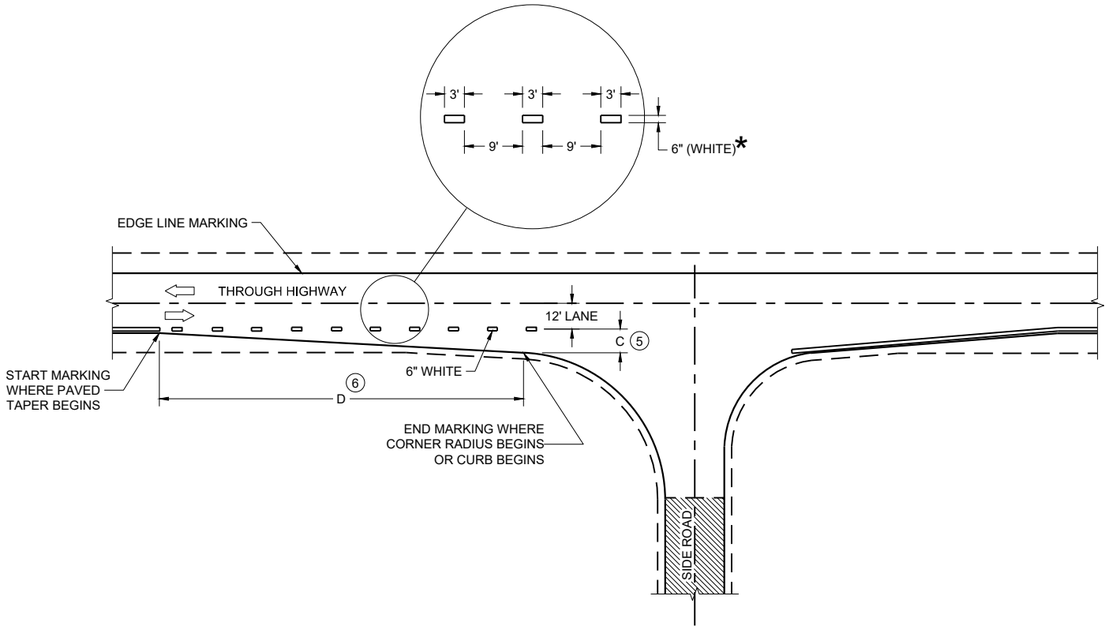
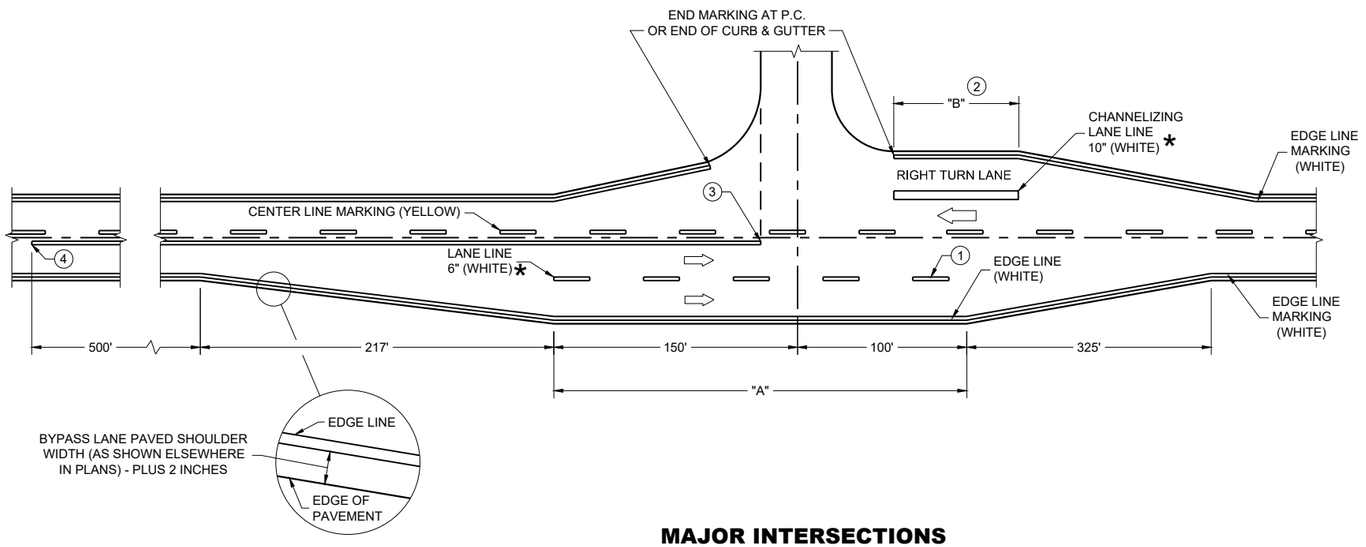


MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

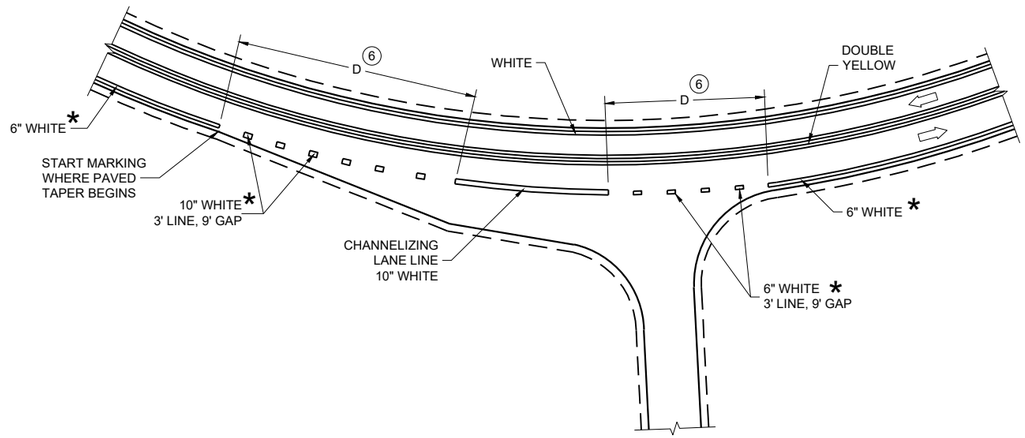
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

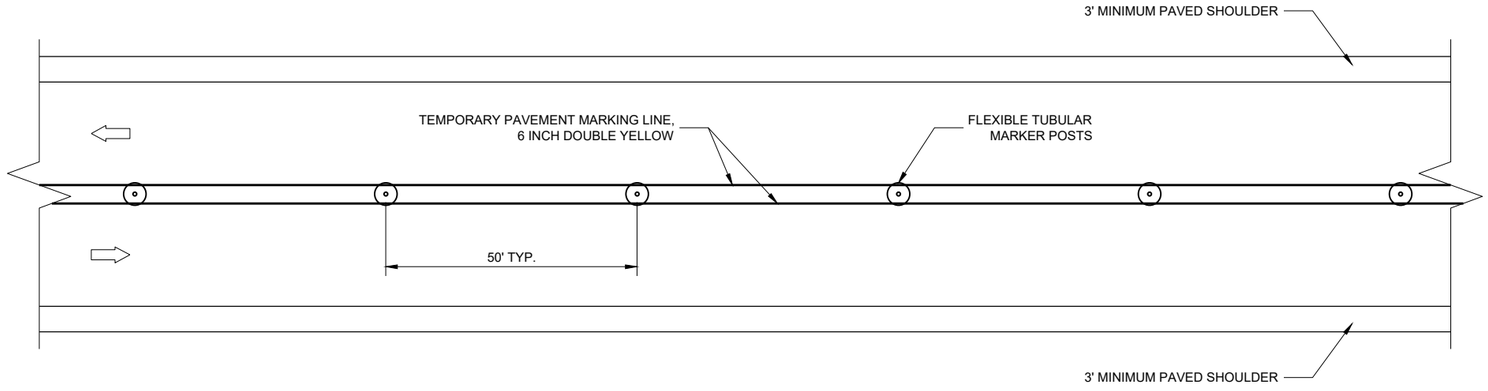
THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

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, 6 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 15D06-06

TRAFFIC CONTROL
TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

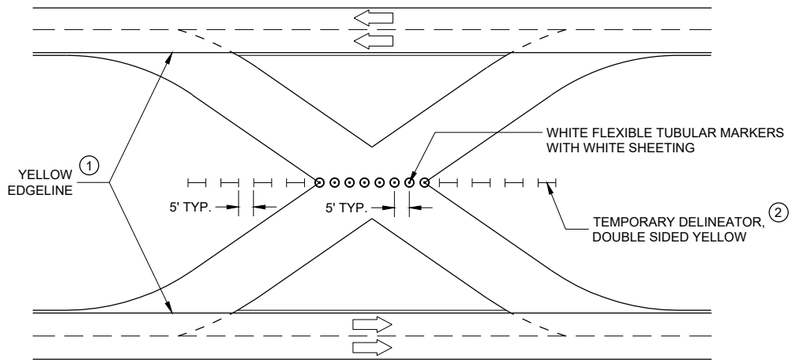
FHWA

6

SDD 15D06-06

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

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.

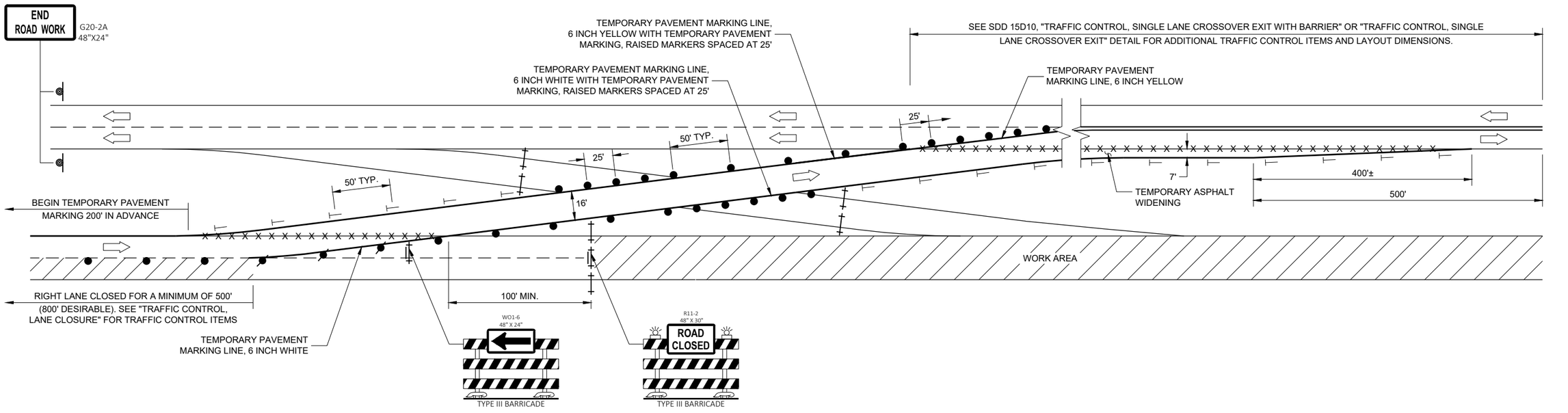
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

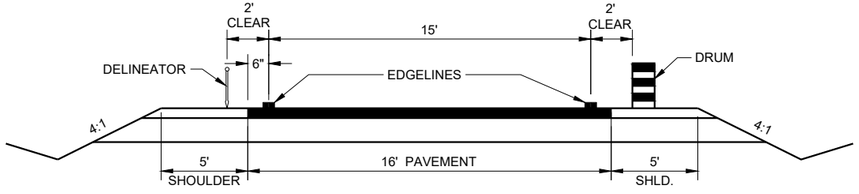
THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

(1) FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.

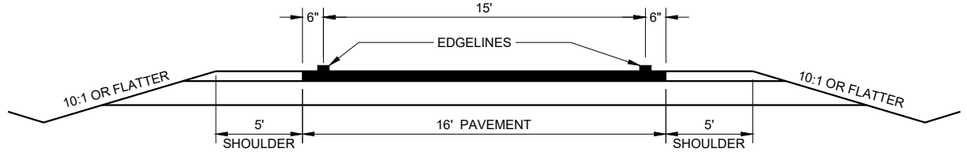
(2) FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.





TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D11-09

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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

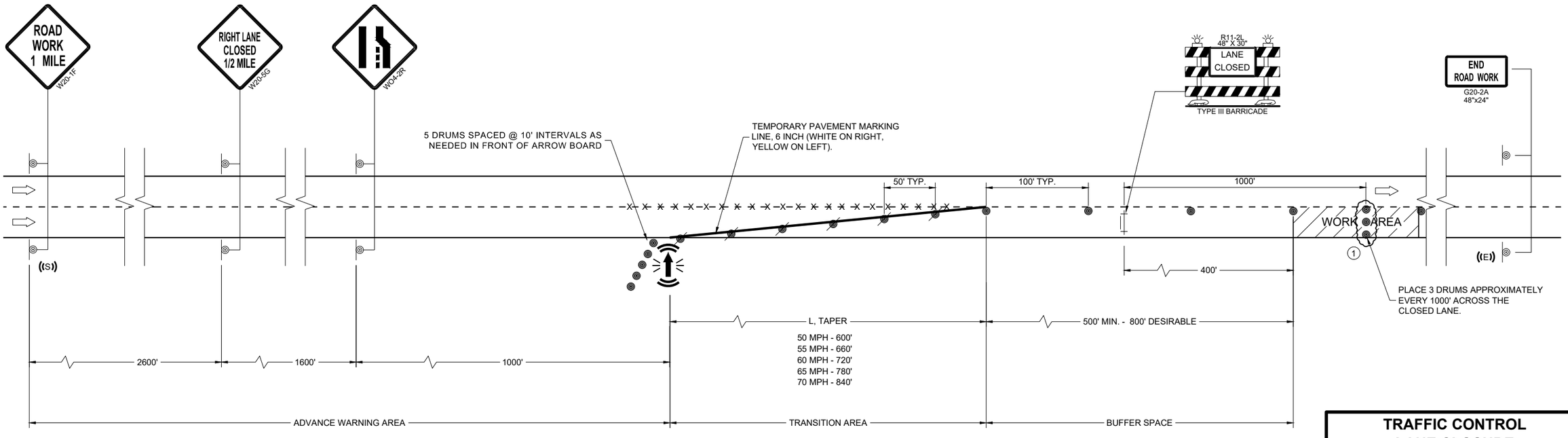
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

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

(1) DRUMS 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.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-15a

6

SDD 15D12-15a

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

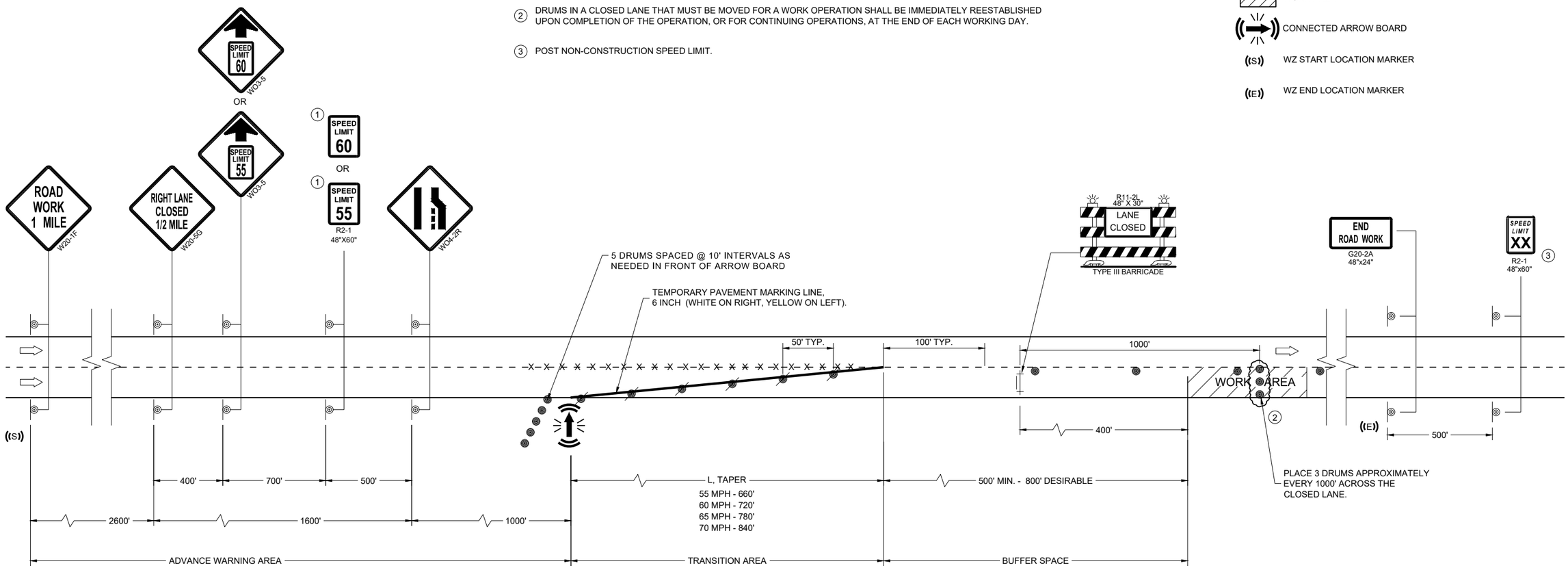
(1) A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES.

(2) DRUMS 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.

(3) POST NON-CONSTRUCTION SPEED LIMIT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-15b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

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.

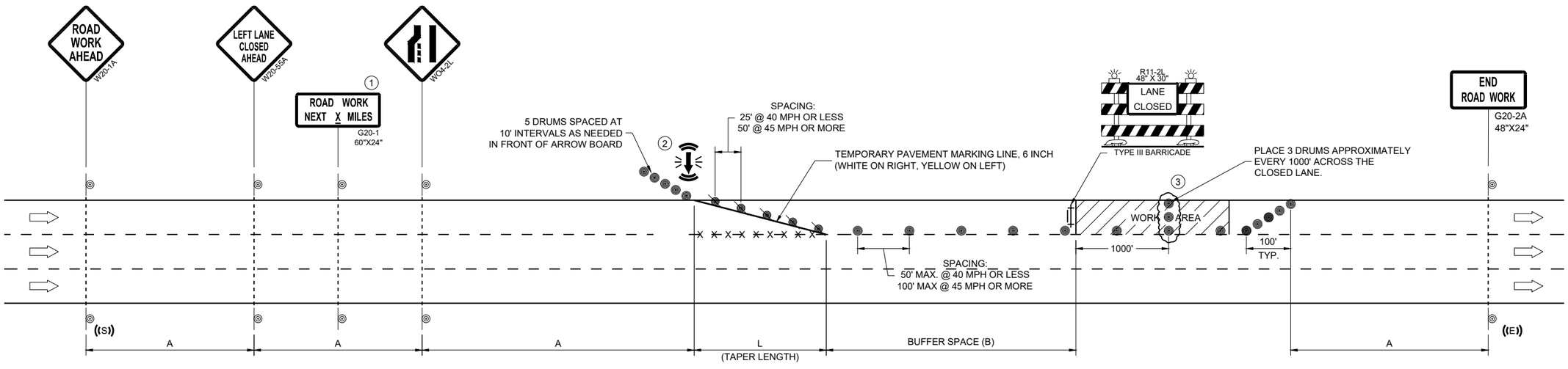
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

(3) DRUMS 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.



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'	155'
30	200'	180'	200'
35	350'	245'	250'
40	350'	320'	305'
45	500'	540'	360'

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-10a
SDD 15D20-10a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

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.

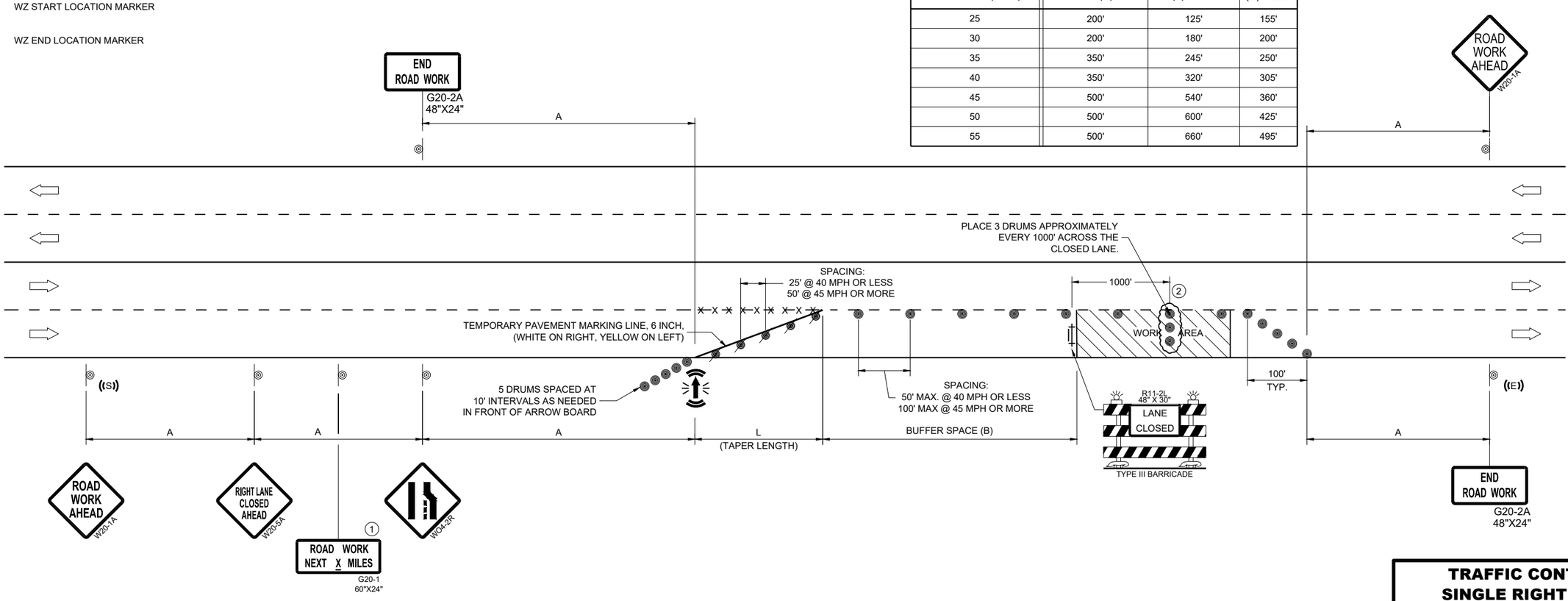
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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) DRUMS 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.

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'	155'
30	200'	180'	200'
35	350'	245'	250'
40	350'	320'	305'
45	500'	540'	360'
50	500'	600'	425'
55	500'	660'	495'



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

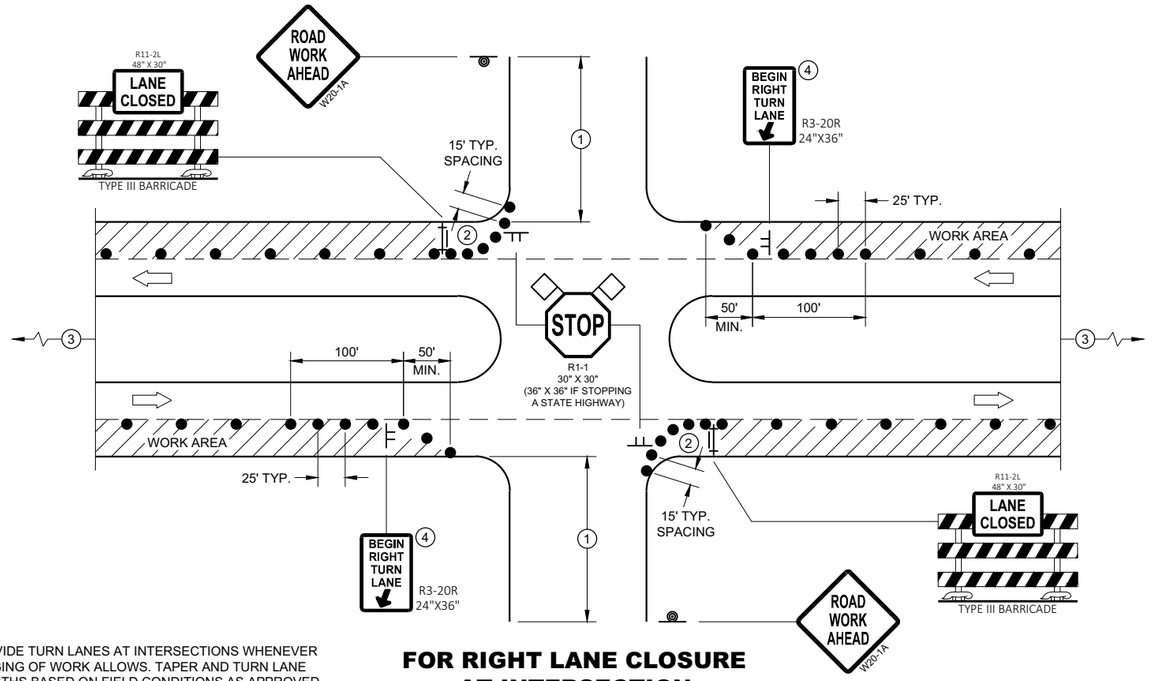
February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

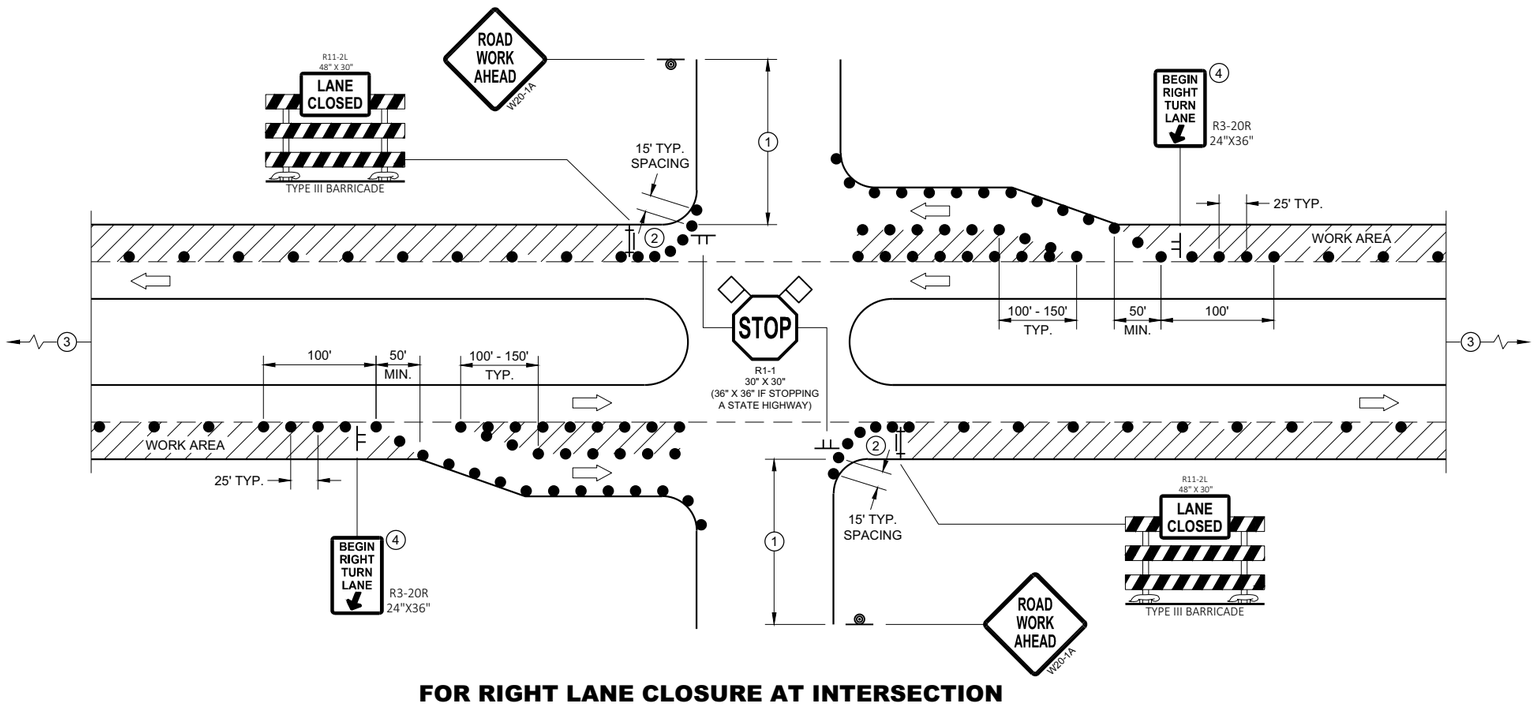
6

SDD 15D20-10b
SDD 15D20-10b



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

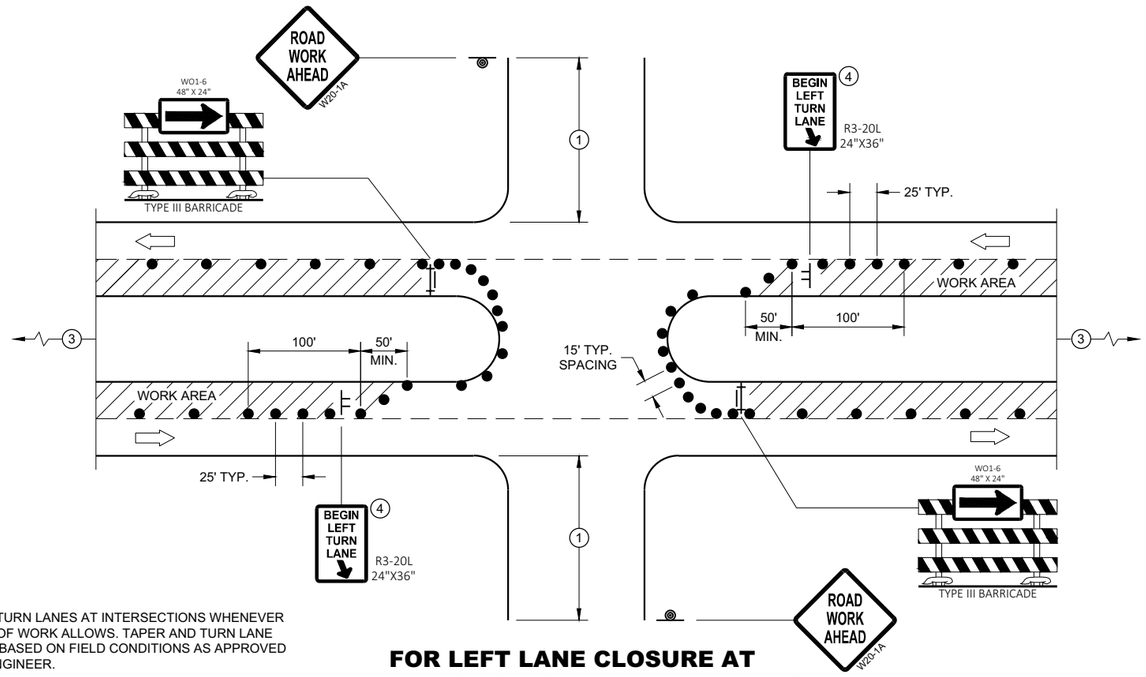
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

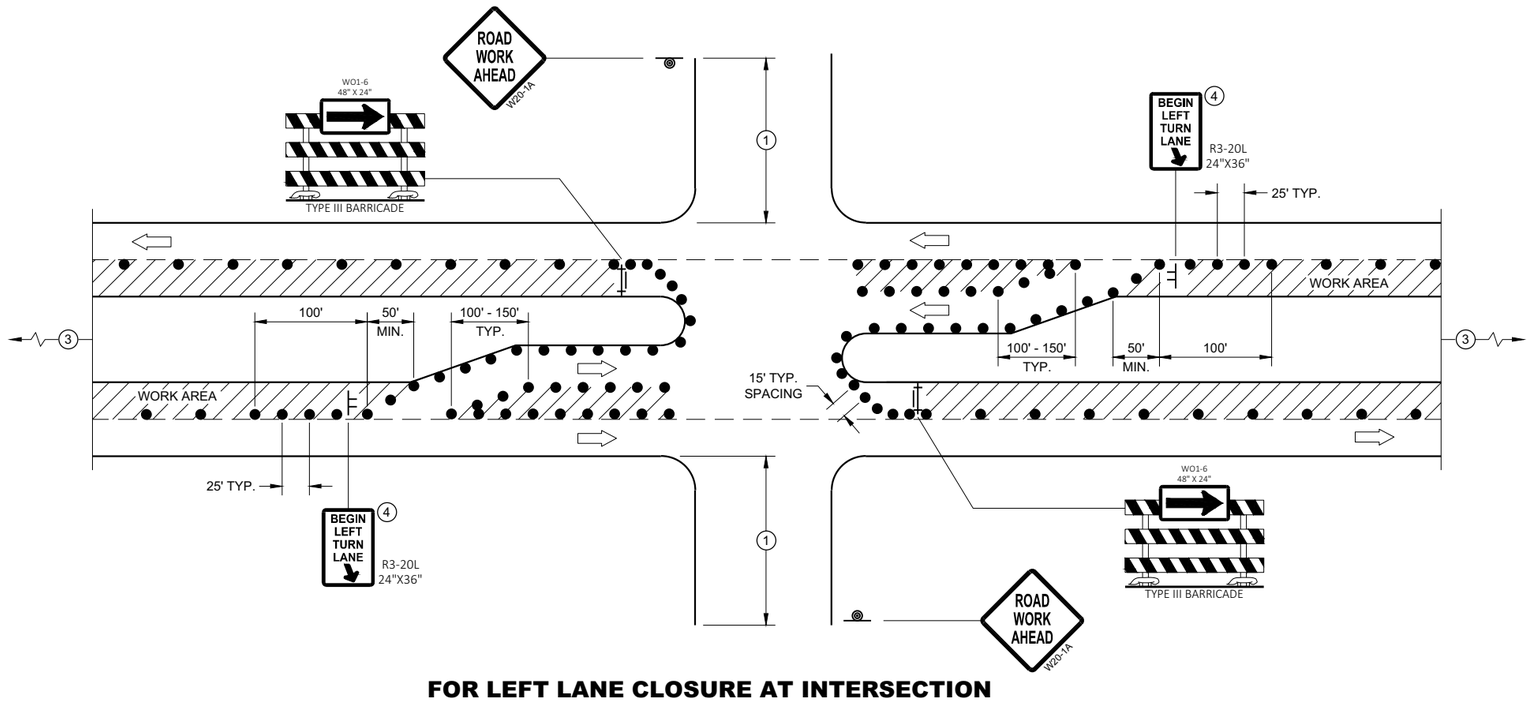
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- CONNECTED ARROW BOARD
- WORK AREA
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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.

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

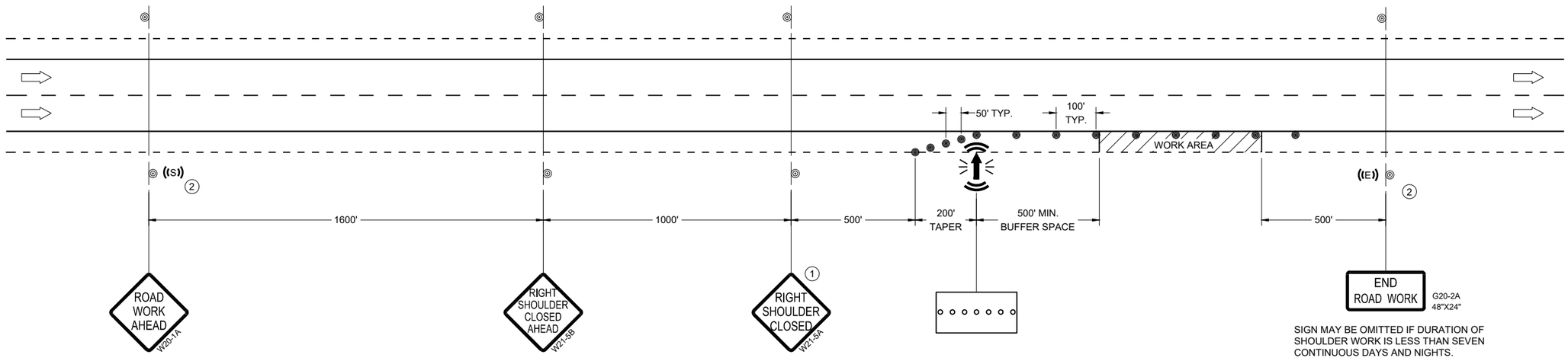
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

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

(1) FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR THE W21-5A SIGN MAY BE OMITTED.

(2) IF ALREADY PRESENT WITHIN PROJECT , DO NOT INCLUDE ADDITIONAL DEVICE.



SIGN MAY BE OMITTED IF DURATION OF SHOULDER WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2025
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6

SDD 15D27-04

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.

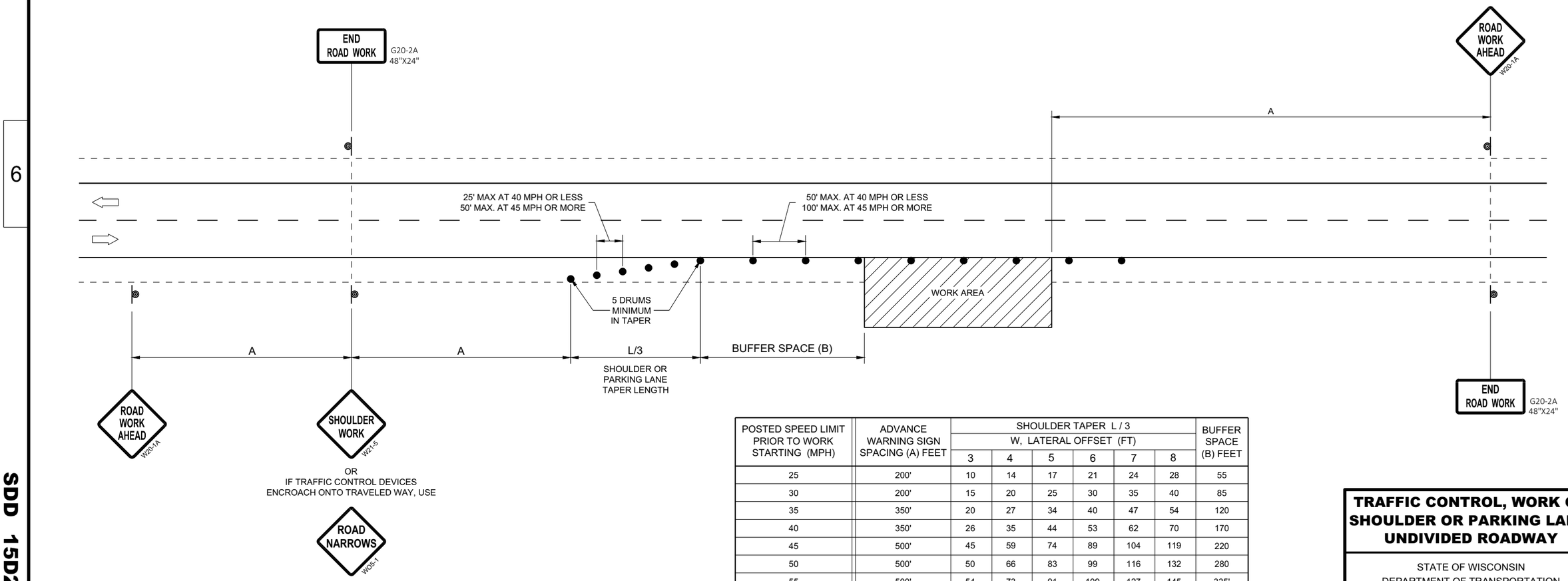
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

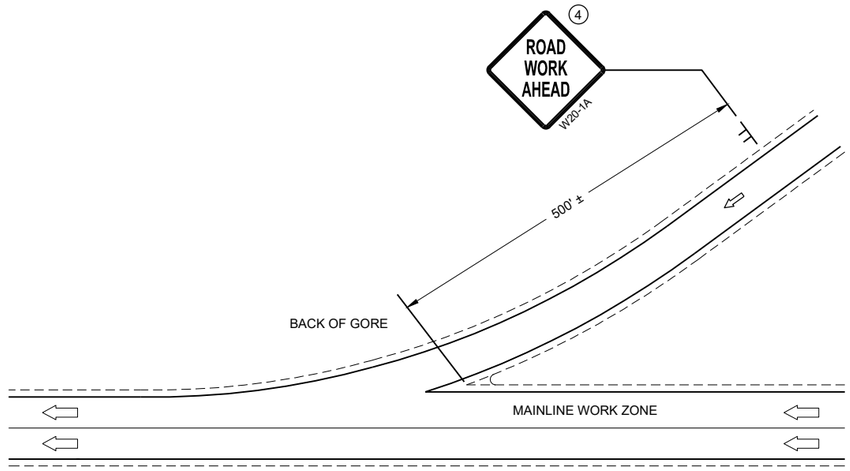
FHWA

6

SDD 15D28 - 04

LEGEND

- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- ● TRAFFIC CONTROL DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- WORK AREA



GENERAL NOTES

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

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

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

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

WHEN WORK ACTIVITY BLOCKS THE RIGHT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

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

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

(2) DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.

(3) WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.

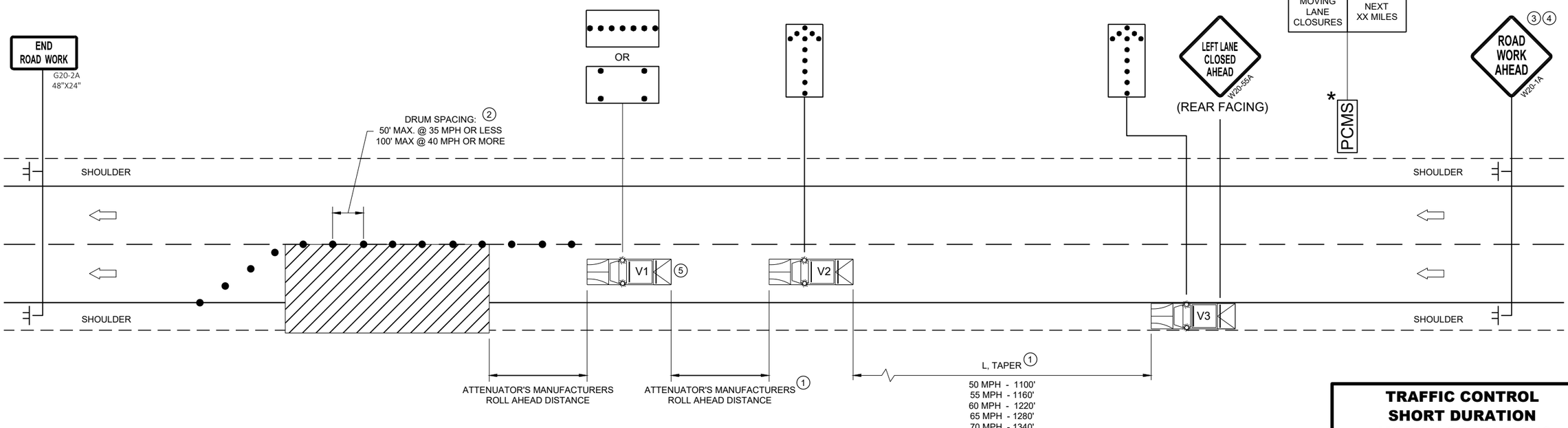
(4) SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(5) SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL

PCMS MESSAGING

FRAME 1	FRAME 2
MOVING LANE CLOSURES	NEXT XX MILES



TRAFFIC CONTROL SHORT DURATION MOBILE OPERATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D43 - 02

6

SDD 15D43 - 02

GENERAL NOTES

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

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

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

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

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

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

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

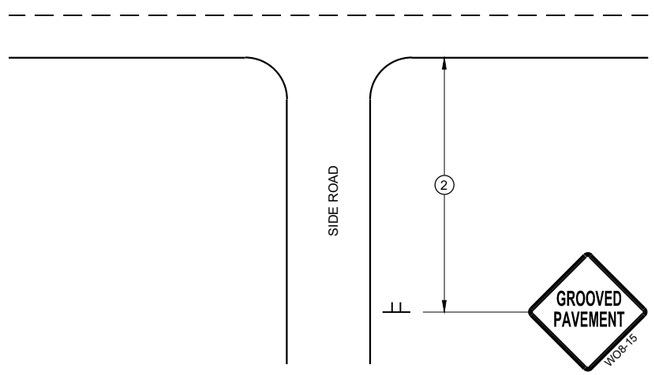
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

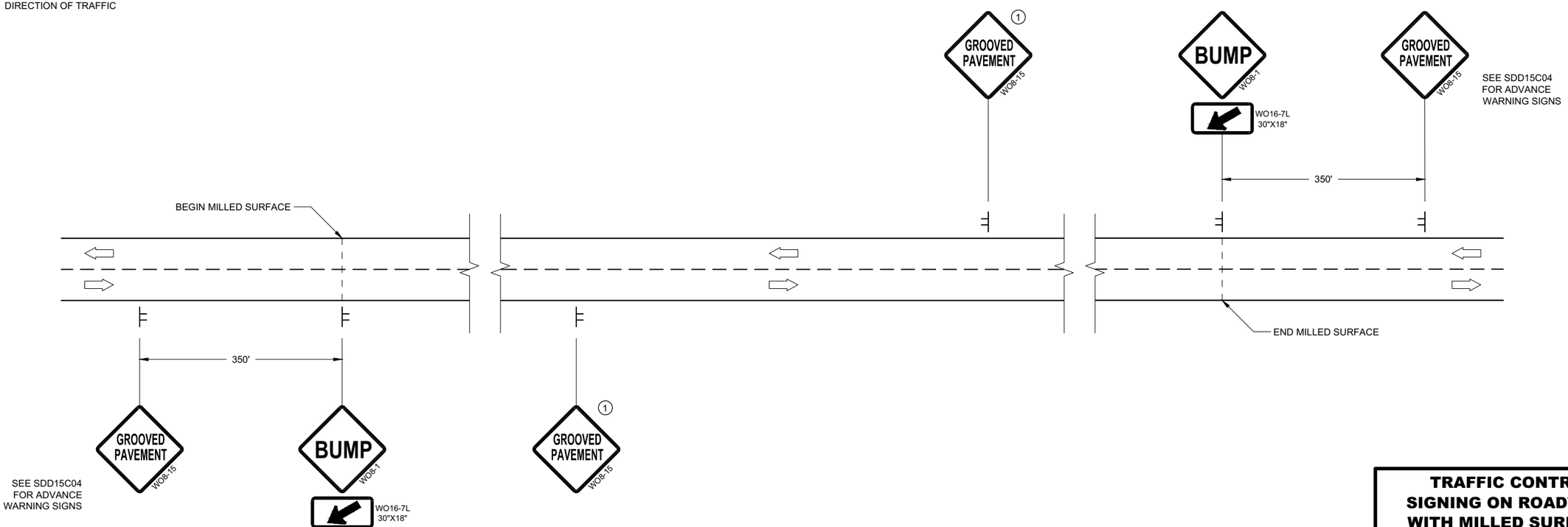
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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.

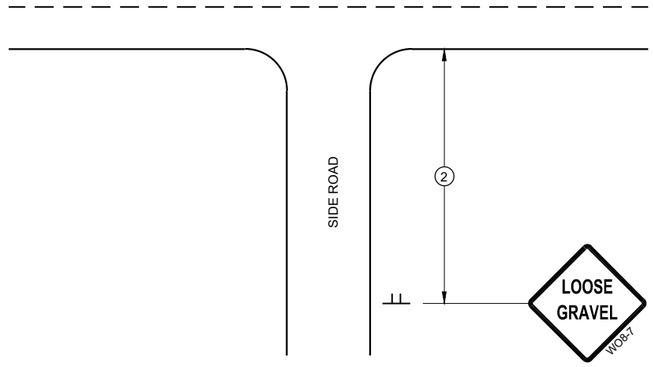
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

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

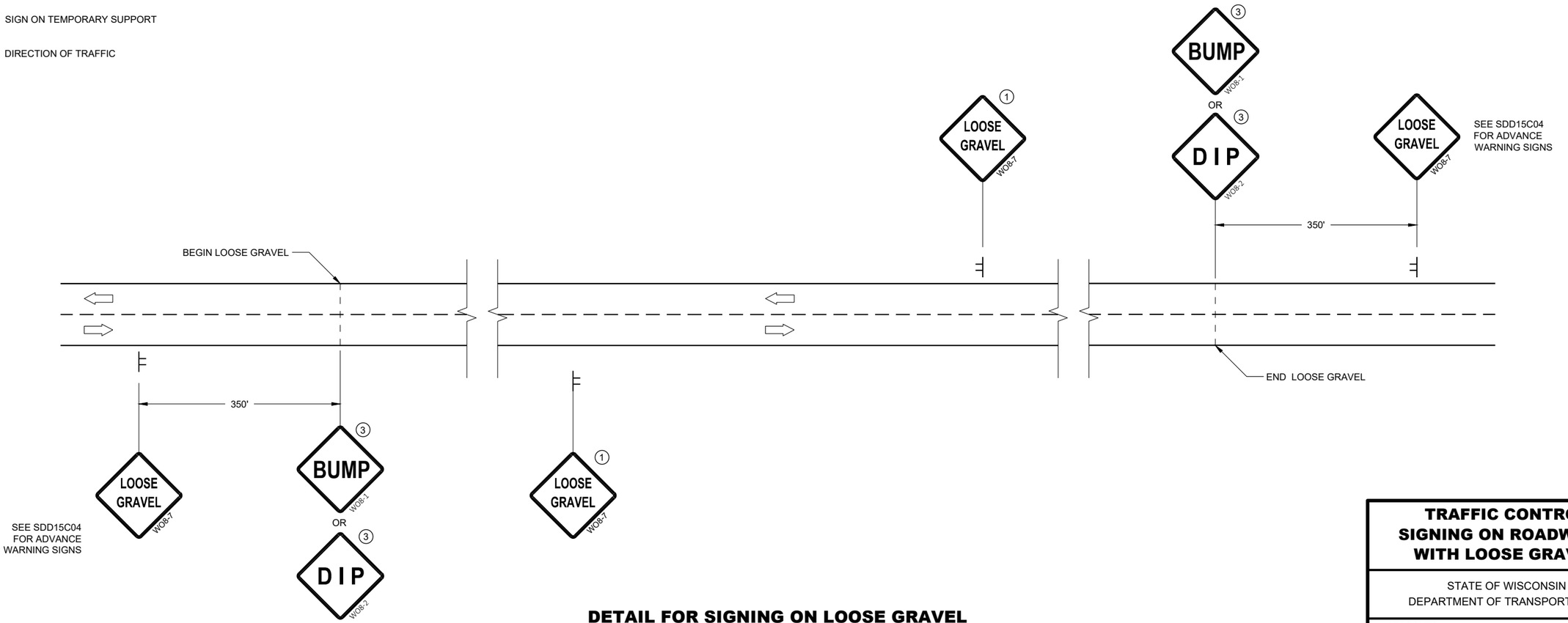
LEGEND

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

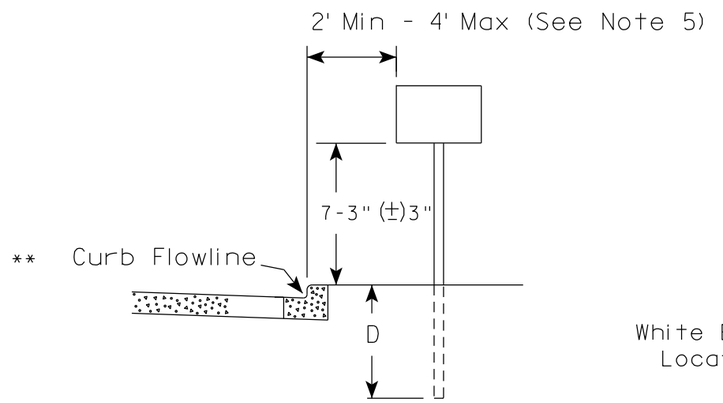
APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

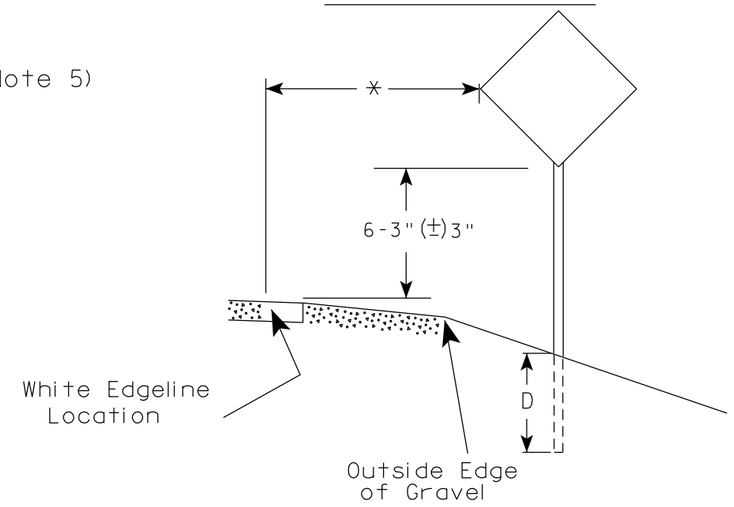
FHWA

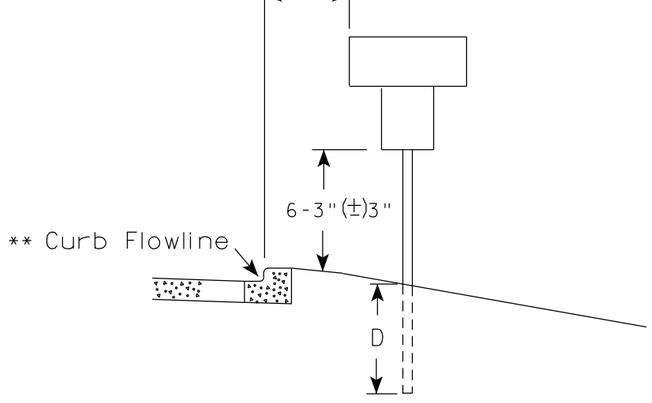
6
SDD 15D45 - 03

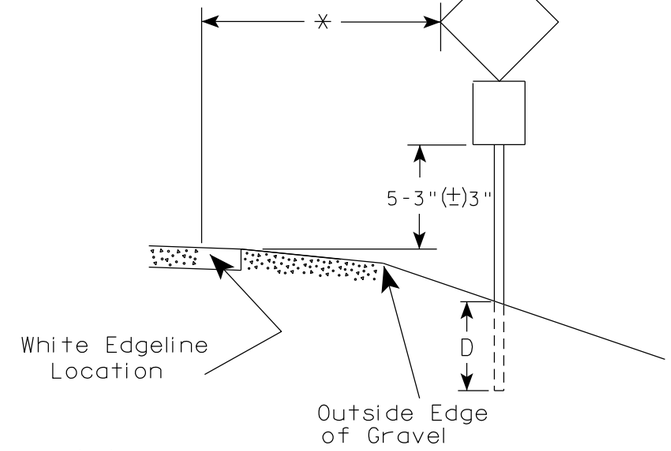
URBAN AREA



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" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

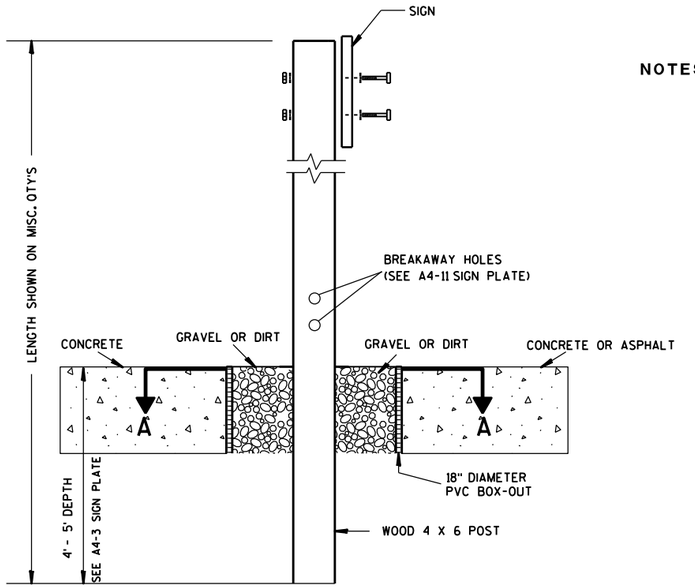
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

