WIS

PROJECT ID: 1140-00-77

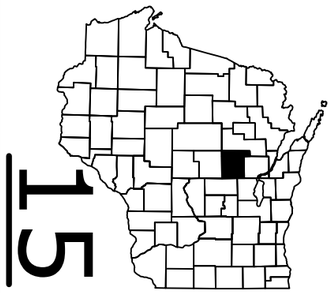
COUNTY: OUTAGAMIE & WAUPACA

NOVEMBER 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 = 464



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

NEW LONDON - CLINTONVILLE

GIVENS ROAD TO CHURCH ROAD

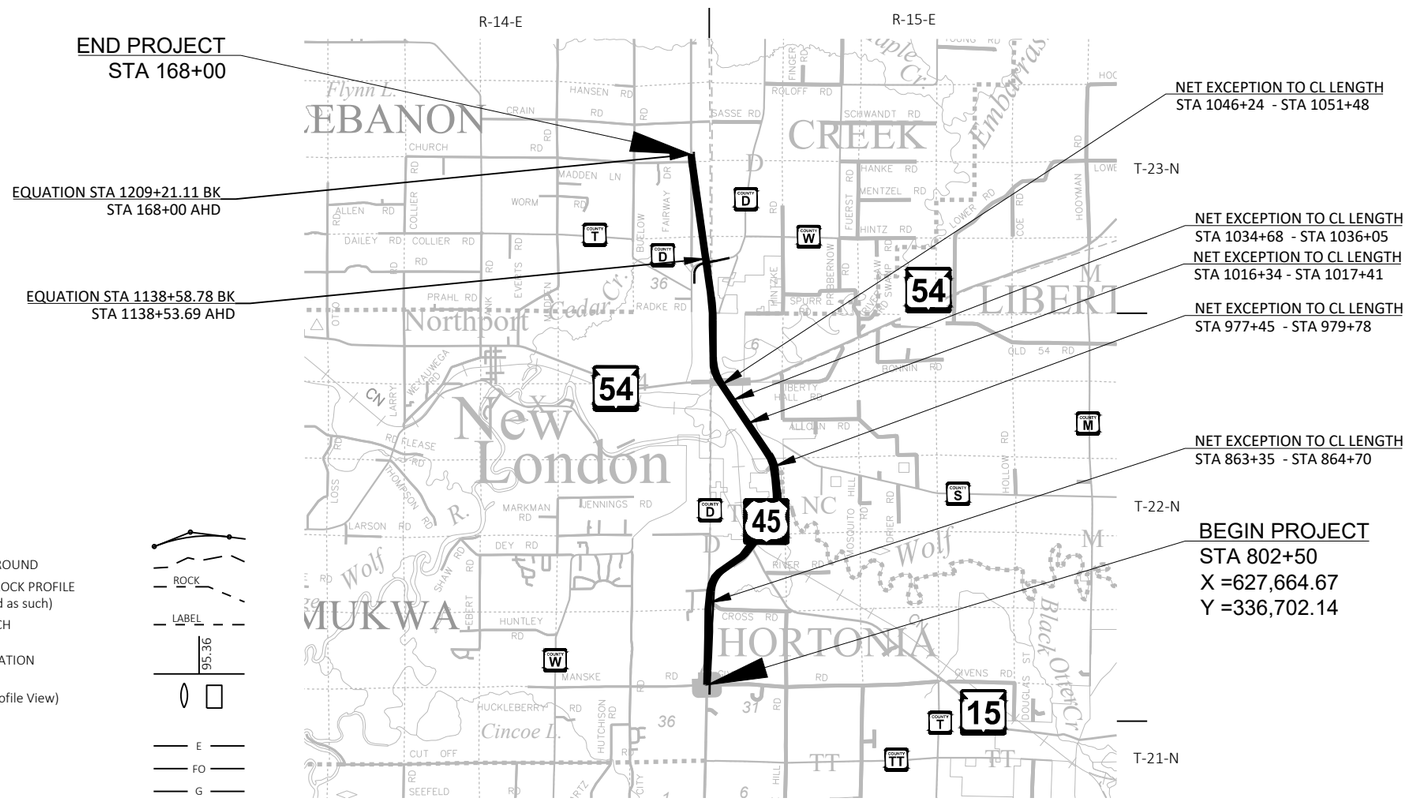
USH 45

OUTAGAMIE & WAUPACA COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1140-00-77	WISC 2026056	1

STATE PROJECT NUMBER

1140-00-77



N

DESIGN DESIGNATION

A.A.D.T.	2026	=	9,800
A.A.D.T.	2046	=	11,300
D.H.V.		=	
D.D.		=	
T.		=	13.8
DESIGN SPEED		=	60 MPH
ESALS		=	3,600,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 7.489 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), 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 12A

ORIGINAL PLANS PREPARED BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Tomahawk, WI 54487
715-224-3122

WISCONSIN
GREGORY R. BUBOLZ
E-43683
GLEASON
WI
PROFESSIONAL ENGINEER

7/28/2025 (DATE) Greg Bubolz (SIGNATURE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	DAAR ENGINEERING, INC.
Designer	DAAR ENGINEERING, INC.
Project Manager	KOREY BOEHM, P.E.
Regional Examiner	FRED SCHUNKE, P.E.
Regional Supervisor	KEVIN KUJAWA, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 7-28-25 (Signature)

E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/28/2025 8:05 AM PLOT BY : ETHAN HEROUX PLOT NAME :

2

GENERAL NOTES

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

2 EXISTING ALIGNMENT FROM SURVEY DATA AND AS-BUILT.

3 HMA PAVEMENT WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN

AS-BUILTS USED FOR PLAN DEVELOPMENT

PROJECT NO: 1146-04-72, CONSTRUCTION YEAR: 1993
PROJECT NO: 1146-04-77, CONSTRUCTION YEAR: 1994
PROJECT NO: 1146-04-78, CONSTRUCTION YEAR: 1994
PROJECT NO: 1146-04-79, CONSTRUCTION YEAR: 1994
PROJECT NO: 1146-04-80, CONSTRUCTION YEAR: 1994
PROJECT NO: 1146-11-76, CONSTRUCTION YEAR: 2003
PROJECT NO: 1140-05-72, CONSTRUCTION YEAR: 2006
PROJECT NO: 1146-75-73, CONSTRUCTION YEAR: 2024

UTILITY CONTACTS

MICHAEL DECET
(920) 840-4344
md4321@att.com
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221 W WASHINGTON ST
APPLETON, WI 54911

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2489 RINDEN RD
COTTAGE GROVE, WI 53527

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ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
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COTTAGE GROVE, WI 53527

ANDY CHANDLER
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achandler@nluwi.org
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NEW LONDON, WI 54961

MICHAEL PINCH
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NEW LONDON UTILITIES - WATER
400 E NORTH WATER ST
NEW LONDON, WI 54961

ROBERT GARSKE
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rgarske@newlondonwi.org
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215 N SHAWANO ST
NEW LONDON, WI 54961

ROSS RONDEAU
(920) 378-0366
ross.rondeau@charter.com
SPECTRUM - COMMUNICATION LINE
3545 E PLANK AVE
APPLETON, WI 54915

ZACH DUGA
(920) 380-3458
zachary.duga@we-energies.com
WE ENERGIES - ELECTRICITY
800 S LYNNDALE DR
APPLETON, WI 54912

CODY BECKMAN
(920) 380-3822
cody.beckman@we-energies.com
WE ENERGIES - GAS/PETROLEUM
800 S LYNNDALE DR
APPLETON, WI 54912

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 = 61.51 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 3.17 ACRES

ORDER OF DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PAVING DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER DETAILS
PERMANENT SIGNING
LIGHTING PLAN
PAVEMENT MARKING
TRAFFIC CONTROL
TRAFFIC CONTROL DETOUR
ALIGNMENT DIAGRAMS

WDNR CONTACT

MARTY DILLENBURG
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
625 E COUNTY ROAD Y STE 70
OSHKOSH, WI 54904-9731
(920) 410-7428
marty.dillenburg@wisconsin.gov

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

2

PAVEMENT CORE LOCATIONS AND RESULTS				
CORE	STATION	OFFSET	HMA THICKNESS (IN)	MATERIAL BELOW/NOTE
C-01	807+95	3.9'	6.75	BASE
C-02	817+06	-30.0'	6.875	BASE
C-03	827+87	2.7'	5.75	BASE
C-04	836+96	-9.5'	6.375	BASE
C-05	847+83	2.7'	5	BASE
C-06	856+91	-10.2'	5.25	BASE
C-07	867+78	3.1'	8.125	BASE
C-08	876+81	-11.7'	4.5	BASE / JOINT AT 2.875"
C-09	887+76	5.1'	6.375	BASE
C-10	896+66	-15.9'	6.25	BASE
C-11	907+71	2.4'	5.375	BASE
C-12	917+70	-46.1'	5.625	BASE
C-13	927+65	1.4'	6	BASE
C-14	936+64	-14.7'	6.5	BASE
C-15	947+37	3.2'	5.875	BASE
C-16	956+68	-11.1'	5	BASE
C-17	967+32	3.3'	5.25	BASE
C-18	973+97	-11.8'	6.125	BASE
C-19	987+44	4.7'	5.75	BASE
C-20	996+63	-9.0'	5.5	BASE
C-21	1007+37	4.8'	5.75	BASE
C-22	1015+07	-9.5'	6.125	BASE
C-23	1027+32	3.9'	5.875	BASE
C-24	1040+02	-11.2'	6	BASE
C-25	1053+56	2.7'	7.125	BASE
C-26	1063+37	-12.0'	8	BASE
C-27	1073+52	4.1'	6.25	BASE
C-28	1083+32	-10.6'	7.125	BASE
C-29	1093+45	4.1'	6.125	BASE
C-30	1103+27	-11.5'	11.375	BASE
C-31	1113+41	3.9'	7	BASE
C-32	1123+24	-11.1'	7.25	BASE
C-33	1134+87	3.5'	9.25	BASE
C-34	1143+17	-11.2'	6.875	BASE
C-35	1153+29	3.9'	7.625	BASE
C-36	1163+13	-10.9'	6	BASE
C-37	1173+25	4.4'	6.5	BASE / JOINT AT 1.875"
C-38	1183+08	-10.7'	7.5	BASE
C-39	1193+19	4.7'	6.875	BASE / JOINT AT 1.75"

SOIL BORING LOCATIONS AND RESULTS

BORE	STATION	OFFSET	HMA THICKNESS (IN)	MATERIAL BELOW/NOTE
B-1	930+00 'SB'	6' LT	7"	15" 1-1/4 INCH
B-2	940+00	6' RT	7.5"	11.5" 1-1/4 INCH
B-3	950+00	6' LT	6.75"	16.24" 1-1/4 INCH
B-4	965+00	6' RT	6"	15" 1-1/4 INCH
B-5	970+00	6' LT	6"	14" 1-1/4 INCH
B-6	985+00	6' RT	6.5"	12.5" 1-1/4 INCH
B-7	995+00	6' LT	6"	12" 1-1/4 INCH

USH 45 SUPERELEVATION TABLE

ROADWAY	PI STATION	NC	FLAT	RC	FULL SUPER	SE (%)	FULL SUPER	RC	FLAT	NC
USH 45 NB	881+55	870+09	870+65	871+21	872+32	6.0	889+32	890+43	890+99	891+55
USH 45 NB	906+46	901+81	902+37	902+93	904+04	6.0	908+84	909+95	910+51	911+07
USH 45 NB	948+82	936+97	937+53	938+09	938+93	5.0	957+83	958+67	959+23	959+79
USH 45 NB	980+41	972+04	972+57	973+10	973+90	5.0	986+63	987+43	987+96	988+49
USH 45 NB	1055+63	1043+96	1044+52	1045+08	1045+78	4.5	1064+87	1065+57	1066+13	1066+69
USH 45 NB	1099+10	1090+18	1090+78	1091+38	-	RC	-	1106+79	1107+39	1107+99
USH 45 NB	1205+85	1202+45	1202+98	1203+51	1204+10	4.2	1207+59	1208+18	1208+71	1209+24
USH 45 SB	906+77	902+02	902+58	903+14	904+25	6.0	909+23	910+34	910+90	911+46
R1	1031+32	1027+67	1028+15	1028+63	1029+59	6.0	1032+97	1033+93	1034+41	1034+89
R2	1038+85	1033+91	1034+27	1034+63	1035+36	6.0	1043+14	-	-	
R2	1048+18	-	-	-	1045+13	4.5	1051+63	-	-	
R3	1047+78	-	-	-	1046+41	4.5	1051+63	1052+29	1052+82	1053+35
R3	1055+23	1052+29	1052+82	1053+35	1054+41	6.0	-	-	-	-
R3	1062+70	-	-	-	-	6.0	1062+89	1063+62	1063+98	1064+34
R4	1054+17	1050+75	1051+16	1051+57	1052+40	6.0	1055+77	1056+60	1057+01	1057+42
R4	1061+85	1057+45	1057+93	1058+41	1059+37	6.0	1064+16	1065+12	1065+60	1066+08

SUPERELEVATION - CTH D EASTBOUND

STATION	RIGHT SHOULDER	RIGHT LANE
213+53.63'	-5.75%	-5.75%
216+19.80'	-5.75%	-5.75%
216+54.00'	-5.75%	-5.75%
216+96.00'	-4.00%	-4.00%
217+44.00'	-4.00%	-2.00%
235+95.31'	-4.00%	-2.00%

SUPERELEVATION - ROUNDABOUT

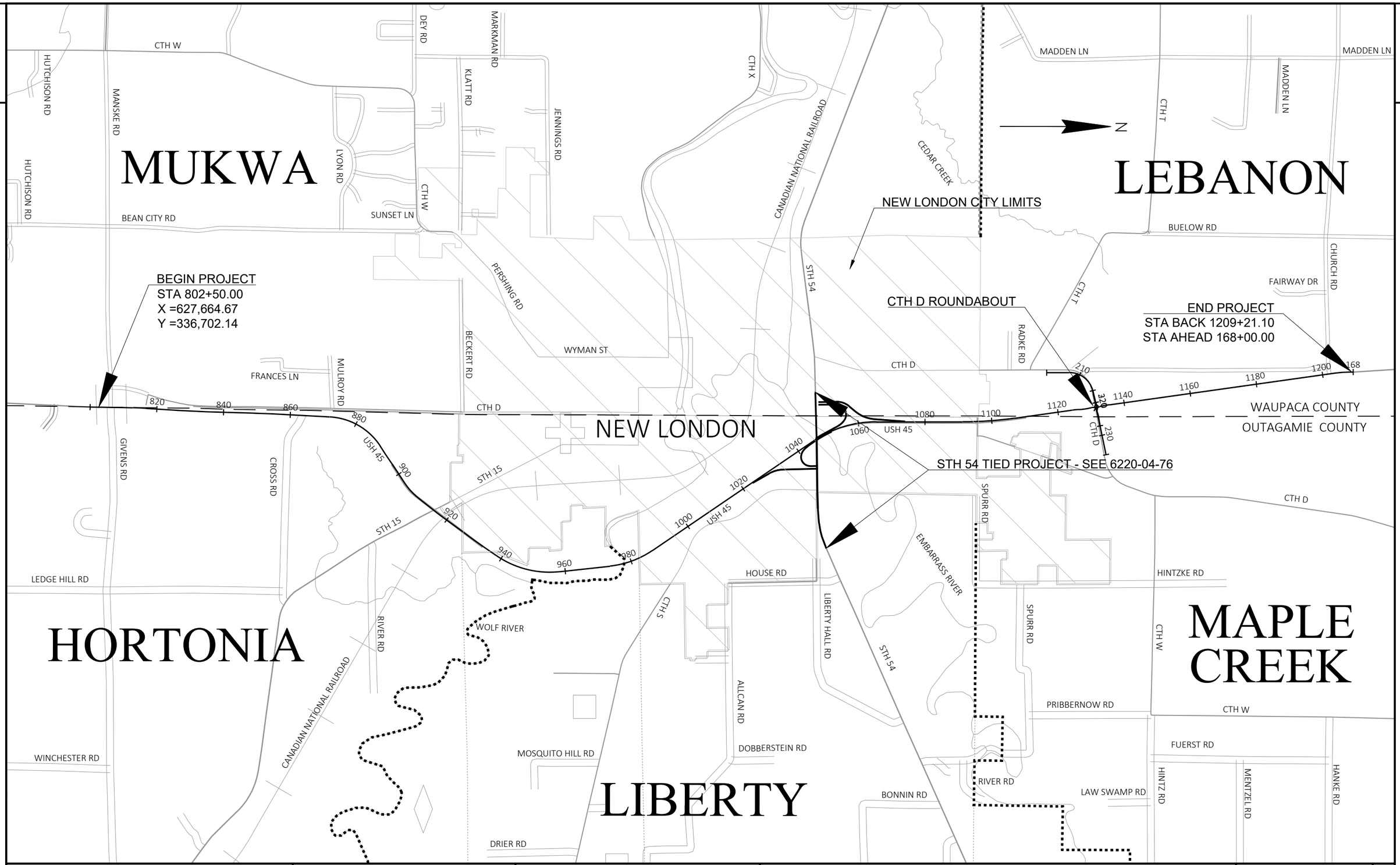
STATION	INSIDE LANE	OUTSIDE LANE
20+00.00'	1.00%	-1.00%
20+52.84'	1.00%	-1.00%
20+60.78'	1.00%	-1.25%
20+68.54'	1.00%	-1.25%
20+80.05'	1.00%	-1.00%
21+03.36'	1.00%	-1.00%
21+17.18'	1.00%	-1.25%
21+21.34'	1.00%	-1.00%
21+37.74'	1.00%	-1.00%
21+47.22'	1.00%	-1.25%
21+62.46'	1.00%	-1.00%
22+10.71'	1.00%	-1.00%
22+18.77'	1.00%	-0.75%
22+26.09'	1.00%	-1.00%
23+14.16'	1.00%	-1.00%

USH 45 SECTION CORNER TIE-OUT TABLE

S25 T22N R14E		
	STA	OFFSET
TIE 1	807+08.34	48.87
TIE 2	807+31.65	-62.50
TIE 3	807+70.95	57.26
TIE 4	807+74.36	-60.44

SUPERELEVATION - CTH D WESTBOUND

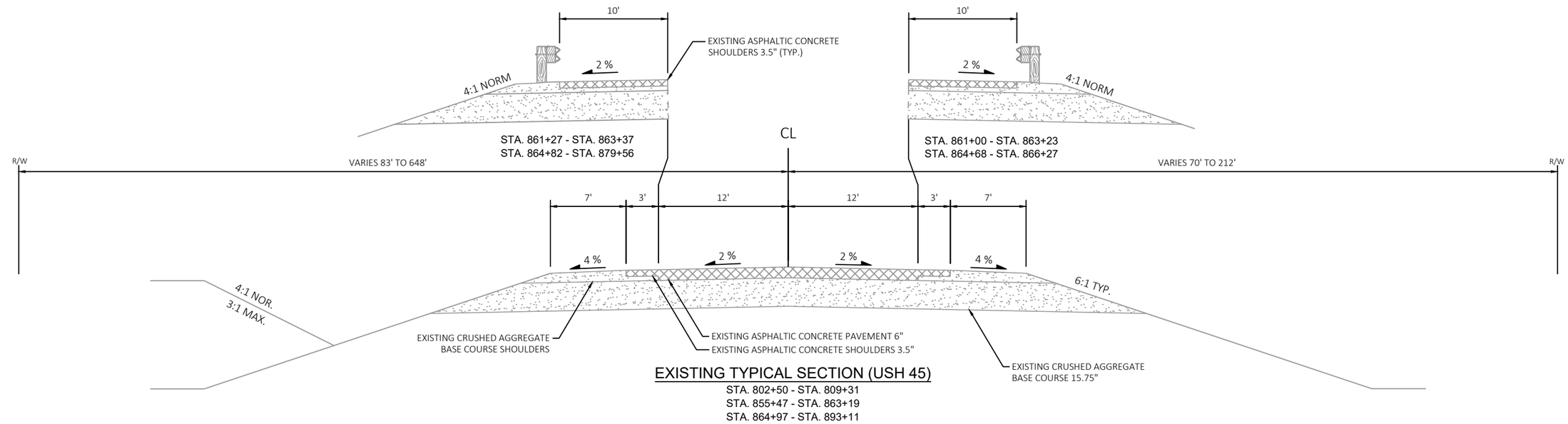
STATION	LEFT SHOULDER	LEFT LANE
316+19.62'	5.75%	5.75%
318+10.00'	-2.00%	-2.00%
318+25.00'	-4.00%	-2.00%
327+35.28'	-4.00%	-2.00%



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\020201-PO.DWG PLOT DATE : 7/24/2025 1:52 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:0.5 MI
LAYOUT NAME - 01
WISDOT/CADDS SHEET 42

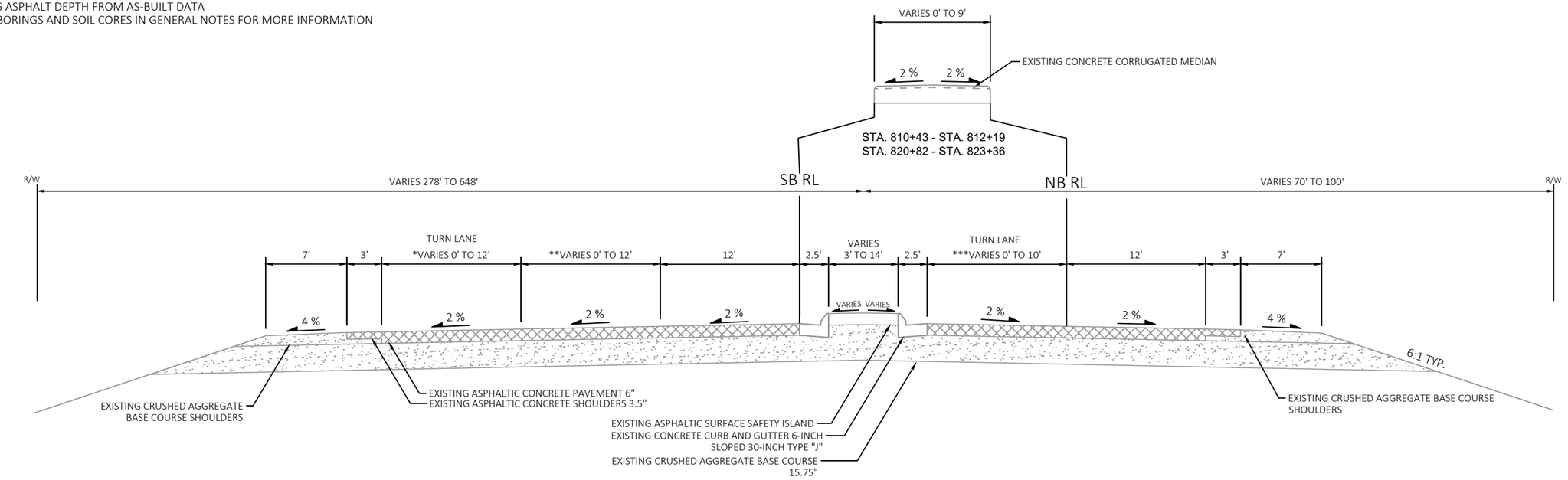
2



EXISTING TYPICAL SECTION (USH 45)

STA. 802+50 - STA. 809+31
STA. 855+47 - STA. 863+19
STA. 864+97 - STA. 893+11

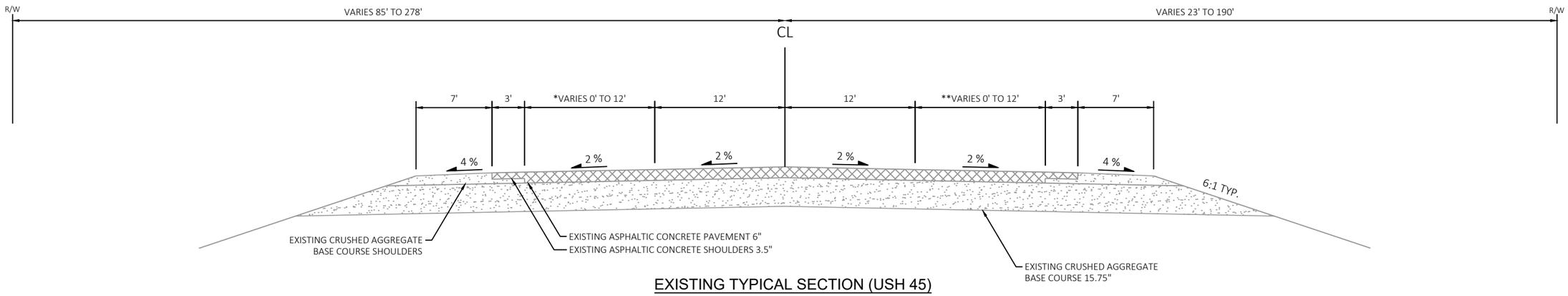
*EXISTING ASPHALT DEPTH FROM AS-BUILT DATA
SEE SOIL BORINGS AND SOIL CORES IN GENERAL NOTES FOR MORE INFORMATION



EXISTING TYPICAL SECTION CTH D INTERSECTION (USH 45)

STA. 809+31 - STA. 823+36

*VARIES FROM 12' AT STA. 818+11 - STA. 820+23 TO 0' AT STA. 821+21
**VARIES FROM 0' AT STA. 809+31 TO 12' AT STA. 812+19
***VARIES FROM 0' AT STA. 813+68 TO 10' AT STA. 814+67 - STA. 816+62

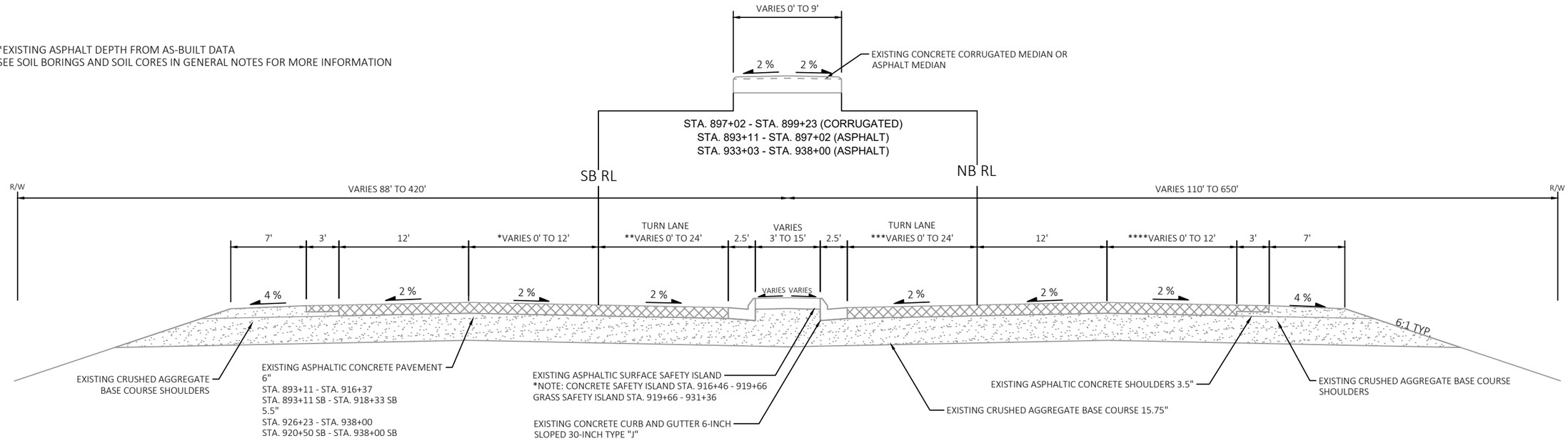


EXISTING TYPICAL SECTION (USH 45)

STA. 823+36 - STA. 855+47

*VARIES FROM 12' AT STA. 842+52 TO 0' AT STA. 843+46
**VARIES FROM O' AT STA. 833+97 TO 12' AT STA. 834+93
**VARIES FROM 12' AT STA. 853+25 TO 0' AT STA. 855+47

*EXISTING ASPHALT DEPTH FROM AS-BUILT DATA
SEE SOIL BORINGS AND SOIL CORES IN GENERAL NOTES FOR MORE INFORMATION

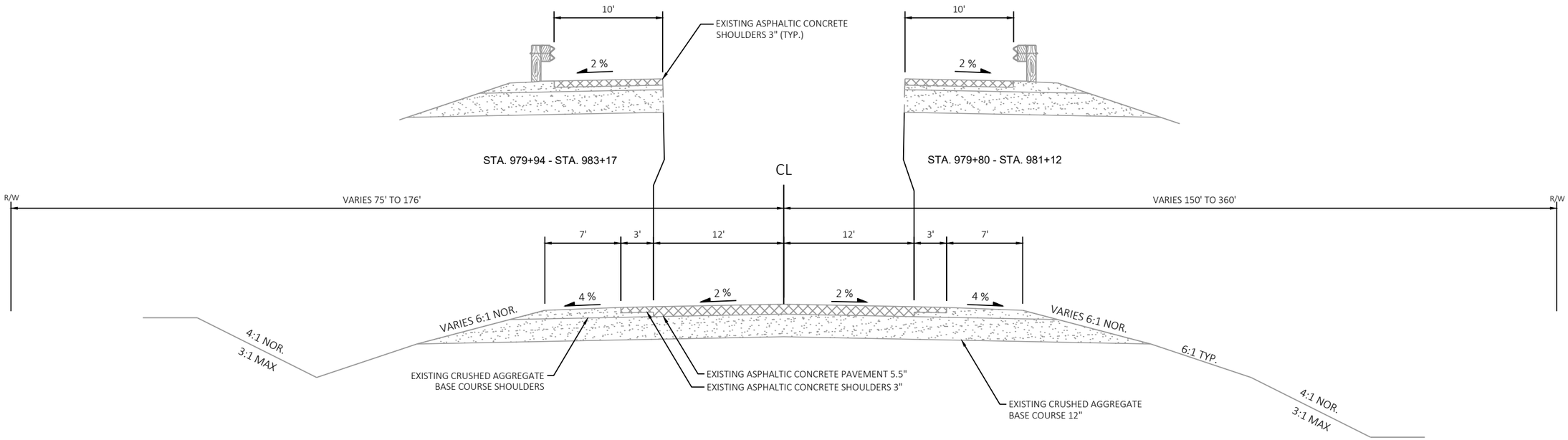


EXISTING TYPICAL SECTION STH 15 INTERSECTION (USH 45)

STA. 893+11 - STA. 916+37
STA. 893+11 SB - STA. 918+33 SB
STA. 926+23 - STA. 938+00
STA. 920+50 SB - STA. 938+00 SB

*VARIES FROM 0' AT STA. 897+02 TO 12' AT 904+12 - STA. 935+70 TO 0' AT STA. 936+70
**VARIES FROM 24' AT STA. 916+37 - STA. 918+72 TO 0' AT STA. 920+20
***VARIES FROM 0' AT STA. 911+97 TO 24' AT STA. 913+44 - STA. 915+05
****VARIES FROM 12' AT STA. 926+75 TO 0' AT 934+60

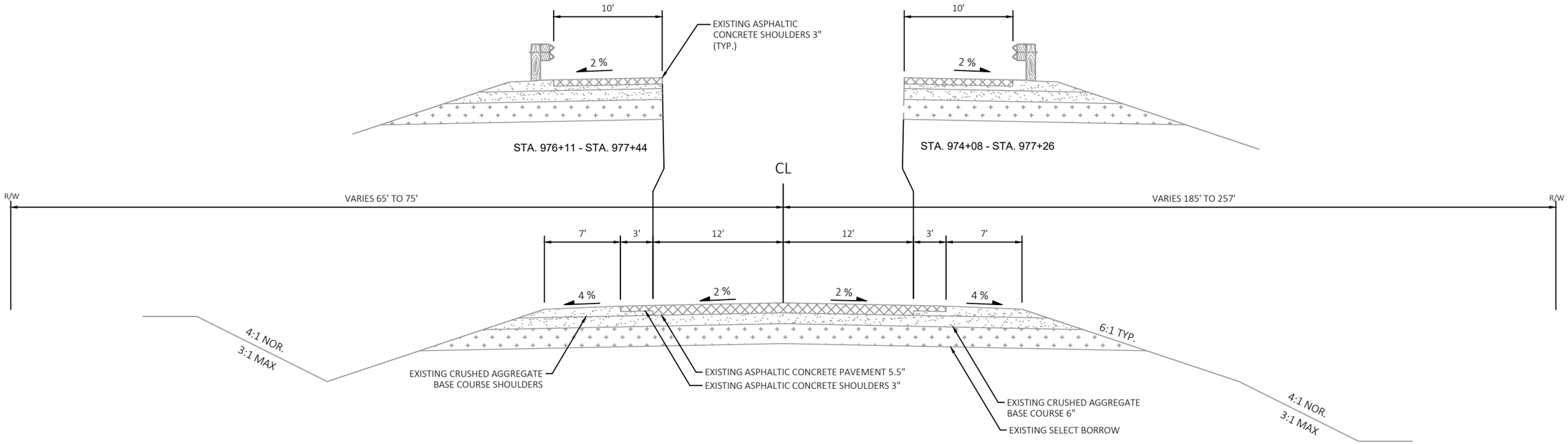
2



EXISTING TYPICAL SECTION (USH 45)

STA. 938+00 - STA. 960+23
STA. 980+21 - STA. 1002+78

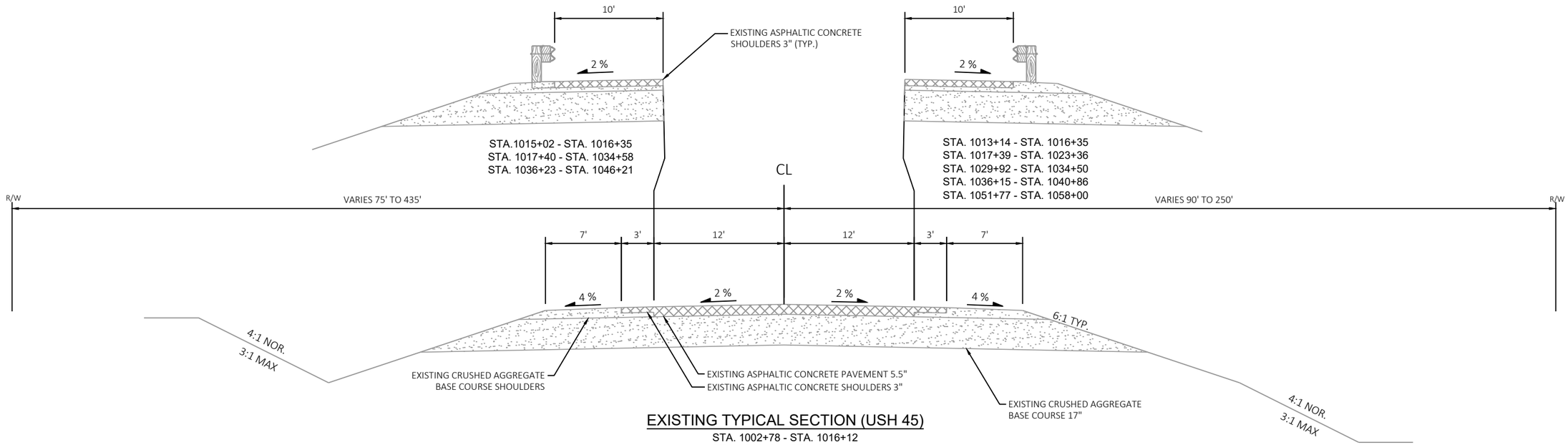
*EXISTING ASPHALT DEPTH FROM AS-BUILT DATA
SEE SOIL BORINGS AND SOIL CORES IN GENERAL NOTES FOR MORE INFORMATION



EXISTING TYPICAL SECTION (USH 45)

STA. 960+23 - STA. 976+95

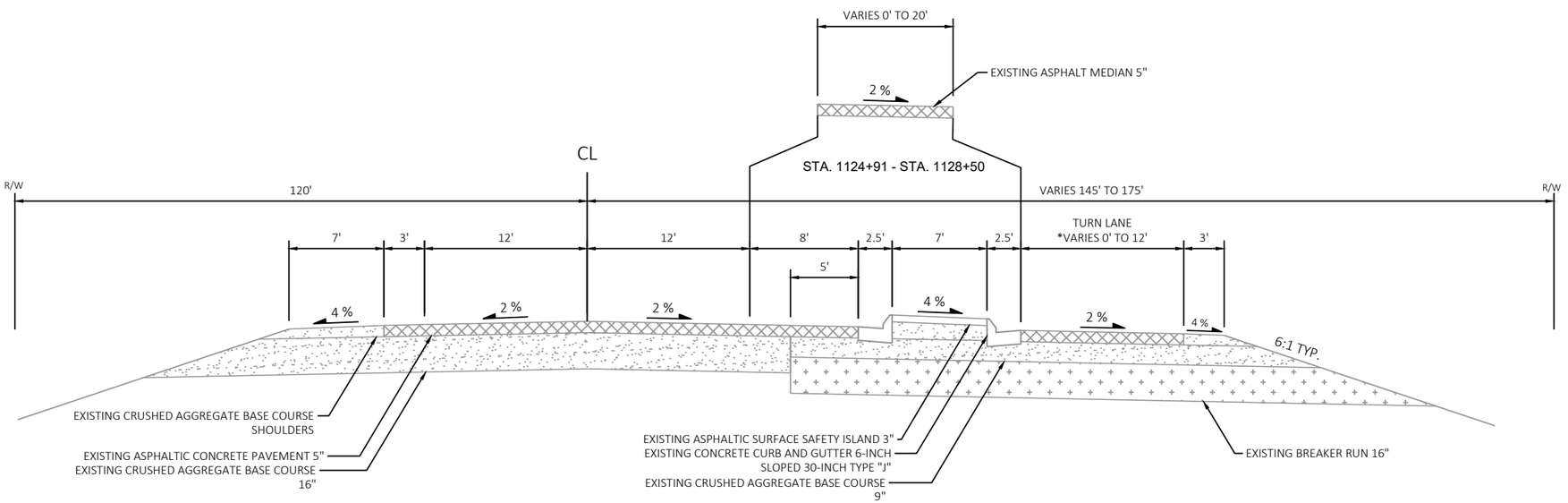
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 7	E



EXISTING TYPICAL SECTION (USH 45)

STA. 1002+78 - STA. 1016+12
STA. 1017+61 - STA. 1034+41
STA. 1036+28 - STA. 1045+40
STA. 1052+05 - STA. 1124+78
STA. 1137+85 - STA. 1197+61

*EXISTING ASPHALT DEPTH FROM AS-BUILT DATA
SEE SOIL BORINGS AND SOIL CORES IN GENERAL NOTES FOR MORE INFORMATION



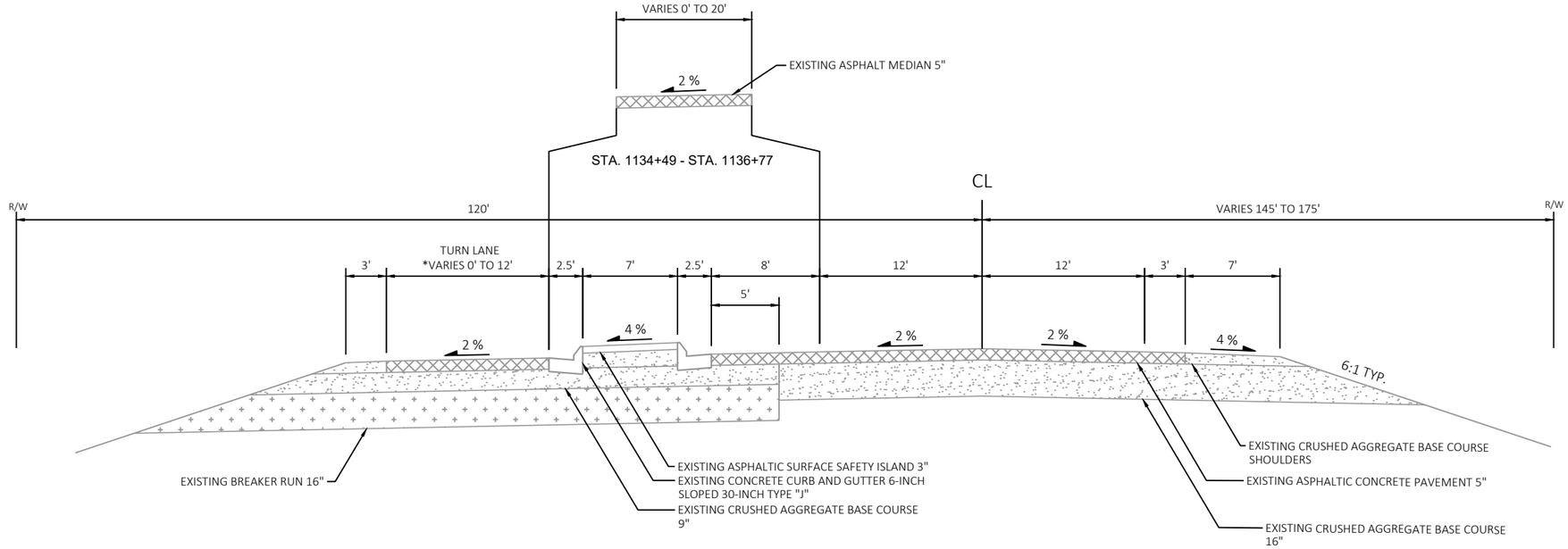
EXISTING TYPICAL SECTION CTH D INTERSECTION (USH 45)

STA. 1124+78 - STA. 1131+16

*VARIES FROM 0' AT STA. 1124+78 TO 12' AT STA. 1128+57 - STA. 1130+79

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 8	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\020301-TS.DWG PLOT DATE : 7/24/2025 1:56 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 04-10ft
WISDOT/CADDS SHEET 42

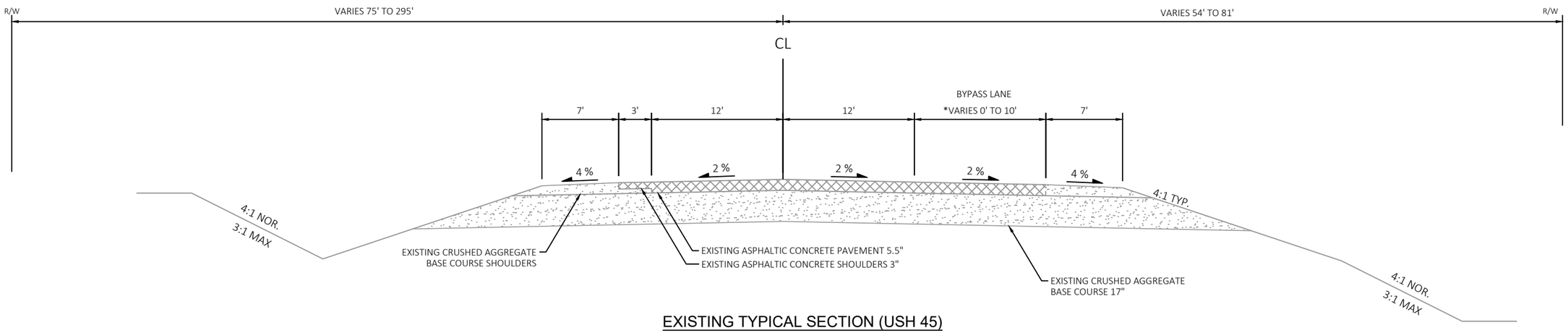


*EXISTING ASPHALT DEPTH FROM AS-BUILT DATA
SEE SOIL BORINGS AND SOIL CORES IN GENERAL NOTES FOR MORE INFORMATION

EXISTING TYPICAL SECTION CTH D INTERSECTION (USH 45)

STA. 1131+84 - STA. 1137+85

*VARIES FROM 12' AT STA. 1132+21 TO STA. 1134+41 TO 0' AT STA. 1137+85

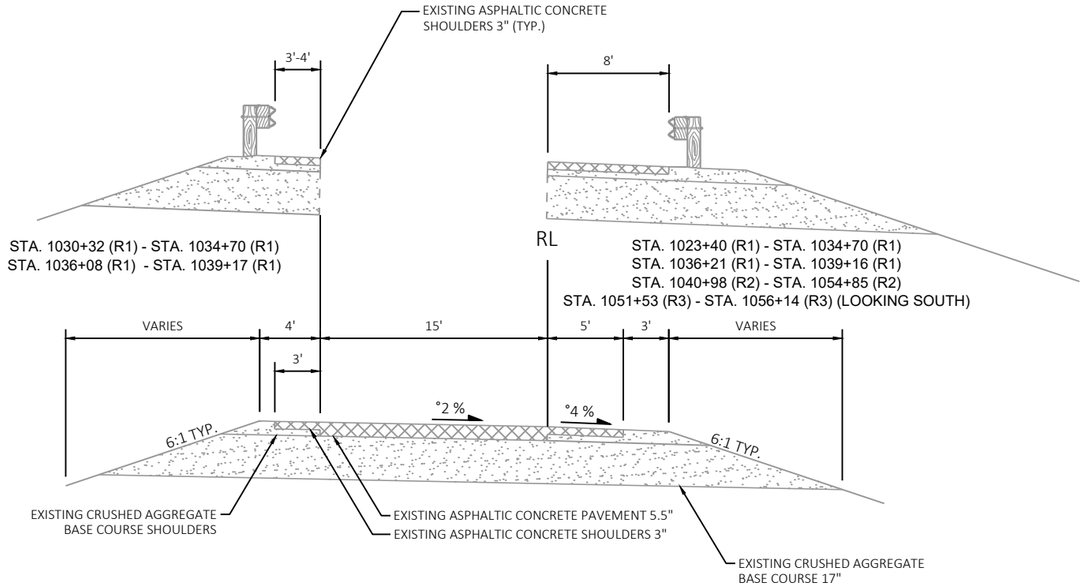


EXISTING TYPICAL SECTION (USH 45)

STA. 1197+61 - STA. 1209+21

*VARIES FROM 0' AT STA. 1197+61 TO 10' AT STA. 1198+66 - STA. 1206+84 TO 3' AT STA. 1208+62

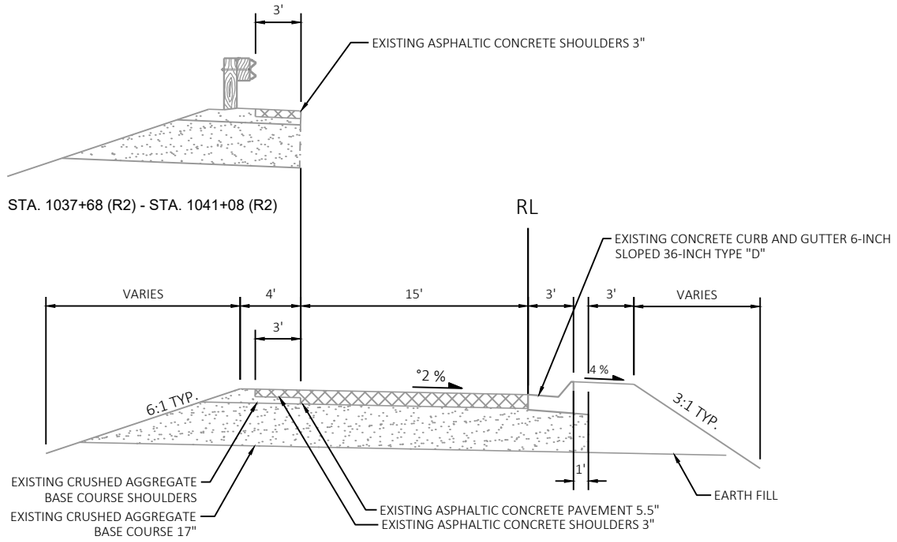
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 9	E



EXISTING TYPICAL SECTION (USH 45 NB EXIT RAMP TO STH 54)

STA. 1023+40 (R1) - STA. 1034+52 (R1)
STA. 1036+43 (R1) - STA. 1043+17 (R1)
STA. 1041+01 (R2) - STA. 1045+48 (R2)
STA. 1051+38 (R3) - STA. 1056+24 (R3) (LOOKING SOUTH)
STA. 1063+78 (R3) - STA. 1067+84 (R3) (LOOKING SOUTH)

°NOR. VARIES IN SUPERELEVATED AREAS

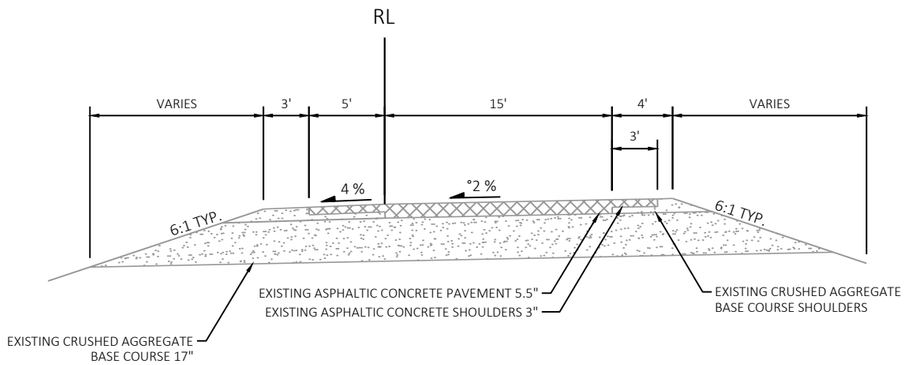


EXISTING TYPICAL SECTION (STH 54 ON RAMP TO USH 45)

STA. 1033+33 (R2) - STA. 1041+01 (R2)
STA. 1056+24 (R3) - STA. 1063+78 (R3) (LOOKING SOUTH)

°2% NOR. VARIES IN SUPERELEVATED AREAS

*EXISTING ASPHALT DEPTH FROM AS-BUILT DATA
SEE SOIL BORINGS AND SOIL CORES IN GENERAL NOTES FOR MORE INFORMATION

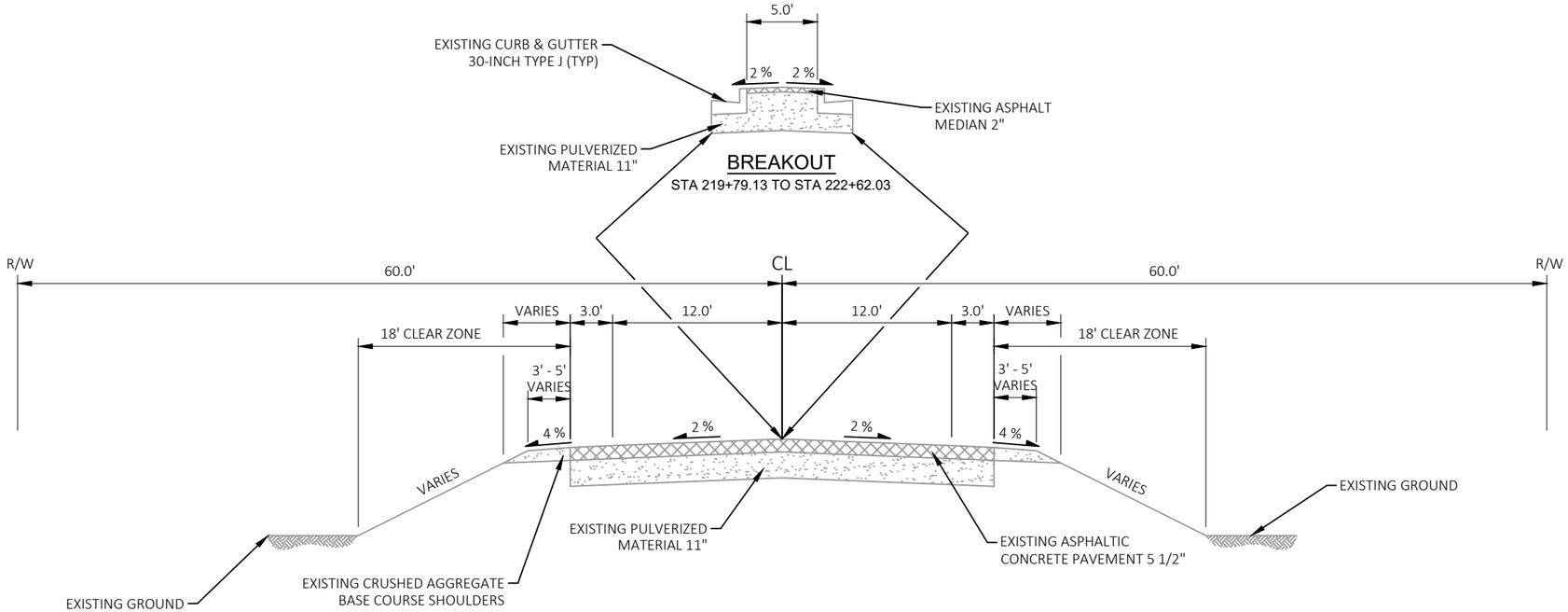


EXISTING TYPICAL SECTION (USH 45 SB EXIT RAMP TO STH 54)

STA. 1047+54 (R4) - STA. 1074+05 (R4)

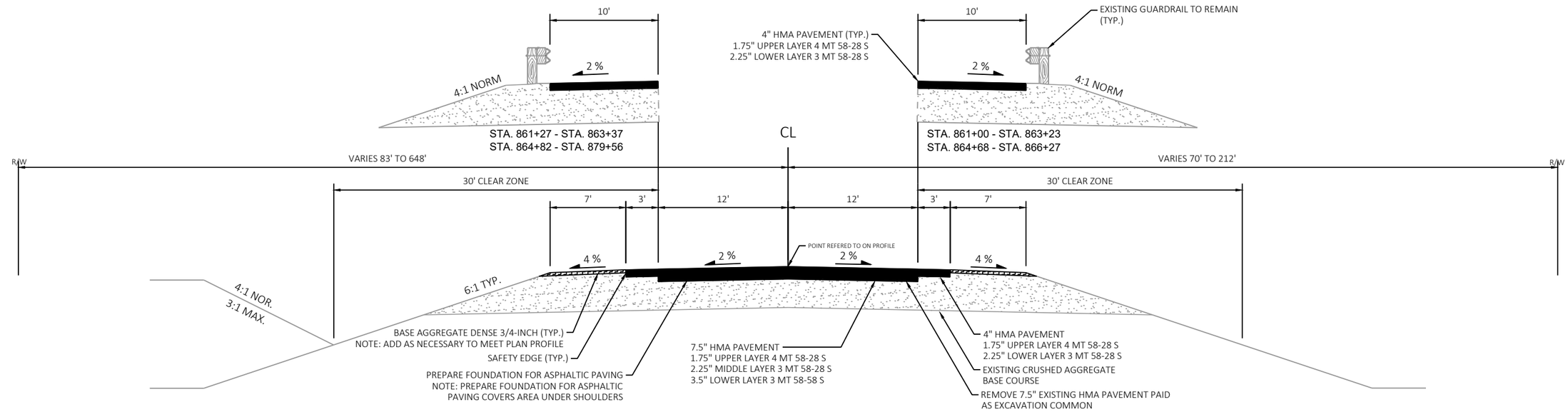
°2% NOR. VARIES IN SUPERELEVATED AREAS

2



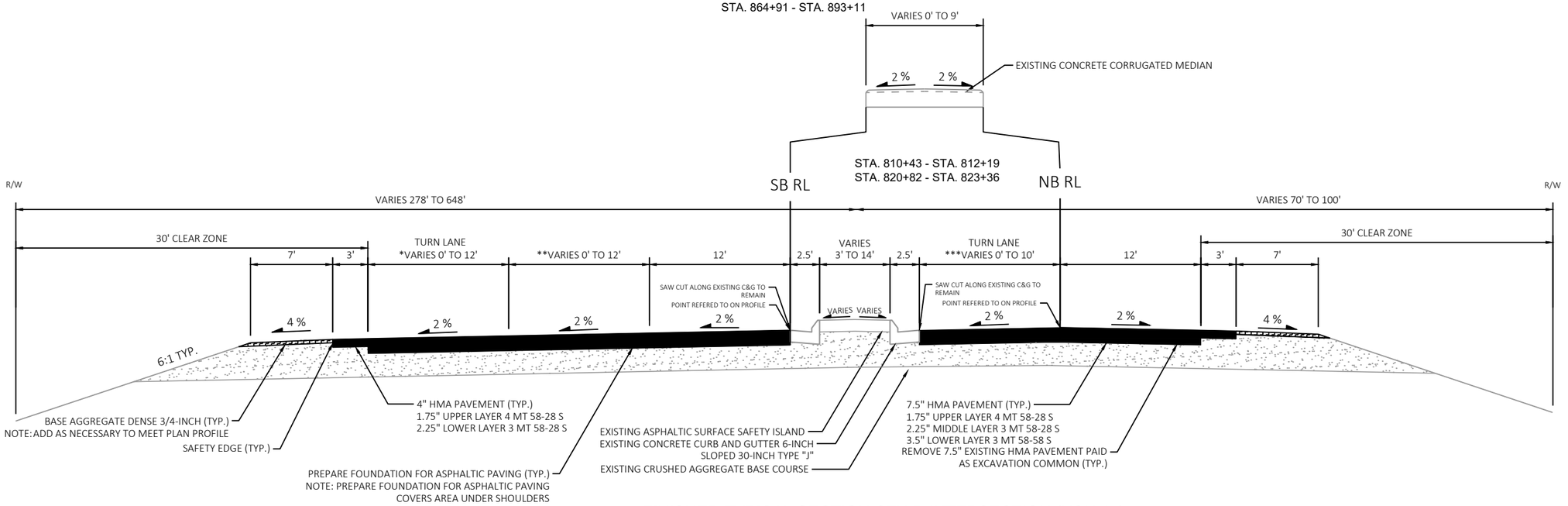
EXISTING TYPICAL SECTION (CTH D)

STA 216+19.80 TO STA 219+79.13
STA 222+62.03 TO STA 227+34.66



FINISHED TYPICAL SECTION (USH 45)

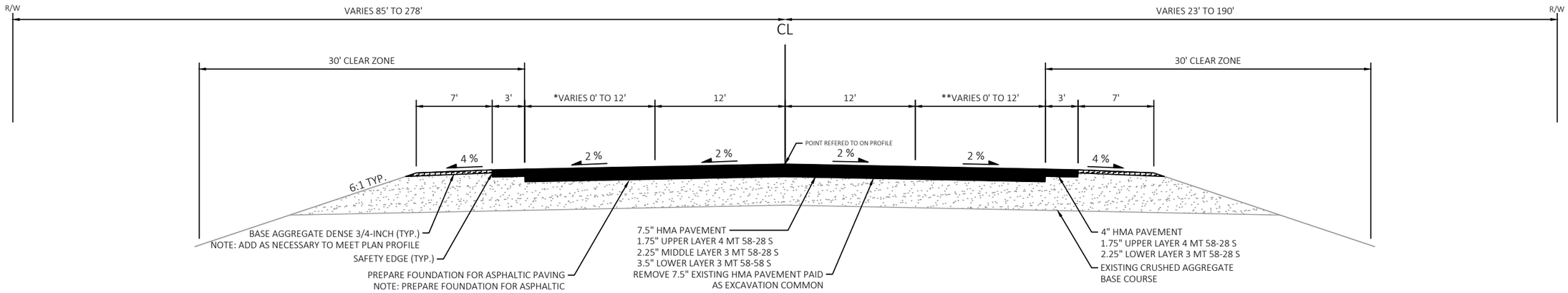
STA. 802+50 - STA. 809+31
STA. 855+47 - STA. 863+13
STA. 864+91 - STA. 893+11



FINISHED TYPICAL SECTION CTH D INTERSECTION (USH 45)

STA. 809+31 - STA. 823+36

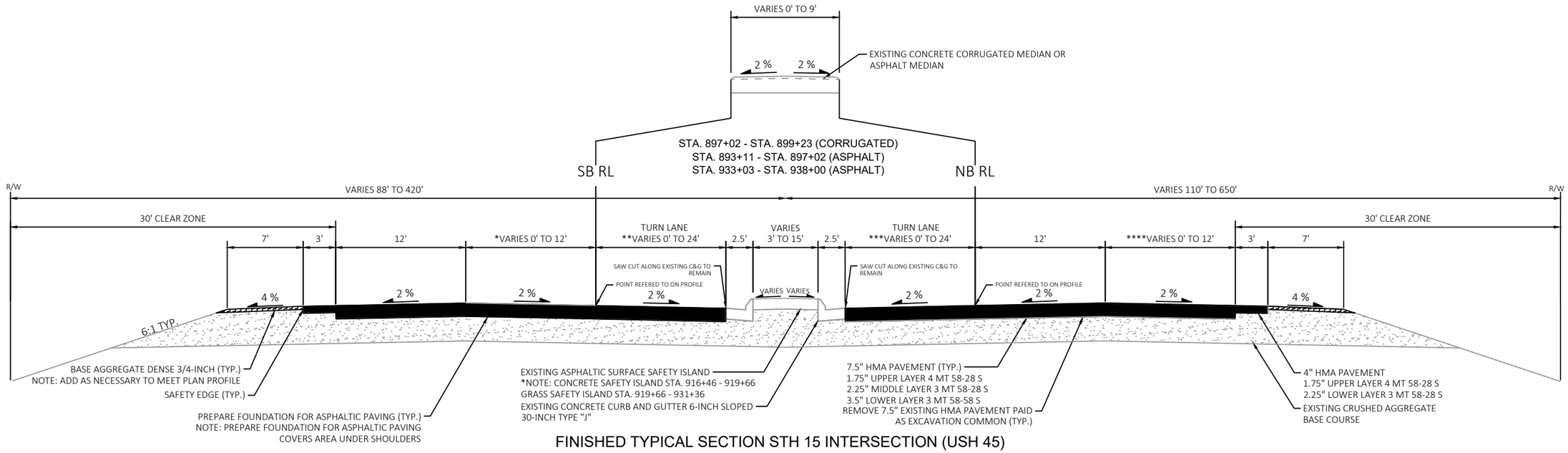
*VARIES FROM 12' AT STA. 818+11 - STA. 820+23 TO 0' AT STA. 821+21
**VARIES FROM O' AT STA. 809+31 TO 12' AT STA. 812+19
***VARIES FROM 0' AT STA. 813+68 TO 10' AT STA. 814+67 - STA. 816+62



FINISHED TYPICAL SECTION (USH 45)

STA. 823+36 - STA. 855+47

*VARIES FROM 12' AT STA. 842+52 TO 0' AT STA. 843+46
**VARIES FROM O' AT STA. 833+97 TO 12' AT STA. 834+93
**VARIES FROM 12' AT STA. 853+25 TO 0' AT STA. 855+47



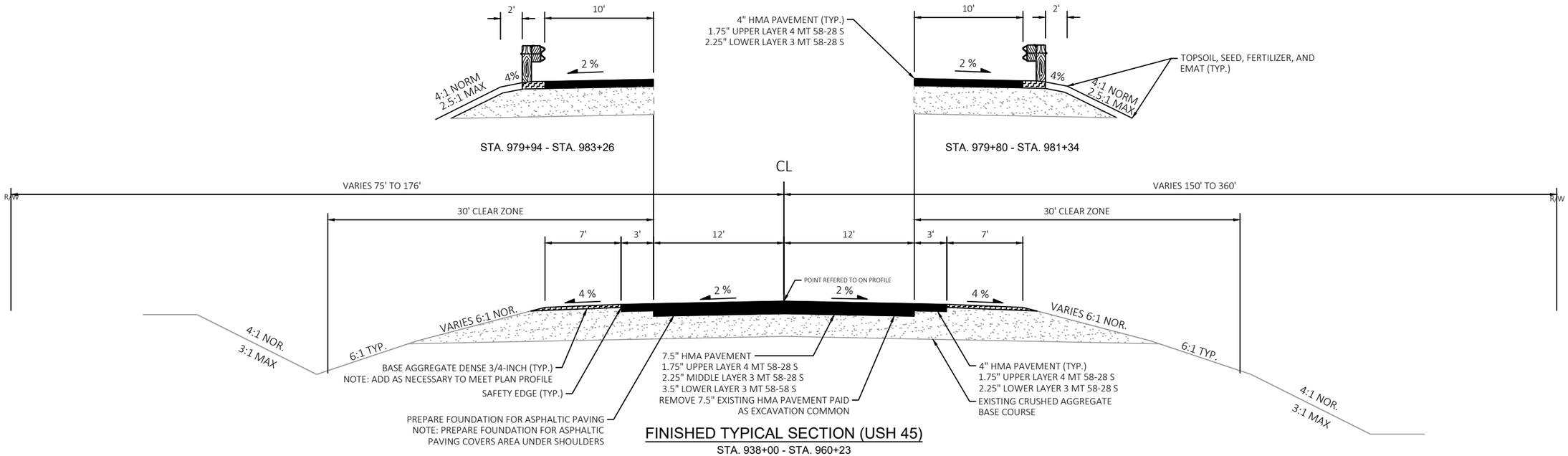
FINISHED TYPICAL SECTION STH 15 INTERSECTION (USH 45)

STA. 893+11 - STA. 916+37
STA. 893+11 SB - STA. 918+33 SB
STA. 926+23 - STA. 938+00
STA. 920+50 SB - STA. 938+00 SB

*VARIES FROM 0' AT STA. 897+02 TO 12' AT 904+12 - STA. 935+70 TO 0' AT STA. 936+70
**VARIES FROM 24' AT STA. 916+37 - STA. 918+72 TO 0' AT STA. 920+20
***VARIES FROM 0' AT STA. 911+97 TO 24' AT STA. 913+44 - STA. 915+05
****VARIES FROM 12' AT STA. 926+75 TO 0' AT 934+60

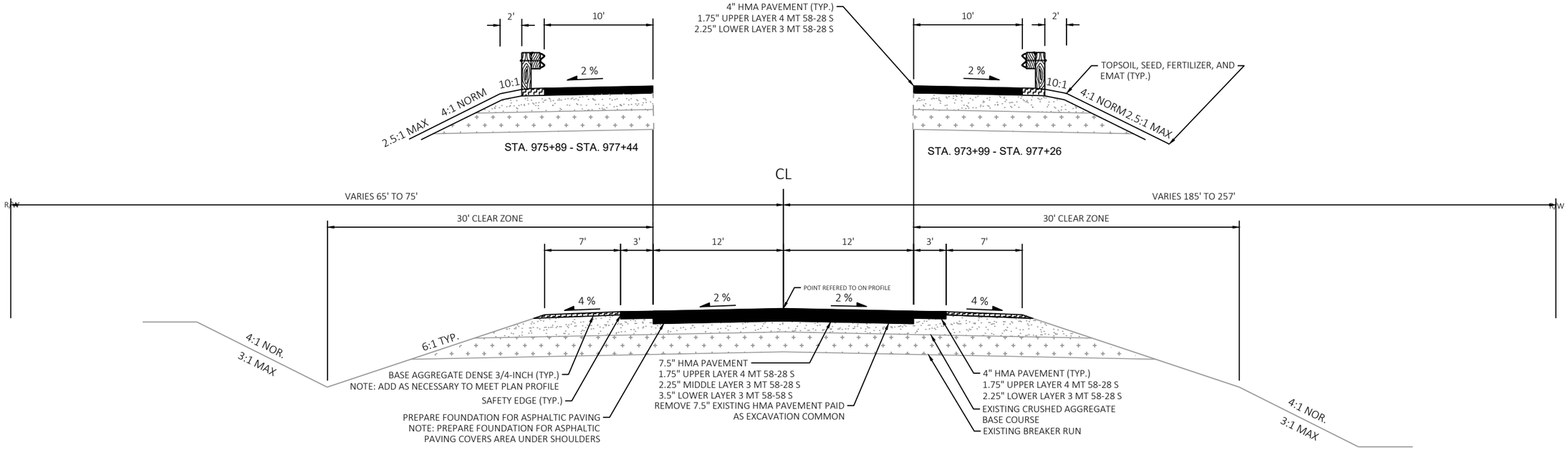
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 13	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\020301-TS.DWG PLOT DATE : 7/24/2025 1:56 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 08-10ft
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION (USH 45)

STA. 938+00 - STA. 960+23
STA. 980+02 - STA. 1002+78

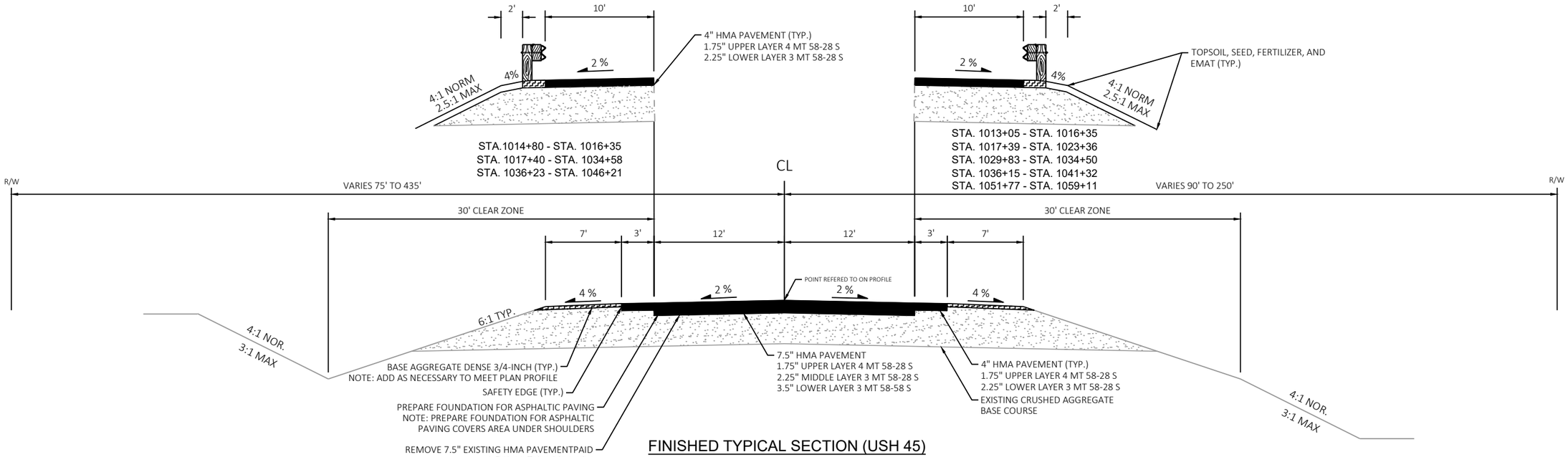


FINISHED TYPICAL SECTION (USH 45)

STA. 960+23 - STA. 977+23

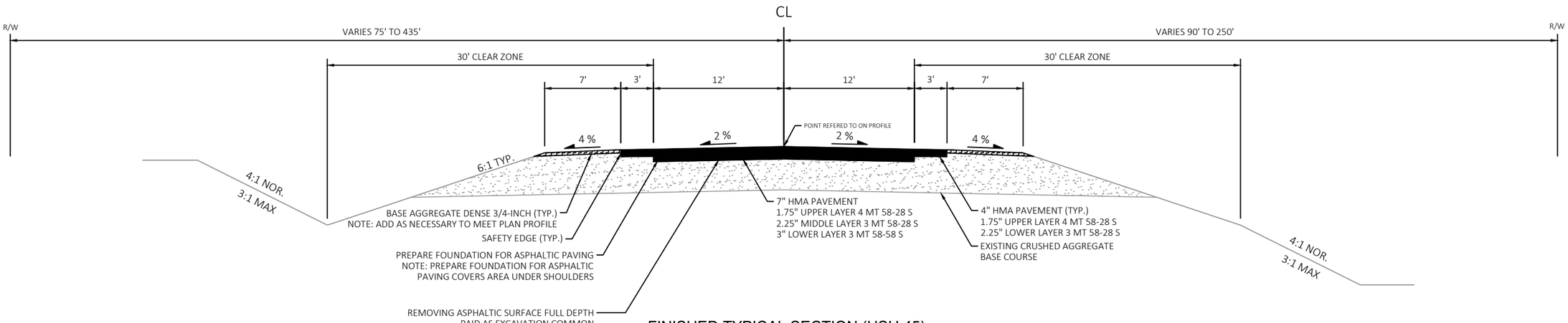
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 14	E

2



FINISHED TYPICAL SECTION (USH 45)

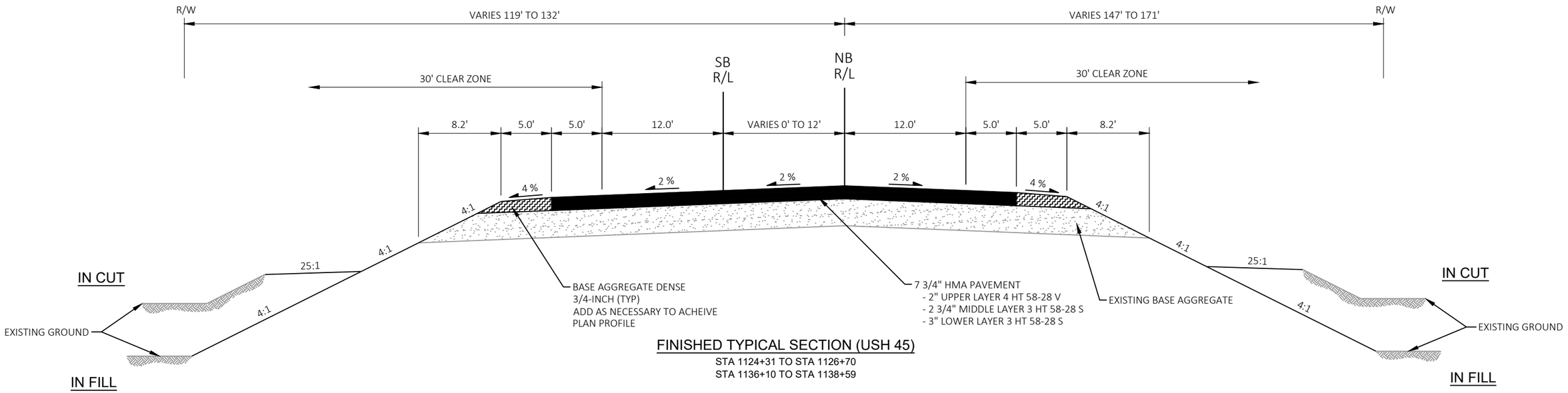
STA. 1002+78 - STA. 1016+19
STA. 1017+56 - STA. 1034+49
STA. 1036+25 - STA. 1045+87
STA. 1051+78 - STA 1074+03



FINISHED TYPICAL SECTION (USH 45)

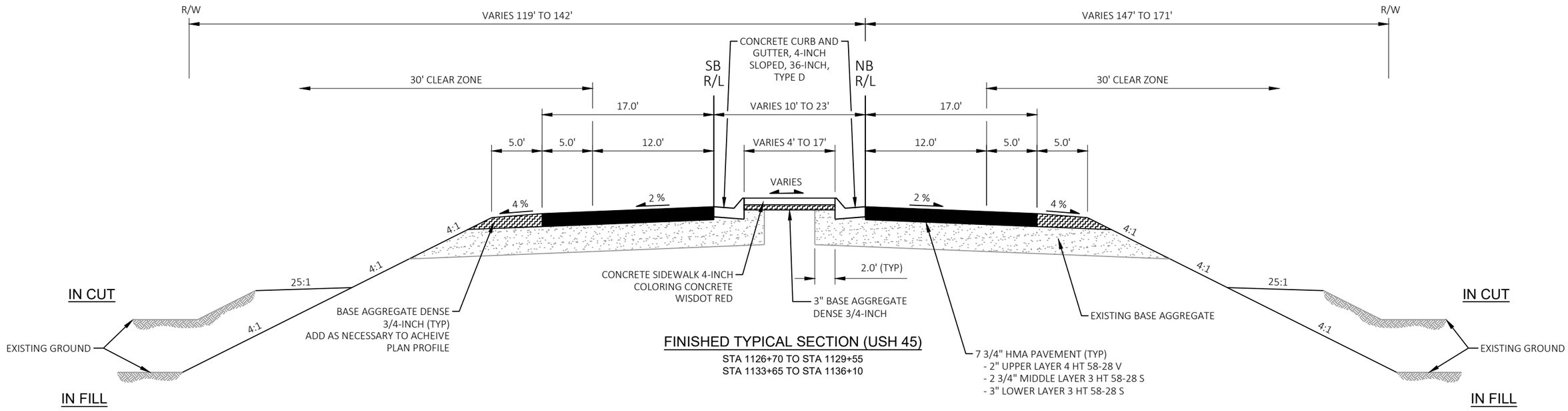
STA. 1074+03 - STA. 1124+31
STA. 1138+53 - STA. 1197+61

2



FINISHED TYPICAL SECTION (USH 45)

STA 1124+31 TO STA 1126+70
STA 1136+10 TO STA 1138+59

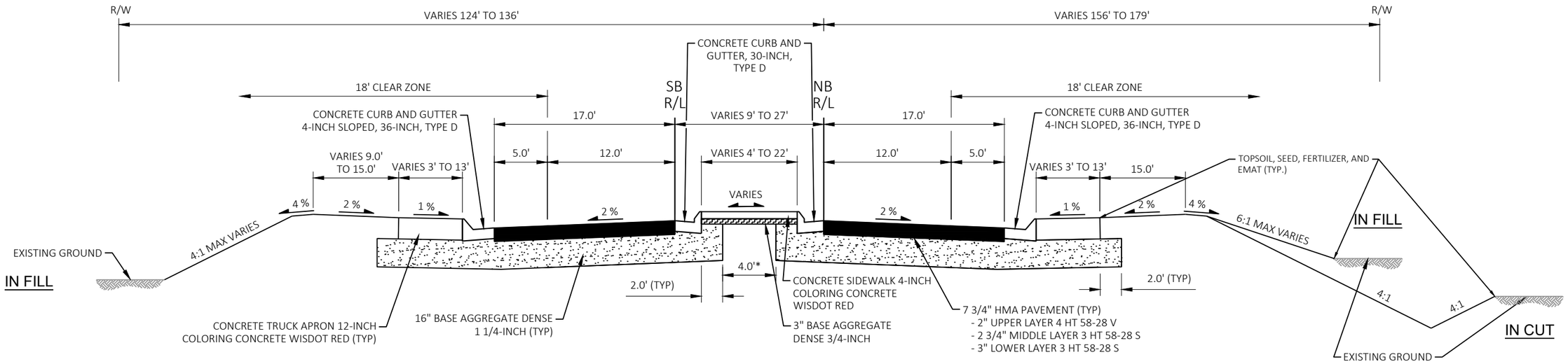


FINISHED TYPICAL SECTION (USH 45)

STA 1126+70 TO STA 1129+55
STA 1133+65 TO STA 1136+10

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 16	E

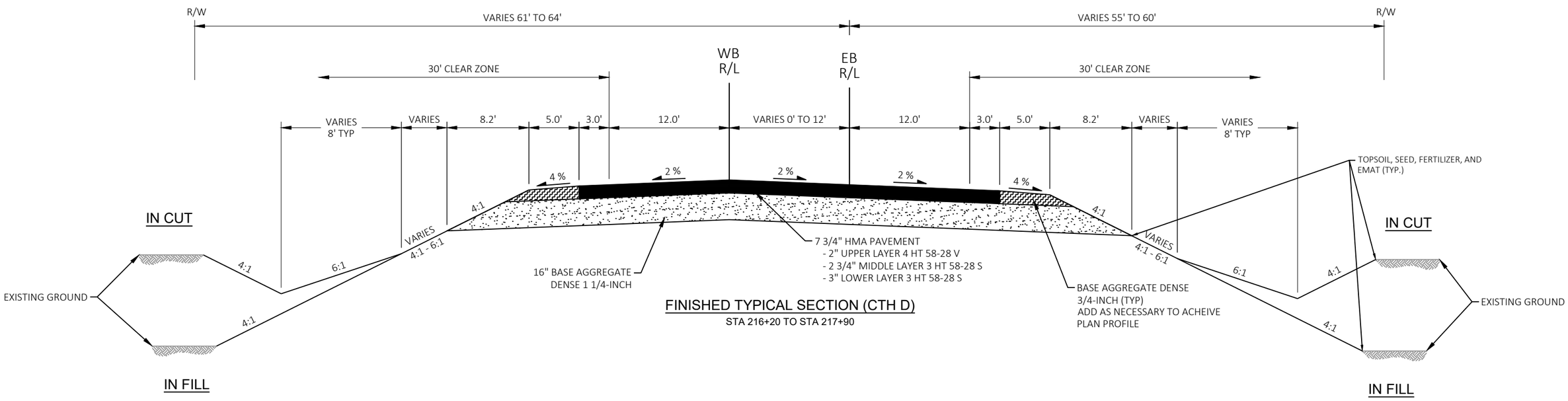
2



FINISHED TYPICAL SECTION (USH 45)

STA 1129+55 TO STA 1130+95
STA 1132+27 TO STA 1133+65

* FILL AREAS LESS THAN 4.0' WITH BASE AGGREGATE DENSE

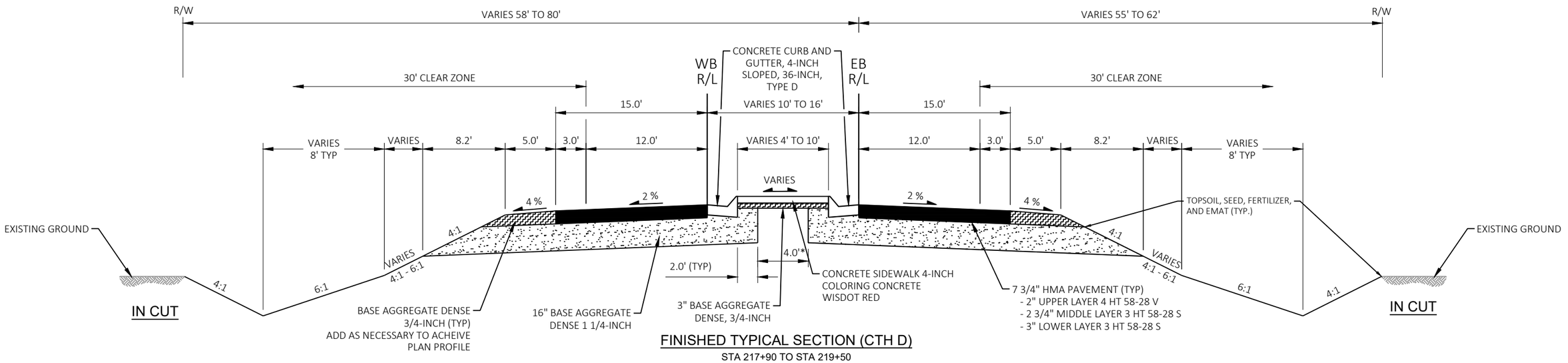


FINISHED TYPICAL SECTION (CTH D)

STA 216+20 TO STA 217+90

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 17	E

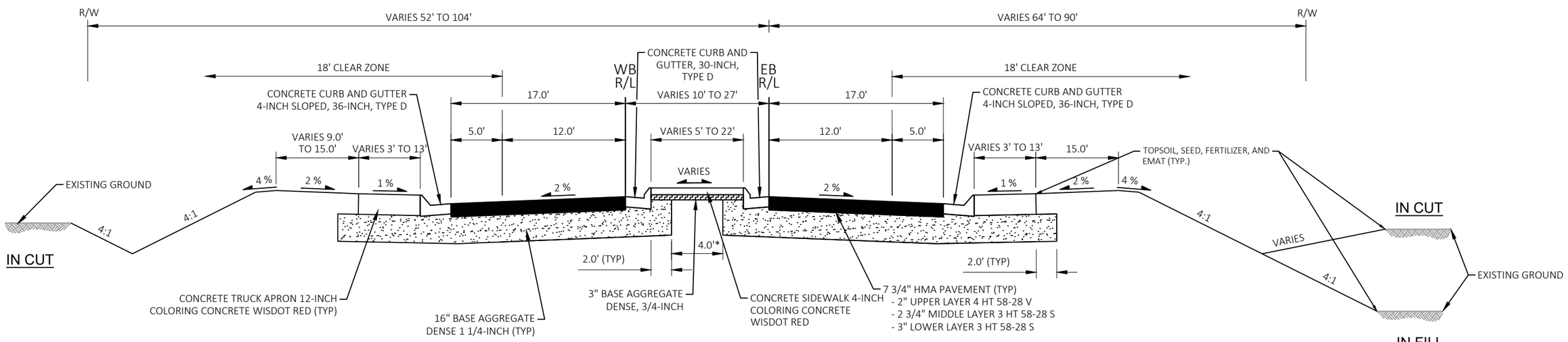
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\020302-TS.DWG PLOT DATE : 9/16/2025 4:45 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - WW-020306-ts
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION (CTH D)

STA 217+90 TO STA 219+50

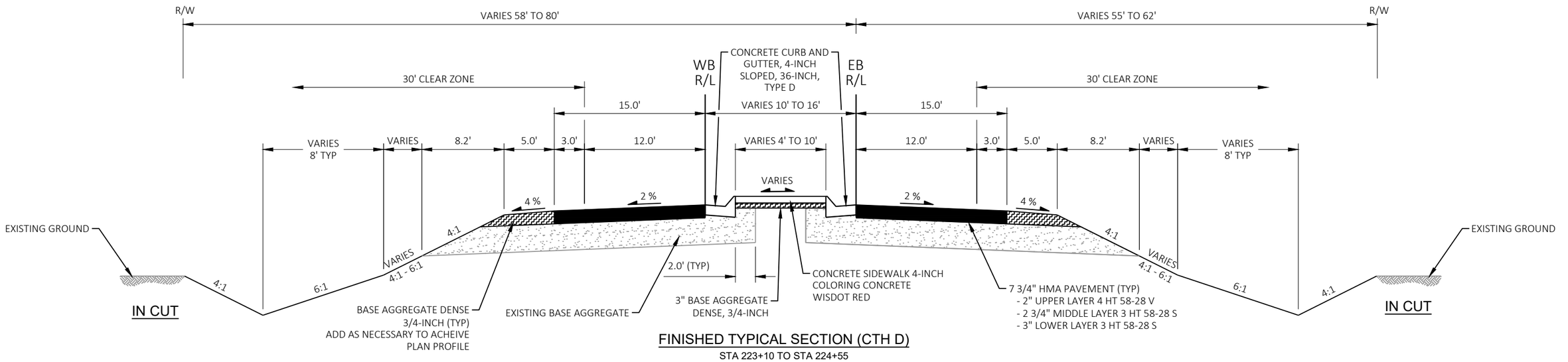
* FILL AREAS LESS THAN 4.0' WITH BASE AGGREGATE DENSE



FINISHED TYPICAL SECTION (CTH D)

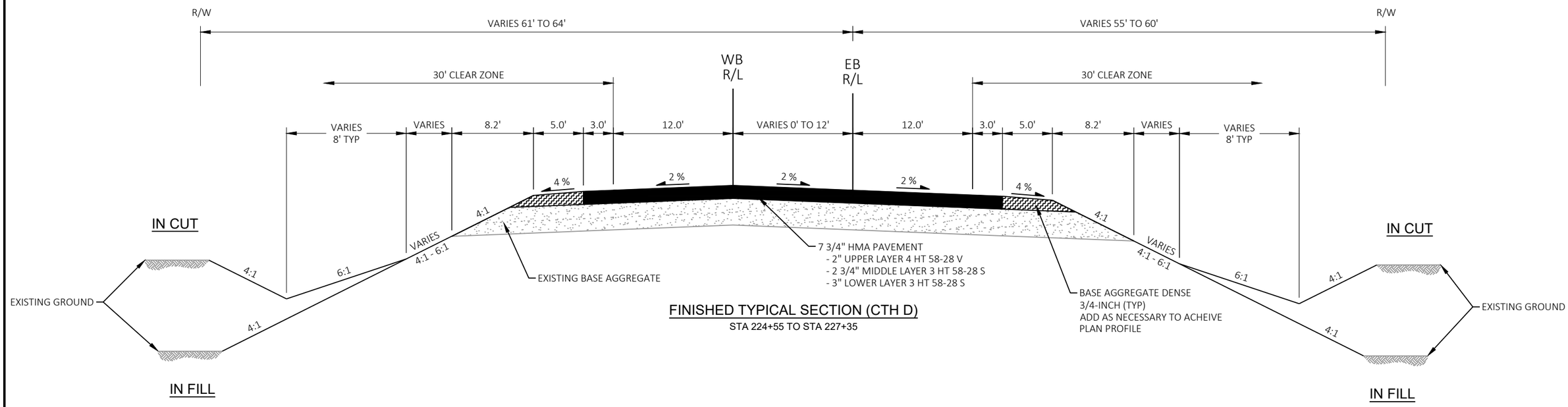
STA 219+50 TO STA 220+64
STA 221+96 TO STA 223+10

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 18	E



FINISHED TYPICAL SECTION (CTH D)

STA 223+10 TO STA 224+55

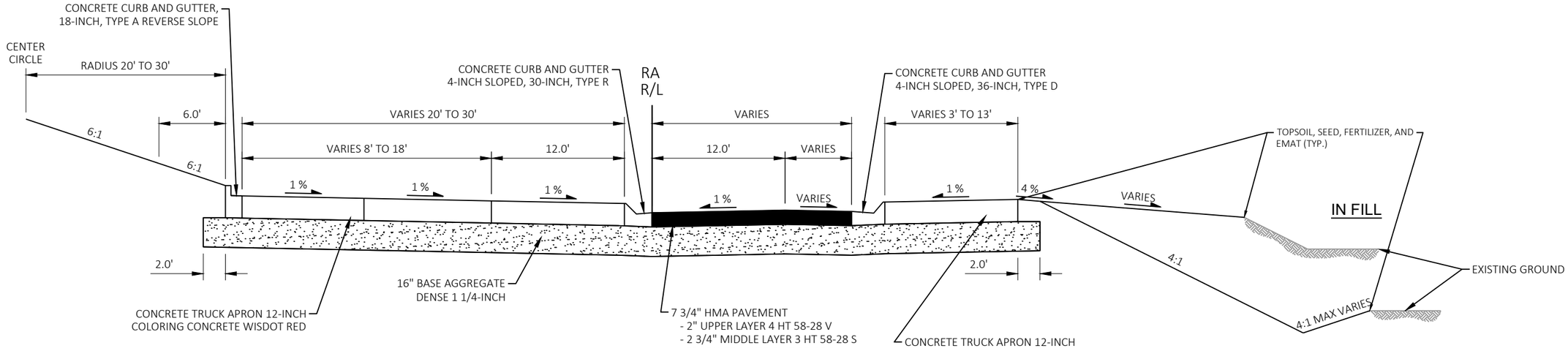


FINISHED TYPICAL SECTION (CTH D)

STA 224+55 TO STA 227+35

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 19	E

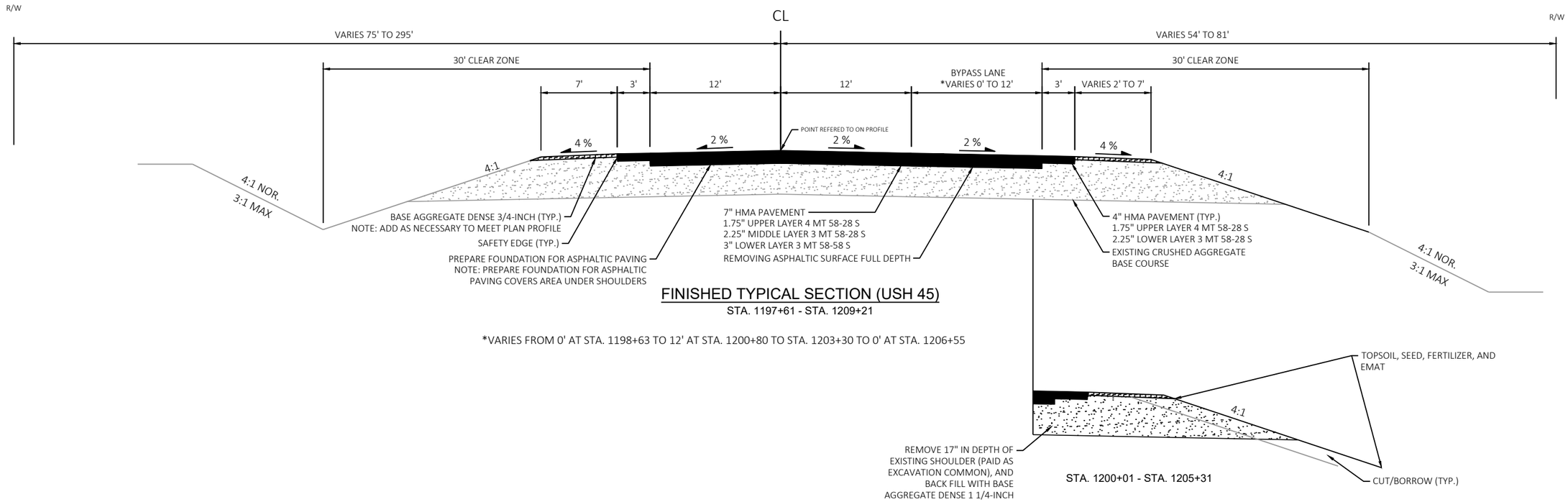
2



FINISHED TYPICAL SECTION (ROUNDABOUT)

STA 20+53 TO STA 20+87
STA 21+31 TO STA 21+60
STA 22+10 TO STA 22+43
STA 22+88 TO STA 20+08

2



FINISHED TYPICAL SECTION (USH 45)

STA. 1197+61 - STA. 1209+21

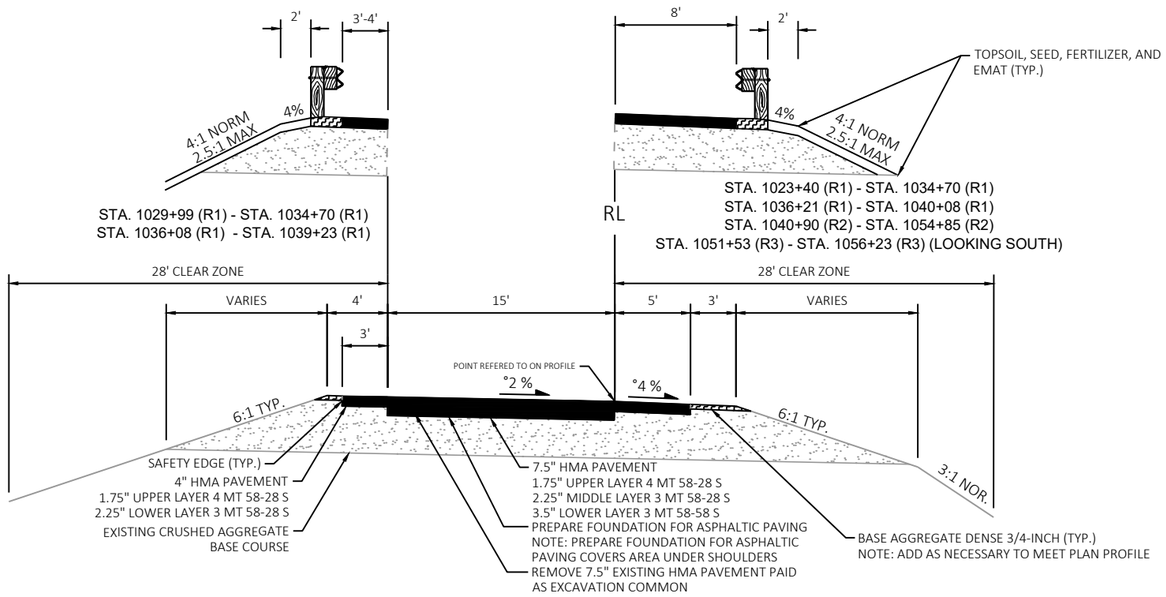
*VARIES FROM 0' AT STA. 1198+63 TO 12' AT STA. 1200+80 TO STA. 1203+30 TO 0' AT STA. 1206+55

STA. 1200+01 - STA. 1205+31

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 21	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\020301-TS.DWG PLOT DATE : 9/16/2025 4:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 11-10ft
WISDOT/CADDS SHEET 42

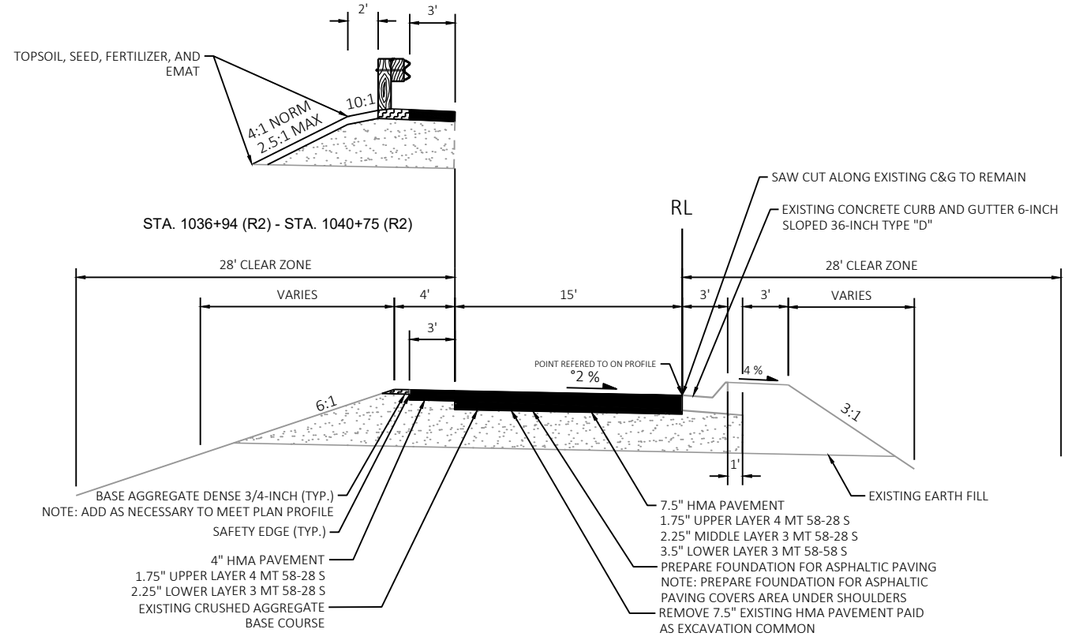
2



FINISHED TYPICAL SECTION (USH 45 NB EXIT RAMP TO STH 54)

STA. 1023+40 (R1) - STA. 1034+52 (R1)
STA. 1036+43 (R1) - STA. 1043+17 (R1)
STA. 1041+01 (R2) - STA. 1045+48 (R2)
STA. 1051+38 (R3) - STA. 1056+24 (R3) (LOOKING SOUTH)
STA. 1063+78 (R3) - STA. 1067+84 (R3) (LOOKING SOUTH)

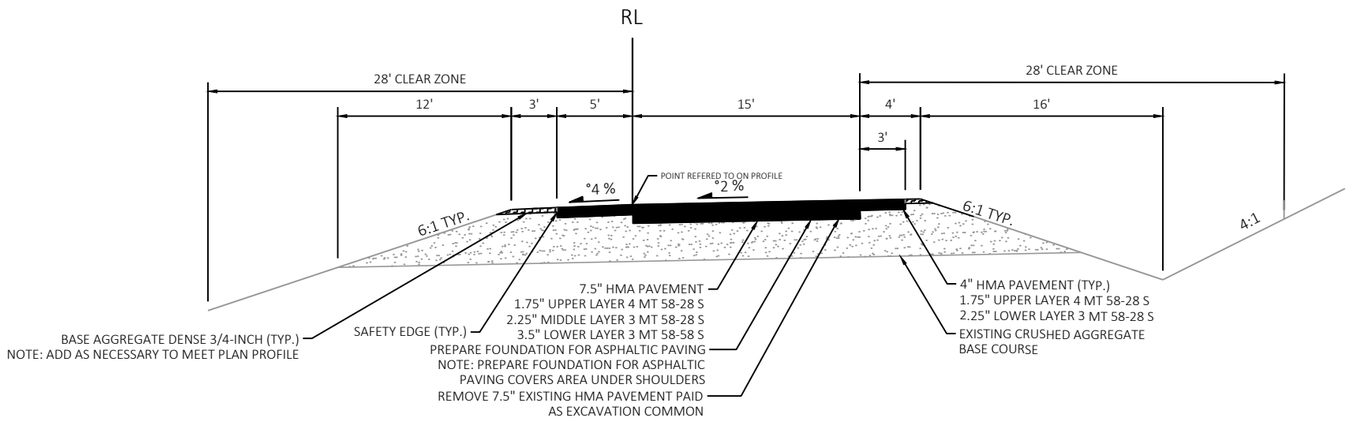
°2% NOR. VARIES IN SUPERELEVATED AREAS



FINISHED TYPICAL SECTION (STH 54 ON RAMP TO USH 45)

STA. 1033+33 (R2) - STA. 1041+01 (R2)
STA. 1056+24 (R3) - STA. 1063+78 (R3) (LOOKING SOUTH)

°2% NOR. VARIES IN SUPERELEVATED AREAS

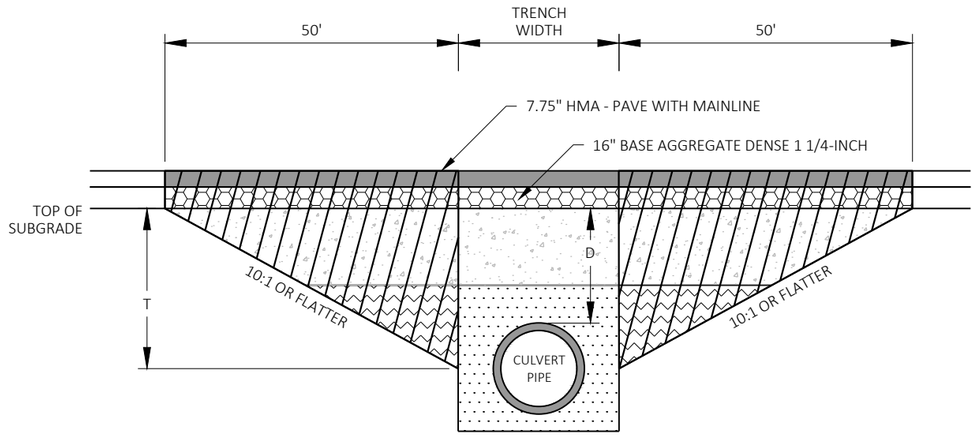


FINISHED TYPICAL SECTION (USH 45 SB EXIT RAMP TO STH 54)

STA. 1047+54 (R4) - STA. 1074+05 (R4)

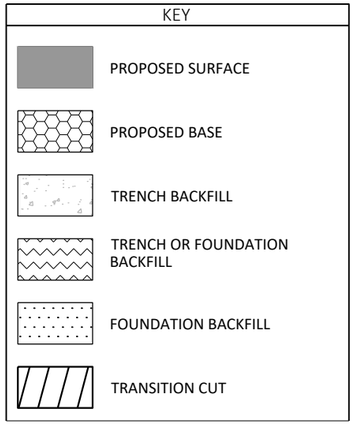
°NOR. VARIES IN SUPERELEVATED AREAS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TYPICAL SECTIONS	SHEET 22	E



DEPTH D < 6 FT

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



NOTES

TRANSITION CUT IS PAID AS EXCAVATION COMMON.

TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.

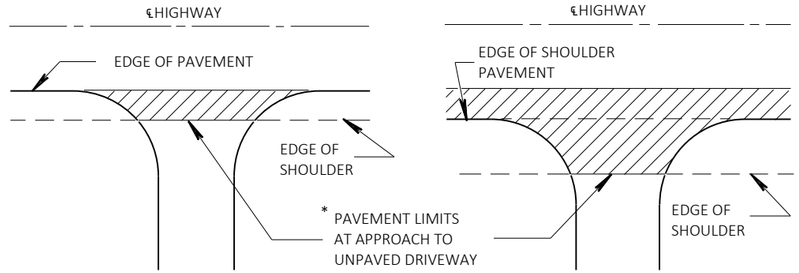
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.

PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING OPERATIONS.

MODIFIED CULVERT PIPE TRANSITION

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)	REMARKS
CTH D WB	320+35	0.0	43x68	SKEWED
CTH D WB	322+82	1.1	34x53	SKEWED
CTH D WB	322+92	1.1	34x53	SKEWED
CTH D WB	324+76	0.4	34x53	SKEWED
CTH D WB	324+88	0.4	34x53	SKEWED

NOTE: DEPTH MEASURED AT PROPOSED REFERENCE LINE

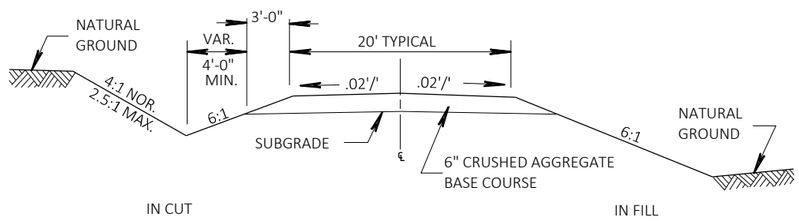


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW

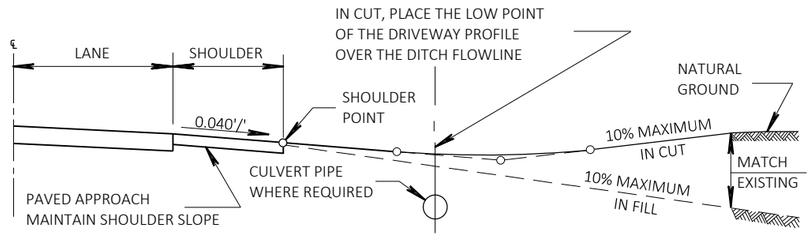
PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL

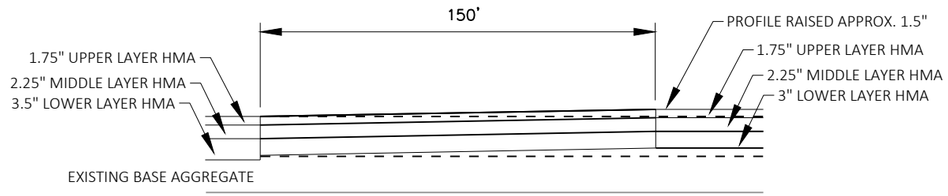


TYPICAL CROSS SECTION FOR PRIVATE

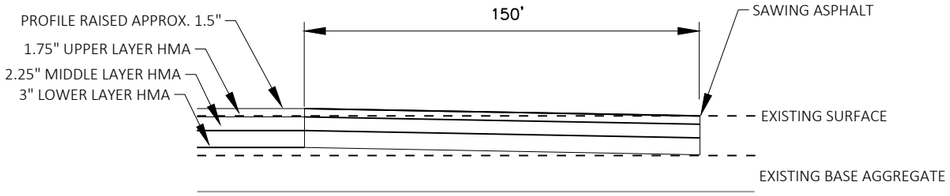
DRIVE OR FIELD ENTRANCE



TYPICAL DRIVEWAY PROFILES



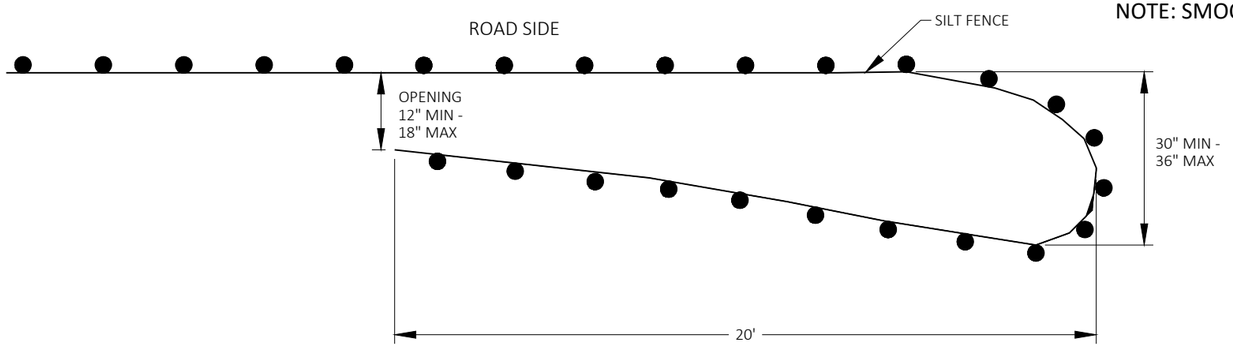
MAINLINE TRANSITION DETAIL
STA 1074+03 - STA 1075+53



MAINLINE TRANSITION DETAIL
STA 1207+71 - STA 1209+21

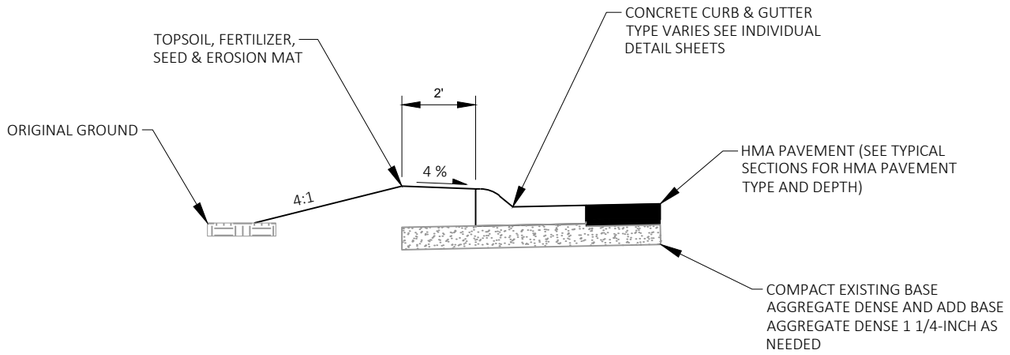
*NOTE: PAVEMENT THICKNESS CHANGES

NOTE: SMOOTH SIDE OF FENCE TO FACE AWAY FROM ROAD SIDE.



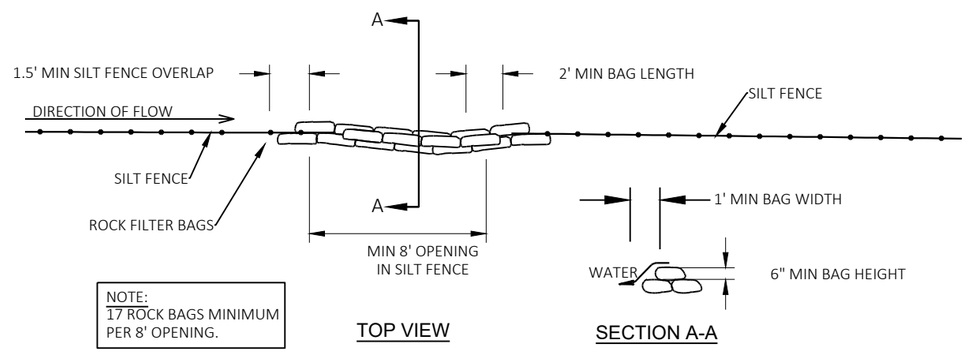
PLAN VIEW

EXCLUSION FENCING / TEMPORARY SMALL ANIMAL
TURN-AROUND

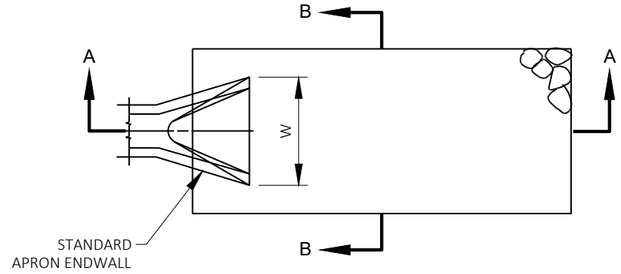


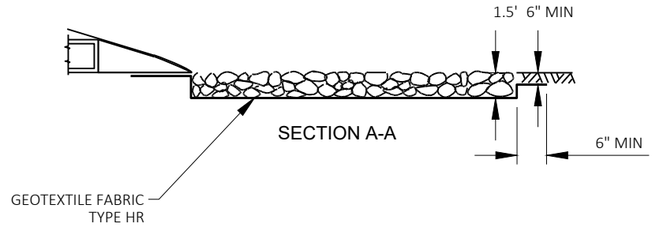
CONCRETE CURB & GUTTER REPLACEMENT DETAIL

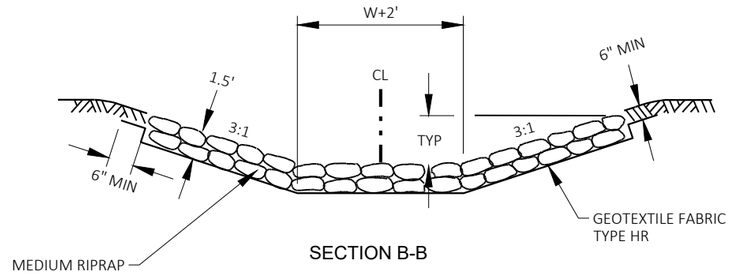
R2
SPURR RD
CHURCH RD



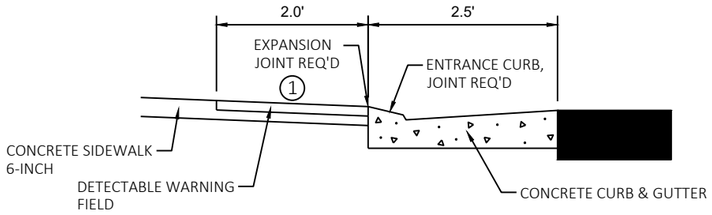
ROCK BAGS USED FOR SILT FENCE RELIEF



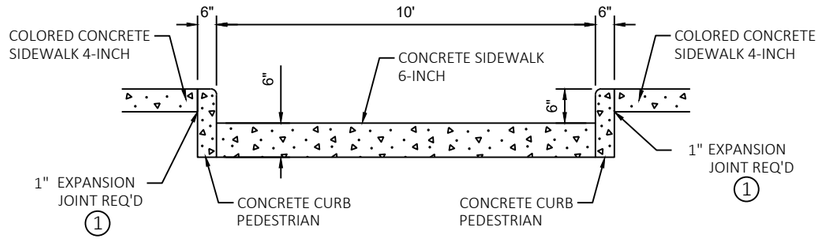




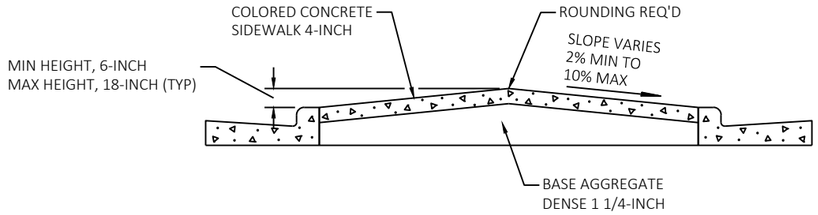
RIP RAP AND GEOTEXTILE



SECTION A-A

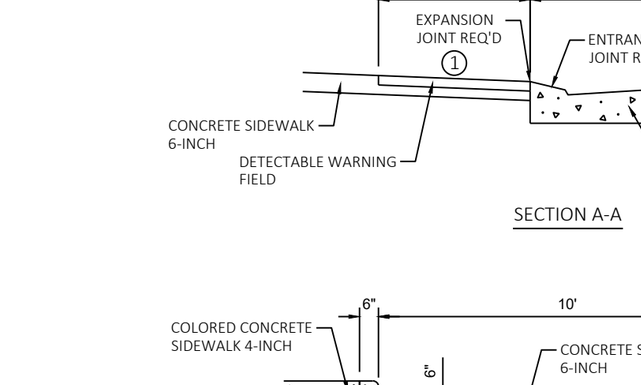


SECTION B-B



SECTION C-C

1 EXPANSION MATERIAL TO BE 1" LONGER THAN ABUTTING MEDIAN CONCRETE THICKNESS. (i.e. 5" IN HEIGHT WHEN ADJACENT TO CONCRETE SIDEWALK 4-INCH)



* DISTANCE TO LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

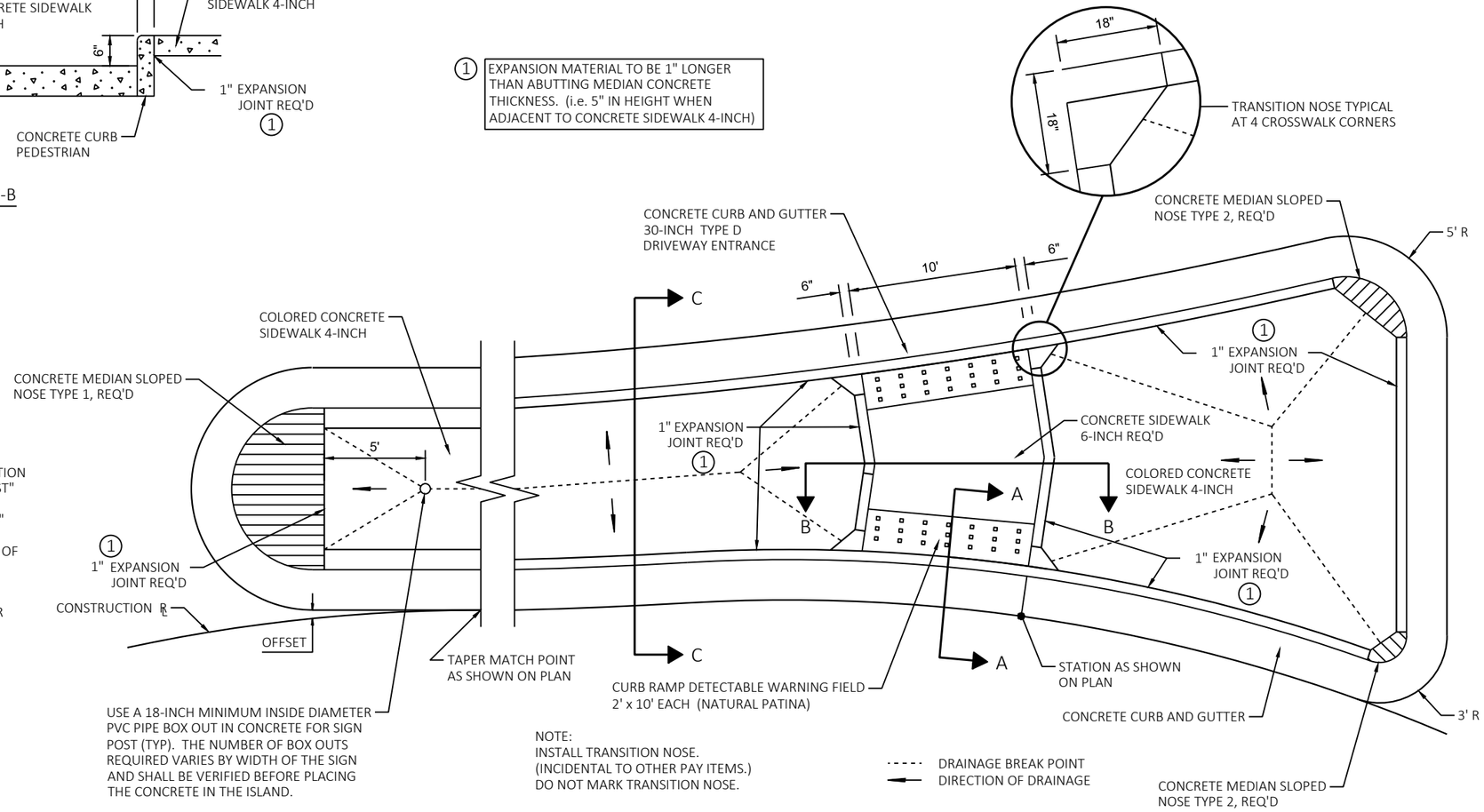
SEE A4-3 SIGN PLATE FOR "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POST"

SEE A4-3B SIGN PLATE "SIGN POST BOX-OUTS"

** SEE A4-4 SIGN PLATE "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE SUPPORTS"

USE A 18-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND.

ISLAND SIGN LOCATION DETAIL (TYP)



CONCRETE SPLITTER ISLAND DETAIL WITH CROSSWALK

2

2

EXISTING R/W (APPROX.)

N

WOLF RIVER

RIP RAP MEDIUM WITH
GEOTEXTILE TYPE HR

NEW LONDON ELECTRIC

CULVERT PIPE CORRUGATED
POLYETHYLENE 12 - INCH
AEWS REQUIRED

REMOVING STORM
SEWER 12-INCH

REMOVE EXISTING INLET

CONCRETE SURFACE
DRAINS DROP INLET
TYPE AT STRUCTURES
INLETS 2X2
STA 976+99.10
O/S -22.00 LT
GRATE INV 763.30

RIP RAP MEDIUM
FILL EXISTING RIP RAP
AREA TO PROPOSED
GRADING LEVEL

3'

15.4'

43.1'

22.5'

12.0

12.0

15.0'

USH 45 NB

976+00 USH 45 NB

977+00 USH 45 NB

978+00 USH 45 NB

B-44-0148

RIP RAP MEDIUM
FILL EXISTING RIP RAP
AREA TO PROPOSED
GRADING LEVEL

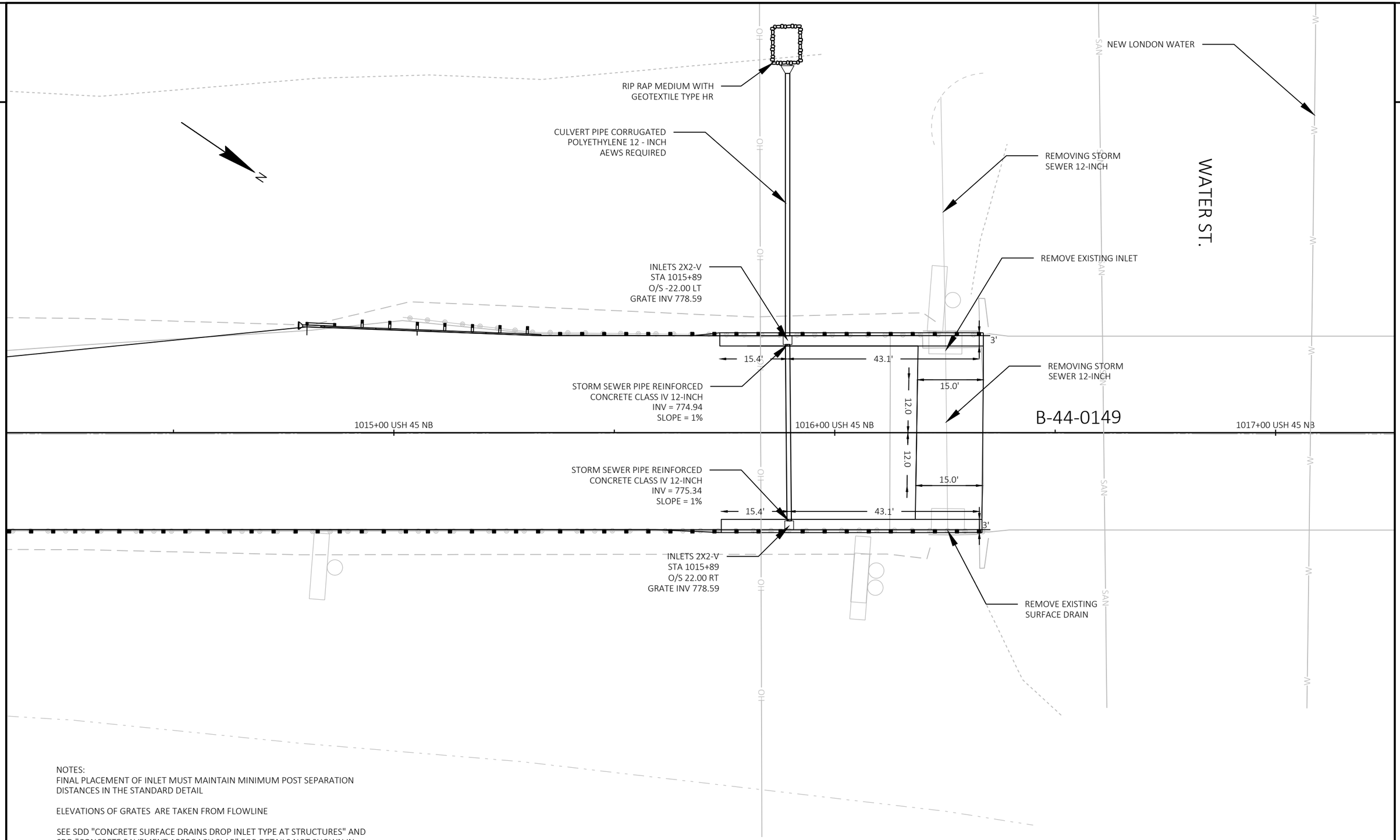
NOTES:
FINAL PLACEMENT OF SURFACE DRAIN MUST MAINTAIN MINIMUM POST SEPARATION DISTANCES IN THE STANDARD DETAIL

ELEVATIONS OF GRATES ARE TAKEN FROM FLOWLINE

SEE SDD "CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES" AND SDD "CONCRETE PAVEMENT APPROACH SLAB" FOR DETAILS NOT SHOWN IN PLAN

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CONSTRUCTION DETAILS - SURFACE DRAINS	SHEET 27	E

2



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

ELEVATIONS OF GRATES ARE TAKEN FROM FLOWLINE

SEE SDD "CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES" AND SDD "CONCRETE PAVEMENT APPROACH SLAB" FOR DETAILS NOT SHOWN IN PLAN

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CONSTRUCTION DETAILS - SURFACE DRAINS	SHEET 28	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021002-CD.DWG PLOT DATE : 9/16/2025 4:26 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:20 FT
LAYOUT NAME - 02
WISDOT/CADDS SHEET 42

2

TON BLACKMOUR STATE TRAIL

N

CONCRETE SURFACE
DRAINS DROP INLET
TYPE AT STRUCTURES
INLETS 2X2
STA 1034+12.53
O/S -22.00 LT
GRATE INV 798.42

REMOVE EXISTING INLET

REMOVING STORM
SEWER 12-INCH

3'

15.4'

43.1'

21.6'

B-44-0141

STORM SEWER PIPE REINFORCED
CONCRETE CLASS IV 12-INCH
INV = 795.17
SLOPE = 1%

1033+00 USH 45 NB

1034+00 USH 45 NB

1035+00 USH 45 NB

1036

12.0

12.0

STORM SEWER PIPE REINFORCED
CONCRETE CLASS IV 12-INCH
INV = 794.76
SLOPE = 1%

17.6'

15.4'

43.1'

3'

CONCRETE SURFACE
DRAINS DROP INLET
TYPE AT STRUCTURES
INLETS 2X2
STA 1034+05
O/S 22.00 RT
GRATE INV 798.32

REMOVE EXISTING INLET

REMOVING STORM
SEWER 12-INCH

CULVERT PIPE CORRUGATED
POLYETHYLENE 12 - INCH
AEWS REQUIRED

RIP RAP MEDIUM WITH
GEOTEXTILE TYPE HR

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

ELEVATIONS OF GRATES ARE TAKEN FROM FLOWLINE

SEE SDD "CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES" AND SDD "CONCRETE PAVEMENT APPROACH SLAB" FOR DETAILS NOT SHOWN IN PLAN

2

2

N

PC: 1053+99.18

47.0'

15.0

12.0

20.3

B-44-0144

1051+00 USH 45 NB

1052+00 USH 45 NB

1053+00 USH 45 NB

1054+

EP: 1051+83.11

18.4'

3'

43.1'

12.5'

15.4'

STORM SEWER PIPE REINFORCED
CONCRETE CLASS IV 12-INCH

CONCRETE SURFACE
DRAINS DROP INLET
TYPE AT STRUCTURES
INLETS 2X2
STA 1052+35
O/S 27.84 RT
GRATE INV 784.21'

REMOVE EXISTING INLETS

CONCRETE SURFACE
DRAINS DROP INLET
TYPE AT STRUCTURES
INLETS 2X2
STA 1052+23
O/S 28.24 RT
GRATE INV 784.58'

CULVERT PIPE CORRUGATED
POLYETHYLENE 12 - INCH
AEWS REQUIRED

CONCRETE SURFACE
DRAINS DROP INLET
TYPE AT STRUCTURES
INLETS 2X2
STA 1052+29
O/S 28.04 RT
GRATE INV 784.39'

RIP RAP MEDIUM WITH
GEOTEXTILE TYPE HR

REMOVING STORM
SEWER 12-INCH

EMBARRASS RIVER

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

ELEVATIONS OF GRATES ARE TAKEN FROM FLOWLINE

SEE SDD "CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES" AND SDD "CONCRETE PAVEMENT APPROACH SLAB" FOR DETAILS NOT SHOWN IN PLAN

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CONSTRUCTION DETAILS - SURFACE DRAINS	SHEET 30	E

2

2

N

NEWTON BLACKMOUR STATE TRAIL

PT: 1033+45.34

1033+00 'R1'

1034+00 'R1'

1035+00 'R1'

1036+00 'R1'

15.0'

15.0

B-44-0142

21.7'

15.4'

43.2'

3'

REMOVE EXISTING INLET

CONCRETE SURFACE
DRAINS DROP INLET
TYPE AT STRUCTURES
INLETS 2X2
STA 1034+37
O/S 8.00 RT
GRATE INV 797.13'

CULVERT PIPE CORRUGATED
POLYETHYLENE 12 - INCH
AEWS REQUIRED

REMOVING STORM
SEWER 12-INCH

RIP RAP MEDIUM WITH
GEOTEXTILE TYPE HR

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

ELEVATIONS OF GRATES ARE TAKEN FROM FLOWLINE

SEE SDD "CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES" AND SDD "CONCRETE PAVEMENT APPROACH SLAB" FOR DETAILS NOT SHOWN IN PLAN

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CONSTRUCTION DETAILS - SURFACE DRAINS	SHEET 31	E

2

STA 975+89 - STA 977+43 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

NEW LONDON ELECTRIC

POST 9 +39.27, -22.15' LT

POST 5 +14.09, -23.19 LT

SLOPE INTERCEPT (TYP.)

POST 1 +88.89, -24.00' LT

15:1 (TYP.)

10:1 (TYP.)

+98, -15.00' LT

973+00 USH 45 NB

974+00 USH 45 NB

975+00 USH 45 NB

976+00 USH 45 NB

977+00 USH 45 NB

978+00 USH 45 NB

979+00

C/L USH 45

B-44-148

22'

22'

+09, 15.00' RT

POST 1 +99.22, 24.00' RT

POST 5 +23.99, 22.93' RT

POST 9 +48.77, 22.09' RT

STA 973+99 - STA 977+27 RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

WOLF RIVER

MATCH LINE 978+97.30

N

2

STA 979+94 - STA 983+26 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

NEW LONDON ELECTRIC

POST 9 +75.80, -22.14' LT

POST 5 +00.98, -23.18' LT

POST 1 +26.18, -24.00' LT

C/L USH 45

USH 45 NB

B-44-148

980+00 USH 45 NB

981+00 USH 45 NB

982+00 USH 45 NB

983+00 USH 45 NB USH 45

984+00 USH 45 NB

985+00 USH 45 NB

22'

22'

15:1 (TYP.)

10:1 (TYP.)

+16, -15.00' LT

+23, 15.00' RT

SLOPE INTERCEPT (TYP.)

POST 1 +33.55, 24.00' RT

POST 5 +08.79, 22.93' RT

POST 9 +84.00, 22.09' RT

STA 979+79 - STA 981+34 RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

WOLF RIVER

MATCH LINE 985+27.30

N

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	GUARDRAIL DETAILS	SHEET 32	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021003-CD.DWG PLOT DATE : 7/24/2025 3:02 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 01
WISDOT/CADDS SHEET 44

2

STA 1014+80 - STA 1016+13 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

POST 9 +30.25, -22.12' LT
POST 5 +05.27, -23.06' LT
POST 1 +80.29, -24.00' LT

C/L USH 45

15:1 (TYP.)
10:1 (TYP.)
+90, -15.00' LT

1011+00 USH 45 NB | 1012+00 USH 45 NB | 1013+00 USH 45 NB | 1014+00 USH 45 NB | 1015+00 USH 45 NB | 1016+00 USH 45 NB

+15, 15.00' RT

SLOPE INTERCEPT (TYP.)
POST 1 +05.32, 24.00' RT
POST 5 +30.30, 23.06' RT
POST 9 +55.28, 22.12' RT

STA 1013+05 - STA 1016+35 RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

SLOPE INTERCEPT (TYP.)

OH
SAN
22'
B-44-149

2

NEW LONDON WATER

STA 1017+38 - STA 1034+58 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

C/L USH 45

VENT

1017+00 USH 45 NB | 1018+00 USH 45 NB | 1019+00 USH 45 NB | 1020+00 USH 45 NB | 1021+00 USH 45 NB | 1022+00 USH 45 NB | 1023+00 USH

B-44-149

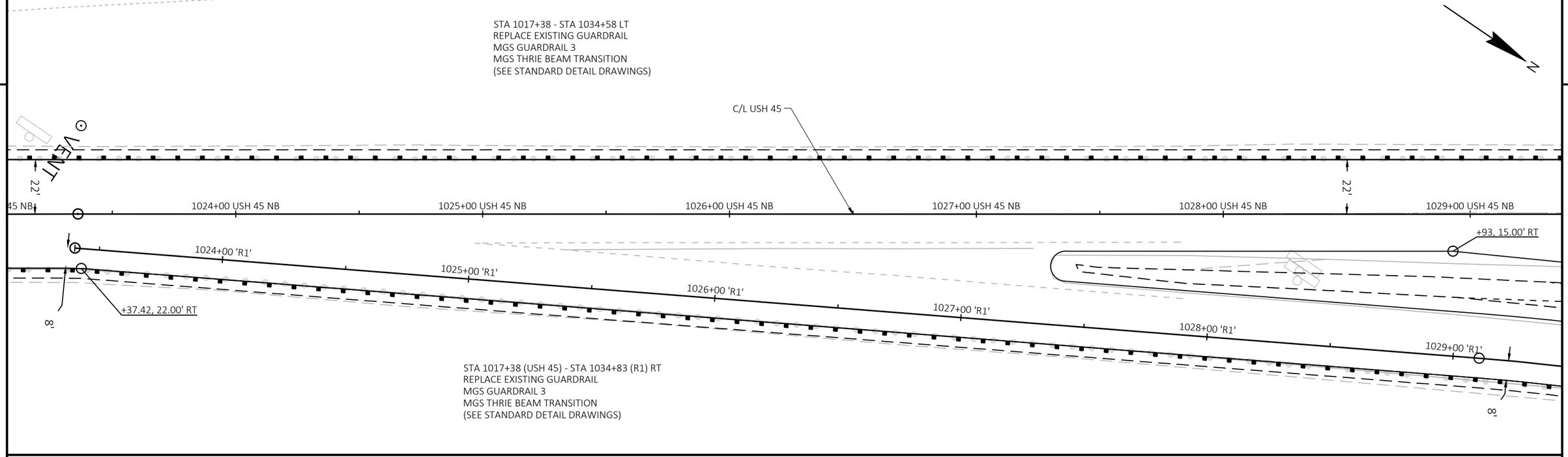
STA 1017+38 (USH 45) - STA 1034+83 (R1) RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	GUARDRAIL DETAILS	SHEET 33	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021003-CD.DWG PLOT DATE : 7/24/2025 3:02 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 02
WISDOT/CADDS SHEET 44

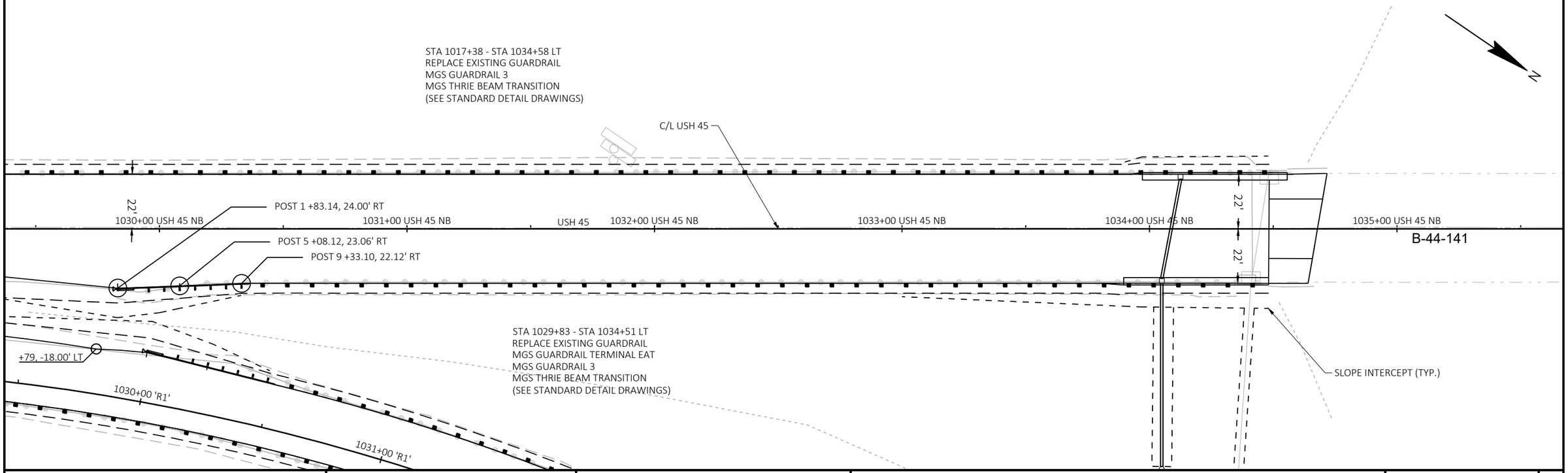
2

STA 1017+38 - STA 1034+58 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)



STA 1017+38 (USH 45) - STA 1034+83 (R1) RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

STA 1017+38 - STA 1034+58 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)



STA 1029+83 - STA 1034+51 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	GUARDRAIL DETAILS	SHEET 34	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021003-CD.DWG PLOT DATE : 9/16/2025 3:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 03
WISDOT/CADDS SHEET 44

2

STA 1036+23 - STA 1046+21 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

C/L USH 45

VENT

VENT

VENT

22'

22'

1036+00 USH 45 NB

1037+00 USH 45 NB

1038+00 USH 45 NB USH 45

1039+00 USH 45 NB

1040+00 USH 45 NB

1041+00 USH 45 NB

1042+00

B-44-141

STA 1036+15 - STA 1041+33 RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

SLOPE INTERCEPT (TYP.)

PCC: 1041+75.63

+77, 21.00' RT

POST 9 +82.57, 22.12' RT

POST 5 +07.55, 23.06' RT

POST 1 +32.54, 24.00' RT

1042+00

1041+00 'R2'

9'

PC: 1040+25

PT: 1040

N

N

STA 1036+23 - STA 1046+21 LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

NEW LONDON ELECTRIC

NEW LONDON WATER

C/L USH 45

+21.23, -29.27' LT

E

E

E

E

E

E

1047+00 'R3'

1048+00 'R3'

B-44-144

USH 45 NB

1043+00 USH 45 NB USH 45

1044+00 USH 45 NB

1045+00 USH 45 NB

1046+00 USH 45 NB

1047+00 USH 45 NB

1048+00 USH 45 NB

PT: 1043+61.75

PC: 1044+71.12

1043+00 'R2'

1044+00 'R2'

1045+00 'R2'

1046+00 'R2'

1047+00 'R2'

1048+00 'R2'

R2'

VENT

+86.47, 9.00' RT

W

W

W

W

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	GUARDRAIL DETAILS	SHEET 35	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021003-CD.DWG
LAYOUT NAME - 04
PLOT DATE : 7/24/2025 3:02 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

N

+52.29, -8.00' LT

1050+00 'R3'

1051+00 'R3'

1052+00 'R3'

1053+00 'R3'

1054+00 'R3'

8'

MATCHLINE 1054+43.20

B-44-144

C/L USH 45

EP: 1051+63.11

1050+00 USH 45 NB

1051+00 USH 45 NB

1052+00 USH 45 NB

1053+00 USH 45 NB

1054+00 USH 45 NB

1050+00 'R2'

1051+00 'R2'

+35.40, 27.86' RT

+97.96, 25.88' RT

+19.06, 22.00' RT

+76.71, 29.67' RT

SLOPE INTERCEPT (TYP.)

STA 1051+77 - STA 1059+12 RT
REPLACE EXISTING GUARDRAIL
MGS TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

1055+00 USH 45 NB

1056+00 USH 45 NB

1057+00 USH 45 NB

1058+00 USH 45 NB

1059+00 USH 45 NB

1060+00 USH 45 NB

C/L USH 45

+01, 15.00' RT

POST 9 +61.40, 22.14' RT

POST 5 +86.55, 23.17' RT

POST 1 +11.71, 24.00' RT

SLOPE INTERCEPT (TYP.)

STA 1051+77 - STA 1059+12 RT
REPLACE EXISTING GUARDRAIL
MGS TERMINAL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

MATCHLINE 1054+43.20

2

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	GUARDRAIL DETAILS	SHEET 36	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021003-CD.DWG PLOT DATE : 7/24/2025 3:02 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 05

WISDOT/CADDS SHEET 44

2

2

1030+00 USH 45 NB

POST 1 +99.15, -20.00' LT

POST 5 +23.58, -18.67' LT

POST 9 +48.06, -18.00' LT

STA 1029+99 (R1) - STA 1034+72 (R1) LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

N

1030+00 'R1'

1031+00 'R1'

1032+00 'R1'

1033+00 'R1'

1034+00 'R1'

1035+00 'R1'

+79, -18.00' LT

10:1

+45.34, -18.00' LT

+72.01, -19.00' LT

B-44-142

USH 45 NB TO STH54

RAMP R/L

STA 1017+38 (USH 45) - STA 1034+83 (R1) RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

SLOPE INTERCEPT (TYP.)

8'

N

STA 1036+08 (R1) - STA 1039+23 (R1) RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL TYPE 2
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

TYPE 2 TERMINAL

+33, -18.00' LT

B-44-142

19'

1036+00 'R1'

1037+00 'R1'

1038+00 'R1'

1039+00 'R1'

1040+00 'R1'

1041+00 'R1'

+38, 5.00' RT

10:1 (TYP.)

8'

TYPE 2 TERMINAL

USH 45 NB TO STH54

RAMP R/L

STA 1036+19 (R1) - STA 1040+08 (R1) RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL TERMINAL TYPE 2
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

MATCH LINE 1035+63.47

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	GUARDRAIL DETAILS	SHEET 37	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021003-CD.DWG PLOT DATE : 7/24/2025 3:02 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 06
WISDOT/CADDS SHEET 44

2

STA 1036+94 (R2) - STA 1040+75 (R2) LT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL EAT
MGS GUARDRAIL 3

N

STH 54 TO USH 45 NB

1039+00 'R2'

18'

RAMP R/L

1040+00 'R2'

PT: 1040+17.50

PC: 1040+25.59

+89.76
9.0 RT
798.250

1041+00 USH 45 NB

USH 45

SLOPE INTERCEPT (TYP.)

1038+00 'R2'

MATCH EXISTING

+00.00
0.0 LT
797.100

R270.00'

R343.18'

R83.45'

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D - DRIVEWAY CURB

+50.00
0.8 RT
798.050

1041+00 'R2'

⊙ VENT

PCC: 1041+75.93

+77.21.00' RT

1042+00 USH 45 NB

SLOPE INTERCEPT (TYP.)

POST 9 +40.91, -17.85' LT

POST 5 +17.46, -17.88' LT

1037+00 'R2'

STA 1040+36.98, 83.54' RT
83.45' RAD. TO EOP

POST 1 +89.61, 11.00' RT

POST 5 +15.42, 11.04 RT

9'

1042+00 'R2'

POST 1 +94.17, -20.00' LT

STA 1037+58.33, 270.00' RT
270' RAD. TO EOP

STA 1034+27.68, 252.72' RT
343.18' RAD. TO EOP

POST 9 +41.11, 9.30' RT

STA 1040+90 (R2) - STA 1045+86 (R2) RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

MATCHLINE 1042+60.19

+21.23, -29.27' LT

1047+00 'R3'

1043+00 USH 45 NB

USH 45

PT: 1044+61.75

1044+00 USH 45 NB

PC: 1044+71.12

1045+00 USH 45 NB

1046+00 USH 45 NB

1047+00 USH 45 NB

B-44-144

1043+00 'R2'

1044+00 'R2'

1045+00 'R2'

1046+00 'R2'

1047+00 'R2'

MATCHLINE 1042+60.19

⊙ VENT

+86.47, 9.00' RT

RAMP R/L

STH 54 TO USH 45 NB

STA 1040+90 (R2) - STA 1045+86 (R2) RT
REPLACE EXISTING GUARDRAIL
MGS GUARDRAIL EAT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
(SEE STANDARD DETAIL DRAWINGS)

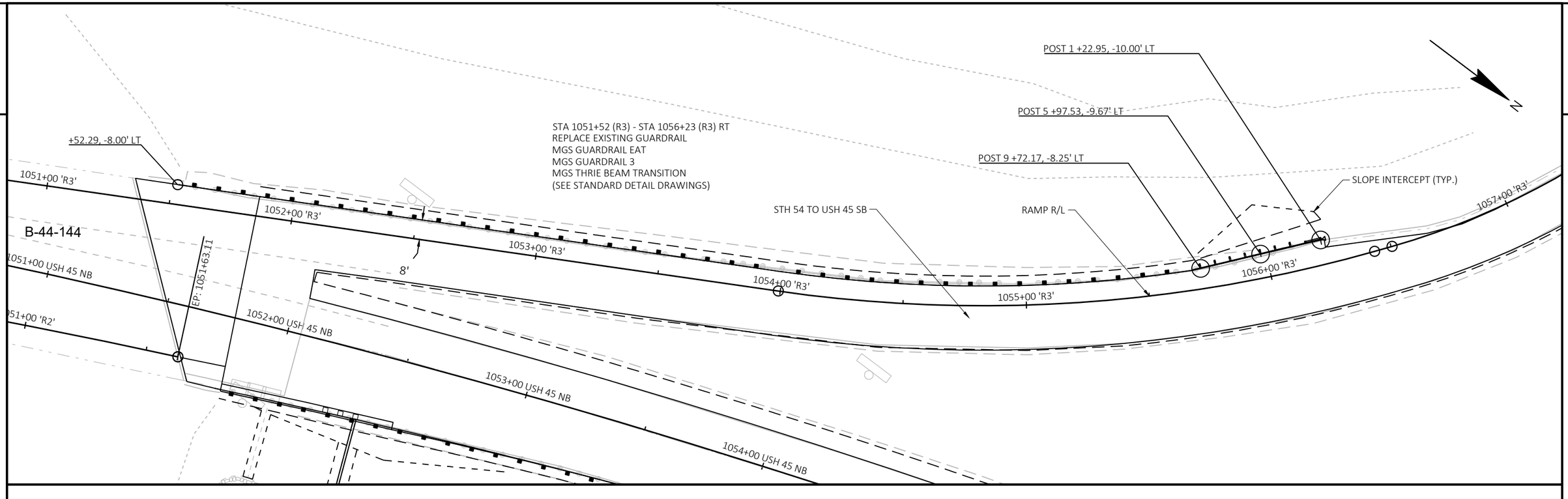
NEW LONDON ELECTRIC

NEW LONDON WATER

N

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	GUARDRAIL DETAILS	SHEET 38	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021003-CD.DWG
LAYOUT NAME - 07
PLOT DATE : 7/24/2025 3:03 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



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2

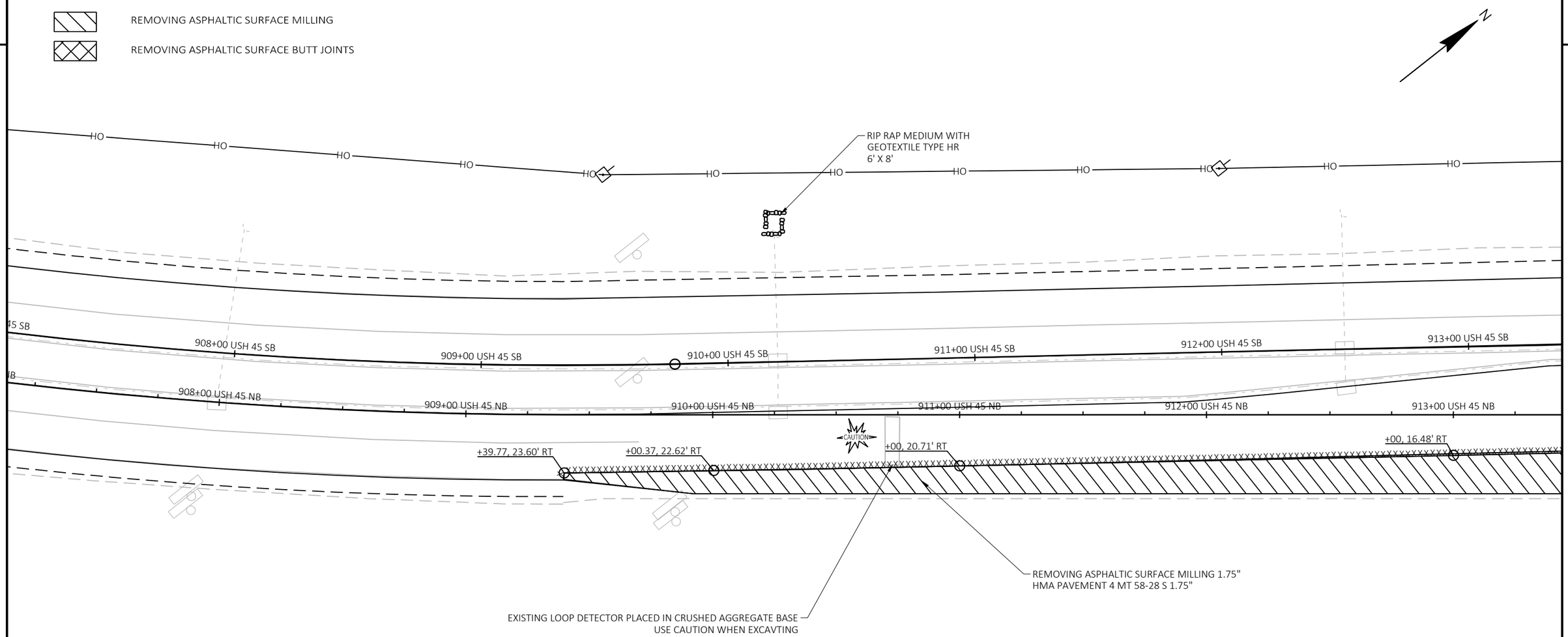
2

LEGEND

XXXXXXXX SAWCUT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS



NOTES:
SAWCUT TO FOLLOW JOINT OF PAVEMENT FROM STH 15 RECONSTRUCT
FULL DEPTH PAVEMENT REPLACEMENT IN AREAS OUTSIDE MILLING LIMITS.
EXISTING LOOP DETECTORS TO REMAIN.

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	INTERSECTION DETAIL	SHEET 40	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021101-ID.DWG PLOT DATE : 9/16/2025 3:41 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 01
WISDOT/CADDS SHEET 42

2

LEGEND

SAWCUT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

NEW LONDON ELECTRIC

WISDOT ELECTRIC

EXISTING LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE
USE CAUTION WHEN EXCAVATING

19203
780.621
CVT ELEC6 NEWLONDON

19205
779.591
CVT ELEC6 NEWLONDON

19201
779.931
TRED ELEC5

19198
779.415
MH

19115
777.115
MHE ELEC1

+30.72, -0.53' LT

+36.65, -4.83' LT

+32.52, -1.04' LT

+02.91, 43.88' RT

+00, 14.20' RT

+00, 11.97' RT

914+00 USH 45 SB

915+00 USH 45 SB

916+00 USH 45 SB

917+00 USH 45 SB

918+00 USH 45 SB

919+00 USH 45 SB

914+00 USH 45 NB

915+00 USH 45 NB

916+00 USH 45 NB

917+00 USH 45 NB

918+00 USH 45 NB

919+00 USH 45 NB

19118
776.577
MHE ELEC1 ST ELEC WDOT

19119
775.540
MHE ELEC1 WDOT

19120
775.174
MHE ELEC ELEC1 ST WDOT

10' (TYP.)

WE ENERGIES GAS

REMOVING ASPHALTIC SURFACE MILLING 1.75"
HMA PAVEMENT 4 MT 58-28 S 1.75"

NOTES:
SAWCUT TO FOLLOW JOINT OF PAVEMENT FROM STH 15 RECONSTRUCT
FULL DEPTH PAVEMENT REPLACEMENT IN AREAS OUTSIDE MILLING LIMITS.
EXISTING LOOP DETECTORS TO REMAIN

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	INTERSECTION DETAIL	SHEET 41	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 02
PLOT DATE : 9/16/2025 3:41 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

LEGEND

SAWCUT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

N

2

WE ENERGIES GAS

GVT

SPURR RD

+27.08
-85.3 LT
772.559

STA 1096+87.44, -82.12' LT
60'RAD. TO EOP

+95.21
-62.2 LT
772.622

STA 1095+54.99, -62.34' LT
40'RAD. TO EOP

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D

+40.87
-43.8 LT
772.965

+83.90
-22.2 LT
773.414

+82.26
-32.8 LT
772.873

+60.14
-28.5 LT
773.190

+53.51
-22.4 LT
773.110

1093+00 USH 45 NB | 1094+00 USH 45 NB | 1095+00 USH 45 NB | 1096+00 USH 45 NB | 1097+00 USH 45 NB | 1098+00 USH 45 NB | USH 45 | 1099+00 USH 45 N

+31.23
22.1 RT
773.516

+55.66
28.6 RT
773.641

+31.77
31.6 RT
773.483

+75.15
44.7 RT
773.765

+60.22
21.7 RT
774.137

ASPHALTIC FLUME REQ'D

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D

+20.52
48.4 RT
773.716

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D

STA 1096+58.15, 61.68' RT
40'RAD. TO EOP

STA 1095+28.36, 82.08' RT
60'RAD. TO EOP

+87.60
75.6 RT
773.930

ASPHALTIC FLUME REQ'D

GVT

SPURR RD

AT&T FIBER OPTIC

NEW LONDON WATER

NEW LONDON ELECTRIC

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	INTERSECTION DETAIL	SHEET 42	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 03
PLOT DATE : 9/16/2025 3:41 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

N

STA 1201+66.77, -62.19' LT
40' RAD. TO EOP

AT&T FIBER OPTIC

+14.95
-87.9 LT
815.149

+12.87
-69.1 LT
815.149

+77.85
-22.6 LT
814.790

+99.42
-32.9 LT
814.894

CHURCH RD

+45.12
-84.6 LT
815.299

+51.72
-54.4 LT
814.810

+67.14
-35.4 LT
814.889

+01.71
-22.0 LT
815.271

STA 1202+99.97, -81.91' LT
60' RAD. TO EOP

WE ENERGIES GAS

ASPHALTIC FLUME REQ'D

1198+00 USH 45 NB | 1199+00 USH 45 NB | 1200+00 USH 45 NB | 1201+00 USH 45 NB | 1202+00 USH 45 NB | 1203+00 USH 45 NB

STA 1198+62.87, 15.00' RT

STA 1200+79.61, 27.00' RT

STA 1203+29.94, 27.00' RT

SLOPE INTERCEPT

BASE AGG FE

2

LEGEND

SAWCUT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

N

1204+00 USH 45 NB | 1205+00 USH 45 NB | 1206+00 USH 45 NB | 1207+00 USH 45 NB | 1208+00 USH 45 NB | 1209+00 USH 45 NB

STA 1206+55.25, 15.00' RT

SLOPE INTERCEPT

MATCH LINE 1203+77.50

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	INTERSECTION DETAIL	SHEET 43	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 04
PLOT DATE : 9/16/2025 3:41 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

STA 1124+31.25 R/L USH 45 NB =
STA 2124+31.25 R/L USH 45 SB
Y=365,860.364
X=627,713.975

N

+88.68'SB' 17.00' LT
+48.55'SB' 20.01' LT
CG-36D
+73.53'SB' 5.00' RT
+52.19'SB' 3.00' RT
+63.14'NB' 0.00' LT
+73.01'NB' 4.00' LT
+55.64'NB' 3.00' LT
+98.24'NB' 17.00' RT
+56.72'NB' 20.01' RT
5' CURB AND GUTTER TRANSITION
CG-36D SLOPED TO CG-30D
USH 45
HMA
CMSN1
CS-4
CCR

2125'SB' 2126'SB' 2127'SB' 2128'SB' 2129'SB'
1125'NB' 1126'NB' 1127'NB' 1128'NB' 1129'NB'

778.58 778.69 778.80 778.92 779.03 779.14 779.23 HP 779.25 779.21 779.12 778.99 778.87 778.74 778.62 778.49
778.67 778.78 778.82 778.90 778.96 779.02 779.10 779.14 779.24 779.26 779.31 779.34 HP 779.37 779.34 779.24 779.12 779.00 778.87 778.75 778.62
778.23 778.14 778.65 778.50 778.31 778.24

MATCH LINE STA 1130+13

LEGEND

AF	ASPHALTIC FLUME
CCR	COLORING CONCRETE, WISDOT RED
CD-6	CONCRETE DRIVEWAY, 6-INCH
CMSN1	CONCRETE MEDIAN SLOPE NOSE, TYPE 1
CMSN2	CONCRETE MEDIAN SLOPE NOSE, TYPE 2
CTA-12	CONCRETE TRUCK APRON, 12-INCH
CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK, 6-INCH
CG-18A	CONCRETE CURB AND GUTTER, 18-INCH, TYPE A
CG-30D	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D
CG-36D	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
CG-30R	CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE R
G	GRASS
HMA	HMA PAVEMENT*

*SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR MATERIAL DEPTHS

N

FUTURE TRAIL
CG-36D
+28.62'NW' 6.00' LT
+67.27'SB' 20.01' LT
+25.00'SB' 17.00' LT
+16.29'SB' 0.00' RT
+62.36'SB' 3.00' RT
+63.62'NB' 3.00' LT
+06.33'SB' 4.00' RT
+06.45'NB' 5.00' LT
+60.70'NB' 20.01' RT
+20.75'NB' 17.00' RT
5' CURB AND GUTTER TRANSITION
CG-36D SLOPED TO CG-30D
USH 45
HMA
CMSN1
CS-4
CCR

2133'SB' 2134'SB' 2135'SB' 2136'SB' 2137'SB' 2138'SB'
1133'NB' 1134'NB' 1135'NB' 1136'NB' 1137'NB' 1138'NB'

778.46 778.60 778.72 778.90 779.06 779.40 779.52 779.64 779.76 779.84 779.88 780.01 780.11 780.18 780.20 780.17 780.14
778.79 778.91 779.03 779.15 779.28 779.41 779.54 779.66 779.79 779.87 779.96 780.04 780.16 780.27 780.33 780.35 780.33 780.29 780.24
778.91 779.03 779.16 779.29 779.41 779.54 779.66 779.79 779.91 780.04 780.16 780.27 780.33 HP+24.3 780.34
778.57 778.69 778.76 778.81 778.87 779.03

HP+31.7 780.21 780.20

MATCH LINE STA 1133+07

STA 1138+53.69 R/L USH 45 NB =
STA 2138+58.52 R/L USH 45 SB
Y=367,268.626
X=627,513.654

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVING DETAILS	SHEET 44	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-021201-PD.DWG
LAYOUT NAME - WW-021201-pd
PLOT DATE : 4/28/2025 11:58 AM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : ##########

2

5' CURB AND GUTTER TRANSITION
CG-36D SLOPED TO CG-30D

FUTURE TRAIL

EXISTING R/W

STA 216+19.80 R/L CTH D EB =
STA 316+19.62 R/L CTH D WB
Y=366,467.350
X=627,119.076

+19.62'WB'
15.00' LT

+19.80'EB'
15.00' RT

CTH D

MATCH LINE STA 220+39

+02.44'WB'
15.00' LT

+55.69'NW'
6.00' LT

+02.80'NW'
6.00' LT

+61.89'WB'
18.03' LT

+94.22'WB'
5.00' RT

+56.47'WB'
3.00' RT

+55.72'EB'
3.00' LT

+34.07'EB'
0.00' LT

+93.95'EB'
2.28' LT

+48.73'EB'
18.00' RT

+89.64'EB'
15.00' RT

+46.23'SW'
6.00' LT

+55.0
5.

LP+78.6

LP+04.4

216'EB'

217'EB'

218'EB'

219'EB'

220'EB'

317'WB'

318'WB'

319'WB'

320'WB'

776.90

776.62

776.65

776.83

777.08

777.31

777.64

776.94

776.92

776.99

777.11

777.28

777.51

777.75

777.48

777.32

777.19

777.15

777.02

777.46

776.97

777.19

776.87

776.76

776.72

776.74

776.83

776.65

776.87

777.19

777.43

777.29

777.18

777.15

777.01

776.41

776.40

776.46

AF

CG-36D

CG-30D

CS-6

HMA

CMSN1

CS-4

CCR

5' CURB AND GUTTER TRANSITION
CG-36D SLOPED TO CG-30D

FUTURE TRAIL

EXISTING R/W

LEGEND

AF	ASPHALTIC FLUME
CCR	COLORING CONCRETE, WISDOT RED
CD-6	CONCRETE DRIVEWAY, 6-INCH
CMSN1	CONCRETE MEDIAN SLOPE NOSE, TYPE 1
CMSN2	CONCRETE MEDIAN SLOPE NOSE, TYPE 2
CTA-12	CONCRETE TRUCK APRON, 12-INCH
CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK, 6-INCH
CG-18A	CONCRETE CURB AND GUTTER, 18-INCH, TYPE A
CG-30D	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D
CG-36D	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
CG-30R	CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE R
G	GRASS
HMA	HMA PAVEMENT*

*SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR MATERIAL DEPTHS

5' CURB AND GUTTER TRANSITION
CG-36D SLOPED TO CG-30D

777.96
VPI+80.1

+11.48'WB'
18.02' LT

+70.46'NE'
6.00' RT

+45.67'WB'
15.00' LT

FUTURE TRAIL

MATCH LINE STA 222+21

+07.48'WB'
3.00' RT

+07.41'EB'
3.00' LT

+04.45'EB'
18.03' RT

+26.45'SE'
6.00' RT

+38.89'EB'
15.00' RT

+11.85'WB'
0.00' RT

+51.84'WB'
2.00' RT

+51.46'EB'
5.00' LT

LP+02.6

LP+04.1

223'EB'

224'EB'

225'EB'

226'EB'

227'EB'

228'EB'

323'WB'

324'WB'

325'WB'

326'WB'

327'WB'

777.94

777.81

777.69

777.52

777.48

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15.00'

CS-6

CG-30D

HMA

CCR

CS-4

CMSN1

CG-36D

AF

FUTURE TRAIL

5' CURB AND GUTTER TRANSITION
CG-36D SLOPED TO CG-30D

EXISTING R/W

STA 227+34.66 R/L CTH D EB =
STA 327+35.28 R/L CTH D WB
Y=366,695.449
X=628,205.927

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVING DETAILS	SHEET 45	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-021201-PD.DWG
LAYOUT NAME - WW-021202-pd

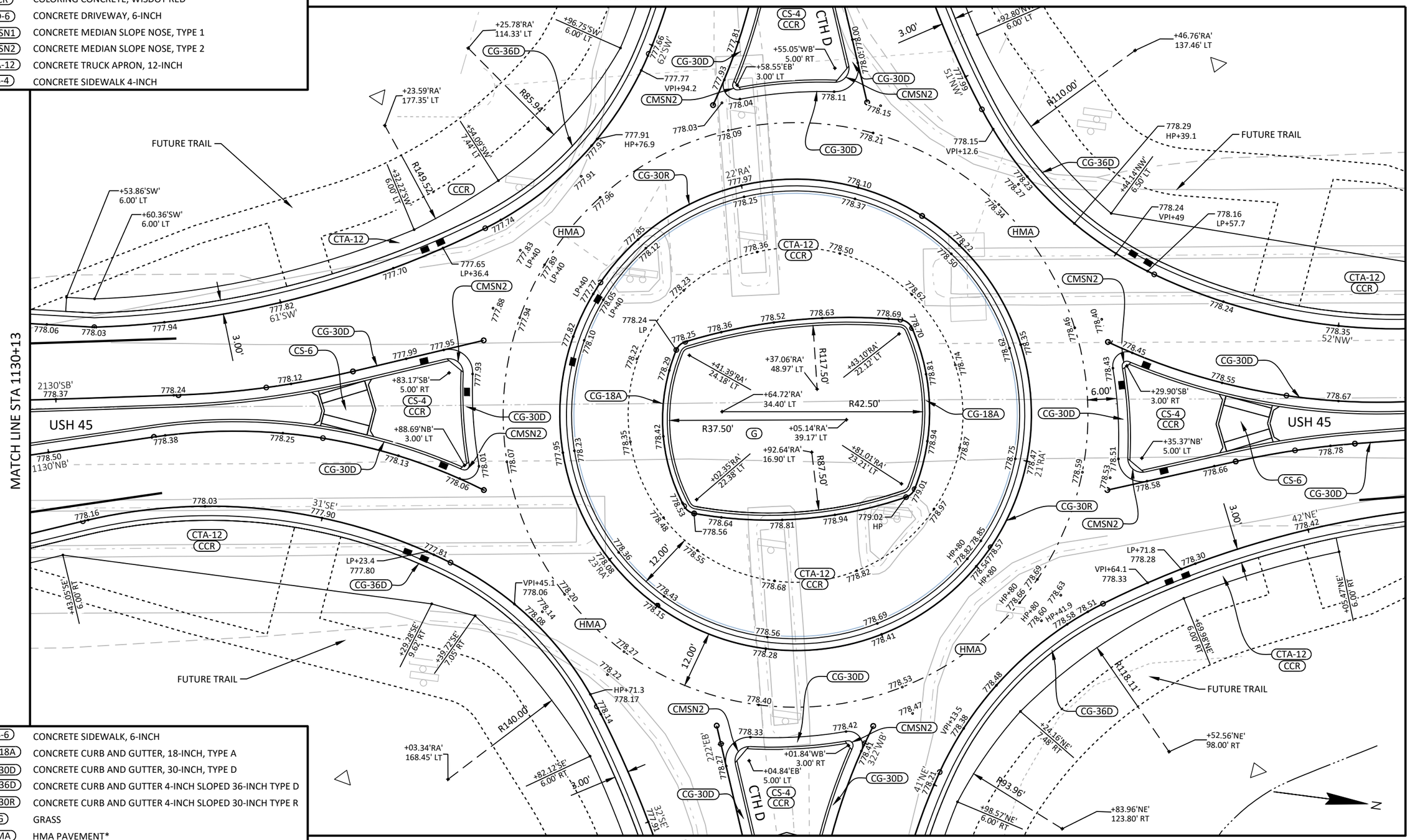
PLOT DATE : 4/28/2025 11:58 AM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

AF	ASPHALTIC FLUME
CCR	COLORING CONCRETE, WISDOT RED
CD-6	CONCRETE DRIVEWAY, 6-INCH
CMSN1	CONCRETE MEDIAN SLOPE NOSE, TYPE 1
CMSN2	CONCRETE MEDIAN SLOPE NOSE, TYPE 2
CTA-12	CONCRETE TRUCK APRON, 12-INCH
CS-4	CONCRETE SIDEWALK 4-INCH

MATCH LINE STA 220+39


MATCH LINE STA 1130+13
MATCH LINE STA 1133+07
MATCH LINE STA 222+21
CTH D
USH 45
FUTURE TRAIL
CG-36D
CG-30D
CG-30R
CG-18A
CS-4
CS-6
CCR
HMA
CTA-12
CMSN2
G
R85.94'
R149.52'
R110.00'
R117.50'
R42.50'
R37.50'
R140.00'
R118.11'
R93.96'
12.00'
3.00'
6.00'
+25.78'RA' 114.33' LT
+23.59'RA' 177.35' LT
+46.76'RA' 137.46' LT
+96.75'SW' 6.00' LT
+54.09'SW' 7.44' LT
+32.22'SW' 6.00' LT
+53.86'SW' 6.00' LT
+60.36'SW' 6.00' LT
+92.80'NW' 6.00' LT
+44.14'NW' 6.50' LT
+55.05'WB' 5.00' RT
+58.55'EB' 3.00' LT
+83.17'SB' 5.00' RT
+88.69'NB' 3.00' LT
+29.90'SB' 3.00' RT
+35.37'NB' 5.00' LT
+37.06'RA' 48.97' LT
+41.39'RA' 24.18' LT
+43.10'RA' 22.12' LT
+64.72'RA' 34.40' LT
+05.14'RA' 39.17' LT
+92.64'RA' 16.90' LT
+02.35'RA' 22.38' LT
+81.01'RA' 23.21' LT
+29.28'SE' 9.60' RT
+39.72'SE' 7.05' RT
+82.12'SE' 6.00' RT
+03.34'RA' 168.45' LT
+01.84'WB' 3.00' RT
+04.84'EB' 5.00' LT
+24.16'NE' 7.48' RT
+52.56'NE' 98.00' RT
+69.98'NE' 6.00' RT
+05.47'NE' 6.00' RT
+98.57'NE' 6.00' RT
+83.96'NE' 123.80' RT
777.77 VPI+94.2
777.91 HP+76.9
777.65 LP+36.4
778.15 VPI+12.6
778.24 VPI+49
778.16 LP+57.7
778.29 HP+39.1
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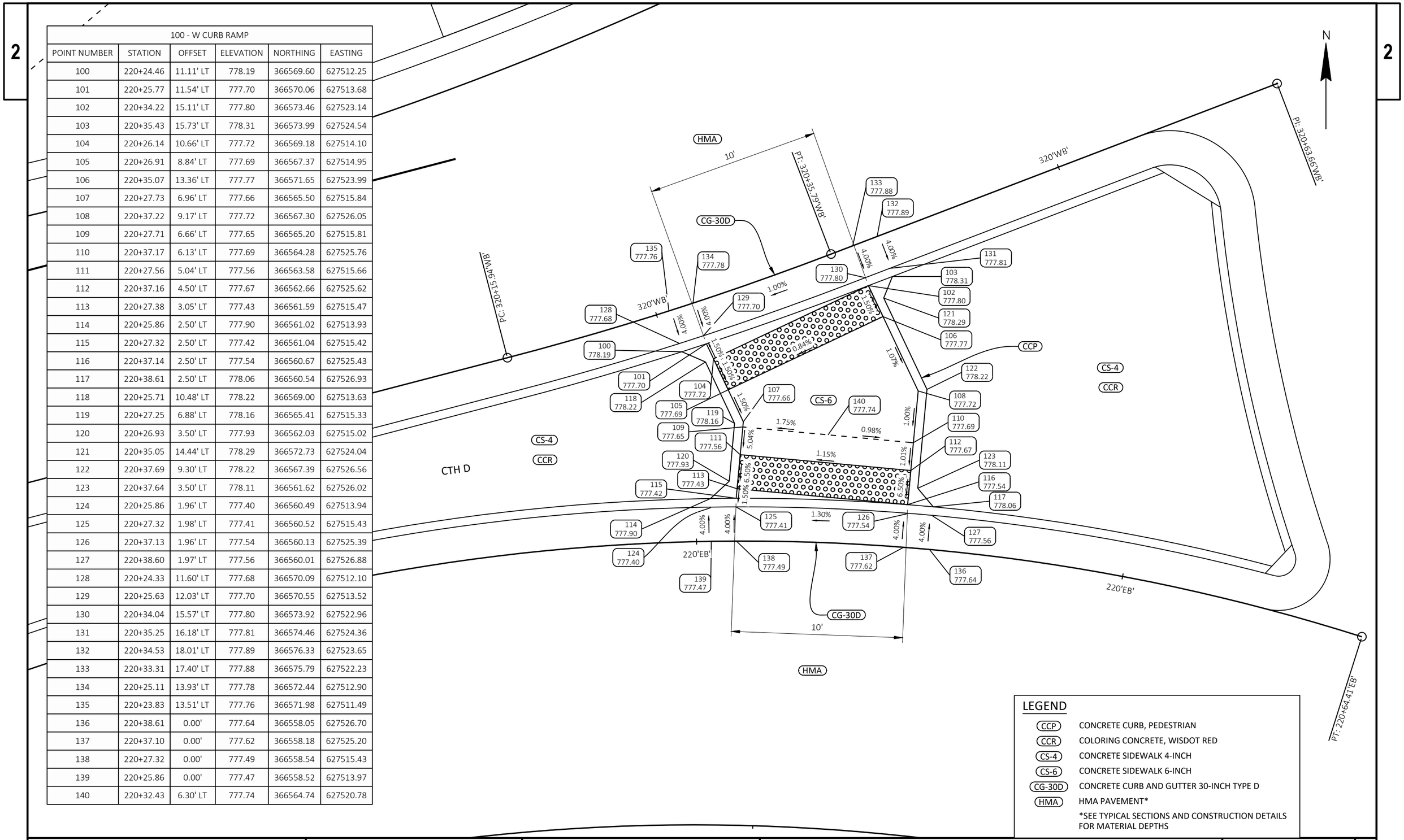
100 - W CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	220+24.46	11.11' LT	778.19	366569.60	627512.25
101	220+25.77	11.54' LT	777.70	366570.06	627513.68
102	220+34.22	15.11' LT	777.80	366573.46	627523.14
103	220+35.43	15.73' LT	778.31	366573.99	627524.54
104	220+26.14	10.66' LT	777.72	366569.18	627514.10
105	220+26.91	8.84' LT	777.69	366567.37	627514.95
106	220+35.07	13.36' LT	777.77	366571.65	627523.99
107	220+27.73	6.96' LT	777.66	366565.50	627515.84
108	220+37.22	9.17' LT	777.72	366567.30	627526.05
109	220+27.71	6.66' LT	777.65	366565.20	627515.81
110	220+37.17	6.13' LT	777.69	366564.28	627525.76
111	220+27.56	5.04' LT	777.56	366563.58	627515.66
112	220+37.16	4.50' LT	777.67	366562.66	627525.62
113	220+27.38	3.05' LT	777.43	366561.59	627515.47
114	220+25.86	2.50' LT	777.90	366561.02	627513.93
115	220+27.32	2.50' LT	777.42	366561.04	627515.42
116	220+37.14	2.50' LT	777.54	366560.67	627525.43
117	220+38.61	2.50' LT	778.06	366560.54	627526.93
118	220+25.71	10.48' LT	778.22	366569.00	627513.63
119	220+27.25	6.88' LT	778.16	366565.41	627515.33
120	220+26.93	3.50' LT	777.93	366562.03	627515.02
121	220+35.05	14.44' LT	778.29	366572.73	627524.04
122	220+37.69	9.30' LT	778.22	366567.39	627526.56
123	220+37.64	3.50' LT	778.11	366561.62	627526.02
124	220+25.86	1.96' LT	777.40	366560.49	627513.94
125	220+27.32	1.98' LT	777.41	366560.52	627515.43
126	220+37.13	1.96' LT	777.54	366560.13	627525.39
127	220+38.60	1.97' LT	777.56	366560.01	627526.88
128	220+24.33	11.60' LT	777.68	366570.09	627512.10
129	220+25.63	12.03' LT	777.70	366570.55	627513.52
130	220+34.04	15.57' LT	777.80	366573.92	627522.96
131	220+35.25	16.18' LT	777.81	366574.46	627524.36
132	220+34.53	18.01' LT	777.89	366576.33	627523.65
133	220+33.31	17.40' LT	777.88	366575.79	627522.23
134	220+25.11	13.93' LT	777.78	366572.44	627512.90
135	220+23.83	13.51' LT	777.76	366571.98	627511.49
136	220+38.61	0.00'	777.64	366558.05	627526.70
137	220+37.10	0.00'	777.62	366558.18	627525.20
138	220+27.32	0.00'	777.49	366558.54	627515.43
139	220+25.86	0.00'	777.47	366558.52	627513.97
140	220+32.43	6.30' LT	777.74	366564.74	627520.78



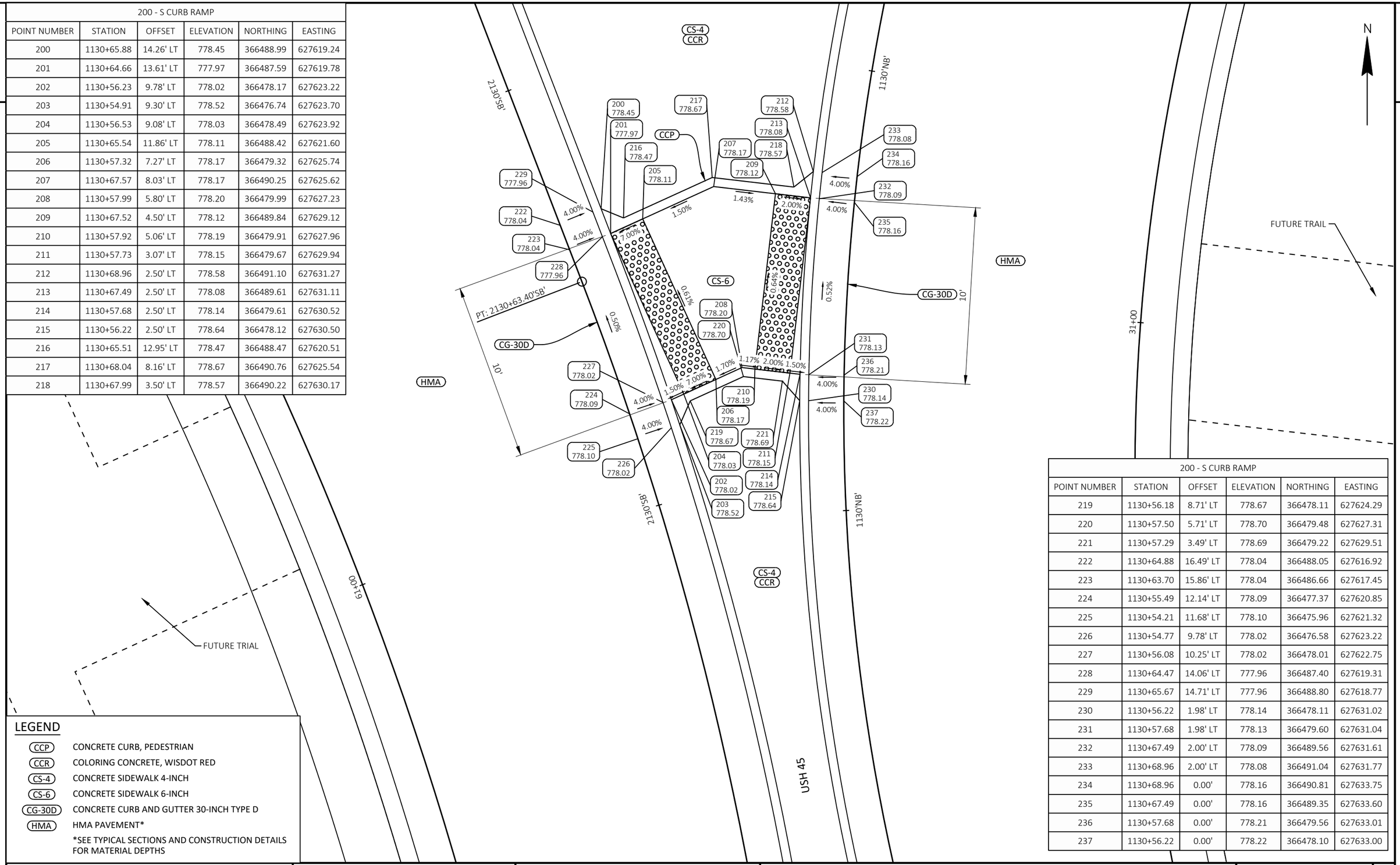
LEGEND

CCP	CONCRETE CURB, PEDESTRIAN
CCR	COLORING CONCRETE, WISDOT RED
CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
HMA	HMA PAVEMENT*
	*SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR MATERIAL DEPTHS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CURB RAMP	SHEET 47	E

2

200 - S CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
200	1130+65.88	14.26' LT	778.45	366488.99	627619.24
201	1130+64.66	13.61' LT	777.97	366487.59	627619.78
202	1130+56.23	9.78' LT	778.02	366478.17	627623.22
203	1130+54.91	9.30' LT	778.52	366476.74	627623.70
204	1130+56.53	9.08' LT	778.03	366478.49	627623.92
205	1130+65.54	11.86' LT	778.11	366488.42	627621.60
206	1130+57.32	7.27' LT	778.17	366479.32	627625.74
207	1130+67.57	8.03' LT	778.17	366490.25	627625.62
208	1130+57.99	5.80' LT	778.20	366479.99	627627.23
209	1130+67.52	4.50' LT	778.12	366489.84	627629.12
210	1130+57.92	5.06' LT	778.19	366479.91	627627.96
211	1130+57.73	3.07' LT	778.15	366479.67	627629.94
212	1130+68.96	2.50' LT	778.58	366491.10	627631.27
213	1130+67.49	2.50' LT	778.08	366489.61	627631.11
214	1130+57.68	2.50' LT	778.14	366479.61	627630.52
215	1130+56.22	2.50' LT	778.64	366478.12	627630.50
216	1130+65.51	12.95' LT	778.47	366488.47	627620.51
217	1130+68.04	8.16' LT	778.67	366490.76	627625.54
218	1130+67.99	3.50' LT	778.57	366490.22	627630.17

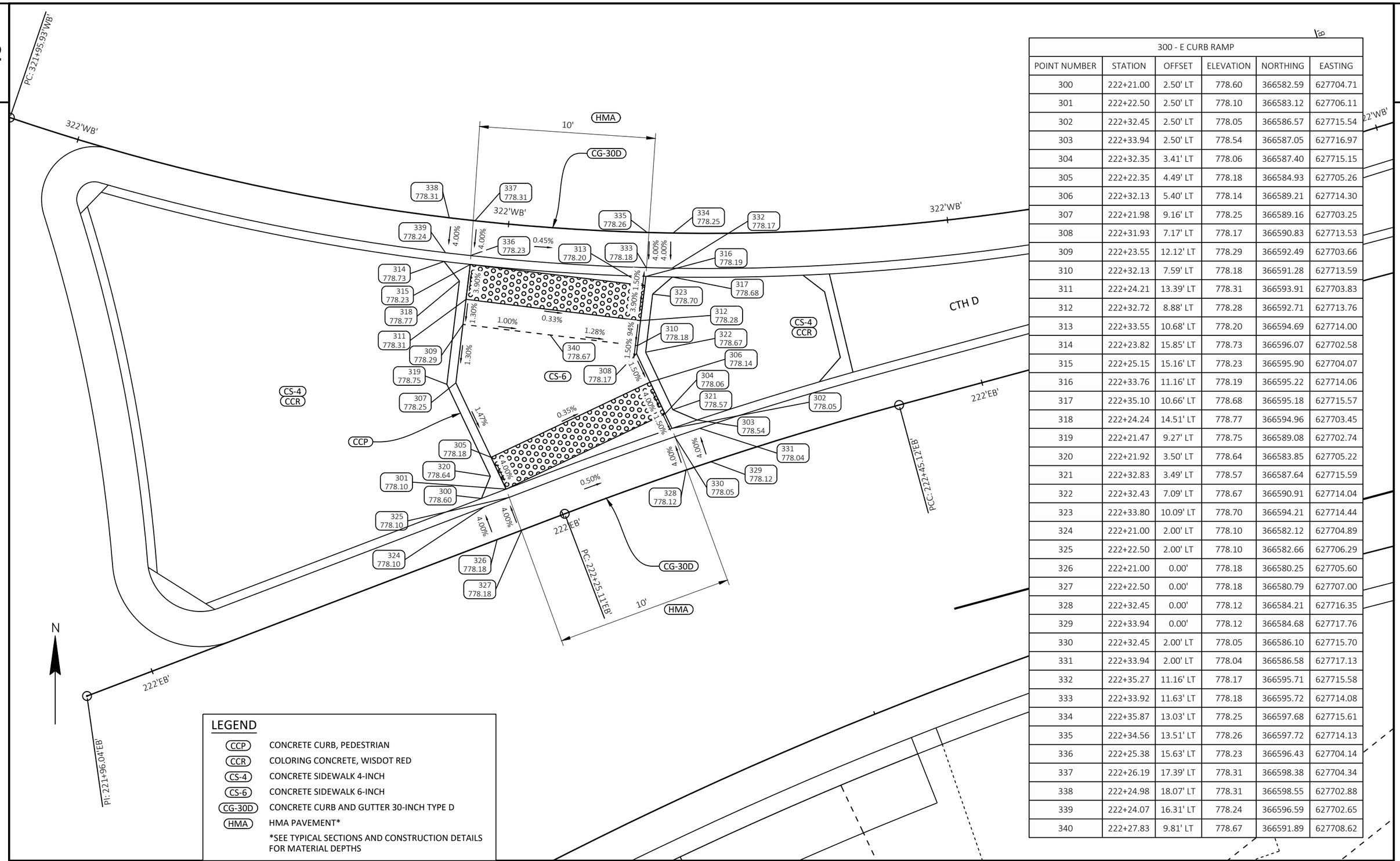


200 - S CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
219	1130+56.18	8.71' LT	778.67	366478.11	627624.29
220	1130+57.50	5.71' LT	778.70	366479.48	627627.31
221	1130+57.29	3.49' LT	778.69	366479.22	627629.51
222	1130+64.88	16.49' LT	778.04	366488.05	627616.92
223	1130+63.70	15.86' LT	778.04	366486.66	627617.45
224	1130+55.49	12.14' LT	778.09	366477.37	627620.85
225	1130+54.21	11.68' LT	778.10	366475.96	627621.32
226	1130+54.77	9.78' LT	778.02	366476.58	627623.22
227	1130+56.08	10.25' LT	778.02	366478.01	627622.75
228	1130+64.47	14.06' LT	777.96	366487.40	627619.31
229	1130+65.67	14.71' LT	777.96	366488.80	627618.77
230	1130+56.22	1.98' LT	778.14	366478.11	627631.02
231	1130+57.68	1.98' LT	778.13	366479.60	627631.04
232	1130+67.49	2.00' LT	778.09	366489.56	627631.61
233	1130+68.96	2.00' LT	778.08	366491.04	627631.77
234	1130+68.96	0.00'	778.16	366490.81	627633.75
235	1130+67.49	0.00'	778.16	366489.35	627633.60
236	1130+57.68	0.00'	778.21	366479.56	627633.01
237	1130+56.22	0.00'	778.22	366478.10	627633.00

LEGEND

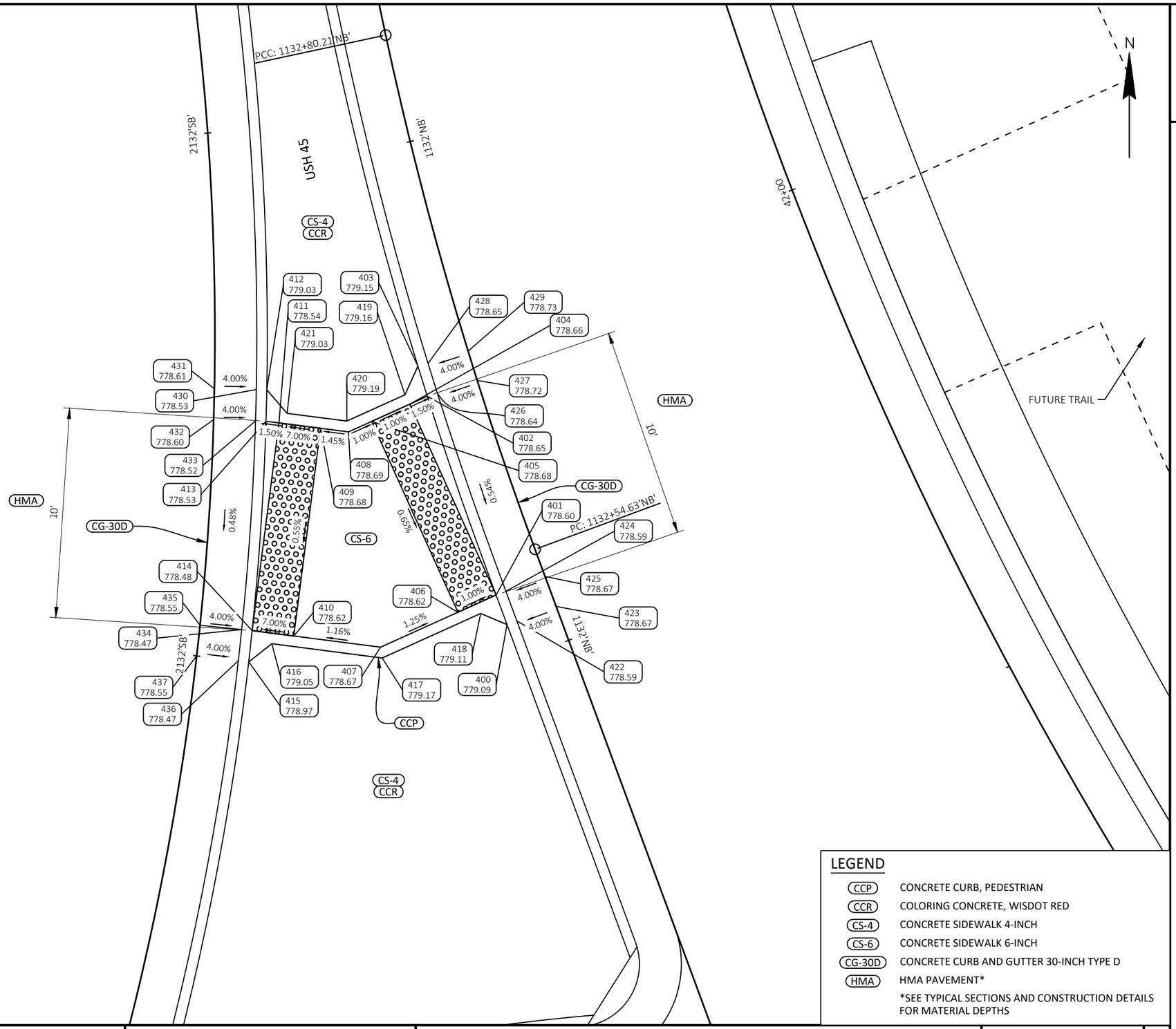
CCP	CONCRETE CURB, PEDESTRIAN
CCR	COLORING CONCRETE, WISDOT RED
CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
HMA	HMA PAVEMENT*
	*SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR MATERIAL DEPTHS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CURB RAMP	SHEET 48	E



300 - E CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
300	222+21.00	2.50' LT	778.60	366582.59	627704.71
301	222+22.50	2.50' LT	778.10	366583.12	627706.11
302	222+32.45	2.50' LT	778.05	366586.57	627715.54
303	222+33.94	2.50' LT	778.54	366587.05	627716.97
304	222+32.35	3.41' LT	778.06	366587.40	627715.15
305	222+22.35	4.49' LT	778.18	366584.93	627705.26
306	222+32.13	5.40' LT	778.14	366589.21	627714.30
307	222+21.98	9.16' LT	778.25	366589.16	627703.25
308	222+31.93	7.17' LT	778.17	366590.83	627713.53
309	222+23.55	12.12' LT	778.29	366592.49	627703.66
310	222+32.13	7.59' LT	778.18	366591.28	627713.59
311	222+24.21	13.39' LT	778.31	366593.91	627703.83
312	222+32.72	8.88' LT	778.28	366592.71	627713.76
313	222+33.55	10.68' LT	778.20	366594.69	627714.00
314	222+23.82	15.85' LT	778.73	366596.07	627702.58
315	222+25.15	15.16' LT	778.23	366595.90	627704.07
316	222+33.76	11.16' LT	778.19	366595.22	627714.06
317	222+35.10	10.66' LT	778.68	366595.18	627715.57
318	222+24.24	14.51' LT	778.77	366594.96	627703.45
319	222+21.47	9.27' LT	778.75	366589.08	627702.74
320	222+21.92	3.50' LT	778.64	366583.85	627705.22
321	222+32.83	3.49' LT	778.57	366587.64	627715.59
322	222+32.43	7.09' LT	778.67	366590.91	627714.04
323	222+33.80	10.09' LT	778.70	366594.21	627714.44
324	222+21.00	2.00' LT	778.10	366582.12	627704.89
325	222+22.50	2.00' LT	778.10	366582.66	627706.29
326	222+21.00	0.00'	778.18	366580.25	627705.60
327	222+22.50	0.00'	778.18	366580.79	627707.00
328	222+32.45	0.00'	778.12	366584.21	627716.35
329	222+33.94	0.00'	778.12	366584.68	627717.76
330	222+32.45	2.00' LT	778.05	366586.10	627715.70
331	222+33.94	2.00' LT	778.04	366586.58	627717.13
332	222+35.27	11.16' LT	778.17	366595.71	627715.58
333	222+33.92	11.63' LT	778.18	366595.72	627714.08
334	222+35.87	13.03' LT	778.25	366597.68	627715.61
335	222+34.56	13.51' LT	778.26	366597.72	627714.13
336	222+25.38	15.63' LT	778.23	366596.43	627704.14
337	222+26.19	17.39' LT	778.31	366598.38	627704.34
338	222+24.98	18.07' LT	778.31	366598.55	627702.88
339	222+24.07	16.31' LT	778.24	366596.59	627702.65
340	222+27.83	9.81' LT	778.67	366591.89	627708.62

400 - N CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
400	1132+51.72	2.50' LT	779.09	366669.30	627610.66
401	1132+53.23	2.50' LT	778.60	366670.71	627610.14
402	1132+63.15	2.50' LT	778.65	366680.20	627606.86
403	1132+64.64	2.50' LT	779.15	366681.64	627606.41
404	1132+63.05	3.41' LT	778.66	366679.83	627606.03
405	1132+62.82	5.39' LT	778.68	366679.00	627604.20
406	1132+53.09	4.50' LT	778.62	366669.89	627608.32
407	1132+52.80	8.54' LT	778.67	366668.22	627604.63
408	1132+62.69	6.60' LT	778.69	366678.50	627603.10
409	1132+63.23	7.82' LT	778.68	366678.68	627601.76
410	1132+54.73	12.24' LT	778.62	366668.76	627600.48
411	1132+64.03	9.63' LT	778.54	366678.93	627599.78
412	1132+65.63	9.73' LT	779.03	366680.51	627599.20
413	1132+64.27	10.20' LT	778.53	366679.01	627599.16
414	1132+55.59	14.01' LT	778.48	366669.01	627598.50
415	1132+54.32	14.68' LT	778.97	366667.52	627598.34
416	1132+54.75	13.35' LT	779.05	366668.39	627599.44
417	1132+52.29	8.64' LT	779.17	366667.71	627604.70
418	1132+52.66	3.50' LT	779.11	366669.83	627609.41
419	1132+63.53	3.49' LT	779.16	366680.27	627605.79
420	1132+63.18	6.52' LT	779.19	366679.02	627603.02
421	1132+64.33	9.13' LT	779.03	366679.39	627600.17
422	1132+51.72	2.00' LT	778.59	366669.48	627611.13
423	1132+51.72	0.00'	778.67	366670.17	627613.01
424	1132+53.23	2.00' LT	778.59	366670.89	627610.61
425	1132+53.25	0.00'	778.67	366671.60	627612.48
426	1132+63.15	2.00' LT	778.64	366680.35	627607.33
427	1132+63.15	0.00'	778.72	366680.96	627609.24
428	1132+64.62	2.00' LT	778.65	366681.77	627606.89
429	1132+64.62	0.00'	778.73	366682.36	627608.80
430	1132+65.77	10.20' LT	778.53	366680.52	627598.70
431	1132+66.34	12.11' LT	778.61	366680.56	627596.70
432	1132+65.03	12.57' LT	778.60	366679.09	627596.66
433	1132+64.43	10.67' LT	778.52	366679.03	627598.66
434	1132+55.79	14.46' LT	778.47	366669.07	627598.00
435	1132+56.59	16.27' LT	778.55	366669.27	627596.01
436	1132+54.55	15.13' LT	778.47	366667.58	627597.84
437	1132+55.38	16.91' LT	778.55	366667.81	627595.85



LEGEND

CCP	CONCRETE CURB, PEDESTRIAN
CCR	COLORING CONCRETE, WISDOT RED
CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
HMA	HMA PAVEMENT*
	*SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR MATERIAL DEPTHS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CURB RAMP	SHEET 50	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-021301-CR.DWG
LAYOUT NAME - WW-021304-cr

PLOT DATE : 4/28/2025 11:59 AM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CCP	CONCRETE CURB, PEDESTRIAN
CCR	COLORING CONCRETE, WISDOT RED
CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
HMA	HMA PAVEMENT*
	*SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR MATERIAL DEPTHS

N

CG-36D

FUTURE TRIAL

+59.48'WB'
18.87' LT

+57.73'WB'
18.94' LT

DRIVEWAY CURB HEAD REQUIRED

SNOWMOBILE TRAIL

16'

HMA

CS-4
CCR

CG-30D

+60.39'WB'
2.50' RT

+58.92'WB'
2.50' RT

CCP

+61.07'EB'
2.50' LT

+59.07'EB'
2.50' LT

322'WB'

16'

222'EB'

PCC: 222+45.12'EB'

+43.12'WB'
2.50' RT

+41.65'WB'
2.50' RT

CS-6

+43.10'EB'
2.50' LT

CCP

+41.12'EB'
2.50' LT

CG-30D

CS-4
CCR

+38.31'WB'
19.58' LT

+36.54'WB'
19.62' LT

CTH D WESTBOUND

322'WB'

222'EB'

PC: 222+25.11'EB'

CTH D EASTBOUND

+60.10'EB'
18.09' RT

+58.60'EB'
18.14' RT

HMA

16'

SNOWMOBILE TRAIL

FUTURE TRIAL

DRIVEWAY CURB HEAD REQUIRED

+42.16'EB'
19.24' RT

+40.52'EB'
19.37' RT

CG-36D

2

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CURB RAMP - SNOWMOBILE TRAIL	SHEET 51	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-021305-CR.DWG
LAYOUT NAME - WW-021305-cr

PLOT DATE : 4/28/2025 11:59 AM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

N

MATCH LINE 979+36.08

EXISTING R/W (APPROX.)

NEW LONDON ELECTRIC

SLOPE INTERCEPT

F

45 NB

974+00 USH 45 NB

975+00 USH 45 NB

976+00 USH 45 NB

977+00 USH 45 NB

978+00 USH 45 NB

979+00 USH 45 NB

B-44-0148

F

SLOPE INTERCEPT

F

HO

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 52	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 01

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

N

EXISTING R/W (APPROX.)

NEW LONDON ELECTRIC

SLOPE INTERCEPT

B-44-0148

980+00 USH 45 NB

981+00 USH 45 NB

982+00 USH 45 NB

983+00 USH 45 NB

984+00 USH 45 NB

985+00 USH 45 NB

SLOPE INTERCEPT

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 53	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 02

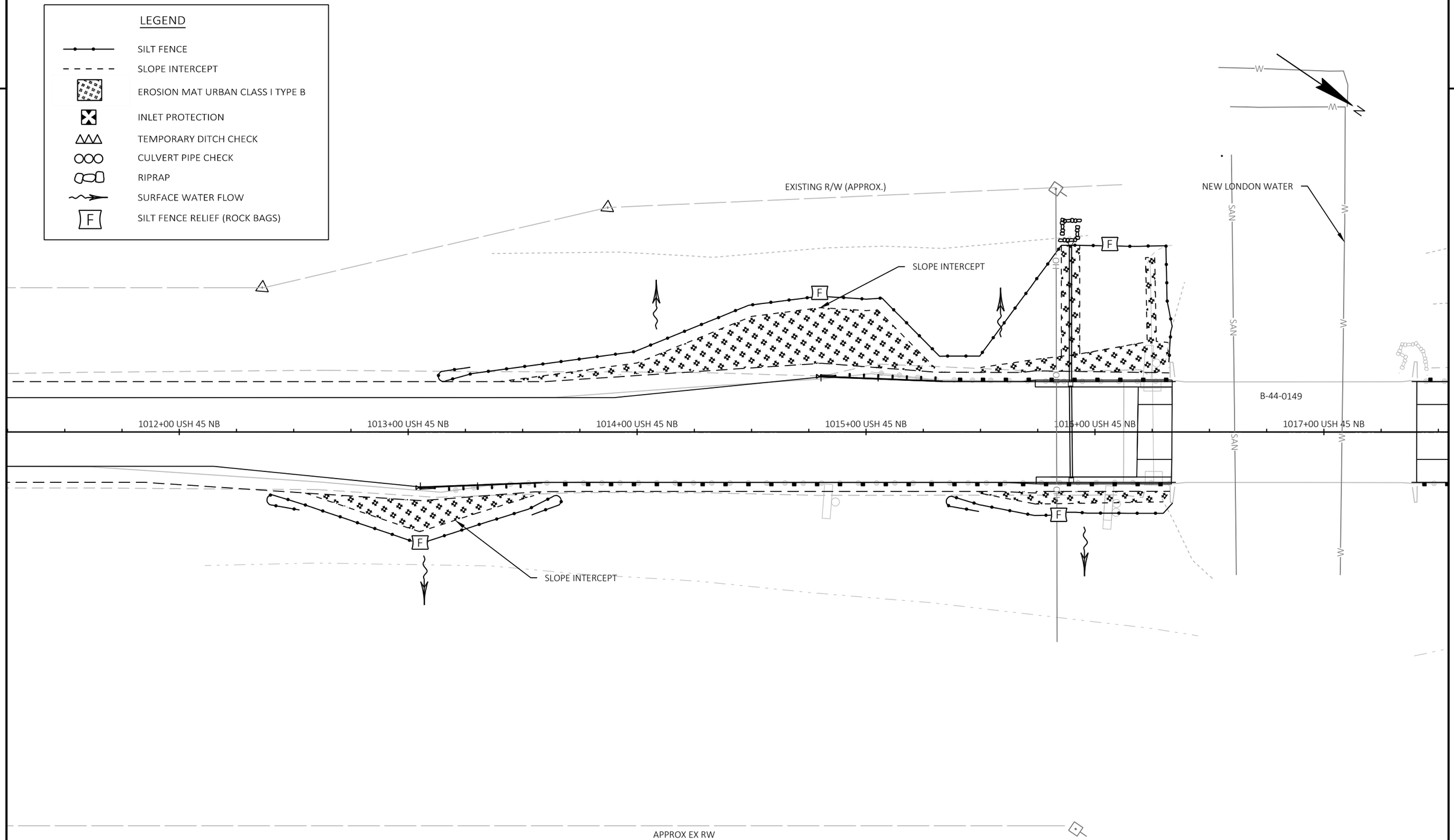
WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 54	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 03

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

EXISTING R/W (APPROX.)

SLOPE INTERCEPT

F

B-44-0141

1029+00 USH 45 NB | 1030+00 USH 45 NB | 1031+00 USH 45 NB | 1032+00 USH 45 NB | 1033+00 USH 45 NB | 1034+00 USH 45 NB | 1035+00 U

PC: 1029+10.52 'R1'

1029+00 'R1'

1030+00 'R1'

1031+00 'R1'

1032+00 'R1'

1033+00 'R1'

PT: 1033+45.34 'R1'

SLOPE INTERCEPT

F

F

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 55	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 04

WISDOT/CADDS SHEET 42

2

2

1033+00 USH 45 NB

1032+00 USH 45 NB

SLOPE INTERCEPT

F

N

PI : 1033+45.34 'R1'

B-44-0142

1033+00 'R1'

1034+00 'R1'

1035+00 'R1'

1036+00 'R1'

1037+00 'R1'

1032+00 'R1'

SLOPE INTERCEPT

F

EXISTING R/W (APPROX.)

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 56	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 05

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

SLOPE INTERCEPT

1035+00 'R2'

1036+00 'R2'

1037+00 'R2'

1038+00 'R2'

1039+00 'R2'

1040+00 'R2'

1041+00 'R2'

1042+00 'R2'

1043+00 'R2'

4+99.27 'R2'

PC: 1040+17.50 'R2'

PC: 1040+25.59 'R2'

PC: 1041+79.93 'R2'

1040+00 USH 45 NB

1041+00 USH 45 NB

1042+00 USH 45 NB

N

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 57	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 06

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

N

1052+00 'R3'
1053+00 'R3'
PC: 1053+99.18 'R3'
1054+00 'R3'
1055+00 'R3'
1056+00 'R3'
3.07 'R3'
3 'R3'
SLOPE INTERCEPT
F

1052+00 USH 45 NB
1053+00 USH 45 NB
1054+00 USH 45 NB
1055+00 USH 45 NB
1056+00 USH 45 NB
1057+00 USH 45 NB
1058+00 USH

B-44-0144

SLOPE INTERCEPT
F

APPROX EX RW

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 58	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 07
WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- SILT FENCE RELIEF (ROCK BAGS)

N

45 NB

1059+00 USH 45 NB

1060+00 USH 45 NB

1061+00 USH 45 NB

1062+00 USH 45 N

F

SLOPE INTERCEPT

MATCH LINE 1058+05.06

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 59	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 08

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

N

APPROX EX RW

APPROX EX RW

WE ENERGIES GAS

SPURR RD

SPURR RD

SLOPE INTERCEPT

ASPHALTIC FLUME

AT&T FIBER OPTIC

NEW LONDON WATER

NEW LONDON ELECTRIC

APPROX EX RW

APPROX EX RW

00 USH 45 NB | 1094+00 USH 45 NB | 1095+00 USH 45 NB | 1096+00 USH 45 NB | 1097+00 USH 45 NB | 1098+00 USH 45 NB | 1099+00 USH 45 NB

OH | SAN | W | FO | GVT | HO

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 60	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 09

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- SILT FENCE RELIEF (ROCK BAGS)

XYZ NOT FOUND
770.872 +
225

EX R/W

XYZ NOT FOUND
772.752 +
224

N

1118+00 USH 45 NB
1119+00 USH 45 NB
1120+00 USH 45 NB
1121+00 USH 45 NB
BP: 20+00.00
1122+00 USH 45 NB
1123+00 USH 45 NB
1124+00 I

SLOPE INTERCEPT

EX R/W

2

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 61	E

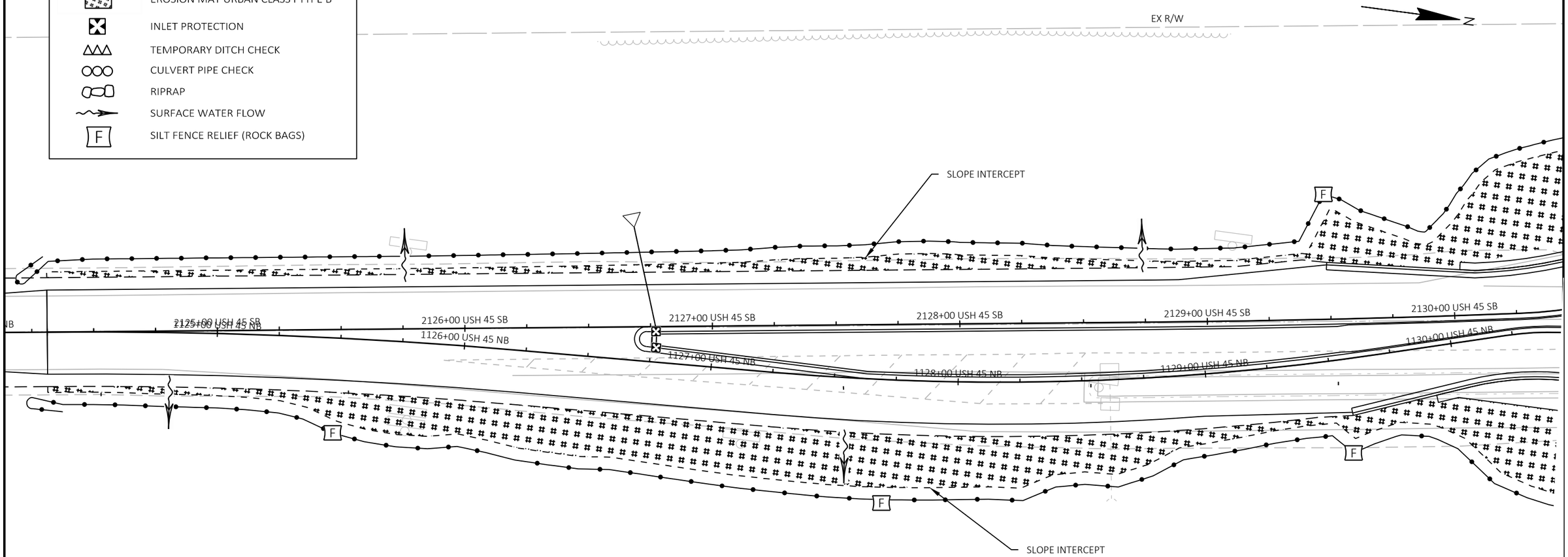
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 10

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)

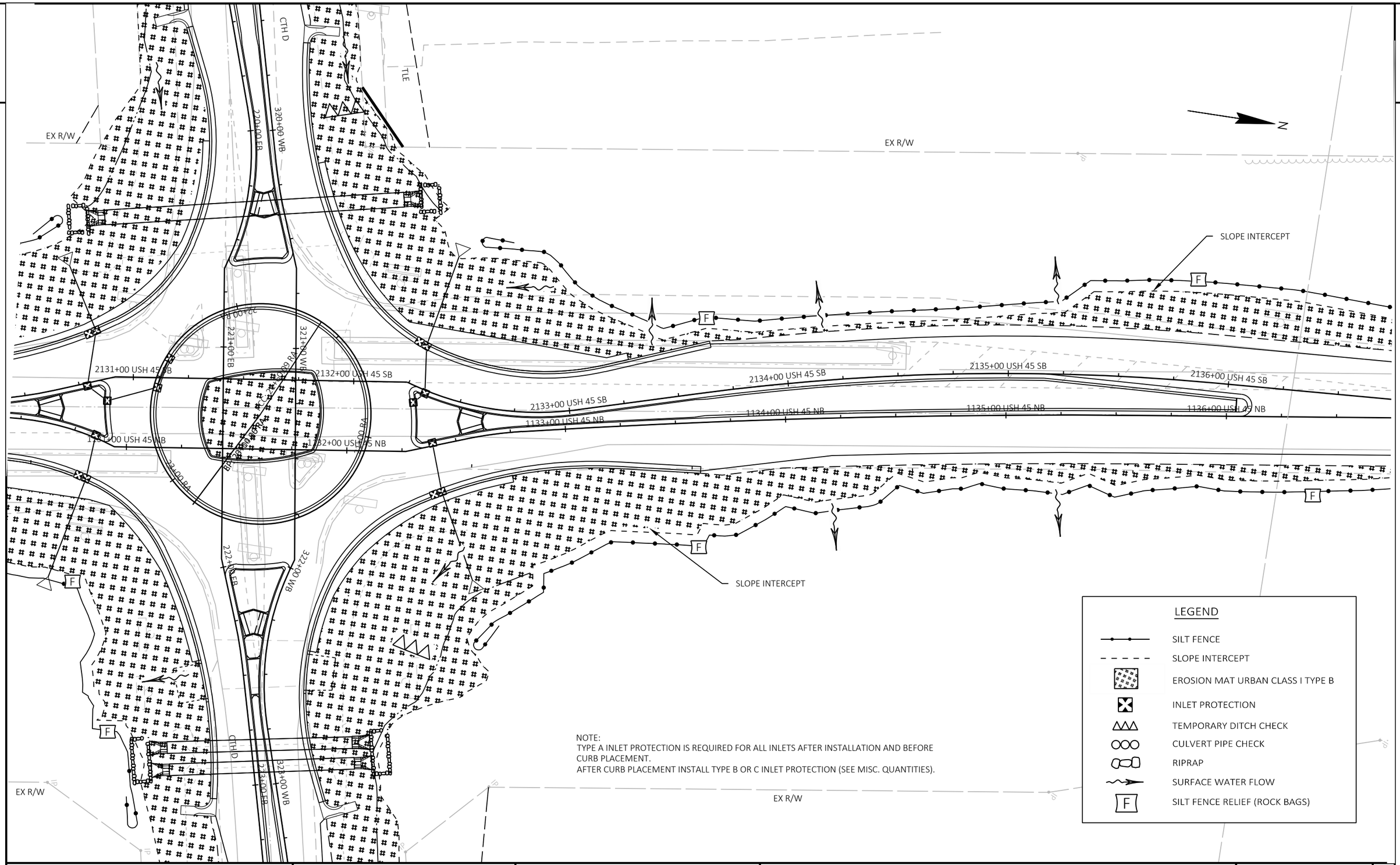


NOTE:
TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B OR C INLET PROTECTION (SEE MISC. QUANTITIES).

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 62	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 11
WISDOT/CADDS SHEET 42

2



NOTE:
TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B OR C INLET PROTECTION (SEE MISC. QUANTITIES).

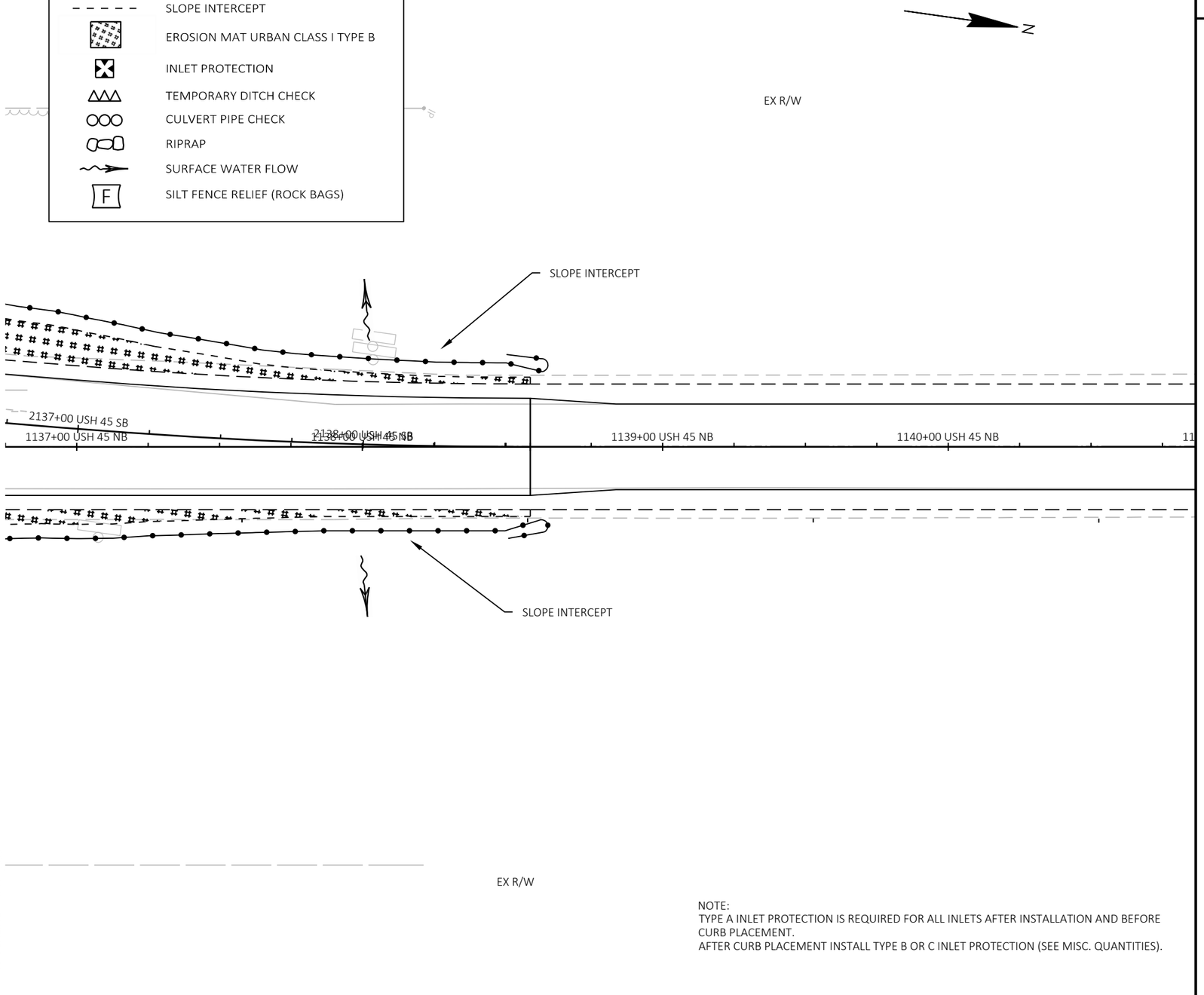
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 63	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 12
WISDOT/CADDS SHEET 42

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- F — SILT FENCE RELIEF (ROCK BAGS)



NOTE:
TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B OR C INLET PROTECTION (SEE MISC. QUANTITIES).

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 64	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 13
WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- SILT FENCE RELIEF (ROCK BAGS)

N

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 43 X 68 - INCH
STA 320+45 'WB', -62.27 LT
INV = 772.23
SLOPE = 0.5%
SKEWED 9° L.H.F.
AEW REQUIRED

RIPRAP MEDIUM
11.5'X8'

TLE

PROPOSED R/W

EX R/W

WE ENERGIES ELECTRIC

SLOPE INTERCEPT

317+00 WB
217+00 EB

318+00 WB

319+00 WB
218+00 EB

320+00 WB
219+00 EB

220+00 EB

REMOVE EXISTING 33 X 49 - INCH CMP - 97 FT

CTH D

321+00 WB

221+00 EB

322+00 WB

222+00 EB

2133+00 USH 45 SB

1133+00 USH 45 NB

MATCHLINE 222+29.54

2132+00 USH 45 SB

1132+00 USH 45 NB

2131+00 USH 45 SB

1131+00 USH 45 NB

2130+00 USH 45 SB

1130+00 USH 45 NB

SLOPE INTERCEPT

EX R/W

TLE

RIPRAP MEDIUM
11.5'X8'

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 43 X 68 - INCH
STA 320+26 'WB', 88.29 RT
INV = 771.48
SLOPE = 0.5%
SKEWED 9° L.H.F.
AEW REQUIRED

NOTE:
TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B OR C INLET PROTECTION (SEE MISC. QUANTITIES).

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 65	E

2

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 322+88 'WB', -44.91 LT
INV = 772.40
SLOPE = 1.6%
SKEWED 7° L.H.F.
AEW REQUIRED

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 322+97 'WB', -44.48 LT
INV = 772.39
SLOPE = 1.6%
SKEWED 7° L.H.F.
AEW REQUIRED

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 324+82 'WB', -43.46 LT
INV = 771.88
SLOPE = 0.9%
SKEWED 7° L.H.F.
AEW REQUIRED

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 324+93 'WB', -43.91 LT
INV = 771.88
SLOPE = 0.9%
SKEWED 7° L.H.F.
AEW REQUIRED

N

TLE

RIPRAP MEDIUM
7'X27'

RIPRAP MEDIUM
8'X20'

SLOPE INTERCEPT

EX R/W

REMOVE EXISTING 43 X 64 - INCH CMP - 62 FT

REMOVE EXISTING 43 X 64 - INCH CMP - 60 FT

323+00 WB
223+00 EB
324+00 WB
224+00 EB
325+00 WB
225+00 EB
326+00 WB
226+00 EB
327+00 WB
227+00 EB
228+00 EB

CTH D

REMOVE EXISTING 43 X 64 - INCH CMP - 62 FT

REMOVE EXISTING 43 X 64 - INCH CMP - 60 FT

RIPRAP MEDIUM
8'X20'

RIPRAP MEDIUM
10'X50'

EX R/W

SLOPE INTERCEPT

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 322+86 'WB', 54.85 RT
INV = 770.84
SLOPE = 1.6%
SKEWED 7° L.H.F.
AEW REQUIRED

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 322+76 'WB', 54.33 RT
INV = 770.85
SLOPE = 1.6%
SKEWED 7° L.H.F.
AEW REQUIRED

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 324+81 'WB', 55.33 RT
INV = 771.02
SLOPE = 0.9%
SKEWED 7° L.H.F.
AEW REQUIRED

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL CLASS HE-IV 34 X 53 - INCH
STA 324+69 'WB', 55.69 RT
INV = 771.02
SLOPE = 0.9%
SKEWED 7° L.H.F.
AEW REQUIRED

MATCHLINE 222+29.54

WAUPACA COUNTY
OUTAGAMIE COUNTY

NOTE:
TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B OR C INLET PROTECTION (SEE MISC. QUANTITIES).

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- SILT FENCE RELIEF (ROCK BAGS)

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 66	E

2

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- EROSION MAT URBAN CLASS I TYPE B
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- SURFACE WATER FLOW
- SILT FENCE RELIEF (ROCK BAGS)

N

GVT

GVT

CHURCH RD

WE ENERGIES GAS

ASPHALTIC FLUME

AT&T FIBER OPTIC

EXISTING R/W (APPROX.)

EXISTING R/W (APPROX.)

SLOPE INTERCEPT

1200+00 USH 45 NB

1201+00 USH 45 NB

1202+00 USH 45 NB

1203+00 USH 45 NB

1204+00 USH 45 NB

1205+00 USH 45 NB

1206+00 USH 45 NB

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	EROSION CONTROL	SHEET 67	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022001-EC.DWG PLOT DATE : 7/31/2025 2:29 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 16

2

SSPRC CLASS IV 18-INCH
INLET INV = 773.03, STA. 1131+47.95, -265.05 LT
OUTLET INV = 772.98, STA. 1131+38.80, -237.94 LT

SSPRC CLASS IV 18-INCH
INLET INV = 772.98, STA. 1131+38.80, -237.94 LT
OUTLET INV = 772.93, STA. 1130+62.31, -227.52 LT

1 STA 1131+47.95, 265.05' LT
INLETS 2.5x3-F

2 STA 1131+38.80, 237.94' LT
INLETS 2.5x3-F

3 STA 1130+62.31, 227.52' LT
APRON ENDWALLS FOR CPRC 18-INCH

4 STA 1131+18.73, 40.50' LT
INLETS 2x2.5-T

SSPRC CLASS IV 18-INCH
INLET INV = 773.18, STA. 1131+18.73, -40.50 LT
OUTLET INV = 773.16, STA. 1131+13.39, -27.21 LT

5 STA 1131+13.39, 27.21' LT
INLETS 2x2.5-T

SSPRC CLASS IV 18-INCH
INLET INV = 773.16, STA. 1131+13.39, -27.21 LT
OUTLET INV = 773.11, STA. 1130+83.64, -17.60 LT

9 STA 1130+59.28, 71.80' LT
APRON ENDWALLS FOR CPRC 18-INCH

SSPRC CLASS IV 18-INCH
INLET INV = 773.05, STA. 1130+71.56, -45.96 LT
OUTLET INV = 772.99, STA. 1130+59.28, -71.80 LT

8 STA 1130+71.56, 45.96' LT
INLETS 2.5x3-F

37 STA 1130+69.53, 43.64' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.09, STA. 1130+74.38, -20.86 LT
OUTLET INV = 773.05, STA. 1130+71.56, -45.96 LT

7 STA 1130+74.38, 20.86' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.11, STA. 1130+83.64, -17.60 LT
OUTLET INV = 773.09, STA. 1130+74.38, -20.86 LT

12 STA 1126+64.18, 53.60' LT
APRON ENDWALLS FOR CPRC 18-INCH

SSPRC CLASS IV 18-INCH
INLET INV = 772.38, STA. 1126+76.82, -12.47 LT
OUTLET INV = 772.30, STA. 1126+64.18, -53.60 LT

11 STA 1126+76.82, 12.47' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 772.39, STA. 1126+77.19, -5.75 LT
OUTLET INV = 772.38, STA. 1126+76.82, -12.47 LT

10 STA 1126+77.19, 5.75' LT
INLETS 2.5x3-F

6 STA 1130+83.64, 17.60' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.67, STA. 1130+84.67, -1.22 LT
OUTLET INV = 773.64, STA. 1130+88.87, 18.54 RT

36 STA 1130+84.35, 18.59' RT
INLETS 2.5x3-F

14 STA 1130+88.87, 18.54' RT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.64, STA. 1130+88.87, 18.54 RT
OUTLET INV = 773.55, STA. 1130+94.54, 66.13 RT

15 STA 1130+94.54, 66.13' RT
APRON ENDWALLS FOR CPRC 18-INCH

13 STA 1130+84.67, 1.22' LT
INLETS 2.5x3-F

22 STA 1132+34.54, 21.08' LT
INLETS 2.5x3-F

38 STA 1132+43, 47.72' LT
INLETS 2.5x3-F

25 STA 1132+63.96, 81.93' LT
APRON ENDWALLS FOR CPRC 18-INCH

SSPRC CLASS IV 18-INCH
INLET INV = 773.79, STA. 1132+45.71, -45.20 LT
OUTLET INV = 773.71, STA. 1132+63.96, -81.93 LT

24 STA 1132+45.71, 45.20' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.83, STA. 1132+40.57, -24.11 LT
OUTLET INV = 773.79, STA. 1132+45.71, -45.20 LT

23 STA 1132+40.57, 24.11' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.84, STA. 1132+34.54, -21.08 LT
OUTLET INV = 773.83, STA. 1132+40.57, -24.11 LT

19 STA 1132+39.36, 1.34' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 774.41, STA. 1132+39.36, -1.34 LT
OUTLET INV = 774.37, STA. 1132+39.08, 21.26 RT

20 STA 1132+39.08, 21.26' RT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 774.37, STA. 1132+39.08, 21.26 RT
OUTLET INV = 774.30, STA. 1132+44.54, 63.24 RT

21 STA 1132+44.54, 63.24' RT
APRON ENDWALLS FOR CPRC 18-INCH

39 STA 1132+35.33, 21.80' RT
INLETS 2.5x3-F

2227+00 USH 45 SB
2128+00 USH 45 SB
2129+00 USH 45 SB
2130+00 USH 45 SB
2131+00 USH 45 SB
2132+00 USH 45 SB
2133+00 USH 45 SB
2134+00 USH 45 SB
1127+00 USH 45 NB
1128+00 USH 45 NB
1129+00 USH 45 NB
1130+00 USH 45 NB
1131+00 USH 45 NB
1132+00 USH 45 NB
1133+00 USH 45 NB
1134+00 USH 45 NB

319+00 EB
319+00 WB
320+00 EB
320+00 WB
221+00 EB
321+00 WB
222+00 EB
322+00 WB
223+00 EB
323+00 WB
61SW+00
57SW+00
52NW+00
31SE+00
32SE+00
42NE+00
41NE+00

N

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	STORM SEWER DETAILS	SHEET 68	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022501-SS.DWG PLOT DATE : 7/24/2025 4:27 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:50 FT
LAYOUT NAME - 01
WISDOT/CADDS SHEET 42

2

2128+00 USH 45 SB
2129+00 USH 45 SB
2130+00 USH 45 SB
2131+00 USH 45 SB
2132+00 USH 45 SB
2133+00 USH 45 SB
2134+00 USH 45 SB
1128+00 USH 45 NB
1129+00 USH 45 NB
1130+00 USH 45 NB
1131+00 USH 45 NB
1132+00 USH 45 NB
1133+00 USH 45 NB
1134+00 USH 45 NB
1135+00 USH 45 NB
31SE+00
42NE+00
52NW+00
325E+00
41NE+00
32SE+00
222+00 EB
323+00 WB
224+00 EB
324+00 WB
225+00 EB
315+00 WB
326+
226

6 STA 1130+83.64, 17.60' LT
INLETS 2.5x3-F

RC CLASS IV 18-INCH
T INV = 772.39, STA. 1126+77.19, -5.75 LT
LET INV = 772.38, STA. 1126+76.82, -12.47 LT

6+77.19, 5.75' LT
.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.67, STA. 1130+84.67, -1.22 LT
OUTLET INV = 773.64, STA. 1130+88.87, 18.54 RT

36 STA 1130+84.35, 18.59' RT
INLETS 2.5x3-F

14 STA 1130+88.87, 18.54' RT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.64, STA. 1130+88.87, 18.54 RT
OUTLET INV = 773.55, STA. 1130+94.54, 66.13 RT

15 STA 1130+94.54, 66.13' RT
APRON ENDWALLS FOR CPRC 18-INCH

13 STA 1130+84.67, 1.22' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 773.84, STA. 1132+34.54, -21.08 LT
OUTLET INV = 773.83, STA. 1132+40.57, -24.11 LT

19 STA 1132+39.36, 1.34' LT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 774.41, STA. 1132+39.36, -1.34 LT
OUTLET INV = 774.37, STA. 1132+39.08, 21.26 RT

20 STA 1132+39.08, 21.26' RT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 774.37, STA. 1132+39.08, 21.26 RT
OUTLET INV = 774.30, STA. 1132+44.54, 63.24 RT

21 STA 1132+44.54, 63.24' RT
APRON ENDWALLS FOR CPRC 18-INCH

39 STA 1132+35.33, 21.80' RT
INLETS 2.5x3-F

SSPRC CLASS IV 18-INCH
INLET INV = 771.58, STA. 1131+84.86, 298.70 RT
OUTLET INV = 771.57, STA. 1131+78.04, 299.08 RT

SSPRC CLASS IV 18-INCH
INLET INV = 771.57, STA. 1131+78.04, 299.08 RT
OUTLET INV = 771.50, STA. 1131+38.15, 304.42 RT

16 STA 1131+84.86, 298.70' RT
INLETS 2.5x3-F

18 STA 1131+38.15, 304.42' RT
APRON ENDWALLS FOR CPRC 18-INCH

17 STA 1131+78.04, 299.08' RT
INLETS 2.5x3-F

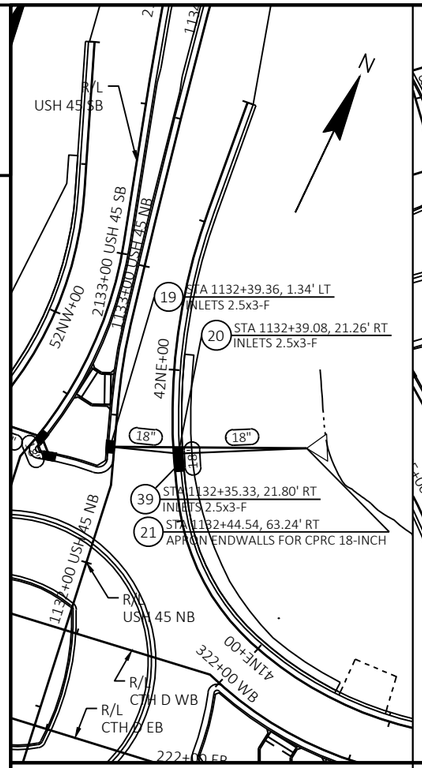
N

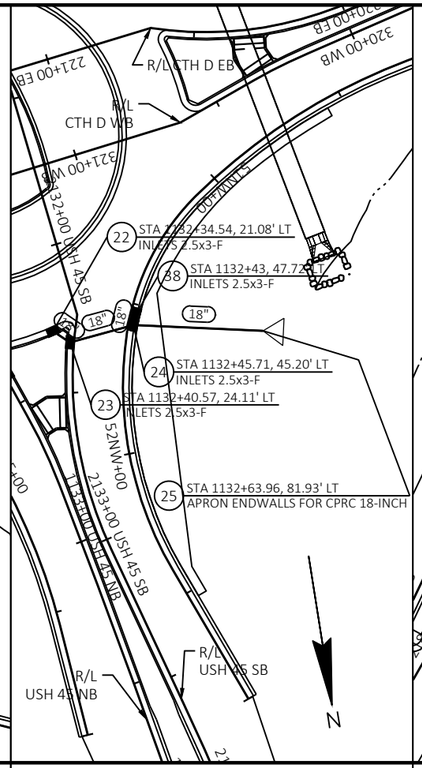
2

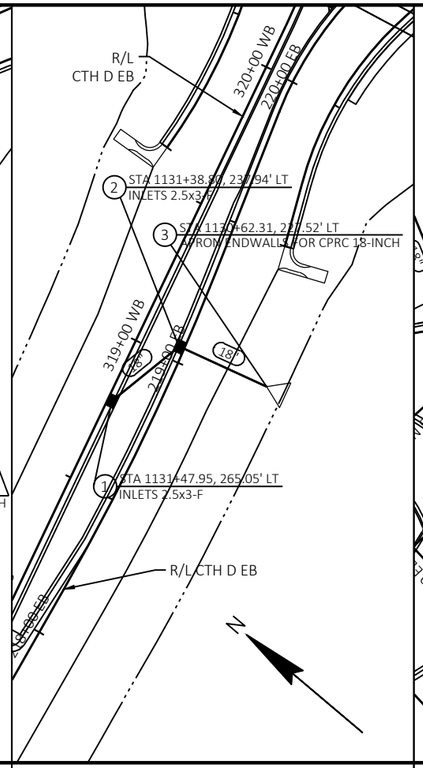
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	STORM SEWER DETAILS	SHEET 69	E

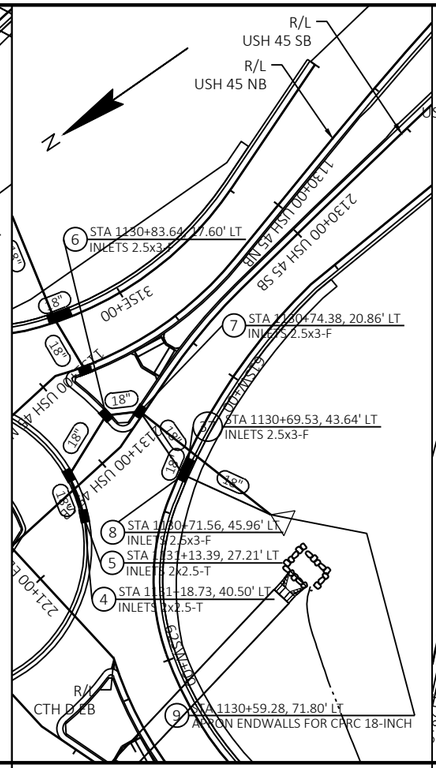
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022501-SS.DWG PLOT DATE : 7/24/2025 4:27 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:50 FT
LAYOUT NAME - 02

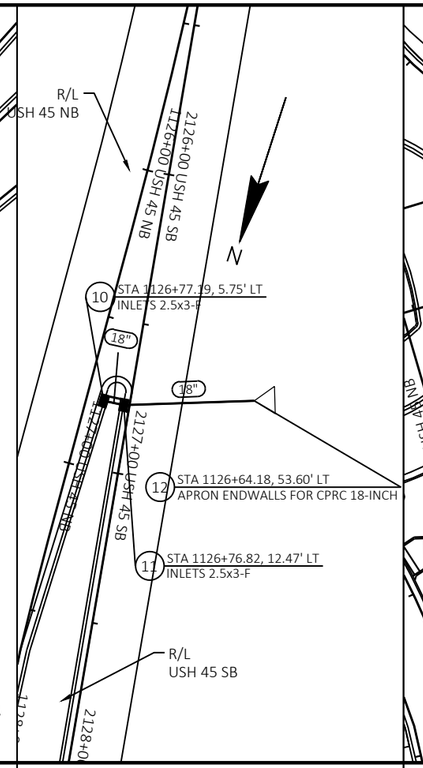
WISDOT/CADDS SHEET 42

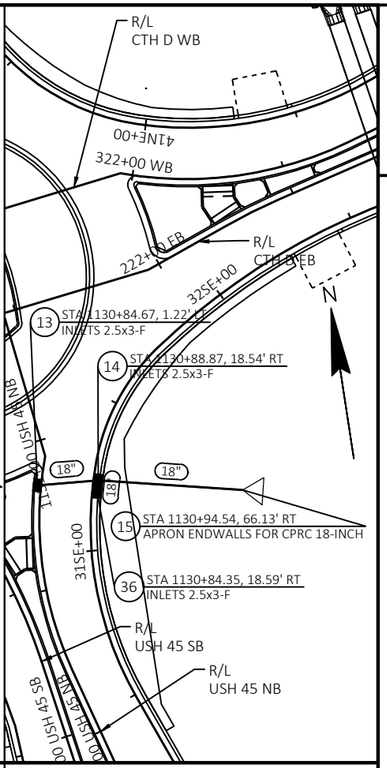


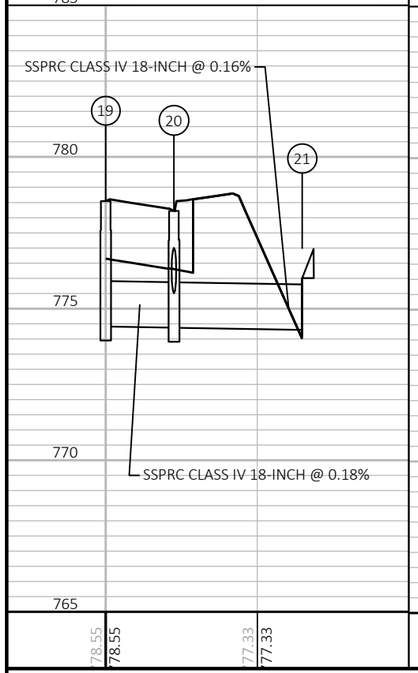


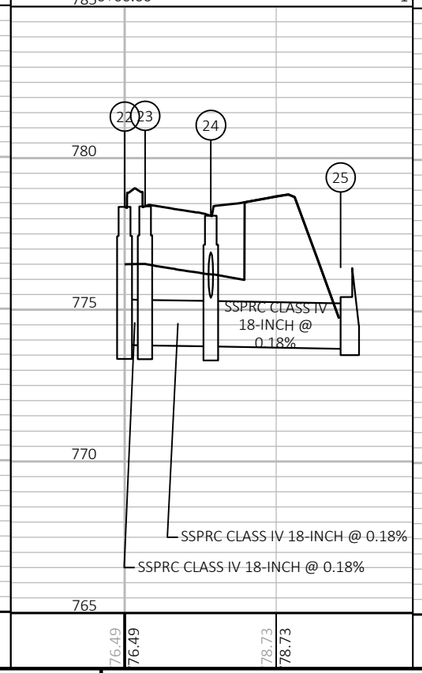


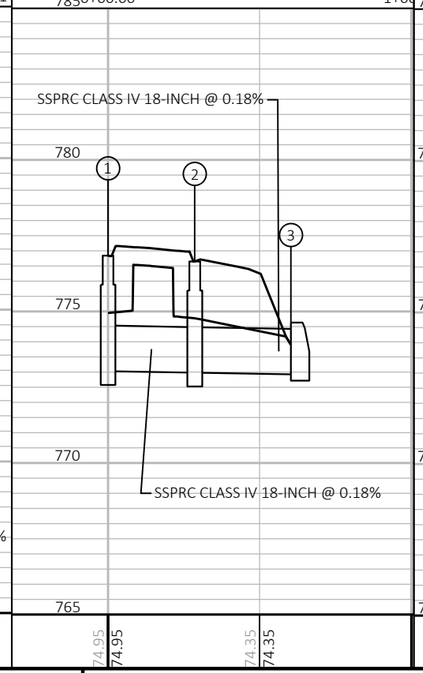


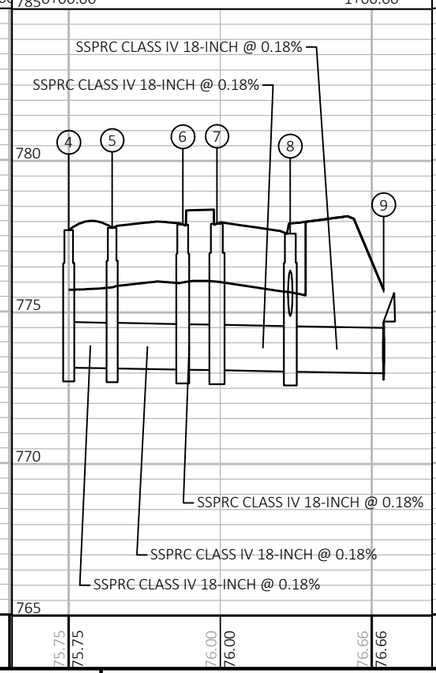


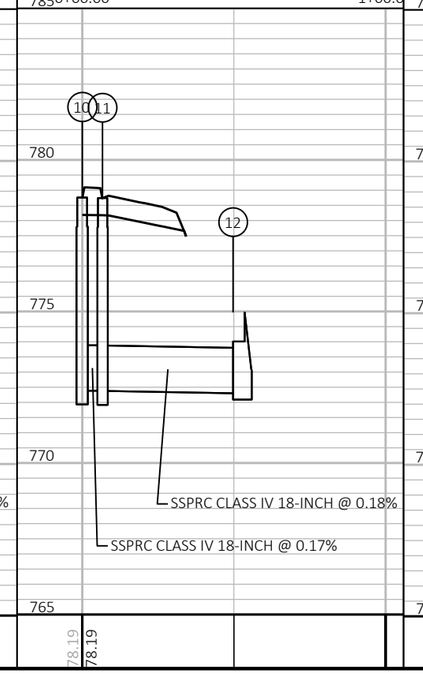


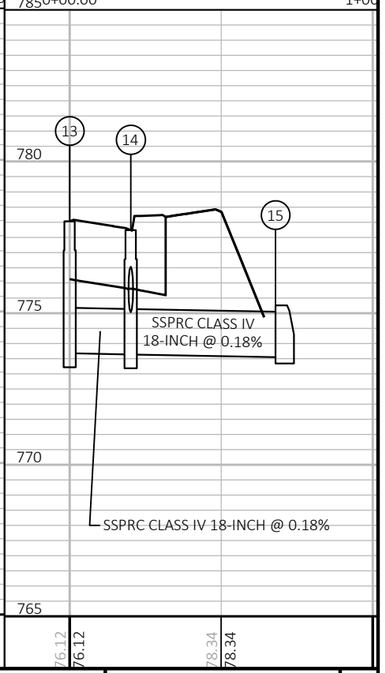






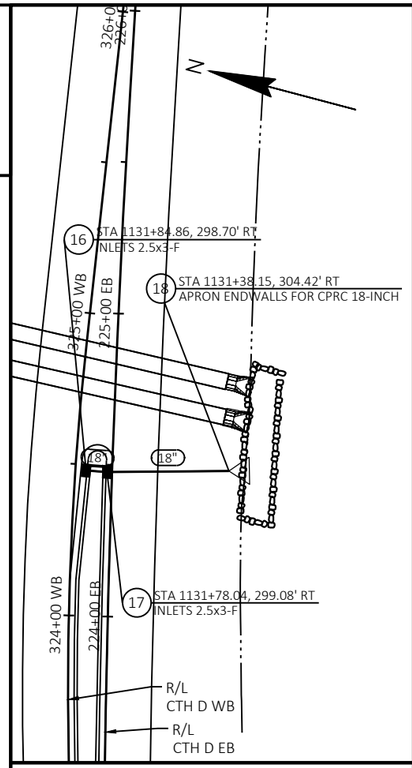


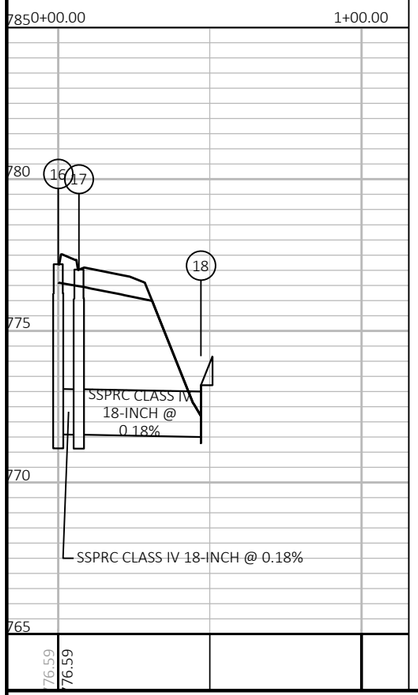




PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: STORM SEWER DETAILS	SHEET 70 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022502-SS.DWG PLOT DATE : 9/16/2025 3:40 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:50 FT
LAYOUT NAME - 03
WISDOT/CADDS SHEET 44





2

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: STORM SEWER DETAILS	SHEET 71	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\022502-SS.DWG PLOT DATE : 9/16/2025 3:40 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:50 FT
LAYOUT NAME - 04
WISDOT/CADDS SHEET 44

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

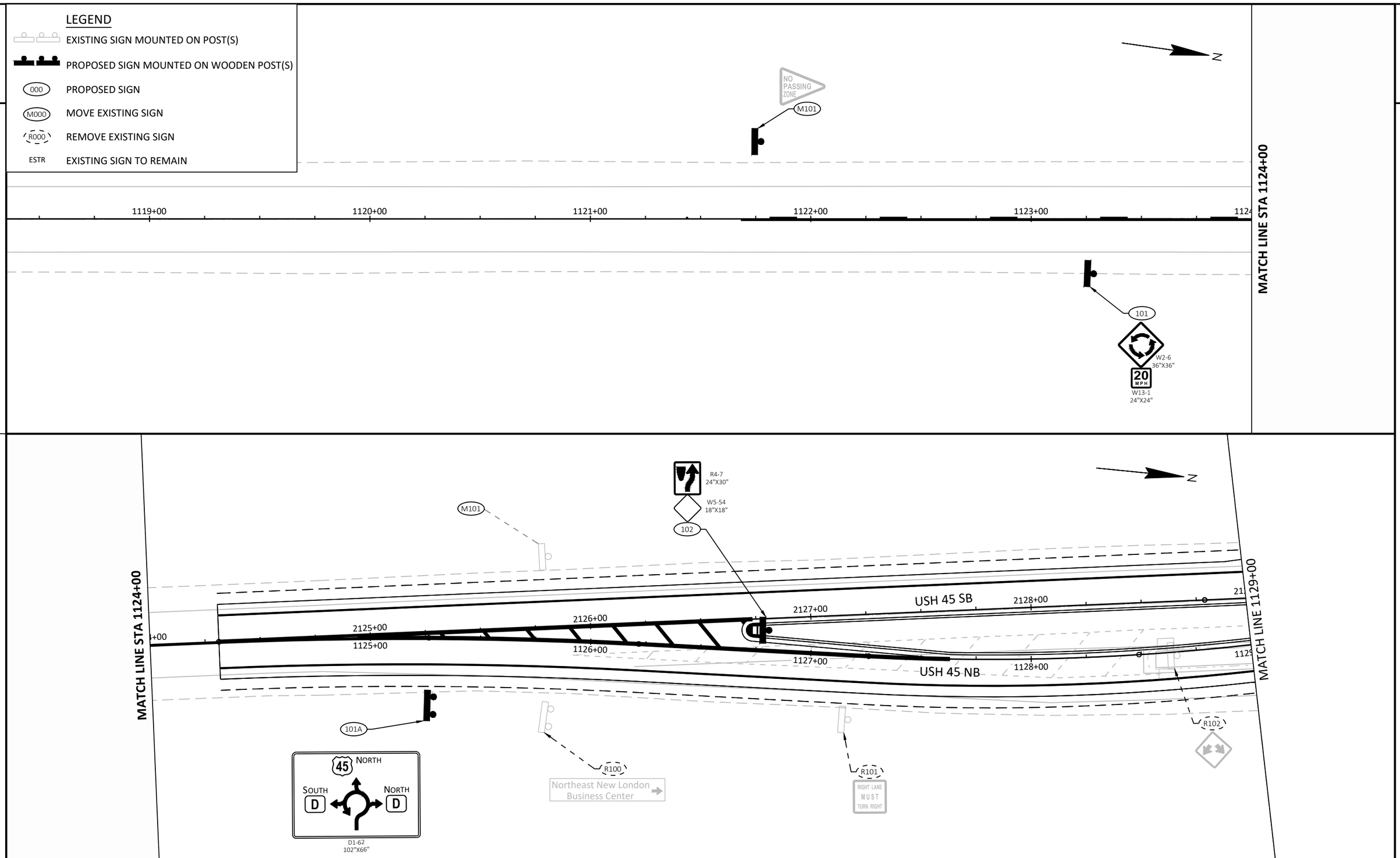
PROPOSED SIGN MOUNTED ON WOODEN POST(S)

000 PROPOSED SIGN

M000 MOVE EXISTING SIGN

R000 REMOVE EXISTING SIGN

ESTR EXISTING SIGN TO REMAIN



2

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PERMANENT SIGNING	SHEET 72	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON WOODEN POST(S)
- 000 — PROPOSED SIGN
- M000 — MOVE EXISTING SIGN
- R000 — REMOVE EXISTING SIGN
- ESTR — EXISTING SIGN TO REMAIN

R6-1R 36"X12" ONE WAY

W5-54 18"X18"

141 142 143 144

MATCH LINE 219+50

CTH D NB

CTH D SB

220+00

320+00

N

M123

125 SOUTH D D1-1 42"X30"

45 MPH

R106 RIGHT LANE MUST TURN RIGHT

R105 COUNTY D

124 123 YIELD R1-2 36"X31" R6-5P 30"X30"

M103 SOUTH 45

105 SOUTH 45 D1-1 42"X30"

R124 R123

108 107 YIELD R1-2 36"X31" R6-5P 30"X30"

R126 R125 R127

221+00

143 142 144 141

<-- USH 45 -->

CTH D

USH 45 SB

2130+00 2133+00 2134+00

1130+00 1133+00 1134+00

MATCH LINE 1129+00

USH 45 NB

MATCH LINE 1134+25

224+00

R128 R129 R130

104 103 YIELD R1-2 36"X31" R6-5P 30"X30"

R103 COUNTY D

R104 RIGHT LANE MUST TURN RIGHT

R132 R131

106 NORTH 45 D1-1 42"X30"

226+00

CTH D NB

CTH D SB

126 NORTH D D1-1 42"X30"

128 127 YIELD R1-2 36"X31" R6-5P 30"X30"

223+00

323+00

MATCH LINE 223+00

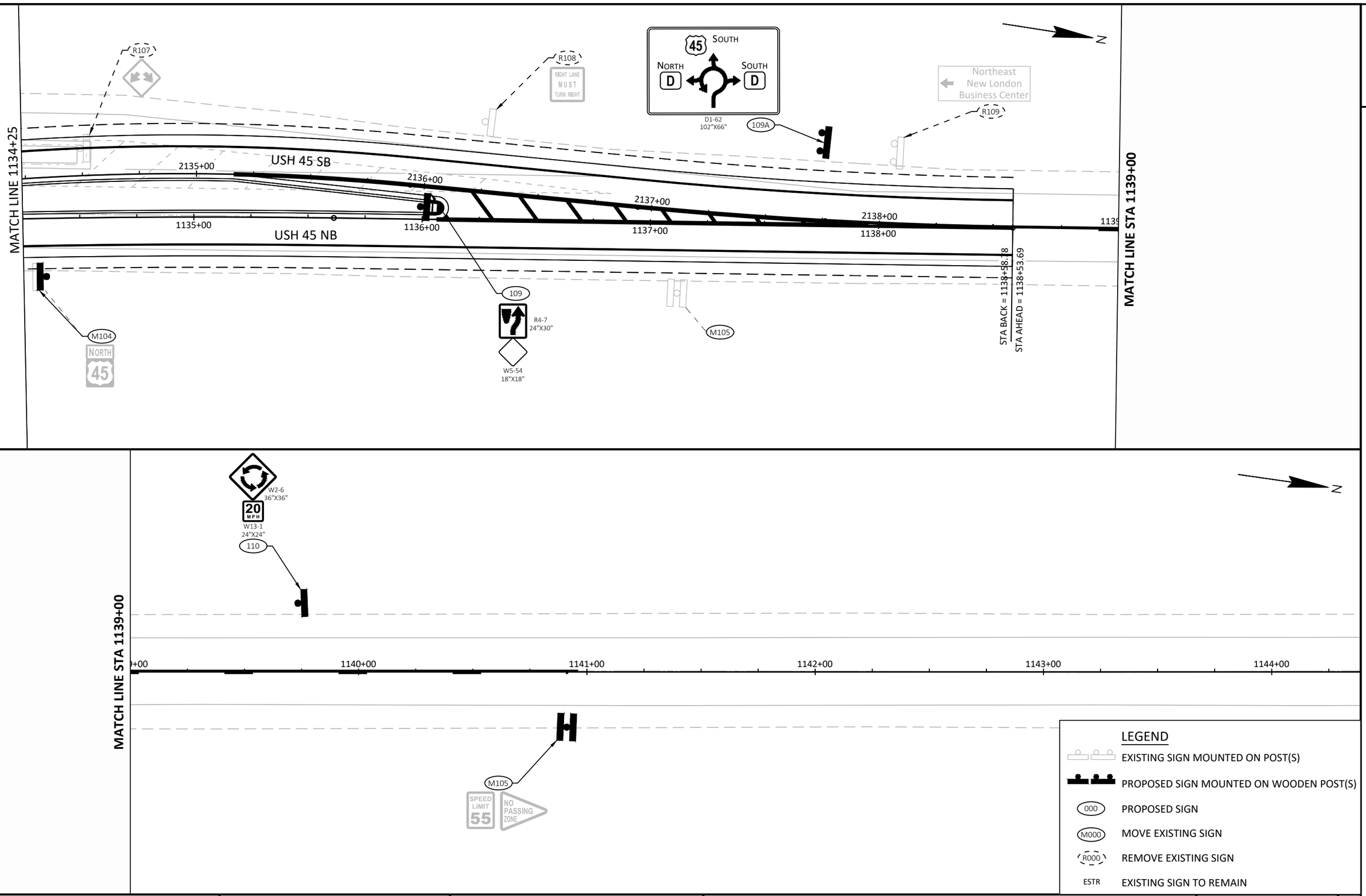
R123 R132 | R124 R126 R129 R131 | R127 R128 | R125 R130

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PERMANENT SIGNING	SHEET 73	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-023201-PS.DWG
LAYOUT NAME - WW-023202-ps

PLOT DATE : 4/28/2025 12:00 PM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PERMANENT SIGNING	SHEET 74	E

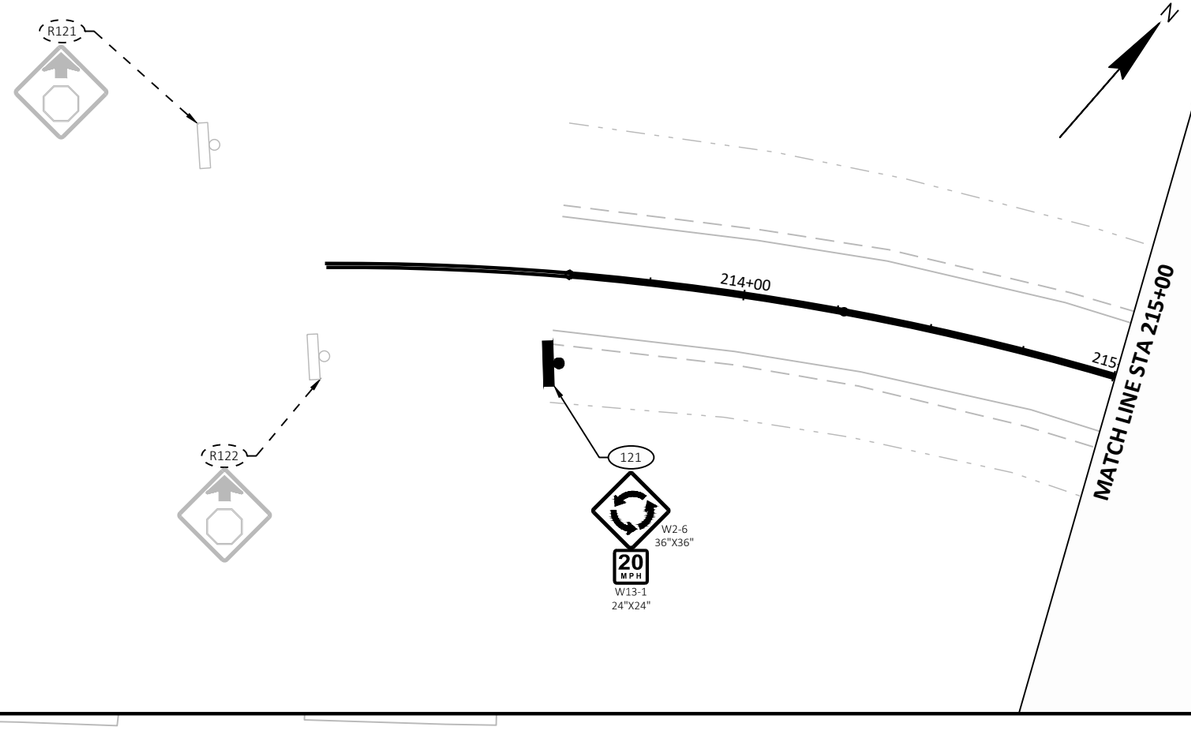
FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-023201-PS.DWG
LAYOUT NAME - WW-023203-ps

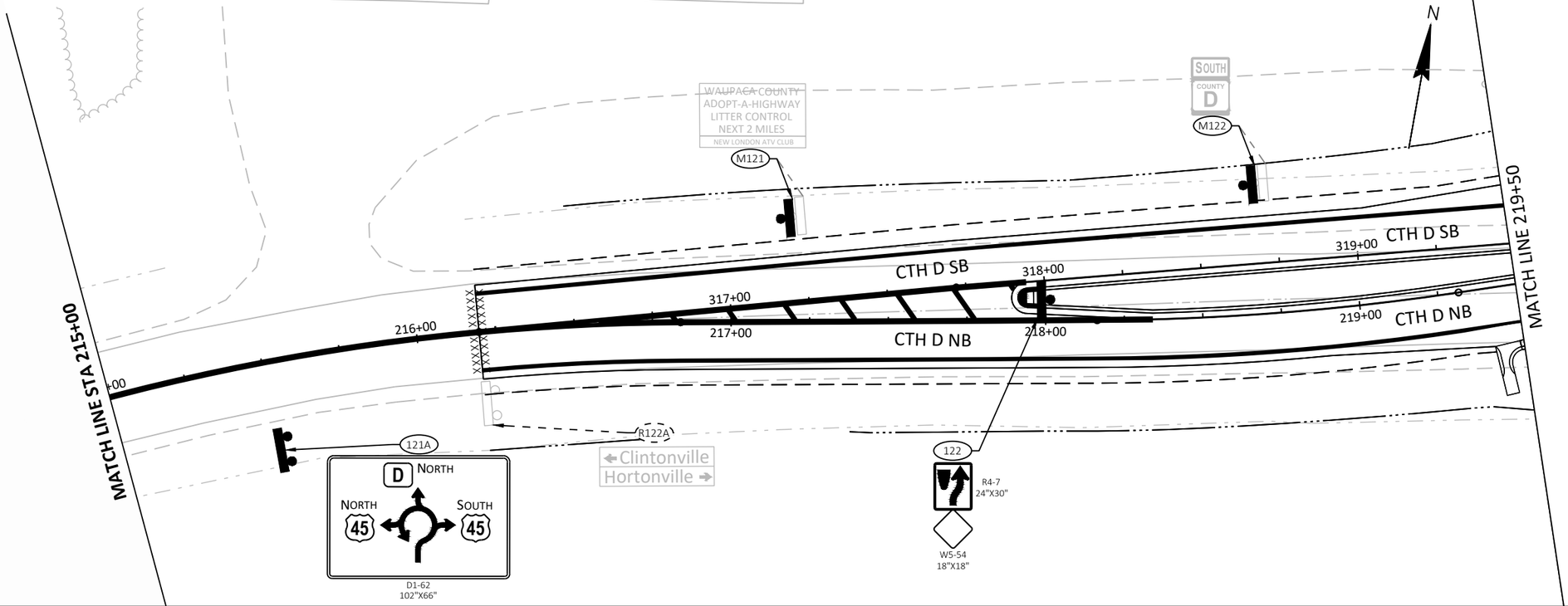
PLOT DATE : 4/28/2025 12:00 PM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

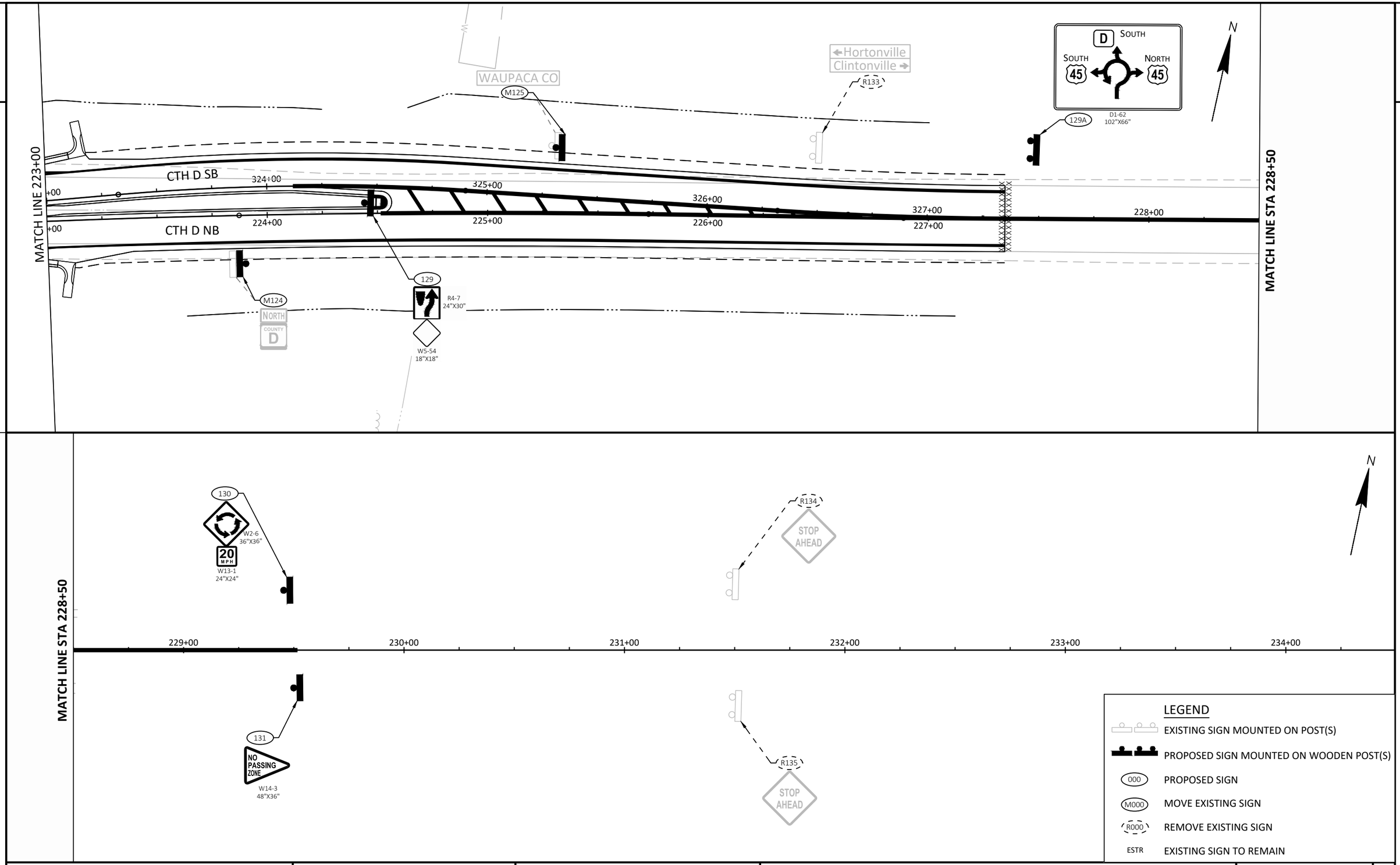
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON WOODEN POST(S)
- 000 — PROPOSED SIGN
- M000 — MOVE EXISTING SIGN
- R000 — REMOVE EXISTING SIGN
- ESTR — EXISTING SIGN TO REMAIN





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PERMANENT SIGNING	SHEET 75	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-023201-PS.DWG
LAYOUT NAME - WW-023204-ps
PLOT DATE : 4/28/2025 12:00 PM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PERMANENT SIGNING	SHEET 76	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-023201-PS.DWG
LAYOUT NAME - WW-023205-ps

PLOT DATE : 4/28/2025 12:00 PM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:40 FT

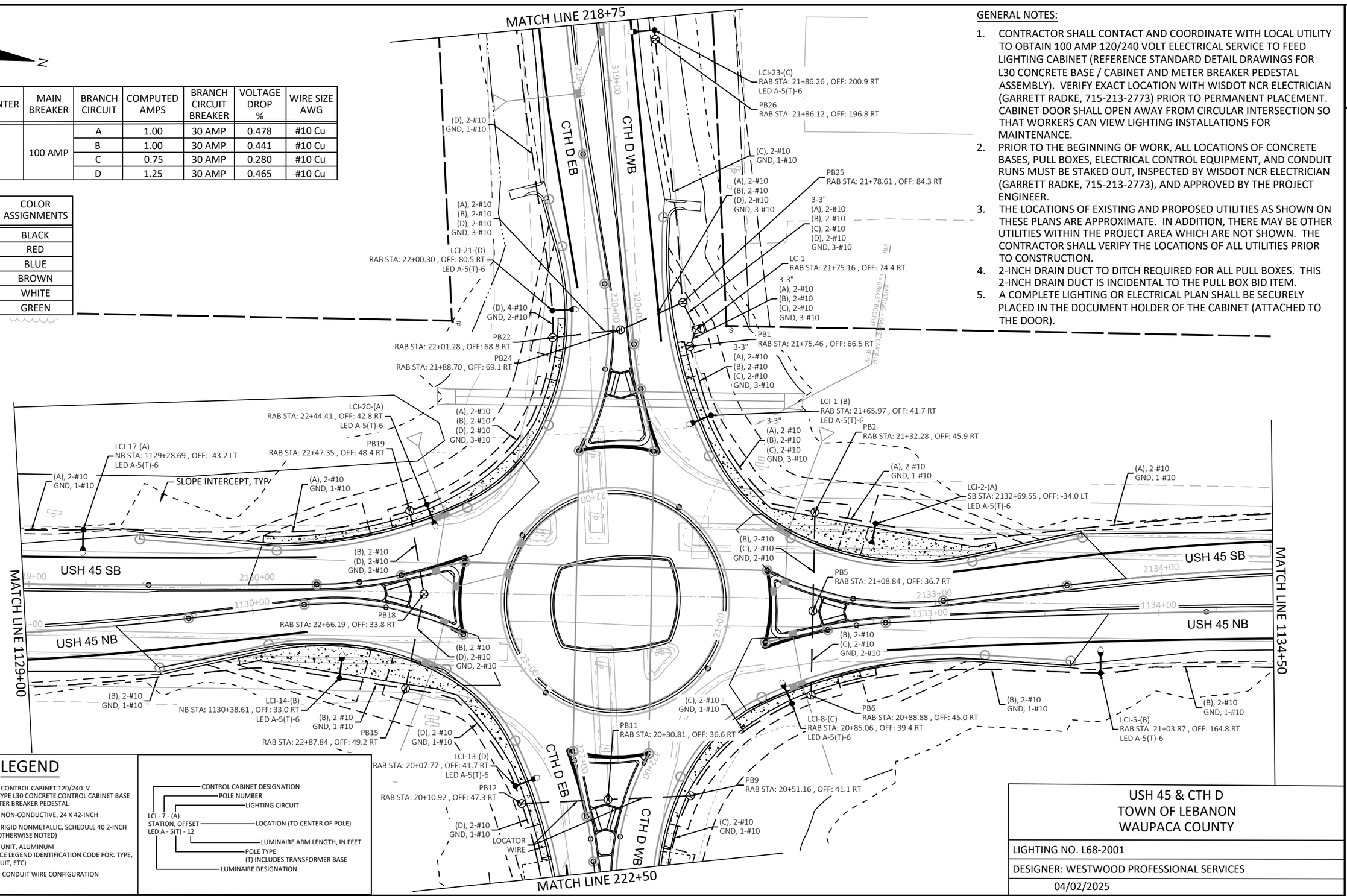
240 V SYSTEM

DISTRIBUTION CENTER	MAIN BREAKER	BRANCH CIRCUIT	COMPUTED AMPS	BRANCH CIRCUIT BREAKER	VOLTAGE DROP %	WIRE SIZE AWG
L68-2001	100 AMP	A	1.00	30 AMP	0.478	#10 Cu
		B	1.00	30 AMP	0.441	#10 Cu
		C	0.75	30 AMP	0.280	#10 Cu
		D	1.25	30 AMP	0.465	#10 Cu

CONDUCTOR	COLOR ASSIGNMENTS
CIRCUIT "A"	BLACK
CIRCUIT "B"	RED
CIRCUIT "C"	BLUE
CIRCUIT "D"	BROWN
NEUTRAL	WHITE
GROUND	GREEN

GENERAL NOTES:

1. CONTRACTOR SHALL CONTACT AND COORDINATE WITH LOCAL UTILITY TO OBTAIN 100 AMP 120/240 VOLT ELECTRICAL SERVICE TO FEED LIGHTING CABINET (REFERENCE STANDARD DETAIL DRAWINGS FOR L30 CONCRETE BASE / CABINET AND METER BREAKER PEDESTAL ASSEMBLY). VERIFY EXACT LOCATION WITH WISDOT NCR ELECTRICIAN (GARRETT RADKE, 715-213-2773) PRIOR TO PERMANENT PLACEMENT. CABINET DOOR SHALL OPEN AWAY FROM CIRCULAR INTERSECTION SO THAT WORKERS CAN VIEW LIGHTING INSTALLATIONS FOR MAINTENANCE.
2. PRIOR TO THE BEGINNING OF WORK, ALL LOCATIONS OF CONCRETE BASES, PULL BOXES, ELECTRICAL CONTROL EQUIPMENT, AND CONDUIT RUNS MUST BE STAKED OUT, INSPECTED BY WISDOT NCR ELECTRICIAN (GARRETT RADKE, 715-213-2773), AND APPROVED BY THE PROJECT ENGINEER.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THESE PLANS ARE APPROXIMATE. IN addition, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4. 2-INCH DRAIN DUCT TO DITCH REQUIRED FOR ALL PULL BOXES. THIS 2-INCH DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM.
5. A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER OF THE CABINET (ATTACHED TO THE DOOR).



LEGEND

- LIGHTING CONTROL CABINET 120/240 V 30-INCH TYPE L30 CONCRETE CONTROL CABINET BASE WITH METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE, 24 X 42-INCH
- CONDUIT RIGID NONMETALLIC, SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHTING UNIT, ALUMINUM (REFERENCE LEGEND IDENTIFICATION CODE FOR: TYPE, SIZE, CIRCUIT, ETC)
- (A), 2-#10 GND, 1-#10 (CIRCUIT), CONDUIT WIRE CONFIGURATION

LCI - 7 - (A)
STATION, OFFSET
LED A - 5(T) - 12

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH, IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

USH 45 & CTH D
TOWN OF LEBANON
WAUPACA COUNTY

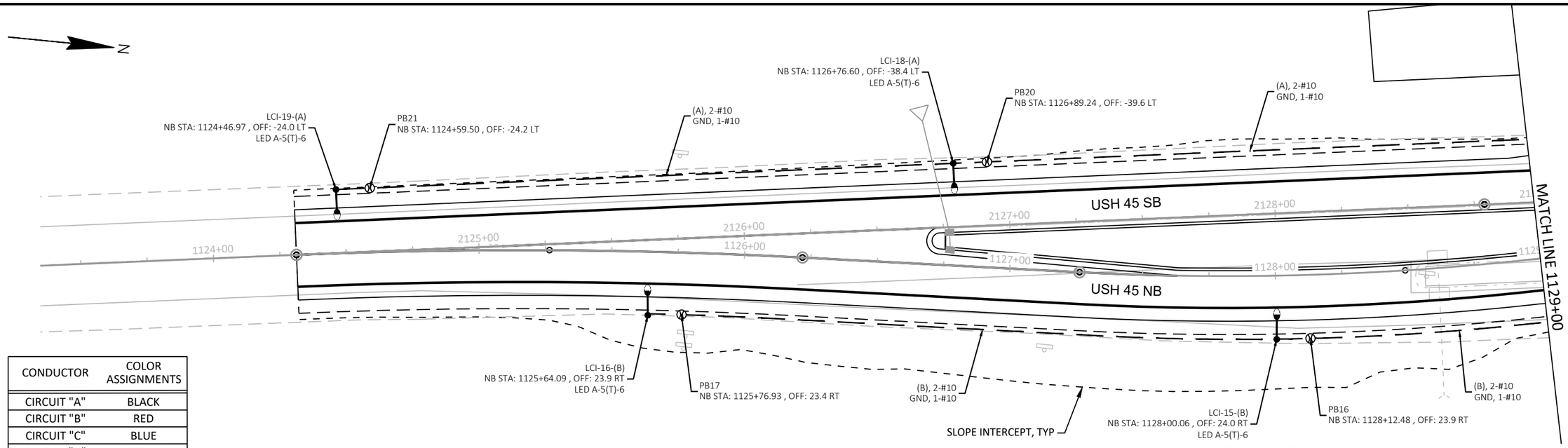
LIGHTING NO. L68-2001

DESIGNER: WESTWOOD PROFESSIONAL SERVICES

04/02/2025

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	LIGHTING PLAN	SHEET 77	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-023601-LP.DWG
LAYOUT NAME - 11400007-023601-lp
PLOT DATE : 8/1/2025 8:25 AM PLOT BY : JOE DRISCOLL PLOT NAME : PLOT SCALE : 1 IN:40 FT



CONDUCTOR	COLOR ASSIGNMENTS
CIRCUIT "A"	BLACK
CIRCUIT "B"	RED
CIRCUIT "C"	BLUE
CIRCUIT "D"	BROWN
NEUTRAL	WHITE
GROUND	GREEN

GENERAL NOTES:

1. CONTRACTOR SHALL CONTACT AND COORDINATE WITH LOCAL UTILITY TO OBTAIN 100 AMP 120/240 VOLT ELECTRICAL SERVICE TO FEED LIGHTING CABINET (REFERENCE STANDARD DETAIL DRAWINGS FOR L30 CONCRETE BASE / CABINET AND METER BREAKER PEDESTAL ASSEMBLY). VERIFY EXACT LOCATION WITH WISDOT NCR ELECTRICIAN (GARRETT RADKE, 715-213-2773) PRIOR TO PERMANENT PLACEMENT. CABINET DOOR SHALL OPEN AWAY FROM CIRCULAR INTERSECTION SO THAT WORKERS CAN VIEW LIGHTING INSTALLATIONS FOR MAINTENANCE.
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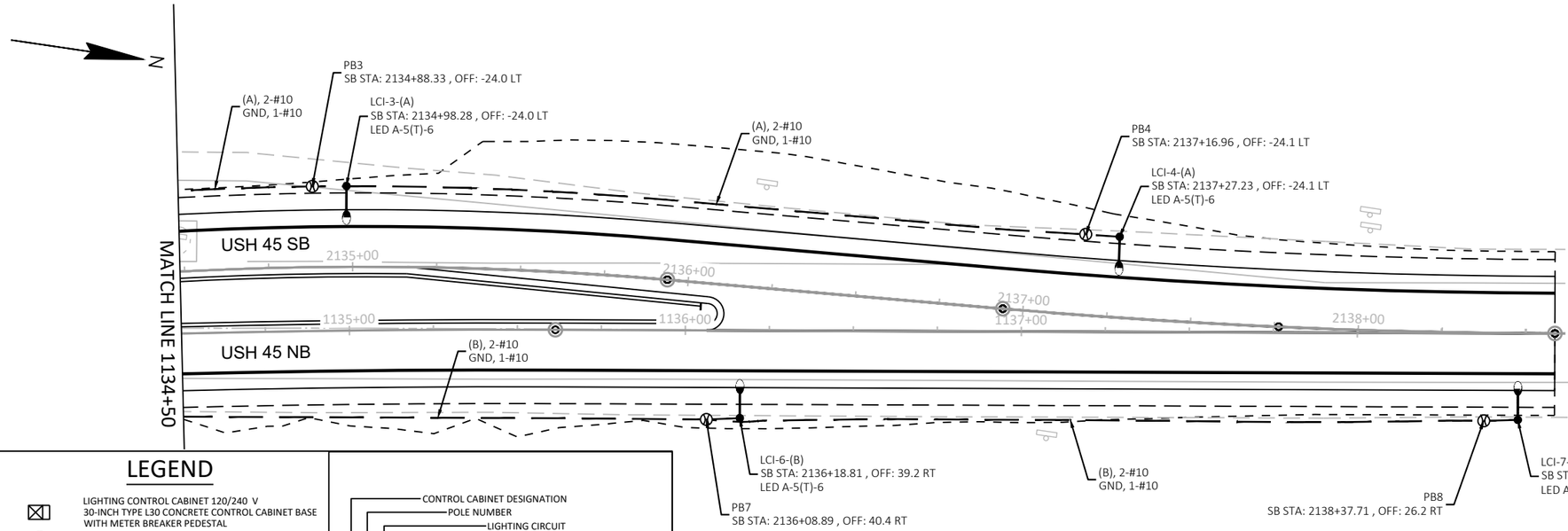

LEGEND

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- CONDUIT RIGID NONMETALLIC, SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHTING UNIT, ALUMINUM (REFERENCE LEGEND IDENTIFICATION CODE FOR: TYPE, SIZE, CIRCUIT, ETC)
- (A), 2-#10 GND, 1-#10 — (CIRCUIT), CONDUIT WIRE CONFIGURATION

LCI - 7 - (A)
STATION, OFFSET
LED A - 5(T) - 12

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH, IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

USH 45 & CTH D
TOWN OF LEBANON
WAUPACA COUNTY

LIGHTING NO. L68-2001

DESIGNER: WESTWOOD PROFESSIONAL SERVICES

04/02/2025

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	LIGHTING PLAN	SHEET 78	E

GENERAL NOTES:

1. CONTRACTOR SHALL CONTACT AND COORDINATE WITH LOCAL UTILITY TO OBTAIN 100 AMP 120/240 VOLT ELECTRICAL SERVICE TO FEED LIGHTING CABINET (REFERENCE STANDARD DETAIL DRAWINGS FOR L30 CONCRETE BASE / CABINET AND METER BREAKER PEDESTAL ASSEMBLY). VERIFY EXACT LOCATION WITH WISDOT NCR ELECTRICIAN (GARRETT RADKE, 715-213-2773) PRIOR TO PERMANENT PLACEMENT. CABINET DOOR SHALL OPEN AWAY FROM CIRCULAR INTERSECTION SO THAT WORKERS CAN VIEW LIGHTING INSTALLATIONS FOR MAINTENANCE.
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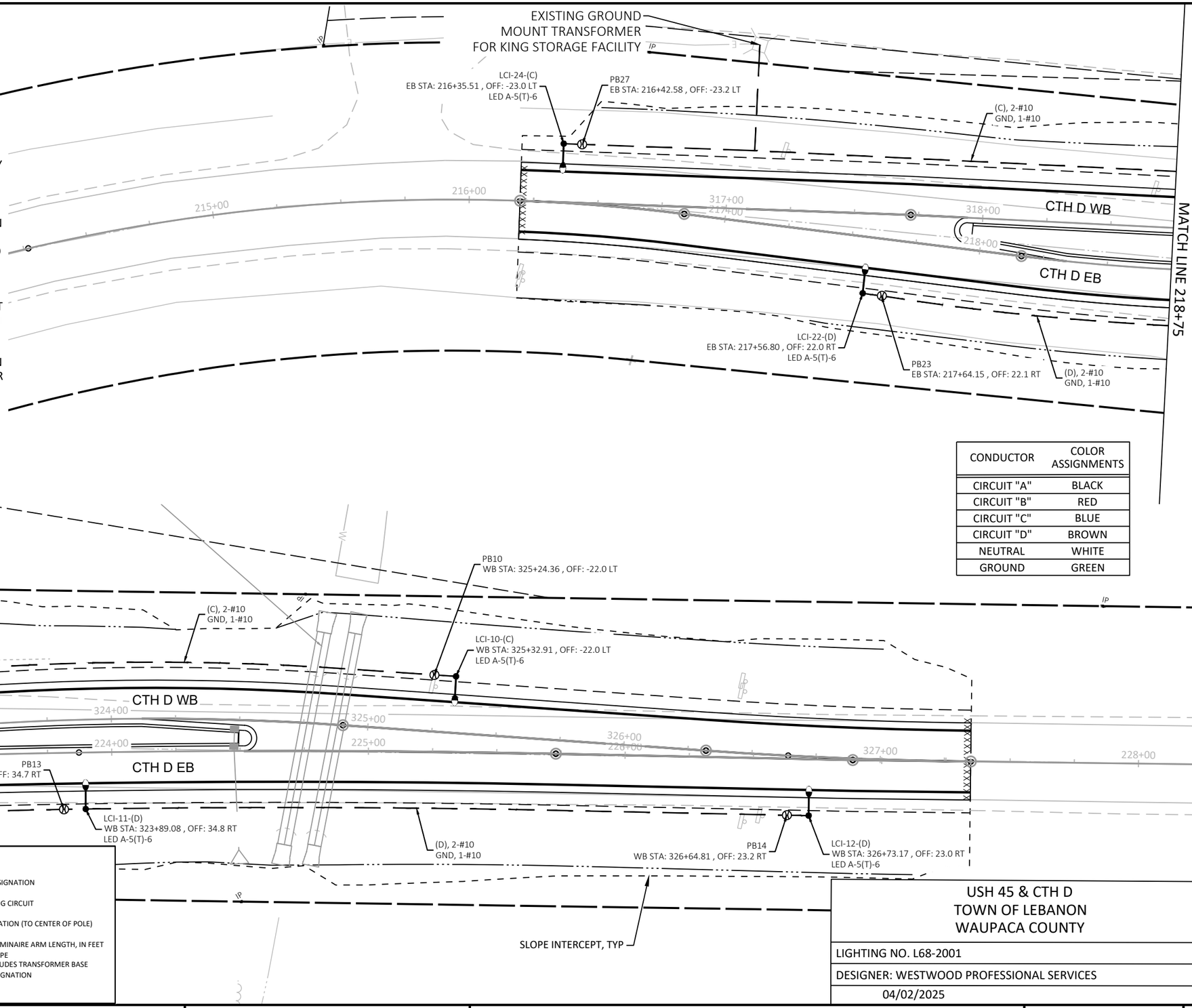


CONDUCTOR	COLOR ASSIGNMENTS
CIRCUIT "A"	BLACK
CIRCUIT "B"	RED
CIRCUIT "C"	BLUE
CIRCUIT "D"	BROWN
NEUTRAL	WHITE
GROUND	GREEN

LEGEND

- LIGHTING CONTROL CABINET 120/240 V, 30-INCH TYPE L30 CONCRETE CONTROL CABINET BASE WITH METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE, 24 X 42-INCH
- CONDUIT RIGID NONMETALLIC, SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED)
- LIGHTING UNIT, ALUMINUM (REFERENCE LEGEND IDENTIFICATION CODE FOR: TYPE, SIZE, CIRCUIT, ETC)
- (A), 2-#10 GND, 1-#10 — (CIRCUIT), CONDUIT WIRE CONFIGURATION

LCI - 7 - (A)
STATION, OFFSET
LED A - 5(T) - 12

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH, IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

USH 45 & CTH D
TOWN OF LEBANON
WAUPACA COUNTY

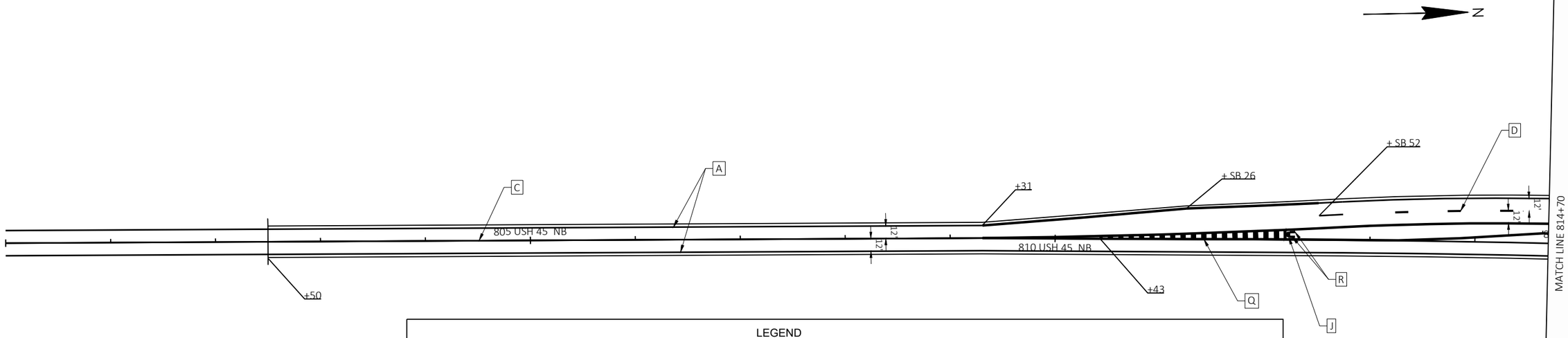
LIGHTING NO. L68-2001

DESIGNER: WESTWOOD PROFESSIONAL SERVICES

04/02/2025

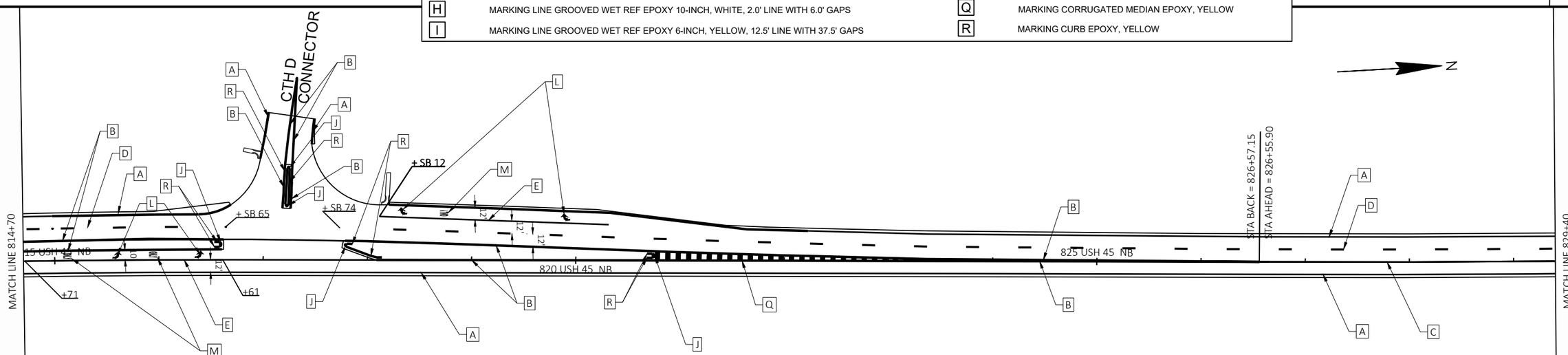
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	LIGHTING PLAN	SHEET 79	E

2



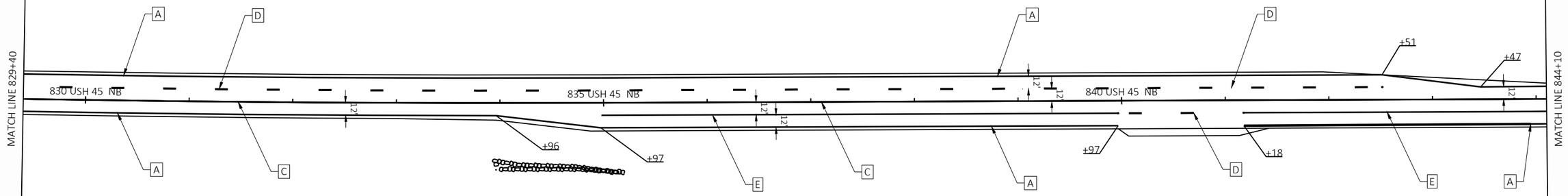
LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 80 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024501-PM.DWG PLOT DATE : 9/25/2025 2:23 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 01
WISDOT/CADDS SHEET 44



LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
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H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
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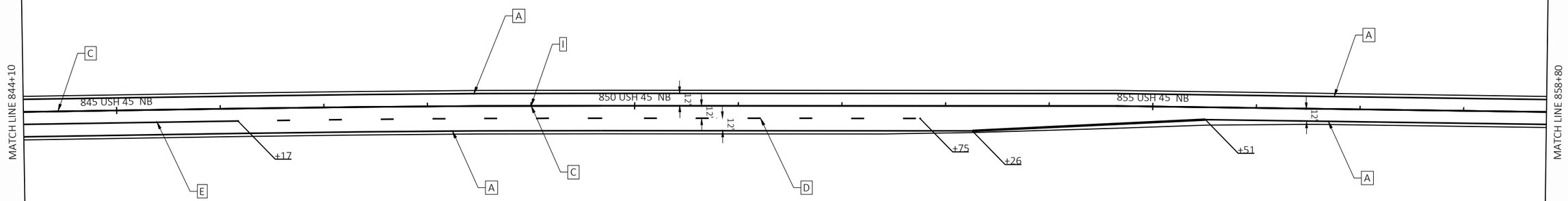
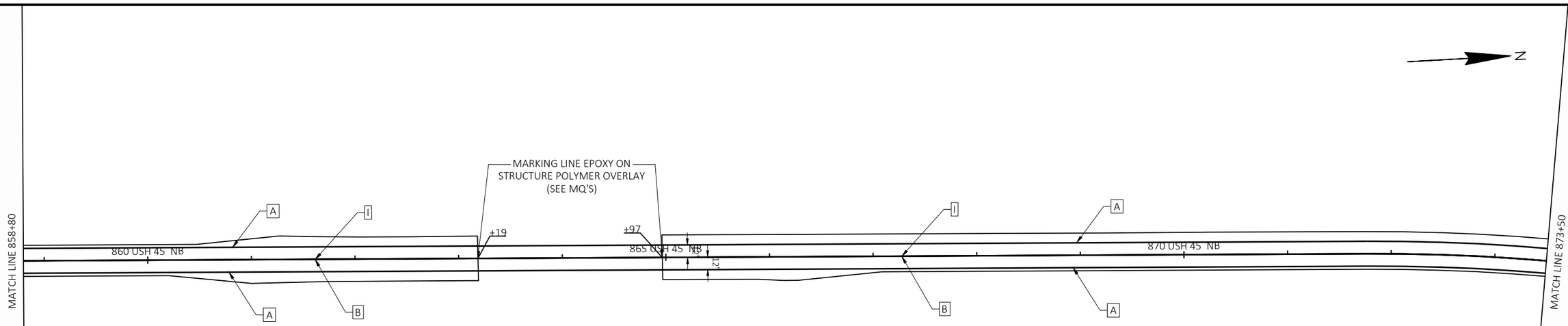


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 81	E



LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
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F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
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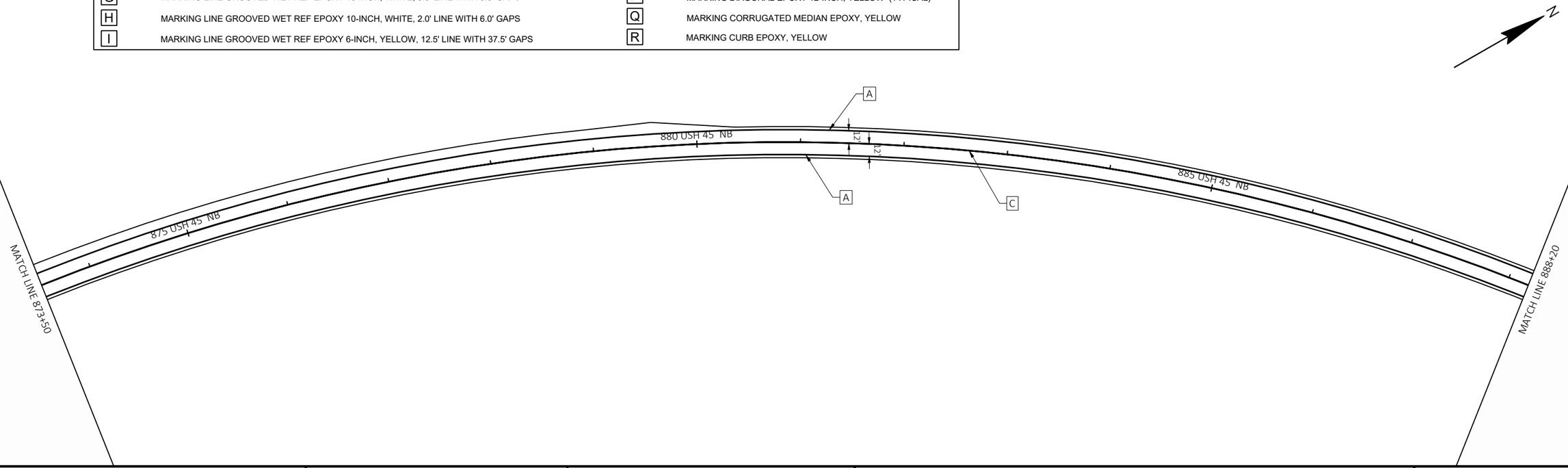
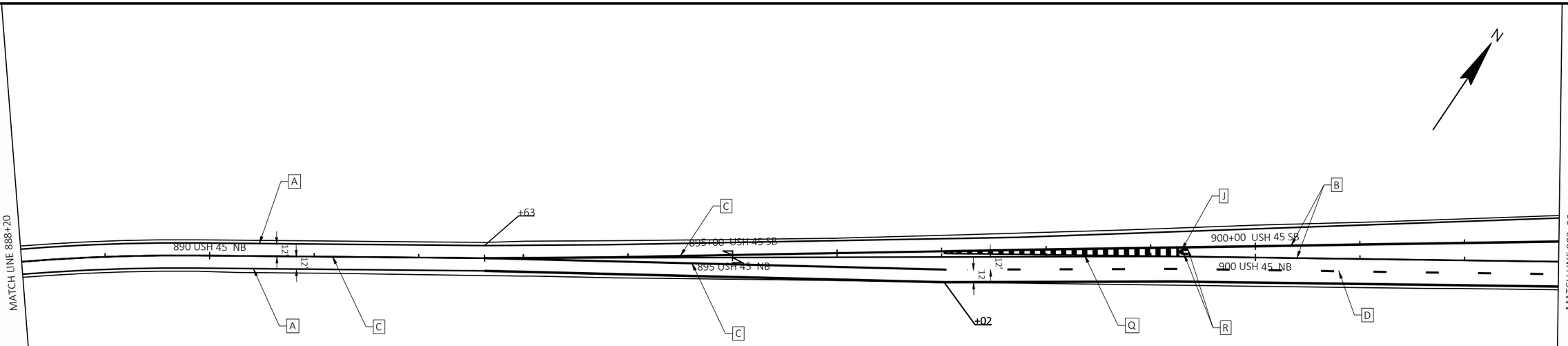
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 82	E

2



2

LEGEND

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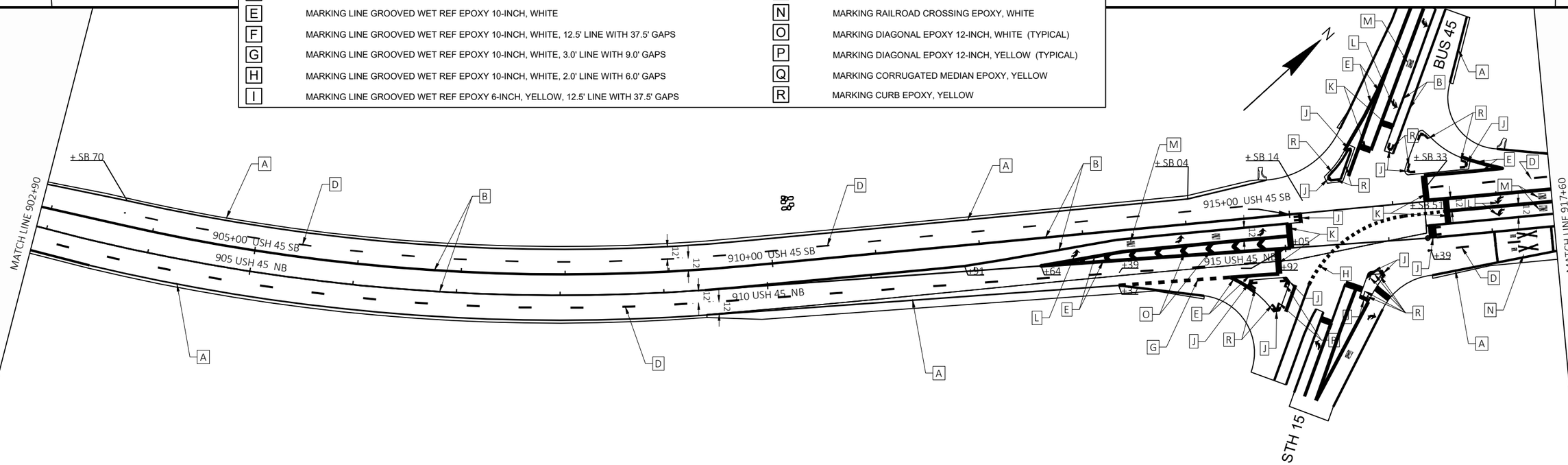
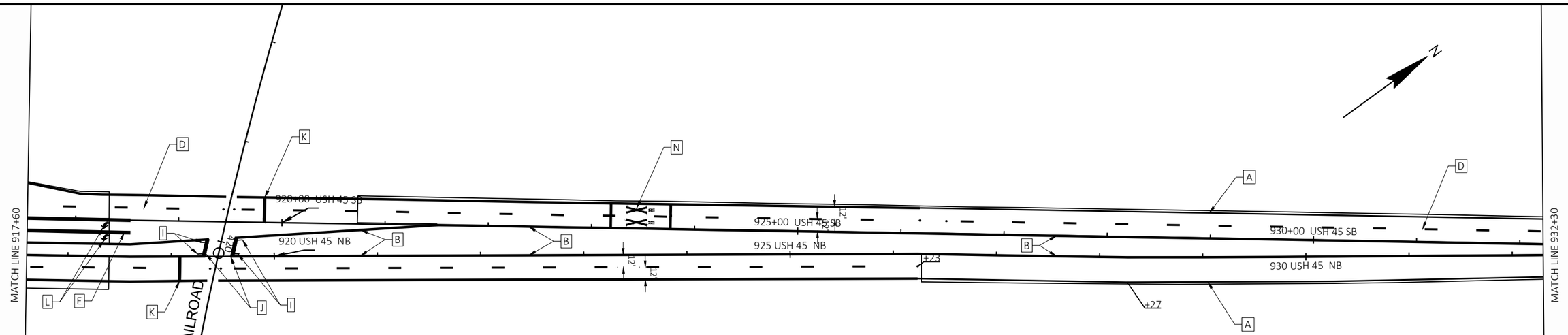


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 83	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024501-PM.DWG PLOT DATE : 9/25/2025 2:23 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 04
WISDOT/CADDS SHEET 44

2



LEGEND

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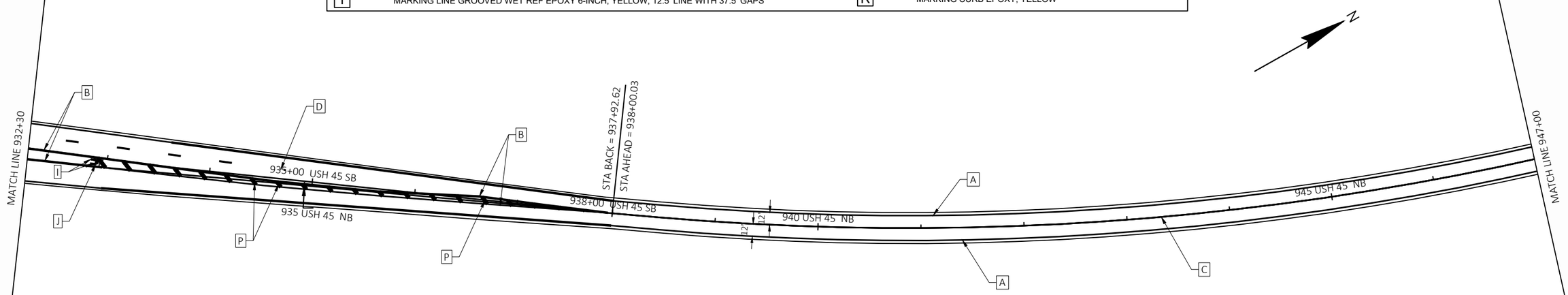
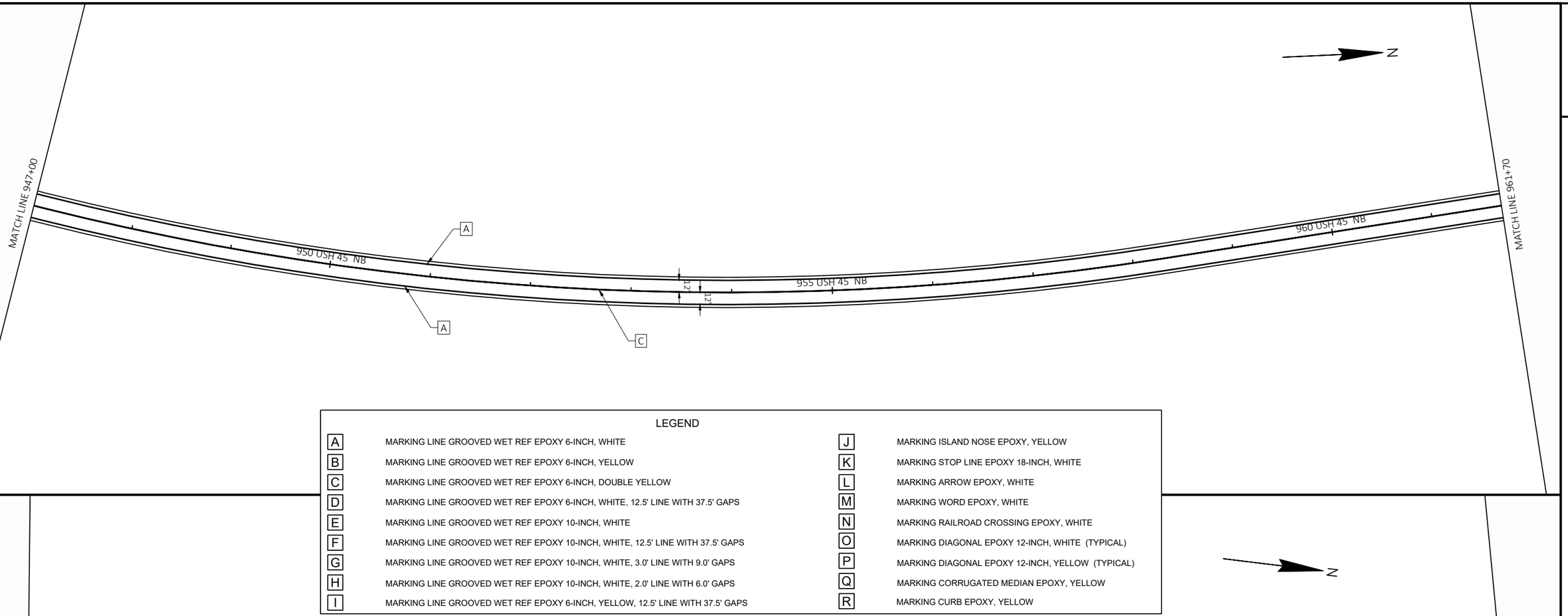


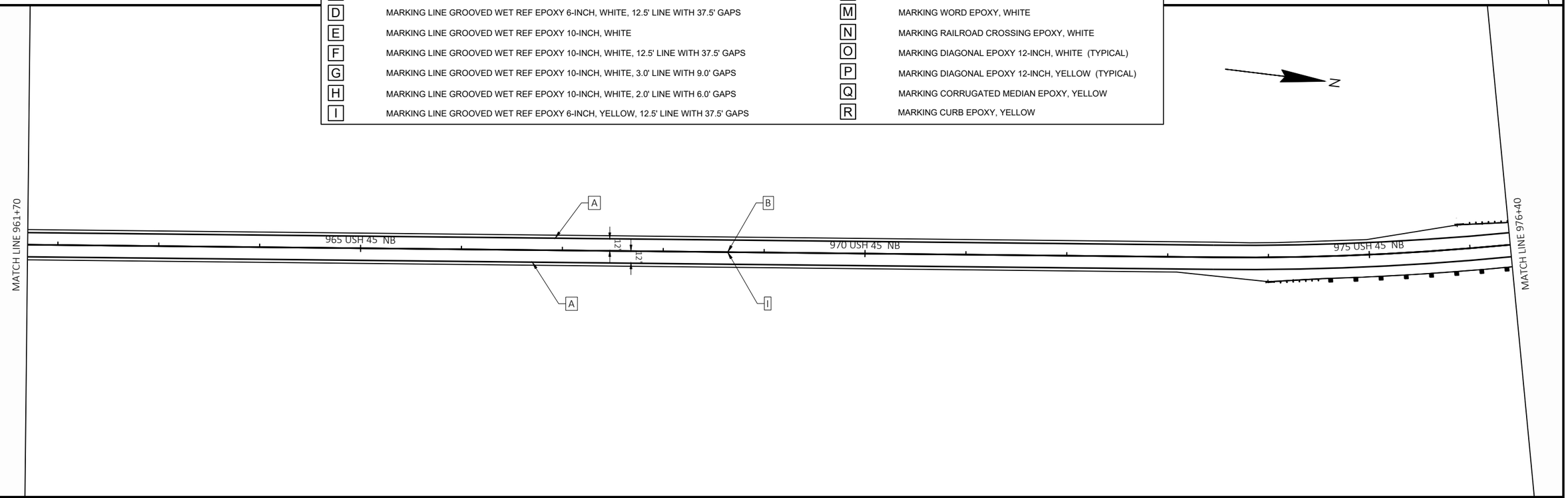
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 84 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024501-PM.DWG PLOT DATE : 9/25/2025 2:23 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 05
WISDOT/CADDS SHEET 44



LEGEND

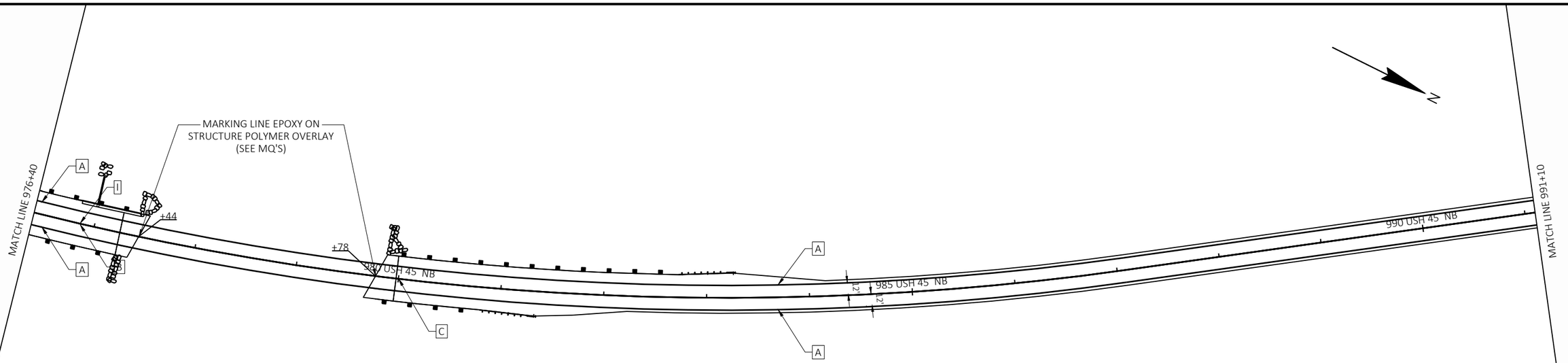
A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 85	E

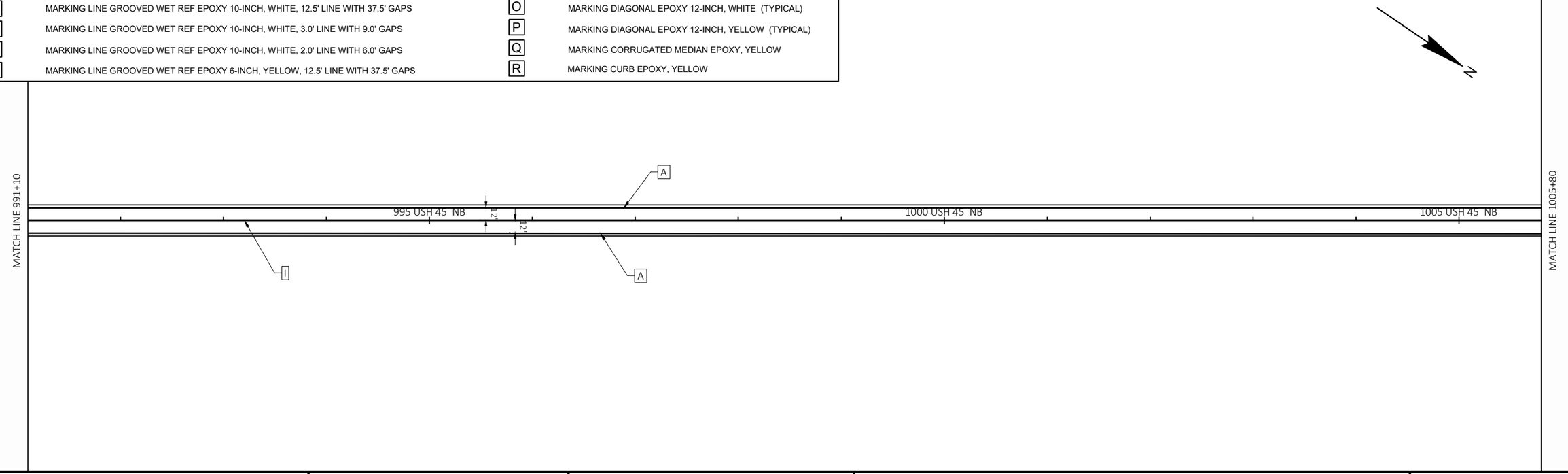
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024501-PM.DWG PLOT DATE : 9/25/2025 2:23 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 06

2



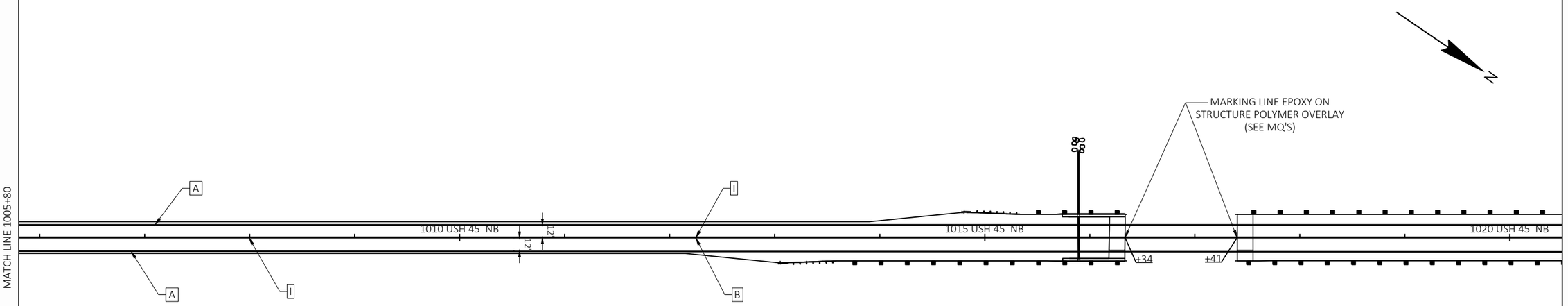
LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



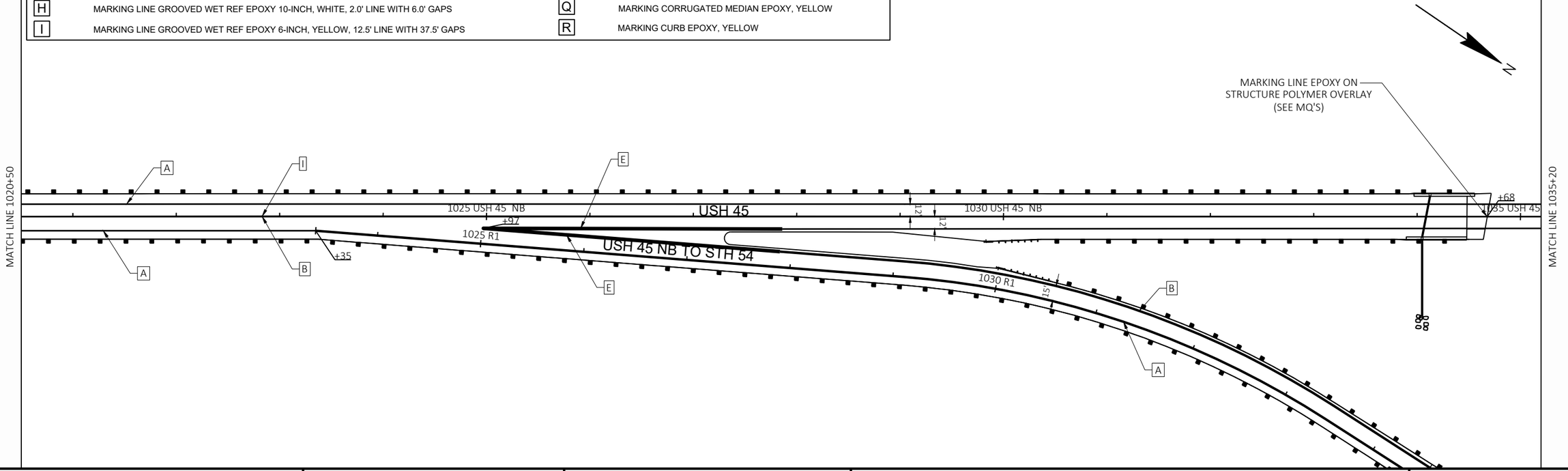
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 86	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024501-PM.DWG PLOT DATE : 9/25/2025 2:23 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 07



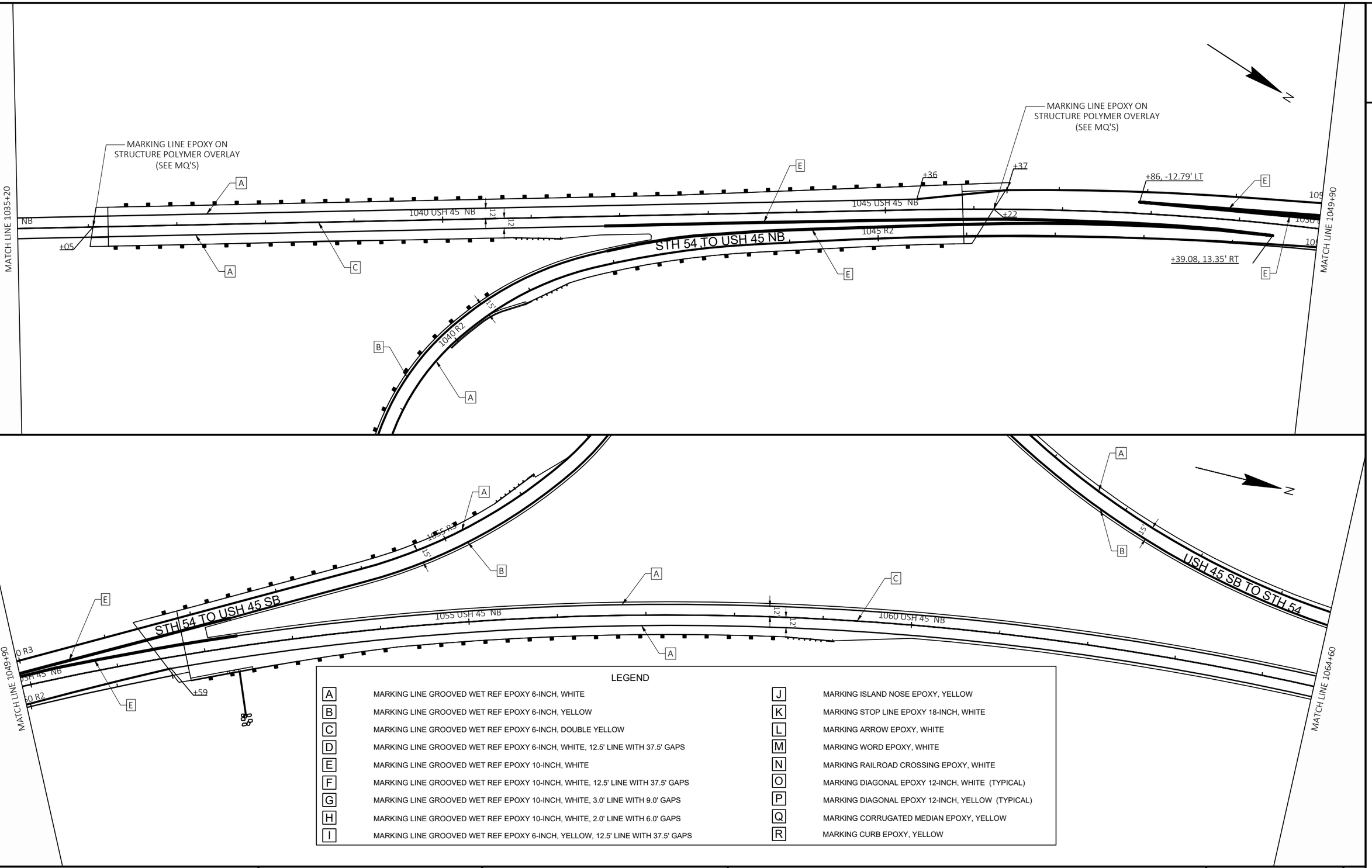
LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 87	E

2

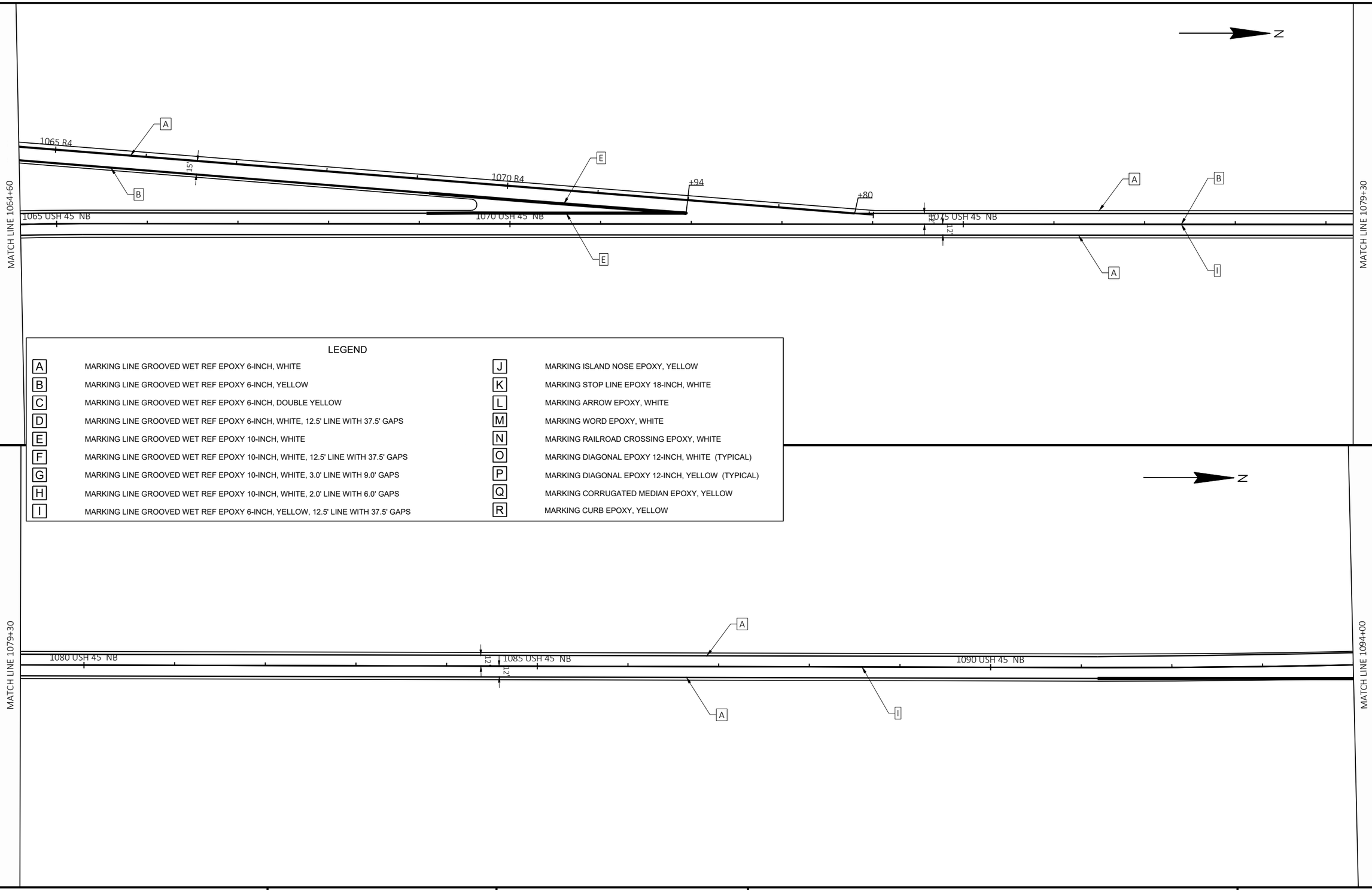


LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 88	E

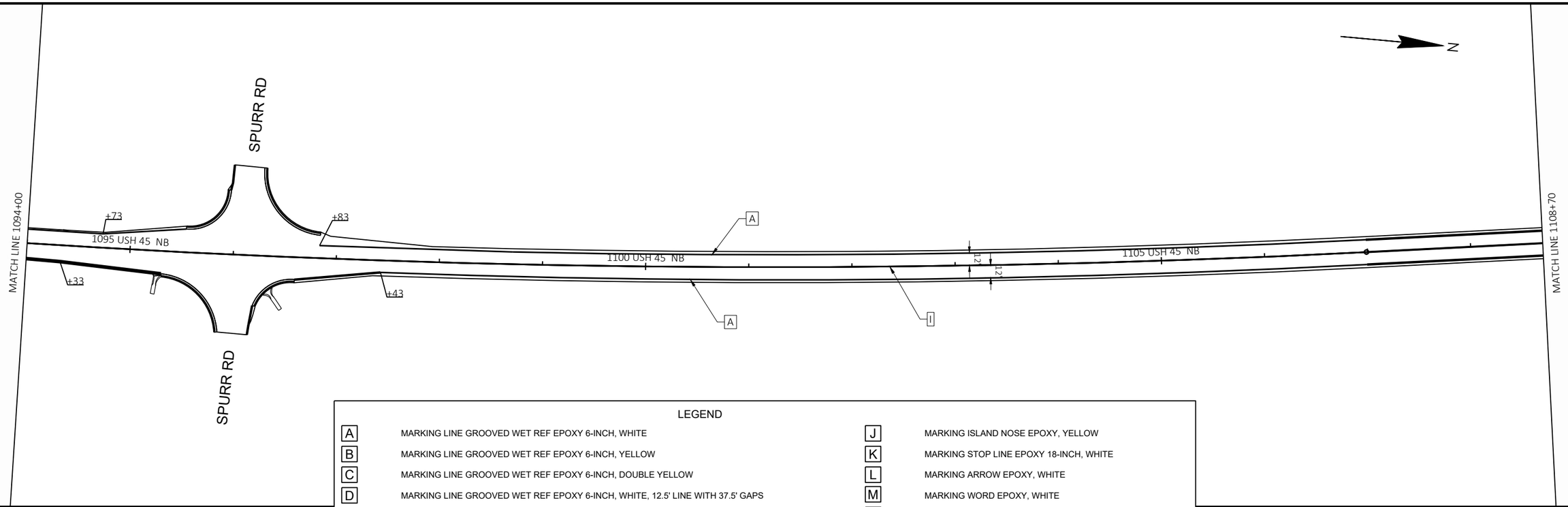
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024501-PM.DWG PLOT DATE : 9/25/2025 2:23 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 09
WISDOT/CADDS SHEET 44



LEGEND

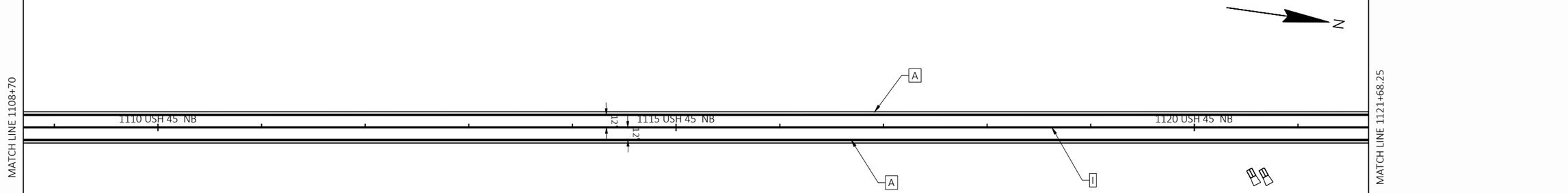
A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 89	E



LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW

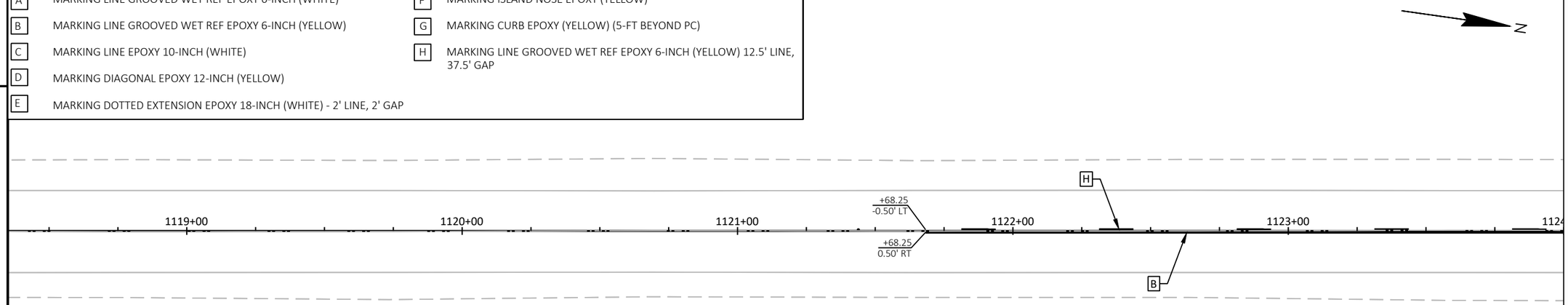


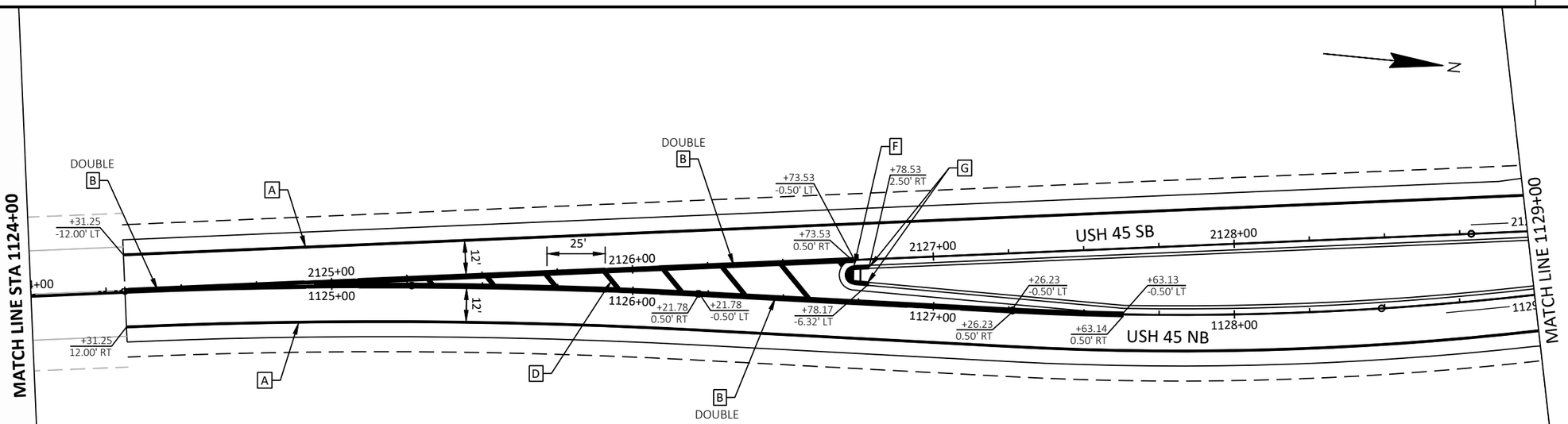
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 90	E

2

LEGEND

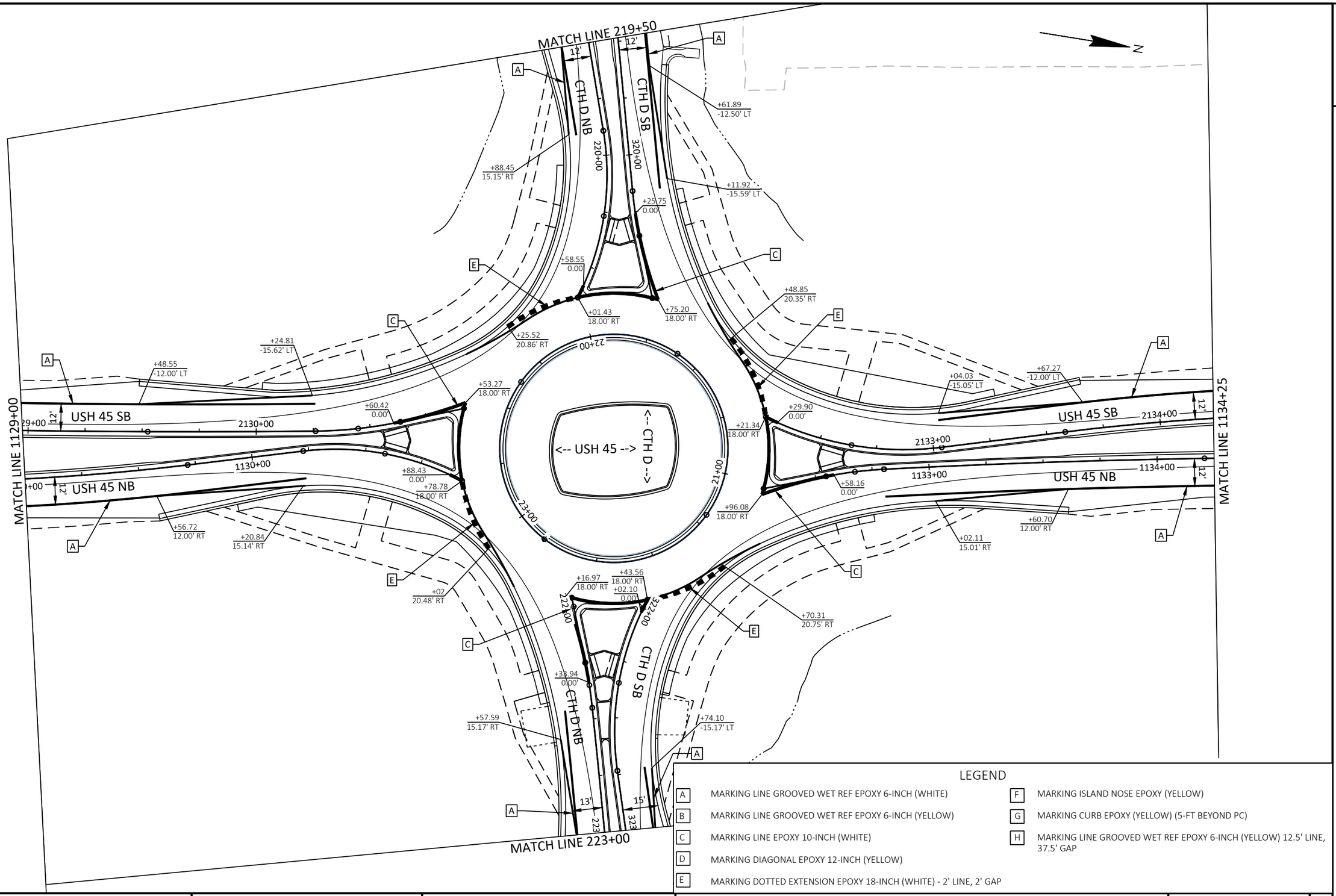
- A — MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- B — MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
- C — MARKING LINE EPOXY 10-INCH (WHITE)
- D — MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- E — MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) - 2' LINE, 2' GAP
- F — MARKING ISLAND NOSE EPOXY (YELLOW)
- G — MARKING CURB EPOXY (YELLOW) (5-FT BEYOND PC)
- H — MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) 12.5' LINE, 37.5' GAP





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 91	E

2

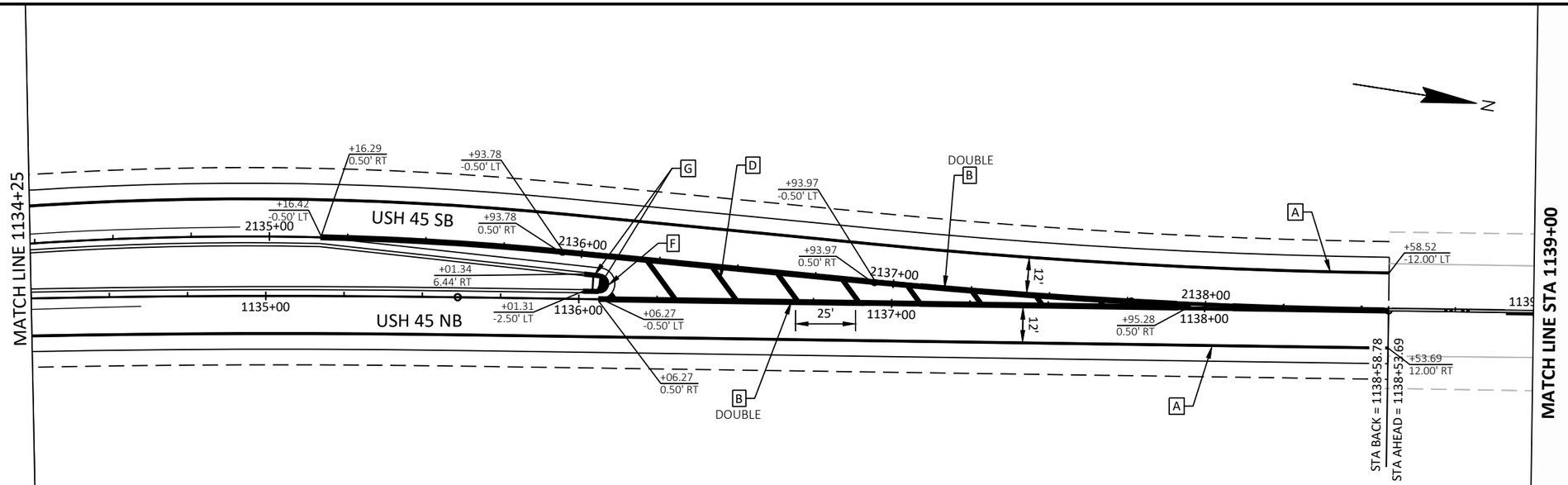


LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)	F	MARKING ISLAND NOSE EPOXY (YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)	G	MARKING CURB EPOXY (YELLOW) (5-FT BEYOND PC)
C	MARKING LINE EPOXY 10-INCH (WHITE)	H	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) 12.5' LINE, 37.5' GAP
D	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)		
E	MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) - 2' LINE, 2' GAP		

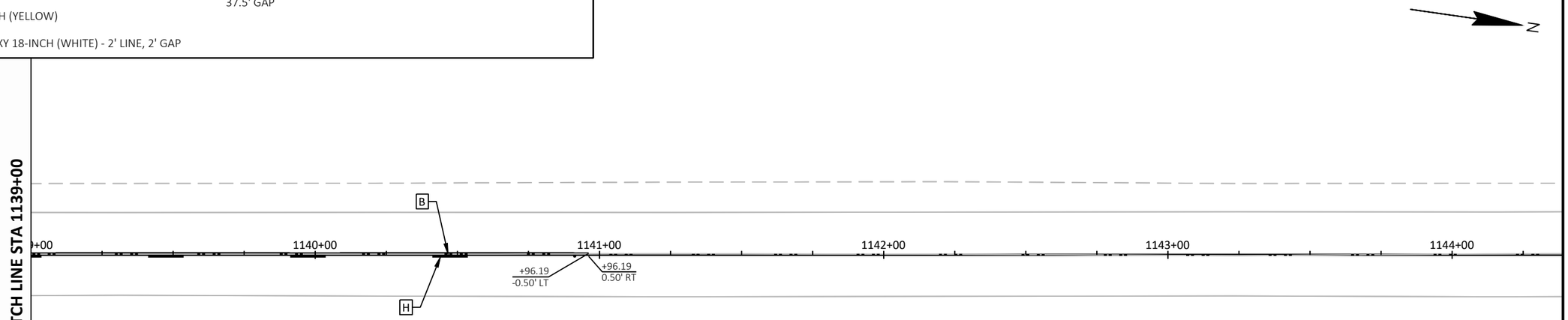
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 92	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-024501-PM.DWG
LAYOUT NAME - WW-024502-pm
PLOT DATE : 4/28/2025 12:01 PM
PLOT BY : JOE DRISCOLL
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



LEGEND

- A MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
- C MARKING LINE EPOXY 10-INCH (WHITE)
- D MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- E MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) - 2' LINE, 2' GAP
- F MARKING ISLAND NOSE EPOXY (YELLOW)
- G MARKING CURB EPOXY (YELLOW) (5-FT BEYOND PC)
- H MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) 12.5' LINE, 37.5' GAP

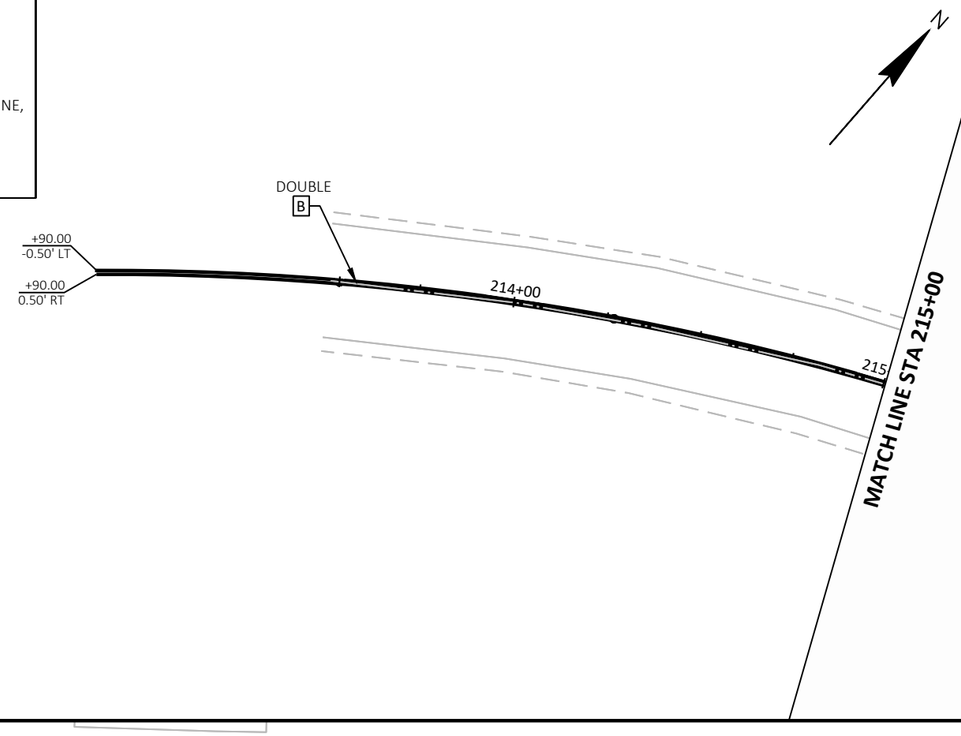


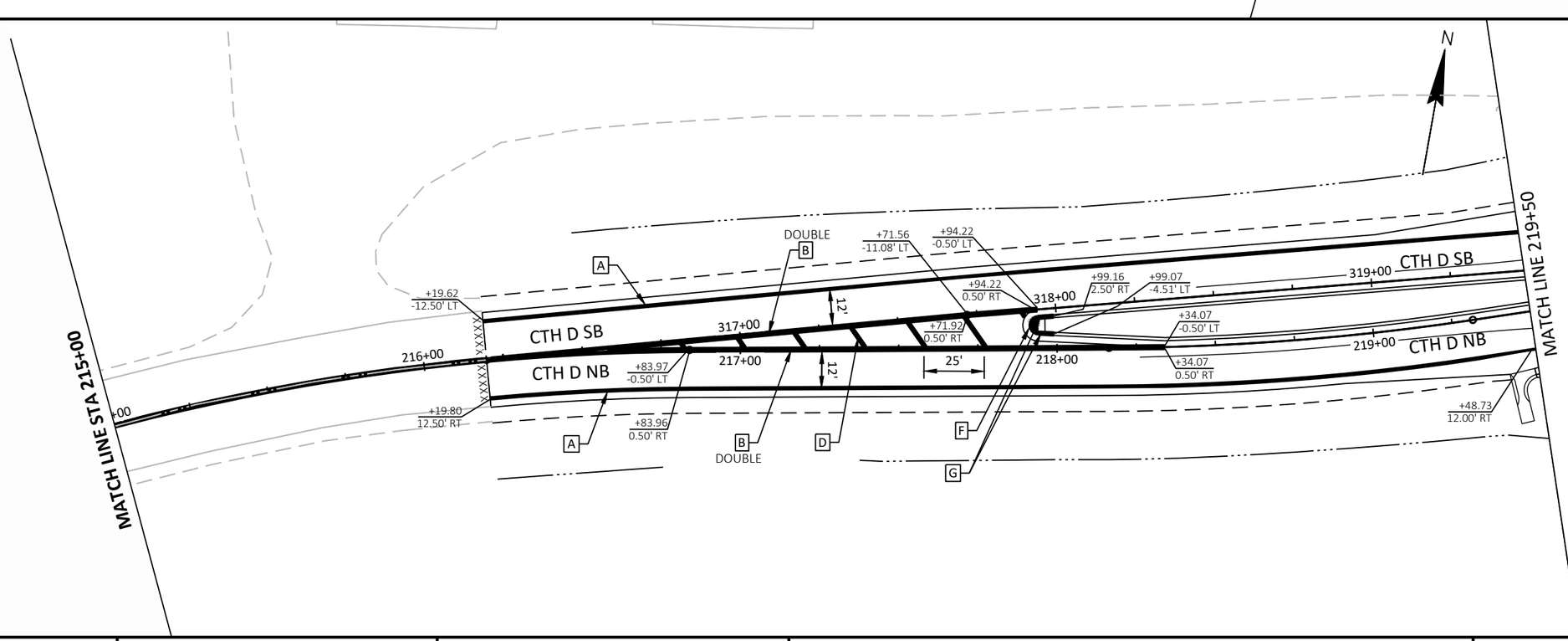
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 93	E

FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-024501-PM.DWG
LAYOUT NAME - WW-024503-pm
PLOT DATE : 4/28/2025 12:01 PM
PLOT BY : JOE DRISCOLL
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

LEGEND

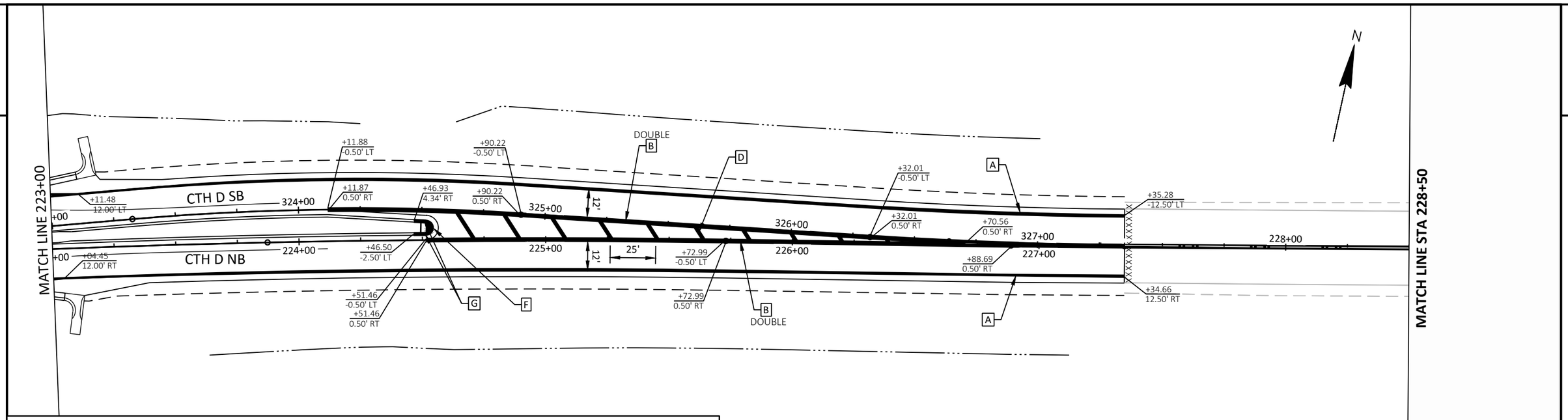
- A — MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- B — MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
- C — MARKING LINE EPOXY 10-INCH (WHITE)
- D — MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- E — MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) - 2' LINE, 2' GAP
- F — MARKING ISLAND NOSE EPOXY (YELLOW)
- G — MARKING CURB EPOXY (YELLOW) (5-FT BEYOND PC)
- H — MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) 12.5' LINE, 37.5' GAP





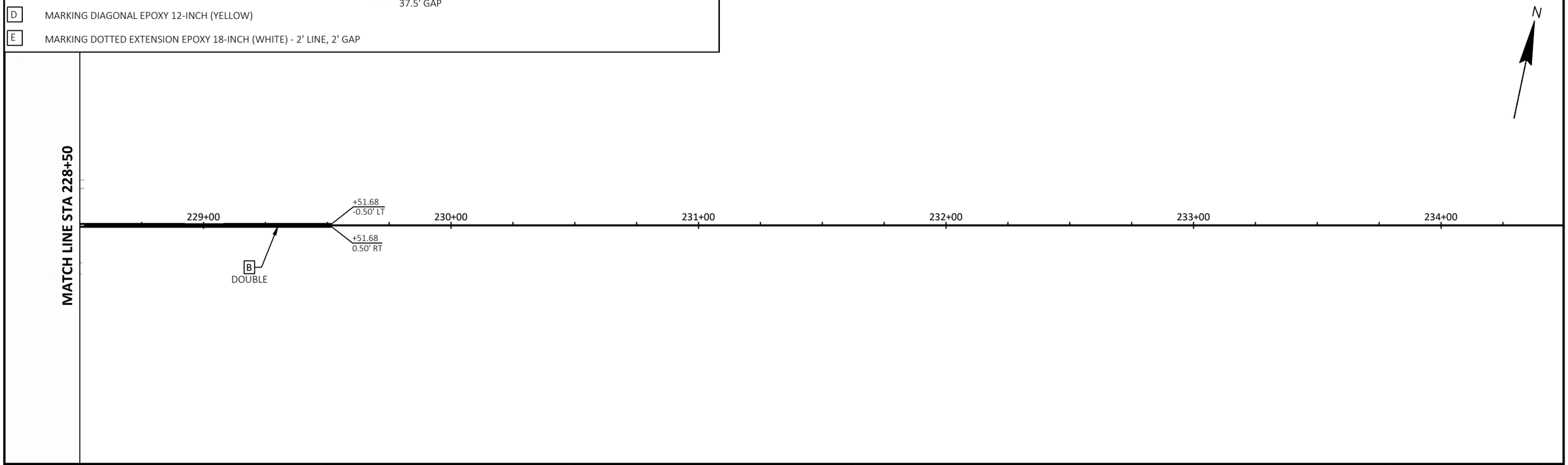
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 94	E

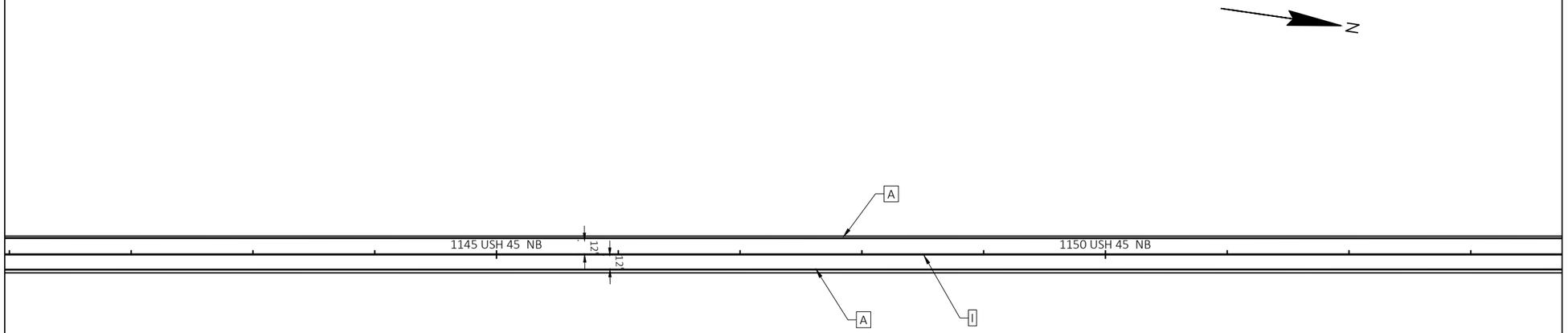
FILE NAME : N:\0051926.00\CIVIL 3D\SHEETS\11400007-024501-PM.DWG
LAYOUT NAME - WW-024504-pm
PLOT DATE : 4/28/2025 12:01 PM
PLOT BY : JOE DRISCOLL
PLOT NAME :
PLOT SCALE : 1 IN:40 FT



LEGEND

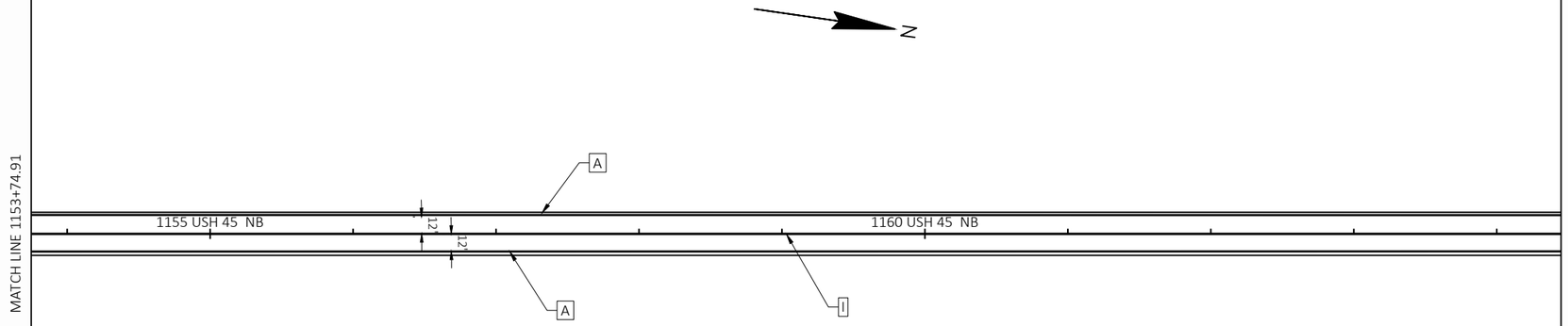
- A MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- B MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
- C MARKING LINE EPOXY 10-INCH (WHITE)
- D MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- E MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) - 2' LINE, 2' GAP
- F MARKING ISLAND NOSE EPOXY (YELLOW)
- G MARKING CURB EPOXY (YELLOW) (5-FT BEYOND PC)
- H MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) 12.5' LINE, 37.5' GAP





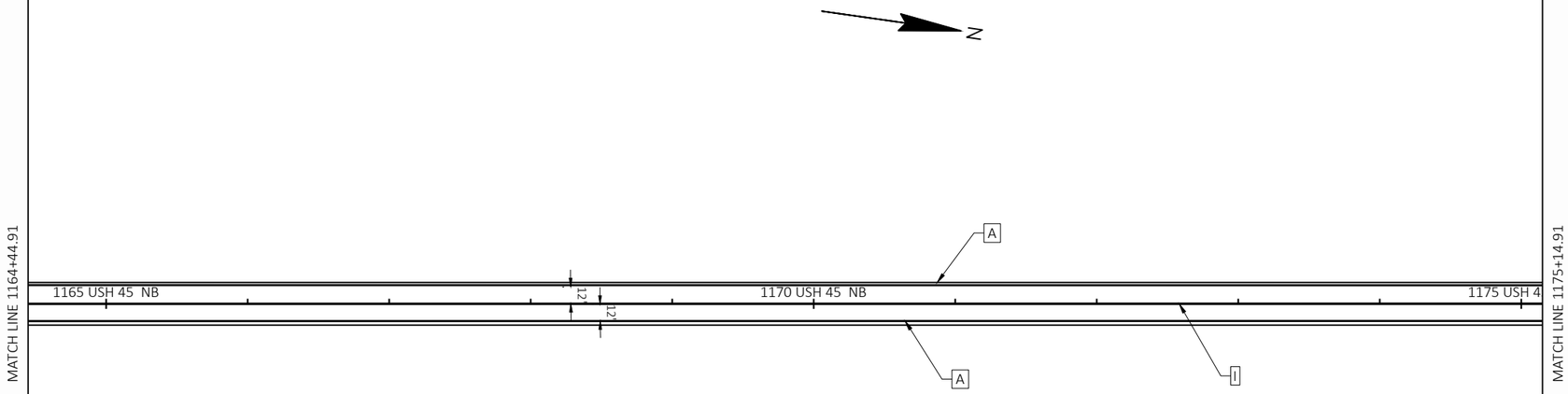
LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



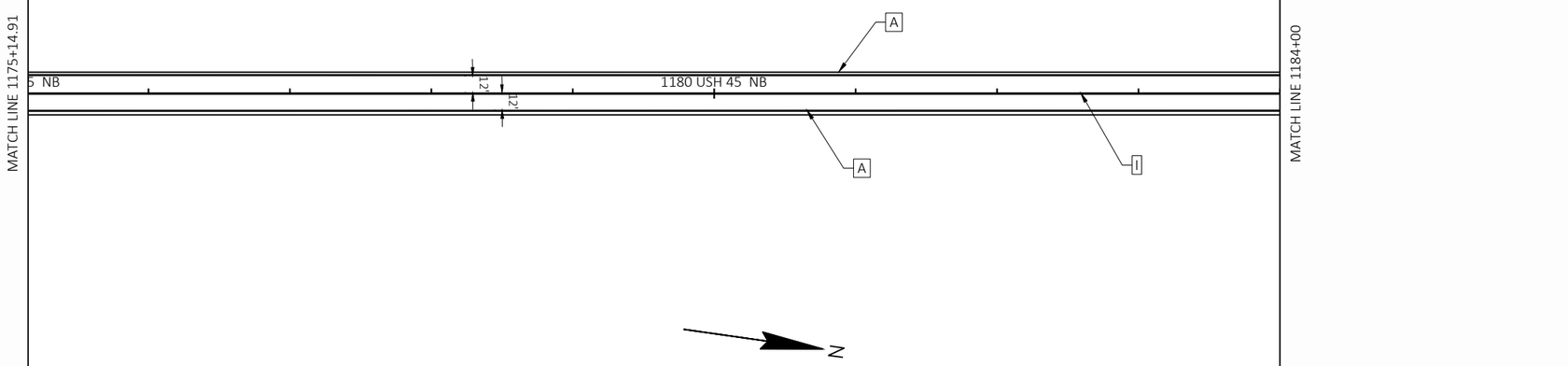
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 96	E

2



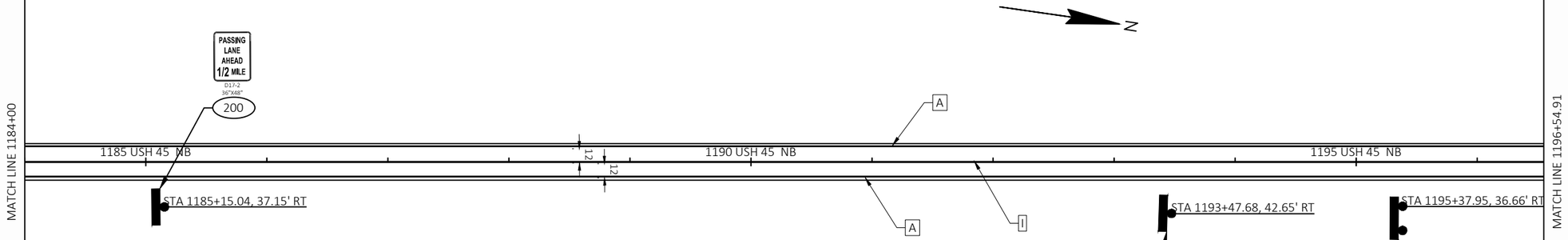
LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



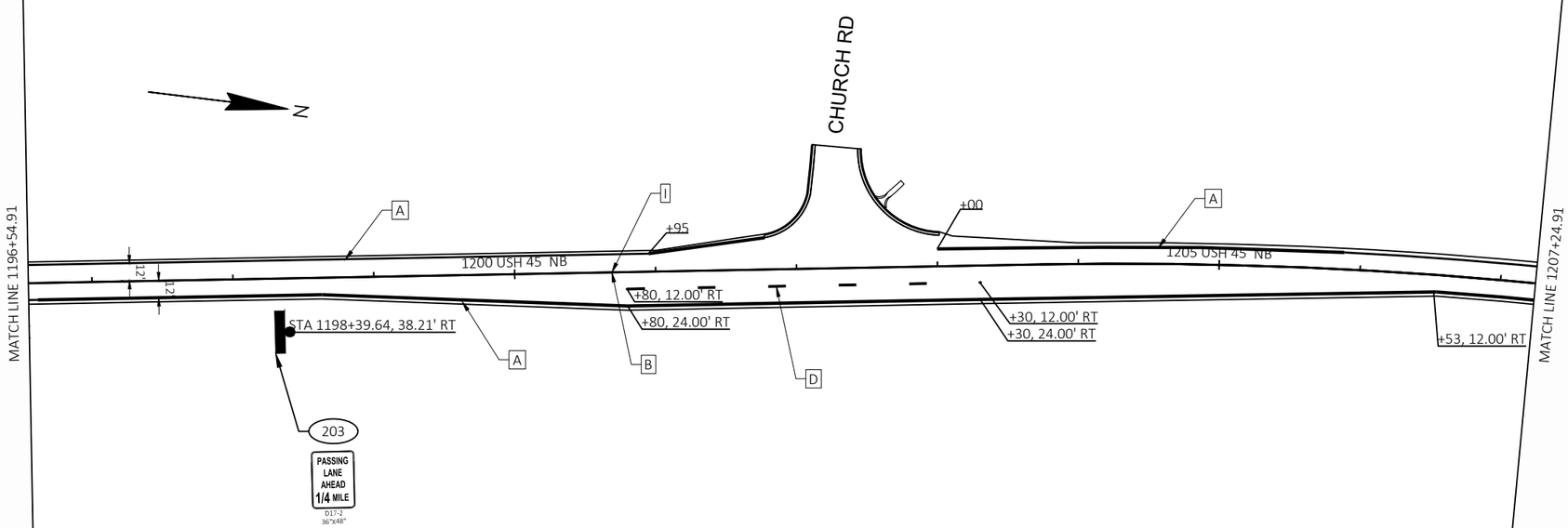
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 97 E

2



LEGEND

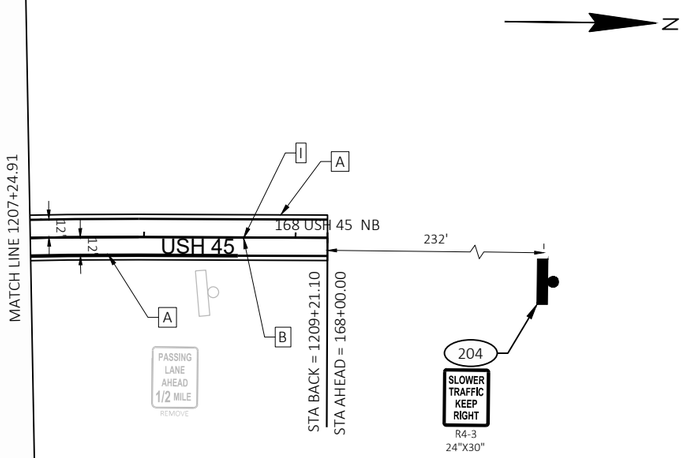
A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING	SHEET 98	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024501-PM.DWG PLOT DATE : 9/25/2025 2:23 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 15
WISDOT/CADDS SHEET 44

2

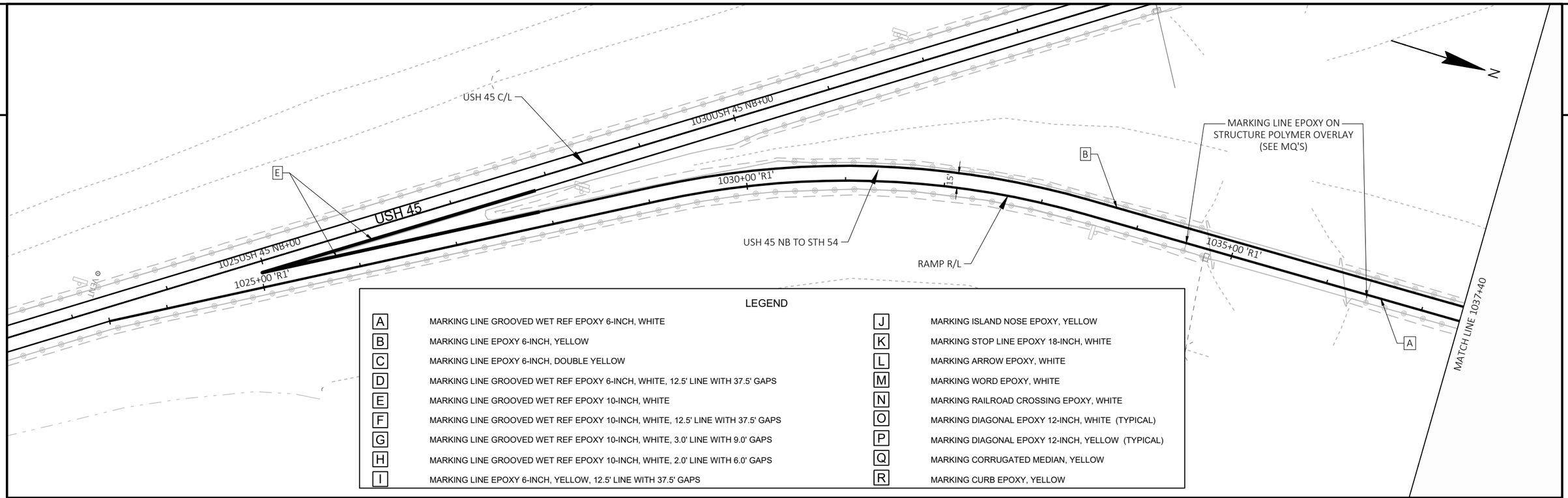


LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE GROOVED WET REF EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN EPOXY, YELLOW
I	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW

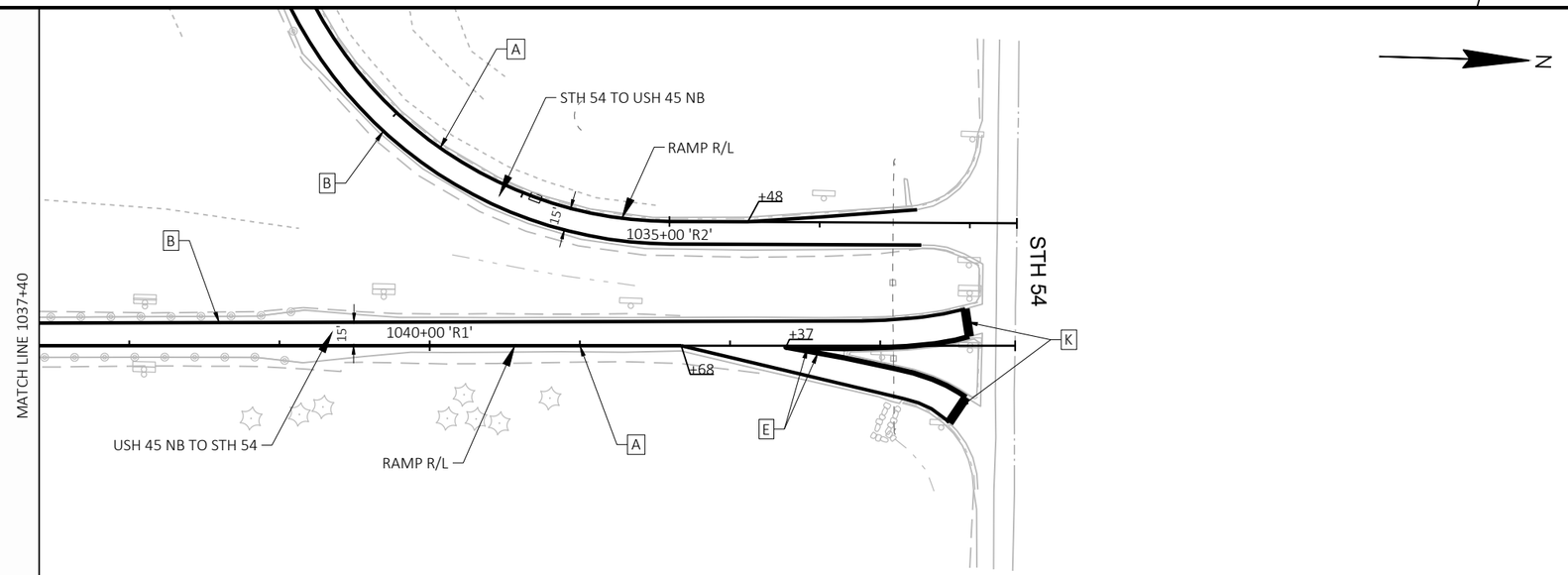
THIS FRAME INTENTIONALLY LEFT BLANK

2



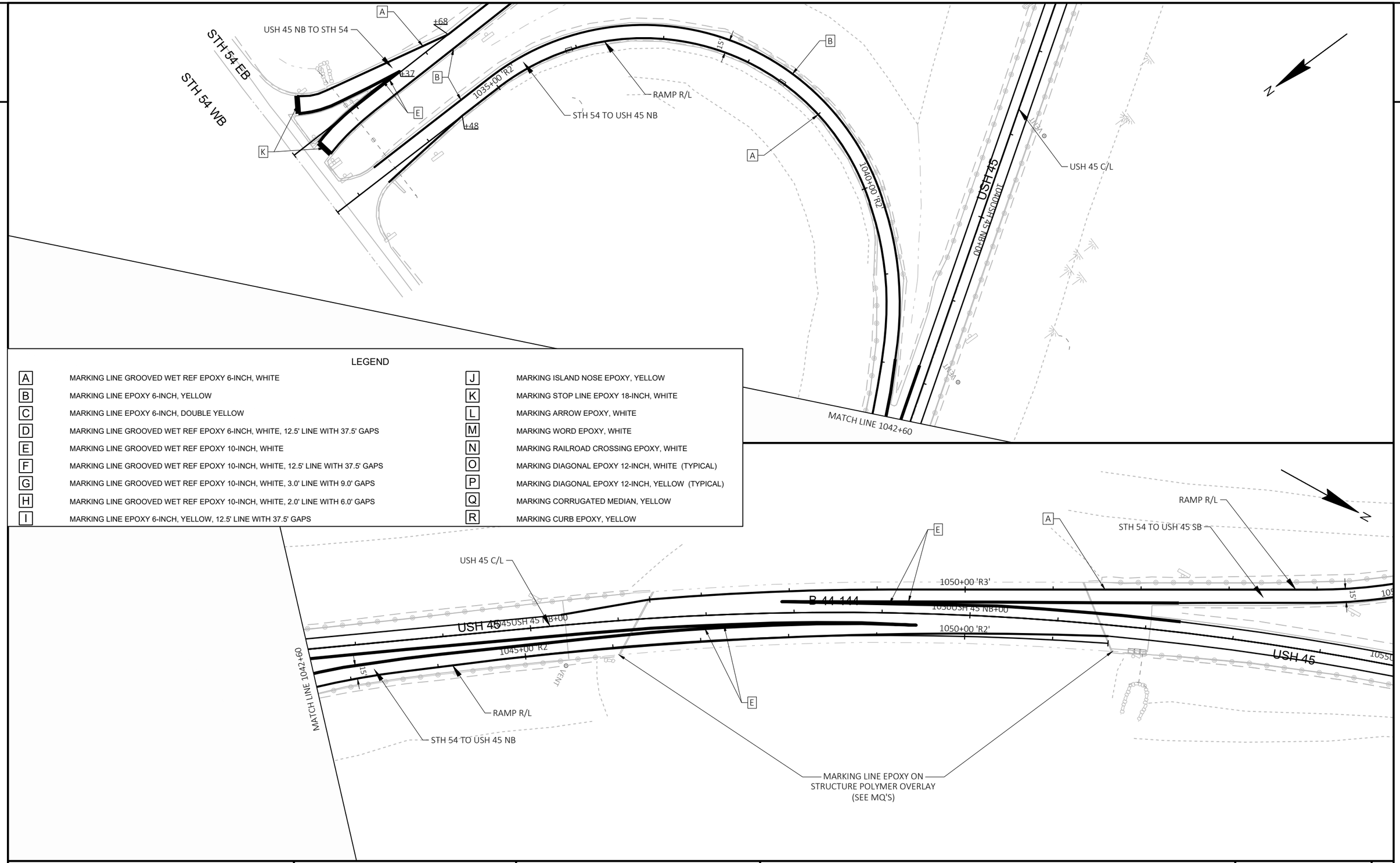
LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN, YELLOW
I	MARKING LINE EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



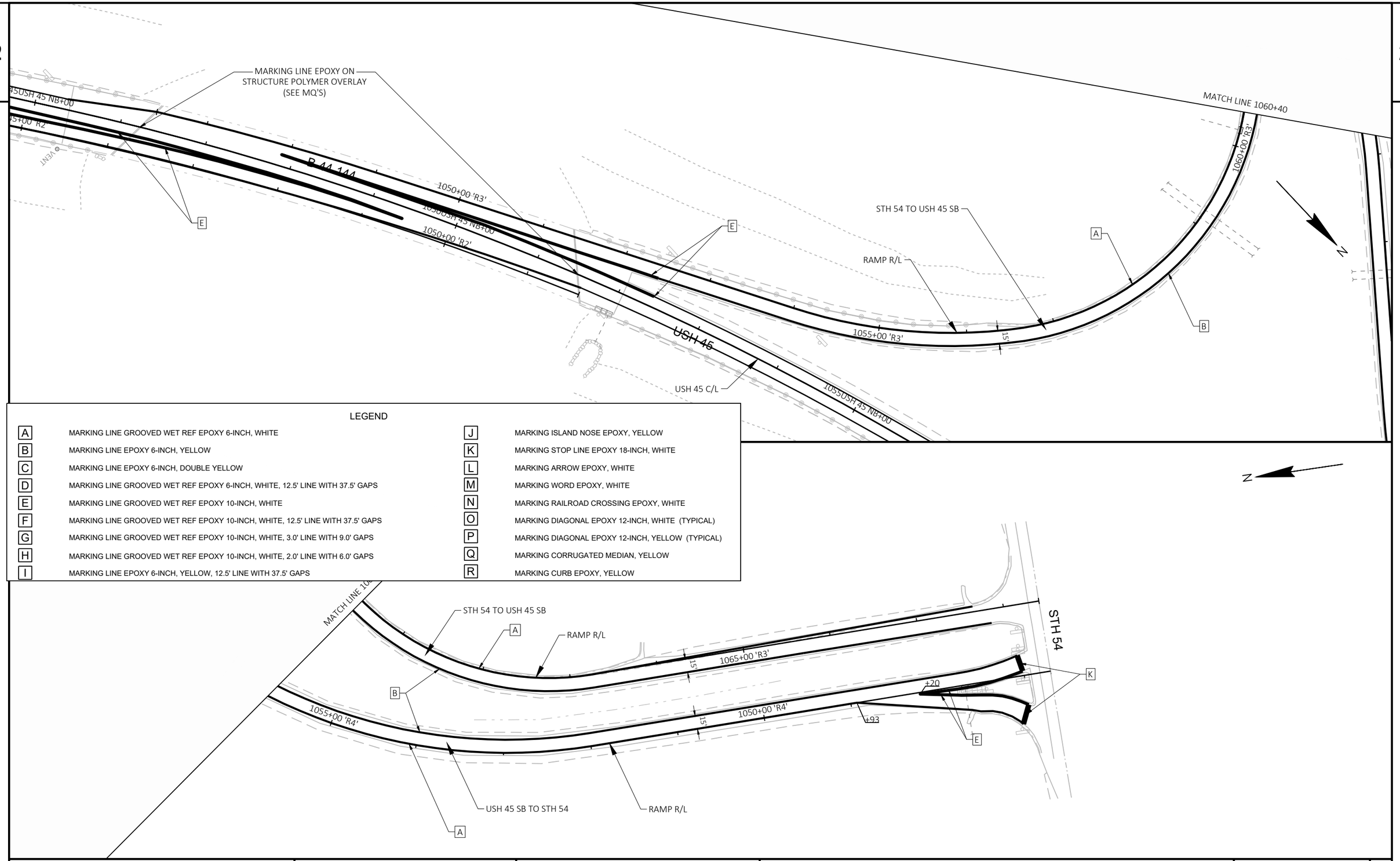
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING DETAILS	SHEET 100	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024502-PM.DWG PLOT DATE : 9/25/2025 2:22 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : ############
LAYOUT NAME - 01
WISDOT/CADDS SHEET 44



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING DETAILS	SHEET 101	E

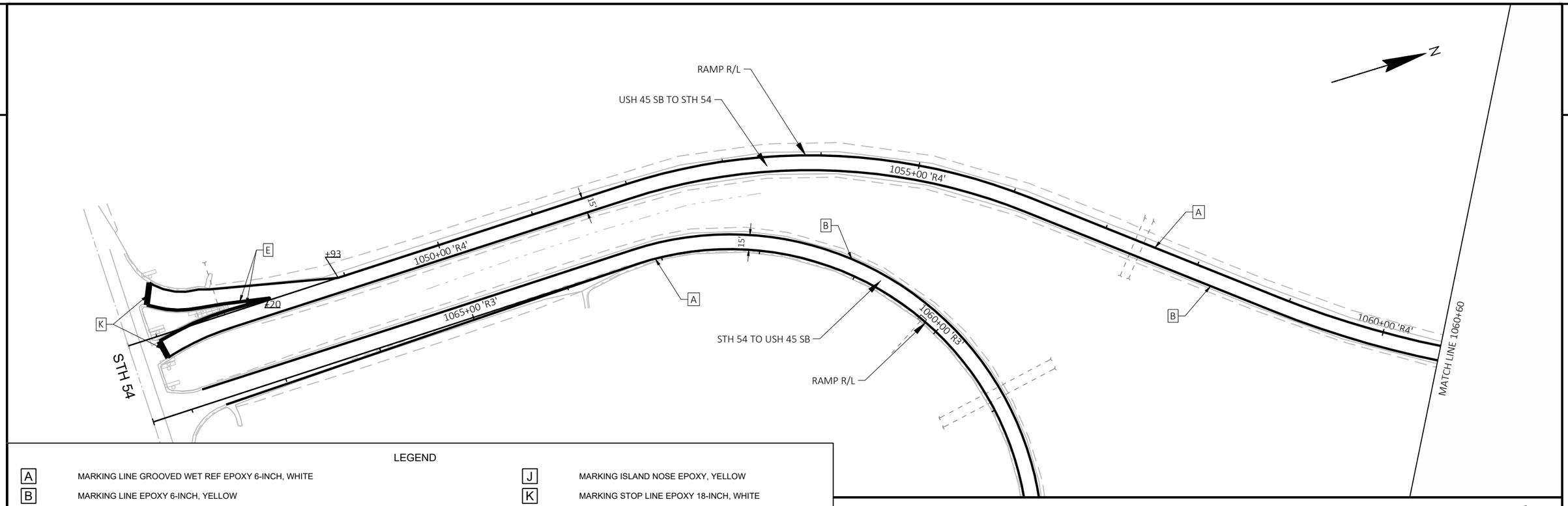
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024502-PM.DWG PLOT DATE : 9/25/2025 2:22 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : ############
LAYOUT NAME - 02
WISDOT/CADDS SHEET 44



LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
H	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 2.0' LINE WITH 6.0' GAPS	Q	MARKING CORRUGATED MEDIAN, YELLOW
I	MARKING LINE EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING DETAILS	SHEET 102	E



LEGEND

A	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE	J	MARKING ISLAND NOSE EPOXY, YELLOW
B	MARKING LINE EPOXY 6-INCH, YELLOW	K	MARKING STOP LINE EPOXY 18-INCH, WHITE
C	MARKING LINE EPOXY 6-INCH, DOUBLE YELLOW	L	MARKING ARROW EPOXY, WHITE
D	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	M	MARKING WORD EPOXY, WHITE
E	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE	N	MARKING RAILROAD CROSSING EPOXY, WHITE
F	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 12.5' LINE WITH 37.5' GAPS	O	MARKING DIAGONAL EPOXY 12-INCH, WHITE (TYPICAL)
G	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE, 3.0' LINE WITH 9.0' GAPS	P	MARKING DIAGONAL EPOXY 12-INCH, YELLOW (TYPICAL)
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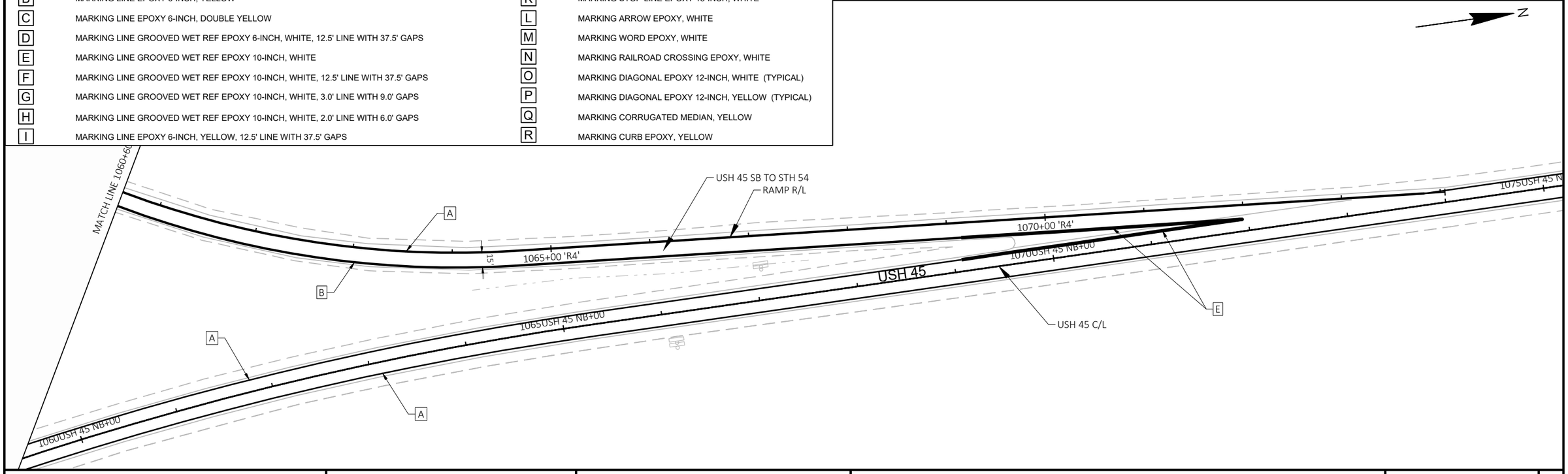
I	MARKING LINE EPOXY 6-INCH, YELLOW, 12.5' LINE WITH 37.5' GAPS	R	MARKING CURB EPOXY, YELLOW



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PAVEMENT MARKING DETAILS	SHEET 103	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\024502-PM.DWG PLOT DATE : 9/25/2025 2:22 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : ############
LAYOUT NAME - 04
WISDOT/CADDS SHEET 44

2

RD

CTH W

MANSKE RD

HUTCHISON RD

BEAN CITY RD

NOTE A

BEGIN PROJECT
STA 802+50
X =627,664.67
Y =336,702.14

3

1

4

5

2

1

USH 45 FROM BEGIN PROJECT TO COUNTY D SOUTH MAY BE CLOSED FOR A MAXIMUM OF 10 DAYS (NOTE C). WHEN NOT IN 10 DAY CLOSURE, SHIFT CLOSURE NORTH TO ALLOW ACCESS TO COUNTY D SOUTH (NOTE D).

LEDGE HILL RD

WINCHESTER RD

GIVENS RD

CROSS RD

MULROY RD

WYMAN ST

STH 15

RIVER RD

WOLF RIVER

CTH T

CTH D

6

NOTE D

6

STH 15 CROSSING USH 45 MAY BE CLOSED FOR A MAXIMUM OF 5 DAYS (NOTE A). MAINTAIN TRAFFIC TO CTH D (SOUTH) ON USH 45 WHEN STH 15 CROSSING USH 45 IS CLOSED. MAINTAIN TRAFFIC ON STH 15 CROSSING USH 45 WHEN CTH D (SOUTH) IS CLOSED. SEE TRAFFIC CONTROL DETOUR FOR ADDITIONAL DETAILS ON STH 15 CLOSURE.

SEE PROJECT 6220-04-76 STH 54, FOR RAMP TERMINAL CLOSURE DETAILS

NOTE B

LIBERTY HALL RD

ALLCAN RD

CTH 5

USH 54

USH 45

NOTE C

NOTE C

1

3

3

1

ABARRASS RIVER

SPURR RD

SPURR RD

HINTZKE RD

PRIBBERNOW RD

FUERST RD

HINTZ RD

RIVER RD

CTH W

CTH D

CTH D

EVERTS RD

N

MADDEN LN

MADDEN LN

MADDEN LN

CTH T

OPEN SPURR ROAD AND CHURCH ROAD TO TRAFFIC WHEN COUNTY D IS CLOSED FOR ROUNDABOUT CONSTRUCTION

BUELOW RD

NOTE C

1

2

3

4

5

FAIRWAY DR

CHURCH RD

NOTE A

END PROJECT
STA1209+21 BK STA 169+00 AHD
X =626,563.51
Y =374,269.59

CTH D

2

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

LEGEND

\# TC SIGN NUMBER

POST MOUNTED SIGN

WORK AREA

TYPE III BARRICADE

1 ROAD CLOSED AHEAD W20-3A

2 ROAD CLOSED 1000 FT W20-3C

3 ROAD CLOSED 500 FT W20-3D

4 ROAD WORK NEXT 8 MILES
G20-1
60"X24"

5 HWY 45 ROAD CLOSED BEGINS XXX-XX
G20-57C
72"X36"

FOLLOW DETOUR
(5) USE ONLY ONCE WHEN ROAD IS CLOSED
45
M1-4
24"X24"

6 ROAD WORK AHEAD W20-1A

GENERAL NOTES:

PLACE PCMS SEVEN DAYS PRIOR TO CLOSING US 45 FROM SOUTH LIMITS TO COUNTY D SOUTH

PCMS 7 DAYS PRIOR TO CLOSURE	
COUNTY D ACCESS TO CLOSE	XX/XX TO XX/XX

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION" ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON FIELD CONDITIONS AND THE CONTRACTOR'S METHODS OF OPERATION.

MAP SHOWN IS NOT TO SCALE.

ALL TRAFFIC CONTROL SIGNS ARE 48" X 48" UNLESS OTHERWISE STATED

PLACE SIGN G20-57C SEVEN DAYS PRIOR TO CONSTRUCTION, REMOVE AT THE START OF CONSTRUCTION.

NOTE A SEE SDD BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION DETAIL C

NOTE B SEE SDD BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP LANE CLOSURE

NOTE C SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1

NOTE D SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 2

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL	SHEET 104	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\025001-TC.DWG PLOT DATE : 9/16/2025 3:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:0.5 MI
LAYOUT NAME - 01
WISDOT/CADDS SHEET 42

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

LEGEND

\# TC SIGN NUMBER

POST MOUNTED SIGN

WORK AREA

TYPE III BARRICADE

1 ROAD CLOSED AHEAD W20-3A

2 ROAD CLOSED 1000 FT W20-3C

3 ROAD CLOSED 500 FT W20-3D

4 ROAD WORK NEXT 8 MILES G20-1 60"X24"

5 HWY 45 ROAD CLOSED BEGINS XXX-XX G20-57C 72"X36"

FOLLOW DETOUR (5) USE ONLY ONCE WHEN ROAD IS CLOSED

45 M1-4 24"X24"

6 ROAD WORK AHEAD W20-1A

GENERAL NOTES:

PLACE PCMS SEVEN DAYS PRIOR TO CLOSING US 45 FROM SOUTH LIMITS TO COUNTY D SOUTH

PCMS 7 DAYS PRIOR TO CLOSURE	
COUNTY D ACCESS TO CLOSE	XX/XX TO XX/XX

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION" ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON FIELD CONDITIONS AND THE CONTRACTOR'S METHODS OF OPERATION.

MAP SHOWN IS NOT TO SCALE.

ALL TRAFFIC CONTROL SIGNS ARE 48" X 48" UNLESS OTHERWISE STATED

PLACE SIGN G20-57C SEVEN DAYS PRIOR TO CONSTRUCTION, REMOVE AT THE START OF CONSTRUCTION.

NOTE A SEE SDD BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION DETAIL C

NOTE B SEE SDD BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP LANE CLOSURE

NOTE C SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 1

NOTE D SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES DETAIL 2

BEGIN PROJECT
STA 802+50
X =627,664.67
Y =336,702.14

NOTE A

USH 45 FROM BEGIN PROJECT TO COUNTY D SOUTH MAY BE CLOSED FOR A MAXIMUM OF 10 DAYS (NOTE C). WHEN NOT IN 10 DAY CLOSURE, SHIFT CLOSURE NORTH TO ALLOW ACCESS TO COUNTY D SOUTH (NOTE D).

SEE PROJECT 6220-04-76 STH 54, FOR RAMP TERMINAL CLOSURE DETAILS

NOTE A

NOTE B

NOTE C

NOTE C

NOTE A

STH 15 CROSSING USH 45 MAY BE CLOSED FOR A MAXIMUM OF 5 DAYS (NOTE A). MAINTAIN TRAFFIC TO CTH D (SOUTH) ON USH 45 WHEN STH 15 CROSSING USH 15 IS CLOSED. MAINTAIN TRAFFIC ON STH 15 CROSSING USH 45 WHEN CTH D (SOUTH) IS CLOSED. SEE TRAFFIC CONTROL DETOUR FOR ADDITIONAL DETAILS ON STH 15 CLOSURE.

OPEN SPURR ROAD AND CHURCH ROAD TO TRAFFIC WHEN COUNTY D IS CLOSED FOR ROUNDABOUT CONSTRUCTION

END PROJECT
STA1209+21 BK STA 169+00 AHD
X =626,563.51
Y =374,269.59

EVERTS RD
MADDEN LN
CTH T
BUELOW RD
FAIRWAY DR
CHURCH RD
CTH D
WYMAN ST
MULROY RD
GIVENS RD
CROSS RD
STH 15
CTH T
CTH D
USH 45
ABARRASS RIVER
SPURR RD
HINTZKE RD
LEDGE HILL RD
WOLF RIVER
RIVER RD
ALLCAN RD
LIBERTY HALL RD
CTH 5
USH 54
CTH W
PRIBBERNOW RD
FUERST RD
HINTZ RD
WINCHESTER RD
HUTCHISON RD
MANSKE RD
BEAN CITY RD
CTH W

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL	SHEET 105	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\025001-TC.DWG PLOT DATE : 9/16/2025 3:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:0.5 MI
LAYOUT NAME - 02

WISDOT/CADDS SHEET 42

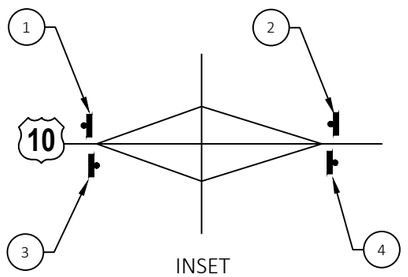
2

LEGEND

DETOUR ROUTE

NO DETOUR ROUTE

WORKZONE AREA



INSET

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
3. TYPICAL REASSURANCE SIGNS ARE TO BE INSTALLED EVERY 4 MILES MINIMUM
4. 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
5. THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE
6. "WO" SIGNS ARE THE SAME AS "W" AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE
7. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK BLACK PANEL UNLESS OTHERWISE NOTED

DETAIL D

DETAIL C

SEE INSET

DETAIL F

DETAIL E

DETAIL A

DETAIL G

DETAIL B

DETOUR END

PROJECT END

PROJECT START

DETOUR START

STH 15 CROSSING USH 45 MAY BE CLOSED FOR A MAXIMUM OF 5 DAYS. OTHERWISE MAINTAIN TRAFFIC ACCESS THROUGH STH 15

STH 15 PLAQUE SHALL BE PLACED FOR THE STH 15 CROSSING USH 45 CLOSURE AND REMOVED WHEN THE INTERSECTION IS OPENED.

SHALL BE PLACED FOR INITIAL ROAD CLOSURE AND REMOVED WHEN ROAD IS OPENED TO THROUGH TRAFFIC

15 45

ROAD CLOSED TO THRU TRAFFIC 11 MILES AHEAD

R11-3 60"X30"

SHALL BE PLACED FOR INITIAL ROAD CLOSURE AND REMOVED WHEN ROAD IS OPENED TO THROUGH TRAFFIC

15 45

ROAD CLOSED TO THRU TRAFFIC 14 1/2 MILES AHEAD

R11-3 60"X30"

STH 15 PLAQUE SHALL BE PLACED FOR THE STH 15 CROSSING USH 45 CLOSURE AND REMOVED WHEN THE INTERSECTION IS OPENED.