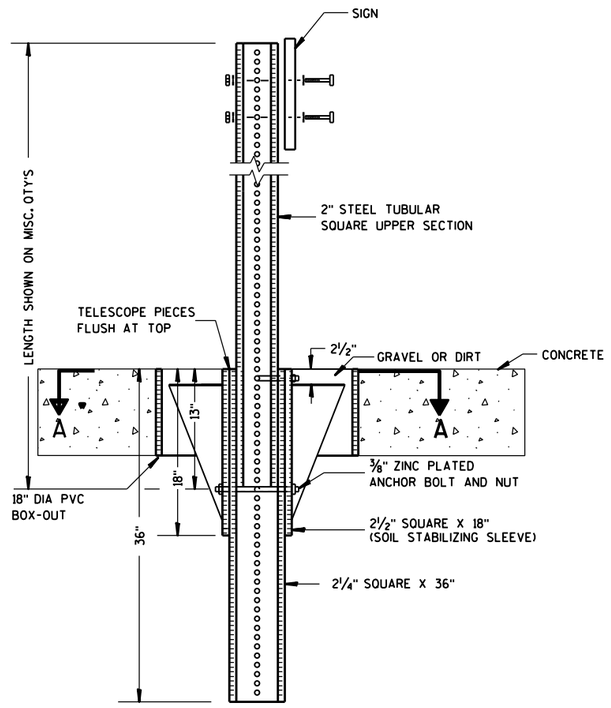
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 327	E



ELEVATION VIEW

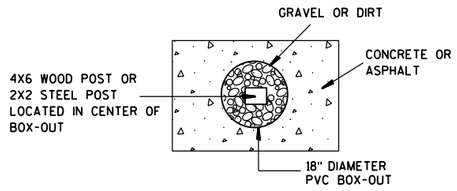
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

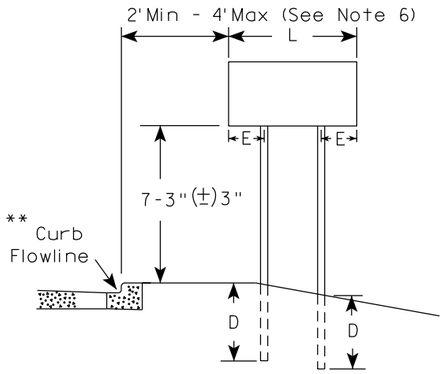
APPROVED Matthew R Rauch
for State Traffic Engineer

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

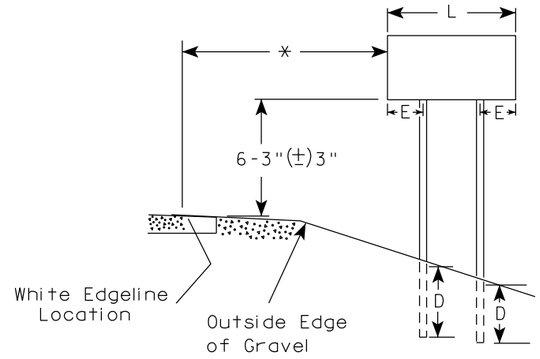
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

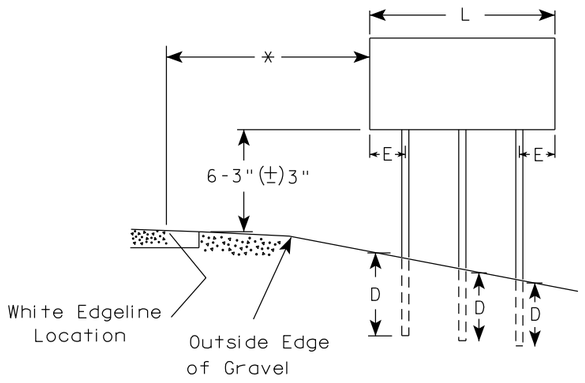
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

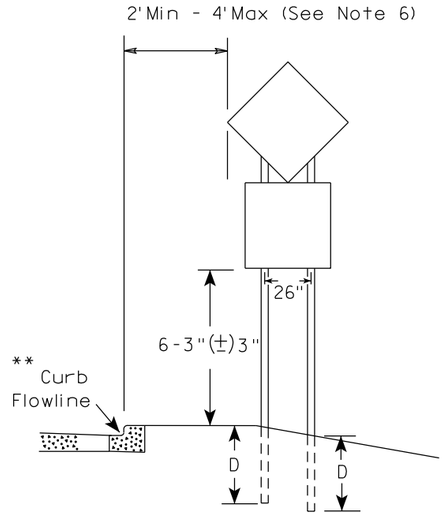
URBAN AREA



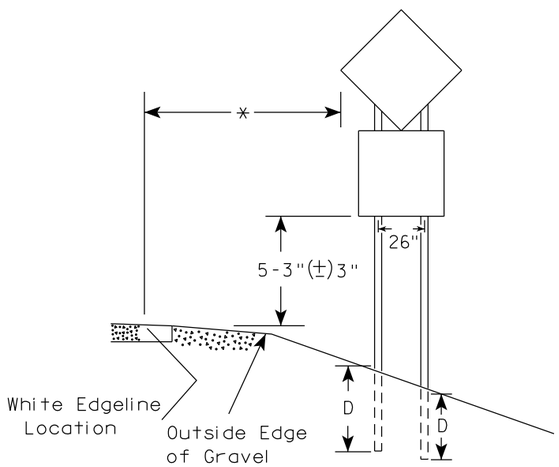
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

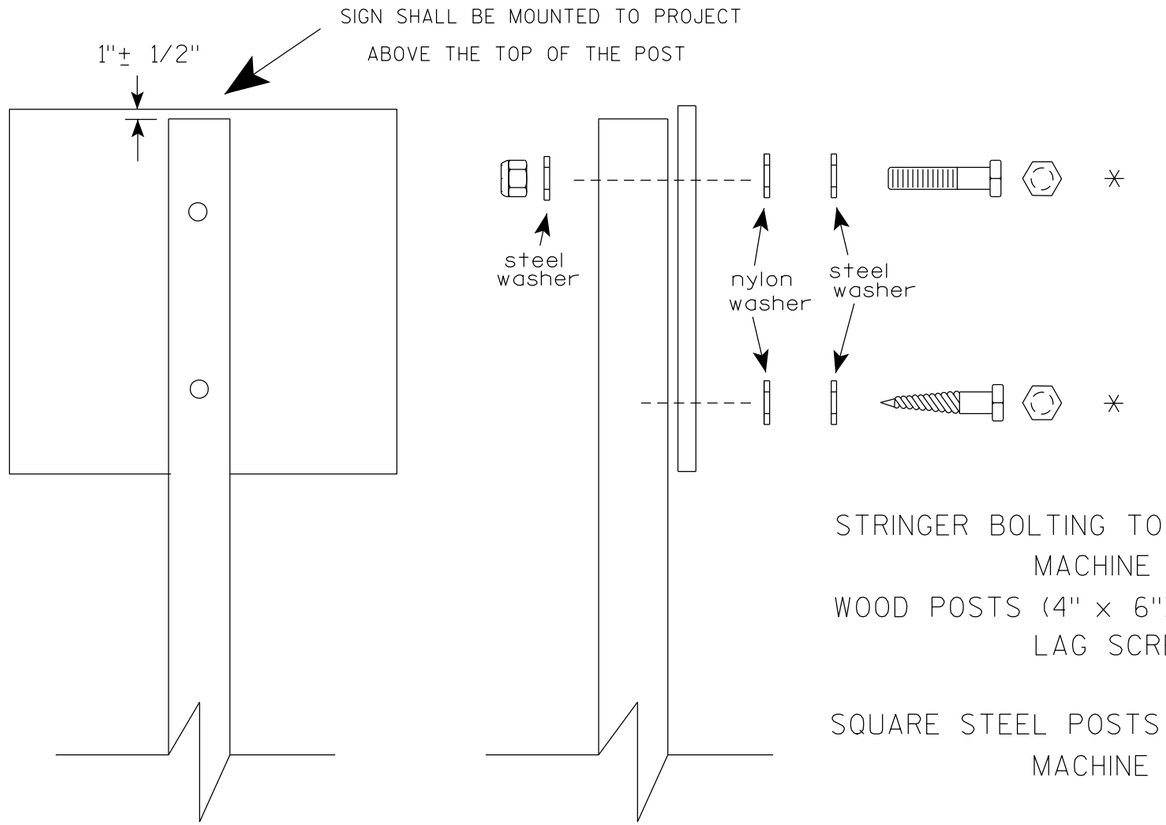
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 329	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

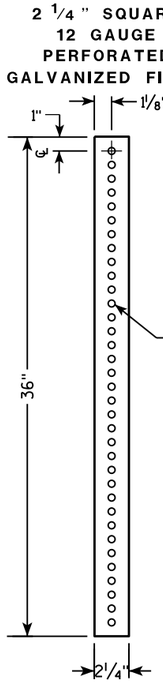
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

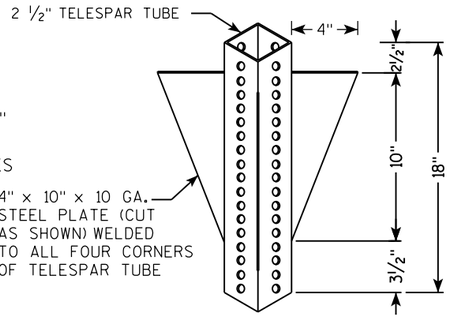
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

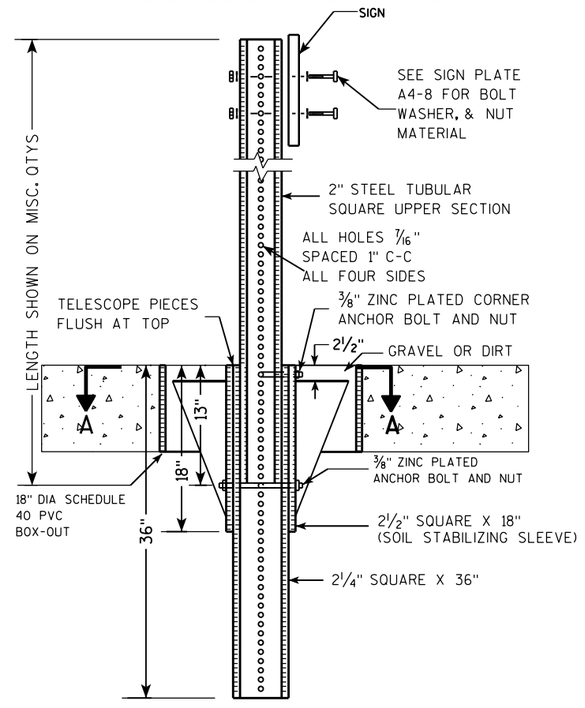
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



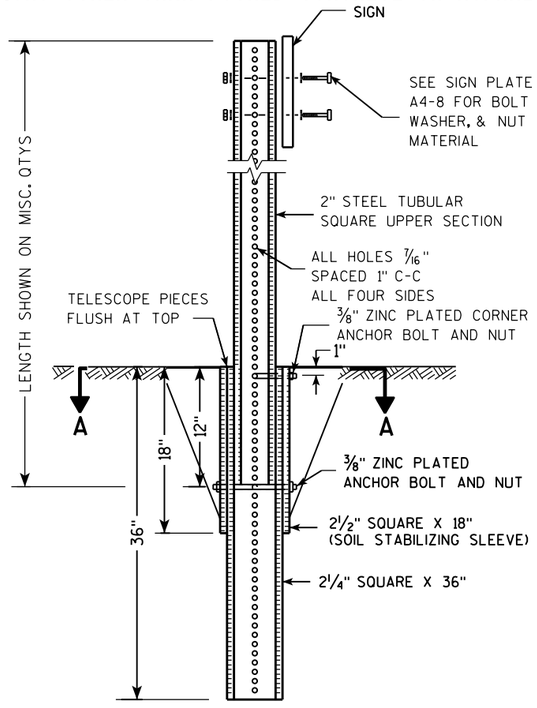
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

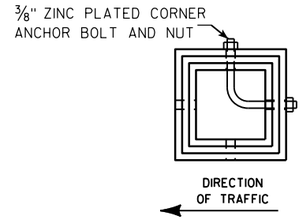


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

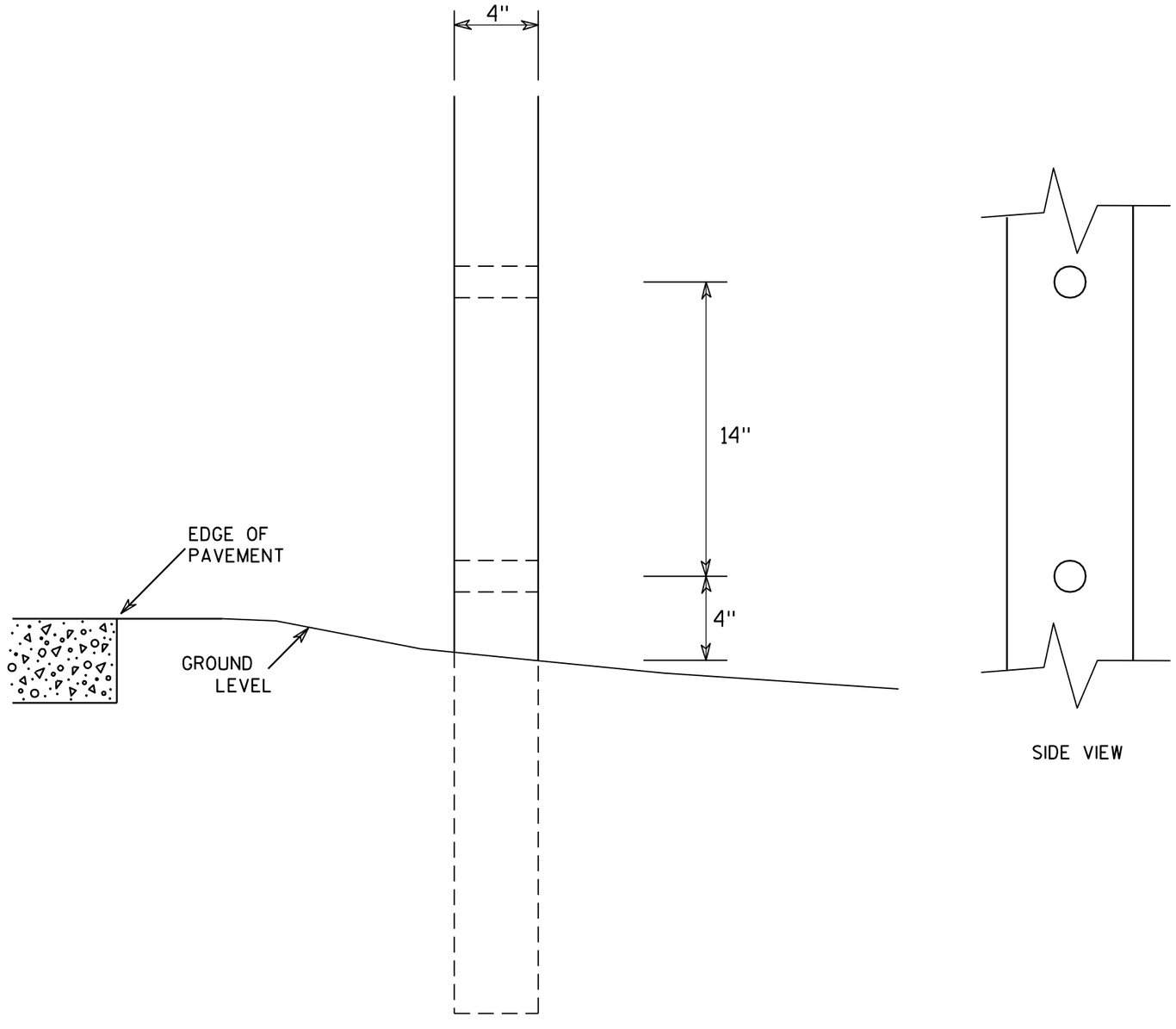
WISCONSIN DEPT OF TRANSPORTATION

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

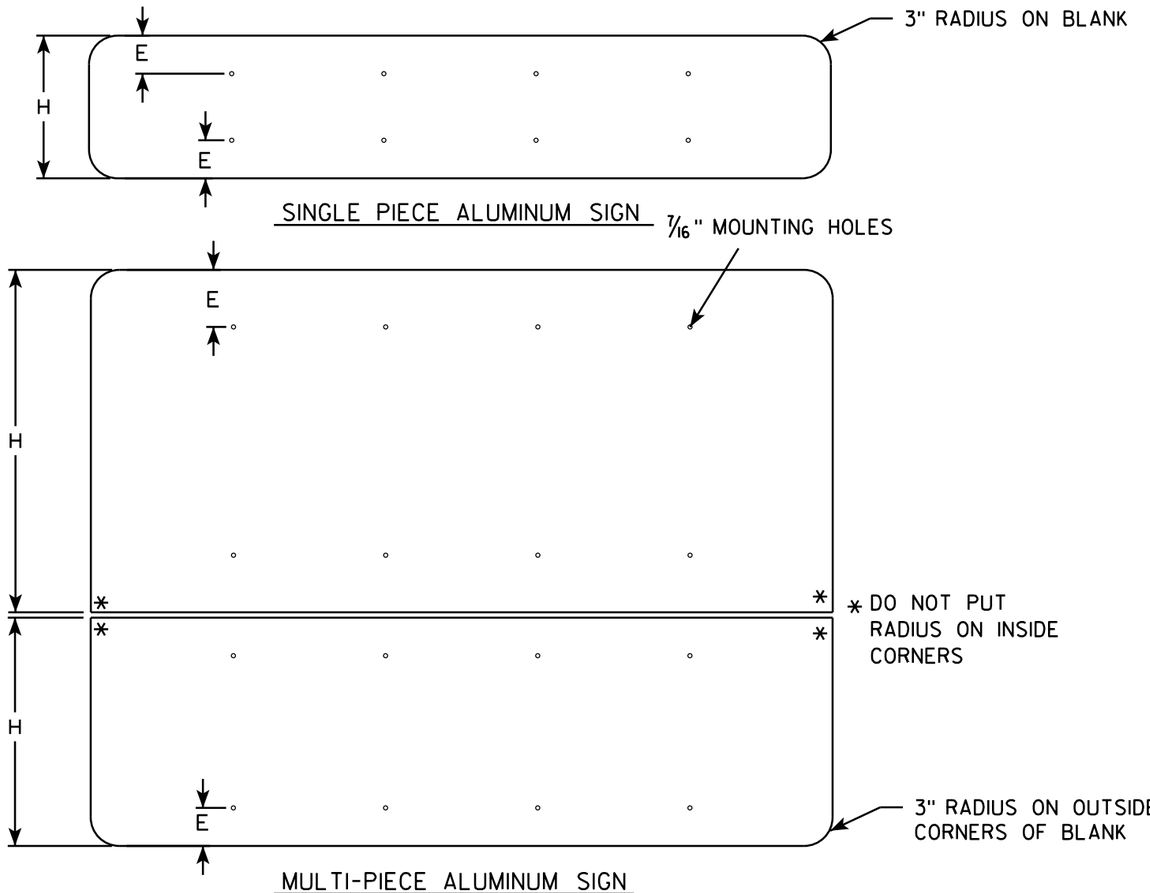
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

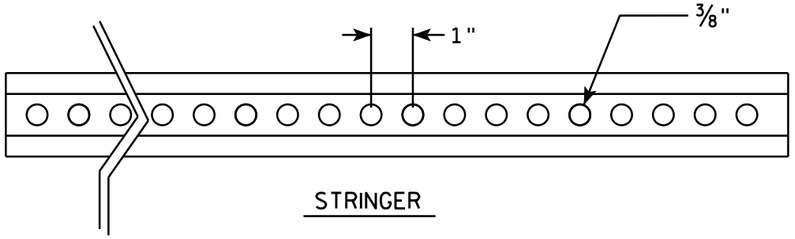
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 332	E



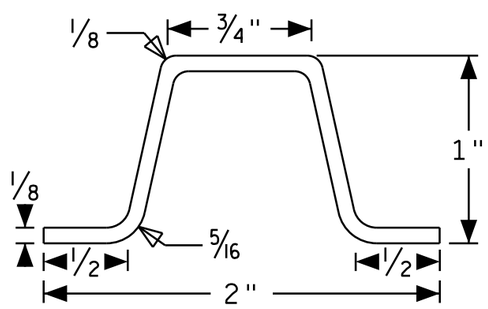
GENERAL NOTES

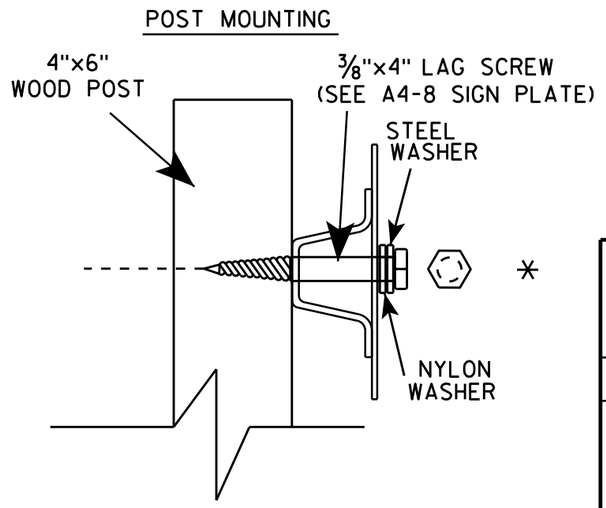
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"



STRINGER





SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

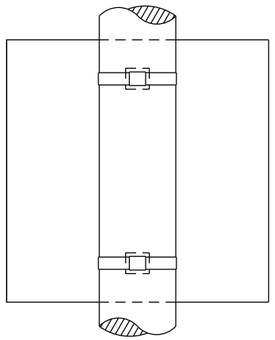
DATE 4/26/16 PLATE NO A4-18.1

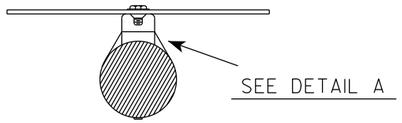
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

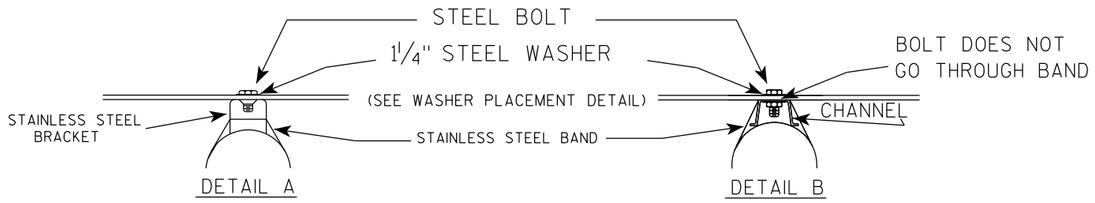
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



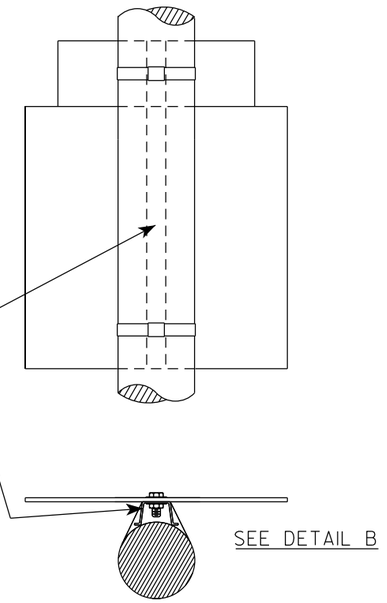




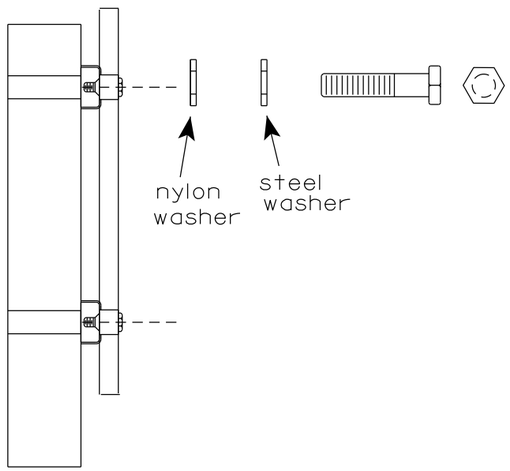
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

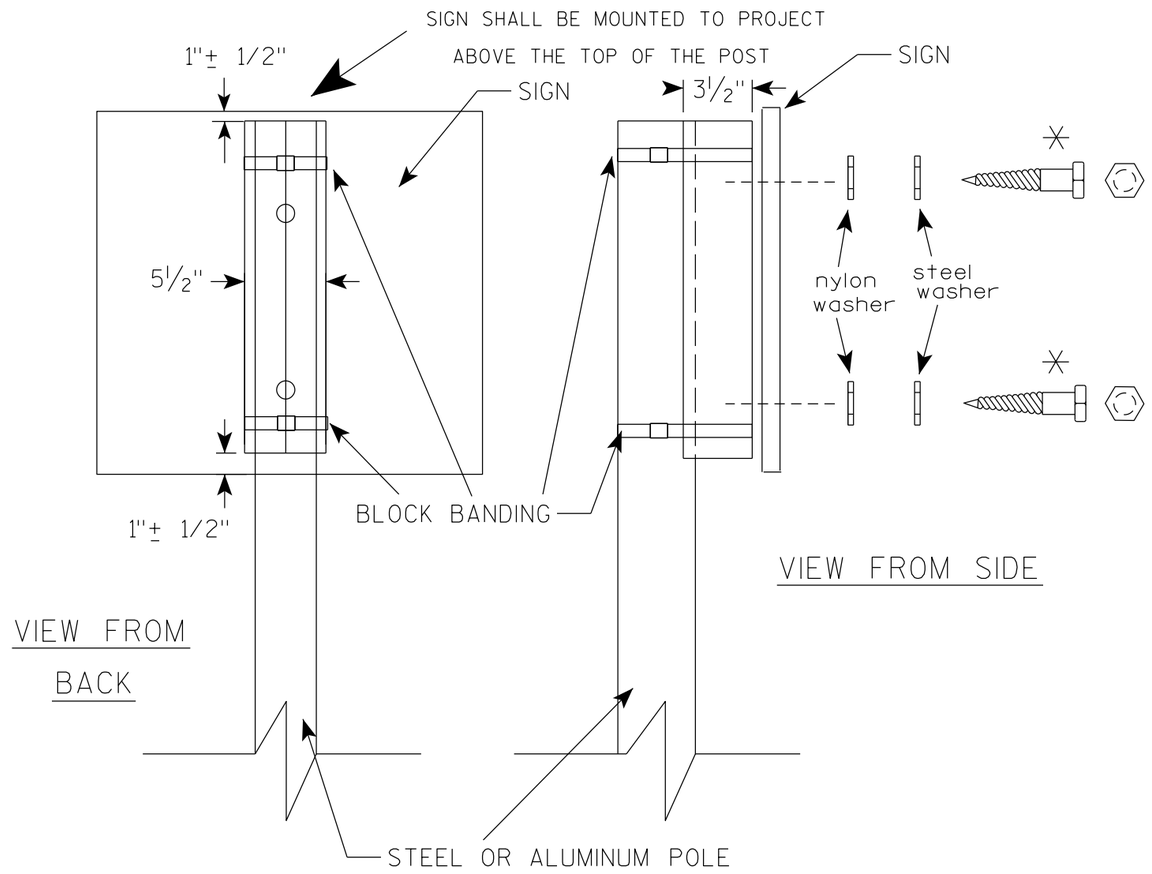
DATE 6/10/19 PLATE NO. A5-9.4

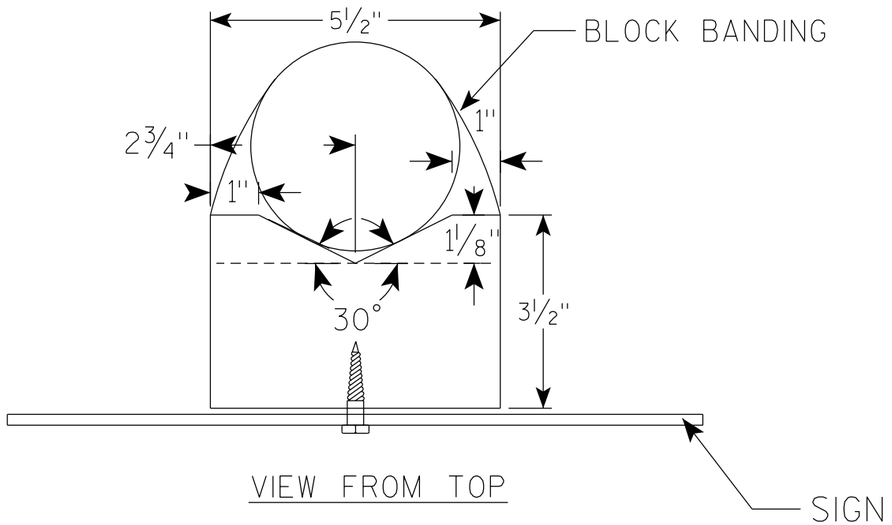
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 334	E

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)

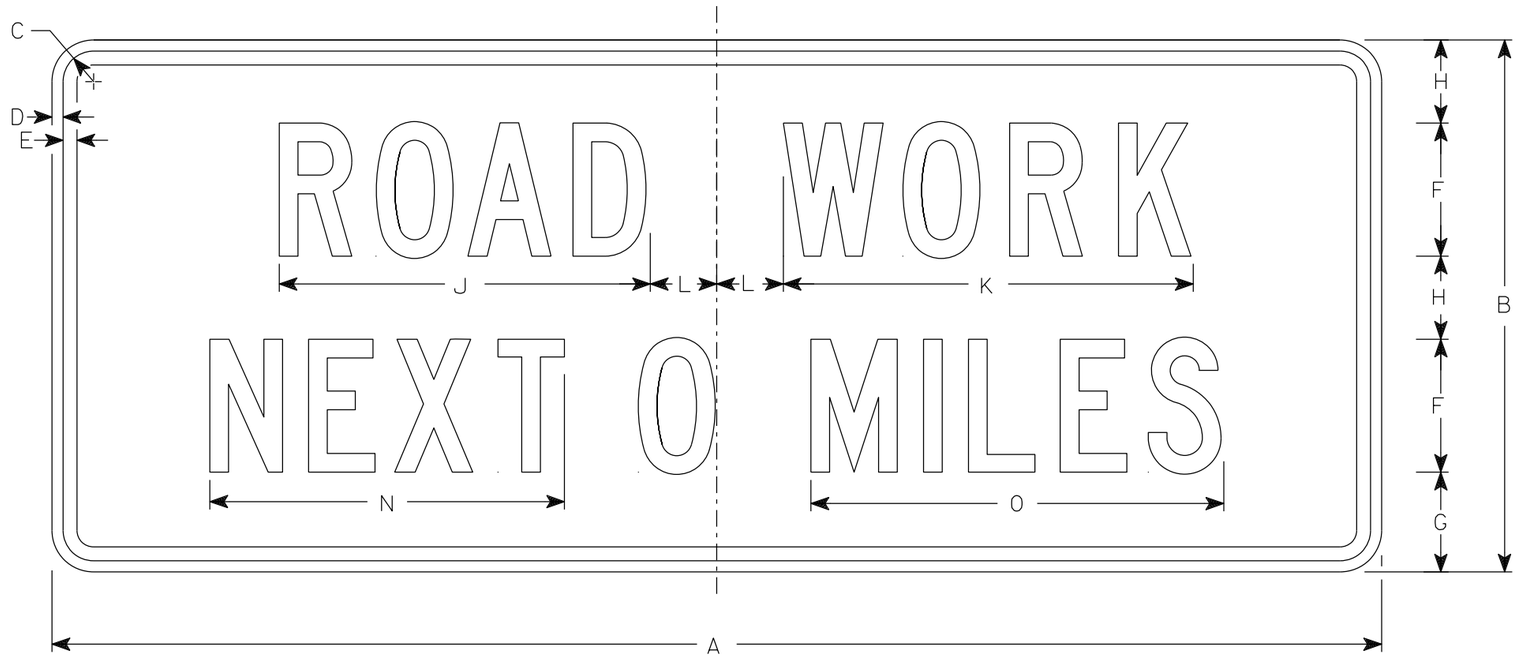
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 335 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																											
2S	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
2M	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
3	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
4	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
5	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0

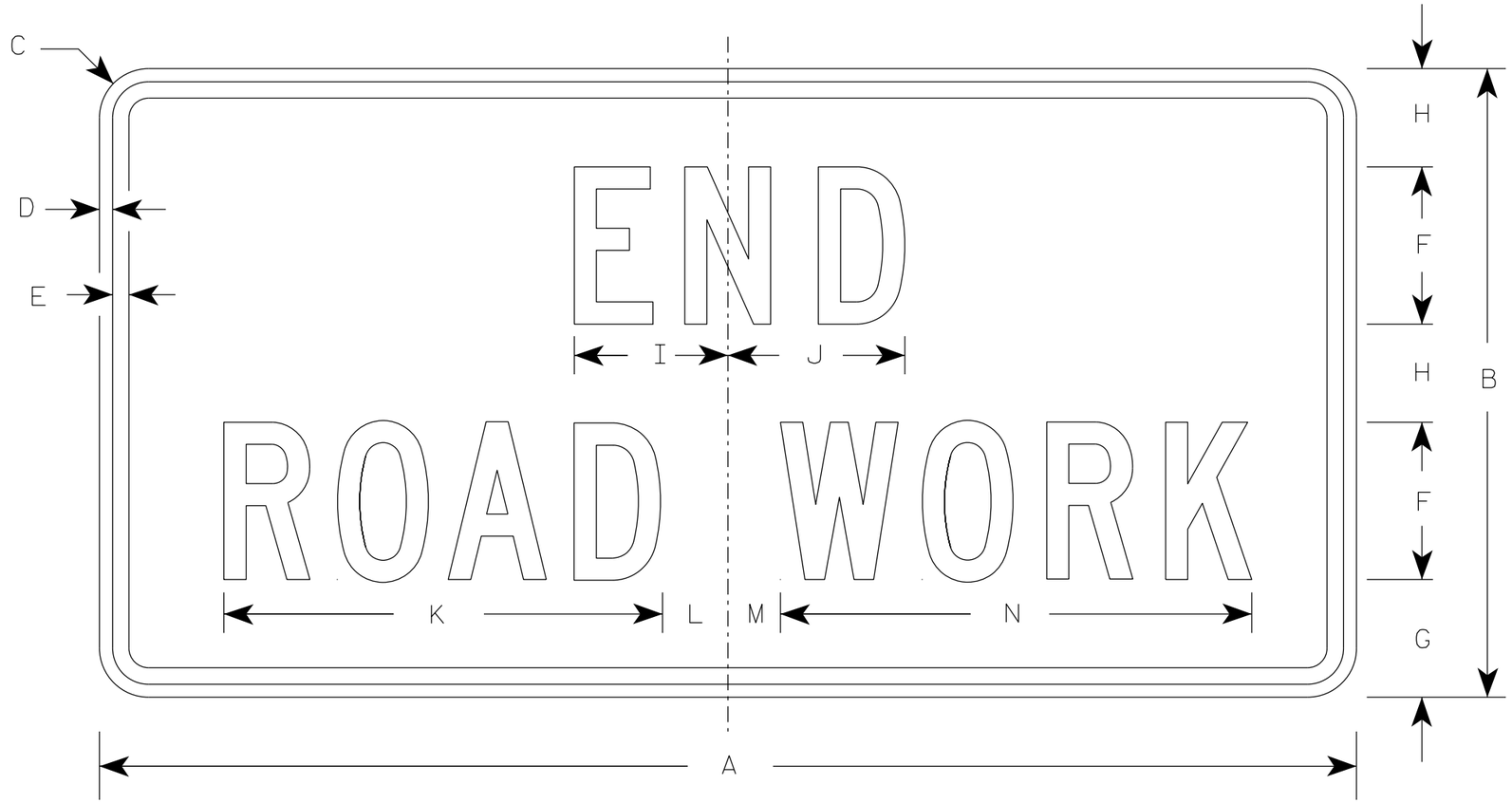
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 336	E



G20-2A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

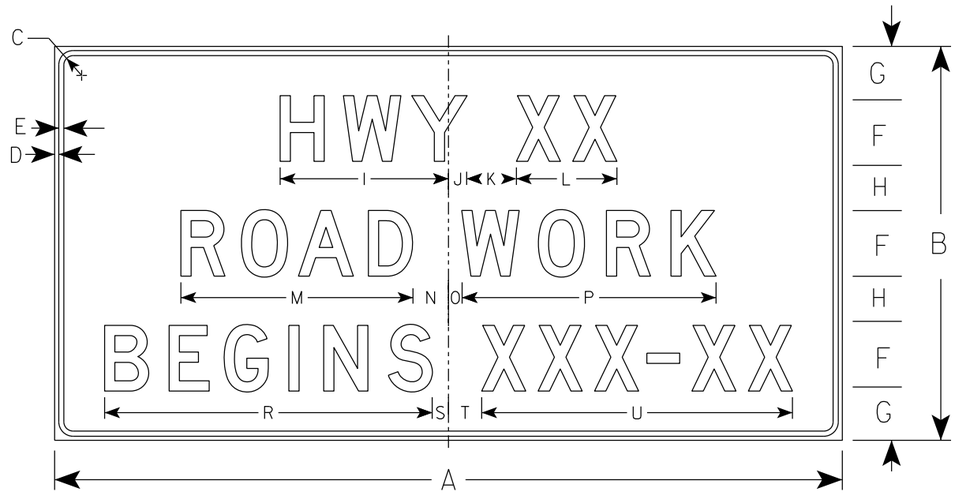
DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 337 E

7

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

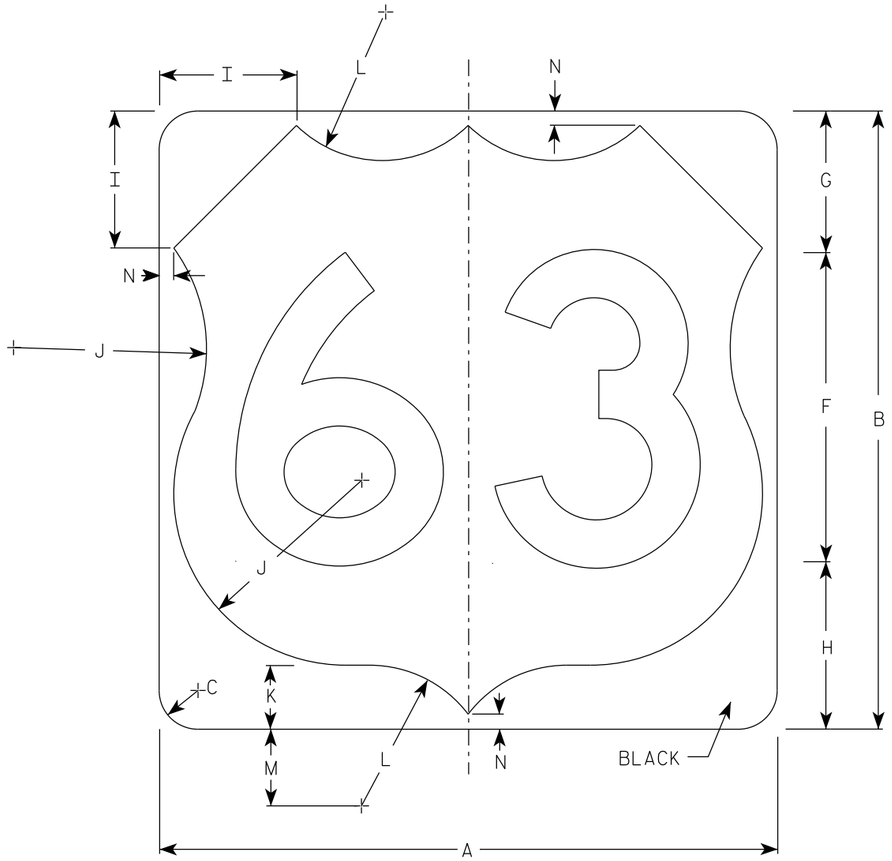
APPROVED Matthew R Rauch
For State Traffic Engineer

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

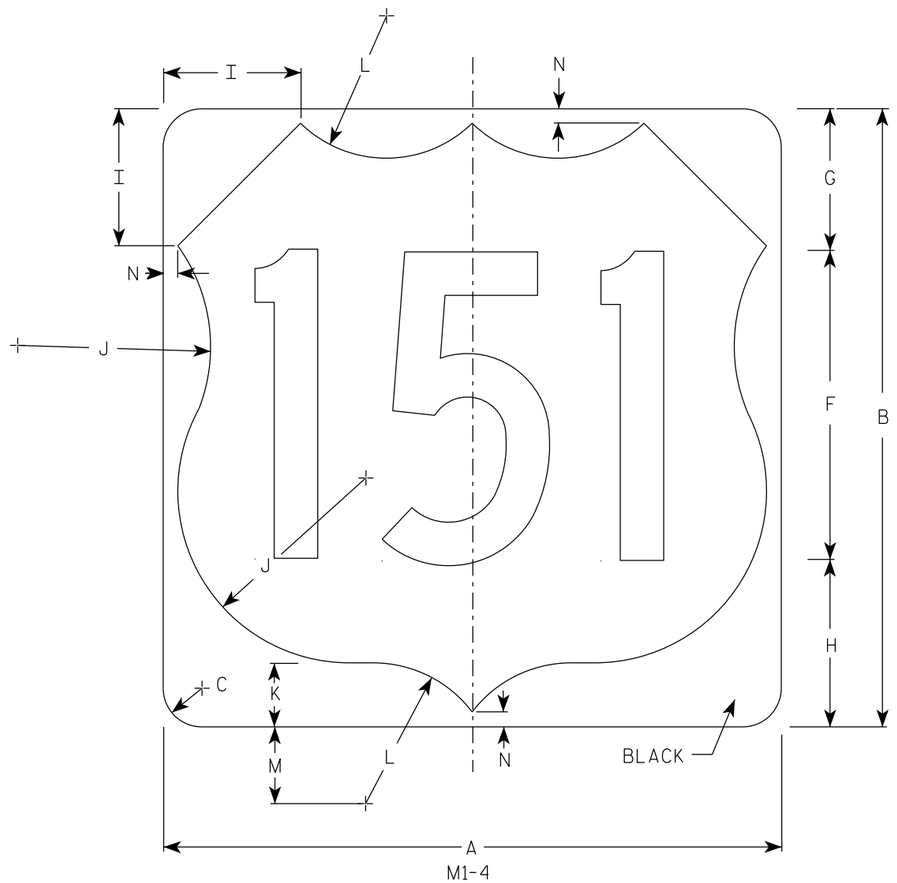
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 338	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
2M	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
3	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
4	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
5	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0

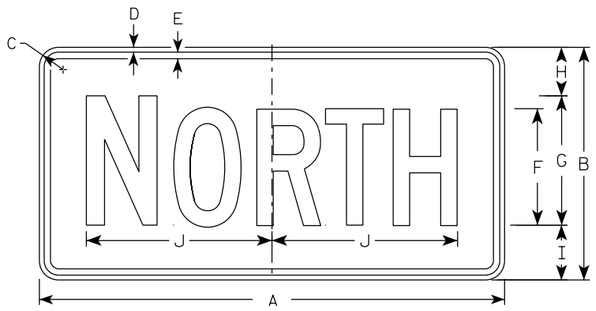
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

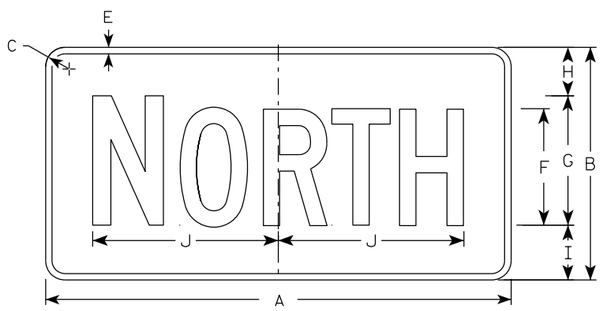
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

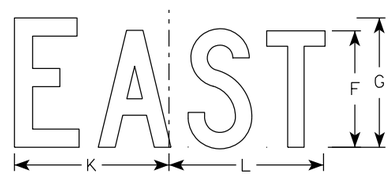
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 339 E



M3-1
MM3-1
MP3-1

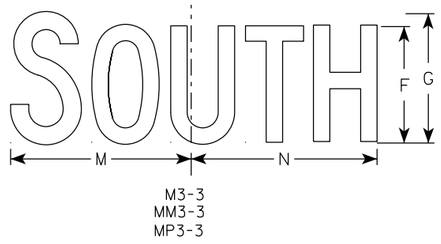


MB3-1
MK3-1
MN3-1

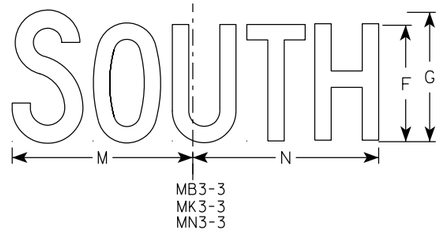


M3-2
MM3-2
MP3-2

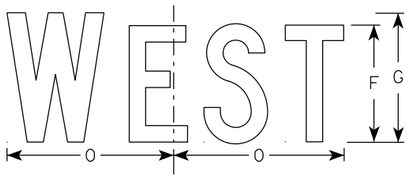
MB3-2
MK3-2
MN3-2



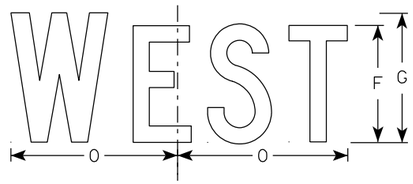
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

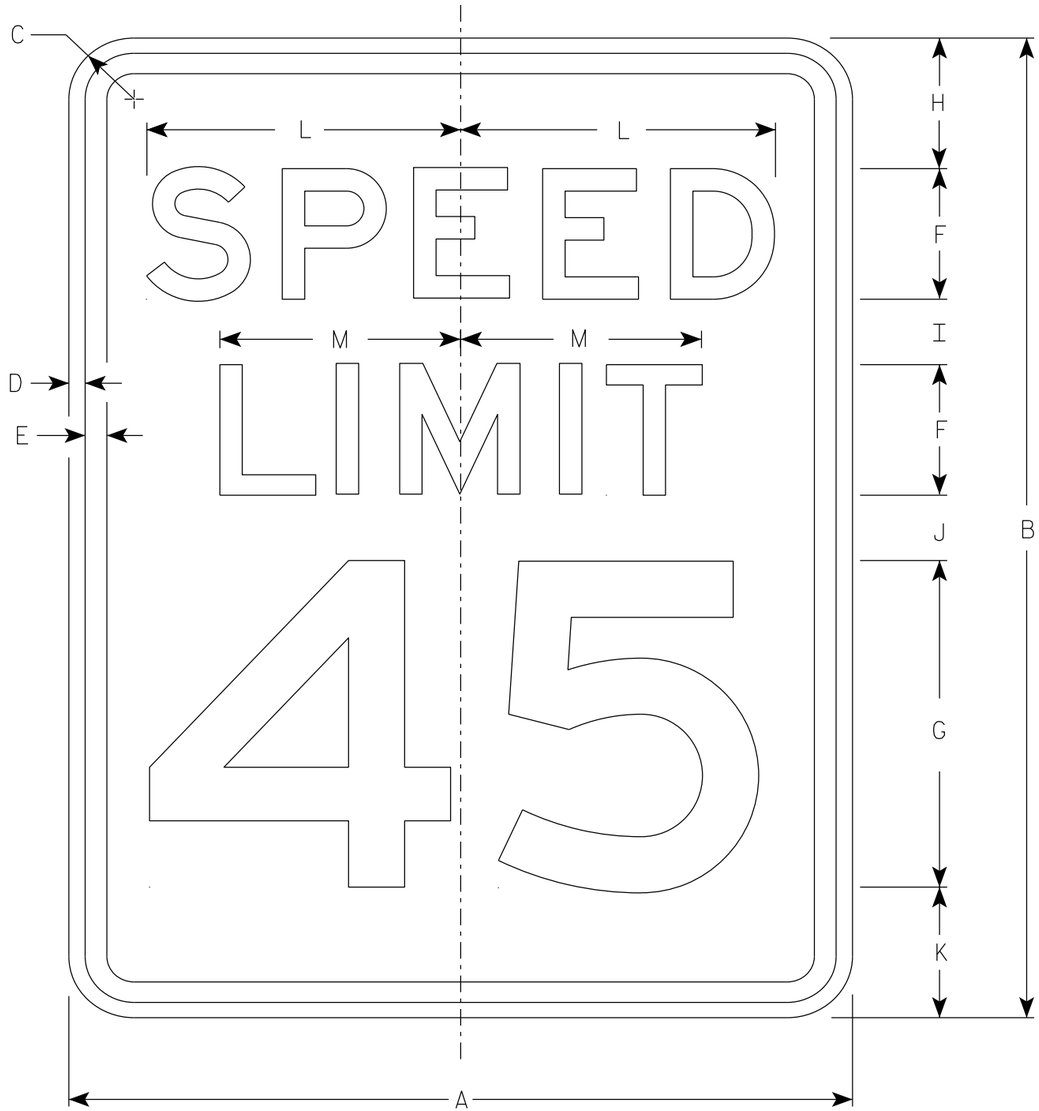
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 340 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. 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	18	24	1 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

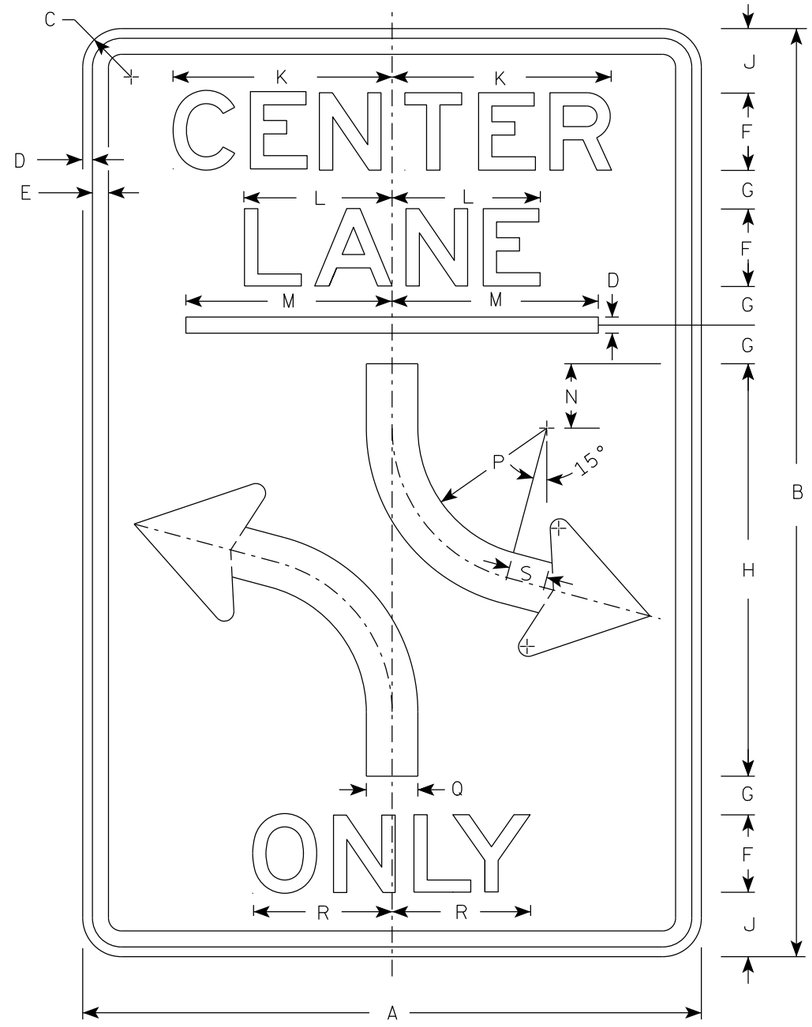
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

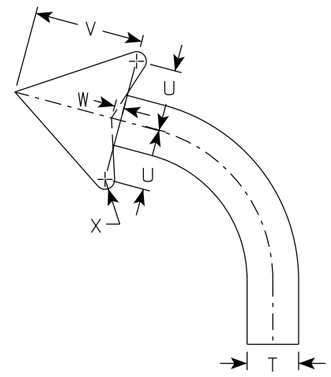
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 341 | E



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	16		2 ½	8 ½	5 ¾	8	2 ½		6	2	5 ⅛	1 ½		2 ⅜	4 ⅜	⅜				6.0
2M	24	36	1 ½	⅜	½	3	1 ½	16		2 ½	8 ½	5 ¾	8	2 ½		6	2	5 ⅛	1 ½		2 ⅜	4 ⅜	⅜				6.0
3	36	48	1 ⅞	⅝	⅞	5	1 ½	20		3 ½	14 ⅛	9 ½	12	3		4	3	9 ⅞	2		3 ½	6 ⅛	½				12.0
4																											
5																											

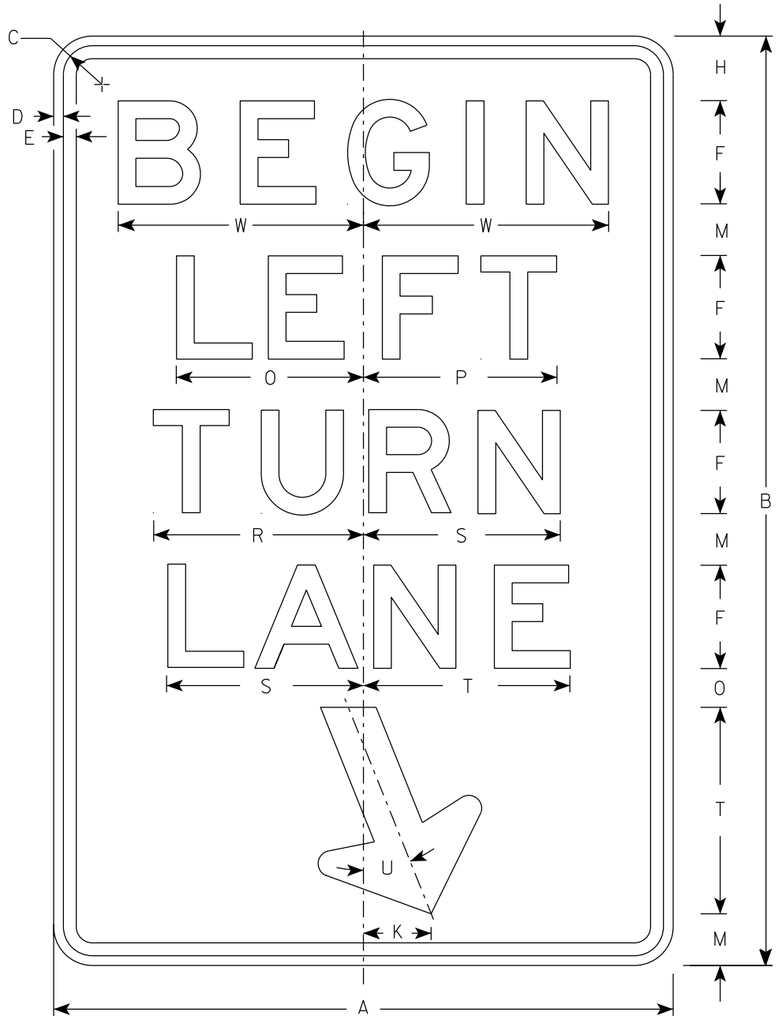
STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/15/23 PLATE NO. R3-9B.6

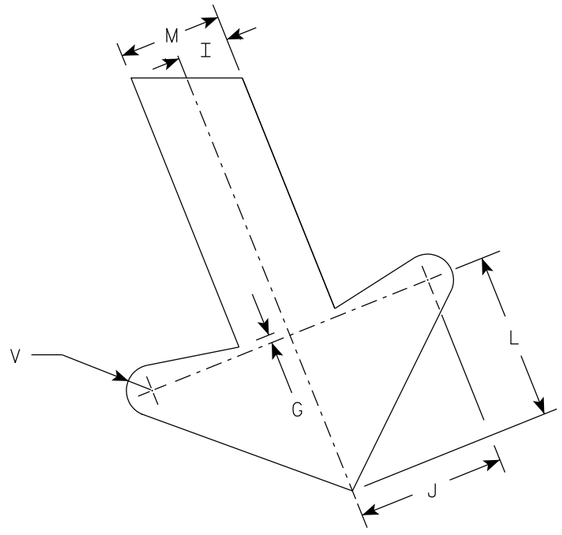
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 342 | E



R3-20L

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 1/2	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 1/2	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 7/8	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																											

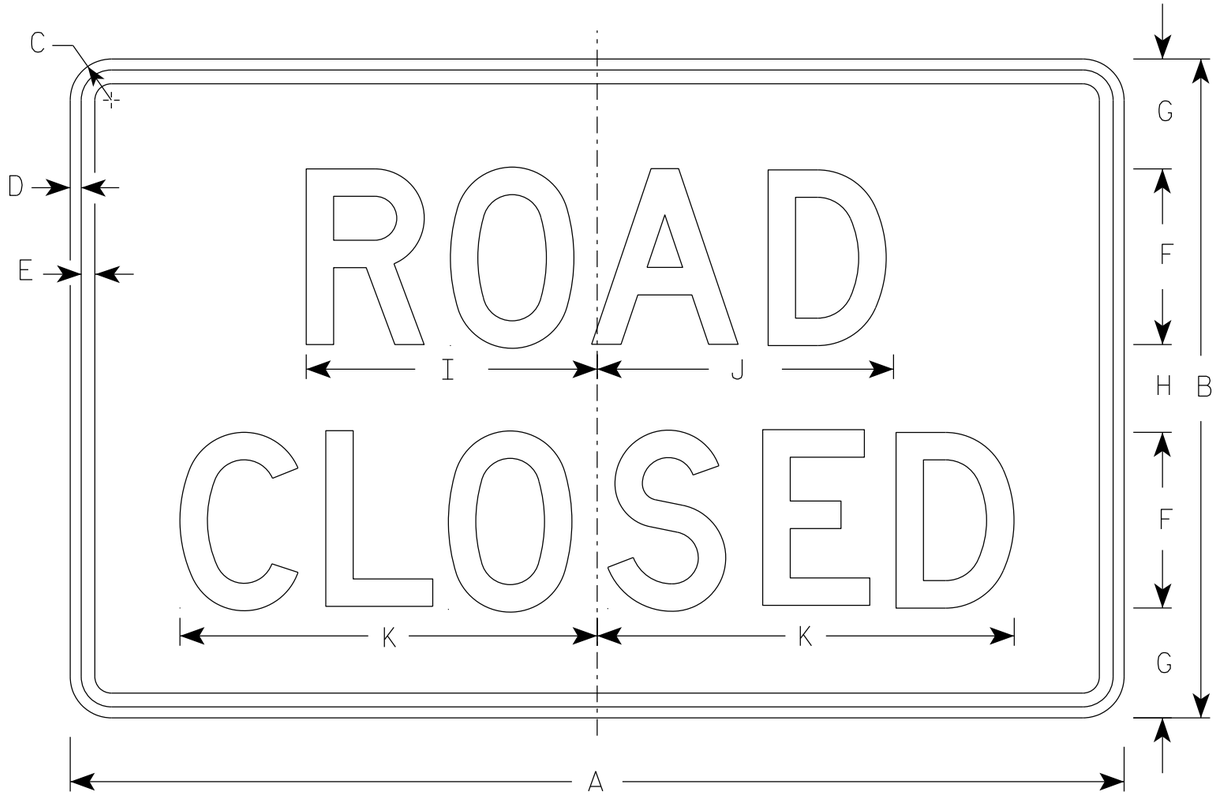
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20L.8

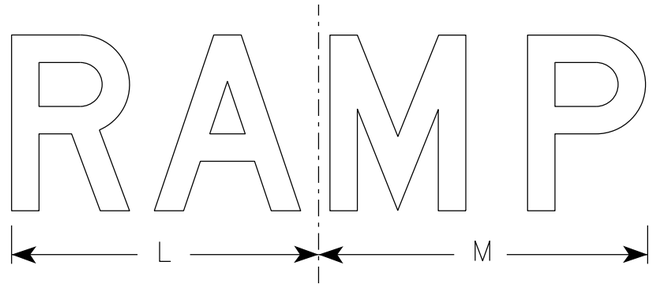
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 343 | E



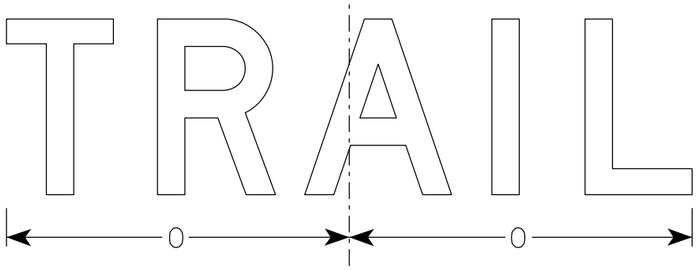
R11-2

NOTES

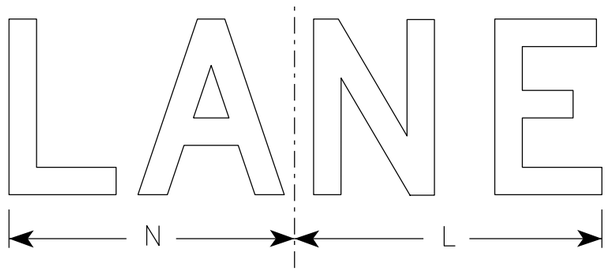
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 344	E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - B

W4-4P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	8	1 1/2	3/8	10	6 1/4	2 1/4	2 1/4	6 1/4											2.0
2M	24	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	8	1 1/2	3/8	10	6 1/4	2 1/4	2 1/4	6 1/4											2.0
3	36	15	1 1/2	3/8	1/2	4	2 5/8	1 3/4	10 3/4	2 3/8	3/8	13 1/2	8 3/8	3	3 1/8	8 3/8											3.75
4	42	18	1 1/2	3/8	1/2	5	3	2	13 3/8	3 1/8	3/8	16 7/8	10 1/2	3 5/8	3 7/8	10 3/8											5.25
5																											

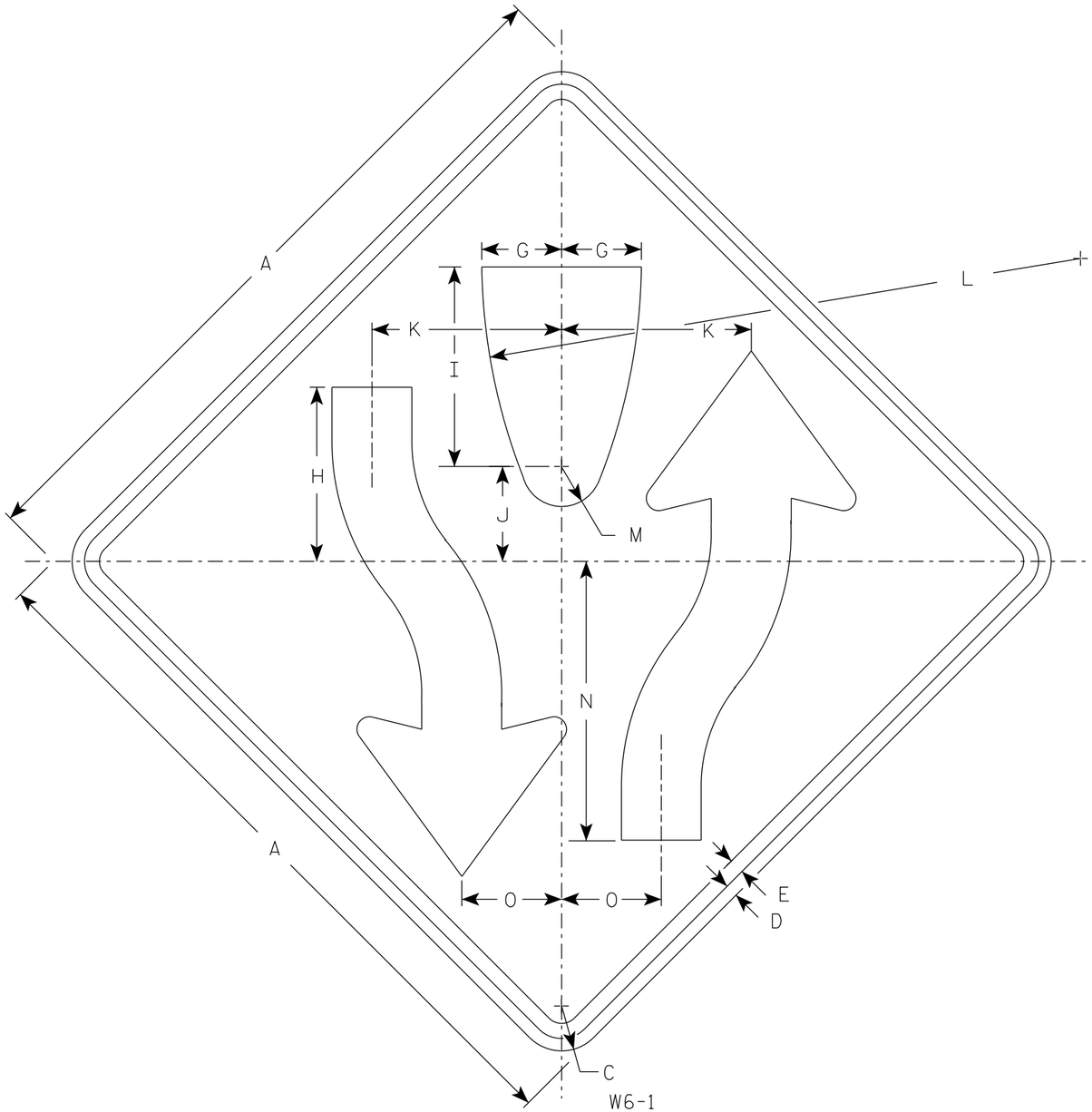
STANDARD SIGN
W4-4P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

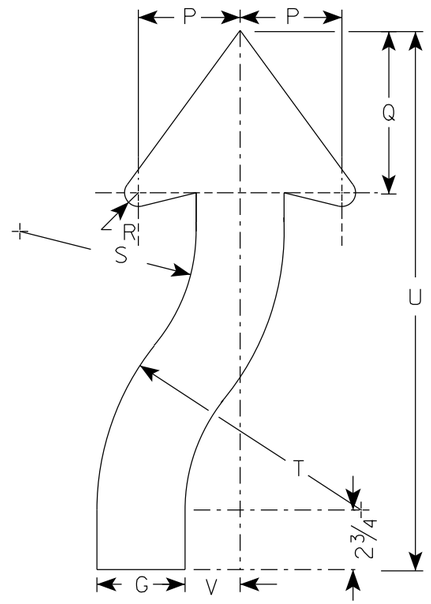
DATE 9/5/2023 PLATE NO. W4-4P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 345 E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W6-2 same as W6-1 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	30		1 7/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		2 1/4	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
2M	36		2 1/4	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
3	36		2 1/4	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
4	48		3	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		3	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

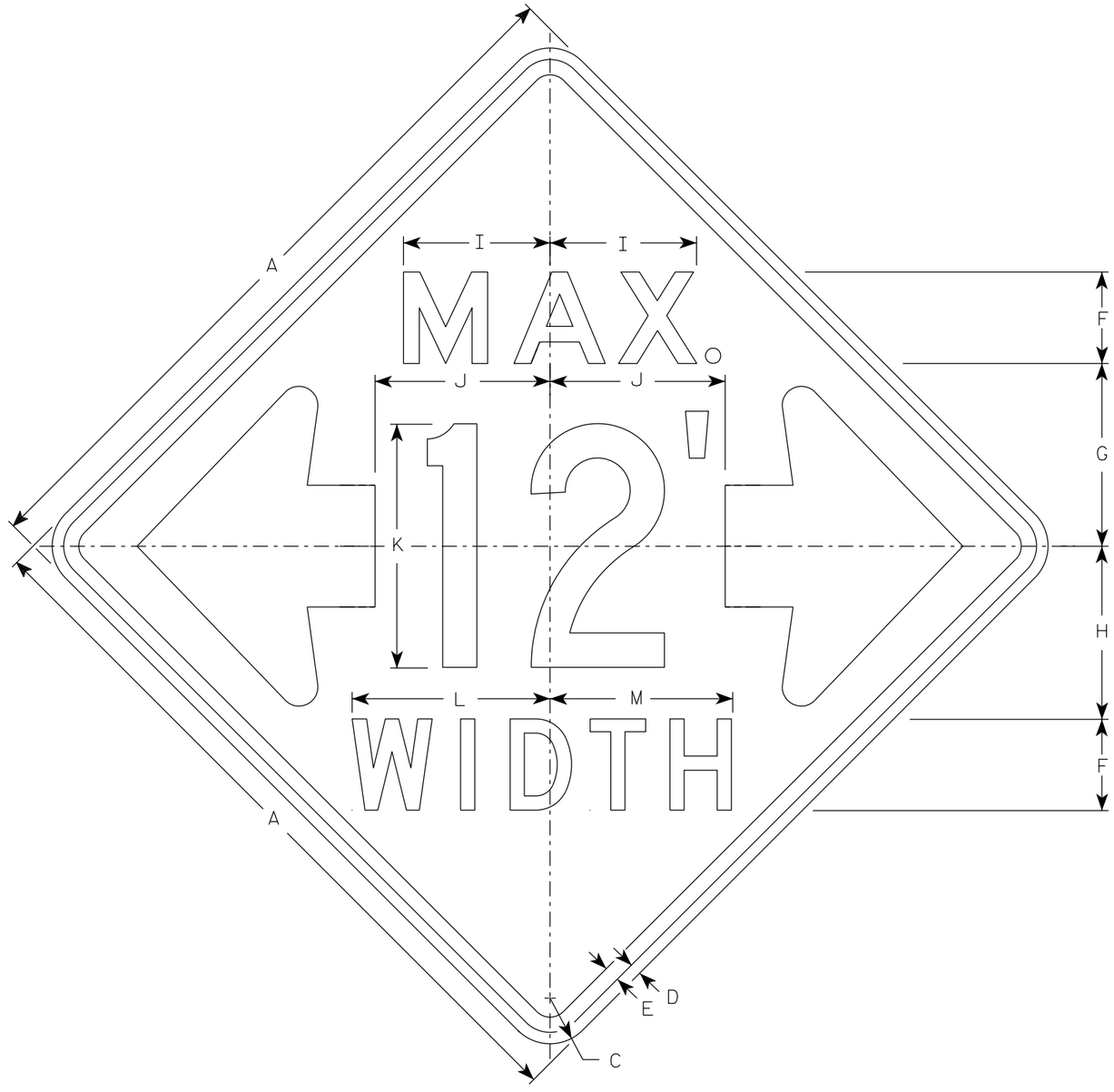
STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/6/2023 PLATE NO. W6-1.15

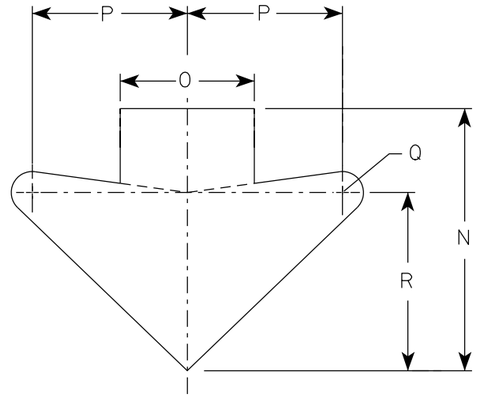
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 346 E



W12-52

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. The top line is series E, the numerals are series C, and the bottom line is series D.
5. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

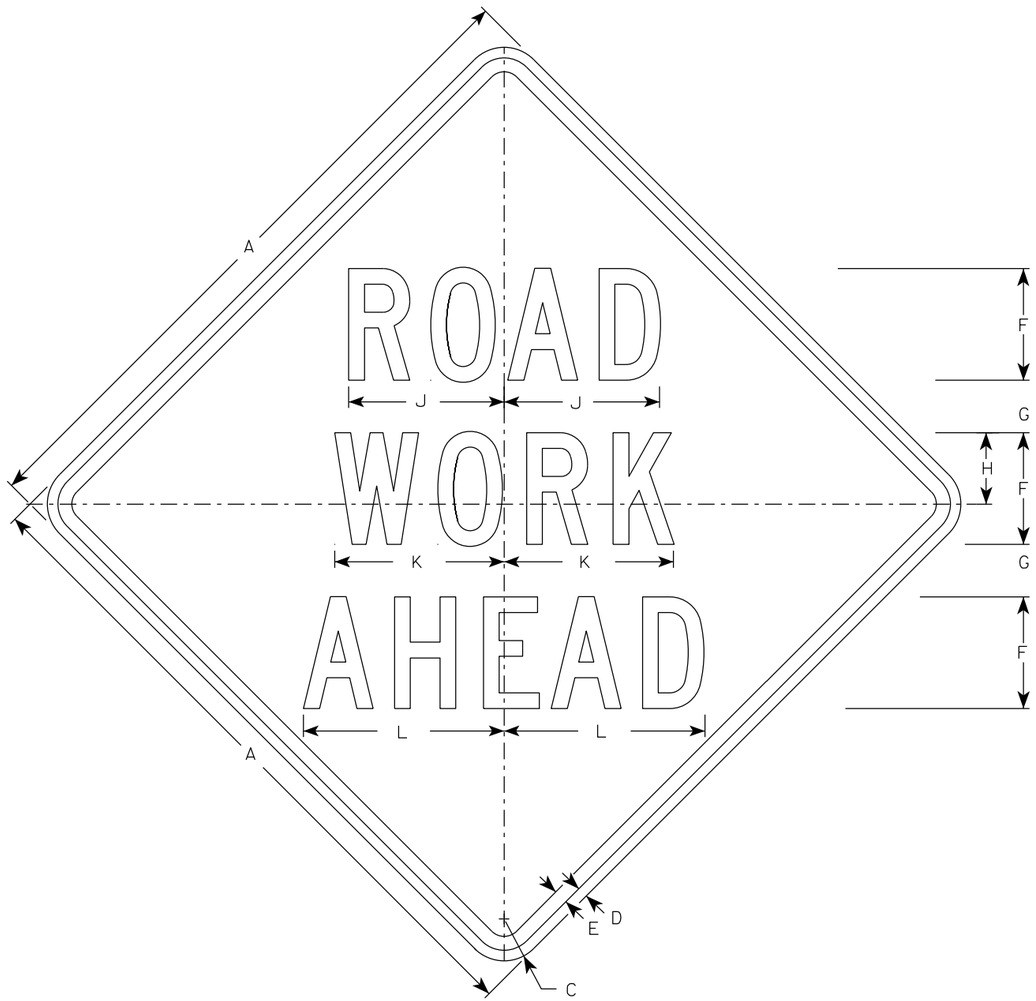
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

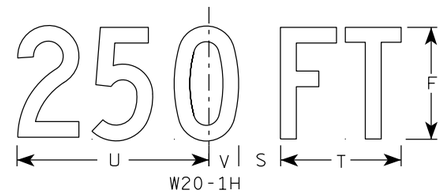
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

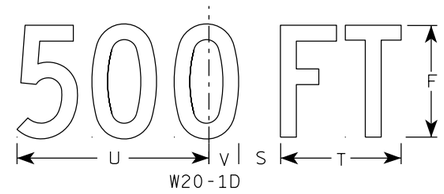
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 347 | E



W20-1A



W20-1H



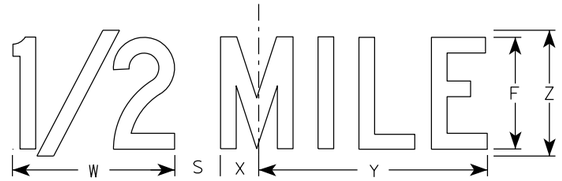
W20-1D

W20-1C

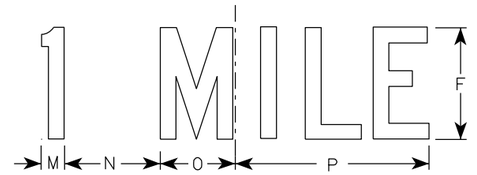
W20-1B

NOTES

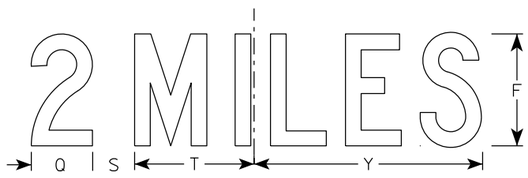
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

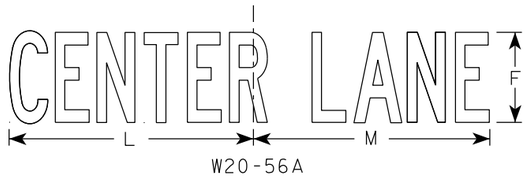
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

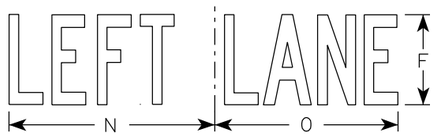
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

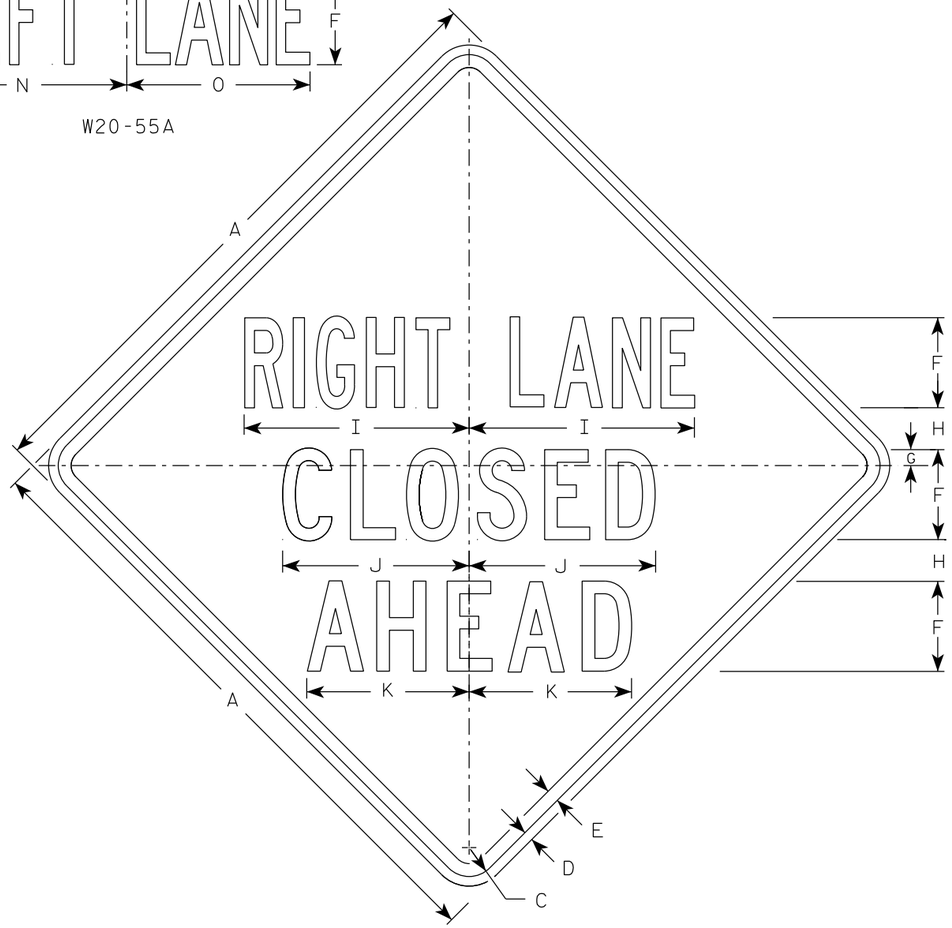
SHEET NO: 348 E



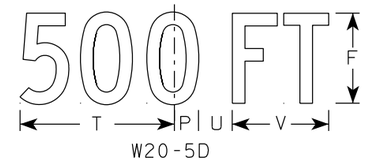
W20-56A



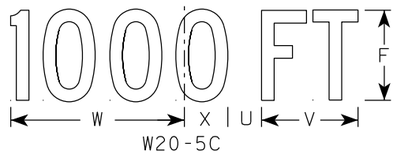
W20-55A



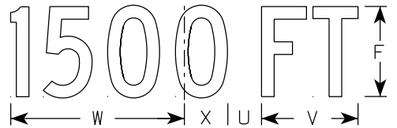
W20-5A



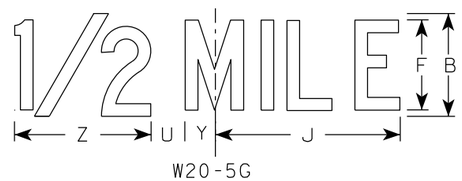
W20-5D



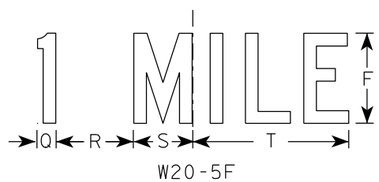
W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

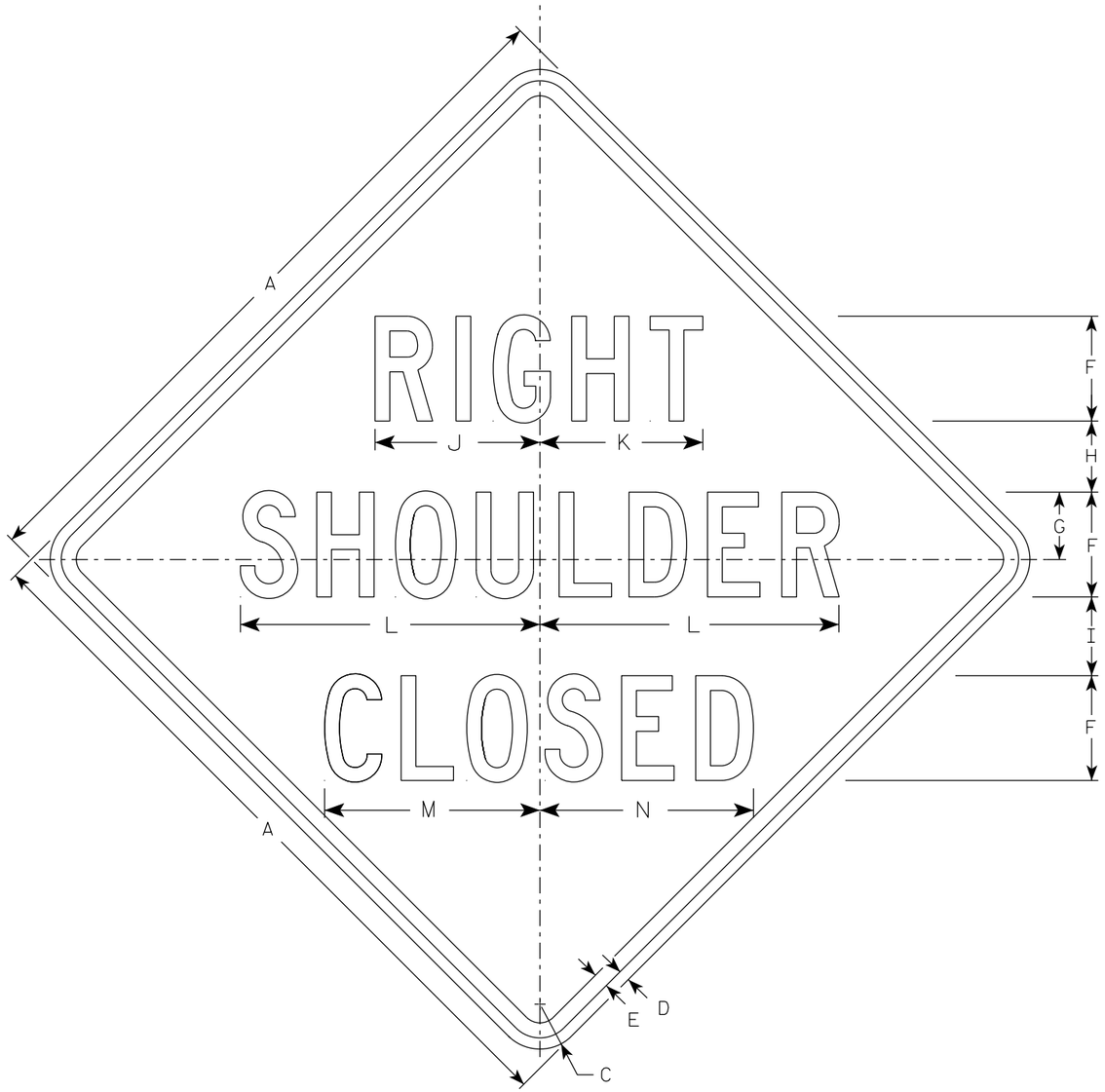
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

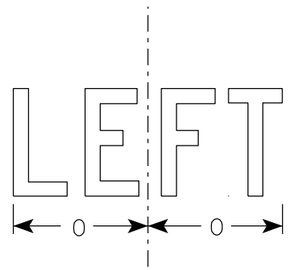
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 349	E



W21-5A



W21-5AL

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
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	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	4	7 7/8	7 3/4	14 1/4	10 1/4	10 1/8	6 1/4												9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0

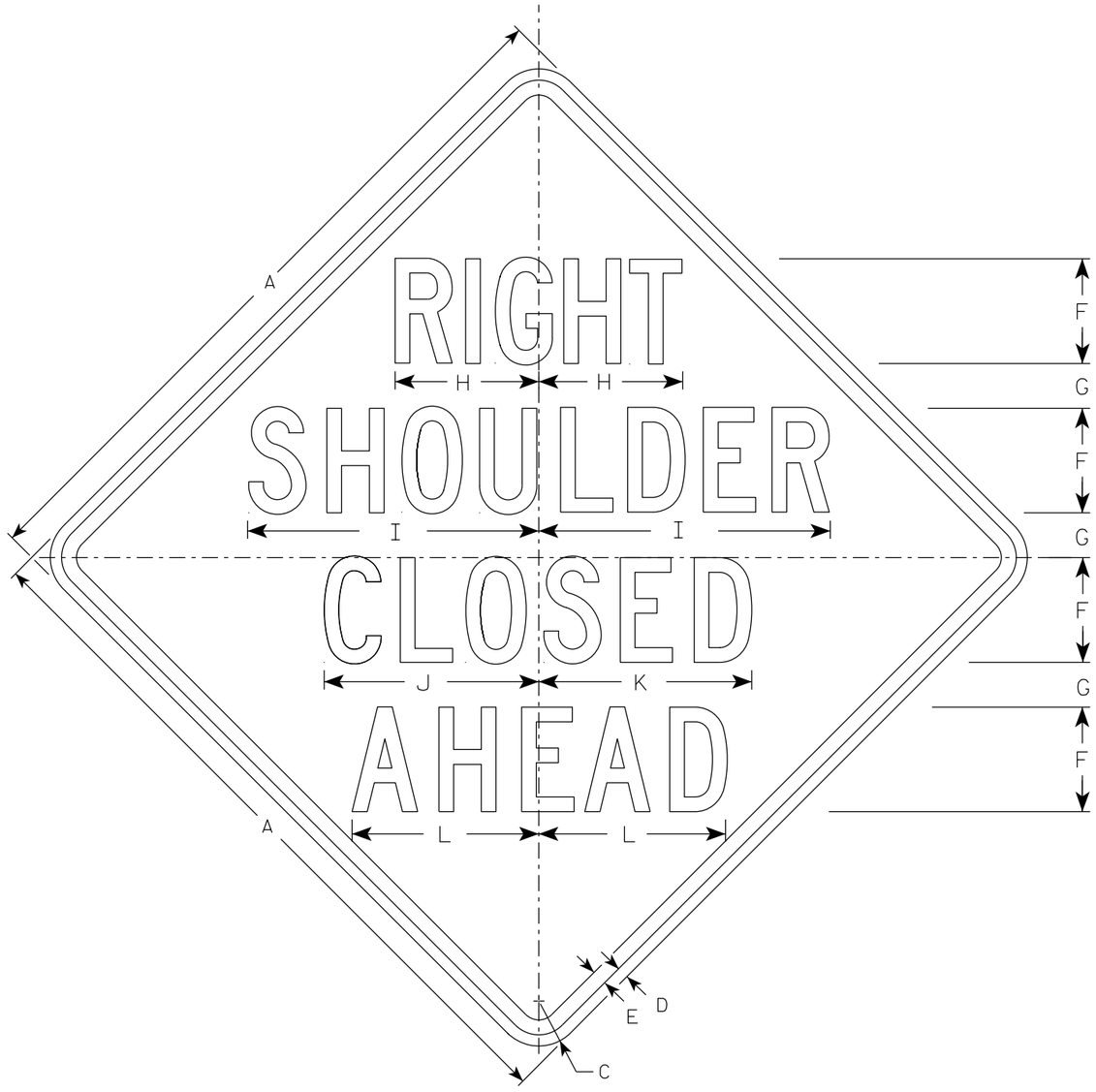
STANDARD SIGN
W21-5A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/11/2024 PLATE NO. W21-5A.4

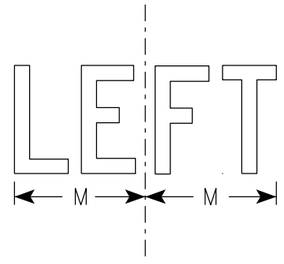
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 350 | E



W21-5B

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



W21-5BL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 1/4	7 3/8	14 1/4	10 1/4	10 1/8	8 7/8	6 1/4														9.0
2S	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
2M	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
3	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
4	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
5	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0

STANDARD SIGN
W21-5B

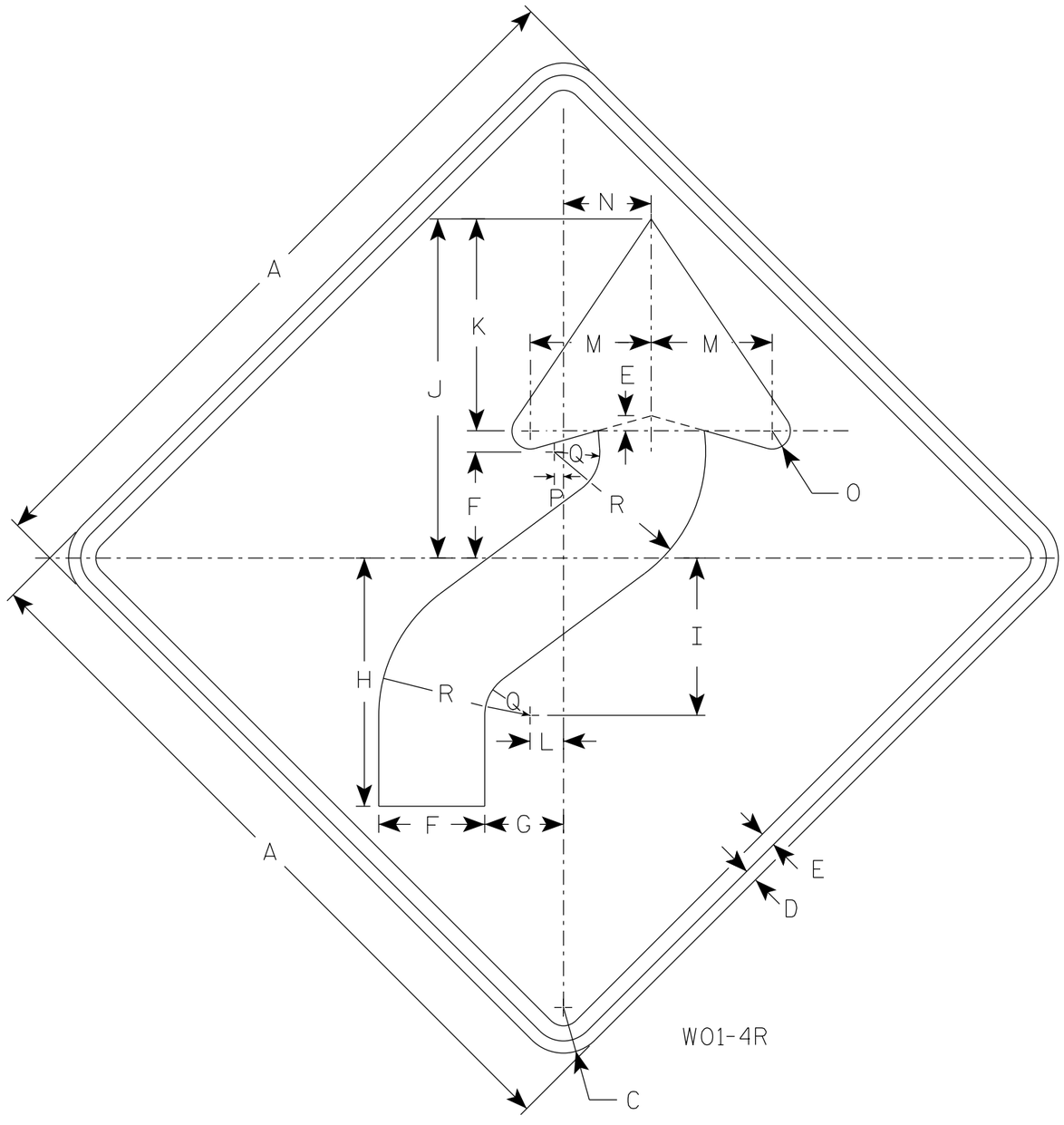
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/16/2024 PLATE NO. W21-5B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 351 | E

7



W01-4R

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

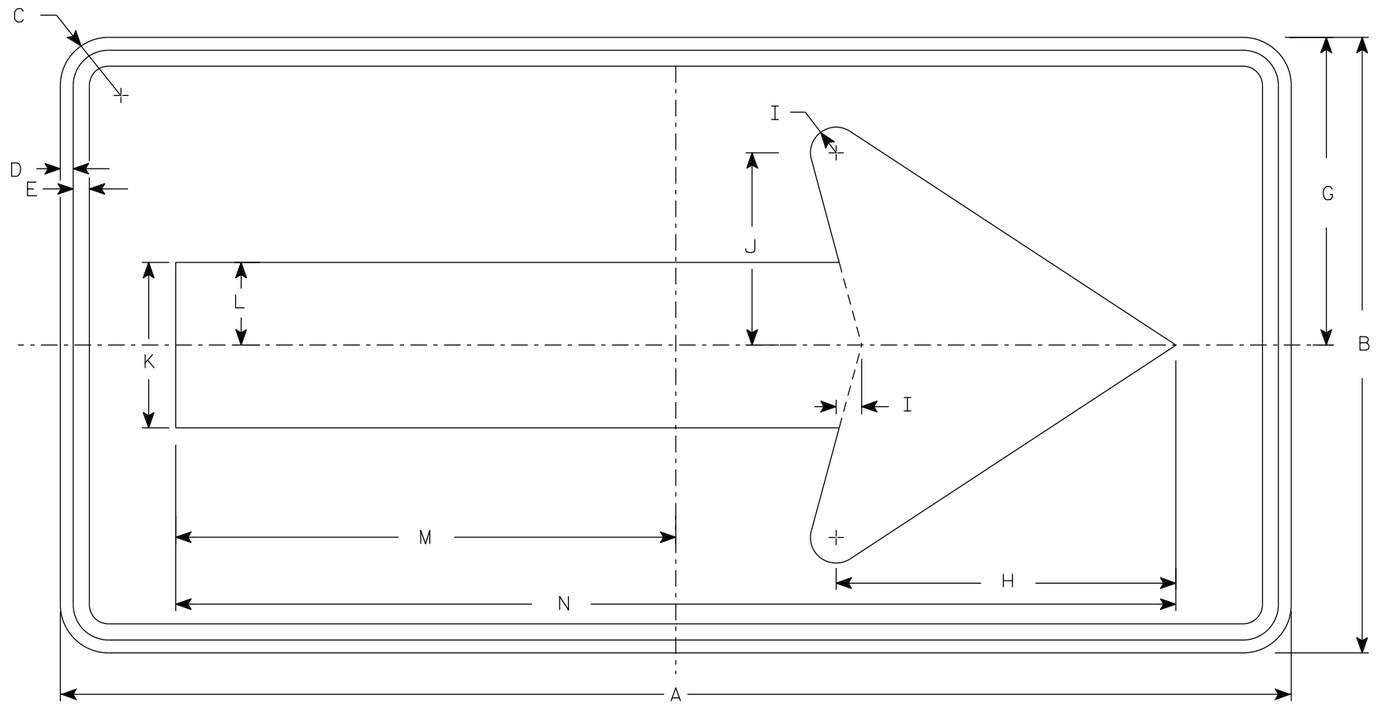
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 352 | E



WO1-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

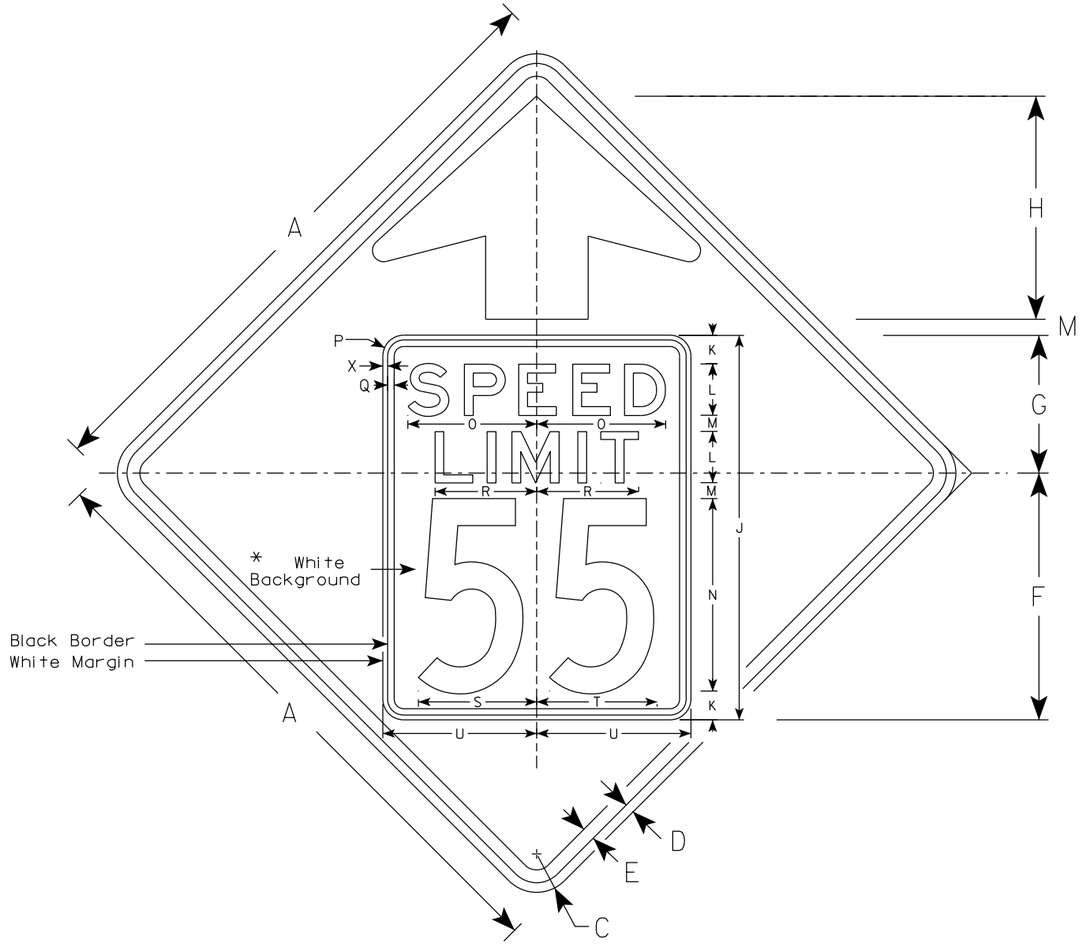
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

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

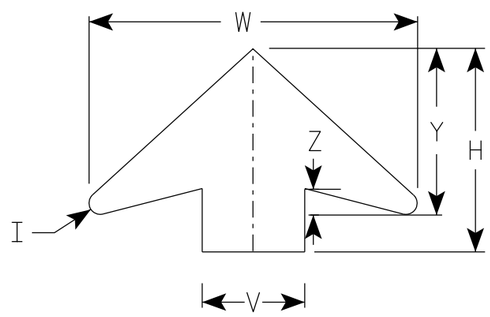


W03-5

NOTES

1. Sign is Type II - Type F Reflective
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



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		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

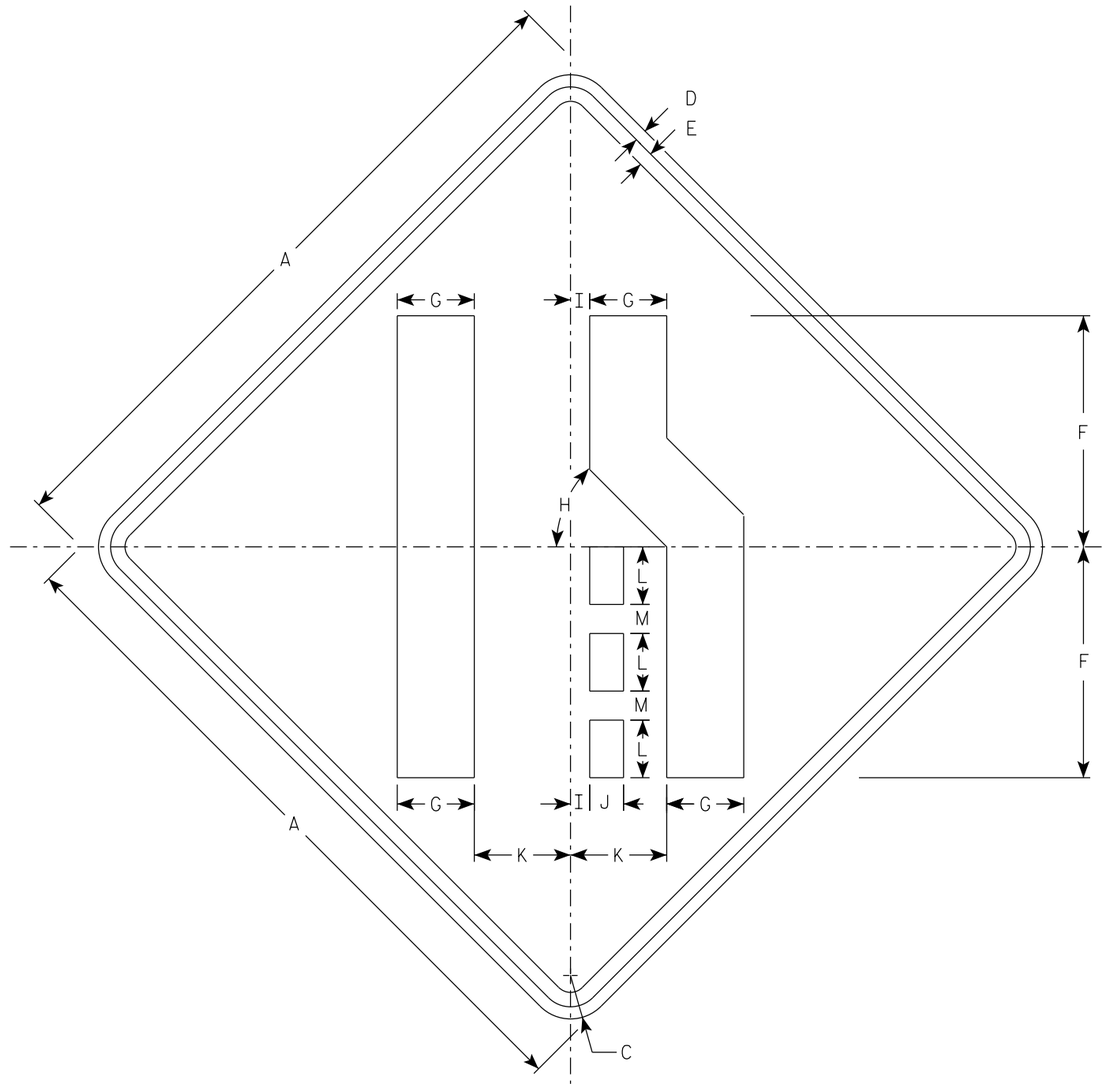
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W03-5.2

PROJECT NO:

SHEET NO: 354 E



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

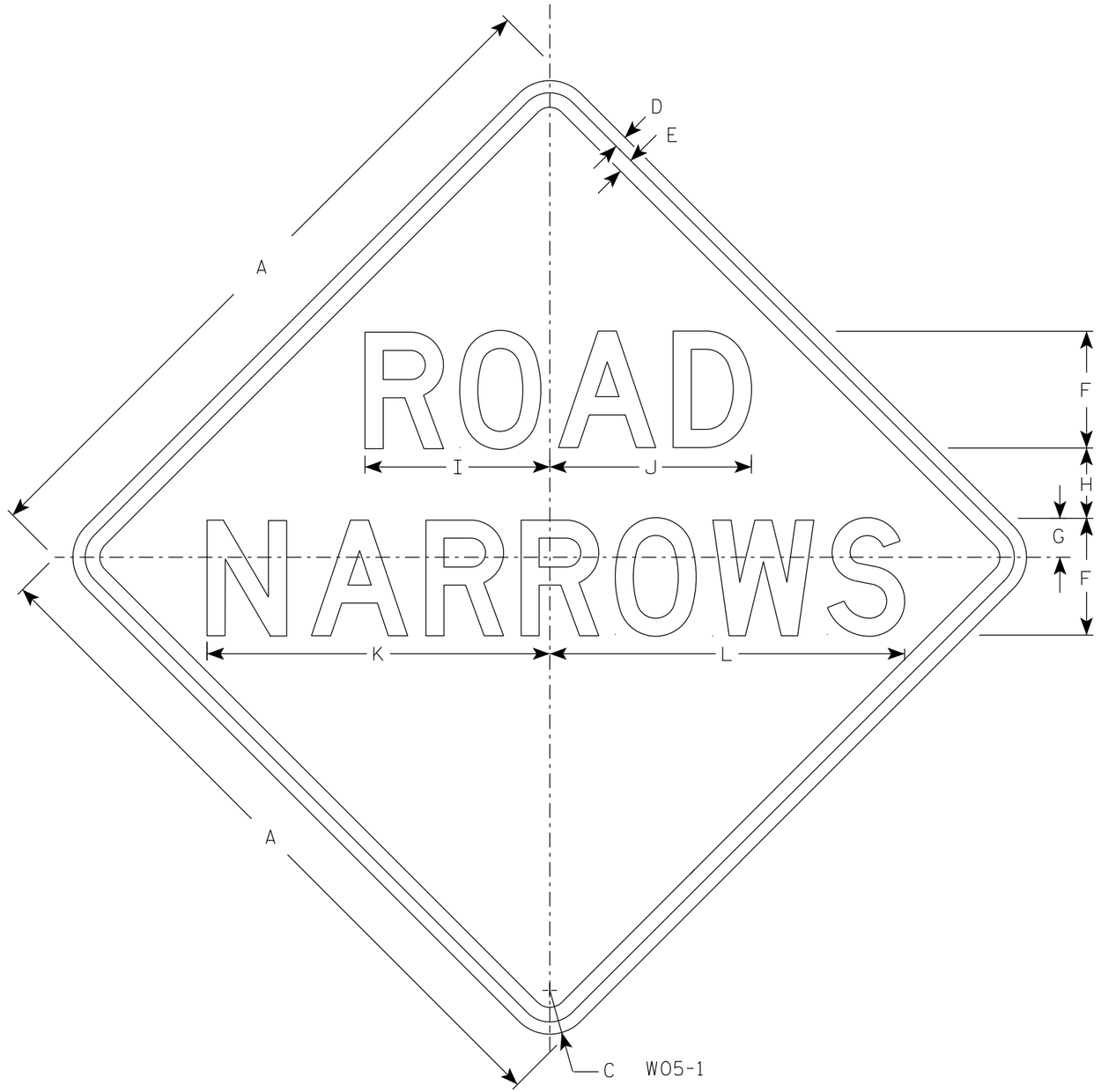
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 355 E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	2	3 1/2	9 1/2	10 3/8	17 5/8	18 1/4															9.0
2S	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
2M	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
3	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
4	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
5	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0

STANDARD SIGN
W05-1

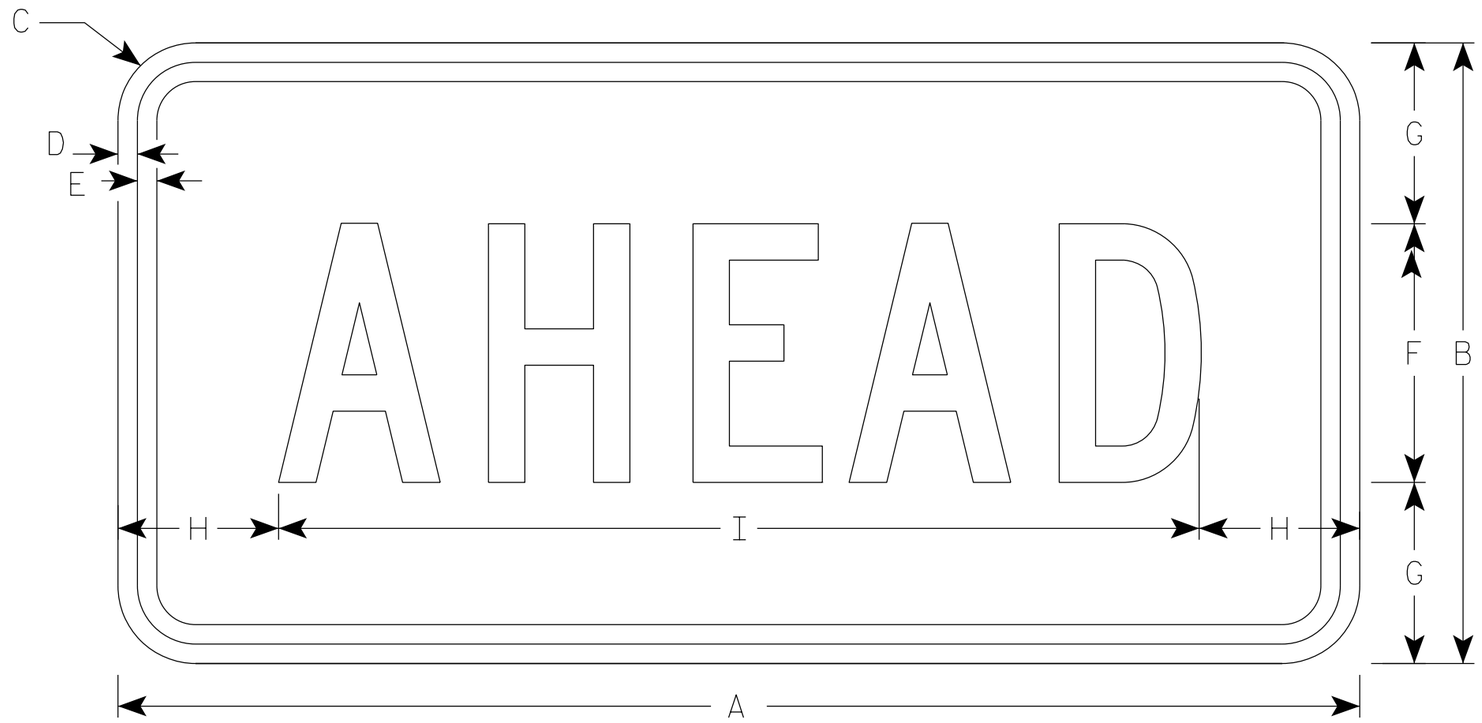
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/29/2024 PLATE NO. W05-1.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 356 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W051.dgn PLOT DATE : 29-JAN 2024 8:10 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W016-9P