WAUPACA COUNTY

WAUSHARA COUNTY

OUTAGAMIE COUNTY

WINNEBAGO COUNTY

1 DETOUR NORTH 45 — M3-1 36"X18" — M1-4 36"X36"

2 DETOUR NORTH 45 — M3-1 36"X18" — M1-4 36"X36" — MO6-1 30"X30"

3 DETOUR SOUTH 45 — M3-3 36"X18" — M1-4 36"X36" — MO6-1 30"X30"

4 DETOUR SOUTH 45 — M3-3 36"X18" — M1-4 36"X36"

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 106	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027001-DT.DWG PLOT DATE : 7/24/2025 4:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:2.5 MI
LAYOUT NAME - 01
WISDOT/CADDS SHEET 42

LEGEND

- DETOUR ROUTE
- EXISTING SIGN ON POST(S)
- PROPOSED SIGN ON POST(S)
- EXISTING SIGN
- PROPOSED SIGN
- COVER SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN

SIGN INVENTORY

45	M1-4 24"X24"		MO5-1L 21"X21"		MO5-1R 21"X21"
NORTH	M3-1 24"X12"		MO6-1 21"X21"		MO6-1 21"X21"
SOUTH	M3-3 24"X12"		MO5-2R 21"X21"		MO6-2 21"X21"
DETOUR	M4-8 24"X12"		MO6-2 21"X21"		MO5-2L 21"X21"
END DETOUR	M4-8A 24"X18"		MO6-1 21"X21"		

DETOUR AHEAD W20-2A 48"X48"

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS

WORKZONE 1 MILE

R11-3 60" X 30" ROAD CLOSED TO THRU TRAFFIC 1 MILES AHEAD
TYPE III BARRICADE

R11-3 60" X 30" ROAD CLOSED TO THRU TRAFFIC 5 MILES AHEAD
TYPE III BARRICADE

DETOUR NORTH 45

DETOUR NORTH 45 ←

DETOUR NORTH 45 ↰

NORTH 45 DETOUR AHEAD W20-2A

Appleton
New London
Oshkosh

Fremont
Oshkosh
New London

New London
Fremont
Appleton

NORTH 45 DETOUR AHEAD W20-2A

SOUTH 45 WEST 96 NORTH 45

NORTH 45 EAST 96 SOUTH 45

NORTH 45 WEST 96 EAST 96

45 96

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
3. TYPICAL REASSURANCE SIGNS ARE TO BE INSTALLED EVERY 4 MILES MINIMUM
4. 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
5. THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE
6. "WO" SIGNS ARE THE SAME AS "W" AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE
7. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK BLACK PANEL UNLESS OTHERWISE NOTED

DETAIL A

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 107	E

LEGEND

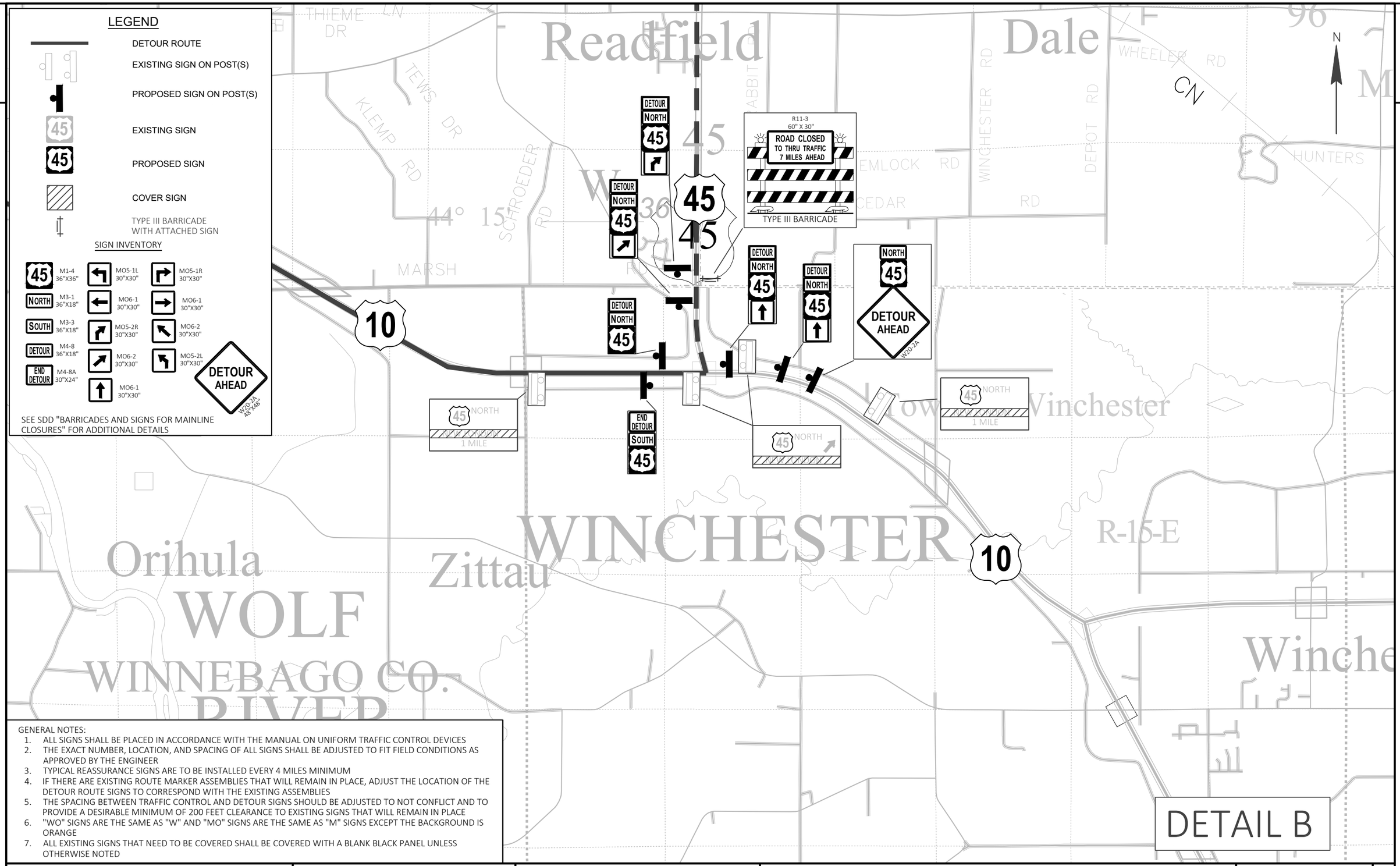
- DETOUR ROUTE
- EXISTING SIGN ON POST(S)
- PROPOSED SIGN ON POST(S)
- EXISTING SIGN
- PROPOSED SIGN
- COVER SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN

SIGN INVENTORY

45 M1-4 36"X36"	MO5-1L 30"X30"	MO5-1R 30"X30"	
NORTH M3-1 36"X18"	MO6-1 30"X30"	MO6-1 30"X30"	
SOUTH M3-3 36"X18"	MO5-2R 30"X30"	MO6-2 30"X30"	
DETOUR M4-8 36"X18"	MO6-2 30"X30"	MO5-2L 30"X30"	
END DETOUR M4-8A 30"X24"	MO6-1 30"X30"		

DETOUR AHEAD W20-2A 48"X48"

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS



DETAIL B

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
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7. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK BLACK PANEL UNLESS OTHERWISE NOTED

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 108	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027001-DT.DWG PLOT DATE : 7/24/2025 4:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : Custom
LAYOUT NAME - 03
WISDOT/CADDS SHEET 42

2

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
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7. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK BLACK PANEL UNLESS OTHERWISE NOTED

22

10

DETOUR SOUTH 45 — WEST 10 — NORTH 49

DETOUR NORTH 45 — NORTH 22 — EAST 54 — NORTH COUNTY K

DETOUR NORTH 45

DETOUR SOUTH 45 — WEST 10 — NORTH 49

NORTH 22 — EAST 54 — NORTH COUNTY K

DETOUR NORTH 45

500'

DETOUR NORTH 45 — M3-1 36"X18" — M1-4 36"X36" — MO6-2 30"X30"

DETOUR NORTH 45 — M3-1 36"X18" — M1-4 36"X36" — MO5-2R 30"X30"

DETOUR SOUTH 45 — M3-3 36"X18" — M1-4 36"X36"

N

10

DETOUR SOUTH 45

EAST 10 — SOUTH 49

DETOUR SOUTH 45

EAST 10 — SOUTH 49

DETAIL C

LEGEND

- DETOUR ROUTE
- EXISTING SIGN ON POST(S)
- PROPOSED SIGN ON POST(S)
- EXISTING SIGN
- PROPOSED SIGN
- COVER SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN

SIGN INVENTORY

45	M1-4 24"X24"		MO5-1L 21"X21"		MO5-1R 21"X21"
NORTH	M3-1 24"X12"		MO6-1 21"X21"		MO6-1 21"X21"
SOUTH	M3-3 24"X12"		MO5-2R 21"X21"		MO6-2 21"X21"
DETOUR	M4-8 24"X12"		MO6-2 21"X21"		MO5-2L 21"X21"
END DETOUR	M4-8A 24"X18"		MO6-1 21"X21"		W20-2A 48"X48" DETOUR AHEAD

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 109	E

2

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
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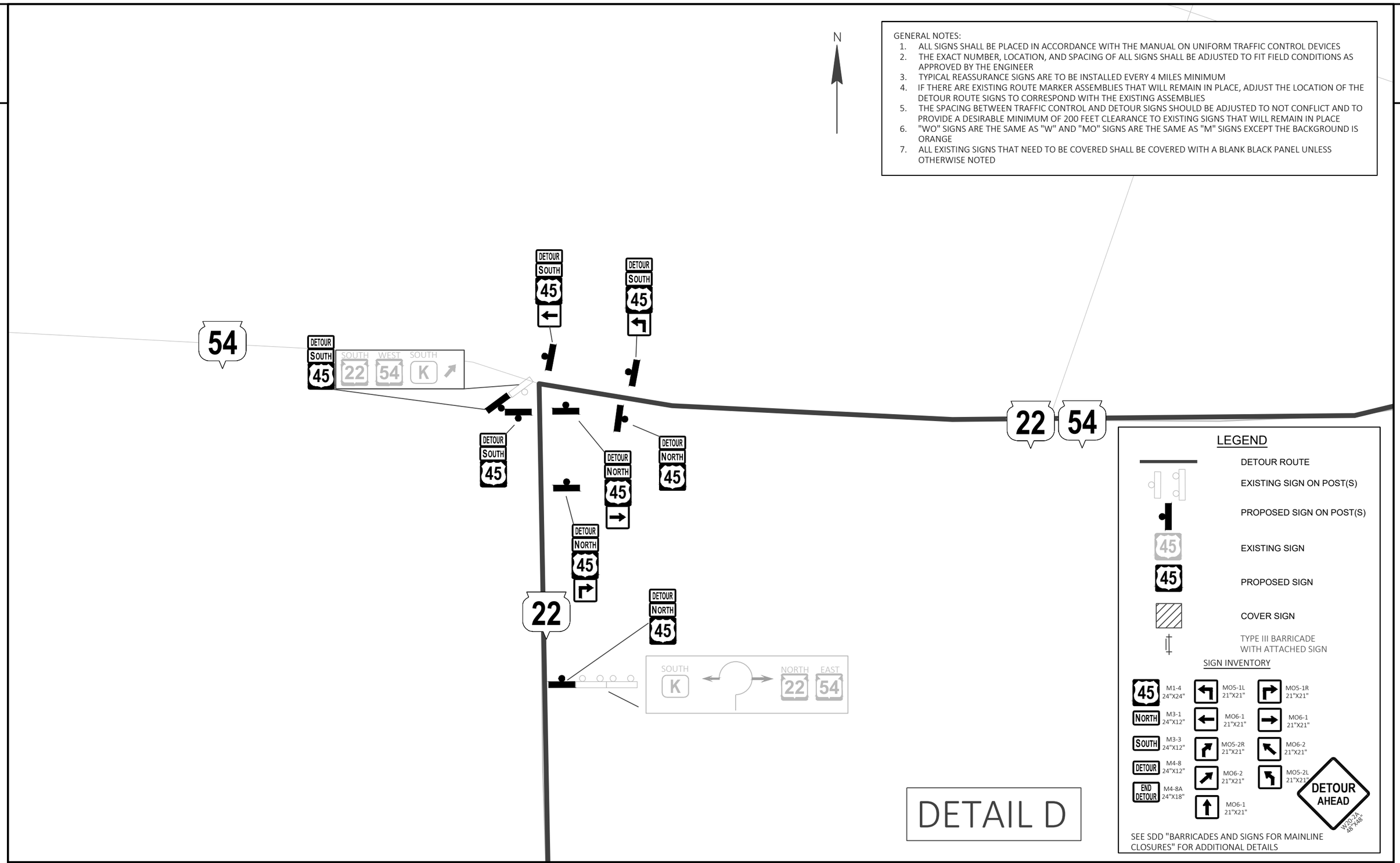
7. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK BLACK PANEL UNLESS OTHERWISE NOTED



LEGEND

- DETOUR ROUTE
- EXISTING SIGN ON POST(S)
- PROPOSED SIGN ON POST(S)
- 45 EXISTING SIGN
- 45 PROPOSED SIGN
- COVER SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN

SIGN INVENTORY

45	M1-4 24"X24"		MO5-1L 21"X21"		MO5-1R 21"X21"
NORTH	M3-1 24"X12"		MO6-1 21"X21"		MO6-1 21"X21"
SOUTH	M3-3 24"X12"		MO5-2R 21"X21"		MO6-2 21"X21"
DETOUR	M4-8 24"X12"		MO6-2 21"X21"		MO5-2L 21"X21"
END DETOUR	M4-8A 24"X18"		MO6-1 21"X21"		

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS

DETAIL D

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 110	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027001-DT.DWG PLOT DATE : 7/24/2025 4:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : Custom
LAYOUT NAME - 05
WISDOT/CADDS SHEET 42

2

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
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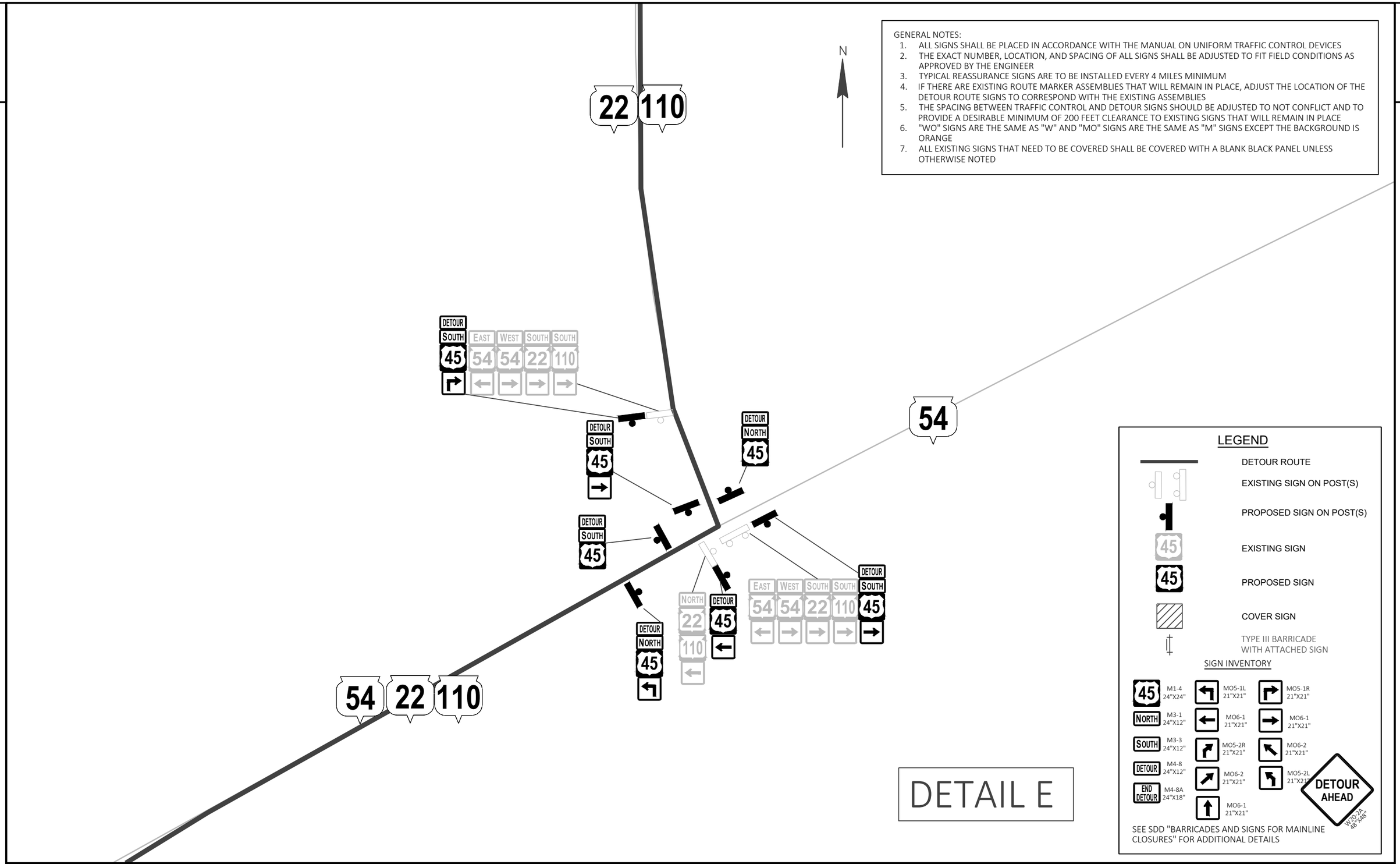

DETAIL E

LEGEND

- DETOUR ROUTE
- EXISTING SIGN ON POST(S)
- PROPOSED SIGN ON POST(S)
- EXISTING SIGN
- PROPOSED SIGN
- COVER SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN

SIGN INVENTORY

M1-4 24"X24"	MO5-1L 21"X21"	MO5-1R 21"X21"	
M3-1 24"X12"	MO6-1 21"X21"	MO6-1 21"X21"	
M3-3 24"X12"	MO5-2R 21"X21"	MO6-2 21"X21"	
M4-8 24"X12"	MO6-2 21"X21"	MO5-2L 21"X21"	
M4-8A 24"X18"	MO6-1 21"X21"		

DETOUR AHEAD W20-2A 48"X48"

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 111	E

2

2

N

GENERAL NOTES:
1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
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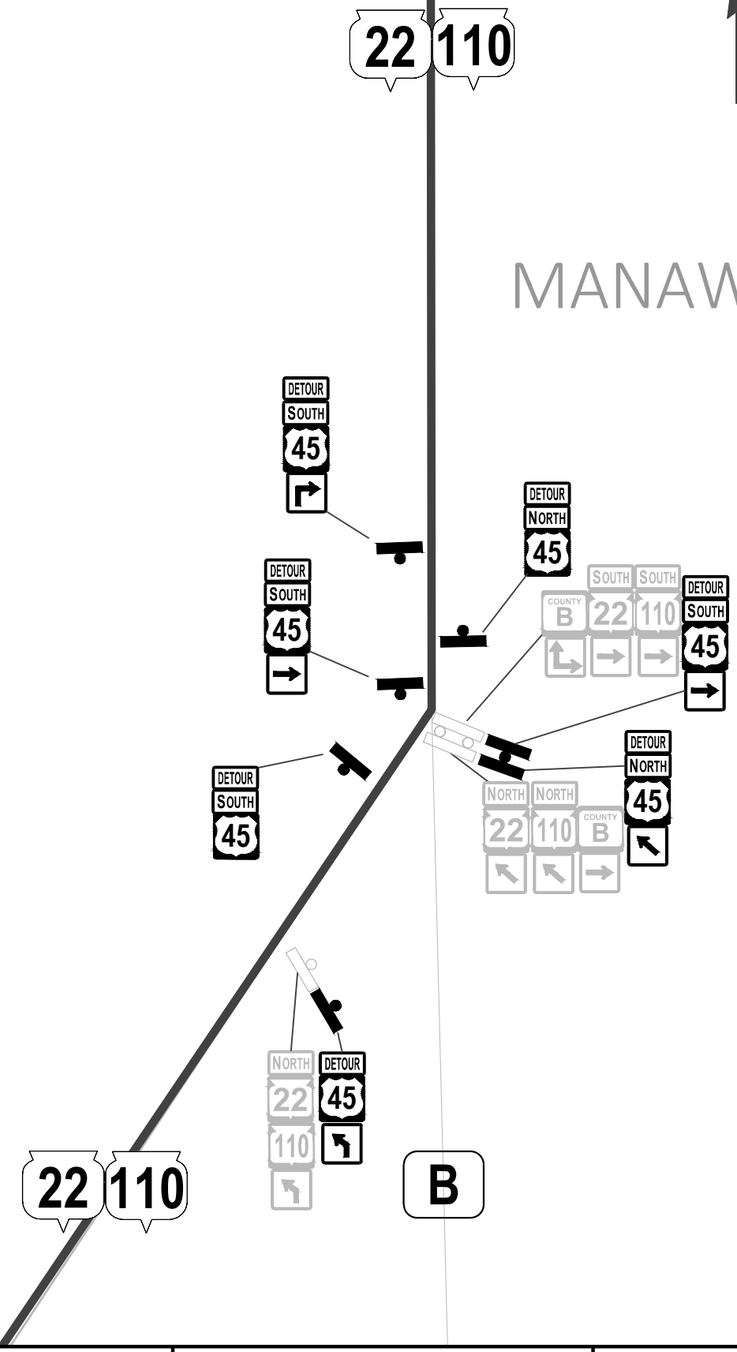

DETAIL F

LEGEND

- DETOUR ROUTE
- EXISTING SIGN ON POST(S)
- PROPOSED SIGN ON POST(S)
- EXISTING SIGN
- PROPOSED SIGN
- COVER SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN

SIGN INVENTORY

45	M1-4 24"X24"		MO5-1L 21"X21"		MO5-1R 21"X21"
NORTH	M3-1 24"X12"		MO6-1 21"X21"		MO6-1 21"X21"
SOUTH	M3-3 24"X12"		MO5-2R 21"X21"		MO6-2 21"X21"
DETOUR	M4-8 24"X12"		MO6-2 21"X21"		MO5-2L 21"X21"
END DETOUR	M4-8A 24"X18"		MO6-1 21"X21"		

DETOUR AHEAD W20-2A 48"X48"

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 112	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027001-DT.DWG PLOT DATE : 7/24/2025 4:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : Custom
LAYOUT NAME - 07
WISDOT/CADDS SHEET 42

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
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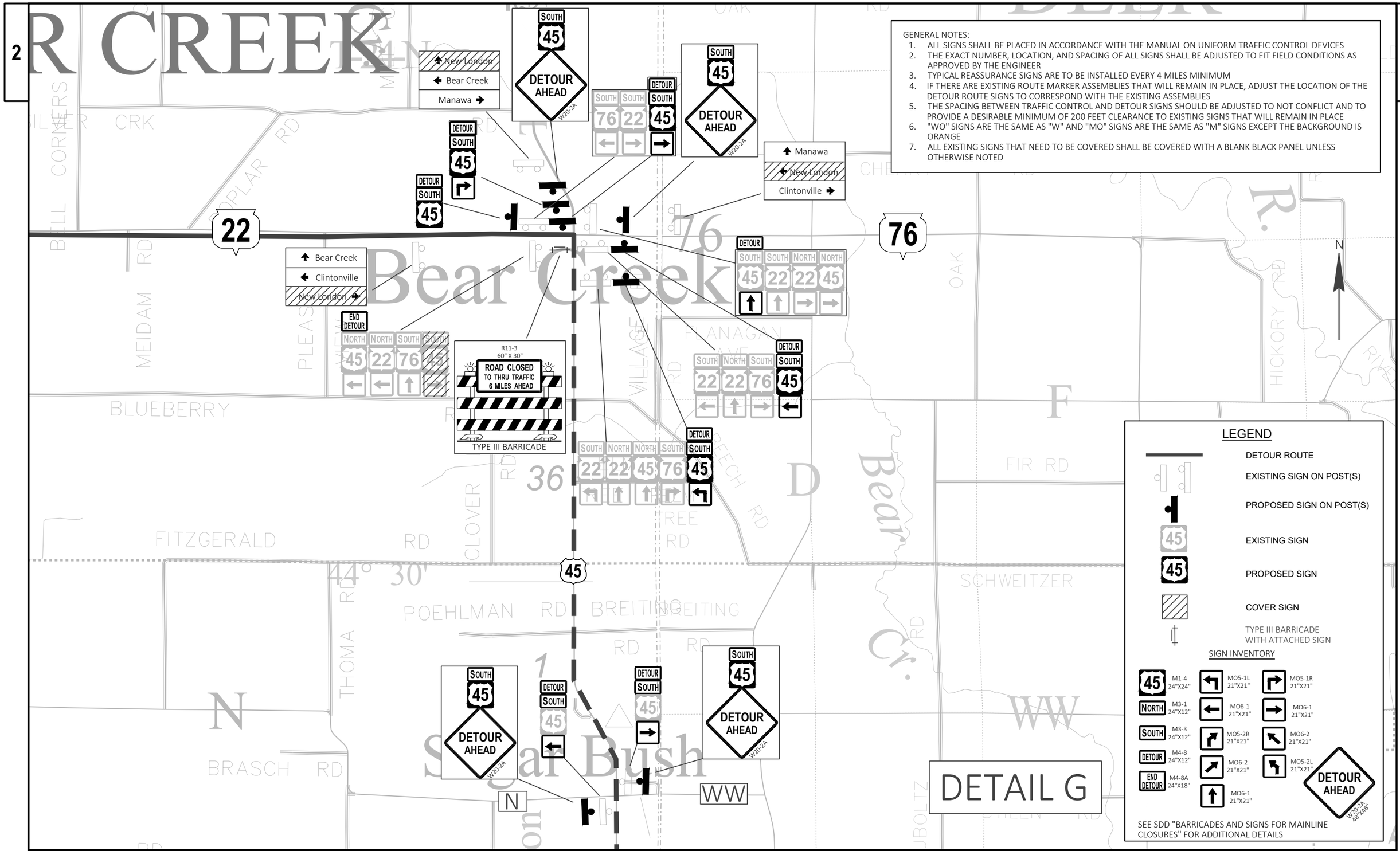

DETAIL G

LEGEND

- DETOUR ROUTE
- EXISTING SIGN ON POST(S)
- PROPOSED SIGN ON POST(S)
- 45 EXISTING SIGN
- 45 PROPOSED SIGN
- COVER SIGN
- TYPE III BARRICADE WITH ATTACHED SIGN

SIGN INVENTORY

45	M1-4 24"X24"		MO5-1L 21"X21"		MO5-1R 21"X21"
NORTH	M3-1 24"X12"		MO6-1 21"X21"		MO6-1 21"X21"
SOUTH	M3-3 24"X12"		MO5-2R 21"X21"		MO6-2 21"X21"
DETOUR	M4-8 24"X12"		MO6-2 21"X21"		MO5-2L 21"X21"
END DETOUR	M4-8A 24"X18"		MO6-1 21"X21"	DETOUR AHEAD	W20-2A 48"X48"

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 113	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027001-DT.DWG PLOT DATE : 7/24/2025 4:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : Custom
LAYOUT NAME - 08
WISDOT/CADDS SHEET 42

SHALL BE PLACED FOR INITIAL ROAD CLOSURE AND REMOVED WHEN ROAD IS OPENED TO THROUGH TRAFFIC

45

ROAD CLOSED
TO THRU TRAFFIC
36 1/2 MILES AHEAD

R11-3
60"X30"

SHALL BE PLACED FOR INITIAL ROAD CLOSURE AND REMOVED WHEN ROAD IS OPENED TO THROUGH TRAFFIC

45

ROAD CLOSED
TO THRU TRAFFIC
12 MILES AHEAD

R11-3
60"X30"

GENERAL NOTES:

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
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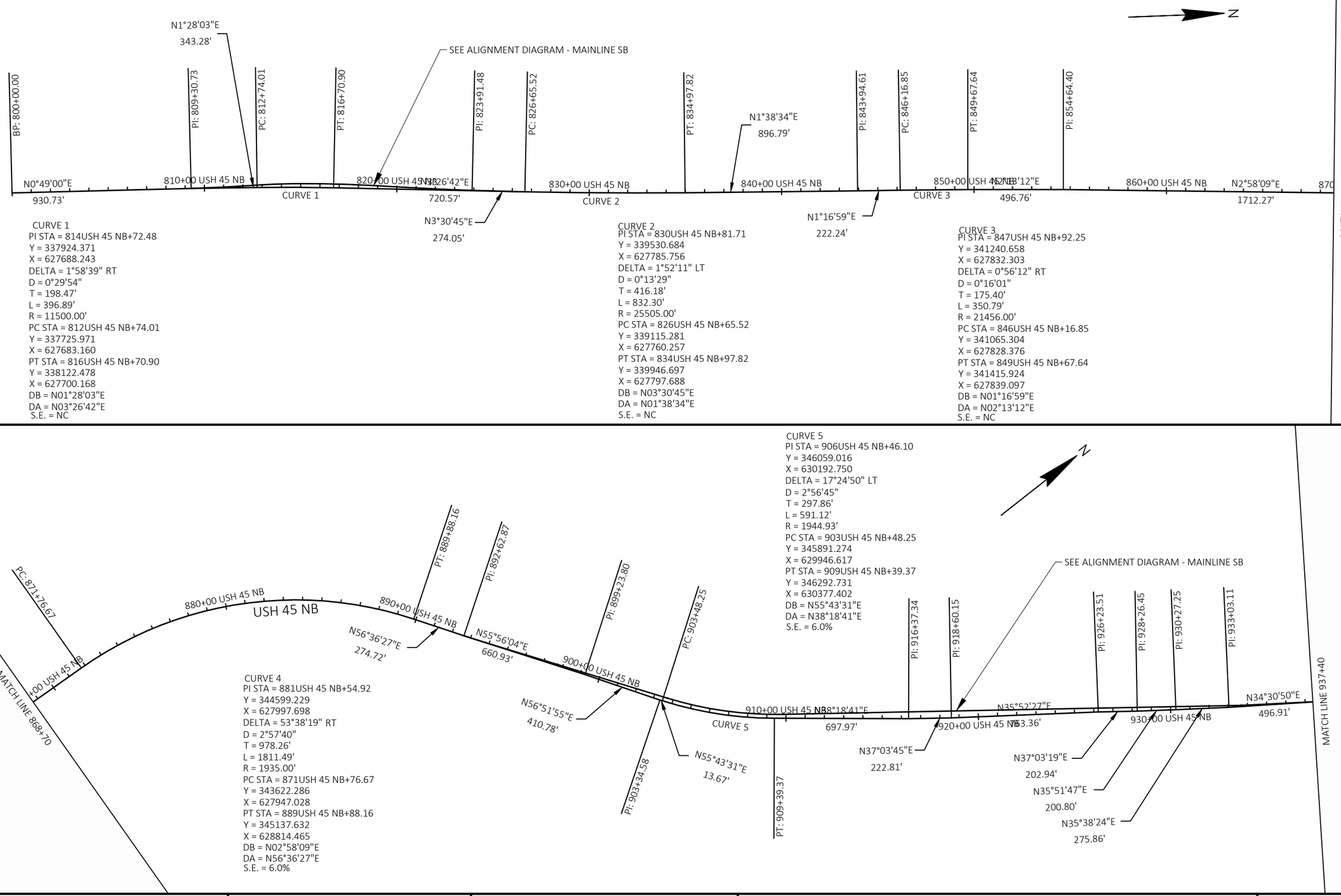
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	TRAFFIC CONTROL DETOUR	SHEET 114 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027001-DT.DWG PLOT DATE : 7/24/2025 4:44 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : Custom
LAYOUT NAME - 09
WISDOT/CADDS SHEET 42

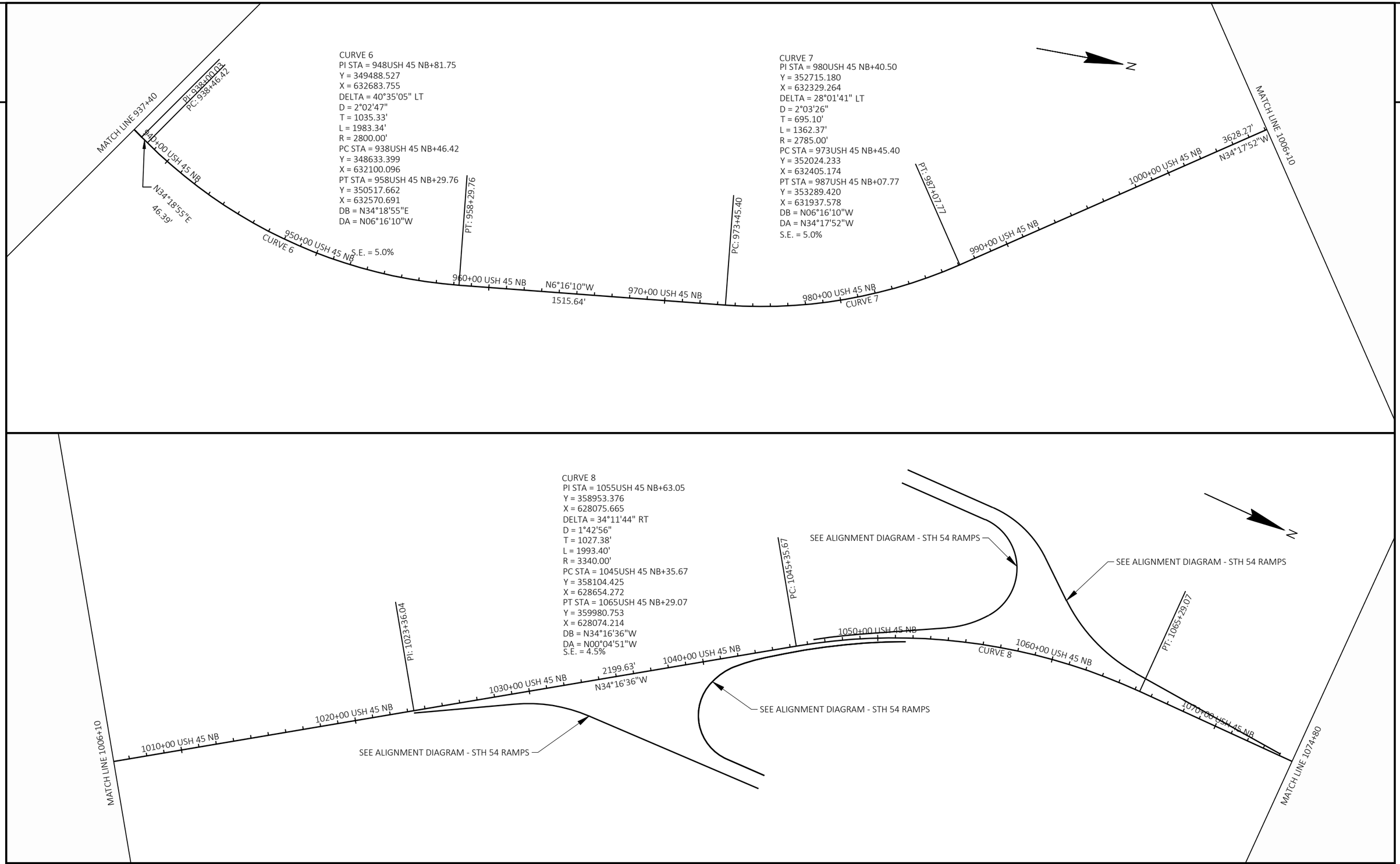
2



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - MAINLINE NB	SHEET 115	E

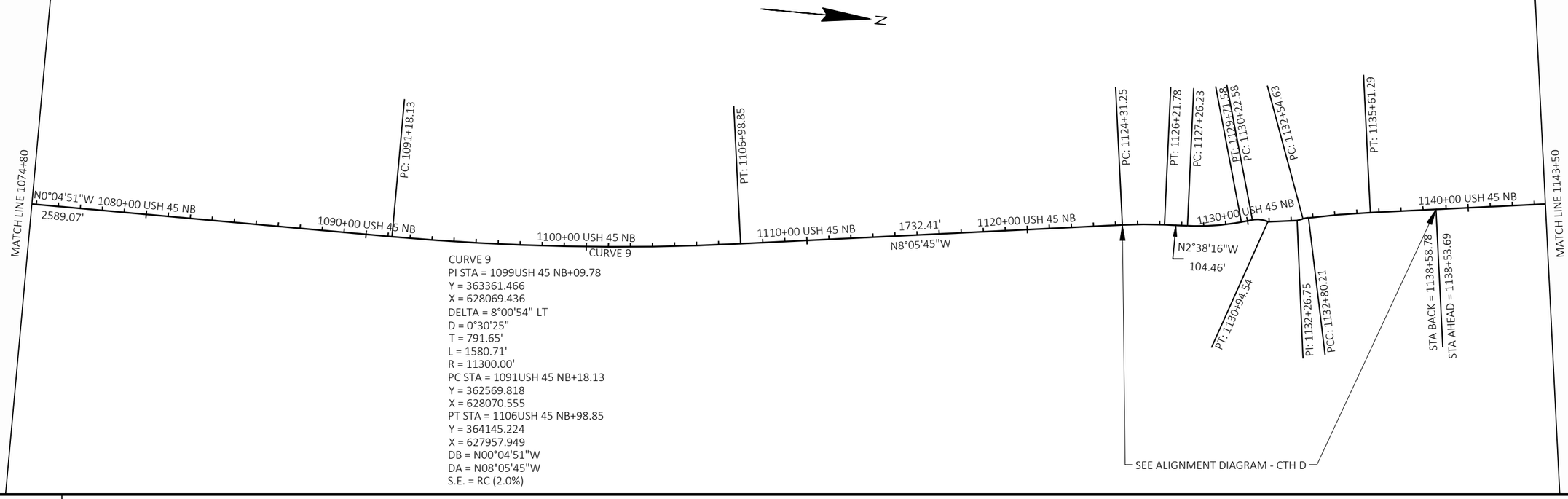
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027201-AD.DWG PLOT DATE : 7/24/2025 4:45 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:500 FT
LAYOUT NAME - 01
WISDOT/CADDS SHEET 44

2

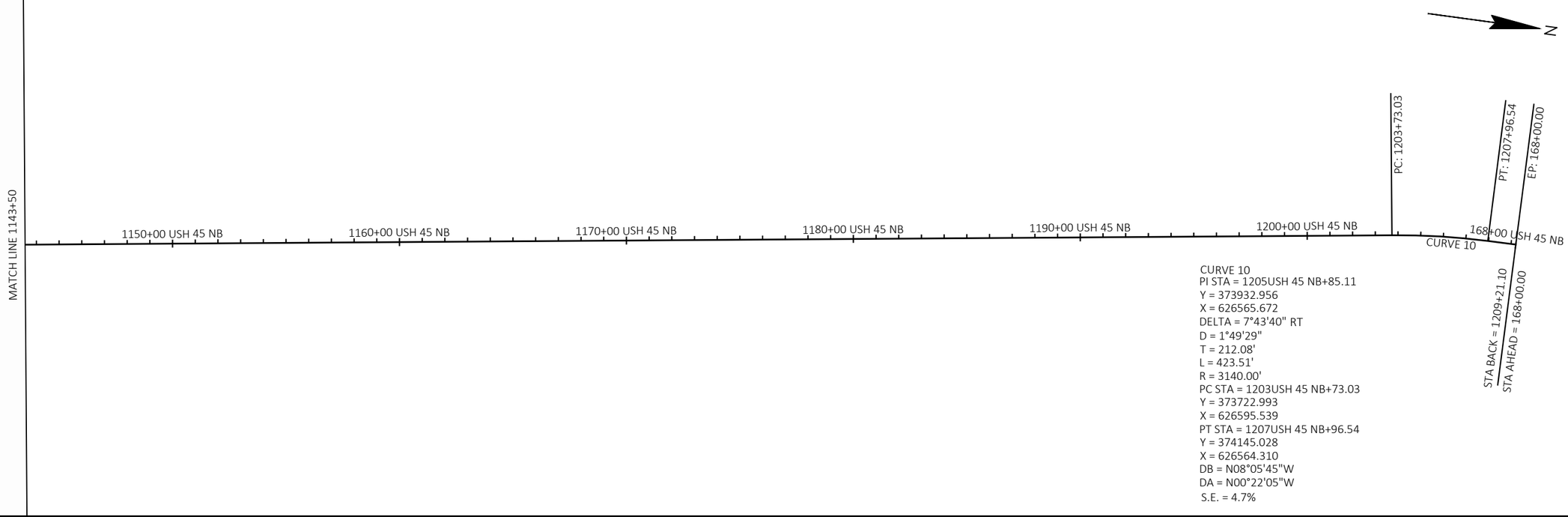


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - MAINLINE NB	SHEET 116	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027201-AD.DWG PLOT DATE : 7/24/2025 4:45 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:500 FT
LAYOUT NAME - 02
WISDOT/CADDS SHEET 44



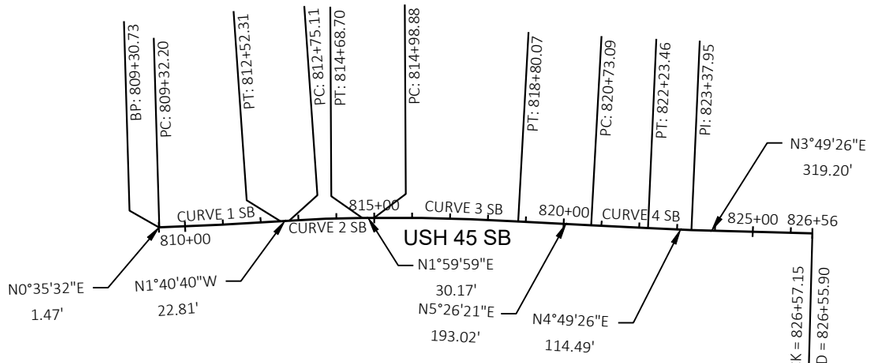
CURVE 9
PI STA = 1099USH 45 NB+09.78
Y = 363361.466
X = 628069.436
DELTA = 8°00'54" LT
D = 0°30'25"
T = 791.65'
L = 1580.71'
R = 11300.00'
PC STA = 1091USH 45 NB+18.13
Y = 362569.818
X = 628070.555
PT STA = 1106USH 45 NB+98.85
Y = 364145.224
X = 627957.949
DB = N00°04'51"W
DA = N08°05'45"W
S.E. = RC (2.0%)



CURVE 10
PI STA = 1205USH 45 NB+85.11
Y = 373932.956
X = 626565.672
DELTA = 7°43'40" RT
D = 1°49'29"
T = 212.08'
L = 423.51'
R = 3140.00'
PC STA = 1203USH 45 NB+73.03
Y = 373722.993
X = 626595.539
PT STA = 1207USH 45 NB+96.54
Y = 374145.028
X = 626564.310
DB = N08°05'45"W
DA = N00°22'05"W
S.E. = 4.7%

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - MAINLINE NB	SHEET 117	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027201-AD.DWG PLOT DATE : 7/24/2025 4:45 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:500 FT
LAYOUT NAME - 03
WISDOT/CADDS SHEET 44

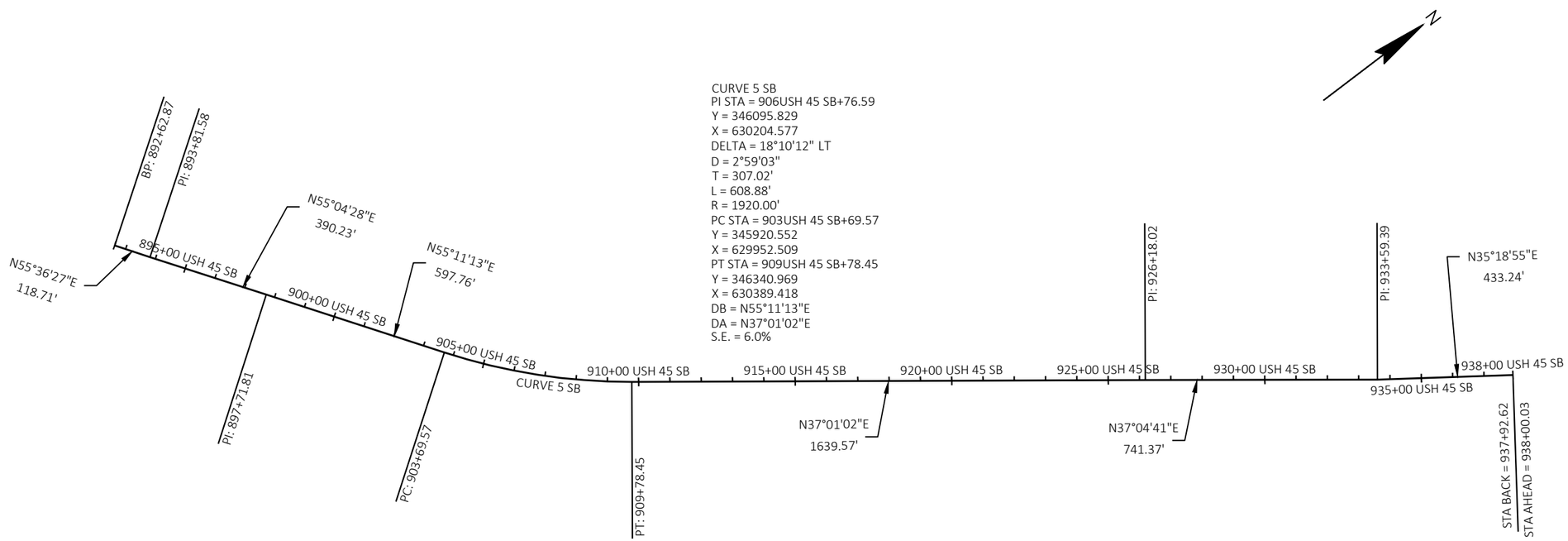


CURVE 1 SB
PI STA = 810+92.27
Y = 337544.337
X = 627676.038
DELTA = 2°16'12" LT
D = 0°42'33"
T = 160.08'
L = 320.11'
R = 8080.00'
PC STA = 809+32.20
Y = 337384.271
X = 627674.384
PT STA = 812+52.31
Y = 337704.344
X = 627671.351
DB = N00°35'32"E
DA = N01°40'40"W
S.E. = NC

CURVE 2 SB
PI STA = 813+71.94
Y = 337823.927
X = 627667.848
DELTA = 3°40'39" RT
D = 1°53'59"
T = 96.83'
L = 193.59'
R = 3016.00'
PC STA = 812+75.11
Y = 337727.142
X = 627670.683
PT STA = 814+68.70
Y = 337920.695
X = 627671.227
DB = N01°40'40"W
DA = N01°59'59"E
S.E. = NC

CURVE 3 SB
PI STA = 816+89.53
Y = 338141.387
X = 627678.933
DELTA = 3°26'22" RT
D = 0°54'08"
T = 190.65'
L = 381.19'
R = 6350.00'
PC STA = 814+98.88
Y = 337950.850
X = 627672.280
PT STA = 818+80.07
Y = 338331.181
X = 627697.006
DB = N01°59'59"E
DA = N05°26'21"E
S.E. = NC

CURVE 4 SB
PI STA = 821+48.27
Y = 338598.182
X = 627722.429
DELTA = 0°36'55" LT
D = 0°24'33"
T = 75.19'
L = 150.37'
R = 14000.00'
PC STA = 820+73.09
Y = 338523.334
X = 627715.302
PT STA = 822+23.46
Y = 338673.101
X = 627728.752
DB = N05°26'21"E
DA = N04°49'26"E
S.E. = NC



CURVE 5 SB
PI STA = 906USH 45 SB+76.59
Y = 346095.829
X = 630204.577
DELTA = 18°10'12" LT
D = 2°59'03"
T = 307.02'
L = 608.88'
R = 1920.00'
PC STA = 903USH 45 SB+69.57
Y = 345920.552
X = 629952.509
PT STA = 909USH 45 SB+78.45
Y = 346340.969
X = 630389.418
DB = N55°11'13"E
DA = N37°01'02"E
S.E. = 6.0%

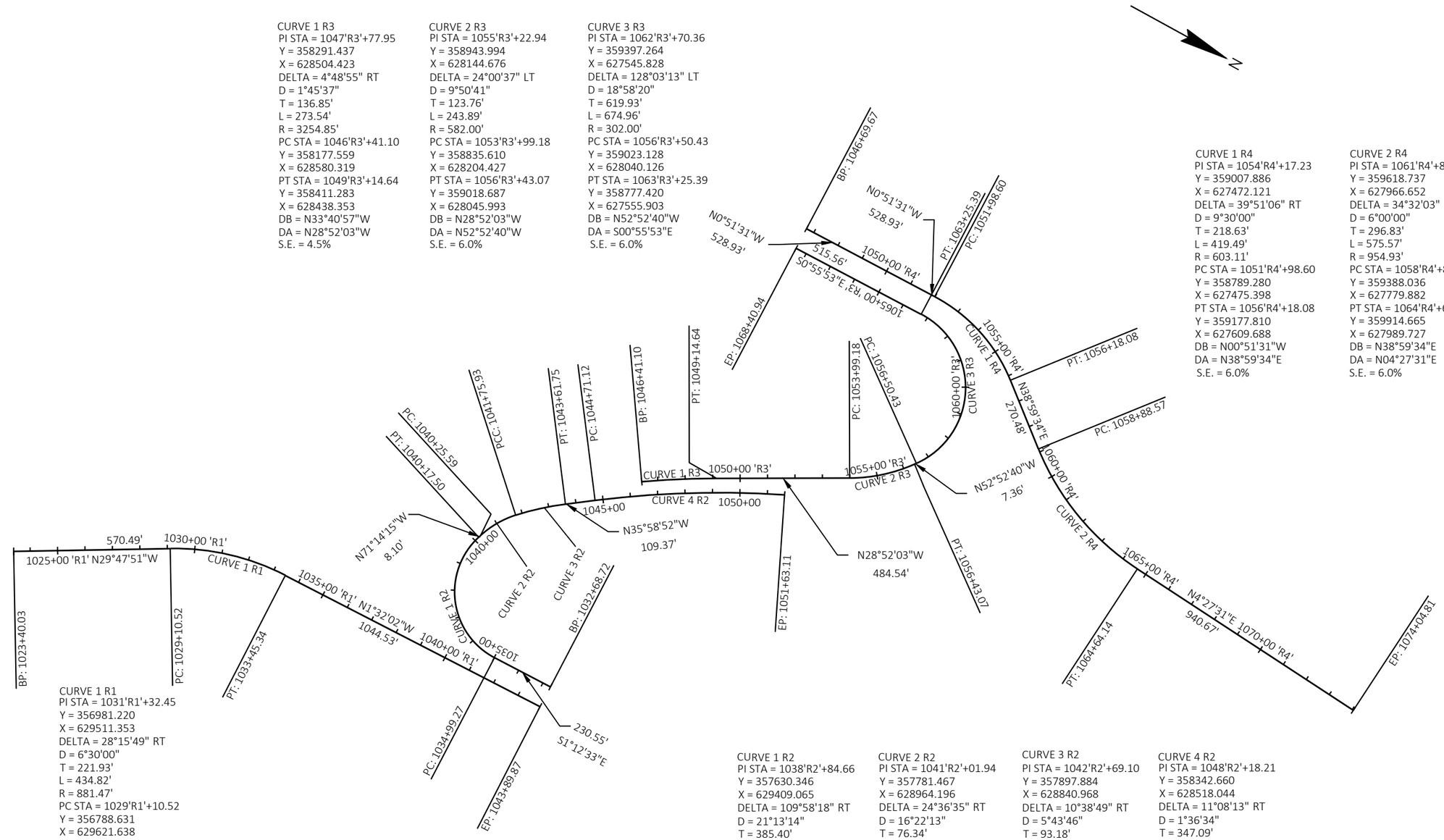
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - MAINLINE SB	SHEET 118	E

2

CURVE 1 R3
PI STA = 1047'R3'+77.95
Y = 358291.437
X = 628504.423
DELTA = 4°48'55" RT
D = 1°45'37"
T = 136.85'
L = 273.54'
R = 3254.85'
PC STA = 1046'R3'+41.10
Y = 358177.559
X = 628580.319
PT STA = 1049'R3'+14.64
Y = 358411.283
X = 628438.353
DB = N33°40'57"W
DA = N28°52'03"W
S.E. = 4.5%

CURVE 2 R3
PI STA = 1055'R3'+22.94
Y = 358943.994
X = 628144.676
DELTA = 24°00'37" LT
D = 9°50'41"
T = 123.76'
L = 243.89'
R = 582.00'
PC STA = 1053'R3'+99.18
Y = 358835.610
X = 628204.427
PT STA = 1056'R3'+43.07
Y = 359018.687
X = 628045.993
DB = N28°52'03"W
DA = N52°52'40"W
S.E. = 6.0%

CURVE 3 R3
PI STA = 1062'R3'+70.36
Y = 359397.264
X = 627545.828
DELTA = 128°03'13" LT
D = 18°58'20"
T = 619.93'
L = 674.96'
R = 302.00'
PC STA = 1056'R3'+50.43
Y = 359023.128
X = 628040.126
PT STA = 1063'R3'+25.39
Y = 358777.420
X = 627555.903
DB = N52°52'40"W
DA = S00°55'53"E
S.E. = 6.0%



CURVE 1 R4
PI STA = 1054'R4'+17.23
Y = 359007.886
X = 627472.121
DELTA = 39°51'06" RT
D = 9°30'00"
T = 218.63'
L = 419.49'
R = 603.11'
PC STA = 1051'R4'+98.60
Y = 358789.280
X = 627475.398
PT STA = 1056'R4'+18.08
Y = 359177.810
X = 627609.688
DB = N00°51'31"W
DA = N38°59'34"E
S.E. = 6.0%

CURVE 2 R4
PI STA = 1061'R4'+85.39
Y = 359618.737
X = 627966.652
DELTA = 34°32'03" LT
D = 6°00'00"
T = 296.83'
L = 575.57'
R = 954.93'
PC STA = 1058'R4'+88.57
Y = 359388.036
X = 627779.882
PT STA = 1064'R4'+64.14
Y = 359914.665
X = 627989.727
DB = N38°59'34"E
DA = N04°27'31"E
S.E. = 6.0%

CURVE 1 R1
PI STA = 1031'R1'+32.45
Y = 356981.220
X = 629511.353
DELTA = 28°15'49" RT
D = 6°30'00"
T = 221.93'
L = 434.82'
R = 881.47'
PC STA = 1029'R1'+10.52
Y = 356788.631
X = 629621.638
PT STA = 1033'R1'+45.34
Y = 357203.071
X = 629505.412
DB = N29°47'51"W
DA = N01°32'02"W
S.E. = 6.0%

CURVE 1 R2
PI STA = 1038'R2'+84.66
Y = 357630.346
X = 629409.065
DELTA = 109°58'18" RT
D = 21°13'14"
T = 385.40'
L = 518.23'
R = 270.00'
PC STA = 1034'R2'+99.27
Y = 358015.657
X = 629400.933
PT STA = 1040'R2'+17.50
Y = 357754.307
X = 629044.148
DB = S01°12'33"E
DA = N71°14'15"W
S.E. = 6.0%

CURVE 2 R2
PI STA = 1041'R2'+01.94
Y = 357781.467
X = 628964.196
DELTA = 24°36'35" RT
D = 16°22'13"
T = 76.34'
L = 150.33'
R = 350.00'
PC STA = 1040'R2'+25.59
Y = 357756.912
X = 629036.482
PT STA = 1041'R2'+75.93
Y = 357833.894
X = 628908.701
DB = N71°14'15"W
DA = N46°37'41"W
S.E. = 6.0%

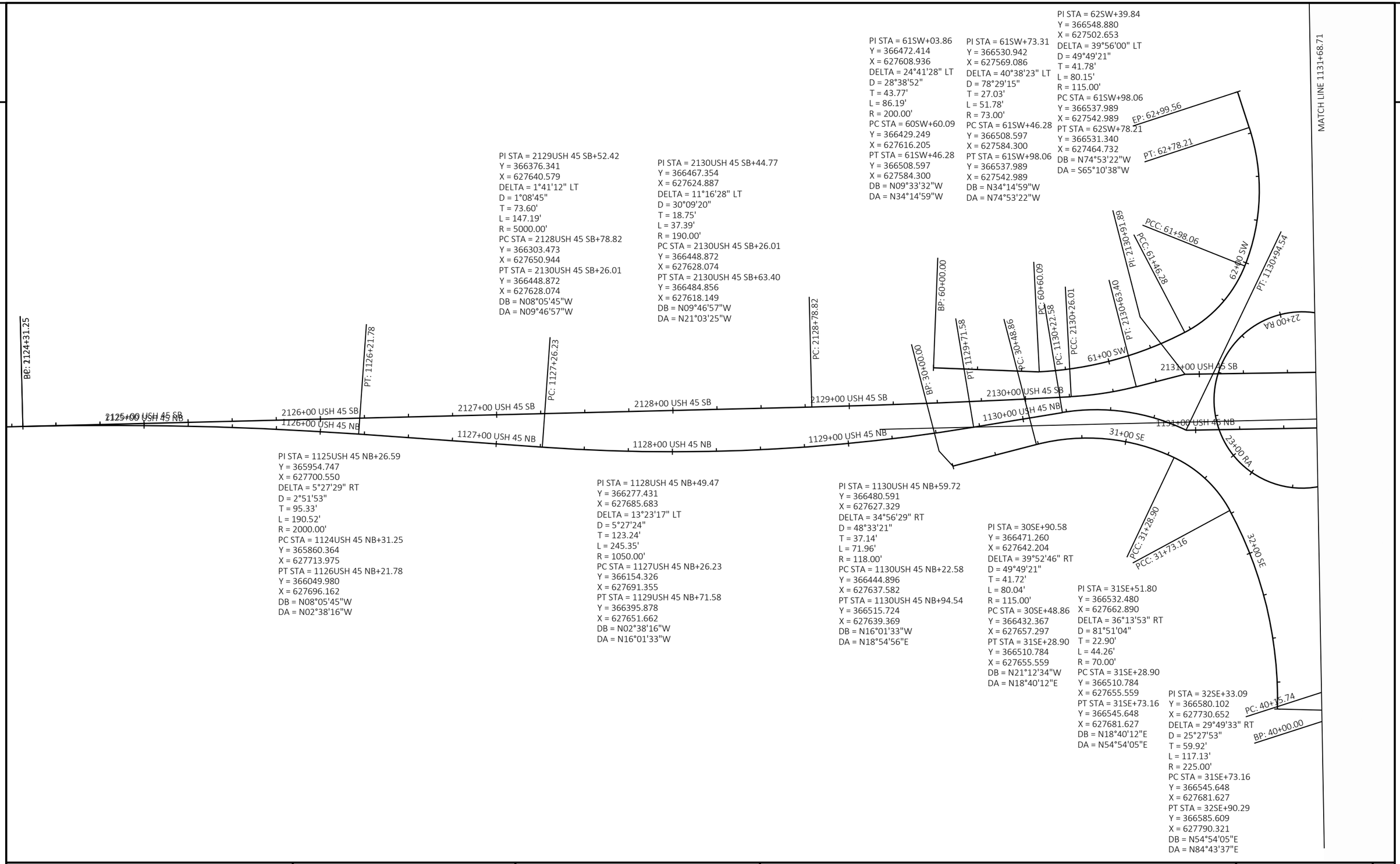
CURVE 3 R2
PI STA = 1042'R2'+69.10
Y = 357897.884
X = 628840.968
DELTA = 10°38'49" RT
D = 5°43'46"
T = 93.18'
L = 185.82'
R = 1000.00'
PC STA = 1041'R2'+75.93
Y = 357833.894
X = 628908.701
PT STA = 1043'R2'+61.75
Y = 357973.286
X = 628786.223
DB = N46°37'41"W
DA = N35°58'52"W
S.E. = 6.0%

CURVE 4 R2
PI STA = 1048'R2'+18.21
Y = 358342.660
X = 628518.044
DELTA = 11°08'13" RT
D = 1°36'34"
T = 347.09'
L = 691.98'
R = 3560.00'
PC STA = 1044'R2'+71.12
Y = 358061.794
X = 628721.963
PT STA = 1051'R2'+63.11
Y = 358657.624
X = 628372.216
DB = N35°58'52"W
DA = N24°50'38"W
S.E. = 4.5%

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: WAUPACA	ALIGNMENT DIAGRAM - STH 54 INTERCHANGE	SHEET 119	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 9/16/2025 3:38 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:400 FT

2



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - USH 45 & CTH D ROUNDABOUT	SHEET 120	E

2

N

BP: 50+00.00

PI STA = 50NW+55.21
Y = 366577.508
X = 627500.248
DELTA = 30°51'55" LT
D = 28°38'52"
T = 55.21'
L = 107.74'
R = 200.00'
PC STA = 50NW+00.00
Y = 366573.058
X = 627445.216
PT STA = 51NW+07.74
Y = 366609.561
X = 627545.203
DB = N85°22'35"E
DA = N54°30'40"E

PI STA = 51NW+34.41
Y = 366625.042
X = 627566.915
DELTA = 36°52'05" LT
D = 71°37'11"
T = 26.67'
L = 51.48'
R = 80.00'
PC STA = 51NW+07.74
Y = 366609.561
X = 627545.203
PT STA = 51NW+59.22
Y = 366650.453
X = 627574.997
DB = N54°30'40"E
DA = N17°38'35"E

PI STA = 52NW+01.82
Y = 366691.051
X = 627587.909
DELTA = 39°05'29" LT
D = 47°44'47"
T = 42.60'
L = 81.87'
R = 120.00'
PC STA = 51NW+59.22
Y = 366650.453
X = 627574.997
PT STA = 52NW+41.09
Y = 366730.703
X = 627572.331
DB = N17°38'35"E
DA = N21°26'54"W

PI STA = 2132USH 45 SB+65.10
Y = 366681.631
X = 627602.764
DELTA = 33°40'49" LT
D = 42°26'29"
T = 40.86'
L = 79.36'
R = 135.00'
PC STA = 2132USH 45 SB+24.24
Y = 366642.647
X = 627590.517
PT STA = 2133USH 45 SB+03.60
Y = 366720.862
X = 627591.337
DB = N17°26'25"E
DA = N16°14'24"W

PI STA = 2134USH 45 SB+76.46
Y = 366886.827
X = 627542.993
DELTA = 12°51'29" RT
D = 5°27'24"
T = 118.32'
L = 235.64'
R = 1050.00'
PC STA = 2133USH 45 SB+58.14
Y = 366773.232
X = 627576.082
PT STA = 2135USH 45 SB+93.78
Y = 367004.936
X = 627536.014
DB = N16°14'24"W
DA = N03°22'55"W

PI STA = 2137USH 45 SB+76.29
Y = 367187.128
X = 627525.247
DELTA = 4°42'50" LT
D = 2°51'53"
T = 82.32'
L = 164.54'
R = 2000.00'
PC STA = 2136USH 45 SB+93.97
Y = 367104.953
X = 627530.103
PT STA = 2138USH 45 SB+58.52
Y = 367268.626
X = 627513.654
DB = N03°22'55"W
DA = N08°05'45"W

51+00 NW
PCC: 51+07.74
PCC: 51+59.22
PC: 2132+24.24
PCC: 1132+80.21
PT: 2133+03.60
PT: 52+41.09
PC: 2133+58.14
EP: 52+90.38
52+00 NW

2132+00 USH 45 SB
2133+00 USH 45 SB
2134+00 USH 45 SB
2135+00 USH 45 SB
2136+00 USH 45 SB
2137+00 USH 45 SB
2138+00 USH 45 SB

PT: 1135+61.29
PT: 2135+93.78
PC: 2136+93.97
EP: 2138+58.52

1132+00 USH 45 NB
1133+00 USH 45 NB
1134+00 USH 45 NB
1135+00 USH 45 NB
1136+00 USH 45 NB
1137+00 USH 45 NB
1138+00 USH 45 NB
1139+00 USH 45 NB

STA BACK = 1138+58.78
STA AHEAD = 1138+53.69

2132+00 RA
42+00 NE
41+00 NE

PI: 1132+26.75
PCC: 41+53.66
PC: 1132+54.63
PT: 42+54.16
EP: 42+91.81
PCC: 41+02.95
EP: 32+90.29

PI STA = 1132USH 45 NB+67.44
Y = 366684.916
X = 627607.564
DELTA = 8°08'35" RT
D = 31°49'52"
T = 12.81'
L = 25.58'
R = 180.00'
PC STA = 1132USH 45 NB+54.63
Y = 366672.896
X = 627612.002
PT STA = 1132USH 45 NB+80.21
Y = 366697.442
X = 627604.874
DB = N20°15'54"W
DA = N12°07'19"W

PI STA = 1134USH 45 NB+20.81
Y = 366834.902
X = 627575.350
DELTA = 4°01'34" RT
D = 1°25'57"
T = 140.59'
L = 281.07'
R = 4000.00'
PC STA = 1132USH 45 NB+80.21
Y = 366697.442
X = 627604.874
PT STA = 1135USH 45 NB+61.29
Y = 366974.095
X = 627555.550
DB = N12°07'19"W
DA = N08°05'45"W

PI STA = 42NE+05.00
Y = 366691.520
X = 627616.807
DELTA = 28°47'25" RT
D = 28°38'52"
T = 51.33'
L = 100.50'
R = 200.00'
PC STA = 41NE+53.66
Y = 366649.066
X = 627645.664
PT STA = 42NE+54.16
Y = 366742.624
X = 627611.962
DB = N34°12'20"W
DA = N05°24'56"W

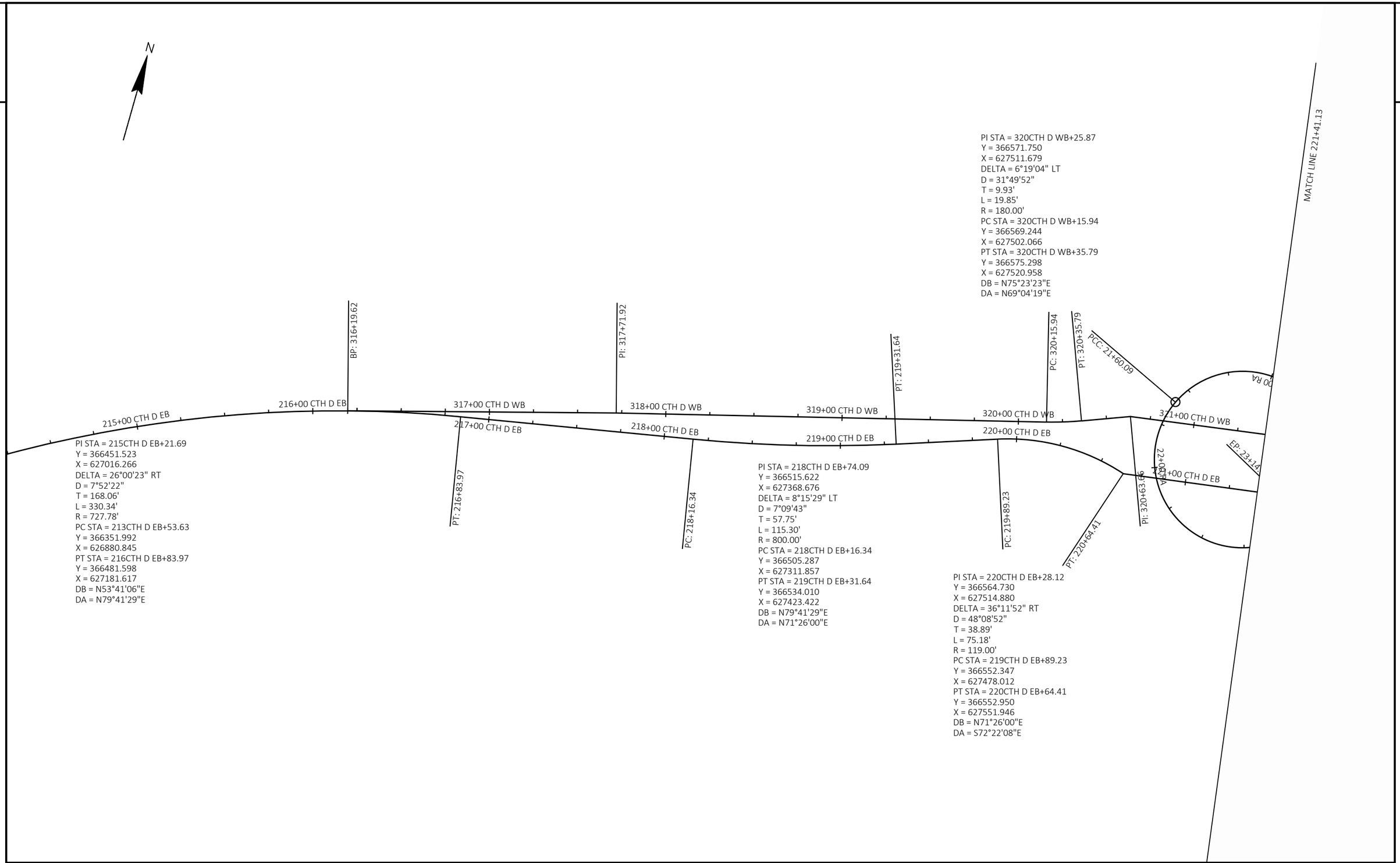
PI STA = 41NE+29.32
Y = 366627.258
X = 627660.488
DELTA = 38°44'31" RT
D = 76°23'40"
T = 26.37'
L = 50.71'
R = 75.00'
PC STA = 41NE+02.95
Y = 366619.526
X = 627685.698
PT STA = 41NE+53.66
Y = 366649.066
X = 627645.664
DB = N72°56'52"W
DA = N34°12'20"W

PI STA = 40NE+61.37
Y = 366606.144
X = 627729.324
DELTA = 41°38'26" RT
D = 47°44'47"
T = 45.63'
L = 87.21'
R = 120.00'
PC STA = 40NE+15.74
Y = 366625.132
X = 627770.819
PT STA = 41NE+02.95
Y = 366619.526
X = 627685.698
DB = S65°24'42"W
DA = N72°56'52"W

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - USH 45 & CTH D ROUNDABOUT	SHEET 121	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 04
PLOT DATE : 7/24/2025 4:47 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - USH 45 & CTH D ROUNDABOUT	SHEET 122	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 05
PLOT DATE : 7/24/2025 4:47 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

N

PI STA = 322CTH D WB+35.94
Y = 366591.338
X = 627715.761
DELTA = 36°02'07" LT
D = 46°34'55"
T = 40.01'
L = 77.36'
R = 123.00'
PC STA = 321CTH D WB+95.93
Y = 366604.250
X = 627677.895
PT STA = 322CTH D WB+73.29
Y = 366603.172
X = 627753.978
DB = S71°10'16"E
DA = N72°47'37"E

PI STA = 324CTH D WB+11.53
Y = 366644.064
X = 627886.025
DELTA = 8°36'17" RT
D = 5°27'24"
T = 78.99'
L = 157.69'
R = 1050.00'
PC STA = 323CTH D WB+32.53
Y = 366620.696
X = 627810.566
PT STA = 324CTH D WB+90.22
Y = 366655.879
X = 627964.131
DB = N72°47'37"E
DA = N81°23'54"E

PI STA = 326CTH D WB+83.66
Y = 366684.809
X = 628155.388
DELTA = 3°17'13" LT
D = 3°10'59"
T = 51.65'
L = 103.26'
R = 1800.00'
PC STA = 326CTH D WB+32.01
Y = 366677.085
X = 628104.323
PT STA = 327CTH D WB+35.28
Y = 366695.449
X = 628205.927
DB = N81°23'54"E
DA = N78°06'41"E

PC: 321+95.93
PCC: 222+45.12
PT: 322+73.29
PC: 323+32.53
PT: 324+90.22
PT: 225+72.99
PC: 326+32.01
PI: 226+88.69
EP: 327+35.28

322+00 CTH D WB
323+00 CTH D WB
324+00 CTH D WB
325+00 CTH D WB
326+00 CTH D WB
327+00 CTH D WB

222+00 CTH D EB
223+00 CTH D EB
224+00 CTH D EB
225+00 CTH D EB
226+00 CTH D EB
227+00 CTH D EB
228+00 CTH D EB
229+00 CTH D EB

23+00 RA

BP: 20+00.00
PI: 221+96.04
PC: 222+25.11

PI STA = 222CTH D EB+35.12
Y = 366585.287
X = 627718.797
DELTA = 5°43'58" RT
D = 28°38'52"
T = 10.01'
L = 20.01'
R = 200.00'
PC STA = 222CTH D EB+25.11
Y = 366581.718
X = 627709.441
PT STA = 222CTH D EB+45.12
Y = 366587.903
X = 627728.463
DB = N69°07'18"E
DA = N74°51'15"E

PI STA = 224CTH D EB+09.11
Y = 366630.750
X = 627886.761
DELTA = 3°45'26" RT
D = 1°08'45"
T = 163.99'
L = 327.87'
R = 5000.00'
PC STA = 222CTH D EB+45.12
Y = 366587.903
X = 627728.463
PT STA = 225CTH D EB+72.99
Y = 366663.133
X = 628047.525
DB = N74°51'15"E
DA = N78°36'41"E

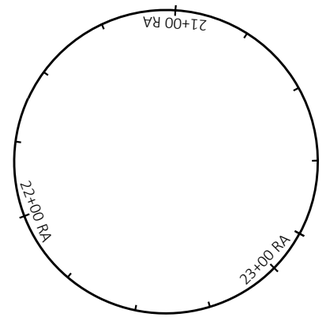
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - USH 45 & CTH D ROUNDABOUT	SHEET 123	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027202-AD.DWG PLOT DATE : 7/24/2025 4:47 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:50 FT
LAYOUT NAME - 06
WISDOT/CADDS SHEET 42

2

N

PI STA = 3RA+41.41
Y = 365093.796
X = 626874.924
DELTA = 183°27'12" LT
D = 114°35'30"
T = 1658.59'
L = 160.09'
R = 50.00'
PC STA = 20RA+00.00
Y = 366555.469
X = 627658.781
PT STA = 21RA+60.09
Y = 366600.032
X = 627569.310
DB = N28°12'13"E
DA = S24°45'00"W



PI STA = 38RA+18.68
Y = 365093.796
X = 626874.924
DELTA = 176°32'48" LT
D = 114°35'30"
T = 1658.59'
L = 154.07'
R = 50.00'
PC STA = 21RA+60.09
Y = 366600.032
X = 627569.310
PT STA = 23RA+14.16
Y = 366555.469
X = 627658.781
DB = S24°45'00"W
DA = N28°12'13"E

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	ALIGNMENT DIAGRAM - USH 45 & CTH D ROUNDABOUT	SHEET 124	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\027202-AD.DWG PLOT DATE : 7/24/2025 4:47 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:50 FT
LAYOUT NAME - 07
WISDOT/CADDS SHEET 42

1140-00-77

Line	Item	Item Description	Unit	Total	Qty
0006	203.0100	Removing Small Pipe Culverts	EACH	5.000	5.000
0010	204.0110	Removing Asphaltic Surface	SY	103.000	103.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	150.000	150.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	3,690.000	3,690.000
0018	204.0150	Removing Curb & Gutter	LF	2,817.000	2,817.000
0022	204.0165	Removing Guardrail	LF	9,750.000	9,750.000
0028	204.0220	Removing Inlets	EACH	16.000	16.000
0030	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	512.000	512.000
0034	205.0100	Excavation Common	CY	40,918.000	40,918.000
0036	208.0100	Borrow	CY	740.000	740.000
0038	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1140-00-77	EACH	1.000	1.000
0044	213.0100	Finishing Roadway (project) 01. 1140-00-77	EACH	1.000	1.000
0048	305.0110	Base Aggregate Dense 3/4-Inch	TON	9,763.000	9,763.000
0050	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	14,010.000	14,010.000
0056	405.0100	Coloring Concrete WisDOT Red	CY	307.000	307.000
0058	415.0070	Concrete Pavement 7-Inch	SY	385.000	385.000
0062	415.0410	Concrete Pavement Approach Slab	SY	752.000	752.000
0064	415.2010	Concrete Truck Apron 12-inch	SY	919.000	919.000
0072	450.6223	HMA Pavement 3 MT 58-28 S	TON	47,600.000	47,600.000
0074	450.6224	HMA Pavement 4 MT 58-28 S	TON	17,410.000	17,410.000
0076	450.7223	HMA Pavement 3 HT 58-28 S	TON	2,890.000	2,890.000
0078	450.7624	HMA Pavement 4 HT 58-28 V	TON	1,110.000	1,110.000
0080	455.0605	Tack Coat	GAL	20,820.000	20,820.000
0090	465.0315	Asphaltic Flumes	SY	160.000	160.000
0094	465.0560	Asphaltic Rumble Strips, Centerline	LF	31,070.000	31,070.000
0096	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	5.000	5.000
0100	520.8000	Concrete Collars for Pipe	EACH	3.000	3.000
0102	520.8700	Cleaning Culvert Pipes	EACH	14.000	14.000
0108	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	7.000	7.000
0110	522.2434	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 34x53-Inch	LF	336.000	336.000
0112	522.2634	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 34x53-Inch	EACH	8.000	8.000
0114	522.2643	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 43x68-Inch	EACH	2.000	2.000
0116	524.0124	Culvert Pipe Salvaged 24-Inch	LF	24.000	24.000
0122	524.0624	Apron Endwalls for Culvert Pipe Salvaged 24-Inch	EACH	1.000	1.000
0124	530.0112	Culvert Pipe Corrugated Polyethylene 12-Inch	LF	325.000	325.000
0128	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	166.000	166.000
0134	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	3,044.000	3,044.000
0136	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	300.000	300.000
0138	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	1,158.000	1,158.000
0142	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	383.000	383.000
0144	601.0581	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type R	LF	302.000	302.000
0146	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	425.000	425.000
0150	601.0600	Concrete Curb Pedestrian	LF	93.000	93.000
0152	602.0405	Concrete Sidewalk 4-Inch	SF	11,800.000	11,800.000
0156	602.0415	Concrete Sidewalk 6-Inch	SF	510.000	510.000
0160	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	160.000	160.000
0164	604.0500	Slope Paving Crushed Aggregate	SY	220.000	220.000
0166	606.0100	Riprap Light	CY	19.000	19.000
0168	606.0200	Riprap Medium	CY	106.000	106.000

1140-00-77

Line	Item	Item Description	Unit	Total	Qty
0174	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	114.000	114.000
0176	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	476.000	476.000
0182	611.0430	Reconstructing Inlets	EACH	8.000	8.000
0186	611.0615	Inlet Covers Type F	EACH	20.000	20.000
0188	611.0624	Inlet Covers Type H	EACH	3.000	3.000
0192	611.0652	Inlet Covers Type T	EACH	2.000	2.000
0194	611.0654	Inlet Covers Type V	EACH	9.000	9.000
0200	611.3220	Inlets 2x2-FT	EACH	9.000	9.000
0202	611.3225	Inlets 2x2.5-FT	EACH	2.000	2.000
0204	611.3230	Inlets 2x3-FT	EACH	3.000	3.000
0206	611.3253	Inlets 2.5x3-FT	EACH	20.000	20.000
0210	611.8115	Adjusting Inlet Covers	EACH	15.000	15.000
0222	614.2300	MGS Guardrail 3	LF	8,700.000	8,700.000
0224	614.2500	MGS Thrie Beam Transition	LF	788.600	788.600
0226	614.2610	MGS Guardrail Terminal EAT	EACH	13.000	13.000
0228	614.2620	MGS Guardrail Terminal Type 2	EACH	3.000	3.000
0230	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1140-00-77	EACH	1.000	1.000
0234	619.1000	Mobilization	EACH	0.720	0.720
0236	620.0300	Concrete Median Sloped Nose	SF	209.000	209.000
0238	624.0100	Water	MGAL	480.000	480.000
0240	625.0100	Topsoil	SY	13,616.000	13,616.000
0244	628.1504	Silt Fence	LF	8,950.000	8,950.000
0246	628.1520	Silt Fence Maintenance	LF	8,950.000	8,950.000
0248	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0250	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0252	628.2008	Erosion Mat Urban Class I Type B	SY	14,026.000	14,026.000
0254	628.7005	Inlet Protection Type A	EACH	24.000	24.000
0256	628.7010	Inlet Protection Type B	EACH	2.000	2.000
0258	628.7015	Inlet Protection Type C	EACH	50.000	50.000
0262	628.7504	Temporary Ditch Checks	LF	40.000	40.000
0264	628.7555	Culvert Pipe Checks	EACH	25.000	25.000
0266	628.7570	Rock Bags	EACH	663.000	663.000
0268	629.0210	Fertilizer Type B	CWT	9.200	9.200
0272	630.0130	Seeding Mixture No. 30	LB	638.000	638.000
0276	630.0500	Seed Water	MGAL	162.000	162.000
0278	633.5200	Markers Culvert End	EACH	10.000	10.000
0284	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	39.000	39.000
0286	637.2210	Signs Type II Reflective H	SF	413.000	413.000
0288	637.2230	Signs Type II Reflective F	SF	79.250	79.250
0290	638.2102	Moving Signs Type II	EACH	34.000	34.000
0292	638.2602	Removing Signs Type II	EACH	29.000	29.000
0294	638.3000	Removing Small Sign Supports	EACH	33.000	33.000
0296	638.4000	Moving Small Sign Supports	EACH	36.000	36.000
0300	642.5201	Field Office Type C	EACH	1.000	1.000
0304	643.0420	Traffic Control Barricades Type III	DAY	4,590.000	4,590.000
0312	643.0705	Traffic Control Warning Lights Type A	DAY	6,460.000	6,460.000
0318	643.0900	Traffic Control Signs	DAY	27,795.000	27,795.000
0320	643.0910	Traffic Control Covering Signs Type I	EACH	3.000	3.000
0322	643.0920	Traffic Control Covering Signs Type II	EACH	13.000	13.000

1140-00-77

Line	Item	Item Description	Unit	Total	Qty
0324	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0326	643.1050	Traffic Control Signs PCMS	DAY	34.000	34.000
0340	643.5000	Traffic Control	EACH	0.500	0.500
0350	645.0120	Geotextile Type HR	SY	269.000	269.000
0352	645.0130	Geotextile Type R	SY	84.000	84.000
0354	646.2020	Marking Line Epoxy 6-Inch	LF	5,040.000	5,040.000
0356	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	143,268.000	143,268.000
0358	646.4020	Marking Line Epoxy 10-Inch	LF	1,640.000	1,640.000
0360	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	3,300.000	3,300.000
0362	646.4050	Marking Line Grooved Permanent Tape 10-Inch	LF	2,710.000	2,710.000
0364	646.5020	Marking Arrow Epoxy	EACH	18.000	18.000
0366	646.5120	Marking Word Epoxy	EACH	12.000	12.000
0368	646.5320	Marking Railroad Crossing Epoxy	EACH	2.000	2.000
0370	646.6120	Marking Stop Line Epoxy 18-Inch	LF	200.000	200.000
0372	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	56.000	56.000
0378	646.7120	Marking Diagonal Epoxy 12-Inch	LF	495.000	495.000
0382	646.8020	Marking Corrugated Median Epoxy	SF	1,435.000	1,435.000
0384	646.8120	Marking Curb Epoxy	LF	420.000	420.000
0386	646.8220	Marking Island Nose Epoxy	EACH	28.000	28.000
0398	648.0100	Locating No-Passing Zones	MI	7.490	7.490
0400	650.4000	Construction Staking Storm Sewer	EACH	27.000	27.000
0402	650.4500	Construction Staking Subgrade	LF	5,616.000	5,616.000
0404	650.5000	Construction Staking Base	LF	56,608.000	56,608.000
0406	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	5,446.000	5,446.000
0408	650.6000	Construction Staking Pipe Culverts	EACH	5.000	5.000
0410	650.7000	Construction Staking Concrete Pavement	LF	207.000	207.000
0412	650.8000	Construction Staking Resurfacing Reference	LF	56,608.000	56,608.000
0414	650.9000	Construction Staking Curb Ramps	EACH	8.000	8.000
0418	650.9911	Construction Staking Supplemental Control (project) 01. 1140-00-77	EACH	1.000	1.000
0422	650.9920	Construction Staking Slope Stakes	LF	8,259.000	8,259.000
0424	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	4,173.000	4,173.000
0428	652.0335	Conduit Rigid Nonmetallic Schedule 80 3-Inch	LF	375.000	375.000
0434	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	27.000	27.000
0442	654.0105	Concrete Bases Type 5	EACH	24.000	24.000
0448	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0460	655.0610	Electrical Wire Lighting 12 AWG	LF	1,920.000	1,920.000
0462	655.0615	Electrical Wire Lighting 10 AWG	LF	14,469.000	14,469.000
0468	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. NW Corner of CTH D & USH 45	EACH	1.000	1.000
0474	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	24.000	24.000
0478	657.0322	Poles Type 5-Aluminum	EACH	24.000	24.000
0490	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	24.000	24.000
0508	659.1115	Luminaires Utility LED A	EACH	24.000	24.000
0512	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0516	690.0150	Sawing Asphalt	LF	13,596.000	13,596.000
0518	690.0250	Sawing Concrete	LF	9.000	9.000
0520	705.0105	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0522	705.2005	Incentive Density PWL HMA Pavement	DOL	43,580.000	43,580.000
0524	705.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	8,640.000	8,640.000

1140-00-77

Line	Item	Item Description	Unit	Total	Qty
0526	705.2010	Incentive Air Voids HMA Pavement	DOL	69,010.000	69,010.000
0528	729.0440	Incentive IRI Ride	DOL	30,000.000	30,000.000
0530	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,500.000	2,500.000
0532	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,880.000	2,880.000
0536	SPV.0060	Special 01. Reestablish Section Corner Monuments	EACH	1.000	1.000
0538	SPV.0060	Special 02. Apron Endwalls for Culvert Pipe Salvaged 43x68-Inch	EACH	2.000	2.000
0552	SPV.0090	Special 01. Culvert Pipe Reinforced Conc. Horizontal Elliptical Class HE-IV 43x68-Inch	LF	136.000	136.000
0554	SPV.0090	Special 02. Culvert Pipe Salvaged 43x68-Inch	LF	16.000	16.000

3

REMOVALS

ROADWAY	SIDE	STA	TO	STA	204.0110 REMOVING ASPHALTIC SURFACE * SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS * SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING * SY	204.0150 REMOVING CURB & GUTTER * LF	204.0165 REMOVING GUARDRAIL * LF	204.0220 REMOVING INLETS EA	REMARKS
USH 45	LT	816+81	-	818+21	24	-	-	-	-	-	CTH D
USH 45	LT/RT	909+38	-	918+39	14	150	3,690	-	-	-	STH 15
USH 45	LT/RT	974+08	-	977+45	-	-	-	14	910	-	B-44-0148
USH 45	LT/RT	1013+14	-	1034+50	-	-	-	23	4,820	-	B-44-0149 TO B-44-0141
USH 45	LT/RT	1017+40	-	1034+68	-	-	-	26	1,960	-	B-44-0141 TO B-44-0144
R1	LT/RT	1036+08	-	1043+17	19	-	-	13	610	-	B-44-0142
R2	LT/RT	1033+34	-	1042+45	-	-	-	111	370	-	
R3	LT	1067+58	-		12	-	-	-	-	-	
R4	LT	1047+65	-		8	-	-	-	-	-	
USH 45	LT/RT	1051+43	-	1058+00	-	-	-	42	1,080	-	B-44-0144
USH 45	LT/RT	1095+31	-	1096+84	16	-	-	283	-	-	SPURR RD
USH 45	LT	1201+78	-	1203+02	10	-	-	170	-	-	CHURCH RD
USH 45	LT/RT	802+50	-	1209+21	-	-	-	100	-	-	UNDISTRIBUTED
TOTAL 0010					**103**	**150**	**3,690**	**782**	**9,750**	**--**	
USH 45	LT/RT	1124+31	-	1138+58	-	-	-	1660	-	-	CTH D
TOTAL 0020					**--**	**--**	**--**	**1,660**	**--**	**--**	
PROJECT TOTAL					**103**	**150**	**3,690**	**2,442**	**9,750**	**--**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

3

REMOVING STORM SEWER

ROADWAY	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS * EACH	204.0220 REMOVING INLETS * EACH	204.0245.01 REMOVING STORM SEWER (size) 01. 12-INCH * LF	REMARKS
USH 45	976+99	LT	-	1	46	B-44-0148
USH 45	1015+89	LT/RT	-	2	100	B-44-0149
USH 45	1034+05	LT/RT	-	2	124	B-44-0141
R1	1034+37	RT	-	1	96	B-44-0142
USH 45	1052+20	RT	-	1	45	B-44-0144
USH 45	1052+26	RT	-	1	-	B-44-0144
USH 45	1052+35	RT	-	1	-	B-44-0144
TOTAL 0010			**--**	**9**	**411**	
USH 45	1128+61	LT/RT	-	2	50	ROUNDABOUT
USH 45	1131+97	LT	-	2	51	ROUNDABOUT
CTH D WB	320+54	LT/RT	1	-	-	ROUNDABOUT
CTH D WB	322+87	LT/RT	2	-	-	ROUNDABOUT
CTH D WB	324+82	LT/RT	2	-	-	ROUNDABOUT
TOTAL 0020			**5**	**4**	**101**	
PROJECT TOTAL			**5**	**13**	**512**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\030201-MQ.DWG PLOT DATE : 9/17/2025 4:07 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1" = 1'
LAYOUT NAME - 02
WISDOT/CADDS SHEET 42

3

EXCAVATION COMMON

205.0100
EXCAVATION
COMMON
*

ROADWAY	SIDE	STA	TO	STA	CY	REMARKS
USH 45	LT/RT	802+50	-	863+18	5,850	
USH 45	LT/RT	864+96	-	918+40	5,160	
USH 45	LT/RT	920+58	-	977+44	4,240	
USH 45	LT/RT	979+78	-	1016+33	2,510	
USH 45	LT/RT	1017+40	-	1034+68	1,620	
R1	LT/RT	1027+41	-	1034+77	380	
R1	LT/RT	1036+19	-	1043+17	460	
R2	LT/RT	1033+34	-	1042+45	460	
USH 45	LT/RT	1036+05	-	1046+22	1,050	
R3	LT/RT	1052+12	-	1067+84	800	
R4	LT/RT	1047+54	-	1069+65	1,160	
USH 45	LT/RT	1051+49	-	1074+03	1,740	
USH 45	LT/RT	1074+03	-	1124+31	3,520	
USH 45	LT/RT	1138+53	-	1209+21	4,590	
USH 45	RT	1200+01	-	1205+31	334	BYPASS LANE
TOTAL 0010					**33,874**	
CTH D ROUNDABOUT		1124+00	-	1138+75	6,194	CTH D ROUNDABOUT
CTH D WB	LT/RT	319+85	-	325+38	850	CULVERT REPLACEMENTS
TOTAL 0020					**7,044**	
PROJECT TOTAL					**40,918**	

BORROW

208.0100
BORROW
*

ROADWAY	SIDE	STA	TO	STA	CY	REMARKS
USH 45	LT/RT	973+49	-	1059+61	730	GUARDRAIL
TOTAL 0010					**730**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

DIVISION	FROM/TO STATION	LOCATION	*205.0100 COMMON EXCAVATION (1) CUT (2)	*205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE (15)	208.0100 BORROW	COMMENT
DIVISION 1 - USH 45 & CTH D ROUNDABOUT (CAT 0020)	1124+00 TO 1138+75	LT/RT	6,194	0	1,823	4,372	3,505	4,382	-10	0	10	
DIVISION 2 - USH 45 NB BYPASS LANE (CAT 0010)	1197+61 TO 1208+62	RT	294	0	36	258	89	111	147	147	0	
GRAND TOTAL			6,488	0	1,859	4,630	3,594	4,493	137	147	10	
*TOTAL COMMON EXC			6,488						*TOTAL BORROW		10	

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.25
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

AGGREGATE ITEMS

ROADWAY	SIDE	STA	TO	STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH * TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH * TON	604.0500 SLOPE PAVING CRUSHED AGGREGATE * SY	624.0100 WATER * MGAL	REMARKS
USH 45	LT/RT	802+50	-	863+13	1,020	-	-	-	
USH 45	LT/RT	864+91	-	909+40	750	-	-	-	
USH 45	LT	909+40	-	914+70	45	-	-	-	
USH 45	LT	920+58	-	926+24	48	-	-	-	
USH 45	LT/RT	926+24	-	977+23	860	-	-	-	
USH 45	LT/RT	980+02	-	1016+19	610	-	-	-	
USH 45	LT/RT	1017+56	-	1034+49	290	-	-	-	
USH 45	LT/RT	1034+68	-	1036+05	-	-	220	-	B-44-0141
USH 45	LT/RT	1036+25	-	1045+89	170	-	-	-	
USH 45	LT/RT	1051+73	-	1074+03	380	-	-	-	
USH 45	LT/RT	1074+03	-	1124+31	1,580	1,740	-	-	RAISED PROFILE
USH 45	LT/RT	1138+53	-	1209+21	2,240	3,230	-	-	RAISED PROFILE
R1	LT/RT	1023+40	-	1034+52	62	-	-	-	
R1	LT/RT	1036+43	-	1043+17	38	-	-	-	
R2	LT	1033+33	-	1041+01	22	-	-	-	
R2	LT/RT	1041+01	-	1045+48	25	-	-	-	
R3	LT/RT	1051+38	-	1056+24	27	-	-	-	
R3	RT	1056+24	-	1063+78	13	-		-	
R3	LT/RT	1063+78	-	1067+84	23	-	-	-	
R4	LT/RT	1047+54	-	1074+05	150	-	-	-	
USH 45	LT/RT	802+50	-	1209+21	-	-	-	270	
TOTAL 0010					**8,353**	**4,970**	**220**	**270**	
USH 45	LT/RT	1124+31	-	1138+58	1,410	9,040	-	210	ROUNDABOUT
TOTAL 0020					**1,410**	**9,040**	**--**	**210**	
PROJECT TOTAL					**9,763**	**14,010**	**220**	**480**	

CONCRETE ITEMS

ROADWAY	STA	TO	STA	405.0100 COLORING CONCRETE WISDOT RED CY	415.0070 CONCRETE PAVEMENT 7-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB * SY	415.2010 CONCRETE TRUCK APRON 12-INCH SY	REMARKS
USH 45	976+83	-	977+51	-	38	51	-	B-44-0148
USH 45	979+68	-	979+97	-	45	54	-	B-44-0148
USH 45	1015+74	-	1016+34	-	27	41	-	B-44-0149
USH 45	1017+41	-	1017+56	-	34	40	-	B-44-0149
USH 45	1033+90	-	1034+72	-	42	53	-	B-44-0141
USH 45	1036+01	-	1036+22	-	39	46	-	B-44-0141
USH 45	1045+86	-	1046+41	-	59	181	-	B-44-0144
USH 45	1051+26	-	1052+51	-	61	224	-	B-44-0144
R1	1034+55	-	1034+77	-	20	31	-	B-44-0142
R1	1036+19	-	1036+34	-	20	31	-	B-44-0142
TOTAL 0010				**--**	**385**	**752**	**--**	
USH 45	1124+31	-	1138+58	307	-	-	919	RAB
TOTAL 0020				**307**	**--**	**--**	**919**	
PROJECT TOTAL				**307**	**385**	**752**	**919**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

3

ASPHALT ITEMS

ROADWAY	STA	TO	STA	450.6223 HMA PAVEMENT 3 MT 58-28 S * TON	450.6224 HMA PAVEMENT 4 MT 58-28 S * TON	450.7223 HMA PAVEMENT 3 HT 58-28 S TON	450.7624 HMA PAVEMENT 4 HT 58-28 V TON	455.0605 TACK COAT * GAL	465.0315 ASPHALTIC FLUMES * SY	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE * LF	REMARKS
USH 45	802+50	-	863+19	8,590	2,880	-	-	3,500	24	3,750	
USH 45	864+97	-	918+40	7,520	2,940	-	-	3,310	14	2,770	
USH 45	920+58	-	977+25	6,140	2,110	-	-	2,450	-	3,880	
USH 45	979+98	-	1016+19	3,530	1,280	-	-	1,360	-	3,580	
USH 45	1017+56	-	1034+48	2,150	870	-	-	740	-	1,650	
USH 45	1036+22	-	1045+87	1,390	560	-	-	490	-	920	
USH 45	1051+78	-	1074+03	2,460	890	-	-	950	-	2,200	
USH 45	1074+03	-	1209+21	4,710	1,750	-	-	2,060	20	12,320	
USH 45	1138+53	-	1209+21	6,610	2,440	-	-	2,890	-	-	
R1	1027+41	-	1034+55	500	210	-	-	170	-	-	
R1	1036+34	-	1043+68	630	240	-	-	240	22	-	
R2	1032+91	-	1042+46	660	230	-	-	260	12	-	
R3	1052+12	-	1068+19	1,110	410	-	-	420	23	-	
R4	1046+92	-	1069+68	1,600	600	-	-	600	9	-	
TOTAL 0010				**47,600**	**17,410**	**--**	**--**	**19,440**	**124**	**31,070**	
USH 45	1124+31	-	1138+58	-	-	2,890	1,110	1,380	36	-	ROUNDABOUT
TOTAL 0020				**--**	**--**	**2,890**	**1,110**	**1,380**	**36**	**--**	
PROJECT TOTAL				**47,600**	**17,410**	**2,890**	**1,110**	**20,820**	**160**	**31,070**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\030201-MQ.DWG PLOT DATE : 9/17/2025 4:07 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1" = 1'
LAYOUT NAME - 05
WISDOT/CADDS SHEET 42

LOCATION	ROADWAY	STATION	MIXTURE USE:	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
								MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
DRIVING LANES 12-FOOT	USH 45 NB/SB MAINLINE	802+50 to 1074+03	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	15980	3.5"	PWL	PWL CORES
DRIVING LANES 12-FOOT	USH 45 NB/SB MAINLINE	1074+03 to 1209+21	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	5920	3.0"	PWL	PWL CORES
DRIVING LANES 12-FOOT	USH 45 NB/SB MAINLINE	802+50 to 1209+21	LOWER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 3 MT 58-28 S	12390	2.25"	PWL	PWL CORES
DRIVING LANES 12-FOOT	USH 45 NB/SB MAINLINE	802+50 to 1209+21	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	9290	1.75"	PWL	PWL CORES
3-FOOT SHOULDERS	USH 45 NB/SB MAINLINE	802+50 to 1209+21	LOWER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 3 MT 58-28 S	1700	2.25"	PWL	DEPARTMENT ACCEPTANCE CORES
3-FOOT SHOULDERS	USH 45 NB/SB MAINLINE	802+50 to 1209+21	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	1320	1.75"	PWL	DEPARTMENT ACCEPTANCE CORES
INTERSECTIONS	USH 45 NB/SB MAINLINE	802+50 to 1209+21	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	5720	3.5"	PWL	DEPARTMENT ACCEPTANCE CORES
INTERSECTIONS	USH 45 NB/SB MAINLINE	802+50 to 1209+21	LOWER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 3 MT 58-28 S	3680	2.25"	PWL	DEPARTMENT ACCEPTANCE CORES
INTERSECTIONS	USH 45 NB/SB MAINLINE	802+50 to 1209+21	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	2860	1.75"	PWL	DEPARTMENT ACCEPTANCE CORES
RAB	USH 45 NB/SB MAINLINE	1124+31 to 1138+58	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 HT 58-28 S	1500	3.0"	PWL LITE	DEPARTMENT ACCEPTANCE CORES
RAB	USH 45 NB/SB MAINLINE	1124+31 to 1138+58	LOWER LAYER	HMA PAVEMENT 3 HT 58-28S	HMA PAVEMENT 3 HT 58-28 S	1390	2.75"	PWL LITE	DEPARTMENT ACCEPTANCE CORES
RAB	USH 45 NB/SB MAINLINE	1124+31 to 1138+58	UPPER LAYER	HMA PAVEMENT 3HT 58-28S	HMA PAVEMENT 4 HT 58-28 V	1110	2"	PWL LITE	DEPARTMENT ACCEPTANCE CORES
RAMP R1	USH 45/STH 54 RAMP	1027+41 to 1043+17	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	680	3.5"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R1	USH 45/STH 54 RAMP	1027+41 to 1043+18	LOWER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 3 MT 58-28 S	440	2.25"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R1	USH 45/STH 54 RAMP	1027+41 to 1043+19	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	450	1.75"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R2	USH 45/STH 54 RAMP	1033+34 to 1042+45	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	400	3.5"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R2	USH 45/STH 54 RAMP	1033+34 to 1042+46	LOWER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 3 MT 58-28 S	250	2.25"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R2	USH 45/STH 54 RAMP	1033+34 to 1042+47	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	230	1.75"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R3	USH 45/STH 54 RAMP	1052+12 to 1067+84	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	670	3.5"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R3	USH 45/STH 54 RAMP	1052+12 to 1067+85	LOWER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 3 MT 58-28 S	430	2.25"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R3	USH 45/STH 54 RAMP	1052+12 to 1067+86	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	410	1.75"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R4	USH 45/STH 54 RAMP	1047+53 to 1069+65	LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	970	3.5"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R4	USH 45/STH 54 RAMP	1047+53 to 1069+66	LOWER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 3 MT 58-28 S	620	2.25"	PWL	DEPARTMENT ACCEPTANCE CORES
RAMP R4	USH 45/STH 54 RAMP	1047+53 to 1069+67	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	600	1.75"	PWL	DEPARTMENT ACCEPTANCE CORES

CULVERT PIPES

ROADWAY	STATION	LOCATION	520.8700 CLEANING CULVERT PIPES * EACH	522.2434 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 34X53-INCH LF	522.2634 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 34X53-INCH EACH	522.2643 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43X68-INCH EACH	524.0124 CULVERT PIPE SALVAGED 24-INCH LF	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	633.5200 MARKERS CULVERT END * EACH	SPV.0060.02 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 43X68-INCH EACH	SPV.0090.01 CULVERT PIPE REINFORCED CONC. HORIZONTAL ELLIPTICAL CLASS HE-IV 43X68-INCH LF	SPV.0090.02 CULVERT PIPE SALVAGED 43X68-INCH LF	REMARKS
USH 45	813+90	LT	1	-	-	-	-	-	-	-	-	-	44045078702
USH 45	820+47	LT	1	-	-	-	-	-	-	-	-	-	44045078703
USH 45	835+40	RT	1	-	-	-	-	-	-	-	-	-	68045006423
USH 45	901+17	LT	1	-	-	-	-	-	-	-	-	-	44045078704
USH 45	903+45	LT	1	-	-	-	-	-	-	-	-	-	44045078706
USH 45	905+72	LT	1	-	-	-	-	-	-	-	-	-	44045078705
USH 45	908+00	LT	1	-	-	-	-	-	-	-	-	-	44045078708
USH 45	912+56	LT	1	-	-	-	-	-	-	-	-	-	44045078710
USH 45	913+92	LT	1	-	-	-	-	-	-	-	-	-	44045078726
USH 45	923+76	RT	1	-	-	-	-	-	-	-	-	-	44045078714
USH 45	928+76	RT	1	-	-	-	-	-	-	-	-	-	44045078696
USH 45	930+26	RT	1	-	-	-	-	-	-	-	-	-	44045078697
USH 45	931+76	RT	1	-	-	-	-	-	-	-	-	-	44045078698
R3	1060+19	LT	1	-	-	-	-	-	-	-	-	-	44045078718
USH 45	1120+31	RT	-	-	-	-	-	-	-	1	-	8	68045006433
USH 45	1120+43	RT	-	-	-	-	-	-	-	1	-	8	68045006432
USH 45	1194+01	RT	-	-	-	-	24	1	-	-	-	-	68045006436
TOTAL 0010			**14**	**--**	**--**	**--**	**24**	**1**	**--**	**2**	**--**	**16**	
CTH D WB	320+35	LT/RT	-	-	-	2	-	-	2	-	136	-	RAB WEST
CTH D WB	322+87	LT/RT	-	168	4	-	-	-	4	-	-	-	RAB EAST DUAL PIPE
CTH D WB	324+82	LT/RT	-	168	4	-	-	-	4	-	-	-	RAB EAST DUAL PIPE
TOTAL 0020			**--**	**336**	**8**	**2**	**--**	**--**	**10**	**--**	**136**	**--**	
PROJECT TOTAL			**14**	**336**	**8**	**2**	**24**	**1**	**10**	**2**	**136**	**16**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

CURB AND GUTTER

ROADWAY	STA	TO	STA	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D * LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D * LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D * LF	601.0581 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE R LF	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT * LF	601.0600 CONCRETE CURB PEDESTRIAN * LF	620.0300 CONCRETE MEDIAN SLOPED NOSE * SF	REMARKS
USH 45	976+83	-	977+51	-	-	-	-	-	59	-	-	B-44-0148
USH 45	1015+74	-	1016+34	-	-	-	-	-	118	-	-	B-44-0149
USH 45	1033+90	-	1034+72	-	-	-	-	-	118	-	-	B-44-0141
USH 45	1051+26	-	1052+51	-	-	-	-	-	71	-	-	B-44-0144
R1	1034+55	-	1034+77	-	-	-	-	-	59	-	-	B-44-0142
R1	1042+00	-	1042+50	-	30	-	-	-	-	-	42	
R2	1039+90	-	1040+90	-	-	-	100	-	-	-	-	
R3	1066+00	-	1068+00	-	20	-	-	-	-	-	-	
R4	1047+00	-	1048+00	-	-	-	-	-	-	-	42	
USH 45	1095+31	-	1096+84	-	-	-	283	-	-	-	-	SPURR RD
USH 45	1201+77	-	1203+02	-	171	-	-	-	-	-	-	CHURCH RD
TOTAL 0010				**--**	**221**	**--**	**383**	**--**	**425**	**--**	**84**	
USH 45	1124+31	-	1138+58	166	2,748	1,158	-	302	-	93	125	ROUNDABOUT
TOTAL 0020				**166**	**2,748**	**1,158**	**--**	**302**	**--**	**93**	**125**	
PROJECT TOTAL				**166**	**2,969**	**1,158**	**383**	**302**	**425**	**93**	**209**	

SIDEWALK ITEMS

ROADWAY	STA	TO	STA	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	REMARKS
USH 45	1124+31	-	1138+58	11,800	510	160	ROUNDABOUT
TOTAL 0020				**11,800**	**510**	**160**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

RIPRAP

ROADWAY	STA	LOCATION	606.0100 RIRAP LIGHT CY	606.0200 RIRAP MEDIUM * CY	645.0120 GEOTEXTILE TYPE HR * SY	645.0130 GEOTEXTILE TYPE R SY	REMARKS
USH 45	833+95	RT	19	-	-	84	DITCH RT
USH 45	910+25	LT	-	3	11	-	EXISTING CULVERT
USH 45	976+99	LT	-	3	11	-	B-44-0148
USH 45	977+25	RT	-	5	-	-	B-44-0148 SE
USH 45	977+50	LT	-	8	-	-	B-44-0148 SW
USH 45	980+00	LT	-	7	-	-	B-44-0148 NW
USH 45	1015+89	LT	-	3	11	-	B-44-0149
USH 45	1034+05	RT	-	3	11	-	B-44-0141
USH 45	1034+13	LT	-	3	11	-	B-44-0141
R1	1034+37	RT	-	3	11	-	B-44-0142
USH 45	1052+35	RT	-	3	11	-	B-44-0144
TOTAL 0010			**19**	**41**	**77**	**84**	
CTH D WB	320+35	LT/RT	-	11	36	-	CULVERT REPLACEMENT
CTH D WB	322+87	LT/RT	-	18	57	-	CULVERT REPLACEMENT
CTH D WB	324+82	LT/RT	-	36	99	-	CULVERT REPLACEMENT
TOTAL 0020			**--**	**65**	**192**	**--**	
PROJECT TOTAL			**19**	**106**	**269**	**84**	

STORM SEWER

ROADWAY	STATION	LOCATION	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	530.0112 CULVERT PIPE CORRUGATED POLYETHYLENE 12-INCH * LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH * LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH * LF	611.0615 INLET COVERS TYPE F EACH	611.0652 INLET COVERS TYPE T EACH	611.0654 INLET COVERS TYPE V * EACH	611.3220 INLETS 2X2-FT * EACH	611.3225 INLETS 2X2.5-FT * EACH	611.3253 INLETS 2.5X3-FT EACH	REMARKS
USH 45	976+99	LT	1	-	29	-	-	-	-	1	1	-	-	B-44-0148
USH 45	1015+89	LT/RT	1	-	62	43	-	-	-	2	2	-	-	B-44-0149
USH 45	1034+05	LT/RT	1	-	81	43	-	-	-	2	2	-	-	B-44-0141
R1	1034+37	RT	1	-	101	-	-	-	-	1	1	-	-	B-44-0142
USH 45	1052+20	RT	1	-	-	6	-	-	-	1	1	-	-	B-44-0144
USH 45	1052+26	RT	-	-	-	6	-	-	-	1	1	-	-	B-44-0144
USH 45	1052+35	RT	-	-	52	-	-	-	-	1	1	-	-	B-44-0144
TOTAL 0010			**5**	**--**	**325**	**98**	**--**	**--**	**--**	**9**	**9**	**--**	**--**	
USH 45	1126+77	LT	-	1	-	-	50	2	-	-	-	-	2	RAB, #10, 11, 12
USH 45	1130+89	RT	-	1	-	-	68	3	-	-	-	-	3	RAB, #13, 14, 15, 36
USH 45	1131+19	LT	-	1	-	-	106	4	2	-	-	2	4	RAB, #4, 5, 6, 7, 8, 9, 37
USH 45	1131+48	LT	-	1	-	-	60	2	-	-	-	-	2	RAB, #1, 2, 3
USH 45	1131+85	RT	-	1	-	-	47	2	-	-	-	-	2	RAB, #16, 17, 18
USH 45	1132+39	LT/RT	-	1	-	-	65	3	-	-	-	-	3	RAB, #19, 20, 21, 39
USH 45	1132+46	LT	-	1	-	-	72	4	-	-	-	-	4	RAB, #22, 23, 24, 25, 38
TOTAL 0020			**--**	**7**	**--**	**--**	**468**	**20**	**2**	**--**	**--**	**2**	**20**	
PROJECT TOTAL			**5**	**7**	**325**	**98**	**468**	**20**	**2**	**9**	**9**	**2**	**20**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

3

INLETS

			204.0150	204.0220	520.8000	601.0411	601.0415	608.0412	608.0418	611.0430	611.0624	611.3230	611.8115
			REMOVING CURB & GUTTER	REMOVING INLETS	CONCRETE COLLARS FOR PIPES	CONCRETE CURB & GUTTER 30-INCH TYPE D	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	RECONSTRUCTING INLETS	INLET COVERS TYPE H	INLETS 2X3-FT	ADJUSTING INLET COVERS
			*	*		*	*	*	*			*	*
ROADWAY	STATION	OFFSET	EA	EA	EA	LF	LF	LF	LF	EA	EA	EA	EACH
USH 45	813+90	5' LT	15	-	-	-	15	-	-	1	-	-	-
USH 45	813+90	16' LT	15	-	-	-	15	-	-	1	-	-	-
USH 45	820+47	2' LT	15	-	-	-	15	-	-	1	-	-	-
USH 45	820+47	8' LT	15	-	-	-	15	-	-	1	-	-	-
USH 45	901+17	2' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	901+17	8' LT	15	1	1	-	15	8	-	-	1	1	-
USH 45	903+45	2' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	905+72	2' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	905+72	18' LT	15	-	-	-	15	-	-	1	-	-	-
USH 45	907+99	2' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	910+26	3' LT	15	-	-	-	15	-	-	1	-	-	-
USH 45	910+26	20' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	912+56	13' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	912+56	25' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	914+94	25' LT	15	1	1	-	15	8	-	-	1	1	-
USH 45	914+94	30' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	915+61	67' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	916+06	94' LT	15	-	-	-	15	-	-	1	-	-	-
USH 45	916+77	64' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	923+69	18' LT	15	-	-	-	15	-	-	-	-	-	1
USH 45	931+76	2' LT	15	1	1	15	-	-	8	-	1	1	1
R2	1035+88	2' RT	15	-	-	15	-	-	-	-	-	-	1
R2	1038+44	2' RT	15	-	-	15	-	-	-	-	-	-	1
R3	1060+19	2' LT	15	-	-	15	-	-	-	-	-	-	1
R4	1047+69	5' LT	15	-	-	15	-	-	-	1	-	-	-
TOTAL 0010			**375**	**3**	**3**	**75**	**300**	**16**	**8**	**8**	**3**	**3**	**15**

* QUANTITIES SHOWN ELSEWHERE IN PLAN

3

GUARDRAIL

ROADWAY	SIDE	STATION	TO	STATION	614.2300 MGS GUARDRAIL 3 * LF	614.2500 MGS THRIE BEAM TRANSITION * LF	614.2610 MGS GUARDRAIL TERMINAL EAT * EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	REMARKS
USH 45	RT	974+08	-	977+26	237.5	39.4	1	-	B-44-0148
USH 45	LT	976+11	-	977+45	62.5	39.4	1	-	B-44-0148
USH 45	RT	979+80	-	981+12	62.5	39.4	1	-	B-44-0148
USH 45	LT	979+94	-	983+17	237.5	39.4	1	-	B-44-0148
USH 45	RT	1013+14	-	1016+35	237.5	39.4	1	-	B-44-0149
USH 45	LT	1015+02	-	1016+35	62.5	39.4	1	-	B-44-0149
USH 45/R1	RT	1017+39	-	1034+22	1662.5	79.0	-	-	B-44-0149 TO B-44-0142
R1	LT	1030+32	-	1034+71	387.5	39.4	1	-	B-44-0142
R1	RT	1036+21	-	1039+16	350.0	39.4	-	1	B-44-0142
R1	LT	1036+08	-	1039+17	275.0	39.4	-	1	B-44-0142
USH 45	LT	1017+40	-	1034+58	1637.5	79.0	-	-	B-44-0149 TO B-44-0141
USH 45	RT	1029+92	-	1034+50	375.0	39.4	1	-	B-44-0141
USH 45	RT	1036+15	-	1040+86	425.0	39.4	1	-	B-44-0141
USH 45	LT	1036+23	-	1046+21	925.0	79.0	-	-	B-44-0141 TO B-44-0144
R2	LT	1037+68	-	1041+08	350.0	-	1	1	NB ON RAMP
USH 45/R2	RT	1041+01	-	1045+77	400.0	39.4	1	-	B-44-0144
R3	LT	1051+53	-	1056+14	375.0	39.4	1	-	B-44-0144
USH 45	RT	1051+77	-	1058+00	637.5	39.4	1	-	B-44-0144
TOTAL 0010					**8,700**	**788.6**	**13**	**3**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\030201-MQ.DWG PLOT DATE : 9/17/2025 4:07 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1" = 1'
LAYOUT NAME - 11
WISDOT/CADDS SHEET 42

3

EROSION CONTROL (1 OF 2)

ROADWAY	STATION	TO	STATION	625.0100 TOPSOIL * SY	628.1504 SILT FENCE * LF	628.1520 SILT FENCE MAINTENANCE * LF	628.1905 MOBILIZATIONS EROSION CONTROL * EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL * EACH	628.2008 EROSION MAT URBAN CLASS I TYPE B * SY	REMARKS
USH 45	813+90	-	820+47	-	-	-	-	-	-	CTH D
USH 45	901+16	-	931+76	-	-	-	-	-	-	STH 15
USH 45	973+50	-	984+80	1,097	1,280	1,280	-	-	1,097	B-44-0148
USH 45	1012+35	-	1016+33	526	720	720	-	-	526	B-44-0149
R1	1029+00	-	1043+08	138	370	370	-	-	138	R1/B-44-0142
USH 45	1029+32	-	1041+65	279	520	520	-	-	279	B-44-0141
R2	1036+25	-	1041+40	697	810	810	-	-	697	R2/B-44-0144
USH 45	1052+00	-	1059+71	248	400	400	-	-	248	B-44-0144
R3	1055+72	-	1056+23	71	220	220	-	-	71	R3/B-44-0144
R4	1047+68	-		-	-	-	-	-	-	
USH 45	1095+31	-	1096+84	150	320	320	-	-	150	SPURR RD
USH 45	1201+75	-	1203+06	940	780	780	-	-	940	CHURCH RD
USH 45	802+50	-	1209+21	-	-	-	-	-	-	SILT FENCE RELIEF
USH 45	802+50	-	1209+21	-	-	-	3	3	410	UNDISTRIBUTED
TOTAL 0010				**4,146**	**5,420**	**5,420**	**3**	**3**	**4,556**	
USH 45	1124+31	-	1138+58	9,470	3,530	3,530	1	1	9,470	ROUNDABOUT
CTH D EB	216+20	-	227+35	-	-	-	-	-	-	ROUNDABOUT
TOTAL 0020				**9,470**	**3,530**	**3,530**	**1**	**1**	**9,470**	
PROJECT TOTAL				**13,616**	**8,950**	**8,950**	**4**	**4**	**14,026**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

3

3

EROSION CONTROL (2 OF 2)

ROADWAY	STATION	TO	STATION	628.7005 INLET PROTECTION TYPE A * EACH	628.7010 INLET PROTECTION TYPE B * EACH	628.7015 INLET PROTECTION TYPE C * EACH	628.7504 TEMPORARY DITCH CHECKS * LF	628.7555 CULVERT PIPE CHECKS * EACH	628.7570 ROCK BAGS * EACH	629.0210 FERTILIZER TYPE B * CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0500 SEED WATER * MGAL	REMARKS
USH 45	813+90	-	820+47	-	-	4	-	-	-	-	-	-	CTH D
USH 45	901+16	-	931+76	-	-	24	-	-	-	-	-	-	STH 15
USH 45	973+50	-	984+80	-	-	-	-	-	-	0.7	50	13	B-44-0148
USH 45	1012+35	-	1016+33	-	-	-	-	-	-	0.4	24	6	B-44-0149
R1	1029+00	-	1043+08	2	-	-	-	-	-	0.1	7	2	R1/B-44-0142
USH 45	1029+32	-	1041+65	-	-	-	-	-	-	0.2	13	4	B-44-0141
R2	1036+25	-	1041+40	-	-	1	-	-	-	0.5	32	8	R2/B-44-0144
USH 45	1052+00	-	1059+71	-	-	-	-	-	-	0.2	12	3	B-44-0144
R3	1055+72	-	1056+23	-	-	-	-	-	-	0.1	4	1	R3/B-44-0144
R4	1047+68	-		-	-	1	-	-	-	-	-	-	
USH 45	1095+31	-	1096+84	-	-	-	-	-	-	0.1	7	2	SPURR RD
USH 45	1201+75	-	1203+06	-	-	-	-	-	-	0.6	43	11	CHURCH RD
USH 45	802+50	-	1209+21	-	-	-	-	-	442	-	-	-	SILT FENCE RELIEF
USH 45	802+50	-	1209+21	-	-	-	-	-	-	0.3	19	5	UNDISTRIBUTED
TOTAL 0010				**2**	**--**	**30**	**--**	**--**	**442**	**3.2**	**211**	**55**	
USH 45	1124+31	-	1138+58	18	2	16	-	-	221	6.0	427	107	ROUNDABOUT
CTH D EB	216+20	-	227+35	4	-	4	40	25	-	-	-	-	ROUNDABOUT
TOTAL 0020				**22**	**2**	**20**	**40**	**25**	**221**	**6.0**	**427**	**107**	
PROJECT TOTAL				**24**	**2**	**50**	**40**	**25**	**663**	**9.2**	**638**	**162**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

SIGNING (1 OF 2)

ROADWAY	STATION	LOCATION	SIGN NO.	634.0616 POSTS WOOD 4x6-INCH x 16FT * EACH	637.2210 SIGNS TYPE II REFLECTIVE H * SF	637.2230 SIGNS TYPE II REFLECTIVE F * SF	REMARKS
USH 45 NB	1185+15	RT	200	1	12.00	-	D17-2
USH 45 NB	1193+48	RT	201	1	-	6.25	W1-10R
USH 45 NB	1195+38	RT	202	2	9.00	-	D1-1
USH 45 NB	1198+40	RT	203	1	12.00	-	D17-2
USH 45 NB	170+32	RT	204	1	5.00	-	R4-3
TOTAL 0010				**6**	**38.00**	**6.25**	
USH 45 NB	1123+28	RT	101	-	-	9.00	W2-6
USH 45 NB	1123+28	RT	101	1	-	4.00	W13-1
USH 45 NB	1125+29	RT	101A	2	46.75	-	D1-62
USH 45 NB	1126+80	LT	102	-	5.00	-	R4-7
USH 45 NB	1126+80	LT	102	1	-	2.25	W5-54
USH 45 NB	1130+93	RT	103	-	7.75	-	R1-2
USH 45 NB	1130+93	RT	103	1	6.25	-	R6-5P
USH 45 NB	1130+87	LT	104	-	7.75	-	R1-2
USH 45 NB	1130+87	LT	104	1	6.25	-	R6-5P
USH 45 NB	1130+78	LT	105	1	8.75	-	D1-1
USH 45 NB	1132+38	LT	106	1	8.75	-	D1-1
USH 45 NB	1132+39	LT	107	-	7.75	-	R1-2
USH 45 NB	1132+39	LT	107	1	6.25	-	R6-5P
USH 45 NB	1132+58	LT	108	-	7.75	-	R1-2
USH 45 NB	1132+58	LT	108	1	6.25	-	R6-5P
USH 45 NB	1135+99	LT	109	-	5.00	-	R4-7
USH 45 NB	1135+99	LT	109	1	-	2.25	W5-54
USH 45 NB	1137+74	LT	109A	2	46.75	-	D1-62
USH 45 NB	1139+73	LT	110	-	-	9.00	W2-6
USH 45 NB	1139+73	LT	110	1	-	4.00	W13-1
CTH D EB	213+54	RT	121	-	-	9.00	W2-6
CTH D EB	213+54	RT	121	1	-	4.00	W13-1
SUBTOTAL 0020				**15**	**177.00**	**43.50**	

SIGNING (2 OF 2)

ROADWAY	STATION	LOCATION	SIGN NO.	634.0616 POSTS WOOD 4x6-INCH x 16FT * EACH	637.2210 SIGNS TYPE II REFLECTIVE H * SF	637.2230 SIGNS TYPE II REFLECTIVE F * SF	REMARKS
CTH D EB	215+54	RT	121A	2	46.75	-	D1-62
CTH D EB	218+02	LT	122	-	5.00	-	R4-7
CTH D EB	218+02	LT	122	1	-	2.25	W5-54
CTH D EB	220+61	RT	123	-	7.75	-	R1-2
CTH D EB	220+61	RT	123	1	6.25	-	R6-5P
CTH D EB	220+56	LT	124	-	7.75	-	R1-2
CTH D EB	220+56	LT	124	1	6.25	-	R6-5P
CTH D EB	220+49	LT	125	1	8.75	-	D1-1
CTH D EB	222+07	LT	126	1	8.75	-	D1-1
CTH D EB	222+09	LT	127	-	7.75	-	R1-2
CTH D EB	222+09	LT	127	1	6.25	-	R6-5P
CTH D EB	222+27	LT	128	-	7.75	-	R1-2
CTH D EB	222+27	LT	128	1	6.25	-	R6-5P
CTH D EB	224+44	LT	129	-	5.00	-	R4-7
CTH D EB	224+44	LT	129	1	-	2.25	W5-54
CTH D EB	227+46	LT	129A	2	46.75	-	D1-62
CTH D EB	229+46	LT	130	-	-	9.00	W2-6
CTH D EB	229+46	LT	130	1	-	4.00	W13-1
CTH D EB	229+50	RT	131	1	-	12.00	W14-3
RAB	20+76	ISLAND	141	-	3.00	-	R6-1R
RAB	20+76	ISLAND	141	1	2.25	-	W5-54
RAB	21+35	ISLAND	142	-	3.00	-	R6-1R
RAB	2135	ISLAND	142	1	2.25	-	W5-54
RAB	22+39	ISLAND	143	-	3.00	-	R6-1R
RAB	22+39	ISLAND	143	1	2.25	-	W5-54
RAB	22+96	ISLAND	144	-	3.00	-	R6-1R
RAB	2296	ISLAND	144	1	2.25	-	W5-54
SUBTOTAL 0020				**18**	**198.00**	**29.50**	
TOTAL 0020				**33**	**375.00**	**73.00**	
PROJECT TOTAL				**39**	**413.00**	**79.25**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

3

MOVING SIGNS

ROADWAY	LOCATION	638.2102 MOVING SIGNS TYPE II * EACH	638.2602 REMOVING SIGNS TYPE II * EACH	638.3000 REMOVING SMALL SIGN SUPPORTS * EACH	638.4000 MOVING SMALL SIGN SUPPORTS * EACH	REMARKS
USH 45	CHURCH RD	-	1	1	-	PASSING LANE AHEAD
USH 45	PROJECT	3	-	-	3	CURB REPLACEMENT
USH 45	PROJECT	10	-	-	10	NO PASSING SIGNS
USH 45	PROJECT	9	-	-	14	GUARDRAIL REPLACEMENT
TOTAL 0010		**22**	**1**	**1**	**27**	
USH 45	CTH D	12	28	32	9	ROUNDABOUT
TOTAL 0020		**12**	**28**	**32**	**9**	
PROJECT TOTAL		**34**	**29**	**33**	**36**	

TRAFFIC CONTROL

ROADWAY	DURATION DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III * DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A * DAY	643.0900 TRAFFIC CONTROL SIGNS * DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II * EACH	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE * SF	643.1050 TRAFFIC CONTROL PCMS DAY
DETOUR	85	510	1020	24650	3	13	36	34
USH 45	85	4080	5440	3145	-	-	-	-
TOTAL 0010		**4,590**	**6,460**	**27,795**	**3**	**13**	**36**	**34**

* QUANTITIES SHOWN ELSEWHERE IN PLAN

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\030201-MQ.DWG PLOT DATE : 9/17/2025 4:07 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1" = 1'
LAYOUT NAME - 15
WISDOT/CADDS SHEET 42

PAVEMENT MARKING ITEMS

ROADWAY	STA	TO	STA	DESCRIPTION	646.2020 MARKING LINE EPOXY 6-INCH YELLOW LF	646.2020 MARKING LINE EPOXY 6-INCH WHITE LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH YELLOW * LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH WHITE * LF	646.4020 EPOXY 10-INCH LF	646.4040 GROOVED WET REF EPOXY 10-INCH * LF	646.5020 MARKING ARROW EPOXY WHITE * EACH	646.5120 MARKING WORD EPOXY WHITE * EACH	646.5320 MARKING RAILROAD CROSSING EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH * LF	646.6320 MARKING DOTTED EXTENSION EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH * LF	646.8020 MARKING CORRUGATED MEDIAN EPOXY SF	646.8120 MARKING CURB EPOXY * LF	646.8220 MARKING ISLAND NOSE EPOXY * EACH	648.0100 LOCATING NO-PASSING ZONES MI	REMARKS
USH 45	802+50	-	823+36	DOUBLE YELLOW	-	-	4,090	4,330	-	410	4	3	-	-	-	-	950	140	6	-	CTH D
USH 45	823+36	-	848+74	DOUBLE YELLOW	-	-	5,080	5,440	-	1,100	3	3	-	-	-	-	-	-	-	-	
USH 45	848+74	-	855+95	NB SOLID/SB SKIPS	-	-	920	1,550	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	855+95	-	857+88	NB/SB SKIPS	-	-	50	390	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	857+88	-	863+18	NB SKIPS/SB SOLID	-	-	670	1,060	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	863+18	-	864+97	NB/SB SKIPS	230	360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B-44-183
USH 45	864+97	-	870+11	NB/SB SKIPS	-	-	130	1,030	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	870+11	-	874+81	NB SOLID/SB SKIPS	-	-	590	940	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	874+81	-	897+02	DOUBLE YELLOW	-	-	5,240	4,450	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	897+02	-	932+99	DOUBLE YELLOW	-	-	6,570	5,760	-	1,790	11	6	2	120	-	100	485	240	18	-	STH 15
USH 45	897+05	-	914+92	NB SKIPS	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	903+70	-	915+20	SB SKIPS	-	-	-	288	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	916+39	-	926+24	NB SKIPS	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	916+39	-	934+79	SB SKIPS	-	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	932+99	-	953+38	DOUBLE YELLOW	-	-	5,080	4,080	-	-	-	-	-	-	-	160	-	-	-	-	
USH 45	953+38	-	965+23	NB SKIPS/SB SOLID	-	-	1,490	2,370	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	965+23	-	966+83	DOUBLE YELLOW	-	-	320	320	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	966+83	-	977+45	NB SOLID/SB SKIPS	-	-	1,340	2,130	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	979+78	-	995+73	NB SKIPS/SB SOLID	-	-	2,320	3,190	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	995+73	-	1016+12	NB/SB SKIPS	-	-	510	4,080	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	1016+12	-	1017+62	BRIDGE	250	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B-44-148
USH 45	1017+62	-	1034+41	NB SOLID/SB SKIPS	-	-	2,100	2,890	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	1034+41		1036+29	NB SOLID/SB SKIPS	240	380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B-44-149
USH 45	1036+29	-	1045+39	DOUBLE YELLOW	-	-	1,820	1,390	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	1045+39		1052+06	DOUBLE YELLOW	1340	1340	-	-	1,360	-	-	-	-	-	-	-	-	-	-	-	B-44-144
USH 45	1051+48	-	1061+25	SOLID	-	-	1,960	1,860	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	1061+25	-	1079+00	NB SKIPS/SB SOLID	-	-	2,225	3,080	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	1079+00	-	1124+31	NB/SB SKIPS	-	-	1,135	8,810	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	1096+07	-	-	RT	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	SPURR RD
USH 45	1138+53	-	1193+97	NB/SB SKIPS	-	-	1,390	11,090	-	-	-	-	-	-	-	-	-	-	-	-	
USH 45	1193+97	-	1209+21	NB SOLID/SB SKIPS	-	-	1,920	3270	-	-	-	-	-	-	-	-	-	-	-	-	
R1	1023+40	-	1043+19	NB OFF RAMP TO STH 54	200	200	1,160	1650	-	840	-	-	-	40	-	-	-	-	-	-	
R2	1033+34	-	1046+14	NB ON RAMP TO USH 45	-	200	860	1080	-	860	-	-	-	-	-	-	-	-	-	-	
R3	1051+37	-	1067+84	SB ON RAMP TO USH 45	-	-	1,610	1660	-	200	-	-	-	-	-	-	-	-	-	-	
R4	1047+54	-	1074+05	SB OFF RAMP TO STH 54	-	-	2,220	2700	-	810	-	-	-	40	-	-	-	-	-	-	
USH 45	802+60	-	1209+21	PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.49	
TOTAL 0010					**2,260**	**2,780**	**52,840**	**82,048**	**1,360**	**6,010**	**18**	**12**	**2**	**200**	**--**	**260**	**1,435**	**380**	**24**	**7.490**	
					5,040		**134,888**														
USH 45	1124+31	-	1138+58	LT/RT	-	-	2,340	2,330	280	-	-	-	-	-	56	120	-	20	2	-	ROUNDA BOUT
CTH D EB	216+20	-	227+35	LT/RT	-	-	1,990	1,720	-	-	-	-	-	-	-	115	-	20	2	-	ROUNDA BOUT
TOTAL 0020					**--**	**--**	**4,330**	**4,050**	**280**	**--**	**--**	**--**	**--**	**--**	**56**	**235**	**--**	**40**	**4**	**--**	
					--		**8,380**														
PROJECT TOTAL					**5,040**		**143,268**		**1,640**	**6,010**	**18**	**12**	**2**	**200**	**56**	**495**	**1,435**	**420**	**28**	**7.490**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

CONSTRUCTION STAKING

ALIGNMENT	STATION	TO	STATION	650.4000 CONSTRUCTION STAKING STORM SEWER * EACH	650.4500 CONSTRUCTION STAKING SUBGRADE * LF	650.5000 CONSTRUCTION STAKING BASE * LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER * LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS * EACH	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9000 CONSTRUCTION STAKING CURB RAMPS * EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES * LF
USH 45 NB	973+50	-	984+80	1	-	-	59	-	39	-	-	811
USH 45 NB	1012+55	-	1017+56	2	-	-	118	-	30	-	-	378
USH 45 NB	1029+32	-	1041+66	2	-	-	118	-	37	-	-	449
USH 45 NB	1045+87	-	1059+78	3	-	-	71	-	64	-	-	236
R1	1023+40	-	1043+19	1	-	1,837	59	-	37	1,837	-	208
R2	1033+34	-	1046+12	-	-	1,278	100	-	-	1,278	-	412
R3	1051+38	-	1067+84	-	-	1,646	-	-	-	1,646	-	149
R4	1047+52	-	1074+05	-	-	2,653	-	-	-	2,653	-	-
USH 45 NB	802+50	-	1124+31	-	-	30,782	283	-	-	30,782	-	-
USH 45 SB	809+30	-	826+57	-	-	1,727	-	-	-	1,727	-	-
USH 45 SB	892+62	-	937+93	-	-	4,531	-	-	-	4,531	-	-
USH 45 NB	1138+53	-	1209+21	-	530	7,068	171	-	-	7,068	-	530
TOTAL 0010				**9**	**530**	**51,522**	**979**	**--**	**207**	**51,522**	**--**	**3,173**
USH 45 NB	1124+31	-	1138+58	18	1,427	1,427	4,467	-	-	1,427	8	1,427
USH 45 SB	2124+31	-	2138+58	-	1,427	1,427	-	-	-	1,427	-	1,427
CTH D EB	216+19	-	227+35	-	1,116	1,116	-	-	-	1,116	-	1,116
CTH D WB	316+19	-	327+35	-	1,116	1,116	-	5	-	1,116	-	1,116
TOTAL 0020				**18**	**5,086**	**5,086**	**4,467**	**5**	**--**	**5,086**	**8**	**5,086**
PROJECT TOTAL				**27**	**5,616**	**56,608**	**5,446**	**5**	**207**	**56,608**	**8**	**8,259**

LIGHTING

ROADWAY	STATION	TO	STATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH * LF	652.0335 CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH LF	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH * EACH	654.0105 CONCRETE BASES TYPE 5 * EACH	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG * LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	656.0201.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (location) 01. NW CORNER OF CTH D & USH 45 * EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE * EACH	657.0322 POLES TYPE 5-ALUMINUM * EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	659.1115 LUMINAIRES UTILITY LED A EACH	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	FOR INFORMATION ONLY LOCATOR WIRE LF	REMARKS
USH 45	1124+31	-	1138+58	4,173	375	27	24	1	1,920	14,469	1	24	24	24	24	1	75	ROUNDABOUT
TOTAL 0020				**4,173**	**375**	**27**	**24**	**1**	**1,920**	**14,469**	**1**	**24**	**24**	**24**	**24**	**1**	**75**	

* QUANTITIES SHOWN ELSEWHERE IN PLAN

SAWCUTS

ROADWAY	SIDE	STATION	TO	STATION	690.0150 SAWING ASPHALT * LF	690.0250 SAWING CONCRETE * LF	REMARKS
USH 45	LT/RT		802+50		30	-	BEGIN PROJECT
USH 45	LT/RT	810+43	-	823+37	2680	-	CTH D
USH 45	LT/RT	909+39	-	918+40	5410	-	STH 15
USH 45	LT/RT	920+58	-	933+09	1990	-	STH 15
USH 45	RT	1095+31	-	1096+60	32	-	SPURR RD
USH 45	LT	1095+53	-	1096+84	32	-	SPURR RD
USH 45	LT	1201+78	-	1203+02	35	6	CHURCH RD
USH 45	LT/RT		1209+21		30	-	END PROJECT
USH 45	LT/RT	863+35	-	1051+49	580	-	BRIDGE APPROACHES
R1	LT/RT	1042+76	-	1043+19	440	-	
R2	LT/RT	1033+34	-	1041+01	871	3	
R3	LT	1056+24	-	1063+87	763	-	
R3	LT/RT	1067+65	-	1068+19	200	-	
R4	LT/RT	1047+54	-	1047+78	443	-	
TOTAL 0010					**13,536**	**9**	
CTH D EB	LT/RT		216+19		30	-	RAB
CTH D EB	LT/RT		227+35		30	-	RAB
TOTAL 0020					**60**	**--**	
PROJECT TOTAL					**13,596**	**9**	

LANDMARK REFERENCE MONUMENTS

SPV.0060.01

SPECIAL (01. REESTABLISH SECTION CORNER MONUMENTS)

*

ROADWAY	STATION	OFFSET	TOWNSHIP	RANGE	EACH
USH 45	807+05	1.19' RT	T22N	R14E/R15E	1
TOTAL 0010					**1**

* QUANTITIES SHOWN ELSEWHERE IN PLAN

TRANSPORTATION PROJECT PLAT NO: 1140-00-27 - 4.01

PART OF LOT 1 , CSM 5998, DOCUMENT NUMBER 661238 IN VOLUME 20, PAGES 413-414, LOCATED IN AND INCLUDING PART OF THE SE 1/4 OF THE NE 1/4 OF SECTION 36, TOWN 23 NORTH, RANGE 14 EAST, TOWN OF LEBANON, WAUPACA COUNTY WISCONSIN.

RELOCATION ORDER: USH 45, NEW LONDON - CLINTONVILLE, GIVENS ROAD TO CHURCH ROAD, OUTAGAMIE & WAUPACA COUNTIES

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, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
100	WE- ENERGIES	RELEASE OF RIGHTS

(100) WE-ENERGIES
EASEMENT RELEASE
DOC. 686222 - PARCEL 3

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SF
			NEW	EXISTING	TOTAL	
2	LESLIE & MARY LOU PROCHNOW	TLE	--	--	--	3981
3	CHAD A. & KIM L. KARPF	FEE, TLE	229	--	229	3692
4	CHAD KARPF	TLE	--	--	--	96

Doc No: 929449
Recorded on
4/7/2025 8:19 AM
JEREMY SCHOENIKE
WAUPACA COUNTY
REGISTER OF DEEDS
Fee Amount:

This document has been electronically recorded

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 1140-00-27 - 4.01
AMENDMENT NO:

FOUND MONUMENT TABLE				FOUND MONUMENT TABLE			
POINT #	Y	X	DESCRIPTION	POINT #	Y	X	DESCRIPTION
208	366927.891	627442.291	3/4" IRON ROD	217	366958.283	627730.745	1" IRON PIPE
209	366607.995	627487.722	1" IRON PIPE	218	366706.830	627766.454	1" IRON PIPE
210	366537.633	627149.853	1" IRON PIPE	219	366673.845	627801.352	3/4" IRON ROD
211	366502.147	627027.996	3/4" IRON ROD	220	366702.515	627938.874	3/4" IRON ROD
215	366489.307	627504.955	1" IRON PIPE	221	366580.225	627940.582	3/4" IRON ROD
216	366765.712	628243.035	1" IRON PIPE	222	366555.010	627818.694	3/4" IRON ROD
				223	366508.554	627794.438	1" IRON PIPE

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

BASIS OF EXISTING R/W			
HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
CTH D	R/W PLAT 1146-04-22	120'	1991
CTH D	CSM 5998	120'	2003
USH 45	R/W PLAT 1146-04-22	290'	1991

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), WAUPACA COUNTY, NAD 83 (2011), IN US 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.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND 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, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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.

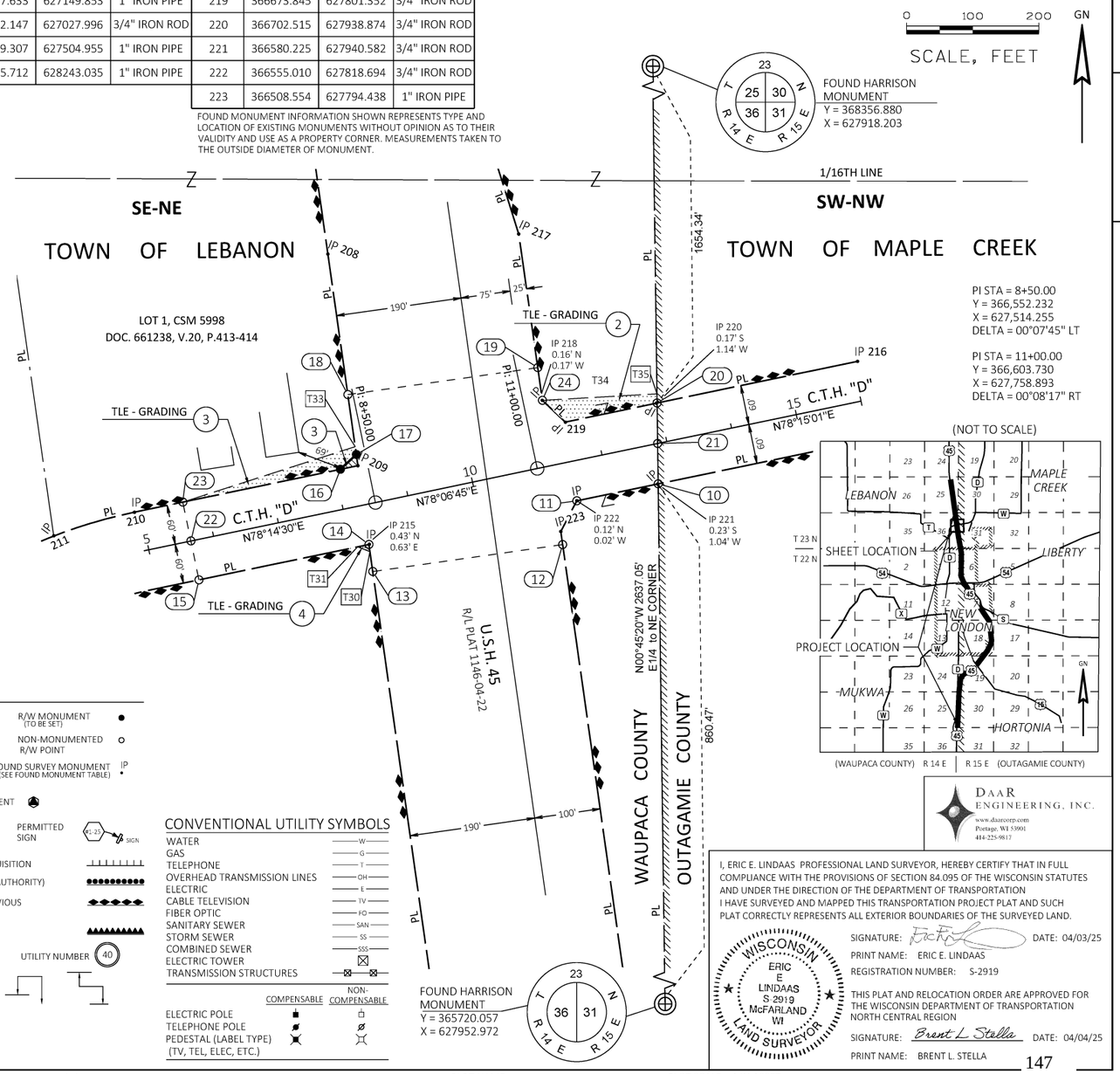
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS AND THE WISCONSIN RAPIDS PUBLIC WORKS OFFICE.

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

EXISTING ACCESS CONTROL ALONG USH 45 AND CTH D ESTABLISHED FROM R/W PLAT 1146-04-22.

R/W COURSE TABLE		
LINE #	DIRECTION	LENGTH
10-11	S78° 15' 01"W	125.54'
11-223	S27° 39' 22"W	52.31'
223-12	S08° 04' 46"E	20.00'
12-13	S81° 55' 14"W	290.00'
13-14	N08° 04' 46"W	41.29'
14-15	S78° 14' 30"W	262.37'
15-22	N11° 45' 30"W	60.00'
22-23	N11° 45' 30"W	60.00'
23-16	N78° 14' 30"E	243.39'
16-17	N47° 06' 45"E	32.82'
17-18	N08° 04' 46"W	91.50'
18-19	N81° 55' 14"E	290.00'
19-24	S08° 04' 46"E	50.00'
24-219	S46° 36' 51"E	47.79'
219-20	N78° 15' 01"E	141.63'
20-21	S00° 45' 20"E	61.12'
21-10	S00° 45' 20"E	61.12'

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
10	12+74.16	60.00'
11	11+48.63	60.00'
12	11+14.14	120.38'
13	8+24.72	101.21'
14	8+27.37	60.00'
15	5+65.00	60.00'
16	8+08.39	-60.00'
17	8+36.48	-76.96'
18	8+42.35	-168.28'
19	11+31.73	-149.11'
20	12+97.48	-60.00'
21	12+85.82	0.00'
22	5+65.00	0.00'
23	5+65.00	-60.00'
24	11+28.53	-99.21'
T30	8+26.66	71.00'
T31	8+10.00	60.00'
T33	8+37.25	-89.00'
T35	13+00.13	-73.64'
219	11+55.85	-60.00'
223	11+15.42	100.42'



0 100 200 GN
SCALE, FEET

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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

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
EXISTING CENTERLINE
CORPORATE LIMITS
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
BUILDING TO BE REMOVED
BRIDGE CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIGN PERMITTED SIGN
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

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND SURVEY MONUMENT (SEE FOUND MONUMENT TABLE) IP

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	
COMBINED SEWER	SSS	
ELECTRIC TOWER		
TRANSMISSION STRUCTURES		

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

DAAR ENGINEERING, INC.
www.daarcorp.com
Portage, WI 53901
414-225-9817

I, ERIC E. LINDAAS 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 THE DEPARTMENT OF TRANSPORTATION I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN ERIC E LINDAAS S 2919 McFARLAND WI LAND SURVEYOR

SIGNATURE: DATE: 04/03/25
PRINT NAME: ERIC E. LINDAAS
REGISTRATION NUMBER: S-2919

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

SIGNATURE: Brent L Stella DATE: 04/04/25
PRINT NAME: BRENT L. STELLA

FILE NAME : C:\USERS\NICKFULTON\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\RW\040101-RP.DWG
PLOT DATE : 4/3/2025 10:14 AM
PLOT BY : NICK FULTON
PLOT NAME :
PLOT SCALE : 1 IN:100FT
APPRAISAL PLAT DATE : 04/03/25

1140-00-27 - 4.01

4

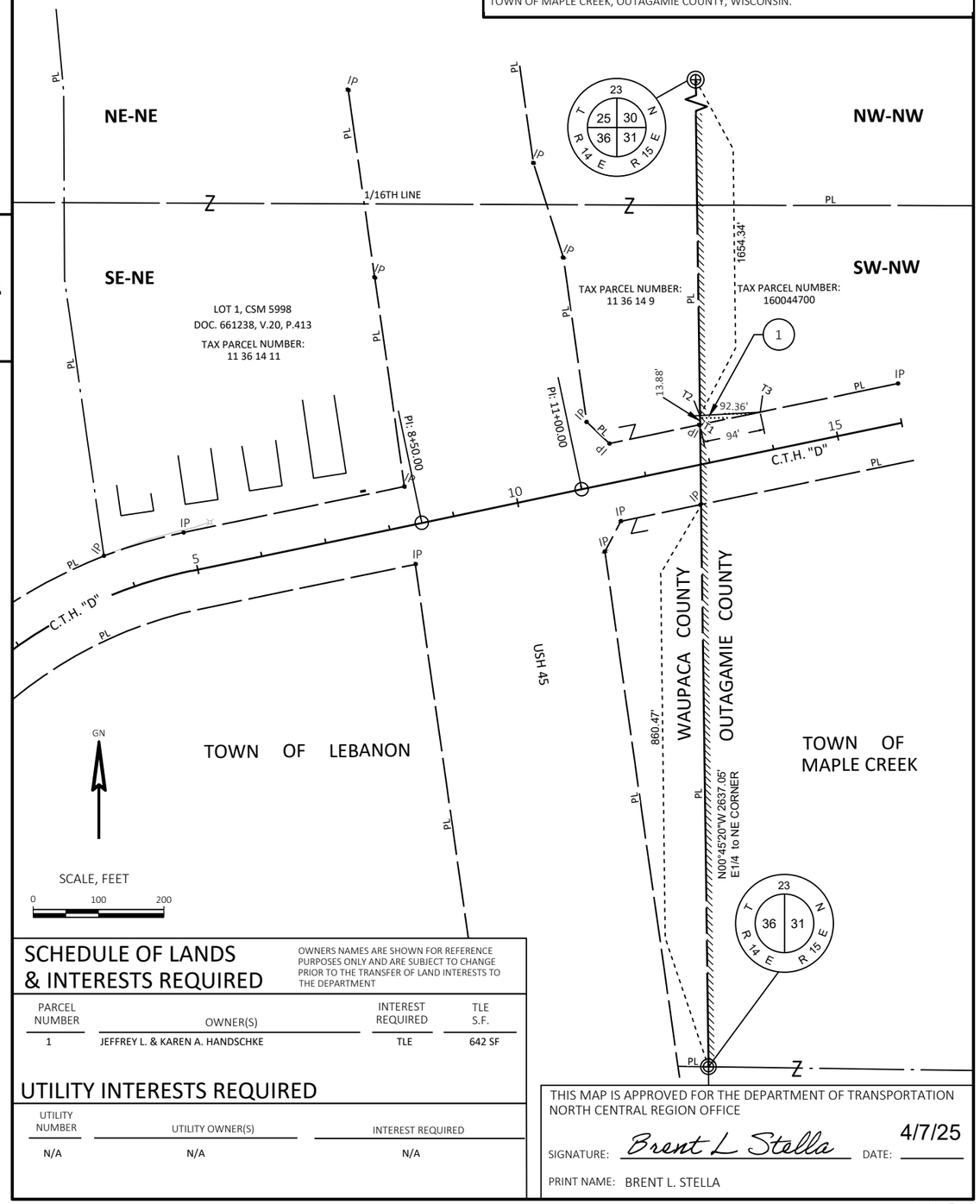
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE FOR TLE IS FOR ACCESS AND GRADING.

R/W PROJECT NUMBER: 1140-00-27	EXHIBIT NUMBER: 1

TLE ACQUISITION EXHIBIT
NEW LONDON - CLINTONVILLE
GIVENS ROAD TO CHURCH ROAD
USH 45 WAUPACA COUNTY

PART OF THE SW 1/4 OF THE NW 1/4 OF SECTION 31, TOWN 23 NORTH, RANGE 15 EAST, TOWN OF MAPLE CREEK, OUTAGAMIE COUNTY, WISCONSIN.



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	JEFFREY L. & KAREN A. HANDSCHKE	TLE	642 SF

UTILITY INTERESTS REQUIRED

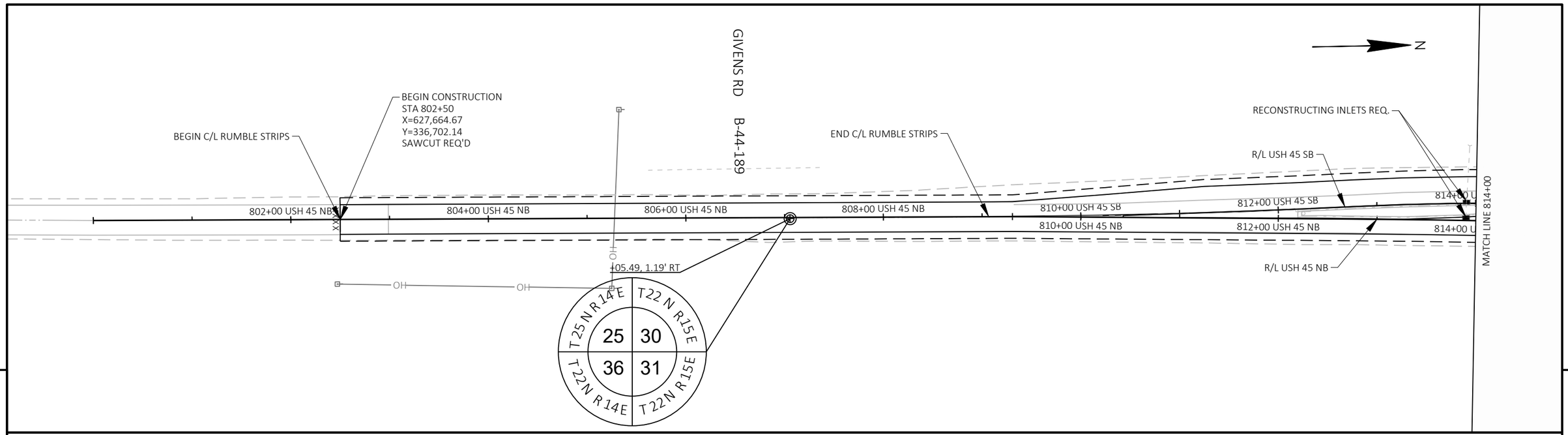
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTH CENTRAL REGION OFFICE

SIGNATURE: Brent L Stella DATE: 4/7/25

PRINT NAME: BRENT L. STELLA

FILE NAME : 040101-TLE.DWG PLOT DATE : 3/31/2025 3:39 PM R/W PROJECT: 1140-00-27



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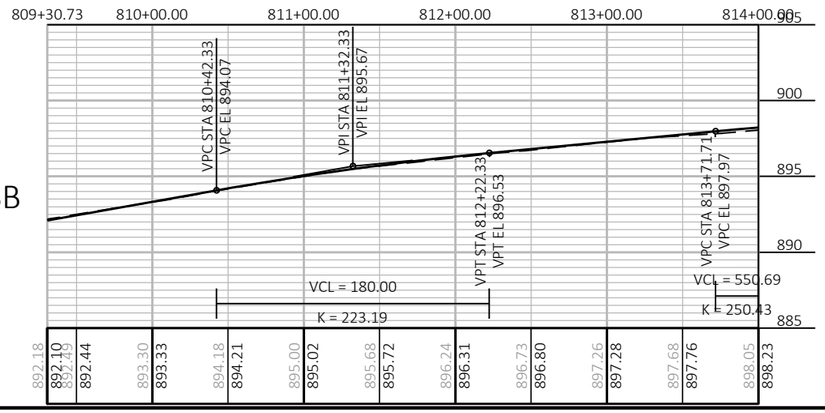
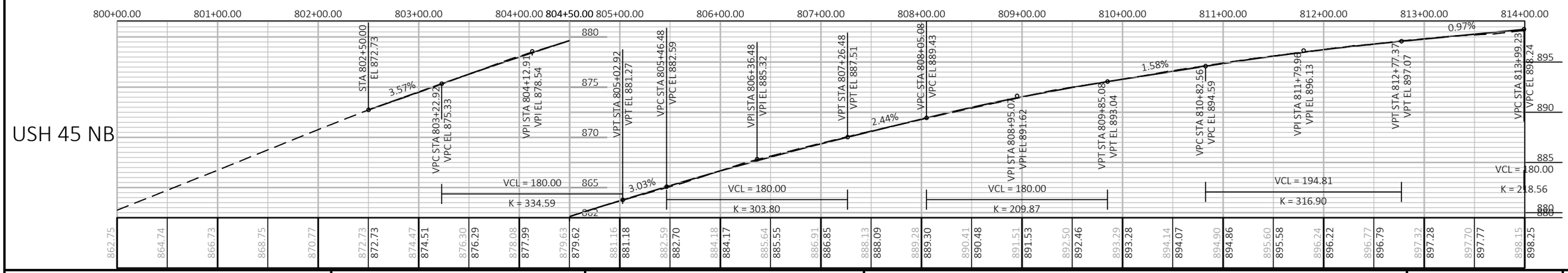
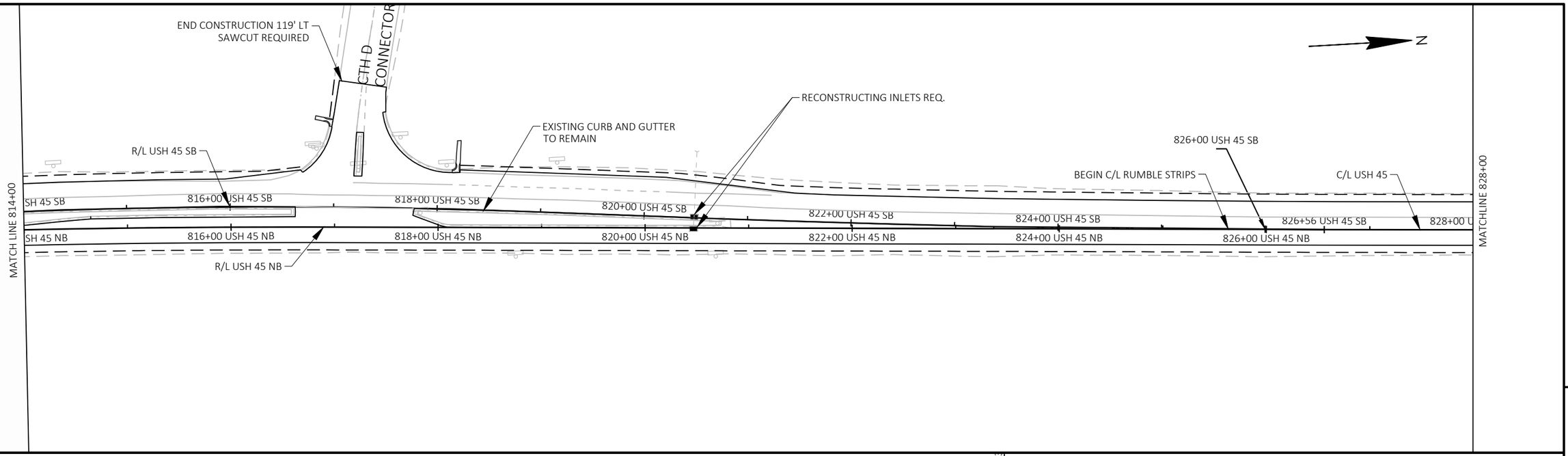




PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 149	E



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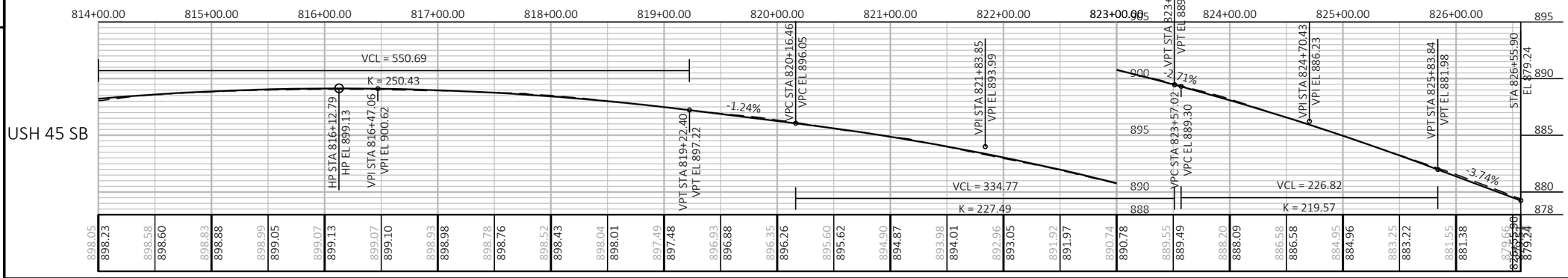
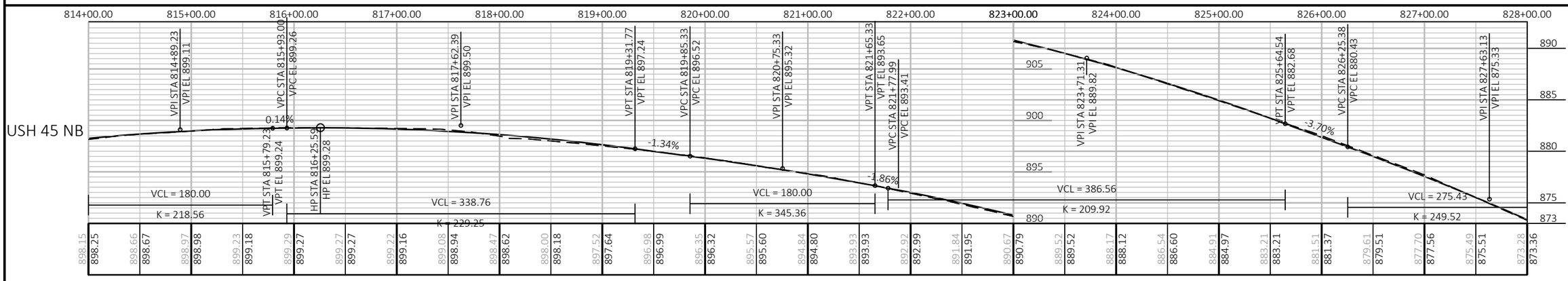
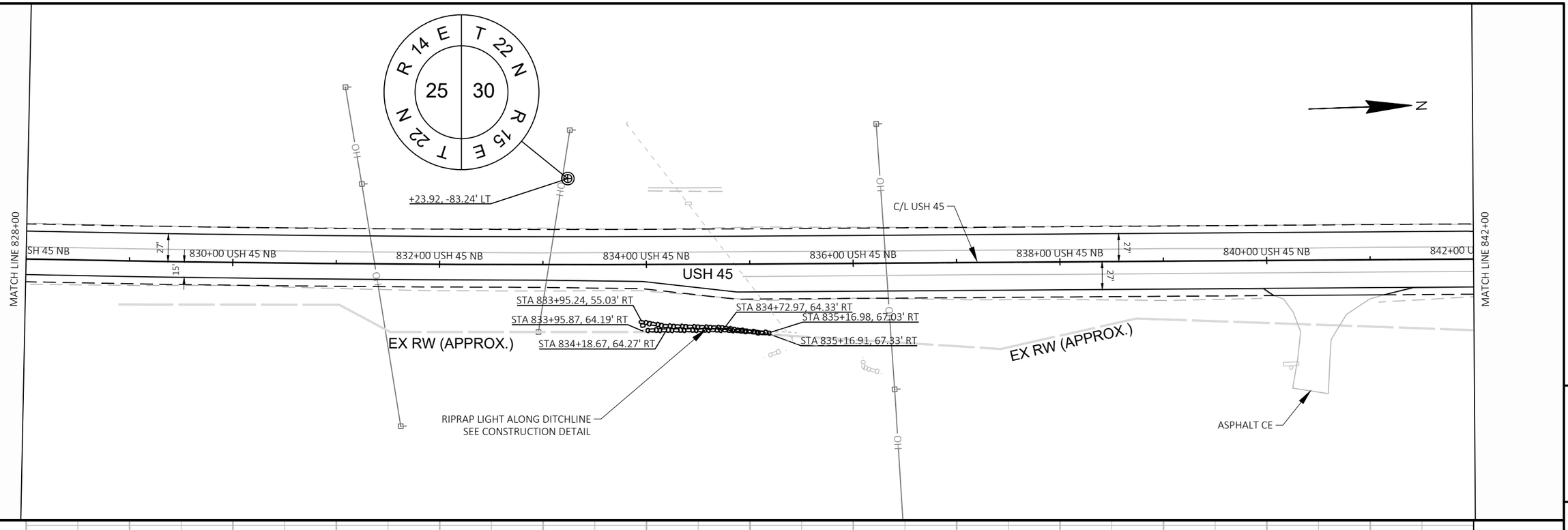




PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 150 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 9/16/2025 5:11 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 02
WISDOT/CADDS SHEET 44



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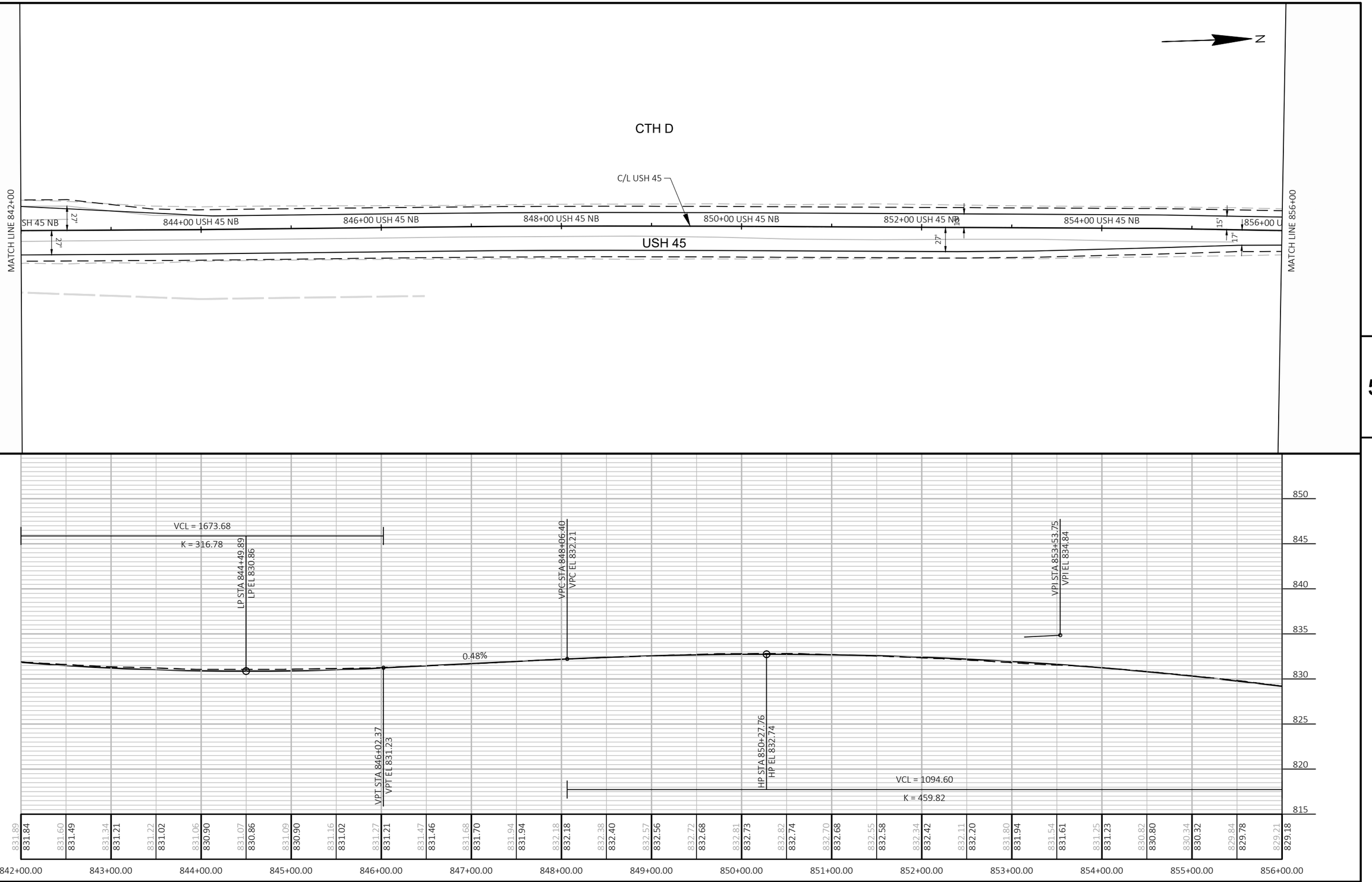
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 151	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 03
PLOT DATE : 7/31/2025 11:47 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



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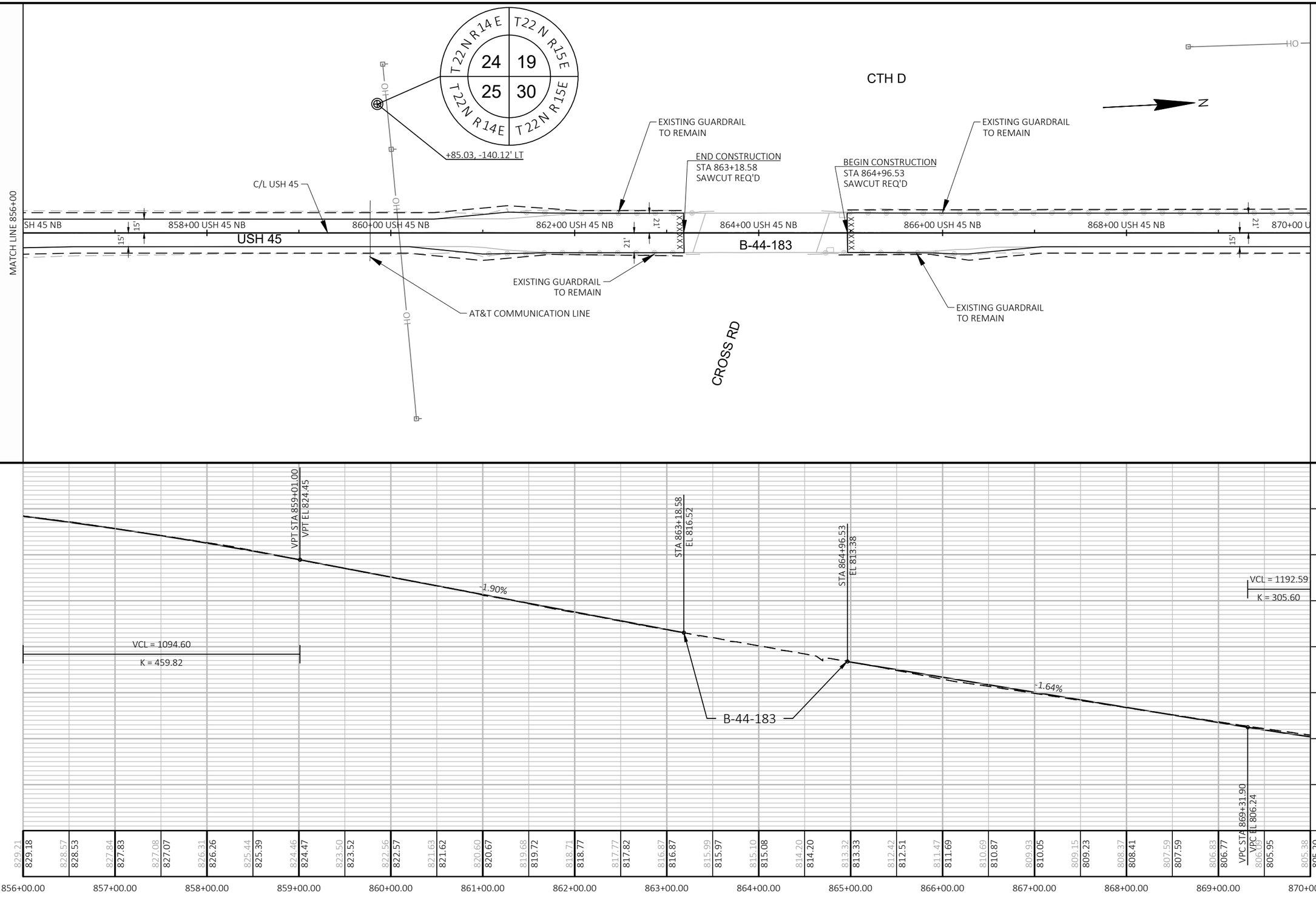
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 152	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 04
PLOT DATE : 7/31/2025 11:47 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



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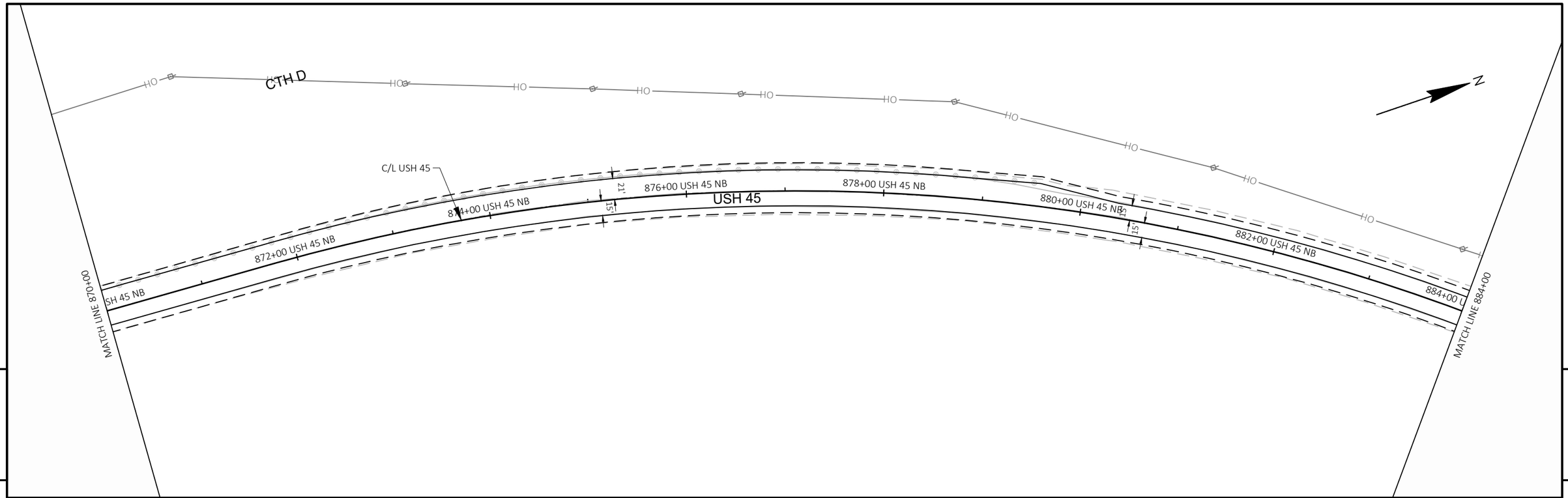
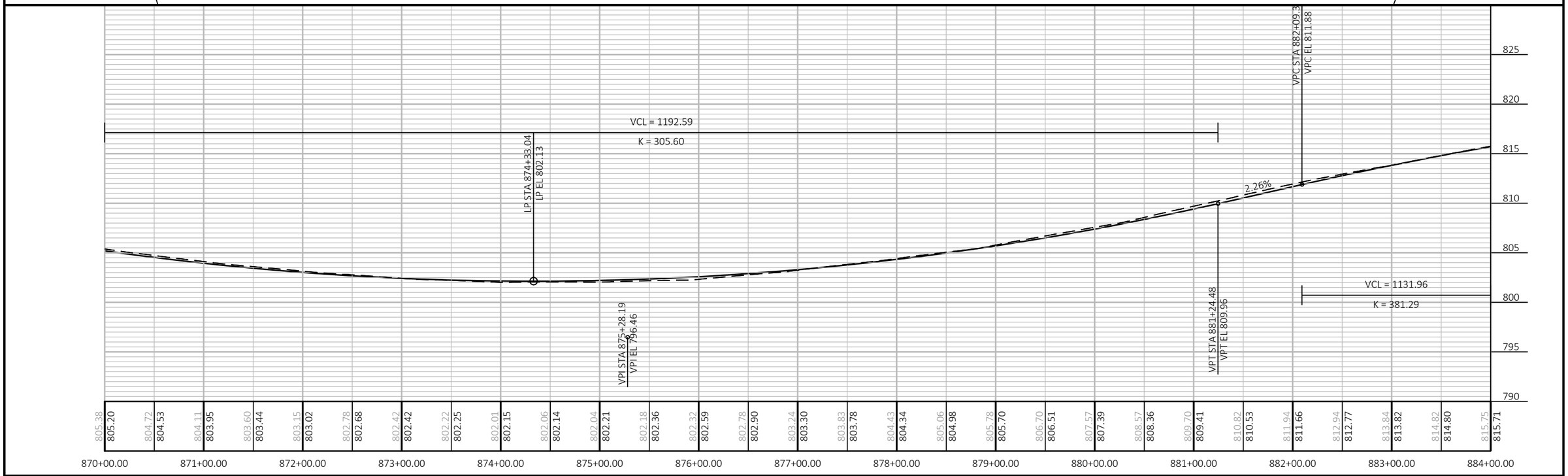
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 153	E

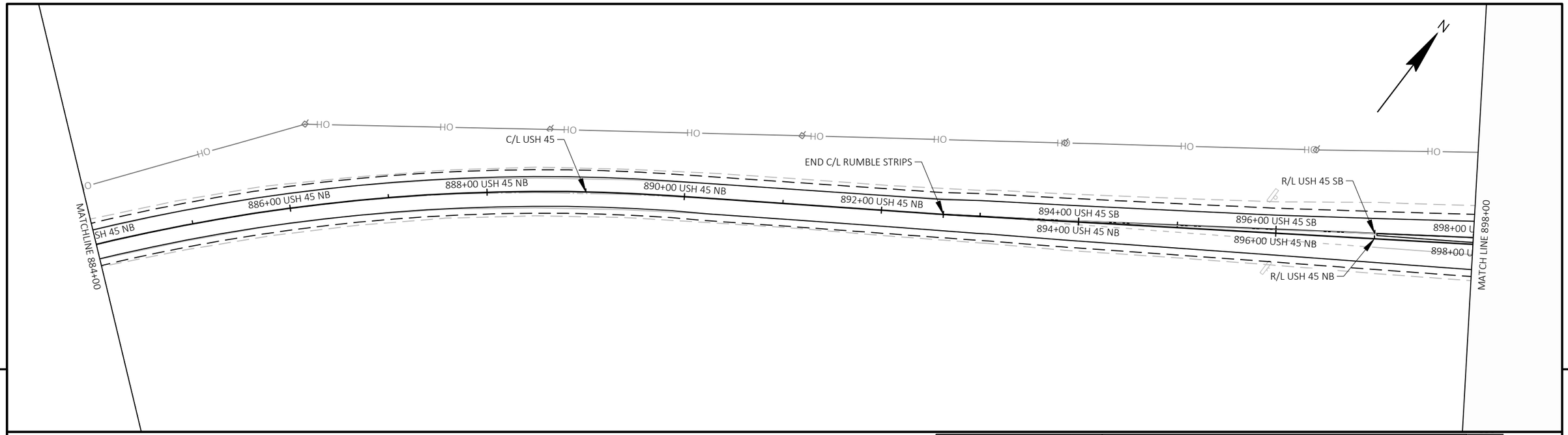
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 05
PLOT DATE : 7/31/2025 11:47 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 154 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 06
PLOT DATE : 7/31/2025 11:47 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



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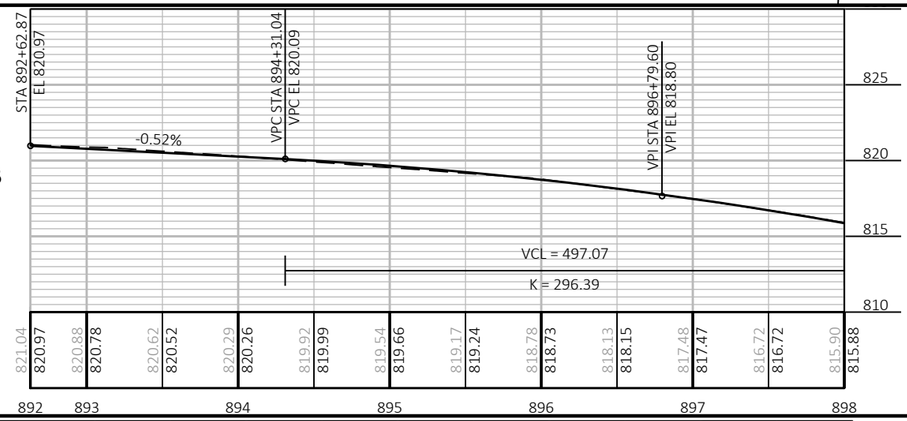
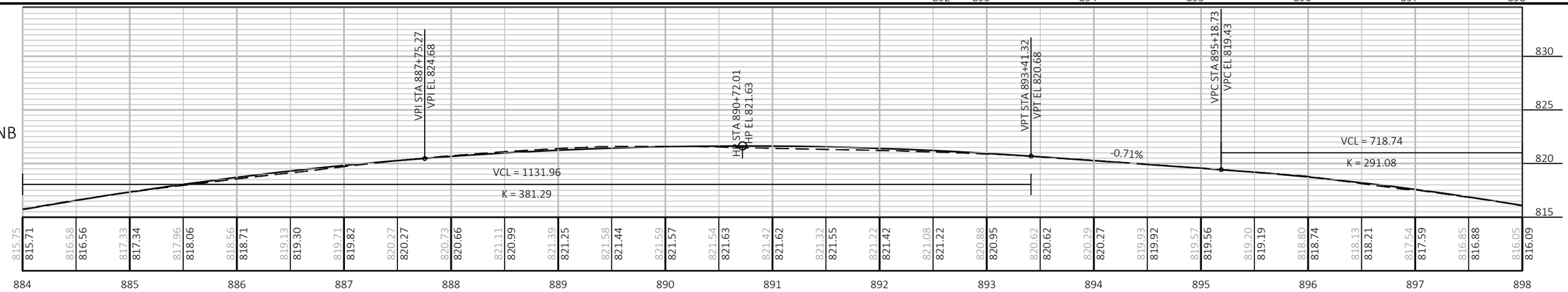
USH 45 SB

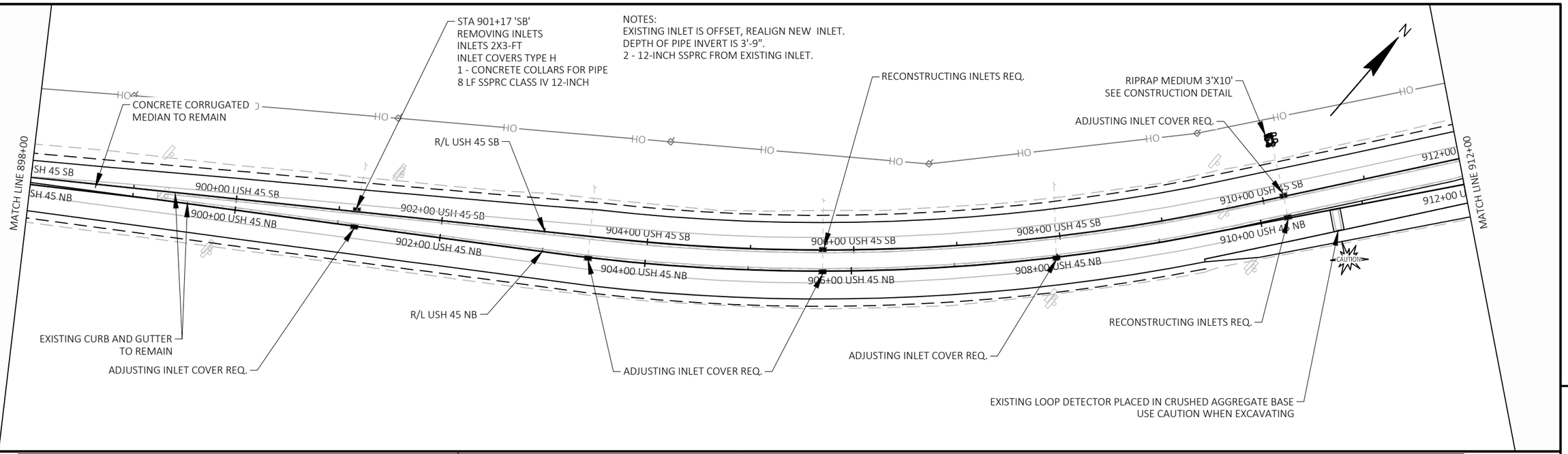


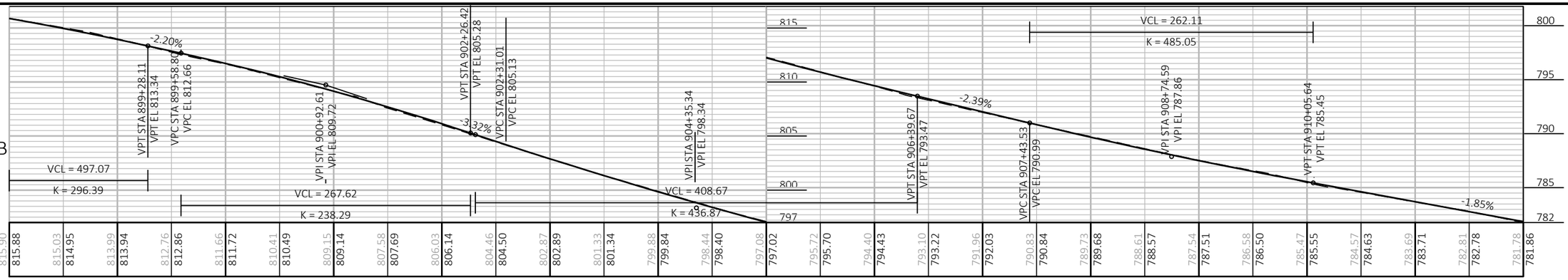
USH 45 NB



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 155	E

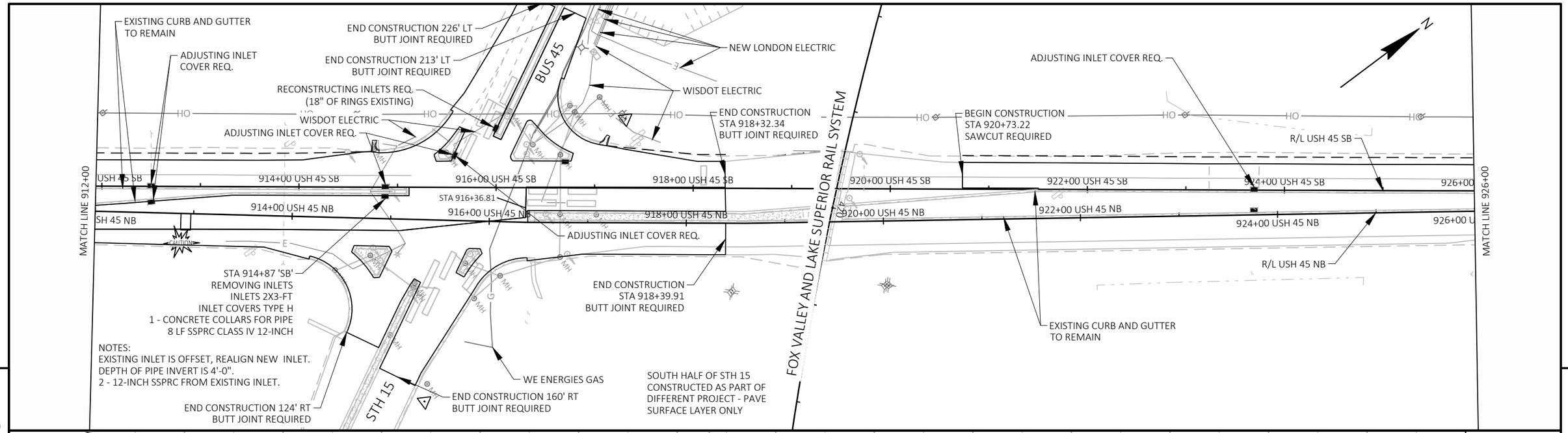
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:47 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 07
WISDOT/CADDS SHEET 44

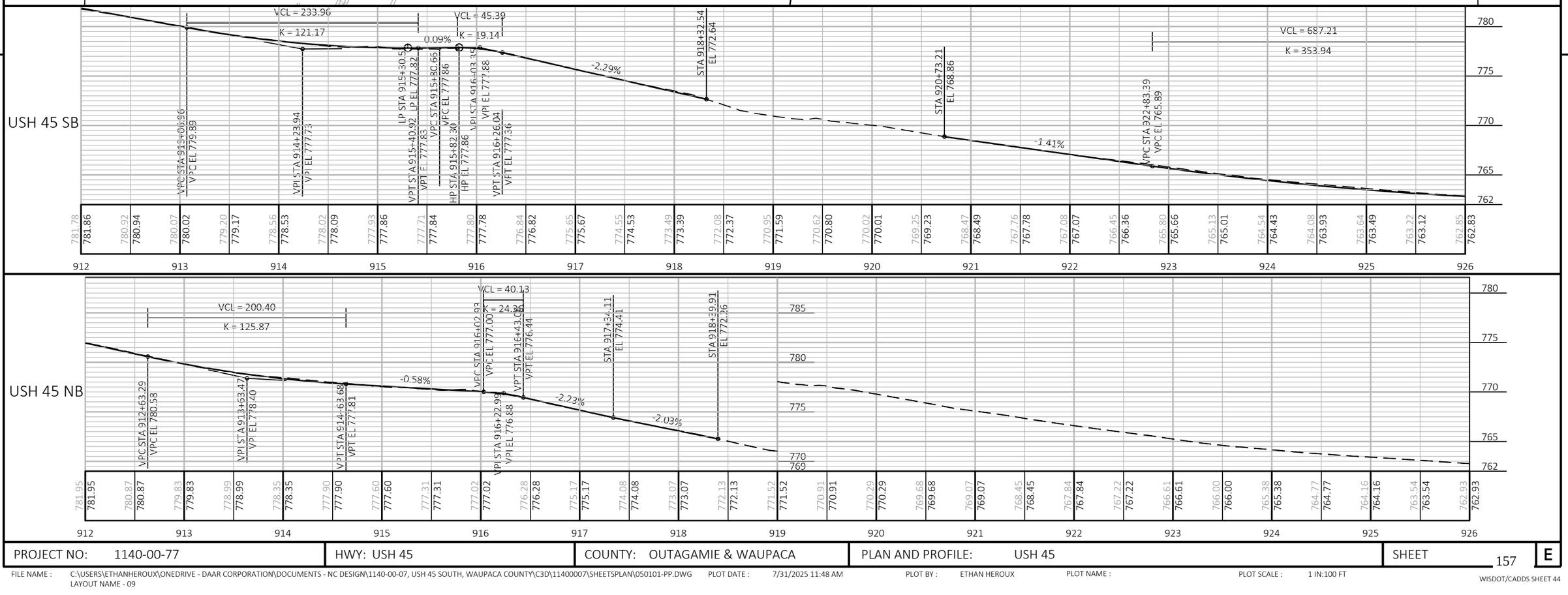




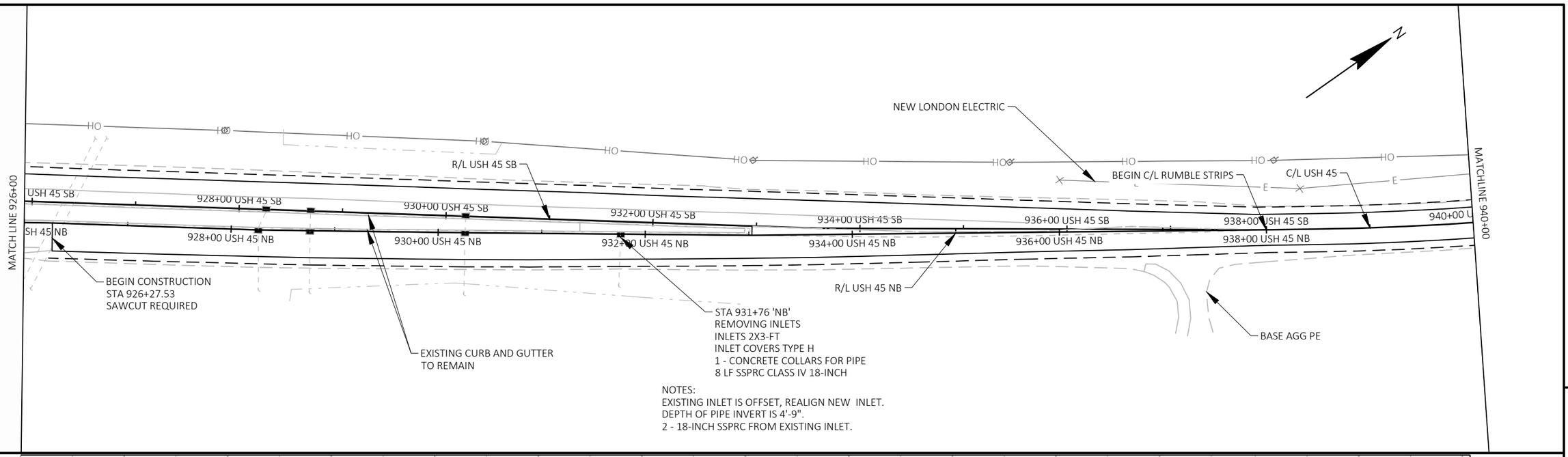
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 156	E

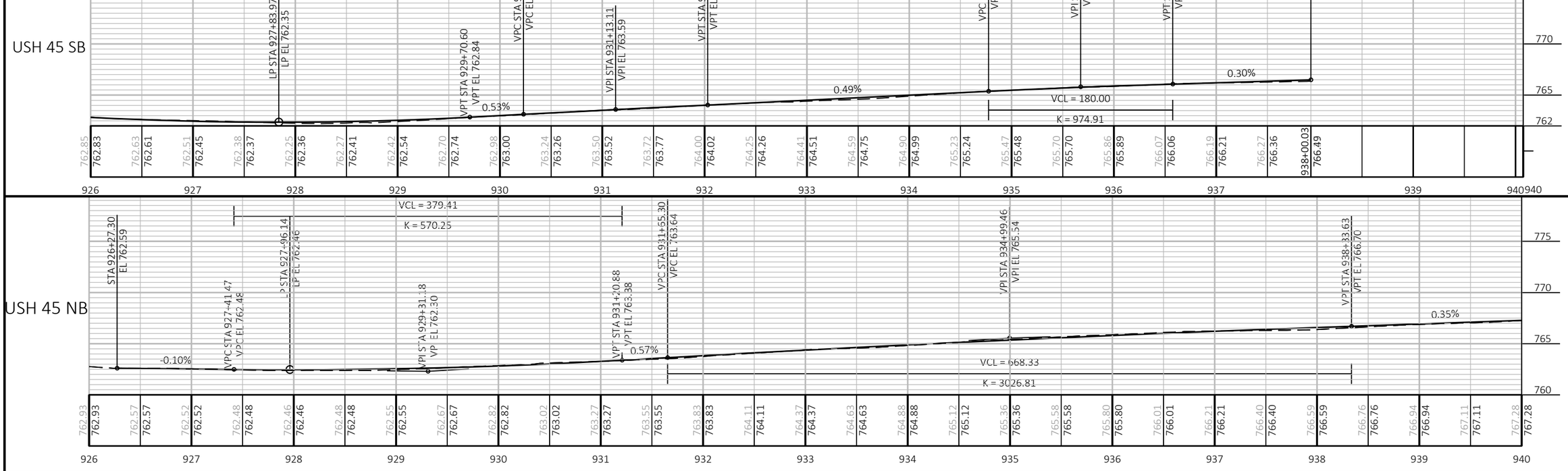
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:48 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 08
WISDOT/CADDS SHEET 44





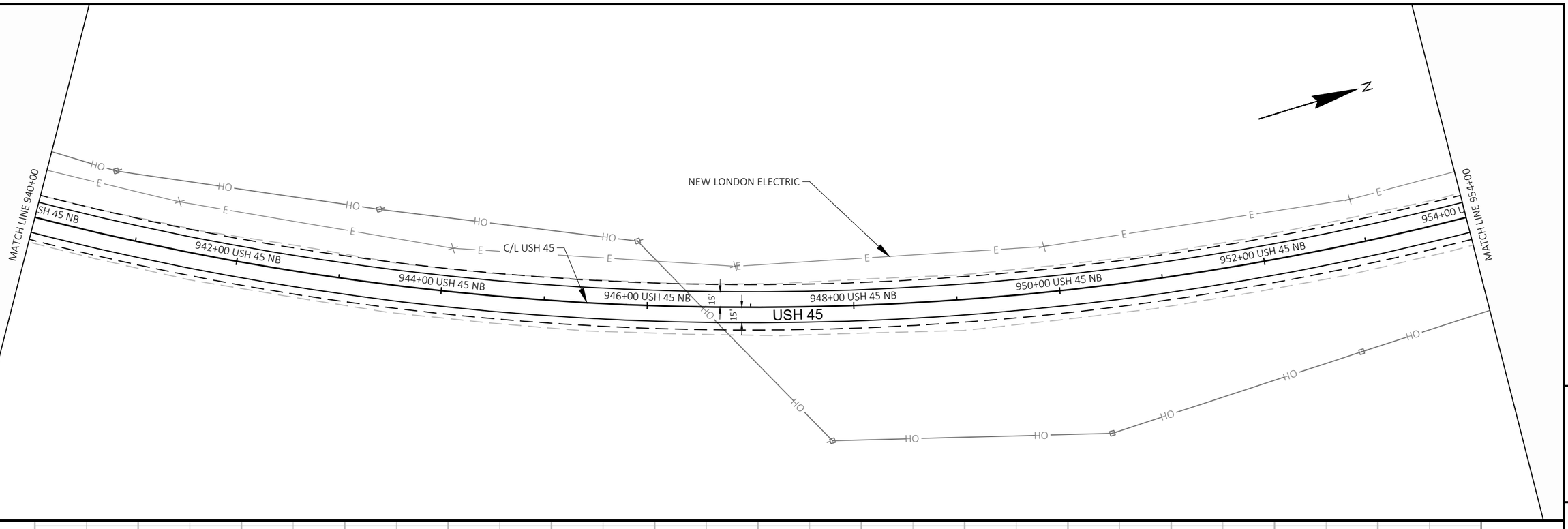
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 157	E





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 158	E

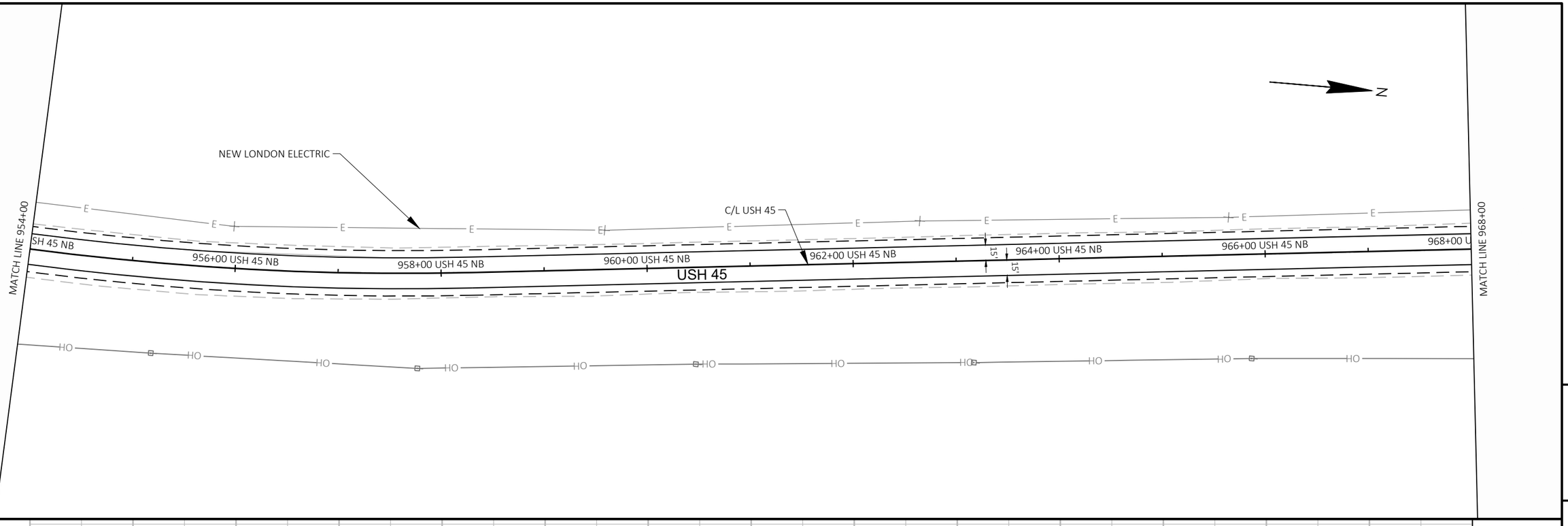
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 10
PLOT DATE : 7/31/2025 11:48 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

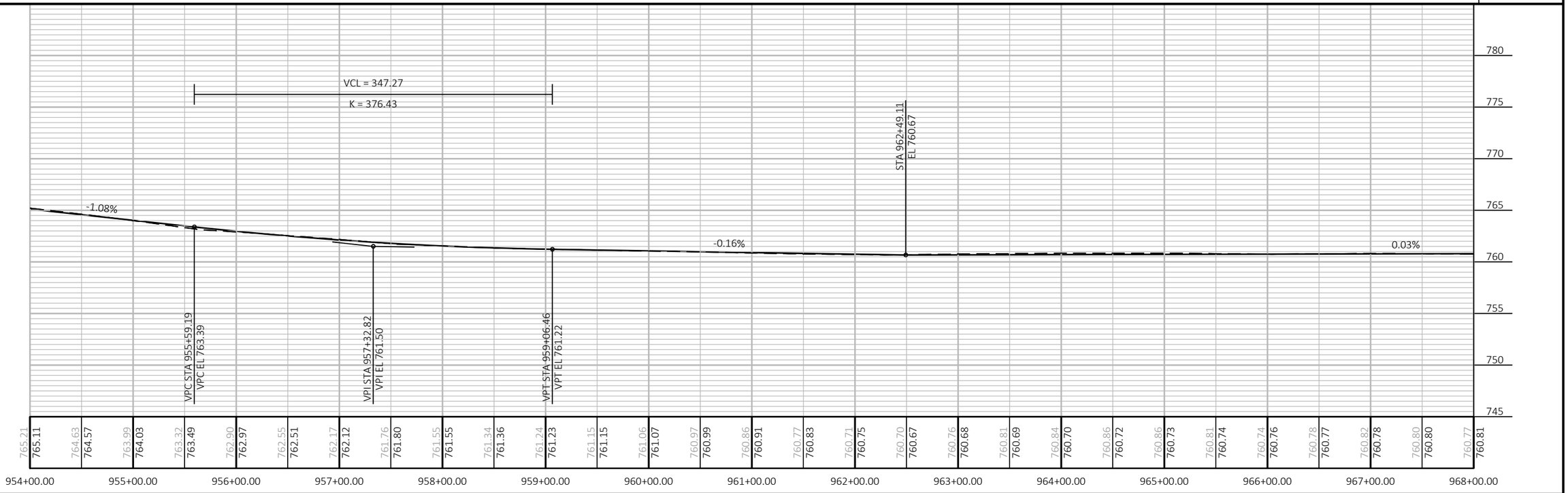


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 159 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 11
PLOT DATE : 7/31/2025 11:48 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

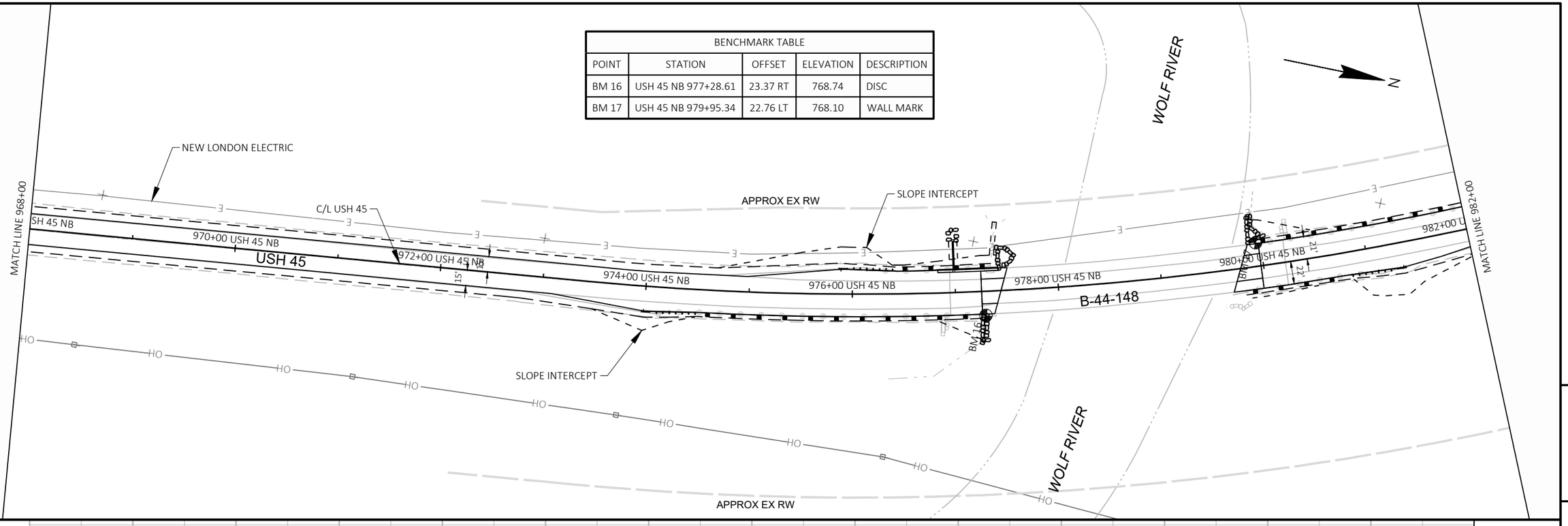


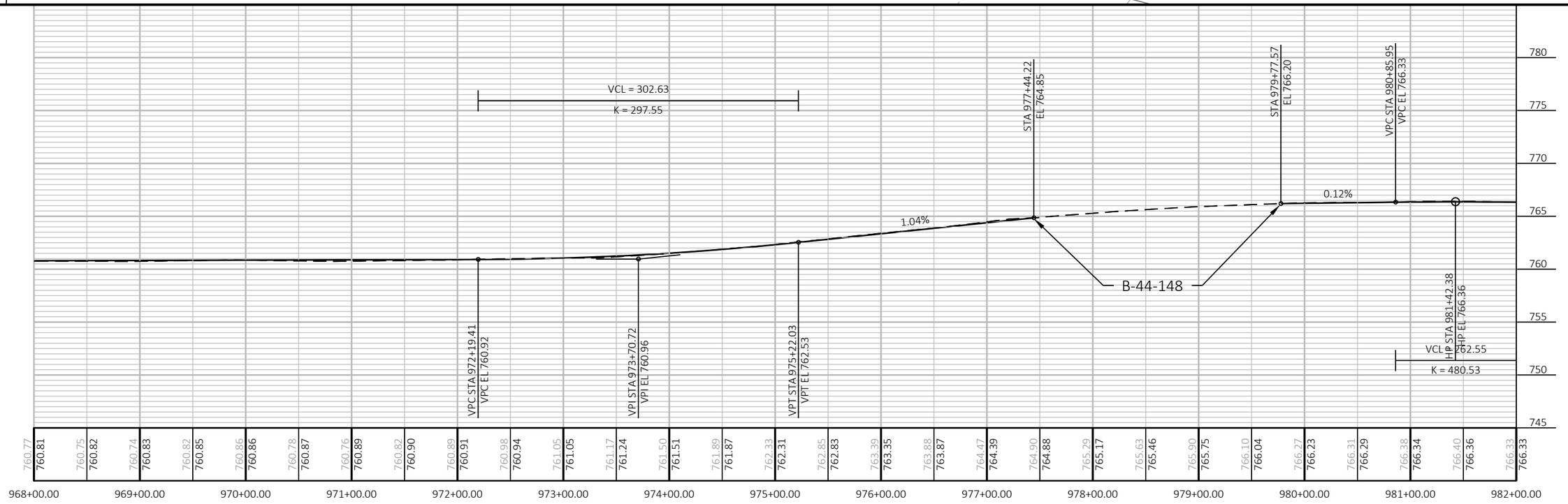


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 160	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 12
PLOT DATE : 7/31/2025 11:48 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

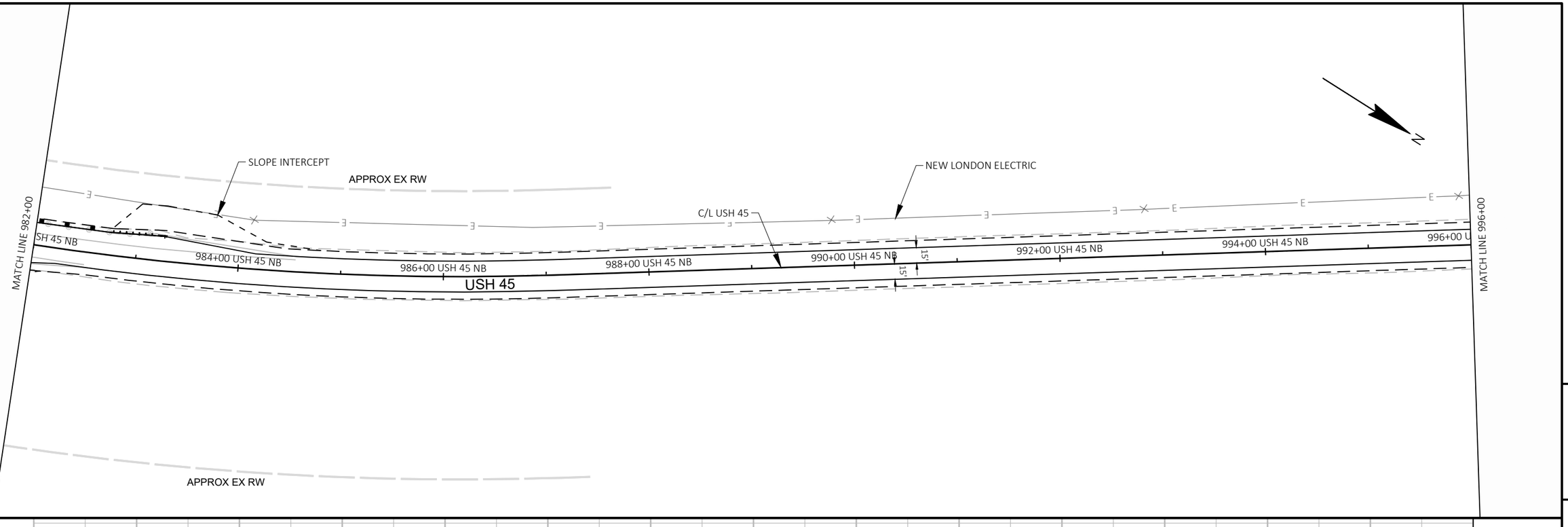
BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 16	USH 45 NB 977+28.61	23.37 RT	768.74	DISC
BM 17	USH 45 NB 979+95.34	22.76 LT	768.10	WALL MARK





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 161	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:48 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 13
WISDOT/CADDS SHEET 44



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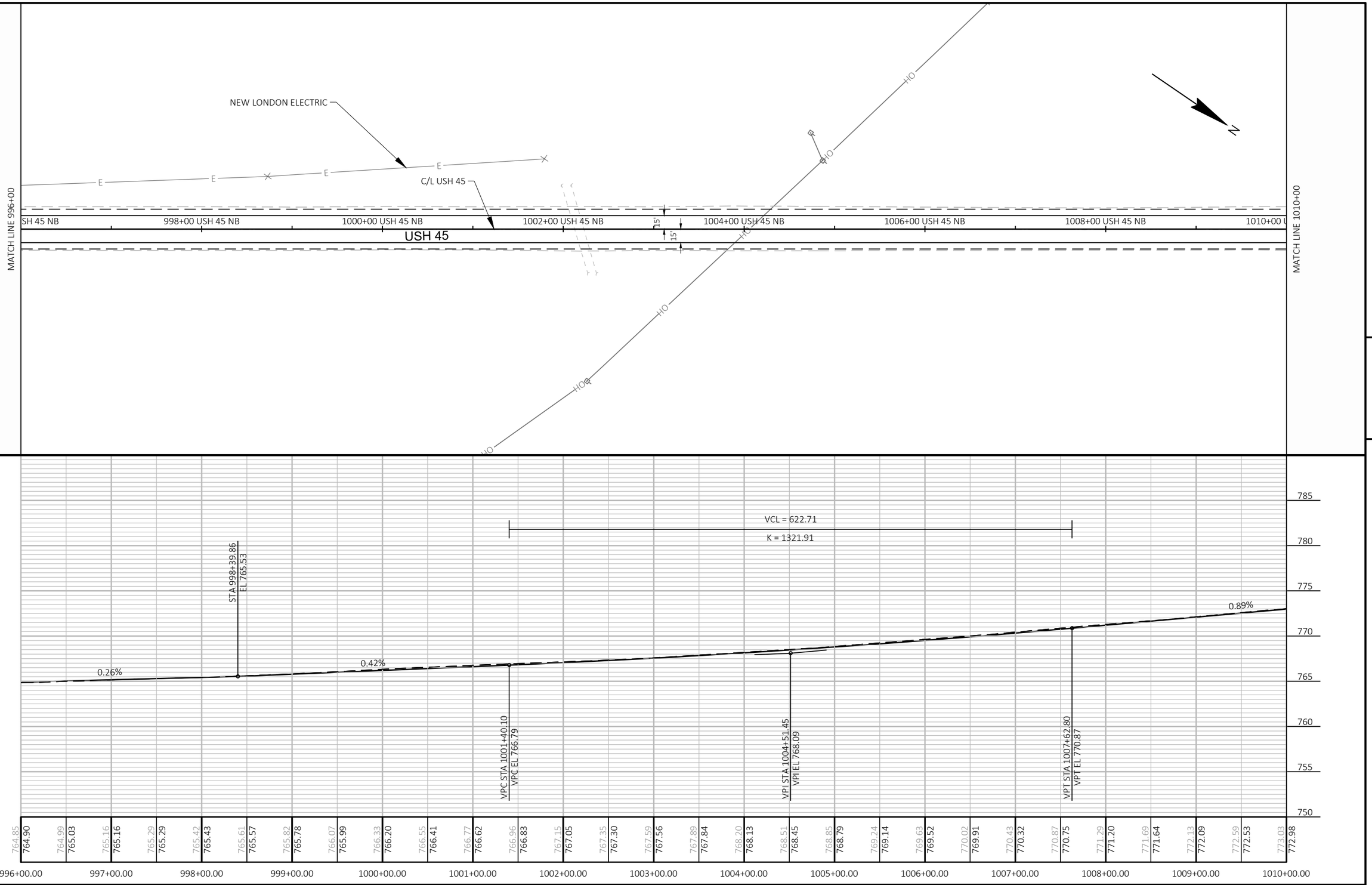
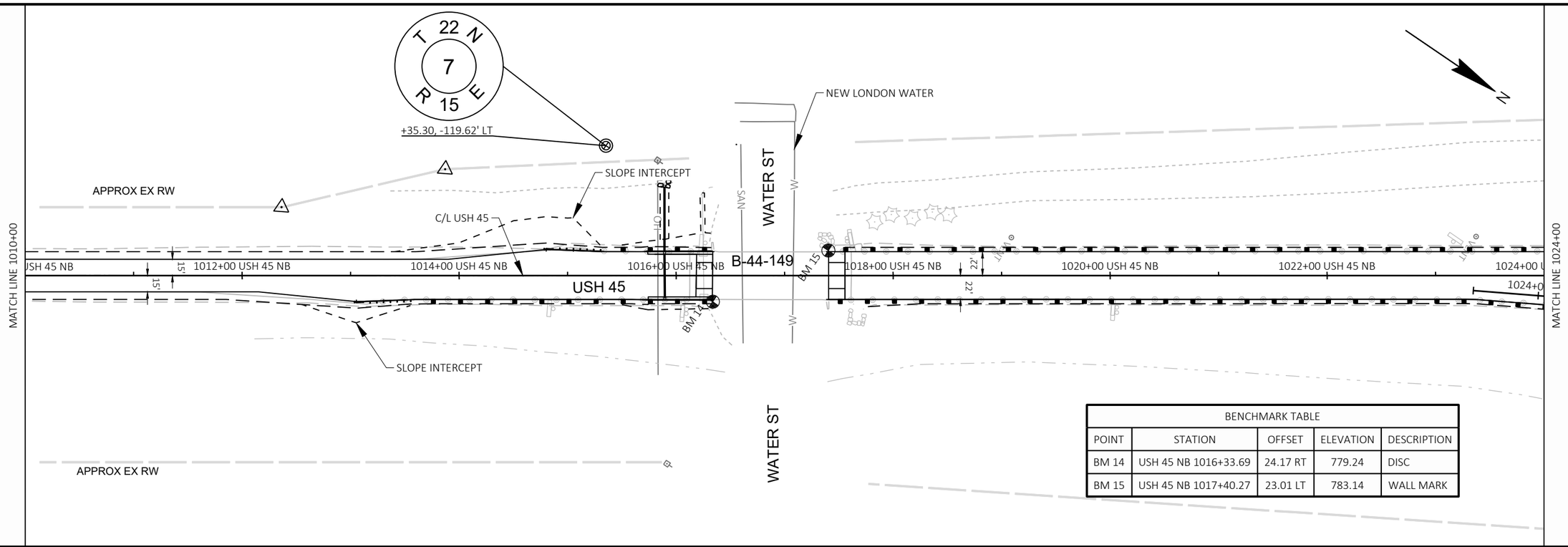
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 162	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 14
PLOT DATE : 7/31/2025 11:48 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

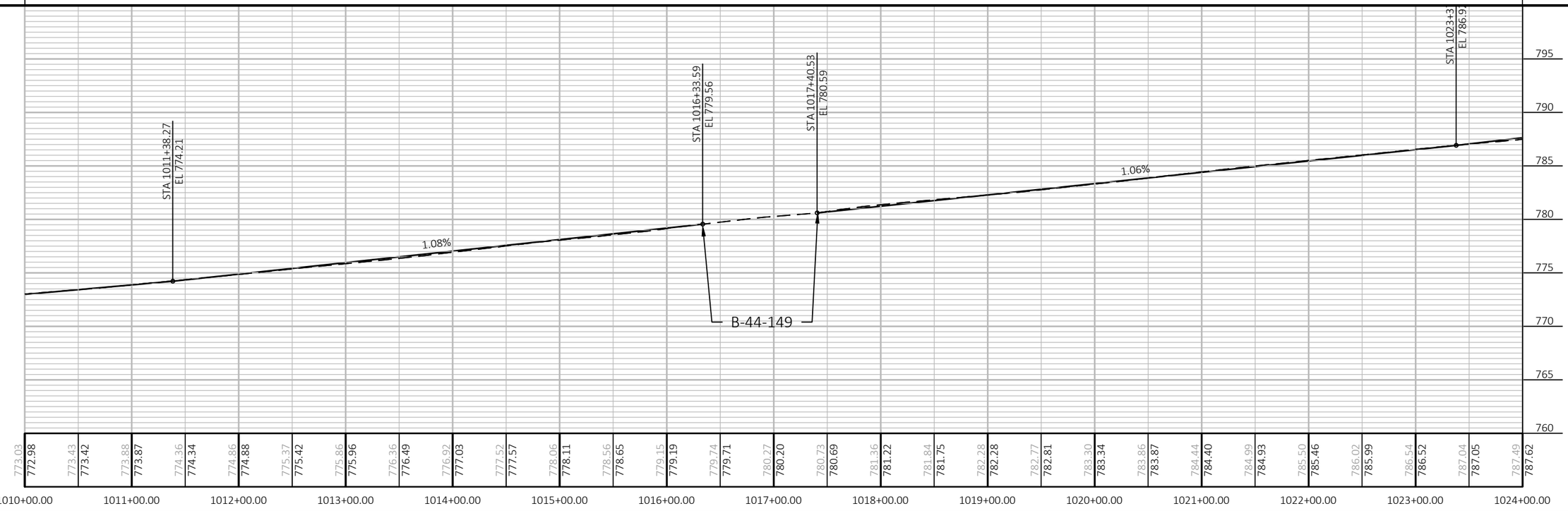


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 163	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 15
PLOT DATE : 7/31/2025 11:49 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



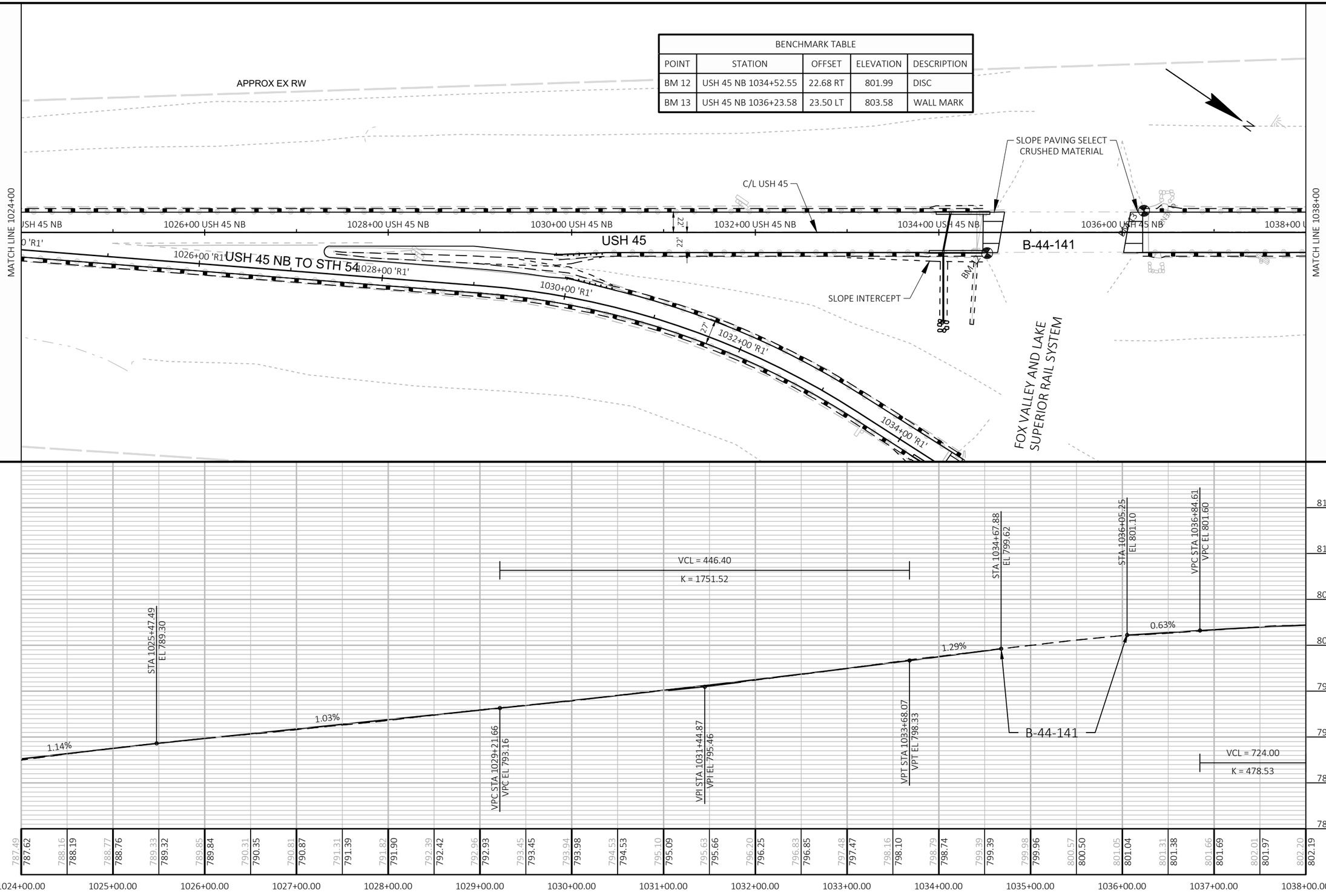
BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 14	USH 45 NB 1016+33.69	24.17 RT	779.24	DISC
BM 15	USH 45 NB 1017+40.27	23.01 LT	783.14	WALL MARK



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 164 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:49 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 16
WISDOT/CADDS SHEET 44

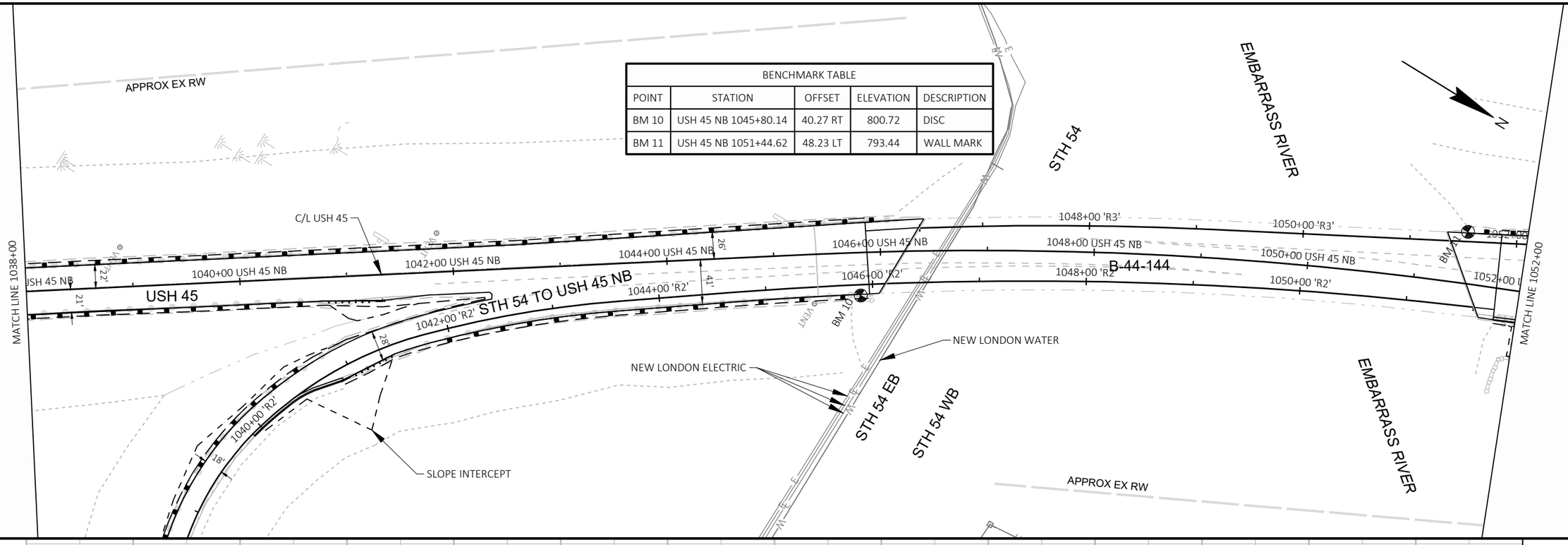
BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 12	USH 45 NB 1034+52.55	22.68 RT	801.99	DISC
BM 13	USH 45 NB 1036+23.58	23.50 LT	803.58	WALL MARK

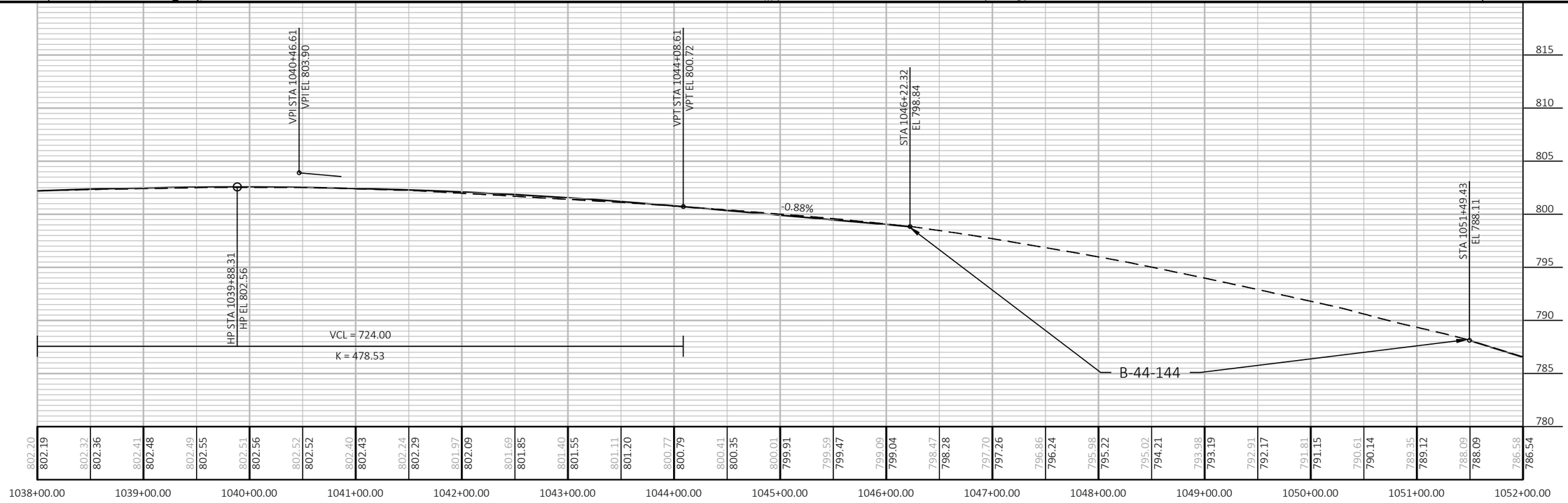


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 165	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 17
PLOT DATE : 7/31/2025 11:49 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

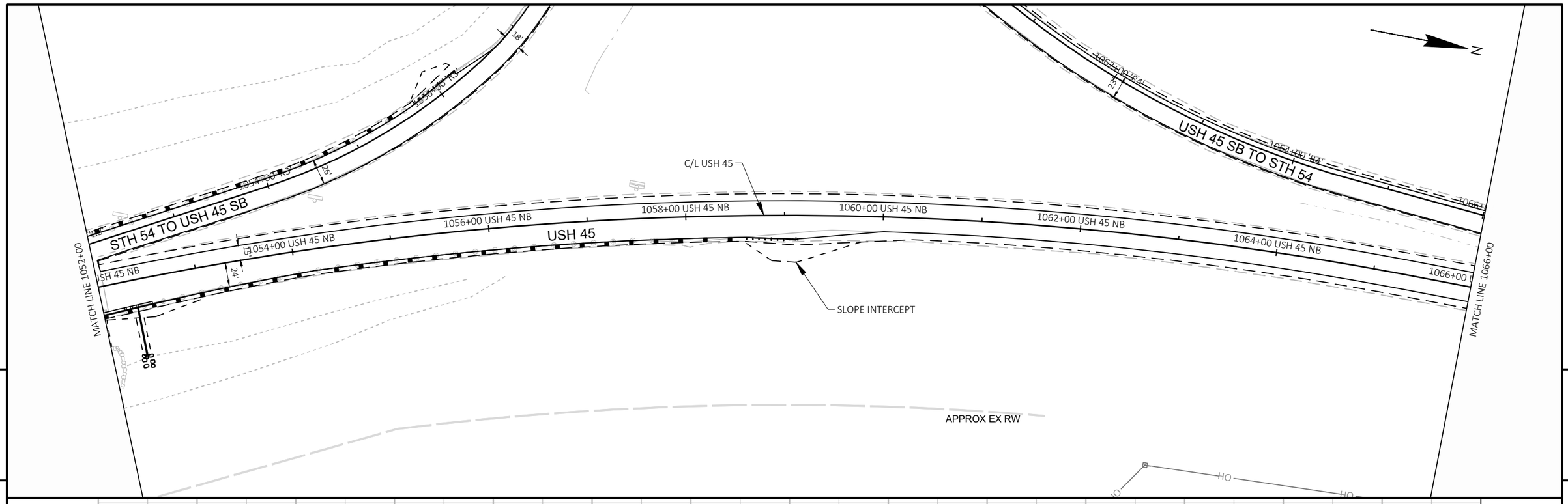
BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 10	USH 45 NB 1045+80.14	40.27 RT	800.72	DISC
BM 11	USH 45 NB 1051+44.62	48.23 LT	793.44	WALL MARK





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 166	E

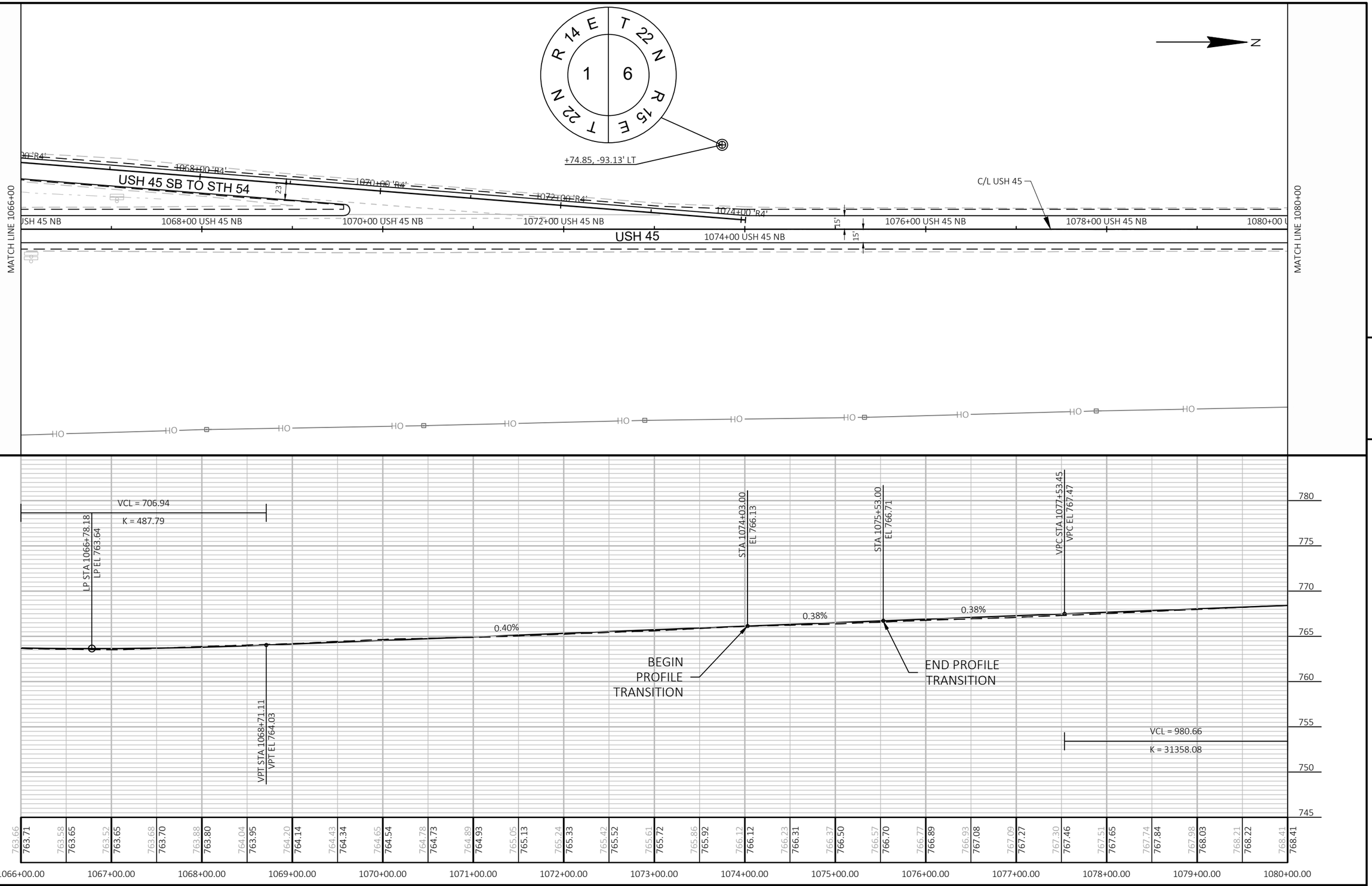
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:49 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 18
WISDOT/CADDS SHEET 44



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 167 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:49 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 19

WISDOT/CADDS SHEET 44



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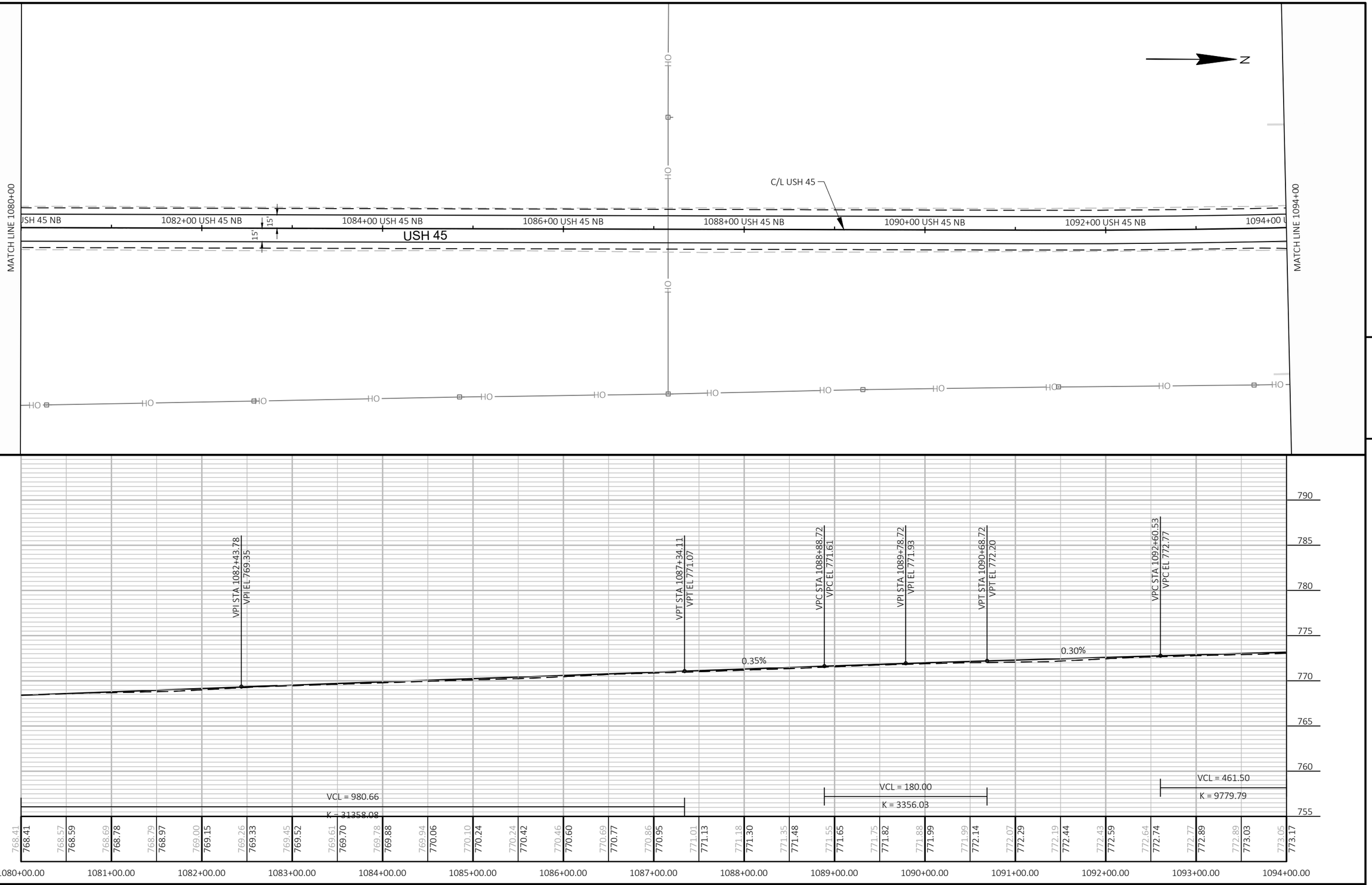
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 168	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 20
PLOT DATE : 7/31/2025 11:49 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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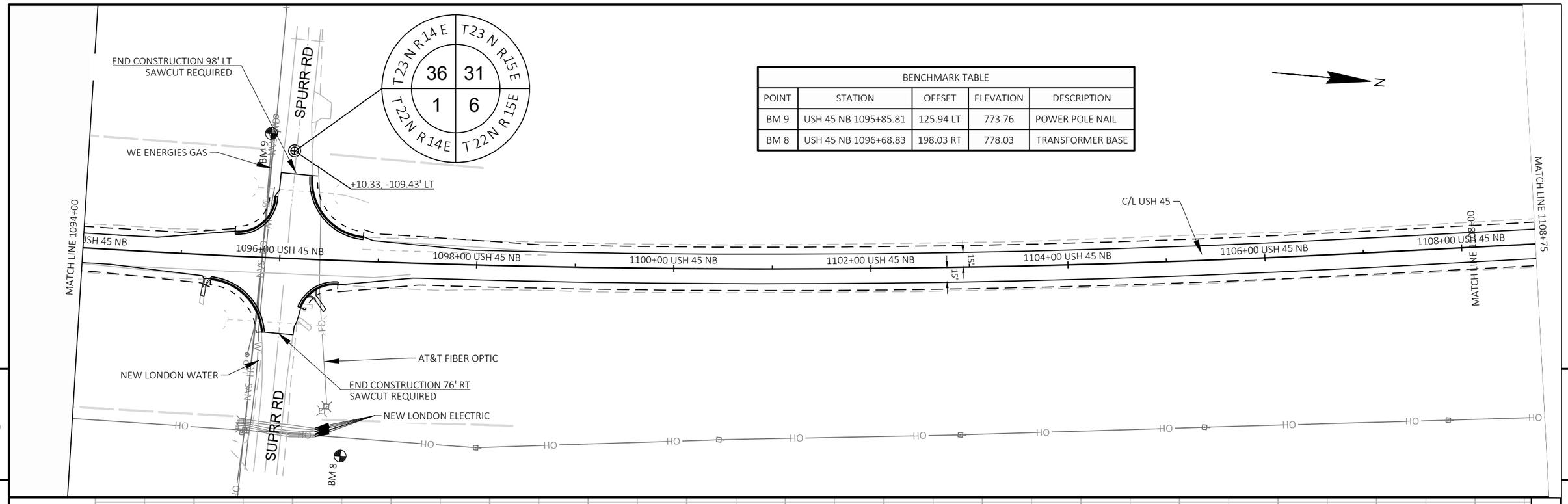
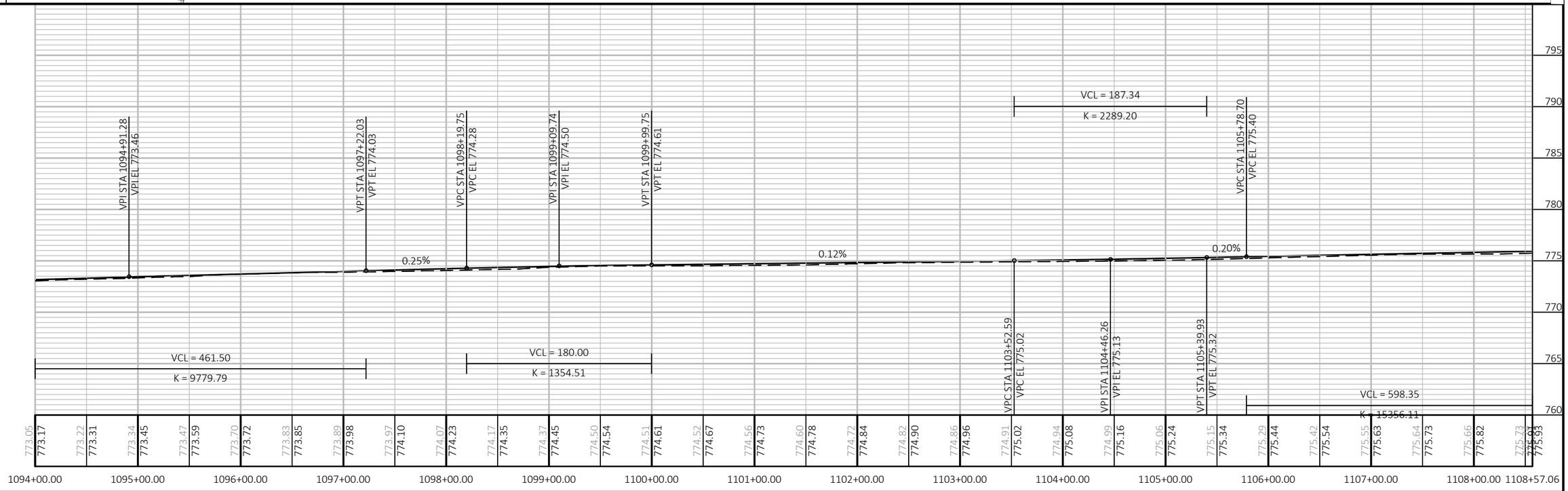
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 169	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:49 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 21
WISDOT/CADDS SHEET 44



BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 9	USH 45 NB 1095+85.81	125.94 LT	773.76	POWER POLE NAIL
BM 8	USH 45 NB 1096+68.83	198.03 RT	778.03	TRANSFORMER BASE



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 170	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 22
PLOT DATE : 7/31/2025 11:49 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

MATCH LINE 1108+75

MATCH LINE 1124+31

EX R/W

C/L USH 45

XYZ NOT FOUND 770.872 225

XYZ NOT FOUND 772.752 224

BP: 20+00.00

MATCH LINE 1122+00

STA 1124+01.25, -15.00' LT

STA 1124+01.25, 15.00' RT

1110+00 USH 45 NB | 1112+00 USH 45 NB | 1114+00 USH 45 NB | 1116+00 USH 45 NB | 1118+00 USH 45 NB | 1120+00 USH 45 NB | 1122+00 USH 45 NB | 1124+00 USH 45 NB

USH 45

15' 15'

CULVERT PIPE SALVAGED 43X68-INCH
APRON ENDWALLS FOR CULVERT PIPE SALVAGED 43X68-INCH
RE-SET ENDWALLS AND FIRST PIPE SECTION IN ORIGINAL POSITION

EX R/W

HO HO HO HO HO HO HO HO HO

T 23 N R 14 E — 36 — 31 — T 23 N R 15 E

+58.70, 216.85' RT

5

5

VPI STA 1108+77.87
VPI EL 775.99

VPT STA 1111+77.04
VPT EL 776.47

STA 1114+91.37
EL 776.98

VPC STA 1117+35.67
VPC EL 777.21

VPI STA 1118+25.67
VPI EL 777.30

VPT STA 1119+15.67
VPT EL 777.37

VPC STA 1120+28.61
VPC EL 777.45

VPI STA 1121+26.47
VPI EL 777.53

VPT STA 1122+24.33
VPT EL 777.71

STA 1124+31.25
EL 778.09

VCL = 598.35
K = 15356.11

VCL = 180.00
K = 10011.87

VCL = 195.71
K = 1825.29

0.16% 0.10% 0.08% 0.18%

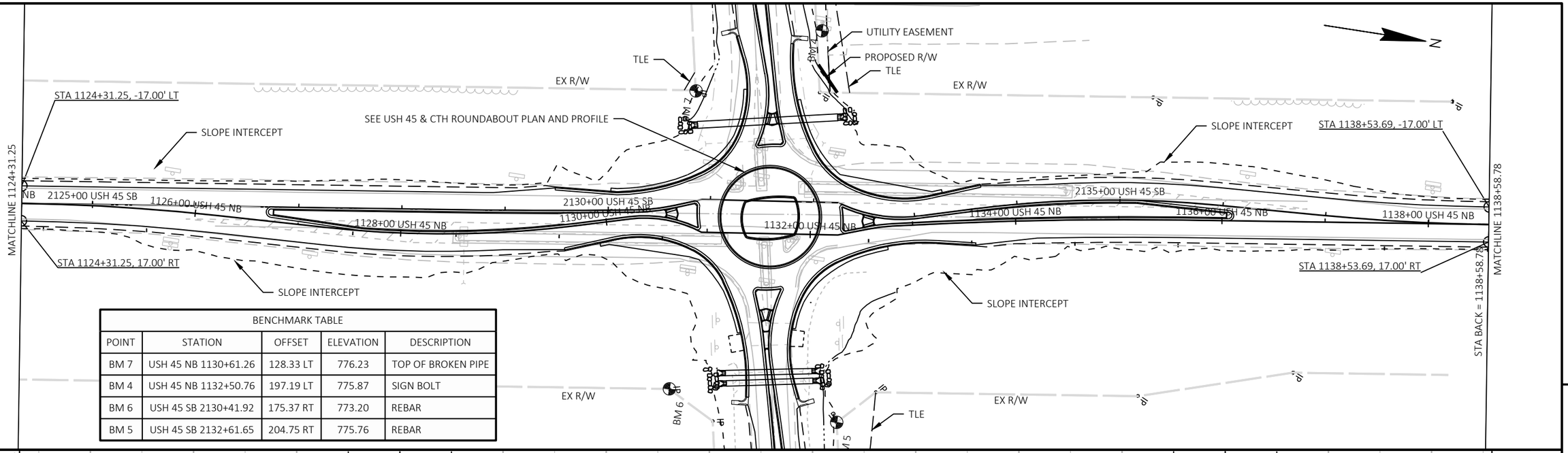
800 795 790 785 780 775 770 765 760

775.74 775.93 775.84 776.00 775.97 776.09 776.11 776.18 776.18 776.26 776.20 776.35 776.27 776.43 776.37 776.51 776.46 776.59 776.55 776.67 776.61 776.75 776.67 776.83 776.80 776.91 776.92 776.98 776.94 777.03 776.97 777.08 776.98 777.13 777.00 777.18 777.07 777.22 777.14 777.27 777.25 777.31 777.33 777.35 777.41 777.39 777.42 777.43 777.40 777.47 777.42 777.52 777.49 777.59 777.60 777.67 777.73 777.76 777.79 777.85 777.83 777.94 777.92 778.04 777.98 778.09

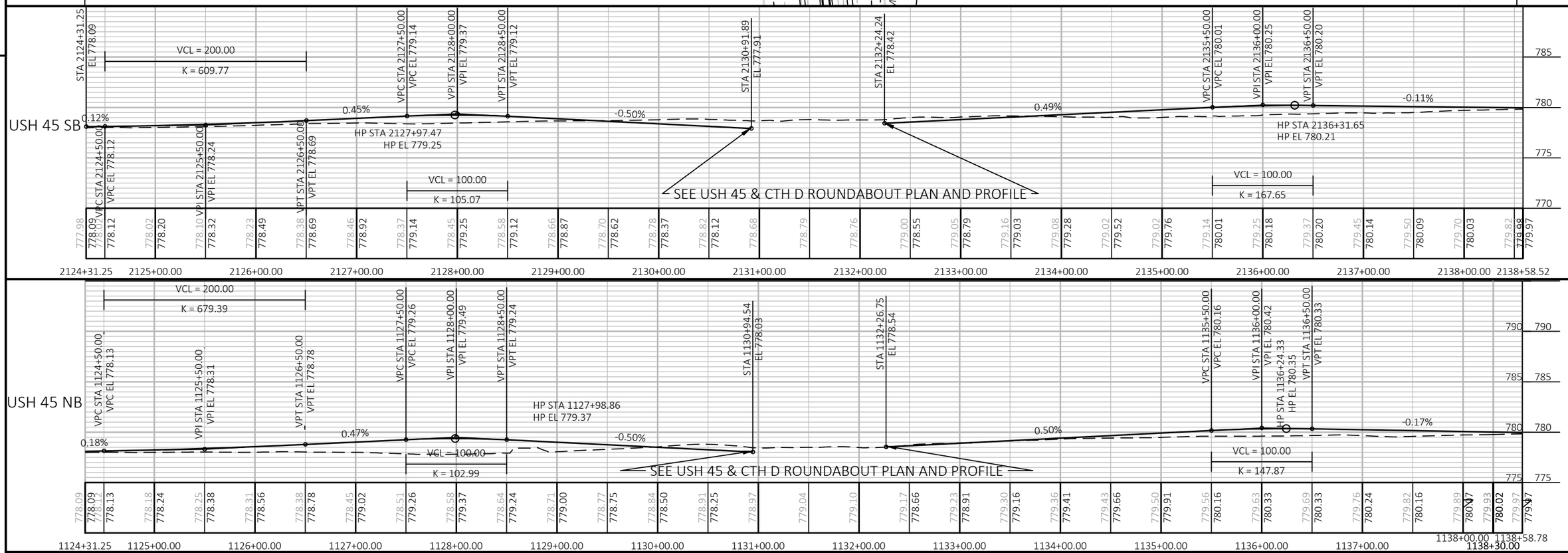
1108+57.05 1109+00.00 1110+00.00 1111+00.00 1112+00.00 1113+00.00 1114+00.00 1115+00.00 1116+00.00 1117+00.00 1118+00.00 1119+00.00 1120+00.00 1121+00.00 1122+00.00 1123+00.00 1124+00.00 1124+31.25

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 171	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 23
PLOT DATE : 7/31/2025 11:49 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1:105



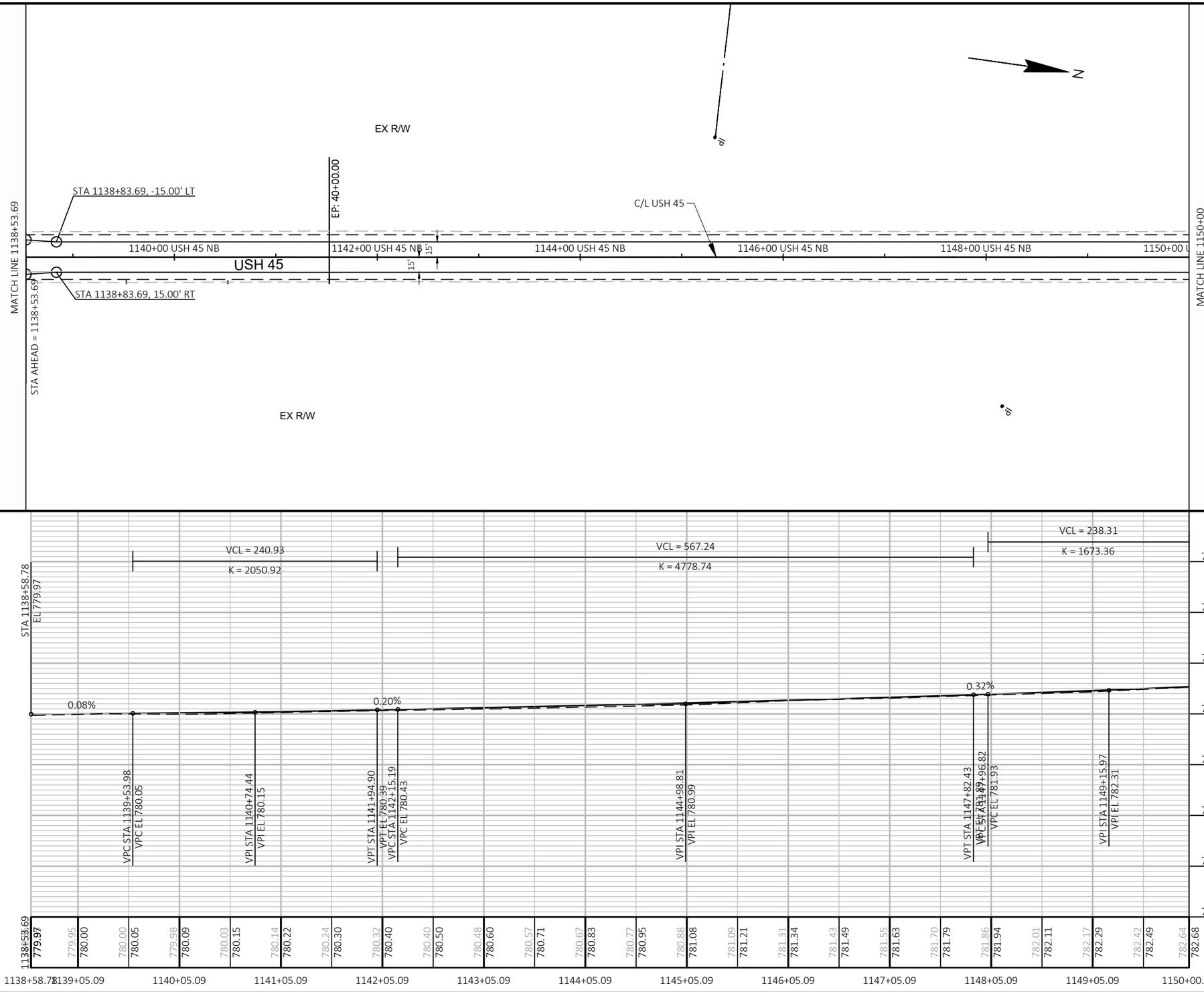
BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 7	USH 45 NB 1130+61.26	128.33 LT	776.23	TOP OF BROKEN PIPE
BM 4	USH 45 NB 1132+50.76	197.19 LT	775.87	SIGN BOLT
BM 6	USH 45 SB 2130+41.92	175.37 RT	773.20	REBAR
BM 5	USH 45 SB 2132+61.65	204.75 RT	775.76	REBAR



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 172	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:50 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 24

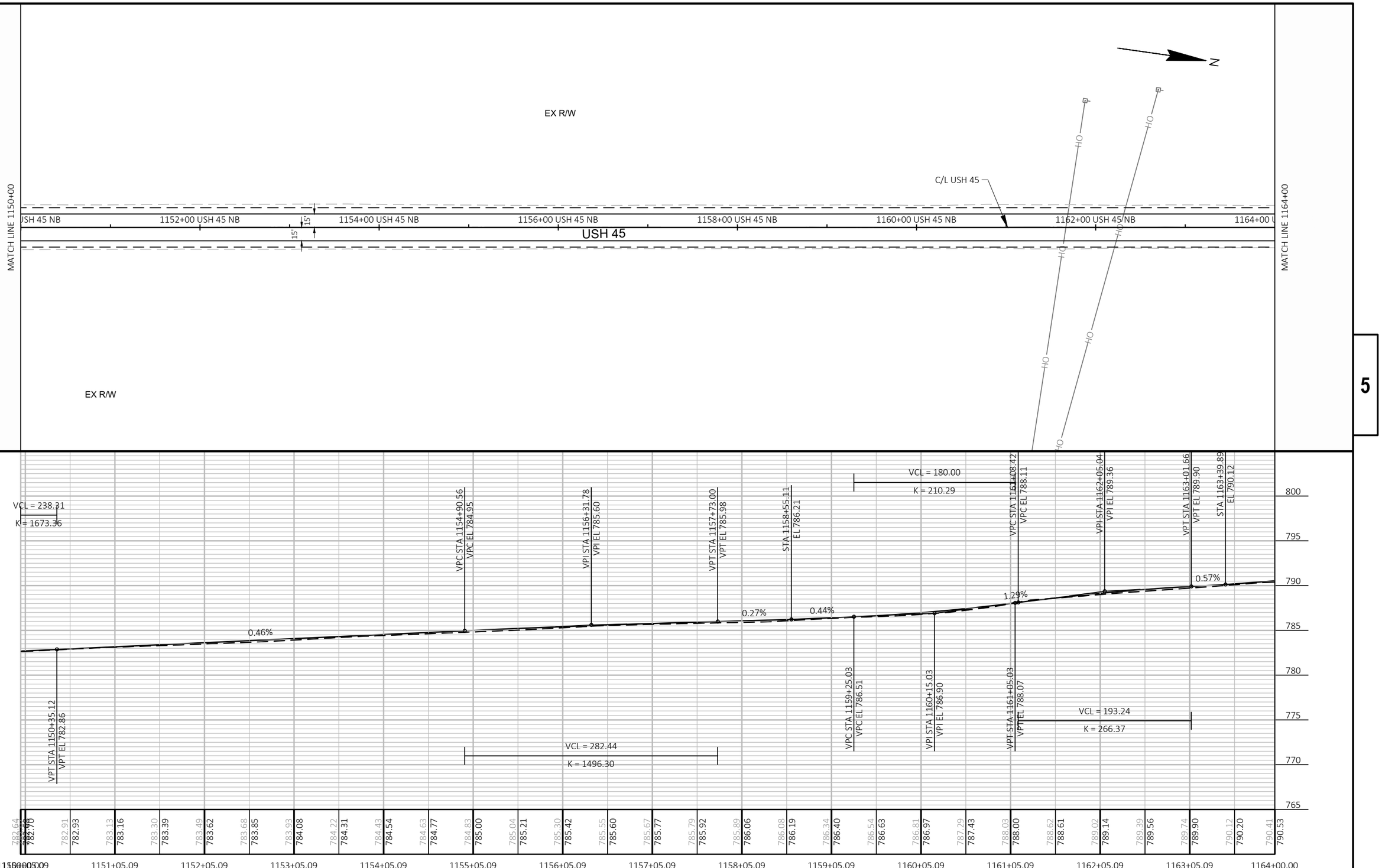
WISDOT/CADDS SHEET 44



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 173	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:50 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 25

WISDOT/CADDS SHEET 44



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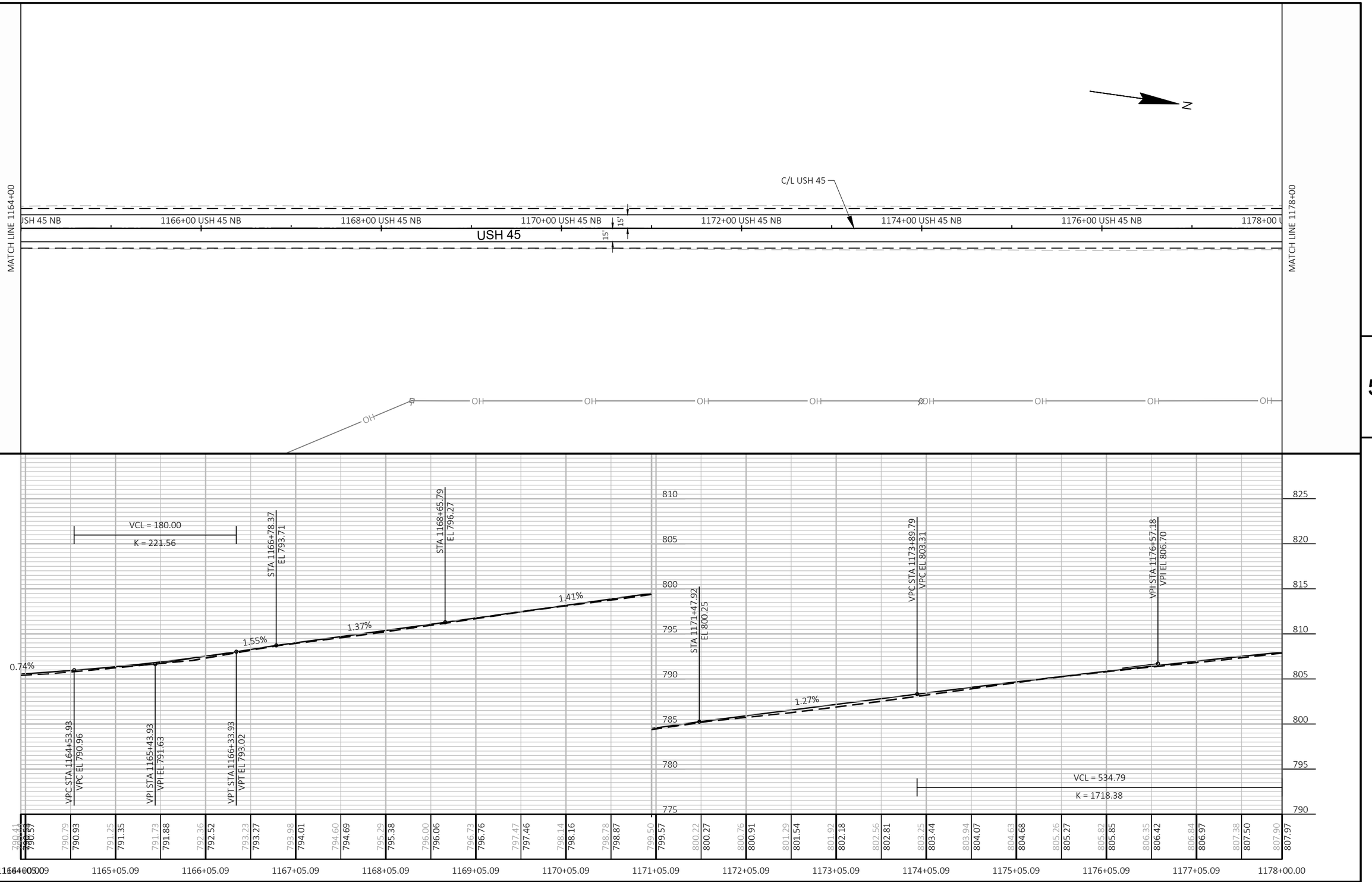
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 174 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:50 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 26
WISDOT/CADDS SHEET 44



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 175	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 27
PLOT DATE : 7/31/2025 11:50 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 1178+00

MATCH LINE 1192+00

N

C/L USH 45

USH 45 NB | 1180+00 USH 45 NB | 1182+00 USH 45 NB | 1184+00 USH 45 NB | 1186+00 USH 45 NB | 1188+00 USH 45 NB | 1190+00 USH 45 NB | 1192+00

USH 45

24

15

OH OH OH

VPT STA 1179+24.58
VPT EL 809.26

VPC STA 1179+79.08
VPC EL 809.78

VPI STA 1183+38.91
VPI EL 813.23

VPT STA 1186+98.76
VPT EL 814.67

VPC STA 1188+07.42
VPC EL 815.11

0.96%

0.40%

VCL = 534.79
K = 18.38

VCL = 719.67
K = 1295.96

VCL = 936.95
K = 1577.09

830
825
820
815
810
805
800
795

807.90 808.03 808.47 808.53 808.94 809.03 809.43 809.51 809.93 809.98 810.40 810.44 810.85 810.88 811.26 811.31 811.66 811.71 812.01 812.09 812.36 812.46 812.71 812.80 813.05 813.13 813.41 813.43 813.75 813.72 813.94 813.99 814.13 814.24 814.34 814.47 814.56 814.68 814.81 814.88 815.03 815.08 815.22 815.27 815.39 815.45 815.56 815.61 815.69 815.76 815.81 815.89 815.89 816.01 815.96 816.11 816.06 816.19

1178+00.00 1178+05.09 1179+05.09 1180+05.09 1181+05.09 1182+05.09 1183+05.09 1184+05.09 1185+05.09 1186+05.09 1187+05.09 1188+05.09 1189+05.09 1190+05.09 1191+05.09 1192+00.00

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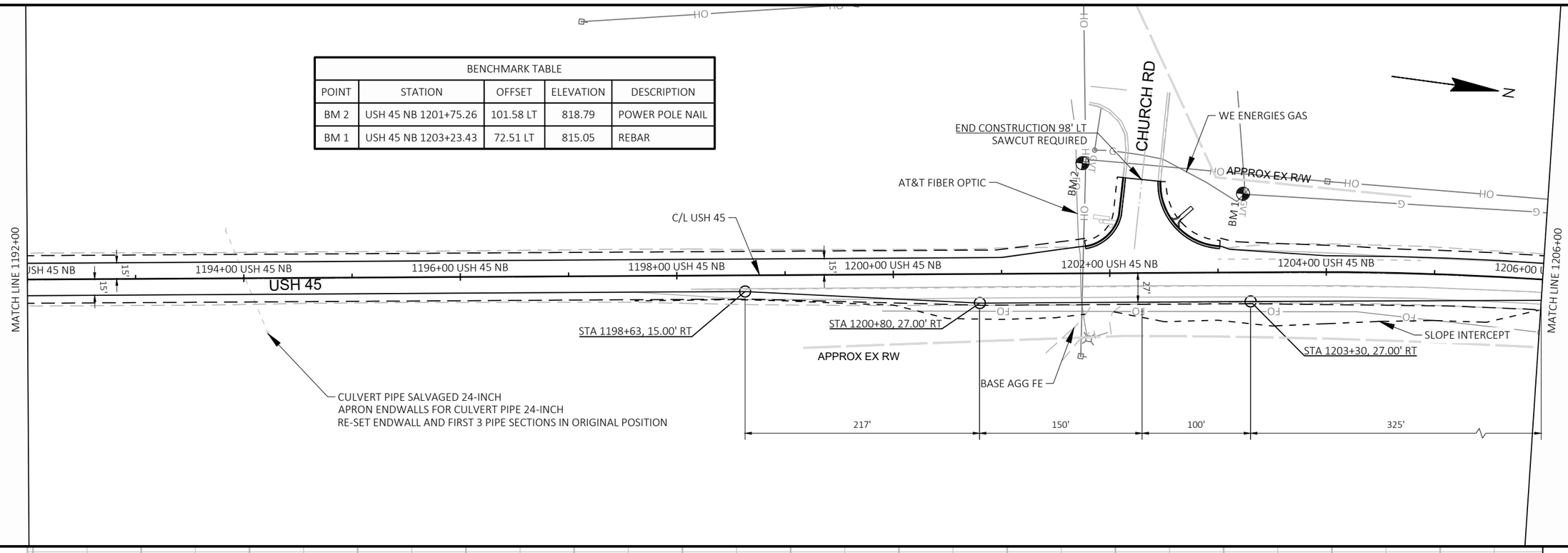
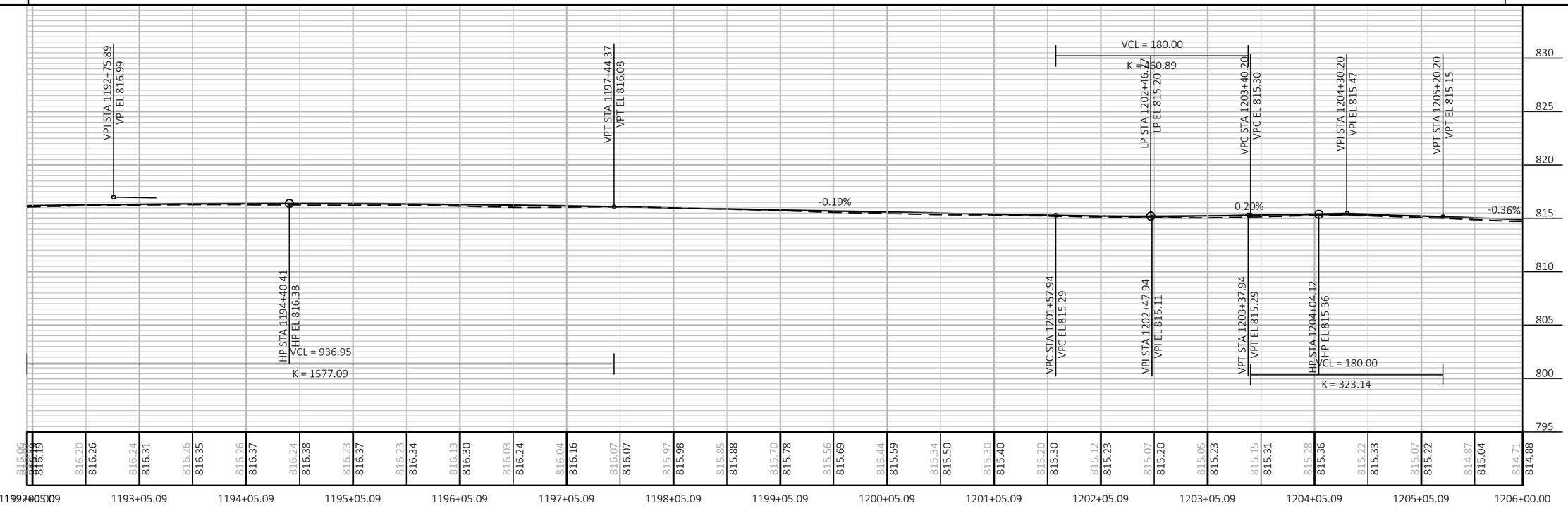
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 176	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:50 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 28

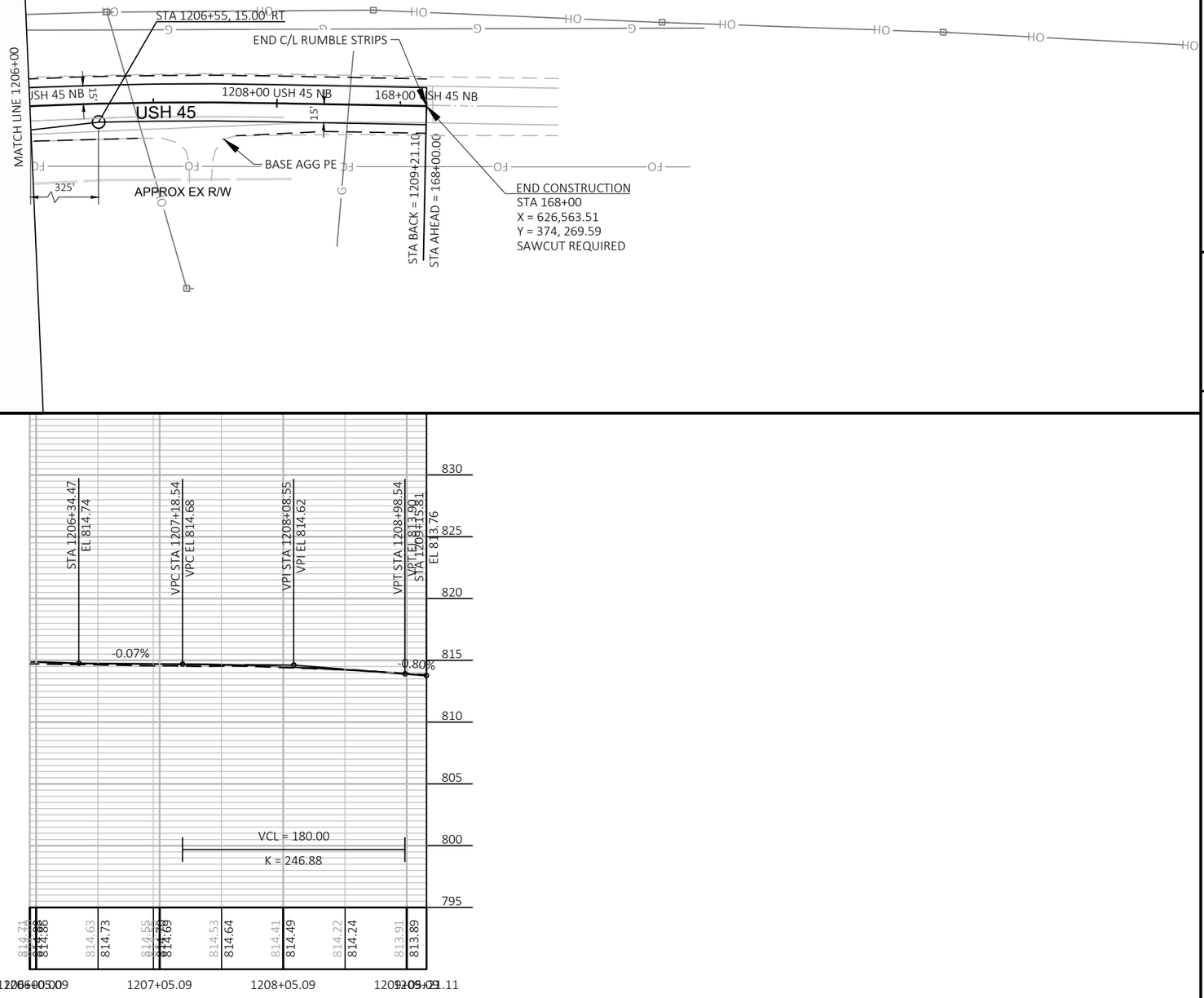
BENCHMARK TABLE				
POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 2	USH 45 NB 1201+75.26	101.58 LT	818.79	POWER POLE NAIL
BM 1	USH 45 NB 1203+23.43	72.51 LT	815.05	REBAR





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 177	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050101-PP.DWG PLOT DATE : 7/31/2025 11:50 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 29
WISDOT/CADDS SHEET 44



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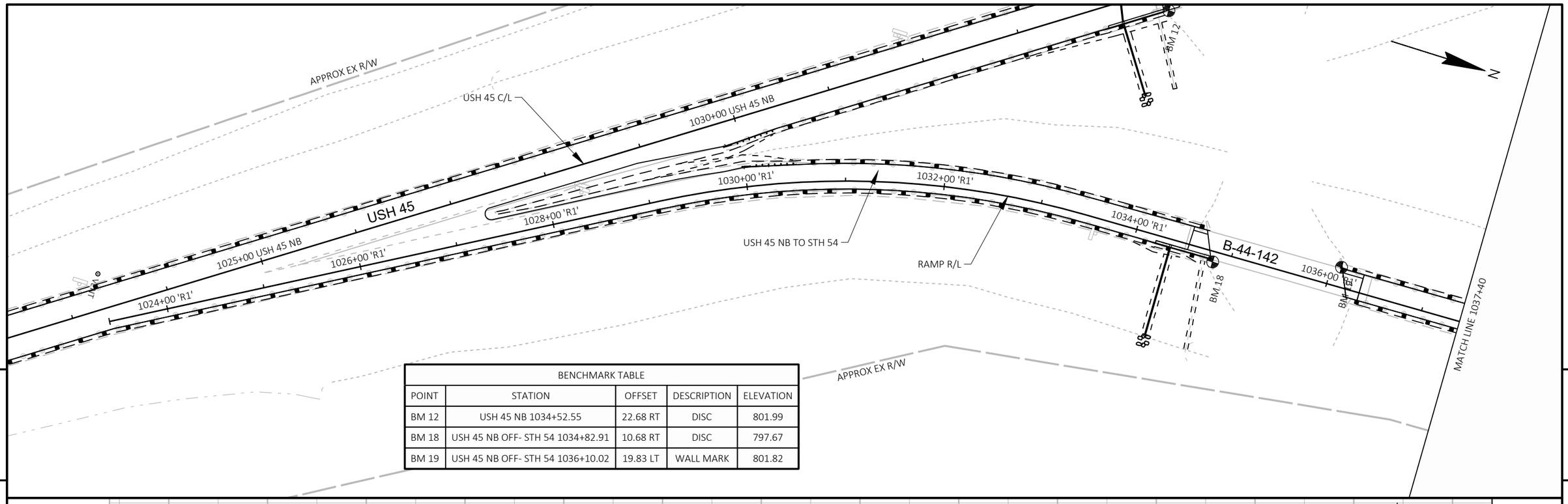
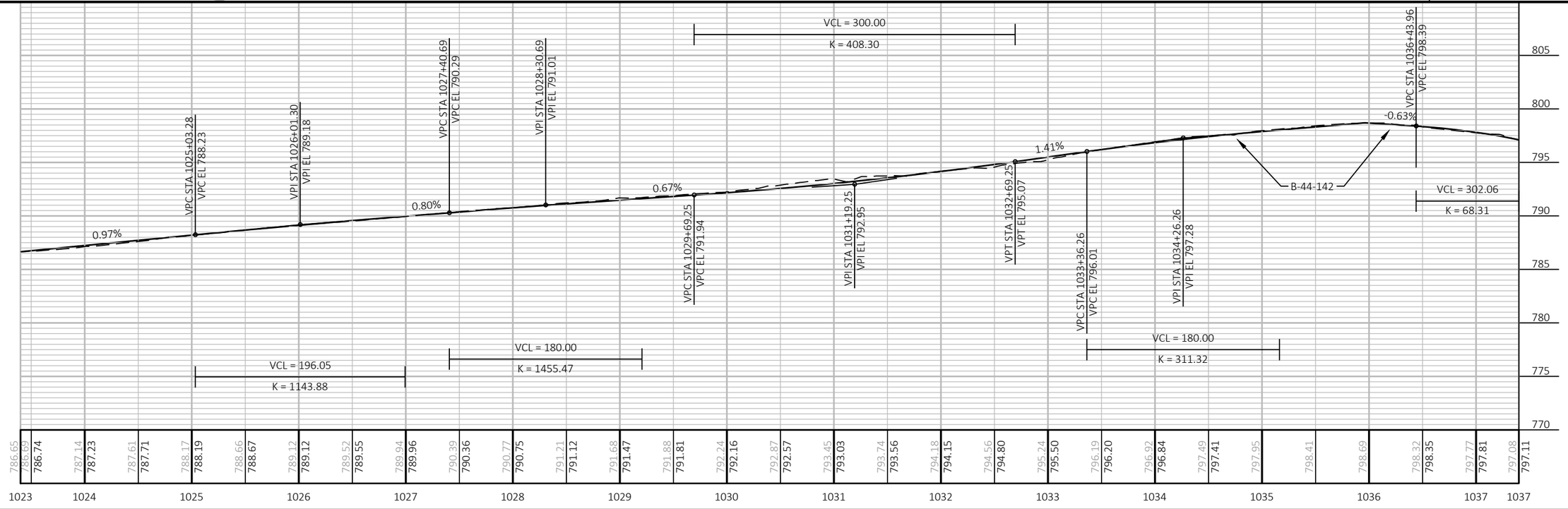
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45	SHEET 178	E

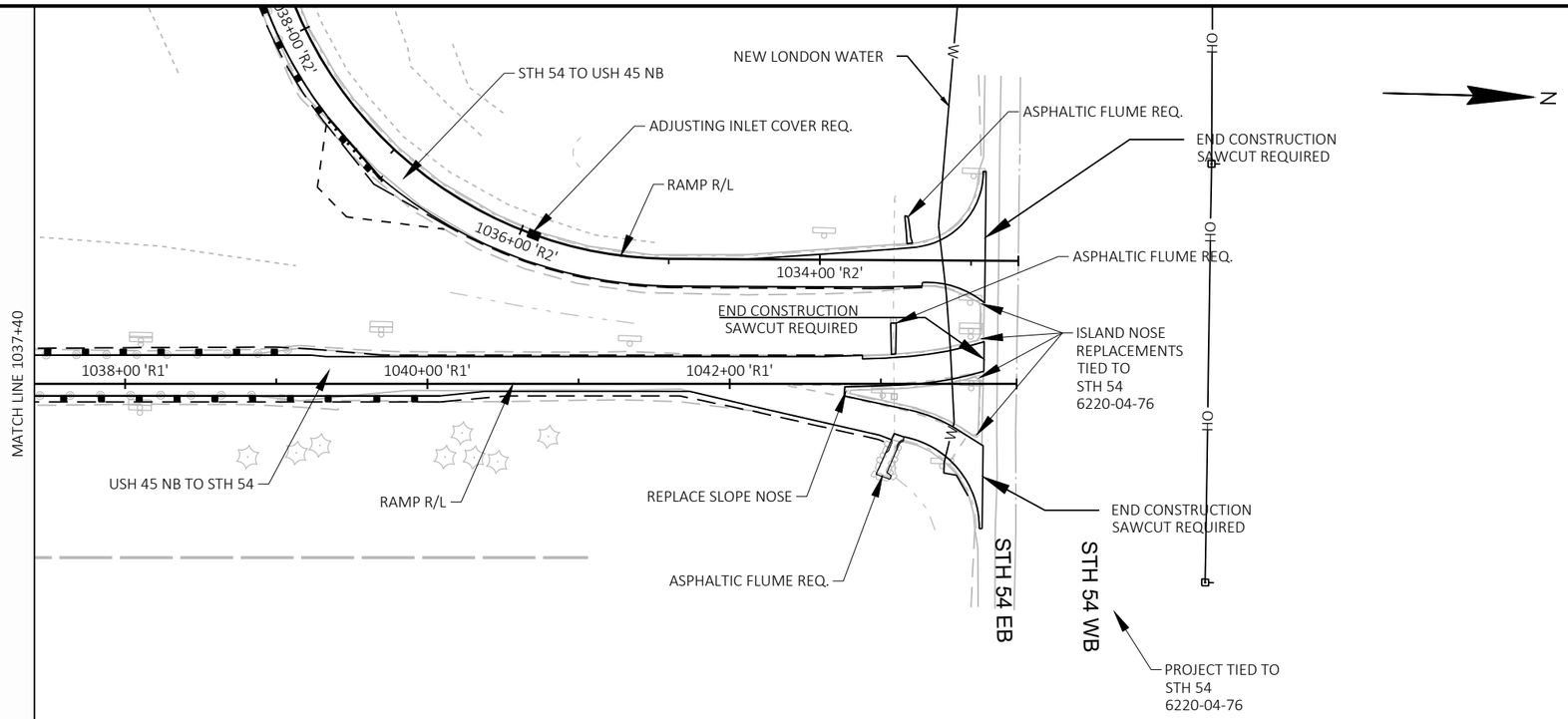


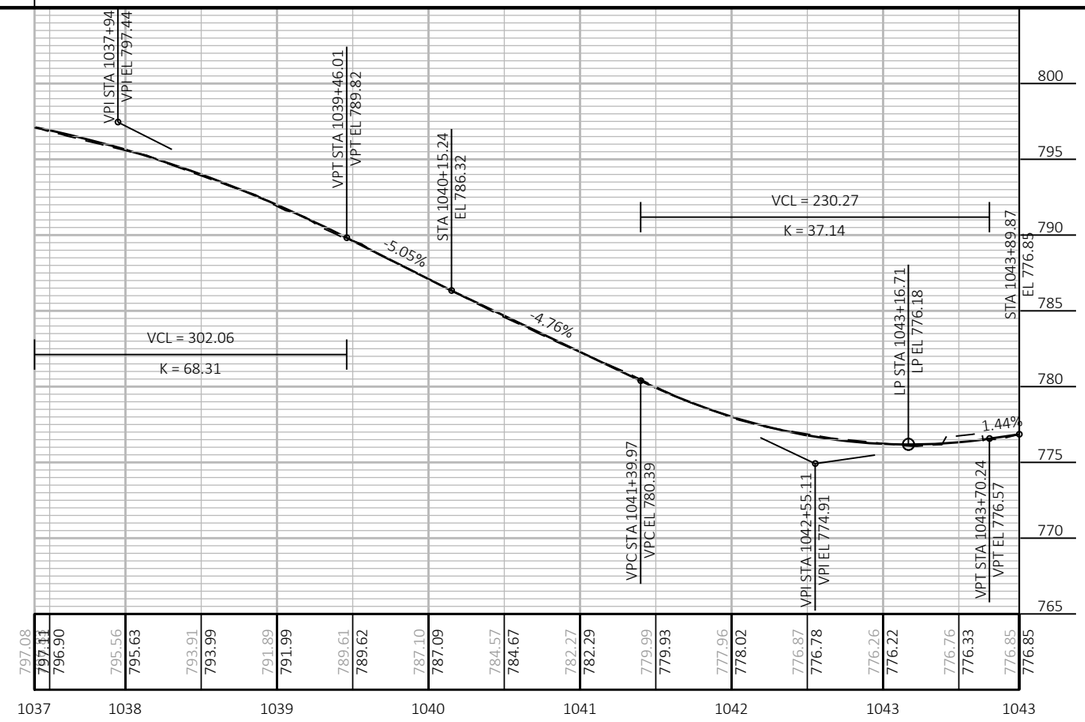
BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 12	USH 45 NB 1034+52.55	22.68 RT	DISC	801.99
BM 18	USH 45 NB OFF- STH 54 1034+82.91	10.68 RT	DISC	797.67
BM 19	USH 45 NB OFF- STH 54 1036+10.02	19.83 LT	WALL MARK	801.82



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45 NB TO STH 54	SHEET 179	E

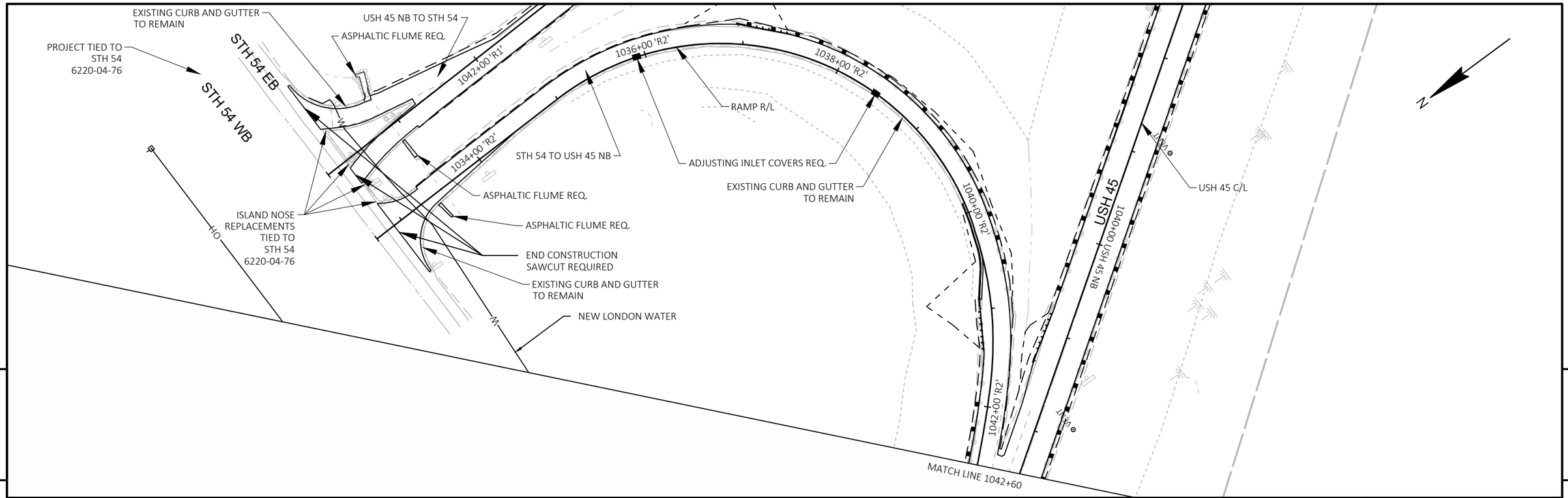
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG PLOT DATE : 7/31/2025 12:00 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 01

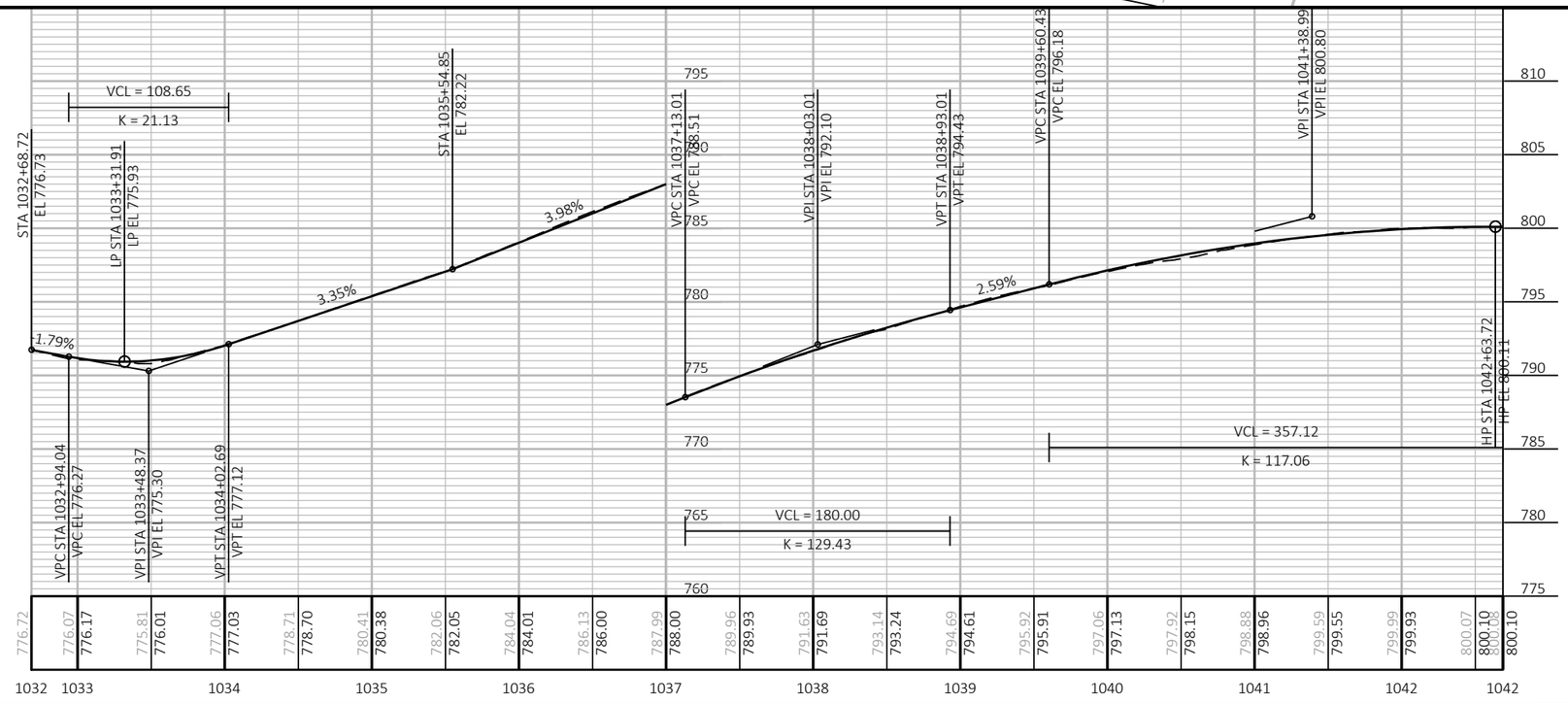




PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45 NB TO STH 54	SHEET 180	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 02
PLOT DATE : 7/31/2025 12:00 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



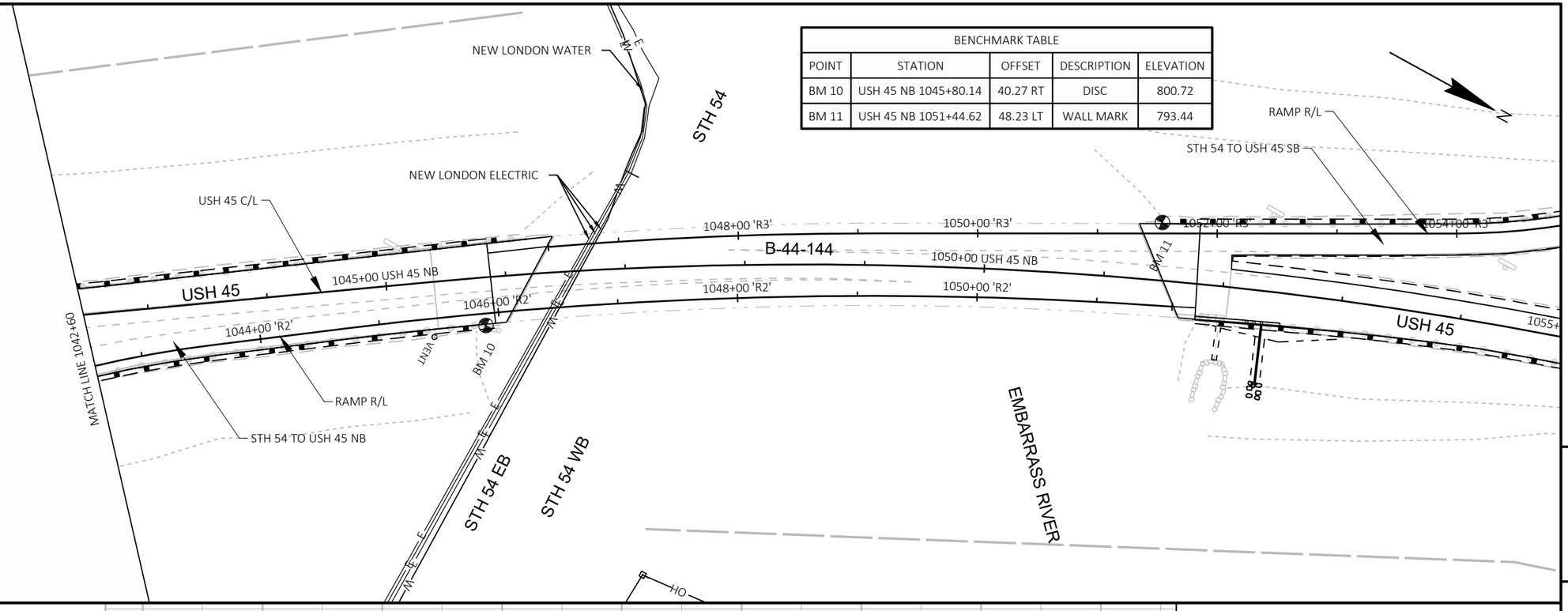


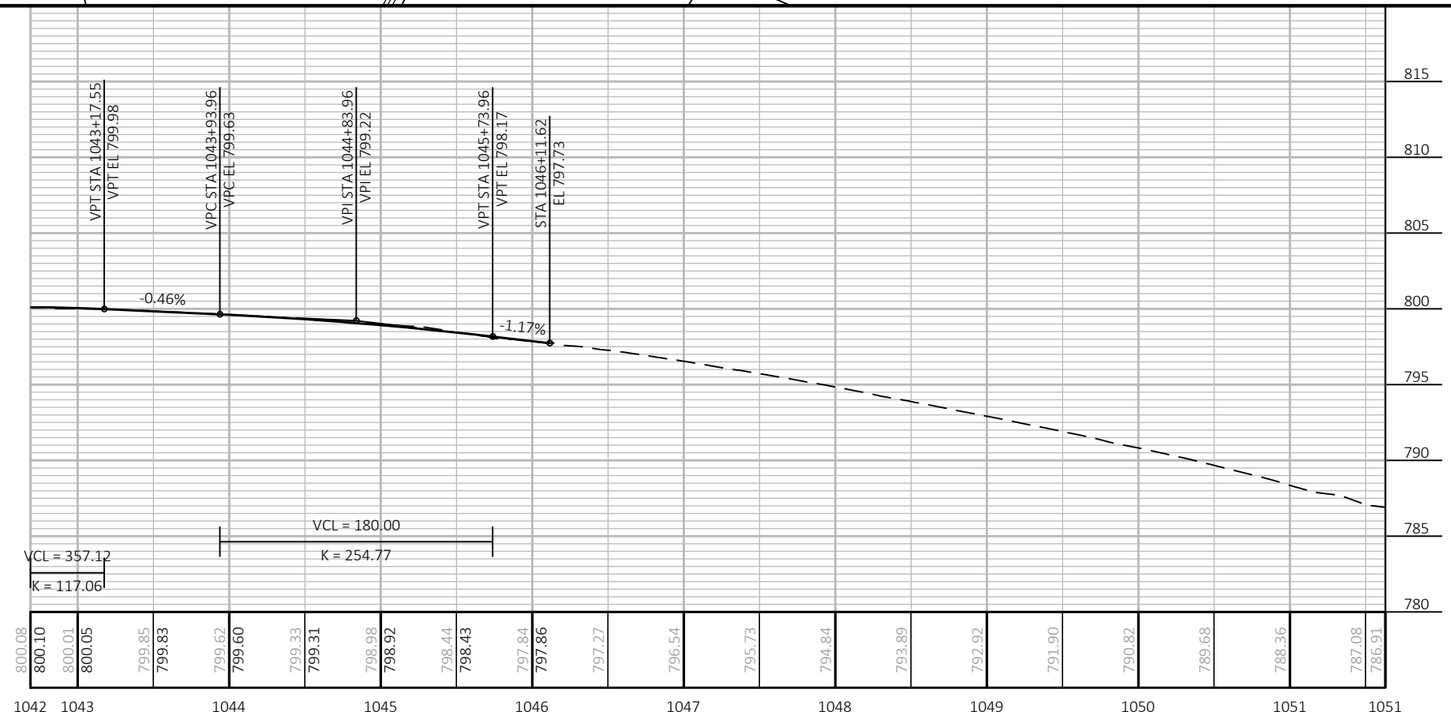
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: STH 54 TO USH 45 NB	SHEET 181	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG PLOT DATE : 7/31/2025 12:00 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 03

WISDOT/CADDS SHEET 44

BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 10	USH 45 NB 1045+80.14	40.27 RT	DISC	800.72
BM 11	USH 45 NB 1051+44.62	48.23 LT	WALL MARK	793.44

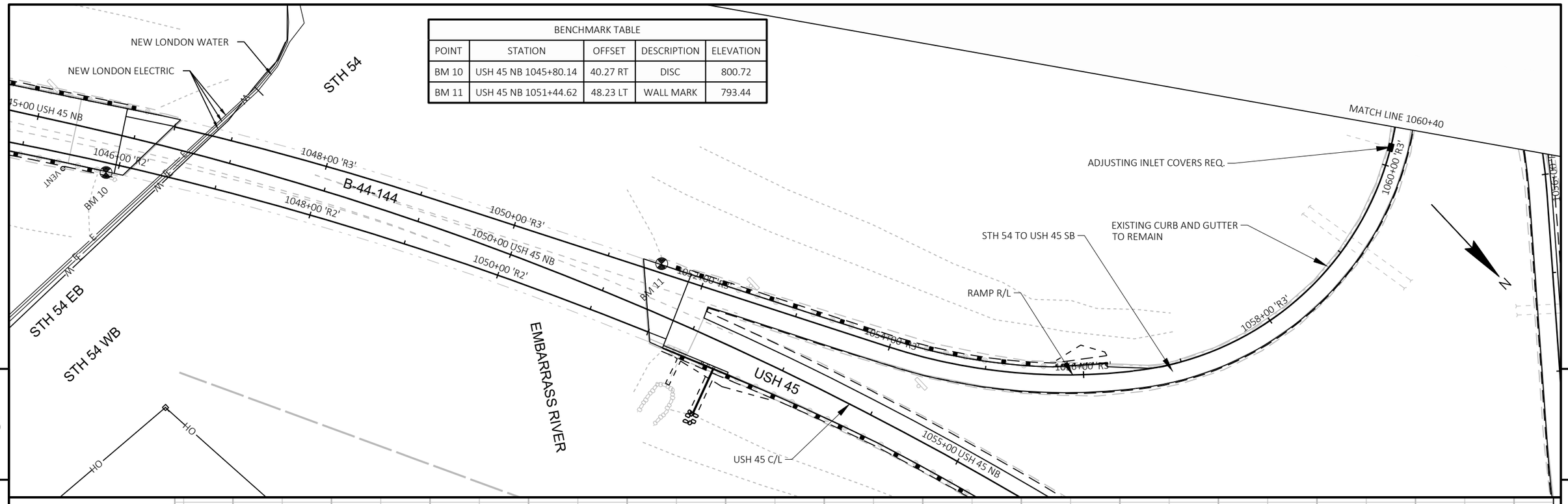


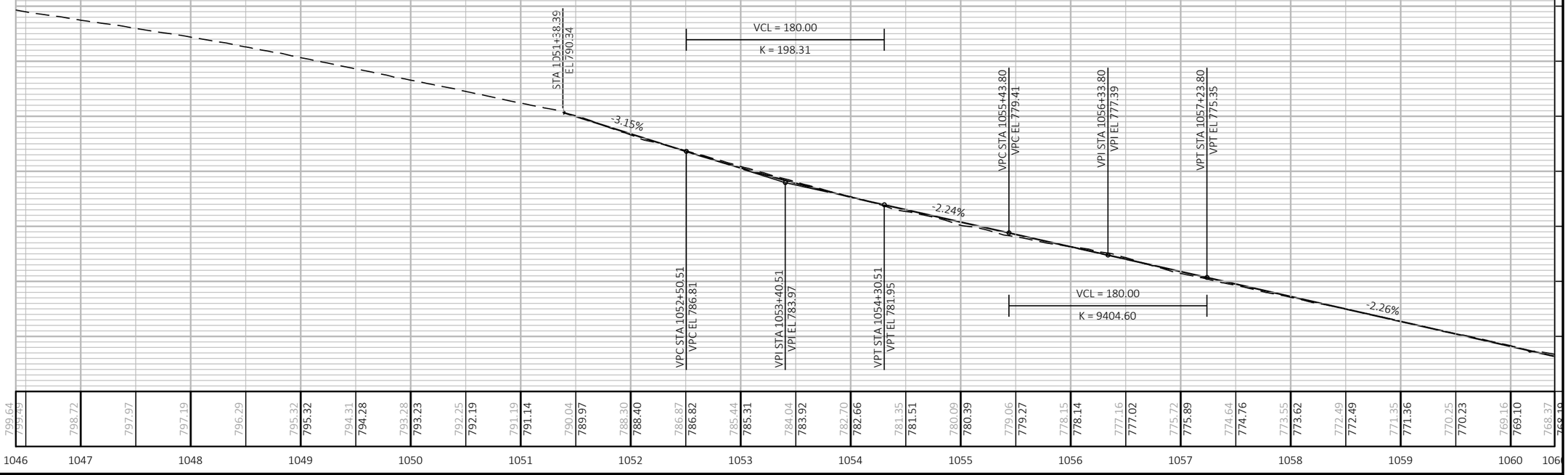


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: STH 54 TO USH 45 NB	SHEET 182	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 04
PLOT DATE : 7/31/2025 12:00 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

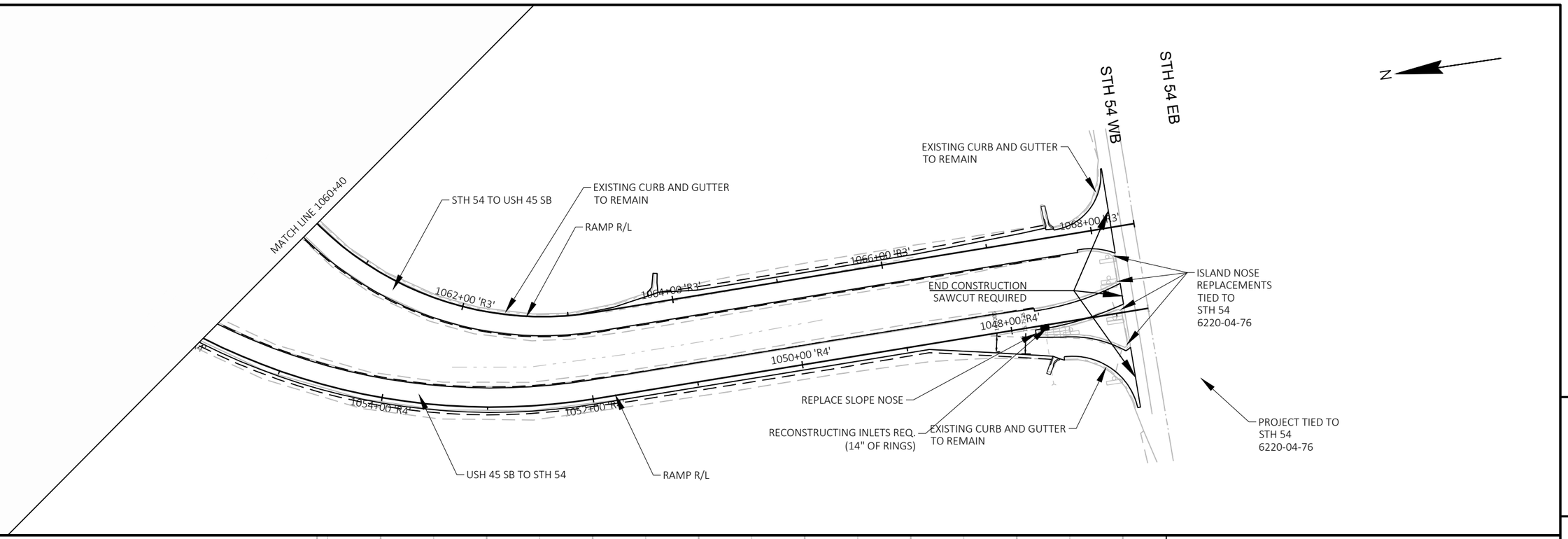
BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 10	USH 45 NB 1045+80.14	40.27 RT	DISC	800.72
BM 11	USH 45 NB 1051+44.62	48.23 LT	WALL MARK	793.44





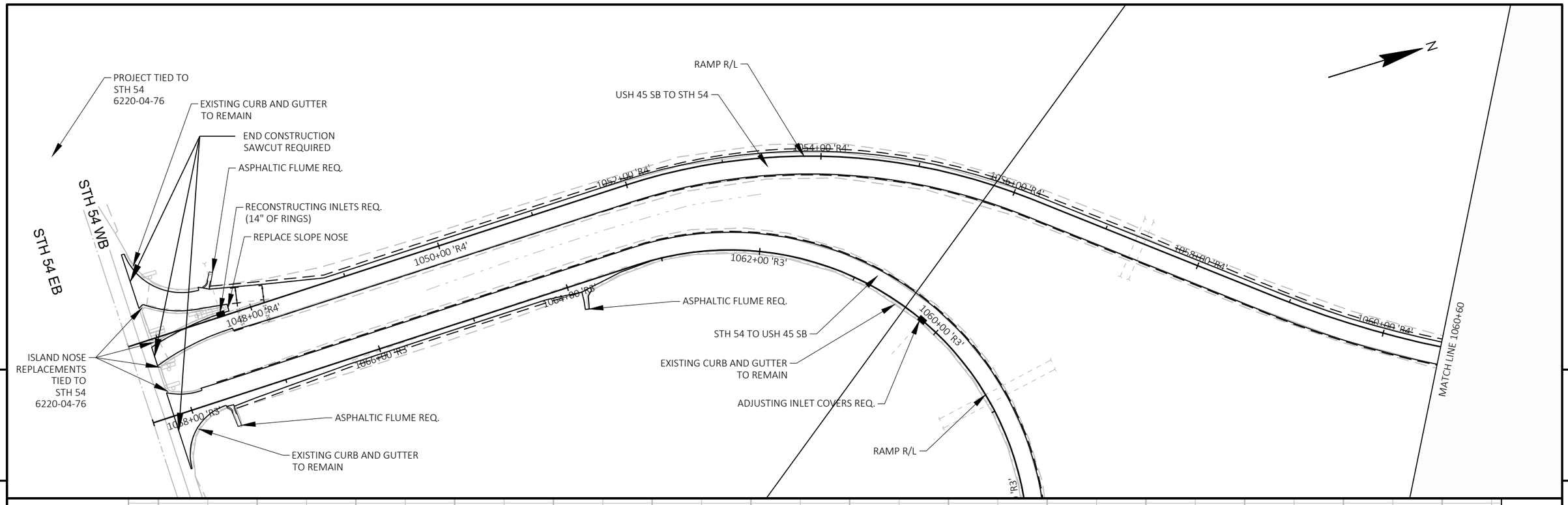
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: STH 54 TO USH 45 SB	SHEET 183	E

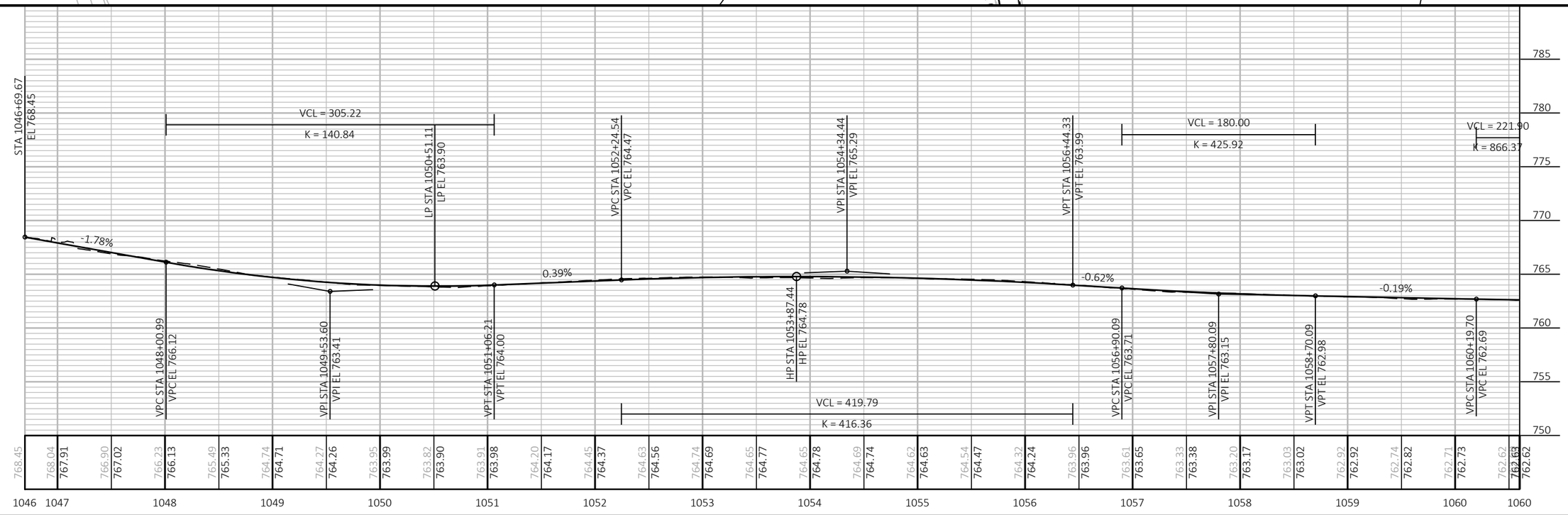
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 05
PLOT DATE : 7/31/2025 12:01 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: STH 54 TO USH 45 SB	SHEET 184	E

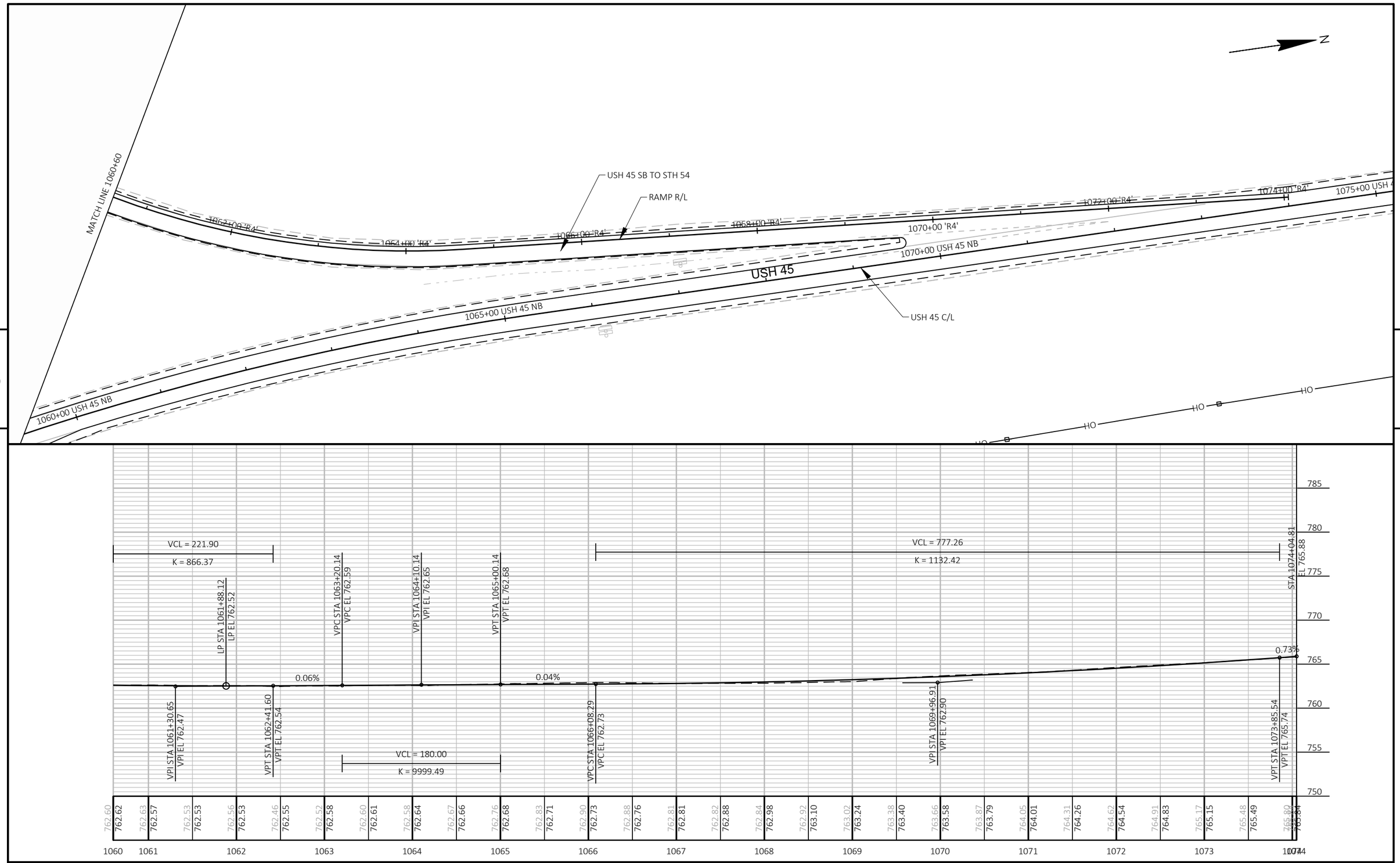
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG PLOT DATE : 7/31/2025 12:01 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:100 FT
LAYOUT NAME - 06
WISDOT/CADDS SHEET 44





PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45 TO STH 54 SB	SHEET 185	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 07
PLOT DATE : 7/31/2025 12:01 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



5

5

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45 TO STH 54 SB	SHEET 186	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 08
PLOT DATE : 7/31/2025 12:01 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

WE ENERGIES ELECTRIC
UTILITY EASEMENT
BM 3
BEGIN PROJECT
STA 216+19.80
MATCH EXISTING
SAW CUT REQ'D
BP: 316+19.62
PT: 216+83.97
PI: 317+71.92
PC: 218+16.84
PT: 219+31.64
PC: 219+89.28
TLE
PROPOSED R/W
BM 4
PC: 320+15.94
PT: 320+35.79
PI: 320+63.66
PROPOSED SPECIAL DITCH
317+00 CTH D WB
318+00 CTH D WB
319+00 CTH D WB
320+00 CTH D WB
217+00 CTH D EB
218+00 CTH D EB
219+00 CTH D EB
220+00 CTH D EB
221+00 CTH D EB
222+00 CTH D EB
PC: 2132+24.24
PI: 2132+38.75
PT: 2132+53.26
2132+00 USH 45 SB
1132+00 USH 45 NB
321+00 CTH D WB
322+00 CTH D WB
MATCH LINE 222+19.80
SLOPE INTERCEPT (TYP.)
PROPOSED SPECIAL DITCH
EXISTING R/W (TYP.)
TLE
BM 7
PT: 2130+94.54
2131+00 USH 45 SB
1131+00 USH 45 NB
PI: 2130+9[illegible]
PT: 2130+63.40

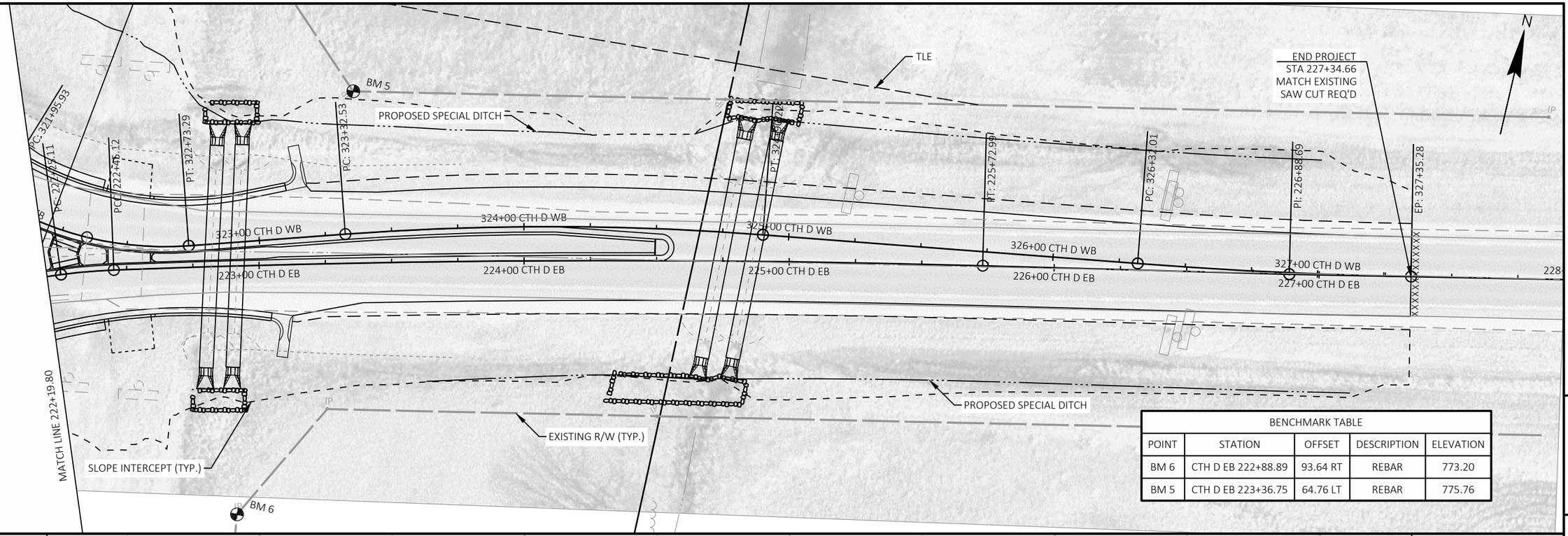
N

BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 3	CTH D EB 216+64.40	61.06 LT	REBAR	777.12
BM 4	CTH D EB 219+57.64	61.90 LT	SIGN BOLT	775.87
BM 7	CTH D EB 220+02.03	68.04 RT	TOP OF BROKEN PIPE	776.23

SEE USH 45 & CTH D ROUNDABOUT PLAN AND PROFILE

STA 216+19.80
EL 777.39
VPC STA 216+50.00
VPC EL 777.51
VPI STA 217+00.00
VPI EL 777.71
VPT STA 217+50.00
VPT EL 777.43
VCL = 200.00
K = 97.61
LP STA 219+04.44
LP EL 776.72
VPC STA 218+50.00
VPC EL 776.87
STA 220+64.41
EL 778.02
0.39%
-0.56%
1.49%
HP STA 216+91.39
HP EL 777.59
L = 100.00
K = 105.11
PROPOSED DITCH RT
0.38%
-0.50%
VPI STA 219+50.00
VPI EL 776.31
VPT STA 220+50.00
VPT EL 777.81

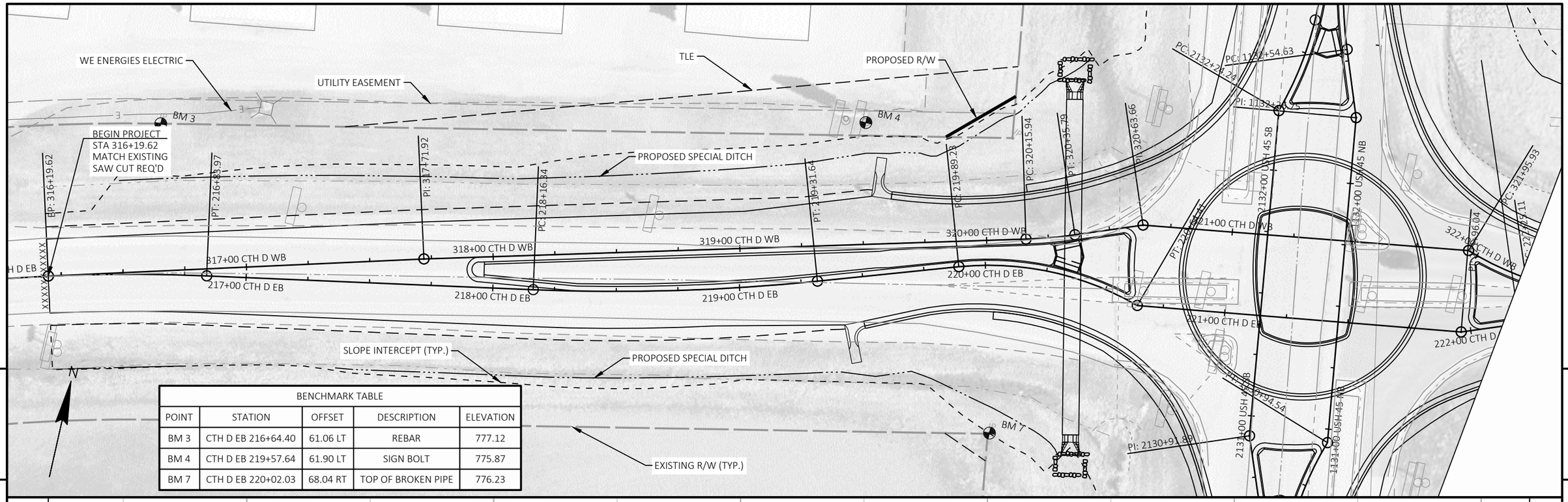
| | | | |



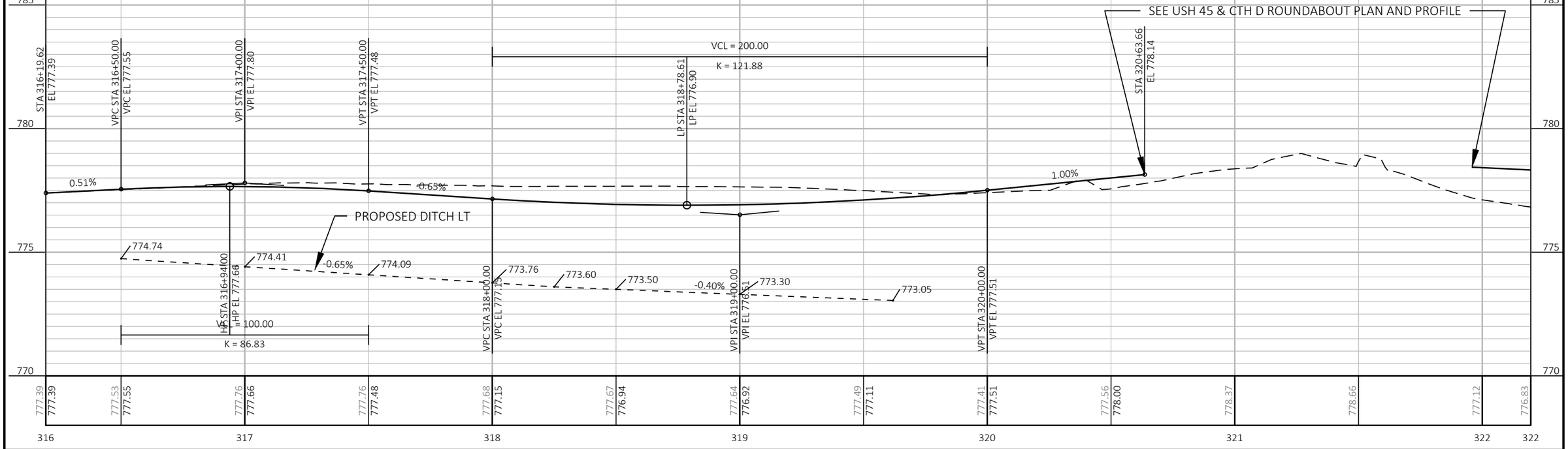
BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 6	CTH D EB 222+88.89	93.64 RT	REBAR	773.20
BM 5	CTH D EB 223+36.75	64.76 LT	REBAR	775.76

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: CTH D EB	SHEET 188 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 02
PLOT DATE : 7/31/2025 2:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

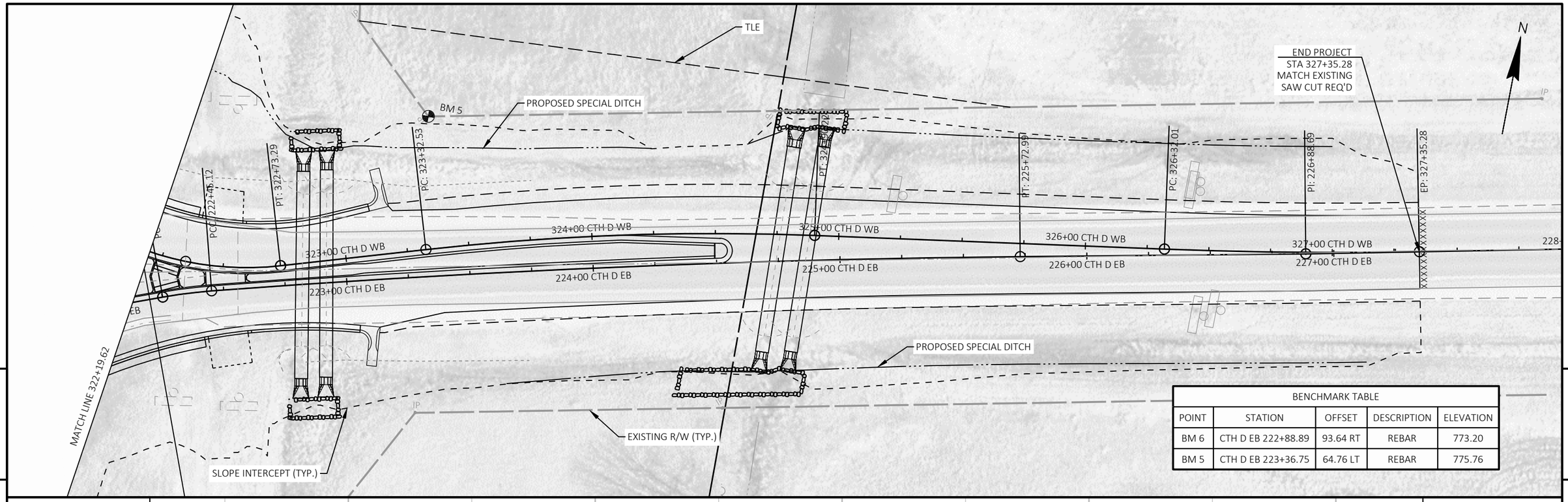


BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 3	CTH D EB 216+64.40	61.06 LT	REBAR	777.12
BM 4	CTH D EB 219+57.64	61.90 LT	SIGN BOLT	775.87
BM 7	CTH D EB 220+02.03	68.04 RT	TOP OF BROKEN PIPE	776.23

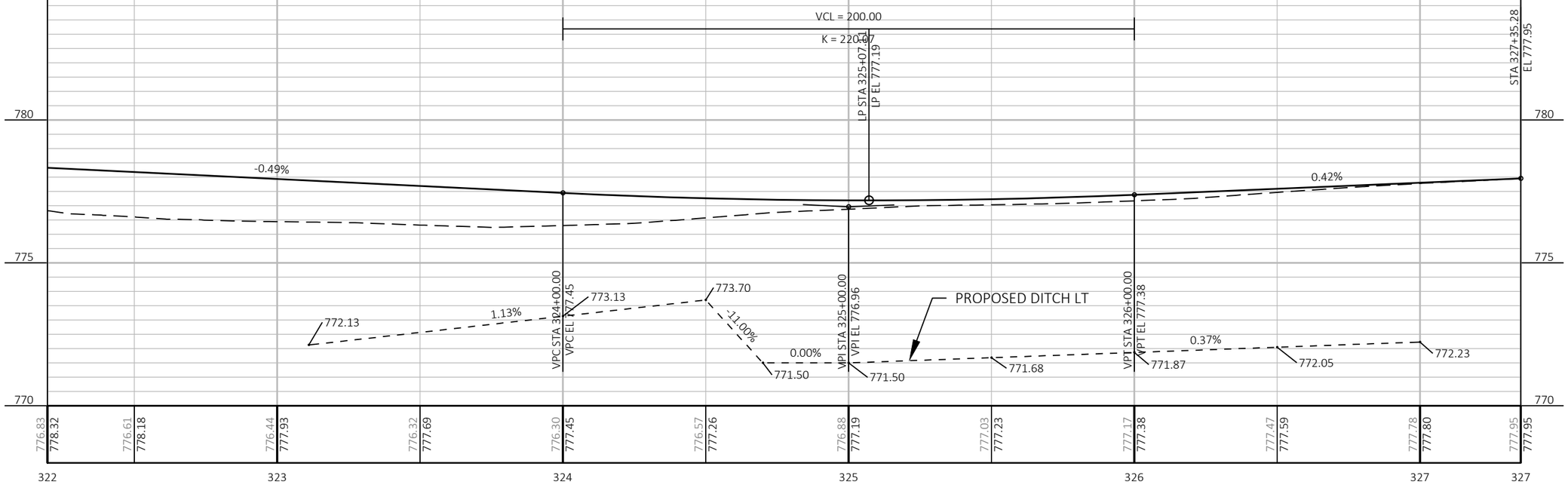


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: CTH D WB	SHEET 189	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 03
PLOT DATE : 7/31/2025 2:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

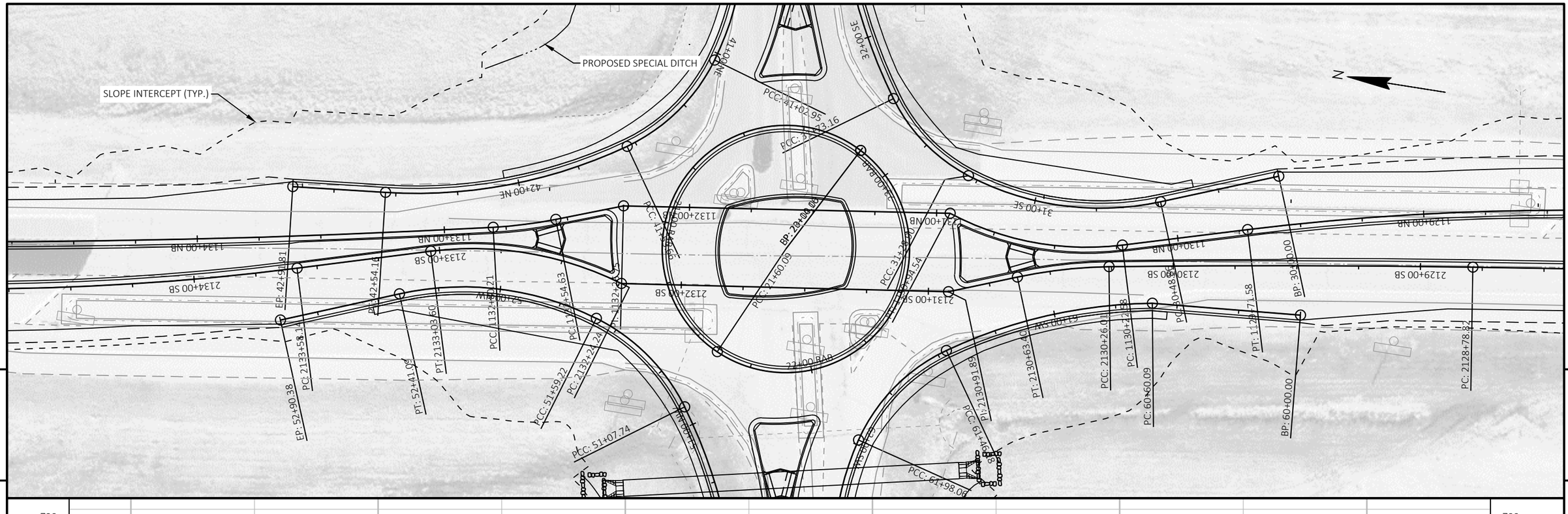


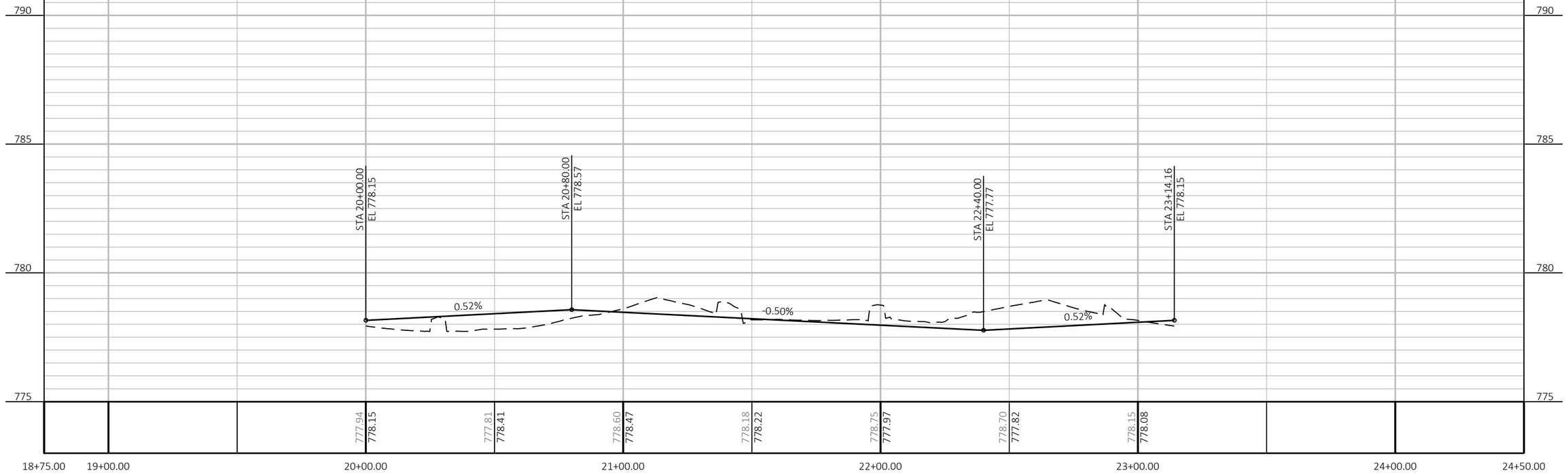
BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 6	CTH D EB 222+88.89	93.64 RT	REBAR	773.20
BM 5	CTH D EB 223+36.75	64.76 LT	REBAR	775.76



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: CTH D WB	SHEET 190	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 04
PLOT DATE : 7/31/2025 2:40 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

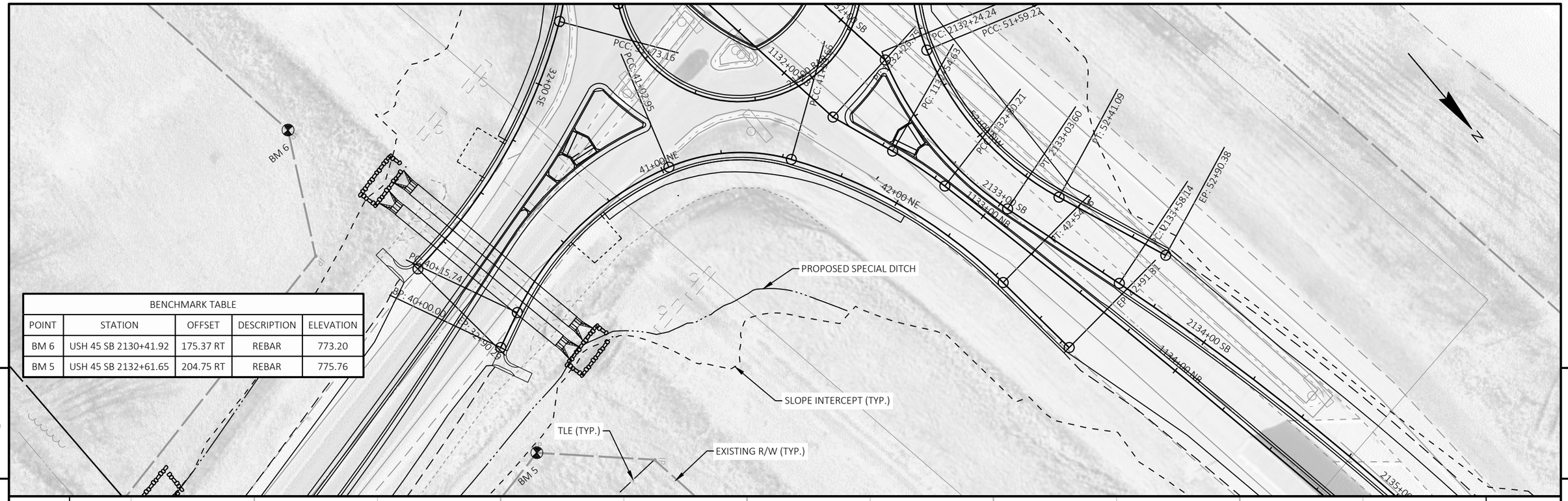


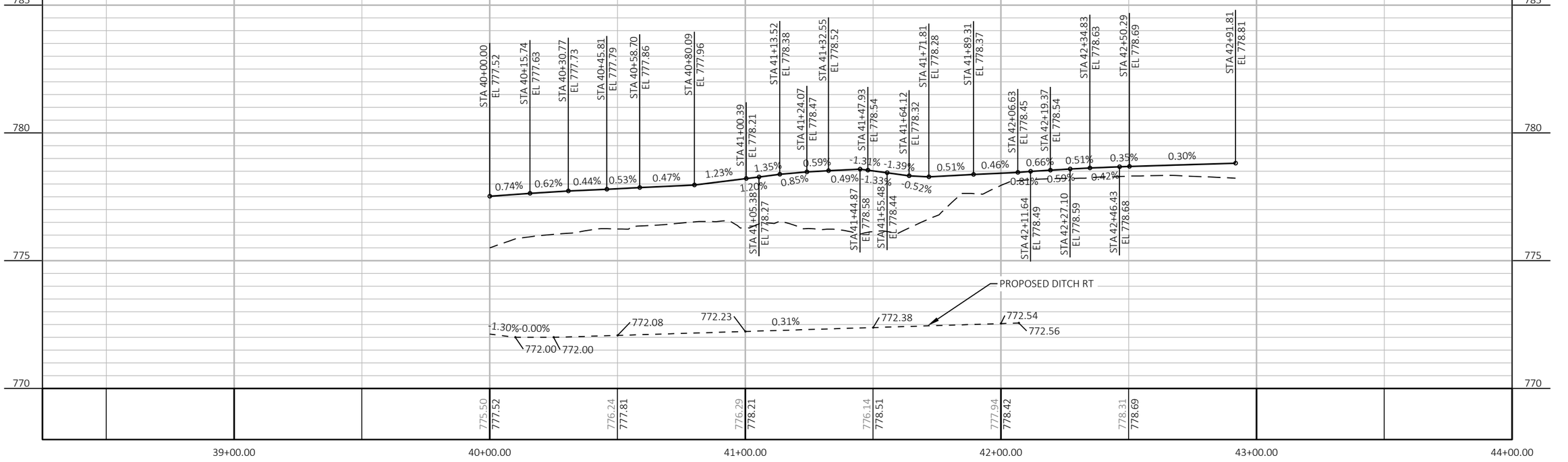


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: USH 45 & CTH D ROUNDABOUT	SHEET 191	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050104-PP.DWG PLOT DATE : 7/28/2025 1:10 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 01
WISDOT/CADDS SHEET 44

BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 6	USH 45 SB 2130+41.92	175.37 RT	REBAR	773.20
BM 5	USH 45 SB 2132+61.65	204.75 RT	REBAR	775.76



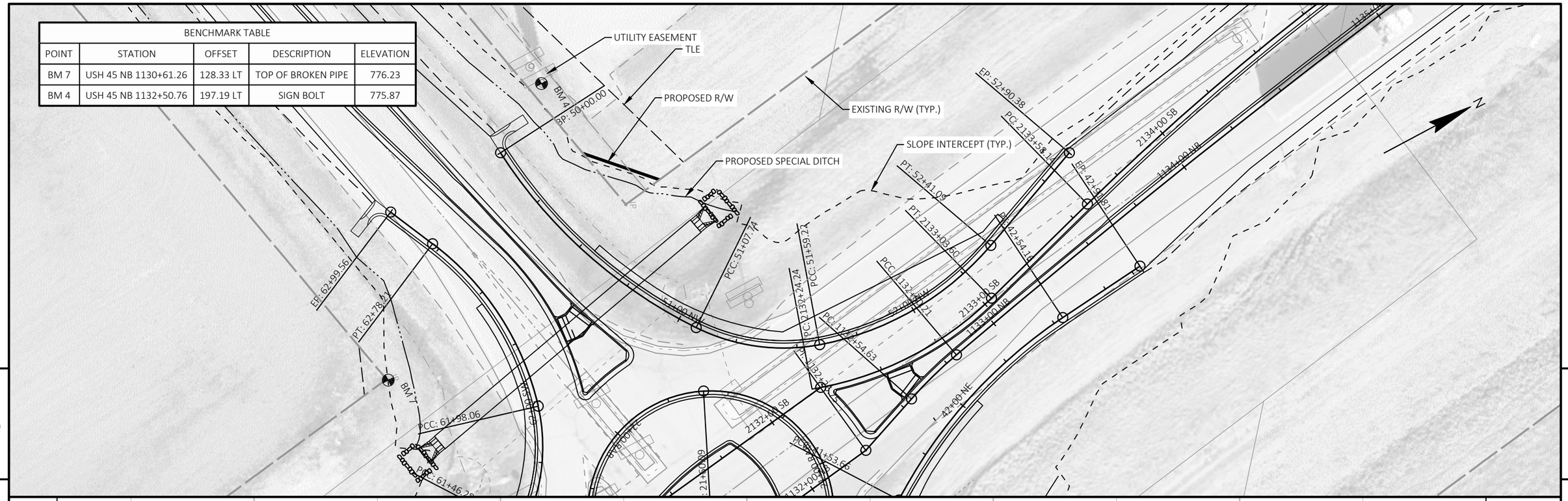


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: RAB NE QUAD	SHEET 192	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050104-PP.DWG
LAYOUT NAME - 02
PLOT DATE : 7/28/2025 1:10 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

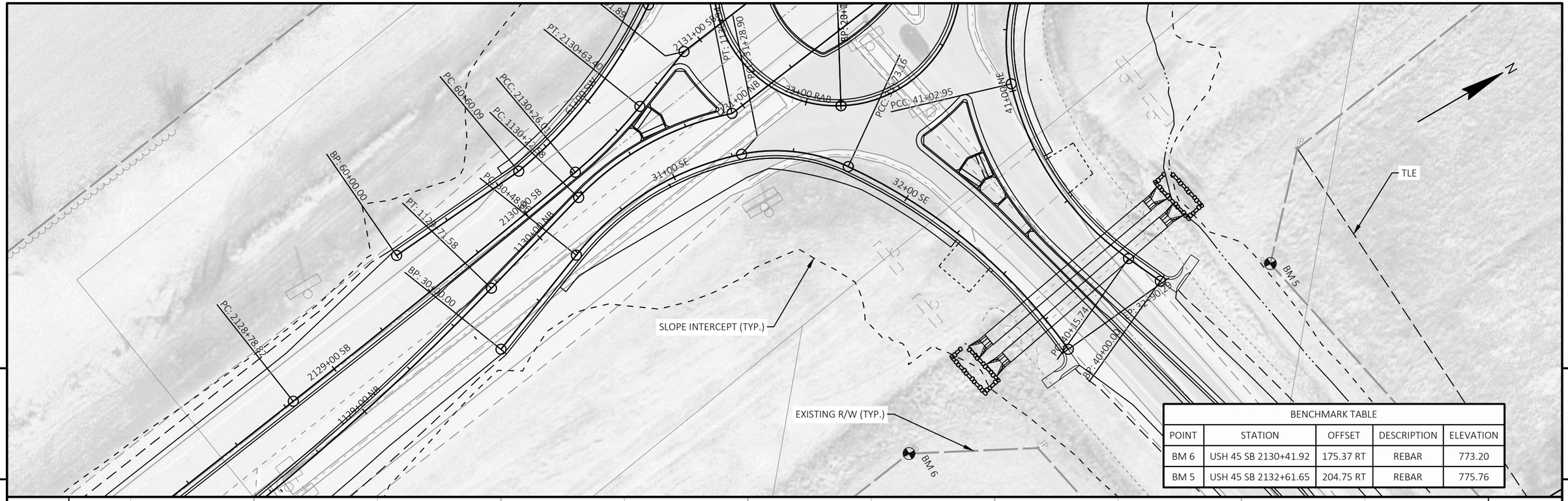
WISDOT/CADDS SHEET 44

BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 7	USH 45 NB 1130+61.26	128.33 LT	TOP OF BROKEN PIPE	776.23
BM 4	USH 45 NB 1132+50.76	197.19 LT	SIGN BOLT	775.87

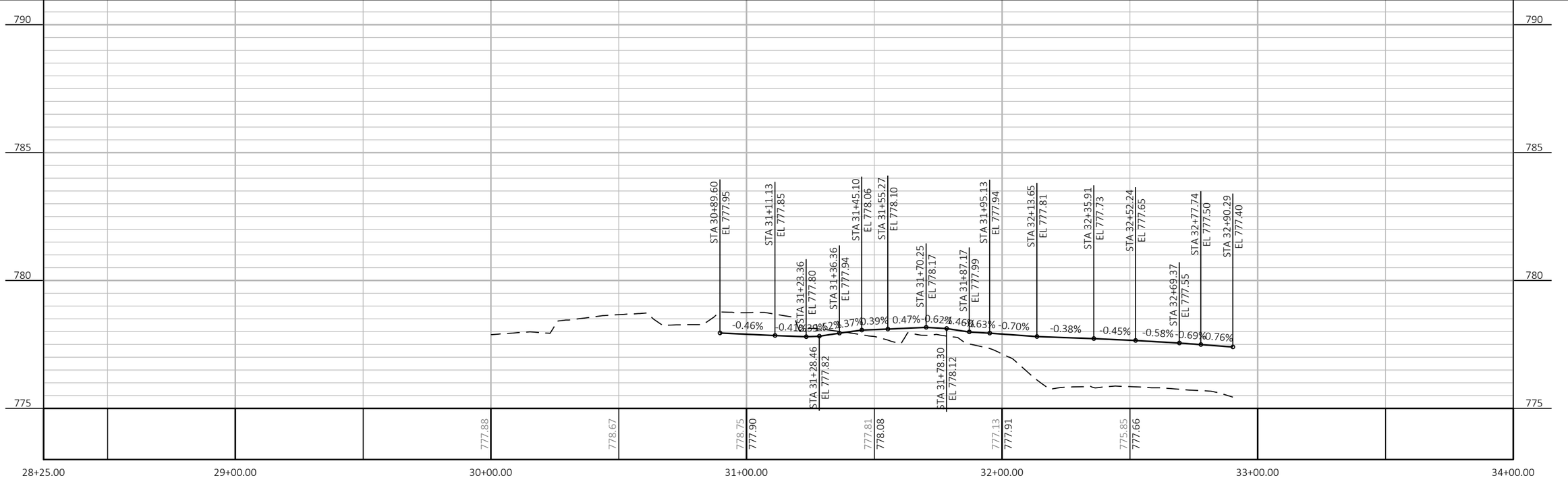


PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: RAB NW QUAD	SHEET 193 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050104-PP.DWG
LAYOUT NAME - 03
PLOT DATE : 7/28/2025 1:10 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT



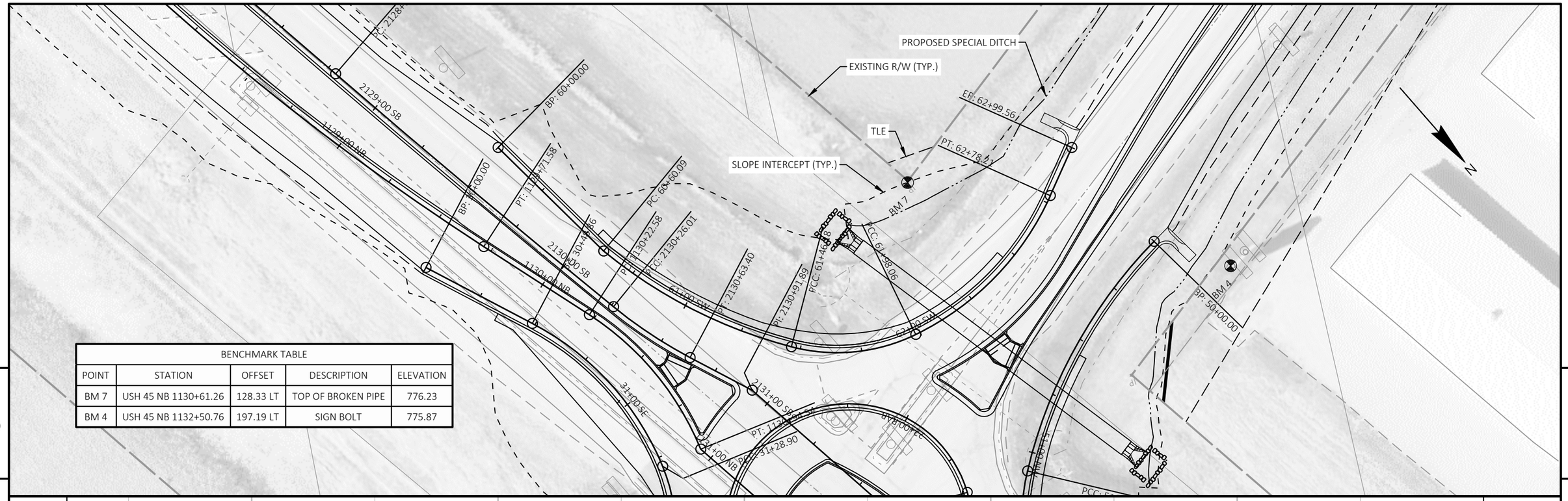
BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 6	USH 45 SB 2130+41.92	175.37 RT	REBAR	773.20
BM 5	USH 45 SB 2132+61.65	204.75 RT	REBAR	775.76



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: RAB SE QUAD	SHEET 194	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050104-PP.DWG
LAYOUT NAME - 04
PLOT DATE : 7/28/2025 1:10 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 7	USH 45 NB 1130+61.26	128.33 LT	TOP OF BROKEN PIPE	776.23
BM 4	USH 45 NB 1132+50.76	197.19 LT	SIGN BOLT	775.87



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	PLAN AND PROFILE: RAB SW QUAD	SHEET 195	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\050104-PP.DWG
LAYOUT NAME - 05
PLOT DATE : 7/28/2025 1:11 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:40 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
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
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
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
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
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL 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
09B02-10	CONDUIT
09B04-13	PULL BOX
09B16-03	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-10	CONCRETE CONTROL CABINET BASES
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
11B02-02	CONCRETE MEDIAN NOSE
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13B01-11A	PAVEMENT DETAILS FOR RAILROAD APPROACH
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-06A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

6

Standard Detail Drawing List

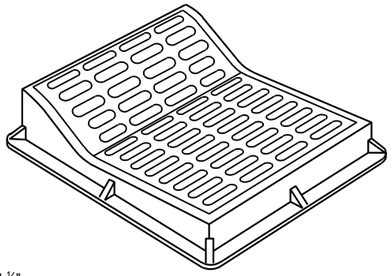
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-16A	PAVEMENT MARKING SYMBOLS
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C07-16D	ROUNDABOUT ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24C	PAVEMENT MARKING (TURN LANES)
15C08-24D	PAVEMENT MARKING (TURN LANES)
15C09-13A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-09A	MEDIAN ISLAND PAVEMENT MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C22-01	DOTTED EXTENSION FOR ROUNDABOUT
15C31-08A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-08B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-08C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C31-08D	PAVEMENT MARKING LANE DROP AND LANE REDUCTION
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C35-06B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-06C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

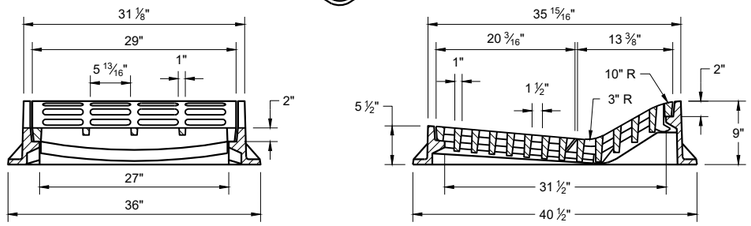
6

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.

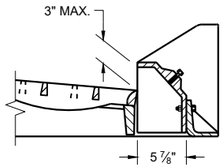
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

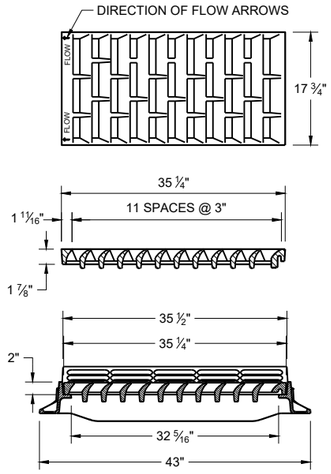


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

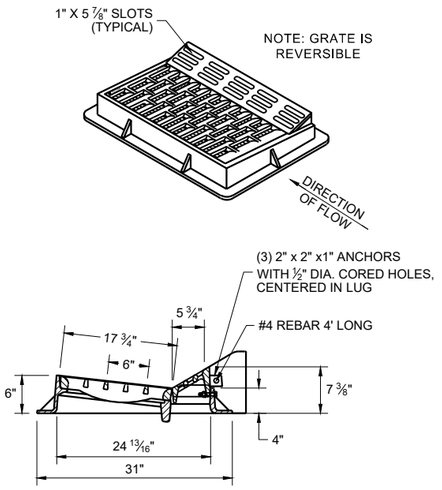
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



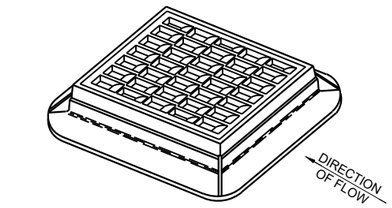
TYPE "HM"

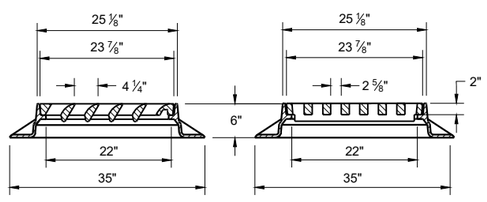
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



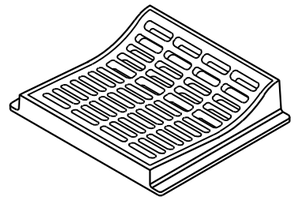
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

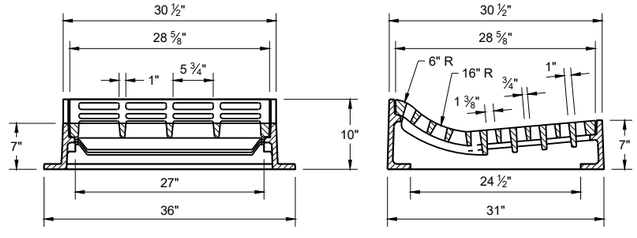
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





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

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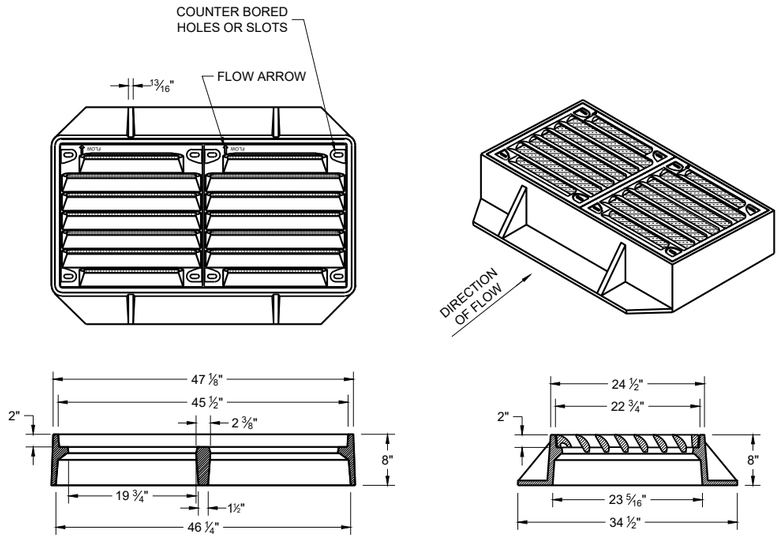
SDD 08A05-21c

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.

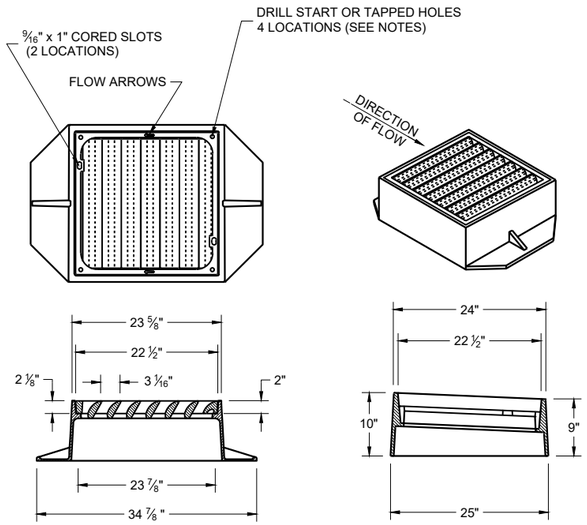
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

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

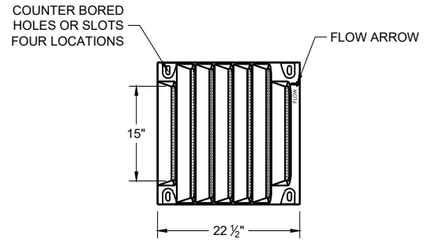
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
⅜" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

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

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



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

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

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

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

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

STATE OF WISCONSIN
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/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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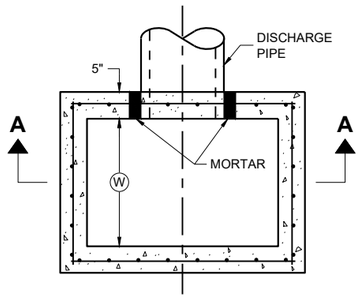
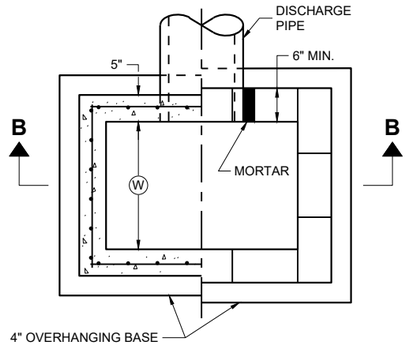
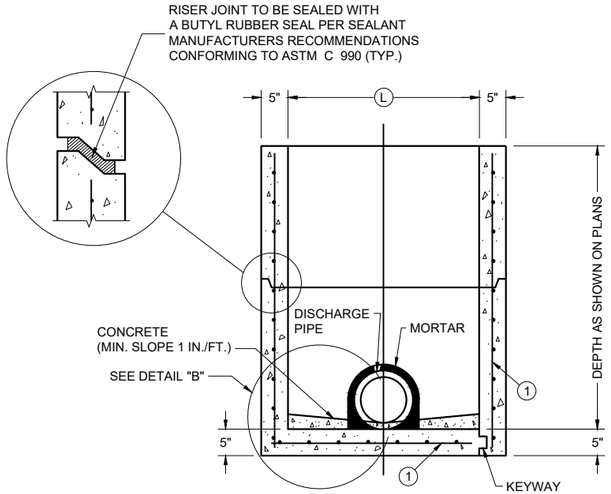
SDD 08A05-21d



PLAN VIEW



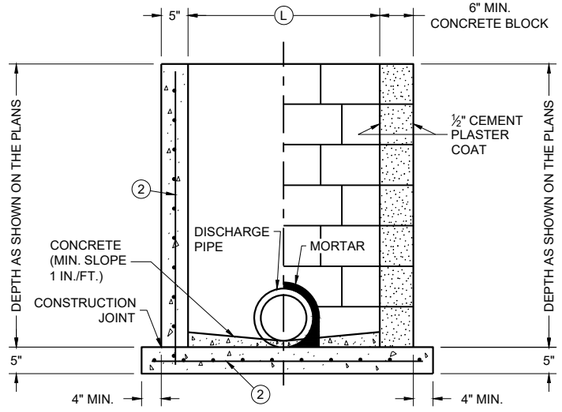
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

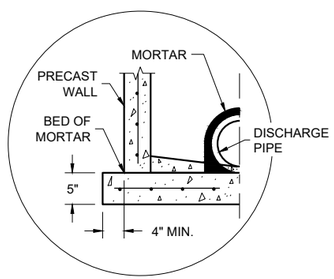
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

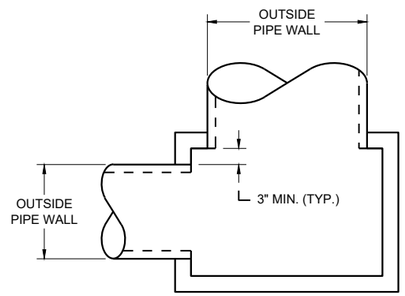
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

CATCH BASIN COVER MATRIX

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

PIPE MATRIX

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

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

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

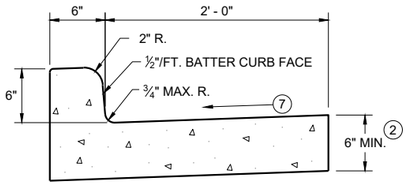
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

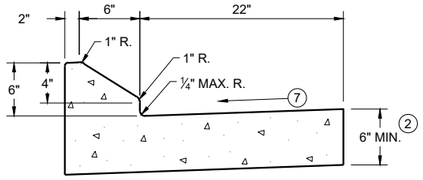
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

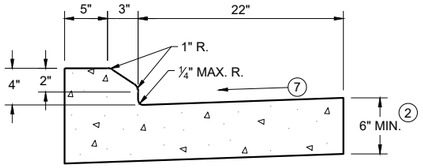
6
SDD 08C07-03



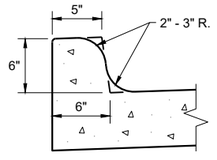
TYPES A (1) & D



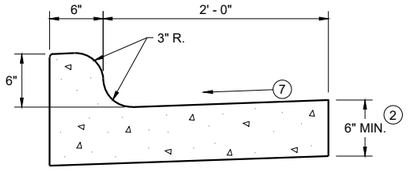
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

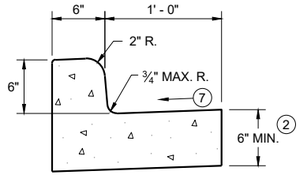


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



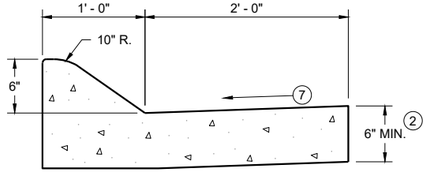
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

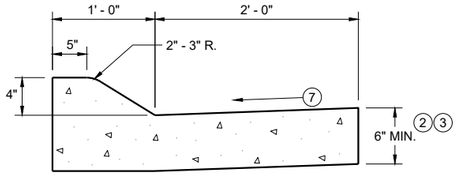


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

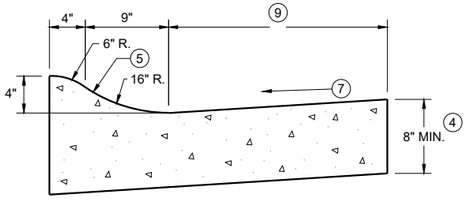


6" SLOPED CURB TYPES A (1) & D



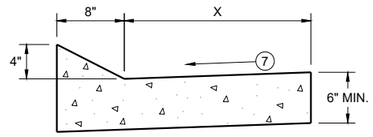
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

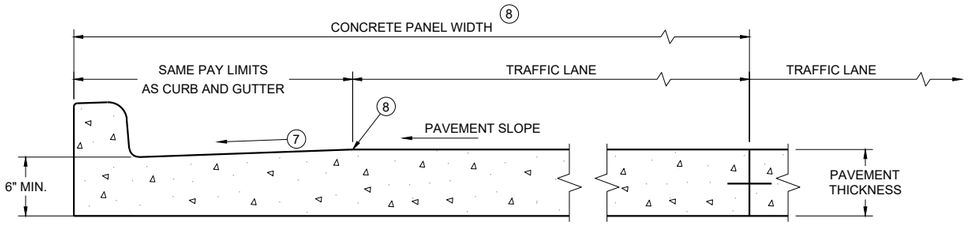


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

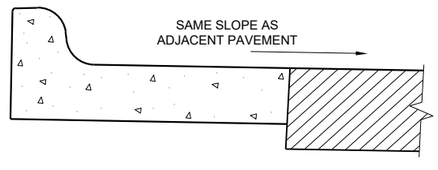
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

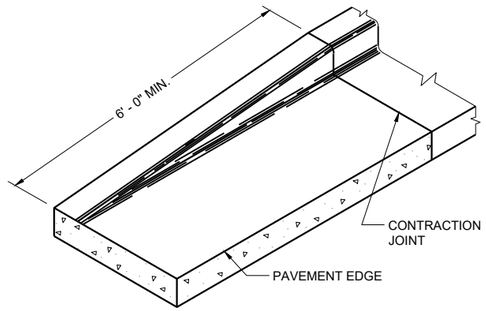
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

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

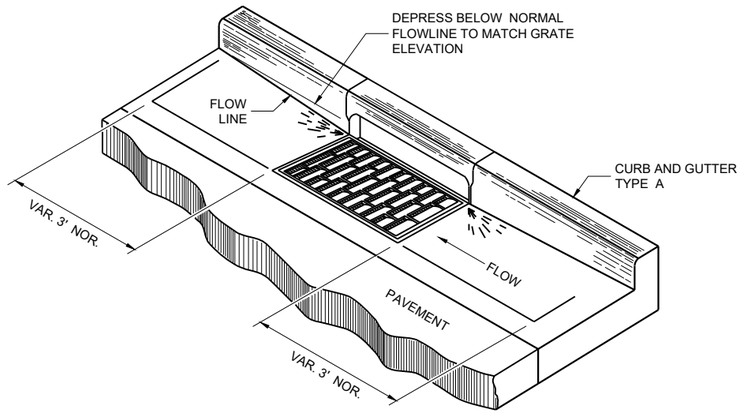
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

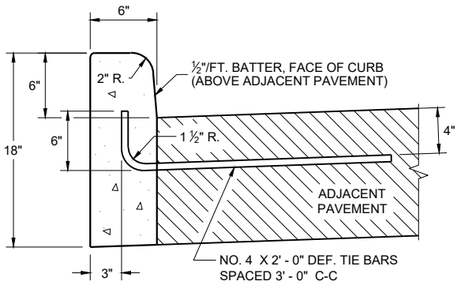
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

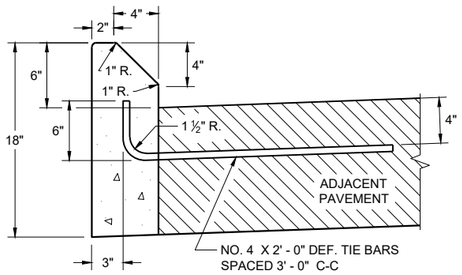
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

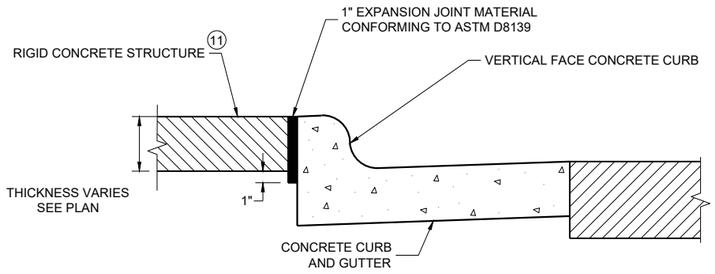


TYPES A (1) & D

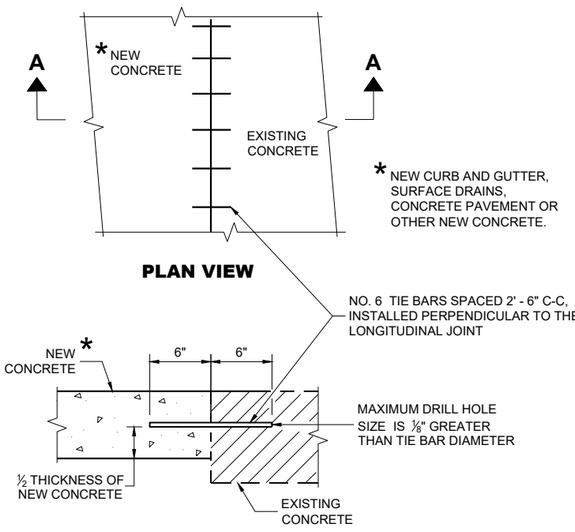


TYPES G (1) & J

CONCRETE CURB



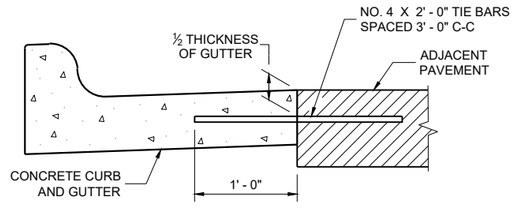
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



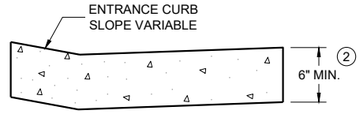
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

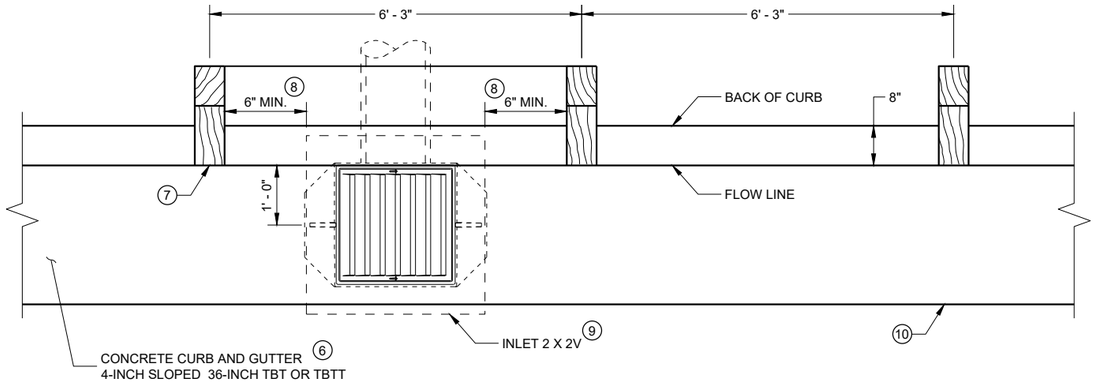
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

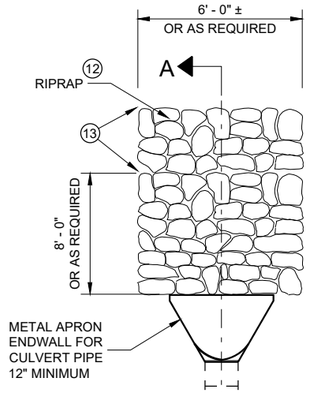
APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA



INLET PLAN VIEW

(NOTE: RAIL NOT SHOWN FOR CLARITY)



GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

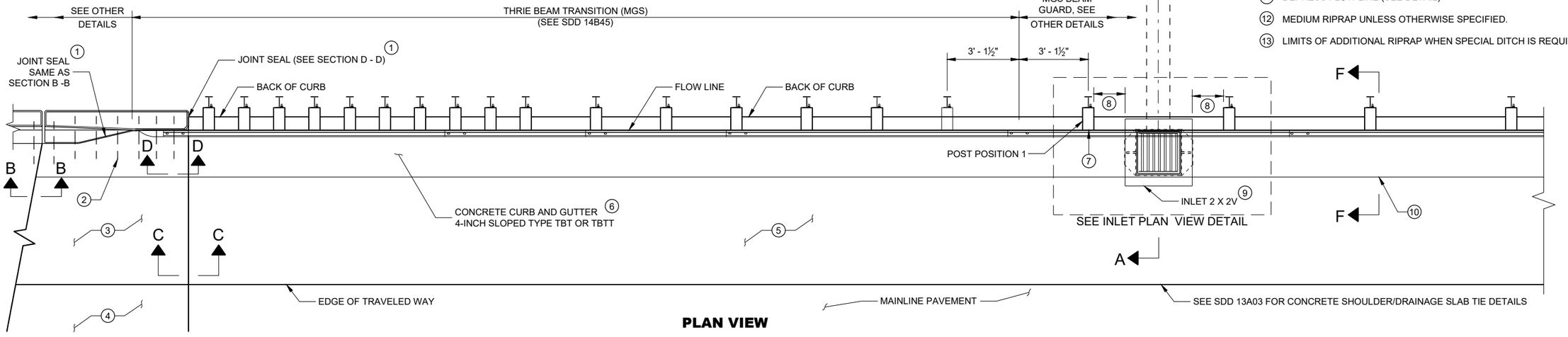
(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

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

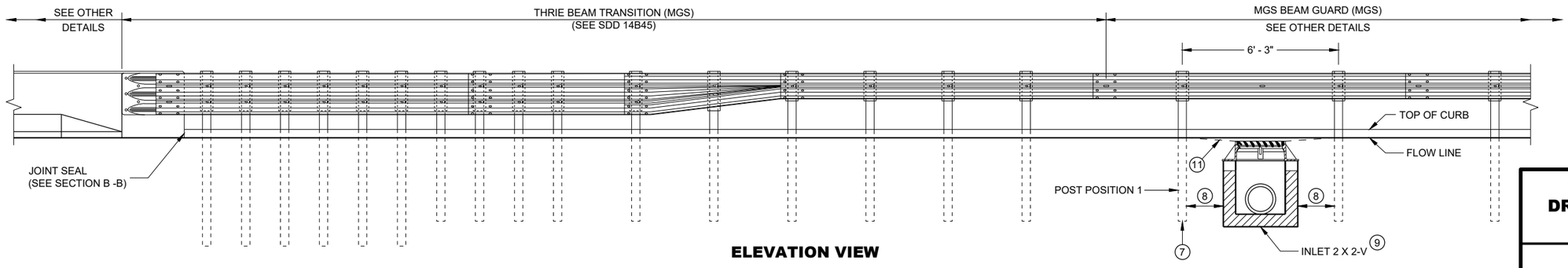
(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

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



PLAN VIEW



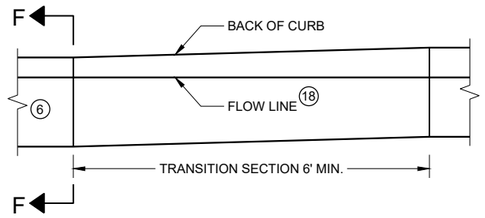
ELEVATION VIEW

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

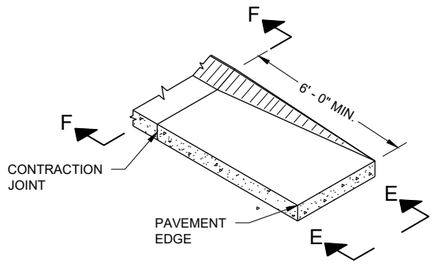
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

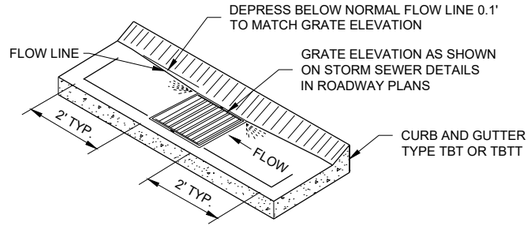
SDD 08D03 - 09a



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.

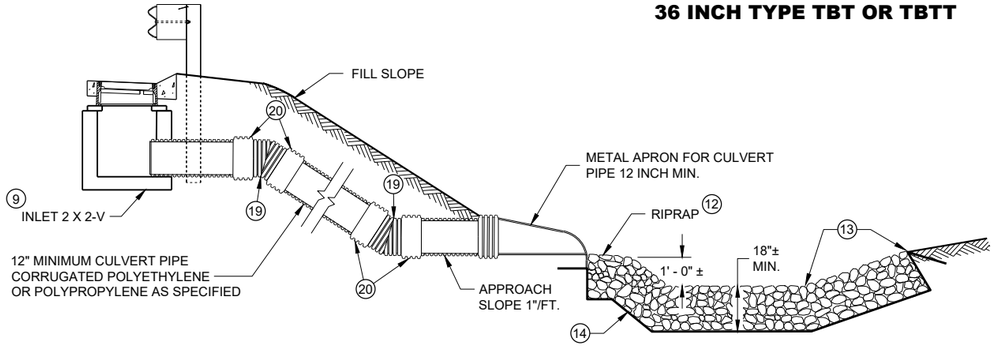
(18) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

(19) MANUFACTURER SUPPLIED BEND.

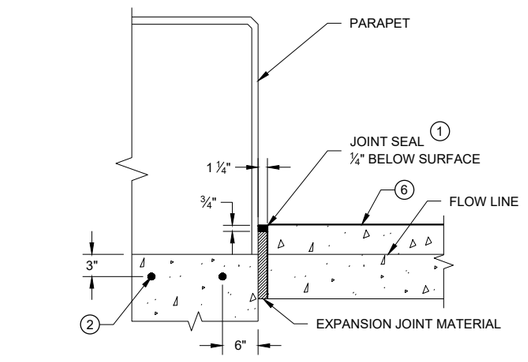
(20) MANUFACTURER SUPPLIED EXTERNAL MECHANICAL COUPLING OR A MANUFACTURER RECOMMENDED COUPLING WITH A MASTIC IMPREGNATED GEOTEXTILE WRAP AND MECHANICAL FASTENING BANDS.

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

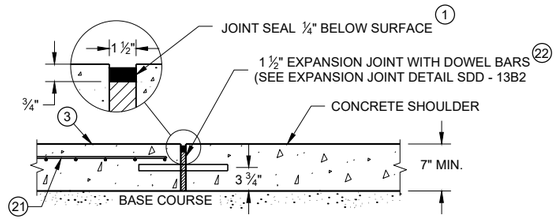
(22) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



SECTION A - A

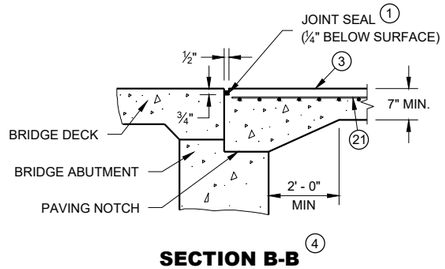


SECTION D - D

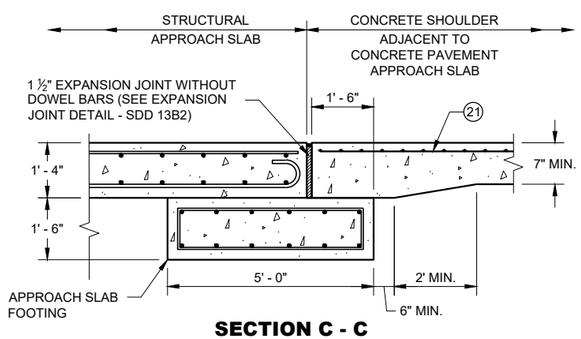


SECTION C - C

JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS

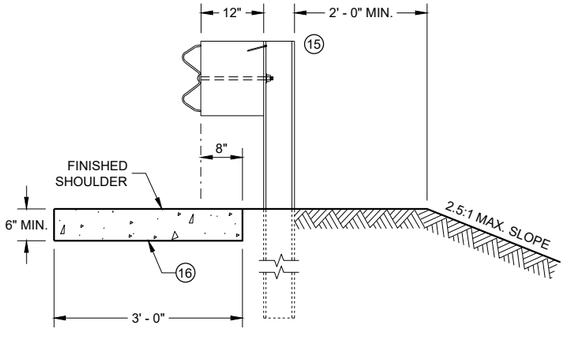


SECTION B-B 4

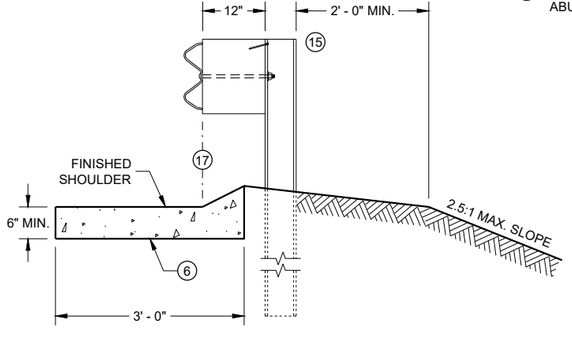


SECTION C - C

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

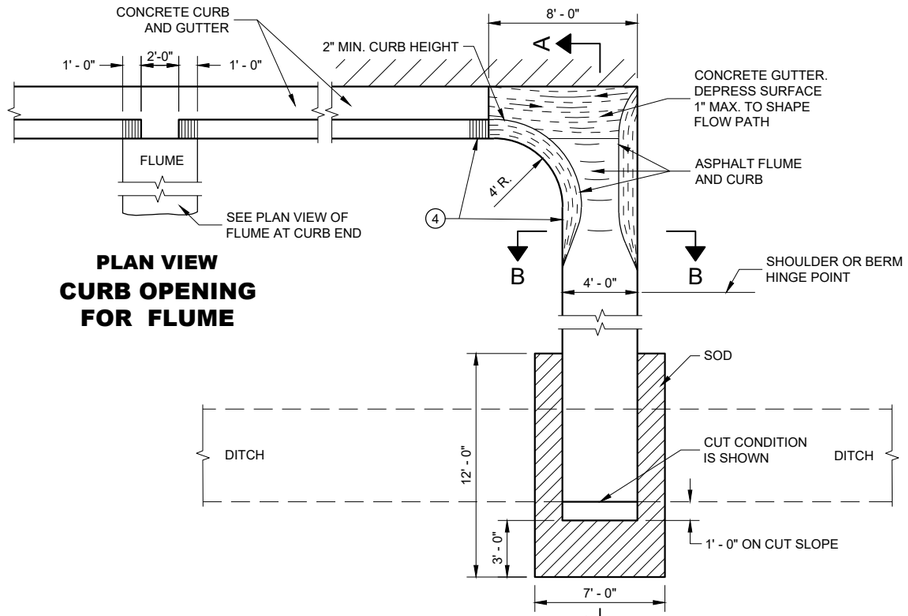
SDD 08D03 - 09b

6

SDD 08D03 - 09b

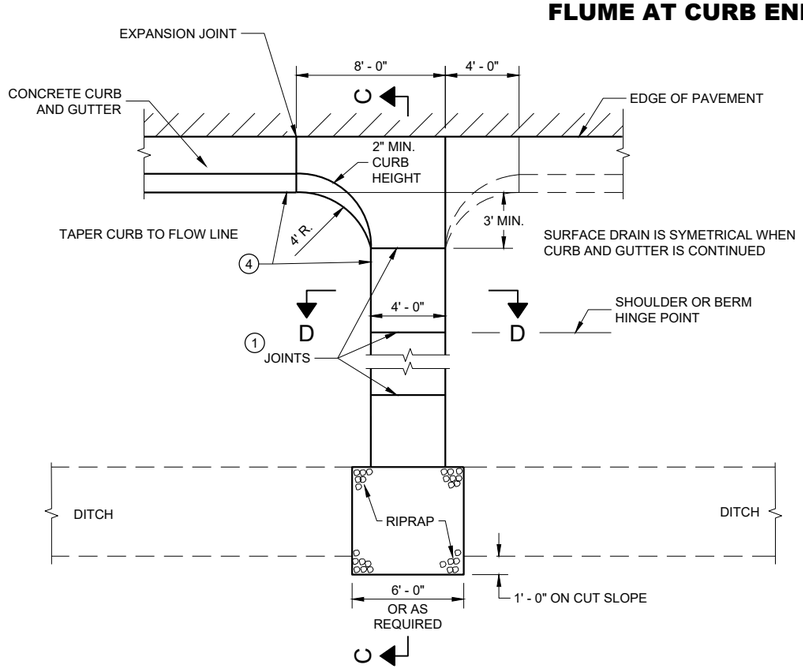
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



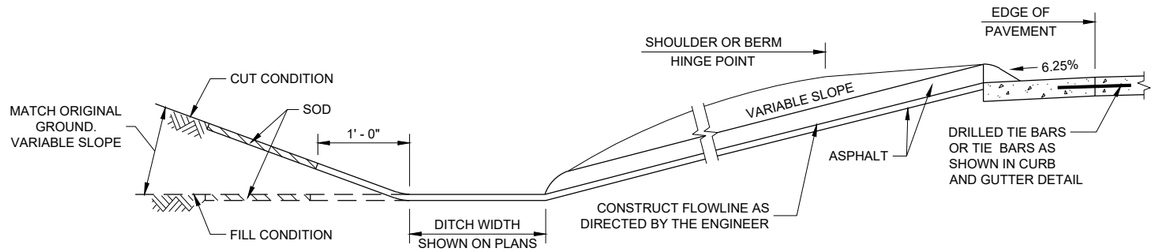
PLAN VIEW
CONCRETE SURFACE DRAIN

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.