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	30	18	1 1/2	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2S	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
2M	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
3	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
4	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0

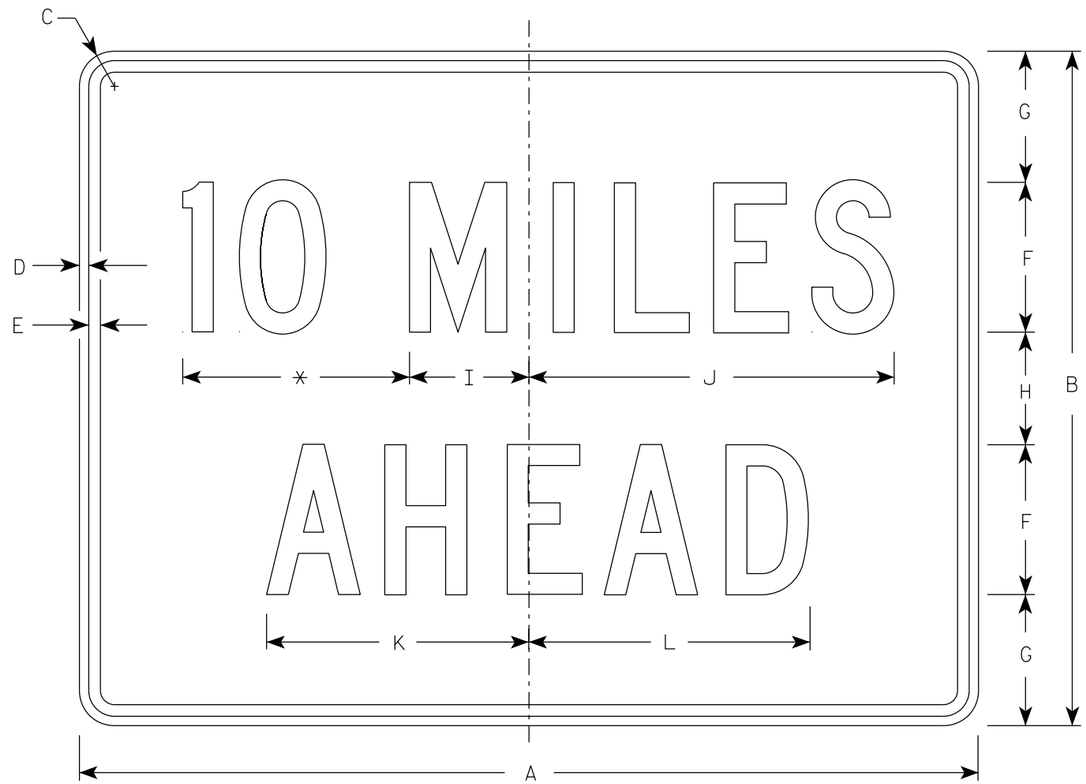
STANDARD SIGN
W016-9P

WISCONSIN DEPT OF TRANSPORTATION

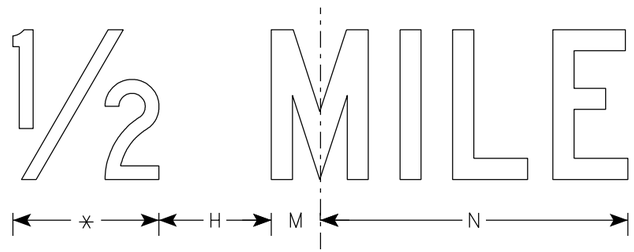
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W016-9P.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 357 | E



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

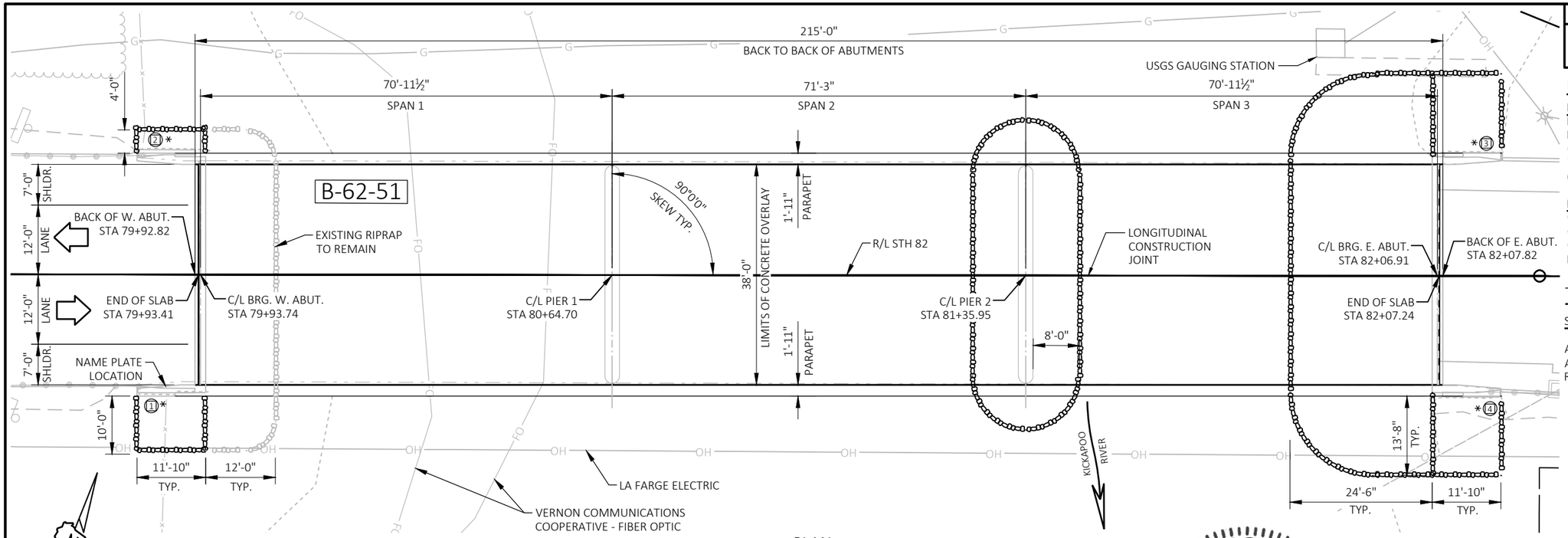
STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W057-52.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 358	E



PLAN

3-SPAN- 45" PRESTRESSED GIRDER
CONCRETE OVERLAY

Josh Mitchell
8/30/2024

WISCONSIN
JOSHUA R. MITCHELL
E-46242-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER

STATE PROJECT NUMBER

5710-00-72

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-20
OPERATING RATING: HS-33
WISCONSIN STANDARD PERMIT VEHICLE
(WIS-SPV)= 200 kips

MATERIAL PROPERTIES:
CONCRETE MASONRY
OVERLAY DECKS _____ f'c = 4,000 psi
CONCRETE SURFACE
REPAIR_____ f'c = 4,000 psi

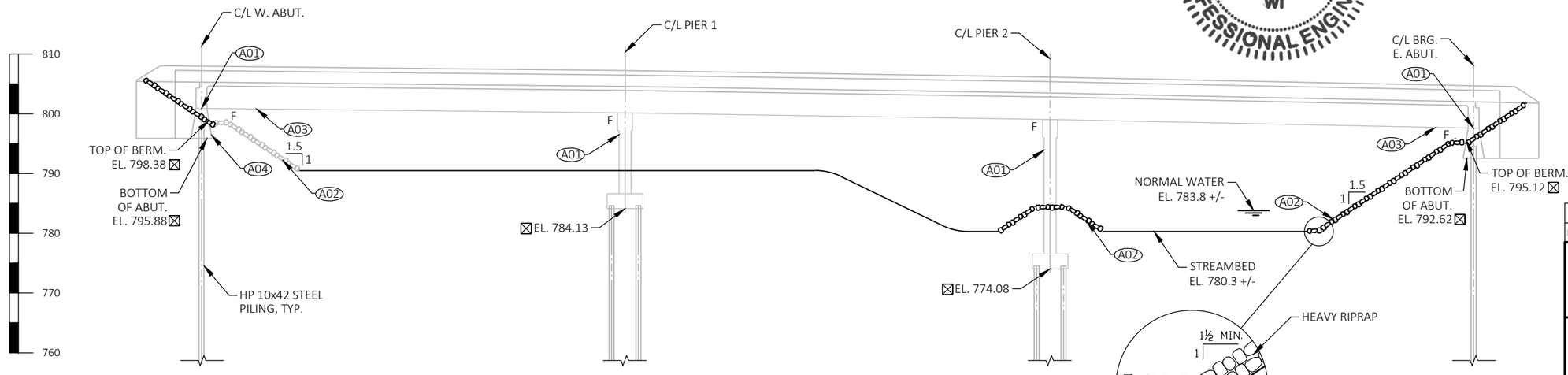
TRAFFIC DATA

STH 82

ADT = 930 (2027)
ADT = 930 (2047)
RDS = 35 MPH

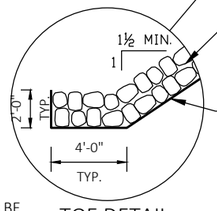
BENCHMARK DATA

NO.	STATION	OFFSET	DESCRIPTION	ELEVATION
506	77+85.50	52.5 LT.	CP3/4X24 REBAR SET W/ EMCS CAP	806.26



ELEVATION

(LOOKING UPSTREAM)



TOE DETAIL

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION & QUANTITIES

STRUCTURES DESIGN CONTACTS

JOSH MITCHELL (EMCS) 414-939-7023
AARON BONK (WISDOT) 608-261-0261

LEGEND

☒ ELEVATIONS FROM EXISTING 1976 ASBUILT PLANS

* EXISTING THRIE BEAM GUARD RAIL ATTACHMENT. NEW GUARDRAIL WILL BE ATTACHED USING EXISTING THRIE BEAM GUARDRAIL ATTACHMENT. SEE ROADWAY PLANS FOR DETAILS.

① INDICATES WING NUMBER

A01 CONCRETE SURFACE REPAIR TO PIERS AND ABUTMENTS. EXACT LOCATIONS AND AMOUNTS TO BE DETERMINED IN FIELD BY ENGINEER.

A02 REPLACE MISSING RIPRAP AT PIER 2, NEXT TO THE WEST ABUTMENT WINGWALLS ONLY, AND AROUND THE ENTIRE EAST ABUTMENT. PLACE GEOTEXTILE TYPE HR UNDER RIPRAP AT ALL LOCATIONS. RIPRAP TO BE PLACED 2 FEET THICK, TYP.

A03 REPAIR PRESTRESSED CONCRETE GIRDER G4 AT WEST ABUTMENT AND G5 AT EAST ABUTMENT. WORK TO BE INCLUDED IN BID ITEM "CONCRETE SURFACE REPAIR". EXACT LOCATIONS AND AMOUNTS TO BE DETERMINED IN FIELD BY ENGINEER.

A04 FILL VOID AT WEST ABUTMENT WITH FOAM FILLING. WORK TO BE INCLUDED IN BID ITEM "FOAM VOID FILLING". PER FIELD INSPECTION 07/21/2021, VOID DIMENSIONS ARE 10' LONG X 1' DEEP. EXACT LOCATION AND AMOUNT OF FILLING TO BE DETERMINED IN FIELD BY ENGINEER. FIELD ENGINEER TO CONFIRM IF ANY FOAM FILLING IS REQUIRED AT EAST ABUTMENT. "FOAM VOID FILLING" BIT ITEM ASSUMES NO FILLING AT EAST ABUTMENT FOR ESTIMATE PURPOSES.

NO.	DATE	REVISION	BY

emcs

STATE OF WISCONSIN DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 11/26/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-62-51

STH 82 OVER KICKAPOO RIVER

COUNTY	VILLAGE
VERNON	LAFARGE

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
AMR	JRM	AMR	AJC

GENERAL PLAN & ELEVATION

SHEET 1 OF 2
359

STATE PROJECT NUMBER

5710-00-72

NOTES

DRAWINGS SHALL NOT BE SCALED

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. EXISTING DIMENSIONS ARE BASED ON THE 1976 ORIGINAL STRUCTURE PLANS.

PIGMENTED SURFACE SEALER RESEAL TO BE APPLIED TO THE TOP AND INSIDE FACES OF PARAPETS.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATION. COST IS CONSIDERED INCLUDED IN BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

A MINIMUM OF 1" OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER BID ITEM "CLEANING DECKS". NOTIFY STRUCTURES SECTION IF MORE THAN 1" CONCRETE REMOVAL IS ANTICIPATED.

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1-½" AT THE CURBS AND 2-⅜"AT THE R_L STH 82 PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2- 3/16". THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½" TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE. IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS TO BE CONSIDERED INCLUDED IN THE COST OF BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PREPARATION DECKS TYPE 1, TYPE 2, AND FULL DEPTH DECK REPAIR ARE BASED ON THE PLANS AND AS DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

SEE ROADWAY PLANS FOR TRAFFIC STAGING AND TRAFFIC CONTROL DEVICES.

CONTAIN ANY DEBRIS FROM CONCRETE SURFACE REPAIR AREAS ON THE PIERS AND ANY FULL DEPTH DECK REPAIR AREAS UNDER BID ITEM "DEBRIS CONTAINMENT B-62-51".

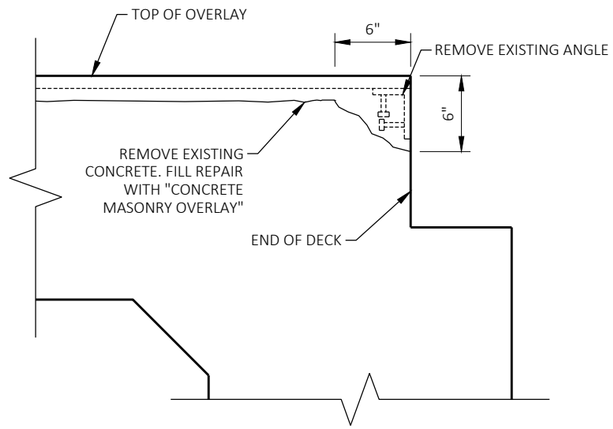
CONCRETE SURFACE REPAIR QUANTITIES ARE AN ESTIMATE ONLY. ACTUAL QUANTITIES TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE FIELD ENGINEER.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A ½-INCH DEEP SAW CUT. SAW CUTS ARE CONSIDERED INCLUDED IN BID ITEM "CONCRETE SURFACE REPAIR".

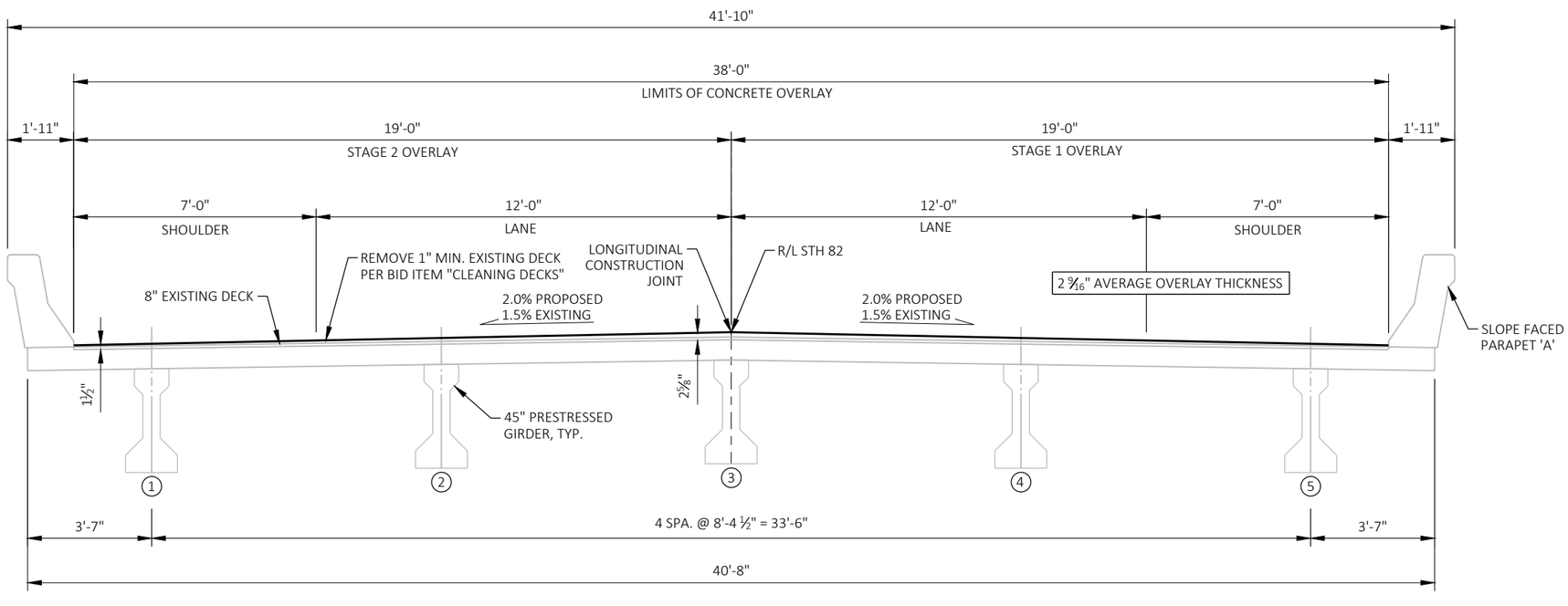
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS AND AROUND THE PIERS SHALL BE COVERED WITH HEAVY RIPRAP TO THE EXTENT SHOWN ON THE GENERAL PLAN AND ELEVATION SHEET.

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	TOTAL
203.0330	DEBRIS CONTAINMENT B-62-51	EACH	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	903
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	209
509.0301	PREPARATION DECKS TYPE 1	SY	64
509.0302	PREPARATION DECKS TYPE 2	SY	28
509.0500	CLEANING DECKS	SY	903
509.1500	CONCRETE SURFACE REPAIR	SF	66
509.2000	FULL-DEPTH DECK REPAIR	SY	5
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	71
606.0300	RIPRAP HEAVY	CY	224
645.0120	GEOTEXTILE TYPE HR	SY	179
SPV.0060	FOAM VOID FILLING	EACH	1



SECTION AT END OF SLAB



TYPICAL SECTION
(LOOKING EAST)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-51

DRAWN BY AMR | PLANS CK'D AJC

TYPICAL SECTION & QUANTITIES

SHEET 2 OF 2

360

8

8

STAGE 1: SOUTH CROSSOVER

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
147+00	14700.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
147+64.224	14764.22	64.22	8.46	0.00	0.00	10	0	0	10	0	10
148+00	14800.00	35.78	10.71	0.00	0.00	13	0	0	23	0	23
148+50	14850.00	50.00	10.74	0.00	0.00	20	0	0	43	0	43
149+00	14900.00	50.00	10.84	0.00	0.00	20	0	0	63	0	63
149+50	14950.00	50.00	10.75	0.00	0.00	20	0	0	83	0	83
150+00	15000.00	50.00	13.09	0.00	0.00	22	0	0	105	0	105
150+50	15050.00	50.00	18.76	0.00	0.00	29	0	0	134	0	134
151+00	15100.00	50.00	22.18	0.00	0.00	38	0	0	172	0	172
151+50	15150.00	50.00	21.16	0.00	0.00	40	0	0	212	0	212
152+00	15200.00	50.00	24.83	0.00	0.00	43	0	0	255	0	255
152+50	15250.00	50.00	25.72	0.00	0.00	47	0	0	302	0	302
153+00	15300.00	50.00	24.88	0.00	0.00	47	0	0	349	0	349
153+50	15350.00	50.00	25.17	0.00	0.00	46	0	0	395	0	395
154+00	15400.00	50.00	27.58	0.00	0.00	49	0	0	444	0	444
154+50	15450.00	50.00	27.47	0.00	0.00	51	0	0	495	0	495
155+00	15500.00	50.00	26.37	0.00	0.00	50	0	0	545	0	545
155+50	15550.00	50.00	29.68	0.00	0.00	52	0	0	597	0	597
156+00	15600.00	50.00	21.09	0.00	0.00	47	0	0	644	0	644
156+50	15650.00	50.00	21.01	0.00	0.00	39	0	0	683	0	683
157+00	15700.00	50.00	22.11	0.00	0.00	40	0	0	723	0	723
157+50	15750.00	50.00	20.92	0.00	0.00	40	0	0	763	0	763
158+00	15800.00	50.00	20.61	0.00	0.00	38	0	0	801	0	801
158+37.883	15837.88	37.88	20.11	0.00	0.00	29	0	0	830	0	830
159+00	15900.00	62.12	0.00	0.00	0.00	23	85	0	853	0	768
				SUBTOTALS CATEGORY 0010		853	85	0			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

STAGE 1: USH 45 NB WIDENING

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
558+40	55840.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
558+43.38	55843.38	3.38	6.88	0.00	0.59	0	0	0	0	0	0
558+50	55850.00	6.62	7.40	0.00	0.39	2	0	0	2	0	2
559+00	55900.00	50.00	9.00	0.00	0.07	15	0	0	17	0	17
559+50	55950.00	50.00	17.81	0.00	0.00	25	0	0	42	0	42
560+00	56000.00	50.00	6.13	0.00	8.60	22	0	8	64	10	54
560+50	56050.00	50.00	6.82	0.00	9.07	12	0	16	76	30	46
561+00	56100.00	50.00	7.08	0.00	8.77	13	0	17	89	51	38
561+50	56150.00	50.00	7.13	0.00	8.70	13	0	16	102	71	31
562+00	56200.00	50.00	7.69	0.00	11.75	14	0	19	116	95	21
562+50	56250.00	50.00	7.18	0.00	17.28	14	0	27	130	129	1
563+00	56300.00	50.00	7.61	0.00	21.60	14	0	36	144	174	-30
563+50	56350.00	50.00	8.60	0.00	21.72	15	0	40	159	224	-65
564+00	56400.00	50.00	8.51	0.00	10.68	16	0	30	175	261	-86
564+25	56425.00	25.00	9.04	0.00	5.18	8	0	7	183	270	-87
564+50	56450.00	25.00	18.63	0.00	2.03	13	0	3	196	274	-78
564+75	56475.00	25.00	33.22	0.00	0.78	24	0	1	220	275	-55
565+00	56500.00	25.00	32.78	0.00	1.22	31	0	1	251	276	-25
565+25	56525.00	25.00	36.46	0.00	1.66	32	0	1	283	278	6
565+50	56550.00	25.00	30.31	0.00	1.68	31	0	2	314	280	34
565+75	56575.00	25.00	20.82	0.00	1.23	24	0	1	338	281	57
566+00	56600.00	25.00	9.69	0.00	0.41	14	0	1	352	283	70
566+25	56625.00	25.00	6.22	0.00	0.17	7	0	0	359	283	77
566+48.16	56648.16	23.16	6.31	0.00	0.02	5	0	0	364	283	82
566+50	56650.00	1.84	0.00	0.00	0.00	0	20	0	364	283	62
SUBTOTALS CATEGORY 0010						364	20	226			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

9

9

STAGE 2: GUARDRAIL 332+99 - 338+56 LT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
332+99	33299.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
333+00	33300.00	1.00	2.88	0.00	0.00	0	0	0	0	0	0
333+16.149	33316.15	16.15	2.68	0.00	0.00	2	0	0	2	0	2
333+50	33350.00	33.85	1.96	0.00	0.00	3	0	0	5	0	5
333+76.149	33376.15	26.15	0.90	0.00	0.11	1	0	0	6	0	6
334+00	33400.00	23.85	1.10	0.00	8.41	1	0	4	7	5	2
334+01.149	33401.15	1.15	1.13	0.00	8.79	0	0	0	7	5	2
334+03.932	33403.93	2.78	1.19	0.00	9.82	0	0	1	7	6	1
334+26.149	33426.15	22.22	1.01	0.00	25.34	1	0	14	8	24	-16
334+50	33450.00	23.85	0.61	0.00	49.22	1	0	33	9	65	-56
334+63.932	33463.93	13.93	0.34	0.00	62.07	0	0	29	9	101	-92
334+88.932	33488.93	25.00	0.42	0.00	64.75	0	0	59	9	175	-166
335+00	33500.00	11.07	0.56	0.00	35.96	0	0	21	9	201	-192
335+13.932	33513.93	13.93	0.79	0.00	8.98	0	0	12	9	216	-207
335+50	33550.00	36.07	0.82	0.00	17.76	1	0	18	10	239	-229
335+75.50	33575.50	25.50	43.00	0.00	0.00	31	13	0	41	239	-210
336+19.63	33619.63	0.00	43.00	0.00	0.00	31	13	0	72	239	-192
336+50	33650.00	30.37	0.00	0.00	1.65	24	0	1	96	240	-169
336+94.204	33694.20	44.20	1.76	0.00	1.01	1	0	2	97	243	-171
337+00	33700.00	5.80	1.79	0.00	1.26	0	0	0	97	243	-171
337+19.198	33719.20	19.20	1.51	0.00	1.24	1	0	1	98	244	-171
337+44.198	33744.20	25.00	1.33	0.00	9.11	1	0	5	99	250	-176
337+50	33750.00	5.80	1.26	0.00	8.05	0	0	2	99	253	-179
337+69.628	33769.63	19.63	1.23	0.00	3.41	1	0	4	100	258	-183
337+94.634	33794.63	25.01	0.97	0.00	3.04	1	0	3	101	261	-185
338+00	33800.00	5.37	0.93	0.00	3.48	0	0	1	101	263	-187
338+04.198	33804.20	4.20	0.88	0.00	3.25	0	0	1	101	264	-188
338+19.628	33819.63	15.43	0.69	0.00	5.49	0	0	2	101	266	-190
338+50	33850.00	30.37	2.50	0.00	0.04	2	0	3	103	270	-192
338+55	33855.00	5.00	3.14	0.00	0.00	1	0	0	104	270	-191
338+56	33856.00	1.00	0.00	0.00	0.00	0	0	0	104	270	-191
			SUBTOTALS CATEGORY 0010			104	25	216			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

9

9

PROJECT NO: 1600-15-70 | HWY: USH 45 | COUNTY: WAUPACA & SHAWANO | EARTHWORK DATA | SHEET 363 | E

STAGE 2: GUARDRAIL 374+99 - 379+76 LT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
374+99	37499.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
375+00	37500.00	1.00	0.00	0.00	1.29	0	0	0	0	0	0
375+50	37550.00	50.00	0.00	0.00	3.60	0	0	5	0	6	-6
375+92.49	37592.49	42.49	0.00	0.00	9.50	0	0	10	0	19	-19
376+00	37600.00	7.51	0.00	0.00	10.94	0	0	3	0	23	-23
376+50	37650.00	50.00	0.00	0.00	15.49	0	0	24	0	53	-53
376+52.491	37652.49	2.49	0.00	0.00	15.12	0	0	1	0	54	-54
376+77.491	37677.49	25.00	0.00	0.00	10.89	0	0	12	0	69	-69
377+00	37700.00	22.51	0.06	0.00	5.87	0	0	7	0	78	-78
377+02.491	37702.49	2.49	0.07	0.00	5.07	0	0	1	0	79	-79
377+50	37750.00	47.51	0.02	0.00	4.49	0	0	8	0	89	-89
378+00	37800.00	50.00	0.00	0.00	6.27	0	0	10	0	101	-101
378+08.665	37808.67	8.67	0.01	0.00	5.81	0	0	2	0	104	-104
378+33.665	37833.67	25.00	0.00	0.00	8.95	0	0	7	0	113	-113
378+50	37850.00	16.33	0.00	0.00	13.12	0	0	7	0	121	-121
378+58.665	37858.67	8.67	0.00	0.00	14.72	0	0	4	0	126	-126
379+00	37900.00	41.33	0.03	0.00	7.05	0	0	17	0	148	-148
379+18.665	37918.67	18.67	0.14	0.00	3.69	0	0	4	0	153	-153
379+50	37950.00	31.33	0.13	0.00	0.78	0	0	3	0	156	-156
379+75	37975.00	25.00	0.38	0.00	0.16	0	0	0	0	156	-156
379+76	37976.00	1.00	0.00	0.00	0.00	0	0	0	0	156	-156
SUBTOTALS CATEGORY 0010						0	0	125			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

STAGE 2: GUARDRAIL 476+99 - 484+51 LT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
476+99	47699.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
477+00	47700.00	1.00	1.66	0.00	0.00	0	0	0	0	0	0
477+50	47750.00	50.00	1.47	0.00	0.00	3	0	0	3	0	3
477+50.435	47750.43	0.43	1.47	0.00	0.00	0	0	0	3	0	3
478+00	47800.00	49.57	1.62	0.00	0.00	3	0	0	6	0	6
478+04.937	47804.94	4.94	1.64	0.00	0.00	0	0	0	6	0	6
478+30.01	47830.01	25.07	1.78	0.00	0.00	2	0	0	8	0	8
478+50	47850.00	19.99	1.90	0.00	0.00	1	0	0	9	0	9
478+55.058	47855.06	5.06	1.93	0.00	0.00	0	0	0	9	0	9
479+00	47900.00	44.94	1.62	0.00	0.00	3	0	0	12	0	12
479+50	47950.00	50.00	1.39	0.00	0.42	3	0	0	15	0	15
479+63.83	47963.83	13.83	1.34	0.00	1.09	1	0	0	16	0	16
480+00	48000.00	36.17	0.16	0.00	7.76	1	0	6	17	8	10
480+30.865	48030.86	30.86	0.00	0.00	17.15	0	0	14	17	25	-8
480+49.377	48049.38	18.51	0.36	0.00	4.91	0	0	8	17	35	-18
480+50	48050.00	0.62	0.39	0.00	4.54	0	0	0	17	35	-18
480+55.73	48055.73	5.73	0.68	0.00	1.74	0	0	1	17	36	-19
480+74.43	48074.43	18.70	1.10	0.00	0.72	1	0	1	18	38	-20
480+80.597	48080.60	6.17	1.13	0.00	1.87	0	0	0	18	38	-20
480+99.504	48099.50	18.91	1.09	0.00	0.57	1	0	1	19	39	-20
481+00	48100.00	0.50	1.09	0.00	0.56	0	0	0	19	39	-20
481+50	48150.00	50.00	1.03	0.00	0.69	2	0	1	21	40	-19
481+55.806	48155.81	5.81	1.22	0.00	0.73	0	0	0	21	40	-19
482+00	48200.00	44.19	1.02	0.00	0.71	2	0	1	23	41	-18
482+50	48250.00	50.00	1.37	0.00	0.94	2	0	2	25	44	-19
482+61.027	48261.03	11.03	1.42	0.00	0.92	1	0	0	26	44	-18
482+85.896	48285.90	24.87	0.92	0.00	2.16	1	0	1	27	45	-18
483+00	48300.00	14.10	0.84	0.00	4.43	0	0	2	27	48	-21
483+10.76	48310.76	10.76	0.76	0.00	5.84	0	0	2	27	50	-23
483+50	48350.00	39.24	0.29	0.00	3.46	1	0	7	28	59	-31
483+75.324	48375.32	25.32	0.63	0.00	2.32	0	0	3	28	63	-35
484+00	48400.00	24.68	0.69	0.00	0.34	1	0	1	29	64	-35
484+50	48450.00	50.00	1.04	0.00	0.00	2	0	0	31	64	-33
484+51	48451.00	1.00	0.00	0.00	0.00	0	0	0	31	64	-33
				SUBTOTALS CATEGORY 0010		31	0	51			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

STAGE 2: GUARDRAIL 519+99 - 530+51 LT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
519+99	51999.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
520+00	52000.00	1.00	0.00	0.00	0.00	0	0	0	0	0	0
520+50	52050.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
521+00	52100.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
521+50	52150.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
522+00	52200.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
522+30.163	52230.16	30.16	1.38	0.00	0.00	1	0	0	1	0	1
522+50	52250.00	19.84	1.12	0.00	0.00	1	0	0	2	0	2
522+90.146	52290.15	40.15	1.16	0.00	0.00	2	0	0	4	0	4
523+00	52300.00	9.85	1.44	0.00	0.00	0	0	0	4	0	4
523+15.154	52315.15	15.15	1.65	0.00	0.00	1	0	0	5	0	5
523+40.146	52340.15	24.99	2.05	0.00	0.00	2	0	0	7	0	7
523+50	52350.00	9.85	2.17	0.00	0.00	1	0	0	8	0	8
524+00	52400.00	50.00	1.19	0.00	0.00	3	0	0	11	0	11
524+10.681	52410.68	10.68	1.00	0.00	0.30	0	0	0	11	0	11
524+50	52450.00	39.32	0.00	0.00	7.26	1	0	5	12	6	6
524+97.98	52497.98	47.98	0.01	0.00	5.76	0	0	12	12	21	-9
525+00	52500.00	2.02	0.00	0.00	6.86	0	0	0	12	21	-9
525+22.98	52522.98	22.98	0.05	0.00	4.51	0	0	5	12	28	-16
525+47.98	52547.98	25.00	0.00	0.00	5.60	0	0	5	12	34	-22
525+50	52550.00	2.02	0.00	0.00	5.53	0	0	0	12	34	-22
525+81.32	52581.32	31.32	0.00	0.00	6.10	0	0	7	12	43	-31
526+00	52600.00	18.68	0.00	0.00	1.04	0	0	2	12	45	-33
526+06.32	52606.32	6.32	0.00	0.00	1.14	0	0	0	12	45	-33
526+31.32	52631.32	25.00	0.00	0.00	1.62	0	0	1	12	46	-34
526+50	52650.00	18.68	0.01	0.00	2.58	0	0	1	12	48	-36
526+91.32	52691.32	41.32	0.18	0.00	1.18	0	0	3	12	51	-39
527+00	52700.00	8.68	0.21	0.00	1.00	0	0	0	12	51	-39
527+50	52750.00	50.00	0.03	0.00	1.04	0	0	2	12	54	-42
527+89.154	52789.15	39.15	0.03	0.00	4.38	0	0	4	12	59	-47
528+00	52800.00	10.85	0.19	0.00	15.57	0	0	4	12	64	-52
528+14.154	52814.15	14.15	1.50	0.00	28.48	0	0	12	12	79	-67
528+39.154	52839.15	25.00	2.80	0.00	38.41	2	0	31	14	118	-104
528+50	52850.00	10.85	2.44	0.00	35.36	1	0	15	15	136	-121
528+99.144	52899.14	49.14	2.50	0.00	22.08	4	0	52	19	201	-182
529+00	52900.00	0.86	2.48	0.00	21.77	0	0	1	19	203	-184
529+50	52950.00	50.00	66.20	0.00	0.00	64	0	20	83	228	-145
530+00	53000.00	50.00	1.03	0.00	0.00	62	0	0	145	228	-83
530+50	53050.00	50.00	0.63	0.00	0.00	2	0	0	147	228	-81
530+51	53051.00	1.00	0.00	0.00	0.00	0	0	0	147	228	-81
				SUBTOTALS CATEGORY 0010		147	0	182			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

STAGE 2: GUARDRAIL 541+99 - 547+51 LT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
541+99	54199.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
542+00	54200.00	1.00	0.22	0.00	0.02	0	0	0	0	0	0
542+50	54250.00	50.00	0.20	0.00	3.42	0	0	3	0	4	-4
542+64.16	54264.16	14.16	0.23	0.00	1.48	0	0	1	0	5	-5
542+83.438	54283.44	19.28	0.26	0.00	2.98	0	0	2	0	8	-8
543+00	54300.00	16.56	0.11	0.00	5.10	0	0	2	0	10	-10
543+24.16	54324.16	24.16	0.03	0.00	10.56	0	0	7	0	19	-19
543+43.438	54343.44	19.28	0.00	0.00	19.10	0	0	11	0	33	-33
543+49.16	54349.16	5.72	0.03	0.00	17.62	0	0	4	0	38	-38
543+50	54350.00	0.84	0.03	0.00	17.29	0	0	1	0	39	-39
543+68.438	54368.44	18.44	0.13	0.00	8.53	0	0	9	0	50	-50
543+74.16	54374.16	5.72	0.15	0.00	6.73	0	0	2	0	53	-53
543+93.444	54393.44	19.28	0.17	0.00	1.84	0	0	3	0	56	-56
544+00	54400.00	6.56	0.14	0.00	1.23	0	0	0	0	56	-56
544+50	54450.00	50.00	0.00	0.00	2.92	0	0	4	0	61	-61
545+00	54500.00	50.00	0.04	0.00	1.03	0	0	4	0	66	-66
545+50	54550.00	50.00	0.34	0.00	8.05	0	0	8	0	76	-76
545+55.334	54555.33	5.33	0.33	0.00	9.23	0	0	2	0	79	-79
545+74.61	54574.61	19.28	0.16	0.00	14.47	0	0	8	0	89	-89
545+80.33	54580.33	5.72	0.25	0.00	16.97	0	0	3	0	93	-93
545+99.612	54599.61	19.28	0.15	0.00	20.79	0	0	13	0	109	-109
546+00	54600.00	0.39	0.15	0.00	20.83	0	0	0	0	109	-109
546+05.334	54605.33	5.33	0.12	0.00	23.06	0	0	4	0	114	-114
546+24.612	54624.61	19.28	0.02	0.00	28.65	0	0	18	0	136	-136
546+34.314	54634.31	9.70	0.02	0.00	27.07	0	0	10	0	149	-149
546+50	54650.00	15.69	0.04	0.00	21.32	0	0	14	0	166	-166
546+78.521	54678.52	28.52	0.17	0.00	10.97	0	0	17	0	188	-188
547+00	54700.00	21.48	0.13	0.00	10.26	0	0	8	0	198	-198
547+50	54750.00	50.00	0.01	0.00	11.58	0	0	20	0	223	-223
547+51	54751.00	1.00	0.00	0.00	0.00	0	0	0	0	223	-223
SUBTOTALS CATEGORY 0010						0	0	178			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

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PROJECT NO: 1600-15-70 | HWY: USH 45 | COUNTY: WAUPACA & SHAWANO | EARTHWORK DATA | SHEET 367 | E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090101_EW.DWG
LAYOUT NAME - 07

PLOT DATE : 4/30/2025 7:32 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

STAGE 2: USH 45 SB WIDENING

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
559+75	55975.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
559+99	55999.00	24.00	0.00	0.00	0.00	0	0	0	0	0	0
560+00	56000.00	1.00	5.52	0.00	0.00	0	0	0	0	0	0
560+50	56050.00	50.00	5.05	0.00	0.07	10	0	0	10	0	10
561+00	56100.00	50.00	5.39	0.00	0.05	10	0	0	20	0	20
561+50	56150.00	50.00	5.57	0.00	0.12	10	0	0	30	0	30
562+00	56200.00	50.00	5.25	0.00	0.20	10	0	0	40	0	40
562+50	56250.00	50.00	5.37	0.00	0.74	10	0	1	50	1	49
563+00	56300.00	50.00	5.98	0.00	1.65	11	0	2	61	4	57
563+50	56350.00	50.00	5.04	0.00	3.30	10	0	5	71	10	61
564+00	56400.00	50.00	5.67	0.00	2.43	10	0	5	81	16	65
564+50	56450.00	50.00	7.01	0.00	1.92	12	0	4	93	21	72
565+00	56500.00	50.00	8.12	0.00	3.53	14	0	5	107	28	80
565+50	56550.00	50.00	3.83	0.00	8.94	11	0	12	118	43	76
566+00	56600.00	50.00	3.63	0.00	3.84	7	0	12	125	58	68
566+50	56650.00	50.00	3.95	0.00	0.22	7	0	4	132	63	70
567+00	56700.00	50.00	3.72	0.00	0.03	7	0	0	139	63	77
567+01	56701.00	1.00	0.00	0.00	0.00	0	5	0	139	63	72
SUBTOTALS CATEGORY 0010						139	5	50			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

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STAGE 3: GUARDRAIL 332+99 - 338+56 RT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
332+99	33299.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
333+00	33300.00	1.00	0.05	0.00	9.20	0	0	0	0	0	0
333+16.149	33316.15	16.15	0.12	0.00	14.35	0	0	7	0	9	-9
333+50	33350.00	33.85	0.15	0.00	25.30	0	0	25	0	40	-40
333+76.149	33376.15	26.15	0.13	0.00	39.17	0	0	31	0	79	-79
334+00	33400.00	23.85	0.53	0.00	19.41	0	0	26	0	111	-111
334+01.149	33401.15	1.15	0.57	0.00	18.80	0	0	1	0	113	-113
334+03.932	33403.93	2.78	0.64	0.00	17.33	0	0	2	0	115	-115
334+26.149	33426.15	22.22	1.33	0.00	7.57	1	0	10	1	128	-127
334+50	33450.00	23.85	1.76	0.00	3.54	1	0	5	2	134	-132
334+63.932	33463.93	13.93	1.52	0.00	2.70	1	0	2	3	136	-133
334+88.932	33488.93	25.00	0.99	0.00	0.25	1	0	1	4	138	-134
335+00	33500.00	11.07	1.07	0.00	0.11	0	0	0	4	138	-134
335+13.932	33513.93	13.93	1.34	0.00	0.01	1	0	0	5	138	-133
335+50	33550.00	36.07	0.98	0.00	6.38	2	0	4	7	143	-136
335+75.50	33575.50	25.50	43.00	0.00	0.00	31	13	0	38	143	-117
336+19.63	33619.63	0.00	43.00	0.00	0.00	31	13	0	69	143	-99
336+50	33650.00	30.37	0.00	0.00	3.67	24	0	2	93	145	-77
336+94.204	33694.20	44.20	0.69	0.00	1.29	1	0	4	94	150	-81
337+00	33700.00	5.80	0.76	0.00	1.60	0	0	0	94	150	-81
337+19.198	33719.20	19.20	0.95	0.00	3.36	1	0	2	95	153	-83
337+44.198	33744.20	25.00	0.27	0.00	12.22	1	0	7	96	161	-90
337+50	33750.00	5.80	0.24	0.00	12.05	0	0	3	96	165	-94
337+69.628	33769.63	19.63	0.14	0.00	9.96	0	0	8	96	175	-104
337+94.634	33794.63	25.01	0.36	0.00	4.18	0	0	7	96	184	-113
338+00	33800.00	5.37	0.42	0.00	3.39	0	0	1	96	185	-114
338+04.198	33804.20	4.20	0.47	0.00	2.82	0	0	0	96	185	-114
338+19.628	33819.63	15.43	0.41	0.00	1.06	0	0	1	96	186	-115
338+50	33850.00	30.37	0.97	0.00	0.00	1	0	1	97	188	-116
338+55	33855.00	5.00	1.23	0.00	0.00	0	0	0	97	188	-116
338+56	33856.00	1.00	0.00	0.00	0.00	0	0	0	97	188	-116
				SUBTOTALS CATEGORY 0010		97	25	150			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

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PROJECT NO: 1600-15-70 | HWY: USH 45 | COUNTY: WAUPACA & SHAWANO | EARTHWORK DATA | SHEET 369 | E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090101_EW.DWG
LAYOUT NAME - 09

PLOT DATE : 4/30/2025 7:32 PM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

STAGE 3: GUARDRAIL 476+99 - 484+51 RT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
476+99	47699.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
477+00	47700.00	1.00	1.85	0.00	0.00	0	0	0	0	0	0
477+50	47750.00	50.00	1.55	0.00	0.46	3	0	0	3	0	3
477+50.435	47750.43	0.43	1.56	0.00	0.49	0	0	0	3	0	3
478+00	47800.00	49.57	0.80	0.00	8.05	2	0	8	5	10	-5
478+04.937	47804.94	4.94	0.74	0.00	7.64	0	0	1	5	11	-6
478+30.01	47830.01	25.07	1.15	0.00	1.25	1	0	4	6	16	-10
478+50	47850.00	19.99	1.51	0.00	0.10	1	0	1	7	18	-11
478+55.058	47855.06	5.06	1.67	0.00	0.21	0	0	0	7	18	-11
479+00	47900.00	44.94	1.25	0.00	0.27	2	0	0	9	18	-9
479+50	47950.00	50.00	0.53	0.00	3.08	2	0	3	11	21	-10
479+63.83	47963.83	13.83	0.41	0.00	4.24	0	0	2	11	24	-13
480+00	48000.00	36.17	0.12	0.00	5.73	0	0	7	11	33	-22
480+30.865	48030.86	30.86	0.37	0.00	6.12	0	0	7	11	41	-30
480+49.377	48049.38	18.51	0.51	0.00	7.61	0	0	5	11	48	-37
480+50	48050.00	0.62	0.51	0.00	7.32	0	0	0	11	48	-37
480+55.73	48055.73	5.73	0.50	0.00	3.89	0	0	1	11	49	-38
480+74.43	48074.43	18.70	0.05	0.00	9.82	0	0	5	11	55	-44
480+80.597	48080.60	6.17	0.00	0.00	13.97	0	0	3	11	59	-48
480+99.504	48099.50	18.91	0.00	0.00	28.10	0	0	15	11	78	-67
481+00	48100.00	0.50	0.00	0.00	28.06	0	0	1	11	79	-68
481+50	48150.00	50.00	0.59	0.00	14.48	1	0	39	12	128	-116
481+55.806	48155.81	5.81	0.80	0.00	11.95	0	0	3	12	131	-119
482+00	48200.00	44.19	1.00	0.00	0.00	1	0	10	13	144	-131
482+50	48250.00	50.00	0.87	0.00	0.00	2	0	0	15	144	-129
482+61.027	48261.03	11.03	0.76	0.00	0.00	0	0	0	15	144	-129
482+85.896	48285.90	24.87	0.99	0.00	0.00	1	0	0	16	144	-128
483+00	48300.00	14.10	1.10	0.00	0.00	1	0	0	17	144	-127
483+10.76	48310.76	10.76	1.10	0.00	0.00	0	0	0	17	144	-127
483+50	48350.00	39.24	1.05	0.00	0.00	2	0	0	19	144	-125
483+75.324	48375.32	25.32	1.13	0.00	0.00	1	0	0	20	144	-124
484+00	48400.00	24.68	1.27	0.00	0.00	1	0	0	21	144	-123
484+50	48450.00	50.00	1.23	0.00	0.00	2	0	0	23	144	-121
484+51	48451.00	1.00	0.00	0.00	0.00	0	0	0	23	144	-121
				SUBTOTALS CATEGORY 0010		23	0	115			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

STAGE 3: GUARDRAIL 519+99 - 530+51 RT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
519+99	51999.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
520+00	52000.00	1.00	13.56	0.00	0.02	0	0	0	0	0	0
520+50	52050.00	50.00	28.64	0.00	0.01	39	0	0	39	0	39
521+00	52100.00	50.00	39.26	0.00	0.00	63	0	0	102	0	102
521+50	52150.00	50.00	33.21	0.00	0.00	67	0	0	169	0	169
522+00	52200.00	50.00	29.85	0.00	0.02	58	0	0	227	0	227
522+30.163	52230.16	30.16	28.60	0.00	0.44	33	0	0	260	0	260
522+50	52250.00	19.84	29.37	0.00	1.12	21	0	1	281	1	280
522+90.146	52290.15	40.15	25.01	0.00	3.21	40	0	3	321	5	316
523+00	52300.00	9.85	21.17	0.00	2.07	8	0	1	329	6	323
523+15.154	52315.15	15.15	17.88	0.00	0.80	11	0	1	340	8	333
523+40.146	52340.15	24.99	20.90	0.00	0.29	18	0	1	358	9	349
523+50	52350.00	9.85	21.13	0.00	0.28	8	0	0	366	9	357
524+00	52400.00	50.00	12.17	0.00	0.45	31	0	1	397	10	387
524+10.681	52410.68	10.68	7.05	0.00	1.26	4	0	0	401	10	391
524+50	52450.00	39.32	0.04	0.00	25.00	5	0	19	406	34	372
524+97.98	52497.98	47.98	27.22	0.00	0.27	24	0	22	430	61	369
525+00	52500.00	2.02	23.76	0.00	0.64	2	0	0	432	61	371
525+22.98	52522.98	22.98	0.80	0.00	2.53	10	0	1	442	63	380
525+47.98	52547.98	25.00	0.00	0.00	5.48	0	0	4	442	68	375
525+50	52550.00	2.02	0.00	0.00	5.58	0	0	0	442	68	375
525+81.32	52581.32	31.32	0.00	0.00	8.51	0	0	8	442	78	365
526+00	52600.00	18.68	0.00	0.00	12.97	0	0	7	442	86	356
526+06.32	52606.32	6.32	0.00	0.00	14.57	0	0	3	442	90	352
526+31.32	52631.32	25.00	0.00	0.00	23.01	0	0	17	442	111	331
526+50	52650.00	18.68	0.00	0.00	18.04	0	0	14	442	129	313
526+91.32	52691.32	41.32	0.10	0.00	7.80	0	0	20	442	154	288
527+00	52700.00	8.68	0.13	0.00	5.98	0	0	2	442	156	286
527+50	52750.00	50.00	0.39	0.00	0.00	0	0	6	442	164	278
527+89.154	52789.15	39.15	0.50	0.00	0.00	1	0	0	443	164	279
528+00	52800.00	10.85	0.51	0.00	0.00	0	0	0	443	164	279
528+14.154	52814.15	14.15	0.55	0.00	0.00	0	0	0	443	164	279
528+39.154	52839.15	25.00	0.62	0.00	0.00	1	0	0	444	164	280
528+50	52850.00	10.85	0.71	0.00	0.00	0	0	0	444	164	280
528+99.144	52899.14	49.14	1.21	0.00	0.00	2	0	0	446	164	282
529+00	52900.00	0.86	1.21	0.00	0.00	0	0	0	446	164	282
529+50	52950.00	50.00	0.00	0.00	0.00	1	0	0	447	164	283
530+00	53000.00	50.00	0.00	0.00	0.00	0	0	0	447	164	283
530+50	53050.00	50.00	0.00	0.00	0.00	0	0	0	447	164	283
530+51	53051.00	1.00	0.00	0.00	0.00	0	0	0	447	164	283
			SUBTOTALS CATEGORY 0010			447	0	131			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

STAGE 3: GUARDRAIL 541+99 - 547+51 RT

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
541+99	54199.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
542+00	54200.00	1.00	1.58	0.00	0.00	0	0	0	0	0	0
542+50	54250.00	50.00	0.56	0.00	13.84	2	0	13	2	16	-14
542+64.16	54264.16	14.16	0.52	0.00	17.42	0	0	8	2	26	-24
542+83.438	54283.44	19.28	0.32	0.00	21.55	0	0	14	2	44	-42
543+00	54300.00	16.56	0.19	0.00	25.12	0	0	14	2	61	-59
543+24.16	54324.16	24.16	0.00	0.00	29.03	0	0	24	2	91	-89
543+43.438	54343.44	19.28	0.08	0.00	23.96	0	0	19	2	115	-113
543+49.16	54349.16	5.72	0.11	0.00	22.15	0	0	5	2	121	-119
543+50	54350.00	0.84	0.12	0.00	21.88	0	0	1	2	123	-121
543+68.438	54368.44	18.44	0.22	0.00	18.82	0	0	14	2	140	-138
543+74.16	54374.16	5.72	0.22	0.00	17.66	0	0	4	2	145	-143
543+93.444	54393.44	19.28	0.20	0.00	15.69	0	0	12	2	160	-158
544+00	54400.00	6.56	0.20	0.00	15.56	0	0	4	2	165	-163
544+50	54450.00	50.00	0.08	0.00	1.33	0	0	16	2	185	-183
545+00	54500.00	50.00	0.00	0.00	3.12	0	0	4	2	190	-188
545+50	54550.00	50.00	0.00	0.00	18.97	0	0	20	2	215	-213
545+55.334	54555.33	5.33	0.01	0.00	15.14	0	0	3	2	219	-217
545+74.61	54574.61	19.28	0.04	0.00	2.07	0	0	6	2	226	-224
545+80.33	54580.33	5.72	0.55	0.00	1.22	0	0	0	2	226	-224
545+99.612	54599.61	19.28	0.08	0.00	10.04	0	0	4	2	231	-229
546+00	54600.00	0.39	0.09	0.00	10.23	0	0	0	2	231	-229
546+05.334	54605.33	5.33	0.11	0.00	11.29	0	0	2	2	234	-232
546+24.612	54624.61	19.28	0.16	0.00	9.99	0	0	8	2	244	-242
546+34.314	54634.31	9.70	0.16	0.00	7.69	0	0	3	2	248	-246
546+50	54650.00	15.69	0.12	0.00	6.03	0	0	4	2	253	-251
546+78.521	54678.52	28.52	0.02	0.00	3.66	0	0	5	2	259	-257
547+00	54700.00	21.48	0.02	0.00	2.46	0	0	2	2	261	-259
547+50	54750.00	50.00	0.61	0.00	0.38	1	0	3	3	265	-262
547+51	54751.00	1.00	0.00	0.00	0.00	0	0	0	3	265	-262
SUBTOTALS CATEGORY 0010						3	0	212			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

STAGE 3: USH 45 NB WIDENING REMOVAL

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
558+41	55841.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
558+42	55842.00	1.00	0.14	0.00	0.45	0	0	0	0	0	0
558+50	55850.00	8.00	0.13	0.00	0.51	0	0	0	0	0	0
559+00	55900.00	50.00	6.73	0.00	0.00	6	0	0	6	0	6
559+50	55950.00	50.00	6.06	0.00	0.06	12	0	0	18	0	18
559+99	55999.00	49.00	9.84	0.00	0.00	14	0	0	32	0	32
560+00	56000.00	1.00	9.94	0.00	0.00	0	0	0	32	0	32
560+50	56050.00	50.00	14.64	0.00	0.00	23	0	0	55	0	55
561+00	56100.00	50.00	16.51	0.00	0.00	29	0	0	84	0	84
561+50	56150.00	50.00	17.55	0.00	0.00	32	0	0	116	0	116
562+00	56200.00	50.00	19.23	0.00	0.00	34	0	0	150	0	150
562+50	56250.00	50.00	28.13	0.00	0.00	44	0	0	194	0	194
563+00	56300.00	50.00	25.55	0.00	0.00	50	0	0	244	0	244
563+50	56350.00	50.00	23.61	0.00	0.00	46	0	0	290	0	290
564+00	56400.00	50.00	14.44	0.00	0.00	35	0	0	325	0	325
564+50	56450.00	50.00	12.09	0.00	0.72	25	0	1	350	1	349
565+00	56500.00	50.00	13.96	0.00	0.32	24	0	1	374	3	372
565+50	56550.00	50.00	19.11	0.00	0.05	31	0	0	405	3	403
566+00	56600.00	50.00	40.04	0.00	1.92	55	0	2	460	5	455
566+49	56649.00	49.00	0.57	0.00	2.87	37	0	4	497	10	487
566+50	56650.00	1.00	0.00	0.00	0.00	0	0	0	497	10	487
567+00	56700.00	50.00	0.00	0.00	0.00	0	0	0	497	10	487
567+01	56701.00	1.00	0.00	0.00	0.00	0	47	0	497	10	440
			SUBTOTALS CATEGORY 0010			497	47	8			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

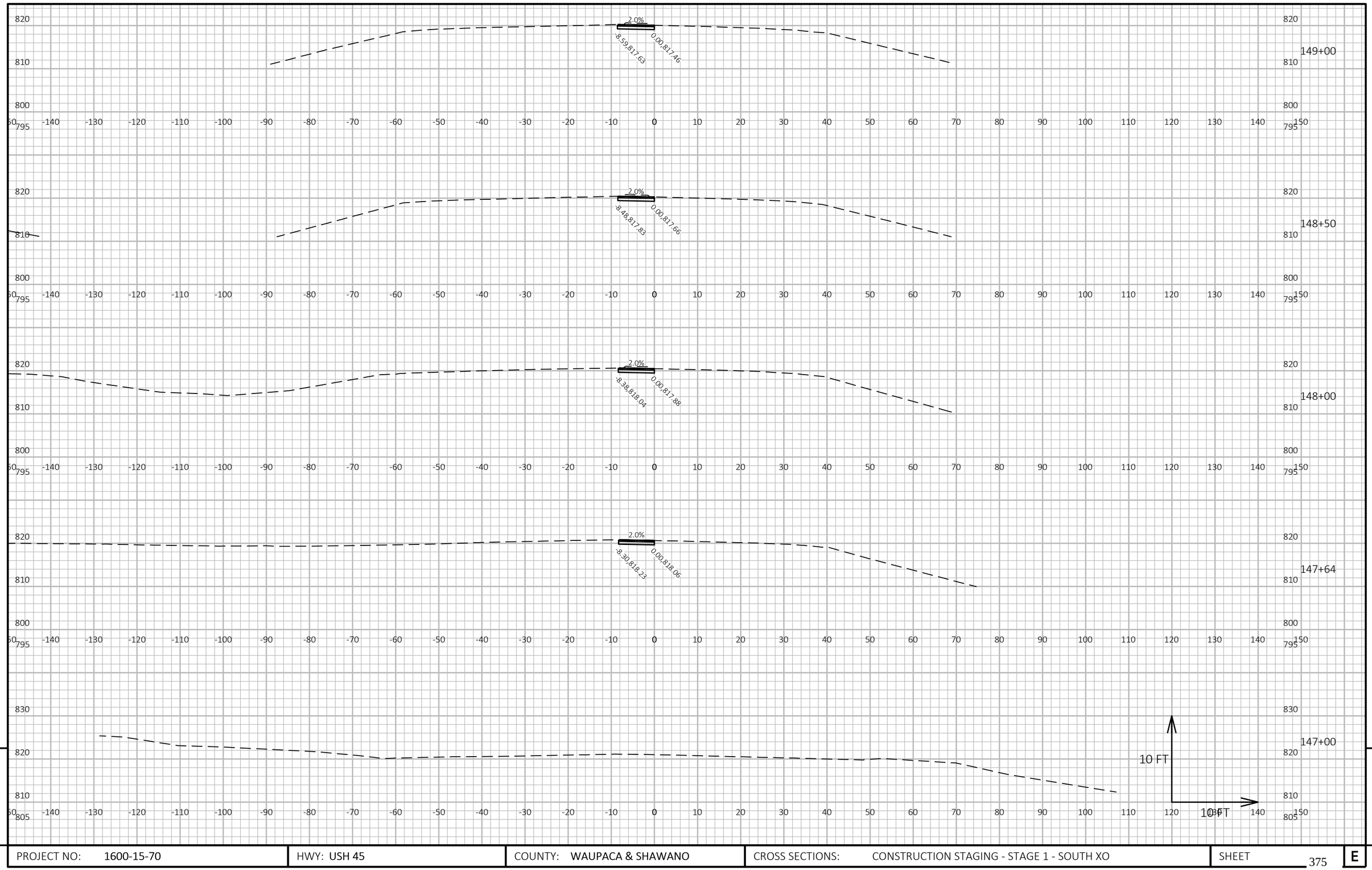
STAGE 4: USH 45 SB WIDENING REMOVAL

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
558+41	55841.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
558+42	55842.00	1.00	0.00	0.00	0.00	0	0	0	0	0	0
558+50	55850.00	8.00	0.00	0.00	0.00	0	0	0	0	0	0
559+00	55900.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
559+50	55950.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
559+99	55999.00	49.00	0.00	0.00	0.00	0	0	0	0	0	0
560+00	56000.00	1.00	0.46	0.00	6.86	0	0	0	0	0	0
560+50	56050.00	50.00	0.78	0.00	8.96	1	0	15	1	19	-18
561+00	56100.00	50.00	1.25	0.00	8.83	2	0	16	3	39	-36
561+50	56150.00	50.00	1.64	0.00	10.34	3	0	18	6	61	-55
562+00	56200.00	50.00	2.18	0.00	16.42	4	0	25	10	93	-83
562+50	56250.00	50.00	2.93	0.00	21.20	5	0	35	15	136	-121
563+00	56300.00	50.00	3.84	0.00	17.84	6	0	36	21	181	-160
563+50	56350.00	50.00	4.91	0.00	13.74	8	0	29	29	218	-189
564+00	56400.00	50.00	6.13	0.00	8.49	10	0	21	39	244	-205
564+50	56450.00	50.00	7.51	0.00	5.18	13	0	13	52	260	-208
565+00	56500.00	50.00	2.06	0.00	4.36	9	0	9	61	271	-210
565+50	56550.00	50.00	7.95	0.00	0.72	9	0	5	70	278	-208
566+00	56600.00	50.00	3.79	0.00	2.18	11	0	3	81	281	-200
566+49	56649.00	49.00	1.30	0.00	4.76	5	0	6	86	289	-203
566+50	56650.00	1.00	1.29	0.00	4.85	0	0	0	86	289	-203
567+00	56700.00	50.00	1.08	0.00	5.65	2	0	10	88	301	-213
567+01	56701.00	1.00	0.00	0.00	0.00	0	42	0	88	301	-255
				SUBTOTALS CATEGORY 0010		88	42	241			

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE SUBSTAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SUBSTAGE.

9

9



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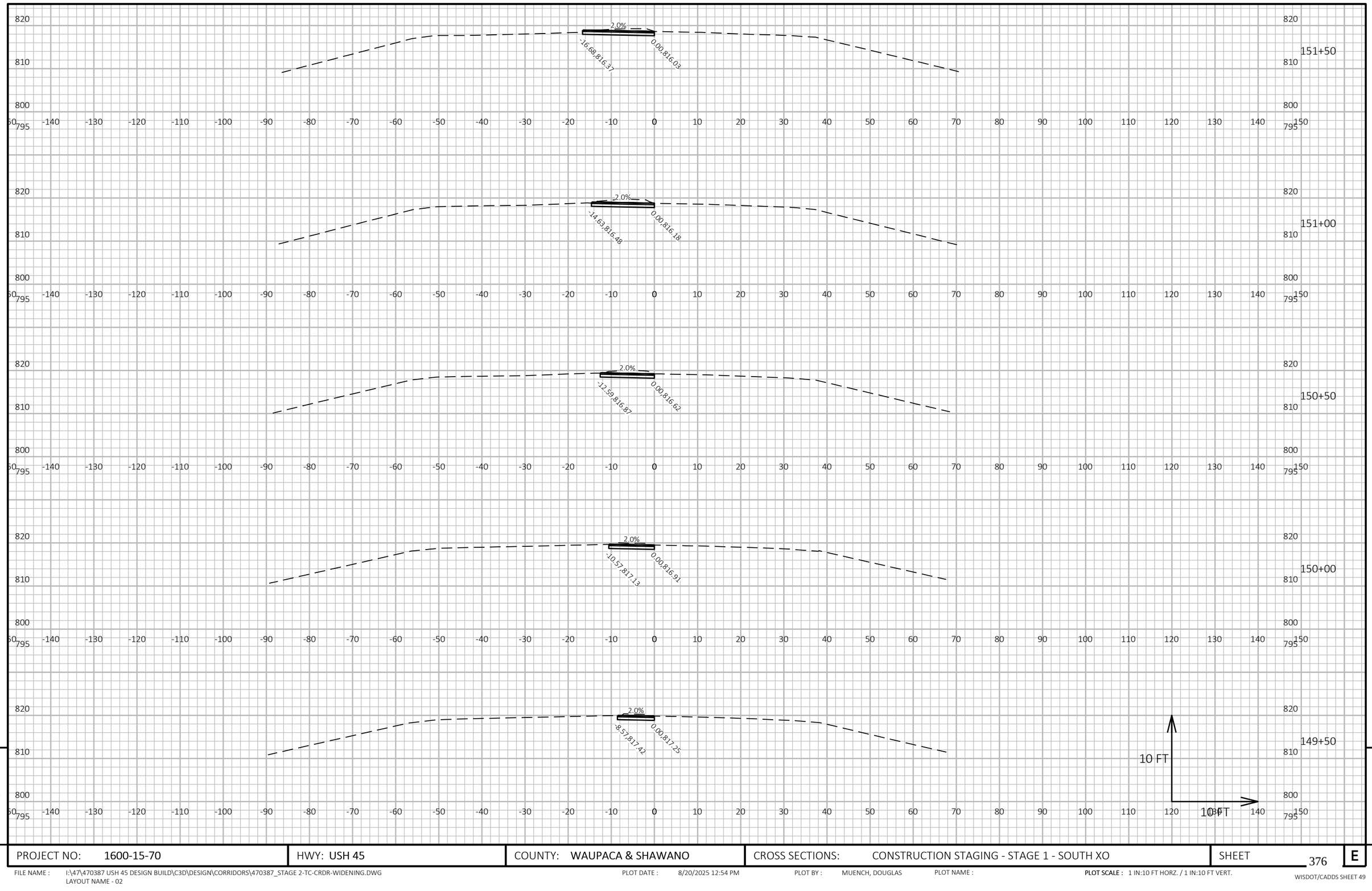
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - SOUTH XO	SHEET 375	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 01

PLOT DATE : 8/20/2025 12:54 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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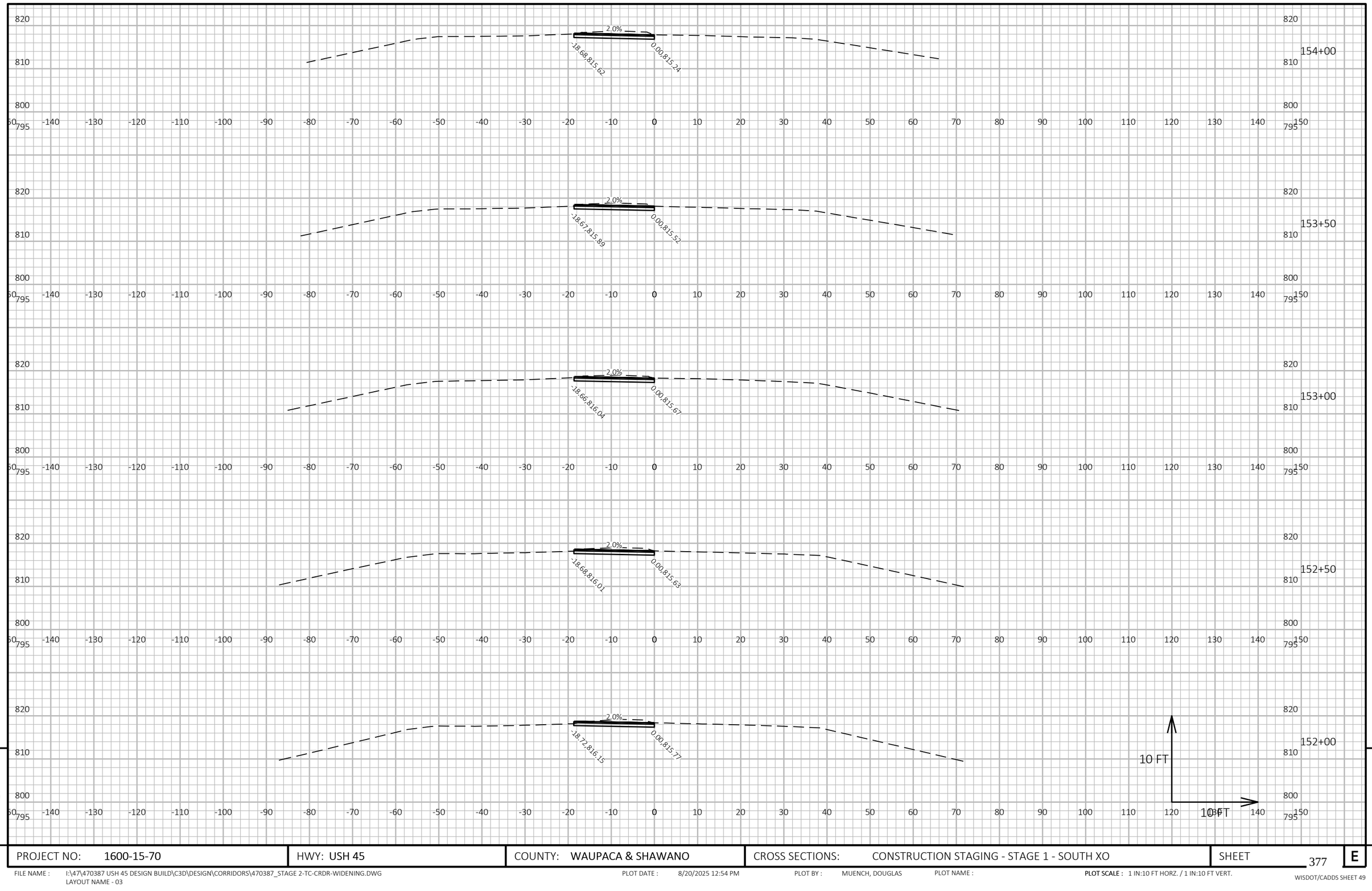
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - SOUTH XO	SHEET 376	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 02

PLOT DATE : 8/20/2025 12:54 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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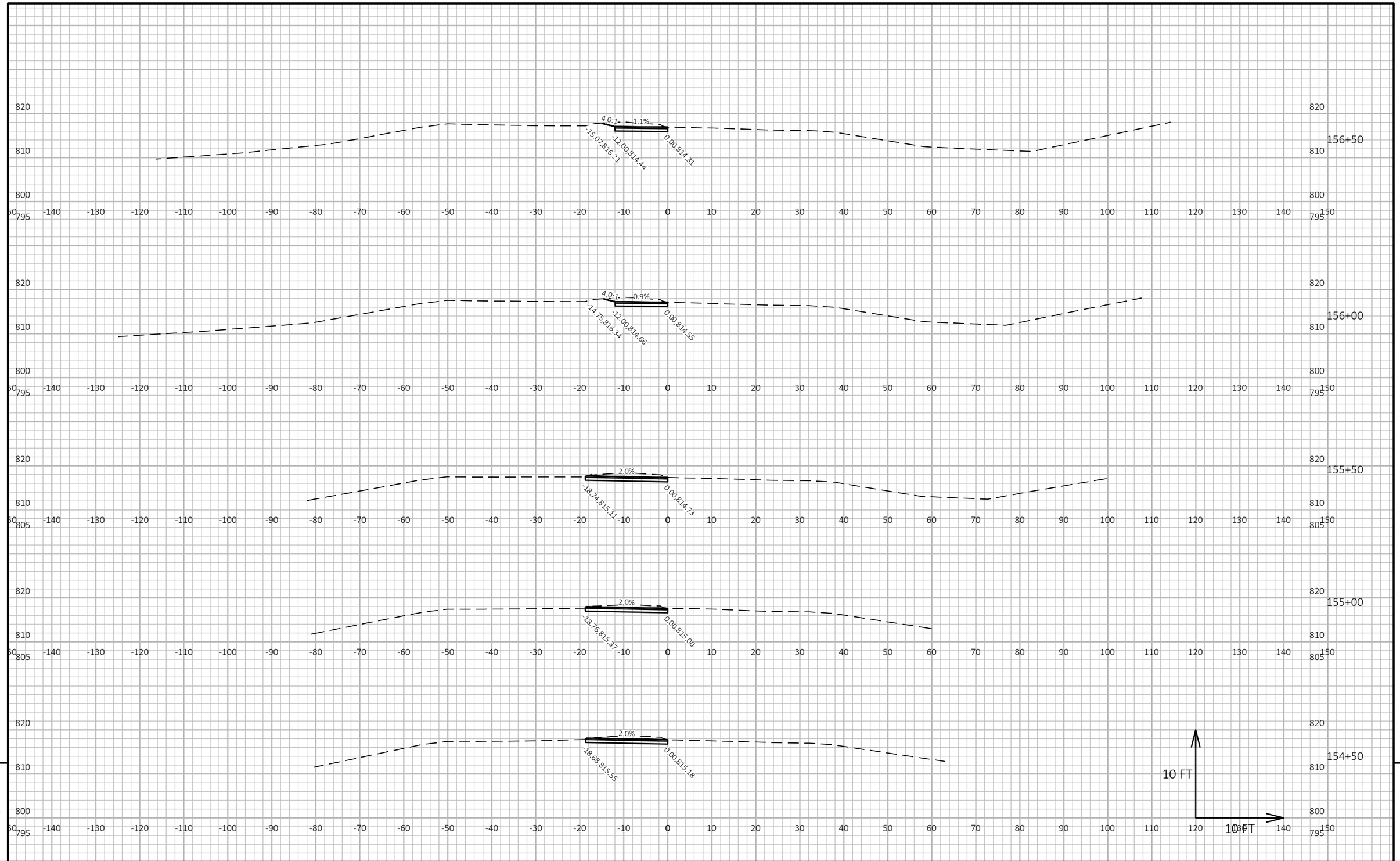
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - SOUTH XO	SHEET 377	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 03

PLOT DATE : 8/20/2025 12:54 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - SOUTH XO	SHEET 378	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 04

PLOT DATE : 8/28/2025 3:19 AM PLOT BY : DALTON, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

159+00

158+38

4.0:1 2.0%
-14.78,815.50
-11.96,813.80
0.00,813.56

158+00

4.0:1 1.8%
-15.05,815.68
-11.97,813.91
0.00,813.69

157+50

4.0:1 1.6%
-15.15,815.85
-11.98,814.05
0.00,813.86

157+00

4.0:1 1.4%
-15.23,816.05
-11.99,814.24
0.00,814.08

10 FT
10 FT

9

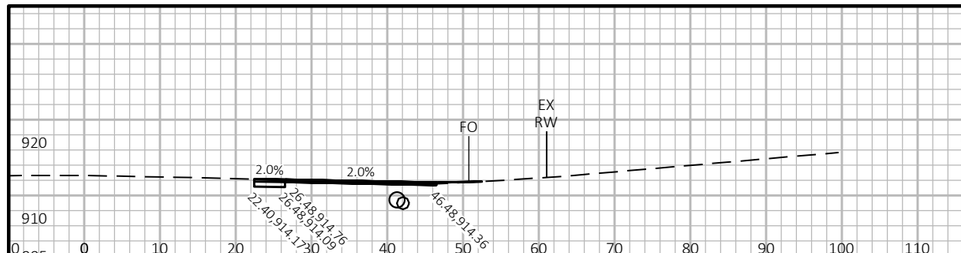
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - SOUTH XO	SHEET 379	E

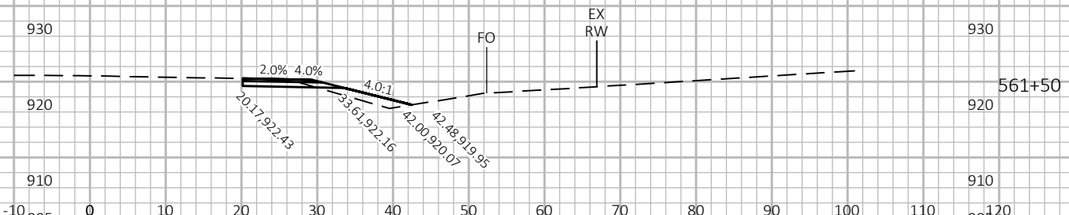
FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 05

PLOT DATE : 8/28/2025 3:19 AM PLOT BY : DALTON, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



559+25



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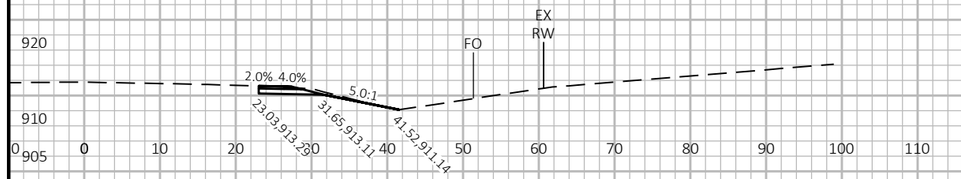
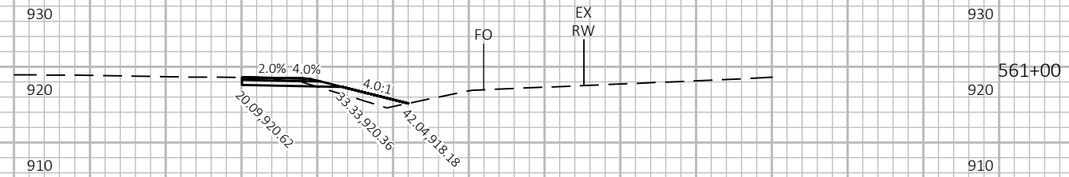
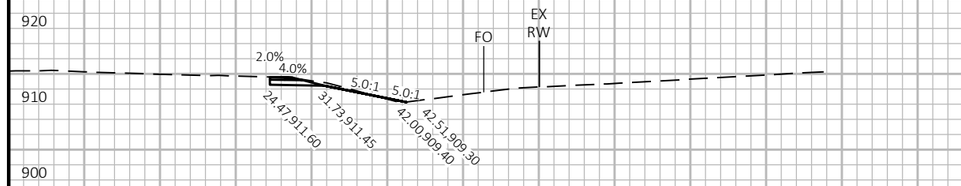


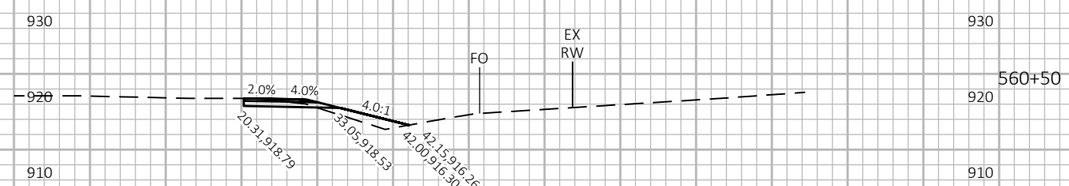
559+00



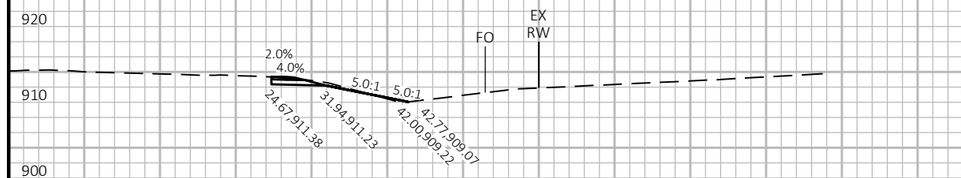
561+00



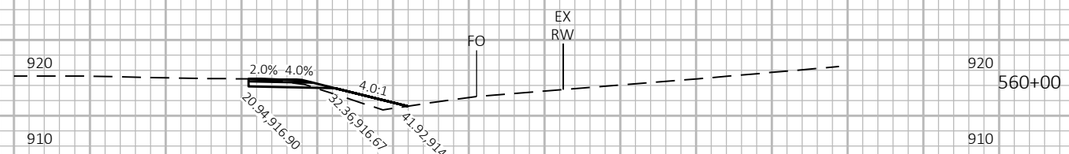
558+50



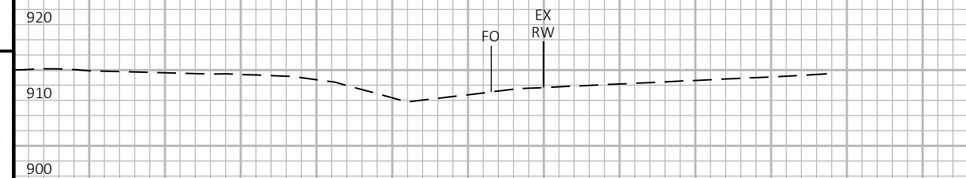
560+50



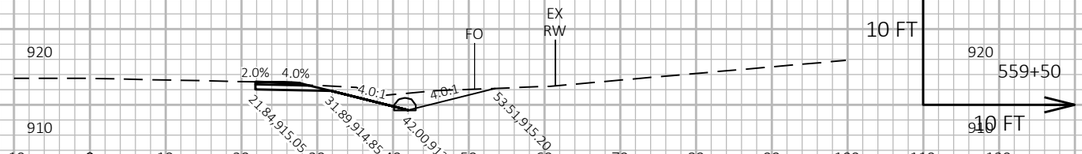
558+43



560+00



558+40



559+50

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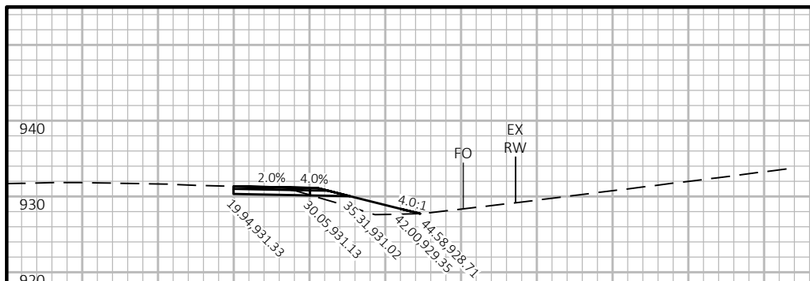
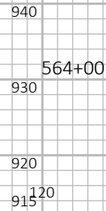
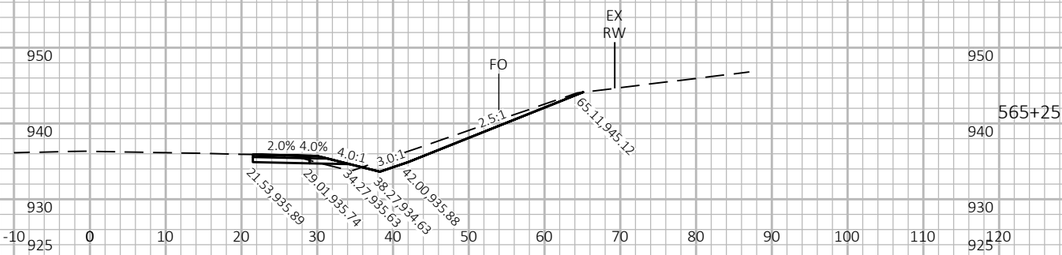
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - NORTH XO (NB)	SHEET 380	E

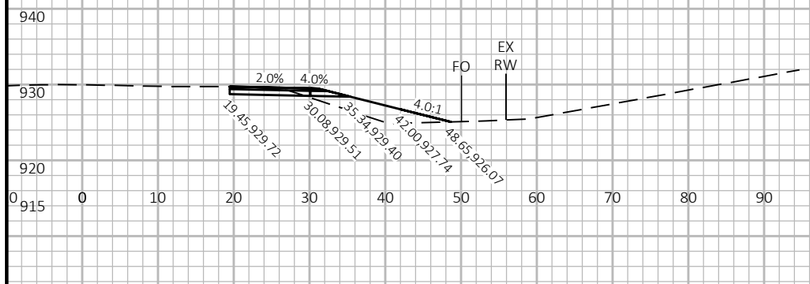
FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 06

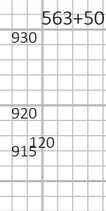
PLOT DATE : 8/28/2025 1:58 AM PLOT BY : DALTON, RYAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

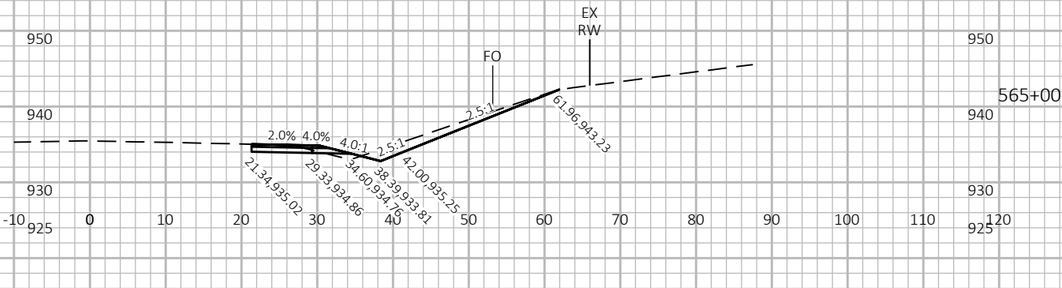


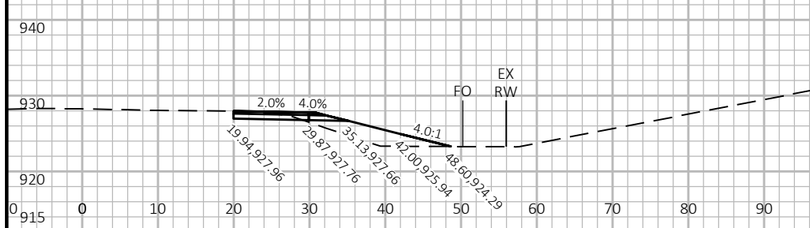


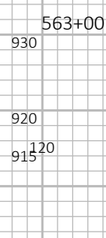


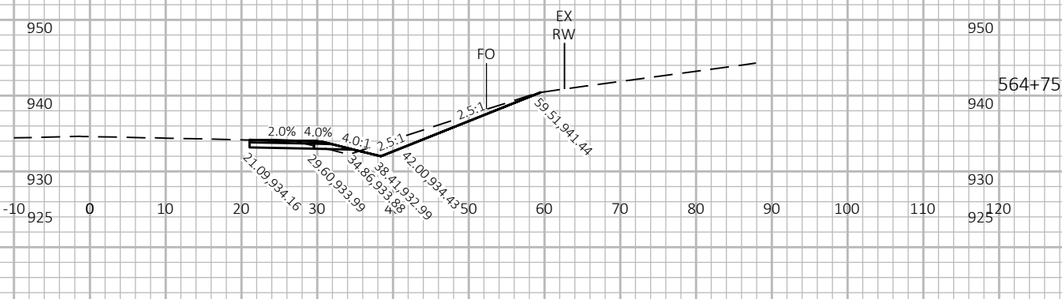


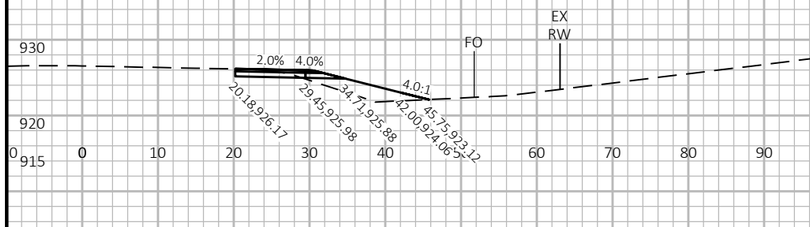


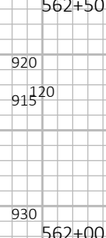


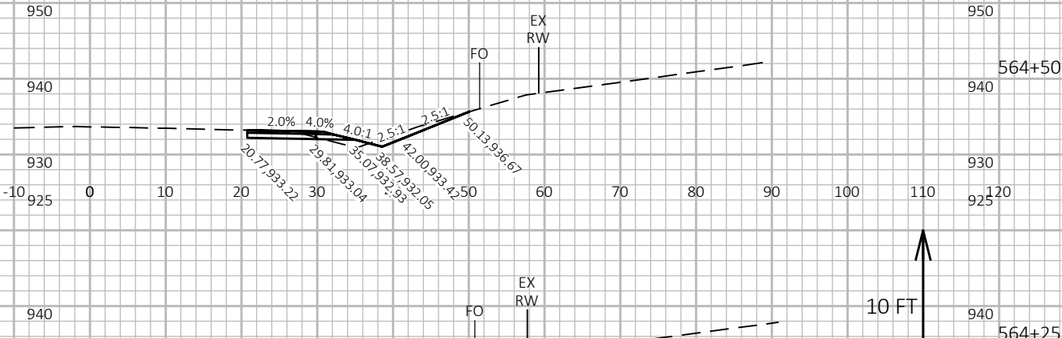


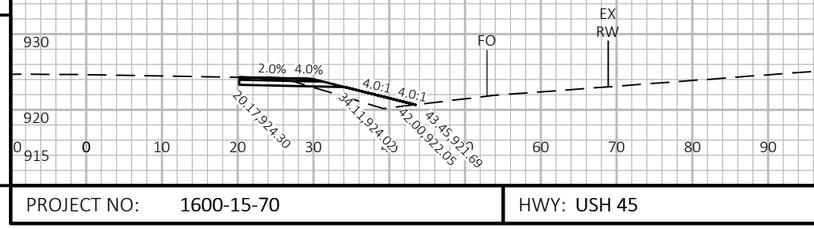


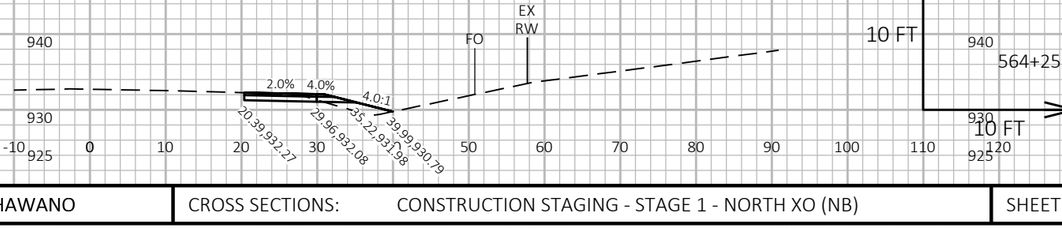


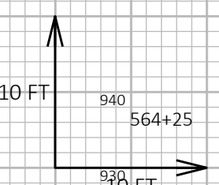












9

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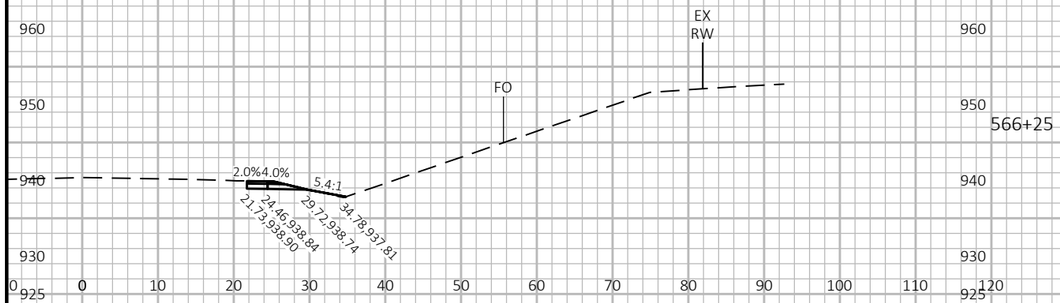
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - NORTH XO (NB)	SHEET 381	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 07

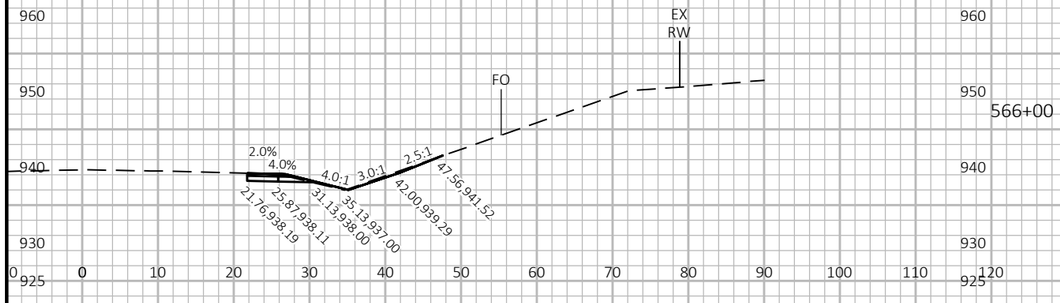
PLOT DATE : 8/20/2025 12:54 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME :

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

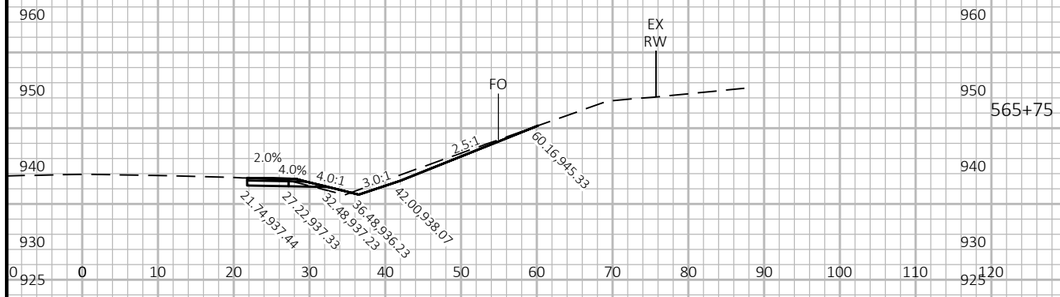
WISDOT/CADDS SHEET 49



566+25



566+00



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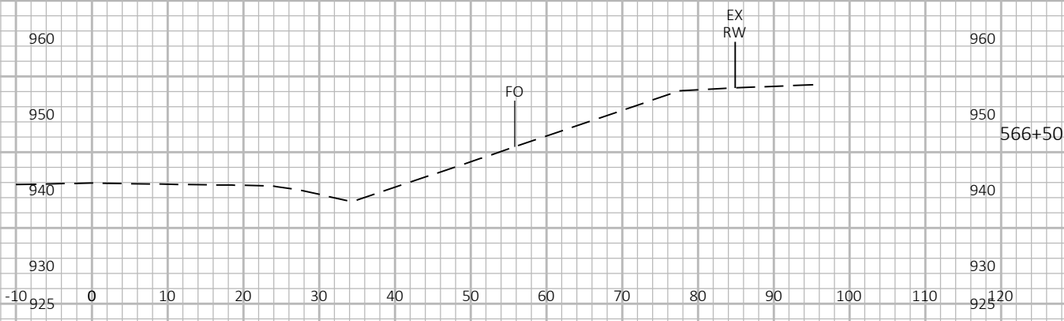

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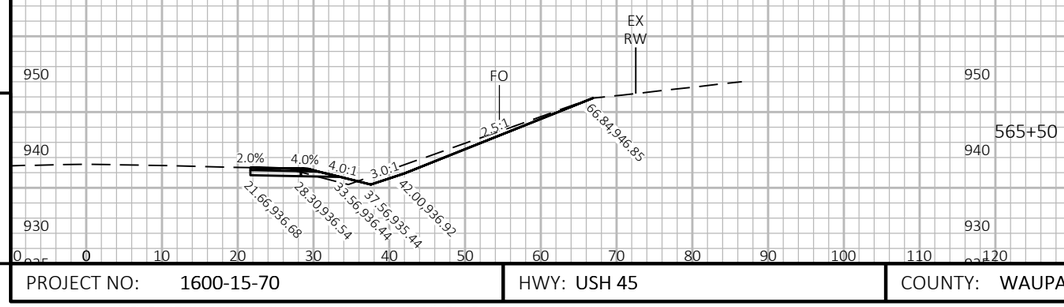
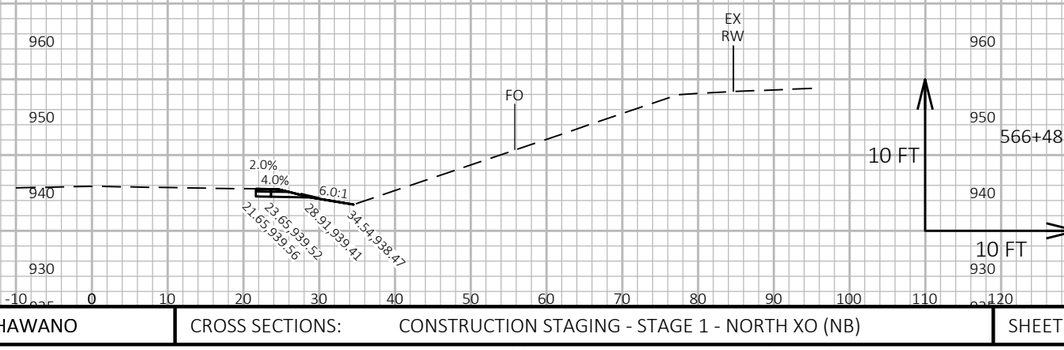


565+50



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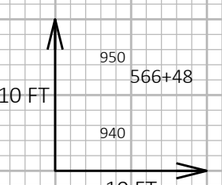

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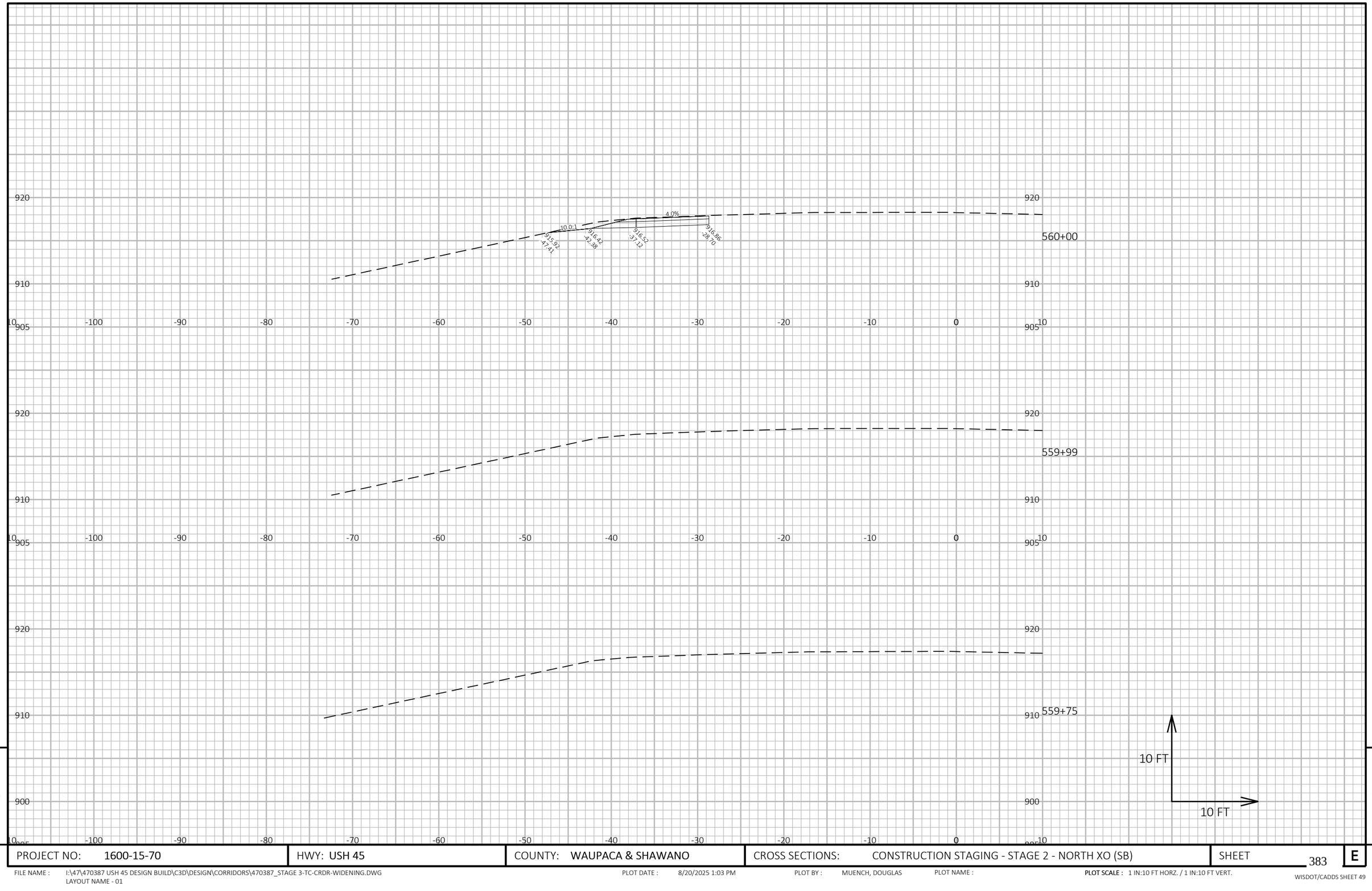
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 1 - NORTH XO (NB)	SHEET 382	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 2-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 08

PLOT DATE : 8/20/2025 12:54 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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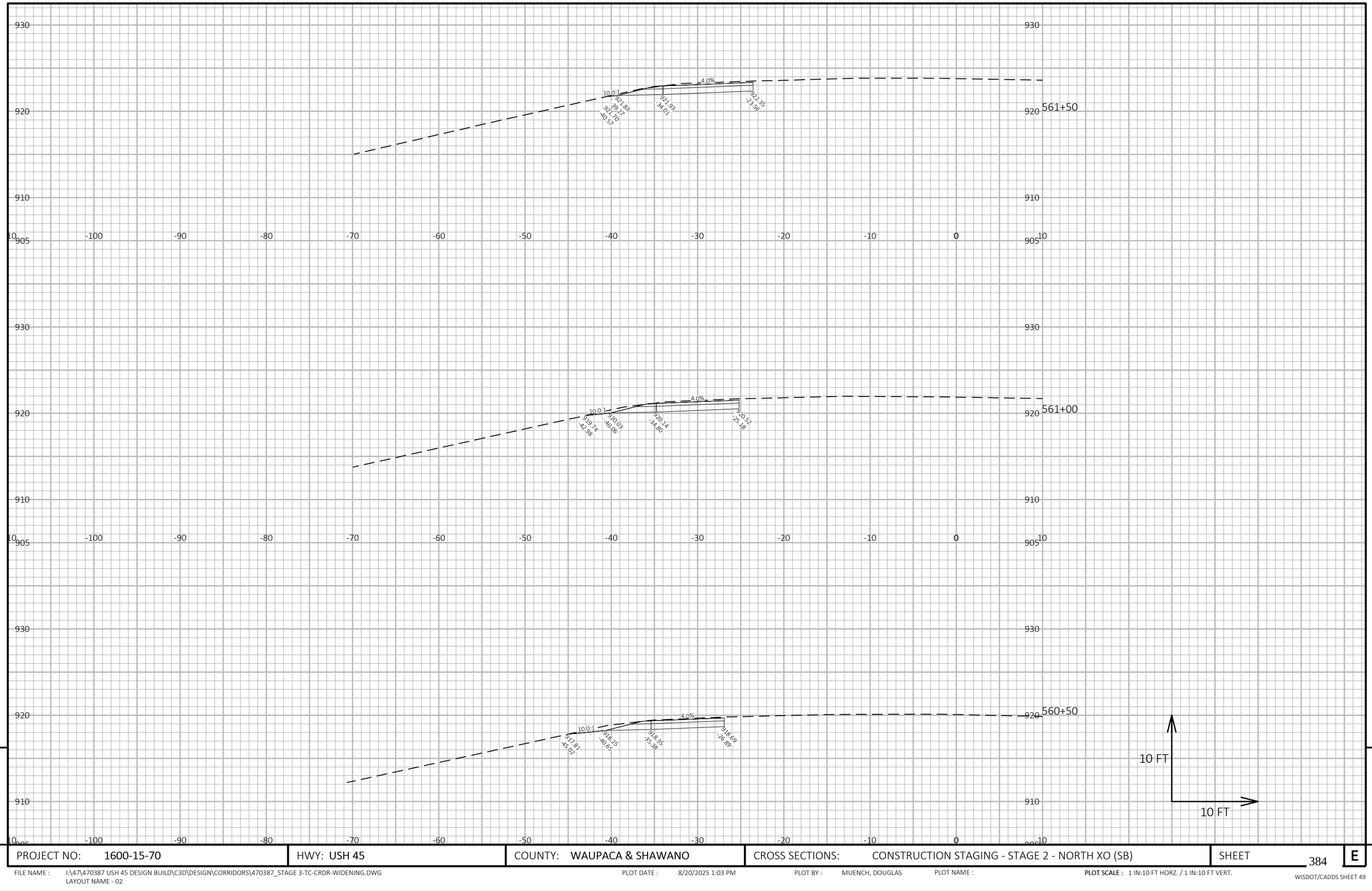
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 2 - NORTH XO (SB)	SHEET 383	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 3-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 01

PLOT DATE : 8/20/2025 1:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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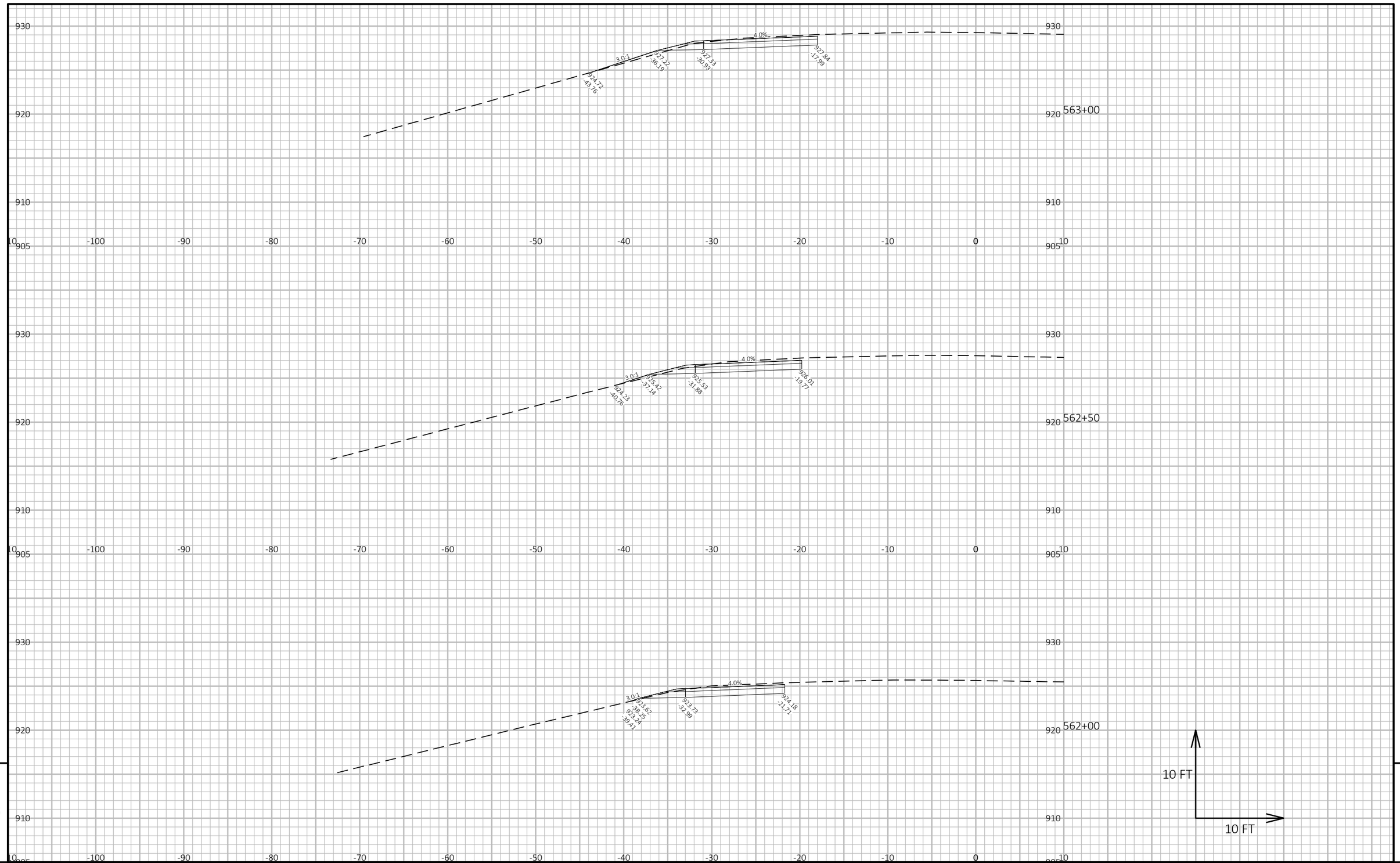
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 2 - NORTH XO (SB)	SHEET 384	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 3-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 02

PLOT DATE : 8/20/2025 1:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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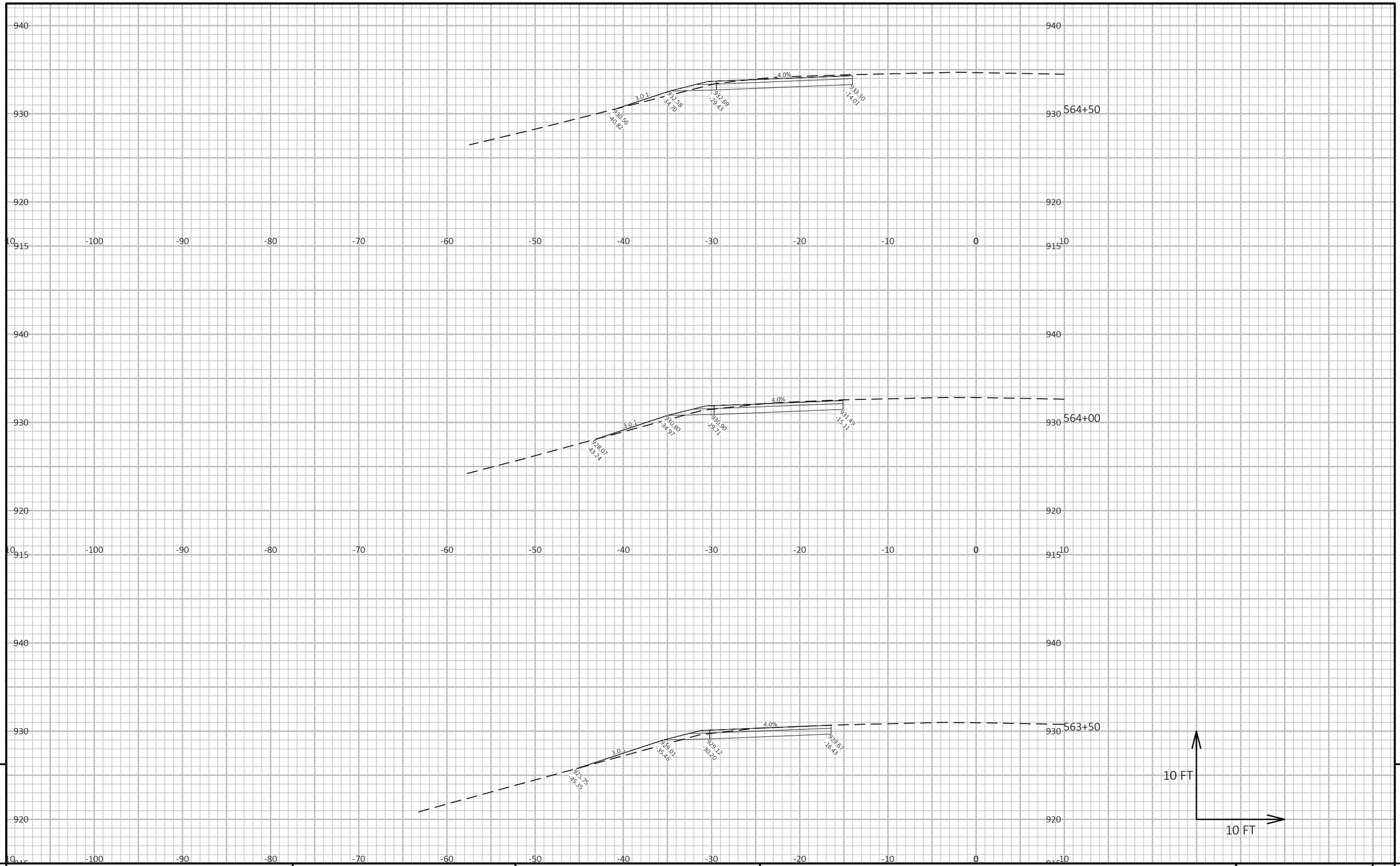
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 2 - NORTH XO (SB)	SHEET 385	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 3-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 03