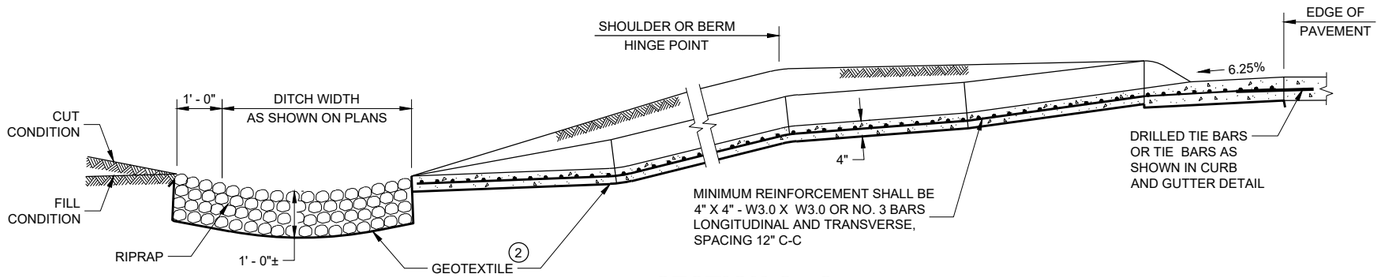
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

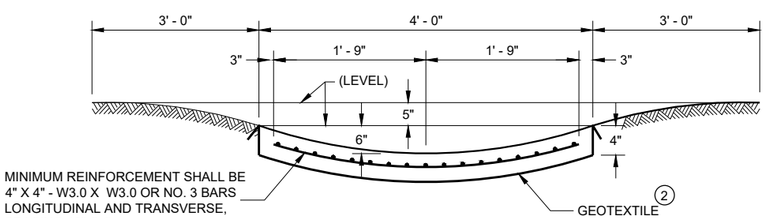


SECTION A - A

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

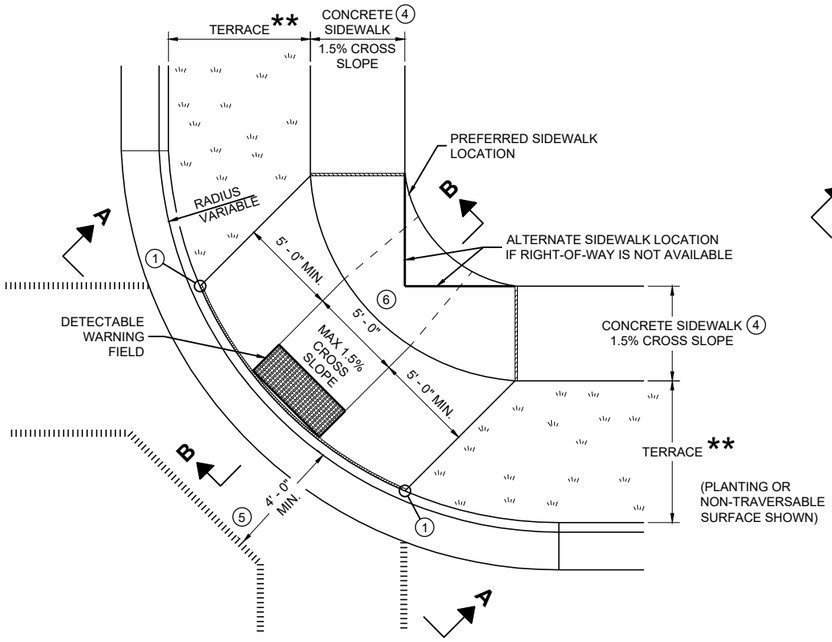
FHWA

6

SDD 08D04 - 07

6

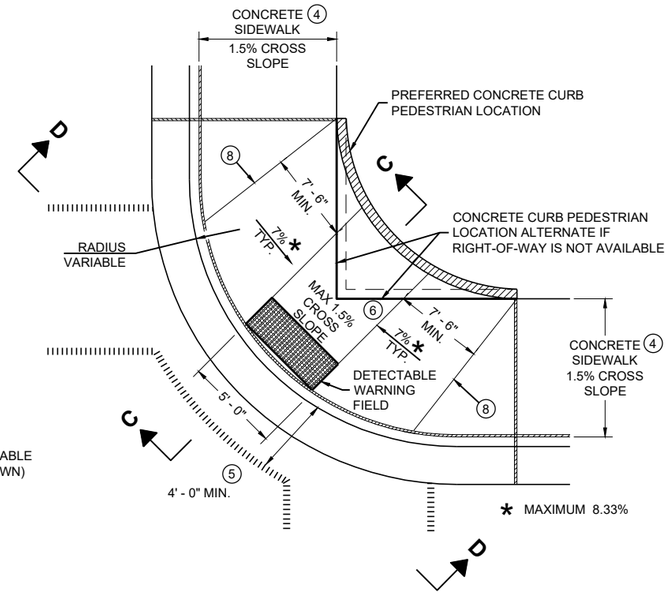
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

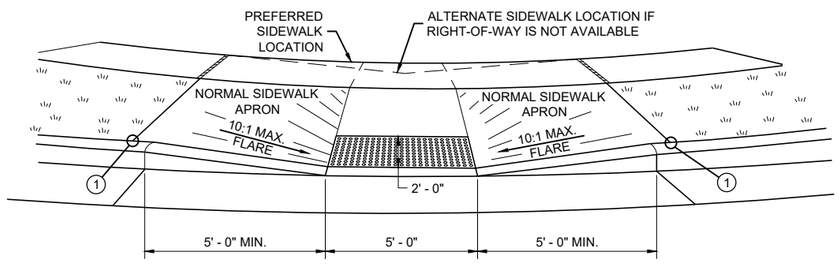
(CENTER OF CORNER RADIUS)



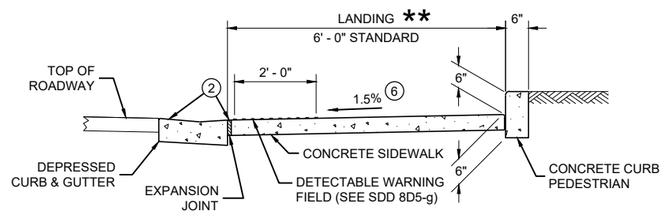
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

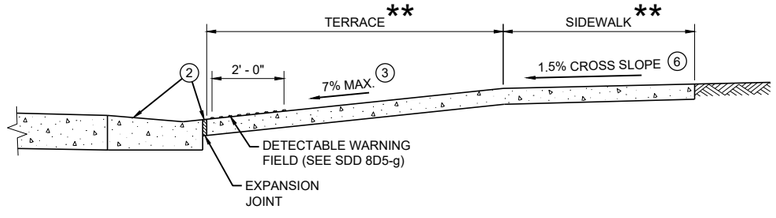


VIEW A - A FOR TYPE 1

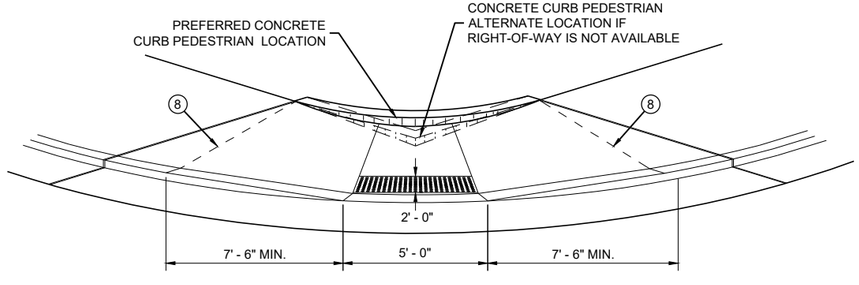


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

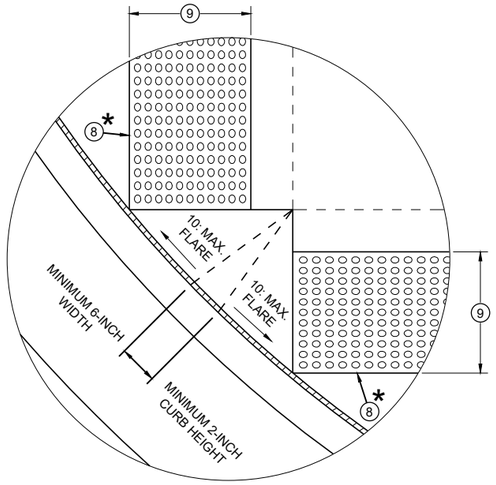
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

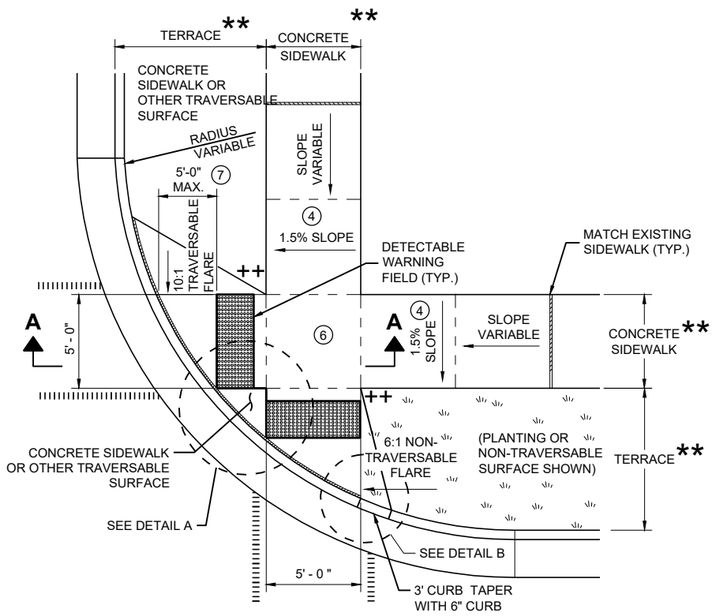
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

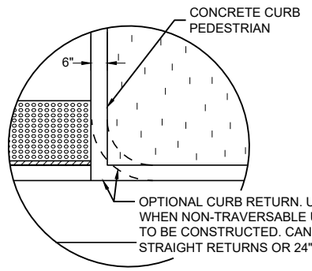
6
SDD 08D05-21a



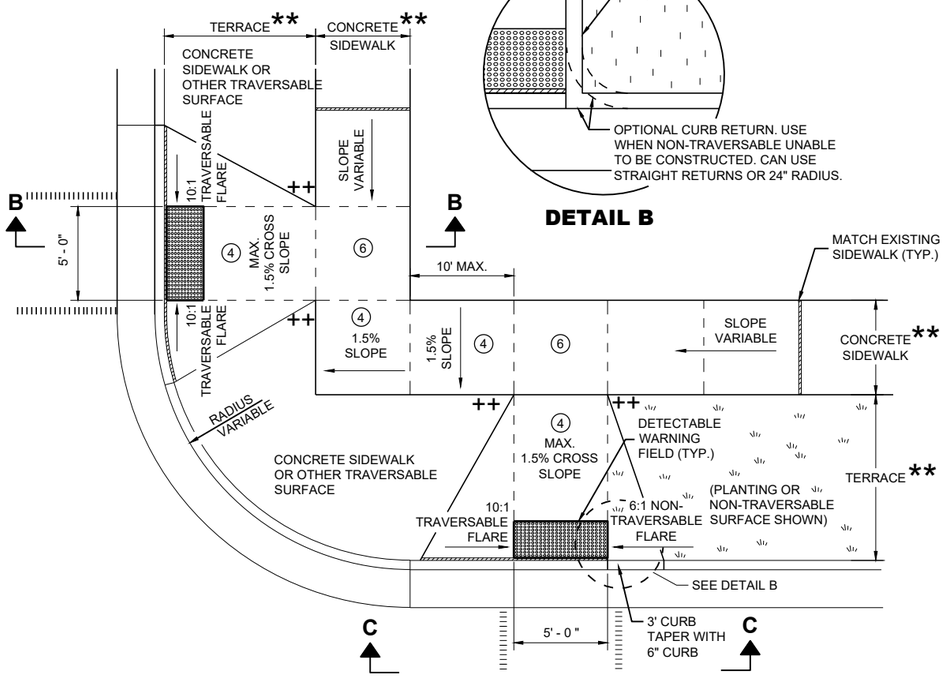
DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

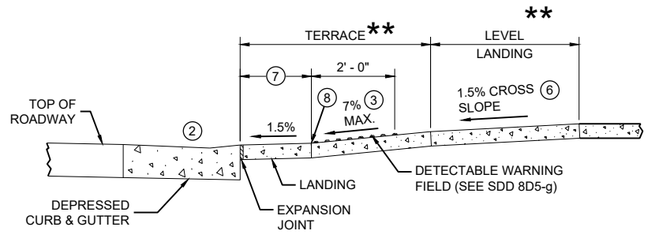
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

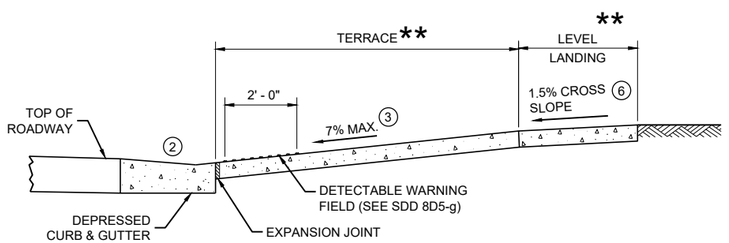


SECTION A - A FOR TYPE 2

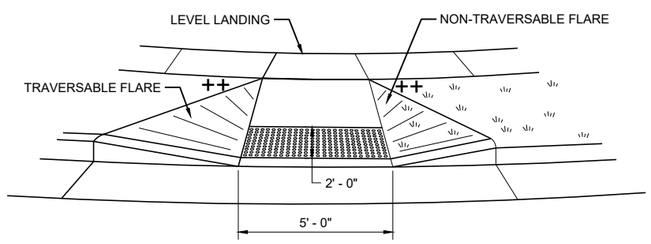
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



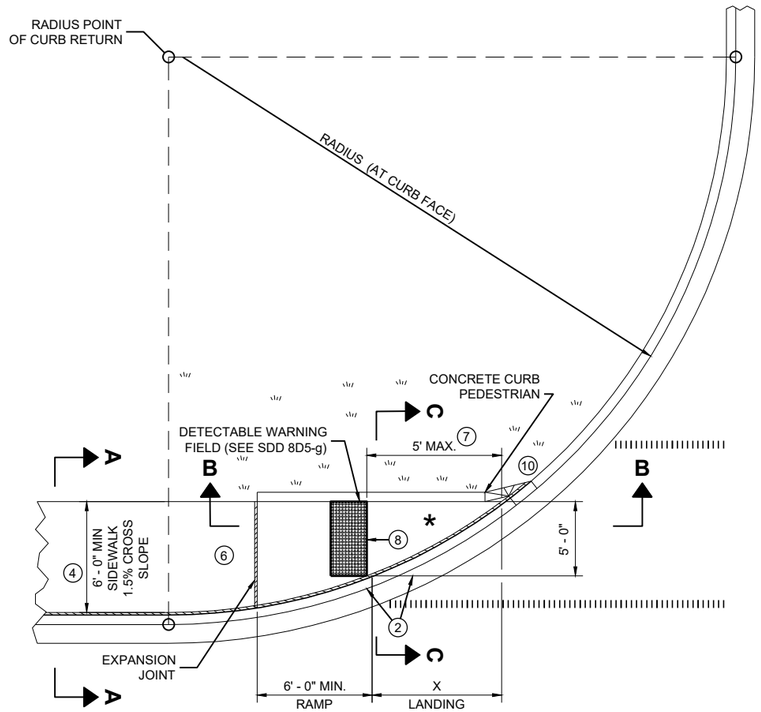
VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

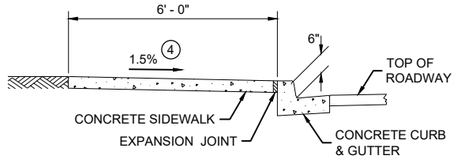


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

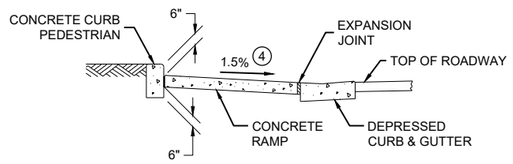
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

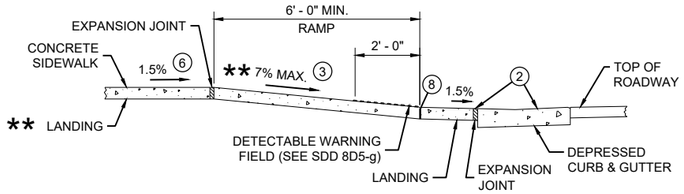
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



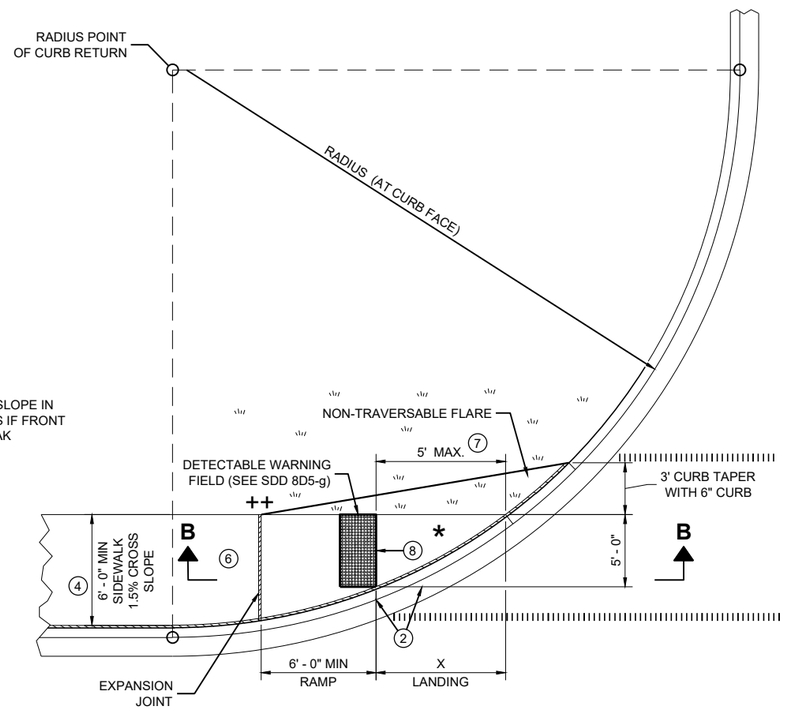
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

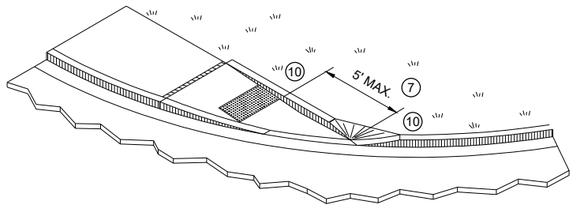
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

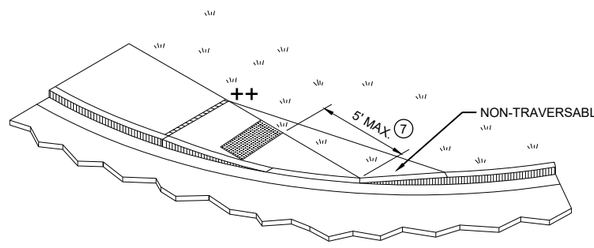


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A

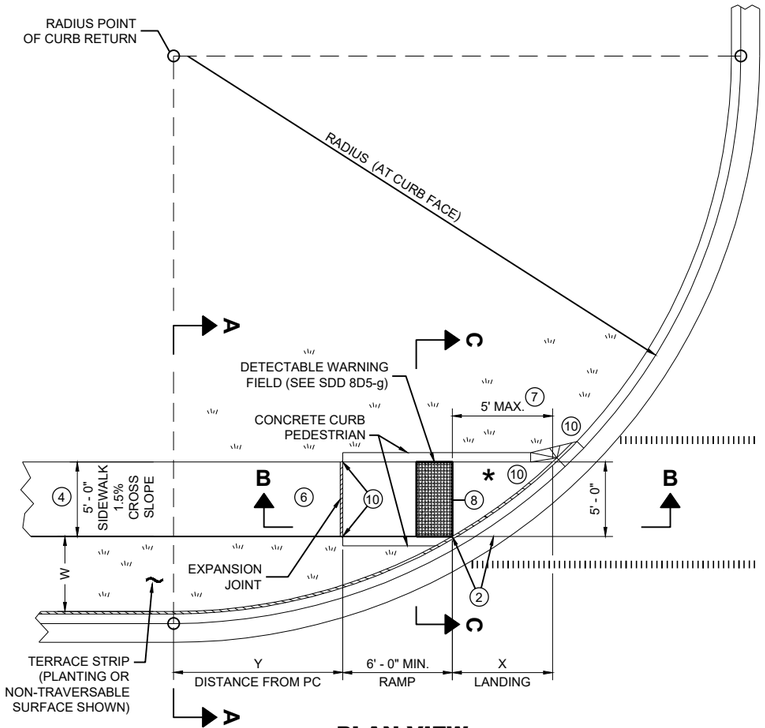


ISOMETRIC VIEW FOR TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



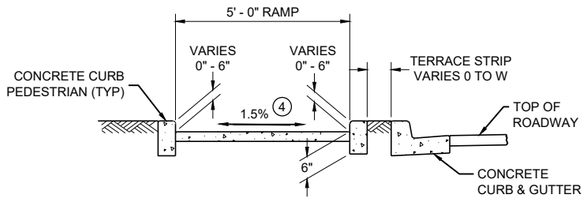
PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C - C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

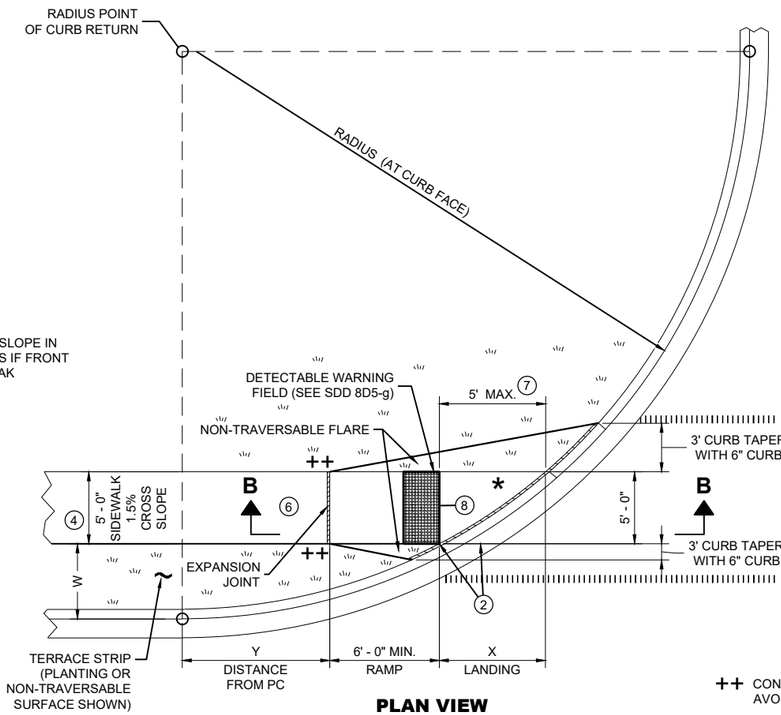
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

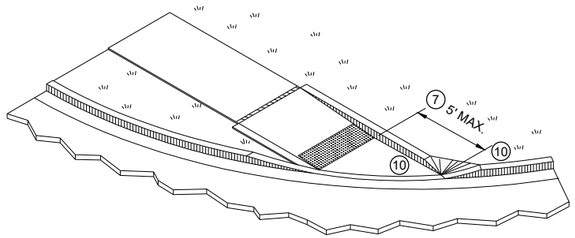
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

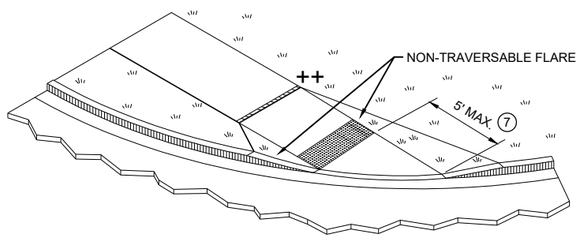
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



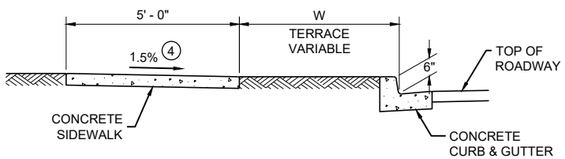
PLAN VIEW
CURB RAMP TYPE 4B1



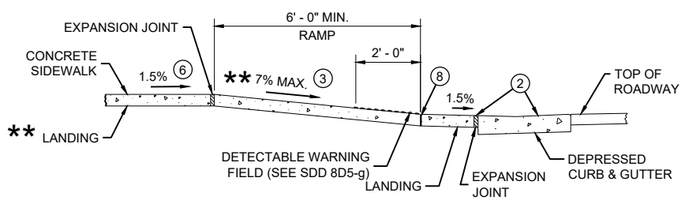
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

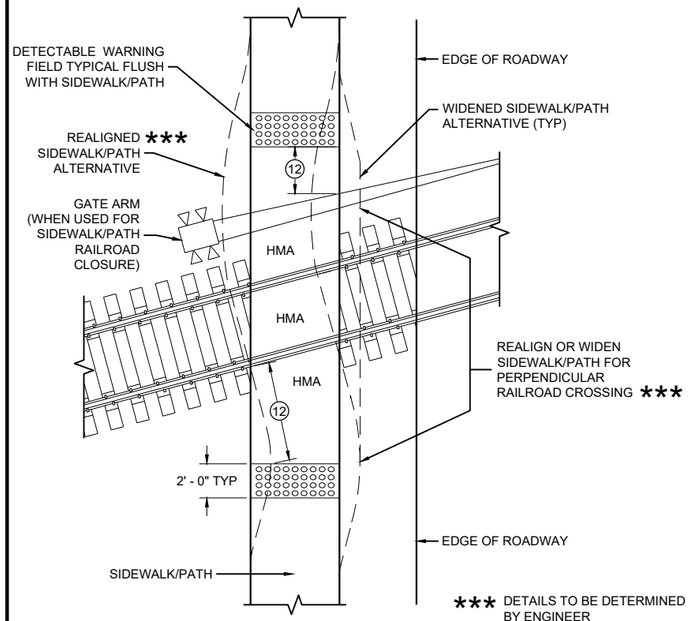
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

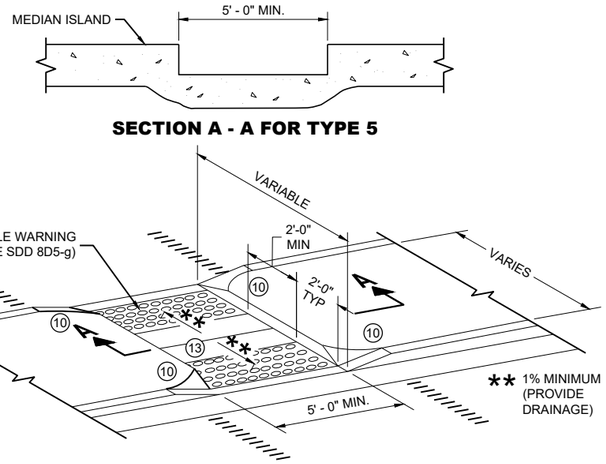
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

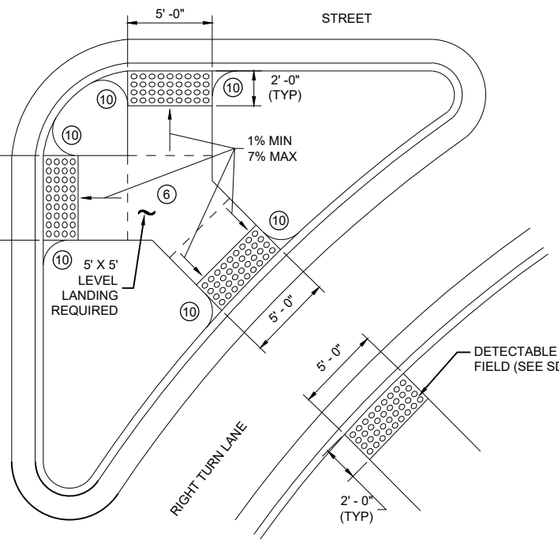
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

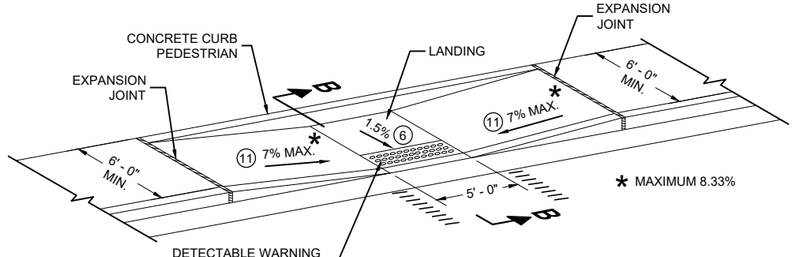
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

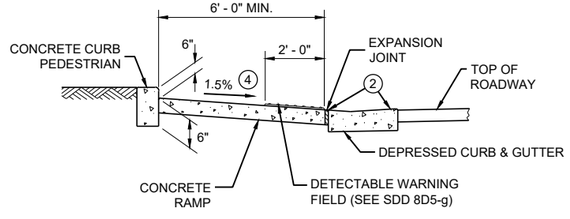
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

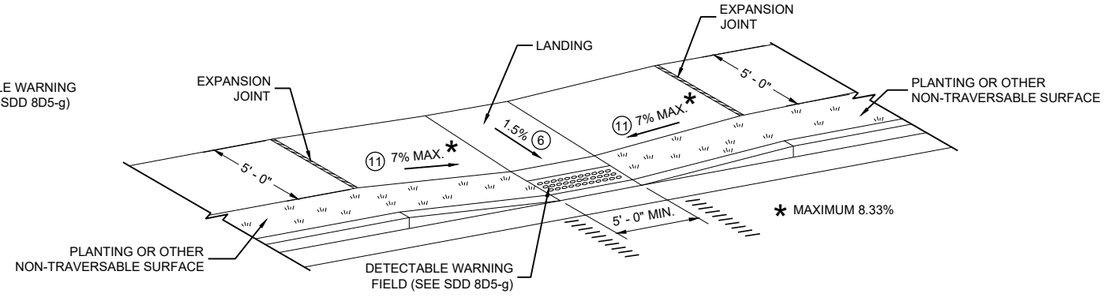


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 7B

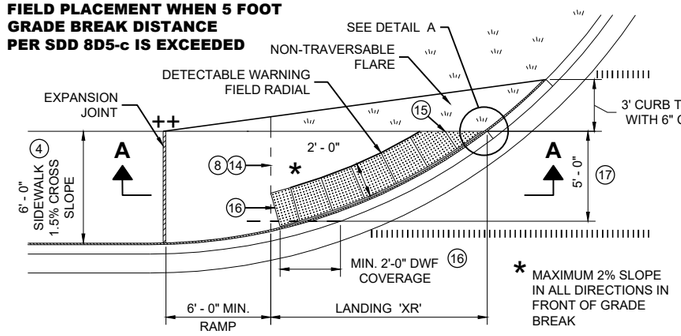
FOR INTERSECTIONS AND MID BLOCK CROSSINGS

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

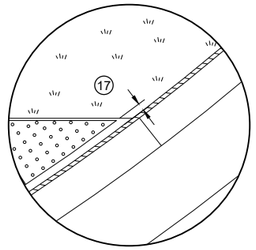
SDD 08D05-21e

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

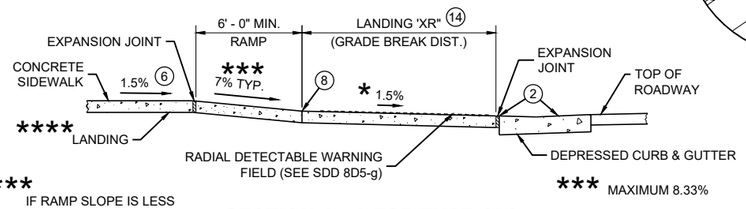


PLAN VIEW

CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

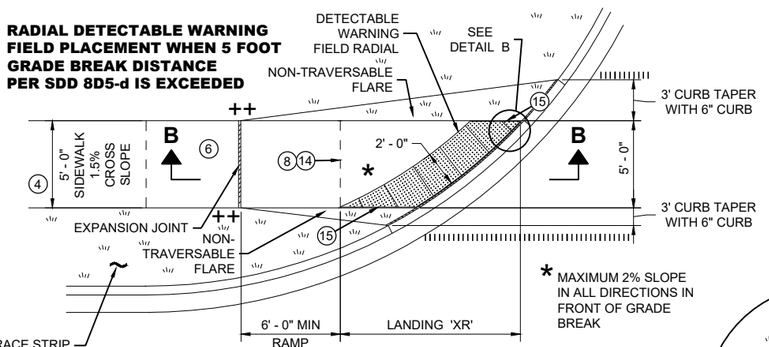
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

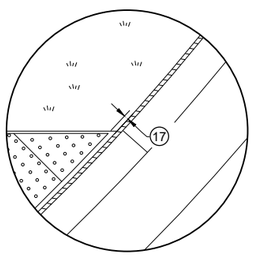
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

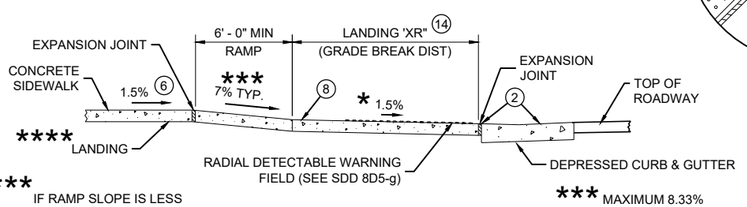


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

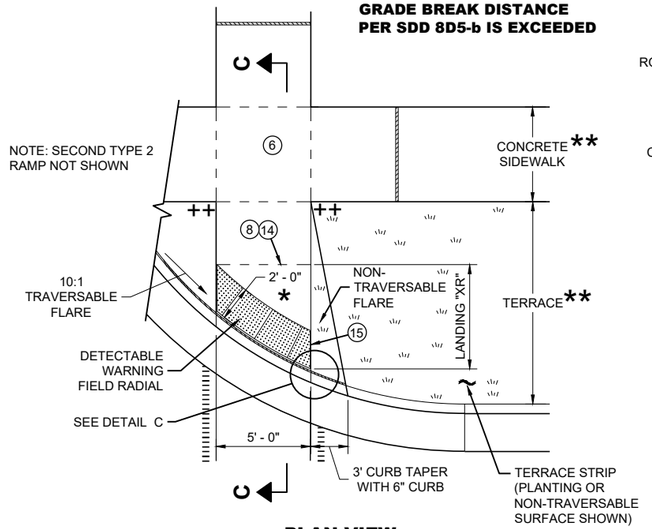


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

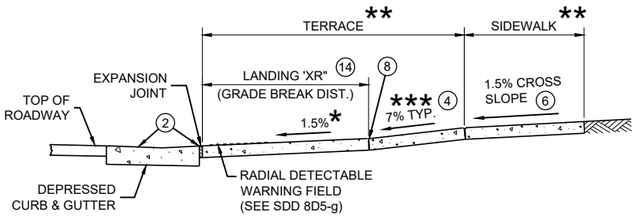
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

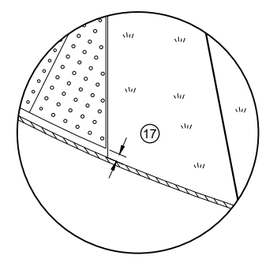


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

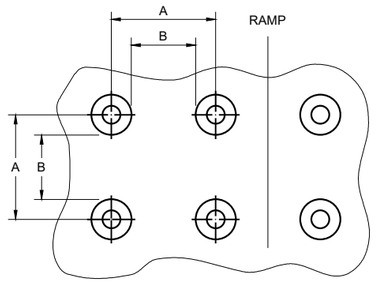
CURB RAMPS
RADIAL DETECTABLE WARNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

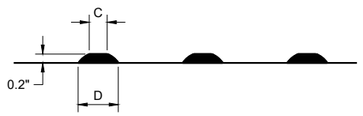
SDD 08D05-21f

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

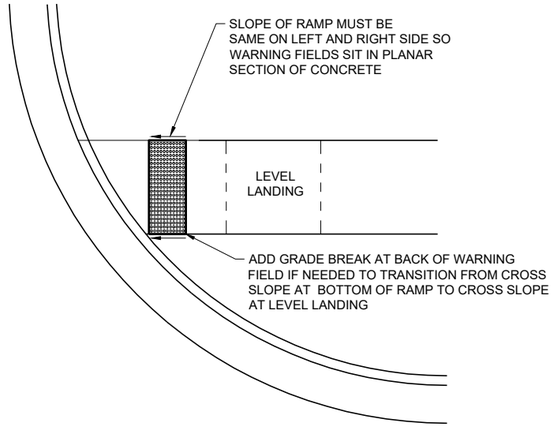
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

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

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

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

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

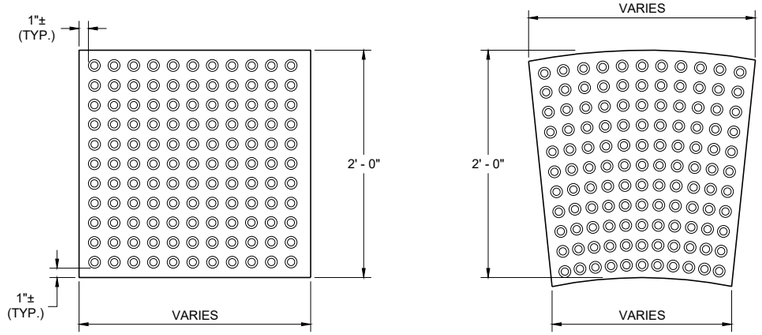
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE.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

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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

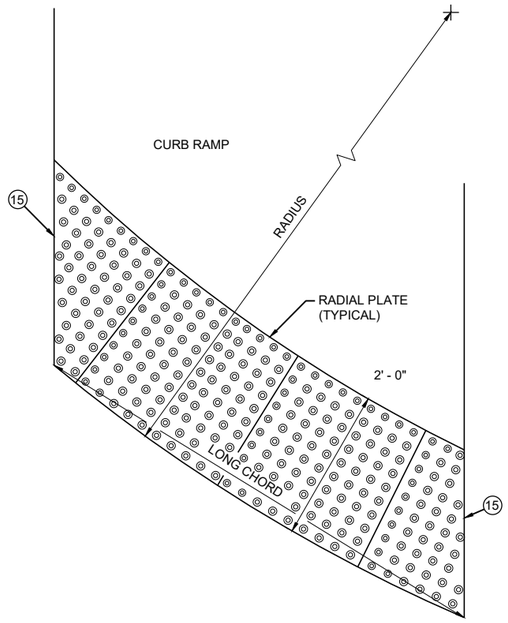
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



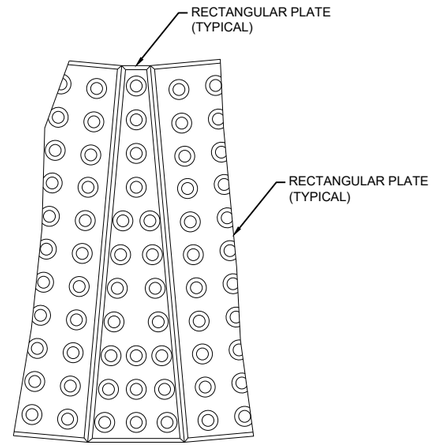
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

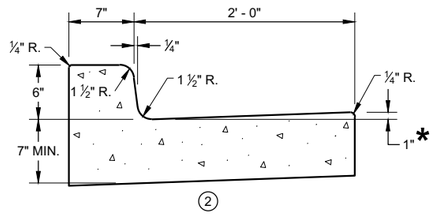
CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

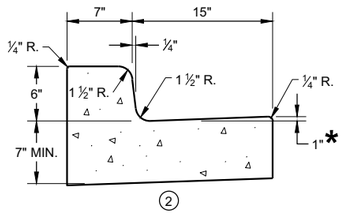
FHWA

6
SDD 08D05-21g

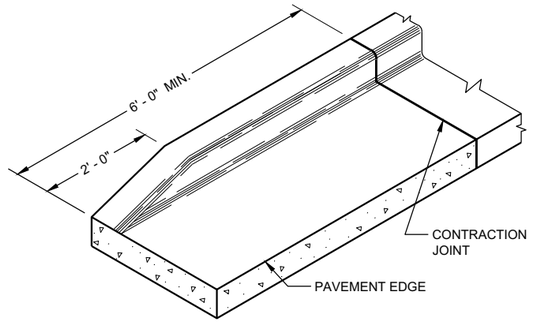


CONCRETE CURB AND GUTTER 31" ①

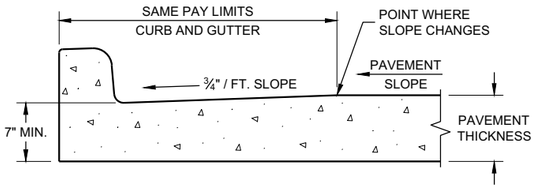
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



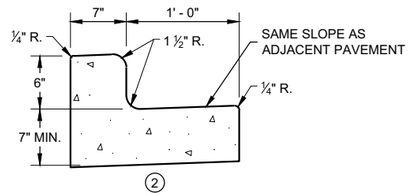
CONCRETE CURB AND GUTTER 22" ①



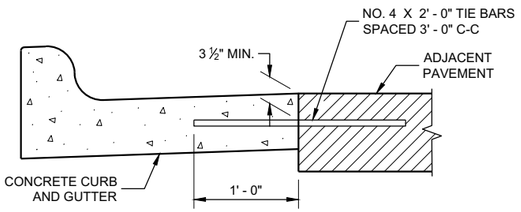
END SECTIONCURB AND GUTTER



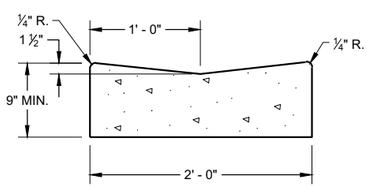
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



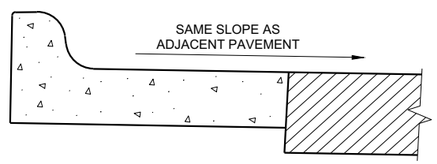
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(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.

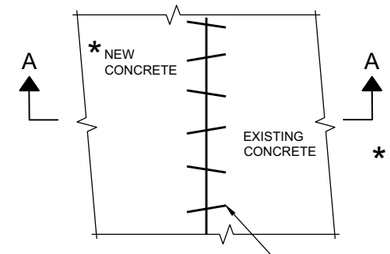
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

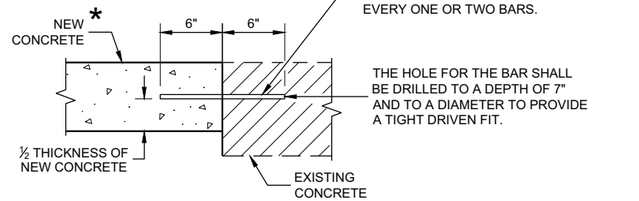
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

*EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

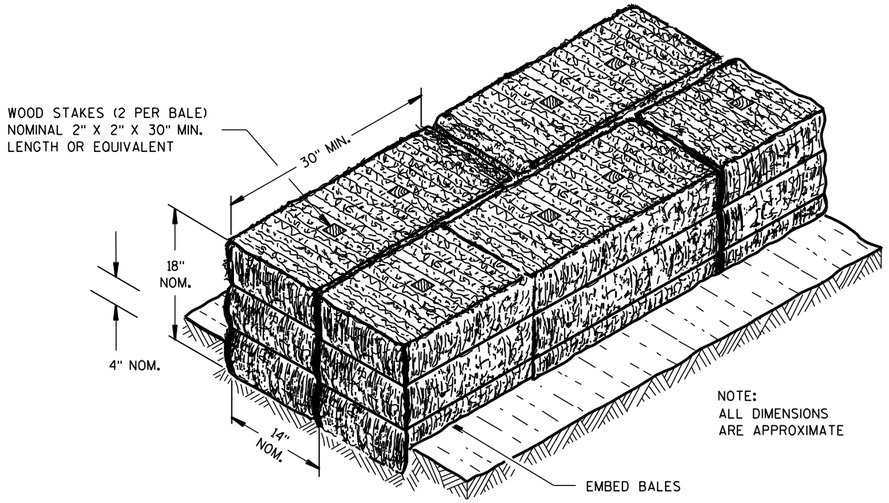
(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

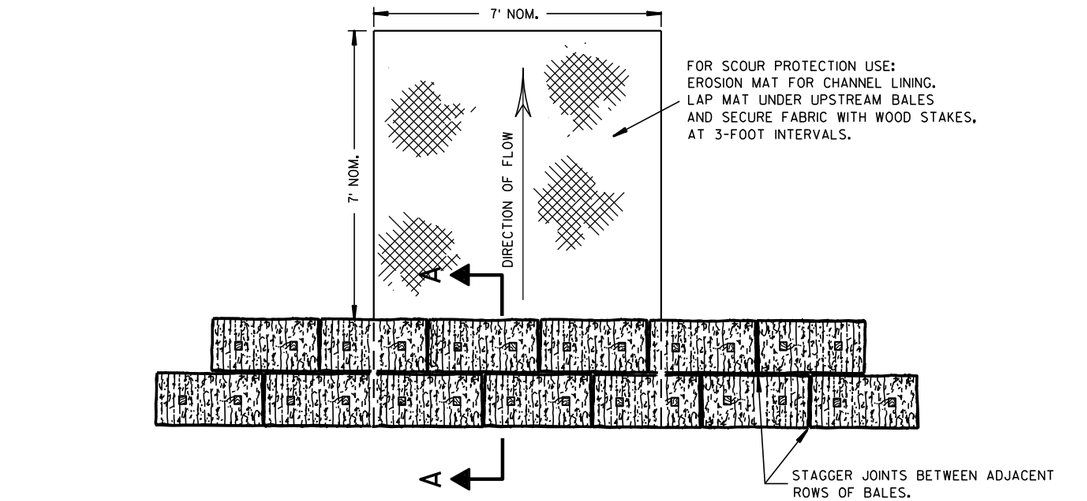
APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

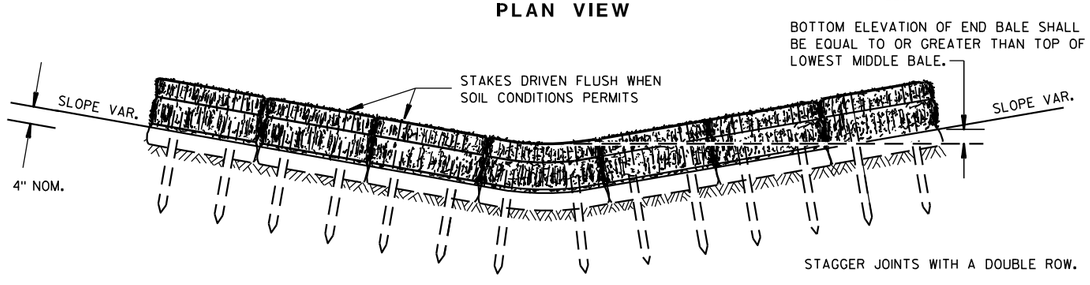
SDD 08D16 - 11



SECTION A-A



PLAN VIEW



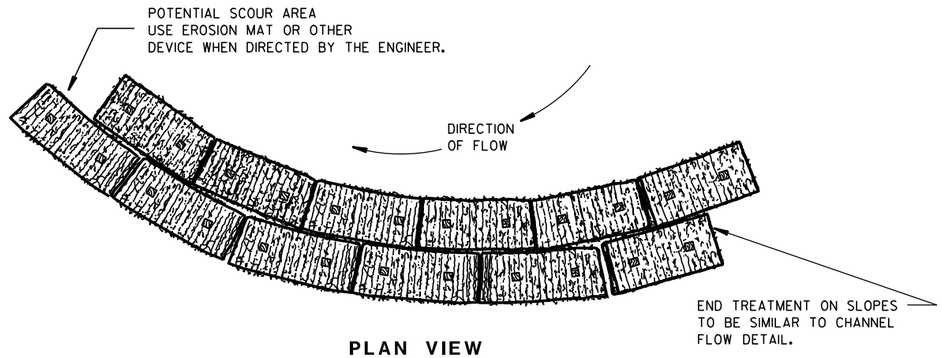
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

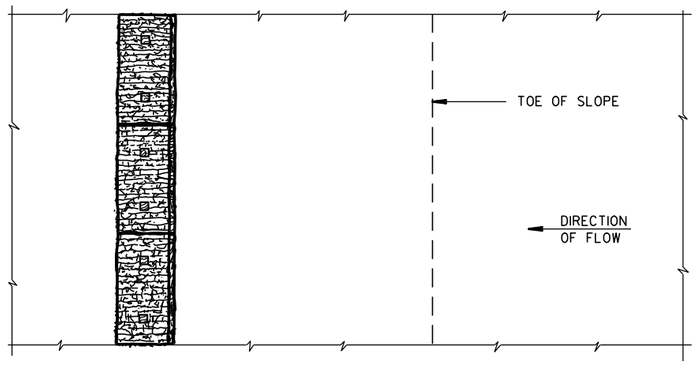
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

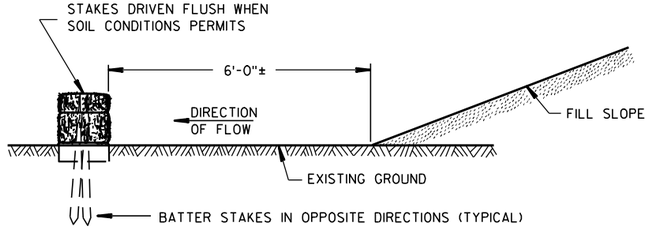


PLAN VIEW

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

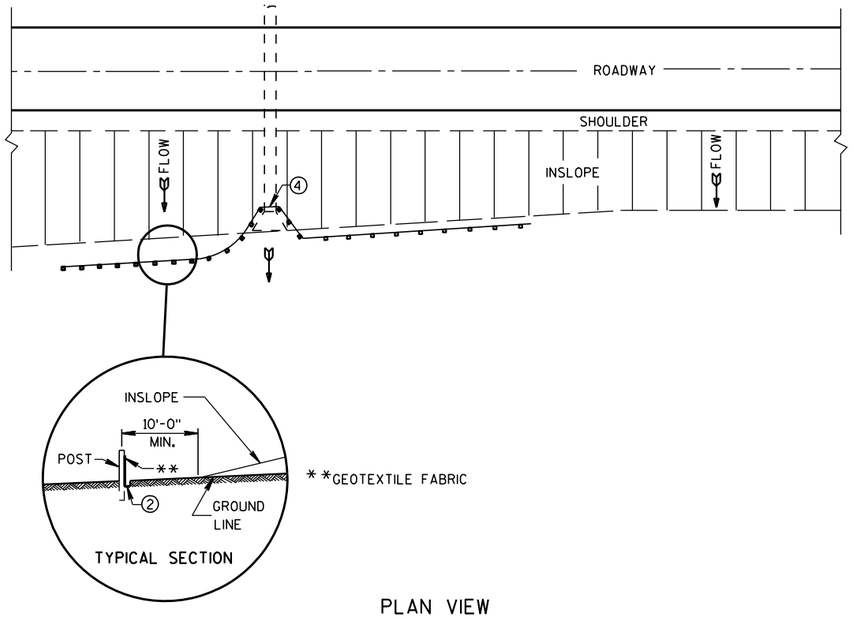
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

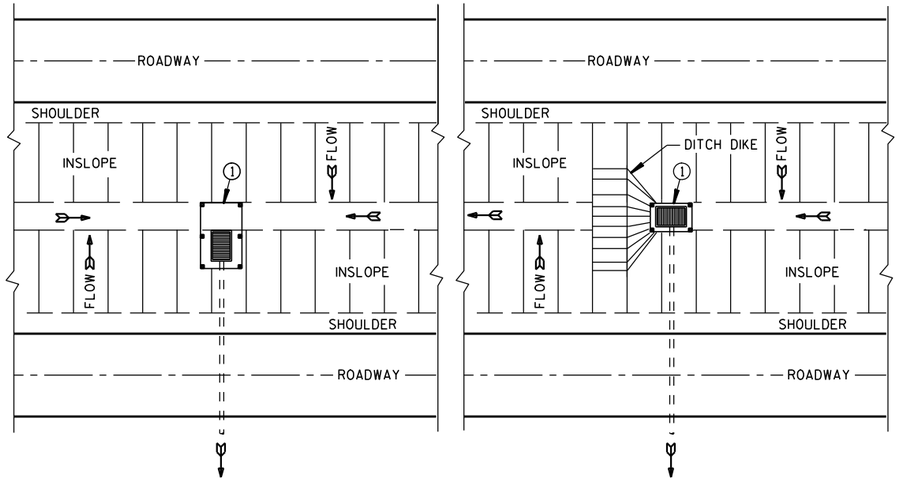
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



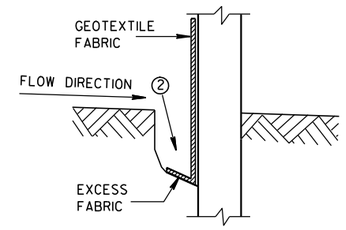
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

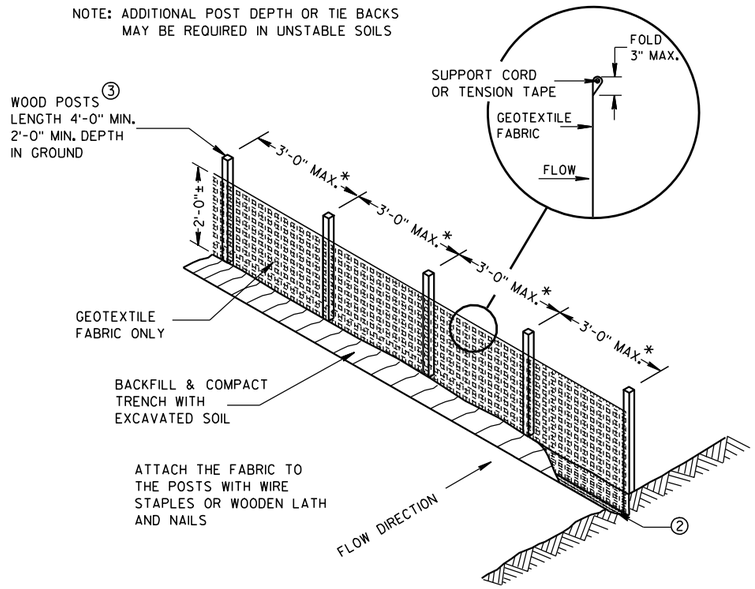
GENERAL NOTES

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.

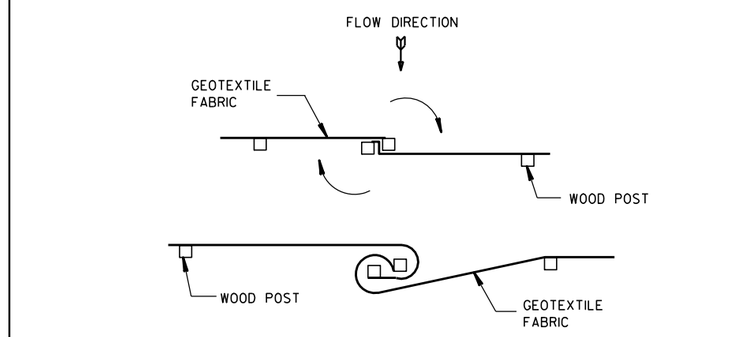


TRENCH DETAIL

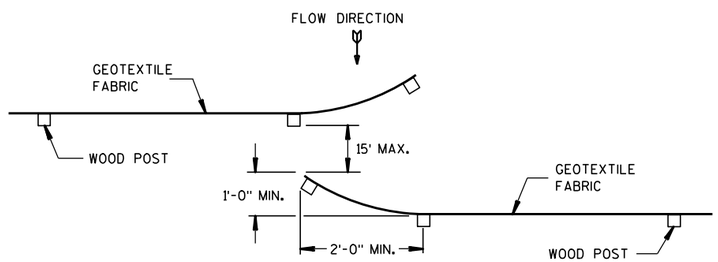


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

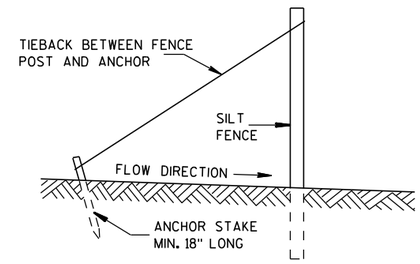


TWIST METHOD



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

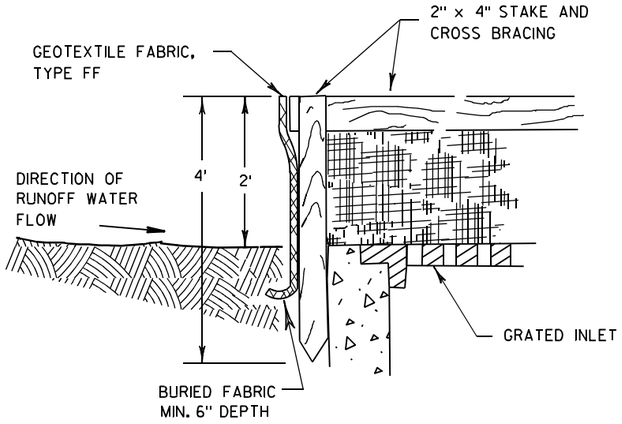
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

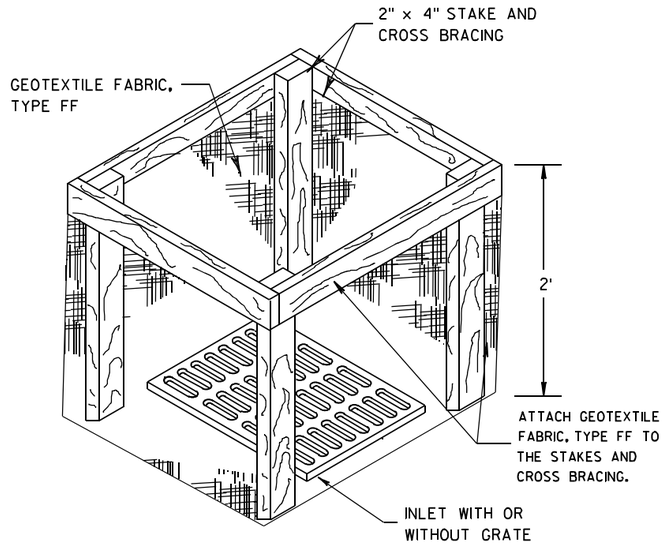
6

S.D.D. 8 E 9-6

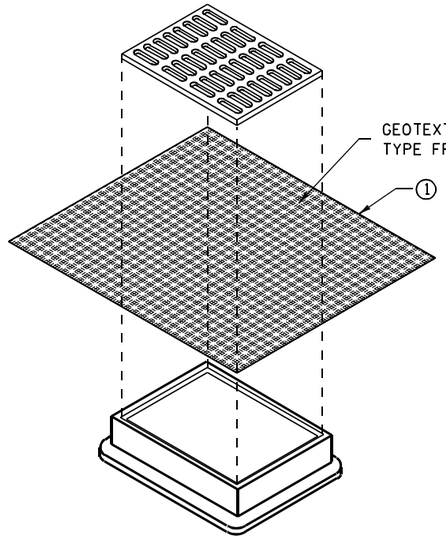
6

S.D.D. 8 E 9-6



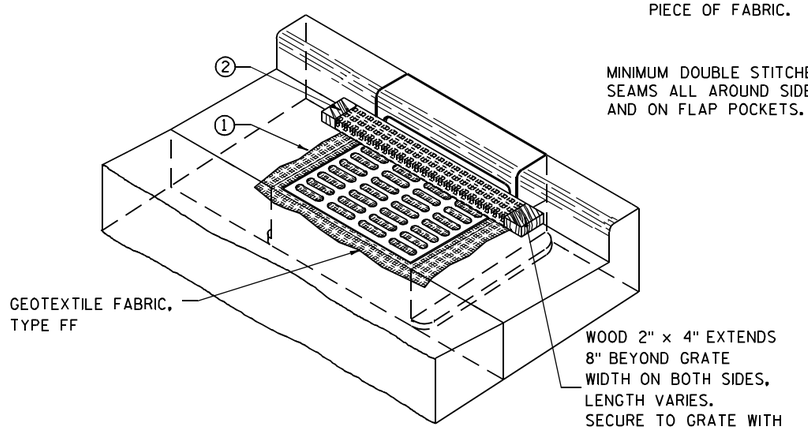


INLET PROTECTION, TYPE A

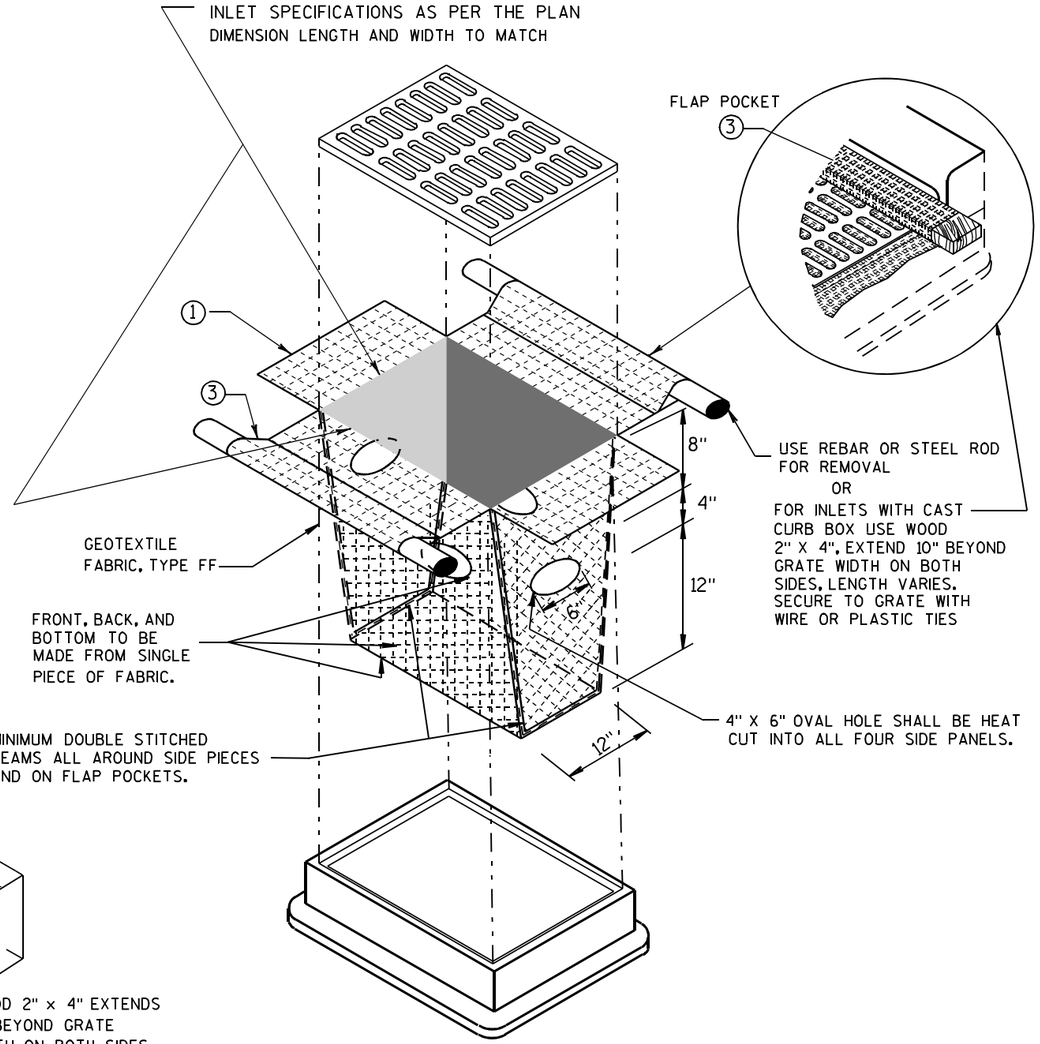


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

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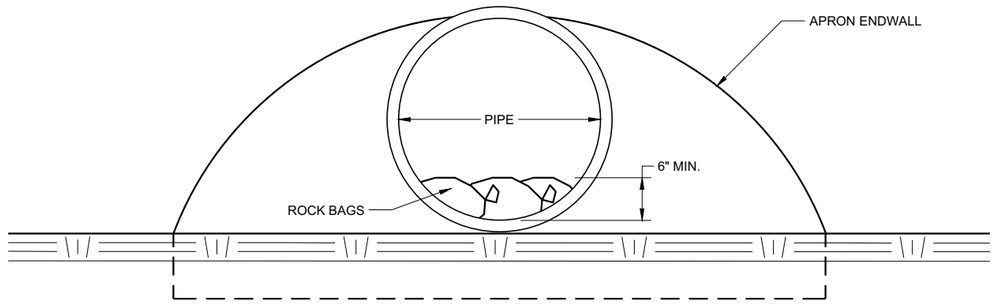
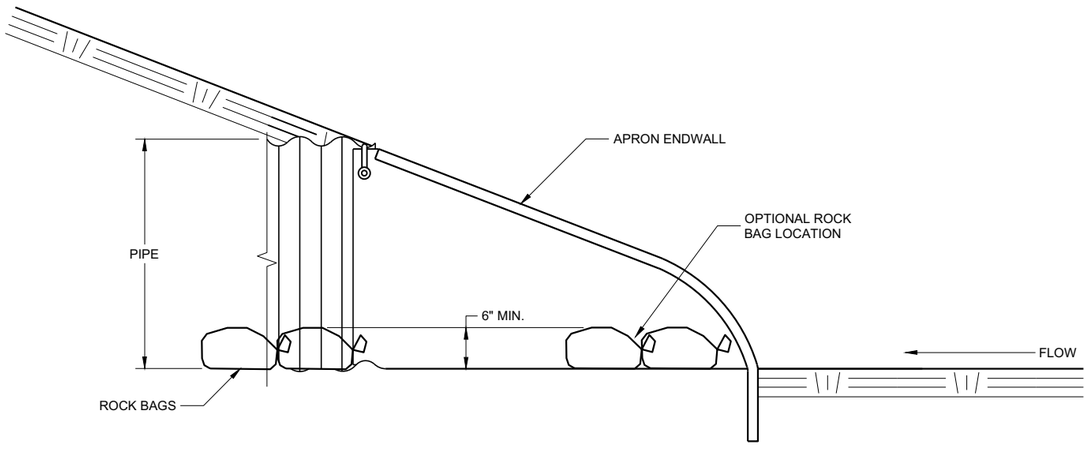
S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

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

6

SDD 08E15 - 01

METAL APRON ENDWALLS

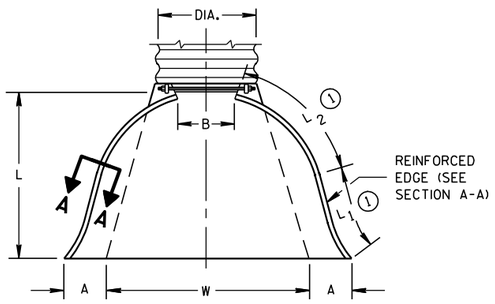
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

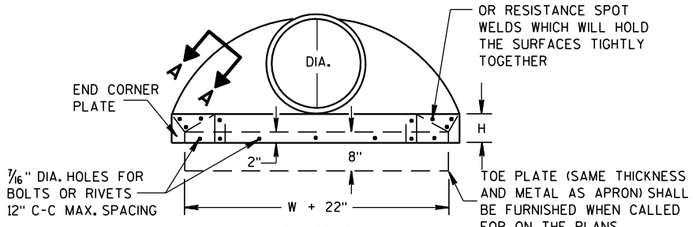
REINFORCED CONCRETE APRON ENDWALLS

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

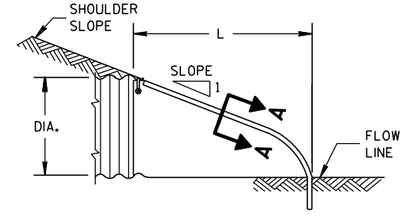
*MINIMUM
**MAXIMUM



PLAN VIEW

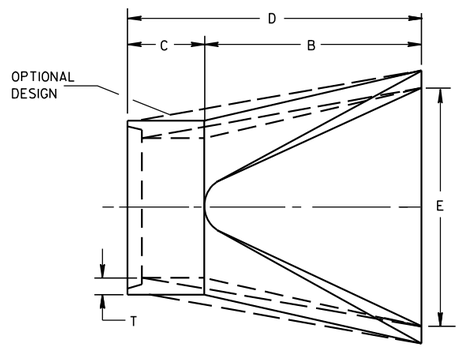


END VIEW

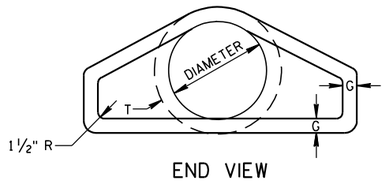


SIDE ELEVATION

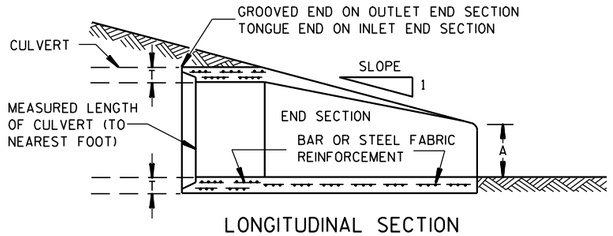
METAL ENDWALLS



PLAN

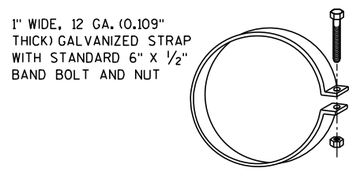


END VIEW



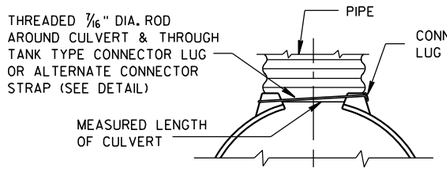
LONGITUDINAL SECTION

CONCRETE ENDWALLS

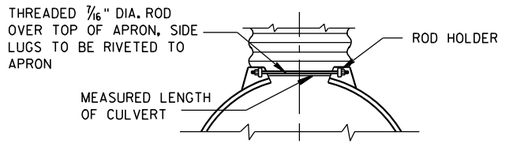


ALTERNATE FOR TYPE 1 CONNECTION

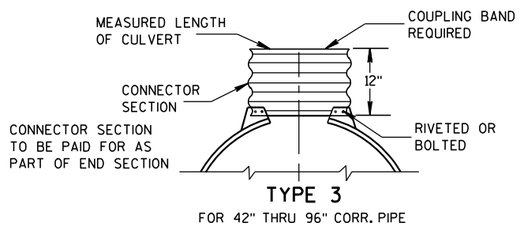
END SECTION CONNECTOR STRAP



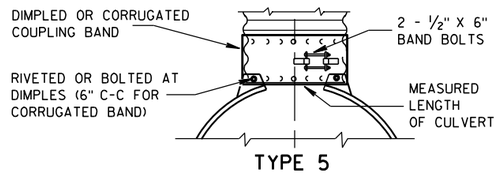
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

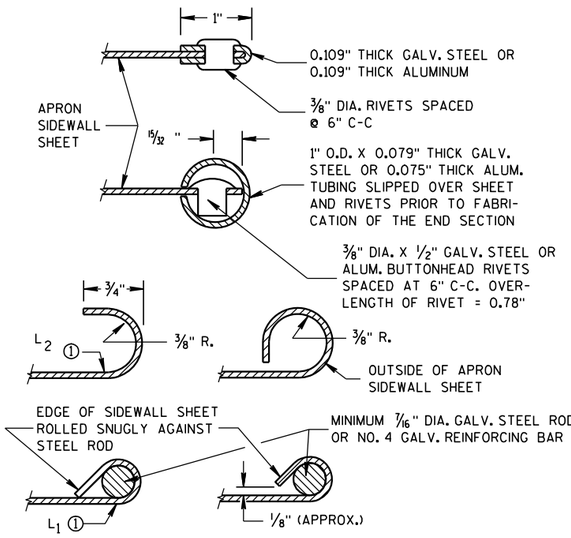
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

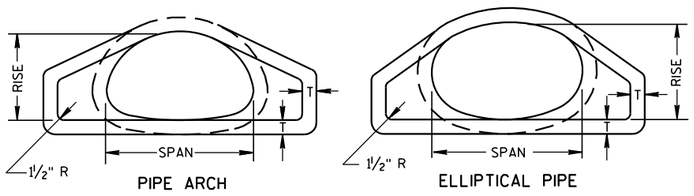
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

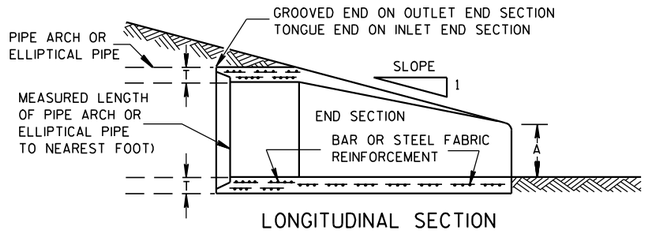
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

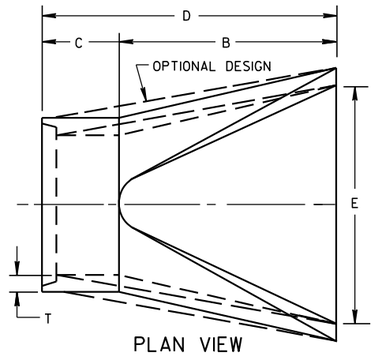
6
S.D.D. 8 F 1-11



END VIEW

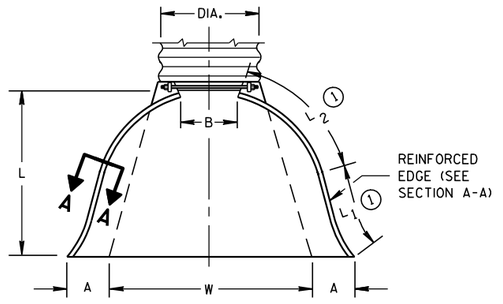


LONGITUDINAL SECTION

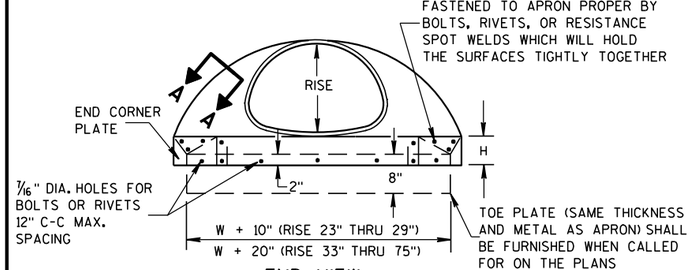


PLAN VIEW

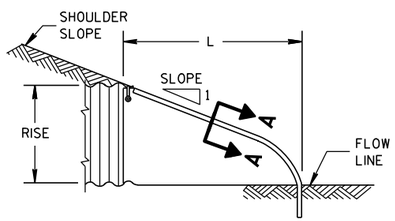
CONCRETE ENDWALLS



PLAN VIEW

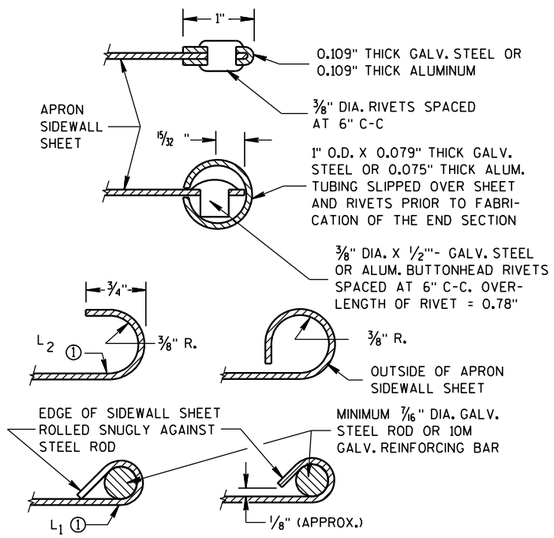


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

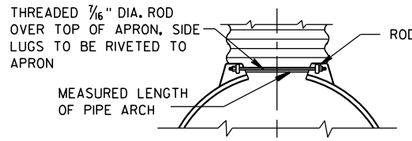
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

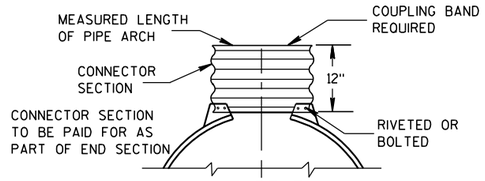
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



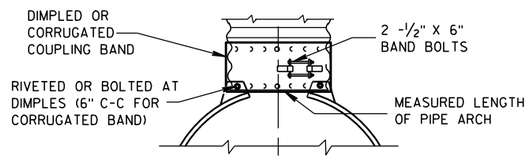
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH 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 ARCH 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 77" X 52" THROUGH 112" X 75" 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 ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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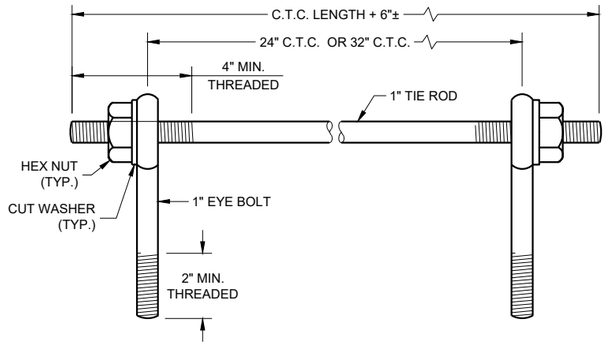
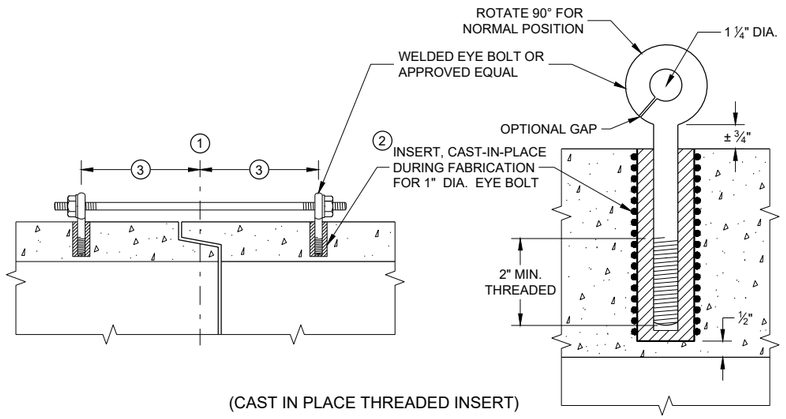
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



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.

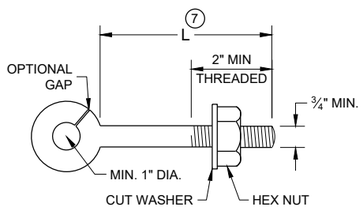
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

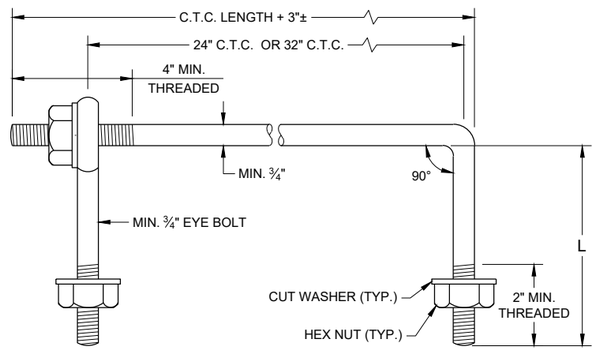
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

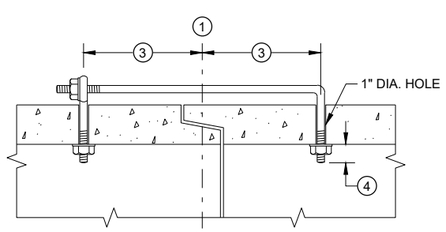


EYE BOLT (7)

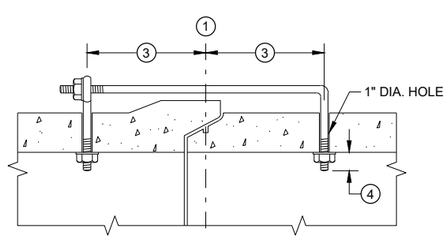
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

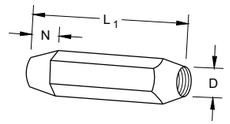
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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



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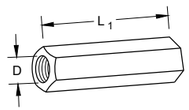
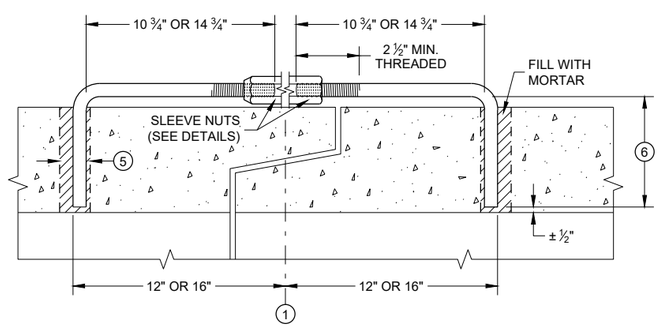


PLAIN

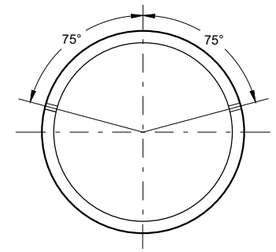
RIGHT AND LEFT THREADS

SLEEVE NUTS



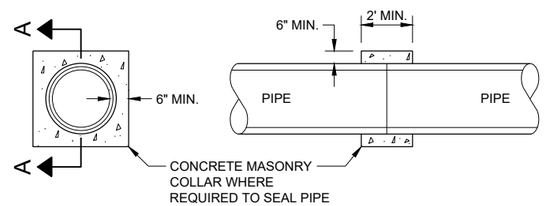
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

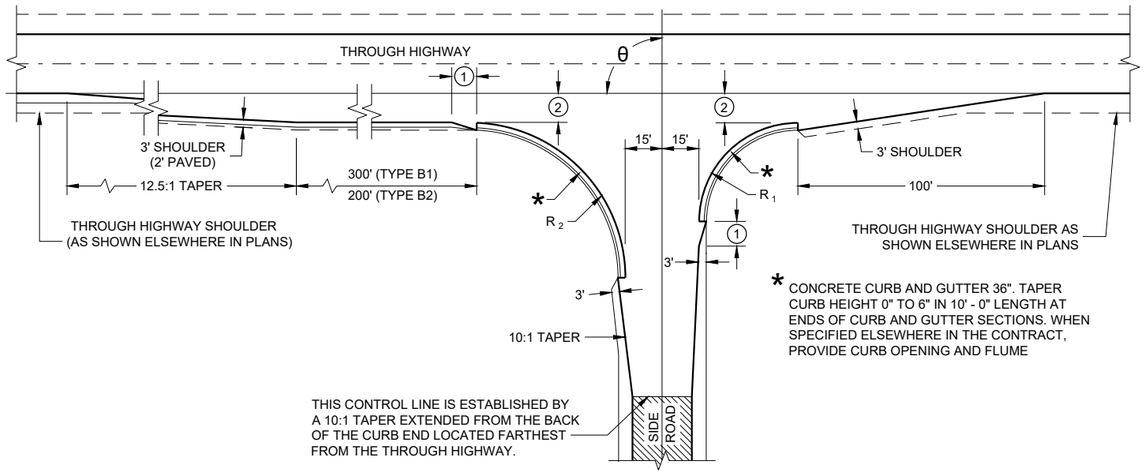
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

SDD 08F04 - 08

SDD 08F04 - 08



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

TYPE "B1" AND "B2"

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

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

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

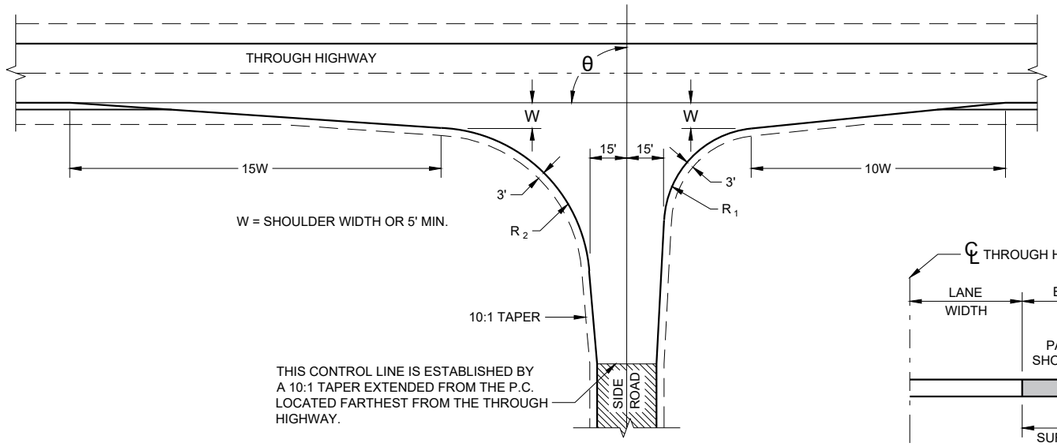
(1) 10-FT TYPICAL.

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

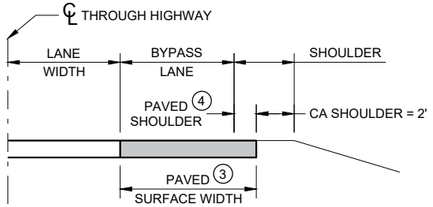
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

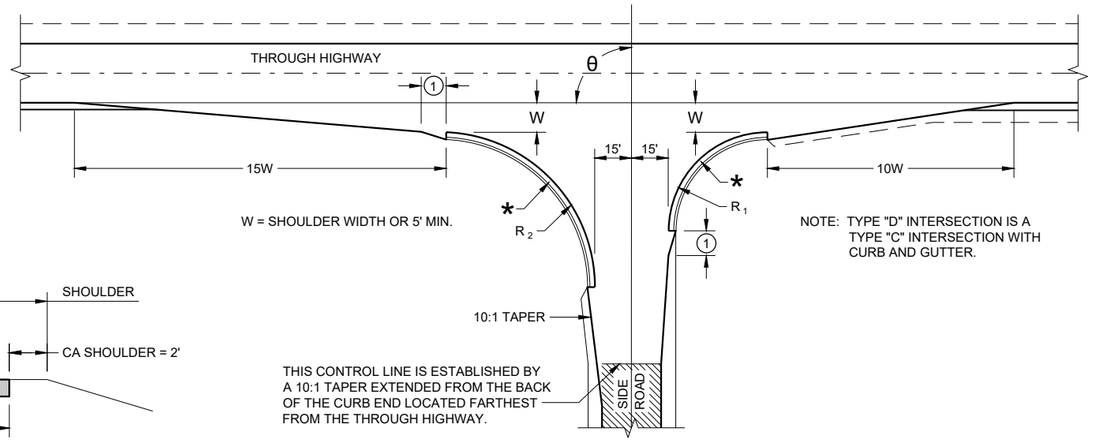
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

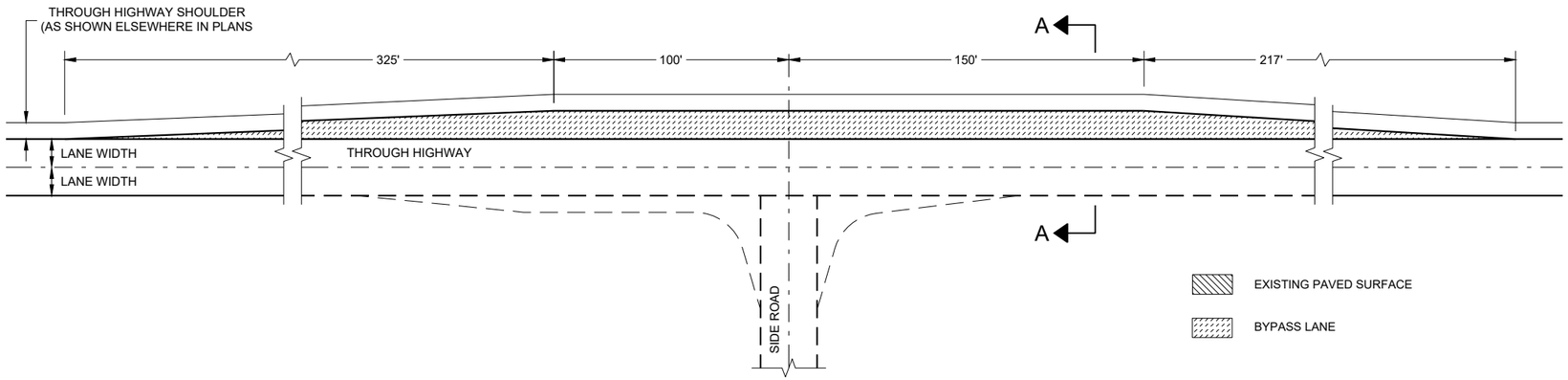


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



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

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 09A01 - 14a

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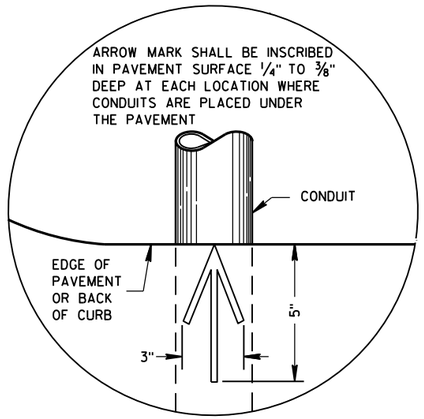
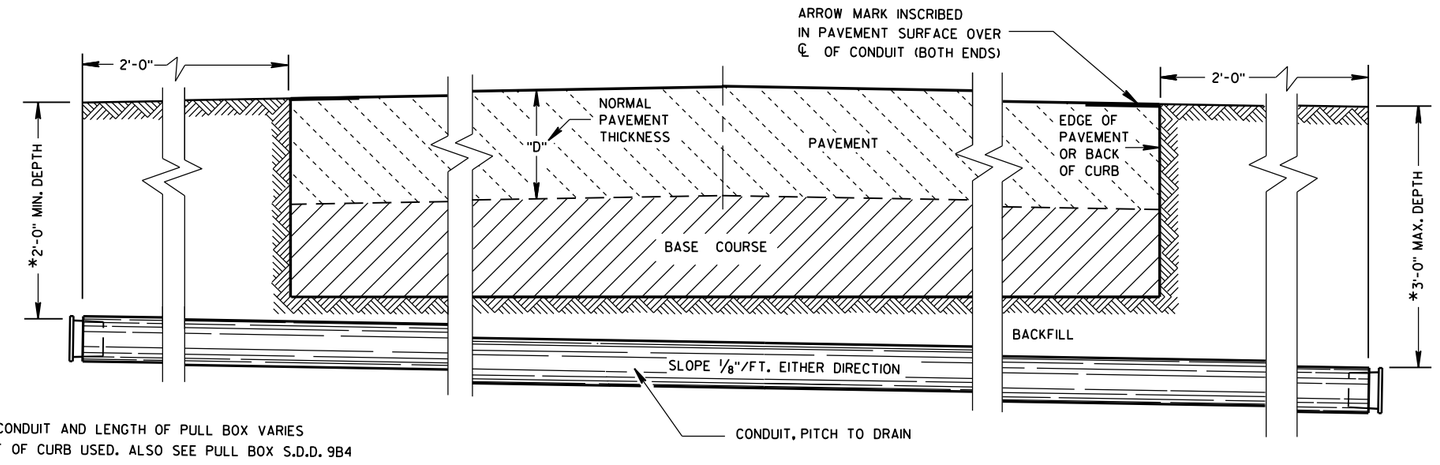
SDD 09A01 - 14a



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 222
FHWA

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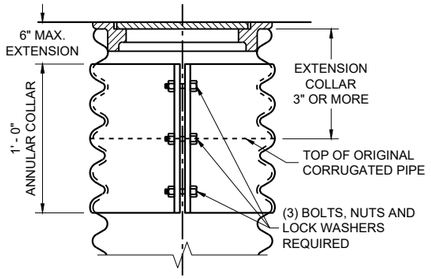
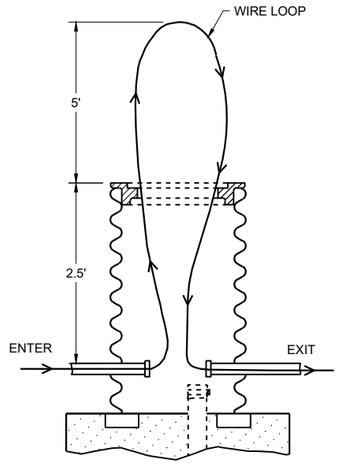
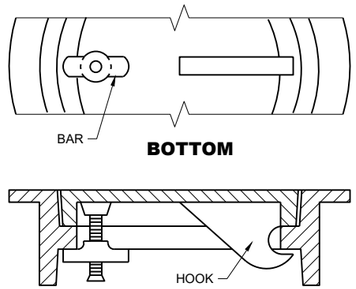
S.D.D. 9 B 2-10



CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



BOTTOM

SECTION

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

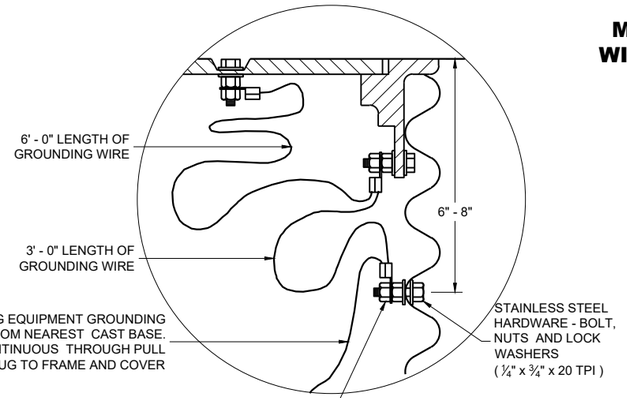
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

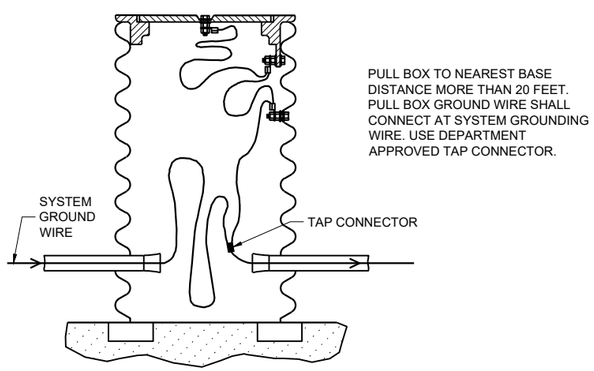
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

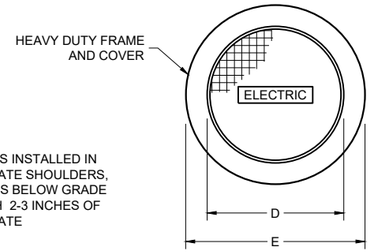
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



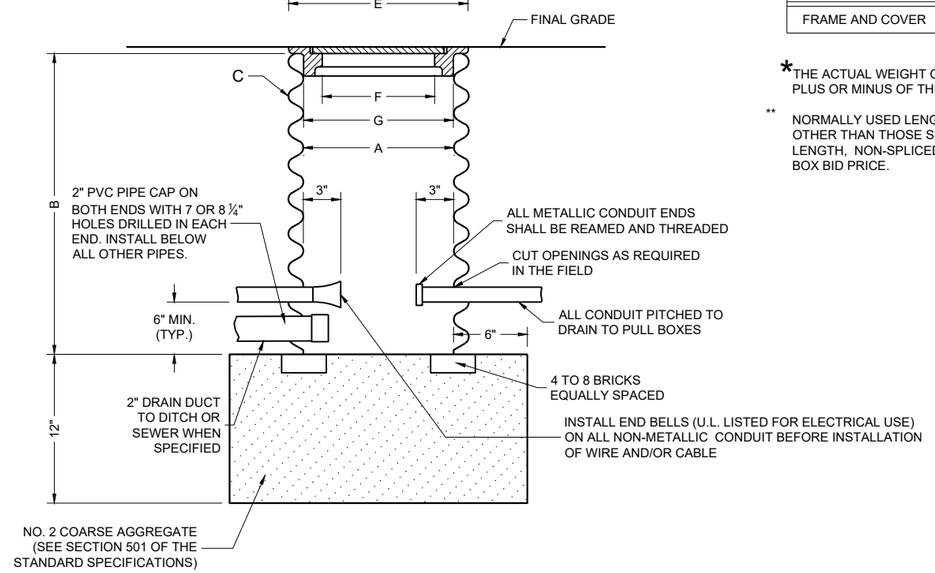
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

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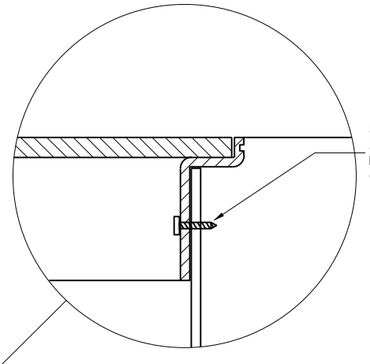
SDD 09B04-13

TABLE OF NOMINAL DIMENSIONS
AND WEIGHTS

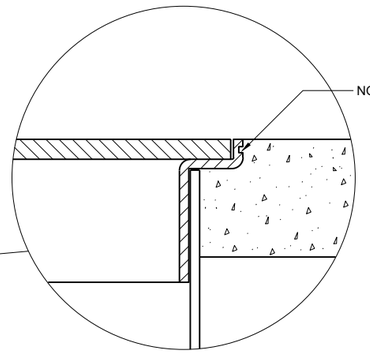
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

*THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

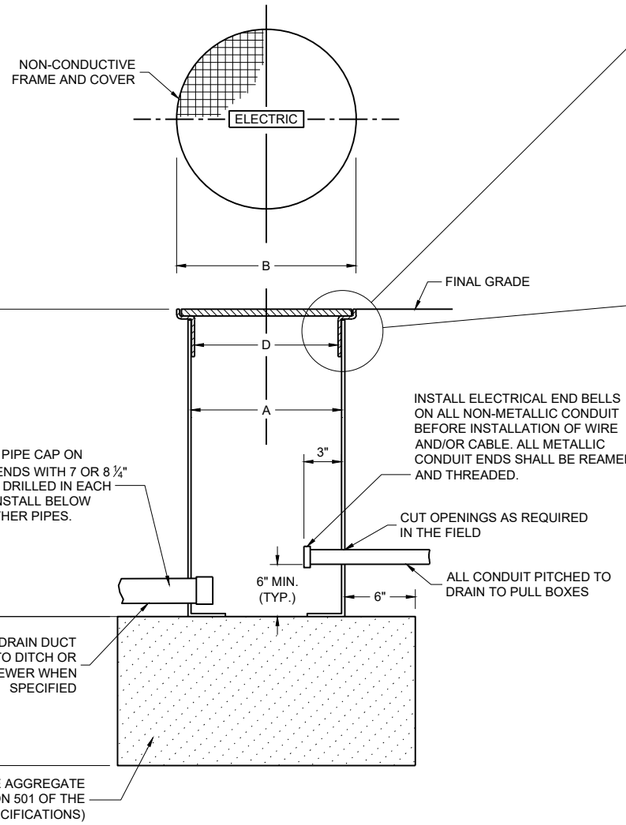
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

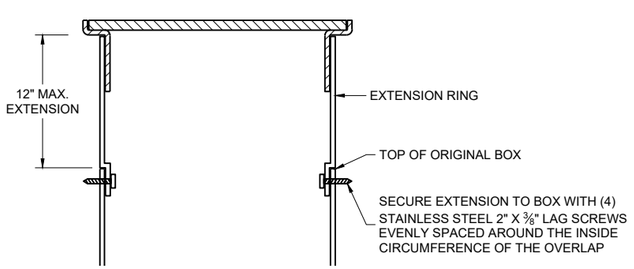
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

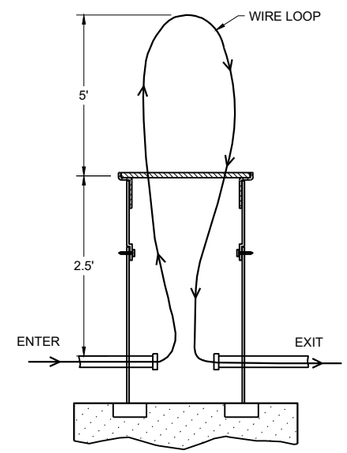
LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



NON-CONDUCTIVE PULL BOX



BOX EXTENSION



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

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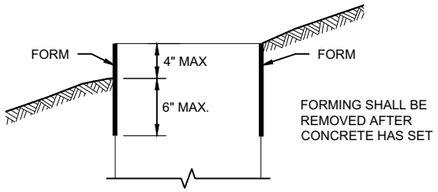
SDD 09B16-03

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

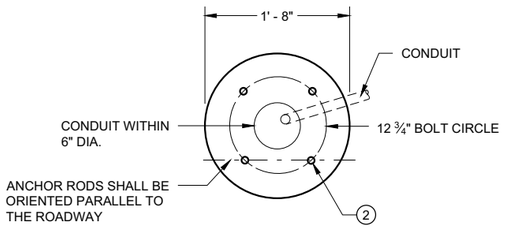
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

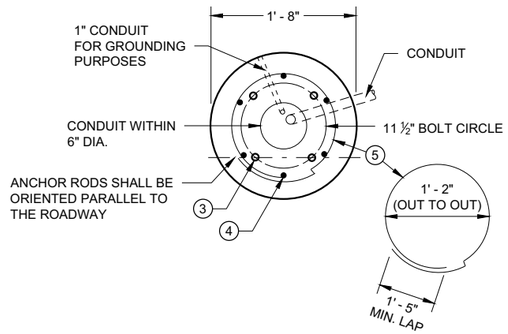
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

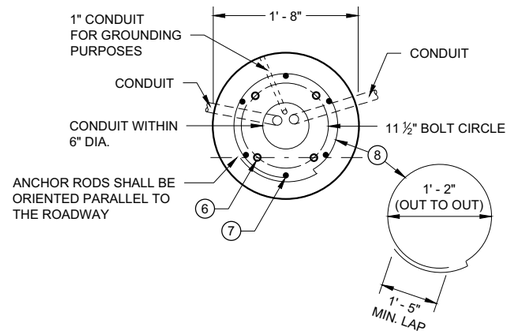
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

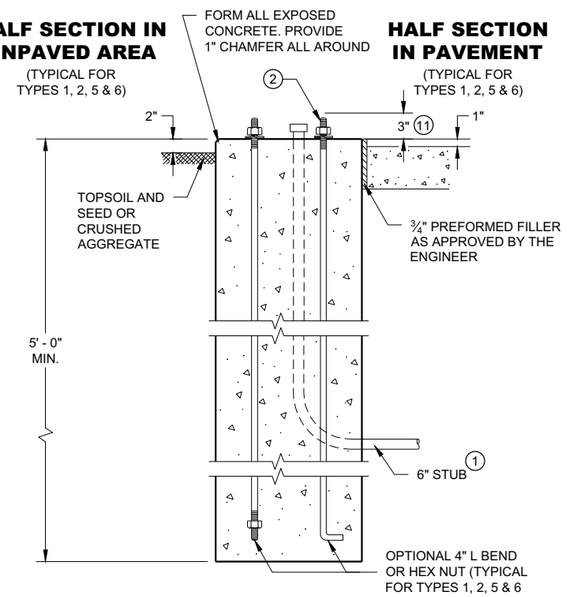
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

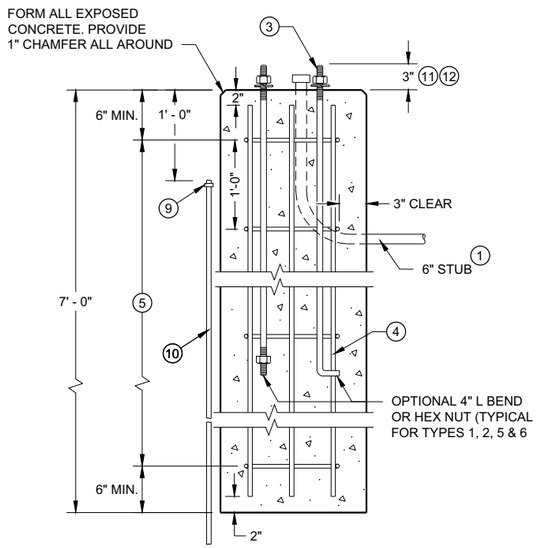
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



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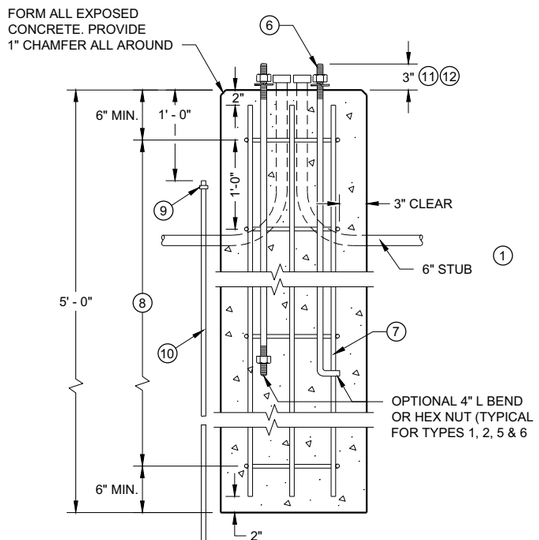


TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 225

FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

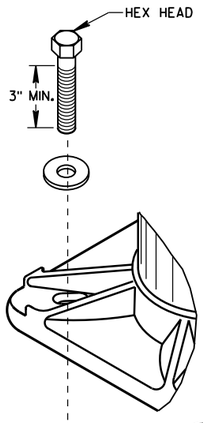
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

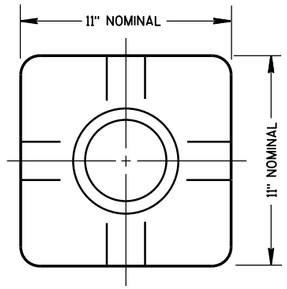
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

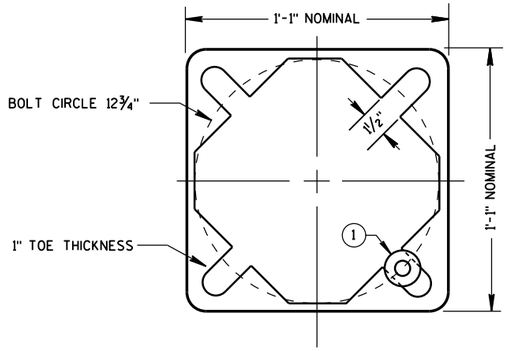
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

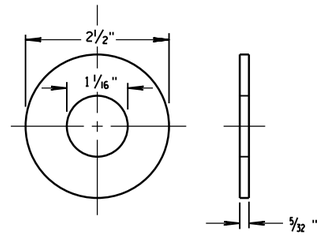




TOP VIEW
(PEDESTAL BASE)

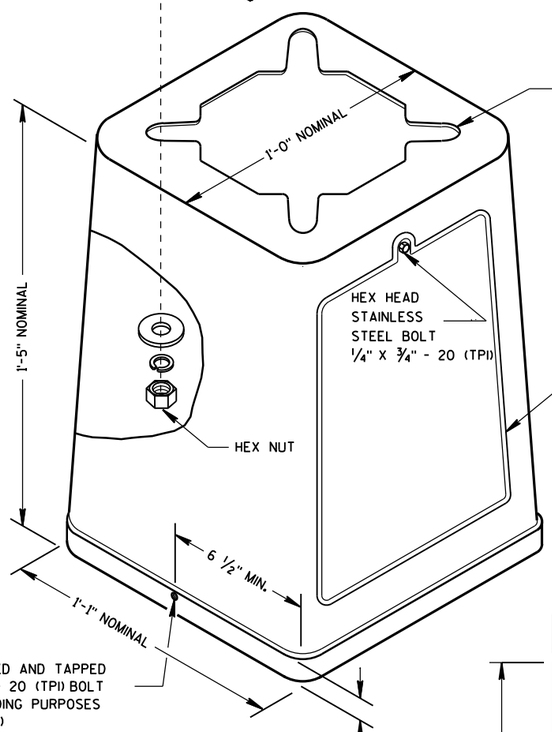


BOTTOM VIEW
(PEDESTAL BASE)

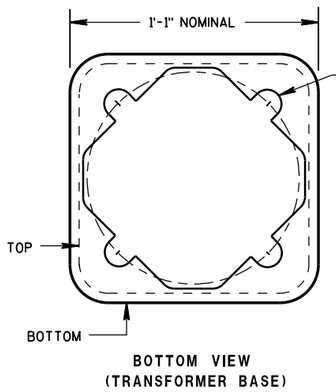


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

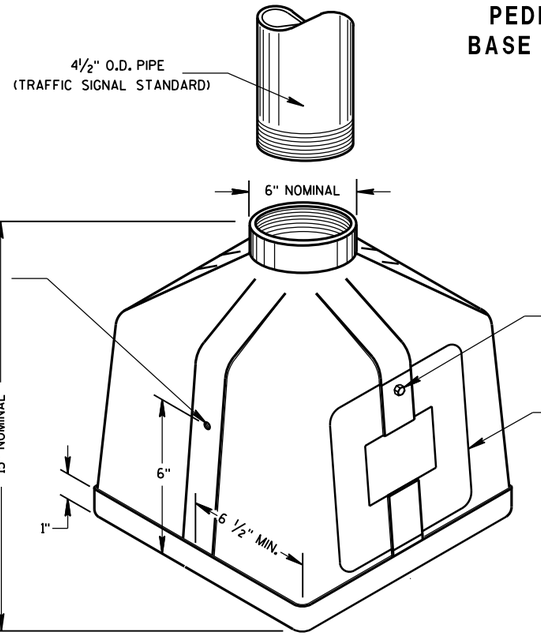
PEDESTAL BASE WASHER (1)



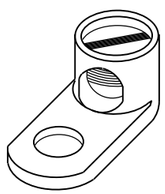
ISOMETRIC VIEW



BOTTOM VIEW
(TRANSFORMER BASE)

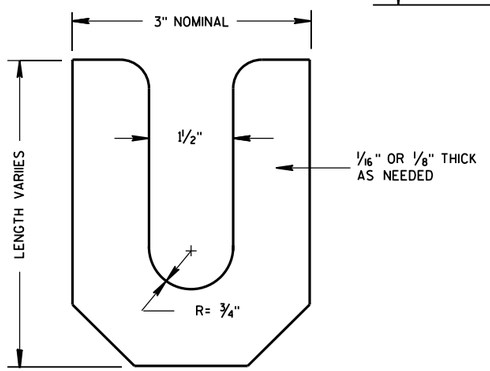


ISOMETRIC VIEW
PEDESTAL BASE



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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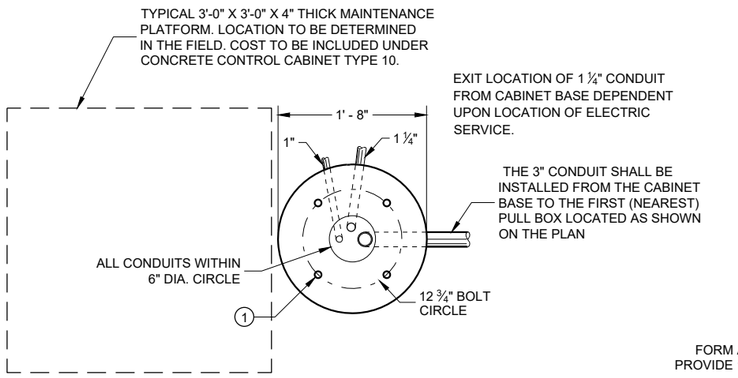
S.D.D. 9 C 3-4

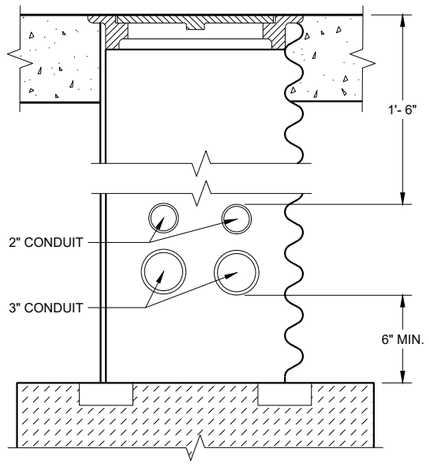
6

S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				CUBIC YARD CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65*

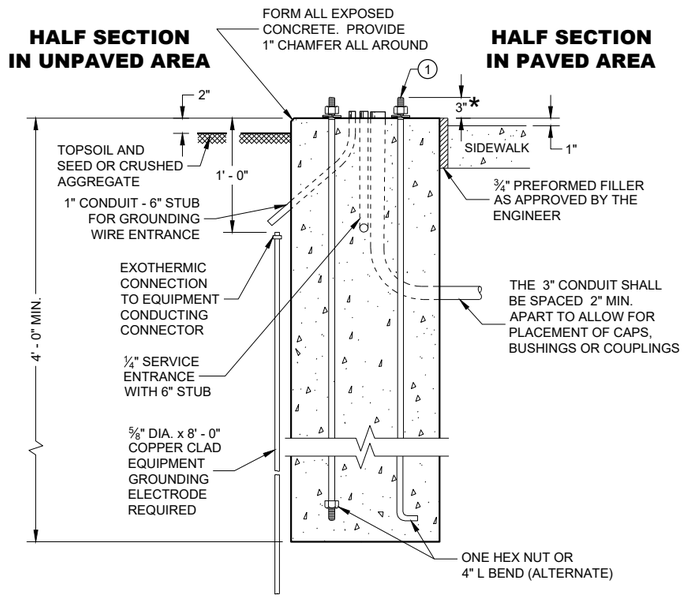
* INCLUDES MAINTENANCE PLATFORM.





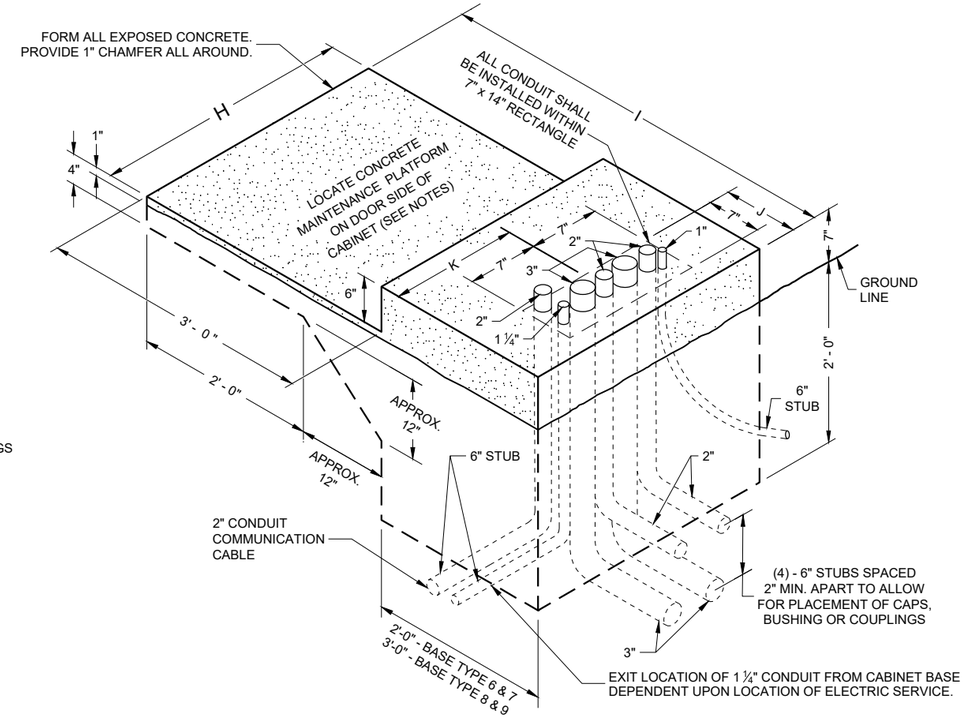
CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.



ISOMETRIC VIEW
TYPE 6, 7, 8 AND 9

GENERAL NOTES

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

INSTALL FOUR (4) ½" INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

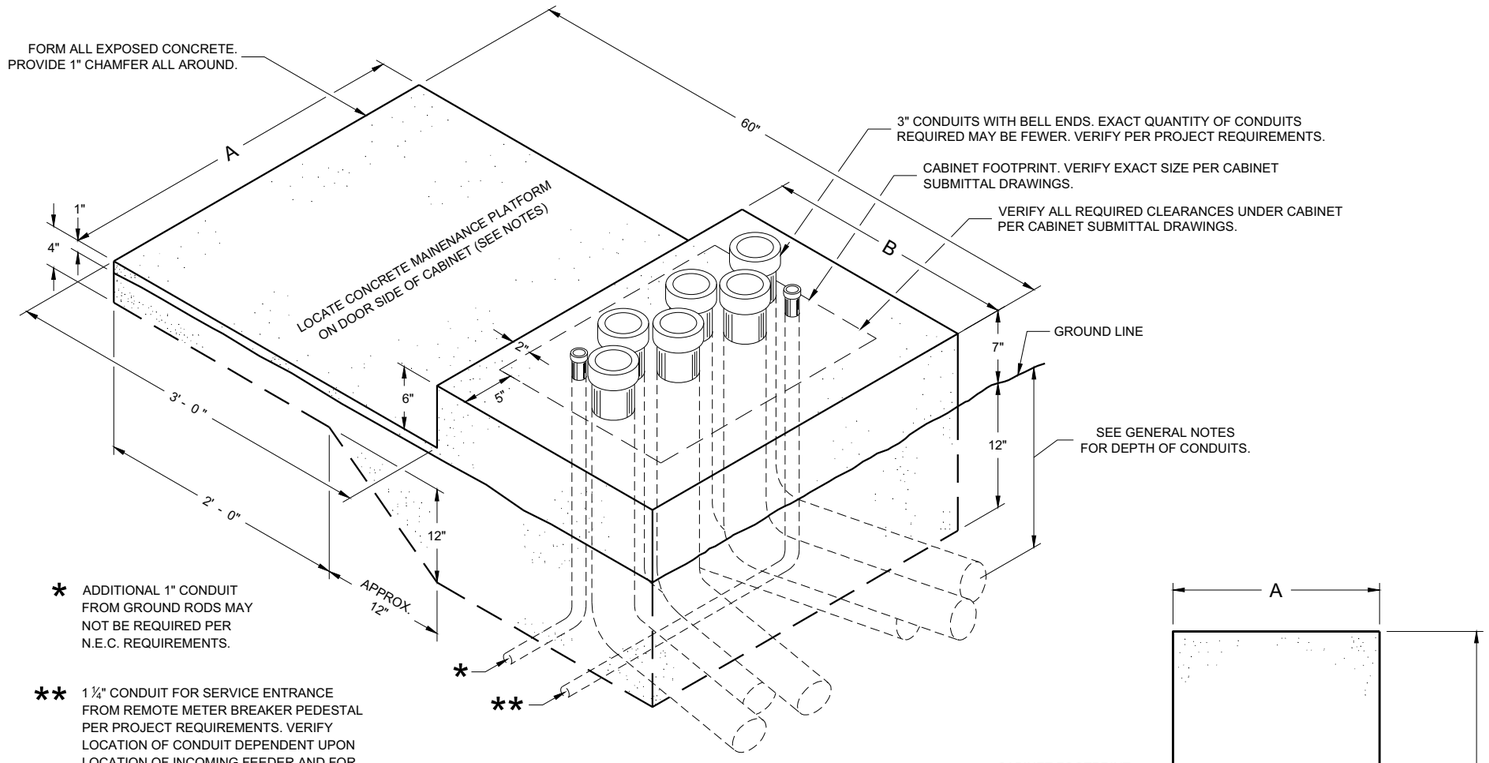
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1 :40 FROM VERTICAL.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CABINET CONTROL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2016
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 227
FHWA



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

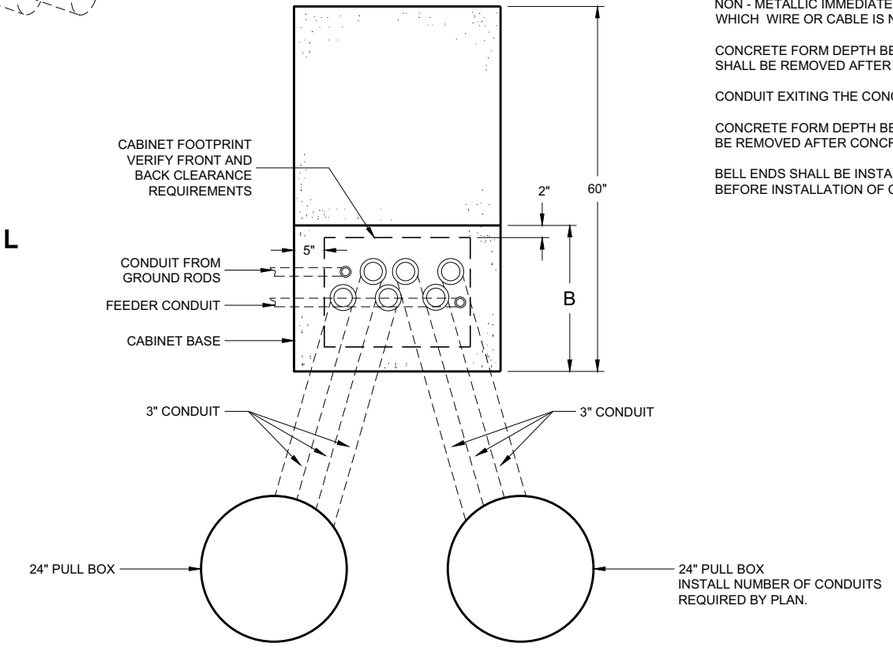
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 228

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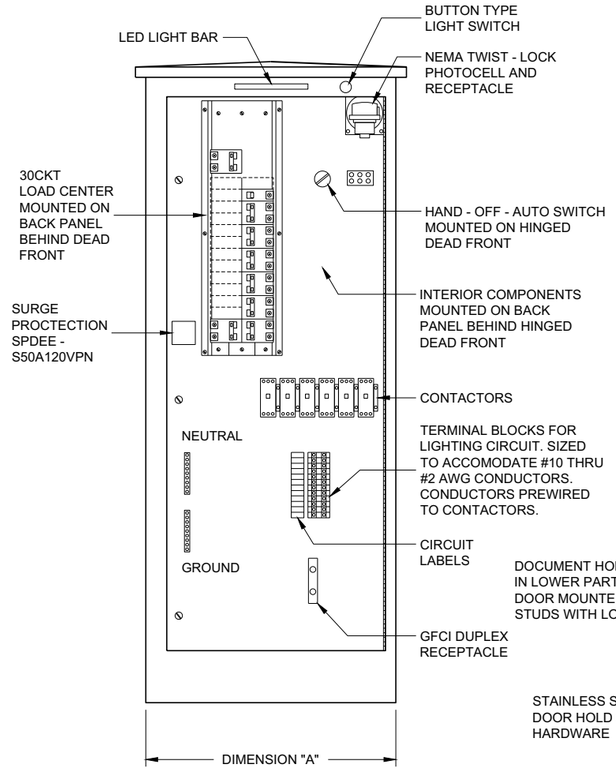
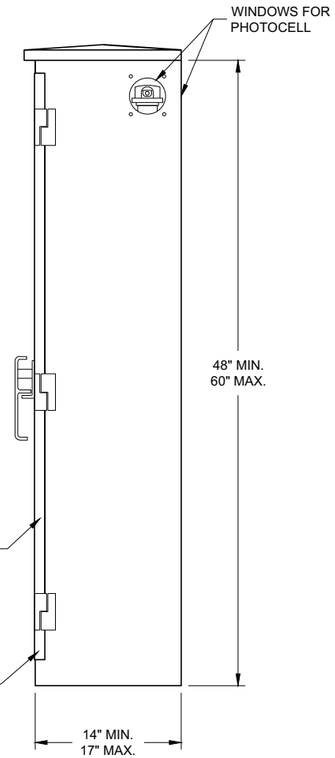
SDD 09C14 - 03

SDD 09C14 - 03

FRONT INTERIOR ELEVATION



SIDE VIEW



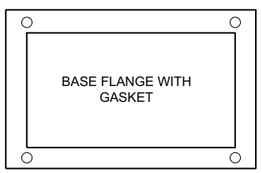
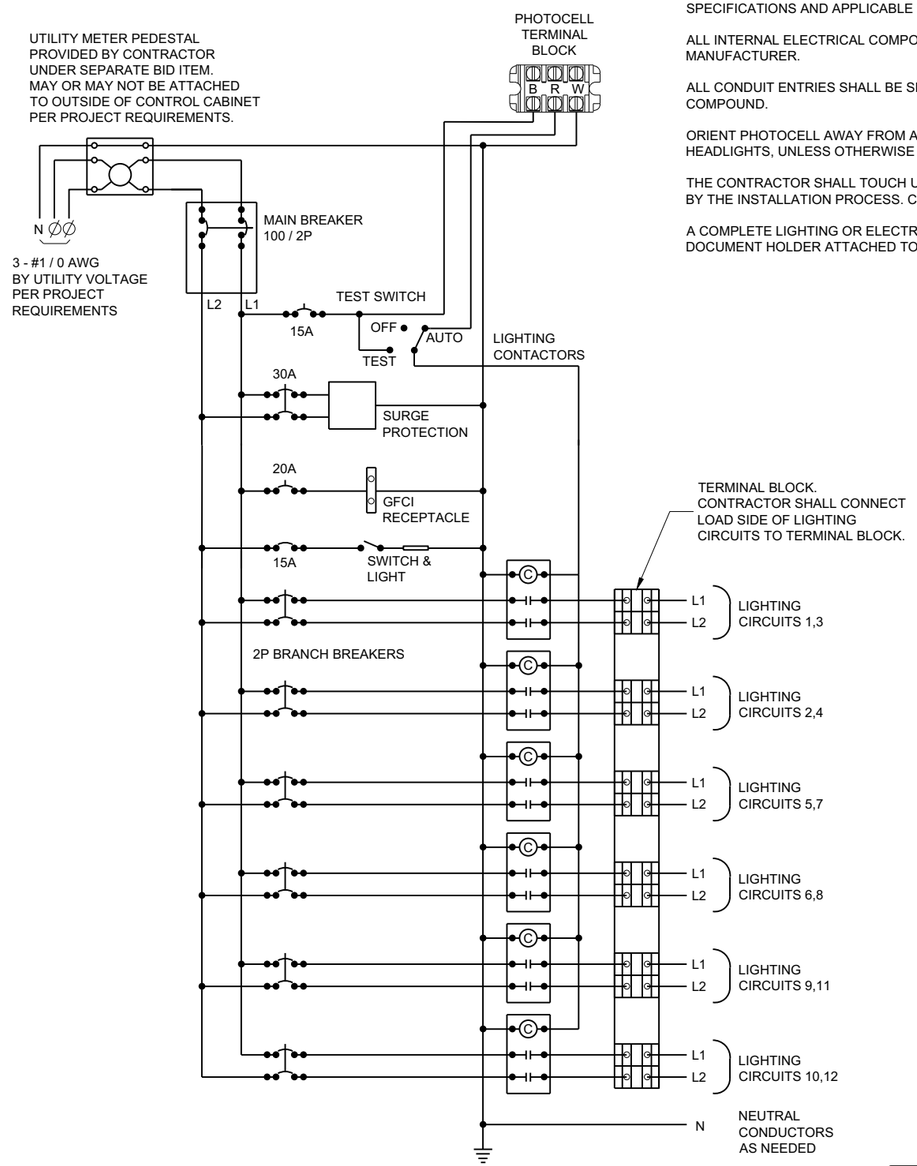


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 229

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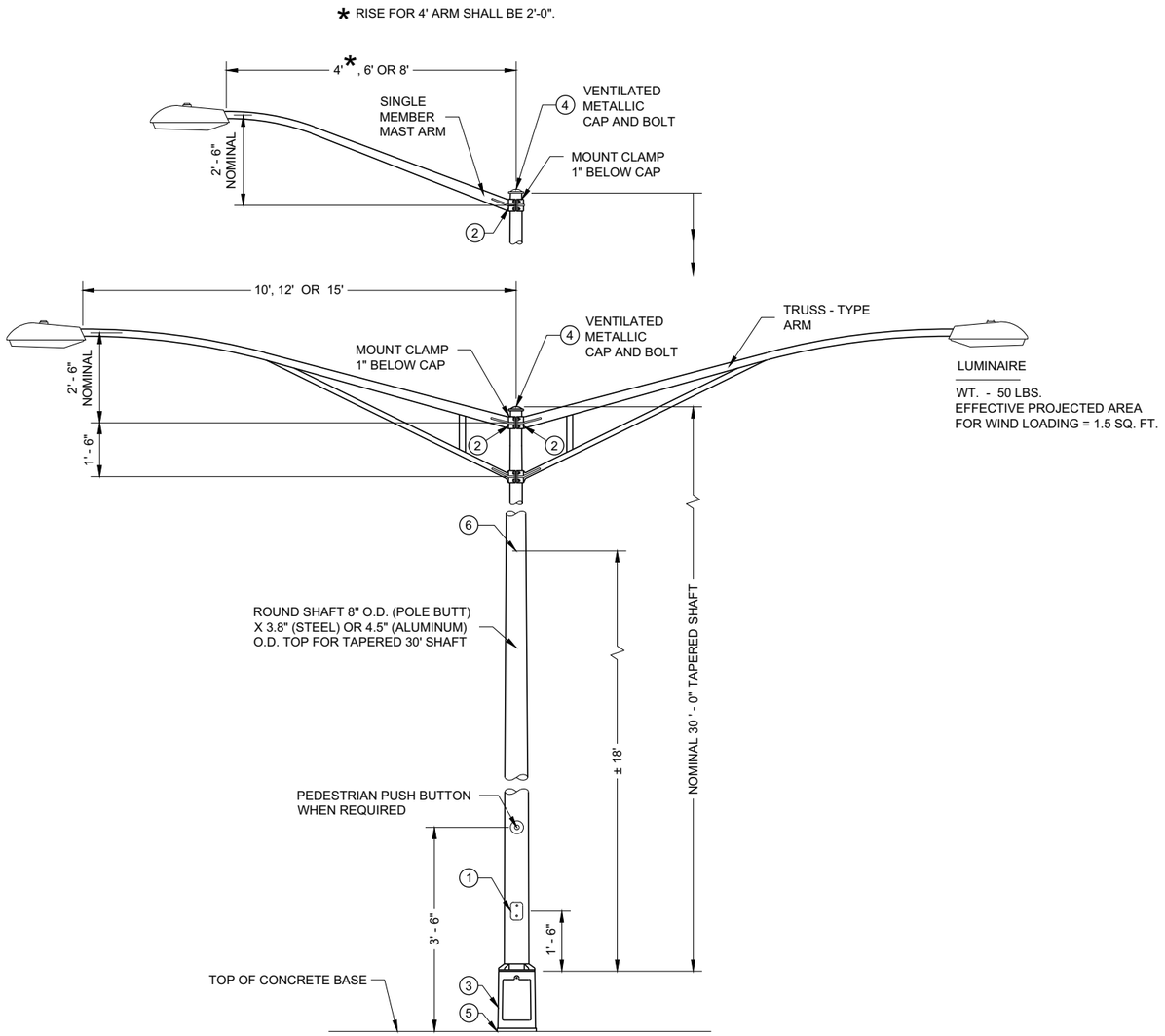


TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

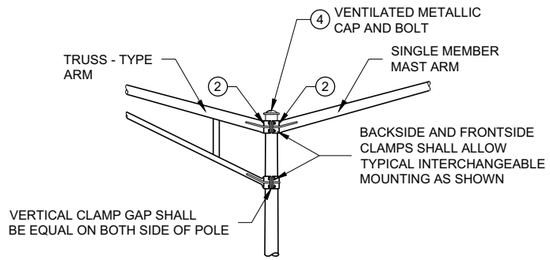
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

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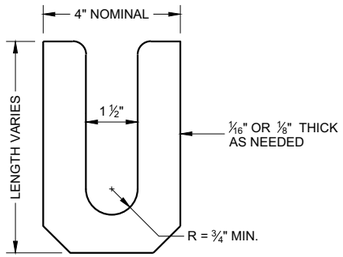
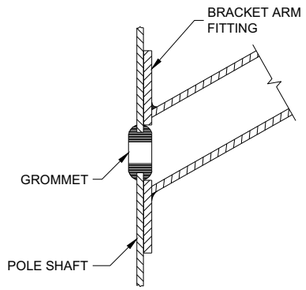
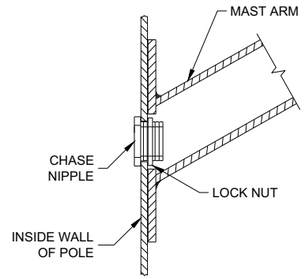
SDD 09E01 - 15d



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

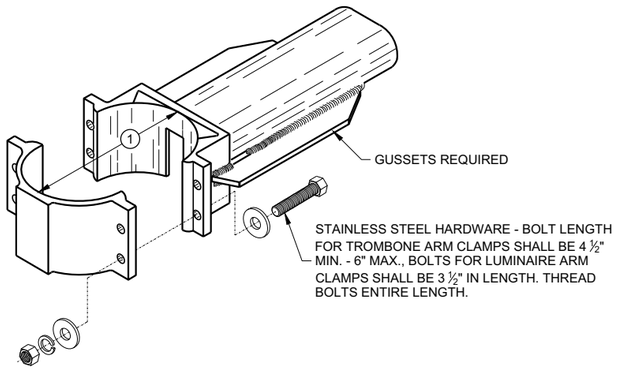
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

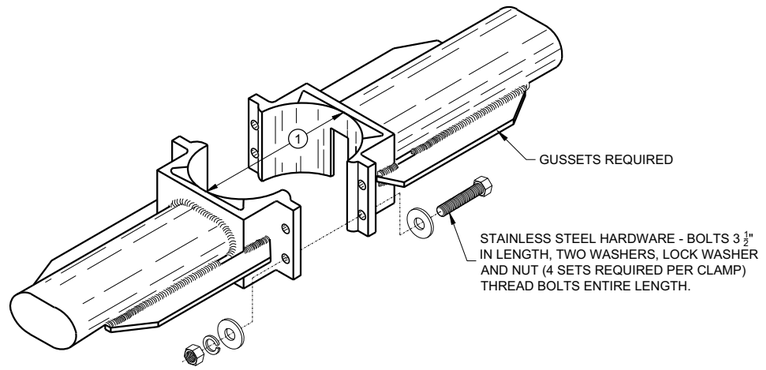
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

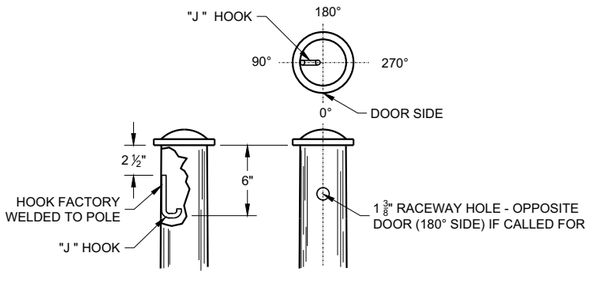
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



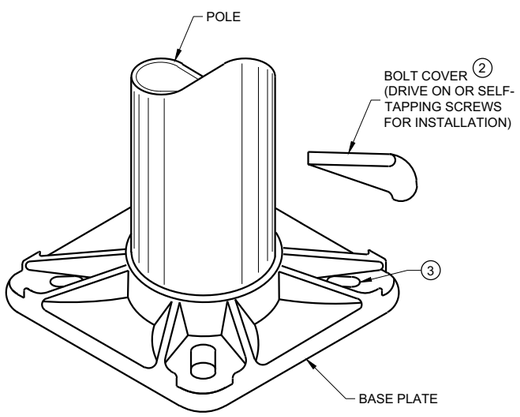
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



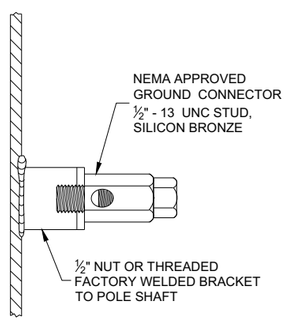
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

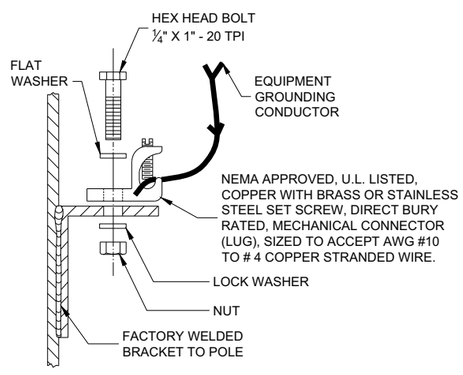


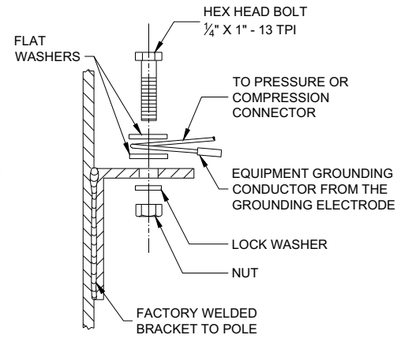
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 231

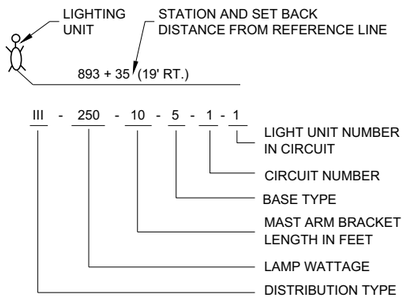
FHWA

GENERAL NOTES

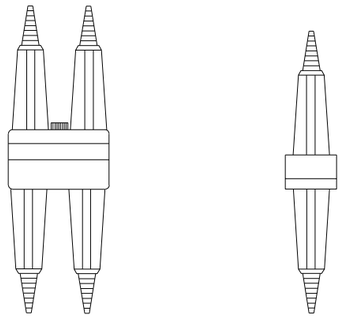
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

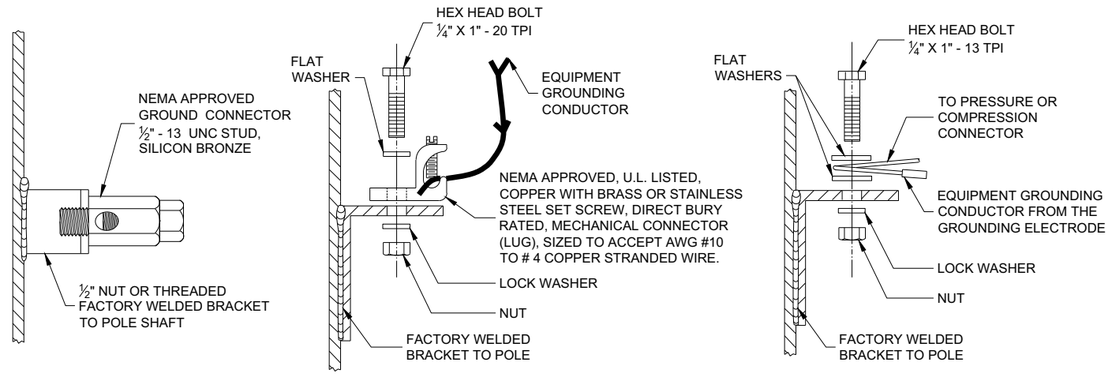


LIGHTING UNIT CODE
(TYPICAL)

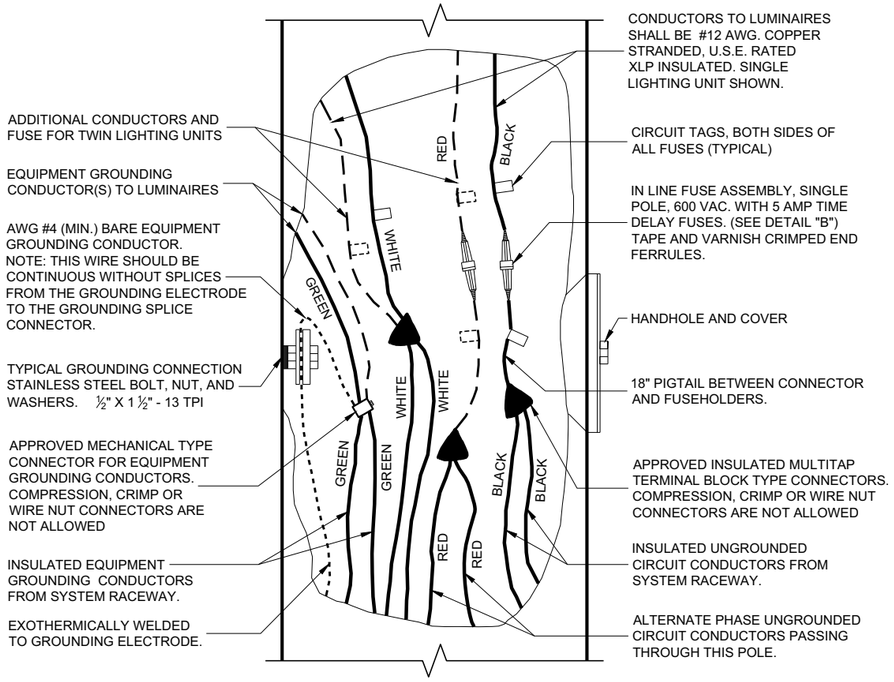


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

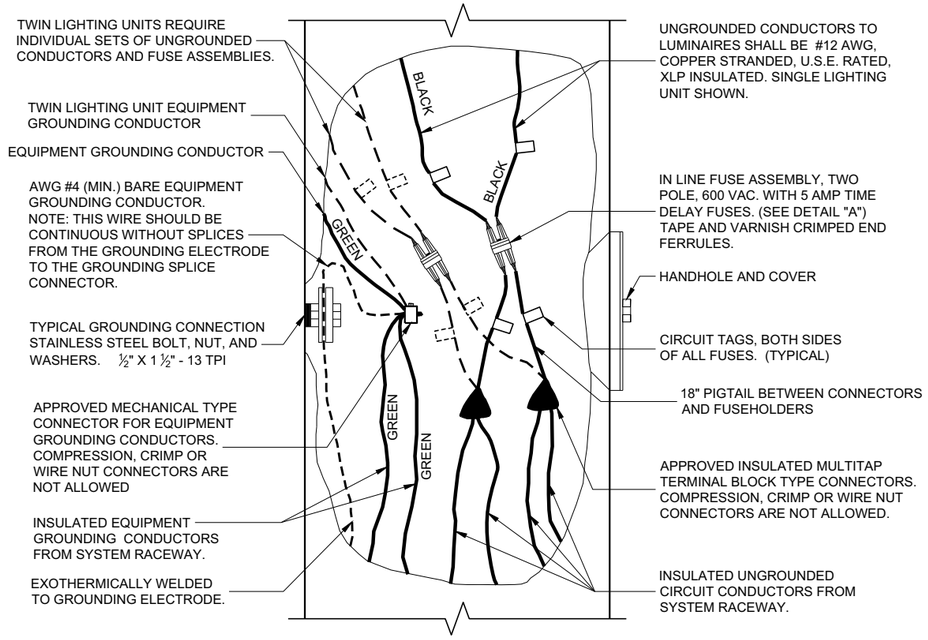
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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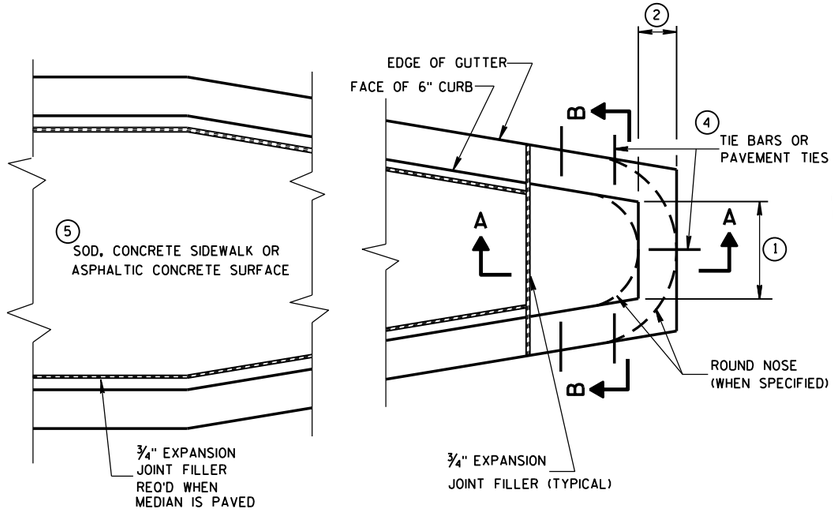
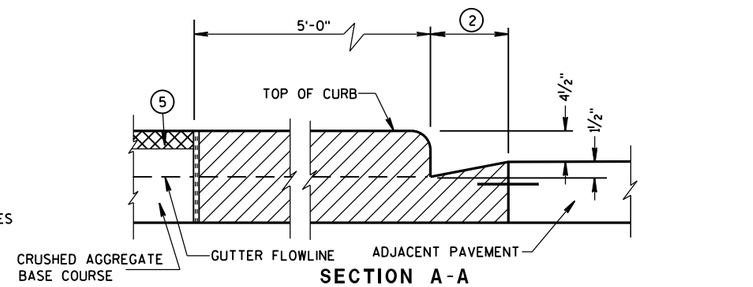
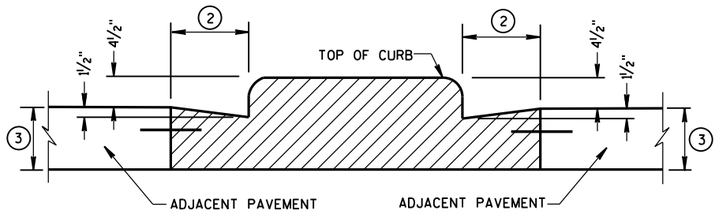
SDD 09E03 - 06







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

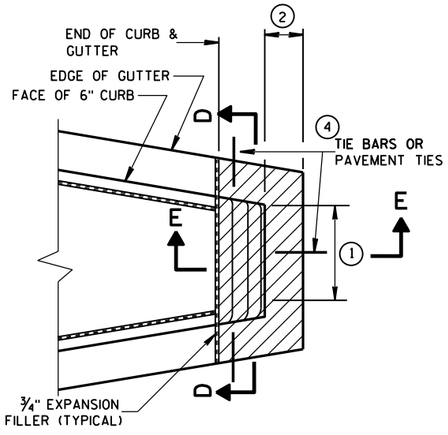
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

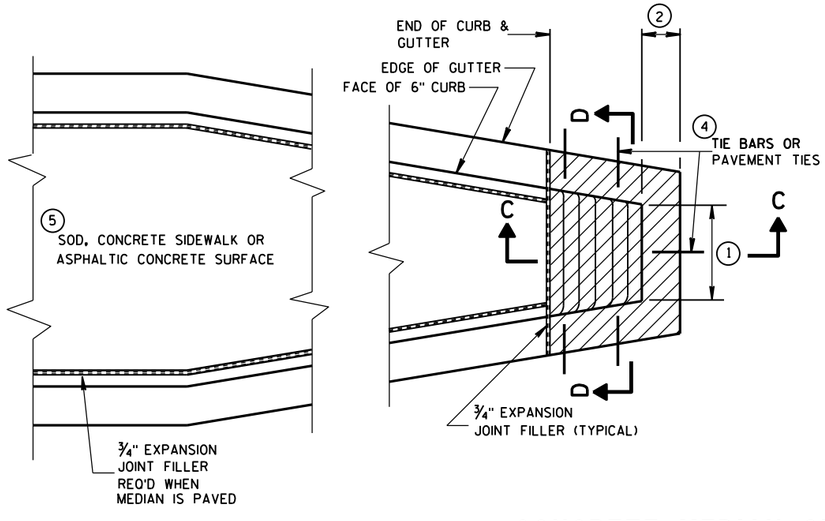
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

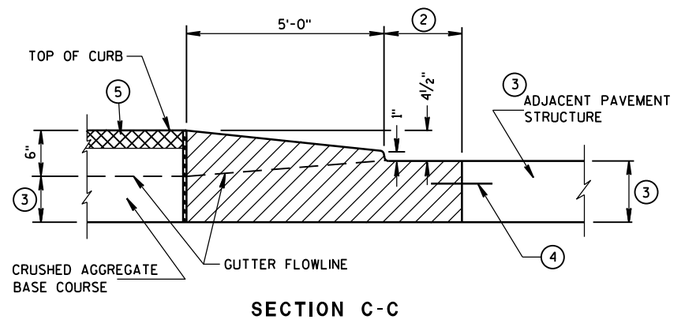
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

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

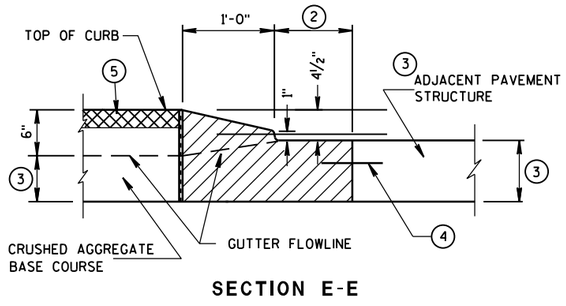
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



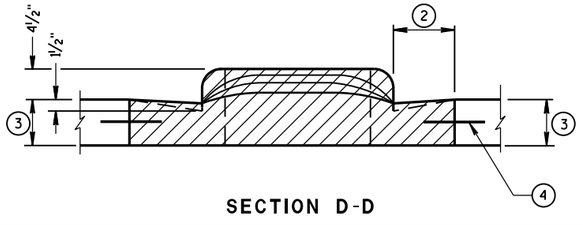




CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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S.D.D. 11 B 2-2

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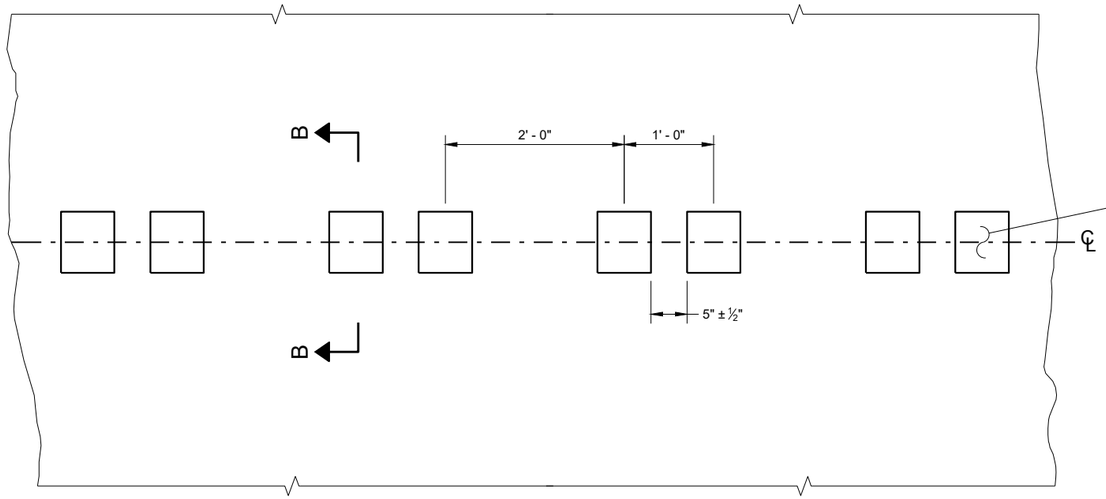
S.D.D. 11 B 2-2

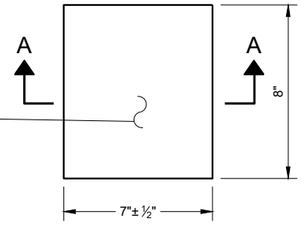
GENERAL NOTES

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

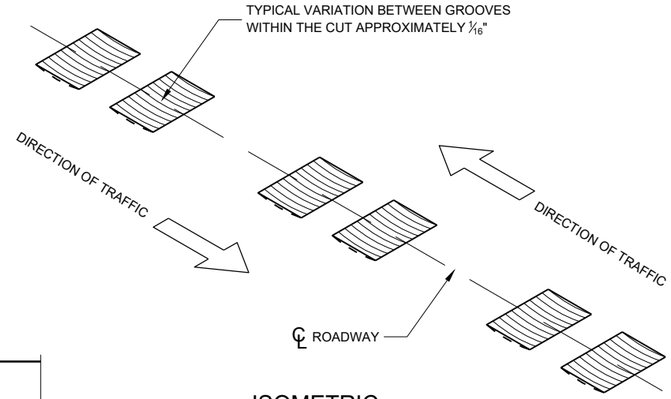
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



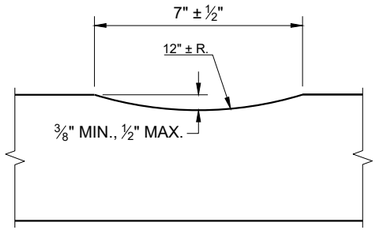
PLAN DETAIL VIEW



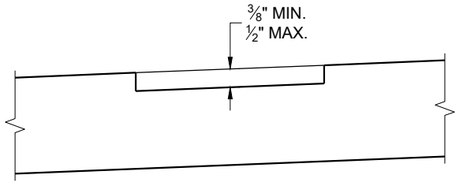
PLAN VIEW
(SINGLE GROOVE)



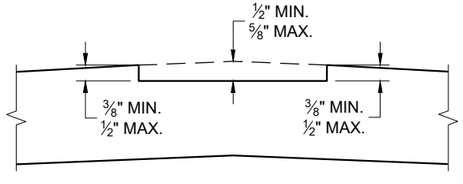
ISOMETRIC



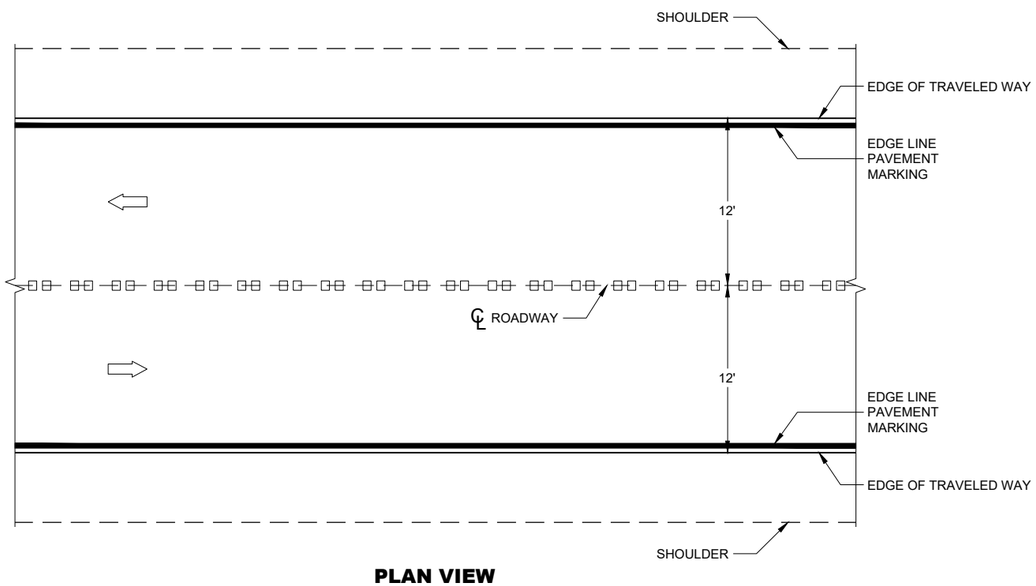
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

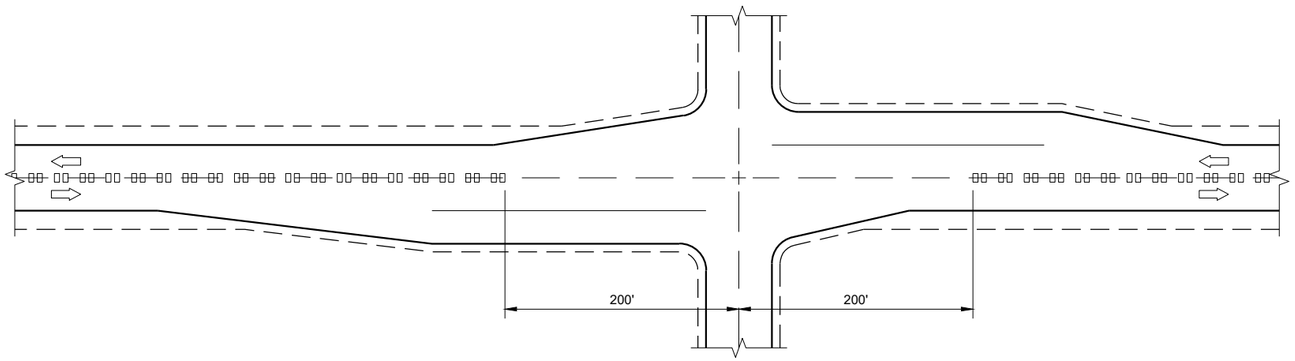
CENTERLINE RUMBLE STRIPS - ASPHALT

CENTERLINE RUMBLE STRIPS - ASPHALT

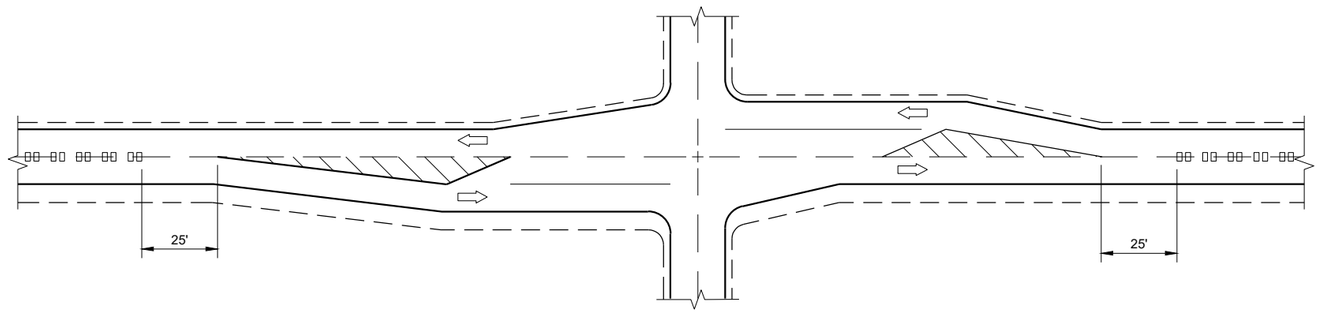
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

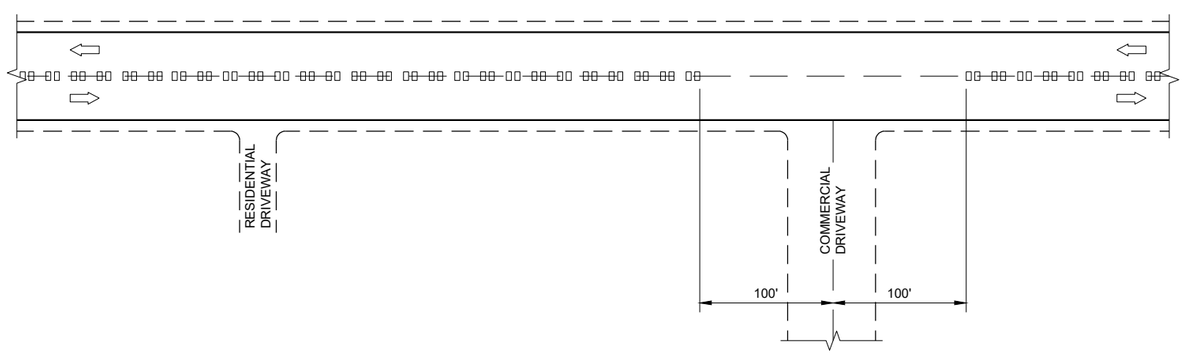
SDD13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



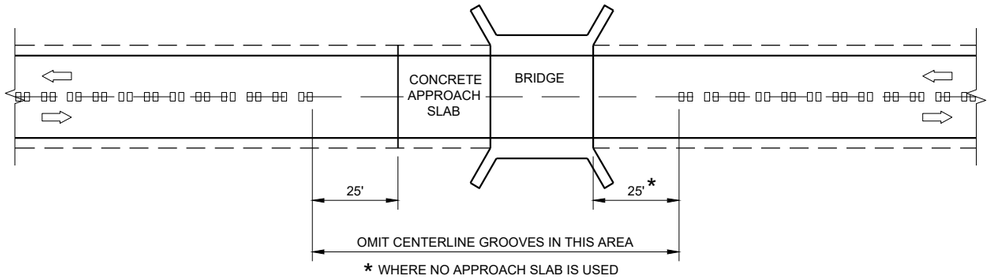
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



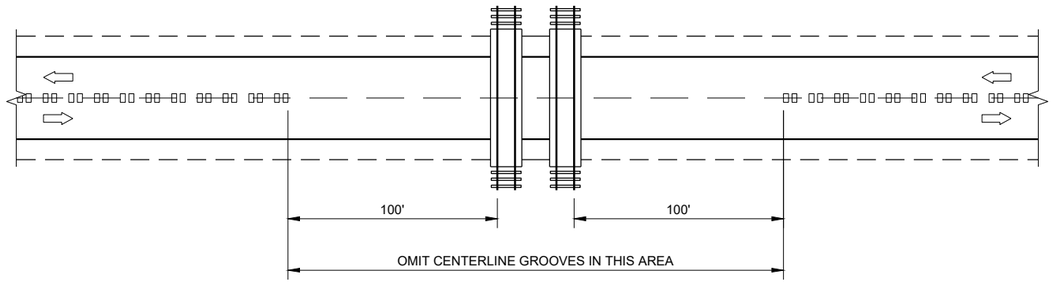
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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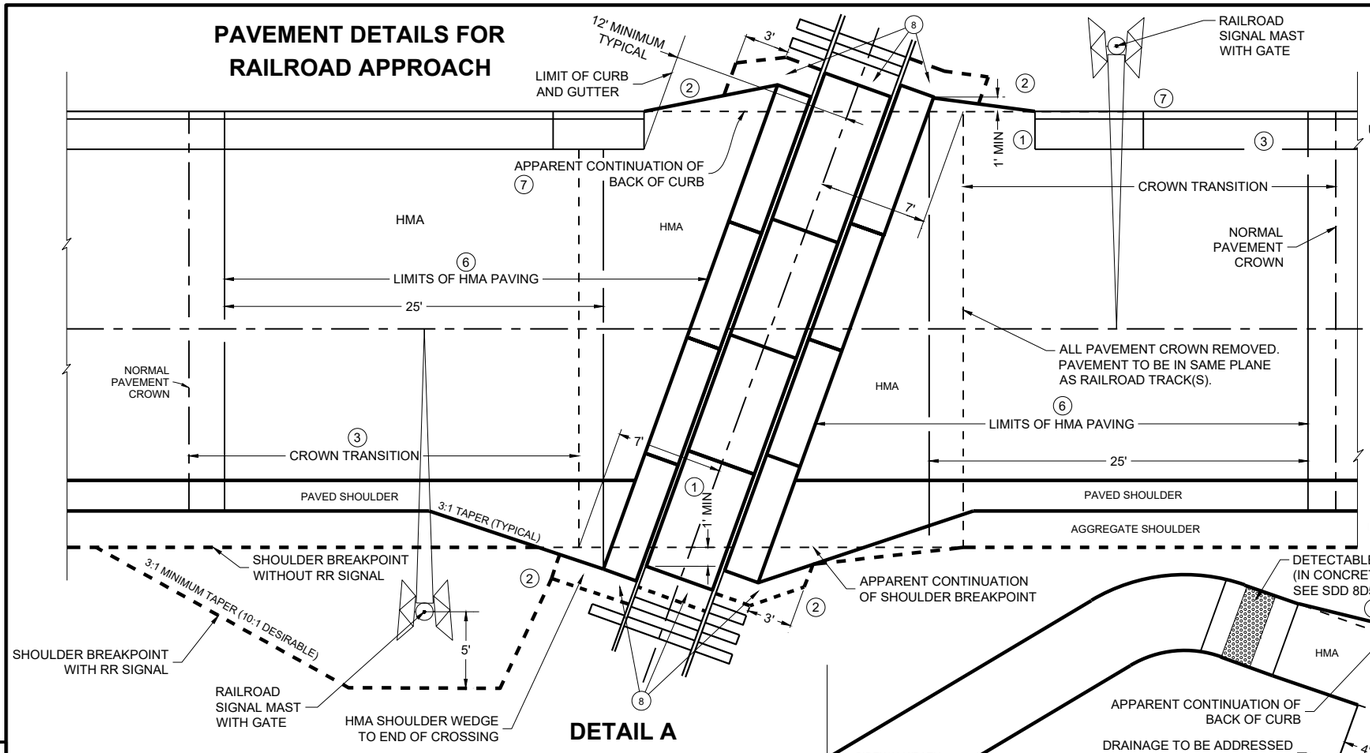
SDD 13A11 - 04d

PAVEMENT DETAILS FOR RAILROAD APPROACH



DETAIL A
RAILROAD APPROACH

GENERAL NOTES CONTINUED

(1) 1' MINIMUM CROSSING SURFACE COVERAGE PAST THE APPARENT CONTINUATION OF SHOULDER BREAKPOINT, BACK OF CURB, OR OUTSIDE EDGE OF SIDEWALK/PATH. INDIVIDUAL RAILROADS MAY HAVE DIFFERENT MINIMUM STANDARDS.

(2) HMA FLARE FROM OUTSIDE EDGE OF SIDEWALK/PATH, BACK OF CURB, OR AGGREGATE SHOULDER BREAKPOINT TO THE END OF CROSSING SURFACE MATERIAL.

(3) CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.

(4) NEAR EDGE OF PATH TO THE CENTER OF SIGNAL OR GATE MAST SHOULD BE A MINIMUM OF 5'-0". FOR SIDEWALK, THE NEAR EDGE SHOULD BE A MINIMUM OF 3'-0" TO THE CENTER OF SIGNAL OR GATE. NEAR EDGE OF SIDEWALK TO A NON-GATED MAST OR CANTILEVER SHOULD BE A MINIMUM OF 2'-6". SEE PLAN FOR RAILROAD SIGNAL AND GATE LOCATION IF THEY ARE NOT ALREADY INSTALLED.

(5) TERRACE WIDTH VARIES. SEE PLAN FOR RAILROAD SIGNAL AND GATE LOCATIONS. PER PLAN OR PROJECT ENGINEER THE TERRACE AND SIDEWALK/PATH GRADES SHALL BE TRANSITIONED TO MATCH THE GRADE OF THE TRACK. FIELD FIT TO AVOID PONDING.

(6) 25' MINIMUM HMA PAVING MEASURED PARALLEL TO THE ROAD OR 10' MINIMUM MEASURED PERPENDICULAR TO THE TRACK FROM THE EDGE OF THE CROSSING SURFACE, WHICHEVER IS GREATER.

(7) REFERENCE SDD 8-D-01 END SECTION CURB AND GUTTER. MEDIAN END NEAR THE TRACK SHOULD BE PARALLEL TO THE TRACK. 6'-0" TAPER FOR A MEDIAN SHOULD BE REDUCED TO GET FULL HEIGHT CURB WHERE THE GATE COMES DOWN. DESIGN OPTION TO POUR MEDIAN TAPER IN ONE PIECE. BUILD PER PLAN UNLESS OTHERWISE APPROVED BY THE RAILROAD ENGINEER AND THE PROJECT ENGINEER.

(8) IF METAL END PLATES ARE NOT INSTALLED BY THE RAILROAD THEN HMA PAVEMENT WEDGE SHALL BE PLACED AT THE END OF THE LAST PANEL TAPERED TO BACK EDGE OF NEXT TIE AND THOROUGHLY COMPACTED. SEE DETAIL G.

GENERAL NOTES

PLANS AND SECTIONS ARE TYPICAL. DIMENSIONS VARY PER PROJECT.

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

CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS DIRECTED OTHERWISE. IF THE FINAL GRADES DON'T MATCH TO THE PLAN GRADES THEN GRADE ADJUSTMENTS WILL BE NECESSARY. CONFIRM NEW GRADES WITH PROJECT ENGINEER.

HMA PAVEMENT APPROACHES, HMA PAVEMENT CROSSING SURFACES, AND HMA FLANGEWAY/FIELD FILLERS TO BE REPLACED BY ROADWAY CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE PLANS, SPECIAL PROVISIONS, RAILROAD ENGINEER, OR PROJECT ENGINEER.

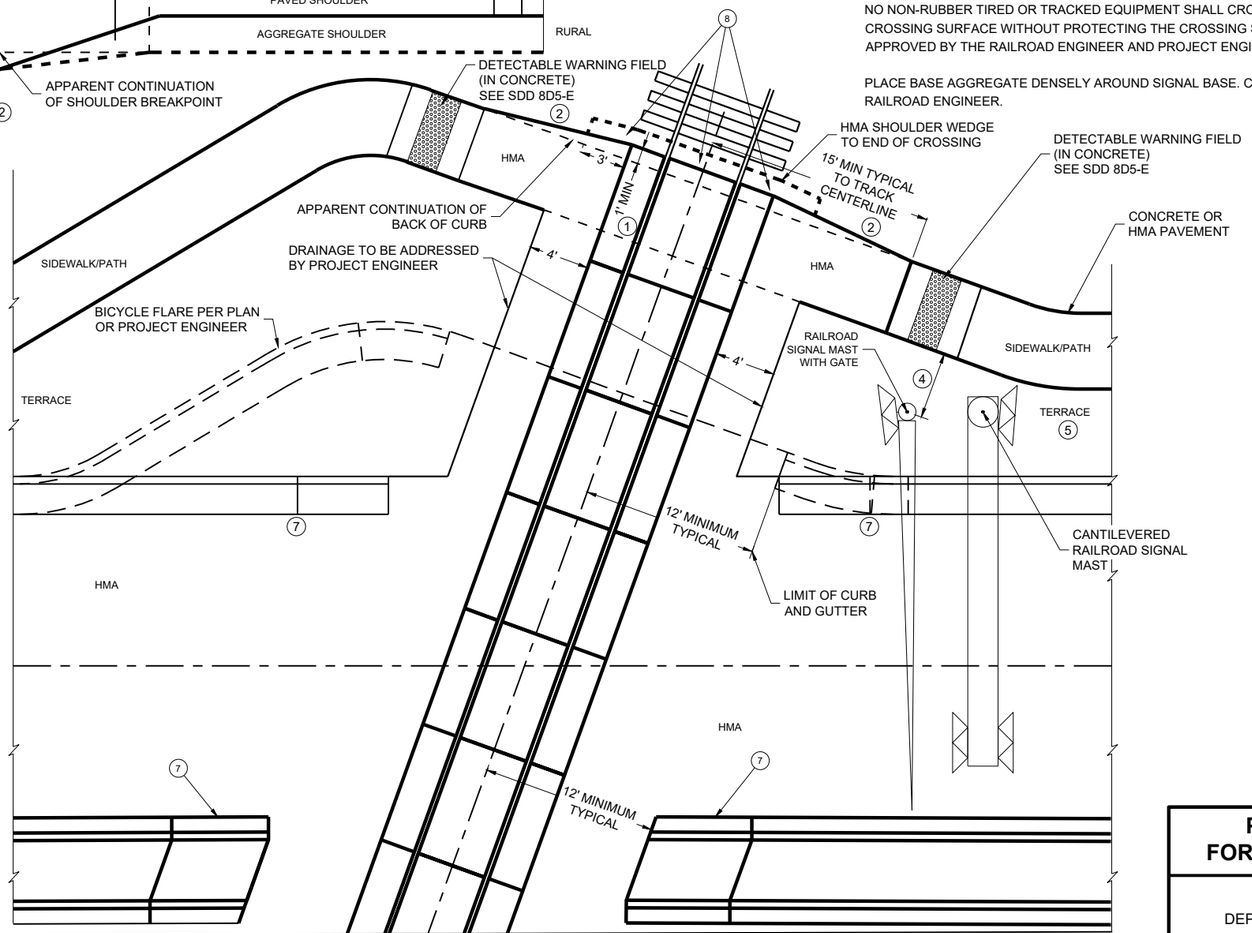
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

WHEN THERE IS A SIDEWALK OR SHARED-USE PATH, ADD DETECTABLE WARNING FIELDS PER CURRENT STANDARD DETAIL DRAWING 8D5-E.

THE CROSSING SHALL NOT BE OPENED TO ANY TYPE OF TRAFFIC UNTIL IT IS FULLY PAVED AND COOLED SUFFICIENTLY UNLESS OTHERWISE APPROVED BY THE RAILROAD ENGINEER AND THE PROJECT ENGINEER.

NO NON-RUBBER TIRED OR TRACKED EQUIPMENT SHALL CROSS OR SIT ON THE CROSSING SURFACE WITHOUT PROTECTING THE CROSSING SURFACE WITH A METHOD APPROVED BY THE RAILROAD ENGINEER AND PROJECT ENGINEER.

PLACE BASE AGGREGATE Ddensely AROUND SIGNAL BASE. COORDINATE WITH THE RAILROAD ENGINEER.



DETAIL B
MEDIAN AND SIDEWALK/SHARED-USE PATH APPROACH

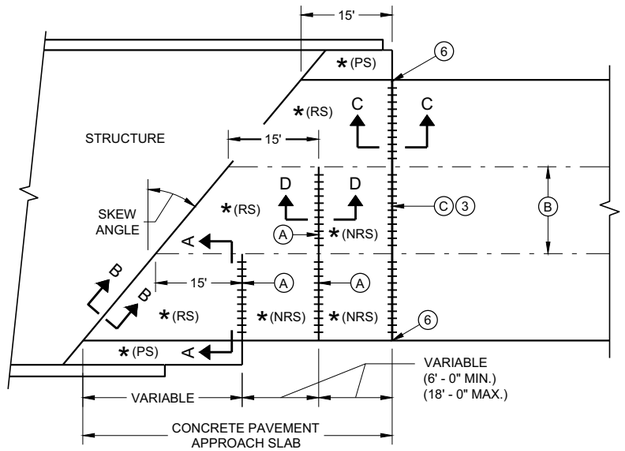
PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Kristen Sommers
STATE RAILROAD ENGINEERING AND SAFETY SUPERVISO

FHWA



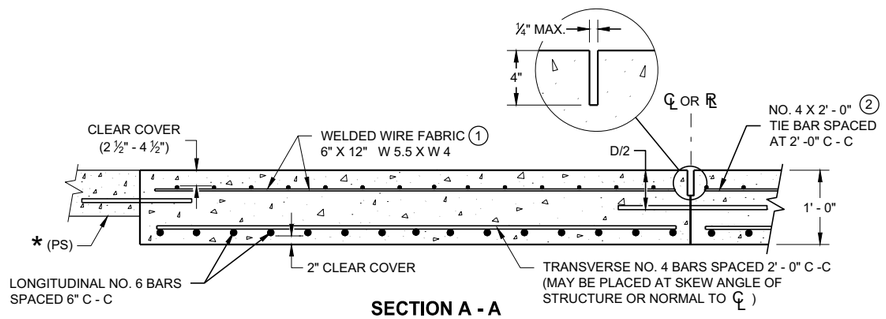
SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)

* (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

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.

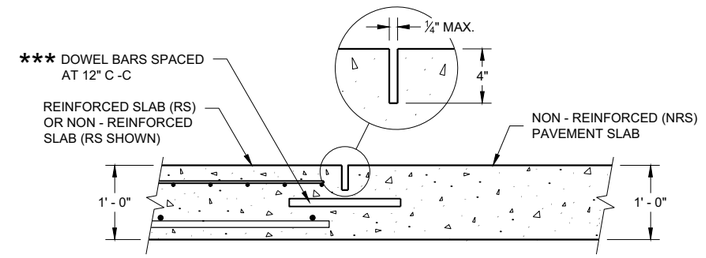
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

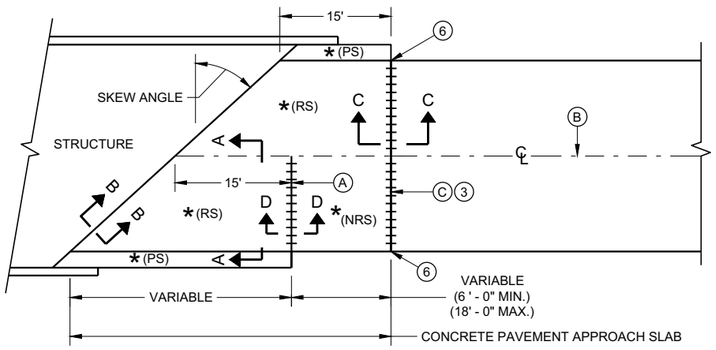
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

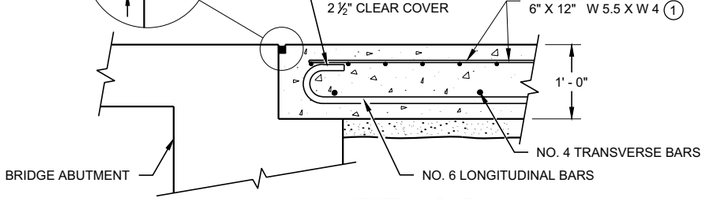
(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT

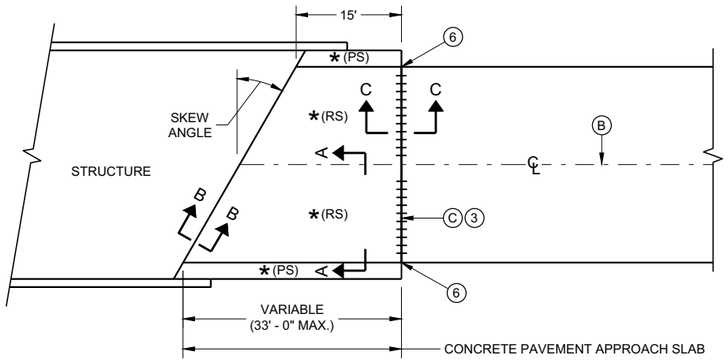


SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



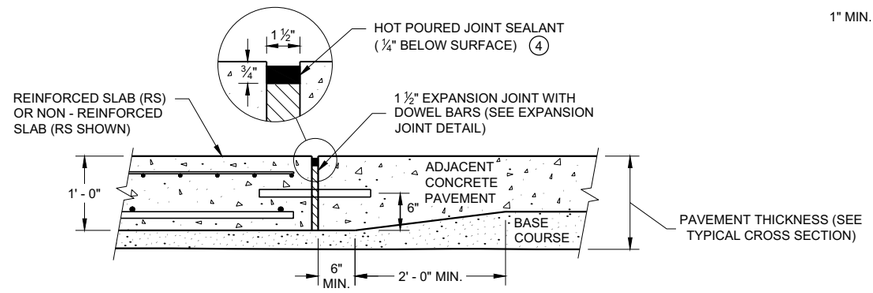
SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT

EXPANSION JOINT DETAIL



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

APPROACH SLAB AND ADJACENT PAVEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

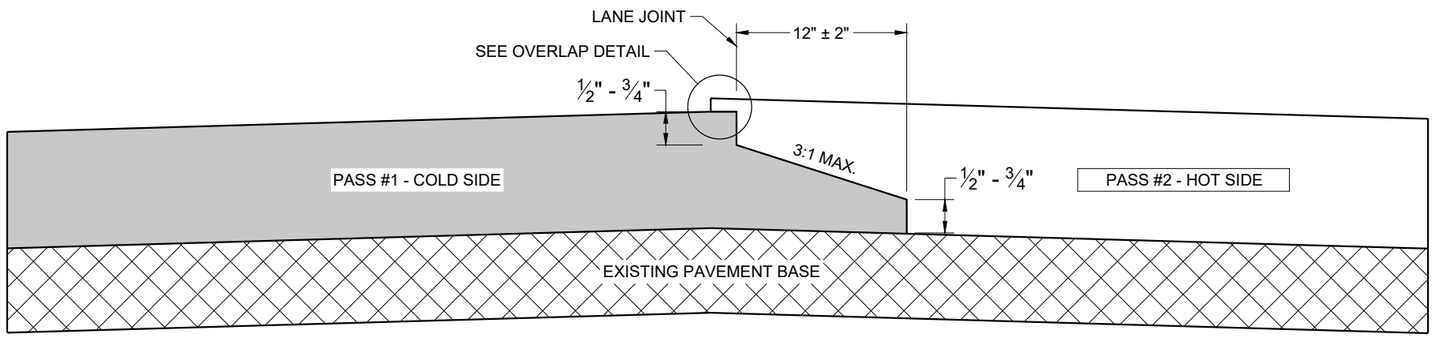
APPROVED
November 2018
DATE

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

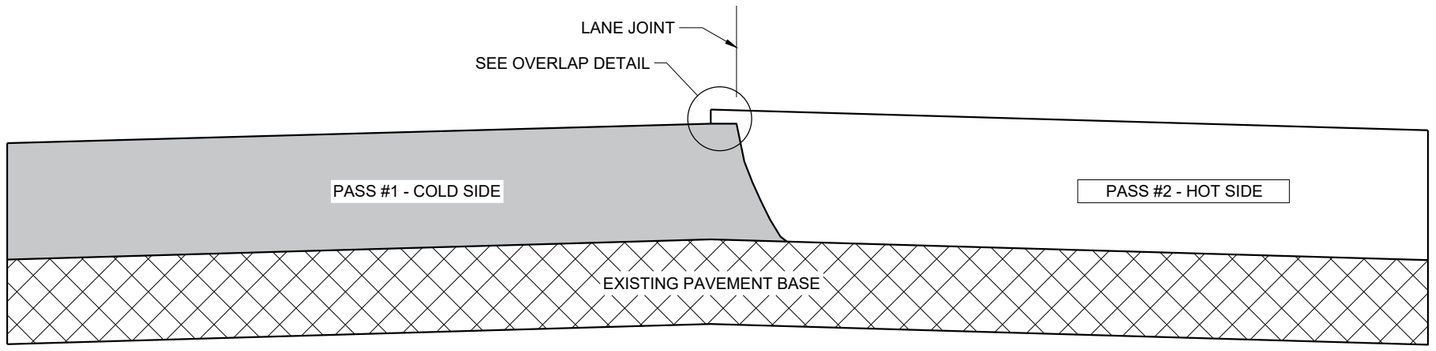
FHWA

6

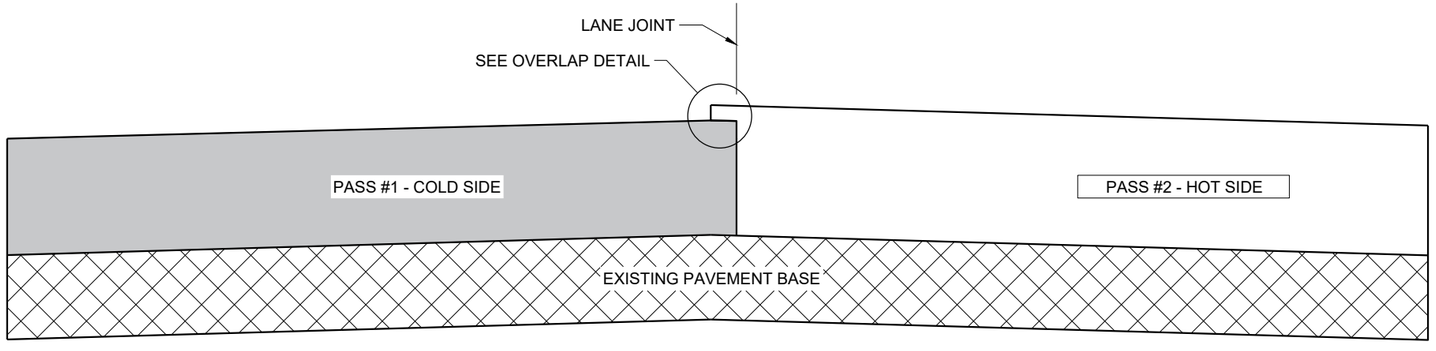
SDD 13B02 - 09a



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

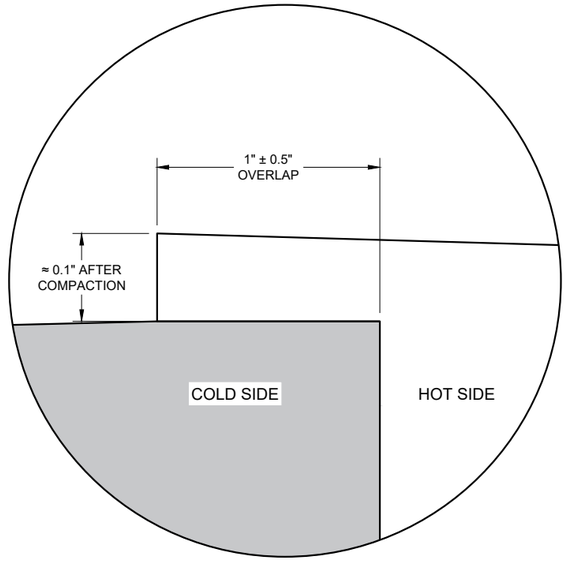
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

(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.

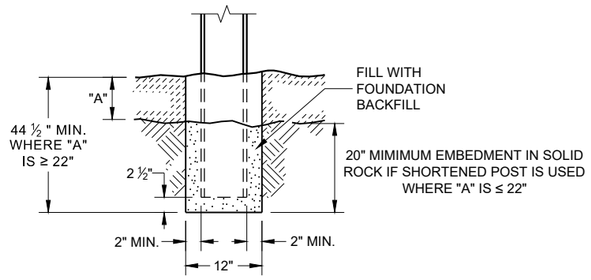
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

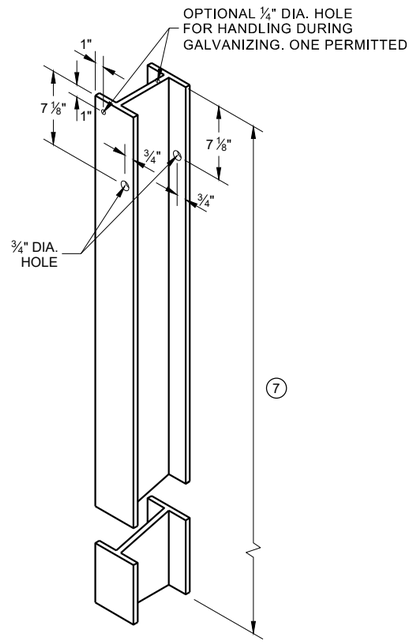
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

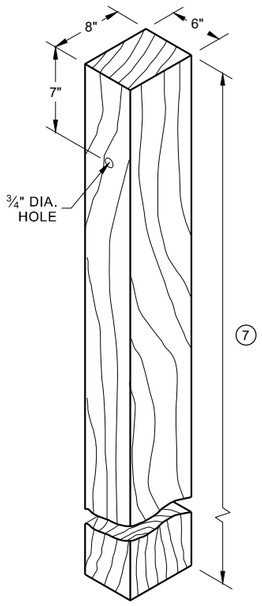
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



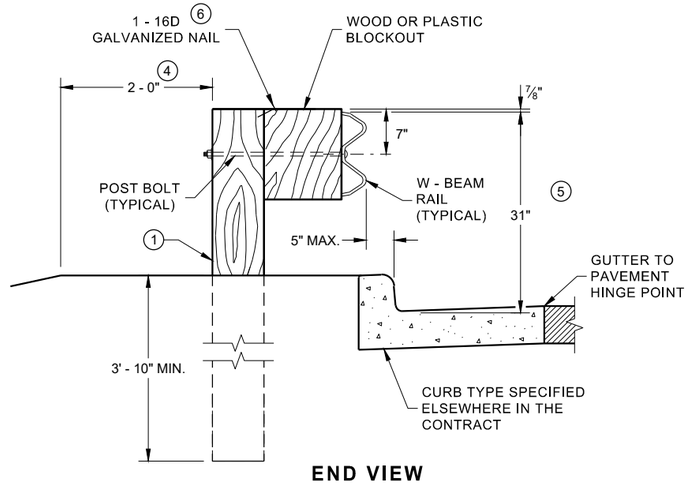
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



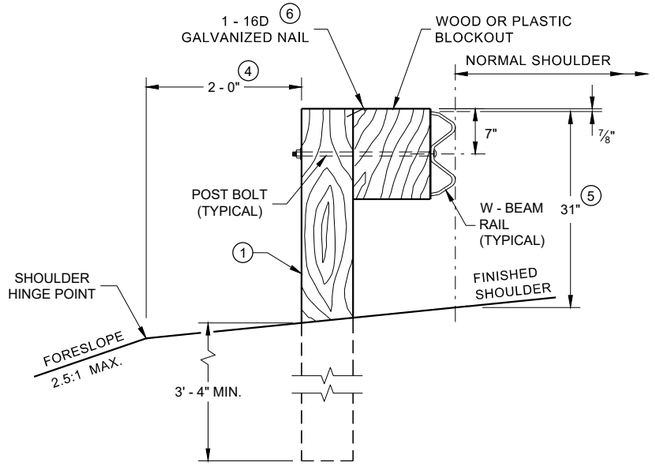
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



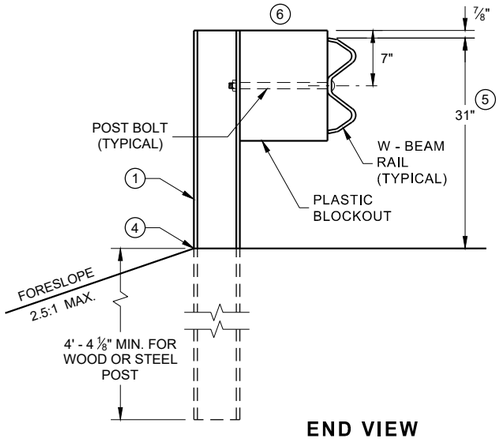
WOOD POST (6" X 8") NOMINAL (1)



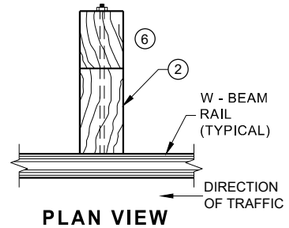
END VIEW
LOCATED ALONG A CURBED ROADWAY



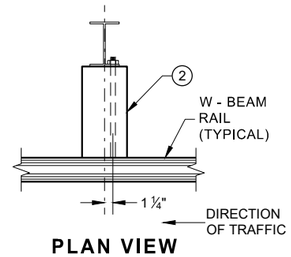
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



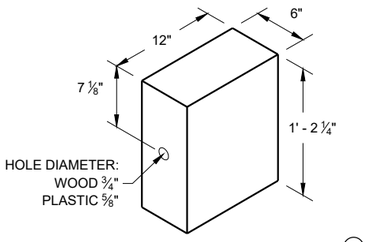
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



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

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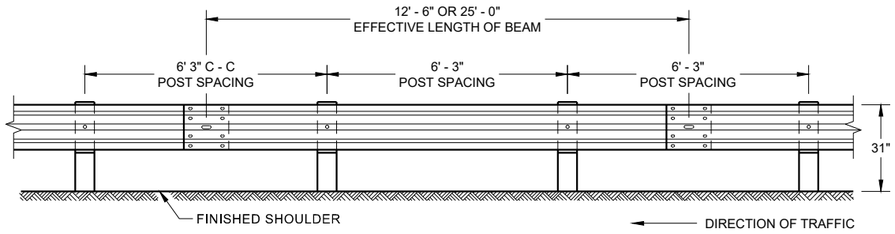
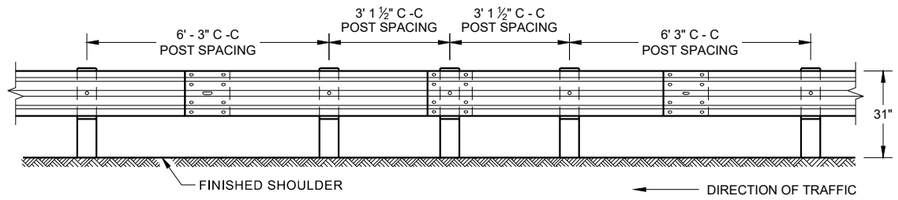
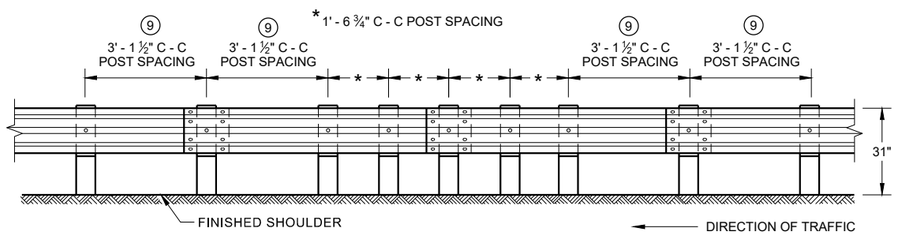
SDD 14B42 - 07a



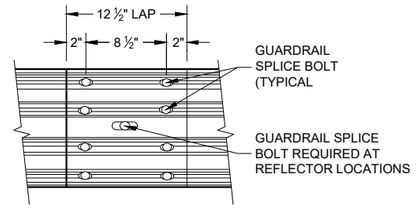
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

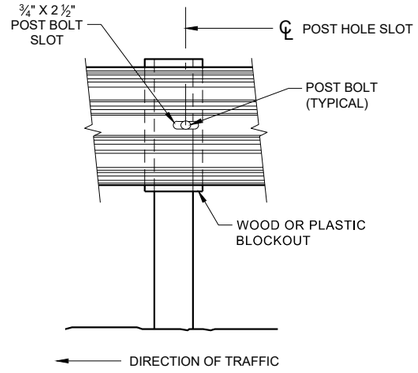
GENERAL NOTES

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

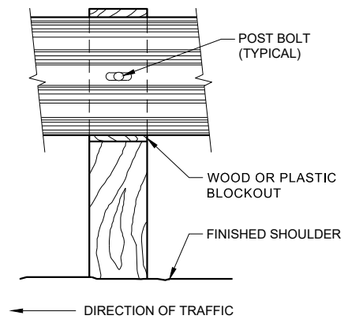
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

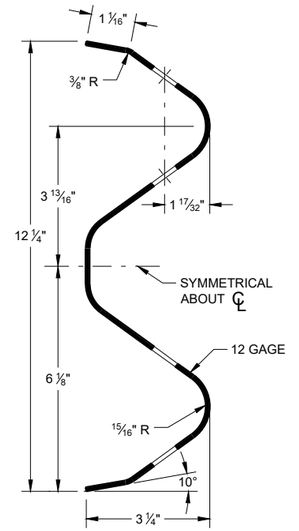
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



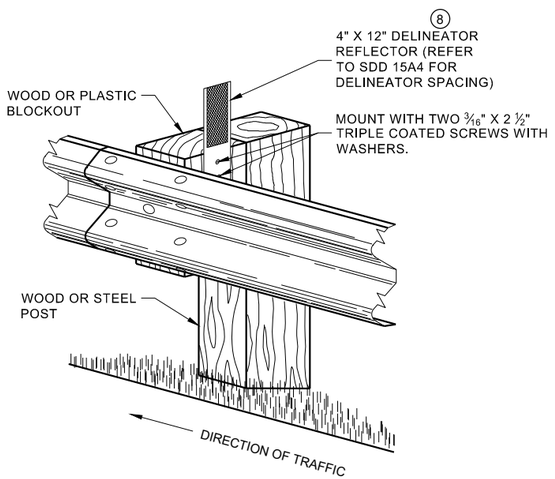
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



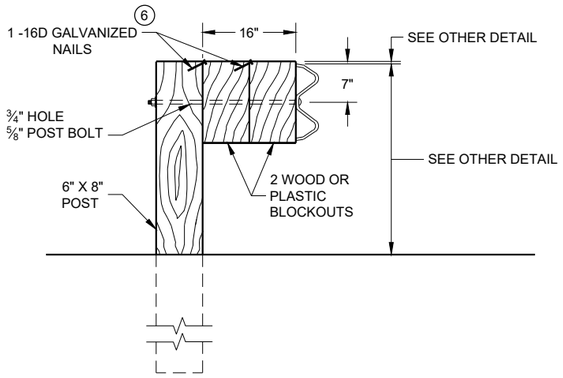
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

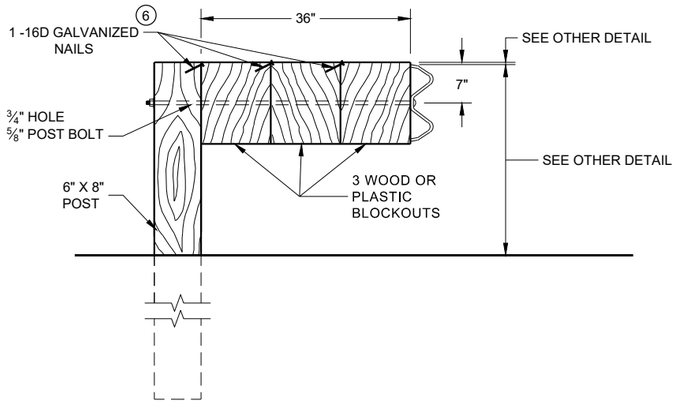
6

SDD 14B42 - 07b



DETAIL FOR 16" BLOCKOUT DEPTH

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



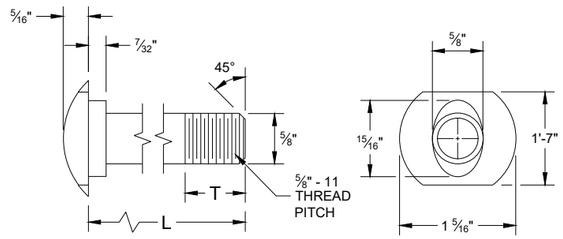
DETAIL FOR 36" BLOCKOUT DEPTH

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

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

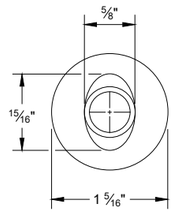
NOTE:

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

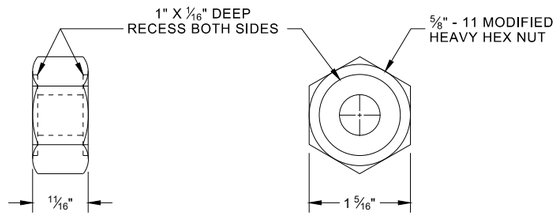


POST BOLT TABLE

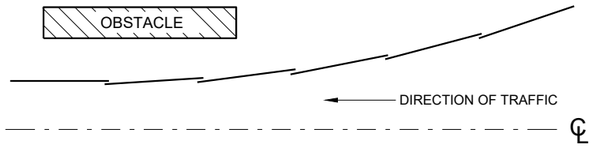
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



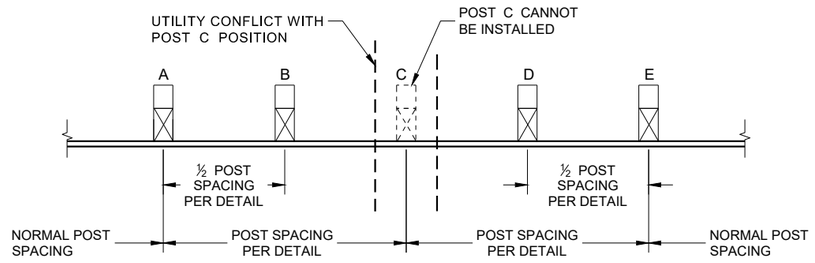
ALTERNATE BOLT HEAD



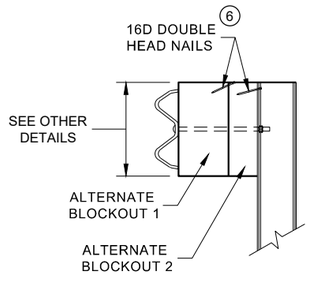
POST BOLT, SPLICE BOLT AND RECESS NUT



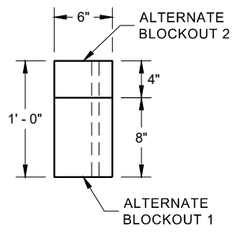
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



PLAN VIEW

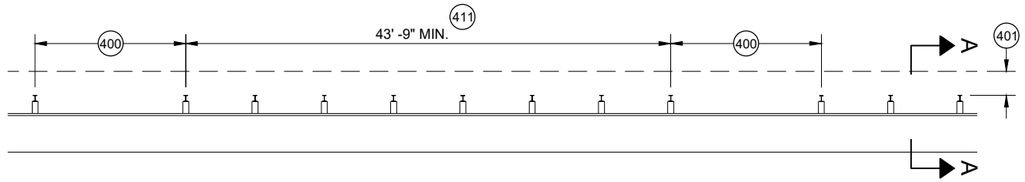
ALTERNATE WOOD BLOCKOUT DETAIL

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

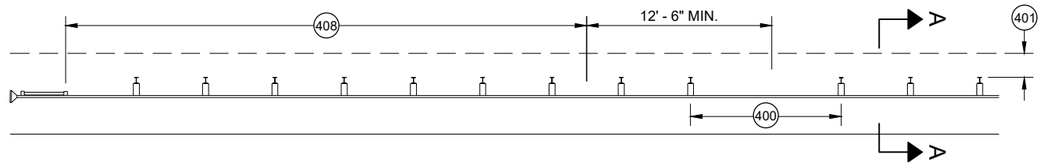
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

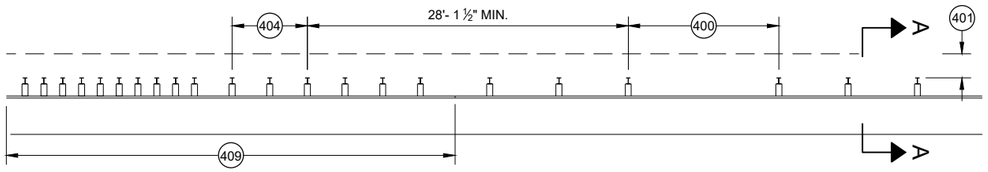
SDD 14B42 - 07c



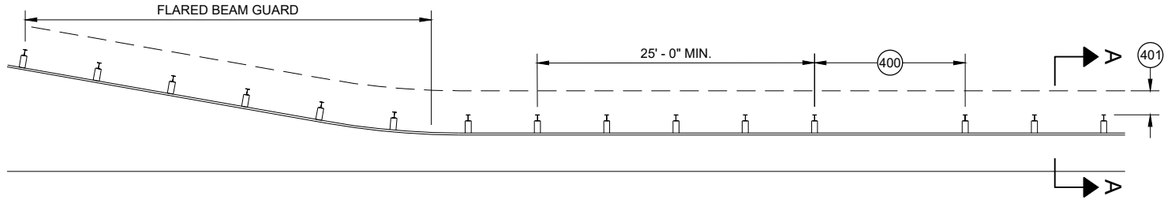
MISSING POST IN MGS GUARDRAIL



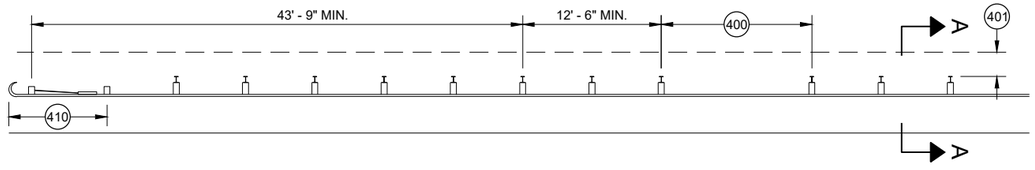
MISSING POST IN MGS GUARDRAIL NEAR EAT



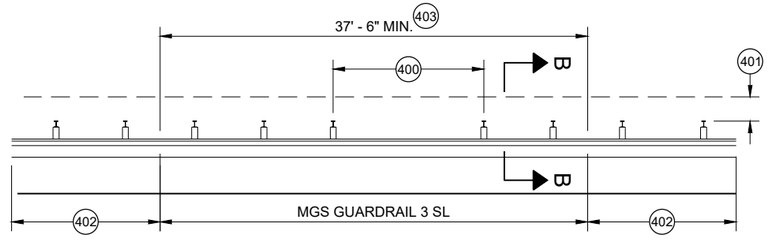
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

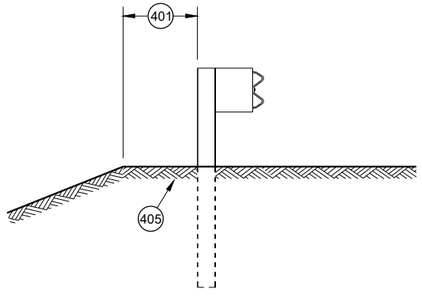


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

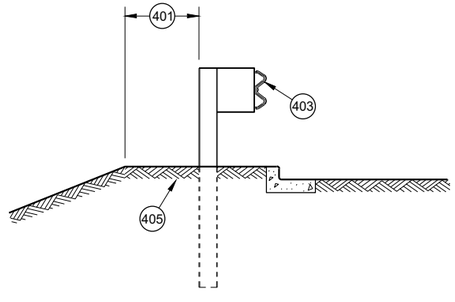


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B42 - 07d

SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

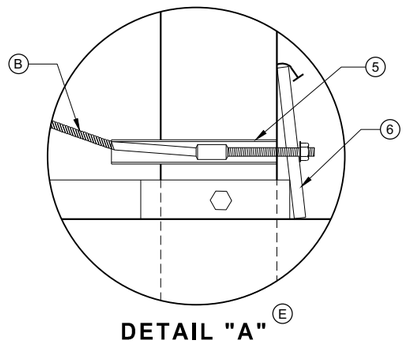
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

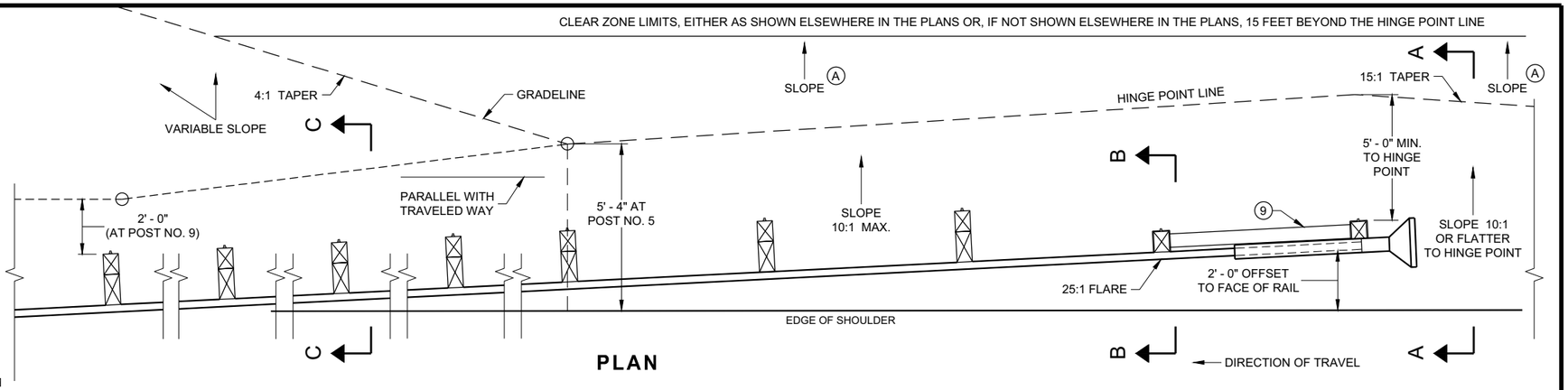
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

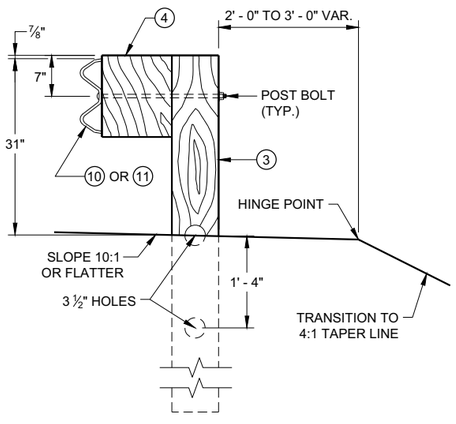
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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

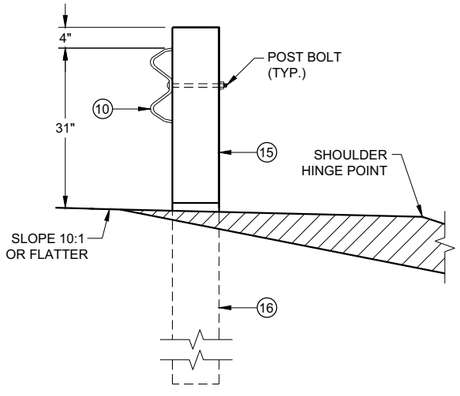


DETAIL "A" (E)

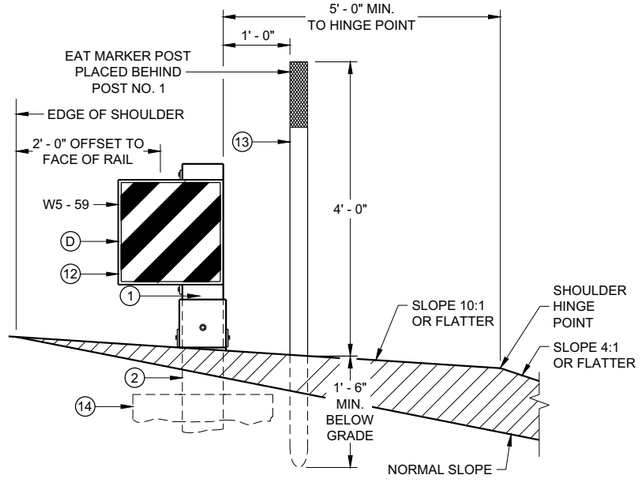




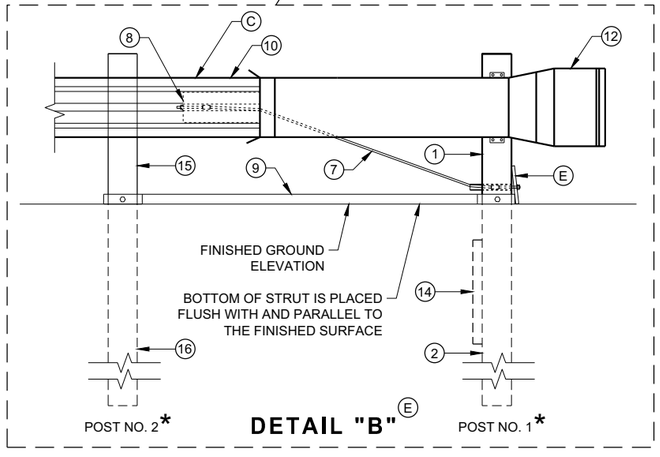
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

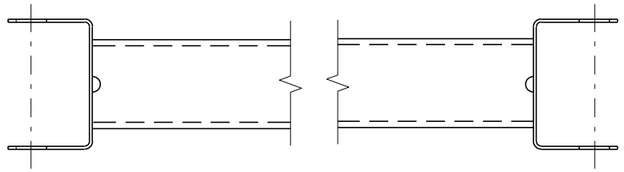
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

6

SDD 14B44 - 04a

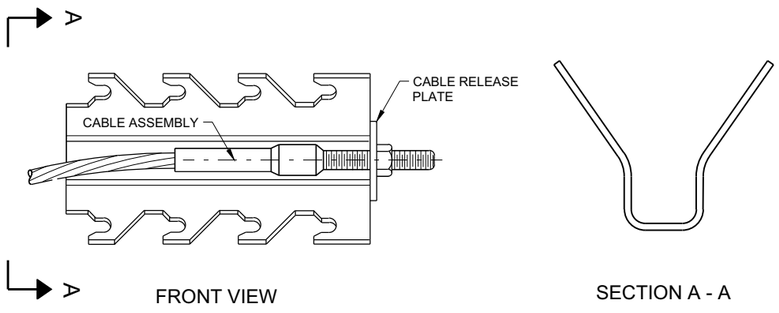
6



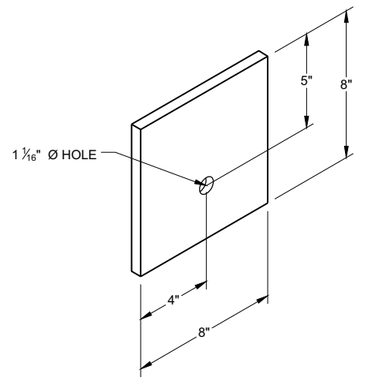
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

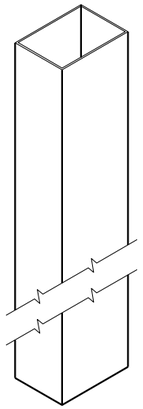
6

SDD 14B44 - 04b

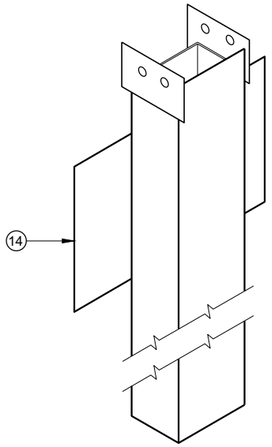
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

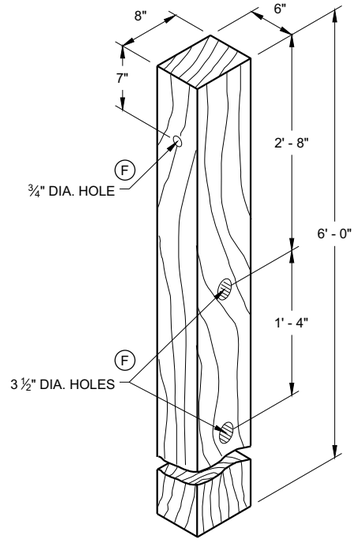
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



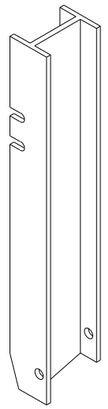
UPPER POST NO. 1 (1) (E)



LOWER POST NO. 1 (2) (E)



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



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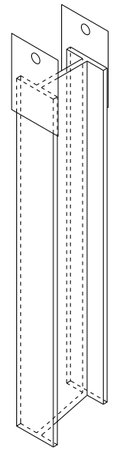
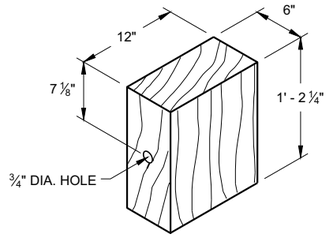
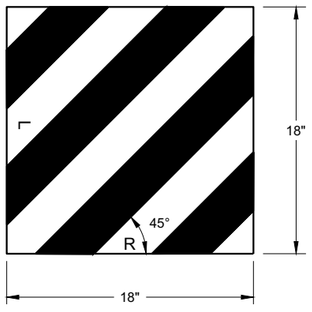


LOWER POST NO. 2 (16) (E)

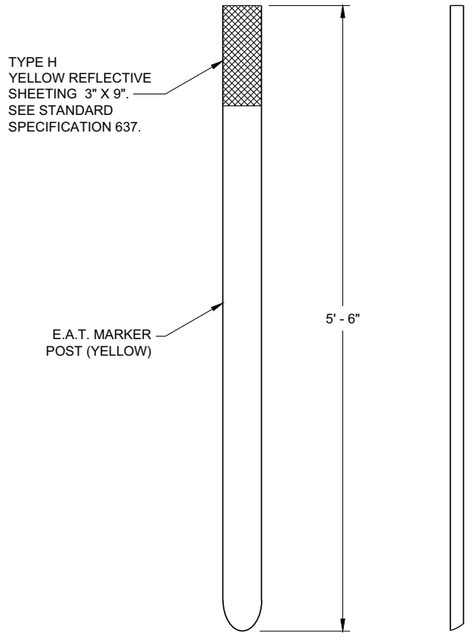


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



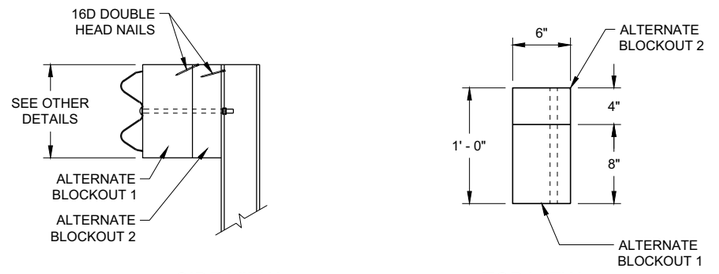
W5 - 59

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)

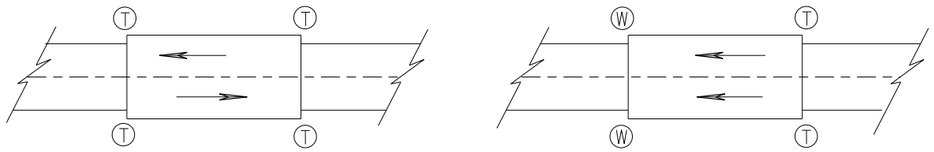
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

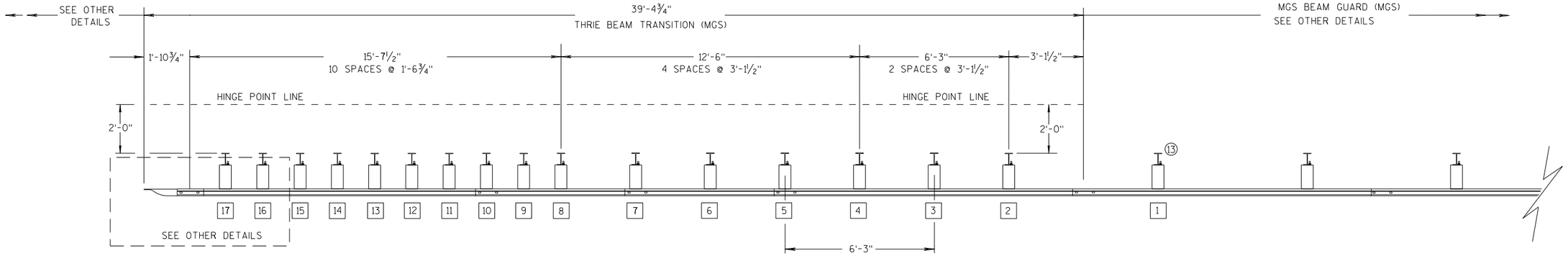
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

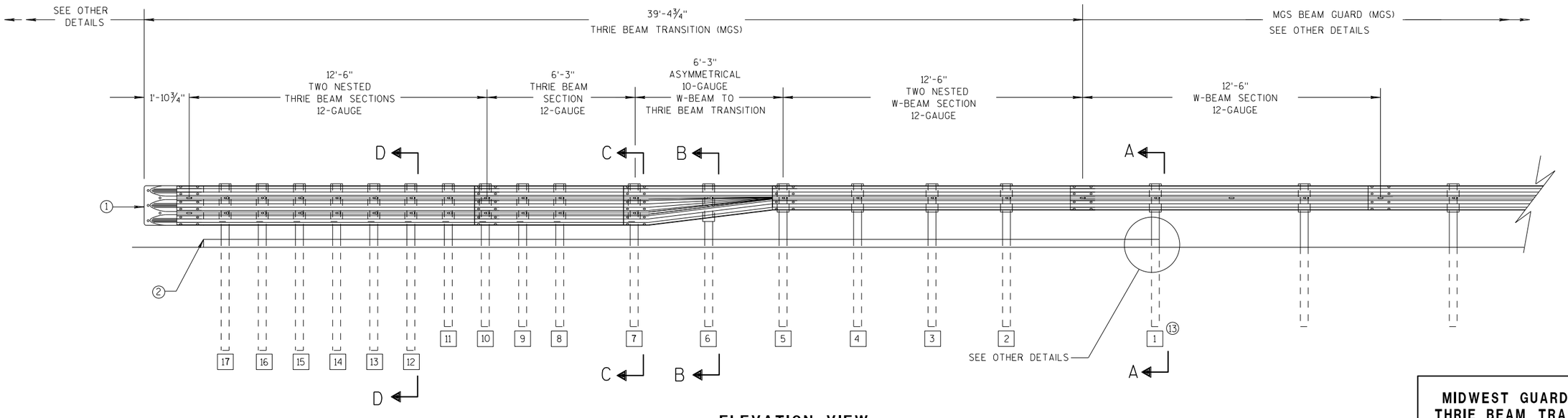
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

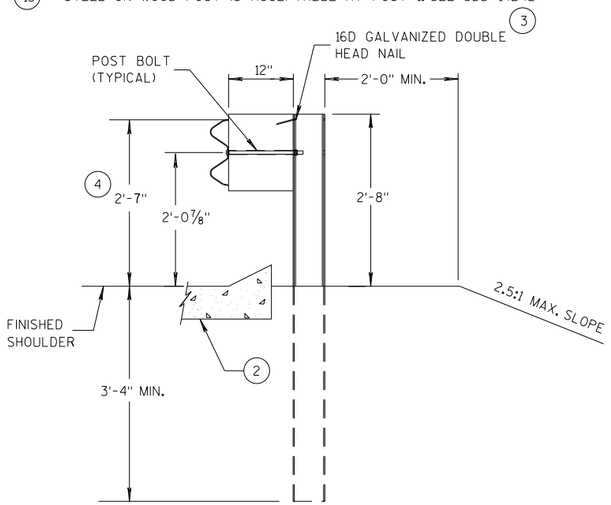
GENERAL NOTES

(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.

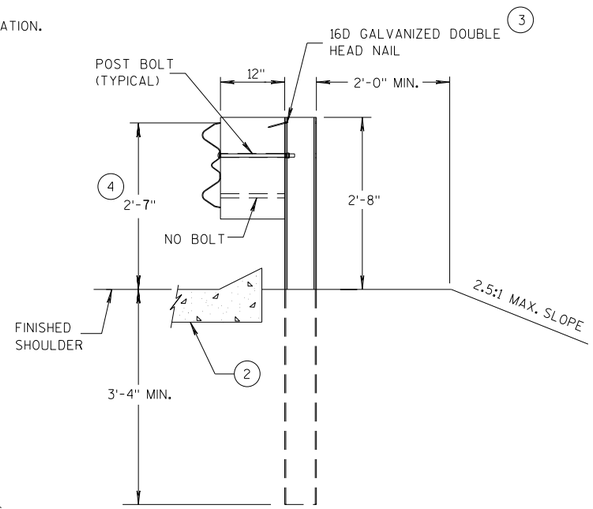
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



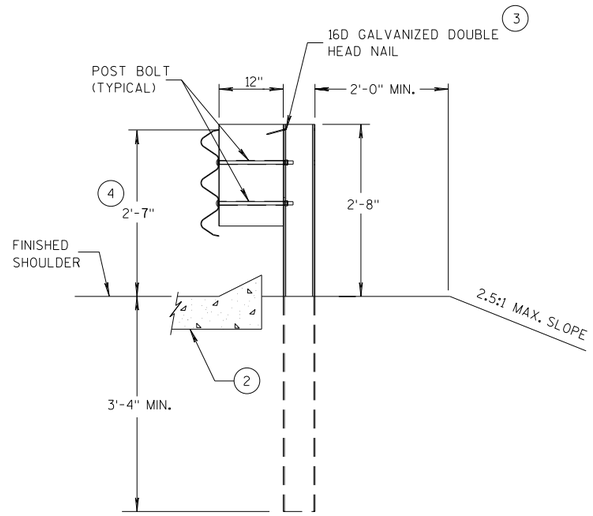
SECTION A-A (13)

POSTS 1-5



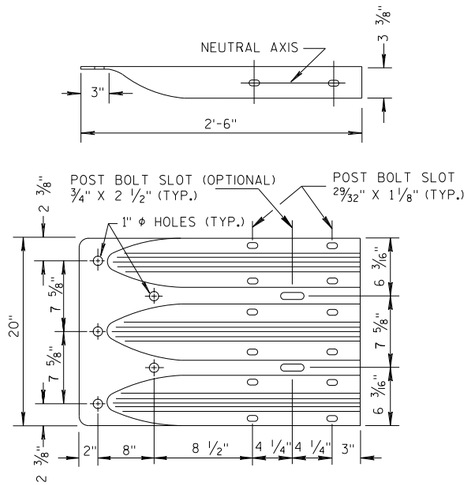
SECTION B-B

POST 6

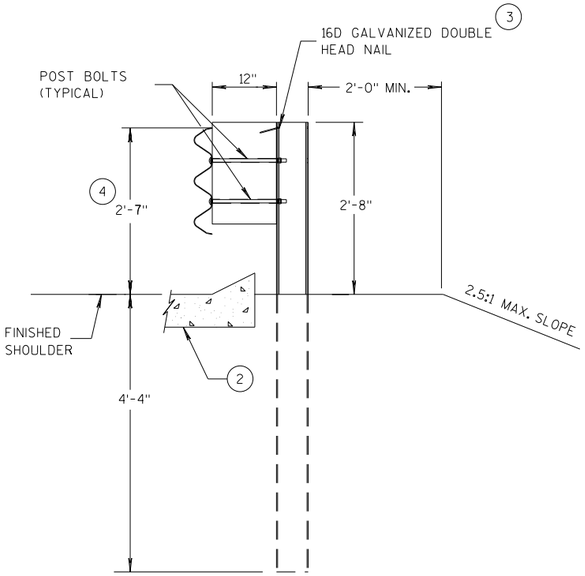


SECTION C-C

POSTS 7-11

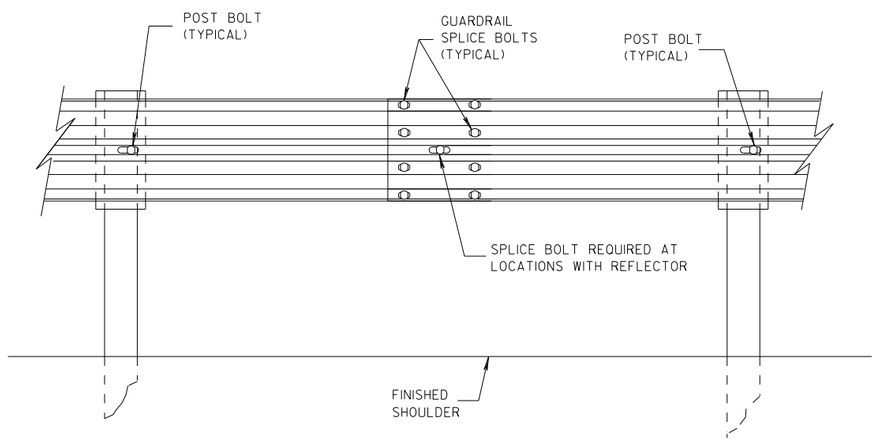


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

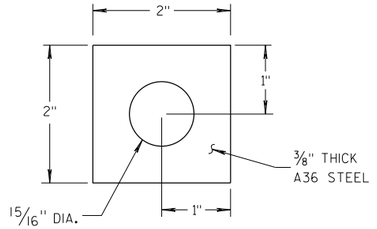
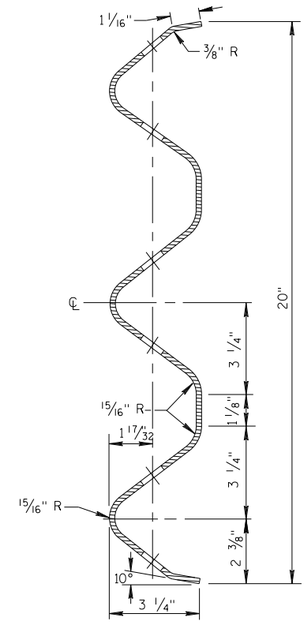


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

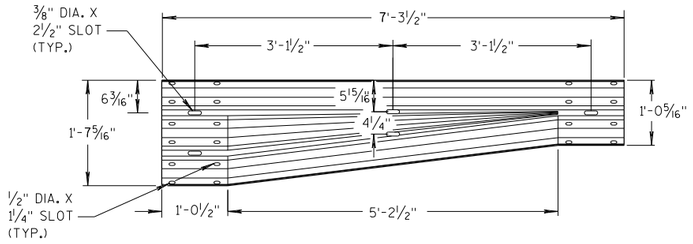
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 247

6

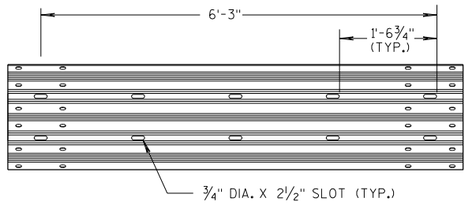
S.D.D. 14 B 45-5b

6

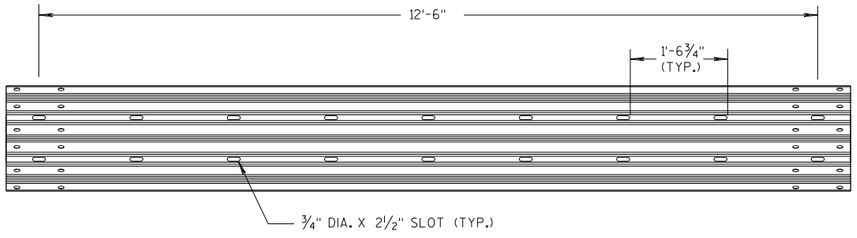
S.D.D. 14 B 45-5b



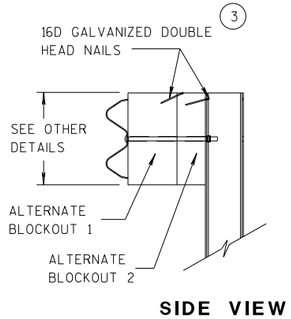
W-BEAM TO THRIE BEAM TRANSITION SECTION



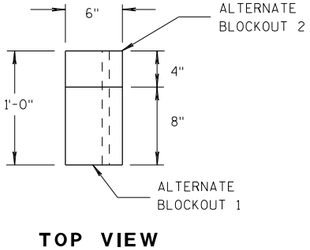
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

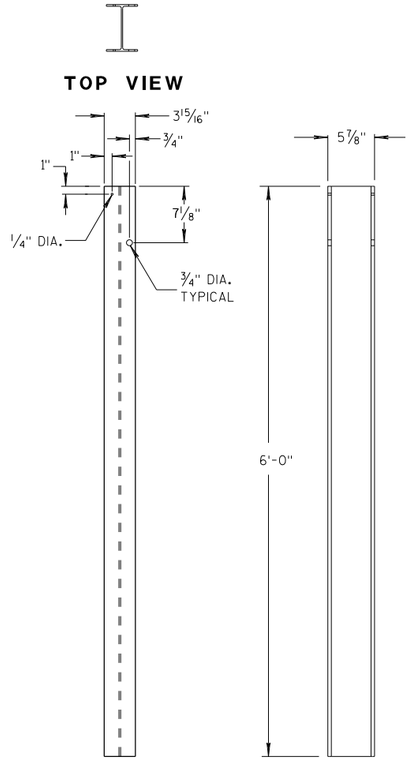


SIDE VIEW



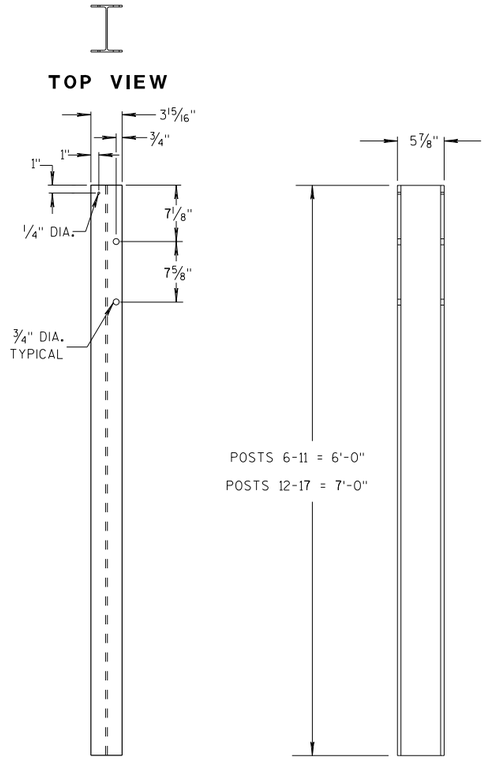
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



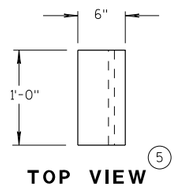
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

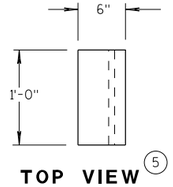


FRONT VIEW SIDE VIEW

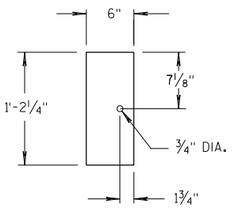
STEEL POSTS 6-17



TOP VIEW (5)

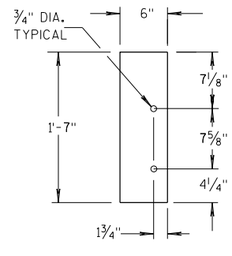


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 248

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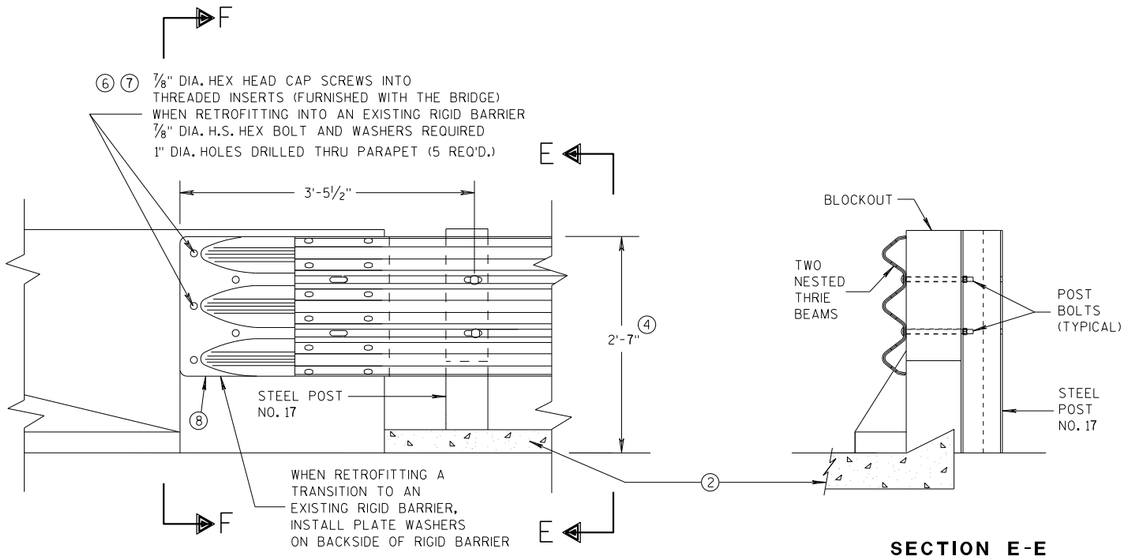
S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

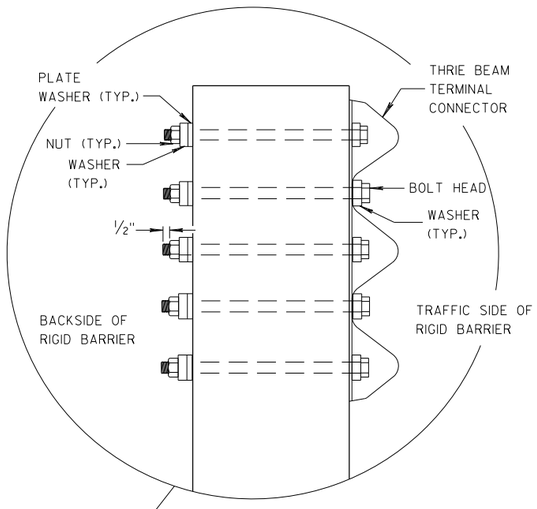
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

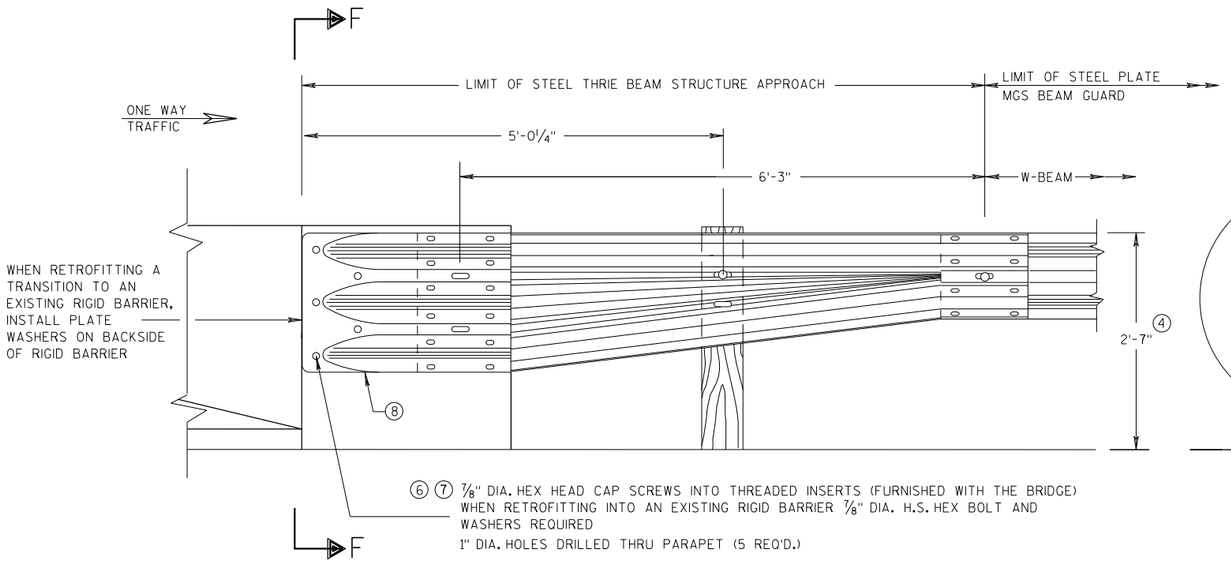
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

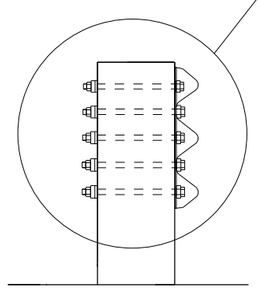
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

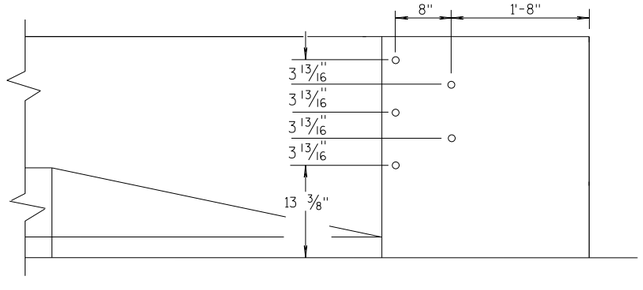




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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

GENERAL NOTES

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

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

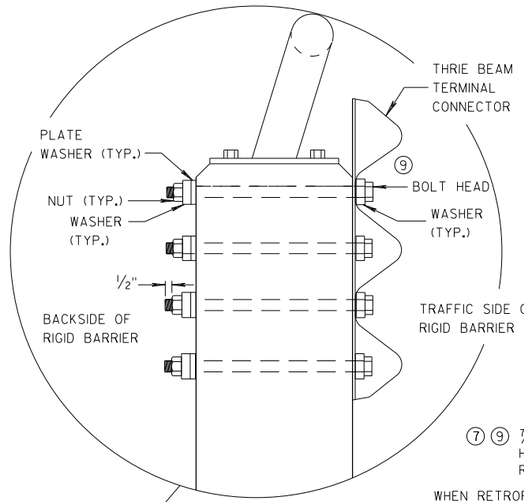
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

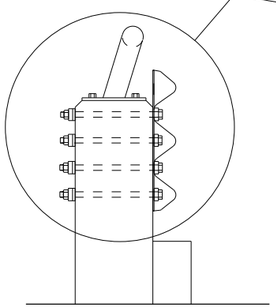
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

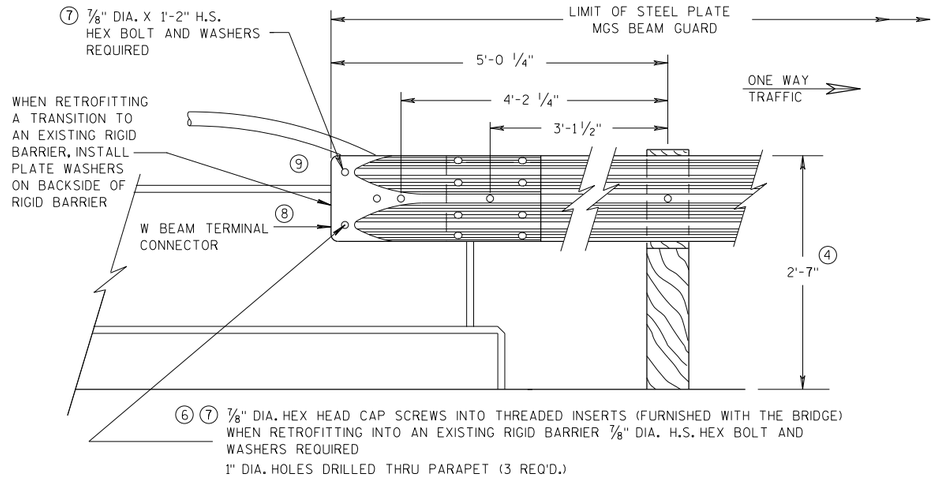
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

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





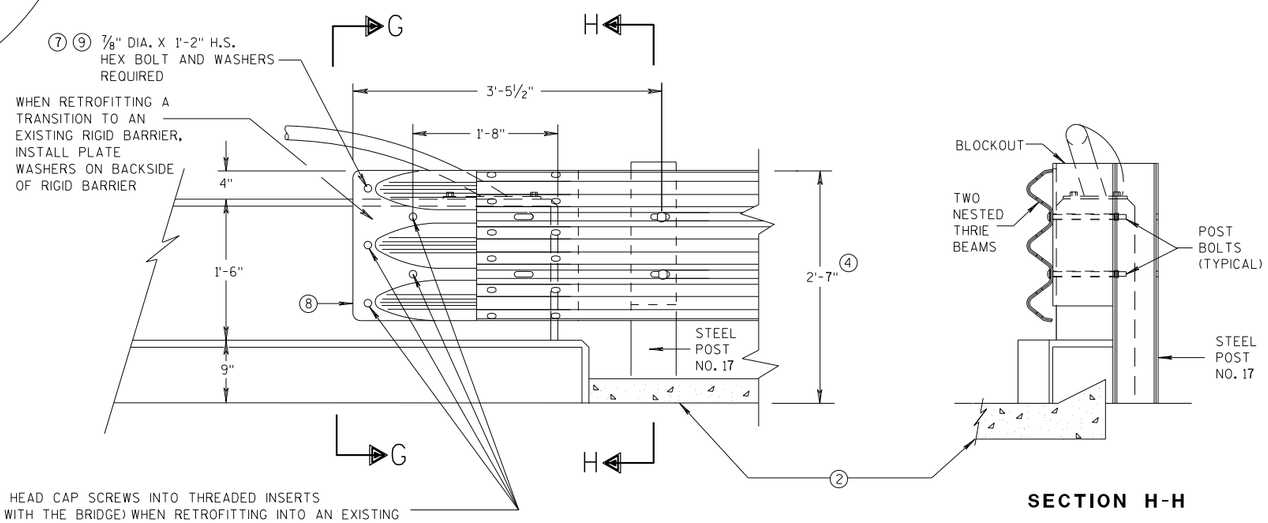
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
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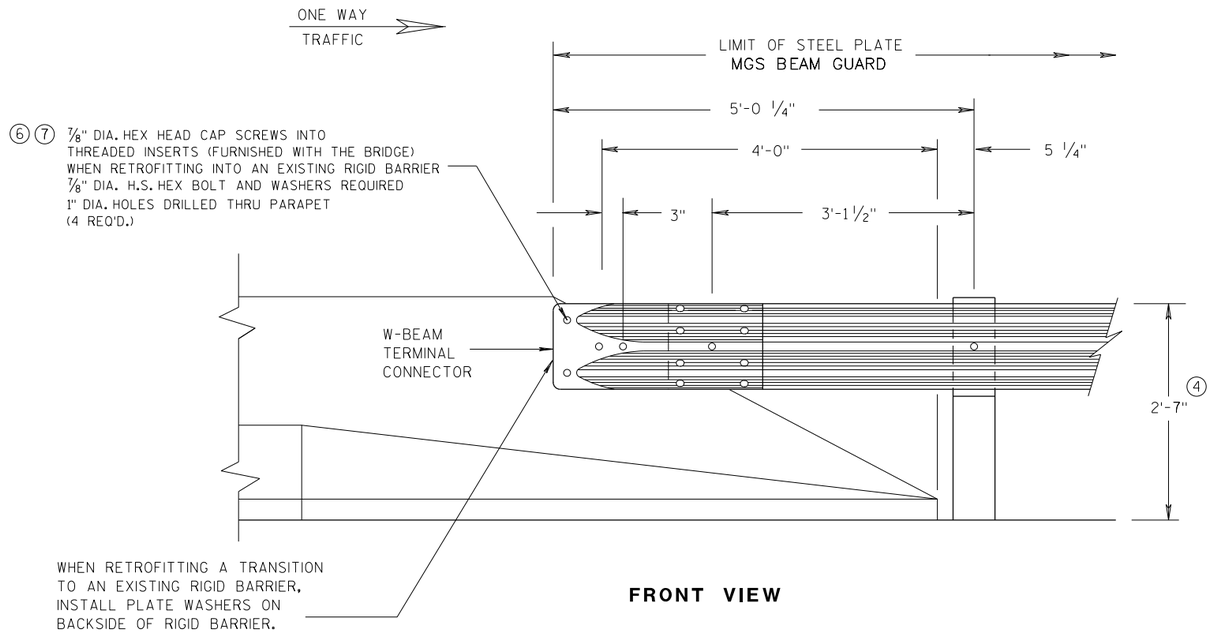


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

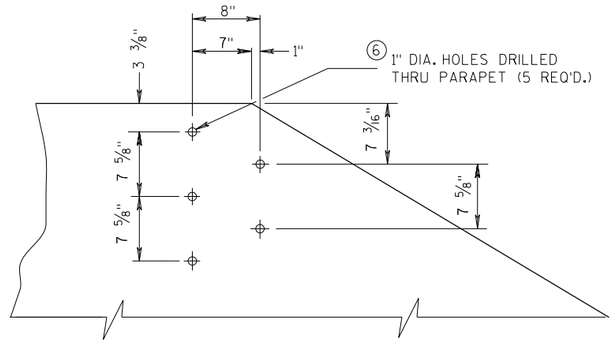
GENERAL NOTES

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

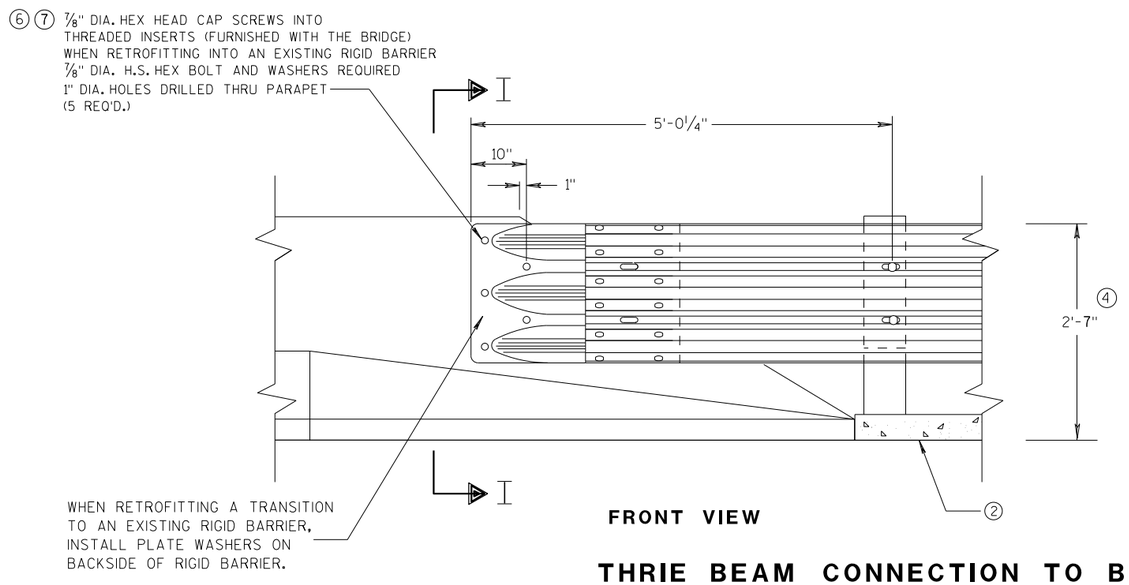
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

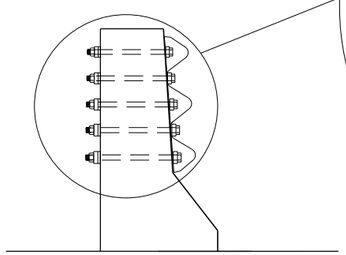
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



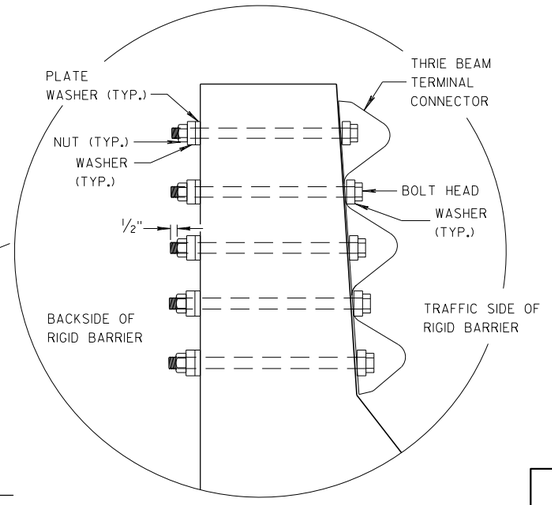
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



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
FHWA

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

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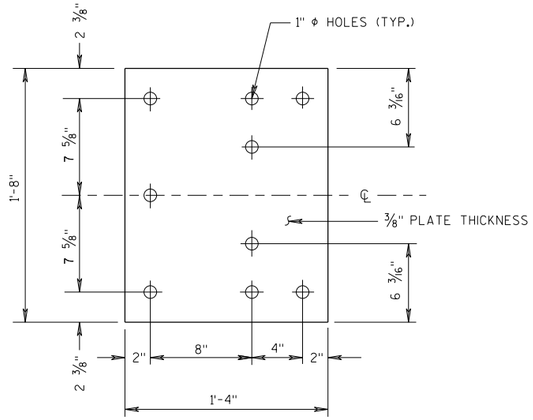
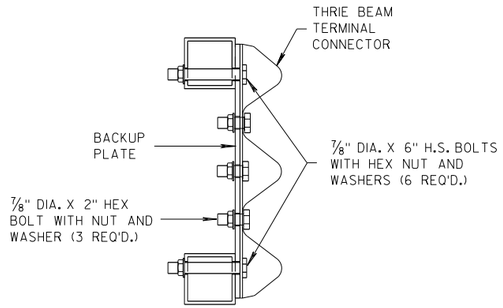
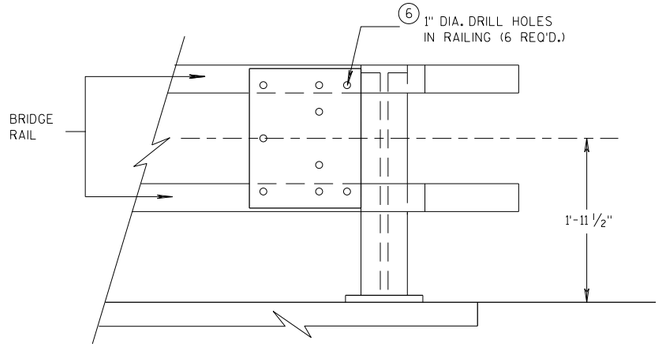
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

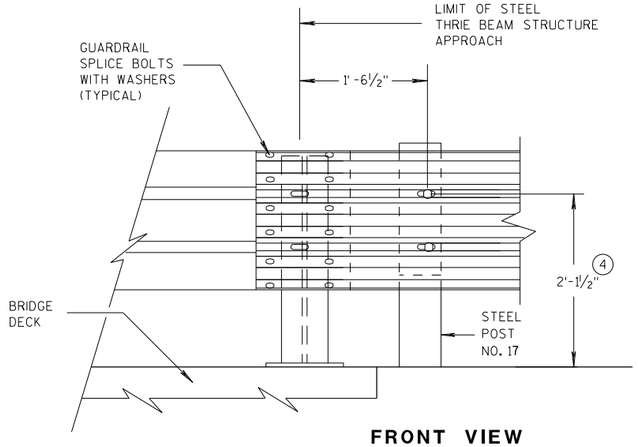


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

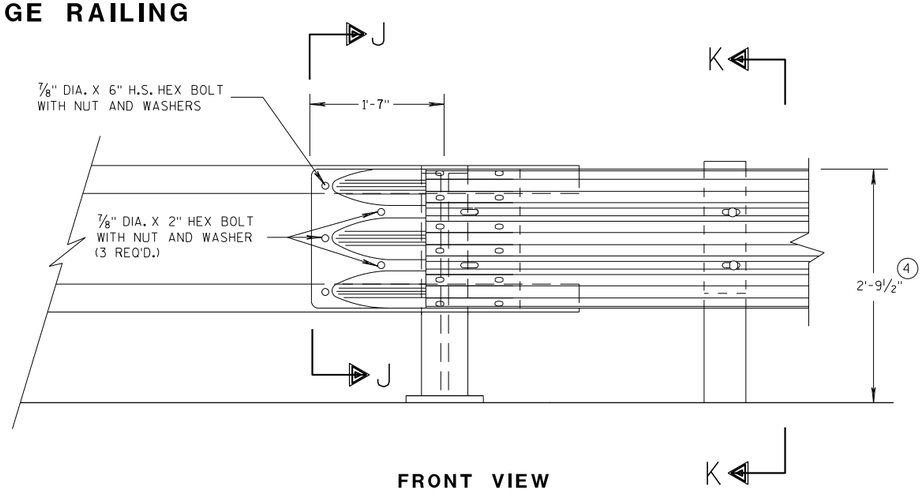
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

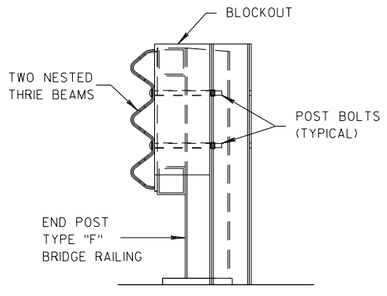


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
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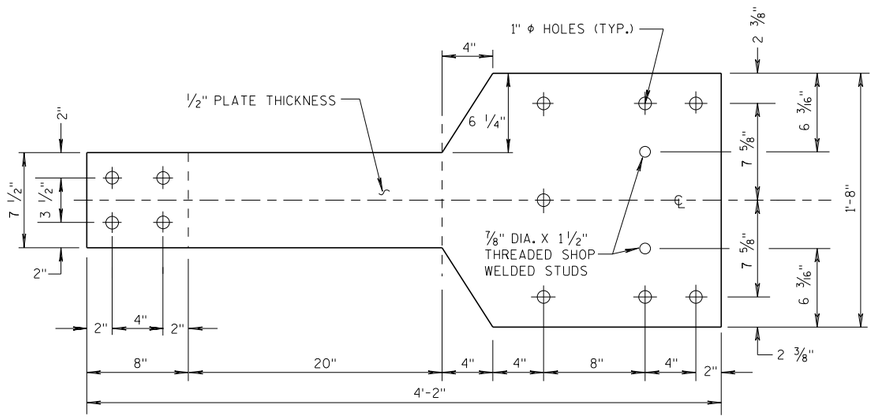
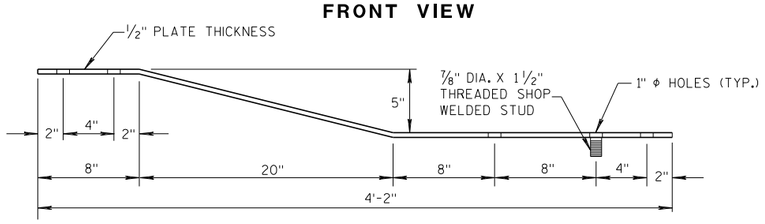
GENERAL NOTES

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

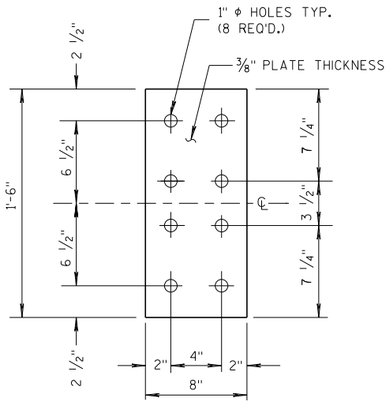


FRONT VIEW



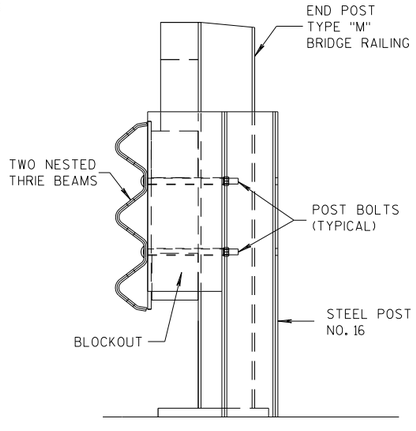
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

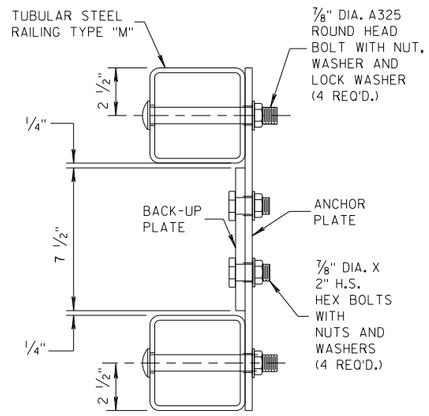


FRONT VIEW

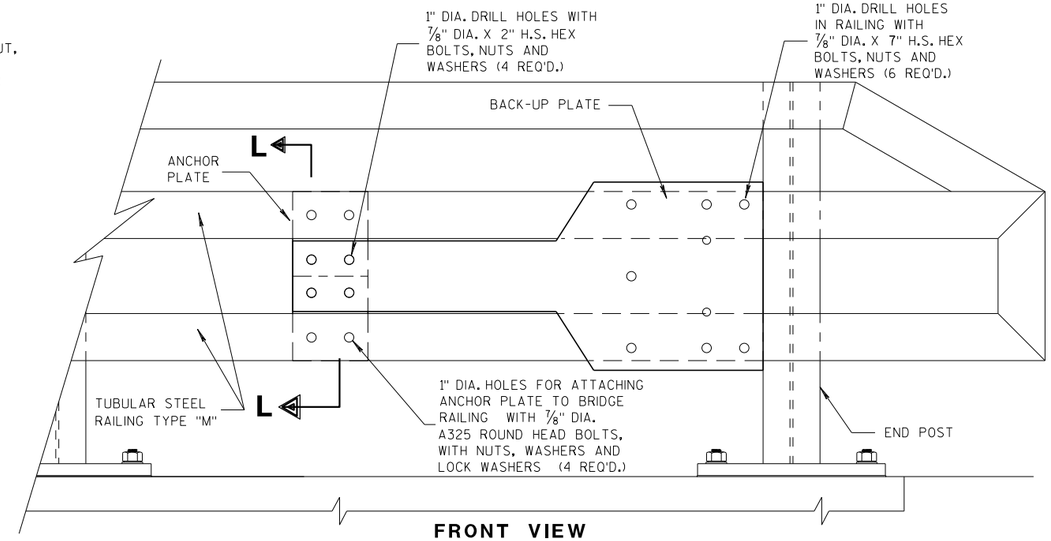
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

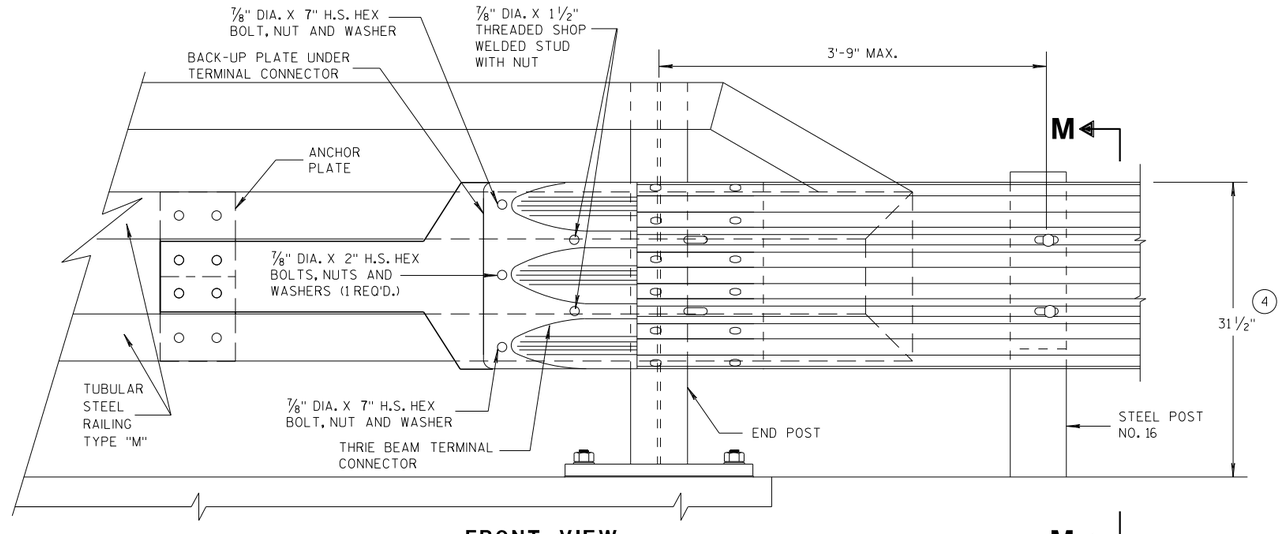


SECTION L-L

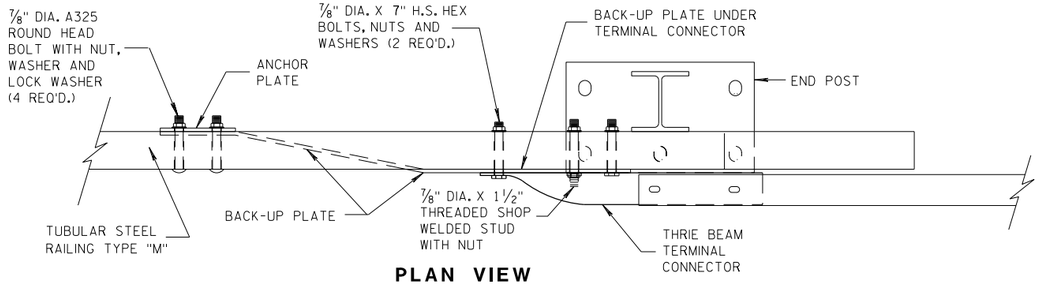


FRONT VIEW

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



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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

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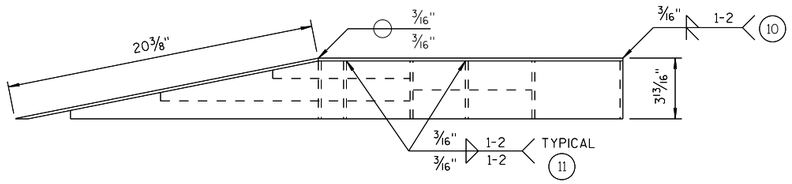
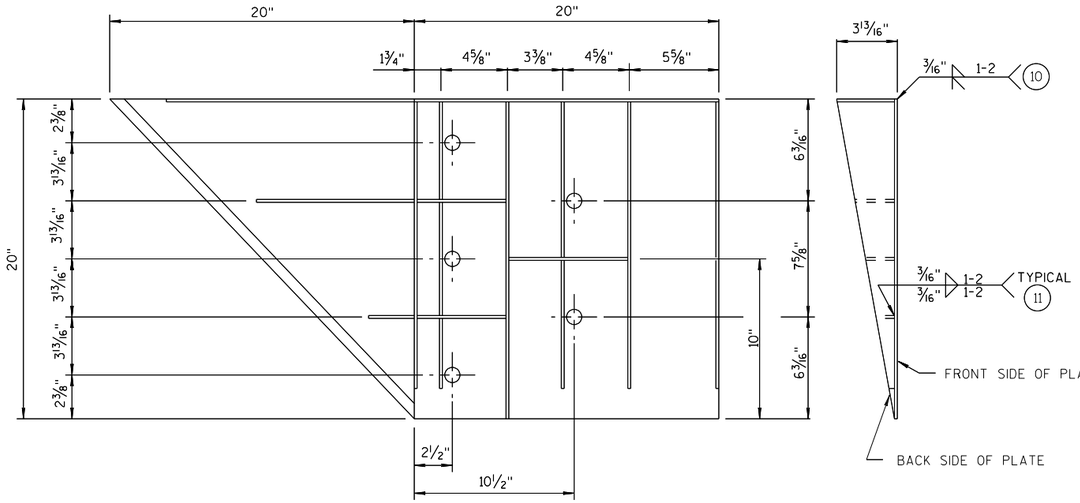
S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

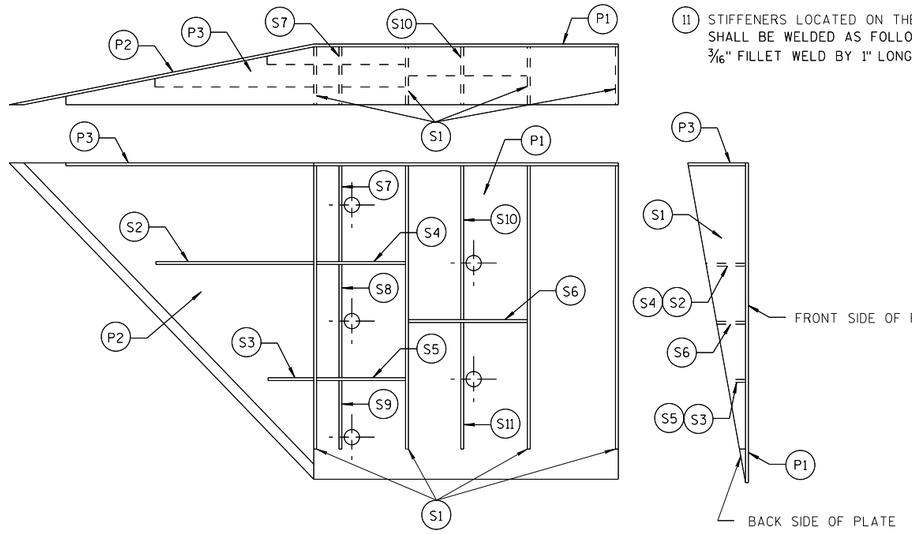


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

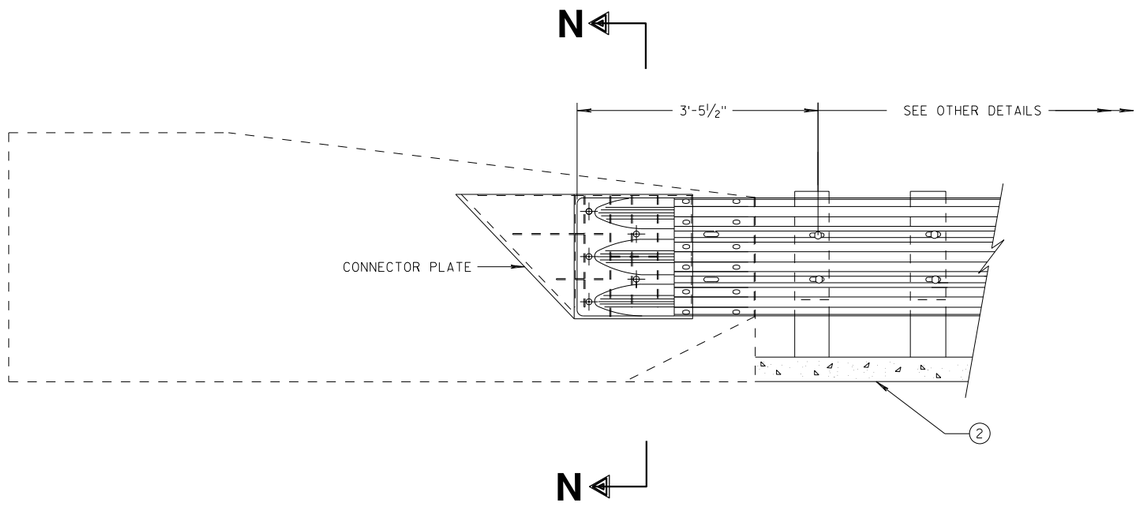
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

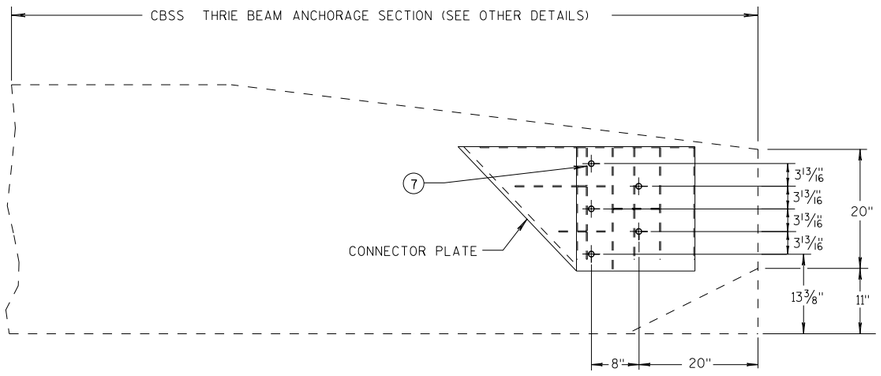
APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

6
S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



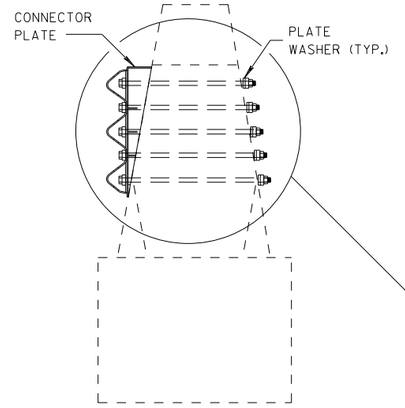
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

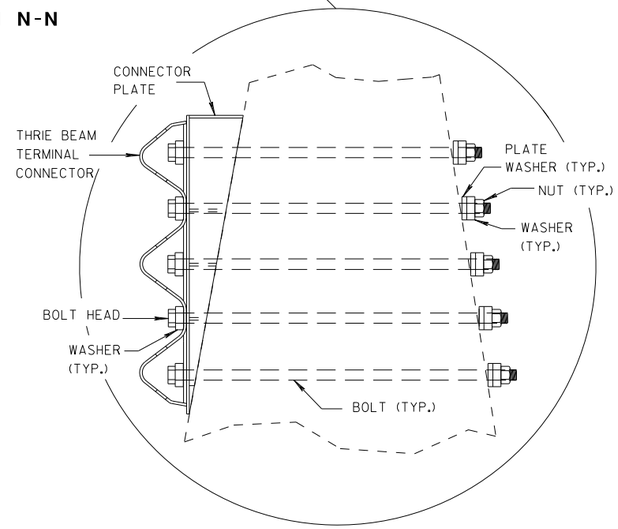
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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
UNIT SUPERVIS

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

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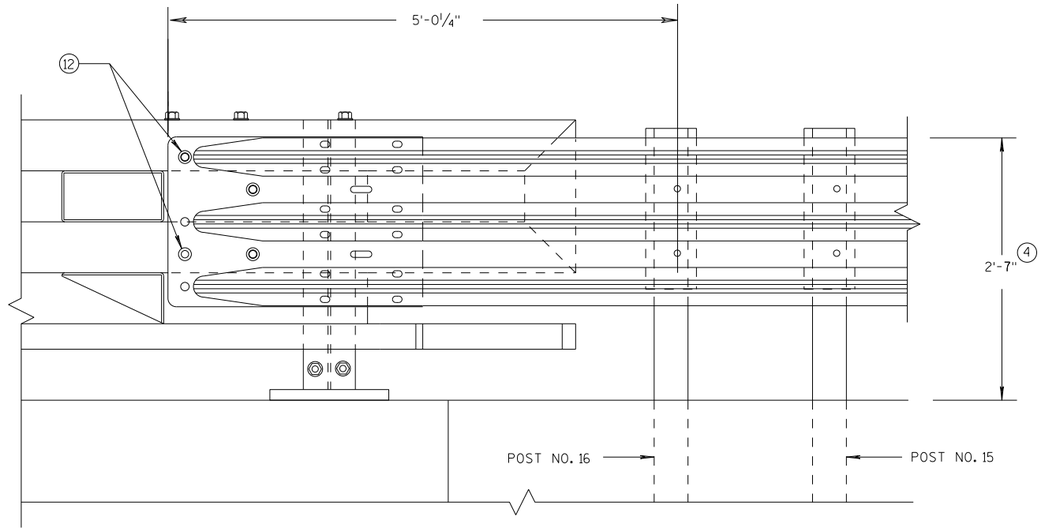
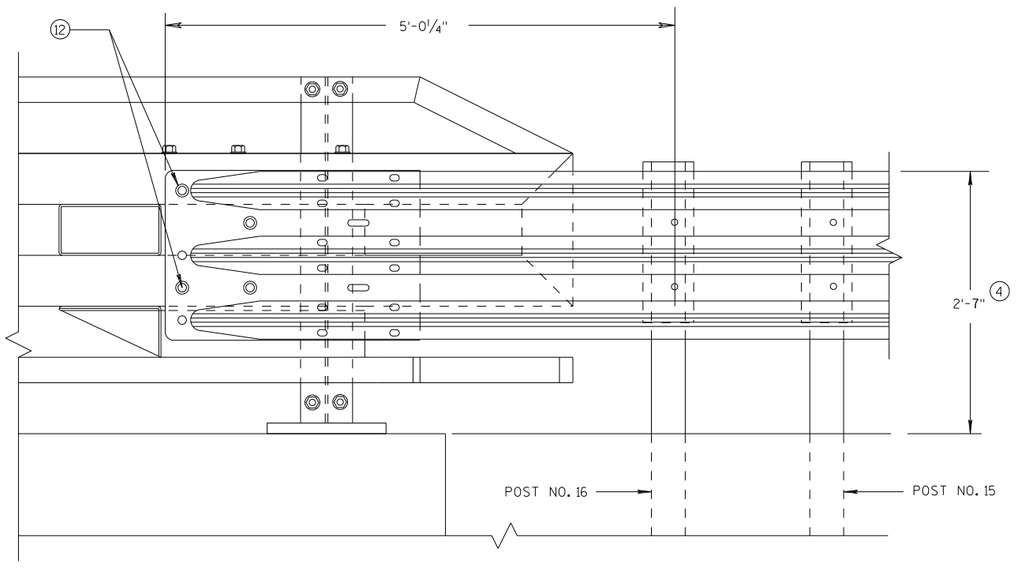
S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
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FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D 256 NT
UNIT SUPERVIS

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

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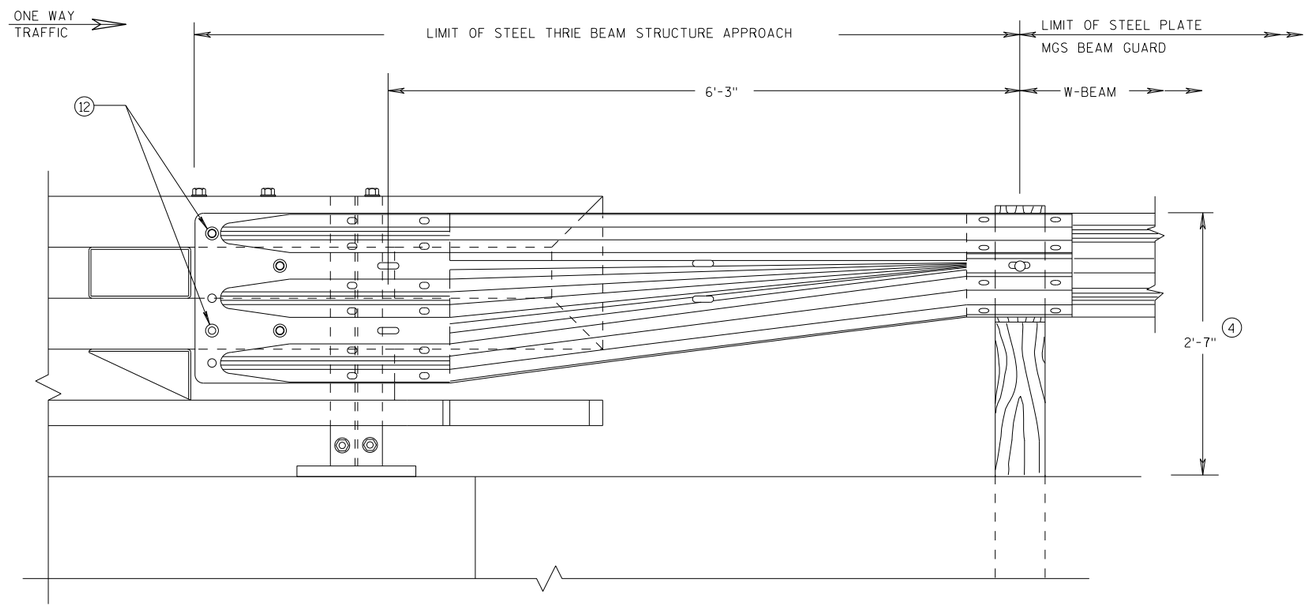
S.D.D. 14 B 45-5k



FRONT VIEW

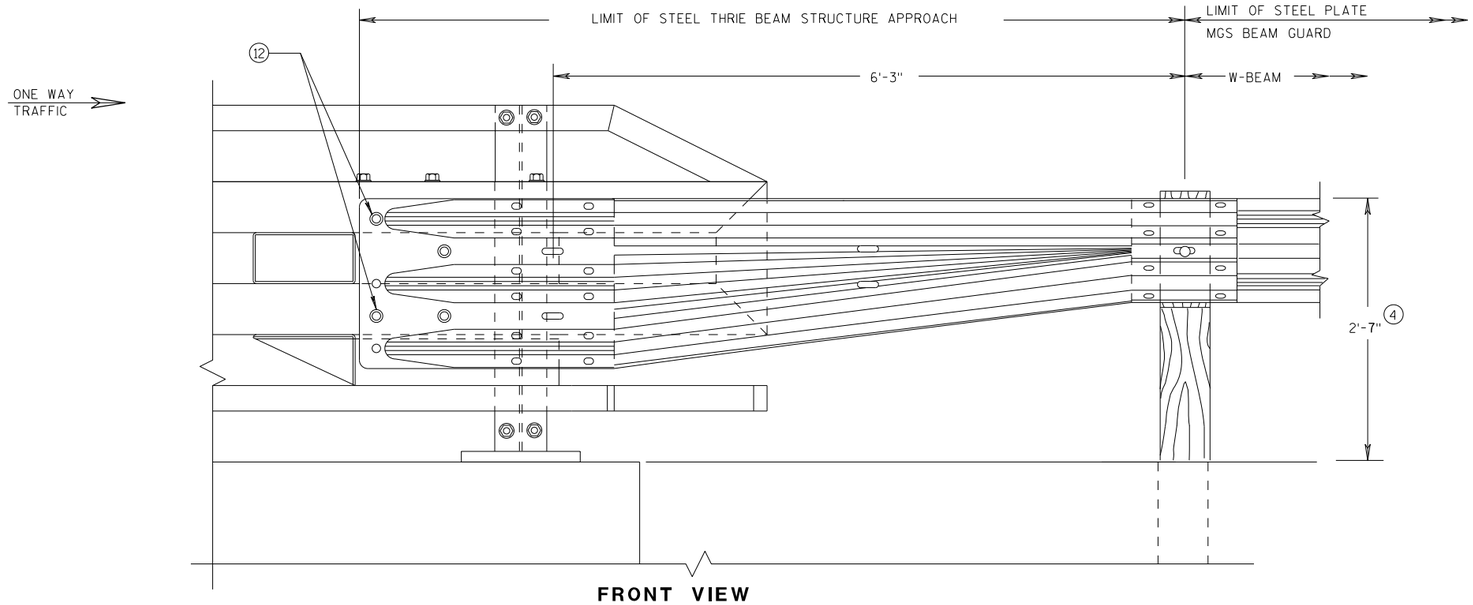
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

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



FRONT VIEW

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS

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

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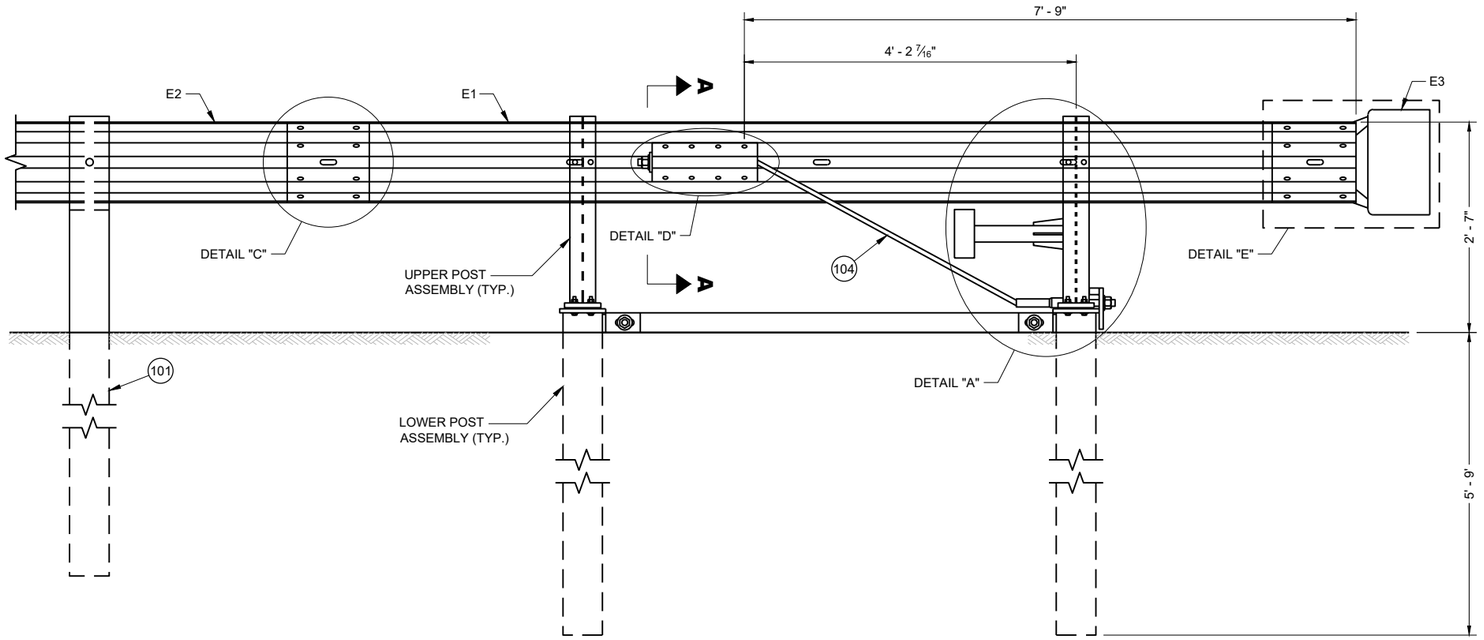
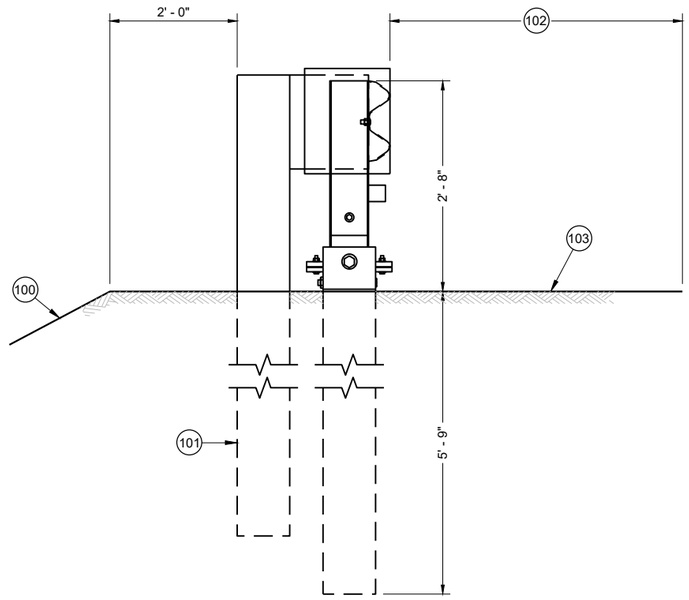
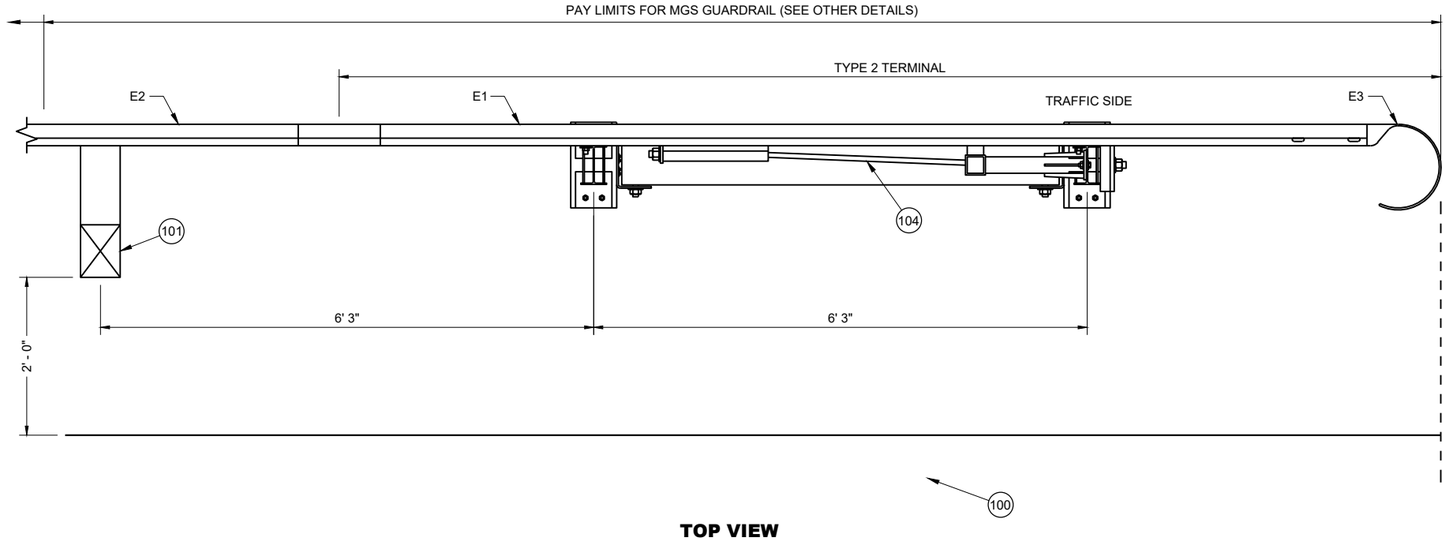
S.D.D. 14 B 45-5L



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

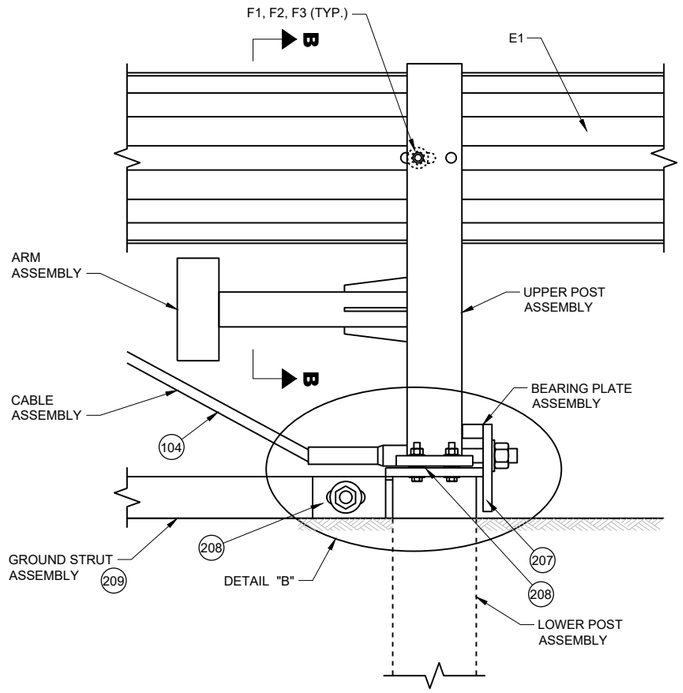
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

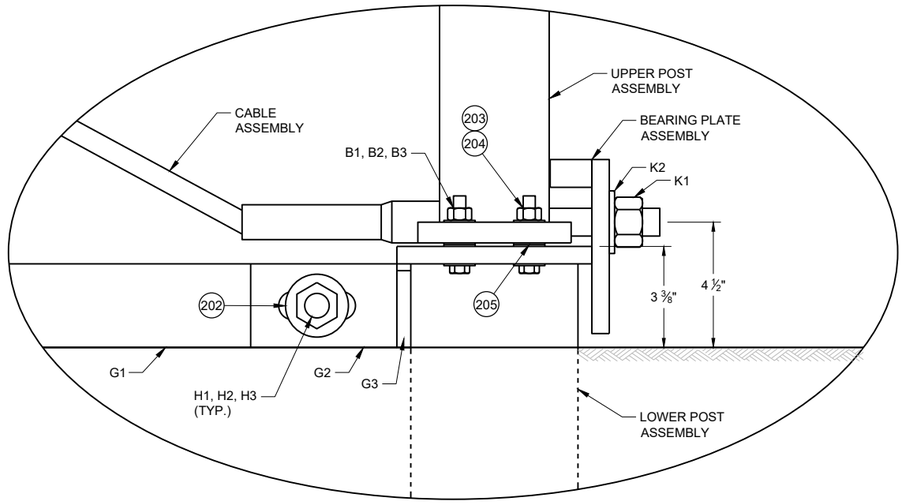
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B47-06a

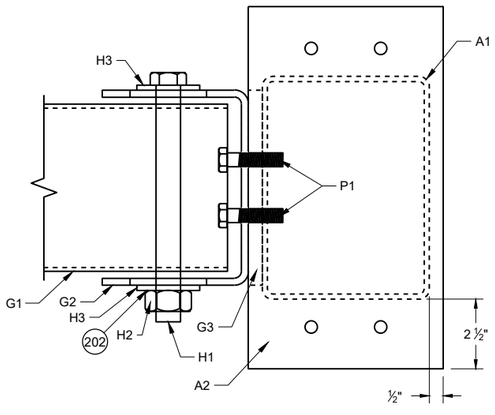


DETAIL "A"



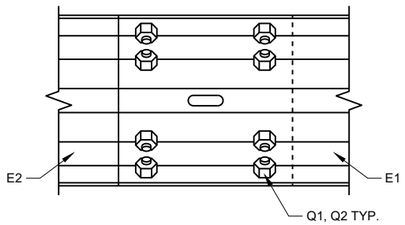
DETAIL "B"

SECTION B - B

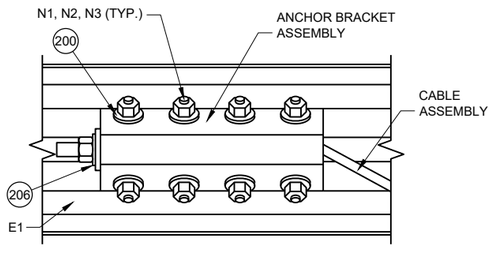


TOP VIEW

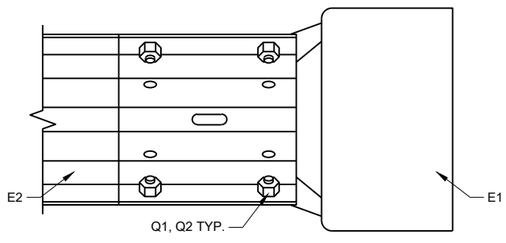
GROUND STRUT CONNECTION DETAIL



DETAIL "C"



DETAIL "D"



DETAIL "E"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

207 NO MATERIAL IS TO BE PLACED AGAINST THE VERTICAL FACES OF BEARING PLATE.

208 PREVENT OR REMOVE MATERIALS THAT BLOCK ACCESS TO BOLTS FOR POST ASSEMBLIES AND GROUND STRUT.

209 PREVENT OR REMOVE MATERIALS THAT IMPEDE REMOVAL OF GROUND STRUT.

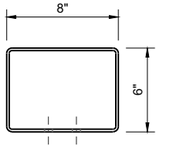
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

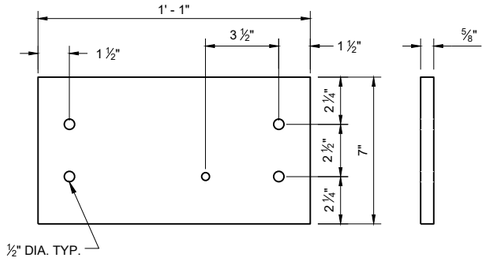
6
SDD 14B47-06b

GENERAL NOTES

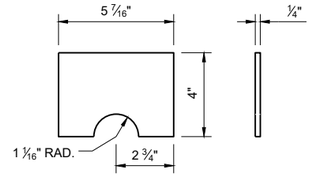
(300) TAP FOR 1/2" AFTER GALVANIZATION



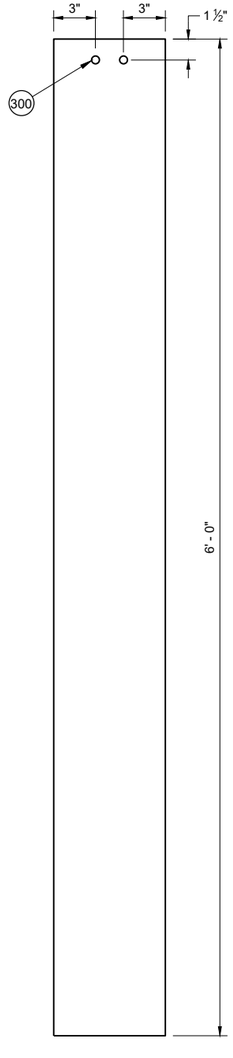
TOP VIEW



LOWER PLATE (A2)

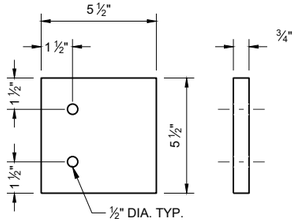


POST GUSSET (A3)

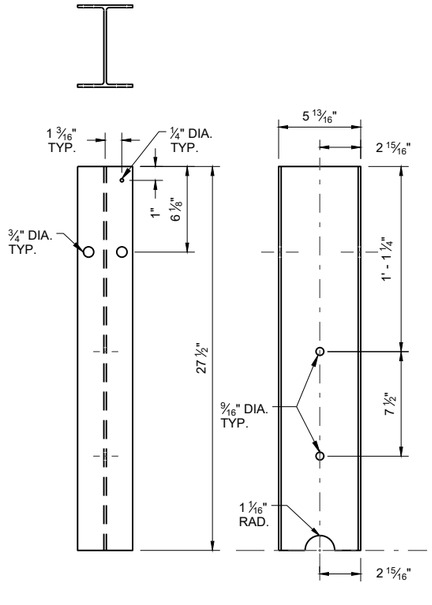


SIDE VIEW

FOUNDATION TUBE (A1)

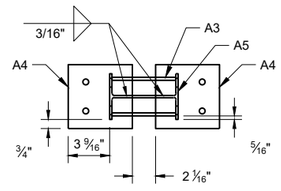


UPPER PLATE (A4)

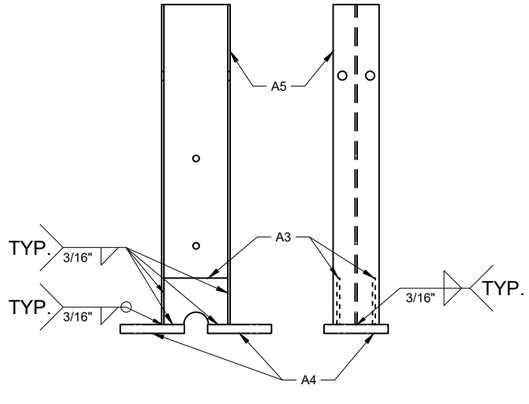


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

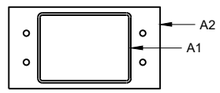


PLAN VIEW

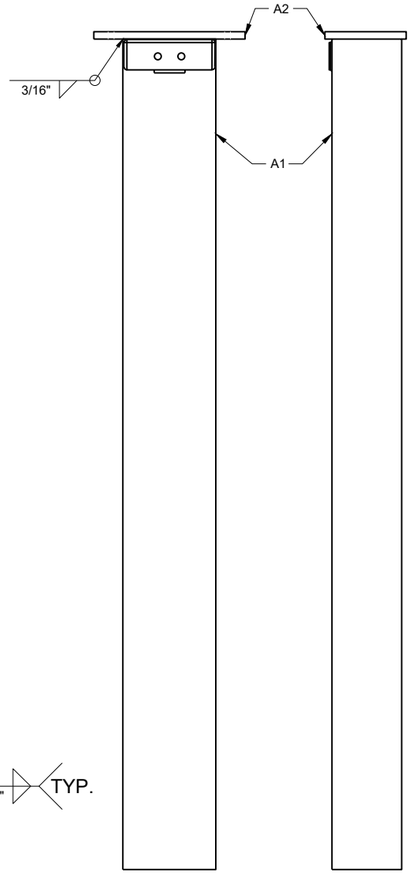


SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY

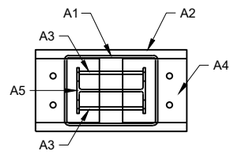


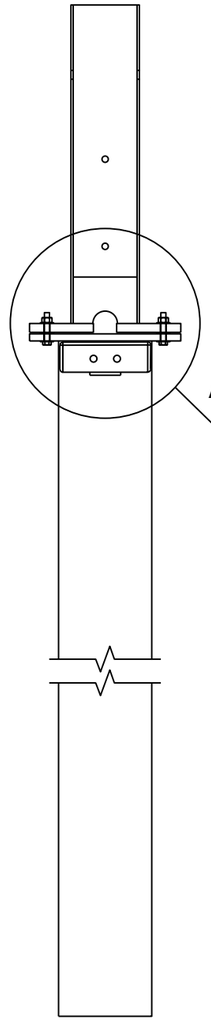
PLAN VIEW



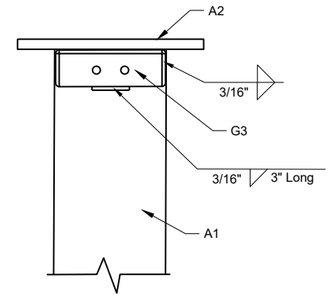
FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY

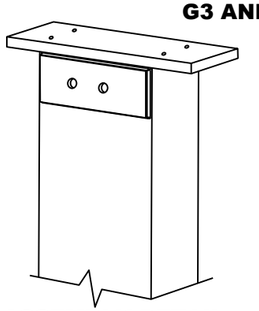




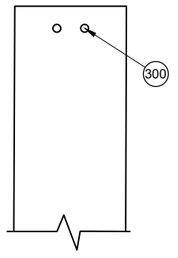
ASSEMBLED POST



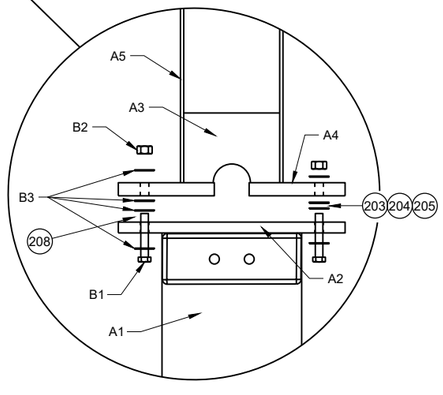
WELDING DETAIL G3 AND A1



ASSEMBLY DETAIL ISOMETRIC



A1

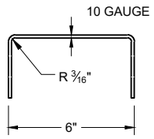


POST CONNECTION DETAIL

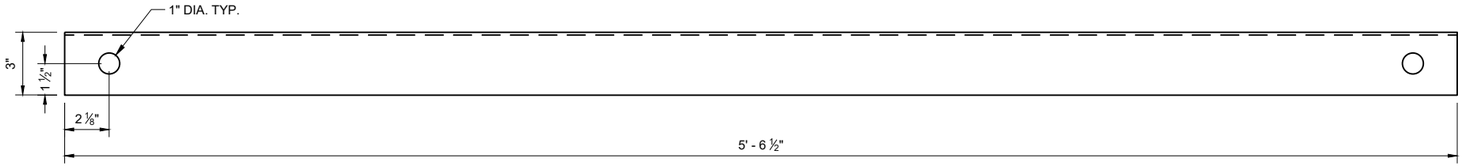
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B47-06c

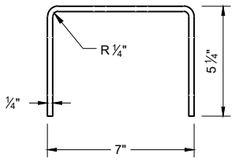


SIDE VIEW

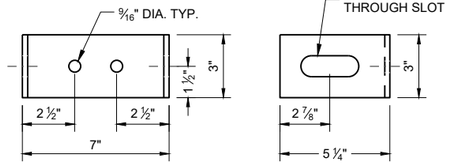


FRONT VIEW

GROUND STRUT CHANNEL (G1)

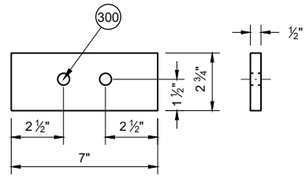


TOP VIEW

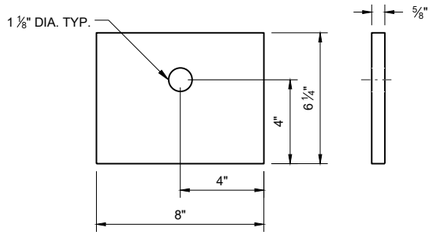


FRONT VIEW SIDE VIEW

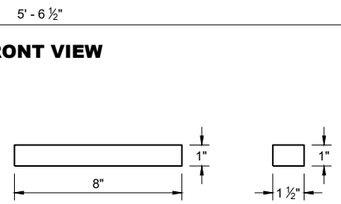
GROUND STRUT CONNECTOR (G2)



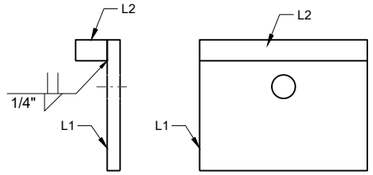
GROUND STRUT PLATE (G3)



BEARING PLATE (L1)

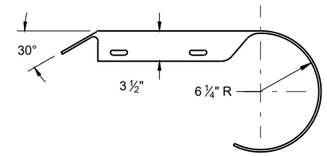


BEARING PLATE FLANGE (L2)

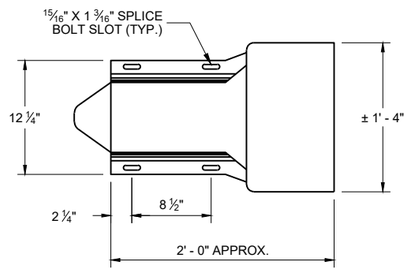


SIDE VIEW FRONT VIEW

BEARING PLATE ASSEMBLY



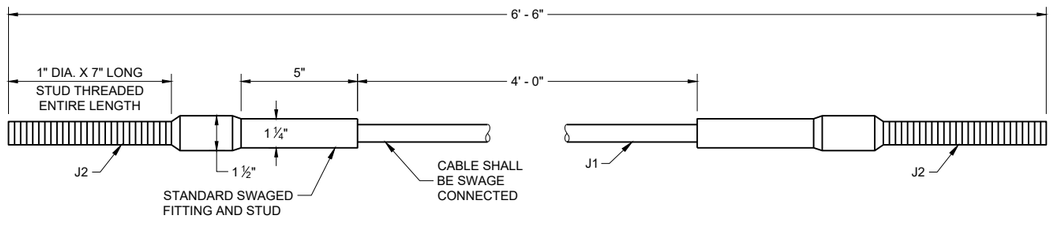
PLAN VIEW



ELEVATION VIEW

ROUNDED BUFFER END (E3)

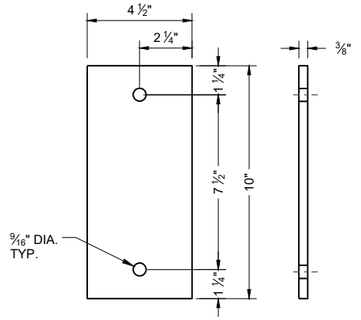
TYPE 2 GUARDRAIL (E1)



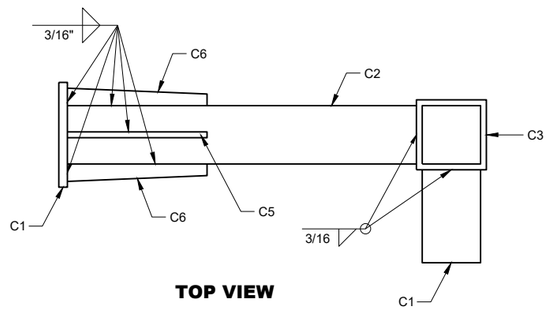
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

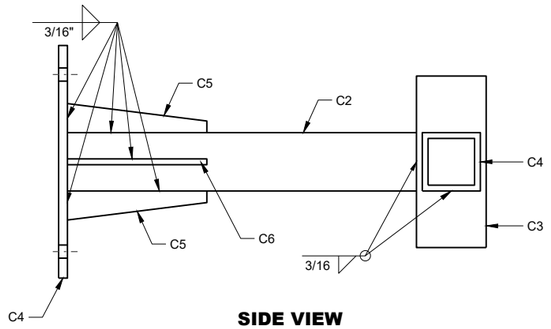
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



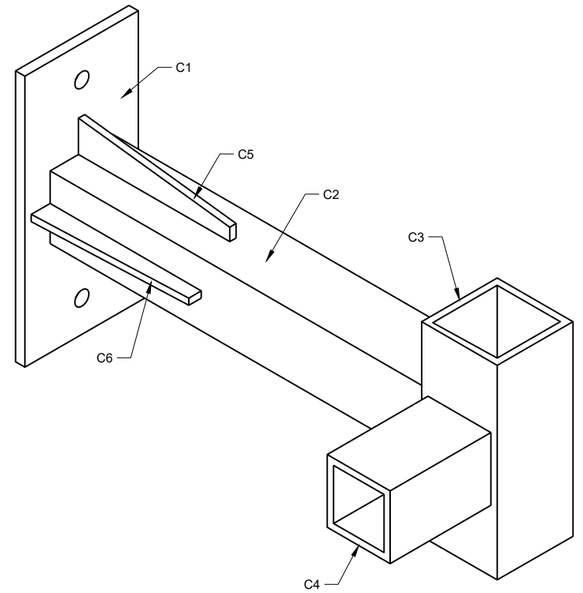
ARM PLATE (C1)



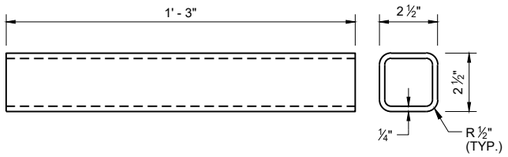
TOP VIEW
ARM ASSEMBLY



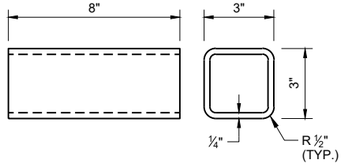
SIDE VIEW
ARM ASSEMBLY



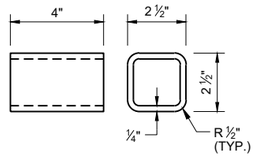
ISOMETRIC VIEW
ARM ASSEMBLY



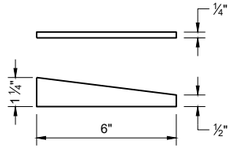
ARM TUBE 1 (C2)



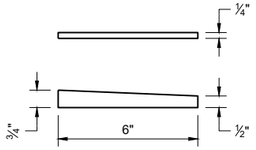
ARM TUBE 2 (C3)



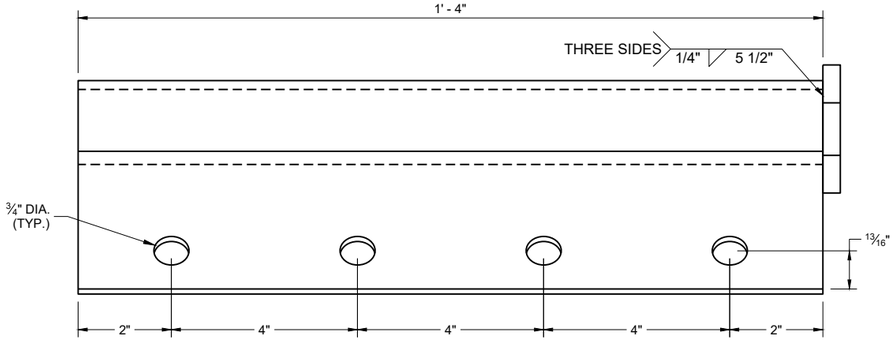
ARM TUBE 3 (C4)

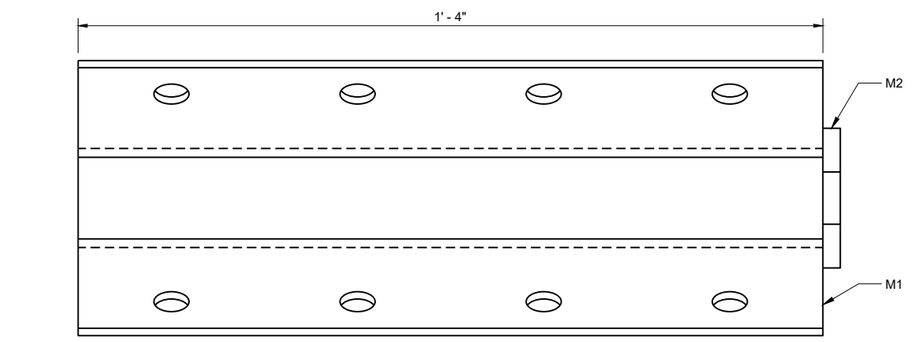


ARM GUSSET PLATE 1 (C5)

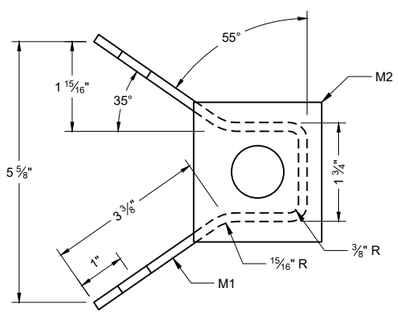


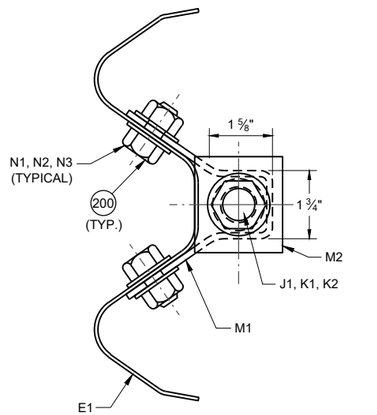
ARM GUSSET PLATE 2 (C6)

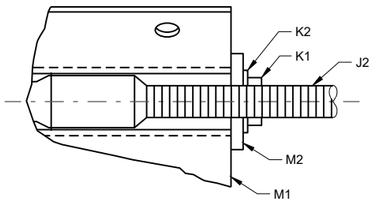




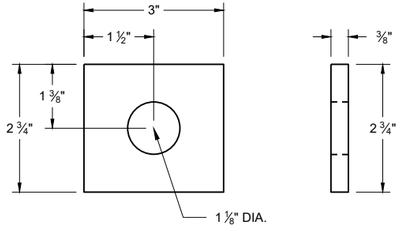
ANCHOR BRACKET (M1, M2)







SECTION A - A



ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47-06e

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
A3	POST GUSSET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
A4	UPPER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/4" THICKNESS
A5	TYPE 2 POST	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI, w6x9 or w6x8.5	
B1	BREAKAWAY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED . PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	7/16" DIA.
B2	BREAKAWAY BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/16" DIA.
B3	BREAKAWAY BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
C1	ARM ASSEMBLY PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
D1	ARM ASSEMBLY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	1/2" DIA.
D2	ARM ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	1/2" DIA.
D3	ARM ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	POST BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
F3	POST BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
G1	GROUND STRUT CHANNEL	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
G3	GROUND STRUT PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" THICKNESS

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47-06f

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	3/4" DIA.
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
L2	BEARING PLATE FLANGE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	
M2	BEAM GUARD ANCHOR END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

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SDD 14B47-06g

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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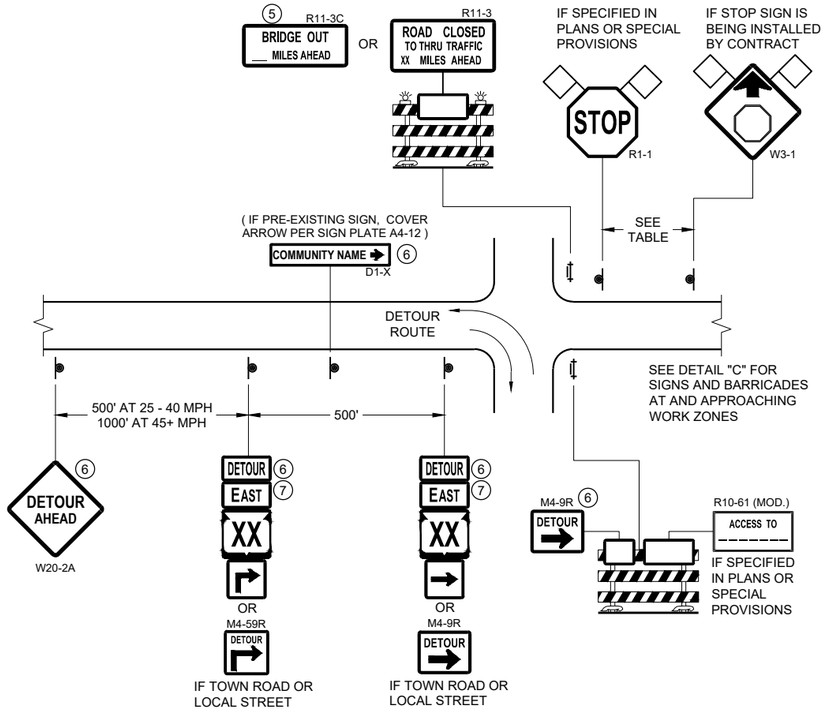
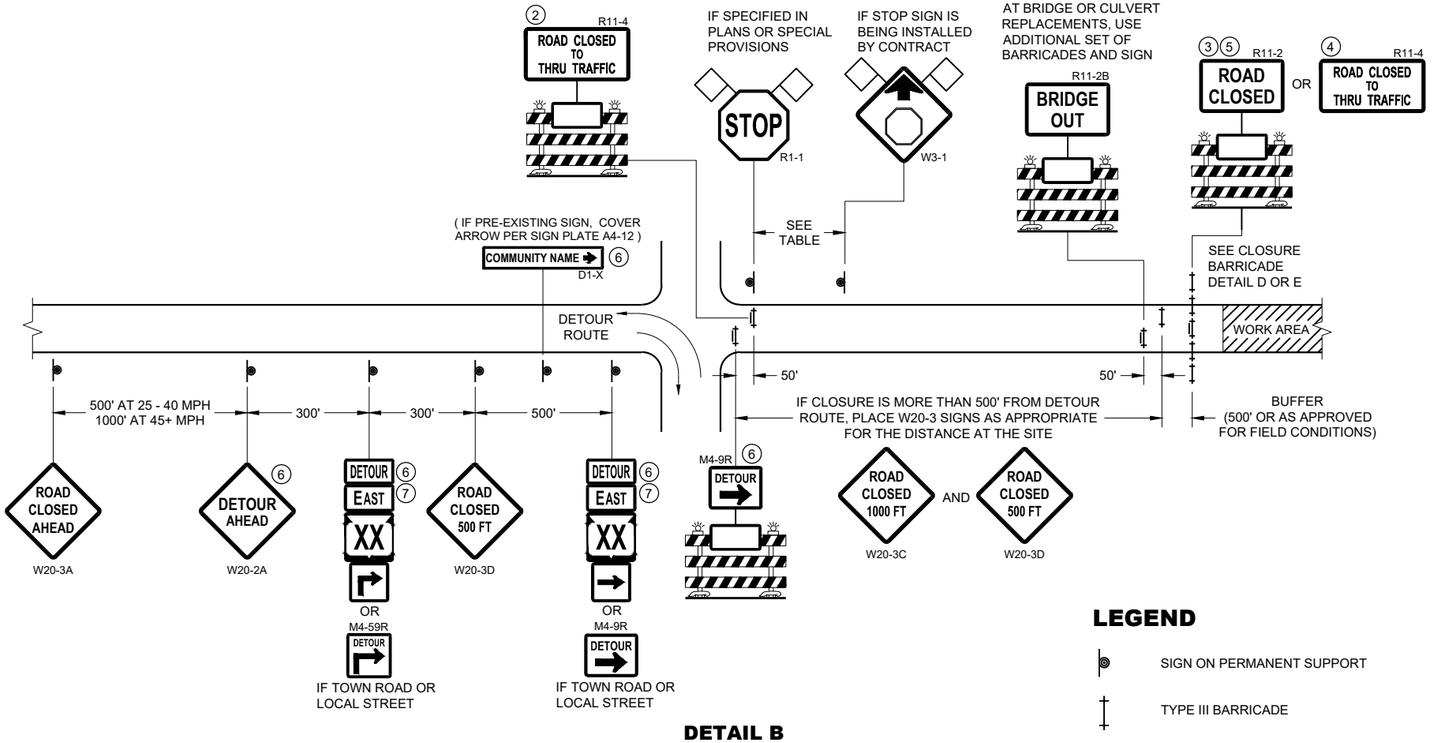
SDD 14B47-06g



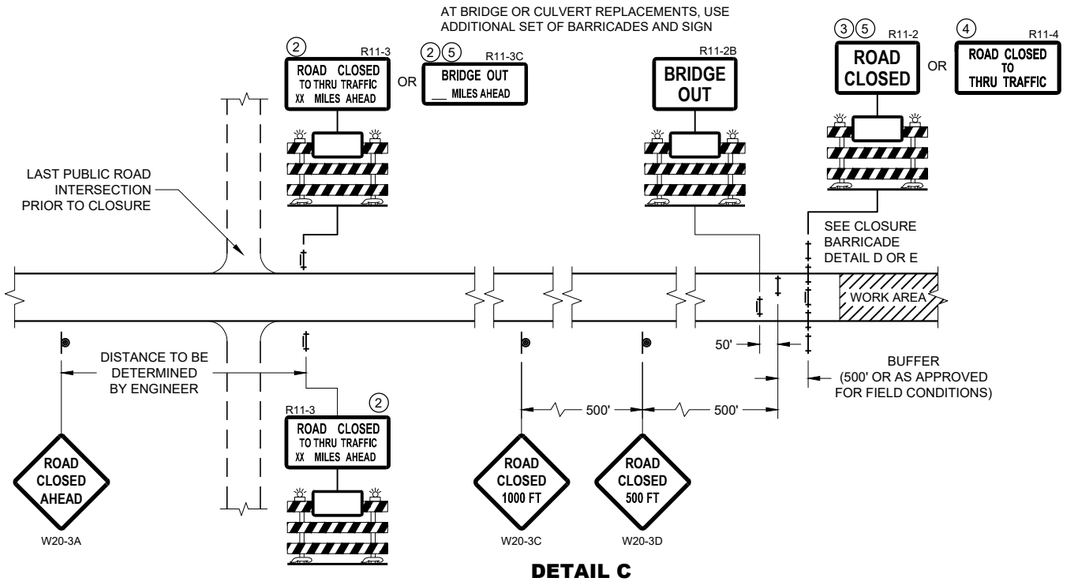
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

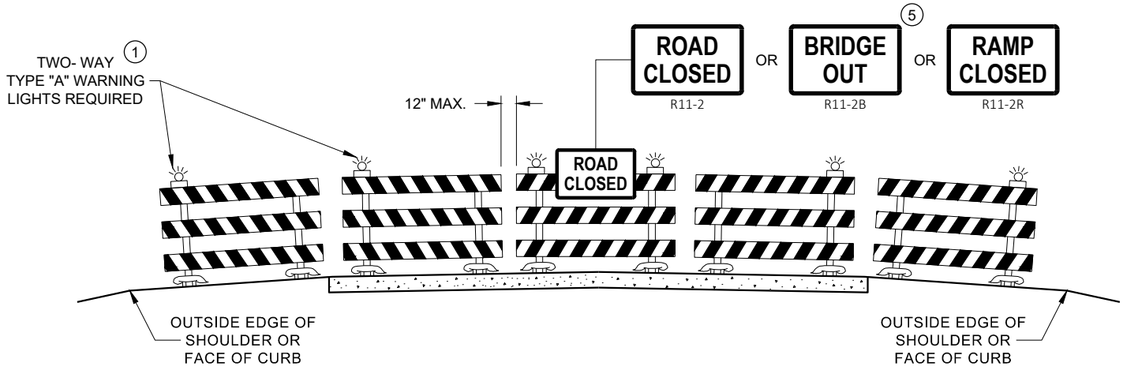
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

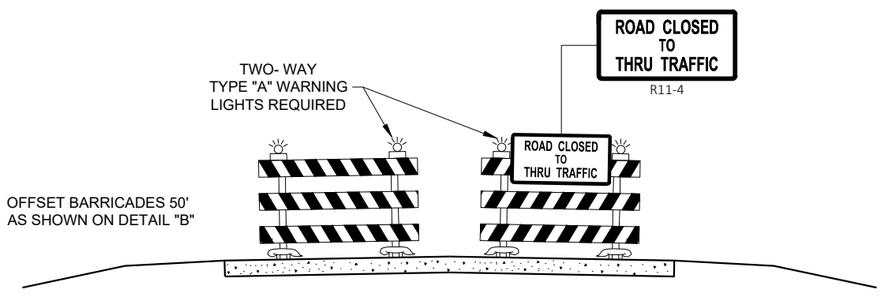
FHWA

SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

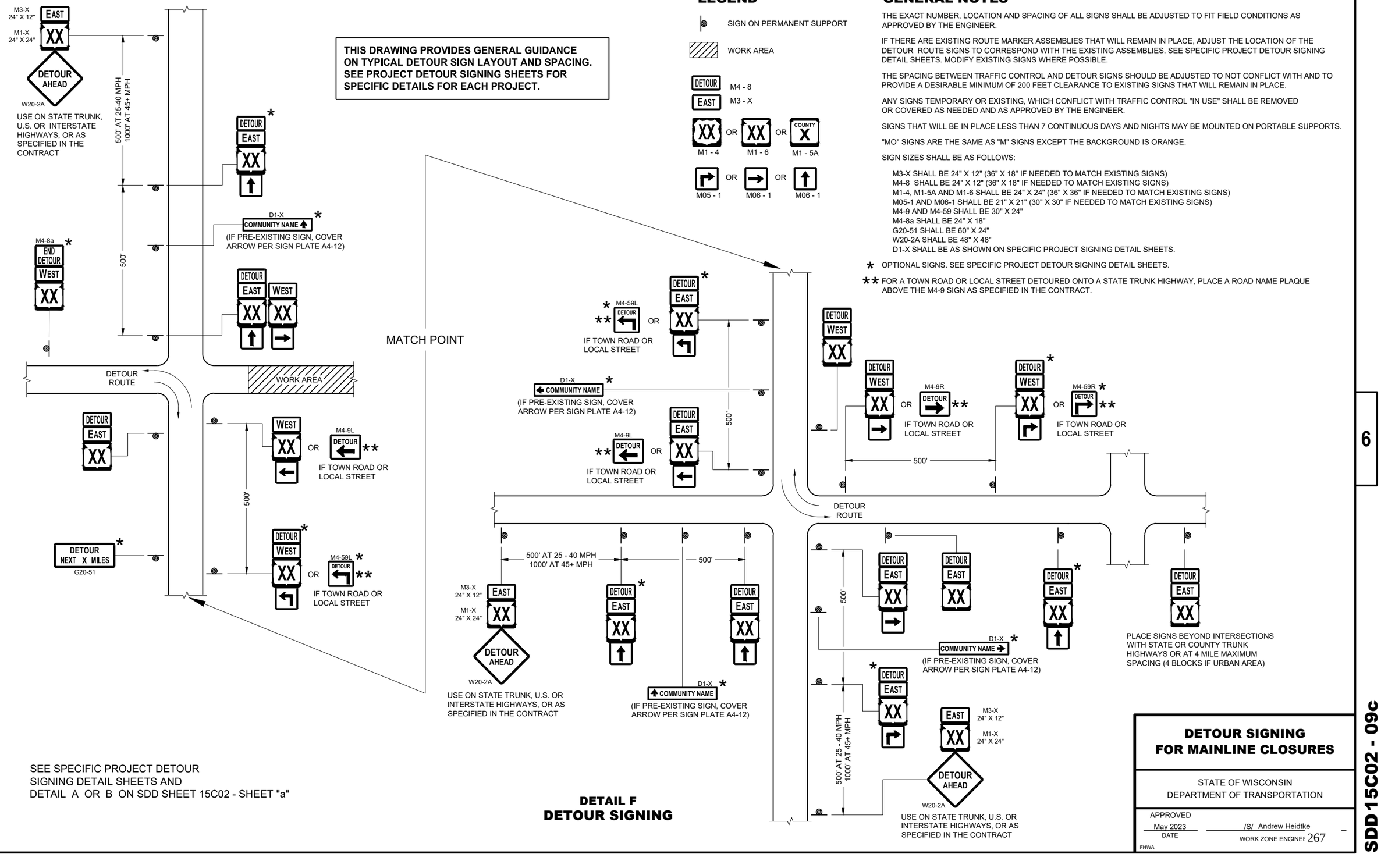
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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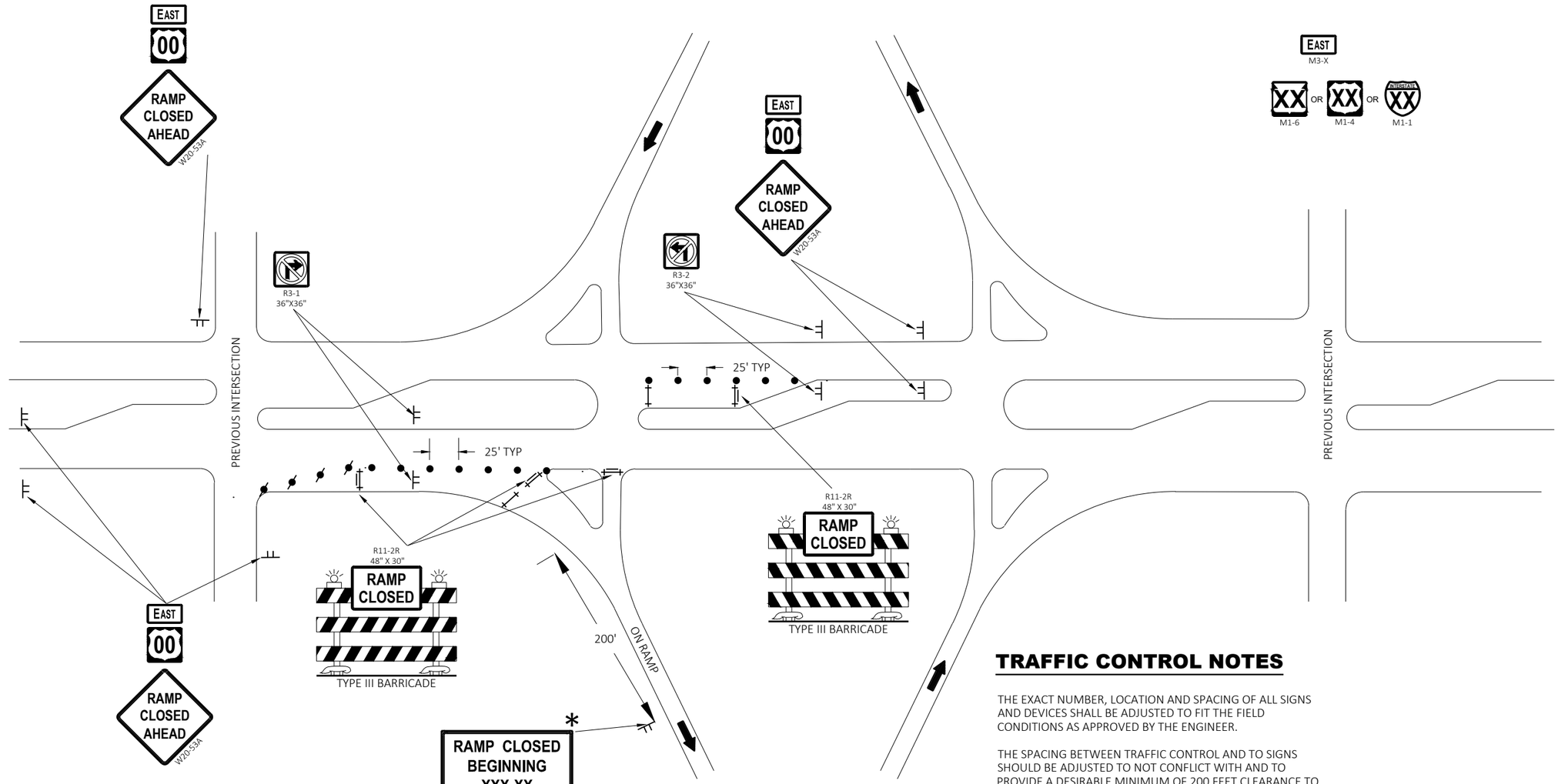
SDD 15C02 - 09c



LEGEND

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

TRAFFIC CONTROL NOTES

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

FHWA

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SDD 15C02-09g

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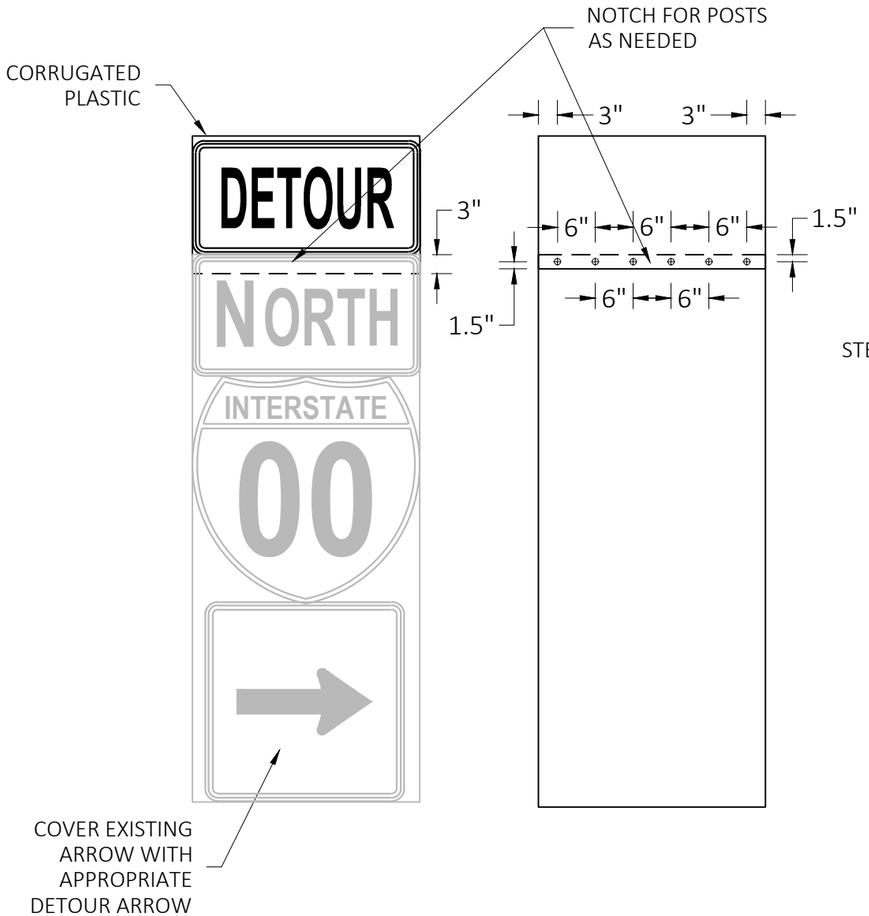
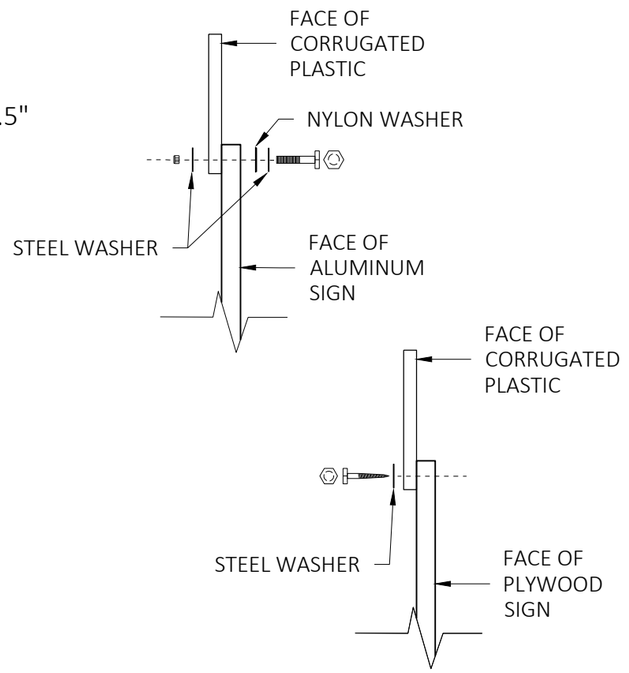
FRONT SIDE

BACK SIDE

SIDE VIEW





GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3.

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1-1/4" O.D. x 3/8" I.D. x .080 NYLON

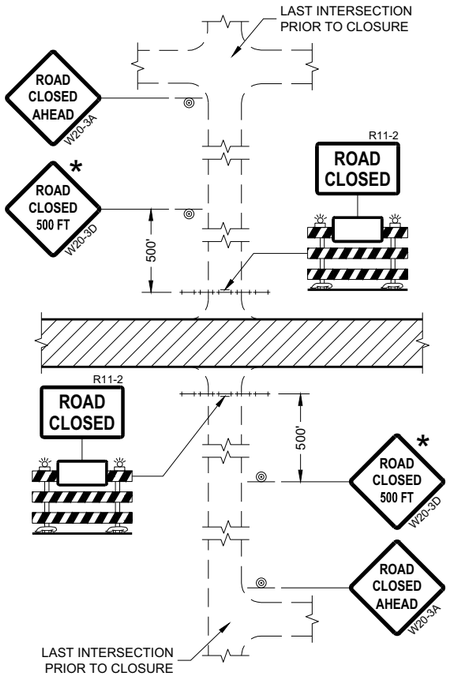
MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

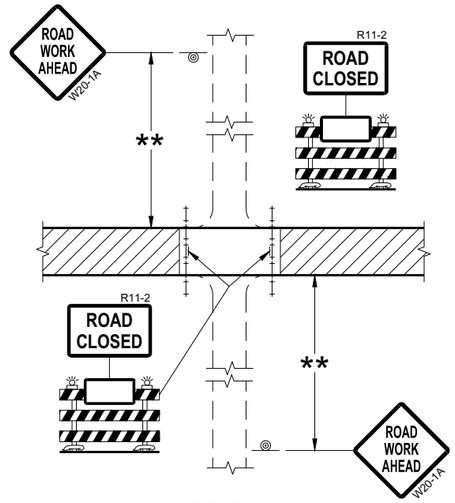
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA

6
SDD 15C02-09h



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

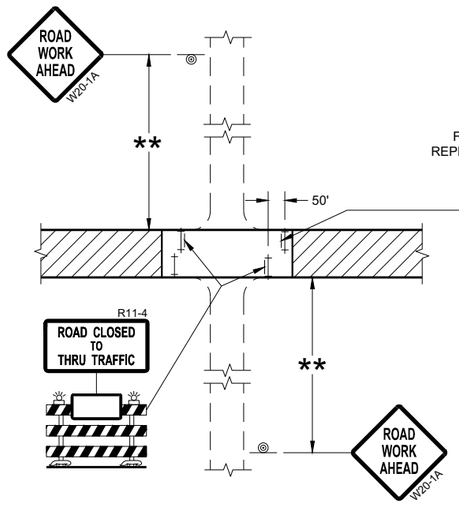
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

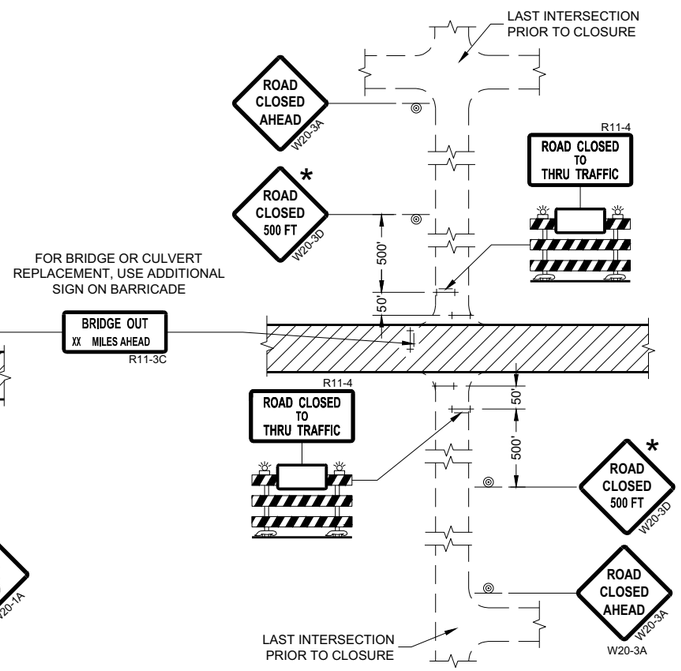
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.





DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

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.

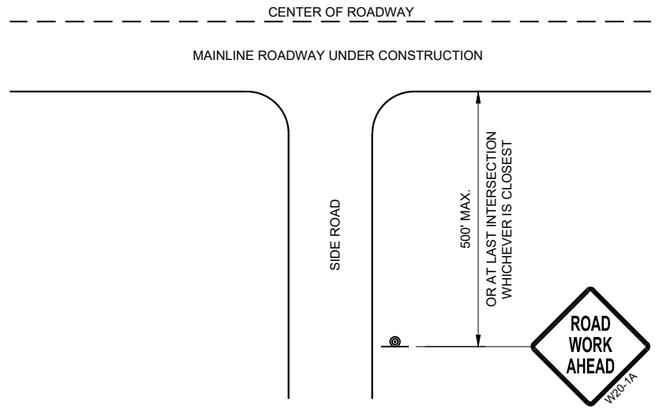
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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.



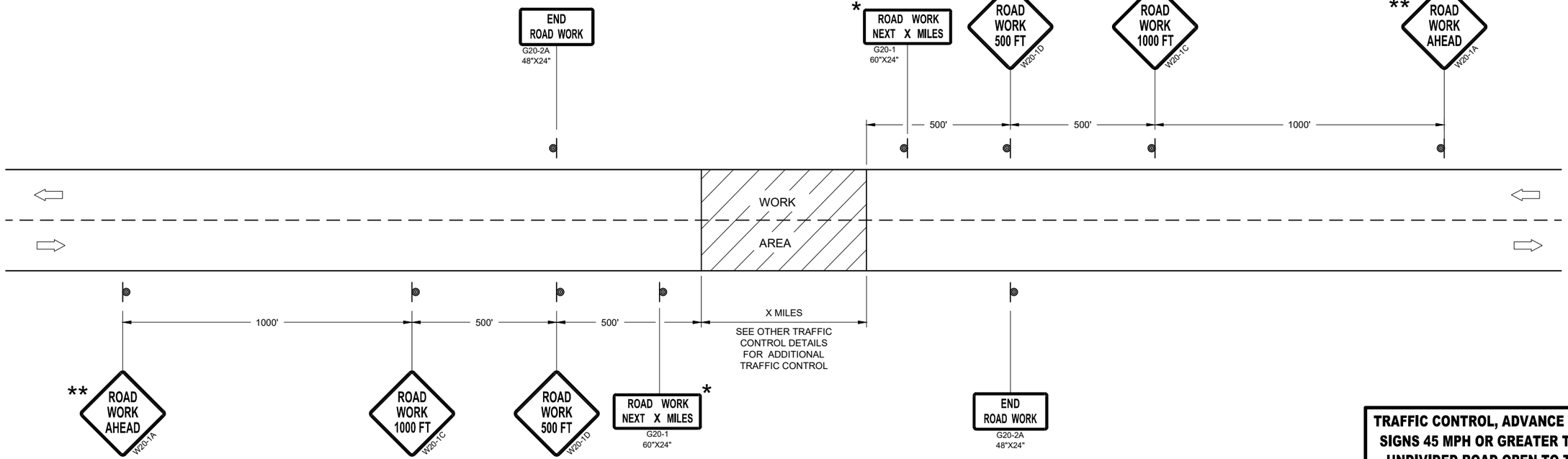
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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

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

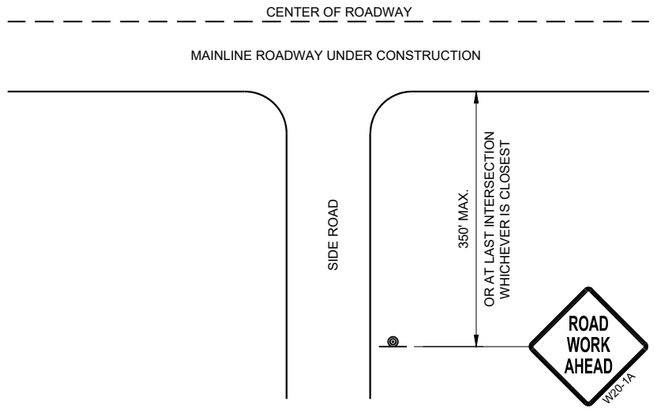
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

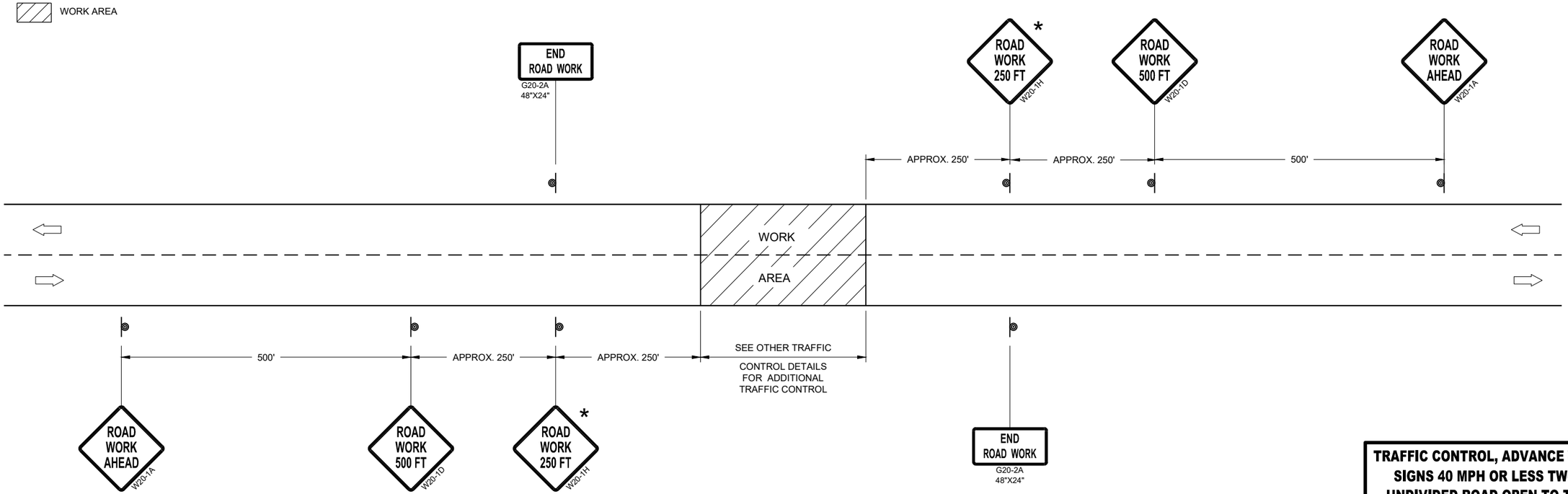
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

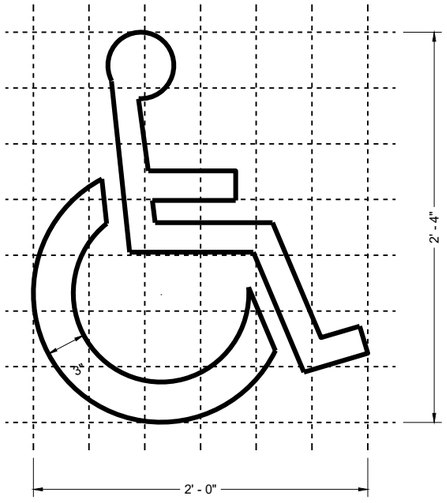
FHWA

6

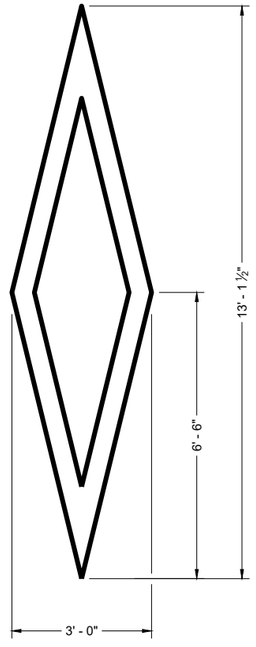
SDD 15C05 - 05

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

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SDD 15C07-16a

SDD 15C07-16a

PAVEMENT MARKING SYMBOLS

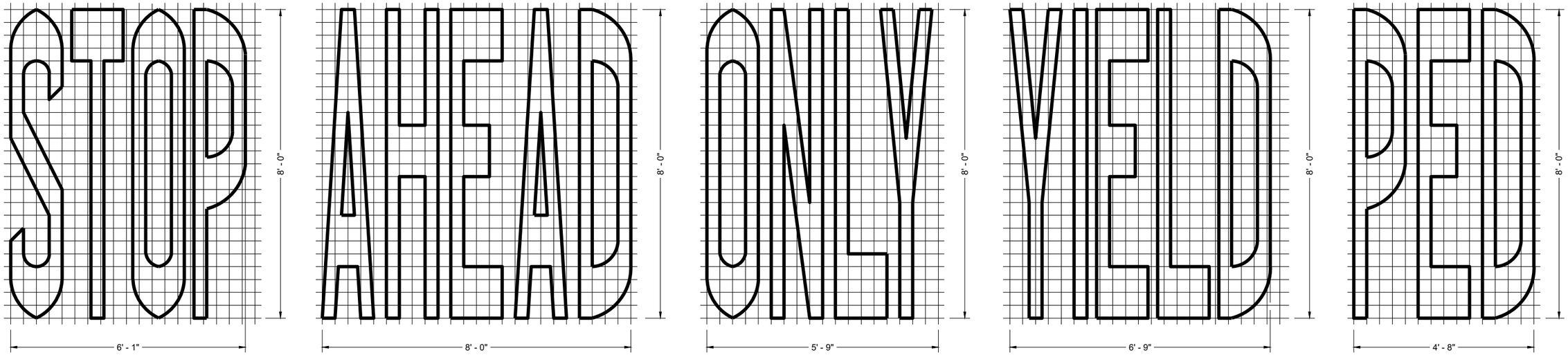
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

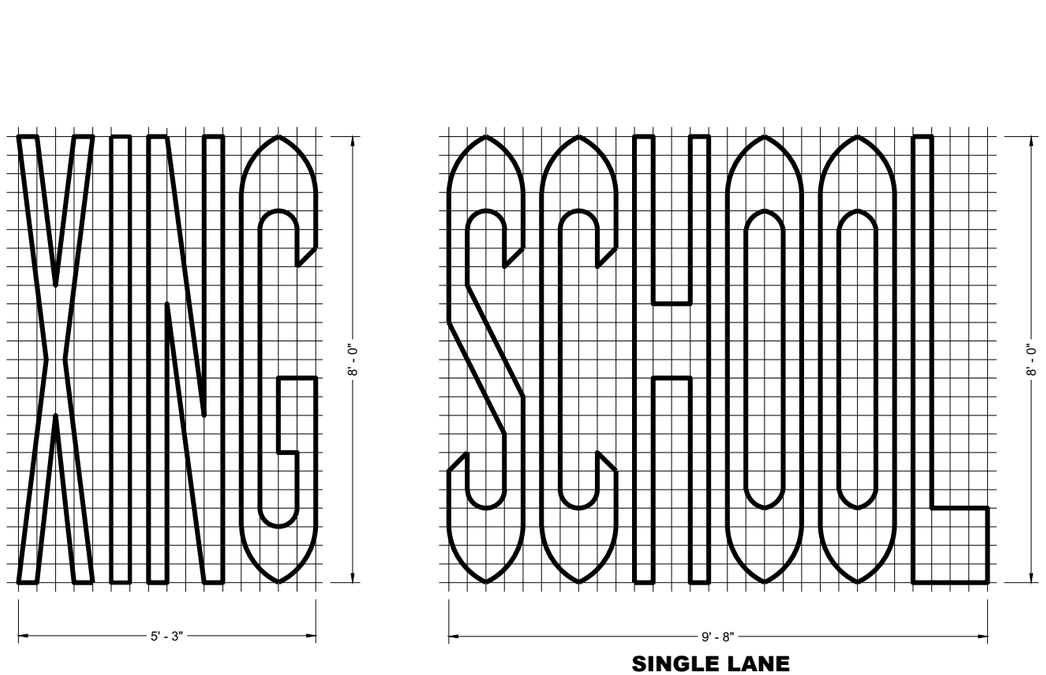
APPROVED

November 2024
DATE

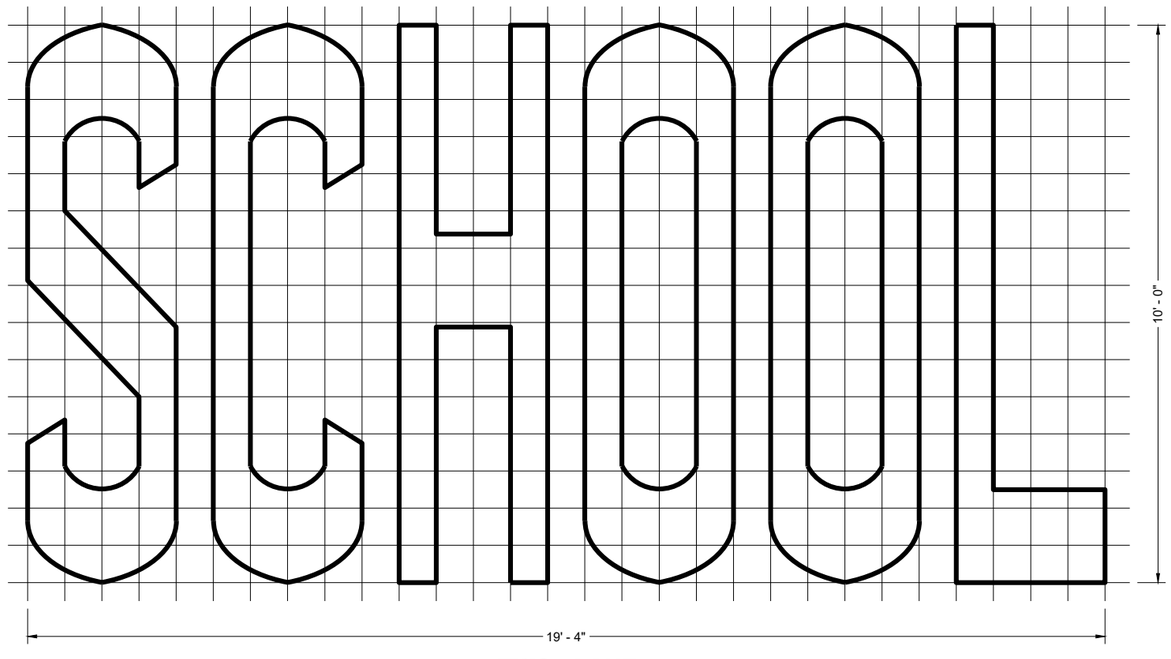
/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

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

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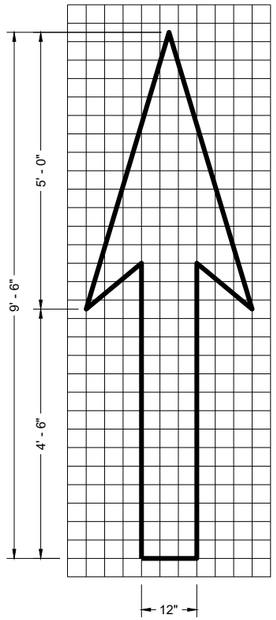
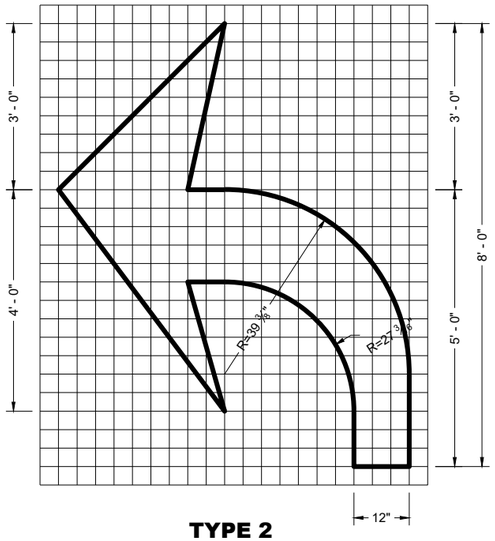
SDD 15C07-16b

6

SDD 15C07-16b



TYPE 1



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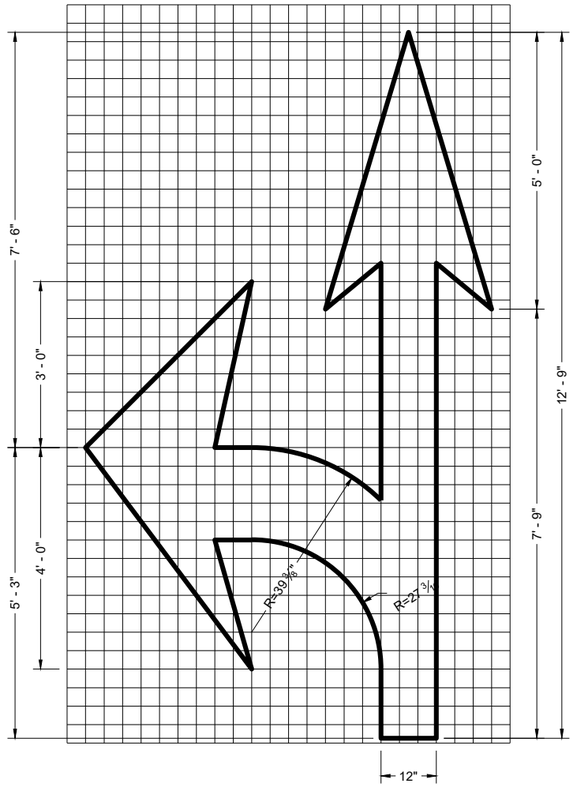
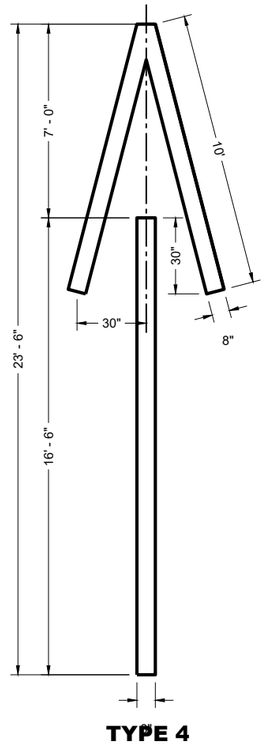


TYPE 3

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.



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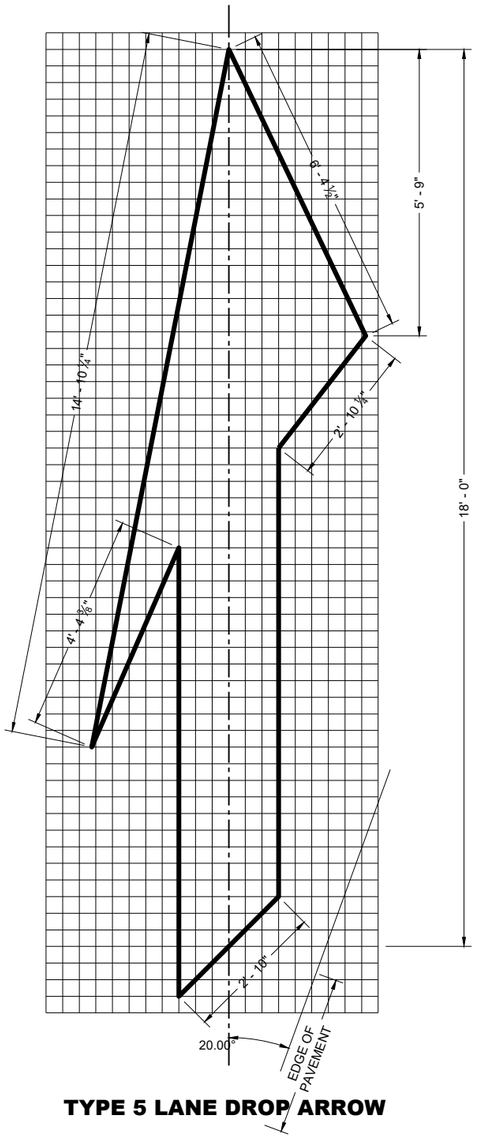
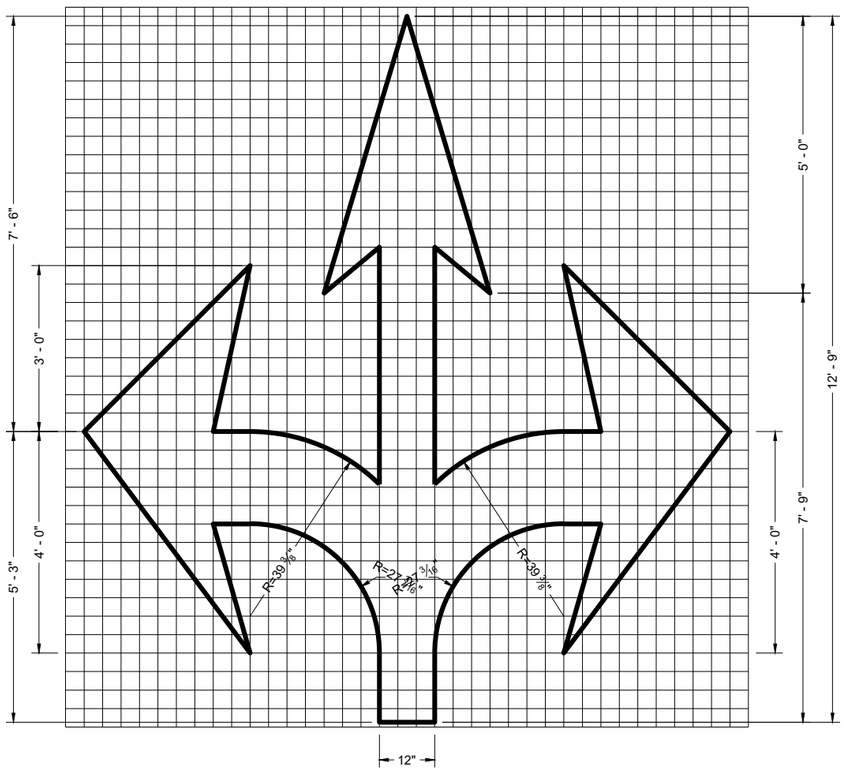
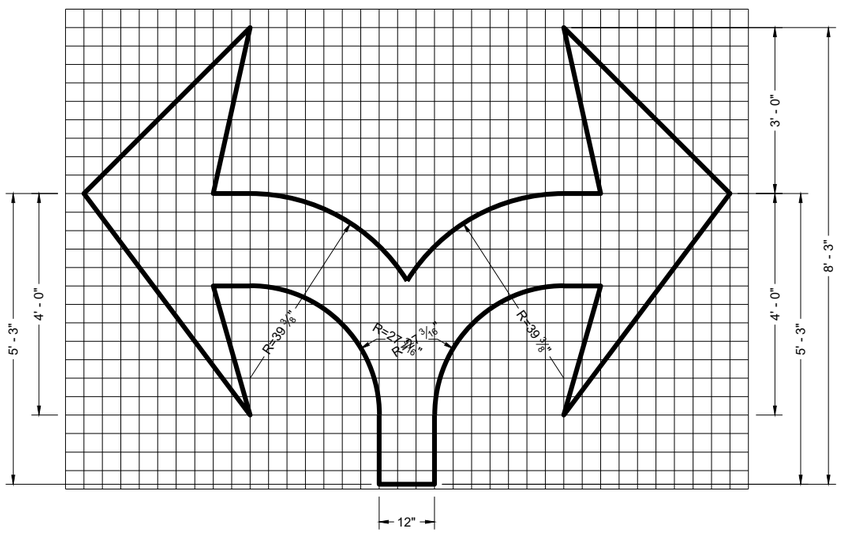


TYPE 5 LANE DROP ARROW



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

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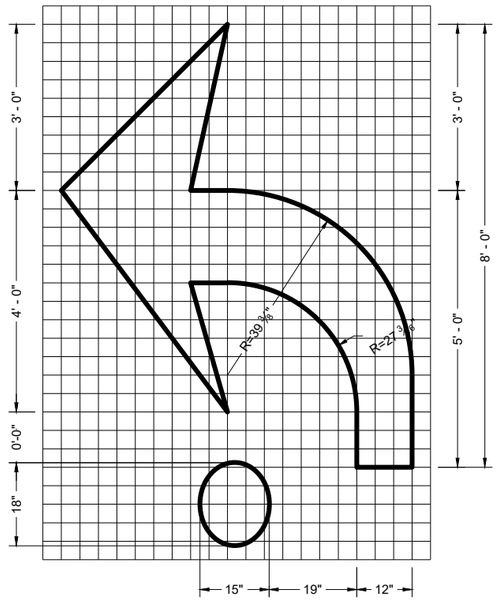
6

SDD 15C07-16c

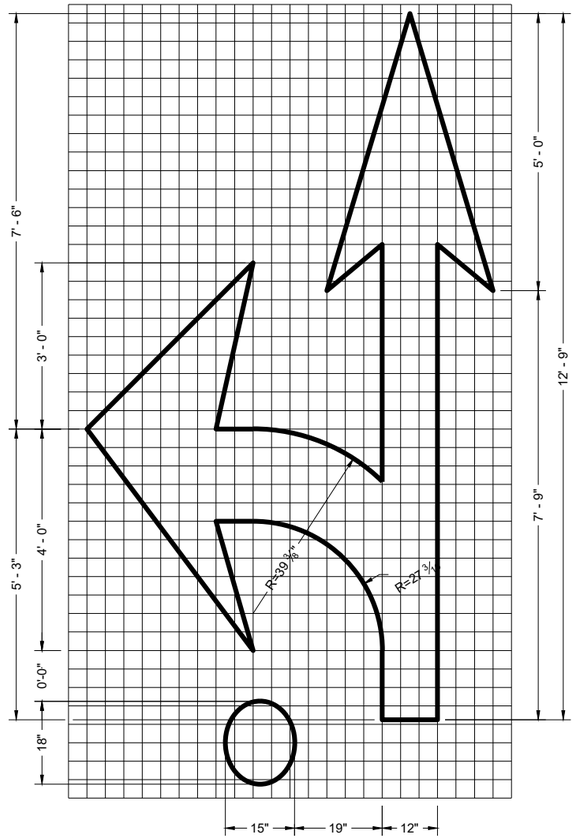
SDD 15C07-16c

GENERAL NOTES

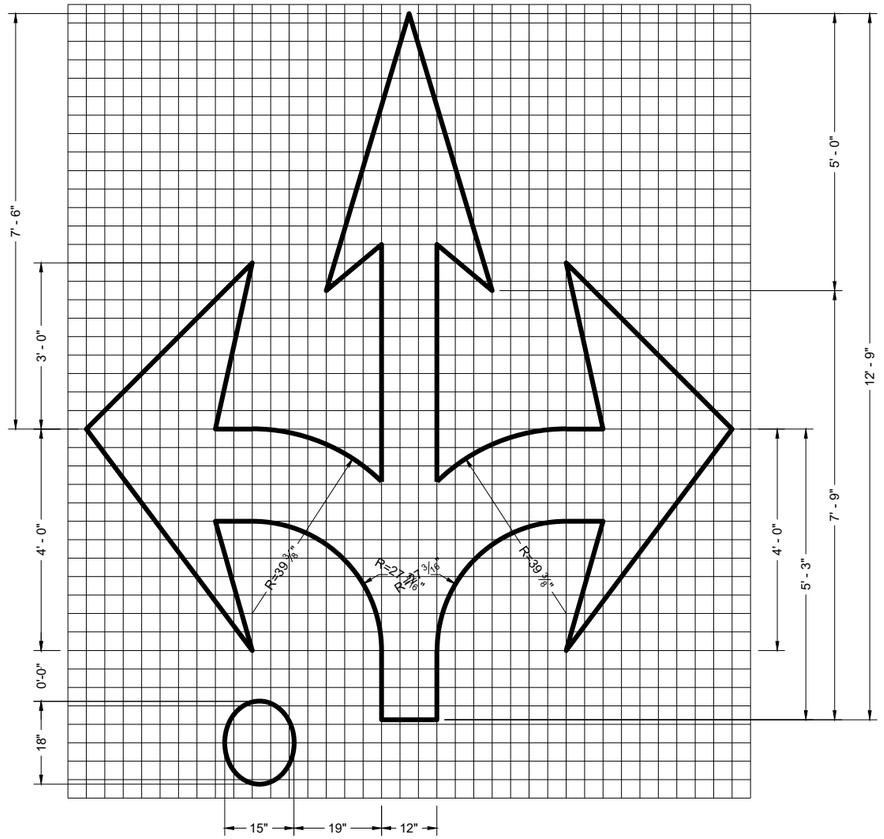
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



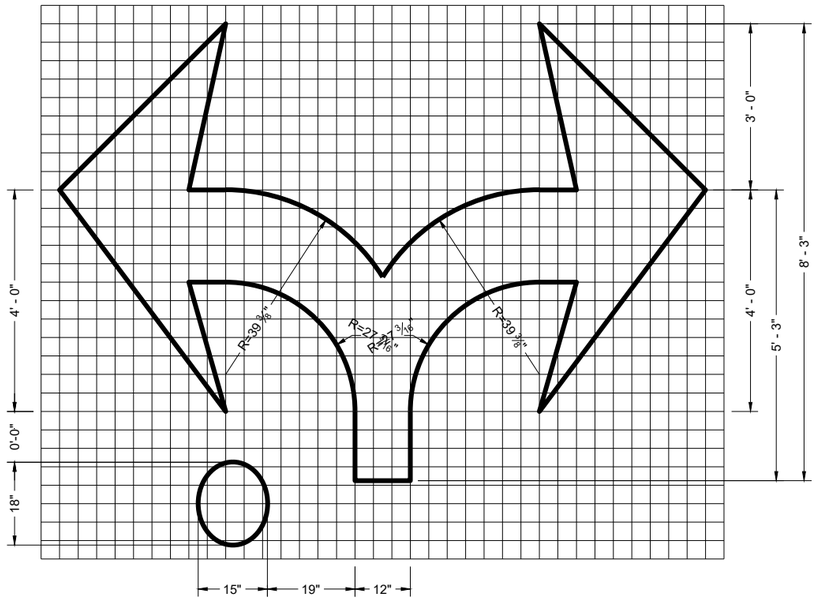
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07-16d

6

SDD 15C07-16d

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.

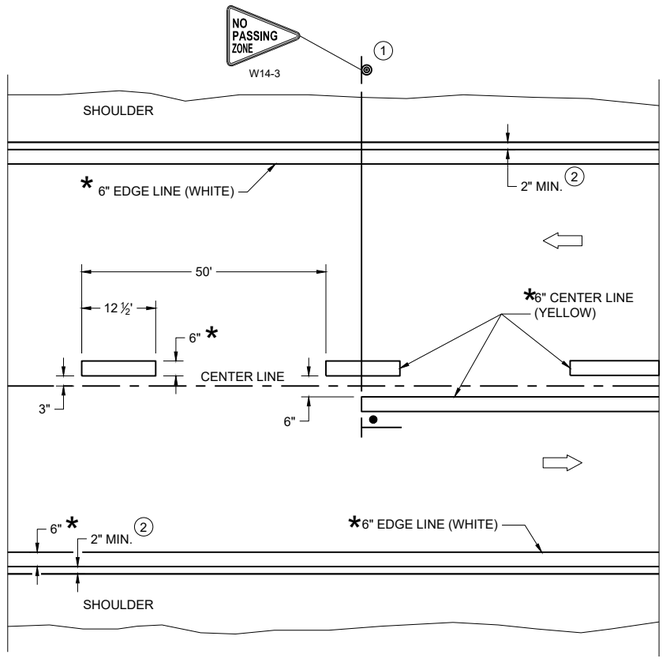
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

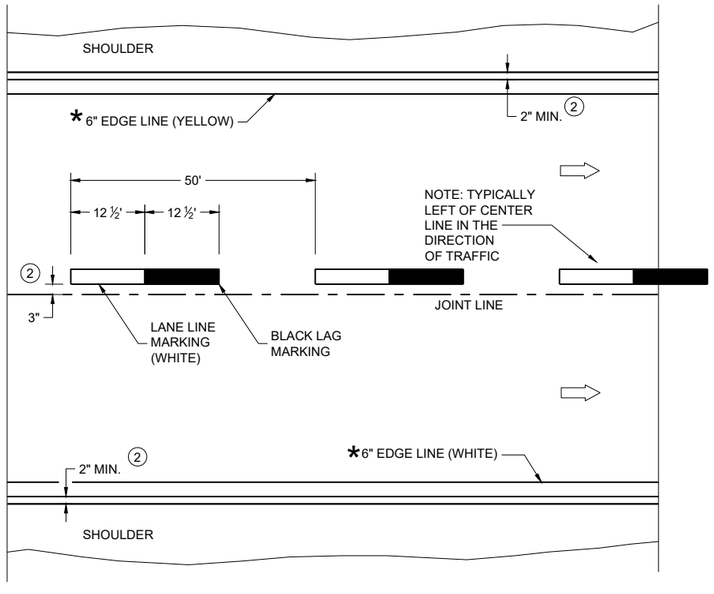
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

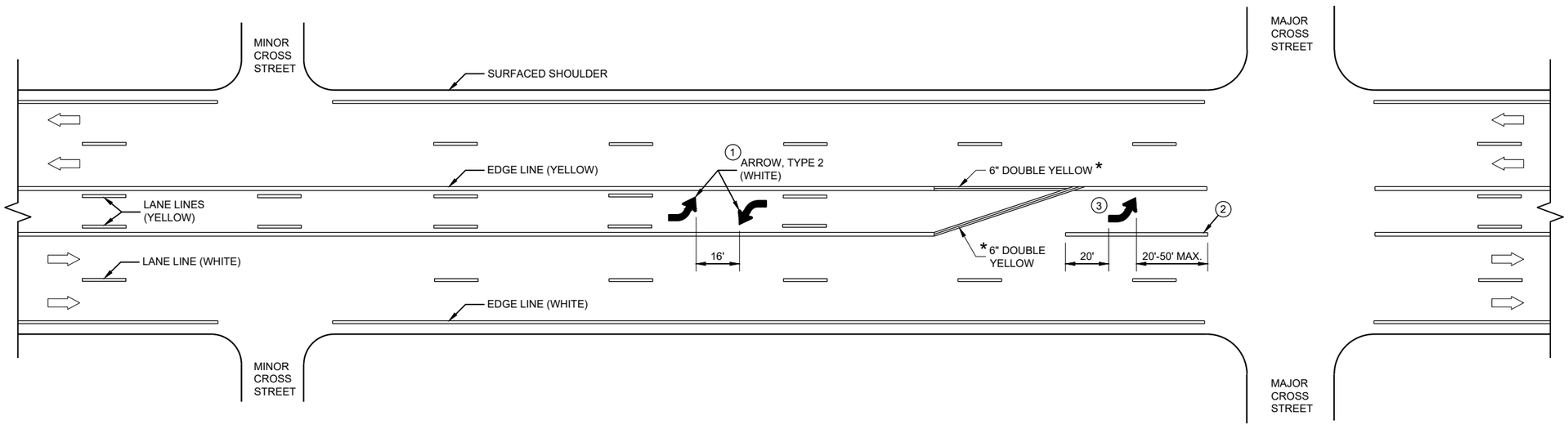
SDD 15C08-23a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 278

SDD 15C08-23c

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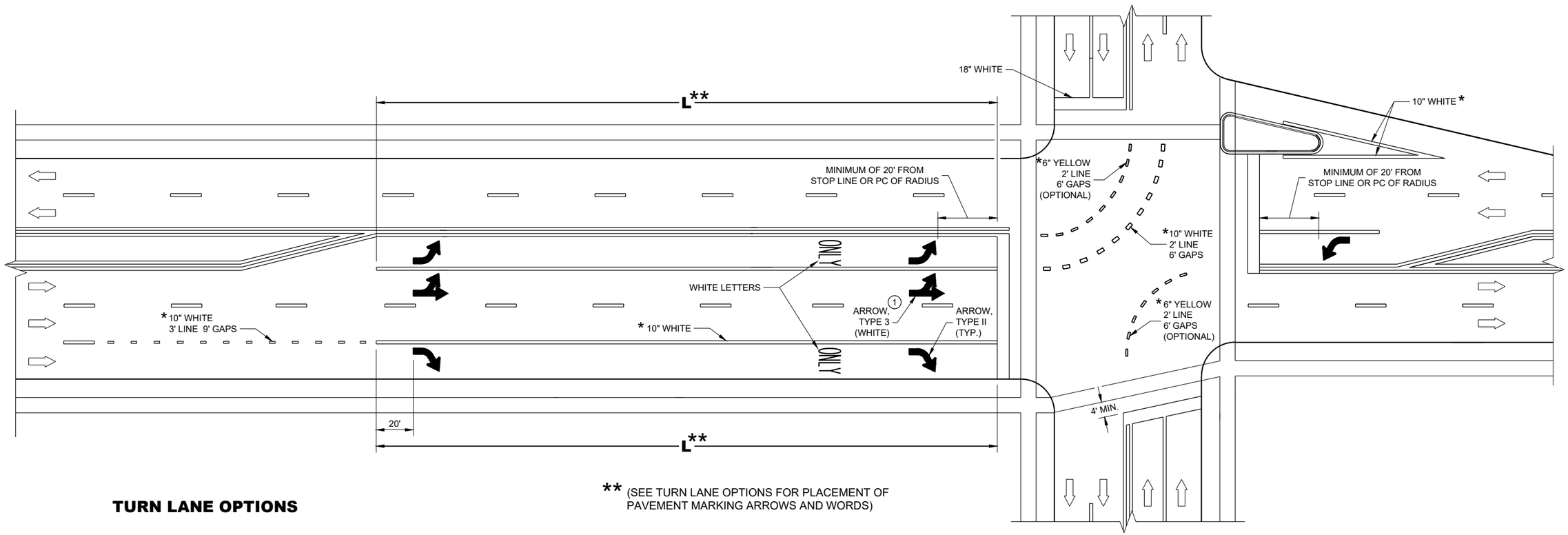
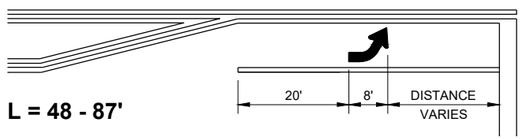


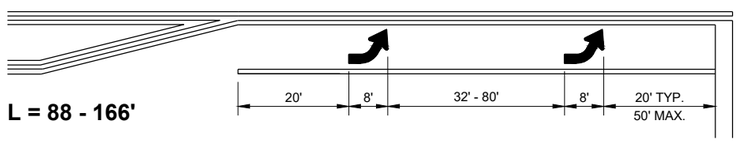
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

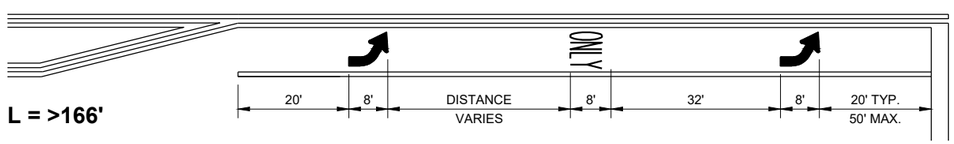
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d

GENERAL NOTES

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

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

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

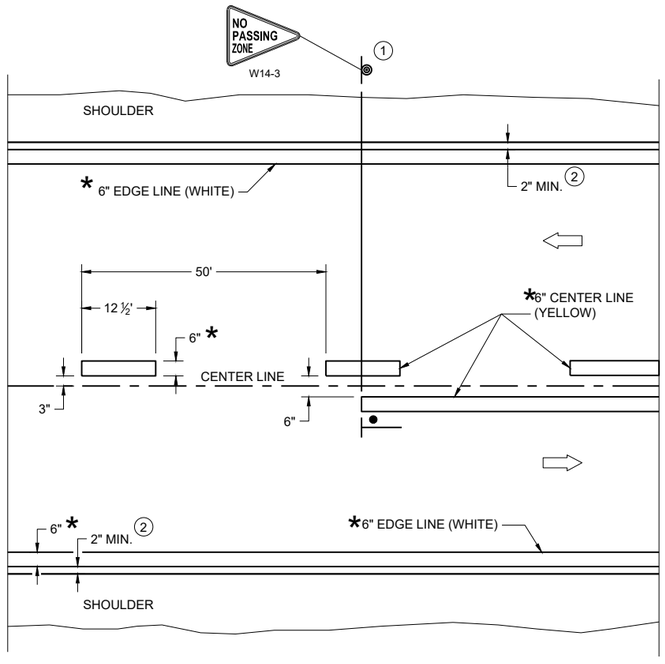
LEGEND

"T" MARKING

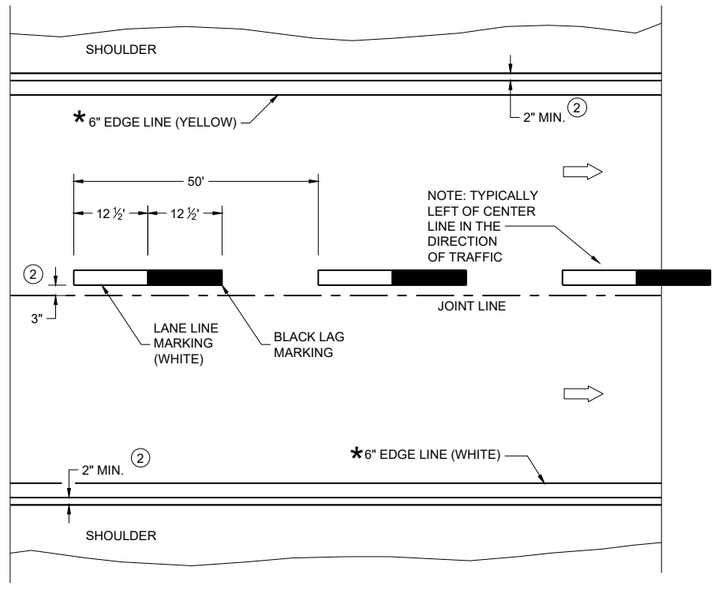
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-24a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

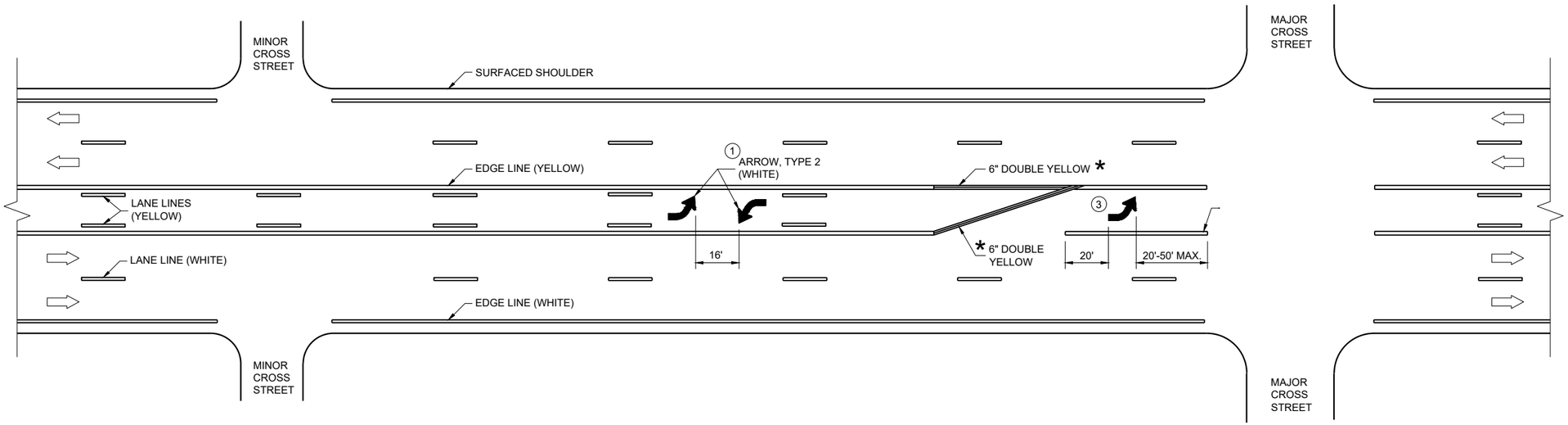
SDD 15C08-24a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



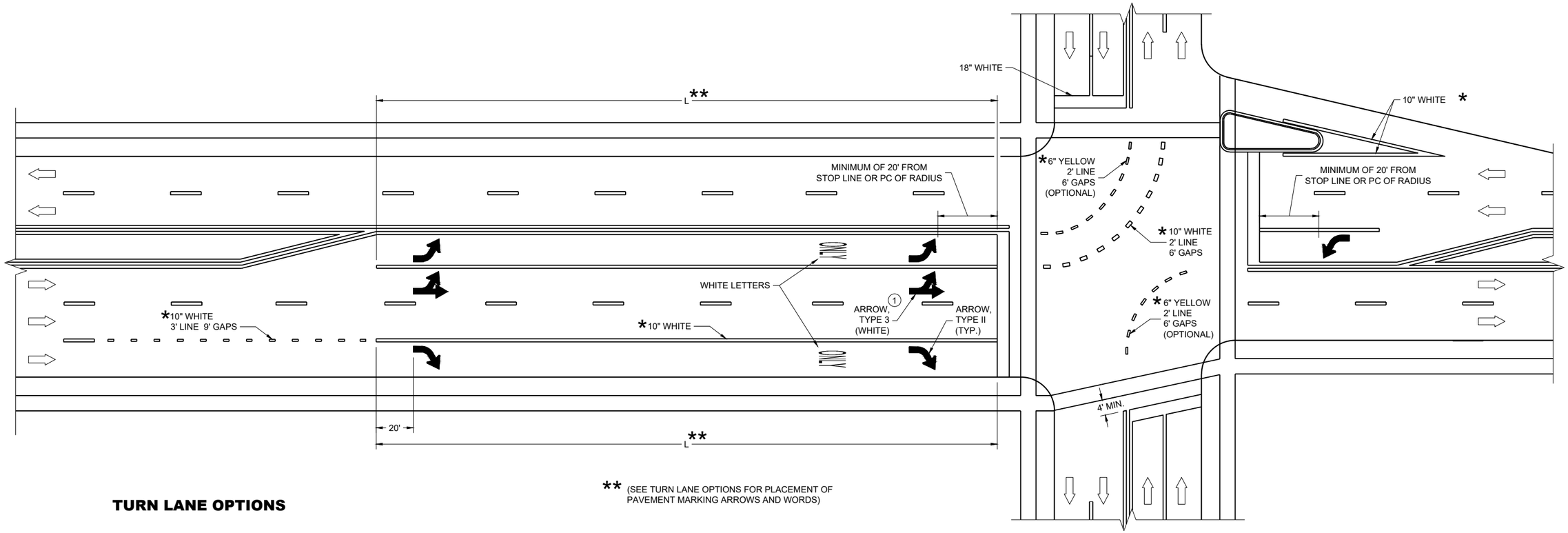
TWO WAY LEFT TURN LANE

6

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

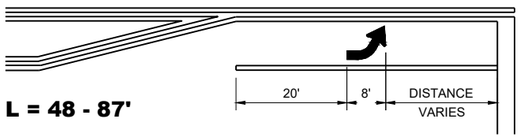
SDD 15C08-24c



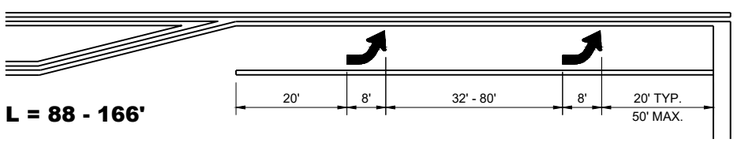
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

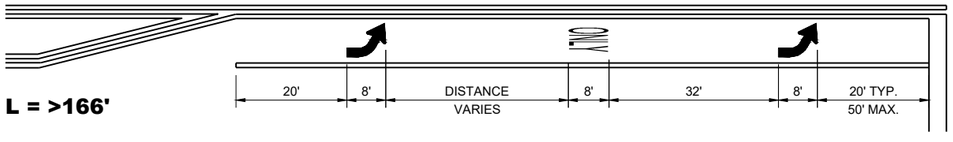
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT
REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

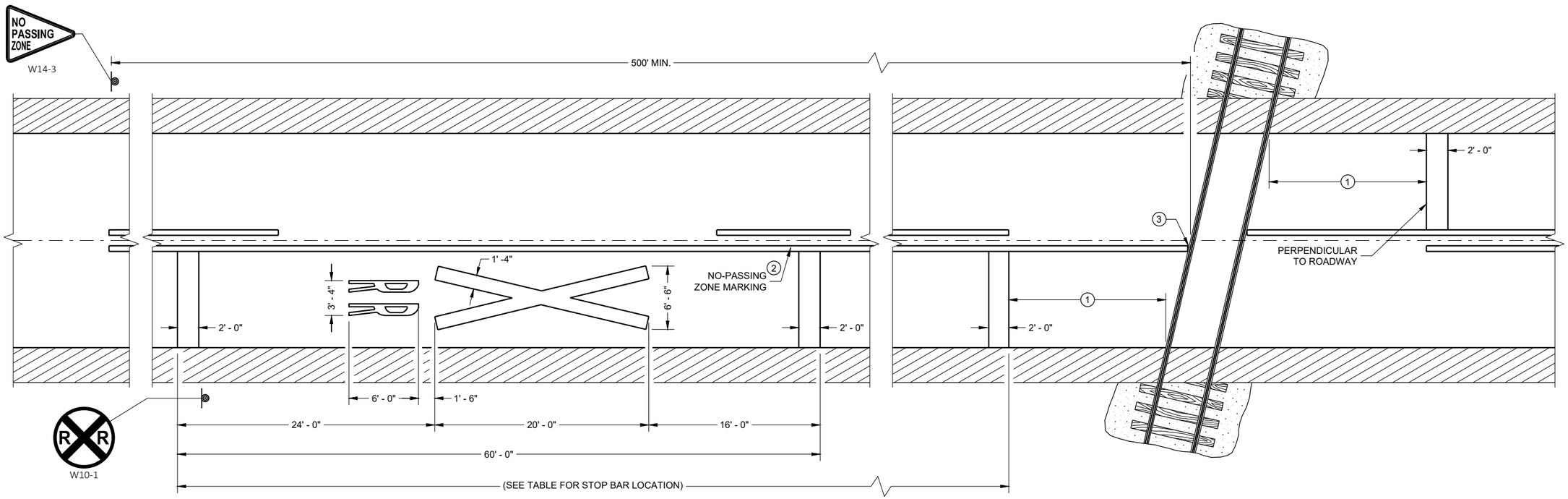
DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

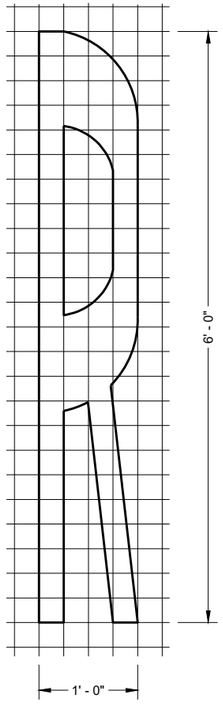
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PAVEMENT MARKING



LEGEND

SIGN ON PERMANENT SUPPORT

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.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

TRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

(1) PLACE STOP BAR APPROXIMATELY 8 FEET IN ADVANCE OF THE GATE (IF PRESENT), BUT NO CLOSER THAN 15 FEET IN ADVANCE OF THE NEAREST RAIL. FIELD-FIT STOP BAR TO MAXIMIZE VIEW OF APPROACHING TRAIN.