PLOT DATE : 8/20/2025 1:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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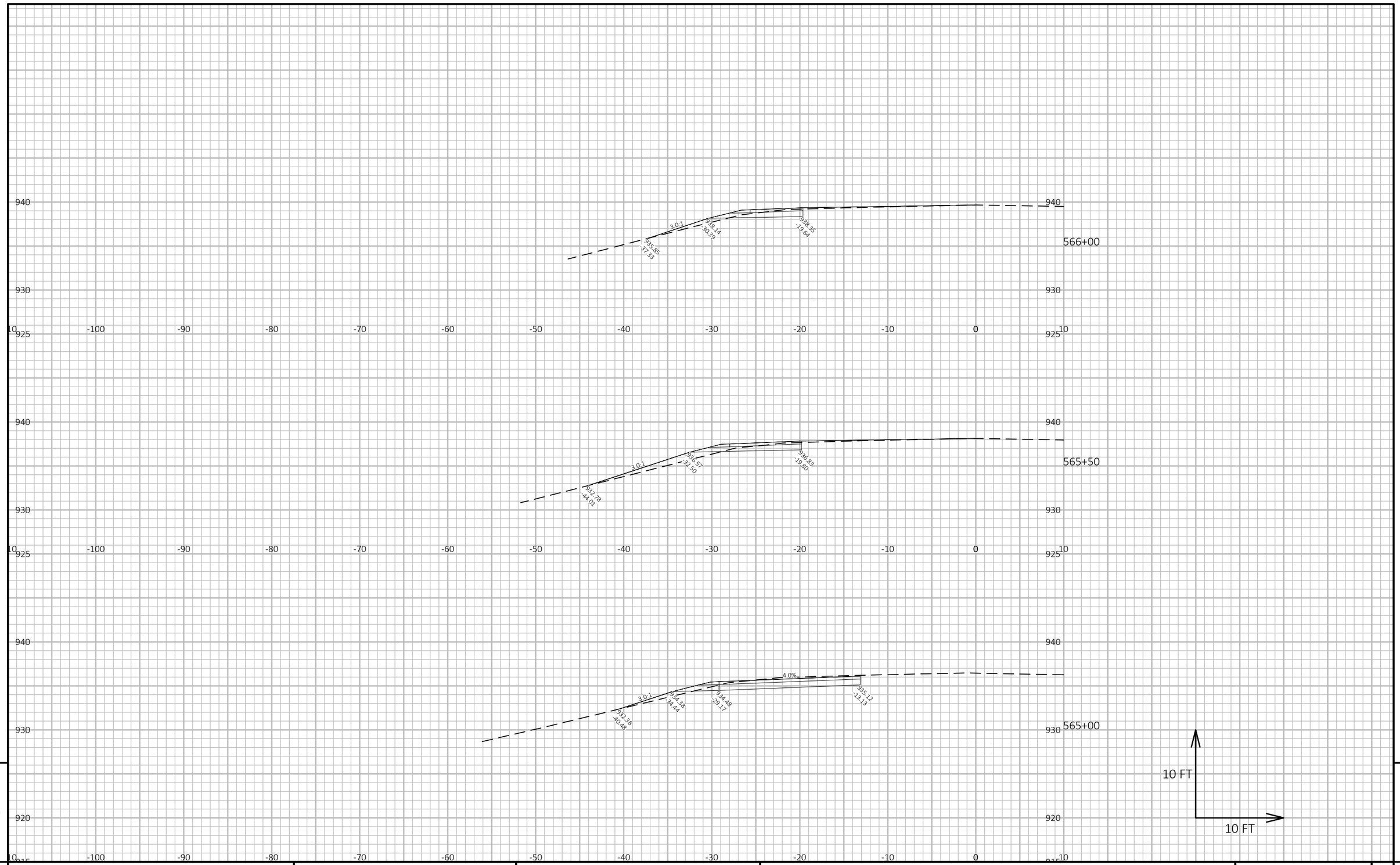
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 2 - NORTH XO (SB)	SHEET 386	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 3-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 04

PLOT DATE : 8/20/2025 1:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 2 - NORTH XO (SB)	SHEET 387	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 3-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 05

PLOT DATE : 8/20/2025 1:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME :

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

WISDOT/CADDS SHEET 49

950
940
930
925
10
-100
-90
-80
-70
-60
-50
-40
-30
-20
-10
0
10

567+01

567+00

10.01
940.71
-27.92
940.66
-25.39

940.86
-20.71

566+50

939.46
-27.71
939.36
-28.40

938.61
-19.84

10 FT

10 FT

9

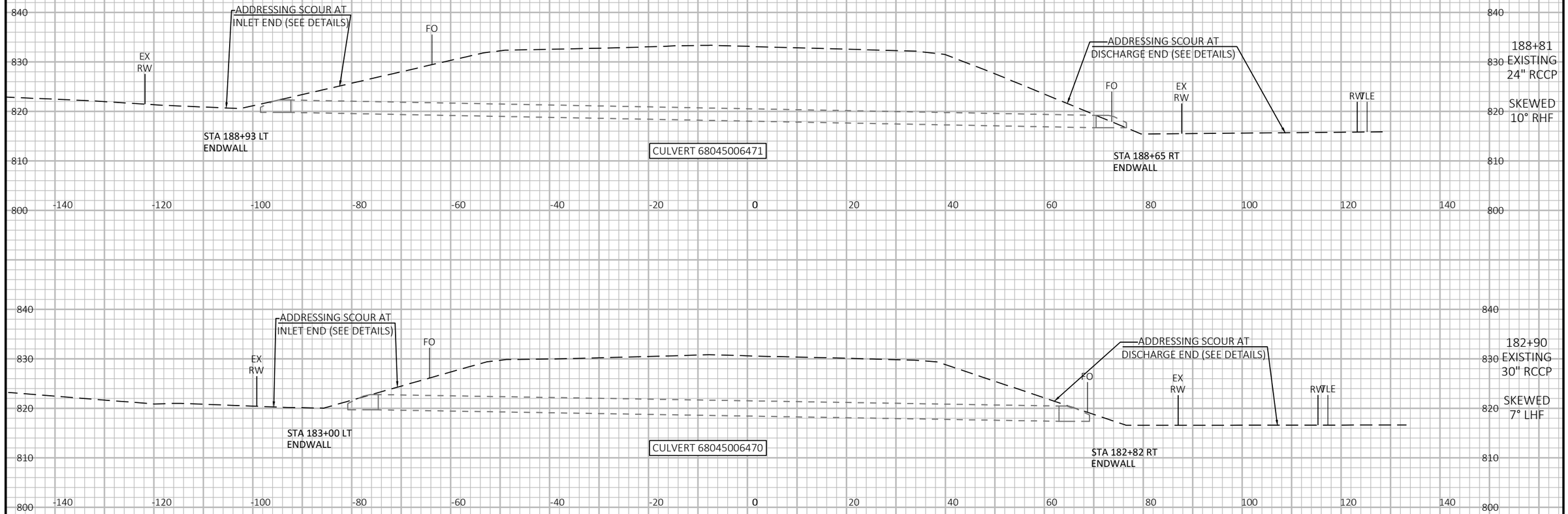
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: CONSTRUCTION STAGING - STAGE 2 - NORTH XO (SB)	SHEET 388	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\DESIGN\CORRIDORS\470387_STAGE 3-TC-CRDR-WIDENING.DWG
LAYOUT NAME - 06

PLOT DATE : 8/20/2025 1:03 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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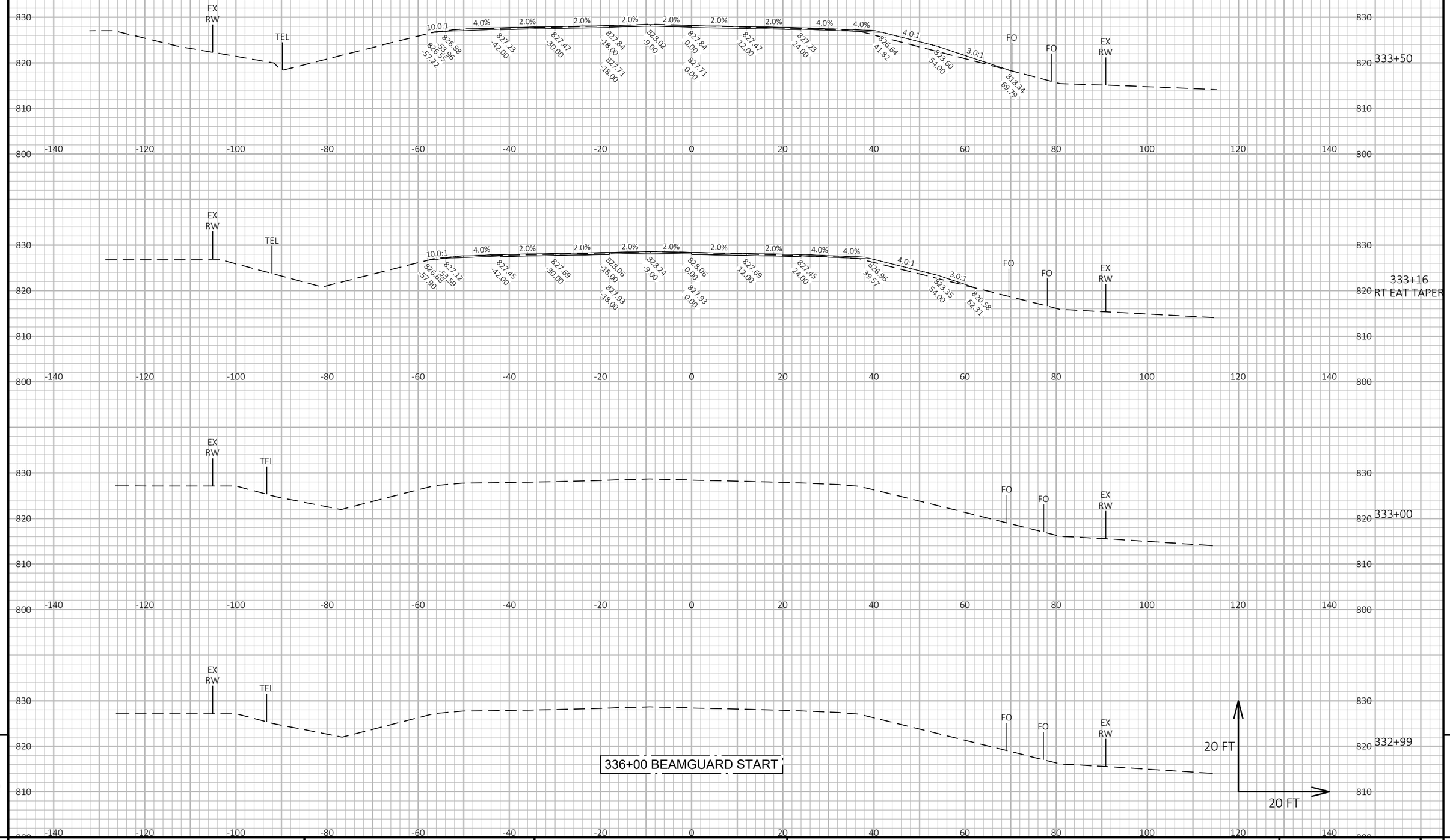
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: EXISTING CULVERT WORK	SHEET 389	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 01

PLOT DATE : 8/28/2025 10:53 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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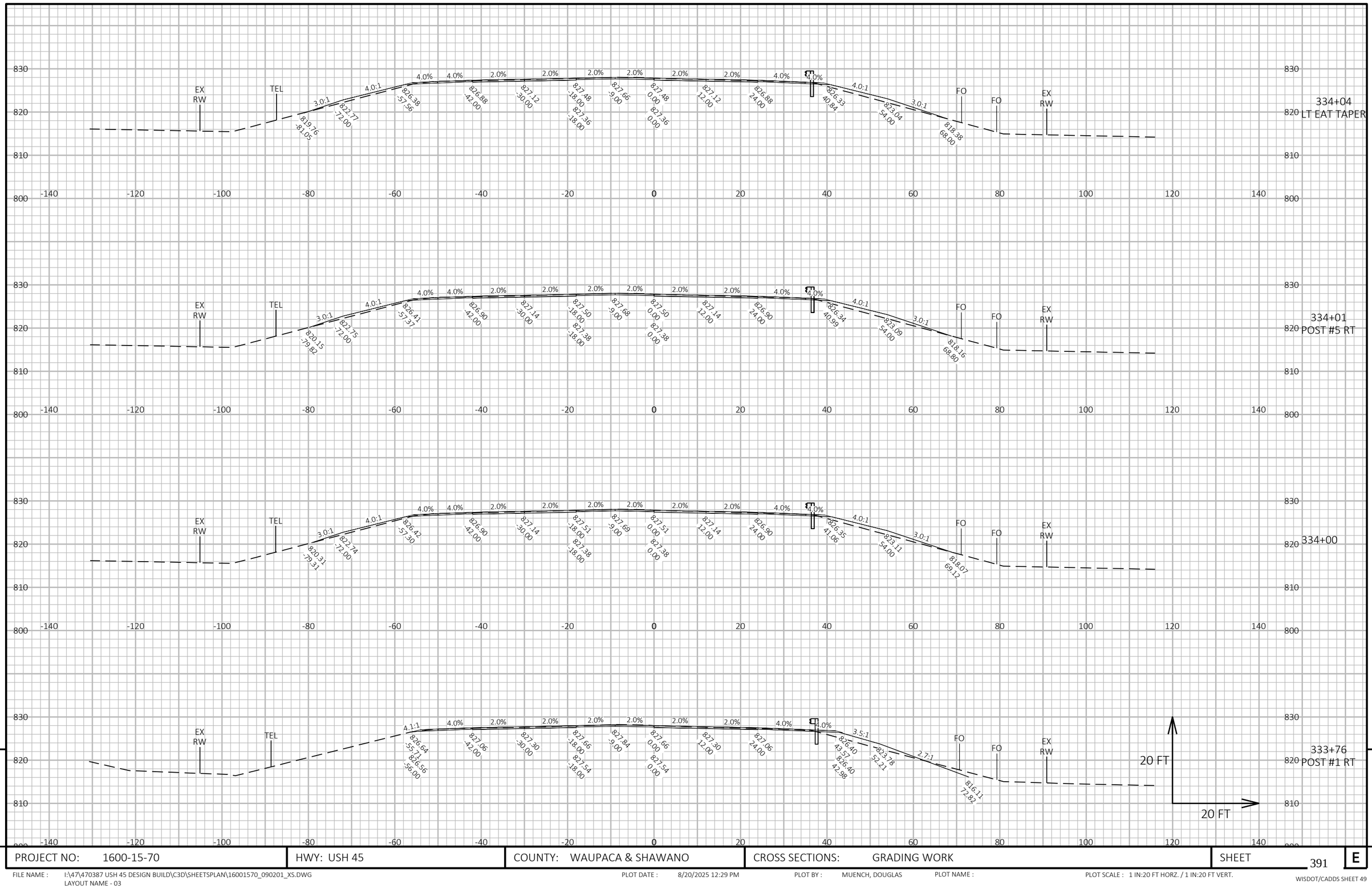
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 390	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 02

PLOT DATE : 8/20/2025 12:29 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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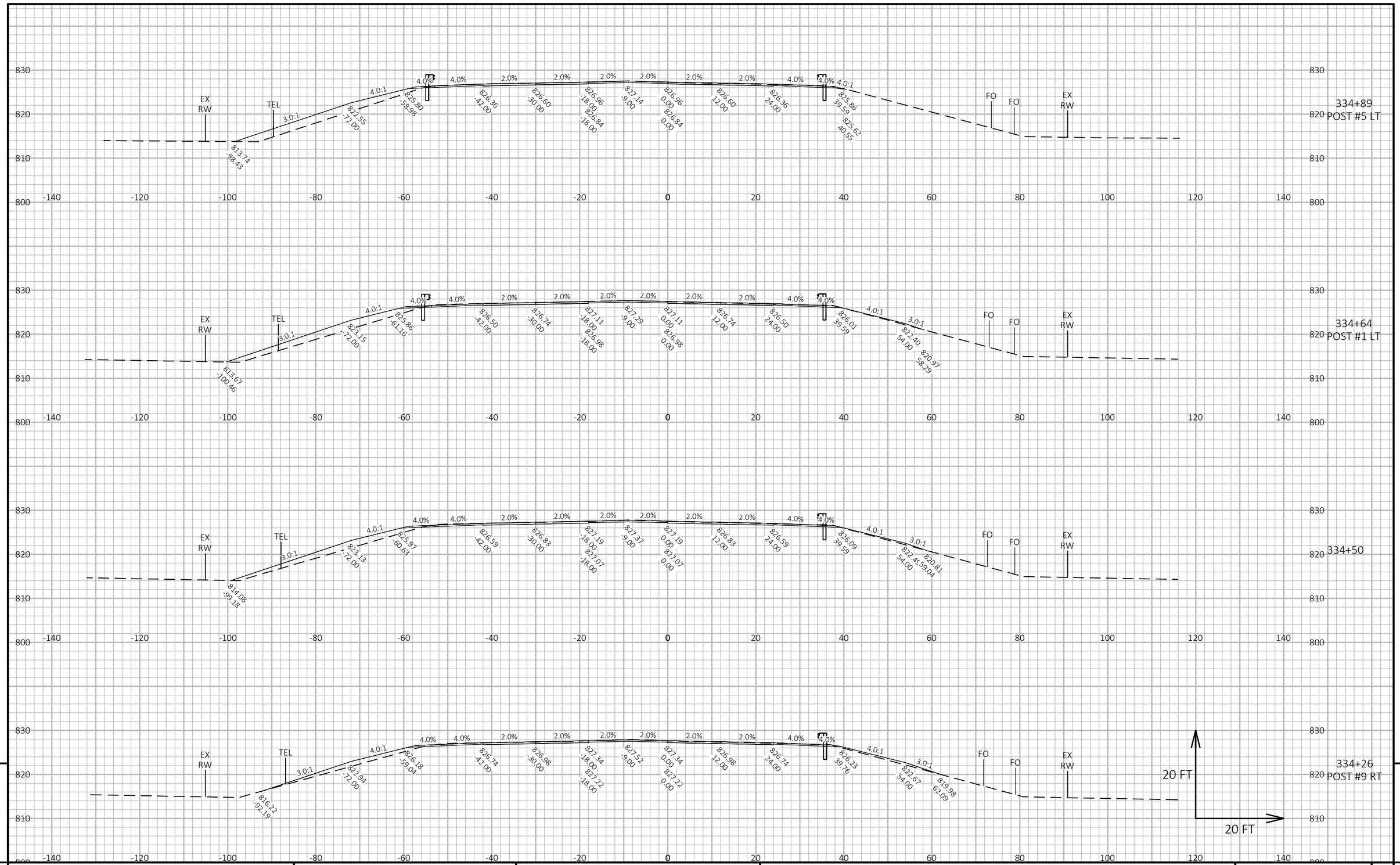
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 391	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 03

PLOT DATE : 8/20/2025 12:29 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

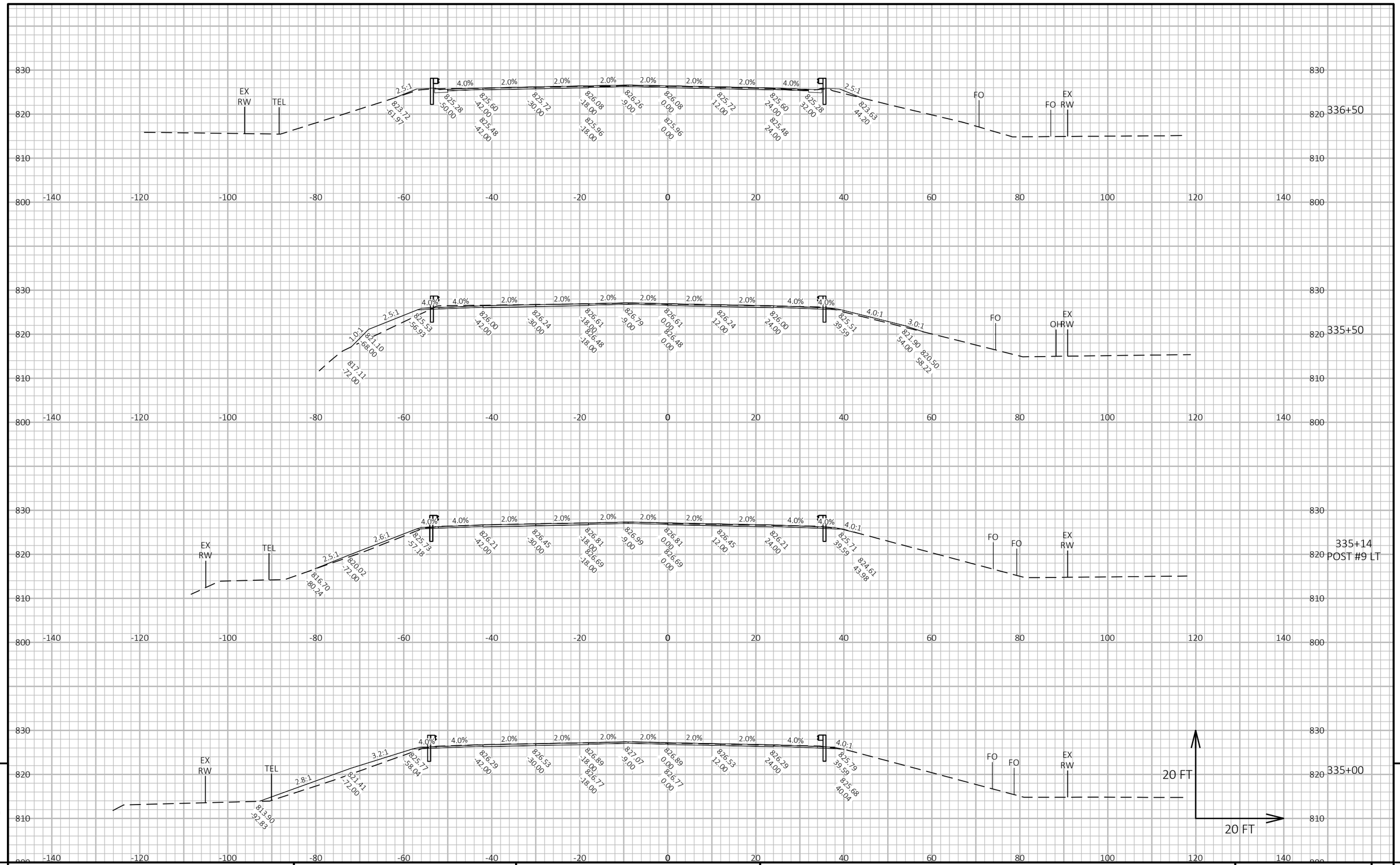


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 392	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 04

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 393	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 05

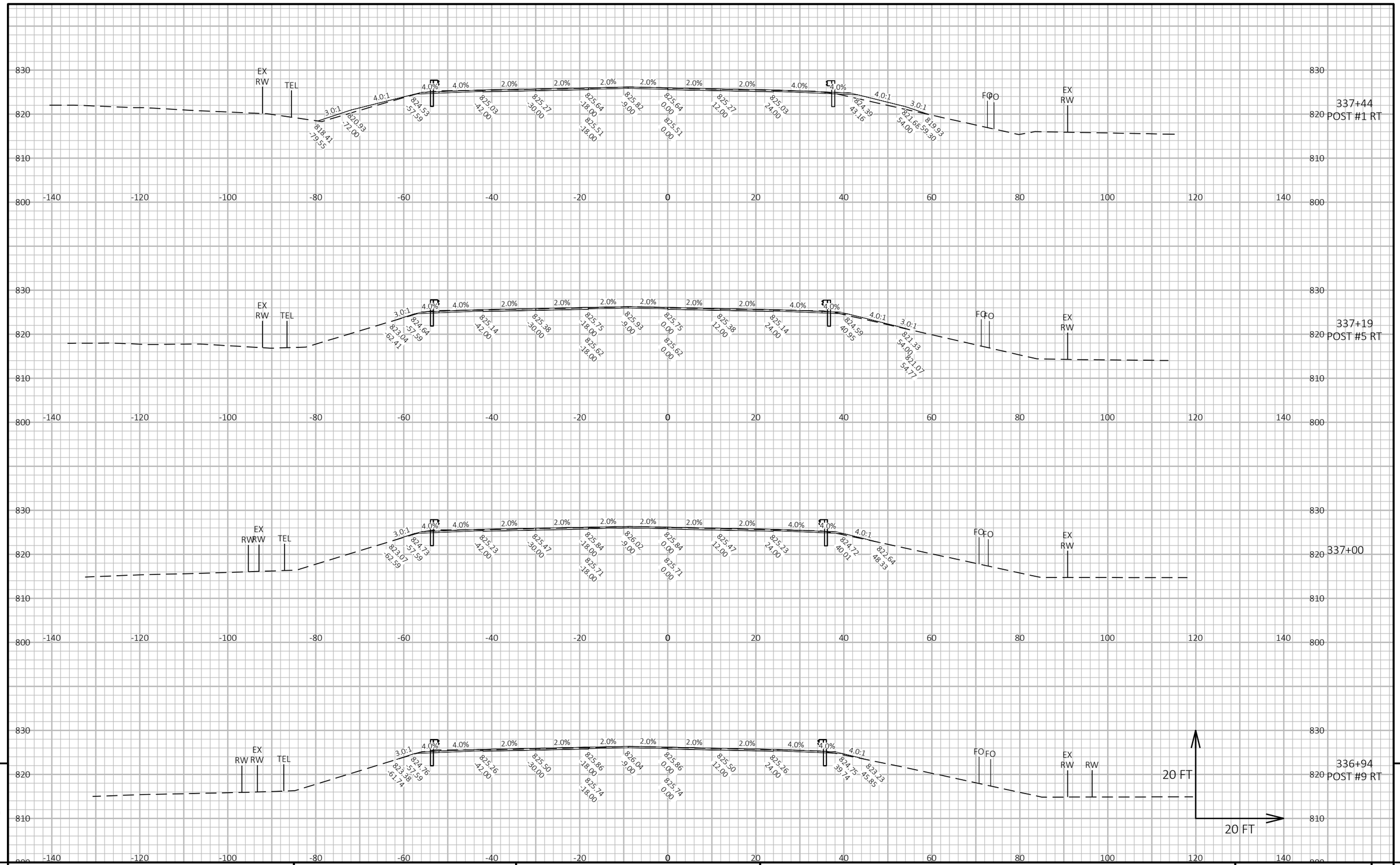
PLOT DATE : 8/28/2025 7:33 PM

PLOT BY : DALTON, RYAN

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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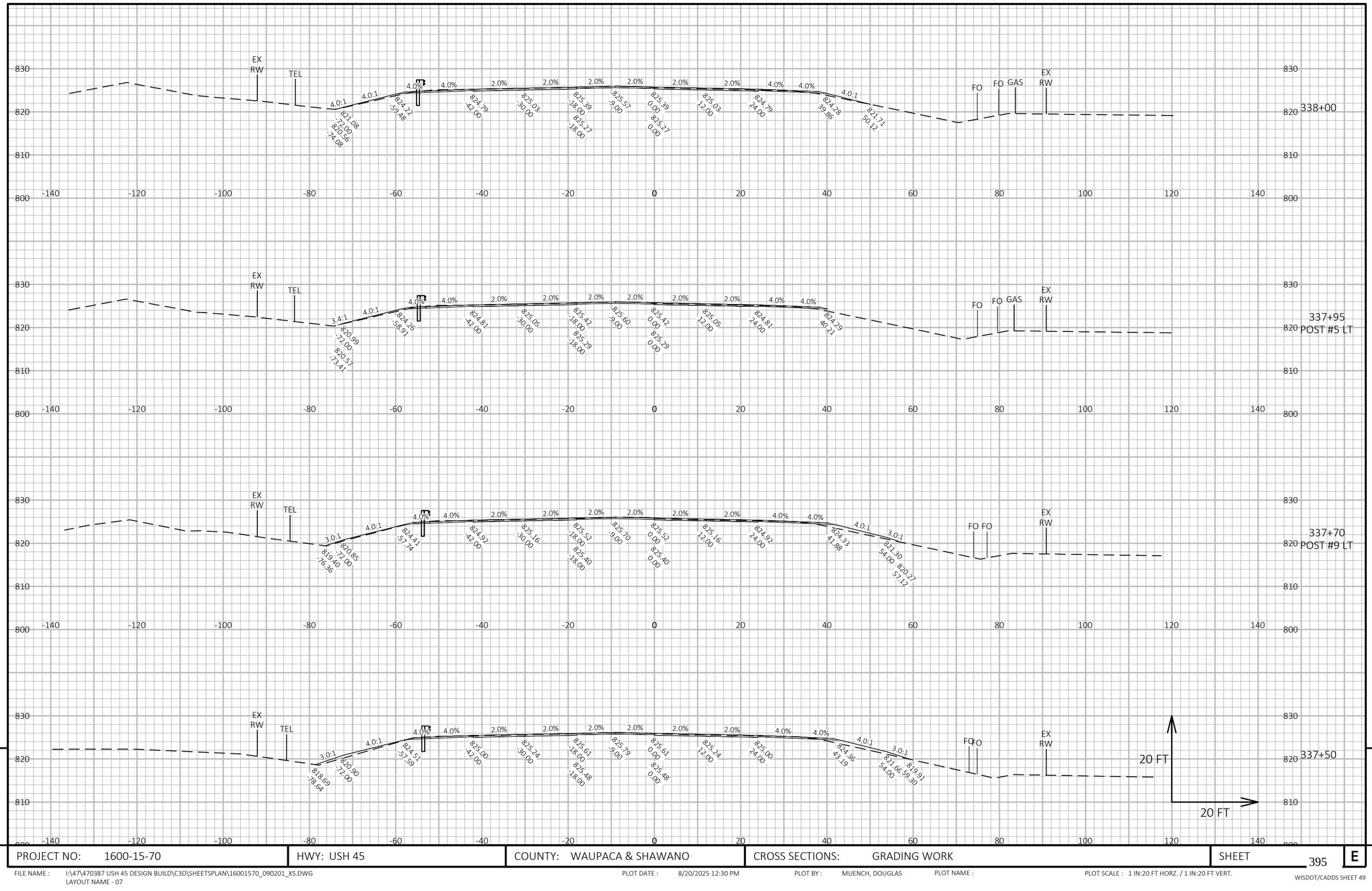
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 394	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 06

PLOT DATE : 8/28/2025 11:12 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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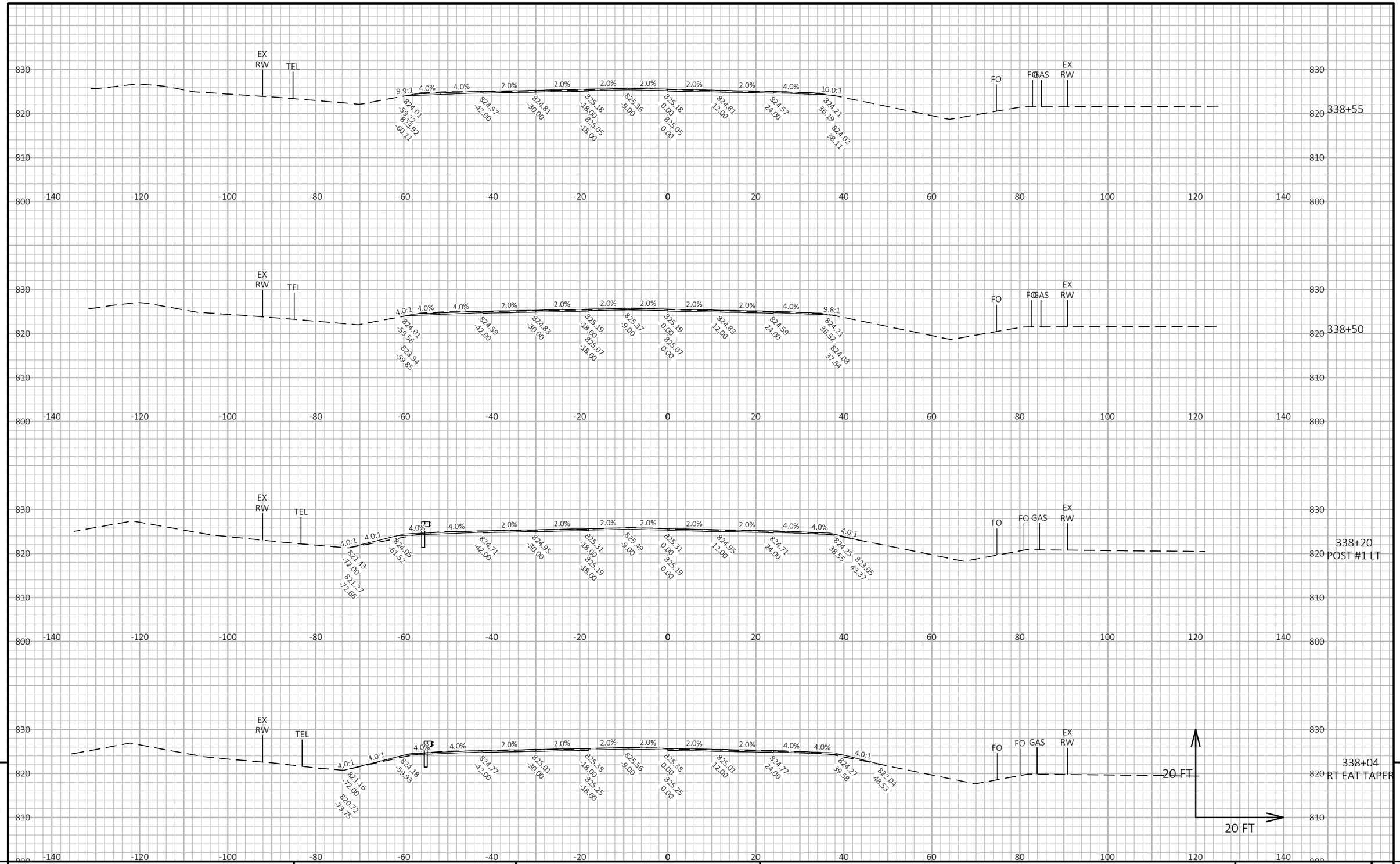
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 395	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 07

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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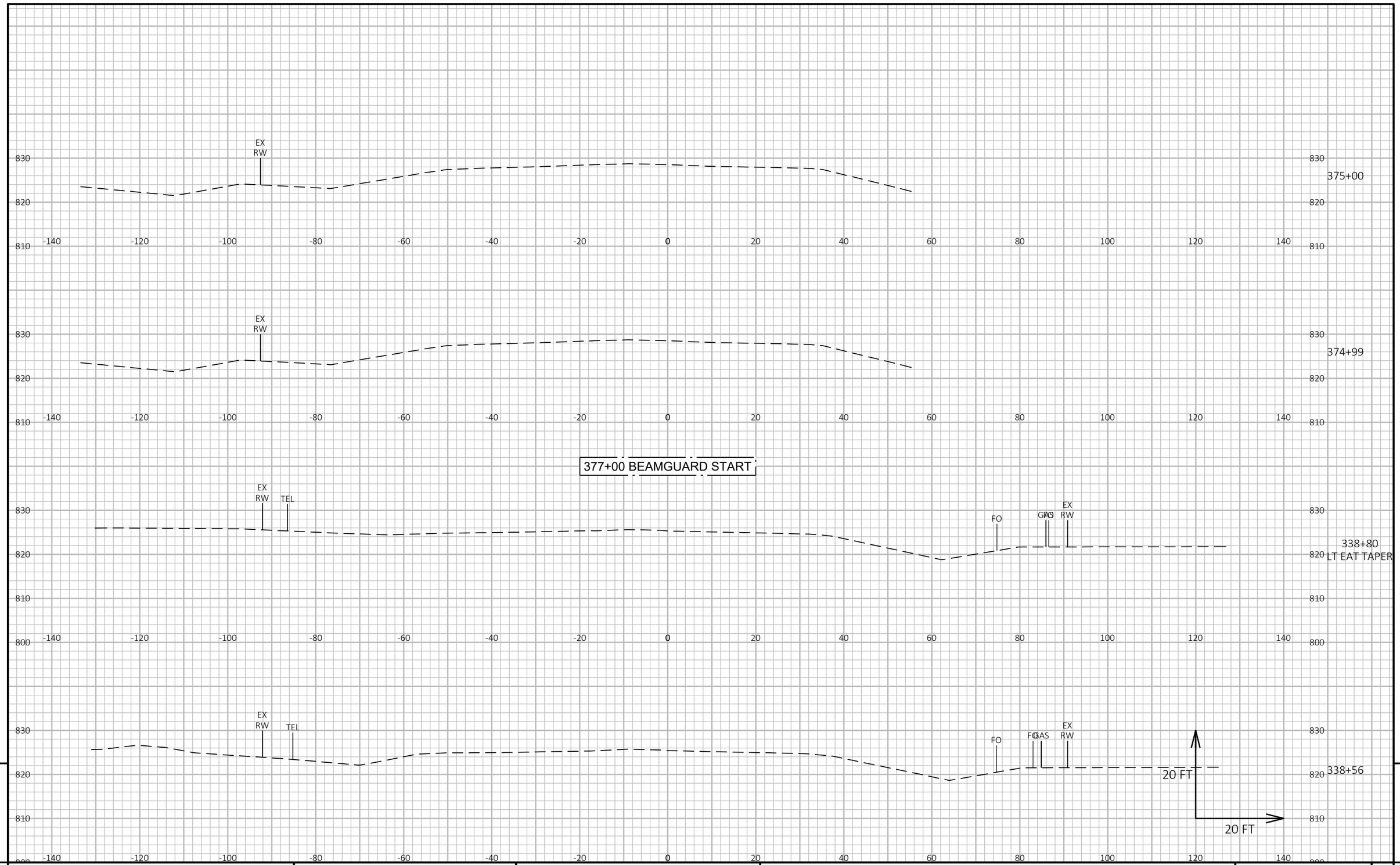
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 396	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 08

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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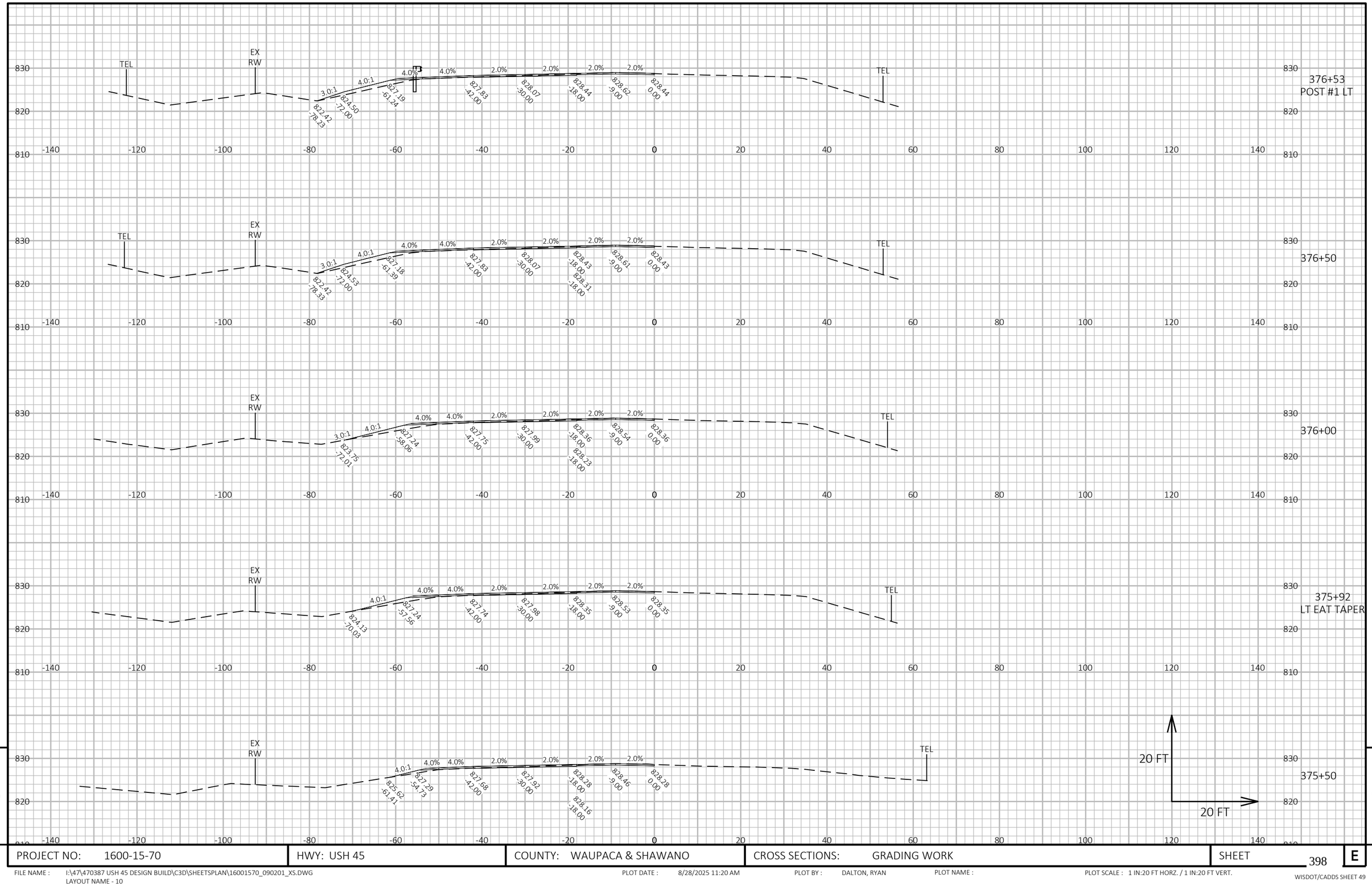
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 397	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 09

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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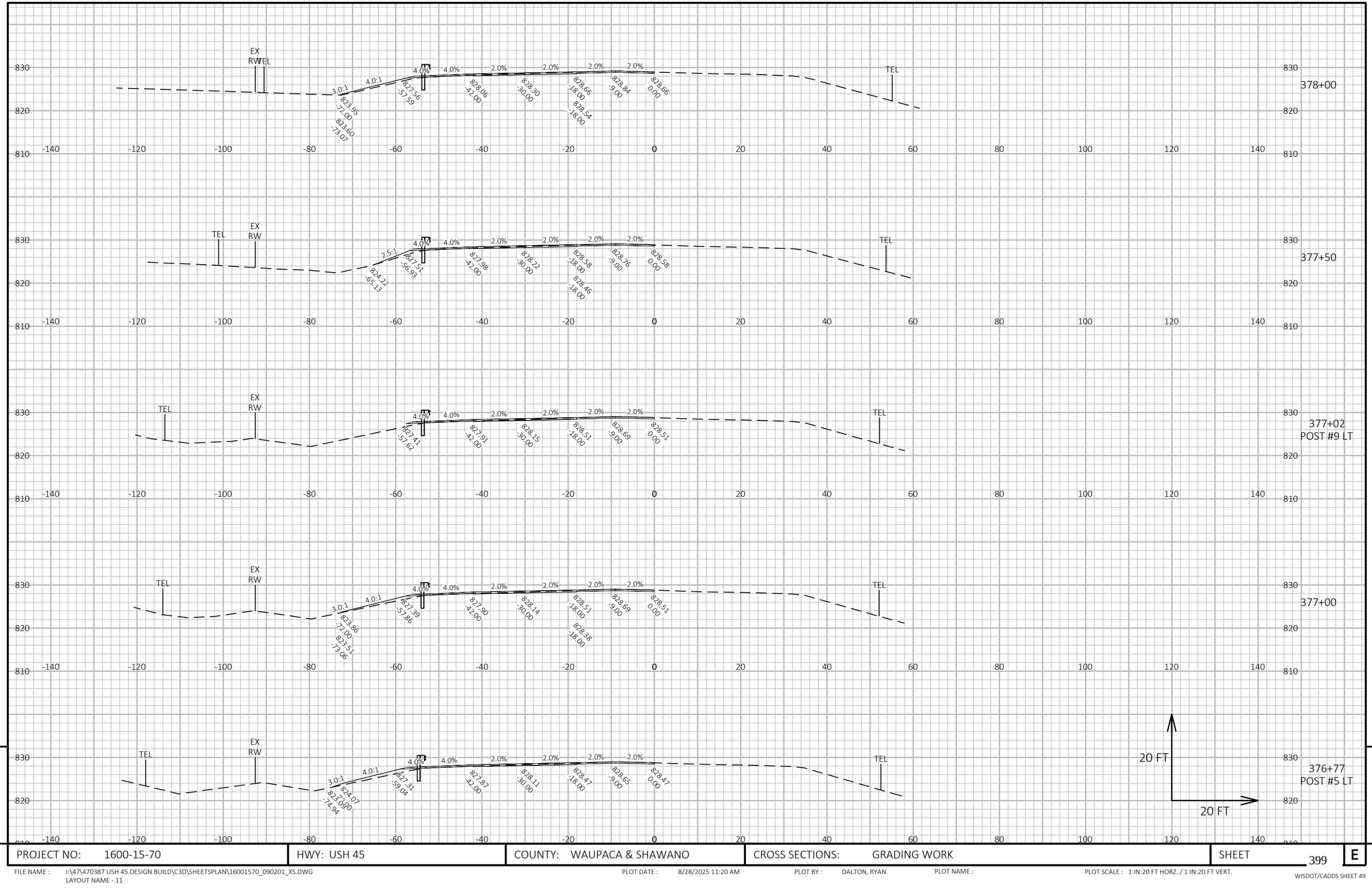
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 398	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 10

PLOT DATE : 8/28/2025 11:20 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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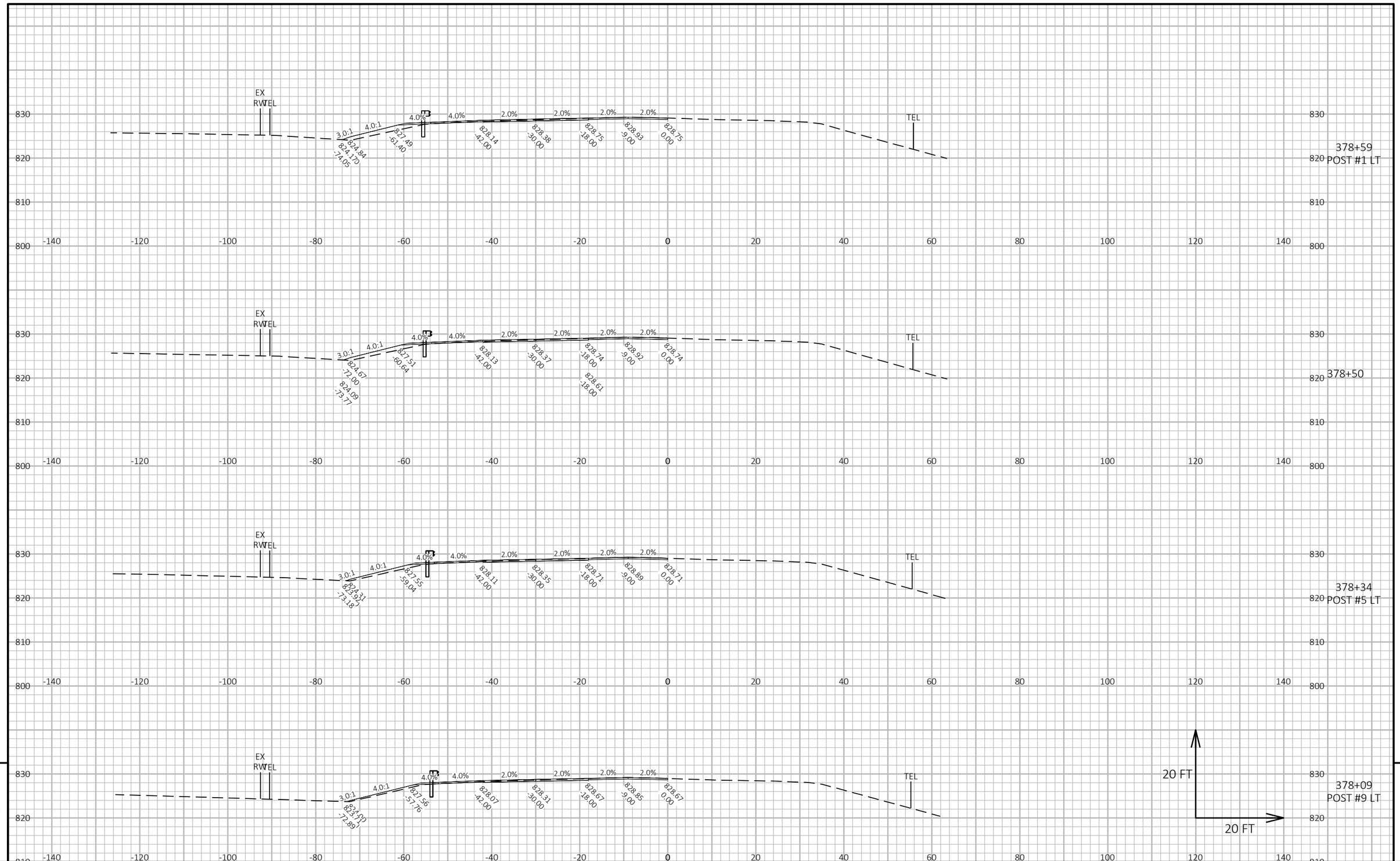
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 399	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 11

PLOT DATE : 8/28/2025 11:20 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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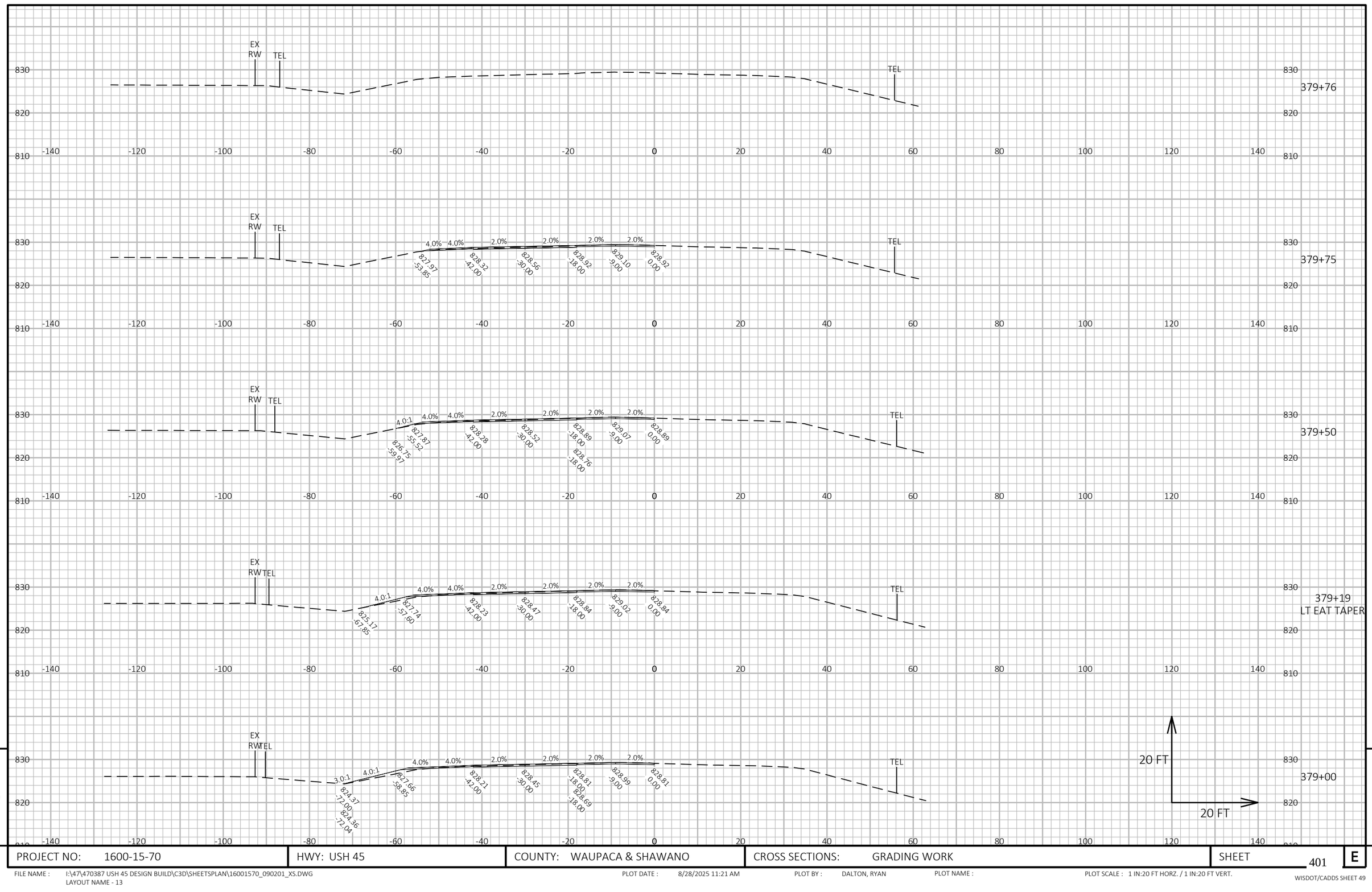
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 400	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 12

PLOT DATE : 8/28/2025 11:20 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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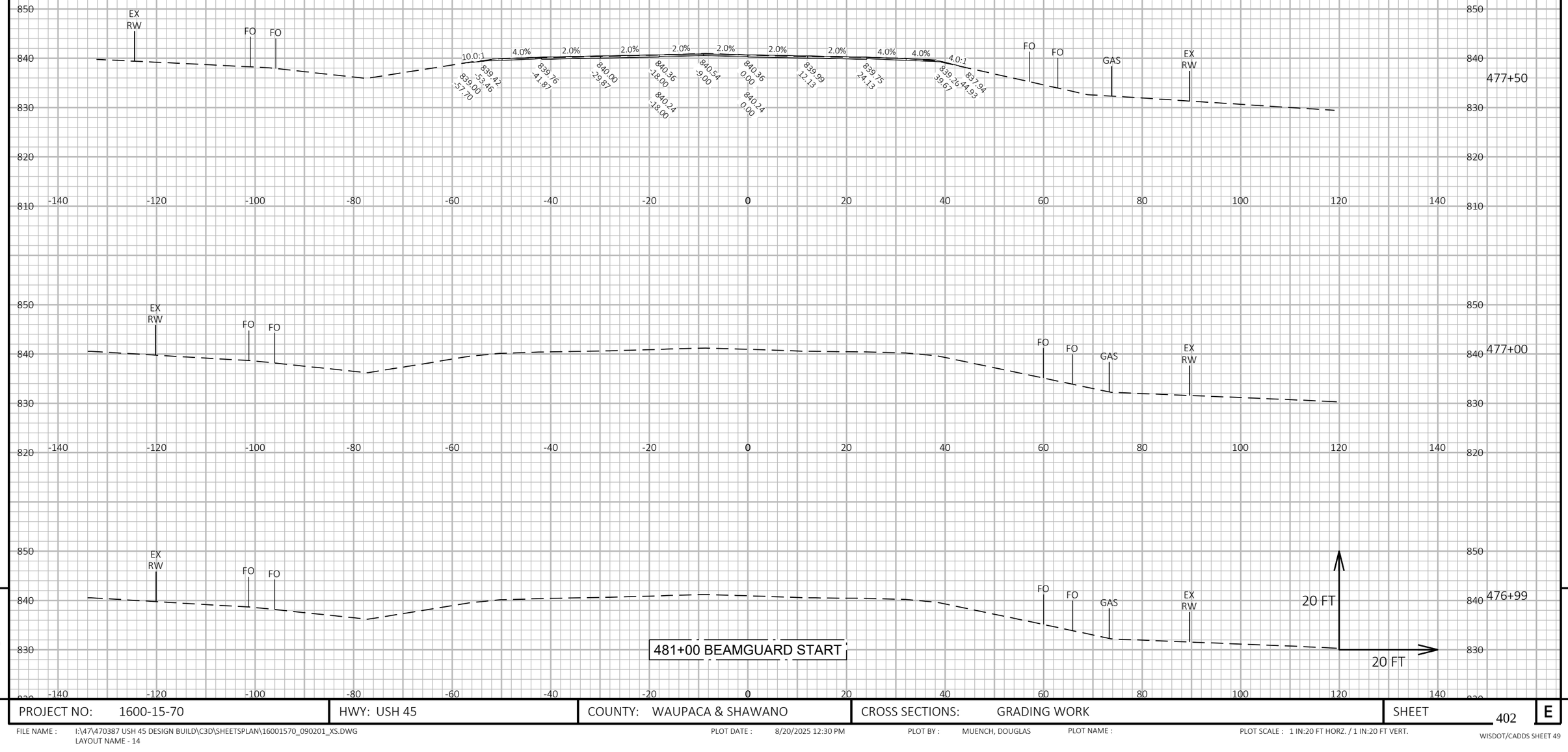
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 401	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 13

PLOT DATE : 8/28/2025 11:21 AM PLOT BY : DALTON, RYAN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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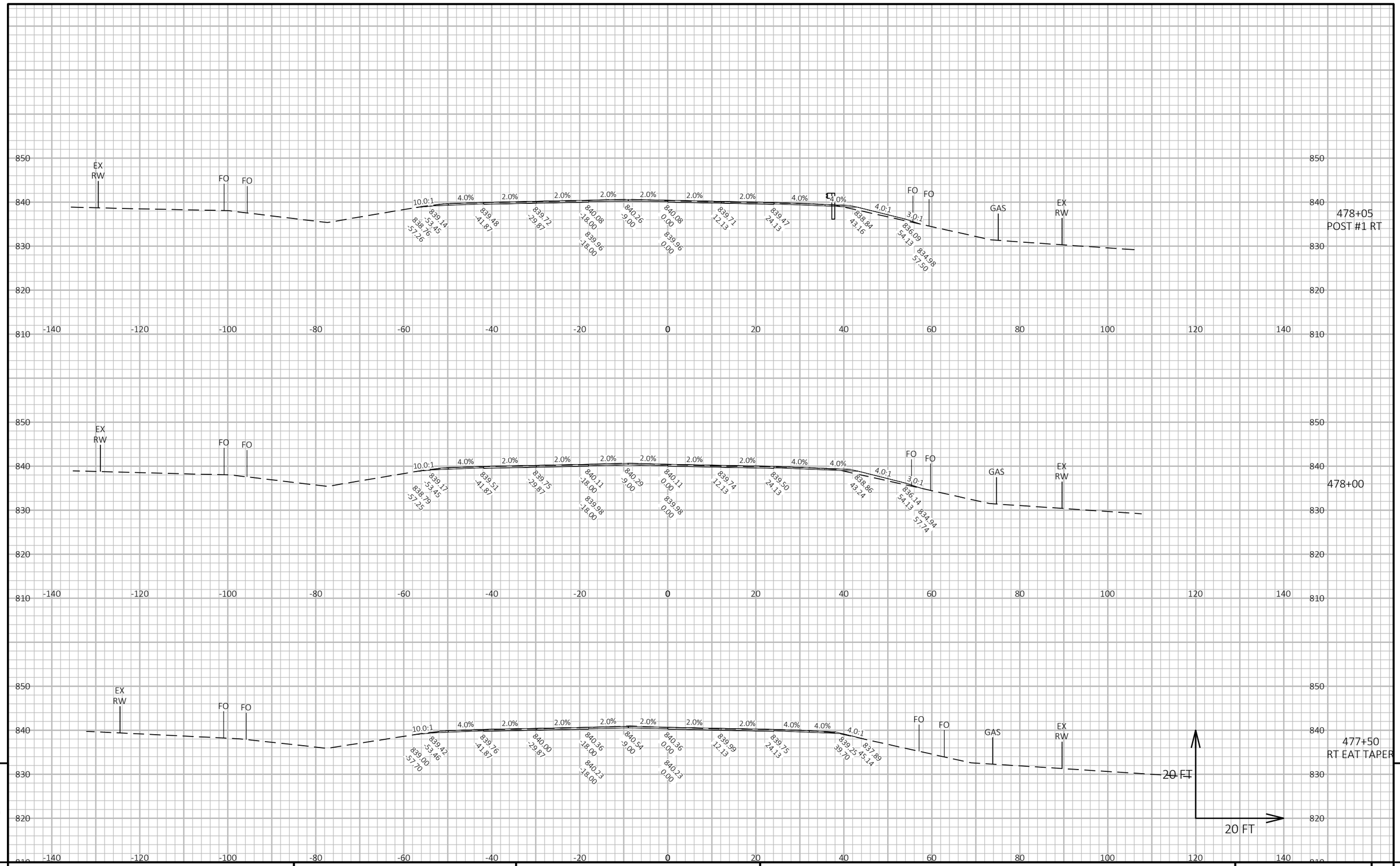
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 402	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 14

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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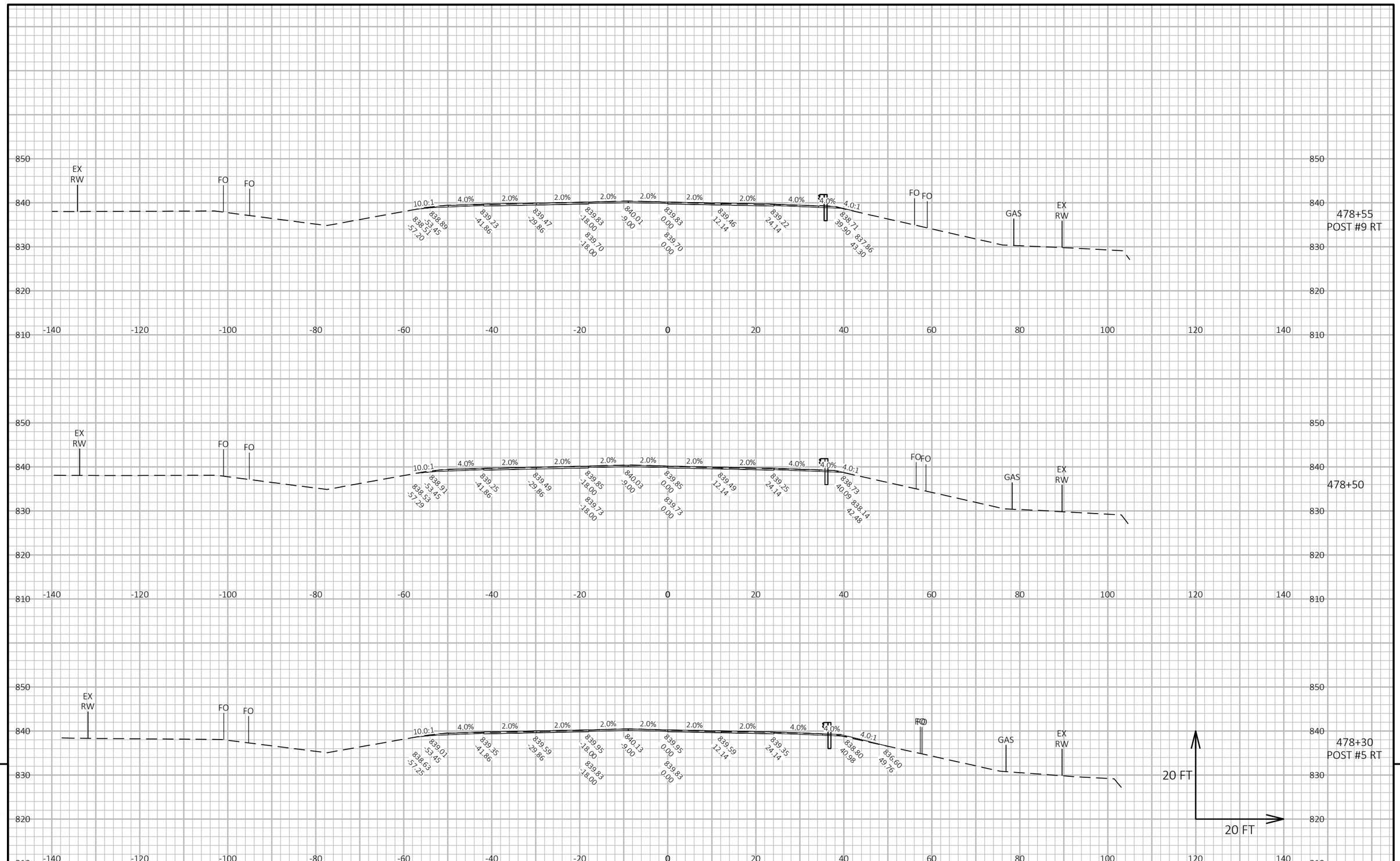
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 403	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 15

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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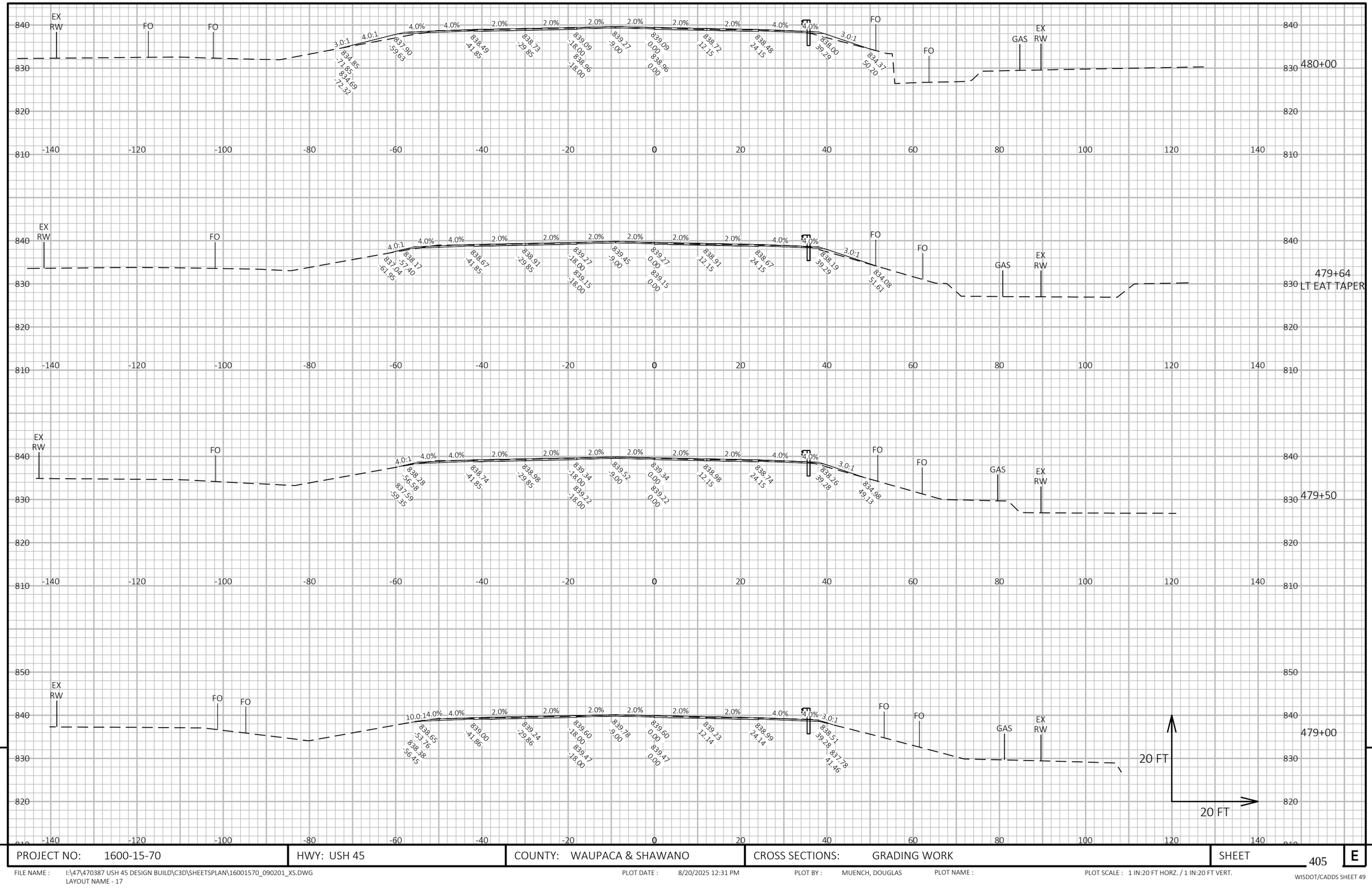
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 404	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 16

PLOT DATE : 8/20/2025 12:30 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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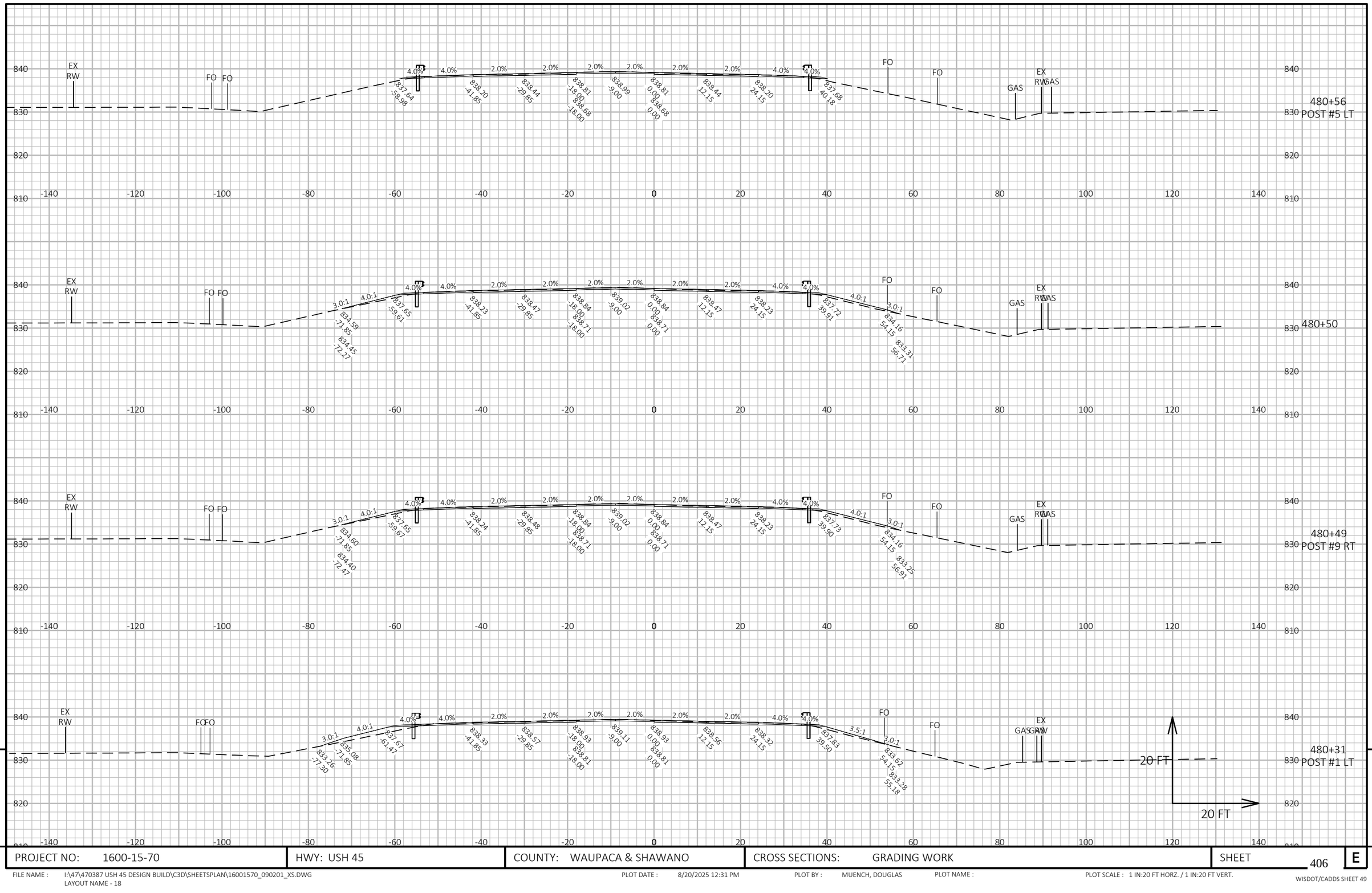
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 405	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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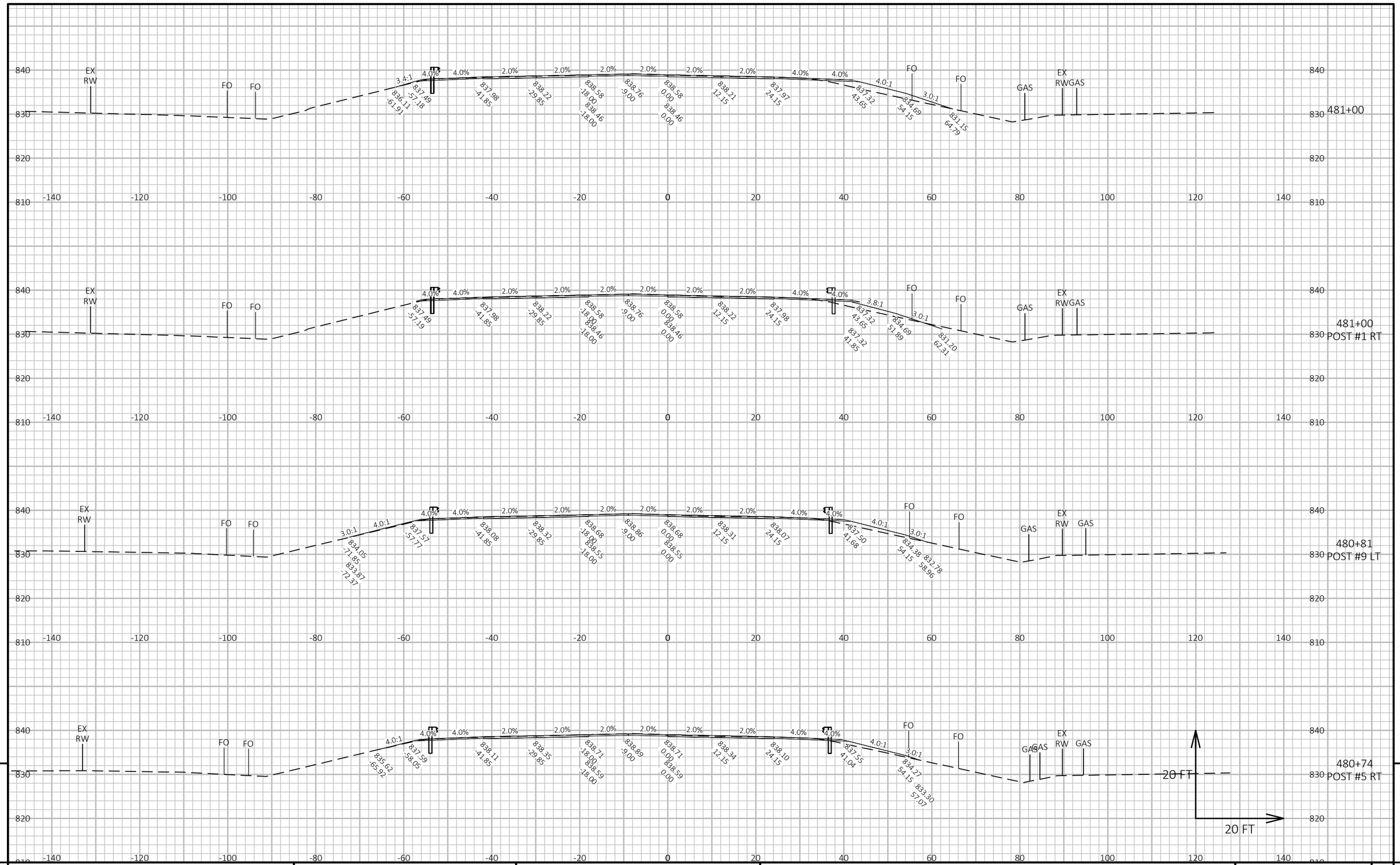
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 406	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 18

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



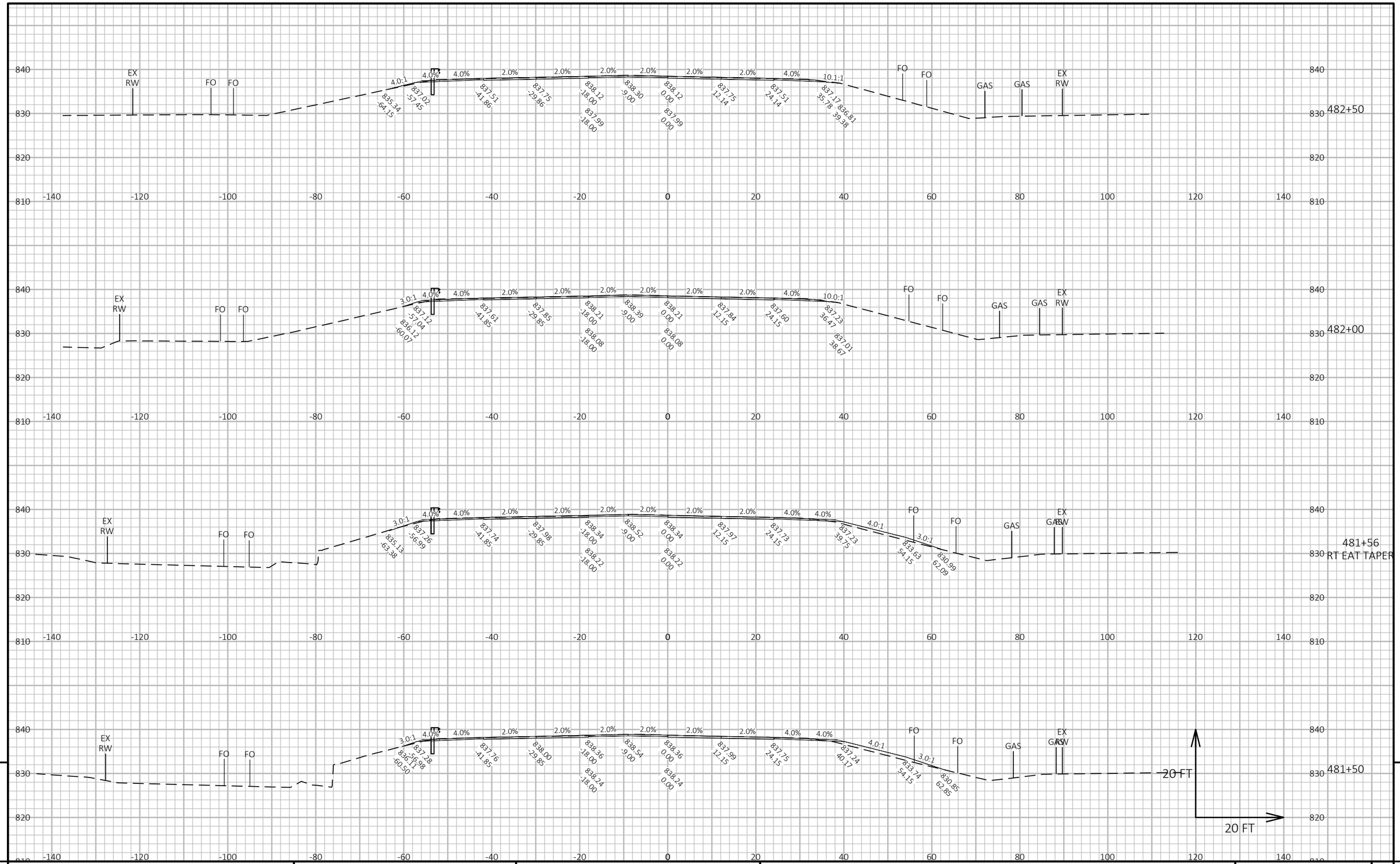
9 9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 407	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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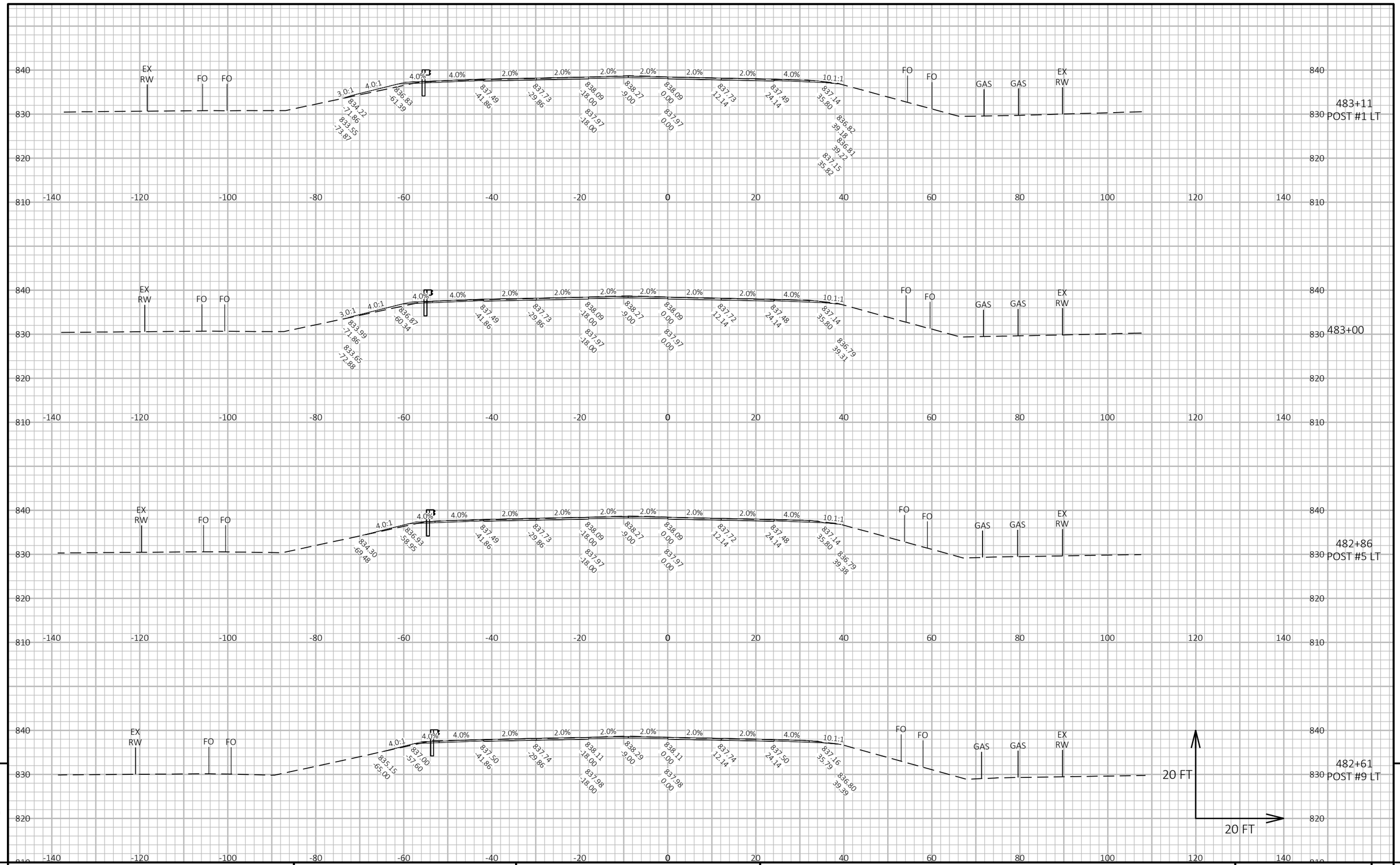
9

PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 408	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 20

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

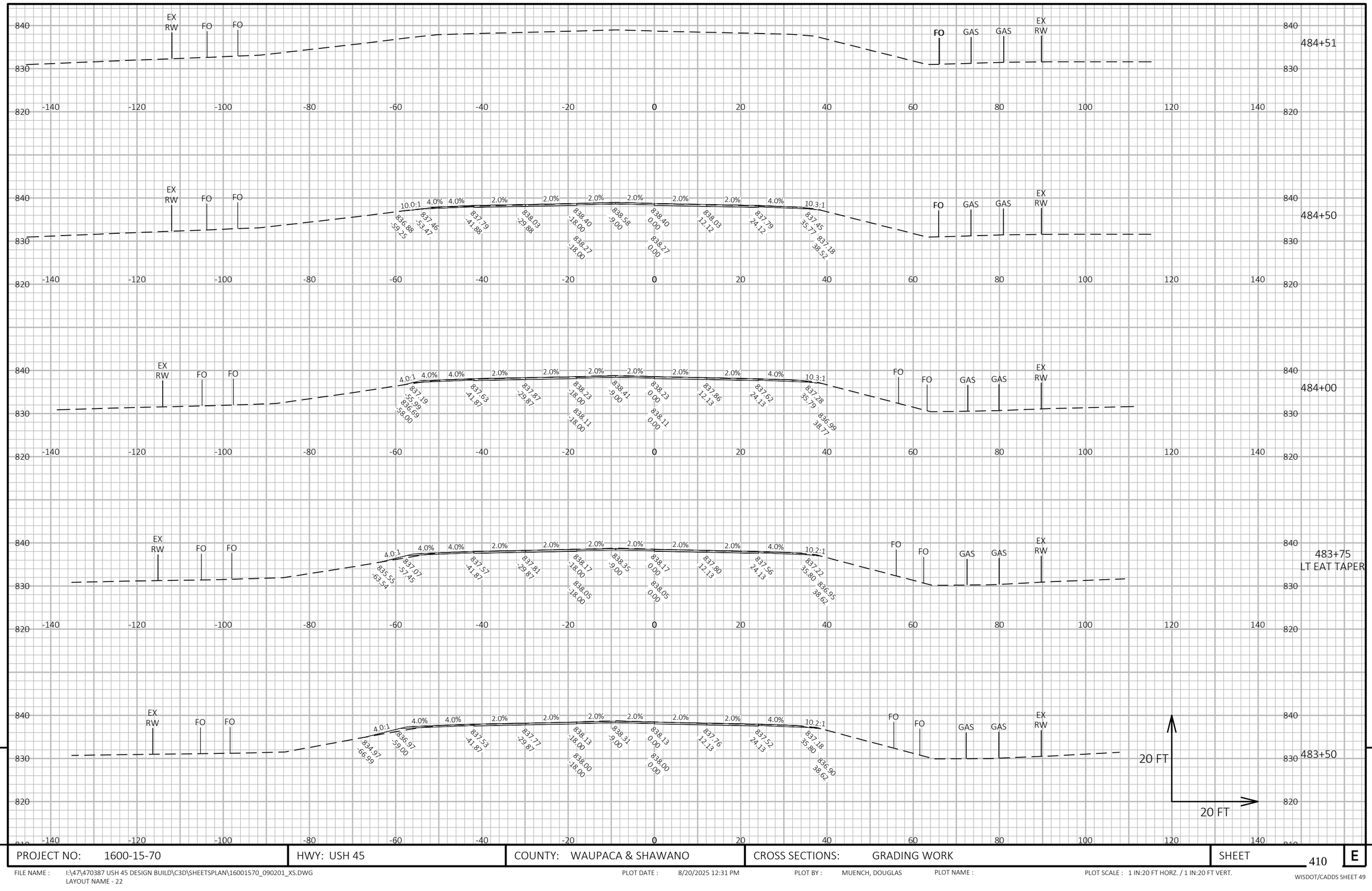


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 409 E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 21

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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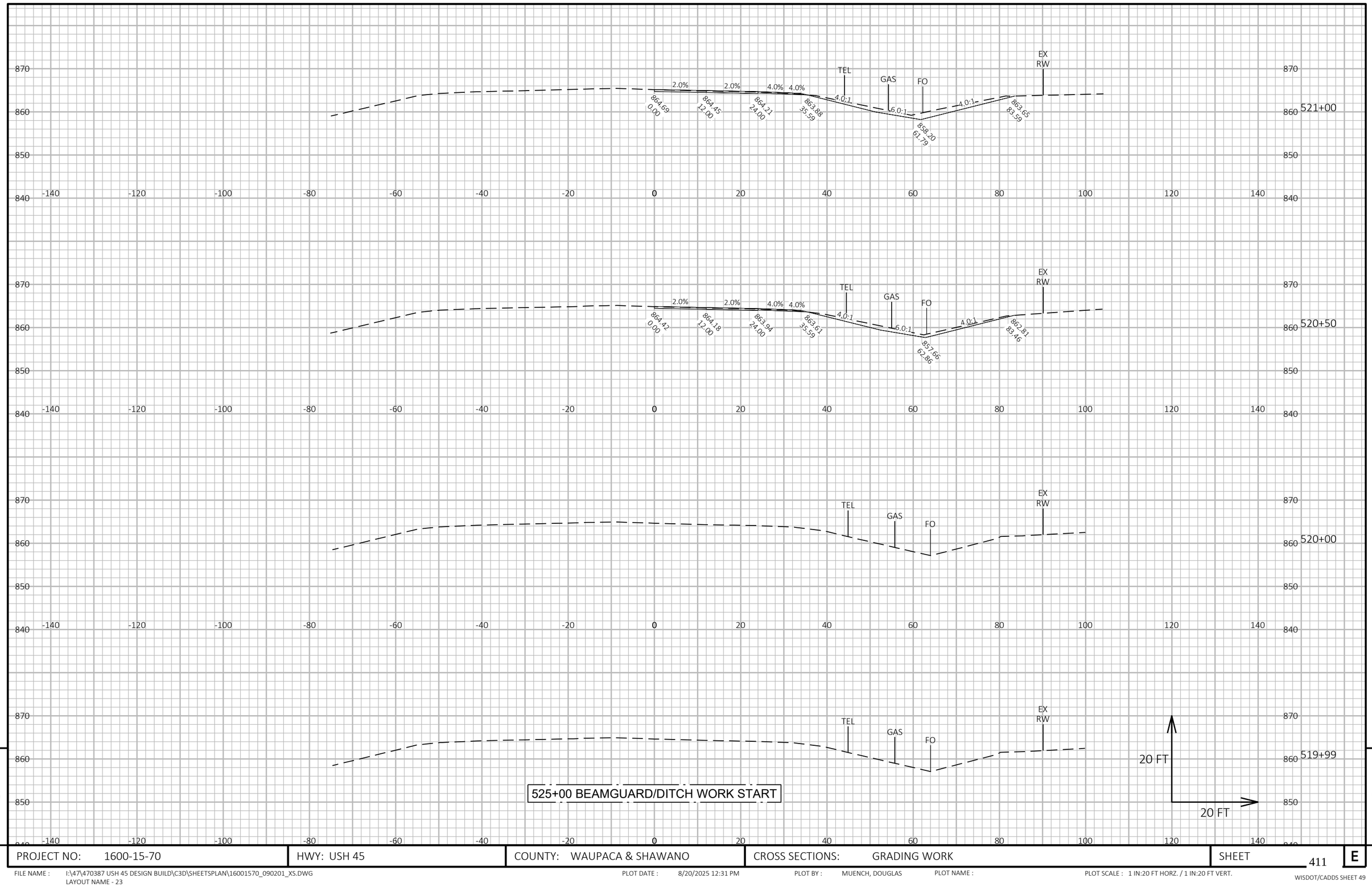
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 410	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 22

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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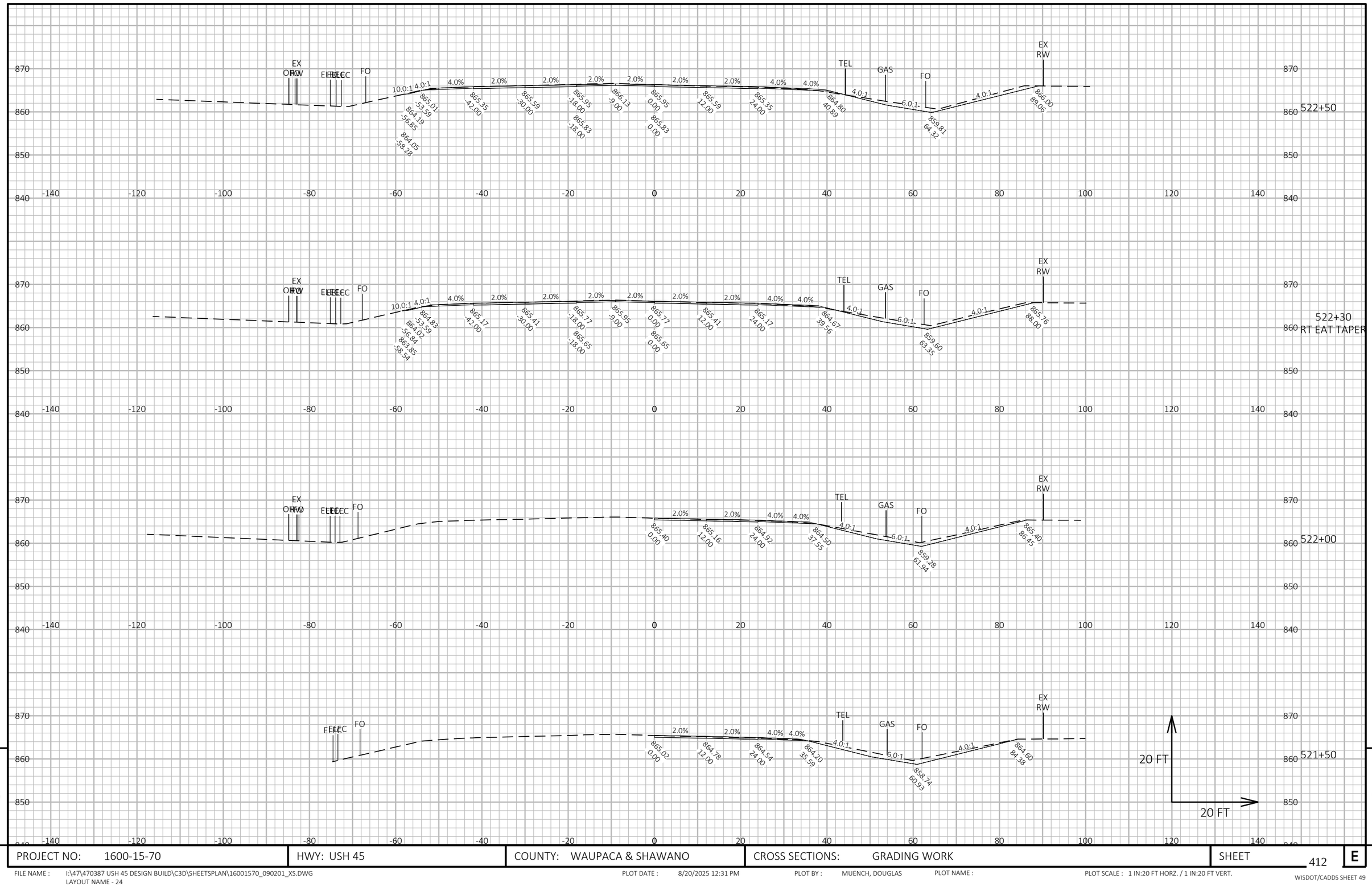
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 411	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 23

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 412	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 24

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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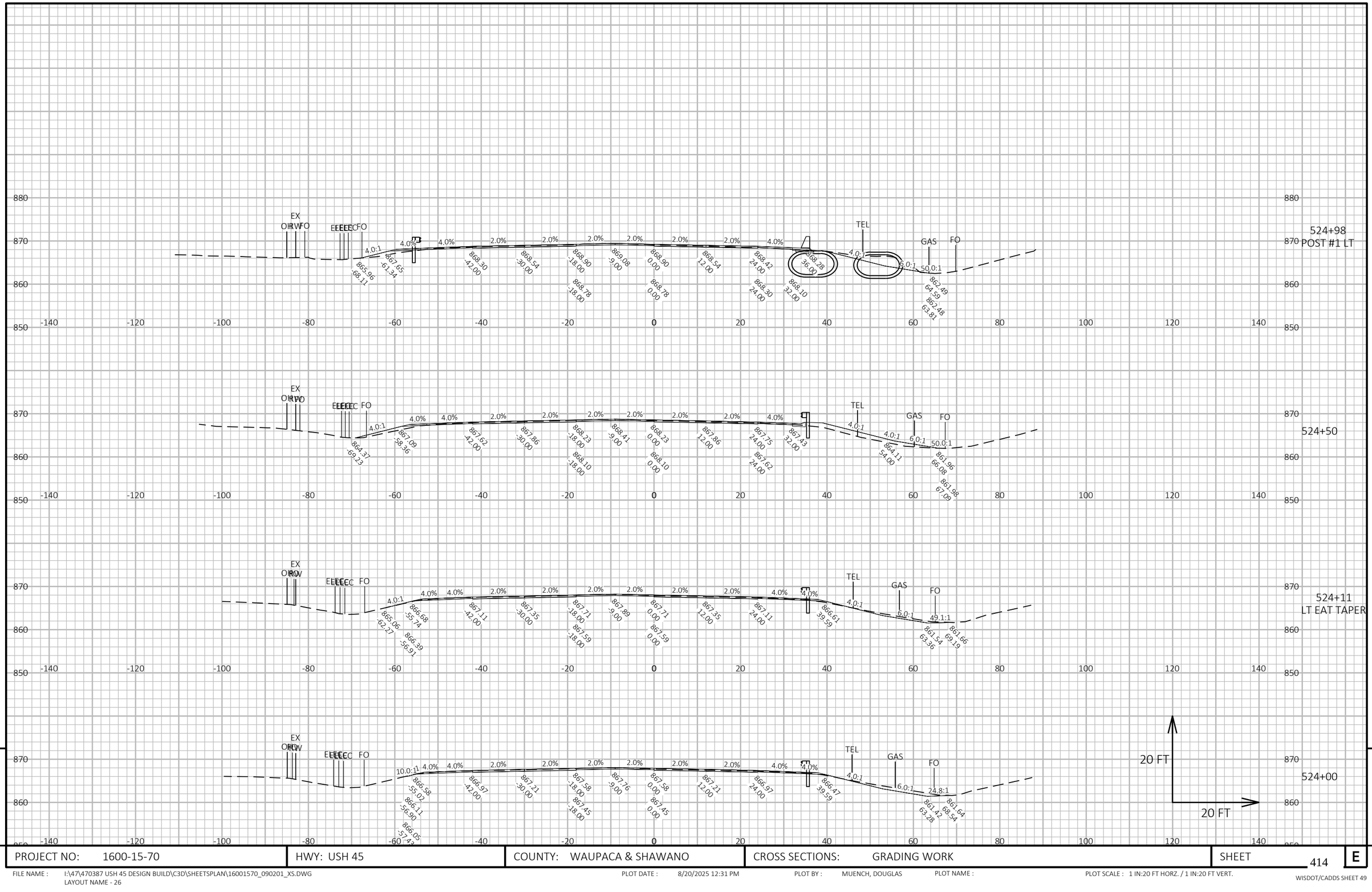
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 413	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 25

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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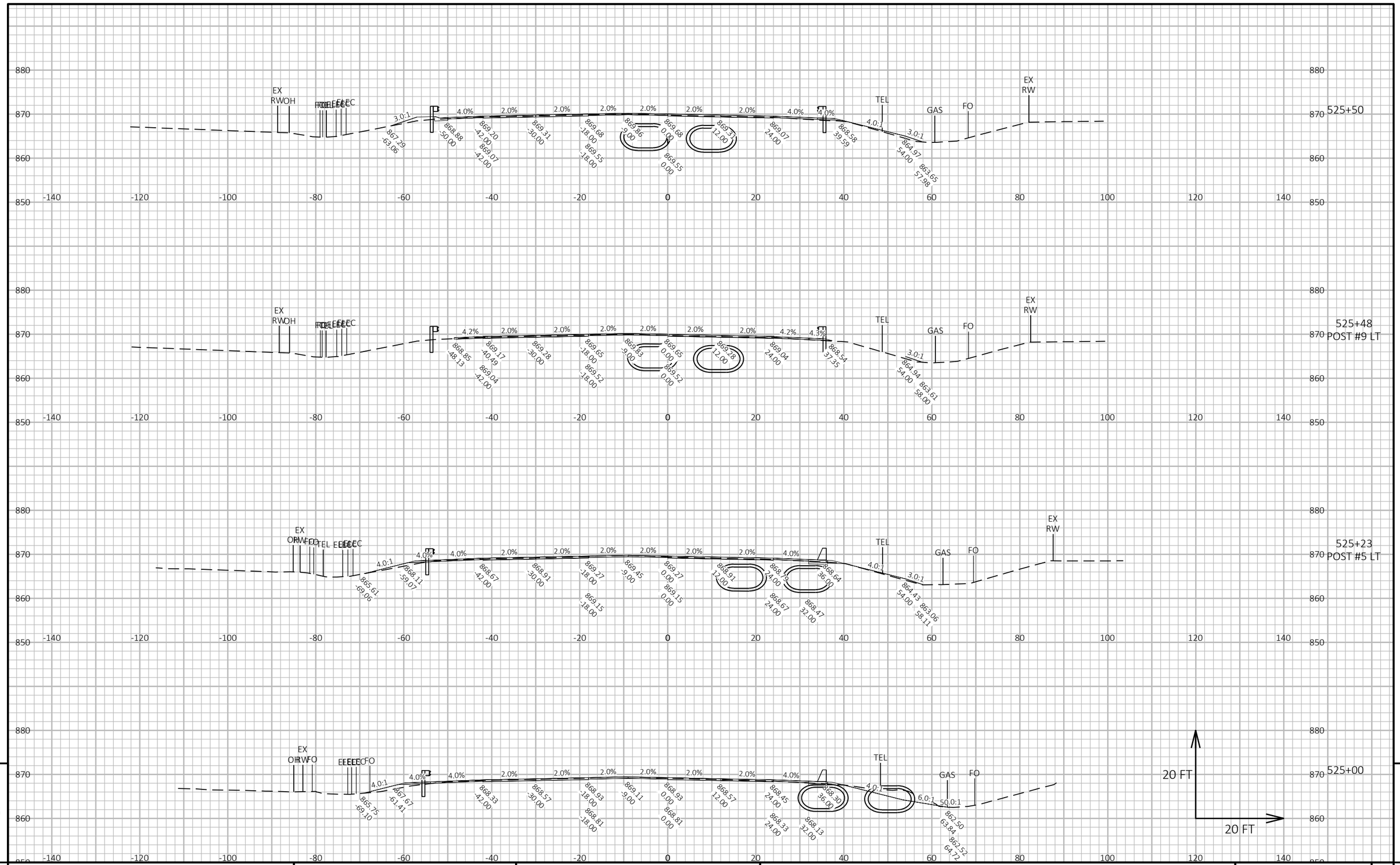
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 414	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 26

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

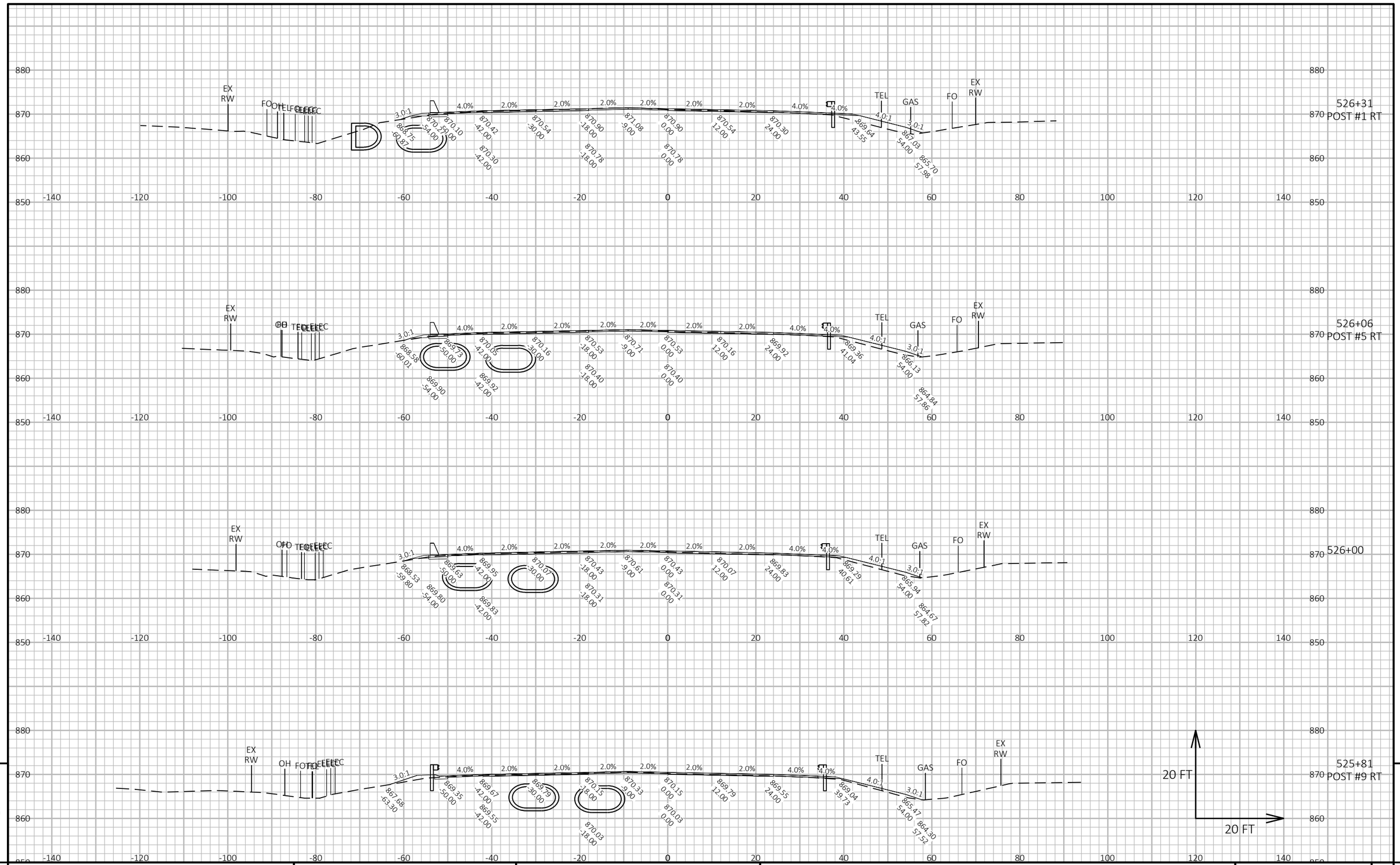


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 415	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 27

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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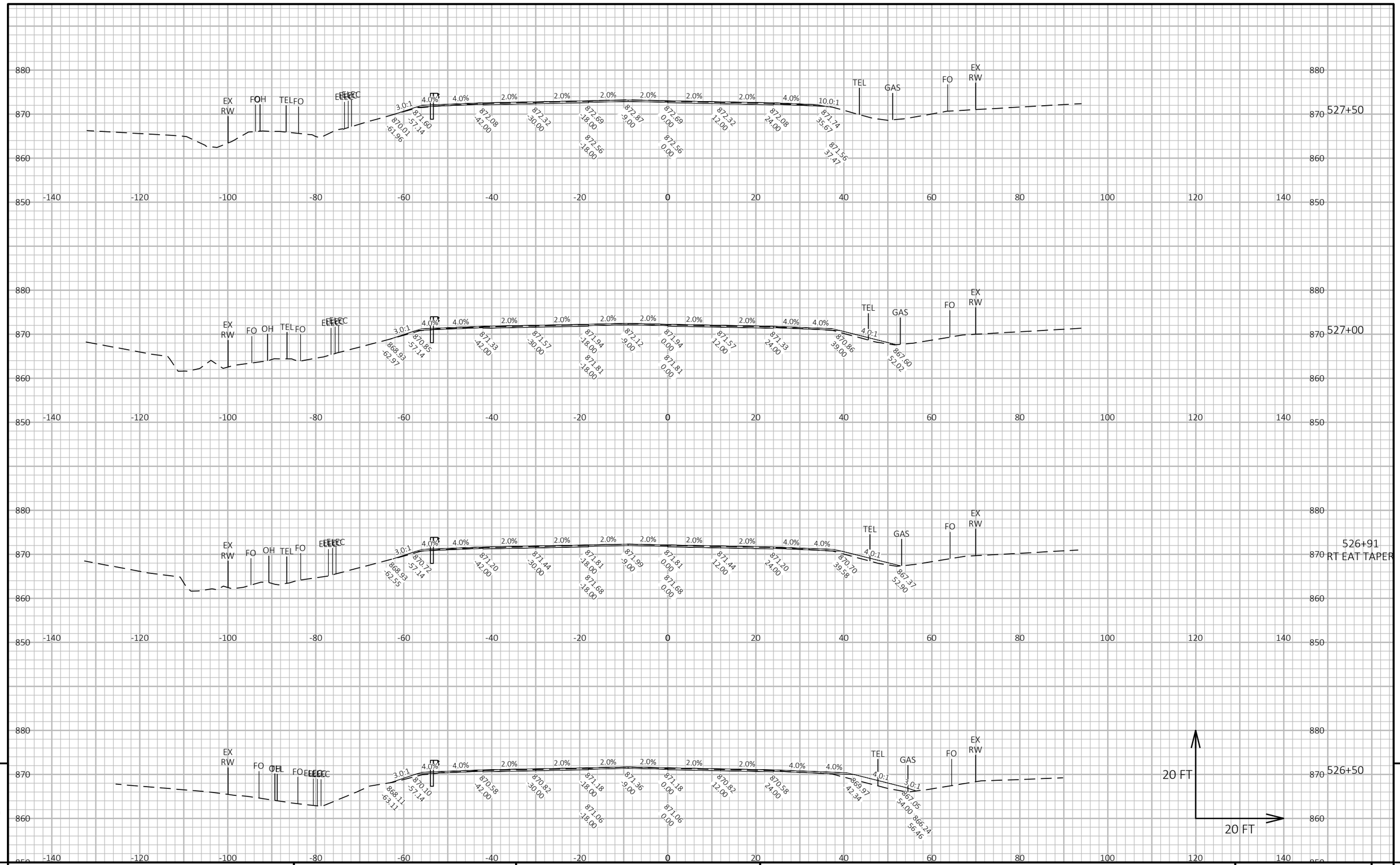
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 416	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 28