(2) 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(3) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

DISTANCE TABLE

TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

POSTED SPEED (M.P.H.)	DIMENSION RANGE (FEET)
25	150* - 250'
30	200* - 300'
35	250* - 450'
40	300* - 500'
45	400* - 650'
50	550* - 800'
55	750* - 1000'
60	1000* - 1250'
65	1000* - 1250'

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSED PROXIMITY OF DRIVEWAYS, BRIDGES, SIDE ROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

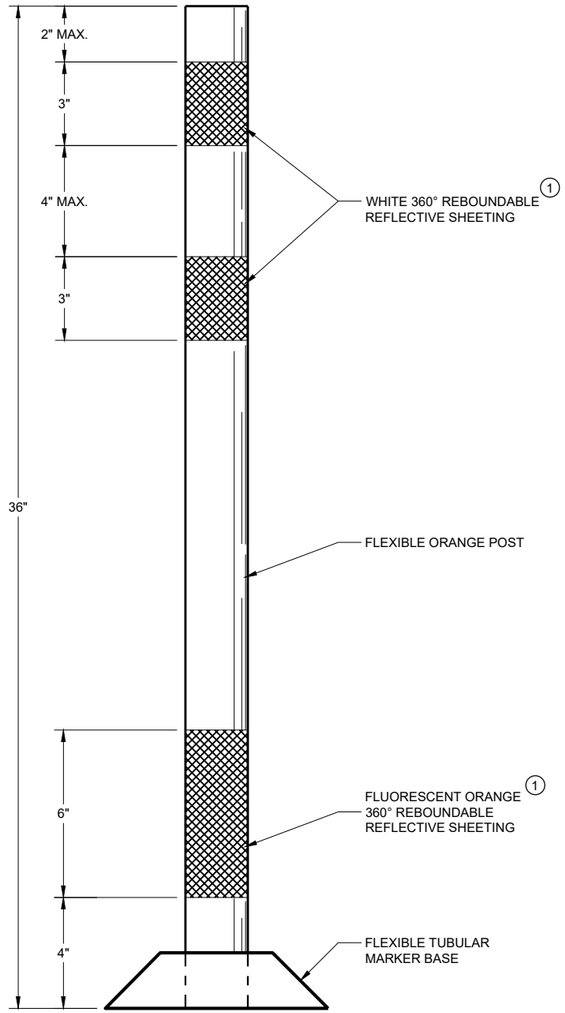
May 2023
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

6

SDD 15C09-13a



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

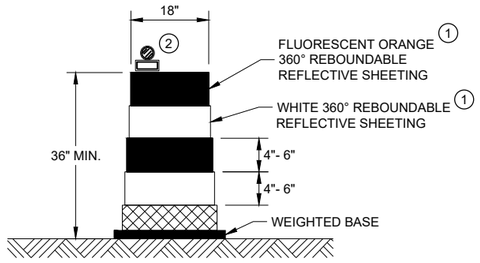
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C11 - 10a

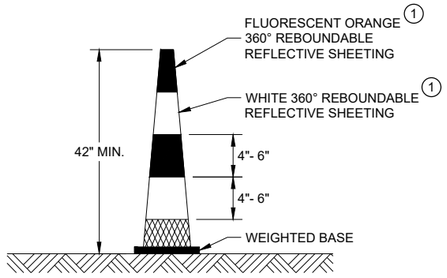
GENERAL NOTES

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

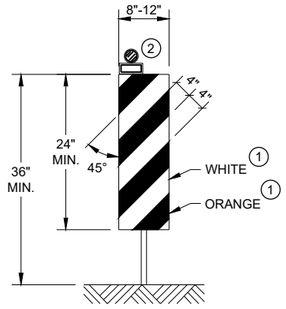
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

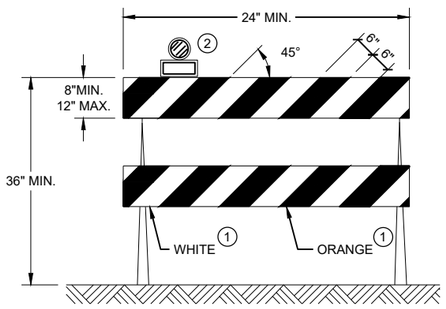
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



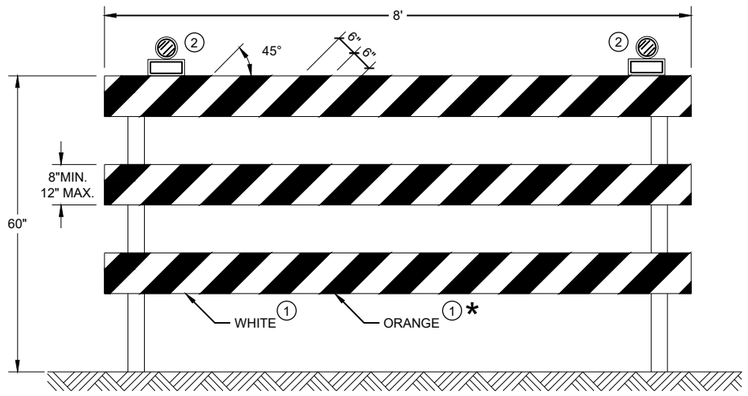
VERTICAL PANEL

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 ENGINEER

FHWA

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

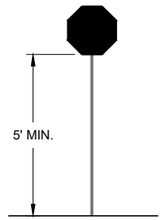
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



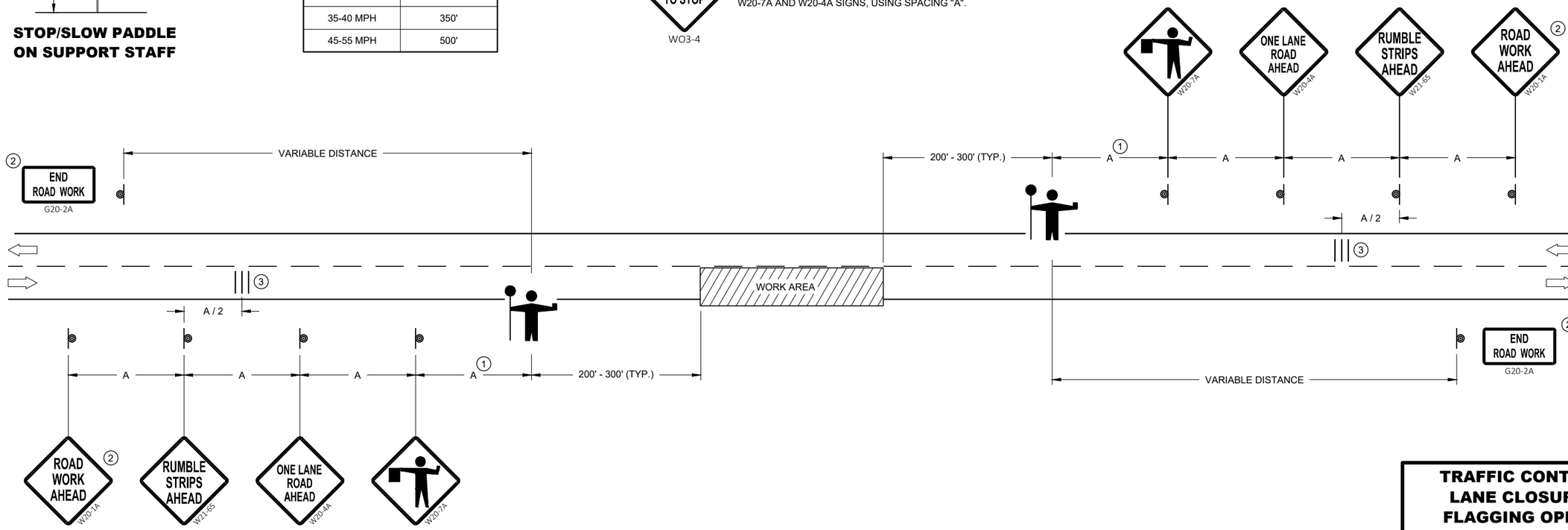
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C12 - 09a

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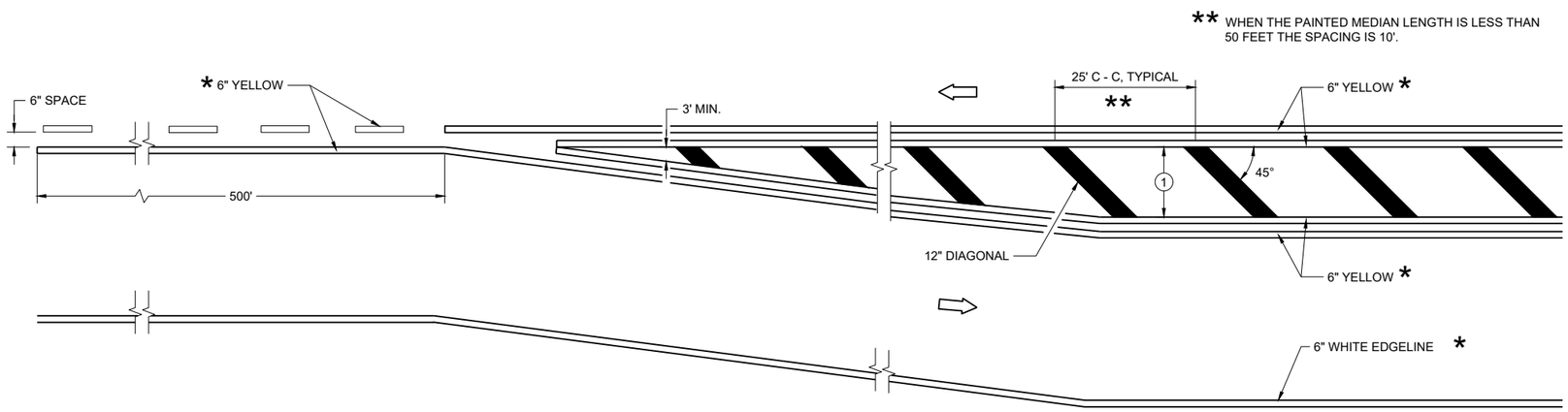


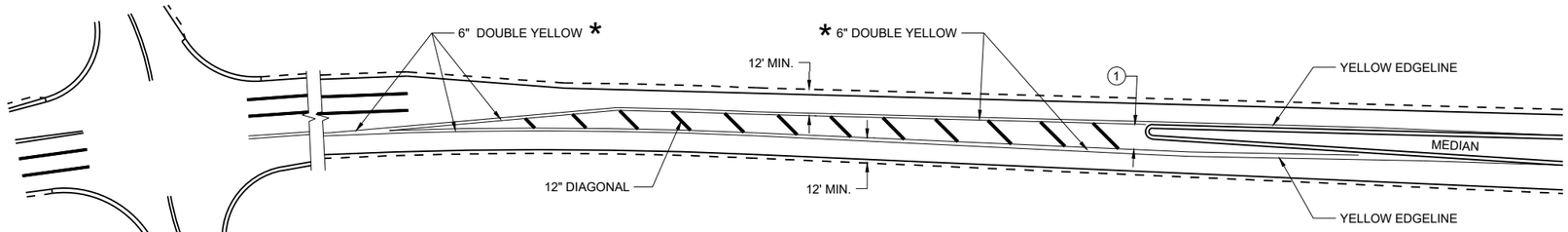
MEDIAN ISLAND DETAIL

GENERAL NOTES

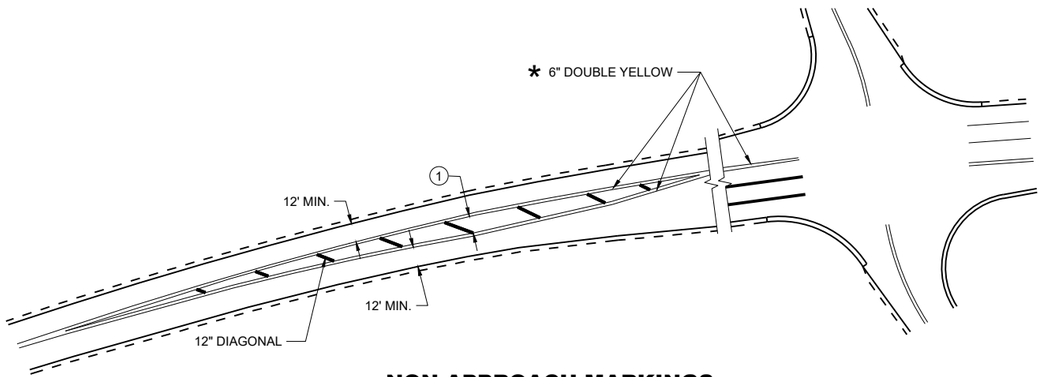
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

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

FHWA

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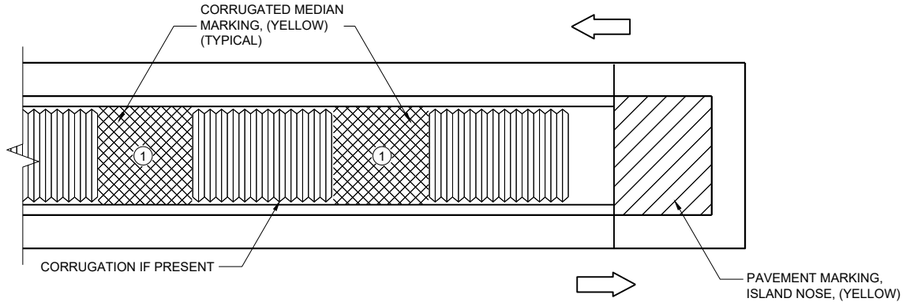
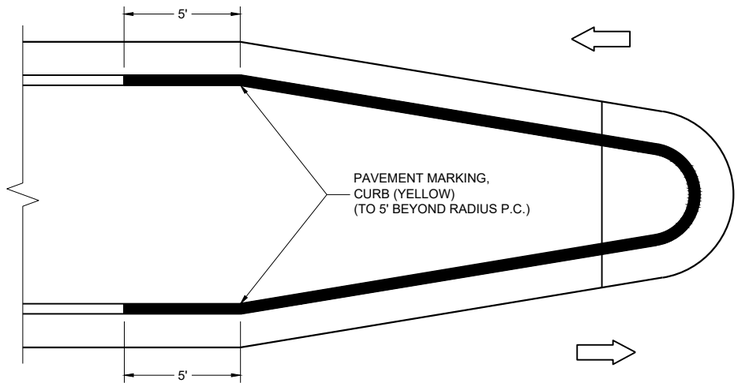
SDD 15C18-09a

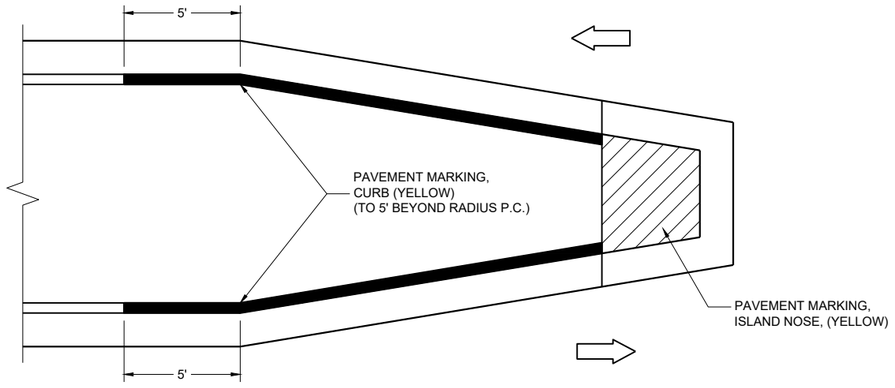
SDD 15C18-09a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

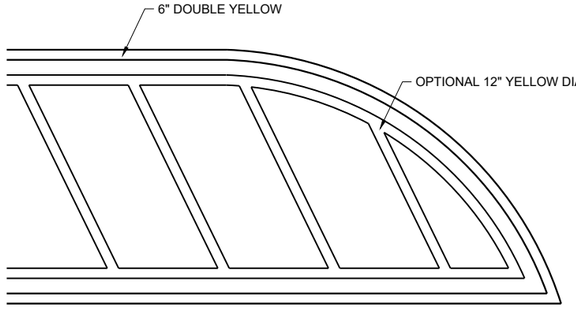
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C18-09b

LEGEND

V1 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.

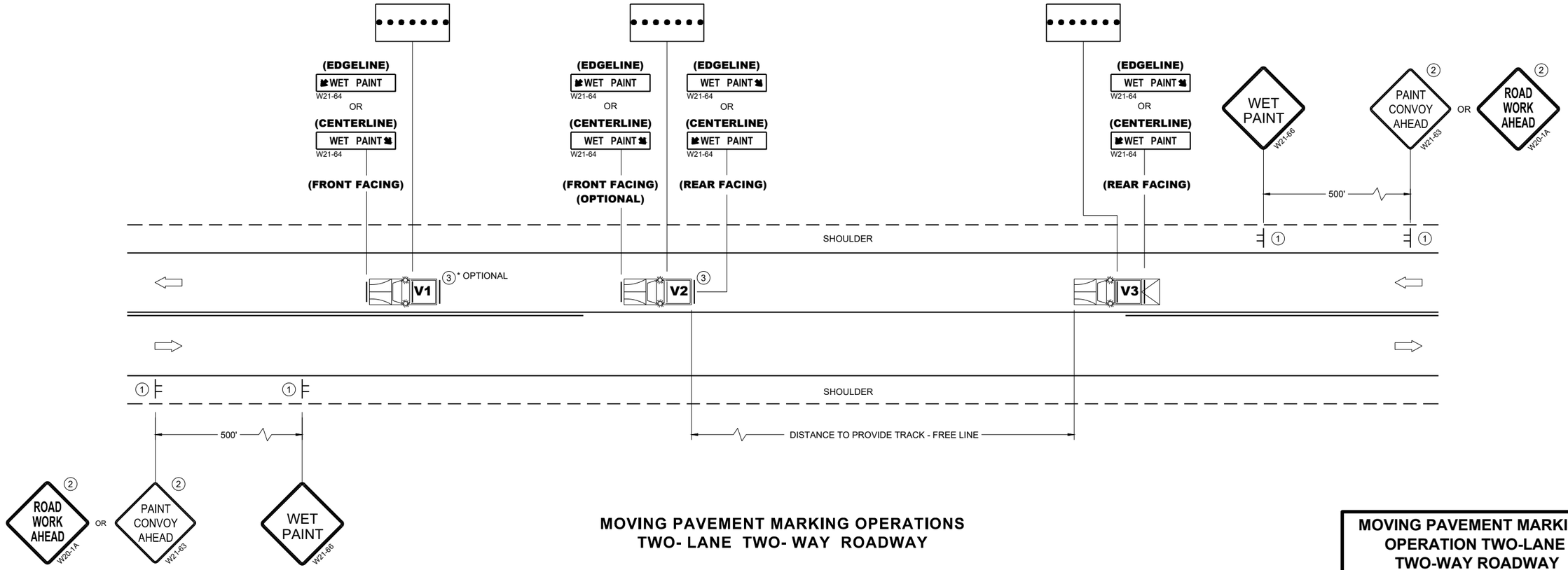
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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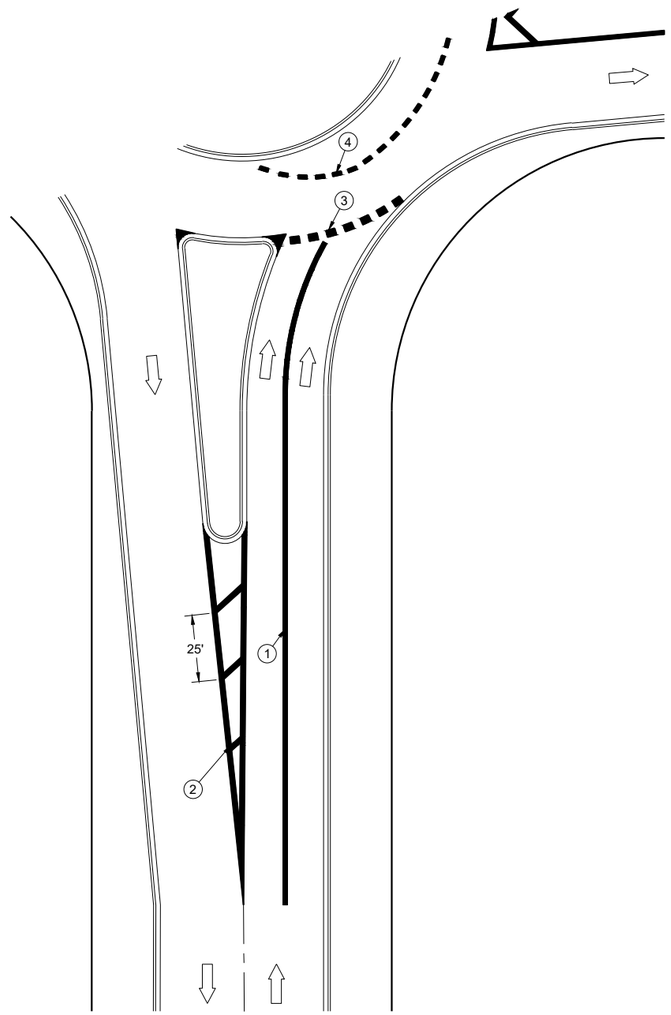
SDD 15C19-9a

LEGEND

- (1) 10" WHITE
- (2) 12" DIAGONALS AT 25' SPACING. (CAN BE OMITTED IF LESS THAN 6')
- (3) 18" WHITE, 2' LINE, 2' GAP
- (4) 6" LINE (6 FT LINE, 3'GAP)
- DIRECTION OF TRAFFIC
- CURB AND GUTTER
- RIGHT OF WAY



DOTTED EXTENSION FOR ROUNDABOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Matthew Rauch
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

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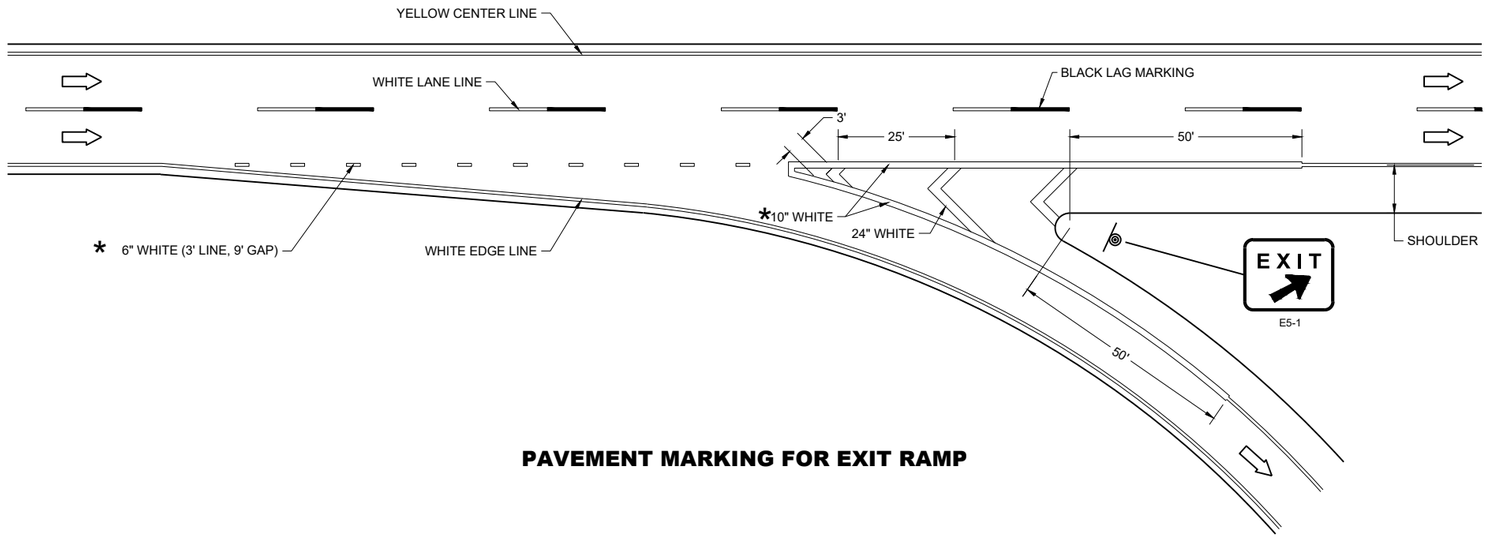
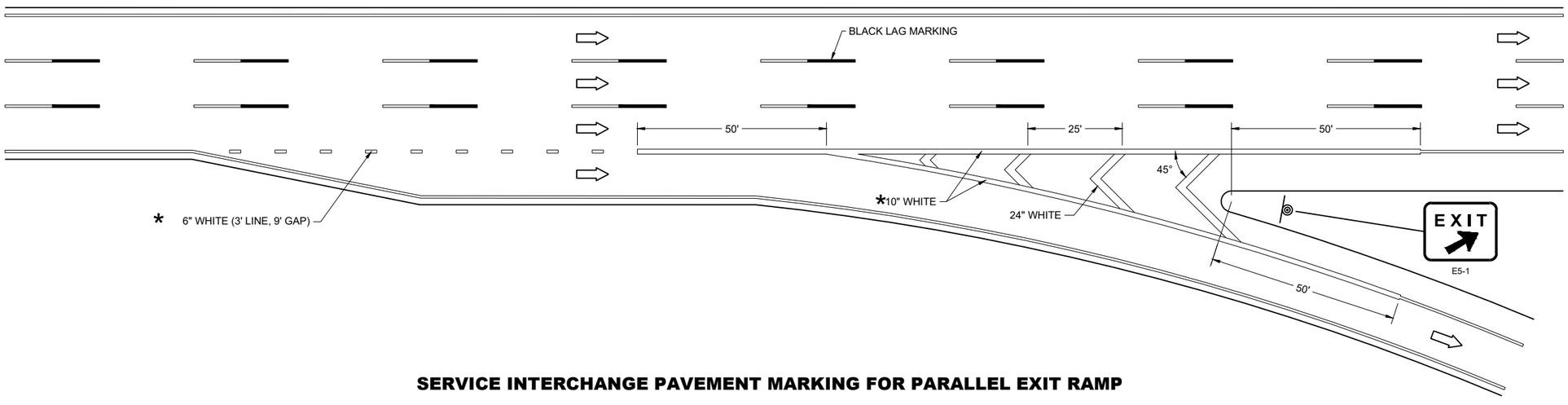
SDD 15C22-01



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

6

SDD 15C31-08a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

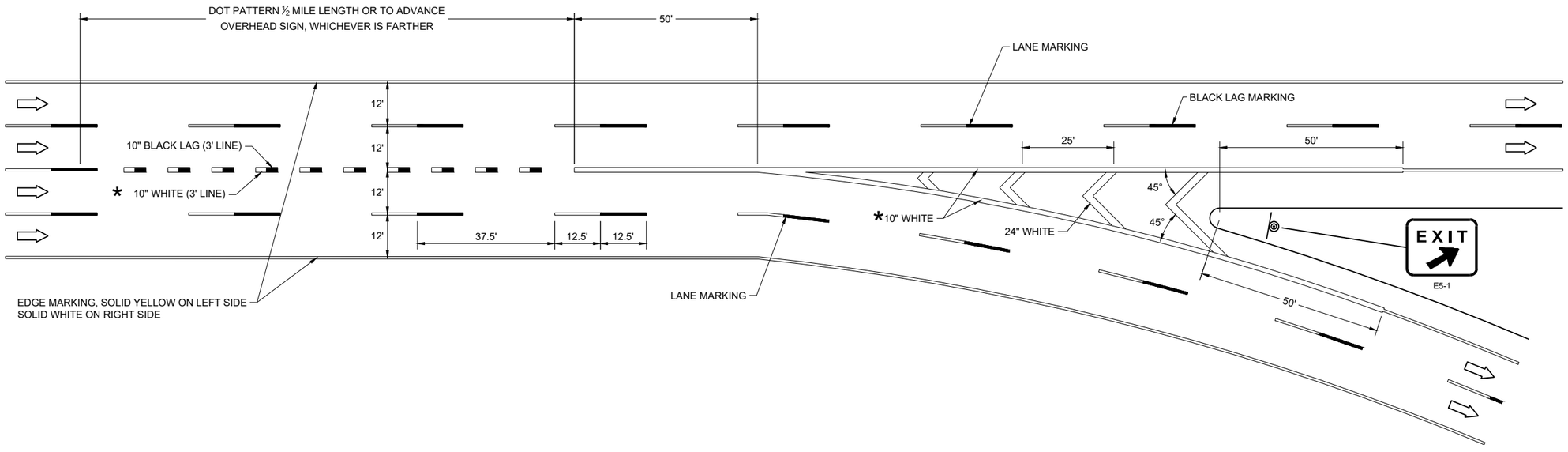
PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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SDD 15C31-08b

PAVEMENT MARKING, MAJOR SPLIT FREEWAY TO FREEWAY

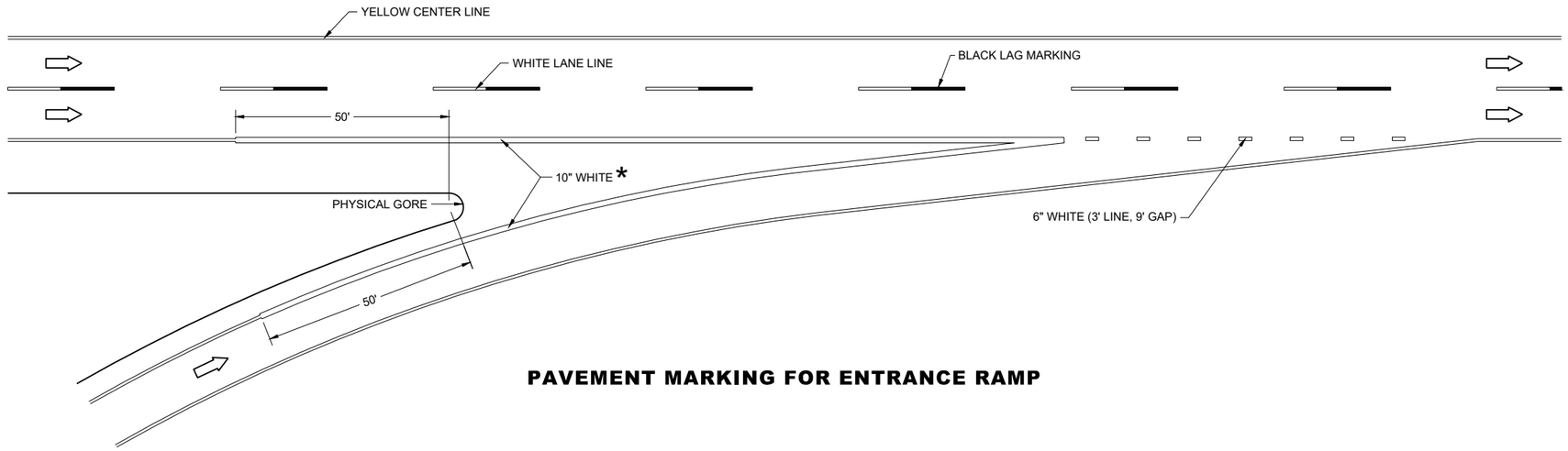
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-08b

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

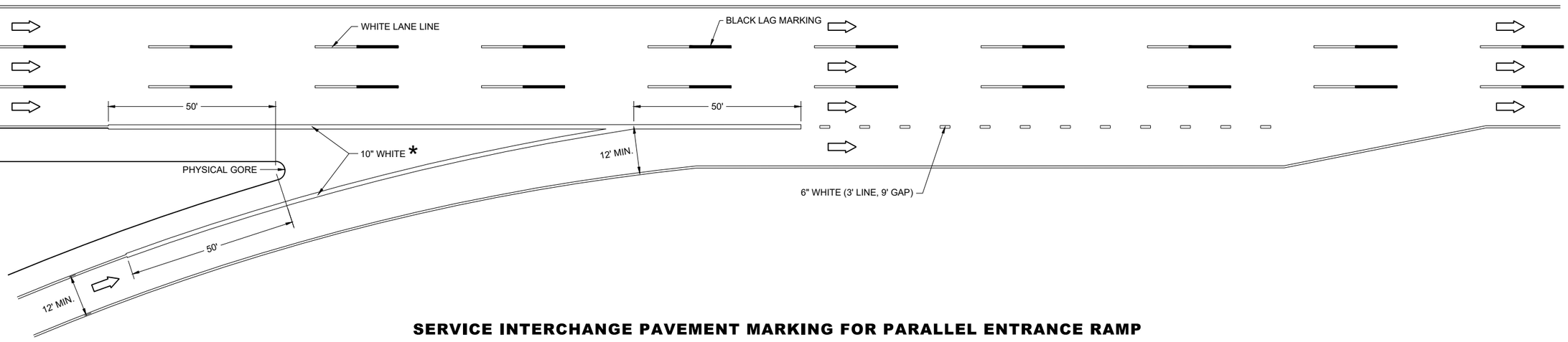


PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

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SDD 15C31-08c

SDD 15C31-08c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

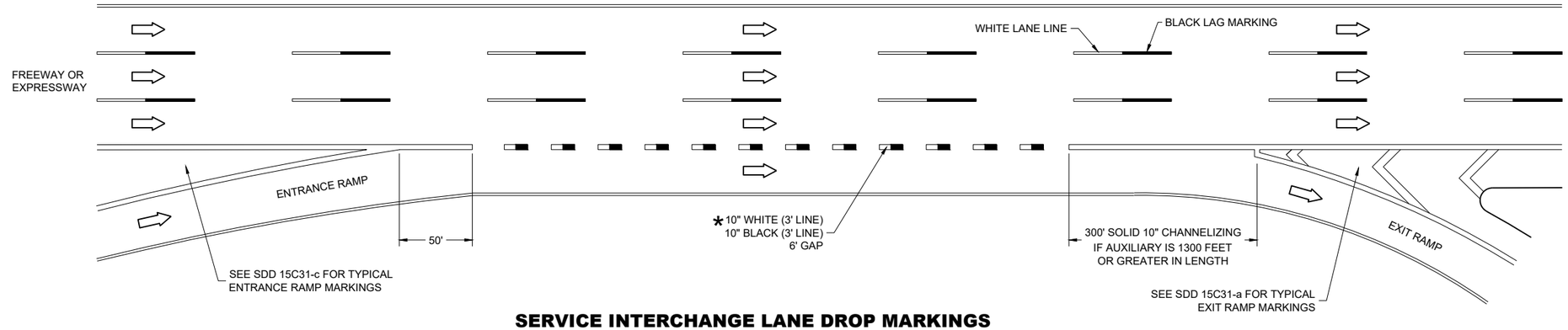
LEGEND

DIRECTION OF TRAVEL

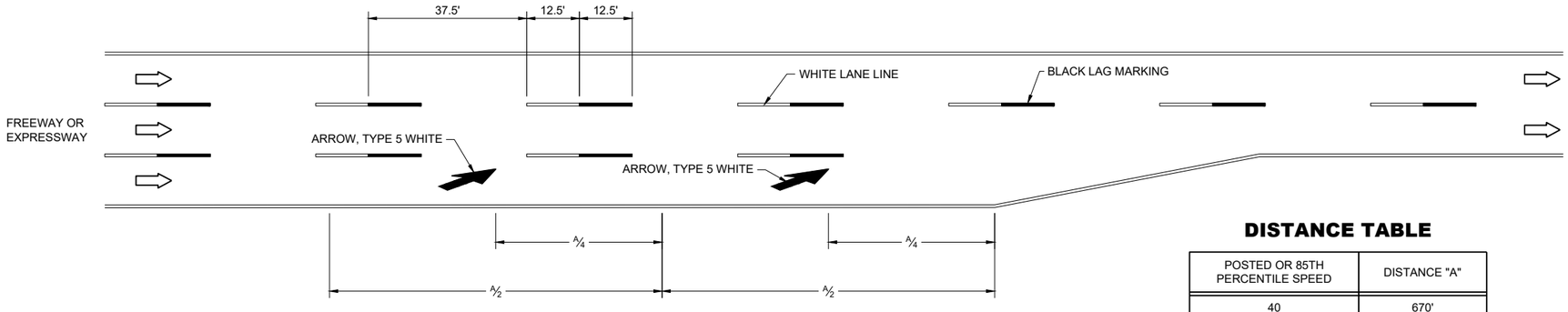
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.



SERVICE INTERCHANGE LANE DROP MARKINGS



LANE REDUCTION MARKINGS

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
40	670'
45	775'
50	885'
55	990'
60	1100'
65	1200'
70	1250'

PAVEMENT MARKING, LANE DROP AND LANE REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Matthew Rauch — WORK ZONE ENGINEFR
FHWA

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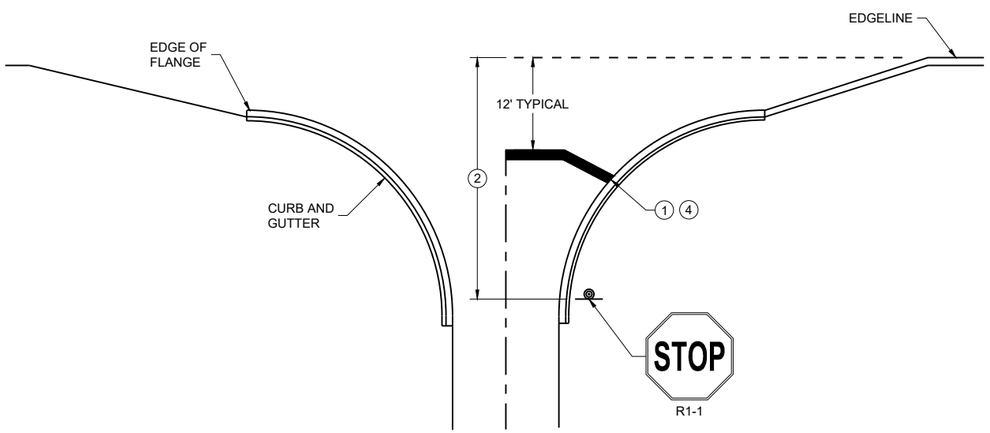
SDD 15C31-08d

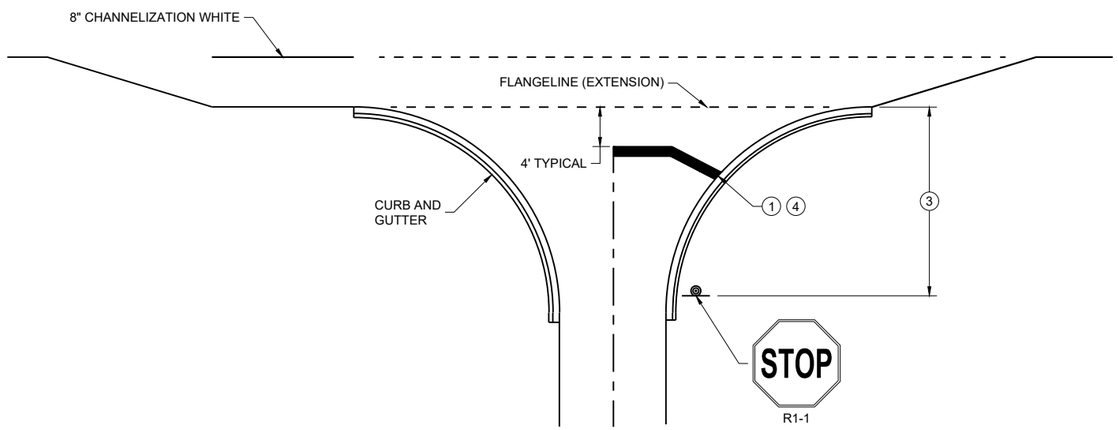
GENERAL NOTES

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

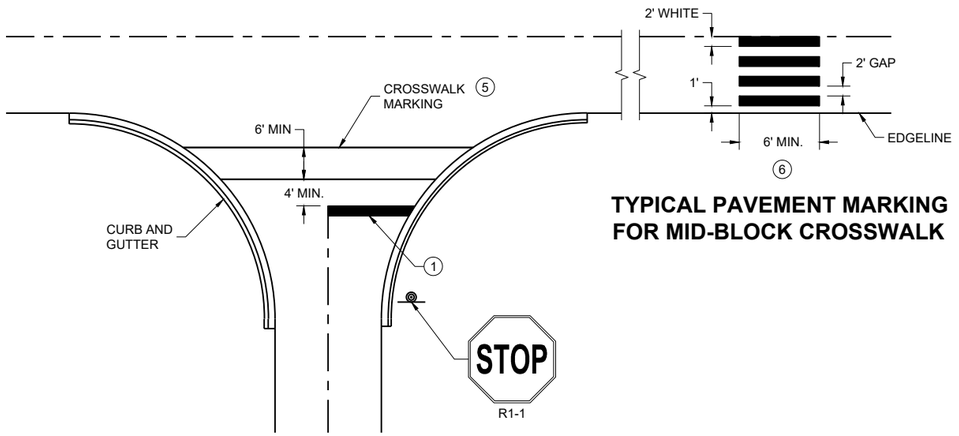
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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

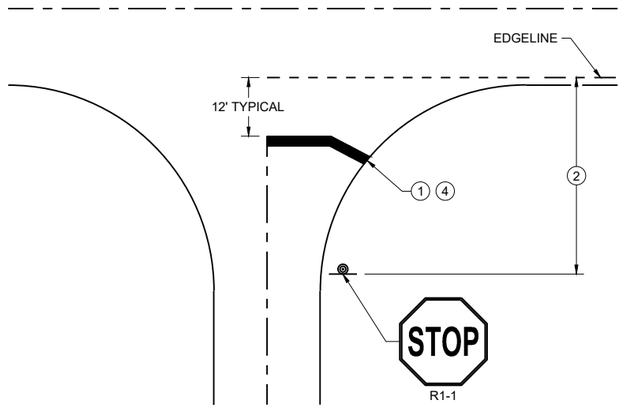


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



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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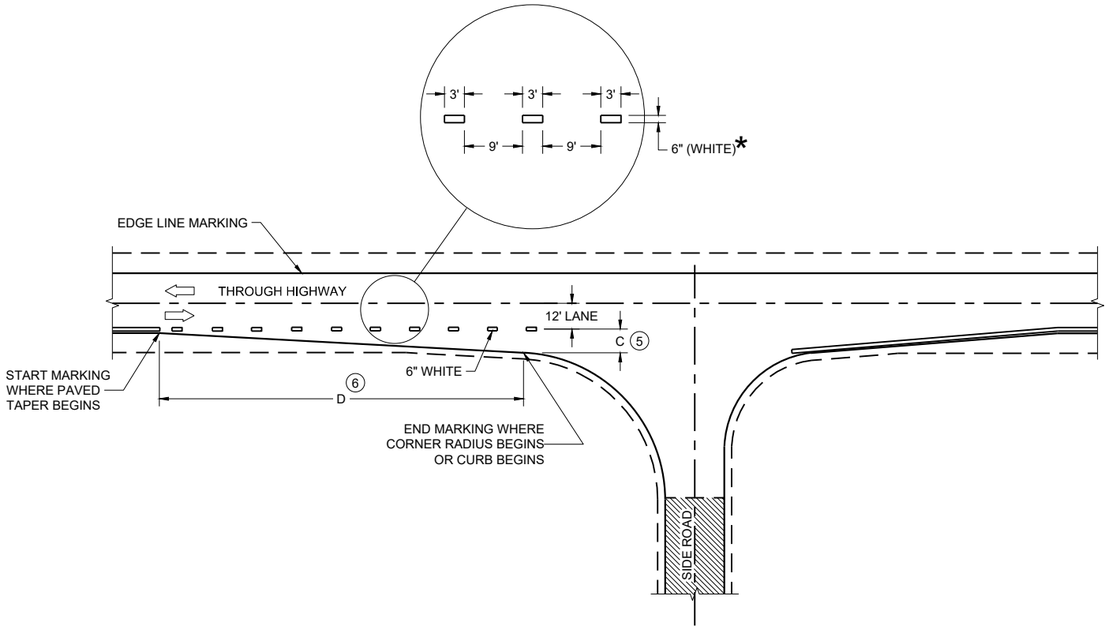
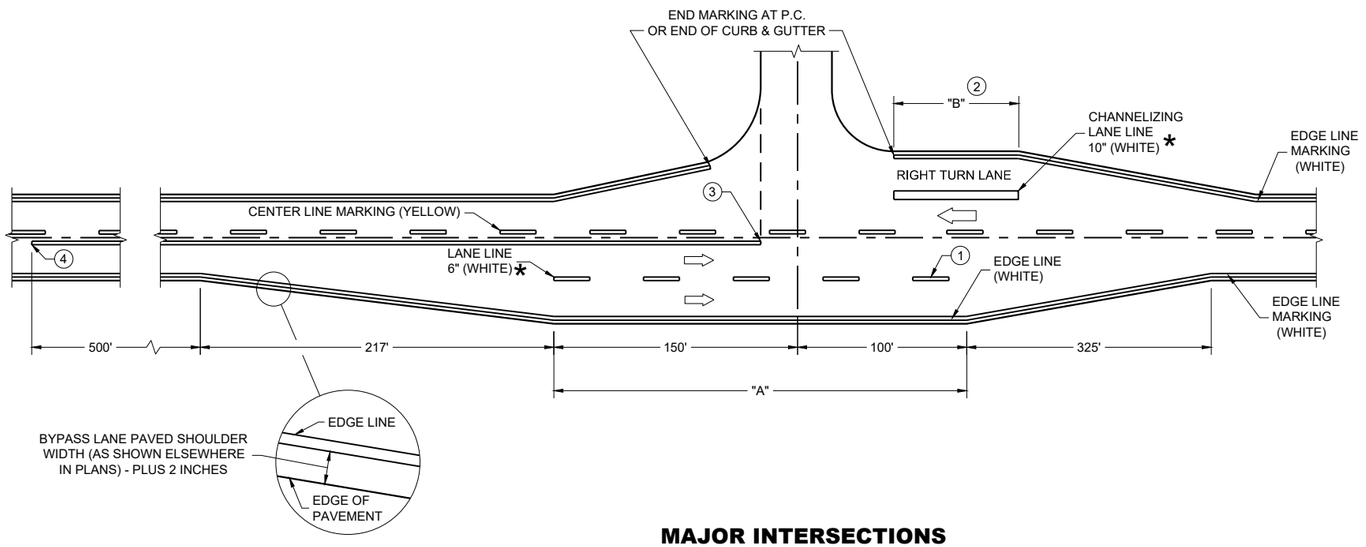
SDD 15C33-05



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

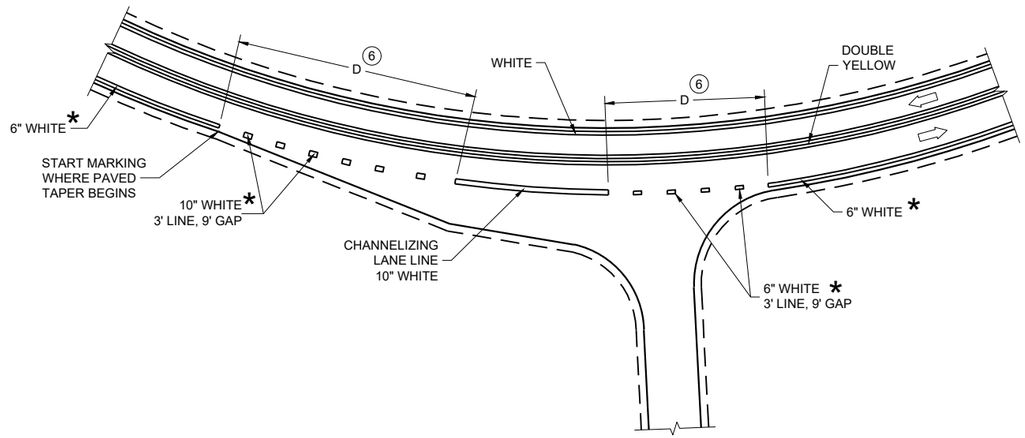
GENERAL NOTES

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

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

LEGEND

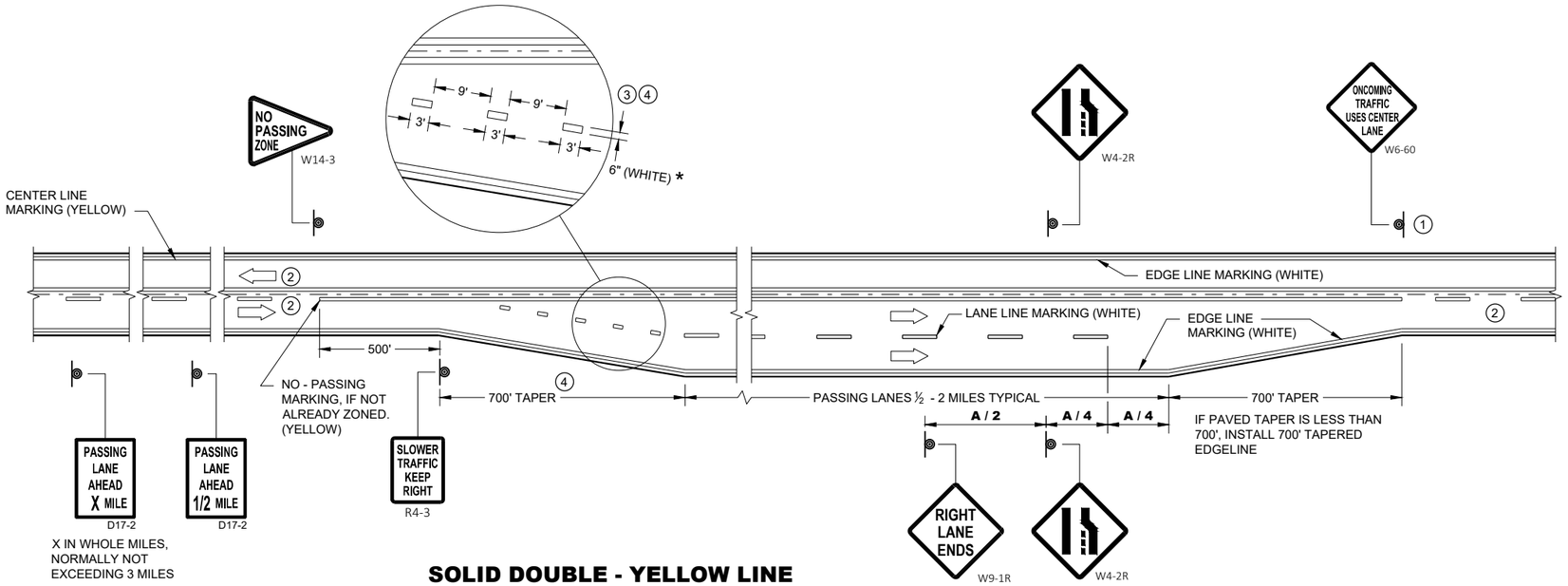
DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)

GENERAL NOTES

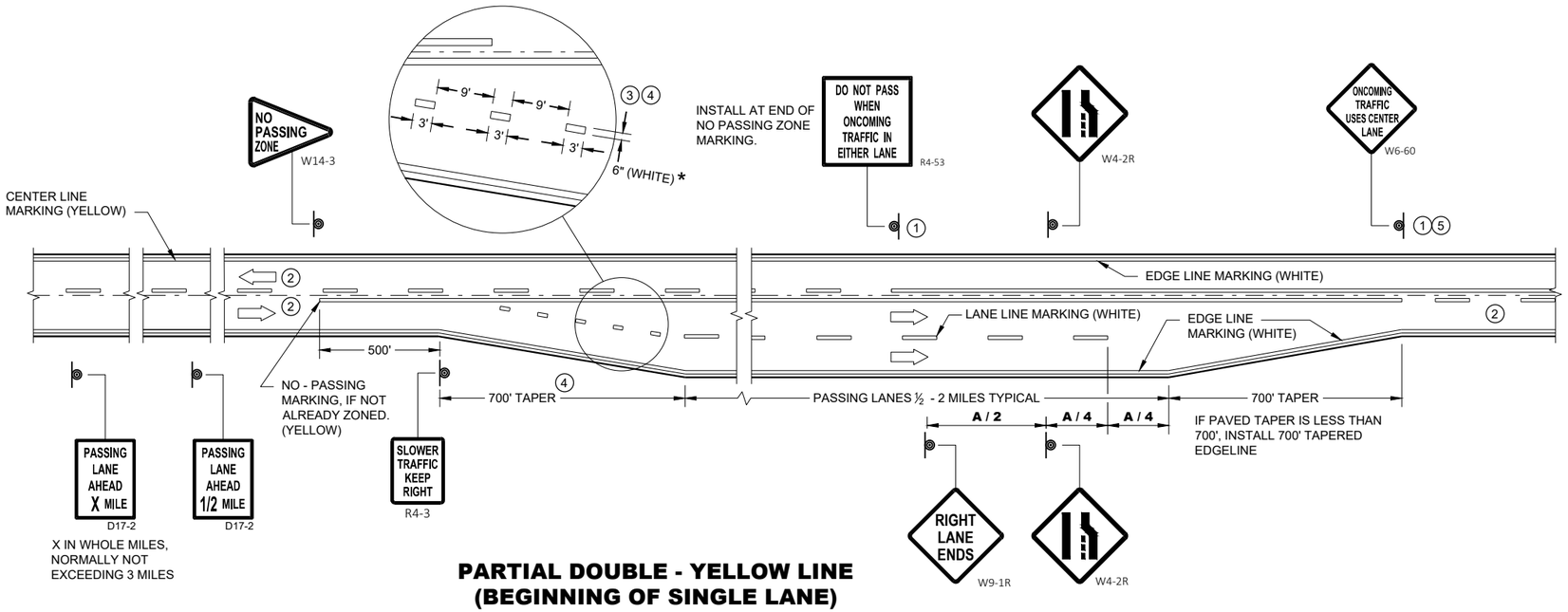
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

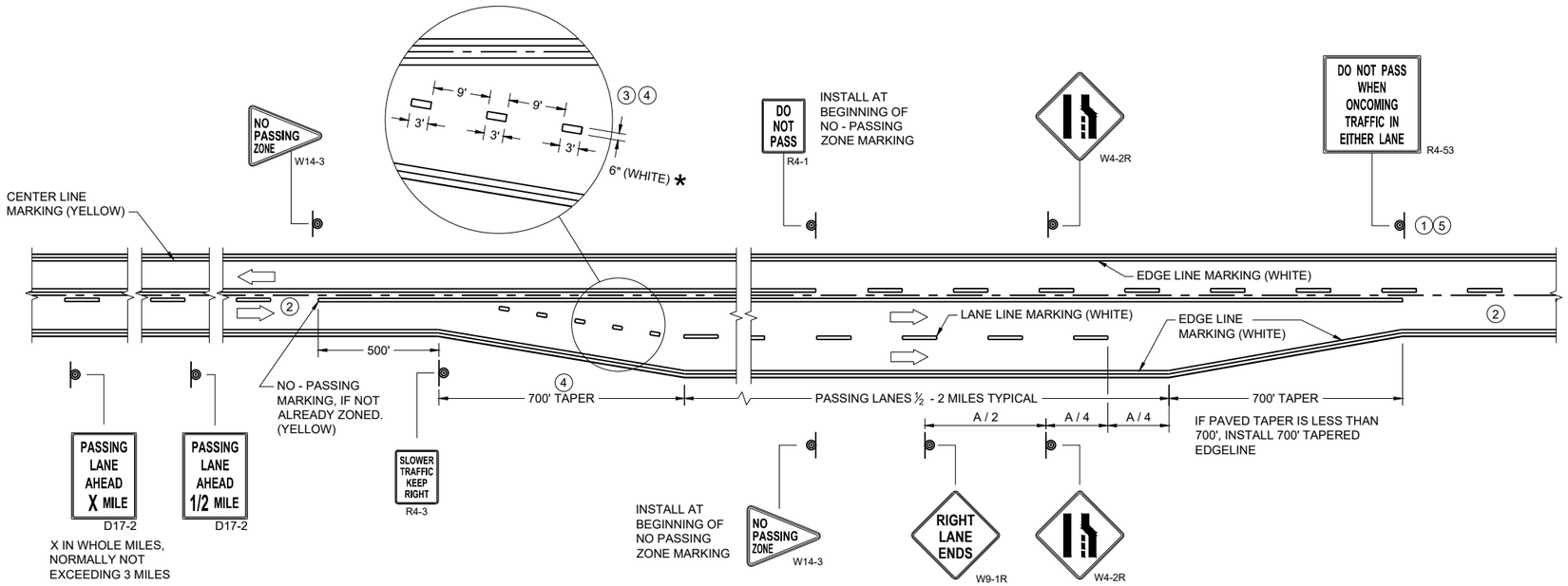
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

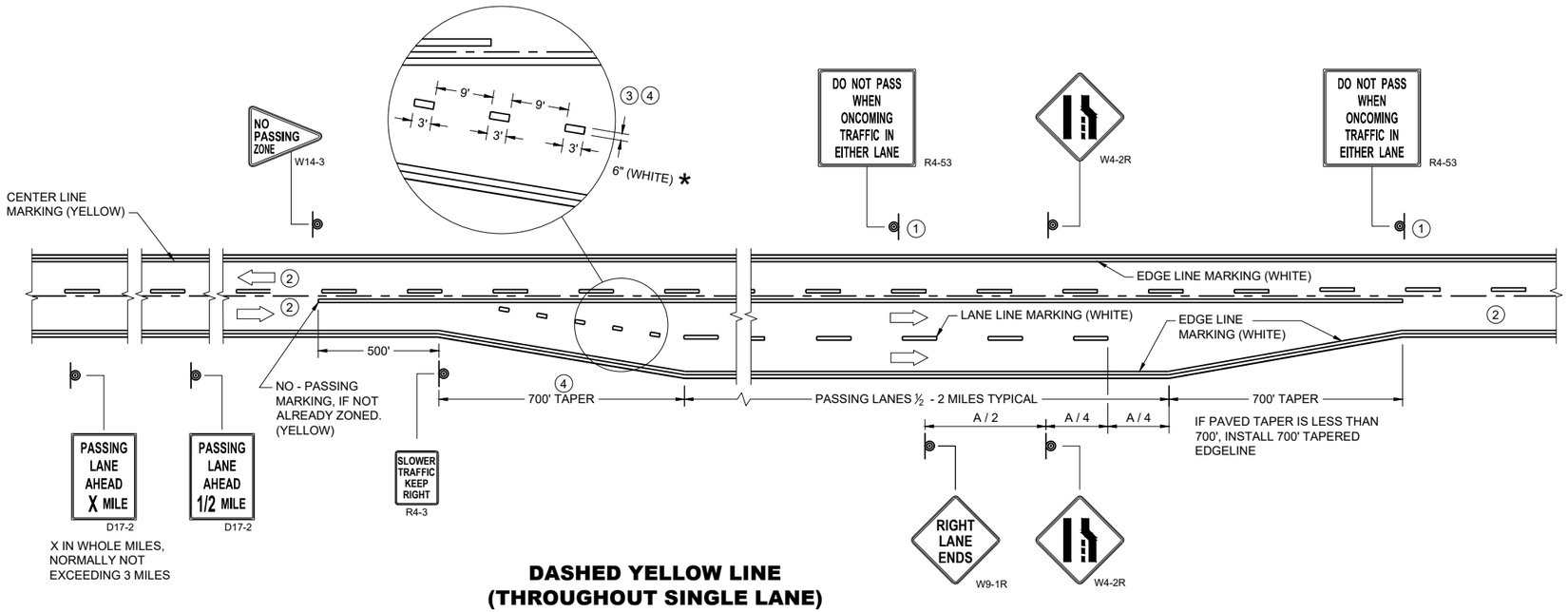
GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

FHWA

6
SDD 15C35-06c

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

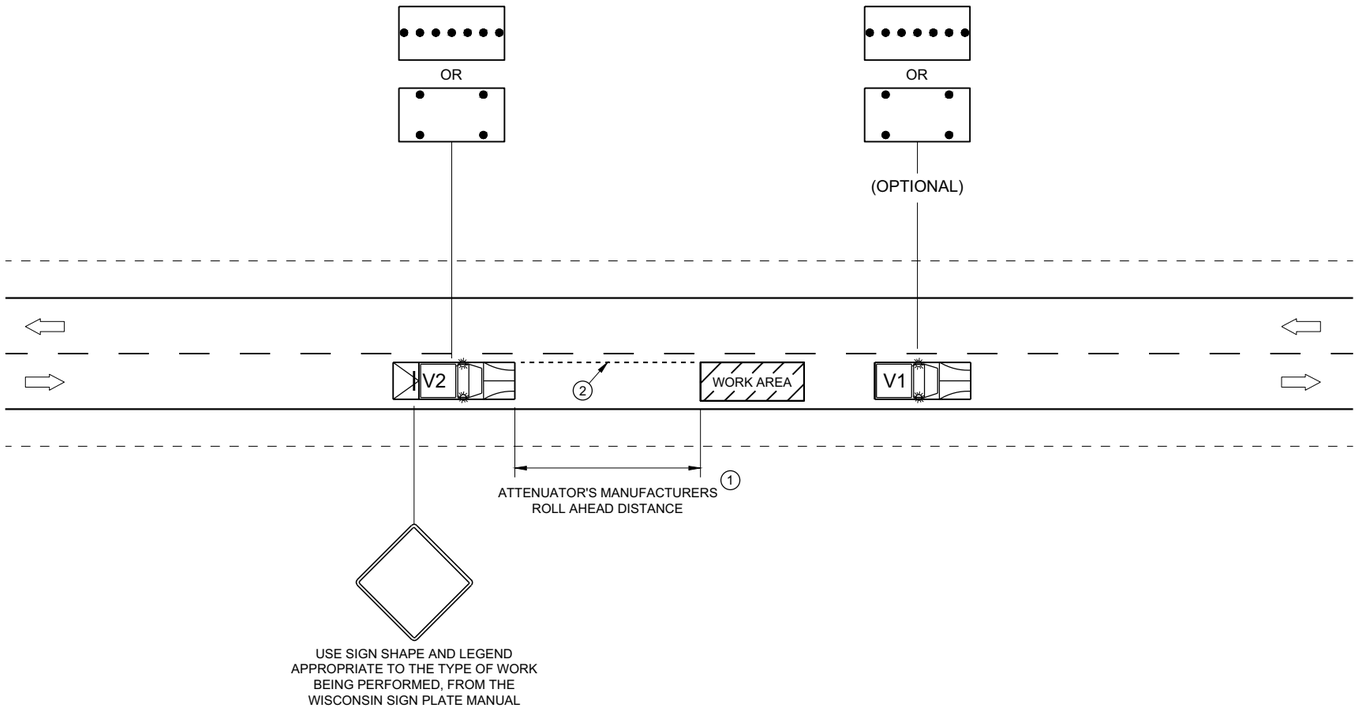
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.

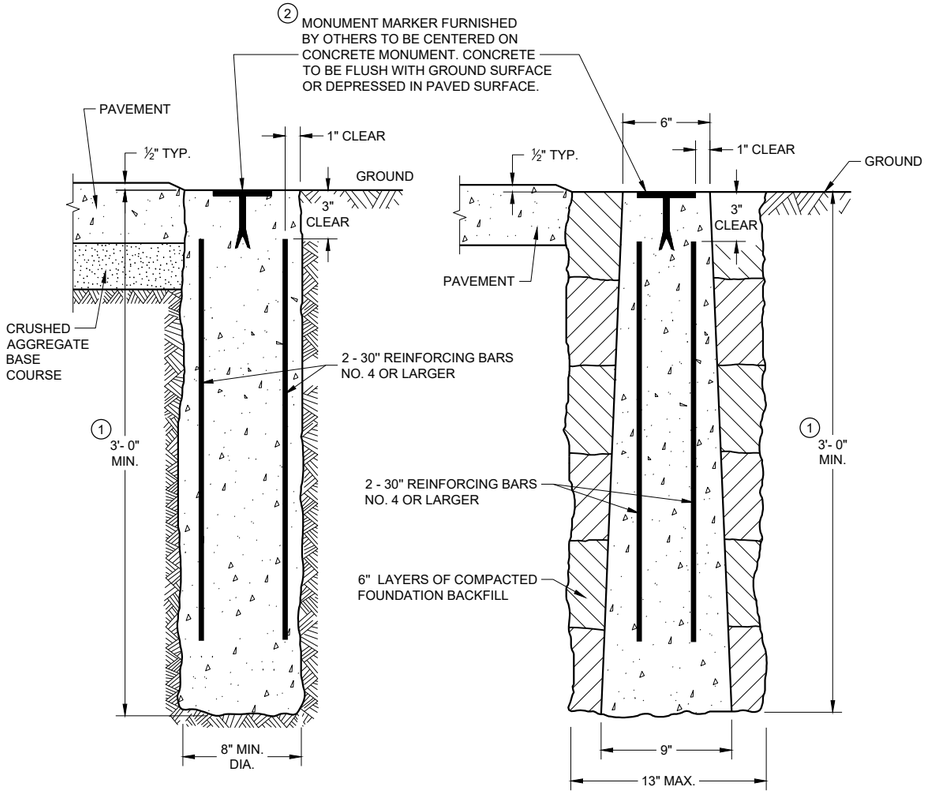


TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

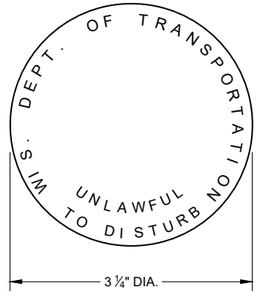
APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6
SDD 15D51 - 01



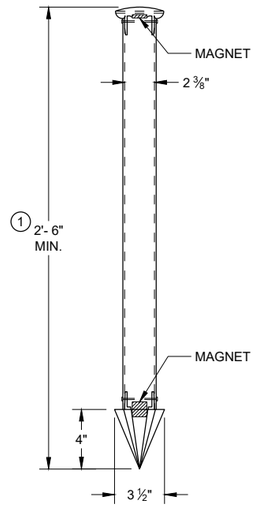
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

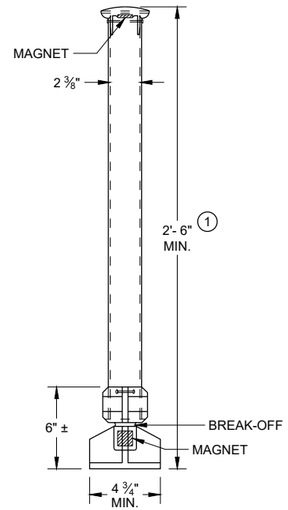


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

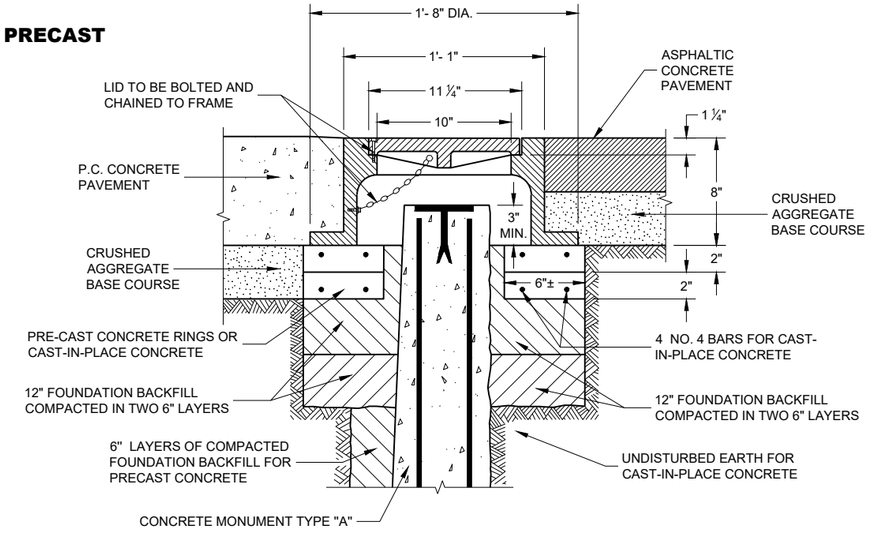


TYPE C
DRIVEN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

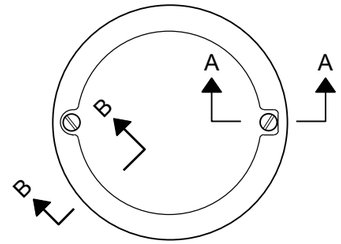
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

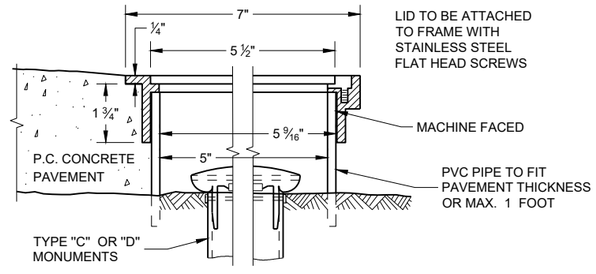
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MA
ENGINEER

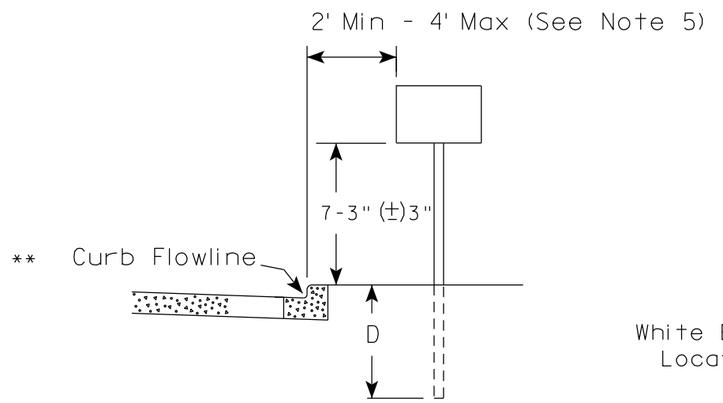
FHWA

6

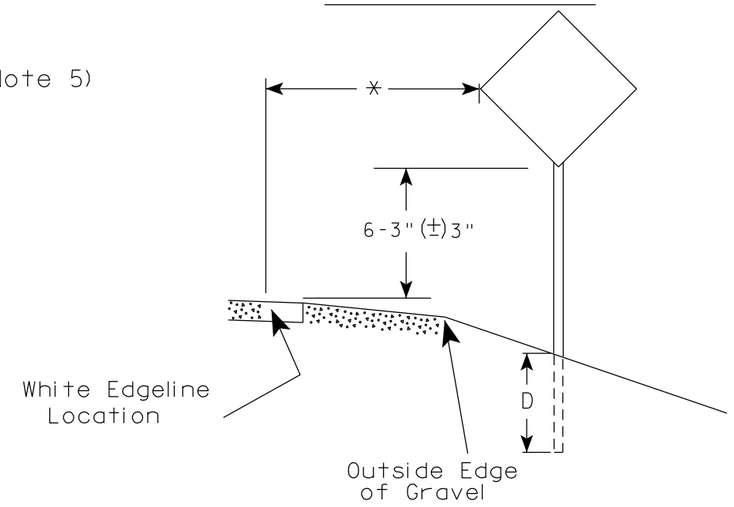
SDD 16A01 - 07

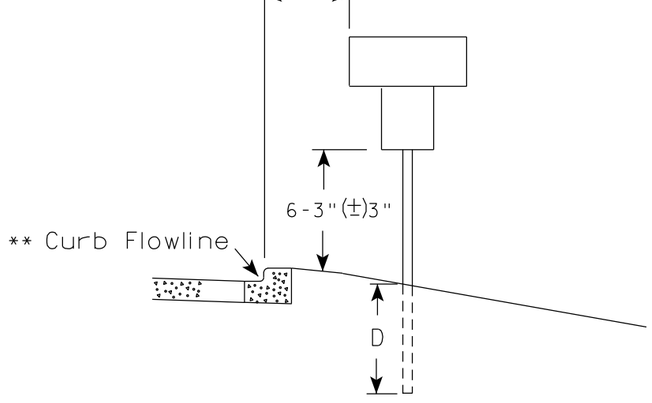
SDD 16A01 - 07

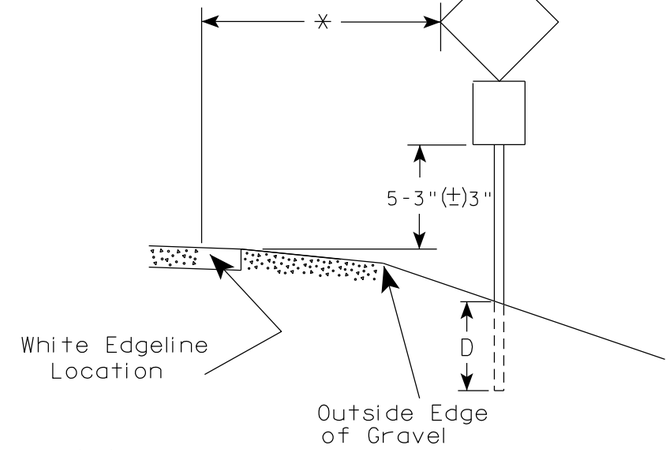
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

POST EMBEDMENT DEPTH

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

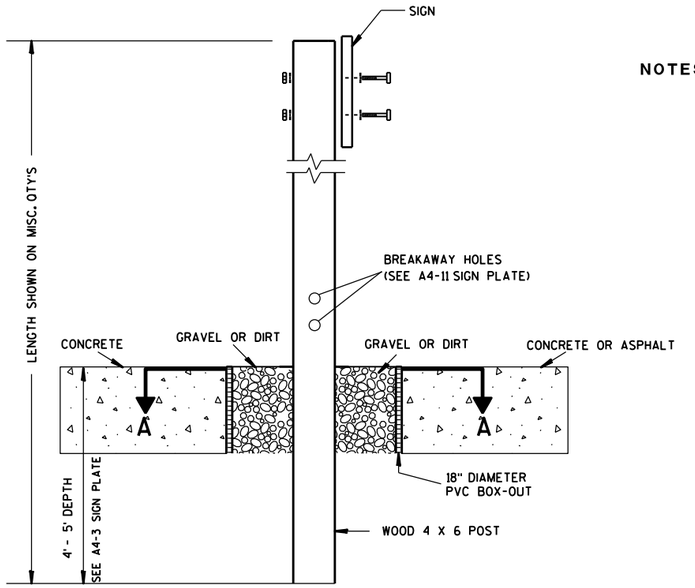
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

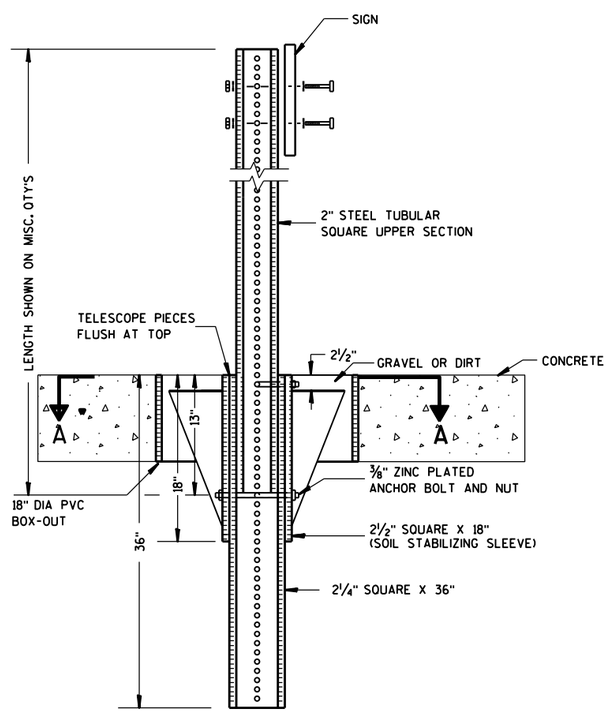
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 301	E



ELEVATION VIEW

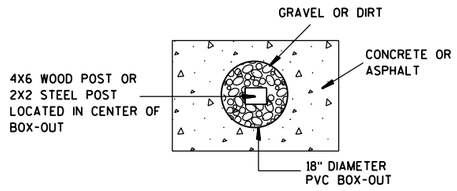
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

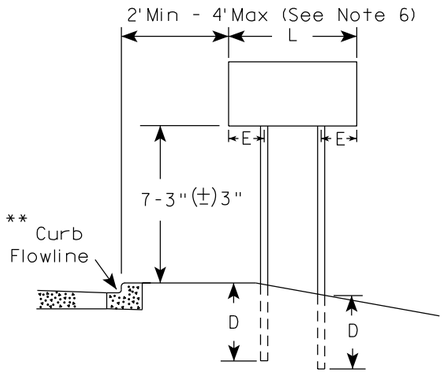
APPROVED Matthew R Rauch
for State Traffic Engineer

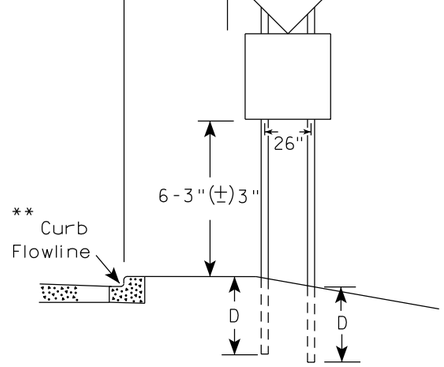
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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

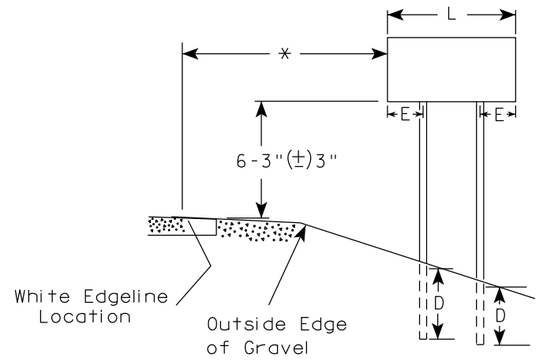
URBAN AREA

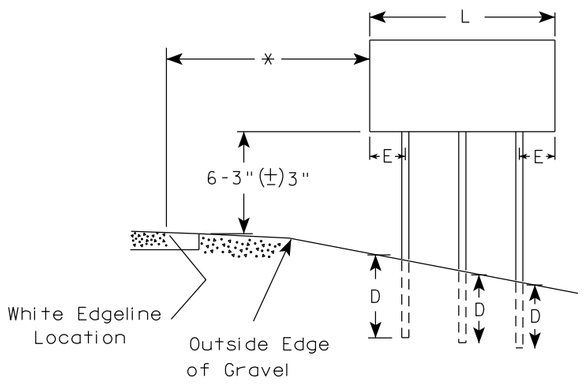


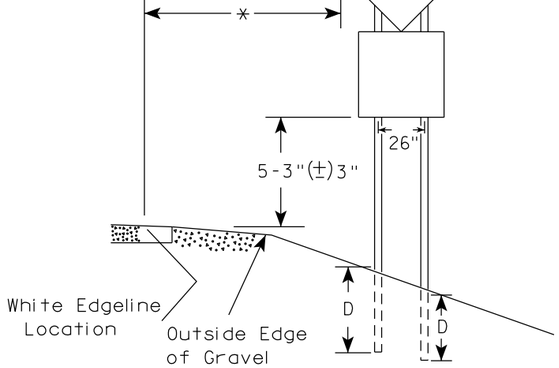


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

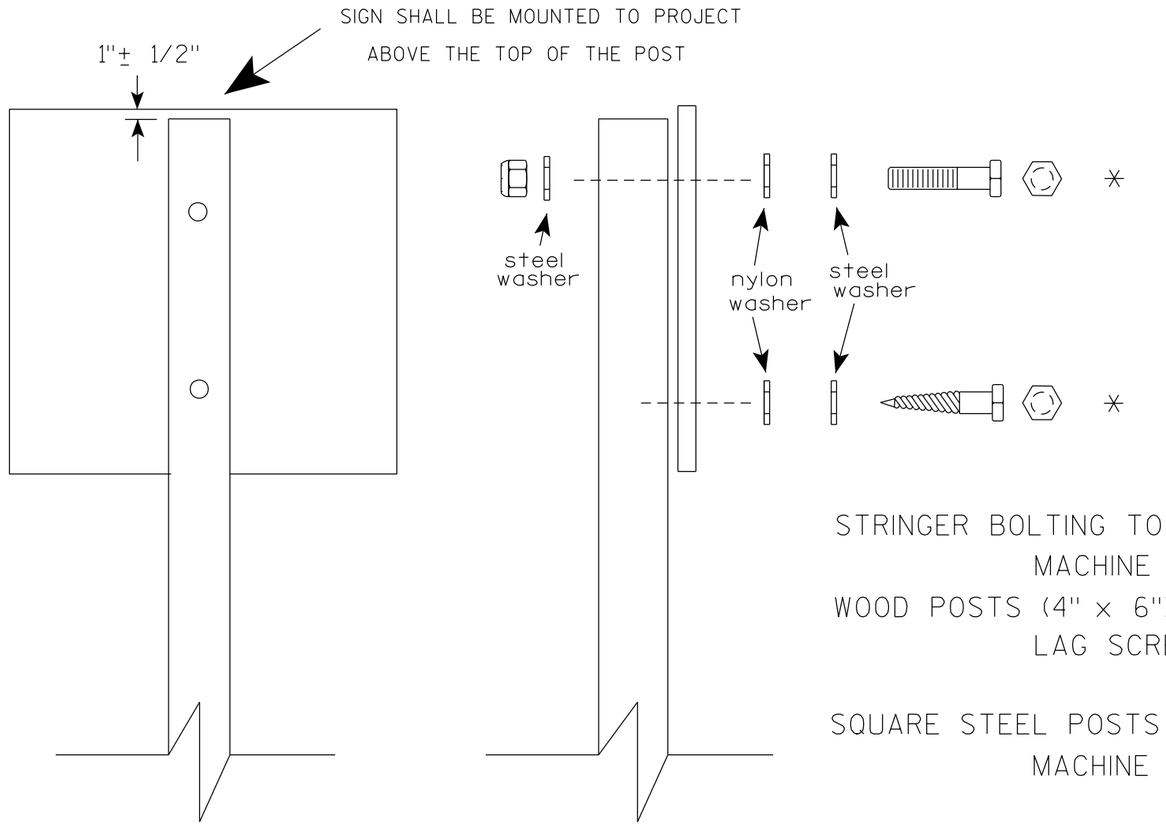
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 303	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

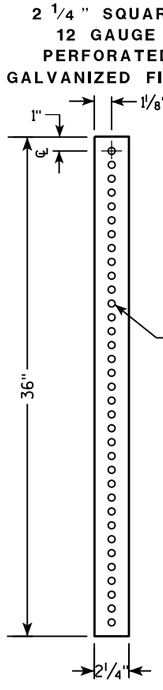
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

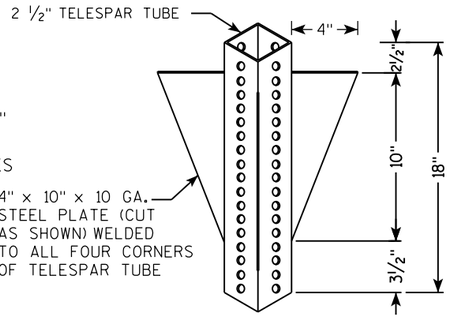
SHEET NO: 304 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

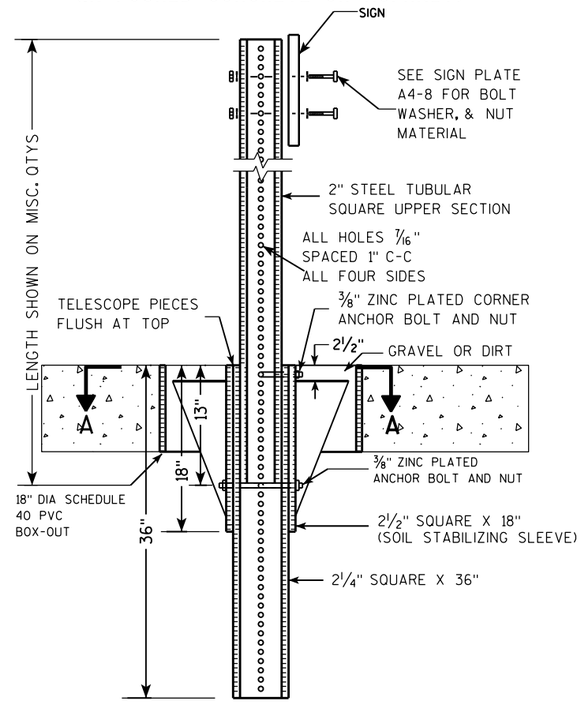
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



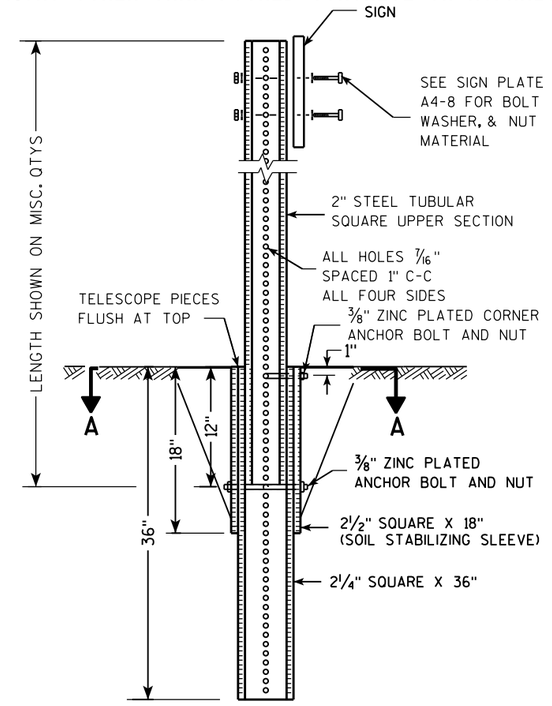
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

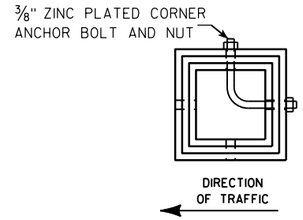


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

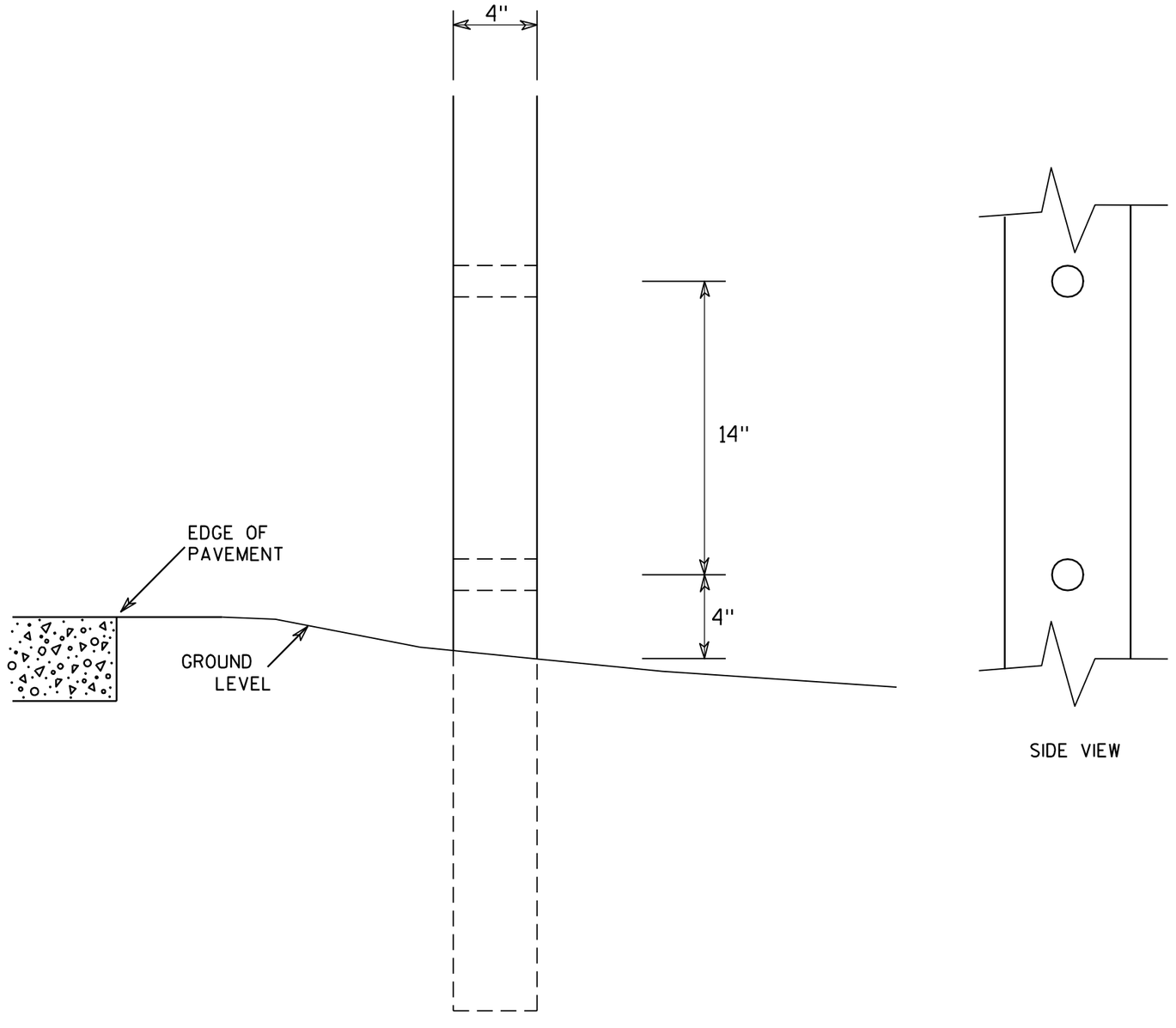
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 305 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

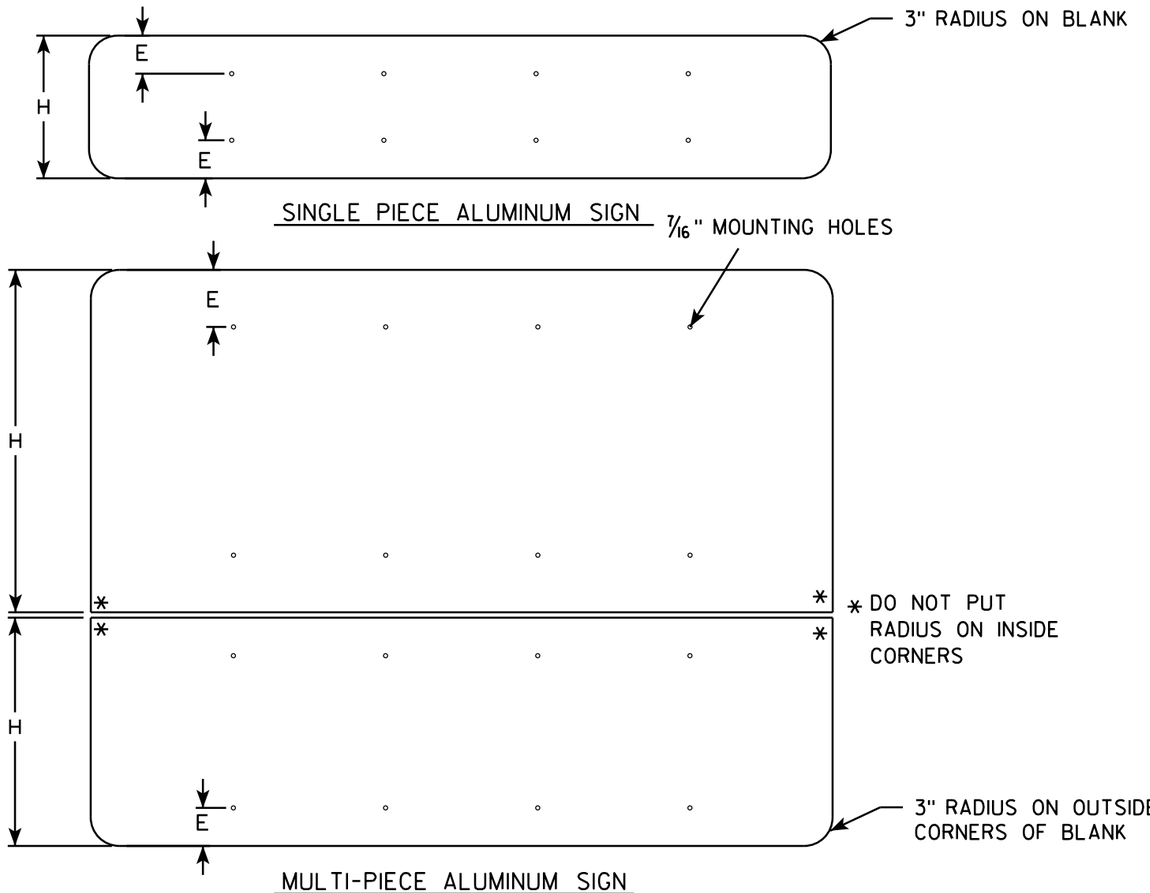
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

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

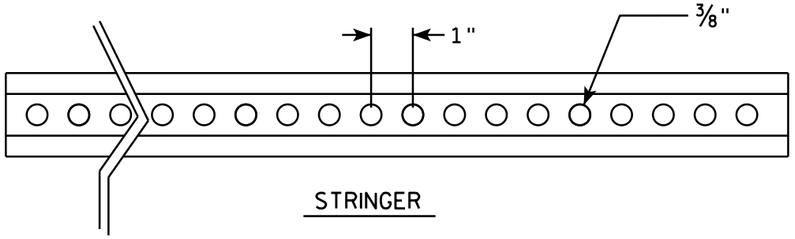
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 306	E



GENERAL NOTES

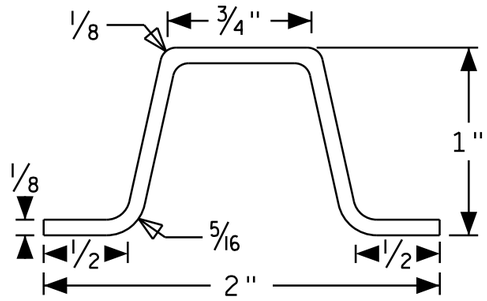
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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"

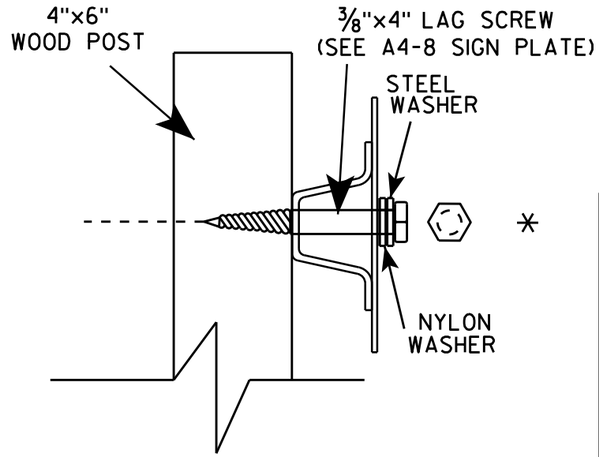


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

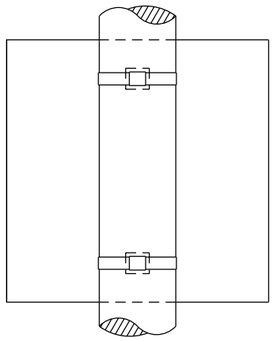
DATE 4/26/16 PLATE NO A4-18.1

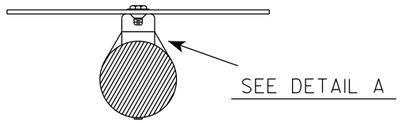
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

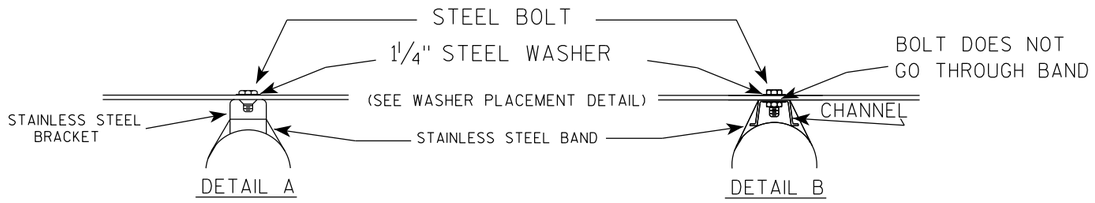
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



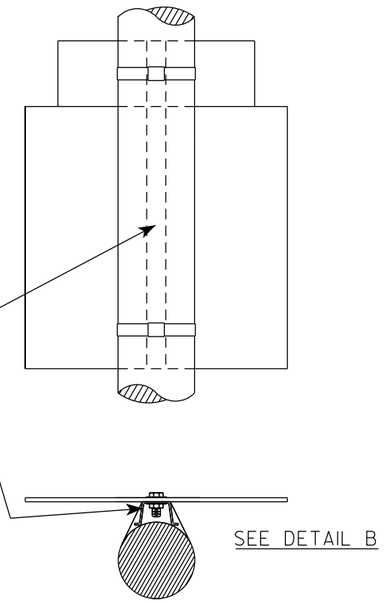




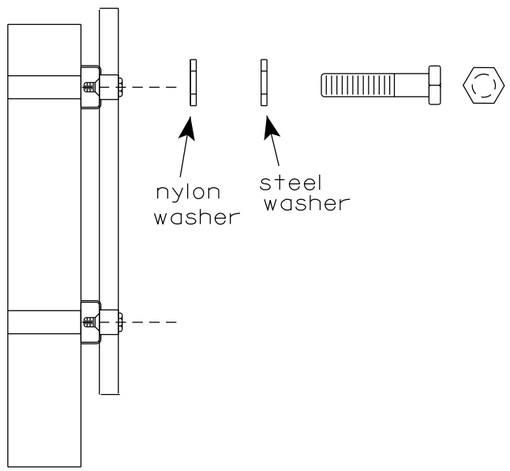
GENERAL NOTES

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

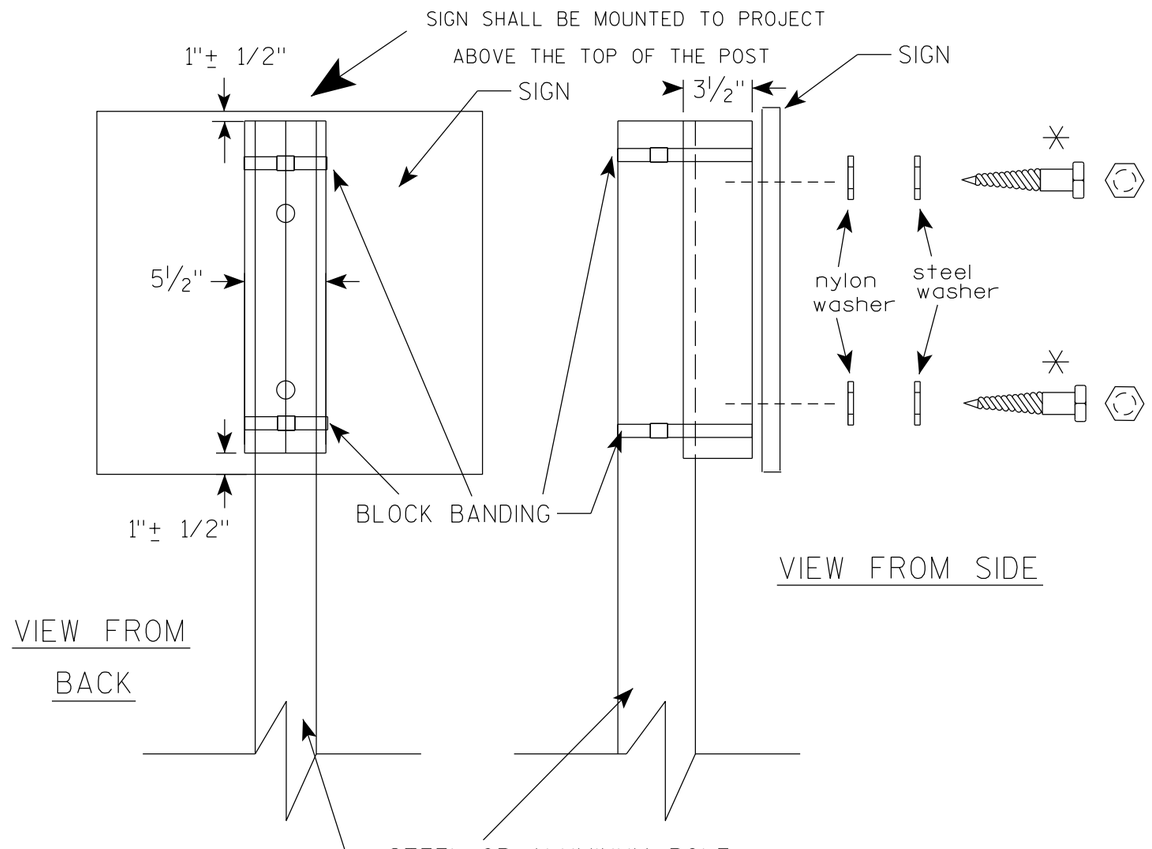
DATE 6/10/19 PLATE NO. A5-9.4

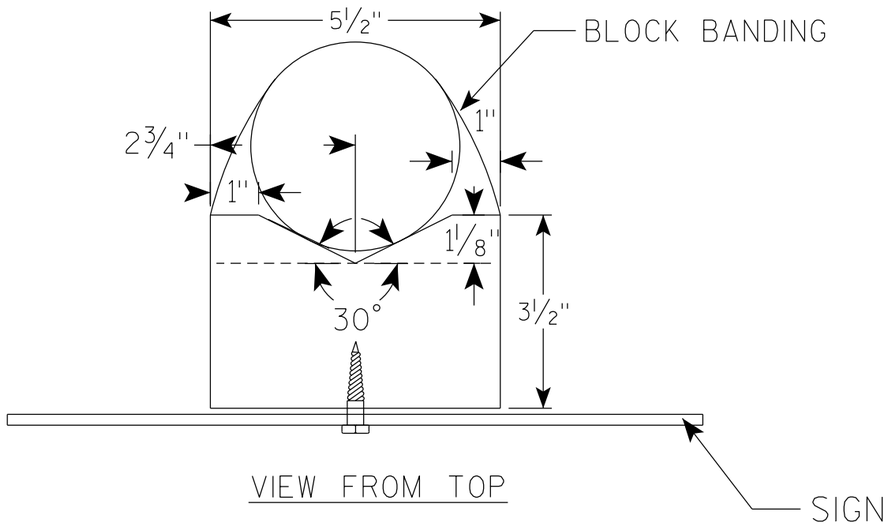
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 308	E

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)

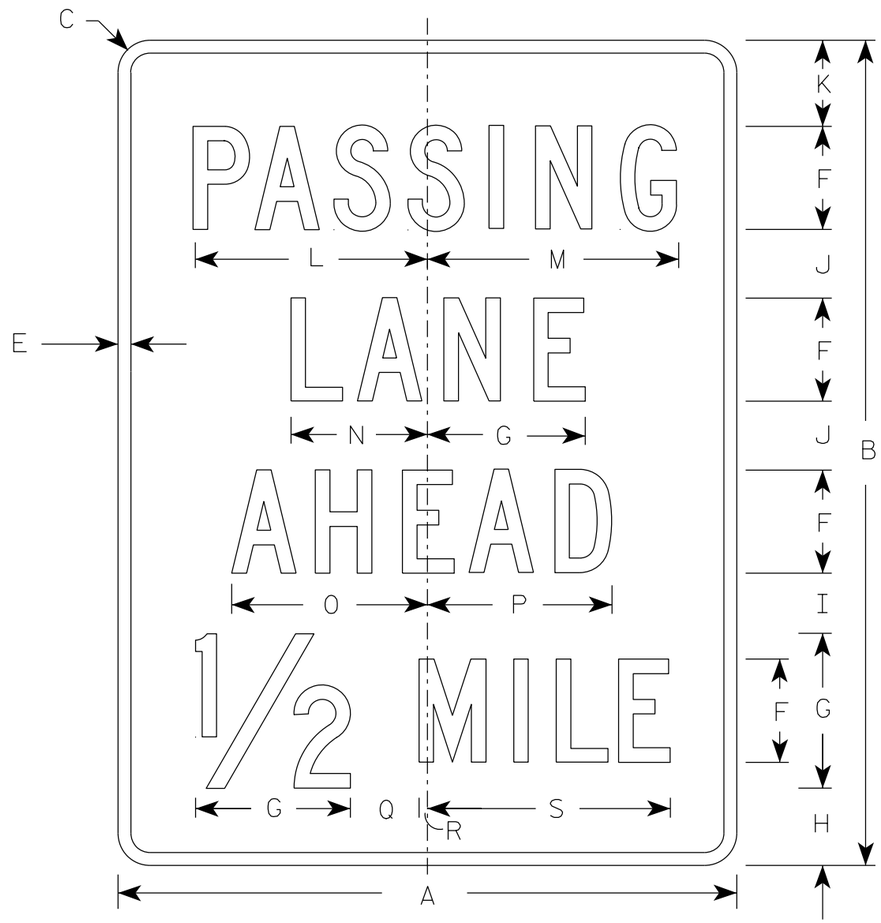
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 309 E



D17-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	48	1 7/8		3/4	6	9	4 1/2	3 1/2	4	5	13 5/8	14 1/2	8	11 3/8	10 3/4	4	1/2	14 1/8								12.0
2M	36	48	1 7/8		3/4	6	9	4 1/2	3 1/2	4	5	13 5/8	14 1/2	8	11 3/8	10 3/4	4	1/2	14 1/8								12.0
3																											
4																											
5																											

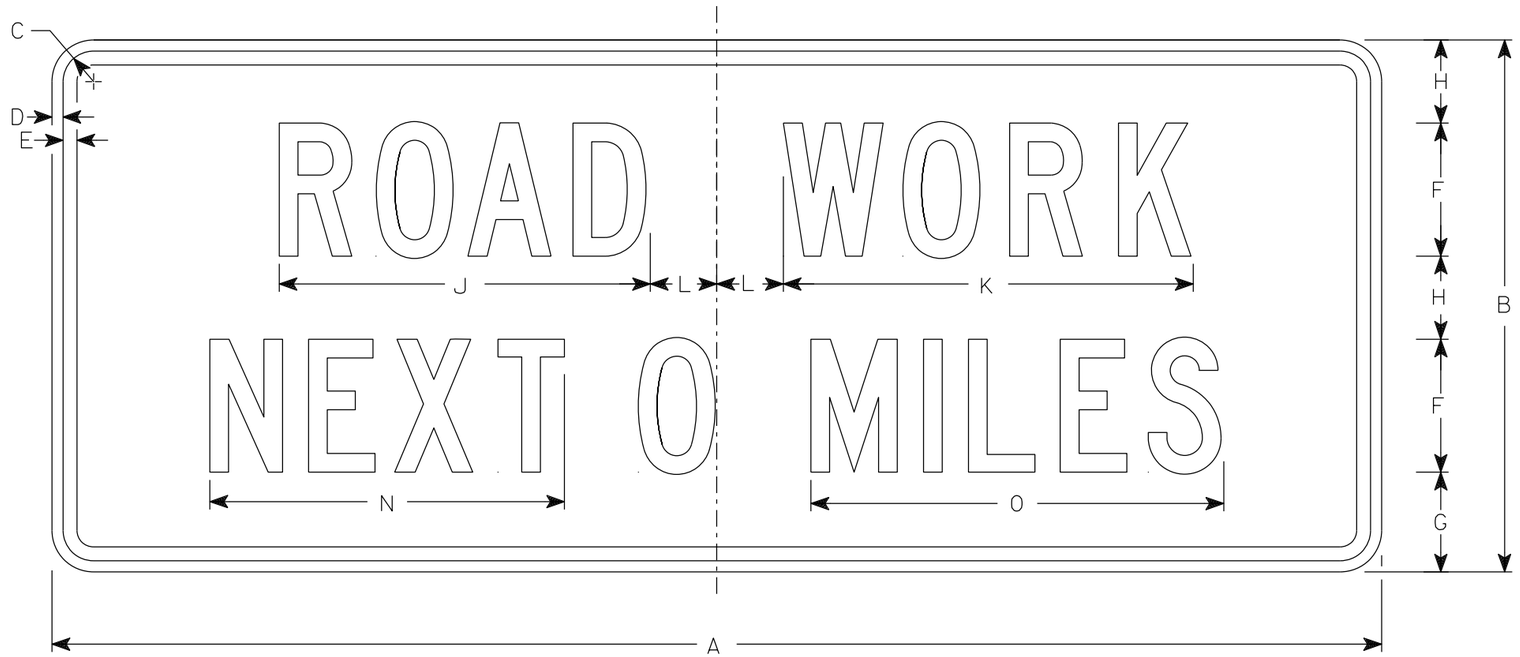
STANDARD SIGN
D17-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2023 PLATE NO. D17-2.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 310	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

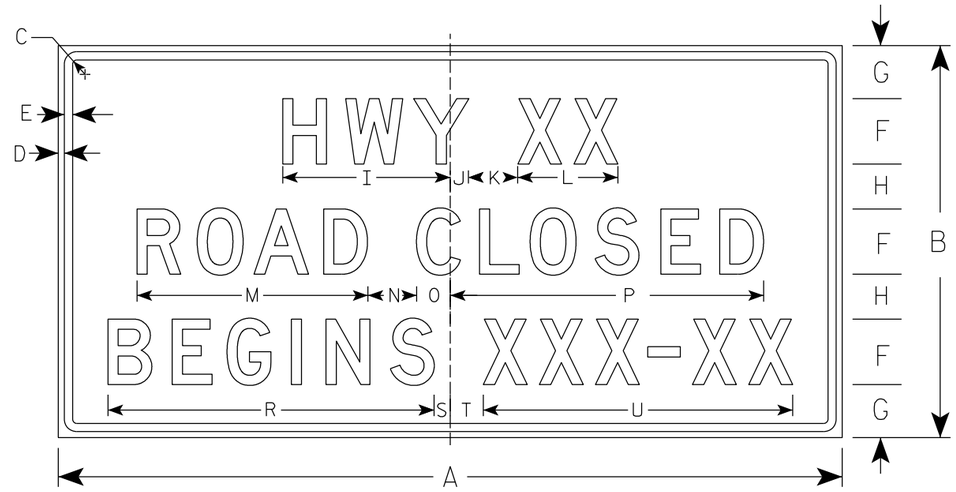
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

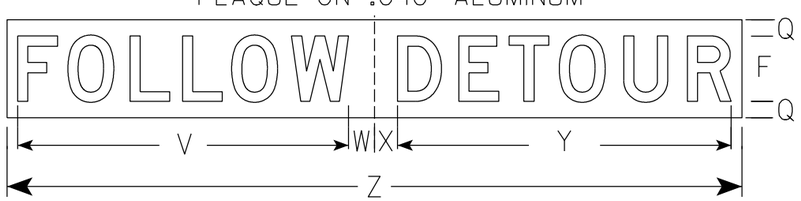
DATE 1/26/2023 PLATE NO. G20-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 311	E



G20-57C

PLAQUE ON .040" ALUMINUM



USE ONLY ONCE WHEN ROAD IS CLOSED

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.

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 1/8	5	2 7/8	29	2	30	1 3/4	3 1/4	28 3/8	40 1/2	2	2	29 3/4	66	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	6	4 1/8	38 3/8	2	39 7/8	2	4	37 7/8	29 3/4	3 1/8	2 7/8	40 7/8	90	32.0
5																											

STANDARD SIGN
G20-57C

WISCONSIN DEPT OF TRANSPORTATION

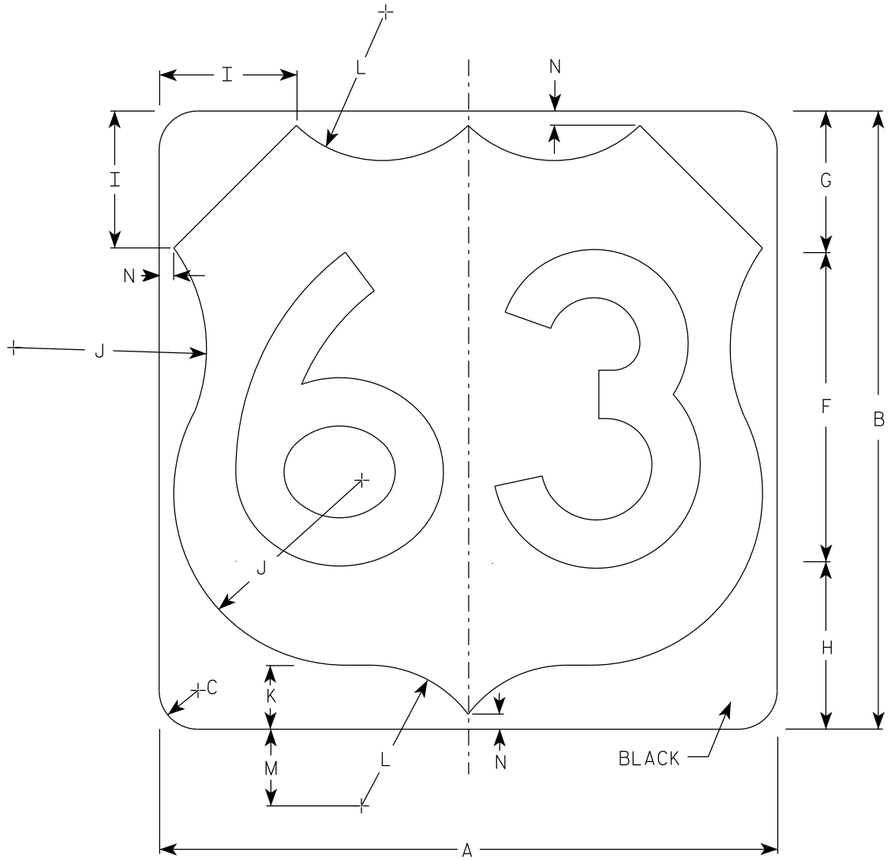
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/19 PLATE NO. G20-57C.1

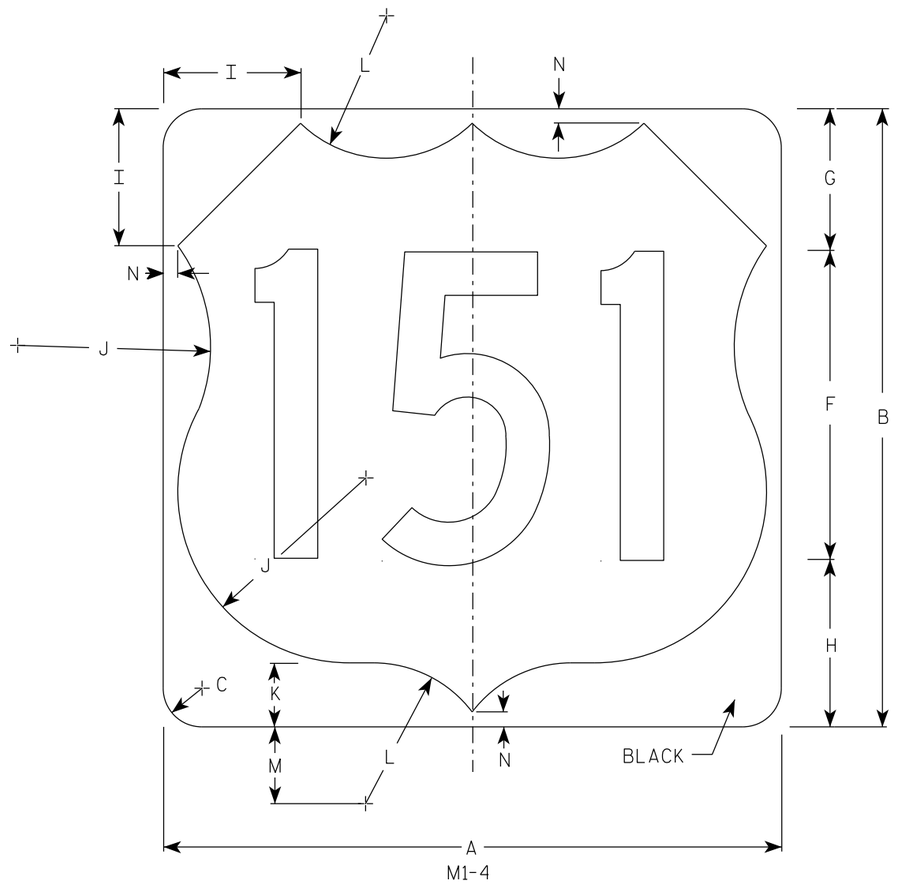
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 312 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
2M	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

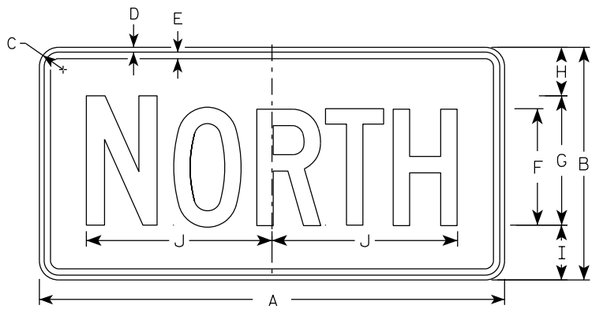
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

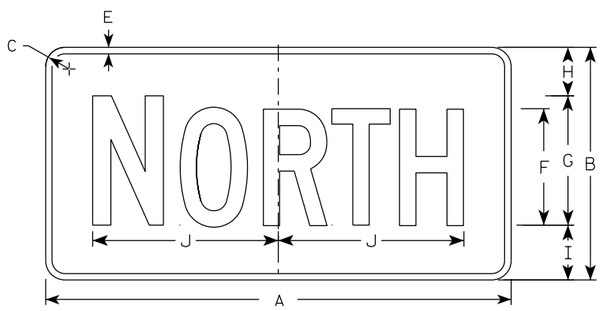
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

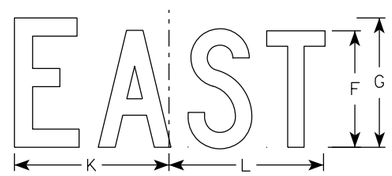
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 313 E



M3-1
MM3-1
MP3-1

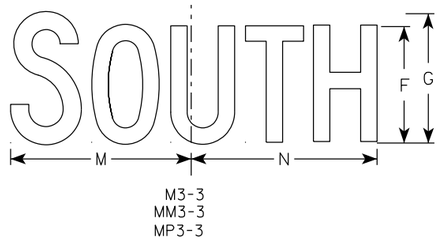


MB3-1
MK3-1
MN3-1

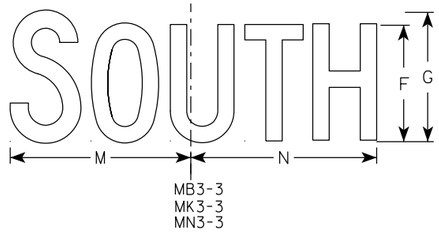


M3-2
MM3-2
MP3-2

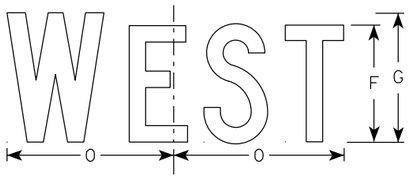
MB3-2
MK3-2
MN3-2



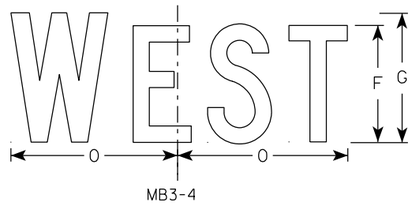
M3-3
MM3-3
MP3-3



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

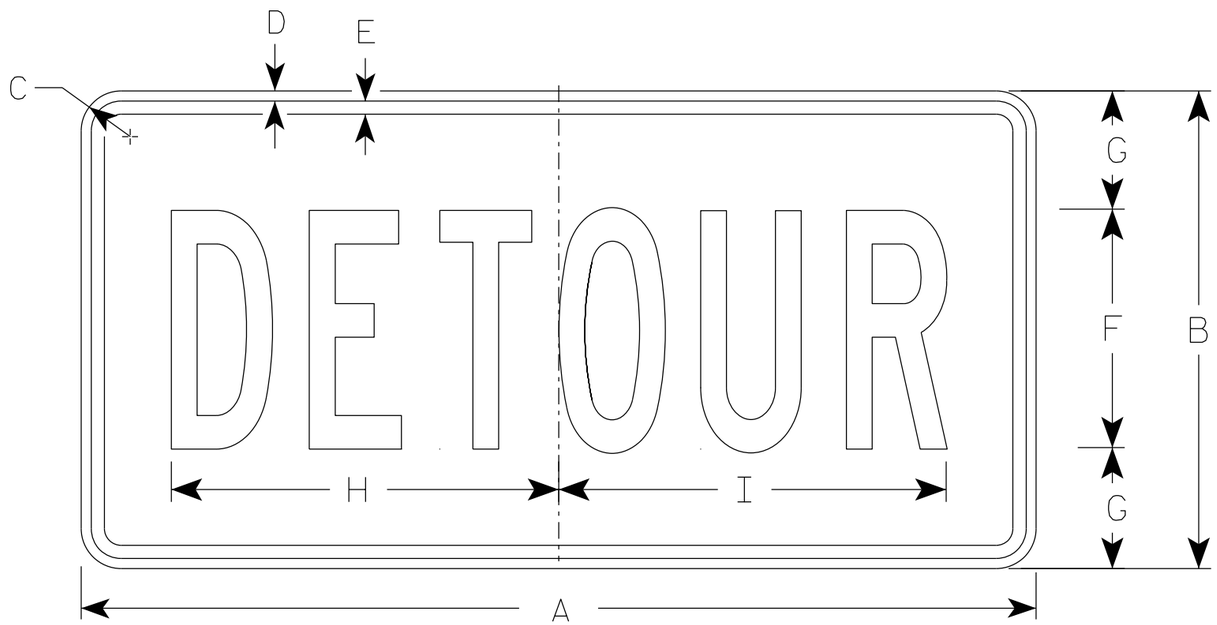
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 314 | E

NOTES

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



M4-8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

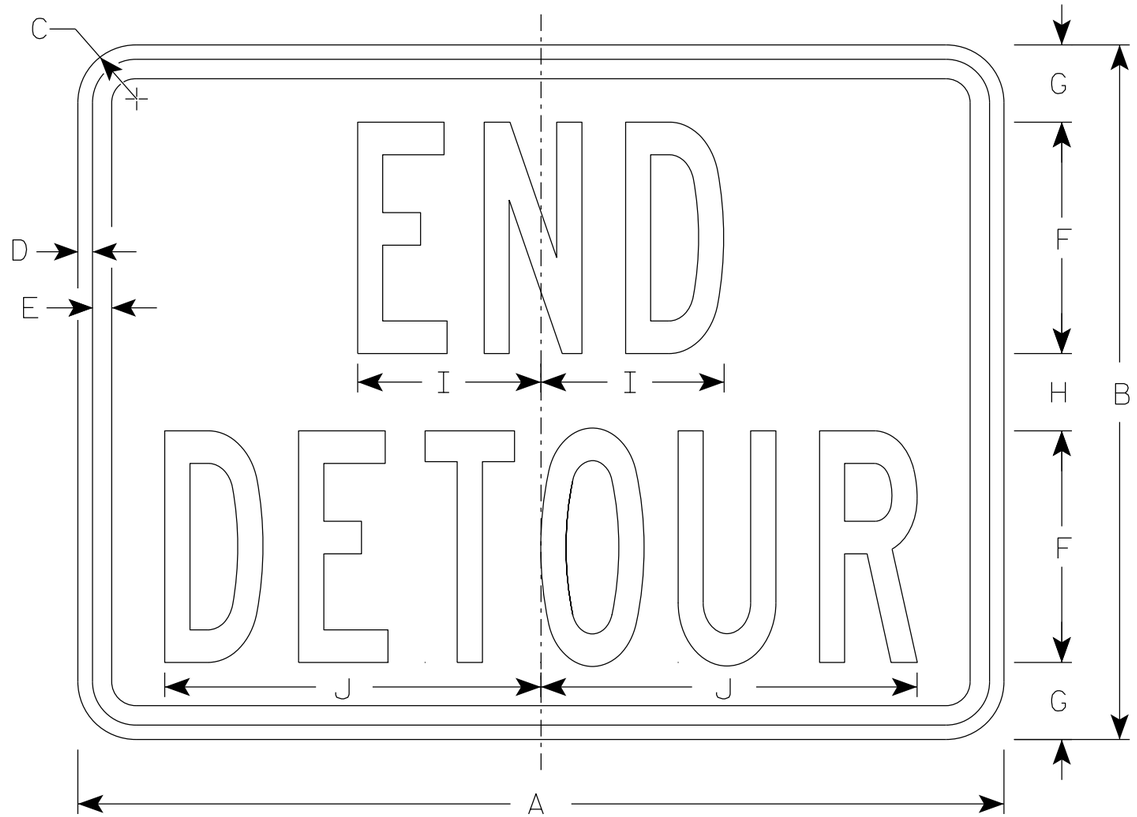
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 315	E



M4-8A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

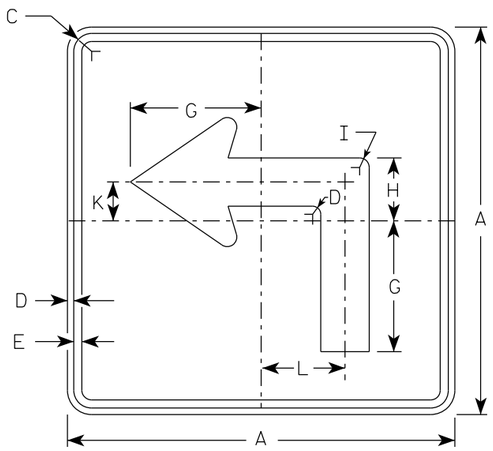
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

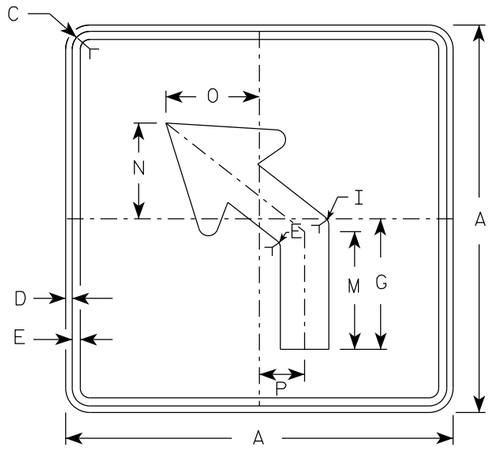
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

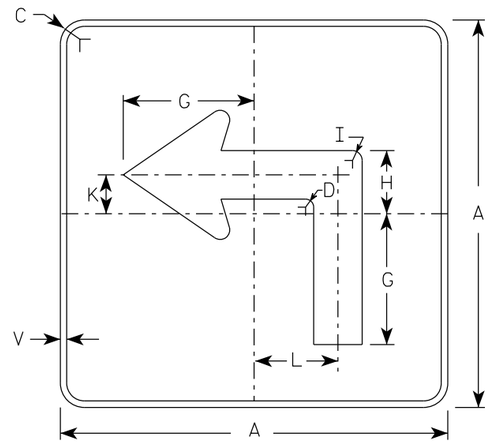
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 316 | E



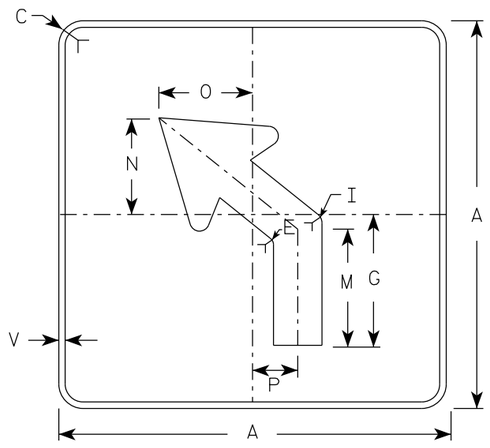
M5-1L
MM5-1L
MO5-1L
MP5-1L



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



MB5-1L
MK5-1L
MN5-1L
MR5-1L

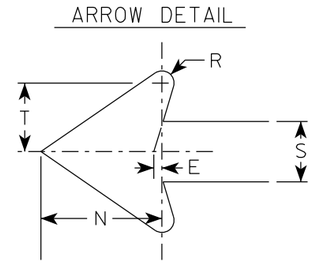


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

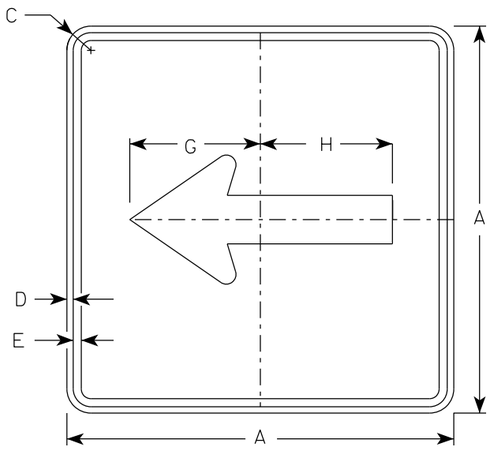
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

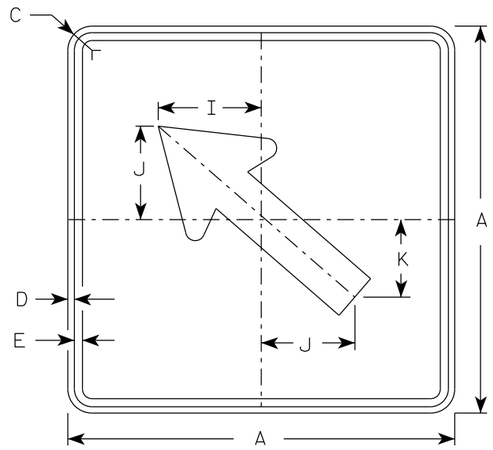
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

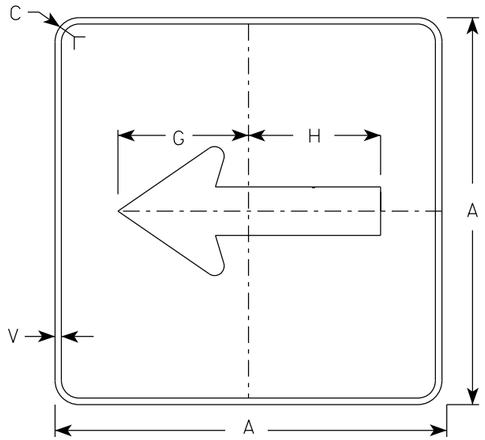
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 317 | E



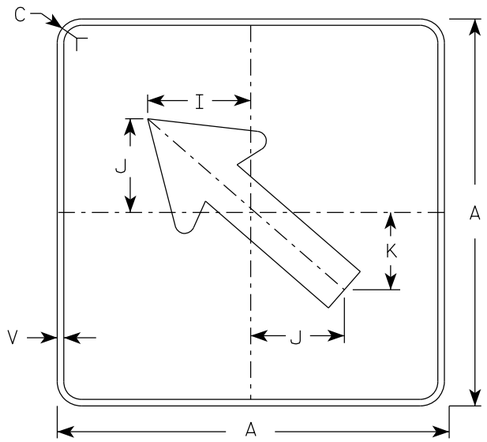
M6-1
MM6-1
MO6-1
MP6-1



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



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

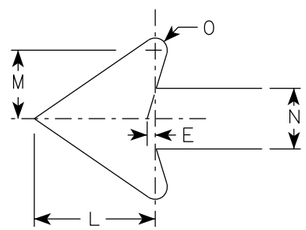


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

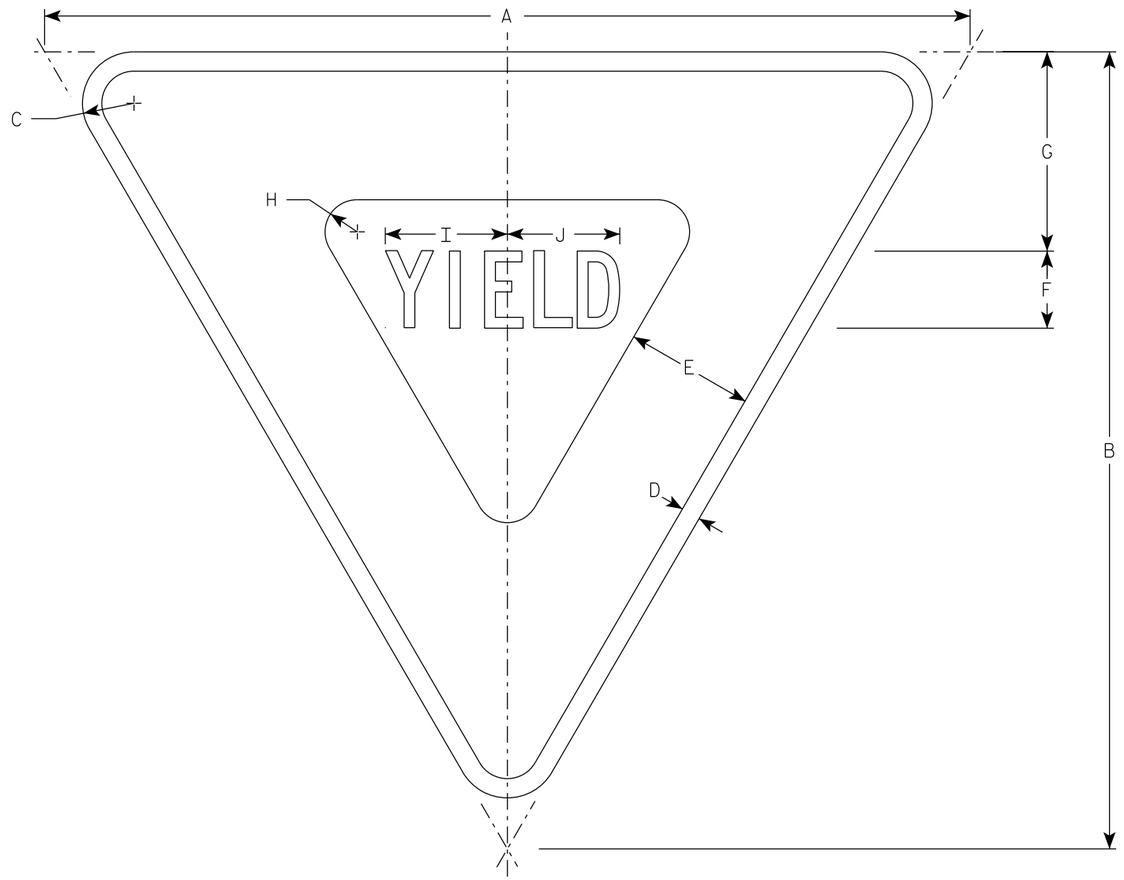
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 318 | E

7

7



R1-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 4
3. Message Series - C
4. The border strip and word message are reflectorized red.

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	26	2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

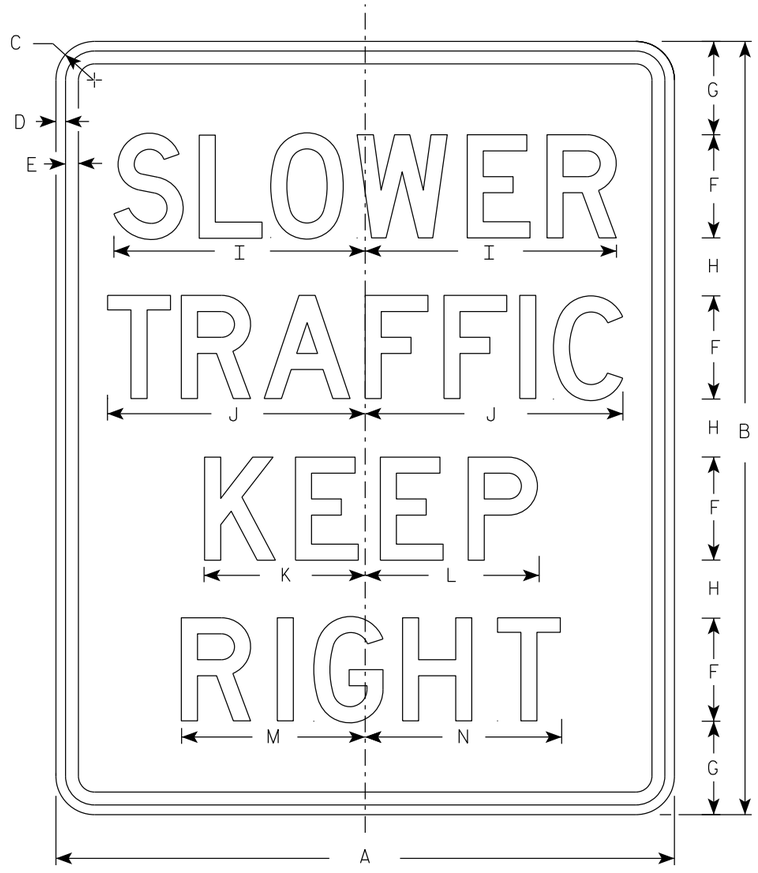
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/10/2024 PLATE NO. R1-2.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 319	E



R4-3

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   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																											
2S	24	30	1 1/2	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
2M	24	30	1 1/2	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
3	36	48	1 7/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
4	36	48	1 7/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
5	48	60	3	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4													20.0

STANDARD SIGN
R4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/23 PLATE NO. R4-3.9

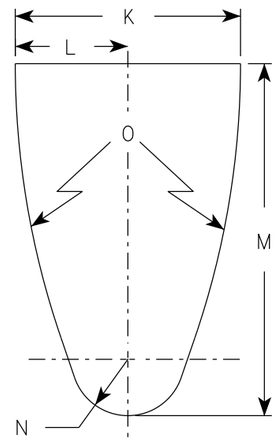
PROJECT NO:

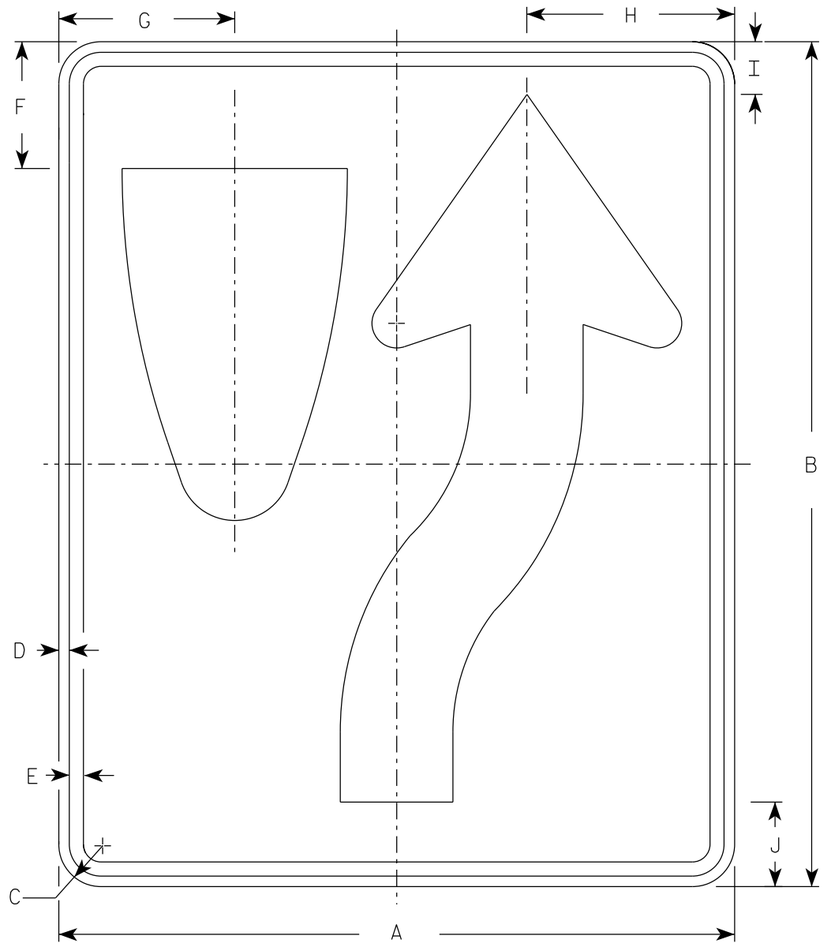
SHEET NO: 320 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

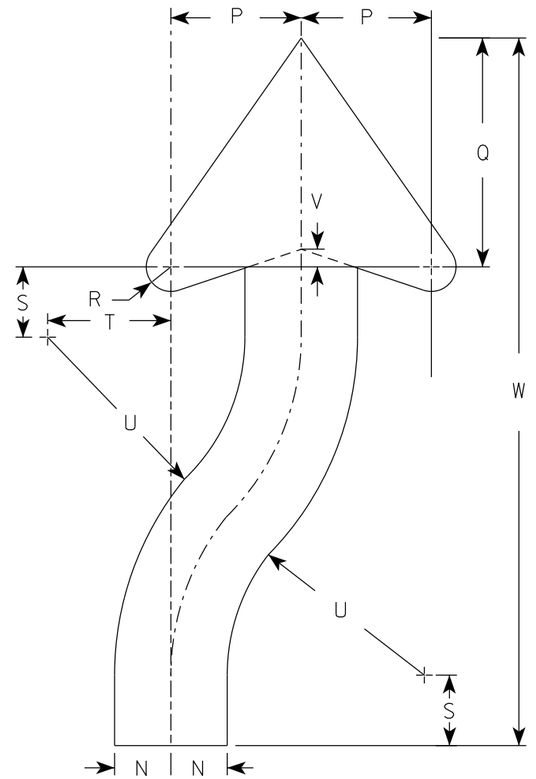
DIVIDER DETAIL





R4-7

ARROW DETAIL



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

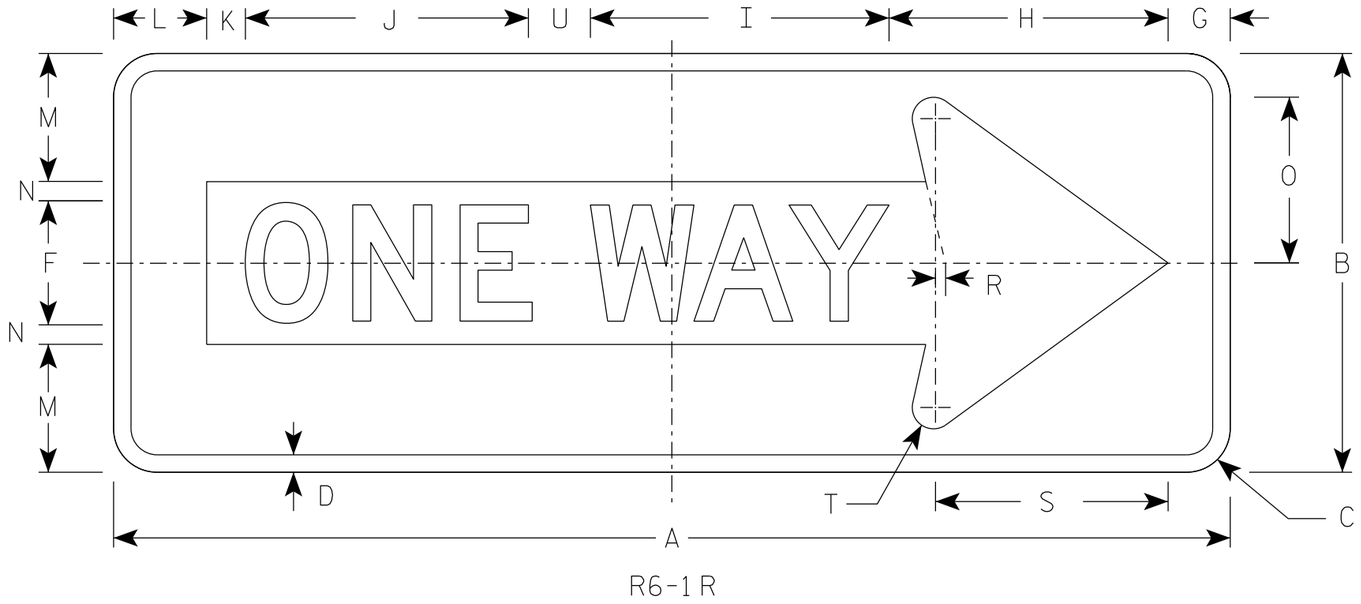
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

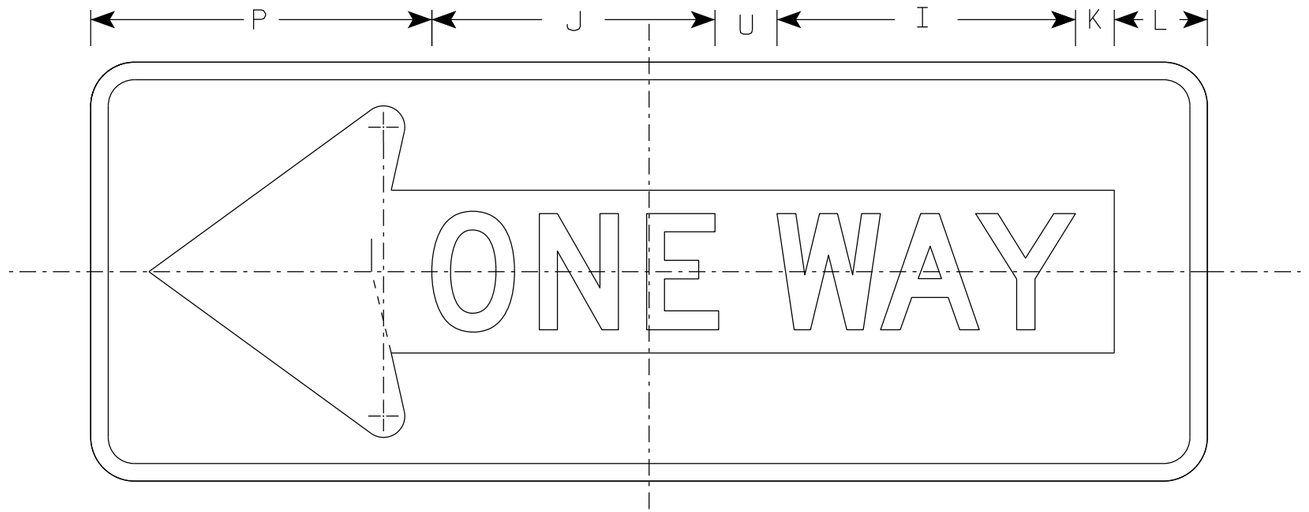
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 321	E



R6-1R



R6-1L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Black
   Message - Black Legend & White Arrow & Border
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2	3/4	2						3.0
2M	48	18	1 7/8	3/4		5	2 1/2	11	13	12 1/4	2 3/4	3 1/2	5 1/2	1	7 1/8	13 1/2		1/2	10 1/8	7/8	3						6.0
3	48	18	1 7/8	3/4		5	2 1/2	11	13	12 1/4	2 3/4	3 1/2	5 1/2	1	7 1/8	13 1/2		1/2	10 1/8	7/8	3						6.0
4	48	18	1 7/8	3/4		5	2 1/2	11	13	12 1/4	2 3/4	3 1/2	5 1/2	1	7 1/8	13 1/2		1/2	10 1/8	7/8	3						6.0
5																											

STANDARD SIGN
R6-1 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

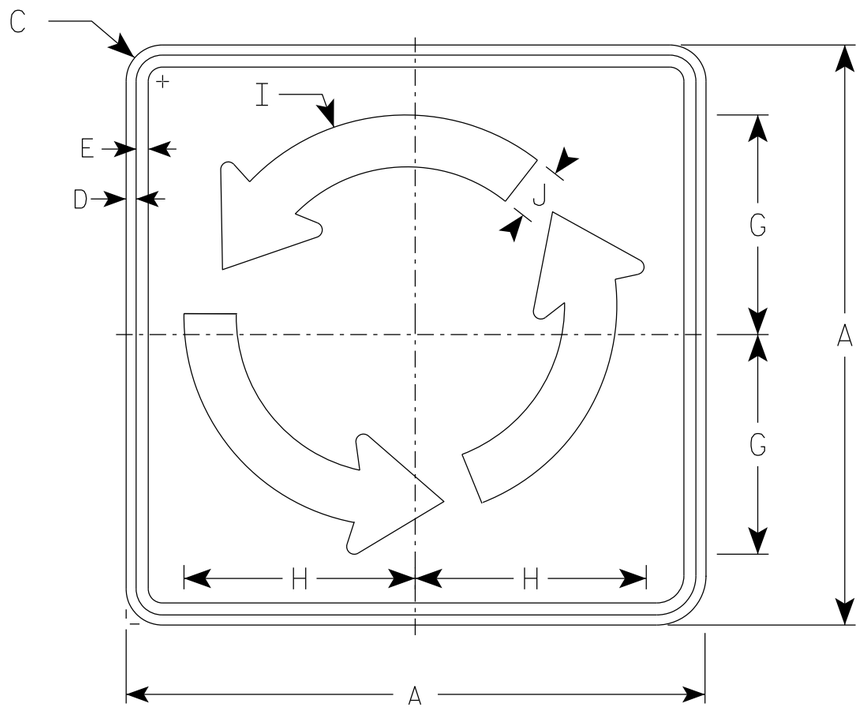
DATE 4/7/2025 PLATE NO. R6-1.5

PROJECT NO:

SHEET NO: 322 E

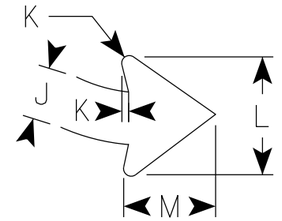
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black



R6-5P

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	Area sq. ft.
1																									
2S	30		1 7/8	1/2	5/8		11 3/8	12	11 1/8	2 3/4	3/8	6	4 3/4												6.25
2M	30		1 7/8	1/2	5/8		11 3/8	12	11 1/8	2 3/4	3/8	6	4 3/4												6.25
3																									
4																									
5																									

STANDARD SIGN
R6-5P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/26/23 PLATE NO. R6-5P.2

PROJECT NO:

SHEET NO: 323 E

FILE NAME : C::CAEfiles\Project\tr_stdplate\R65P.dgn PLOT DATE : 26-OCT 2023 1:46 PLOT BY : mscj9h

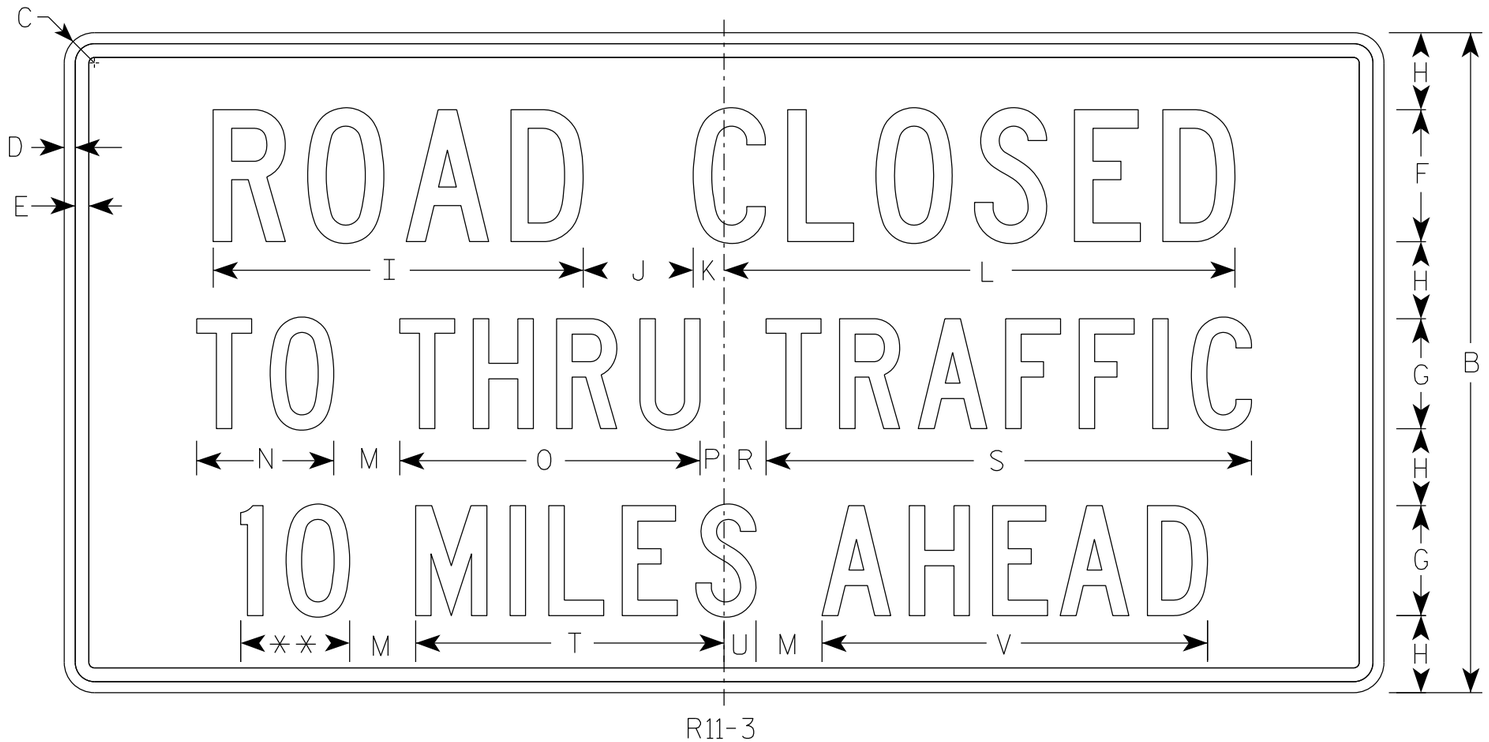
WISDOT/CADDS SHEET 42

7

7

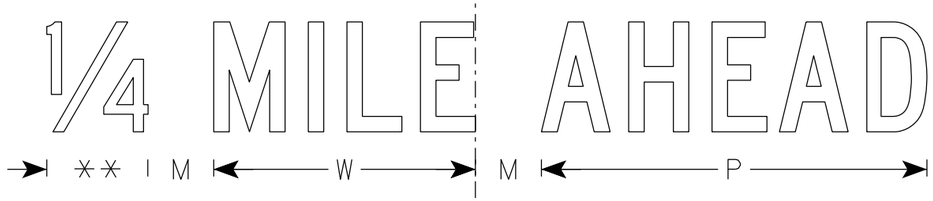
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

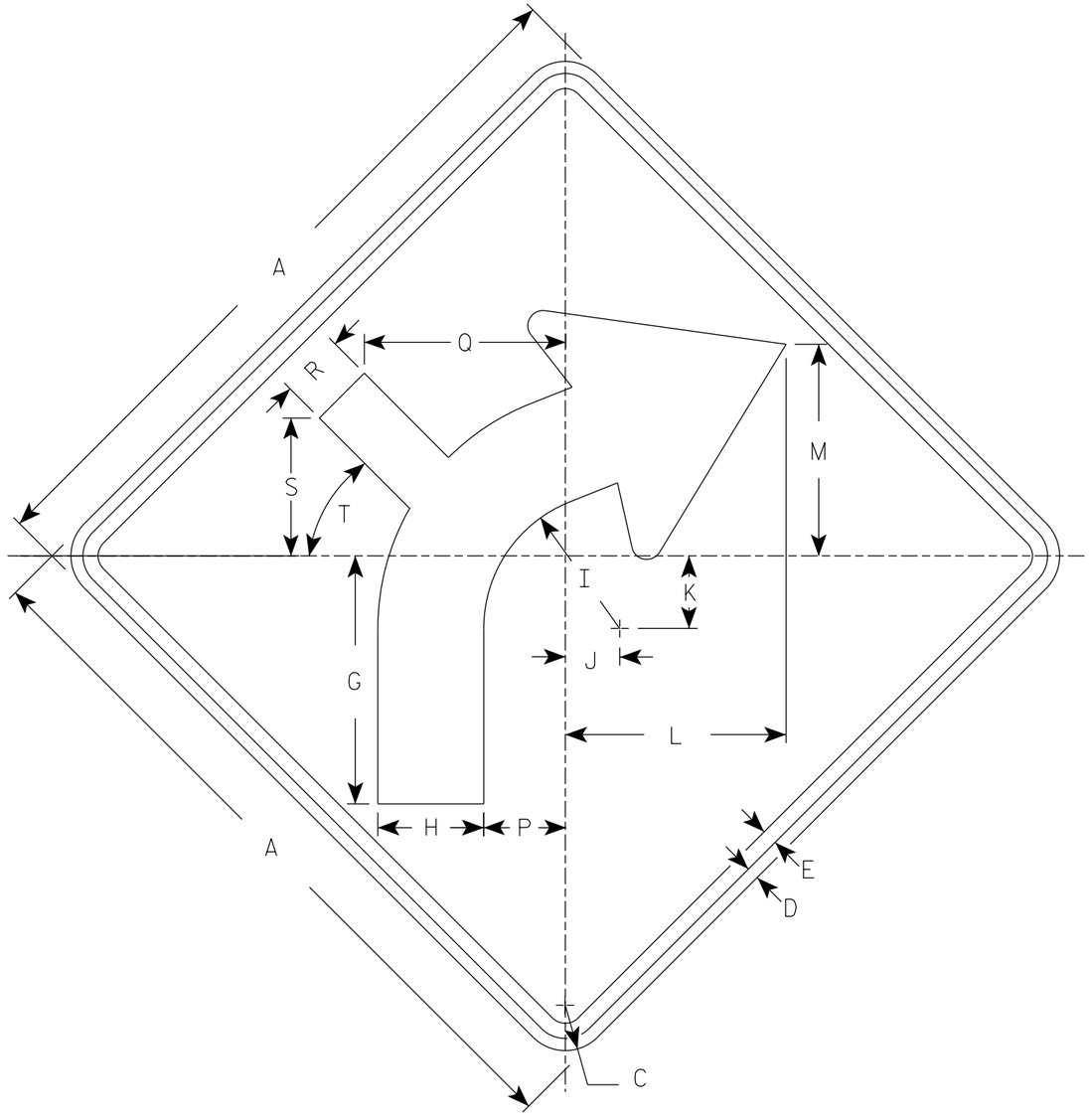
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3.10

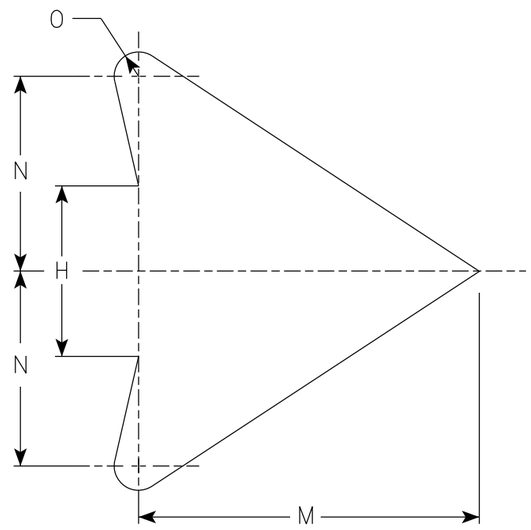
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 324 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-10L is the same as W1-10R except the arrow is reversed along the vertical centerline.



W1-10R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2	2 5/8	6 5/8	2 1/8	4 1/2	45°							4.0
2S	30		1 7/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8	3 3/8	8 3/8	2 5/8	5 3/4	45°							6.25
2M	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
3	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
4	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
5	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1	5 3/8	13 1/4	4 1/4	9 1/8	45°							16.0

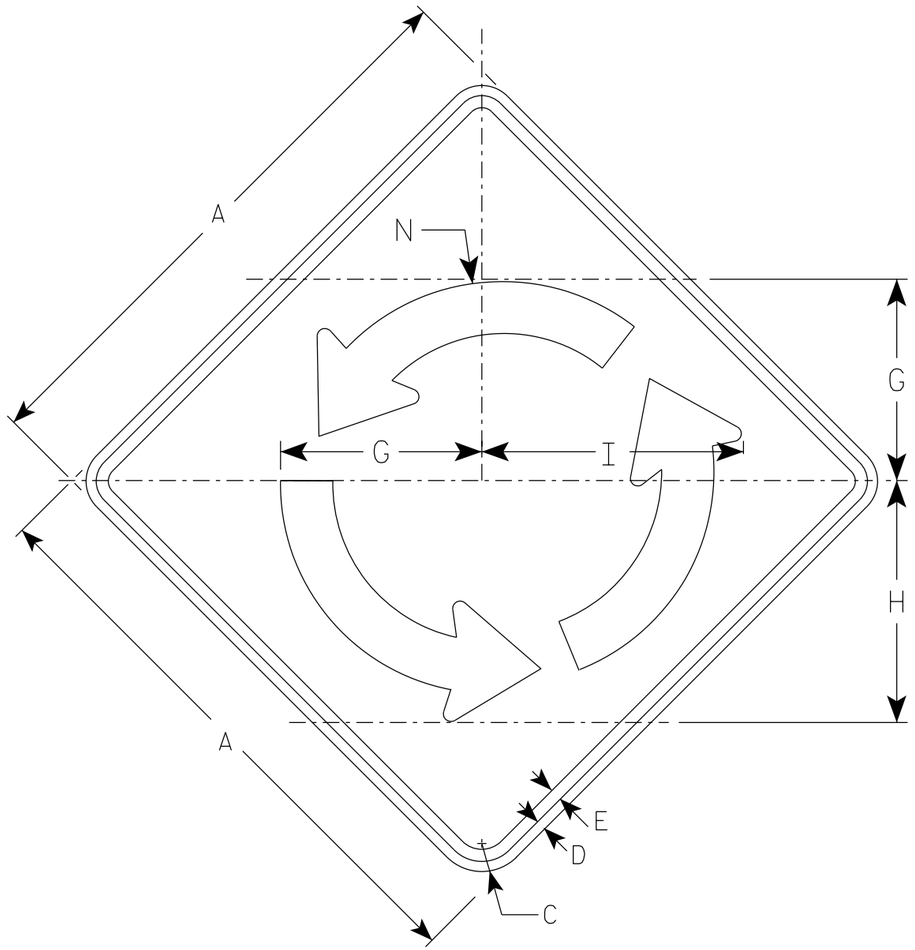
STANDARD SIGN
W1-10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/15/2023 PLATE NO. W1-10.4

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

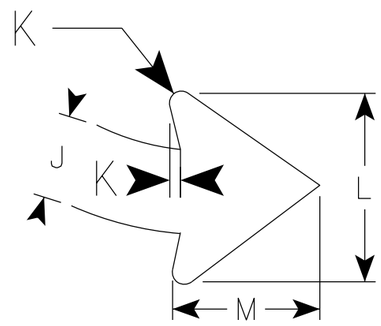


W2-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

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	Area sq. ft.
1																									
2S	30		1 7/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
2M	30		1 7/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
3	36		2 1/4	5/8	3/4		12 1/2	15	16 1/4	3 1/4	1/2	7 3/8	5 3/4	13 3/8											9.00
4	48		3	3/4	1		16 5/8	20	16 1/4	4 3/8	5/8	9 3/4	7 5/8	17 7/8											16.0
5																									

STANDARD SIGN
W2-6

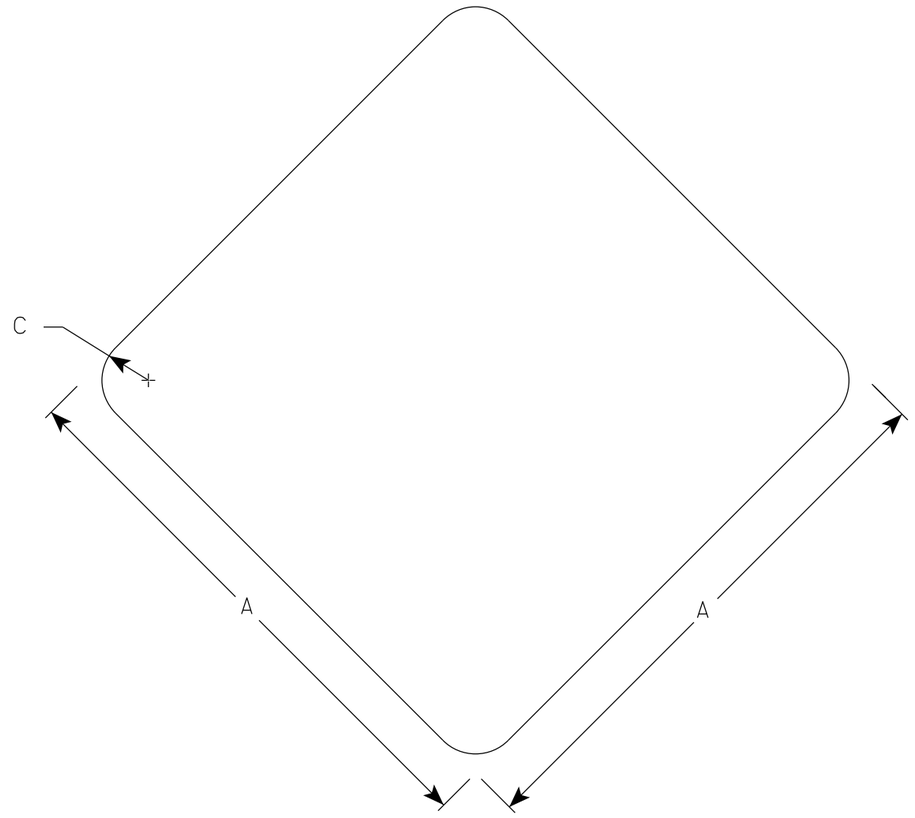
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/2023 PLATE NO. W2-6.8

PROJECT NO:

SHEET NO: 326 E



W5-54

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow

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	12		1 ½																								1.0
2S	18		1 ½																								2.25
2M	18		1 ½																								2.25
3																											
4																											
5																											

STANDARD SIGN
W5-54

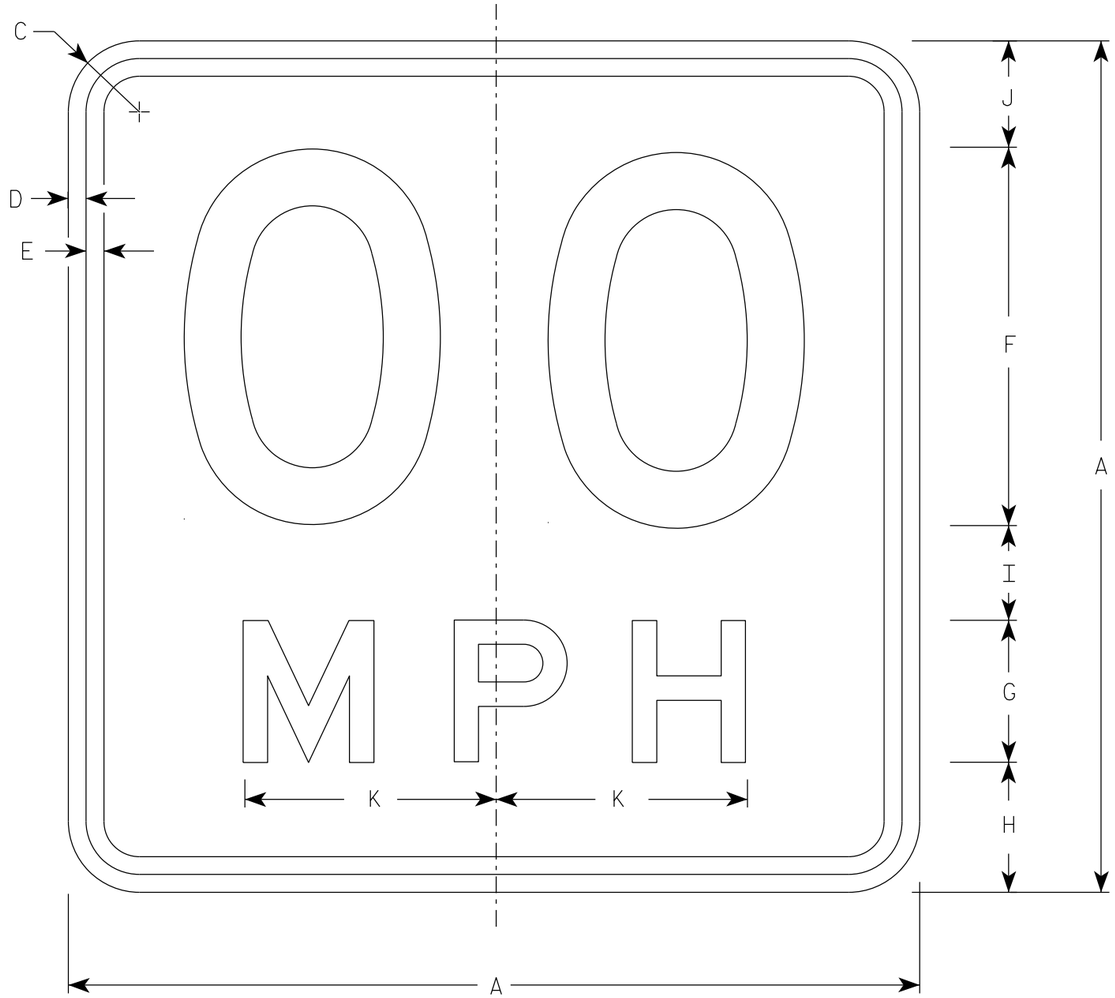
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/5/2024 PLATE NO. W5-54.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate_W554.dgn PLOT DATE : 5-MARCH 2024 11:55 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W13-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 5
4. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
5. Line 1 is Series D
   Line 2 is Series E

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/2	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

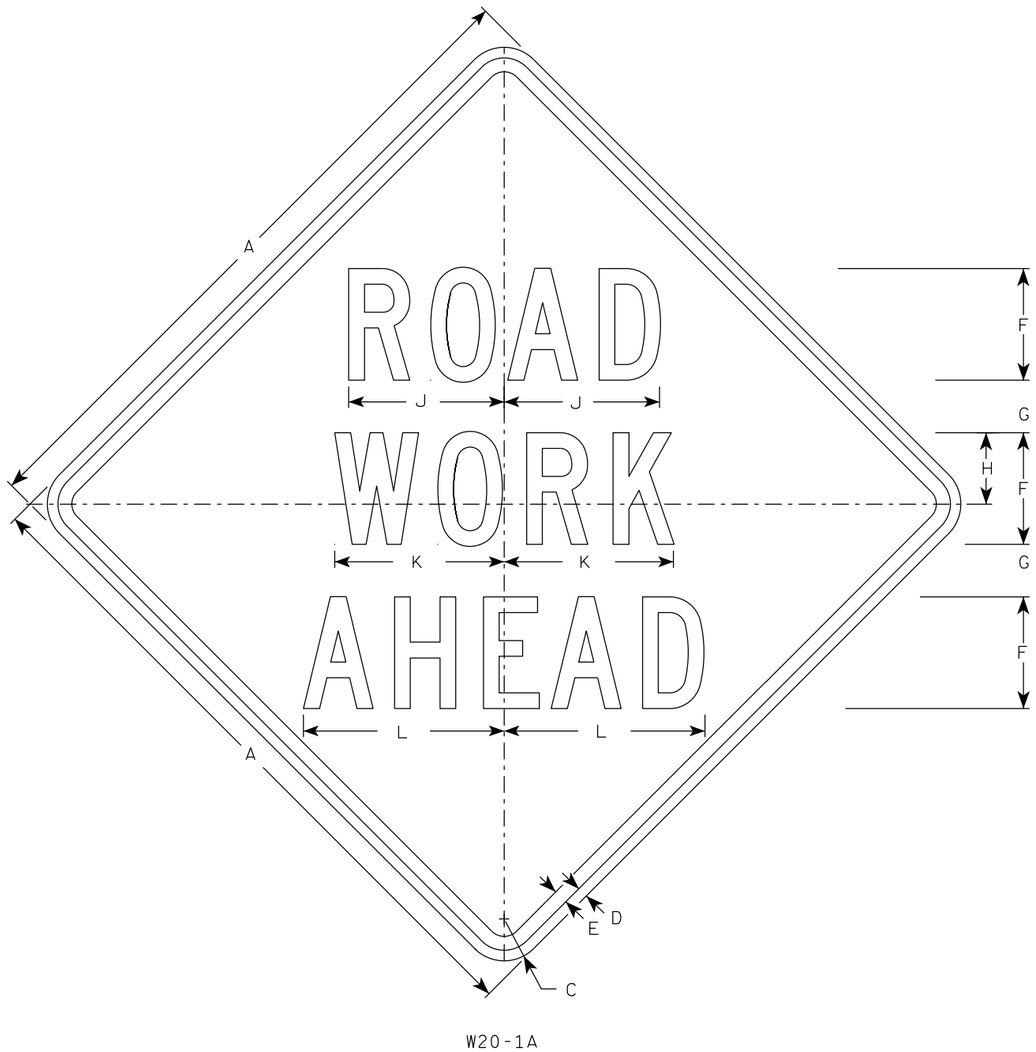
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

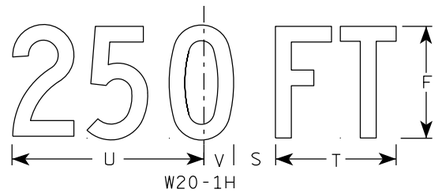
DATE 1/8/2024 PLATE NO. W13-1.17

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

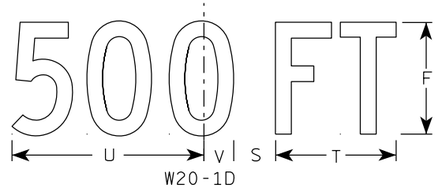
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W131.dgn PLOT DATE : 8-Jan 2024 11:07 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W20-1A

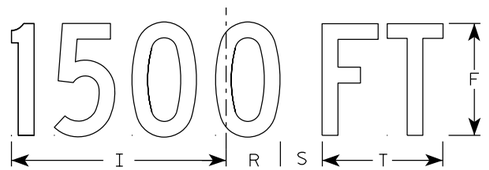


W20-1H



W20-1D

W20-1C

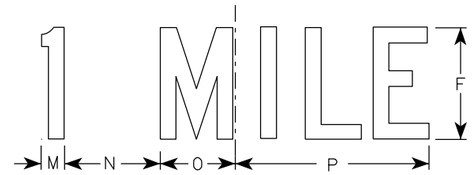


W20-1B

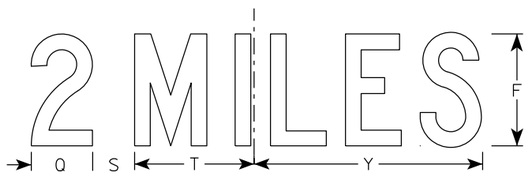
NOTES

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

W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		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

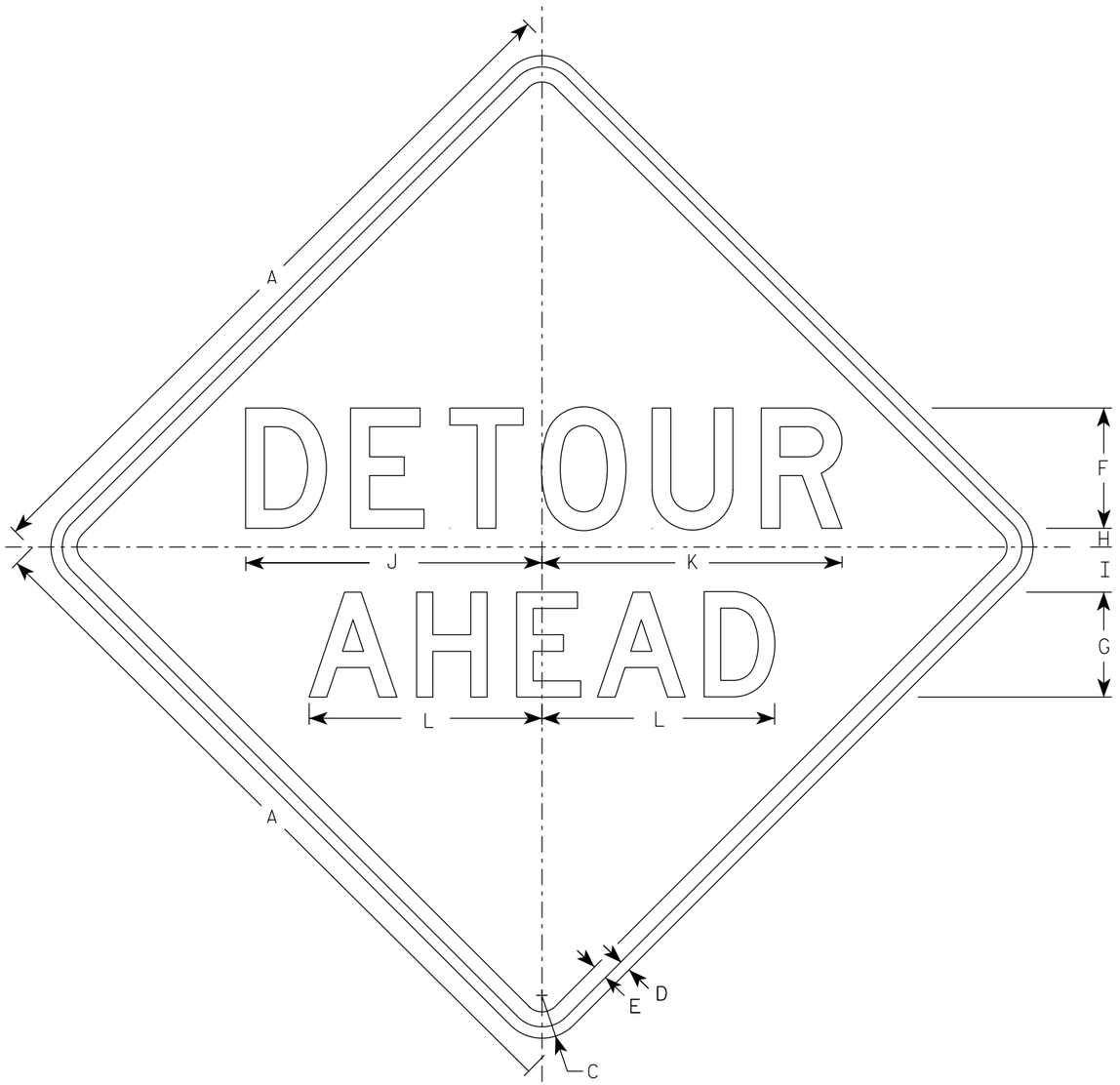
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

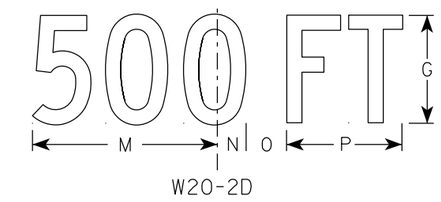
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

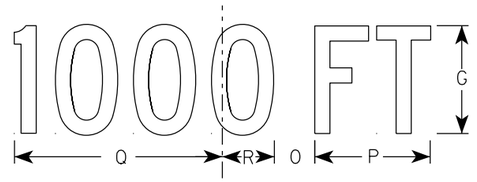
SHEET NO: 329 E



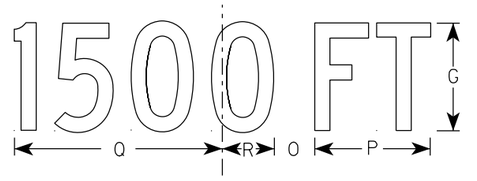
W20-2A



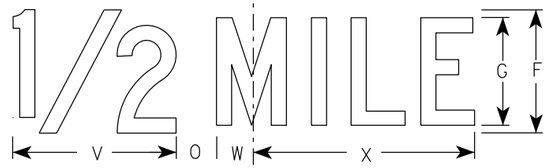
W20-2D



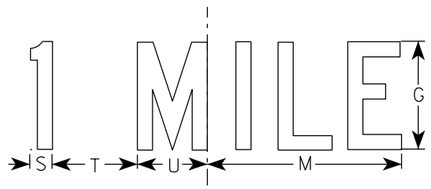
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

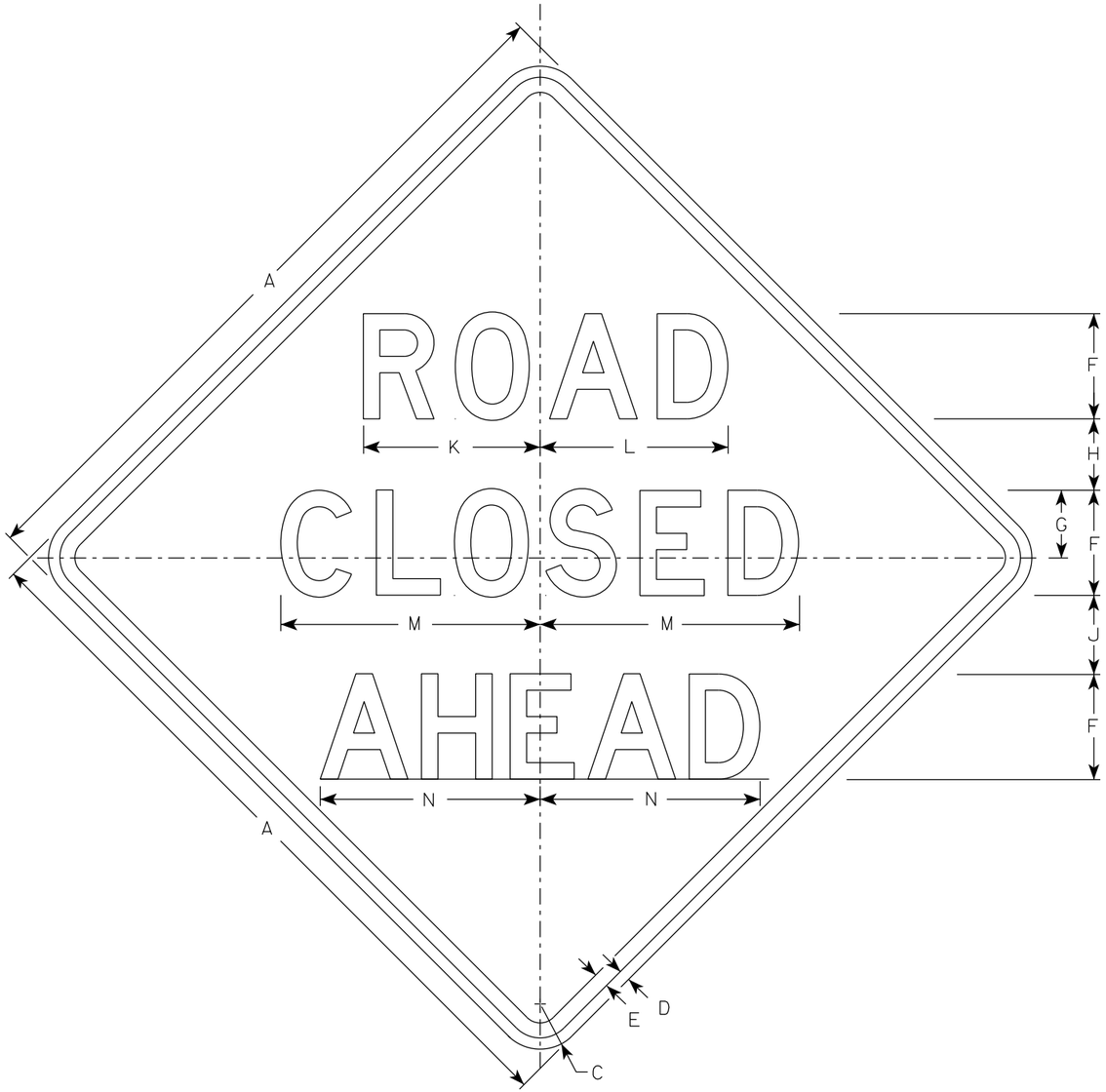
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

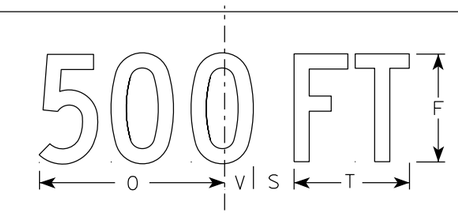
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W20-3A



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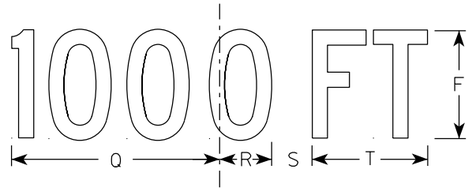

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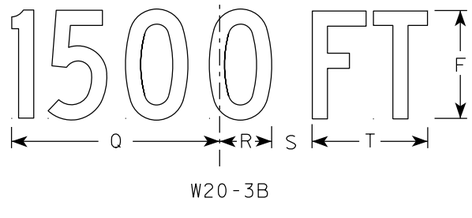

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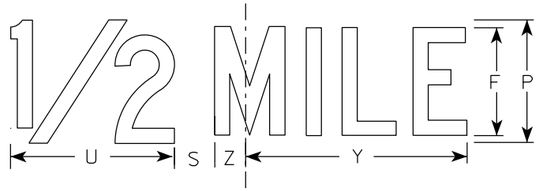
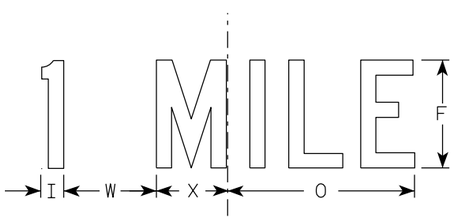


W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

DIVISION 1A - USH 45 NB

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 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1124+31.25	112431.25	0.00	19.93	12.50	0.00	0	0	0	0	0	0
1124+50.00	112450.00	18.75	20.04	12.50	0.00	14	9	0	14	0	5
1124+75.00	112475.00	25.00	17.64	12.50	0.14	17	12	0	31	0	10
1125+00.00	112500.00	25.00	17.37	13.33	0.24	16	12	0	47	0	14
1125+25.00	112525.00	25.00	17.14	13.75	0.48	16	13	0	63	0	17
1125+50.00	112550.00	25.00	17.34	14.58	2.61	16	13	1	79	1	19
1125+75.00	112575.00	25.00	17.59	15.42	5.48	16	14	4	95	6	16
1126+00.00	112600.00	25.00	18.02	16.67	5.87	16	15	5	111	13	11
1126+25.00	112625.00	25.00	18.99	17.50	8.82	17	16	7	128	21	3
1126+50.00	112650.00	25.00	19.04	18.33	13.56	18	17	10	146	34	-9
1126+75.00	112675.00	25.00	20.29	19.58	16.21	18	18	14	164	51	-26
1127+00.00	112700.00	25.00	20.60	20.42	20.34	19	19	17	183	73	-48
1127+25.00	112725.00	25.00	21.96	21.25	26.03	20	19	21	203	99	-73
1127+50.00	112750.00	25.00	22.08	22.08	28.62	20	20	25	223	130	-104
1127+75.00	112775.00	25.00	22.92	22.92	28.86	21	21	27	244	164	-138
1128+00.00	112800.00	25.00	24.17	24.17	24.25	22	22	25	266	195	-169
1128+25.00	112825.00	25.00	24.58	24.58	15.51	23	23	18	289	218	-192
1128+50.00	112850.00	25.00	24.58	24.58	8.98	23	23	11	312	231	-205
1128+75.00	112875.00	25.00	26.03	24.23	3.91	23	23	6	335	239	-213
1129+00.00	112900.00	25.00	27.34	24.23	0.44	25	22	2	360	241	-212
1129+25.00	112925.00	25.00	32.41	24.18	0.00	28	22	0	388	241	-206
1129+50.00	112950.00	25.00	37.78	24.21	0.00	32	22	0	420	241	-196
1129+75.00	112975.00	25.00	112.83	24.21	7.38	70	22	3	490	245	-152
1130+00.00	113000.00	25.00	127.56	25.07	14.57	111	23	10	601	258	-77
1130+25.00	113025.00	25.00	153.14	27.13	68.01	130	24	38	731	305	-18

DIVISION 1B- USH 45 NB

FROM/TO STATION		DISTANCE	INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
			NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1130+25	1132+75	250.00	2,297	478	1,886	2,297	2,358	-538

SURFACE COMPARISON USED FOR QUANTITY CALCULATION

DIVISION 1C - USH 45 NB

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 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1132+75.00	113275.00	0.00	152.03	29.83	163.56	0	0	0	0	0	0
1133+00.00	113300.00	25.00	131.32	27.98	110.27	131	27	127	131	159	-55
1133+25.00	113325.00	25.00	120.40	26.14	43.01	117	25	71	248	248	-52
1133+50.00	113350.00	25.00	121.46	26.14	43.65	112	24	40	360	298	-14
1133+75.00	113375.00	25.00	55.23	26.14	10.53	82	24	25	442	329	13
1134+00.00	113400.00	25.00	51.68	26.17	0.93	49	24	5	491	335	32
1134+25.00	113425.00	25.00	49.52	26.17	0.88	47	24	1	538	336	54
1134+50.00	113450.00	25.00	28.98	25.74	0.09	36	24	0	574	336	66
1134+75.00	113475.00	25.00	26.85	26.58	0.33	26	24	0	600	336	68
1135+00.00	113500.00	25.00	26.21	25.67	1.24	25	24	1	625	338	68
1135+25.00	113525.00	25.00	24.91	24.75	3.98	24	23	2	649	340	66
1135+50.00	113550.00	25.00	23.38	23.38	10.91	22	22	7	671	349	57
1135+75.00	113575.00	25.00	22.46	22.46	18.26	21	21	14	692	366	40
1136+00.00	113600.00	25.00	21.54	21.54	21.48	20	20	18	712	389	17
1136+25.00	113625.00	25.00	20.17	20.17	20.49	19	19	19	731	413	-7
1136+50.00	113650.00	25.00	19.25	19.25	16.47	18	18	17	749	434	-28
1136+75.00	113675.00	25.00	18.33	18.33	10.99	17	17	13	766	450	-44
1137+00.00	113700.00	25.00	17.42	17.42	8.24	17	17	9	783	461	-55
1137+25.00	113725.00	25.00	16.04	16.04	6.77	15	15	7	798	470	-64
1137+50.00	113750.00	25.00	15.15	15.13	4.03	14	14	5	812	476	-70
1137+75.00	113775.00	25.00	14.86	14.21	1.45	14	14	3	826	480	-74
1138+00.00	113800.00	25.00	14.82	13.75	0.30	14	13	1	840	481	-74
1138+25.00	113825.00	25.00	16.11	13.75	0.00	14	13	0	854	481	-73
1138+58.78	113858.78	33.78	20.02	13.75	0.00	23	17	0	877	481	-67

DIVISION 1D - CTH D EB

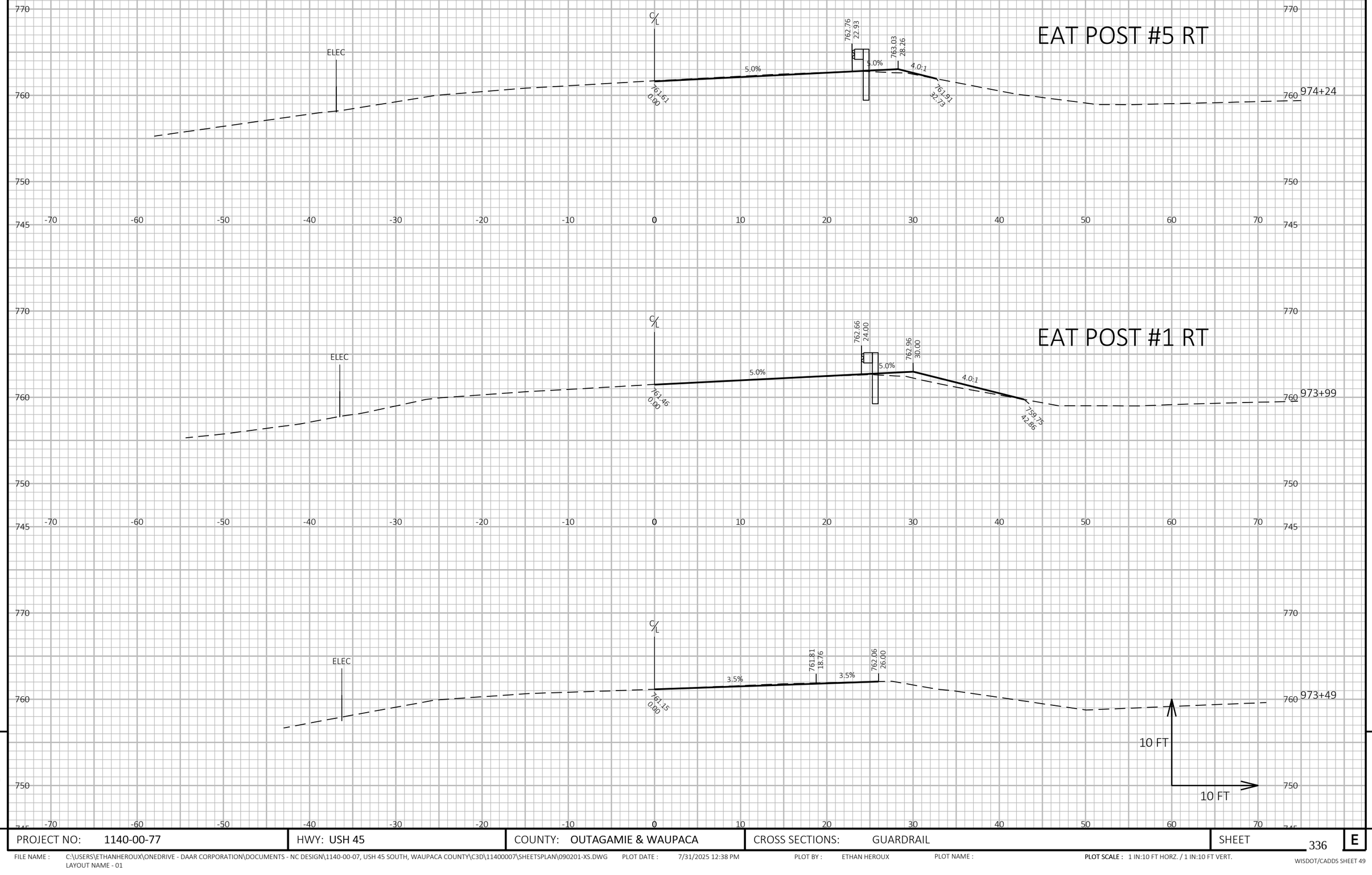
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
216+19.80	21619.80	0.00	91.59	13.75	0.00	0	0	0	0	0	0
216+50.00	21650.00	30.20	96.48	13.75	1.34	105	15	1	105	1	89
216+75.00	21675.00	25.00	95.36	13.75	3.00	89	13	2	194	4	162
217+00.00	21700.00	25.00	96.66	13.75	4.02	89	13	3	283	8	235
217+25.00	21725.00	25.00	100.89	13.75	4.39	91	13	4	374	13	308
217+50.00	21750.00	25.00	107.99	13.75	4.60	97	13	4	471	18	387
217+75.00	21775.00	25.00	120.34	13.75	3.26	106	13	4	577	23	475
218+00.00	21800.00	25.00	133.66	13.75	1.60	118	13	2	695	25	577
218+25.00	21825.00	25.00	146.15	13.75	1.40	130	13	1	825	26	693
218+50.00	21850.00	25.00	148.66	13.75	1.58	136	13	1	961	28	815
218+75.00	21875.00	25.00	157.13	13.75	2.10	142	13	2	1103	30	941
219+00.00	21900.00	25.00	163.05	13.75	3.67	148	13	3	1251	34	1072
219+25.00	21925.00	25.00	166.46	13.75	5.90	153	13	4	1404	39	1207
219+50.00	21950.00	25.00	144.67	13.75	8.87	144	13	7	1548	48	1330
219+75.00	21975.00	25.00	128.13	15.13	24.56	126	13	15	1674	66	1424
220+00.00	22000.00	25.00	120.32	16.50	79.87	115	15	48	1789	126	1464

DIVISION 1E - CTH D EB

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 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
222+75.00	22275.00	0.00	21.23	14.67	217.33	0	0	0	0	0	0
223+00.00	22300.00	25.00	23.01	13.75	137.34	20	13	164	20	205	-198
223+25.00	22325.00	25.00	25.20	13.75	65.99	22	13	94	42	323	-307
223+50.00	22350.00	25.00	26.03	13.75	62.01	24	13	59	66	396	-369
223+75.00	22375.00	25.00	23.43	13.75	58.37	23	13	56	89	466	-429
224+00.00	22400.00	25.00	26.52	13.75	55.21	23	13	53	112	533	-486
224+25.00	22425.00	25.00	27.19	13.75	50.30	25	13	49	137	594	-535
224+50.00	22450.00	25.00	21.35	13.75	44.96	22	13	44	159	649	-581
224+75.00	22475.00	25.00	33.23	13.75	55.09	25	13	46	184	706	-626
225+00.00	22500.00	25.00	43.81	13.75	45.22	36	13	46	220	764	-661
225+25.00	22525.00	25.00	48.97	13.75	30.82	43	13	35	263	808	-675
225+50.00	22550.00	25.00	39.95	13.75	32.57	41	13	29	304	844	-683
225+75.00	22575.00	25.00	31.80	13.75	33.71	33	13	31	337	883	-702
226+00.00	22600.00	25.00	29.67	13.75	36.20	28	13	32	365	923	-727
226+25.00	22625.00	25.00	28.28	13.75	37.12	27	13	34	392	965	-755
226+50.00	22650.00	25.00	28.95	13.75	34.49	26	13	33	418	1006	-783
226+75.00	22675.00	25.00	31.92	13.75	27.60	28	13	29	446	1043	-805
227+00.00	22700.00	25.00	22.78	13.75	29.50	25	13	26	471	1075	-825
227+25.00	22725.00	25.00	22.96	13.75	20.23	21	13	23	492	1104	-846
227+34.66	22734.66	9.66	23.23	13.75	15.68	8	5	6	500	1111	-850

DIVISION 2 - USH 45 NB BYPASS LANE

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED			CUMULATIVE VOL (CY)		
			CUT	SALVAGED /UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED /UNUSABLE PAVEMENT NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
1197+61.00	119761.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
1198+00.00	119800.00	39.00	1.30	1.30	0.00	1	1	0	1	0	0
1198+50.00	119850.00	50.00	2.91	2.91	0.25	4	4	0	5	0	0
1199+00.00	119900.00	50.00	2.53	2.53	0.21	5	5	0	10	0	0
1199+50.00	119950.00	50.00	1.33	1.33	0.12	4	4	0	14	0	0
1200+00.00	120000.00	50.00	0.00	0.00	0.00	1	1	0	15	0	0
1200+50.00	120050.00	50.00	17.04	0.00	0.36	16	0	0	31	0	16
1201+00.00	120100.00	50.00	17.30	0.00	0.62	32	0	1	63	1	47
1201+50.00	120150.00	50.00	15.97	0.00	0.57	31	0	1	94	3	77
1202+00.00	120200.00	50.00	10.69	0.00	0.00	25	0	1	119	4	100
1202+50.00	120250.00	50.00	11.76	0.00	6.14	21	0	6	140	11	114
1203+00.00	120300.00	50.00	10.50	0.00	5.92	21	0	11	161	25	121
1203+50.00	120350.00	50.00	10.92	0.00	13.60	20	0	18	181	48	119
1204+00.00	120400.00	50.00	13.94	0.00	7.06	23	0	19	204	71	118
1204+50.00	120450.00	50.00	15.43	0.00	2.47	27	0	9	231	83	134
1205+00.00	120500.00	50.00	14.30	0.00	2.40	28	0	5	259	89	155
1205+50.00	120550.00	50.00	0.4125	0.41	8.57	14	0	10	273	101	157
1206+00.00	120600.00	50.00	1.6316667	1.63	0.00	2	2	8	275	111	147
1206+50.00	120650.00	50.00	3.19	3.19	0.00	4	4	0	279	111	147
1207+00.00	120700.00	50.00	2.90	2.90	0.00	6	6	0	285	111	147
1207+50.00	120750.00	50.00	2.09	2.09	0.00	5	5	0	290	111	147
1208+00.00	120800.00	50.00	0.8433333	0.84	0.00	3	3	0	293	111	147
1208+50.00	120850.00	50.00	0.00	0.00	0.00	1	1	0	294	111	147
1208+62.00	120862.00	12.00	0.00	0.00	0.00	0	0	0	294	111	147



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9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 336	E

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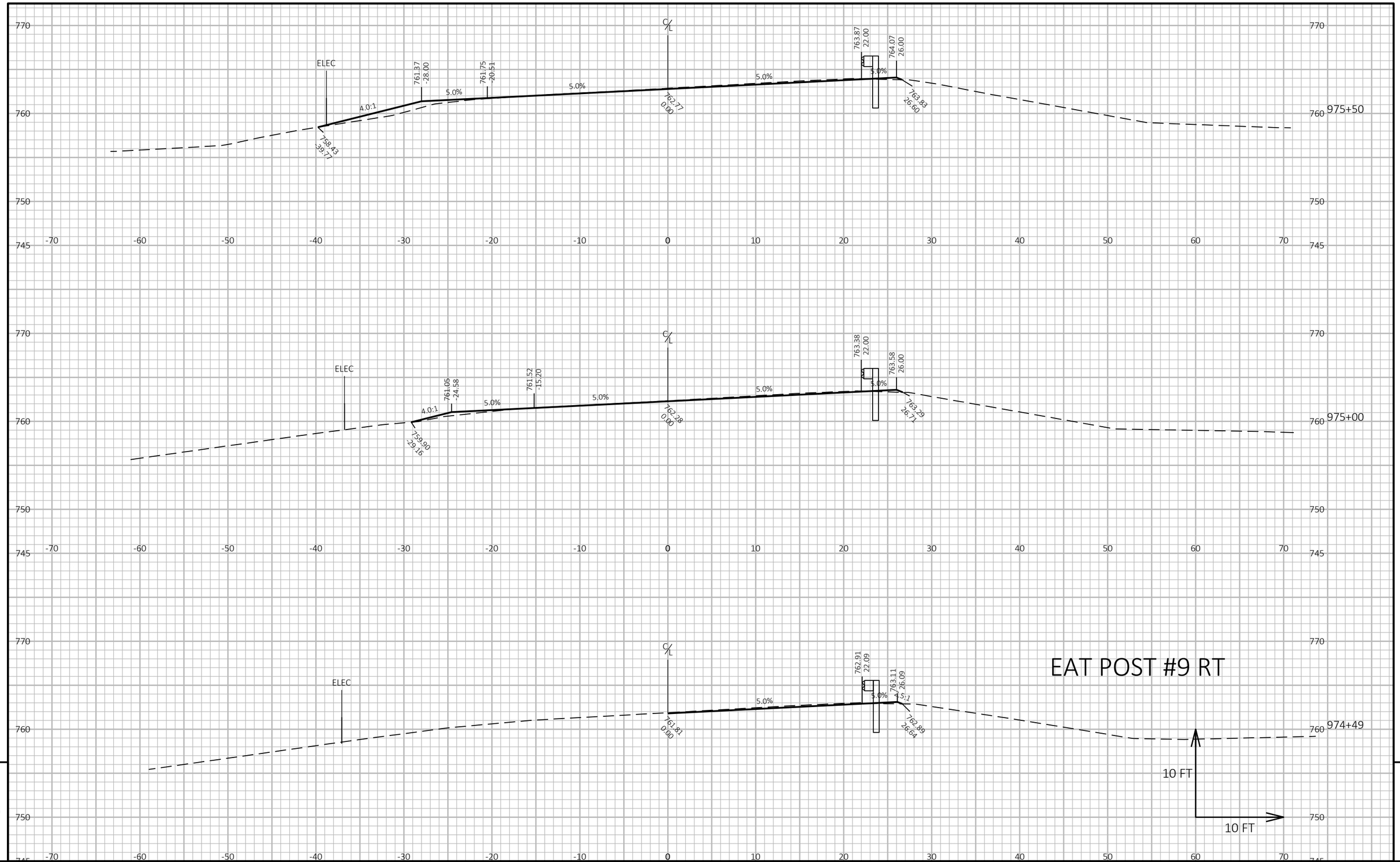
LAYOUT NAME - 01
PLOT DATE : 7/31/2025 12:38 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 337	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
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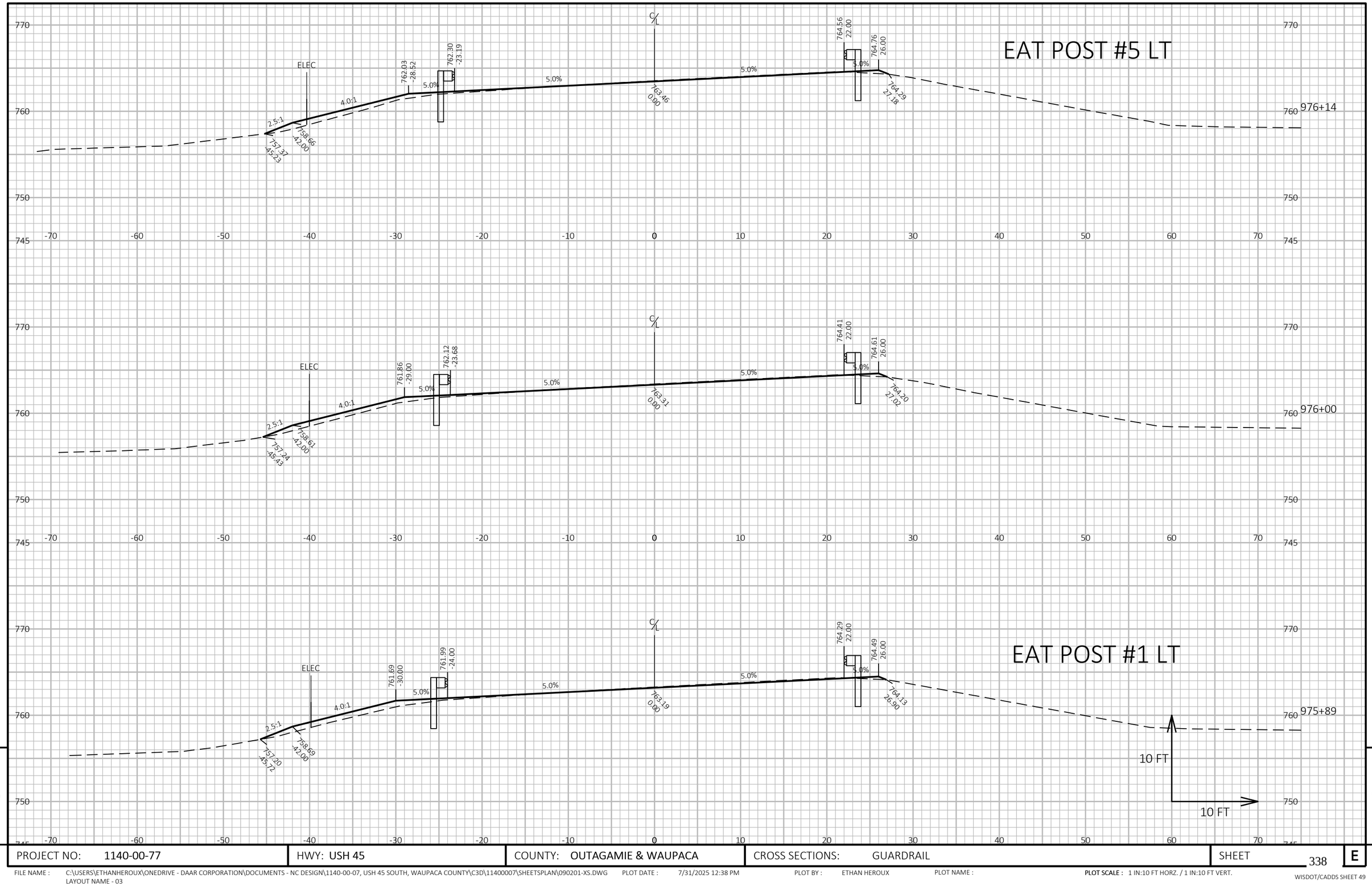
PLOT DATE : 7/31/2025 12:38 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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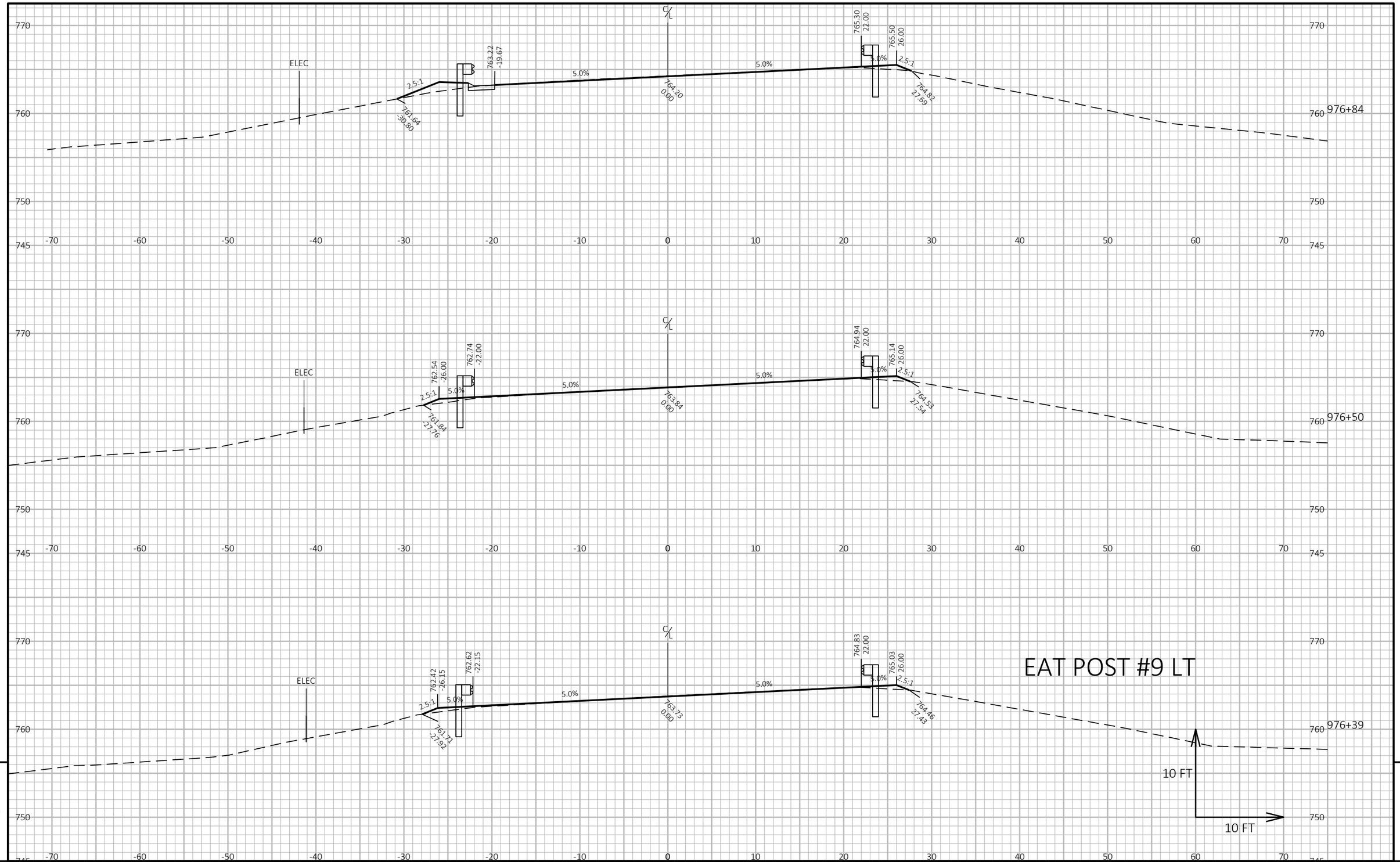
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 338	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03
PLOT DATE : 7/31/2025 12:38 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 339 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04
PLOT DATE : 7/31/2025 12:38 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

MATCH EXISTING STRUCTURE B-44-0148 STA 977+44

9

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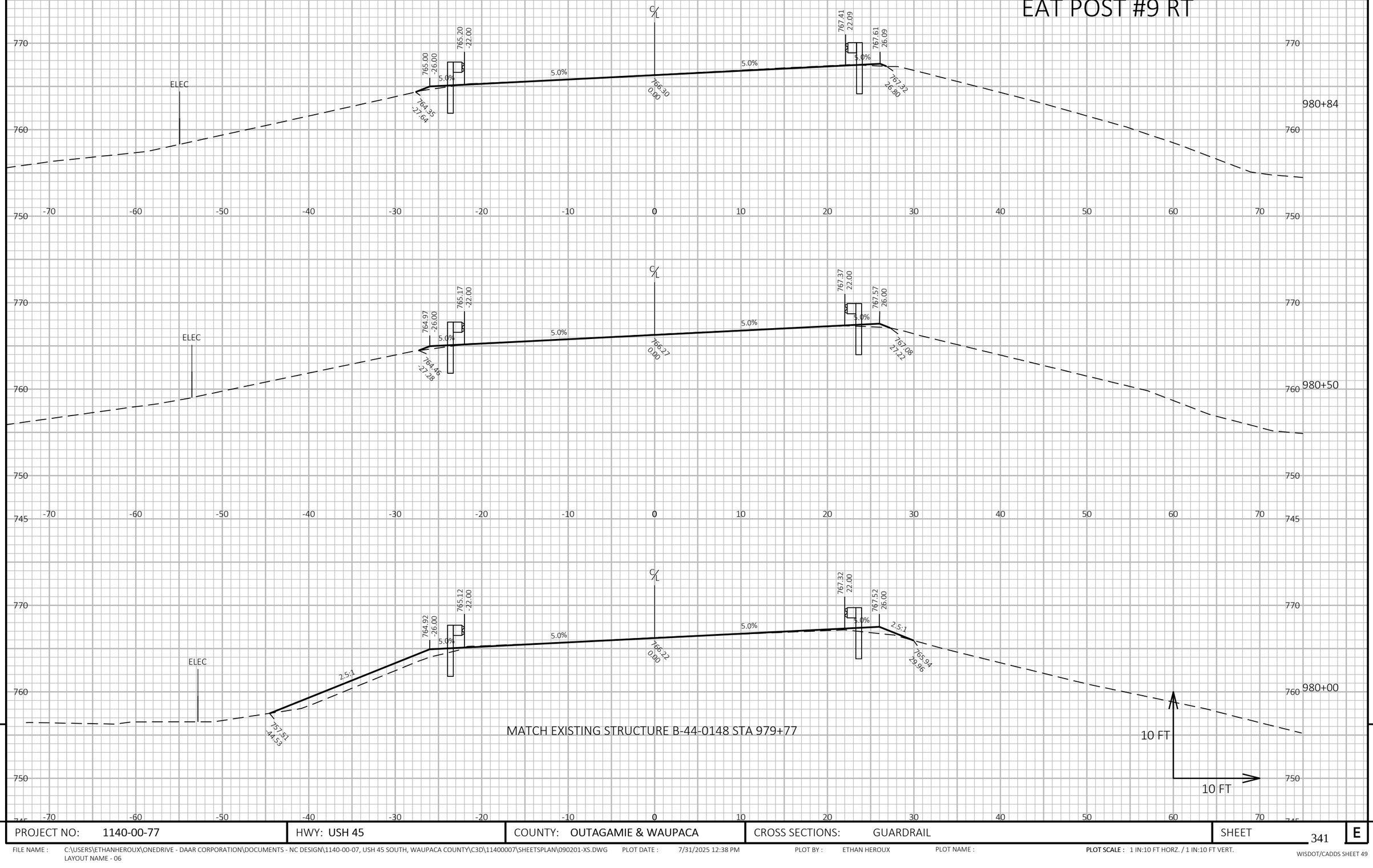
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 340	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05
PLOT DATE : 7/31/2025 12:38 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

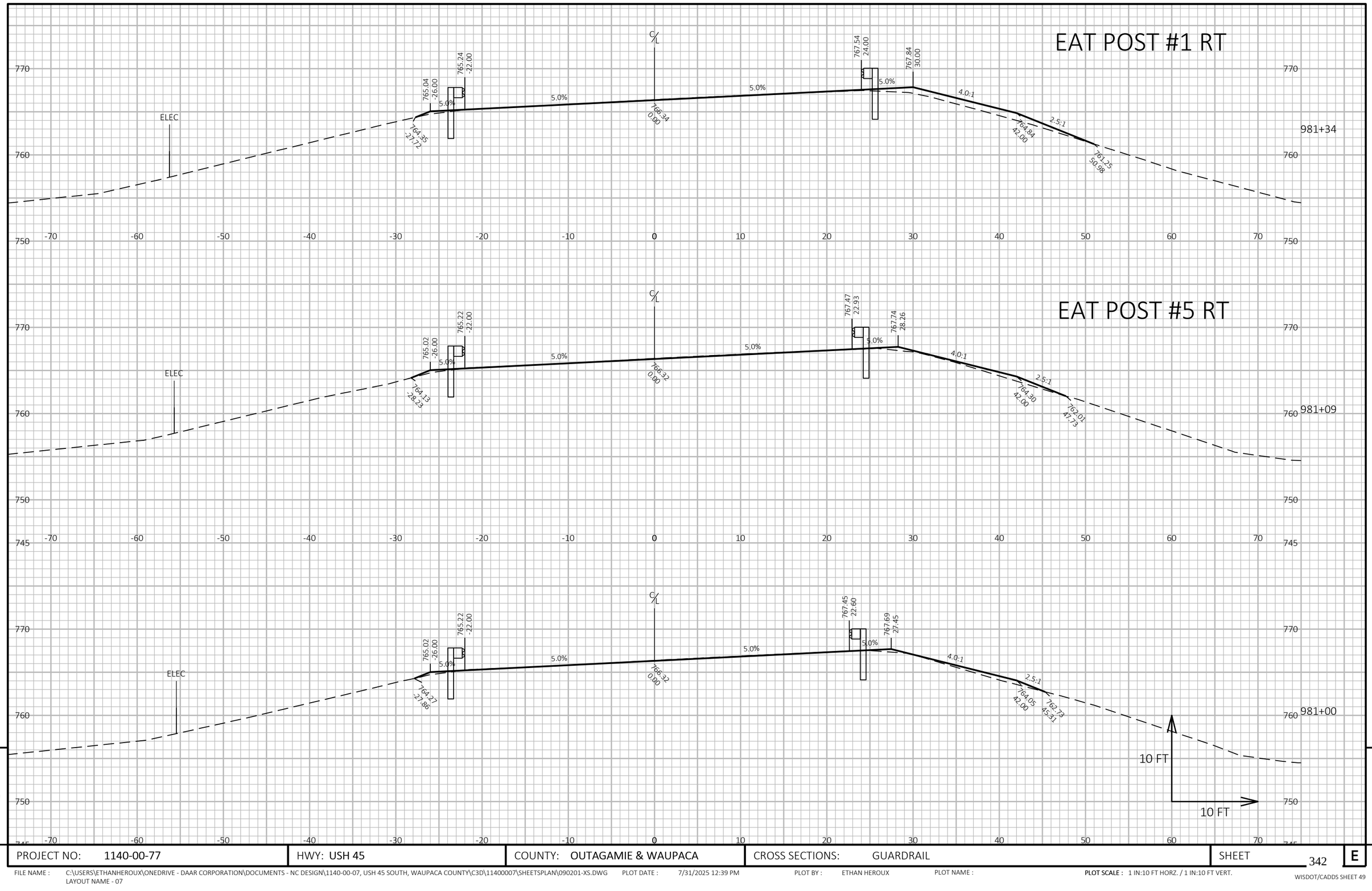
EAT POST #9 RT



9 9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 341	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG PLOT DATE : 7/31/2025 12:38 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 06
WISDOT/CADDS SHEET 49



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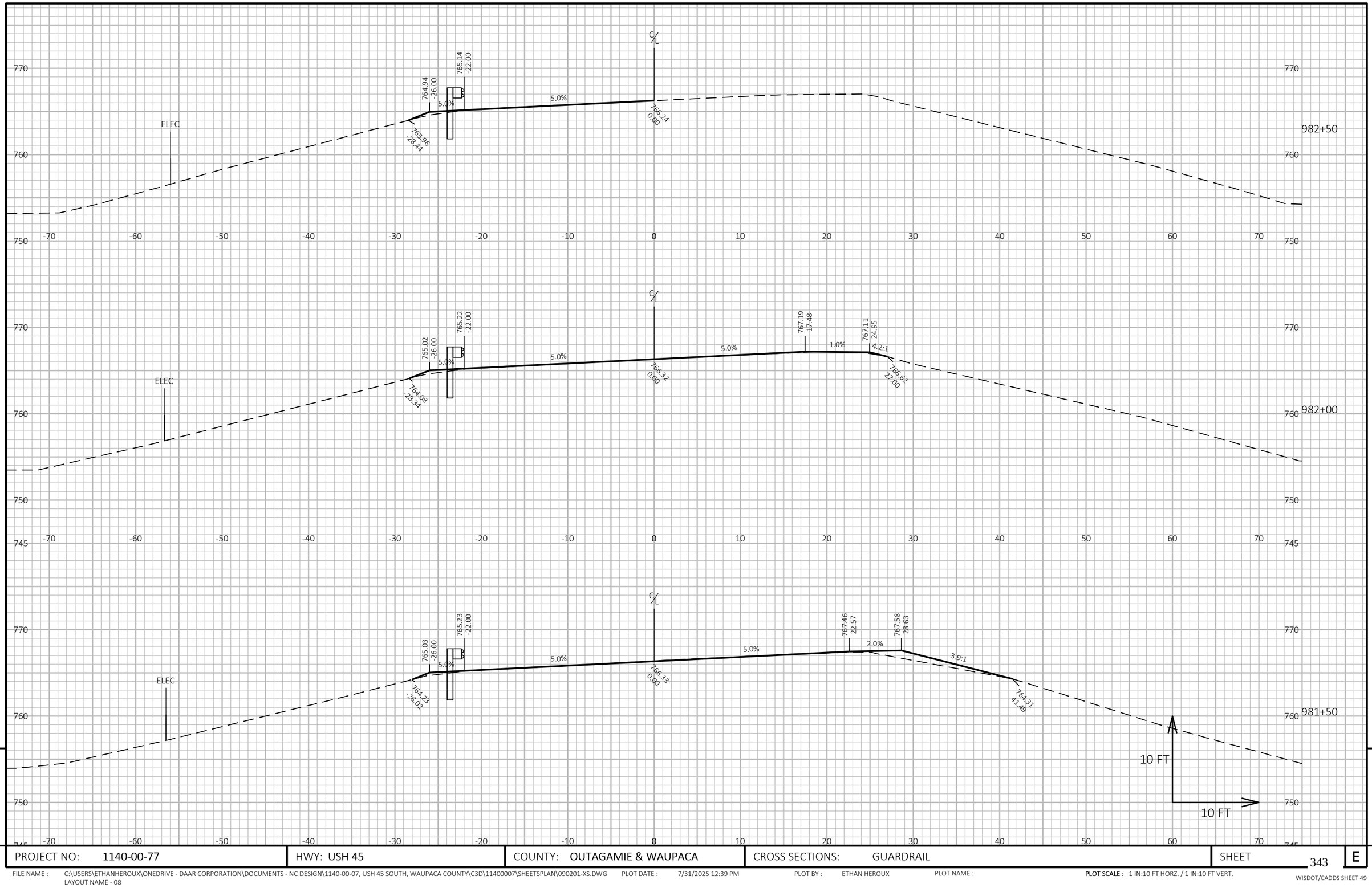
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 342	E

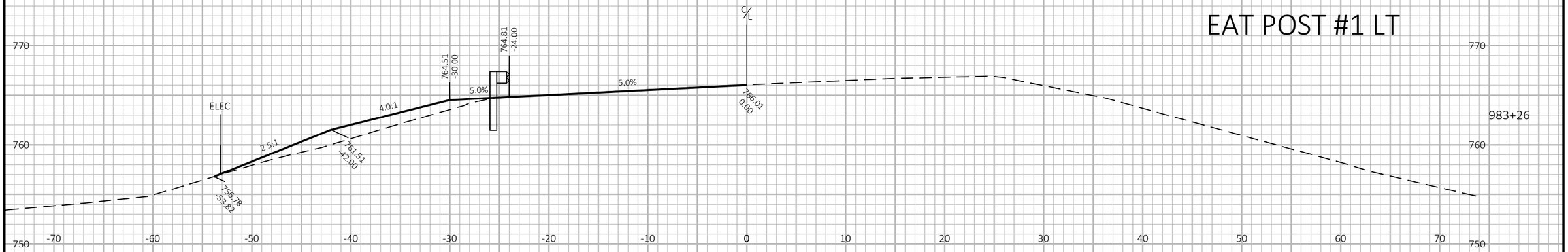
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



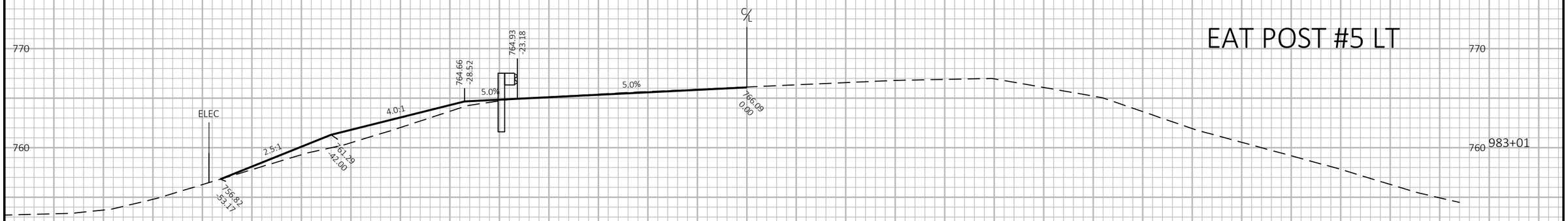
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 343	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

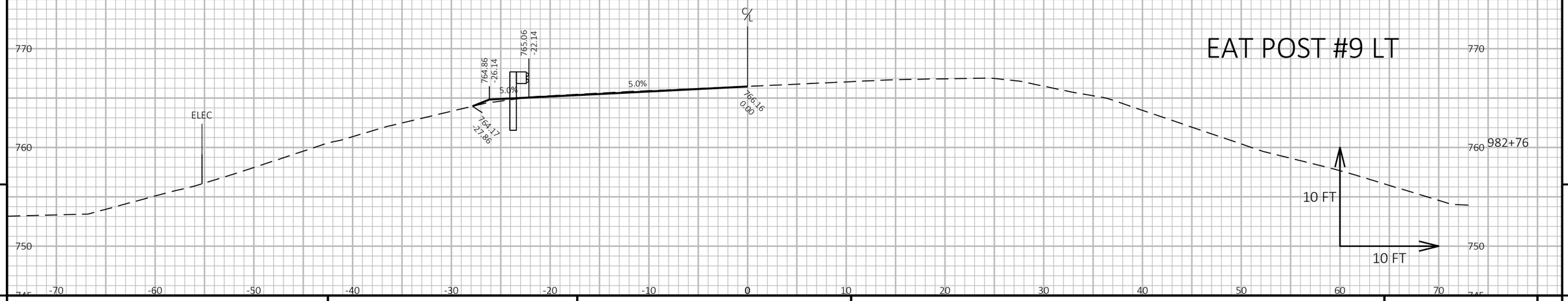
EAT POST #1 LT



EAT POST #5 LT



EAT POST #9 LT



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 344	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

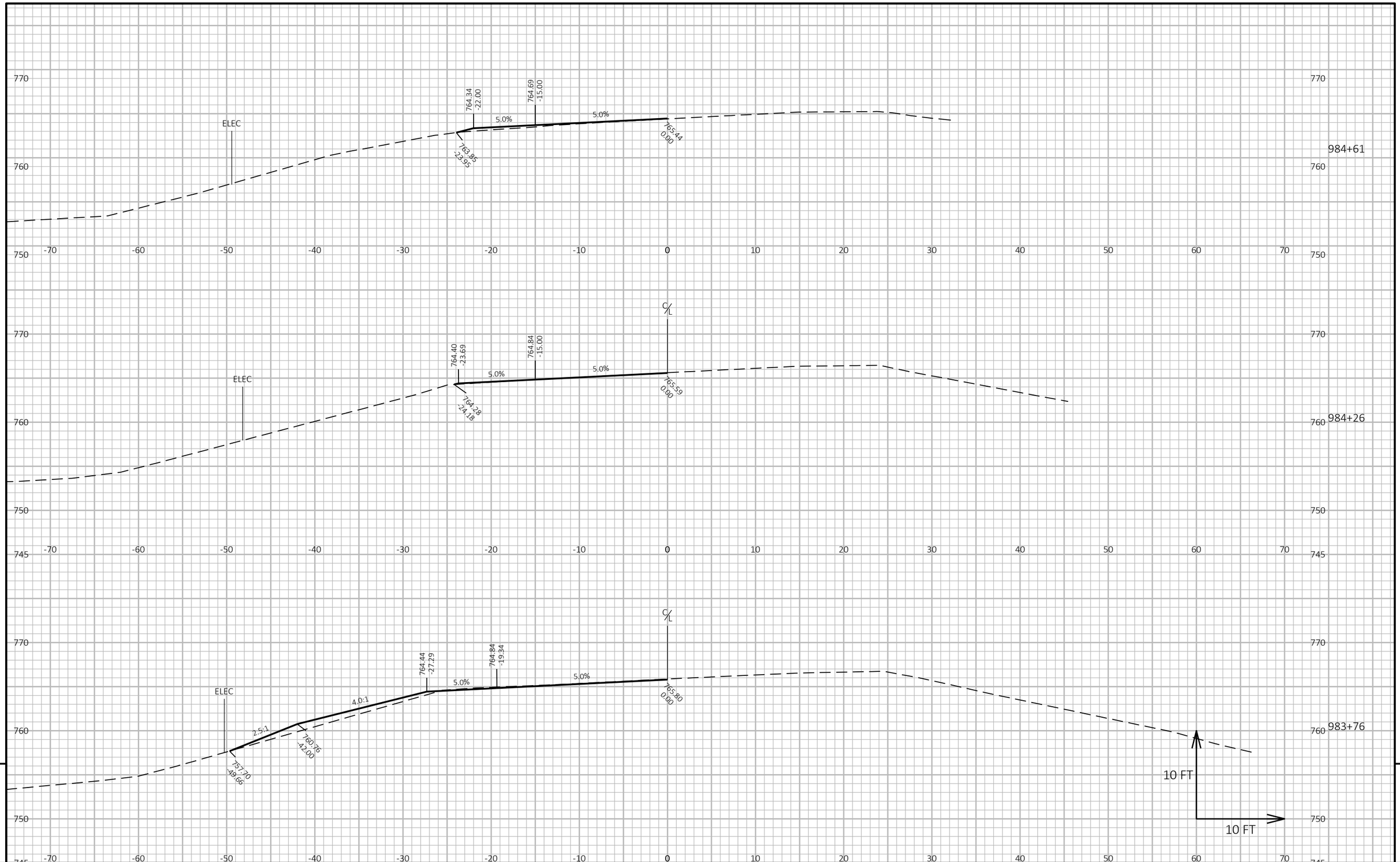
PLOT DATE : 7/31/2025 12:39 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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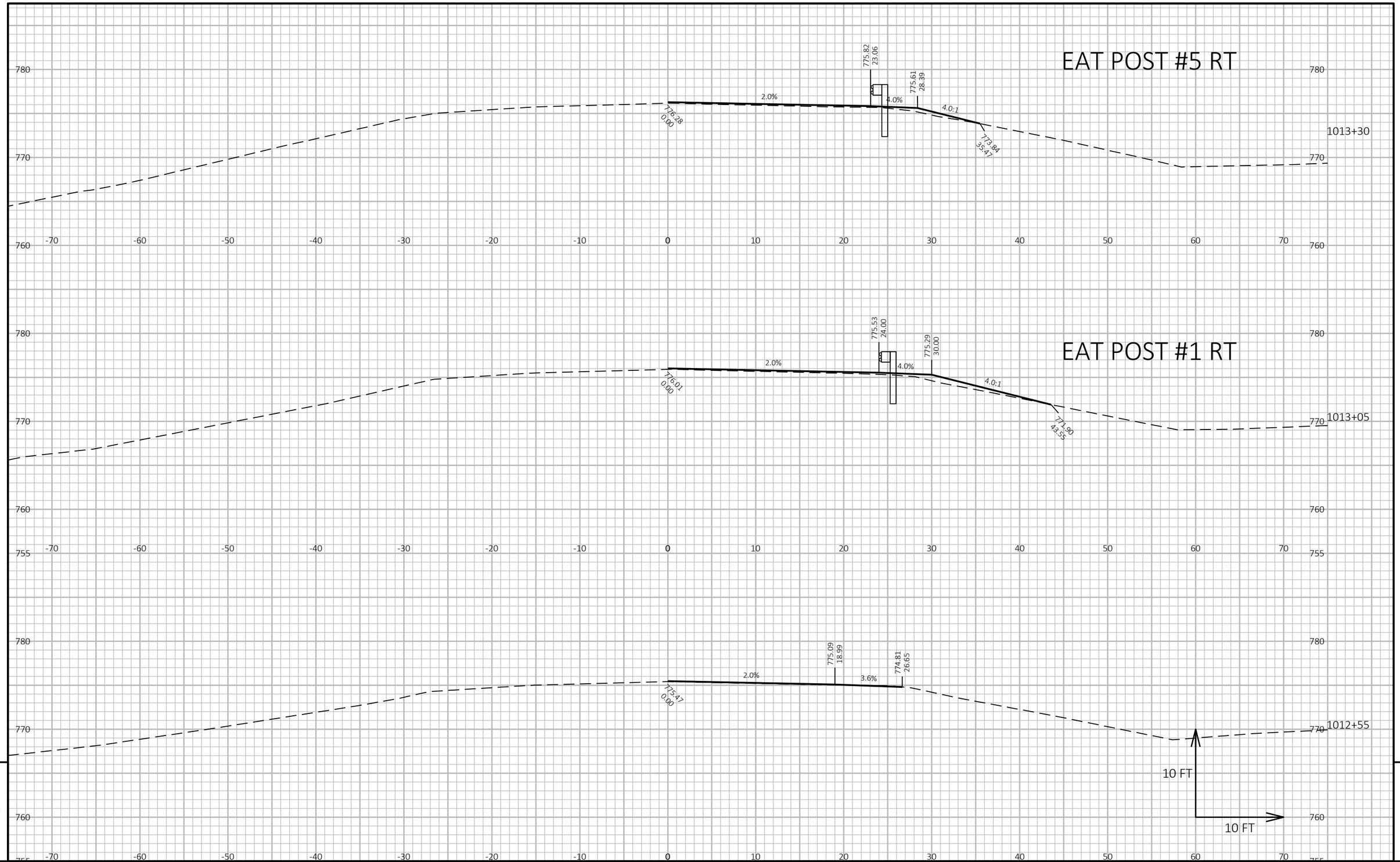
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 345	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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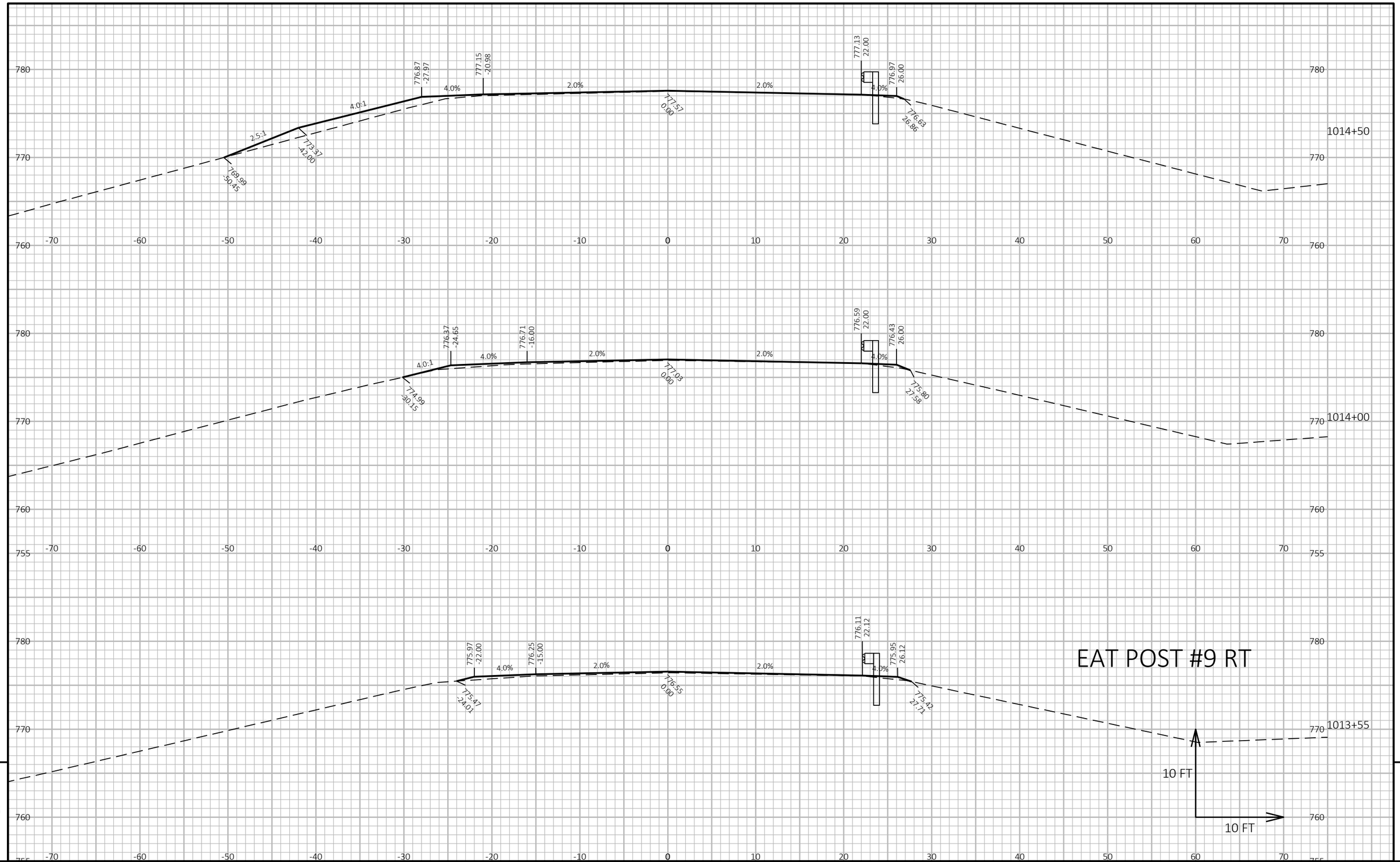
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 346	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 11

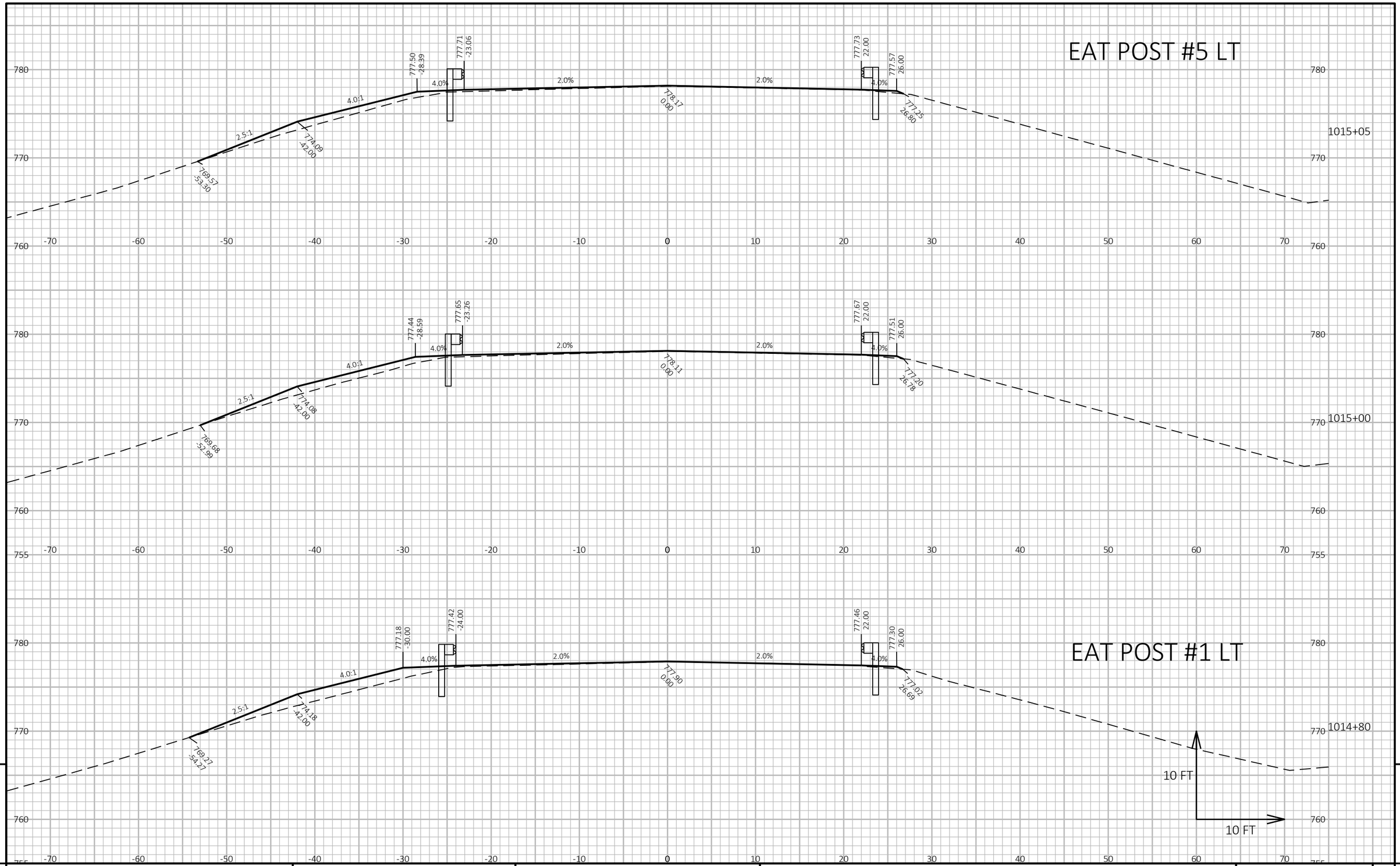
PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 347	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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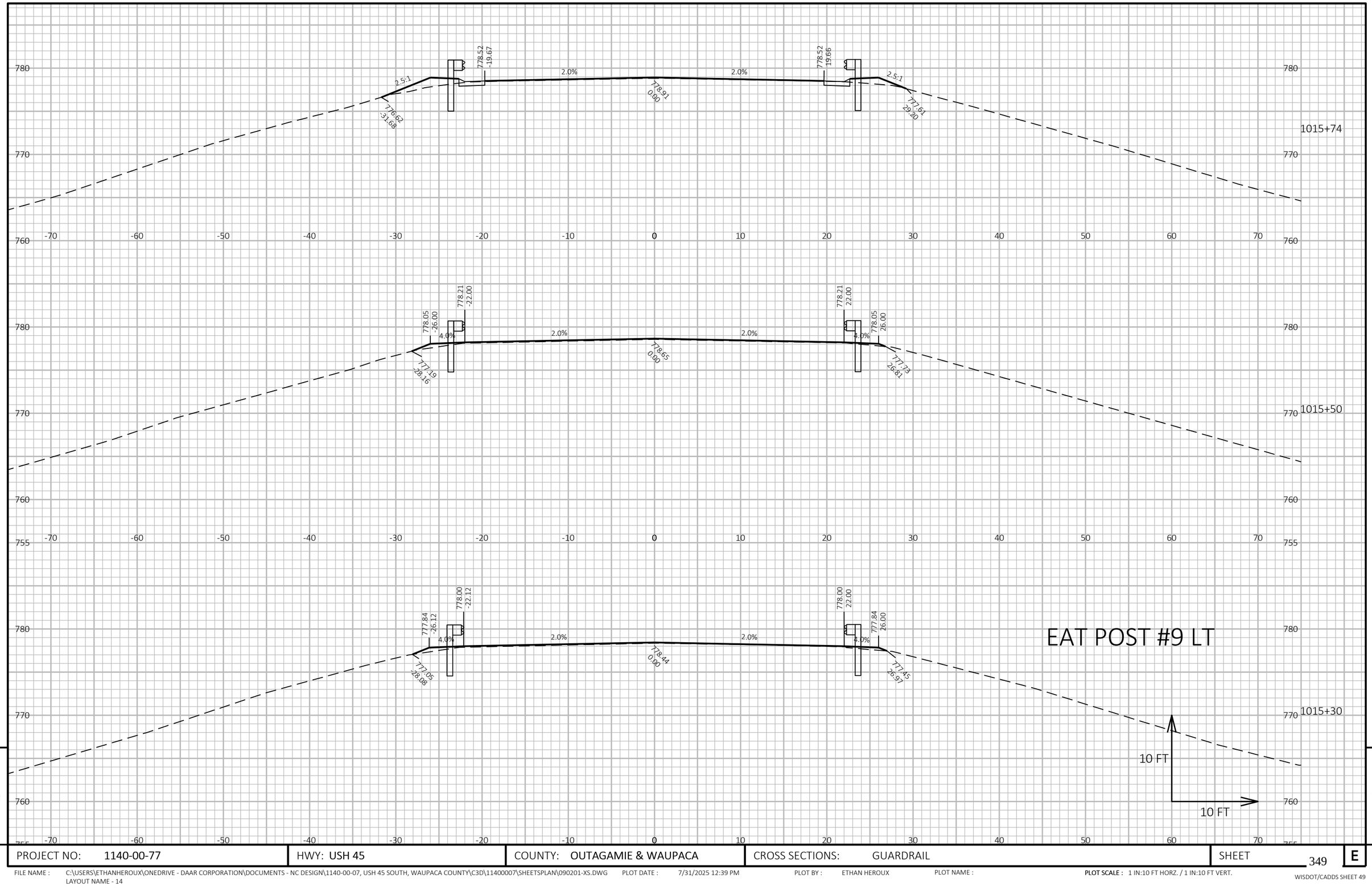
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 348	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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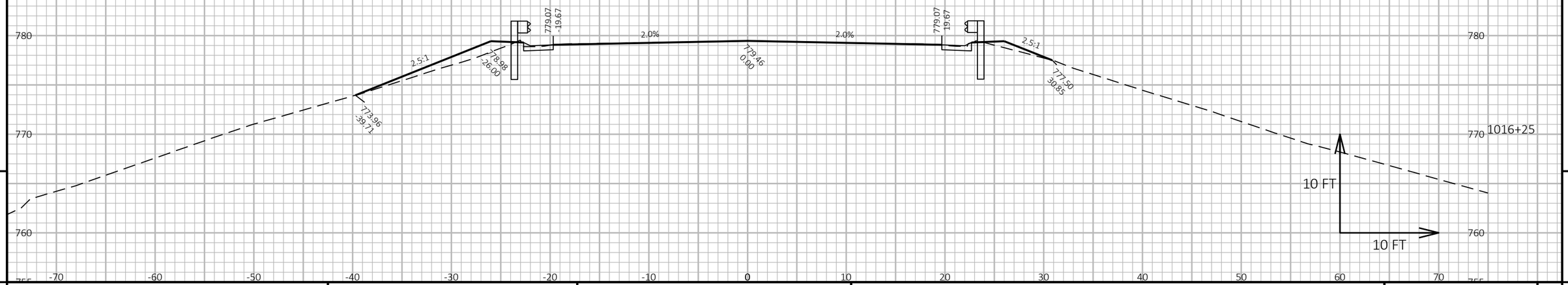
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 349	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

MATCH EXISTING STRUCTURE B-44-0149 STA 1016+34



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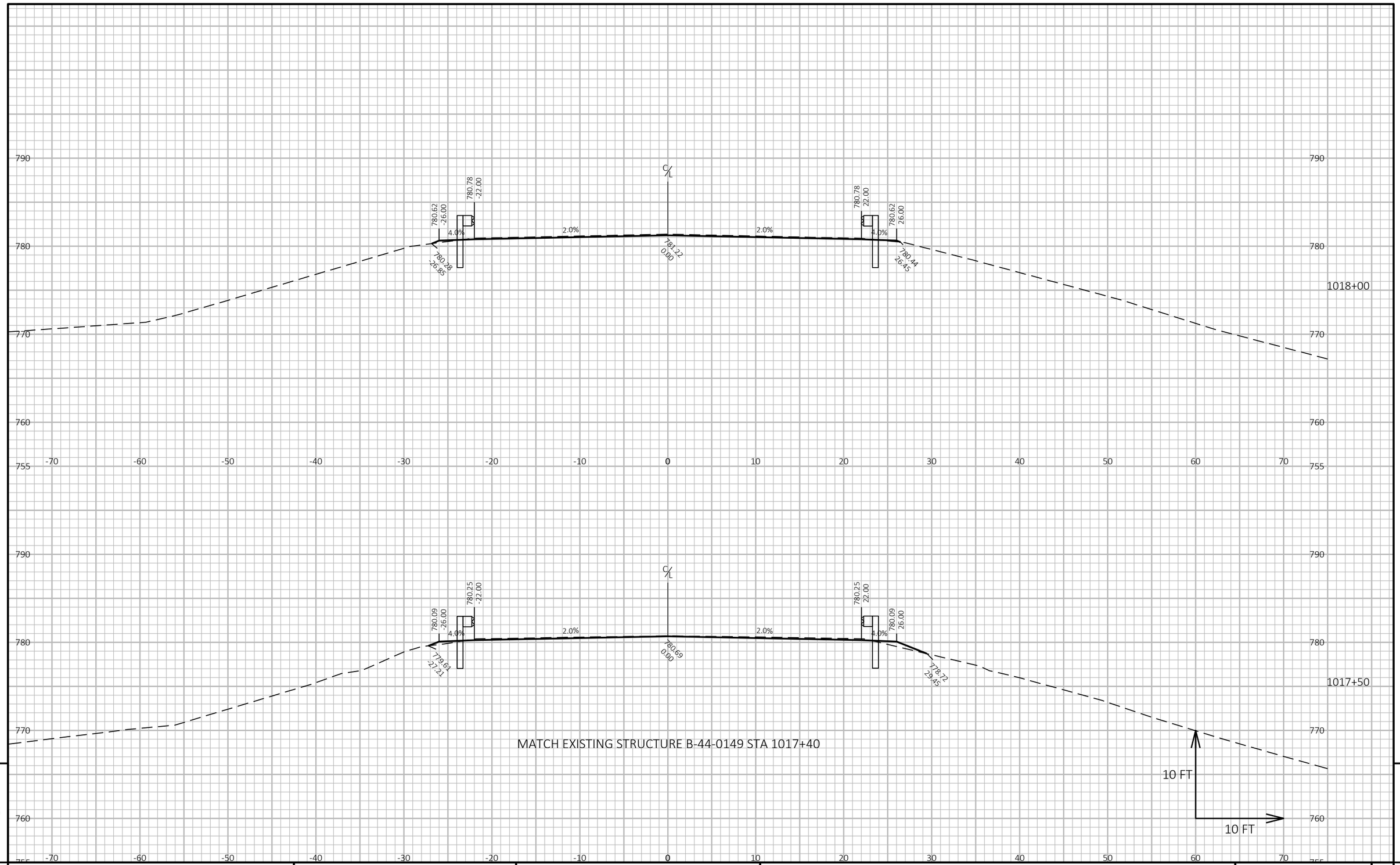
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 350	E

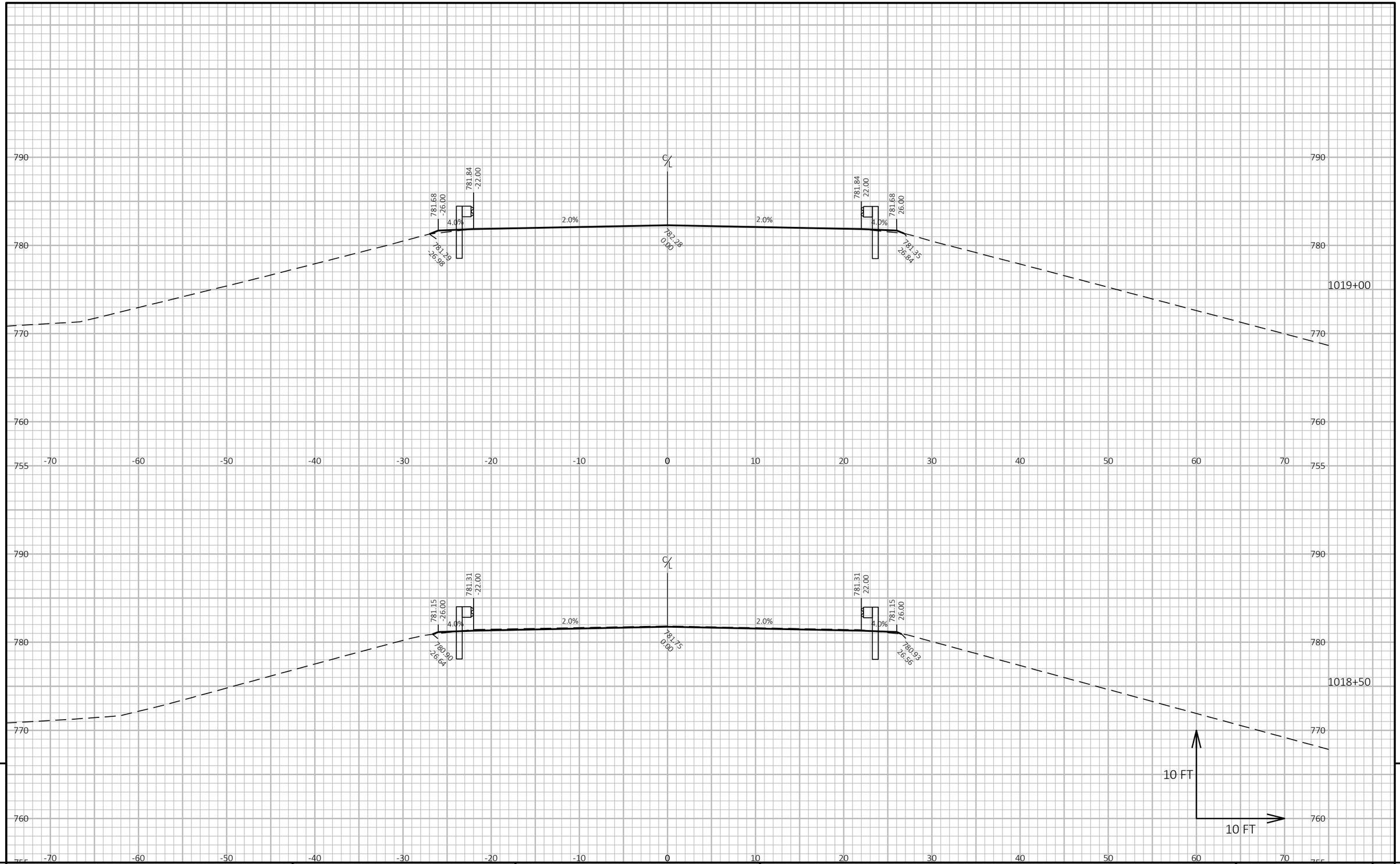
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 351	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 16
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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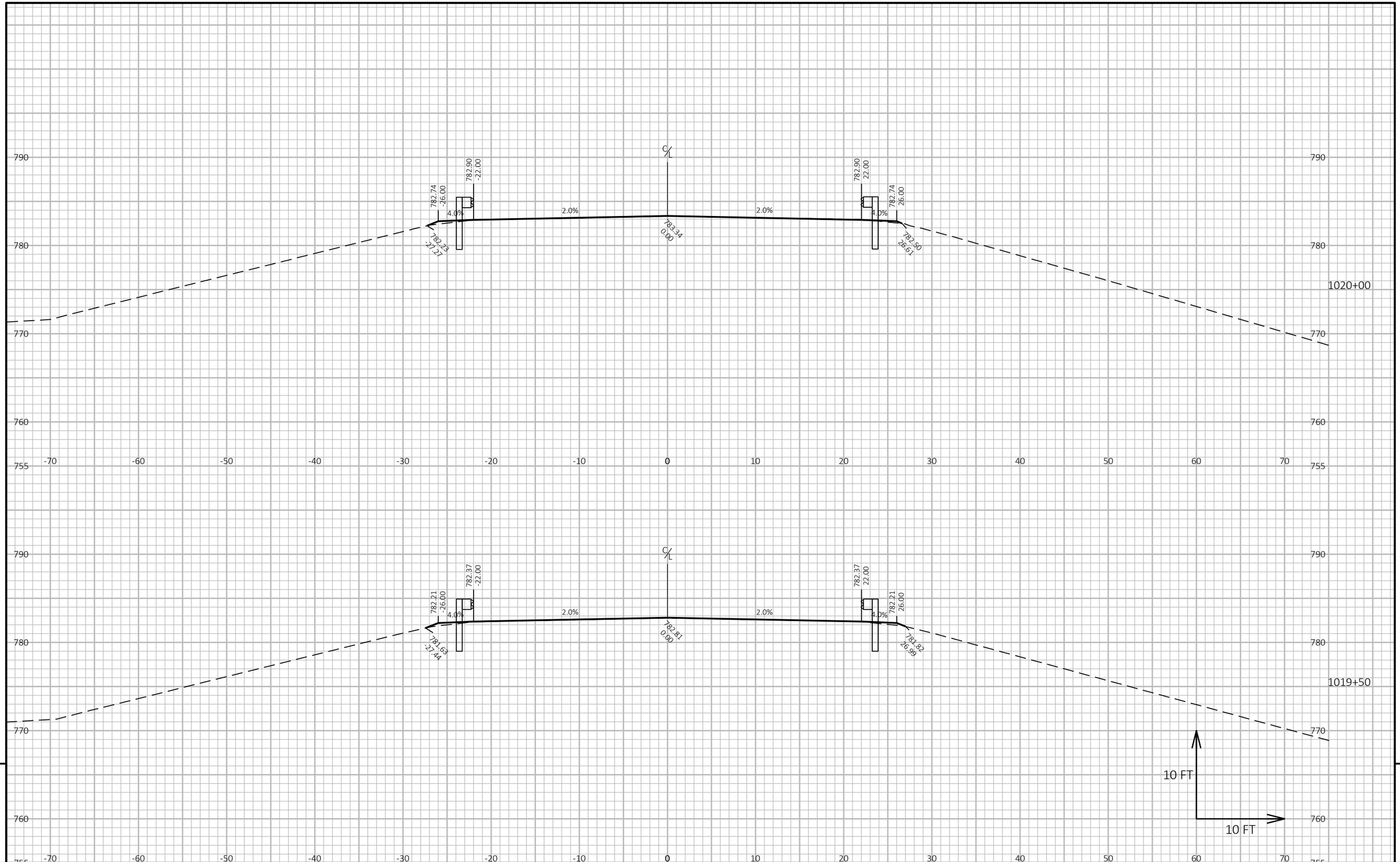
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 352	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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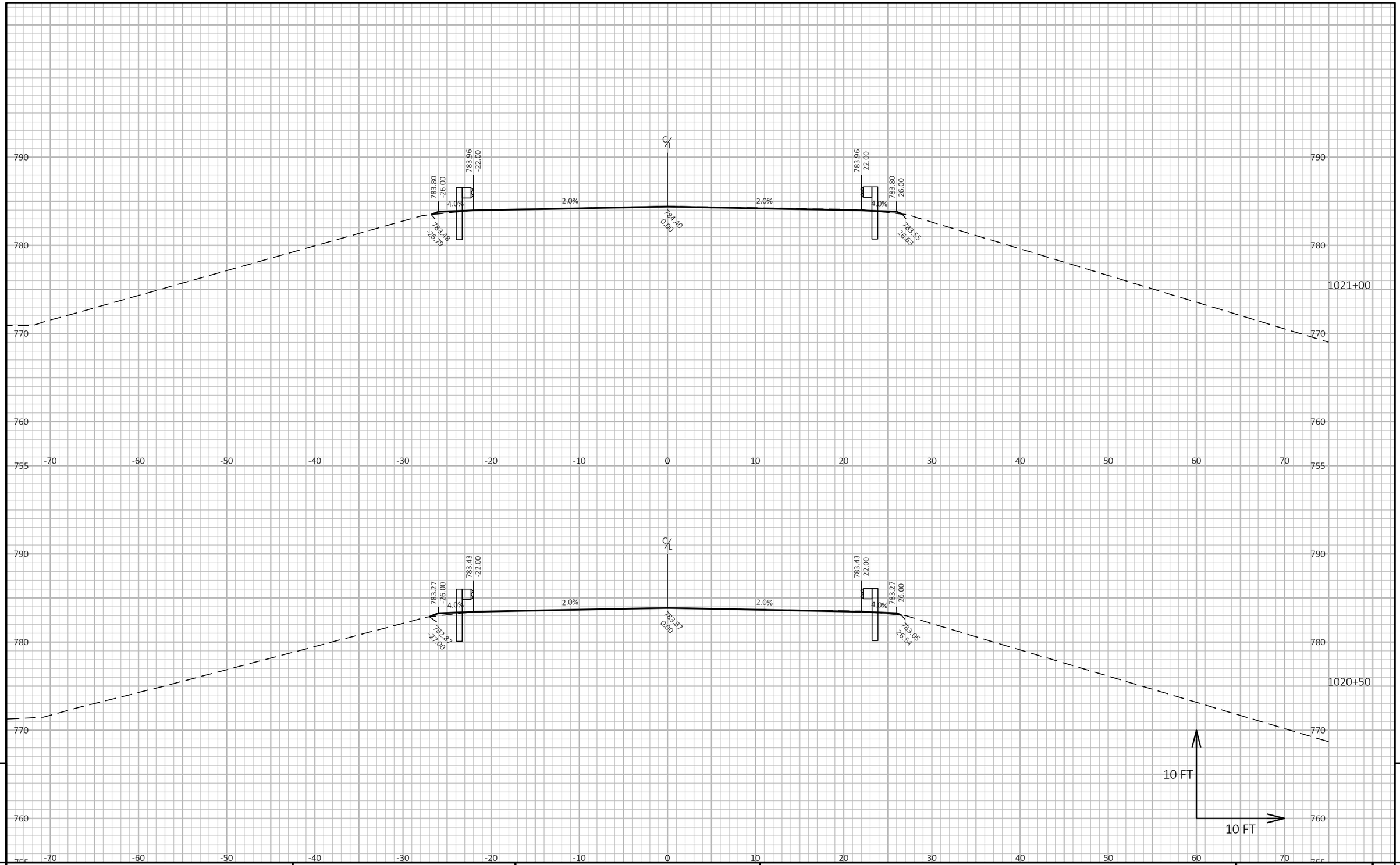
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 353	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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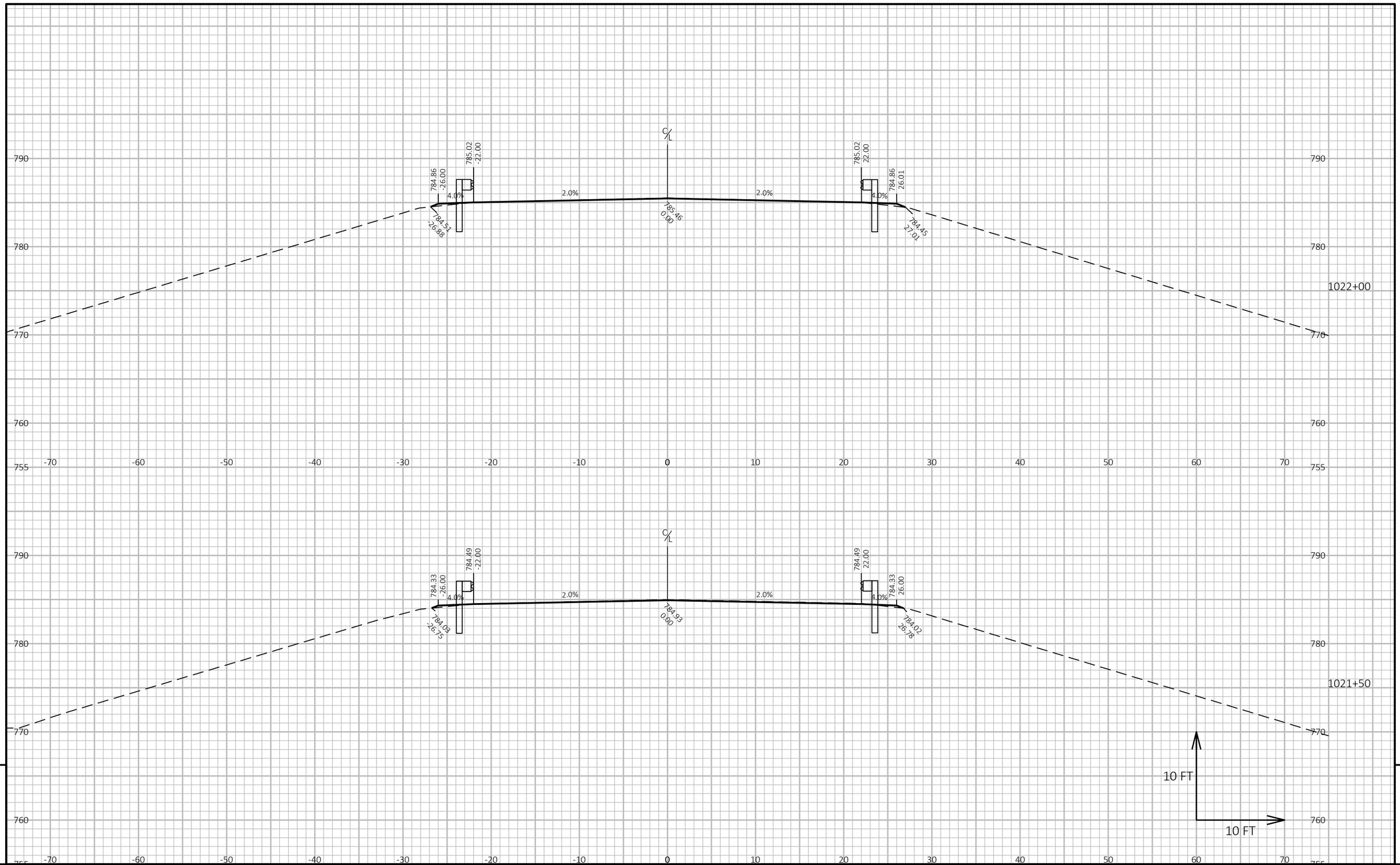
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 354	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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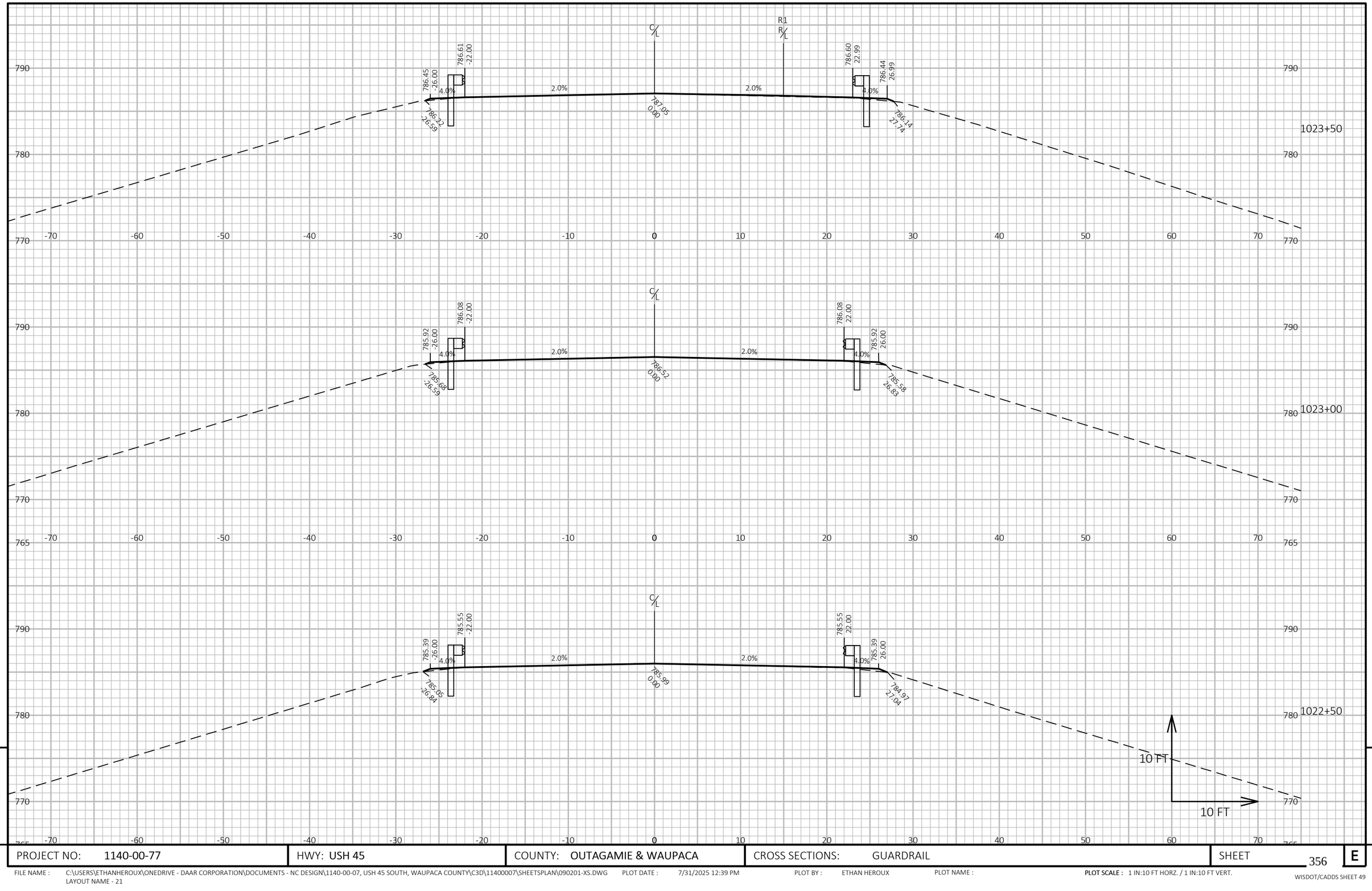
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 355	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 20

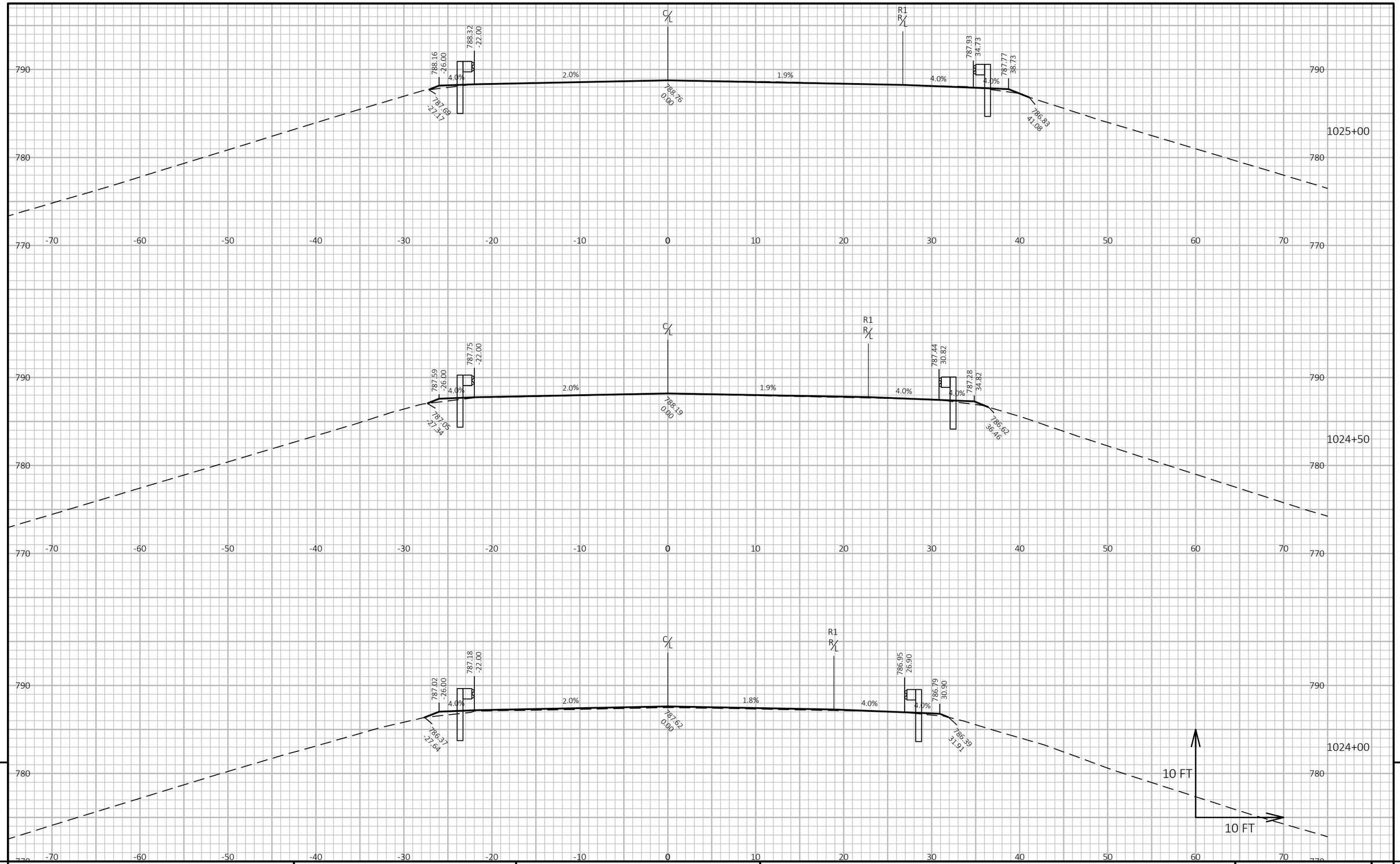
PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 356	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 21
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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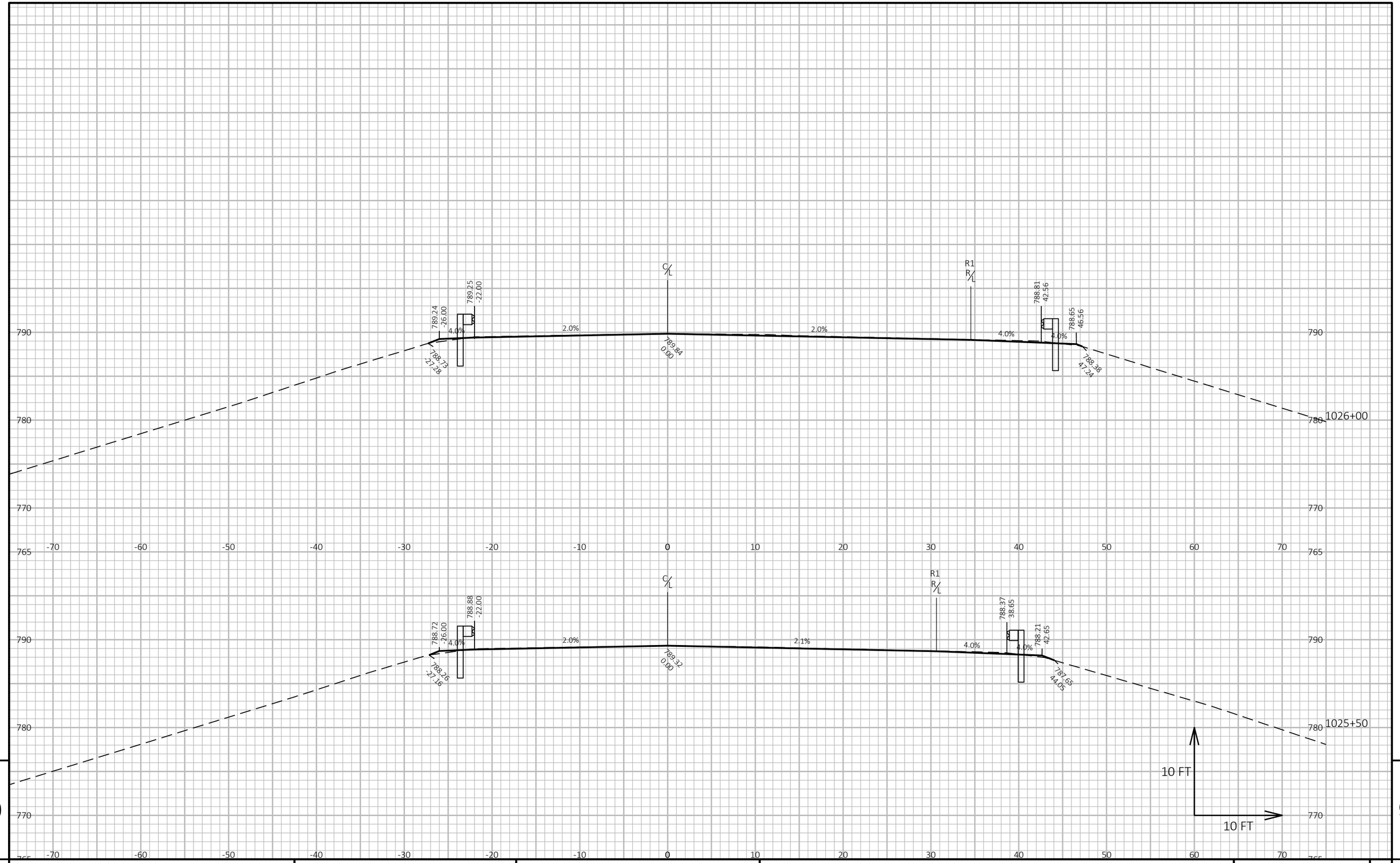
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 357	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 22
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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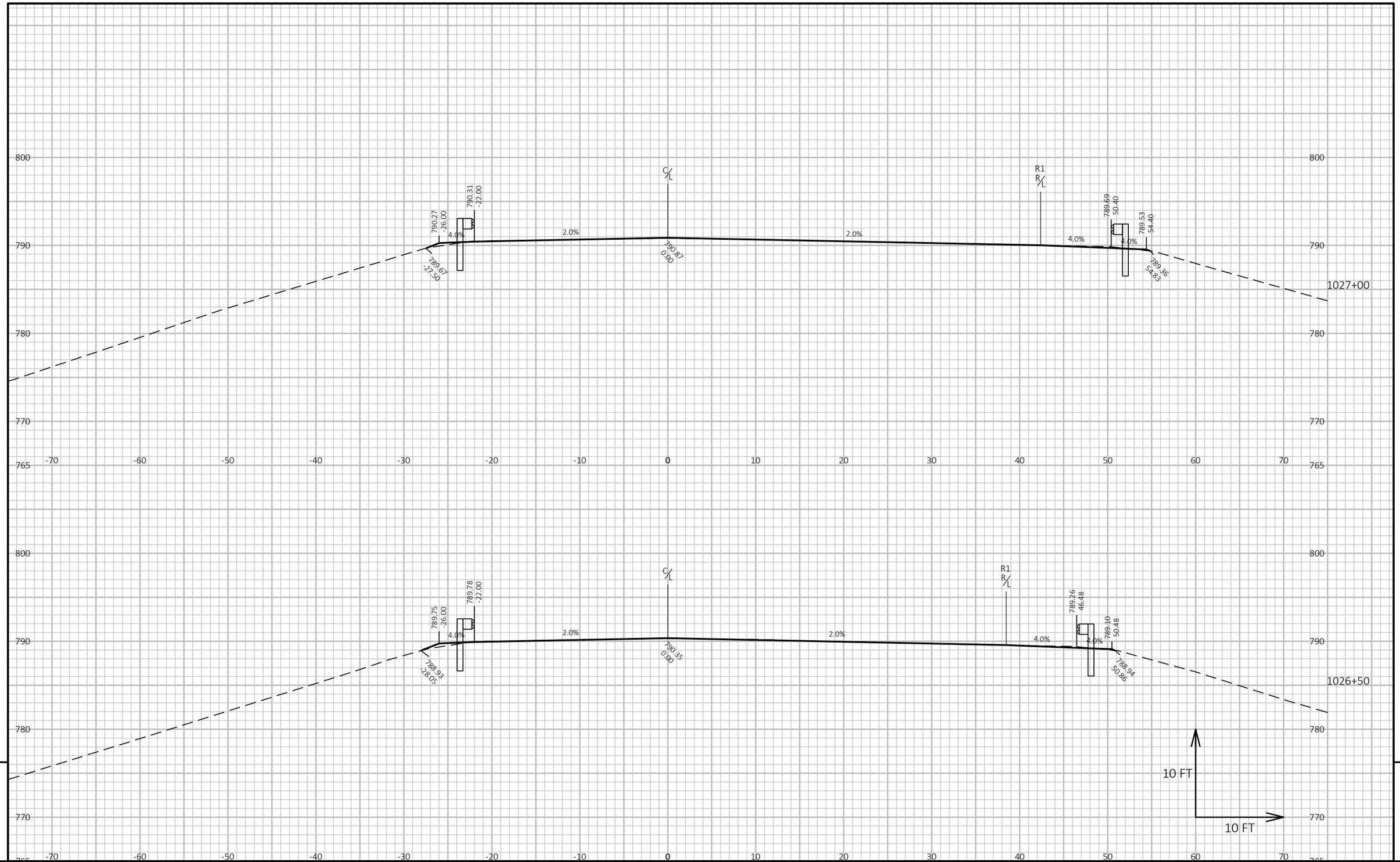
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 358	E

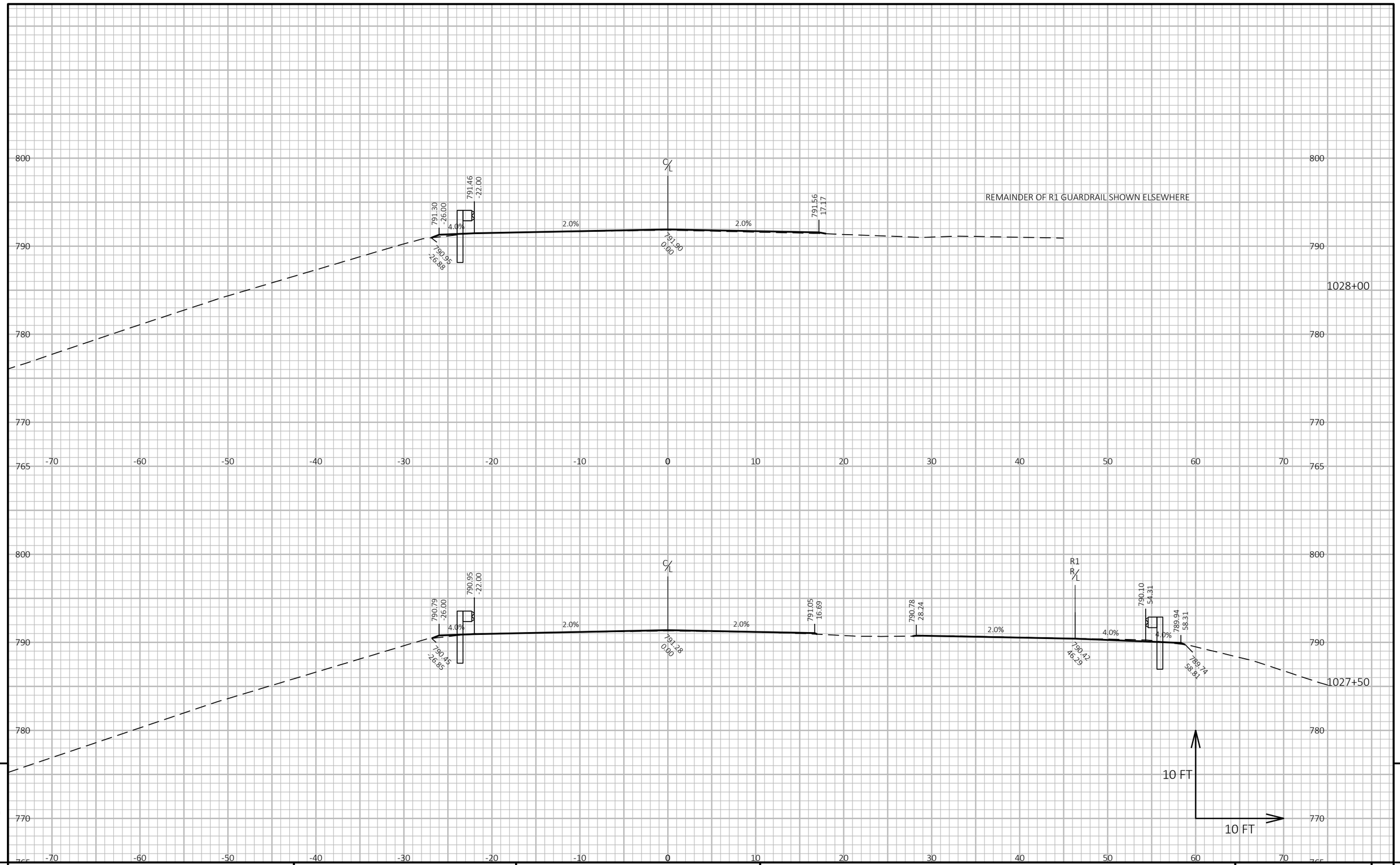
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 23
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 359	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 24
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 360	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 25

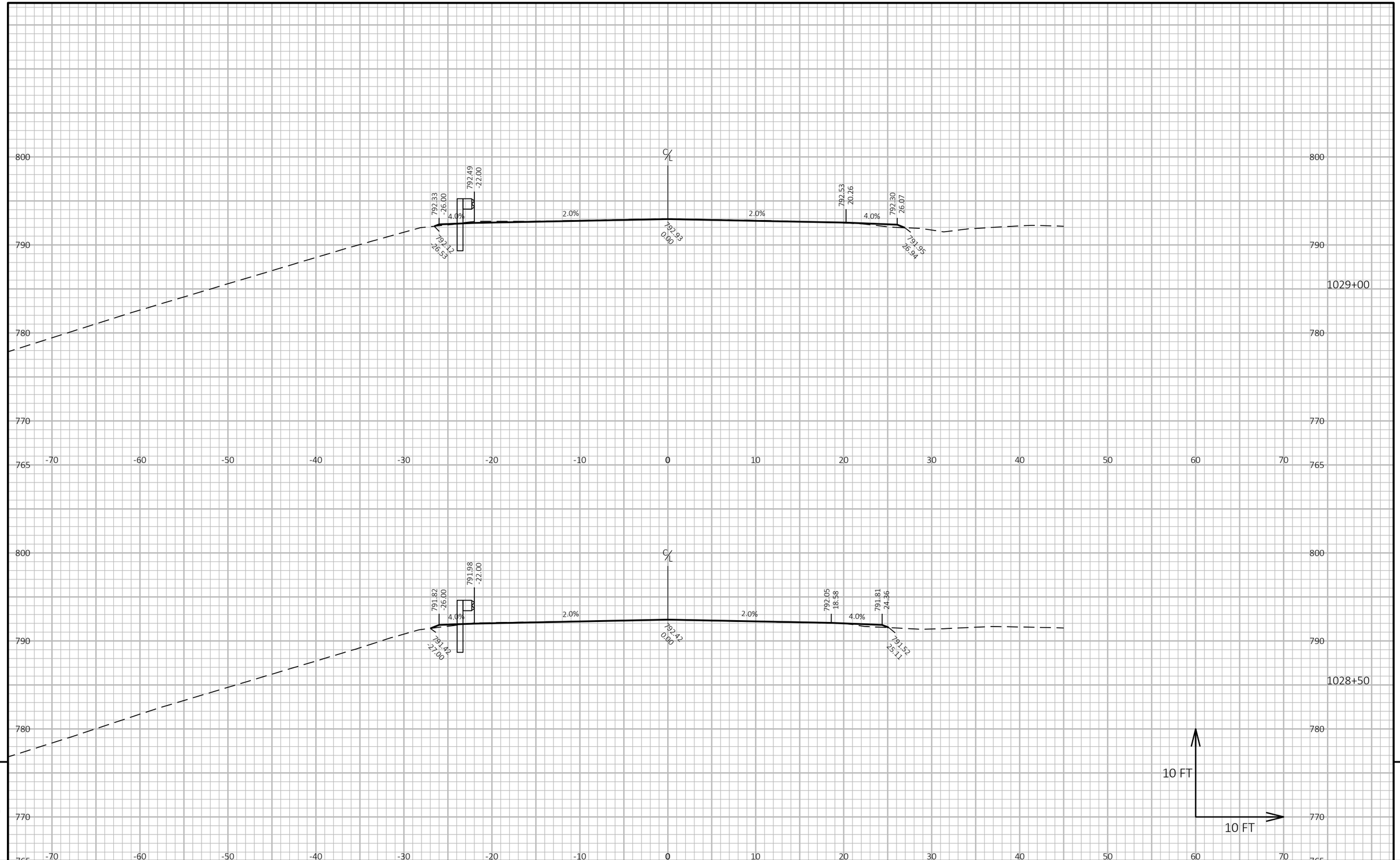
PLOT DATE : 7/31/2025 12:39 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

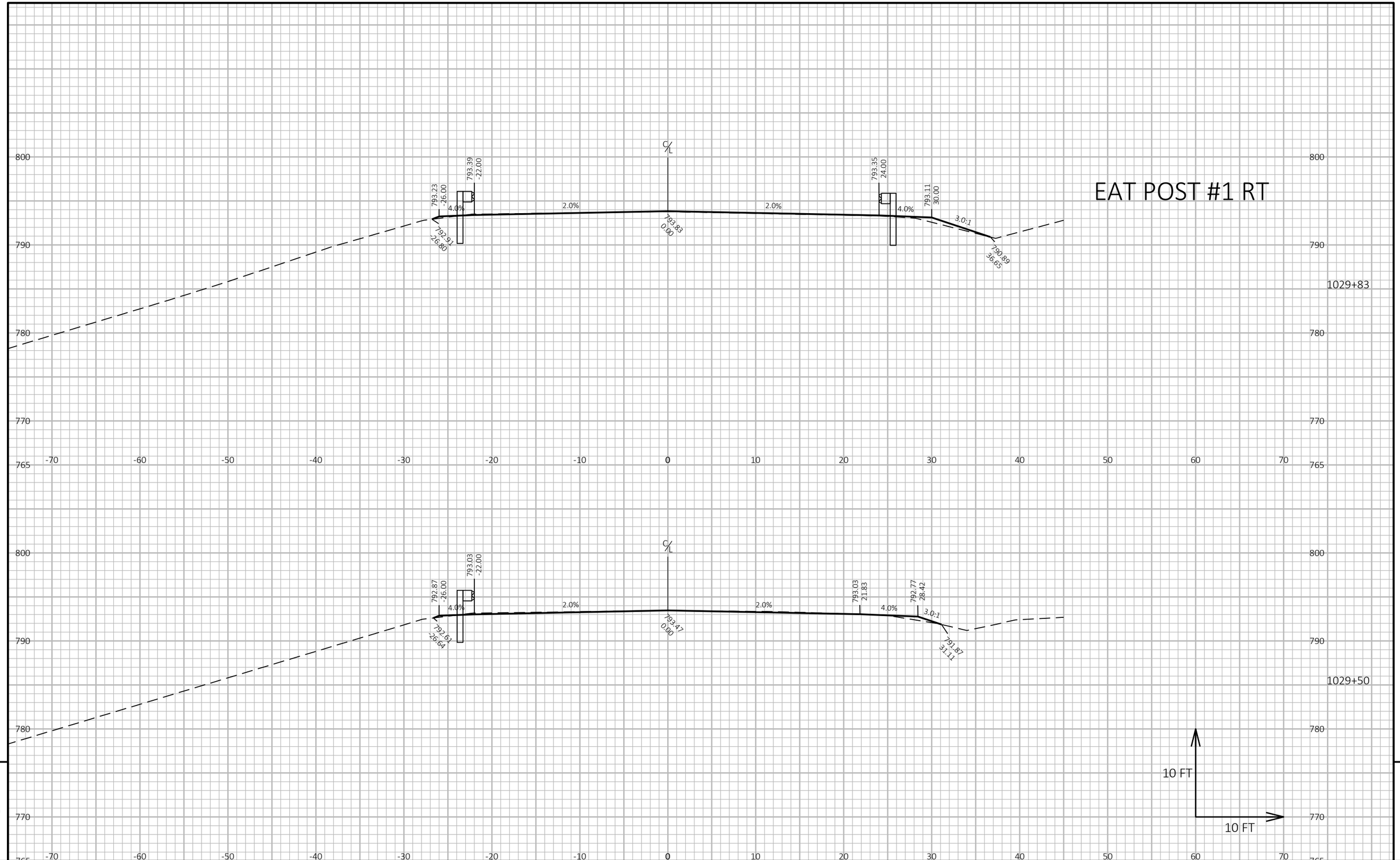
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 361	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 26
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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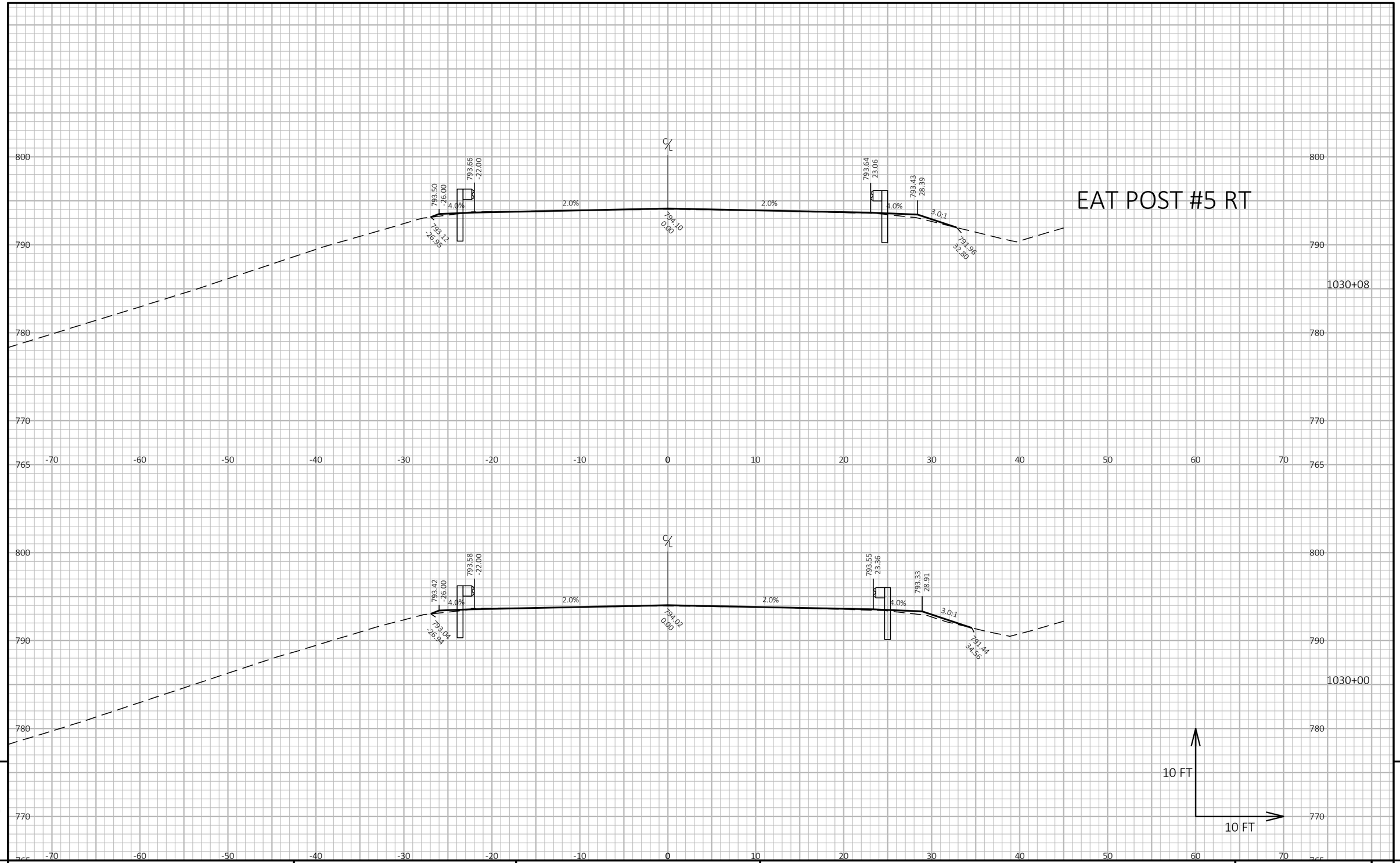
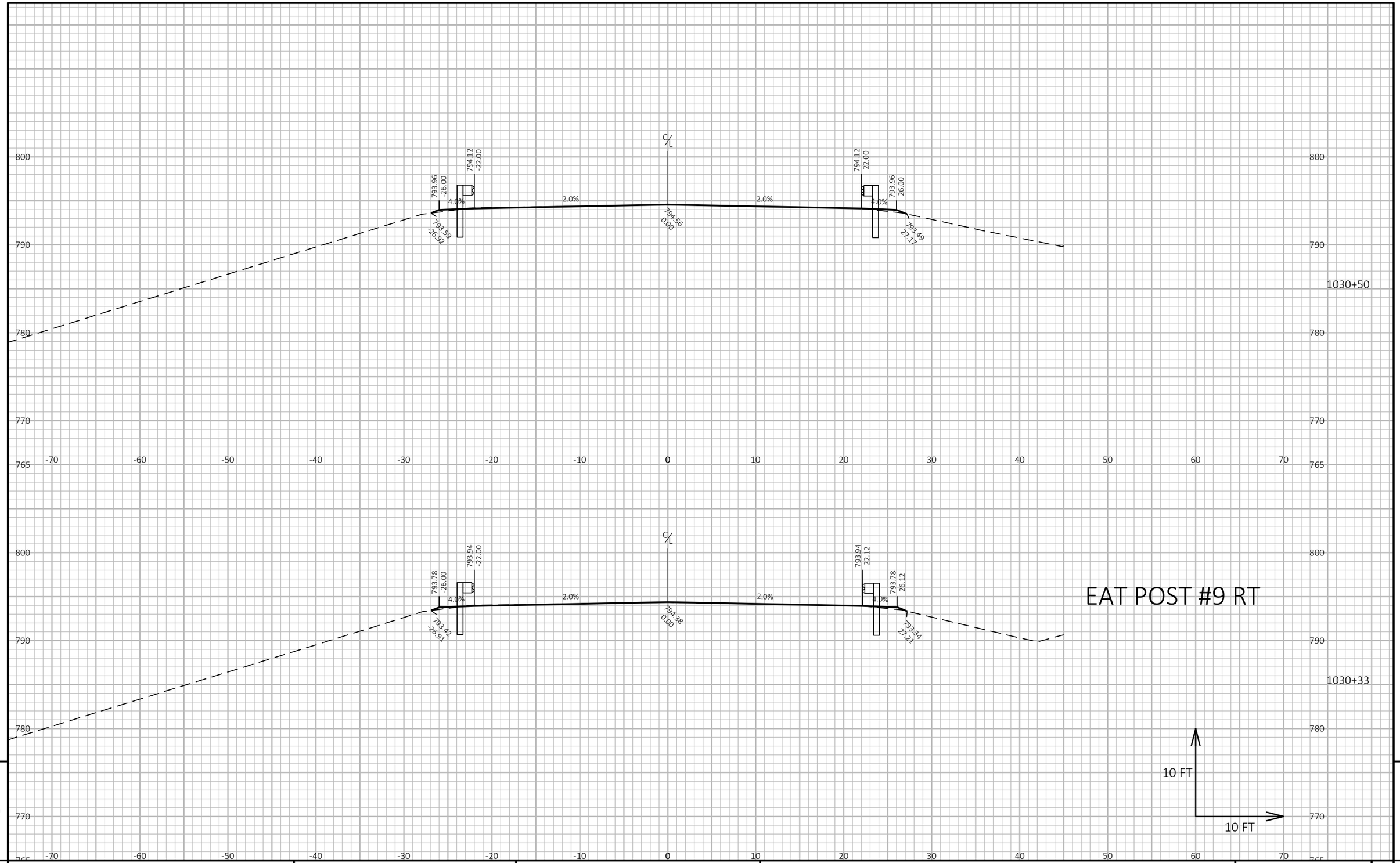
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 362	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 27
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 363	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 28
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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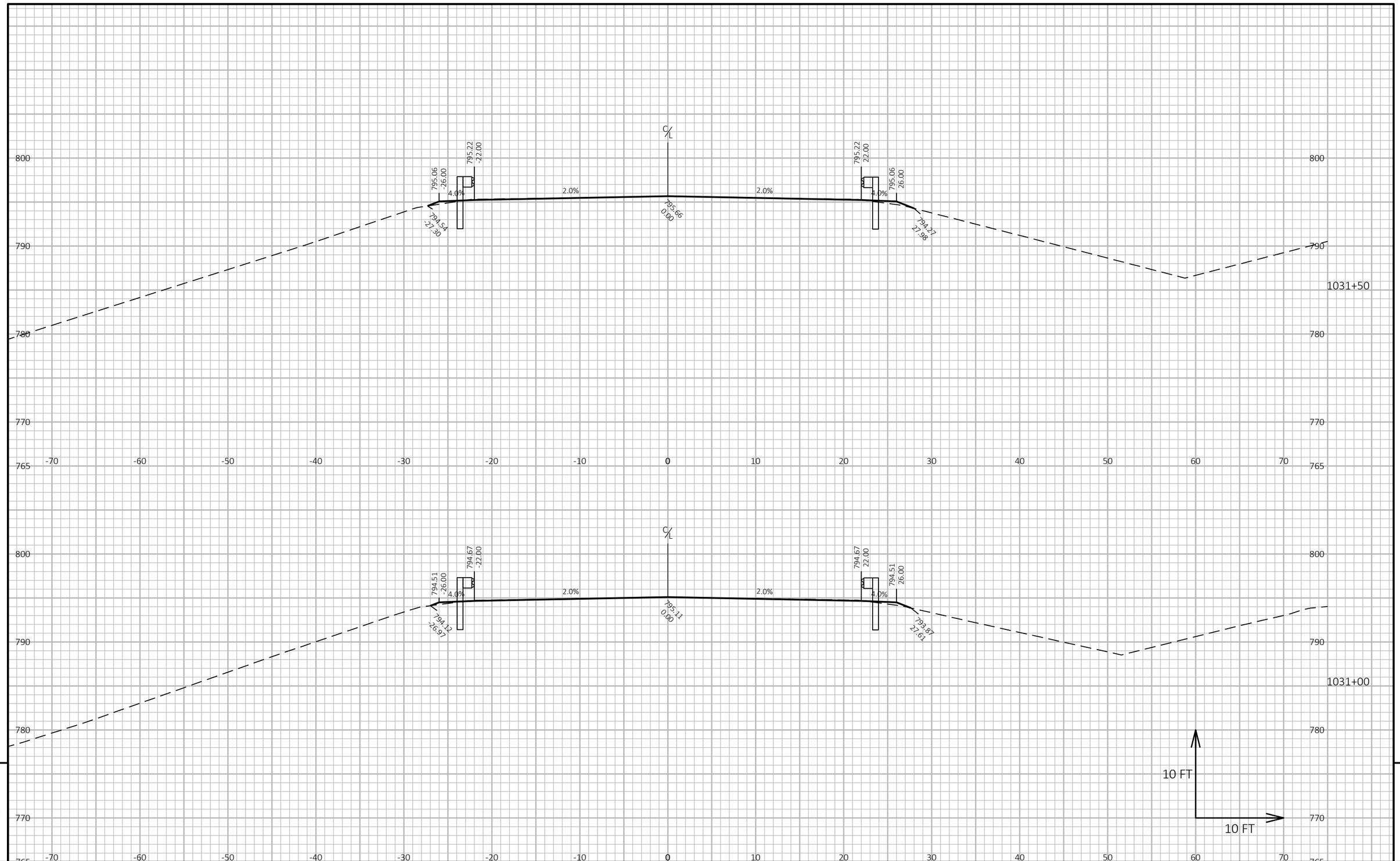
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 364	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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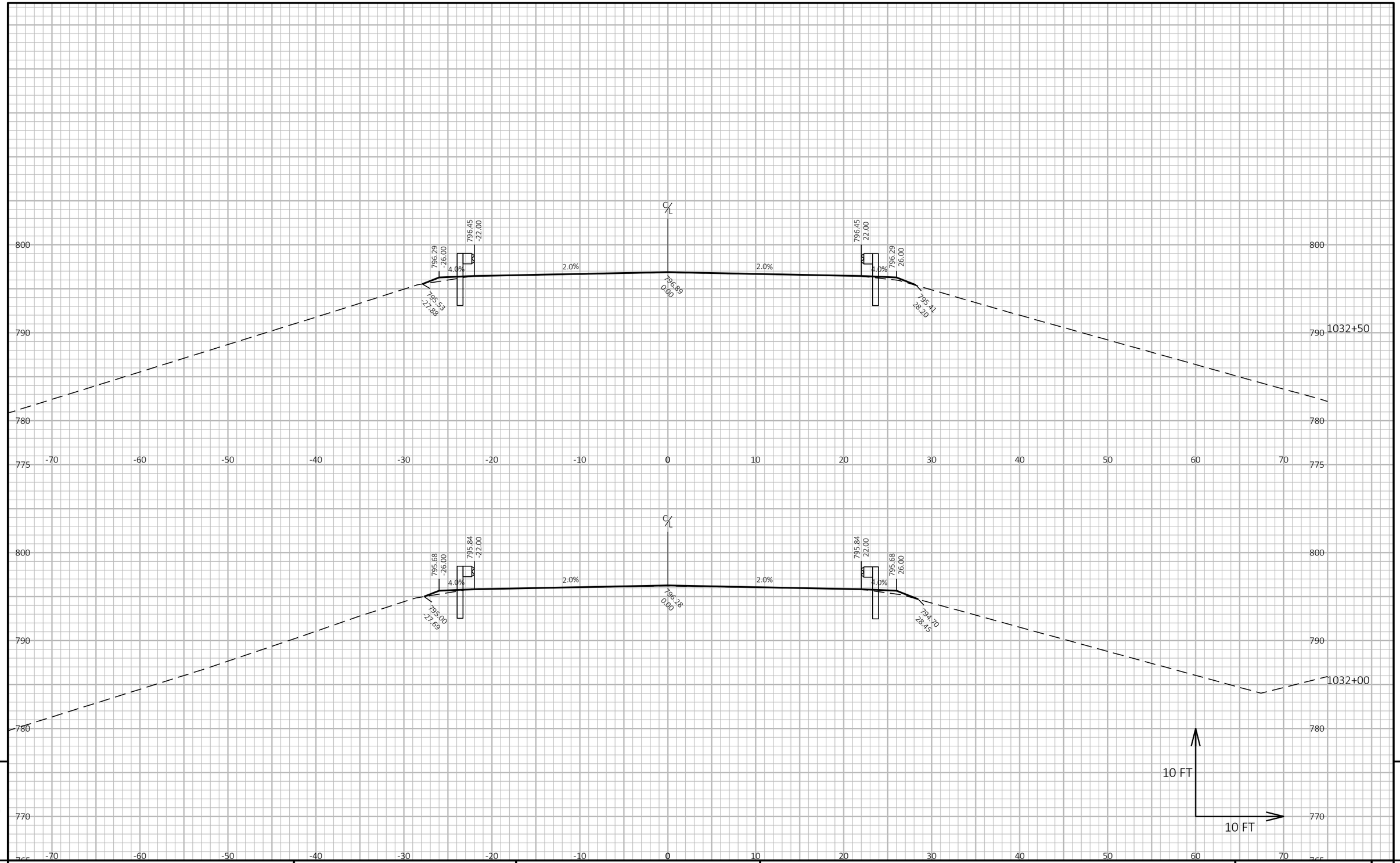
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 365	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 30

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

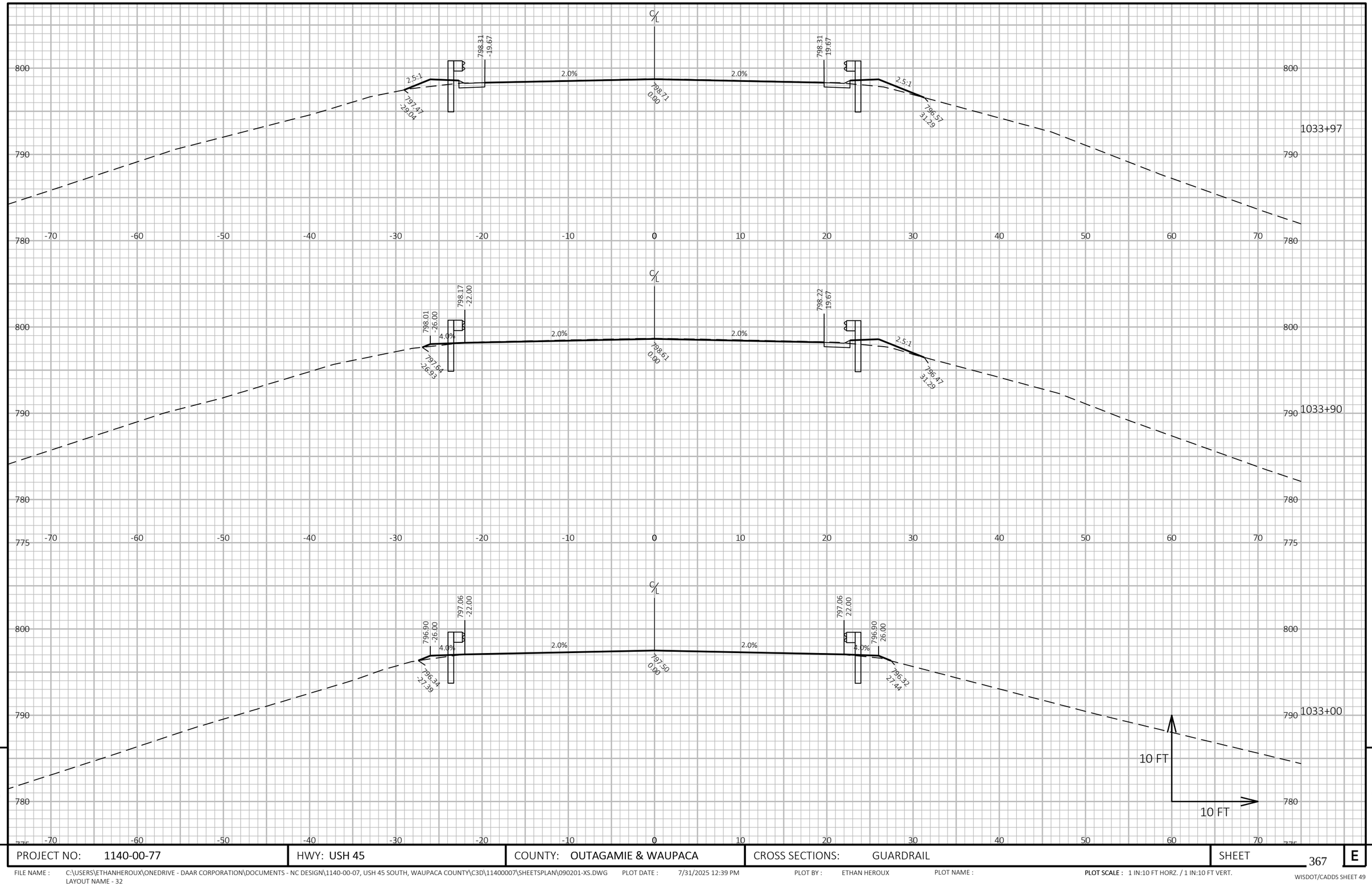
WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 366	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 31
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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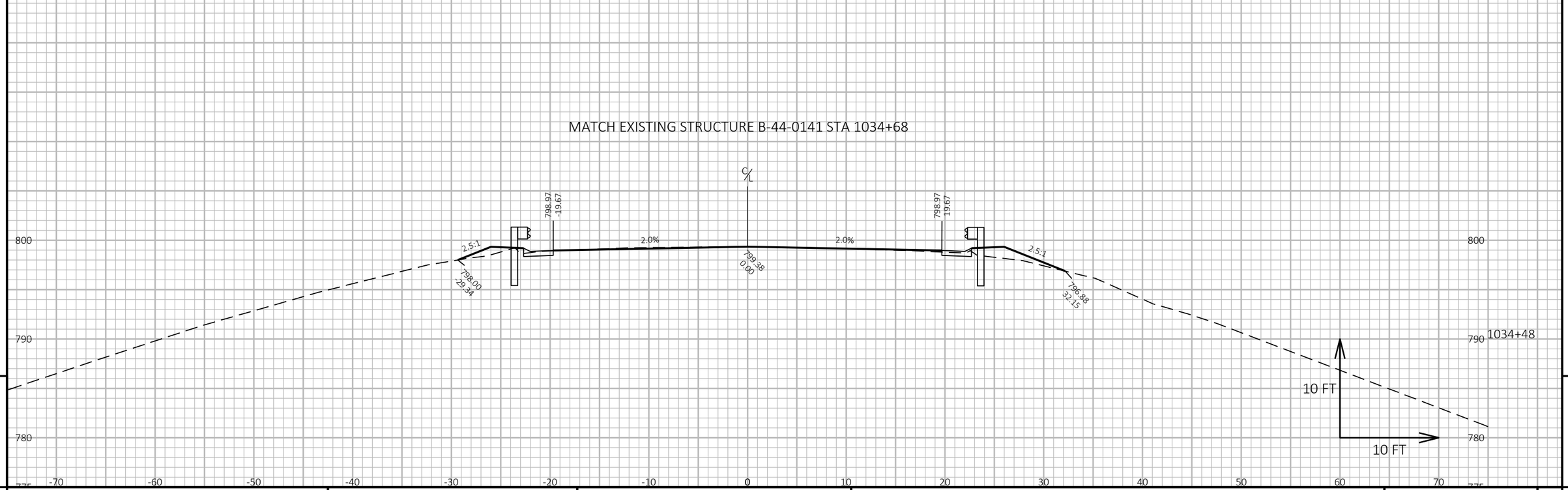
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 367	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 32

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

MATCH EXISTING STRUCTURE B-44-0141 STA 1034+68



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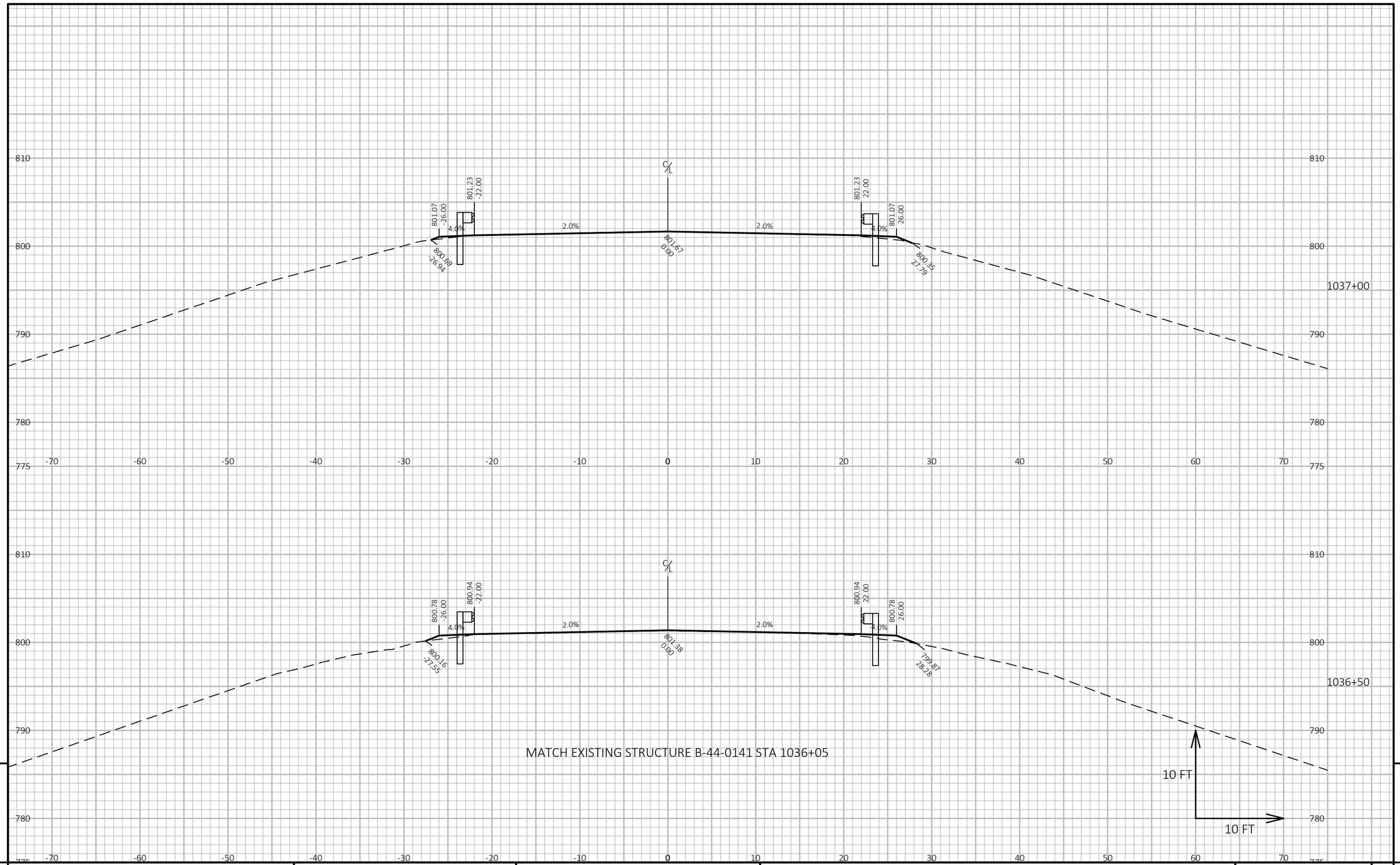
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 368	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 33
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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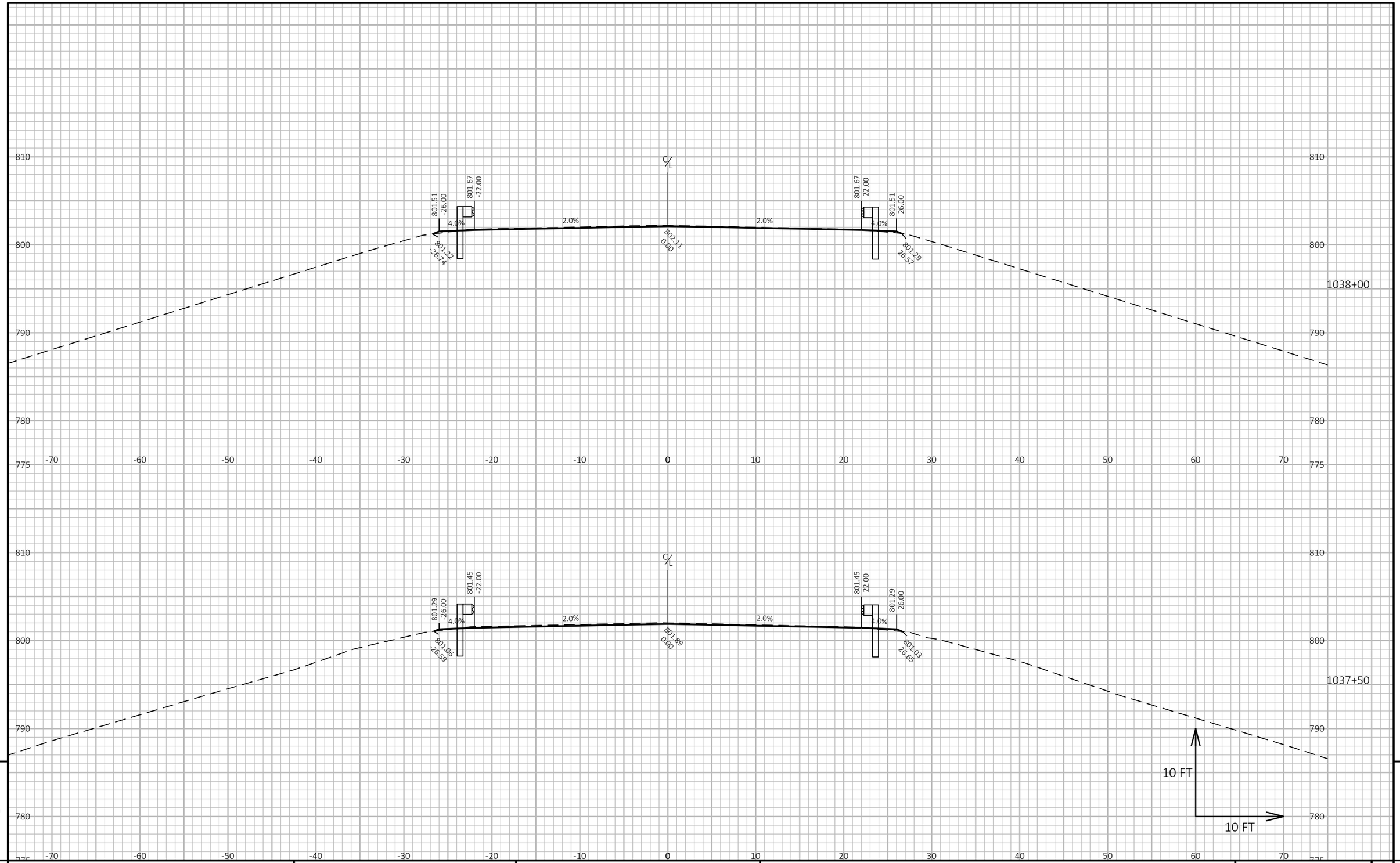
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 369	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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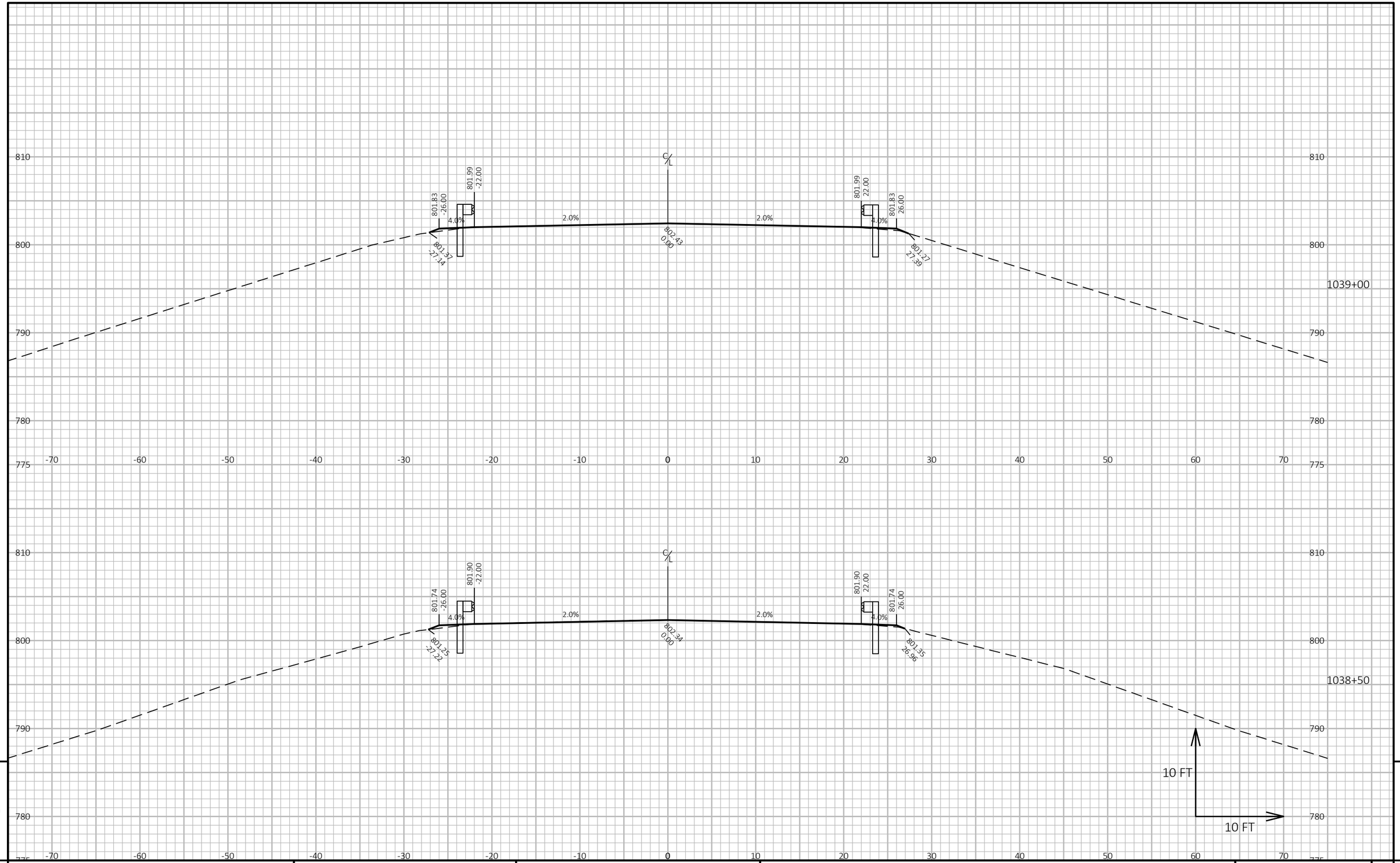
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 370	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 35

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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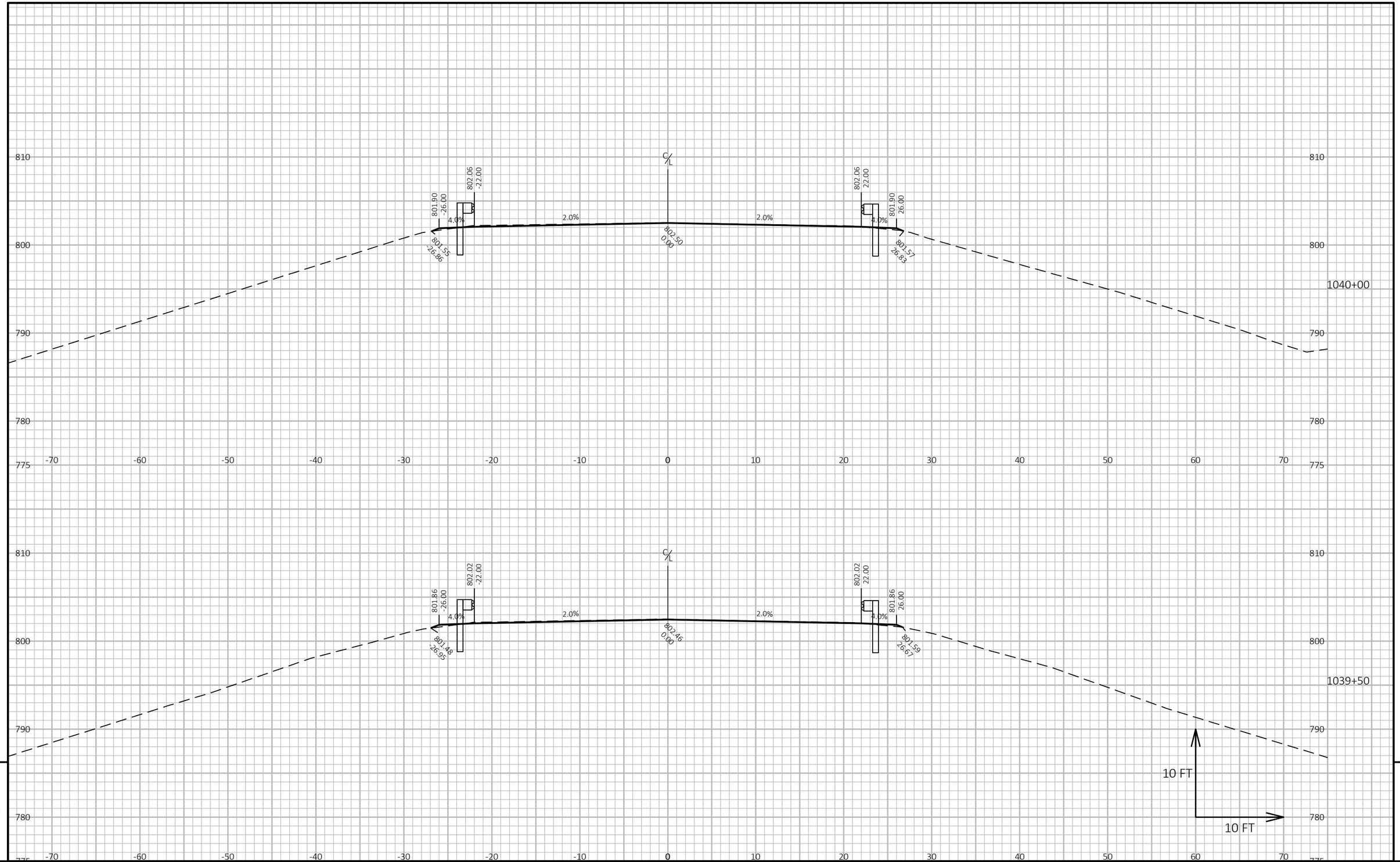
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 371	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 36

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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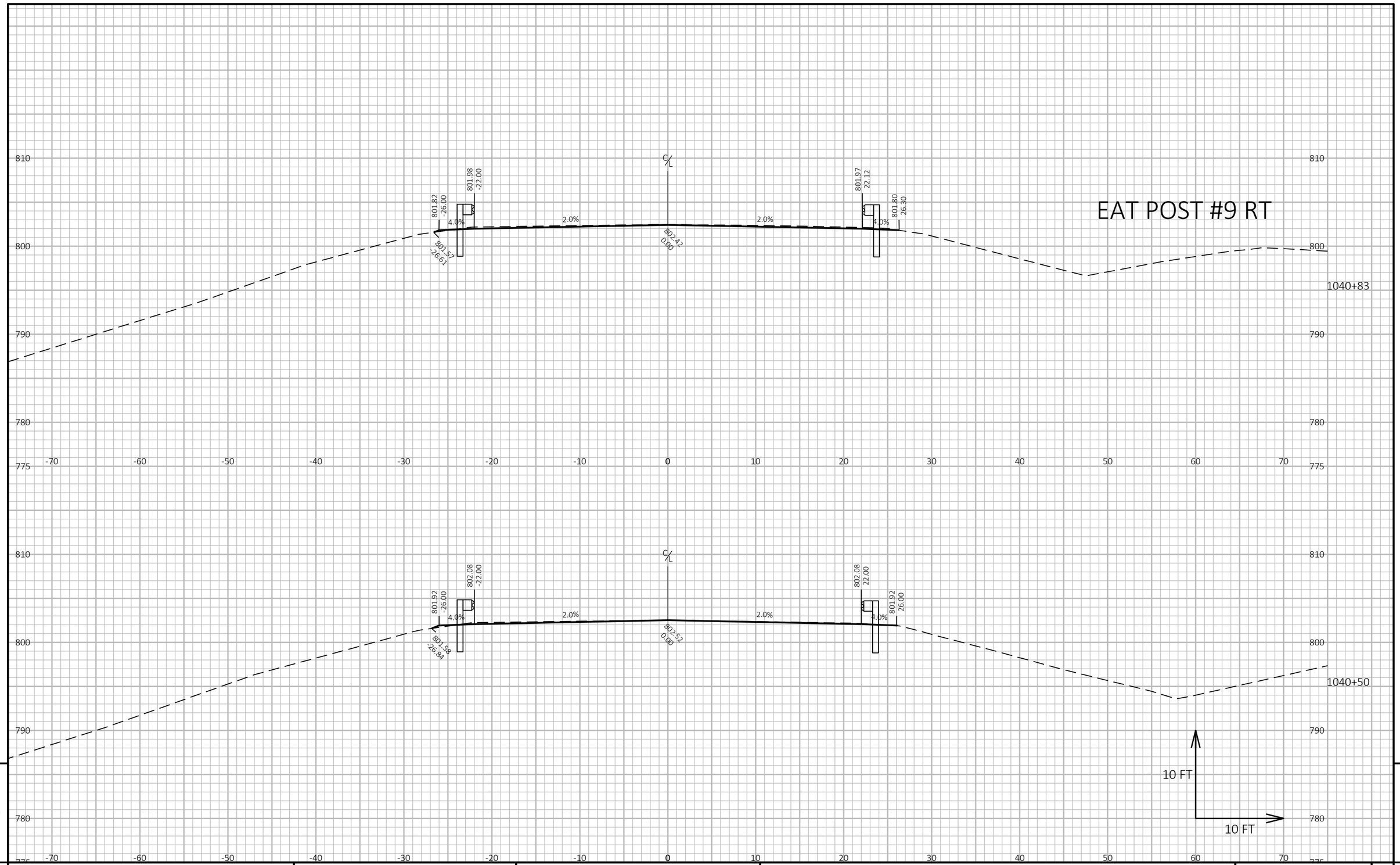
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 372	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 37

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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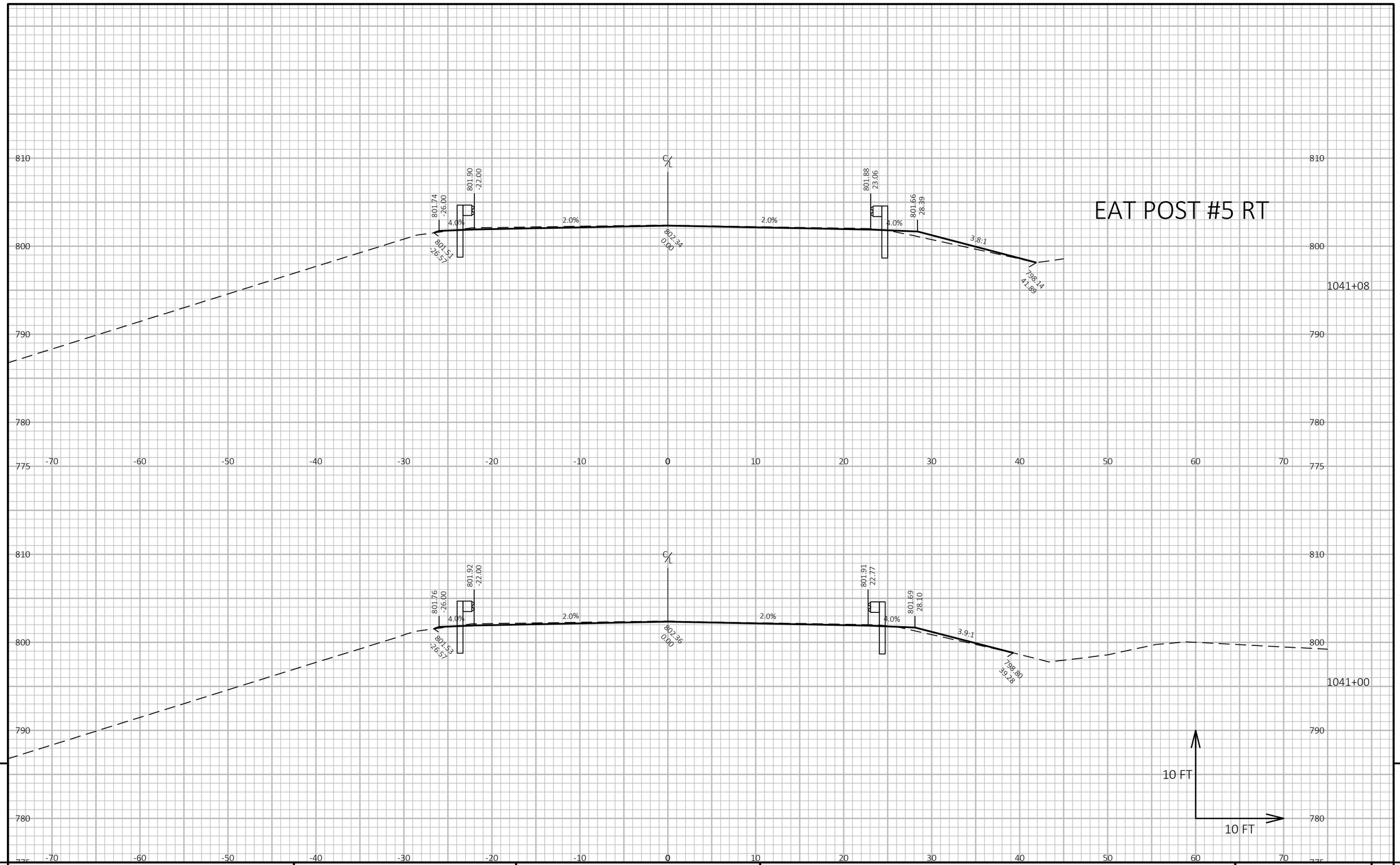
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 373	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 38
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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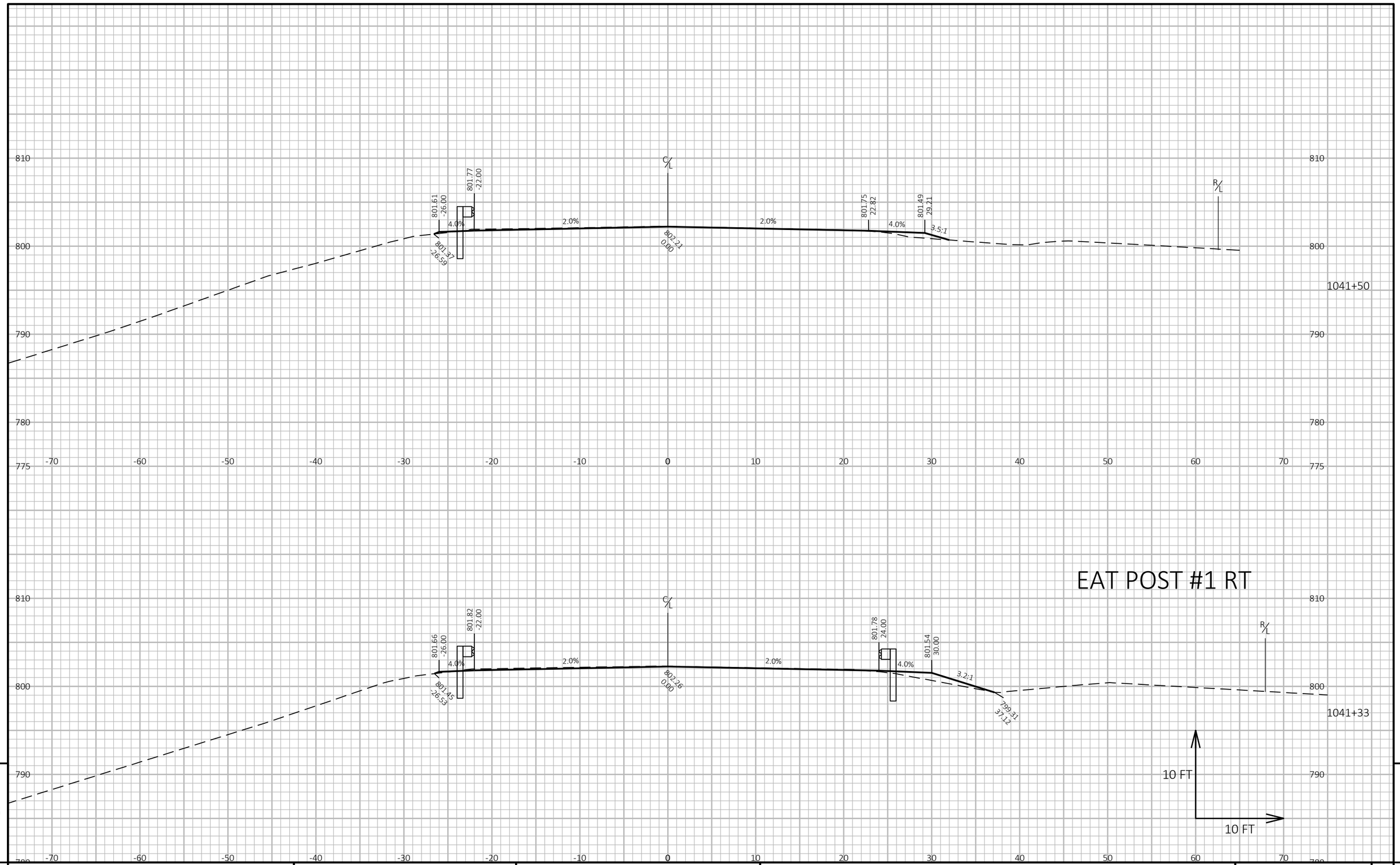
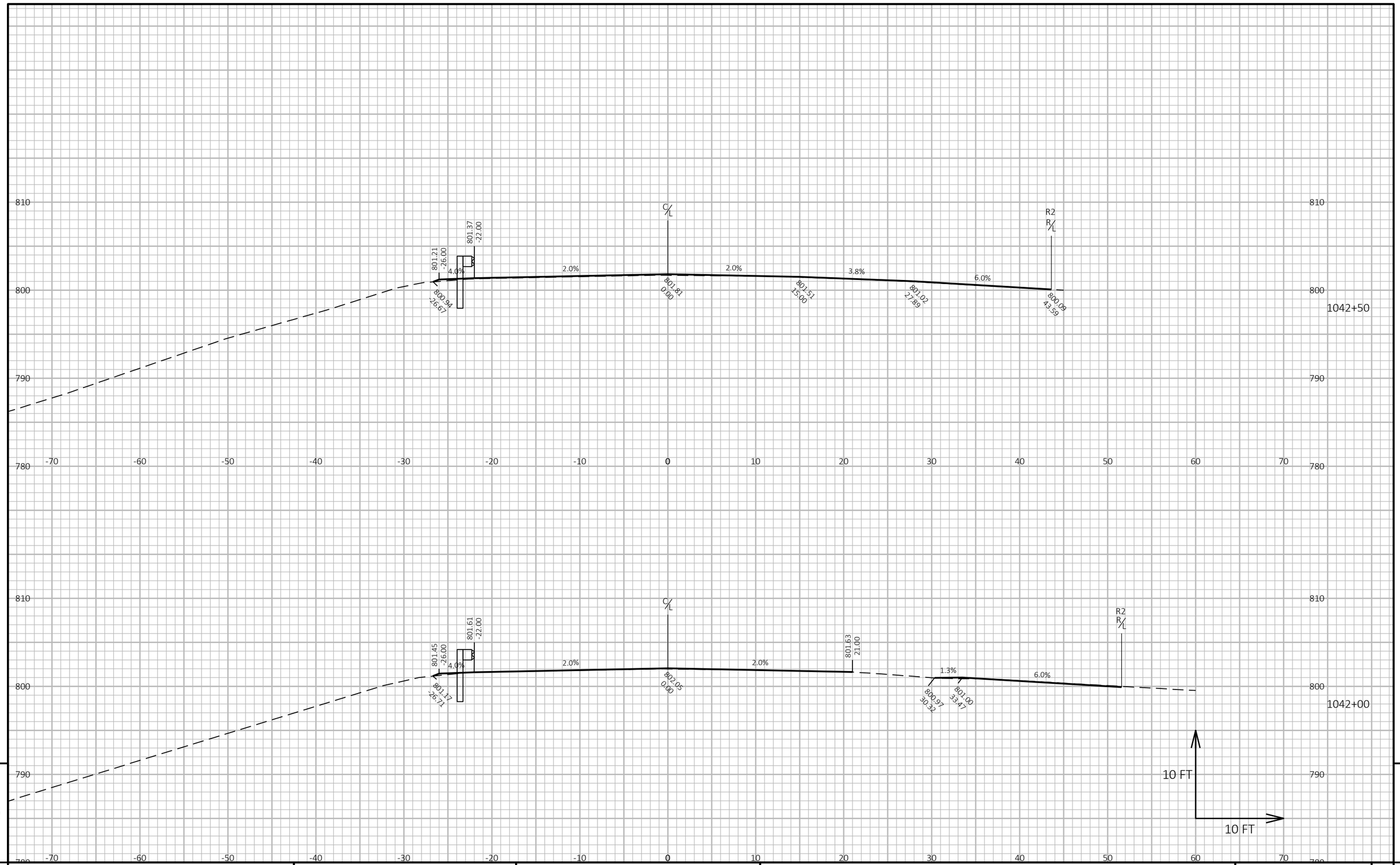
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 374	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 39
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 375	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 40
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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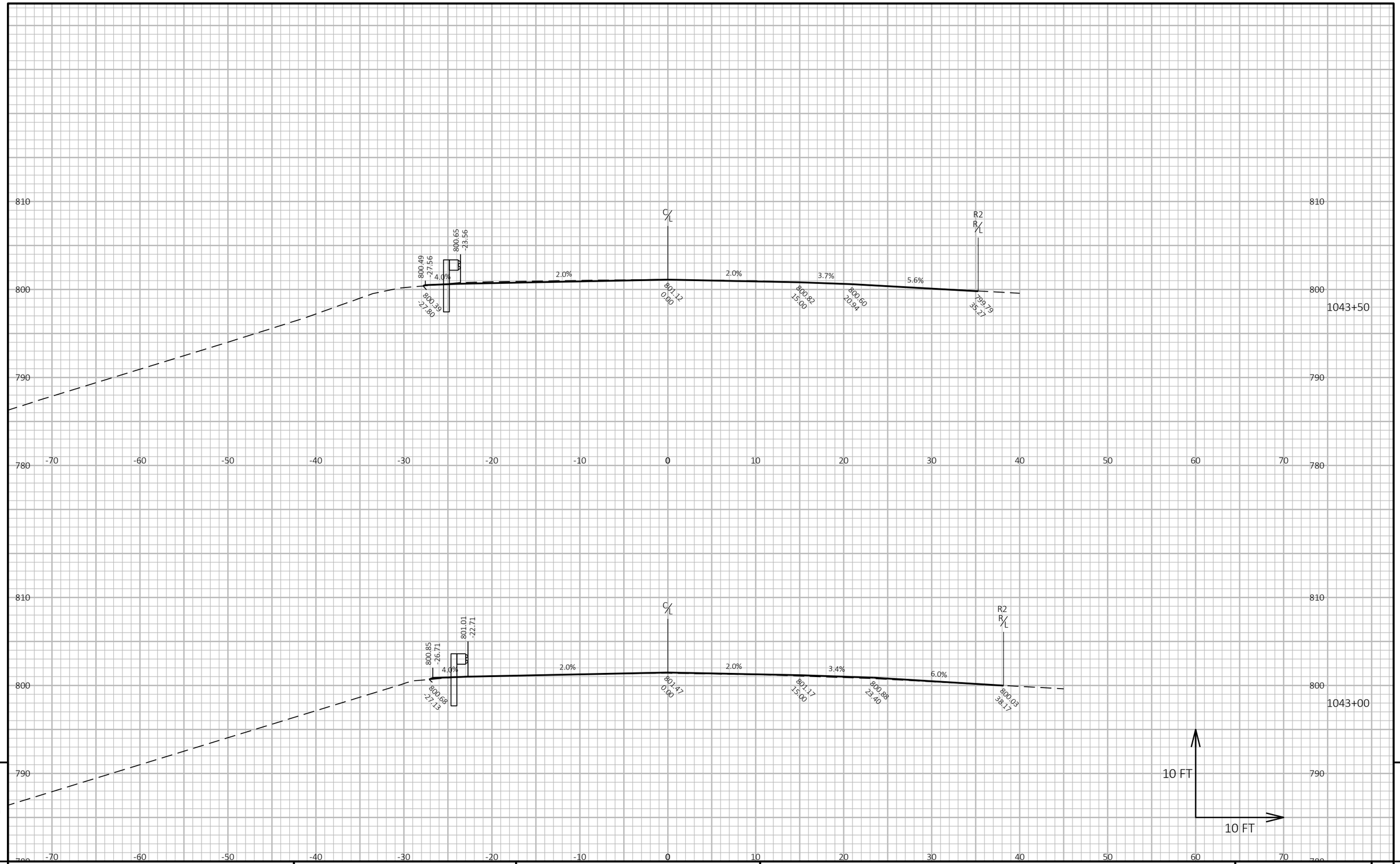
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 376	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 41

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 377	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 42

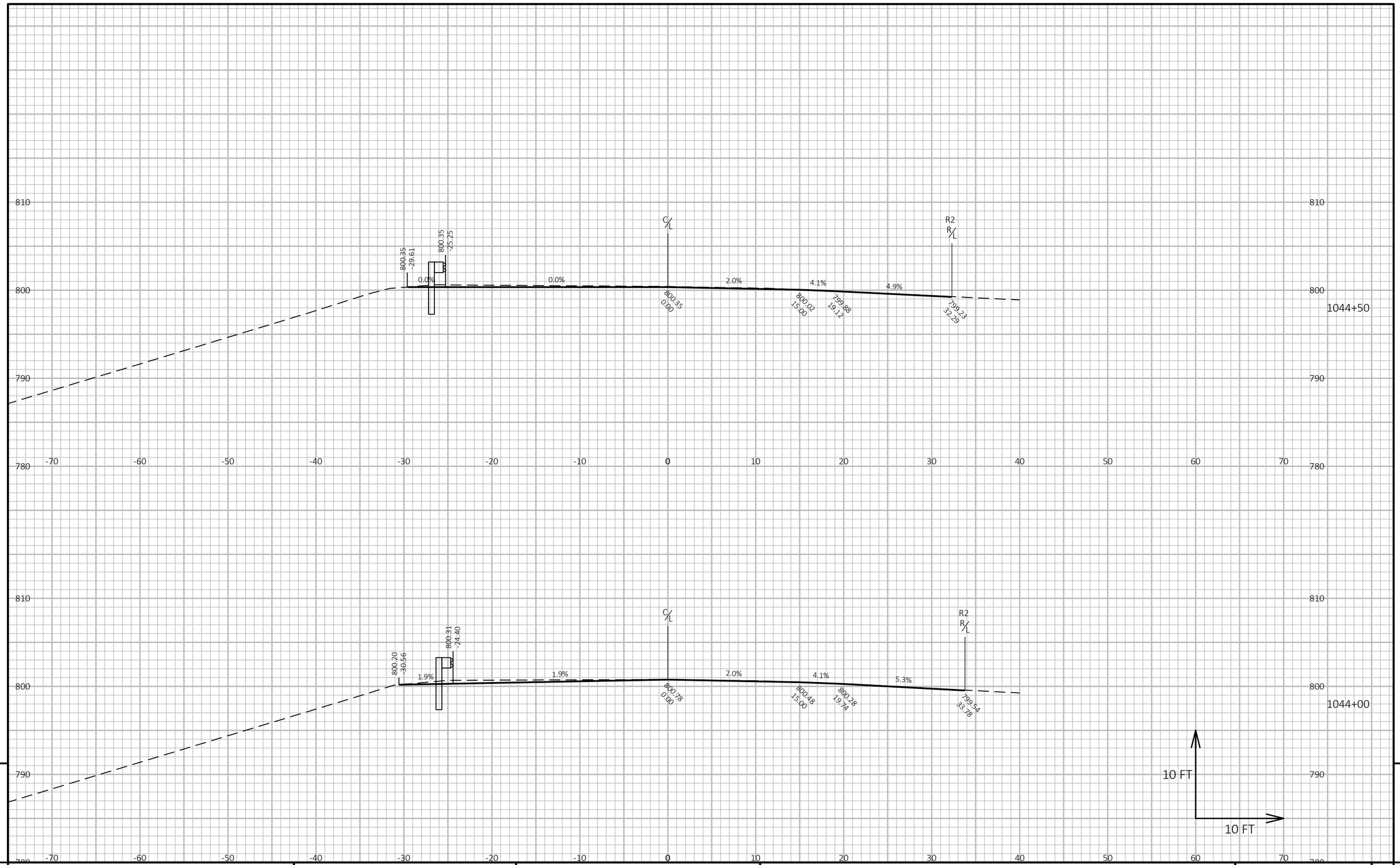
PLOT DATE : 7/31/2025 12:39 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 378	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 43

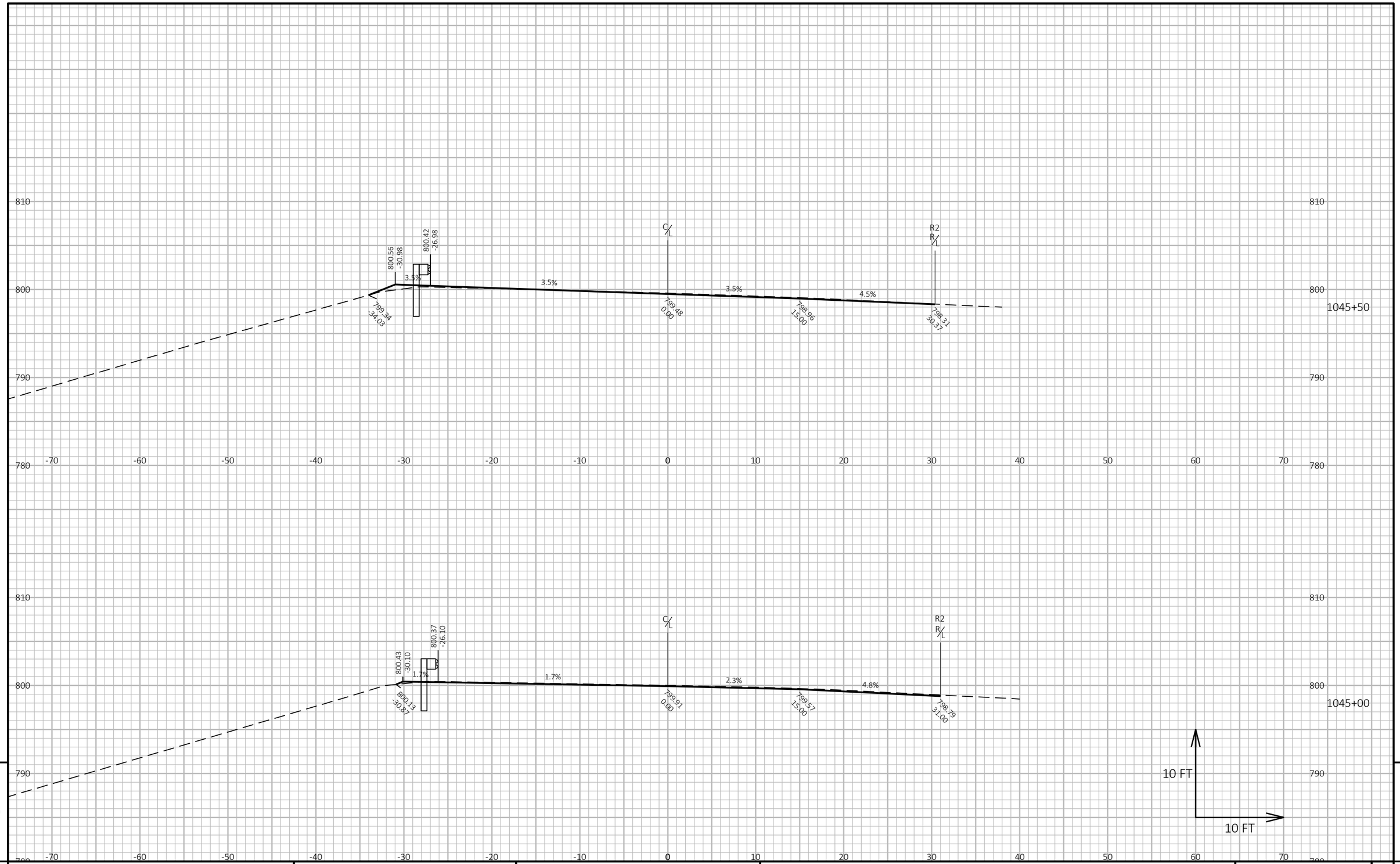
PLOT DATE : 7/31/2025 12:39 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 379	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 44

PLOT DATE : 7/31/2025 12:39 PM

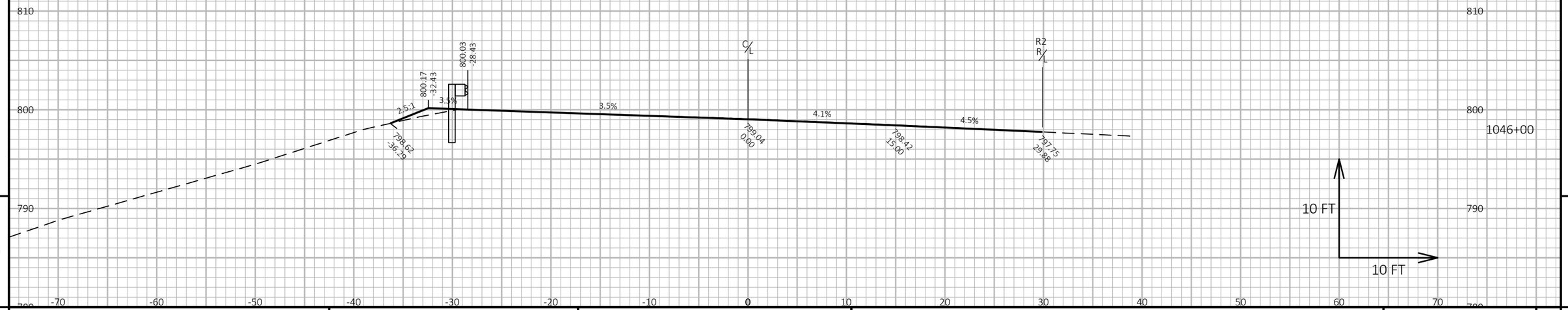
PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49

MATCH EXISTING STRUCTURE B-44-0144 STA 1046+22



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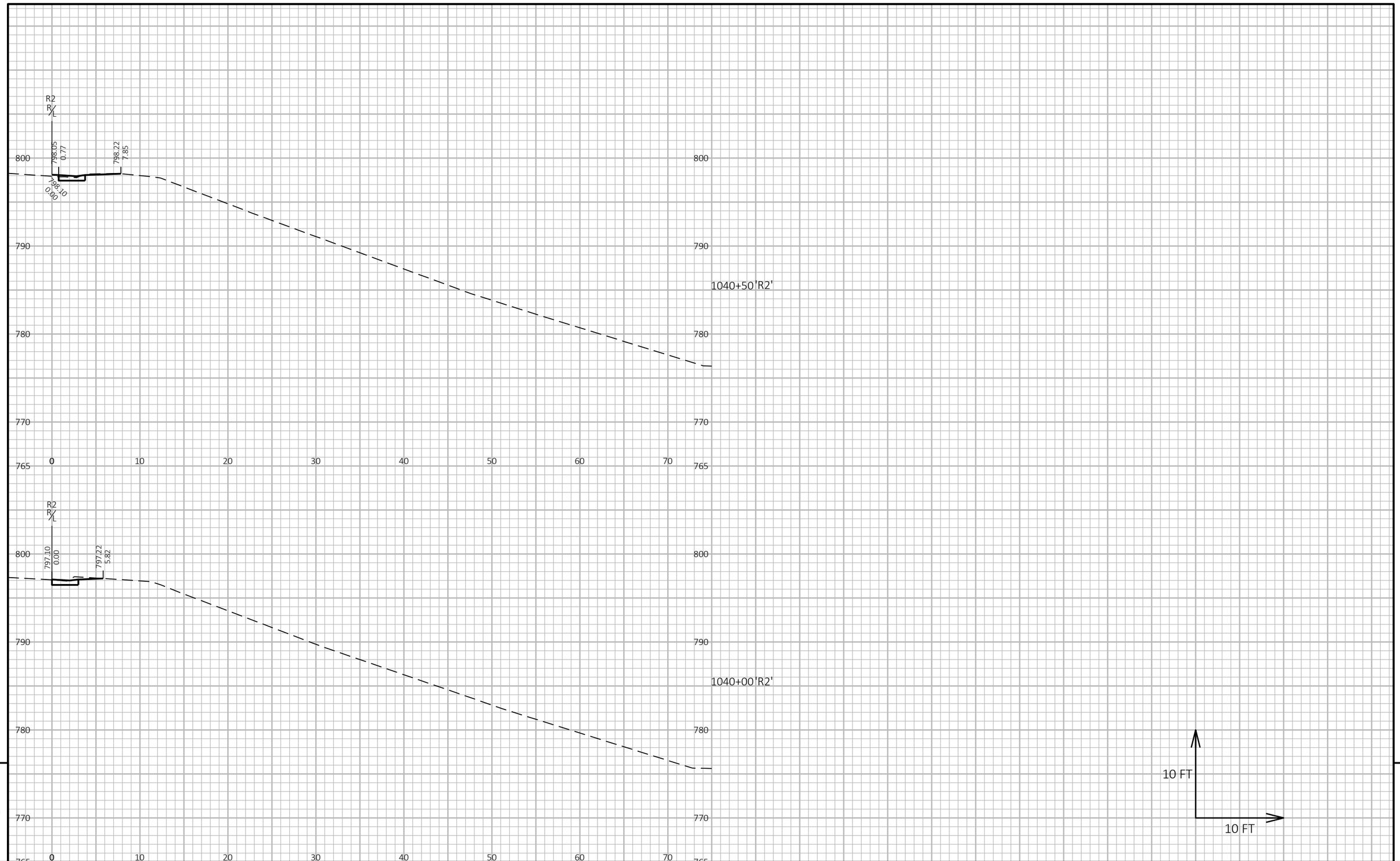
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 380	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 45

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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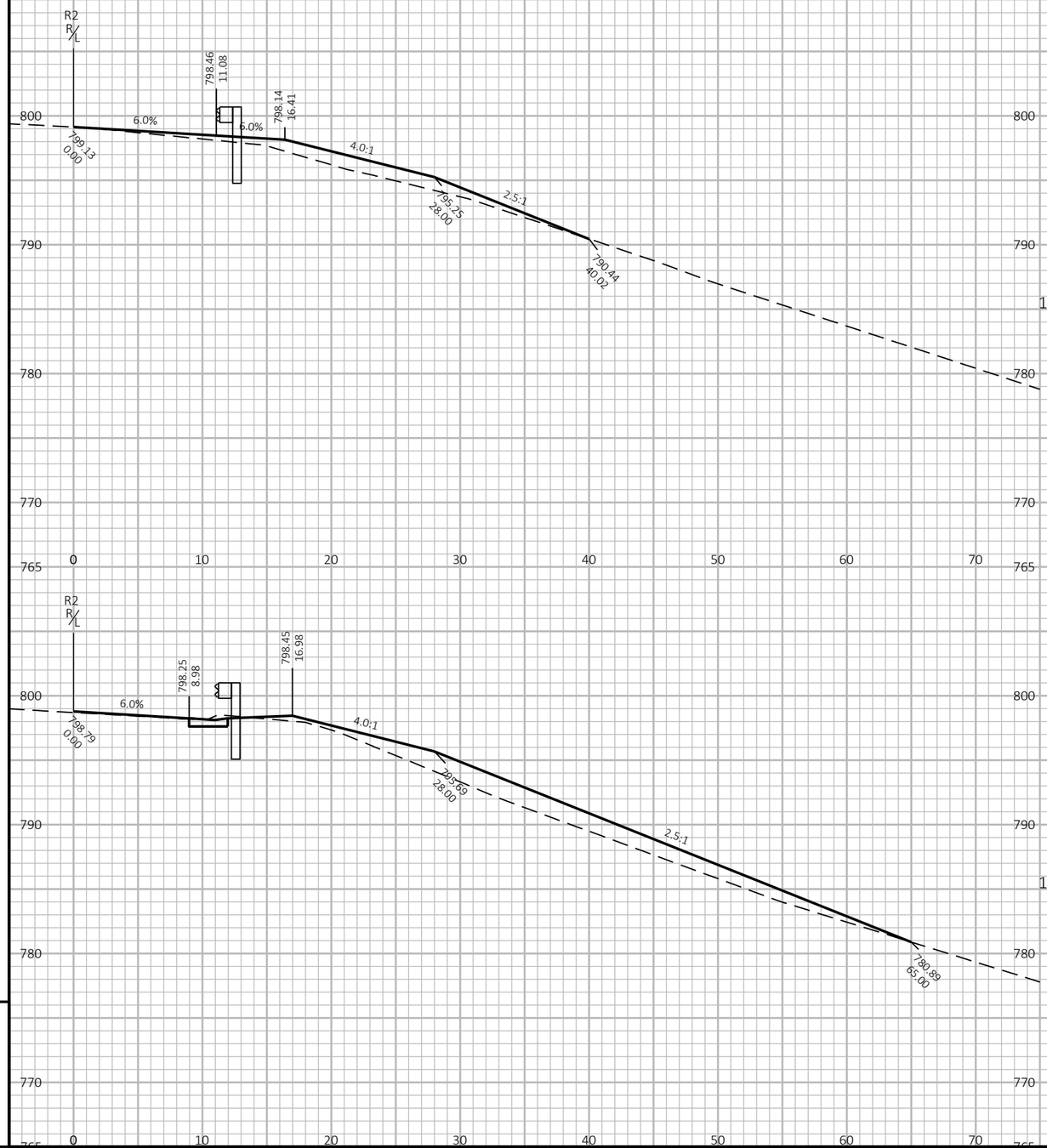
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 381	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 46
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

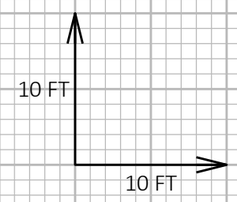


EAT POST #5 RT

1041+15 'R2'

EAT POST #1 RT

1040+90 'R2'



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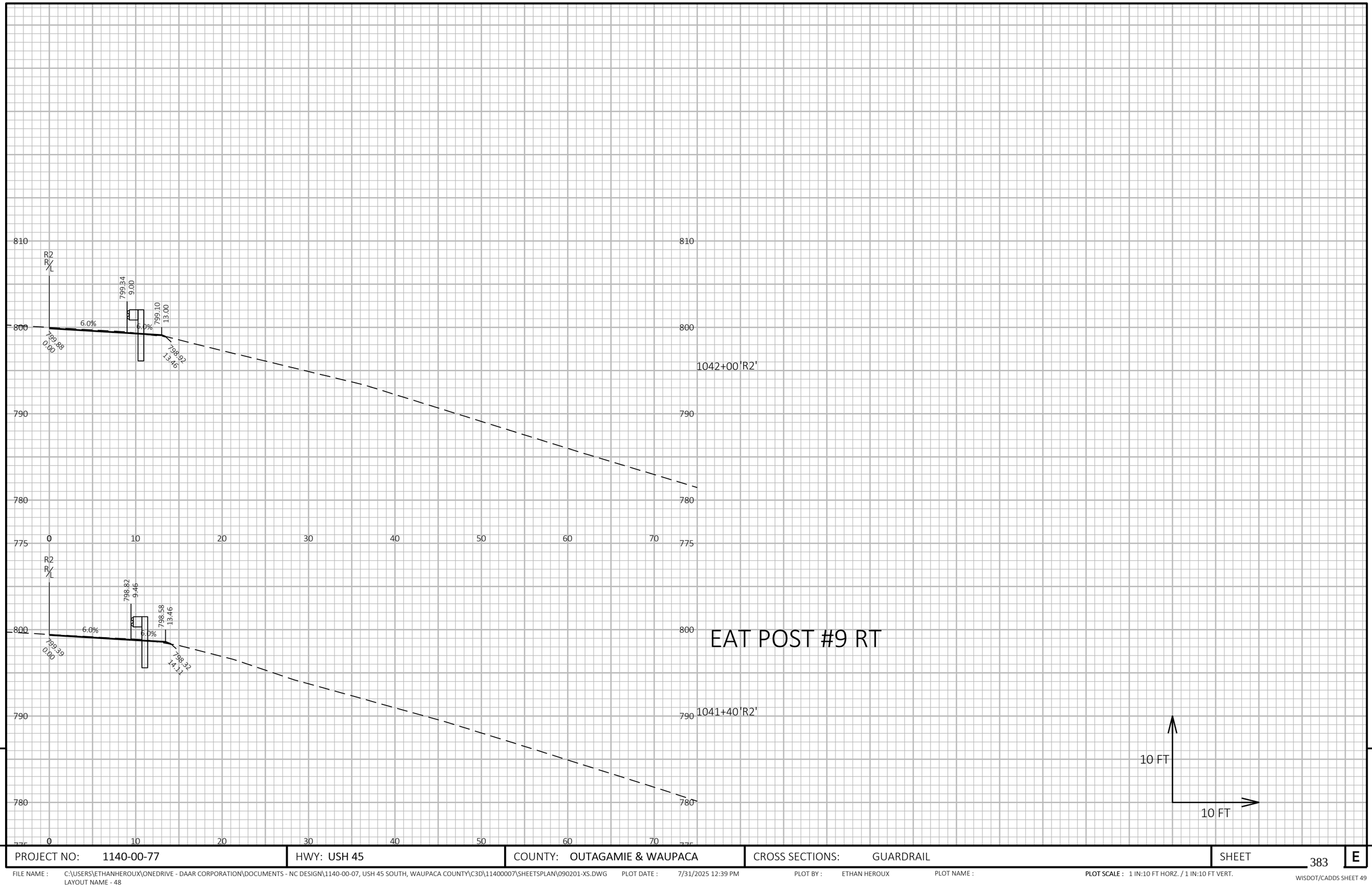
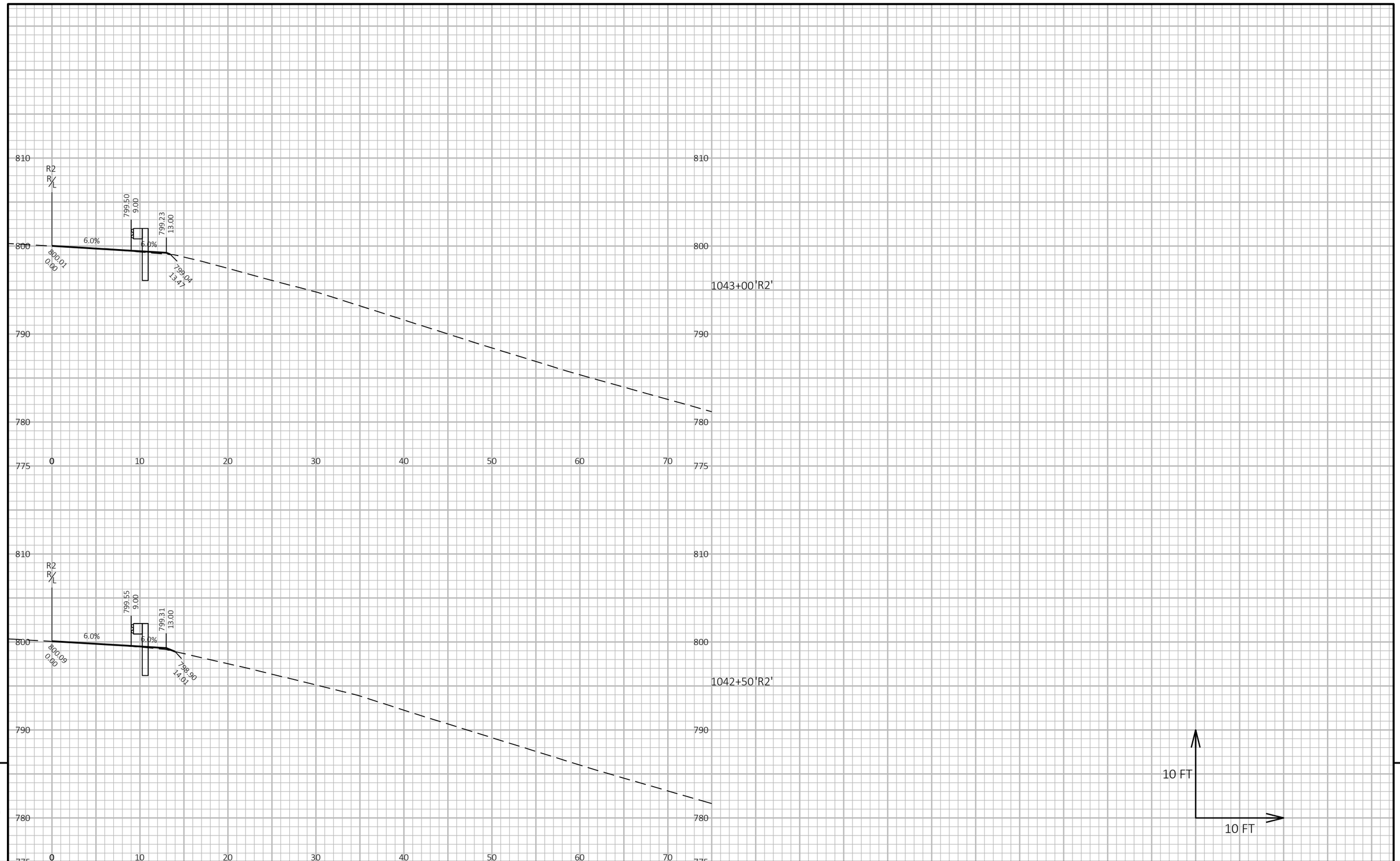
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 382	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 47
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 383	E



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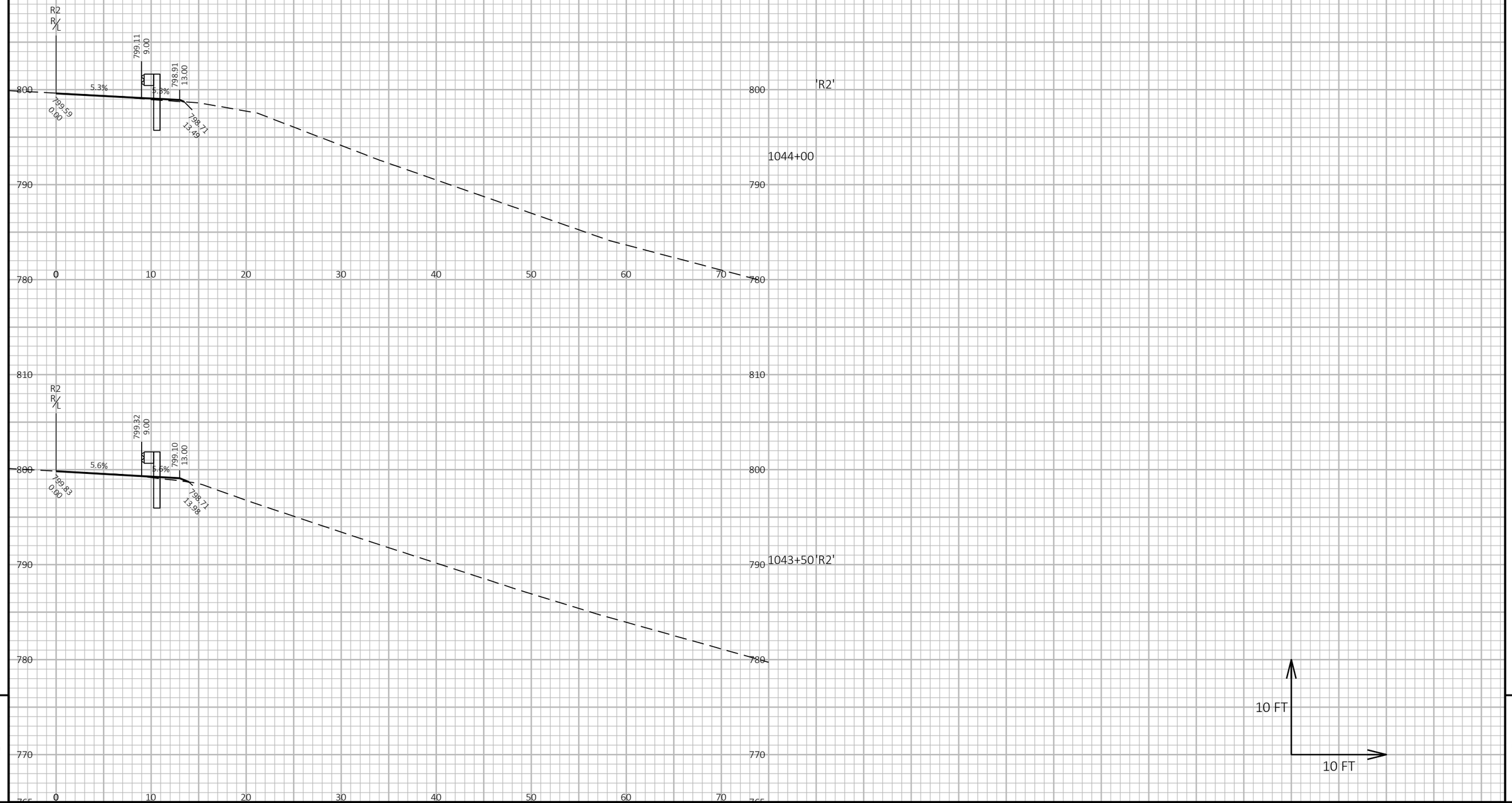
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 384	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 49

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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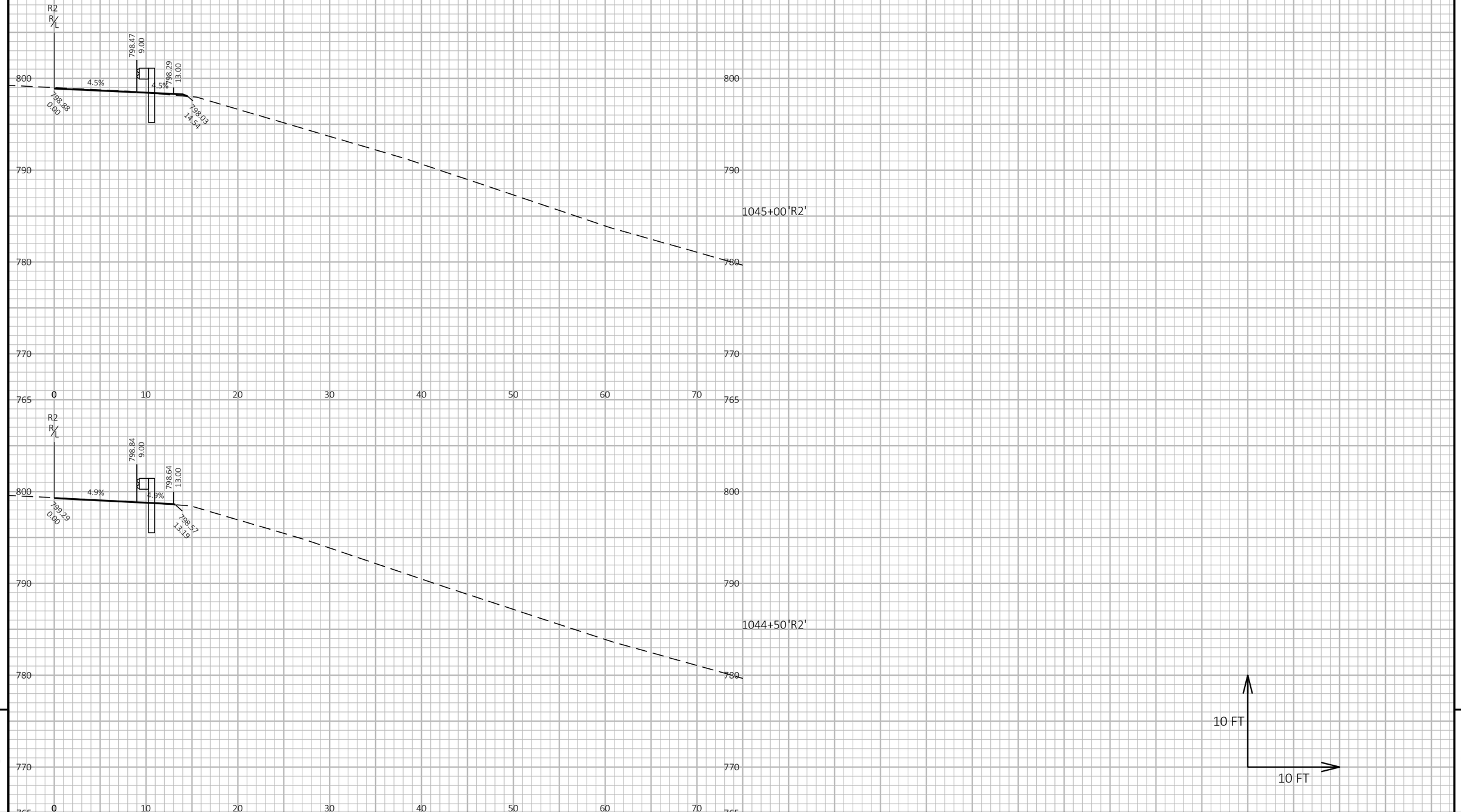
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 385	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 50
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 386	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 51
PLOT DATE : 7/31/2025 12:39 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

MATCH EXISTING STRUCTURE B-44-0144 STA 1046+11 'R2'

R2
R/
L

800
790
780
770
765

0 10 20 30 40 50 60 70

ELEC ELEC ELEC

1046+00
'R2'

R2
R/
L

797.99
9.00

797.81
12.95

4.5%
4.5%

798.33
0.00

1045+50 'R2'

10 FT
10 FT

9

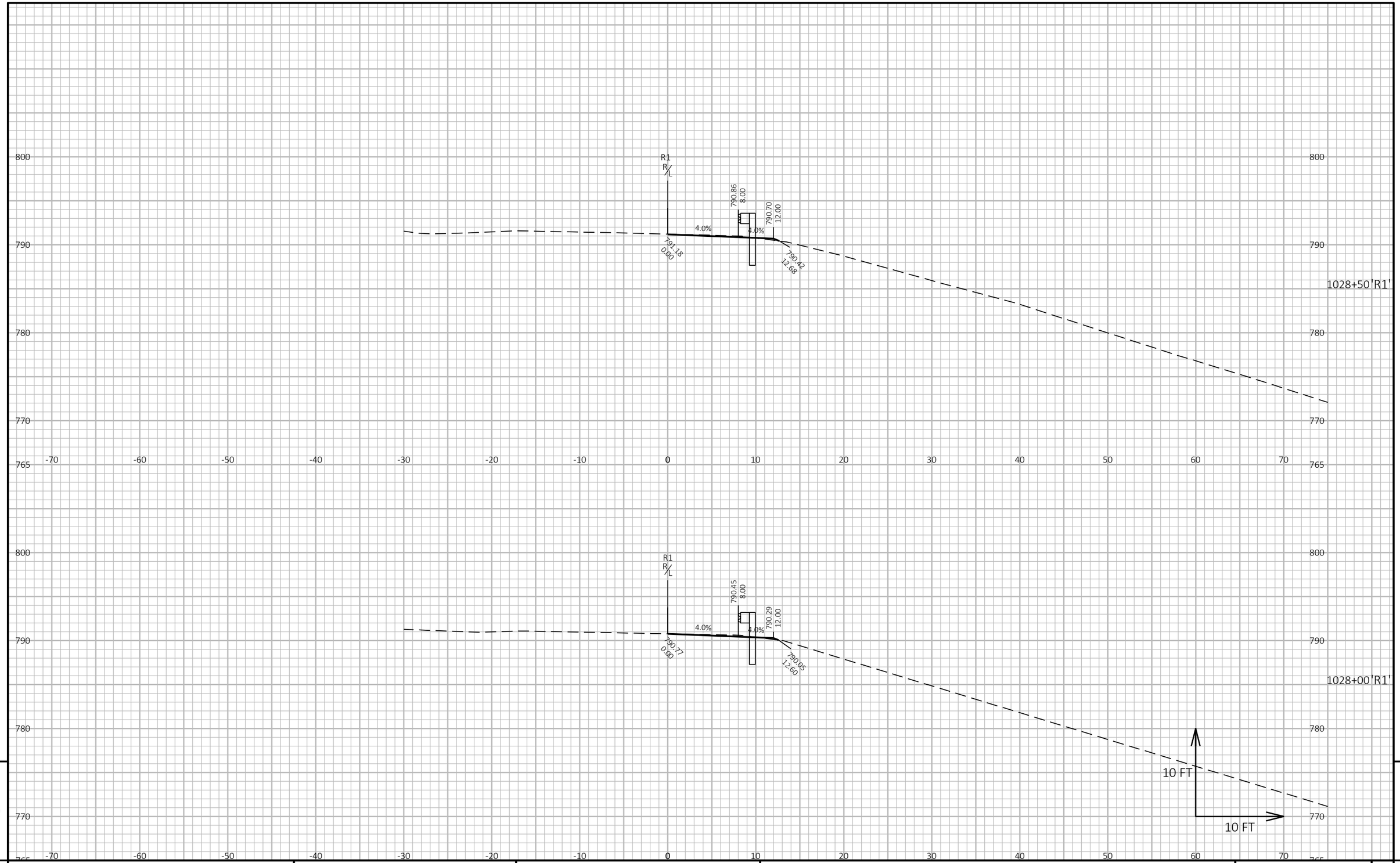
9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 387	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 52

PLOT DATE : 7/31/2025 12:39 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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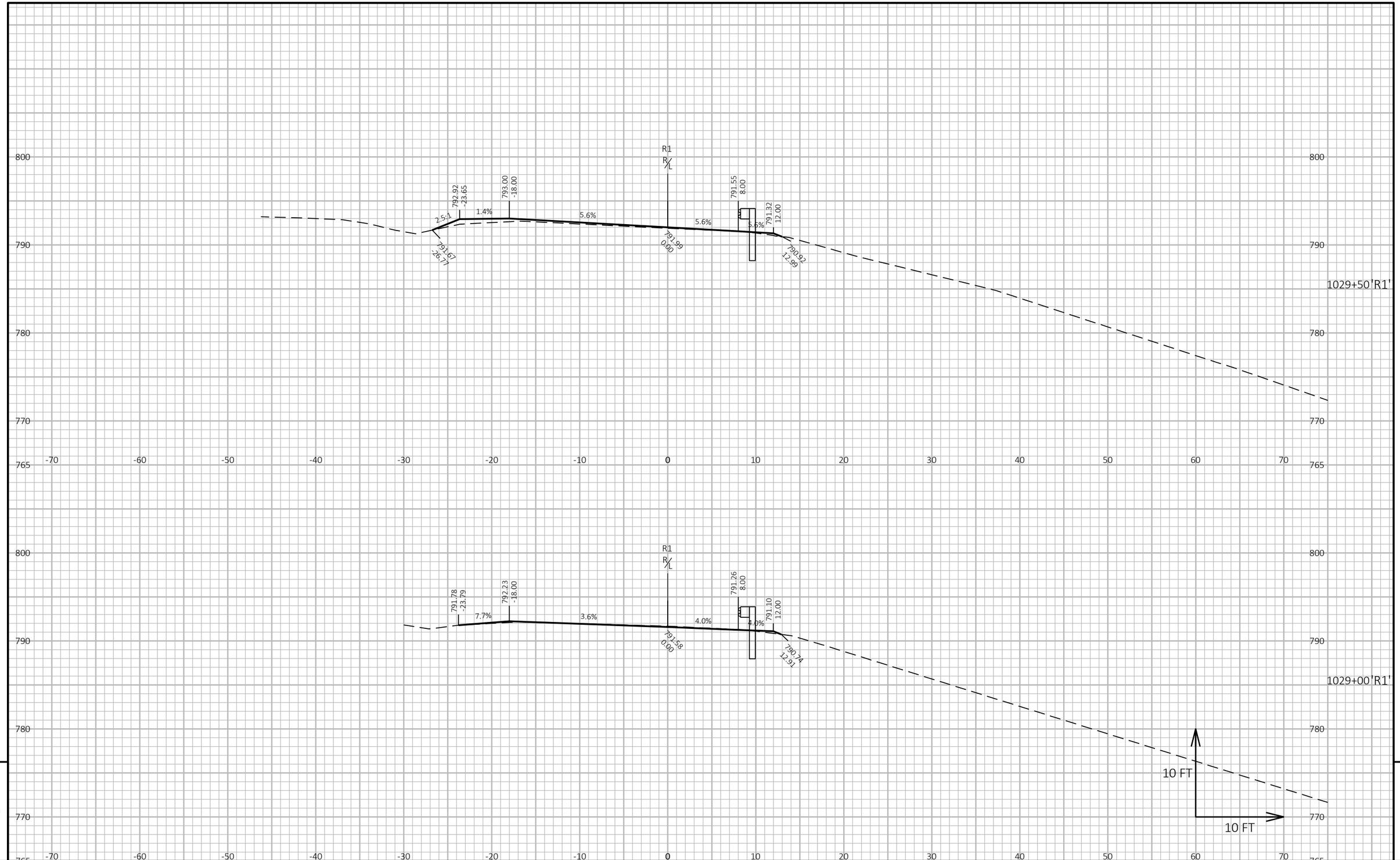
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 388	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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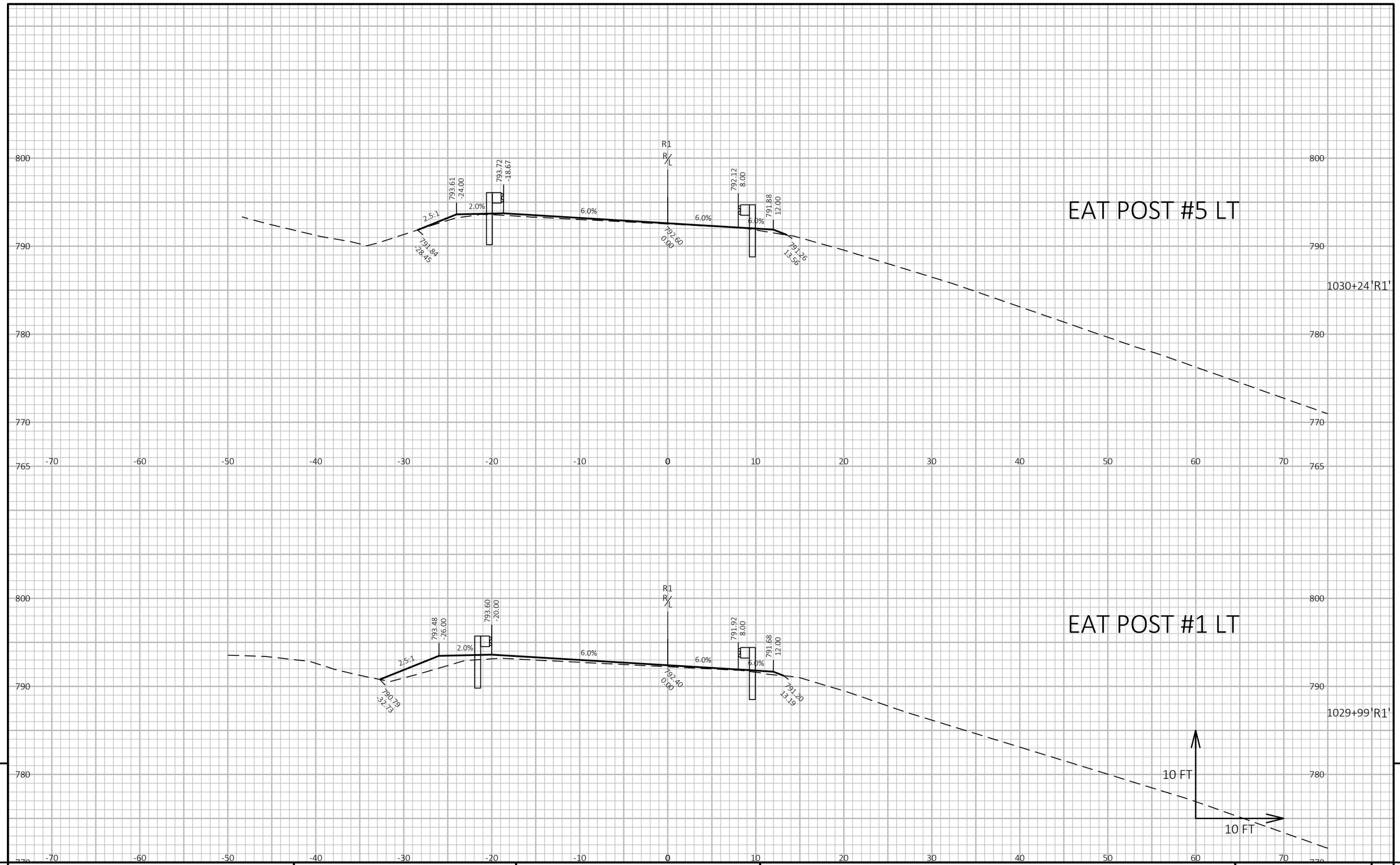
9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 389	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 02
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 390	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 04

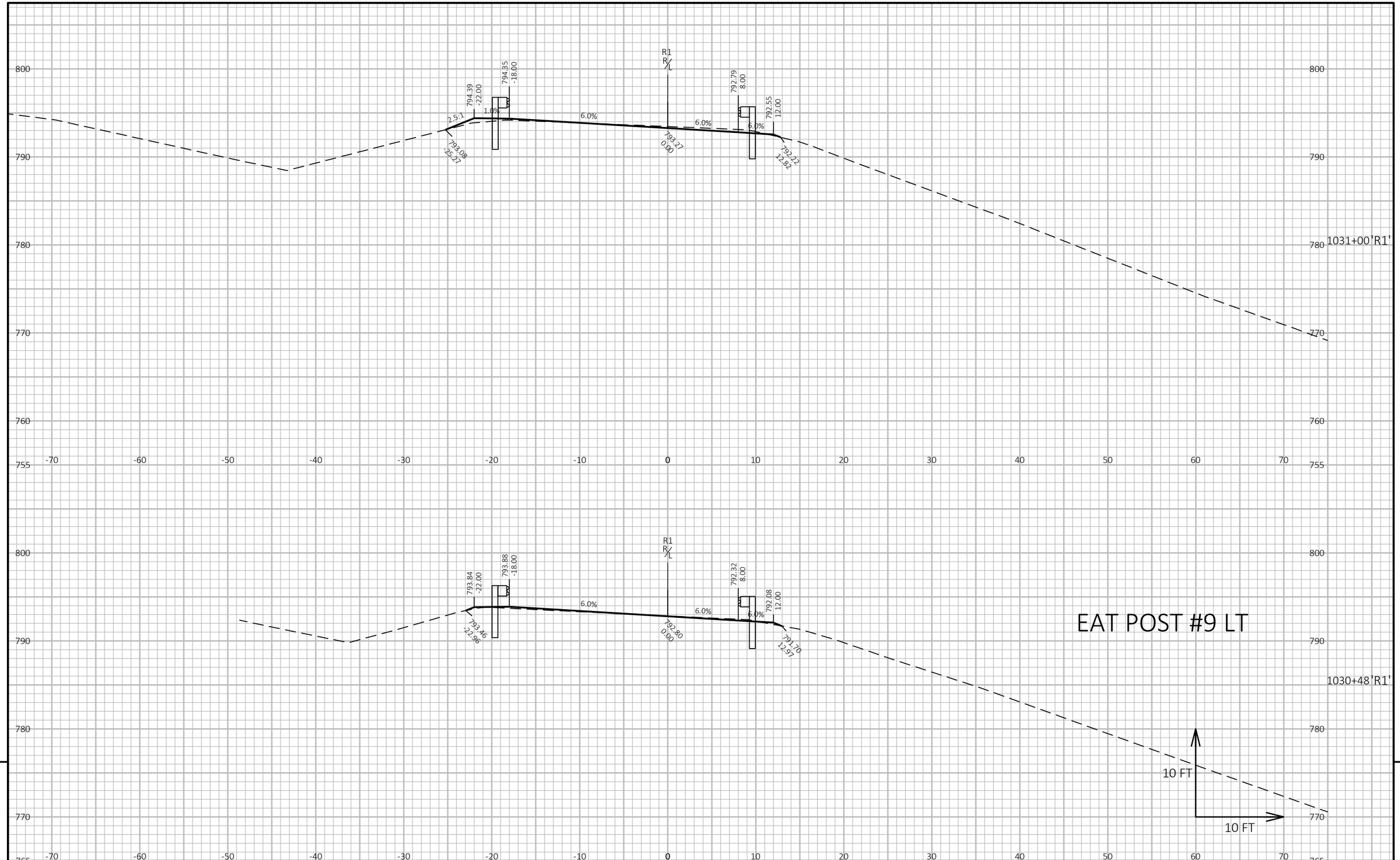
PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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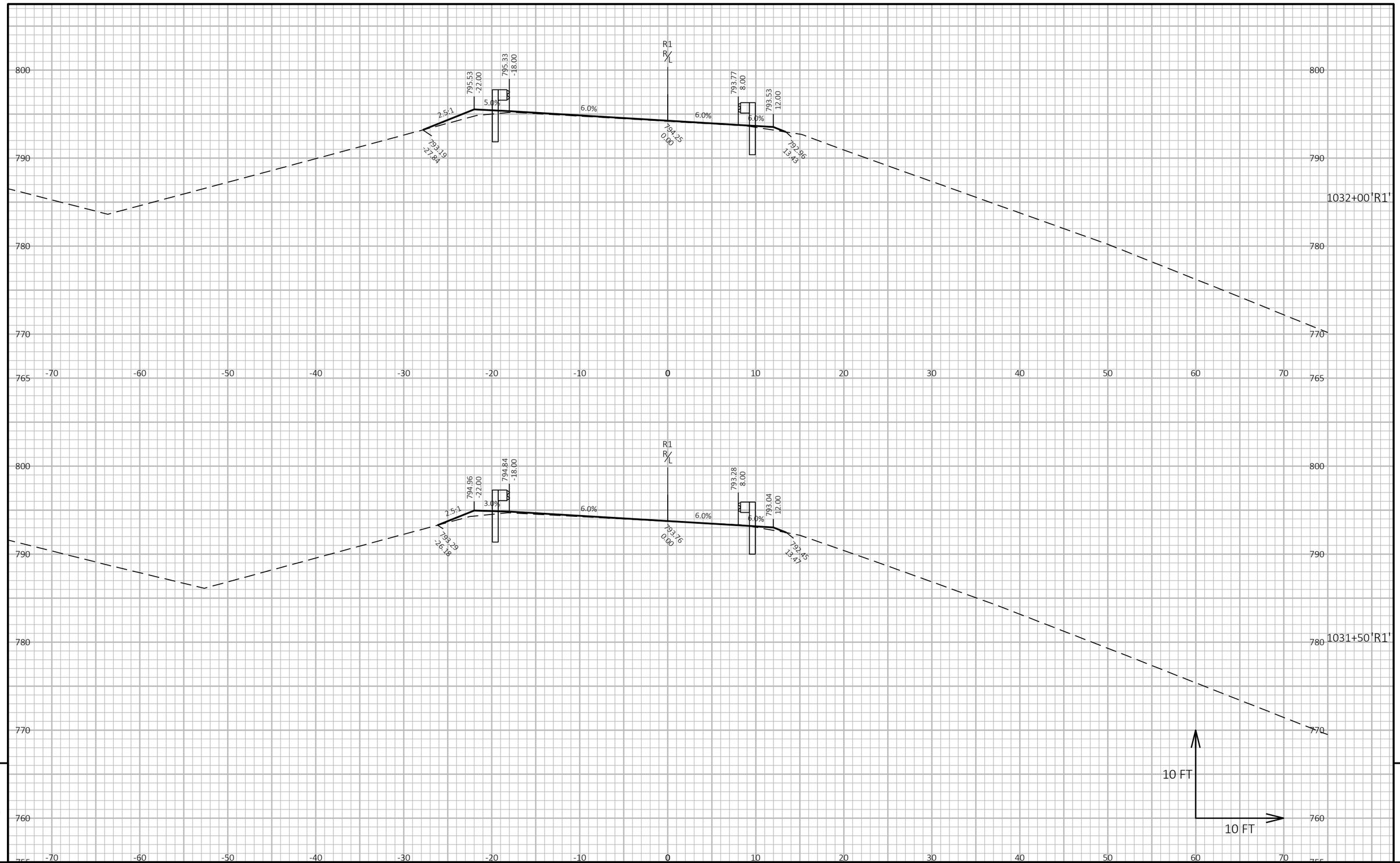
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 391	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 03
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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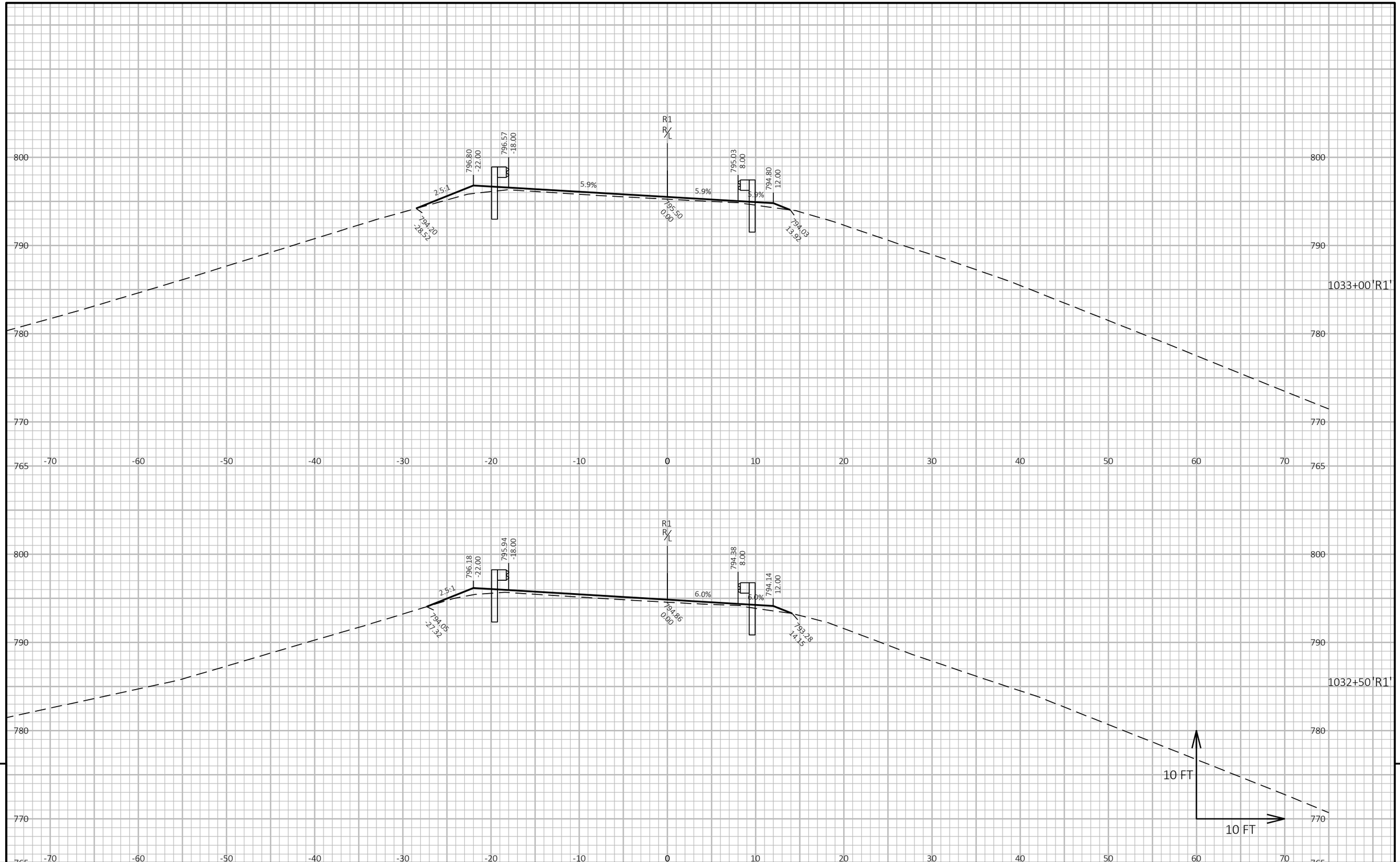
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 392	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 05
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 393	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 06

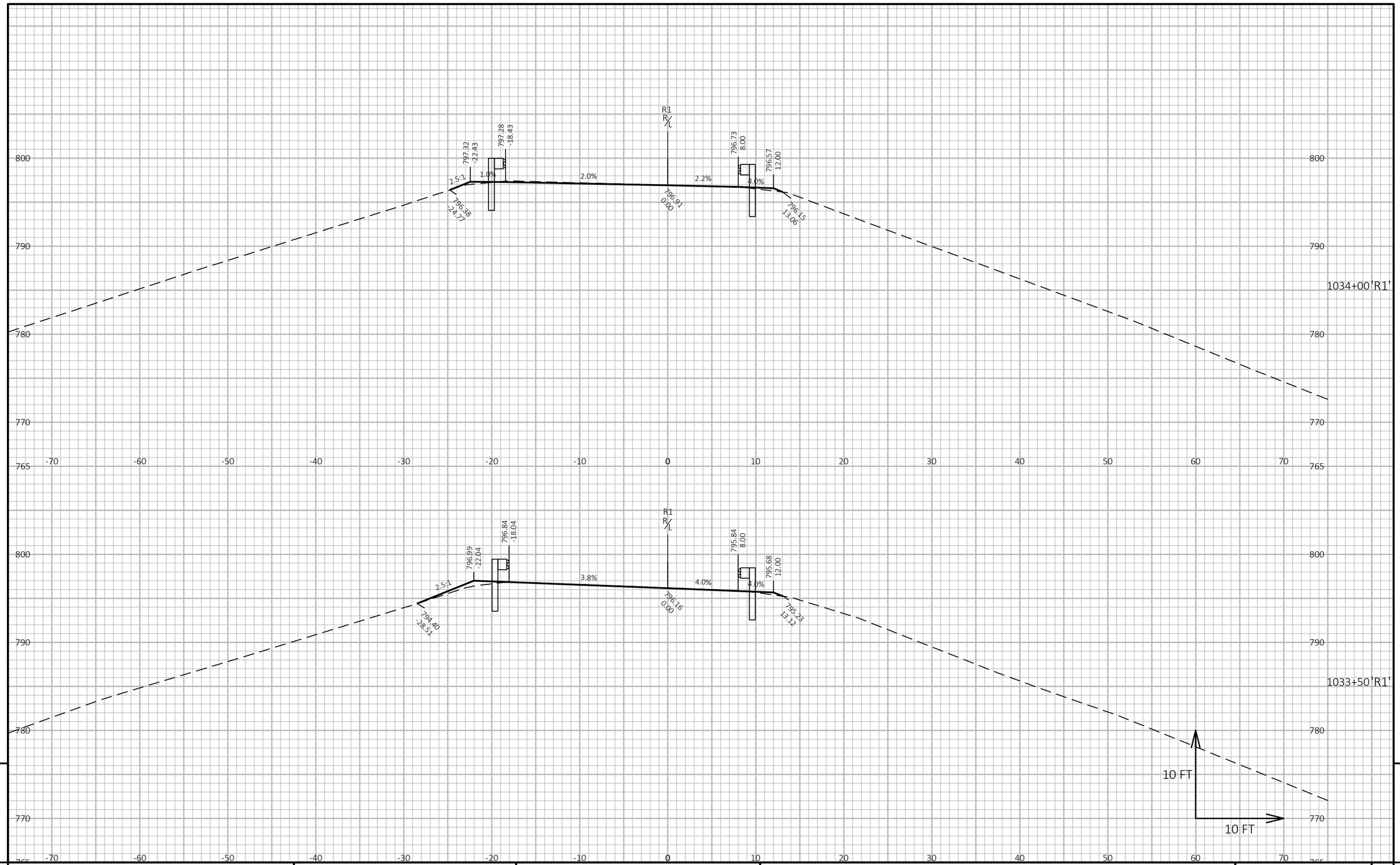
PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 394	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/24/2025 4:57 PM

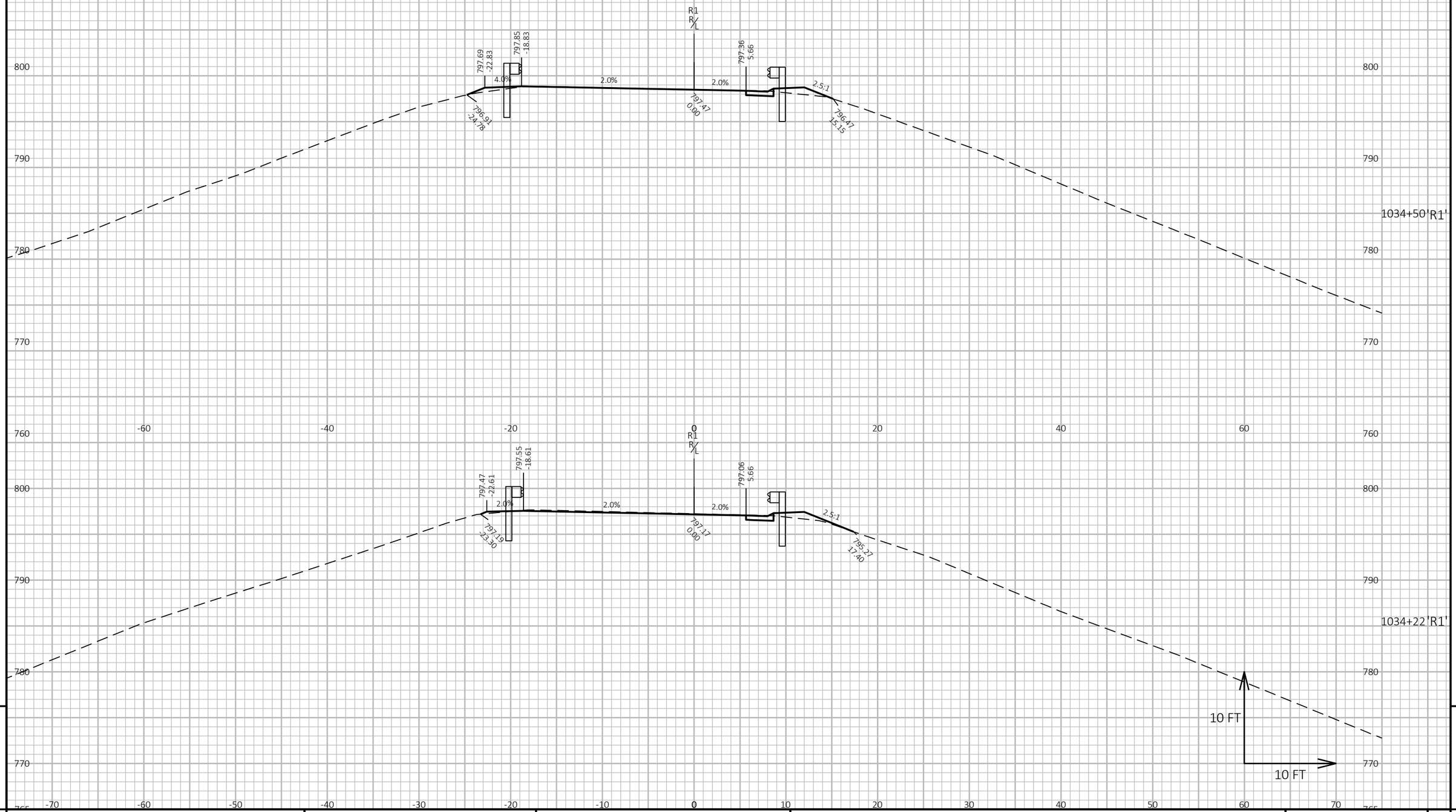
PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49

MATCH EXISTING STRUCTURE B-44-0142 STA 1034+77 'R1'



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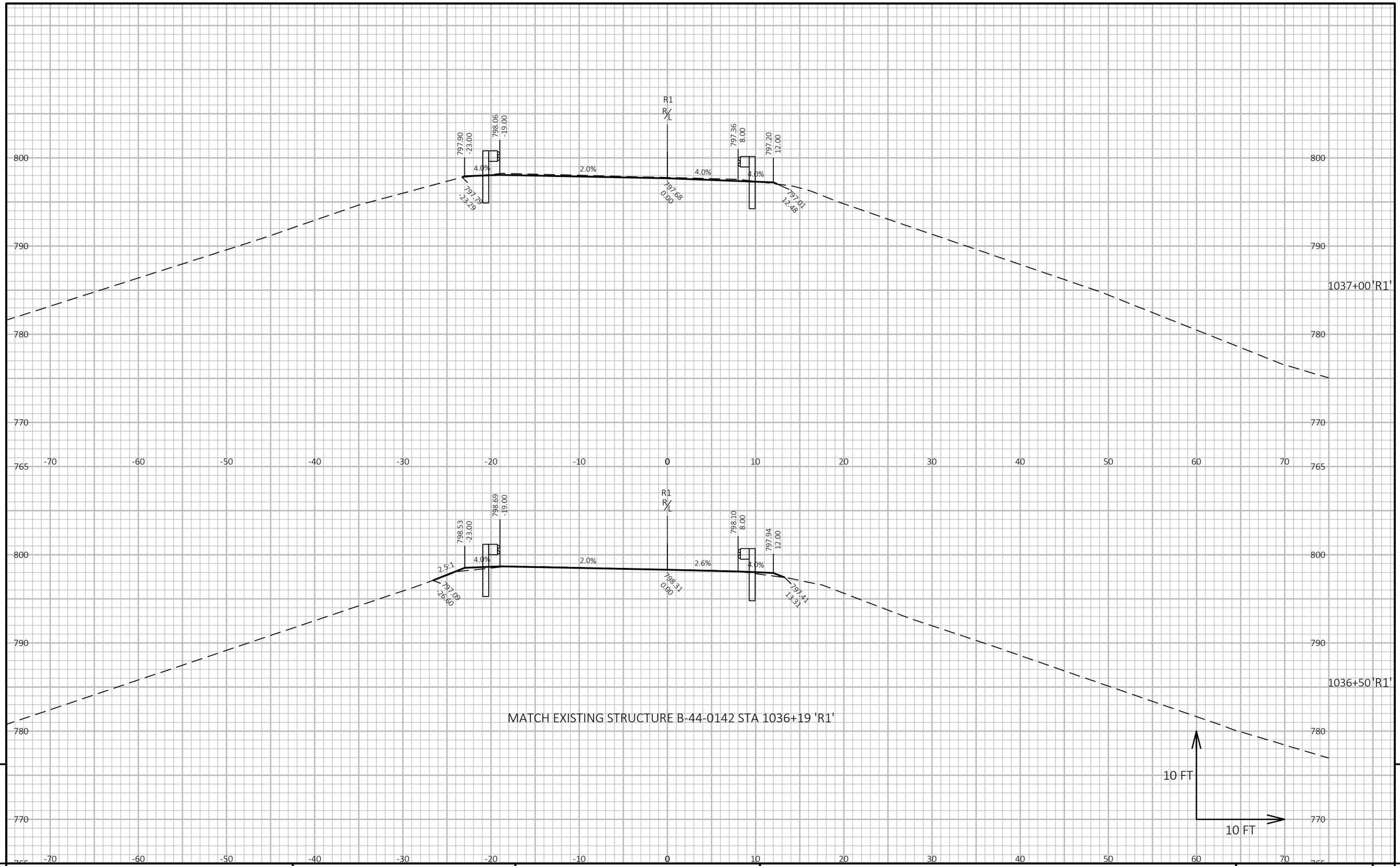
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 395	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 08
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 396	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 09

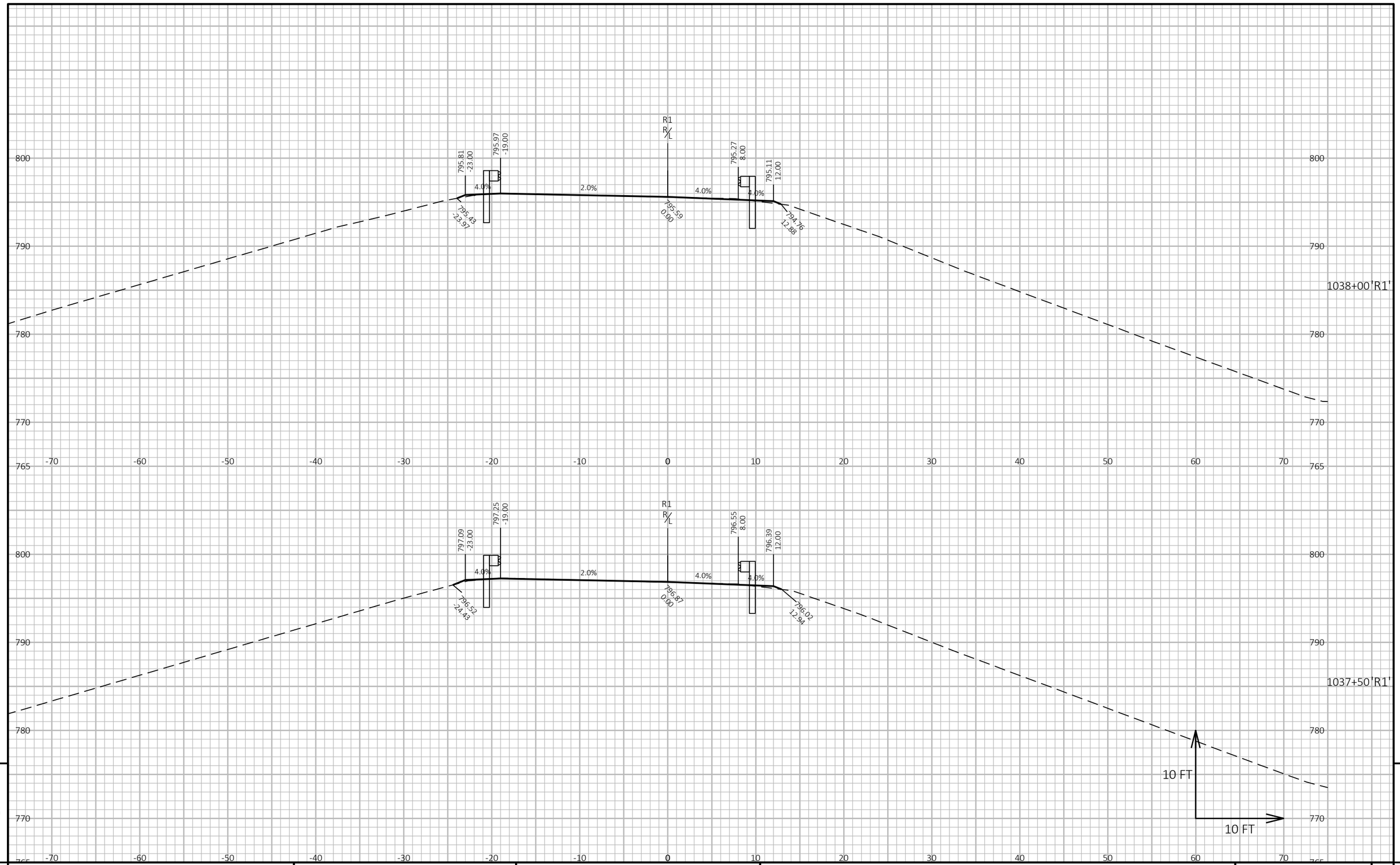
PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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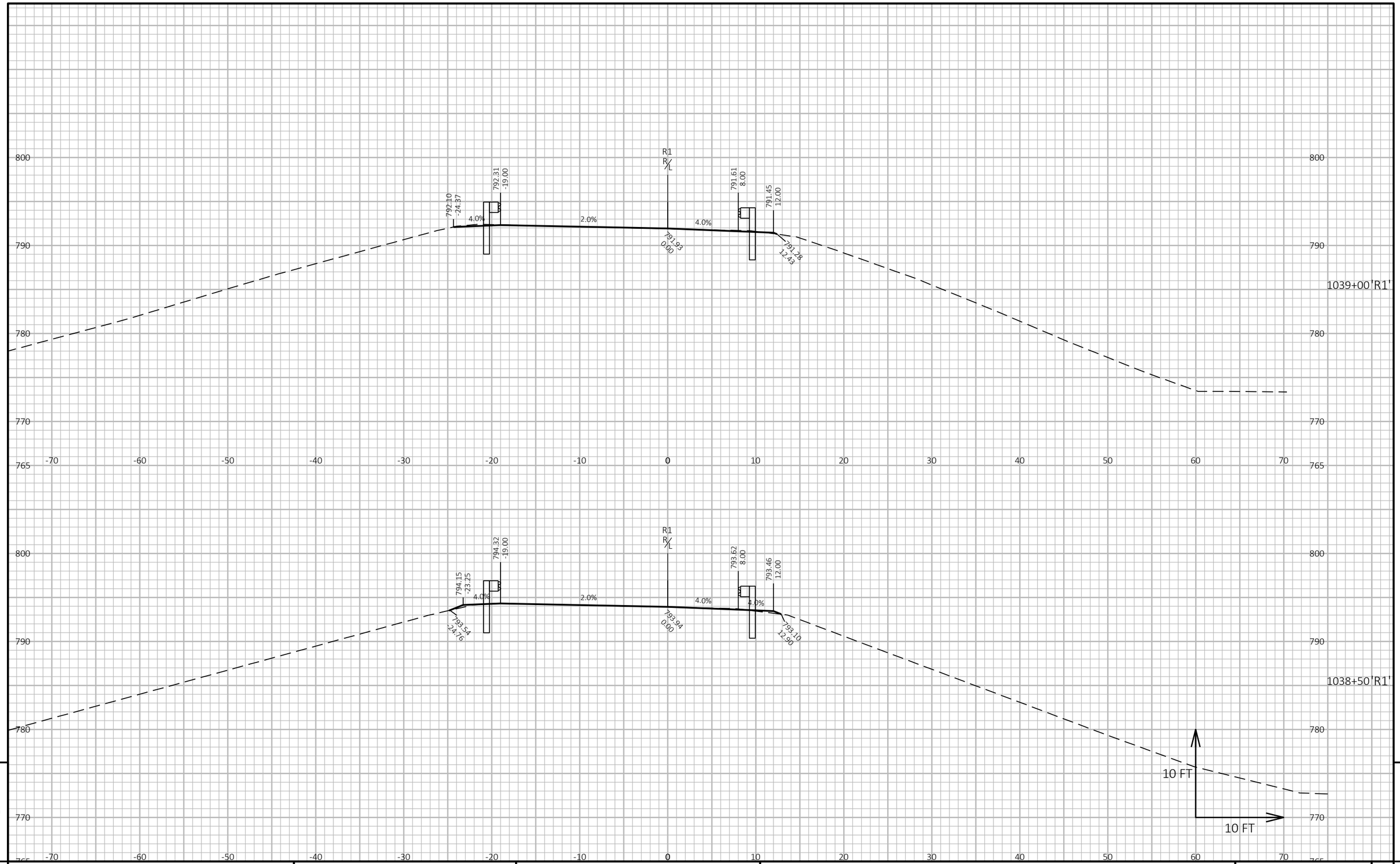
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 397	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 7/24/2025 4:57 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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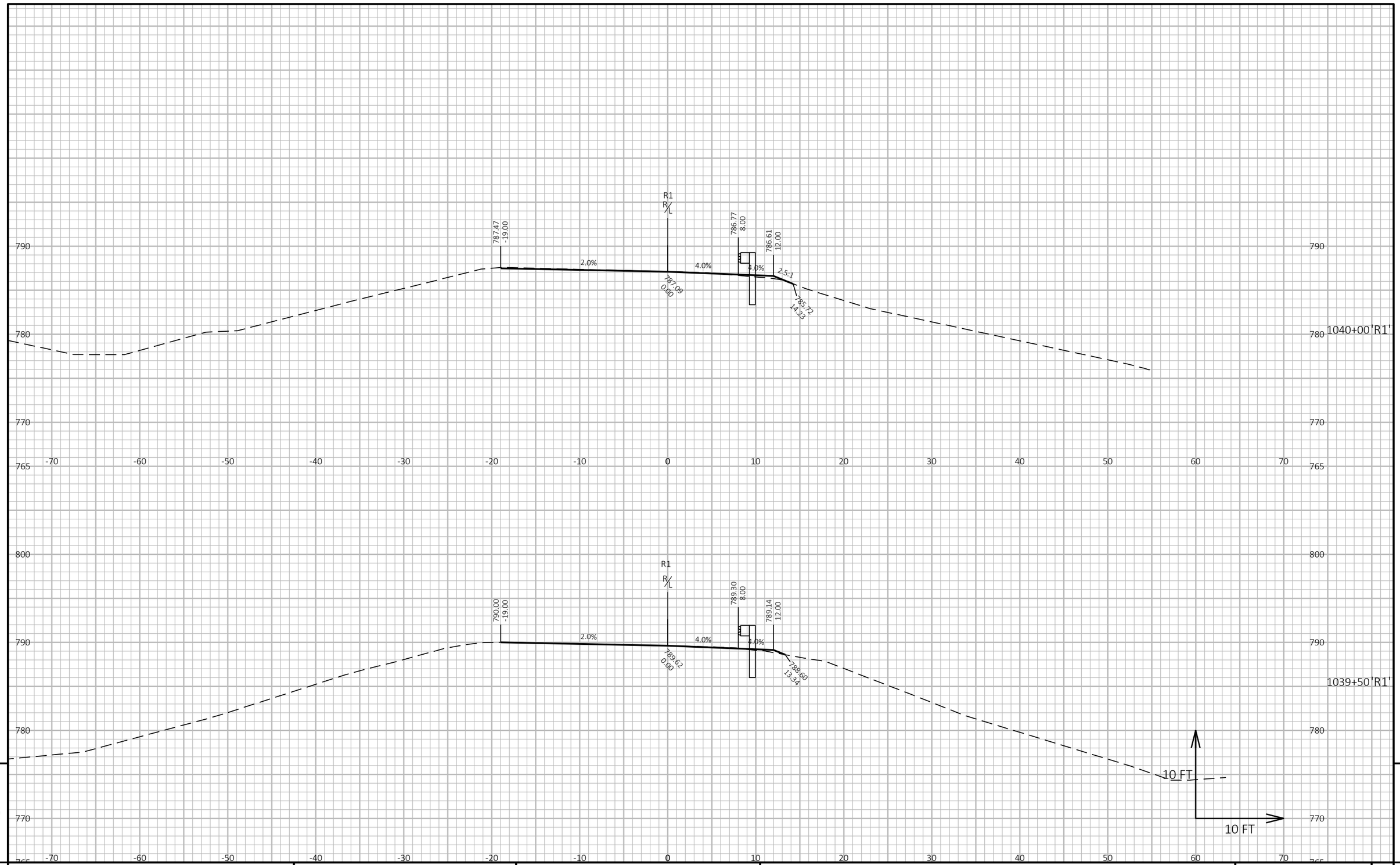
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 398	E

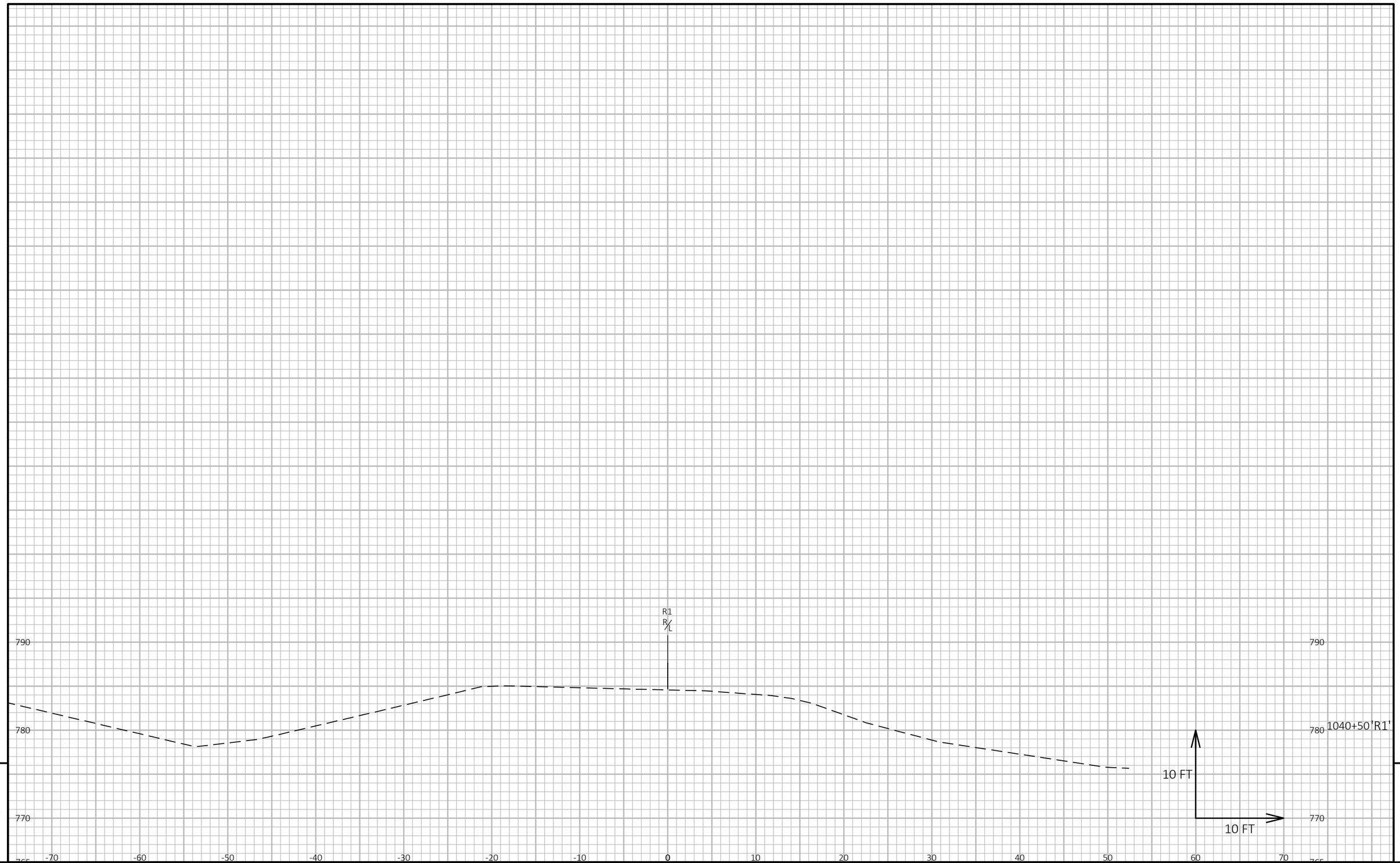
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 11
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 399	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 12
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 400	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 13

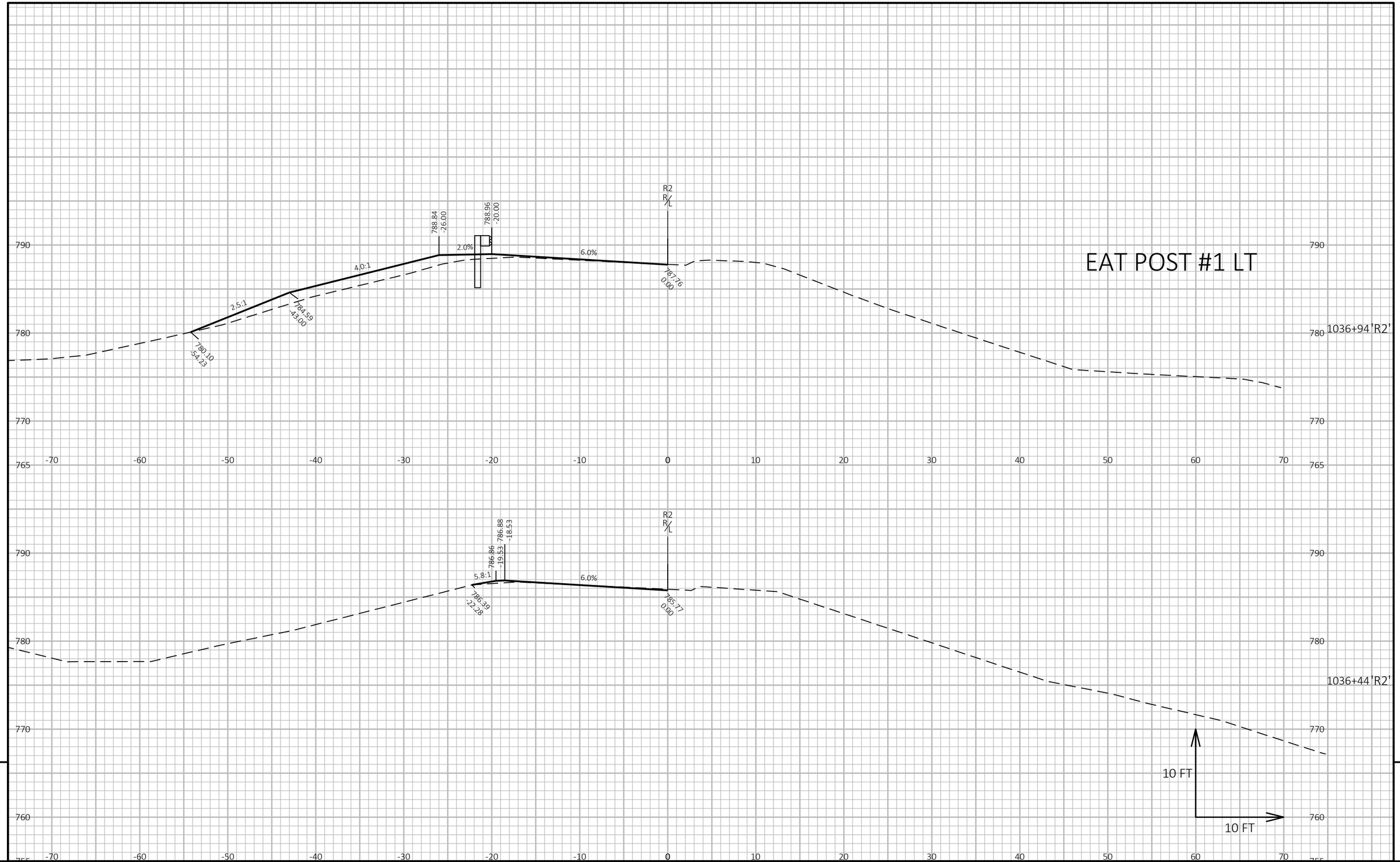
PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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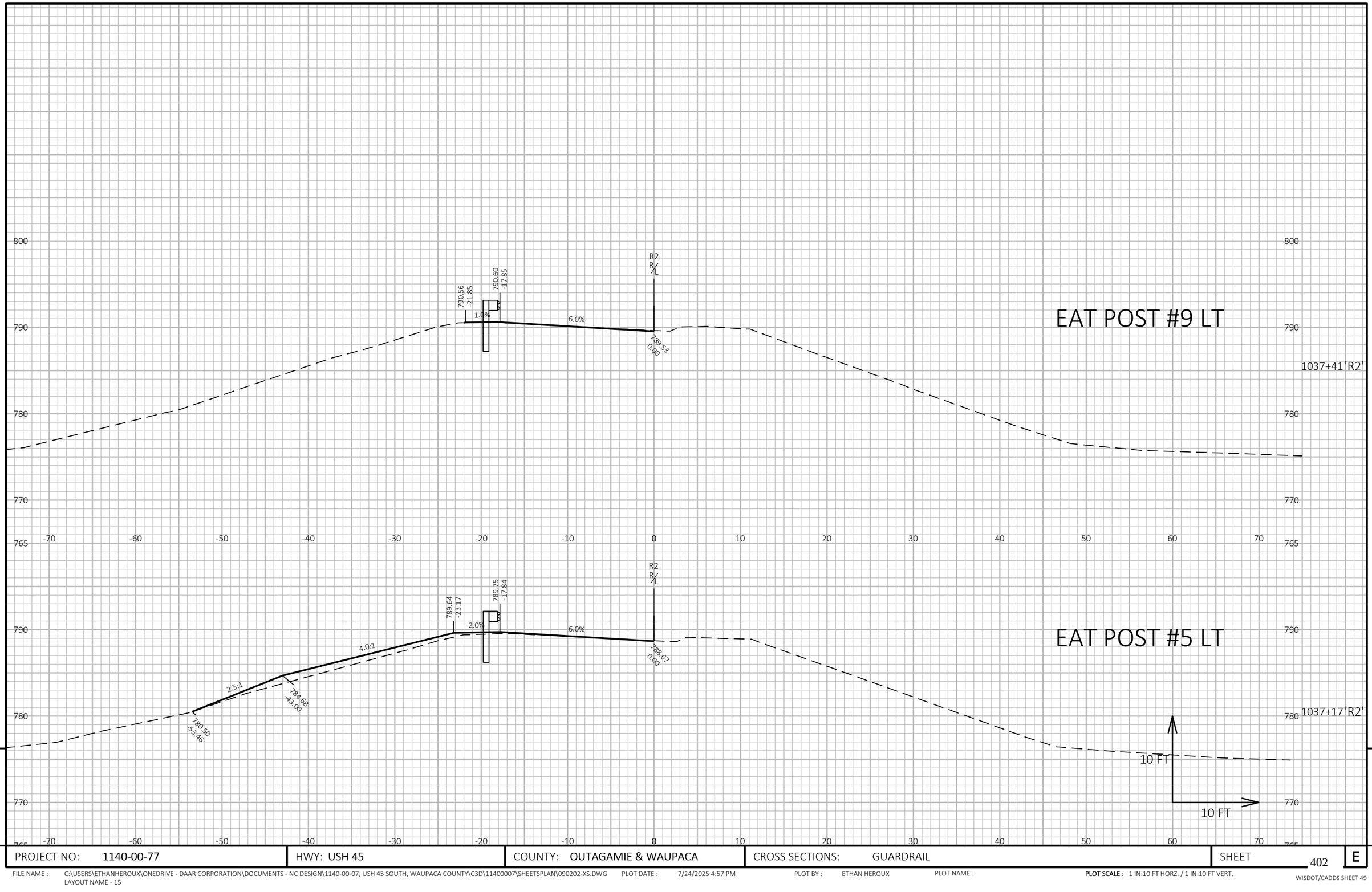
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 401	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 14
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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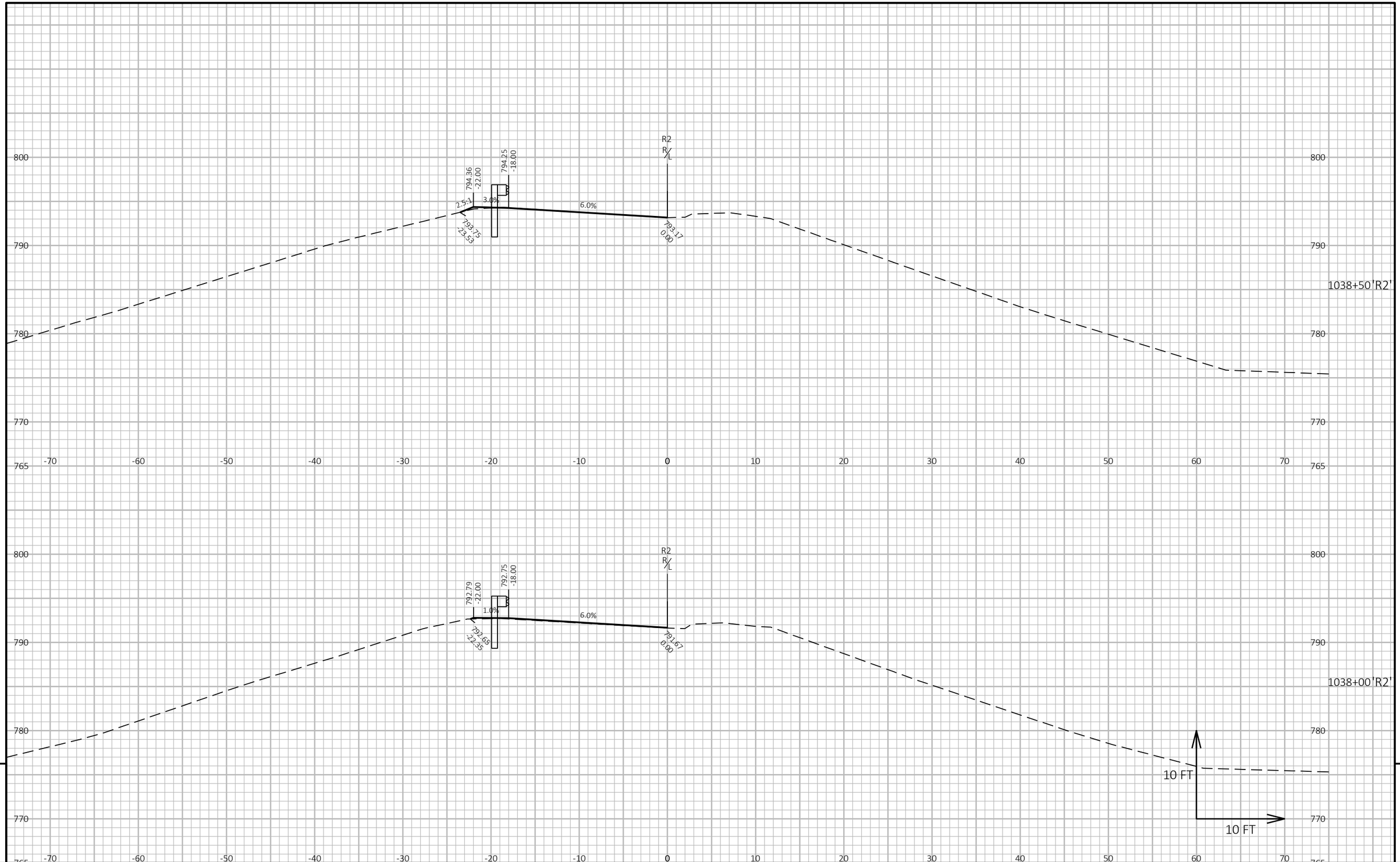
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 402	E

9

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 15
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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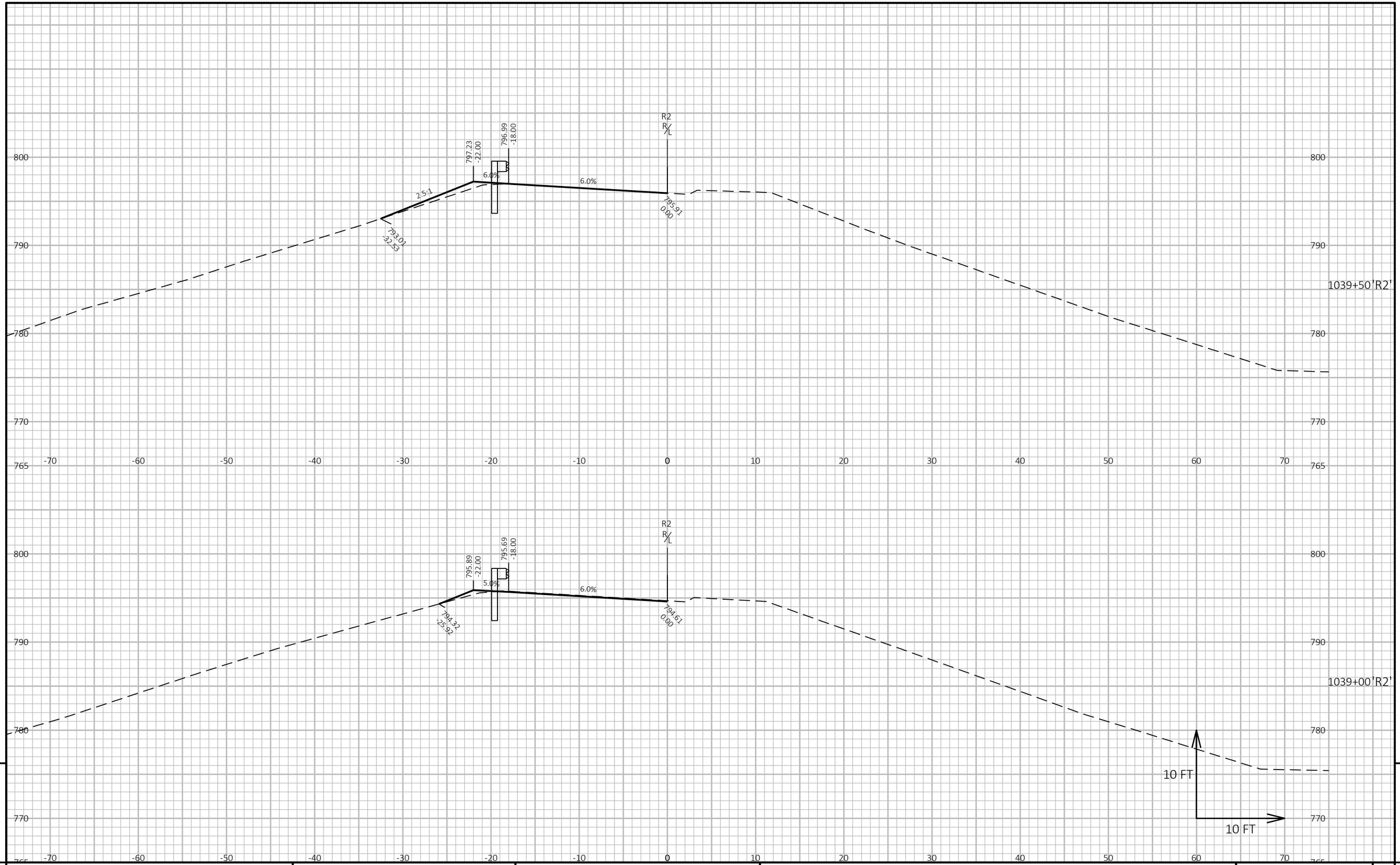
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 403	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 16
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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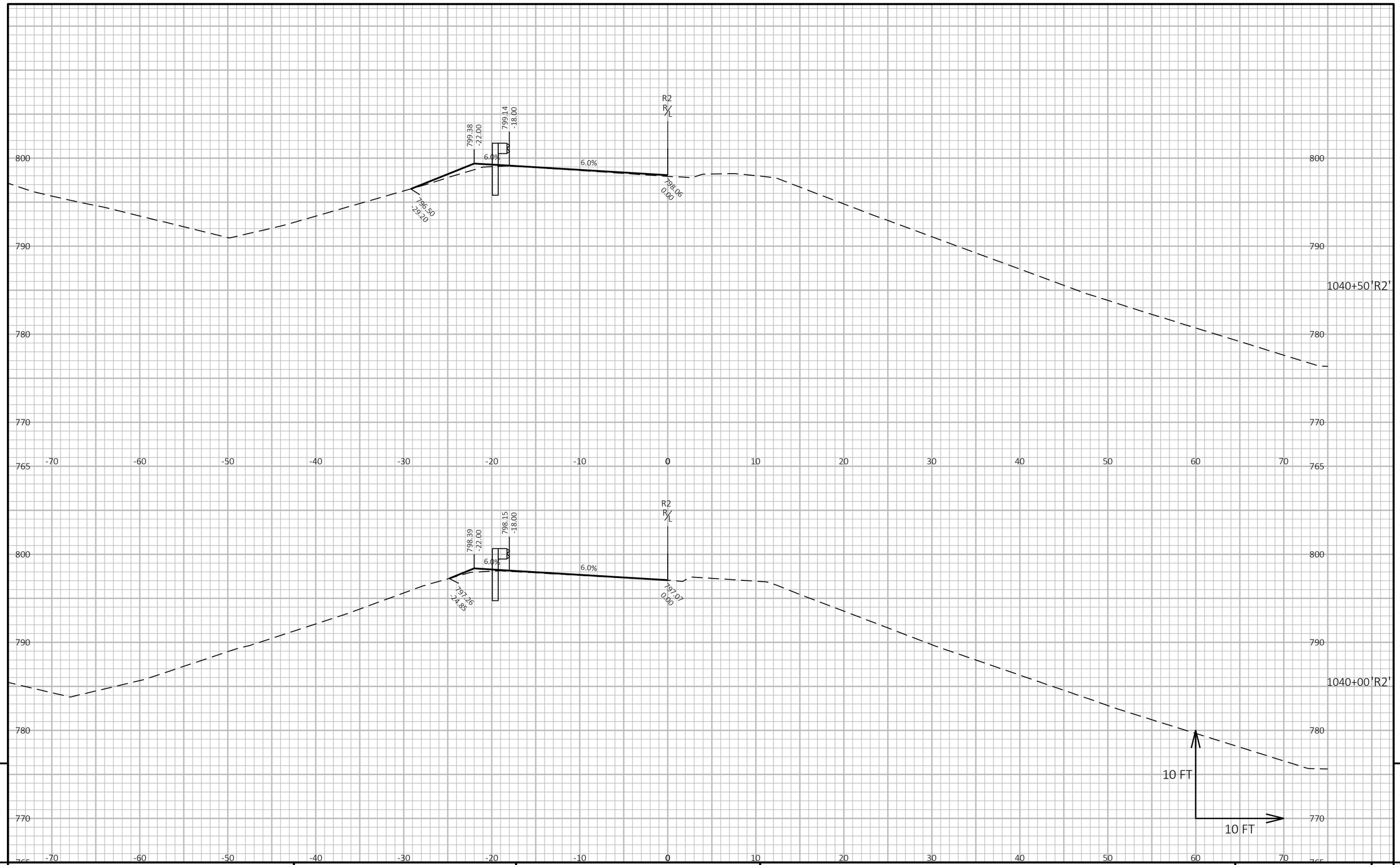
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 404	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 17
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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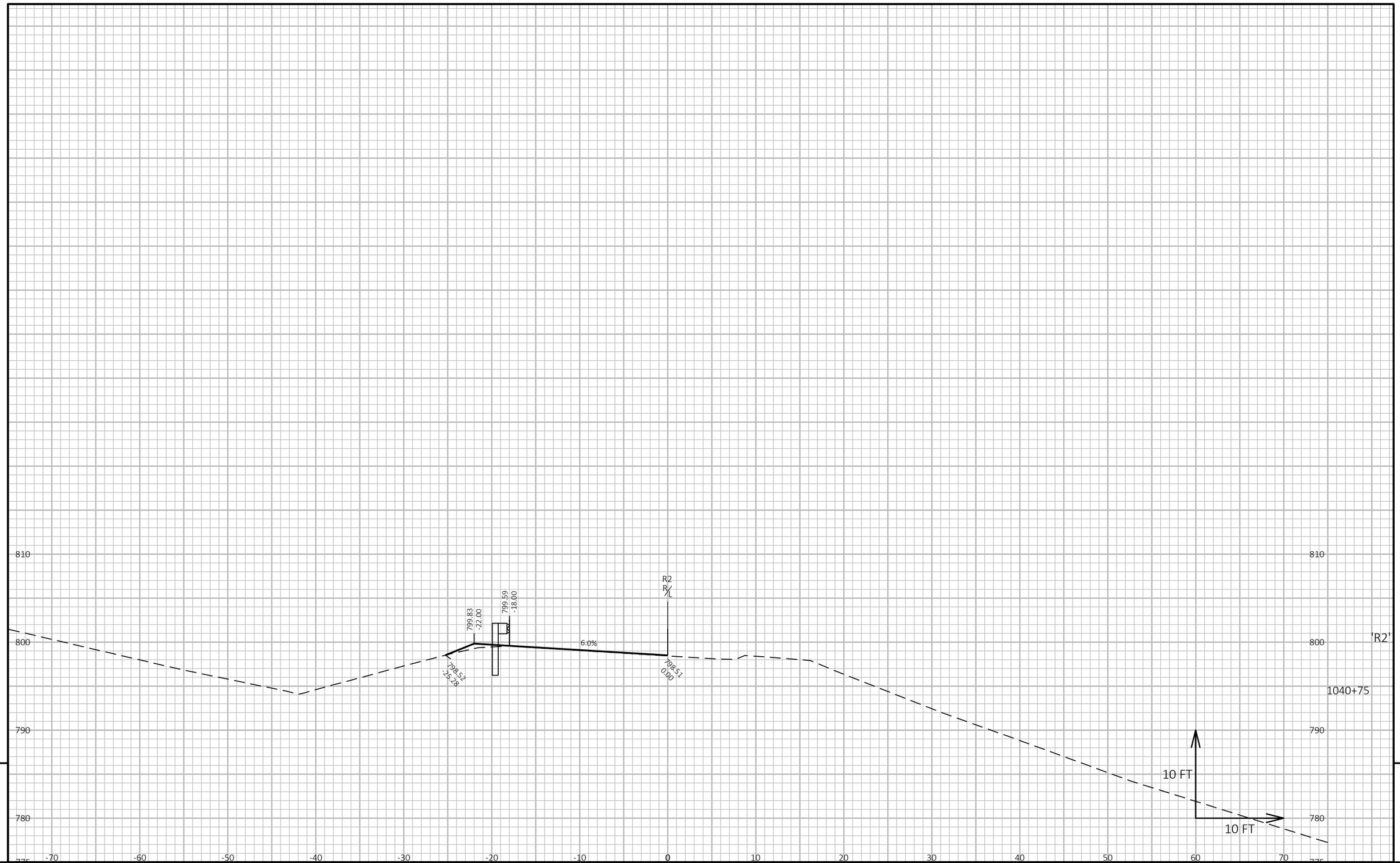
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 405	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 18
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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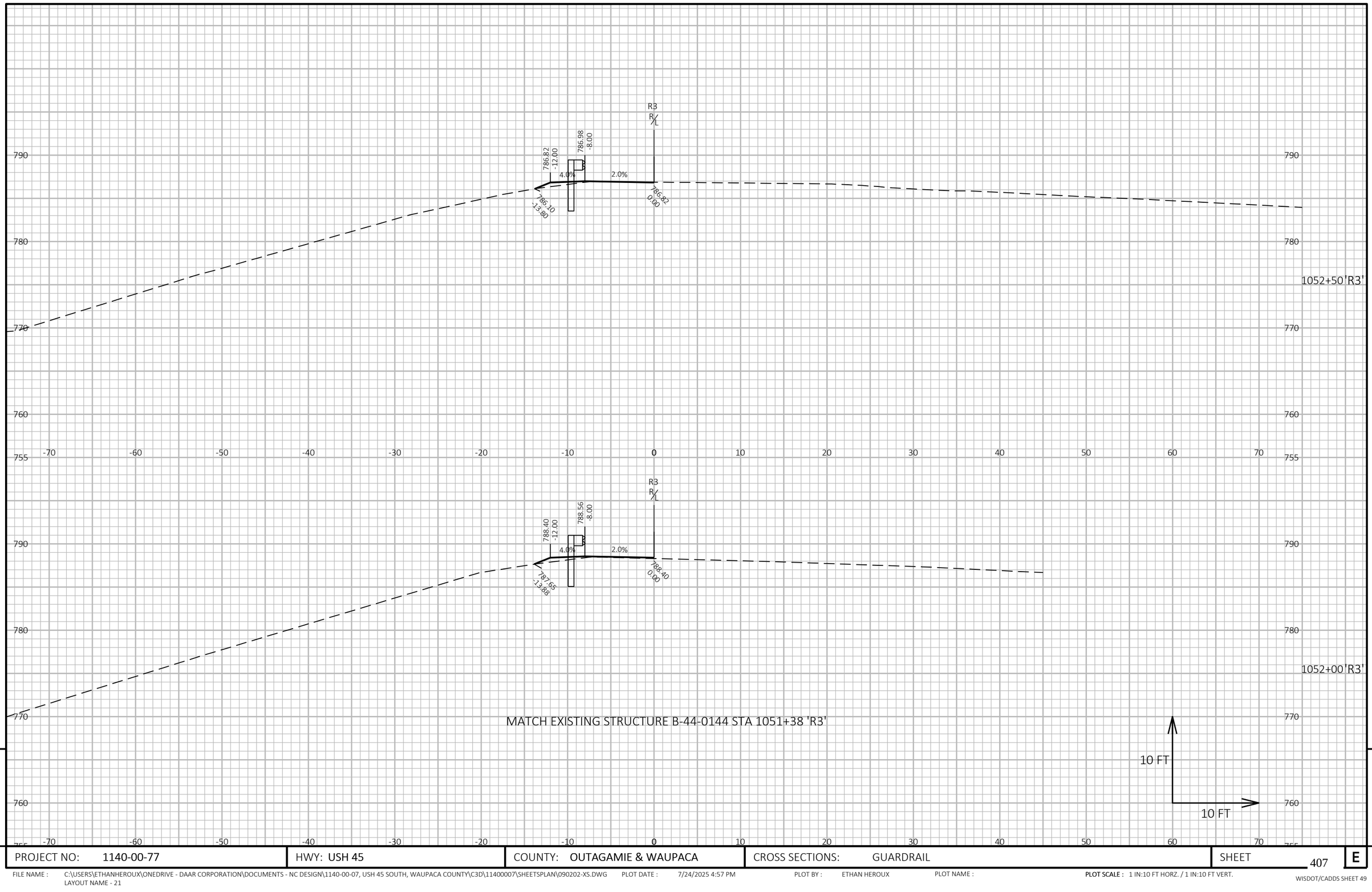
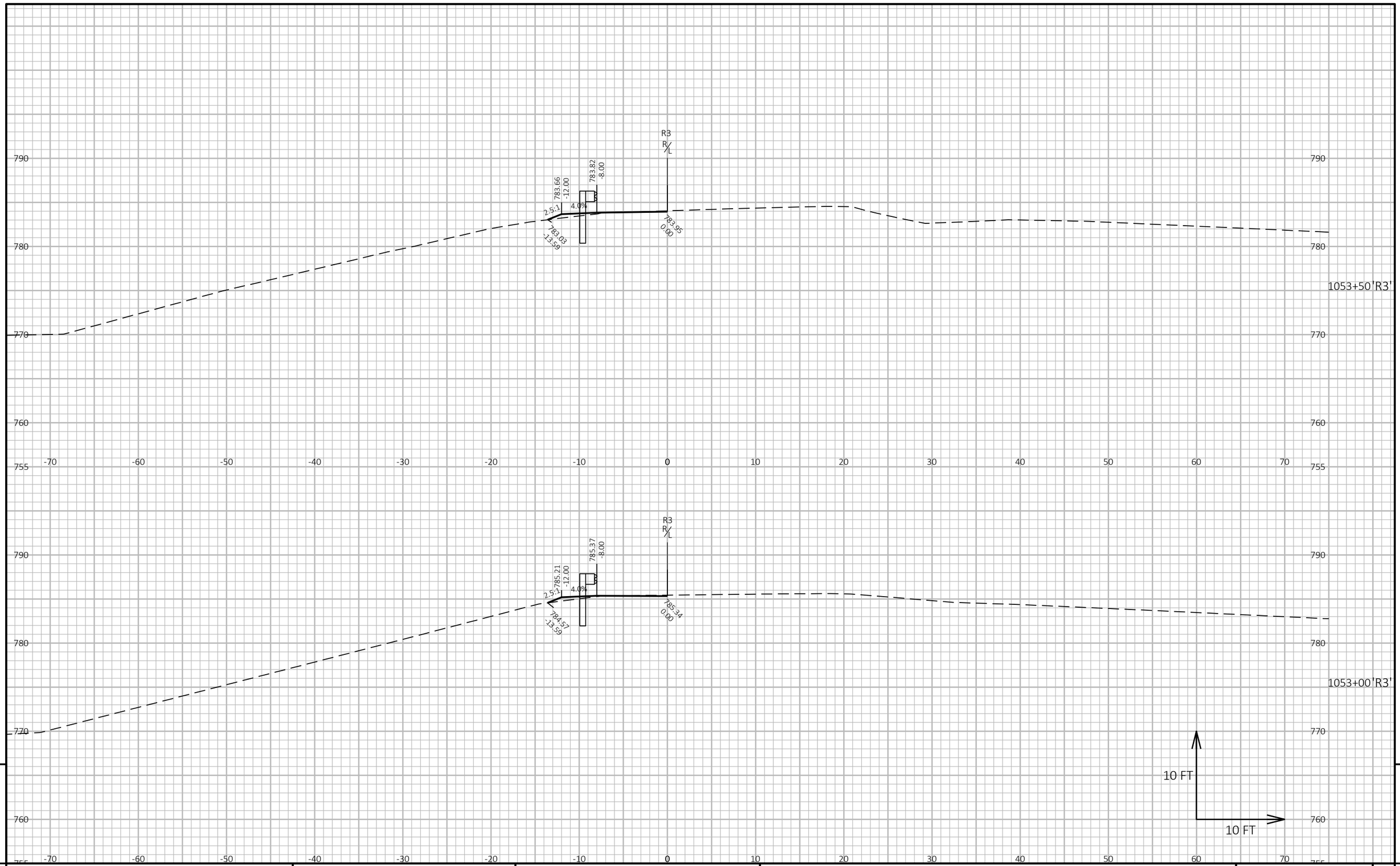
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 406	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 19
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 407	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 21
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 408	E

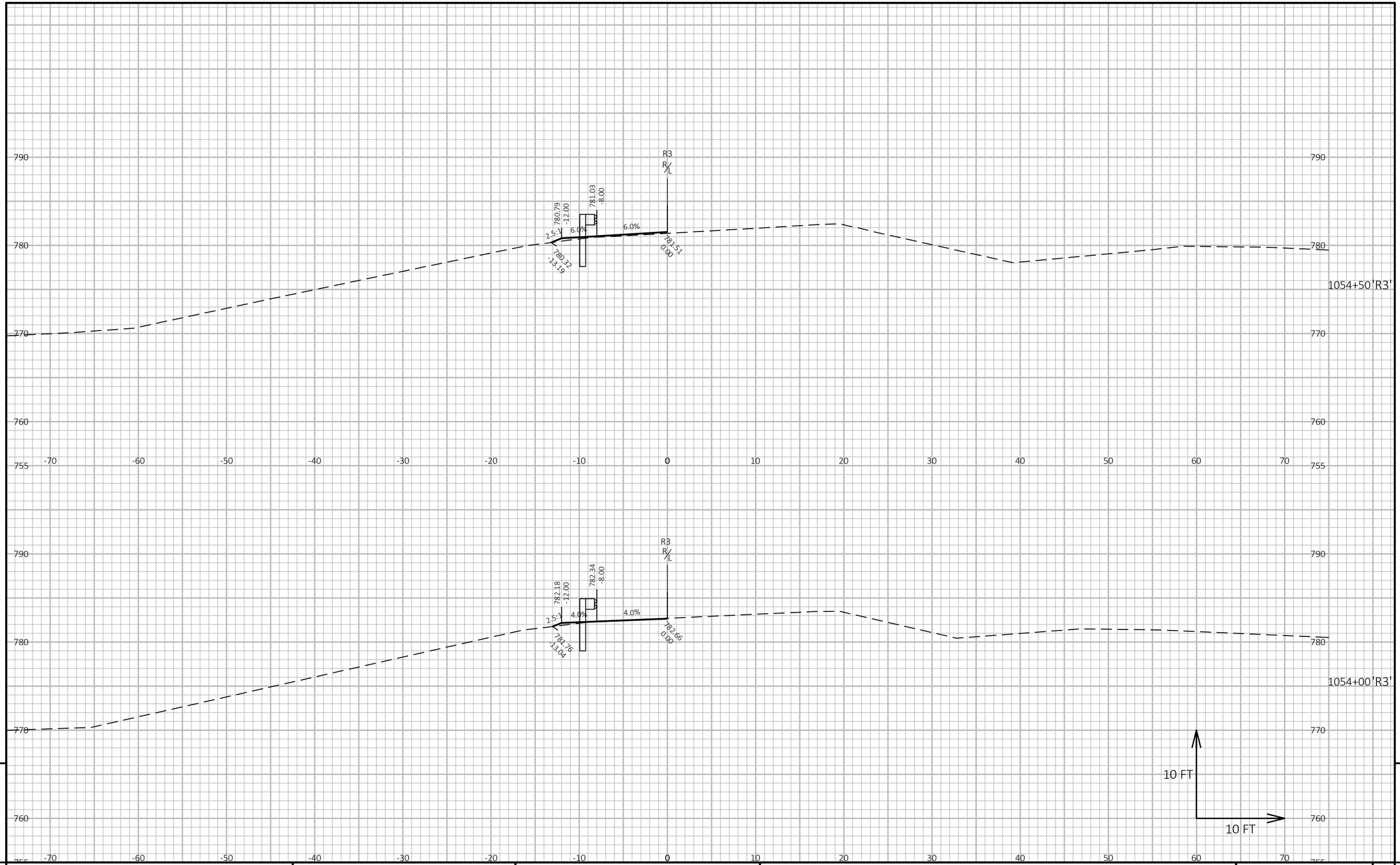
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 22

PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 409	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 23

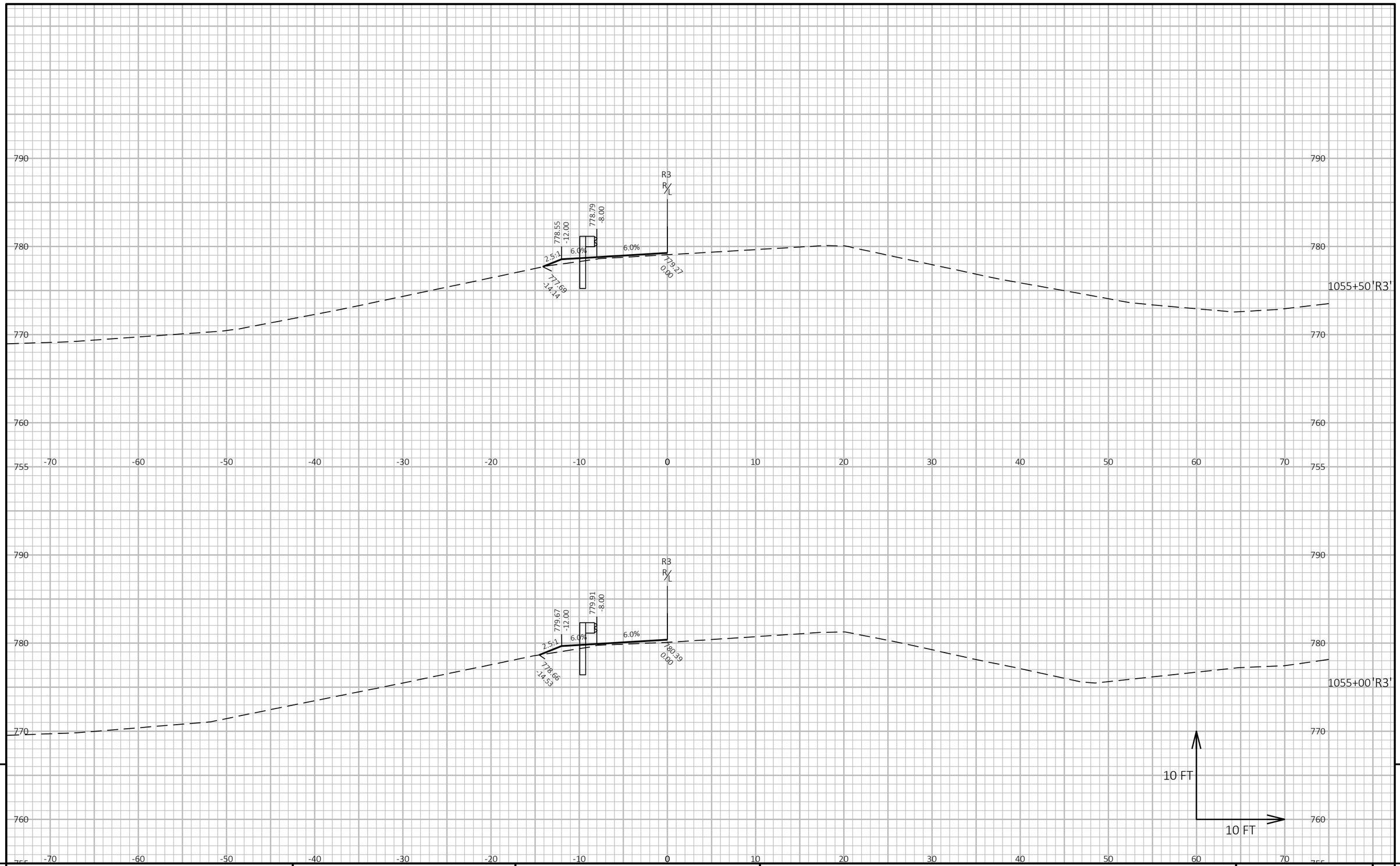
PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 410	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 24

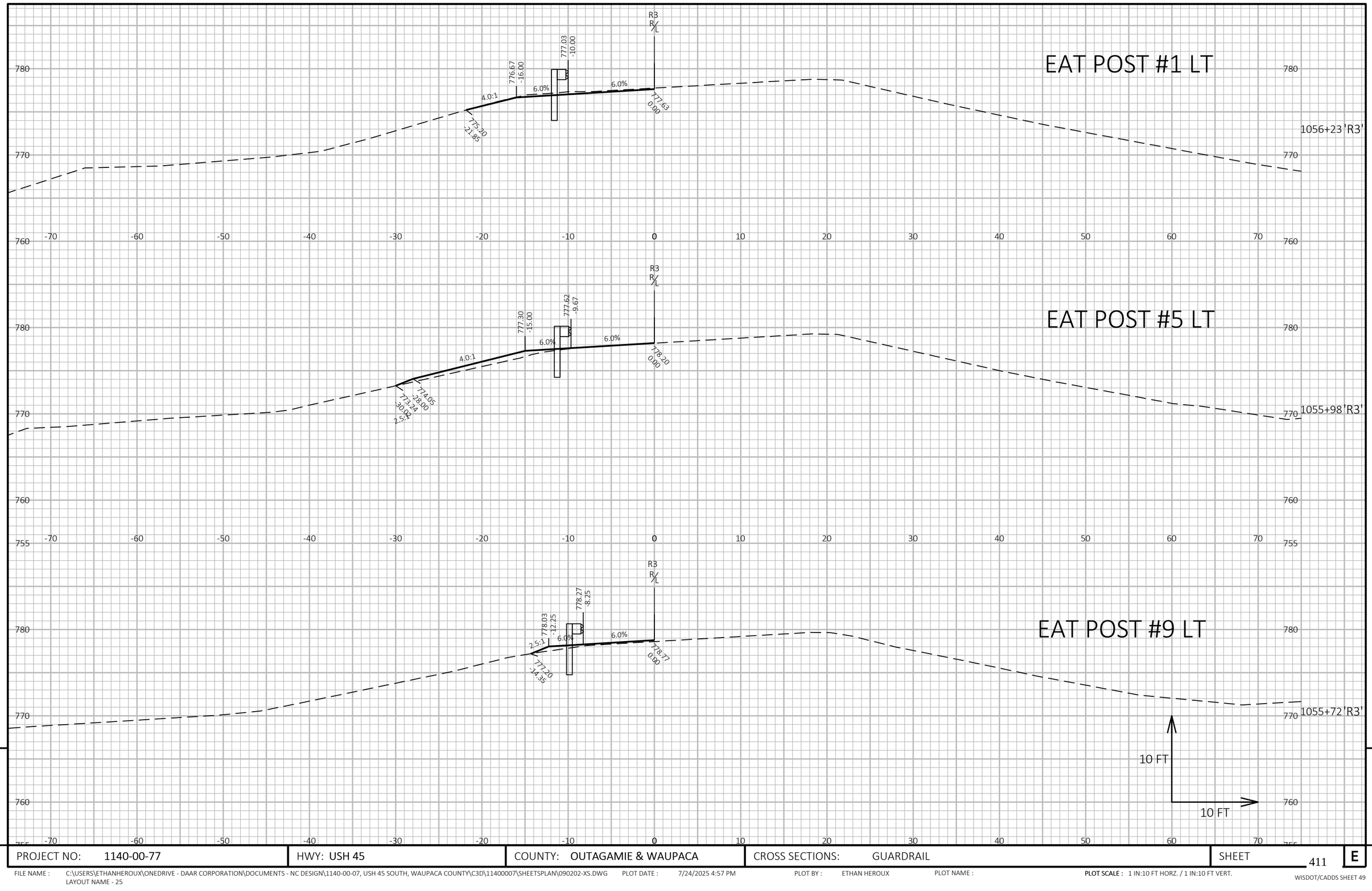
PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

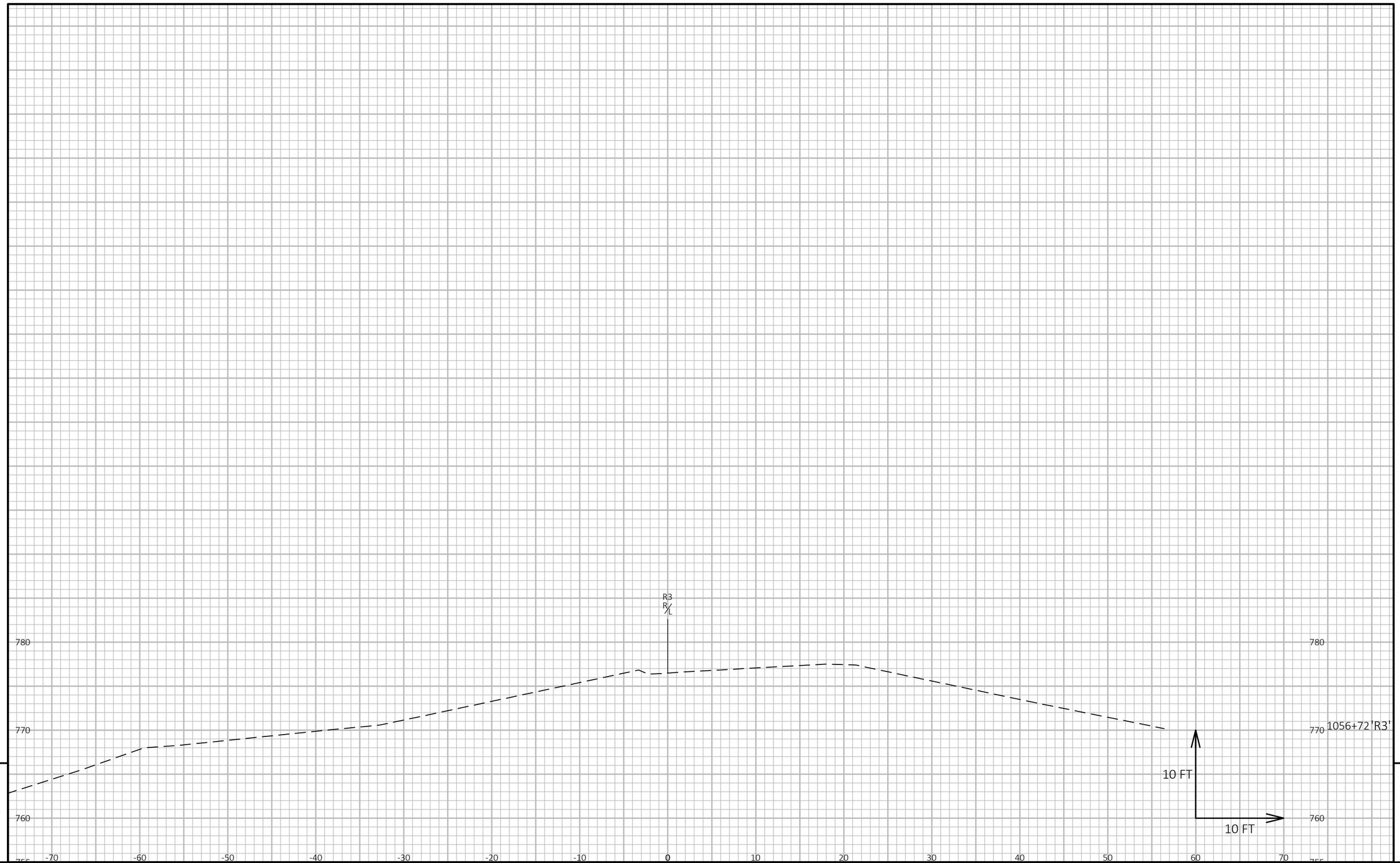
WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 411 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG PLOT DATE : 7/24/2025 4:57 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 25

WISDOT/CADDS SHEET 49



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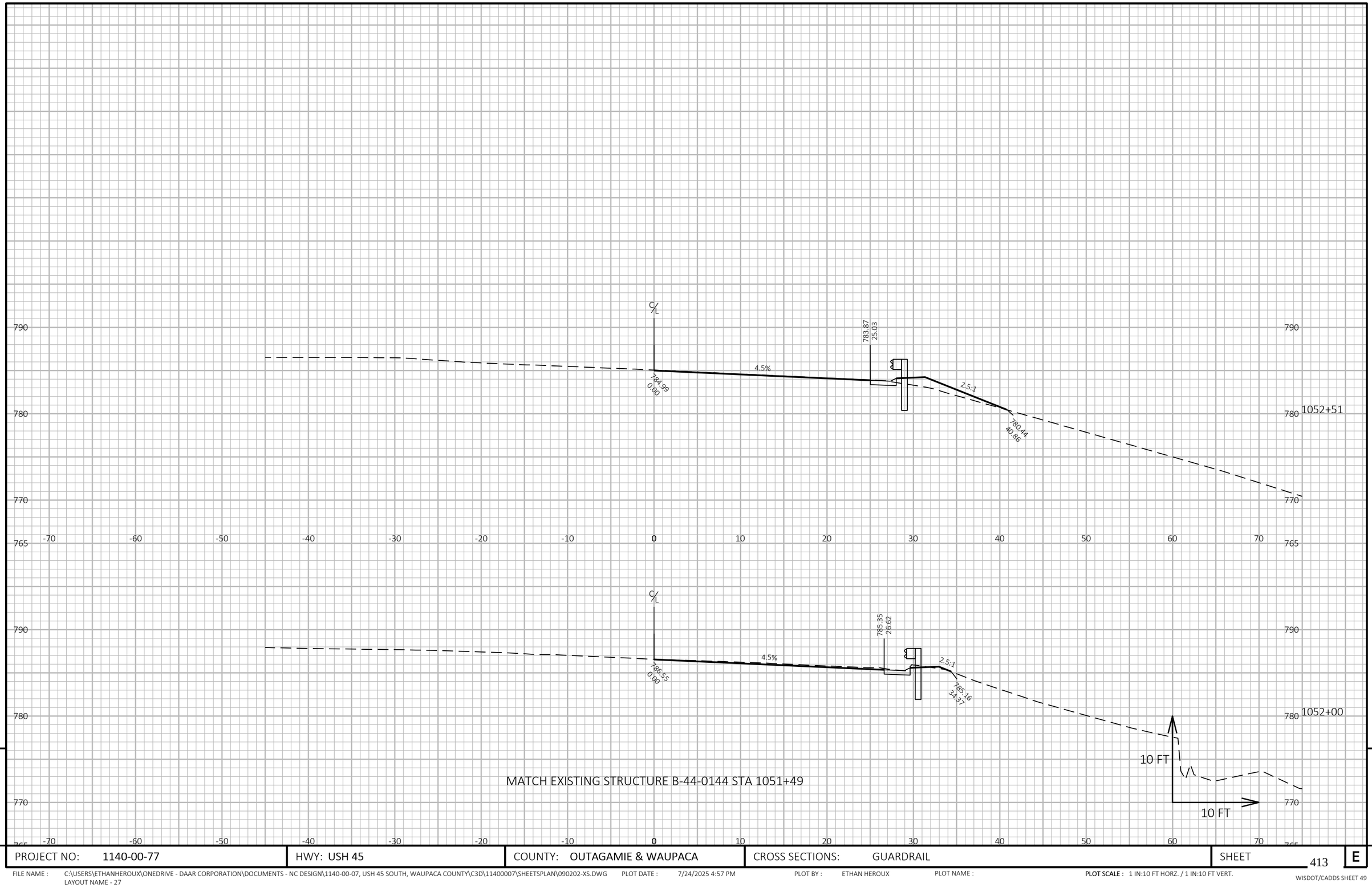
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 412	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 26
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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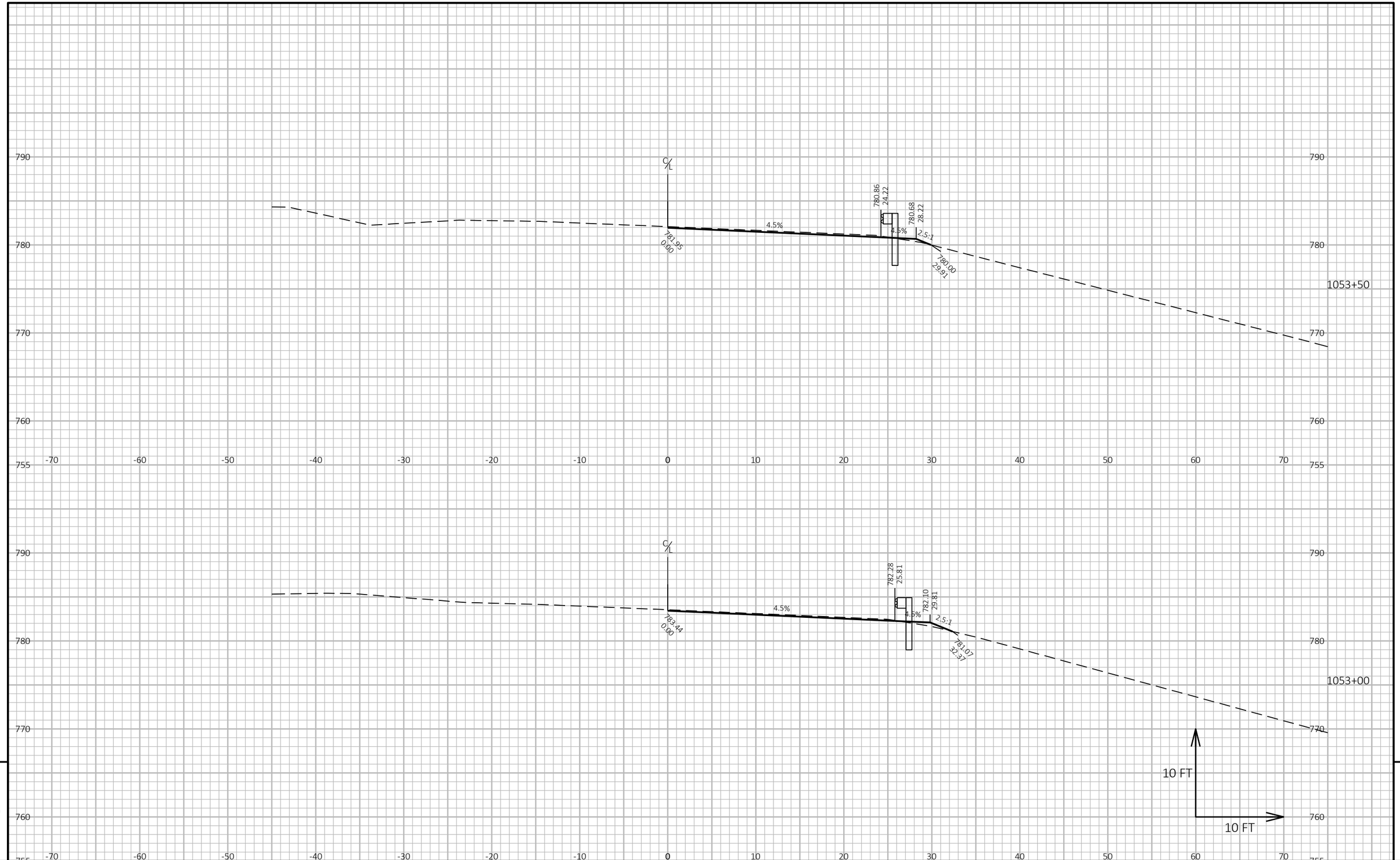
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 413	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 27
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 414	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 28

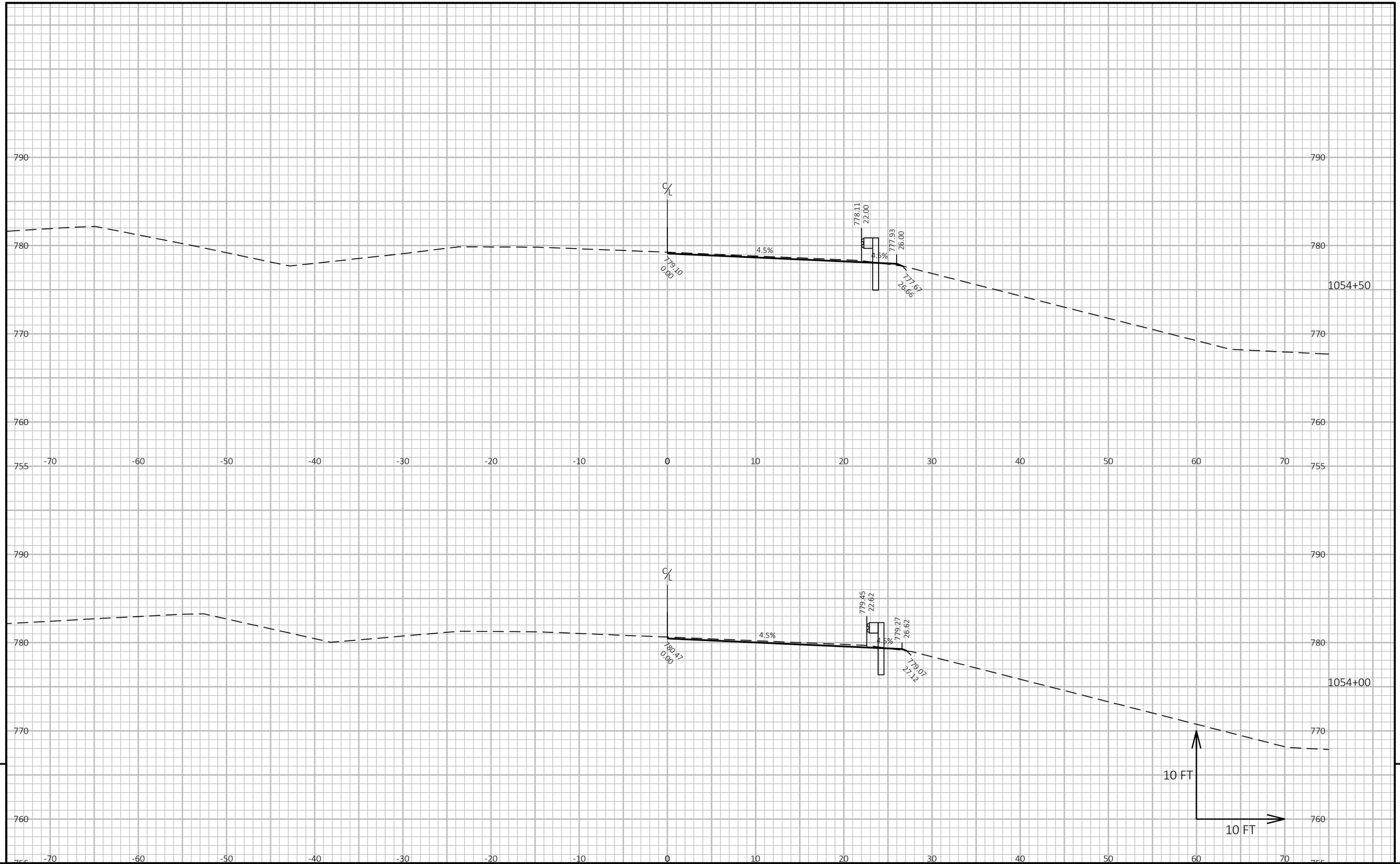
PLOT DATE : 7/24/2025 4:57 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

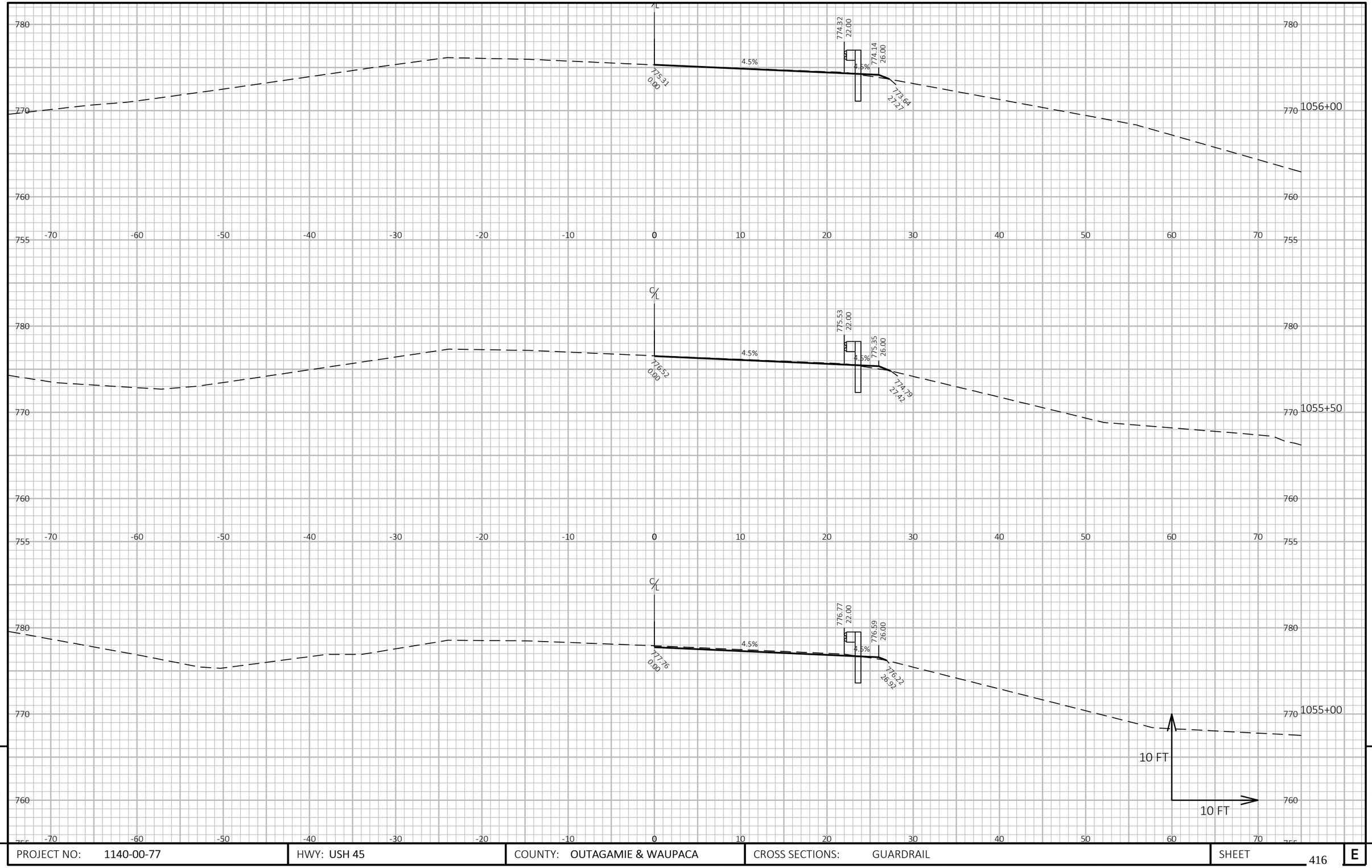
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 415	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 29
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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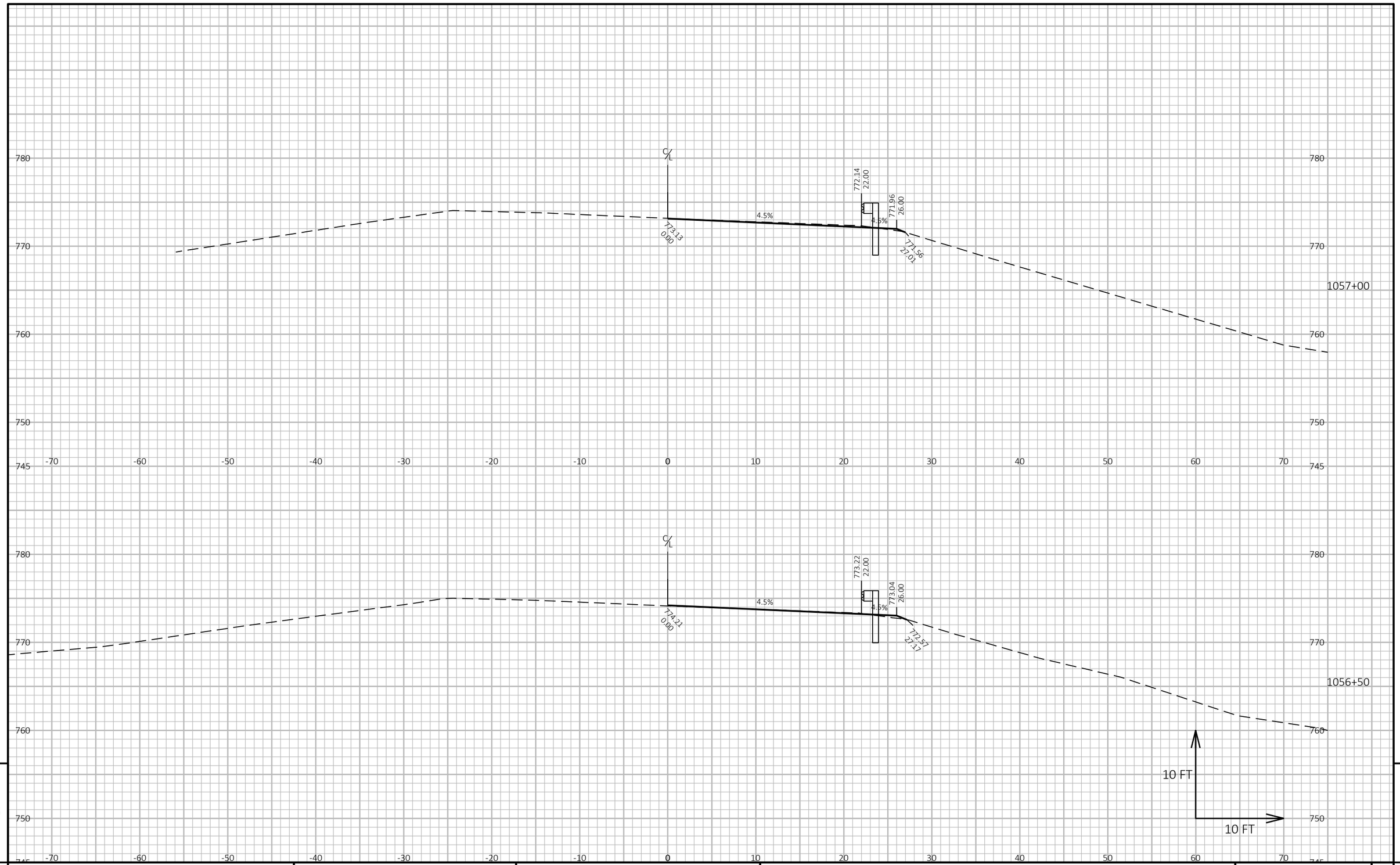
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 416	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 30
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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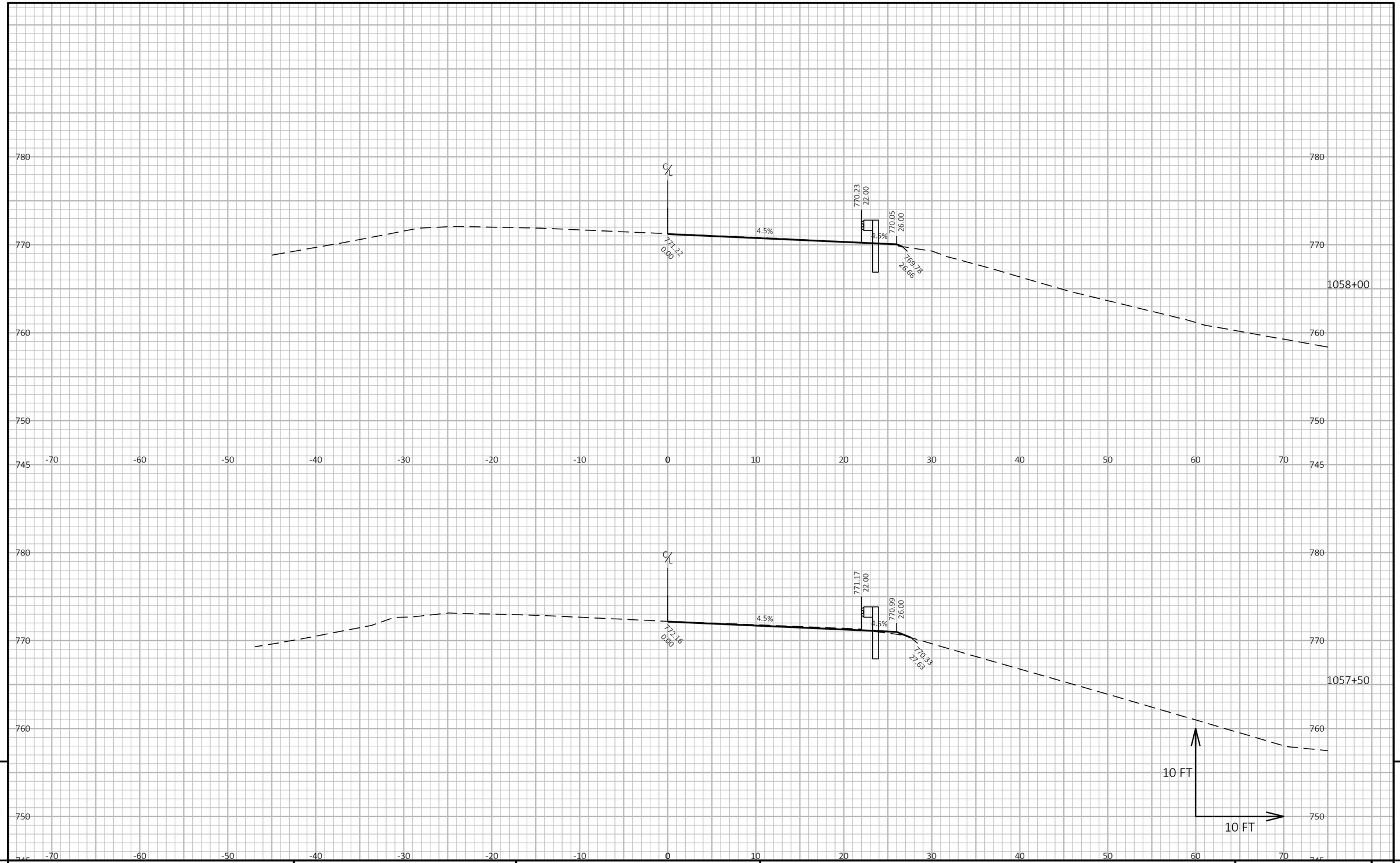
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 417	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 31
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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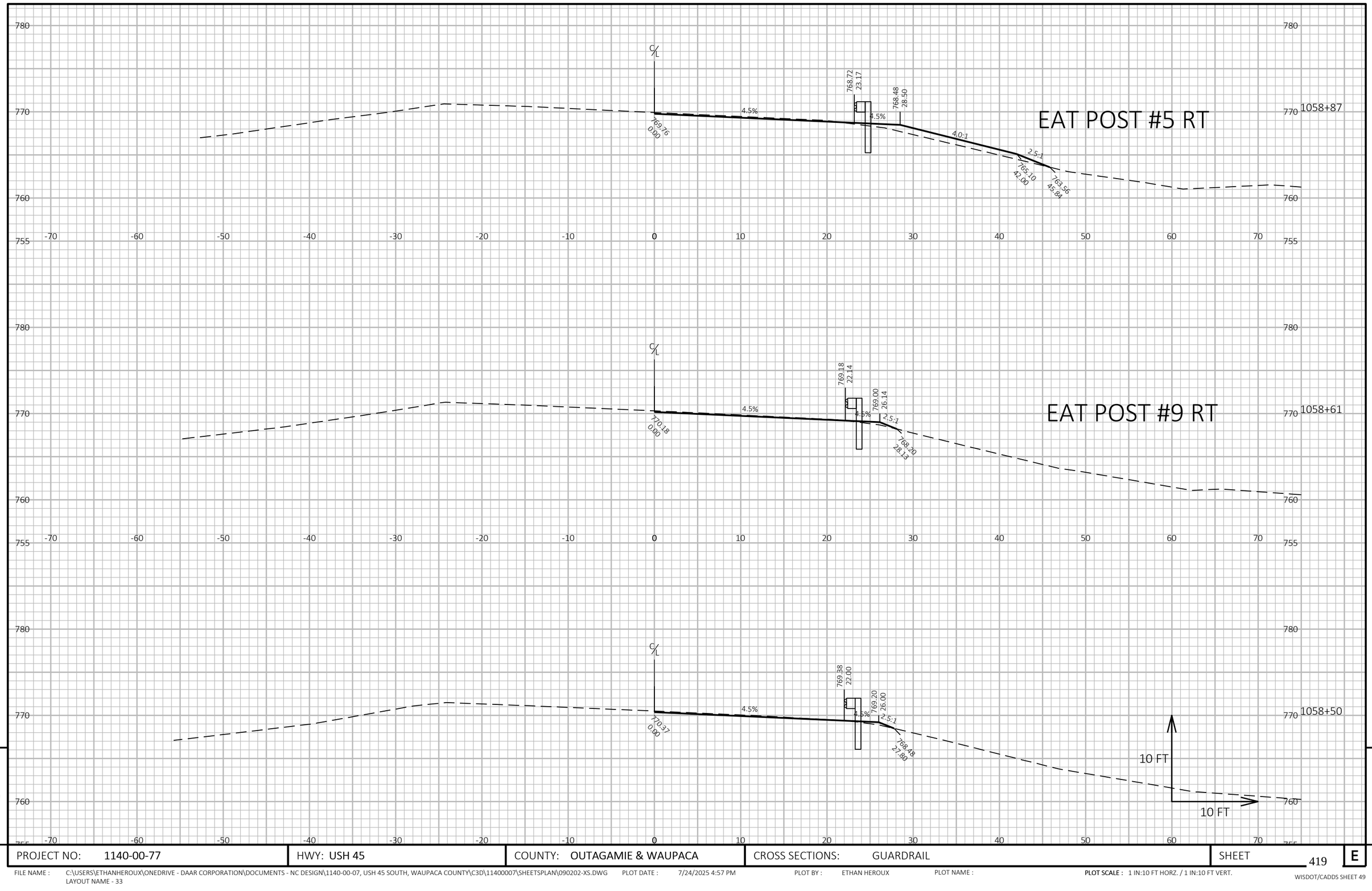
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 418	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 32
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 419	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 33
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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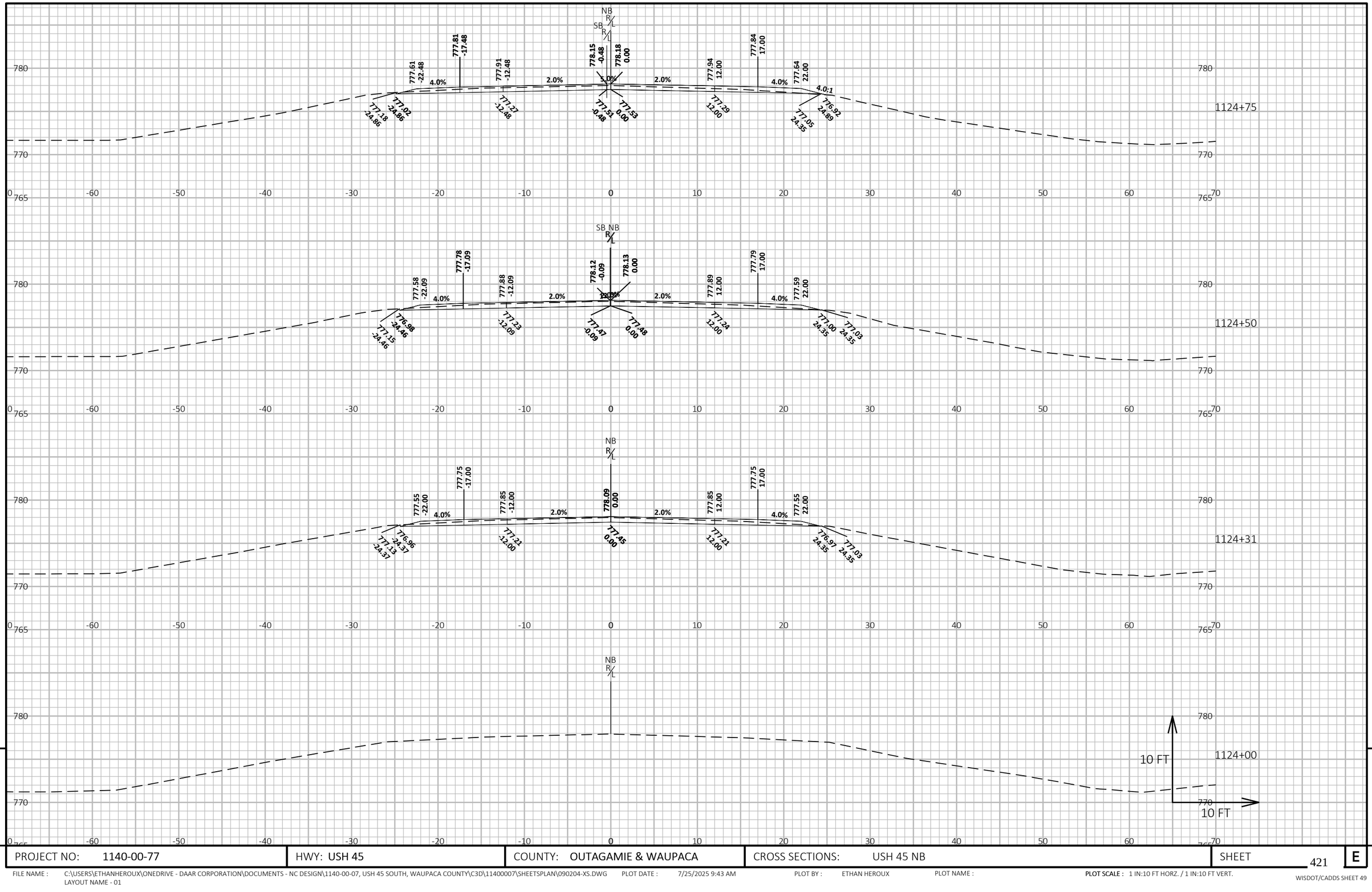
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: GUARDRAIL	SHEET 420	E

9

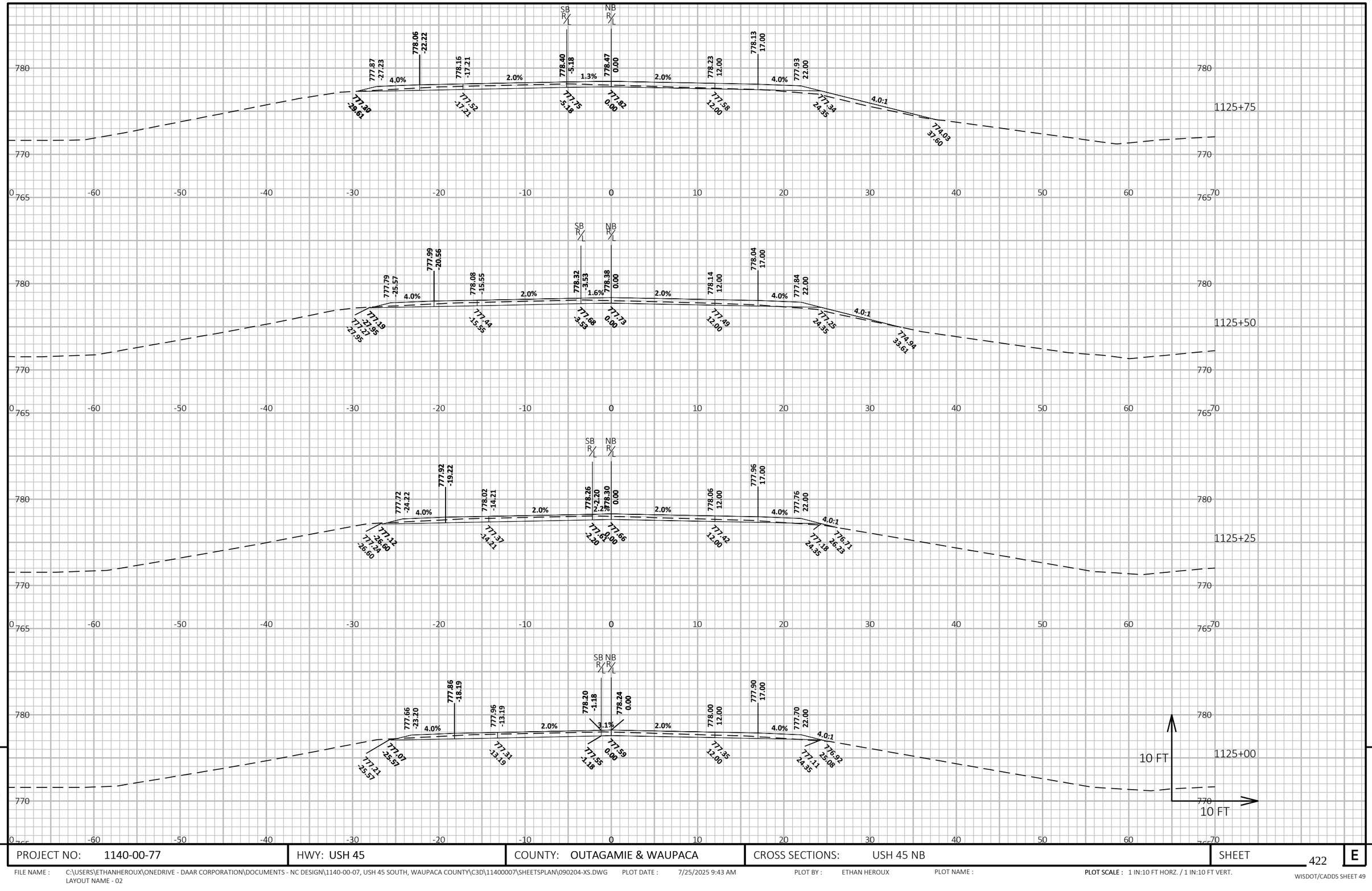
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 34
PLOT DATE : 7/24/2025 4:57 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 421 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 01

WISDOT/CADDS SHEET 49



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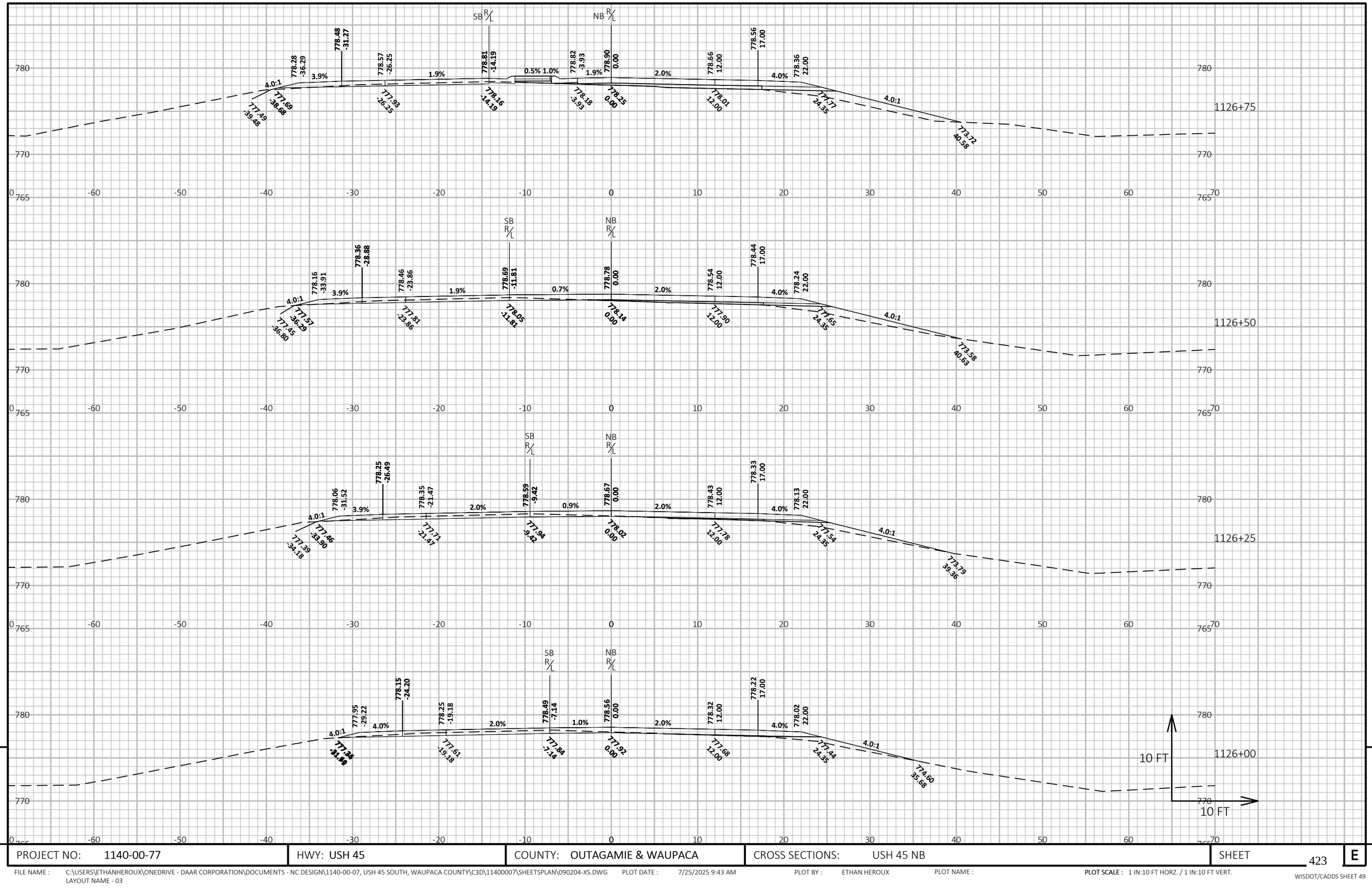
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 422	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 02

WISDOT/CADDS SHEET 49



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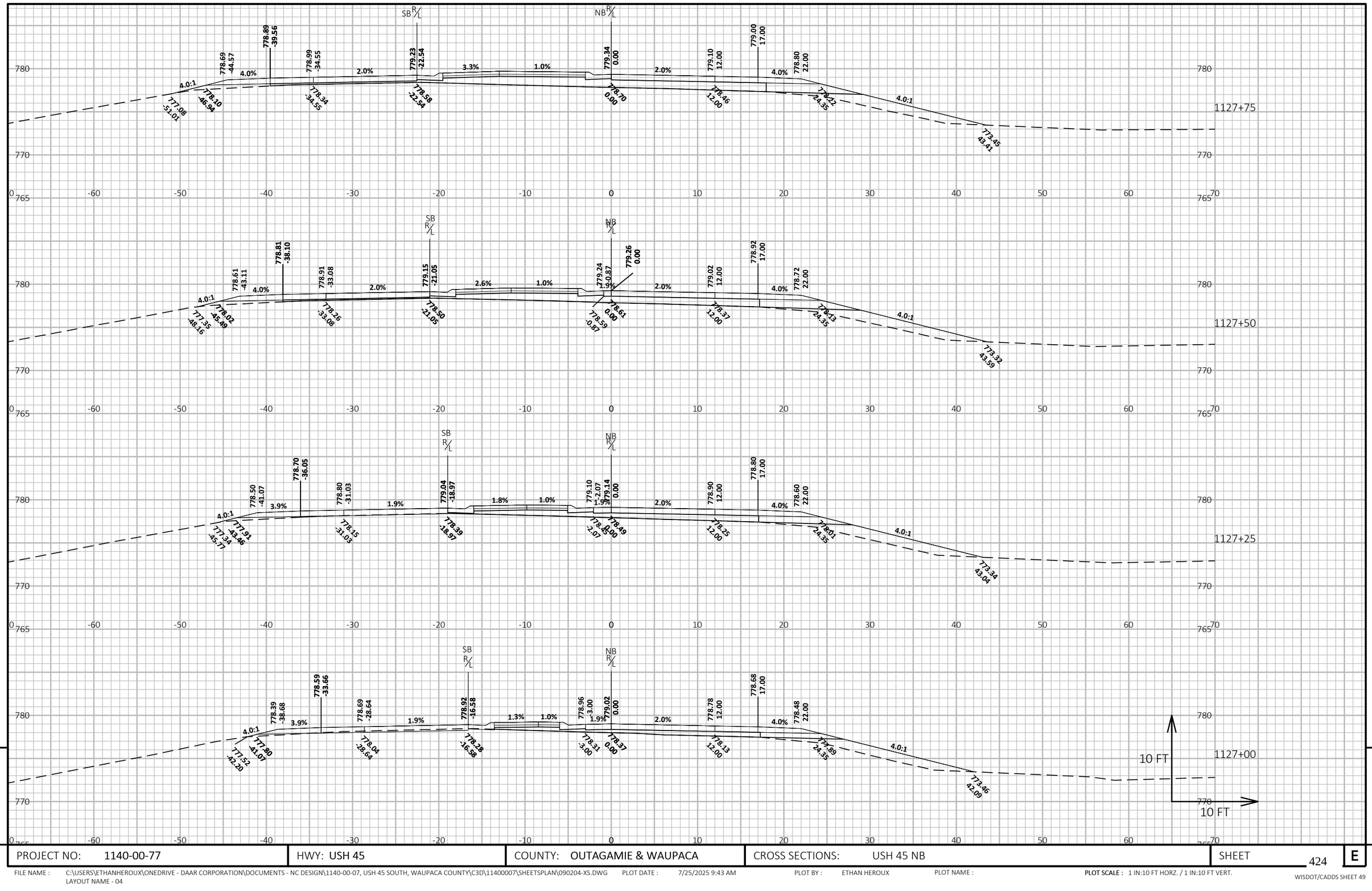
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 423	E

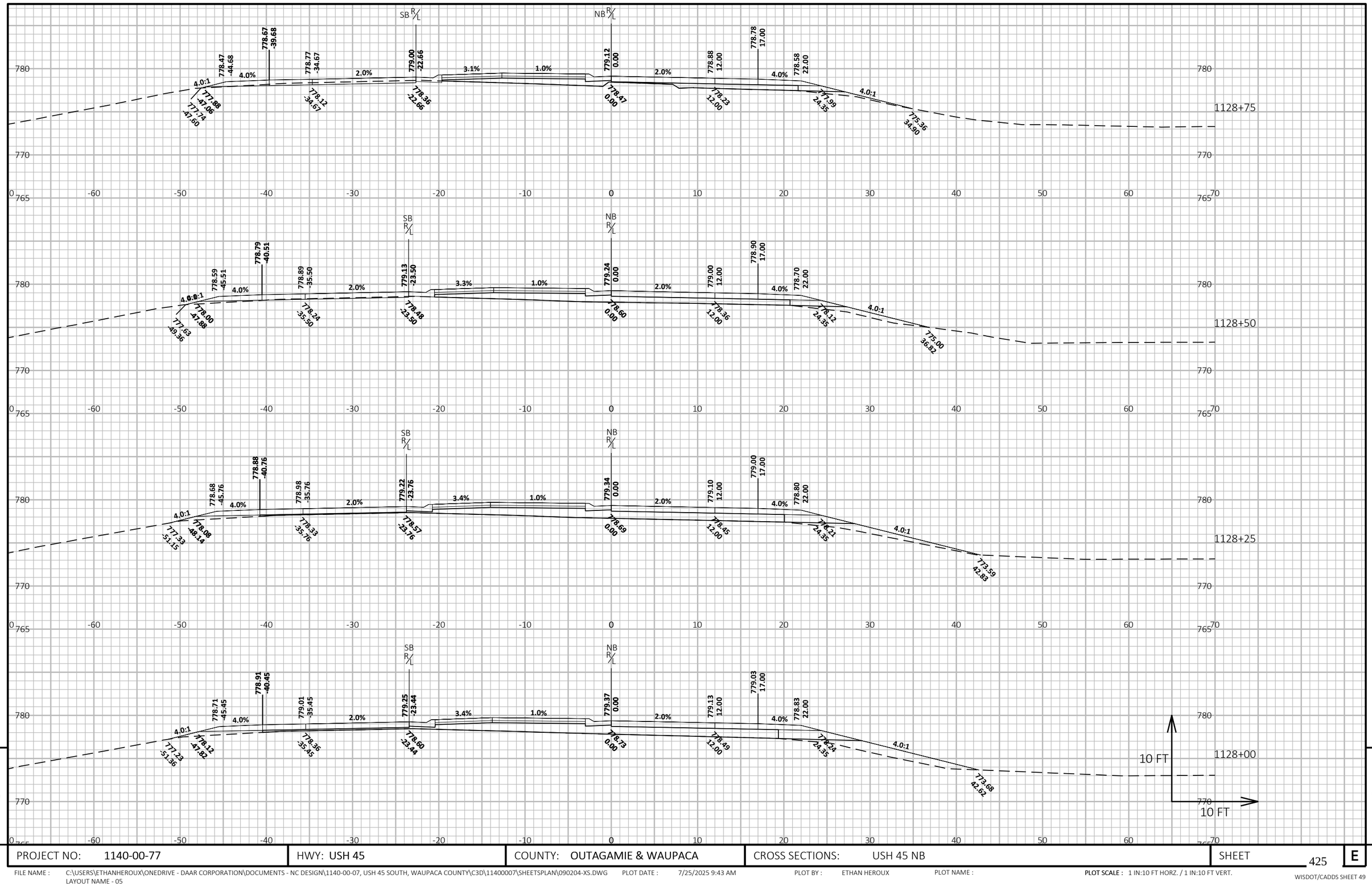
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 03

WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 424	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 04
PLOT DATE : 7/25/2025 9:43 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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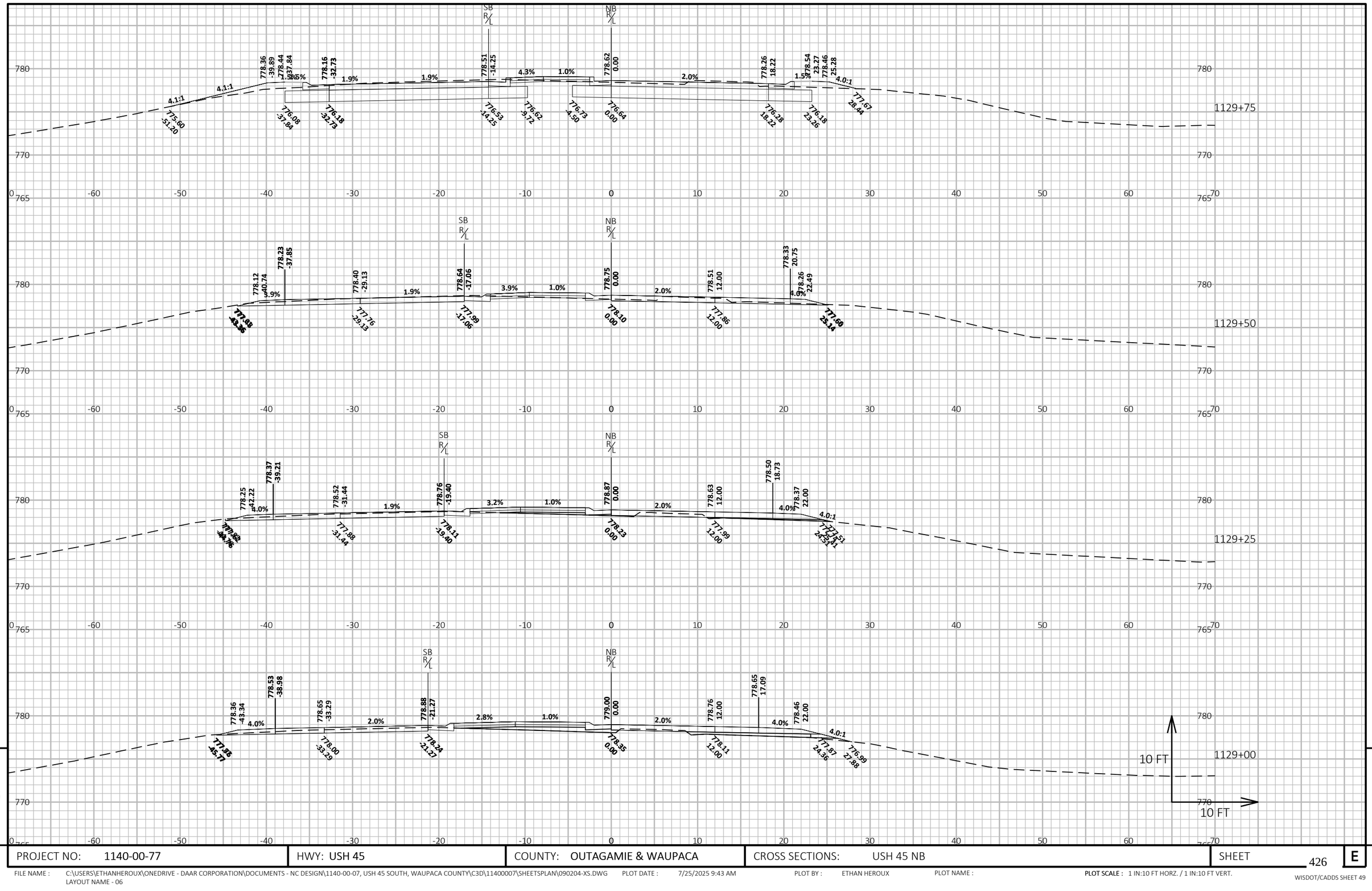
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 425	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 05
PLOT DATE : 7/25/2025 9:43 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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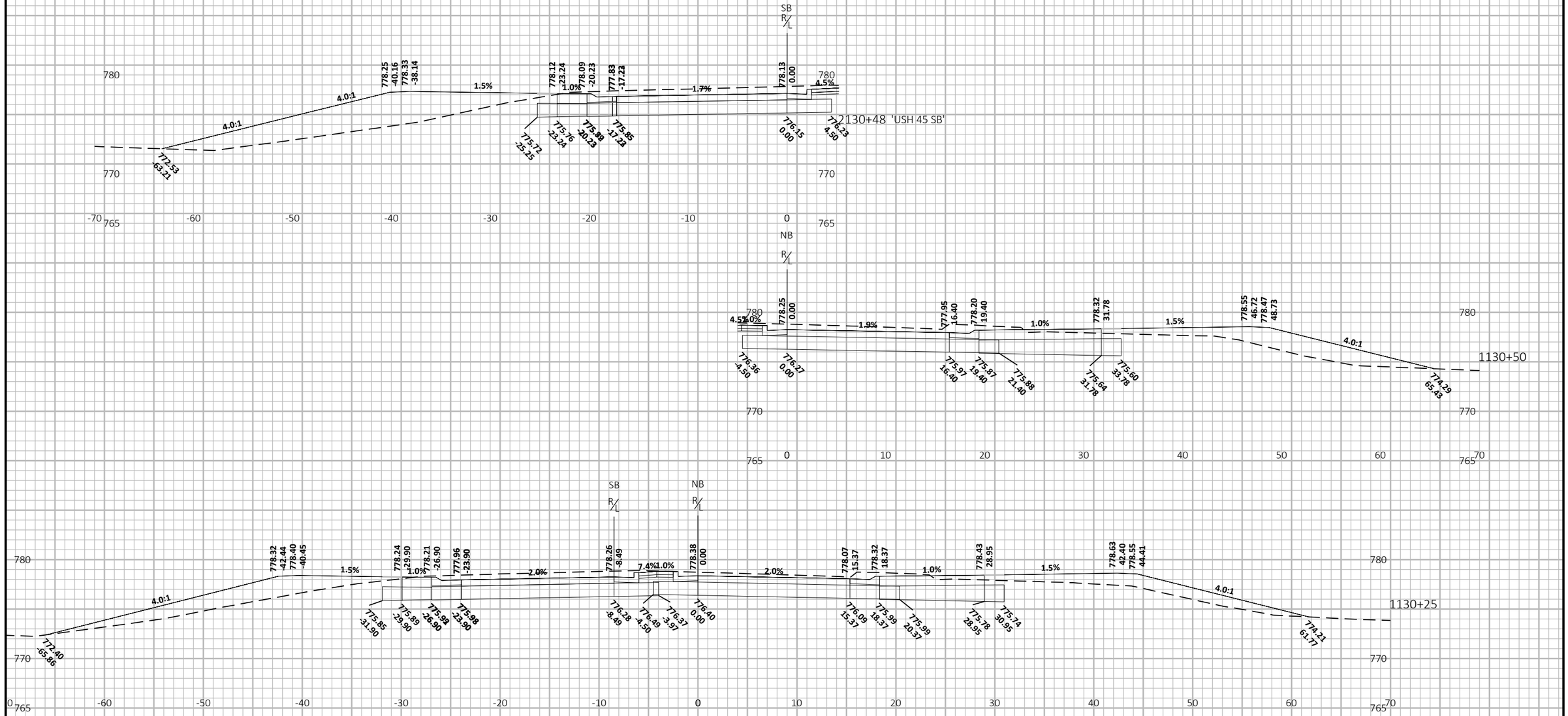
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 426	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 06
PLOT DATE : 7/25/2025 9:43 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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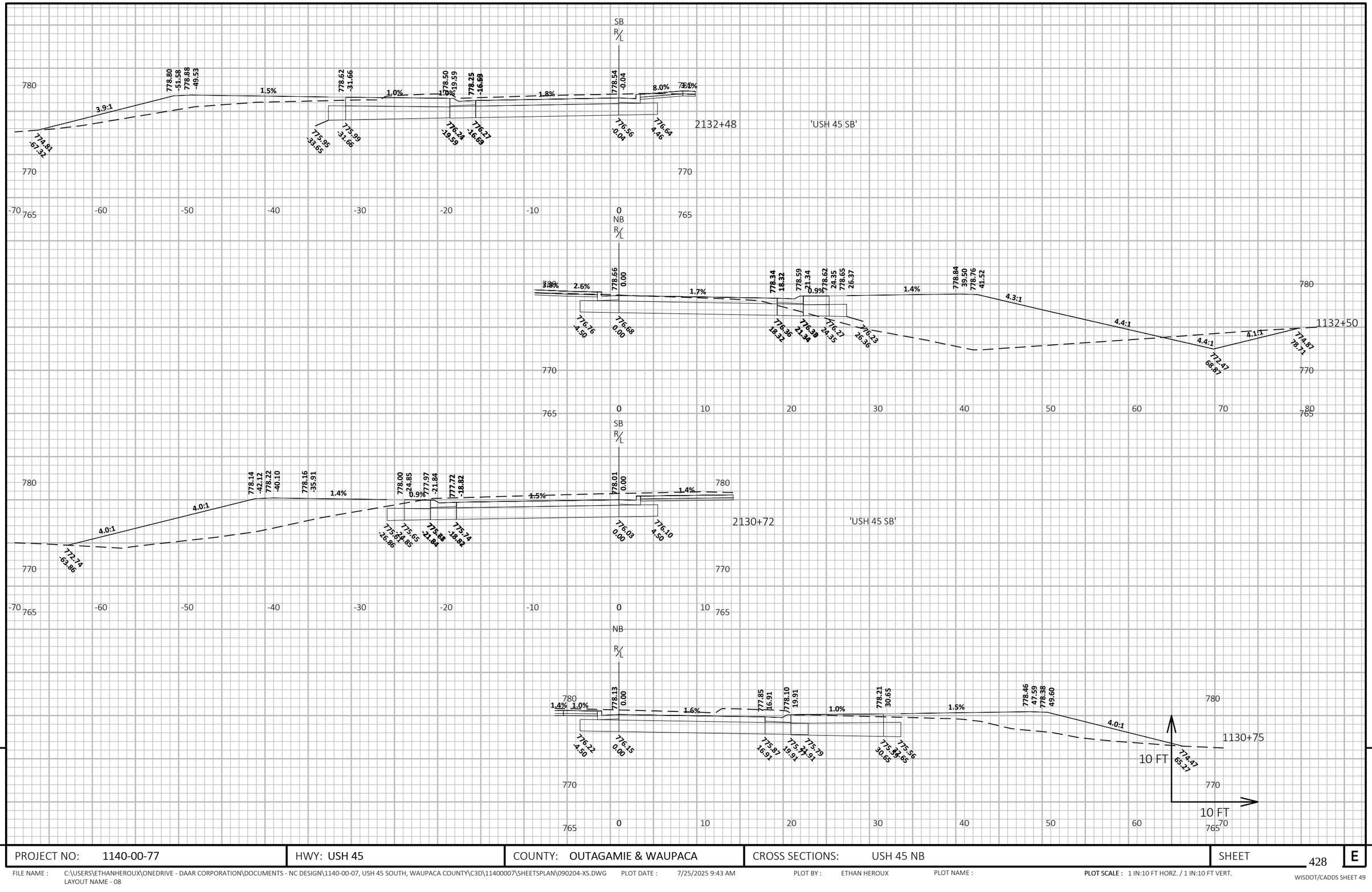
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 427	E

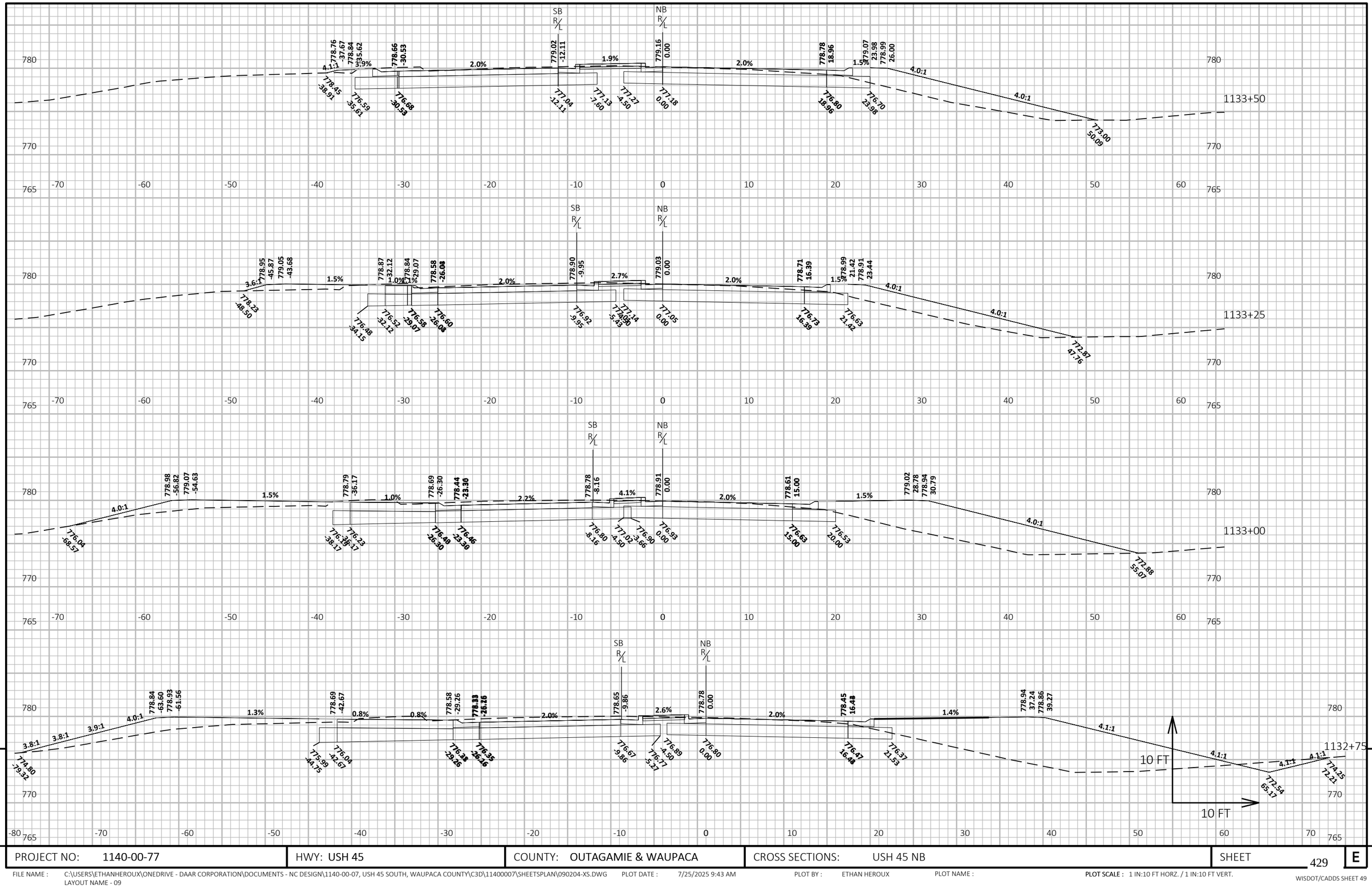
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 07
PLOT DATE : 7/25/2025 9:43 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 428 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 08

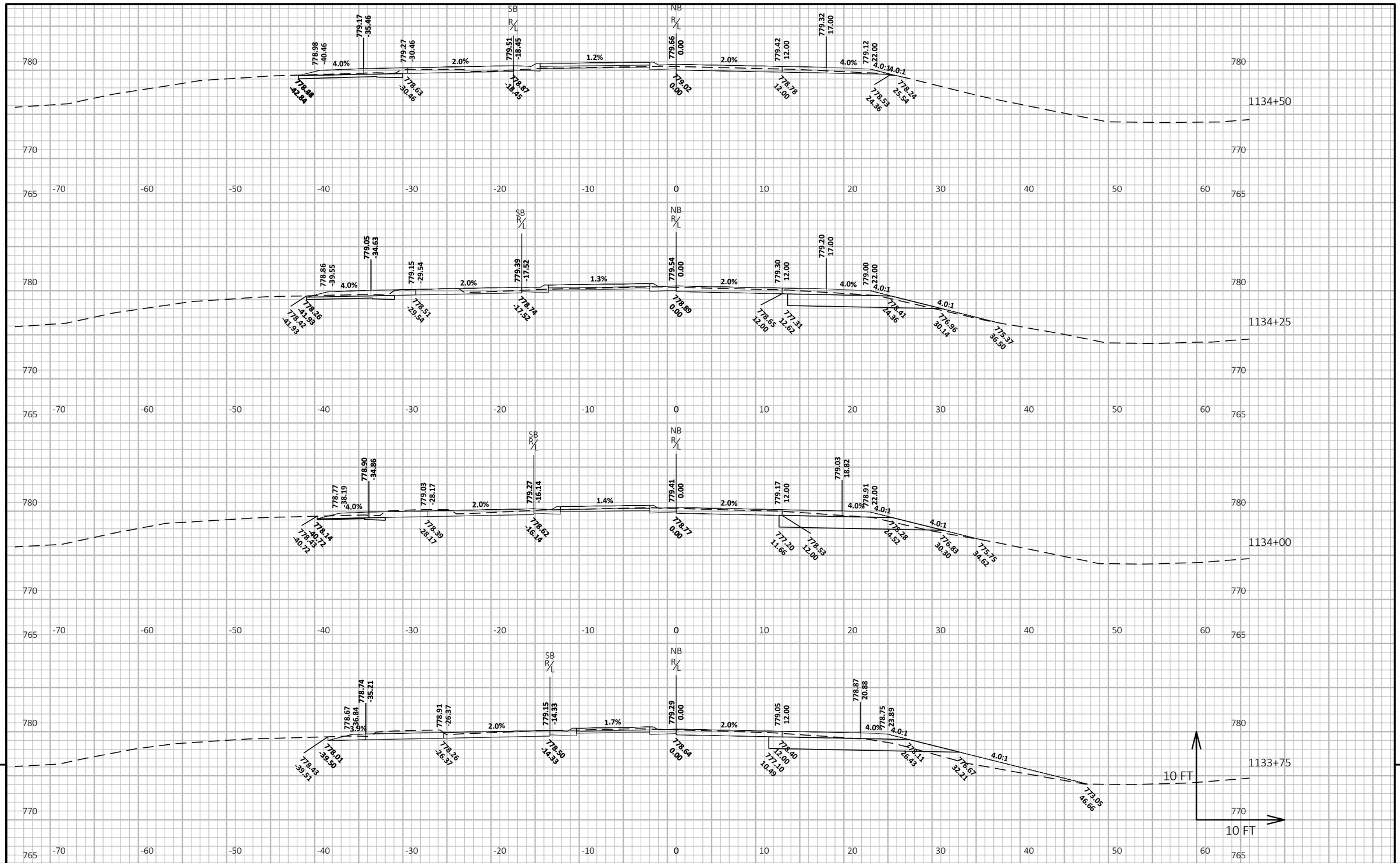
WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 429 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 09

WISDOT/CADDS SHEET 49



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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 430	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 10

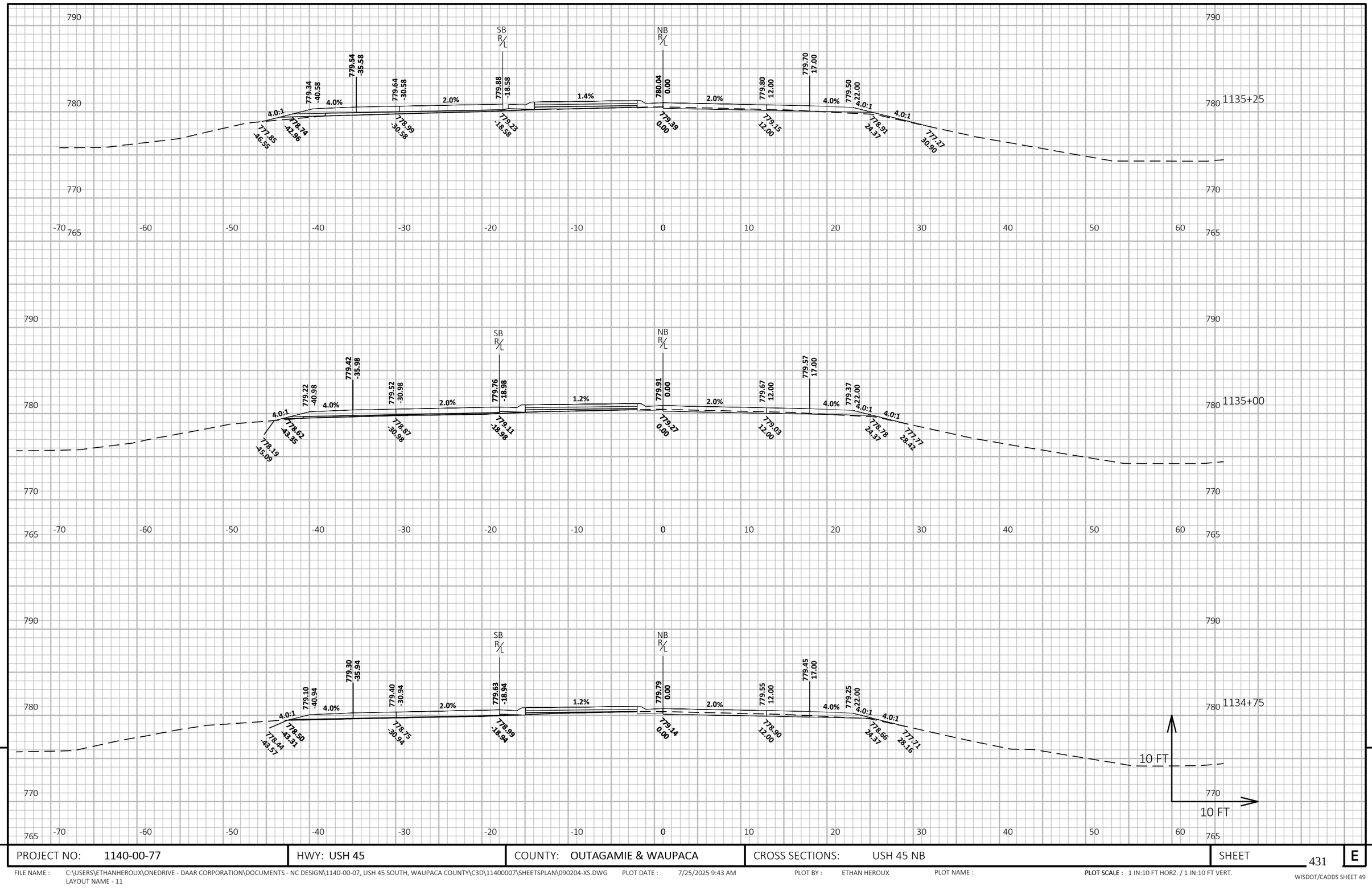
PLOT DATE : 7/25/2025 9:43 AM

PLOT BY : ETHAN HEROUX

PLOT NAME :

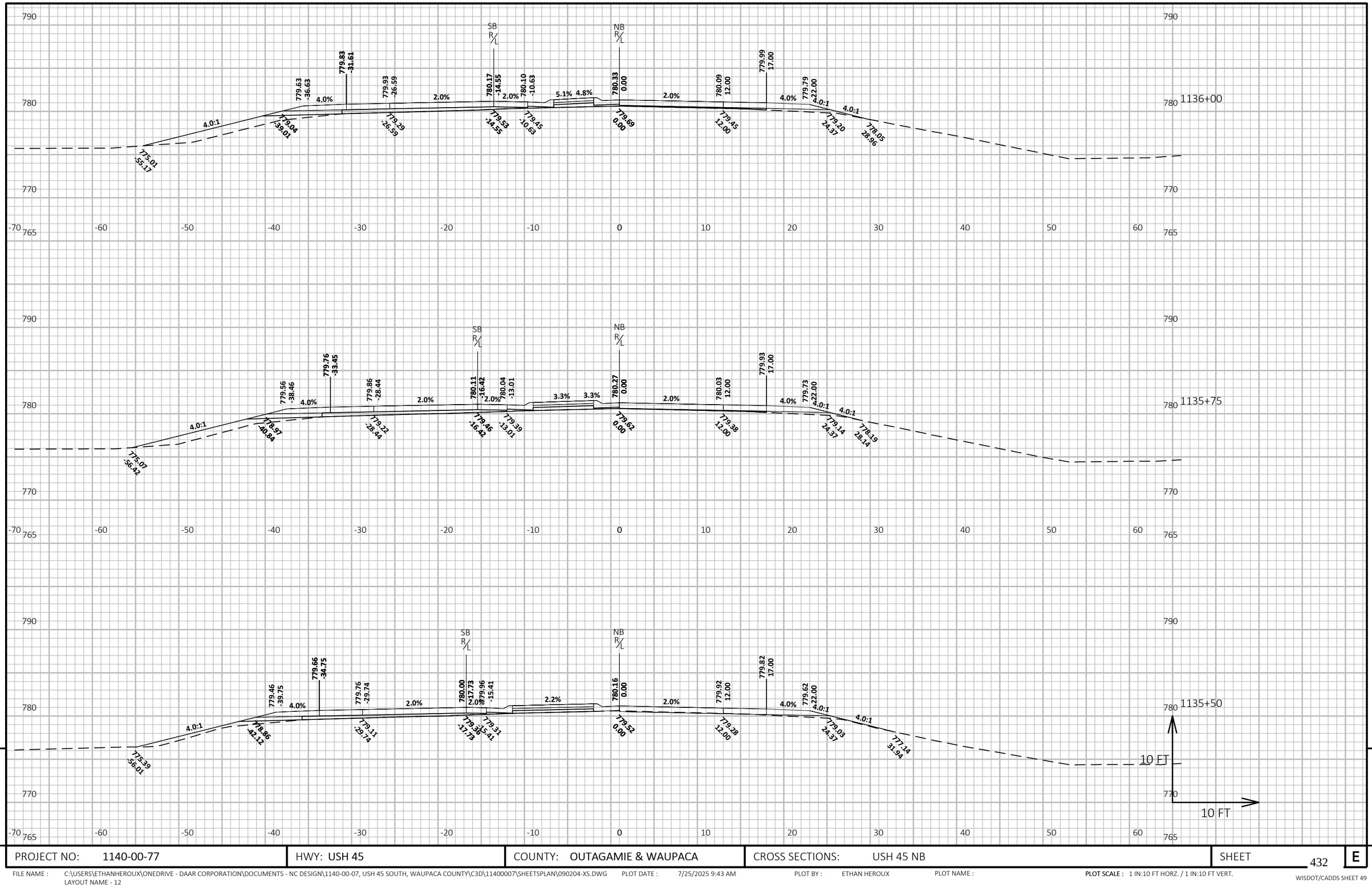
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 431	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 11
PLOT DATE : 7/25/2025 9:43 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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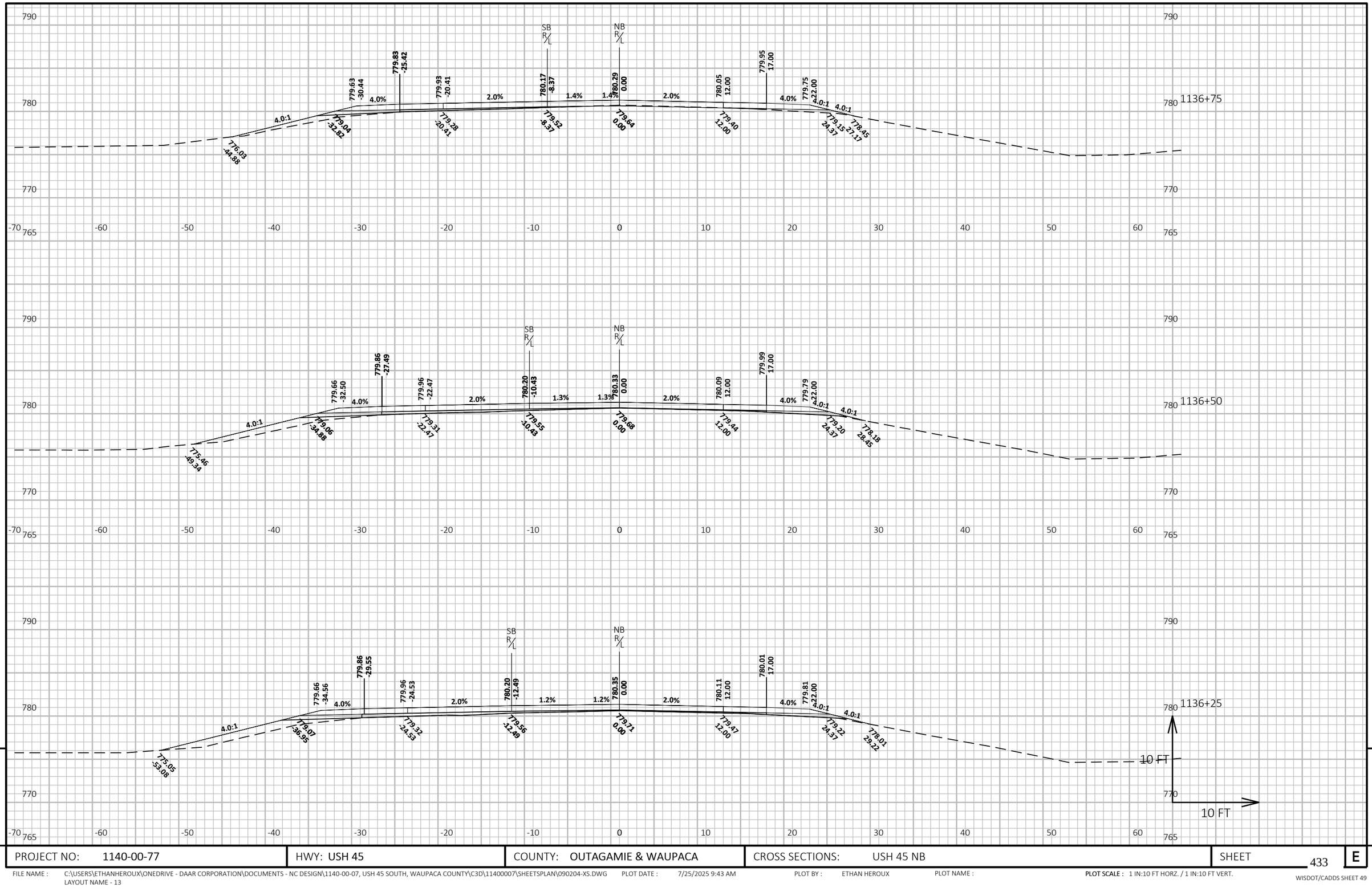
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 432	E

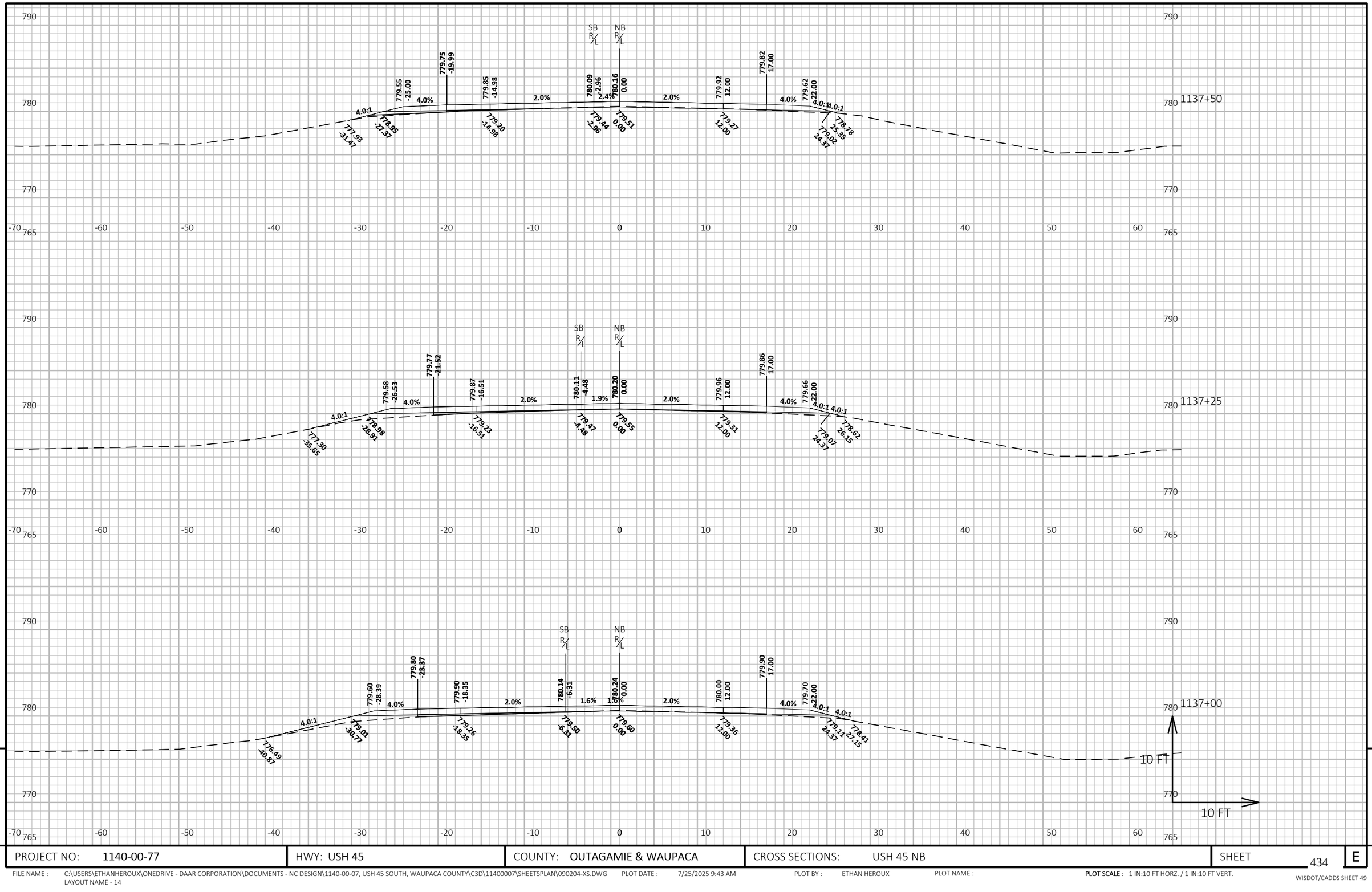
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 433 E

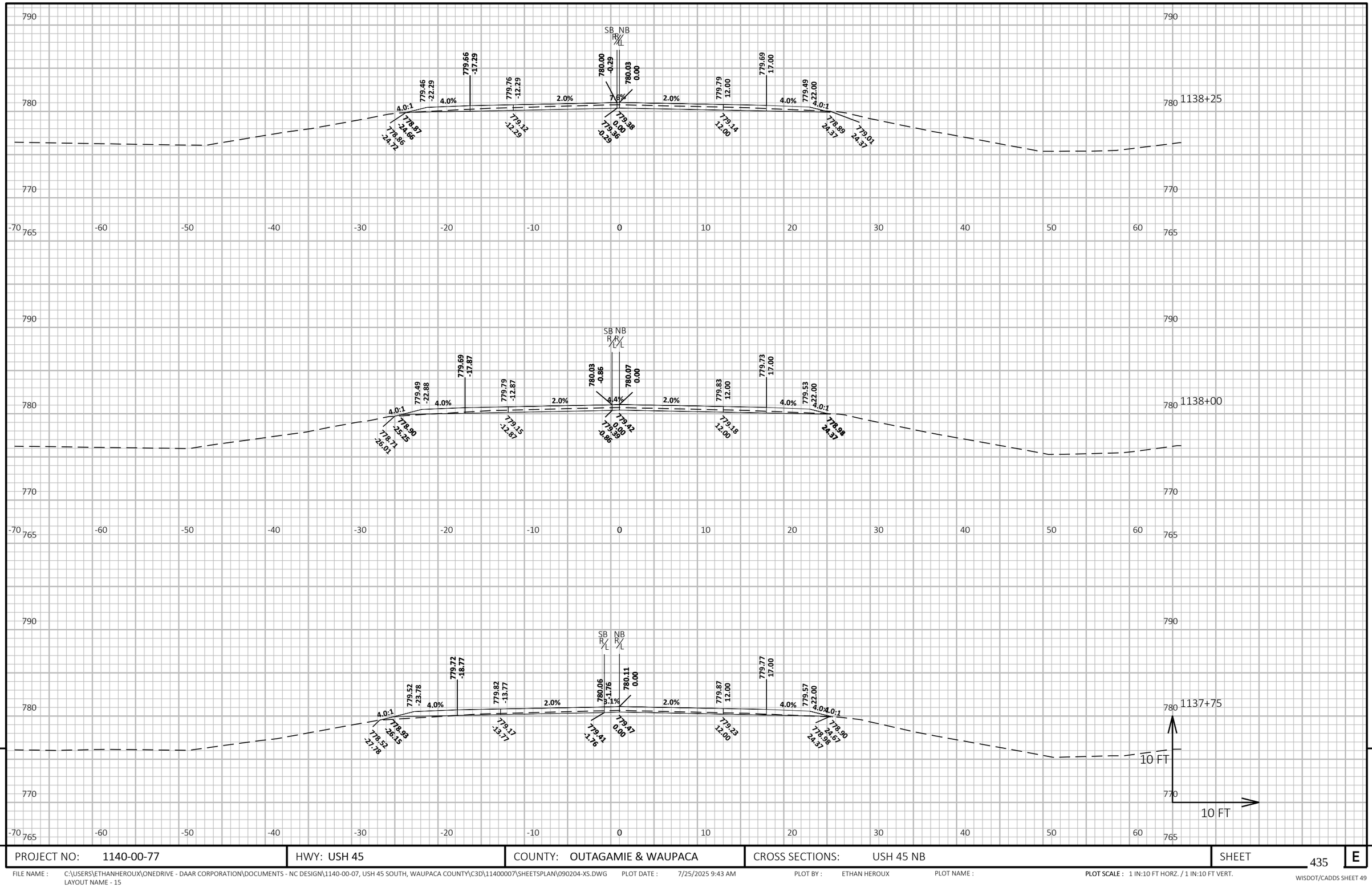
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 13
PLOT DATE : 7/25/2025 9:43 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 434 E

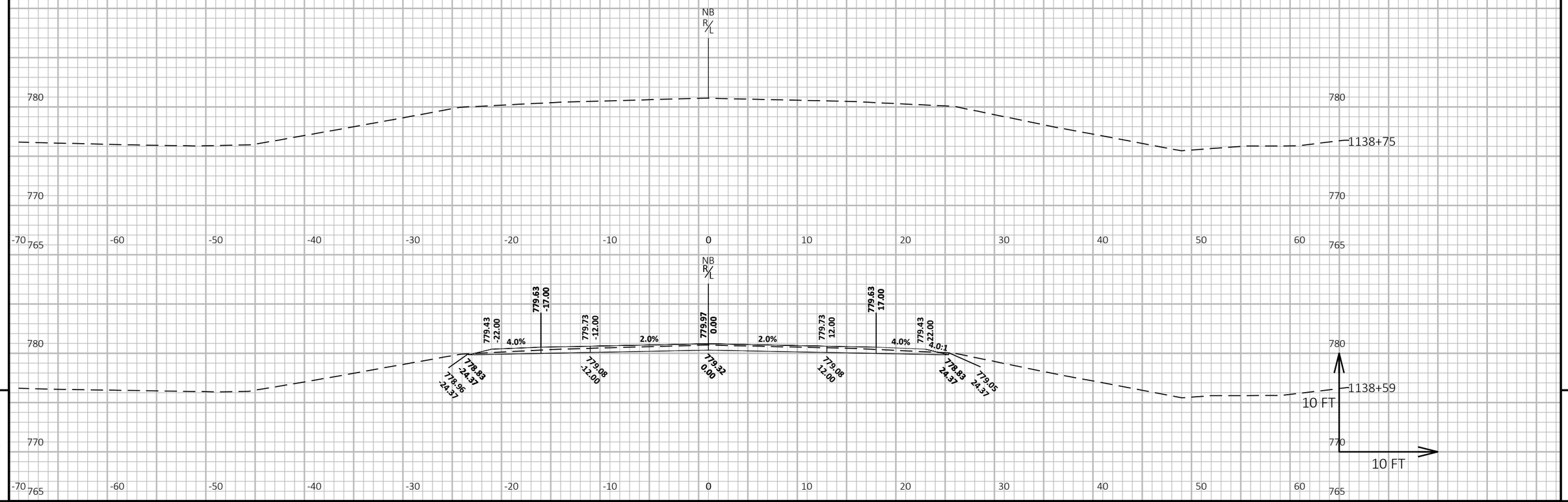
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 14

WISDOT/CADDS SHEET 49



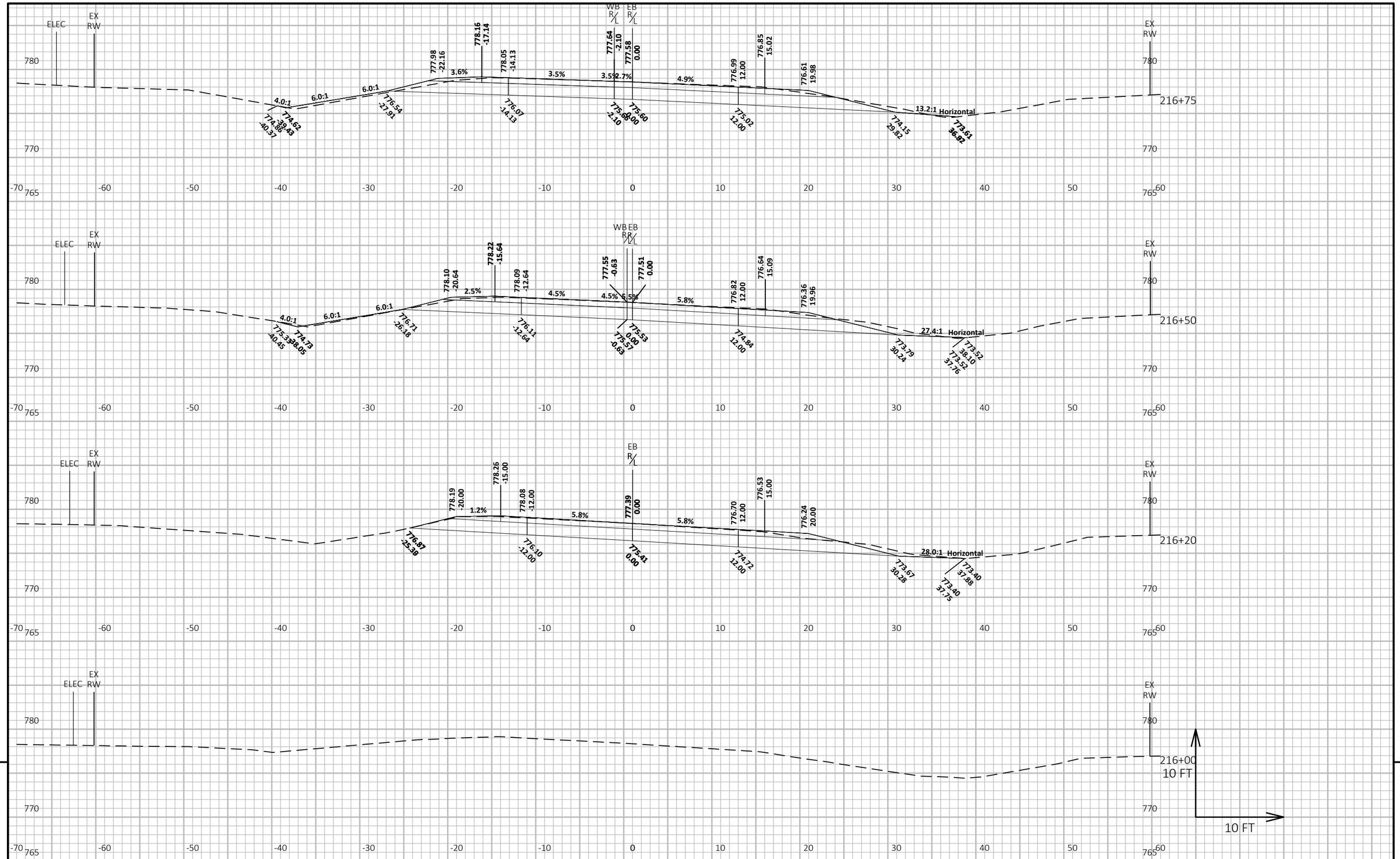
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 435 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 15
PLOT DATE : 7/25/2025 9:43 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 NB	SHEET 436	E

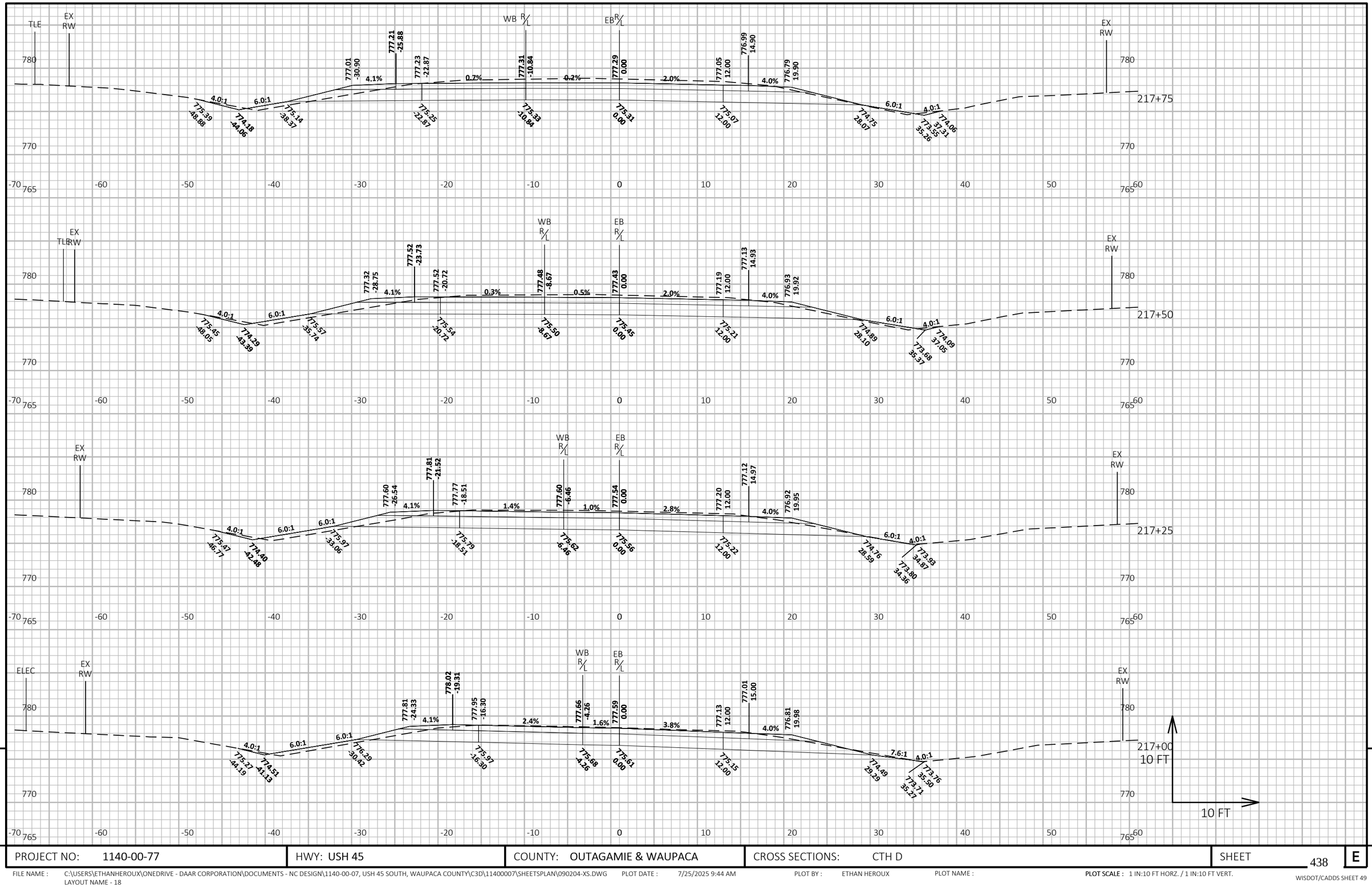
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 16



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 437	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:43 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 17

WISDOT/CADDS SHEET 49



9

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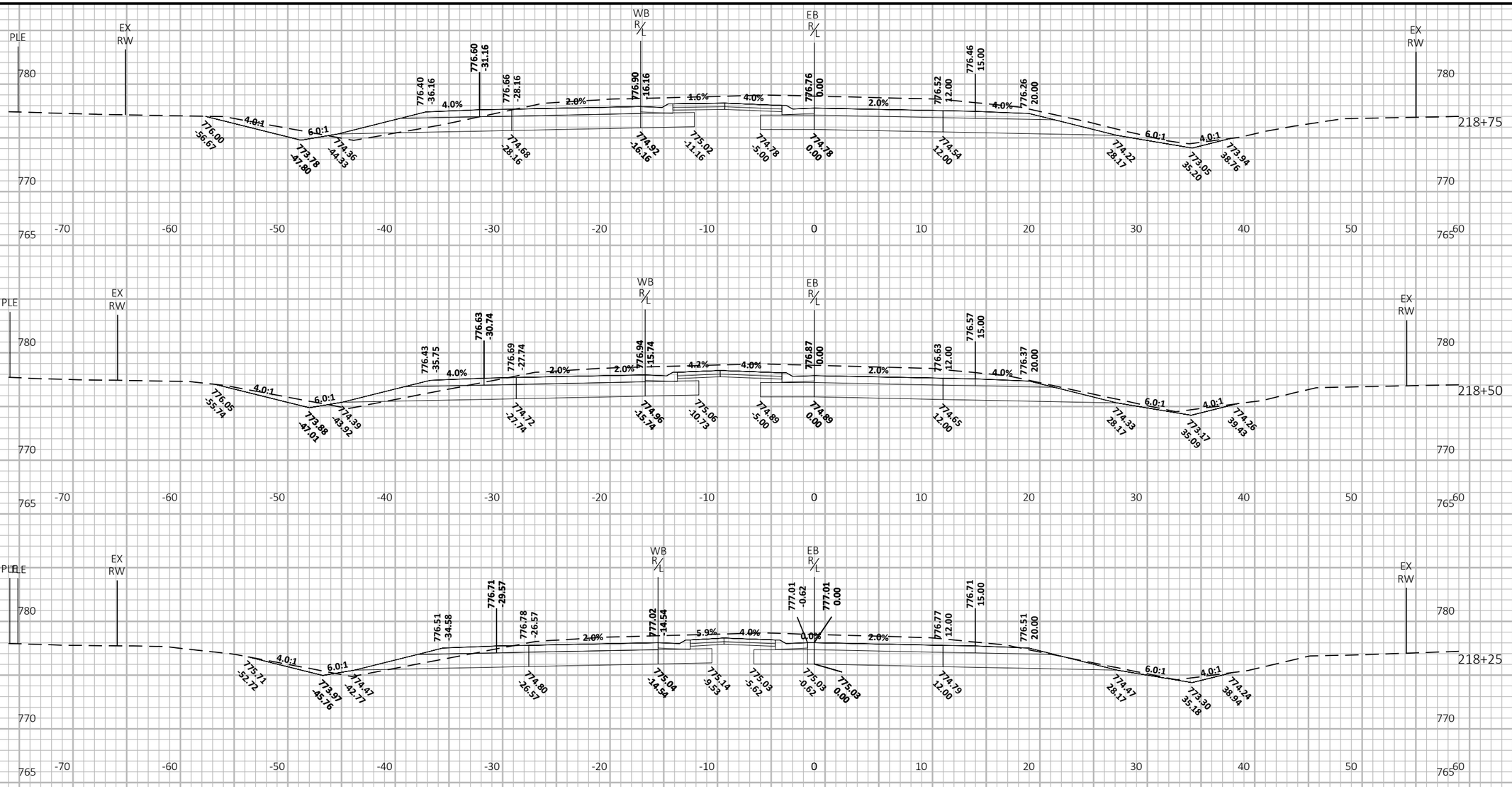
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 438	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:44 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 18
WISDOT/CADDS SHEET 49



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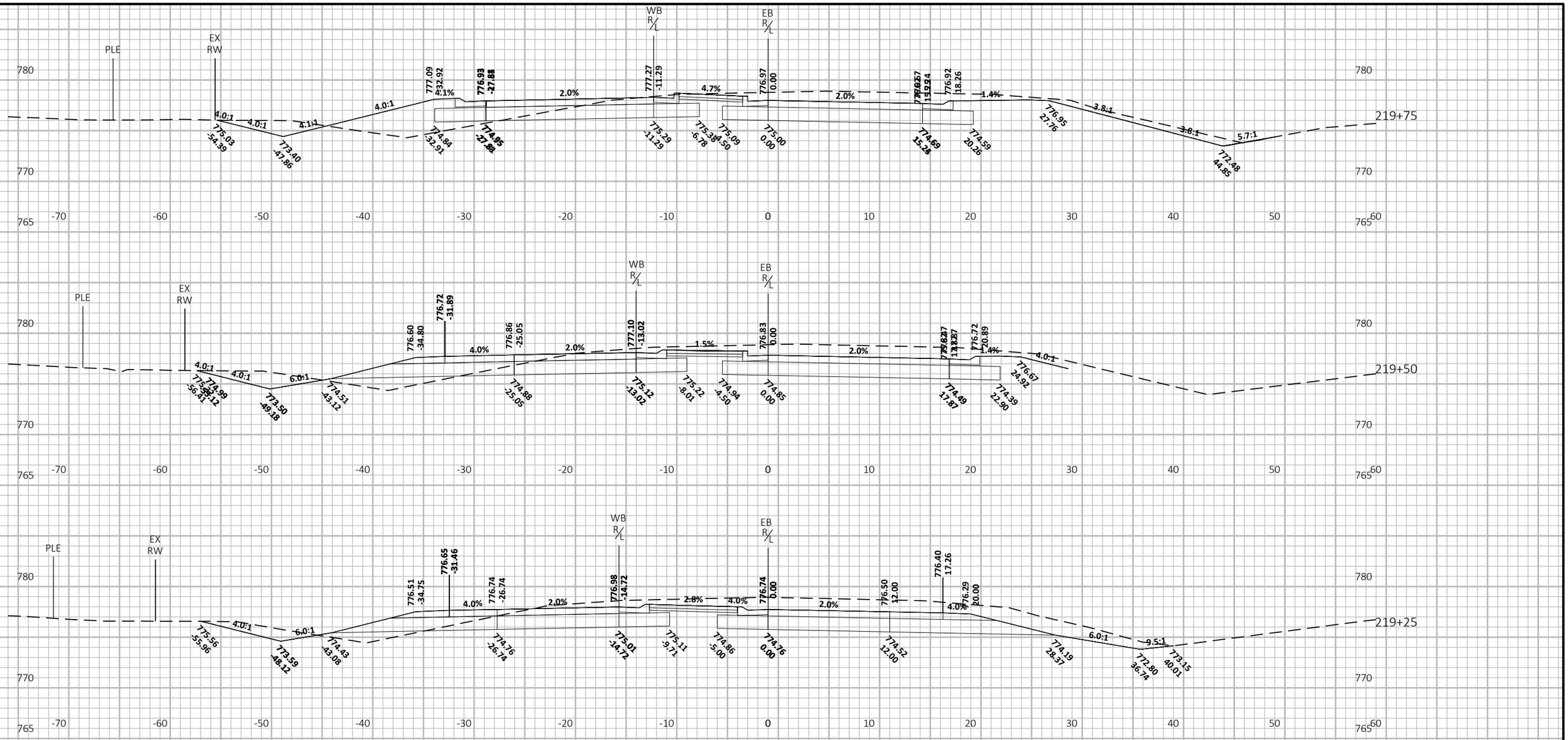
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 439	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:44 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 19



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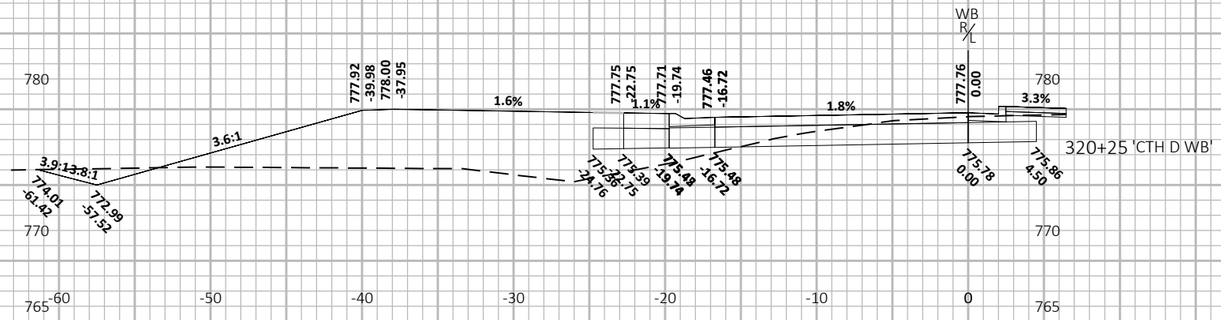
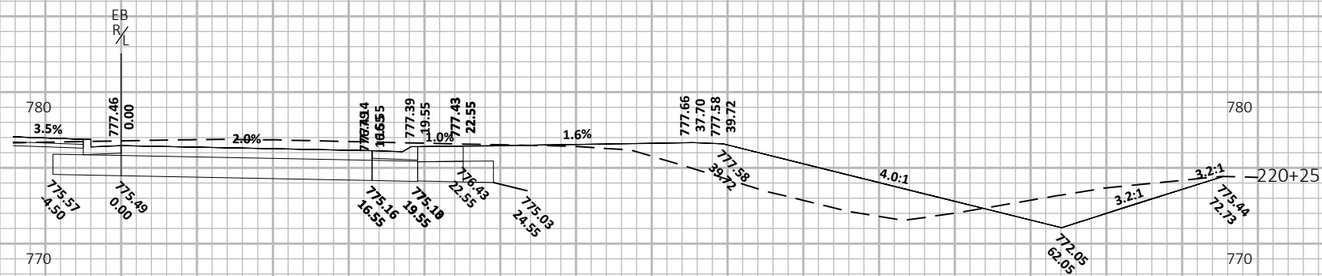
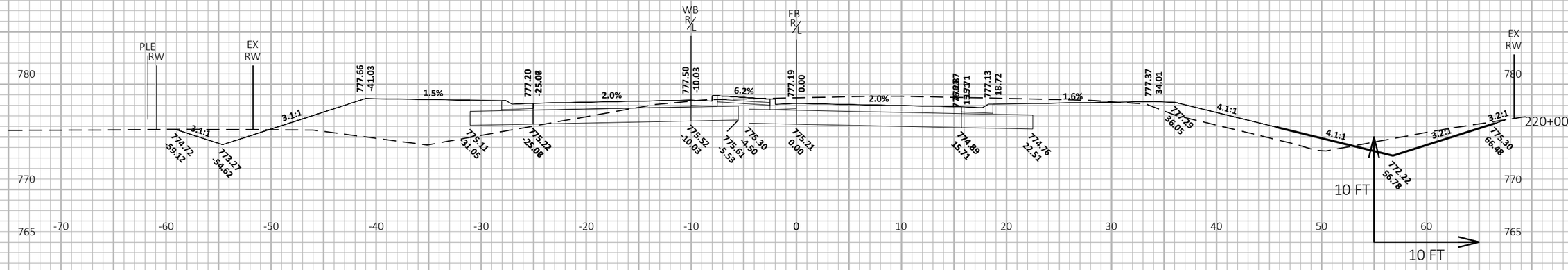
9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 440	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:44 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 20
WISDOT/CADDS SHEET 49







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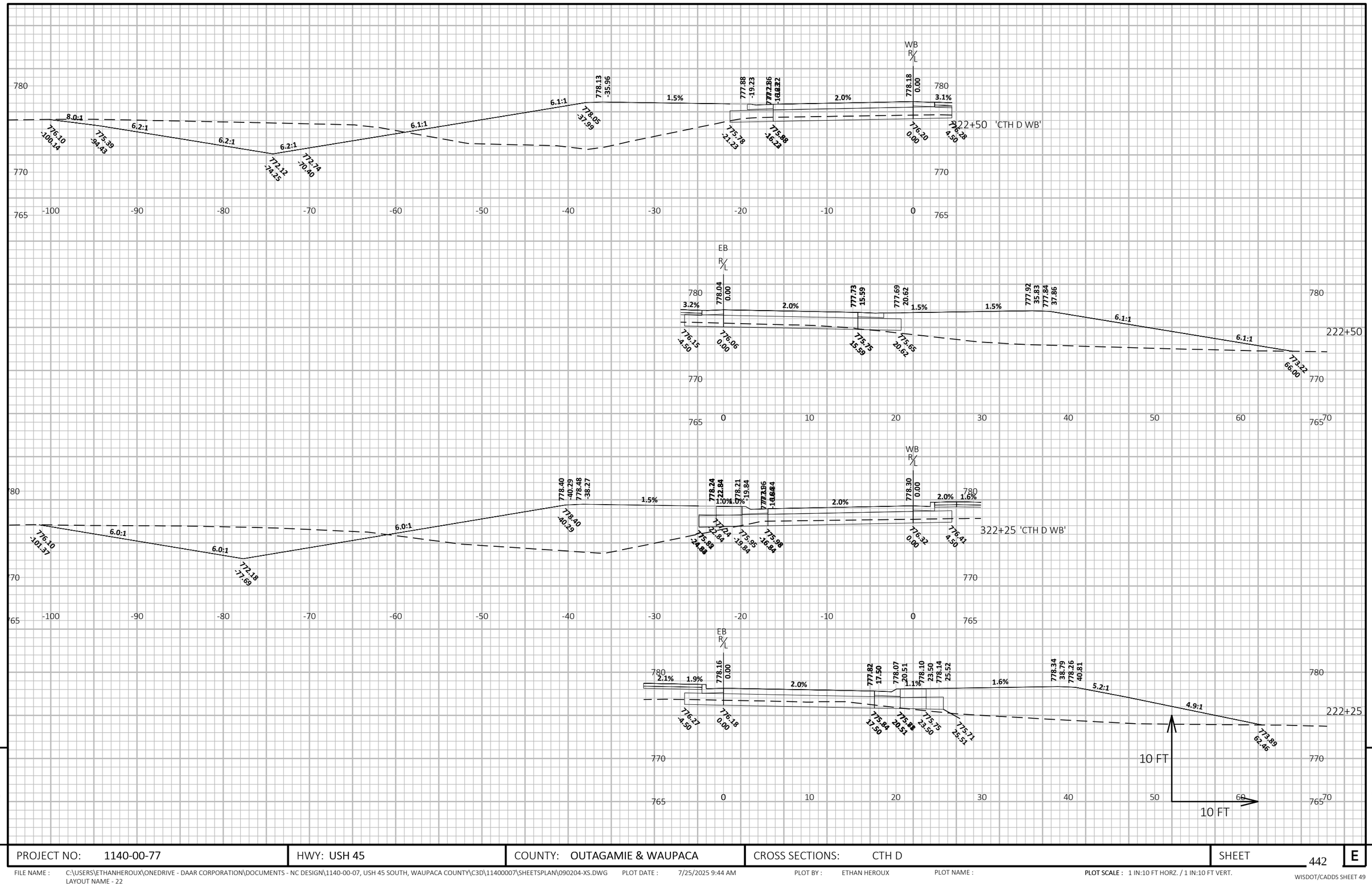
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 441	E

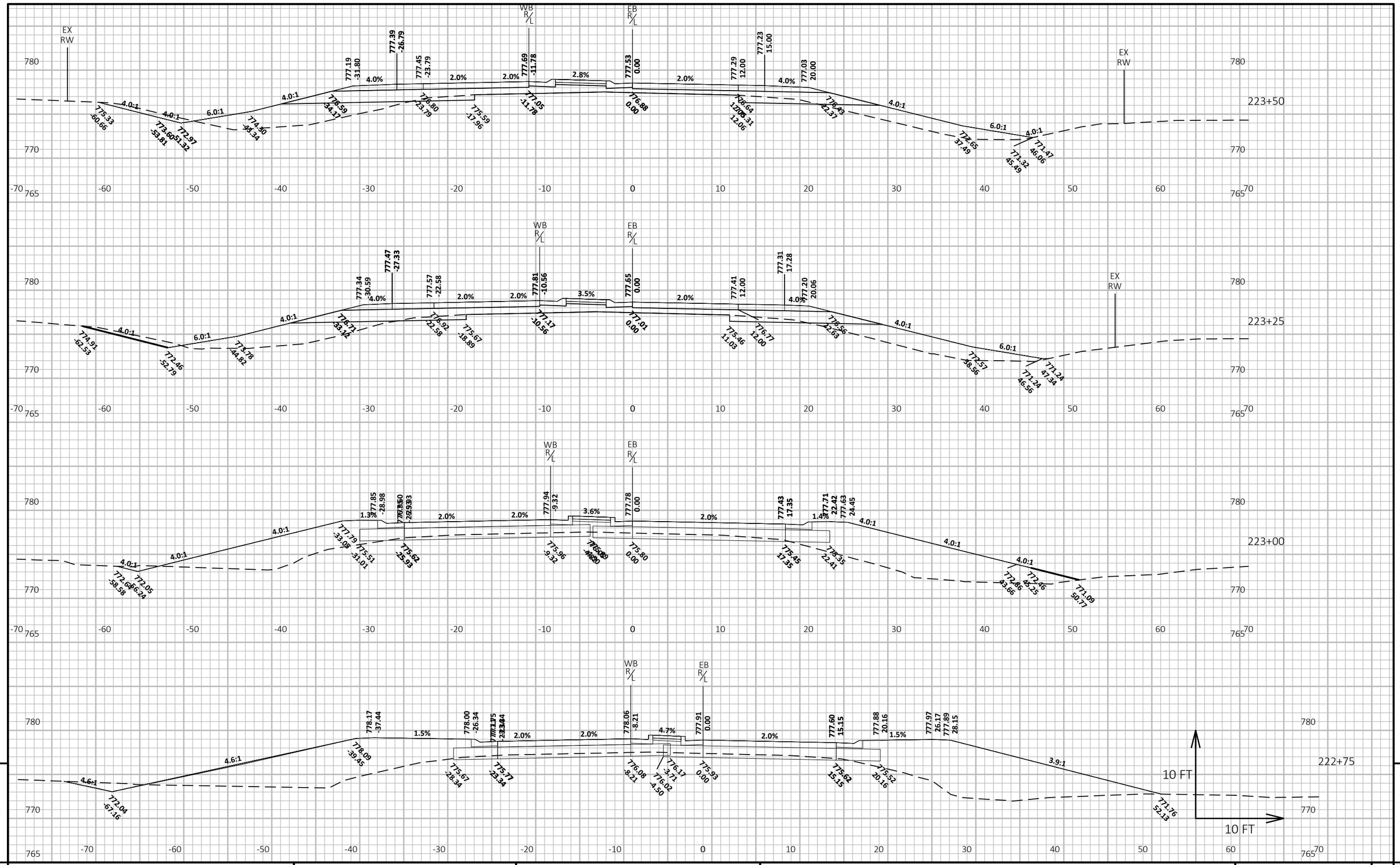
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 21
PLOT DATE : 7/25/2025 9:44 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 442	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 22
PLOT DATE : 7/25/2025 9:44 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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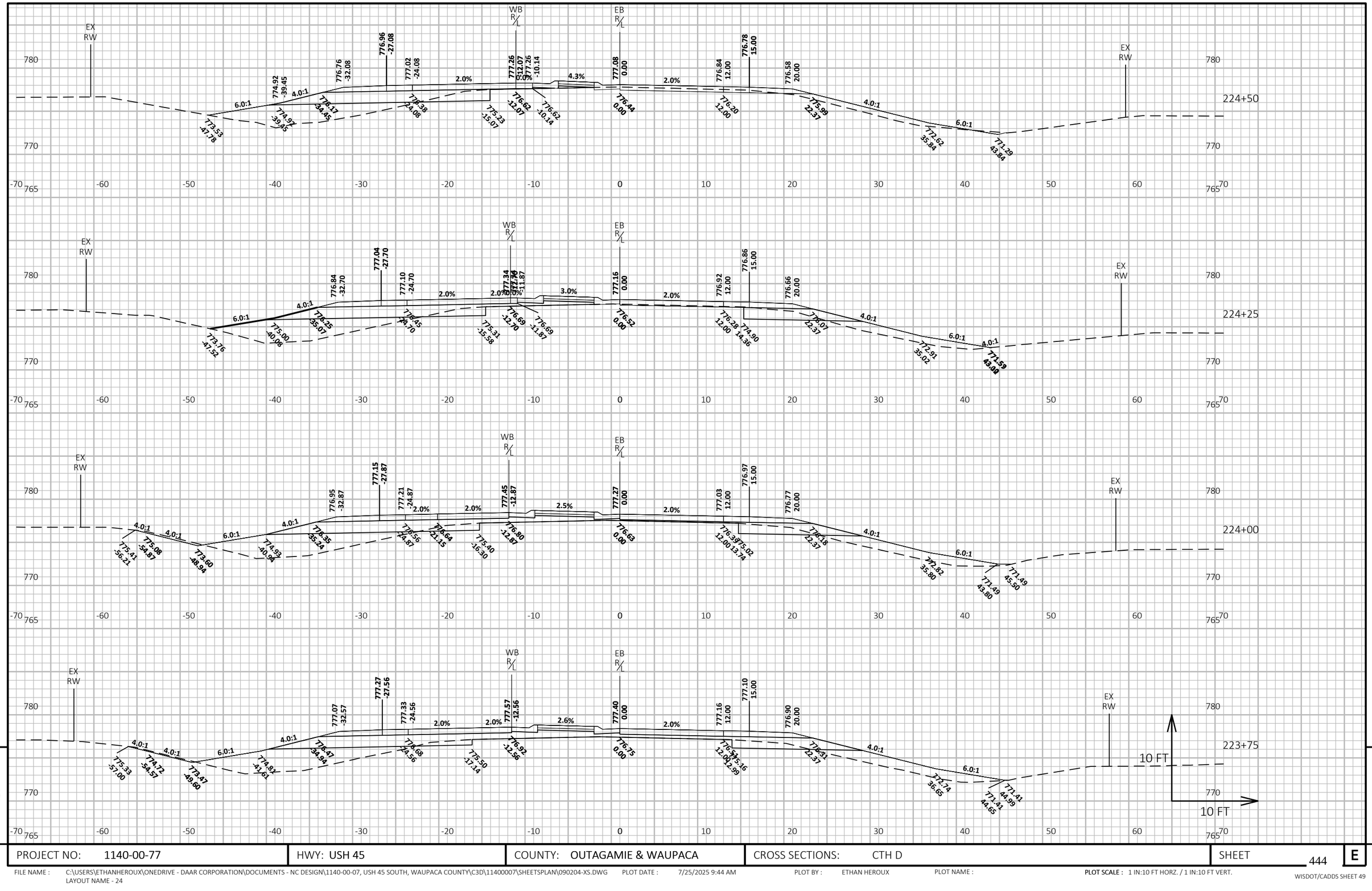
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 443	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 23
PLOT DATE : 7/25/2025 9:44 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

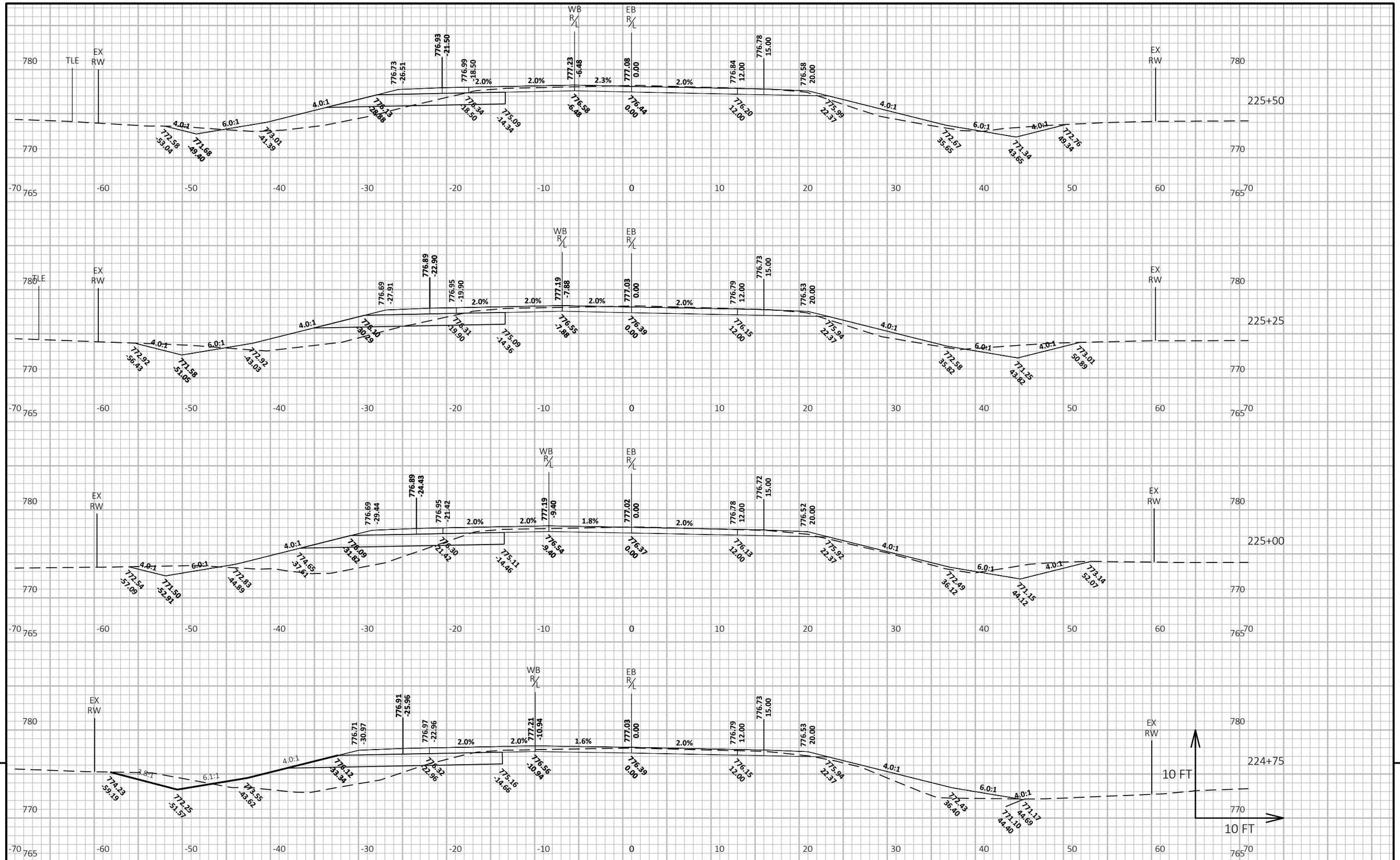
WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 444	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:44 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 24

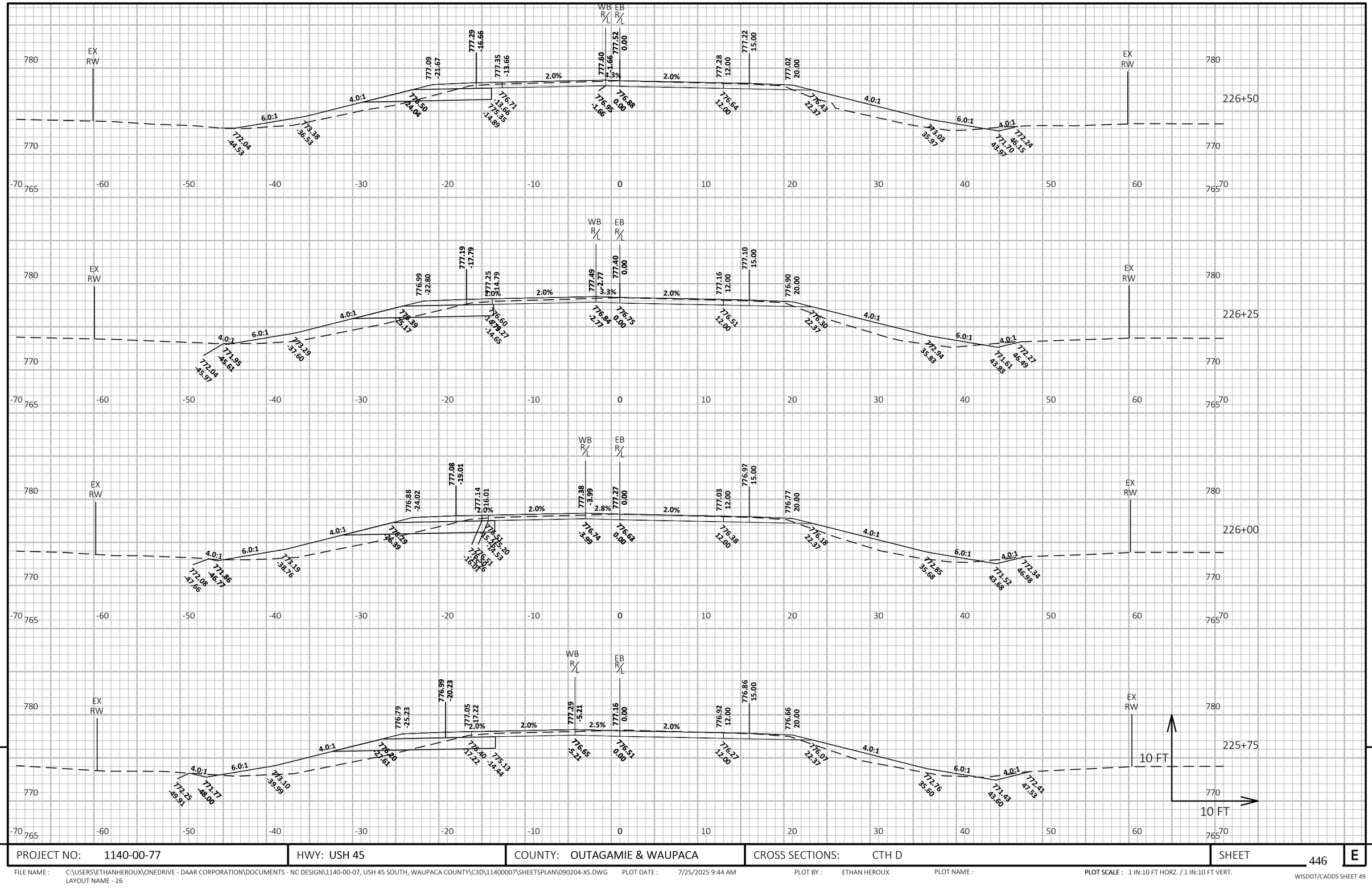
WISDOT/CADDS SHEET 49



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 445 E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:44 AM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 25

WISDOT/CADDS SHEET 49



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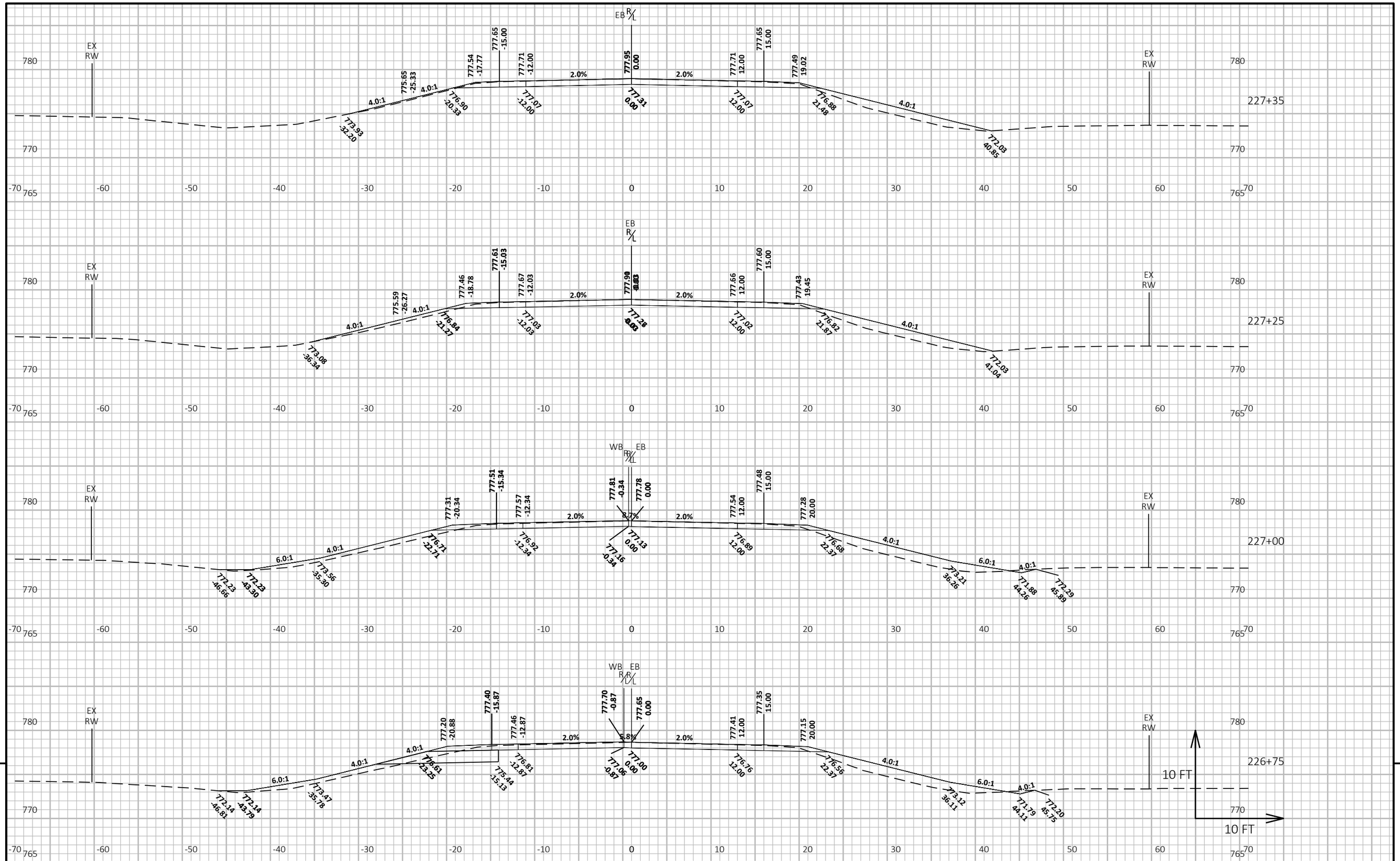
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 446	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:44 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 26
WISDOT/CADDS SHEET 49



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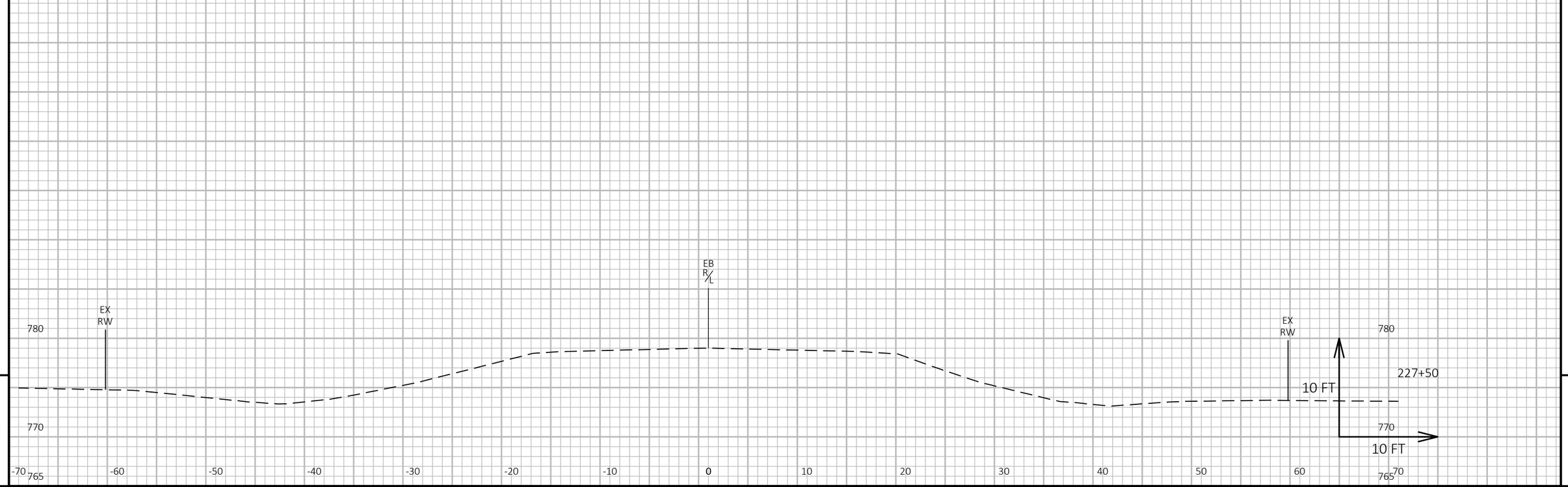
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 447	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG PLOT DATE : 7/25/2025 9:44 AM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 27
WISDOT/CADDS SHEET 49



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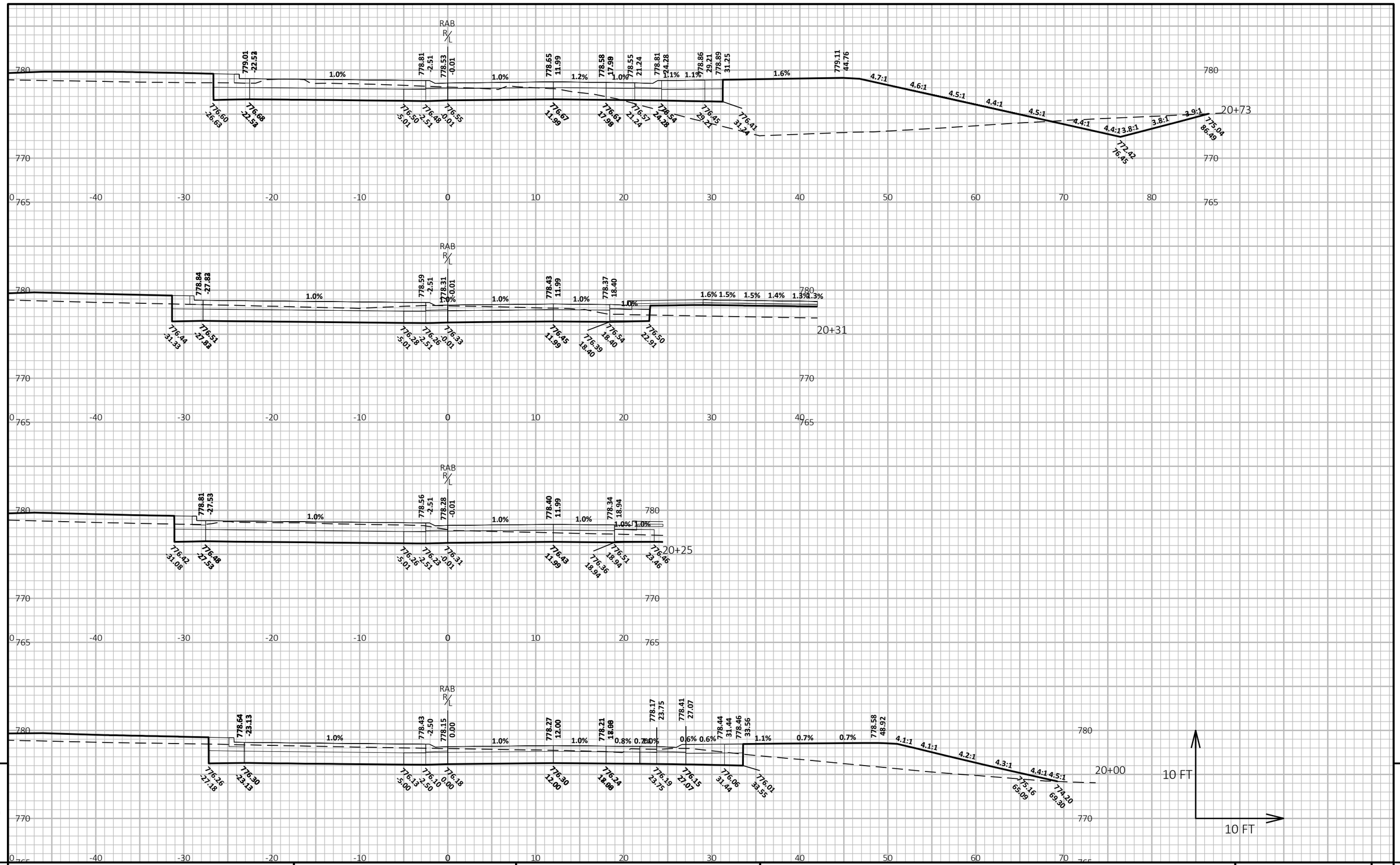
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CTH D	SHEET 448	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 28
PLOT DATE : 7/25/2025 9:45 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 AND CTH D ROUNDABOUT	SHEET 449	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 29

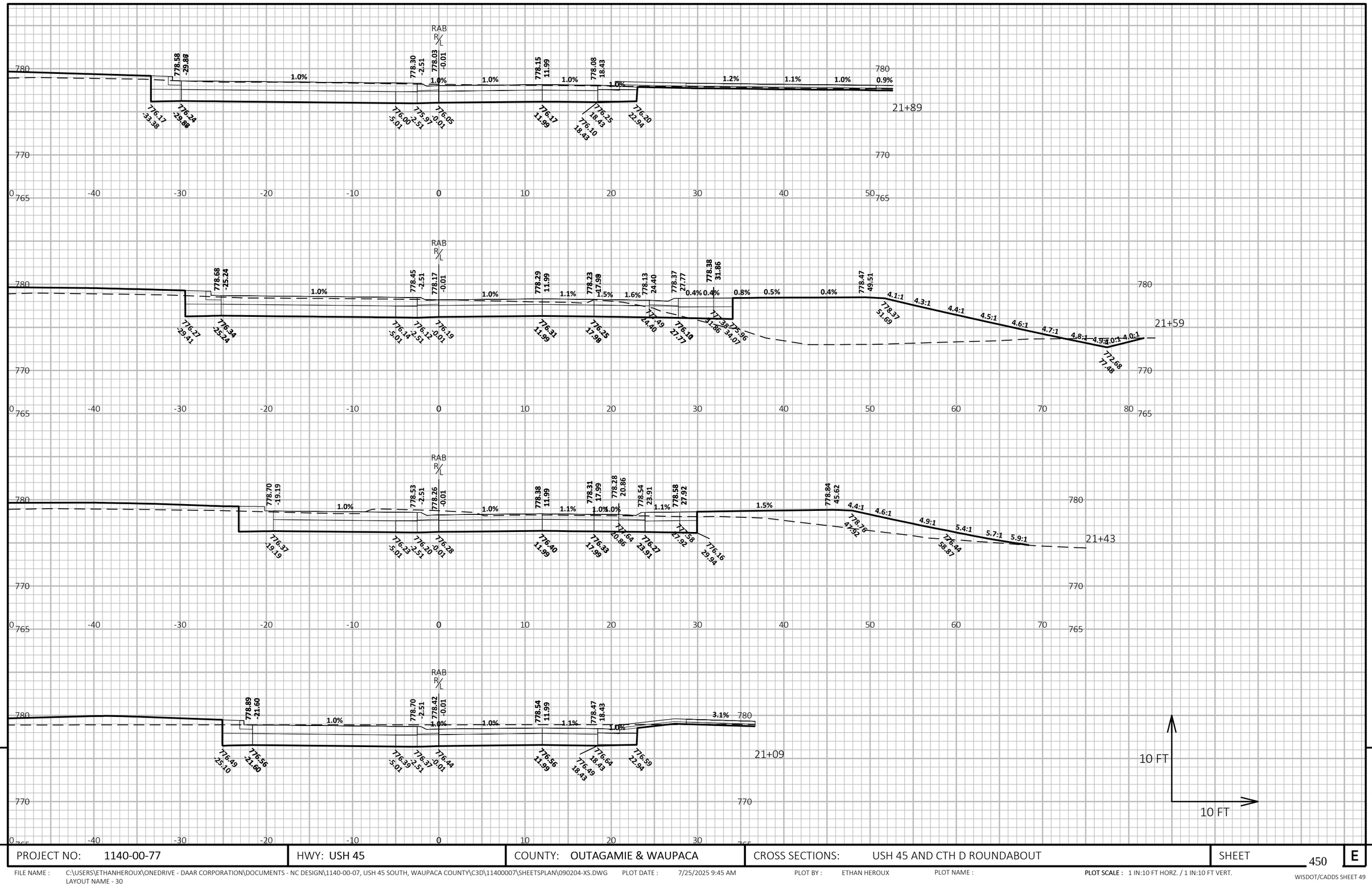
PLOT DATE : 7/25/2025 9:45 AM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49

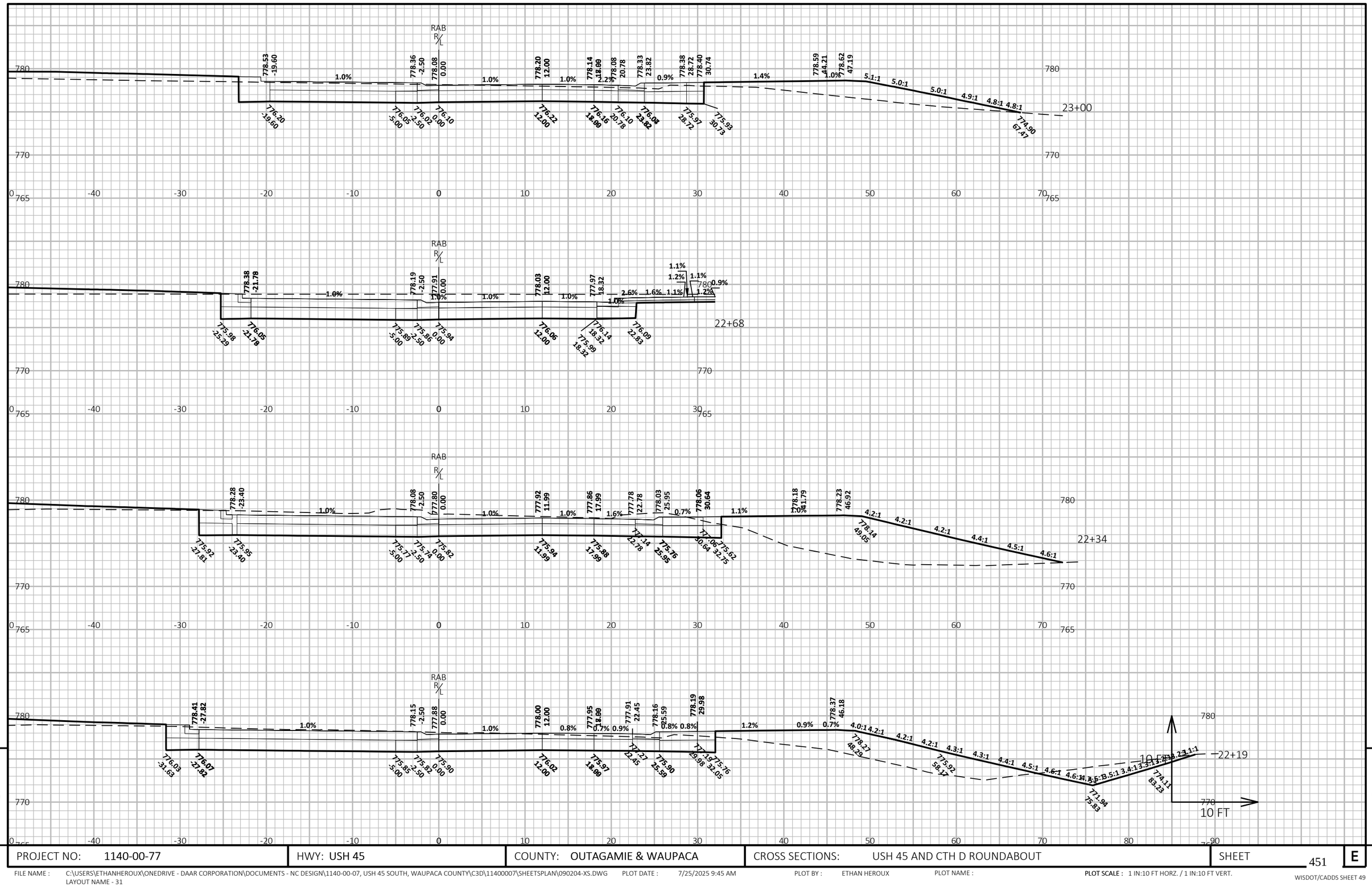


9

9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 AND CTH D ROUNDABOUT	SHEET 450	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 30
PLOT DATE : 7/25/2025 9:45 AM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: USH 45 AND CTH D ROUNDABOUT	SHEET 451	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 31

PLOT DATE : 7/25/2025 9:45 AM

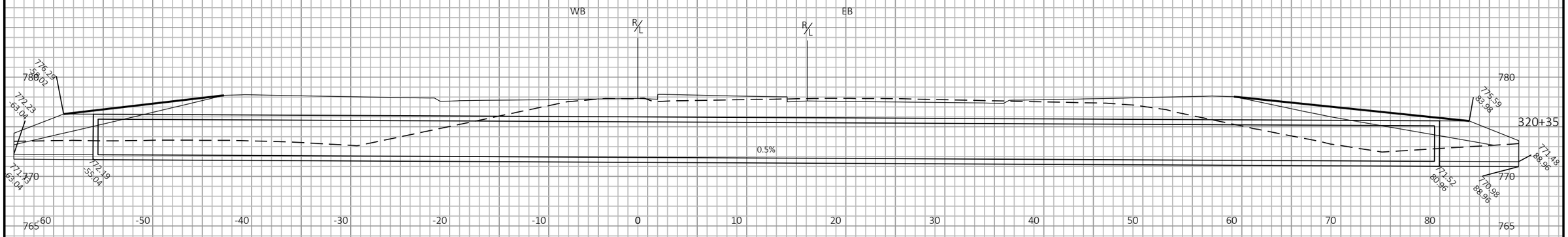
PLOT BY : ETHAN HEROUX

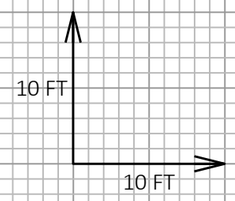
PLOT NAME :

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

WISDOT/CADDS SHEET 49

STA 320+35 'WB' (SKEWED 9° L.H.F)
REMOVE EXISTING PIPE
1 - CPRCHE CLASS HE-IV 43x68-INCH @ 0.5%
2 - AEW CPRCHE 43x68-INCH
2 - MARCKERS CULVERT END
INV(I) = 772.23 (STA 320+45 'WB', -62.27 LT)
INV(E) = 771.48 (STA 320+26 'WB', 88.29 RT)
CROSS SECTION NORMAL TO PIPE





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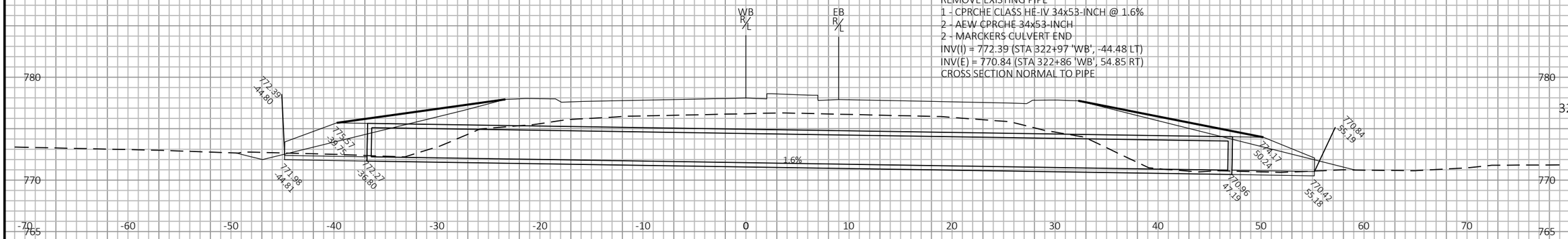
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CULVERTS	SHEET 452	E

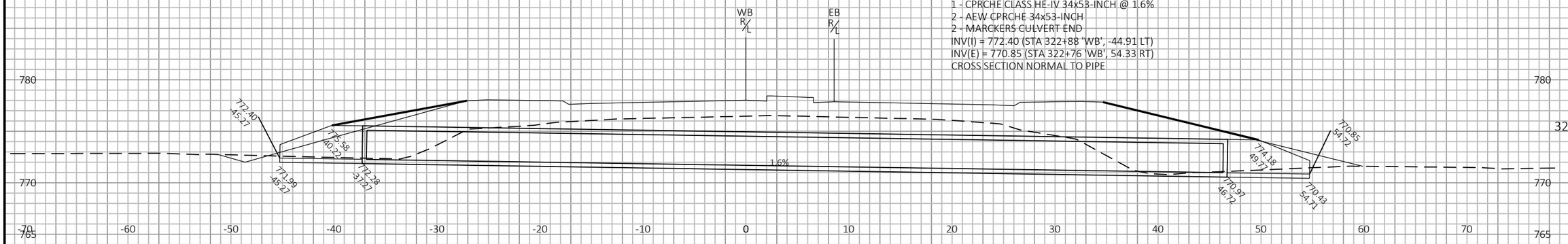
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090205-XS.DWG PLOT DATE : 7/31/2025 12:49 PM PLOT BY : ETHAN HEROUX PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 01

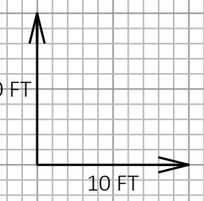
WISDOT/CADDS SHEET 49

STA 322+92 'WB' (SKEWED 7° L.H.F)
REMOVE EXISTING PIPE
1 - CPRCHE CLASS HE-IV 34x53-INCH @ 1.6%
2 - AEW CPRCHE 34x53-INCH
2 - MARCKERS CULVERT END
INV(I) = 772.39 (STA 322+97 'WB', -44.48 LT)
INV(E) = 770.84 (STA 322+86 'WB', 54.85 RT)
CROSS SECTION NORMAL TO PIPE



STA 322+82 'WB' (SKEWED 7° L.H.F)
REMOVE EXISTING PIPE
1 - CPRCHE CLASS HE-IV 34x53-INCH @ 1.6%
2 - AEW CPRCHE 34x53-INCH
2 - MARCKERS CULVERT END
INV(I) = 772.40 (STA 322+88 'WB', -44.91 LT)
INV(E) = 770.85 (STA 322+76 'WB', 54.33 RT)
CROSS SECTION NORMAL TO PIPE





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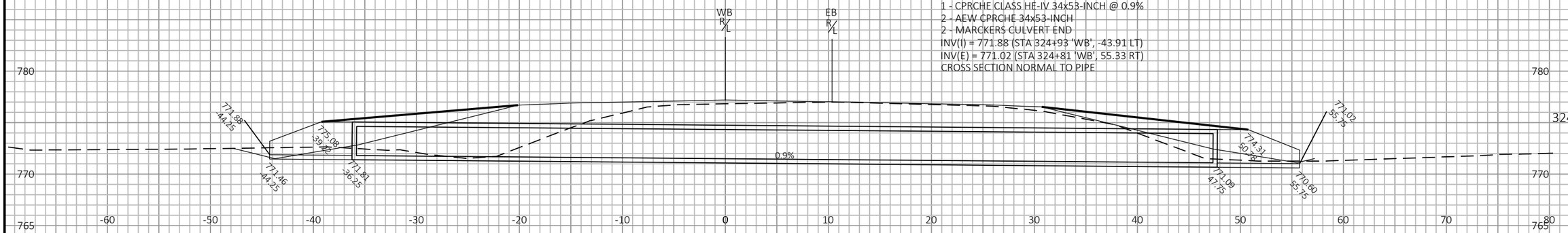
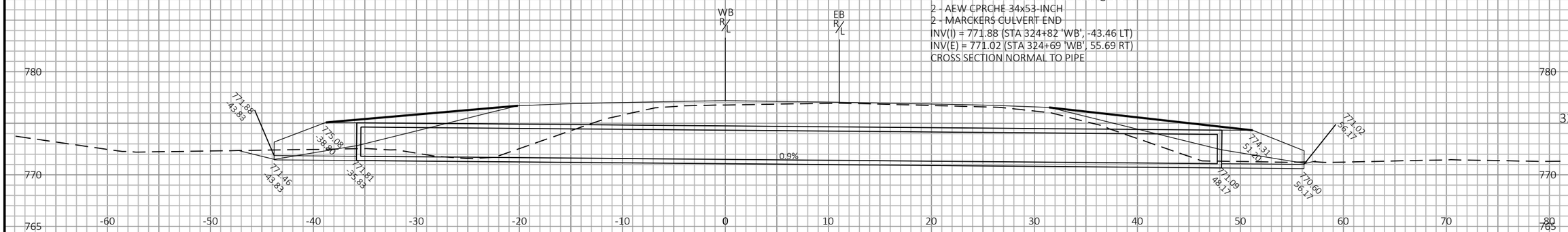
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CULVERTS	SHEET 453	E

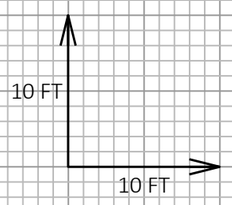
FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090205-XS.DWG PLOT DATE : 7/31/2025 12:49 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 02
WISDOT/CADDS SHEET 49

STA 324+88 'WB' (SKEWED 7° L.H.F)
REMOVE EXISTING PIPE
1 - CPRCHE CLASS HE-IV 34x53-INCH @ 0.9%
2 - AEW CPRCHE 34x53-INCH
2 - MARCKERS CULVERT END
INV(I) = 771.88 (STA 324+93 'WB', -43.91 LT)
INV(E) = 771.02 (STA 324+81 'WB', 55.33 RT)
CROSS SECTION NORMAL TO PIPE



STA 324+76 'WB' (SKEWED 7° L.H.F)
REMOVE EXISTING PIPE
1 - CPRCHE CLASS HE-IV 34x53-INCH @ 0.9%
2 - AEW CPRCHE 34x53-INCH
2 - MARCKERS CULVERT END
INV(I) = 771.88 (STA 324+82 'WB', -43.46 LT)
INV(E) = 771.02 (STA 324+69 'WB', 55.69 RT)
CROSS SECTION NORMAL TO PIPE





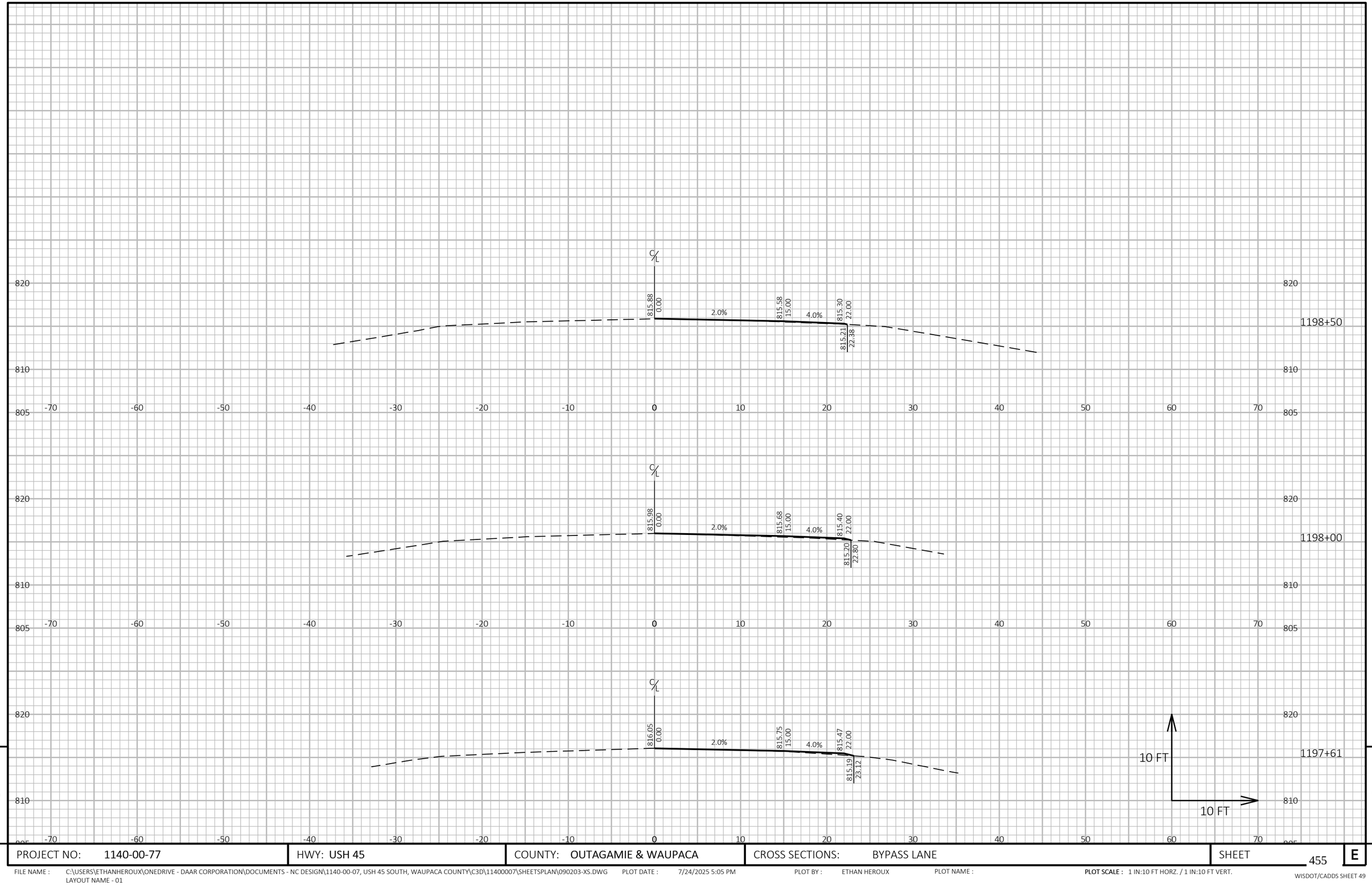
9

9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: CULVERTS	SHEET 454	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090205-XS.DWG PLOT DATE : 7/31/2025 12:49 PM PLOT BY : ETHAN HEROUX PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 03

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 455	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 01

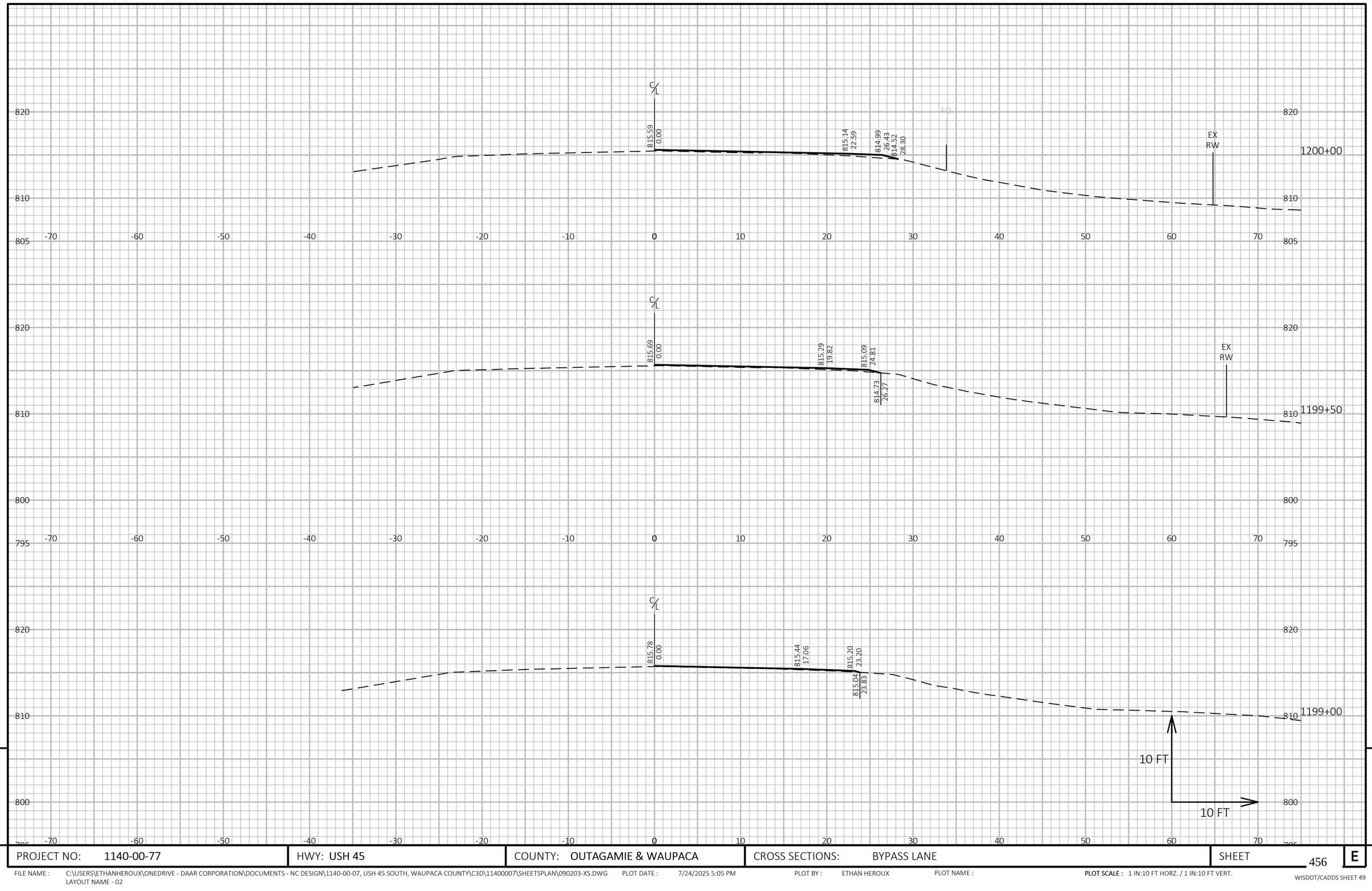
PLOT DATE : 7/24/2025 5:05 PM

PLOT BY : ETHAN HEROUX

PLOT NAME :

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

WISDOT/CADDS SHEET 49

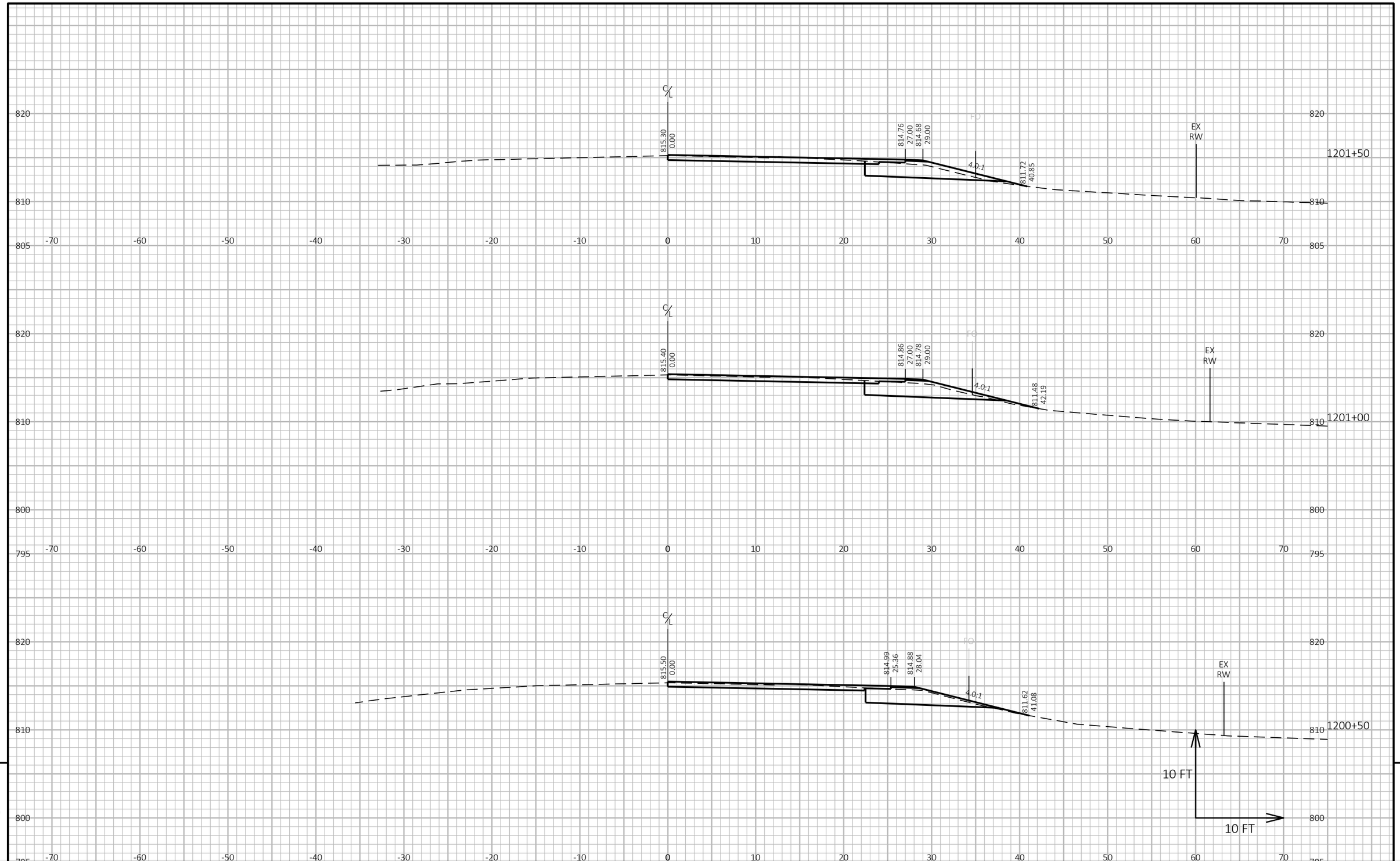


9

9

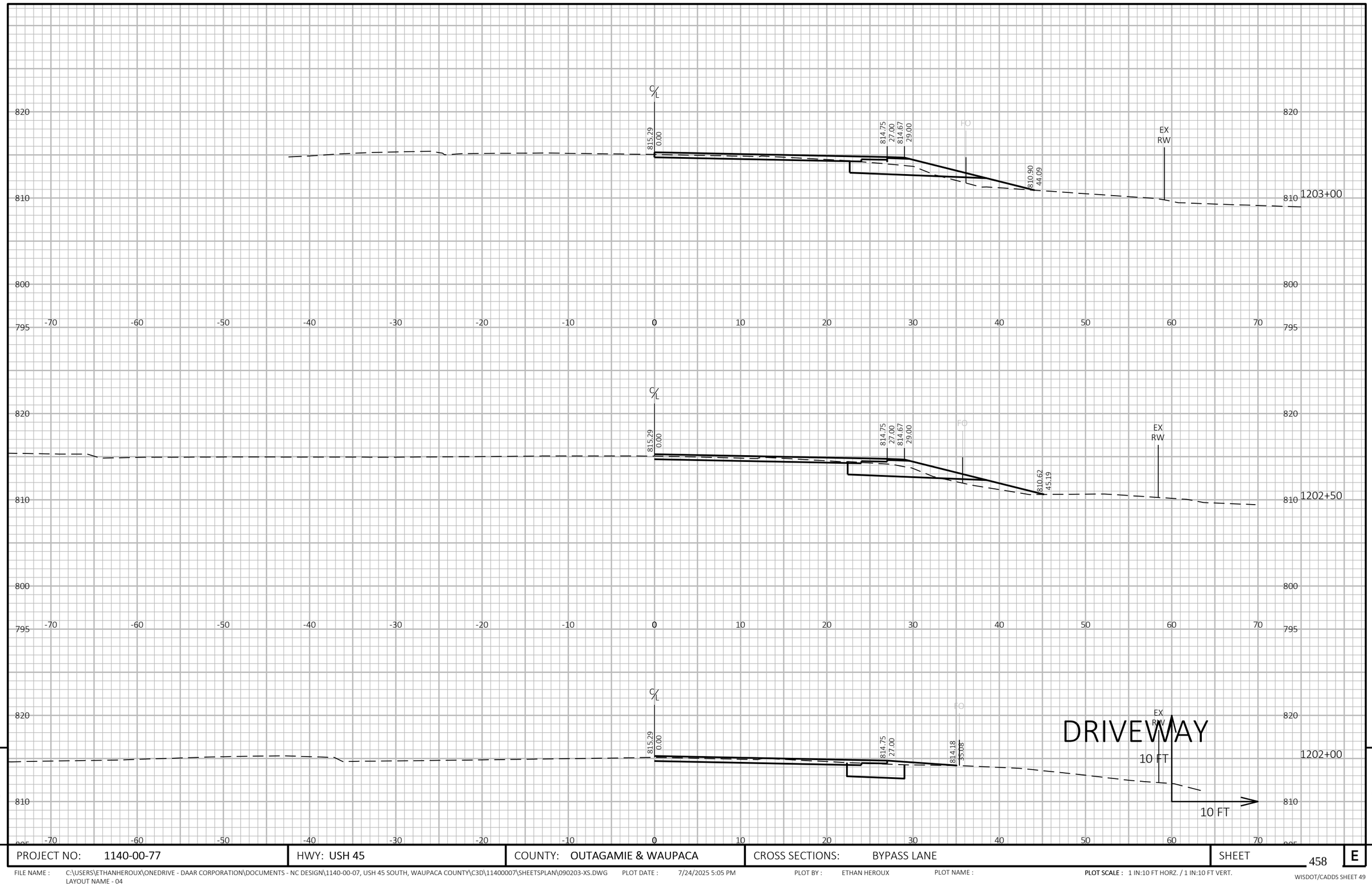
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 456	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 02
PLOT DATE : 7/24/2025 5:05 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 457	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 03
PLOT DATE : 7/24/2025 5:05 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

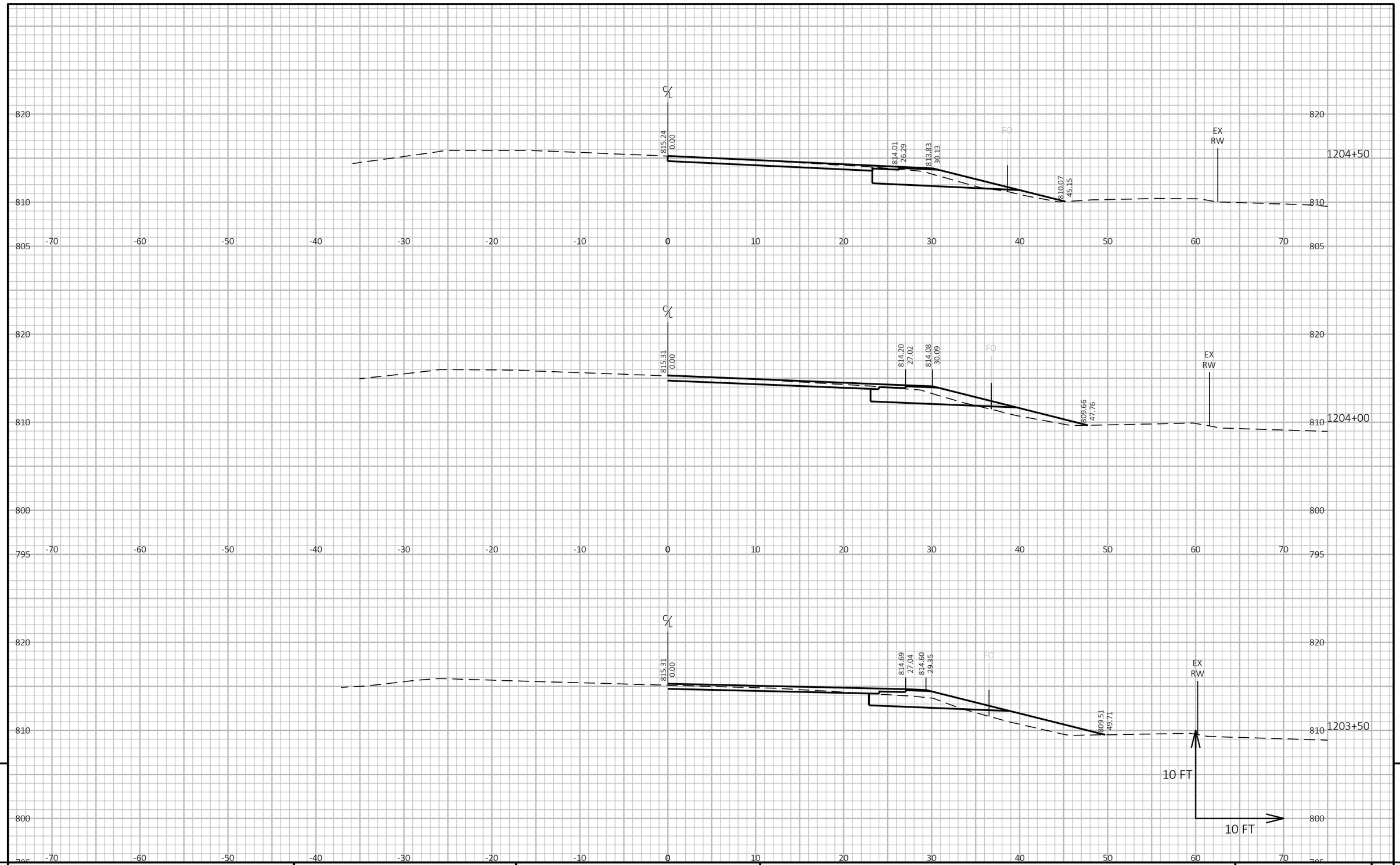


9

9

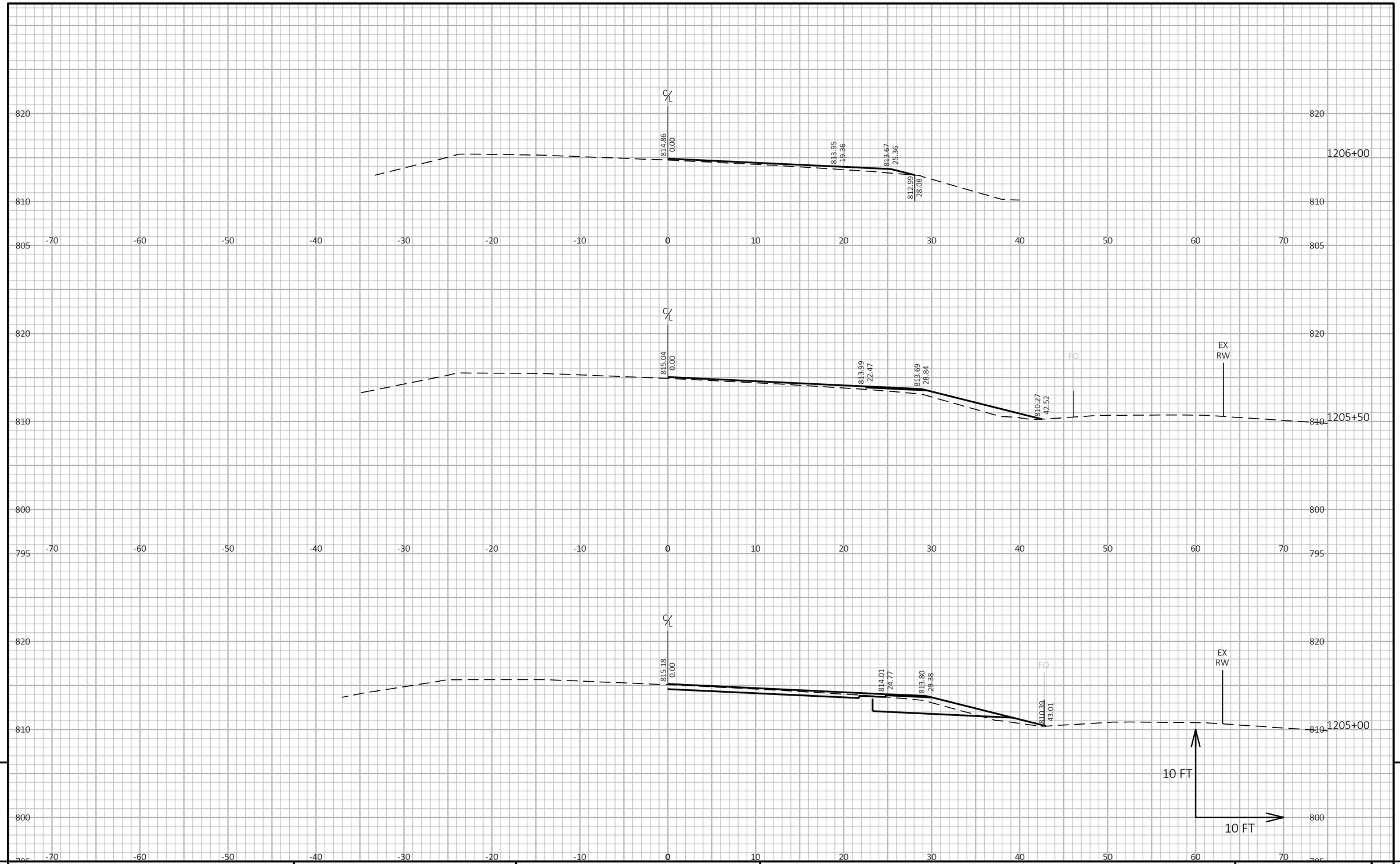
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 458	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 04
PLOT DATE : 7/24/2025 5:05 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



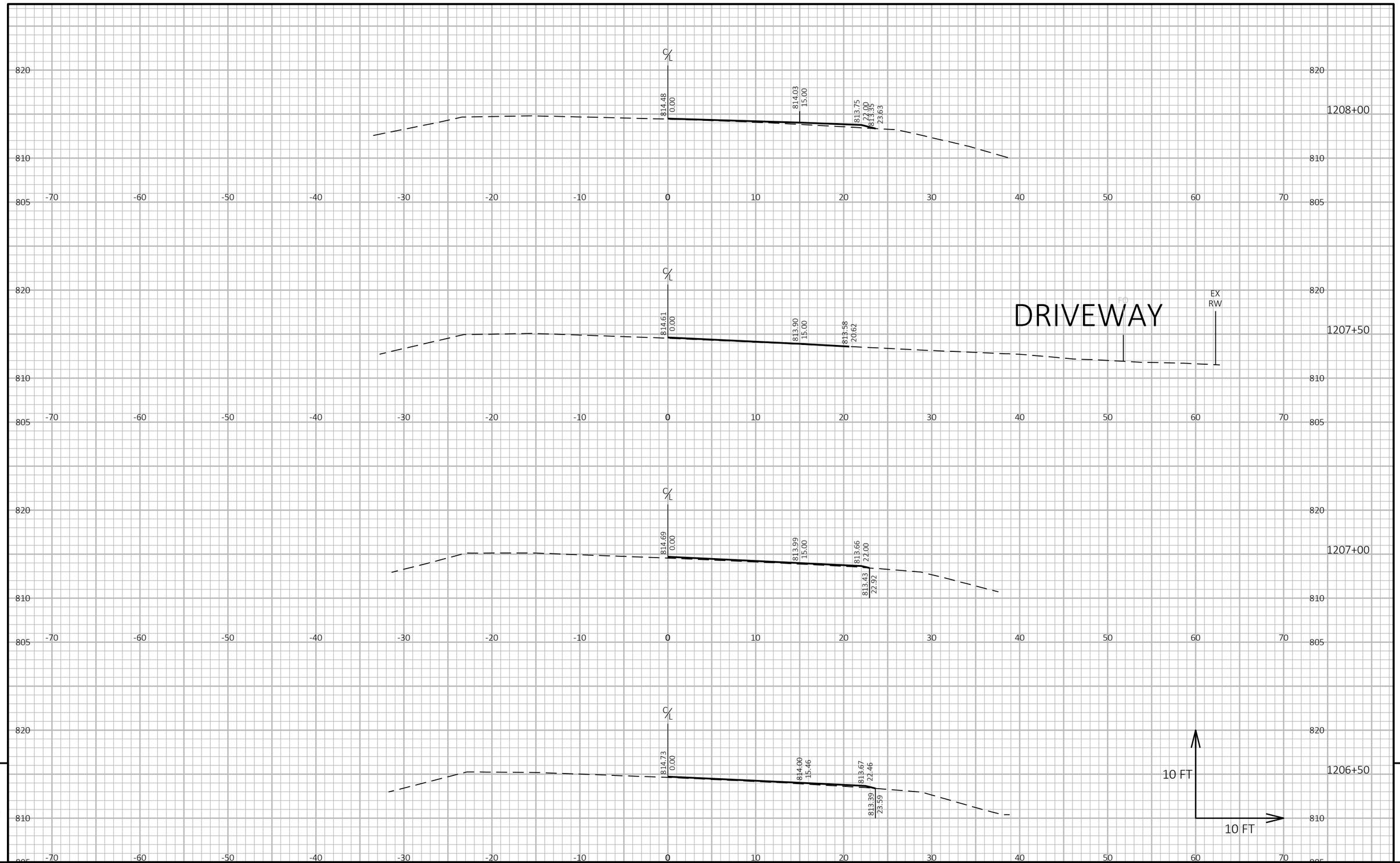
PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 459	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 05
PLOT DATE : 7/24/2025 5:05 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 460	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 06
PLOT DATE : 7/24/2025 5:05 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

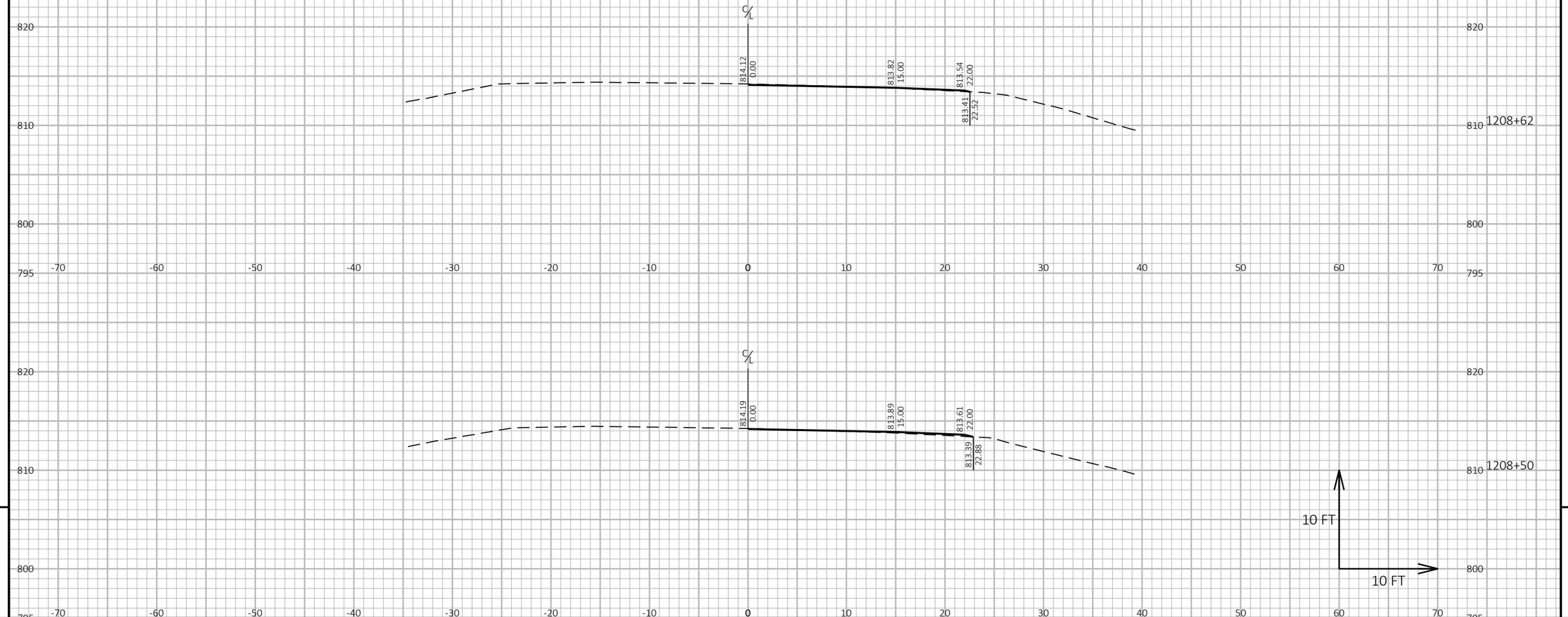


9

9

PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 461	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 07
PLOT DATE : 7/24/2025 5:05 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

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PROJECT NO: 1140-00-77	HWY: USH 45	COUNTY: OUTAGAMIE & WAUPACA	CROSS SECTIONS: BYPASS LANE	SHEET 462	E

FILE NAME : C:\USERS\ETHANHEROUX\ONEDRIVE - DAAR CORPORATION\DOCUMENTS - NC DESIGN\1140-00-07, USH 45 SOUTH, WAUPACA COUNTY\C3D\11400007\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 08
PLOT DATE : 7/24/2025 5:05 PM
PLOT BY : ETHAN HEROUX
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WIS

PROJECT ID: 6220-04-76

WITH: 1140-00-77

COUNTY: WAUPACA & OUTAGAMIE

NOVEMBER 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 = 698

15

N

DESIGN DESIGNATION 6220-04-06

A.A.D.T.	2026	=	8000
A.A.D.T.	2046	=	8400
D.H.V.		=	--
D.D.		=	50/50
T.		=	13.2
DESIGN SPEED		=	50 MPH
ESALS		=	2,700,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

NEW LONDON - BLACK CREEK

W JEANNE STREET TO CTH S

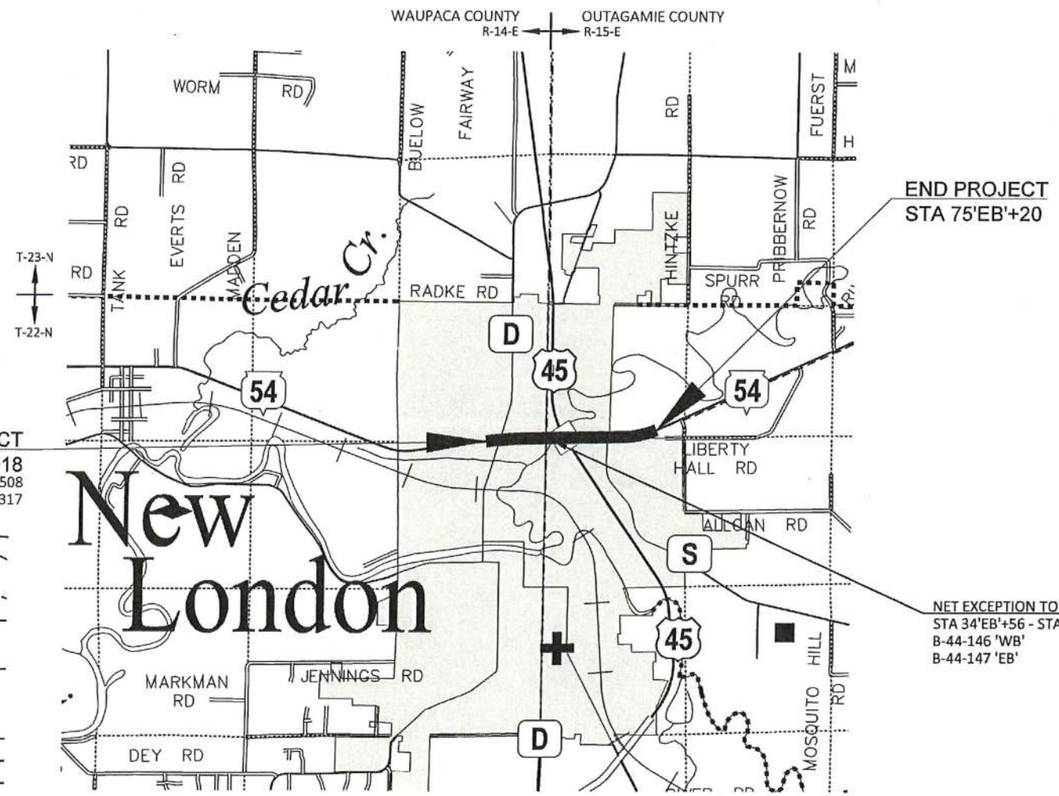
STH 54

WAUPACA & OUTAGAMIE COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6220-04-76	WISC 2026057	1

STATE PROJECT NUMBER

6220-04-76



BEGIN PROJECT
STA 7'EB'+18
X = 625,322.508
Y = 358,068.317

END PROJECT
STA 75'EB'+20

NET EXCEPTION TO CL LENGTH
STA 34'EB'+56 - STA 37'EB'+19
B-44-146 'WB'
B-44-147 'EB'

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 1.288 MILES

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 12A

ORIGINAL PLANS PREPARED BY

QUEST

Civil Engineers, LLC

WISCONSIN
LUKE T. HARDINGER
E-50051
WISCONSIN RAPIDS WISCONSIN
PROFESSIONAL ENGINEER

7-12-25
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	QUEST CIVIL ENGINEERS
Designer	QUEST CIVIL ENGINEERS
Project Manager	KOREY BOEHM
Regional Examiner	FRED SCHUNKE
Regional Supervisor	KEVIN KUJAWA

APPROVED FOR THE DEPARTMENT

DATE: 7-15-25 (Signature)

E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\010101-TI-54.DWG PLOT DATE : 7/10/2025 4:06 PM PLOT BY : LUKE HARDINGER PLOT NAME :

2

GENERAL NOTES

THE ALIGNMENT IN THIS PLAN IS BASED ON THE EXISTING AS BUILTS. THE ACTUAL ROADWAY CENTERLINE MAY DEVIATE FROM THE PLAN. NEW HMA PAVEMENT SHALL FOLLOW EXISTING ROADWAY CENTERLINE. ANY ADJUSTMENTS SHALL BE INCIDENTAL TO OTHER ITEMS IN THE CONTRACT.

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

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PLAN DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
SIGNING PLAN
TRAFFIC SIGNAL
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT PLAN

ORDER OF SECTION 9 SHEETS

EARTHWORK SUMMARY
CROSS SECTIONS – STAGE 1 TEMPORARY WIDENING ‘X’
CROSS SECTIONS – STAGE 2 WB STH 54
CROSS SECTIONS – STAGE 2 DITCH CLEANING ‘L’ & ‘M’
CROSS SECTIONS – STAGE 3 EB STH 54
CROSS SECTIONS – STAGE 3 TEMPORARY WIDENING ‘W’
CROSS SECTIONS – STAGE 3A TEMPORARY MEDIAN PAVEMENT
CROSS SECTIONS – STAGE 4 TEMPORARY WIDENING ‘Y’
CROSS SECTIONS – STAGE 4 WB STH 54
CROSS SECTIONS – STAGE 4 CTH D
CROSS SECTIONS – STAGE 4 STEEL THRIE BULLNOSE AT B-44-0144
CROSS SECTIONS – STAGE 4 REMOVE TEMPORARY WIDENING ‘Z’
CROSS SECTIONS – STAGE 5 REMOVE TEMPORARY WIDENING ‘W’
CROSS SECTIONS – STAGE 5 EB STH 54
CROSS SECTIONS – STAGE 5 CTH D
CROSS SECTIONS – STAGE 6 STH 54 MEDIAN ISLAND
CROSS SECTIONS – STAGE 6 CTH D MEDIAN ISLAND

HMA PAVEMENT LAYER THICKNESS

TOTAL LAYER THICKNESS	LAYERS	HMA PAVEMENT	LOCATIONS
JEANNE ST	1 .75” UPPER LAYER	4-MT 58-28 S	
TEMPORARY WIDENINGS	1.75” UPPER LAYER 2.25” LOWER LAYER	ASPHALTIC SURFACE / ASPHALTIC SURFACE TEMPORARY (SEE PLAN DETAILS FOR LOCATIONS)	TEMPORARY WIDENING ‘X’ – STAGE 1 TEMPORARY WIDENING ‘Z’ – STAGE 2 TEMPORARY WIDENING ‘W’ – STAGE 3 TEMPORARY WIDENING ‘Y’ – STAGE 4

DNR CONTACT

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
Marty Dillenburg
625 E County Road Y, Suite 70
Oshkosh, WI 54901-9731
(920) 410-7428
marty.dillenburg@wisconsin.gov

RUNOFF COEFFICENT 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-.85											
GRAVEL ROADS, SHOULDERS	.40-.60											

TOTAL PROJECT AREA = 14.15 ac
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES= 2.52 ac

UTILITY CONTACTS

AT&T Wisconsin – Communications
Mike Decet
221 W. Washington Street
Appleton, WI 54911
(920) 840-4344
md4321@att.com

Spectrum Communications - Communication Line
Ross Rondeau
3545 E Plank Rd
Appleton, WI 54915
(920) 378-0366
ross.rondeau@charter.com

New London Department of Public Works - Sewer
Robert Garske
215 North Shawano St
New London, WI 54961
(920) 472-3217
rgarske@newlondonwi.org

New London Utilities - Electricity
Andy Chandler
400 E North Water St
New London, WI 54961
(920) 585-7964
achandler@nluwi.org

New London Utilities - Water
Mike Pinch
400 E North Water St
New London, WI 54961
(920) 982-8516
mpinch@nluwi.org

New London Wastewater Treatment Facility - Sewer
Robert Garske
1010 W Wolfriver Ave
New London, WI 54961
(920) 472-3217
rgarske@newlondonwi.org

We Energies – Gas/Petroleum
Cody Beckman
800 S Lynndale Drive
Appleton, WI 54912
(920) 380-3422
cody.beckman@we-energies.com

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

2

2

N

NORTHRIDGE DR

CITY OF NEW LONDON

CITY OF NEW LONDON

TOWN OF LIBERTY

CTH D/N SHAWANO ST

HENRY ST

USH 45

PROJECT 1140-00-77
USH 45

STRUCTURE B-44-0144
USH 45 OVER STH 54
INSTALL STEEL THRIE BEAM BULLNOSE

END PROJECT
STA 75'EB'+20

BEGIN PROJECT
STA 7'EB'+18

JEANNE ST

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

5'EB'
10'EB'
15'EB'
20'EB'
25'EB'
30'EB'
35'EB'
40'EB'
45'EB'
50'EB'
55'EB'
60'EB'
65'EB'
70'EB'
75'EB'
80'EB'

NET EXCEPTION TO CL LENGTH
STA 34'EB'+56- STA 37'EB'+19
B-44-0146 'WB'
B-44-0147 'EB'

EMBARRASS RIVER

RIVER RD

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

CTH S

END CONSTRUCTION
STA 78'EB'+63

BEGIN CONSTRUCTION
STA 3'EB'+75

RASMUSSEN CANAL

CTH D/N SHAWANO ST

USH 45

BROAD ST

RAILROAD

WAUPACA COUNTY

OUTAGAMIE COUNTY

CITY OF NEW LONDON

CITY OF NEW LONDON

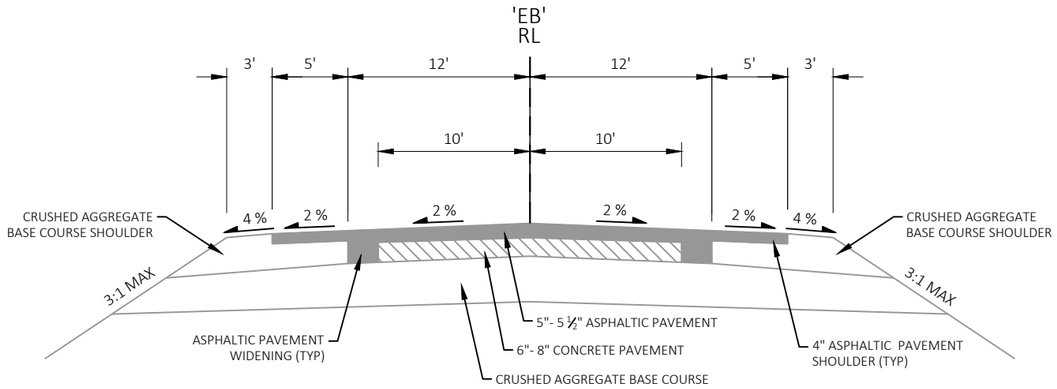
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\020201_PO-54.DWG
LAYOUT NAME - Plan 1 IN 1000 FT

PLOT DATE : 6/28/2025 4:18 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:500 FT

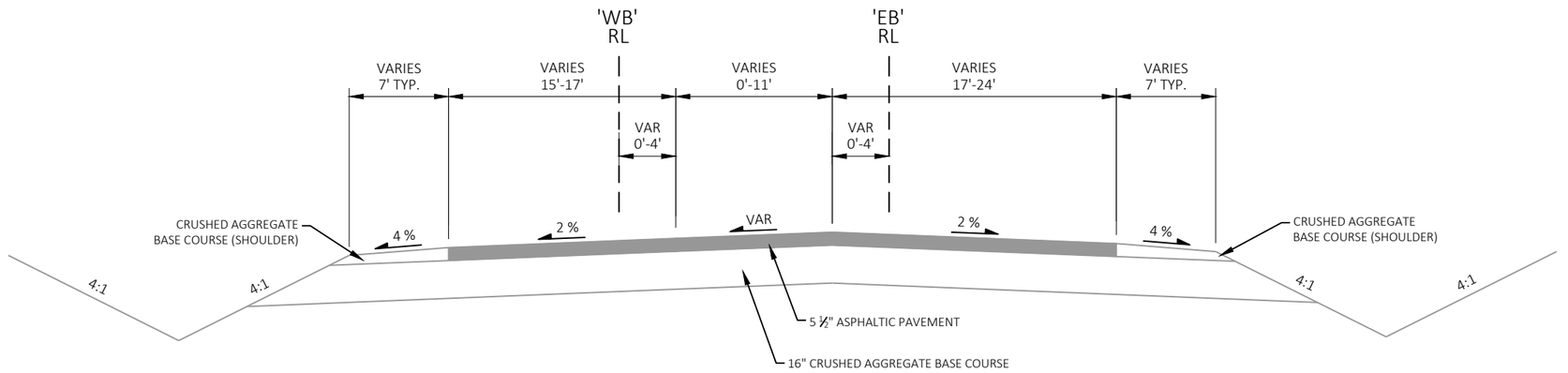
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION

STA 3'EB'+75- STA 8'EB'+75

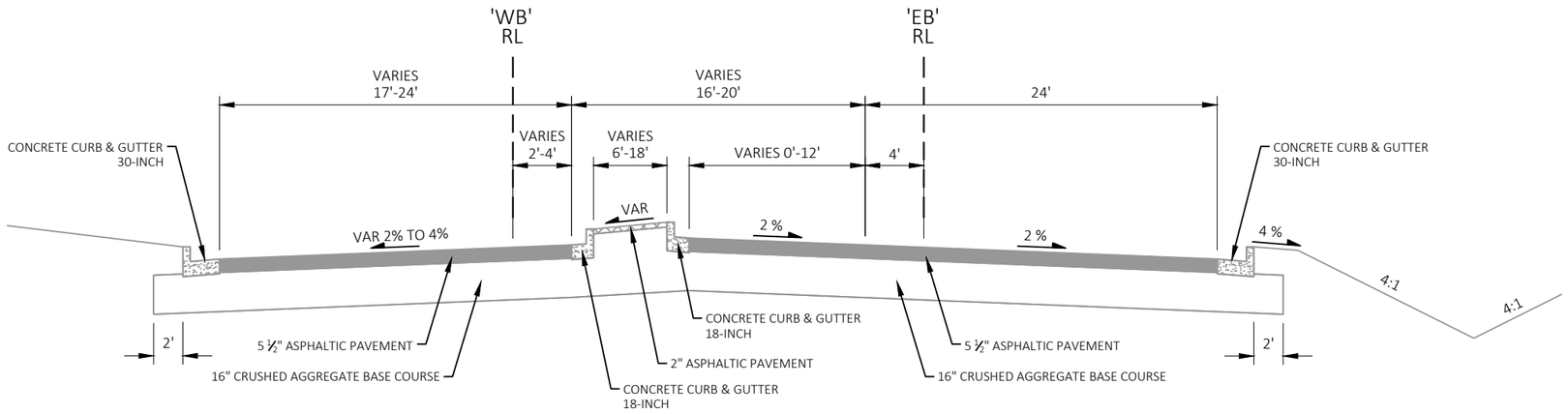


EXISTING TYPICAL SECTION

STA 8'EB'+75 - STA 11'EB'+26
STA 208'WB'+72 - STA 211'WB'+23

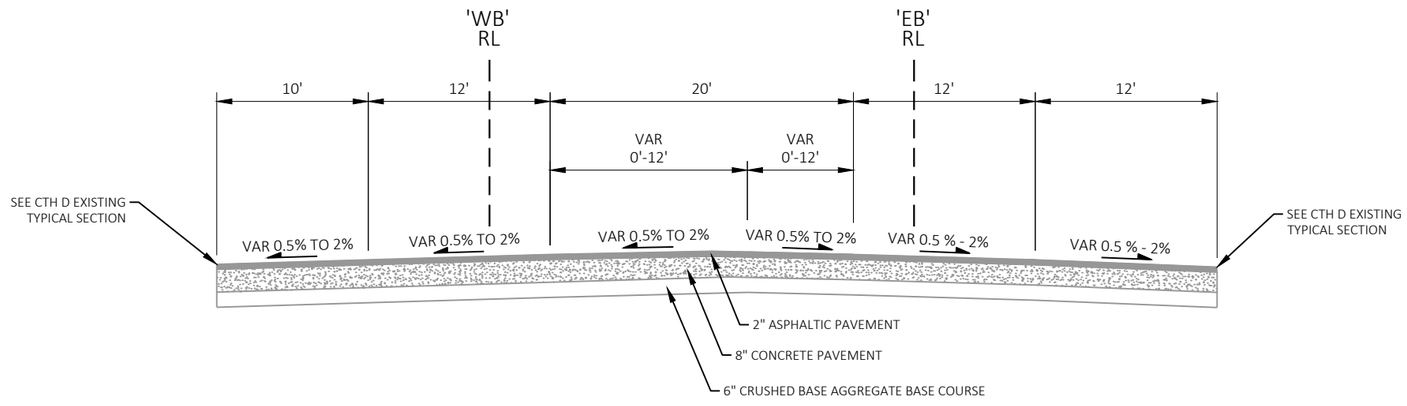
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 5	E

2



EXISTING TYPICAL SECTION

STA 11'EB'+26 - STA 15'EB'+59
STA 211'WB'+23 - STA 215'WB'+60

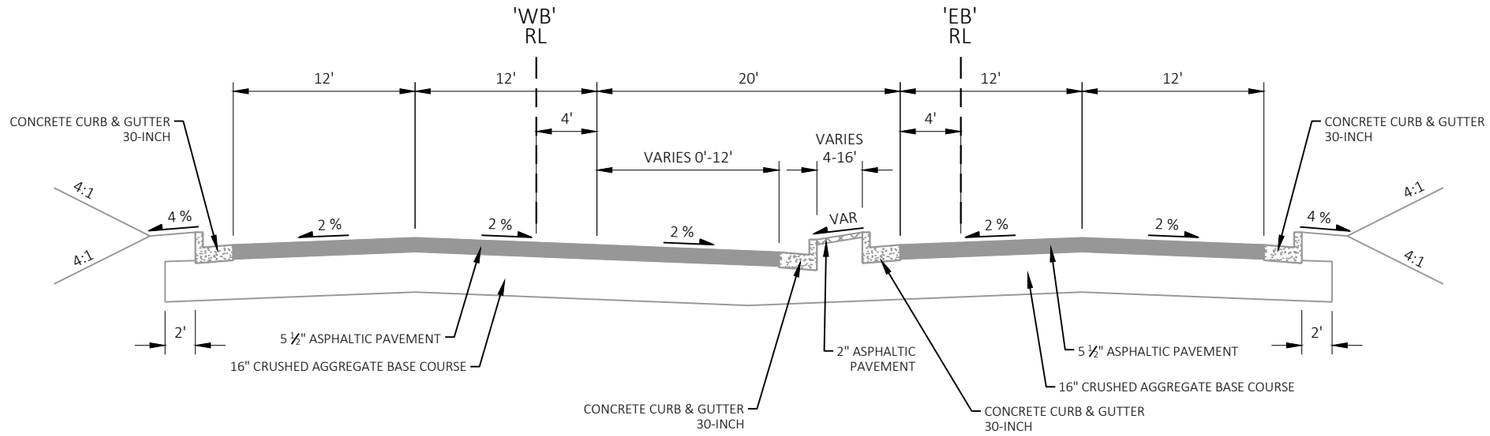


EXISTING TYPICAL SECTION

STA 15'EB'+59 - STA 16'EB'+63
STA 215'WB'+60 - STA 216'WB'+61

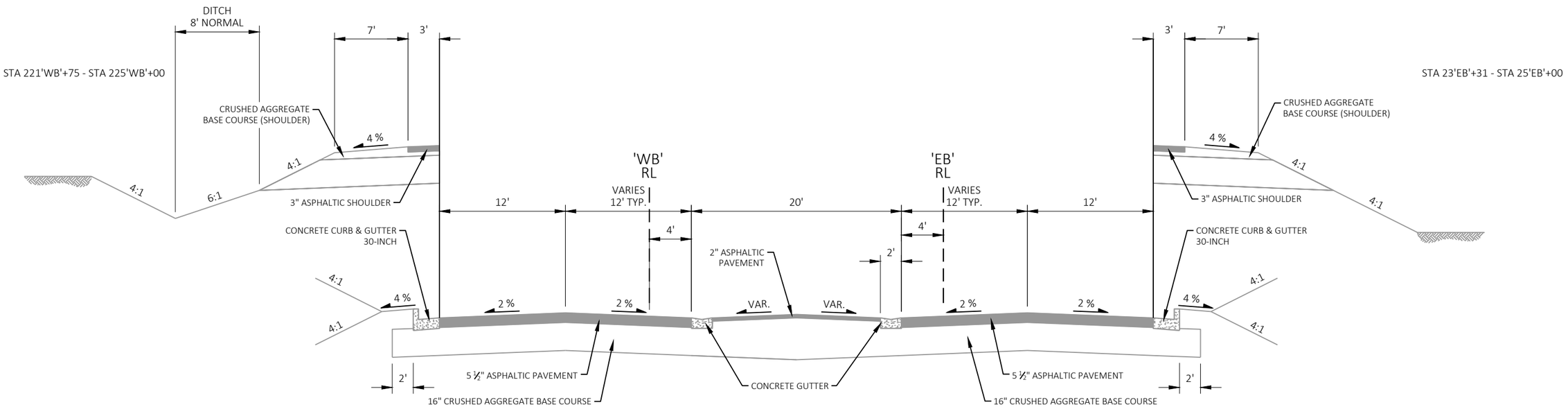
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 6	E

2



EXISTING TYPICAL SECTION

STA 16'EB'+63 - STA 19'EB'+36
STA 216'WB'+61 - STA 219'WB'+36

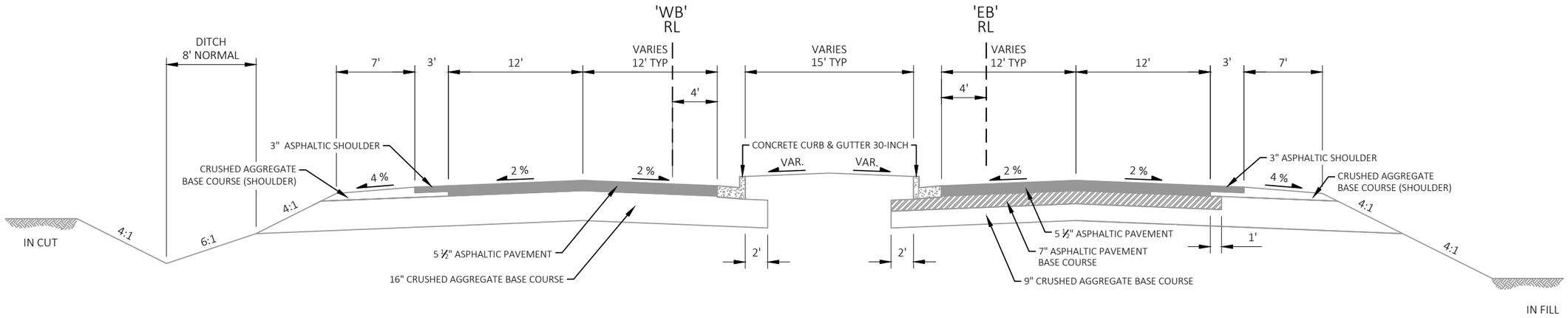


EXISTING TYPICAL SECTION

STA 19+36'EB' - STA 25'EB'+00
STA 219'WB'+36 - STA 225'WB'+00

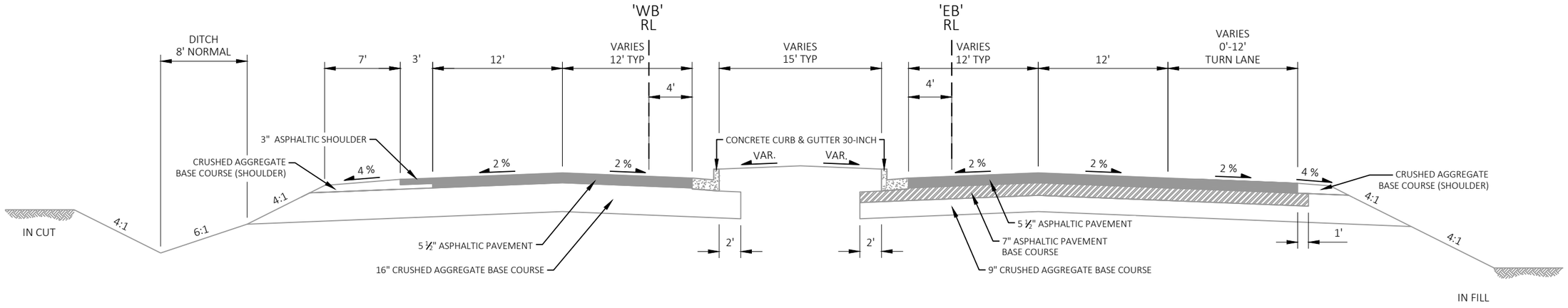
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 7	E

2



EXISTING TYPICAL SECTION

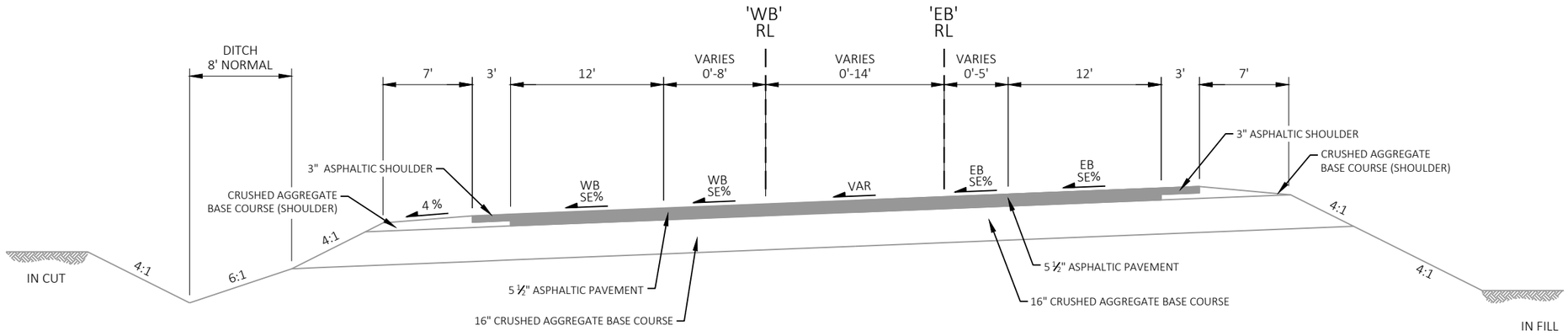
STA 25'EB'+00 - STA 34'EB'+56
STA 225'WB'+00 - STA 234'WB'+74
STA 37'EB'+20 - STA 44'EB'+90
STA 237'WB'+38 - STA 247'WB'+50
STA 55'EB'+65 - STA 61'EB'+40
STA 255'WB'+65 - STA 261'WB'+40



EXISTING TYPICAL SECTION

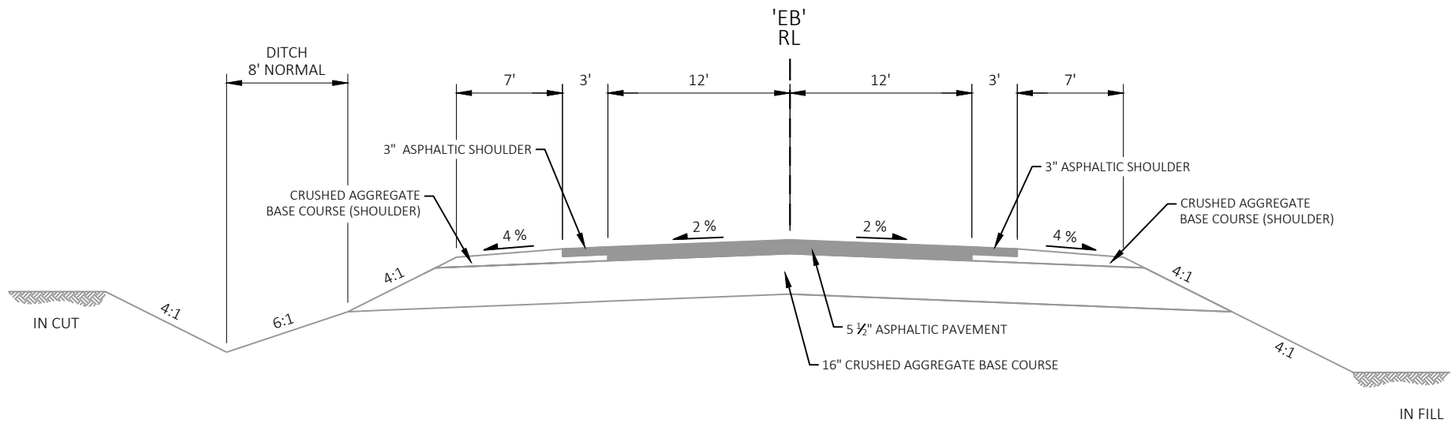
STA 44'EB'+90 - STA 55'EB'+65
STA 244'WB'+90 - STA 255'WB'+65

2



EXISTING TYPICAL SECTION

STA 61'EB'+40 - STA 64'EB'+54
STA 261'WB'+40 - STA 264'WB'+54

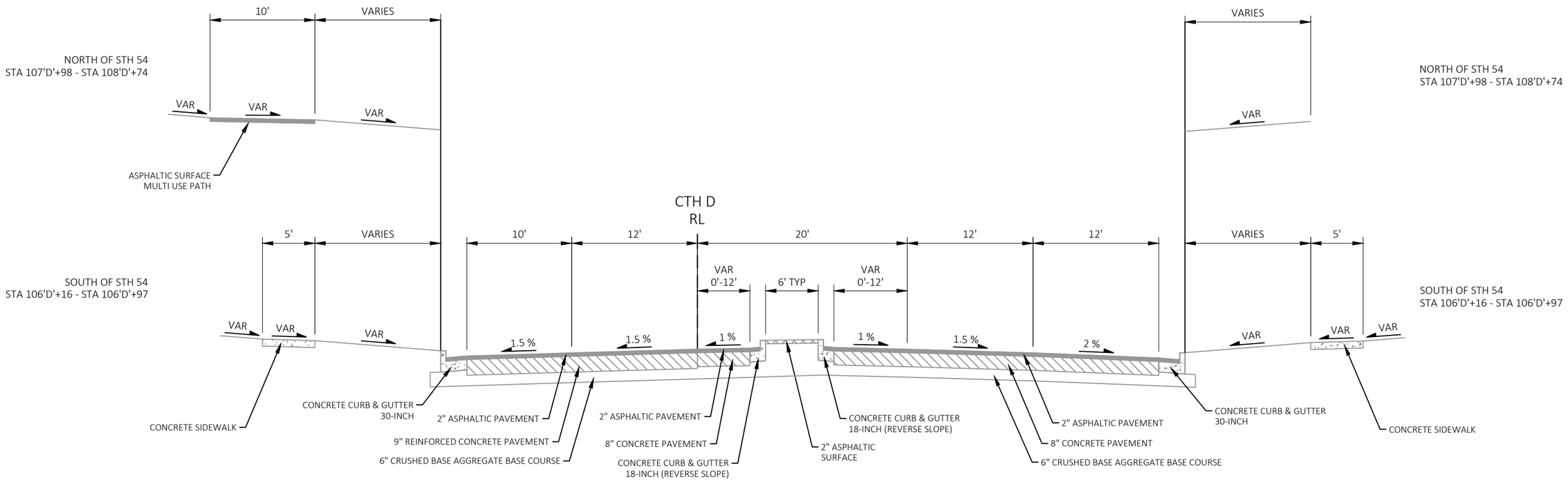


EXISTING TYPICAL SECTION

STA 64'EB'+54 - STA 79'EB'+95

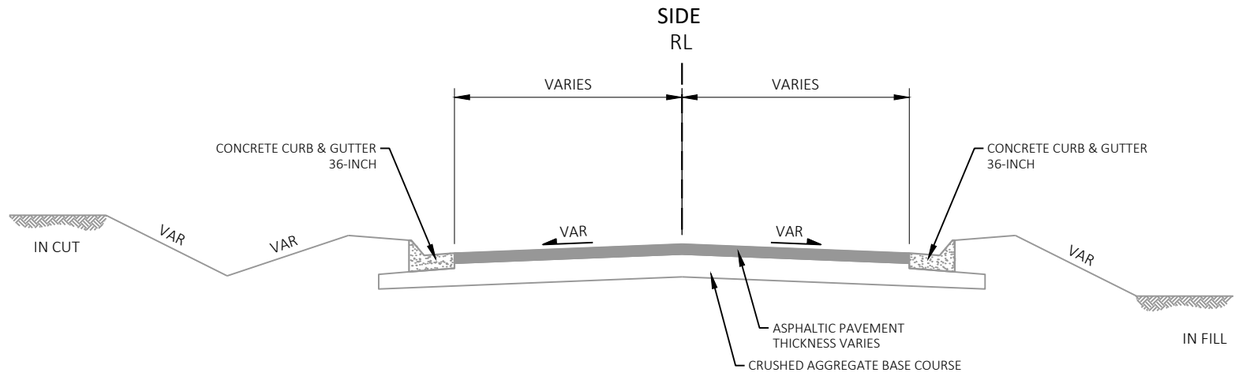
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 9	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\020301_TS_54.DWG
LAYOUT NAME - E5
PLOT DATE : 6/28/2025 4:49 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:10 FT



EXISTING CTH D TYPICAL SECTION

STA 106'D'+16 - STA 106'D'+97
STA 107'D'+98 - STA 108'D'+74



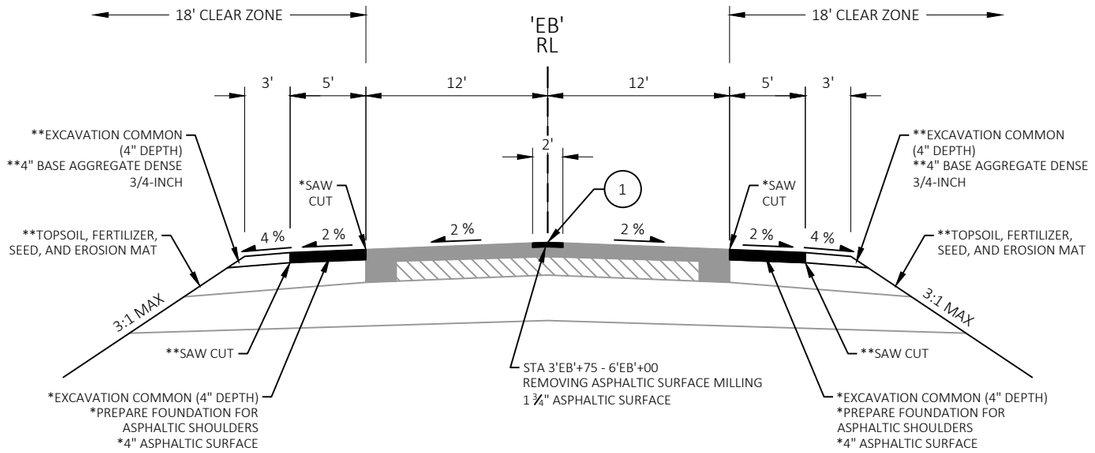
EXISTING TYPICAL SECTION

RIVER RD
CTH S

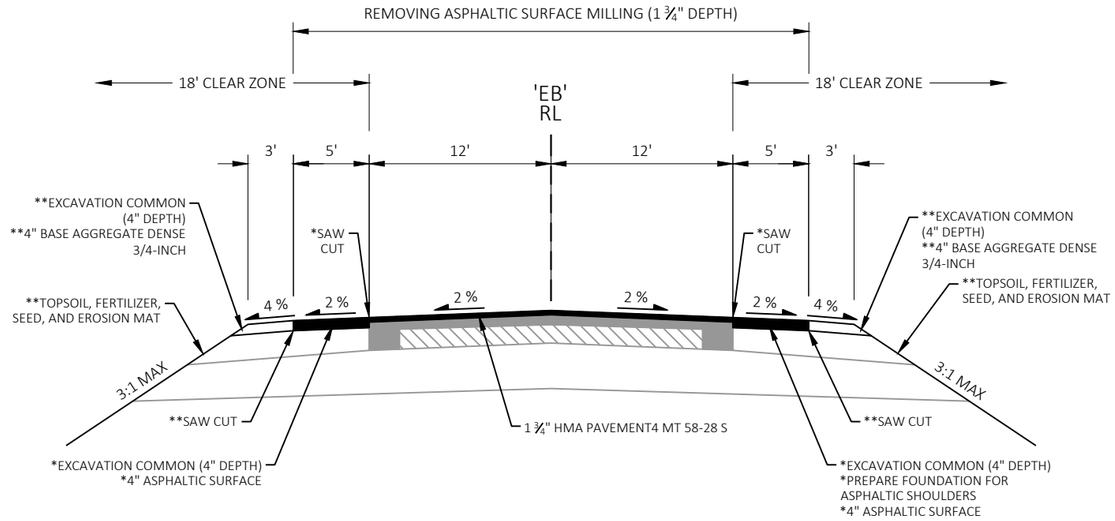
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 10	E

2

1 STA 3'EB'+75 - 6'EB'+00
REMOVE EXISTING CENTERLINE RUMBLE STRIPS (SEE TRAFFIC CONTROL DETAILS)
INSTALL CENTERLINE RUMBLE STRIPS AT END OF PROJECT

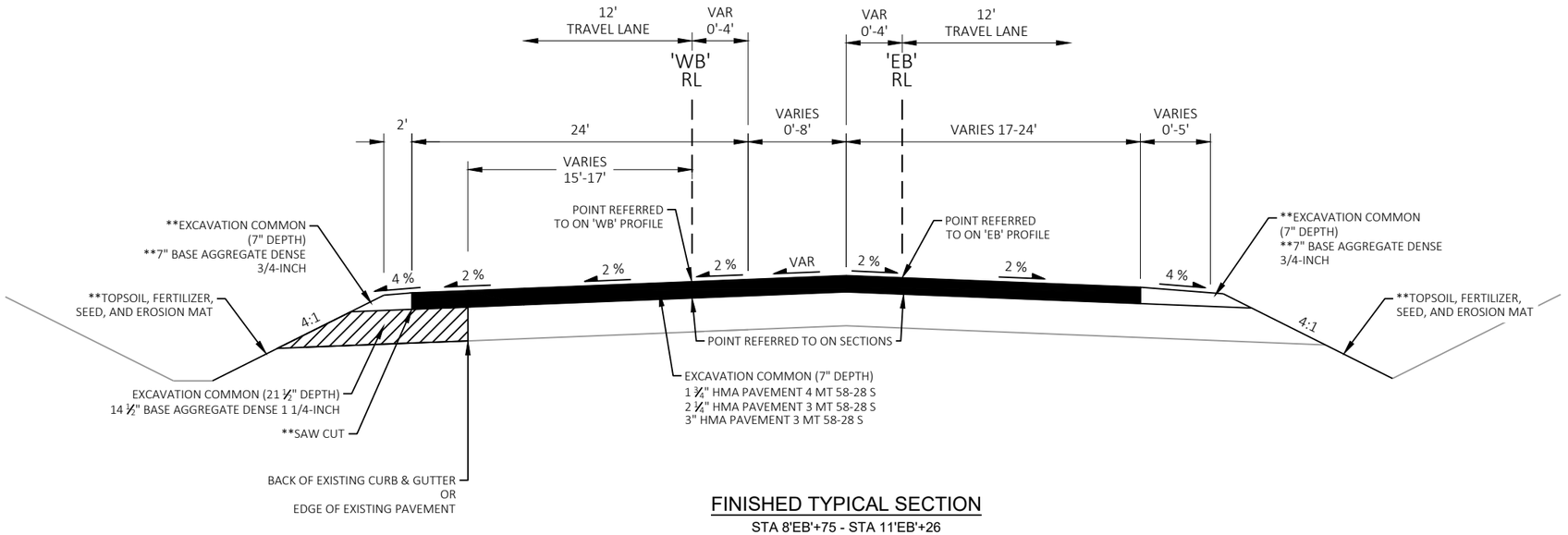


FINISHED TYPICAL SECTION
STA 3'EB'+75 - STA 7'EB'+18



FINISHED TYPICAL SECTION
STA 7'EB'+18 - STA 8'EB'+75

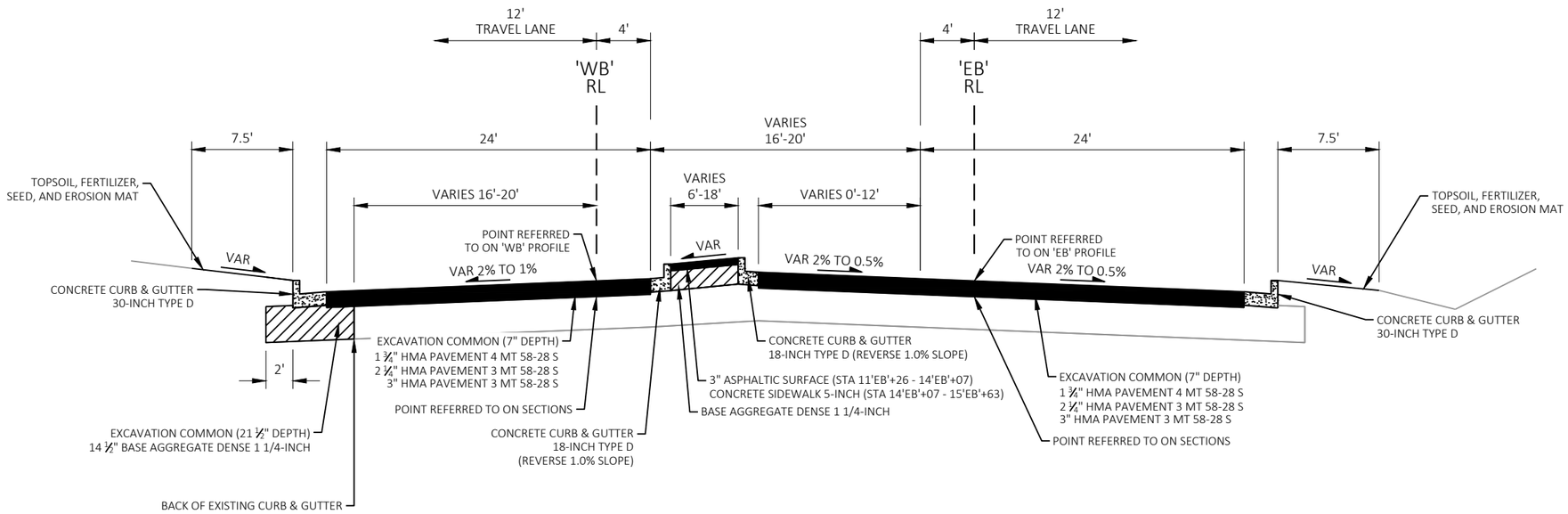
* WORK REQUIRED TO INSTALL TEMPORARY WIDENING
** WORK REQUIRED TO REMOVE TEMPORARY WIDENING



FINISHED TYPICAL SECTION
STA 8'EB'+75 - STA 11'EB'+26
STA 208'WB'+72 - STA 211'WB'+23

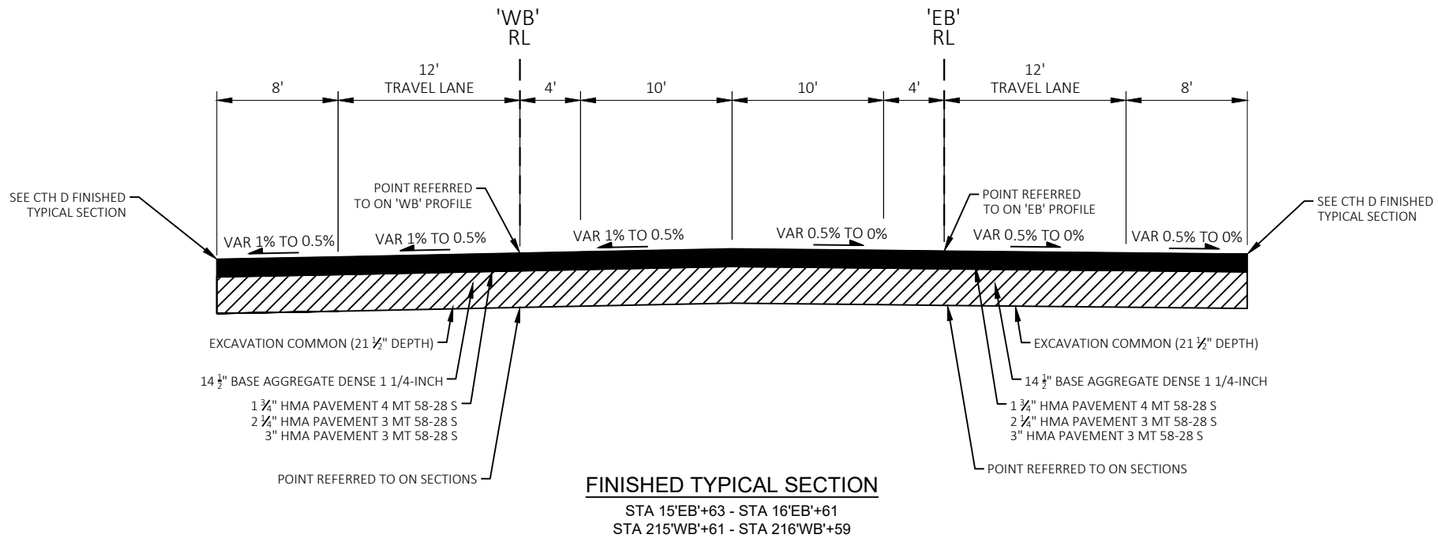
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 11	E

2



FINISHED TYPICAL SECTION

STA 11'EB'+26 - STA 15'EB'+63
STA 211'WB'+23 - STA 215'WB'+61

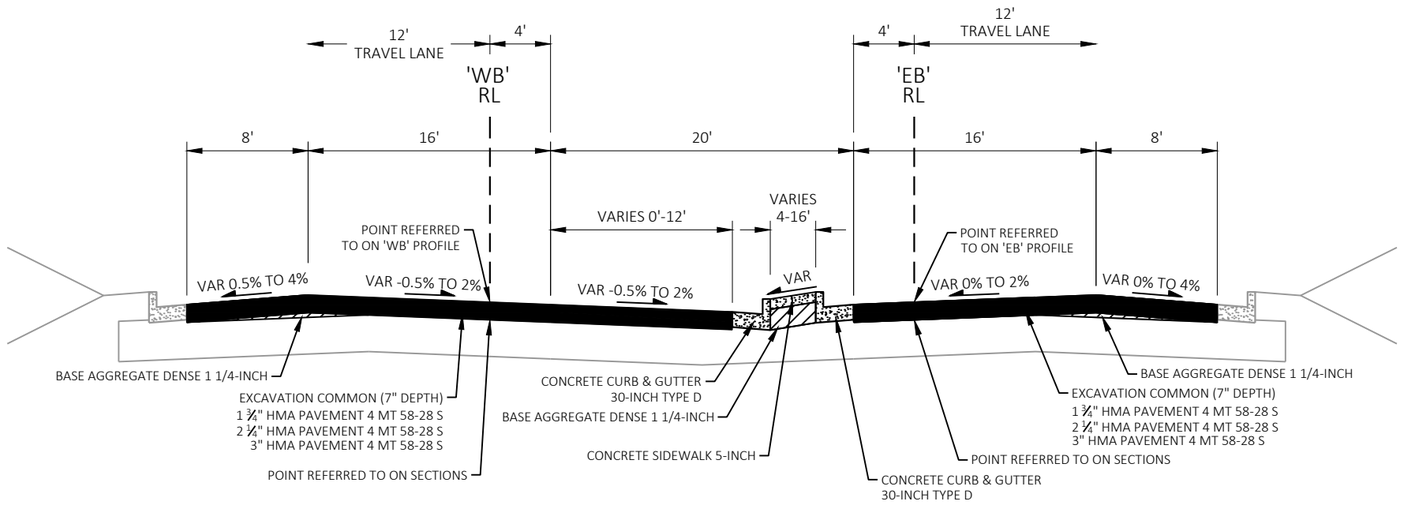


FINISHED TYPICAL SECTION

STA 15'EB'+63 - STA 16'EB'+61
STA 215'WB'+61 - STA 216'WB'+59

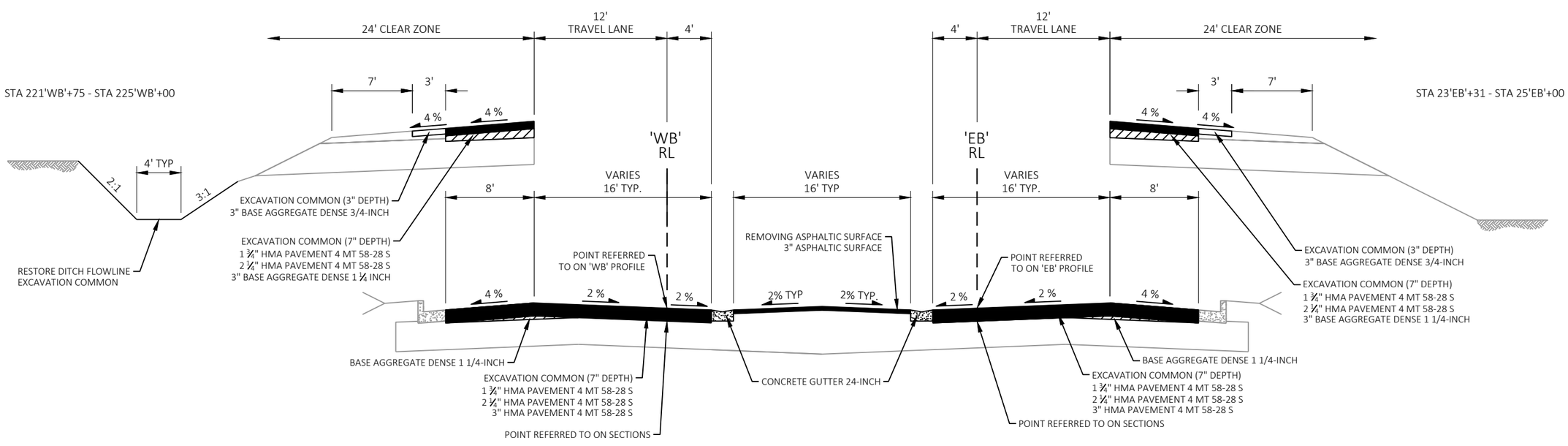
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 12	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\020301_TS_54.DWG
LAYOUT NAME - P2
PLOT DATE : 6/28/2025 4:49 PM
PLOT BY : LUKE HARDINGER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION

STA 16'EB'+61 - STA 19'EB'+29
STA 216'WB'+59 - STA 219'WB'+29

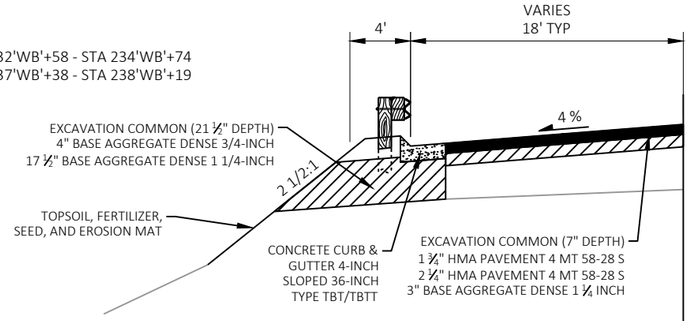


FINISHED TYPICAL SECTION

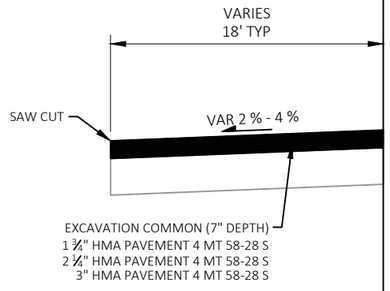
STA 19'EB'+29 - STA 25'EB'+00
STA 219'WB'+29 - STA 225'WB'+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 13	E

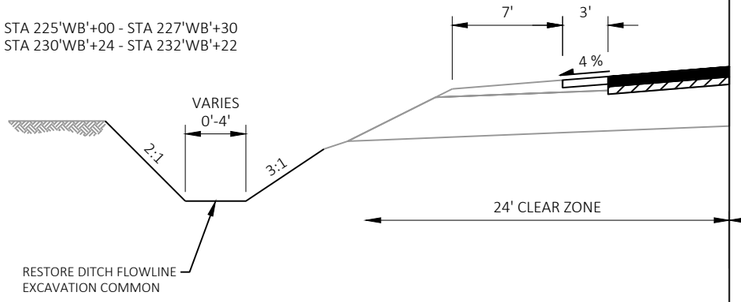
STA 232'WB'+58 - STA 234'WB'+74
STA 237'WB'+38 - STA 238'WB'+19

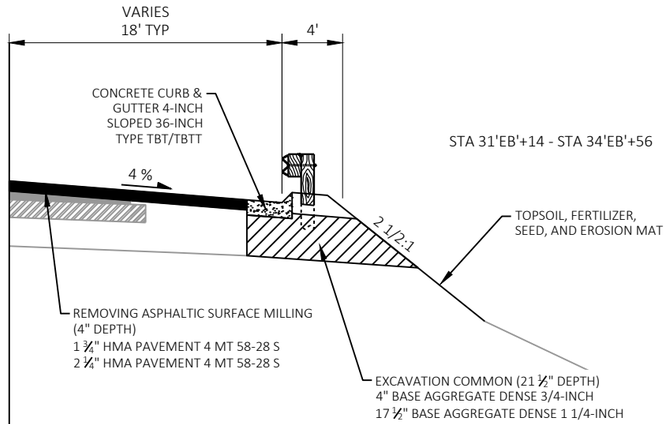


STA 227'WB'+30 - STA 230'WB'+24
USH 45 SB RAMP TERMINALS

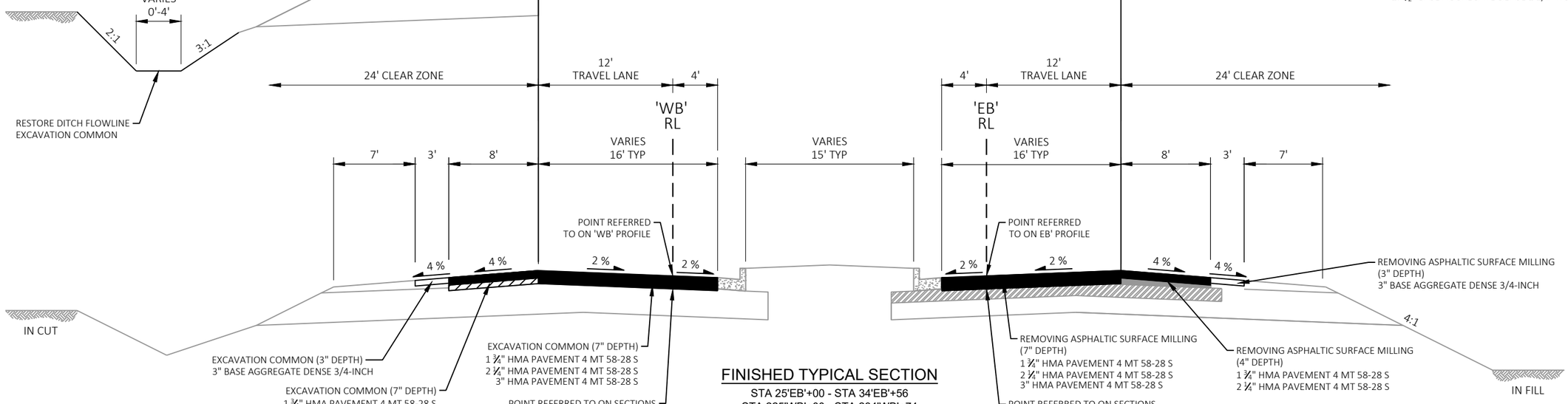


STA 225'WB'+00 - STA 227'WB'+30
STA 230'WB'+24 - STA 232'WB'+22



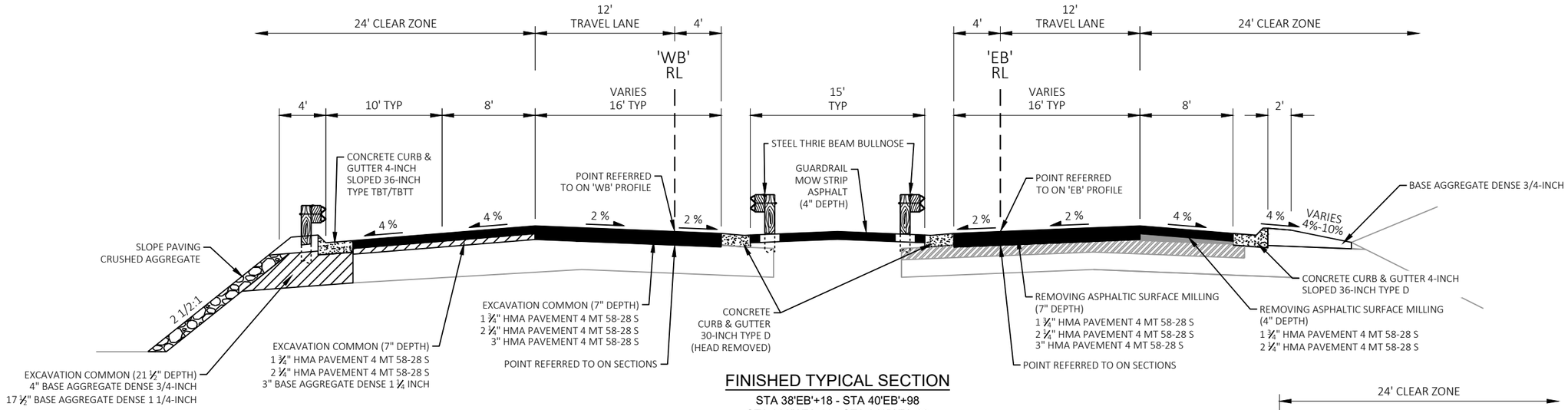


STA 31'EB'+14 - STA 34'EB'+56



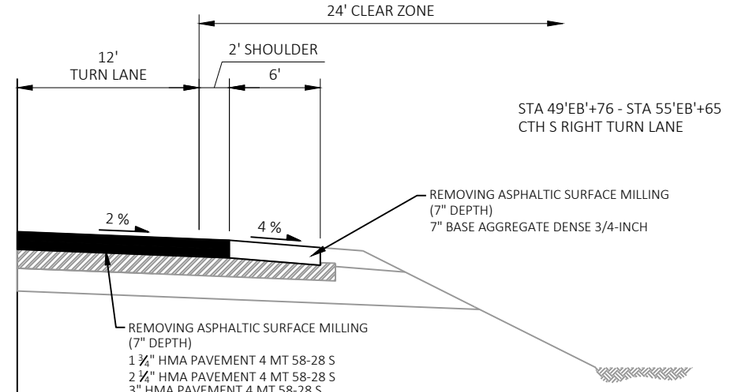
FINISHED TYPICAL SECTION

STA 25'EB'+00 - STA 34'EB'+56
STA 225'WB'+00 - STA 234'WB'+74
STA 37'EB'+19 - STA 38'EB'+18
STA 237'WB'+38 - STA 238'WB'+18
STA 40'EB'+98 - STA 44'EB'+90
STA 240'WB'+98 - STA 244'WB'+90
STA 55'EB'+65 - STA 61'EB'+40
STA 255'WB'+65 - STA 261'WB'+40

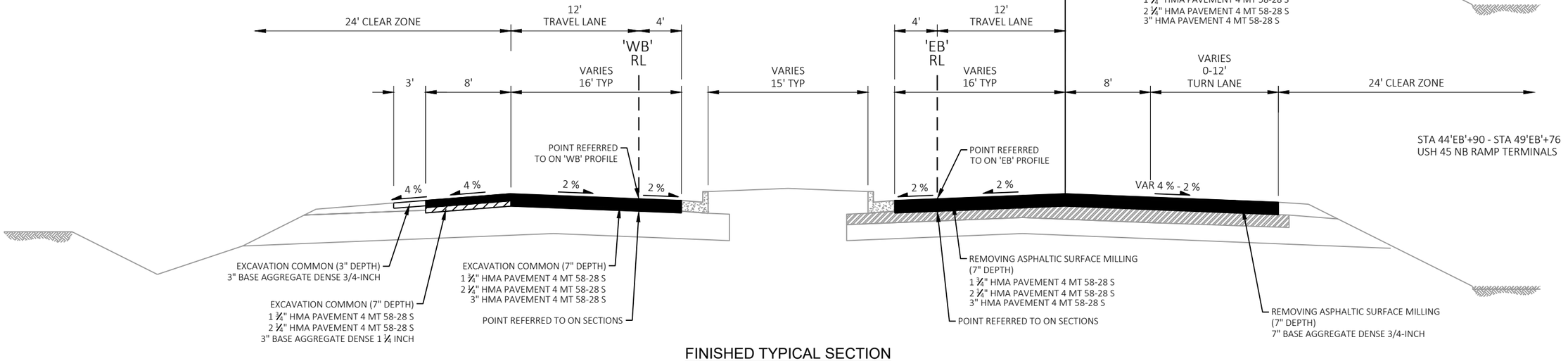


FINISHED TYPICAL SECTION

STA 38'EB'+18 - STA 40'EB'+98
STA 238'WB'+18 - STA 240'WB'+98



STA 49'EB'+76 - STA 55'EB'+65
CTH S RIGHT TURN LANE

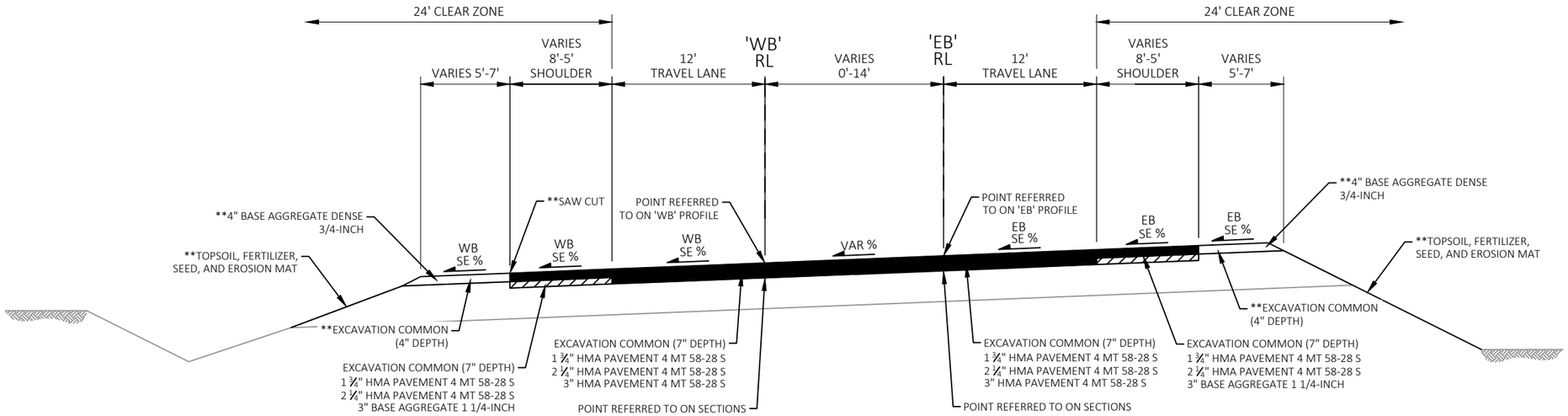


FINISHED TYPICAL SECTION

STA 44'EB'+90 - STA 55'EB'+65
STA 244'WB'+90 - STA 255'WB'+65

STA 44'EB'+90 - STA 49'EB'+76
USH 45 NB RAMP TERMINALS

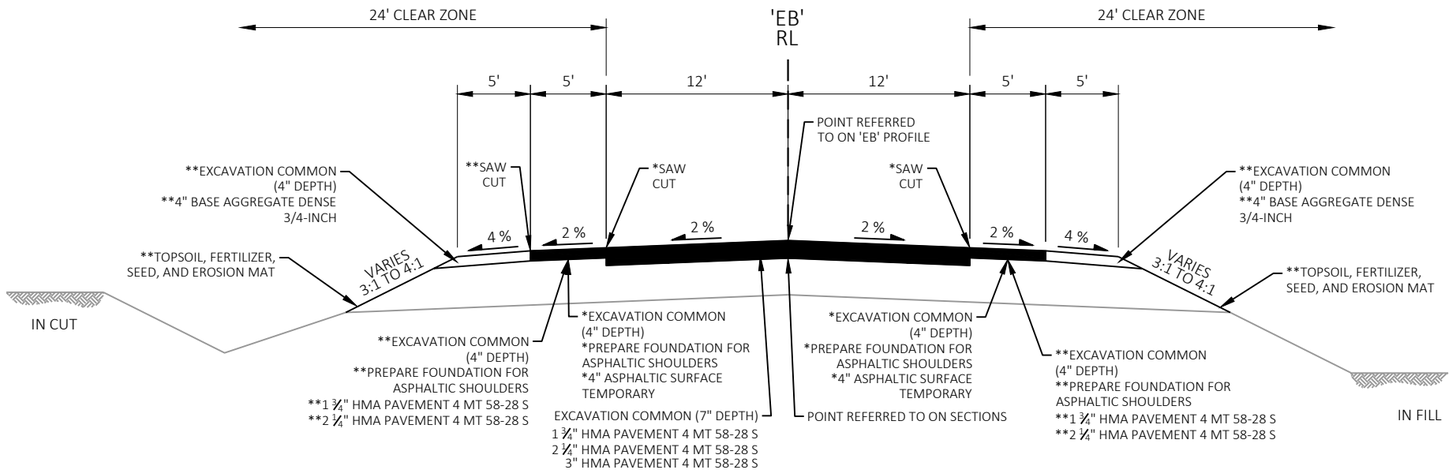
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 15	E



FINISHED TYPICAL SECTION

STA 61'EB'+40 - STA 64'EB'+54
STA 261'WB'+40 - STA 264'WB'+54

* WORK REQUIRED TO INSTALL TEMPORARY WIDENING
** WORK REQUIRED TO REMOVE TEMPORARY WIDENING



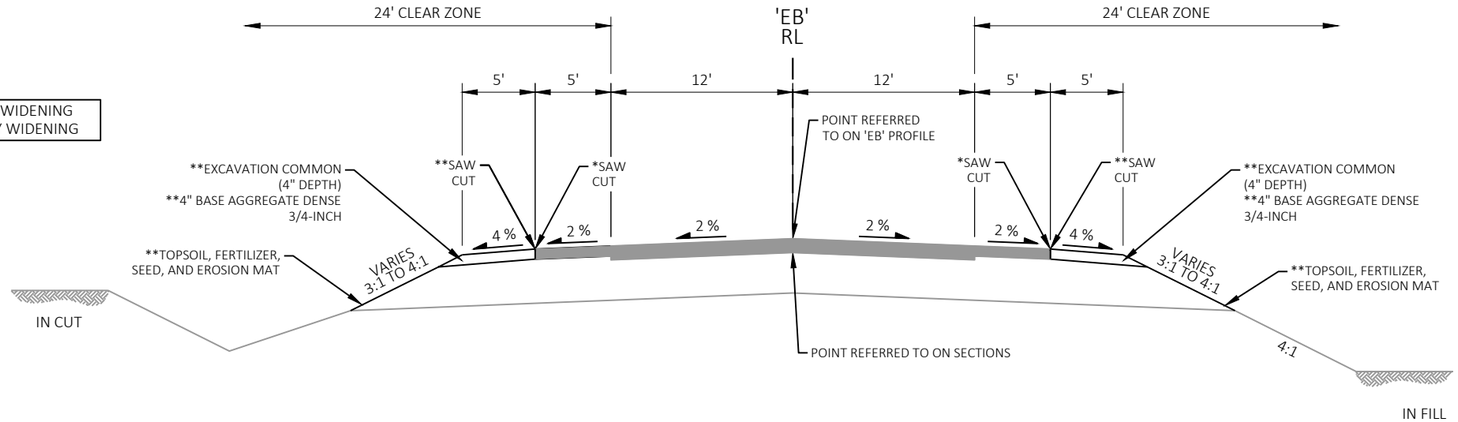
FINISHED TYPICAL SECTION

STA 64'EB'+54 - STA 75'EB'+20

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 16	E

2

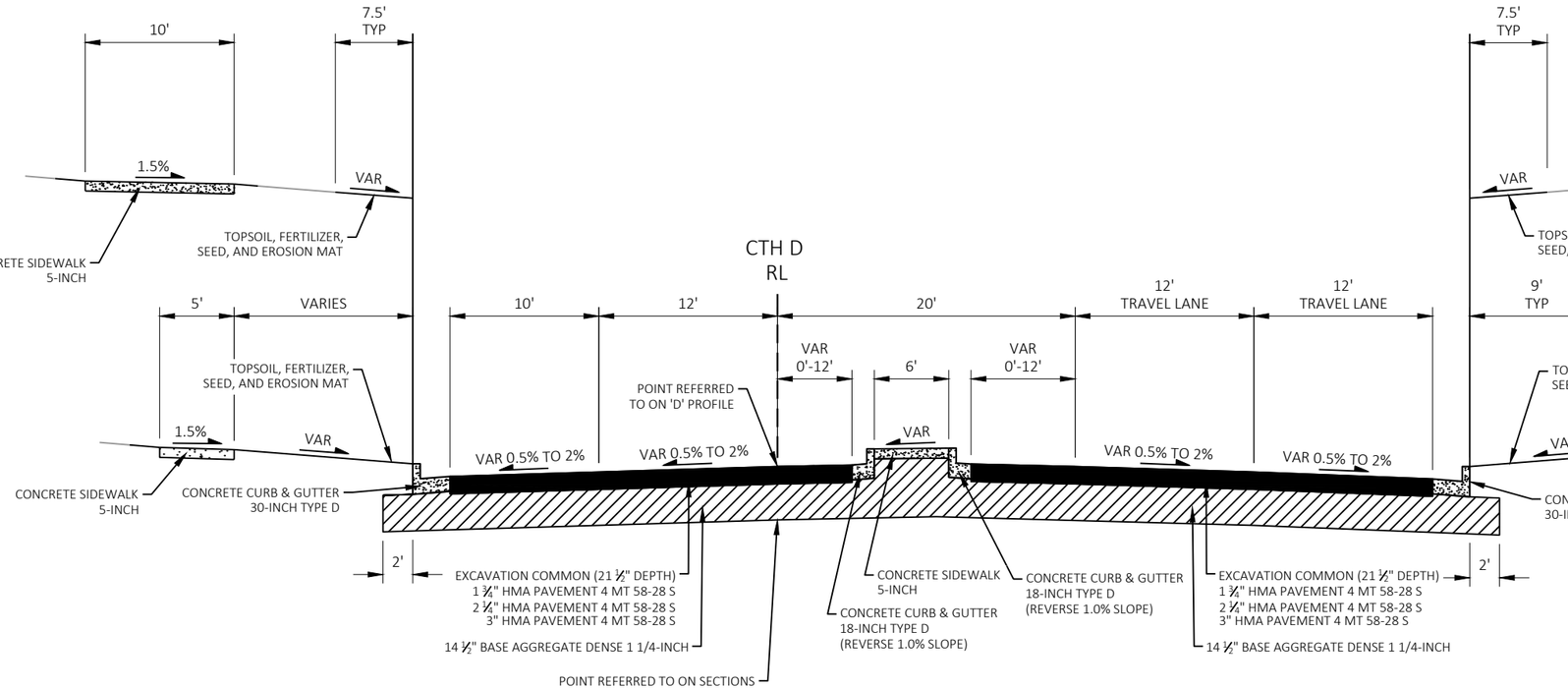
* WORK REQUIRED TO INSTALL TEMPORARY WIDENING
** WORK REQUIRED TO REMOVE TEMPORARY WIDENING



FINISHED TYPICAL SECTION

STA 75'EB'+20 - STA 78'EB'+63

NORTH OF STH 54
STA 107'D'+98 - STA 108'D'+74



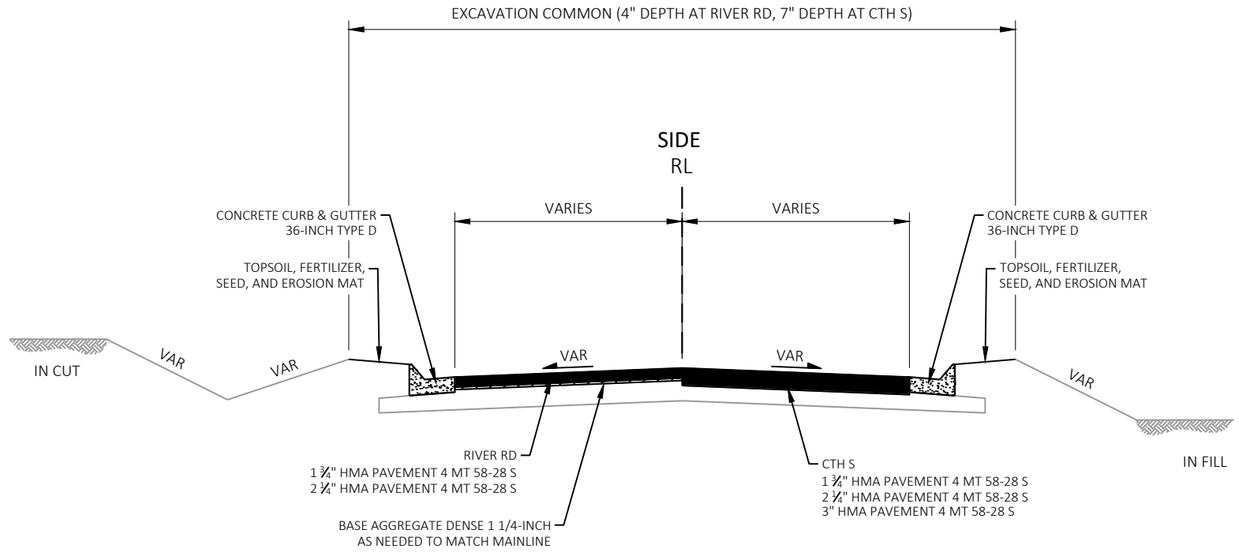
FINISHED CTH D TYPICAL SECTION

STA 106'D'+16 - STA 106'D'+97
STA 107'D'+98 - STA 108'D'+74

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 17	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\020301_TS_54.DWG
LAYOUT NAME - P7
PLOT DATE : 6/28/2025 4:49 PM
PLOT BY : LUKE HARDINGER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

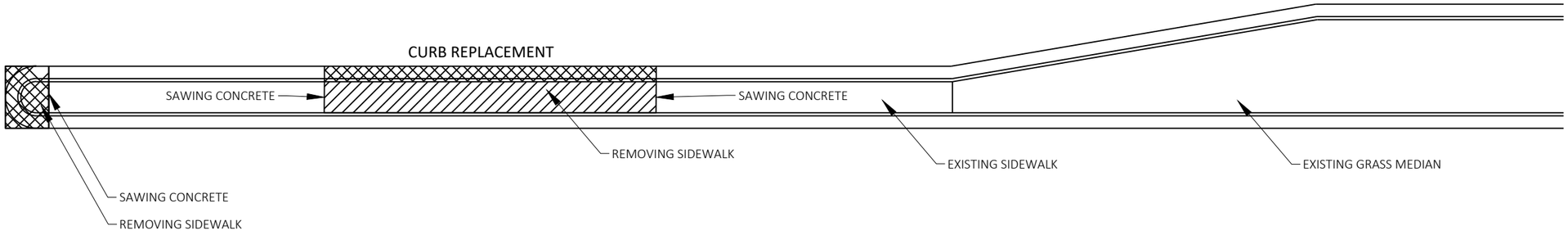


FINISHED TYPICAL SECTION

RIVER RD
CTH S

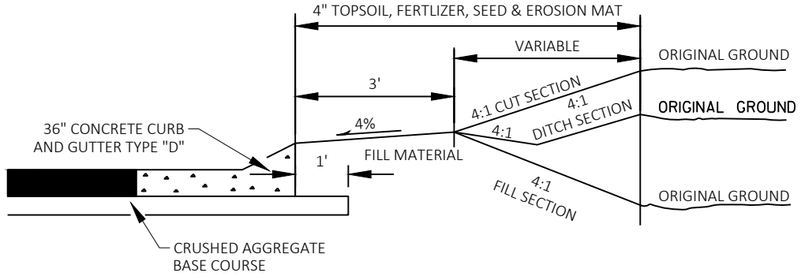
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TYPICAL SECTIONS	SHEET 18	E

2

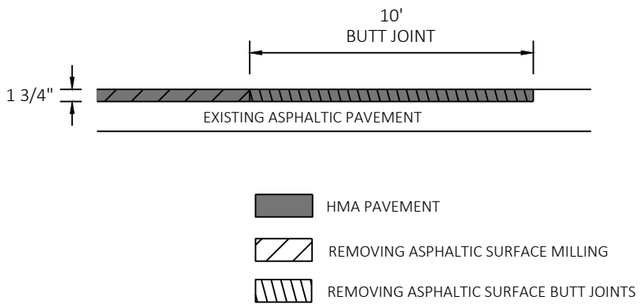


(PLAN VIEW)

REMOVING SIDEWALK FOR CURB REPLACEMENT
IN MEDIANS

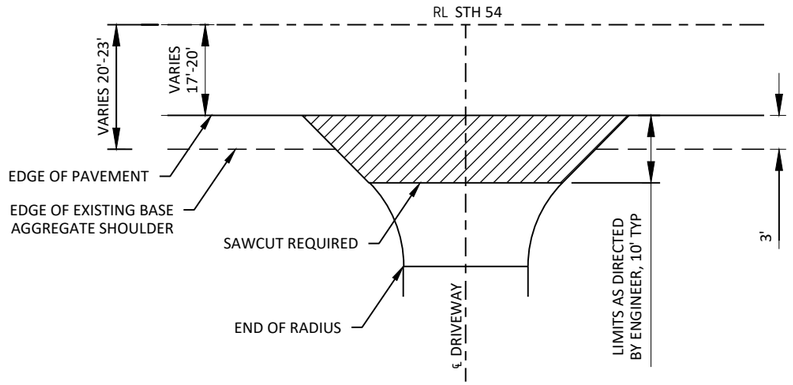


TYPICAL FOR SLOPE TREATMENT BEHIND CURB AND
GUTTER AT RURAL SIDEROAD INTERSECTIONS



BUTT JOINT

STA 3'EB'+75
STA 6'EB'+00
STA 7'EB'+18
STA 8'EB'+75
JEANNE STREET



EXCAVATION COMMON, REPLACE WITH 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES.

MATCH EXISTING PAVED SURFACE WIDTH, RADII AND TAPERS.

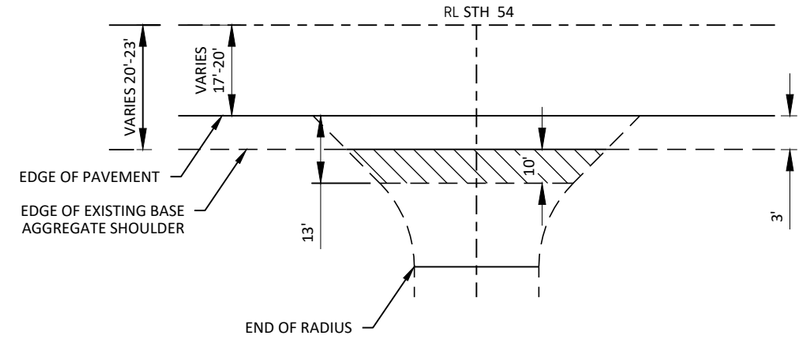
MATCH EXISTING PAVEMENT THICKNESS.

ANY ADDITIONAL BASE AGG. DENSE REQUIRED SHALL BE PAID UNDER ITEM - "BASE AGGREGATE DENSE 3/4-INCH"

SAWCUT PAID FOR UNDER ITEM "SAWING ASPHALT"

PAVED RURAL DRIVEWAY RESTORATION DETAIL

STA 24'EB'+62 RT
STA 255'WB'+15 LT
STA 76'EB'+49 LT

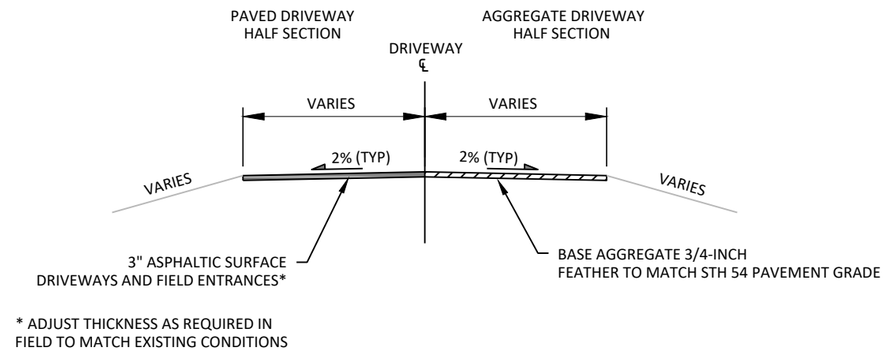


EACH ENTRANCE SHALL RECEIVE ADEQUATE 3/4-INCH BASE AGGREGATE DENSE AFTER MAINLINE PAVING AND SHOULDERING OPERATIONS TO BRING ENTRANCE UP TO SHOULDER PAVEMENT GRADE.

MATCH EXISTING DRIVEWAY WIDTH AND RADII.

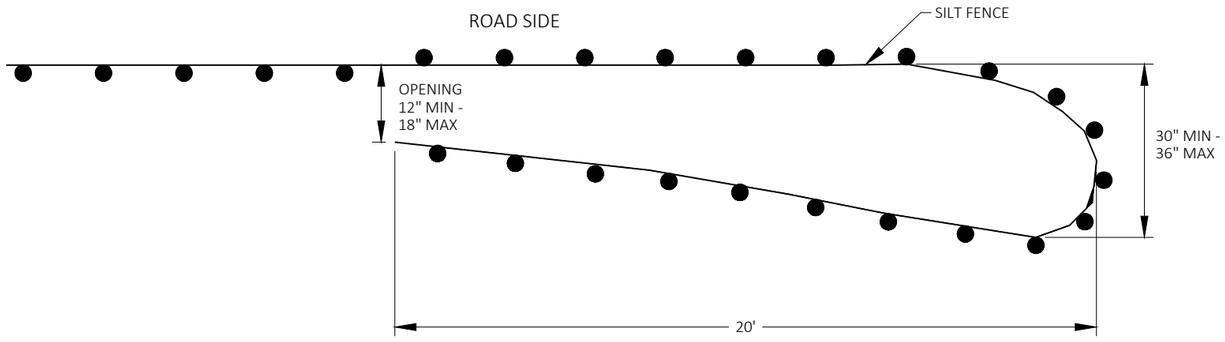
AGGREGATE RURAL DRIVEWAY RESTORATION DETAIL

STA 261'WB'+63 LT
STA 62'EB'+13 RT
STA 63'EB'+15 RT
STA 264'WB'+50 LT



* ADJUST THICKNESS AS REQUIRED IN FIELD TO MATCH EXISTING CONDITIONS

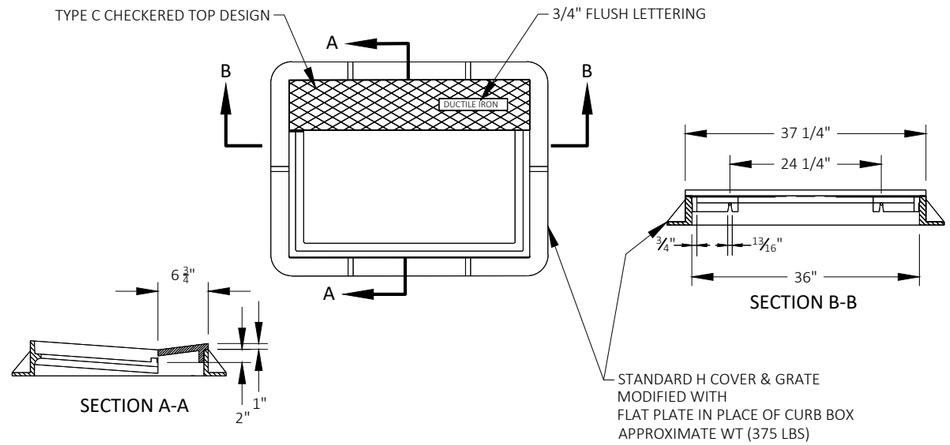
TYPICAL DRIVEWAY RESTORATION SECTION



PLAN VIEW

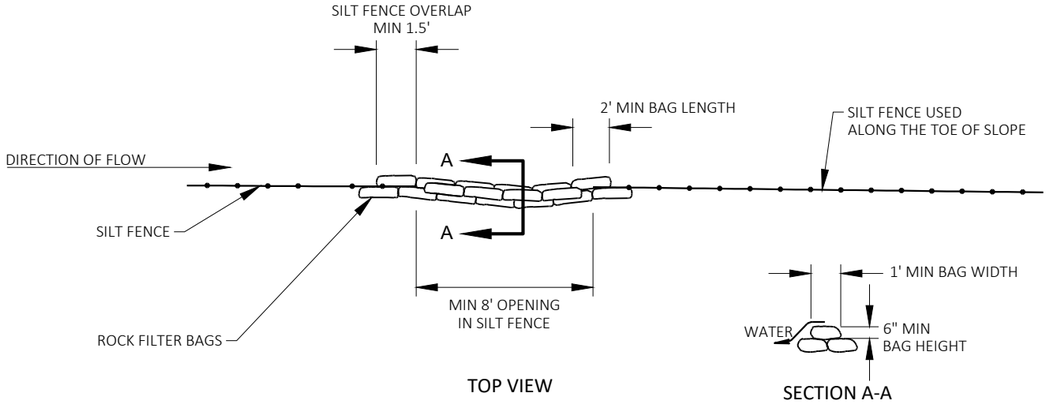
TEMPORARY SMALL ANIMAL TURN-AROUND

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



INLET COVER TYPE H-D

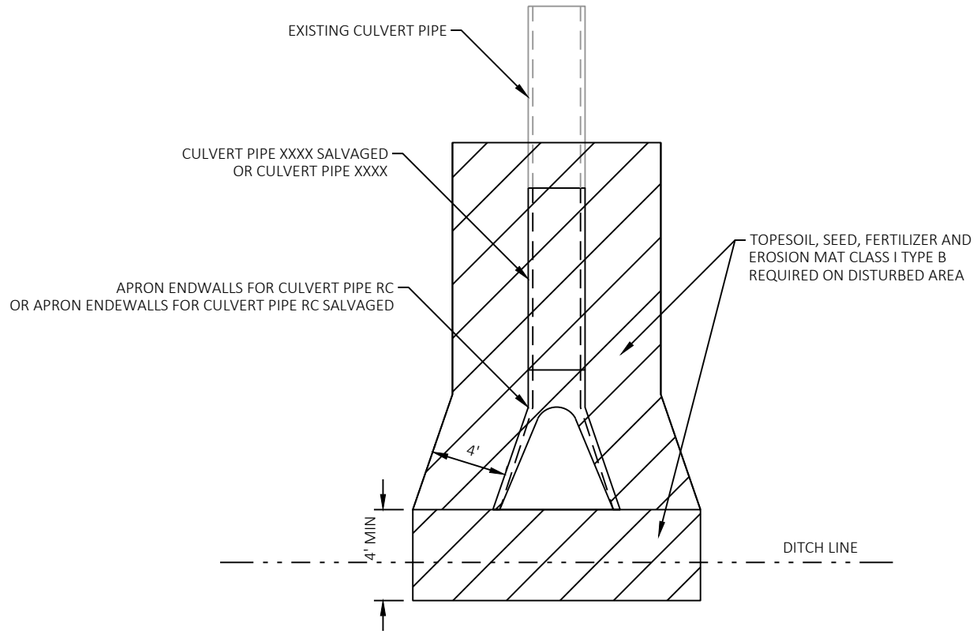
(WITH MOUNTABLE CURB PLATE)



TOP VIEW

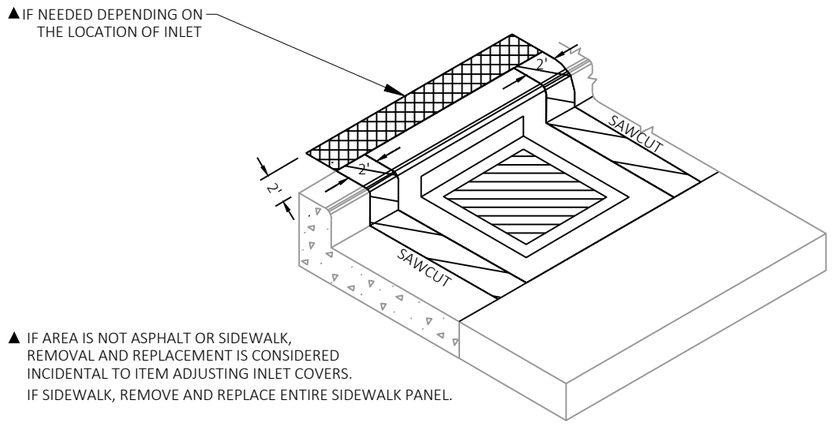
SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF



EROSION CONTROL FOR CROSS DRAIN RESTORATION

SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS



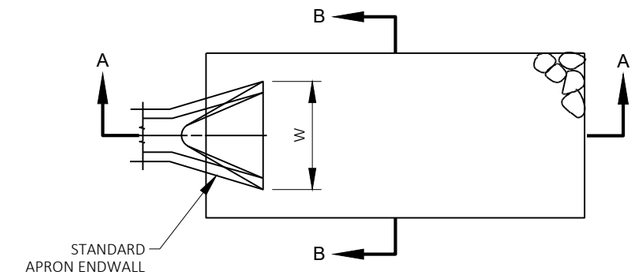
▲ IF AREA IS NOT ASPHALT OR SIDEWALK, REMOVAL AND REPLACEMENT IS CONSIDERED INCIDENTAL TO ITEM ADJUSTING INLET COVERS.
IF SIDEWALK, REMOVE AND REPLACE ENTIRE SIDEWALK PANEL.

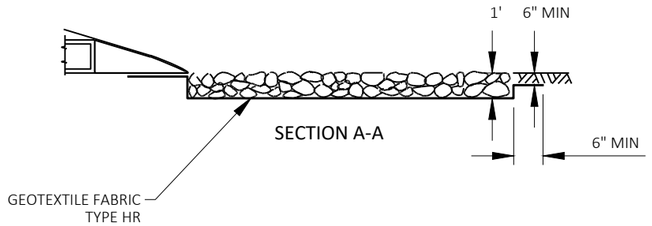
REMOVING CURB & GUTTER
INSTALL CONCRETE CURB & GUTTER

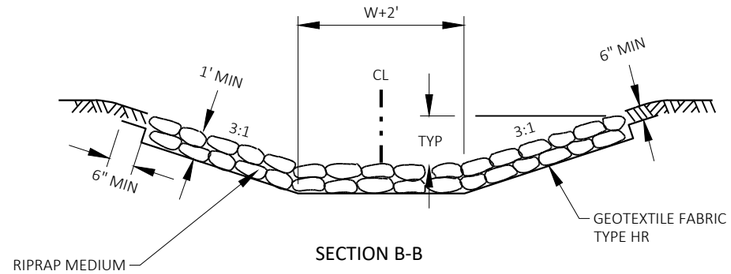
REMOVING ASPHALTIC SURFACE
ASPHALTIC SURFACE PATCHING

INLET ADJUSTMENT / RECONSTRUCTION DETAIL

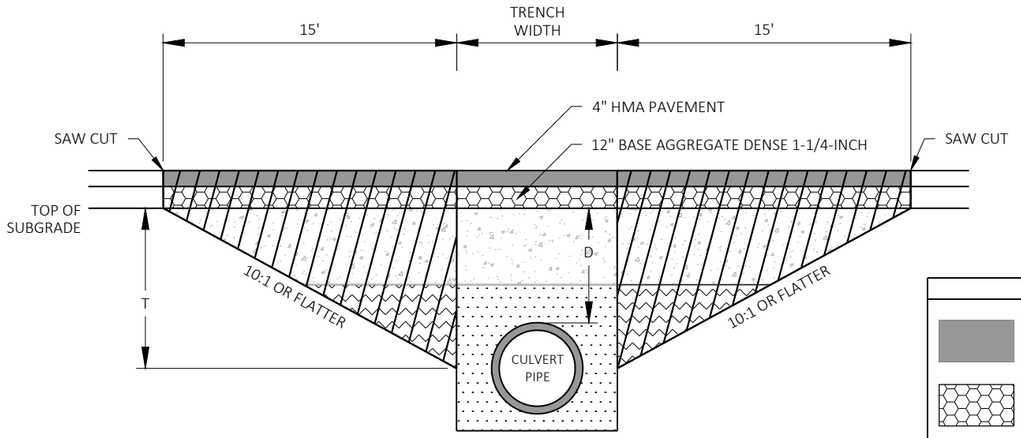
STRUCTURE 113 - STA 18+90
STRUCTURE 4B - STA 27+46
STRUCTURE 6B - STA 32+05
STRUCTURE 11A - STA 44+07
STRUCTURE 11B - STA 44+08
STRUCTURE 12A - STA 46+36
STRUCTURE 12B - STA 46+36
STRUCTURE 14A - STA 51+10
STRUCTURE 14B - STA 51+10
STRUCTURE 15B - STA 53+40
STRUCTURE 17A - STA 57+63
STRUCTURE 17B - STA 57+63





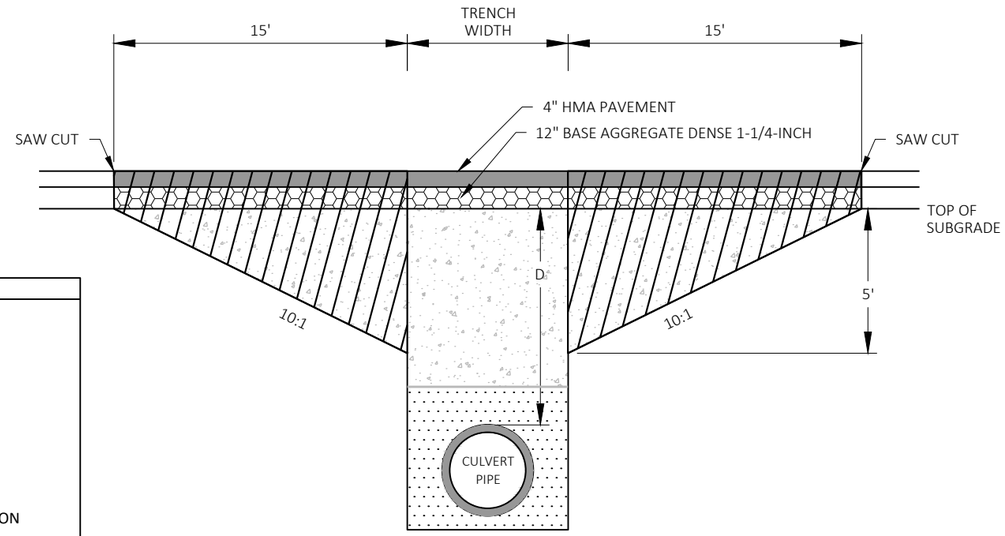


RIP RAP MEDIUM AND GEOTEXTILE TREATMENTS AT CULVERTS



DEPTH D < 6 FT

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



DEPTH D ≥ 6 FT

KEY

- PROPOSED SURFACE
- PROPOSED BASE
- TRENCH BACKFILL
- TRENCH OR FOUNDATION BACKFILL
- FOUNDATION BACKFILL
- TRANSITION CUT

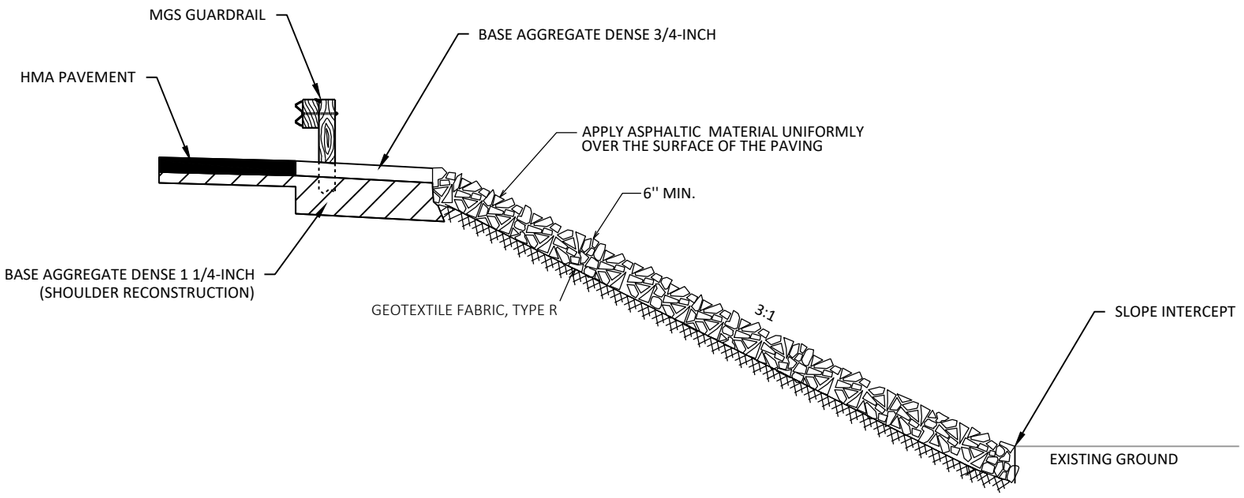
NOTES

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

CULVERT PIPE TRANSITION

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)	REMARKS
JEANNE ST	10+41.75	0.6	18"	

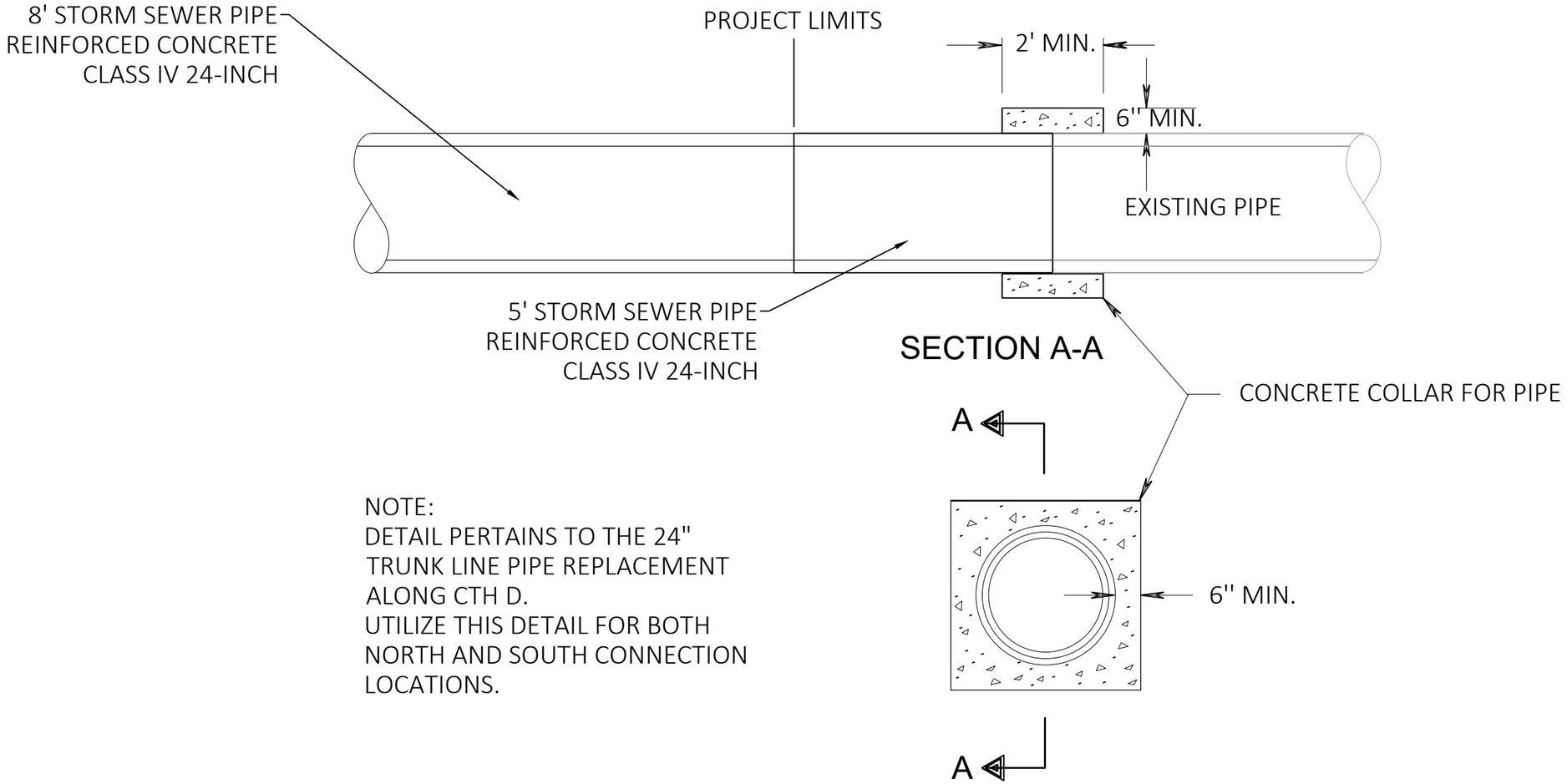
2



SLOPE PAVING CRUSHED AGGREGATE

STA 238'WB'+99 - 240'WB'+20 LT

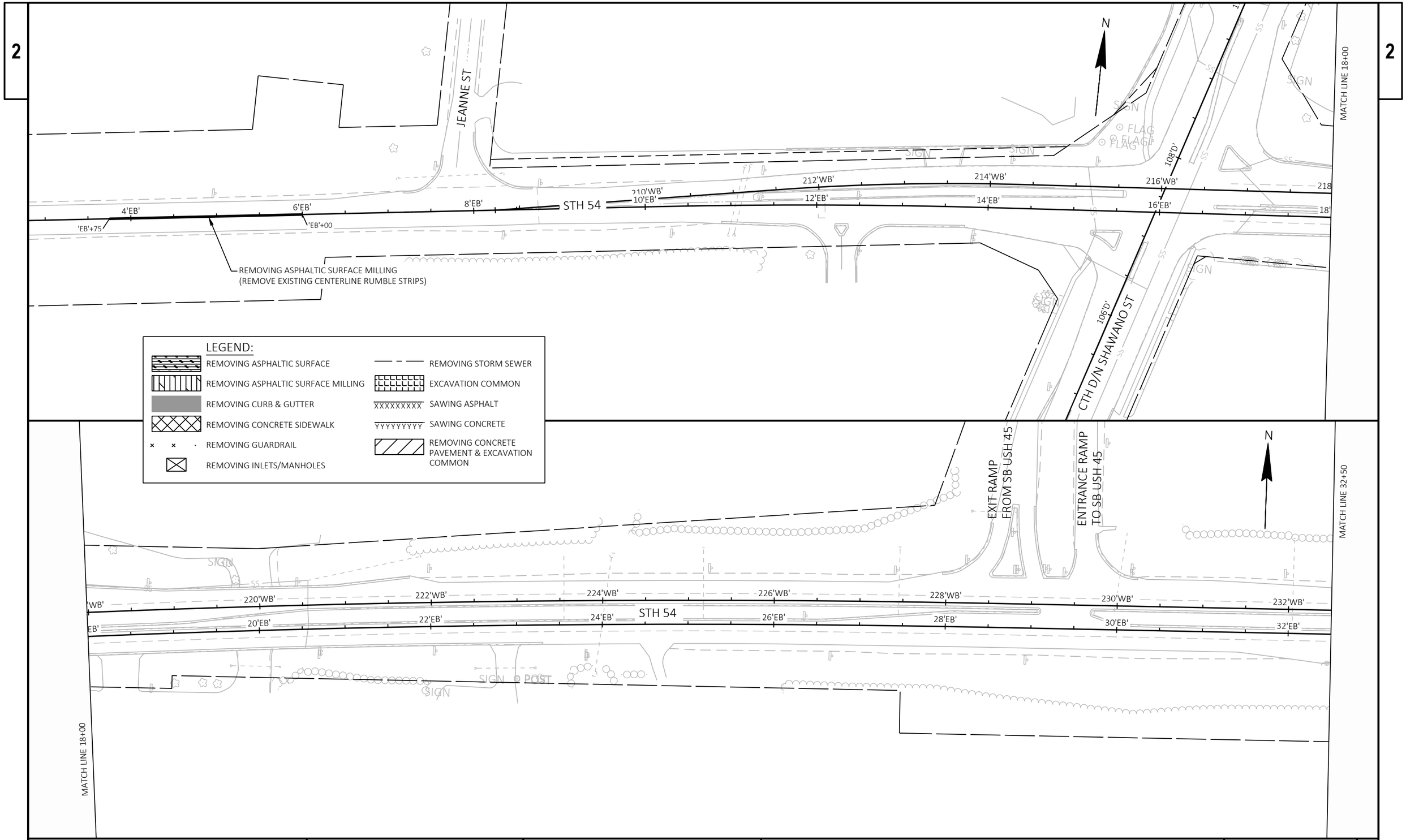
2



NOTE:
DETAIL PERTAINS TO THE 24" TRUNK LINE PIPE REPLACEMENT ALONG CTH D.
UTILIZE THIS DETAIL FOR BOTH NORTH AND SOUTH CONNECTION LOCATIONS.