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

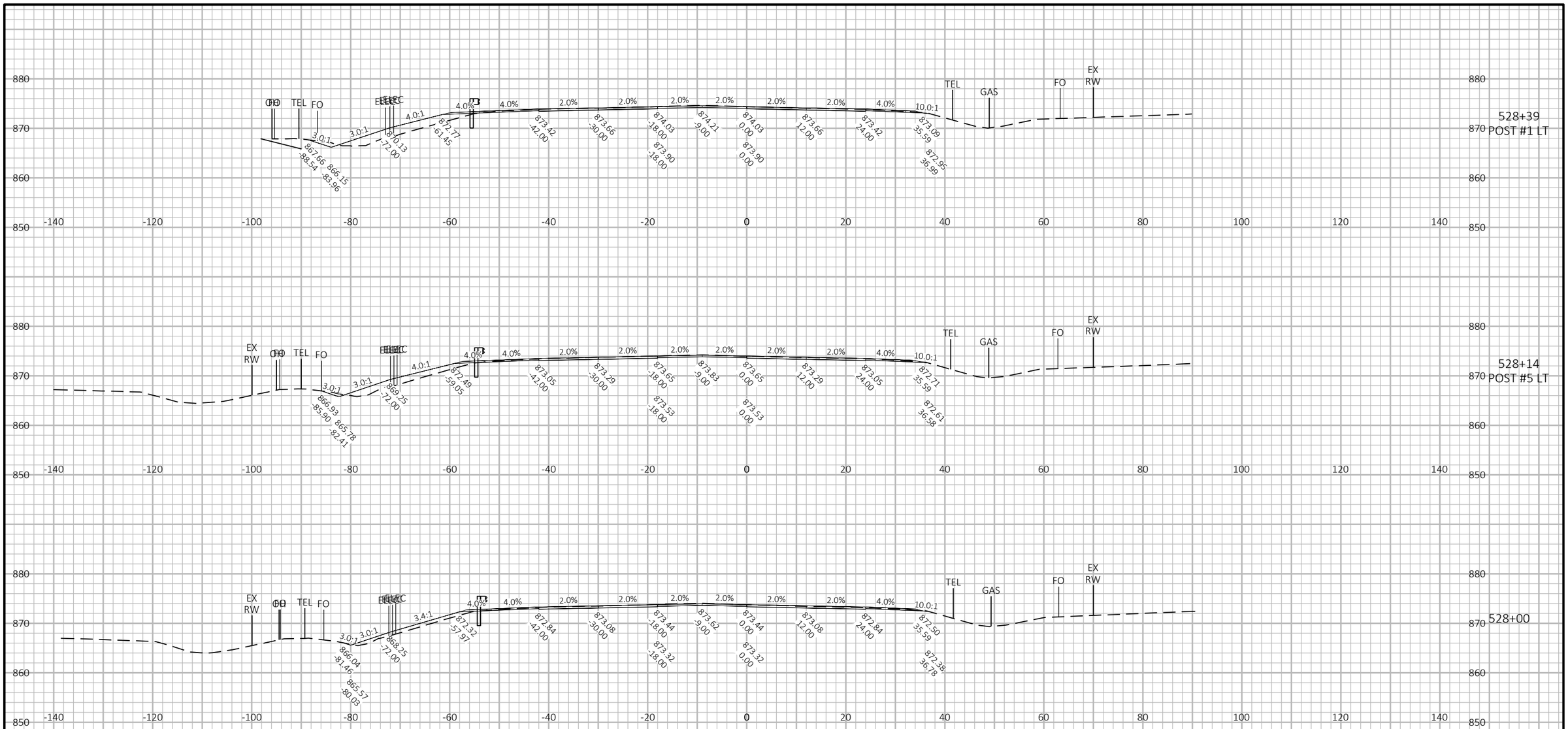


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 417	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 29

PLOT DATE : 8/20/2025 12:31 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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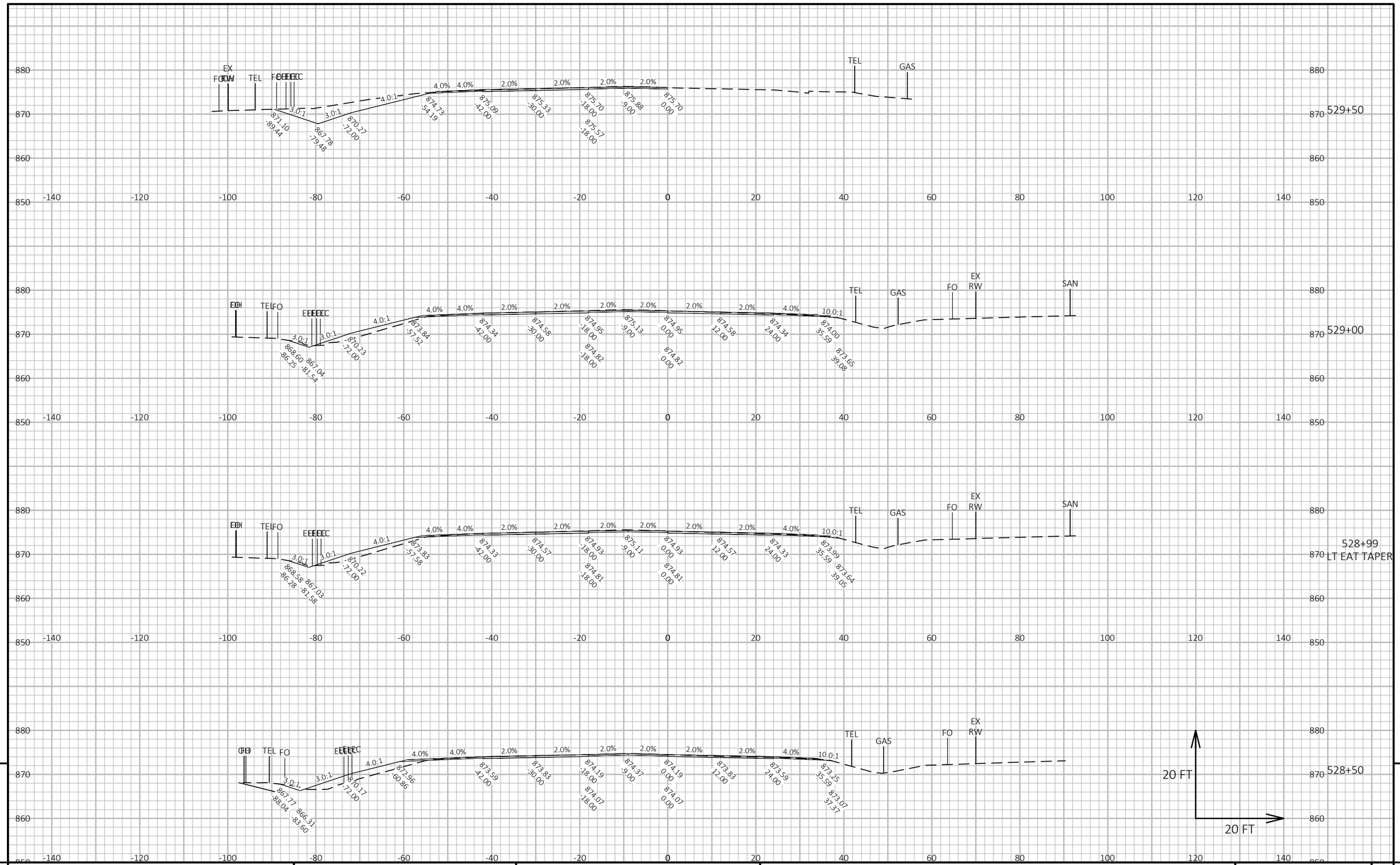
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 418	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 30

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

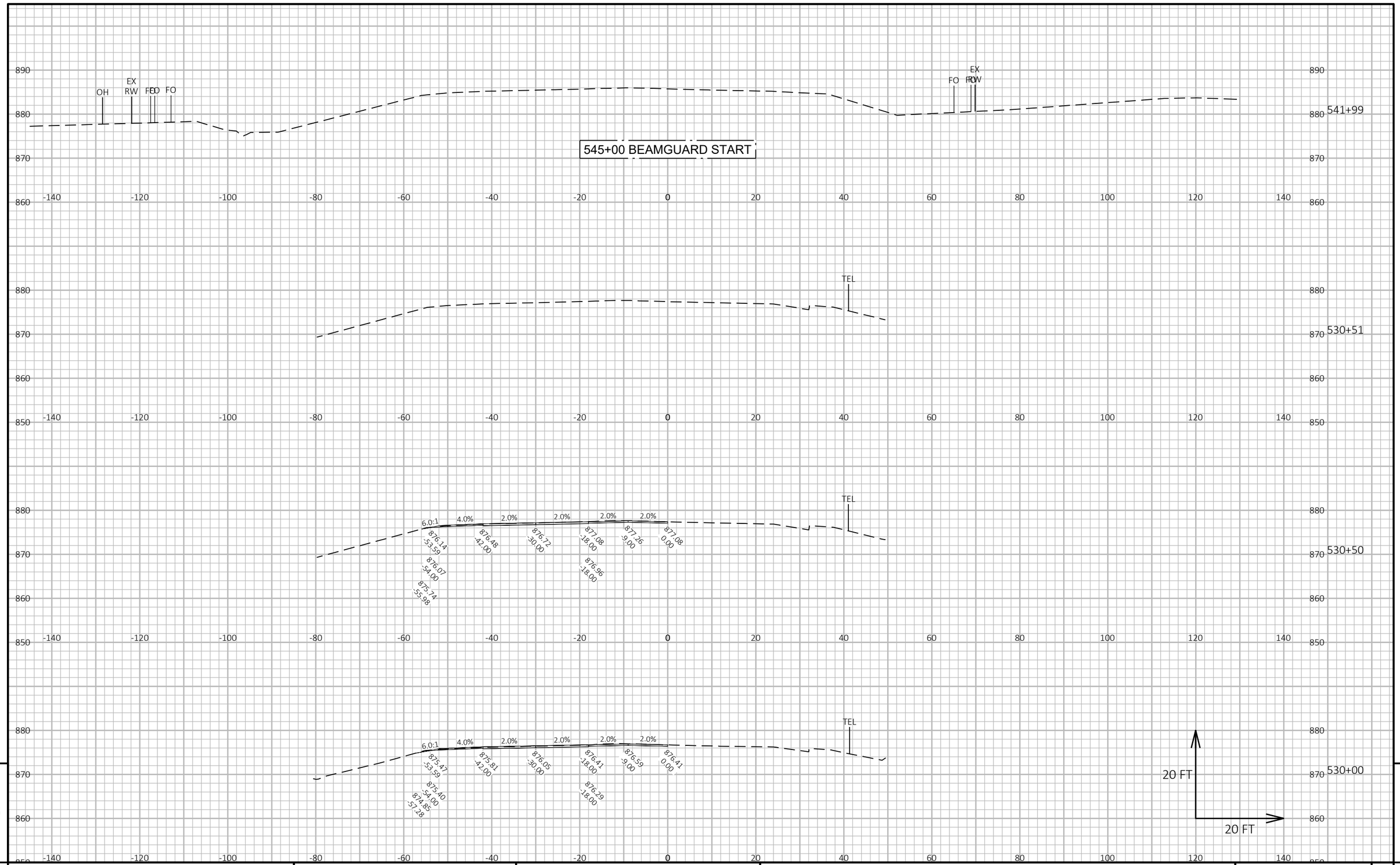


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 419	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 31

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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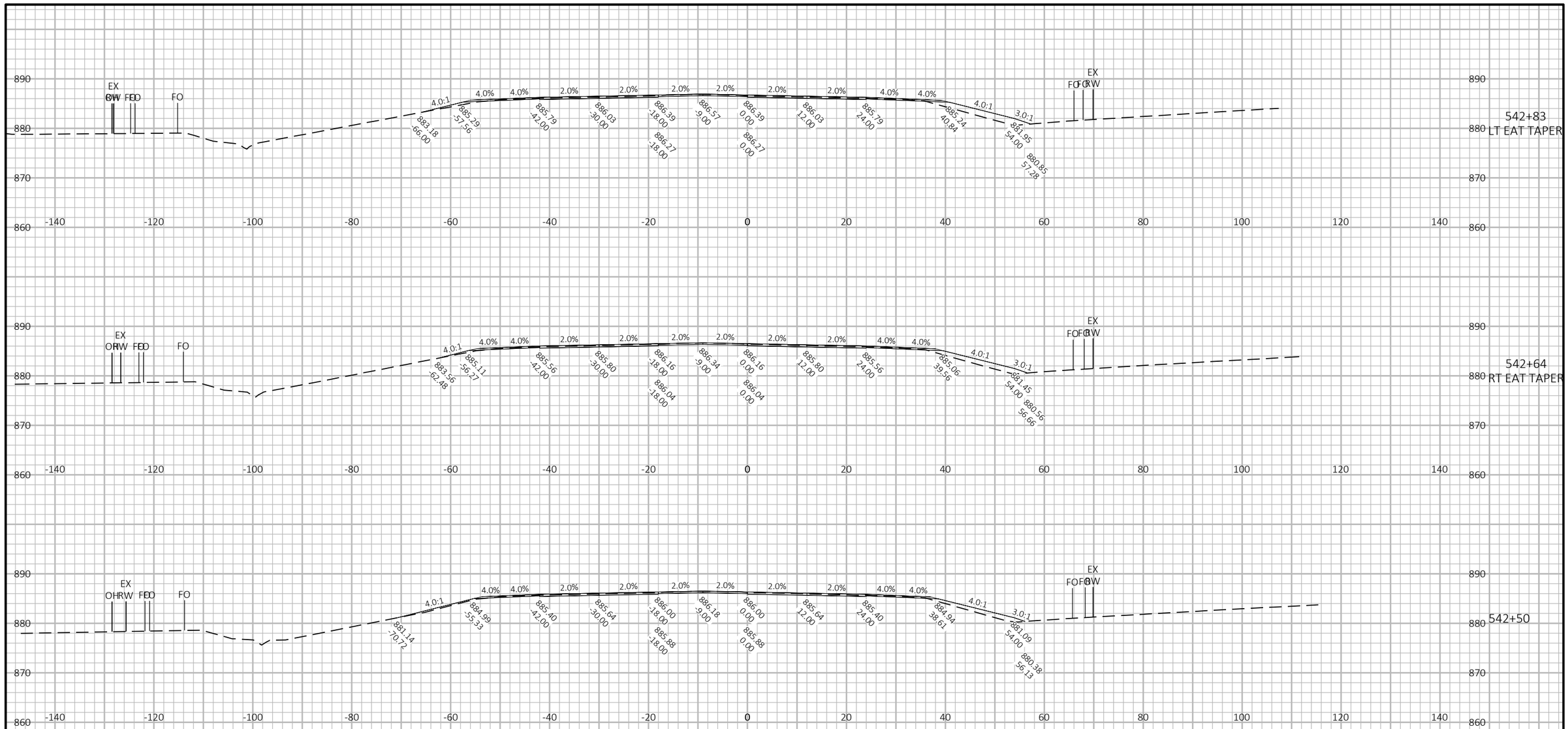
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 420	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 32

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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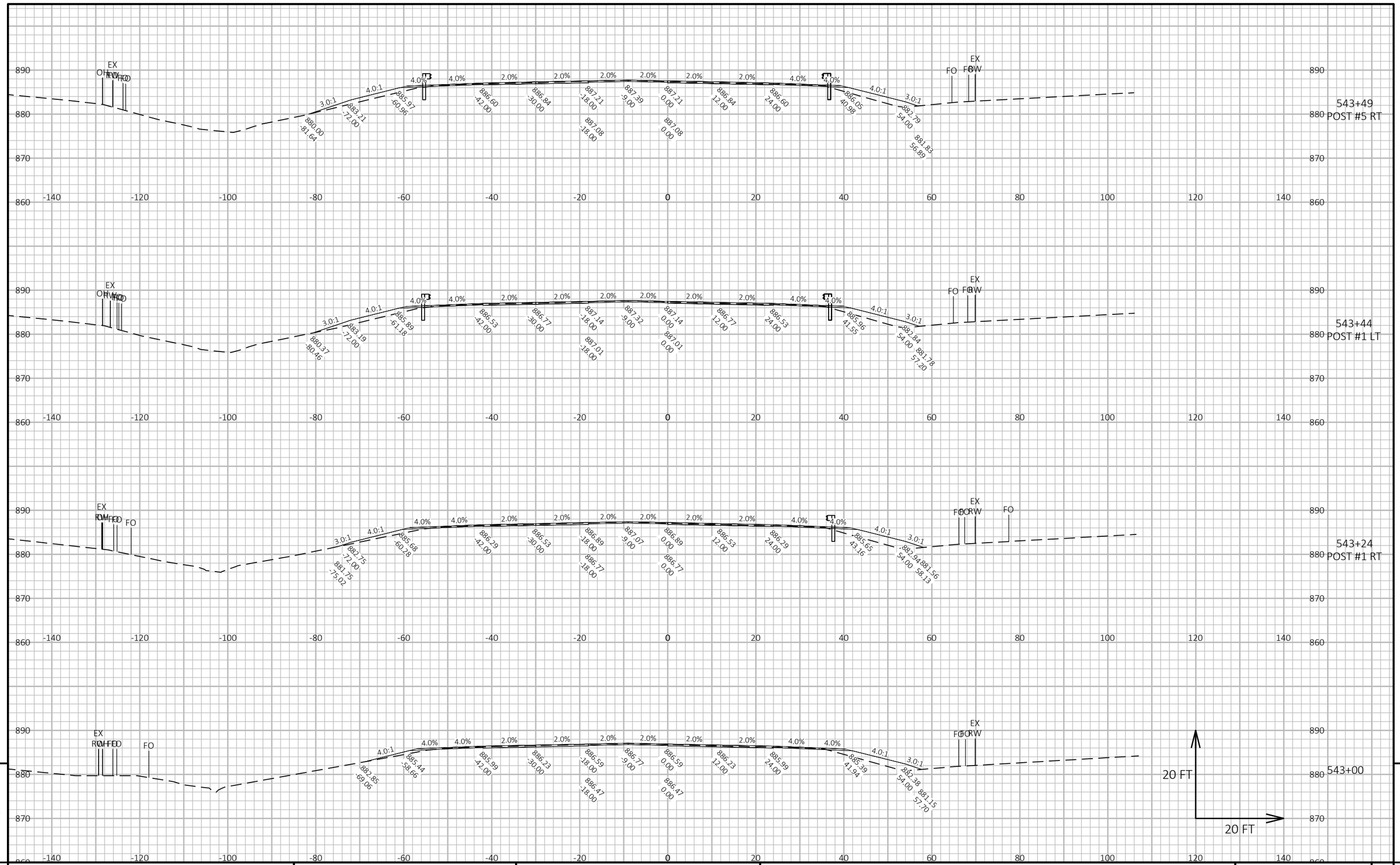
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 421	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 33

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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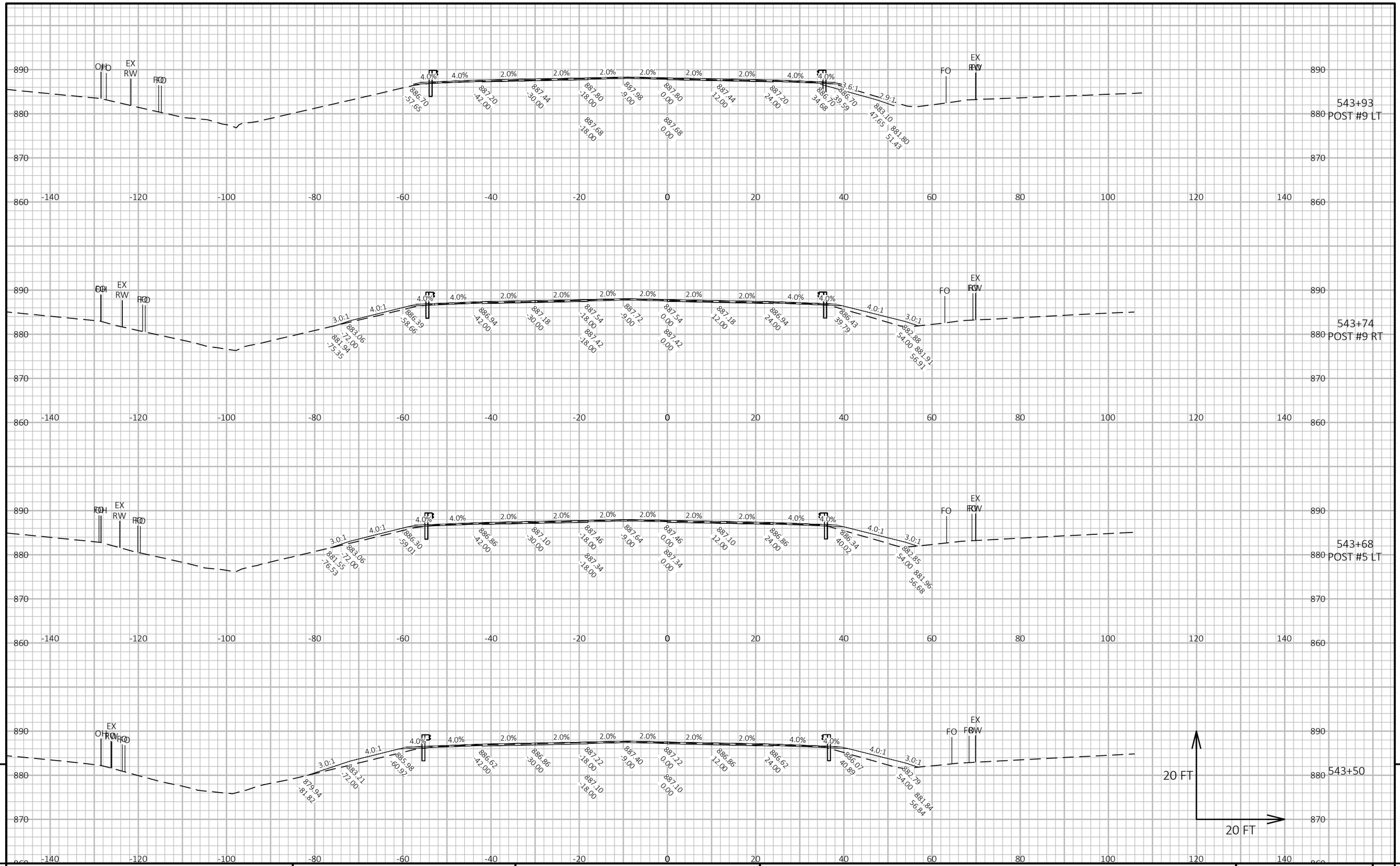
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 422	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 34

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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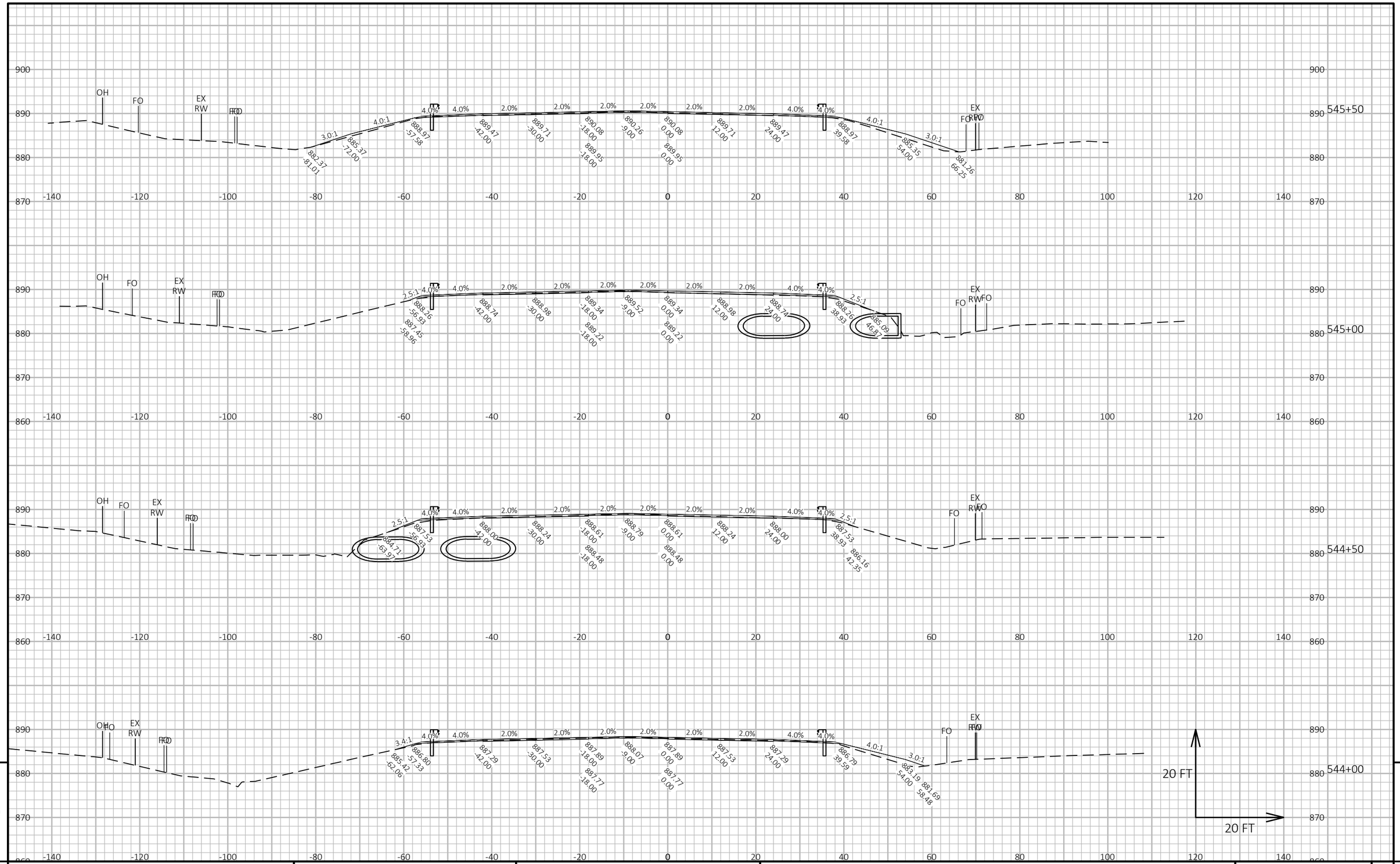
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 423	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 35

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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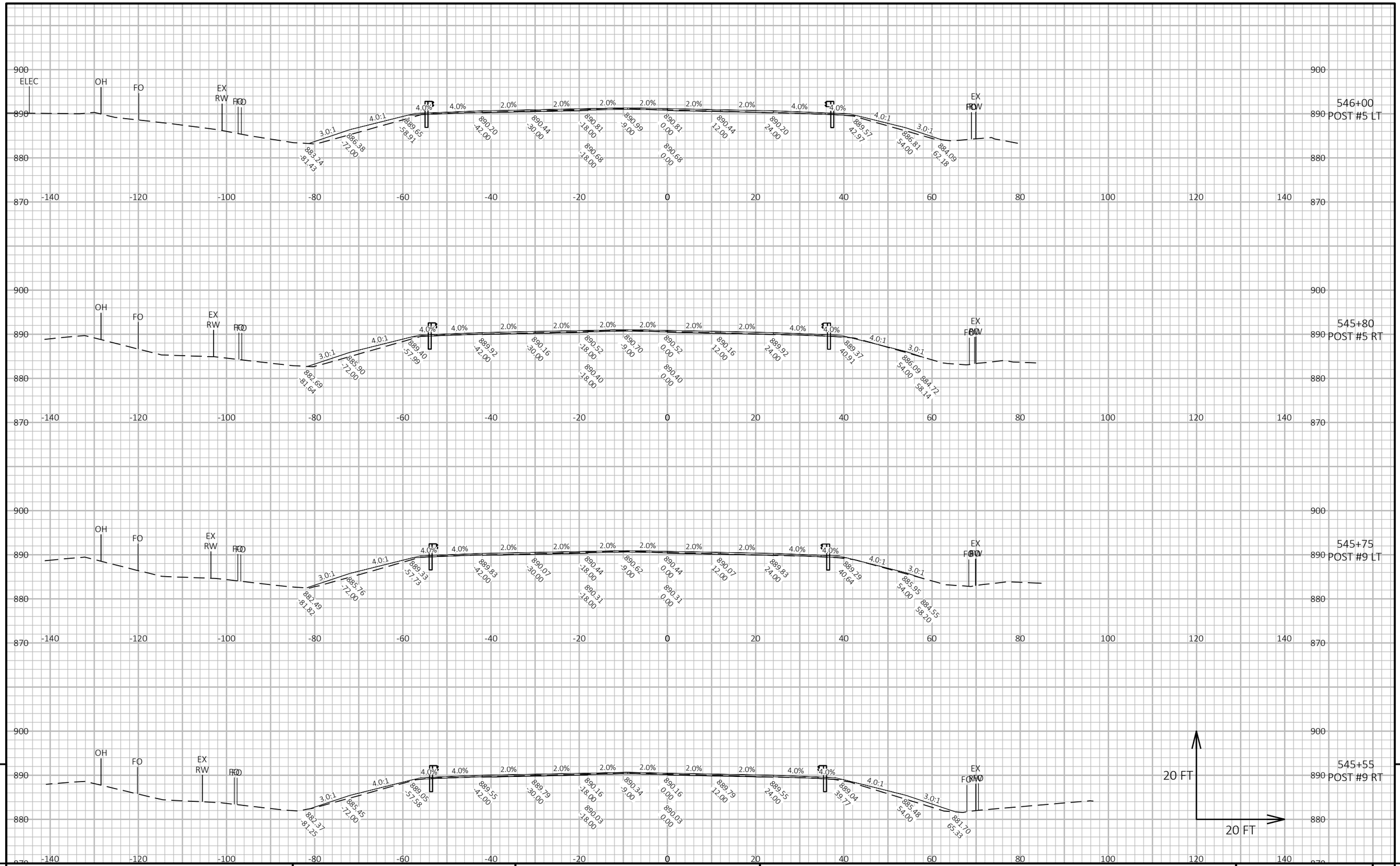
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 424	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 36

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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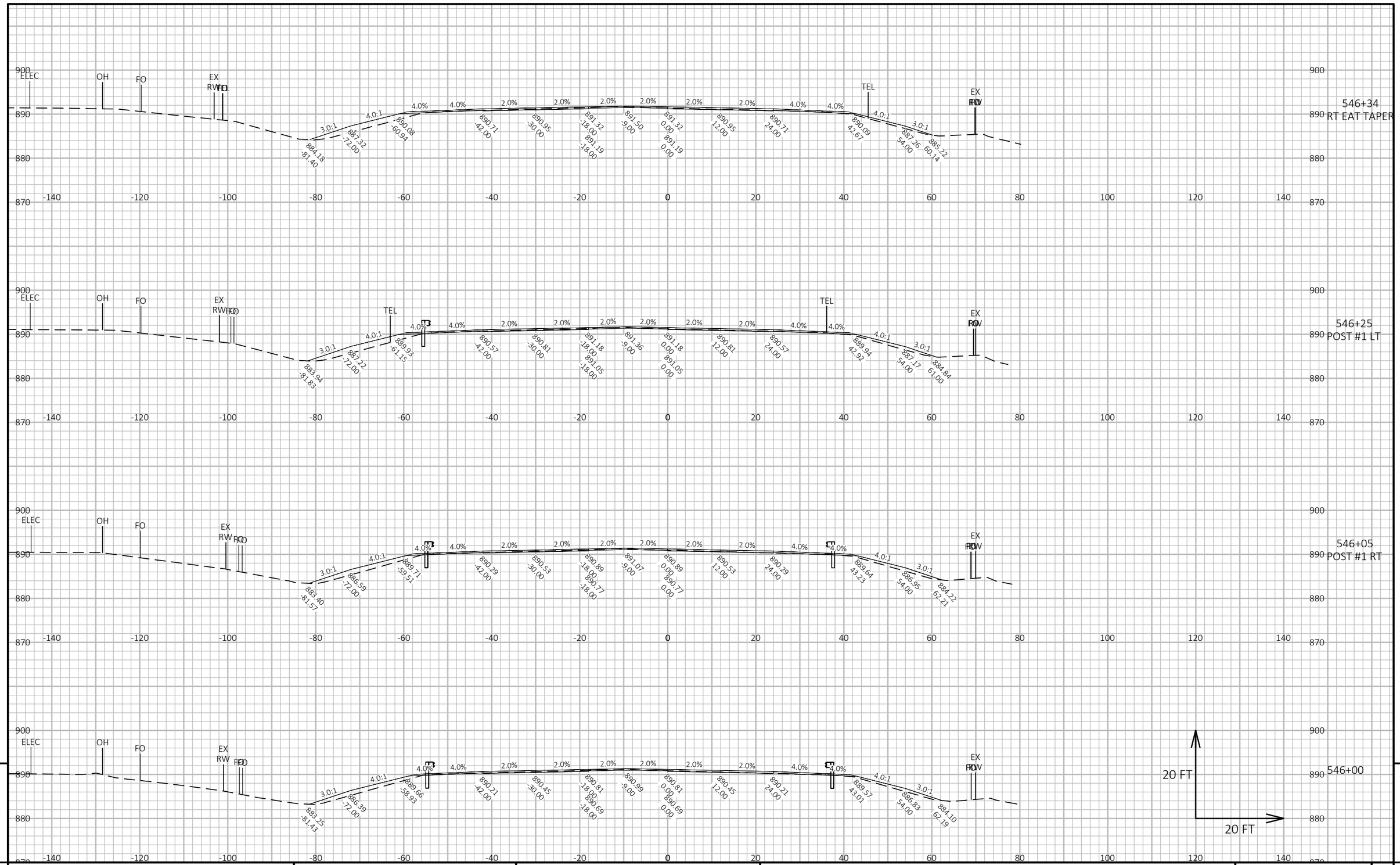
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 425	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 37

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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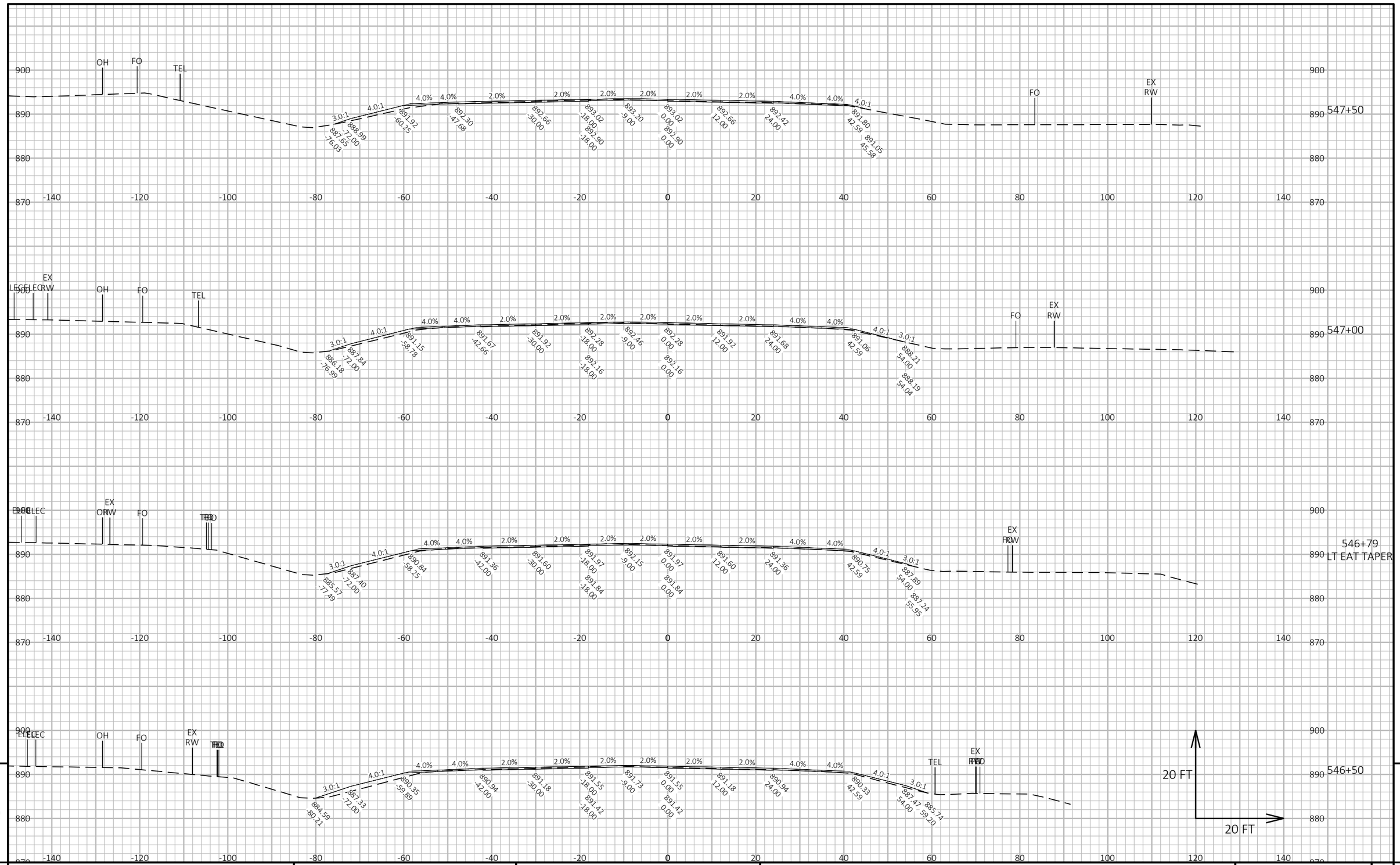
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 426	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 38

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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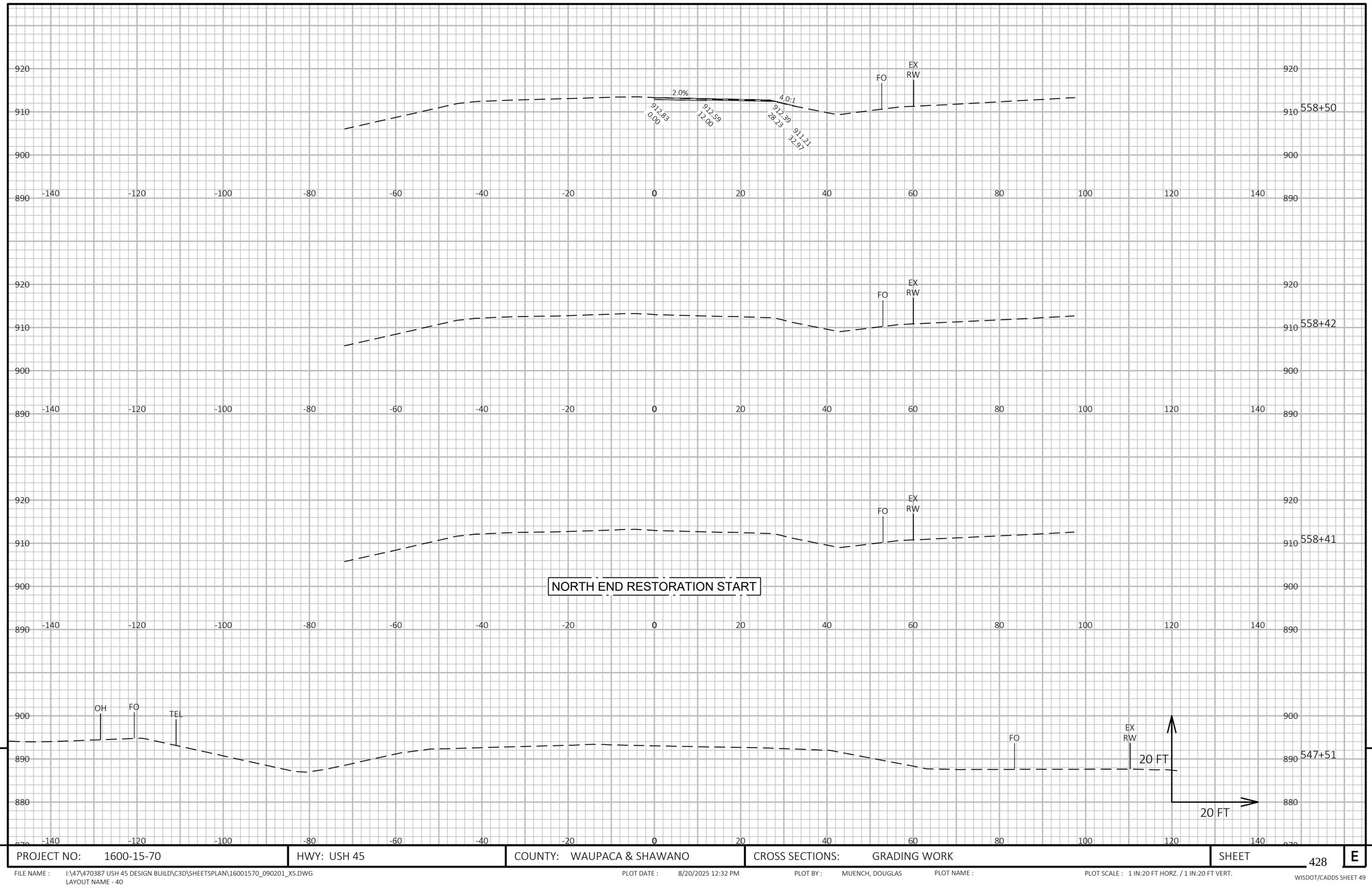
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 427	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 39

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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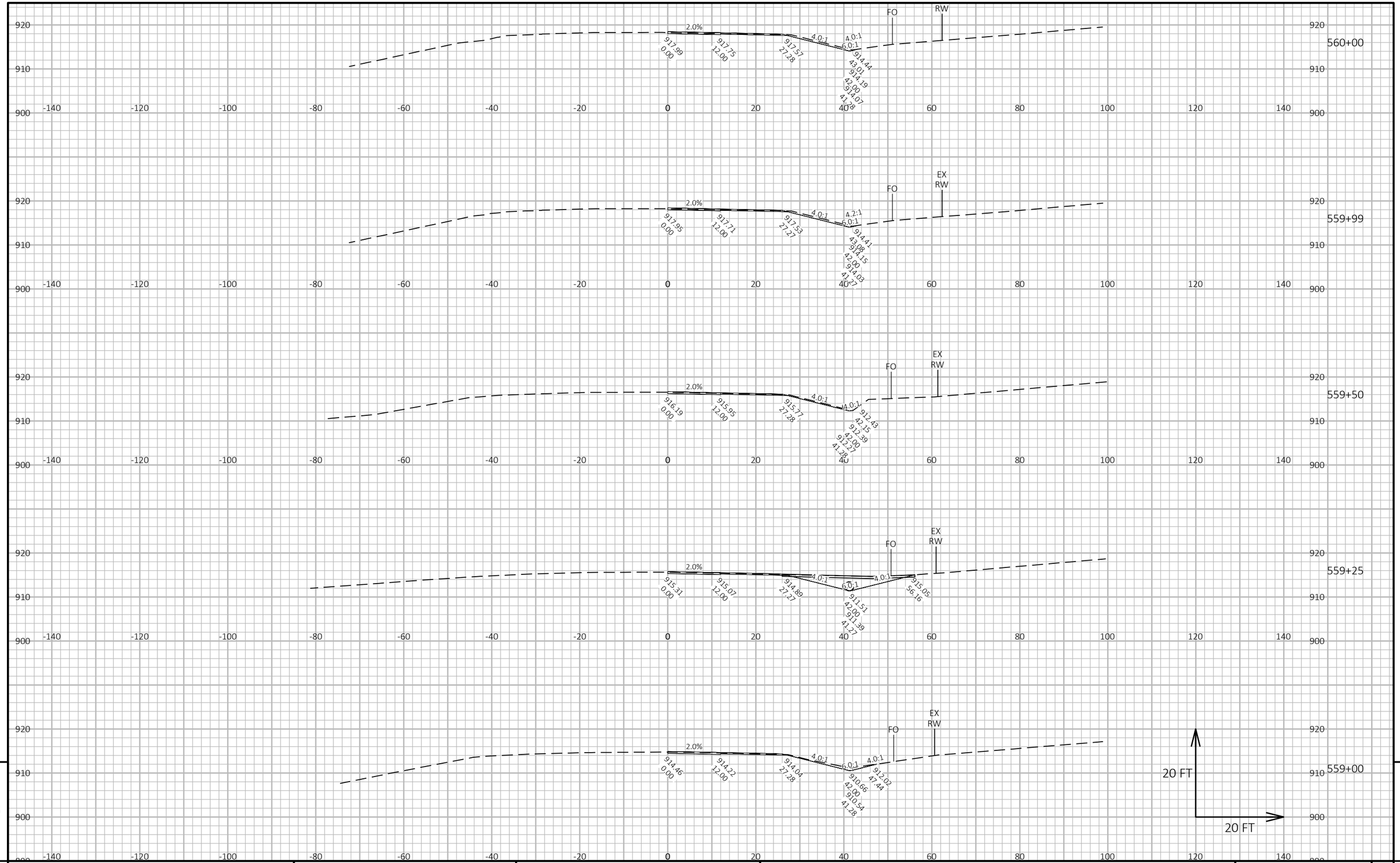
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 428	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 40

PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

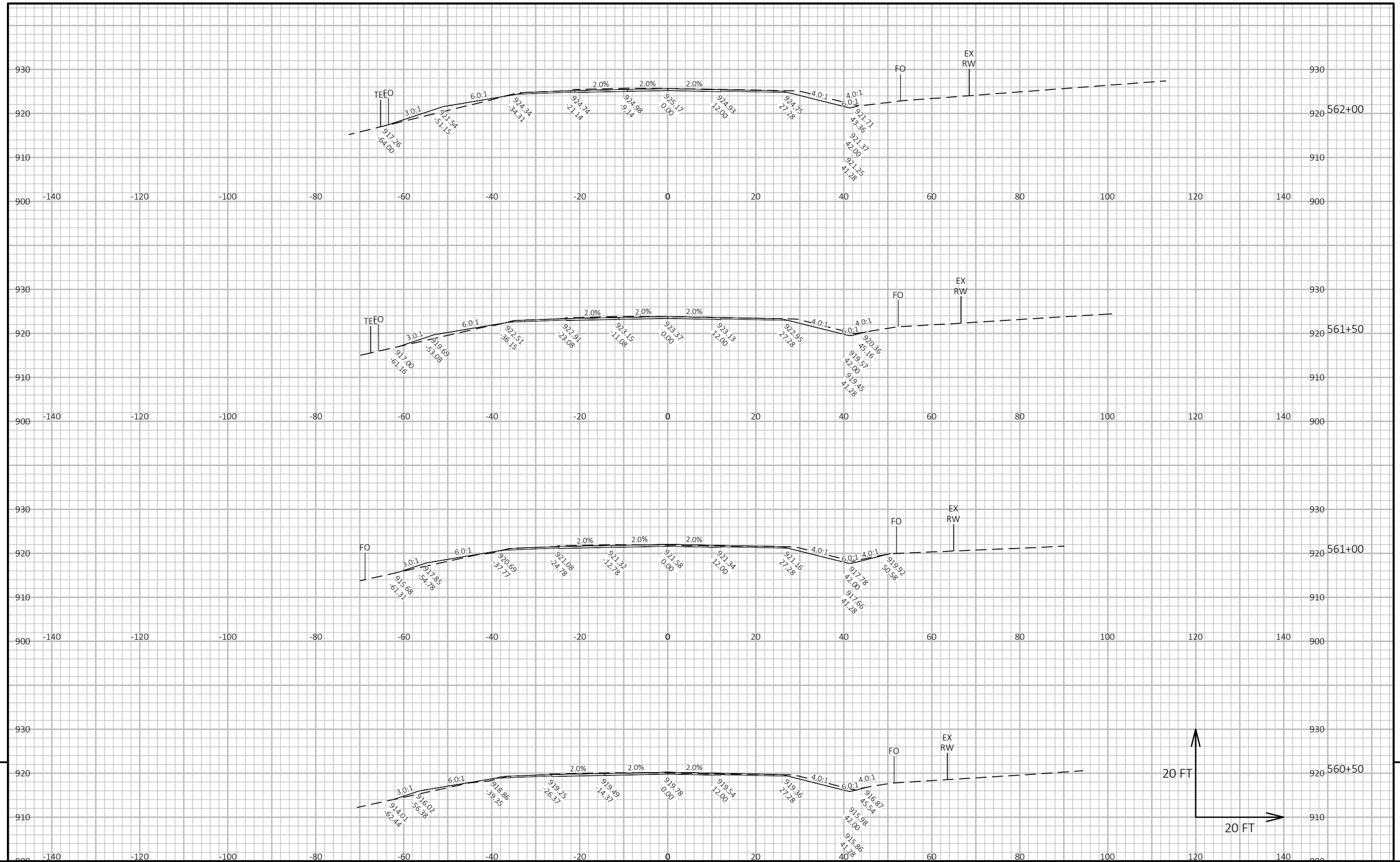


PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 429	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 41

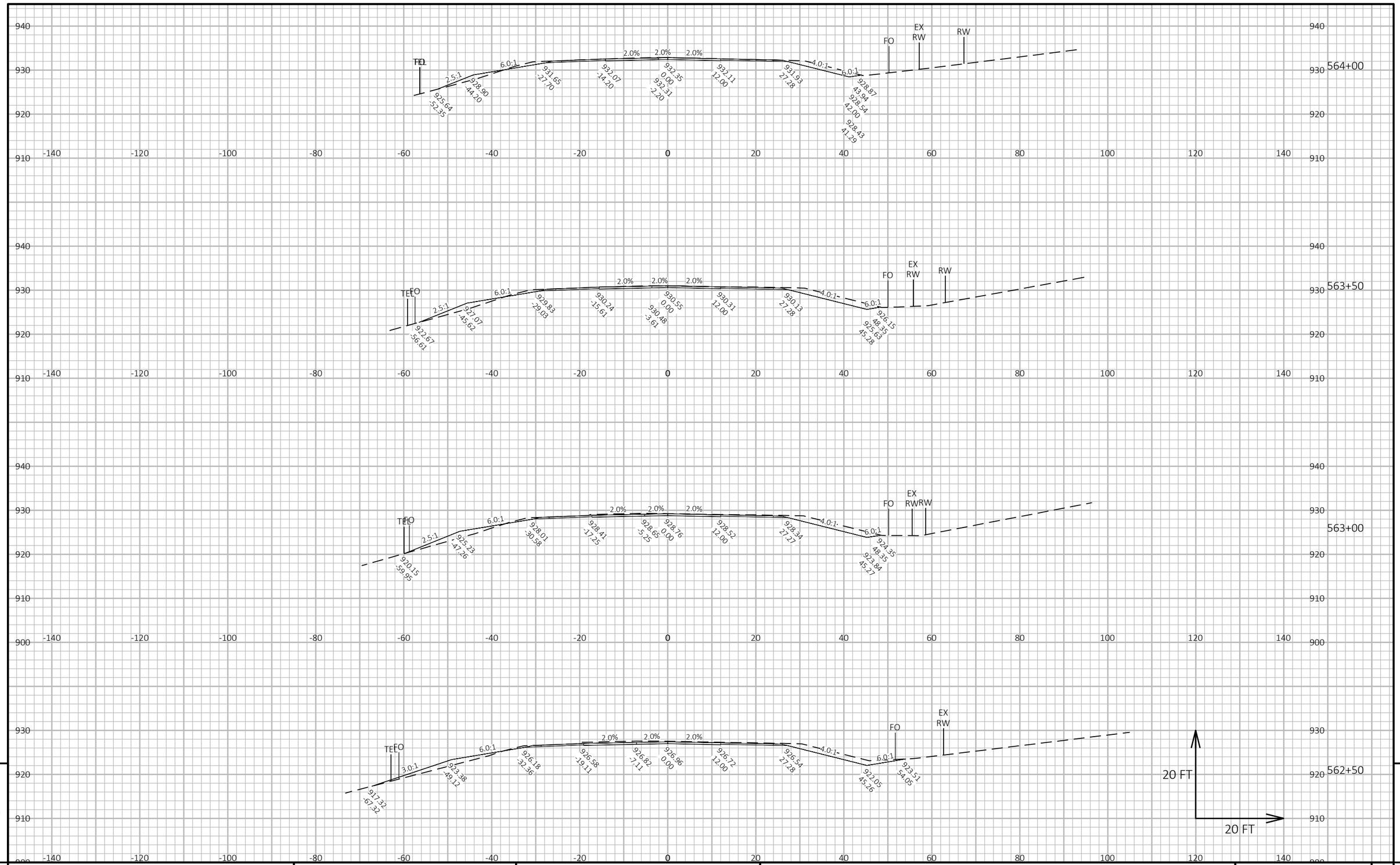
PLOT DATE : 8/20/2025 12:32 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 430 E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 42
PLOT DATE : 8/20/2025 12:32 PM
PLOT BY : MUENCH, DOUGLAS
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 431	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 43

PLOT DATE : 8/20/2025 12:33 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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9

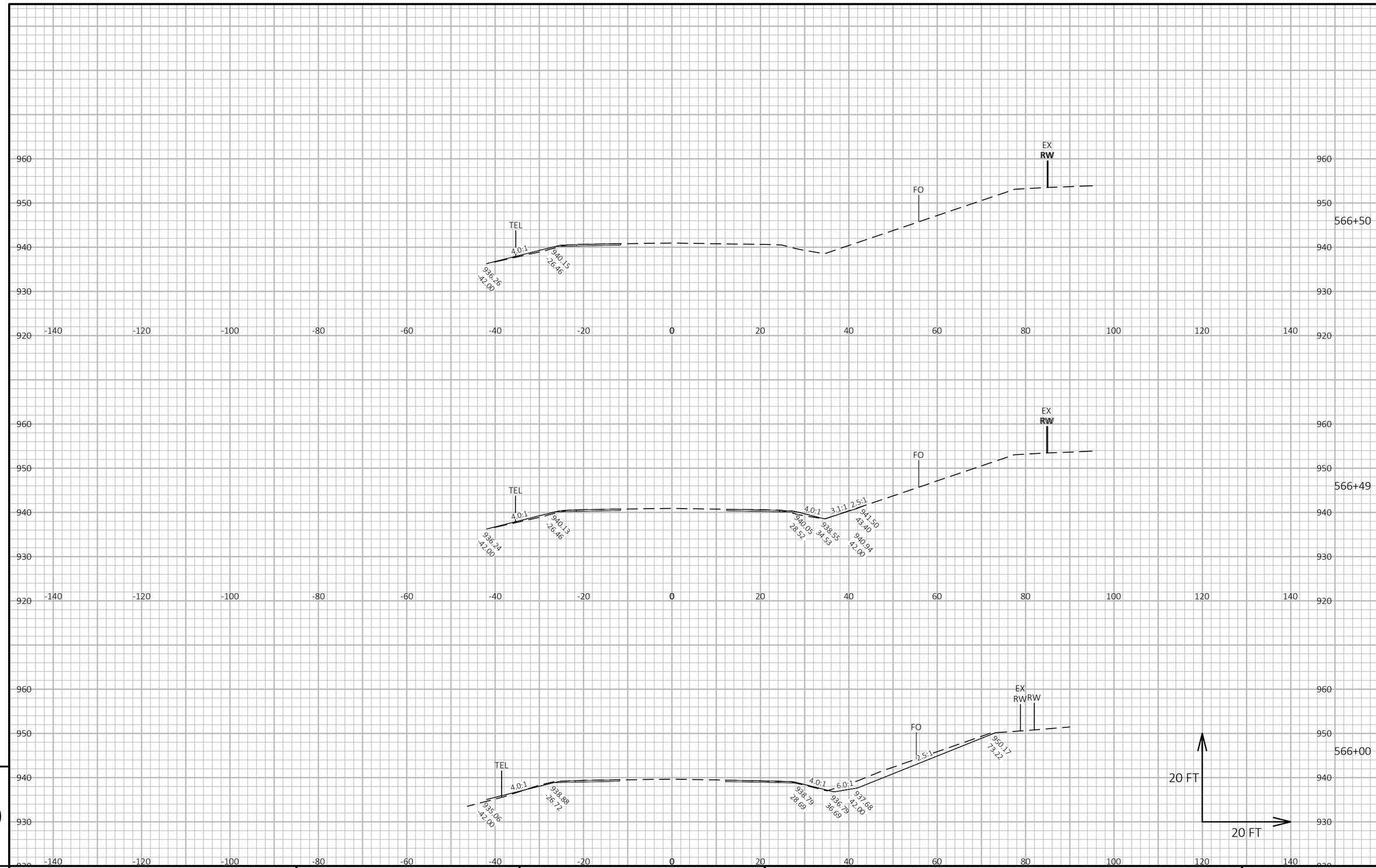
PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 432	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 44

PLOT DATE : 8/20/2025 12:33 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 433	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 45

PLOT DATE : 8/20/2025 12:33 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

960
950
940
930
920
-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

FO
TEL

567+01

FO
TEL

4.0:1
941.40
-26.76
937.59
-42.00

567+00

20 FT
20 FT

9

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PROJECT NO: 1600-15-70	HWY: USH 45	COUNTY: WAUPACA & SHAWANO	CROSS SECTIONS: GRADING WORK	SHEET 434	E

FILE NAME : I:\47\470387 USH 45 DESIGN BUILD\C3D\SHEETSPLAN\16001570_090201_XS.DWG
LAYOUT NAME - 46

PLOT DATE : 8/20/2025 12:33 PM PLOT BY : MUENCH, DOUGLAS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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