CTH D TRUNK LINE CONCRETE COLLAR DETAIL

STA 106'D'+16.25 - 27.2' RT
STA 108'D'+74.27 - 26.6' RT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 1	SHEET 26	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021051_RM_S1_54.DWG
LAYOUT NAME - 01
PLOT DATE : 6/28/2025 6:14 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

N

SIGN

MATCH LINE 47+00

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' STH 54 42'EB' 44'EB' 46'EB'

XX

LOCATION OF STAGE 2 CRASH CUSHION

EMBARRASS RIVER

RIVER RD

VENT

USH 45

MATCH LINE 32+50

LEGEND:

- REMOVING ASPHALTIC SURFACE
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING GUARDRAIL
- REMOVING INLETS/MANHOLES
- REMOVING STORM SEWER
- EXCAVATION COMMON
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CONCRETE PAVEMENT & EXCAVATION COMMON

N

MATCH LINE 61+50

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' STH 54 54'EB' 56'EB' 58'EB' 'EB'+60.94 17.00' RT 60'EB'

MATCH LINE 47+00

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

CTH S

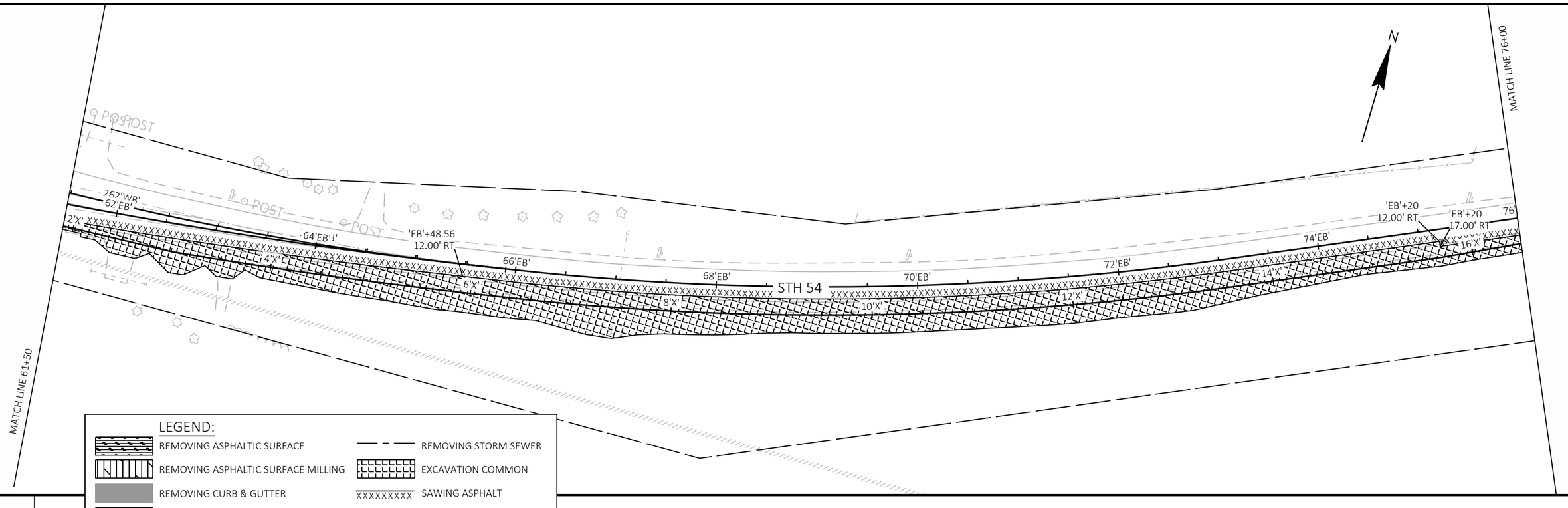
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 1	SHEET 27	E

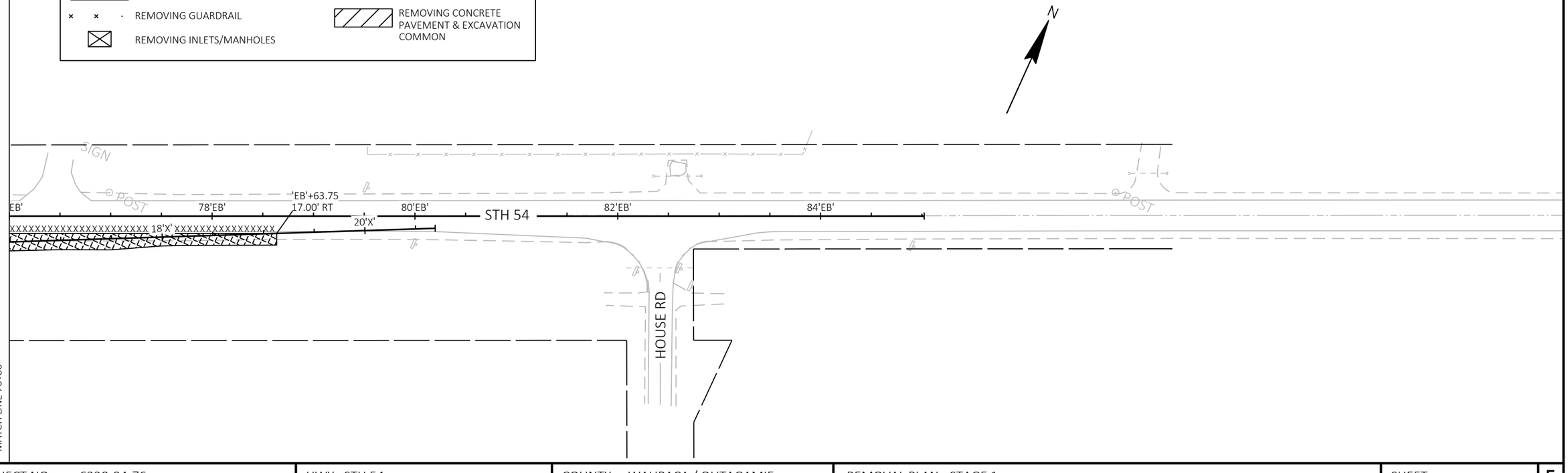
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021051_RM_S1_54.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 6:14 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2





PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 1	SHEET 28	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021051_RM_S1_54.DWG
LAYOUT NAME - 03
PLOT DATE : 6/28/2025 6:14 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ###

2

JEANNE ST

STH 54

4'EB' 6'EB' 8'EB' 10'EB' 12'EB' 14'EB' 16'EB' 18'

210'WB' 212'WB' 214'WB' 216'WB' 218

108'D'

SIGN

FLAG

SS

MATCH LINE 18+00

2

N

106'D'

CTH D/N SHAWANO ST

LEGEND:

- REMOVING ASPHALTIC SURFACE
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING GUARDRAIL
- REMOVING INLETS/MANHOLES
- REMOVING STORM SEWER
- EXCAVATION COMMON
- XXXXXXXXX SAWING ASPHALT
- YYYYYYYYY SAWING CONCRETE
- REMOVING CONCRETE PAVEMENT & EXCAVATION COMMON

N

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

MATCH LINE 32+50

MATCH LINE 18+00

'WB'+95.77 -30.00' LT

'WB'+23.26 30.01' LT

'WB'+13.09 10.00' RT

'WB'+65.11 10.00' RT

'WB'+83 'WB'+53 'WB'+59 'WB'+23 'WB'+32 'WB'+38 'WB'+04 'WB'+75 'WB'+91 'WB'+08 'WB'+04 'WB'+98 'WB'+12

220'WB' 222'WB' 224'WB' 226'WB' 228'WB' 230'WB' 232'WB'

20'EB' 22'EB' 24'EB' 26'EB' 28'EB' 30'EB' 32'EB'

STH 54

SIGN

SIGN POST

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 2	SHEET 29	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021052_RM_S2_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 6:22 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

N

MATCH LINE 47+00

SIGN

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

'WB'+50 34'EB' 36'EB' 38'EB' 40'EB' 42'EB' 44'EB' 46'EB'

'WB'+82 'WB'+31 'WB'+28 'WB'+43 'WB'+85 'WB'+00 'WB'+15

STH 54

'WB'+69.97
13.99' RT

'WB'+17.09
13.99' RT

EMBARRASS RIVER

RIVER RD

USH 45

VENT

MATCH LINE 32+50

LEGEND:

- REMOVING ASPHALTIC SURFACE
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING GUARDRAIL
- REMOVING INLETS/MANHOLES
- REMOVING STORM SEWER
- EXCAVATION COMMON
- XXXXXXXXX SAWING ASPHALT
- YYYYYYYYY SAWING CONCRETE
- REMOVING CONCRETE PAVEMENT & EXCAVATION COMMON

N

MATCH LINE 61+50

WB'+94.33
15.99' RT

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' 54'EB' 56'EB' 58'EB' 60'EB'

'WB'+87 'WB'+02 'WB'+17 'WB'+33 'WB'+48 'WB'+19 'WB'+08 'WB'+53 'WB'+73 'WB'+37 'WB'+01

2'Z'

STH 54

WB'+58.30
15.99' RT

'WB'+38.87
16.00' RT

WB'+54.65
16.02' RT

MATCH LINE 47+00

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

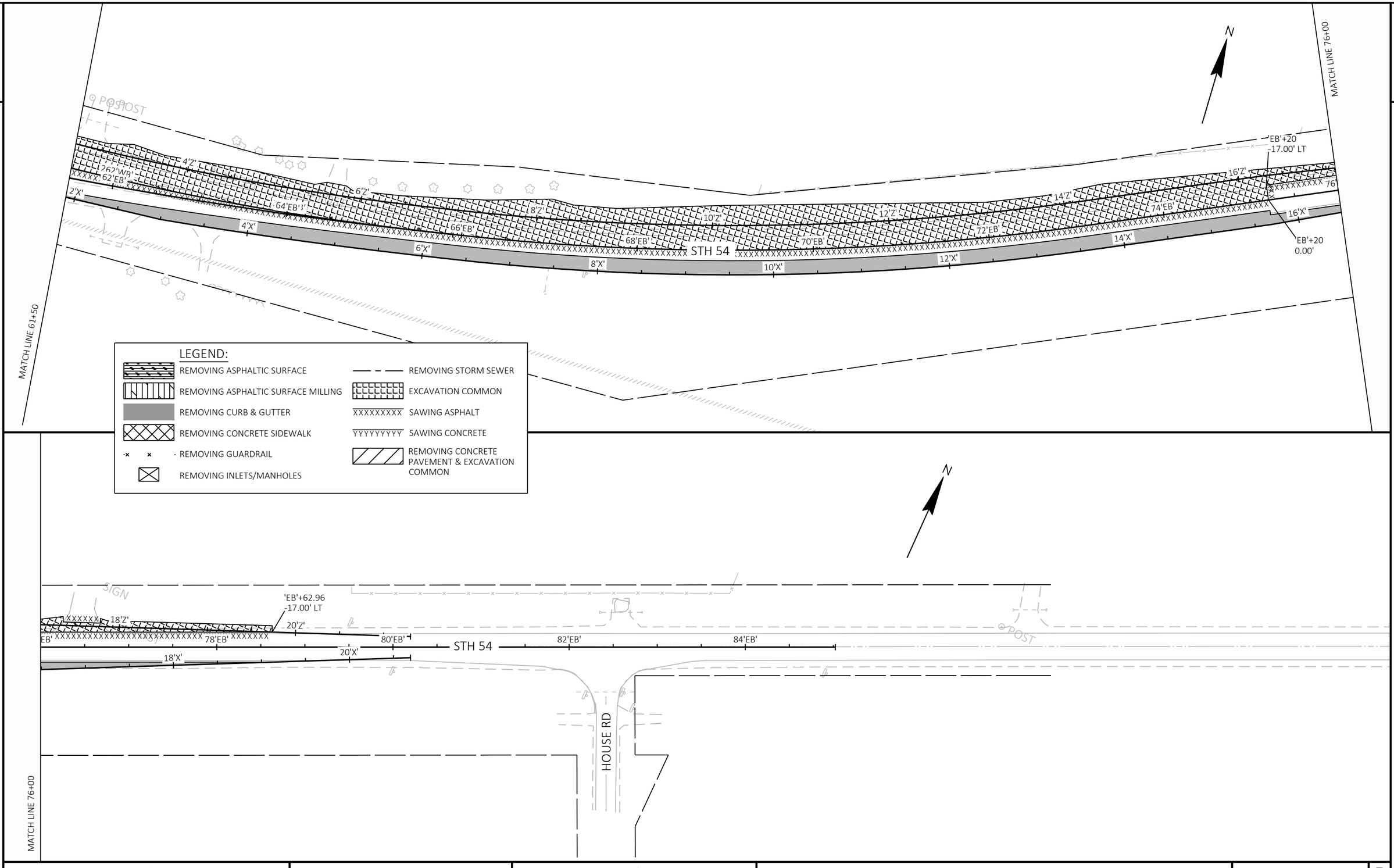
CTH S

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 2	SHEET 30	E

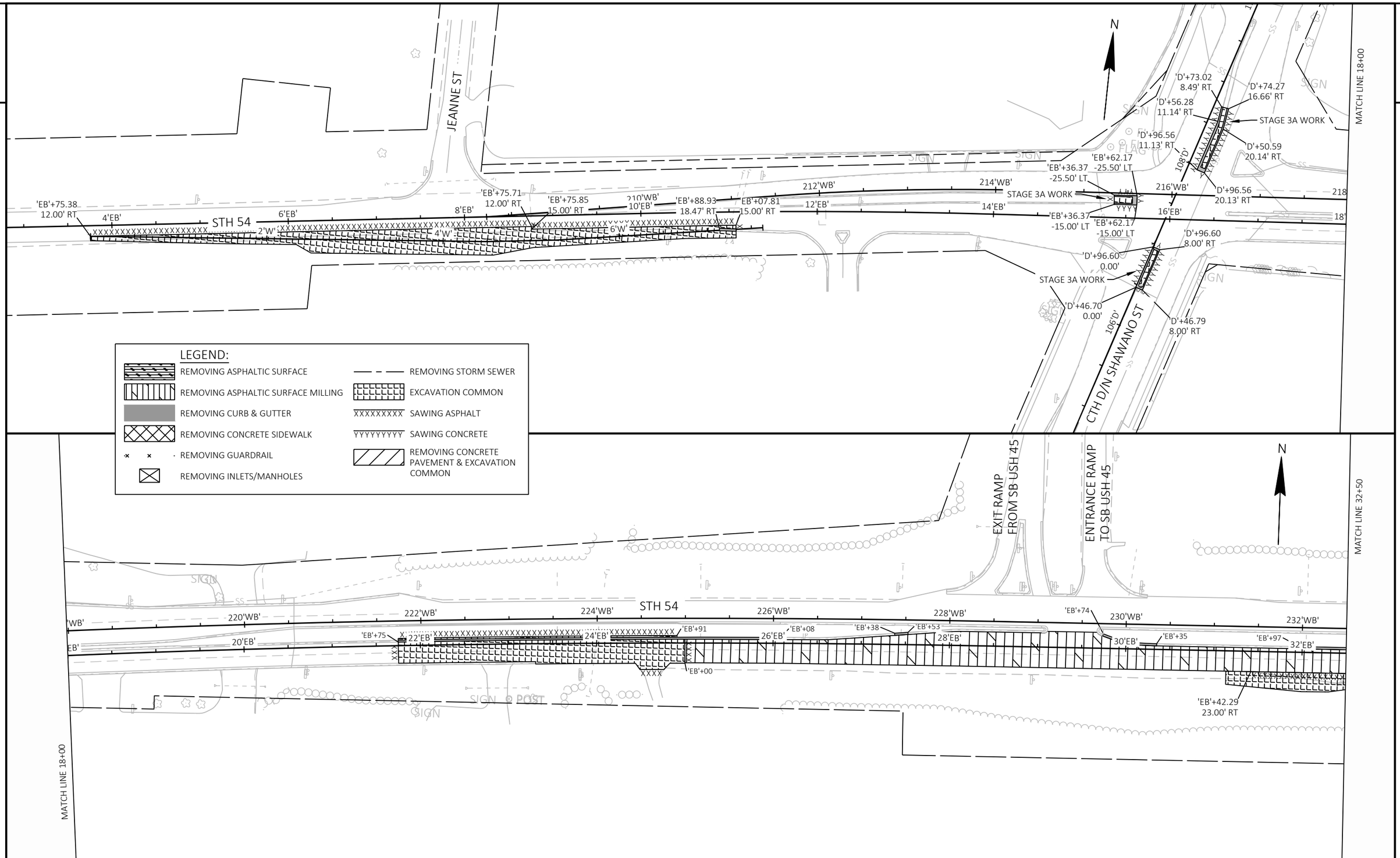
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021052_RM_S2_54.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 6:22 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 2	SHEET 31	E



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 3 & STAGE 3A	SHEET 32	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021053_RM_S3_54.DWG
LAYOUT NAME - 01
PLOT DATE : 6/28/2025 6:28 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

MATCH LINE 32+50

MATCH LINE 47+00

2

N

SIGN

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' 42'EB' 44'EB' 46'EB'

'EB'+69.97
-14.00' LT

'EB'+19
-14.00' LT

'EB'+04.20
23.01' RT

'EB'+85

'EB'+00

'EB'+15

'EB'+82

'EB'+31

'EB'+28

'EB'+43

STH 54

'EB'+27.62
23.00' RT

'EB'+35.73
39.60' RT

'EB'+36
23.00' RT

EMBARRASS RIVER

RIVER RD

USH 45

VENT

LEGEND:

- REMOVING ASPHALTIC SURFACE
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING GUARDRAIL
- REMOVING INLETS/MANHOLES
- REMOVING STORM SEWER
- EXCAVATION COMMON
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING CONCRETE PAVEMENT & EXCAVATION COMMON

N

MATCH LINE 61+50

MATCH LINE 47+00

'EB'+94.33
-12.00' LT

'EB'+62.30
-12.00' LT

'EB'+38.87
-12.00' LT

'EB'+58.62
-12.00' LT

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' 54'EB' 56'EB' 58'EB' 60'EB'

'EB'+87

'EB'+02

'EB'+17

'EB'+33

'EB'+48

'EB'+08

'EB'+53

'EB'+73

'EB'+46

'EB'+36

'EB'+10

'EB'+44

'EB'+82

'EB'+40

2'Z'

STH 54

CTH S

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

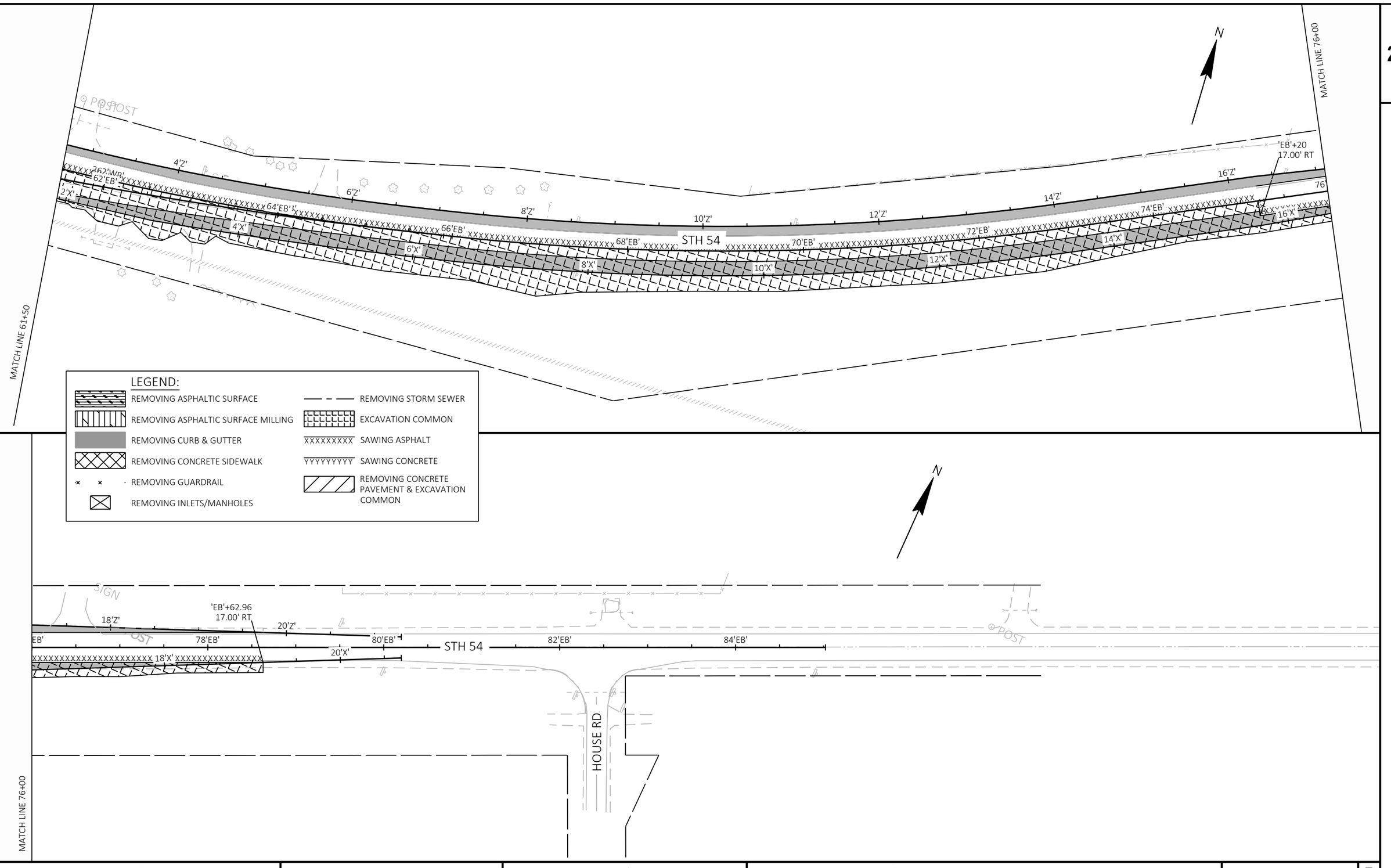
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 3 & STAGE 3A	SHEET 33	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021053_RM_S3_54.DWG
LAYOUT NAME - 02

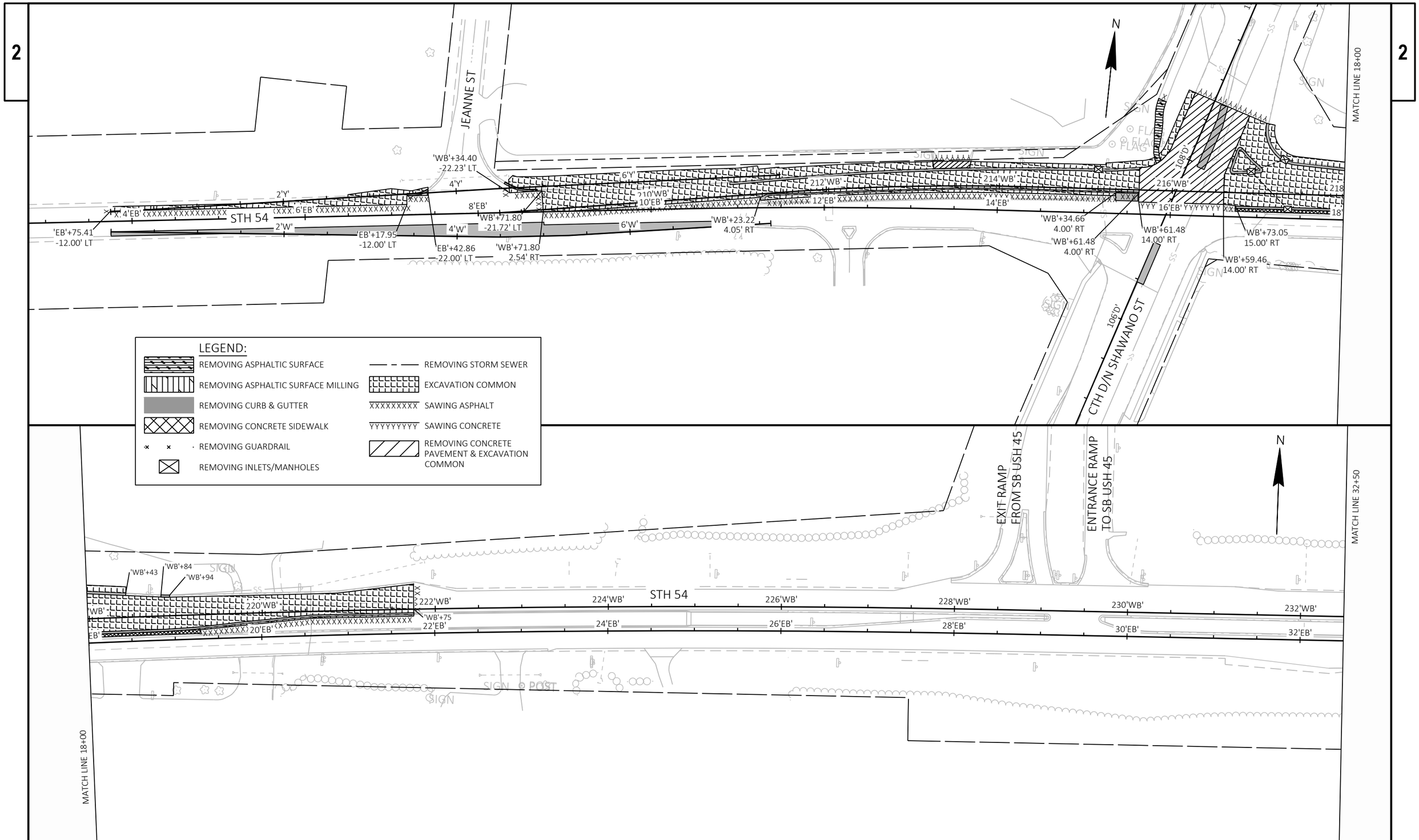
PLOT DATE : 6/28/2025 6:28 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 3 & STAGE 3A	SHEET 34	E



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 4	SHEET 35	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021054_RM_S4_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 6:39 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

SIGN

MATCH LINE 47+00

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' STH 54 42'EB' 44'EB' 46'EB'

EMBARRASS RIVER

RIVER RD

INSTALL STEEL THRIE BEAM BULLNOSE TERMINALS

USH 45

MATCH LINE 32+50

LEGEND:

- REMOVING ASPHALTIC SURFACE
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING CURB & GUTTER
- REMOVING CONCRETE SIDEWALK
- REMOVING GUARDRAIL
- REMOVING INLETS/MANHOLES
- REMOVING STORM SEWER
- EXCAVATION COMMON
- XXXXXXXXX SAWING ASPHALT
- YYYYYYYYY SAWING CONCRETE
- REMOVING CONCRETE PAVEMENT & EXCAVATION COMMON

N

MATCH LINE 61+50

'WB'+76.79
-20.00' LT

2'Z'

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' STH 54 54'EB' 56'EB' 58'EB' 60'EB'

CTH S

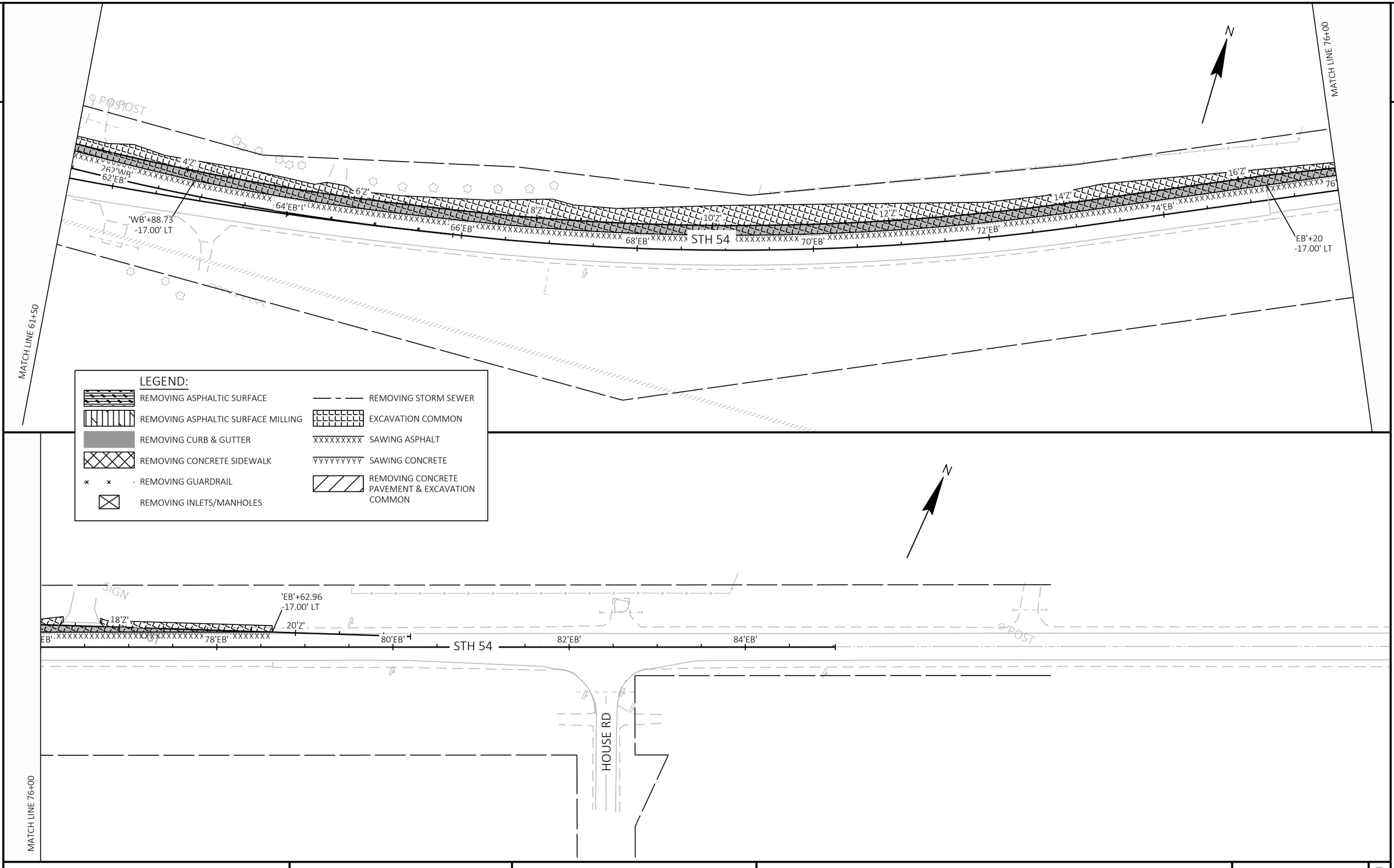
MATCH LINE 47+00

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 4	SHEET 36	E

2

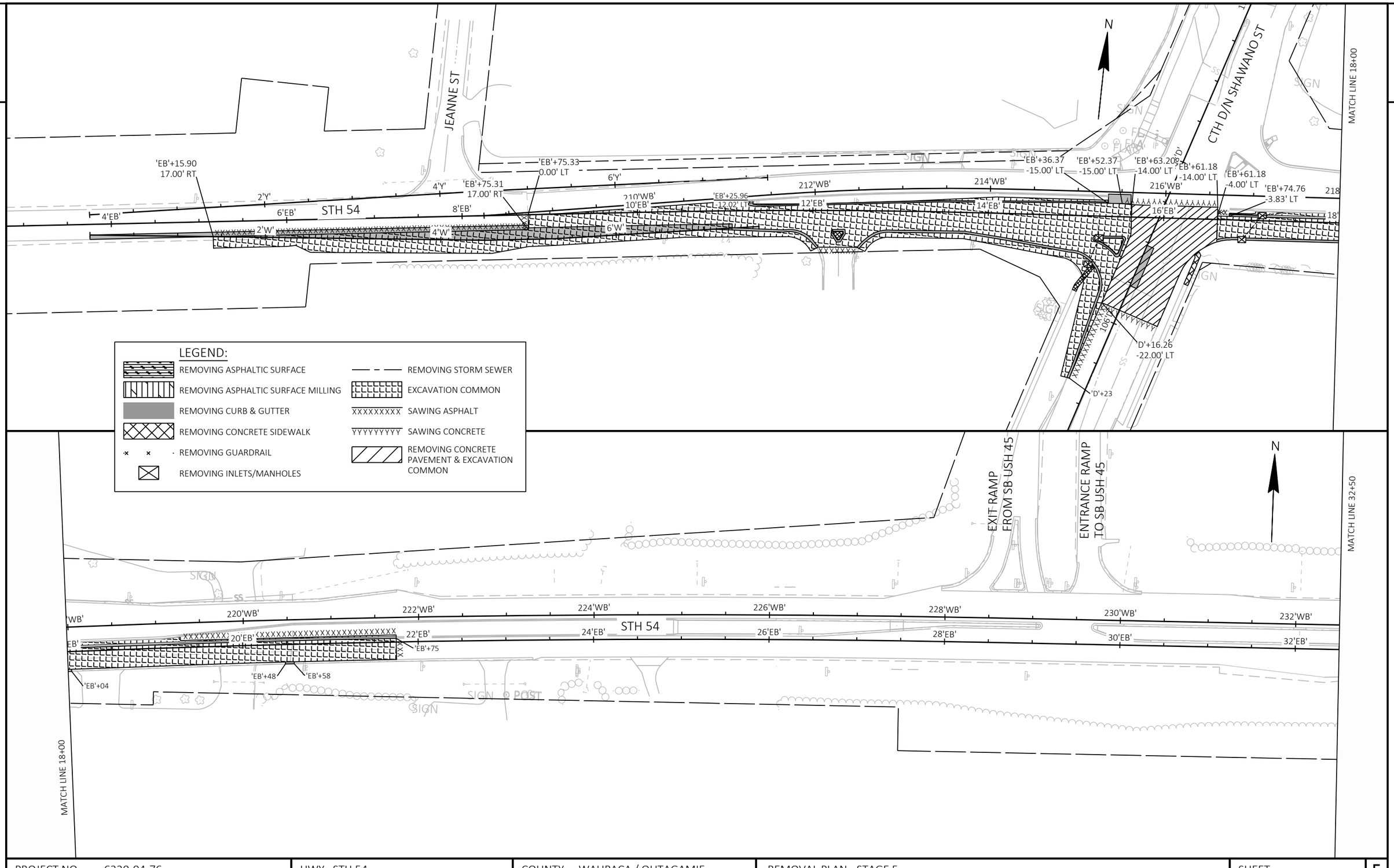


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 4	SHEET 37	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021054_RM_S4_54.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 6:39 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ###

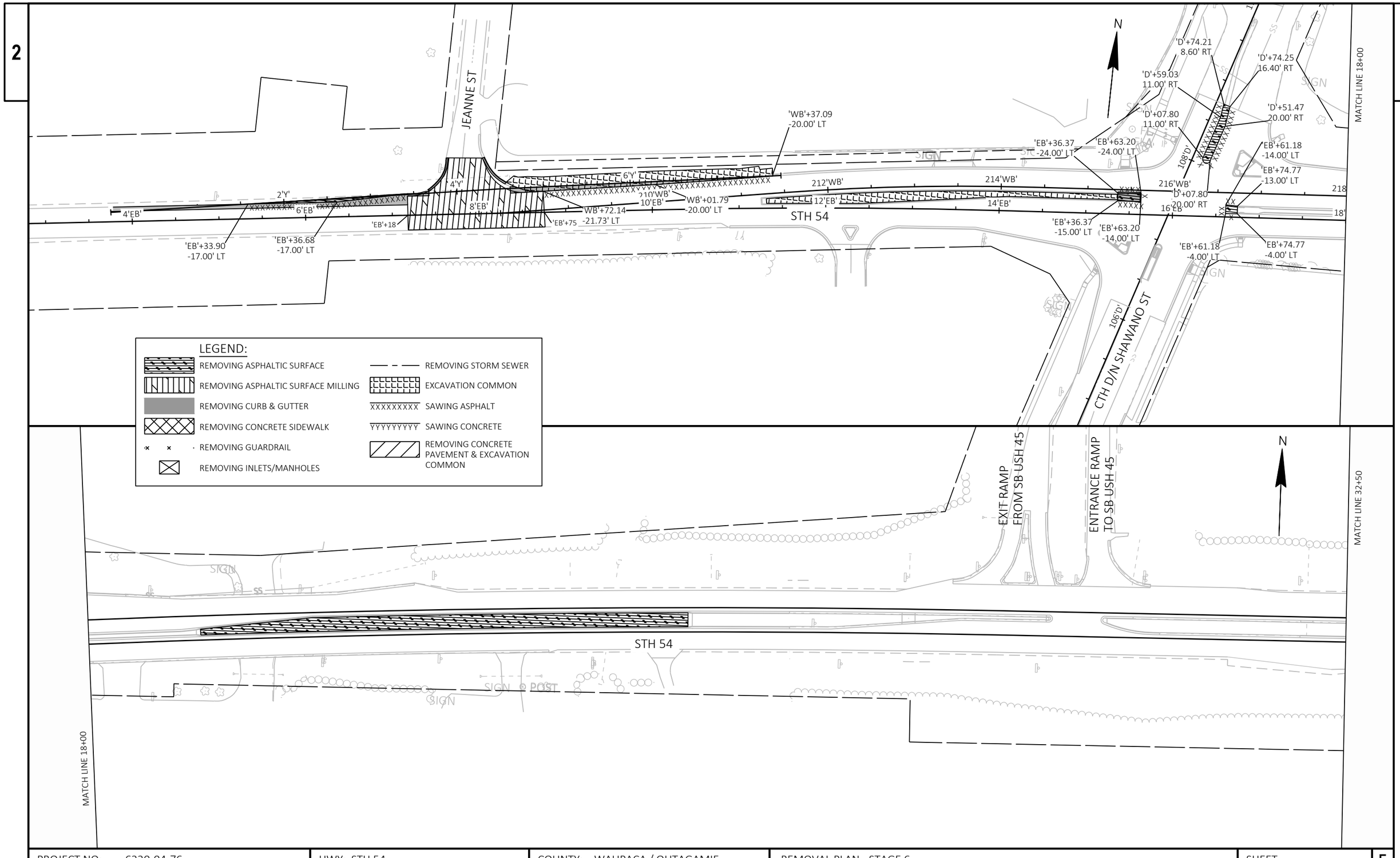
WISDOT/CADDS SHEET 44



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 5	SHEET 38	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021055_RM_S5_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/12/2025 9:38 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	REMOVAL PLAN - STAGE 6	SHEET 39	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021056_RM_S6_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/12/2025 9:46 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

JEANNE ST INTERSECITON STATION & OFFSET TABLE								
POINT	EB STATION	EB OFFSET	JEANNE STATION	JEANNE OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1001	7+18.16	22.53 LT	10+15.33	57.97 LT	358090.686	625319.807		762.11
1002	7+51.17	33.53 LT	10+30.42	26.60 LT	358105.791	625351.161		761.81
1003	7+65.76	65.13 LT	10+63.61	16.13 LT	358138.987	625361.615		761.63
1004	8+05.36	64.18 LT	10+67.66	23.28 RT	358143.071	625401.022		761.55
1005	8+09.69	52.64 LT	10+56.76	29.03 RT	358132.175	625406.778		761.58
1006	8+27.14	30.82 LT	10+37.32	49.10 RT	358112.743	625426.854		761.91
1007	8+54.10	23.50 LT	10+33.46	76.77 RT	358108.905	625454.529		762.08
1008	7+21.95	66.19 LT	10+59.12	59.72 LT	358134.470	625318.029	44' TO FLANGE	
1009	8+51.83	68.44 LT	10+77.76	68.84 RT	358153.195	625446.567	45' TO FLANGE	

N

EXISTING R/W

JEANNE ST

11'J'

STA 10'J'+65.27
STA 7'EB'+81.97, 64.74' LT
MATCH EXISTING
BUTT JOINT REQ'D

AT&T
COMMUNICATION

REPLACE EXISTING CULVERT PIPE
CULVERT PIPE TRANSITION REQ'D
SEE CONSTRUCTION DETAIL

SI

R44'

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

1008

1003

1004

1005

1009

R45'

TLE

CONCRETE CURB & GUTTER
30-INCH TYPE D

SI

EXISTING R/W

NEW LONDON UTILITIES
WATER

1002

1001

1006

1007

209'WB'

9'EB'

8'EB'

7'EB'

STH 54

STA 10+00.00'J'

STA 7+73.72'EB'

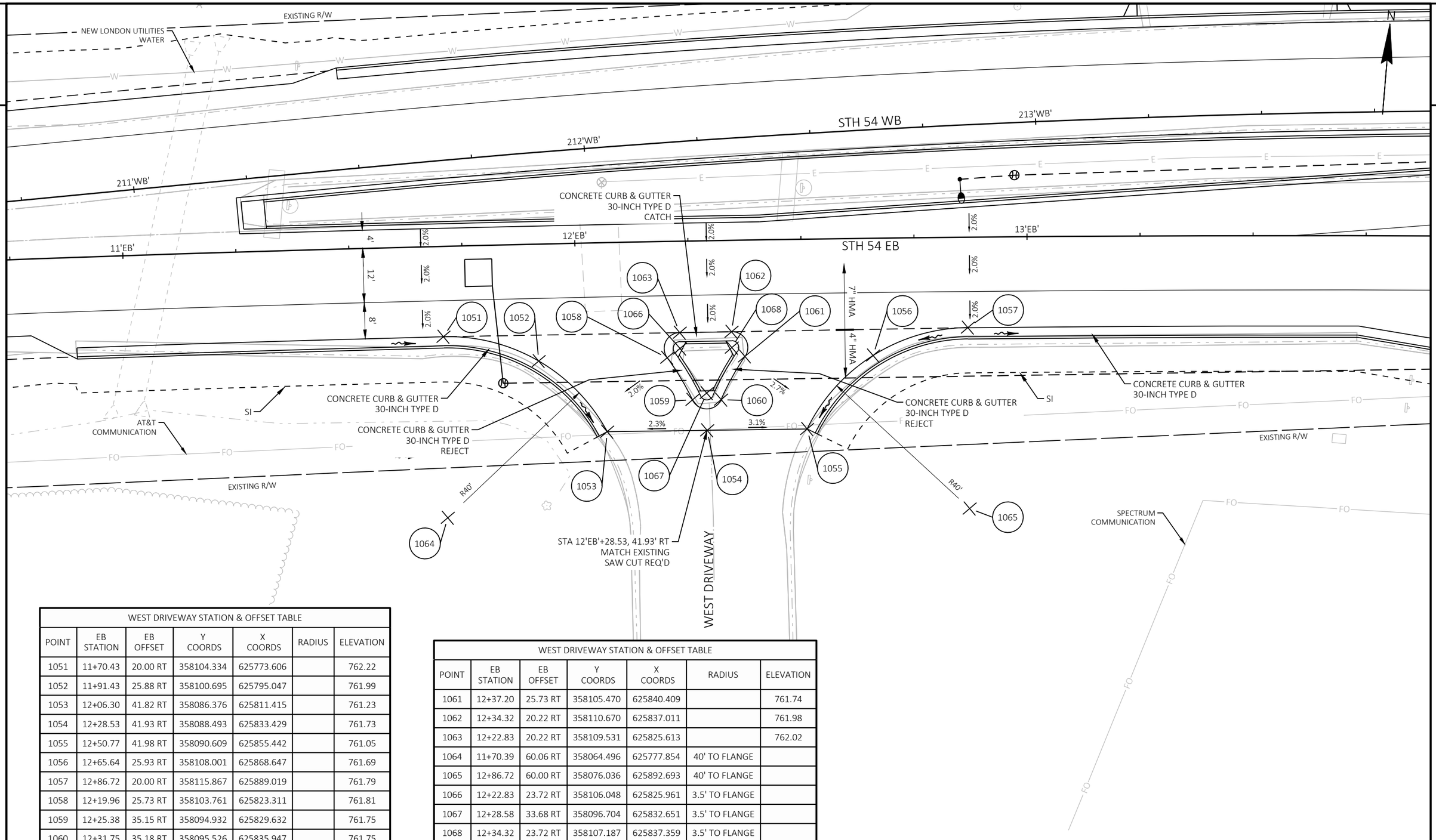
EXISTING R/W

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	INTERSECTION DETAILS - JEANNE ST	SHEET 40	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021101-ID-54.DWG
LAYOUT NAME - JEANNE ST

PLOT DATE : 7/18/2025 10:32 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42



WEST DRIVEWAY STATION & OFFSET TABLE						
POINT	EB STATION	EB OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1051	11+70.43	20.00 RT	358104.334	625773.606		762.22
1052	11+91.43	25.88 RT	358100.695	625795.047		761.99
1053	12+06.30	41.82 RT	358086.376	625811.415		761.23
1054	12+28.53	41.93 RT	358088.493	625833.429		761.73
1055	12+50.77	41.98 RT	358090.609	625855.442		761.05
1056	12+65.64	25.93 RT	358108.001	625868.647		761.69
1057	12+86.72	20.00 RT	358115.867	625889.019		761.79
1058	12+19.96	25.73 RT	358103.761	625823.311		761.81
1059	12+25.38	35.15 RT	358094.932	625829.632		761.75
1060	12+31.75	35.18 RT	358095.526	625835.947		761.75

WEST DRIVEWAY STATION & OFFSET TABLE						
POINT	EB STATION	EB OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1061	12+37.20	25.73 RT	358105.470	625840.409		761.74
1062	12+34.32	20.22 RT	358110.670	625837.011		761.98
1063	12+22.83	20.22 RT	358109.531	625825.613		762.02
1064	11+70.39	60.06 RT	358064.496	625777.854	40' TO FLANGE	
1065	12+86.72	60.00 RT	358076.036	625892.693	40' TO FLANGE	
1066	12+22.83	23.72 RT	358106.048	625825.961	3.5' TO FLANGE	
1067	12+28.58	33.68 RT	358096.704	625832.651	3.5' TO FLANGE	
1068	12+34.32	23.72 RT	358107.187	625837.359	3.5' TO FLANGE	

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	INTERSECTION DETAILS - WEST DRIVEWAY	SHEET 41	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021101-ID-54.DWG
LAYOUT NAME - WALGREENS DRIVE
PLOT DATE : 7/18/2025 10:35 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

CTH D NORTH INTERSECITON STATION & OFFSET TABLE								
POINT	WB STATION	WB OFFSET	CTH D STATION	CTH D OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1100	215+22.88	20.00 LT	107+49.67	82.95 LT	358202.765	626120.606		761.09
1101	215+62.88	24.00 LT	107+68.14	47.25 LT	358209.820	626160.181		761.43
1102	215+85.36	30.91 LT	107+82.85	28.91 LT	358218.432	626182.057		761.56
1103	216+00.06	49.25 LT	108+05.32	22.00 LT	358237.846	626195.317		761.49
1104	216+25.39	113.08 LT	108+73.98	22.00 LT	358303.426	626215.671		760.95
1105	216+53.91	102.01 LT	108+74.21	8.60 RT	358294.576	626244.963		761.66
1106	216+50.55	87.00 LT	108+59.03	11.00 RT	358279.360	626242.754		761.68
1107	216+31.66	39.39 LT	108+07.80	11.00 RT	358230.438	626227.570		761.73
1108	216+40.02	36.07 LT	108+07.80	20.00 RT	358227.770	626236.166		761.61
1109	216+56.12	76.66 LT	108+51.47	20.00 RT	358269.471	626249.109		761.48

CTH D NORTH INTERSECITON STATION & OFFSET TABLE								
POINT	WB STATION	WB OFFSET	CTH D STATION	CTH D OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1110	216+61.18	99.19 LT	108+74.27	16.39 RT	358292.322	626252.425		761.52
1111	217+06.71	81.11 LT	108+74.26	65.38 RT	358277.793	626299.207		760.67
1112	217+14.12	49.45 LT	108+47.56	83.94 RT	358246.789	626309.019		760.46
1113	217+26.69	38.57 LT	108+42.09	99.64 RT	358236.911	626322.388		760.36
1114	217+42.60	33.75 LT	108+43.47	116.20 RT	358233.320	626338.618		760.40
1115	215+62.88	64.00 LT	108+05.32	62.00 LT	358249.702	626157.114	40' TO FLANGE	
1116	216+35.84	37.73 LT	108+07.80	15.50 RT	358229.104	626231.868	4.5' TO FLANGE	
1117	217+46.00	73.60 LT	108+81.77	104.67 RT	358273.319	626338.956	40' TO FLANGE	

2

N

TLE

STA 108'D'+74.15
MATCH EXISTING
SAW CUT REQ'D

109'D'

CTH 'D'/N SHAWANO ST

CONCRETE SIDEWALK
5-INCH

CAUTION

WE ENERGIES
PETROLEUM

AT&T
COMMUNICATIONS

EXISTING R/W

NEW LONDON UTILITIES
ELECTRIC
SPECTRUM
COMMUNICATIONS

CONCRETE CURB &
GUTTER 30-INCH TYPE D

CONCRETE CURB &
GUTTER 18-INCH TYPE D
REJECT

R40'

SI

TLE

NEW LONDON UTILITIES
WATER

CITY OF NEW LONDON
SANITARY

108'D'

CONCRETE CURB &
GUTTER 30-INCH TYPE D

R4.5'

SEE CTH D
NORTHEAST ISLAND
CURB RAMP DETAIL

SEE WEST MEDIAN CURB
RAMP DETAIL

SEE EAST MEDIAN CURB
RAMP DETAIL

AT&T
COMMUNICATIONS

AT&T
COMMUNICATIONS

215'WB'

'WB'+05

'WB'+80

216'WB'

'WB'+60

217'WB'

'WB'+60

15'EB'

16'EB'

17'EB'

1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1208

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	INTERSECTION DETAILS - CTH D NORTH	SHEET 42	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021101-ID-54.DWG
LAYOUT NAME - D-N

PLOT DATE : 7/18/2025 10:36 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

STH 54 EB

STH 54 EB

CONCRETE CURB & GUTTER 30-INCH TYPE D

SEE CTH D SOUTHWEST ISLAND CURB RAMP DETAIL

SPECTRUM COMMUNICATIONS

CONCRETE CURB & GUTTER 18-INCH TYPE D REJECT

CONCRETE CURB & GUTTER 30-INCH TYPE D

NEW LONDON UTILITIES ELECTRIC

EXISTING R/W

NEW LONDON UTILITIES ELECTRIC SPECTRUM COMMUNICATIONS

AT&T COMMUNICATIONS

NEW LONDON UTILITIES WATER

SI

STA 106'D'+16.25 MATCH EXISTING SAW CUT REQ'D

CTH D/N SHAWANO ST

WE ENERGIES PETROLEUM

CAUTION

CITY OF NEW LONDON SANITARY

AT&T COMMUNICATIONS

EXISTING R/W

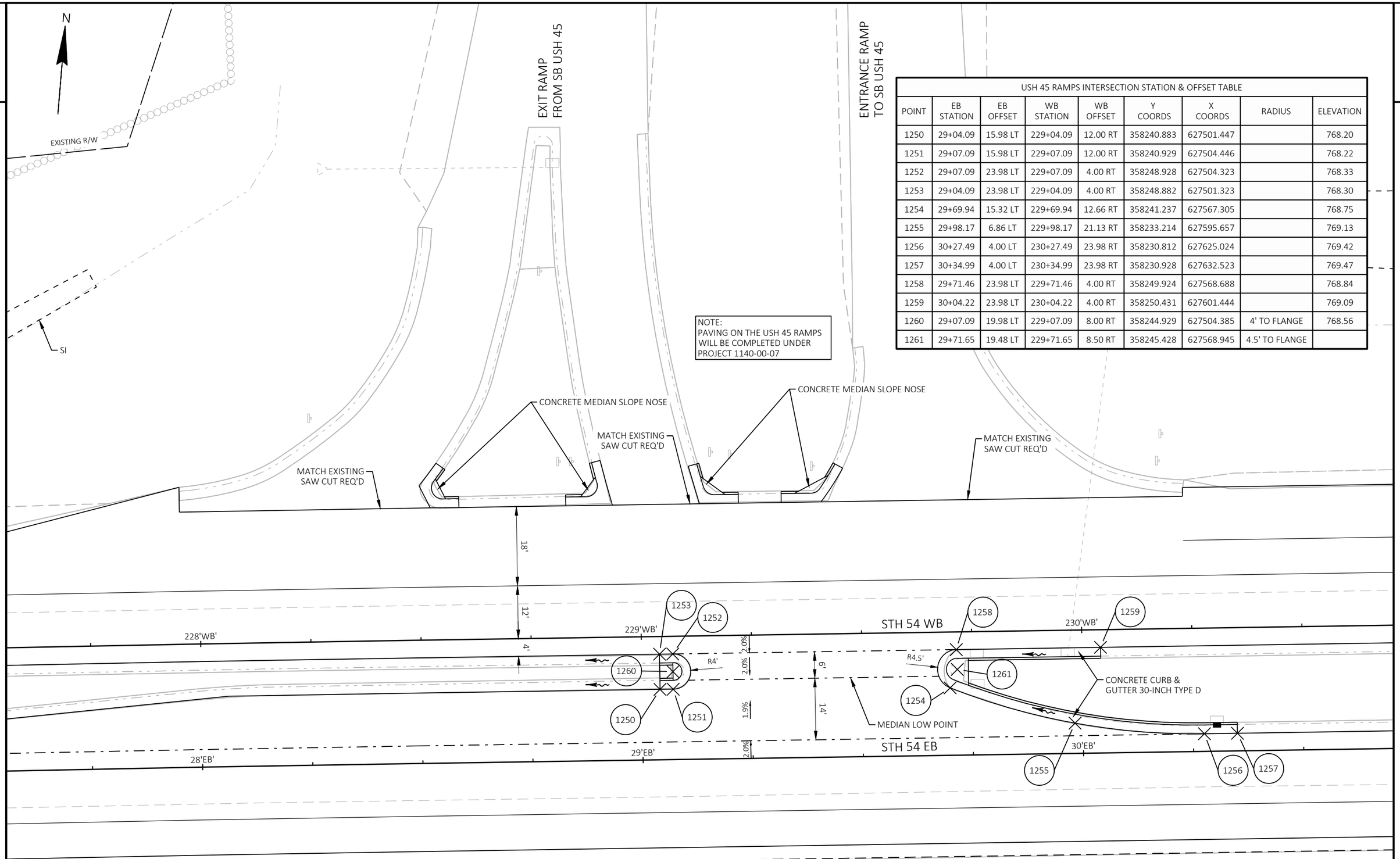
SIGN

N

CTH D DSOUTH INTERSECTION STATION & OFFSET TABLE								
POINT	EB STATION	EB OFFSET	CTH D STATION	CTH D OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1200	14+86.91	38.44 RT	106+55.42	86.11 LT	358113.690	626089.651		760.49
1201	15+14.74	57.23 RT	106+48.22	53.32 LT	358097.092	626118.841		760.57
1202	15+19.55	86.62 RT	106+22.68	38.00 LT	358068.159	626125.896		760.41
1203	14+97.55	185.47 RT	105+22.68	22.00 LT	357967.909	626111.537		760.22
1204	15+32.06	98.49 RT	106+16.25	22.00 LT	358057.274	626139.273		760.73
1205	15+93.42	122.79 RT	106+16.30	44.00 RT	358037.758	626202.322		760.84
1206	16+16.67	64.18 RT	106+79.34	44.00 RT	358097.970	626221.010		761.31
1207	16+42.41	32.09 RT	107+18.67	56.09 RT	358131.943	626244.213		761.47
1208	16+81.74	20.00 RT	107+44.41	88.19 RT	358147.013	626282.496		761.26
1209	15+65.44	74.02 RT	106+51.31	0.00 RT	358084.239	626170.677		761.51
1210	15+73.80	77.34 RT	106+51.31	9.00 RT	358081.571	626179.273		761.55
1211	15+80.41	36.28 RT	106+91.90	0.00 RT	358123.008	626182.710		761.66
1212	15+88.77	39.60 RT	106+91.90	9.00 RT	358120.341	626191.306		761.71
1213	14+80.00	77.84 RT	106+16.25	78.00 LT	358073.873	626085.790	40' TO FLANGE	
1214	16+81.74	90.00 RT	106+79.34	114.00 RT	358077.220	626287.863	70' TO FLANGE	
1215	15+69.62	75.68 RT	106+51.31	4.50 RT	358082.905	626174.975	4.5' TO FLANGE	
1216	15+84.59	37.94 RT	106+91.90	4.50 RT	358121.675	626187.008	4.5' TO FLANGE	

PROJECT NO: 6220-04-76 | HWY: STH 54 | COUNTY: WAUPACA / OUTAGAMIE | INTERSECTION DETAILS CTH D SOUTH | SHEET 43 | E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021101-ID-54.DWG
LAYOUT NAME - D-S
PLOT DATE : 7/18/2025 10:38 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:20 FT



USH 45 RAMPS INTERSECTION STATION & OFFSET TABLE								
POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1250	29+04.09	15.98 LT	229+04.09	12.00 RT	358240.883	627501.447		768.20
1251	29+07.09	15.98 LT	229+07.09	12.00 RT	358240.929	627504.446		768.22
1252	29+07.09	23.98 LT	229+07.09	4.00 RT	358248.928	627504.323		768.33
1253	29+04.09	23.98 LT	229+04.09	4.00 RT	358248.882	627501.323		768.30
1254	29+69.94	15.32 LT	229+69.94	12.66 RT	358241.237	627567.305		768.75
1255	29+98.17	6.86 LT	229+98.17	21.13 RT	358233.214	627595.657		769.13
1256	30+27.49	4.00 LT	230+27.49	23.98 RT	358230.812	627625.024		769.42
1257	30+34.99	4.00 LT	230+34.99	23.98 RT	358230.928	627632.523		769.47
1258	29+71.46	23.98 LT	229+71.46	4.00 RT	358249.924	627568.688		768.84
1259	30+04.22	23.98 LT	230+04.22	4.00 RT	358250.431	627601.444		769.09
1260	29+07.09	19.98 LT	229+07.09	8.00 RT	358244.929	627504.385	4' TO FLANGE	768.56
1261	29+71.65	19.48 LT	229+71.65	8.50 RT	358245.428	627568.945	4.5' TO FLANGE	

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	INTERSECTION DETAILS - USH 45 SB RAMPS	SHEET 44	E

N

B-44-0146

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE TBT

CONCRETE PAVEMENT
APPROACH SLAB
12-INCH

CROWN SHIFT

+15' 'WB'LT
-12.00'

+75' 'WB'LT
-8.00'

237'WB'

238'WB'

STH 54 WB

239'WB'

MEDIAN CROWN

CONCRETE
SIDEWALK 5-INCH

CONCRETE CURB &
GUTTER 30-INCH TYPE A

R47'

R4'

STA 37+83.00'EB'

37'EB'

38'EB'

STH 54 EB

39'EB'

+40' 'EB'RT
8.00'

CONCRETE
CURB & GUTTER
30-INCH TYPE D

STA 30+08.00'R'

30'R'

CONCRETE PAVEMENT
APPROACH SLAB
12-INCH

CROWN SHIFT

+80' 'EB'RT
12.00'

SEE GUARDRAIL DETAILS

GUARDRAIL MOW STRIP
ASPHALT
SEE GUARDRAIL DETAILS

R10'

CONCRETE CURB &
GUTTER 30-INCH TYPE D
(NO VERTICAL HEAD)

STEEL THRIE BEAM
BULLNOSE TERMINAL
SEE GUARDRAIL DETAILS

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

SI

ASPHALTIC
FLUME

B-44-0147

SI

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

R47'

R40'

R159'

NEW LONDON UTILITIES
ELECTRIC

NEW LONDON UTILITIES
WATER

EMBARRASS RIVER

RIVER RD

29'R'

R111'

STA 28'R'+87.37
STA 37'EB'+49.42, 111.41' RT
MATCH EXISTING
SAW CUT REQ'D

1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1350 1351 1352 1353 1354 1355

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	INTERSECTION DETAILS - RIVER RD	SHEET 45	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021101-ID-54.DWG
LAYOUT NAME - RIVER

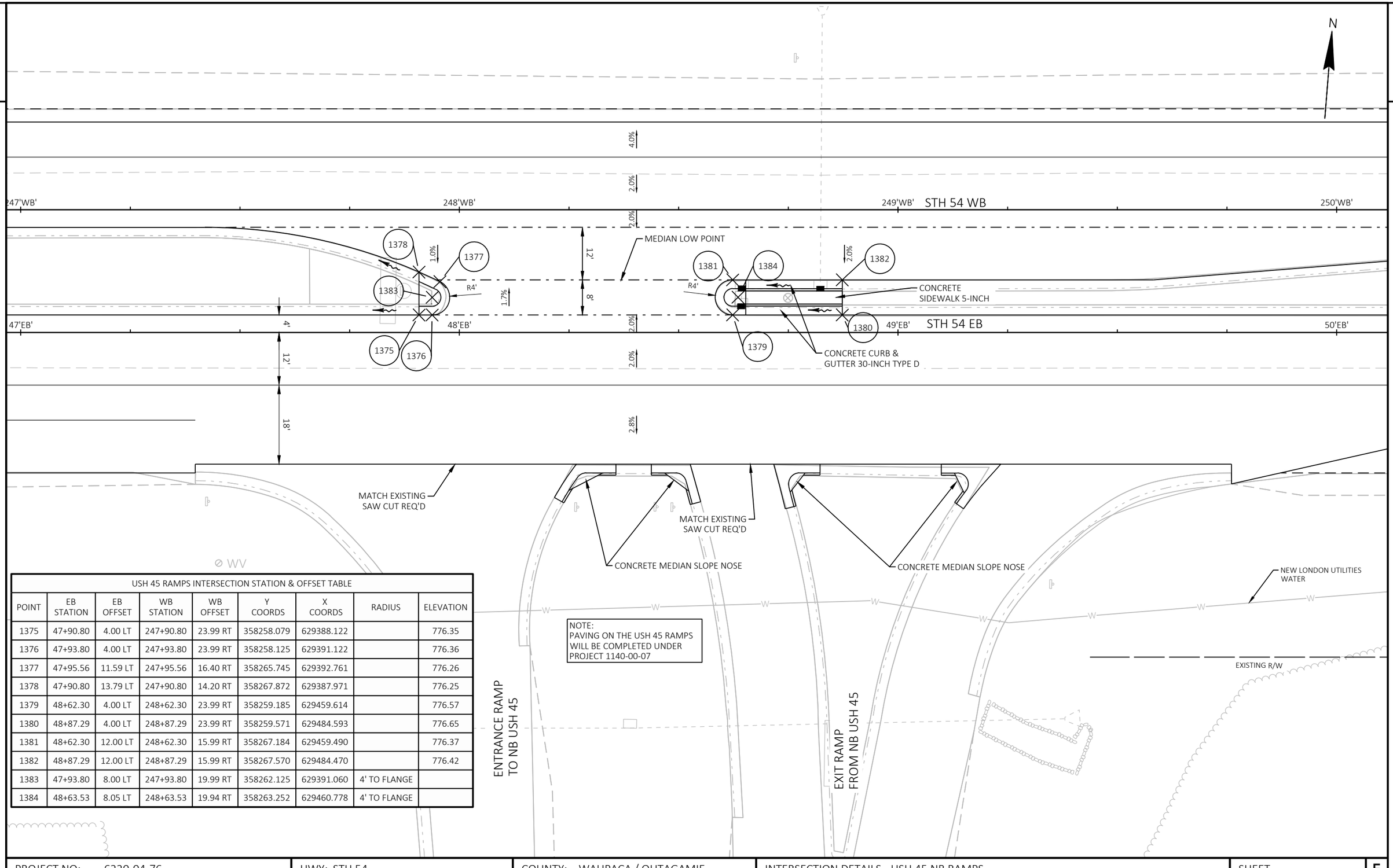
PLOT DATE : 7/18/2025 10:46 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

RIVER RD INTERSECTION STATION & OFFSET TABLE						
POINT	WB STATION	WB OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1311	37+22.22	4.00 LT	358241.555	628319.666		773.01
1312	37+65.78	4.00 LT	358242.229	628363.227		773.15
1313	237+68.56	17.10 RT	358249.156	628365.891		773.26
1314	238+19.00	13.99 RT	358253.050	628416.277		773.46
1315	38+29.00	4.00 LT	358243.206	628426.431		773.34
1320	237+65.78	19.99 RT	358246.228	628363.165	4' TO FLANGE	
1321	238+29.00	13.99 RT	358253.205	628426.276	10' TO FLANGE	
1350	237+36.00	4.00 RT	358261.751	628333.136		773.05
1351	238+29.00	3.99 RT	358263.204	628426.121		773.34
1352	237+66.56	27.67 LT	358293.890	628363.201		773.00
1353	238+16.51	27.67 LT	358294.663	628413.147		773.00
1354	239+34.50	27.67 LT	358296.488	628531.123		773.37
1355	237+36.00	51.00 RT	358214.757	628333.864	47' TO FLANGE	

NOTE: Points 1311, 1312 and 1315 are referenced off of STH 54 EB Alignment.

RIVER RD INTERSECTION STATION & OFFSET TABLE								
POINT	EB STATION	EB OFFSET	RIVER STATION	RIVER OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1300	37+00.87	28.00 RT	29+80.00	82.13 LT	358209.229	628298.818		772.78
1301	37+04.83	28.00 RT	29+80.00	78.17 LT	358209.290	628302.779		772.70
1302	37+35.74	39.59 RT	29+64.22	47.05 LT	358198.179	628333.860		772.00
1303	37+41.30	104.65 RT	28+87.37	10.57 LT	358133.209	628340.424		770.79
1304	37+57.88	118.45 RT	28+87.37	11.00 RT	358119.671	628357.217		771.13
1305	37+68.34	105.87 RT	29+03.73	11.00 RT	358132.412	628367.483		771.43
1306	37+79.50	89.74 RT	29+21.43	11.00 RT	358148.714	628378.394		771.81
1307	37+96.48	53.52 RT	29+56.84	15.00 RT	358185.189	628394.809		772.87
1308	38+10.06	29.51 RT	29+78.49	27.06 RT	358209.406	628408.016		773.13
1309	38+35.95	20.00 RT	29+88.00	52.95 RT	358219.316	628433.758		773.36
1310	38+84.31	20.00 RT	29+88.00	101.31 RT	358220.064	628482.104		773.52
1316	37+04.83	75.00 RT	28+86.86	57.57 LT	358162.295	628303.506	47' TO FLANGE	
1317	36+83.00	34.89 RT	29+73.11	100.00 LT	358202.060	628281.054	111' TO EOP	
1318	36+45.22	4.75 RT	30+03.25	137.78 LT	358231.619	628242.809	159' TO EOP	
1319	38+35.95	60.00 RT	29+56.84	55.00 RT	358179.321	628434.377	40' TO FLANGE	



NOTE:
PAVING ON THE USH 45 RAMPS WILL BE COMPLETED UNDER PROJECT 1140-00-07

USH 45 RAMPS INTERSECTION STATION & OFFSET TABLE

POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1375	47+90.80	4.00 LT	247+90.80	23.99 RT	358258.079	629388.122		776.35
1376	47+93.80	4.00 LT	247+93.80	23.99 RT	358258.125	629391.122		776.36
1377	47+95.56	11.59 LT	247+95.56	16.40 RT	358265.745	629392.761		776.26
1378	47+90.80	13.79 LT	247+90.80	14.20 RT	358267.872	629387.971		776.25
1379	48+62.30	4.00 LT	248+62.30	23.99 RT	358259.185	629459.614		776.57
1380	48+87.29	4.00 LT	248+87.29	23.99 RT	358259.571	629484.593		776.65
1381	48+62.30	12.00 LT	248+62.30	15.99 RT	358267.184	629459.490		776.37
1382	48+87.29	12.00 LT	248+87.29	15.99 RT	358267.570	629484.470		776.42
1383	47+93.80	8.00 LT	247+93.80	19.99 RT	358262.125	629391.060	4' TO FLANGE	
1384	48+63.53	8.05 LT	248+63.53	19.94 RT	358263.252	629460.778	4' TO FLANGE	

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	INTERSECTION DETAILS - USH 45 NB RAMPS	SHEET 47	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021101-ID-54.DWG
LAYOUT NAME - USH 45 NB
PLOT DATE : 9/16/2025 9:12 AM
PLOT BY : BRETT HIELSBERG
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N

STH 54 WB

STH 54 EB

CTH S

254'WB'

255'WB'

256'WB'

54'EB'

55'EB'

56'EB'

STA 55+08.11'EB'

STA 7+00.00'S'

STA 6'S'+06.54
STA 55'EB'+06.20, 93.44' RT
MATCH EXISTING
SAW CUT REQ'D

+64.81' 'EB'RT
12.00'

MEDIAN CROSSOVER

MEDIAN CROWN

CONCRETE
SIDEWALK 5-INCH

CONCRETE CURB &
GUTTER 30-INCH TYPE D

CONCRETE CURB &
GUTTER 6-INCH SLOPED 36-INCH TYPE D

FULL DEPTH 7" HMA

4" HMA
SHOULDER

ASPHALTIC
FLUME

NEW LONDON UTILITIES
WATER

NEW LONDON UTILITIES
ELECTRIC

SPECTRUM
COMMUNICATIONS

EXISTING R/W

SI

R10'

R4'

R40'

R60'

24'

18'

8'

12'

4'

2'

2.0%

0.3%

0.5%

1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	INTERSECTION DETAILS - CTH S	SHEET 48	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021101-ID-54.DWG
LAYOUT NAME - S

PLOT DATE : 7/18/2025 10:50 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

CTH S INTERSECTION STATION & OFFSET TABLE								
POINT	EB STATION	EB OFFSET	S STATION	S OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
1401	54+22.37	24.00 RT	6+74.25	85.23 LT	358239.849	630020.049		778.41
1402	54+65.23	42.01 RT	6+57.12	42.01 LT	358222.503	630063.181		778.36
1403	54+81.88	76.33 RT	6+23.15	24.66 LT	358188.449	630080.358		777.88
1404	54+82.36	85.23 RT	6+14.26	24.00 LT	358179.555	630080.976		777.77
1405	54+78.90	92.91 RT	6+06.51	27.30 LT	358171.818	630077.636		777.77
1406	55+24.19	93.78 RT	6+06.56	18.00 RT	358171.647	630122.937		777.86
1407	55+24.40	83.69 RT	6+16.66	18.00 RT	358181.742	630122.988		777.86
1408	55+24.51	78.36 RT	6+21.99	18.00 RT	358187.074	630123.014		777.90
1409	55+24.82	63.18 RT	6+37.18	18.00 RT	358202.258	630123.090		778.11
1410	55+36.82	35.43 RT	6+65.17	29.43 RT	358230.192	630134.658		778.46
1411	55+64.81	24.00 RT	6+77.17	57.18 RT	358242.051	630162.471		778.69
1412	56+11.48	20.00 RT	6+82.12	103.76 RT	358246.772	630209.071		779.19
1422	54+22.37	84.00 RT	6+14.26	84.00 LT	358179.856	630020.977	60' TO FLANGE	
1423	55+64.77	63.99 RT	6+37.19	57.96 RT	358202.070	630163.053	40' TO FLANGE	

CTH S INTERSECTION STATION & OFFSET TABLE							
POINT	WB STATION	OFFSET	EB STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1413	254+19.02	24.00 RT	54+19.02	4.00 LT	358267.793	630016.263	
1414	254+29.02	24.00 RT	54+29.02	4.00 LT	358267.948	630026.262	
1415	254+39.02	14.00 RT	54+39.02	14.00 LT	358278.099	630036.104	
1416	254+29.02	4.00 RT	54+29.02	24.00 LT	358287.942	630025.953	
1417	254+19.02	4.00 RT	54+19.02	24.00 LT	358287.787	630015.954	
1418	255+58.62	24.00 RT	55+58.62	4.00 LT	358269.952	630155.847	
1419	256+08.10	24.00 RT	56+08.10	4.00 LT	358270.717	630205.317	
1420	255+58.62	16.00 RT	55+58.62	12.00 LT	358277.951	630155.724	
1421	256+08.10	16.00 RT	56+08.10	12.00 LT	358278.716	630205.193	
1424	254+29.02	14.00 RT	54+29.02	14.00 LT	358277.945	630026.107	10' TO FLANGE
1425	255+58.62	20.00 RT	55+58.62	8.00 LT	358273.952	630155.785	4' TO FLANGE

2

CITY OF NEW LONDON

N

MATCH LINE 11+50

2

JEANNE ST

12'J'

11'J'

BUTT JOINT REQUIRED

REMOVING SMALL PIPE CULVERT
INSTALL CULVERT PIPE CLASS III-A NON-METAL 18 INCH
W INVERT STA 7'EB'+13.35, 39.92' LT ELEV 758.08
E INVERT STA 8'EB'+39.34, 42.79' LT ELEV 758.43
SLOPE = 0.28%
2 APRON ENDWALLS 18-INCH REQ'D

EXISTING R/W

AT&T
COMMUNICATION

TEMP WIDENING 'Y' STAGE 4
SAW CUT AND RE-SHAPE
SHOULDER STAGE 6

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

SI

CONCRETE CURB & GUTTER
30-INCH TYPE D

NEW
LONDON
UTILITIES
WATER

TEMP WIDENING 'Y' STAGE 4
SAW CUT AND RE-SHAPE
SHOULDER STAGE 6

TLE

+47.11' 'WB'LT
-20.00'

EXISTING R/W

+22.33' 'WB'RT
4.00'

211'WB'

210'WB'

209'WB'

CONCRETE MEDIAN
SLOPED NOSE

STH 54

4'EB' 5'EB' 6'EB' 7'EB' 8'EB' 9'EB' 10'EB' 11'EB'

FO W OHU

REMOVING ASPHALTIC SURFACE MILLING
REMOVE EXISTING CENTERLINE RUMBLE
STRIPS - STAGE 1
ASPHALTIC SURFACE RUMBLE STRIPS
CENTERLINE - STAGE 6

NEW
LONDON
UTILITIES
ELECTRIC

TEMP WIDENING 'W' STAGE 3
SAW CUT AND RE-SHAPE
SHOULDER STAGE 5

STA 7'EB'+18
BEGIN MILL AND OVERLAY
BUTT JOINT REQ'D

STA 8+25.02 'EB' = STA 208+21.56 'WB'

STA 8'EB'+75
END MILL AND OVERLAY
BEGIN PAVEMENT REPLACEMENT
SAW CUT REQUIRED

SI

AT&T
COMMUNICATION

EXISTING R/W

+89.12' 'EB'RT
20.00'

+25.96' 'EB'LT
-4.00'

EXISTING CROSS
CULVERTS TO
REMAIN

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 50	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 01

PLOT DATE : 9/16/2025 9:24 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

CITY OF NEW LONDON

MATCH LINE 19+00

2

N

CTH D/N SHAWANO ST

WE ENERGIES PETROLEUM

CAUTION

AT&T COMMUNICATIONS

EXISTING R/W

CONCRETE SIDEWALK 5-INCH

TLE

NEW LONDON UTILITIES ELECTRIC SPECTRUM COMMUNICATION

SAW CUT

+73.98' 'D'LT -22.00'

109'D'

CITY OF NEW LONDON SANITARY

+74.26' 'D'RT 65.38'

SI

ASPHALTIC SURFACE

NEW LONDON UTILITIES WATER

TLE

SAW CUT

CONCRETE DRIVEWAY 6-INCH TYPE Y

EXISTING R/W

SI

+05.32' 'D'LT -22.00'

+62.88' 'WB'LT -24.00'

+22.88' 'WB'LT -20.00'

CONCRETE SIDEWALK 5-INCH

CONCRETE SIDEWALK 5-INCH

+42.60' 'WB'LT -33.75'

+42.94' 'WB'LT -25.25'

108'D'

CITY OF NEW LONDON SANITARY

+49.15' 'WB'RT 4.00'

+73.06' 'WB'RT 15.00'

212'WB' 213'WB' STH 54 WB 214'WB' 215'WB' 216'WB' 217'WB' 218'WB' 219

+08.99' 'EB'LT -15.00'

+50.87' 'EB'LT -15.00'

12'EB' +40.94' 'EB'LT -4.00' 13'EB' STH 54 EB 14'EB' 15'EB' 16'EB' +74.77' 'EB'LT -4.00' 17'EB' 18'EB' 19'

107'D'

SPECTRUM COMMUNICATION

NEW LONDON UTILITIES WATER

+70.43' 'EB'RT 20.00'

+86.72' 'EB'RT 20.00'

+73.37' 'EB'RT 20.00'

+81.74' 'EB'RT 20.00'

+03.94' 'EB'RT 20.00'

+06.30' 'EB'RT 41.82'

CE

+50.77' 'EB'RT 41.98'

AT&T COMMUNICATION

SI

+86.91' 'EB'RT 38.44'

EXISTING R/W

SAW CUT

SPECTRUM COMMUNICATION

CONCRETE SIDEWALK 5-INCH

+22.68' 'D'LT -38.00'

+16.25' 'D'LT -22.00'

NEW LONDON UTILITIES ELECTRIC SPECTRUM COMMUNICATION

NEW LONDON UTILITIES WATER

AT&T COMMUNICATION

+22.68' 'D'LT -22.00'

106'D'

105'D'

CITY OF NEW LONDON SANITARY

CTH D/N SHAWANO ST

+79.34' 'D'RT 44.00'

+16.25' 'D'RT 44.00'

WE ENERGIES PETROLEUM

SAW CUT

CAUTION

EXISTING R/W

AT&T COMMUNICATION

NEW LONDON UTILITIES ELECTRIC

AT&T COMMUNICATION

EXISTING R/W

WE ENERGIES PETROLEUM

CAUTION

MATCH LINE 11+50

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 51	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 02

PLOT DATE : 7/21/2025 11:27 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

CITY OF NEW LONDON

N

MATCH LINE 26+50

CLEARING & GRUBBING

RESTORE DITCH FLOWLINE
SEE DETAIL
(PAID FOR AS EXCAVATION COMMON)

+87.76' 'WB'LT
-67.60'

EXISTING R/W

+51.65' 'WB'LT
-69.25'

1'L'

2'L'

3'L'

4'L'

EXISTING CURB &
GUTTER TO REMAIN

ASPHALTIC SURFACE

+75.51' 'WB'LT
-31.49'

+85.61' 'WB'LT
-20.00'

+25.44' 'WB'LT
-20.00'

SI

NEW
LONDON
UTILITIES
WATER

+08.16' 'WB'LT
-20.00'

CE

+55.85' 'WB'RT
4.00'

STH 54 WB

'WB'

+05.71' 'WB'RT
15.00'

220'WB'

221'WB'

222'WB'

223'WB'

224'WB'

225'WB'

226'WB'

CONCRETE MEDIAN
SLOPED NOSE

CONCRETE GUTTER 24-INCH

CONCRETE MEDIAN
SLOPED NOSE

EB'

+29.28' 'EB'LT
-4.00'

20'EB'

21'EB'

22'EB'

STH 54 EB

23'EB'

24'EB'

+91' 'EB'LT
-4.00'

25'EB'

26'EB'

EXISTING CURB &
GUTTER TO REMAIN

CE

+30.51' 'EB'RT
20.00'

CE

PE

NEW
LONDON
UTILITIES
WATER

SAW CUT

AT&T
COMMUNICAITON

EXISTING CURB AND
GUTTER TO REMAIN

WE ENERGIES
PETROLEUM

CAUTION

EXISTING R/W

NEW
LONDON
UTILITIES
ELECTRIC

EXISTING CROSS
CULVERT TO
REMAIN

MATCH LINE 19+00

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 52	E

2

CITY OF NEW LONDON
WAUPACA COUNTY

EXIT RAMP
FROM SB USH 45

ENTRANCE RAMP
TO SB USH 45

N

CITY OF NEW LONDON
OUTAGAMIE COUNTY

MATCH LINE 34+00

2

RESTORE DITCH FLOWLINE
SEE DETAIL
(PAID FOR AS EXCAVATION COMMON)

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
30-INCH TYPE D
CONCRETE MEDIAN SLOPE NOSE

CLEARING & GRUBBING

EXISTING R/W

6'L'

5'L'

SAW CUT

SI

+74.21' 'WB'LT
-96.96'

+22.73' 'WB'LT
-96.88'

1'M'

2'M'

+95.67' 'WB'LT
-30.00'

+29.75' 'WB'LT
-20.00'

+23.36' 'WB'LT
-30.00'

+23.36' 'WB'LT
-32.00'

+73.36' 'WB'LT
-28.00'

+58.39' 'WB'LT
-30.00'

+77.47' 'WB'LT
-37.94'

+38.09' 'WB'LT
-28.00'

+77.47' 'WB'LT
-32.00'

+71.65' 'WB'RT
4.00'

+04.09' 'WB'RT
4.00'

STH 54 WB

227'WB' 228'WB' 229'WB' 230'WB' 231'WB' 232'WB' 233'WB' 234'

+04.22' 'WB'RT
4.00'

+06.13' 'EB'LT
-15.98'

CONCRETE MEDIAN
SLOPED NOSE

+04.09' 'EB'LT
-15.98'

+56.13' 'EB'LT
-4.00'

27'EB' 28'EB' 29'EB' 30'EB' 31'EB' 32'EB' 33'EB' 34'

STH 54 EB

+69.94' 'EB'LT
-15.32'

+34.99' 'EB'LT
-4.02'

+68.37' 'EB'RT
27.67'

+14.03' 'EB'RT
20.00'

+14.03' 'EB'RT
30.00'

SI

+34.03' 'EB'RT
32.00'

+34.03' 'EB'RT
38.00'

+87.12' 'EB'RT
30.00'

+87.19' 'EB'RT
34.00'

+83.75' 'EB'RT
67.30'

+63.47' 'EB'RT
67.33'

CONCRETE SIDEWALK
5-INCH

NEW
LONDON
UTILITIES
WATER

STA 32'EB'+34 - STA 33'EB'+47 RT
REMOVING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT
SEE GUARDRAIL DETAILS

CLEARING & GRUBBING

CONCRETE SURFACE DRAIN DROP INLET TYPE
CONCRETE CURB AND GUTTER TBT
RIPRAP MEDIUM
SEE STORM SEWER PLAN

EXISTING R/W

CITY OF NEW LONDON
WAUPACA COUNTY

CITY OF NEW LONDON
OUTAGAMIE COUNTY

MATCH LINE 26+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 53	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 04

PLOT DATE : 7/21/2025 11:28 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

CITY OF NEW LONDON
OUTAGAMIE COUNTY

N

MATCH LINE 41+50

CONCRETE SURFACE DRAIN DROP INLET TYPE
CONCRETE CURB AND GUTTER TBT
RIPRAP MEDIUM
SEE STORM SEWER PLAN

STA 233'WB'+77 - STA 234'WB'+81 LT
REMOVING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT
SEE GUARDRAIL DETAILS

+27.43' 'WB'LT
-34.00'

SI

B-44-146

CONCRETE PAVEMENT APPROACH SLAB

+30.55' 'WB'LT
-30.00'

+56.79' 'WB'RT
4.00'

CONCRETE SURFACE DRAIN DROP INLET TYPE
CONCRETE CURB AND GUTTER TBT
RIPRAP MEDIUM
SEE STORM SEWER PLAN

CONCRETE PAVEMENT APPROACH SLAB

DITCH RESTORATION
CLEARING & GRUBBING

STA 238'WB'+47 - STA 239'WB'+88 LT
REMOVING GUARDRAIL
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT
SEE GUARDRAIL DETAILS

SLOPE PAVING CRUSHED
AGGREGATE

SI

+99' 'WB'LT
-50.00'

+20' 'WB'LT
-50.00'

+06.66' 'WB'LT
-30.00'

+87.59' 'WB'LT
-37.94'

+66.63' 'WB'RT
4.00'

+29' 'WB'RT
3.99'

+34.50' 'WB'LT
-27.67'

+37.62' 'WB'LT
-34.06'

+87.59' 'WB'LT
-32.00'

+73.32' 'WB'RT
6.50'

+05.73' 'WB'LT
-20.00'

235'WB' 236'WB' 237'WB' 238'WB' 239'WB' 240'WB' 241'WB'

STH 54 WB

35'EB' 36'EB' 37'EB' 38'EB' 39'EB' 40'EB' 41'EB'

STH 54 EB

+37.22' 'EB'LT
-4.00'

30'R'

+29' 'EB'LT
-4.00'

+73.32' 'EB'LT
-6.50'

+65.78' 'EB'LT
-4.00'

+27.62' 'EB'LT
-3.99'

SI

CONCRETE SIDEWALK
5-INCH

B-44-147

CONCRETE SIDEWALK
5-INCH

CONCRETE MEDIAN
SLOPED NOSE

+35.95' 'EB'RT
20.00'

NEW
LONDON
UTILITIES
ELECTRIC

+84.29' 'EB'RT
20.00'

+98.20' 'EB'RT
20.00'

ASPHALTIC FLUME

STEEL THRIE BEAM BULLNOSE
CONCRETE CURB AND GUTTER 30-INCH TYPE D (NO VERTICAL HEAD)
GUARDRAIL MOW STRIP ASPHALT

NEW
LONDON
UTILITIES
WATER

EMBARRASS RIVER

RIVER RD

29'R'

28'R'

WV

SAW CUT

CONCRETE MEDIAN
SLOPED NOSE
(FLAT)

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D

USH 45

CITY OF NEW LONDON

MATCH LINE 34+00

2

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 54	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 05
PLOT DATE : 7/21/2025 11:28 AM
PLOT BY : BRETT HIELSBERG
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

CITY OF NEW LONDON

N

MATCH LINE 49+00

SIGN

DITCH RESTORATION

NEW LONDON UTILITIES ELECTRIC

EXISTING R/W

ASPHALTIC SURFACE

PE

CONCRETE SIDEWALK 5-INCH

CONCRETE MEDIAN SLOPED NOSE

CONCRETE MEDIAN SLOPED NOSE

+77.09' 'WB'RT 4.00'

+90.80' 'WB'RT 14.20'

+62.30' 'WB'RT 15.99'

242'WB' 243'WB' 244'WB' 245'WB' 246'WB' 247'WB' 248'WB' 249'

STH 54 WB

42'EB' 43'EB' 44'EB' 45'EB' 46'EB' 47'EB' 48'EB' 49'

STH 54 EB

+77.09' 'EB'LT -4.00'

+93.80' 'EB'LT -4.00'

+62.30' 'EB'LT -4.00'

SAW CUT

CONCRETE CURB & GUTTER 30-INCH TYPE D (NO VERTICAL HEAD)

+90.47' 'EB'RT 20.00'

CONCRETE CURB & GUTTER 30-INCH TYPE D (NO VERTICAL HEAD)

39.79' 'EB'RT 32.00'

+39.79' 'EB'RT 30.00'

SAW CUT

NEW LONDON UTILITIES ELECTRIC

NEW LONDON UTILITIES WATER

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER 30-INCH TYPE D
CONCRETE MEDIAN SLOPE NOSE

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

MATCH LINE 41+50

CITY OF NEW LONDON

2

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 55	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 06

PLOT DATE : 7/21/2025 11:29 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

CITY OF NEW LONDON

TOWN OF LIBERTY

MATCH LINE 56+50

MATCH LINE 49+00

N

DITCH RESTORATION

NEW LONDON UTILITIES ELECTRIC

EXISTING R/W

SAW CUT

CE

CONCRETE MEDIAN SLOPED NOSE

CONCRETE SIDEWALK 5-INCH

+29.02' 'WB'RT 4.00'

+08.30' 'WB'RT 4.00'

+58.30' 'WB'RT 15.99'

+58.62' 'WB'RT 16.00'

WB' 250'WB' 251'WB' 252'WB' STH 54 WB 253'WB' 254'WB' 255'WB' 256'WB'

EB' 50'EB' 51'EB' 52'EB' STH 54 EB 53'EB' 54'EB' 55'EB' 56'EB'

+29.02' 'EB'LT -4.00'

+58.62' 'EB'LT -4.00'

+13.86' 'EB'RT 26.00'

+76.04' 'EB'RT 30.00'

+22.37' 'EB'RT 24.00'

+64.81' 'EB'RT 24.00'

+11.48' 'EB'RT 20.00'

NEW LONDON UTILITIES WATER

SI

EXISTING R/W

SAW CUT

SPECTRUM COMMUNICATION

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER 30-INCH TYPE D
CONCRETE MEDIAN SLOPE NOSE

EXIT RAMP FROM NB USH 45

ASPHALTIC FLUME

NEW LONDON UTILITIES ELECTRIC

CTH S

6'S'

5'S'

ASPHALTIC FLUME

SAW CUT

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 56	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 07

PLOT DATE : 7/21/2025 11:30 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

TOWN OF LIBERTY

N

MATCH LINE 64+00

EXISTING R/W

CONCRETE MEDIAN
SLOPED NOSE

CONCRETE SIDEWALK
5-INCH

NEW
LONDON
UTILITIES
ELECTRIC

TEMP WIDENING 'Z' STAGE 2
SAW CUT AND RE-SHAPE
SHOULDER STAGE 4

+54.76' 'WB'RT
16.00'

+63.09' 'WB'RT
4.00'

+37.33' 'WB'RT
4.00'

+76.68' 'WB'RT
4.00'

+39.31' 'WB'LT
-20.00'

+88.73' 'WB'LT
-17.00'

257'WB'
258'WB'
259'WB'
260'WB'
261'WB'
262'WB'
263'WB'

STH 54 WB

57'EB'
58'EB'
59'EB'
60'EB'
61'EB'
62'EB'
63'EB'

STH 54 EB

+45.78' 'EB'LT
-4.00'

+77.19' 'EB'LT
-4.00'

+40' 'EB'RT
20.00'

+90' 'EB'RT
17.00'

NEW
LONDON
UTILITIES
WATER

NEW
LONDON
UTILITIES
ELECTRIC

EXISTING R/W

EXISTING CROSS
CULVERT TO
REMAIN

TEMP WIDENING 'X' STAGE 1
SAW CUT AND RE-SHAPE
SHOULDER STAGE 3

TOWN OF LIBERTY

CITY OF NEW LONDON

MATCH LINE 56+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 57	E

2

TOWN OF LIBERTY

N

MATCH LINE 71+50

EXISTING R/W

PE
W10630

SI

TEMP WIDENING 'Z' STAGE 2
SAW CUT AND RE-SHAPE
SHOULDER STAGE 4

POST

'WB'
EB'

265'WB'
65'EB'

66'EB'

67'EB'

STH 54

68'EB'

69'EB'

70'EB'

71'EB'

NEW
LONDON
UTILITIES
ELECTRIC

TOWN OF LIBERTY

EXISTING CROSS
CULVERT TO
REMAIN

SI

TEMP WIDENING 'X' STAGE 1
SAW CUT AND RE-SHAPE
SHOULDER STAGE 3

OH

GUY

OH

OH

OH

EXISTING R/W

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 58	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 09

PLOT DATE : 7/21/2025 11:32 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

EXISTING R/W

SI

TEMP WIDENING 'Z' STAGE 2
SAW CUT AND RE-SHAPE
SHOULDER STAGE 4

GUY

OH

WE ENERGIES
ELECTRIC

SIGN

PE
W10546

SAW CUT

POST

STH 54

72'EB' 73'EB' 74'EB' 75'EB' 76'EB' 77'EB' 78'EB' 79'EB'

SI

TEMP WIDENING 'X' STAGE 1
SAW CUT AND RE-SHAPE
SHOULDER STAGE 3

STA 75'EB'+20
END PAVEMENT REPLACEMENT
SAW CUT REQUIRED

EXISTING R/W

MATCH LINE 71+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 59	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021201_PD-54.DWG
LAYOUT NAME - 10

PLOT DATE : 7/21/2025 11:33 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

+73.37' 'EB'RT
20.00'

14'EB'

+08.99' 'EB'LT
-15.00'

214'WB'

STH 54 EB

STH 54 WB

TLE

SI

EXISTING R/W

+86.91' 'EB'RT
38.44'

+22.68' 'D'LT
-22.00'

104'D'

15'EB'

215'WB'

+22.88' 'WB'LT
-20.00'

SI

+16.25'

+22.68' 'D'LT
-38.00'

105'D'

CTH D/N SHAWANO ST

TLE

+62.88' 'WB'LT
-24.00'

+49.15' 'WB'RT
4.00'

106'D'

+50.87' 'EB'LT
-15.00'

JEANNE ST

107'D'

+05.32' 'D'LT
-22.00'

EXISTING R/W

CE

9" BASE PATCHING CONCRETE
2"ASPHALT SURFACE PATCHING

16'EB'

216'WB'

+73.98' 'D'LT
-22.00'

108'D'

9" BASE PATCHING CONCRETE
2"ASPHALT SURFACE PATCHING

EXISTING R/W

+16.25' 'D'RT
44.00'

+79.34' 'D'RT
44.00'

SI

109'D'

+73.06' 'WB'RT
15.00'

110'D'

+74.77' 'EB'LT
-4.00'

CTH D/N SHAWANO ST

+81.74' 'EB'RT
20.00'

17'EB'

217'WB'

+74.26' 'D'RT
65.38'

111'D'

+42.60' 'WB'LT
-33.75'

EXISTING R/W

SI

CE

18'EB'

218'WB'

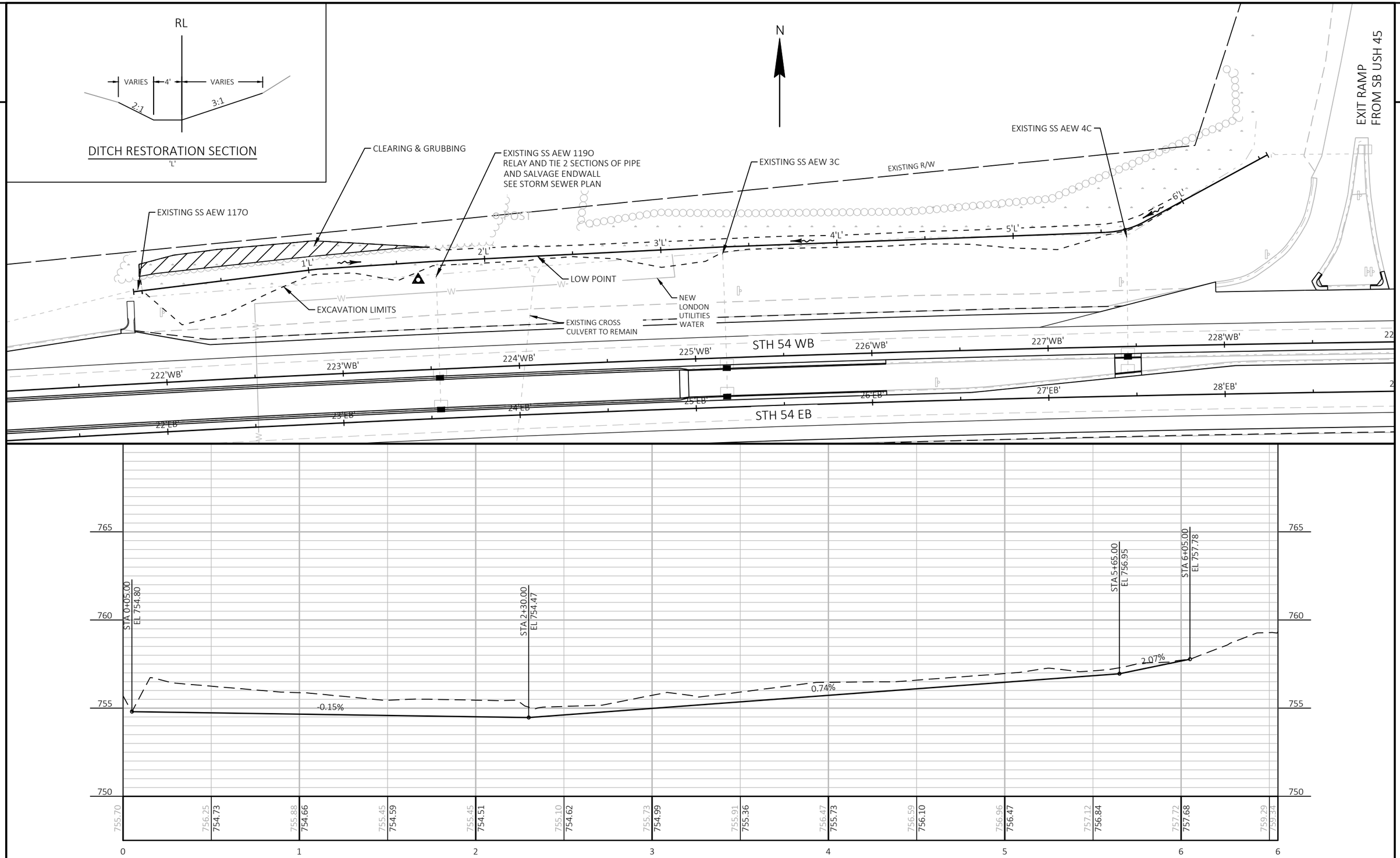
+03.94' 'EB'RT
20.00'

N

CE

+42.94' 'WB'LT
-25.25'

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN DETAILS	SHEET 60	E



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	DITCH RESTORATION DETAIL - 'L'	SHEET 61 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021202_PD-DITCH.DWG
LAYOUT NAME - DITCH L

PLOT DATE : 7/21/2025 11:41 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

EXIT RAMP
FROM SB USH 45

ENTRANCE RAMP
TO SB USH 45

CLEARING & GRUBBING

EXISTING SS AEW 5E

EXISTING SS AEW 6C

1'M'

2'M'

LOW POINT

EXCAVATION LIMITS

RL

14'

VARIES

3:1

VARIES

DITCH RESTORATION SECTION
'M'

B-44-146

EMBARRASS RIVER

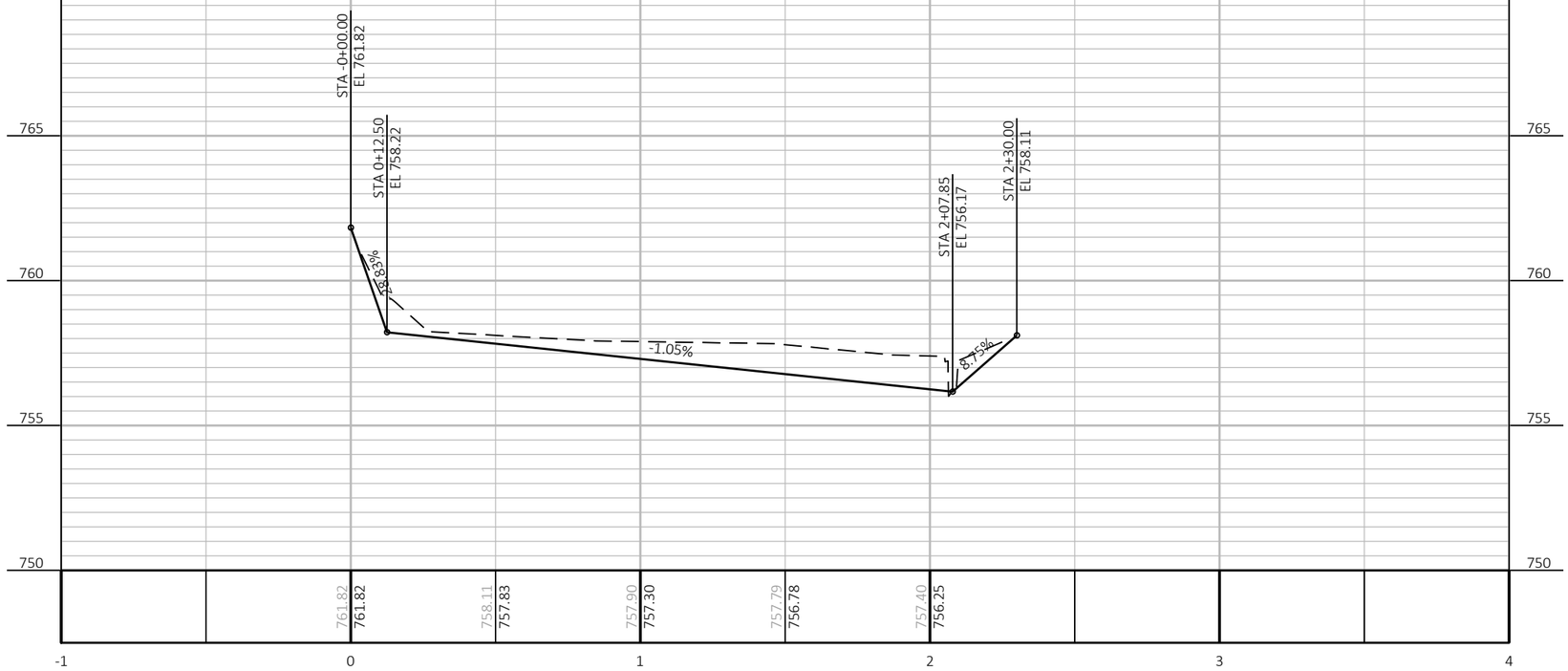
STH 54 WB

229'WB' 230'WB' 231'WB' 232'WB' 233'WB' 234'WB' 235'WB' 236'WB'

STH 54 EB

29'EB' 30'EB' 31'EB' 32'EB' 33'EB' 34'EB' 35'EB' 36'EB'

B-44-147



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	DITCH RESTORATION DETAIL 'M'	SHEET 62	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021202_PD-DITCH.DWG
LAYOUT NAME - DITCH M

PLOT DATE : 7/21/2025 11:44 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

ENTRANCE RAMP
TO SB USH 45

12.5' MGS
GUARDRAIL
3

GUARDRAIL MOW STRIP
EMULSIFIED ASPHALT

53.125' MGS GUARDRAIL
TERMINAL EAT

39.396' MGS THRIE
BEAM TRANSITION

CONCRETE CURB & GUTTER 4-INCH
SLOPED 36-INCH TYPE TBTT

SI

10:1 PAVED TAPER

B-44-146

'WB'+38.09
-28.00' LT

'WB'+77.47
-32.00' LT

'WB'+30.55
-30.00' LT

CONCRETE PAVEMENT
8.5-INCH

CONCRETE PAVEMENT
APPROACH SLAB 12-INCH

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH
TYPE TBT

230'WB' STH 54 WB 231'WB' 232'WB' 233'WB' 234'WB' 235'WB'

30'EB' 31'EB' 32'EB' 33'EB' 34'EB' 35'EB'

STH 54 EB

'EB'+12.77
20.00' RT

'EB'+34.03
32.00' RT

'EB'+87.12
30.00' RT

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH
TYPE TBT

CONCRETE PAVEMENT
APPROACH SLAB 12-INCH

CONCRETE PAVEMENT
8.5-INCH

B-44-147

10:1 PAVED TAPER

WV

SI

W

MH

53.125' MGS GUARDRAIL
TERMINAL EAT

100' MGS GUARDRAIL 3

39.396 MGS THRIE
BEAM TRANSITION

NEW LONDON UTILITIES
WATER

GUARDRAIL MOW STRIP
EMULSIFIED ASPHALT

EMBARRASS RIVER

EXISTING R/W

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	GUARDRAIL DETAILS	SHEET 63	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021203_PD-GR.DWG
LAYOUT NAME - West

PLOT DATE : 7/21/2025 8:19 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

NEW LONDON UTILITIES
ELECTRIC

EXISTING R/W

OH

GUY

SLOPE PAVING
CRUSHED AGGREGATE

GUARDRAIL MOW STRIP
EMULSIFIED ASPHALT

39.396' MGS THRIE
BEAM TRANSITION

125' MGS GUARDRAIL 3

53.125' MGS GUARDRAIL
TERMINAL EAT

SI

B-44-146

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH
TYPE TBT

CONCRETE PAVEMENT
8.5-INCH

CONCRETE PAVEMENT
APPROACH SLAB 12-INCH

WB'+34.50
-30.00' LT

WB'+87.59
-32.00' LT

10:1 PAVED TAPER

WB'+05.73
-20.00' LT

POST 1
'WB'+67.06
10.05' RT

POST 5
'WB'+79.28
7.79' RT

100' STEEL THRIE BEAM

POST 5
'WB'+54.26
7.78' RT

POST 1
'WB'+66.49
10.04' RT

'WB'+73.32
6.50' RT

237'WB'

238'WB'

STH 54 WB

239'WB'

240'WB'

241'WB'

242'WB'

CONCRETE PAVEMENT
8.5-INCH

GUARDRAIL MOW STRIP
ASPHALT

GUARDRAIL MOW STRIP
ASPHALT LIMIT

37'EB'

38'EB'

39'EB'

40'EB'

41'EB'

42'EB'

CONCRETE PAVEMENT
APPROACH SLAB 12-INCH

CONCRETE PAVEMENT
8.5-INCH

30'R'

STH 54 EB

WB'+67.06
19.73' RT

WB'+79.28
21.99' RT

B-44-0144 PIERS

'WB'+54.56
21.98' RT

'WB'+66.49
19.72' RT

WB'+73.32
21.49' RT

CONCRETE CURB &
GUTTER 30-INCH TYPE D
(NO VERTICAL HEAD)

POST 1
POST 5

STEEL THRIE BEAM
BULLNOSE TERMINAL

100' STEEL THRIE BEAM

POST 5
POST 1

STEEL THRIE BEAM
BULLNOSE TERMINAL

B-44-147

NEW LONDON UTILITIES
WATER

NEW LONDON UTILITIES
ELECTRIC

B-44-0144
USH 45 OVER STH 54

EMBARRASS RIVER

29'R'

RIVER RD

28'R'

VENT

WV

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	GUARDRAIL DETAILS	SHEET 64	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021203_PD-GR.DWG
LAYOUT NAME - East

PLOT DATE : 7/21/2025 8:19 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 11+50

12'J'

11'J' JEANNE ST

EXISTING R/W

MILL & OVERLAY
REMOVING ASPHALTIC SURFACE
MILLING 1 ½" DEPTH
1 ¾" HMA PAVEMENT

4" ASPHALTIC SURFACE
(TEMPORARY WIDENING 'Y')

SI

TLE

EXISTING R/W

SI

STA 7'EB'+18
BEGIN MILL & OVERLAY

STA 8'EB'+75
END MILL & OVERLAY
BEGIN PAVEMENT
REPLACEMENT

STH 54

5'

2.0%

8'

12'

761.91 761.89 761.91 761.98 762.01 762.03 762.06 762.16 762.12 762.15 762.22 762.25 762.20 762.16 762.32 762.62

762.01 761.99 762.01 762.08 762.11 762.15 762.29 762.34 762.55 762.64 762.63 762.66 762.67 762.68 762.69 762.56

4'EB' 5'EB' 6'EB' 7'EB' 8'EB' 9'EB' 10'EB' 11'EB' 209'WB' 210'WB' 211'WB'

762.02 762.02 762.05 762.13 762.17 762.22 762.28 762.31 762.31 762.31 762.34 762.38 762.85 762.78

761.92 761.92 761.95 762.02 762.07 762.12 762.18 762.21 762.21 762.21 762.24 762.31 762.31 762.32 762.33 762.34 762.29 762.45 762.29

19'

8'

4" ASPHALTIC SURFACE
(TEMPORARY WIDENING 'W')

SI

EXISTING R/W

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT GRADES	SHEET 65	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021204_PD-PAVEGRADES.DWG
LAYOUT NAME - 01

PLOT DATE : 7/21/2025 9:38 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WB SUPERELEVATION TRANSITION POINTS				
STATION	TYPE	LEFT OUTSIDE SHOULDER	TRAVEL LANE	RIGHT INSIDE SHOULDER
215'WB'+05	BEGIN TRANSITION INTO INTERSECTION	-2.00%	-2.00%	2.00%
215'WB'+80	END TRANSITION INTO INTERSECTION	-0.50%	-0.50%	0.50%
216'WB'+60	BEGIN TRANSITION OUT OF INTERSECTION	-0.S0%	-0.S0%	0.S0%
217'WB'+00	INTERMEDIATE OUTSIDE SHOULDER	-1.S0%	0.S0%	-0.S0%
217'WB'+60	END INSIDE SHOULDER TRANSITION	-3.00%	2.00%	-2.00%
218'WB'+00	BEGIN NORMAL CROWN	-4.00%	2.00%	-2.00%

EB SUPERELEVATION TRANSITION POINTS				
STATION	TYPE	LEFT INSIDE SHOULDER	TRAVEL LANE	RIGHT OUTSIDE SHOULDER
14'EB'+90	BEGIN TRANSITION INTO INTERSECTION	2.00%	-2.00%	-2.00%
1S'EB'+6S	END TRANSITION INTO INTERSECTION	0.S0%	-0.50%	-0.50%
16'EB'+40	BEGIN TRANSITION OUT OF INTERSECTION	0.S0%	-0.S0%	-0.S0%
16'EB'+80	INTERMEDIATE OUTSIDE SHOULDER	-0.S0%	0.S0%	-1.S0%
17'EB'+40	END INSIDE SHOULDER TRANSITION	-2.00%	2.00%	-3.00%
17'EB'+80	BEGIN NORMAL CROWN	-2.00%	2.00%	-4.00%

2

2

N

MATCH LINE 26+50

MATCH LINE 19+00

EXISTING R/W

STA 221'WB'+75
BEGIN 4" HMA
OUTER SHOULDER

4" HMA PAVEMENT
OUTER SHOULDER

SI

CE

SS

SIGN

761.22 761.55 761.86 762.17 762.39 762.42 762.53 762.49 762.86 763.25 763.41 763.72 764.03 764.35 764.69 765.06 765.45 765.85
761.29
761.56 761.87 762.18 762.49 762.80 763.11 763.27 763.42 763.73 764.04 764.35 764.67 765.01 765.38 765.77 766.17
'WB' 220'WB' 221'WB' 222'WB' 223'WB' 224'WB' 225'WB' 226'WB'
762.20 765.92
761.32 761.63 761.77 762.16 762.48 762.79 762.95 763.10 763.41 763.72 764.03 764.35 764.69 765.06 765.45 765.85
761.05 761.39
761.02

4.0%
2.0%
8'
16'

3" ASPHALTIC SURFACE

STH 54

761.59 761.86 762.13 762.39 762.66 762.93 763.07 763.20 763.47 763.74 764.01 764.28 764.59 764.98 765.41 765.83
EB' 20'EB' 21'EB' 22'EB' 23'EB' 24'EB' 25'EB' 26'EB'
761.91 762.18 762.45 762.71 762.98 763.25 763.39 763.52 763.79 764.06 764.33 764.60 764.91 765.30 765.73 766.15 765.91
761.59 761.86 762.13 762.39 762.66 762.93 763.07 763.20 763.47 763.74 764.01 764.28 764.59 764.98 765.41 765.83

2.0%
4.0%
16'
8'

CE

STA 21'EB'+75
BEGIN 4" HMA
OUTER SHOULDER

4" HMA PAVEMENT
OUTER SHOULDER

STA 25'EB'+00
END COMMON EXCAVATION
BEGIN REMOVING ASPHALTIC SURFACE MILLING
STAGE 3 - EASTBOUND ONLY

3" ASPHALTIC
SURFACE DRIVEWAYS
& FIELD ENTRANCES

CE

SIGN

POST

PE

EXISTING R/W

SIGN

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT GRADES	SHEET 67	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021204_PD-PAVEGRADES.DWG
LAYOUT NAME - 03

PLOT DATE : 7/21/2025 9:38 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

N

MATCH LINE 34+00

EXISTING R/W

SI

4" HMA PAVEMENT OUTER SHOULDER

STA 226'WB'+96 LT BEGIN FULL-DEPTH HMA ON OUTER SHOULDER

MATCH EXISTING PAVEMENT ELEVATION AT USH 45 SB RAMP TERMINALS

4" HMA PAVEMENT OUTER SHOULDER

SEE GUARDRAIL DETAILS FOR TAPER LAYOUT

SI

STH 54

227'WB' 228'WB' 229'WB' 230'WB' 231'WB' 232'WB' 233'WB' 234'

27'EB' 28'EB' 29'EB' 30'EB' 31'EB' 32'EB' 33'EB' 33'EB'+85 34'

LOW POINT

CROWN SHIFT

4" HMA PAVEMENT OUTER SHOULDER

SEE GUARDRAIL DETAILS FOR TAPER LAYOUT

SI

EXISTING R/W

WEST OF BRIDGE CROWN SHIFTS

234'WB'

34'EB'

CROWN SHIFT

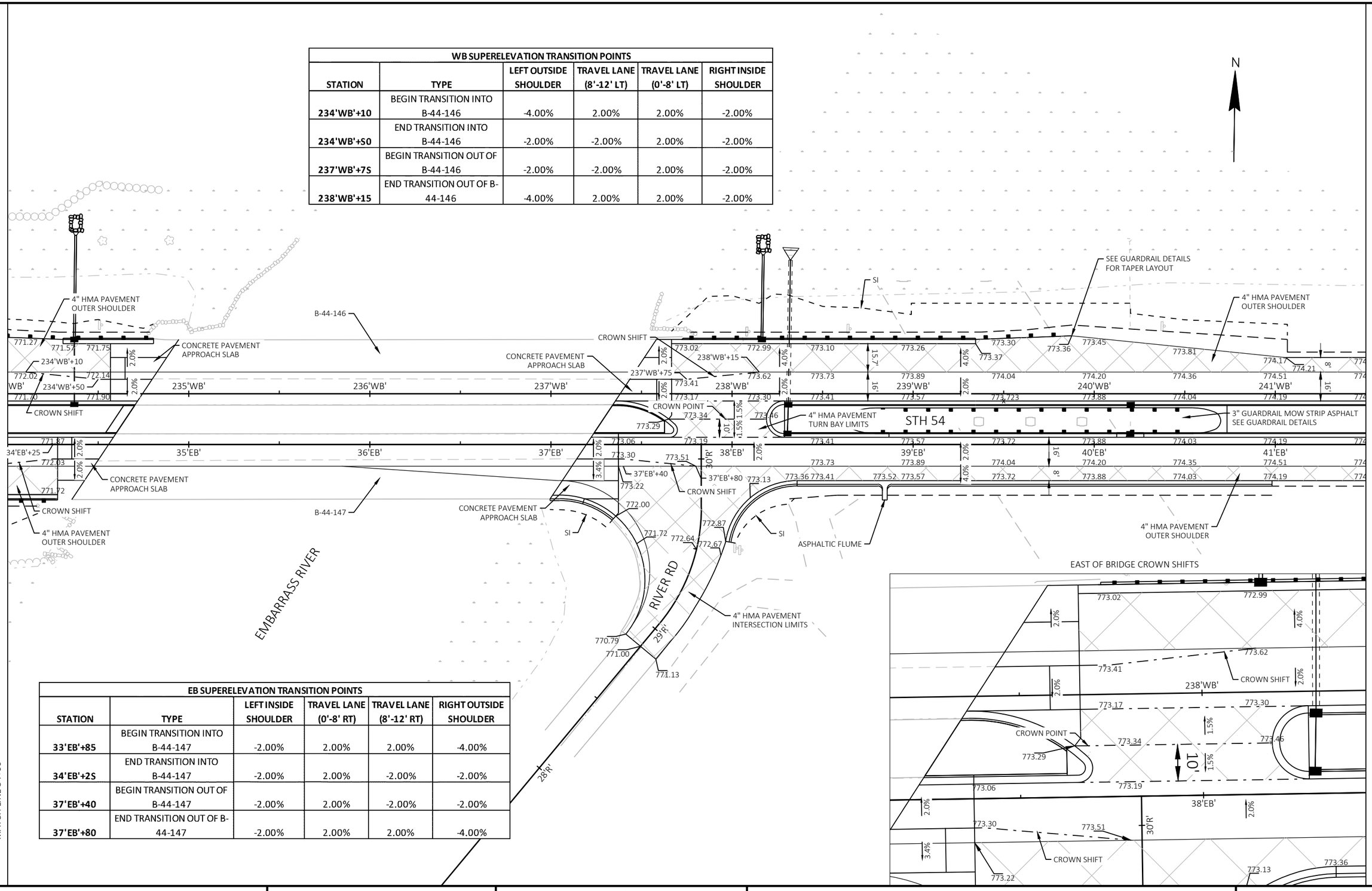
CROWN SHIFT

MATCH LINE 26+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT GRADES	SHEET 68	E

2

WB SUPERELEVATION TRANSITION POINTS					
STATION	TYPE	LEFT OUTSIDE SHOULDER	TRAVEL LANE (8'-12' LT)	TRAVEL LANE (0'-8' LT)	RIGHT INSIDE SHOULDER
234'WB'+10	BEGIN TRANSITION INTO B-44-146	-4.00%	2.00%	2.00%	-2.00%
234'WB'+S0	END TRANSITION INTO B-44-146	-2.00%	-2.00%	2.00%	-2.00%
237'WB'+7S	BEGIN TRANSITION OUT OF B-44-146	-2.00%	-2.00%	2.00%	-2.00%
238'WB'+15	END TRANSITION OUT OF B-44-146	-4.00%	2.00%	2.00%	-2.00%



EB SUPERELEVATION TRANSITION POINTS					
STATION	TYPE	LEFT INSIDE SHOULDER	TRAVEL LANE (0'-8' RT)	TRAVEL LANE (8'-12' RT)	RIGHT OUTSIDE SHOULDER
33'EB'+85	BEGIN TRANSITION INTO B-44-147	-2.00%	2.00%	2.00%	-4.00%
34'EB'+2S	END TRANSITION INTO B-44-147	-2.00%	2.00%	-2.00%	-2.00%
37'EB'+40	BEGIN TRANSITION OUT OF B-44-147	-2.00%	2.00%	-2.00%	-2.00%
37'EB'+80	END TRANSITION OUT OF B-44-147	-2.00%	2.00%	2.00%	-4.00%

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT GRADES	SHEET 69 E

2

2

N

MATCH LINE 49+00

MATCH LINE 41+50

SIGN

EXISTING R/W

4" HMA PAVEMENT
OUTER SHOULDER

PE

STH 54

3" ASPHALTIC
SURFACE

LOW POINT

4" HMA PAVEMENT
OUTER SHOULDER

STA 43'EB'+91 RT
BEGIN FULL-DEPTH HMA
ON OUTER SHOULDER

MATCH EXISTING PAVEMENT
ELEVATION AT USH 45 NB RAMP
TERMINALS

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT GRADES	SHEET 70	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021204_PD-PAVEGRADES.DWG
LAYOUT NAME - 06

PLOT DATE : 7/21/2025 9:41 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

EXISTING R/W

MATCH LINE 56+50

N

EXISTING R/W

3" ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES

CE

4" HMA PAVEMENT OUTER SHOULDER

STH 54

LOW POINT

MATCH EXISTING PAVEMENT ELEVATION AT USH 45 NB RAMP TERMINALS

EXISTING R/W

EXIT RAMP FROM NB USH 45

CTH S

EXISTING R/W

MATCH LINE 49+00

EB SUPERELEVATION TRANSITION POINTS				
STATION	TYPE	LEFT INSIDE SHOULDER	TRAVEL LANE	RIGHT OUTSIDE SHOULDER
55'EB'+75	END NORMAL CROWN	-2.00%	2.00%	-2.00%
56'EB'+23	LEVEL CROWN	-2.00%	2.00%	0.00%
56'EB'+71	REVERSE CROWN	-2.00%	2.00%	2.00%
56'EB'+76	BEGIN FULL SUPER	-2.20%	2.20%	2.20%
61'EB'+00	END FULL SUPER	-2.20%	2.20%	2.20%
63'EB'+10	BEGIN FULL SUPER	-4.50%	4.50%	4.50%
72'EB'+68.83	END FULL SUPER	N/A	4.50%	4.50%
73'EB'+35.5	REVERSE CROWN	N/A	2.00%	2.00%
73'EB'+88.83	LEVEL CROWN	N/A	0.00%	0.00%
74'EB'+42.17	NORMAL CROWN	N/A	-2.00%	-2.00%

2

2

WB SUPERELEVATION TRANSITION POINTS				
STATION	TYPE	LEFT OUTSIDE SHOULDER	TRAVEL LANE	RIGHT INSIDE SHOULDER
259'WB'+71	END NORMAL CROWN	-4.00%	2.00%	-2.00%
260'WB'+24	LEVEL CROWN	-4.00%	0.00%	0.00%
260'WB'+77	REVERSE CROWN	-4.00%	-2.00%	2.00%
261'WB'+31		-4.00%	-4.00%	4.00%
261'WB'+44	FULL SUPER	-4.50%	-4.50%	4.50%

N

MATCH LINE 64+00

EXISTING R/W

4" HMA PAVEMENT
OUTER SHOULDER

STH 54

STA 56'EB'+65 RT
END FULL-DEPTH HMA
ON OUTER SHOULDER

4" HMA PAVEMENT
OUTER SHOULDER

STA 61'EB'+40
END REMOVING ASPHALTIC SURFACE MILLING
BEGIN COMMON EXCAVATION
STAGE 3 - EASTBOUND ONLY

POST POST

FE

SI

FE

SI

PE

EXISTING R/W

MATCH LINE 56+50

EB SUPERELEVATION TRANSITION POINTS				
STATION	TYPE	LEFT INSIDE SHOULDER	TRAVEL LANE	RIGHT OUTSIDE SHOULDER
55'EB'+75	END NORMAL CROWN	-2.00%	2.00%	-2.00%
56'EB'+23	LEVEL CROWN	-2.00%	2.00%	0.00%
56'EB'+71	REVERSE CROWN	-2.00%	2.00%	2.00%
56'EB'+76	BEGIN FULL SUPER	-2.20%	2.20%	2.20%
61'EB'+00	END FULL SUPER	-2.20%	2.20%	2.20%
63'EB'+10	BEGIN FULL SUPER	-4.50%	4.50%	4.50%
72'EB'+68.83	END FULL SUPER	N/A	4.50%	4.50%
73'EB'+35.5	REVERSE CROWN	N/A	2.00%	2.00%
73'EB'+88.83	LEVEL CROWN	N/A	0.00%	0.00%
74'EB'+42.17	NORMAL CROWN	N/A	-2.00%	-2.00%

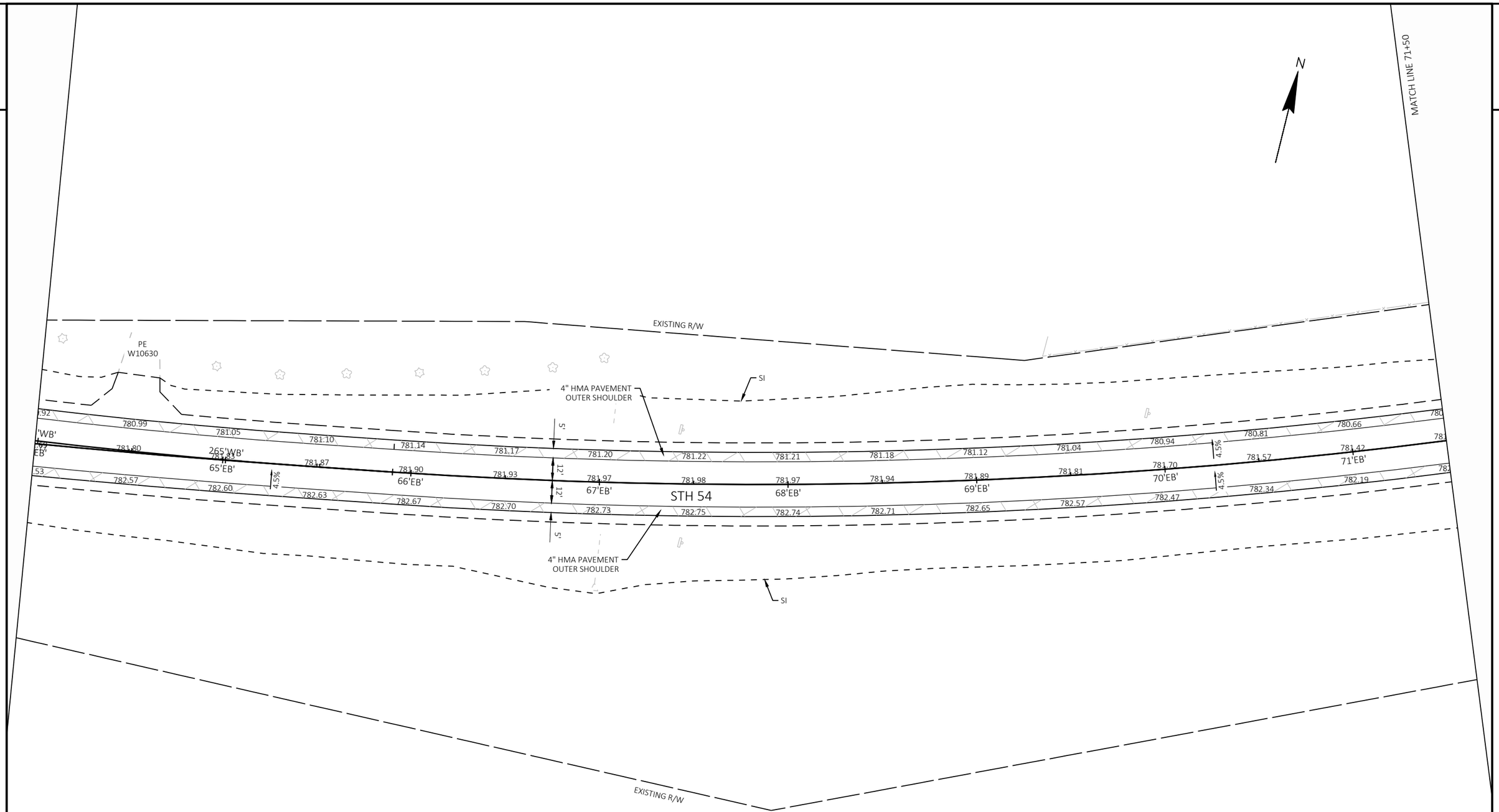
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT GRADES	SHEET 72	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021204_PD-PAVEGRADES.DWG
LAYOUT NAME - 08

PLOT DATE : 7/21/2025 9:51 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

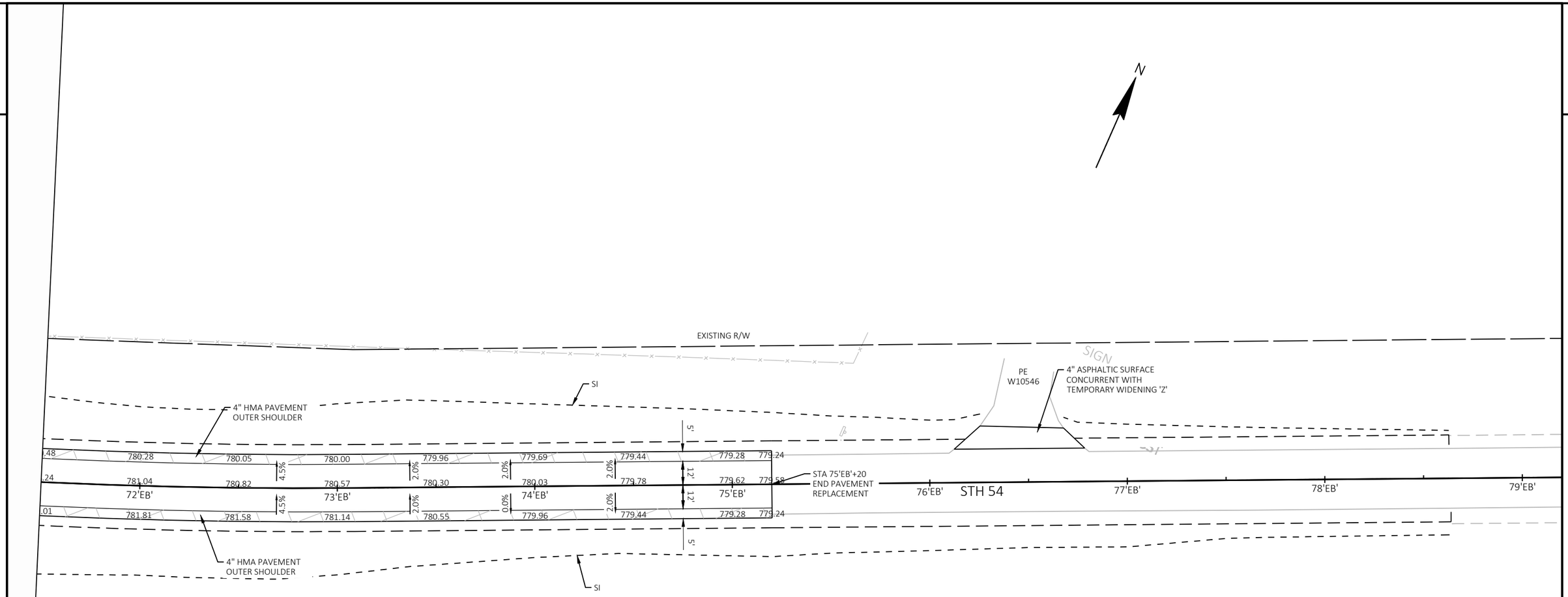
WISDOT/CADDS SHEET 42

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT GRADES	SHEET 73	E

2



EB SUPERELEVATION TRANSITION POINTS				
STATION	TYPE	LEFT INSIDE SHOULDER	TRAVEL LANE	RIGHT OUTSIDE SHOULDER
55'EB'+75	END NORMAL CROWN	-2.00%	2.00%	-2.00%
56'EB'+23	LEVEL CROWN	-2.00%	2.00%	0.00%
56'EB'+71	REVERSE CROWN	-2.00%	2.00%	2.00%
56'EB'+76	BEGIN FULL SUPER	-2.20%	2.20%	2.20%
61'EB'+00	END FULL SUPER	-2.20%	2.20%	2.20%
63'EB'+10	BEGIN FULL SUPER	-4.50%	4.50%	4.50%
72'EB'+68.83	END FULL SUPER	N/A	4.50%	4.50%
73'EB'+35.5	REVERSE CROWN	N/A	2.00%	2.00%
73'EB'+88.83	LEVEL CROWN	N/A	0.00%	0.00%
74'EB'+42.17	NORMAL CROWN	N/A	-2.00%	-2.00%

TEMP WIDENING 'X' SUPERELEVATION TRANSITION POINTS		
STATION	**TYPE**	**TEMP WIDENING**
59'EB'+61	BEGIN FULL SUPER	2.20%
61'EB'+00	END FULL SUPER	2.20%
63'EB'+10	BEGIN FULL SUPER	4.50%
72'EB'+68.83	END FULL SUPER	4.50%
73'EB'+35.5	REVERSE CROWN	2.00%
73'EB'+88.83	LEVEL CROWN	0.00%
74'EB'+42.17	NORMAL CROWN	-2.00%

2

2

N

NEW LONDON UTILITIES
ELECTRIC

EXISTING R/W

POST POST

FE

PE
W10630

POST POST

MATCH LINE 64+80

259'WB'

STH 54 WB

260'WB'

261'WB'

59'EB'

STH 54 EB

60'EB'

61'EB'

62'EB'

263'WB'

63'EB'

64'EB'

STH 54

REMOVE EXISTING EB PAVED SHOULDER
SAW ALONG EXISTING EDGE OF
TRAVELED WAY

'EB'+60.94
17.00' RT

'EB'+58.08
16.64' RT

'EB'+60.09
15.00' RT

2.2%

2.2%

4.5%

4" ASPHALTIC SURFACE TEMPORARY

3'

2'

1'X'

2'X'

3'X'

4'X'

5'X'

'EB'+60.95
20.00' RT

'EB'+58.09
19.64' RT

STA 61'EB'+69
BEGIN SHOULDER RECONSTRUCTION
SEE CROSS SECTIONS

'EB'+60.13
28.00' RT

SI

RESTORE DRIVE ACCESS
BASE AGGREGATE DENSE 3/4-INCH

RESTORE DRIVE ACCESS
BASE AGGREGATE DENSE 3/4-INCH

GUY

OH

NEW LONDON UTILITIES
ELECTRIC

EXISTING R/W

N

EXISTING R/W

MATCH LINE 70+60

REMOVE EXISTING EB PAVED SHOULDER
SAW ALONG EXISTING EDGE OF
TRAVELED WAY

65'EB'3'

66'EB'

67'EB'

68'EB'

STH 54

69'EB'

70'EB'

'EB'+48.56
12.00' RT

'EB'+48.56
28.00' RT

1.6'

4.5%

1.6'

4.5%

4" ASPHALTIC SURFACE TEMPORARY

6'X'

7'X'

8'X'

9'X'

10'X'

11'X'

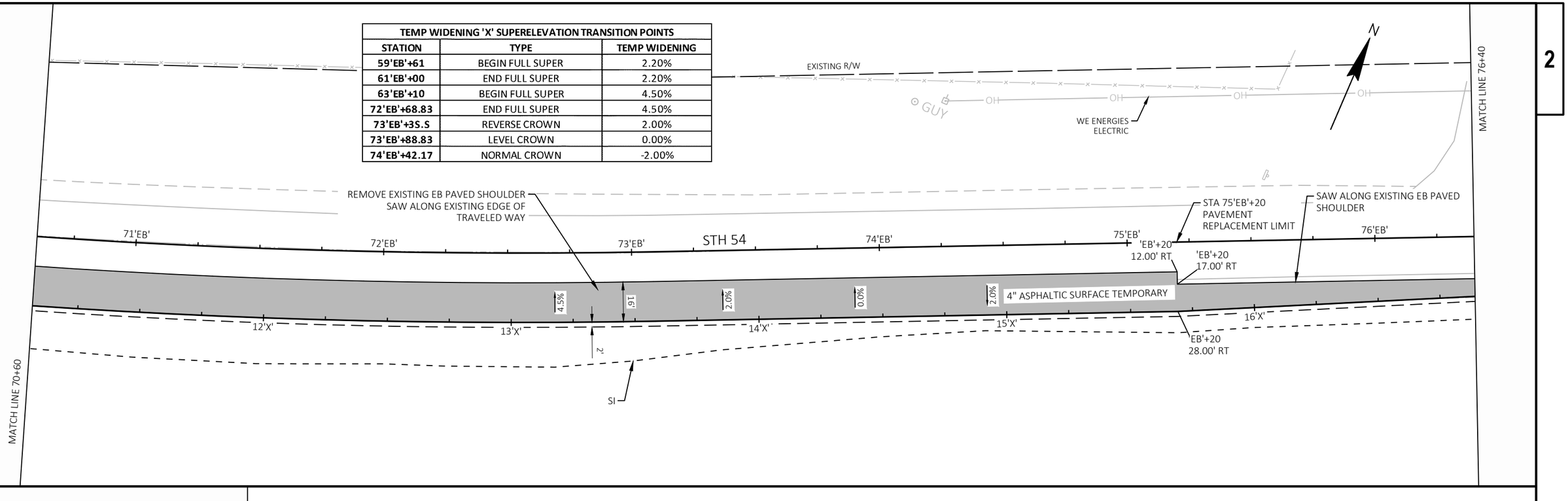
2'

SI

MATCH LINE 64+80

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STAGE 1 TEMPORARY WIDENING 'X' DETAIL	SHEET 75	E

TEMP WIDENING 'X' SUPERELEVATION TRANSITION POINTS		
STATION	TYPE	TEMP WIDENING
59'EB'+61	BEGIN FULL SUPER	2.20%
61'EB'+00	END FULL SUPER	2.20%
63'EB'+10	BEGIN FULL SUPER	4.50%
72'EB'+68.83	END FULL SUPER	4.50%
73'EB'+3S.S	REVERSE CROWN	2.00%
73'EB'+88.83	LEVEL CROWN	0.00%
74'EB'+42.17	NORMAL CROWN	-2.00%

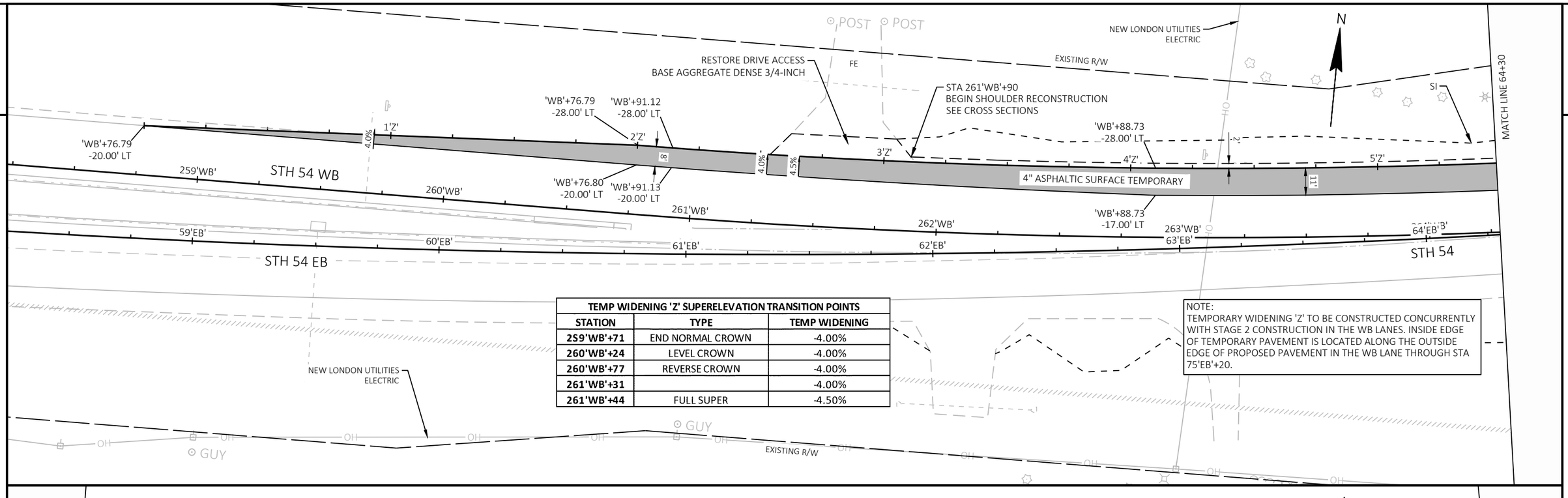


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STAGE 1 TEMPORARY WIDENING 'X' DETAIL	SHEET 76	E

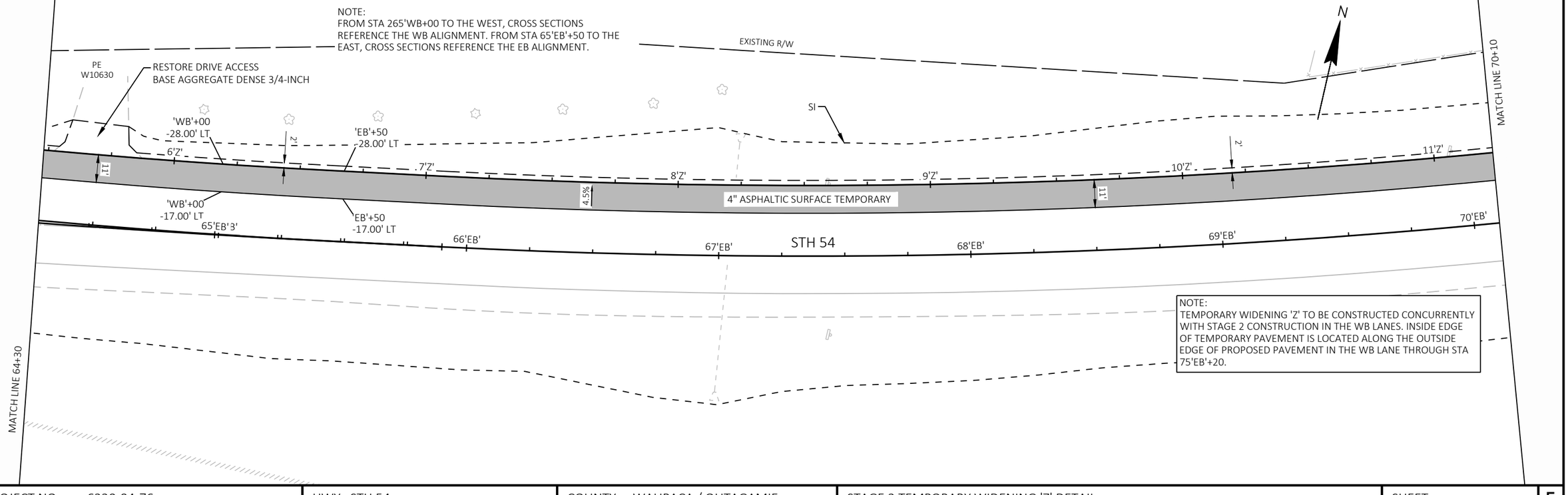
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021205_PD-X.DWG
LAYOUT NAME - 02

PLOT DATE : 6/21/2025 12:22 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

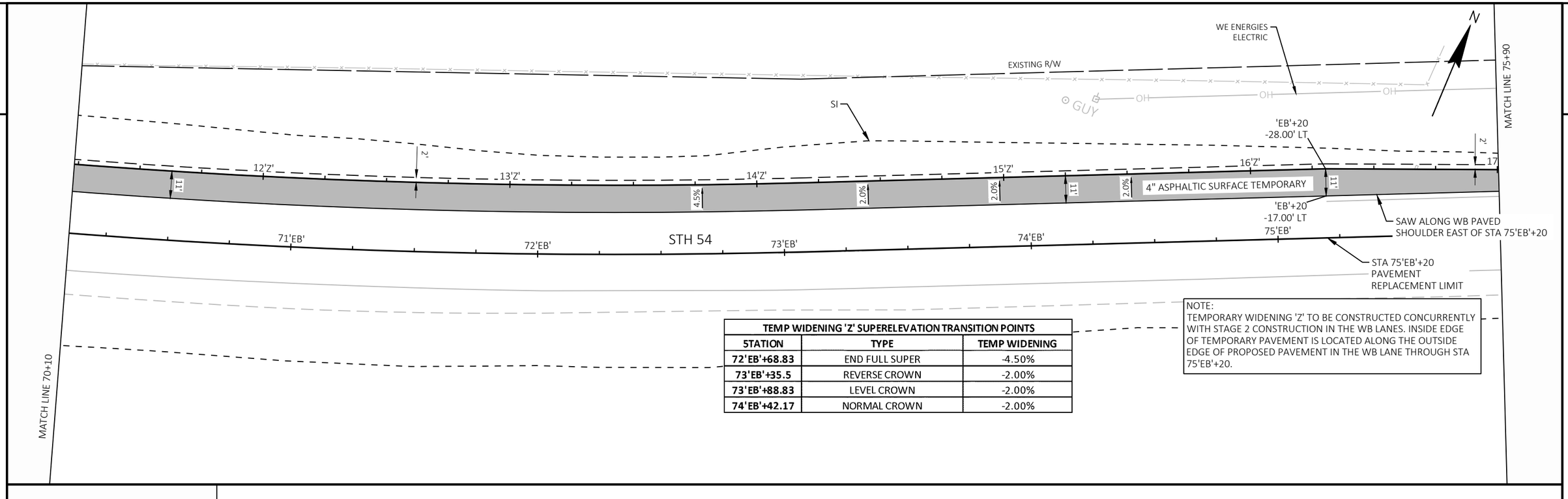


TEMP WIDENING 'Z' SUPERELEVATION TRANSITION POINTS		
STATION	**TYPE**	**TEMP WIDENING**
259'WB'+71	END NORMAL CROWN	-4.00%
260'WB'+24	LEVEL CROWN	-4.00%
260'WB'+77	REVERSE CROWN	-4.00%
261'WB'+31		-4.00%
261'WB'+44	FULL SUPER	-4.50%



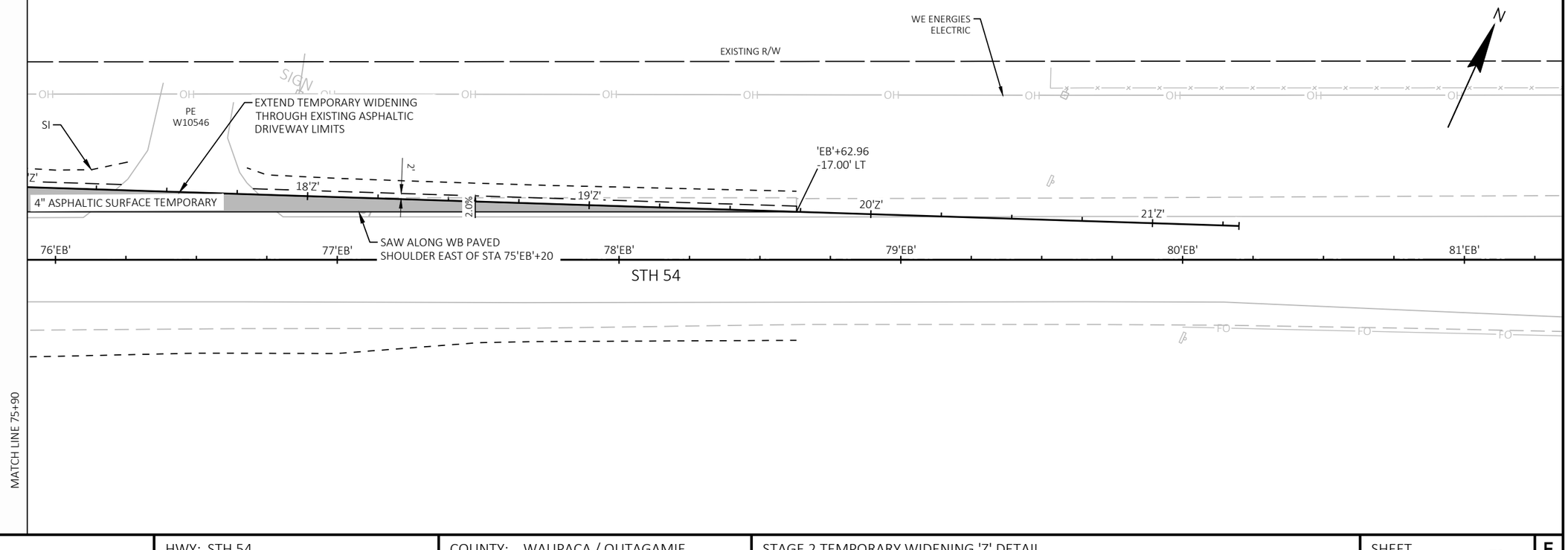
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STAGE 2 TEMPORARY WIDENING 'Z' DETAIL	SHEET 77	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021206_PD-Z.DWG
LAYOUT NAME - 01
PLOT DATE : 6/21/2025 2:38 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

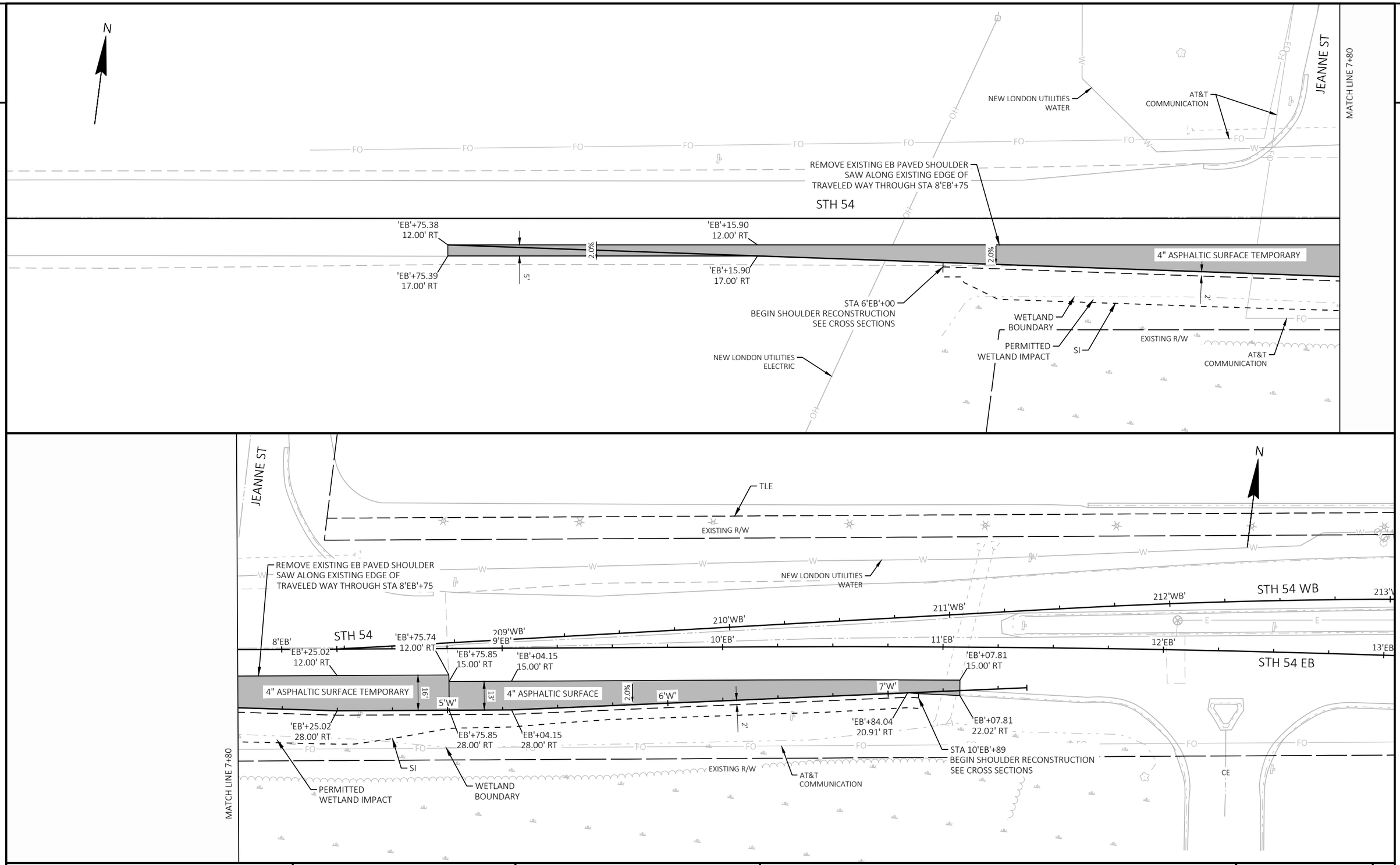


TEMP WIDENING 'Z' SUPERELEVATION TRANSITION POINTS		
5TATION	TYPE	TEMP WIDENING
72'EB'+68.83	END FULL SUPER	-4.50%
73'EB'+35.5	REVERSE CROWN	-2.00%
73'EB'+88.83	LEVEL CROWN	-2.00%
74'EB'+42.17	NORMAL CROWN	-2.00%

NOTE:
TEMPORARY WIDENING 'Z' TO BE CONSTRUCTED CONCURRENTLY WITH STAGE 2 CONSTRUCTION IN THE WB LANES. INSIDE EDGE OF TEMPORARY PAVEMENT IS LOCATED ALONG THE OUTSIDE EDGE OF PROPOSED PAVEMENT IN THE WB LANE THROUGH STA 75'EB'+20.



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STAGE 2 TEMPORARY WIDENING 'Z' DETAIL	SHEET 78	E



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STAGE 3 TEMPORARY WIDENING 'W' DETAIL	SHEET 79	E

2

N

CTH D/N SHAWANO ST

109'D'

'D'+73.02
8.49' RT

'D'+74.27
16.66' RT

'D'+56.28
11.14' RT

'D'+50.59
20.14' RT

9'

108'D'

'D'+96.56
11.13' RT

'D'+96.56
20.13' RT

4" ASPHALTIC SURFACE TEMPORARY
2" BASE AGGREGATE DENSE 1 1/4-INCH

TLE

EXISTING R/W

NEW LONDON UTILITIES
ELECTRIC
SPECTRUM
COMMUNICATIONS

CITY OF NEW LONDON
SANITARY

STH 54 WB

214'WB'
215'WB'
216'WB'
217'WB'
218'WB'
219'WB'

'EB'+36.37
-25.50' LT

'EB'+62.17
-25.50' LT

4" ASPHALTIC SURFACE TEMPORARY
2" BASE AGGREGATE DENSE 1 1/4-INCH

'EB'+36.37
-15.00' LT

'EB'+62.17
-15.00' LT

10.5'

STH 54 EB

14'EB'
15'EB'
16'EB'
17'EB'
18'EB'
19'EB'

AT&T
COMMUNICATIONS

'D'+96.60
0.00'

'D'+96.60
8.00' RT

107'D'

SPECTRUM
COMMUNICATIONS

8'

4" ASPHALTIC SURFACE TEMPORARY
2" BASE AGGREGATE DENSE 1 1/4-INCH

'D'+46.79
0.00'

'D'+46.79
8.00' RT

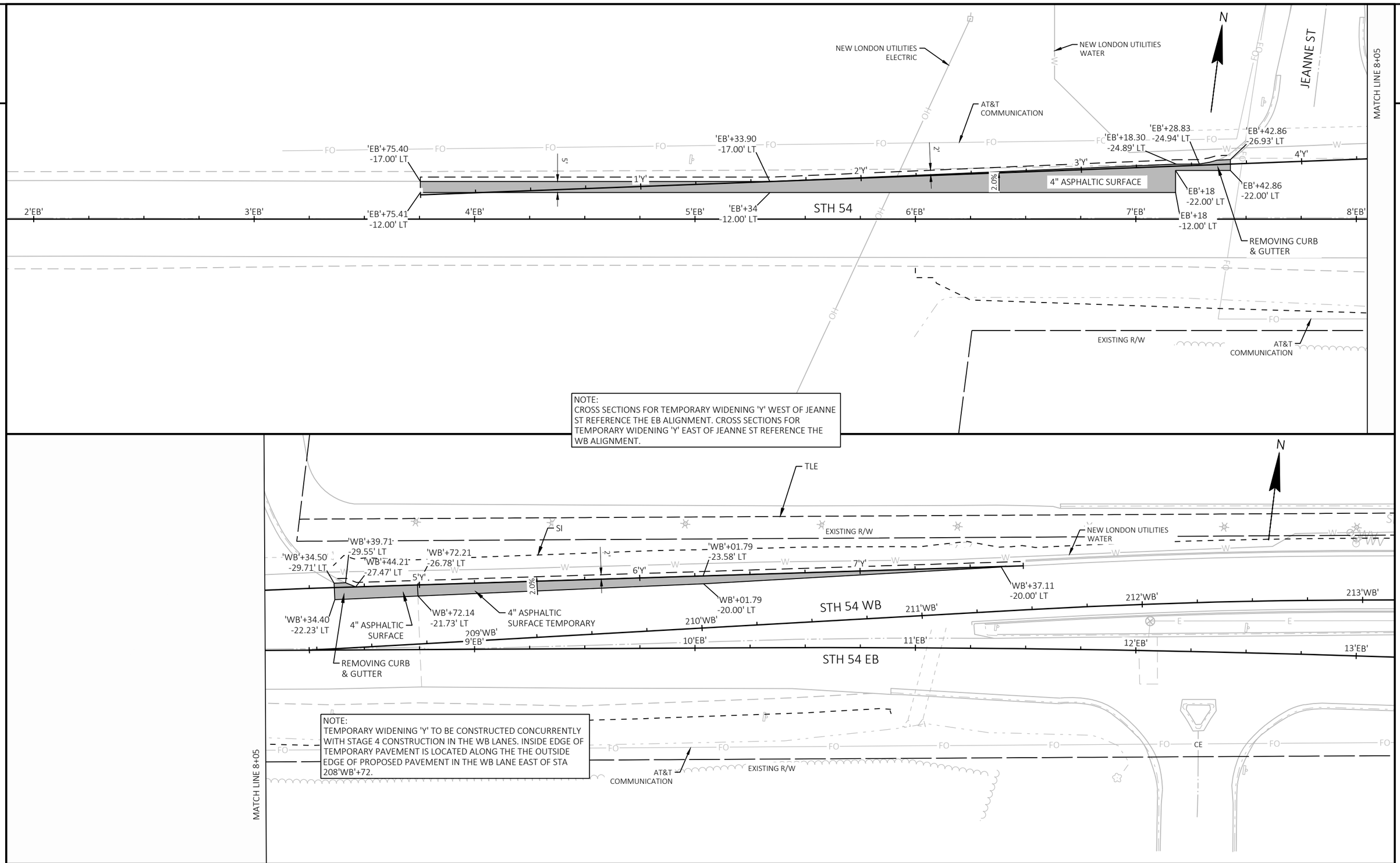
106'D'

CTH D/N SHAWANO ST

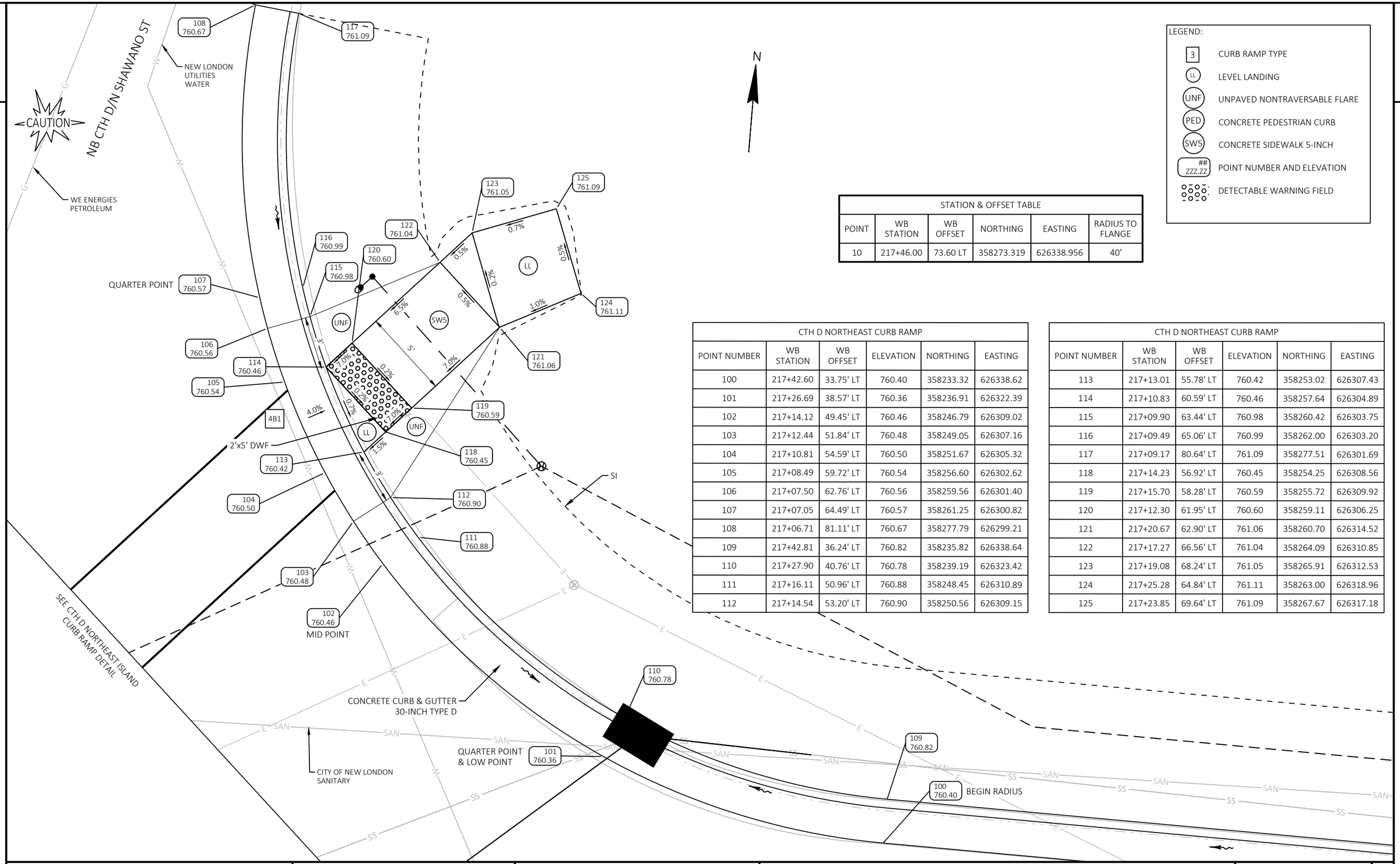
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STAGE 3A TEMPORARY PAVEMENT DETAIL	SHEET 80	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021208_PD-MEDIAN.DWG
LAYOUT NAME - 01

PLOT DATE : 4/14/2025 1:01 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STAGE 4 TEMPORARY WIDENING 'Y' DETAIL	SHEET 81	E



LEGEND:

- 3 — CURB RAMP TYPE
- LL — LEVEL LANDING
- UNF — UNPAVED NONTRAVERSABLE FLARE
- PED — CONCRETE PEDESTRIAN CURB
- SW5 — CONCRETE SIDEWALK 5-INCH
- ## ZZZ.ZZ — POINT NUMBER AND ELEVATION
- DETECTABLE WARNING FIELD

STATION & OFFSET TABLE

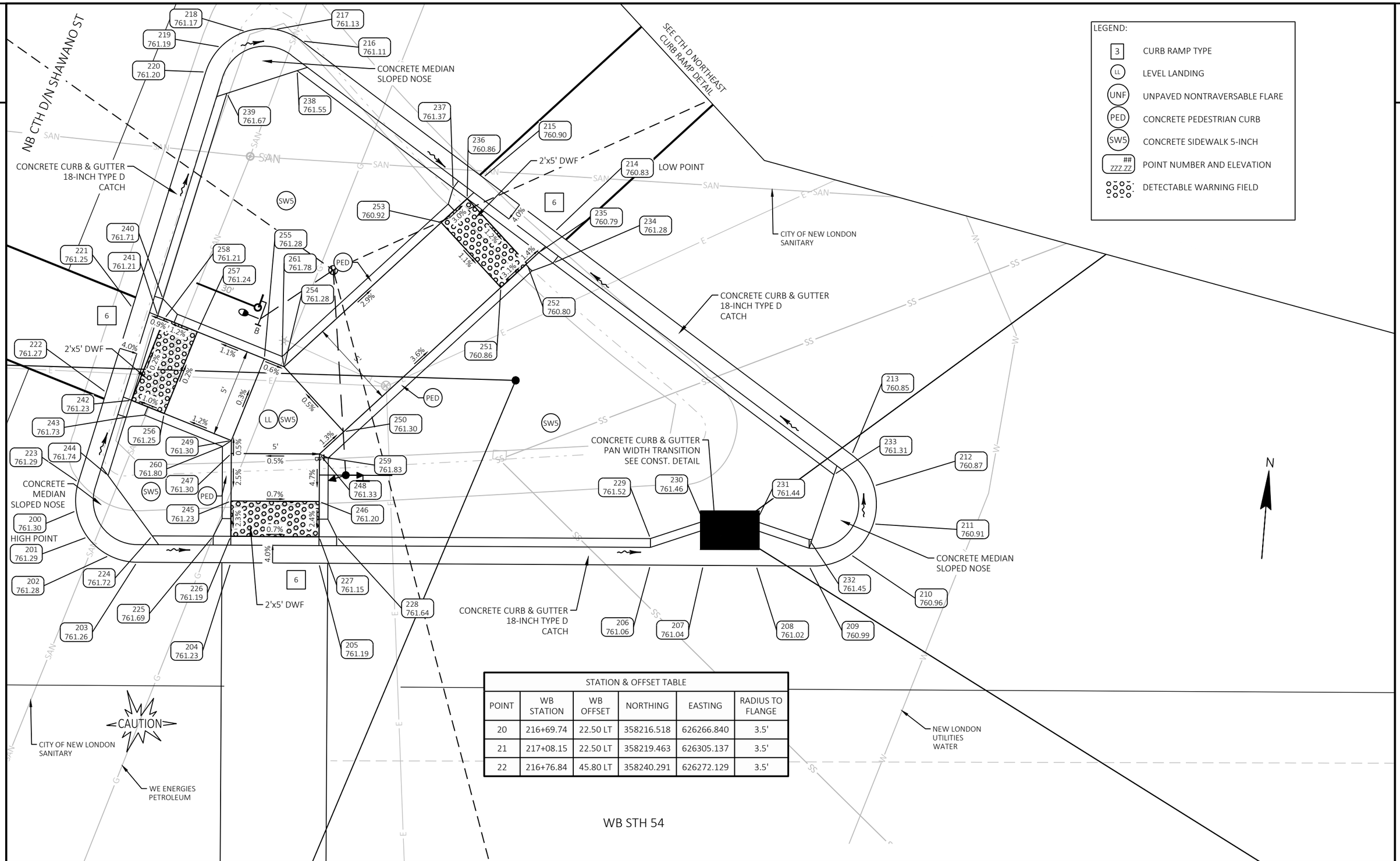
POINT	WB STATION	WB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
10	217+46.00	73.60 LT	358273.319	626338.956	40'

CTH D NORTHEAST CURB RAMP

POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
100	217+42.60	33.75' LT	760.40	358233.32	626338.62
101	217+26.69	38.57' LT	760.36	358236.91	626322.39
102	217+14.12	49.45' LT	760.46	358246.79	626309.02
103	217+12.44	51.84' LT	760.48	358249.05	626307.16
104	217+10.81	54.59' LT	760.50	358251.67	626305.32
105	217+08.49	59.72' LT	760.54	358256.60	626302.62
106	217+07.50	62.76' LT	760.56	358259.56	626301.40
107	217+07.05	64.49' LT	760.57	358261.25	626300.82
108	217+06.71	81.11' LT	760.67	358277.79	626299.21
109	217+42.81	36.24' LT	760.82	358235.82	626338.64
110	217+27.90	40.76' LT	760.78	358239.19	626323.42
111	217+16.11	50.96' LT	760.88	358248.45	626310.89
112	217+14.54	53.20' LT	760.90	358250.56	626309.15

CTH D NORTHEAST CURB RAMP

POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
113	217+13.01	55.78' LT	760.42	358253.02	626307.43
114	217+10.83	60.59' LT	760.46	358257.64	626304.89
115	217+09.90	63.44' LT	760.98	358260.42	626303.75
116	217+09.49	65.06' LT	760.99	358262.00	626303.20
117	217+09.17	80.64' LT	761.09	358277.51	626301.69
118	217+14.23	56.92' LT	760.45	358254.25	626308.56
119	217+15.70	58.28' LT	760.59	358255.72	626309.92
120	217+12.30	61.95' LT	760.60	358259.11	626306.25
121	217+20.67	62.90' LT	761.06	358260.70	626314.52
122	217+17.27	66.56' LT	761.04	358264.09	626310.85
123	217+19.08	68.24' LT	761.05	358265.91	626312.53
124	217+25.28	64.84' LT	761.11	358263.00	626318.96
125	217+23.85	69.64' LT	761.09	358267.67	626317.18



STATION & OFFSET TABLE					
POINT	WB STATION	WB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
20	216+69.74	22.50 LT	358216.518	626266.840	3.5'
21	217+08.15	22.50 LT	358219.463	626305.137	3.5'
22	216+76.84	45.80 LT	358240.291	626272.129	3.5'

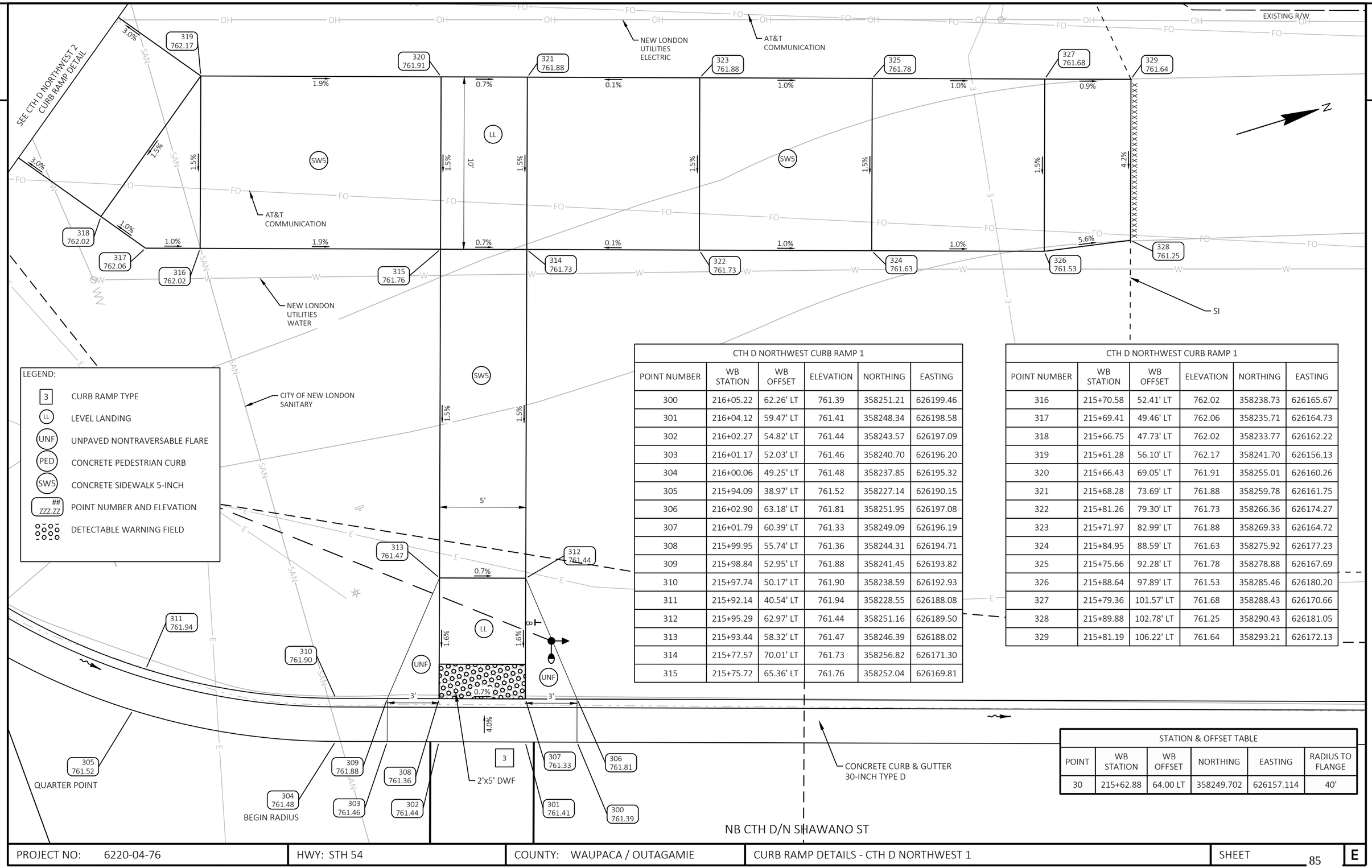
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D NORTHEAST ISLAND	SHEET 83	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - NE-Island
PLOT DATE : 6/28/2025 8:20 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

CTH D NORTHEAST ISLAND CURB RAMPS					
POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
200	216+66.29	21.90' LT	761.30	358215.66	626263.45
201	216+66.93	20.42' LT	761.29	358214.22	626264.20
202	216+68.17	19.37' LT	761.28	358213.28	626265.51
203	216+69.74	19.00' LT	761.26	358213.03	626267.11
204	216+75.06	19.00' LT	761.23	358213.44	626272.41
205	216+80.06	19.00' LT	761.19	358213.82	626277.39
206	216+98.85	19.00' LT	761.06	358215.26	626296.13
207	217+01.85	19.00' LT	761.04	358215.49	626299.12
208	217+04.85	19.00' LT	761.02	358215.72	626302.11
209	217+07.85	19.00' LT	760.99	358215.95	626305.10
210	217+10.20	19.66' LT	760.96	358216.79	626307.40
211	217+11.47	21.40' LT	760.91	358218.62	626308.53
212	217+11.49	23.55' LT	760.87	358220.77	626308.38
213	217+10.24	25.31' LT	760.85	358222.42	626307.00
214	216+93.33	37.89' LT	760.83	358233.67	626289.18
215	216+89.25	40.92' LT	760.90	358236.38	626284.88
216	216+78.93	48.61' LT	761.11	358243.25	626274.00
217	216+77.40	49.25' LT	761.13	358243.78	626272.42
218	216+75.74	49.12' LT	761.17	358243.52	626270.78
219	216+74.34	48.25' LT	761.19	358242.54	626269.45
220	216+73.49	46.82' LT	761.20	358241.05	626268.71

CTH D NORTHEAST ISLAND CURB RAMPS					
POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
221	216+69.41	33.42' LT	761.25	358227.38	626265.67
222	216+67.95	28.62' LT	761.27	358222.48	626264.58
223	216+66.39	23.52' LT	761.29	358217.28	626263.42
224	216+70.60	20.50' LT	761.72	358214.59	626267.85
225	216+74.06	20.50' LT	761.69	358214.85	626271.30
226	216+75.06	20.50' LT	761.19	358214.93	626272.29
227	216+80.06	20.50' LT	761.15	358215.31	626277.28
228	216+81.06	20.50' LT	761.64	358215.39	626278.28
229	216+98.85	20.50' LT	761.52	358216.76	626296.02
230	217+01.85	21.50' LT	761.46	358217.98	626298.93
231	217+04.85	21.50' LT	761.44	358218.21	626301.92
232	217+07.85	20.50' LT	761.45	358217.45	626304.99
233	217+09.24	24.19' LT	761.31	358221.23	626306.09
234	216+93.24	36.09' LT	761.28	358231.87	626289.23
235	216+92.44	36.69' LT	760.79	358232.40	626288.38
236	216+88.36	39.72' LT	760.86	358235.12	626284.08
237	216+87.55	40.32' LT	761.37	358235.65	626283.23
238	216+78.67	46.93' LT	761.55	358241.56	626273.87
239	216+74.69	45.62' LT	761.67	358239.95	626270.00
240	216+71.14	33.94' LT	761.71	358228.03	626267.35
241	216+70.84	32.98' LT	761.21	358227.05	626267.13

CTH D NORTHEAST ISLAND CURB RAMPS					
POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
242	216+69.38	28.18' LT	761.23	358222.16	626266.05
243	216+69.09	27.23' LT	761.73	358221.18	626265.83
244	216+68.08	23.90' LT	761.74	358217.79	626265.07
245	216+75.06	22.50' LT	761.23	358216.93	626272.14
246	216+80.06	22.50' LT	761.20	358217.31	626277.13
247	216+75.06	25.19' LT	761.30	358219.61	626271.93
248	216+80.06	25.19' LT	761.33	358220.00	626276.92
249	216+75.06	25.93' LT	761.30	358220.34	626271.88
250	216+81.43	26.47' LT	761.30	358221.37	626278.19
251	216+90.29	34.70' LT	760.86	358230.25	626286.39
252	216+91.76	36.06' LT	760.80	358231.72	626287.75
253	216+86.89	38.36' LT	760.92	358233.65	626282.72
254	216+78.02	30.13' LT	761.28	358224.76	626274.51
255	216+76.90	30.58' LT	761.28	358225.12	626273.36
256	216+71.24	27.44' LT	761.25	358221.56	626267.96
257	216+73.10	32.09' LT	761.24	358226.33	626269.45
258	216+71.23	32.83' LT	761.21	358226.93	626267.53
259	216+80.56	24.98' LT	761.83	358219.82	626277.43
260	216+74.56	25.59' LT	761.80	358219.97	626271.40
261	216+77.92	30.71' LT	761.78	358225.33	626274.36



CTH D NORTHWEST CURB RAMP 1					
POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
300	216+05.22	62.26' LT	761.39	358251.21	626199.46
301	216+04.12	59.47' LT	761.41	358248.34	626198.58
302	216+02.27	54.82' LT	761.44	358243.57	626197.09
303	216+01.17	52.03' LT	761.46	358240.70	626196.20
304	216+00.06	49.25' LT	761.48	358237.85	626195.32
305	215+94.09	38.97' LT	761.52	358227.14	626190.15
306	216+02.90	63.18' LT	761.81	358251.95	626197.08
307	216+01.79	60.39' LT	761.33	358249.09	626196.19
308	215+99.95	55.74' LT	761.36	358244.31	626194.71
309	215+98.84	52.95' LT	761.88	358241.45	626193.82
310	215+97.74	50.17' LT	761.90	358238.59	626192.93
311	215+92.14	40.54' LT	761.94	358228.55	626188.08
312	215+95.29	62.97' LT	761.44	358251.16	626189.50
313	215+93.44	58.32' LT	761.47	358246.39	626188.02
314	215+77.57	70.01' LT	761.73	358256.82	626171.30
315	215+75.72	65.36' LT	761.76	358252.04	626169.81

CTH D NORTHWEST CURB RAMP 1					
POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
316	215+70.58	52.41' LT	762.02	358238.73	626165.67
317	215+69.41	49.46' LT	762.06	358235.71	626164.73
318	215+66.75	47.73' LT	762.02	358233.77	626162.22
319	215+61.28	56.10' LT	762.17	358241.70	626156.13
320	215+66.43	69.05' LT	761.91	358255.01	626160.26
321	215+68.28	73.69' LT	761.88	358259.78	626161.75
322	215+81.26	79.30' LT	761.73	358266.36	626174.27
323	215+71.97	82.99' LT	761.88	358269.33	626164.72
324	215+84.95	88.59' LT	761.63	358275.92	626177.23
325	215+75.66	92.28' LT	761.78	358278.88	626167.69
326	215+88.64	97.89' LT	761.53	358285.46	626180.20
327	215+79.36	101.57' LT	761.68	358288.43	626170.66
328	215+89.88	102.78' LT	761.25	358290.43	626181.05
329	215+81.19	106.22' LT	761.64	358293.21	626172.13

STATION & OFFSET TABLE					
POINT	WB STATION	WB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
30	215+62.88	64.00 LT	358249.702	626157.114	40'

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D NORTHWEST 1	SHEET 85	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - NW-1
PLOT DATE : 6/28/2025 8:20 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

CTH D NORTHWEST CURB RAMP 2					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
400	215+85.36	30.91' LT	761.56	358218.43	626182.06
401	215+74.64	25.77' LT	761.50	358212.48	626171.77
402	215+62.88	24.00' LT	761.43	358209.82	626160.18
403	215+50.38	22.75' LT	761.32	358207.62	626147.81
404	215+47.40	22.45' LT	761.30	358207.09	626144.86
405	215+37.40	21.45' LT	761.21	358205.32	626134.97
406	215+34.41	21.15' LT	761.18	358204.80	626132.01
407	215+22.88	20.00' LT	761.09	358202.76	626120.61
408	215+83.95	32.98' LT	761.98	358220.39	626180.50
409	215+73.90	28.16' LT	761.92	358214.81	626170.85
410	215+62.88	26.50' LT	761.85	358212.31	626159.99
411	215+50.14	25.23' LT	761.74	358210.06	626147.38
412	215+47.15	24.93' LT	761.22	358209.54	626144.42
413	215+37.15	23.93' LT	761.13	358207.77	626134.53
414	215+34.17	23.63' LT	761.60	358207.25	626131.58
415	215+22.88	22.50' LT	761.51	358205.26	626120.41
416	215+37.15	24.93' LT	761.15	358208.77	626134.45
417	215+47.15	34.93' LT	761.37	358219.51	626143.66
418	215+37.15	34.93' LT	761.30	358218.74	626133.69
419	215+49.63	36.54' LT	761.41	358221.31	626146.00

CTH D NORTHWEST CURB RAMP 2					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
420	215+37.15	40.34' LT	761.39	358224.14	626133.27
421	215+47.15	40.34' LT	761.48	358224.91	626143.24
422	215+44.16	44.92' LT	761.56	358229.24	626139.91
423	215+58.80	42.53' LT	761.74	358227.99	626154.69
424	215+53.33	50.91' LT	761.89	358235.92	626148.60

LEGEND:
- 3 — CURB RAMP TYPE
- LL — LEVEL LANDING
- UNF — UNPAVED NONTRAVERSABLE FLARE
- PED — CONCRETE PEDESTRIAN CURB
- SW5 — CONCRETE SIDEWALK 5-INCH
- ## ZZZ.ZZ — POINT NUMBER AND ELEVATION
- DETECTABLE WARNING FIELD

N

CITY OF NEW LONDON SANITARY

SEE CTH D NORTHWEST 1 CURB RAMP DETAIL

NEW LONDON UTILITIES ELECTRIC

AT&T COMMUNICATION

NEW LONDON UTILITIES WATER

REMOVING INLETS

SI

AT&T COMMUNICATION

CONCRETE CURB & GUTTER 30-INCH TYPE D

2'x10' DWF

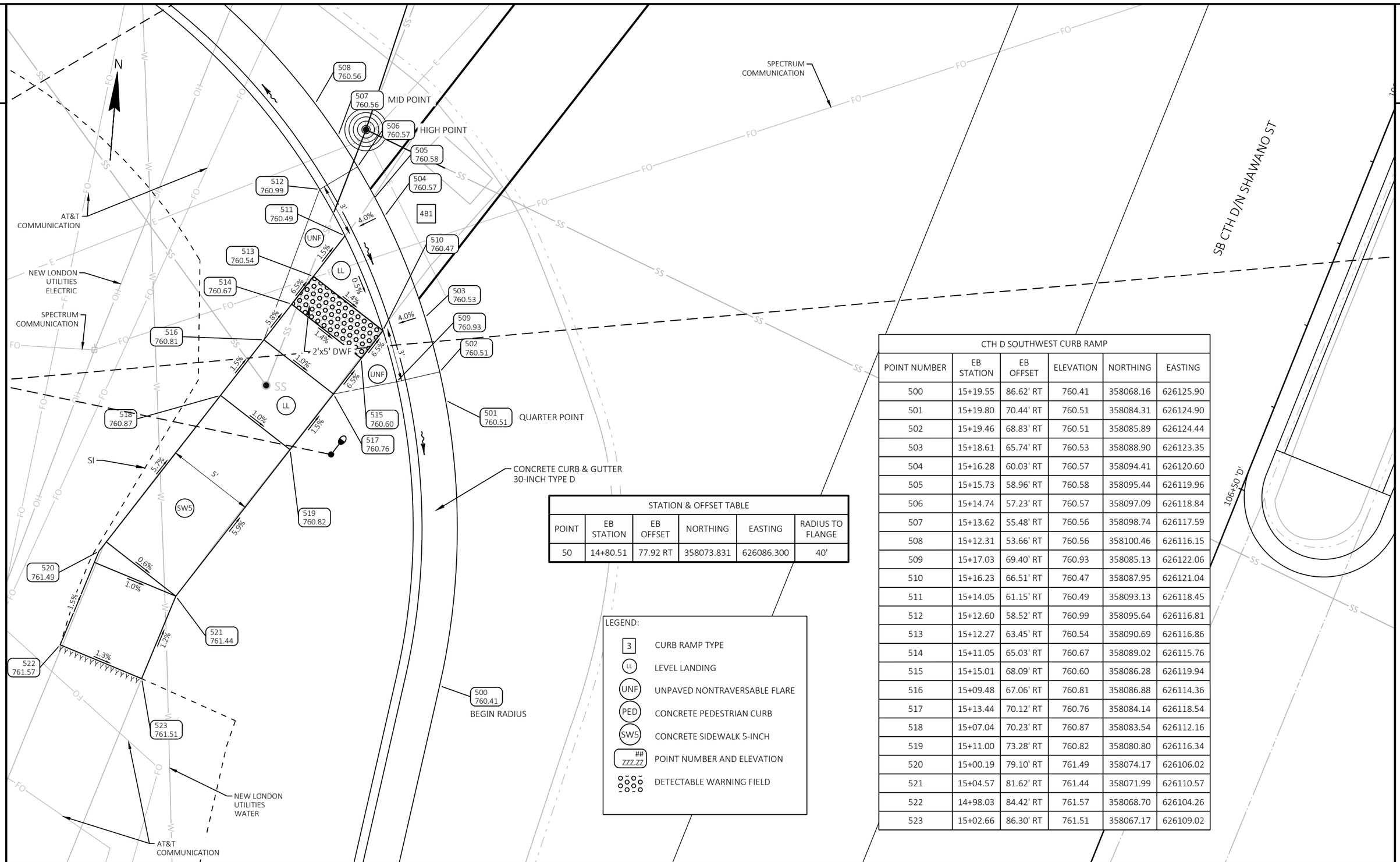
MID POINT & HIGH POINT

QUARTER POINT

END RADIUS

WB STH 54

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D NORTHWEST 2	SHEET 86	E



STATION & OFFSET TABLE					
POINT	EB STATION	EB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
50	14+80.51	77.92 RT	358073.831	626086.300	40'

LEGEND:

- 3 — CURB RAMP TYPE
- LL — LEVEL LANDING
- UNF — UNPAVED NONTRAVERSABLE FLARE
- PED — CONCRETE PEDESTRIAN CURB
- SW5 — CONCRETE SIDEWALK 5-INCH
- ## ZZZ.ZZ — POINT NUMBER AND ELEVATION
- DETECTABLE WARNING FIELD

CTH D SOUTHWEST CURB RAMP					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
500	15+19.55	86.62' RT	760.41	358068.16	626125.90
501	15+19.80	70.44' RT	760.51	358084.31	626124.90
502	15+19.46	68.83' RT	760.51	358085.89	626124.44
503	15+18.61	65.74' RT	760.53	358088.90	626123.35
504	15+16.28	60.03' RT	760.57	358094.41	626120.60
505	15+15.73	58.96' RT	760.58	358095.44	626119.96
506	15+14.74	57.23' RT	760.57	358097.09	626118.84
507	15+13.62	55.48' RT	760.56	358098.74	626117.59
508	15+12.31	53.66' RT	760.56	358100.46	626116.15
509	15+17.03	69.40' RT	760.93	358085.13	626122.06
510	15+16.23	66.51' RT	760.47	358087.95	626121.04
511	15+14.05	61.15' RT	760.49	358093.13	626118.45
512	15+12.60	58.52' RT	760.99	358095.64	626116.81
513	15+12.27	63.45' RT	760.54	358090.69	626116.86
514	15+11.05	65.03' RT	760.67	358089.02	626115.76
515	15+15.01	68.09' RT	760.60	358086.28	626119.94
516	15+09.48	67.06' RT	760.81	358086.88	626114.36
517	15+13.44	70.12' RT	760.76	358084.14	626118.54
518	15+07.04	70.23' RT	760.87	358083.54	626112.16
519	15+11.00	73.28' RT	760.82	358080.80	626116.34
520	15+00.19	79.10' RT	761.49	358074.17	626106.02
521	15+04.57	81.62' RT	761.44	358071.99	626110.57
522	14+98.03	84.42' RT	761.57	358068.70	626104.26
523	15+02.66	86.30' RT	761.51	358067.17	626109.02

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D SOUTHWEST	SHEET 87	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - SW
PLOT DATE : 6/28/2025 8:20 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

15'EB'+00 15'EB'+25 15'EB'+50 EB STH 54

2 2

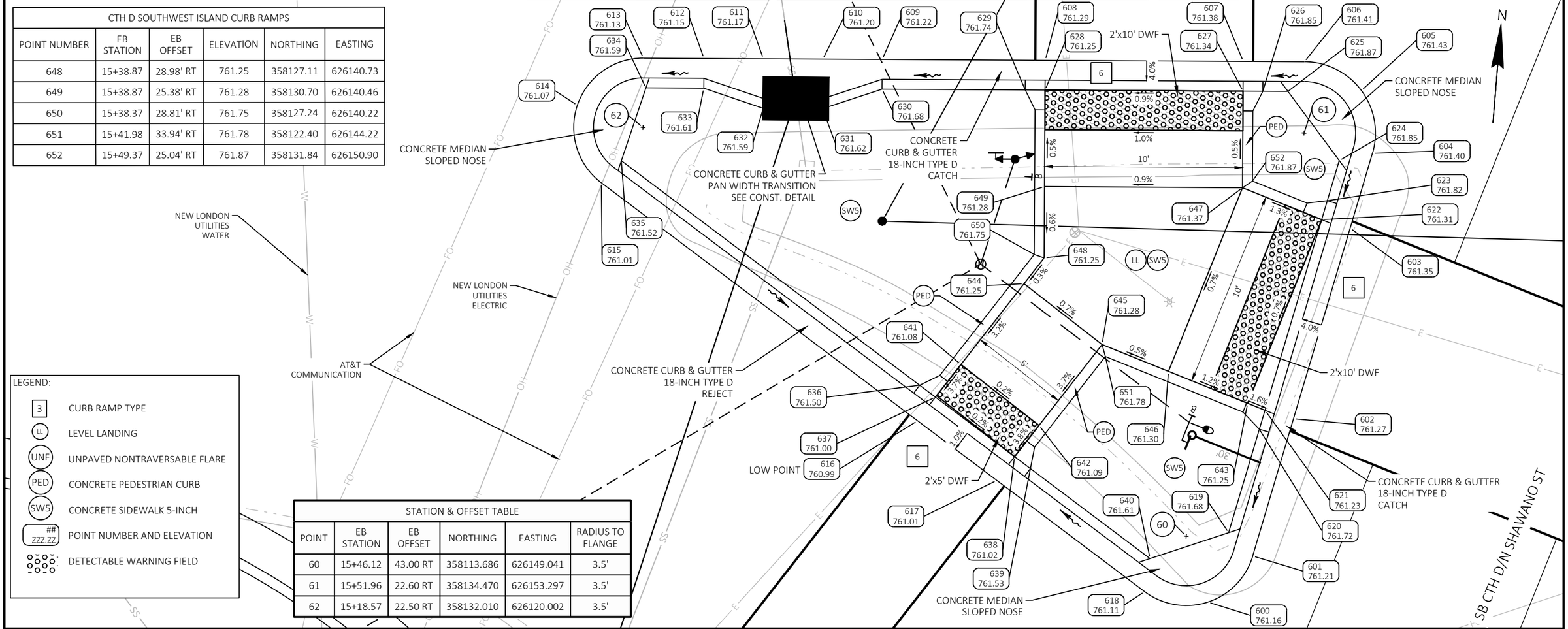
CTH D SOUTHWEST ISLAND CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
600	15+47.24	46.31' RT	761.16	358110.46	626150.41
601	15+49.48	43.98' RT	761.21	358112.97	626152.47
602	15+51.50	37.03' RT	761.27	358120.05	626153.95
603	15+54.31	27.39' RT	761.35	358129.88	626156.01
604	15+55.41	23.61' RT	761.40	358133.73	626156.82
605	15+54.84	20.44' RT	761.43	358136.85	626156.00
606	15+51.96	19.00' RT	761.41	358138.06	626153.02
607	15+48.87	19.00' RT	761.38	358137.82	626149.94
608	15+38.87	19.00' RT	761.29	358137.06	626139.97
609	15+30.63	19.00' RT	761.22	358136.42	626131.76
610	15+27.63	19.00' RT	761.20	358136.19	626128.77
611	15+24.63	19.00' RT	761.17	358135.96	626125.78

CTH D SOUTHWEST ISLAND CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
612	15+21.63	19.00' RT	761.15	358135.73	626122.79
613	15+18.57	19.00' RT	761.13	358135.50	626119.73
614	15+15.25	21.40' RT	761.07	358132.85	626116.61
615	15+16.48	25.31' RT	761.01	358129.05	626118.13
616	15+32.52	37.24' RT	760.99	358118.38	626135.04
617	15+36.54	40.23' RT	761.01	358115.71	626139.27
618	15+44.03	45.80' RT	761.11	358110.73	626147.17
619	15+48.26	42.81' RT	761.68	358114.04	626151.16
620	15+49.78	37.57' RT	761.72	358119.38	626152.28
621	15+50.06	36.61' RT	761.23	358120.35	626152.48
622	15+52.87	26.97' RT	761.31	358130.19	626154.54
623	15+53.15	26.01' RT	761.82	358131.16	626154.75

CTH D SOUTHWEST ISLAND CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
624	15+53.74	23.98' RT	761.85	358133.23	626155.18
625	15+51.13	20.50' RT	761.87	358136.50	626152.31
626	15+49.87	20.50' RT	761.85	358136.40	626151.05
627	15+48.87	20.50' RT	761.34	358136.33	626150.05
628	15+38.87	20.50' RT	761.25	358135.56	626140.08
629	15+37.87	20.50' RT	761.74	358135.48	626139.09
630	15+30.63	20.50' RT	761.68	358134.93	626131.87
631	15+27.63	21.50' RT	761.62	358133.70	626128.96
632	15+24.63	21.50' RT	761.59	358133.47	626125.97
633	15+21.63	20.50' RT	761.61	358134.24	626122.90
634	15+18.71	20.50' RT	761.59	358134.01	626119.98
635	15+17.49	24.19' RT	761.52	358130.25	626119.05

CTH D SOUTHWEST ISLAND CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
636	15+32.62	35.44' RT	761.50	358120.18	626135.00
637	15+33.42	36.04' RT	761.00	358119.65	626135.84
638	15+37.43	39.02' RT	761.02	358116.98	626140.07
639	15+38.23	39.62' RT	761.53	358116.45	626140.92
640	15+44.30	44.14' RT	761.61	358112.41	626147.31
641	15+34.69	34.39' RT	761.08	358121.40	626136.99
642	15+38.65	37.44' RT	761.09	358118.65	626141.17
643	15+49.18	36.26' RT	761.25	358120.64	626151.58
644	15+37.86	30.28' RT	761.25	358125.73	626139.83
645	15+41.82	33.34' RT	761.28	358122.99	626144.01
646	15+45.18	34.67' RT	761.30	358121.91	626147.46
647	15+48.87	25.38' RT	761.37	358131.46	626150.43

CTH D SOUTHWEST ISLAND CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
648	15+38.87	28.98' RT	761.25	358127.11	626140.73
649	15+38.87	25.38' RT	761.28	358130.70	626140.46
650	15+38.37	28.81' RT	761.75	358127.24	626140.22
651	15+41.98	33.94' RT	761.78	358122.40	626144.22
652	15+49.37	25.04' RT	761.87	358131.84	626150.90



LEGEND:

- 3 — CURB RAMP TYPE
- LL — LEVEL LANDING
- UNF — UNPAVED NONTRAVERSABLE FLARE
- PED — CONCRETE PEDESTRIAN CURB
- SW5 — CONCRETE SIDEWALK 5-INCH
- ## ZZZ.ZZ — POINT NUMBER AND ELEVATION
- DETECTABLE WARNING FIELD

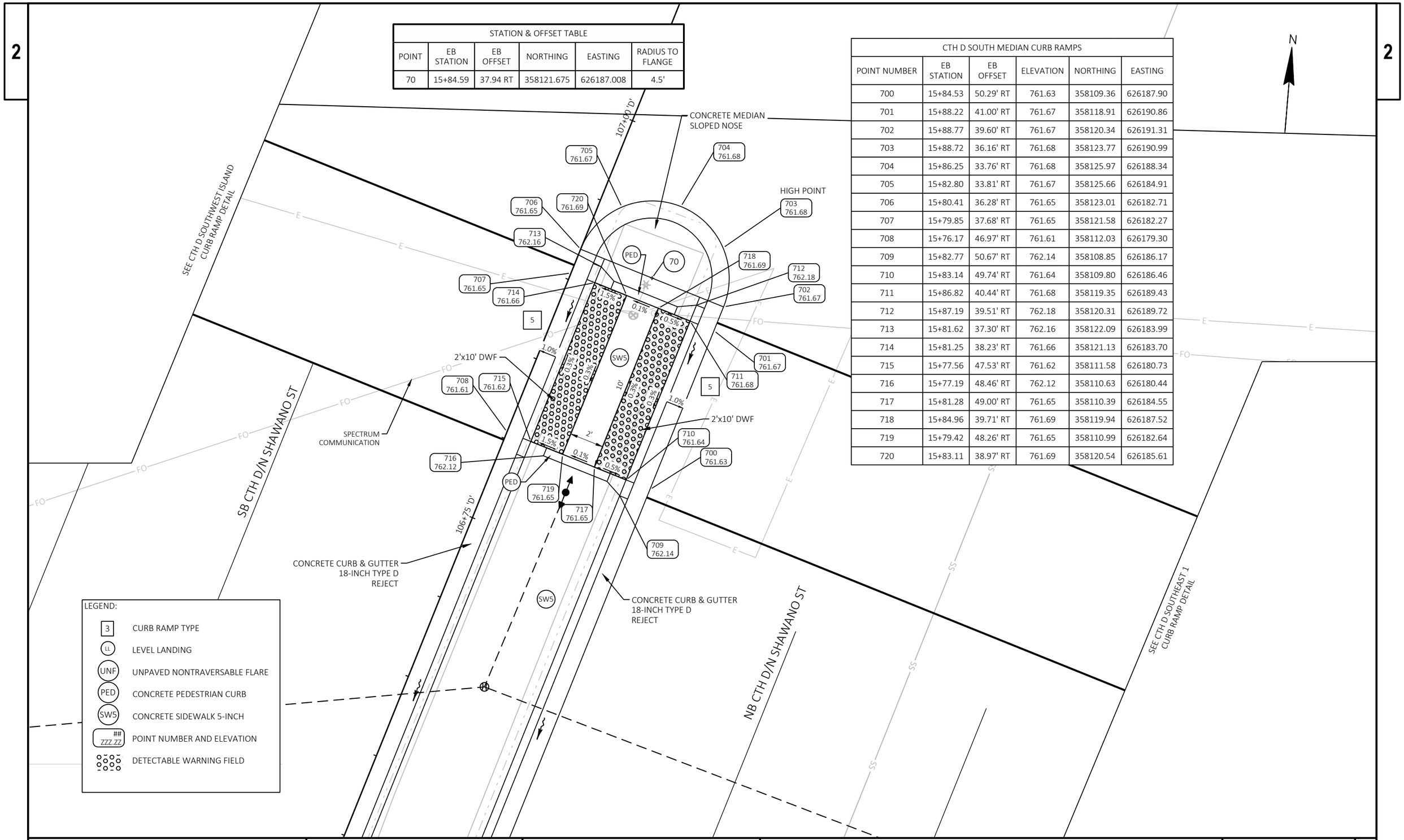
STATION & OFFSET TABLE					
POINT	EB STATION	EB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
60	15+46.12	43.00 RT	358113.686	626149.041	3.5'
61	15+51.96	22.60 RT	358134.470	626153.297	3.5'
62	15+18.57	22.50 RT	358132.010	626120.002	3.5'

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D SOUTHWEST ISLAND	SHEET 88	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - SW-Island
PLOT DATE : 6/28/2025 8:20 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

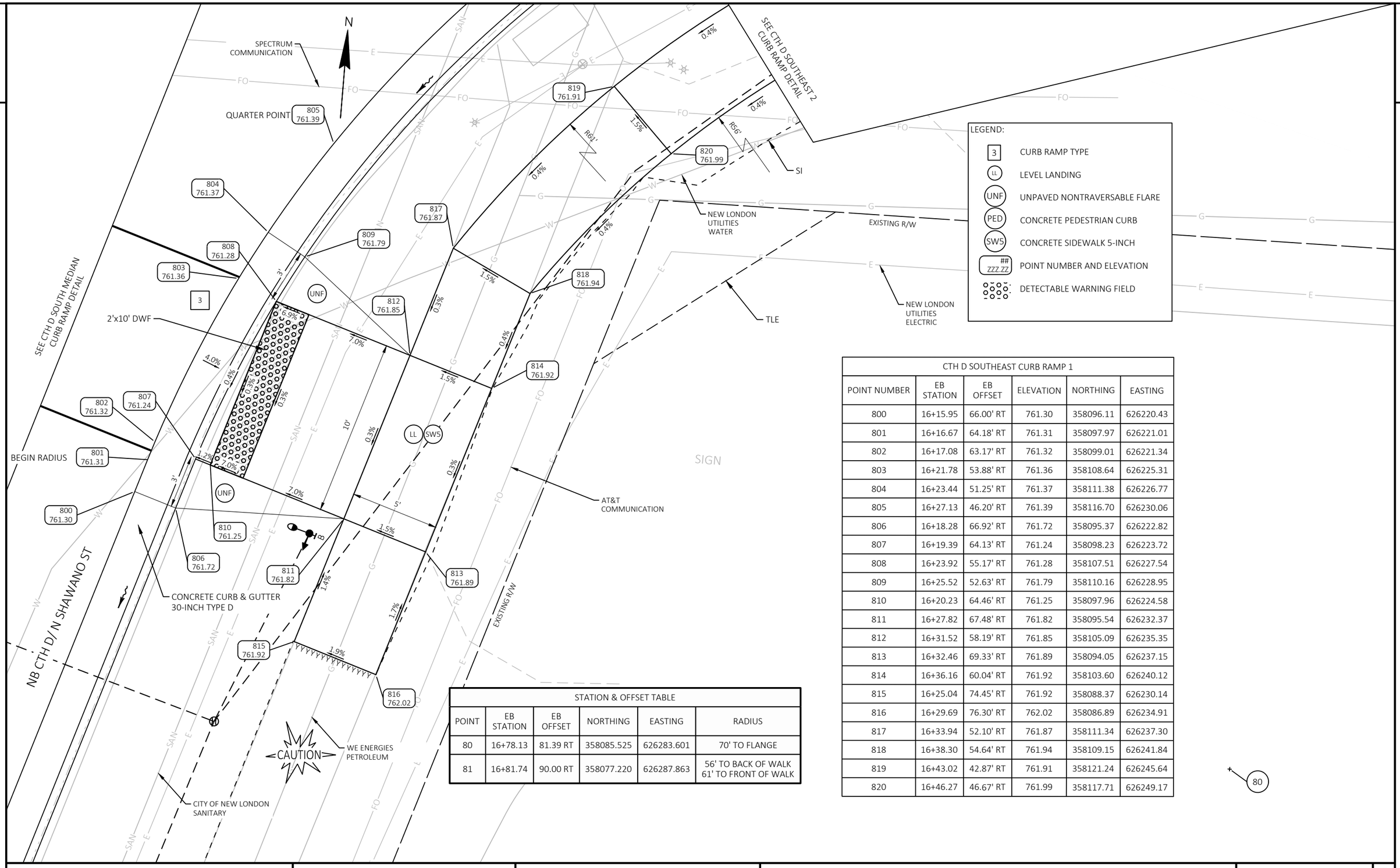
STATION & OFFSET TABLE					
POINT	EB STATION	EB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
70	15+84.59	37.94 RT	358121.675	626187.008	4.5'

CTH D SOUTH MEDIAN CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
700	15+84.53	50.29' RT	761.63	358109.36	626187.90
701	15+88.22	41.00' RT	761.67	358118.91	626190.86
702	15+88.77	39.60' RT	761.67	358120.34	626191.31
703	15+88.72	36.16' RT	761.68	358123.77	626190.99
704	15+86.25	33.76' RT	761.68	358125.97	626188.34
705	15+82.80	33.81' RT	761.67	358125.66	626184.91
706	15+80.41	36.28' RT	761.65	358123.01	626182.71
707	15+79.85	37.68' RT	761.65	358121.58	626182.27
708	15+76.17	46.97' RT	761.61	358112.03	626179.30
709	15+82.77	50.67' RT	762.14	358108.85	626186.17
710	15+83.14	49.74' RT	761.64	358109.80	626186.46
711	15+86.82	40.44' RT	761.68	358119.35	626189.43
712	15+87.19	39.51' RT	762.18	358120.31	626189.72
713	15+81.62	37.30' RT	762.16	358122.09	626183.99
714	15+81.25	38.23' RT	761.66	358121.13	626183.70
715	15+77.56	47.53' RT	761.62	358111.58	626180.73
716	15+77.19	48.46' RT	762.12	358110.63	626180.44
717	15+81.28	49.00' RT	761.65	358110.39	626184.55
718	15+84.96	39.71' RT	761.69	358119.94	626187.52
719	15+79.42	48.26' RT	761.65	358110.99	626182.64
720	15+83.11	38.97' RT	761.69	358120.54	626185.61



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D SOUTH MEDIAN	SHEET 89	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - S Med
PLOT DATE : 6/28/2025 8:20 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

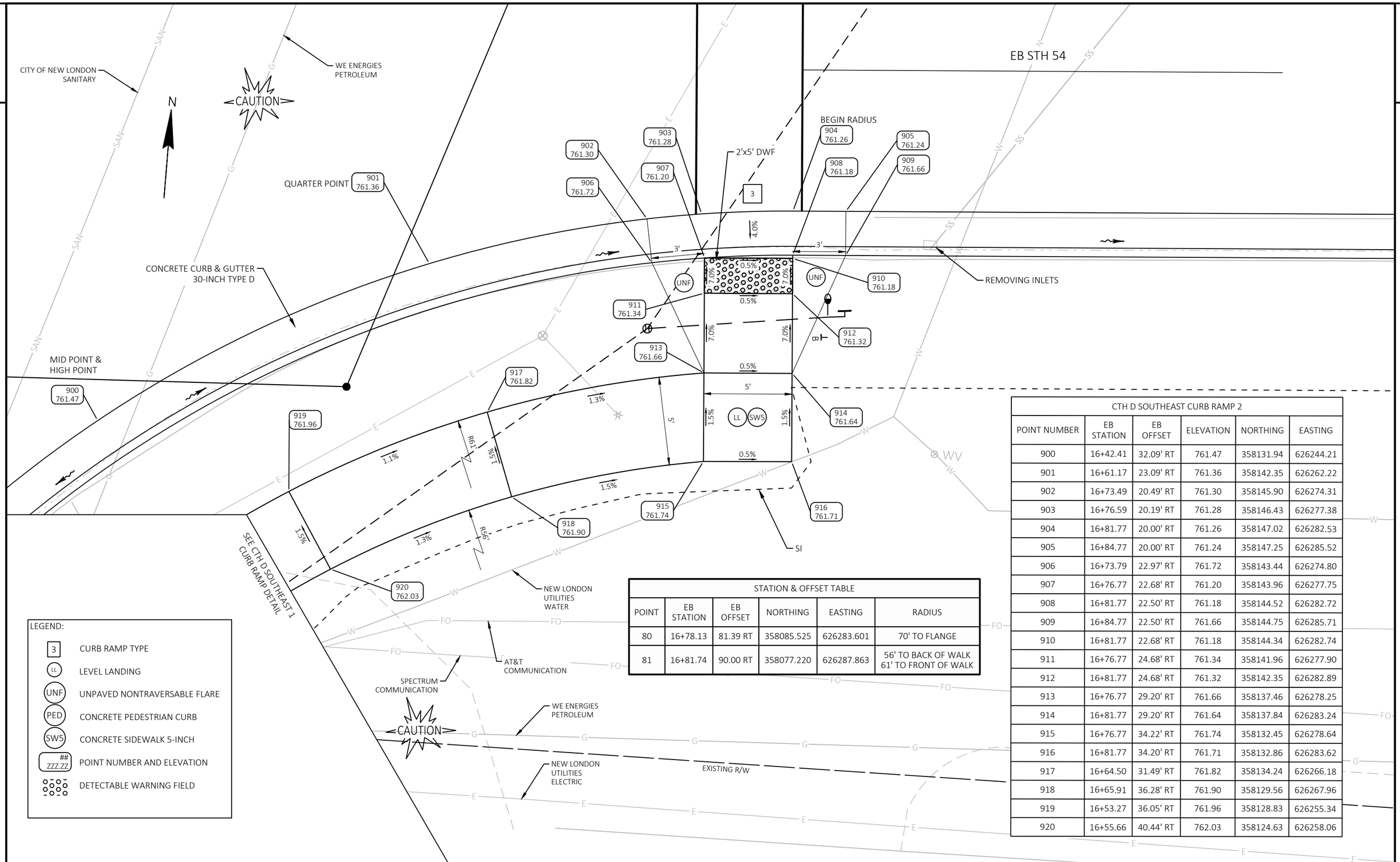


CTH D SOUTHEAST CURB RAMP 1					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
800	16+15.95	66.00' RT	761.30	358096.11	626220.43
801	16+16.67	64.18' RT	761.31	358097.97	626221.01
802	16+17.08	63.17' RT	761.32	358099.01	626221.34
803	16+21.78	53.88' RT	761.36	358108.64	626225.31
804	16+23.44	51.25' RT	761.37	358111.38	626226.77
805	16+27.13	46.20' RT	761.39	358116.70	626230.06
806	16+18.28	66.92' RT	761.72	358095.37	626222.82
807	16+19.39	64.13' RT	761.24	358098.23	626223.72
808	16+23.92	55.17' RT	761.28	358107.51	626227.54
809	16+25.52	52.63' RT	761.79	358110.16	626228.95
810	16+20.23	64.46' RT	761.25	358097.96	626224.58
811	16+27.82	67.48' RT	761.82	358095.54	626232.37
812	16+31.52	58.19' RT	761.85	358105.09	626235.35
813	16+32.46	69.33' RT	761.89	358094.05	626237.15
814	16+36.16	60.04' RT	761.92	358103.60	626240.12
815	16+25.04	74.45' RT	761.92	358088.37	626230.14
816	16+29.69	76.30' RT	762.02	358086.89	626234.91
817	16+33.94	52.10' RT	761.87	358111.34	626237.30
818	16+38.30	54.64' RT	761.94	358109.15	626241.84
819	16+43.02	42.87' RT	761.91	358121.24	626245.64
820	16+46.27	46.67' RT	761.99	358117.71	626249.17

STATION & OFFSET TABLE					
POINT	EB STATION	EB OFFSET	NORTHING	EASTING	RADIUS
80	16+78.13	81.39 RT	358085.525	626283.601	70' TO FLANGE
81	16+81.74	90.00 RT	358077.220	626287.863	56' TO BACK OF WALK 61' TO FRONT OF WALK

80

2



LEGEND:

- 3 — CURB RAMP TYPE
- LL — LEVEL LANDING
- UNF — UNPAVED NONTRAVERSABLE FLARE
- PED — CONCRETE PEDESTRIAN CURB
- SW5 — CONCRETE SIDEWALK 5-INCH
- ## ZZZ.ZZ — POINT NUMBER AND ELEVATION
- DETECTABLE WARNING FIELD

STATION & OFFSET TABLE

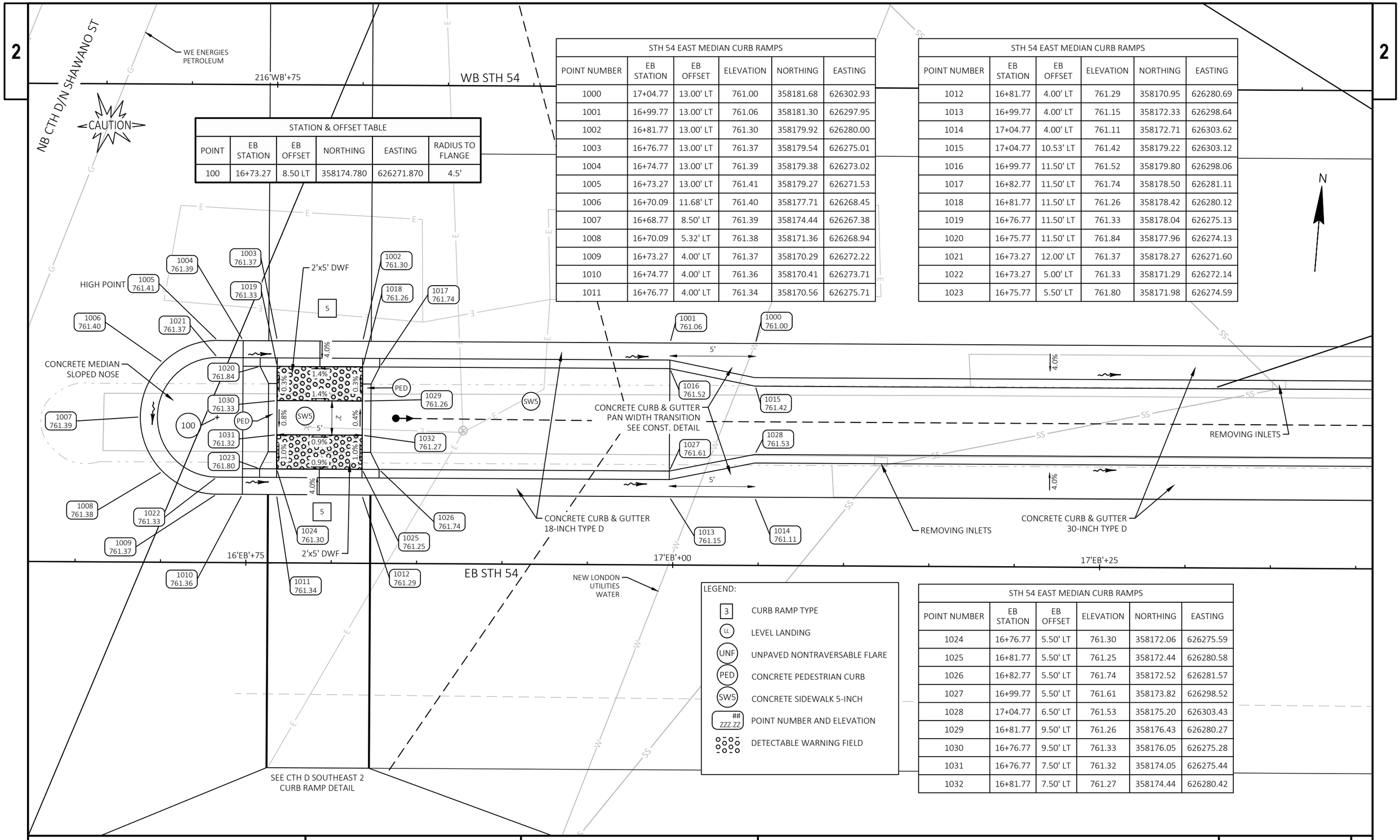
POINT	EB STATION	EB OFFSET	NORTHING	EASTING	RADIUS
80	16+78.13	81.39 RT	358085.525	626283.601	70' TO FLANGE
81	16+81.74	90.00 RT	358077.220	626287.863	56' TO BACK OF WALK 61' TO FRONT OF WALK

CTH D SOUTHEAST CURB RAMP 2

POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
900	16+42.41	32.09' RT	761.47	358131.94	626244.21
901	16+61.17	23.09' RT	761.36	358142.35	626262.22
902	16+73.49	20.49' RT	761.30	358145.90	626274.31
903	16+76.59	20.19' RT	761.28	358146.43	626277.38
904	16+81.77	20.00' RT	761.26	358147.02	626282.53
905	16+84.77	20.00' RT	761.24	358147.25	626285.52
906	16+73.79	22.97' RT	761.72	358143.44	626274.80
907	16+76.77	22.68' RT	761.20	358143.96	626277.75
908	16+81.77	22.50' RT	761.18	358144.52	626282.72
909	16+84.77	22.50' RT	761.66	358144.75	626285.71
910	16+81.77	22.68' RT	761.18	358144.34	626282.74
911	16+76.77	24.68' RT	761.34	358141.96	626277.90
912	16+81.77	24.68' RT	761.32	358142.35	626282.89
913	16+76.77	29.20' RT	761.66	358137.46	626278.25
914	16+81.77	29.20' RT	761.64	358137.84	626283.24
915	16+76.77	34.22' RT	761.74	358132.45	626278.64
916	16+81.77	34.20' RT	761.71	358132.86	626283.62
917	16+64.50	31.49' RT	761.82	358134.24	626266.18
918	16+65.91	36.28' RT	761.90	358129.56	626267.96
919	16+53.27	36.05' RT	761.96	358128.83	626255.34
920	16+55.66	40.44' RT	762.03	358124.63	626258.06

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D SOUTHEAST 2	SHEET 91	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - SE-2
PLOT DATE : 6/28/2025 8:20 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42



STATION & OFFSET TABLE					
POINT	EB STATION	EB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
100	16+73.27	8.50 LT	358174.780	626271.870	4.5'

STH 54 EAST MEDIAN CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
1000	17+04.77	13.00' LT	761.00	358181.68	626302.93
1001	16+99.77	13.00' LT	761.06	358181.30	626297.95
1002	16+81.77	13.00' LT	761.30	358179.92	626280.00
1003	16+76.77	13.00' LT	761.37	358179.54	626275.01
1004	16+74.77	13.00' LT	761.39	358179.38	626273.02
1005	16+73.27	13.00' LT	761.41	358179.27	626271.53
1006	16+70.09	11.68' LT	761.40	358177.71	626268.45
1007	16+68.77	8.50' LT	761.39	358174.44	626267.38
1008	16+70.09	5.32' LT	761.38	358171.36	626268.94
1009	16+73.27	4.00' LT	761.37	358170.29	626272.22
1010	16+74.77	4.00' LT	761.36	358170.41	626273.71
1011	16+76.77	4.00' LT	761.34	358170.56	626275.71

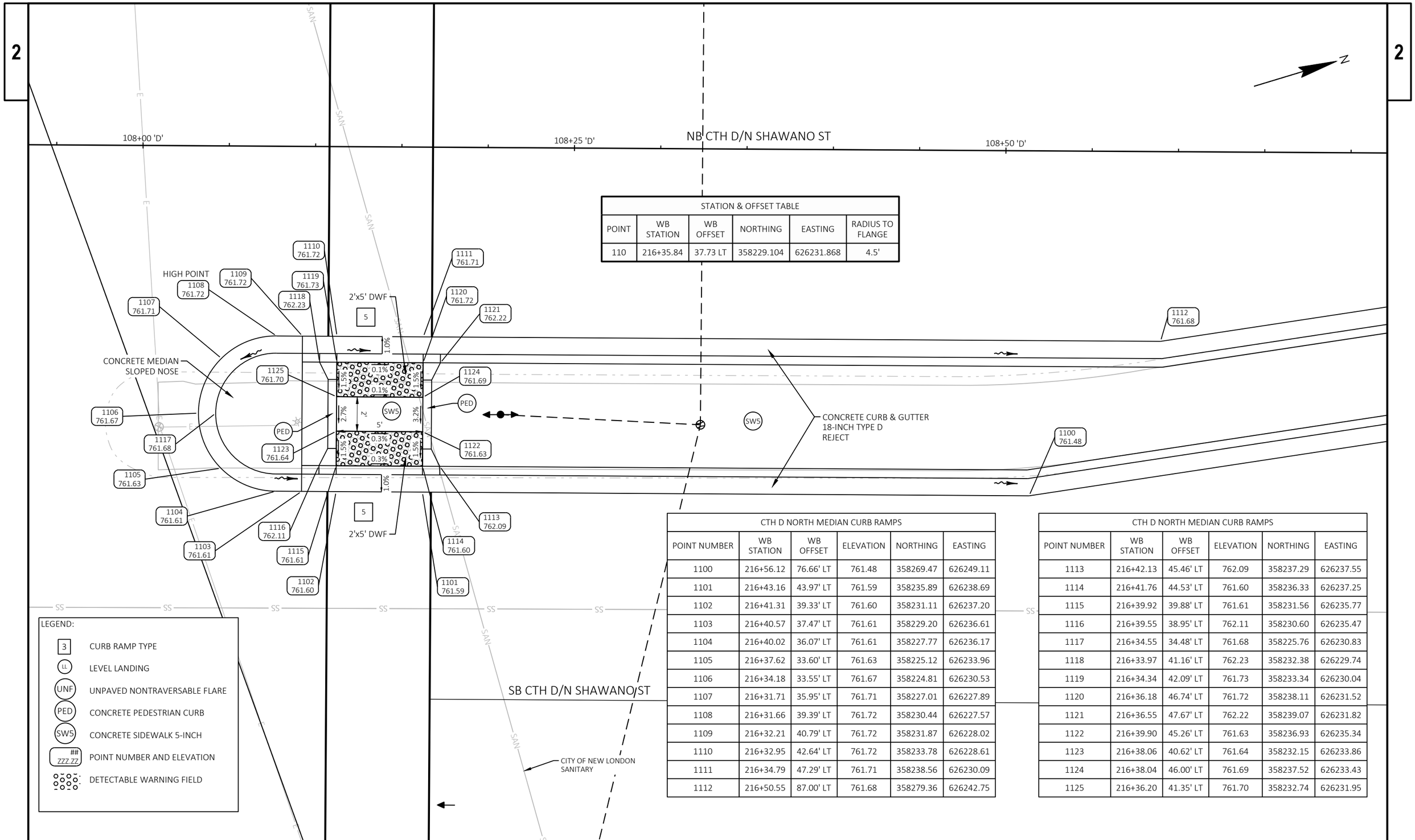
STH 54 EAST MEDIAN CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
1012	16+81.77	4.00' LT	761.29	358170.95	626280.69
1013	16+99.77	4.00' LT	761.15	358172.33	626298.64
1014	17+04.77	4.00' LT	761.11	358172.71	626303.62
1015	17+04.77	10.53' LT	761.42	358179.22	626303.12
1016	16+99.77	11.50' LT	761.52	358179.80	626298.06
1017	16+82.77	11.50' LT	761.74	358178.50	626281.11
1018	16+81.77	11.50' LT	761.26	358178.42	626280.12
1019	16+76.77	11.50' LT	761.33	358178.04	626275.13
1020	16+75.77	11.50' LT	761.84	358177.96	626274.13
1021	16+73.27	12.00' LT	761.37	358178.27	626271.60
1022	16+73.27	5.00' LT	761.33	358171.29	626272.14
1023	16+75.77	5.50' LT	761.80	358171.98	626274.59

LEGEND:

3	CURB RAMP TYPE
LL	LEVEL LANDING
UNF	UNPAVED NONTRAVERSABLE FLARE
PED	CONCRETE PEDESTRIAN CURB
SW5	CONCRETE SIDEWALK 5-INCH
## ZZZ.ZZ	POINT NUMBER AND ELEVATION
	DETECTABLE WARNING FIELD

STH 54 EAST MEDIAN CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
1024	16+76.77	5.50' LT	761.30	358172.06	626275.59
1025	16+81.77	5.50' LT	761.25	358172.44	626280.58
1026	16+82.77	5.50' LT	761.74	358172.52	626281.57
1027	16+99.77	5.50' LT	761.61	358173.82	626298.52
1028	17+04.77	6.50' LT	761.53	358175.20	626303.43
1029	16+81.77	9.50' LT	761.26	358176.43	626280.27
1030	16+76.77	9.50' LT	761.33	358176.05	626275.28
1031	16+76.77	7.50' LT	761.32	358174.05	626275.44
1032	16+81.77	7.50' LT	761.27	358174.44	626280.42

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - STH 54 EAST MEDIAN	SHEET 92	E



STATION & OFFSET TABLE					
POINT	WB STATION	WB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
110	216+35.84	37.73 LT	358229.104	626231.868	4.5'

LEGEND:

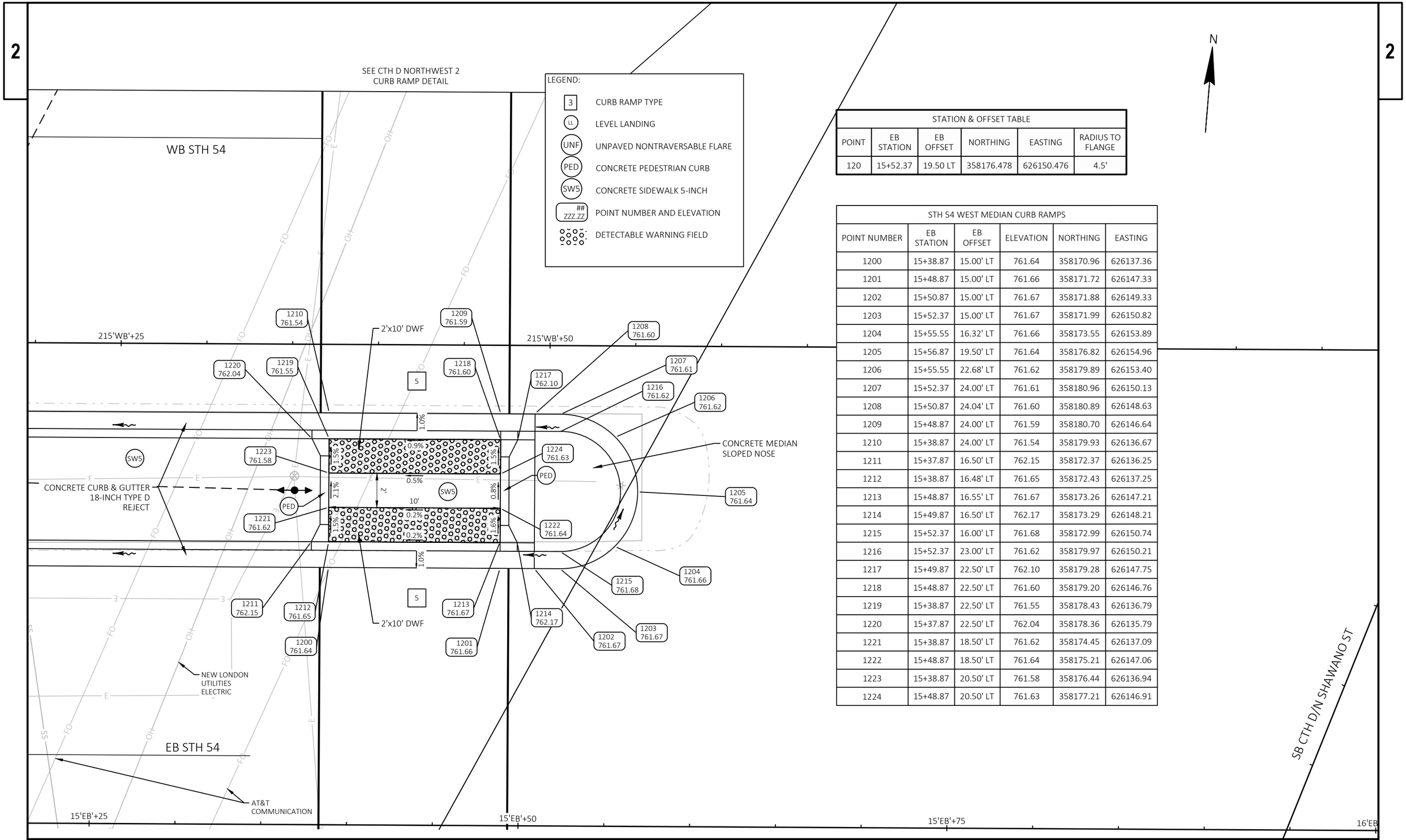
- 3 — CURB RAMP TYPE
- LL — LEVEL LANDING
- UNF — UNPAVED NONTRAVERSABLE FLARE
- PED — CONCRETE PEDESTRIAN CURB
- SW5 — CONCRETE SIDEWALK 5-INCH
- ## ZZZ.ZZ — POINT NUMBER AND ELEVATION
- DETECTABLE WARNING FIELD

CTH D NORTH MEDIAN CURB RAMPS					
POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
1100	216+56.12	76.66' LT	761.48	358269.47	626249.11
1101	216+43.16	43.97' LT	761.59	358235.89	626238.69
1102	216+41.31	39.33' LT	761.60	358231.11	626237.20
1103	216+40.57	37.47' LT	761.61	358229.20	626236.61
1104	216+40.02	36.07' LT	761.61	358227.77	626236.17
1105	216+37.62	33.60' LT	761.63	358225.12	626233.96
1106	216+34.18	33.55' LT	761.67	358224.81	626230.53
1107	216+31.71	35.95' LT	761.71	358227.01	626227.89
1108	216+31.66	39.39' LT	761.72	358230.44	626227.57
1109	216+32.21	40.79' LT	761.72	358231.87	626228.02
1110	216+32.95	42.64' LT	761.72	358233.78	626228.61
1111	216+34.79	47.29' LT	761.71	358238.56	626230.09
1112	216+50.55	87.00' LT	761.68	358279.36	626242.75

CTH D NORTH MEDIAN CURB RAMPS					
POINT NUMBER	WB STATION	WB OFFSET	ELEVATION	NORTHING	EASTING
1113	216+42.13	45.46' LT	762.09	358237.29	626237.55
1114	216+41.76	44.53' LT	761.60	358236.33	626237.25
1115	216+39.92	39.88' LT	761.61	358231.56	626235.77
1116	216+39.55	38.95' LT	762.11	358230.60	626235.47
1117	216+34.55	34.48' LT	761.68	358225.76	626230.83
1118	216+33.97	41.16' LT	762.23	358232.38	626229.74
1119	216+34.34	42.09' LT	761.73	358233.34	626230.04
1120	216+36.18	46.74' LT	761.72	358238.11	626231.52
1121	216+36.55	47.67' LT	762.22	358239.07	626231.82
1122	216+39.90	45.26' LT	761.63	358236.93	626235.34
1123	216+38.06	40.62' LT	761.64	358232.15	626233.86
1124	216+38.04	46.00' LT	761.69	358237.52	626233.43
1125	216+36.20	41.35' LT	761.70	358232.74	626231.95

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - CTH D NORTH MEDIAN	SHEET 93	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - N MED
PLOT DATE : 6/28/2025 8:20 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42



STATION & OFFSET TABLE					
POINT	EB STATION	EB OFFSET	NORTHING	EASTING	RADIUS TO FLANGE
120	15+52.37	19.50 LT	358176.478	626150.476	4.5'

STH 54 WEST MEDIAN CURB RAMPS					
POINT NUMBER	EB STATION	EB OFFSET	ELEVATION	NORTHING	EASTING
1200	15+38.87	15.00' LT	761.64	358170.96	626137.36
1201	15+48.87	15.00' LT	761.66	358171.72	626147.33
1202	15+50.87	15.00' LT	761.67	358171.88	626149.33
1203	15+52.37	15.00' LT	761.67	358171.99	626150.82
1204	15+55.55	16.32' LT	761.66	358173.55	626153.89
1205	15+56.87	19.50' LT	761.64	358176.82	626154.96
1206	15+55.55	22.68' LT	761.62	358179.89	626153.40
1207	15+52.37	24.00' LT	761.61	358180.96	626150.13
1208	15+50.87	24.04' LT	761.60	358180.89	626148.63
1209	15+48.87	24.00' LT	761.59	358180.70	626146.64
1210	15+38.87	24.00' LT	761.54	358179.93	626136.67
1211	15+37.87	16.50' LT	762.15	358172.37	626136.25
1212	15+38.87	16.48' LT	761.65	358172.43	626137.25
1213	15+48.87	16.55' LT	761.67	358173.26	626147.21
1214	15+49.87	16.50' LT	762.17	358173.29	626148.21
1215	15+52.37	16.00' LT	761.68	358172.99	626150.74
1216	15+52.37	23.00' LT	761.62	358179.97	626150.21
1217	15+49.87	22.50' LT	762.10	358179.28	626147.75
1218	15+48.87	22.50' LT	761.60	358179.20	626146.76
1219	15+38.87	22.50' LT	761.55	358178.43	626136.79
1220	15+37.87	22.50' LT	762.04	358178.36	626135.79
1221	15+38.87	18.50' LT	761.62	358174.45	626137.09
1222	15+48.87	18.50' LT	761.64	358175.21	626147.06
1223	15+38.87	20.50' LT	761.58	358176.44	626136.94
1224	15+48.87	20.50' LT	761.63	358177.21	626146.91

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CURB RAMP DETAILS - STH 54 WEST MEDIAN	SHEET 94	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\021401_CR-54.DWG
LAYOUT NAME - W MED
PLOT DATE : 6/28/2025 8:21 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

2

2

EXISTING R/W

JEANNE ST

TLE

STH 54

4'EB'

6'EB'

8'EB'

10'EB'

12'EB'

14'EB'

16'EB'

18'

210'WB'

212'WB'

214'WB'

216'WB'

218

620 SF PERMANENT WETLAND IMPACT (TEMPORARY WIDENING 'W')

EXISTING R/W

TLE

EXISTING R/W

108'D'

MATCH LINE 18+00

N

TLE

EXISTING R/W

106'D'

CTH D/N SHAWANO ST

CITY OF NEW LONDON

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

6520 SF TEMPORARY WETLAND IMPACT (DITCH RESTORATION 'M')

N

MATCH LINE 32+50

6,000 SF TEMPORARY WETLAND IMPACT (DITCH RESTORATION 'L')

EXISTING R/W

220'WB'

222'WB'

224'WB'

226'WB'

228'WB'

230'WB'

232'WB'

20'EB'

22'EB'

24'EB'

STH 54

26'EB'

28'EB'

30'EB'

32'EB'

EXISTING R/W

MATCH LINE 18+00

CITY OF NEW LONDON
WAUPACA COUNTY

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - INITIAL	SHEET 95	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022000_EC-54-INTIAL.DWG
LAYOUT NAME - 01

PLOT DATE : 8/5/2025 9:28 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

1475 SF TEMPORARY WETLAND IMPACT
(OUTFALL REMOVAL/INSTALLATION)
50 SF PERMANENT WETLAND IMPACT
(RIPRAP AT OUTFALL)

1230 SF TEMPORARY WETLAND IMPACT
(OUTFALL INSTALLATION AND DITCH RESTORATION)
50 SF PERMANENT WETLAND IMPACT
(RIPRAP AT OUTFALL)
150 SF PERMANENT WETLAND IMPACT
(FILL FOR GUARDRAIL INSTALLATION)

250 SF TEMPORARY
WETLAND IMPACT
(DITCH RESTORATION)

N

MATCH LINE 47+00

EXISTING R/W

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' STH 54 42'EB' 44'EB' 46'EB'

MATCH LINE 32+50

EMBARRASS RIVER

RIVER RD

350 SF TEMPORARY WETLAND IMPACT
(OUTFALL INSTALLATION)
50 SF PERMANENT WETLAND IMPACT
(RIPRAP AT OUTFALL)

CITY OF NEW LONDON
OUTAGAMIE COUNTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CITY OF NEW LONDON

TOWN OF LIBERTY

N

MATCH LINE 61+50

EXISTING R/W

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' STH 54 54'EB' 56'EB' 58'EB' 60'EB'

EXISTING R/W

MATCH LINE 47+00

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

CTH S

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - INITIAL	SHEET 96	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022000_EC-54-INTIAL.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 7:44 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

TOWN OF LIBERTY

MATCH LINE 76+00

EXISTING R/W

62'WB'
62'EB'
64'EB'
66'EB'
68'EB'
STH 54
70'EB'
72'EB'
74'EB'
76

MATCH LINE 61+50

CITY OF NEW LONDON

TOWN OF LIBERTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

TOWN OF LIBERTY

EXISTING R/W

78'EB'
80'EB'
STH 54
82'EB'
84'EB'

HOUSE RD

EXISTING R/W

EXISTING R/W

MATCH LINE 76+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - INITIAL	SHEET 97	E

2

2

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

JEANNE ST

TLE

EXISTING R/W

STH 54

4'EB'

6'EB'

8'EB'

10'EB'

12'EB'

14'EB'

16'EB'

18'

210'WB'

212'WB'

214'WB'

216'WB'

218

108'D'

N

TLE

EXISTING R/W

MATCH LINE 18+00

EXISTING R/W

TLE

106'D'

CTH D/N SHAWANO ST

CITY OF NEW LONDON

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

N

MATCH LINE 32+50

EXISTING R/W

220'WB'

222'WB'

224'WB'

226'WB'

228'WB'

230'WB'

232'WB'

20'EB'

22'EB'

24'EB'

STH 54

26'EB'

28'EB'

30'EB'

32'EB'

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

MATCH LINE 18+00

CITY OF NEW LONDON
WAUPACA COUNTY

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 1	SHEET 98	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022001_EC-S1_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 8:15 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

SIGN

EXISTING R/W

N

MATCH LINE 47+00

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' STH 54 42'EB' 44'EB' 46'EB'

MH

EMBARRASS RIVER

RIVER RD

WV

CITY OF NEW LONDON
OUTAGAMIE COUNTY

MATCH LINE 32+50

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CITY OF NEW LONDON

TOWN OF LIBERTY

EXISTING R/W

N

MATCH LINE 61+50

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' STH 54 54'EB' 58'EB' 60'EB'

EXISTING R/W

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

CTH S

MATCH LINE 47+00

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 1	SHEET 99	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022001_EC-S1_54.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 8:15 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

TOWN OF LIBERTY

N

MATCH LINE 76+00

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

EXISTING R/W

62'WB'
62'EB'
2'X'
64'EB'
4'X'
66'EB'
6'X'
68'EB'
8'X'
STH 54
70'EB'
10'X'
72'EB'
12'X'
74'EB'
14'X'
16'X'
76

POST
GUY
OH

MATCH LINE 61+50

CITY OF NEW LONDON

TOWN OF LIBERTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

N

TOWN OF LIBERTY

EXISTING R/W

STH 54

78'EB'
80'EB'
82'EB'
84'EB'
18'X'
20'X'

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

HOUSE RD

EXISTING R/W

EXISTING R/W

MATCH LINE 76+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 1	SHEET 100	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022001_EC-S1_54.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 8:15 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : ###

2

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

JEANNE ST

STH 54

4'EB'

6'EB'

8'EB'

10'EB'

12'EB'

14'EB'

16'EB'

210'WB'

212'WB'

214'WB'

216'WB'

218'

TLE

EXISTING R/W

N

TLE

EXISTING R/W

MATCH LINE 18+00

2

108'D'

106'D'

CTH D/N SHAWANO ST

D

D

D

EXISTING R/W

TLE

CITY OF NEW LONDON

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CLEANING CULVERT PIPES

CLEANING CULVERT PIPES

EXIT RAMP FROM SB USH 45

N

ENTRANCE RAMP TO SB USH 45

CLEANING CULVERT PIPES

MATCH LINE 32+50

CLEANING CULVERT PIPES

EXISTING R/W

220'WB'

222'WB'

224'WB'

226'WB'

228'WB'

230'WB'

232'WB'

20'EB'

22'EB'

24'EB'

STH 54

26'EB'

28'EB'

30'EB'

32'EB'

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

MATCH LINE 18+00

CITY OF NEW LONDON
WAUPACA COUNTY

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 2	SHEET 101	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022002_EC-S2_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 8:31 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 32+50

MATCH LINE 47+00

N

SLOPE PAVING
CRUSHED AGGREGATE

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

CLEANING CULVERT PIPES

CLEANING CULVERT PIPES

CLEANING CULVERT PIPES

EXISTING R/W

SIGN

234'WB'
236'WB'
238'WB'
240'WB'
242'WB'
244'WB'
246'WB'

34'EB'
36'EB'
38'EB'
40'EB'
42'EB'
44'EB'
46'EB'

STH 54

EMBARRASS RIVER

RIVER RD

MH

WV

CITY OF NEW LONDON
OUTAGAMIE COUNTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CITY OF NEW LONDON

TOWN OF LIBERTY

N

MATCH LINE 61+50

MATCH LINE 47+00

CLEANING CULVERT PIPES

CLEANING CULVERT PIPES

CLEANING CULVERT PIPES

CLEANING CULVERT PIPES

CLEANING CULVERT PIPES

EXISTING R/W

EXISTING R/W

248'WB'
250'WB'
252'WB'
254'WB'
256'WB'
258'WB'
260'WB'

48'EB'
50'EB'
52'EB'
54'EB'
56'EB'
58'EB'
60'EB'

STH 54

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

CTH S

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 2	SHEET 102	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022002_EC-S2_54.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 8:31 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

TOWN OF LIBERTY

N

MATCH LINE 76+00

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

EXISTING R/W

4'Z'
6'Z'
8'Z'
10'Z'
12'Z'
14'Z'
16'Z'
62'EB'
64'EB'
66'EB'
68'EB'
70'EB'
72'EB'
74'EB'
76

STH 54

GUY
POST
OH

MATCH LINE 61+50

CITY OF NEW LONDON

TOWN OF LIBERTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

N

TOWN OF LIBERTY

EXISTING R/W

18'Z'
20'Z'
78'EB'
80'EB'
82'EB'
84'EB'

STH 54

HOUSE RD

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

EXISTING R/W

EXISTING R/W

MATCH LINE 76+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 2	SHEET 103	E

2

2

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

JEANNE ST

TLE

EXISTING R/W

STH 54

4'EB' 6'EB' 8'EB' 10'EB' 12'EB' 14'EB' 16'EB' 18'

2'W' 4'W' 6'W'

210'WB' 212'WB' 214'WB' 216'WB' 218

108'D'

EXISTING R/W

MATCH LINE 18+00

N

TLE

EXISTING R/W

106'D'

CTH D/N SHAWANO ST

TLE

CITY OF NEW LONDON

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

N

MATCH LINE 32+50

EXISTING R/W

220'WB' 222'WB' 224'WB' 226'WB' 228'WB' 230'WB' 232'WB'

20'EB' 22'EB' 24'EB' STH 54 26'EB' 28'EB' 30'EB' 32'EB'

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

MATCH LINE 18+00

CITY OF NEW LONDON
WAUPACA COUNTY

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 3	SHEET 104	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022003_EC-S3_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 8:50 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

SIGN

EXISTING R/W

MATCH LINE 47+00

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' 42'EB' 44'EB' 46'EB'

STH 54

EMBARRASS RIVER

RIVER RD

MATCH LINE 32+50

CITY OF NEW LONDON
OUTAGAMIE COUNTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CITY OF NEW LONDON

TOWN OF LIBERTY

MATCH LINE 61+50

EXISTING R/W

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' STH 54 54'EB' 56'EB' 58'EB' 60'EB'

EXISTING R/W

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

CTH S

MATCH LINE 47+00

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

CITY OF NEW LONDON

2

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 3	SHEET 105	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022003_EC-S3_54.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 8:50 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

TOWN OF LIBERTY

N

MATCH LINE 76+00

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

EXISTING R/W

62'EB'

64'EB'

66'EB'

68'EB'

STH 54

70'EB'

72'EB'

74'EB'

76

GUY

POST

OH

MATCH LINE 61+50

EXISTING R/W

CITY OF NEW LONDON

TOWN OF LIBERTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

N

TOWN OF LIBERTY

EXISTING R/W

STH 54

78'EB'

80'EB'

82'EB'

84'EB'

GUY

POST

FO

HOUSE RD

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

EXISTING R/W

EXISTING R/W

MATCH LINE 76+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 3	SHEET 106	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022003_EC-S3_54.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 8:51 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : ###

WISDOT/CADDS SHEET 44

2

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

JEANNE ST

TLE

EXISTING R/W

6'Y'

4'Y'

2'Y'

4'EB'

6'EB'

8'EB'

10'EB'

12'EB'

14'EB'

16'EB'

210'WB'

212'WB'

214'WB'

216'WB'

218

STH 54

EXISTING R/W

N

TLE

C

C

C

C

C

C

A

A

D

108'D'

106'D'

CTH D/N SHAWANO ST

EXISTING R/W

TLE

MATCH LINE 18+00

2

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CITY OF NEW LONDON

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

N

MATCH LINE 32+50

EXISTING R/W

220'WB'

222'WB'

224'WB'

226'WB'

228'WB'

230'WB'

232'WB'

20'EB'

22'EB'

24'EB'

26'EB'

28'EB'

30'EB'

32'EB'

STH 54

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

MATCH LINE 18+00

CITY OF NEW LONDON
WAUPACA COUNTY

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 4	SHEET 107	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022004_EC-S4_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 9:06 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 32+50

MATCH LINE 47+00

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

EXISTING R/W

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' 42'EB' STH 54 44'EB' 46'EB'

EMBARRASS RIVER

RIVER RD

CITY OF NEW LONDON
OUTAGAMIE COUNTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CITY OF NEW LONDON

TOWN OF LIBERTY

MATCH LINE 61+50

MATCH LINE 47+00

EXISTING R/W

248'WB' 250'WB' 252'WB' 254'WB' 256'WB' 258'WB' 260'WB'

48'EB' 50'EB' 52'EB' STH 54 54'EB' 56'EB' 58'EB' 60'EB'

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

CTH S

CITY OF NEW LONDON

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 4	SHEET 108 E

2

TOWN OF LIBERTY

MATCH LINE 76+00

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

EXISTING R/W

62'WB'
62'EB'
64'EB'
66'EB'
68'EB'
STH 54
70'EB'
72'EB'
74'EB'
76

MATCH LINE 61+50

CITY OF NEW LONDON

TOWN OF LIBERTY

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

TOWN OF LIBERTY

EXISTING R/W

78'EB'
80'EB'
STH 54
82'EB'
84'EB'

EXCLUSION FENCING INSTALLED
PRIOR TO STAGE 1 (TYP)

HOUSE RD

EXISTING R/W

EXISTING R/W

MATCH LINE 76+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 4	SHEET 109	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022004_EC-S4_54.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 9:06 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : ###

WISDOT/CADDS SHEET 44

2

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

JEANNE ST

TLE

EXISTING R/W

4'EB'

6'EB'

8'EB'

10'EB'

10'WB'

12'EB'

212'WB'

14'EB'

214'WB'

16'EB'

216'WB'

218

18'

STH 54

EXISTING R/W

TLE

N

CTH D/N SHAWANO ST

EXISTING R/W

MATCH LINE 18+00

108'D'

106'D'

A

C

D

TLE

EXISTING R/W

PLACE IN EXISTING INLET AT STA 104'D'+20 LT

PLACE IN EXISTING INLET AT STA 104'D'+15 RT

CITY OF NEW LONDON

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

EXISTING R/W

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

N

MATCH LINE 32+50

220'WB'

222'WB'

224'WB'

226'WB'

228'WB'

230'WB'

232'WB'

20'EB'

22'EB'

24'EB'

26'EB'

28'EB'

30'EB'

32'EB'

STH 54

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

MATCH LINE 18+00

CITY OF NEW LONDON
WAUPACA COUNTY

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 5	SHEET 110	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022005_EC-S5_54.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 9:21 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

JEANNE ST

TLE

EXISTING R/W

CTH D/N SHAWANO ST

EXISTING R/W

MATCH LINE 18+00

4'EB'

6'EB'

8'EB'

10'EB'

12'EB'

14'EB'

16'EB'

18'

STH 54

EXISTING R/W

TLE

EXISTING R/W

106'D'

108'D'

210'WB'

212'WB'

214'WB'

216'WB'

218'

N

TLE

LEGEND:

- SILT FENCE RELIEF (SEE CONST DETAILS)
- SILT FENCE - EXCLUSION FENCING (5' BEHIND SI)
- TEMPORARY SMALL ANIMAL TURN AROUND (SEE CONST DETAILS)
- PERMITTED WETLAND IMPACT
- WETLAND
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- INLET PROTECTION (TYPE) IN EXISTING INLET
- INLET PROTECTION (TYPE) IN PROPOSED INLET
- EROSION MAT URBAN CLASS I TYPE B

CITY OF NEW LONDON

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

N

MATCH LINE 32+50

EXISTING R/W

220'WB'

222'WB'

224'WB'

226'WB'

228'WB'

230'WB'

232'WB'

20'EB'

22'EB'

24'EB'

26'EB'

28'EB'

30'EB'

32'EB'

STH 54

EXISTING R/W

EXCLUSION FENCING INSTALLED PRIOR TO STAGE 1 (TYP)

MATCH LINE 18+00

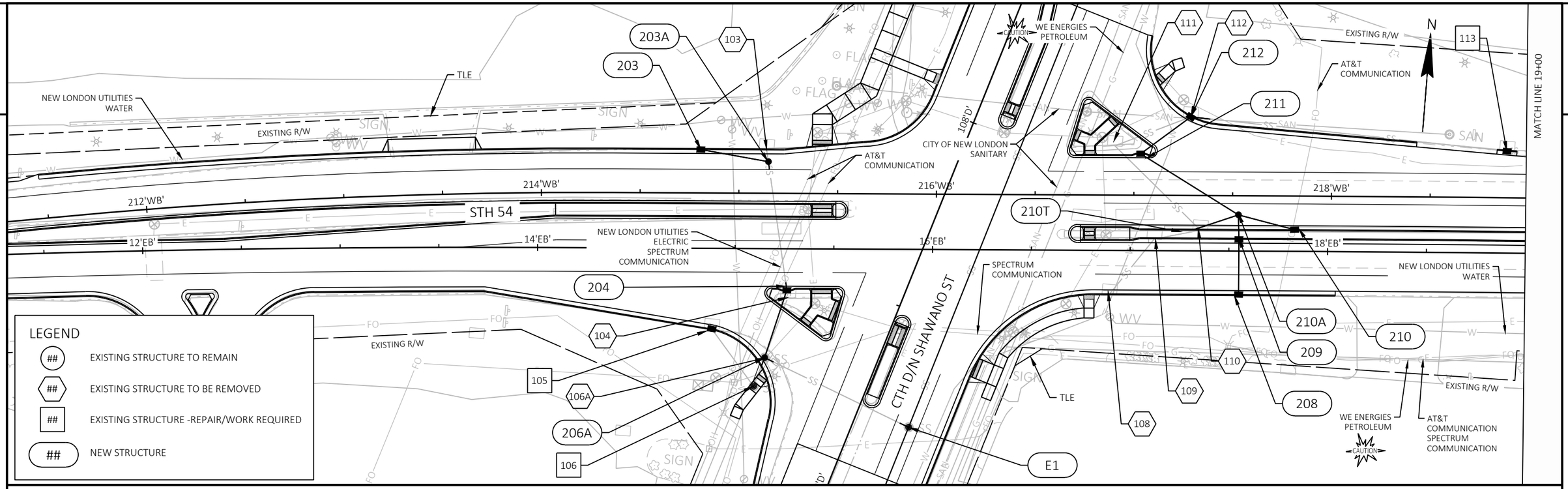
CITY OF NEW LONDON
WAUPACA COUNTY

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	EROSION CONTROL - STAGE 6	SHEET 111	E

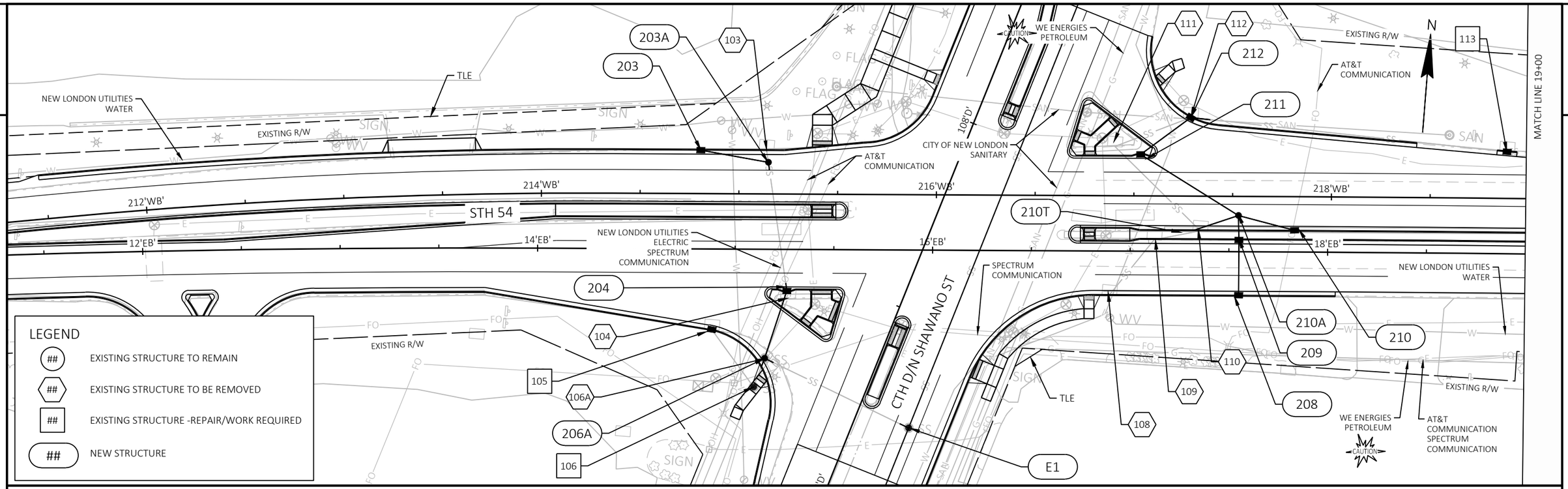
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022006_EC-S6_54.DWG
LAYOUT NAME - 01

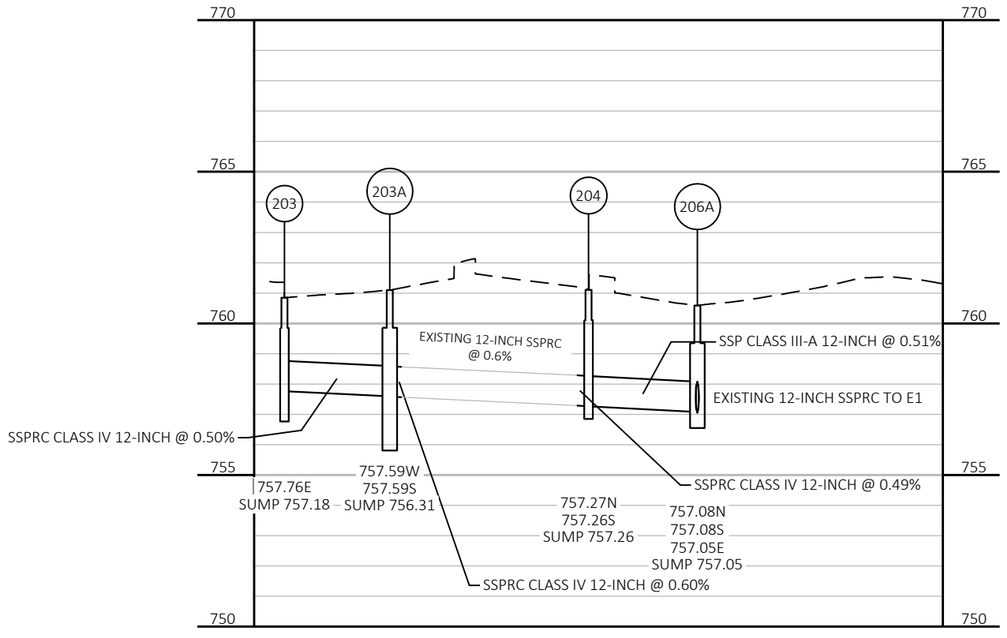
PLOT DATE : 6/28/2025 9:32 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:100 FT

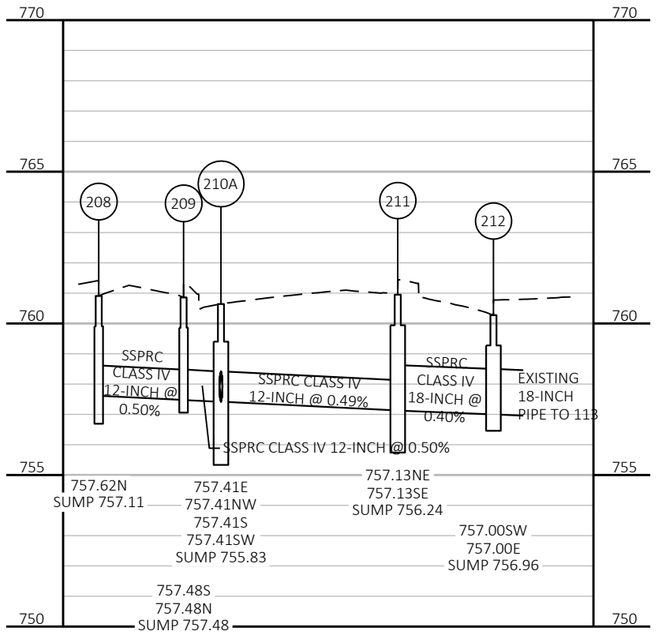
WISDOT/CADDS SHEET 44

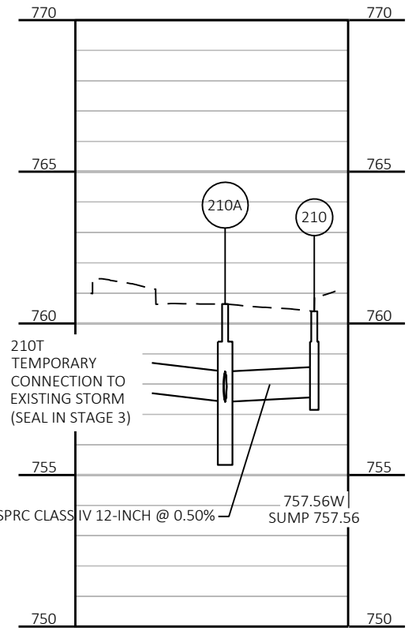


STRUCT NO.	STATION	OFFSET		STRUCTURE					DISCHARGE PIPE		REPAIR	REMARKS
				TYPE			COVER		TO STRUCT	SIZE (IN)		
STAGE 4 STRUCTURES												
103	15'EB'+15.6	50.3	LT	REMOVE	INLET	TYPE 3 (RECT)	EX H-S		REMOVE INLET AND PIPE TO 203A			
203	14'EB'+82.4	50.0	LT	NEW	INLET	2X3-FT	H-S		203A	12"	NEW CATCH BASIN AND PIPE	SEE DETAIL NEXT PAGE
203A	15'EB'+16.6	44.0	LT	NEW	MH	4-FT	J		204A	12"	NEW MANHOLE AND CONNECTION TO EXISTING PIPE	SEE DETAIL NEXT PAGE PIPE COLLAR REQ'D
STAGE 5 STRUCTURES												
104	15'EB'+26.8	24.6	RT	REMOVE	INLET	TYPE 3 (RECT)	EX H-S		REMOVE INLET AND PIPE TO 106A			
105	14'EB'+88.3	40.7	RT	ADJUST	INLET	TYPE 3 (RECT)	EX H		106	EX 12"	ADUST INLET - RISERS AND ELEVATION	
106	15'EB'+09.6	69.6	RT	ADJUST	MH	TYPE 1	J		106A	EX 12"	ADUST MANHOLE - ELEVATION	
106A	15'EB'+15.2	55.1	RT	REMOVE	MH	TYPE 1	EX J		REMOVE MANHOLE, REPLACE WITH 206A			SEE DETAIL NEXT PAGE
E1	15'EB'+88.3	90.0	RT	NEW	MH	4-FT	J		EXISTING	SYSTEM	NEW MANHOLE AND CONNECTIONS TO EXISTING PIPES	SEE DETAIL ALONG CTH D
204	15'EB'+26.1	20.0	RT	NEW	INLET	2X3-FT	H		206A	12"	CONNECTION TO EXISTING PIPE, NEW CATCH BASIN AND PIPE	SEE DETAIL NEXT PAGE PIPE COLLAR REQ'D
206A	15'EB'+15.2	55.1	RT	NEW	MH	4-FT	J		E1	EX 12"	NEW MANHOLE AND CONNECTIONS TO EXISTING PIPES	SEE DETAIL NEXT PAGE PIPE COLLARS REQ'D

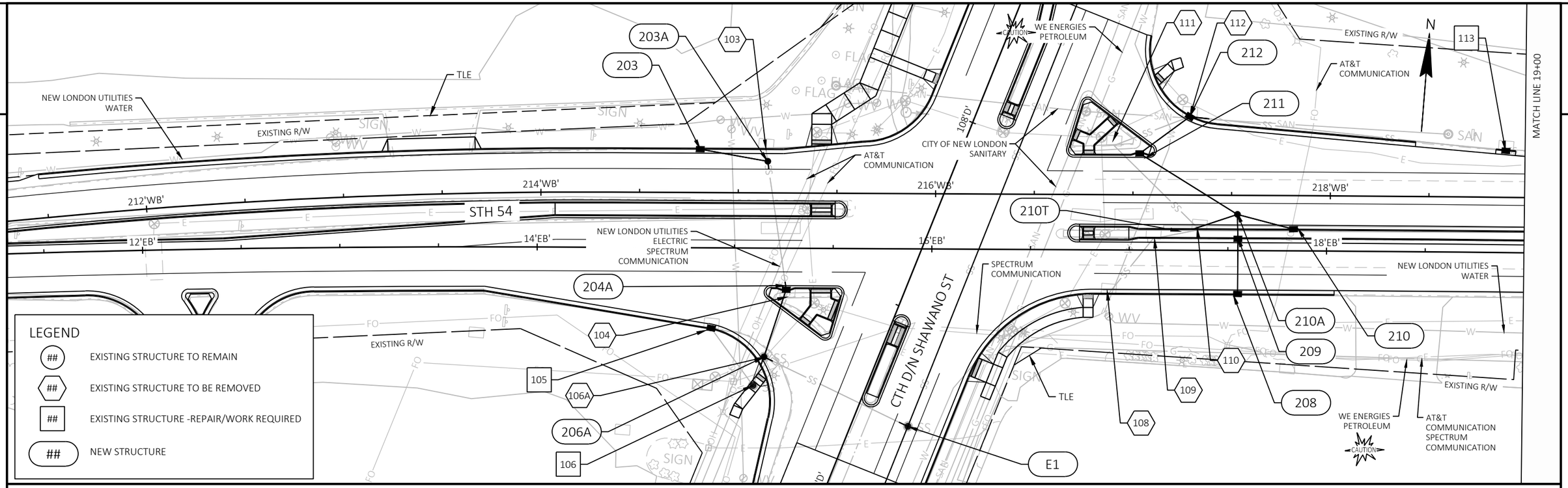




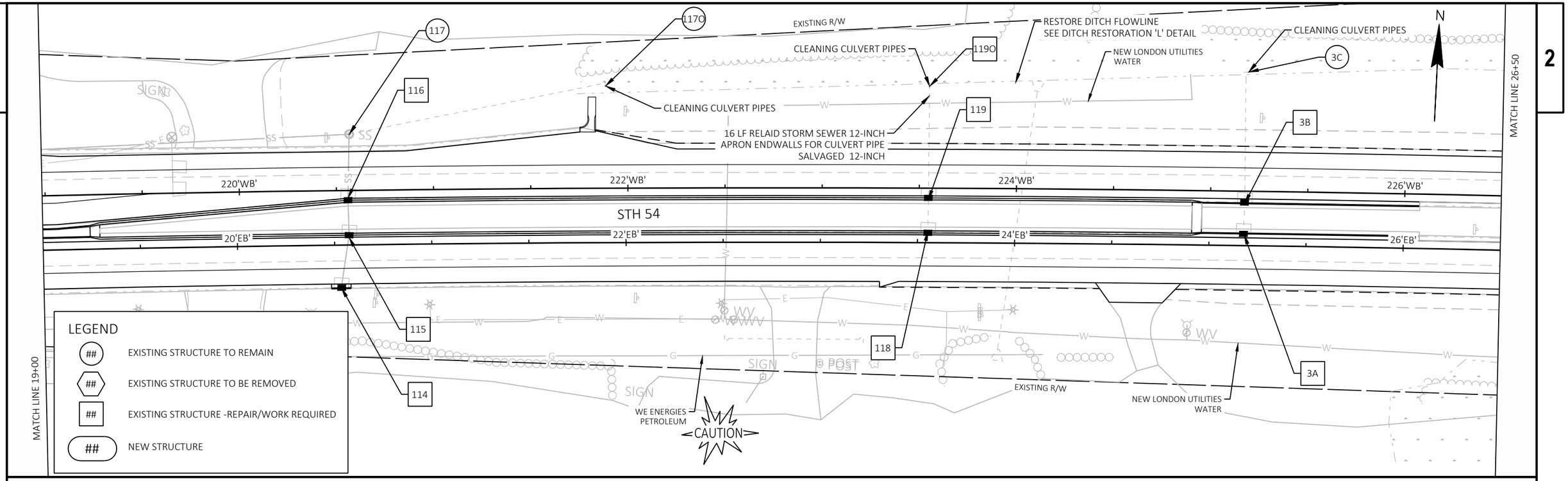




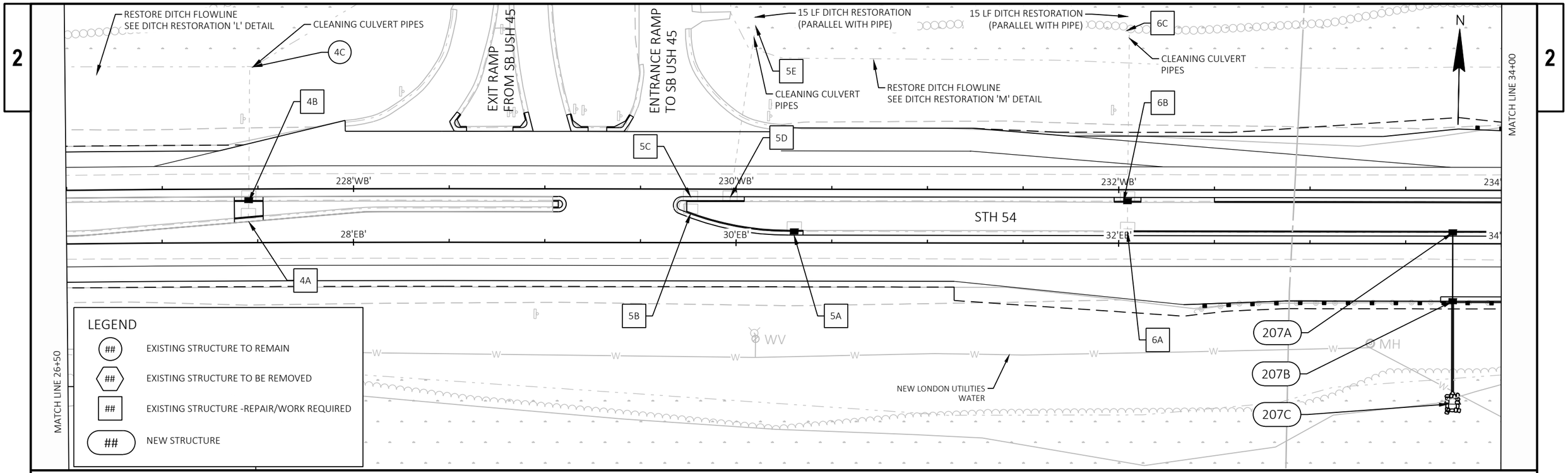
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STORM SEWER	SHEET 113	E



STRUCT NO.	STATION	OFFSET		STRUCTURE					DISCHARGE PIPE		REPAIR	REMARKS
				TYPE			COVER		TO STRUCT	SIZE (IN)		
STAGE 4 STRUCTURES												
110	17'EB'+35.5	105. LT		REMOVE	INLET	TYPE 3 (RECT)	EX H	REMOVE INLET AND PIPE TO 111, SEE 210T				
111	16'EB'+92.0	52.9	LT	REMOVE	INLET	TYPE 3 (RECT)	EX H	REMOVE INLET AND PIPE TO 112				
112	17'EB'+30.4	67.8	LT	REMOVE	INLET	TYPE 3 (RECT)	EX H	REMOVE INLET, REPLACE WITH 212				SEE DETAIL PREVIOUS PAGE
113	18'EB'+90.3	51.6	LT	ADJUST	INLET	TYPE 3 (RECT)			117	EX 18"	ADJUST INLET - RISER REPAIR	
210	17'EB'+83.2	11.0	LT	NEW	INLET	2X3-FT	H-S		210A	12"	NEW CATCH BASIN	SEE DETAIL PREVIOUS PAGE
210A	17'EB'+54.7	18.3	LT	NEW	MH	4-FT	J		211	12"	NEW MANHOLE	SEE DETAIL PREVIOUS PAGE
211	17'EB'+05.6	48.0	LT	NEW	INLET	4-FT	H		212	18"	NEW CATCH BASIN	SEE DETAIL PREVIOUS PAGE
212	17'EB'+30.4	67.8	LT	NEW	INLET	4-FT	H-S		113	EX 18"	NEW CATCH BASIN - CONNECT TO EXISTING 18" PIPE TO 113	SEE DETAIL PREVIOUS PAGE
210T	17'EB'+35.5	10.5	LT	TEMP	CONNECT				210A		TEMPORAY CONNECTION TO EXISTING STORM SEWER	
STAGE 5 STRUCTURES												
108	16'EB'+89.6	22.1	RT	REMOVE	INLET	TYPE 3 (RECT)	EX H	REMOVE INLET AND PIPE TO 109				
109	17'EB'+12.1	5.9	LT	REMOVE	INLET	TYPE 3 (RECT)	EX H	REMOVE INLET AND PIPE TO 210T				
208	17'EB'+55.0	22.0	RT	NEW	INLET	2X3-FT	H-S		209	12"	NEW CATCH BASIN	SEE DETAIL PREVIOUS PAGE
209	17'EB'+55.0	6.0	LT	NEW	INLET	2X3-FT	H-S		210A	12"	NEW CATCH BASIN	SEE DETAIL PREVIOUS PAGE
210T	17'EB'+35.5	10.5	LT								ABANDON TEMPORARY CONNECTION TO EXISTING STORM SEWER	



STRUCT NO.	STATION	OFFSET		STRUCTURE					DISCHARGE PIPE		REPAIR	REMARKS
				TYPE			COVER	STAGE	TO STRUCT	SIZE (IN)		
114	20'EB'+57.2	23.0	LT	RECST	INLET	TYPE 3 (RECT)	EX H	5	115	EX 12"	RECONSTRUCT INLET - RISER REPAIR	
115	20'EB'+57.6	5.0	LT	RECST	INLET	TYPE 3 (RECT)	EX B	5	116	EX 12"	RECONSTRUCT INLET - RISER REPAIR/PIPE CONNECTIONS	
116	20'EB'+53.4	22.0	RT	ADJUST	INLET	TYPE 3 (RECT)	EX B	4	117	EX 12"	ADJUST INLET - RISER REPAIR	
117	20'EB'+58.1	56.9	LT	EXIST	MH	TYPE 1	EX J	N/A	117O	EX 24"	NONE - TO REMAIN	
117O	21'EB'+87.4	81.6	LT	EXIST	AEW	24-INCH		2			RESTORE DITCH FLOWLINE - SEE DITCH RESTORATION 'L' DETAIL CLEANING CULVERT PIPES (117 - 117O)	MARKERS CULVERT END REQ'D
118	23'EB'+55.4	5.1	LT	ADJUST	INLET	TYPE 3 (RECT)	EX B	3	119	EX 12"	ADJUST INLET - RISER REPAIR	
119	23'EB'+55.5	-23.0	LT	RECST	INLET	TYPE 3 (RECT)	EX B	2	119O	EX 12"	RECONSTRUCT INLET - RISER REPAIR	
119O	23'EB'+55.9	80.4	LT	RESET	AEW	12-INCH		2			RELAY AND TIE 2 SECTIONS EXISTING 12" PIPE AND SALVAGE ENDWALL RESTORE DITCH FLOWLINE - SEE DITCH RESTORATION 'L' DETAIL CLEANING CULVERT PIPES (119 - 119O)	MARKERS CULVERT END REQ'D
3A	25'EB'+18.1	22.1	LT	RECST	INLET	TYPE 3 (RECT)	EX H	3	3B	EX 12"	RECONSTRUCT INLET - RISER REPAIR	
3B	25'EB'+17.7	6.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	2	3C	EX 18"	ADJUST INLET - RISER REPAIR	
3C	25'EB'+18.0	87.1	LT	EXIST	AEW	18-INCH		2			RESTORE DITCH FLOWLINE - SEE DITCH RESTORATION 'L' DETAIL CLEANING CULVERT PIPES (3B - 3C)	MARKERS CULVERT END REQ'D



STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	STAGE	DISCHARGE PIPE TO STRUCT	DISCHARGE PIPE SIZE (IN)	REPAIR	REMARKS
4A	27'EB'+45.1	12.8	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	4B	EX 12"	ADJUST INLET - RISER REPAIR	
4B	27'EB'+45.3	-22.2	LT	RECST	INLET	TYPE 3 (RECT)	EX H	2	4C	EX 18"	RECONSTRUCT INLET - RISER REPAIR	
4C	27'EB'+46.1	90.0	LT	EXIST	AEW	18-INCH		2			RESTORE DITCH FLOWLINE - SEE DITCH RESTORATION 'L' DETAIL CLEANING CULVERT PIPES (4B - 4C)	MARKERS CULVERT END REQ'D
5A	30'EB'+30.4	6.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	3	5D	EX 12"	ADJUST INLET - RISER REPAIR	
5B	29'EB'+76.2	15.2	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	5C	EX 12"	ADJUST INLET - RISER REPAIR	
5C	29'EB'+76.1	22.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	5D	EX 12"	ADJUST INLET - RISER REPAIR	
5D	29'EB'+96.7	22.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	5E	EX 18"	ADJUST INLET - RISER REPAIR	
5E	30'EB'+10.1	113.3	LT	EXIST	AEW	18-INCH		2			DITCH RESTORATION - 15 FEET PARALLEL WITH PIPE RESTORE DITCH FLOWLINE - SEE DITCH RESTORATION 'M' DETAIL CLEANING CULVERT PIPES (5D - 5E)	MARKERS CULVERT END REQ'D
6A	32'EB'+04.6	6.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	3	6B	EX 12"	ADJUST INLET - RISER REPAIR	
6B	32'EB'+04.6	22.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	2	6C	EX 18"	ADJUST INLET - RISER REPAIR	
6C	32'EB'+05.4	109.0	LT	EXIST	AEW	18-INCH		2			DITCH RESTORATION - 15 FEET PARALLEL WITH PIPE RESTORE DITCH FLOWLINE - SEE DITCH RESTORATION 'M' DETAIL CLEANING CULVERT PIPES (6B - 6C)	
207A	33'EB'+74.6	5.8	LT	NEW	INLET	2X3-FT	H	3	207B	12"	NEW INLET	SEE DETAIL NEXT PAGE
207B	33'EB'+74.6	30.0	RT	NEW	INLET	2X2.5-FT	V	3	207C	12" CPCP	NEW INLET	SEE DETAIL NEXT PAGE
207C	33'EB'+74.6	77.0	RT	NEW	AEW	AEW CP STEEL 12-INCH		3			NEW AEW	SEE DETAIL NEXT PAGE MARKERS CULVERT END REQ'D

RESTORE DITCH FLOWLINE
SEE DITCH RESTORATION 'L' DETAIL

CLEANING CULVERT PIPES

4C

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

15 LF DITCH RESTORATION
(PARALLEL WITH PIPE)

15 LF DITCH RESTORATION
(PARALLEL WITH PIPE)

6C

CLEANING CULVERT PIPES

5E

CLEANING CULVERT PIPES

RESTORE DITCH FLOWLINE
SEE DITCH RESTORATION 'M' DETAIL

N

MATCH LINE 34+00

4B

6B

5C

5D

228'WB'

230'WB'

232'WB'

234'

STH 54

28'EB'

30'EB'

32'EB'

34'

4A

5B

5A

6A

WV

MH

207A

207B

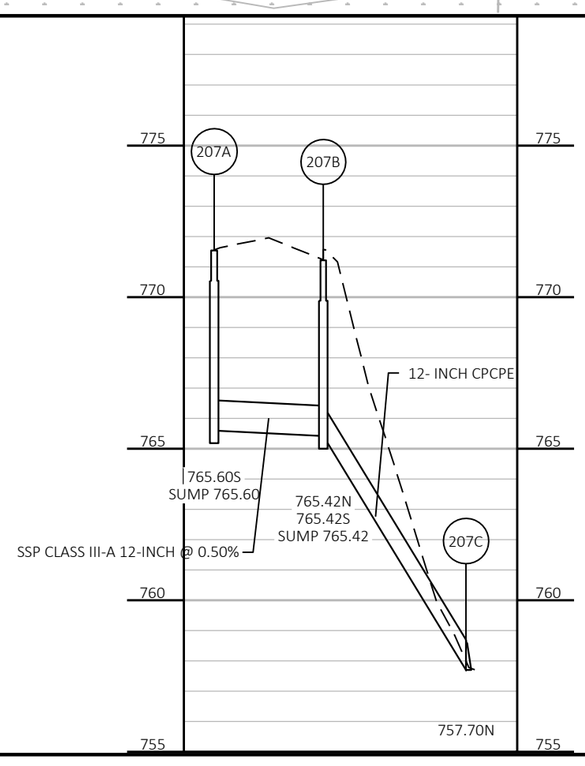
207C

NEW LONDON UTILITIES
WATER

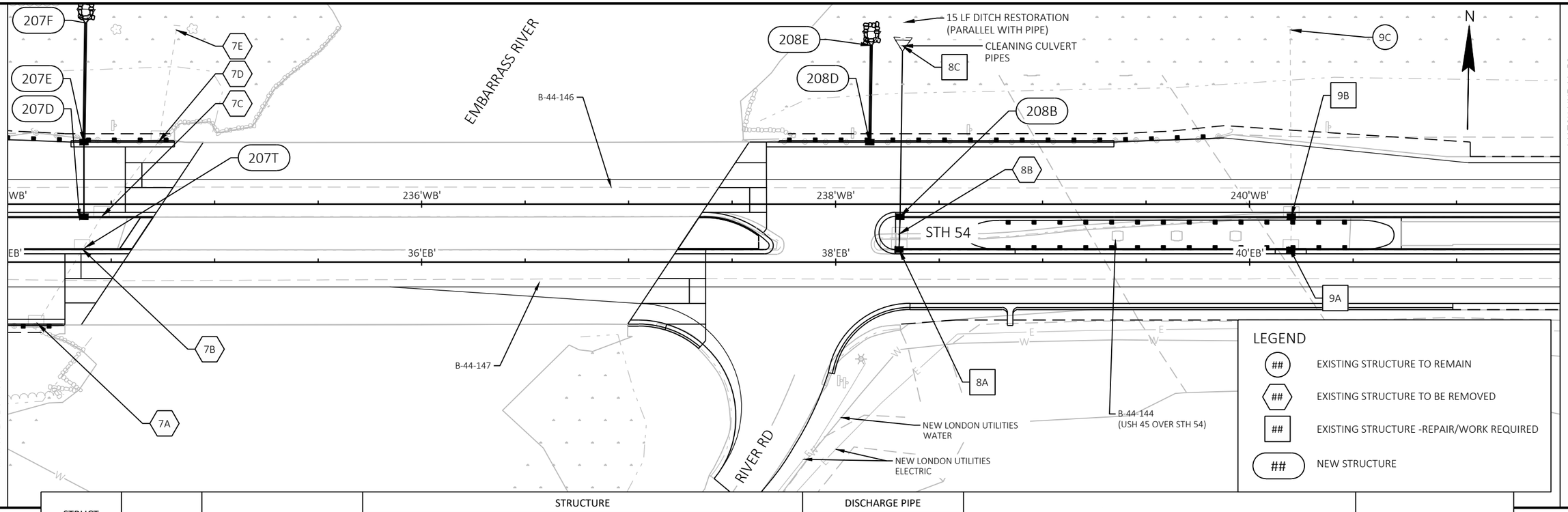
MATCH LINE 26+50

LEGEND

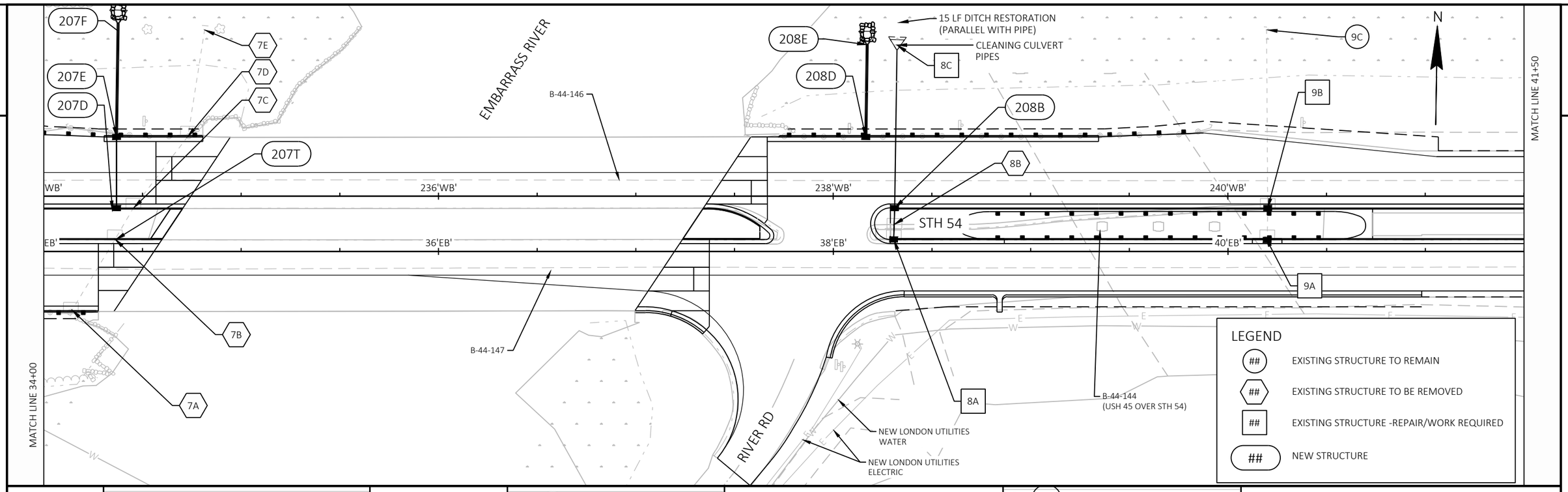
##	EXISTING STRUCTURE TO REMAIN
##	EXISTING STRUCTURE TO BE REMOVED
##	EXISTING STRUCTURE -REPAIR/WORK REQUIRED
##	NEW STRUCTURE

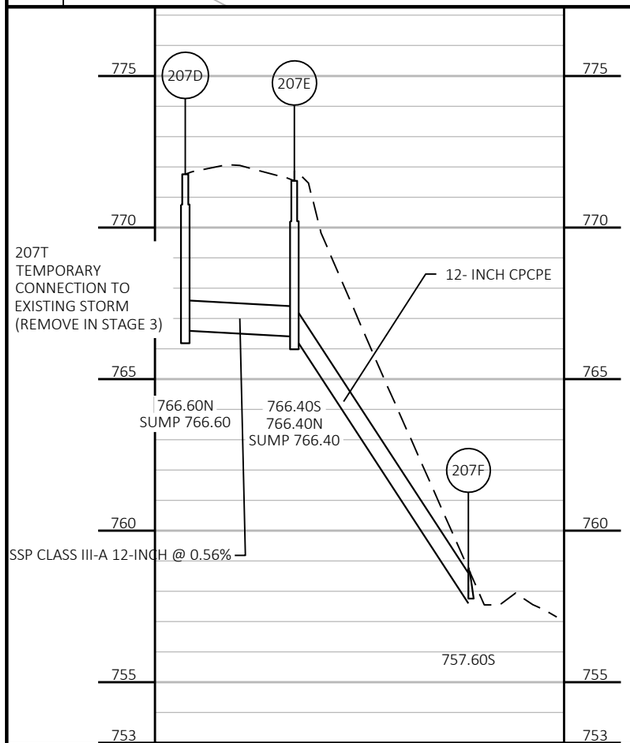


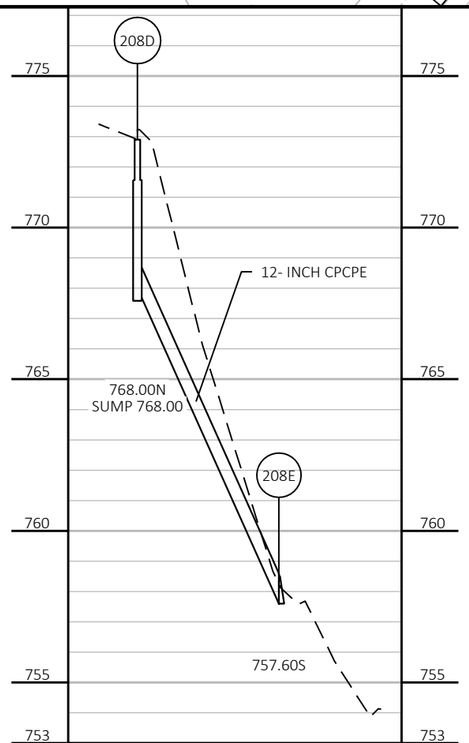
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STORM SEWER	SHEET 117	E

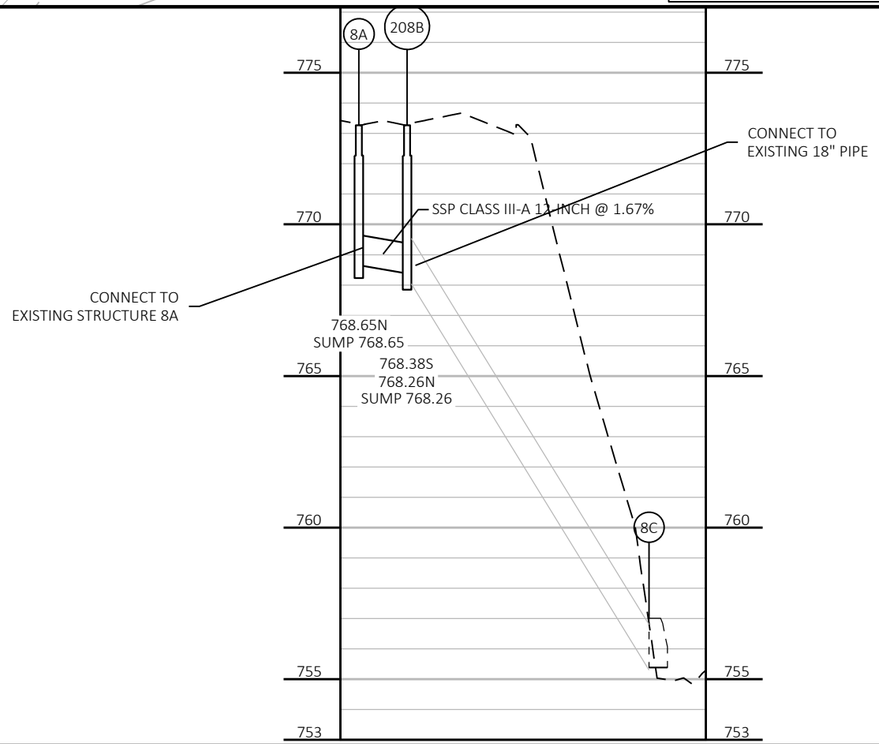


STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	STAGE	DISCHARGE PIPE TO STRUCT	DISCHARGE PIPE SIZE (IN)	REPAIR	REMARKS
7A	34'EB'+13.6	30.8	RT	REMOVE	INLET	TYPE 1 (RECT)	EX V	3			REMOVE INLET AND PIPE TO 7B	
7B	34'EB'+35.9	5.9	LT	REMOVE	INLET	TYPE 3 (RECT)	EX H	3			REMOVE INLET AND PIPE TO 7C	
7C	34'EB'+45.3	21.9	LT	REMOVE	INLET	TYPE 3 (RECT)	EX H	2			REMOVE INLET AND PIPE TO7D	
7D	34'EB'+73.0	58.4	LT	REMOVE	INLET	TYPE 1 (RECT)	EX V	2			REMOVE INLET AND PIPE TO 7E	
7E	34'EB'+81.5	112.2	LT	REMOVE	AEW	18-INCH		2			REMOVE ENDWALL	
8A	38'EB'+30.6	6.1	LT	ADJUST	INLET	TYPE 3 (RECT)	H-D	3	208B	12"	REPLACE EXISTING H COVER WITH H-D CASTING REMOVE EXISTING PIPETO 8B, CONNECT TO NEW 12" PIPE TO 208B	SEE DETAIL NEXT PAGE PIPE COLLAR REQ'D
8B	38'EB'+30.9	11.7	LT	REMOVE	INLET	TYPE 3 (RECT)	EX H	2			REMOVE INLET AND EXISTING PIPE TO 208B	
8C	38'EB'+32.3	101.8	LT	EXIST	AEW	18-INCH		2			DITCH RESTORATION - 15 FEET PARALLEL WITH PIPE CLEANING CULVERT PIPES (208B - 8C)	
9A	40'EB'+19.9	5.9	LT	ADJUST	INLET	TYPE 3 (RECT)	H-D	3	9B	EX 12"	RISER REPAIR REPLACE EXISTING H COVER WITH H-D CASTING	
9B	40'EB'+20.2	22.0	LT	ADJUST	INLET	TYPE 3 (RECT)	H-D	2	9C	EX 18"	RISER REPAIR REPLACE EXISTING H COVER WITH H-D CASTING	
9C	40'EB'+19.6	111.9	LT	EXIST	AEW	18-INCH		2			NONE - TO REMAIN	
207D	34'EB'+36.8	-22.0	LT	NEW	INLET	2X3-FT	H	2	207E	12"	NEW INLET	SEE DETAIL NEXT PAGE
207E	34'EB'+36.8	58.0	LT	NEW	INLET	2X2.5-FT	V	2	207F	12" CPCP	NEW INLET	SEE DETAIL NEXT PAGE
207F	34'EB'+37.6	115.5	LT	NEW	AEW	AEW CP STEEL 12-INCH		2			NEW AEW - MARKERS CULVERT END REQ'D	SEE DETAIL NEXT PAGE
207T	34'EB'+45.3	5.9	LT	TEMP	CONNECT			2/3	207D		TEMPORARY CONNECTION TO EXISTING STORM SEWER CONNECT EXISTING STRUCTURE 7B TO 207D IN STAGE 2, REMOVE IN STAGE 3	
208B	38'EB'+31.1	22.0	LT	NEW	INLET	2X3-FT	H-D	2	8C	EX 18"	NEW INLET - CONNECT TO EXISTING 18" PIPE TO 8C	SEE DETAIL NEXT PAGE PIPE COLLAR REQ'D
208D	38'EB'+16.5	58.0	LT	NEW	INLET	2X2.5-FT	V	2	208E	12" CPCP	NEW INLET	SEE DETAIL NEXT PAGE
208E	38'EB'+17.2	105.0	LT	NEW	AEW	AEW CP STEEL 12-INCH		2			NEW AEW - MARKERS CULVERT END REQ'D	SEE DETAIL NEXT PAGE

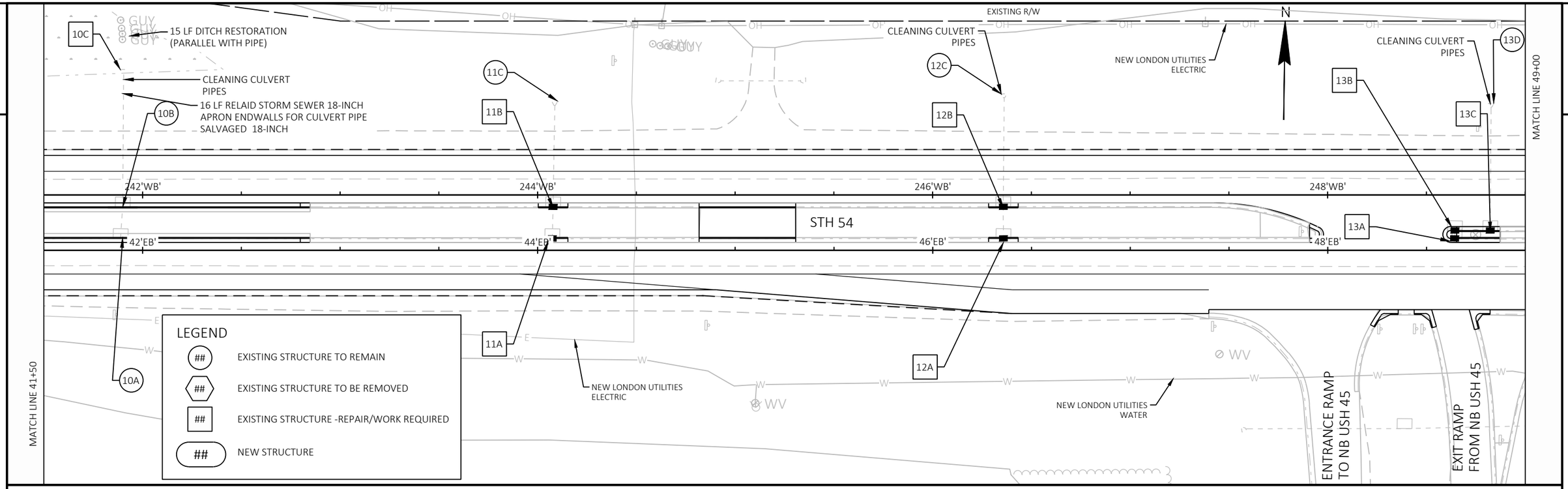




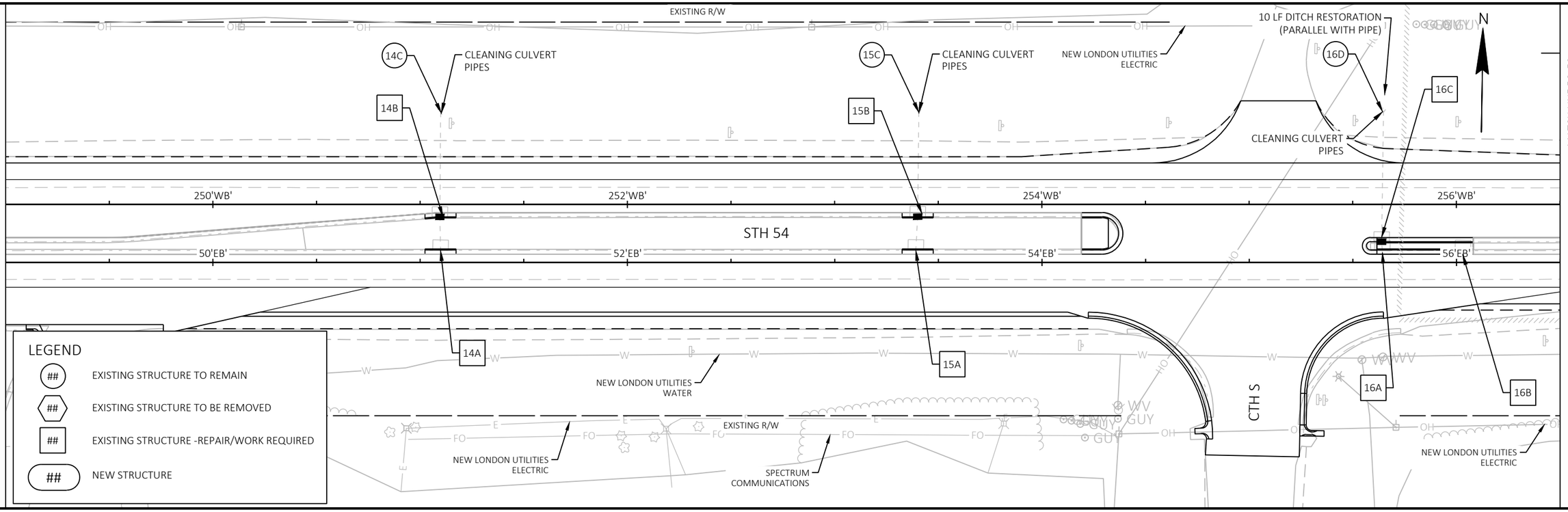




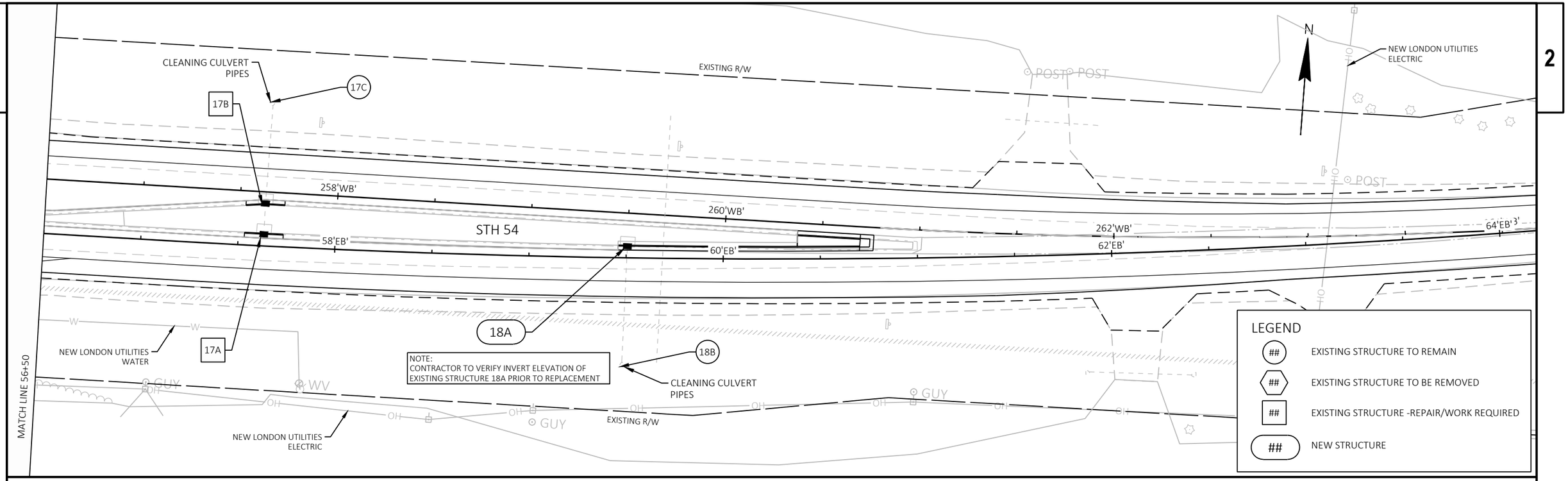
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STORM SEWER	SHEET 119	E



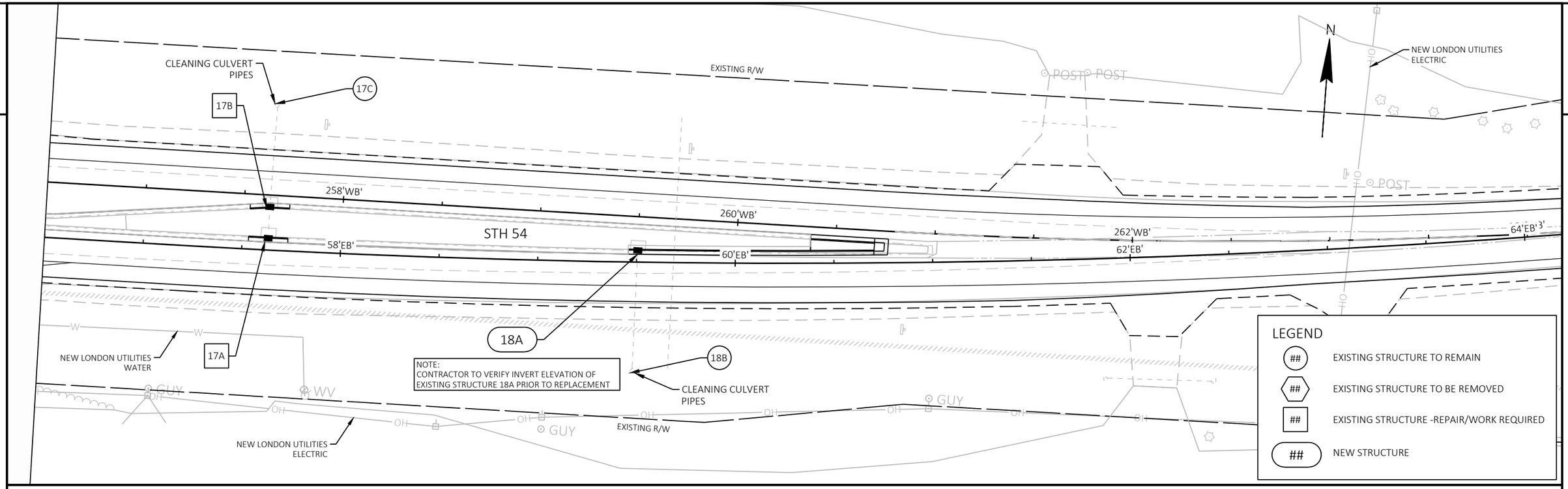
STRUCT NO.	STATION	OFFSET		STRUCTURE					DISCHARGE PIPE		REPAIR	REMARKS
				TYPE			COVER	STAGE	TO STRUCT	SIZE (IN)		
10A	41'EB'+88.9	5.9	LT	EXIST	INLET	TYPE 3 (RECT)	H-D	3	10B	EX 12"	REPLACE EXISTING H COVER WITH H-D CASTING	
10B	41'EB'+89.9	21.9	LT	EXIST	INLET	TYPE 3 (RECT)	H-D	2	10C	EX 18"	REPLACE EXISTING H COVER WITH H-D CASTING	
10C	41'EB'+90.4	89.0	LT	RESET	AEW	18-INCH		2			RELAY AND TIE 2 SECTIONS EXISTING 18" PIPE AND SALVAGE ENDWALL DITCH RESTORATION - 15 FEET PARALLEL WITH PIPE CLEANING CULVERT PIPES (10B - 10C)	
11A	44'EB'+07.4	6.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	3	11B	EX 12"	ADJUST INLET - RISER REPAIR	
11B	44'EB'+07.8	22.0	LT	RECST	INLET	TYPE 3 (RECT)	EX H	2	11C	EX 18"	RECONSTRUCT INLET - RISER REPAIR	
11C	44'EB'+08.7	73.1	LT	EXIST	AEW	18-INCH		2			NONE - TO REMAIN	
12A	46'EB'+35.8	6.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	3	12B	EX 12"	ADJUST INLET - RISER REPAIR	
12B	46'EB'+35.8	-22.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	2	12C	EX 18"	ADJUST INLET - RISER REPAIR	
12C	46'EB'+36.2	76.9	LT	EXIST	AEW	18-INCH		2			CLEANING CULVERT PIPES (12B - 12C)	
13A	48'EB'+64.3	6.0	LT	RECST	INLET	TYPE 3 (RECT)	EX H	3	13B	EX 12"	RECONSTRUCT INLET - RISER REPAIR	
13B	48'EB'+64.4	-10.1	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	2	13C	EX 12"	ADJUST INLET - RISER REPAIR	
13C	48'EB'+82.3	-10.0	LT	RECST	INLET	TYPE 3 (RECT)	EX H	2	13D	EX 18"	RECONSTRUCT INLET - RISER REPAIR	
13D	48'EB'+82.7	72.4	LT	EXIST	AEW	18-INCH		2			CLEANING CULVERT PIPES (13C - 13D)	

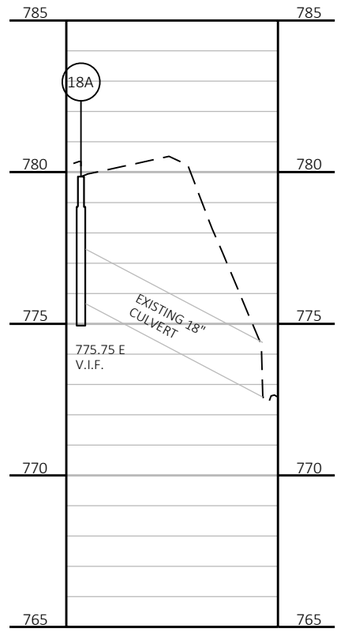


STRUCT NO.	STATION	OFFSET		STRUCTURE					DISCHARGE PIPE		REPAIR	REMARKS
				TYPE			COVER	STAGE	TO STRUCT	SIZE (IN)		
14A	51'EB'+09.8	5.8	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	14B	EX 12"	ADJUST INLET - RISER REPAIR	
14B	51'EB'+09.5	22.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	2	14C	EX 18"	ADJUST INLET - RISER REPAIR	
14C	51'EB'+09.9	71.9	LT	EXIST	AEW	18-INCH		2			CLEANING CULVERT PIPES (14B - 14C)	MARKERS CULVERT END REQ'D
15A	53'EB'+39.1	5.9	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	15B	EX 12"	ADJUST INLET - RISER REPAIR	
15B	53'EB'+40.1	-22.1	LT	RECST	INLET	TYPE 3 (RECT)	EX H	2	15B	EX 18"	RECONSTRUCT INLET - RISER REPAIR	
15C	53'EB'+40.6	72.0	LT	EXIST	AEW	18-INCH		2			CLEANING CULVERT PIPES (15B - 15C)	
16A	55'EB'+64.2	5.7	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	16C	EX 12"	ADJUST INLET - RISER REPAIR	
16B	56'EB'+03.1	5.7	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	N/A	16A	EX 12"	ADJUST INLET - RISER REPAIR	
16C	55'EB'+63.9	10.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	2	16D	EX 18"	ADJUST INLET - RISER REPAIR	
16D	55'EB'+64.8	72.3	LT	EXIST	AEW	18-INCH		2			DITCH RESTORATION - 10 FEET PARALLEL WITH PIPE CLEANING CULVERT PIPES (16C - 16D)	



STRUCT NO.	STATION	OFFSET		STRUCTURE					DISCHARGE PIPE		REPAIR	REMARKS
				TYPE			COVER	STAGE	TO STRUCT	SIZE (IN)		
17A	57'EB'+63.1	-6.0	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	3	17B	EX 12"	ADJUST INLET - RISER REPAIR	
17B	57'EB'+63.2	21.8	LT	ADJUST	INLET	TYPE 3 (RECT)	EX H	2	17C	EX 18"	ADJUST INLET - RISER REPAIR	
17C	57'EB'+64.5	72.1	LT	EXIST	AEW	18-INCH		2			CLEANING CULVERT PIPES (17B - 17C)	
18A	59'EB'+50.6	6.0	LT	NEW	INLET	TYPE 3 (RECT)	EX H	3	18B	EX 18"	NEW INLET	SEE DETAIL NEXT PAGE CONTRACTOR VERIFY DEPTH
18B	59'EB'+48.6	53.8	RT	EXIST	AEW	18-INCH		N/A			CLEANING CULVERT PIPES (18A - 18B)	





PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	STORM SEWER	SHEET 123	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022501_SS-54.DWG
LAYOUT NAME - 8
PLOT DATE : 7/22/2025 9:21 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

EXISTING R/W

NEW LONDON UTILITIES ELECTRIC

NEW LONDON UTILITIES WATER

NEW LONDON UTILITIES ELECTRIC SPECTRUM COMMUNICATION

AT&T COMMUNICATION

TLE

EXISTING R/W

CONCRETE COLLAR FOR PIPE

104'D' 106'D' 108'D' 110'D'

216WB

15EB

SPECTRUM COMMUNICATION

CITY OF NEW LONDON SANITARY

WE ENERGIES PETROLEUM

CAUTION

EXISTING R/W

CONCRETE COLLAR FOR PIPE

E1

TLE

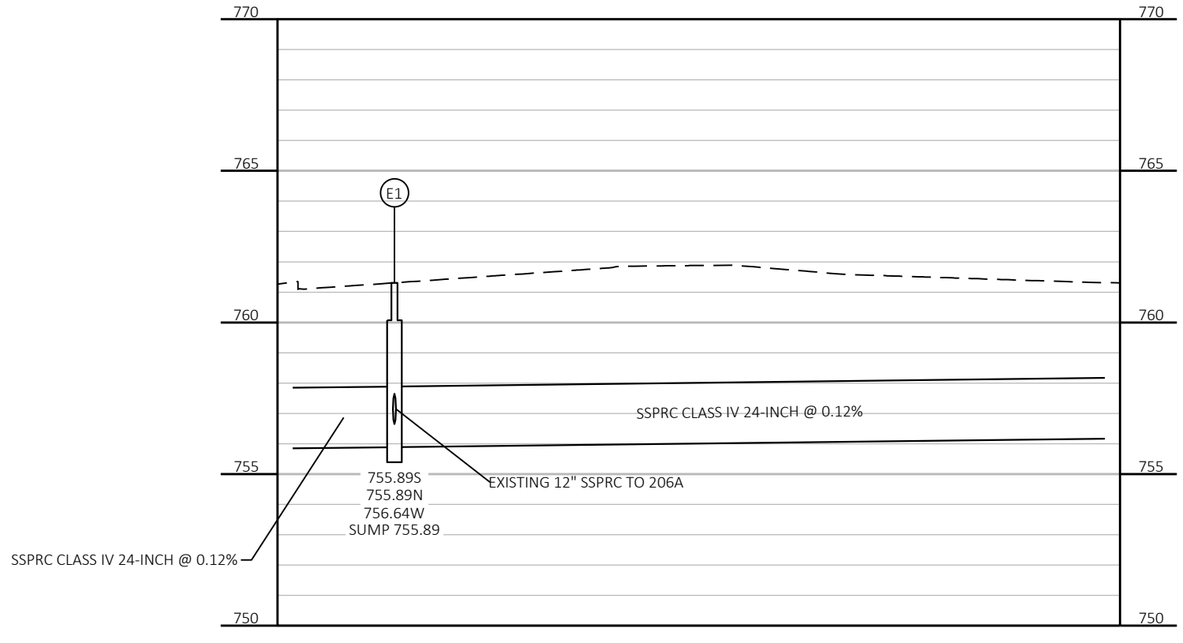
AT&T COMMUNICATION SPECTRUM COMMUNICATION

CAUTION

WE ENERGIES PETROLEUM

LEGEND

##	EXISTING STRUCTURE TO REMAIN
##	EXISTING STRUCTURE TO BE REMOVED
##	EXISTING STRUCTURE -REPAIR/WORK REQUIRED
##	NEW STRUCTURE



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	STORM SEWER - CTH D	SHEET 124	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\022501_SS-54.DWG
LAYOUT NAME - 9

PLOT DATE : 9/16/2025 9:30 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MATCH LINE 11+50

N

MOVE IN STAGE 6
MOVE TO FINAL LOCATION AFTER CURB &
GUTTER INSTALLATION IN STAGE 6

STOP 01-02

STREET NAME SIGNS
MOVED BY OTHERS

JEANNE ST

01-04
SPEED LIMIT 55

MOVE FOR TEMPORARY WIDENING IN STAGE 4
MOVE TO FINAL LOCATION AFTER REMOVAL
OF TEMPORARY WIDENING IN STAGE 6

MOVE FOR TEMPORARY WIDENING IN STAGE 4
MOVE TO FINAL LOCATION AFTER REMOVAL
OF TEMPORARY WIDENING IN STAGE 6

DO NOT ENTER 01-07

FO FO FO

2

MATCH LINE 19+00

2

N

MOVE FROM EXISTING SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 6

02-23

02-24

02-30

MOVE FROM EXISTING LIGHT POLE
MOVE TO NEW LIGHT POLE LB3

CTH D/N SHAWANO ST

02-05

REMOVE

MOVE FOR CONDUIT
INSTALLATION IN STAGE 4

MOVE FROM EXISTING SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 5

ON EXISTING
SIGNAL POLE

REMOVE

02-28

MOVE FROM EXISTING SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 8

MOVE IN STAGE 4
MOVE TO FINAL LOCATION AFTER
COMPLETION OF MEDIAN WORK
IN STAGE 6
BOX OUT REQUIRED

02-02

MOVE IN STAGE 4
MOVE TO FINAL LOCATION AFTER
COMPLETION OF MEDIAN WORK
IN STAGE 6
BOX OUT REQUIRED

02-03

R6-2R
24"X30"

02-04

R7-1D
18"X24"

02-13

02-14

LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
30"X36"

MOUNT TO
SB 6

02-21

02-22

109'D'

02-29

W12-1D
24"X24"

BOX OUT REQUIRED

02-26

02-27

MOVE FROM EXIST SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 9

LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
30"X36"

MOUNT TO
SB 6

02-20

408'D'

212'WB'
213'WB'
214'WB'
215'WB'
216'WB'
217'WB'
218'WB'

STH 54

12'EB'
13'EB'
14'EB'
15'EB'
16'EB'
17'EB'
18'EB'

LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
30"X36"

MOUNT TO
SB 12

02-16

107'D'

02-06

02-07

MOVE FROM EXISTING SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 3

02-08

W12-1D
24"X24"
BOX OUT
REQUIRED

02-09

MOVE FROM EXISTING SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 2

02-15

LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L
30"X36"

MOUNT TO
SB 12

106'D'

02-25

54

ON EXISTING LIGHT POLE
MOVE TO DEDICATED POST

02-31

R7-1D
18"X24"

02-32

R6-2R
24"X30"
BOX OUT
REQUIRED

02-01

MOVE IN STAGE 5
MOVE TO FINAL LOCATION AFTER
COMPLETION OF ISLAND WORK IN
STAGE 5
BOX OUT REQUIRED

02-10

MOVE FROM EXISTING LIGHT POLE
MOVE TO NEW LIGHT POLE LB6

02-29

02-30

ON EXISTING LIGHT POLE & SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 11

02-19

REMOVE

ON EXISTING
SIGNAL POLE

MOVE IN STAGE 5

02-11

02-17

02-18

MOVE IN STAGE 5

02-12

105'D'

MOVE FROM EXISTING SIGNAL POLE
MOVE TO NEW SIGNAL POLE SB 12

MATCH LINE 11+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 126	E

2

2

MATCH LINE 26+50

MATCH LINE 19+00

N

MOVE FOR DITCH CLEANING IN STAGE 2

New London Business Dist

Bear Creek

03-01

NO PARKING ANY TIME

R7-1D
18"X24"

03-03

03-02

NO PARKING ANY TIME

R7-1D
18"X24"

STH 54

'WB' 220'WB' 221'WB' 222'WB' 223'WB' 224'WB' 225'WB' 226'WB'

EB' 20'EB' 21'EB' 22'EB' 23'EB' 24'EB' 25'EB' 26'EB'

SIGN

SS

W

WV

E

G

POST

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 127	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 9:56 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

EXIT RAMP
FROM SB USH 45

ENTRANCE RAMP
TO SB USH 45

NO MODIFICATIONS TO SIGNING ON THIS SHEET

N

MATCH LINE 34+00

2

227'WB' 228'WB' 229'WB' 230'WB' 231'WB' 232'WB' 233'WB' 234'

STH 54

27'EB' 28'EB' 29'EB' 30'EB' 31'EB' 32'EB' 33'EB' 34'

WV

MH

MATCH LINE 26+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 128	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 9:56 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE 41+50

2

N

05-03

WEST SOUTH 54 45

MOVE IN STAGE 2
MOVE TO FINAL LOCATION AFTER
COMPLETION OF GUARDRAIL
WORK IN STAGE 2

MOVE IN STAGE 2
MOVE TO FINAL LOCATION AFTER
COMPLETION OF GUARDRAIL
WORK IN STAGE 2

Embarrass River

ONE WAY

05-06

MOVE IN STAGE 2
MOVE TO FINAL LOCATION AFTER
COMPLETION OF GUARDRAIL
WORK IN STAGE 2

05-10

TO 15

DO NOT ENTER

05-11

SPEED LIMIT 45

WRONG WAY

MOVE IN STAGE 2
MOVE TO FINAL LOCATION AFTER
COMPLETION OF GUARDRAIL
WORK IN STAGE 2

05-05

R4-7
24"X30"
BOX OUT
REQUIRED

WB' 235'WB' 236'WB' 237'WB' 238'WB' 239'WB' 240'WB' 241'WB'

EB' 35'EB' 36'EB' 37'EB' 38'EB' 39'EB' 40'EB' 41'EB'

STH 54

05-02

Outagamie Co

Waupaca Co

MOVE

05-04

SPEED LIMIT 45

DO NOT ENTER

MOVE IN STAGE 3
MOVE TO FINAL LOCATION AFTER
COMPLETION OF CURB & GUTTER
WORK IN STAGE 3

EMBARRASS RIVER

05-01

Embarrass River

WRONG WAY

MOVE IN STAGE 3
MOVE TO FINAL LOCATION AFTER
COMPLETION OF GUARDRAIL
WORK IN STAGE 3

RIVER RD

05-07

STOP

05-08

ONE WAY

MOVE IN STAGE 3
MOVE TO FINAL LOCATION AFTER
COMPLETION OF CURB & GUTTER
WORK IN STAGE 3

05-09

NO PARKING ANY TIME

R7-1D
18"X24"

VENT

WV

USH 45

MATCH LINE 34+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 129	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 9:56 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 49+00

SIGN

OH

GUY

242'WB' 243'WB' 244'WB' 245'WB' 246'WB' 247'WB' 248'WB' 249'

STH 54

42'EB' 43'EB' 44'EB' 45'EB' 46'EB' 47'EB' 48'EB' 49'

E

W

WV

NO MODIFICATIONS TO SIGNING ON THIS SHEET

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

MATCH LINE 41+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 130	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 9:56 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MATCH LINE 56+50

MATCH LINE 49+00

N

MOVE IN STAGE 2
MOVE TO NEW
LOCATION IN STAGE 3
BOX OUT REQUIRED

MOVE IN STAGE 3
BOX OUT REQUIRED

07-03

07-06

WB' 250'WB' 251'WB' 252'WB' 253'WB' 254'WB' 255'WB' 256'WB'

EB' 50'EB' 51'EB' 52'EB' 53'EB' 54'EB' 55'EB' 56'EB'

STH 54

EXIT RAMP
FROM NB USH 45

07-01

REMOVE

07-02

MOVE IN STAGE 3

CTH S

07-04

07-05

MOVE IN STAGE 3

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 131	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 9:56 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE 64+00

MATCH LINE 56+50

N

MOVE IN STAGE 2
MOVE TO NEW
LOCATION IN STAGE 3
BOX OUT REQUIRED

08-01

JCT
COUNTY
S

08-02

MOVE FOR TEMPORARY WIDENING IN STAGE 2
MOVE TO FINAL LOCATION AFTER REMOVAL
OF TEMPORARY WIDENING IN STAGE 4

STH 54

257'WB'
258'WB'
259'WB'
260'WB'
261'WB'
262'WB'
263'WB'
64'
57'EB'
58'EB'
59'EB'
60'EB'
61'EB'
62'EB'
63'EB'

POST
POST
POST
GUY
WV
GUY
GUY
W
W
OH

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 132	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 08
PLOT DATE : 6/28/2025 9:56 PM
PLOT BY : LUKE HARDINGER
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 71+50

MOVE FOR TEMPORARY WIDENING IN STAGE 2
MOVE TO FINAL LOCATION AFTER REMOVAL
OF TEMPORARY WIDENING IN STAGE 4

09-02

SPEED LIMIT 45

09-03

MOVE FOR TEMPORARY WIDENING IN STAGE 2
MOVE TO FINAL LOCATION AFTER REMOVAL
OF TEMPORARY WIDENING IN STAGE 4

POST

65'EB'3'

66'EB'

67'EB'

68'EB'

69'EB'

70'EB'

71'EB'

STH 54

OH

GUY

09-01

SPEED LIMIT 55

MOVE FOR TEMPORARY WIDENING IN STAGE 1
MOVE TO FINAL LOCATION AFTER REMOVAL
OF TEMPORARY WIDENING IN STAGE 3

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 133	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 09

PLOT DATE : 6/28/2025 9:56 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MOVE FOR TEMPORARY WIDENING IN STAGE 2
MOVE TO FINAL LOCATION AFTER REMOVAL
OF TEMPORARY WIDENING IN STAGE 4

10-01

GUY

OH

SIGN

POST

72'EB'

73'EB'

74'EB'

STH 54

75'EB'

76'EB'

77'EB'

78'EB'

79'EB'

MATCH LINE 71+50

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	SIGNING PLAN	SHEET 134	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\023201_PS_54.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2025 9:57 PM PLOT BY : LUKE HARDINGER PLOT NAME : PLOT SCALE : 1 IN:50 FT

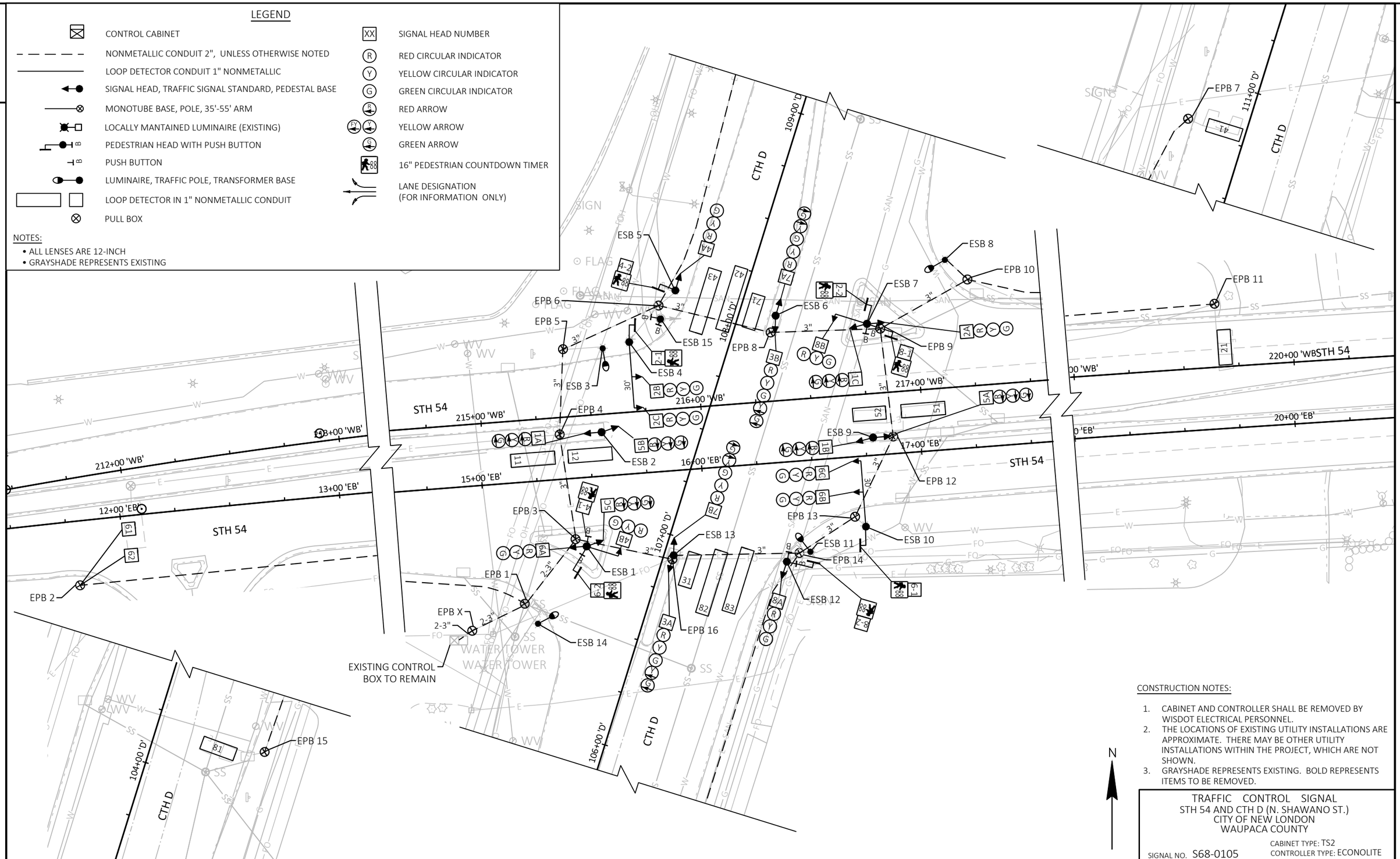
2

LEGEND

	CONTROL CABINET	XX	SIGNAL HEAD NUMBER
	NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED	R	RED CIRCULAR INDICATOR
	LOOP DETECTOR CONDUIT 1" NONMETALLIC	Y	YELLOW CIRCULAR INDICATOR
	SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE	G	GREEN CIRCULAR INDICATOR
	MONOTUBE BASE, POLE, 35'-55' ARM	R	RED ARROW
	LOCALLY MANTAINED LUMINAIRE (EXISTING)	Y	YELLOW ARROW
B	PEDESTRIAN HEAD WITH PUSH BUTTON	G	GREEN ARROW
B	PUSH BUTTON	88	16" PEDESTRIAN COUNTDOWN TIMER
	LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE		LANE DESIGNATION (FOR INFORMATION ONLY)
	LOOP DETECTOR IN 1" NONMETALLIC CONDUIT		
	PULL BOX		

NOTES:

- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT, WHICH ARE NOT SHOWN.
3. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
STH 54 AND CTH D (N. SHAWANO ST.)
CITY OF NEW LONDON
WAUPACA COUNTY

SIGNAL NO. S68-0105
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 135	E

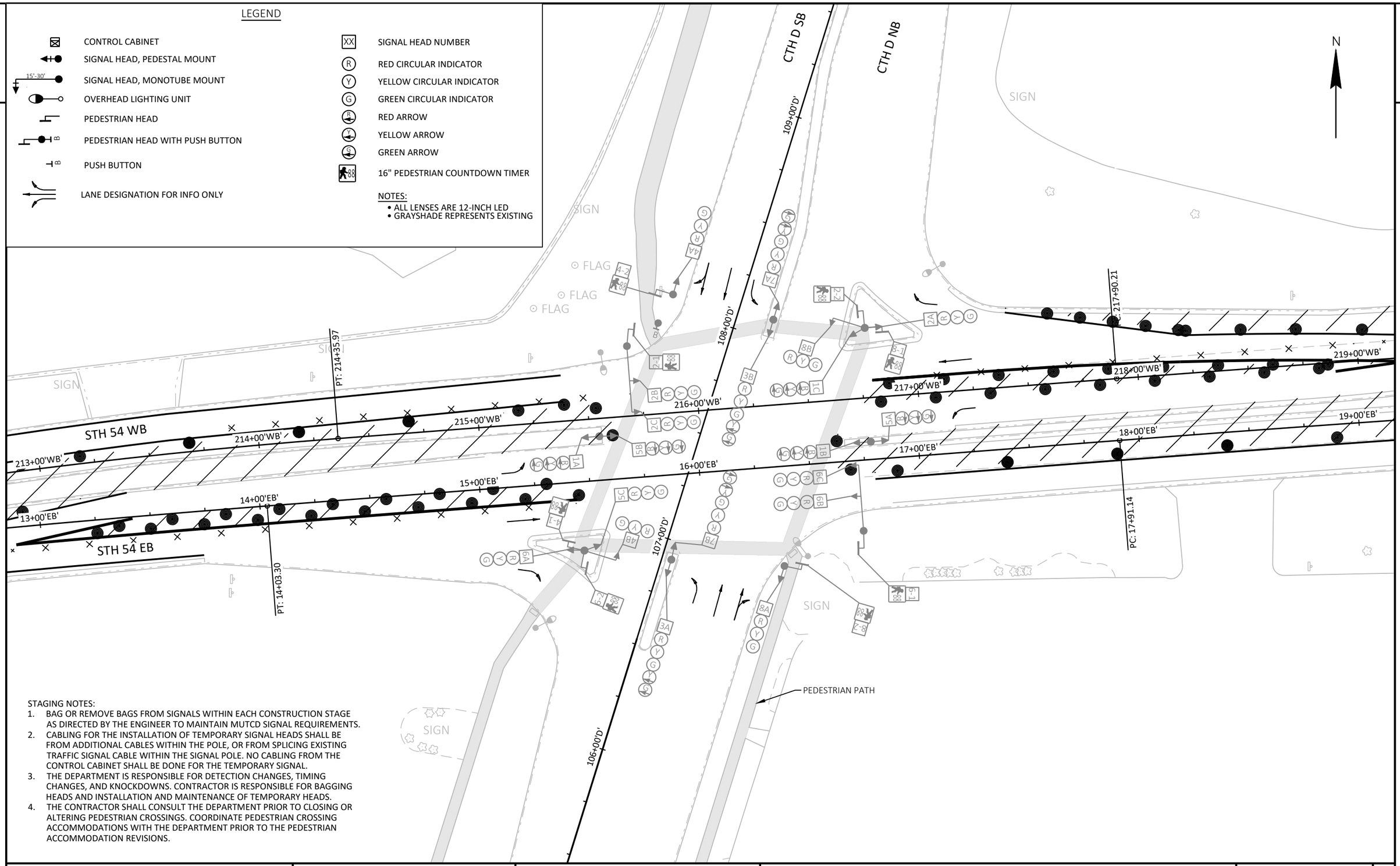
FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024001-SR.DWG
LAYOUT NAME - 024001-sr
PLOT DATE : 6/6/2025 8:53 AM
PLOT BY : EMMA DECOSTER
PLOT NAME :
PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MONOTUBE MOUNT (15'-30')
- OVERHEAD LIGHTING UNIT
- PEDESTRIAN HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LANE DESIGNATION FOR INFO ONLY
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- 16" PEDESTRIAN COUNTDOWN TIMER

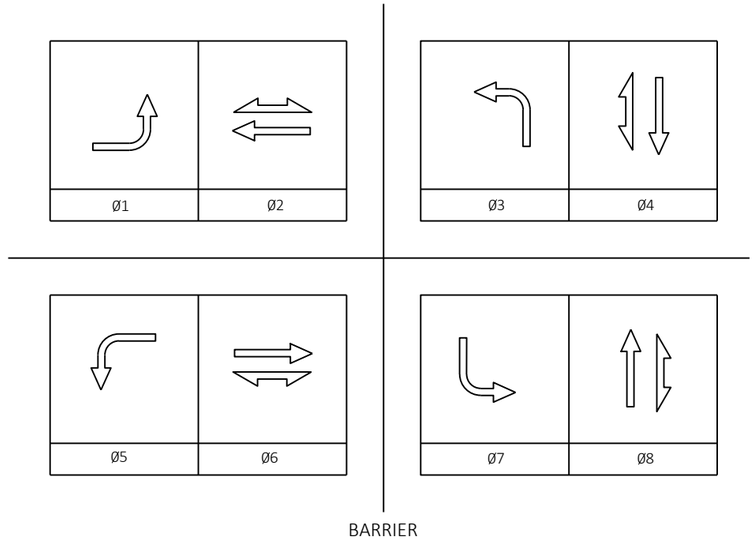
NOTES:
- ALL LENSES ARE 12-INCH LED
- GRAYSHADE REPRESENTS EXISTING



STAGING NOTES:
1. BAG OR REMOVE BAGS FROM SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
2. CABLING FOR THE INSTALLATION OF TEMPORARY SIGNAL HEADS SHALL BE FROM ADDITIONAL CABLES WITHIN THE POLE, OR FROM SPLICING EXISTING TRAFFIC SIGNAL CABLE WITHIN THE SIGNAL POLE. NO CABLING FROM THE CONTROL CABINET SHALL BE DONE FOR THE TEMPORARY SIGNAL.
3. THE DEPARTMENT IS RESPONSIBLE FOR DETECTION CHANGES, TIMING CHANGES, AND KNOCKDOWNS. CONTRACTOR IS RESPONSIBLE FOR BAGGING HEADS AND INSTALLATION AND MAINTENANCE OF TEMPORARY HEADS.
4. THE CONTRACTOR SHALL CONSULT THE DEPARTMENT PRIOR TO CLOSING OR ALTERING PEDESTRIAN CROSSINGS. COORDINATE PEDESTRIAN CROSSING ACCOMMODATIONS WITH THE DEPARTMENT PRIOR TO THE PEDESTRIAN ACCOMMODATION REVISIONS.

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION - STAGE 2 & 3	SHEET 136	E

	HEAD NUMBERS	FLASH
Ø1	1A, 1B, 1C	R
Ø2	2A, 2B, 2C	R
Ø3	3A, 3B	-
Ø4	4A, 4B, 7A, 7B	R
Ø5	5A, 5B, 5C	R
Ø6	6A,6B, 6C	R
Ø7	7A, 7B	-
Ø8	8A, 8B, 3A, 3B	R
Ø2 PED	2-1,2-2	-
Ø4 PED	4-1, 4-2	-
Ø6 PED	6-1, 6-2	-
Ø8 PED	8-1, 8-2	-
O.L."A"		
O.L."B"		
O.L."C"		
O.L."D"		
O.L."E"		
O.L."F"		
O.L."G"		
O.L."H"		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W /Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

OVERLAPS

O.L."A"	NONE
O.L."B"	NONE
O.L."C"	NONE
O.L."D"	NONE

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	5 OR 6	2,3,4,7,8
Ø2	5 OR 6	1,3,4,7,8
Ø3	7 OR 8	1,2,4,5,6
Ø4	7 OR 8	1,2,4,5,6
Ø5	1 OR 2	3,4,6,7,8
Ø6	1 OR 2	3,4,5,7,8
Ø7	3 OR 4	1,2,5,6,8
Ø8	3 OR 4	1,2,5,6,7

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	61	11	21	51	41	42	71	81
CALLS & EXTENDS	X	X	X	X		X	X	
CALLS ONLY								
EXTENDS ONLY					X			X
PHASE CALLED	6	1	2	5		4	7	
PHASE EXTENDED	6	1	2	5	4	4	7	8
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH					X			X
SIZE	6x6	6x20	6x20	6x20	6x14	6x30	6x20	6x15
NUMBER OF TURNS	5	3	5	3	4	3	3	4

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)	82	31						
CALLS & EXTENDS	X	X						
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	8	3						
PHASE EXTENDED	8	3						
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE	6x30	6x21						
NUMBER OF TURNS	3	3						

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)	62	12		52		43		
CALLS & EXTENDS	X	X		X		X		
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	6	1		5		4		
PHASE EXTENDED	6	1		5		4		
DISCONNECT PHASE								
CALLING DELAY						X		
EXTENSION STRETCH								
SIZE	6x6	6x20		6x20		6x20		
NUMBER OF TURNS	5	3		4		3		

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)	83							
CALLS & EXTENDS	X							
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	8							
PHASE EXTENDED	8							
DISCONNECT PHASE								
CALLING DELAY	X							
EXTENSION STRETCH								
SIZE	6x30							
NUMBER OF TURNS	3							

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED
2. WHEN ONE PHASE IS ON ALONE ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL.
3. WHEN OPPOSING THROUGH PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TRAFFIC CONTROL SIGNAL
STH 54 AND CTH D (N. SHAWANO ST.)
CITY OF NEW LONDON
WAUPACA COUNTY

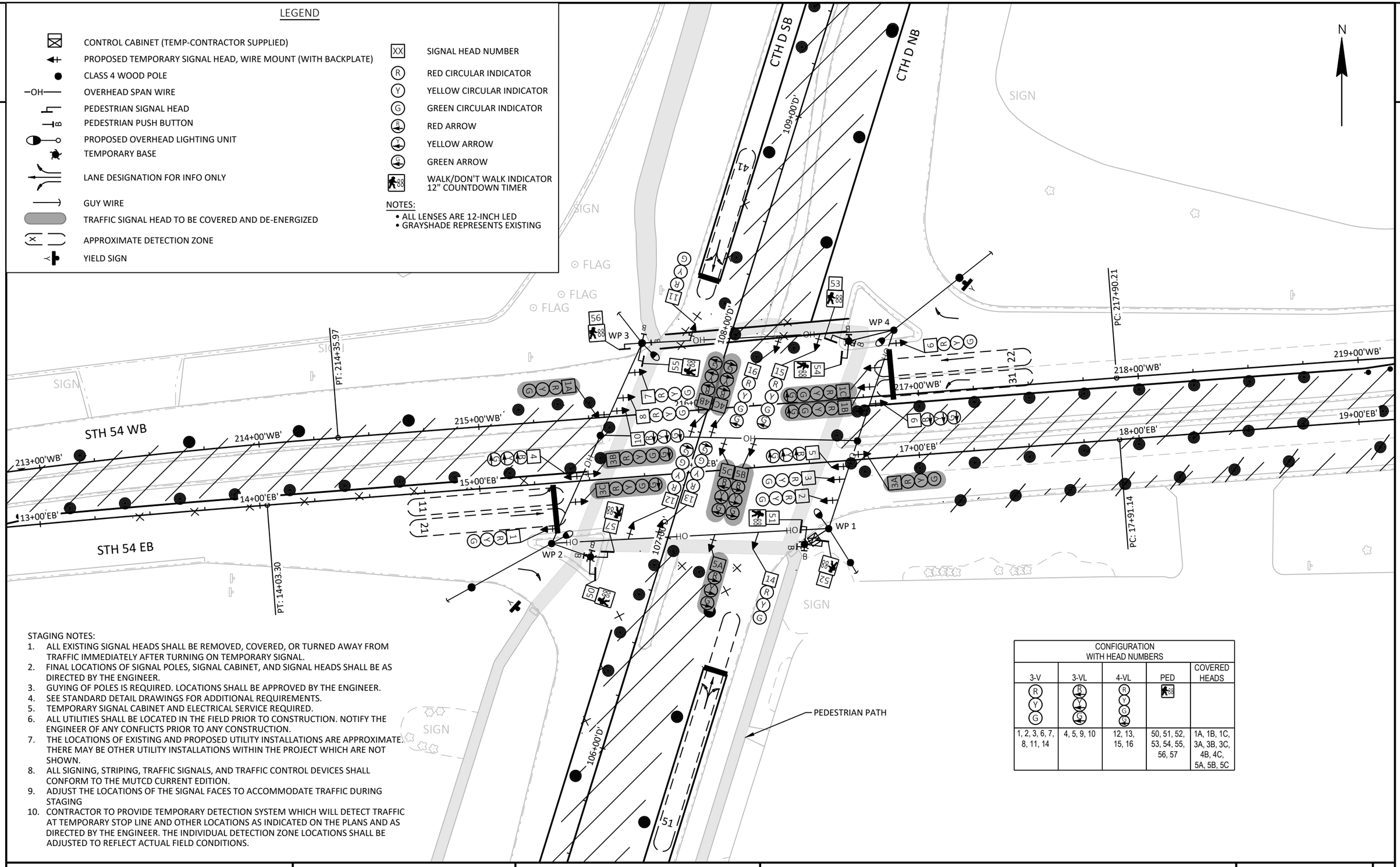
SIGNAL NO. S68-0105

REGION CONTACT: RON JOHNSON
DESIGNED BY:
REVISED BY: WESTWOOD

LEGEND

- CONTROL CABINET (TEMP-CONTRACTOR SUPPLIED)
- PROPOSED TEMPORARY SIGNAL HEAD, WIRE MOUNT (WITH BACKPLATE)
- CLASS 4 WOOD POLE
- OVERHEAD SPAN WIRE
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSH BUTTON
- PROPOSED OVERHEAD LIGHTING UNIT
- TEMPORARY BASE
- LANE DESIGNATION FOR INFO ONLY
- GUY WIRE
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- APPROXIMATE DETECTION ZONE
- YIELD SIGN
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 12" COUNTDOWN TIMER

NOTES:
- ALL LENSES ARE 12-INCH LED
- GRAYSHADE REPRESENTS EXISTING

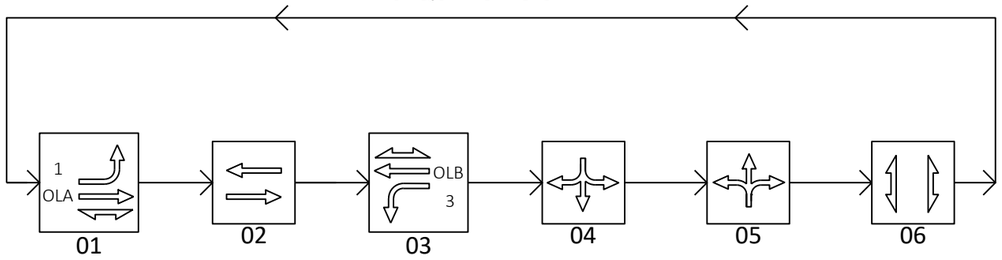


STAGING NOTES:
1. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNAL.
2. FINAL LOCATIONS OF SIGNAL POLES, SIGNAL CABINET, AND SIGNAL HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
3. GUYING OF POLES IS REQUIRED. LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. SEE STANDARD DETAIL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
5. TEMPORARY SIGNAL CABINET AND ELECTRICAL SERVICE REQUIRED.
6. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO ANY CONSTRUCTION.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL SIGNING, STRIPING, TRAFFIC SIGNALS, AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MUTCD CURRENT EDITION.
9. ADJUST THE LOCATIONS OF THE SIGNAL FACES TO ACCOMMODATE TRAFFIC DURING STAGING
10. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT TEMPORARY STOP LINE AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.

CONFIGURATION WITH HEAD NUMBERS				
3-V	3-VL	4-VL	PED	COVERED HEADS
1, 2, 3, 6, 7, 8, 11, 14	4, 5, 9, 10	12, 13, 15, 16	50, 51, 52, 53, 54, 55, 56, 57	1A, 1B, 1C, 3A, 3B, 3C, 4B, 4C, 5A, 5B, 5C

	HEAD NUMBERS	FLASH
01	4, 5	R
02	1, 2, 3, 6, 7, 8	R
03	9, 10	R
04	11, 12, 13	R
05	14, 15, 16	R
06	-	-
07	-	-
08	-	-
01 PED	50, 51	-
03 PED	54, 55	-
06 PED	52, 53, 56, 57	-
08 PED	-	-
O.L."A"	1, 2, 3	R
O.L."B"	6, 7, 8	R
O.L."C"	-	-
O.L."D"	-	-
O.L."E"	-	-
O.L."F"	-	-
O.L."G"	-	-
O.L."H"	-	-

SEQUENCING CHART



ACTUATED TIMING PARAMETERS								
PHASE	1	2	3	4	5	6	7	8
MIN GREEN	12	12	12	10	10	-	-	-
PASSAGE						-	-	-
MAX 1 (AM)	24.4	24.4	24.4	22.5	22.5	-	-	-
MAX 2 (PM)	24.4	24.4	24.4	32.5	32.5	-	-	-
YELLOW	4.7	4.7	4.7	4.0	4.0	-	-	-
RED	1.9	1.9	1.9	2.5	2.5	-	-	-
WALK	7	-	7	-	-	7	-	-
DON'T WALK	17	-	17	-	-	21	-	-
TBR						-	-	-
TTR						-	-	-
VEH EXT.	5	5	5	2	2	-	-	-
MIN GAP	3	3	3	2	2	-	-	-

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
DETECTOR #(S)	11	31	41														DETECTOR #(S)
CALLS & EXTENDS	X	X	X														CALLS & EXTENDS
CALLS ONLY																	CALLS ONLY
EXTENDS ONLY																	EXTENDS ONLY
PHASE CALLED	1	3	4														PHASE CALLED
PHASE EXTENDED	1	3	4														PHASE EXTENDED
DISCONNECT PHASE																	DISCONNECT PHASE
CALLING DELAY																	CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
SIZE																	SIZE
NUMBER OF TURNS																	NUMBER OF TURNS

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
DETECTOR #(S)	21	22	51														DETECTOR #(S)
CALLS & EXTENDS	X	X	X														CALLS & EXTENDS
CALLS ONLY																	CALLS ONLY
EXTENDS ONLY																	EXTENDS ONLY
PHASE CALLED	2	2	5														PHASE CALLED
PHASE EXTENDED	2	2	5														PHASE EXTENDED
DISCONNECT PHASE																	DISCONNECT PHASE
CALLING DELAY																	CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
SIZE																	SIZE
NUMBER OF TURNS																	NUMBER OF TURNS

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W /Ø	PHASE RECALL	PHASE ACTIVE
1				X
2				X
3				X
4				X
5				X
6				X PED
7				-
8				-

OVERLAPS

O.L."A"	1, 2
O.L."B"	3, 4
O.L."C"	NONE
O.L."D"	NONE

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TRAFFIC CONTROL SIGNAL
STH 54 AND CTH D (N. SHAWANO ST.)
CITY OF NEW LONDON
WAUPACA COUNTY

SIGNAL NO. CONTRACTOR TEMP

REGION CONTACT: RON JOHNSON
DESIGNED BY:
REVISED BY: WESTWOOD

PROJECT NO: 6220-04-76 | HWY: STH 54 | COUNTY: WAUPACA | SEQUENCE OF OPERATIONS - STAGE 3A | SHEET 139 | E

FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024103-ST.DWG
LAYOUT NAME - 024112-st
PLOT DATE : 6/27/2025 7:57 AM PLOT BY : BRANDI SWANSON PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET (TEMP-CONTRACTOR SUPPLIED)
- PROPOSED TEMPORARY SIGNAL HEAD, WIRE MOUNT (WITH BACKPLATE)
- CLASS 4 WOOD POLE
- OVERHEAD SPAN WIRE
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSH BUTTON
- PROPOSED OVERHEAD LIGHTING UNIT
- TEMPORARY BASE
- LANE DESIGNATION FOR INFO ONLY
- GUY WIRE
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- APPROXIMATE DETECTION ZONE
- YIELD SIGN
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 12" COUNTDOWN TIMER

NOTES:
- ALL LENSES ARE 12-INCH LED
- GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
1. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNAL.
2. FINAL LOCATIONS OF SIGNAL POLES, SIGNAL CABINET, AND SIGNAL HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
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9. ADJUST THE LOCATIONS OF THE SIGNAL FACES TO ACCOMMODATE TRAFFIC DURING STAGING
10. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT TEMPORARY STOP LINE AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.

N

STH 54 WB
STH 54 EB
CTH D SB
CTH D NB
WP 1
WP 2
WP 3
WP 4
WP 5
WP 6
TP 2
TP 6
PT: 214+35.97
PT: 14+03.30
PC: 21+90.21
PC: 17+91.14
PEDESTRIAN PATH

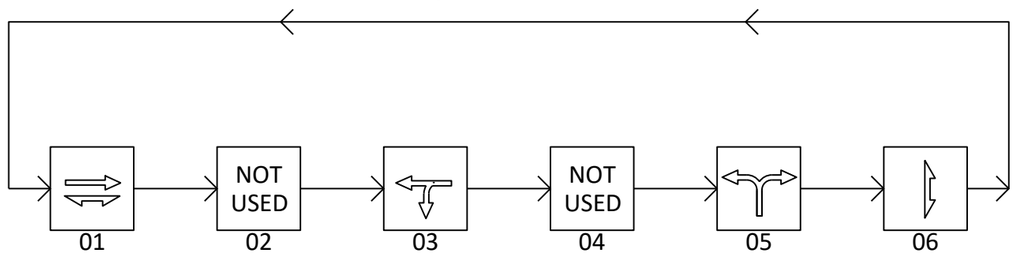
CONFIGURATION WITH HEAD NUMBERS					
3-V	3-VL	3-VR	4-VL	PED	COVERED HEADS
1A, 1B, 1C, 3A, 5A	5C	5B	3B, 3C	1-1, 1-2, 6-1, 6-2	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 1B, 1C, 4B, 4C

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	TEMPORARY TRAFFIC SIGNAL - STAGE 4	SHEET 140	E

FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024104-ST.DWG
LAYOUT NAME - 024121-st
PLOT DATE : 6/27/2025 8:04 AM
PLOT BY : BRANDI SWANSON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
01	1A, 1B, 1C	R
02	-	-
03	3A, 3B, 3C	R
04	-	-
05	5A, 5B, 5C	R
06	-	-
07	-	-
08	-	-
01 PED	1-1, 1-2	-
03 PED	-	-
06 PED	6-1, 6-2	-
08 PED	-	-
O.L."A"	-	-
O.L."B"	-	-
O.L."C"	-	-
O.L."D"	-	-
O.L."E"	-	-
O.L."F"	-	-
O.L."G"	-	-
O.L."H"	-	-

SEQUENCING CHART



ACTUATED TIMING PARAMETERS								
PHASE	1	2	3	4	5	6	7	8
MIN GREEN	12	-	12	-	6	-	-	-
PASSAGE		-		-		-	-	-
MAX 1	33.4	-	33.4	-	33.5	-	-	-
MAX 2		-		-		-	-	-
YELLOW	4.7	-	4.7	-	4.0	-	-	-
RED	1.9	-	1.9	-	2.5	-	-	-
WALK	7	-	-	-	-	7	-	-
DON'T WALK	17	-	-	-	-	8	-	-
TBR		-		-		-	-	-
TTR		-		-		-	-	-
VEH EXT.	5	-	5	-	2	-	-	-
MIN GAP	3	-	3	-	2	-	-	-

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	31						
CALLS & EXTENDS	X	X						
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	1	3						
PHASE EXTENDED	1	3						
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)								
CALLS & EXTENDS								
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)			51					
CALLS & EXTENDS			X					
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED			5					
PHASE EXTENDED			5					
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)								
CALLS & EXTENDS								
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W /Ø	PHASE RECALL	PHASE ACTIVE
1				X
2				X
3				X
4				X
5				X
6				X PED
7				-
8				-

OVERLAPS

O.L."A"	NONE
O.L."B"	NONE
O.L."C"	NONE
O.L."D"	NONE

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED
2. WHEN ONE PHASE IS ON ALONE ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL.
3. WHEN OPPOSING THROUGH PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TRAFFIC CONTROL SIGNAL
STH 54 AND CTH D (N. SHAWANO ST.)
CITY OF NEW LONDON
WAUPACA COUNTY

SIGNAL NO. CONTRACTOR TEMP

REGION CONTACT: RON JOHNSON
DESIGNED BY:
REVISED BY: WESTWOOD

LEGEND

- CONTROL CABINET (TEMP-CONTRACTOR SUPPLIED)
- PROPOSED TEMPORARY SIGNAL HEAD, WIRE MOUNT (WITH BACKPLATE)
- CLASS 4 WOOD POLE
- OVERHEAD SPAN WIRE
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSH BUTTON
- PROPOSED OVERHEAD LIGHTING UNIT
- TEMPORARY BASE
- LANE DESIGNATION FOR INFO ONLY
- GUY WIRE
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- APPROXIMATE DETECTION ZONE
- YIELD SIGN

- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 12" COUNTDOWN TIMER

NOTES:
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- GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
1. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNAL.
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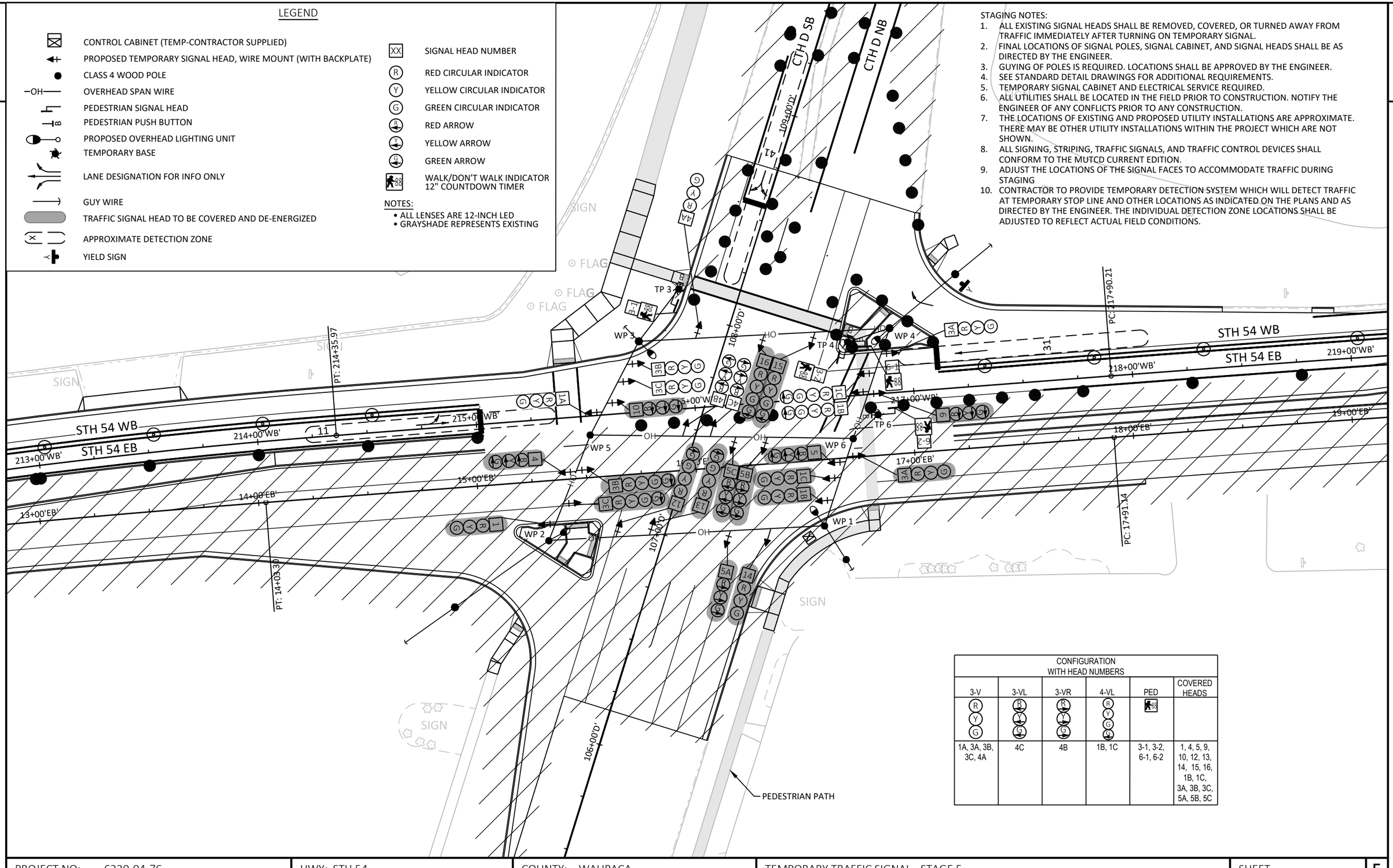
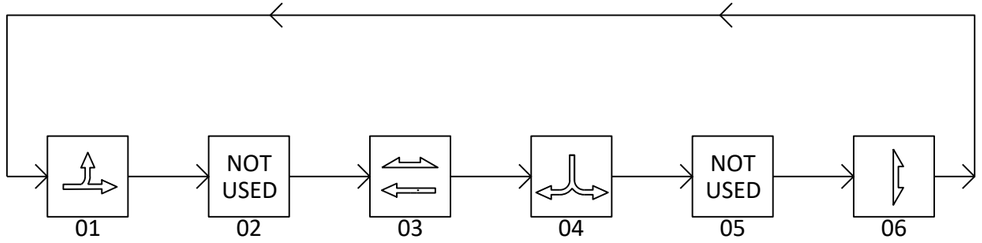


CONFIGURATION WITH HEAD NUMBERS					
3-V	3-VL	3-VR	4-VL	PED	COVERED HEADS
R Y G	R Y G	R Y G	R Y G		
1A, 3A, 3B, 3C, 4A	4C	4B	1B, 1C	3-1, 3-2, 6-1, 6-2	1, 4, 5, 9, 10, 12, 13, 14, 15, 16, 1B, 1C, 3A, 3B, 3C, 5A, 5B, 5C

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	TEMPORARY TRAFFIC SIGNAL - STAGE 5	SHEET 142	E

	HEAD NUMBERS	FLASH
01	1A, 1B, 1C	R
02	-	-
03	3A, 3B, 3C	R
04	4A, 4B, 4C	R
05	-	-
06	-	-
07	-	-
08	-	-
01 PED	-	-
03 PED	3-1, 3-2	-
06 PED	6-1, 6-2	-
08 PED	-	-
O.L."A"	-	-
O.L."B"	-	-
O.L."C"	-	-
O.L."D"	-	-
O.L."E"	-	-
O.L."F"	-	-
O.L."G"	-	-
O.L."H"	-	-

SEQUENCING CHART



ACTUATED TIMING PARAMETERS								
PHASE	1	2	3	4	5	6	7	8
MIN GREEN	12	-	12	6	-	-	-	-
PASSAGE		-			-	-	-	-
MAX 1	33.3	-	33.3	33.5	-	-	-	-
MAX 2		-			-	-	-	-
YELLOW	4.7	-	4.7	4.0	-	-	-	-
RED	1.9	-	1.9	2.5	-	-	-	-
WALK	-	-	7	-	-	7	-	-
DON'T WALK	-	-	17	-	-	8	-	-
TBR		-			-	-	-	-
TTR		-			-	-	-	-
VEH EXT.	5	-	5	2	-	-	-	-
MIN GAP	3	-	3	2	-	-	-	-

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	31	41					
CALLS & EXTENDS	X	X	X					
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	1	3	4					
PHASE EXTENDED	1	3	4					
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)								
CALLS & EXTENDS								
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)								
CALLS & EXTENDS								
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)								
CALLS & EXTENDS								
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/Ø	PHASE RECALL	PHASE ACTIVE
1				X
2				X
3				X
4				X
5				X
6				X PED
7				-
8				-

OVERLAPS

O.L."A"	NONE
O.L."B"	NONE
O.L."C"	NONE
O.L."D"	NONE

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TRAFFIC CONTROL SIGNAL
STH 54 AND CTH D (N. SHAWANO ST.)
CITY OF NEW LONDON
WAUPACA COUNTY

SIGNAL NO. CONTRACTOR TEMP

REGION CONTACT: RON JOHNSON
DESIGNED BY:
REVISED BY: WESTWOOD

PROJECT NO: 6220-04-76 | HWY: STH 54 | COUNTY: WAUPACA | SEQUENCE OF OPERATIONS - STAGE 5 | SHEET 143 | E

FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024105-ST.DWG
LAYOUT NAME - 024132-st
PLOT DATE : 6/27/2025 8:10 AM
PLOT BY : BRANDI SWANSON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

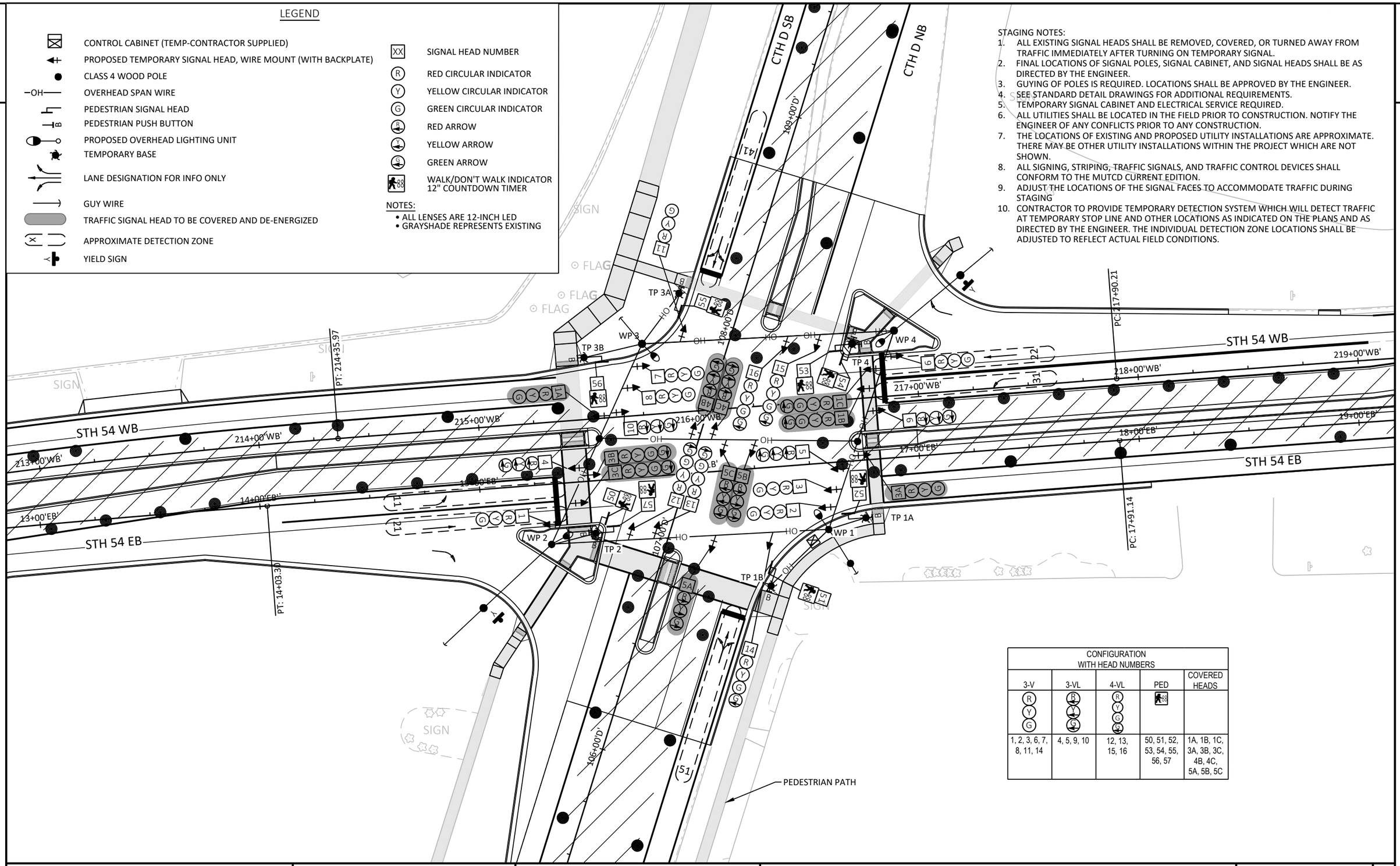
LEGEND

- CONTROL CABINET (TEMP-CONTRACTOR SUPPLIED)
- PROPOSED TEMPORARY SIGNAL HEAD, WIRE MOUNT (WITH BACKPLATE)
- CLASS 4 WOOD POLE
- OVERHEAD SPAN WIRE
- PEDESTRIAN SIGNAL HEAD
- PEDESTRIAN PUSH BUTTON
- PROPOSED OVERHEAD LIGHTING UNIT
- TEMPORARY BASE
- LANE DESIGNATION FOR INFO ONLY
- GUY WIRE
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- APPROXIMATE DETECTION ZONE
- YIELD SIGN

- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 12" COUNTDOWN TIMER

NOTES:
- ALL LENSES ARE 12-INCH LED
- GRAYSHADE REPRESENTS EXISTING

STAGING NOTES:
1. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNAL.
2. FINAL LOCATIONS OF SIGNAL POLES, SIGNAL CABINET, AND SIGNAL HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
3. GUYING OF POLES IS REQUIRED. LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. SEE STANDARD DETAIL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
5. TEMPORARY SIGNAL CABINET AND ELECTRICAL SERVICE REQUIRED.
6. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO ANY CONSTRUCTION.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL SIGNING, STRIPING, TRAFFIC SIGNALS, AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MUTCD CURRENT EDITION.
9. ADJUST THE LOCATIONS OF THE SIGNAL FACES TO ACCOMMODATE TRAFFIC DURING STAGING
10. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT TEMPORARY STOP LINE AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



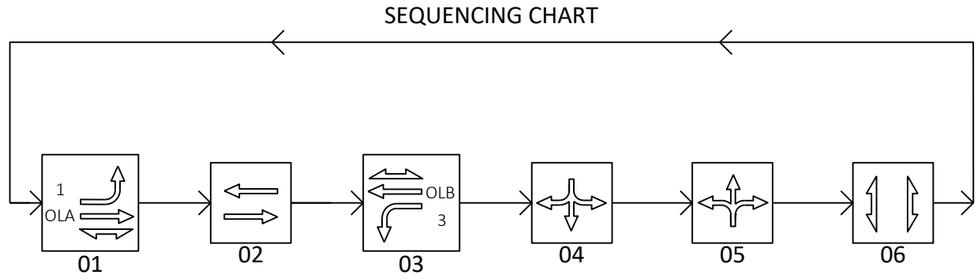
CONFIGURATION WITH HEAD NUMBERS				
3-V	3-VL	4-VL	PED	COVERED HEADS
1, 2, 3, 6, 7, 8, 11, 14	4, 5, 9, 10	12, 13, 15, 16	50, 51, 52, 53, 54, 55, 56, 57	1A, 1B, 1C, 3A, 3B, 3C, 4B, 4C, 5A, 5B, 5C

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	TEMPORARY TRAFFIC SIGNAL - STAGE 6	SHEET 144	E

FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024106-ST.DWG
LAYOUT NAME - 024141-st
PLOT DATE : 6/27/2025 8:15 AM
PLOT BY : BRANDI SWANSON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
01	4, 5	R
02	1, 2, 3, 6, 7, 8	R
03	9, 10	R
04	11, 12, 13	R
05	14, 15, 16	R
06	-	-
07	-	-
08	-	-
01 PED	50, 51	-
03 PED	54, 55	-
06 PED	52, 53, 56, 57	-
08 PED	-	-
O.L."A"	1, 2, 3	R
O.L."B"	6, 7, 8	R
O.L."C"	-	-
O.L."D"	-	-
O.L."E"	-	-
O.L."F"	-	-
O.L."G"	-	-
O.L."H"	-	-

SEQUENCING CHART



ACTUATED TIMING PARAMETERS								
PHASE	1	2	3	4	5	6	7	8
MIN GREEN	12	12	12	10	10	-	-	-
PASSAGE						-	-	-
MAX 1 (AM)	24.4	24.4	24.4	22.5	22.5	-	-	-
MAX 2 (PM)	24.4	24.4	24.4	32.5	32.5	-	-	-
YELLOW	4.7	4.7	4.7	4.0	4.0	-	-	-
RED	1.9	1.9	1.9	2.5	2.5	-	-	-
WALK	7	-	7	-	-	7	-	-
DON'T WALK	17	-	17	-	-	21	-	-
TBR						-	-	-
TTR						-	-	-
VEH EXT.	5		5	2	2	-	-	-
MIN GAP	3		3	2	2	-	-	-

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	31	41					
CALLS & EXTENDS	X	X	X					
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	1	3	4					
PHASE EXTENDED	1	3	4					
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

	19	17	23	21	27	25	31	29	DETECTOR INPUT
									DETECTOR #(S)
									CALLS & EXTENDS
									CALLS ONLY
									EXTENDS ONLY
									PHASE CALLED
									PHASE EXTENDED
									DISCONNECT PHASE
									CALLING DELAY
									EXTENSION STRETCH
									SIZE
									NUMBER OF TURNS

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)	21	22	51					
CALLS & EXTENDS	X	X	X					
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	2	2	5					
PHASE EXTENDED	2	2	5					
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

	20	18	24	22	28	26	32	30	DETECTOR INPUT
									DETECTOR #(S)
									CALLS & EXTENDS
									CALLS ONLY
									EXTENDS ONLY
									PHASE CALLED
									PHASE EXTENDED
									DISCONNECT PHASE
									CALLING DELAY
									EXTENSION STRETCH
									SIZE
									NUMBER OF TURNS

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W /Ø	PHASE RECALL	PHASE ACTIVE
1				X
2				X
3				X
4				X
5				X
6				X PED
7				-
8				-

OVERLAPS

O.L."A"	1, 2
O.L."B"	3, 4
O.L."C"	NONE
O.L."D"	NONE

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

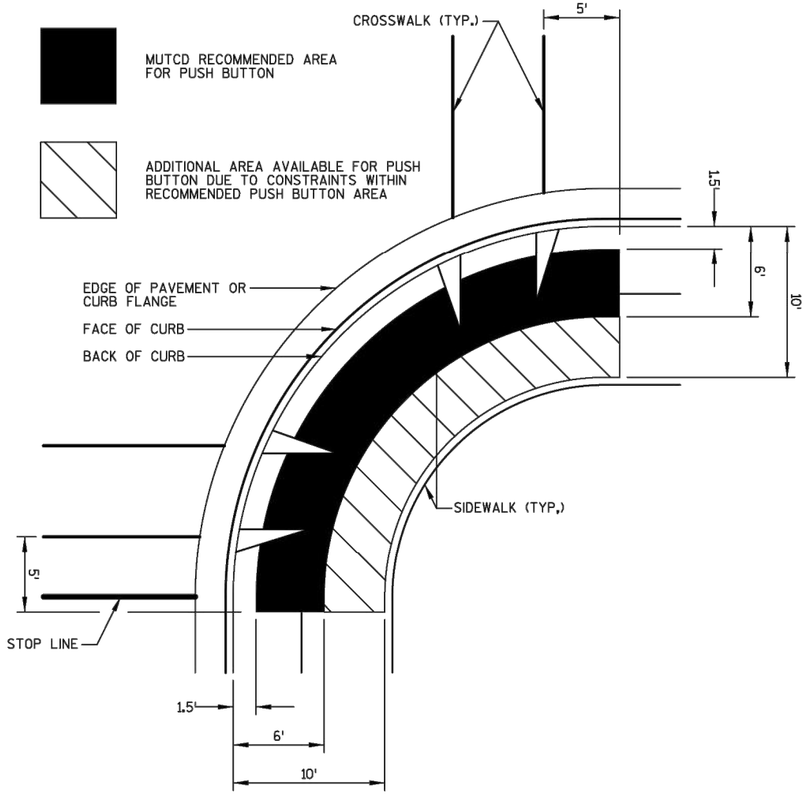
TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TRAFFIC CONTROL SIGNAL
STH 54 AND CTH D (N. SHAWANO ST.)
CITY OF NEW LONDON
WAUPACA COUNTY

SIGNAL NO. CONTRACTOR TEMP

REGION CONTACT: RON JOHNSON
DESIGNED BY:
REVISED BY: WESTWOOD

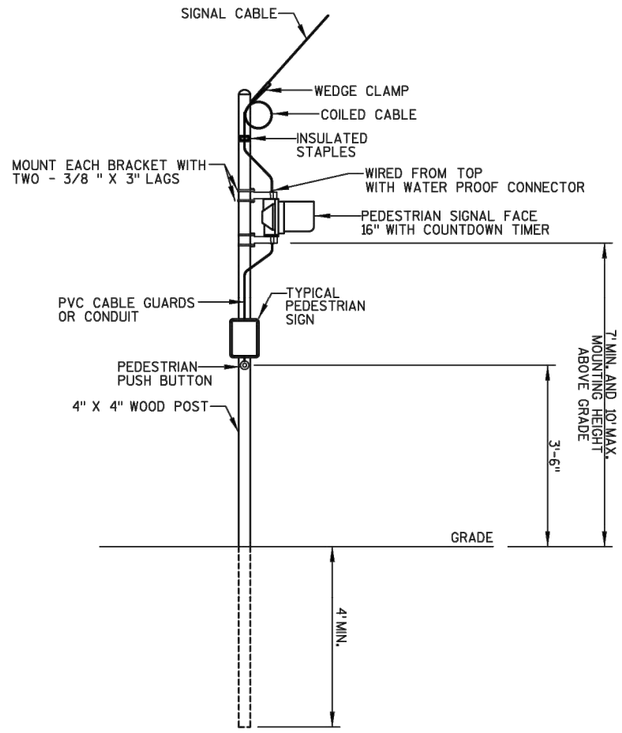
PROJECT NO: 6220-04-76 | HWY: STH 54 | COUNTY: WAUPACA | SEQUENCE OF OPERATIONS - STAGE 6 | SHEET 145 | E



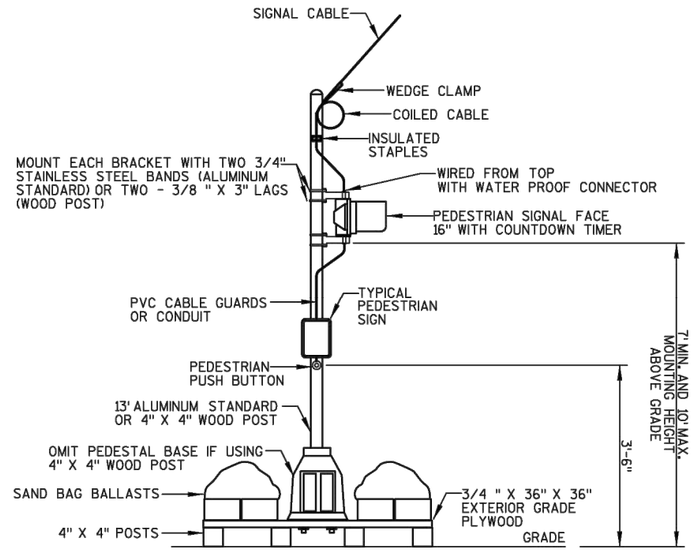
PUSH BUTTON LOCATION NOTES:

1. PUSHBUTTONS SHOULD BE CAPABLE OF EASY ACTIVATION AND CONVENIENTLY LOCATED NEAR EACH END OF CROSSWALK OR CROSSING AREA.
2. PUSHBUTTONS SHOULD BE PLACED UNOBSTRUCTED AND ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR.
3. PUSHBUTTONS SHOULD BE PLACED WHERE THERE IS AN ALL-WEATHER SURFACE, A WHEELCHAIR ACCESSIBLE ROUTE FROM THE PUSHBUTTON TO THE RAMP.
4. PUSHBUTTONS SHOULD BE PLACED BETWEEN THE EDGE OF THE CROSSWALK LINE (EXTENDED) FARTHEST FROM THE CENTER OF THE INTERSECTION AND THE SIDE OF A CURB RAMP (IF PRESENT), BUT NOT GREATER THAN 5-FEET FROM SAID CROSSWALK LINE.
5. PUSHBUTTONS SHOULD BE PLACED BETWEEN 1.5-FEET AND 6-FEET FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT. IF THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5-FEET AND 6-FEET FORM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FARTHER THAN 10-FEET FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
6. PUSHBUTTONS SHOULD BE PLACED WITH THE FACE OF THE PUSH BUTTON PARALLEL TO THE CROSSWALK TO BE USED.
7. PUSHBUTTONS ON THE SAME CORNER OF AN INTERSECTION SHOULD BE SEPARATED BY A DISTANCE OF AT LEAST 10-FEET. WHERE THERE ARE PHYSICAL CONSTRAINTS ON A PARTICULAR CORNER THAN MAKE IT IMPRACTICAL TO PROVIDE THE 10-FOOT SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.
8. PUSHBUTTON POLES SHALL BE PLACED SO THAT ALL EQUIPMENT ATTACHED TO THE POLE (PEDESTRIAN SIGNAL HEAD, PUSHBUTTON, SIGN, ETC.) IS OUTSIDE THE MINIMUM LATERAL CLEARANCE DISTANCE OF 2-FEET FROM FACE OF CURB OR EDGE OF TRAVELED WAY.
9. PUSHBUTTONS SHOULD BE PLACED SO THE THE REACH DISTANCE FROM THE EDGE OF THE FLAT SURFACE ADJACENT TO THE PUSHBUTTON DOES NOT EXCEED THE MAXIMUM ADA REACH DISTANCE OF 2-FEET.

TEMPORARY PEDESTRIAN SIGNAL AREA



WOOD POST



SKID TYPE

TEMPORARY PEDESTRIAN SIGNAL NOTES:

1. SIGNAL DROP CABLES SHALL BE PLACED A MINIMUM OF 12-FEET ABOVE GROUND NOT SUBJECT TO VEHICULAR TRAFFIC.
2. SIGNAL DROP CABLES SHALL BE PLACED A MINIMUM OF 17-FEET ABOVE GROUND SUBJECT TO VEHICULAR TRAFFIC, INCLUDING CONSTRUCTION VEHICLES.
3. SKID TYPE TEMPORARY MAY BE USED FOR PEDESTRIAN PUSH BUTTONS AS LONG AS THE REACH DISTANCE FROM THE EDGE OF THE SKID TO THE PUSH BUTTON DOES NOT EXCEED THE MAXIMUM ADA REACH DISTANCE OF 2-FEET.
4. PUSHBUTTONS SHOULD BE PLACED AT A MOUNTING HEIGHT OF 3.5-FEET ABOVE THE WALKING SURFACE.
5. MAINTAIN ADA ACCESSIBLE ROUTE AND PEDESTRIAN ACCESSIBILITY REQUIREMENTS FOR ALL ACTIVE PEDESTRIAN SIGNAL INDICATION CROSSING AREAS.
6. MAINTAIN TEMPORARY PEDESTRIAN SIGNALS THROUGHOUT CONSTRUCTION TO ENSURE THAT THE PLACEMENT OF THE TEMPORARY PEDESTRIAN SIGNALS COMPLIES WITH ALL APPLICABLE ADA AND MUTCD SIGNAL PLACEMENT REQUIREMENTS.

TEMPORARY PEDESTRIAN SIGNAL

2

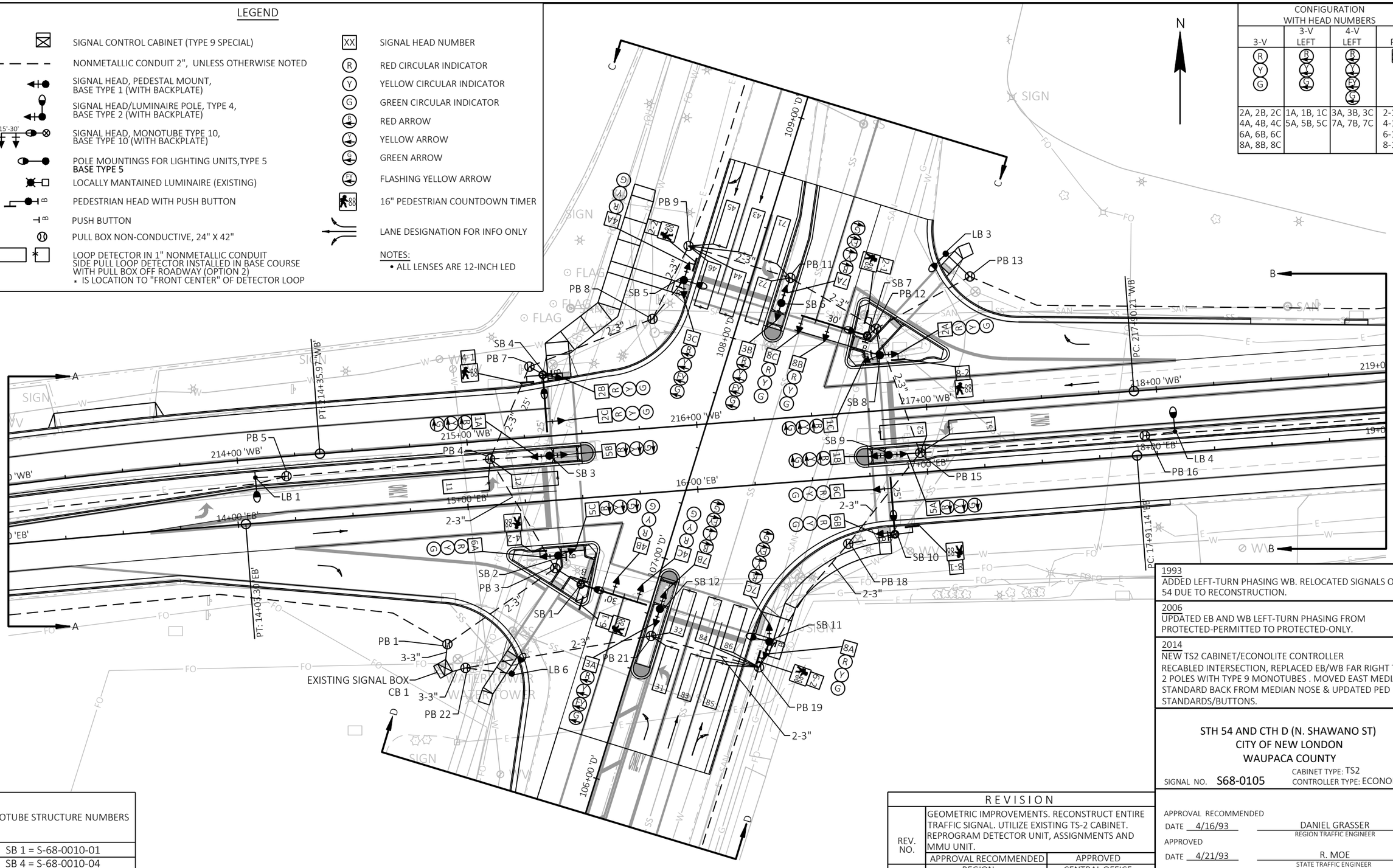
LEGEND

- SIGNAL CONTROL CABINET (TYPE 9 SPECIAL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT, BASE TYPE 1 (WITH BACKPLATE)
- SIGNAL HEAD/LUMINAIRE POLE, TYPE 4, BASE TYPE 2 (WITH BACKPLATE)
- SIGNAL HEAD, MONOTUBE TYPE 10, BASE TYPE 10 (WITH BACKPLATE) (15'-30')
- POLE MOUNTINGS FOR LIGHTING UNITS,TYPE 5 BASE TYPE 5
- LOCALLY MANTAINED LUMINAIRE (EXISTING)
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- PULL BOX NON-CONDUCTIVE, 24" X 42"
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT SIDE PULL LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2)
  - ⋆ IS LOCATION TO "FRONT CENTER" OF DETECTOR LOOP

- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- FY FLASHING YELLOW ARROW
- 16" PEDESTRIAN COUNTDOWN TIMER
- LANE DESIGNATION FOR INFO ONLY

NOTES:
- ALL LENSES ARE 12-INCH LED

CONFIGURATION WITH HEAD NUMBERS			
3-V	3-V LEFT	4-V LEFT	PED
R Y G	R Y G	R FY Y G	
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C 8A, 8B, 8C	1A, 1B, 1C 5A, 5B, 5C	3A, 3B, 3C 7A, 7B, 7C	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2



MONOTUBE STRUCTURE NUMBERS
SB 1 = S-68-0010-01
SB 4 = S-68-0010-04
SB 7 = S-68-0010-07
SB 10 = S-68-0010-10

REVISION				
REV. NO.	GEOMETRIC IMPROVEMENTS. RECONSTRUCT ENTIRE TRAFFIC SIGNAL. UTILIZE EXISTING TS-2 CABINET. REPROGRAM DETECTOR UNIT, ASSIGNMENTS AND MMU UNIT.			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
4	DATE	BY	DATE	BY

1993
ADDED LEFT-TURN PHASING WB. RELOCATED SIGNALS ON STH 54 DUE TO RECONSTRUCTION.

2006
UPDATED EB AND WB LEFT-TURN PHASING FROM PROTECTED-PERMITTED TO PROTECTED-ONLY.

2014
NEW TS2 CABINET/ECONOLITE CONTROLLER
RECABLED INTERSECTION, REPLACED EB/WB FAR RIGHT TYPE 2 POLES WITH TYPE 9 MONOTUBES . MOVED EAST MEDIAN STANDARD BACK FROM MEDIAN NOSE & UPDATED PED STANDARDS/BUTTONS.

STH 54 AND CTH D (N. SHAWANO ST)
CITY OF NEW LONDON
WAUPACA COUNTY

SIGNAL NO. S68-0105
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE

APPROVAL RECOMMENDED
DATE 4/16/93 — DANIEL GRASSER, REGION TRAFFIC ENGINEER

APPROVED
DATE 4/21/93 — R. MOE, STATE TRAFFIC ENGINEER

REGION CONTACT: RON JOHNSON
DESIGNED BY: xx
REVISED BY: WESTWOOD

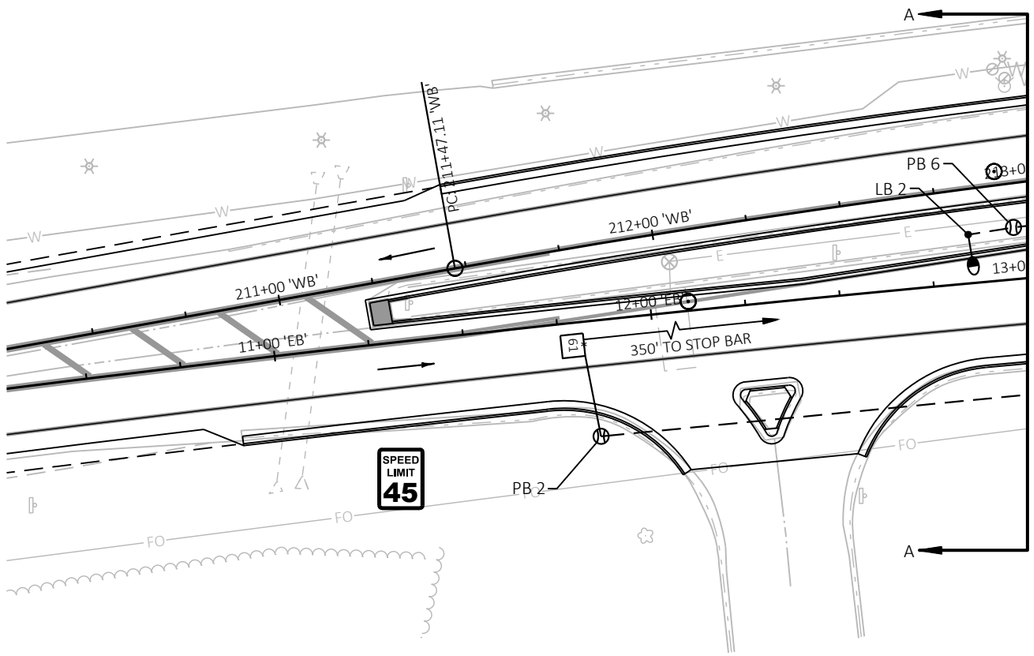
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	TRAFFIC SIGNAL PLAN (REV #4)	SHEET 147 E

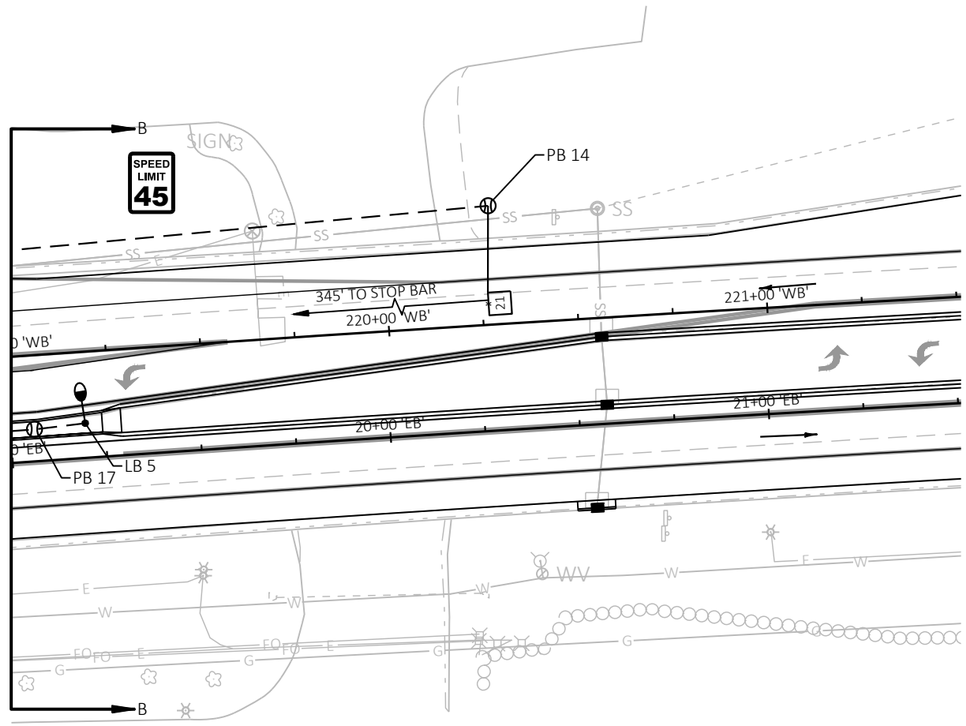
FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024201-sp
PLOT DATE : 7/23/2025 8:24 AM
PLOT BY : BRANDI SWANSON
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

CONSTRUCTION NOTES

1. X-LOCATION IS TO FRONT CENTER OF DETECTOR LOOP. LOOPS SHALL BE CENTERED IN TRAFFIC LANE. INSTALL LOOPS IN THE AGGREGATE BASE COURSE. DISTANCE BETWEEN MULTIPLE STOP LINE LOOPS SHALL BE 8-FEET.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIRABLE CLEARANCE TO THE FACE OF CURB, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED PERPENDICULAR OR NEARLY PERPENDICULAR TO THE CROSSWALK, IF POSSIBLE.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM.
5. ALL WISDOT LUMINAIRES SHOWN ARE 120 VOLT, CATEGORY C LED (LUMINAIRE ARM LENGTHS VARY-REFERENCE QUANTITY LISTING).
6. EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD-IN CABLE TO THE CONTROL CABINET.
7. FURNISH AND INSTALL FOLDING STOP SIGNS (36"x36") ON SIGNAL BASES (SB2, SB3, SB5, SB6, SB8, SB9, SB11, AND SB12).
8. LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
9. THE ENGINEER WILL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICTS WITH EXISTING UTILITY FACILITIES
10. ALL CONDUIT RUNS SHALL HAVE EXTRA PULL-WIRE INSTALLED TO PULL FUTURE CABLE. COST WILL BE INCIDENTAL TO THE TRAFFIC SIGNAL CABLE NO. 14.
11. INSTALL 13-FT SIGNAL STANDARDS AT (SB2, SB3, SB8, SB9)
    INSTALL 15-FT SIGNAL STANDARDS AT (SB6, SB12)
    INSTALL TYPE 4 (30-FT) POLES AT (SB5, SB11)
    INSTALL TYPE 5 ALUMINUM (30-FT) POLES AT (LB1, LB2, LB3, LB4, LB5, LB6)
    INSTALL TYPE 10 MONOTUBE, 25-FT ARMS AT (SB4, SB10)
    INSTALL TYPE 10 MONOTUBE, 30-FT ARMS AT (SB1, SB7)





N

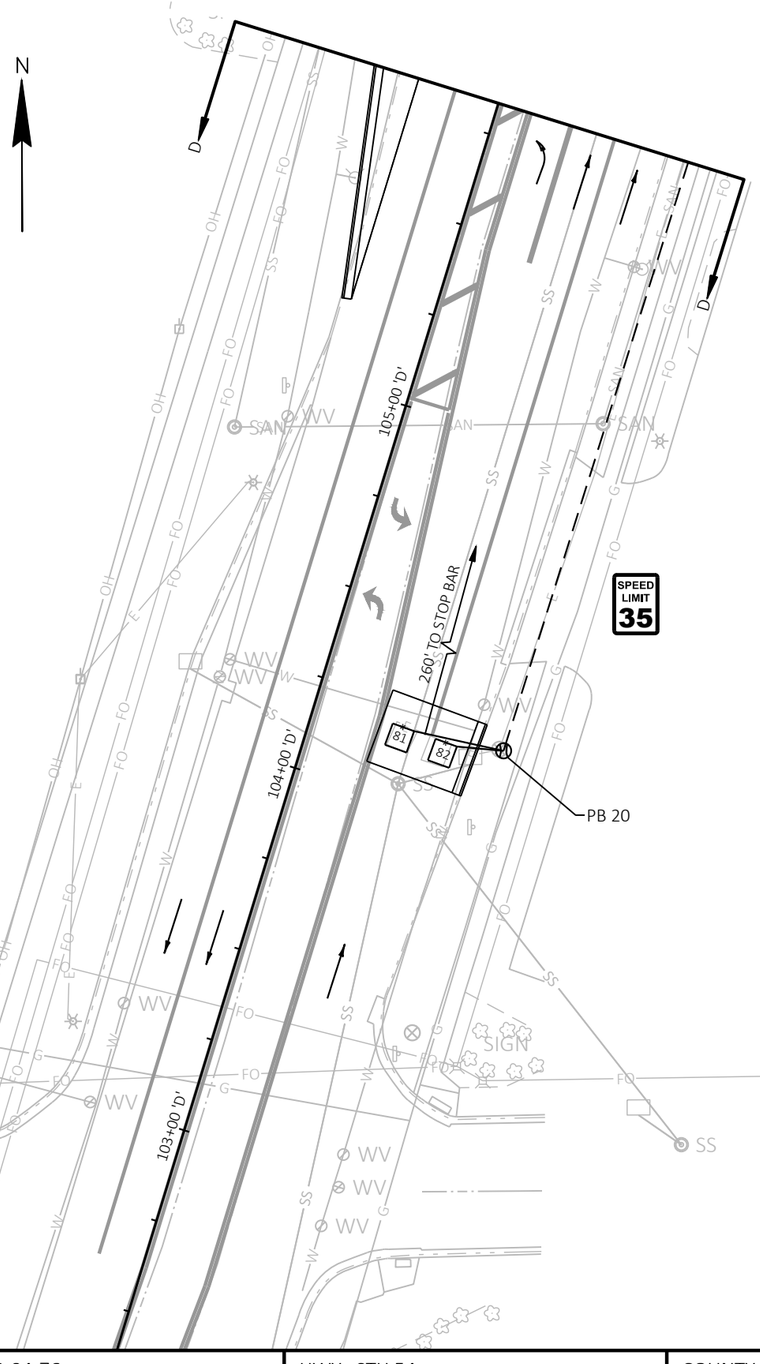
2

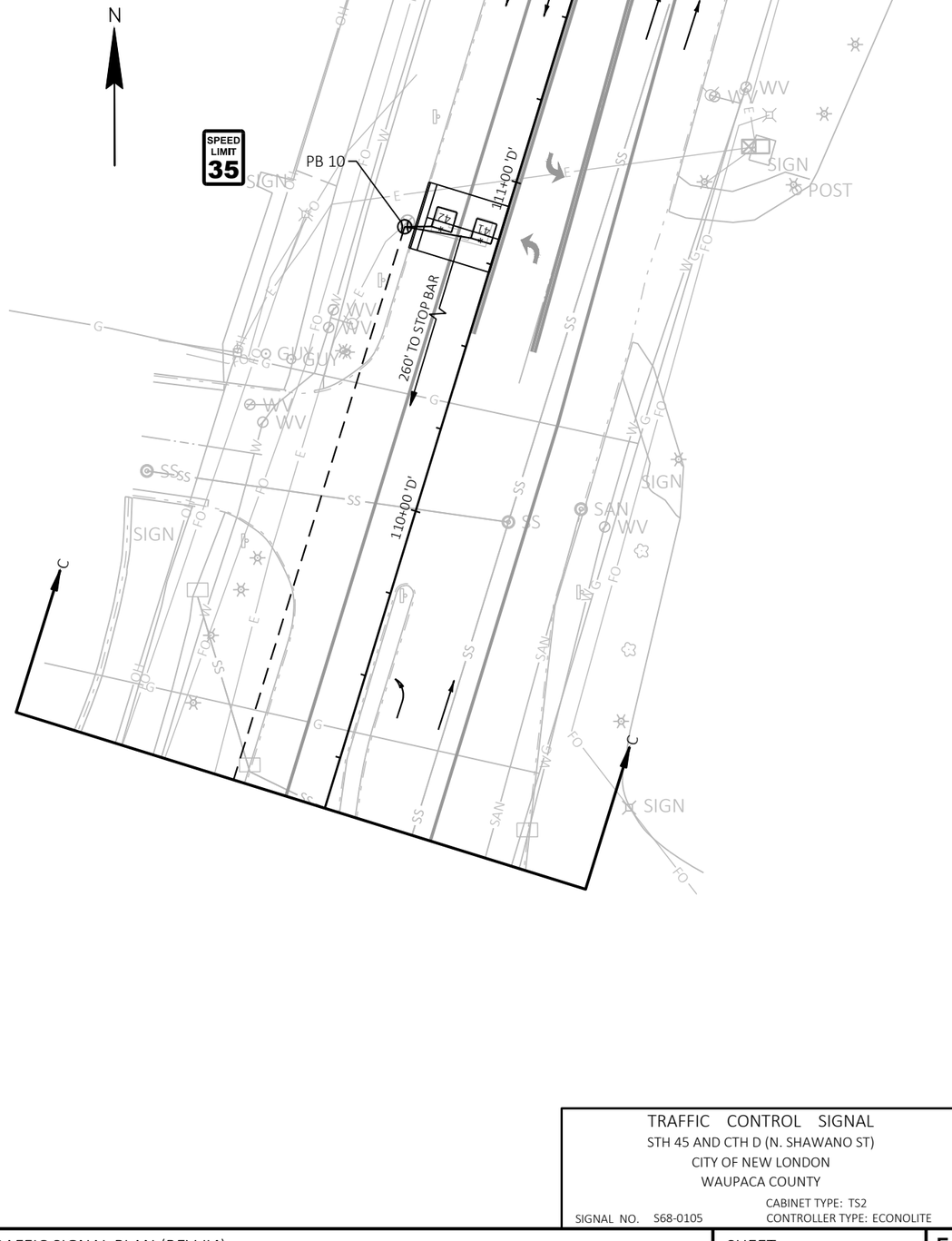
TRAFFIC CONTROL SIGNAL
STH 45 AND CTH D (N. SHAWANO ST)
CITY OF NEW LONDON
WAUPACA COUNTY

CABINET TYPE: TS2
SIGNAL NO. S68-0105 CONTROLLER TYPE: ECONOLITE

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	TRAFFIC SIGNAL PLAN (REV #4)	SHEET 148	E

FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024202-sp
PLOT DATE : 6/10/2025 10:12 AM PLOT BY : EMMA DECOSTER PLOT NAME : PLOT SCALE : ##########





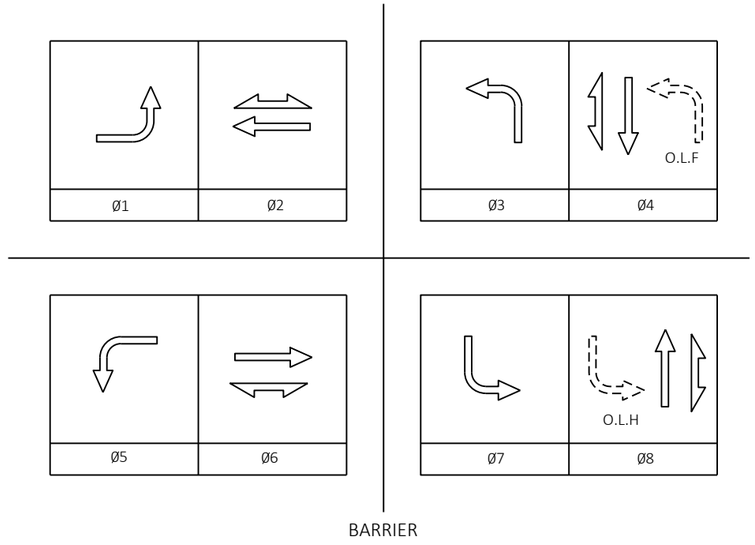
2

TRAFFIC CONTROL SIGNAL
STH 45 AND CTH D (N. SHAWANO ST)
CITY OF NEW LONDON
WAUPACA COUNTY
CABINET TYPE: TS2
SIGNAL NO. S68-0105 CONTROLLER TYPE: ECONOLITE

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA	TRAFFIC SIGNAL PLAN (REV #4)	SHEET 149	E

FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024203-sp
PLOT DATE : 4/9/2025 1:26 PM PLOT BY : BRANDI SWANSON PLOT NAME : PLOT SCALE : ##########

	HEAD NUMBERS	FLASH
Ø1	1A, 1B, 1C	R
Ø2	2A, 2B, 2C	R
Ø3	3A, 3B, 3C	-
Ø4	4A, 4B, 4C	R
Ø5	5A, 5B, 5C	R
Ø6	6A,6B, 6C	R
Ø7	7A, 7B, 7C	-
Ø8	8A, 8B, 8C	R
Ø2 PED	2-1,2-2	-
Ø4 PED	4-1, 4-2	-
Ø6 PED	6-1, 6-2	-
Ø8 PED	8-1, 8-2	-
O.L."A"		
O.L."B"		
O.L."C"		
O.L."D"		
O.L."E"		
O.L."F"	3A, 3B, 3C	R
O.L."G"		
O.L."H"	7A, 7B, 7C	R



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W /Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

OVERLAPS

O.L."A"	NONE
O.L."B"	NONE
O.L."C"	NONE
O.L."D"	NONE

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
O.L."E"	-	-
O.L."F"	3	4
O.L."G"	-	-
O.L."H"	7	8

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	
FIBER	
CELL MODEM	X
PHONE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
DETECTOR #(S)	61	11	21	51	41	43	45	71	81	83	85	31					DETECTOR #(S)
CALLS & EXTENDS	X	X	X	X		X	X	X		X	X	X					CALLS & EXTENDS
CALLS ONLY																	CALLS ONLY
EXTENDS ONLY					X				X								EXTENDS ONLY
PHASE CALLED	6	1	2	5		4	4	7		8	8	3					PHASE CALLED
PHASE EXTENDED	6	1	2	5	4	4	4	7	8	8	8	3					PHASE EXTENDED
DISCONNECT PHASE																	DISCONNECT PHASE
CALLING DELAY							X				X						CALLING DELAY
EXTENSION STRETCH					X				X								EXTENSION STRETCH
SIZE	6x6	6x20	6x6	6x20	6x6	6x20	6x20	6x20	6x6	6x20	6x20	6x20					SIZE
NUMBER OF TURNS	5	3	5	3	4	3	3	3	4	3	3	3					NUMBER OF TURNS

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
DETECTOR #(S)		12		52	42	44	46	72	82	84	86	32					DETECTOR #(S)
CALLS & EXTENDS		X		X		X	X	X		X	X	X					CALLS & EXTENDS
CALLS ONLY																	CALLS ONLY
EXTENDS ONLY					X				X								EXTENDS ONLY
PHASE CALLED		1		5		4	4	7		8	8	3					PHASE CALLED
PHASE EXTENDED		1		5	4	4	4	7	8	8	8	3					PHASE EXTENDED
DISCONNECT PHASE																	DISCONNECT PHASE
CALLING DELAY							X				X						CALLING DELAY
EXTENSION STRETCH					X				X								EXTENSION STRETCH
SIZE		6x20		6x20	6x6	6x20	6x20	6x20	6x6	6x20	6x20	6x20					SIZE
NUMBER OF TURNS		3		3	4	3	3	3	4	3	3	3					NUMBER OF TURNS

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED
2. WHEN ONE PHASE IS ON ALONE ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL.
3. WHEN OPPOSING THROUGH PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TRAFFIC CONTROL SIGNAL
STH 54 AND CTH D (N. SHAWANO ST.)
CITY OF NEW LONDON
WAUPACA COUNTY

SIGNAL NO. S68-0105

REGION CONTACT: RON JOHNSON
DESIGNED BY: DESIGNED BY
REVISED BY: WESTWOOD

FILE NAME : N:\3001703.00\CIVIL 3D\SHEETSPLAN\024301-PH.DWG
LAYOUT NAME - 024301-ph
PLOT DATE : 2/19/2025 2:26 PM
PLOT BY : BRANDI SWANSON
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

PROJECT ID:	6220-04-76
INTERSECTION:	STH 54 & CTH D (N. SHAWANO ST)

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB_TO	JUMPER	AWG __ # OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR								PED BUTTON	<FYA>
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	D/WALK	WALK		
SB1		9	4B/4C	4	RED	ORG	GRN							
			6(1)	6							BLK	BLU		
			BUTTON	6									WHT/BLK	
SB2		12	6A	6	RED	ORG	GRN							
			5C	5				RED/BLK	ORG/BLK	GRN/BLK				
			4(2)	4							BLK	BLU		
			BUTTON	4									WHT/BLK	
SB3		12	5B	5				RED	ORG	GRN				
			1A	1				RED/BLK	ORG/BLK	GRN/BLK				
SB4		9	2B/2C	2	RED	ORG	GRN							
			4(1)	4							BLK	BLU		
			BUTTON	4									WHT/BLK	
SB5		12	4A	4	RED	ORG	GRN							
			3C	3				RED/BLK	ORG/BLK	GRN/BLK				BLK
			2(2)	2							BLK/WHT	BLU		
			BUTTON	2									WHT/BLK	
SB6		12	3B	3				RED	ORG	GRN				BLK
			7A	7				RED/BLK	ORG/BLK	GRN/BLK				BLK/WHT
SB7		9	8B/8C	8	RED	ORG	GRN							
			2(1)	2							BLK	BLU		
			BUTTON	2									WHT/BLK	
SB8		12	2A	2	RED	ORG	GRN							
			1C	1				RED/BLK	ORG/BLK	GRN/BLK				
			8(2)	8							BLK	BLU		
			BUTTON	8									WHT/BLK	
SB9		12	1B	1				RED	ORG	GRN				
			5A	5				RED/BLK	ORG/BLK	GRN/BLK				
SB10		9	6B/6C	6	RED	ORG	GRN							
			8(1)	8							BLK	BLU		
			BUTTON	8									WHT/BLK	
SB11		12	8A	8	RED	ORG	GRN							
			7C	7				RED/BLK	ORG/BLK	GRN/BLK				BLK
			6(2)	6							BLK/WHT	BLU		
			BUTTON	6									WHT/BLK	
SB12		12	7B	7				RED	ORG	GRN				BLK
			3A	3				RED/BLK	ORG/BLK	GRN/BLK				BLK/WHT

grounding conductor 10 AWG	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	CB1

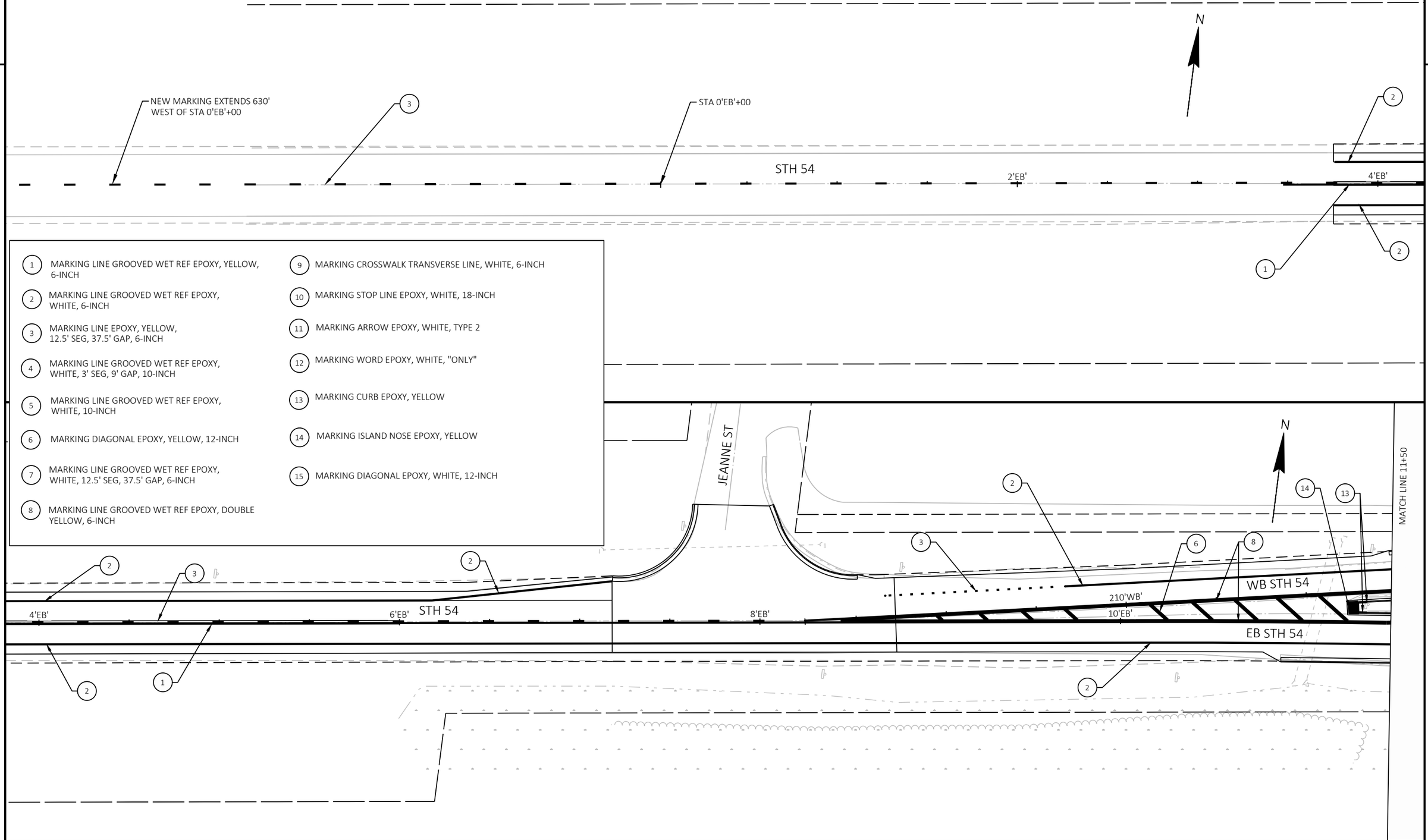
Pull Box Bonding Jumper 10 AWG Green XLP	
From	To

Lighting UF __ w/ground	
From	To
CB1	LB6
CB1	SB1
CB1	SB3
SB3	LB1
LB1	LB2
CB1	SB4
CB1	SB5
CB1	SB7
CB1	LB3
CB1	LB4
CB1	SB10
CB1	SB11
LB4	LB5

Emergency Vehicle Preemption	
From	To

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 12" longer than the ungrounded conductors.
*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.

2



1. MARKING LINE GROOVED WET REF EPOXY, YELLOW, 6-INCH
2. MARKING LINE GROOVED WET REF EPOXY, WHITE, 6-INCH
3. MARKING LINE EPOXY, YELLOW, 12.5' SEG, 37.5' GAP, 6-INCH
4. MARKING LINE GROOVED WET REF EPOXY, WHITE, 3' SEG, 9' GAP, 10-INCH
5. MARKING LINE GROOVED WET REF EPOXY, WHITE, 10-INCH
6. MARKING DIAGONAL EPOXY, YELLOW, 12-INCH
7. MARKING LINE GROOVED WET REF EPOXY, WHITE, 12.5' SEG, 37.5' GAP, 6-INCH
8. MARKING LINE GROOVED WET REF EPOXY, DOUBLE YELLOW, 6-INCH
9. MARKING CROSSWALK TRANSVERSE LINE, WHITE, 6-INCH
10. MARKING STOP LINE EPOXY, WHITE, 18-INCH
11. MARKING ARROW EPOXY, WHITE, TYPE 2
12. MARKING WORD EPOXY, WHITE, "ONLY"
13. MARKING CURB EPOXY, YELLOW
14. MARKING ISLAND NOSE EPOXY, YELLOW
15. MARKING DIAGONAL EPOXY, WHITE, 12-INCH

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT MARKING	SHEET 152	E

1. MARKING LINE GROOVED WET REF EPOXY, YELLOW, 6-INCH
2. MARKING LINE GROOVED WET REF EPOXY, WHITE, 6-INCH
3. MARKING LINE EPOXY, YELLOW, 12.5' SEG, 37.5' GAP, 6-INCH
4. MARKING LINE GROOVED WET REF EPOXY, WHITE, 3' SEG, 9' GAP, 10-INCH
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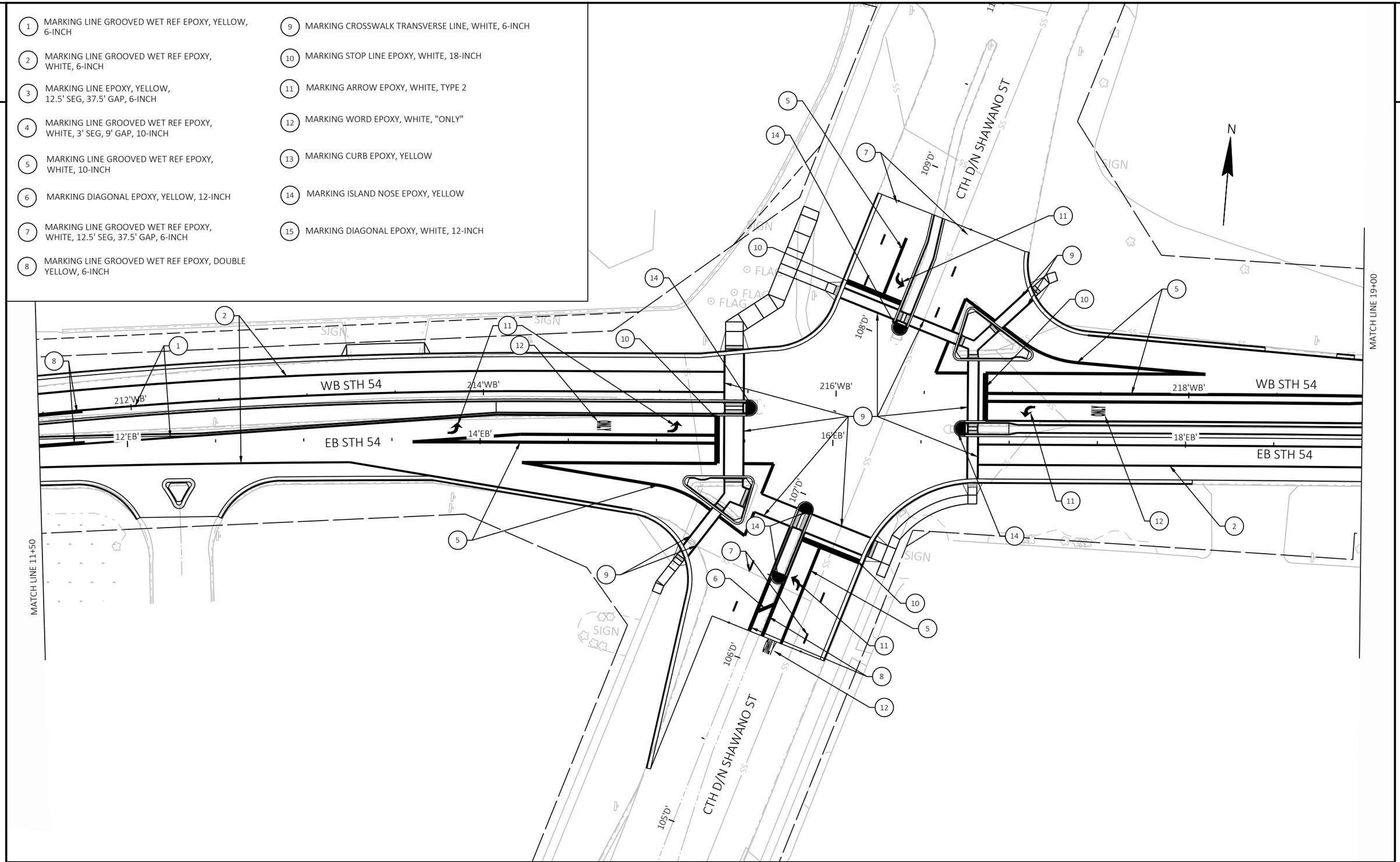
13. MARKING CURB EPOXY, YELLOW
14. MARKING ISLAND NOSE EPOXY, YELLOW
15. MARKING DIAGONAL EPOXY, WHITE, 12-INCH



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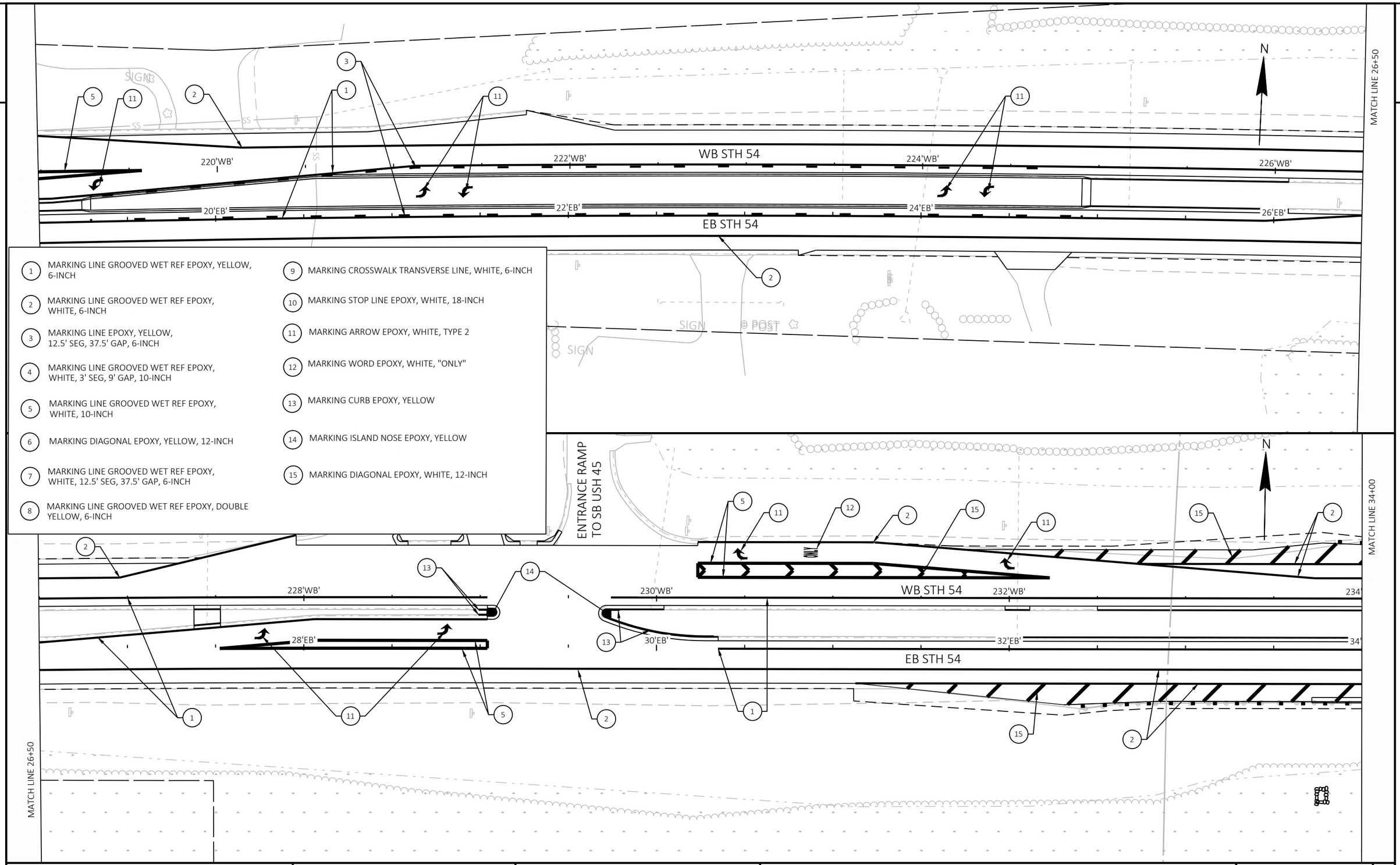

1. MARKING LINE GROOVED WET REF EPOXY, YELLOW, 6-INCH
2. MARKING LINE GROOVED WET REF EPOXY, WHITE, 6-INCH
3. MARKING LINE EPOXY, YELLOW, 12.5' SEG, 37.5' GAP, 6-INCH
4. MARKING LINE GROOVED WET REF EPOXY, WHITE, 3' SEG, 9' GAP, 10-INCH
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11. MARKING ARROW EPOXY, WHITE, TYPE 2
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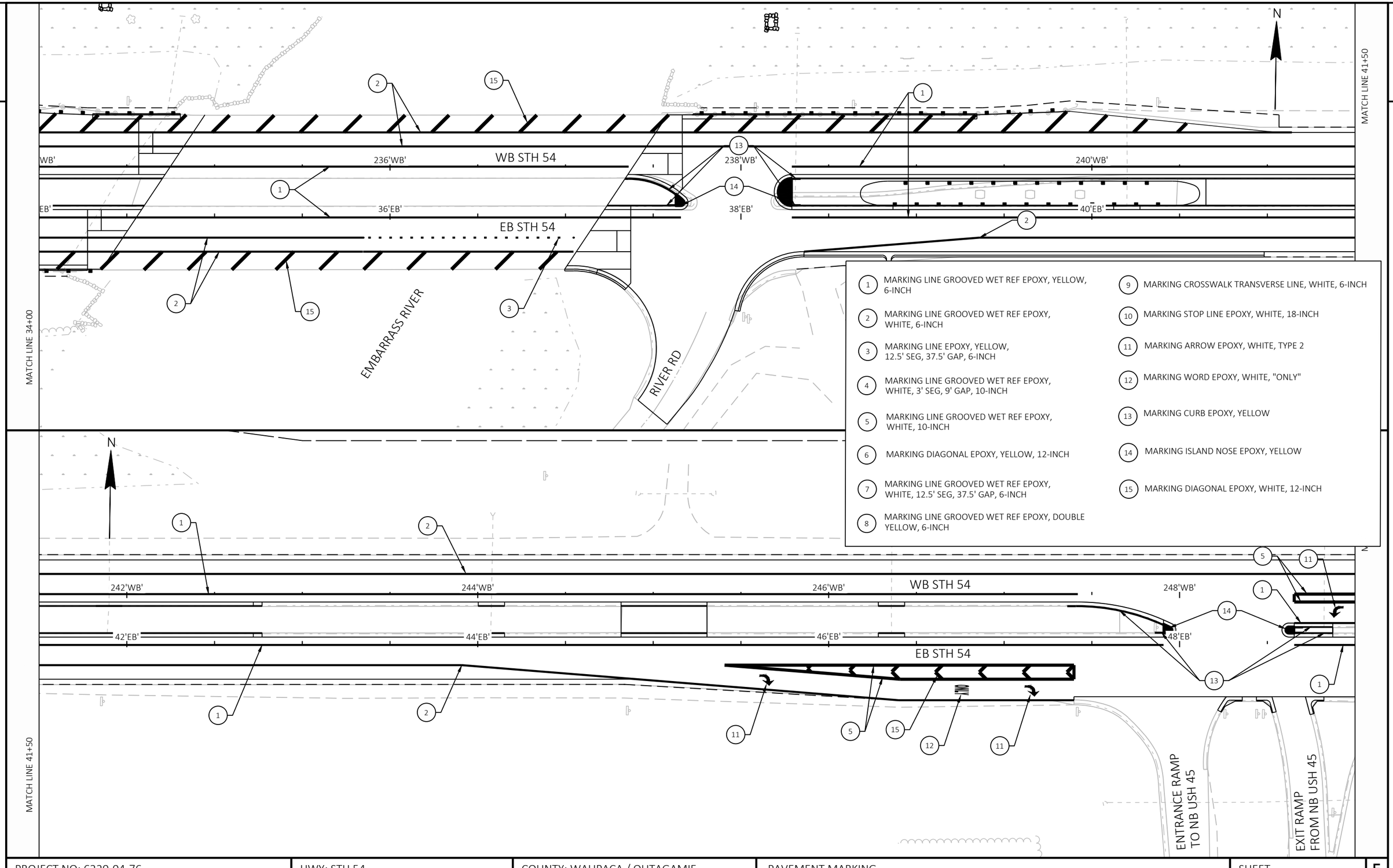
13. MARKING CURB EPOXY, YELLOW
14. MARKING ISLAND NOSE EPOXY, YELLOW
15. MARKING DIAGONAL EPOXY, WHITE, 12-INCH

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT MARKING	SHEET 154	E



1. MARKING LINE GROOVED WET REF EPOXY, YELLOW, 6-INCH
2. MARKING LINE GROOVED WET REF EPOXY, WHITE, 6-INCH
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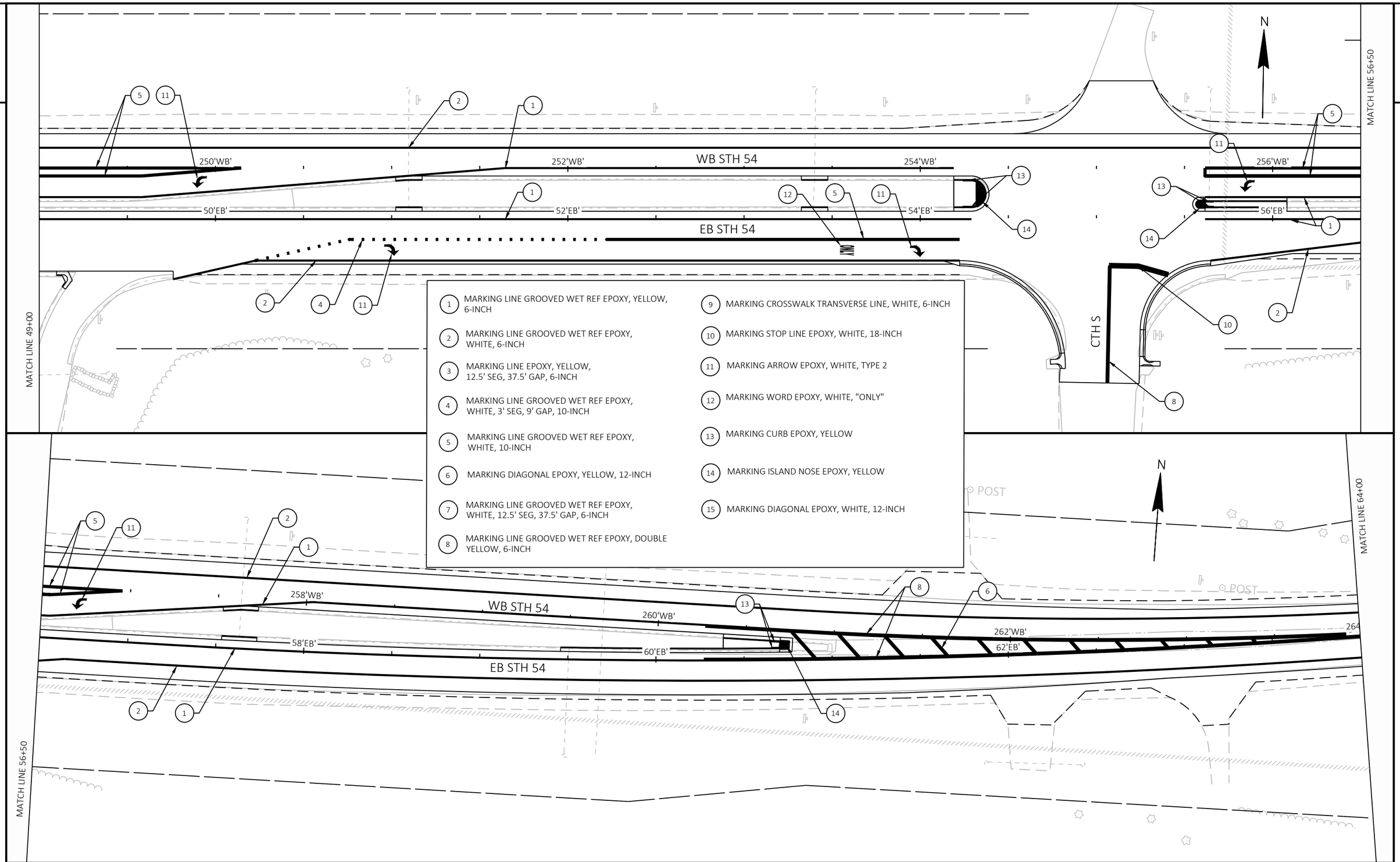
13. MARKING CURB EPOXY, YELLOW
14. MARKING ISLAND NOSE EPOXY, YELLOW
15. MARKING DIAGONAL EPOXY, WHITE, 12-INCH



1. MARKING LINE GROOVED WET REF EPOXY, YELLOW, 6-INCH
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3. MARKING LINE EPOXY, YELLOW, 12.5' SEG, 37.5' GAP, 6-INCH
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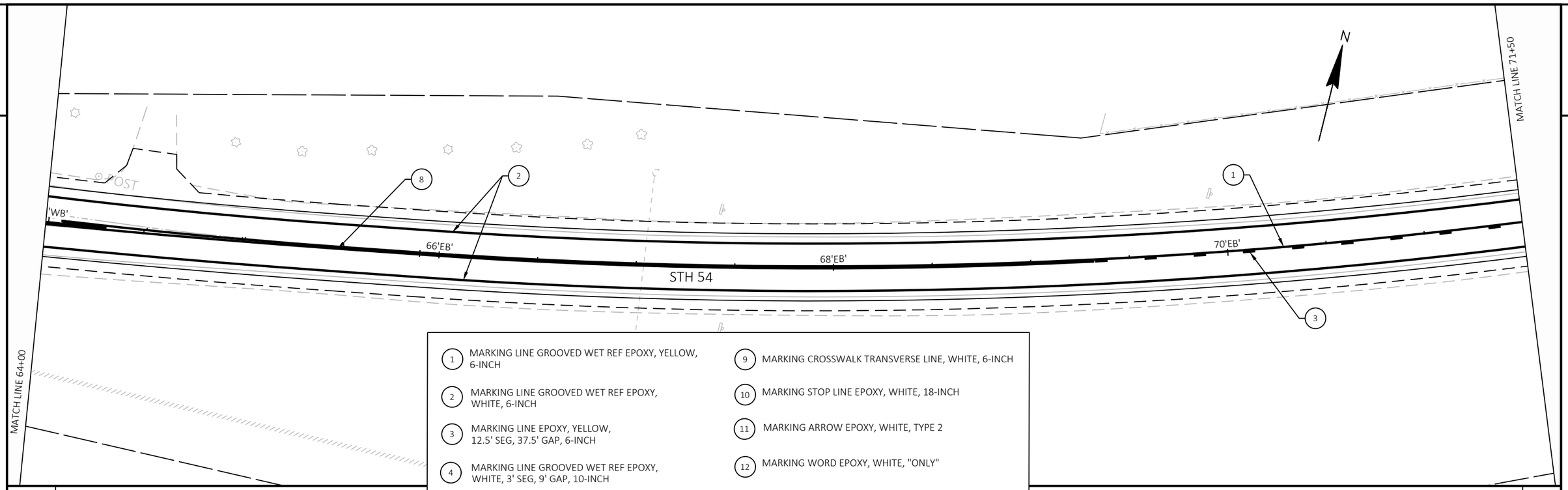
14. MARKING ISLAND NOSE EPOXY, YELLOW
15. MARKING DIAGONAL EPOXY, WHITE, 12-INCH

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT MARKING	SHEET 156	E



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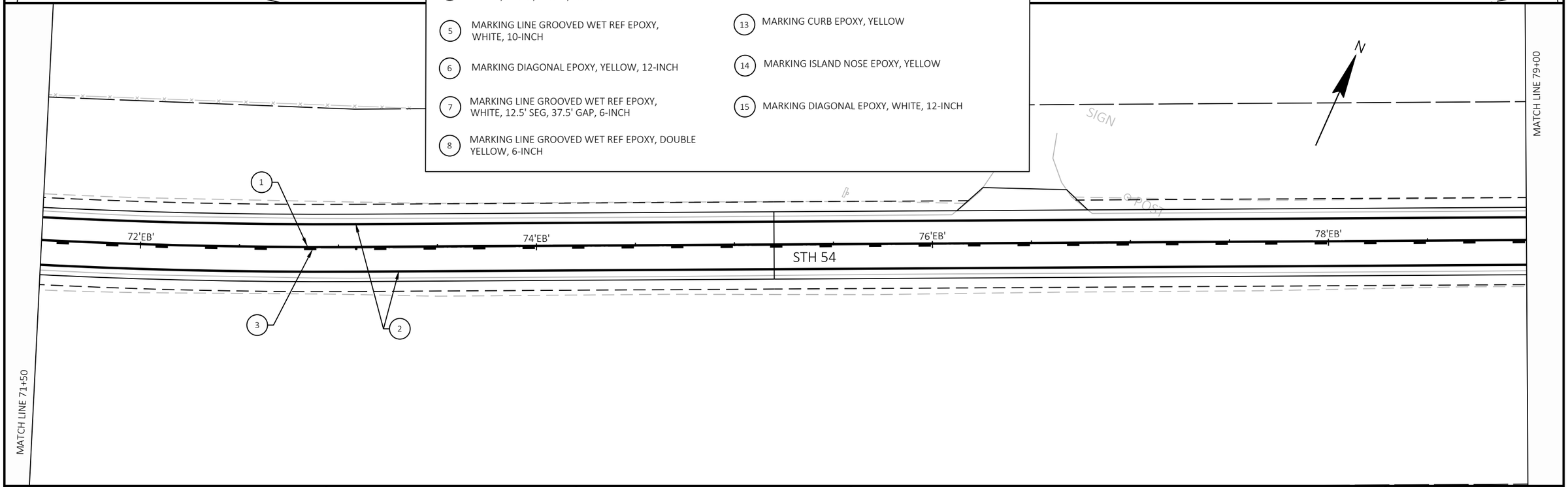
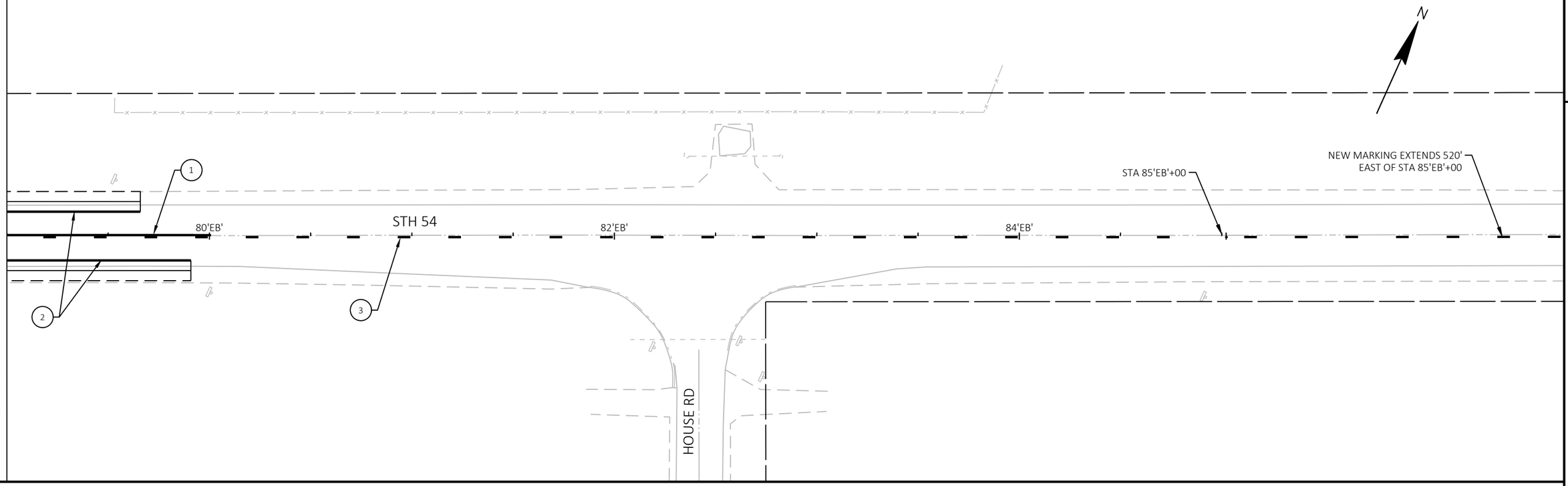


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PAVEMENT MARKING	SHEET 157	E



2

1. MARKING LINE GROOVED WET REF EPOXY, YELLOW, 6-INCH
2. MARKING LINE GROOVED WET REF EPOXY, WHITE, 6-INCH
3. MARKING LINE EPOXY, YELLOW, 12.5' SEG, 37.5' GAP, 6-INCH
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13. MARKING CURB EPOXY, YELLOW
14. MARKING ISLAND NOSE EPOXY, YELLOW
15. MARKING DIAGONAL EPOXY, WHITE, 12-INCH

2

2

CTH D/N SHAWANO ST

101'D' 102'D' 103'D' 104'D' 105'D' 106'D'

108'D' 109'D' 110'D' 111'D' 112'D' 113'D' 114'D' 115'D'

CTH D/N SHAWANO ST

REPLACE CENTER SKIPS
STA 115'D'+26 - 117'D'+72 LT

SIGN

SIGN

SIGN

2

2

TRAFFIC CONTROL NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS OR AS DETERMINED BY THE ENGINEER.
2. ADJUST SIGN SPACING TO AVOID CONFLICTING WITH EXISTING SIGNS AND TO PROVIDE A MINIMUM SPACING OF 200 FEET (500 FEET DESIRABLE) TO EXISTING SIGNS.
3. SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGORUND IS ORANGE.
4. ALL SIDE STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES EXCEPT WHEN HARD CLOSURES ARE SHOWN IN THE STAGING PLANS.
5. ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
6. ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED
7. DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS TYPE A. WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.
8. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC/STAGING REQUIREMENTS.

N

NORTHRIDGE DR

CITY OF NEW LONDON

CTH D/N SHAWANO ST

HENRY ST

PROJECT 1140-00-77
USH 45

USH 45

CITY OF NEW LONDON

TOWN OF LIBERTY

STAGE 6
REMOVE TEMPORARY WIDENING 'Y'
JEANNE ST PIPE REPLACEMENT

STAGE 4
REMOVE TEMPORARY WIDENING 'Z'

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

JEANNE ST

STAGE 4
WB STH 54
AND TEMP WIDENING 'Y'

STAGE 2
WB STH 54
AND TEMP WIDENING 'Z'

HOUSE RD

5'EB'
10'EB'
15'EB'
20'EB'
25'EB'
30'EB'
35'EB'
40'EB'
45'EB'
50'EB'
55'EB'
60'EB'
65'EB'
70'EB'
75'EB'
80'EB'

STAGE 3A
TEMP MEDIAN PAVING
STAGE 6
REMOVE MEDIAN PAVING

STAGE 3
EB STH 54
REMOVE TEMPORARY WIDENING 'X'

STAGE 1
TEMPORARY WIDENING 'X'

STAGE 5
EB STH 54

EMBARRASS RIVER

RIVER RD

CTH S

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

STAGE 3
TEMPORARY WIDENING 'W'

RASMUSSEN CANAL

STAGE 4
INSTALL STEEL THRIE BEAM BULLNOSE
AT B-44-0144

CTH D/N SHAWANO ST

USH 45

BROAD ST

RAILROAD

WAUPACA COUNTY

OUTAGAMIE COUNTY

CITY OF NEW LONDON

CITY OF NEW LONDON

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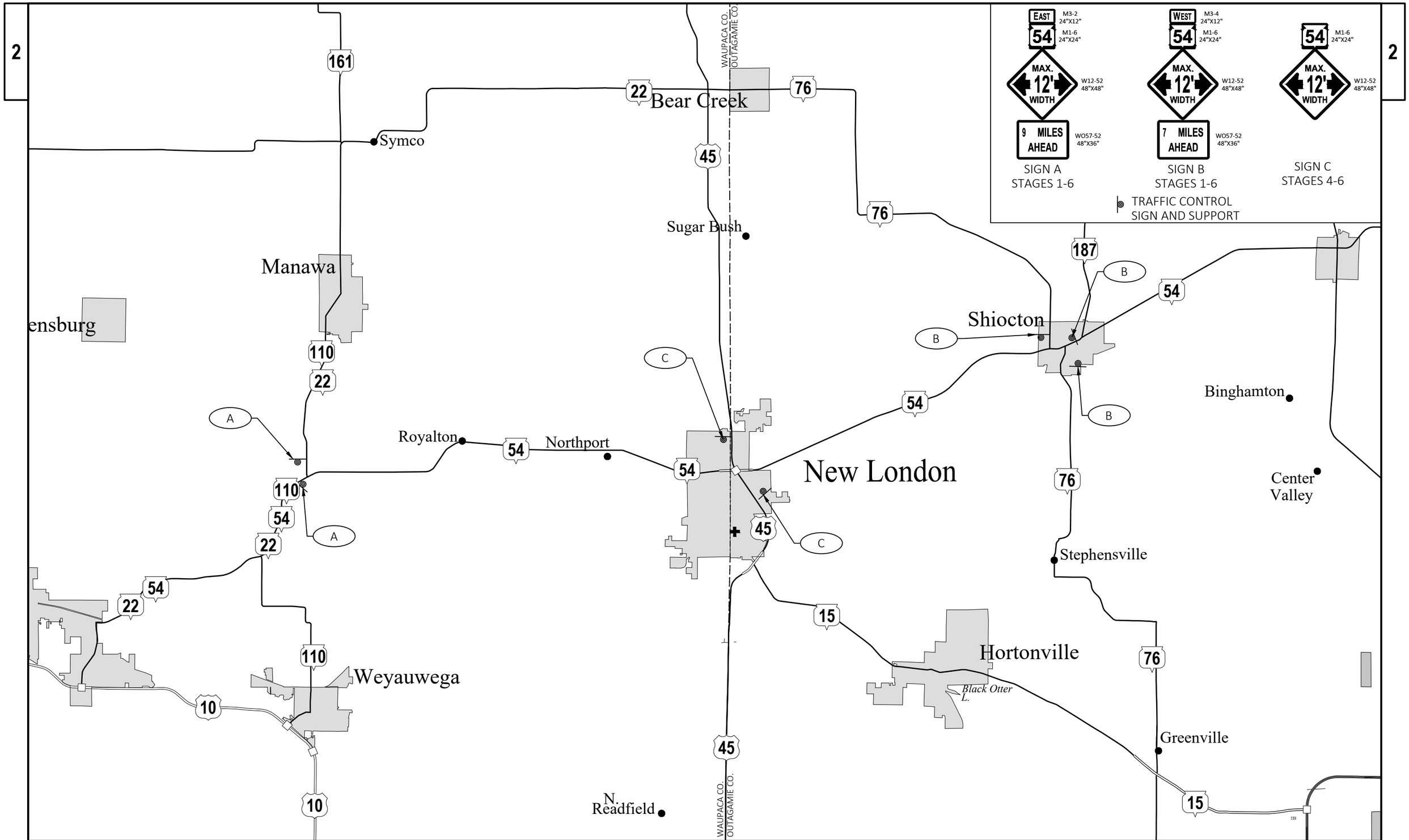
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	STAGING OVERVIEW	SHEET 160	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\025100-TC-OVERVIEW-54.DWG
LAYOUT NAME - Plan 1 IN 1000 FT
PLOT DATE : 6/28/2025 8:42 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42



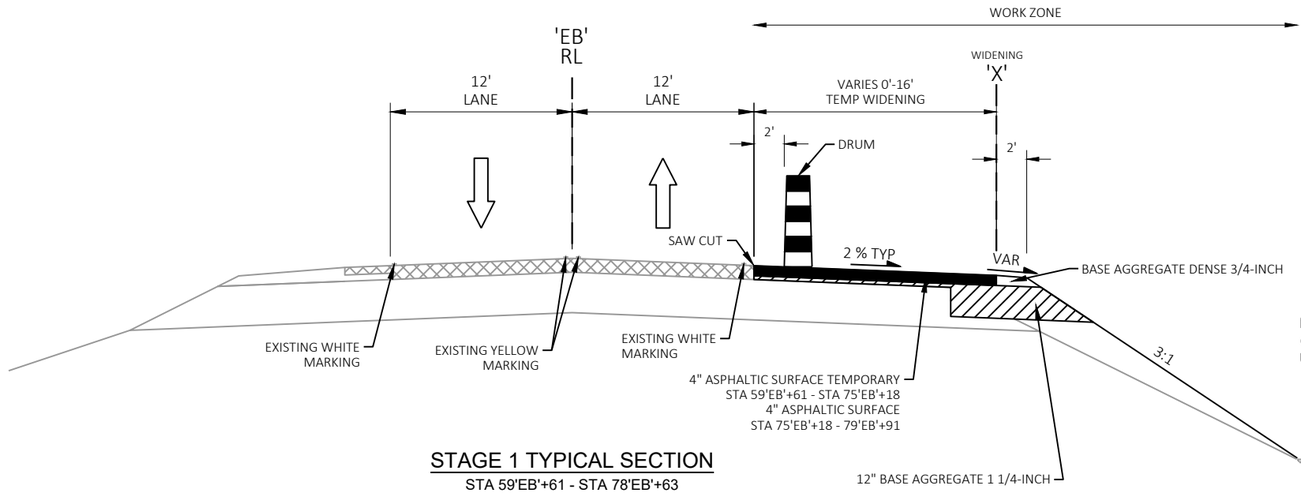
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - OSOW SIGNING	SHEET 161	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\025101-TC-OSOW-54.DWG
LAYOUT NAME - PC

PLOT DATE : 10/3/2024 8:12 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1-2MI

WISDOT/CADDS SHEET 42

2



NOTE:
CONSTRUCT TEMPORARY WIDENING
UNDER FLAGGING OPERATIONS

STAGE 1 TYPICAL SECTION

STA 59'EB'+61 - STA 78'EB'+63

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 1 - TYPICAL SECTIONS	SHEET 162	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\999999_TC_TYPICAL SHELL_54.DWG
LAYOUT NAME - 1-2
PLOT DATE : 6/28/2025 9:11 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

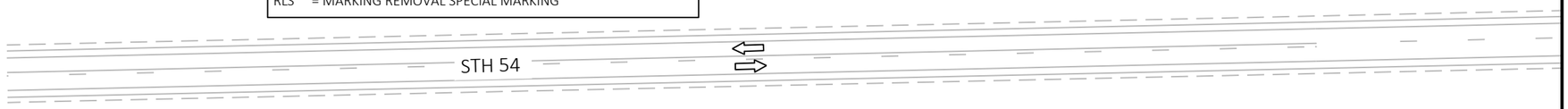
2

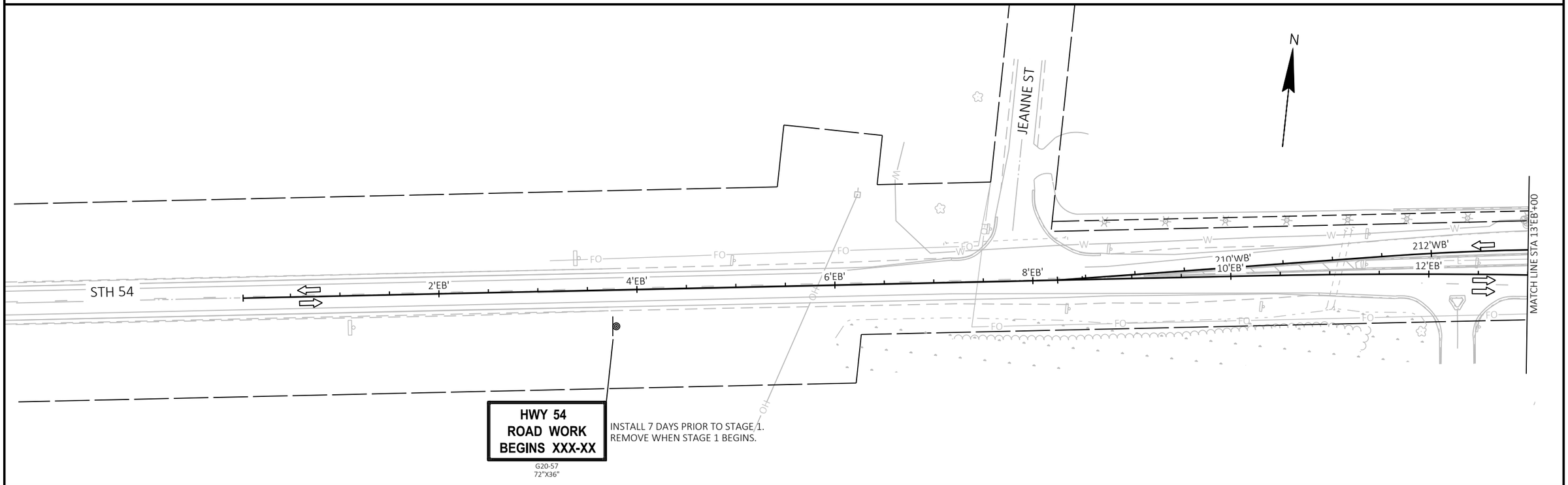
TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLEXIBLE TUBULAR MARKER
- CC — TEMPORARY CRASH CUSHION
- WORK AREA

TEMPORARY PAVEMENT MARKING LEGEND

TP6	= TEMPORARY MARKING LINE PAINT 6-INCH
TP10	= TEMPORARY MARKING LINE PAINT 10-INCH
TP18	= TEMPORARY MARKING STOP LINE PAINT 18-INCH
TT6	= TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
TT10	= TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
TT18	= TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
RL4	= MARKING REMOVAL LINE 4-INCH
RWB4	= MARKING REMOVAL LINE WATER BLASTING 6-INCH
RL8	= MARKING REMOVAL LINE 8-INCH
RLW	= MARKING REMOVAL LINE WIDE
RLS	= MARKING REMOVAL SPECIAL MARKING



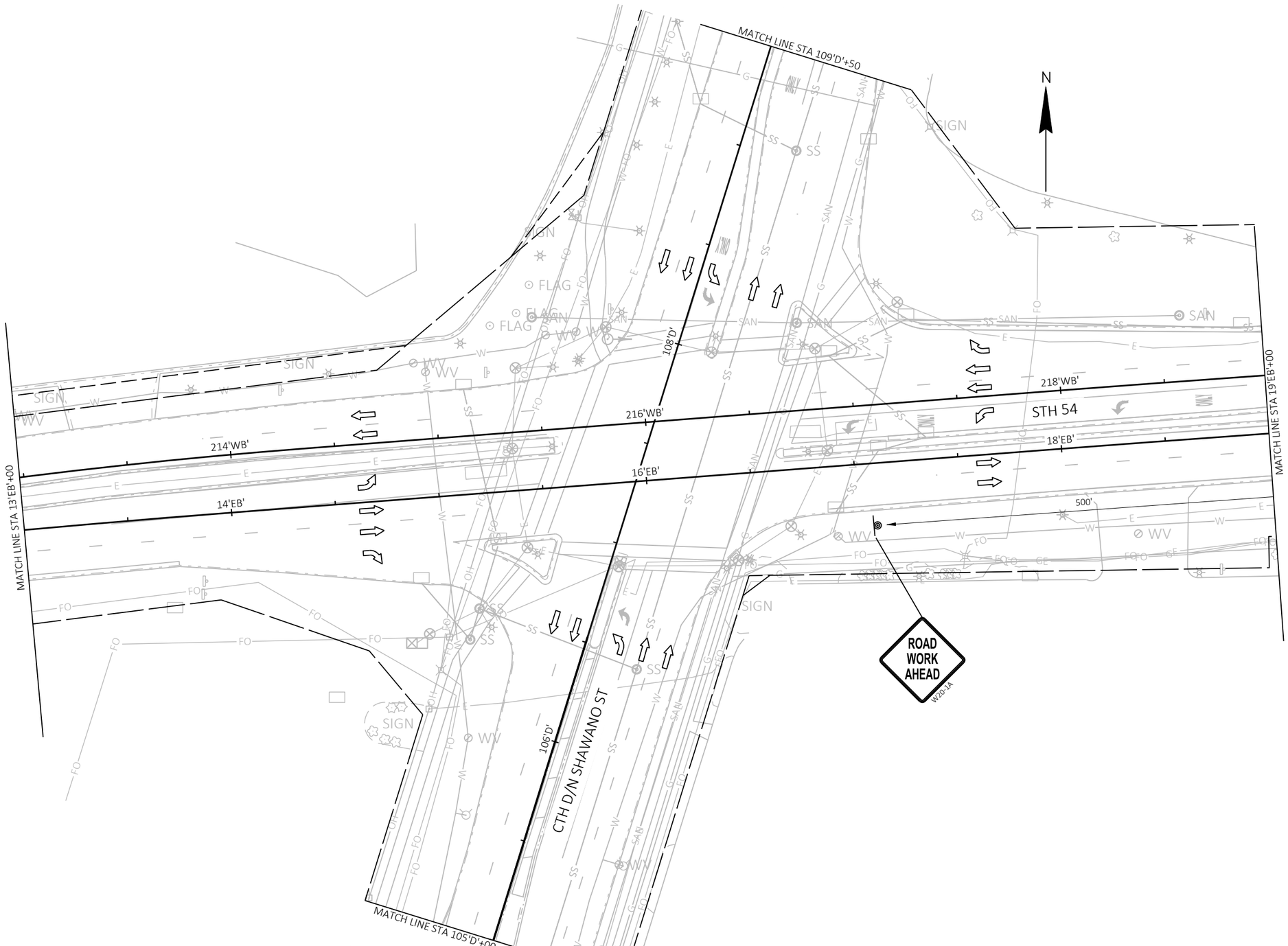


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 1	SHEET 163	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026110_S1_54.DWG
LAYOUT NAME - W1

PLOT DATE : 6/28/2025 9:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 1 - CTH D INTERSECTION	SHEET 164	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026110_S1_54.DWG
LAYOUT NAME - int
PLOT DATE : 6/28/2025 9:06 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA 19'EB'+00

220'WB' 222'WB' 224'WB' 226'WB' 228'WB' 230'WB' 232'WB'

20'EB' 22'EB' 24'EB' 26'EB' 28'EB' 30'EB' 32'EB'

STH 54

500' 500' 500' 500'

R2-1 24"X30" SPEED LIMIT 45

R3-2 24"X24"

DRUMS @ 25' THRU TURN LANE

RAMP CLOSED R11-2R 48"X30"

DRUMS @ 25' THRU RAMP LIMITS

EXIT RAMP FROM SB USH 45 (CLOSED)

ENTRANCE RAMP TO SB USH 45 (CLOSED)

SOUTH TO 45 13

COVER

R11-2R 48"X30" RAMP CLOSED

Waupaca Hortonville Oshkosh

COVER

R3-1 24"X24"

N

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

SOUTH 45 M3-3 24"X12" M1-4 24"X24" RAMP CLOSED AHEAD W20-53A

TO 13 SOUTH NORTH 45 45

COVER COVER

Green Bay Hortonville Oshkosh

COVER

SPEED LIMIT 35 W03-5

SOUTH EAST NORTH 45 54 45

COVER

SPEED LIMIT 35 R2-1 24"X30"

SIGN POST

SOUTH 45 M3-3 24"X12" M1-4 24"X24" RAMP CLOSED AHEAD W20-53A

WEST SOUTH 54 45

COVER

EMBARRASS RIVER

COVER

SIGN

N

234'WB' 236'WB' 238'WB' 240'WB' 242'WB' 244'WB' 246'WB'

34'EB' 36'EB' 38'EB' 40'EB' STH 54 42'EB' 44'EB' 46'EB'

500'

DRUMS @ 25' THRU TAPER

CONSTRUCT ASPHALTIC SURFACE TEMPORARY FOR STAGE 2 CRASH CUSHION UNDER FLAGGING OPERATIONS

COVER WITH GREEN LIME SPEED LIMIT 35 R2-1 24"X30"

TO 45 M04-5 24"X12" M1-4 24"X24" MO6-1 21"X21"

SEE PROJECT 1140-00-77 FOR REMAINING USH 45 DETOUR SIGNING

RIVER RD

ROAD WORK AHEAD W20-1A

USH 45

NORTH 45 M3-1 24"X12" M1-4 24"X24" RAMP CLOSED AHEAD W20-53A

EAST NORTH 54 45

COVER

Green Bay Clintonville Marion

COVER

R3-1 24"X24"

DRUMS @ 25' THRU RAMP LIMITS

RAMP CLOSED R11-2R 48"X30"

NORTH 45

COVER

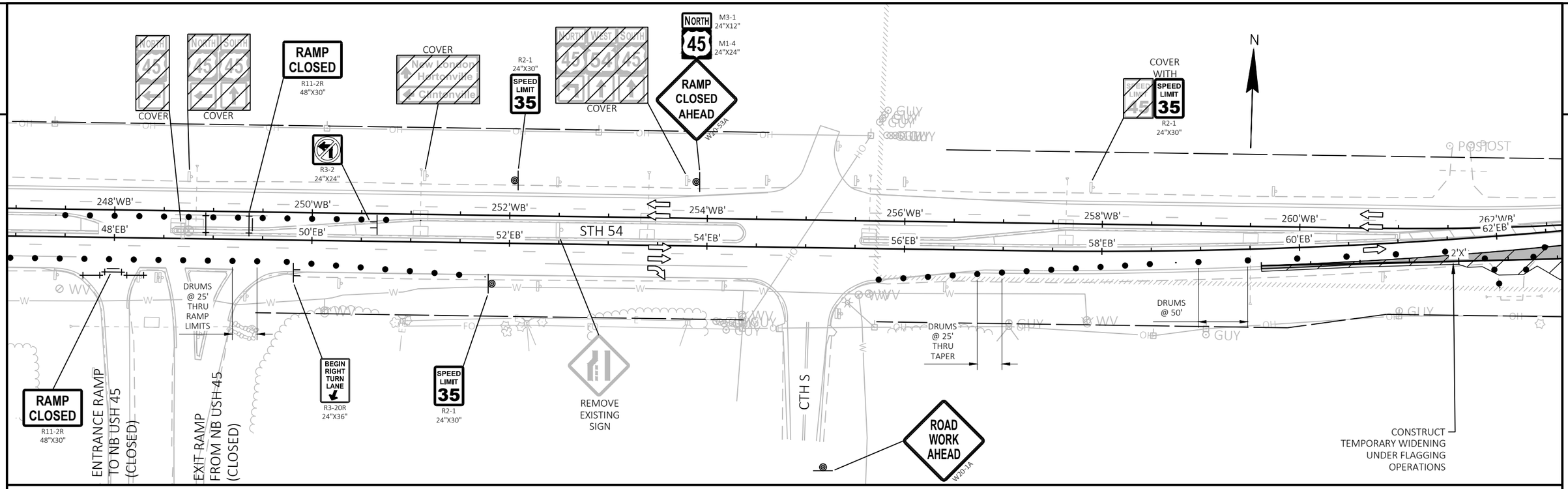
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 1	SHEET 165	E

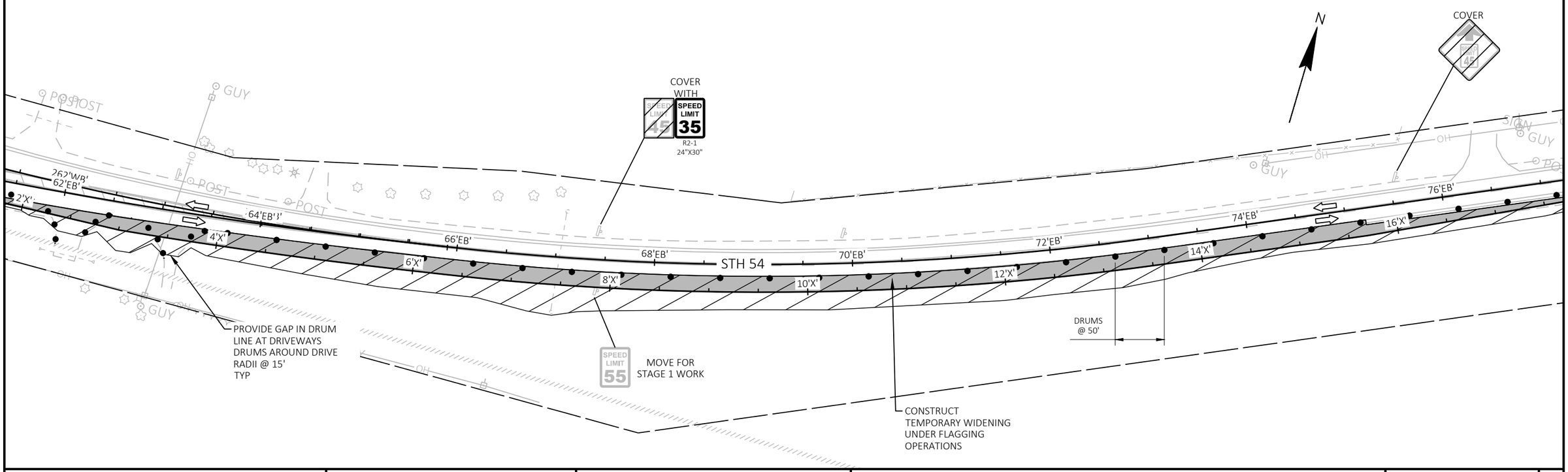
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026110_S1_54.DWG
LAYOUT NAME - E1

PLOT DATE : 6/28/2025 9:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2





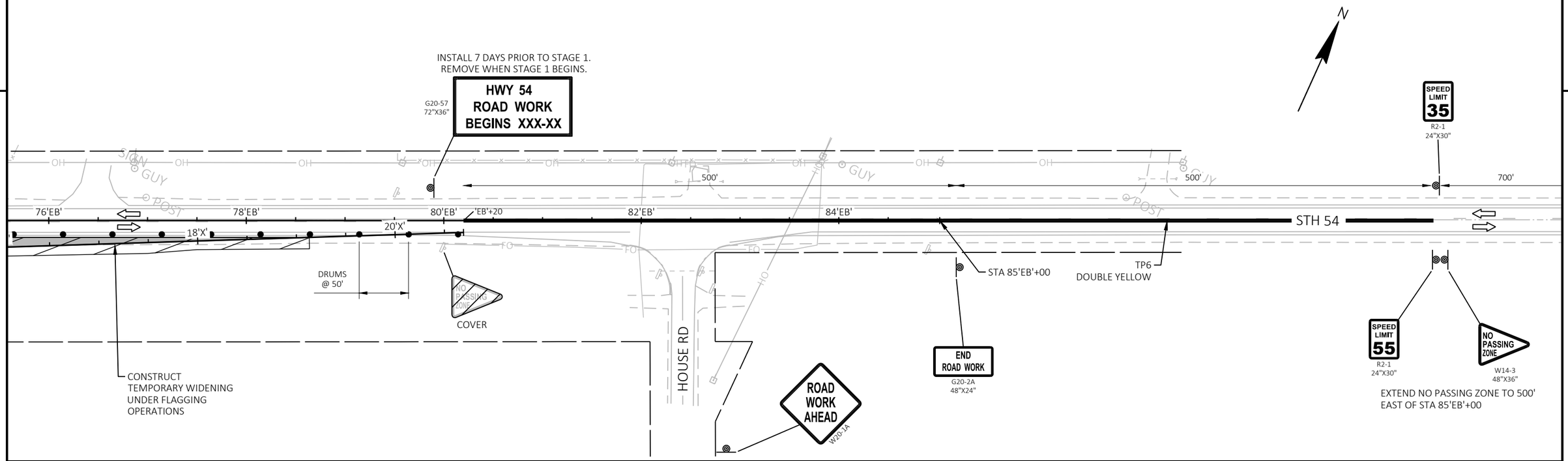
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 1	SHEET 166	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026110_S1_54.DWG
LAYOUT NAME - E2

PLOT DATE : 6/28/2025 9:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ############

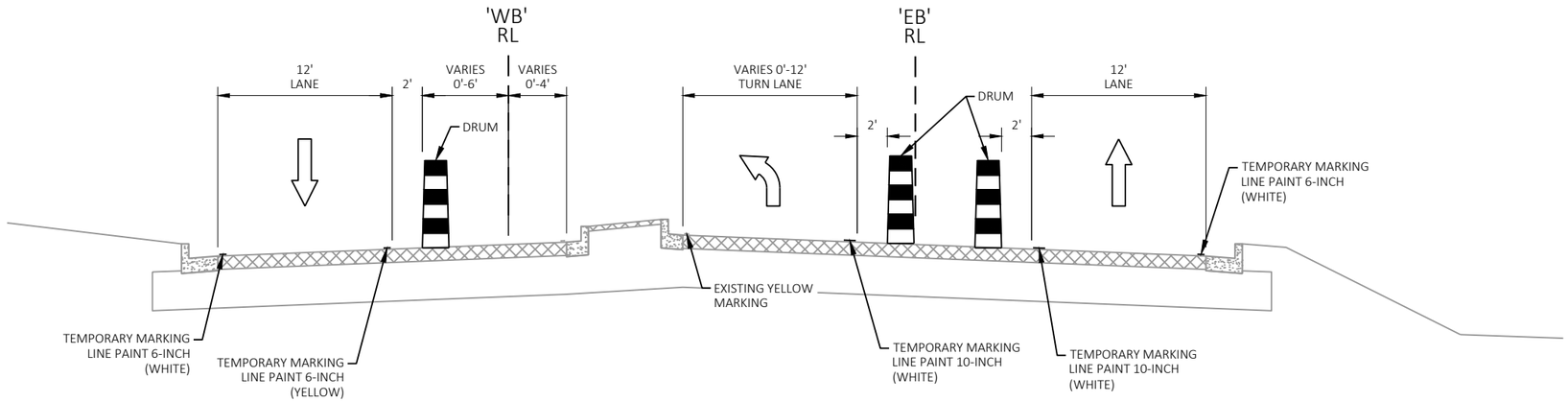
2

INSTALL 7 DAYS PRIOR TO STAGE 1.
REMOVE WHEN STAGE 1 BEGINS.



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 1	SHEET 167	E

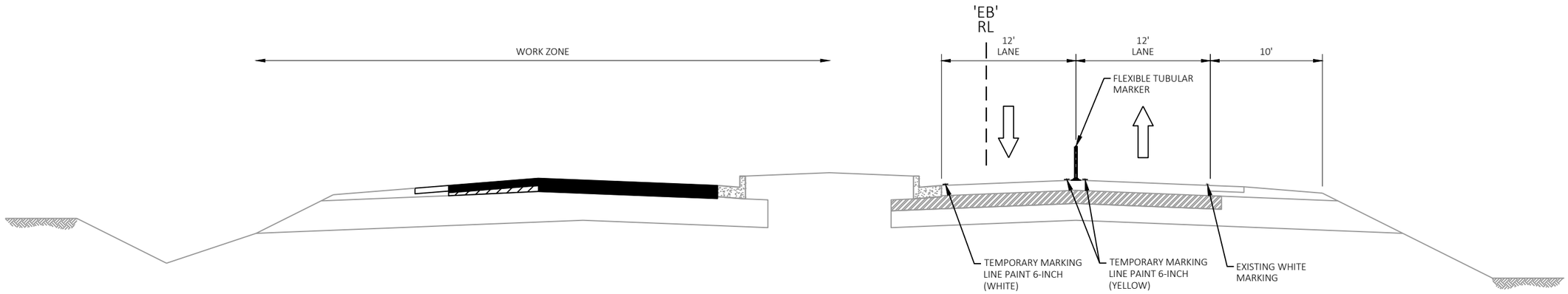
2



STAGE 2 TYPICAL SECTION

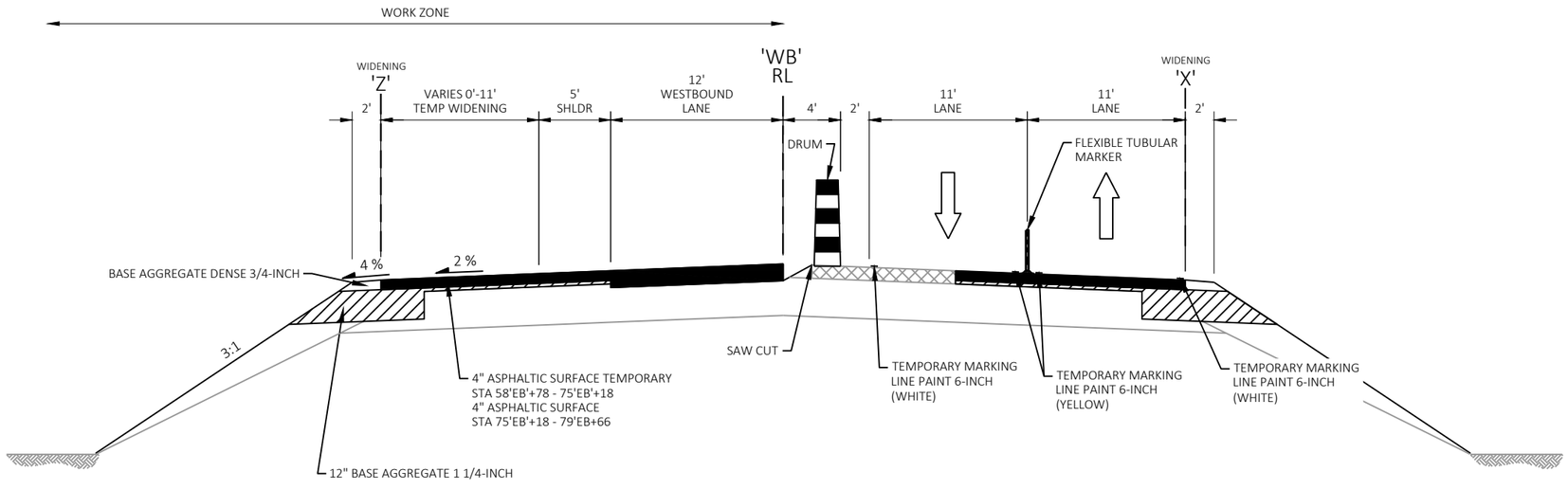
STA 8'EB'+75 - STA 18'EB'+00
STA 208'WB'+72 - STA 218'WB'+00

2



STAGE 2 TYPICAL SECTION

STA 24'EB'+00 - STA 58'EB'+78
STA 224'WB'+00 - STA 258'WB'+78



STAGE 2 TYPICAL SECTION

STA 58'EB'+78 - STA 78'EB'+63

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 2 - TYPICAL SECTIONS	SHEET 169	E

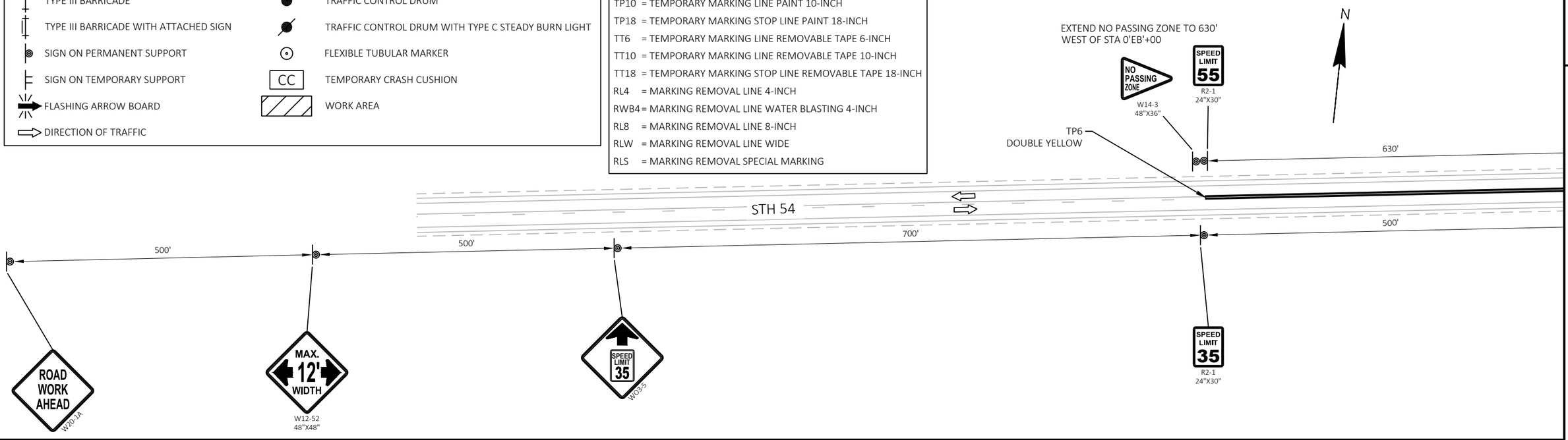
2

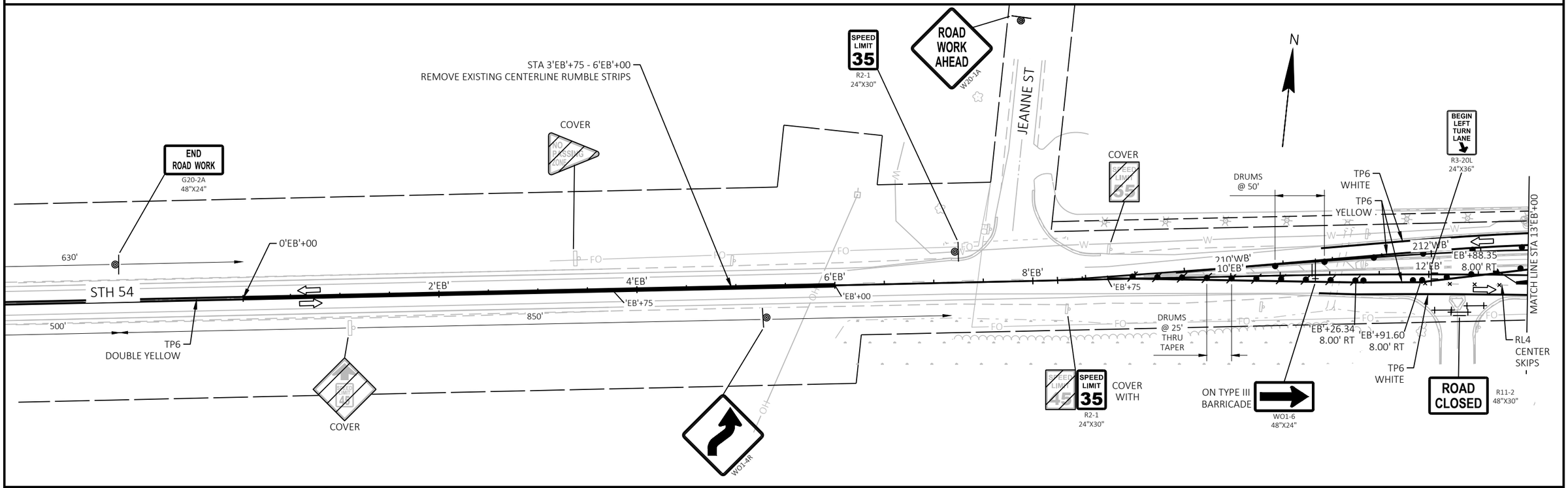
TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLEXIBLE TUBULAR MARKER
- CC — TEMPORARY CRASH CUSHION
- WORK AREA

TEMPORARY PAVEMENT MARKING LEGEND

TP6	= TEMPORARY MARKING LINE PAINT 6-INCH
TP10	= TEMPORARY MARKING LINE PAINT 10-INCH
TP18	= TEMPORARY MARKING STOP LINE PAINT 18-INCH
TT6	= TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
TT10	= TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
TT18	= TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
RL4	= MARKING REMOVAL LINE 4-INCH
RWB4	= MARKING REMOVAL LINE WATER BLASTING 4-INCH
RL8	= MARKING REMOVAL LINE 8-INCH
RLW	= MARKING REMOVAL LINE WIDE
RLS	= MARKING REMOVAL SPECIAL MARKING

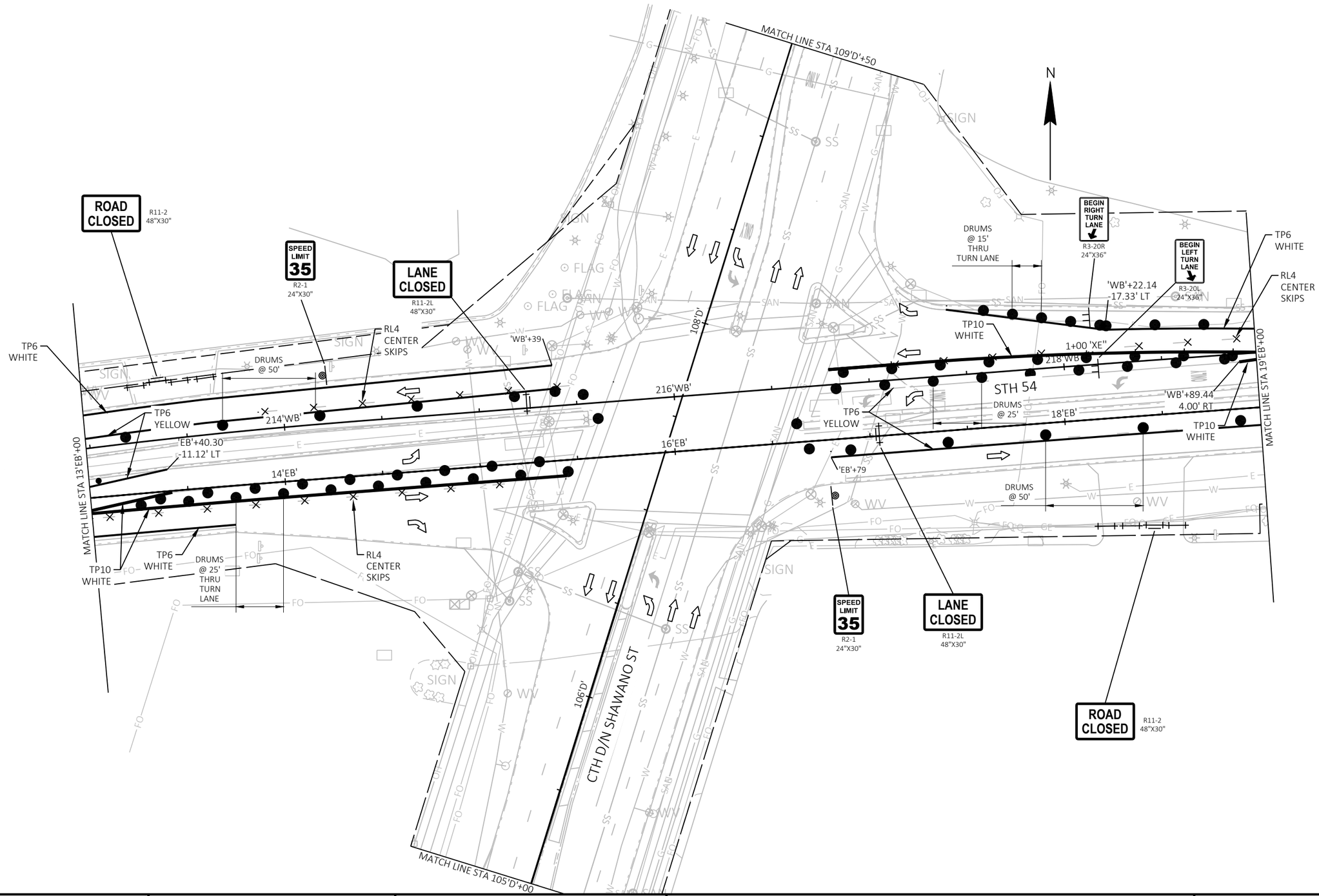




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 2	SHEET 170	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026210_S2_54.DWG
LAYOUT NAME - W1
PLOT DATE : 6/28/2025 9:34 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 2 - CTH D INTERSECTION	SHEET 171	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026210_S2_54.DWG
LAYOUT NAME - int
PLOT DATE : 6/28/2025 9:34 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

ROAD CLOSED
R11-2
48"X30"

BEGIN LEFT TURN LANE
R3-20L
24"X36"

ON TYPE III BARRICADE
WO1-6
48"X24"

SPEED LIMIT 35
R2-1
24"X30"

WO6-1

RAMP CLOSED
R11-2R
48"X30"

EXIT RAMP FROM SB USH 45 (CLOSED)

ENTRANCE RAMP TO SB USH 45 (CLOSED)

R3-1
24"X24"

WO1-4R

N

SOUTH 45 TO 15
COVERED IN STAGE 1

Waupaca
Hortonville
Oshkosh
COVERED IN STAGE 1

RL4
CENTER SKIPS

RL4

TP6 WHITE

DRUMS @ 25' THRU CROSS OVER

DRUMS @ 15' THRU RAMP LIMITS

MATCH LINE STA 19'EB'+00

00 'XE"
WB'+21.67
1.74' RT

220'WB'
3+00 'XE"
20'EB'

4+00 'XE"
22'EB' 'XE"

222'WB'

6+00 'XE"
24'EB'

224'WB'

TP6 WHITE

STH 54

226'WB'
26'EB'

228'WB'
28'EB'

230'WB'
30'EB'

232'WB'
32'EB'

RL4

DRUMS
FLEXIBLE TUBULAR MARKERS

STA 21'EB'+40

TP6 YELLOW

DRUMS @ 50'

ONE WAY
R6-2R
24"X30"

SPEED LIMIT 45
SPEED LIMIT 35
R2-1
24"X30"
COVER WITH

PROVIDE GAP IN FLEXIBLE TUBULAR MARKERS AT DRIVEWAYS & INTERSECTIONS TYP

SOUTH 45
RAMP CLOSED AHEAD
FROM STAGE 1

TO 15
SOUTH 45
NORTH 45
COVERED IN STAGE 1

TP6 DOUBLE YELLOW

FLEXIBLE TUBULAR MARKERS @ 50' TYP

Green Bay
Hortonville
Oshkosh
COVERED IN STAGE 1

WRONG WAY
COVER

WO6-3

R3-2
24"X24"

SOUTH 45
EAST 54
NORTH 45
COVERED IN STAGE 1

DO NOT ENTER
COVER

SPEED LIMIT 35
FROM STAGE 1

SOUTH 45
M3-3
24"X12"
M1-4
24"X24"
RAMP CLOSED AHEAD
W20-3A

WEST 54
SOUTH 45
COVERED IN STAGE 1
MOVE FOR STAGE 2 WORK

EMBARRASS RIVER

WO6-3

ON TYPE III BARRICADE
WO1-7
48"X24"

MOVE FOR STAGE 2 WORK
ONE WAY

DRUMS @ 15' THRU TURN LANE

TO 15
COVERED IN STAGE 1
MOVE FOR STAGE 2 WORK

MOVE FOR STAGE 2 WORK
SPEED LIMIT 45

SIGN

MAINTAIN DRIVE ACCESS
DELINEATE WITH DRUMS @ 15' TYP

N

TP6 WHITE

234'WB'
34'EB'

236'WB'
36'EB'

238'WB'
38'EB'

240'WB'
40'EB'

STH 54

242'WB'
42'EB'

244'WB'
44'EB'

246'WB'
46'EB'

CRASH CUSHION TEMPORARY

TP6 DOUBLE YELLOW

FLEXIBLE TUBULAR MARKERS @ 50' TYP

'EB'+41.86
19.00' RT

TP6 WHITE

DRUMS @ 25' THRU RAMP LIMITS

Green Bay
Clintonville
Marion
COVERED IN STAGE 1

RAMP CLOSED
FROM STAGE 1

NORTH 45
COVERED IN STAGE 1

DO NOT ENTER
COVER

SPEED LIMIT 45
SPEED LIMIT 35
COVERED IN STAGE 1

ONE WAY
COVER

RIVER RD

USH 45

WO6-3

NORTH 45
RAMP CLOSED AHEAD
FROM STAGE 1

EAST 54
NORTH 45
COVERED IN STAGE 1

TO 45
FROM STAGE 1

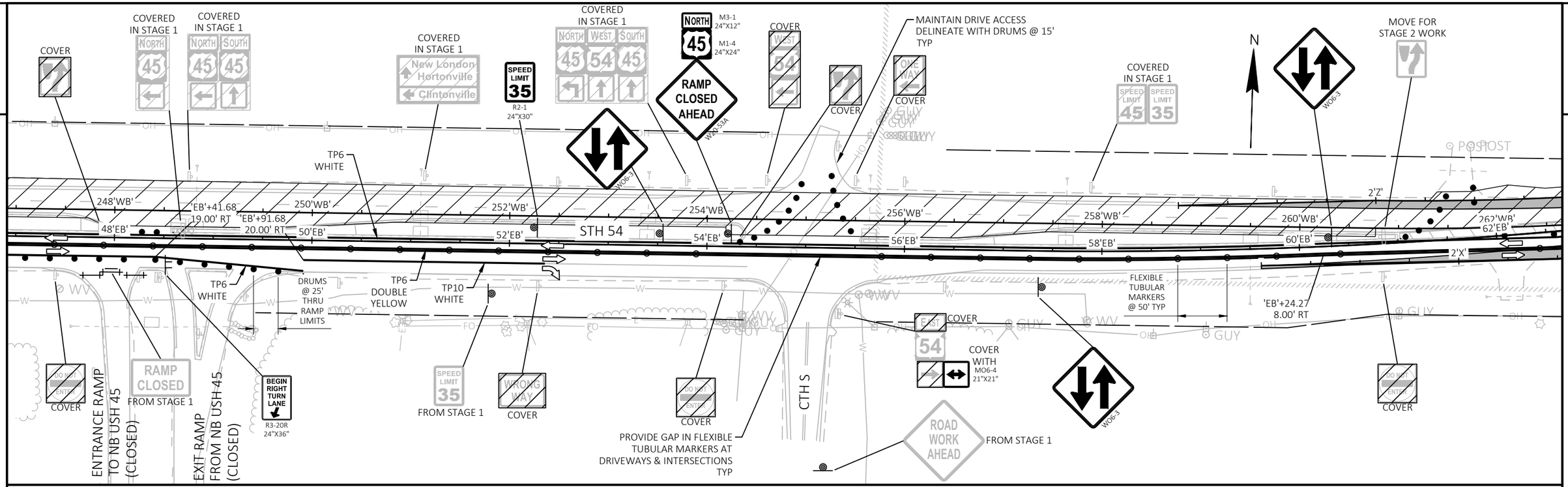
SEE PROJECT 1140-00-77 FOR REMAINING USH 45 DETOUR SIGNING

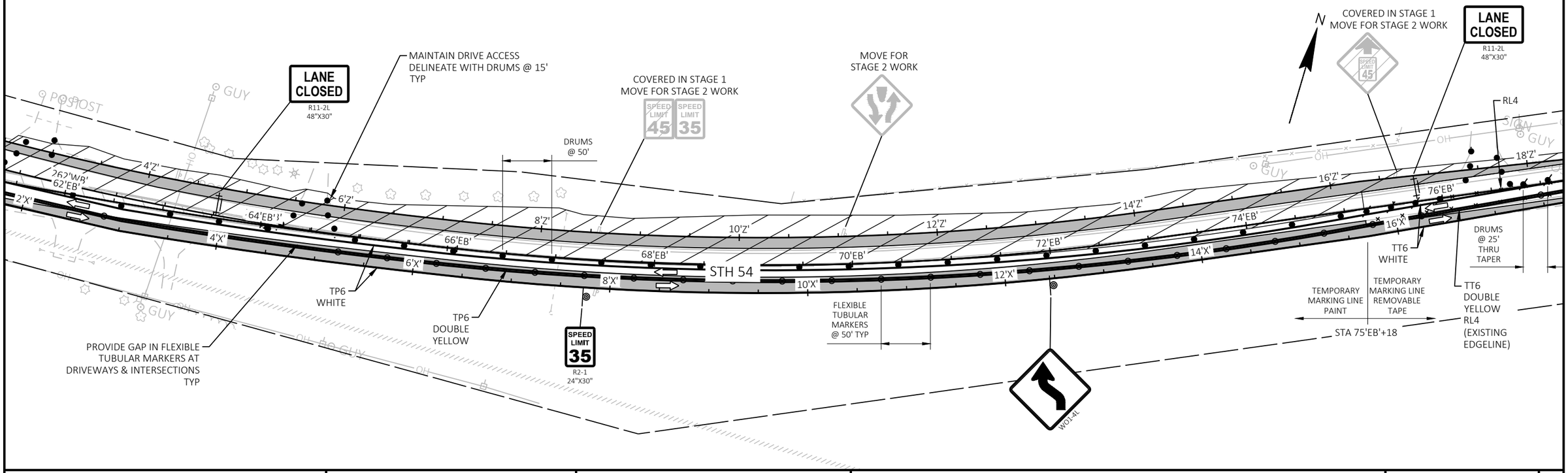
WRONG WAY
COVER

PROVIDE GAP IN FLEXIBLE TUBULAR MARKERS AT DRIVEWAYS & INTERSECTIONS TYP

ROAD WORK AHEAD
FROM STAGE 1

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 2	SHEET 172	E

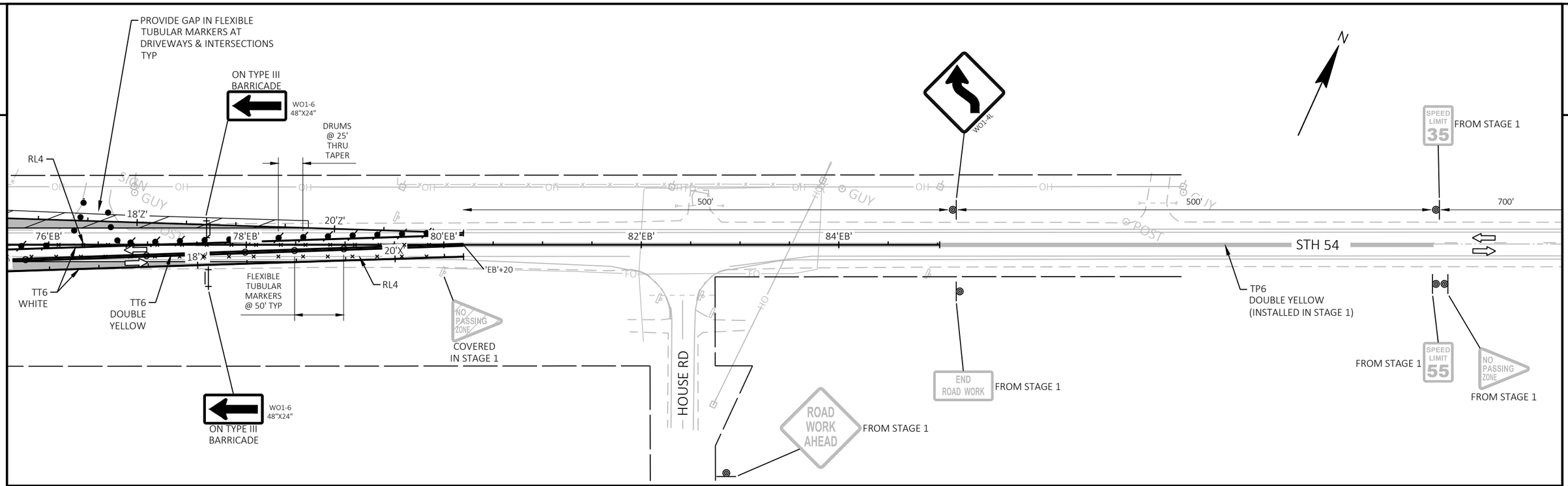




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 2	SHEET 173	E

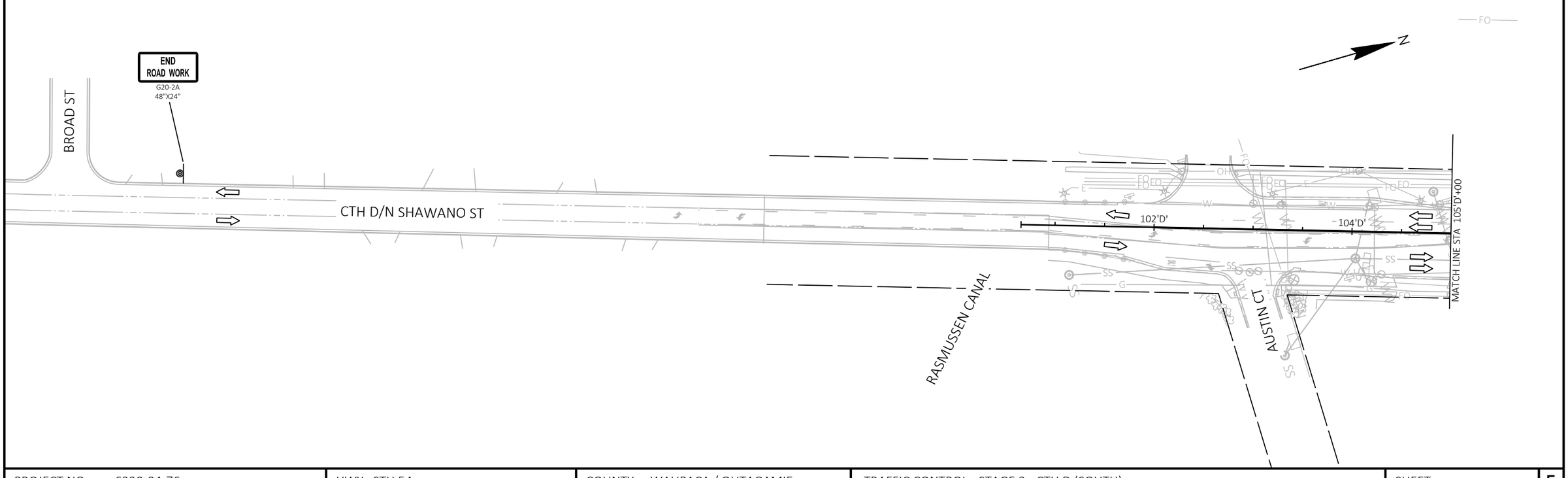
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026210_S2_54.DWG
LAYOUT NAME - E2
PLOT DATE : 6/28/2025 9:34 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 2	SHEET 174	E

2

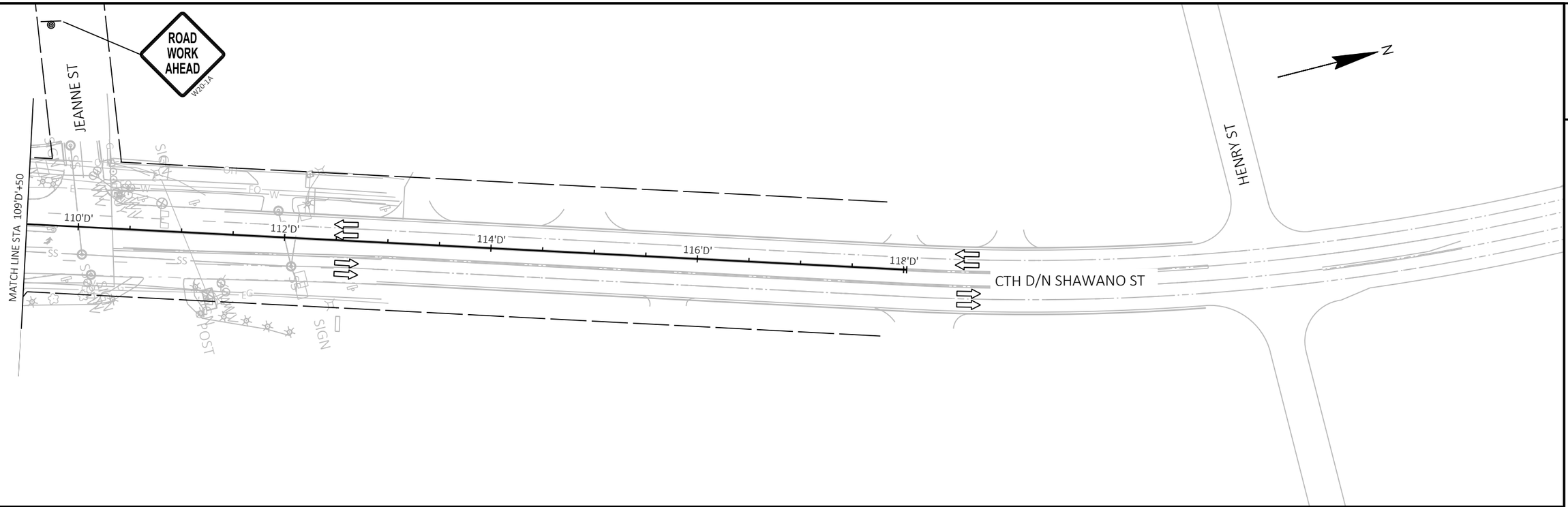


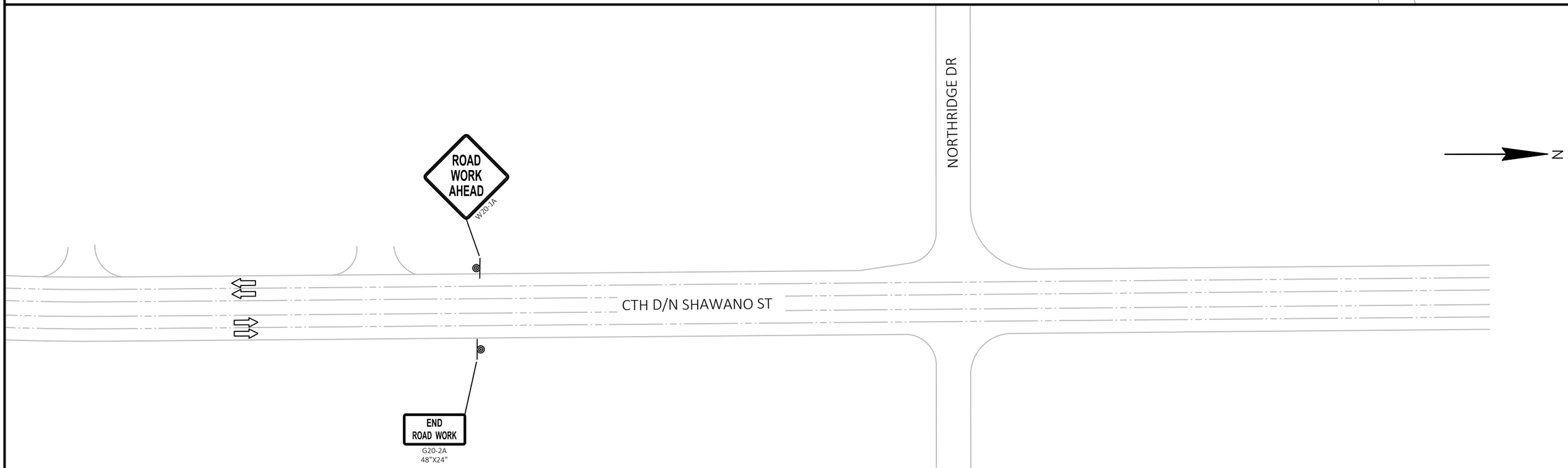
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 2 - CTH D (SOUTH)	SHEET 175	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026210_S2_54.DWG
LAYOUT NAME - CTH D S

PLOT DATE : 6/28/2025 9:34 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

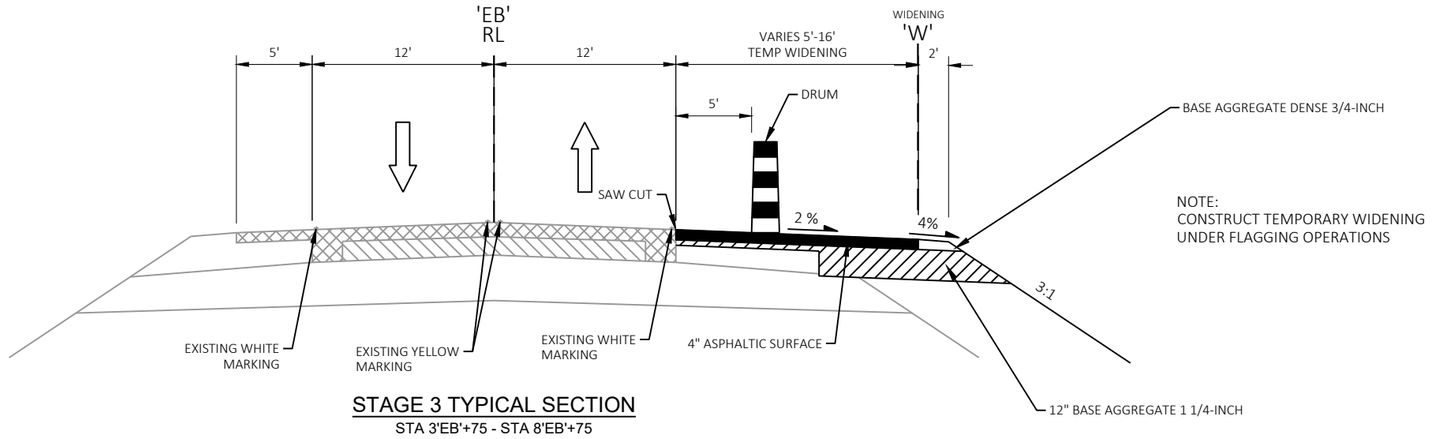




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 2 - CTH D (NORTH)	SHEET 176	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026210_S2_54.DWG
LAYOUT NAME - CTH D N

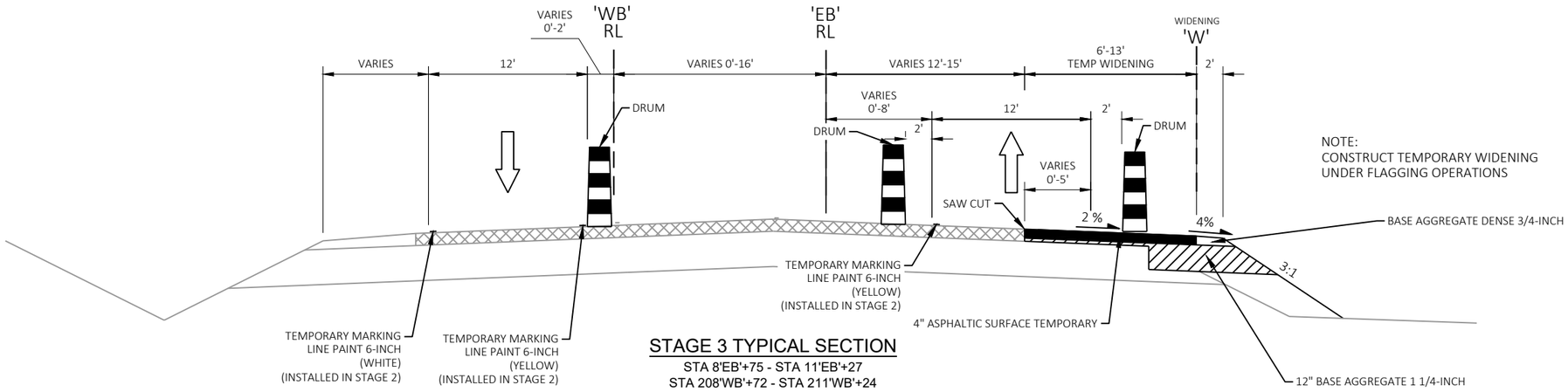
PLOT DATE : 6/28/2025 9:35 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ##########



NOTE:
CONSTRUCT TEMPORARY WIDENING
UNDER FLAGGING OPERATIONS

STAGE 3 TYPICAL SECTION

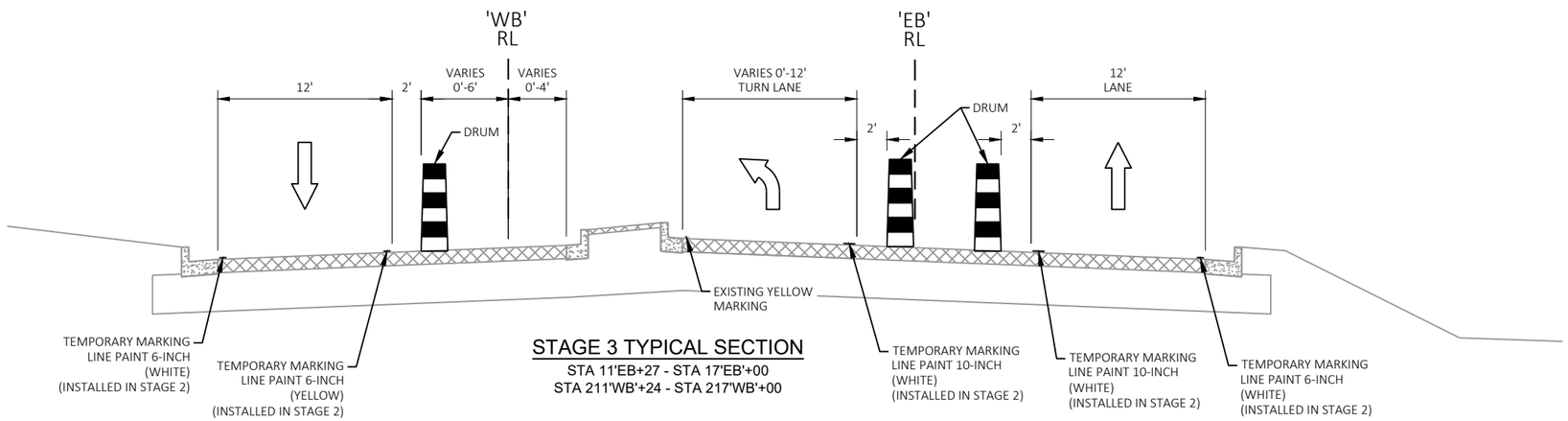
STA 3'EB'+75 - STA 8'EB'+75



NOTE:
CONSTRUCT TEMPORARY WIDENING
UNDER FLAGGING OPERATIONS

STAGE 3 TYPICAL SECTION

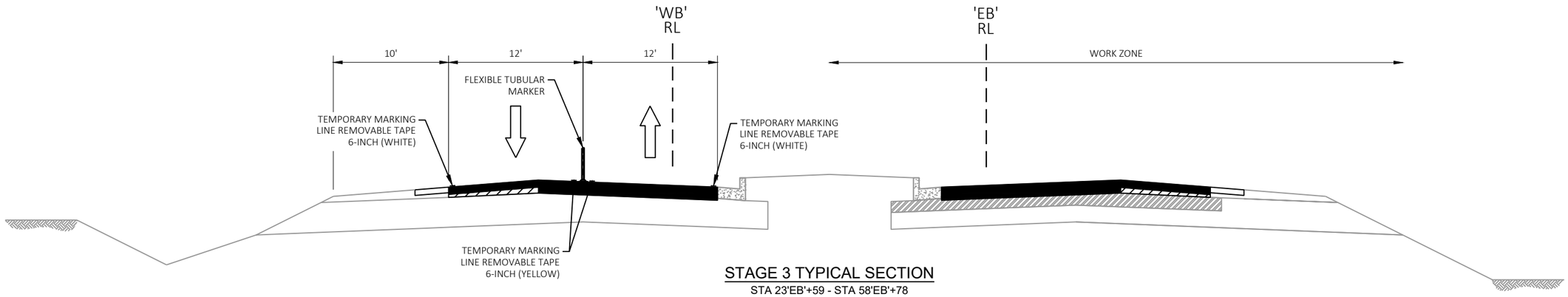
STA 8'EB'+75 - STA 11'EB'+27
STA 208'WB'+72 - STA 211'WB'+24



STAGE 3 TYPICAL SECTION

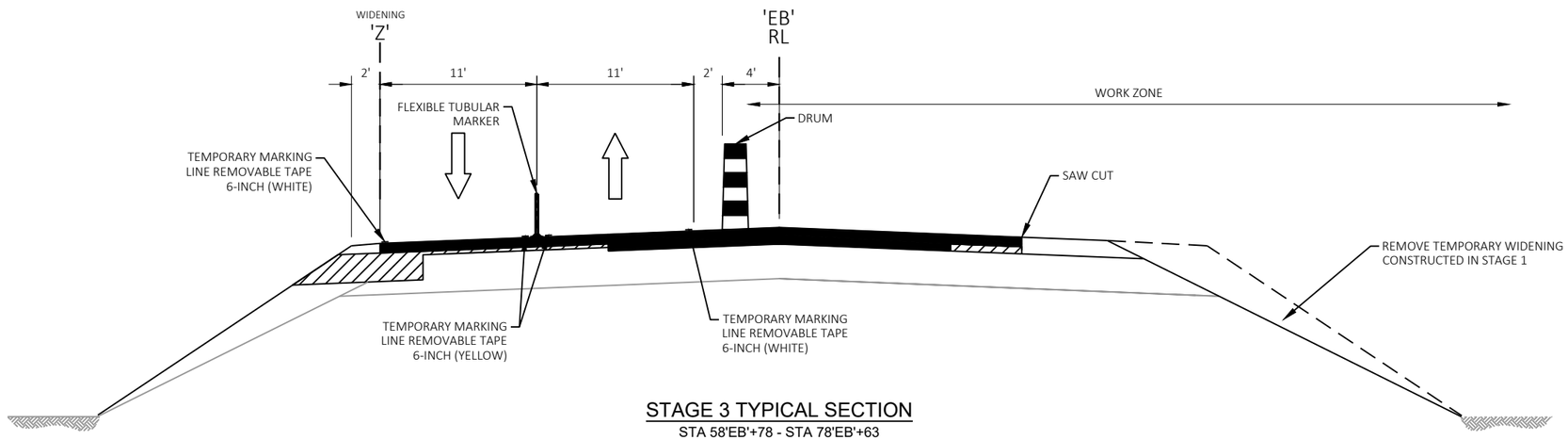
STA 11'EB'+27 - STA 17'EB'+00
STA 211'WB'+24 - STA 217'WB'+00

2



STAGE 3 TYPICAL SECTION

STA 23'EB'+59 - STA 58'EB'+78
STA 223'WB'+59 - STA 258'WB'+78



STAGE 3 TYPICAL SECTION

STA 58'EB'+78 - STA 78'EB'+63

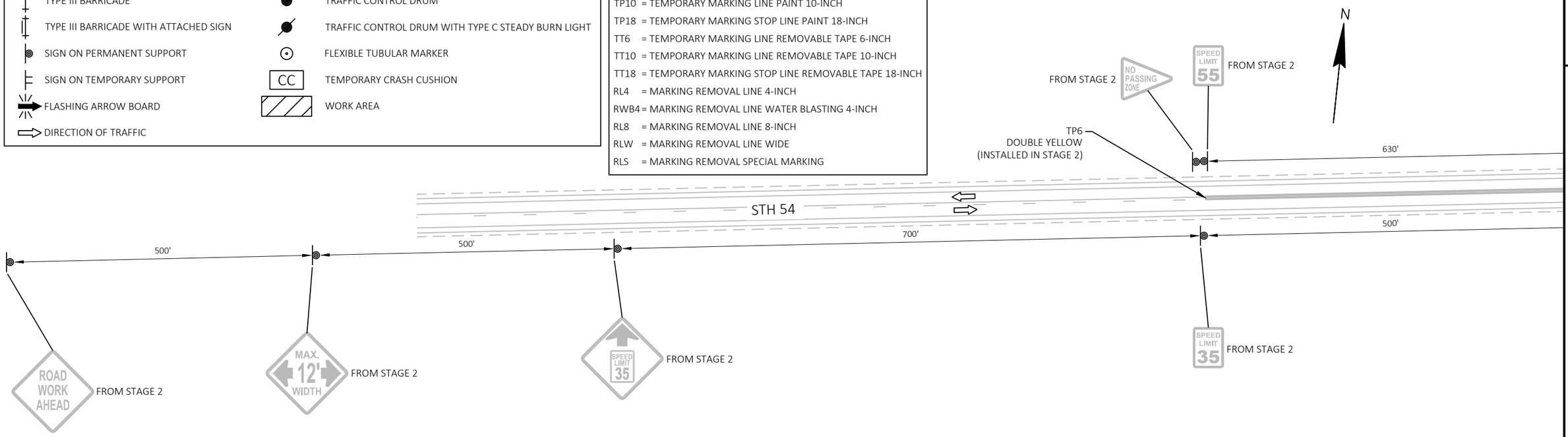
2

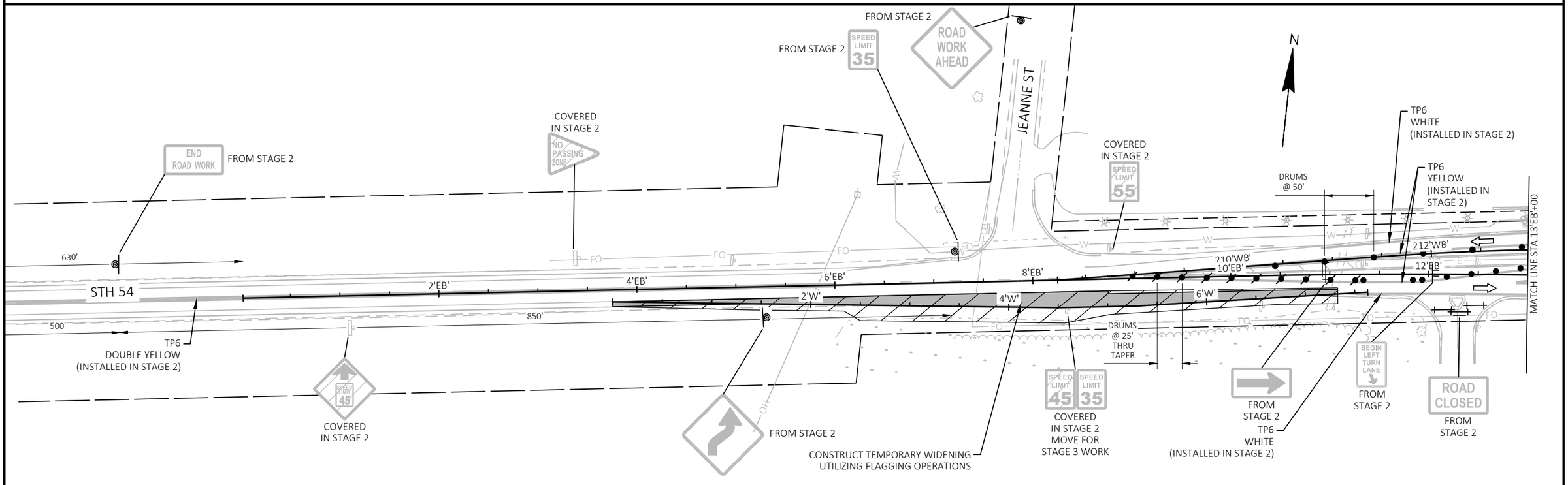
TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLEXIBLE TUBULAR MARKER
- CC — TEMPORARY CRASH CUSHION
- WORK AREA

TEMPORARY PAVEMENT MARKING LEGEND

TP6 = TEMPORARY MARKING LINE PAINT 6-INCH
TP10 = TEMPORARY MARKING LINE PAINT 10-INCH
TP18 = TEMPORARY MARKING STOP LINE PAINT 18-INCH
TT6 = TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
TT10 = TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
TT18 = TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
RL4 = MARKING REMOVAL LINE 4-INCH
RWB4 = MARKING REMOVAL LINE WATER BLASTING 4-INCH
RL8 = MARKING REMOVAL LINE 8-INCH
RLW = MARKING REMOVAL LINE WIDE
RLS = MARKING REMOVAL SPECIAL MARKING

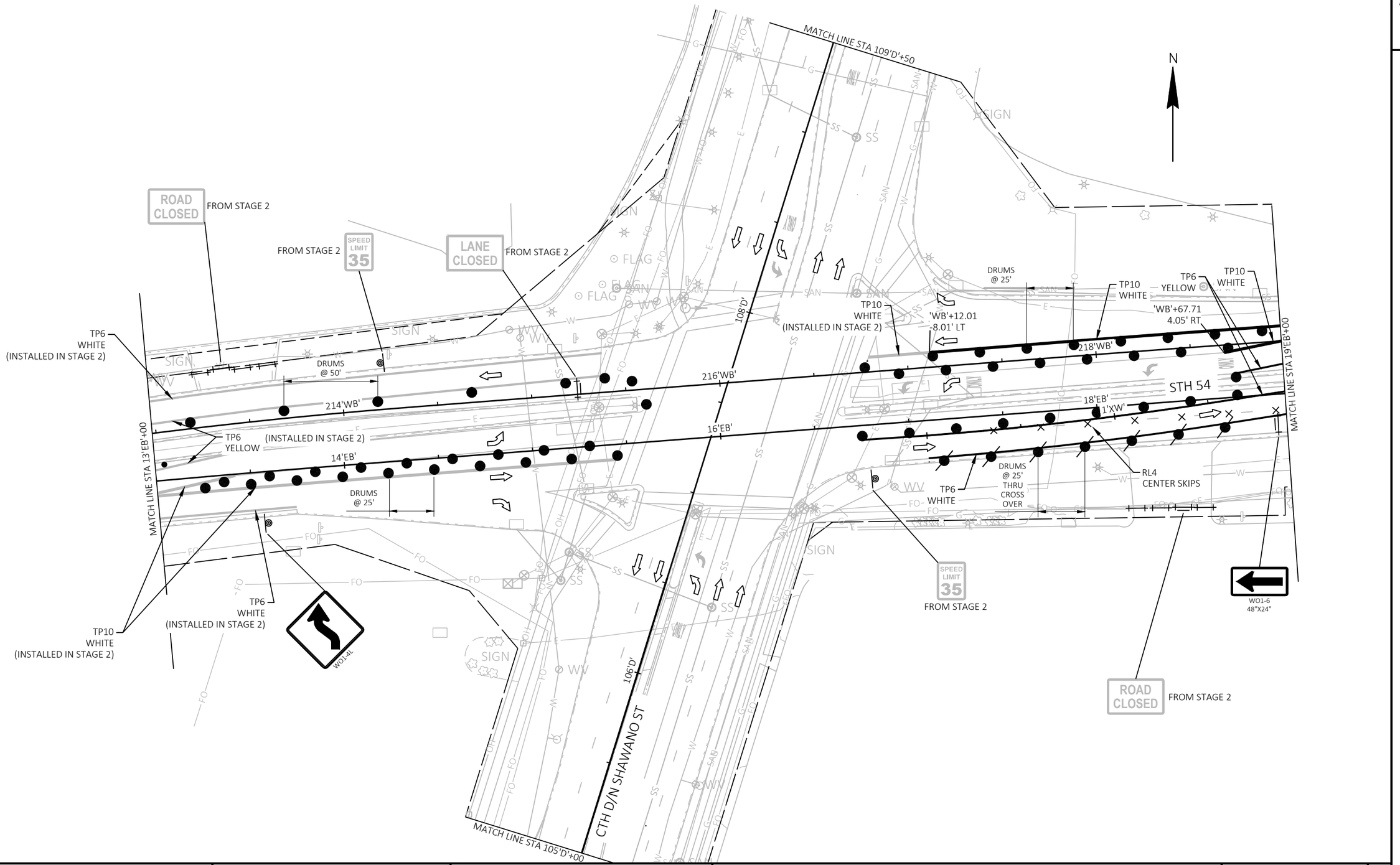




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3	SHEET 179	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026310_S3_54.DWG
LAYOUT NAME - W1
PLOT DATE : 6/28/2025 10:04 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

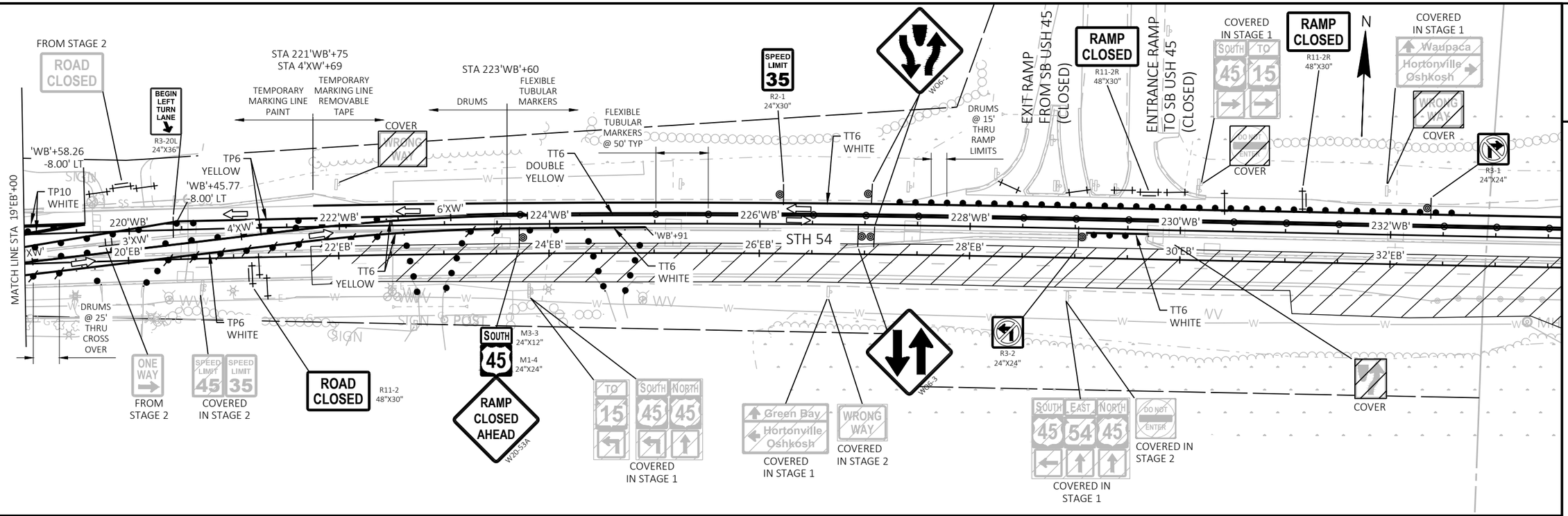
2

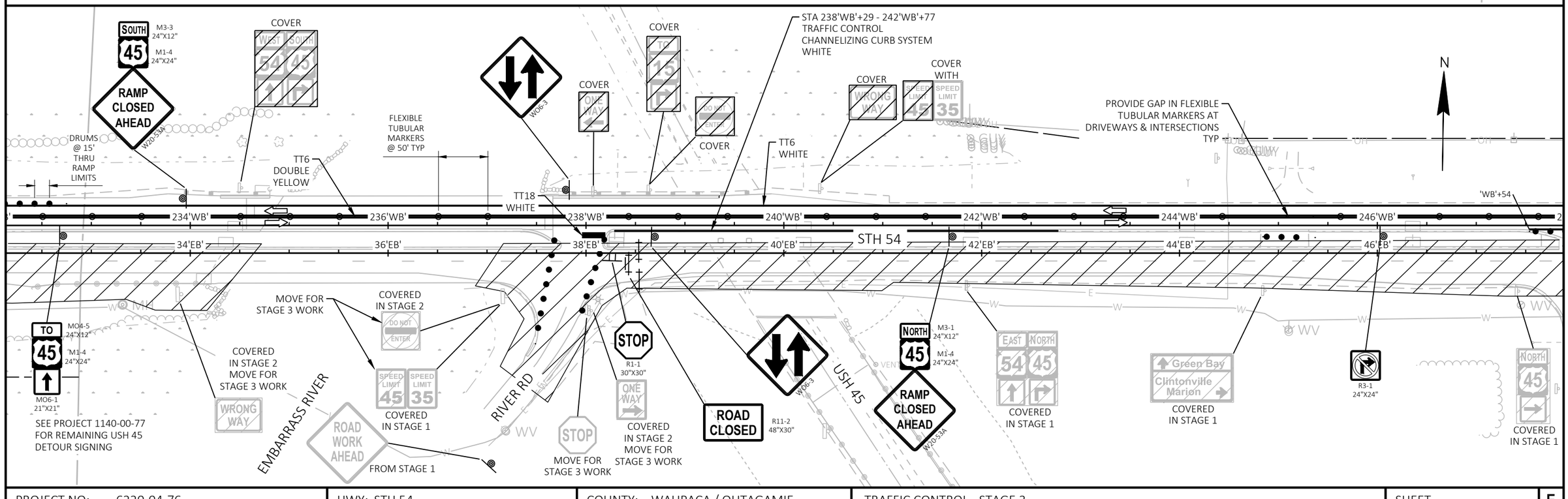


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3 - CTH D INTERSECTION	SHEET 180	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026310_S3_54.DWG
LAYOUT NAME - int

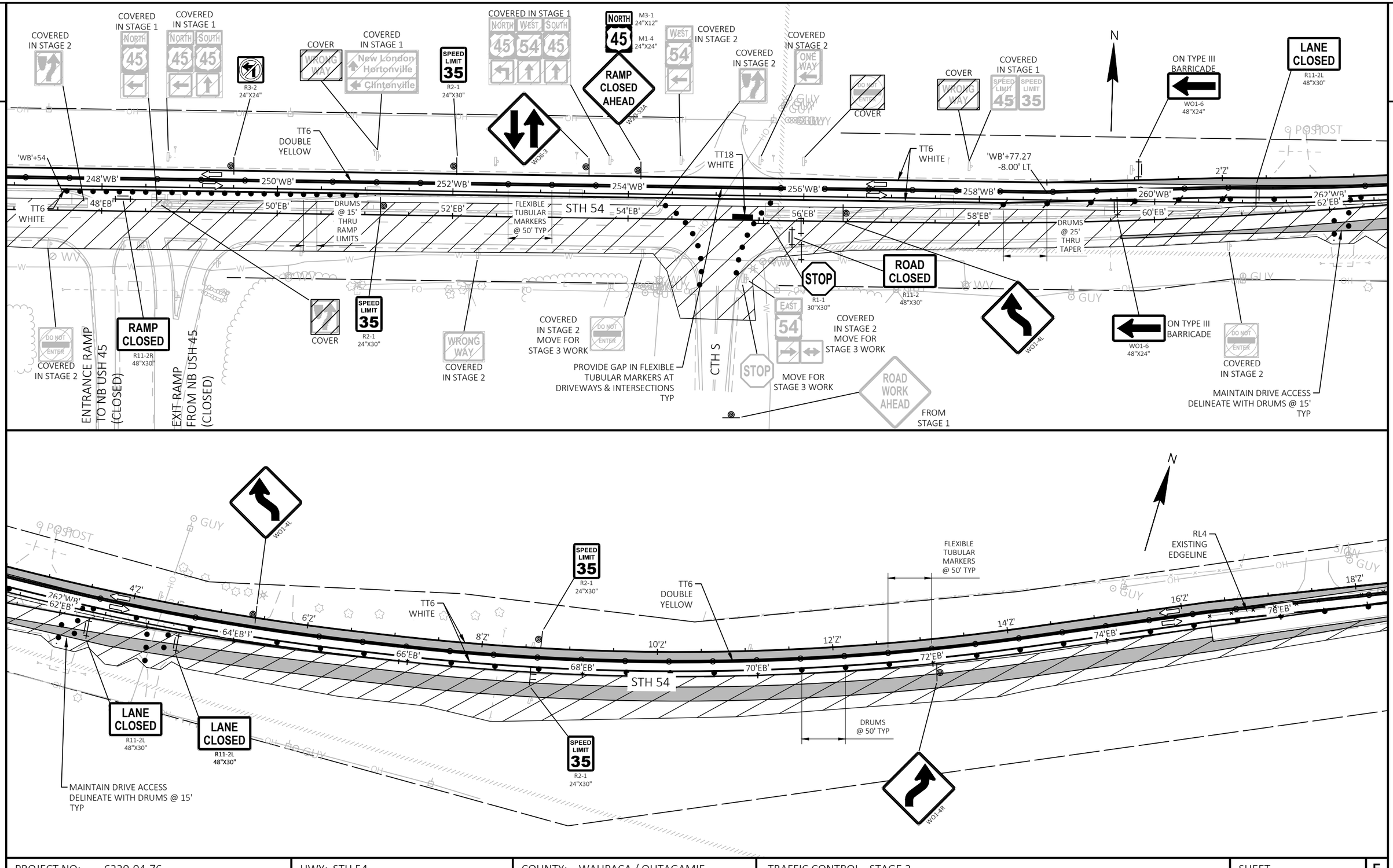
PLOT DATE : 6/28/2025 10:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:50 FT





PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3	SHEET 181	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026310_S3_54.DWG
LAYOUT NAME - E1
PLOT DATE : 6/28/2025 10:04 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

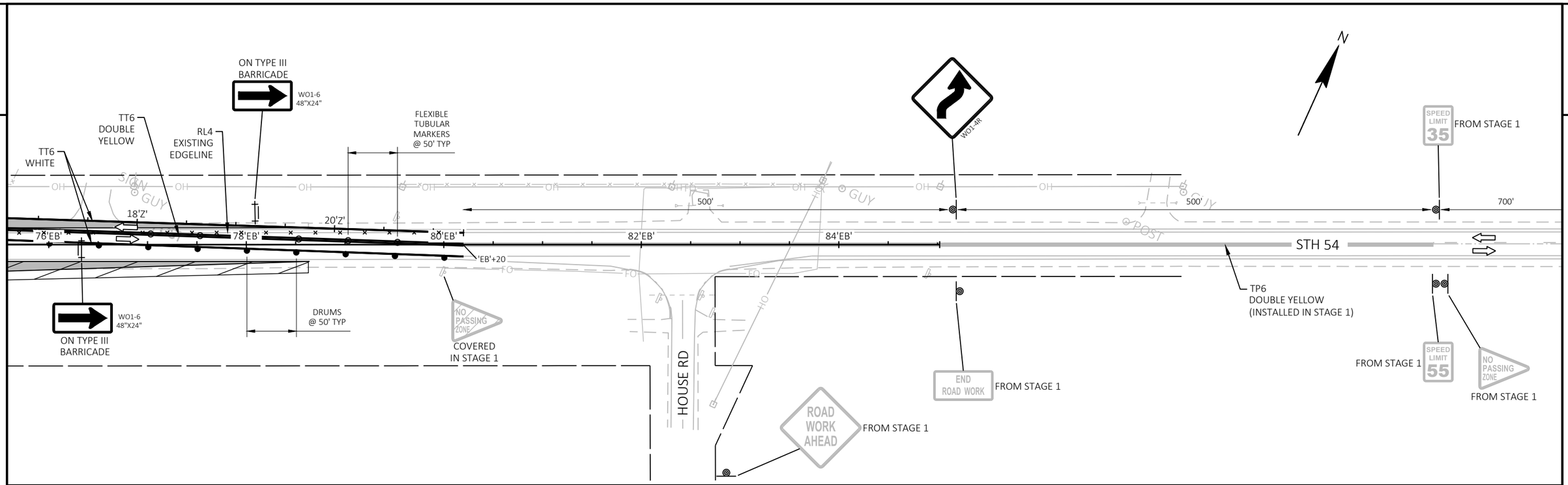


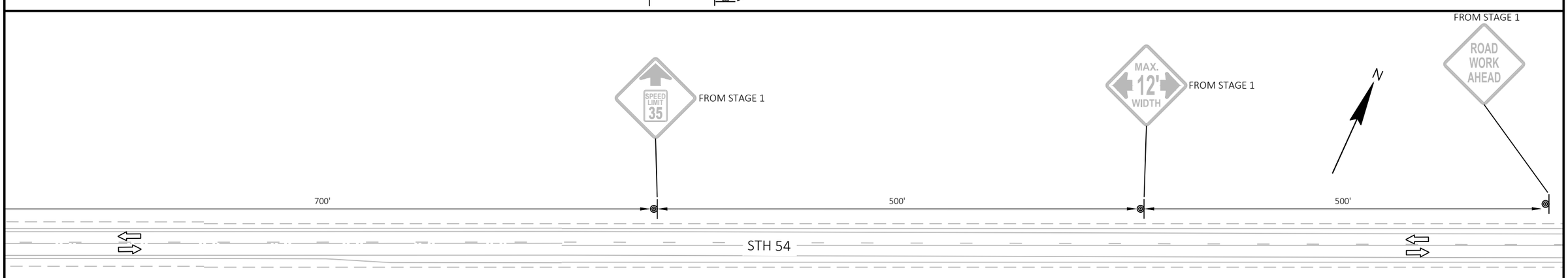
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3	SHEET 182	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026310_S3_54.DWG
LAYOUT NAME - E2

PLOT DATE : 6/28/2025 10:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ############

2





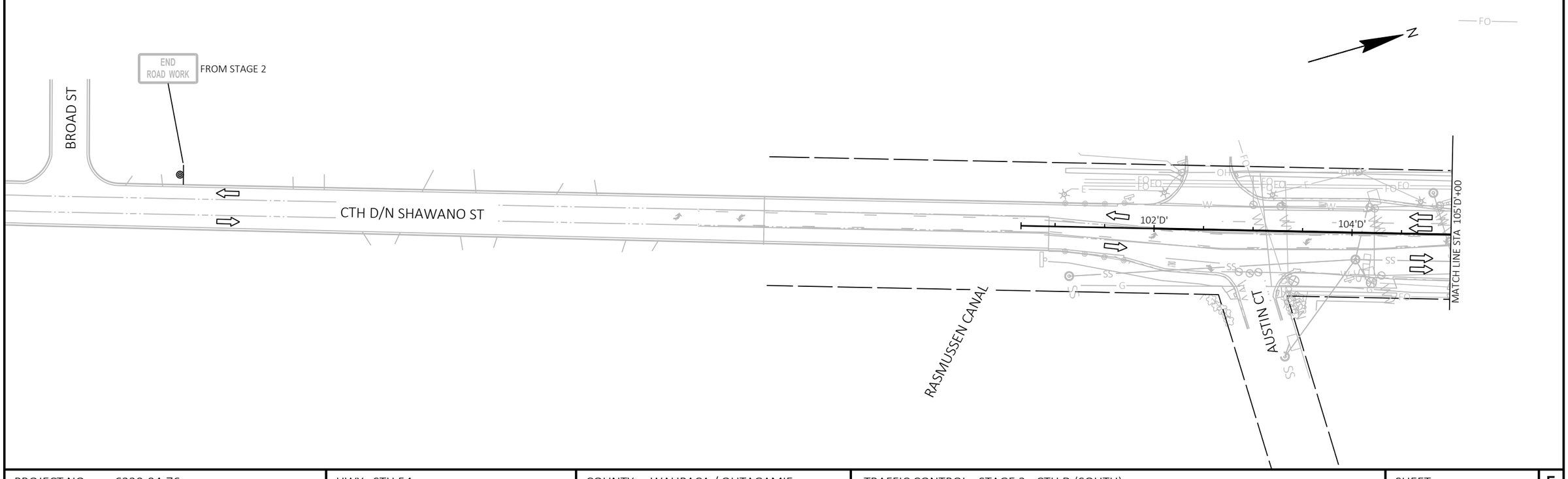
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3	SHEET 183	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026310_S3_54.DWG
LAYOUT NAME - E3

PLOT DATE : 6/28/2025 10:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ###

WISDOT/CADDS SHEET 44

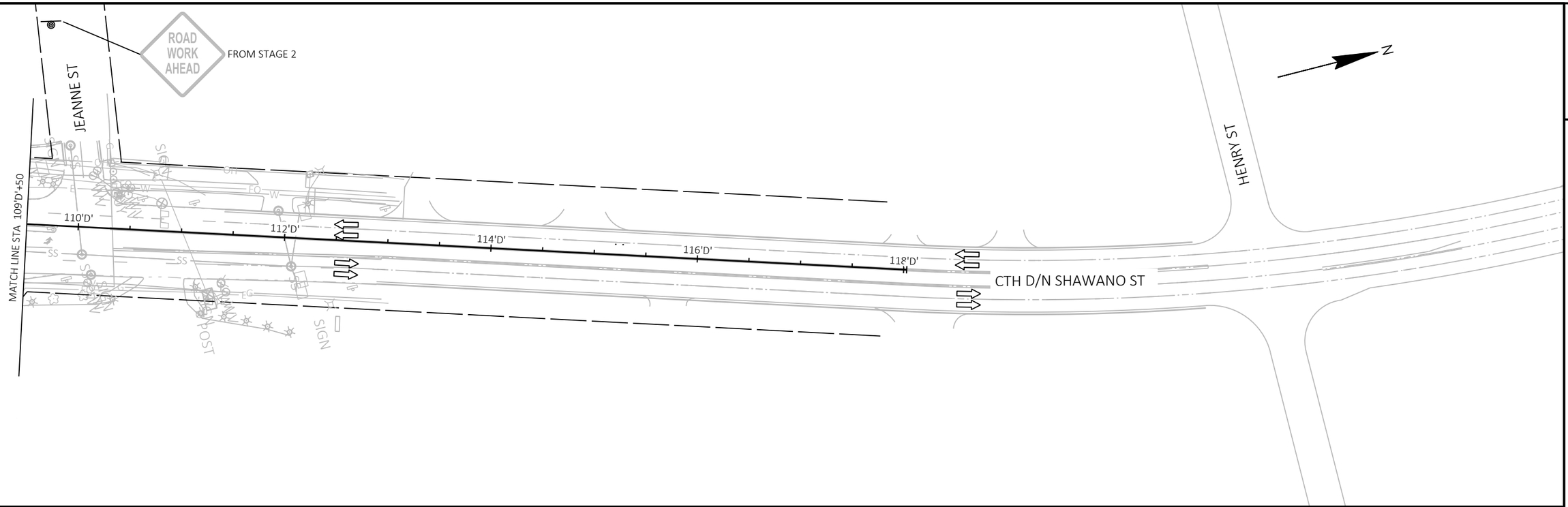
2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3 - CTH D (SOUTH)	SHEET 184	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026310_S3_54.DWG
LAYOUT NAME - CTH D S

PLOT DATE : 6/28/2025 10:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

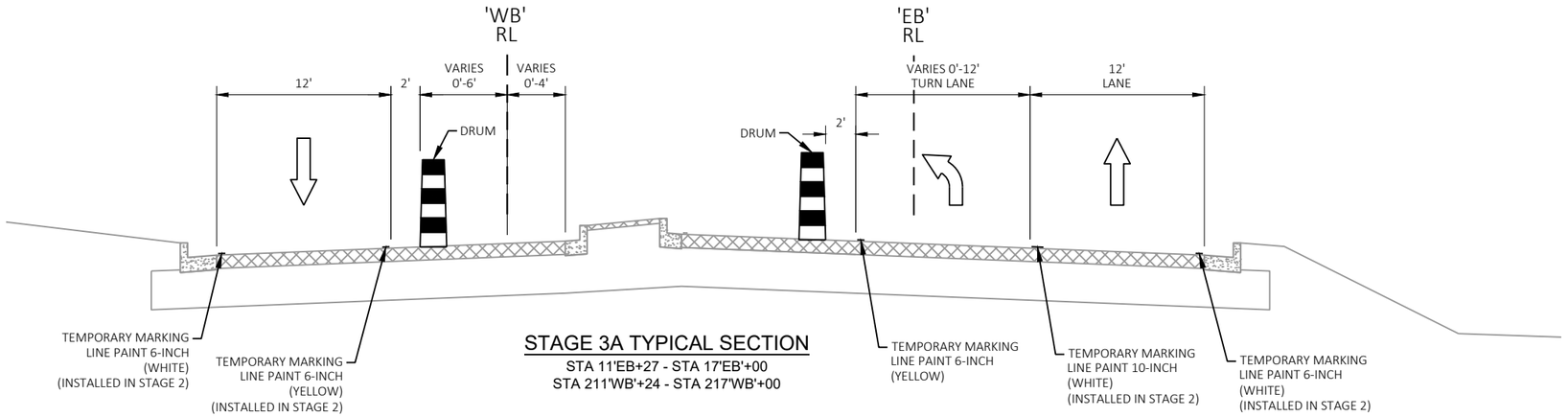


2

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3 - CTH D (NORTH)	SHEET 185	E

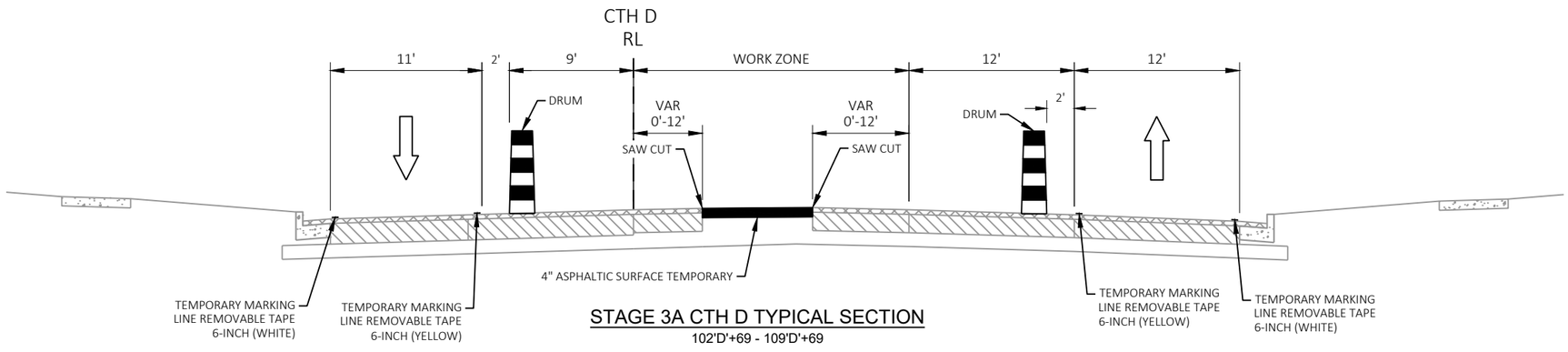
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026310_S3_54.DWG
LAYOUT NAME - CTH D N
PLOT DATE : 6/28/2025 10:05 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

NOTE:
ALL OTHER TRAFFIC CONTROL TYPICAL SECTIONS
FOR STAGE 3A ARE THE SAME AS STAGE 3



STAGE 3A TYPICAL SECTION

STA 11'EB+27 - STA 17'EB'+00
STA 211'WB'+24 - STA 217'WB'+00



STAGE 3A CTH D TYPICAL SECTION

102'D'+69 - 109'D'+69

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 3A - TYPICAL SECTIONS	SHEET 186	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\999999_TC_TYPICAL SHELL_54.DWG
LAYOUT NAME - 3A-1
PLOT DATE : 6/28/2025 10:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

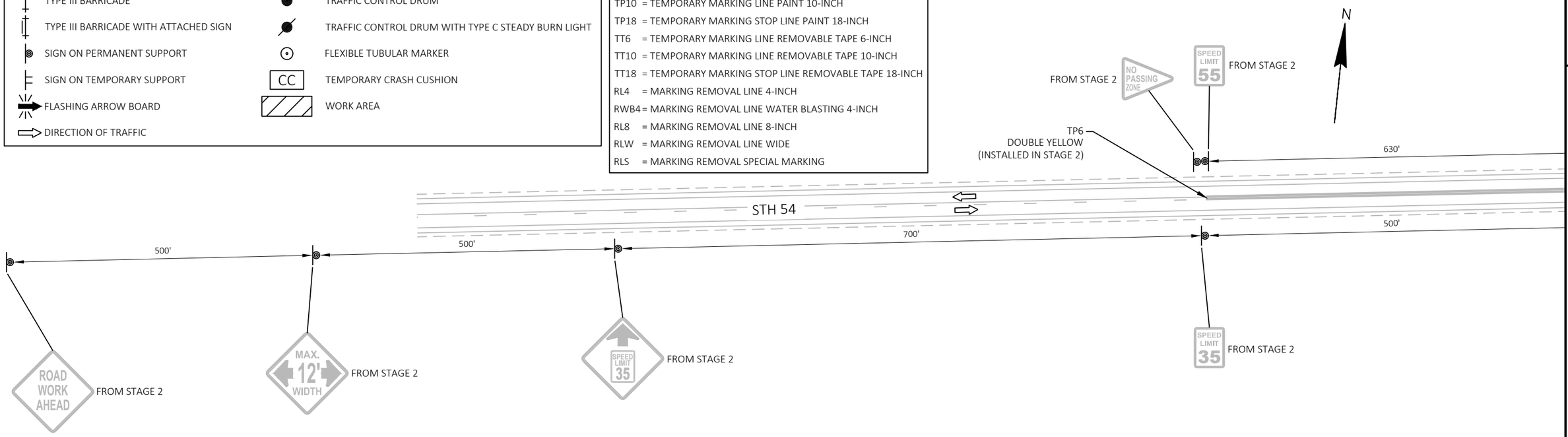
2

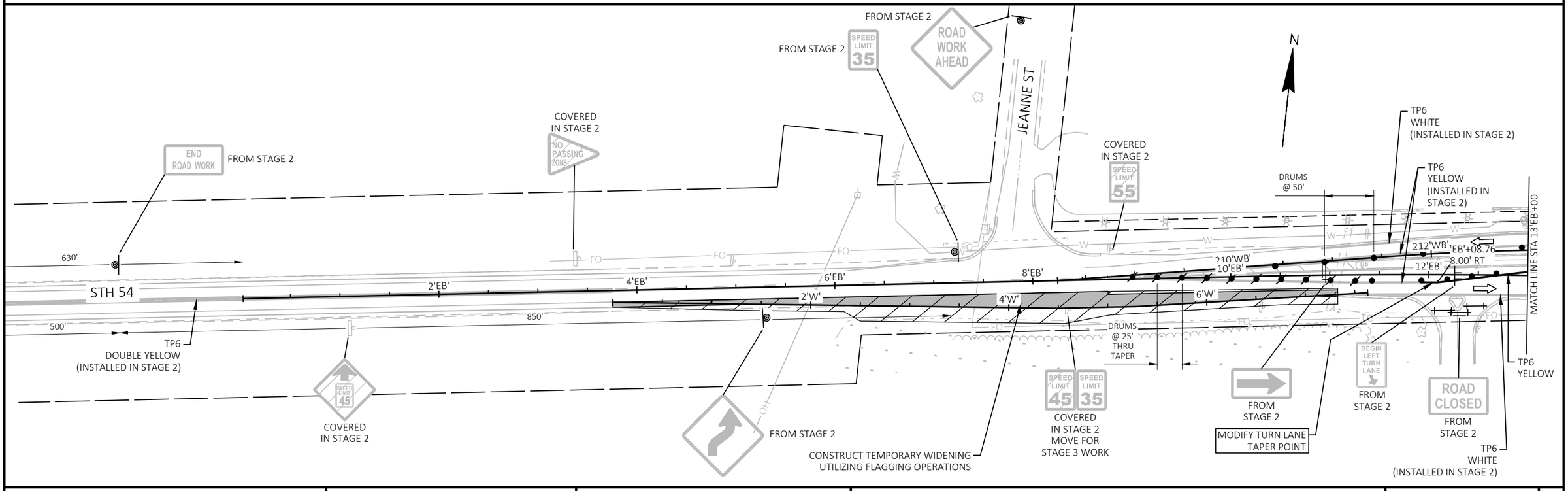
TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLEXIBLE TUBULAR MARKER
- CC — TEMPORARY CRASH CUSHION
- WORK AREA

TEMPORARY PAVEMENT MARKING LEGEND

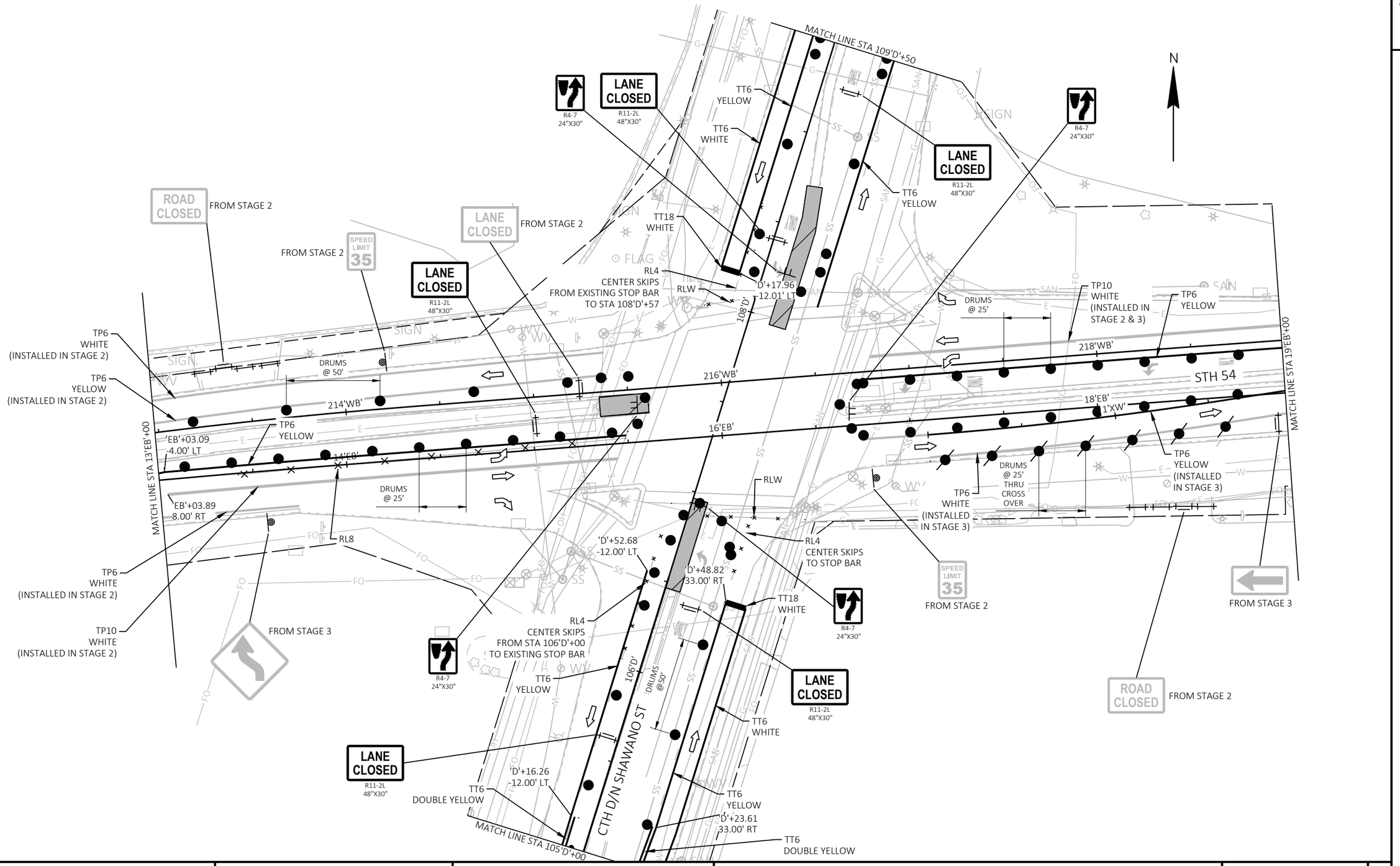
TP6 = TEMPORARY MARKING LINE PAINT 6-INCH
TP10 = TEMPORARY MARKING LINE PAINT 10-INCH
TP18 = TEMPORARY MARKING STOP LINE PAINT 18-INCH
TT6 = TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
TT10 = TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
TT18 = TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
RL4 = MARKING REMOVAL LINE 4-INCH
RWB4 = MARKING REMOVAL LINE WATER BLASTING 4-INCH
RL8 = MARKING REMOVAL LINE 8-INCH
RLW = MARKING REMOVAL LINE WIDE
RLS = MARKING REMOVAL SPECIAL MARKING



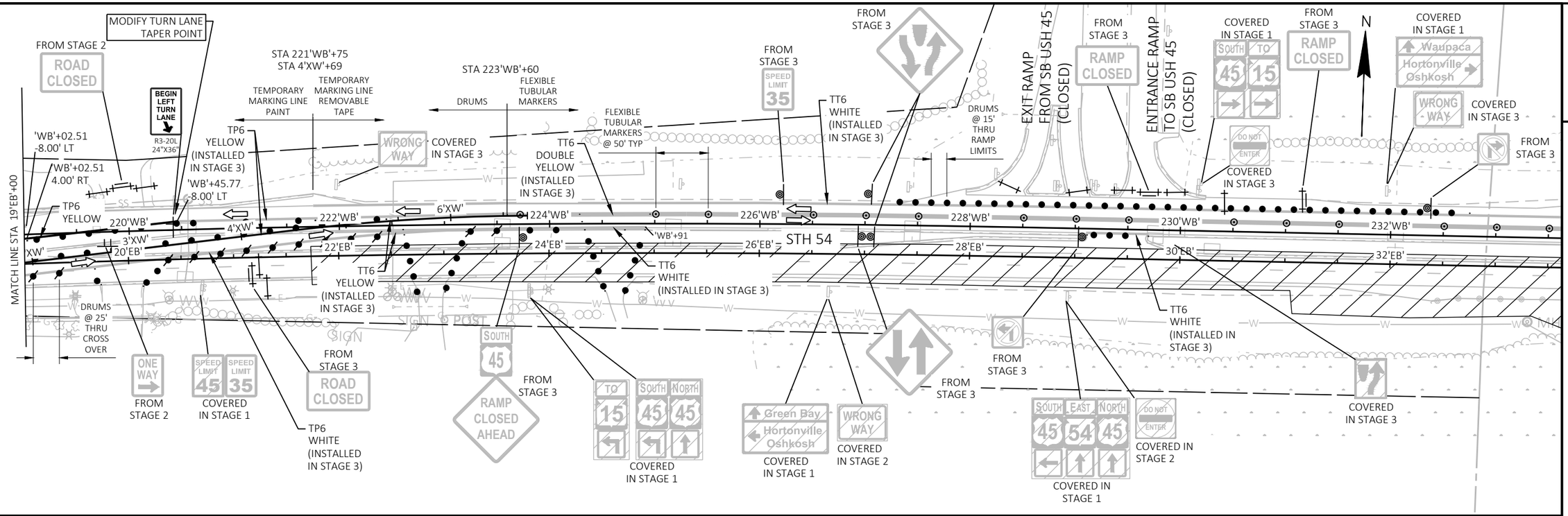


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3A	SHEET 187	E

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3A - CTH D INTERSECTION	SHEET 188	E

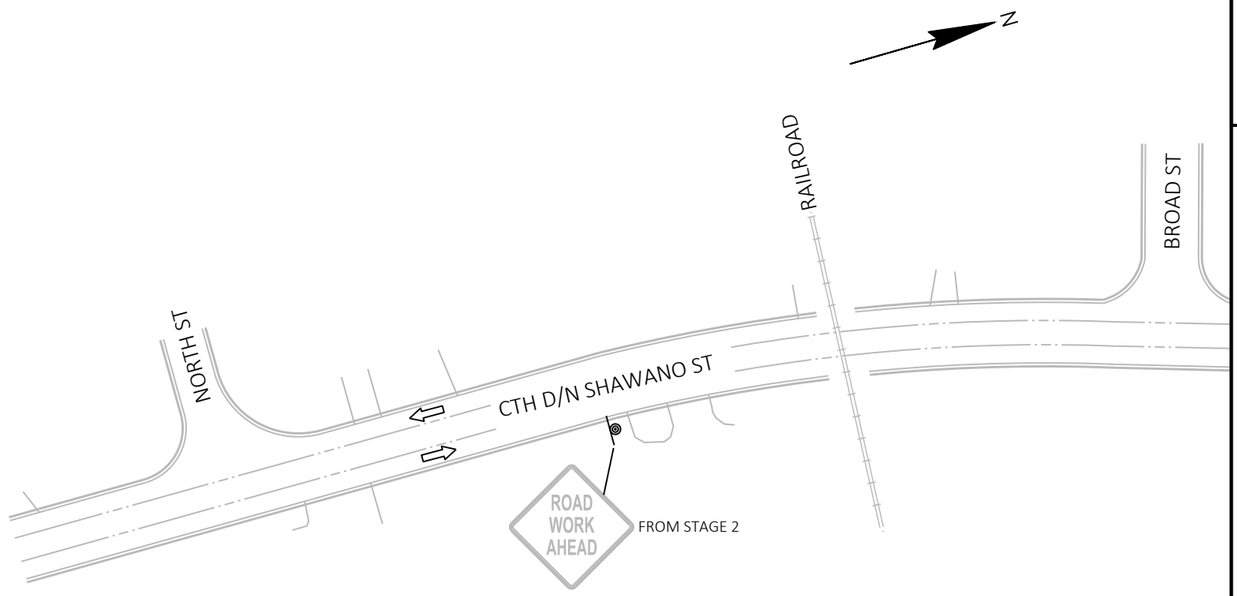


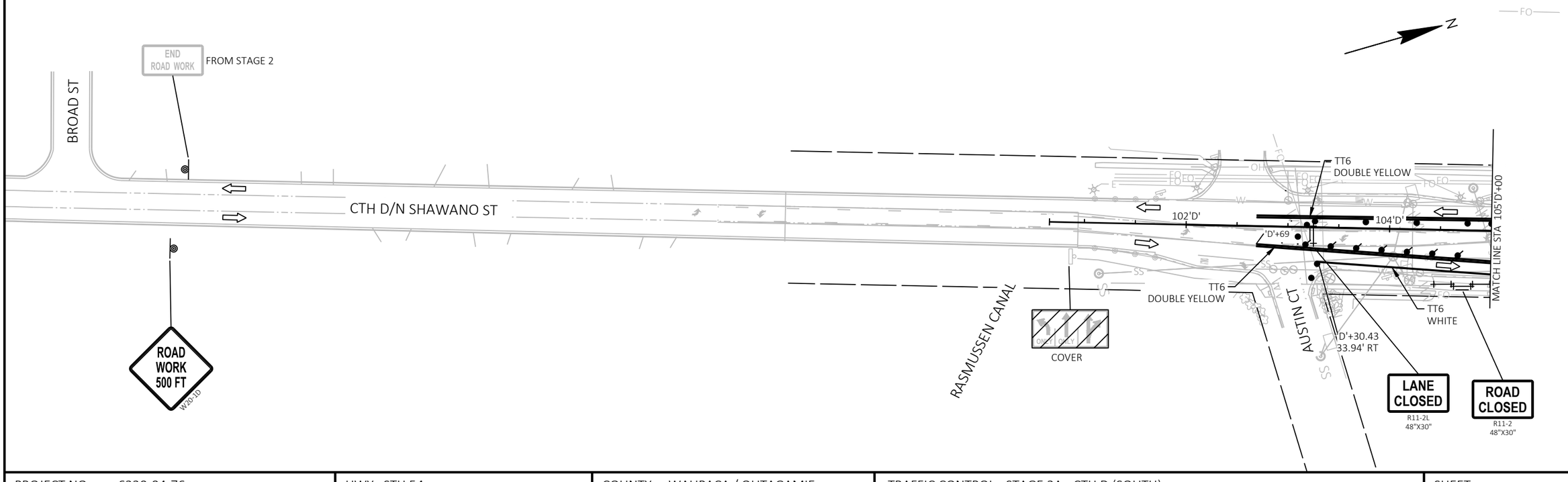
NOTE:
ALL TRAFFIC CONTROL EAST OF STA 220'WB'+46 IS THE SAME AS STAGE 3.

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3A	SHEET 189	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026311_S3A_54.DWG
LAYOUT NAME - E1
PLOT DATE : 6/28/2025 10:21 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2



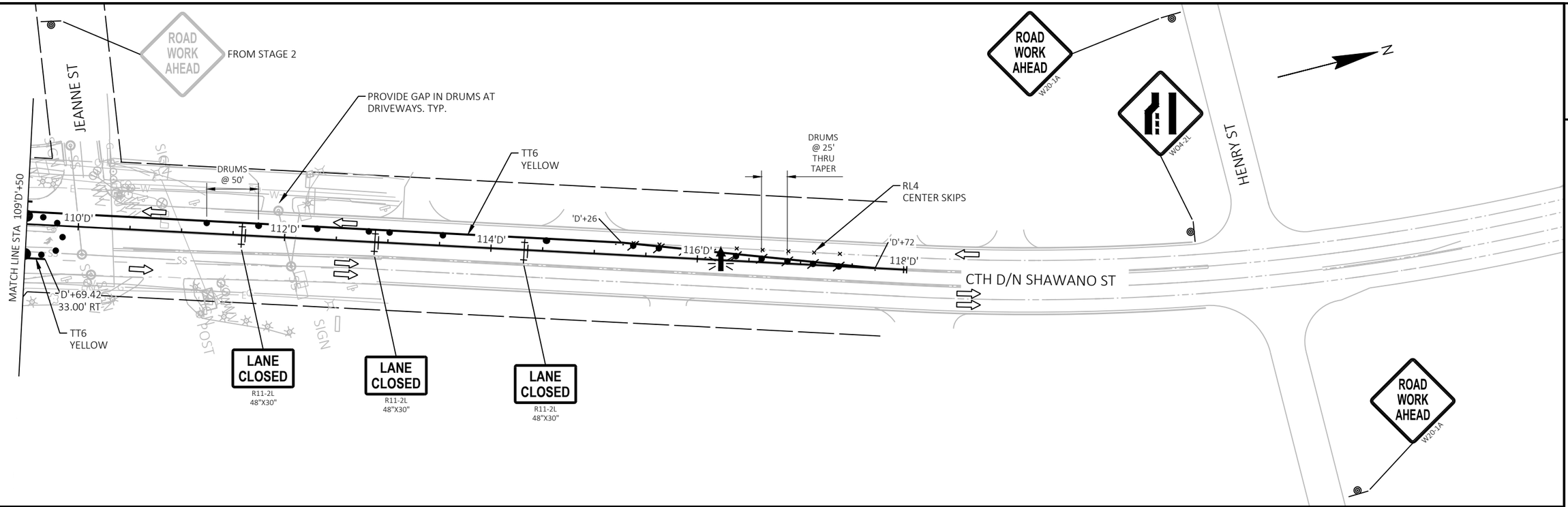


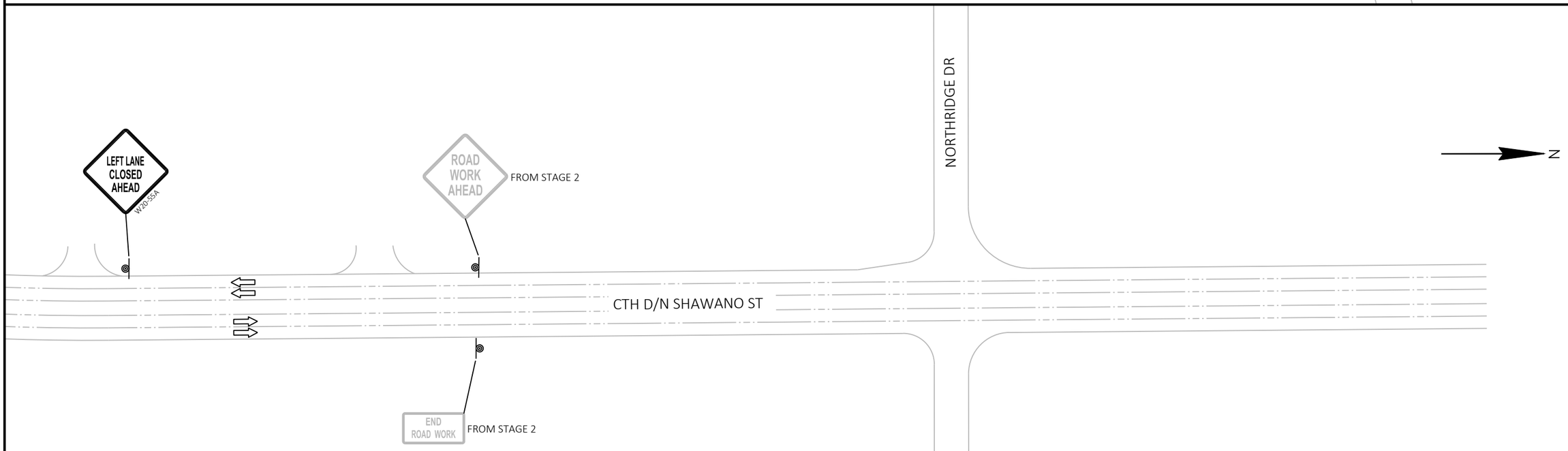
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3A - CTH D (SOUTH)	SHEET 190	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026311_S3A_54.DWG
LAYOUT NAME - CTH D S

PLOT DATE : 6/28/2025 10:21 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

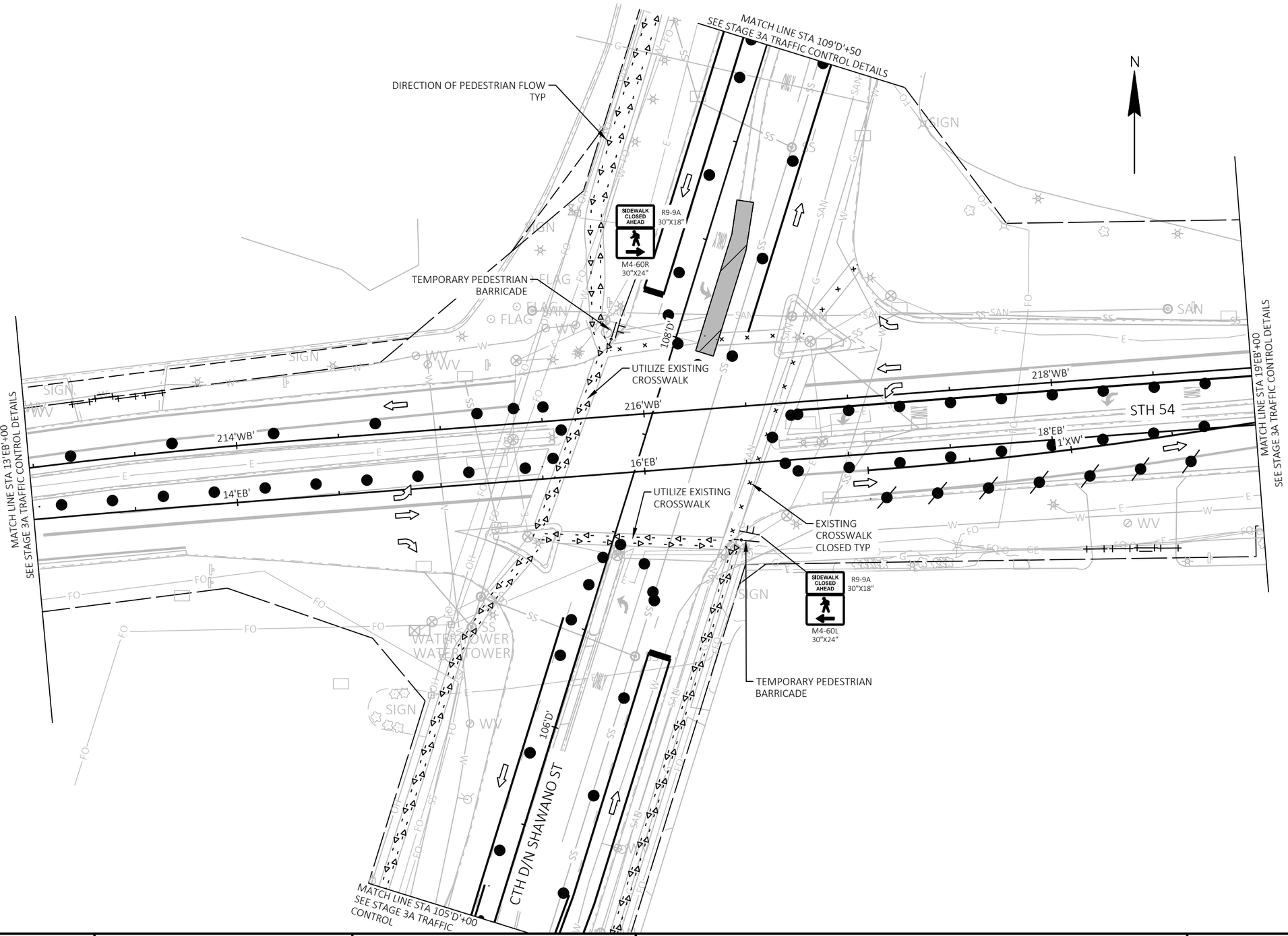




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 3A - CTH D (NORTH)	SHEET 191	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026311_S3A_54.DWG
LAYOUT NAME - CTH D N
PLOT DATE : 6/28/2025 10:21 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ##########

2

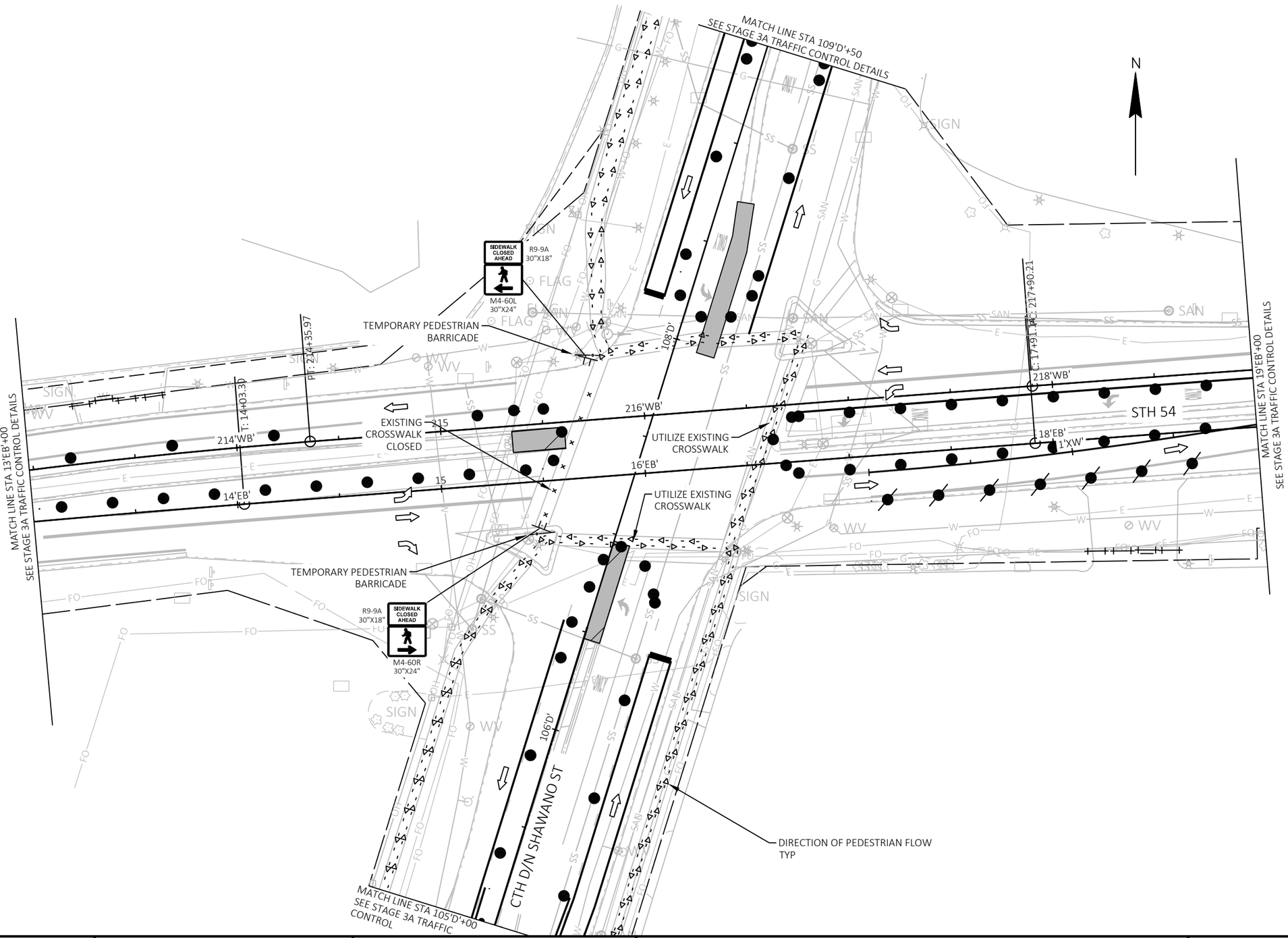


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 3A.1	SHEET 192	E

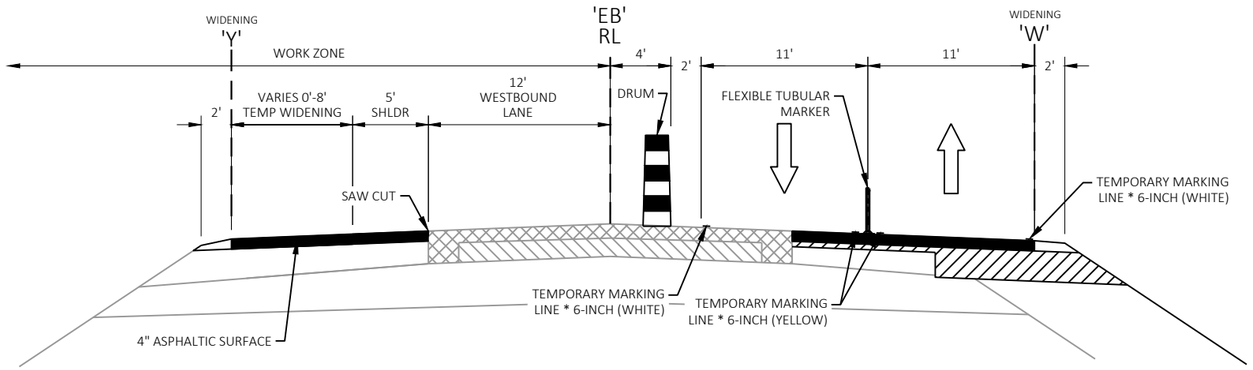
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026315_S3A-1_PED_54.DWG
LAYOUT NAME - int

PLOT DATE : 3/27/2025 3:58 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



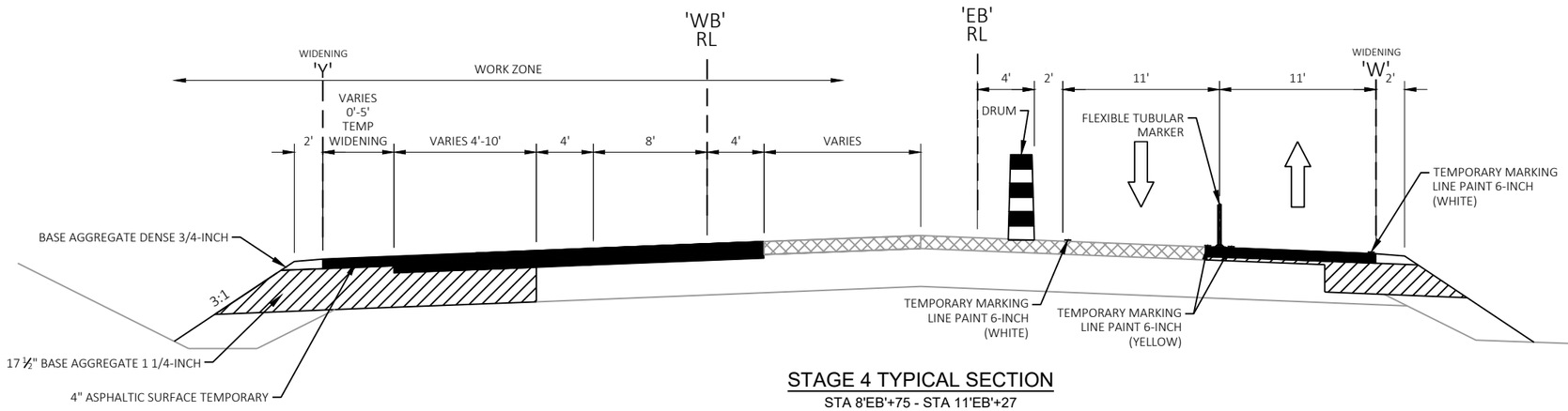
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 3A.2	SHEET 193	E



* = TEMPORARY PAVEMENT MARKING FROM STA 3'EB'+75 - 7'EB'+18 TO BE REMOVABLE TAPE.
* =TEMPORARY PAVEMENT MARKING FROM ST 7'EB'+18 - 8'EB'+75 TO PAINT.

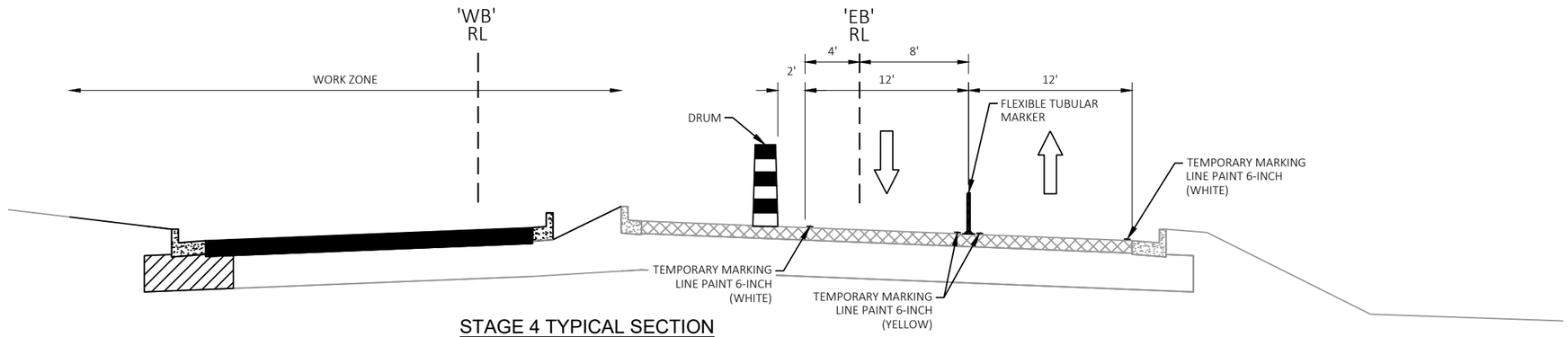
STAGE 4 TYPICAL SECTION

STA 3'EB'+75 - STA 8'EB'+75



STAGE 4 TYPICAL SECTION

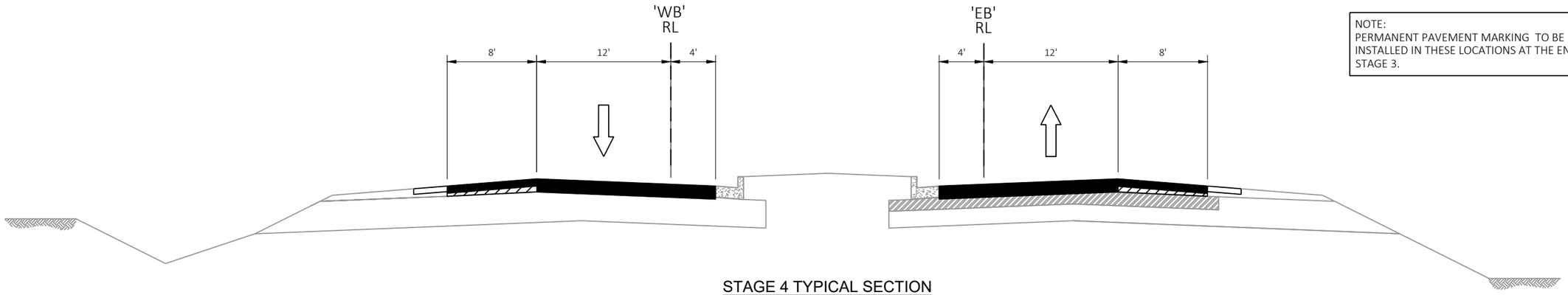
STA 8'EB'+75 - STA 11'EB'+27
STA 208'WB'+72 - STA 211'WB'+24



STAGE 4 TYPICAL SECTION

STA 11'EB+27 - STA 20'EB'+11
STA 211'WB'+24 - STA 220'WB'+11

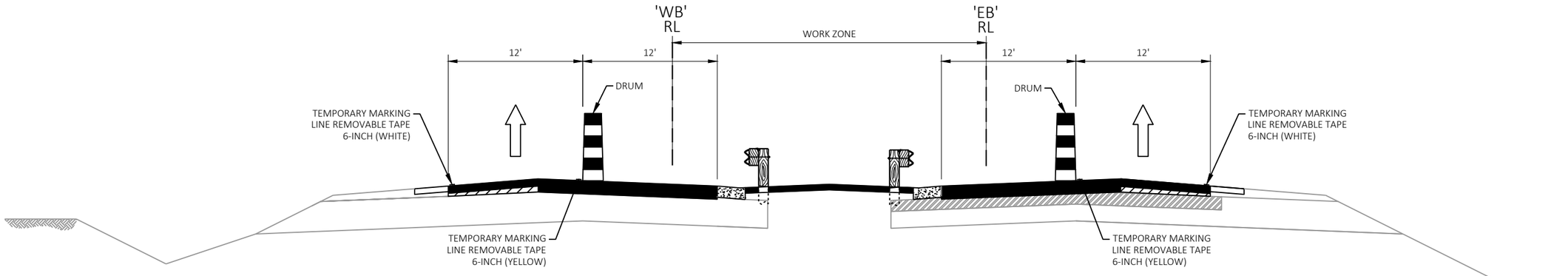
2



NOTE:
PERMANENT PAVEMENT MARKING TO BE INSTALLED IN THESE LOCATIONS AT THE END OF STAGE 3.

STAGE 4 TYPICAL SECTION

STA 26'EB'+00- STA 34'EB'+29
STA 44'EB'+65 - STA 58'EB'+78
STA 226'WB'+00 - STA 235'WB'+56
STA 244'WB'+65 - STA 258'WB'+78



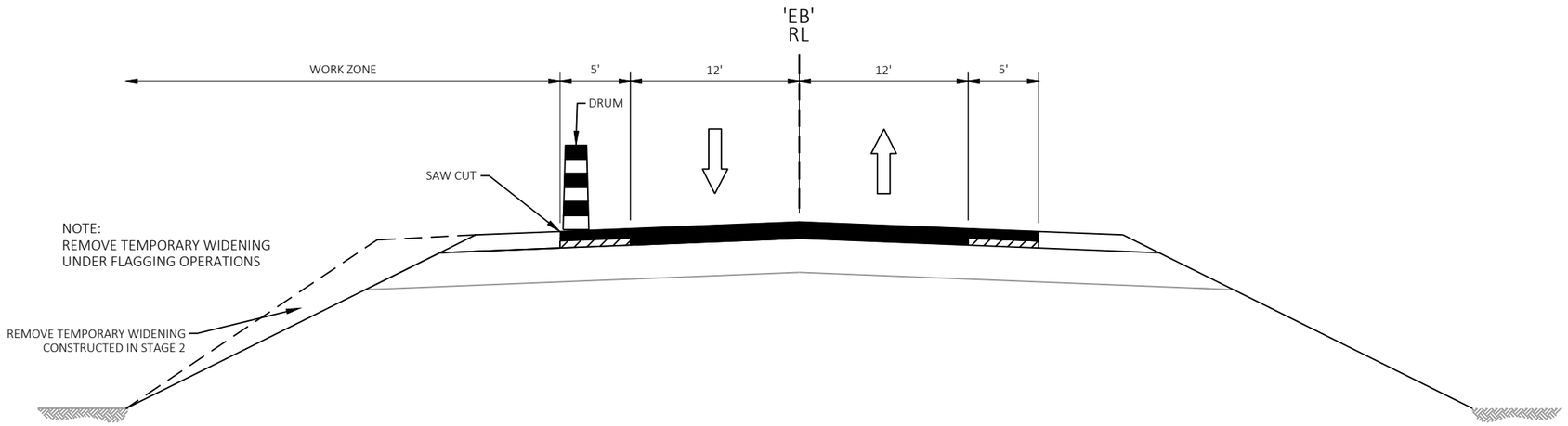
STAGE 4 TYPICAL SECTION

STA 34'EB'+29 - STA 44'EB'+65
STA 235'WB'+56 - STA 244'WB'+65

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 4 - TYPICAL SECTIONS	SHEET 195	E

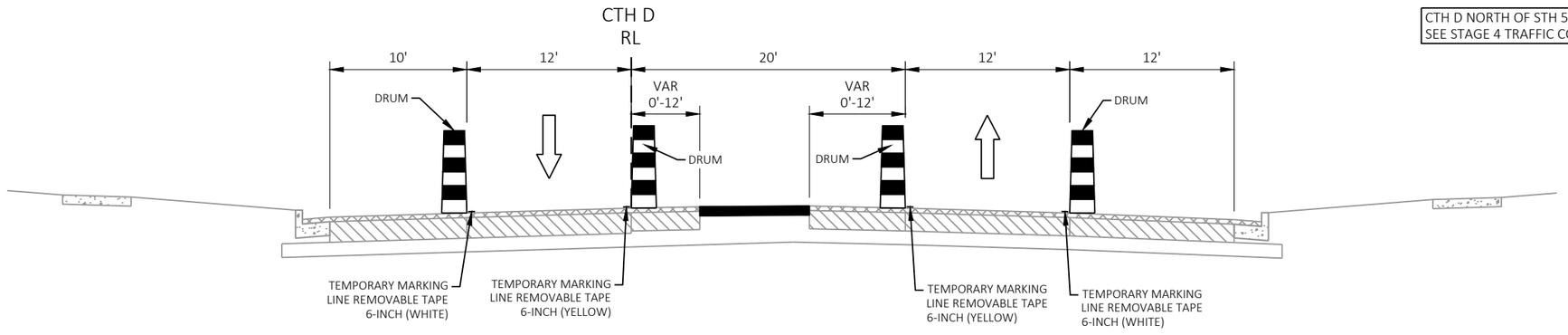
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\999999_TC_TYPICAL SHELL_54.DWG
LAYOUT NAME - 4-2
PLOT DATE : 6/28/2025 10:30 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



STAGE 4 TYPICAL SECTION

STA 58'EB'+78 - STA 78'EB'+63



CTH D NORTH OF STH 54 CLOSED IN STAGE 4.
SEE STAGE 4 TRAFFIC CONTROL DETAILS.

STAGE 4 CTH D TYPICAL SECTION

102'D'+69 - 107'D'+00 (CTH D SOUTH)

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 4 - TYPICAL SECTIONS	SHEET 196	E

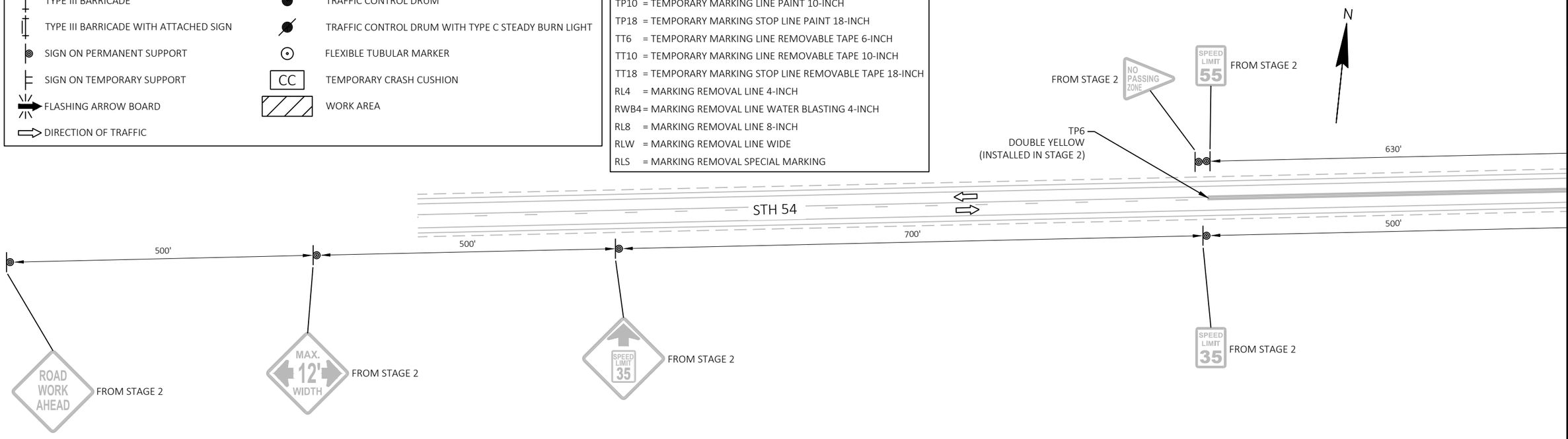
2

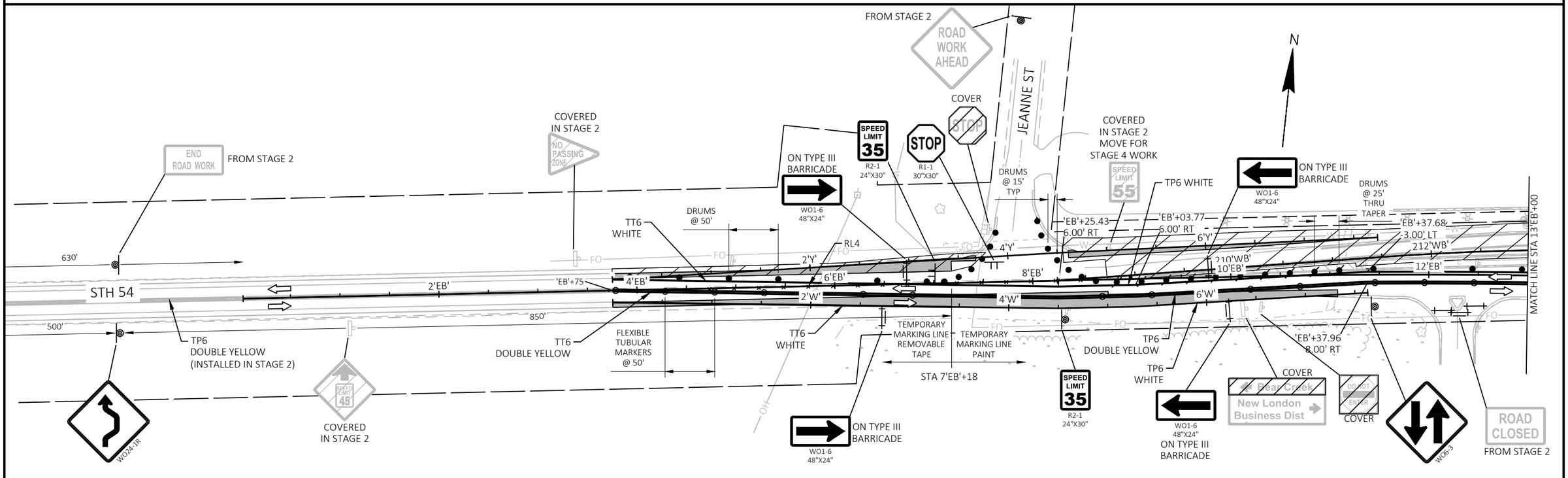
TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLEXIBLE TUBULAR MARKER
- CC — TEMPORARY CRASH CUSHION
- WORK AREA

TEMPORARY PAVEMENT MARKING LEGEND

TP6 = TEMPORARY MARKING LINE PAINT 6-INCH
TP10 = TEMPORARY MARKING LINE PAINT 10-INCH
TP18 = TEMPORARY MARKING STOP LINE PAINT 18-INCH
TT6 = TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
TT10 = TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
TT18 = TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
RL4 = MARKING REMOVAL LINE 4-INCH
RWB4 = MARKING REMOVAL LINE WATER BLASTING 4-INCH
RL8 = MARKING REMOVAL LINE 8-INCH
RLW = MARKING REMOVAL LINE WIDE
RLS = MARKING REMOVAL SPECIAL MARKING





PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 4	SHEET 197	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026410_S4_54.DWG
LAYOUT NAME - W1
PLOT DATE : 6/28/2025 10:45 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

*= SEE ACCOMMODATIONS FOR PEDESTRIAN STAGE 4.1 & PEDESTRIAN STAGE 4.2

MATCH LINE STA 109'D'+50

R11-2
48"X30"
ROAD CLOSED

TT6*
WHITE

ON TYPE III
BARRICADE

W1-7
48"X24"

N

R3-1
24"X24"

FROM STAGE 2
ROAD CLOSED

SPEED LIMIT 35
R2-1
24"X30"

W20-4L

W06-3

108'D'

'EB'+52.80
8.00' RT

218'WB'

TP6
WHITE

MATCH LINE STA 19'EB'+00

216'WB'

'EB'+94.65
8.00' RT

DRUMS
@ 50'

214'WB'

18'EB'

16'EB'

STH 54

MATCH LINE STA 13'EB'+00

14'EB'

FLEXIBLE
TUBULAR
MARKERS
@ 50'

RLW

TP18

TP6
DOUBLE YELLOW

FLEXIBLE
TUBULAR
MARKERS
@ 50'

TP6
DOUBLE YELLOW

DRUMS
@ 15'

RL8

RLS

'D'+53

DRUMS
@ 15'

SPEED LIMIT 35
FROM STAGE 2

W06-1

TP6
WHITE

COVER
WITH

MO6-1
21"X21"

COUNTY D 45 BUSINESS H

WRONG WAY
COVER

R3-2
24"X24"

TT18
WHITE

'D'+04

LANE CLOSED
R11-2L
48"X30"

R4-7
24"X30"

106'D'

TT6
WHITE

CTH D/N SHAWANO ST

LANE CLOSED
R11-2L
48"X30"

DRUMS
@ 50'

W01-4R

TT6
YELLOW

TT6
WHITE

MATCH LINE STA 105'D'+00

ROAD CLOSED
FROM STAGE 2

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 4 - CTH D INTERSECTION	SHEET 198	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026410_S4_54.DWG
LAYOUT NAME - int
PLOT DATE : 6/28/2025 10:45 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2

ROAD CLOSED
FROM STAGE 2
COVERED IN STAGE 3
WRONG WAY
ON TYPE III BARRICADE
WO1-6 48"X24"
DRUMS @ 25' THRU CROSS OVER
FROM STAGE 3
SPEED LIMIT 35
ROAD WORK AHEAD
W20-1A
WO1-4L
EXIT RAMP FROM SB USH 45
ENTRANCE RAMP TO SB USH 45
END ROAD WORK
G20-2A 48"X24"
N
SOUTH 45 TO 15
DO NOT ENTER
REMOVE COVERINGS
Waupaca
Hortonville
Oshkosh
WRONG WAY
REMOVE COVERINGS
STA 226'WB'+92
TEMPORARY MARKING LINE REMOVABLE TAPE
PERMANENT PAVEMENT MARKING
'WB'+97.30
-12.00' LT
TP6 YELLOW
MATCH LINE STA 19'EB'+00
TP6 WHITE
220'WB'
222'WB'
224'WB'
5'YE'
6'YE'
226'WB'
228'WB'
230'WB'
232'WB'
20'EB'
1'YE'
2'YE'
22'EB'
3'YE'
4'YE'
STH 54
'EB'+00
24'EB'
26'EB'
28'EB'
30'EB'
32'EB'
EB'+50.97
8.00' RT
TP6 YELLOW
'EB'+12.68
9.00' RT
TT6 YELLOW
TT6 WHITE
TEMPORARY MARKING LINE REMOVABLE TAPE
PERMANENT PAVEMENT MARKING
STA 26'EB'+00
DRUMS @ 50'
DRUMS @ 25' THRU TAPER
TP6 DOUBLE YELLOW
ONE WAY
FROM STAGE 2
TEMPORARY MARKING LINE PAINT
TEMPORARY MARKING LINE REMOVABLE TAPE
STA 21'EB'+75
STA 221'WB'+75
STA 2'YE'+24
ON TYPE III BARRICADE
WO1-6 48"X24"
Green Bay
Hortonville
Oshkosh
WRONG WAY
REMOVE COVERINGS
SOUTH EAST NORTH 45 54 45
DO NOT ENTER
WO2-1R
REMOVE COVERING
SPEED LIMIT 45
SPEED LIMIT 35
COVERED IN STAGE 2
TO 15
SOUTH 45
NORTH 45
REMOVE COVERINGS
WO1-4L

ONLY UTILIZE LANE CLOSURES AROUND THE BRIDGE PIERS FOR GUARDRAIL, MOW STRIP, AND RESTORATION WORK. REMOVE WHEN COMPLETE.

REMOVE COVERING
WEST 54
SOUTH 45
EMBARRASS RIVER
ON TYPE III BARRICADE
WO1-6 48"X24"
REMOVE COVERING
ONE WAY
TO 15
REMOVE COVERINGS
DO NOT ENTER
SPEED LIMIT 45
SPEED LIMIT 35
COVERED IN STAGE 3
WRONG WAY
REMOVE COVERING
LANE CLOSED
R11-2L 48"X30"
WO1-6 48"X24"
N
STA 235'WB'+56
PERMANENT PAVEMENT MARKING
TEMPORARY MARKING LINE REMOVABLE TAPE
DRUMS @ 25' THRU TAPERS TYP
'WB'+35.55
-8.00' LT
TT6 YELLOW
TT6 WHITE
STA 244'WB'+65
TEMPORARY MARKING LINE REMOVABLE TAPE
PERMANENT PAVEMENT MARKING
'WB'+85
-8.00' LT
RWB4 EXISTING MARKING OVER B-44-0146
234'WB'
'WB'+56
236'WB'
238'WB'
240'WB'
242'WB'
244'WB'
'WB'+65
246'WB'
34'EB'
'EB'+29
36'EB'
'EB'+09
8.00' RT
38'EB'
40'EB'
'EB'+90
8.00' RT
STH 54
42'EB'
'EB'+70
44'EB'
46'EB'
RWB4 EXISTING MARKING OVER B-44-0147
DRUMS @ 50'
TEMPORARY MARKING LINE REMOVABLE TAPE
PERMANENT PAVEMENT MARKING
STA 42'EB'+70
WRONG WAY
REMOVE COVERING
PERMANENT PAVEMENT MARKING
TEMPORARY MARKING LINE REMOVABLE TAPE
STA 34'EB'+29
ON TYPE III BARRICADE
WO1-6 48"X24"
LANE CLOSED
R11-2L 48"X30"
REMOVE COVERING
DO NOT ENTER
ONE WAY
REMOVE COVERING
TT6 YELLOW
TT6 WHITE
CONSTRUCT STEEL THRIE BEAM BULL NOSE AND GUARDRAIL MOW STRIP ASPHALT
WO1-6 48"X24"
ON TYPE III BARRICADE
EAST 54
NORTH 45
REMOVE COVERING
Green Bay
Clintonville
Marion
REMOVE COVERING
NORTH 45
REMOVE COVERING
RIVER RD
USH 45
SPEED LIMIT 45
SPEED LIMIT 35
COVER
ROAD WORK AHEAD
FROM STAGE 1

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 4	SHEET 199	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026410_S4_54.DWG
LAYOUT NAME - E1
PLOT DATE : 6/28/2025 10:45 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ##########

2

REMOVE COVERING

REMOVE COVERING

REMOVE COVERINGS

REMOVE COVERINGS

REMOVE COVERING

REMOVE COVERING

REMOVE COVERING

REMOVE COVERING

REMOVE COVERING

COVERED IN STAGE 1

N

MAINTAIN DRIVE ACCESS DELINEATE WITH DRUMS @15' TYP

FROM STAGE 3

DRUMS @ 50'

248'WB'

250'WB'

252'WB'

254'WB'

256'WB'

258'WB'

260'WB'

262'WB'

48'EB'

50'EB'

52'EB'

54'EB'

56'EB'

58'EB'

60'EB'

62'EB'

STH 54

2'Z'

REMOVE TEMPORARY WIDENING UNDER FLAGGING OPERATIONS

REMOVE COVERING

REMOVE COVERING

REMOVE COVERING

REMOVE COVERING

REMOVE COVERINGS

REMOVE COVERING

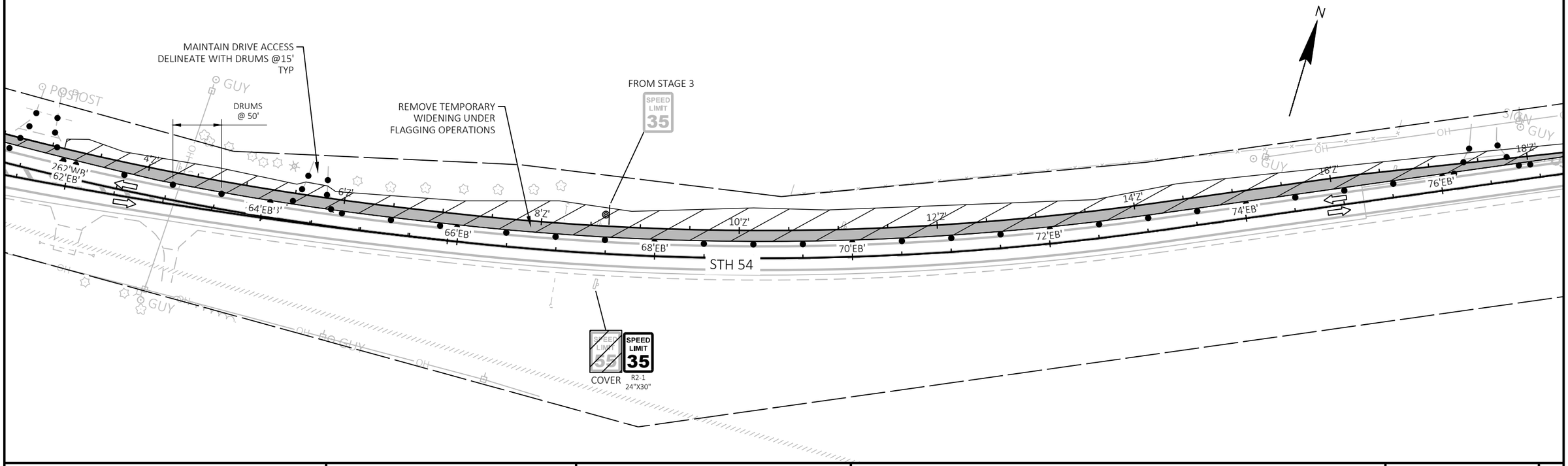
FROM STAGE 1

END ROAD WORK
G20-2A
48"X24"

ENTRANCE RAMP TO NB USH 45

EXIT RAMP FROM NB USH 45

CTH S

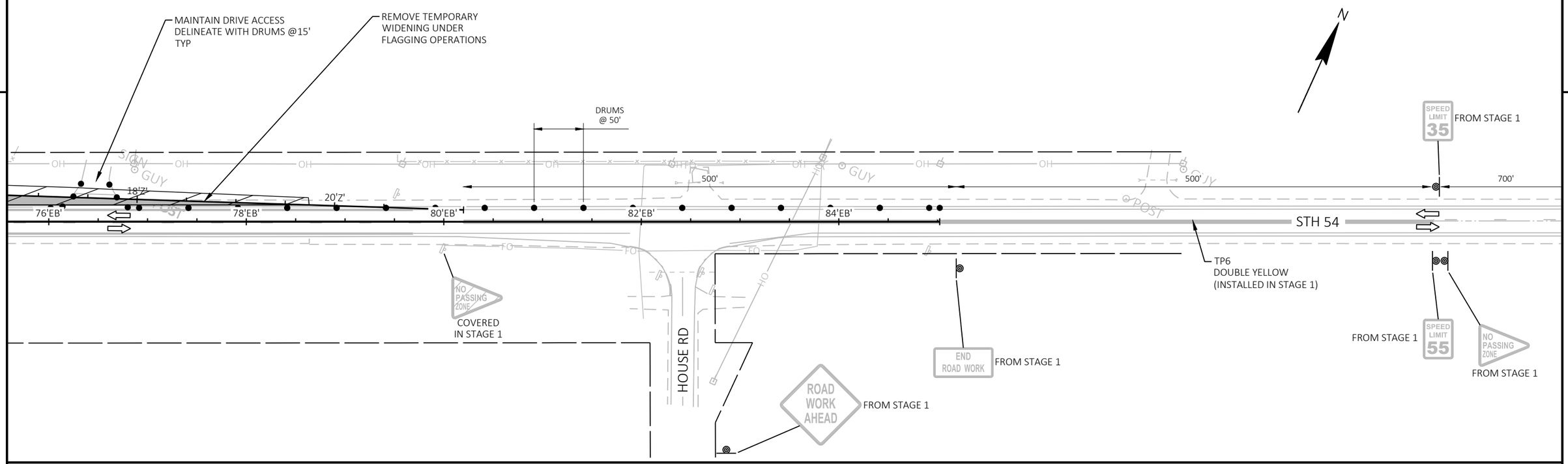


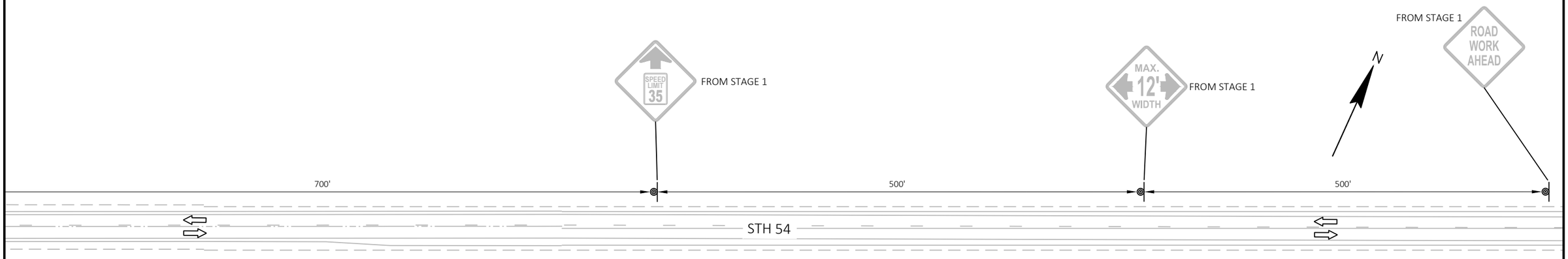
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 4	SHEET 200	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026410_S4_54.DWG
LAYOUT NAME - E2

PLOT DATE : 6/28/2025 10:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ##########

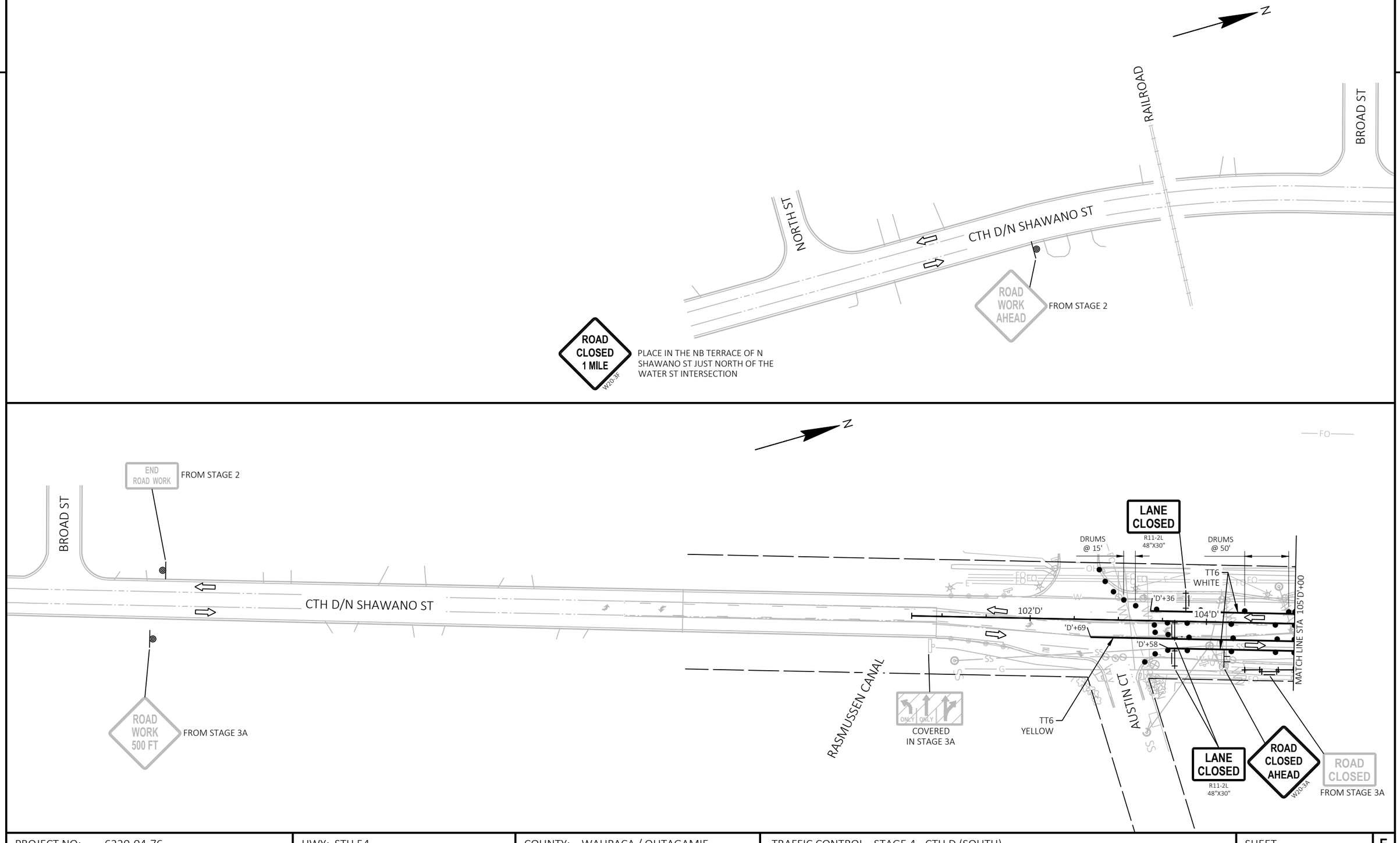
WISDOT/CADDS SHEET 44





PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 4	SHEET 201	E

2

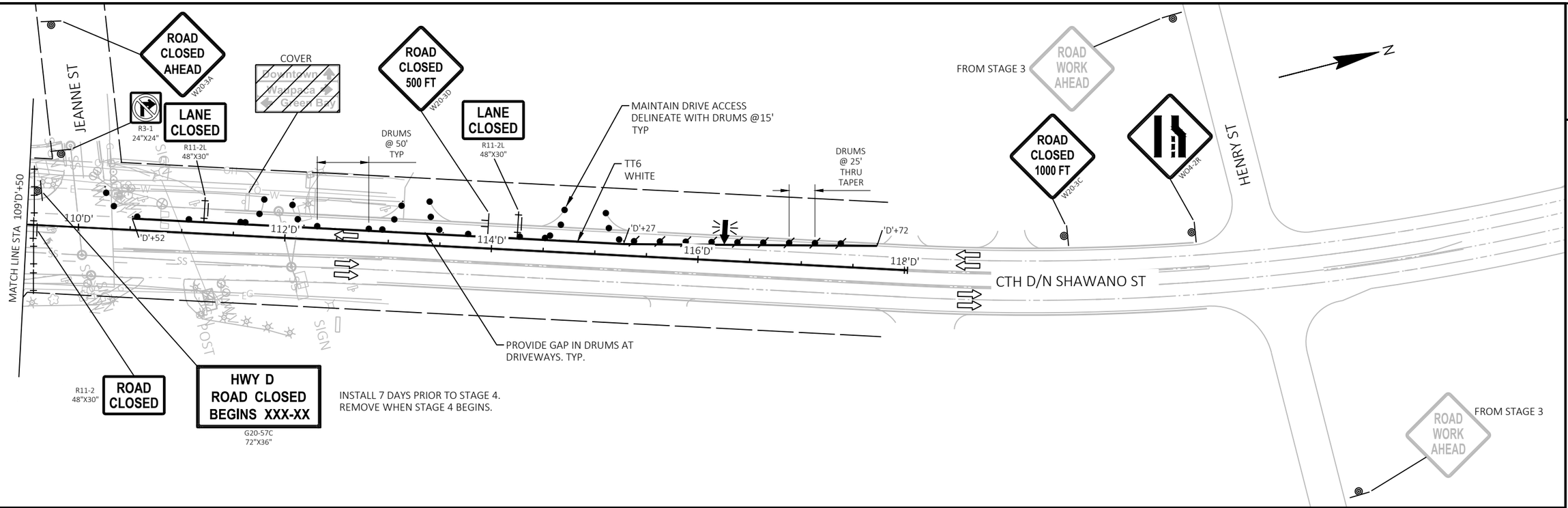


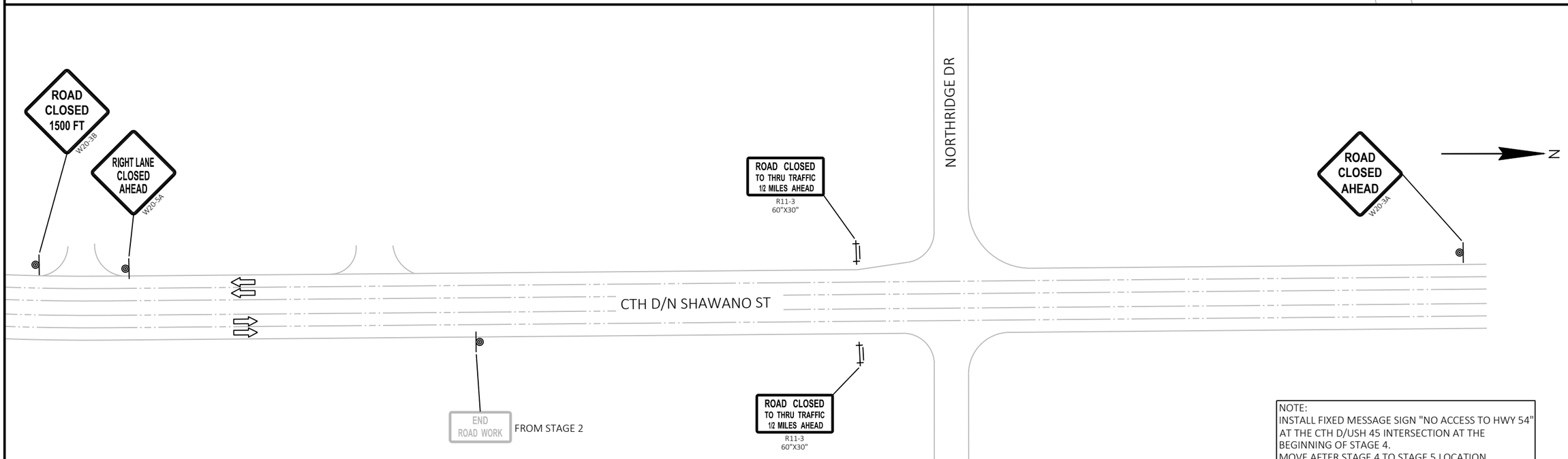
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 4 - CTH D (SOUTH)	SHEET 202	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026410_S4_54.DWG
LAYOUT NAME - CTH D S

PLOT DATE : 6/28/2025 10:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

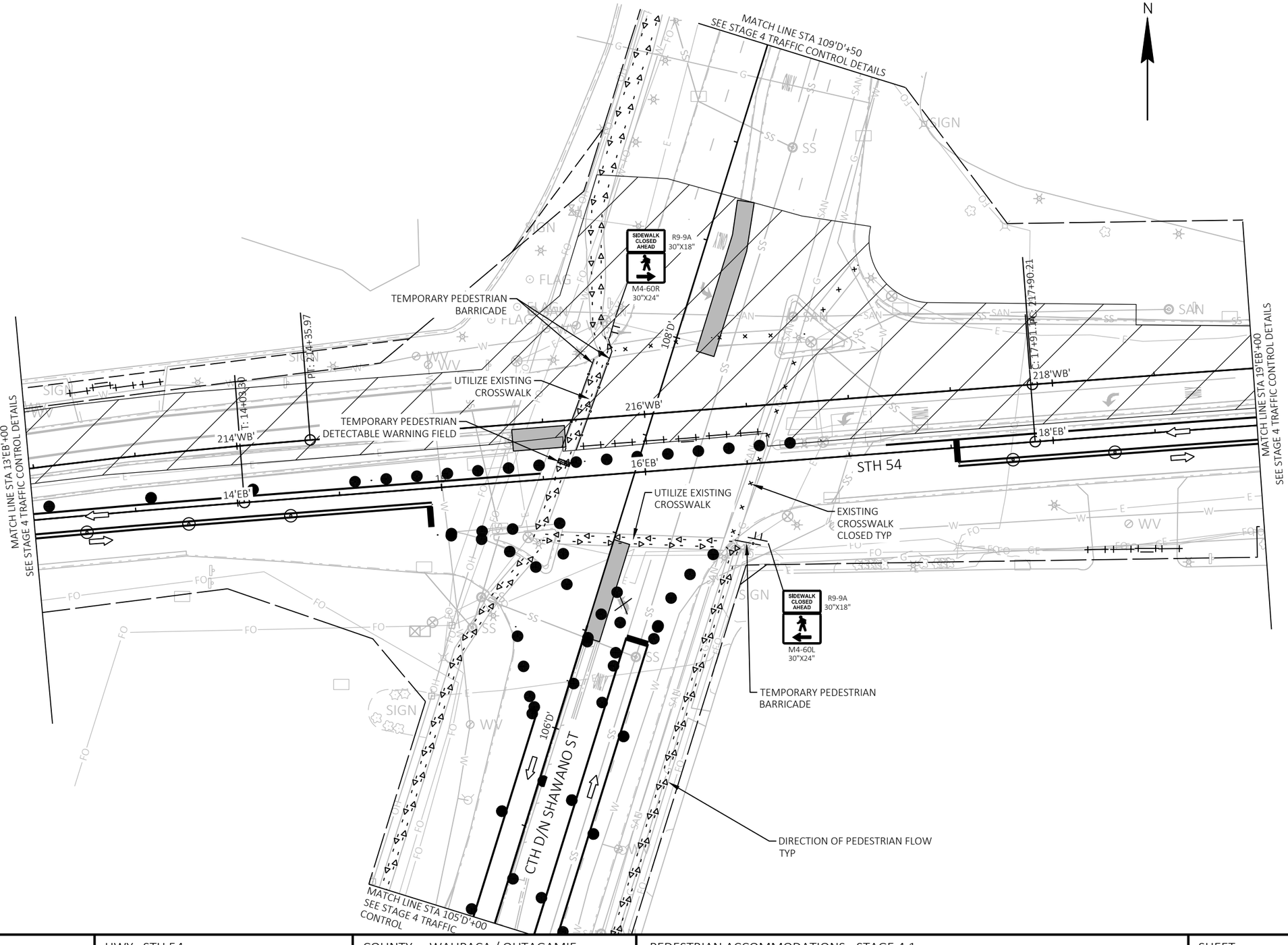




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 4 - CTH D (NORTH)	SHEET 203	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026410_S4_54.DWG
LAYOUT NAME - CTH D N
PLOT DATE : 6/28/2025 10:46 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

2

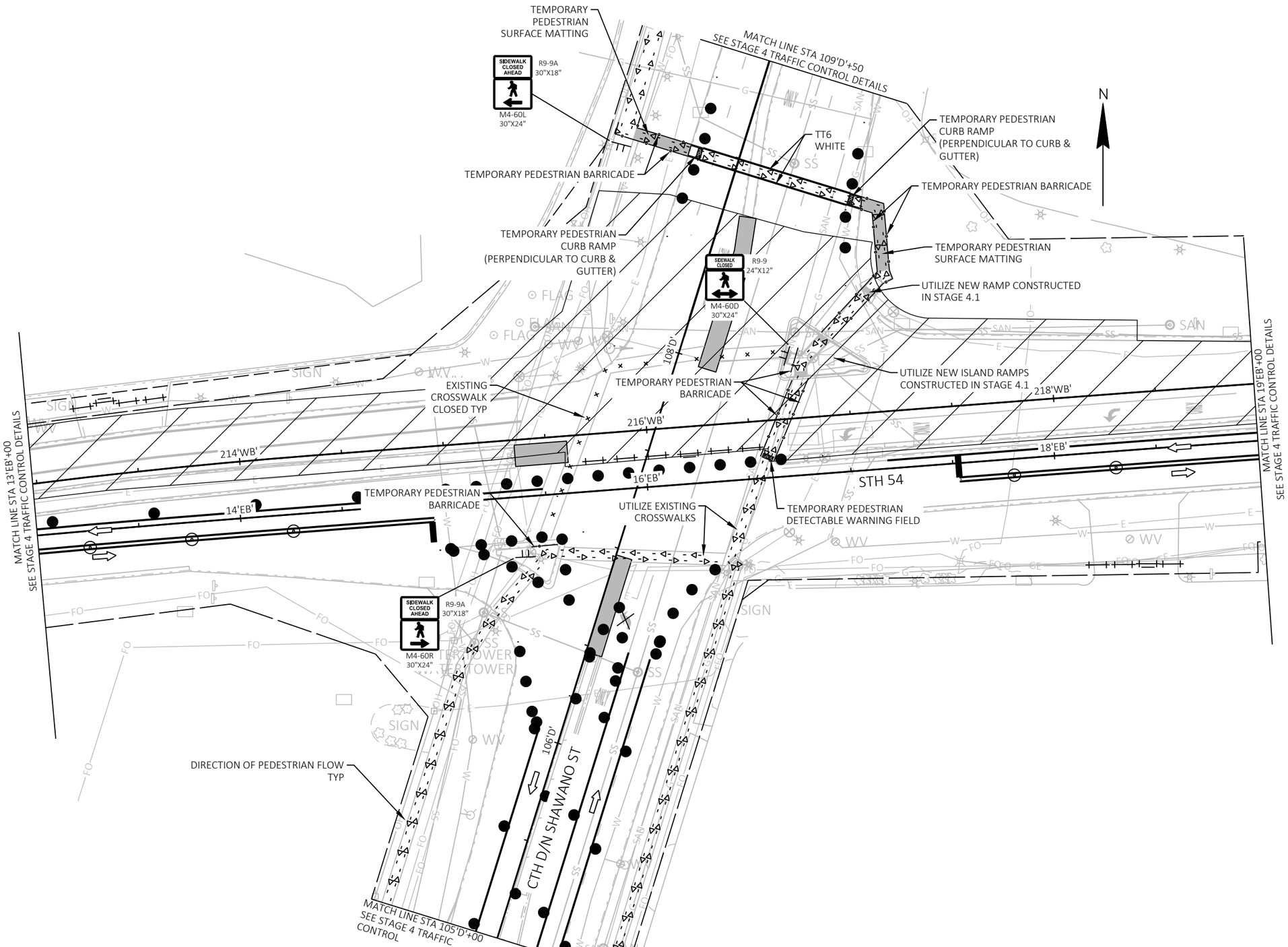


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 4.1	SHEET 204	E

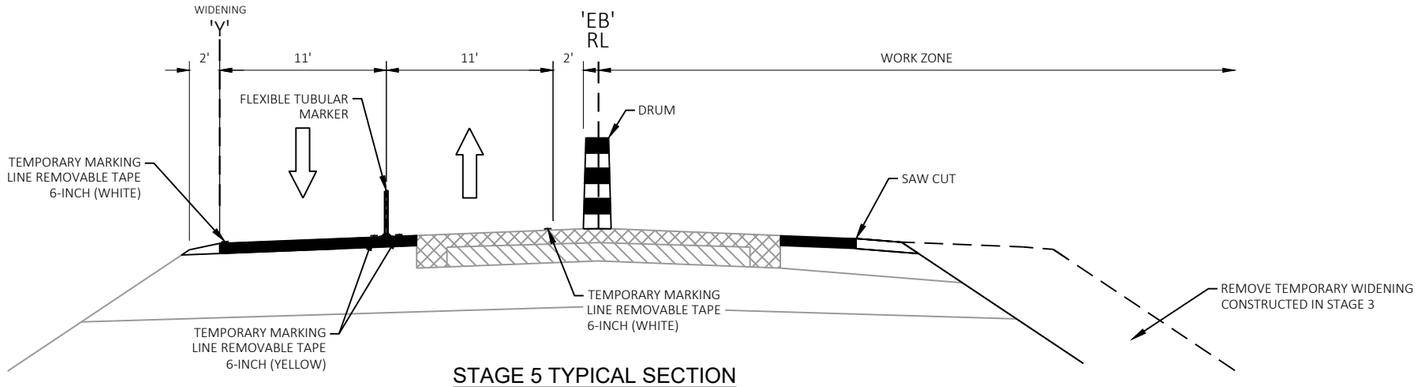
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026411_S4-1_PED_54.DWG
LAYOUT NAME - int

PLOT DATE : 6/18/2025 11:51 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

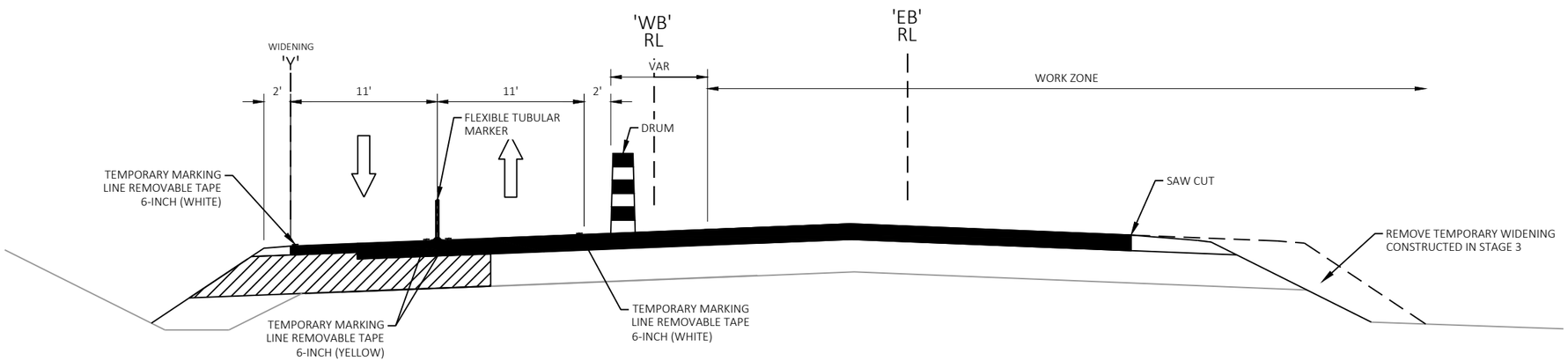


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 4.2	SHEET 205	E



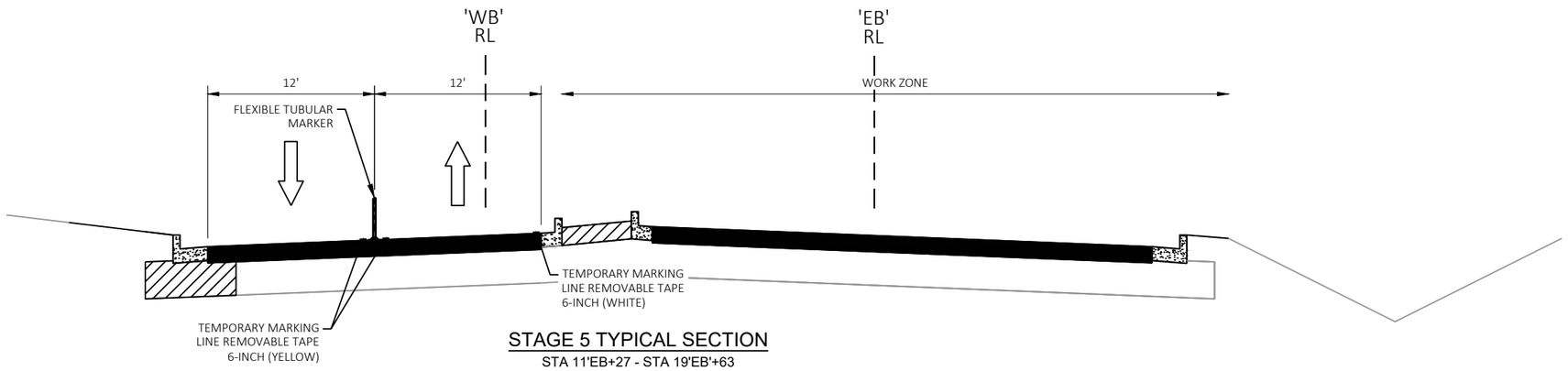
STAGE 5 TYPICAL SECTION

STA 3'EB'+75 - STA 8'EB'+75



STAGE 5 TYPICAL SECTION

STA 8'EB'+75 - STA 11'EB'+27
STA 208'WB'+72 - STA 211'WB'+24

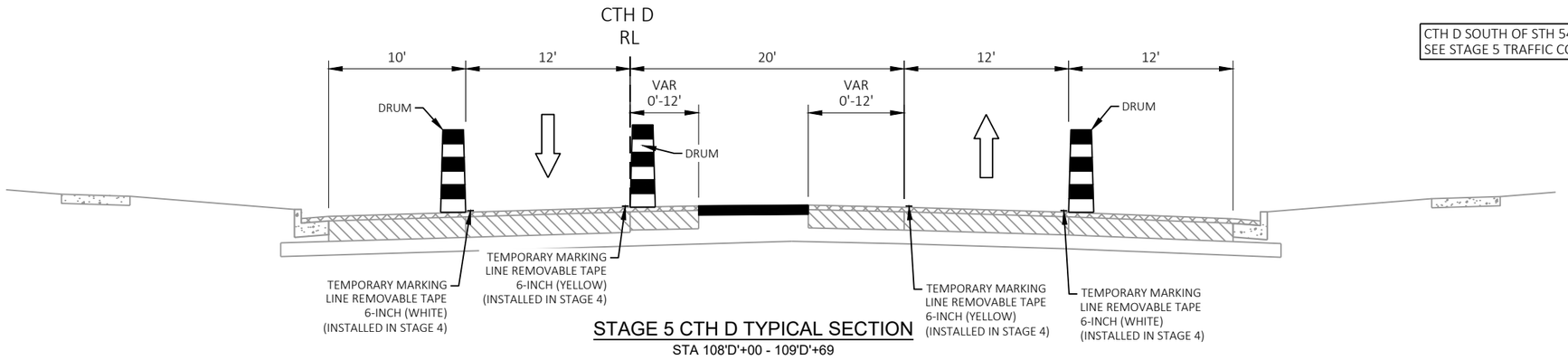


STAGE 5 TYPICAL SECTION

STA 11'EB+27 - STA 19'EB'+63
STA 211'WB'+24 - STA 219'WB'+63

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 5 - TYPICAL SECTIONS	SHEET 206	E

2



CTH D SOUTH OF STH 54 CLOSED IN STAGE 5.
SEE STAGE 5 TRAFFIC CONTROL DETAILS.

STAGE 5 CTH D TYPICAL SECTION

STA 108'D'+00 - 109'D'+69

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 5 - TYPICAL SECTIONS	SHEET 207	E

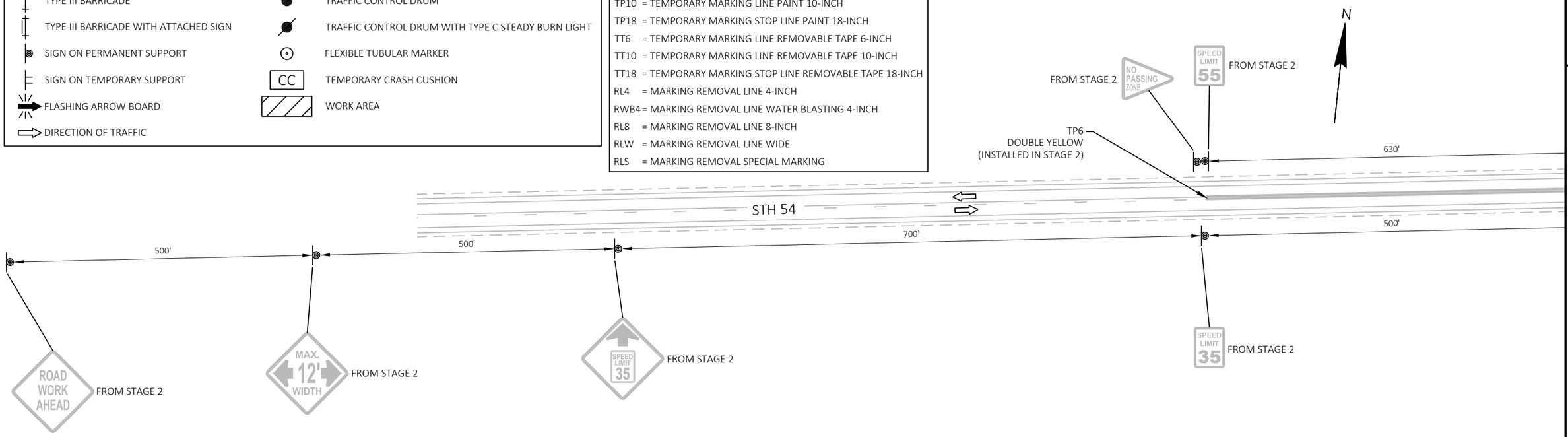
2

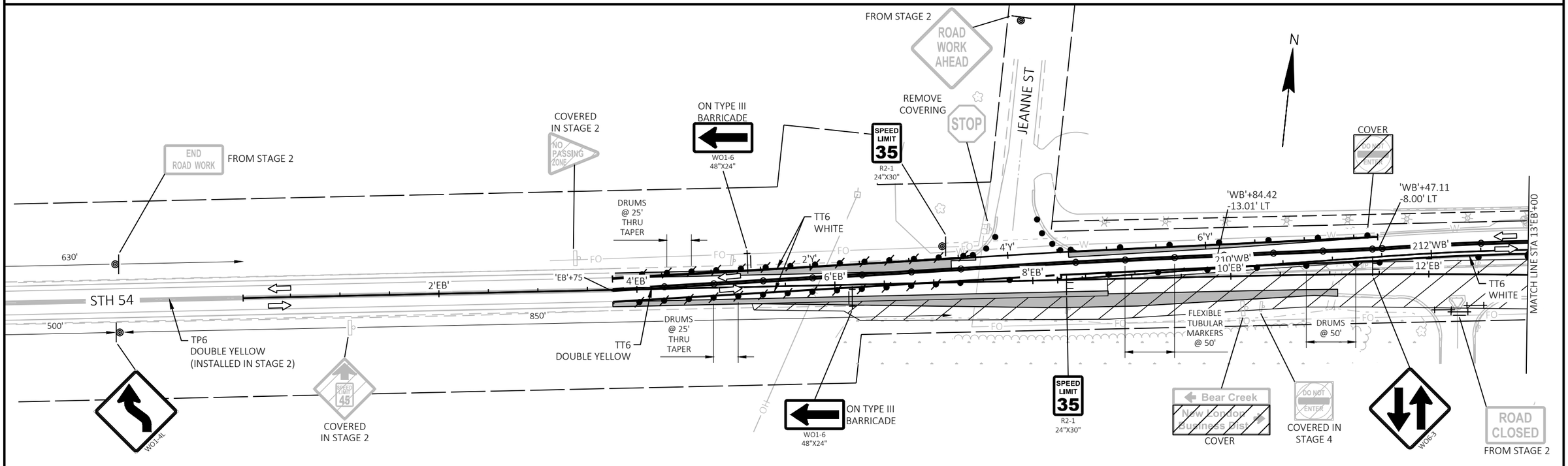
TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLEXIBLE TUBULAR MARKER
- CC — TEMPORARY CRASH CUSHION
- WORK AREA

TEMPORARY PAVEMENT MARKING LEGEND

TP6 = TEMPORARY MARKING LINE PAINT 6-INCH
TP10 = TEMPORARY MARKING LINE PAINT 10-INCH
TP18 = TEMPORARY MARKING STOP LINE PAINT 18-INCH
TT6 = TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
TT10 = TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
TT18 = TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
RL4 = MARKING REMOVAL LINE 4-INCH
RWB4 = MARKING REMOVAL LINE WATER BLASTING 4-INCH
RL8 = MARKING REMOVAL LINE 8-INCH
RLW = MARKING REMOVAL LINE WIDE
RLS = MARKING REMOVAL SPECIAL MARKING

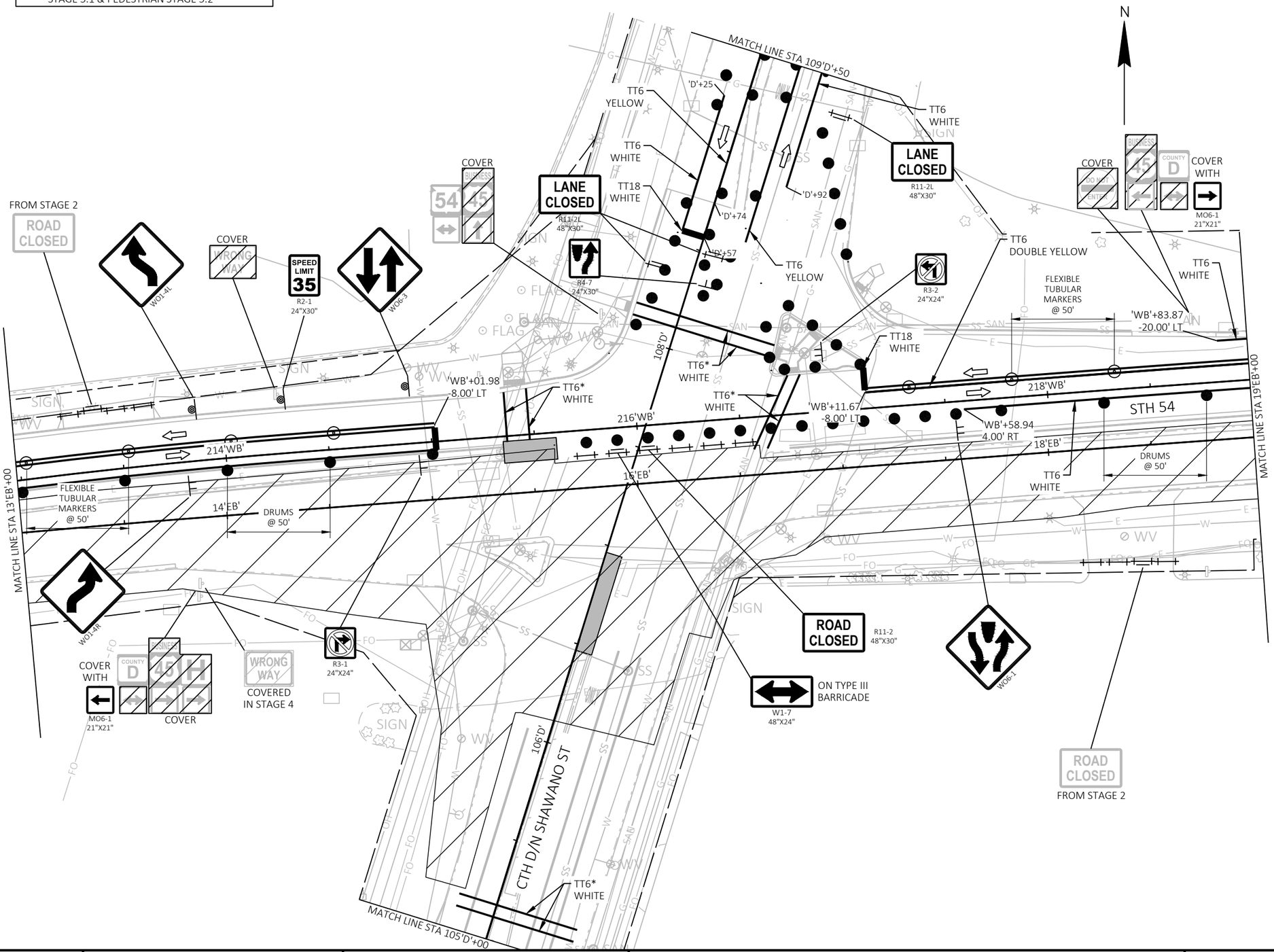




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 5	SHEET 208	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026510_S5_54.DWG
LAYOUT NAME - W1
PLOT DATE : 6/28/2025 11:09 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

*= SEE ACCOMMODATIONS FOR PEDESTRIAN STAGE 5.1 & PEDESTRIAN STAGE 5.2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 5 - CTH D INTERSECTION	SHEET 209	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026510_S5_54.DWG
LAYOUT NAME - int
PLOT DATE : 6/28/2025 11:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

FROM STAGE 2
ROAD CLOSED
COVERED IN STAGE 3
WRONG WAY
COVER
New London Business Dist
Bear Creek
ON TYPE III BARRICADE
WO1-6 48"X24"
R2-1 24"X30"
SPEED LIMIT 35
DRUMS @ 50'
STA 226'WB'+92
FROM STAGE 4
ROAD WORK AHEAD
W20-4R
EXIT RAMP FROM SB USH 45
ENTRANCE RAMP TO SB USH 45
END ROAD WORK
FROM STAGE 4
N
TEMPORARY MARKING LINE REMOVABLE TAPE
PERMANENT PAVEMENT MARKING
DRUMS @ 25' THRU TAPER
'WB'+23.86 -10.00' LT
TT6 YELLOW
TT6 WHITE
'WB'+24
500'
300'
MATCH LINE STA 19'EB'+00
220'WB'
2'YW'
222'WB'
224'WB'
4'YW'
226'WB'
228'WB'
230'WB'
232'WB'
20'EB'
22'EB'
24'EB'
6'YW'
26'EB'
28'EB'
30'EB'
32'EB'
'EB'+02
STH 54
TT6 WHITE
TT6 DOUBLE YELLOW
TT6 WHITE
DRUMS @ 25' THRU TAPER
TEMPORARY MARKING LINE REMOVABLE TAPE
PERMANENT PAVEMENT MARKING
STA 26'EB'+00
SPEED LIMIT 35
R2-1 24"X30"
SPEED LIMIT 45
SPEED LIMIT 35
COVERED IN STAGE 2
ON TYPE III BARRICADE
WO1-6 48"X24"
MAINTAIN DRIVE ACCESS DELINEATE WITH DRUMS @15' TYP
PROVIDE GAP IN DRUMS AT DRIVEWAYS. TYP.
END ROAD WORK
G20-2A 48"X24"
SPEED LIMIT 45
R2-1 24"X30"

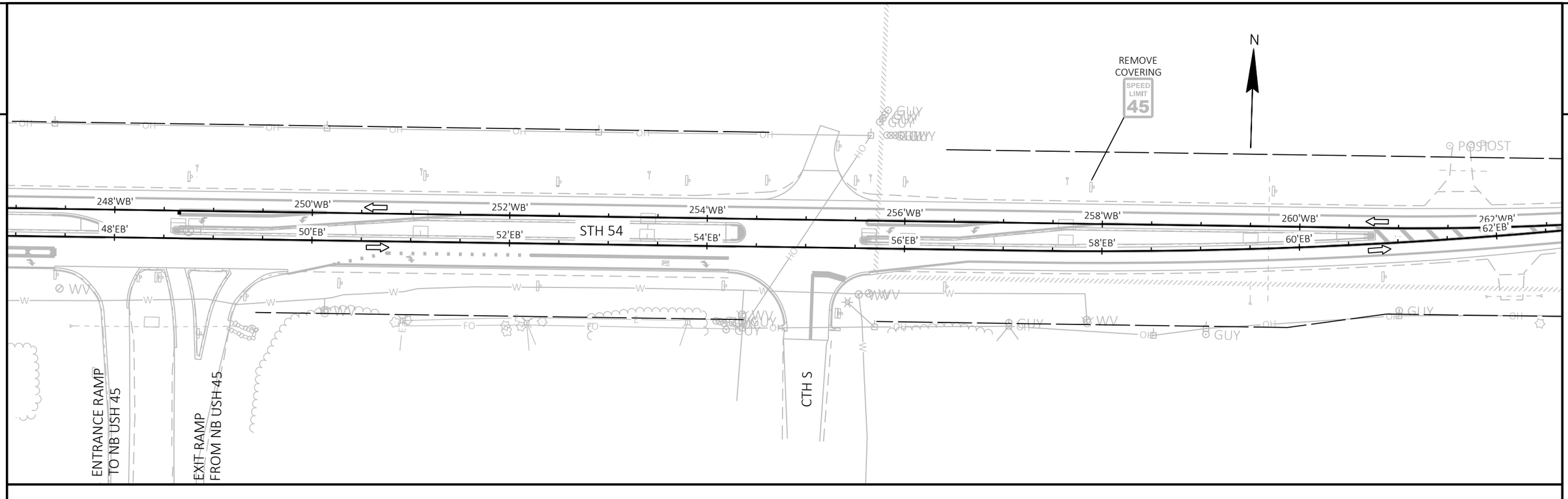
SPEED LIMIT 35
W3-5
REMOVE COVERING
SPEED LIMIT 45
ROAD WORK AHEAD
W20-1A
N
300'
700'
500'
234'WB'
236'WB'
238'WB'
240'WB'
242'WB'
244'WB'
246'WB'
34'EB'
36'EB'
38'EB'
40'EB'
42'EB'
STH 54
44'EB'
46'EB'
EMBARRASS RIVER
RIVER RD
USH 45
MAX. 12' WIDTH
W12-52 48"X48"
REMOVE COVERING
ROAD WORK AHEAD
FROM STAGE 1

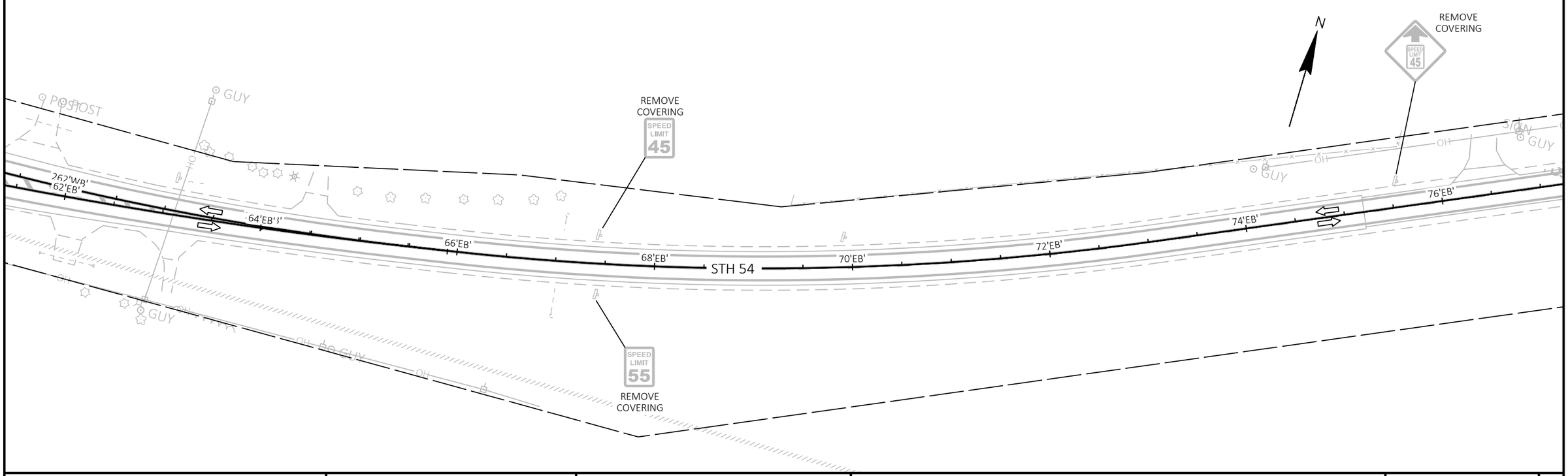
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 5	SHEET 210	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026510_S5_54.DWG
LAYOUT NAME - E1
PLOT DATE : 6/28/2025 11:10 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

2

2





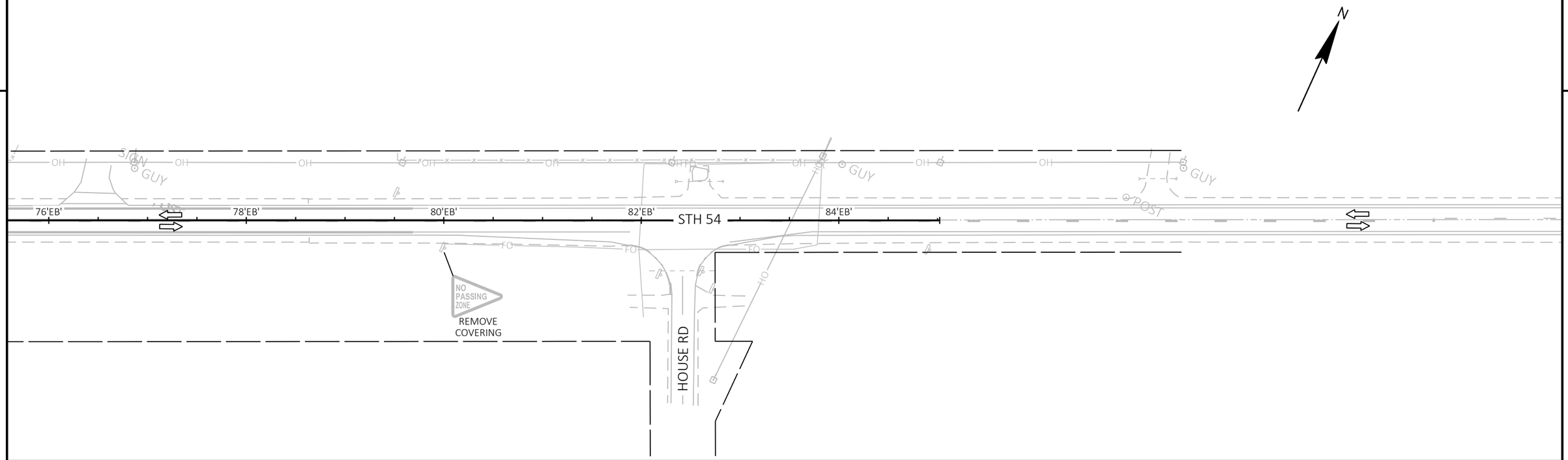
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 5	SHEET 211	E

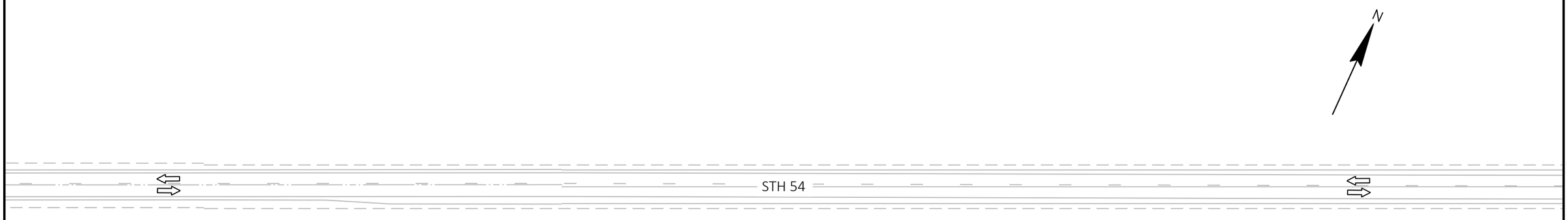
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026510_S5_54.DWG
LAYOUT NAME - E2

PLOT DATE : 6/28/2025 11:10 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ############

WISDOT/CADDS SHEET 44

2



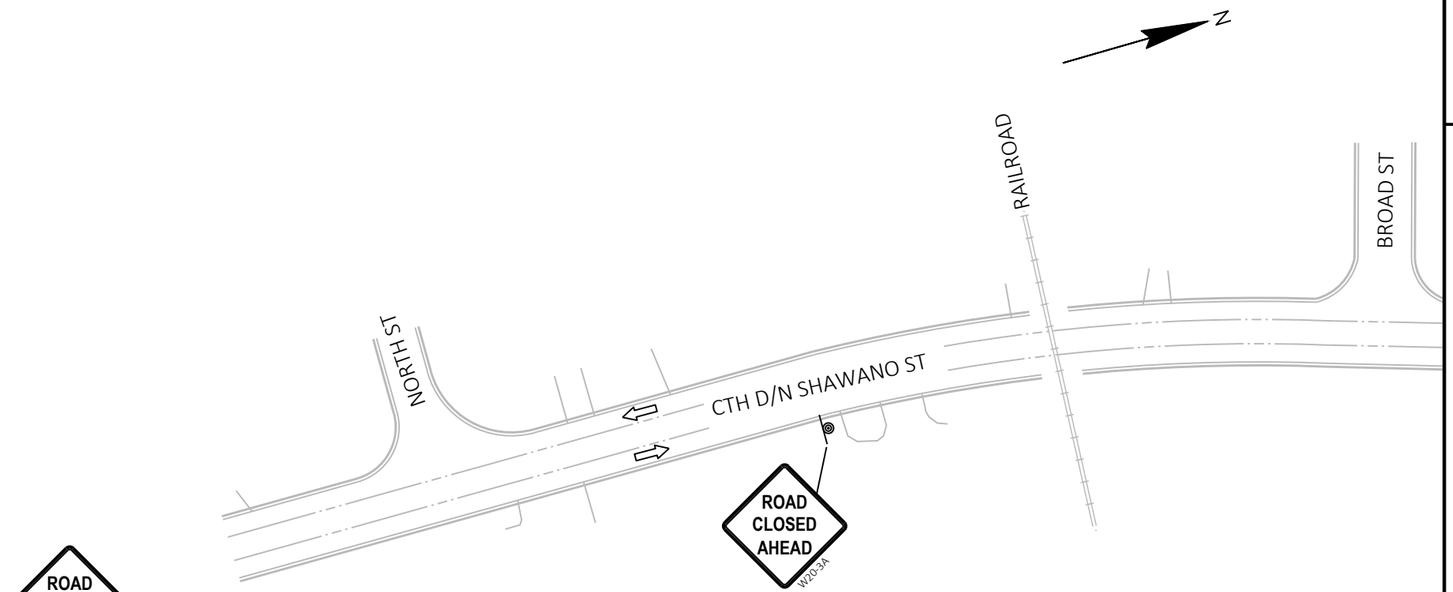


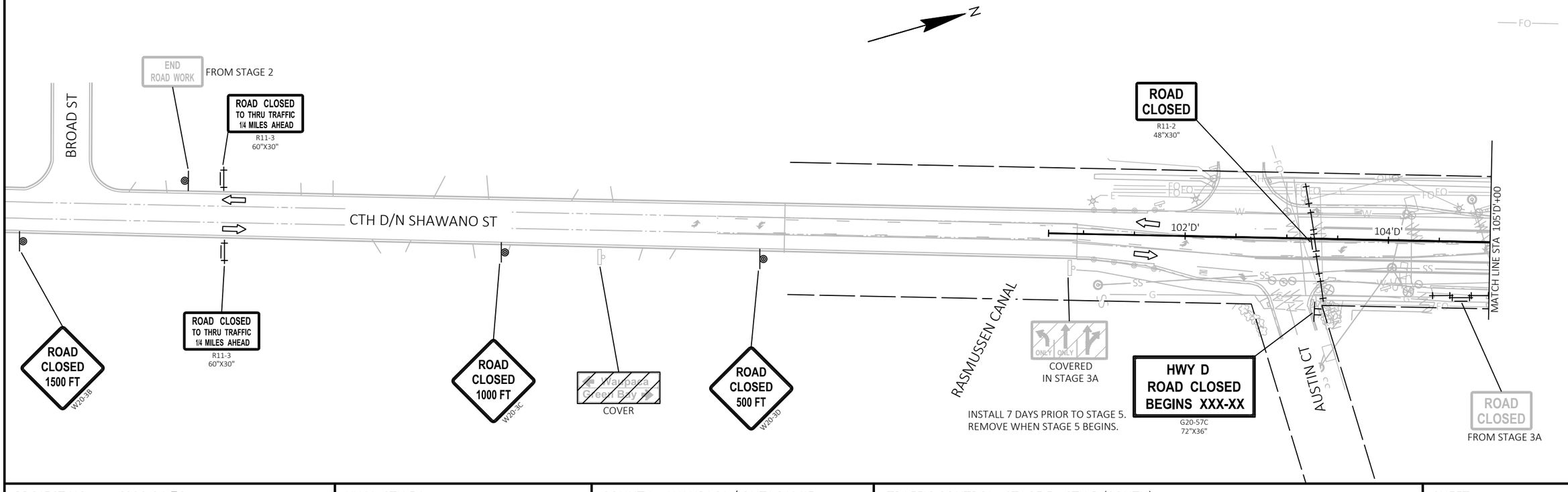
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 5	SHEET 212	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026510_S5_54.DWG
LAYOUT NAME - E3
PLOT DATE : 6/28/2025 11:10 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ###
WISDOT/CADDS SHEET 44

2

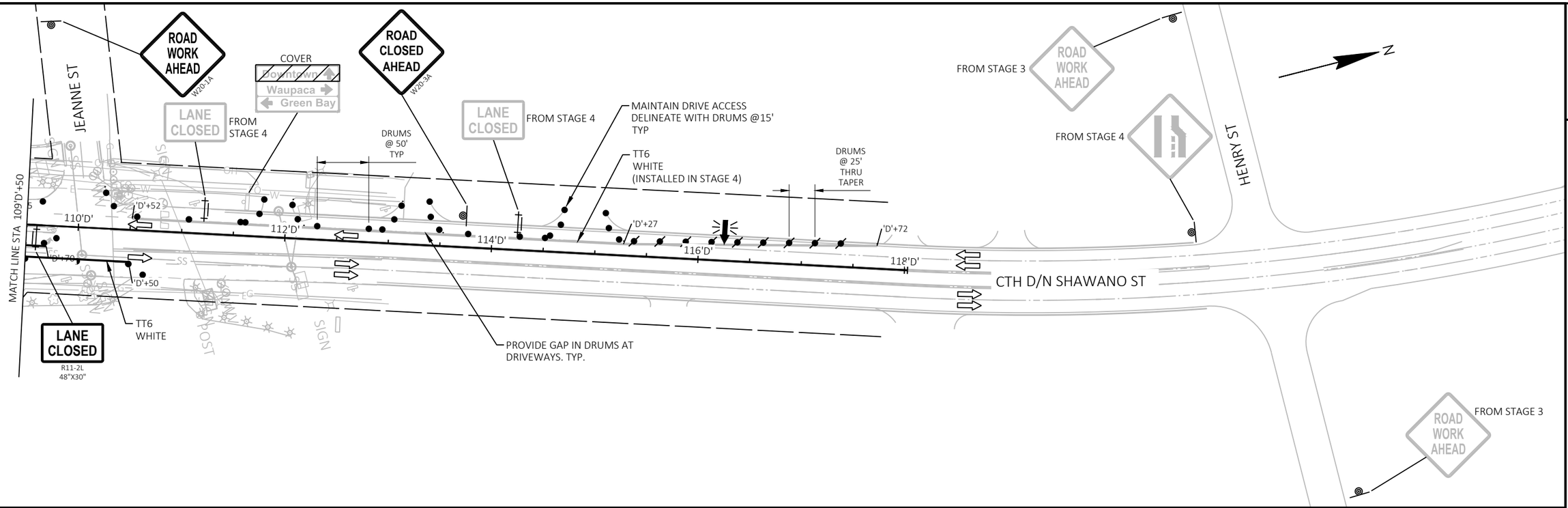
NOTE:
INSTALL FIXED MESSAGE SIGN "NO ACCESS TO HWY 54" AT THE N SHAWANO ST/N WATER ST INTERSECTION AT THE BEGINNING OF STAGE 5.
MOVED FROM STAGE 4 LOCATION.

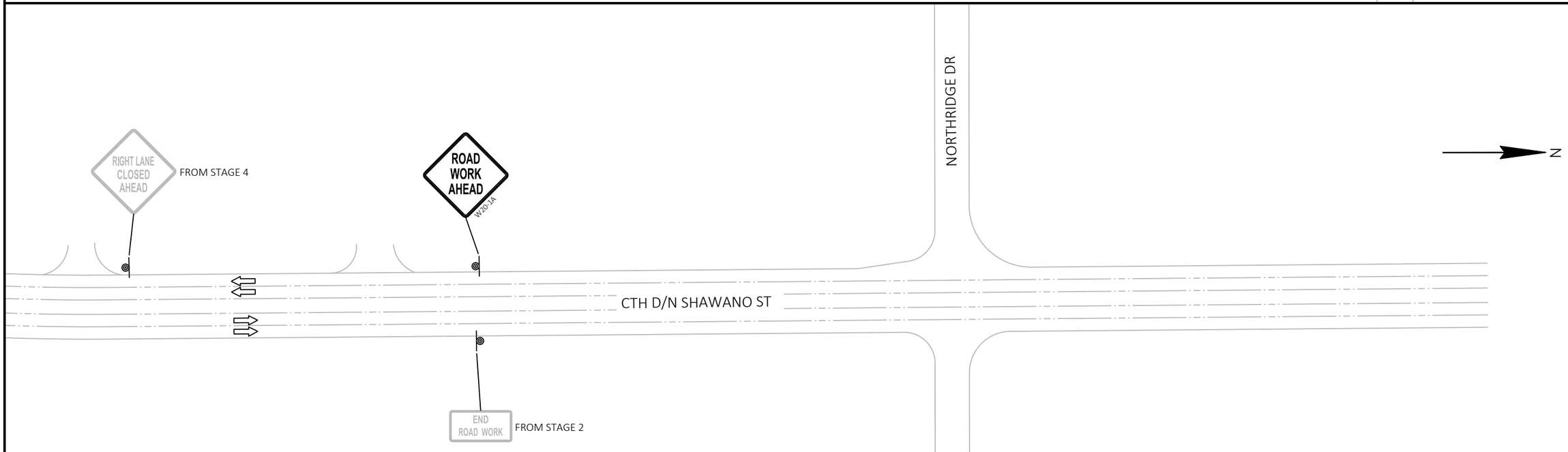




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 5 - CTH D (SOUTH)	SHEET 213	E

2





PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 5 - CTH D (NORTH)	SHEET 214	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026510_S5_54.DWG
LAYOUT NAME - CTH D N
PLOT DATE : 6/28/2025 11:10 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ##########

2

N

UTILIZE NEW RAMP CONSTRUCTED IN STAGE 4.2

MATCH LINE STA 109'D'+00 SEE STAGE 5 TRAFFIC CONTROL DETAILS

TEMPORARY PEDESTRIAN BARRICADE

SIDEWALK CLOSED AHEAD R9-9A 30"X18"

M4-60L 30"X24"

UTILIZE NEW RAMPS CONSTRUCTED IN STAGE 4.1

108'D'

TT6 WHITE

TT6 WHITE

218'WB'

STH 54

216'WB'

214'WB'

18'EB'

16'EB'

14'EB'

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

EXISTING CROSSWALK CLOSED TYP

TEMPORARY PEDESTRIAN BARRICADE

MATCH LINE STA 13'EB'+00 SEE STAGE 5 TRAFFIC CONTROL DETAILS

MATCH LINE STA 19'EB'+00 SEE STAGE 5 TRAFFIC CONTROL DETAILS

SIDEWALK CLOSED R9-9 24"X12"

M4-60D 30"X24"

CTH D/N SHAWANO ST

106'D'

SIDEWALK CLOSED AHEAD R9-9A 30"X18"

M4-60R 30"X24"

DIRECTION OF PEDESTRIAN FLOW TYP

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN CURB RAMP (PERPENDICULAR TO CURB & GUTTER)

TEMPORARY PEDESTRIAN BARRICADE

TT6 WHITE

TEMPORARY PEDESTRIAN SURFACE MATTING

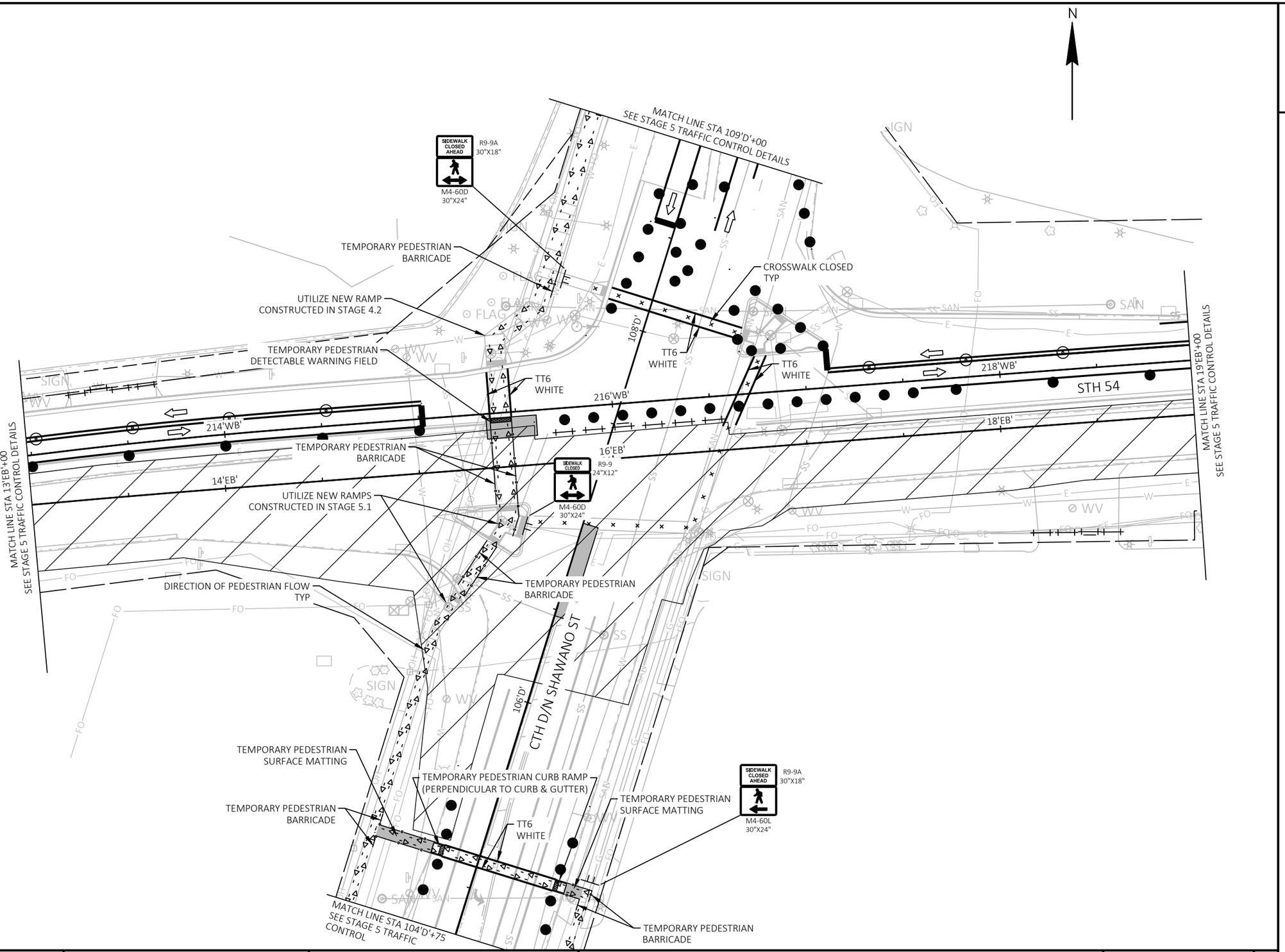
MATCH LINE STA 104'D'+75 SEE STAGE 5 TRAFFIC CONTROL

TEMPORARY PEDESTRIAN BARRICADE

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 5.1	SHEET 215	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026511_S5-1_PED_54.DWG
LAYOUT NAME - int
PLOT DATE : 4/5/2025 5:57 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

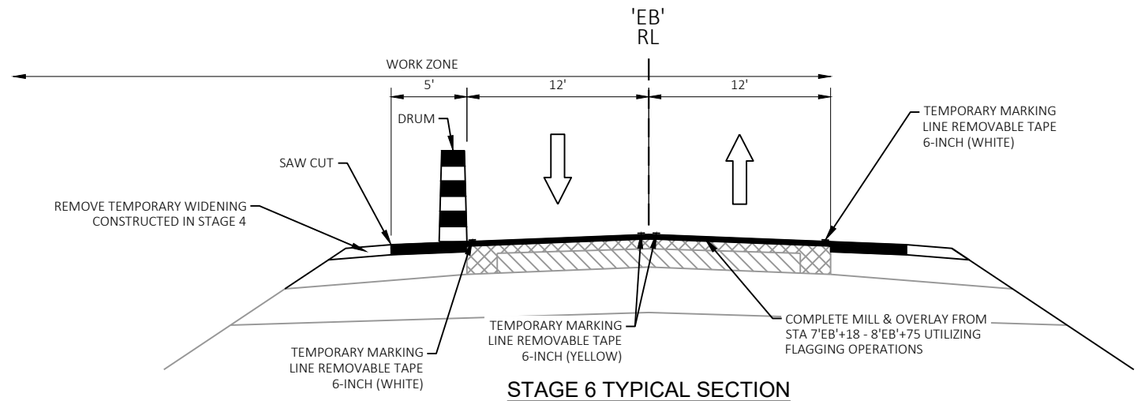
2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 5.2	SHEET 216	E

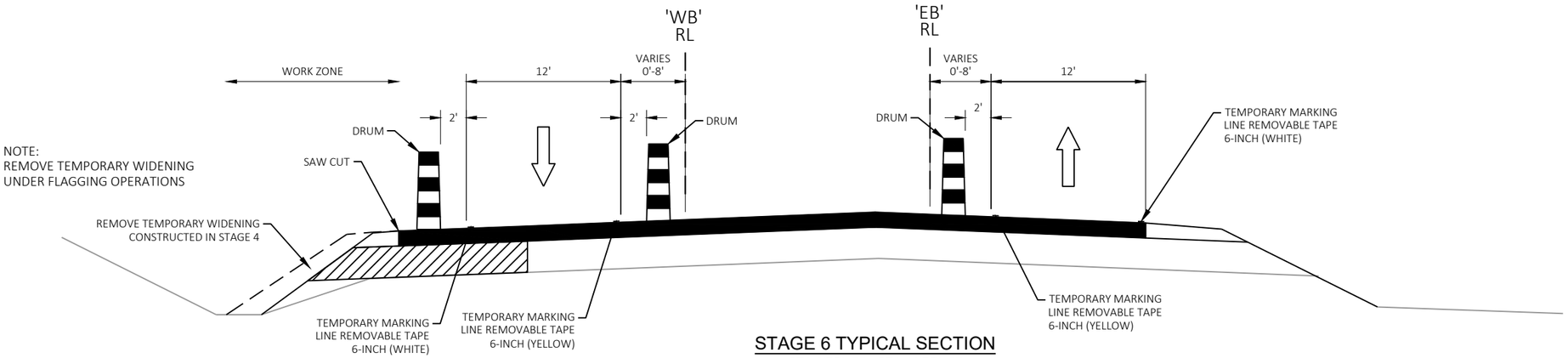
2

NOTE:
REMOVE TEMPORARY WIDENING
UNDER FLAGGING OPERATIONS

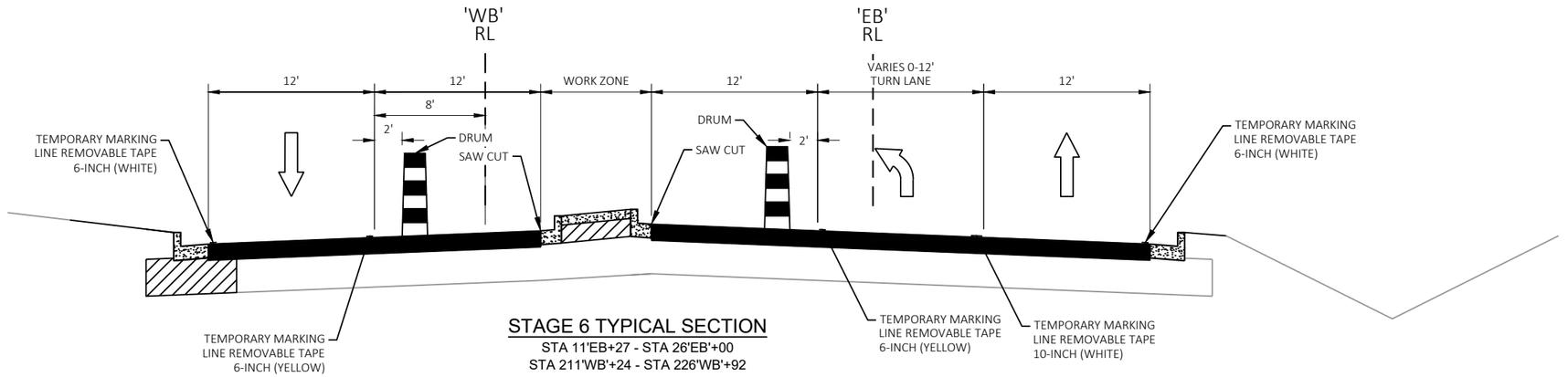


STAGE 6 TYPICAL SECTION
STA 3'EB'+75 - STA 8'EB'+75

NOTE:
REMOVE TEMPORARY WIDENING
UNDER FLAGGING OPERATIONS



STAGE 6 TYPICAL SECTION
STA 8'EB'+75 - STA 11'EB'+27
STA 208'WB'+72 - STA 211'WB'+24

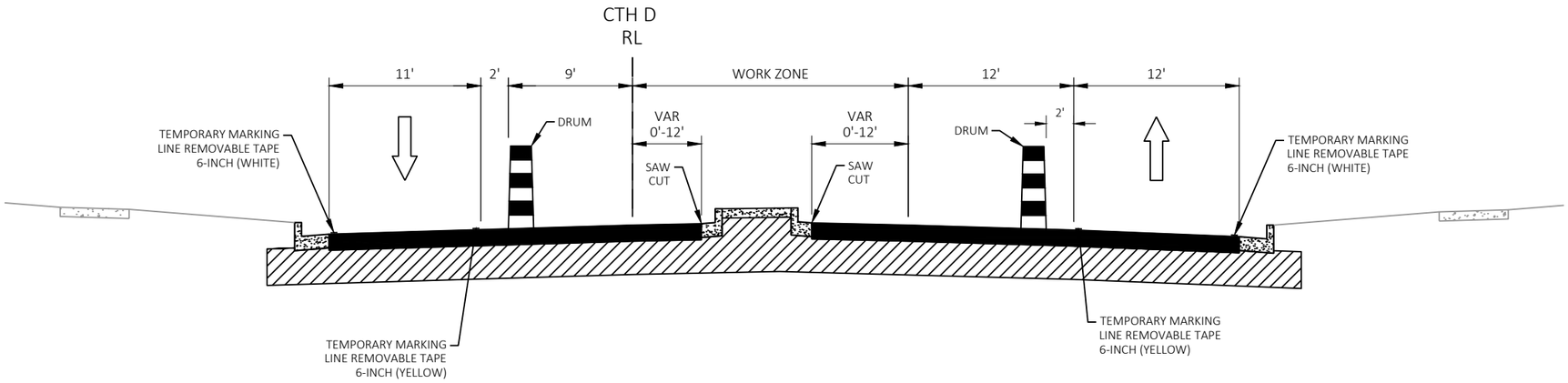


STAGE 6 TYPICAL SECTION
STA 11'EB+27 - STA 26'EB'+00
STA 211'WB'+24 - STA 226'WB'+92

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 6 - TYPICAL SECTIONS	SHEET 217	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\999999_TC_TYPICAL SHELL_54.DWG
LAYOUT NAME - 6-1
PLOT DATE : 6/28/2025 11:15 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



STAGE 6 CTH D TYPICAL SECTION

STA 102'D'+69 - 109'D'+69

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL STAGE 6 - TYPICAL SECTIONS	SHEET 218	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\999999_TC_TYPICAL SHELL_54.DWG
LAYOUT NAME - 6-2
PLOT DATE : 6/28/2025 11:15 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

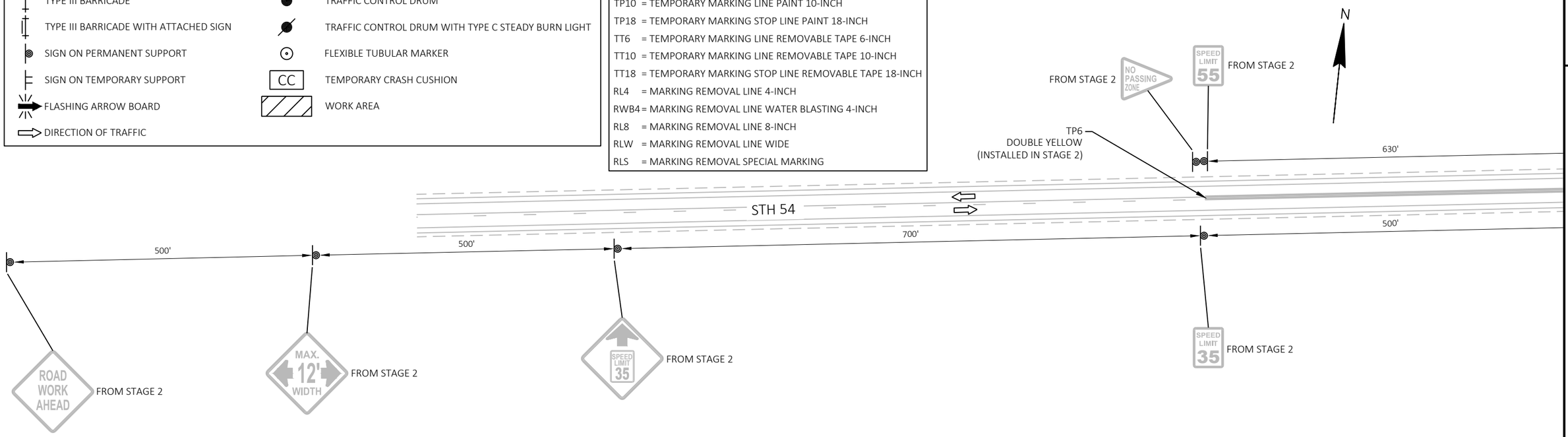
2

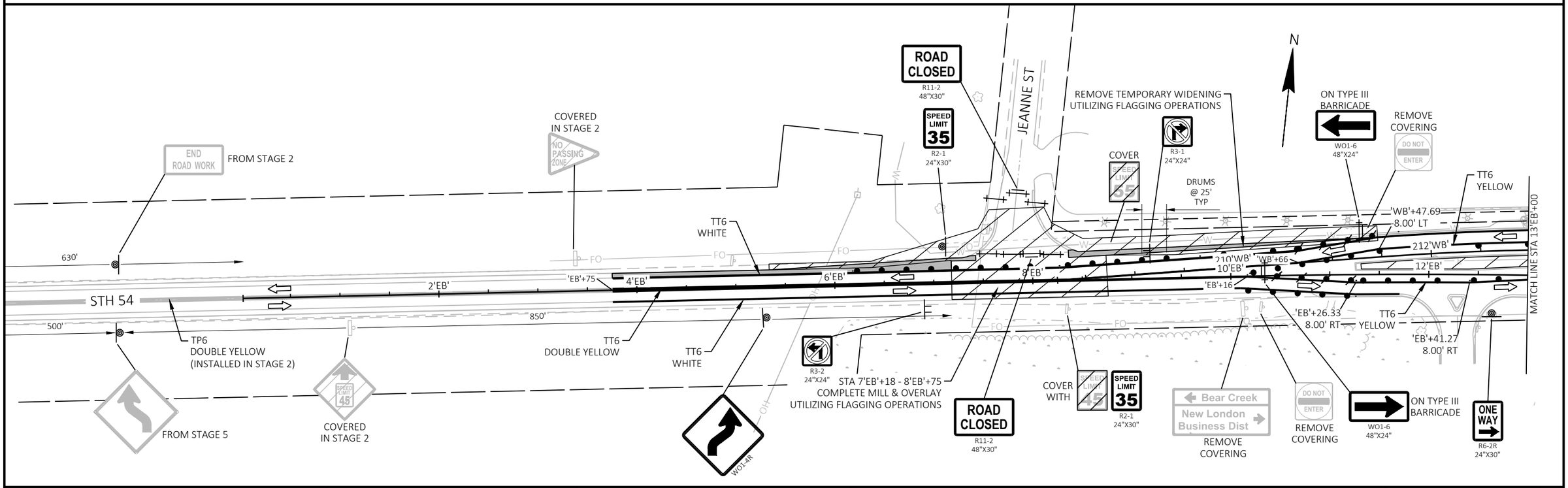
TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLEXIBLE TUBULAR MARKER
- CC — TEMPORARY CRASH CUSHION
- WORK AREA

TEMPORARY PAVEMENT MARKING LEGEND

TP6	= TEMPORARY MARKING LINE PAINT 6-INCH
TP10	= TEMPORARY MARKING LINE PAINT 10-INCH
TP18	= TEMPORARY MARKING STOP LINE PAINT 18-INCH
TT6	= TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
TT10	= TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
TT18	= TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
RL4	= MARKING REMOVAL LINE 4-INCH
RWB4	= MARKING REMOVAL LINE WATER BLASTING 4-INCH
RL8	= MARKING REMOVAL LINE 8-INCH
RLW	= MARKING REMOVAL LINE WIDE
RLS	= MARKING REMOVAL SPECIAL MARKING





PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 6	SHEET 219	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026610_S6_54.DWG
LAYOUT NAME - W1
PLOT DATE : 6/28/2025 11:24 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

*= SEE ACCOMMODATIONS FOR PEDESTRIAN STAGE 6.1 & PEDESTRIAN STAGE 6.2

N

MATCH LINE STA 109'D'+50

TT6 WHITE

-22.00

DRUMS @50'

LANE CLOSED R11-2L 48"X30"

TT6 YELLOW

R4-7 24"X30"

LANE CLOSED R11-2L 48"X30"

TT6 YELLOW

REMOVE COVERINGS

BUSINESS 45 COUNTY D

DO NOT ENTER

FROM STAGE 5

REMOVE COVERING

WRONG WAY

FROM STAGE 5

SPEED LIMIT 35

LANE CLOSED R11-2L 48"X30"

R4-7 24"X30"

REMOVE COVERINGS

BUSINESS 54 45

D'+20.81 -12.00' LT

108'D'

TT18 WHITE

TT6* WHITE (INSTALLED IN STAGE 5)

TT10 WHITE

TT6 YELLOW

'WB'+0 -8.00

DRUMS @ 25'

218'WB'

D'+16.80 33.00' RT

'WB'+84.72 -8.00' LT

TT18 WHITE

DRUMS @ 50'

TT6 WHITE

'WB'+37

TT6* WHITE (INSTALLED IN STAGE 5)

216'WB'

TT6* WHITE

WB'+84.69 3.00' RT

STH 54

214'WB'

DRUMS @ 25'

18'EB'

16'EB'

MATCH LINE STA 19'EB'+00

TT6 YELLOW

14'EB'

'EB'+09.45 -3.00' LT

'EB'+34

TT18 WHITE

TT6* WHITE

EB'+09.45 8.00' RT

TT10 WHITE

TT6* WHITE

DRUMS @ 50'

TT6 WHITE

MATCH LINE STA 13'EB'+00

D'+75.90 33.00' RT

TT6* WHITE

D'+79.91 -12.00' LT

BEGIN LEFT TURN LANE R3-20L 24"X36"

BUSINESS COUNTY D 45 H

REMOVE COVERINGS

WRONG WAY

REMOVE COVERING

TT18 WHITE

R4-7 24"X30"

SPEED LIMIT 35 R2-1 24"X30"

LANE CLOSED R11-2L 48"X30"

ONE WAY R6-2R 24"X30"

TT6 YELLOW

106'D'

DRUMS @50'

LANE CLOSED R11-2L 48"X30"

LANE CLOSED R11-2L 48"X30"

TT6 WHITE

TT6 YELLOW

'D'+16.26 -12.00' LT

TT6 DOUBLE YELLOW

'D'+23.61 33.00' RT

TT6 DOUBLE YELLOW

CTH D/N SHAWANO ST

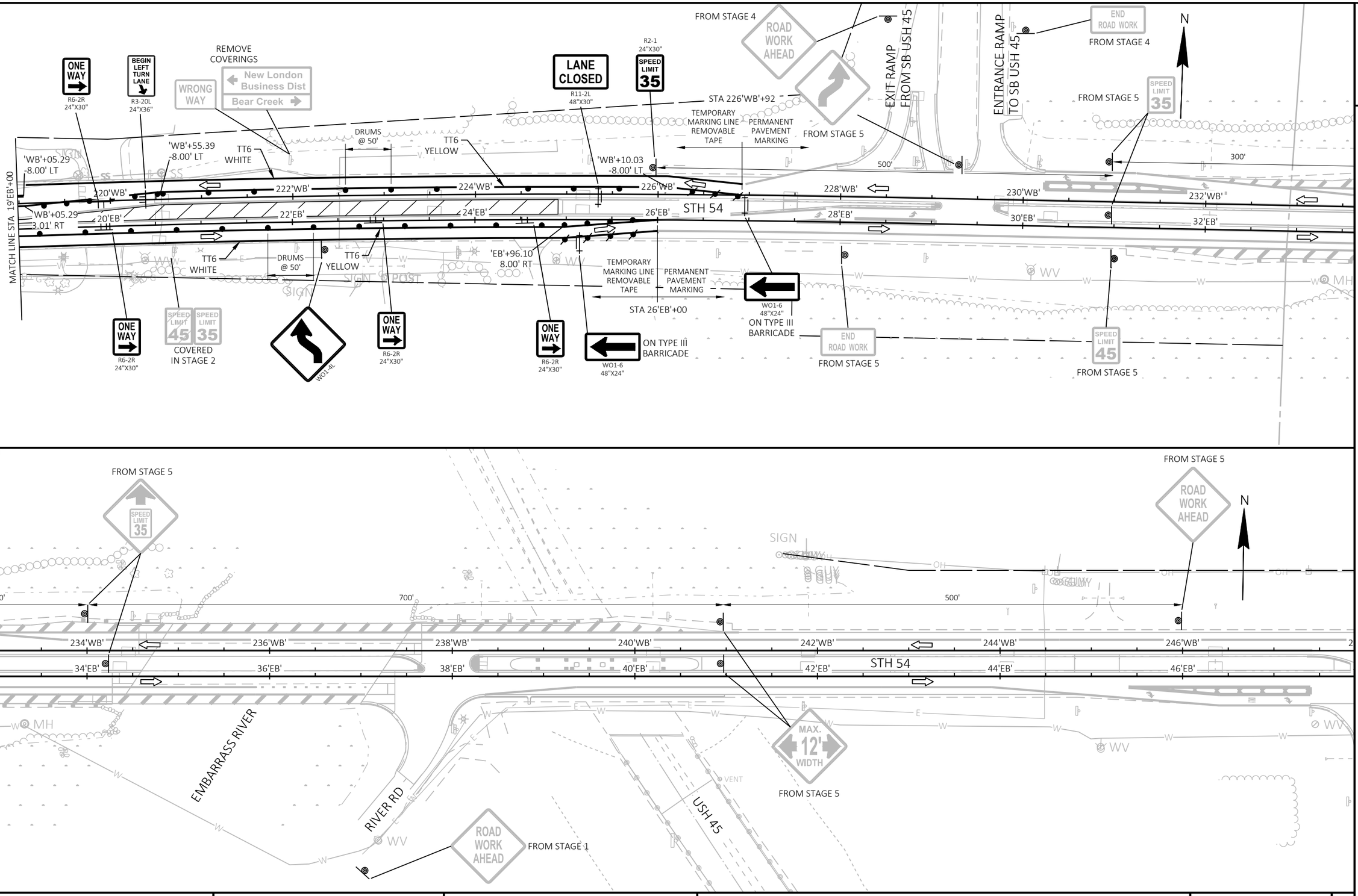
MATCH LINE STA 105'D'+00

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 6 - CTH D INTERSECTION	SHEET 220	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026610_S6_54.DWG
LAYOUT NAME - int

PLOT DATE : 6/28/2025 11:24 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

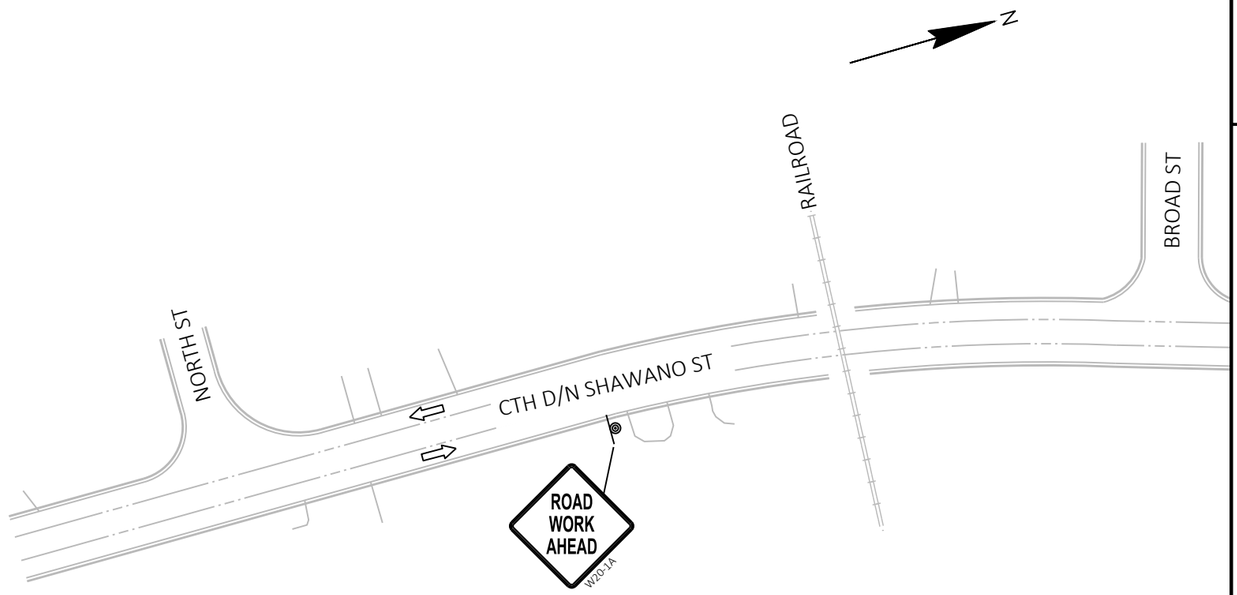


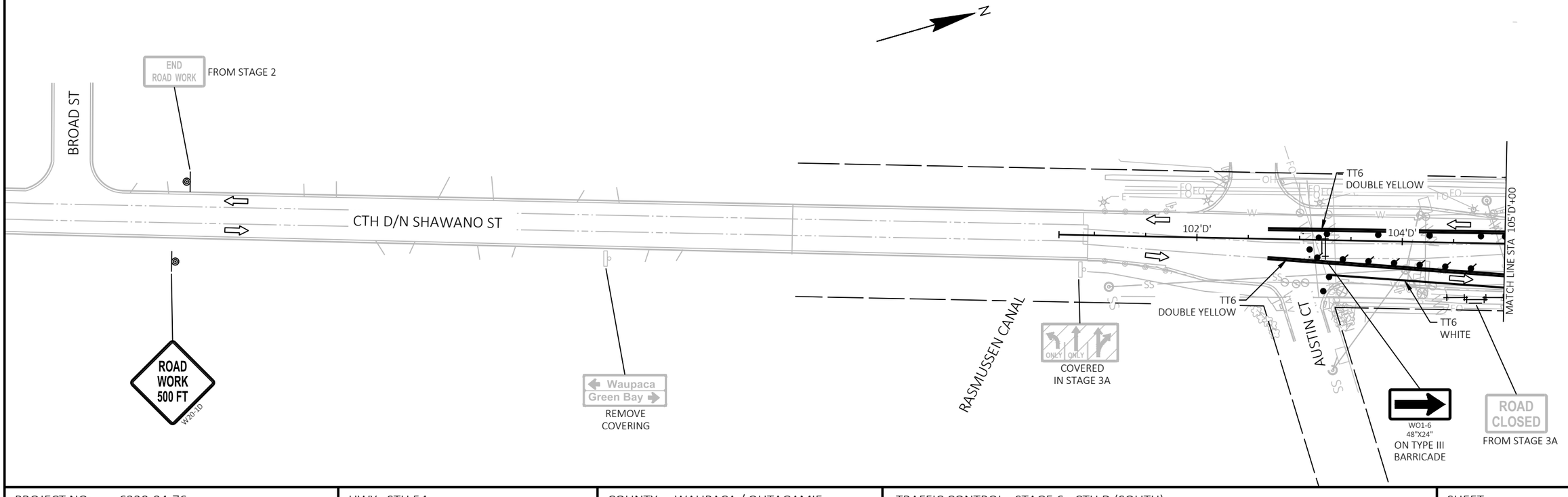
2

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 6	SHEET 221	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026610_S6_54.DWG
LAYOUT NAME - E1
PLOT DATE : 6/28/2025 11:24 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : ############
WISDOT/CADDS SHEET 44

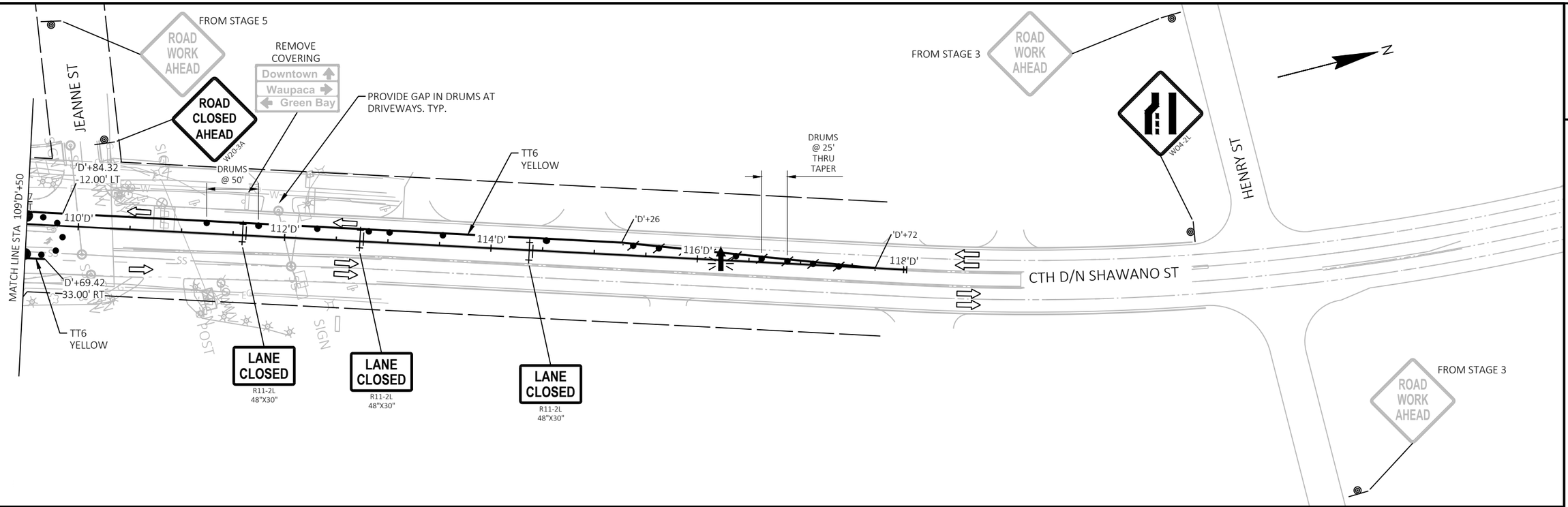
2

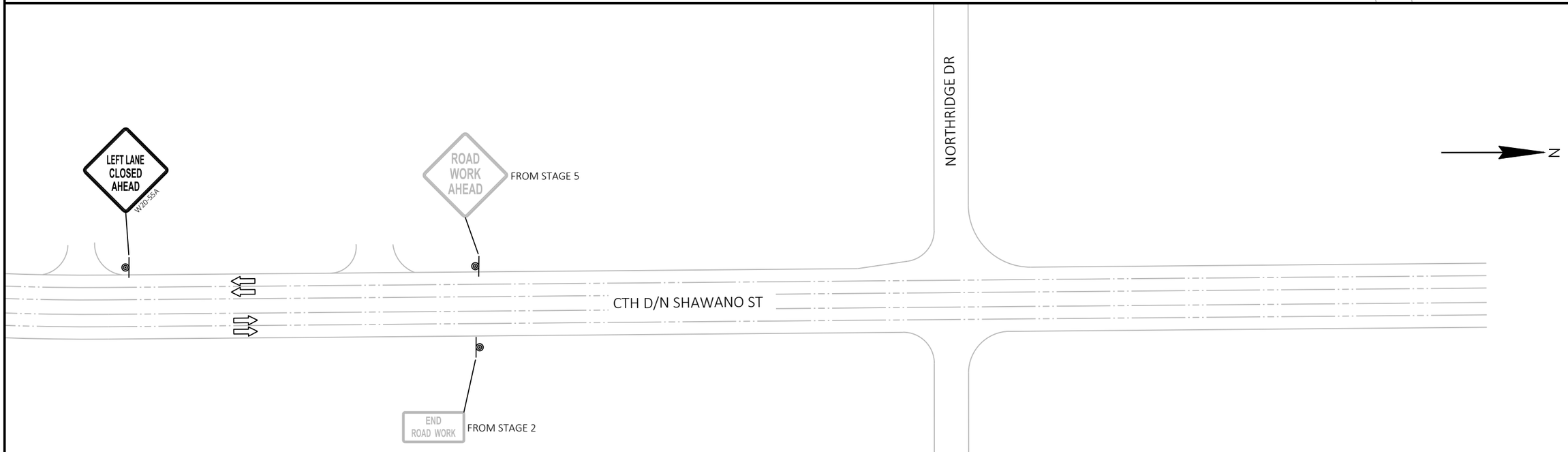




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 6 - CTH D (SOUTH)	SHEET 222	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026610_S6_54.DWG
LAYOUT NAME - CTH D S
PLOT DATE : 6/28/2025 11:24 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

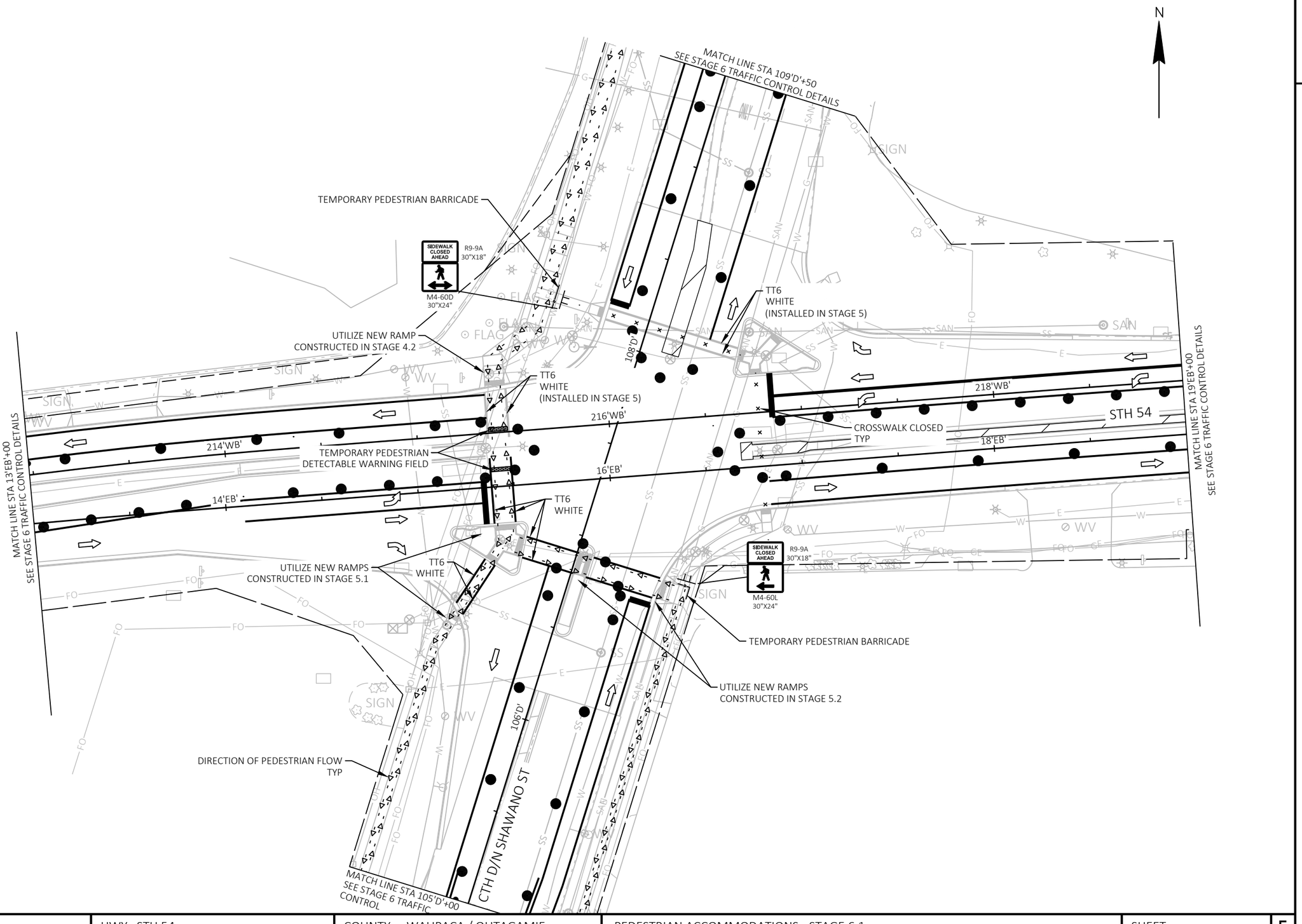




PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	TRAFFIC CONTROL - STAGE 6 - CTH D (NORTH)	SHEET 223	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026610_S6_54.DWG
LAYOUT NAME - CTH D N
PLOT DATE : 6/28/2025 11:24 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

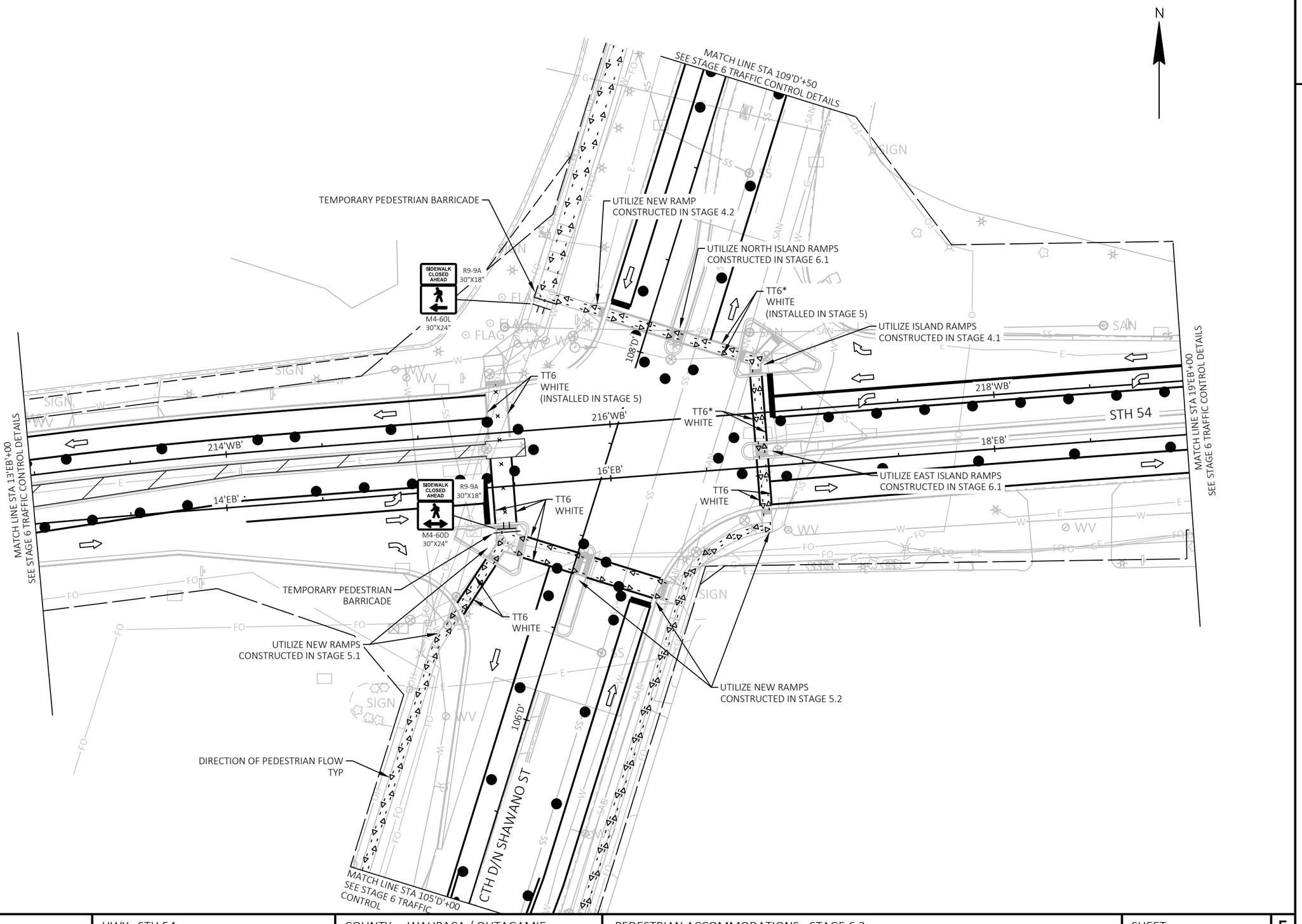
2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 6.1	SHEET 224	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026611_S6-1_PED_54.DWG
LAYOUT NAME - int
PLOT DATE : 4/5/2025 6:41 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PEDESTRIAN ACCOMMODATIONS - STAGE 6.2	SHEET 225	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\026612_S6-2_PED_54.DWG
LAYOUT NAME - int
PLOT DATE : 4/5/2025 6:50 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

PI STA = 212+91.66 'WB'
Y = 358165.077
X = 625891.352
DELTA = 5°47'36" RT
D = 2°00'20"
T = 144.55'
L = 288.86'
R = 2856.79'
PC STA = 211+47.11 'WB'
Y = 358139.501
X = 625749.078
PT STA = 214+35.97 'WB'
Y = 358176.160
X = 626035.481
DB = N79°48'33"E
DA = N85°36'10"E

PI STA = 1+71.97 'L'
Y = 358298.436
X = 626949.653
DELTA = 0°53'40" RT
D = 28°38'52"
T = 1.56'
L = 3.12'
R = 200.00'
PC STA = 1+70.41 'L'
Y = 358298.333
X = 626948.096
PT STA = 1+73.53 'L'
Y = 358298.515
X = 626951.212
DB = N86°11'35"E
DA = N87°05'15"E

PI STA = 5+64.31 'L'
Y = 358315.305
X = 627341.624
DELTA = 26°21'39" LT
D = 114°35'30"
T = 11.71'
L = 23.00'
R = 50.00'
PC STA = 5+52.60 'L'
Y = 358314.859
X = 627329.923
PT STA = 5+75.60 'L'
Y = 358320.900
X = 627351.910
DB = N87°49'02"E
DA = N61°27'23"E

N

MATCH LINE 29+31.58

SEE PROJECT 1140-00-77
FOR USH 45 AND
RAMP ALIGNMENTS

EP: 13+22.68 'J'

BP: 208+21.56 'WB'

PC: 211+47.11 'WB'

PT: 214+35.97 'WB'

115'D'

N17°14'34"E

CTH D

110'D'

PC: 217+90.21 'WB'

BP: 0+00.00 'L'

PI: 1+04.95 'L'

PC: 1+70.41 'L'

PT: 1+73.53 'L'

PI: 2+28.34 'L'

PI: 3+34.74 'L'

PC: 5+52.60 'L'

PT: 5+75.60 'L'

EP: 6+54.93 'L'

PT: 228+46.19 'WB'

BP: 10+00.00 'J'

N79°48'33"E210'WB'

215'WB'

N85°36'10"E

220'WB'

N83°00'05"E

N87°05'15"E

N86°11'35"E

N87°09'58"E

225'WB'

N87°49'02"E

N61°27'23"E

10'EB

15'EB'

N85°36'10"E

20'EB'

25'EB'

STH 54

N82°42'25"E 5'EB'

BP: 0+02.14 'EB'

PC: 10+16.81 'EB'

PT: 14+03.30 'EB'

105'D'

PC: 17+91.14 'EB'

PT: 28+47.72 'EB'

PI STA = 12+10.10 'EB'
Y = 358130.786
X = 625810.628
DELTA = 2°53'44" RT
D = 0°44'57"
T = 193.29'
L = 386.49'
R = 7647.44'
PC STA = 10+16.81 'EB'
Y = 358106.250
X = 625618.904
PT STA = 14+03.30 'EB'
Y = 358145.606
X = 626003.346
DB = N82°42'25"E
DA = N85°36'10"E

BP: 100+65.62 'D'

PI STA = 223+18.37 'WB'
Y = 358243.816
X = 626915.280
DELTA = 3°30'39" RT
D = 0°19'57"
T = 528.16'
L = 1055.98'
R = 17232.73'
PC STA = 217+90.21 'WB'
Y = 358203.320
X = 626388.677
PT STA = 228+46.19 'WB'
Y = 358251.986
X = 627443.374
DB = N85°36'10"E
DA = N89°06'49"E

PI STA = 23+19.59 'EB'
Y = 358215.861
X = 626916.940
DELTA = 3°30'41" RT
D = 0°19'56"
T = 528.45'
L = 1056.58'
R = 17240.73'
PC STA = 17+91.14 'EB'
Y = 358175.343
X = 626390.041
PT STA = 28+47.72 'EB'
Y = 358224.032
X = 627445.330
DB = N85°36'10"E
DA = N89°06'50"E

NOTE: REFER TO WIDENING ALIGNMENT PLAN SHEETS FOR DETAILS PERTAINING TO WIDENINGS.

NOTE: REFER TO CROSSOVER ALIGNMENT PLAN SHEETS FOR DETAILS PERTAINING TO CROSSOVERS.

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	ALIGNMENT PLAN	SHEET 226	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\027201_AD-54.DWG
LAYOUT NAME - 04

PLOT DATE : 6/18/2025 2:55 PM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

SEE PROJECT 1140-00-77
FOR USH 45 AND
RAMP ALIGNMENTS

PI STA = 0+12.57 'M'
Y = 358339.819
X = 627605.892
DELTA = 24°44'14" LT
D = 381°58'19"
T = 3.29'
L = 6.48'
R = 15.00'
PC STA = 0+09.28 'M'
Y = 358341.183
X = 627602.899
PT STA = 0+15.75 'M'
Y = 358339.832
X = 627609.181
DB = S65°29'40"E
DA = N89°46'05"E

BP: 0+00.00 'M'
PC: 0+09.28 'M'
PT: 0+15.75 'M'
EP: 2+25.00 'M'
S65°29'40"E
N89°46'05"E

N

MATCH LINE 58+35.52

EP: 30+08.00 'R'

230'WB' N89°06'49"E 235'WB' 240'WB' N89°06'49"E 245'WB' 250'WB' 255'WB'

30'EB' N89°06'50"E 35'EB' PT: 29+73.11 'R' 30'R' 40'EB' N89°06'50"E 45'EB' 50'EB' 55'EB'

STH 54

PC: 29+03.73 'R'
BP: 26+57.59 'R'
N38°51'47"E
N0°53'10"W

RIVER RD

PI STA = 29+39.88 'R'
Y = 358167.461
X = 628381.601
DELTA = 39°44'57" LT
D = 57°17'45"
T = 36.15'
L = 69.38'
R = 100.00'
PC STA = 29+03.73 'R'
Y = 358139.314
X = 628358.918
PT STA = 29+73.11 'R'
Y = 358203.606
X = 628381.042
DB = N38°51'47"E
DA = N00°53'10"W

USH 45

SEE PROJECT 1140-00-77
FOR USH 45 AND
RAMP ALIGNMENTS

EP: 7+00.00 'S'

5'S'
N0°17'14"E
CTH S

PC: 57+22.40 'EB'

BP: 0+01.54 'S'

MATCH LINE 29+31.58

2

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	ALIGNMENT PLAN	SHEET 227	E

2

N

PI STA = 263+12.43 'WB'
Y = 358305.607
X = 630909.195
DELTA = 9°02'06" LT
D = 1°55'16"
T = 235.64'
L = 470.30'
R = 2982.45'
PC STA = 260+76.79 'WB'
Y = 358301.962
X = 630673.586
PT STA = 265+47.09 'WB'
Y = 358346.206
X = 631141.309
DB = N89°06'49"E
DA = N80°04'43"E

PC: 260+76.79 'WB'
260'WB'
60'EB'
PT: 265+47.09 'WB'
EP: 265+88.73 'WB'
265'WB'
65'EB'
70'EB'
75'EB'
STH 54
N65°42'23"E
80'EB'
85'EB'
EP: 85+02.14 'EB'
N80°04'43"E
PT: 65+48.56 'EB'
PC: 65+90.21 'EB'
PT: 73+08.83 'EB'

PI STA = 61+36.34 'EB'
Y = 358274.886
X = 630733.559
DELTA = 9°02'07" LT
D = 1°05'37"
T = 413.94'
L = 826.17'
R = 5239.02'
PC STA = 57+22.40 'EB'
Y = 358268.485
X = 630319.667
PT STA = 65+48.56 'EB'
Y = 358346.206
X = 631141.309
DB = N89°06'50"E
DA = N80°04'43"E

PI STA = 69+51.41 'EB'
Y = 358415.615
X = 631538.135
DELTA = 14°22'21" LT
D = 2°00'00"
T = 361.21'
L = 718.62'
R = 2864.79'
PC STA = 65+90.21 'EB'
Y = 358353.381
X = 631182.329
PT STA = 73+08.83 'EB'
Y = 358564.221
X = 631867.357
DB = N80°04'43"E
DA = N65°42'23"E

NOTE: REFER TO WIDENING ALIGNMENT PLAN SHEETS FOR DETAILS PERTAINING TO WIDENINGS.

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	ALIGNMENT PLAN	SHEET 228	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\027201_AD-54.DWG
LAYOUT NAME - 06
PLOT DATE : 6/18/2025 2:56 PM
PLOT BY : BRETT HIELSBERG
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

N

PI STA = 1'XE''+11.84
Y = 358214.205
X = 626421.579
DELTA = 6°24'05" RT
D = 2°51'53"
T = 111.84'
L = 223.45'
R = 2000.00'
PC STA = 0'XE''+00.00
Y = 358205.124
X = 626310.108
PT STA = 2'XE''+23.45
Y = 358210.801
X = 626533.368
DB = N85°20'34"E
DA = S88°15'21"E

BP: 0+00.00 'XE''

PT: 2+23.45 'XE''

PC: 4+47.81 'XW''

EP: 6+73.06 'XW''

PC: 5+24.08 'XE''

N81°06'26"E

S88°15'21"E

5'XW''

5'XE''

BP: -0+00.00 'XW''

PT: 1+56.92 'XW''

PI STA = 0'XW''+78.50
Y = 358167.090
X = 626387.067
DELTA = 4°29'43" LT
D = 2°51'53"
T = 78.50'
L = 156.92'
R = 2000.00'
PC STA = -0'XW''+-00.00
Y = 358161.072
X = 626308.799
PT STA = 1'XW''+56.92
Y = 358179.225
X = 626464.621
DB = N85°36'10"E
DA = N81°06'26"E

PI STA = 5'XW''+60.56
Y = 358241.621
X = 626863.412
DELTA = 6°27'11" RT
D = 2°51'53"
T = 112.74'
L = 225.25'
R = 2000.00'
PC STA = 4'XW''+47.81
Y = 358224.193
X = 626752.022
PT STA = 6'XW''+73.06
Y = 358246.421
X = 626976.054
DB = N81°06'26"E
DA = N87°33'37"E

EP: 6+69.97 'XE''

PI STA = 5'XE''+97.06
Y = 358199.430
X = 626906.806
DELTA = 4°10'46" LT
D = 2°51'53"
T = 72.98'
L = 145.89'
R = 2000.00'
PC STA = 5'XE''+24.08
Y = 358201.651
X = 626833.864
PT STA = 6'XE''+69.97
Y = 358202.531
X = 626979.715
DB = S88°15'21"E
DA = N87°33'53"E

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	ALIGNMENT PLAN - X ALIGNMENT CROSSOVERS	SHEET 229	E

2

N

PI STA = 0'YW'+95.10
Y = 358230.017
X = 626655.206
DELTA = 5°26'41" RT
D = 2°51'53"
T = 95.10'
L = 190.06'
R = 2000.00'
PC STA = -0'YW'+-00.00
Y = 358223.675
X = 626560.317
PT STA = 1'YW'+90.06
Y = 358227.326
X = 626750.268
DB = N86°10'36"E
DA = S88°22'43"E

BP: -0+00.00 'YW'

PT: 1+90.06 'YW'

PC: 4+64.31 'YE'

EP: 6+48.29 'YE'

S88°22'43"E

N83°00'56"E

5'YE'

5'YW'

BP: -0+00.00 'YE'

PI STA = 0'YE'+54.44
Y = 358182.547
X = 626604.310
DELTA = 3°07'06" LT
D = 2°51'53"
T = 54.44'
L = 108.85'
R = 2000.00'
PC STA = -0'YE'+-00.00
Y = 358178.877
X = 626549.995
PT STA = 1'YE'+08.85
Y = 358189.167
X = 626658.346
DB = N86°08'02"E
DA = N83°00'56"E

PT: 1+08.85 'YE'

PC: 5+14.82 'YW'

PI STA = 5'YE'+56.37
Y = 358243.586
X = 627102.538
DELTA = 5°16'14" RT
D = 2°51'53"
T = 92.06'
L = 183.98'
R = 2000.00'
PC STA = 4'YE'+64.31
Y = 358232.391
X = 627011.165
PT STA = 6'YE'+48.29
Y = 358246.339
X = 627194.552
DB = N83°00'56"E
DA = N88°17'10"E

EP: 6+31.76 'YW'

PI STA = 5'YW'+73.31
Y = 358216.482
X = 627133.363
DELTA = 3°21'00" LT
D = 2°51'53"
T = 58.49'
L = 116.94'
R = 2000.00'
PC STA = 5'YW'+14.82
Y = 358218.137
X = 627074.900
PT STA = 6'YW'+31.76
Y = 358218.247
X = 627191.823
DB = S88°22'43"E
DA = N88°16'17"E

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	ALIGNMENT PLAN - Y ALIGNMENT CROSSOVERS	SHEET 230	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\027203_AD-54 - YOVERS.DWG
LAYOUT NAME - 04
PLOT DATE : 6/18/2025 2:59 PM
PLOT BY : BRETT HIELSBERG
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

BP: 0+00.00 'Y'

N80°32'07"E

PI: 4+48.58 'Y'

5'Y'

N81°13'17"E

EP: 7+74.05 'Y'

BP: 0+00.00 'W'

N84°44'42"E

PI: 4+49.92 'W'

N82°42'25"E

PI: 5+29.05 'W'

N80°32'32"E

EP: 7+63.03 'W'

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGMIE	ALIGNMENT PLAN - W AND Y WIDENING ALIGNMENTS	SHEET 231	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\027204_AD-54 - WIDENINGS.DWG
LAYOUT NAME - 07

PLOT DATE : 6/18/2025 3:01 PM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 12+41.84

PI STA = 2'Z'+73.58
Y = 358331.147
X = 630746.566
DELTA = 2°45'51" LT
D = 1°52'58"
T = 73.42'
L = 146.82'
R = 3043.19'
PC STA = 2'Z'+00.16
Y = 358329.958
X = 630673.153
PT STA = 3'Z'+46.98
Y = 358335.875
X = 630819.836
DB = N89°04'20"E
DA = N86°18'28"E

PI STA = 5'Z'+06.66
Y = 358346.274
X = 630979.185
DELTA = 6°11'16" LT
D = 1°56'22"
T = 159.69'
L = 319.07'
R = 2954.45'
PC STA = 3'Z'+46.98
Y = 358335.875
X = 630819.836
PT STA = 6'Z'+66.04
Y = 358373.787
X = 631136.485
DB = N86°15'59"E
DA = N80°04'43"E

PI STA = 10'Z'+65.35
Y = 358442.646
X = 631529.813
DELTA = 14°21'11" LT
D = 2°01'01"
T = 357.67'
L = 711.60'
R = 2840.62'
PC STA = 7'Z'+07.68
Y = 358380.961
X = 631177.500
PT STA = 14'Z'+19.28
Y = 358589.741
X = 631855.837
DB = N80°04'09"E
DA = N65°42'58"E

BP: 0+00.00 'Z'
PC: 2+00.16 'Z'
PCC: 3+46.98 'Z'
PT: 6+66.04 'Z'
PC: 7+07.68 'Z'
N86°49'23"E
5'Z'
N80°04'43"E
10'Z'

N86°57'55"E
5'X'
N80°04'43"E
10'X'
BP: 0+00.00 'X'
PC: 3+00.63 'X'
PT: 5+90.61 'X'
PC: 6+32.25 'X'

PI STA = 4'X'+45.65
Y = 358293.638
X = 631003.276
DELTA = 3°09'16" LT
D = 1°05'16"
T = 145.03'
L = 289.98'
R = 5267.02'
PC STA = 3'X'+00.63
Y = 358276.549
X = 630859.261
PT STA = 5'X'+90.61
Y = 358318.625
X = 631146.133
DB = N83°13'59"E
DA = N80°04'43"E

PI STA = 9'X'+96.99
Y = 358388.642
X = 631546.437
DELTA = 14°22'21" LT
D = 1°58'50"
T = 364.74'
L = 725.65'
R = 2892.79'
PC STA = 6'X'+32.25
Y = 358325.800
X = 631187.154
PT STA = 13'X'+57.90
Y = 358538.700
X = 631878.876
DB = N80°04'43"E
DA = N65°42'23"E

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	ALIGNMENT PLAN - X AND Z WIDENING ALIGNMENTS	SHEET 232	E

2

N

PT: 14+19.28 'Z'

PI: 16+30.45 'Z'

EP: 21+30.70 'Z'

N65°42'23"E 15'Z

N67°32'21"E 20'Z'

N65°42'23"E 15'X'

N63°52'24"E 20'X'

PT: 13+57.90 'X'

PI: 15+69.07 'X'

EP: 20+69.32 'X'

MATCH LINE 12+41.84

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA/OUTAGAMIE	ALIGNMENT PLAN - X AND Z WIDENING ALIGNMENTS	SHEET 233	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\027204_AD-54 - WIDENINGS.DWG
LAYOUT NAME - 09

PLOT DATE : 6/18/2025 3:02 PM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

6220-04-76

Line	Item	Item Description	Unit	Total	Qty
0002	201.0110	Clearing	SY	383.000	383.000
0004	201.0210	Grubbing	SY	383.000	383.000
0006	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0008	204.0100	Removing Concrete Pavement	SY	2,276.000	2,276.000
0010	204.0110	Removing Asphaltic Surface	SY	1,234.000	1,234.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	139.000	139.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	12,441.000	12,441.000
0016	204.0140	Removing Gutter	LF	1,123.000	1,123.000
0018	204.0150	Removing Curb & Gutter	LF	6,385.000	6,385.000
0020	204.0155	Removing Concrete Sidewalk	SY	563.000	563.000
0022	204.0165	Removing Guardrail	LF	480.000	480.000
0024	204.0195	Removing Concrete Bases	EACH	16.000	16.000
0026	204.0210	Removing Manholes	EACH	1.000	1.000
0028	204.0220	Removing Inlets	EACH	12.000	12.000
0030	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	295.000	295.000
0032	204.0245	Removing Storm Sewer (size) 02. 18-Inch	LF	119.000	119.000
0034	205.0100	Excavation Common	CY	12,011.000	12,011.000
0036	208.0100	Borrow	CY	191.000	191.000
0040	211.0101	Prepare Foundation for Asphaltic Paving (project) 02. 6220-04-76	EACH	1.000	1.000
0042	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	9.000	9.000
0046	213.0100	Finishing Roadway (project) 02. 6220-04-76	EACH	1.000	1.000
0048	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,867.000	1,867.000
0050	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	7,807.000	7,807.000
0052	390.0100	Removing Pavement for Base Patching	CY	25.000	25.000
0054	390.0305	Base Patching Concrete HES	CY	25.000	25.000
0060	415.0085	Concrete Pavement 8 1/2-Inch	SY	115.000	115.000
0062	415.0410	Concrete Pavement Approach Slab	SY	247.000	247.000
0066	416.0610	Drilled Tie Bars	EACH	206.000	206.000
0068	416.0620	Drilled Dowel Bars	EACH	73.000	73.000
0070	450.4000	HMA Cold Weather Paving	TON	2,400.000	2,400.000
0072	450.6223	HMA Pavement 3 MT 58-28 S	TON	10,641.000	10,641.000
0074	450.6224	HMA Pavement 4 MT 58-28 S	TON	4,101.000	4,101.000
0080	455.0605	Tack Coat	GAL	4,881.000	4,881.000
0082	465.0105	Asphaltic Surface	TON	473.000	473.000
0084	465.0110	Asphaltic Surface Patching	TON	53.000	53.000
0086	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	46.000	46.000
0088	465.0125	Asphaltic Surface Temporary	TON	1,181.000	1,181.000
0090	465.0315	Asphaltic Flumes	SY	15.000	15.000
0092	465.0520	Asphaltic Rumble Strips, Shoulder	LF	400.000	400.000
0094	465.0560	Asphaltic Rumble Strips, Centerline	LF	225.000	225.000
0098	520.3418	Culvert Pipe Class III-A Non-metal 18-Inch	LF	126.000	126.000
0100	520.8000	Concrete Collars for Pipe	EACH	9.000	9.000
0102	520.8700	Cleaning Culvert Pipes	EACH	15.000	15.000
0104	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	3.000	3.000
0106	521.1503	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 4 to 1	EACH	2.000	2.000
0118	524.0612	Apron Endwalls for Culvert Pipe Salvaged 12-Inch	EACH	1.000	1.000
0120	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	1.000	1.000
0124	530.0112	Culvert Pipe Corrugated Polyethylene 12-Inch	LF	154.000	154.000
0126	601.0205	Concrete Gutter 24-Inch	LF	1,126.000	1,126.000

6220-04-76

Line	Item	Item Description	Unit	Total	Qty
0130	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	1,261.000	1,261.000
0132	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	131.000	131.000
0134	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	5,098.000	5,098.000
0138	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	262.000	262.000
0140	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	38.000	38.000
0142	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	280.000	280.000
0146	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	253.000	253.000
0148	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	24.000	24.000
0150	601.0600	Concrete Curb Pedestrian	LF	144.000	144.000
0154	602.0410	Concrete Sidewalk 5-Inch	SF	6,679.000	6,679.000
0158	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	280.000	280.000
0162	602.0810	Concrete Driveway 6-Inch	SY	32.000	32.000
0164	604.0500	Slope Paving Crushed Aggregate	SY	195.000	195.000
0168	606.0200	Riprap Medium	CY	3.000	3.000
0170	608.0112	Relaid Storm Sewer 12-Inch	LF	16.000	16.000
0172	608.0118	Relaid Storm Sewer 18-Inch	LF	16.000	16.000
0174	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	170.000	170.000
0176	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	42.000	42.000
0178	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	269.000	269.000
0180	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	139.000	139.000
0182	611.0430	Reconstructing Inlets	EACH	9.000	9.000
0184	611.0530	Manhole Covers Type J	EACH	4.000	4.000
0188	611.0624	Inlet Covers Type H	EACH	5.000	5.000
0190	611.0639	Inlet Covers Type H-S	EACH	5.000	5.000
0194	611.0654	Inlet Covers Type V	EACH	3.000	3.000
0196	611.2004	Manholes 4-FT Diameter	EACH	4.000	4.000
0198	611.3004	Inlets 4-FT Diameter	EACH	2.000	2.000
0202	611.3225	Inlets 2x2.5-FT	EACH	3.000	3.000
0204	611.3230	Inlets 2x3-FT	EACH	9.000	9.000
0208	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0210	611.8115	Adjusting Inlet Covers	EACH	25.000	25.000
0212	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	2.000
0214	614.0230	Steel Thrie Beam	LF	200.000	200.000
0216	614.0396	Guardrail Mow Strip Asphalt	SY	407.000	407.000
0218	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	206.000	206.000
0220	614.0905	Crash Cushions Temporary	EACH	1.000	1.000
0222	614.2300	MGS Guardrail 3	LF	237.500	237.500
0224	614.2500	MGS Thrie Beam Transition	LF	118.200	118.200
0226	614.2610	MGS Guardrail Terminal EAT	EACH	3.000	3.000
0232	618.0100	Maintenance and Repair of Haul Roads (project) 02. 6220-04-76	EACH	1.000	1.000
0234	619.1000	Mobilization	EACH	0.280	0.280
0236	620.0300	Concrete Median Sloped Nose	SF	1,380.000	1,380.000
0238	624.0100	Water	MGAL	150.000	150.000
0240	625.0100	Topsoil	SY	13,657.000	13,657.000
0242	625.0500	Salvaged Topsoil	SY	5,541.000	5,541.000
0244	628.1504	Silt Fence	LF	12,355.000	12,355.000
0246	628.1520	Silt Fence Maintenance	LF	12,355.000	12,355.000
0248	628.1905	Mobilizations Erosion Control	EACH	12.000	12.000
0250	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000

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Line	Item	Item Description	Unit	Total	Qty
0252	628.2008	Erosion Mat Urban Class I Type B	SY	19,198.000	19,198.000
0254	628.7005	Inlet Protection Type A	EACH	5.000	5.000
0256	628.7010	Inlet Protection Type B	EACH	12.000	12.000
0258	628.7015	Inlet Protection Type C	EACH	59.000	59.000
0260	628.7020	Inlet Protection Type D	EACH	9.000	9.000
0262	628.7504	Temporary Ditch Checks	LF	90.000	90.000
0264	628.7555	Culvert Pipe Checks	EACH	16.000	16.000
0266	628.7570	Rock Bags	EACH	295.000	295.000
0268	629.0210	Fertilizer Type B	CWT	9.400	9.400
0270	630.0120	Seeding Mixture No. 20	LB	700.000	700.000
0274	630.0140	Seeding Mixture No. 40	LB	159.000	159.000
0276	630.0500	Seed Water	MGAL	432.000	432.000
0278	633.5200	Markers Culvert End	EACH	8.000	8.000
0280	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	2.000	2.000
0282	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	9.000	9.000
0284	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	1.000	1.000
0286	637.2210	Signs Type II Reflective H	SF	63.000	63.000
0288	637.2230	Signs Type II Reflective F	SF	8.000	8.000
0290	638.2102	Moving Signs Type II	EACH	56.000	56.000
0292	638.2602	Removing Signs Type II	EACH	4.000	4.000
0294	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0296	638.4000	Moving Small Sign Supports	EACH	34.000	34.000
0298	642.5001	Field Office Type B	EACH	1.000	1.000
0302	643.0300	Traffic Control Drums	DAY	40,587.000	40,587.000
0304	643.0420	Traffic Control Barricades Type III	DAY	5,529.000	5,529.000
0306	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	322.000	322.000
0308	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	322.000	322.000
0310	643.0650	Traffic Control Channelizing Curb System	LF	448.000	448.000
0312	643.0705	Traffic Control Warning Lights Type A	DAY	11,058.000	11,058.000
0314	643.0715	Traffic Control Warning Lights Type C	DAY	7,116.000	7,116.000
0316	643.0800	Traffic Control Arrow Boards	DAY	63.000	63.000
0318	643.0900	Traffic Control Signs	DAY	11,521.000	11,521.000
0322	643.0920	Traffic Control Covering Signs Type II	EACH	73.000	73.000
0324	643.1000	Traffic Control Signs Fixed Message	SF	108.000	108.000
0328	643.3165	Temporary Marking Line Paint 6-Inch	LF	34,040.000	34,040.000
0330	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	54,424.000	54,424.000
0332	643.3265	Temporary Marking Line Paint 10-Inch	LF	1,349.000	1,349.000
0334	643.3280	Temporary Marking Line Removable Tape 10-Inch	LF	346.000	346.000
0336	643.3805	Temporary Marking Stop Line Paint 18-Inch	LF	22.000	22.000
0338	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	157.000	157.000
0340	643.5000	Traffic Control	EACH	0.500	0.500
0342	644.1440	Temporary Pedestrian Surface Matting	SF	525.000	525.000
0344	644.1601	Temporary Pedestrian Curb Ramp	DAY	72.000	72.000
0346	644.1605	Temporary Pedestrian Detectable Warning Field	SF	90.000	90.000
0348	644.1810	Temporary Pedestrian Barricade	LF	1,110.000	1,110.000
0350	645.0120	Geotextile Type HR	SY	30.000	30.000
0354	646.2020	Marking Line Epoxy 6-Inch	LF	102.000	102.000
0356	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	21,045.000	21,045.000
0360	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	3,290.000	3,290.000

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Line	Item	Item Description	Unit	Total	Qty
0364	646.5020	Marking Arrow Epoxy	EACH	22.000	22.000
0366	646.5120	Marking Word Epoxy	EACH	6.000	6.000
0370	646.6120	Marking Stop Line Epoxy 18-Inch	LF	122.000	122.000
0374	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	2,592.000	2,592.000
0376	646.6470	Cold Weather Marking Epoxy 10-Inch	LF	636.000	636.000
0378	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,153.000	1,153.000
0380	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	583.000	583.000
0384	646.8120	Marking Curb Epoxy	LF	243.000	243.000
0386	646.8220	Marking Island Nose Epoxy	EACH	15.000	15.000
0388	646.9000	Marking Removal Line 4-Inch	LF	3,269.000	3,269.000
0390	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	1,182.000	1,182.000
0392	646.9100	Marking Removal Line 8-Inch	LF	247.000	247.000
0394	646.9200	Marking Removal Line Wide	LF	126.000	126.000
0396	646.9300	Marking Removal Special Marking	EACH	1.000	1.000
0400	650.4000	Construction Staking Storm Sewer	EACH	18.000	18.000
0402	650.4500	Construction Staking Subgrade	LF	10,280.000	10,280.000
0404	650.5000	Construction Staking Base	LF	10,280.000	10,280.000
0406	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	8,373.000	8,373.000
0408	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
0414	650.9000	Construction Staking Curb Ramps	EACH	20.000	20.000
0416	650.9500	Construction Staking Sidewalk (project) 01. 6220-04-76	EACH	1.000	1.000
0420	650.9911	Construction Staking Supplemental Control (project) 02. 6220-04-76	EACH	1.000	1.000
0422	650.9920	Construction Staking Slope Stakes	LF	13,083.000	13,083.000
0424	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,537.000	1,537.000
0426	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,385.000	1,385.000
0430	652.0605	Conduit Special 2-Inch	LF	293.000	293.000
0432	652.0800	Conduit Loop Detector	LF	1,624.000	1,624.000
0434	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	22.000	22.000
0436	653.0905	Removing Pull Boxes	EACH	17.000	17.000
0438	654.0101	Concrete Bases Type 1	EACH	6.000	6.000
0440	654.0102	Concrete Bases Type 2	EACH	2.000	2.000
0442	654.0105	Concrete Bases Type 5	EACH	6.000	6.000
0444	654.0110	Concrete Bases Type 10	EACH	4.000	4.000
0446	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0450	655.0240	Cable Traffic Signal 7-14 AWG	LF	896.000	896.000
0452	655.0250	Cable Traffic Signal 9-14 AWG	LF	1,250.000	1,250.000
0454	655.0260	Cable Traffic Signal 12-14 AWG	LF	2,570.000	2,570.000
0456	655.0305	Cable Type UF 2-12 AWG Grounded	LF	4,545.000	4,545.000
0458	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,465.000	1,465.000
0460	655.0610	Electrical Wire Lighting 12 AWG	LF	192.000	192.000
0464	655.0700	Loop Detector Lead In Cable	LF	6,285.000	6,285.000
0466	655.0800	Loop Detector Wire	LF	3,815.000	3,815.000
0470	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. STH 54 and CTH D	EACH	1.000	1.000
0472	657.0100	Pedestal Bases	EACH	6.000	6.000
0474	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	8.000	8.000
0476	657.0315	Poles Type 4	EACH	2.000	2.000
0478	657.0322	Poles Type 5-Aluminum	EACH	6.000	6.000
0480	657.0350	Poles Type 10	EACH	4.000	4.000
0482	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	4.000	4.000

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Line	Item	Item Description	Unit	Total	Qty
0484	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2.000
0486	657.0525	Monotube Arms 25-FT	EACH	2.000	2.000
0488	657.0530	Monotube Arms 30-FT	EACH	2.000	2.000
0492	657.0614	Luminaire Arms Single Member 4-Inch Clamp 8-FT	EACH	2.000	2.000
0494	657.0615	Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	EACH	6.000	6.000
0496	657.0808	Luminaire Arms Steel 8-FT	EACH	4.000	4.000
0498	658.0173	Traffic Signal Face 3S 12-Inch	EACH	18.000	18.000
0500	658.0174	Traffic Signal Face 4S 12-Inch	EACH	6.000	6.000
0502	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0504	658.0500	Pedestrian Push Buttons	EACH	8.000	8.000
0506	658.5070	Signal Mounting Hardware (location) 01. STH 54 and CTH D	EACH	1.000	1.000
0510	659.1125	Luminaires Utility LED C	EACH	12.000	12.000
0514	661.0201	Temporary Traffic Signals for Intersections (location) 01. STH 54 and CTH D	EACH	1.000	1.000
0516	690.0150	Sawing Asphalt	LF	13,734.000	13,734.000
0518	690.0250	Sawing Concrete	LF	1,316.000	1,316.000
0522	705.2005	Incentive Density PWL HMA Pavement	DOL	6,390.000	6,390.000
0524	705.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	8,040.000	8,040.000
0526	705.2010	Incentive Air Voids HMA Pavement	DOL	14,740.000	14,740.000
0528	729.0440	Incentive IRI Ride	DOL	5,040.000	5,040.000
0530	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0532	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,260.000	1,260.000
0534	SPV.0030	Special 01. Fertilizer for Lawn Type Turf	CWT	2.100	2.100
0536	SPV.0060	Special 01. Reestablish Section Corner Monuments	EACH	2.000	2.000
0540	SPV.0060	Special 03. Research and Locate Existing Land Parcel Monuments	EACH	2.000	2.000
0542	SPV.0060	Special 04. Verify and Replace Existing Land Parcel Monuments	EACH	2.000	2.000
0544	SPV.0060	Special 05. Inlet Covers Type H-D	EACH	6.000	6.000
0546	SPV.0060	Special 06. Temporary Storm Sewer Connection	EACH	2.000	2.000
0548	SPV.0060	Special 07. Salvage Traffic Signals STH 54 and CTH D	EACH	1.000	1.000
0550	SPV.0060	Special 08. Adjusting Sanitary Manhole Covers	EACH	2.000	2.000
0556	SPV.0090	Special 03. Ditch Restoration	LF	70.000	70.000
0558	SPV.0180	Special 01. Preparing Topsoil for Lawn Type Turf	SY	3,485.000	3,485.000
0560	SPV.0195	Special 01. Excavation, Hauling, and Disposal of Contaminated Soil	TON	30.000	30.000

*** DENOTES ITEMS USED ON PROJECTS 1140-00-77 AND 6220-04-76 (TYPICAL)

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Clearing & Grubbing

STA	-	STA	Location	201.0110 Clearing SY	201.021 Grubbing SY	Comments
Project 6220-04-76 Category 0010						
221'WB'+87	-	223'WB'+50	LT	129	129	Ditch Cleaning Limts
230'WB'+75	-	232'WB'+25	LT	198	198	Ditch Cleaning Limts
238'WB'+25	-	238'WB'+35	LT	11	11	Trees at Pipe Endwall
33'EB'+63	-	33'EB'+84	RT	45	45	Trees at Pipe Endwall
Project 6220-04-76 Category 0010 Totals				**383**	**383**	

Removing Concrete Pavement

Stage	Location	204.0100 Removing Concrete Pavement SY	390.0100 Removing Pavement for Base Patching CY	** 690.0250 Sawing Concrete LF
Project 6220-04-76 Category 0010				
4	Driveway STA 213'WB'+45 LT	39	---	44
4	CTH D Intersection (North)	1,070	---	188
4	CTH D (Southbound Signal Loops)	---	12	142
5	CTH D Intersection (South)	1,167	---	178
5	CTH D (Northbound Signal Loops)	---	13	142
Project 6220-04-76 Category 0010 Totals		**2,276**	**25**	694 **

** See Sawing for Project Totals

Removing Culverts

STA	Location	Stage	Removal Length FT	*** 203.0100 Removing Small Pipe Culverts EACH
Project 6220-04-76 Category 0010				
10'EB'+43	LT	6	120	1
Project 6220-04-76 Category 0010 Total				**1**

Removing Asphaltic Surface

Stage	STA - STA	Location	*** 204.0110 Removing Asphaltic Surface SY	** Sawing Asphalt LF
Project 6220-04-76 Category 0010				
1	River Road Intersection	STA 37+18 RT, Crash Cushion Pad	3	20
2	STA 245'WB'+00 RT	Median behind Curb & Gutter	11	49
3	STA 45'EB'+00 LT	Driveway Median Crossover	70	---
4	CTH D Intersection NW Quadrant	Asphaltic Sidewalk	64	10
6	STA 5'EB'+34 - 7'EB'+18 LT	WB Shoulder Remove 'Y'	45	185
6	STA 15'EB'+36 - 15'EB'+63 LT	Median	27	64
6	STA 108'D'+08 - 108'D'+74 RT	Median	67	148
6	STA 16'EB'+61 - 16'EB'+74 LT	Median	15	37
6	STA 29'EB'+19 - 24'EB'+91 LT	Median	932	---
Project 6220-04-76 Category 0010 Totals			**1,234**	513 **

** See Sawing for Project Totals

Removing Asphaltic Surface Butt Joints

Stage	Location	*** 204.0115 Removing Asphaltic Surface Butt Joints SY
Project 6220-04-76 Category 0010		
1	STA 3'EB'+75	2
1	STA 6'EB'+00	2
6	STA 7'EB+18	44
6	STA 8'EB'+75	47
6	Jeanne St	44
Project 6220-04-76 Category 0010 Totals		**139**

Removing Asphaltic Surface Milling

STA	-	STA	Stage	Location	*** 204.0120 Removing Asphaltic Surface Milling SY
Project 6220-04-76 Category 0010					
3'EB'+75	-	6'EB'+00	1	Centerline Rumble Strip Removal	46
25'EB'+00		34'EB'+55	3	EB Mainline	3,217
37'EB'+04		61'EB'+40	3	EB Mainline	8,375
7'EB'+18	-	8'EB'+75	6	Jeanne Street	849
Project 6220-04-76 Category 0010 Total					**12,441**

Removing Storm Sewer

From	To	Stage	*** 204.0220 Removing Inlets EACH	204.0210 Removing Manholes EACH	*** 204.0245 Removing Storm Sewer 01. 12-Inch LF	204.0245 Removing Storm Sewer 02. 18-Inch LF
Project 6220-04-76 Category 0010						
7B	7C	2	1	---	19	---
7C	7D	2	1	---	46	---
7D	7E	2	---	---	---	57
8A	8B	2	---	---	5	---
8B	208B	2	1	---	---	11
7A	7B	3	2	---	43	---
103	203A	4	1	---	6	---
203A	104	4	---	---	4	---
110	111	4	1	---	61	---
111	112	4	1	---	---	41
112	113	4	1	---	---	10
203A	104	5	---	---	8	---
104	106A	5	1	---	32	---
106	106A	5	---	---	5	---
106A	E1	5	---	1	5	---
108	109	5	1	---	37	---
109	110	5	1	---	24	---
E1	NPL	4	---	1	---	---
E1	SPL	4/5	---	---	---	---

Removing Curb & Gutter and Sidewalk

Stage	STA - STA	Location	204.0140 Removing Gutter LF	*** 204.0150 Removing Curb & Gutter LF	204.0155 Removing Concrete Sidewalk SY	** Sawing Concrete (Curb) LF	** Sawing Concrete (Sidewalk) LF
Project 6220-04-76 Category 0010							
1	STA 37'EB'+18 RT	River Rd Intersection	---	17	---	2.5	---
2	STA 221'WB'+75 - 226'WB'+08 RT	Median	315	118	9	5.0	---
2	USH 45 SB Ramp Intersection	Ramps Terminals and Median	---	123	20	35.0	3
2	USH 45 SB Ramp to Embarrass River	WB Shoulder and Median	---	247	16	7.5	7
2	Embarrass River to USH 45 NB Ramp	Median	---	583	305	22.5	---
2	USH 45 NB Ramp Intersection	Median	---	29	8	5.0	3
2	USH 45 NB Ramp to CTH S	Median	---	30	---	10.0	---
2	CTH S Intersection	Median	---	77	17	10.0	3
2	CTH S to East Project Limits	Median	---	84	34	10.0	---
3	STA 10'EB'+89 - 11'EB'+08 RT	Temporary Widening 'W'	---	19	---	2.5	---
3	STH 21'EB'+75 - 26'EB'+08 RT	Median	315	118	---	5.0	---
3	STH 27'EB'+38 - 27'EB'+53 LT	Median	---	15	---	5.0	---
3	USH 45 SB Ramp Intersection	Median	---	62	---	2.5	---
3	USH 45 SB Ramp to Embarrass River	EB Shoulder and Median	---	283	---	2.5	---
3	Embarrass River to USH 45 NB Ramp	EB Shoulder and Median	---	668	---	20.0	---
3	USH 45 Ramp Intersection	Ramps Terminals and Median	---	101	---	27.5	---
3	USH 45 Ramp to CTH S	Median	---	30	---	10.0	---
3	CTH S Intersection	Approach and Median	---	233	---	5.0	---
3	CTH S to East Project Limits	Median	---	176	---	7.5	---
3A	STA 15'EB'+36 - 15'EB'+62 LT	Temporary Median Pavement	---	62	---	67.0	---
3A	STA 107'D'+97 - 108'D'+74 RT	Temporary Median Pavement	---	152	---	166.0	---
3A	STA 106'D'+47 - 106'D'+97 RT	Temporary Median Pavement	---	99	---	116	---
4	Jeanne St	Temporary Widening 'Y'	---	63	---	7.5	---
4	Jeanne St to CTH D	WB Shoulder and Median	---	884	28	3.0	---
4	CTH D Intersection	Northeast Island	---	98	---	---	---
4	CTH D to STA 221'WB'+75	WB Shoulder and Median	248	428	103	15.0	4
4	CTH D SB Loop Repair	CTH D	---	20	---	5.0	---
5	Jeanne St to CTH D	EB Shoulder and Median	---	967	---	7.5	---
5	CTH D Intersection	Southwest Island	---	86	---	---	---
5	CTH D to STA 21+75 'EB'	EB Shoulder and Median	245	409	23	12.5	---
5	CTH D NB Loop Repair	CTH D	---	20	---	5.0	---
6	Jeanne St Intersection	Jeanne St	---	84	---	2.5	---
Project 6220-04-76 Category 0010 Totals			**1,123**	**6,385**	**563**	602	20

** See Sawing for Project Totals

Removing Guardrail

Stage	Location			*** 204.0165 Removing Guardrail LF
Project 6220-04-76 Category 0010				
2	WB Departure B-44-146	LT	WB STH 54	70
2	WB Approach B-44-146	LT	WB STH 54	225
3	EB Approach B-44-147	RT	EB STH 54	185
Project 6220-04-76 Category 0010 Total				**480**

Finishing

Location	*** 213.0100 Finishing Roadway EACH
Project 6220-04-76 Category 0010	
Project	1
Project 6220-04-76 Category 0010 Total	1

Preparing Foundation

STA	-	STA	Stage	Location	*** 211.0101 Prepare Foundation for Asphaltic Paving EACH	211.0400 Prepare Foundation for Asphaltic Shoulders STA
Project 6220-04-76 Category 0010						
7'EB'+18	-	75'EB'+18	All	Project Limits	1	---
3'EB'+75	-	8'EB'+75	3	Install Temp Widening 'W'	---	5
3'EB'+75	-	7'EB'+18	4	Install Temp Widening 'Y'	---	4
Project 6220-04-76 Category 0010 Totals					**1**	**9**

Sawing

Stage	STA - STA	Location	*** 690.0150 Sawing Asphalt LF	*** 690.0250 Sawing Concrete LF
Project 6220-04-76 Category 0010				
1	STA 59'EB'+61 - 78'EB'+64 RT	Temporary Widening 'X'	1,916	---
2	STA 221'WB'+75	Stage 2 West Limit	33	---
2	STA 221'WB'+75 - 224'WB'+91 RT	Median behind Valley Gutter	318	---
2	USH 45 SB Ramp Intersection	Ramp Terminals and Median	241	---
2	STA 237'WB'+70 - 238'WB'+17 RT	River Rd Median	50	---
2	STA 247'WB'+94 - 248'WB'+16 RT	USH 45 NB Ramps Median	70	---
2	STA 254'WB'+39 - 255'WB'+55 RT	CTH S Median	120	---
2	STA 261'WB'+01 - 78'EB'+63	Centerline	1,781	---
2	STA 76'EB'+50 LT	Driveway	42	---
3	STA 3'EB'+75 - 11'EB'+08 RT	Temporary Widening 'W'	745	---
3	STA 21'EB'+75	Stage 3 West Limit	24	---
3	STA 21'EB'+75 - 24'EB'+91 LT	Median behind Valley Gutter	318	---
3	STA 24'EB'+63 RT	Driveway	27	---
3	STA 25'EB'+00	Excavation/Milling Limit	27	---
3	STA 31'EB'+42 - 34'EB'+28 RT	Guardrail Shoulder Reconstruction	290	---
3	STA 33'EB'+78 LT & RT	Asphaltic Base at Storm Sewer Install	48	---
3	STA 34'EB'+30 LT & RT	Asphaltic Base at Storm Sewer Install	56	---
3	STA 37'EB'+04 - 38'EB'+36 RT	River Rd Intersection	161	---
3	USH 45 NB Ramp Intersection	Ramp and Median	165	---
3	CTH S Intersection	Approach	208	---
3	STA 61'EB'+40	Excavation/Milling Limit	34	---
3	STA 61'EB'+40 - 78'EB'+63	Centerline	1,740	---
3A	STA 15'EB'+36 - 15'EB'+62 LT	Temporary Median Pavement	8	---
3A	108'D'+74 RT	Temporary Median Pavement	5	---
4	STA 3'EB'+75 - 7'EB'+73 LT	Temporary Widening 'Y'	387	---
4	STA 208'WB'+34 - 211'WB'+23 LT & RT	Temporary Widening 'Y' & Stage 4 West Limit	321	---
4	STA 211'WB'+23 - 215'WB'+61 RT	Median	450	---
4	STA 219'WB'+26 - 221'WB'+75	Median	454	---
4	STA 221'WB'+75	Stage 4 East Limit	33	---
4	STA 258'WB'+77 - 78'EB'+63 LT	Remove Temporary Widening 'Z'	1,978	---
5	STA 5'EB'+16 - 8'EB'+75	Remove 'W' & Stage 5 West Limit	376	---
5	STH 12'EB'+30 RT	Driveway	44	---
5	STA 105'D'+23 - 106'D'+16 LT	CTH D Intersection	94	---
5	STA 19'EB'+29 - 21'EB'+75	Median	248	---
5	STA 21'EB'+75	Stage 5 East Limit	24	---
6	STA 208'WB'+72 - 211'WB'+37 LT	WB Shoulder Remove 'Y'	265	---
6	Jeanne St Intersection	Jeanne St Pipe Removal	120	---
Varies	From Removing Asphaltic Surface		513	---
Varies	From Removing Concrete Pavement		---	694
Varies	From Removing Curb & Gutter		---	602
Varies	From Removing Concrete Sidewalk		---	20
Project 6220-04-76 Category 0010 Totals			**13,734**	**1,316**

DIVISION	FROM/TO STATION	LOCATION	205.0100 *** COMMON EXCAVATION (1) CUT (2)	205.0100 *** COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 *** BORROW	COMMENT
DIVISION 1 STAGE 1												
TEMPORARY WIDENING 'X'	59+60.94/78+62.96	STH 54 EB	653	0	47	606	632	790	-184	0	184	
DIVISION 1 SUBTOTAL			653	0	47	606	632	790	-184	0	184	
DIVISION 2 STAGE 2												
STA 221'WB'+75 TO B-44-0146	221+75.00/234+94.51	STH 54 WB	894	0	650	244	9	11	233	233	0	
B-44-0146 TO STA 265'WB'+00	237+34.22/265+00.00	STH 54 WB	2,101	0	1,257	844	45	56	788	788	0	
STA 65'EB'+00 - EAST PROJECT LIMIT	65+01.47/78+62.96	STH 54 WB	729	0	246	483	368	460	23	23	0	
DITCH L	0+05.00/6+00.00	DITCH CLEANING 'L'	184	0	0	184	0	0	184	184	0	
DITCH M	0+00.00/2+25.00	DITCH CLEANING 'M'	54	0	0	54	5	6	48	48	0	
DIVISION 2 SUBTOTAL			3,962	0	2,153	1,809	427	534	1,275	1,275	0	
DIVISION 3 STAGE 3												
STA 21'EB'+75 TO MILLING LIMIT	21+75.00/25+00.00	STH 54 EB	191	0	138	53	0	0	53	53	0	
MILLING LIMIT TO EAST PROJECT LIMIT	61+40.00/78+62.96	STH 54 EB	1,733	0	622	1,111	0	0	1,111	1,111	0	
GUARDRAIL SHOULDER RECONSTRUCT	31+14.03/34+35.73	STH 54 EB	135	0	20	115	7	9	106	106	0	
EB OUTER SHOULDER THRU RIVER RD	36+99.54/38+35.91	STH 54 EB	26	0	14	12	4	5	7	7	0	
RIVER RD INTERSECTION	28+87.49/29+83.90	RIVER RD	44	0	27	17	0	0	17	17	0	
EB OUTER SHOULDER THRU CTH S	54+22.37/55+64.81	STH 54 EB	28	0	25	3	8	10	-7	0	7	
CTH S INTERSECTION	6+06.56/6+72.89	CTH S	57	0	45	12	5	6	6	6	0	
TEMPORARY WIDENING 'W'	3+75.39/11+07.81	STH 54 EB	251	0	41	210	75	94	116	116	0	
STH 54 TEMPORARY MEDIAN WEST	15+36.37/15+62.17	STH 54 EB	7	0	5	2	0	0	2	2	0	
CTH D TEMPORARY MEDIAN SOUTH	106+46.79/106+96.60	CTH D	9	0	7	2	0	0	2	2	0	
CTH D TEMPORARY MEDIAN NORTH	107+96.56/108+73.02	CTH D	17	0	13	4	0	0	4	4	0	
DIVISION 3 SUBTOTAL			2,498	0	957	1,541	99	124	1,417	1,424	7	
DIVISION 4 STAGE 4												
TEMPORARY WIDENING 'Y'	3+75.49/7+42.86	STH 54 WB	34	0	26	8	1	1	7	7	0	
TEMPORARY WIDENING 'Y'	8+36.82/8+72.97	STH 54 WB	20	0	3	17	3	4	13	13	0	
STH 54 WB MAINLINE	208+71.80/221+75.00	STH 54 WB	1,348	0	698	650	18	23	628	628	0	
CTH D INTERSECTION	107+82.78/108+74.15	CTH D	382	0	174	208	0	0	208	208	0	
STEEL THRIE BEAM AT B-44-0144	38+29.00/40+73.32	STH 54 WB	131	0	0	131	0	0	131	131	0	
REMOVE TEMPORARY WIDENING 'Z'	258+76.79/265+00.00	STH 54 WB	127	0	58	69	0	0	69	69	0	
REMOVE TEMPORARY WIDENING 'Z'	65+01.47/78+62.96	STH 54 EB	777	0	163	614	13	16	598	598	0	
DIVISION 4 SUBTOTAL			2,819	0	1,122	1,697	35	44	1,653	1,653	0	
DIVISION 5 STAGE 5												
REMOVE TEMPORARY WIDENING 'W'	5+17.83/8+72.76	STH 54 EB	156	0	25	131	0	0	131	131	0	
STH 54 EB MAINLINE	8+75.31/21+75.00	STH 54 EB	1,275	0	773	502	8	10	492	492	0	
CTH D INTERSECTION	105+22.68/107+09.30	CTH D	486	0	169	317	0	0	317	317	0	
DIVISION 5 SUBTOTAL			1,917	0	967	950	8	10	940	940	0	
DIVISION 6 STAGE 6												
REMOVE TEMPORARY WIDENING 'Y'	208+51.80/211+37.09	STH 54 WB	61	0	9	52	1	1	51	51	0	
STH 54 WEST MEDIAN	211+28.39/215+34.65	STH 54 EB & WB	101	0	0	101	0	0	101	101	0	
DIVISION 6 SUBTOTAL			162	0	9	153	1	1	152	152	0	
GRAND TOTAL			12,011	0	5,255	6,756	1,202	1,503	5,254	5,445	191	
TOTAL COMMON EXC			12,011									

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.25
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

Base Aggregate

STA	-	STA	Location	Stage	*** 305.0110 Base Aggregate Dense 3/4-Inch TON	*** 305.0120 Base Aggregate Dense 1 1/4-Inch TON	*** 624.0100 Water MGAL
Project 6220-04-76 Category 0010							
59'EB'+61	-	61'EB'+69	Temporary Widening 'X' - Taper out	1	14	---	---
61'EB'+69	-	62'EB'+60	Temporary Widening 'X' - Taper out	1	6	61	---
62'EB'+00	-	75'EB'+20	Temporary Widening 'X' - Parallel	1	82	1,362	---
75'EB'+20	-	78'EB'+63	Temporary Widening 'X' - Taper in	1	22	267	---
78'EB'+63	-	79'EB'+91	Temporary Widening 'X' - Taper in	1	8	---	---
221'WB'+75	-	226'WB'+96	Shoulder - WB STH 54	2	30	103	---
226'WB+96	-	227'WB+95	Shoulder - WB STH 54	2	6	---	---
230'WB'+23	-	234'WB'+80	Shoulder & Guardrail - WB STH 54	2	46	230	---
237'WB'+73	-	241'WB'+07	Shoulder & Guardrail - WB STH 54	2	44	362	---
241'WB'+07	-	258'WB'+77	Shoulder - WB STH 54	2	103	---	---
258'WB'+77	-	261'WB'+90	Temporary Widening 'Z' - Taper Out	2	20	62	---
261'WB'+90	-	75'EB'+20	Temporary Widening 'Z' - Parallel	2	85	1,414	---
75'EB'+20	-	78'EB'+63	Temporary Widening 'Z' - Taper In	2	22	241	---
78'EB'+63	-	79'EB'+66	Temporary Widening 'Z' - Taper In	2	7	---	---
23'EB'+31	-	31'EB'+13	Shoulder - EB STH 54	3	46	---	---
31'EB'+13	-	232+58	Shoulder & Guardrail - EB STH 54	3	45	230	---
38'EB'+36	-	40'EB'+98	Shoulder behind BOC - EB STH 54	3	34	---	---
40'EB'+98	-	47'EB'+40	Shoulder - EB STH 54	3	37	---	---
49'EB'+75	-	54'EB'+22	Shoulder - EB STH 54	3	122	---	---
55'EB'+65	-	61'EB'+40	Shoulder - EB STH 54	3	34	---	---
61'EB'+40	-	64'EB'+54	Shoulder - EB STH 54	3	45	46	---
64'EB'+65	-	78'EB'+63	Shoulder - EB STH 54	3	199	---	---
3'EB'+75	-	6'EB'+00	Temporary Widening 'W' - Taper out	3	15	---	---
6'EB'+00	-	8'EB'+25	Temporary Widening 'W' - Taper out	3	15	175	---
8'EB'+25	-	9'EB'+04	Temporary Widening 'W' - Parallel	3	5	85	---
9'EB'+04	-	10'EB'+89	Temporary Widening 'W' - Taper in	3	12	137	---
15'EB'+36	-	15'EB'+62	Temporary Median Pavement	3A	---	3	---
106'D'+47	-	106'D'+96	Temporary Median Pavement	3A	---	5	---
107'D'+97	-	108'D'+74	Temporary Median Pavement	3A	---	9	---
3'EB'+75	-	7'EB'+43	Temporary Widening 'Y'	4	24	---	---
8'EB'+37	-	8'EB'+73	Temporary Widening 'Y'	4	2	42	---
208'WB'+72	-	211'WB'+47	Temporary Widening 'Y' and WB STH 54	4	18	314	---
211'WB'+47	-	214'WB'+36	Widening WB STH 54 Curb & Gutter	4	---	148	---
215'WB'+61	-	216'WB'+59	CTH D Intersection Reconstruction	4	---	882	---
39'EB'+29	-	40'EB'+65	Steel Thrie Bullnose Mow Strip	4	---	38	---
258'WB'+77	-	78'EB'+63	Shoulder - WB STH 54	4	282	---	---
5'EB+18	-	8'EB+75	Temporary Widening 'W'	5	51	---	---
8'EB'+75	-	10'EB'+89	Temporary Widening 'W' and EB STH 54	5	31	---	---
14'EB'+89	-	15'EB'+32	Southwest Corner Widening	5	---	156	---
15'EB'+63	-	16'EB'+61	CTH D Intersection Reconstruction	5	---	958	---
208'WB'+52	-	211'WB'+47	Shoulder - WB STH 54	6	19	---	---
211'WB'+29	-	214'WB'+07	Center Median Asphaltic Surface	6	---	96	---
			Driveways	All	82	11	---
			Under Sidewalk	All	164	---	---
			Undistributed	All	90	370	150
Project 6220-04-76 Category 0010 Totals					**1,867**	**7,807**	**150**

Slope Paving

STA	-	STA	Location	Stage	*** 604.0500 Slope Paving Crushed Aggregate SY
Project 6220-04-76 Category 0010					
238'WB'+99	-	240'WB'+20	STH 54 LT	2	195
Project 6220-04-76 Category 0010 Total					**195**

Riprap and Geotextile Fabric

Stage	Location	*** 606.0200 Riprap Medium CY	*** 645.0120 Geotextile Type HR SY
Project 6220-04-76 Category 0010			
2	Outfall 207F	1	10
2	Outfall 208E	1	10
3	Outfall 207C	1	10
Project 6220-04-76 Category 0010 Tota		**3**	**30**

Concrete Pavement

Stage	Location	390.0305 Base Patching Concrete HES CY	*** 415.0410 Concrete Pavement Approach Slab SY	415.0085 Concrete Pavement 8 1/2-inch SY	416.0610 Drilled Tie Bars EACH	416.0620 Drilled Dowel Bars EACH
Project 6220-04-76 Category 0010						
2	WB West Abutment B-44-146	---	62	33	---	---
2	WB East Abutment B-44-146	---	62	25	---	---
3	EB West Abutment B-44-147	---	61	13	---	---
3	EB East Abutment B-44-147	---	62	44	---	---
4	SB CTH D (Loop Repairs)	12	---	---	8	35
5	NB CTH D (Loop Repairs)	13	---	---	8	38
	From Curb and Gutter	---	---	---	190	---
Project 6220-04-76 Category 0010 Totals		**25**	**247**	**115**	**206**	**73**

HMA Pavement

Stage	STA	-	STA		*** 455.0605 Tack Coat GAL	*** 450.6223 HMA Pavement 3 MT 58-28 S Lower TON	*** Middle TON	*** 450.6224 HMA Pavement 4 MT 58-28 S Upper TON
Project 6220-04-76 Category 0010								
2	221'WB'+75	-	226'WB'+96	12' Lane & 4' Inside Shoulder	120	160	120	93
2	221'WB'+75	-	226'WB'+96	8' Outside Shoulder	32	---	64	50
2	226'WB'+96	-	233'WB'+73	USH 45 SB Ramp Intersection & Right Turn Lane	306	407	305	237
2	231'WB'+73	-	234'WB'+57	Guardrail Outside Shoulder	23	---	45	35
2	233'WB'+73	-	234'WB'+57	12' Lane & 4' Inside Shoulder	19	26	19	15
2	237'WB'+67	-	260'WB'+77	12' Lane & 4' Inside Shoulder	534	708	531	413
2	237'WB'+67	-	238'WB'+29	North Half River Rd Median	4	---	8	6
2	237'WB'+67	-	241'WB'+06	Guardrail Outside Shoulder	38	---	76	59
2	241'WB'+06	-	260'WB'+77	8' Outside Shoulder	114	---	227	176
2	247'WB'+42	-	251'WB'+08	North Half USH NB Median & Left Turn Lane	44	59	44	34
2	254'WB'+29	-	257'WB'+63	North Half CTH S Median & Left Turn Lane	47	62	47	36
2	260'WB'+77	-	75'EB'+20	12' Lane	249	331	248	193
2	260'WB'+77	-	75'EB'+20	8'-5' Outside Shoulder	55	---	109	85
3	21'EB'+75	-	34'EB'+28	12' Lane & 4' Inside Shoulder	289	384	288	224
3	21'EB'+75	-	31'EB'+14	8' Outside Shoulder	54	---	108	84
3	26'EB'+56	-	30'EB'+27	USH 45 SB Left Turn Lane & South Half of Median	44	59	44	34
3	31'EB'+14	-	34'EB'+28	Guardrail Outside Shoulder	37	---	73	57
3	37'EB'+37	-	43'EB'+91	12' Lane & 4' Inside Shoulder	151	200	150	117
3	37'EB'+37	-	38'EB'+36	River Rd Intersection	36	---	73	56
3	37'EB'+66	-	38'EB'+29	South Half River Rd Median	8	---	8	6
3	38'EB'+36	-	43'EB'+91	8' Outside Shoulder	64	---	64	50
3	43'EB'+91	-	50'EB'+14	USH 45 NB Ramp Intersection & Right Turn Lane	293	389	292	227
3	50'EB'+14	-	54'EB'+22	12' Lane, 4' Inside Shoulder, CTH S Right Turn Lane	177	235	176	137
3	54'EB'+22	-	56'EB'+65	12' Lane, 4' Inside Shoulder, Outside Shoulder	95	126	94	73
3	54'EB'+22	-	55'EB'+65	CTH S Intersection	59	78	59	46
3	54'EB'+29	-	55'EB'+29	South Half CTH S Median	14	18	14	11
3	56'EB'+65	-	75'EB'+20	12' Lane, 4' Inside Shoulder, Median Gore	382	507	380	296
3	56'EB'+65	-	75'EB'+20	8'-5' Outside Shoulder	79	---	158	123
4	208'WB'+72	-	215'WB'+61	12' Lane, 4' Inside Shoulder, 8' Outside Shoulder	229	304	228	177
4	215'WB'+61	-	216'WB'+59	12' Lane, 10' Median, 8' Outside Shoulder	48	64	48	37
4	215'WB'+61	-	219'WB'+08	CTH D North Intersection & Right Turn Lane	135	180	135	105
4	216'WB'+59	-	221'WB'+75	12' Lane, 4' Inside Shoulder, 8' Outside Shoulder	184	244	183	142
4	216'WB'+59	-	220'WB'+56	CTH D Left Turn Lane	51	68	51	40
5	8'EB'+75	-	11'EB'+26	12' Lane, Median Gore, 5'-8' Outside Shoulder	96	127	96	74
5	11'EB'+26	-	15'EB'+63	12' Lane, 4' Inside Shoulder, 8' Outside Shoulder	151	200	150	117
5	11'EB'+71	-	12'EB'+86	Walgreens Driveway Intersection	9	---	17	13
5	12'EB'+41	-	15'EB'+63	CTH D Left Turn Lane	37	49	37	29
5	13'EB'+73	-	16'EB'+82	CTH D South Intersection & Right Turn Lane	153	203	152	118
5	15'EB'+63	-	16'EB'+61	12' Lane, 10' Median, 8' Outside Shoulder	48	64	48	37
5	16'EB'+61	-	21'EB'+75	12' Lane, 4' Inside Shoulder, 8' Outside Shoulder	181	240	180	140
6	7+18		8+75	EB/WB Lanes and Jeanne St Overlay	192	---	---	99
Project 6220-04-76 Category 0010 Totals					**4,881**	5,492	5,149	**4,101**
						10,641		

Asphaltic Surface Temporary

Stage	Location	465.0125 Asphaltic Surface Temporary TON
Project 6220-04-76 Category 0010		
1	SE B-44-0147, Crash Cushion Pad	3
1	Temporary Widening 'X'	603
2	Temporary Widening 'Z'	461
3	Temporary Widening 'W'	57
3A	STH 54 West Median at CTH D	7
3A	CTH D South Median	11
3A	CTH D North Median	18
4	Temporary Widening 'Y'	21
Project 6220-04-76 Category 0010 Total		**1,181**

Asphaltic Rumble Strips

STA	-	STA	*** 465.0560 Asphaltic Rumble Strips, Centerline LF	465.0520 Asphaltic Rumble Strips, Shoulder LF
Project 6220-04-76 Category 0010				
3'EB'+75	-	6'EB'+00	225	-
EPL Limits - Tie-ins				400
Project 6220-04-76 Category 0010 Total			225	400

Incentive IRI Ride

				Lanes	Lane-Miles	729.0440 Incentive IRI Ride DOL
Project 6220-04-76 Category 0010						
EB STH 54	08+75	-	75+20	1	1.26	2,520
WB STH 54	08+75	-	75+20	1	1.26	2,520
Project 6220-04-76 Category 0010 Total						**5,040**

PWL Mixture Use Table

Project 6220-04-76 Category 0010

Stage	Station	Location	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
								Mixture Acceptance	Density Acceptance
2	STA 221'WB'+75 - STA 75'EB'+20 WB Lane & Shoulders	12' Driving Lane	Lower Layer	Existing Base	3 MT 58-28 S	1002	3"	PWL	PWL Cores
			Middle Layer	Lower Layer HMA	3 MT 58-28 S	751	2.25"	PWL	PWL Cores
			Upper Layer	Middle Layer HMA	4 MT 58-28 S	584	1.75"	PWL	PWL Cores
		4' Inside Shoulders (3 Layers) 8' Outside Shoulders (2 Layers)	Lower Layer	Existing Base	3 MT 58-28 S	223	3"	PWL	Department Acceptance Cores
			Middle Layer	Base Aggregate/Lower Layer HMA	3 MT 58-28 S	688	2.25"	PWL	Department Acceptance Cores
			Upper Layer	Lower/Middle Layer HMA	4 MT 58-28 S	535	1.75	PWL	Department Acceptance Cores
3	STA 21'EB'+75 - 75'EB'+20 EB Lane & Shoulders	12 Foot Driving Lane	Lower Layer	Existing Base	3 MT 58-28 S	1016	3"	PWL	PWL Cores
			Middle Layer	Lower Layer HMA	3 MT 58-28 S	761	2.25"	PWL	PWL Cores
			Upper Layer	Middle Layer HMA	4 MT 58-28 S	593	1.75"	PWL	PWL Cores
		4' Inside Shoulders (3 Layers) 8' Outside Shoulders (2 Layers)	Lower Layer	Existing Base	3 MT 58-28 S	328	3"	PWL	Department Acceptance Cores
			Middle Layer	Base Aggregate/Lower Layer HMA	3 MT 58-28 S	649	2.25"	PWL	Department Acceptance Cores
			Upper Layer	Lower/Middle Layer HMA	4 MT 58-28 S	505	1.75	PWL	Department Acceptance Cores
4	STA 208'WB'+75 - 221'WB'+75	12 Foot Driving Lane	Lower Layer	Existing Base/Base Aggregate	3 MT 58-28 S	354	3"	PWL	PWL Cores
			Middle Layer	Lower Layer HMA	3 MT 58-28 S	266	2.25"	PWL	PWL Cores
			Upper Layer	Middle Layer HMA	4 MT 58-28 S	206	1.75"	PWL	PWL Cores
		Shoulders	Lower Layer	Existing Base/Base Aggregate	3 MT 58-28 S	258	3"	PWL	Department Acceptance Cores
			Middle Layer	Base Aggregate/Lower Layer HMA	3 MT 58-28 S	193	2.25"	PWL	Department Acceptance Cores
			Upper Layer	Lower/Middle Layer HMA	4 MT 58-28 S	150	1.75	PWL	Department Acceptance Cores
5	STA 8'EB'+75 - 21'EB'+75	12 Foot Driving Lane	Lower Layer	Existing Base/Base Aggregate	3 MT 58-28 S	348	3"	PWL	PWL Cores
			Middle Layer	Lower Layer HMA	3 MT 58-28 S	261	2.25"	PWL	PWL Cores
			Upper Layer	Middle Layer HMA	4 MT 58-28 S	203	1.75"	PWL	PWL Cores
		Shoulders	Lower Layer	Existing Base/Base Aggregate	3 MT 58-28 S	283	3"	PWL	Department Acceptance Cores
			Middle Layer	Base Aggregate/Lower Layer HMA	3 MT 58-28 S	213	2.25"	PWL	Department Acceptance Cores
			Upper Layer	Lower/Middle Layer HMA	4 MT 58-28 S	165	1.75	PWL	Department Acceptance Cores
6	STA 7'EB'+18 - 8'EB'+75	12 Foot Driving Lane	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	42	1.75"	PWL	PWL Cores
		Shoulders	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	18	1.75"	PWL	Department Acceptance Cores
All Stages	Side Road Intersections & Turn lanes		Lower Layer	Varies	3 MT 58-28 S	1680	3"	PWL	Department Acceptance Cores
			Middle Layer	Varies	3 MT 58-28 S	1367	2.25"	PWL	Department Acceptance Cores
			Upper Layer	Varies	4 MT 58-28 S	1,100	1.75"	PWL	Department Acceptance Cores

Asphaltic Surface

STA	-	STA	Location	Stage	465.0105 Asphaltic Surface TON	465.0110 Asphaltic Surface Patching TON	465.0120 Asphaltic Surface Driveways and Field Entrances TON	*** 465.0315 Asphaltic Flumes SY
Project 6220-04-76 Category 0010								
3'EB'+75	-	6'EB'+00	Centerline Rumble Removal	1	6	---	---	---
221'WB'+75	-	224'WB'+91	Behind Concrete Gutter in TWLTL	2	---	13	---	---
221'WB'+80 LT			Flume		---	---	---	3
255'WB'+14 LT			Driveway	2	---	---	35	---
76'EB'+47 LT			Driveway	2	---	---	4	---
3'EB'+75	-	8'EB'+75	Temporary Widening 'W'	3	122	---	---	---
21'EB'+75	-	24'EB'+91	Behind Concrete Gutter in TWLTL	3	---	13	---	---
24'EB'+63 RT			Driveway	3	---	---	7	---
38'EB'+84 RT			Flume	3	---	---	---	3
44'EB'+82	-	45'EB'+31	Median Opening	3	15	---	---	---
55'EB'+03 RT			CTH S Flumes	3	---	---	---	9
3'EB'+75	-	8'EB'+75	Temporary Widening 'Y'	4	71	---	---	---
110'D'+73	-	110'D'+93	CTH D North Signal Loop Patch	4	---	6	---	---
219'WB'+28	-	221'WB'+75	Behind Concrete Gutter in TWLTL	4	---	10	---	---
104'D'+07	-	104'D'+27	CTH D South Signal Loop Patch	5	---	7	---	---
7'EB'+18	-	8'EB'+54	Jeanne St Culvert Pipe	6	47	---	---	---
7'EB'+18	-	8'EB'+54	Jeanne St Curb & Gutter Patches	6	---	4	---	---
11'EB'+32	-	14'EB'+09	Center Median Island	6	51	---	---	---
19'EB'+29	-	24'EB'+91	Median TWLTL	6	161	---	---	---
Project 6220-04-76 Category 0010 Totals					**473**	**53**	**46**	**15**

Cleaning Culverts and Ditches

Pipe Run	STA	Location	Stage	*** 520.8700 Cleaning Culvert Pipes EACH	SPV.0090.03 Ditch Restoration LF
Project 6220-04-76 Category 0010					
117 - 117O	221'WB'+90	LT	2	1	---
119 - 119O	223'WB'+55	LT	2	1	---
3B - 3C	225'WB'+17	LT	2	1	---
4B - 4C	227'WB'+45	LT	2	1	---
5D - 5E	230'WB'+10	LT	2	1	15
6B - 6C	232'WB'+05	LT	2	1	15
8B - 8C	238'WB'+30	LT	2	1	15
10B - 10C	241'WB'+90	LT	2	1	15
12B - 12C	246'WB'+35	LT	2	1	---
13C - 13D	248'WB'+83	LT	2	1	---
14B - 14C	251'WB'+10	LT	2	1	---
15B - 15C	253'WB'+40	LT	2	1	---
16C - 16D	255'WB'+65	LT	2	1	10
17B - 17C	257'WB'+64	LT	2	1	---
18A - 18B	59'EB'+49	RT	3	1	
Project 6220-04-76 Category 0010 Totals				**15**	**70**

Culvert Pipes

STA	Location	Stage	520.3418 Culvert Pipe Class III-A Non-Metal 18-Inch LF	521.1503 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 4 to 1 EACH	Inlet** Elevation	Outlet** Elevation
Project 6220-04-76 Category 0010						
7'EB'+81 LT	Jeanne St	6	126	2	758.43	758.08
Project 6220-04-76 Category 0010 Totals			126	2		

**Pipe Invert at End of Pipe for Information Only. Field Verify.

Concrete Driveways

Location	Stage	602.0810 Concrete Driveway 6-Inch SY
Project 6220-04-76 Category 0010		
STA 213'WB'+45 LT	4	32
Project 6220-04-76 Category 0010 Total		**32**

Concrete Curb & Gutter and Sidewalk

Stage	Location	601.0205 Concrete Gutter 24-Inch LF	601.0407 Concrete Curb & Gutter 18-Inch Type D LF	601.0409 Concrete Curb & Gutter 30-Inch Type A LF	*** 601.0411 Concrete Curb & Gutter 30-Inch Type D LF	*** 601.0553 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D LF	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A 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	*** 601.0600 Concrete Curb Pedestrian LF	602.0410 Concrete Sidewalk 5-Inch SF	602.0505 Curb Ramp Detectable Warning Field Yellow SF	*** 620.0300 Concrete Median Sloped Nose SF	* 416.0610 Drilled Tie Bars EA	** 305.0110 Base Aggregate Dense 3/4-Inch TON
Project 6220-04-76 Category 0010																
2	221'WB'+75 - 224'WB'+91 RT, Median Gutter	316	---	---	---		---	---	---	---	---	---	---	---	---	---
2	224'WB'+91 - 230+04 RT, Median	---	---	---	168	---	---	---	---	---	---	9	---	81	12	---
2	228'WB'+50 - 229'WB'+45 LT, USH 45 SB Ramps	---	---	---	25	---	---	---	---	---	---	---	---	125	16	---
2	231'WB'+97 - 234'WB'+94 LT & RT, Median & Guardrail	---	---	14	222	---	---	---	26	24	---	---	---	---	6	---
2	237'WB'+67 - 239'WB'+35 LT, Guardrail	---	---	---	---	---	---	---	168	---	---	---	---	---	---	---
2	237'WB'+34 - 242'WB'+85 RT, Median	---		31	456	---	---	---	---	---	---	---	---	79	2	---
2	244'WB'+00 - 260'WB'+76 LT, Median	---	---	---	244	---	---	---	---	---	---	---	---	49	32	---
3	21'EB'+75 - 24'EB'+91, Median Gutter	316	---	---	534	---	---	---	---	---	---	---	---	---	---	---
3	24'EB'+91 - 30'EB'+35, Median	---	---	---	194	---	---	---	---	---	---	120	---	78	8	3
3	31'EB'+97 - 34'EB'+60 LT & RT Median & Guardrail	---	---	32	231	---	---	---	59	---	---	90	---	---	2	2
3	37'EB'+00 - 40'EB'+98 RT, River Rd & Outside Shoulder	---	---	---	---	262	38	54	---	---	---	---	---	---	2	---
3	37'EB'+24 - 42'EB'+85 LT, Median	---	---	14	481	---	---	---	---	---	---	432	---	135	2	11
3	44'EB'+00 - 60'EB'+77 LT, Median	---	---	---	335	---	---	---	---	---	---	544	---	258	36	13
3	48'EB'+22 - 49'EB'+19 RT, USH 45 NB Ramps	---	---	---	25	---	---	---	---	---	---	---	---	125	16	---
3	54'EB'+22 - 55'EB'+65 RT, CTH S Intersection	---	---	---	---	---	---	158	---	---	---	---	---	---	---	---
4	211'WB'+28 - 215'WB'+35 RT, Median	---	406	---	---	---	---	---	---	---	---	---	---	---	---	---
4	211'WB'+47 - 215'WB'+23 LT, Outside Shoulder	---	---	---	378	---	---	---	---	---	---	---	---	---	---	---
4	CTH D NW Corner	---	---	---	154	---	---	---	---	---	---	1,093	30	---	2	27
4	216'WB'+66 - 217'WB'+12 LT, NE Island	---	88	---	9	---	---	---	---	---	54	616	30	47	---	15
4	CTH D NE Corner	---	---	---	64	---	---	---	---	---	---	81	10	---	2	2
4	216'WB'+73 - 219'WB'+28 RT, Median	---	25	---	230	---	---	---	---	---	---	---	---	---	---	---
4	217'WB'+43 - 218'WB'+94 LT, Outside Shoulder	---	---	---	111	---	---	---	---	---	---	---	---	---	6	---
4	219'WB'+28 - 221'WB'+75 RT, Median Gutter	248	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4	CTH D North Signal Loop Repair	---	---	20	---	---	---	---	---	---	---	---	---	---	4	---
5	10'EB'+89 - 12'EB'+06 RT, Outside Shoulder	---	---	---	123	---	---	---	---	---	---	---	---	---	2	---
5	11'EB'+26 - 15'EB'+36 LT, Median	---	405	---	---	---	---	---	---	---	---	---	---	49	---	---
5	12'EB'+19 - 12'EB'+38 RT, Walgreens Island	---	---	---	26	---	---	---	---	---	---	82	---	65	---	2
5	12'EB'+51 - 14'EB'+87 RT, Outside Shoulder	---	---	---	243	---	---	---	---	---	---	---	---	---	2	---
5	CTH D SW Corner	---	---	---	163	---	---	---	---	---	---	132	10	---	2	3
5	15'EB'+15 - 15'EB'+56 RT, SW Island	---	75	---	9	---	---	---	---	---	42	493	50	47	---	12
5	CTH D South Center Median Island	---	78	---	---	---	---	---	---	---	12	228	40	77	---	6
5	CTH SE Corner	---	---	---	144	---	---	---	---	---	---	501	30	---	2	12
5	16'EB'+75 - 19'EB'+29 LT, Median	---	25	---	230	---	---	---	---	---	---	---	---	30	---	---
5	16'EB'+82 - 20'EB'+58 RT, Outside Shoulder	---	---	---	132	---	---	---	---	---	---	---	---	---	6	---
5	19'EB'+29 - 21'EB'+75 LT, Median Gutter	246	---	---	---	---	---	---	---	---	---	---	---	---	---	---
5	CTH D South Signal Loop Repair	---	---	20	---	---	---	---	---	---	---	---	---	---	4	---
6	7'EB'+18 - 8'EB'+54 LT, Jeanne St Intersection	---	---	---	67	---	---	68	---	---	---	---	---	---	---	---
6	14'EB'+09 - 15'EB'+57 LT, Median	---	29	---	---	---	---	---	---	---	12	843	40	45	---	21
6	16'EB'+69 - 19'EB'+29 LT, Median	---	---	---	---	---	---	---	---	---	12	1,056	20	45	---	26
6	CTH D North Center Median Island	---	130	---	---	---	---	---	---	---	12	359	20	45	4	9
N/A	Undistributed	---	---	---	100	---	---	---	---	---	---	---	---	---	20	---
Project 6220-04-76 Category 0010 Totals		**1,126**	**1,261**	**131**	**5,098**	**262**	**38**	**280**	**253**	**24**	**144**	**6,679**	**280**	**1,380**	190	164
															*	**

* See Concrete Pavement for Totals

** See Base Aggregate for Totals

Storm Sewer Structures

Structure	Station*	Offset*	Stage	*** 521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch EACH	611.0420 Reconstructing Inlets EACH	611.0530 Manhole Covers Type J EACH	611.0624 Inlet Covers Type H EACH	611.0639 Inlet Covers Type H-S EACH	SPV.0060.05 Inlet Covers Type H-D EACH	*** 611.0654 Inlet Covers Type V EACH	611.2004 Manholes 4-FT Diameter EACH	611.3004 Inlets 4-FT Diameter EACH	*** 611.3225 Inlets 2X2.5-FT EACH	*** 611.3230 Inlets 2X3-FT EACH	611.8110 Adjusting Manhole Covers EACH	*** 611.8115 Adjusting Inlet Covers EACH	*** 650.4000 Construction Staking Storm Sewer EACH	SPV.0060.06 Temporary Connection to Existing Storm Sewer EACH	Rim** Elevation	Invert*** Elevation	Depth**** FT
Project 6220-04-76 Category 0010																					
203	14+82.36	50.00' LT	4	---	---	---	---	1	---	---	---	---	---	1	---	---	1	---	760.85	757.18	2.67
203A	15+16.57	44.00' LT	4	---	---	1	---	---	---	---	1	---	---	---	---	---	1	---	761.10	756.31	3.54
204	15+26.13	21.00' RT	5	---	---	---	1	---	---	---	---	---	---	1	---	---	1	---	761.11	757.26	2.85
206A	15+15.20	55.12' RT	5	---	---	1	---	---	---	---	1	---	---	---	---	---	1	---	760.59	757.05	2.29
105	14+88.34	40.68' RT	5	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	760.40	Exist	Exist
106	15+15.20	55.12' RT	5	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	760.59	Exist	Exist
208	17+55.02	22.00' RT	5	---	---	---	---	1	---	---	---	---	---	1	---	---	1	---	760.91	757.11	2.80
209	17+55.02	6.00' LT	5	---	---	---	---	1	---	---	---	---	---	1	---	---	1	---	760.86	757.48	2.38
210	17+83.20	11.00' LT	4	---	---	---	---	1	---	---	---	---	---	1	---	---	1	---	760.40	757.56	1.84
210A	17+54.73	18.31' LT	4	---	---	1	---	---	---	---	1	---	---	---	---	---	1	---	760.64	755.83	3.56
210T	17+31.83	10.59' LT	4/5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	Connect to Exist Pipe in Stage 4		
211	17+05.07	49.00' LT	4	---	---	---	1	---	---	---	---	1	---	---	---	---	1	---	760.94	756.24	3.70
212	17+30.39	67.79' LT	4	---	---	---	---	1	---	---	---	1	---	---	---	---	1	---	760.27	756.96	2.31
113	18+90.27	51.56' LT	4	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	761.04	Exist	Exist
114	20+53.36	21.96' RT	5	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	762.22	Exist	Exist
115	20+57.55	5.00' LT	5	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	762.31	Exist	Exist
116	20+57.18	23.01' LT	4	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	762.08	Exist	Exist
118	23+55.36	5.05' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	763.92	Exist	Exist
119	23+55.54	23.02' LT	2	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	763.92	Exist	Exist
3A	25+17.71	6.00' LT	3	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	765.22	Exist	Exist
3B	25+18.07	22.13' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	765.12	Exist	Exist
4B	27+45.34	22.15' LT	2	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	766.64	Exist	Exist
5A	30+30.40	6.00' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	769.44	Exist	Exist
6A	32+04.58	6.00' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	770.56	Exist	Exist
6B	32+04.59	22.02' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	770.27	Exist	Exist
207A	33+77.90	6.00' LT	3	---	---	---	1	---	---	---	---	---	---	1	---	---	1	---	771.56	765.60	4.96
207B	33+77.90	30.00' RT	3	---	---	---	---	---	---	1	---	---	1	---	---	---	1	---	771.24	765.42	4.82
207C	33+77.35	77.03' RT	3	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	N/A	757.70	N/A
207D	34+36.80	21.98' LT	2	---	---	---	1	---	---	---	---	---	---	1	---	---	1	---	771.75	766.60	4.15
207E	34+36.80	57.98' LT	2	---	---	---	---	---	---	1	---	---	1	---	---	---	1	---	771.54	766.40	4.14
207F	34+37.62	115.45' LT	2	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	N/A	757.60	N/A
207T	34+45.30	5.88' LT	2/3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	Connect to Existing Inlet in Stage 2		
208D	38+16.51	57.99' LT	2	---	---	---	---	---	---	1	---	---	1	---	---	---	1	---	772.91	768.00	3.91
Project 6220-04-76 Category 0010 Sheet Totals				**2**	**5**	**3**	**4**	**5**	**---**	**3**	**3**	**2**	**3**	**7**	**1**	**8**	**15**	**2**			

Remarks:

*Stations and Offsets are to Center of Structure and reference the EB Alignment of STH 54

**Rim Elevation is at the Center of Inlet Cover Flowline Location

***For Structures with Sumps, the Invert Elevationis the Elevation of Sump. For Structures without Sumps, the Invert Elevation is the Elevation of the Lowest Pipe Flow Line

****Depth = Rim Elev - Top of Structure Base Elev - Cover Height - 6-Inch Adjustment Ring Height

Storm Sewer Structures (continued)

Structure	Station*	Offset*	Stage	*** 521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch EACH	611.0420 Reconstructing Inlets EACH	611.0530 Manhole Covers Type J EACH	611.0624 Inlet Covers Type H EACH	611.0639 Inlet Covers Type H-S EACH	SPV.0060.05 Inlet Covers Type H-D EACH	*** 611.0654 Inlet Covers Type V EACH	611.2004 Manholes 4-FT Diameter EACH	611.3004 Inlets 4-FT Diameter EACH	*** 611.3225 Inlets 2X2.5-FT EACH	*** 611.3230 Inlets 2X3-FT EACH	611.8110 Adjusting Manhole Covers EACH	*** 611.8115 Adjusting Inlet Covers EACH	*** 650.4000 Construction Staking Storm Sewer EACH	SPV.0060.06 Temporary Connection to Existing Storm Sewer EACH	Rim** Elevation	Invert*** Elevation	Depth**** FT
Project 6220-04-76 Category 0010																					
208E	38+17.23	104.68' LT	2	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	N/A	757.60	N/A
8A	38+30.60	6.01' LT	3	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	773.27	Exist	Exist
208B	38+31.09	22.00' LT	2	---	---	---	---	---	1	---	---	---	---	1	---	---	1	---	773.27	768.26	4.01
9A	40+19.90	5.89' LT	3	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	773.86	Exist	Exist
9B	40+20.15	21.99' LT	2	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	773.86	Exist	Exist
10A	41+88.80	5..93' LT	3	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	774.42	Exist	Exist
10B	41+89.88	21.89' LT	2	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	774.43	Exist	Exist
11A	44+07.38	6.00' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	775.08	Exist	Exist
11B	44+07.79	22.00' LT	2	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	774.93	Exist	Exist
12A	46+35.80	6.00' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	775.71	Exist	Exist
12B	46+35.76	22.03' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	775.74	Exist	Exist
13A	48+64.25	6.00' LT	3	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	776.50	Exist	Exist
13B	48+64.41	10.07' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	776.30	Exist	Exist
13C	48+82.29	10.00' LT	2	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	776.34	Exist	Exist
14B	51+09.49	21.99' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	777.11	Exist	Exist
15B	53+40.05	22.09' LT	2	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	777.92	Exist	Exist
16C	55+63.92	10.00' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	778.54	Exist	Exist
17A	57+63.12	5.98' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	779.01	Exist	Exist
17B	57+63.20	21.83' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	779.14	Exist	Exist
18A	59+50.61	5.97' LT	3	---	---	---	1	---	---	---	---	---	---	1	---	---	1	---	779.85	775.75	3.10
E1	15+88.3	90.0' RT	5	---	---	1	---	---	---	---	1	---	---	---	---	---	1	---	761.31	755.89	4.17
4A	27+45.1	12.8' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	766.94	Exist	Exist
5B	29+76.2	15.2' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	769.25	Exist	Exist
5C	29+76.1	22' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	768.80	Exist	Exist
5D	29+96.7	22' LT	2	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	768.96	Exist	Exist
14A	51+09.8	5.8' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	777.35	Exist	Exist
15A	53+39.1	5.9' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	778.06	Exist	Exist
16A	55+64.2	5.7' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	778.70	Exist	Exist
16B	56+03.1	5.7' LT	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	778.82	Exist	Exist
Project 6220-04-76 Category 0010 Sheet Totals				**1**	**4**	**1**	**1**	**---**	**6**	**---**	**1**	**---**	**---**	**2**	**---**	**17**	**3**	**---**			
Project 6220-04-76 Category 0010 Totals				**3**	**9**	**4**	**5**	**5**	**6**	**3**	**4**	**2**	**3**	**9**	**1**	**25**	**18**	**2**			

Remarks:

*Stations and Offsets are to Center of Structure and reference the EB Alignment of STH 54

**Rim Elevation is at the Center of Inlet Cover Flowline Location

***For Structures with Sumps, the Invert Elevationis the Elevation of Sump. For Structures without Sumps, the Invert Elevation is the Elevation of the Lowest Pipe Flow Line

****Depth = Rim Elev - Top of Structure Base Elev - Cover Height - 6-Inch Adjustment Ring Height

Storm Sewer Pipes

From	-	To	Stage	520.8000 Concrete Collars for Pipe EACH	524.0612 Apron Endwalls for Culvert Pipe Salvaged 12-Inch EACH	524.0618 Apron Endwalls for Culvert Pipe Salvaged 18-Inch EACH	*** 530.0112 Culvert Pipe Corrugated Polyethylene 12-Inch LF	608.0112 Relaid Storm Sewer 12-Inch LF	608.0118 Relaid Storm Sewer 18-Inch LF	*** 608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch LF	*** 608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch LF	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch LF	608.3012 Storm Sewer Pipe Class III-A 12-Inch LF	Inlet Elevation	Discharge Elevation	Slope FT/FT
Project 6220-04-76 Category 0010																
203	-	203A	4	---	---	---	---	---	---	35	---	---	---	757.76	757.59	0.0050
203A	-	204	4	1	---	---	---	---	---	4	---	---	---	Match Existing	757.59	Match Existing
203A	-	204	5	1	---	---	---	---	---	4	---	---	---	Match Existing	757.27	Match Existing
204	-	206A	5	---	---	---	---	---	---	---	---	---	36	757.26	757.08	0.0051
106	-	206A	5	1	---	---	---	---	---	---	---	---	5	757.08	Match Existing	Match Existing
206A	-	E1	5	2	---	---	---	---	---	---	---	---	10	Match Existing	757.05	Match Existing
208	-	209	5	---	---	---	---	---	---	28	---	---	---	757.62	757.48	0.0050
209	-	210A	4	---	---	---	---	---	---	12	---	---	---	757.48	757.41	-0.0050
210	-	210A	4	---	---	---	---	---	---	29	---	---	---	757.56	757.41	0.0050
210A	-	211	4	---	---	---	---	---	---	58	---	---	---	757.41	757.13	0.0049
211	-	212	4	---	---	---	---	---	---	---	32	---	---	757.13	757.00	0.0040
212	-	213	4	1	---	---	---	---	---	---	10	---	---	757.00	756.95	0.0046
119	-	119O	2	---	1	---	---	16	---	---	---	---	---		Match Existing	
207A	-	207B	3	---	---	---	---	---	---	---	---	---	36	765.60	765.42	0.0050
207B	-	207C	3	---	---	---	48	---	---	---	---	---	---	765.42	757.70	0.1641
207D	-	207E	2	---	---	---	---	---	---	---	---	---	36	766.60	766.40	0.0056
207E	-	207F	2	---	---	---	58	---	---	---	---	---	---	766.40	757.60	0.1531
208D	-	208E	2	---	---	---	48	---	---	---	---	---	---	768.00	757.60	0.2227
8A	-	208B	2	1	---	---	---	---	---	---	---	---	16	768.65	768.38	0.0167
10B	-	10C	2	---	---	1	---	---	16	---	---	---	---		Match Existing	
E1		North D Limits	4/5	1	---	---	---	---	---	---	---	235	---	755.89	756.17	0.0012
E1		South D Limits	5	1	---	---	---	---	---	---	---	34	---	755.89	755.85	0.0012
Project 6220-04-76 Category 0010 Totals				**9**	**1**	**1**	**154**	**16**	**16**	**170**	**42**	**269**	**139**			

Crash Cushions Temporary

STA	Location	Stage	614.0905 Crash Cushions Temporary EACH	Comment
Project 6220-04-76 Category 0010				
37'EB'+15	RT	2	1	Southeast Wing of B-44-0146
Project 6220-04-76 Category 0010 Total			**1**	

Guardrail

STA	-	STA	Stage	Location	614.0220 Steel Thrie Beam Bullnose Terminal Each	614.0230 Steel Thrie Beam LF	614.0396 Guardrail Mow Strip Asphalt SY	614.0397 Guardrail Mow Strip Emulsified Asphalt SY	*** 614.2300 MGS Guardrail 3 LF	*** 614.2500 MGS Thrie Beam Transition LF	*** 614.2610 MGS Guardrail Terminal EAT EACH
Project 6220-04-76 Category 0010											
233'WB'+77	-	234'WB'+81	2	WB STH 54 LT	---	---	---	41	12.5	39.4	1
237'WB'+70	-	239'WB'+88	2	WB STH 54 LT	---	---	---	85	125.0	39.4	1
32'EB'+34	-	34'EB'+27	3	EB STH 54 RT	---	---	---	80	100.0	39.4	1
38+68	-	40+61	4	Median	2	200	407	---	---	---	---
Project 6220-04-76 Category 0010 Totals					**2**	**200**	**407**	**206**	**237.5**	**118.2**	**3**

Mobilization

	618.0100 Maintenance and Repair of Haul Roads EACH	619.1000 Mobilization EACH
Project 6220-04-76 Category 0010		
Project	1	1
Project 6220-04-76 Category 0010 Totals	**1**	**1**

Monuments

Type	Town/Range	Corner	SPV.0060.01 Reestablish Section Corner Monuments EACH	Notes
Project 6220-04-76 Category 0010				
Quarter Corner	T22N R14E	1-12	---	Off Roadway
Section Corner	T22N R14E / T22N R15E	1-12-6-7	1	---
Quarter Corner	T22N R15E	6-7	1	---
Project 6220-04-76 Category 0010 Totals			**2**	

Topsoil, Erosion Mat, Fertilizer, and Seeding

Stage	Location	*** 625.0100 Topsoil SY	625.0500 Salvaged Topsoil SY	628.2008 Erosion Mat Urban Class I Type B SY	*** 629.0210 Fertilizer Type B CWT	SPV.0030.01 Fertilizer for Lawn Type Turf CWT	630.0120 Seeding Mixture No. 20 LB	630.0140 Seeding Mixture No. 40 LB	*** 630.0500 Seed Water MGAL	SPV.0180.01 Preparing Topsoil for Lawn Type Turf SY
Project 6220-04-76 Category 0010										
1	STA 61'EB'+70 - 78'EB'+65 RT, Temporary Widening 'X'	---	2,429	2,429	1.53	---	109	---	55	---
2	STA 221'WB'+88 - 222'WB'+78 LT, Ditch Restoration 'L'	864	---	864	0.54	---	39	---	19	---
2	STA 229'WB'+99 - 232'WB'+23 LT, Ditch Restoration 'M'	540	---	540	0.34	---	22	---	12	---
2	STA 232'WB'+65 - 234'WB'+88 LT, Guardrail West	561	---	561	0.35	---	25	---	13	---
2	STA 237'WB'+66 - 241'WB'+07 LT, Guardrail East	438	---	438	0.28	---	20	---	10	---
2	STA 221'WB'+75 - 260'WB'+77 RT, Median Restoration	207	---	207	---	0.13	---	9	5	207
2	STA 221'WB'+75 - 260'WB'+77 LT, Culvert Restoration	98	---	98	0.06	---	4	---	2	---
2	STA 261'WB'+80 - 78'EB'+65 LT, Temporary Widening 'Z'	---	2,006	2,006	1.26	---	90	---	45	---
3	STA 6'EB'+00 - 11'EB'+10 RT, Temporary Widening 'W'	---	515	515	0.32	---	23	---	12	---
3	STA 31'EB'+12 - 34'EB'+25 RT, Guardrail West	349	---	349	0.22	---	16	---	8	---
3	STA 37'EB'+00 - 38'EB'+40 RT, River Rd Intersection	56	---	56	---	0.04	---	3	1	56
3	STA 54'EB'+25 - 55'EB'+85 RT, CTH S Intersection	174	---	174	---	0.11	---	8	4	174
3	STA 21'EB'+75 - 60'EB'+77 LT, Median Restoration	194	---	194	---	0.12	---	9	4	194
3	STA 61'EB'+70 - 78'EB'+65 RT, Temporary Widening 'X'	3,632	---	3,632	2.29	---	163	---	82	---
4	STA 208'WB'+30 - 211'WB'+50 LT, Temporary Widening 'Y'	---	331	331	0.21	---	15	---	7	---
4	STA 211'WB'+50 - 216'WB'+25 LT, WB Terrace	566	---	566	---	0.36	---	25	13	566
4	STA 217'WB'+10 - 219'WB'+00 LT, WB Terrace	131	---	131	---	0.08	---	6	3	131
4	STA 261'WB'+80 - 78'EB'+65 LT, Temporary Widening 'Z'	3,210	---	3,210	2.02	---	144	---	72	---
5	STA 6'EB'+00 - 12'EB'+05 RT, Temporary Widening 'W'	861	---	861	---	0.54	---	39	19	861
5	STA 12'EB'+55 - 15'EB'+50 RT, EB Terrace	344	---	344	---	0.22	---	15	8	344
5	STA 16'EB'+00 - 20'EB'+50 RT, EB Terrace	223	---	223	---	0.14	---	10	5	223
6	STA 7'EB'+00 - 211'WB'+50 LT, Temporary Widening 'Y'	559	---	559	---	0.35	---	25	13	559
	Undistributed	650	260	910	---	---	30	10	20	170
Project 6220-04-76 Category 0010 Totals		**13,657**	**5,541**	**19,198**	**9.40**	**2.10**	**700**	**159**	**432**	**3,485**

Silt Fence

STA	-	STA	Location	*** 628.1504 Silt Fence LF	*** 628.1520 Silt Fence Maintenance LF	*** 628.7570 Rock Bags EACH
Project 6220-04-76 Category 0010						
3'EB'+25	-	7'EB'+40	LT	435	435	15
3'EB'+25	-	12'EB'+00	RT	855	855	---
24'EB'+80	-	35'EB'+00	RT	990	990	15
29'EB'+75	-	35'EB'+00	LT	640	640	60
37'EB'+00	-	47'EB'+75	RT	1,090	1,090	---
37'EB'+50	-	45'EB'+00	LT	825	825	30
45'EB'+25	-	55'EB'+00	LT	1065	1065	60
49'EB'+40	-	54'EB'+80	RT	575	575	15
55'EB'+30	-	61'EB'+35	LT	635	635	30
55'EB'+30	-	61'EB'+90	RT	710	710	15
61'EB'+85	-	79'EB'+50	LT	1,610	1,610	15
62'EB'+25	-	79'EB'+50	RT	1,825	1,825	15
Undistributed				1,100	1,100	25
Project 6220-04-76 Category 0010 Totals				**12,355**	**12,355**	**295**

Temporary Ditch Checks

Location	Stage	*** 628.7504 Temporary Ditch Checks LF
Project 6220-04-76 Category 0010		
Ditch Restoration 'L'	2	20
Ditch Restoration 'M'	2	10
STA 8'EB'+45 RT	3	10
River Rd Intersection	3	20
CTH S Intersection	3	20
STA 209'WB'+00 LT	4	10
Project 6220-04-76 Category 0010 Total		**90**

Markers Culvert End

Location/Pipe	*** 633.5200 Markers Culvert End EACH
Project 6220-04-76 Category 0010	
117O	1
119O	1
3C	1
4C	1
5E	1
207C	1
207F	1
208E	1
14C	
Project 6220-04-76 Category 0010 Total	**8**

Culvert Pipe Checks

Location	Stage	*** 628.7555 Culvert Pipe Checks EACH
Project 6220-04-76 Category 0010		
STA 67'EB'+00 RT	1	2
STA 224'WB'+10 LT	2	2
STA 11'EB'+00 RT	3	2
STA 208'WB'+35 LT	4	2
STA 211'WB'+20 LT	4	4
Undistributed	N/A	4
Project 6220-04-76 Category 0010 Total		**16**

Mobilization Erosion Control

Location	*** 628.1905 Mobilization Erosion Control EACH	*** 628.1910 Mobilization Emergency Erosion Control EACH
Project 6220-04-76 Category 0010		
Install Exclusion Fencing	1	---
Stage 1	1	---
Stage 2	2	---
Stage 3	2	---
Stage 4	2	---
Stage 5	2	---
Stage 6	2	---
Project	---	3
Project 6220-04-76 Category 0010 Totals	**12**	**3**

Inlet Protection

Stage	Structure No.	Structure Type	*** 628.7005 Inlet Protection Type A EACH	*** 628.7010 Inlet Protection Type B EACH	*** 628.7015 Inlet Protection Type C EACH	628.7020 Inlet Protection Type D EACH
Project 6220-04-76 Category 0010						
1	16A	EX INL	---	---	1	---
1	16B	EX INL	---	---	1	---
1	17A	EX INL	---	---	1	---
1	18A	EX INL	---	---	1	---
2	110	EX INL	---	---	---	1
2	111	EX INL	---	---	---	1
2	112	EX INL	---	---	---	1
2	113	EX INL	---	---	1	---
2	116	EX INL	---	1	---	---
2	119	EX INL	---	1	---	---
2	3B	EX INL	---	---	1	---
2	4B	EX INL	---	---	1	---
2	5C	EX INL	---	---	1	---
2	5D	EX INL	---	---	1	---
2	6B	EX INL	---	---	1	---
2	207D	INL	---	---	1	---
2	207E	INL	---	---	1	---
2	7C	EX INL	---	---	1	---
2	7D	EX INL	---	---	1	---
2	208B	INL	---	1	---	---
2	208D	INL	---	---	1	---
2	8B	EX INL	---	---	1	---
2	9B	EX INL	---	1	1	---
2	10B	EX INL	---	1	1	---
2	11B	EX INL	---	---	1	---
2	12B	EX INL	---	---	1	---
2	13B	EX INL	---	---	1	---
2	13C	EX INL	---	---	1	---
2	14B	EX INL	---	---	1	---
2	15B	EX INL	---	---	1	---
2	16C	EX INL	---	---	1	---
2	17B	EX INL	---	---	1	---
3	108	EX INL	---	---	---	1
3	109	EX INL	---	---	---	1
3	114	EX INL	---	---	1	---
3	115	EX INL	---	1	---	---
3	118	EX INL	---	1	---	---
3	3A	EX INL	---	---	1	---
3	4A	EX INL	---	---	1	---
3	5B	EX INL	---	---	1	---
3	5A	EX INL	---	---	1	---
3	207A	INL	---	---	1	---
3	207B	INL	---	---	1	---
3	7A	EX INL	---	---	1	---
3	7B	EX INL	---	---	1	---
3	8A	EX INL	---	1	1	---
3	9A	EX INL	---	1	1	---
3	10A	EX INL	---	1	1	---
3	11A	EX INL	---	---	1	---
3	12A	EX INL	---	---	1	---
3	13A	EX INL	---	---	1	---
3	14A	EX INL	---	---	1	---
3	15A	EX INL	---	---	1	---
3	16A	EX INL	---	---	1	---
3	16B	EX INL	---	---	1	---
3	17A	EX INL	---	---	1	---
3	18A	EX INL	---	---	1	---
4	203	INL	---	---	1	---
4	103	EX INL	---	---	1	---
4	203A	MH	1	---	---	---
4	109'D'+15		---	---	1	---
4	109'D'+15 RT		---	---	1	---
4	210	INL	---	---	---	1
4	210A	MH	1	---	---	---
4	211	INL	---	---	1	---
4	212	INL	---	---	1	---
5	105	INL	---	---	1	---
5	204	EX INL	---	---	1	---
5	206A	MH	1	---	---	---
5	E1	MH	1	---	---	---
5	104'D'+15 RT		---	---	1	---
5	104'D'+20 LT		---	---	1	---
5	208	INL	---	---	---	1
5	209	INL	---	---	---	1
Undistributed			1	2	2	1
Project 6220-04-76 Category 0010 Totals			**5**	**12**	**59**	**9**

Permanent Signing

Sign #	Sign Code	Shape T,O,R,D	Sign Size IN X IN	Sign Message	*** 637.2210 Signs Type II Reflective H SF	*** 637.2230 Signs Type II Reflective F SF	634.0612 Posts Wood 4X6 Inch 12 FT EACH	634.0614 Posts Wood 4X6 Inch 14 FT EACH	*** 634.0616 Posts Wood 4X6 Inch 16 FT EACH	*** 638.2102 Moving Signs Type II EACH	*** 638.2602 Removing Signs Type II EACH	*** 638.3000 Removing Small Sign Supports EACH	*** 638.4000 Moving Small Sign Supports EACH
Project 6220-04-76 Category 0010													
01 - 01	-	-	Exist	JCT D, JCT Business 45	---	---	---	---	---	1	---	---	1
01 - 02	-	-	Exist	Stop	---	---	---	---	---	1	---	---	1
01 - 03	-	-	Exist	Speed Limit 45	---	---	---	---	---	1	---	---	1
01 - 04	-	-	Exist	Speed Limit 55	---	---	---	---	---	1	---	---	1
01 - 05	R7-1D	R	18 x 24	No Parking Any Time	3.00	---	---	1	---	---	---	---	---
01 - 06	-	-	Exist	Keep Right	---	---	---	---	---	1	---	---	1
01 - 07	-	-	Exist	Do not Enter / Two Way Traffic	---	---	---	---	---	2	---	---	1
02 - 01	-	-	Exist	Double Down Arrow	---	---	---	---	---	1	---	---	1
02 - 02	-	-	Exist	One Way Right	---	---	---	---	---	1	---	---	1
02 - 03	R6-2R	R	24 x 30	One Way Right	5.00	---	---	1	---	---	---	---	---
02 - 04	R7-1D	R	18 x 24	No Parking Any Time	3.00	---	---	1	---	---	---	---	---
02 - 05	-	-	Exist	Right Lane Ends	---	---	---	---	---	---	1	1	---
02 - 06	-	-	Exist	Folding Stop	---	---	---	---	---	1	---	---	---
02 - 07	-	-	Exist	Keep Right	---	---	---	---	---	1	---	---	---
02 - 08	W12-1D	D	24 x 24	Double Down Arrow	---	4.00	1	---	---	---	---	---	---
02 - 09	-	-	Exist	Folding Stop	---	---	---	---	---	1	---	---	---
02 - 10	-	–	Exist	Yield	---	---	---	---	---	1	---	---	---
02 - 11	-	–	Exist	Right Lane Ends	---	---	---	---	---	1	---	---	1
02 - 12	-	-	Exist	Hospital Ahead	---	---	---	---	---	2	---	---	1
02 - 13	-	-	Exist	Do Not enter / 54 Arrows / Bus 45 Ahead	---	---	---	---	---	2	---	---	1
02 - 14	-	-	Exist	Folding Stop	---	---	---	---	---	1	---	---	---
02 - 15	R10-50L	R	30 x 36	Left Turn Yield on Flashing Yellow Arrow	7.50	---	---	---	---	---	---	---	---
02 - 16	R10-50L	R	30 x 36	Left Turn Yield on Flashing Yellow Arrow	7.50	---	---	---	---	---	---	---	---
02 - 17	-	-	Exist	Folding Stop	---	---	---	---	---	1	---	---	---
02 - 18	-	-	Exist	Keep Right	---	---	---	---	---	1	---	---	---
02 - 19	-	-	Exist	Left Turn Yield on Green	---	---	---	---	---	---	1	---	---
02 - 20	R10-50L	R	30 x 36	Left Turn Yield on Flashing Yellow Arrow	7.50	---	---	---	---	---	---	---	---
02 - 21	R10-50L	R	30 x 36	Left Turn Yield on Flashing Yellow Arrow	7.50	---	---	---	---	---	---	---	---
02 - 22	-	-	Exist	Left Turn Yield on Green	---	---	---	---	---	---	1	---	---
02 - 23	-	-	Exist	Folding Stop	---	---	---	---	---	1	---	---	---
02 - 24	-	-	Exist	Keep Right	---	---	---	---	---	1	---	---	---
02 - 25	-	-	Exist	54 Arrows	---	---	---	---	1	1	---	---	---
02 - 26	-	-	Exist	Folding Stop	---	---	---	---	---	1	---	---	---
02 - 27	-	-	Exist	Keep Right	---	---	---	---	---	1	---	---	---
02 - 28	-	-	Exist	Folding Stop	---	---	---	---	---	1	---	---	---
02 - 29	W12-1D	D	24 x 24	Double Down Arrow	---	4.00	1	---	---	---	---	---	---
02 - 30	-	-	Exist	Yield	---	---	---	---	---	1	---	---	---
02 - 31	R7-1D	R	18 x 24	No Parking Any Time	3.00	---	---	1	---	---	---	---	---
02 - 32	R6-2R	R	24 x 30	One Way Right	5.00	---	---	1	---	---	---	---	---
03 - 01	R7-1D	R	18 x 24	No Parking Any Time	3.00	---	---	1	---	---	---	---	---
03 - 02	R7-1D	R	18 x 24	New London Bus District Left	3.00	---	---	1	---	---	---	---	---
03 - 03	-	–	Exist	New London Bus District / Bear Creek	---	---	---	---	---	1	---	---	2
Project 6220-04-76 Category 0010 Sheet Totals (Continued on next page)					**55.00**	**8.00**	**2**	**7**	**1**	**29**	**3**	**1**	**13**

3

Permanent Signing Continued

Sign #	Sign Code	Shape T,O,R,D	Sign Size IN X IN	Sign Message	*** 637.2210 Signs Type II Reflective H SF	*** 637.2230 Signs Type II Reflective F SF	634.0612 Posts Wood 4X6 Inch 12 FT EACH	634.0614 Posts Wood 4X6 Inch 14 FT EACH	*** 634.0616 Posts Wood 4X6 Inch 16 FT EACH	*** 638.2102 Moving Signs Type II EACH	*** 638.2602 Removing Signs Type II EACH	*** 638.3000 Removing Small Sign Supports EACH	*** 638.4000 Moving Small Sign Supports EACH
Project 6220-04-76 Category 0010													
05 - 01	-	-	Exist	Embarrass River / Wrong Way	---	---	---	---	---	2	---	---	1
05 - 02	-	-	Exist	Outagamie County / Waupaca County	---	---	---	---	---	2	---	---	2
05 - 03	-	-	Exist	W 54 Ahead S 45 Right	---	---	---	---	---	1	---	---	1
05 - 04	-	-	Exist	Speed Limit 45 / Wrong Way	---	---	---	---	---	2	---	---	1
05 - 05	R4-7	R	24 X 30	Keep Right	5.00	---	---	1	---	---	---	---	---
05 - 06	-	-	Exist	Embarrass River / One Way Left	---	---	---	---	---	2	---	---	1
05 - 07	-	-	Exist	Stop	---	---	---	---	---	1	---	---	1
05 - 08	-	-	Exist	One Way Right	---	---	---	---	---	1	---	---	1
05 - 09	R7-1D	R	18 X 24	No Parking Any Time	3.00	---	---	1	---	---	---	---	---
05 - 10	-	-	Exist	To 15 Right Ahead / Do Not Enter	---	---	---	---	---	2	---	---	1
05 - 11	-	-	Exist	Speed Limit 45 / Wrong Way	---	---	---	---	---	2	---	---	1
07 - 01	-	-	Exist	Left Lane Ends	---	---	---	---	---	---	1	1	---
07 - 02	-	-	Exist	CTH S Left / Do Not Enter	---	---	---	---	---	2	---	---	1
07 - 03	-	-	Exist	Keep Right	---	---	---	---	---	1	---	---	1
07 - 04	-	-	Exist	Stop	---	---	---	---	---	1	---	---	1
07 - 05	-	-	Exist	East 54 Right	---	---	---	---	---	1	---	---	1
07 - 06	-	-	Exist	CTH S Right	---	---	---	---	---	1	---	---	1
08 - 01	-	-	Exist	Keep Right	---	---	---	---	---	1	---	---	1
08 - 02	-	-	Exist	JCT CTH S	---	---	---	---	---	1	---	---	1
09 - 01	-	-	Exist	Speed Limit 55	---	---	---	---	---	1	---	---	1
09 - 02	-	-	Exist	Speed Limit 45	---	---	---	---	---	1	---	---	1
09 - 03	-	-	Exist	Divided Highway Ahead	---	---	---	---	---	1	---	---	1
10 - 01	-	-	Exist	Speed Limit 45 Ahead	---	---	---	---	---	1	---	---	1
Project 6220-04-76 Category 0010 Sheet Totals					**8.00**	**0.00**	**0**	**2**	**0**	**27**	**1**	**1**	**21**
Project 6220-04-76 Category 0010 Totals					**63.00**	**8.00**	**2**	**9**	**1**	**56**	**4**	**2**	**34**

3

Traffic Control

Stage	Duration DAY	643.0300 Traffic Control Drums # Req'd	643.0300 Traffic Control Drums DAY	*** 643.0420 Traffic Control Barricades Type III # Req'd	643.0420 Traffic Control Barricades Type III DAY	643.0500 643.0600 Traffic Control Flexible Tubular Marker Posts EACH	643.0500 643.0600 Traffic Control Flexible Tubular Marker Bases EACH	643.0650 Traffic Control Channelizing Curb System LF	*** 643.0705 Traffic Control Warning Lights Type A # Req'd	643.0705 Traffic Control Warning Lights Type A DAY	643.0715 Traffic Control Warning Lights Type C # Req'd	643.0715 Traffic Control Warning Lights Type C DAY	643.0810 Connect Arrow Boards # Req'd	643.0810 Connect Arrow Boards DAY	643.1220 Connected Work Zone Start and End Location Markers # Req'd	643.1220 Connected Work Zone Start and End Location Markers DAY	*** 643.0900 Traffic Control SIGNS # Req'd	643.0900 Traffic Control SIGNS DAY	*** 643.0920 Traffic Control Covering Signs Type II EACH	*** 643.1000 Traffic Control Signs Fixed Message SF
Project 6220-04-76 Category 0010																				
Exterior OSOW Signing	134	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5	670	---	---
Stage 1	10	193	1,930	17	170	---	0	---	34	340	---	0	---	---	---	---	47	470	20	36
Stage 2	29	358	10,382	36	1,044	126	126	---	72	2,088	47	1,363	---	---	---	---	88	2,552	20	---
Stage 3	27	385	10,395	49	1,323	122	122	448	98	2,646	49	1,323	---	---	---	---	89	2,403	13	---
Stage 3A	3	92	276	12	36	---	0	---	24	72	22	66	1	3	1	3	18	54	1	---
Stage 4	24	289	6,936	56	1,344	36	36	---	112	2,688	62	1,488	1	24	1	24	97	2,328	8	36
Stage 5	24	307	7,368	49	1,176	38	38	---	98	2,352	76	1,824	1	24	1	24	69	1,656	10	36
Stage 6	12	251	3,012	28	336	---	0	---	56	672	46	552	1	12	1	12	71	852	1	---
Pedestrian Accommodations	Varies	---	288	---	---	---	---	---	---	---	---	---	---	---	---	---	---	336	---	---
Undistributed	20	---		5	100				10	200	25	500	---	---	---	---	10	200	---	
Project 6220-04-76 Category 0010 Totals			**40,587**		**5,529**	**322**	**322**	**448**		**11,058**		**7,116**		**63**		**63**		**11,521**	**73**	**108**

Temporary Pedestrian Accommodations

Stage	Duration DAY	*643.0900* Traffic Control Signs # Req'd	*643.0900* Traffic Control Signs DAY	**643.3180** Temporary Marking Line Removable Tape 6-Inch (White) LF	644.1440 Temporary Pedestrian Surface Matting SF	644.1601 Temporary Pedestrian Curb Ramp # Req'd	644.1601 Temporary Pedestrian Curb Ramp DAY	644.1605 Temporary Pedestrian Detectable Warning Field SF	644.1810 Temporary Pedestrian Barricade LF
Project 6220-04-76 Category 0010									
3A.1	3	4	12	---	---	---	---	---	24
3A.2	3	4	12	---	---	---	---	---	24
4.1	12	4	48	---	---	---	---	10	114
4.2	12	6	72	151	335	2	24	10	378
5.1	12	6	72	339	190	2	24	10	270
5.2	12	6	72	49	---	2	24	20	246
6.1	6	4	24	254	---		---	40	24
6.2	6	4	24	116	---		---	---	30
Project 6220-04-76 Category 0010 Totals			**336***	**909****	**525**		**72**	**90**	**1,110**

*** See Traffic Control for Project Totals ***

**** See Temporary Pavement Marking (Traffic Control) for Project Totals ****

3

Temporary Pavement Marking (Traffic Control)

STA	-	STA	Stage	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 (White) LF	643.3280 Temporary Marking Line Removable Tape 10-Inch (White) LF	643.3805 Temporary Marking Stop Line Paint 18-Inch LF	643.3850 Temporary Marking Stop Line Removable Tape 18-Inch LF	Comments
Project 6220-04-76 Category 0010												
80'EB'+20	-	East	1	---	1,964	---	---	---	---	---	---	NPZ Extension
West	-	6'EB'+00	2	---	2,456	---	---	---	---	---	---	NPZ Extension
8'EB'+75	-	15'EB'+50	2	284	467	---	---	309	---	---	---	EB (Jeanne St - CTH D)
16'EB'+79	-	21'EB'+40	2	---	461	---	---	---	---	---	---	EB (CTH D - XE Crossover)
21'EB'+40	-	80'EB'+20	2	8,196	11,773	---	---	245	---	---	---	EB (XE Crossover - East)
209'WB'+41	-	215'WB'+39	2	762	598	---	---	---	---	---	---	WB (Jeanne St - CTH D)
216'WB'+74	-	218'WB'+17	2	82	---	---	---	140	---	---	---	WB (CTH D - XE Crossover)
1'XE'+08	-	6'XE'+70	2	560	326	---	---	77	---	---	---	XE Crossover
0'XW'+00	-	6'XW'+73	3	469	503	204	204	---	---	---	---	XW Crossover
217'WB'+12	-	221'WB'+75	3	---	304	---	---	338	---	---	---	WB (CTH D - XW Crossover)
221'WB'+75	-	80'EB'+20	3	---	---	9,268	13,858	---	---	---	24	WB (XW Crossover - East)
11'EB'+92	-	15'EB'+50	3A	---	358	---	---	240	---	---	---	EB (Jeanne St - CTH D)
216'WB'+74	-	220'WB'+46	3A	---	372	---	---	---	---	---	---	WB (CTH D - XW Crossover)
102'D'+69	-	102'D'+53	3A	---	---	319	1,266	---	---	---	11	CTH D South
108'D'+18	-	117'D'+72	3A	---	---	137	1,111	---	---	---	11	CTH D North
3'EB'+75	-	15'EB'+50	4	1,251	1,553	685	686	---	---	11	---	EB (Jeanne St - CTH D)
17'EB'+53	-	19'EB'+51	4	233	396	---	---	---	---	11	---	EB (CTH D - YE Crossover)
19'EB'+51	-	26'EB'+00	4	---	224	282	427	---	---	---	---	EB (YE Crossover - Permanent Marking)
0'YE'+00	-	6'YE'+48	4	224	224	424	424	---	---	---	---	YE Crossover
225'WB'+97	-	226'WB'+92	4	---	---	98	98	---	---	---	---	WB (YE Crossover - Permanent Marking)
34'EB'+29	-	42'EB'+70	4	---	---	843	841	---	---	---	---	EB (Guardrail Lane Shift)
235'WB'+56	-	244'WB'+65	4	---	---	910	910	---	---	---	---	WB (Guardrail Lane Shift)
102'D'+69	-	106'D'+53	4	---	---	563	384	---	---	---	11	CTH D South
110'D'+52	-	117'D'+72	4	---	---	721	---	---	---	---	---	CTH D North
3'EB'+75	-	215'WB'+02	5	---	---	1,803	2,261	---	---	---	11	WB (Jeanne St - CTH D)
217'WB'+12	-	219'WB'+63	5	---	---	283	502	---	---	---	11	WB (CTH D - YW Crossover)
219'WB'+63	-	226'WB'+92	5	---	---	734	733	---	---	---	---	WB (YW Crossover - Permanent Marking)
0'YW'+00	-	6'YW'+32	5	---	---	631	640	---	---	---	---	YW Crossover
108'D'+57	-	108'D'+74	5	---	---	227	218	---	---	---	11	CTH D North
3'EB'+75	-	8'EB'+35	6	---	---	909	919	---	---	---	---	EB (West - Jeanne St)
8'EB'+35	-	15'EB'+50	6	---	---	337	700	---	125	---	22	EB (Jeanne St - CTH D)
16'EB'+82	-	26'EB'+00	6	---	---	917	918	---	---	---	---	EB (CTH D - Permanent Marking)
208'WB'+31	-	215'WB'+37	6	---	---	715	706	---	---	---	---	WB (Jeanne St - CTH D)
216'WB'+85	-	226'WB'+92	6	---	---	786	1,008	---	221	---	23	WB (CTH D - Permanent Marking)
102'D'+69	-	106'D'+76	6	---	---	346	1,321	---	---	---	11	CTH D South
108'D'+17	-	117'D'+72	6	---	---	134	1,104	---	---	---	11	CTH D North
Pedestrian Accommodations			3A - 6	---	---	909	---	---	---	---	---	See Temporary Pedestrian Accommodations
Project 6220-04-76 Category 0010 Totals				12,061	21,979	23,185	31,239	**1,349**	**346**	**22**	**157**	
				34,040		**54,424**						

Pavement Marking Removal

STA	-	STA	Stage	646.9000 Marking Removal Line 4-Inch LF	646.9010 Marking Removal Line Water Blasting 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	Comments
Project 6220-04-76 Category 0010									
11'EB'+93	-	15'EB'+50	2	88	---	---	---	---	EB Center Skips & Turn Lane Line
19'EB'+22	-	23'EB'+75	2	453	---	---	---	---	EB Inside Yellow Lline
76'EB'+00	-	802'EB'+20	2	520	---	---	---	---	EB Centerline
213'WB'+87	-	215'WB'+69	2	50	---	---	---	---	WB Center Skips
217'WB'+12	-	220'WB'+46	2	88	---	---	---	---	WB Center Skips
219'WB'+96	-	221'WB'+75	2	302	---	---	---	---	WB Inside Yellow Line
75'EB'+20	-	80'EB'+20	2	500	---	---	---	---	EB Edgeline
17'EB'+39	-	19'EB'+50	3	50	---	---	---	---	EB Center Skips
75'EB'+20	-	80'EB'+20	3	500	---	---	---	---	WB Edgeline
13'EB'+42	-	15'EB'+49	3A	---	---	207	---	---	EB Turn Lane Line
106'D'+00	-	107'D'+00	3A	38	---	---	43	---	CTH D Center Skips & NB Stop Bar
107'D'+96	-	108'D'+57	3A	13	---	---	43	---	CTH D Center Skips, SB Stop Bar
115'D'+26	-	117'D'+72	3A	63	---	---	---	---	CTH D SB Center Skips
3'EB'+75	-	8'EB'+50	4	604	---	---	---	---	EB Centerline
15'EB'+50			4	---	---	---	40	---	EB Stop Bar
34'EB'+42	-	37'EB'+22	4	---	589	---	---	---	EB Marking Over B-44-0147
234'WB'+72	-	237'WB'+51	4	---	593	---	---	---	WB Marking OverB-44-0146
106'D'+53	-	106'D'+92	4	---	---	40	---	1	CTH D NB Turn Lane Line & Arrow
Project 6220-04-76 Category 0010 Totals				**3,269**	**1,182**	**247**	**126**	**1**	

Pavement Marking (Transverse)

Location From	-	Location To	*** 646.6120 Marking Stop Line Epoxy 18-Inch (White) LF	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch (White) LF	*** 646.7120 Marking Diagonal Epoxy 12-Inch (Yellow) LF	646.7120 Marking Diagonal Epoxy 12-Inch (White) LF	*** 646.5020 Marking Arrow Epoxy (White) EACH	*** 646.5120 Marking Word Epoxy (White) EACH	*** 646.8120 Marking Curb Epoxy (Yellow) LF	*** 646.8220 Marking Island Nose Epoxy (Yellow) EACH
Project 6220-04-76 Category 0010										
West Project Limits	-	CTH D	27	178	123	---	2	1	14	2
CTH D	-	USH 45 SB	27	167	---	---	8	1	14	2
USH 45 SB	-	River Rd	---	---	---	673	2	1	98	2
River Rd	-	USH 45 NB	---	---	---	234	2	1	71	2
USH 45 NB	-	CTH S	---	---	---	---	4	1	26	2
CTH S	-	East Project Limits	---	---	113	---	2	---	20	2
CTH D South Approach			35	115	10	---	1	1	---	2
CTH D North Approach			33	123	---	---	1	---	---	1
CTH S			35	---	---	---	---	---	---	---
Project 6220-04-76 Category 0010 Totals			**122**	**583**	246	907	**22**	**6**	**243**	**15**
					1,153					

Adjusting Local Utility

STATION	SPV.0060.08 Adjusting Sanitary Manhole Covers EACH
Project 6220-04-76 Category 0020	
15'EB'+51, 82.5' LT	1
16'EB'+78, 70.0' LT	1
Project 6220-04-76 Category 0020 Totals	**2**

3

Construction Staking

STA	-	STA	Location	*** 650.4500 Construction Staking Subgrade LF	*** 650.5000 Construction Staking Base LF	*** 650.5500 Construction Staking Curb Gutter and Curb & Gutter LF	*** 650.6000 Construction Staking Pipe Culverts EACH	*** 650.9000 Construction Staking Curb Ramps EACH	650.9500 Construction Staking Sidewalk EACH	650.9911 Construction Staking Supplemental Control EACH	*** 650.9920 Construction Staking Slope Stakes LF
Project 6220-04-76 Category 0010											
Project			STH 54	---	---	---	---	---	1	1	---
3'EB'+75	-	7'EB'+18	STH 54	343	343	---	---	---	---	---	343
7'EB'+18	-	8'EB'+75	STH 54	157	157	135	1	---	---	---	157
8'EB'+75	-	15'EB'+63	STH 54	688	688	910	---	4	---	---	688
15'EB'+63	-	16'EB'+61	STH 54	98	98	---	---	---	---	---	98
16'EB'+61	-	21'EB'+75	STH 54	514	514	633	---	1	---	---	514
21'EB'+75	-	25'EB'+00	STH 54	325	325	316	---	---	---	---	325
25'EB'+00	-	31'EB'+42	STH 54	---	---	728	---	---	---	---	642
31'EB'+42	-	34'EB'+56	STH 54	314	314	322	1	---	---	---	314
37'EB'+19	-	38'EB'+36	STH 54	117	117	106	---	---	---	---	117
38'EB'+36	-	54'EB'+22	STH 54	---	---	993	---	---	---	---	1,586
54'EB'+22	-	55'EB'+65	STH 54	143	143	158	---	---	---	---	143
55'EB'+65	-	61'EB'+40	STH 54	---	---	110	---	---	---	---	575
61'EB'+40	-	79'EB'+91	STH 54	1,851	1,851	---	---	---	---	---	1,851
208'WB'+72	-	215'WB'+61	STH 54	689	689	784	---	1	---	---	689
215'WB'+61	-	216'WB'+59	STH 54	98	98	---	---	---	---	---	98
216'WB'+59	-	221'WB'+75	STH 54	516	516	711	---	4	---	---	516
221'WB'+75	-	234'WB'+75	STH 54	1,300	1,300	795	1	---	---	---	1,300
237'WB'+38	-	265'WB'+88	STH 54	2,850	2,850	899	1	---			2,850
105'D'+23	-	107'D'+09	CTH D	186	186	405	---	5	---	---	186
107'D'+83	-	108'D'+74	CTH D	91	91	368	---	5			91
Project 6220-04-76 Category 0010 Totals				**10,280**	**10,280**	**8,373**	**4**	**20**	**1**	**1**	**13,083**

Note: Quantity for Construction Staking Storm Sewer shown in Storm Sewer Items

LAND PARCEL MONUMENTS

LOCATION	SPV.0060.03 RESEARCH AND LOCATE EXISTING LAND PARCEL MONUMENTS EA	SPV.0060.04 VERIFY AND REPLACE EXISTING LAND PARCEL MONUMENTS EA
PROJECT 6220-04-76 CATEGORY 0010		
PROJECT	2	2
PROJECT 6220-04-76 CAT 0010 TOTALS	**2**	**2**

Excavation, Hauling, and Disposal of Contaminated Soil

Station	Offset	SPV.0195.01 Excavation, Hauling, and Disposal of Contaminated Soil TON	Notes
Project 6220-04-76 Category 0010			
215+30 'WB'	30' LT	30	Existing grade to 5' below grade
Project 6220-04-76 Category 0010 Totals		**30**	

Pavement Marking (Longitudinal)

Location From	-	To	*** 646.2040 Marking Line Grooved Wet Ref Epoxy 6-Inch (Yellow) LF	*** 646.2040 Marking Line Grooved Wet Ref Epoxy 6-Inch (White) LF	*** 646.4040 Marking Line Grooved Wet Ref Epoxy 10-Inch (White) LF	646.2020 Marking Line Epoxy 6-Inch (Yellow) LF	646.2020 Marking Line Epoxy 6-Inch (White) LF
Project 6220-04-76 Category 0010							
West Project Limits	-	CTH D	3,123	2,060	636	---	---
CTH D	-	USH 45 SB	2,730	2,279	1,176	---	---
USH 45 SB	-	River Rd	1,493	2,547	407	---	---
River Rd	-	USH 45 NB	1,875	2,351	406	---	---
USH 45 NB	-	CTH S	1,118	1,144	570	---	---
CTH S	-	East Project Limits	5,140	4,830	272	---	---
CTH D South Approach			192	25	60	---	---
CTH D North Approach			20	88	35	40	62
CTH S			133	---	---	---	---
Project 6220-04-76 Category 0010 Totals			10,551	10,494	**3,290**	40	62
				21,045			**102**

3

Removing Concrete Bases

Intersection	Base No.	Station	DIR	Reference Line	204.0195 Removing Concrete Bases EACH
Category 0010					
STH 54 and CTH D	ESB 1	14+54	RT	STH 54 EB	1
	ESB 2	215+54	RT	STH 54 WB	1
	ESB 3	215+58	LT	STH 54 WB	1
	ESB 4	215+70	LT	STH 54 WB	1
	ESB 5	215+92	LT	STH 54 WB	1
	ESB 6	216+34	LT	STH 54 WB	1
	ESB 7	216+78	LT	STH 54 WB	1
	ESB 8	217+15	LT	STH 54 WB	1
	ESB 9	16+75	LT	STH 54 EB	1
	ESB 10	16+72	RT	STH 54 EB	1
	ESB 11	16+45	RT	STH 54 EB	1
	ESB 12	16+35	RT	STH 54 EB	1
	ESB 13	15+84	RT	STH 54 EB	1
	ESB 14	15+20	RT	STH 54 EB	1
	ESB 15	215+85	LT	STH 54 WB	1
	ECB 1	14+84	RT	STH 54 EB	1

Project Total 16

Removing Pull Boxes

Intersection	Pull Box Number	Station	Reference Line	Offset	653.0905 Removing Pull Boxes EACH
Category 0010					
STH 54 and CTH D	EPB X	14+90	STH 54 EB	65.5 RT	1
	EPB 1	15+15	STH 54 EB	55.1 RT	1
	EPB 2	11+79	STH 54 WB	29.2 RT	1
	EPB 3	15+40	STH 54 EB	27.7 T	1
	EPB 4	215+35	STH 54 WB	7.7 RT	1
	EPB 5	215+40	STH 54 WB	30.8 LT	1
	EPB 6	215+84	STH 54 WB	47.1 LT	1
	EPB 7	110+80	CTH D	26.9 LT	1
	EPB 8	108+01	CTH D	16.3 RT	1
	EPB 9	216+84	STH 54 WB	29.1 LT	1
	EPB 10	217+25	STH 54 WB	48.3 LT	1
	EPB 11	219+66	STH 54 WB	28.7 LT	1
	EPB 12	16+88	STH 54 EB	7.8 LT	1
	EPB 13	16+68	STH 54 EB	27.2 RT	1
	EPB 14	16+41	STH 54 EB	41.6 RT	1
	EPB 15	104+20	CTH D	50.2 RT	1
	EPB 16	106+90	CTH D	4.3 RT	1

Project Total 17

Pull Boxes

Intersection	Pull Box Number	Station	Reference Line	Offset	653.0164 Pull Boxes Non-Conductive 24 X 42-Inch EACH
Category 0010					
STH 54 and CTH D	PB 1	14+86	STH 54 EB	58.7 RT	1
	PB 2	11+83	STH 54 EB	30.6 RT	1
	PB 3	15+35	STH 54 EB	29.3 RT	1
	PB 4	15+11	STH 54 EB	20.0 LT	1
	PB 5	14+22	STH 54 EB	19.4 LT	1
	PB 6	12+97	STH 54 EB	13.6 LT	1
	PB 7	215+29	STH 54 WB	30.7 LT	1
	PB 8	215+84	STH 54 WB	47.3 LT	1
	PB 9	108+32	CTH D	30.3 LT	1
	PB 10	110+78	CTH D	27.2 LT	1
	PB 11	108+32	CTH D	16.0 RT	1
	PB 12	216+79	STH 54 WB	34.8 LT	1
	PB 13	217+23	STH 54 WB	55.0 LT	1
	PB 14	220+28	STH 54 WB	31.3 LT	1
	PB 15	216+96	STH 54 WB	19.6 RT	1
	PB 16	217+93	STH 54 WB	19.6 RT	1
	PB 17	219+05	STH 54 WB	19.6 RT	1
	PB 18	16+63	STH 54 EB	28.5 RT	1
	PB 19	106+67	CTH D	53.0 RT	1
	PB 20	104+20	CTH D	51.3 RT	1
	PB 21	106+66	STH 54 EB	4.4 RT	1
	PB 22	14+95	STH 54 EB	72.5 RT	1

Project Total 22

Conduit

Intersection	From	To	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch LF	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch LF	652.0605 Conduit Special 2-Inch LF
Category 0010					
STH 54 and CTH D	CB 1	PB 1	--	44	--
	PB 1	PB 2	221	--	87
	PB 1	PB 3	--	115	--
	PB 3	SB 1	13	--	--
	PB 3	SB 2	6	--	--
	PB 3	PB 4	--	110	--
	PB 4	SB 3	26	--	--
	PB 4	PB 5	89	--	--
	PB 5	LB 1	14	--	--
	PB 5	PB 6	126	--	--
	PB 6	LB 2	12	--	--
	PB 4	PB 7	--	87	--
	PB 7	SB 4	7	--	--
	PB 7	PB 8	--	115	--
	PB 8	SB 5	22	--	--
	PB 8	PB 9	--	71	--
	PB 9	PB 10	168	--	78
	PB 9	PB 11	--	87	--
	PB 11	SB 6	14	--	--
	PB 11	PB 12	--	85	--
	PB 12	PB 13	48	--	--
	PB 13	LB 3	14	--	--
	PB 13	PB 14	245	--	65
	PB 12	SB 7	4	--	--
	PB 12	SB 8	11	--	--
	PB 12	PB 15	--	114	--
	PB 15	SB 9	14	--	--
	PB 15	PB 16	98	--	--
	PB 16	LB 4	13	--	--
	PB 16	PB 17	111	--	--
	PB 17	LB 5	14	--	--
	PB 15	PB 18	--	101	--
	PB 18	SB 10	21	--	--
	PB 18	PB 19	--	153	--
	PB 19	SB 11	12	--	--
	PB 19	PB 20	184	--	63
	PB 19	PB 21	--	97	--
	PB 21	SB 12	12	--	--
	PB 21	PB 22	--	161	--
	PB 22	LB 6	18	--	--
	PB 22	CB 1	--	45	--
	Project Totals		1,537	1,385	293

Electrical Service Meter Breaker Pedestal

Location	656.0201.01 Electrical Service Meter Breaker Pedestal (STH 54 & CTH D) EACH
Category 0010	
STH 54 and CTH D	1
Project Total	1

Signal Mounting Hardware

Location	658.5070.01 Signal Mounting Hardware (STH 54 and CTH D) EACH
Category 0010	
STH 54 and CTH D	1
Project Total	1

Salvage Traffic Signals

Location	SPV.0060.07 Salvage Traffic Signals STH 54 and CTH D EACH
Category 0010	
STH 54 and CTH D	1
Project Total	1

3

Concrete Bases

Intersection	Base Number	Station	Reference Line	Offset	654.0101 Concrete Bases Type 1 EACH	654.0102 Concrete Bases Type 2 EACH	654.0105 Concrete Bases Type 5 EACH	654.0110 Concrete Bases Type 10 EACH	654.0217 Concrete Control Cabinet Bases Type 9 Special EACH
Category 0010									
STH 54 and CTH D	CB 1	14+84	STH 54 EB	68.8 RT	--	--	--	--	1
	SB 1	106+78	CTH D	31.4 LT	--	--	--	1	--
	SB 2	15+37	STH 54 EB	24.0 RT	1	--	--	--	--
	SB 3	15+37	STH 54 EB	19.5 LT	1	--	--	--	--
	SB 4	215+35	STH 54 WB	27.2 LT	--	--	--	1	--
	SB 5	108+18	CTH D	27.1 LT	--	1	--	--	--
	SB 6	108+18	CTH D	15.5 RT	1	--	--	--	--
	SB 7	108+18	CTH D	53.1 RT	--	--	--	1	--
	SB 8	216+82	STH 54 WB	24.0 LT	1	--	--	--	--
	SB 9	216+82	STH 54 WB	19.5 RT	1	--	--	--	--
	SB 10	16+84	STH 54 EB	26.0 RT	--	--	--	1	--
	SB 11	106+75	CTH D	50.1 RT	--	1	--	--	--
	SB 12	106+78	CTH D	4.5 RT	1	--	--	--	--
	LB 1	14+09	STH 54 EB	19.8 LT	--	--	1	--	--
	LB 2	12+85	STH 54 EB	12.8 LT	--	--	1	--	--
	LB 3	108+62	CTH D	77.3 RT	--	--	1	--	--
	LB 4	218+07	STH 54 WB	18.9 RT	--	--	1	--	--
	LB 5	219+18	STH 54 WB	18.9 RT	--	--	1	--	--
	LB 6	106+33	CTH D	48.6 LT	--	--	1	--	--
				Project Totals	6	2	6	4	1

Loop Detector

Intersection	Loop No.	Home Pull Box	Station	Reference Line	Offset	Size (FT) X (FT)	No. of Turns	652.0800 Conduit Loop Detector LF	655.0700 Loop Detector Lead in Cable LF	655.0800 Loop Detector Wire LF
Category 0010										
STH 54 and CTH D	11	PB 4	15+40	STH 54 EB	9.5 LT	6 X 20	3	75	140	180
	12	PB 4	15+10	STH 54 EB	9.5 LT	6 X 20	3	67	140	175
	61	PB 2	11+82	STH 54 EB	6.0 RT	6 X 6	5	68	350	165
	72	PB 11	108+09	CTH D	5.6 RT	6 X 20	3	69	325	175
	44	PB 9	108+09	CTH D	5.9 LT	6 X 20	3	96	280	200
	46	PB 9	108+09	CTH D	17.4 LT	6 X 20	3	74	280	180
	71	PB 11	108+37	CTH D	5.6 RT	6 X 20	3	69	325	175
	43	PB 9	108+37	CTH D	5.9 LT	6 X 20	3	96	280	200
	45	PB 9	108+37	CTH D	17.4 LT	6 X 20	3	74	280	180
	41	PB 10	110+81	CTH D	4.8 LT	6 X 6	4	64	525	140
	42	PB 10	110+81	CTH D	16.8 LT	6 X 6	4	40	525	115
	52	PB 15	216+79	STH 54 WB	9.5 RT	6 X 20	3	68	280	175
	51	PB 15	217+09	STH 54 WB	9.5 RT	6 X 20	3	83	280	190
	21	PB 14	220+27	STH 54 WB	5.5 LT	6 X 6	5	70	725	170
	32	PB 21	106+90	CTH D	14.6 RT	6 X 20	3	69	110	175
	84	PB 19	106+90	CTH D	26.1 RT	6 X 20	3	101	130	205
	86	PB 19	106+90	CTH D	37.6 RT	6 X 20	3	78	130	185
	31	PB 21	106+64	CTH D	14.6 RT	6 X 20	3	68	110	175
	83	PB 19	106+64	CTH D	26.1 RT	6 X 20	3	101	130	205
	85	PB 19	106+64	CTH D	37.6 RT	6 X 20	3	78	130	185
	81	PB 20	104+19	CTH D	24.2 RT	6 X 6	4	49	405	125
	82	PB 20	104+19	CTH D	36.2 RT	6 X 6	4	67	405	140
Project Totals								1,624	6,285	3,815

Traffic Signal Cable and Wire (Above Ground)

Intersection	From	To	655.0240 Cable Traffic Signal 7-14 AWG LF	655.0610 * Electrical Wire Lighting 12 AWG LF	Remarks
Category 0010					
STH 54 and CTH D	SB 1	HEAD 4B	41	--	
		HEAD 4C	52	--	
		PED 6-1	27	--	
		LUMINAIRE	--	35	
	SB 2	HEAD 5C	21	--	
		HEAD 6A	21	--	
		PED 4-2	21	--	
	SB 3	HEAD 1A	21	--	
		HEAD 5B	21	--	
	SB 4	HEAD 2B	27	--	
		HEAD 2C	48	--	
		PED 4-1	27	--	
		LUMINAIRE	--	27	
	SB 5	HEAD 3C	30	--	
		HEAD 4A	22	--	
		PED 2-2	22	--	
		LUMINAIRE	--	30	
	SB 6	HEAD 3B	23	--	
		HEAD 7A	23	--	
	SB 7	HEAD 8B	42	--	
		HEAD 8C	54	--	
		PED 2-1	27	--	
		LUMINAIRE	--	35	
	SB 8	HEAD 1C	21	--	
		HEAD 2A	21	--	
		PED 8-2	21	--	
	SB 9	HEAD 1B	21	--	
		HEAD 5A	21	--	
	SB 10	HEAD 6B	47	--	
		HEAD 6C	27	--	
		PED 8-1	27	--	
		LUMINAIRE	--	35	
	SB 11	HEAD 7C	22	--	
		HEAD 8A	22	--	
		PED 6-2	22	--	
		LUMINAIRE	--	30	
	SB 12	HEAD 3A	23	--	
		HEAD 7B	23	--	
		Project Total	896	192	

* See Traffic Signal Cable & Wire (Below Ground) Table for Additional Quantities

Traffic Signal Cable (Below Ground)

From	To	655.0250 Cable Traffic Signal 9-14 AWG LF	655.0260 Cable Traffic Signal 12-14 AWG LF	655.0305 Cable Type UF 2-12 AWG Grounded LF	Remarks
CB 1	SB 1	150	--	150	
CB 1	SB 2	--	140	--	
CB 1	SB 3	--	240	--	
CB 1	SB 4	285	--	285	
CB 1	SB 5	--	380	380	
CB 1	SB 6	--	495	--	
CB 1	SB 7	475	--	475	
CB 1	SB 8	--	485	--	
CB 1	SB 9	--	410	--	
CB 1	SB 10	340	--	340	
CB 1	SB 11	--	245	245	
CB 1	SB 12	--	175	--	
CB 1	LB 1	--	--	340	
CB 1	LB 2	--	--	495	
CB 1	LB 3	--	--	560	
CB 1	LB 4	--	--	670	
CB 1	LB 5	--	--	530	
CB 1	LB 6	--	--	75	
	Project Total	1,250	2,570	4,545	

* See Traffic Signal Cable & Wire (Above Ground) Table for Additional Quantities

Traffic Signal Cable and Wire

From	To	655.0515 Electrical Wire Traffic Signals 10 AWG (Green) LF	Remarks
Category 0010			
CB 1	SB 1	150	
SB 1	SB 2	60	
SB 2	SB 3	150	
SB 3	SB 4	140	
SB 4	SB 5	150	
SB 5	SB 6	200	
SB 6	SB 7	120	
SB 7	SB 8	55	
SB 8	SB 9	145	
SB 9	SB 10	130	
SB 10	SB 11	165	
SB 11	SB 12	135	
SB 12	CB 1	175	
	Project Total	1,465	

Traffic Signal Poles, Arms, & Bases

Int.	Base No.	STA	Reference Line	Offset	657.0100 Pedestal Bases EACH	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle EACH	657.0315 Poles Type 4 EACH	657.0322 Poles Type 5 Aluminum EACH	657.0350 Poles Type 10 EACH	657.0420 Traffic Signal Standards Aluminum 13-FT EACH	657.0425 Traffic Signal Standards Aluminum 15-FT EACH	657.0525 Monotube Arms 25-FT EACH	657.0530 Monotube Arms 30-FT EACH	657.0614 Luminaire Arms Single Member 4-Inch Clamp 8-FT EACH	657.0615 Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT EACH	657.0808 Luminaire Arms Steel 8-FT EACH	658.0173 Traffic Signal Face 3S 12-Inch EACH	658.0174 Traffic Signal Face 4S 12-Inch EACH	658.0416 Pedestrian Signal Face 16-Inch EACH	658.0500 Pedestrian Push Buttons EACH	659.1125 Luminaires Utility LED C EACH
Category 0010																					
STH 54 and CTH D	SB 1	106+78	CTH D	31.4 LT	--	--	--	--	1	--	--	--	1	--	--	1	2	--	1	1	1
	SB 2	15+37	STH 54 EB	24.0 RT	1	--	--	--	--	1	--	--	--	--	--	--	2	--	1	1	--
	SB 3	15+37	STH 54 EB	19.5 LT	1	--	--	--	--	1	--	--	--	--	--	--	2	--	--	--	--
	SB 4	215+35	STH 54 WB	27.2 LT	--	--	--	--	1	--	--	1	--	--	--	1	2	--	1	1	1
	SB 5	108+18	CTH D	27.1 LT	--	1	1	--	--	--	--	--	--	1	--	--	1	1	1	1	1
	SB 6	108+18	CTH D	15.5 RT	1	--	--	--	--	--	1	--	--	--	--	--	--	2	--	--	--
	SB 7	108+18	CTH D	53.1 RT	--	--	--	--	1	--	--	--	1	--	--	1	2	--	1	1	1
	SB 8	216+82	STH 54 WB	24.0 LT	1	--	--	--	--	1	--	--	--	--	--	--	2	--	1	1	--
	SB 9	216+82	STH 54 WB	19.5 RT	1	--	--	--	--	1	--	--	--	--	--	--	2	--	--	--	--
	SB 10	16+84	STH 54 EB	26.0 RT	--	--	--	--	1	--	--	1	--	--	--	1	2	--	1	1	1
	SB 11	106+75	CTH D	50.1 RT	--	1	1	--	--	--	--	--	--	1	--	--	1	1	1	1	1
	SB 12	106+78	CTH D	4.5 RT	1	--	--	--	--	--	1	--	--	--	--	--	--	2	--	--	--
	LB 1	14+09	STH 54 EB	19.8 LT	--	1	--	1	--	--	--	--	--	--	1	--	--	--	--	--	1
	LB 2	12+85	STH 54 EB	12.8 LT	--	1	--	1	--	--	--	--	--	--	1	--	--	--	--	--	1
	LB 3	108+62	CTH D	77.3 RT	--	1	--	1	--	--	--	--	--	--	1	--	--	--	--	--	1
	LB 4	218+07	STH 54 WB	18.9 RT	--	1	--	1	--	--	--	--	--	--	1	--	--	--	--	--	1
	LB 5	219+18	STH 54 WB	18.9 RT	--	1	--	1	--	--	--	--	--	--	1	--	--	--	--	--	1
	LB 6	106+33	CTH D	48.6 LT	--	1	--	1	--	--	--	--	--	--	1	--	--	--	--	--	1
Project Totals					6	8	2	6	4	4	2	2	2	2	6	4	18	6	8	8	12

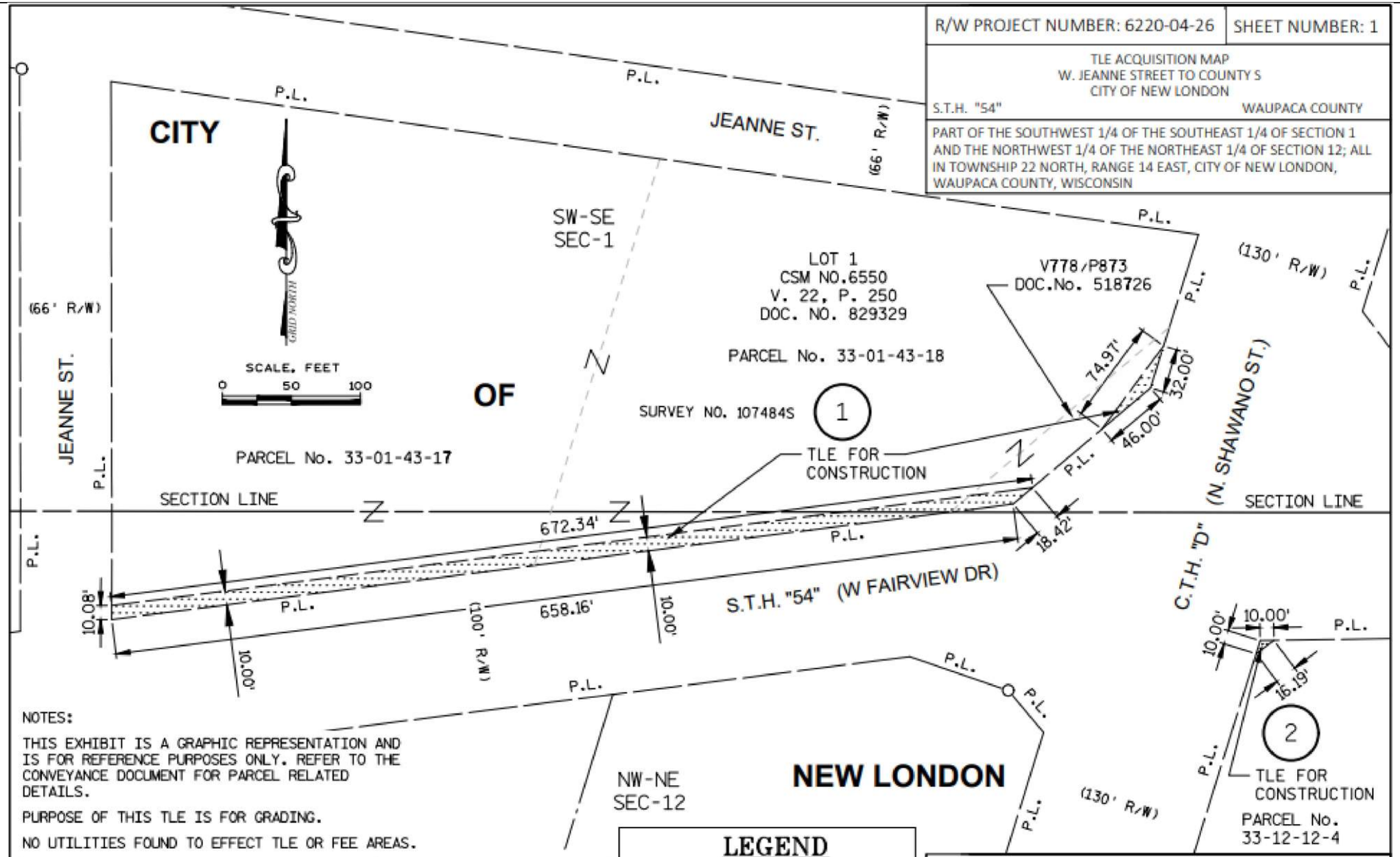
Temporary Traffic Signals

Intersection	661.0201 Temporary Traffic Signals for Intersections (STH 54 & CTH D) EACH
Category 0010	
STH 54 and CTH D	1
Project Totals	1

R/W PROJECT NUMBER: 6220-04-26	SHEET NUMBER: 1

TLE ACQUISITION MAP
W. JEANNE STREET TO COUNTY S
CITY OF NEW LONDON
S.T.H. "54" WAUPACA COUNTY

PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 1 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 12; ALL IN TOWNSHIP 22 NORTH, RANGE 14 EAST, CITY OF NEW LONDON, WAUPACA COUNTY, WISCONSIN



NOTES:

THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE OF THIS TLE IS FOR GRADING.

NO UTILITIES FOUND TO EFFECT TLE OR FEE AREAS.

SCHEDULE OF LANDS AND INTERESTS REQUIRED		OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT	
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	TLE S.F. REQUIRED
1	DANIEL C PLACH REV. TRUST	TLE	7,049
2	KT REAL ESTATE HOLDINGS LLC	TLE	48

LEGEND

⊙	FOUND 1.25 O.D. IRON PIPE
—— ——	EXISTING R/W LINE
— — —	TLE LINES
- - - - -	CSM LOT LINE
P.L.	PROPERTY LINE
Z	PROPERTY CONNECTOR

THIS MAP PREPARED BY QUEST CIVIL ENGINEERS, LLC, FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

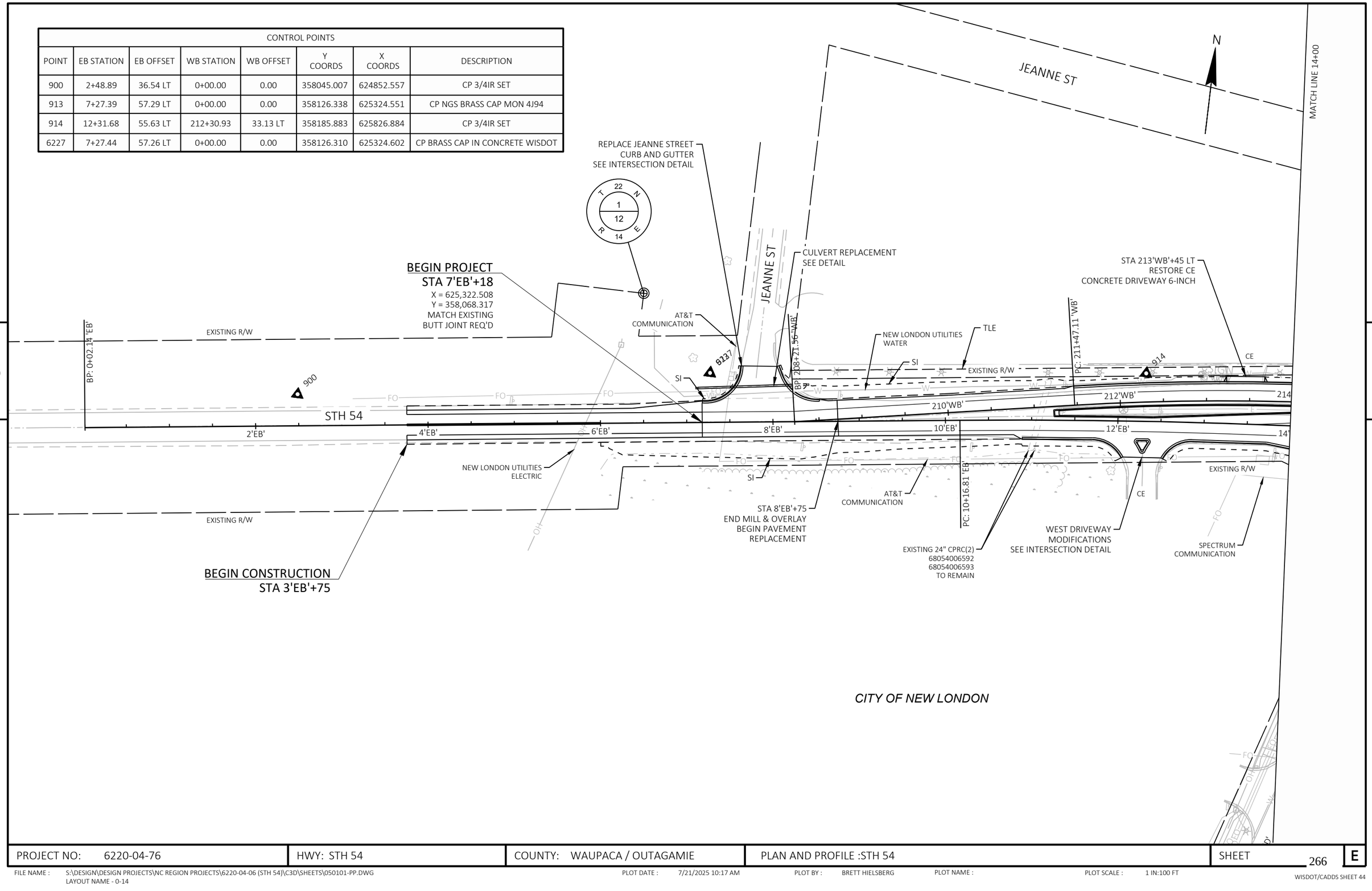
THIS MAP APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE: _____ DATE: _____

PRINT NAME: Craig D. Smits

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\04 - TLE EXHIBIT.DWG PLOT DATE : 8/1/2025 11:04 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE :
APPRAISAL PLAT DATE : _____ XXXX-XX-XX XXXX-XX-XX - 4.XX

CONTROL POINTS							
POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	DESCRIPTION
900	2+48.89	36.54 LT	0+00.00	0.00	358045.007	624852.557	CP 3/4IR SET
913	7+27.39	57.29 LT	0+00.00	0.00	358126.338	625324.551	CP NGS BRASS CAP MON 4J94
914	12+31.68	55.63 LT	212+30.93	33.13 LT	358185.883	625826.884	CP 3/4IR SET
6227	7+27.44	57.26 LT	0+00.00	0.00	358126.310	625324.602	CP BRASS CAP IN CONCRETE WISDOT



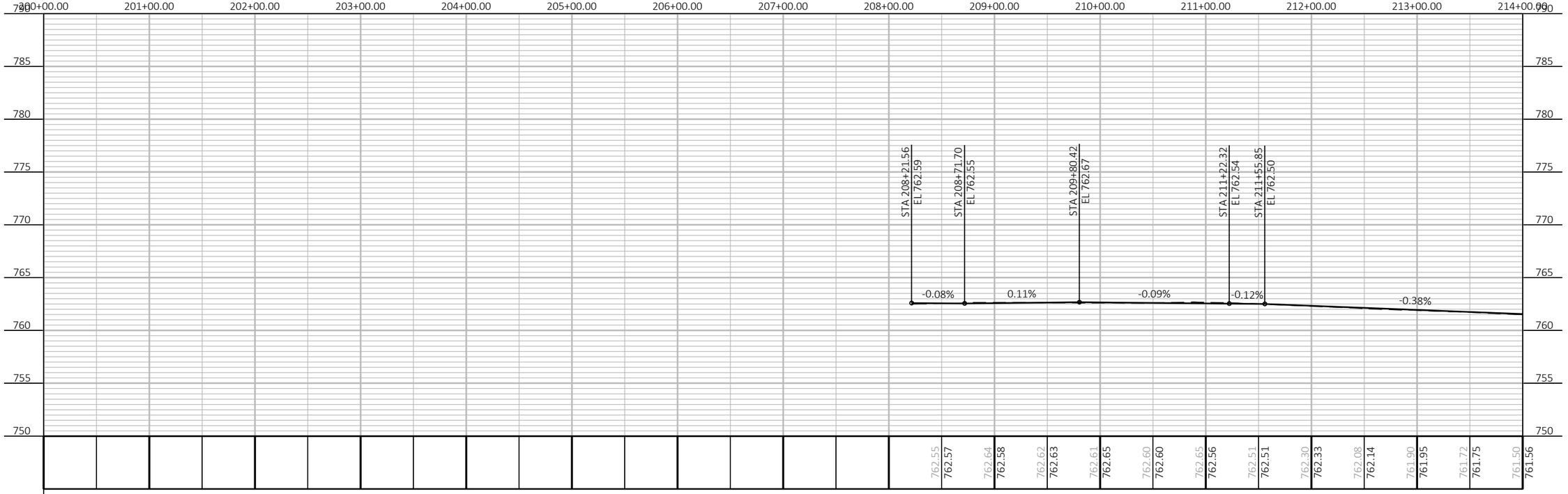
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 266	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - 0-14

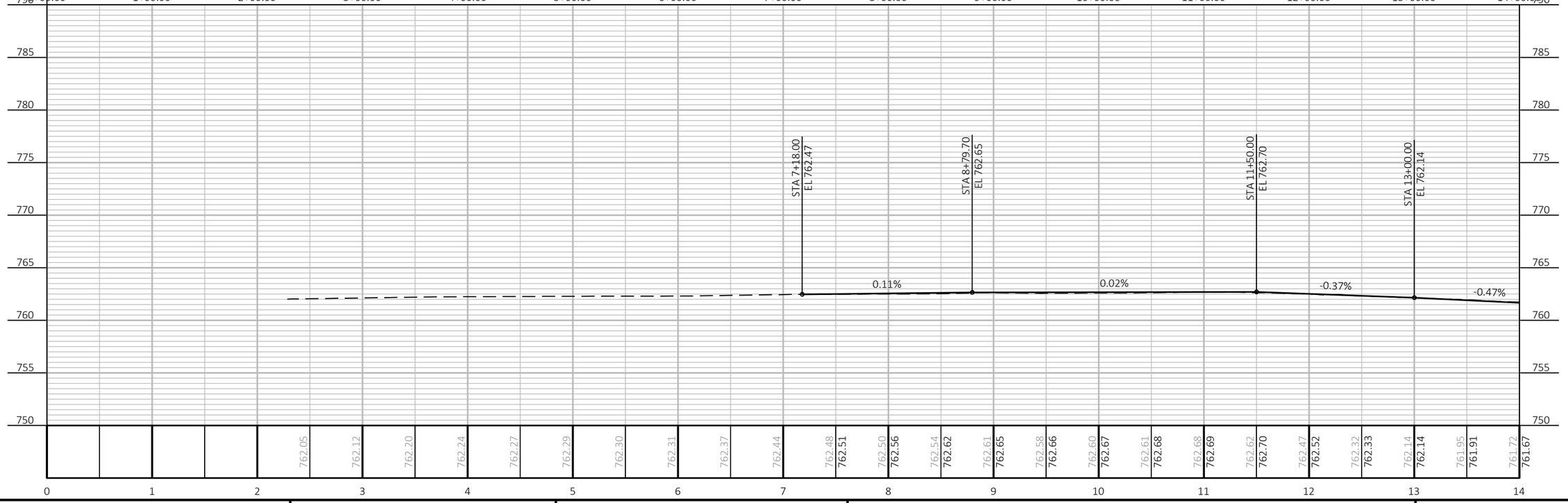
PLOT DATE : 7/21/2025 10:17 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

WESTBOUND STH 54 PROFILE



EASTBOUND STH 54 PROFILE



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 267	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - P0-14

PLOT DATE : 7/21/2025 10:21 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 44

CONTROL POINTS							
POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	DESCRIPTION
901	17+43.03	47.86 RT	217+41.31	75.86 RT	358123.936	626345.739	CP 3/4IR SET
912	23+45.66	79.05 LT	223+44.85	51.05 LT	358287.935	626939.999	CP 3/4IR SET

N

MATCH LINE 28+00

TRAFFIC SIGNAL LOOP PATCH

CTH D/N SHAWANO ST

JEANNE ST

EXISTING R/W

STA 214'WB'+40 - STA 218'EB'+43
PROFILE/CROWN ADJUSTMENT

NEW LONDON UTILITIES
ELECTRIC
SPECTRUM
COMMUNICATION

TLE

NEW
LONDON
UTILITIES
WATER

PT: 214+35.97 'WB'

SI

WE ENERGIES
PETROLEUM

CAUTION

AT&T
COMMUNICATION

CITY OF NEW
LONDON
SANITARY

PC: 217+90.21 'WB'

CLEARING & GRUBBING

DITCH RESTORATION 'L'
SEE DETAIL

EXISTING R/W

STH 54

216'WB'

218'WB'

220'WB'

222'WB'

224'WB'

226'WB'

16'EB'

18'EB'

20'EB'

22'EB'

24'EB'

26'EB'

CE

PE

SPECTRUM
COMMUNICATION

NEW
LONDON
UTILITIES
ELECTRIC

PC: 17+91.14 'EB'

AT&T
COMMUNICATION

WE ENERGIES
PETROLEUM

EXISTING R/W

NEW LONDON UTILITIES
WATER

AT&T
COMMUNICATION

SPECTRUM
COMMUNICATION

PT: 14+03.30 'EB'

NEW LONDON UTILITIES
ELECTRIC
SPECTRUM
COMMUNICATION

AT&T
COMMUNICATION

CTH D MODIFICATIONS
SEE DETAILS

NEW
LONDON
UTILITIES
WATER

STA 14'EB'+40 - STA 18'EB'+04
PROFILE/CROWN ADJUSTMENT

EXISTING 48" CPRC
68054006594
TO REMAIN

STA 24'EB'+63 RT
RESTORE PE
ASPHALTIC SURFACE DRIVEWAYS
& FIELD ENTRANCES

EXISTING R/W

CITY OF NEW LONDON
SANITARY

AT&T
COMMUNICATION

TRAFFIC SIGNAL LOOP PATCH

MATCH LINE 14+00

CTH D/N SHAWANO ST

AUSTIN CT

CITY OF NEW LONDON

112'D'

110'D'

108'D'

106'D'

105

104'D'

90

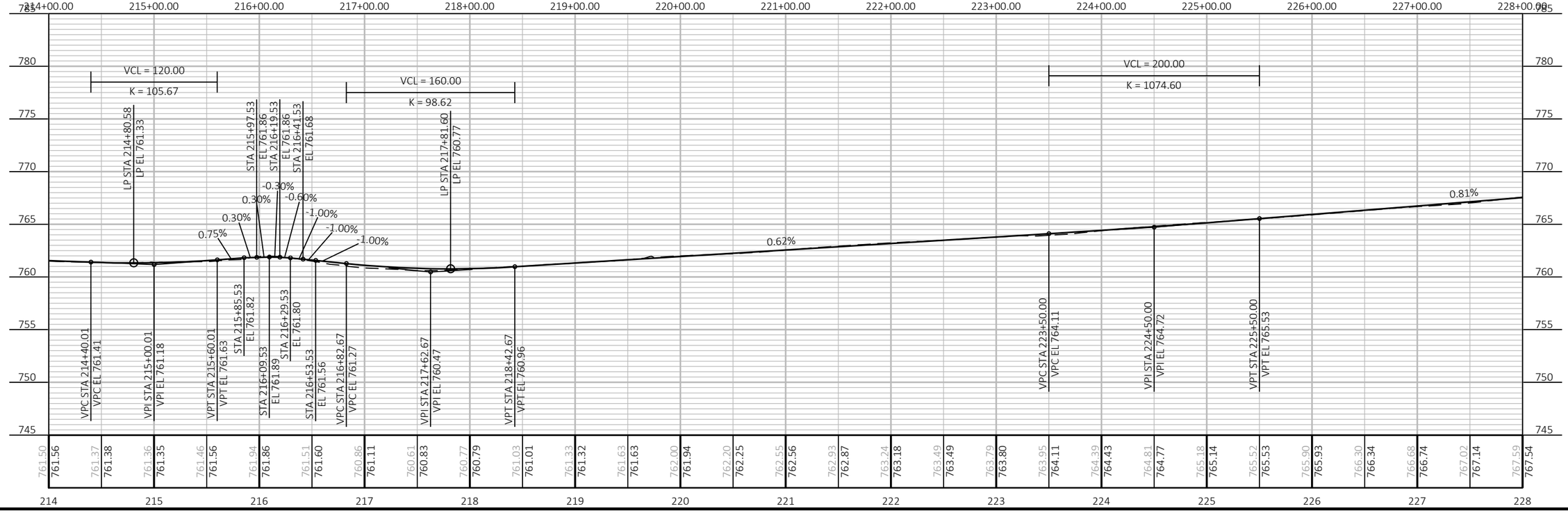
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 268 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - 14-28

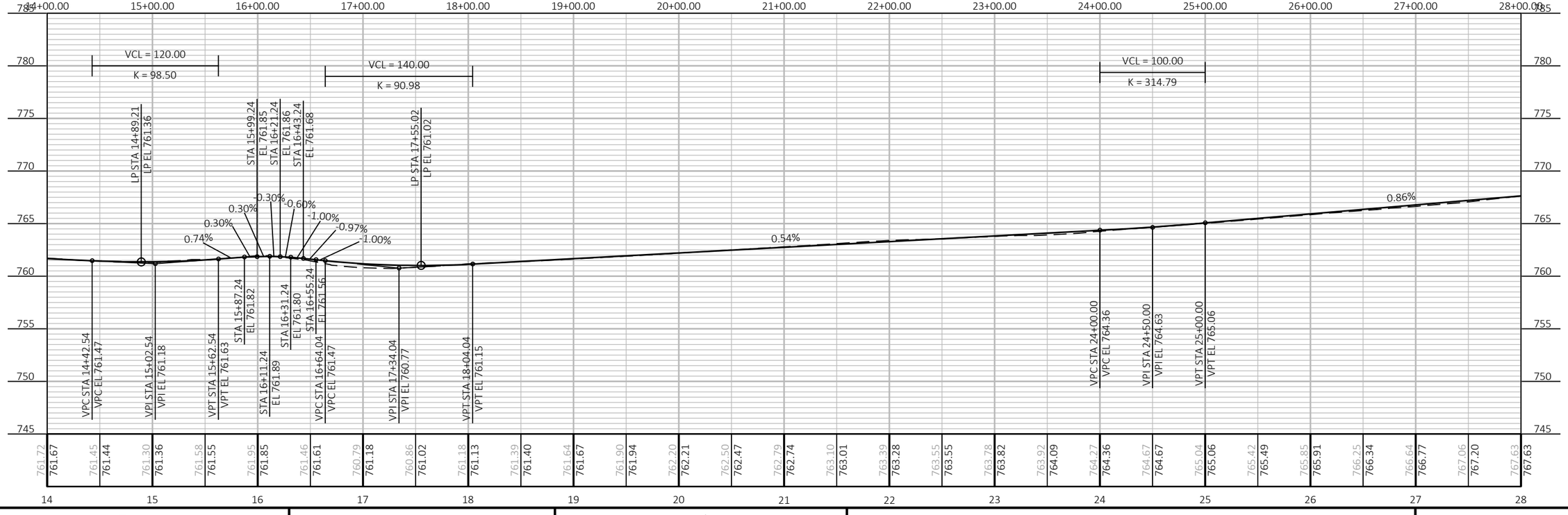
PLOT DATE : 7/21/2025 10:23 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

WESTBOUND STH 54 PROFILE



EASTBOUND STH 54 PROFILE



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 269	E

CONTROL POINTS							
POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	DESCRIPTION
902	33+03.62	88.39 LT	233+03.62	60.41 LT	358319.465	627899.816	CP 3/4IR SET
911	41+43.43	45.44 RT	241+43.43	73.43 RT	358198.636	628741.590	CP 3/4IR SET
915	28+34.92	55.78 RT	228+34.91	83.76 RT	358168.060	627433.440	CP 3/4IR SET
920	40+38.84	55.77 LT	240+38.84	27.79 LT	358298.219	628635.445	CP PK

N

MATCH LINE 42+25

EXIT RAMP FROM SB USH 45

ENTRANCE RAMP TO SB USH 45

POST

CLEARING & GRUBBING

DITCH RESTORATION 'M' SEE DETAIL

USH 45 RAMP CONSTRUCTION SEE PROJECT 1140-00-77

STA 232'WB'+50 - STA 234'WB'+56 PROFILE ADJUSTMENT/ SETTLEMENT CORRECTION

REPLACE GUARDRAIL SEE DETAIL

SI

2'M'

902

B-44-146

EMBARRASS RIVER

CLEARING & GRUBBING

REPLACE GUARDRAIL SEE DETAIL

SLOPE PAVING CRUSHED AGGREGATE

SIGN

920

PT: 228+46.19 'WB'

WB' 230'WB' 232'WB' 234'WB' 236'WB' 238'WB' 240'WB' 242'WB'

STH 54

EB' 30'EB' 32'EB' 34'EB' 36'EB' 38'EB' 40'EB' 42'EB'

915

PT: 28+47.72 'EB'

WV

MH

NEW LONDON UTILITIES WATER

EXISTING R/W

T22N R14E | T22N R15E | T21N R14E | T21N R15E

1 6 12 7

REPLACE GUARDRAIL SEE DETAIL

CLEARING & GRUBBING

STA 32'EB'+00 - STA 34'EB'+56 PROFILE ADJUSTMENT/ SETTLEMENT CORRECTION

B-44-147

EXCEPTION TO PROJECT LIMITS
STRUCTURE B-44-147 STA 34'EB'+56 - STA 37'EB'+19
STRUCTURE B-44-146 STA 34'WB'+75 - STA 37'WB+38

RIVER RD

NEW LONDON UTILITIES WATER

RIVER ROAD INTERSECTION MODIFICATIONS SEE INTERSECTION DETAIL

NEW LONDON UTILITIES ELECTRIC

B-44-144 (USH 45 OVER STH 54)

CONSTRUCT STEEL THRIE BEAM BULLNOSE SEE DETAIL

SI

911

VENT

USH 45

CITY OF NEW LONDON
WAUPACA COUNTY

CITY OF NEW LONDON
OUTAGAMIE COUNTY

MATCH LINE 28+00

5

5

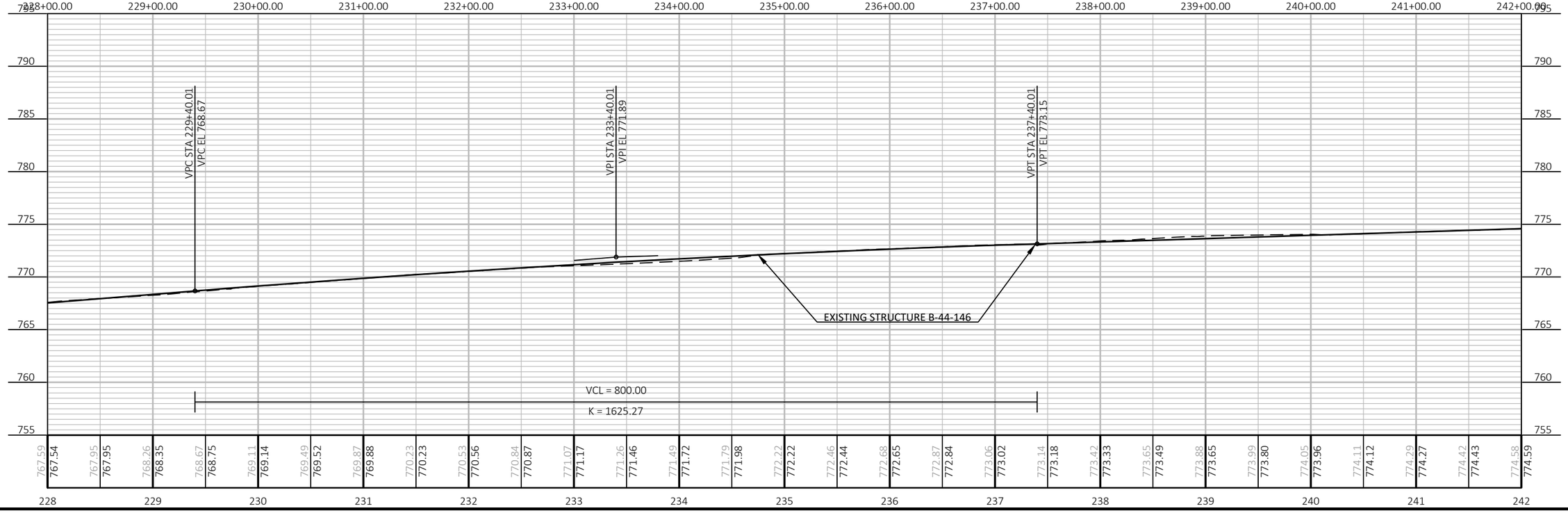
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 270	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - 28-42

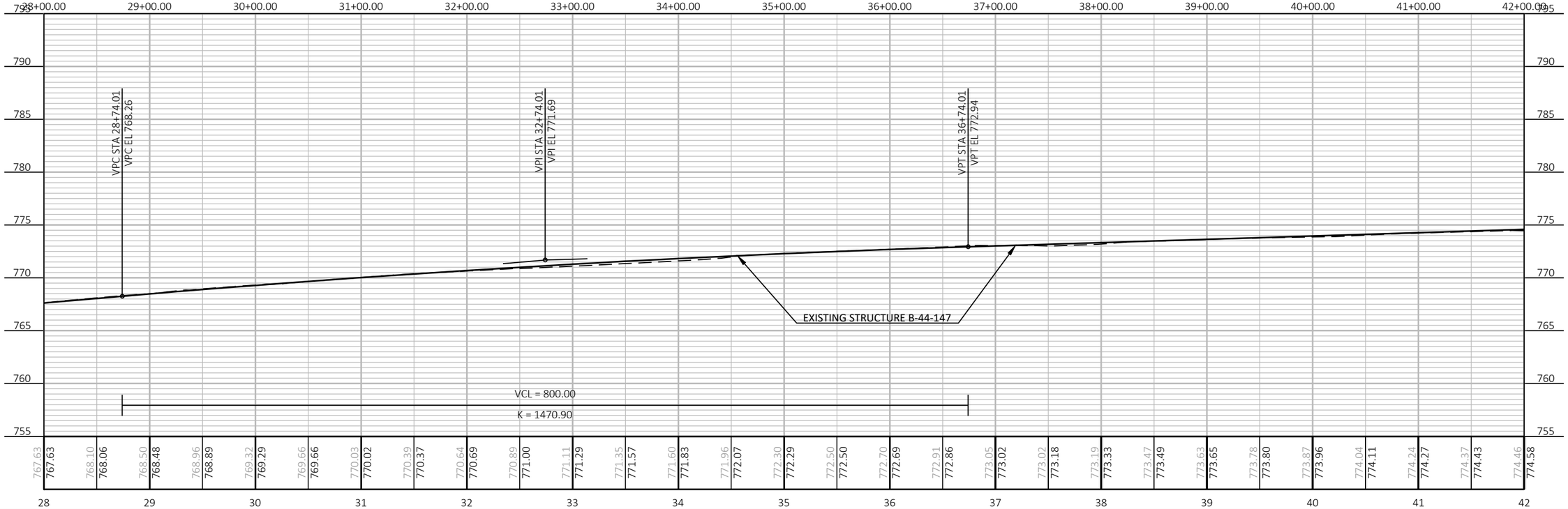
PLOT DATE : 7/21/2025 10:26 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

WESTBOUND STH 54 PROFILE



EASTBOUND STH 54 PROFILE



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 271	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - P28-42

PLOT DATE : 7/21/2025 10:28 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 44

CONTROL POINTS							
POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	DESCRIPTION
903	48+34.36	82.45 LT	248+34.36	54.46 LT	358337.197	629430.463	CP 3/4IR SET
910	55+51.66	107.52 LT	255+51.66	79.52 LT	358373.352	630147.290	CP 3/4IR SET

N

MATCH LINE 56+00

CITY OF NEW LONDON

TOWN OF LIBERTY

STA 255'WB'+14 LT
RESTORE CE
ASPHALTIC SURFACE DRIVEWAYS &
FIELD ENTRANCES

NEW LONDON UTILITIES
ELECTRIC

NEW LONDON UTILITIES
ELECTRIC

EXISTING R/W

BAD
PE

903

910

CE

244'WB' 246'WB' 248'WB' 250'WB' 252'WB' 254'WB' 256

STH 54

44'EB' 46'EB' 48'EB' 50'EB' 52'EB' 54'EB' 56

NEW LONDON UTILITIES
ELECTRIC

NEW LONDON UTILITIES
WATER

EXISTING R/W

NEW
LONDON
UTILITIES
WATER

SPECTRUM
COMMUNICATION

NEW
LONDON
UTILITIES
ELECTRIC

SI

SI

USH 45 RAMP CONSTRUCTION
SEE PROJECT 1140-00-77

ENTRANCE RAMP
TO NB USH 45

EXIT RAMP
FROM NB USH 45

CTH S

CTH S INTERSECTION AND
TURN LANE MODIFICATIONS
SEE DETAIL

T 22 N
6
7
R 15 E

MATCH LINE 42+25

5

5

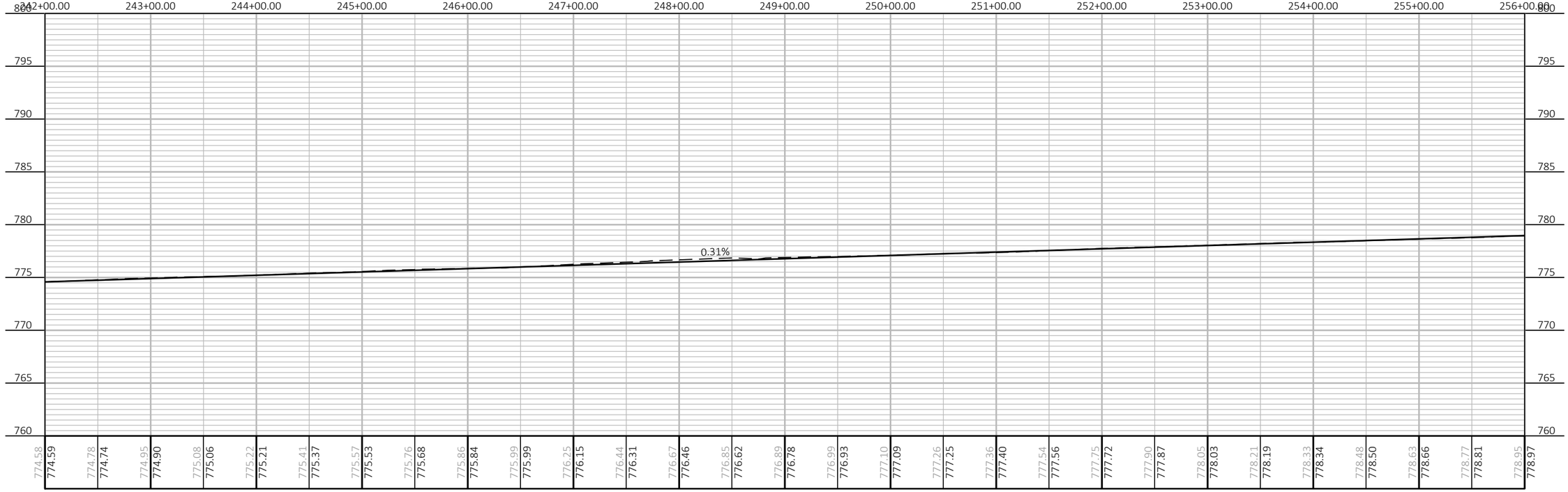
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 272	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - 42-56

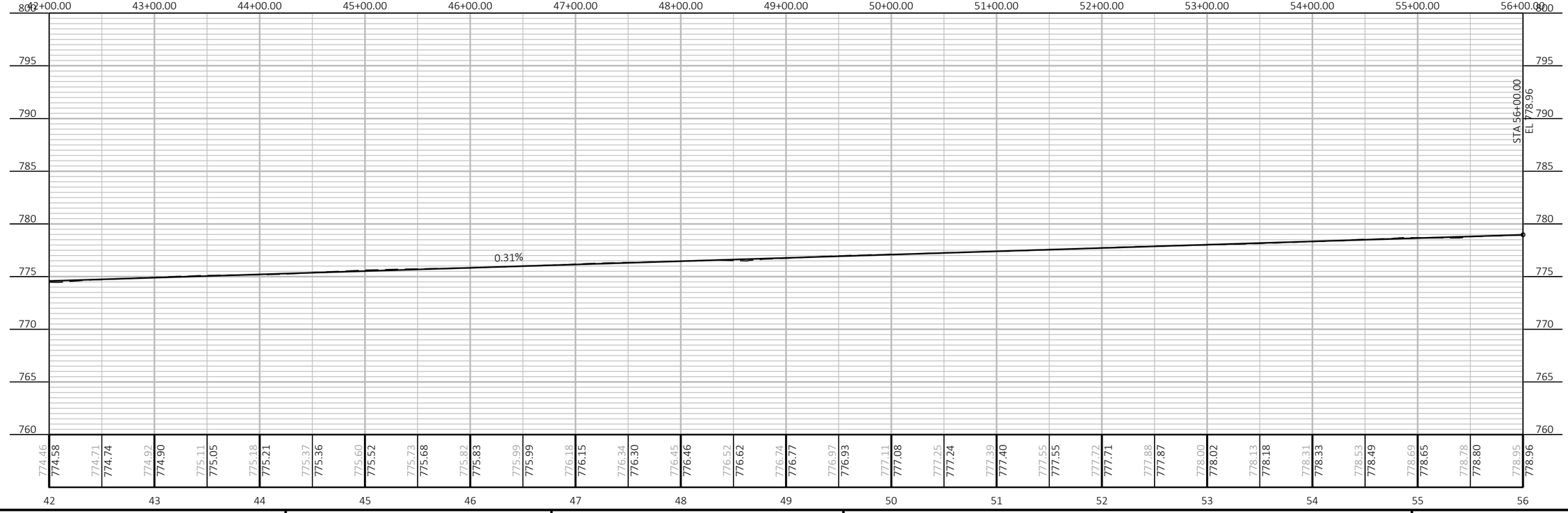
PLOT DATE : 7/21/2025 10:28 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

WESTBOUND STH 54 PROFILE



EASTBOUND STH 54 PROFILE



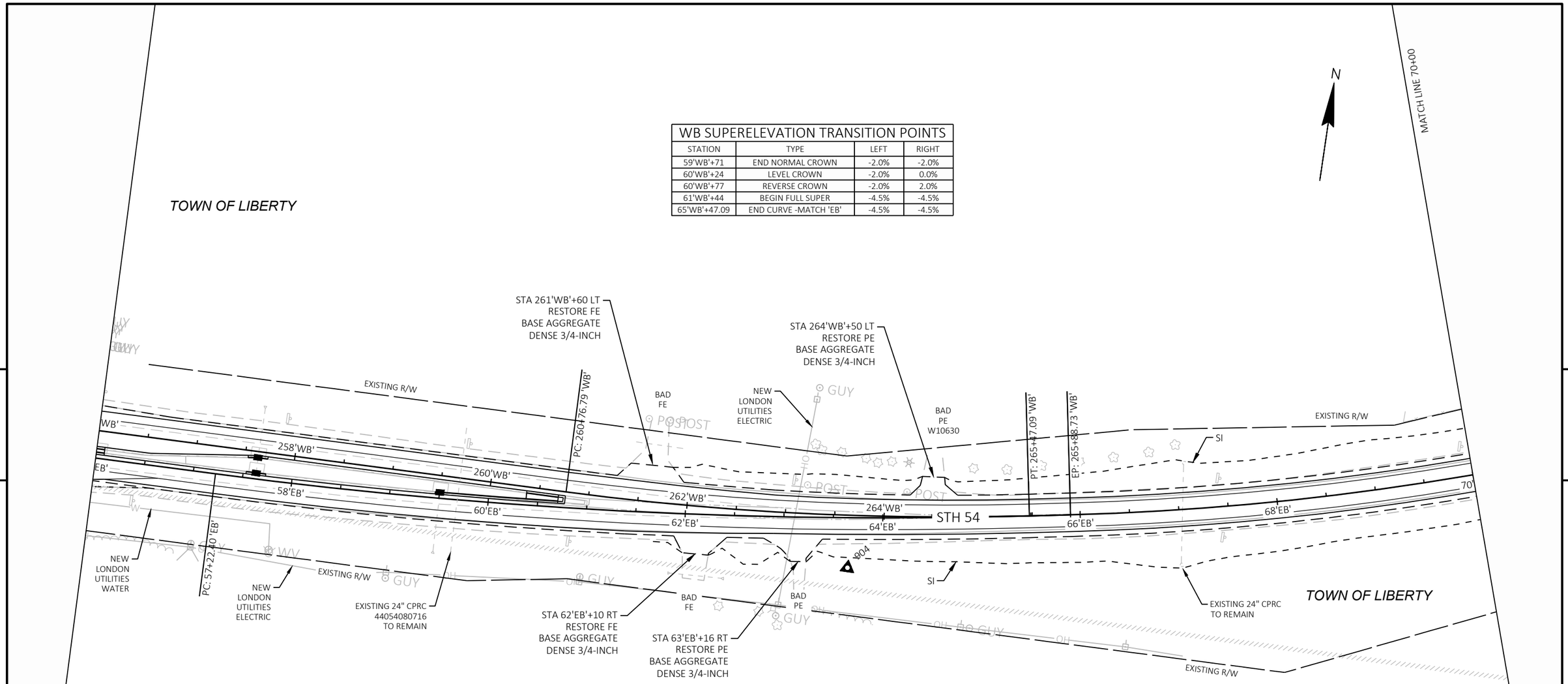
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 273	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - P42-56

PLOT DATE : 7/21/2025 10:29 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 44

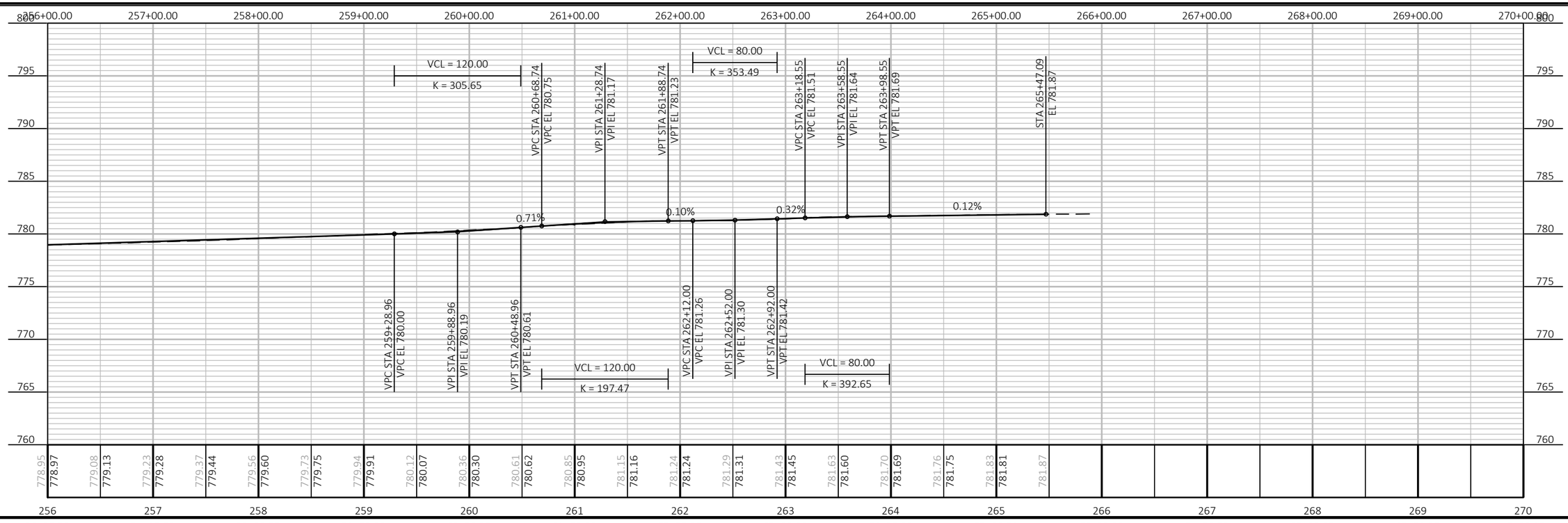
WB SUPERELEVATION TRANSITION POINTS			
STATION	TYPE	LEFT	RIGHT
59'WB'+71	END NORMAL CROWN	-2.0%	-2.0%
60'WB'+24	LEVEL CROWN	-2.0%	0.0%
60'WB'+77	REVERSE CROWN	-2.0%	2.0%
61'WB'+44	BEGIN FULL SUPER	-4.5%	-4.5%
65'WB'+47.09	END CURVE -MATCH 'EB'	-4.5%	-4.5%



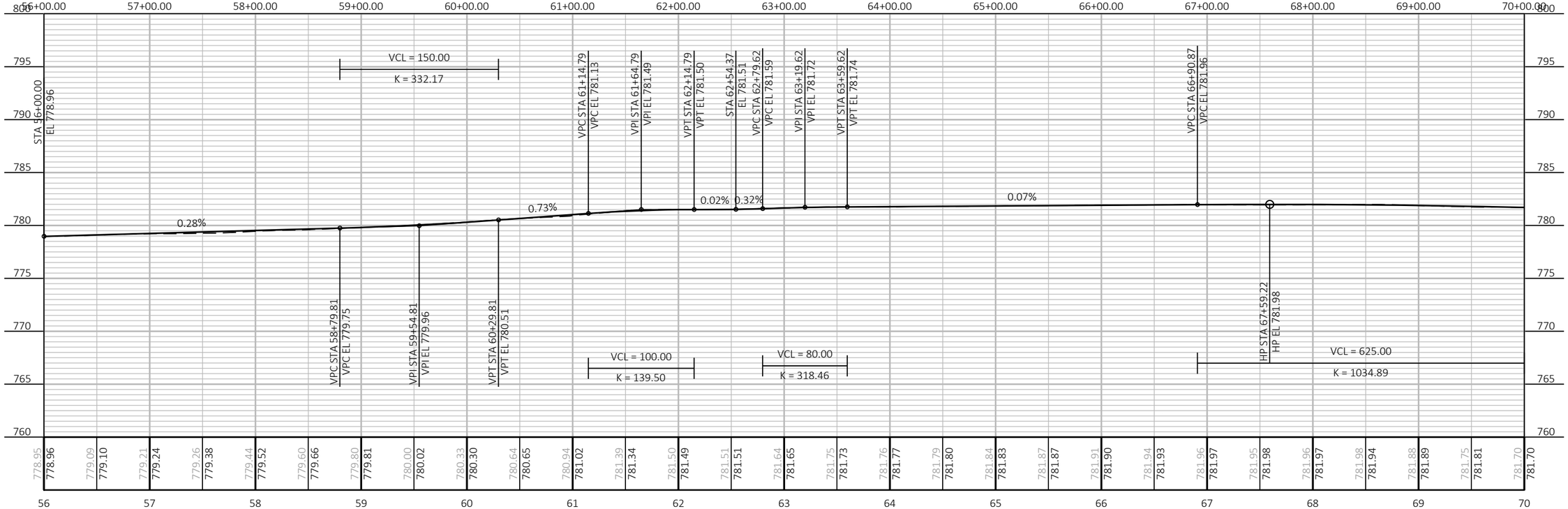
CONTROL POINTS							
POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	DESCRIPTION
904	63+64.62	50.78 RT	263+64.54	53.21 RT	358267.401	630966.582	CP 3/4IR SET

EB SUPERELEVATION TRANSITION POINTS			
STATION	TYPE	LEFT	RIGHT
55'EB'+75	END NORMAL CROWN	-2.0%	-2.0%
56'EB'+23	LEVEL CROWN	-2.0%	0.0%
56'EB'+71	REVERSE CROWN	-2.0%	2.0%
56'EB'+76	BEGIN FULL SUPER	-2.2%	-2.2%
61'EB'+00	BEGIN SUPER TRANSITION BETWEEN CURVES	-2.2%	-2.2%
63'EB'+10	END SUPER TRANSITION BETWEEN CURVES	-4.5%	-4.5%
72'EB'+68	END FULL SUPER	-4.5%	-4.5%
73'EB'+35.5	REVERSE CROWN	-2.0%	-2.0%
73'EB'+88.8	LEVEL CROWN	0.0%	-2.0%
74'EB'+42.17	BEGIN NORMAL CROWN	-2.0%	-2.0%

WESTBOUND STH 54 PROFILE



EASTBOUND STH 54 PROFILE



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 275	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - PS6-70

PLOT DATE : 7/21/2025 10:39 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 44

CONTROL POINTS							
POINT	EB STATION	EB OFFSET	WB STATION	WB OFFSET	Y COORDS	X COORDS	DESCRIPTION
905	76+81.05	41.10 RT	0+00.00	0.00	358679.899	632223.532	CP 3/4IR SET
908	81+82.56	39.70 LT	0+00.00	0.00	358959.870	632647.385	CP 3/4IR SET
909	72+56.51	67.35 LT	0+00.00	0.00	358605.018	631792.893	CP NGS BRASS CAP 4J95

N

TOWN OF LIBERTY

STA 76'EB'+47 LT
RESTORE PE
ASPHALTIC SURFACE
(CONSTRUCTED CONCURRENTLY
WITH TEMPORARY WIDENING 'Z')

WE ENERGIES
ELECTRIC

BAD
PE
W10546

PT: 73+08.83 'EB'

EXISTING R/W

909

908

902

SI

SI

72'EB'

74'EB'

76'EB'

78'EB'

80'EB'

82'EB'

84'EB'

STH 54

END CONSTRUCTION
STA 78'EB'+63

NEWTON BLACKMOUR TRAIL

HOUSE RD

EXISTING R/W

END PROJECT
STA 75'EB'+20
X=632,059.827
Y=358,651.099
MATCH EXISTING
SAW CUT REQ'D

MATCH LINE 70+00

TOWN OF LIBERTY

5

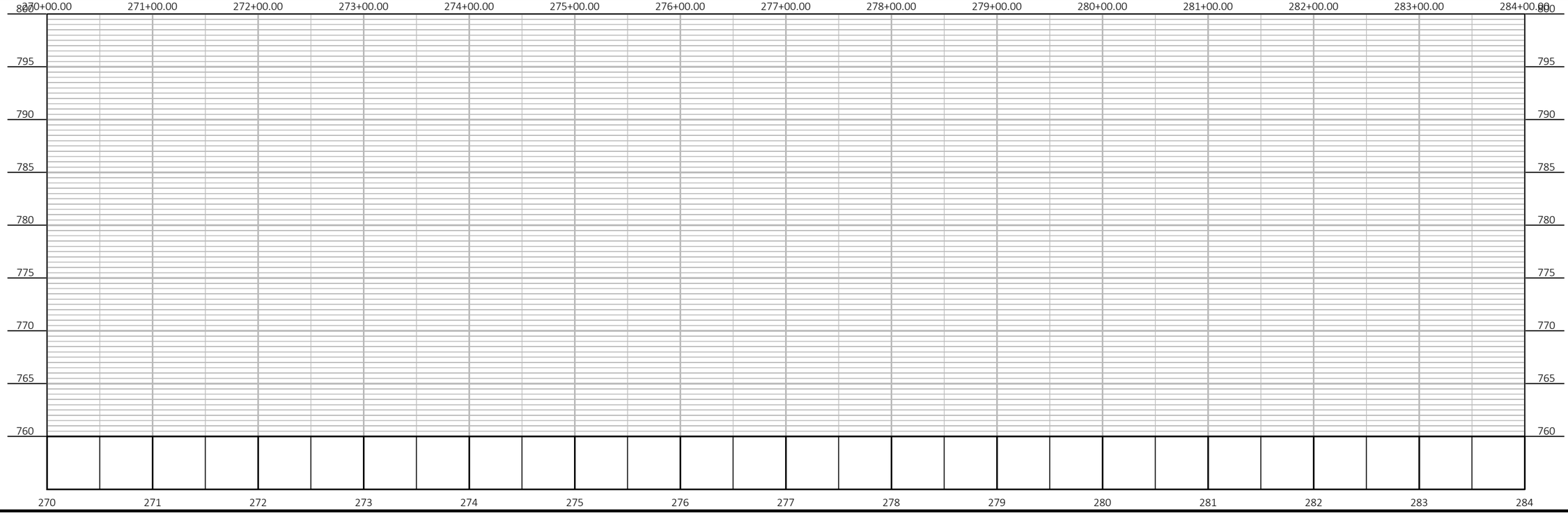
5

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 276	E

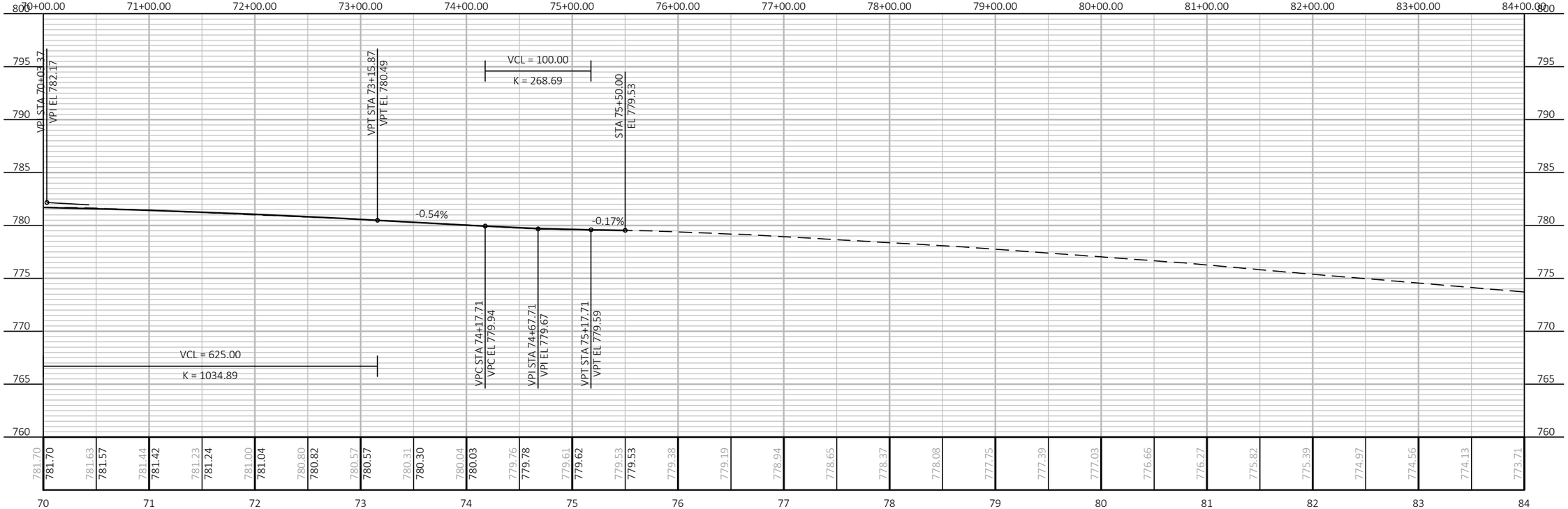
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - 70-84

PLOT DATE : 7/21/2025 10:42 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WESTBOUND STH 54 PROFILE



EASTBOUND STH 54 PROFILE

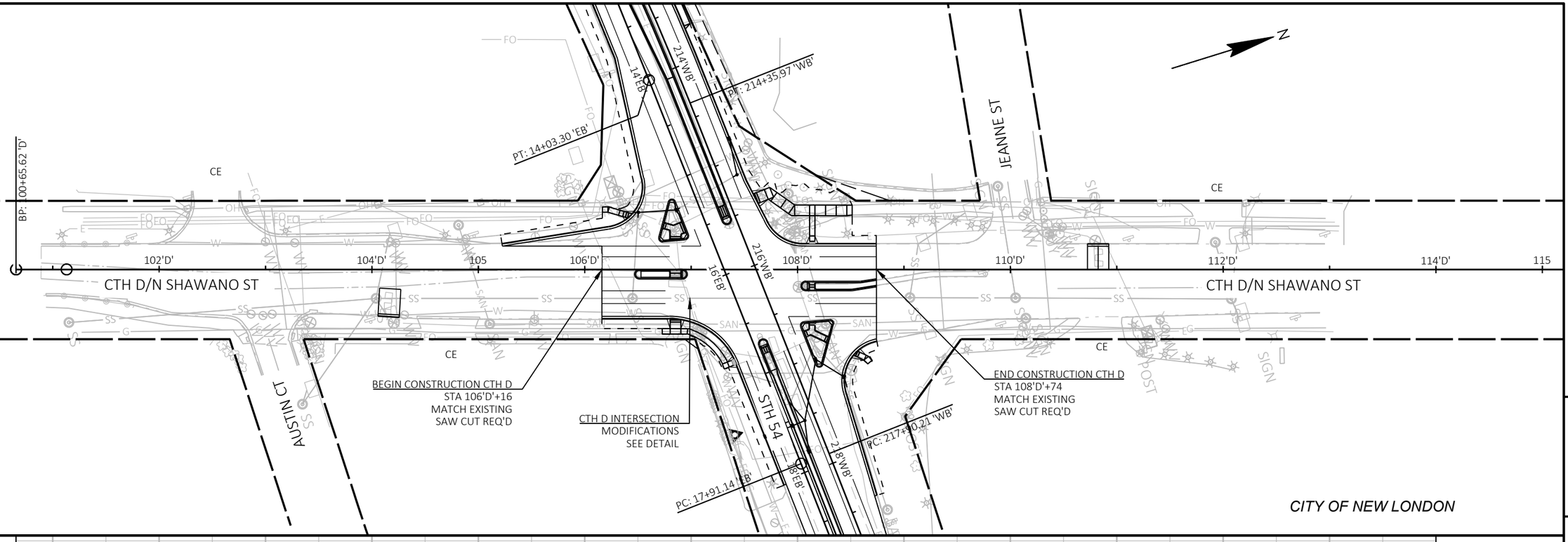


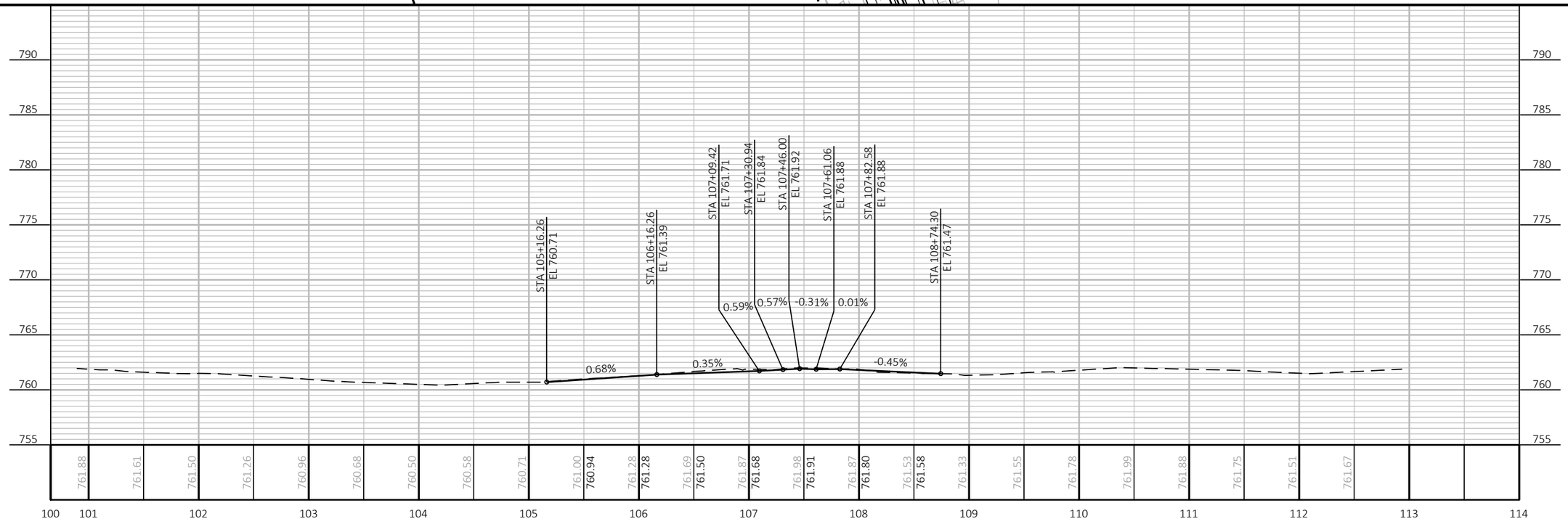
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE :STH 54	SHEET 277	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050101-PP.DWG
LAYOUT NAME - P70-84

PLOT DATE : 7/21/2025 10:48 AM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 6240-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	PLAN AND PROFILE: CTH D	SHEET 278	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\050102-PP-D.DWG
LAYOUT NAME - PP20

PLOT DATE : 6/18/2025 4:59 PM PLOT BY : BRETT HIELSBERG PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

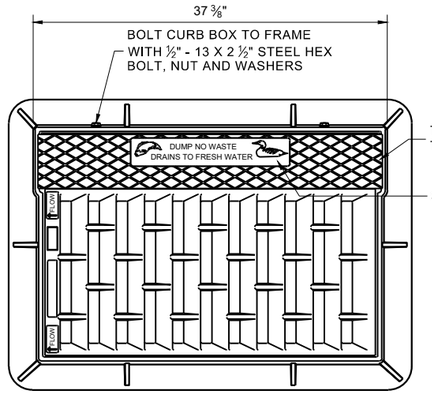
08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21D	INLET COVERS TYPE V, V-B, & VV-B
08A05-21E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
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
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
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
09B02-10	CONDUIT
09B04-13	PULL BOX
09B16-03	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E05-06	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09F01-04	DETAILS FOR THE INSTALLATION OF TEMPORARY TRAFFIC SIGNAL LOOP DETECTOR WIRES IN ANY EXISTING PAVEMENT
09F04-05	LOOP DETECTOR INSTALLED IN NEW CONCRETE PAVEMENT ROUND CSCP PULLBOX
09F10-04	LOOP DETECTOR INSTALLED IN EXISTING OR NEW ASPHALTIC PAVEMENT WITH NEW ASPHALTIC OVERLAY
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09H03-01	2 CIRCUIT METER BREAKER PEDESTAL
09H04-01	2 CIRCUIT ELECTRICAL SERVICE METER BREAKER PEDESTAL AND BREAKER DISCONNECT BOX
11B02-02	CONCRETE MEDIAN NOSE
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
14B26-05A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05H	STEEL THRIE BEAM BULLNOSE TERMINAL
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP

6

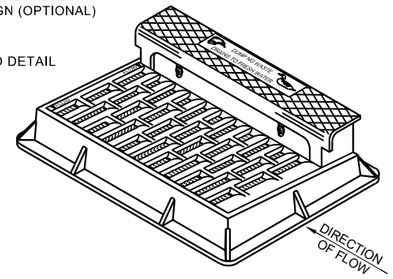
Standard Detail Drawing List

14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10A	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
15C18-09A	MEDIAN ISLAND PAVEMENT MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-09C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
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)
15D05-06	TRAFFIC CONTROL, SINGLE LANE CROSSOVER ENTRANCE WITH BARRIER
15D06-06	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D11-09	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D20-09A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-09B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-09C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-10A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D46-01	TRAFFIC CONTROL, ONE - WAY SIGNING
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

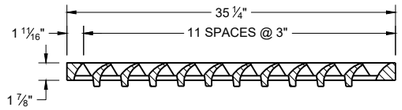
6

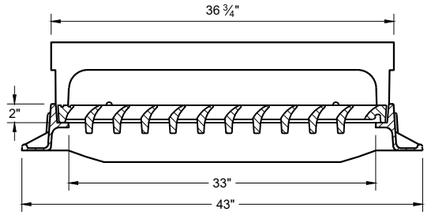


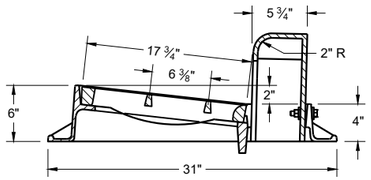
NOTE: EITHER CASTING IS ACCEPTABLE

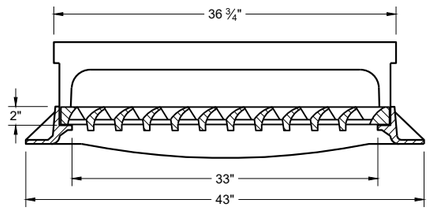


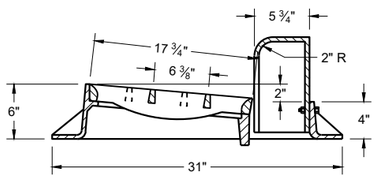
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







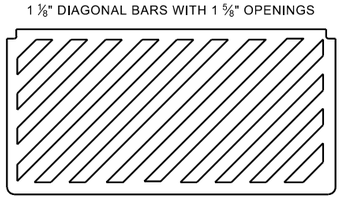




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

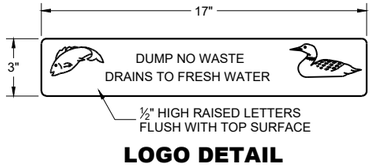
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



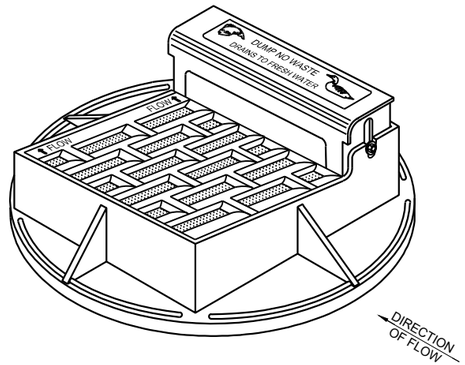
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

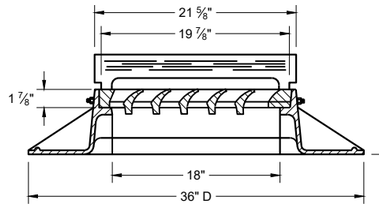


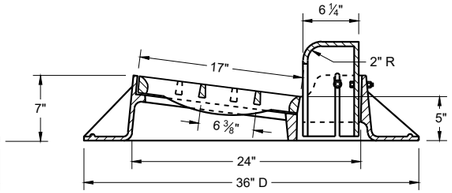
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





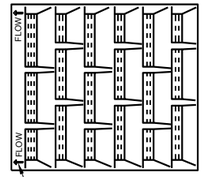
TYPE "A"

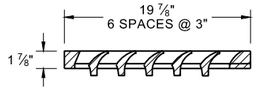
GENERAL NOTES

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.

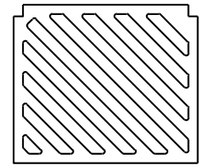
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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





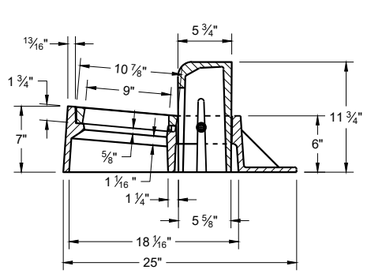
1" DIAGONAL BARS WITH 1 1/2" OPENINGS



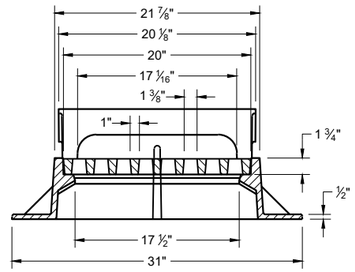
SPECIAL GRATE FOR TYPE "A" COVER

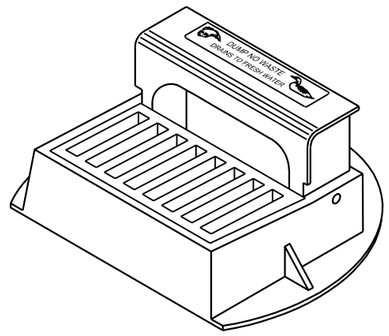
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

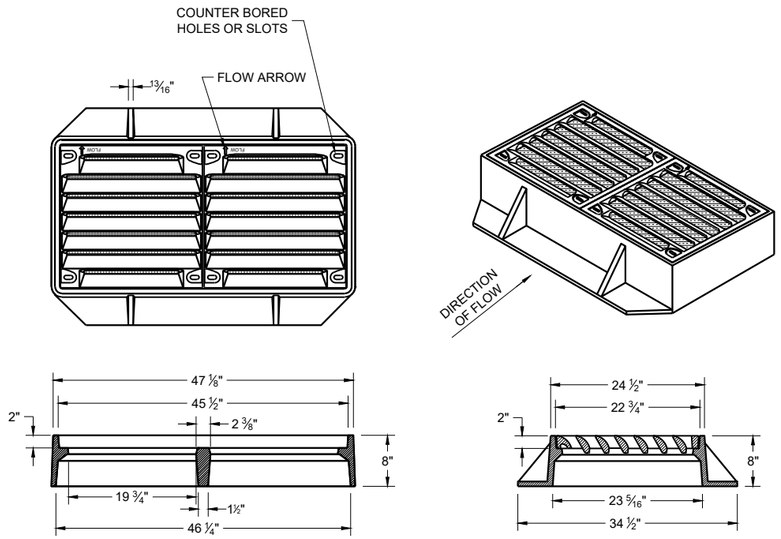
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

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.

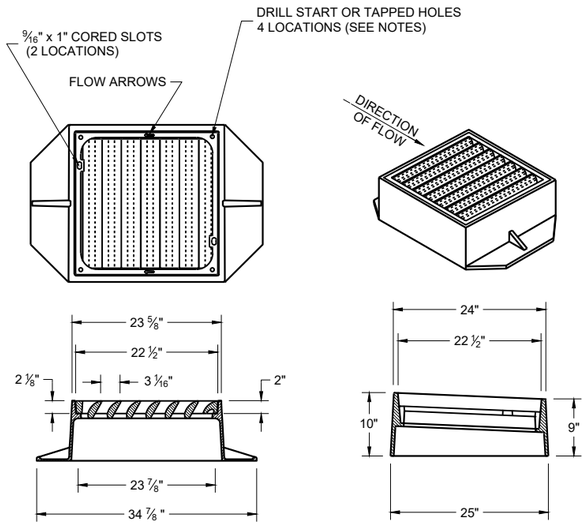
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

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

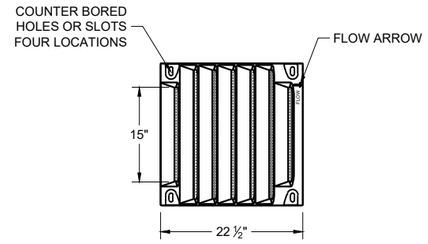
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
3/8" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



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
DEPARTMENT OF TRANSPORTATION

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

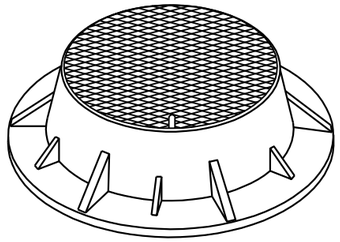
6
SDD 08A05-21d

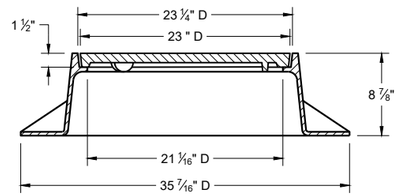
GENERAL NOTES

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

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

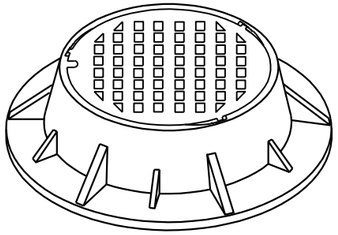
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

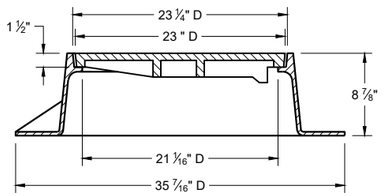




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

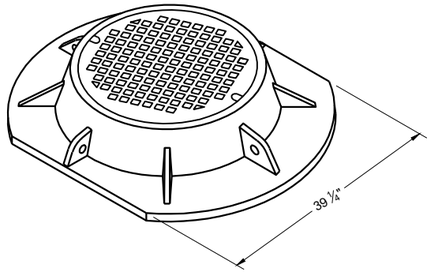


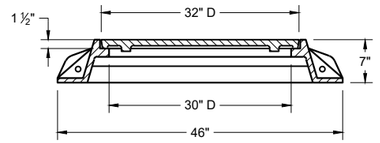


TYPE "J" SPECIAL

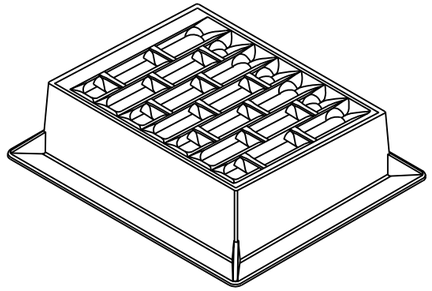
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

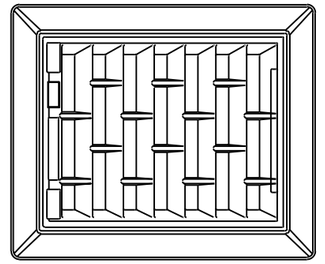
NOTE: EITHER CASTING IS ACCEPTABLE

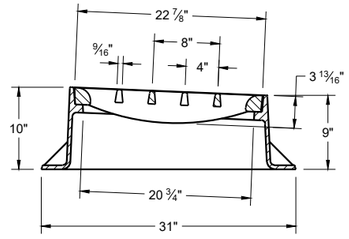


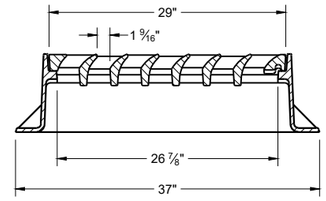


TYPE "K"

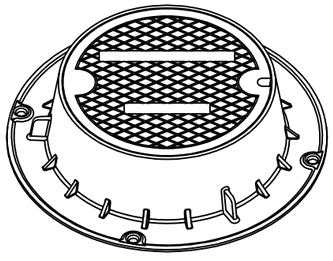


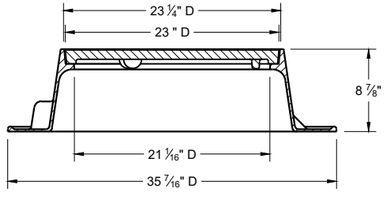






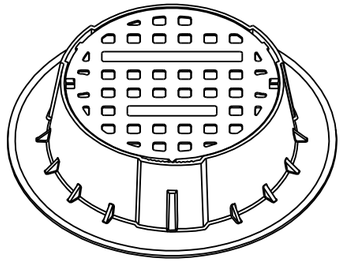
INLET COVER TYPE "BW"

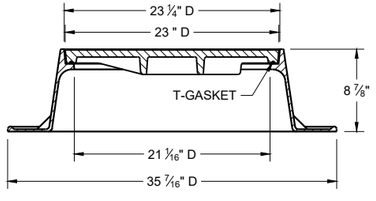




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

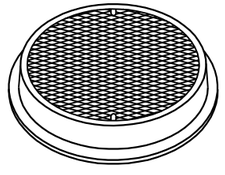


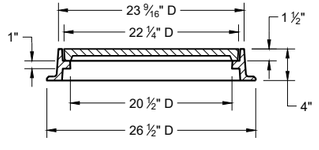


TYPE "J" SPECIAL

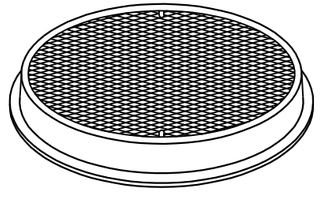
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

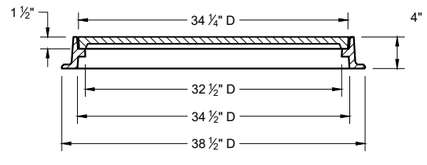
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

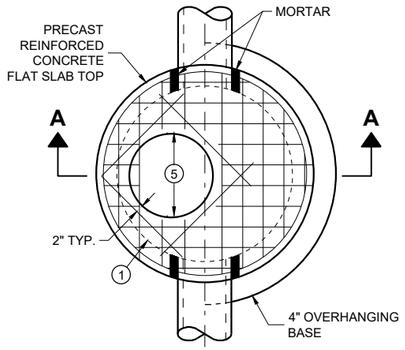
INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

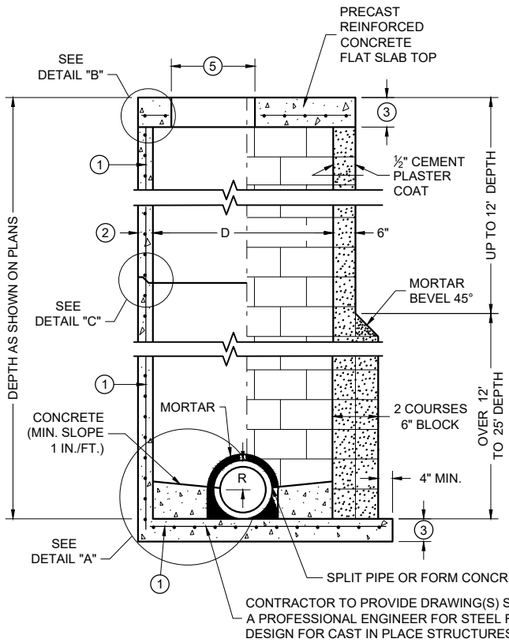
FHWA

6
SDD 08A05-21e



PLAN VIEW

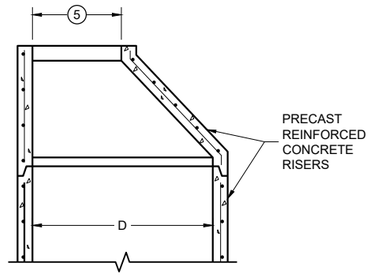
CIRCULAR OPENING



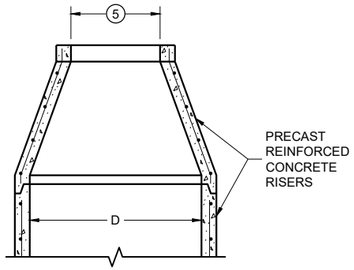
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

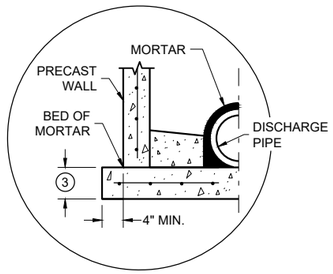
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



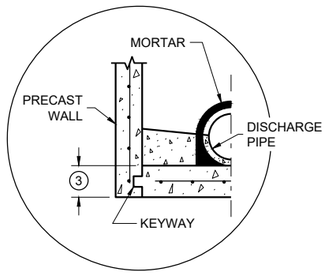
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

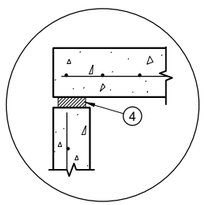


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

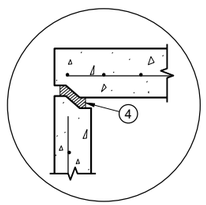


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

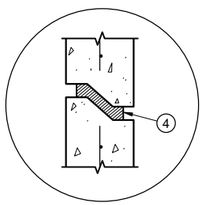
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

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.

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".

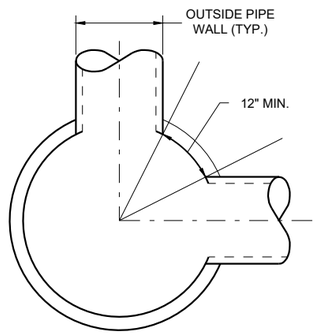
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(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.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

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

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

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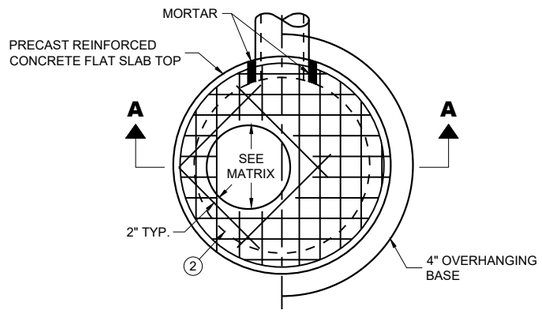
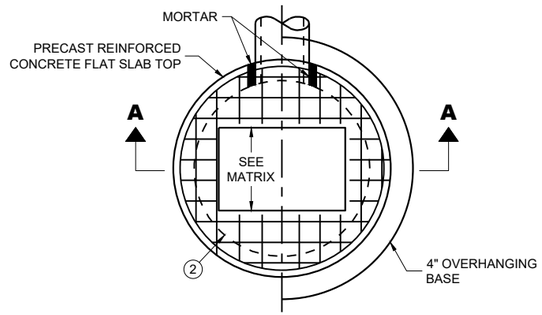
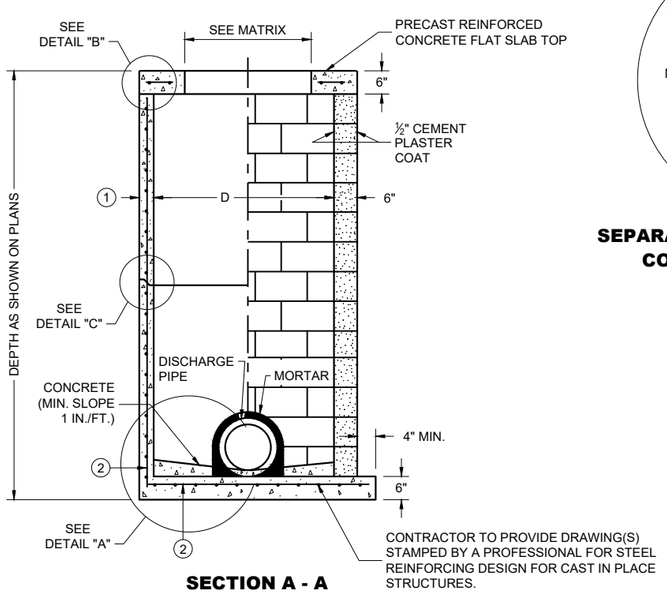


PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

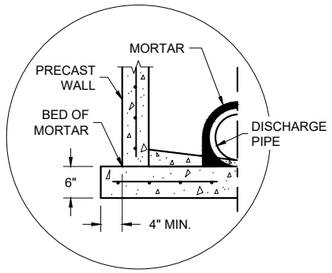
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

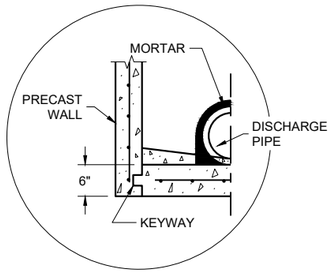
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

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

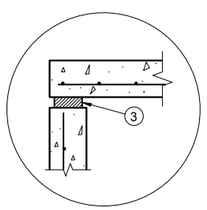


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

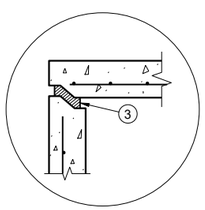


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

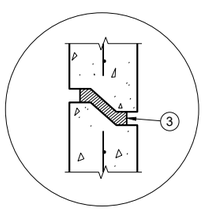
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

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

INLETS 3-FT AND 4-FT DIAMETER

GENERAL NOTES

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

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

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

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

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

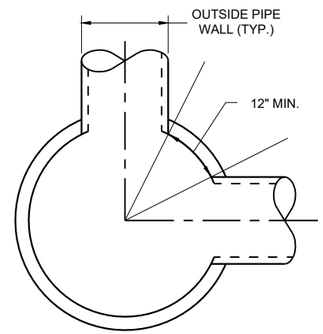
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

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

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

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



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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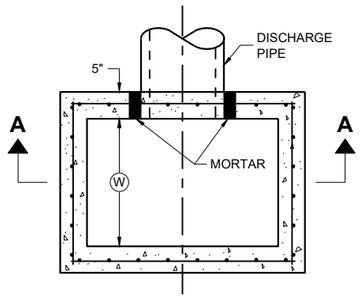
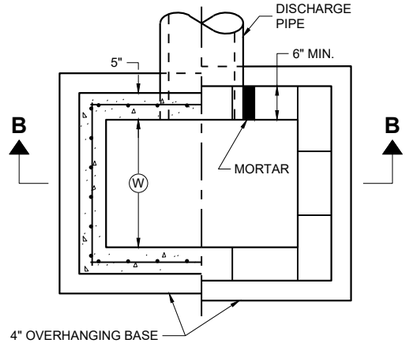
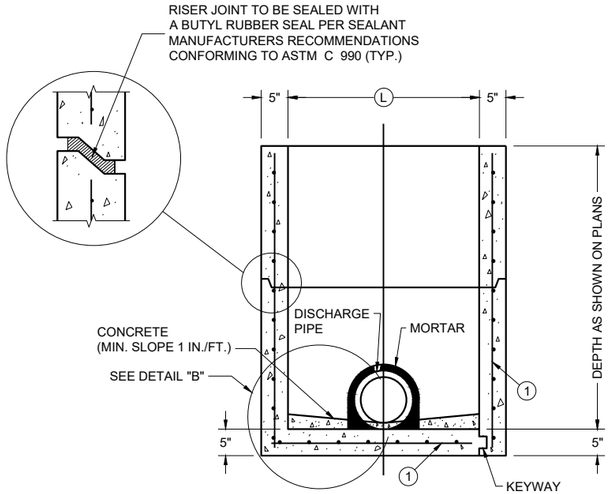


PLAN VIEW



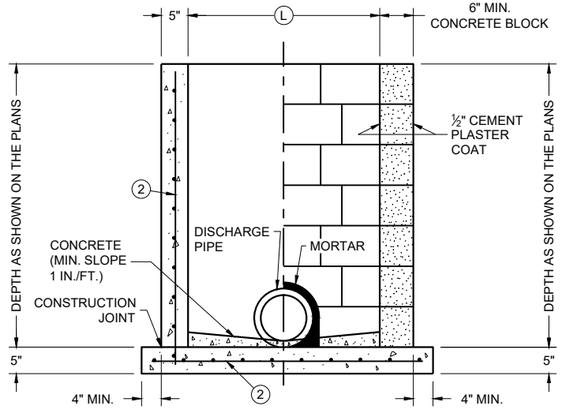
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

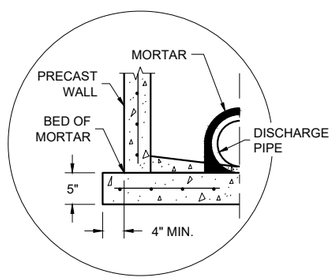
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

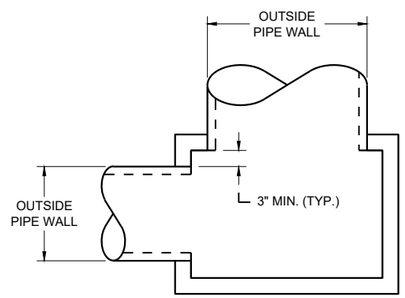
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

CATCH BASIN COVER MATRIX

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

PIPE MATRIX

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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DATE

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ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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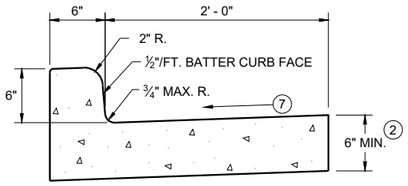
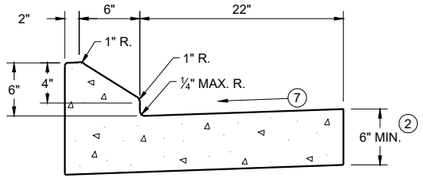
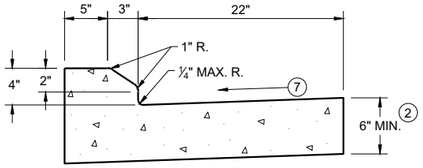


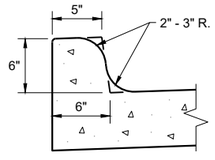
TYPES A (1) & D



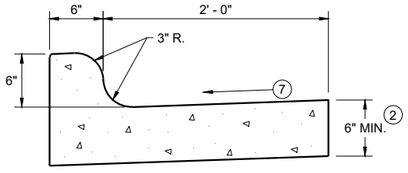
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

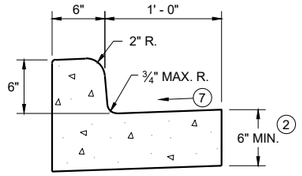


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



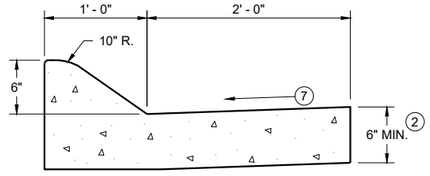
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

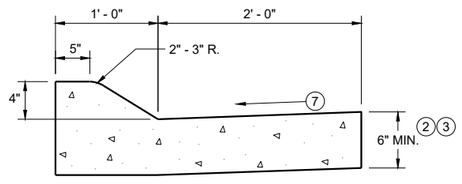


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

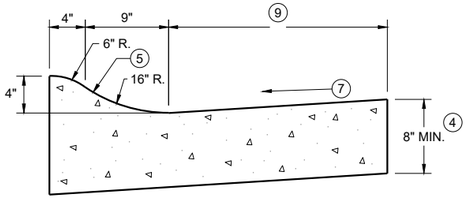


6" SLOPED CURB TYPES A (1) & D



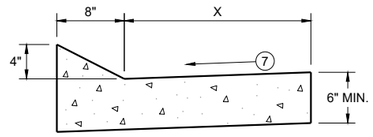
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

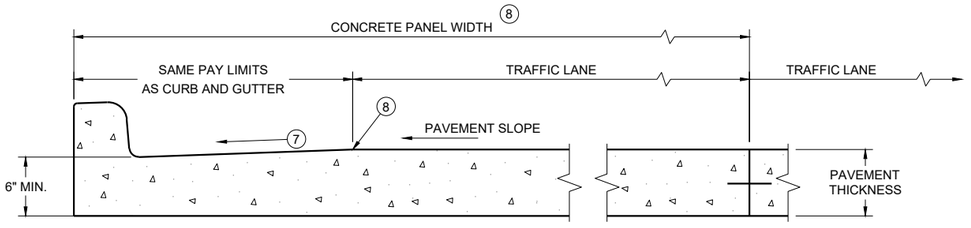


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

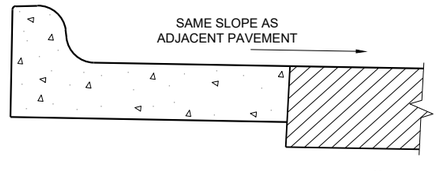
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

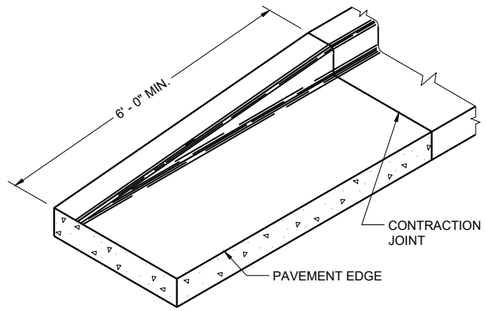
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

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

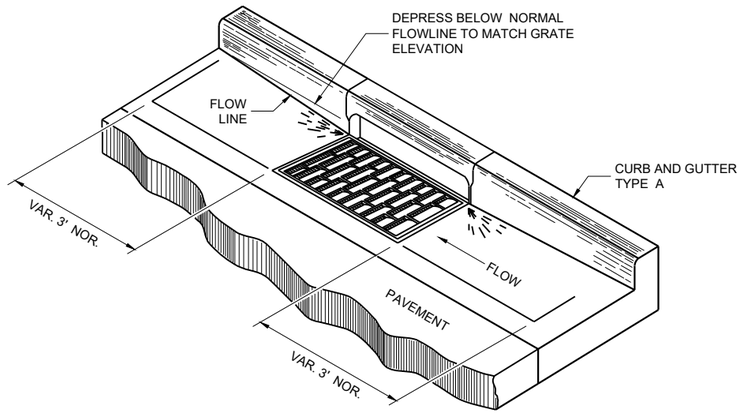
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

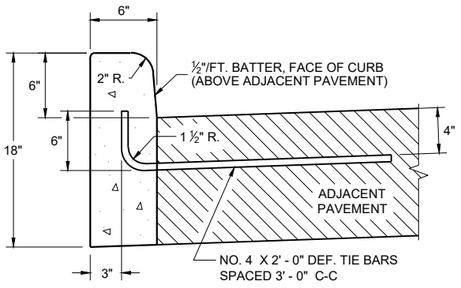
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

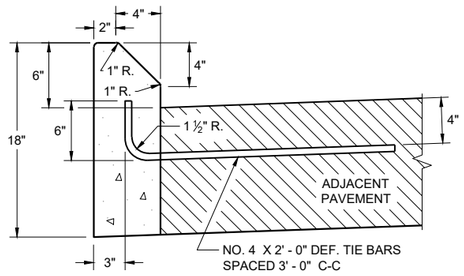
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

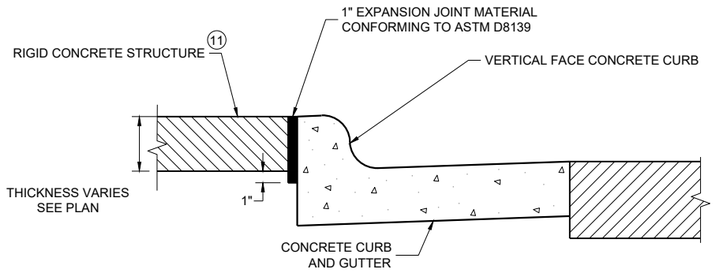


TYPES A (1) & D

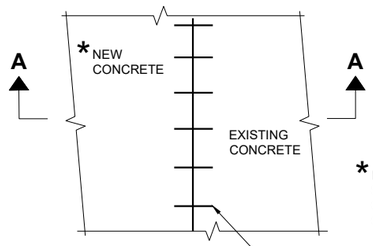


TYPES G (1) & J

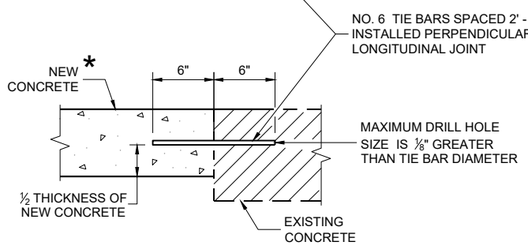
CONCRETE CURB



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

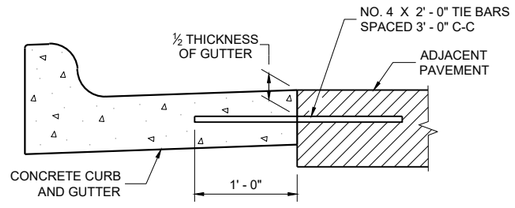


PLAN VIEW

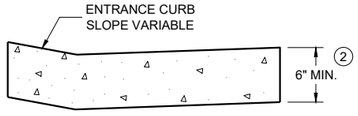


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

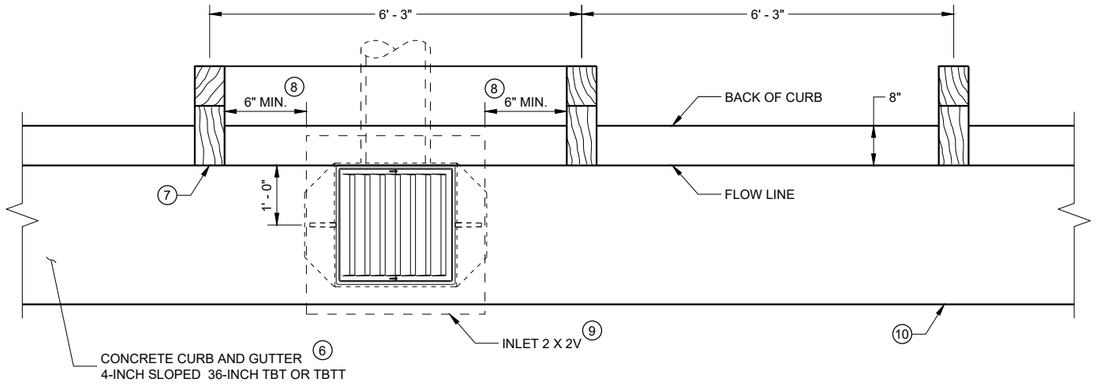
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

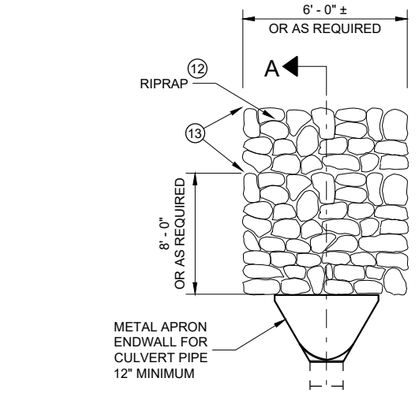
FHWA

6
SDD 08D01-23b



INLET PLAN VIEW

(NOTE: RAIL NOT SHOWN FOR CLARITY)

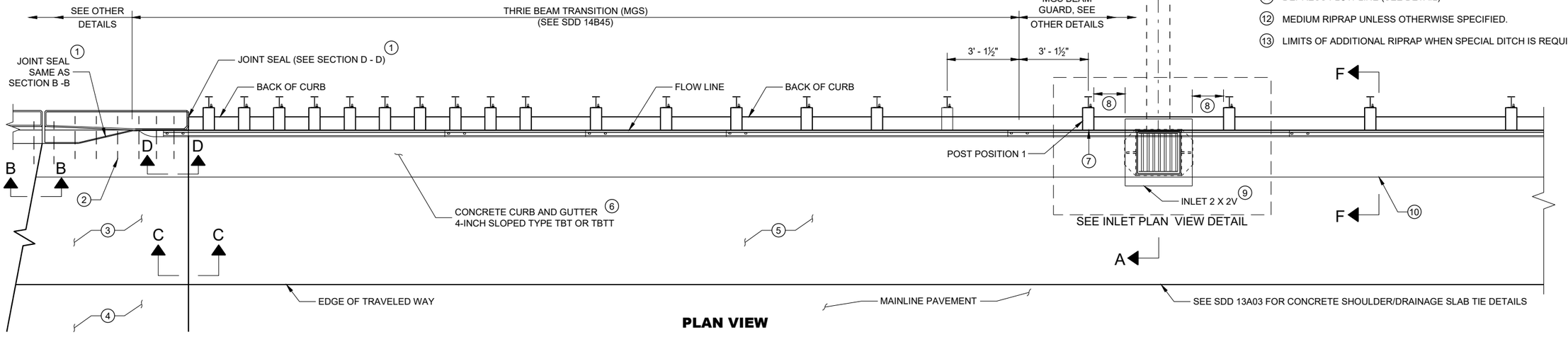


GENERAL NOTES

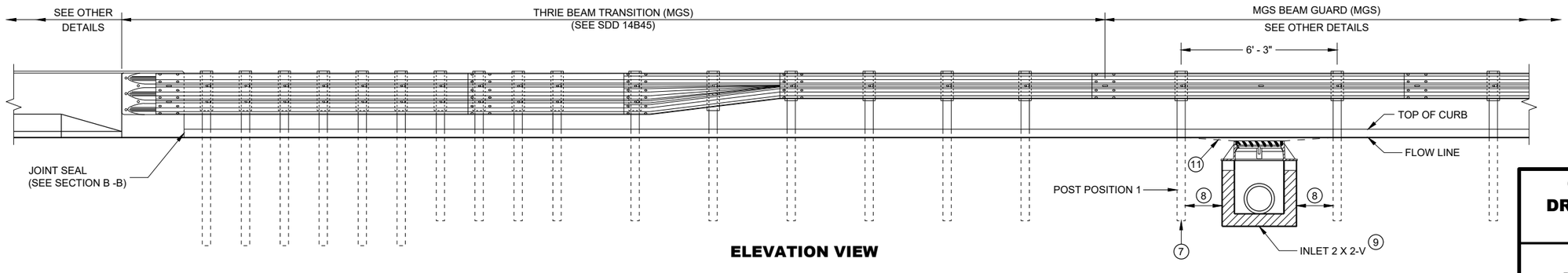
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



PLAN VIEW



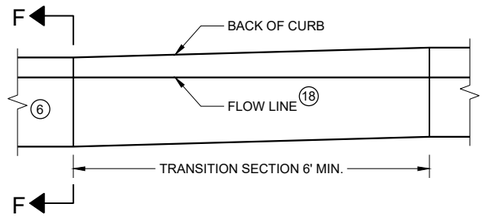
ELEVATION VIEW

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

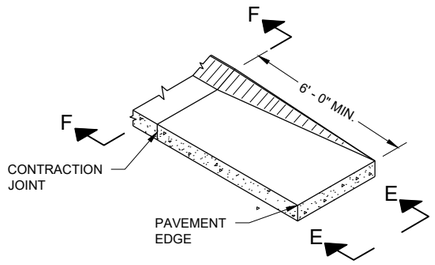
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D03 - 09a

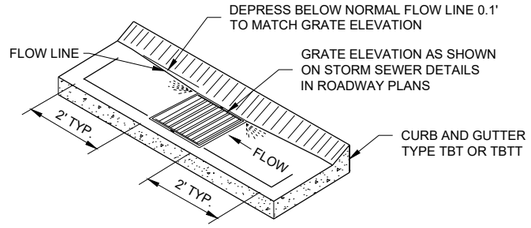
SDD 08D03 - 09a



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



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



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

GENERAL NOTES

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

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.

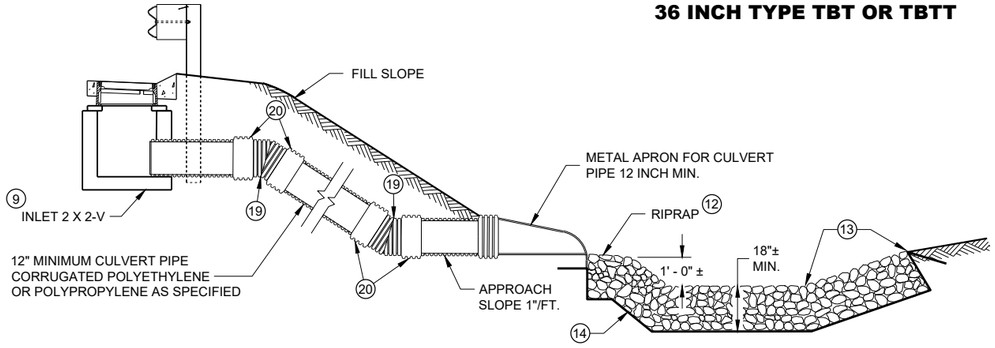
(18) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

(19) MANUFACTURER SUPPLIED BEND.

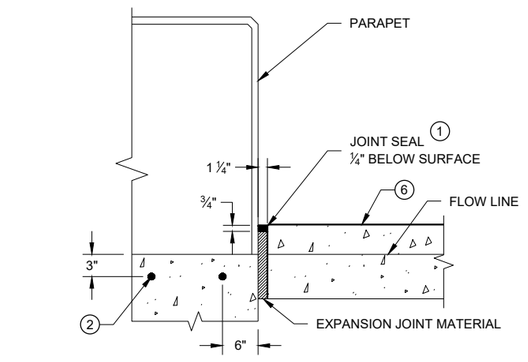
(20) MANUFACTURER SUPPLIED EXTERNAL MECHANICAL COUPLING OR A MANUFACTURER RECOMMENDED COUPLING WITH A MASTIC IMPREGNATED GEOTEXTILE WRAP AND MECHANICAL FASTENING BANDS.

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

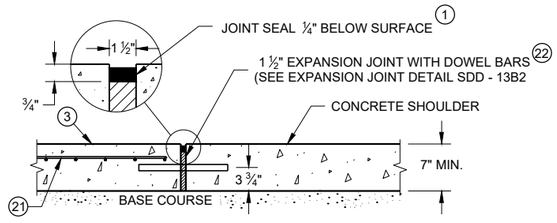
(22) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



SECTION A - A

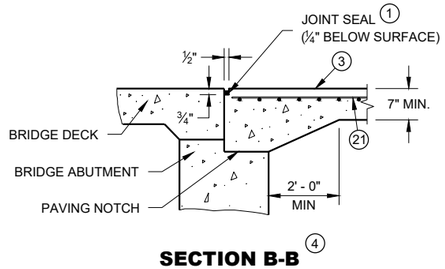


SECTION D - D

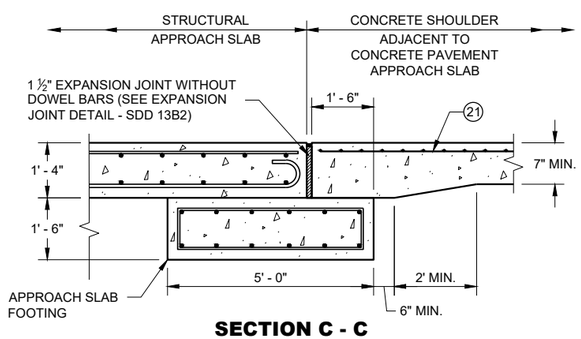


SECTION C - C

JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS

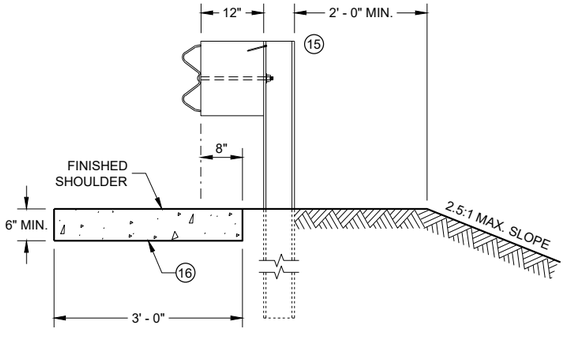


SECTION B-B 4

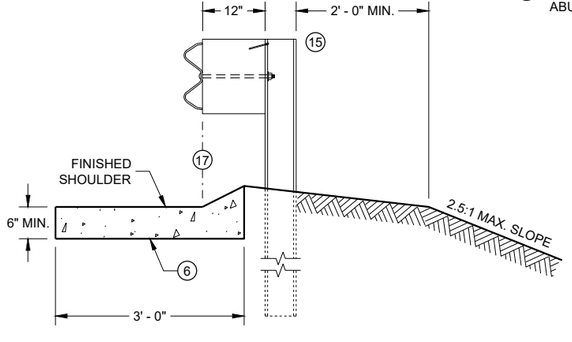


SECTION C - C

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

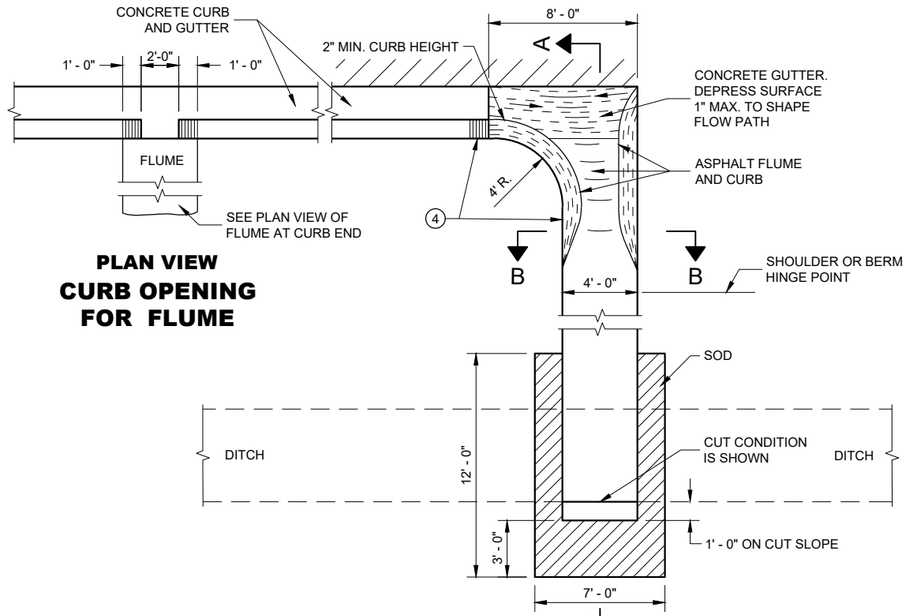
FHWA

6

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

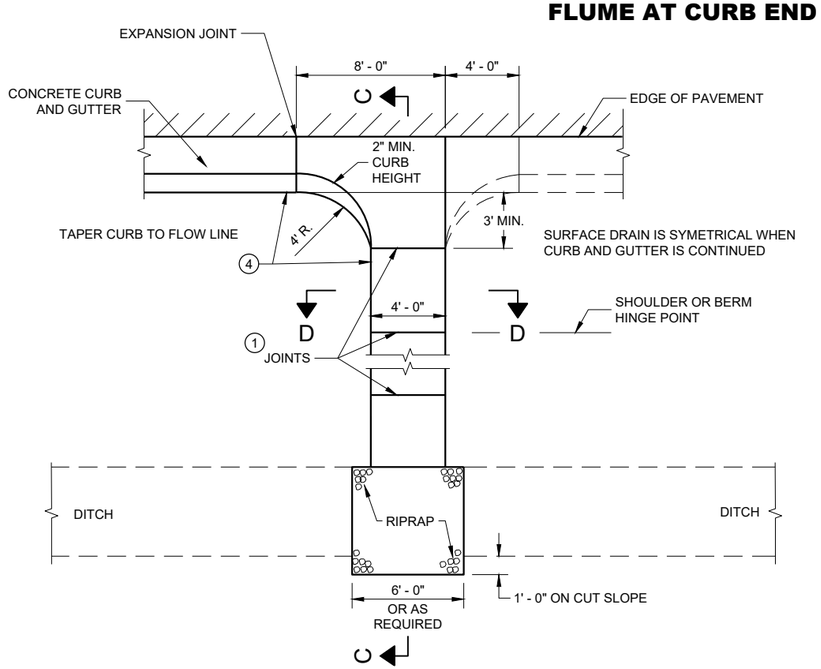
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



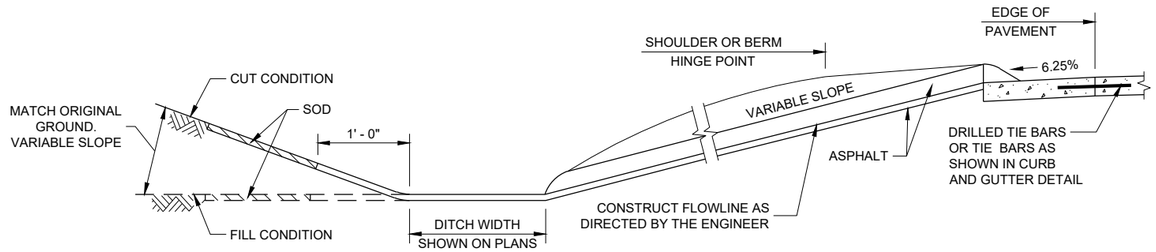
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

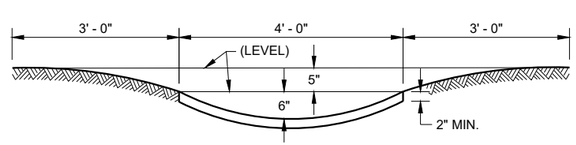
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

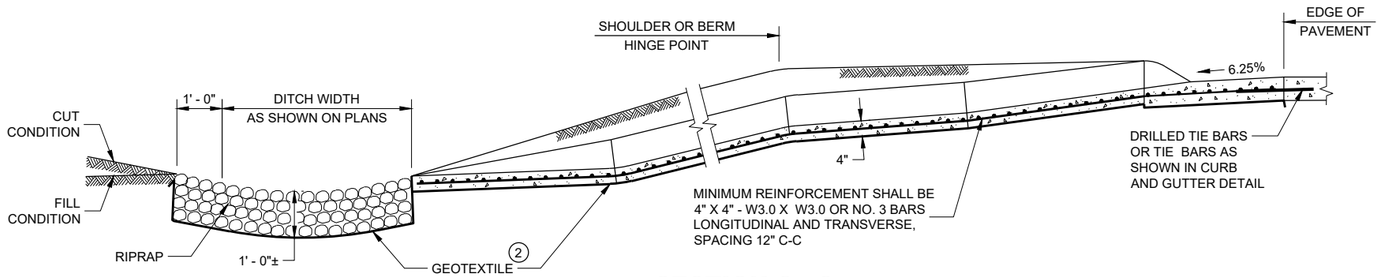
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. 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.



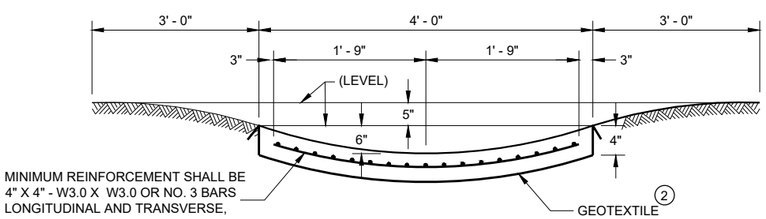
SECTION A - A



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

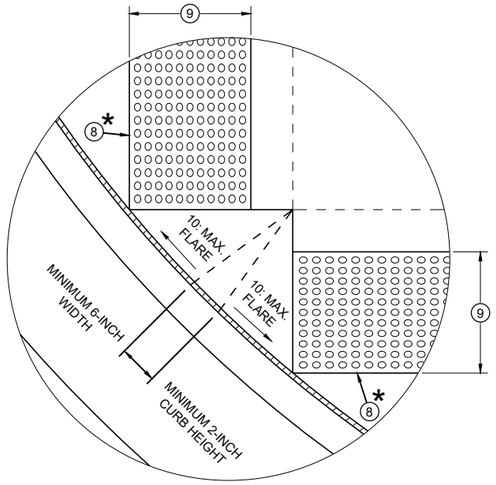
FHWA

6

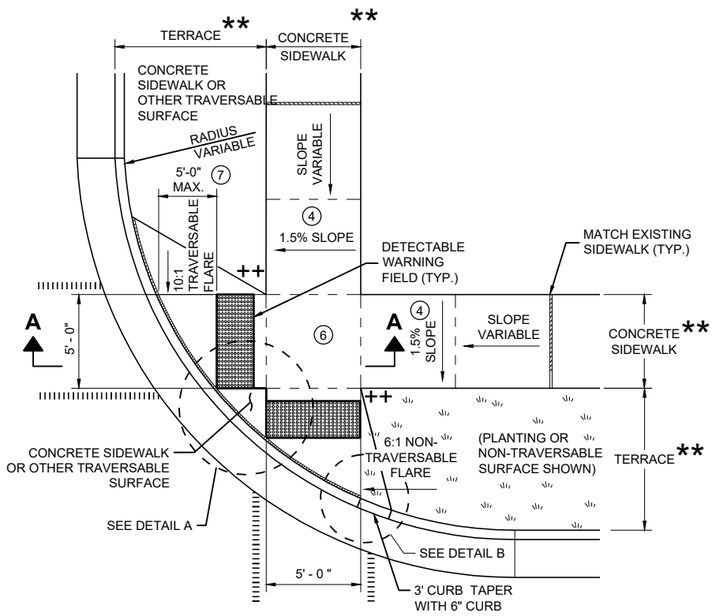
SDD 08D04 - 07

6

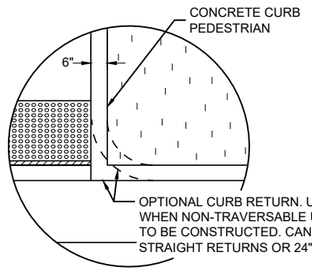
SDD 08D04 - 07



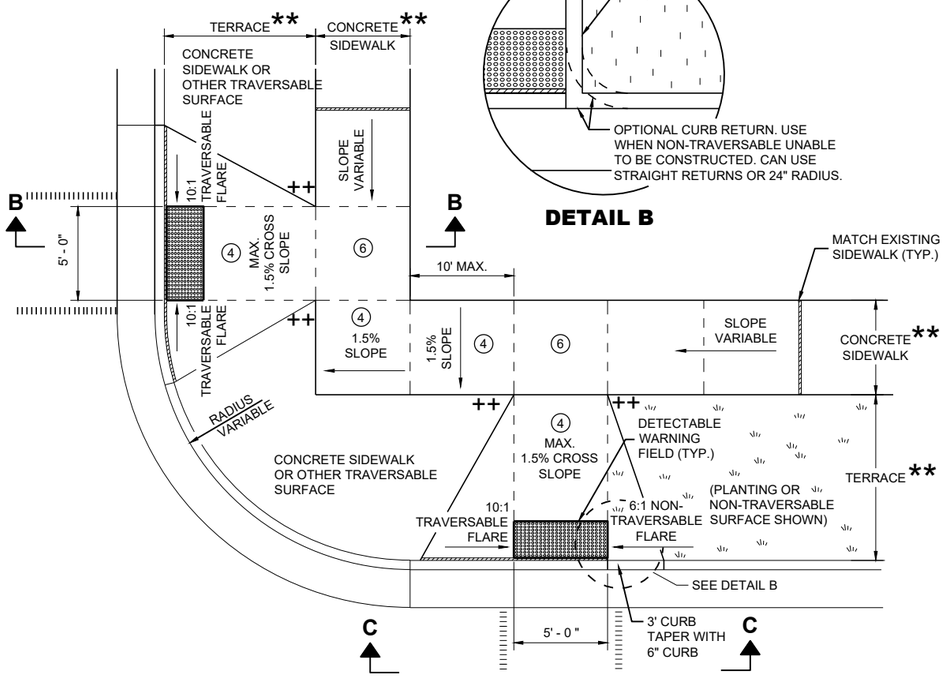
DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

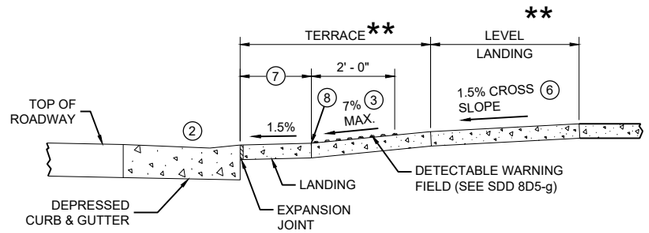
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

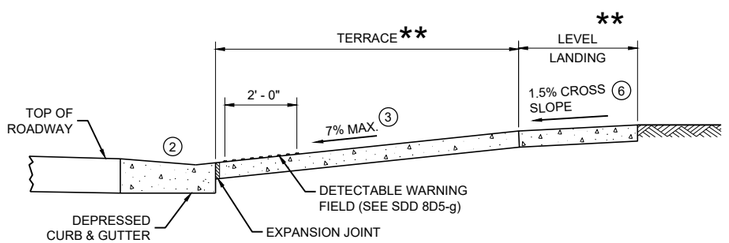


SECTION A - A FOR TYPE 2

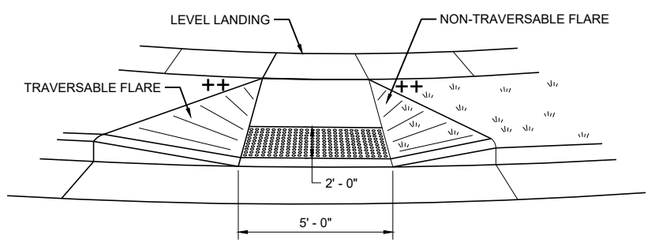
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



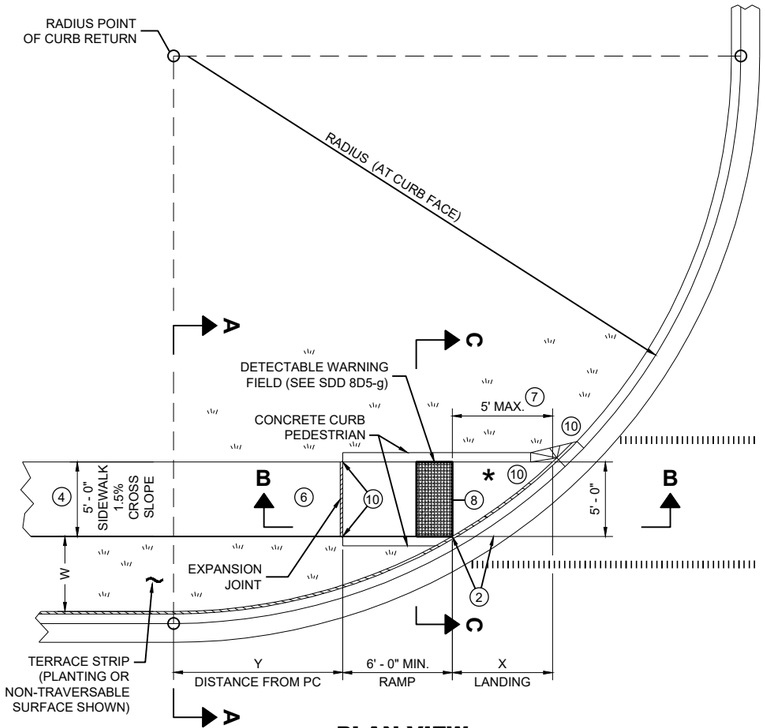
VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

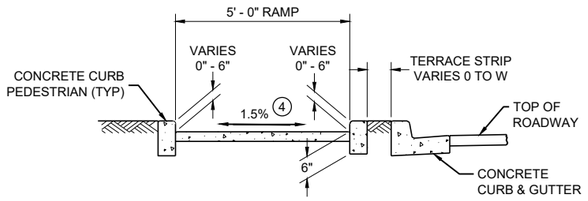
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

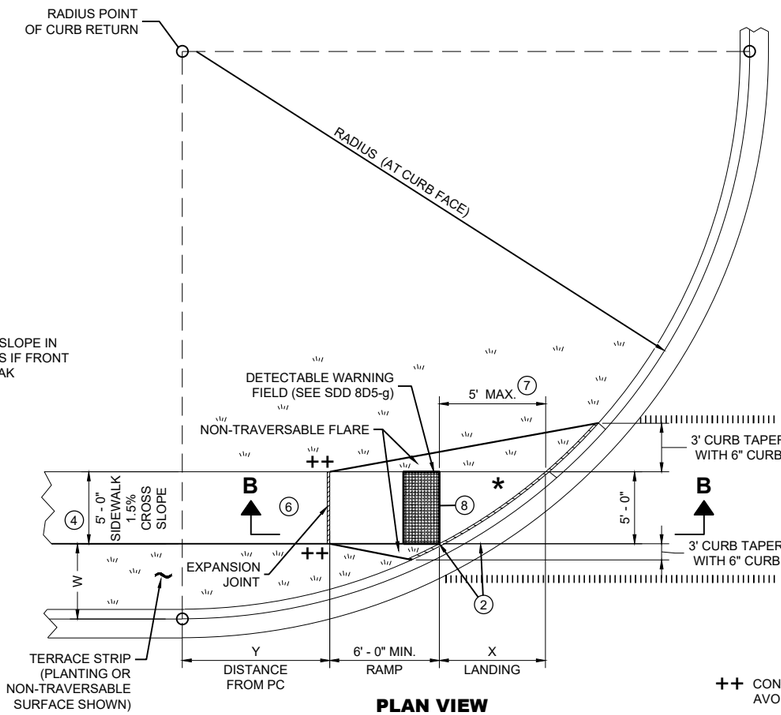
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

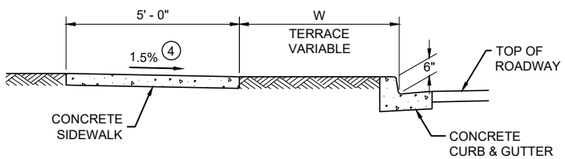
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



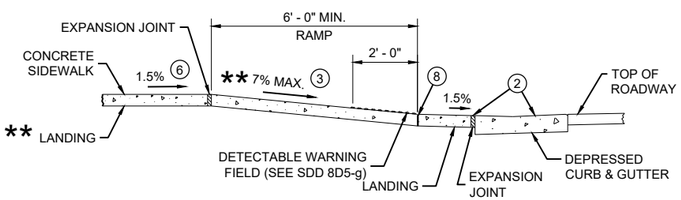
PLAN VIEW
CURB RAMP TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

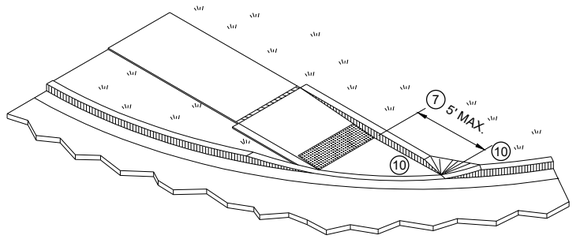


SECTION A - A FOR TYPE 4B

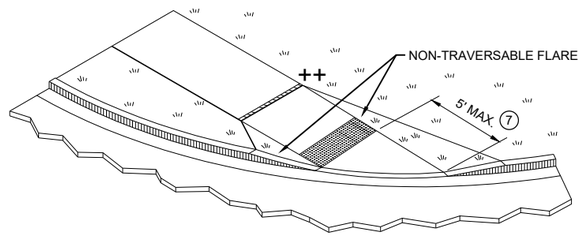


SECTION B - B FOR TYPE 4B AND TYPE 4B1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



ISOMETRIC VIEW FOR TYPE 4B



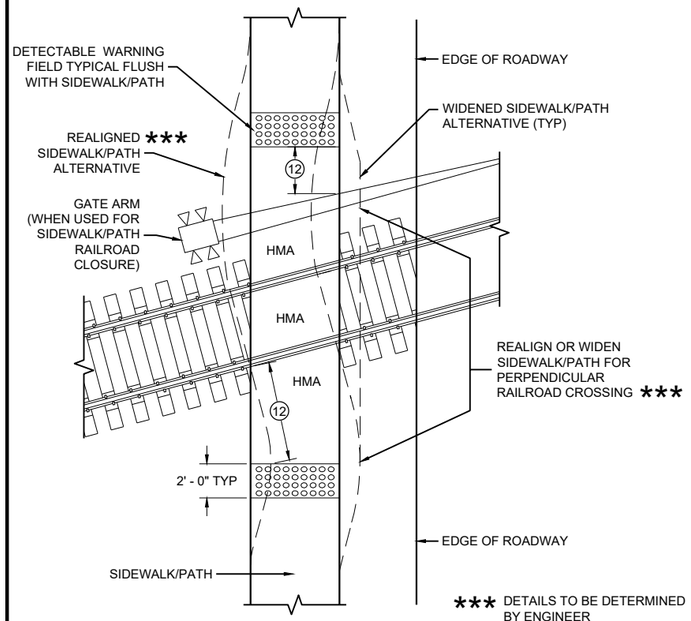
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

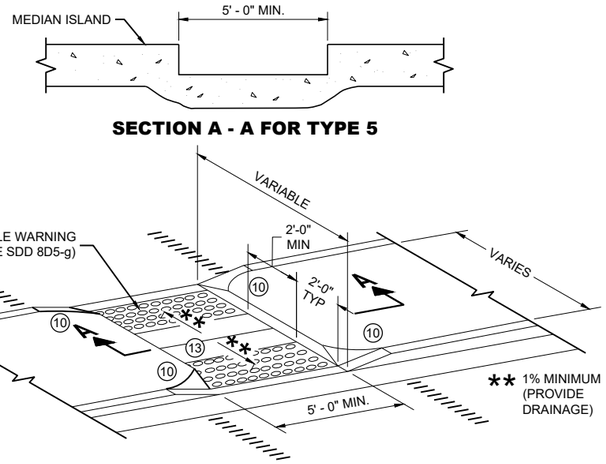
6

SDD 08D05-21d



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

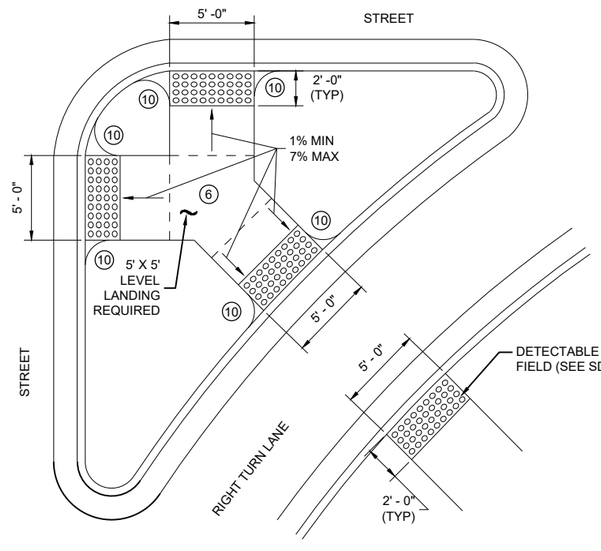
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

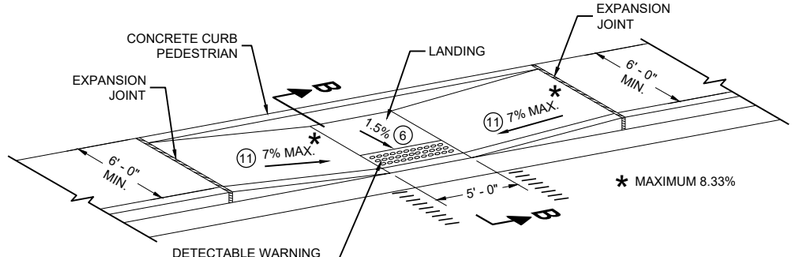
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

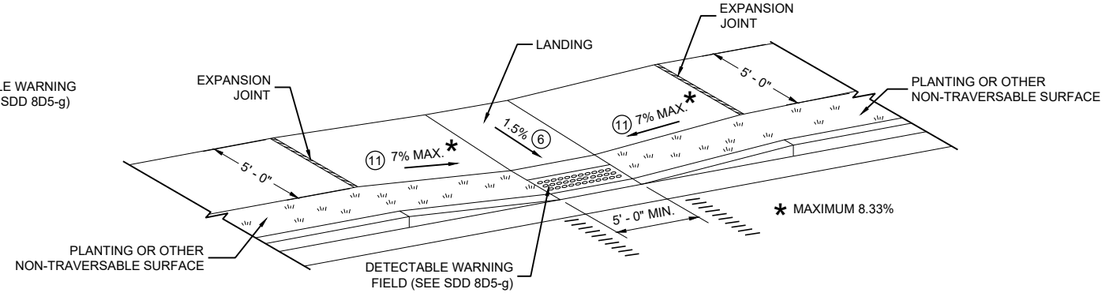
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



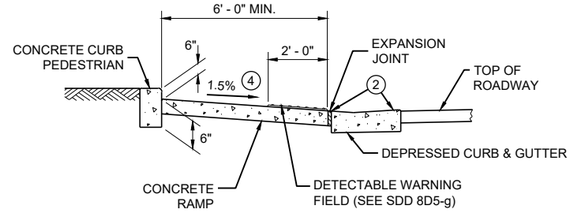
CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



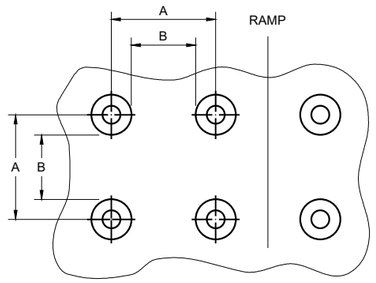
SECTION B - B FOR TYPE 7A

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

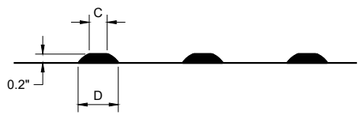
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

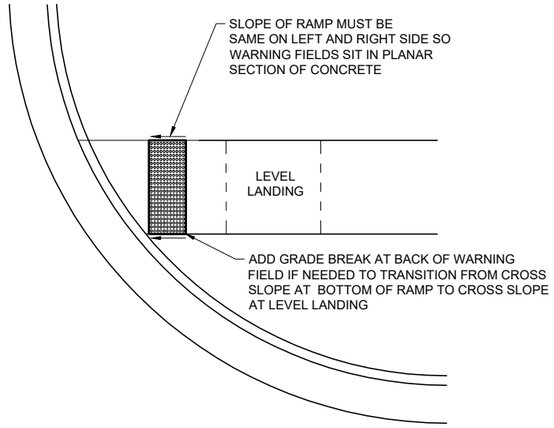
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD

PLANAR INSTALLATION

GENERAL NOTES

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

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

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

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

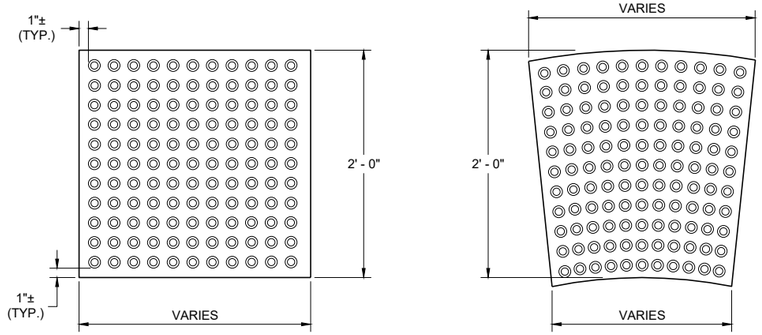
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE.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

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

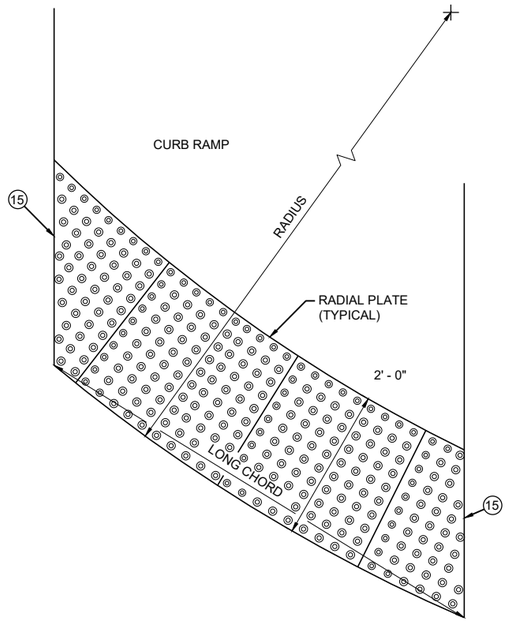


RECTANGULAR PLATES

RADIAL PLATES

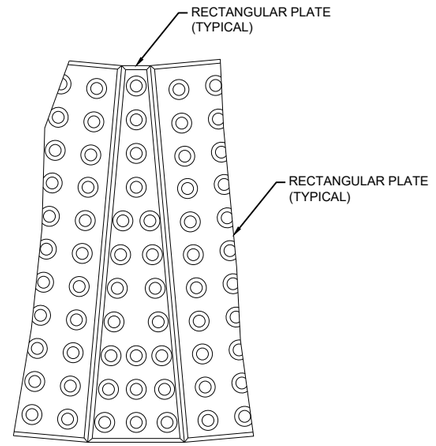
PLAN VIEW

DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW

RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW

RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 2023 — DATE

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 08D05-21g

GENERAL NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

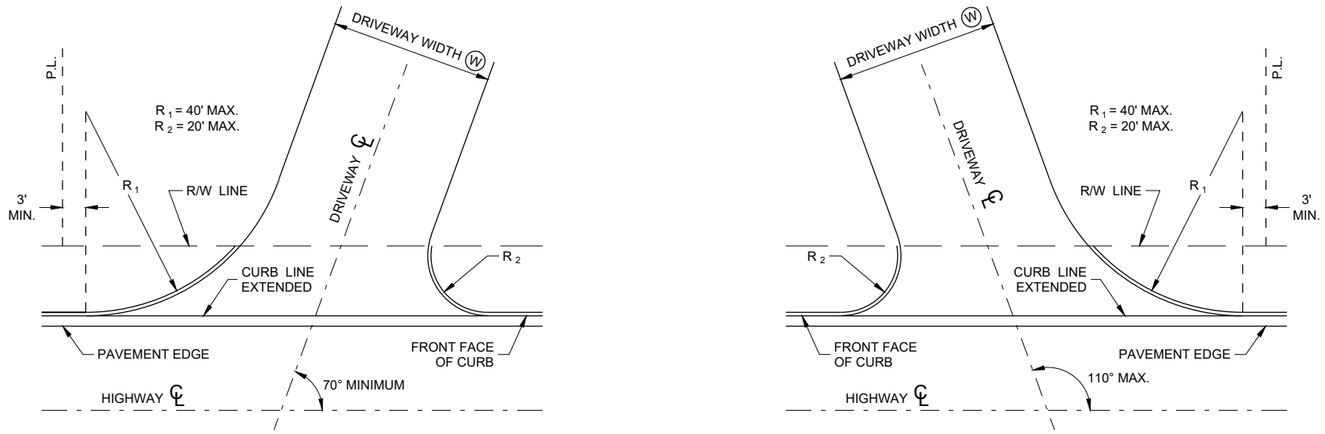
THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

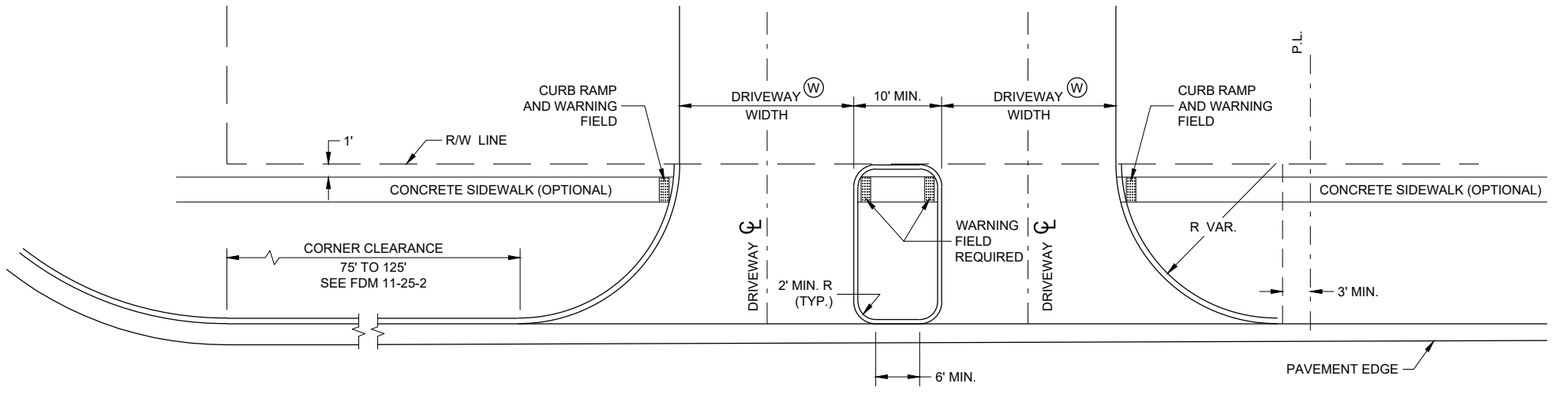
Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



SKEWED DRIVEWAY DETAILS (COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

DRIVEWAYS WITH CURB AND GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

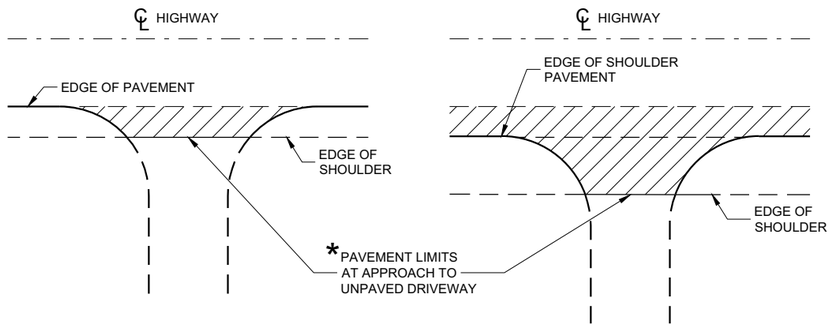
00-00-00
DATE

/S/ <AUTHOR>
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08D20 - 01

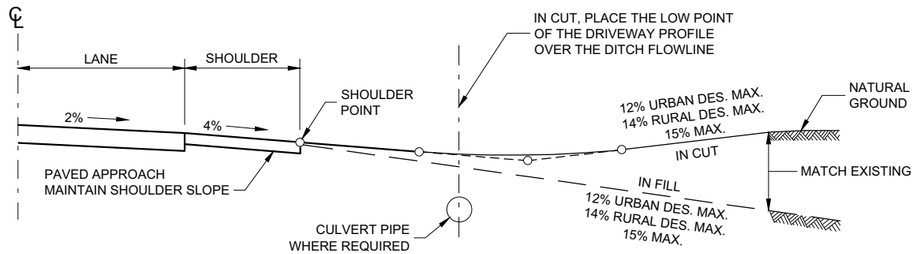
SDD 08D20 - 01



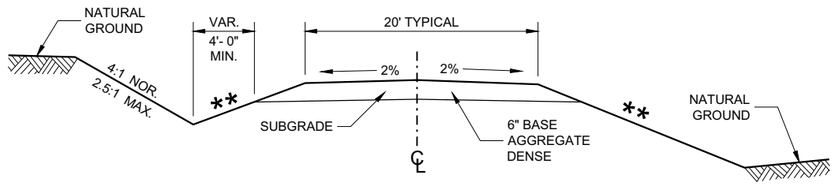
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

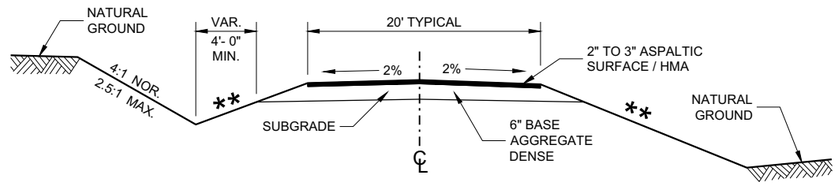


IN CUT **IN FILL**

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

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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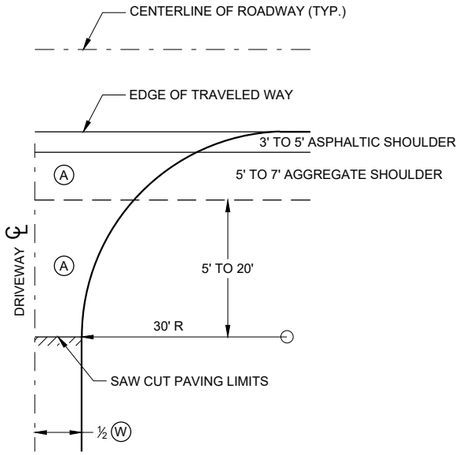
SDD 08D21 - 01

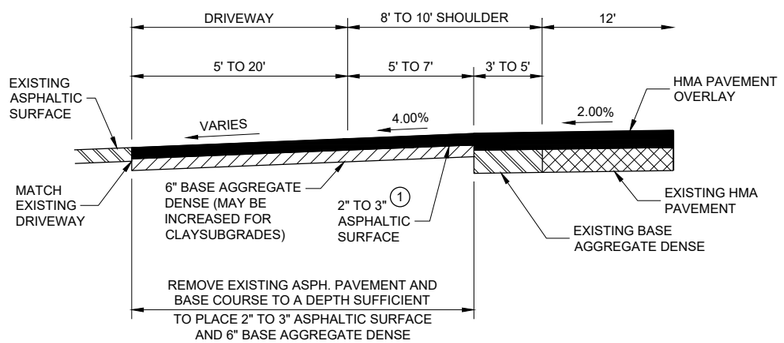
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



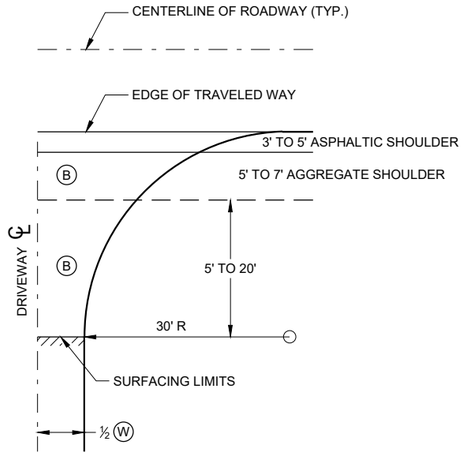
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

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

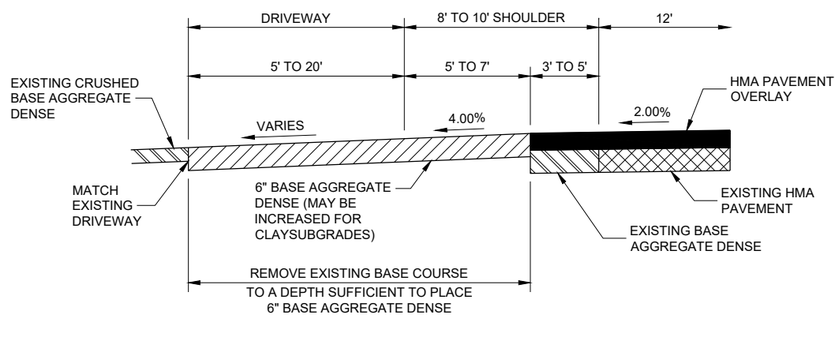
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

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



PLAN VIEW

HALF SECTION



PROFILE VIEW

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

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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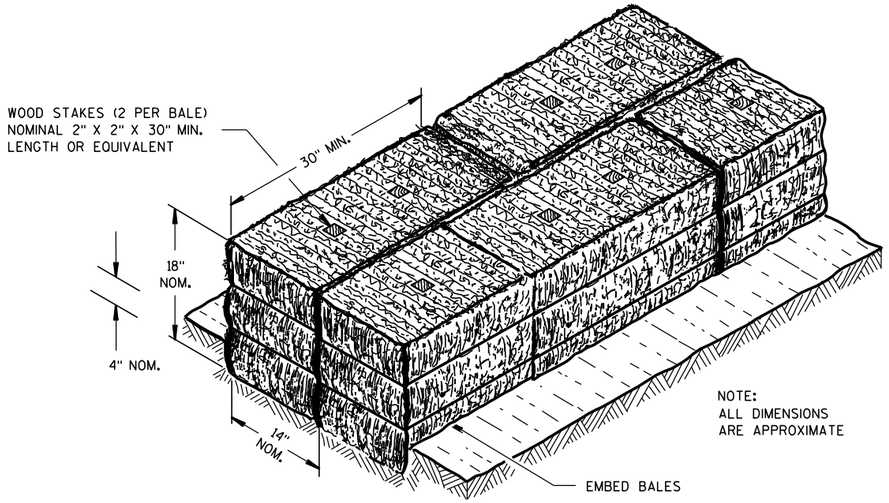
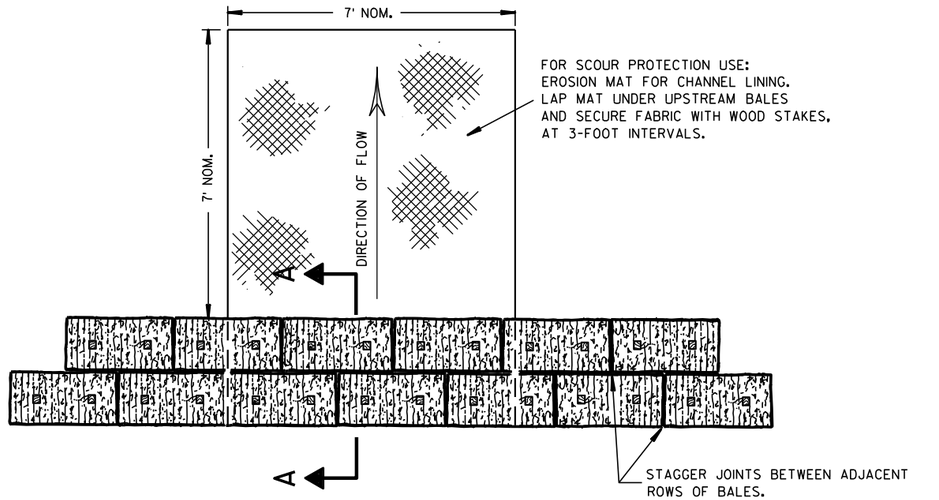
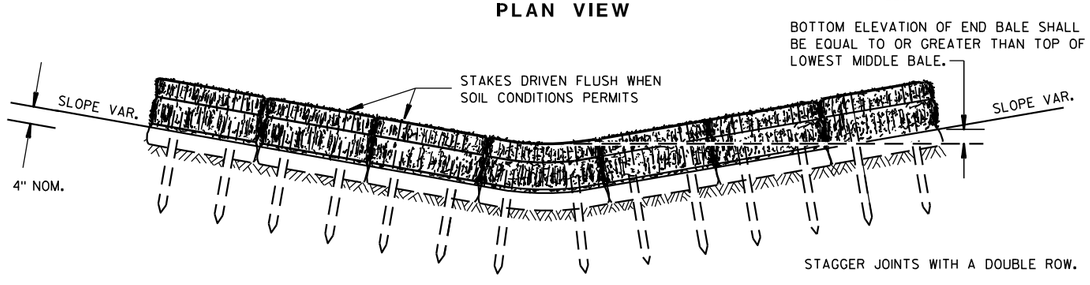
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



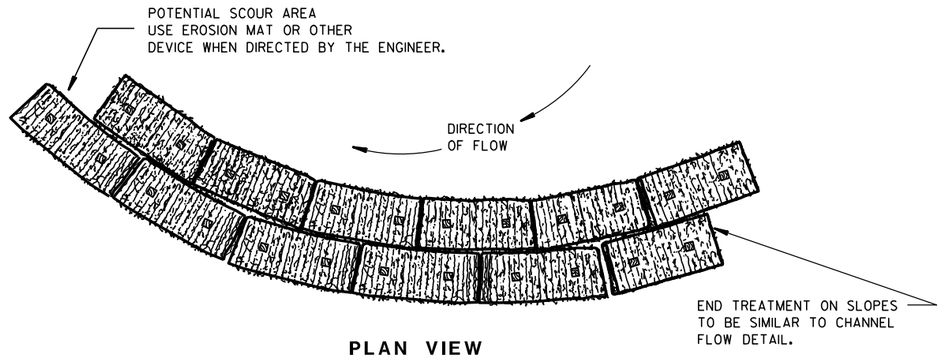
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

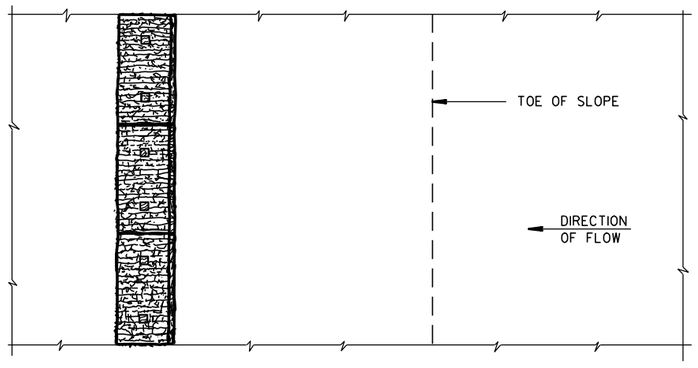
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

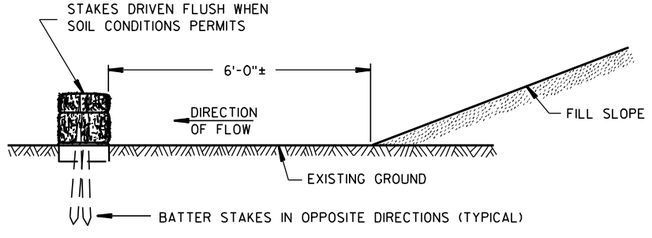


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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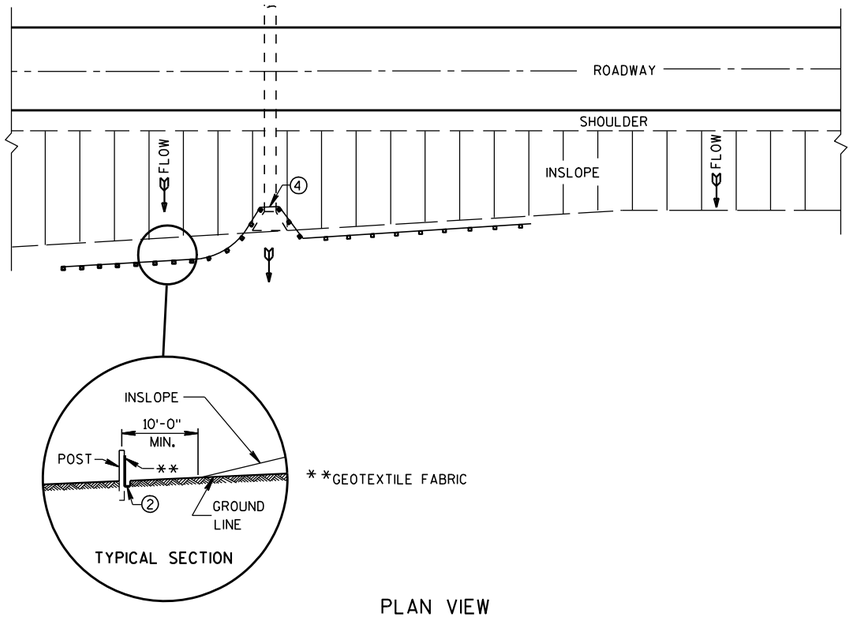
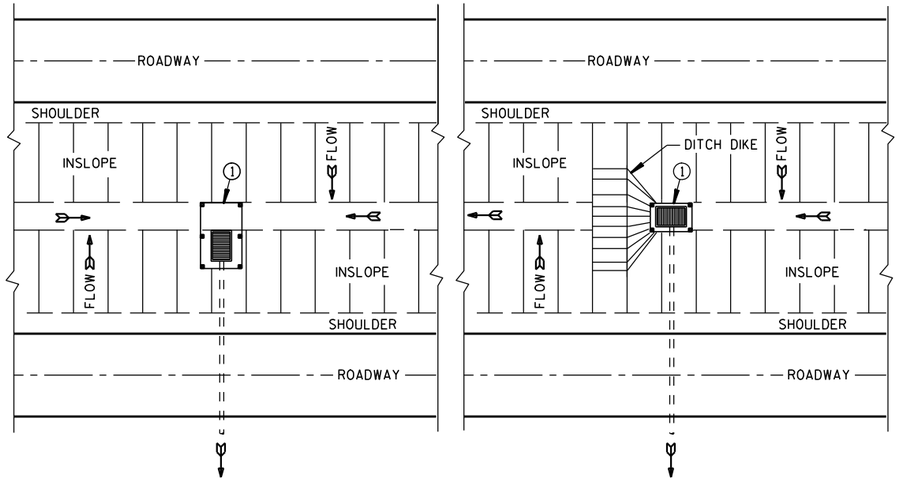
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



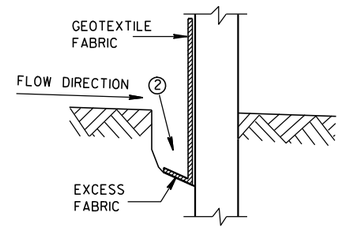
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

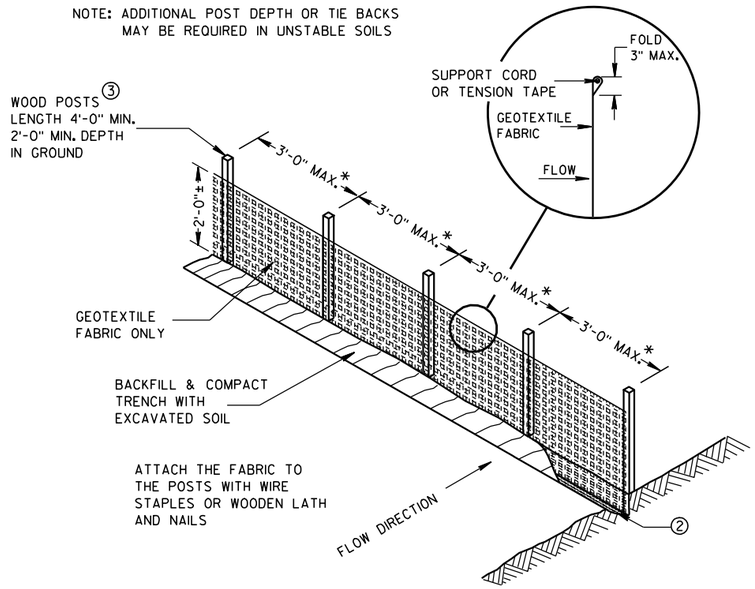
GENERAL NOTES

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

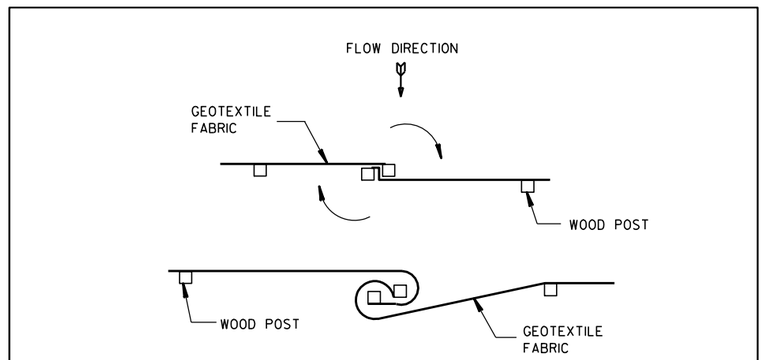
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



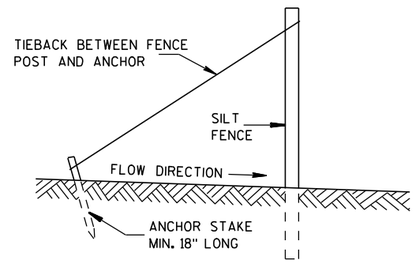
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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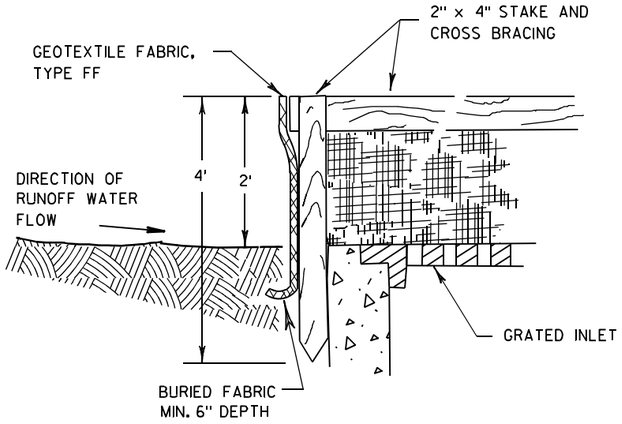
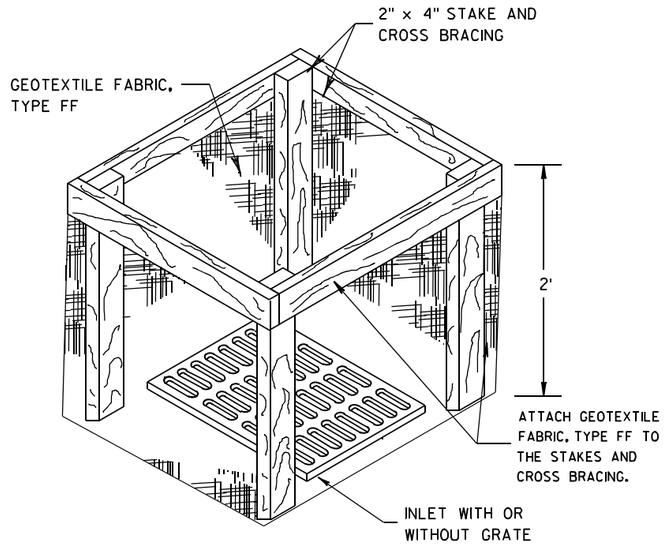
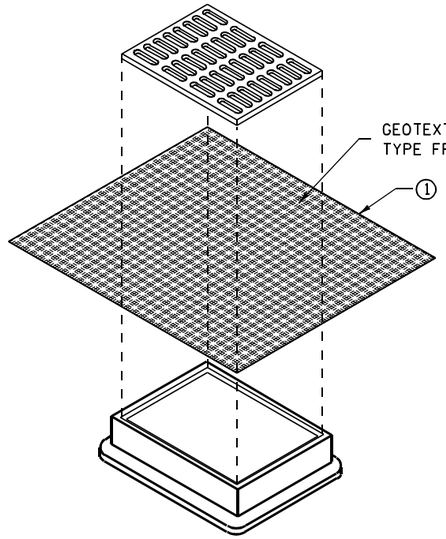
S.D.D. 8 E 9-6



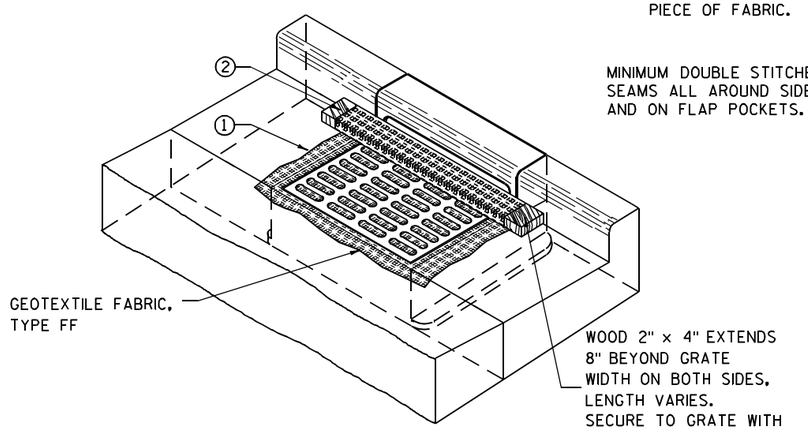


INLET PROTECTION, TYPE A

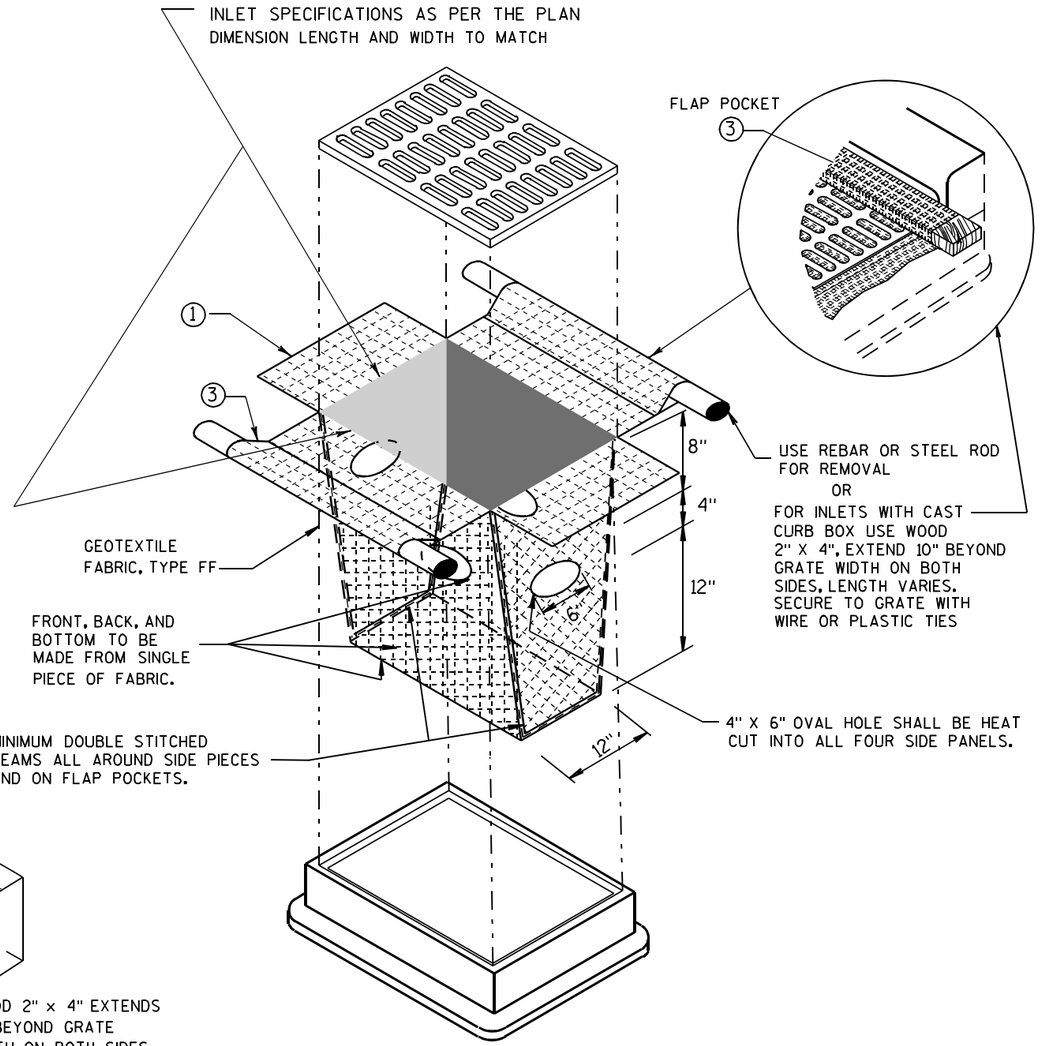


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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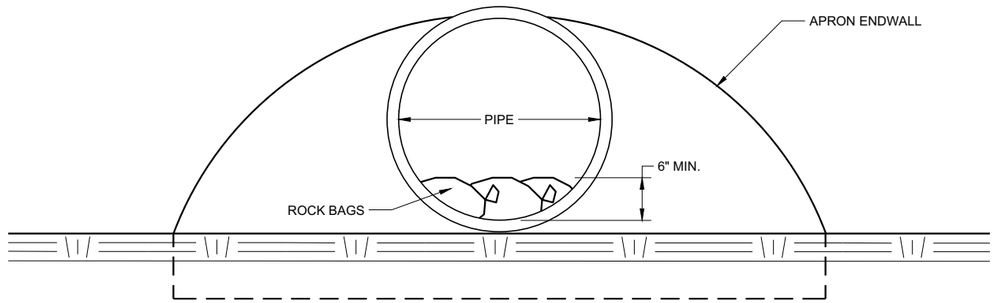
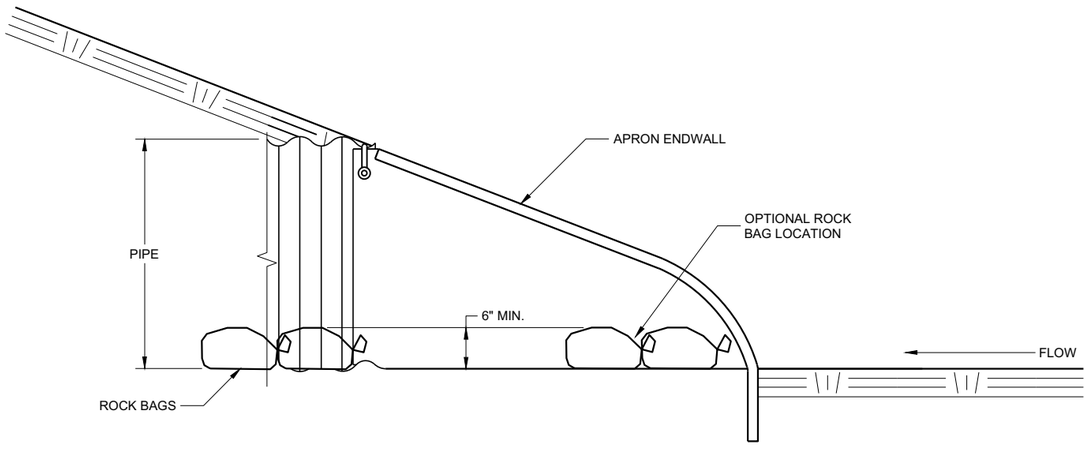
S.D.D. 8 E 10-2

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	302

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

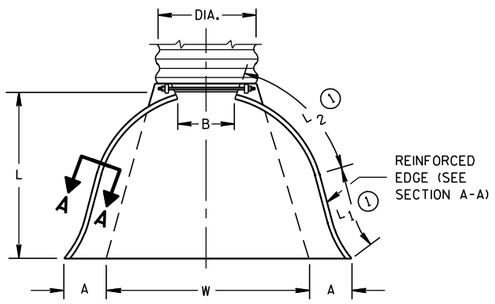
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

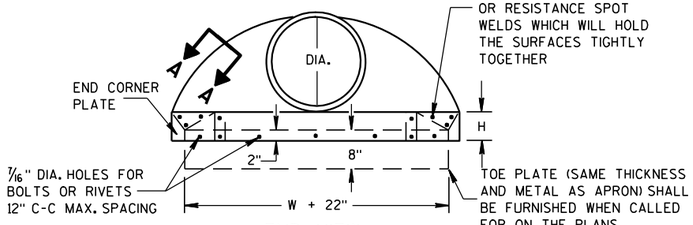
REINFORCED CONCRETE APRON ENDWALLS

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

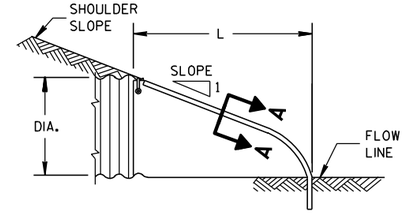
*MINIMUM
**MAXIMUM



PLAN VIEW

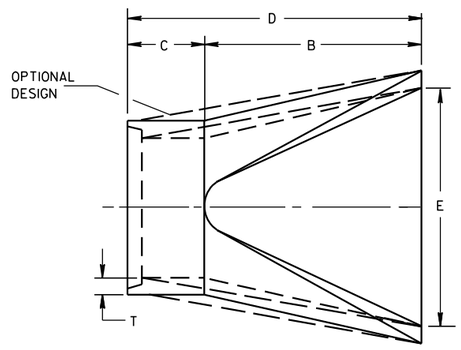


END VIEW

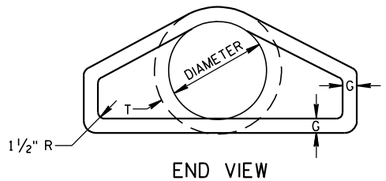


SIDE ELEVATION

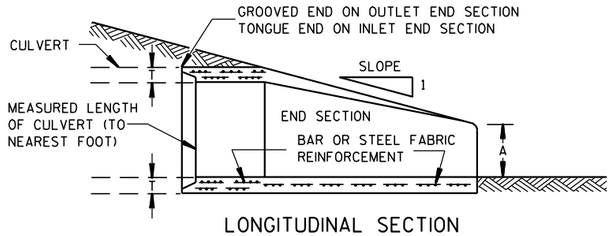
METAL ENDWALLS



PLAN

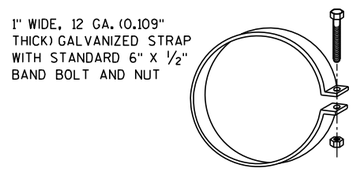


END VIEW



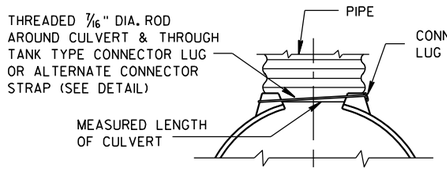
LONGITUDINAL SECTION

CONCRETE ENDWALLS

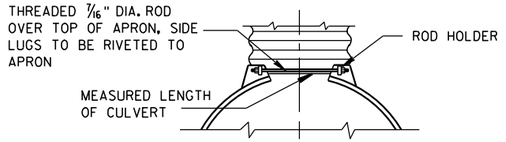


ALTERNATE FOR TYPE 1 CONNECTION

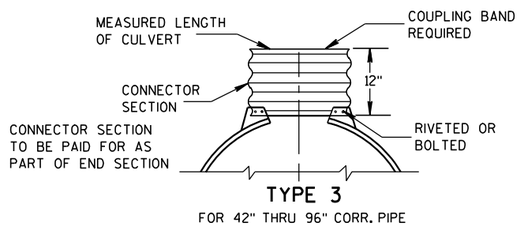
END SECTION CONNECTOR STRAP



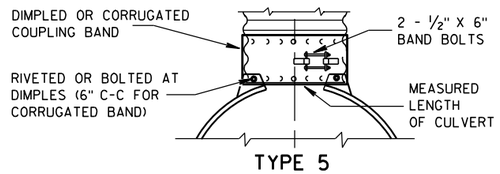
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

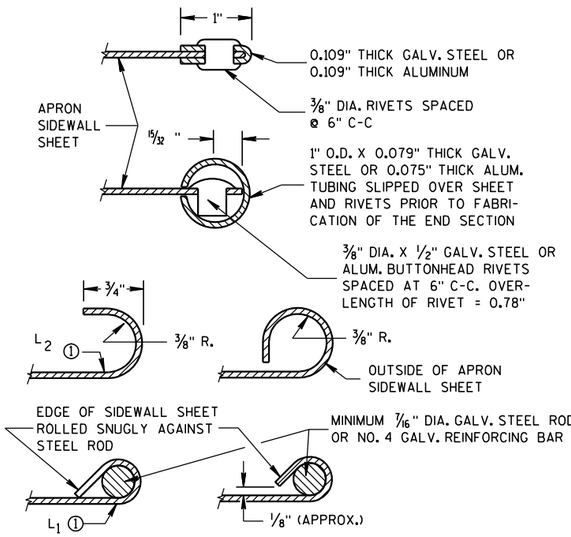
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

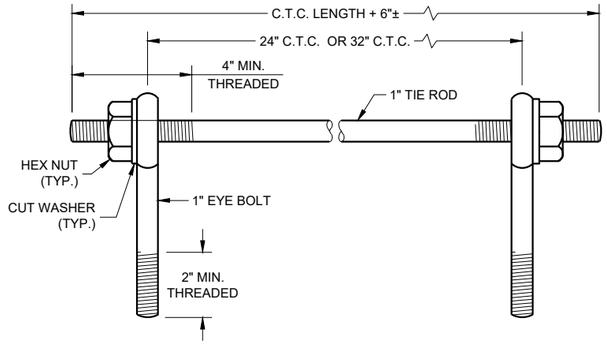
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

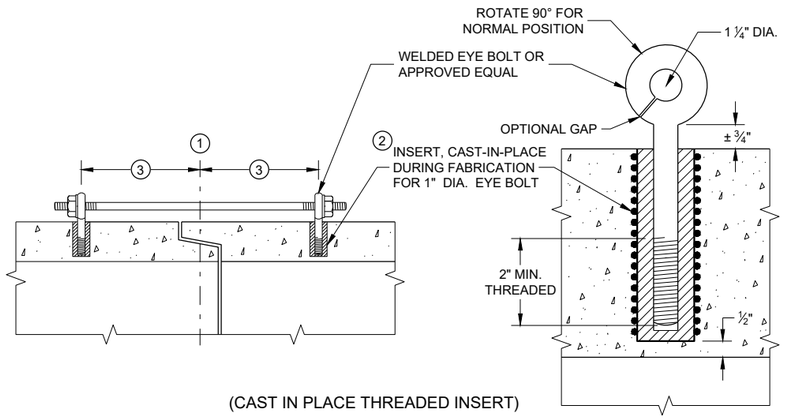
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

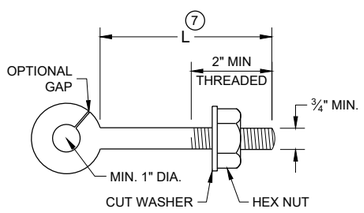
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

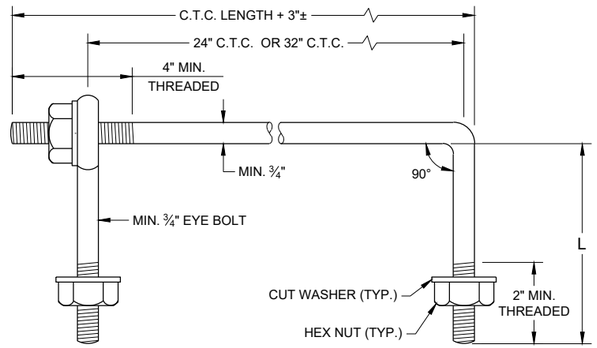
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

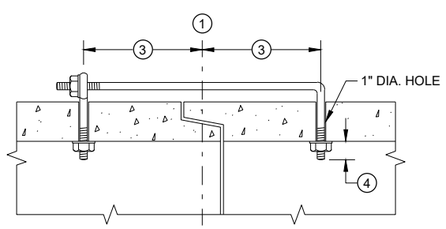


EYE BOLT (7)

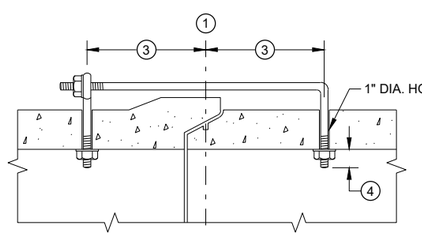
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

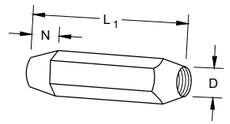
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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



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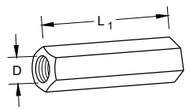
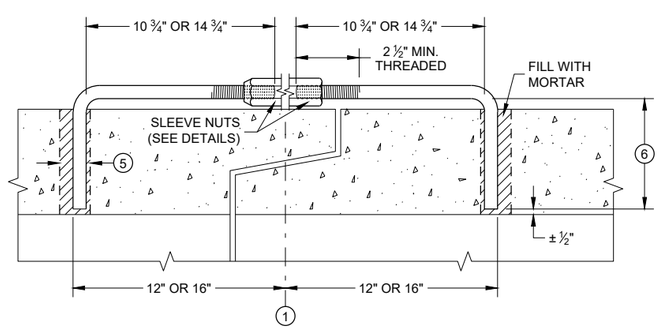


PLAIN

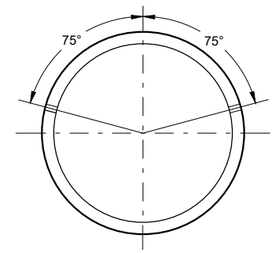
RIGHT AND LEFT THREADS

SLEEVE NUTS



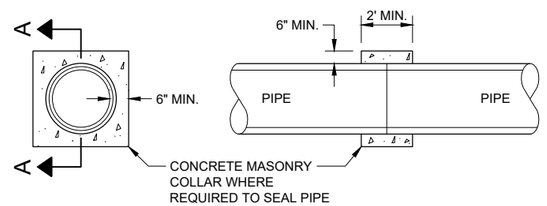
LONGITUDINAL SECTION

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

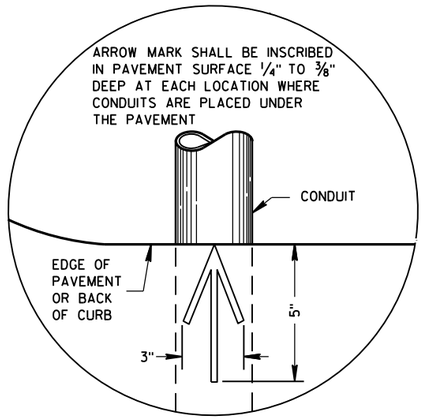
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

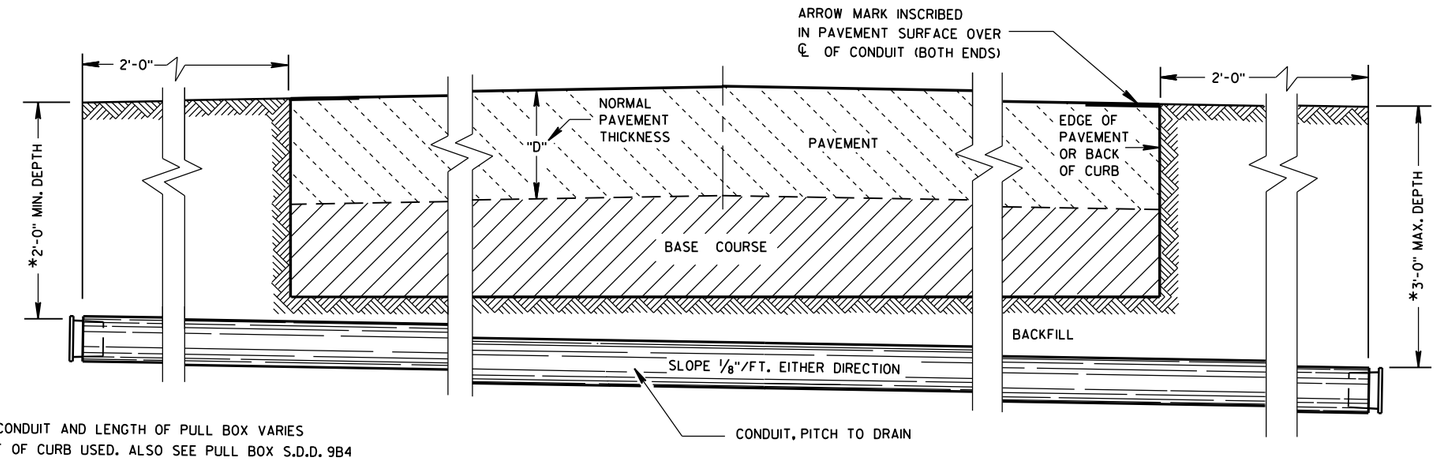
FHWA

6
SDD 08F04 - 08



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

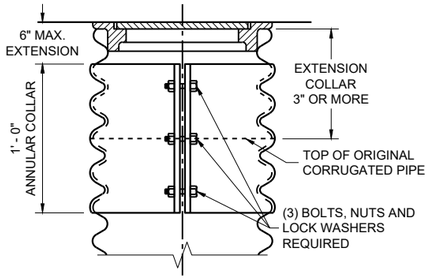
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

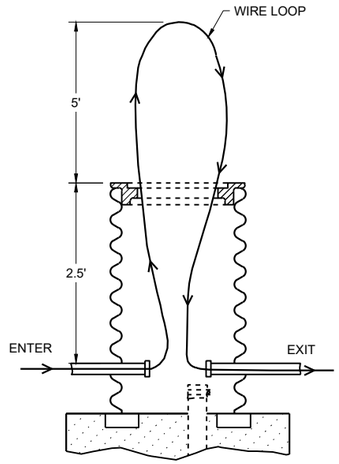
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 305
FHWA

6

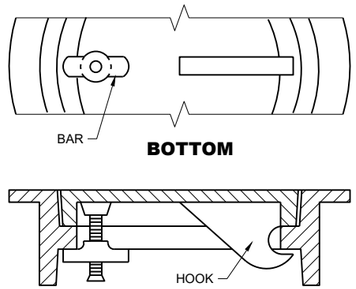
S.D.D. 9 B 2-10



CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



BOTTOM

SECTION

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

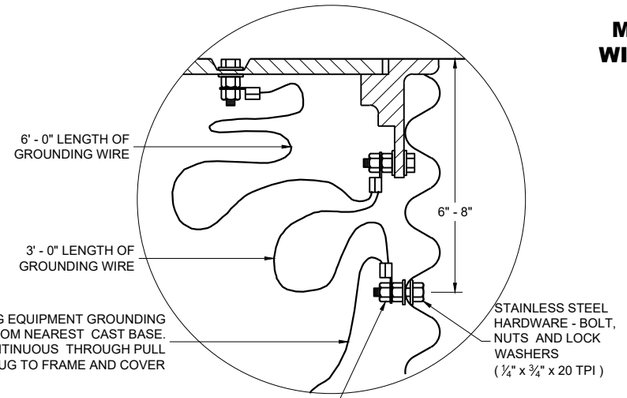
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

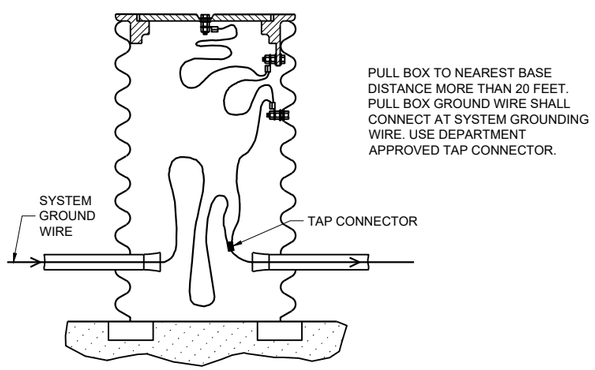
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

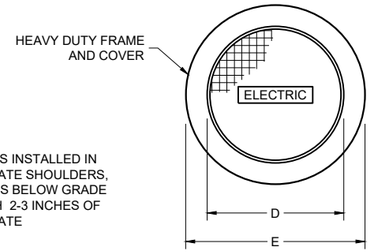
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



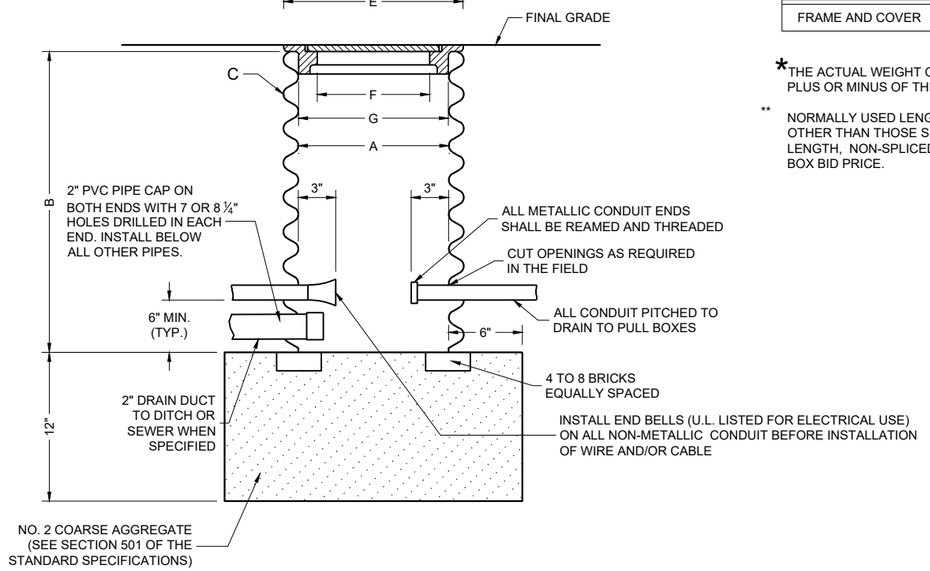
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

6

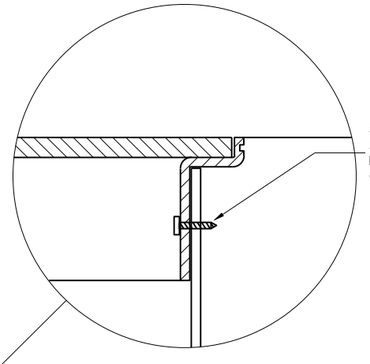
SDD 09B04-13

TABLE OF NOMINAL DIMENSIONS
AND WEIGHTS

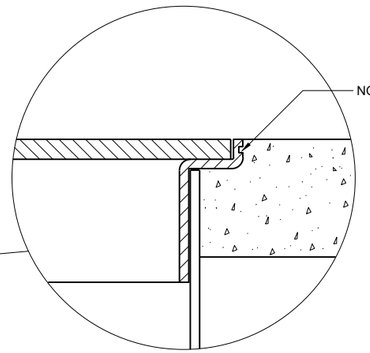
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

*THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

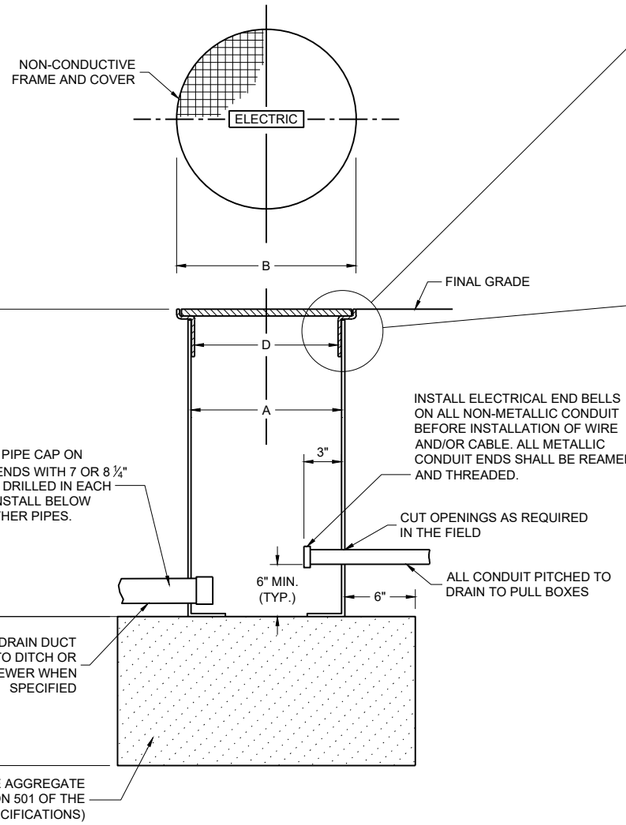
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

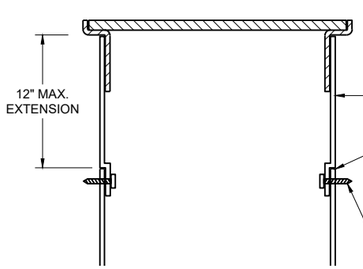
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

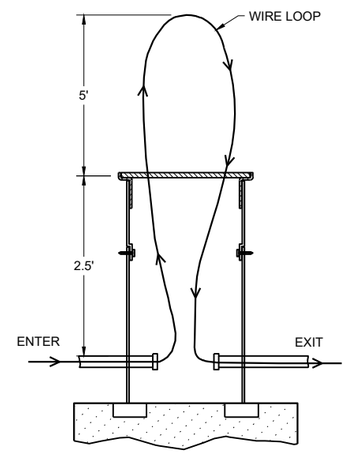
LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



NON-CONDUCTIVE PULL BOX



BOX EXTENSION



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

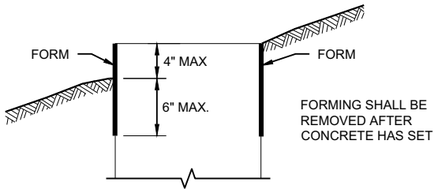
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

6
SDD 09B16-03

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

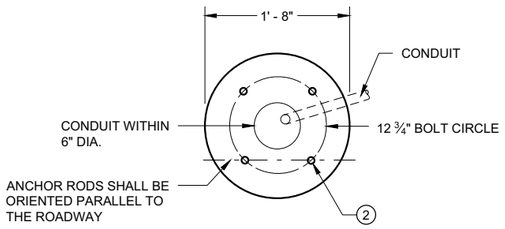
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

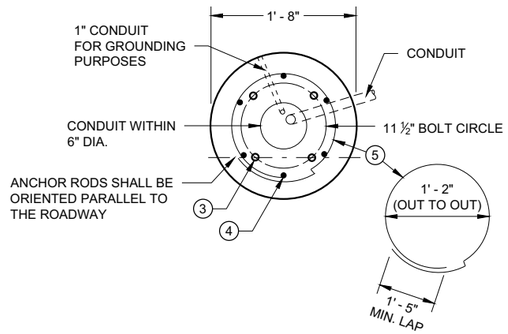
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

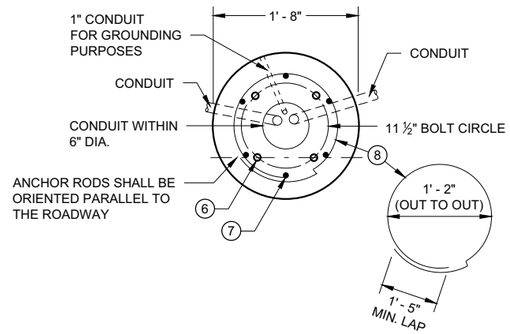
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

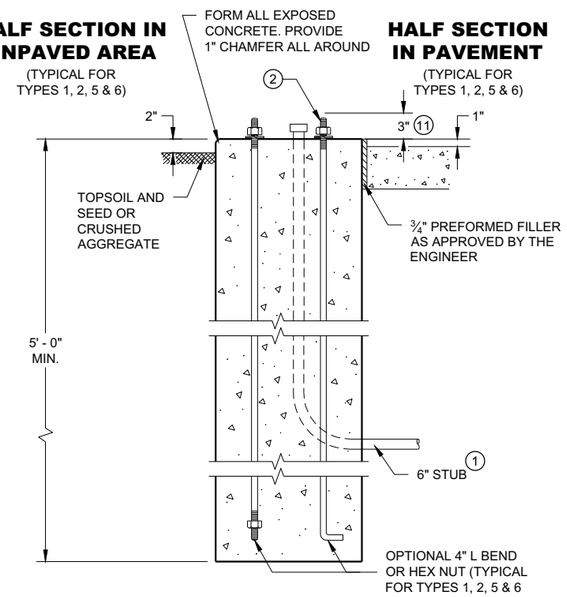
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

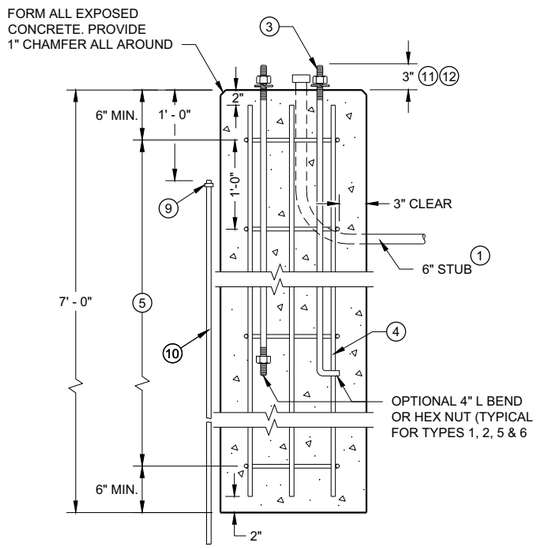
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

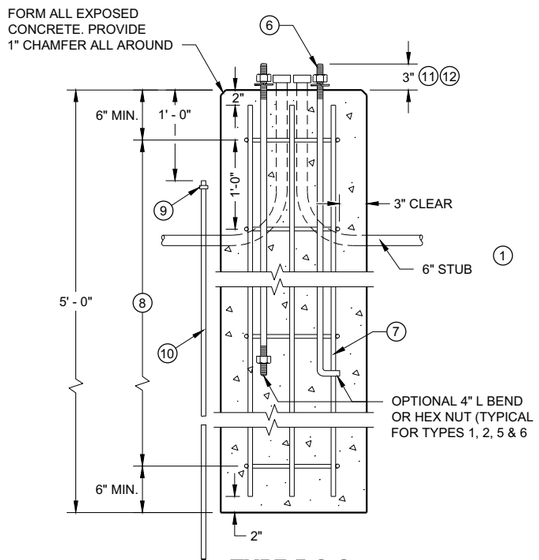
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 308
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

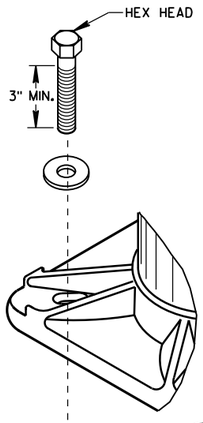
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

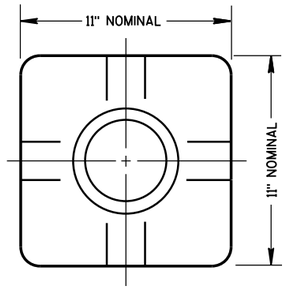
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

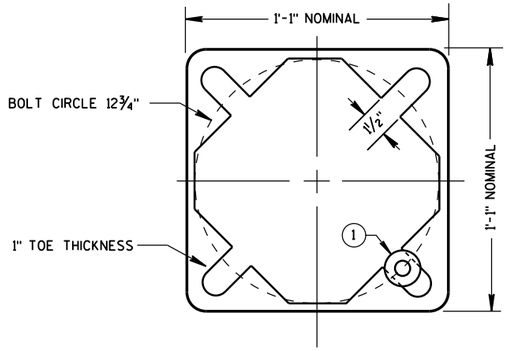
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

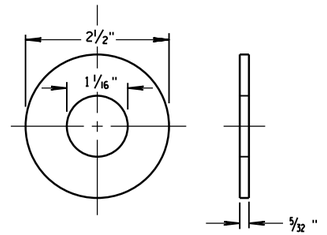




TOP VIEW
(PEDESTAL BASE)

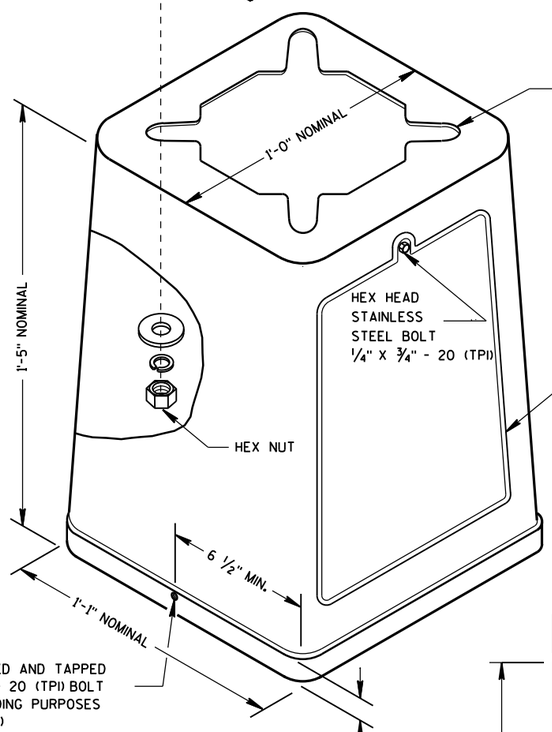


BOTTOM VIEW
(PEDESTAL BASE)

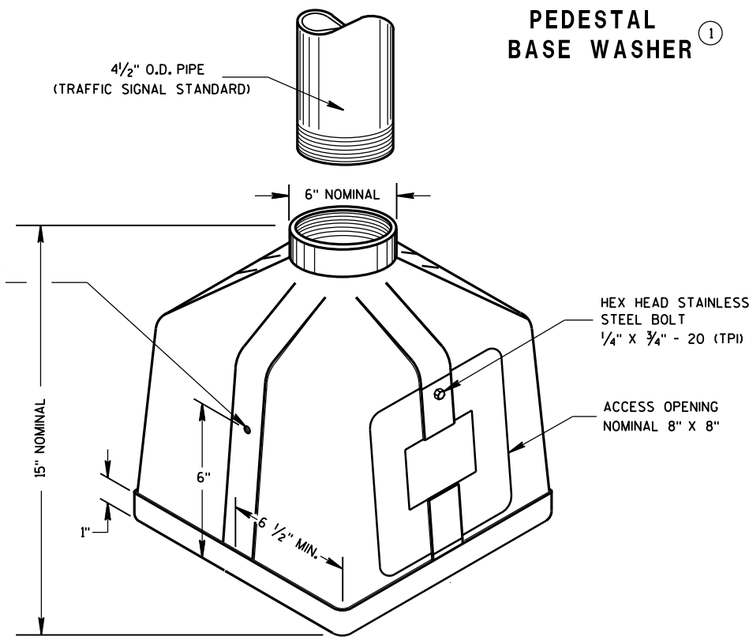


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

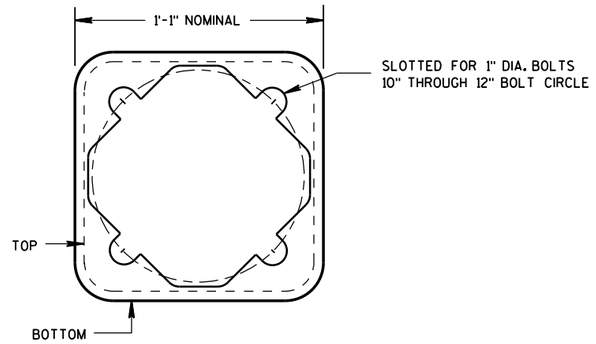


ISOMETRIC VIEW

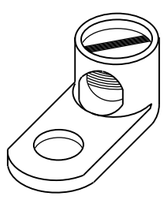


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

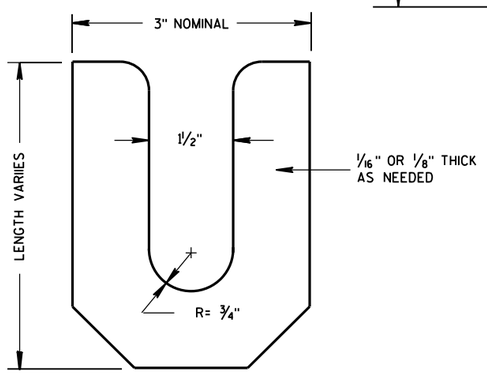


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

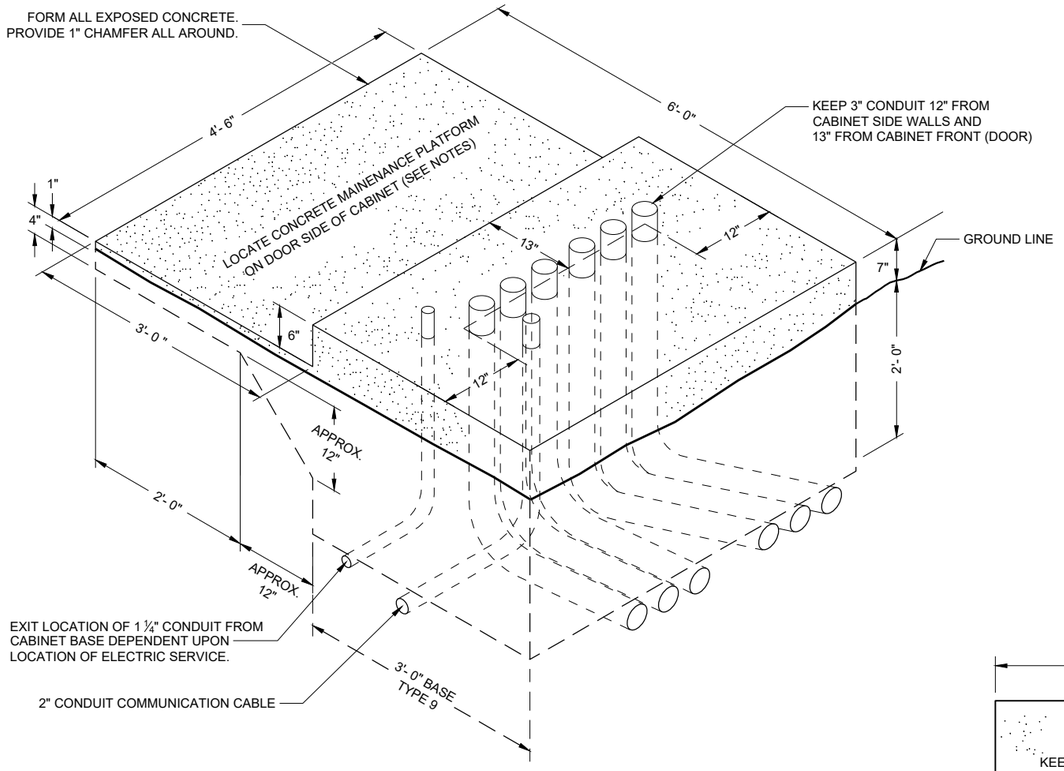
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 3-4

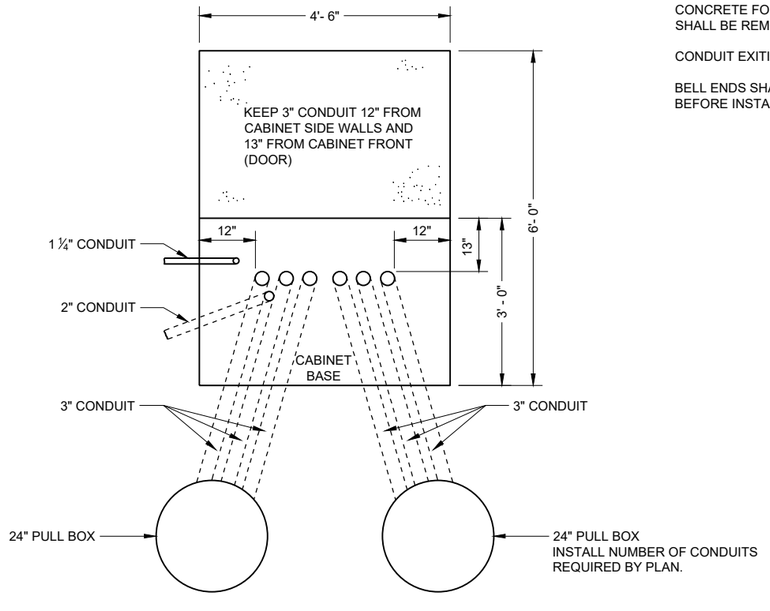
SDD 09C06 Concrete Control Cabinet Base, Type 9, Special



ISOMETRIC VIEW

TYPE 9 SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL

GENERAL NOTES

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

INSTALL FOUR INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE (SIX 3") SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 310

FHWA

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GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

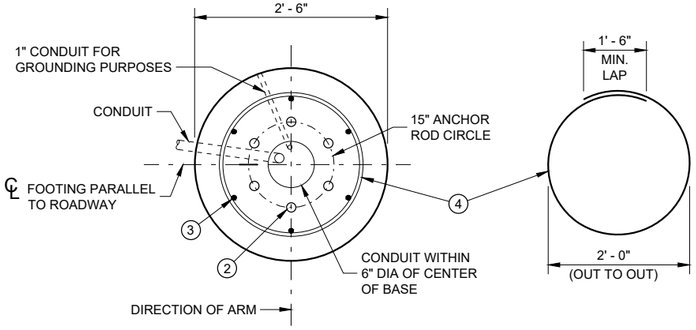
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

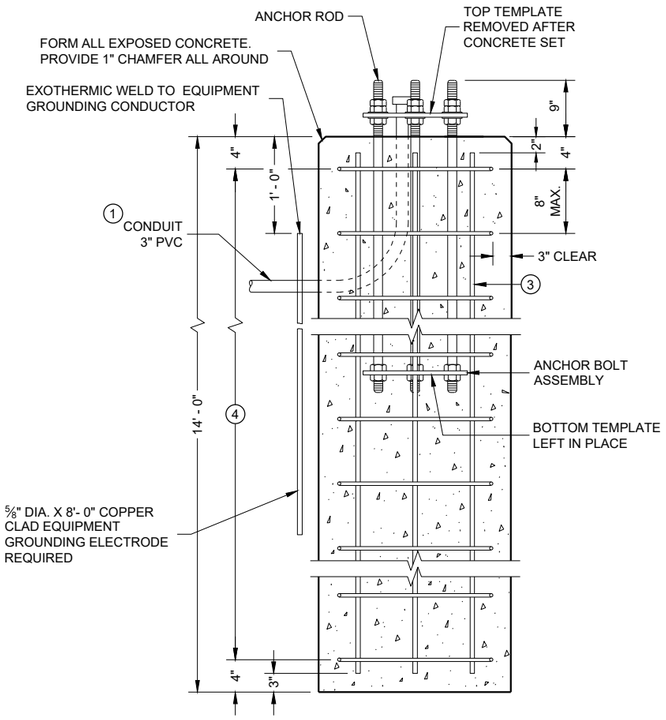
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

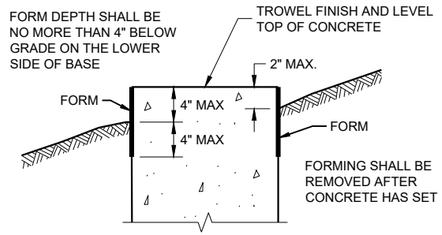
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



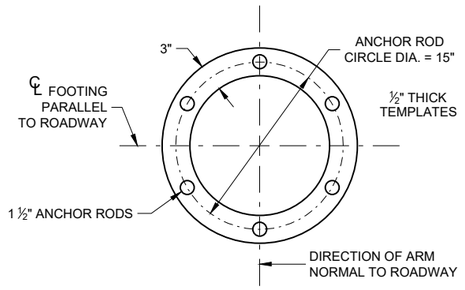


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

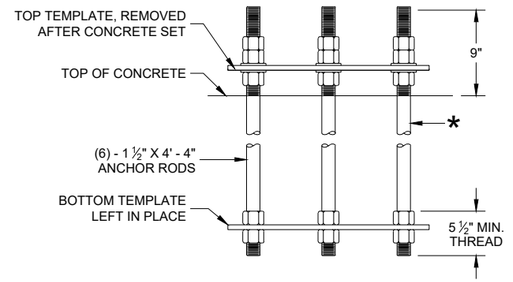
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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SDD 09C11 - 10

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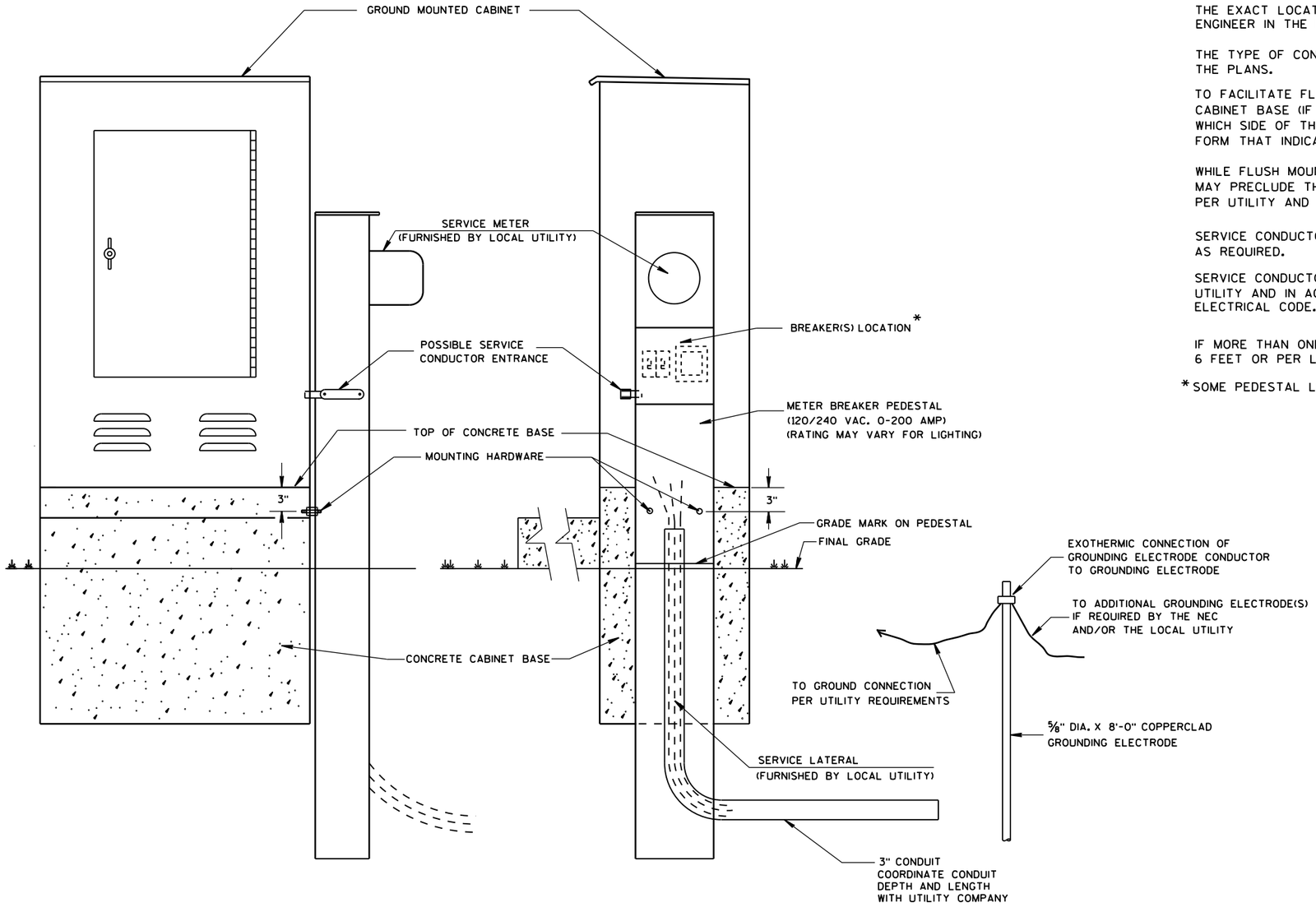
SDD 09C11 - 10



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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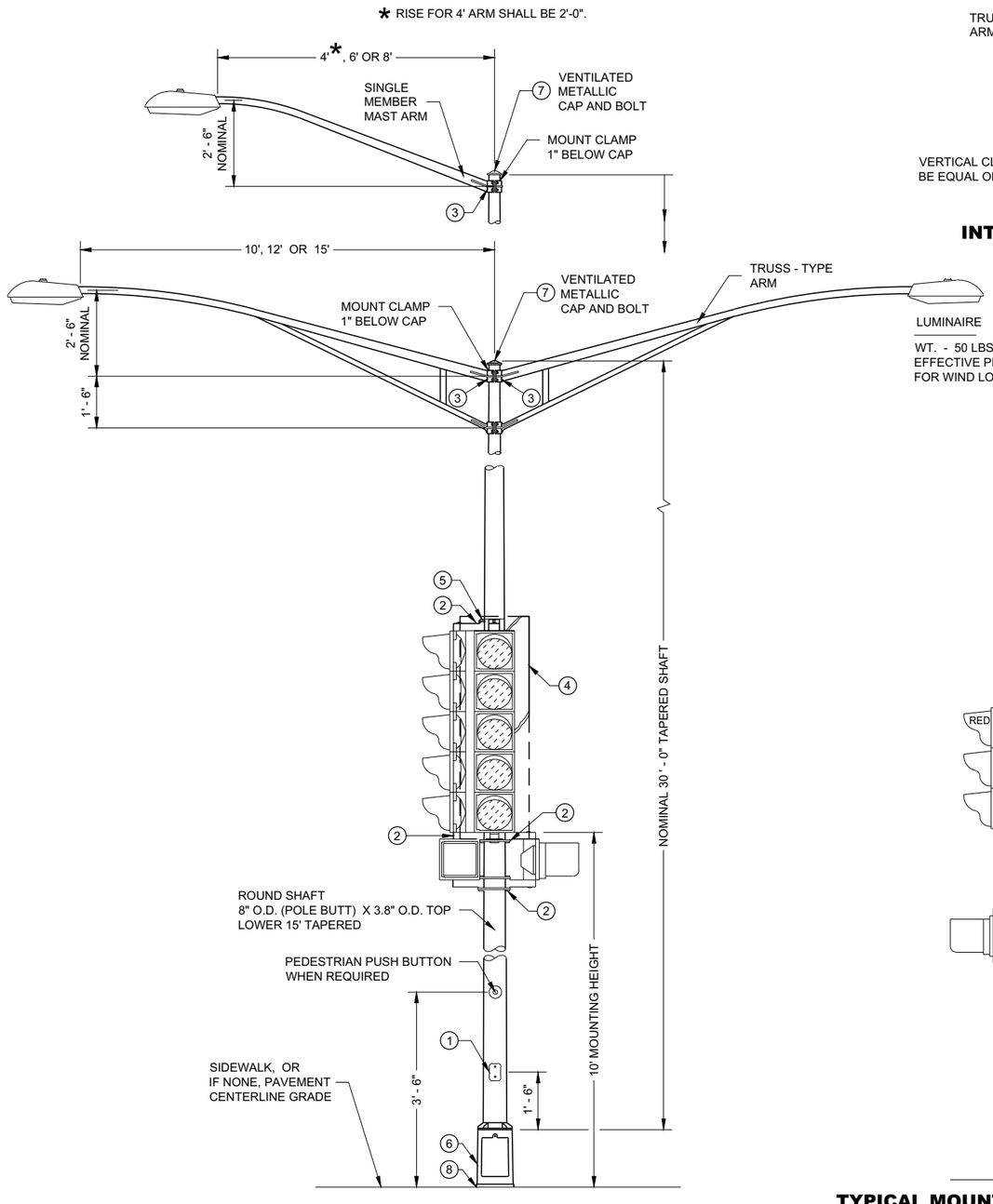
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

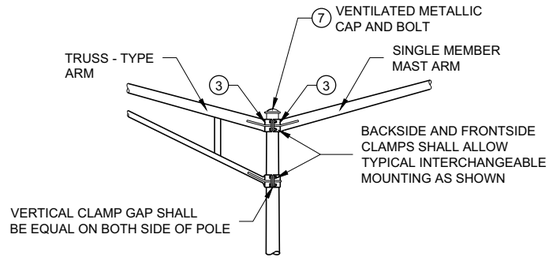
APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA



(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

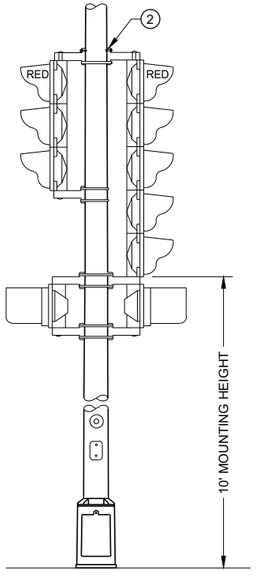
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

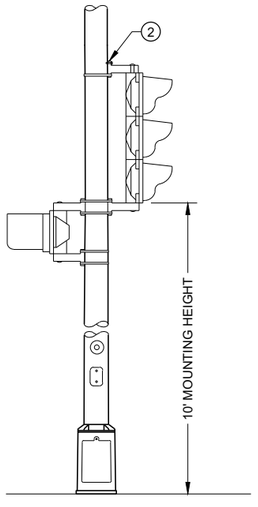
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

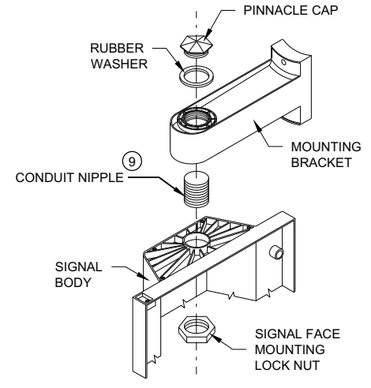
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TYPE 4 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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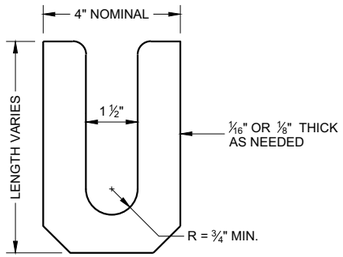
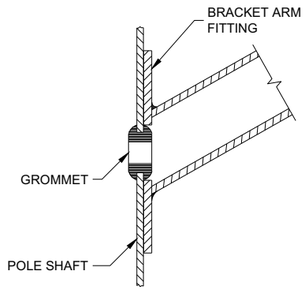
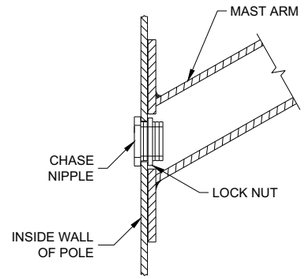


LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

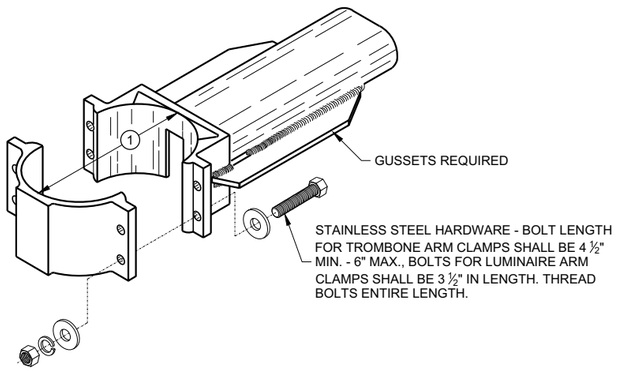
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

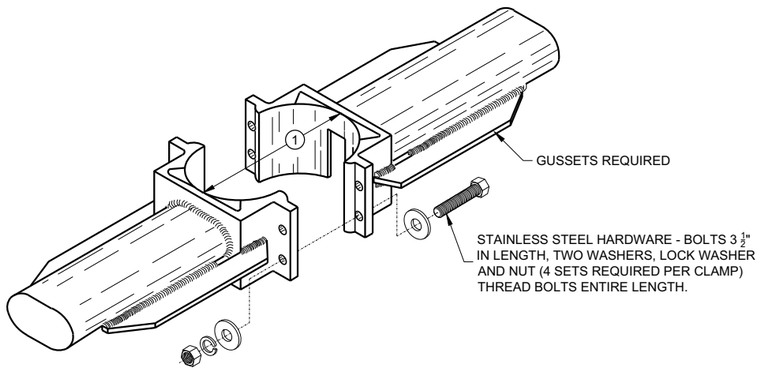
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

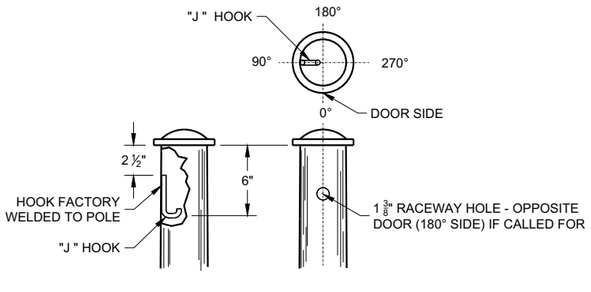
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



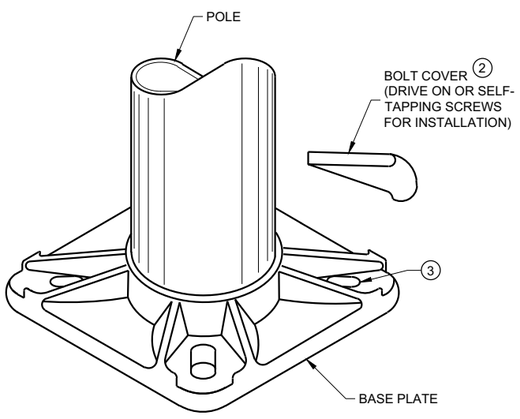
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



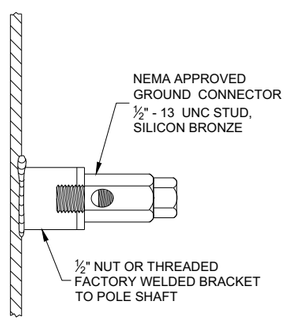
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

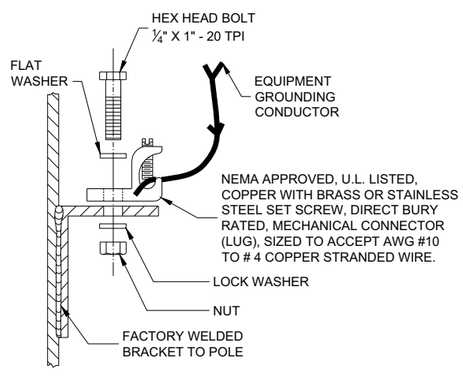


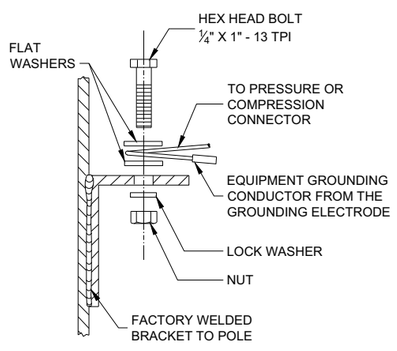
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 314

FHWA

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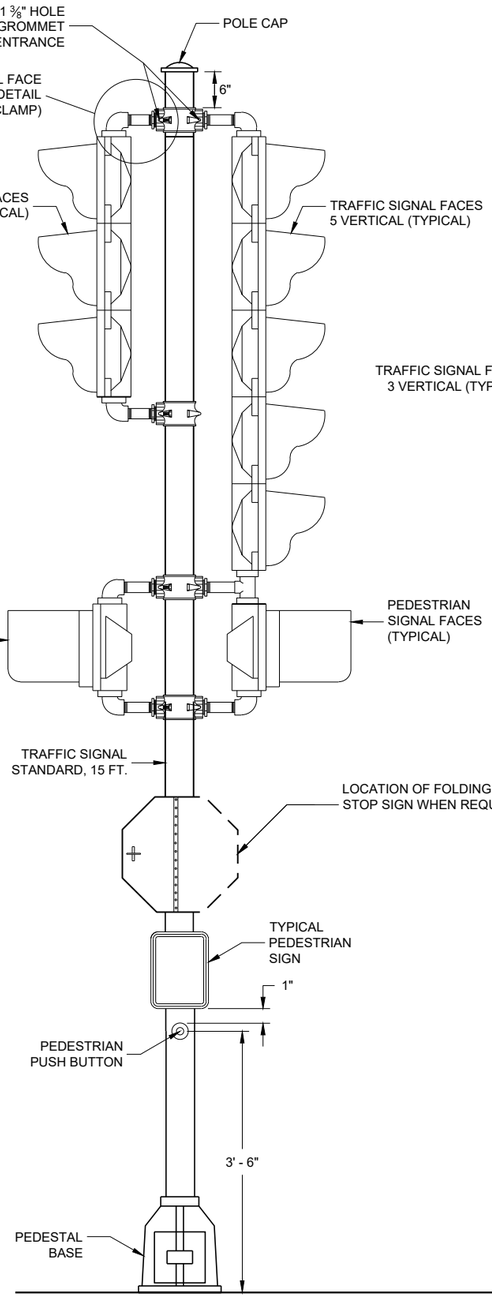
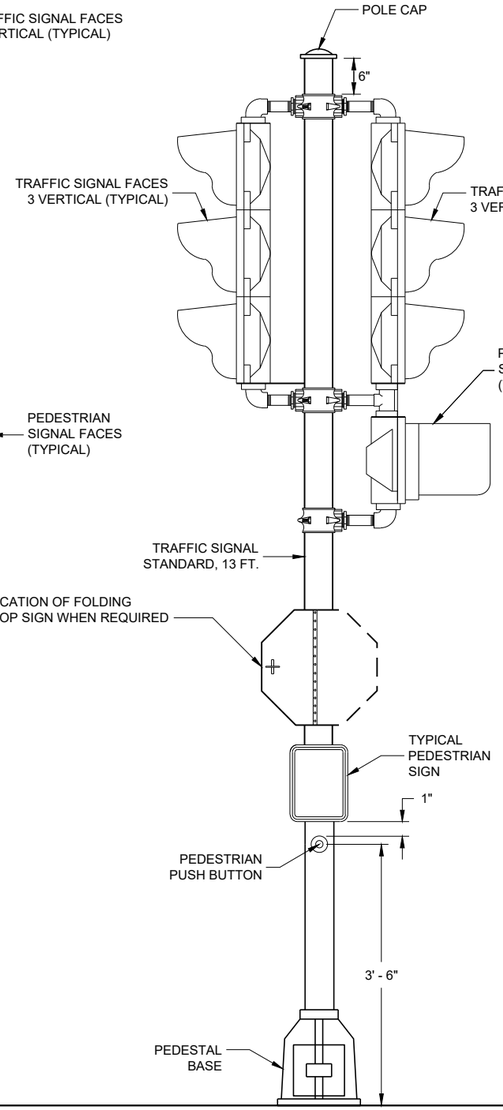
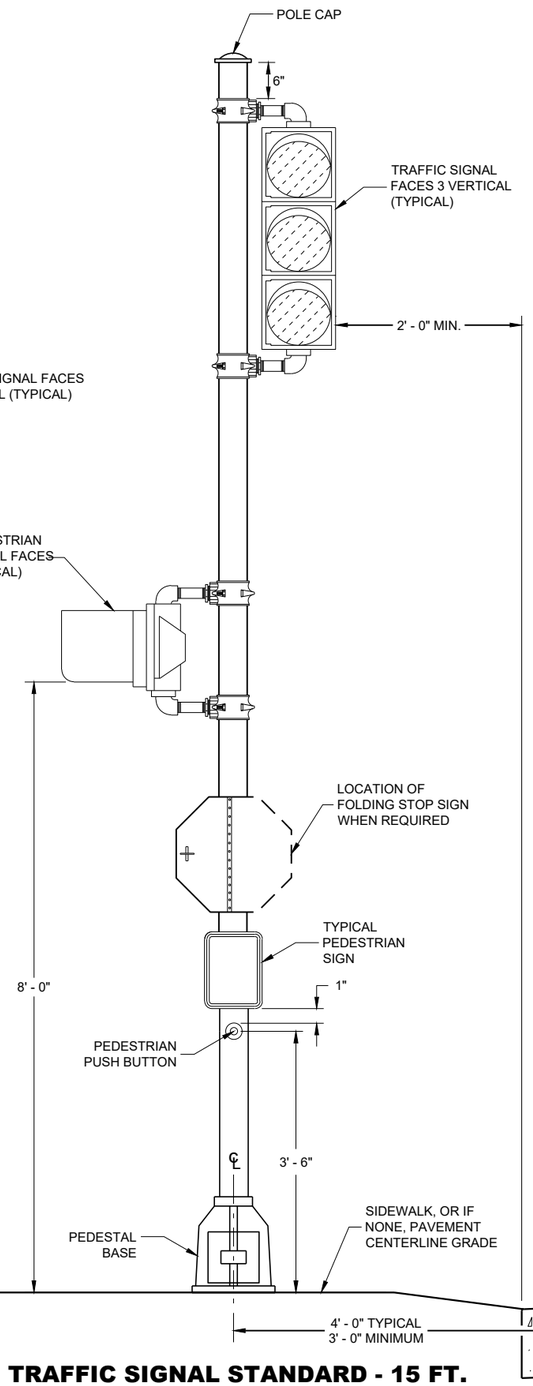
SDD 09E01 - 15g



TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL STANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

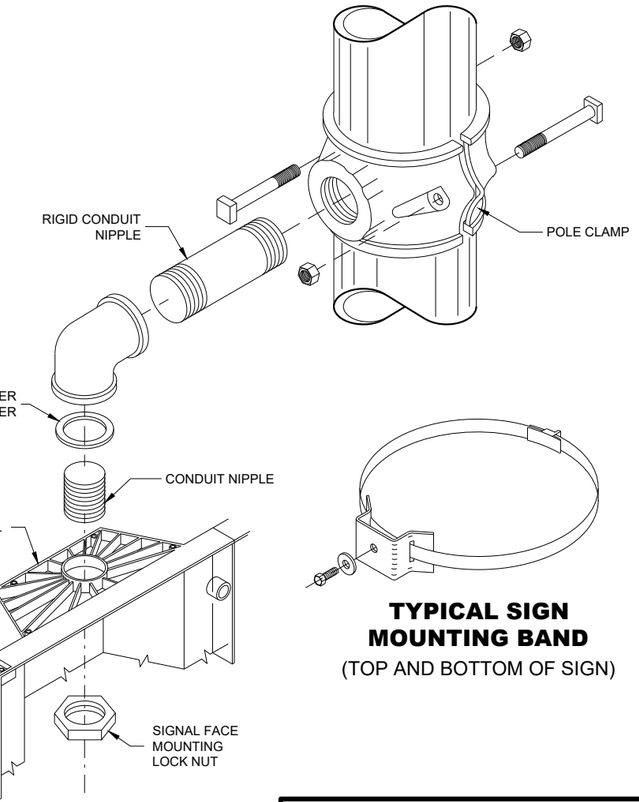
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL (ORNAMENTAL)

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)

TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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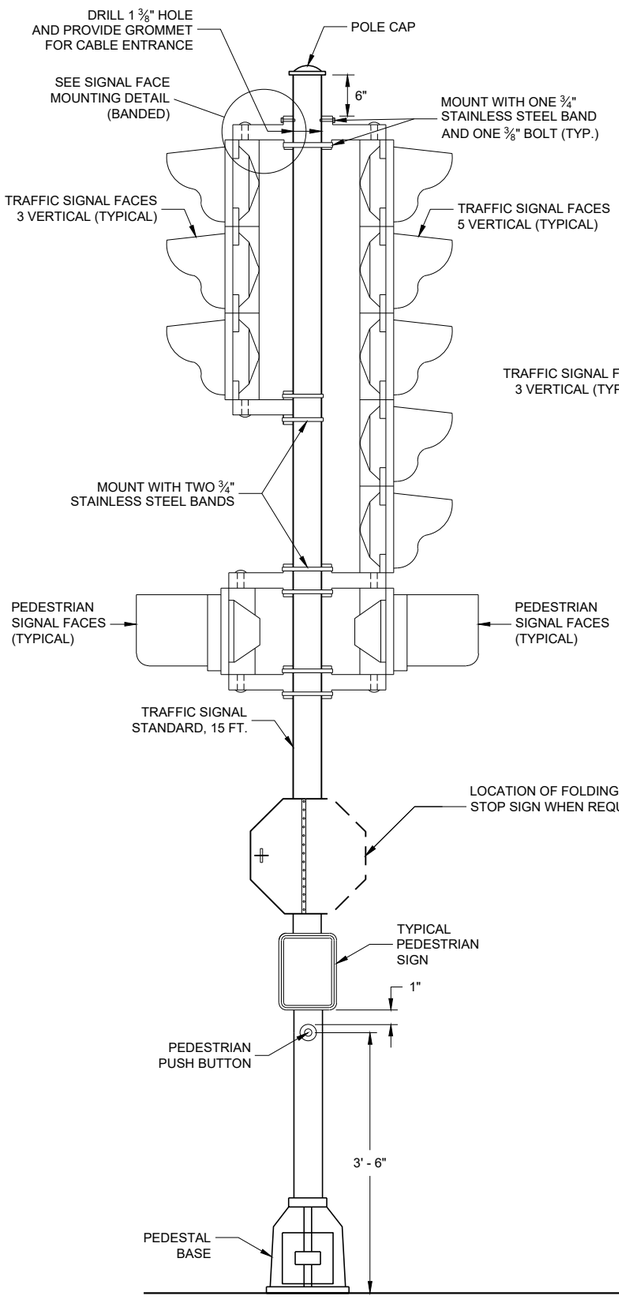
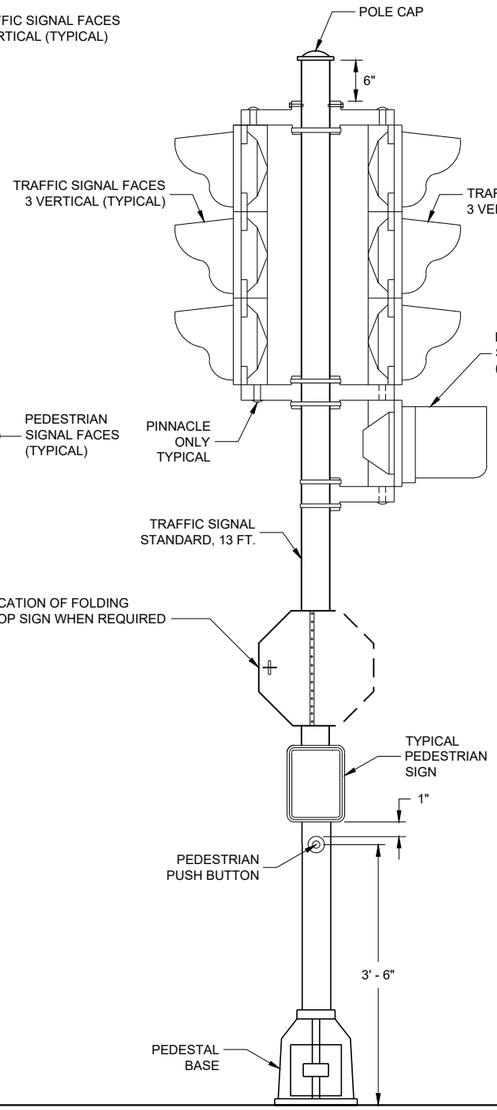
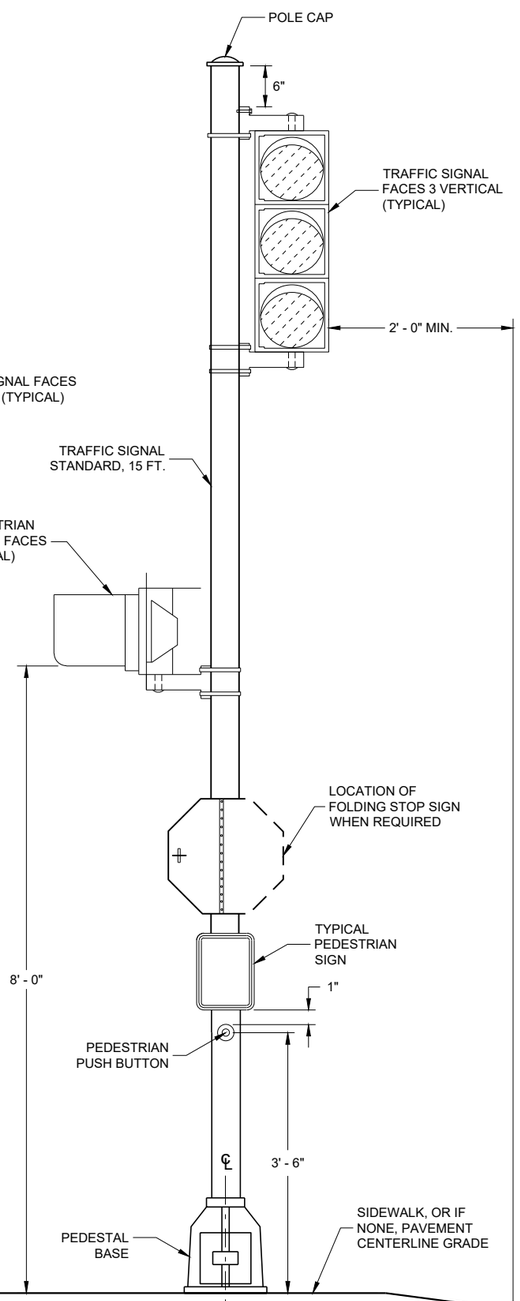


TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

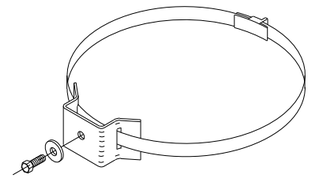
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

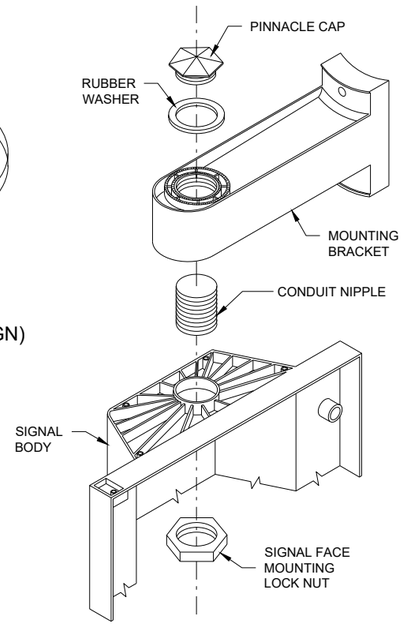
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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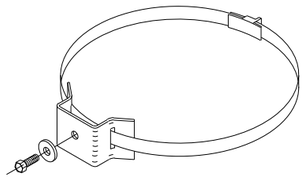
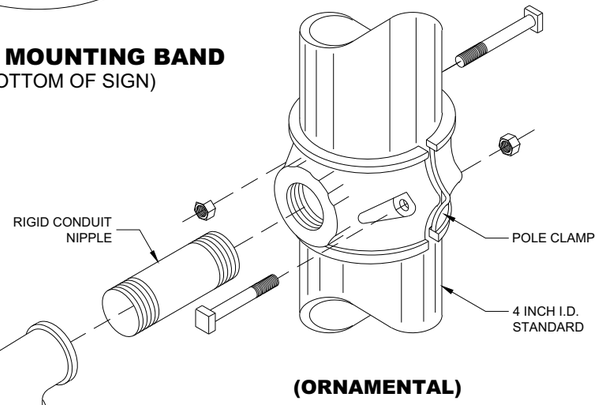
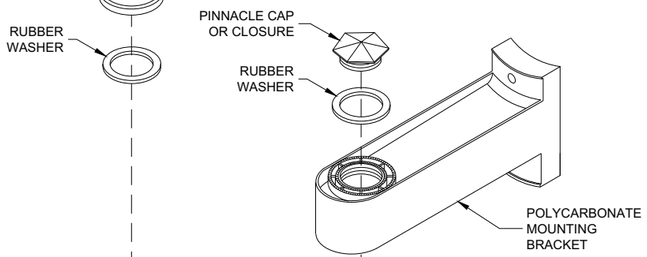


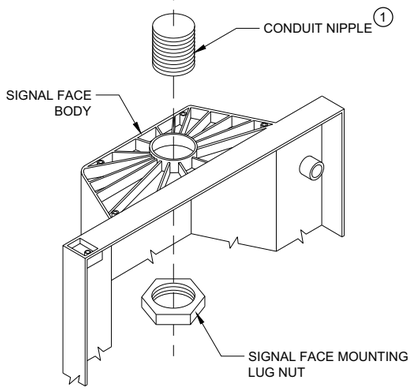
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



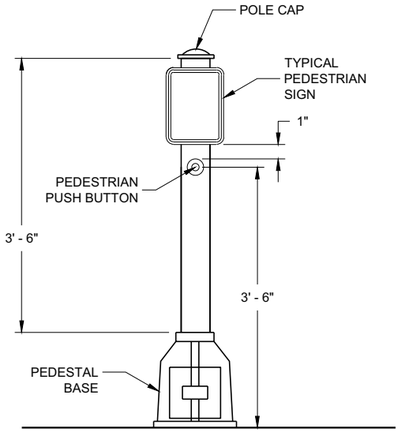
(ORNAMENTAL)



(BANDED)



SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

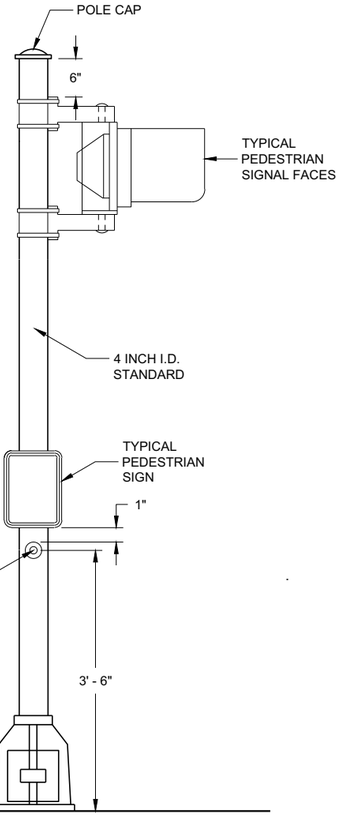
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

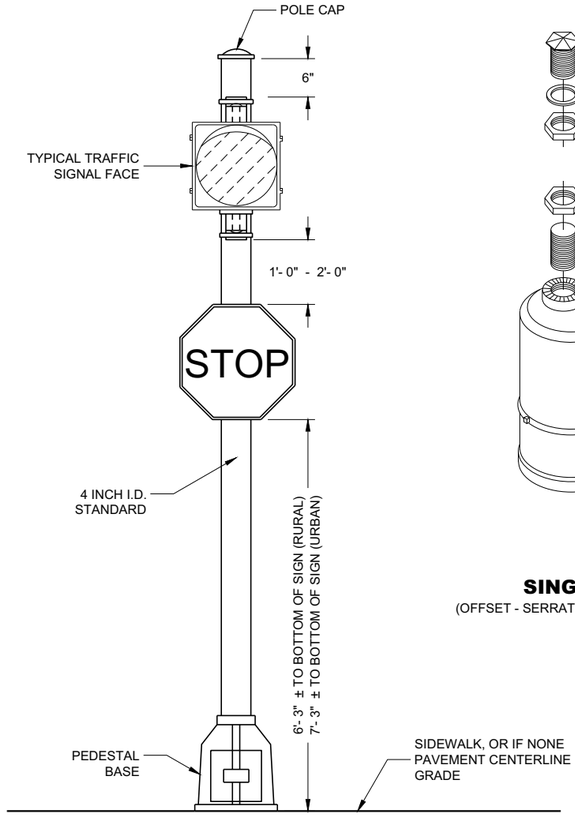
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

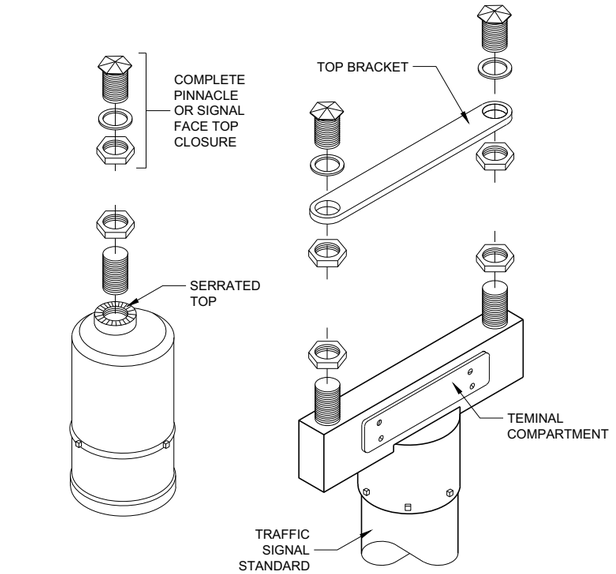
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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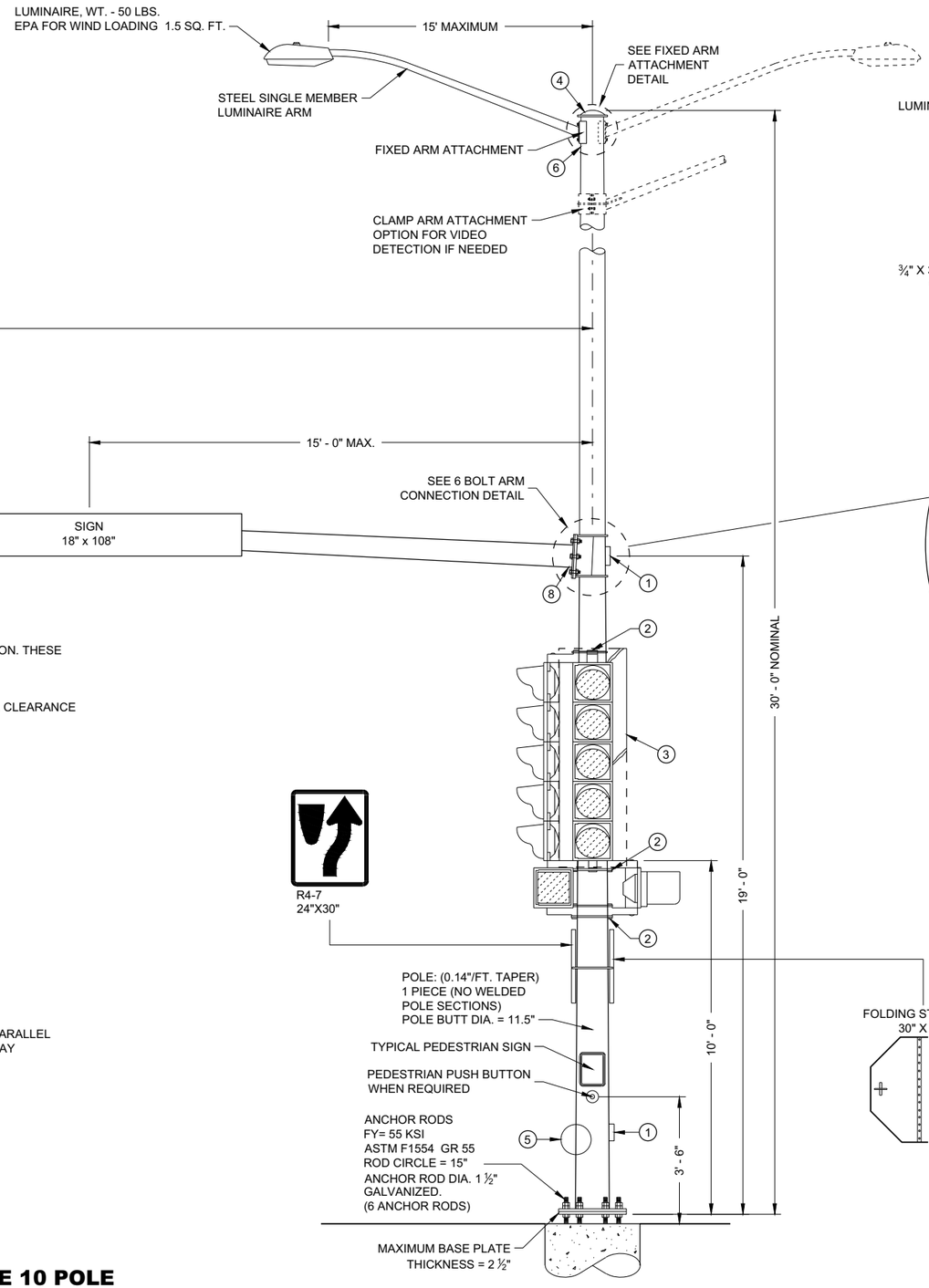
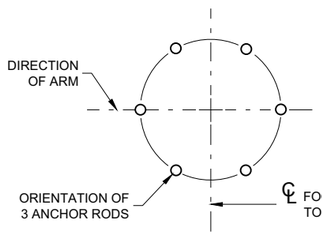
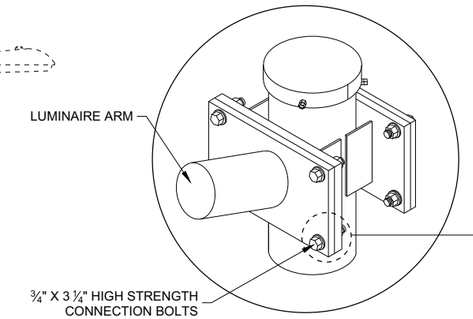


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

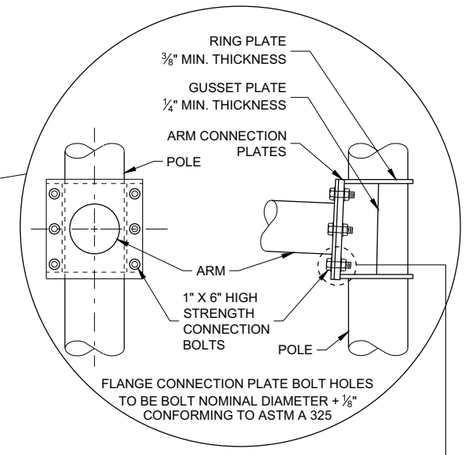
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



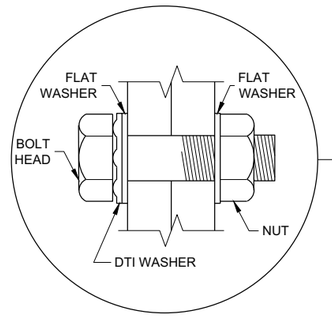
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 318

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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

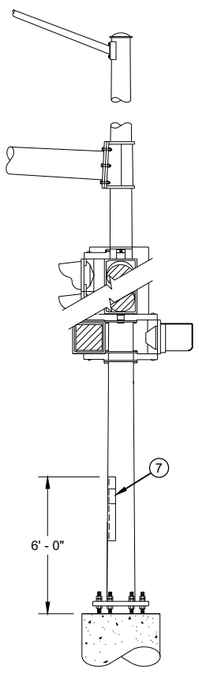
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

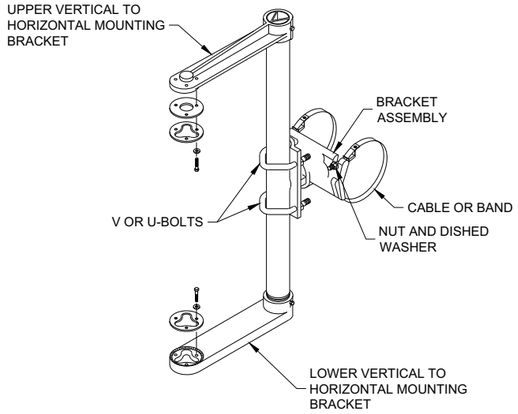
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

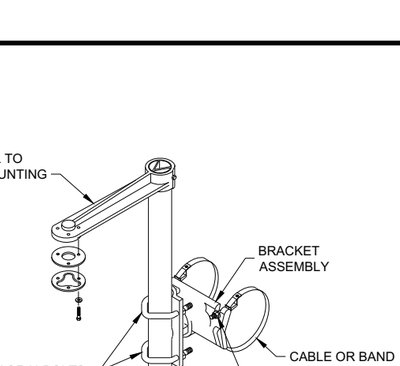


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



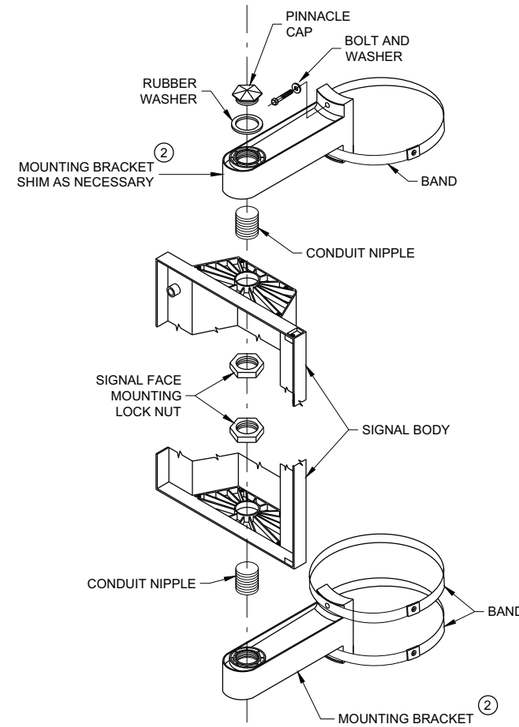
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

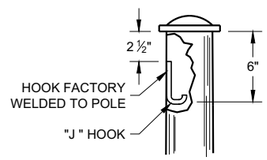


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

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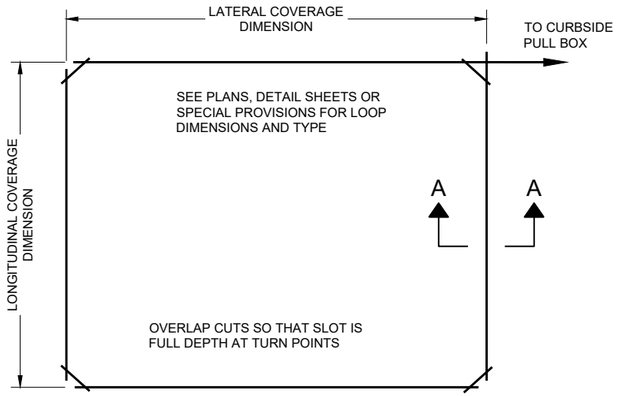
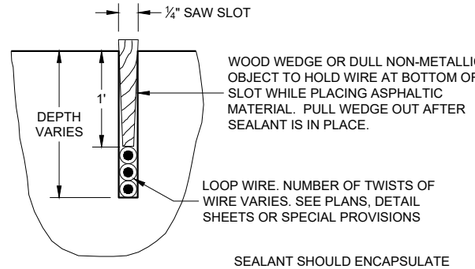
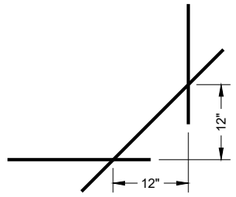


LOOP WIRE SLOT CONSTRUCTION

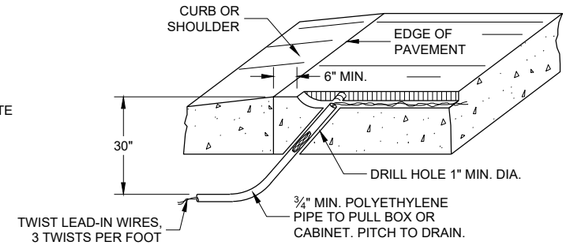


SECTION A - A

LOOP AND LEAD-IN WIRES IN PAVEMENT



EXPANDED VIEW SAW CUT CORNERS



LOOP LEAD-IN WIRES THROUGH PAVEMENT

GENERAL NOTES

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

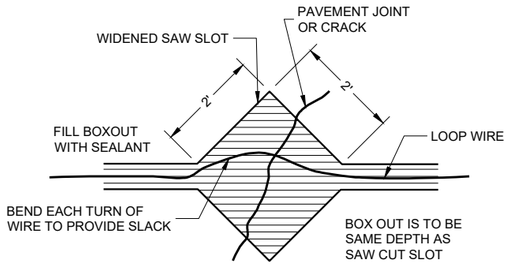
THE SLOTS IN THE PAVEMENT SHALL BE CUT TO DIMENSION WITH A SAW. THE SLOTS SHALL BE CLEANED FREE OF DIRT, DUST, MOISTURE AND DEBRIS PRIOR TO INSTALLATION OF THE WIRE.

AFTER PLACING THE WIRE IN THE SLOT, FILL THE SLOT WITH AN ASPHALTIC MATERIAL IN ACCORDANCE WITH THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D6690".

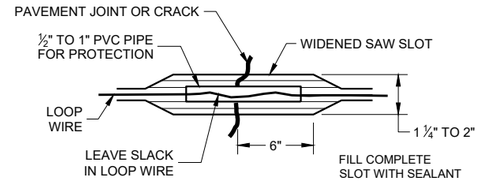
IN THE EVENT ASPHALTIC MATERIAL IS UNAVAILABLE, A FLEXIBLE TYPE EPOXY MAY BE USED AS A LOOP SLOT FILLER. THE LOOP SLOT SHALL BE CLEAN AND DRY BEFORE EPOXY IS INSTALLED. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED ONLY AFTER WRITTEN APPROVAL BY THE BY THE PROJECT ENGINEER.

THE TWO SINGLE CONDUCTOR LOOP WIRES SHALL BE TWISTED TOGETHER AT A RATE OF THREE TWISTS PER FOOT FROM THE PAVEMENT EDGE TO THE SPLICE CONNECTION WITH THE LOOP LEAD-IN CABLE.

LEAD-IN CABLES AND LOOP LEAD-IN WIRES SHALL BOTH BE CUT TO 6 FEET IN LENGTH AT THE SPLICING PULL BOX.



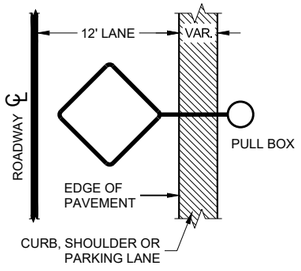
PLAN VIEW



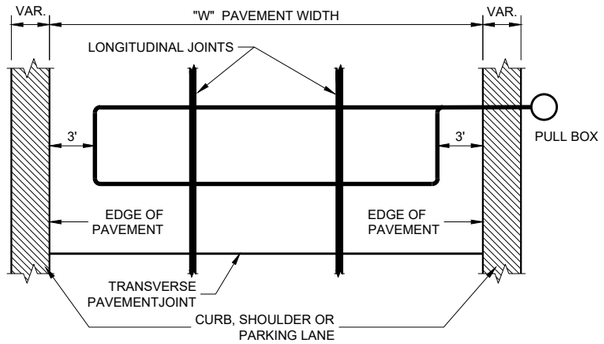
FRONT VIEW

LOOP WIRE INSTALLATION ACROSS PAVEMENT JOINT OR CRACK

CENTER LOOP IN LANE

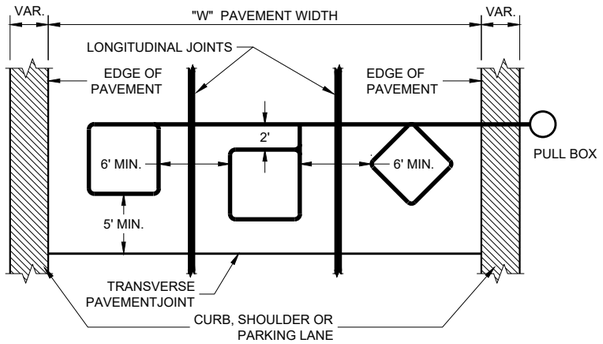


LOOP WIRE SLOT PLAN

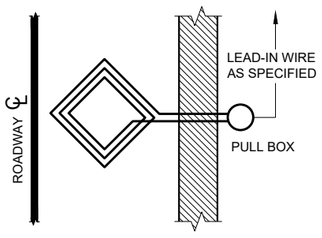


LOOP WIRE SLOT PLAN

PLACE LOOPS IN CENTER OF LANES

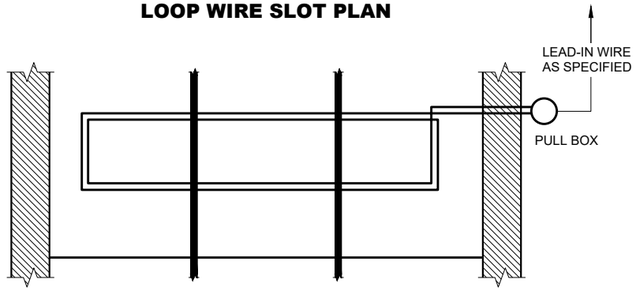


LOOP WIRE SLOT PLAN



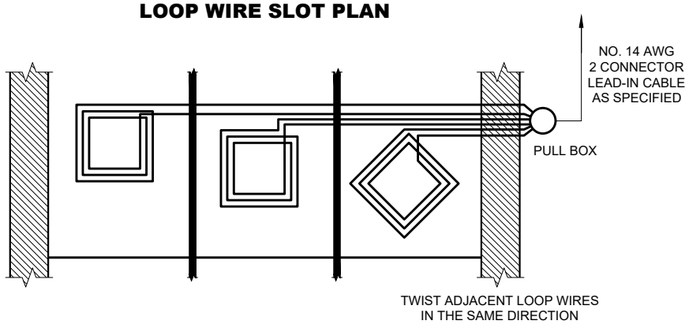
LOOP WIRE LAY CONSTRUCTION DETAILS

SINGLE LANE LOOP DETECTION



LOOP WIRE LAY CONSTRUCTION DETAILS

MULTIPLE LANE MASS LOOP DETECTION



LOOP WIRE LAY CONSTRUCTION DETAILS

MULTIPLE LANE DETECTION BY INDIVIDUAL LANES. TYPICAL STYLE LOOPS

DETAILS FOR THE INSTALLATION OF TEMPORARY TRAFFIC LOOP DETECTOR WIRES IN ANY EXISTING PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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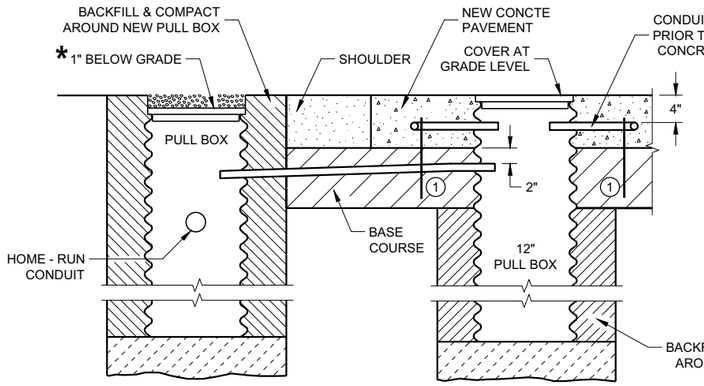
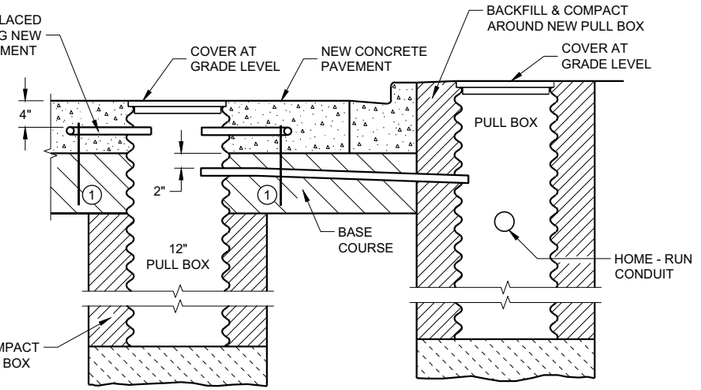


SECTION A - A
NO CURB AND GUTTER

LOOP DETECTOR INSTALLATION DETAIL



SECTION B - B
CURB AND GUTTER

LOOP DETECTOR INSTALLATION DETAIL

* RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

ANY PVC LEADOUT CONDUIT CONTAINING MORE THAN ONE TWISTED PAIR OF LOOP LEAD WIRE SHALL BE 2".

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

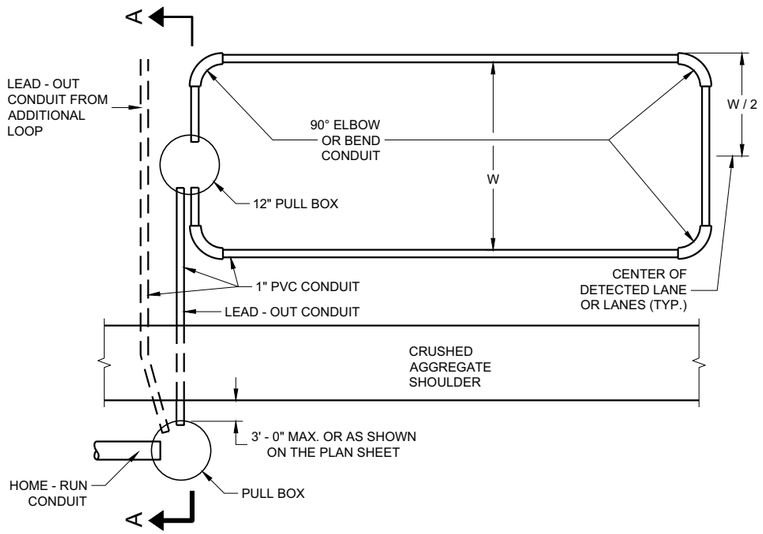
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, INTO THE PULL BOX IN THE PAVEMENT, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE NON-SPLICED CONTINUOUS LENGTH.

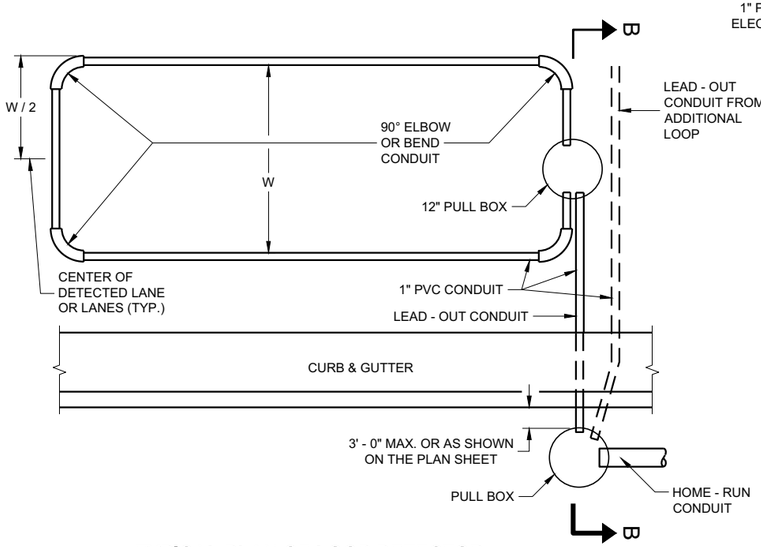
PROTECTION OF THE PULL BOX IN THE BASE COURSE, AND THE RELATED CONDUITS SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW CONCRETE PAVEMENT IS POURED.

12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.

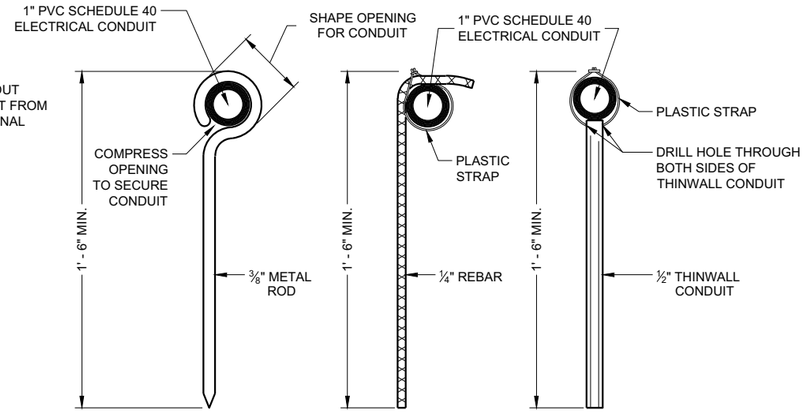
(1) HOLD DOWN PINS TO HOLD CONDUIT DURING POUR.



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX



TYPICAL DETAILS FOR HOLD DOWN PINS (1)

LOOP DETECTOR INSTALLED IN NEW CONCRETE PAVEMENT ROUND CSCP PULLBOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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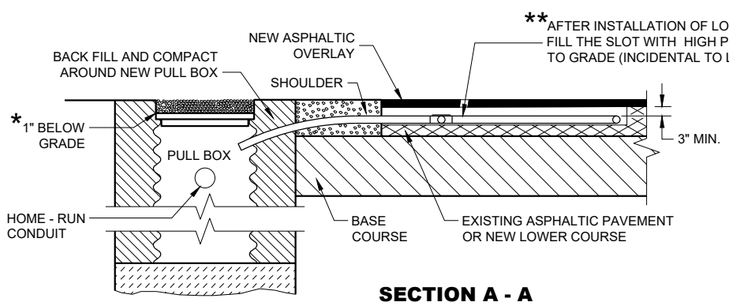
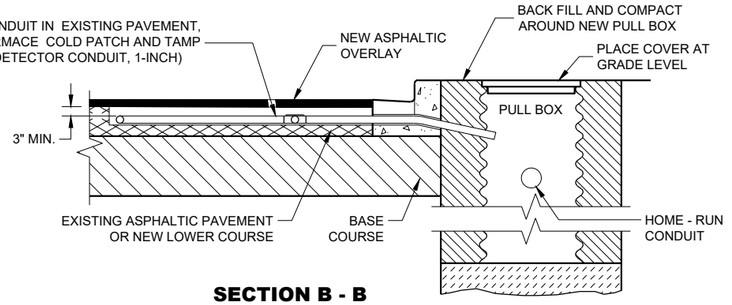


SECTION A - A
NO CURB AND GUTTER

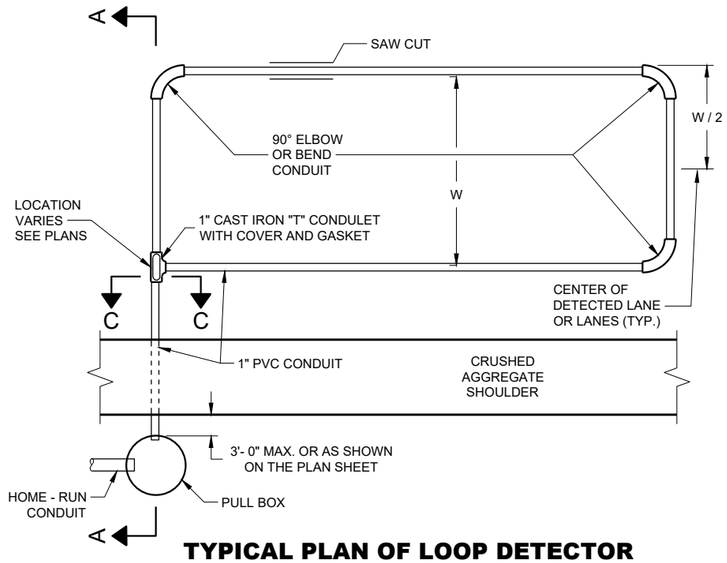
LOOP DETECTOR INSTALLATION DETAIL



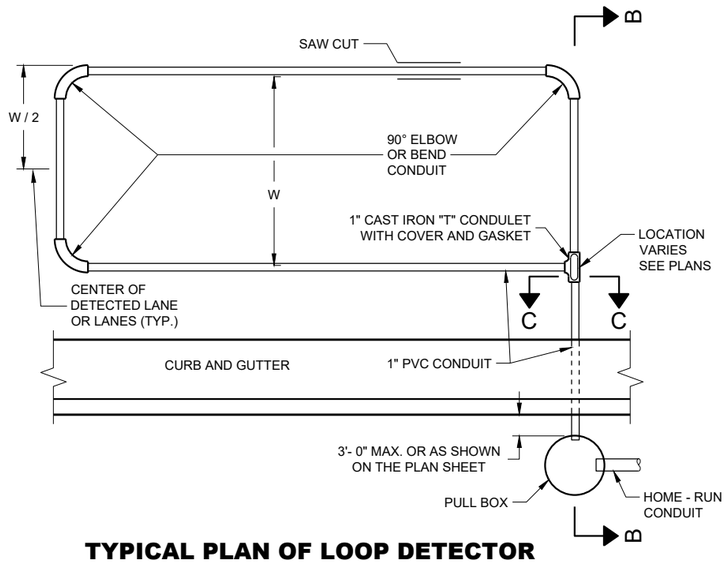
SECTION B - B
CURB AND GUTTER

LOOP DETECTOR INSTALLATION DETAIL

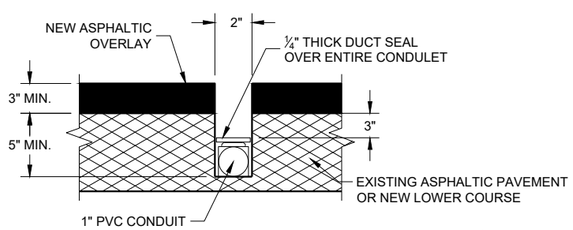
* RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR



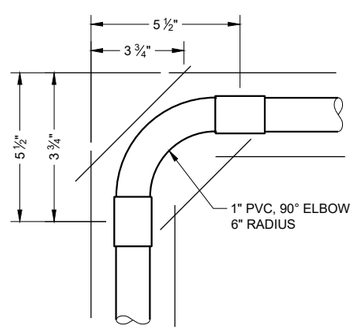
TYPICAL PLAN OF LOOP DETECTOR



SIDE VIEW
SECTION C - C

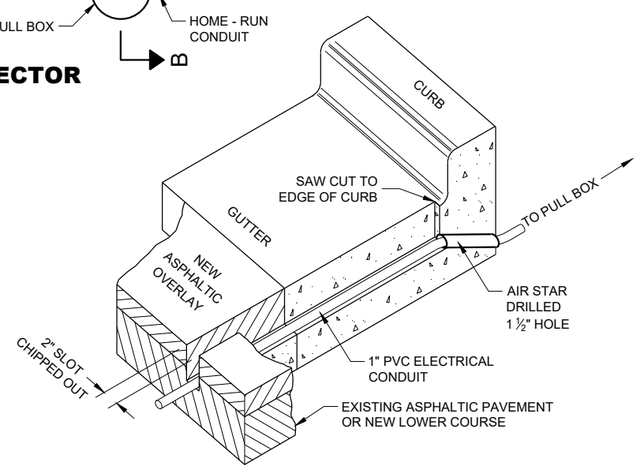
IF PAVEMENT IS LESS THAN 4 INCHES THICK, CONDUIT SHALL BE PLACED IN BASE COURSE.

LOOP DETECTOR SLOT DETAIL



TOP VIEW

CORNER SAW SLOT DETAIL



ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY ½ INCH. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.

LOOP DETECTOR INSTALLED IN EXISTING OR NEW ASPHALTIC PAVEMENT WITH NEW ASPHALTIC OVERLAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 322
FHWA

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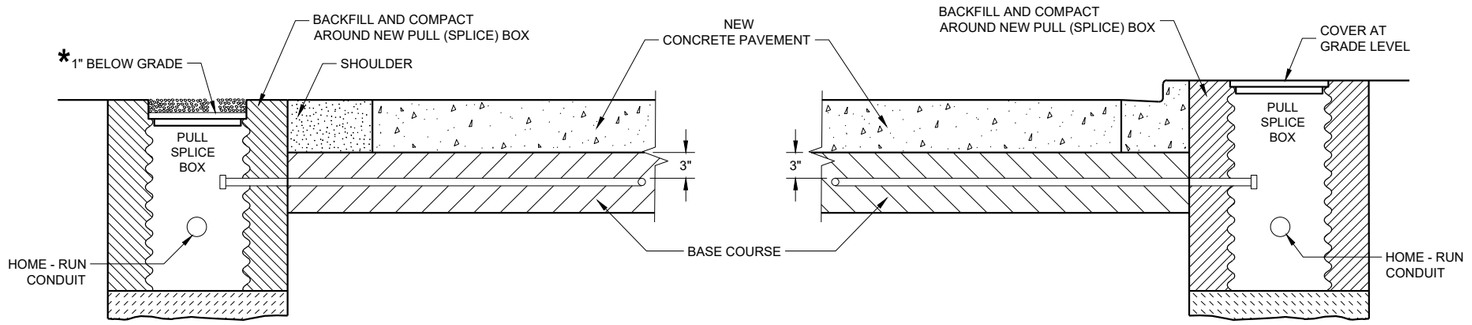
SDD 09F10 - 04



SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

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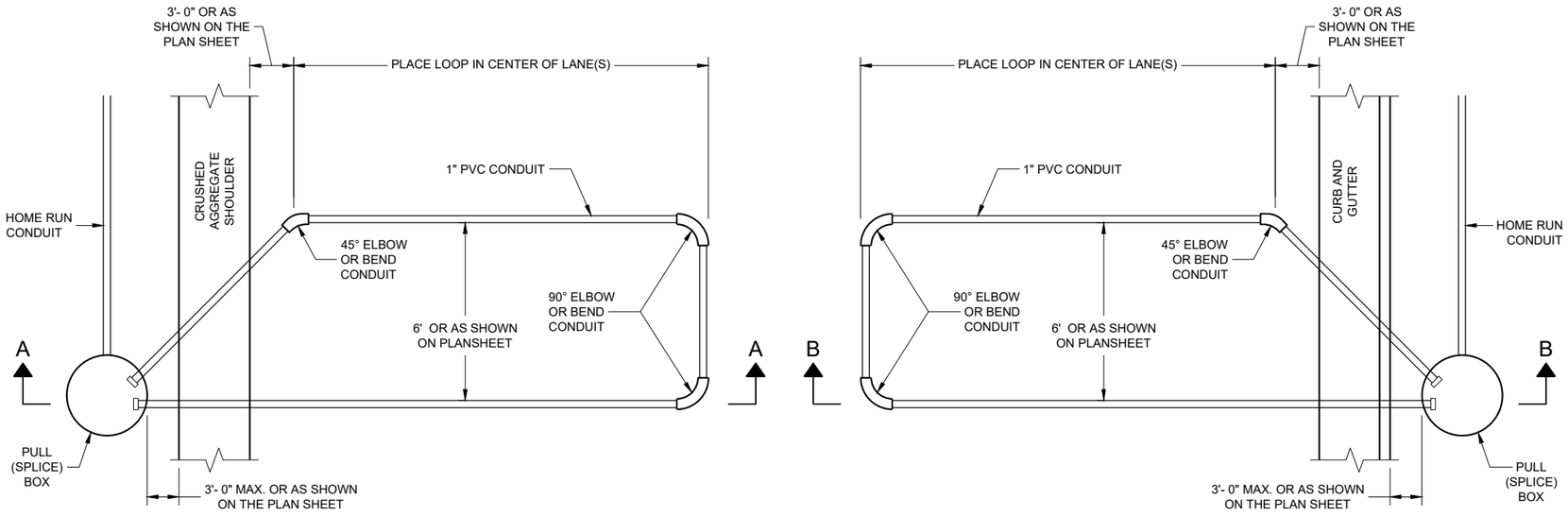
THE #12 AWG LOOP WIRE IN THE ROADSIDE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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SDD 09F15 - 04a

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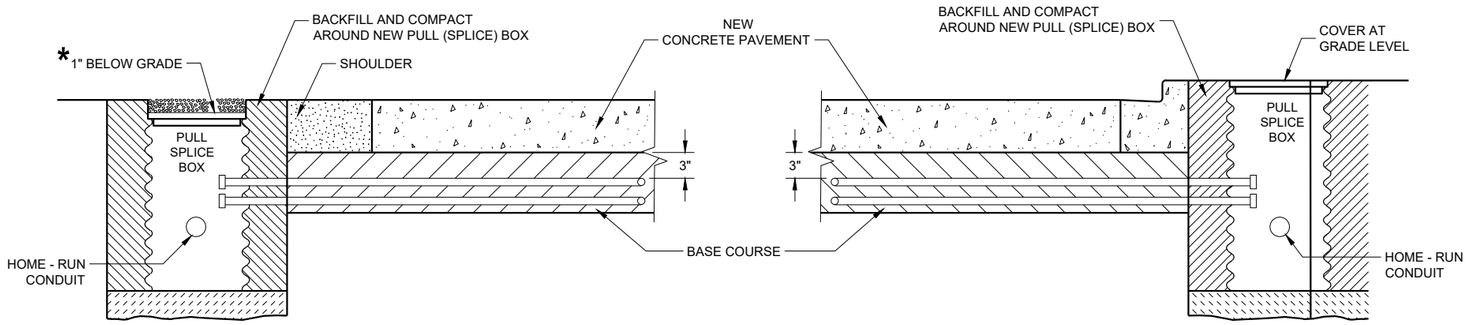

SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

* RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

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LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

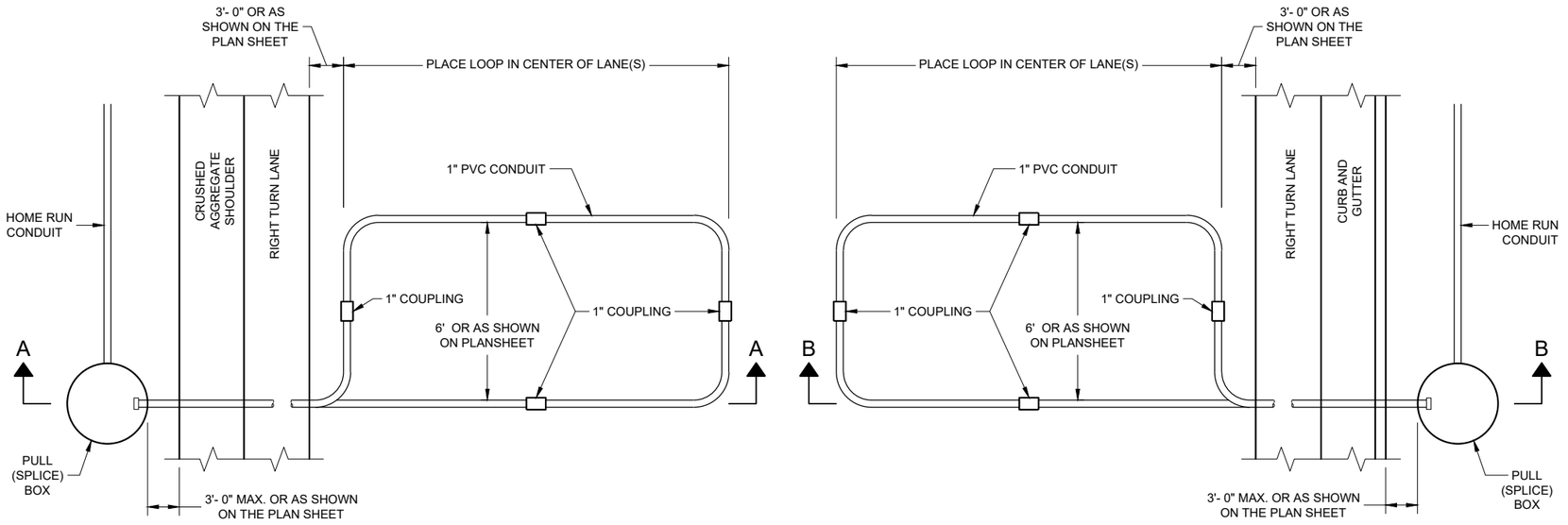
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

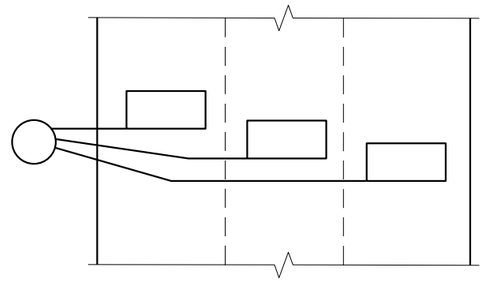
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR
WITH 24" PULL (SPLICE) BOX



MULTI-LANE
INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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SDD 09F15 - 04b

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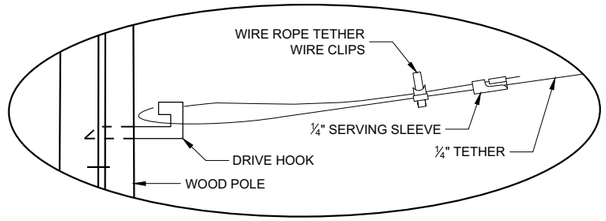
MINIMUM POLE LENGTHS	POLE BURIAL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

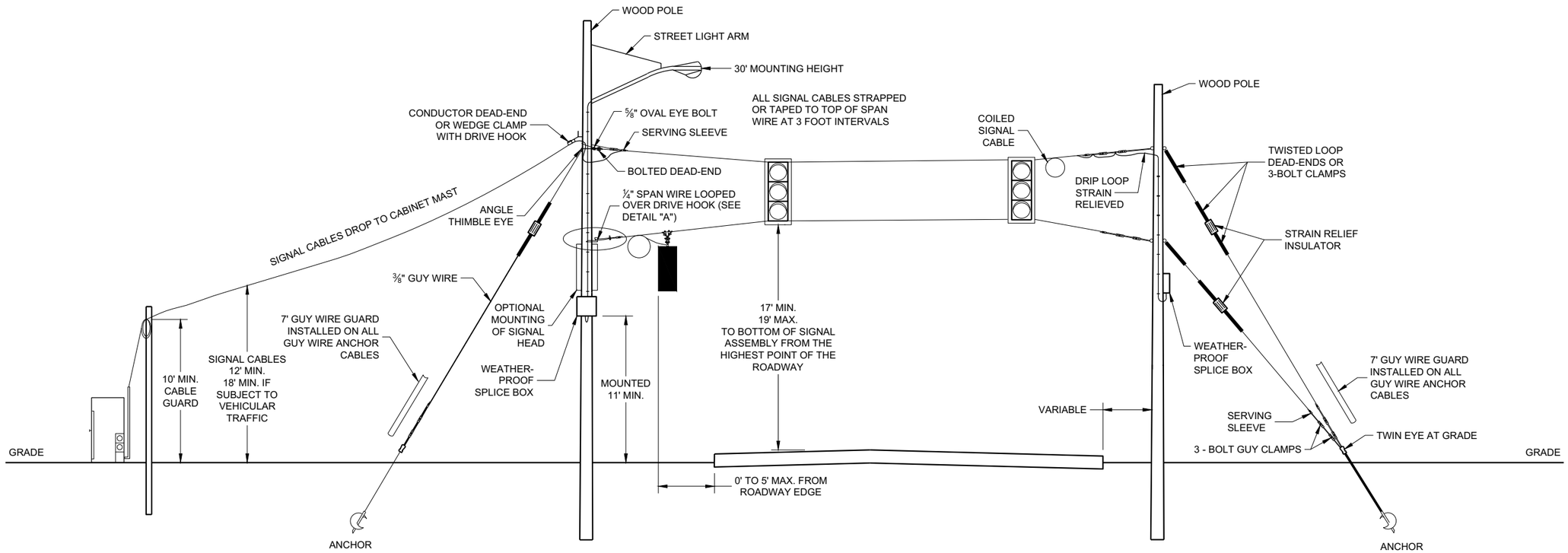


DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — STATE ELECTRICAL ENGI
325

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SDD09G01 - 04a

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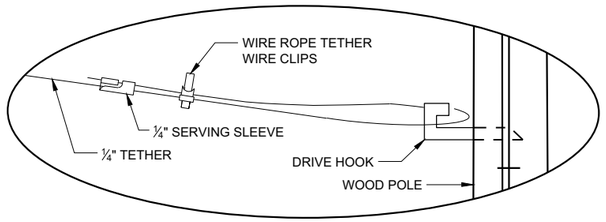
MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



DETAIL "A"

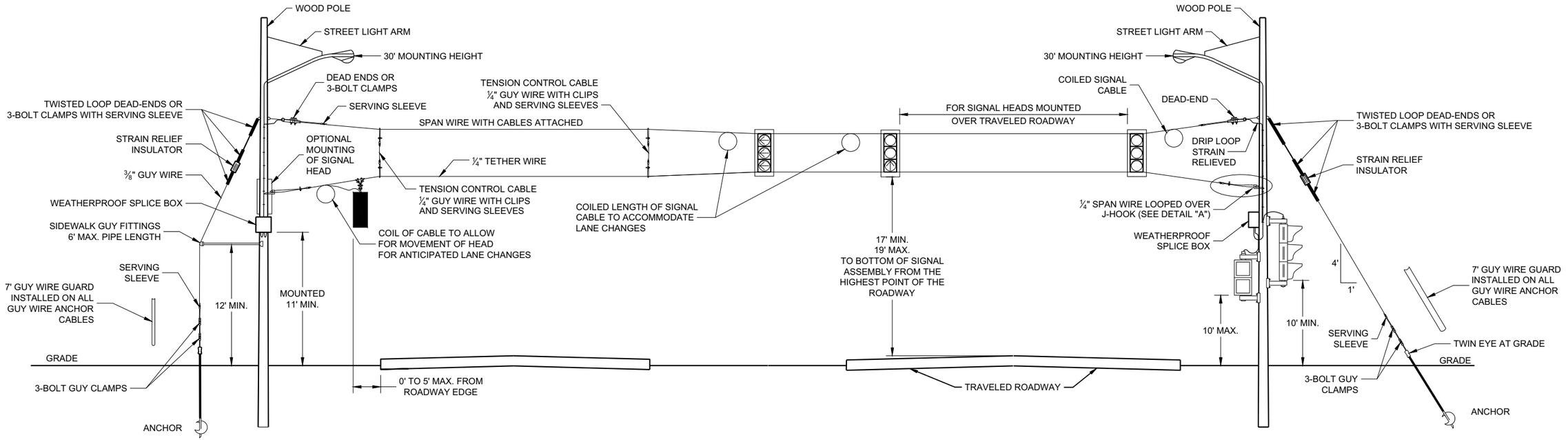
GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   - A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   - B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   - C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   - D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   - E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   - A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   - B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   - C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

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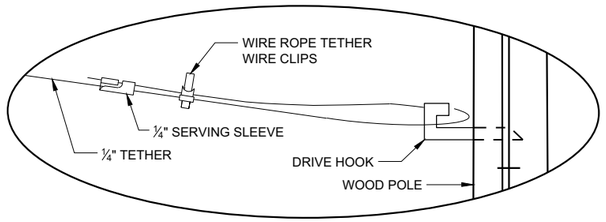
MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



DETAIL "A"

GENERAL NOTES

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

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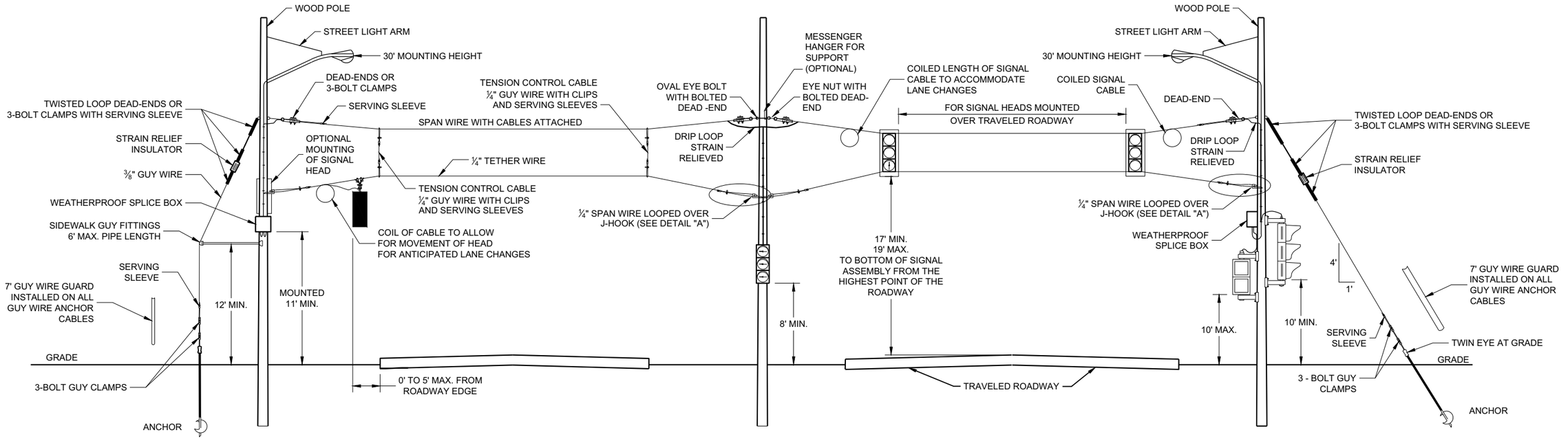

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

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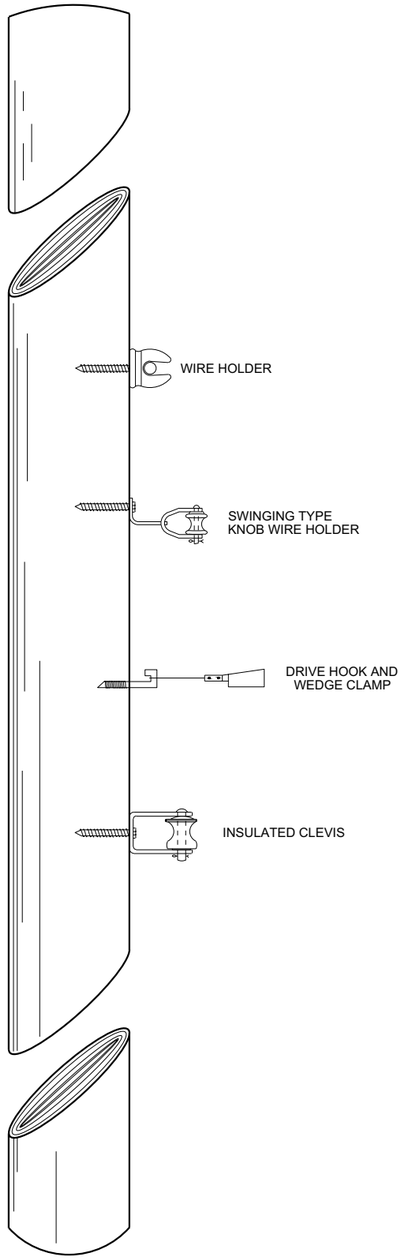

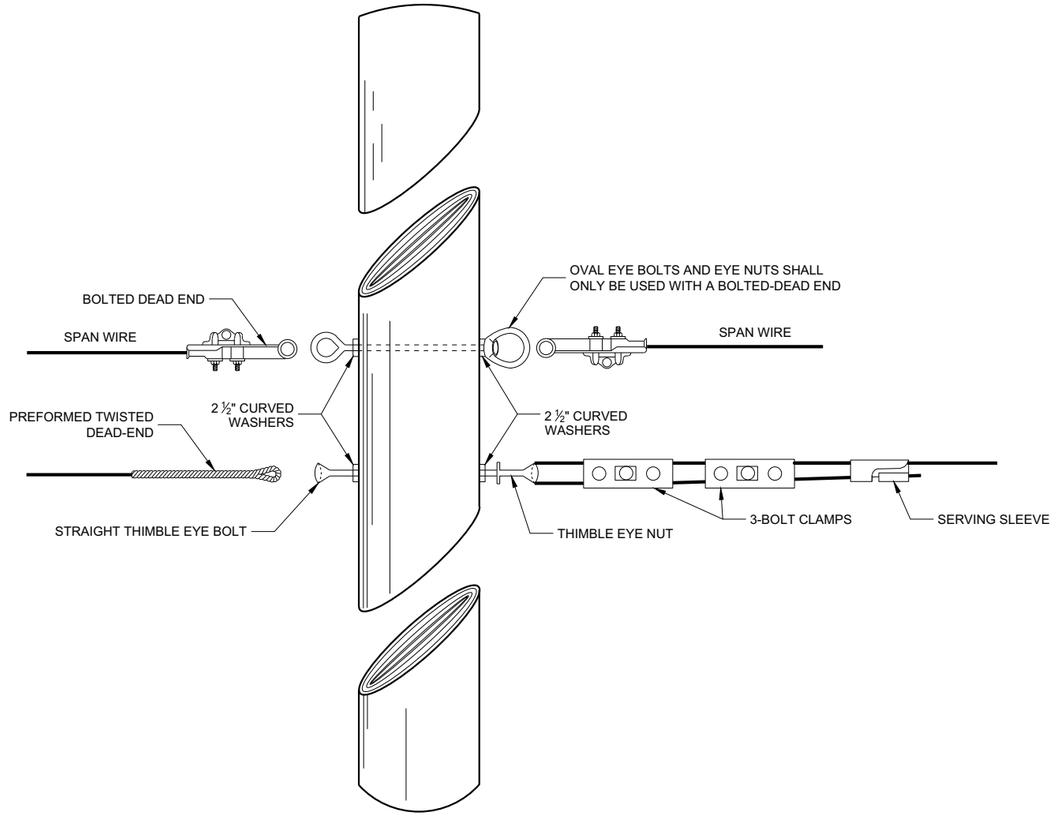

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SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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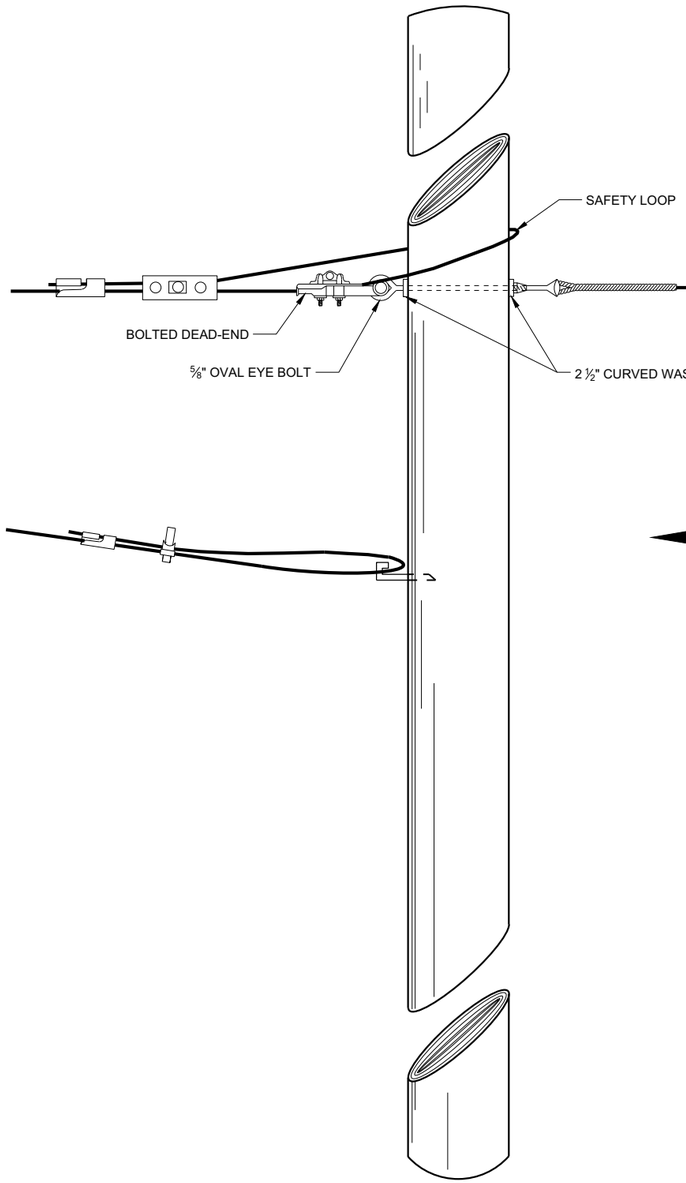
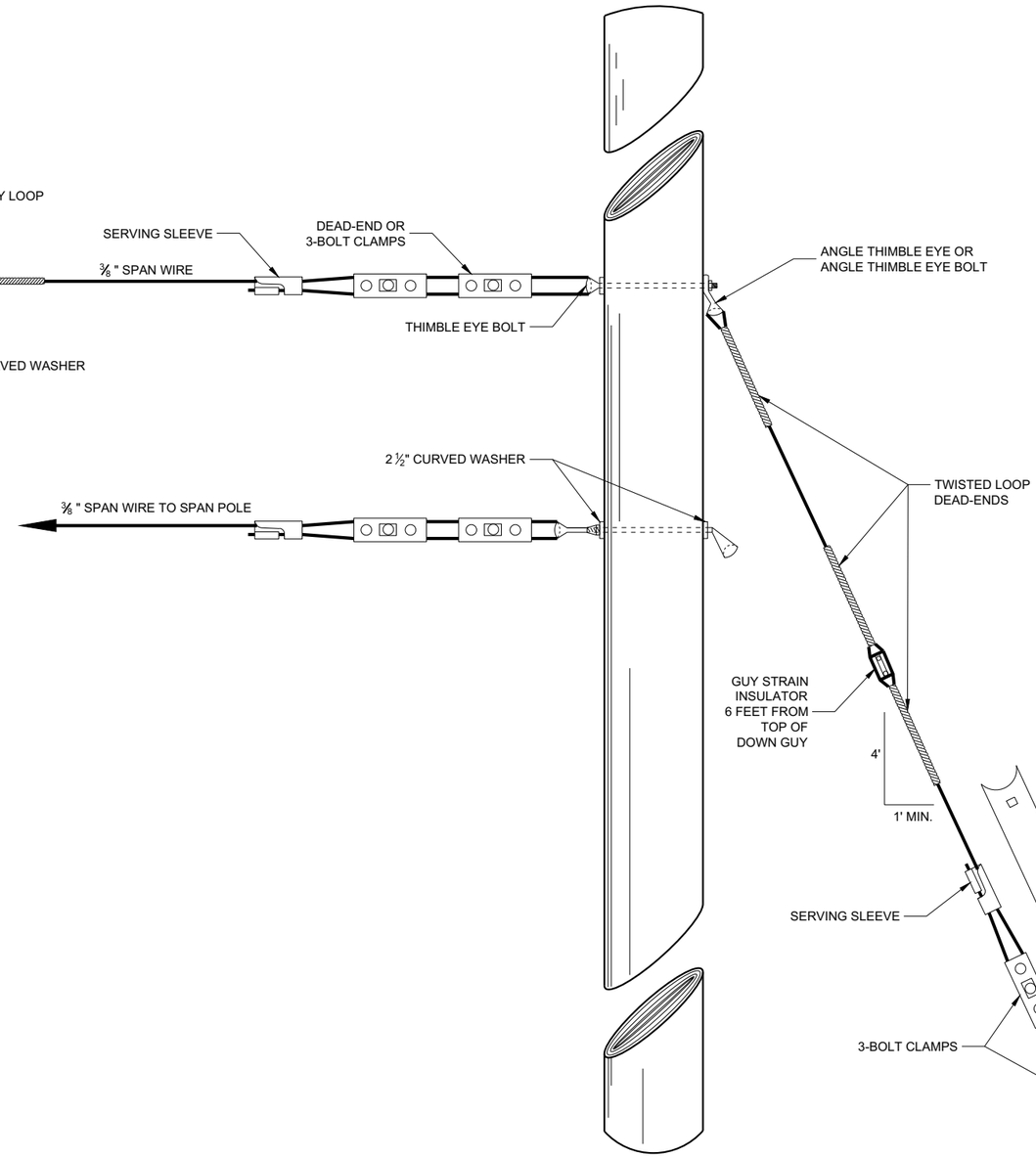
GENERAL NOTES

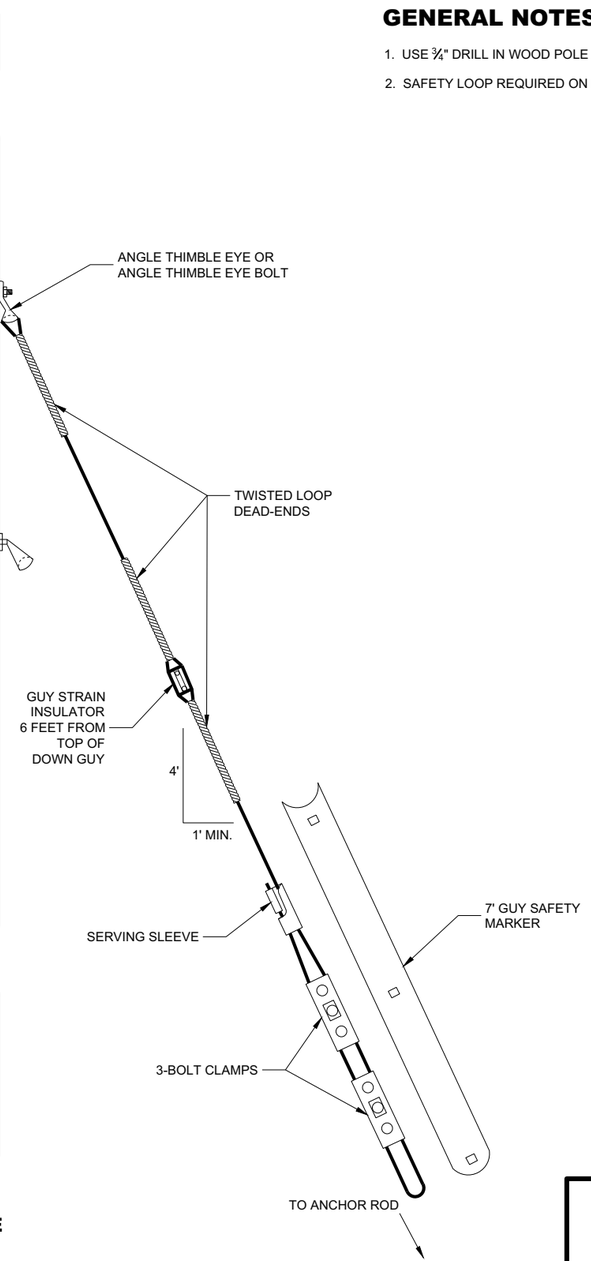
1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE



TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER
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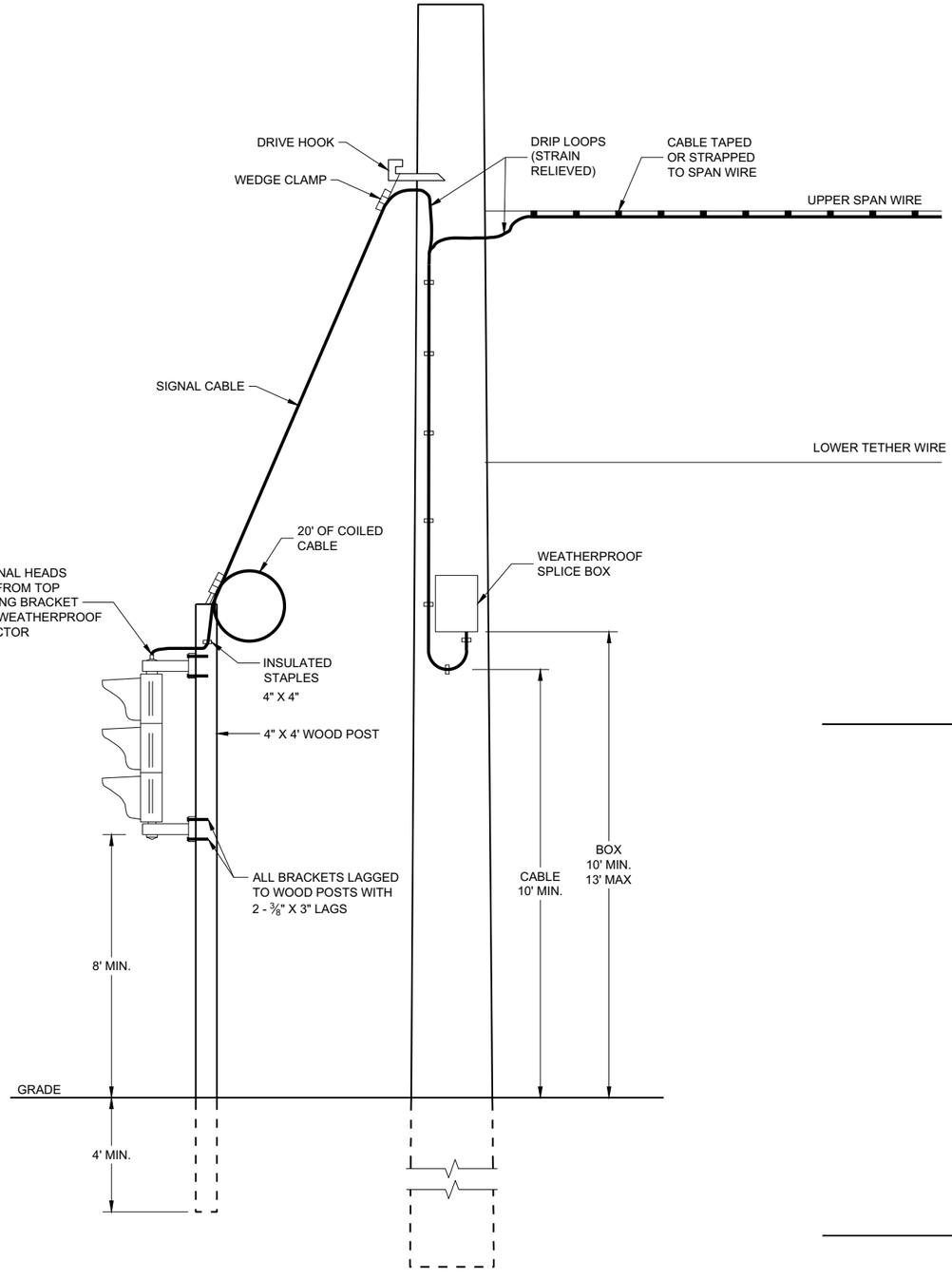
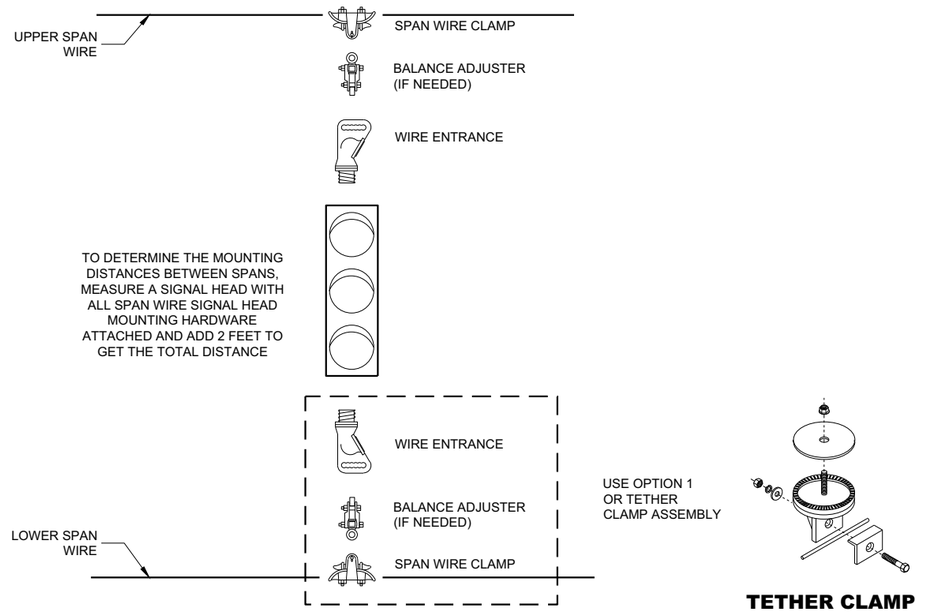


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL

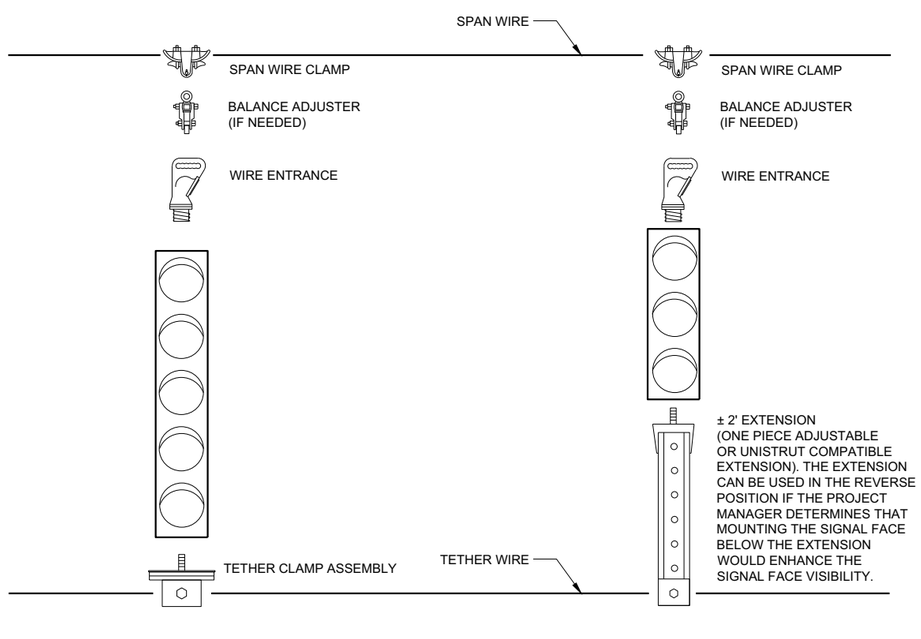


OPTION 1

USE OPTION 1 OR TETHER CLAMP ASSEMBLY

TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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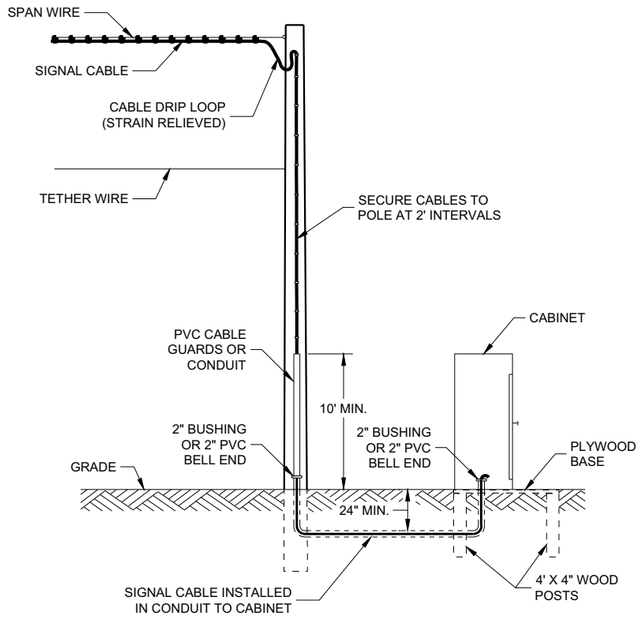
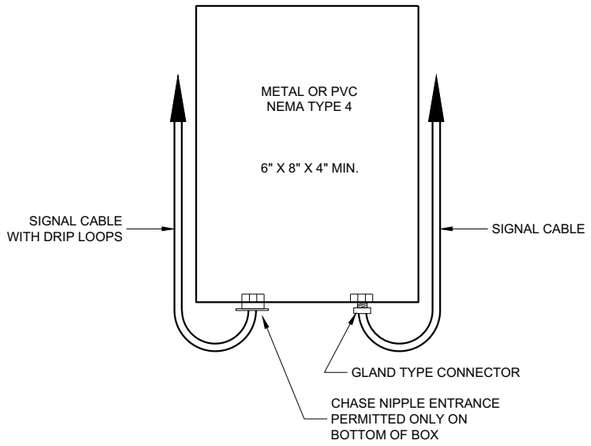
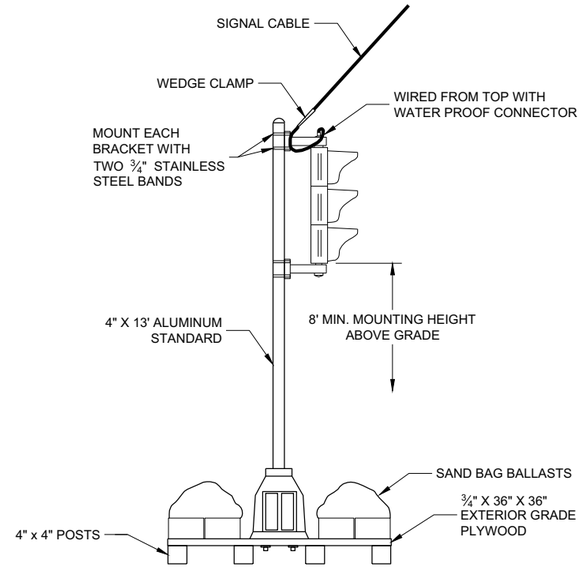
SDD 09G01 - 4f

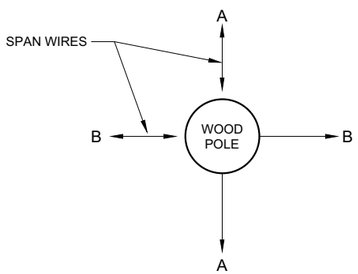




SPLICE BOX

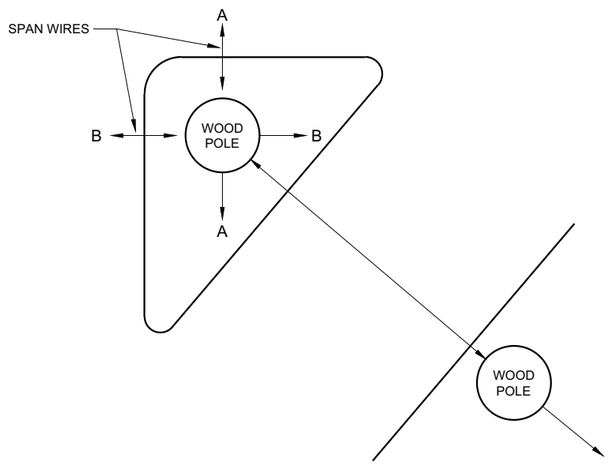


TYPICAL SKID TYPE TEMPORARY

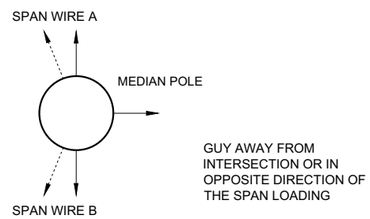


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF
THE SPAN LOADING

MEDIAN POLES

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 09G01 - 4g

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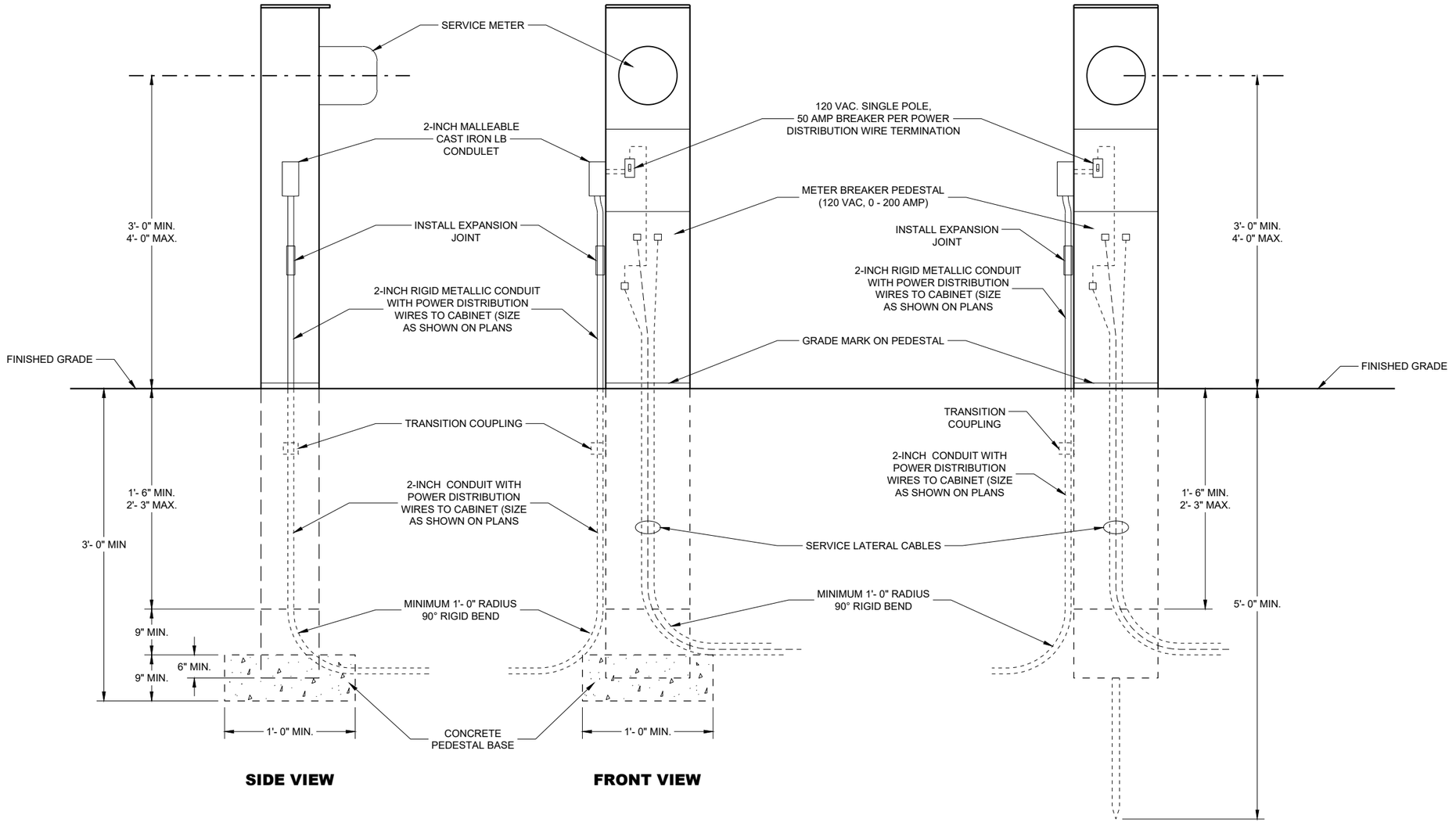

2 CIRCUIT METER BREAKER PEDESTAL

ALTERNATE SUPPORTING STAKE
(IF APPROVED BY UTILITY)

2 CIRCUIT METER BREAKER PEDESTAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 332
FHWA

SDD 09H03 - 01

SDD 09H03 - 01

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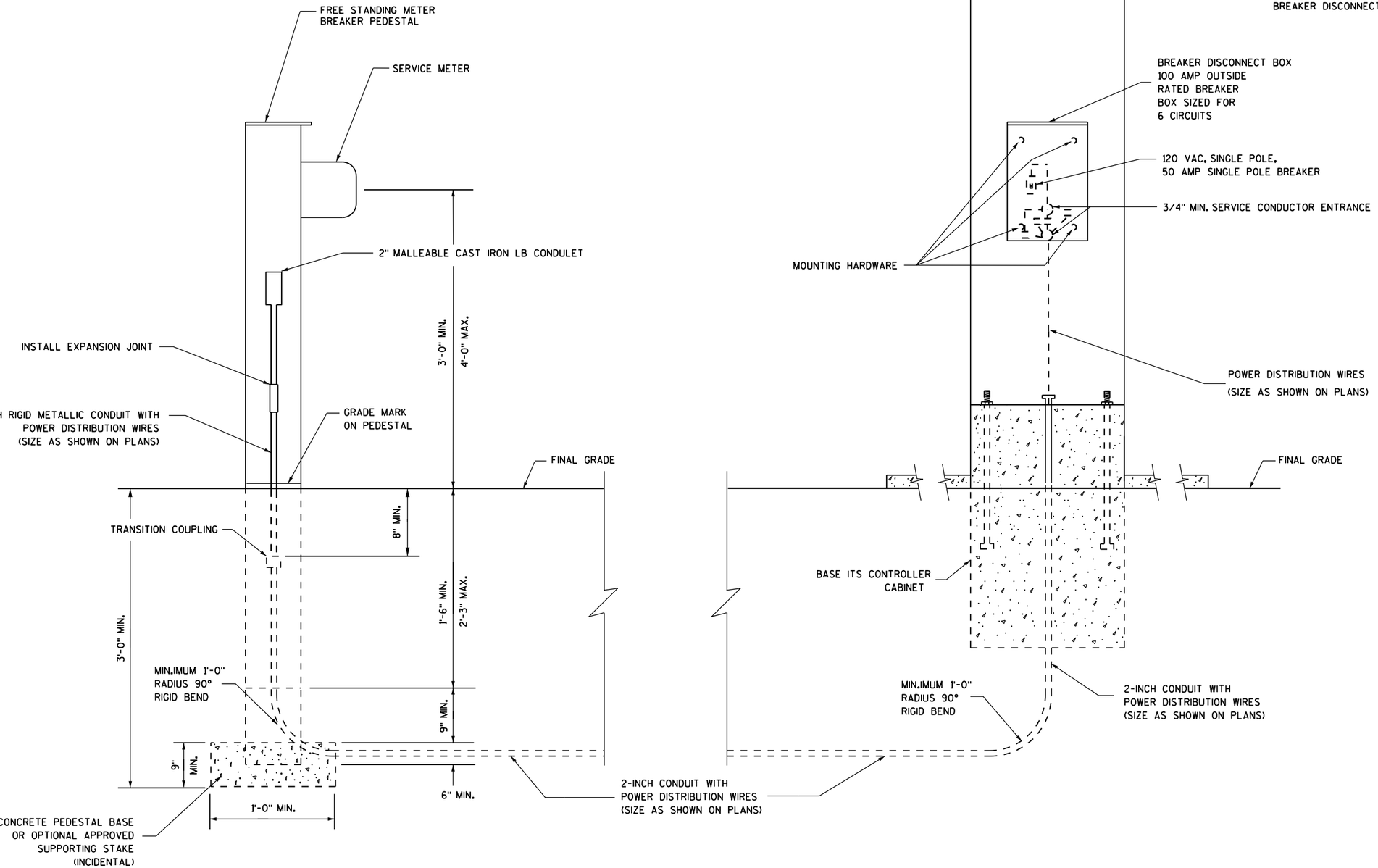
GENERAL NOTES

MINIMUM REQUIREMENT SHOWN. ADDITIONAL BREAKERS MAY BE REQUIRED.

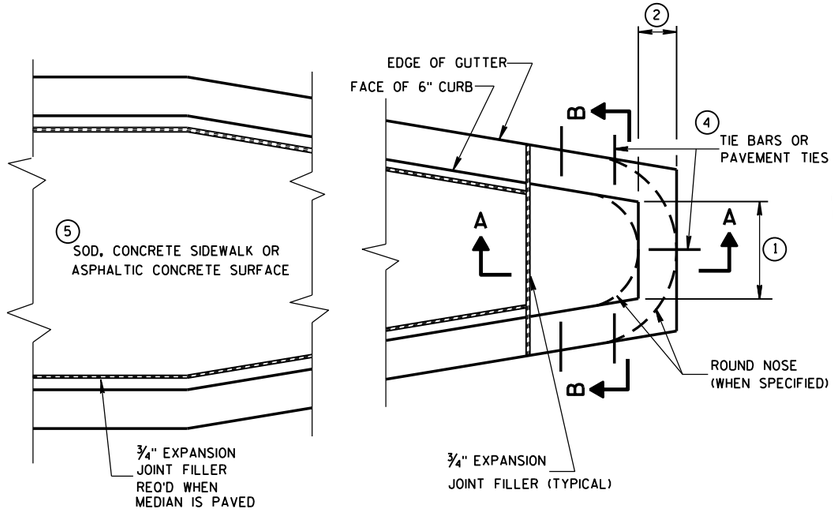
UP TO THREE BREAKERS WILL BE CONSIDERED INCIDENTAL TO THE ITEM BREAKER DISCONNECT BOX.

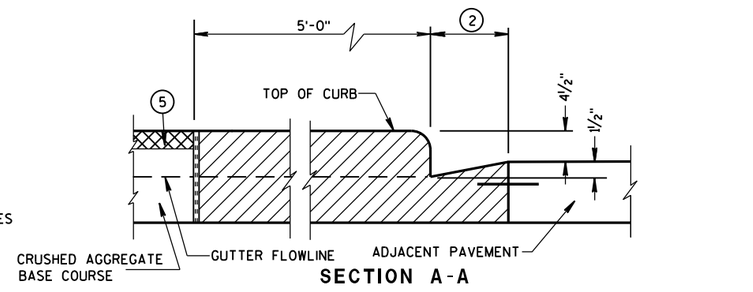


2 CIRCUIT ELECTRICAL SERVICE METER BREAKER PEDESTAL AND BREAKER DISCONNECT BOX

2 CIRCUIT ELECTRICAL SERVICE METER BREAKER PEDESTAL AND BREAKER DISCONNECT BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

6 S.D.D. 9 H 4-1





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

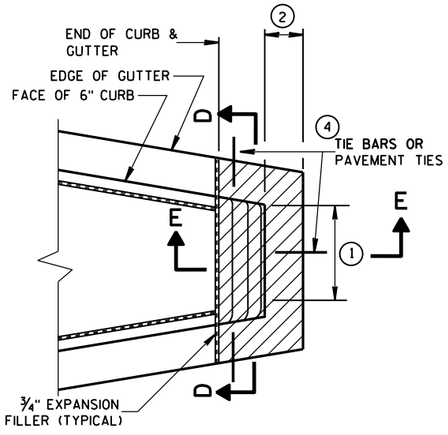
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

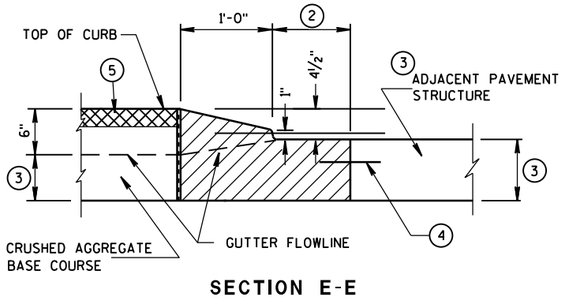
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

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

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

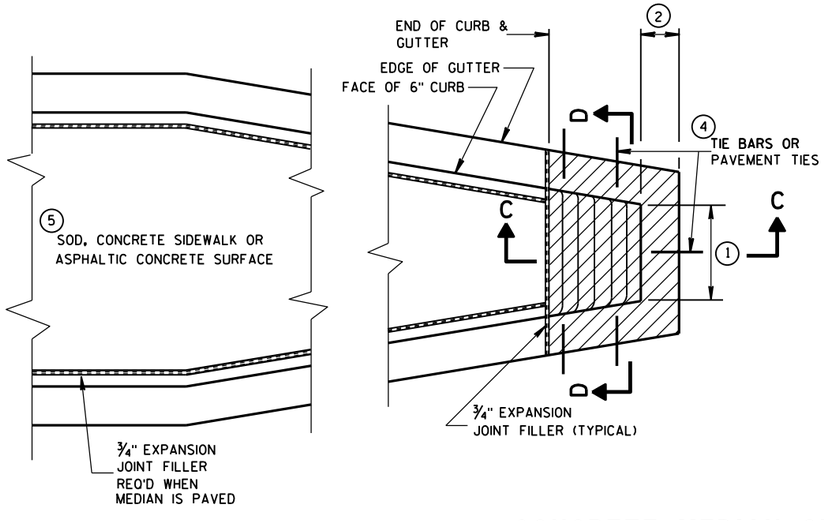
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

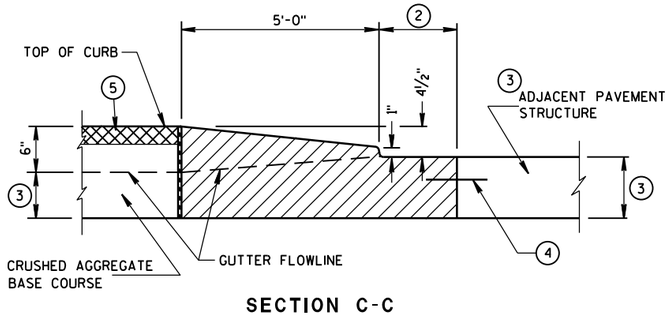




SECTION E-E

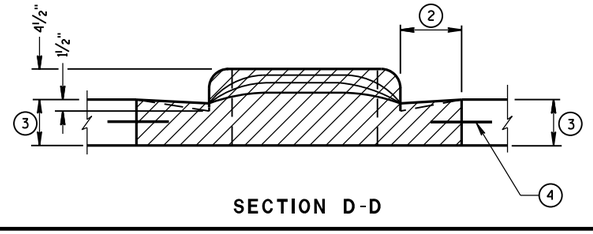
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 11 B 2-2

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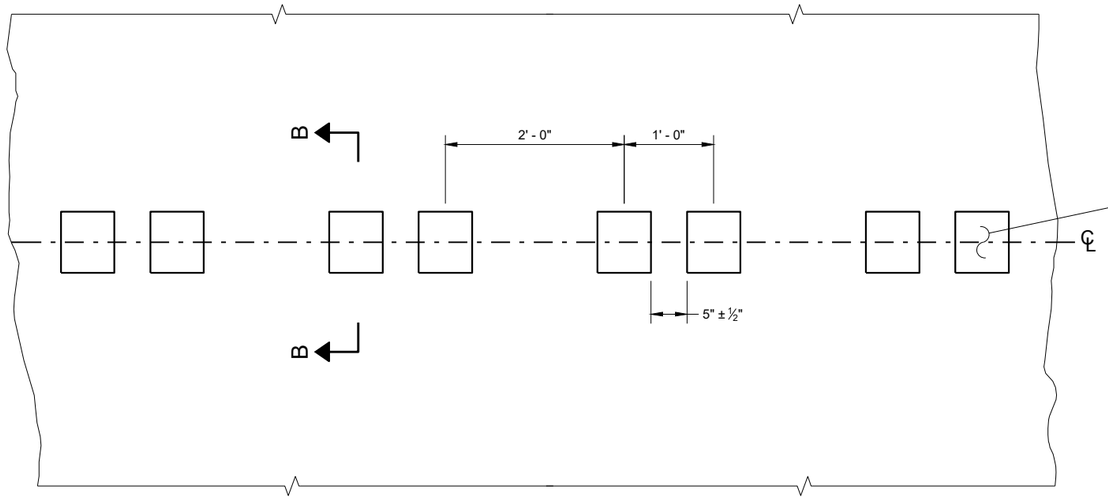
S.D.D. 11 B 2-2

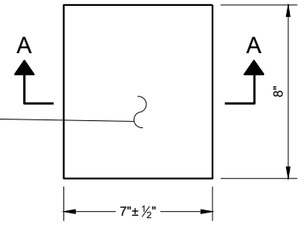
GENERAL NOTES

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

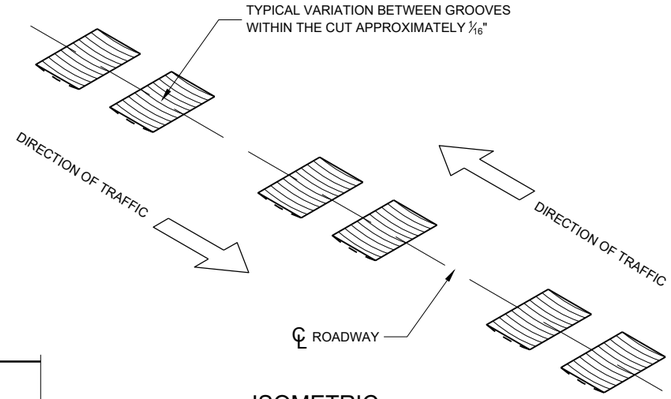
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



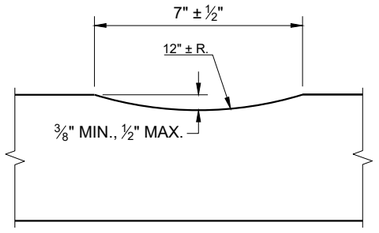
PLAN DETAIL VIEW



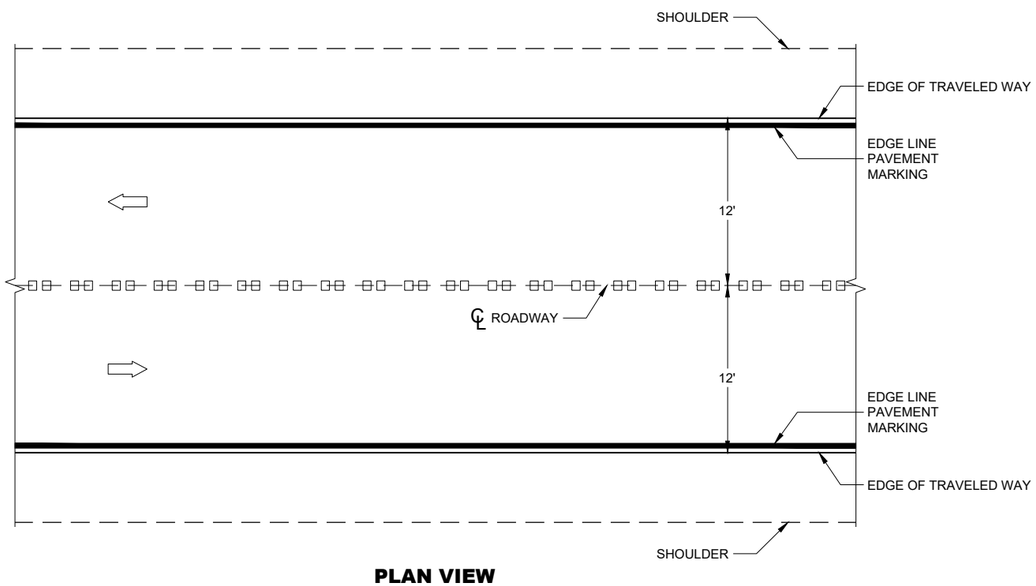
PLAN VIEW
(SINGLE GROOVE)



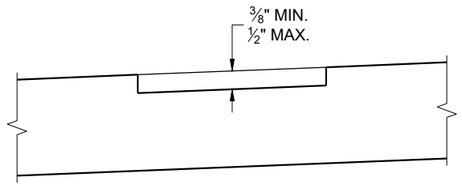
ISOMETRIC



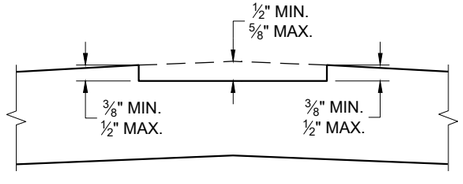
SECTION A - A



PLAN VIEW



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY

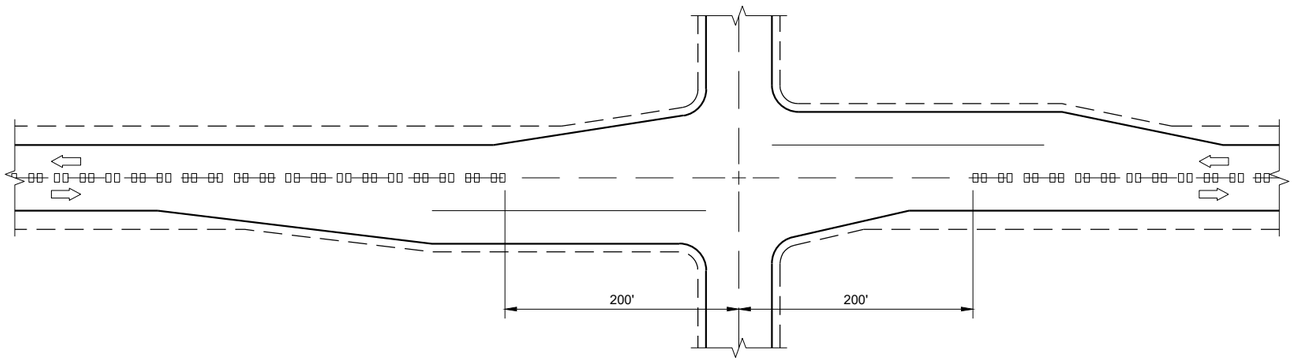
CENTERLINE RUMBLE STRIPS - ASPHALT

CENTERLINE RUMBLE STRIPS - ASPHALT

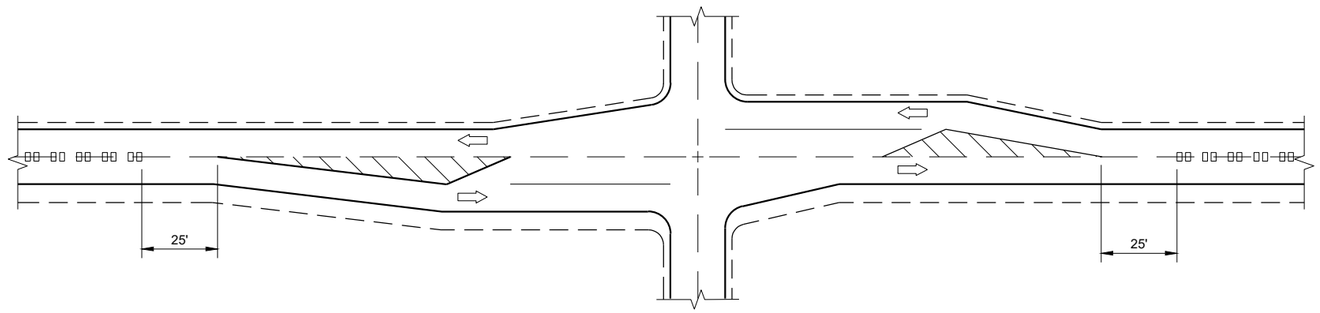
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

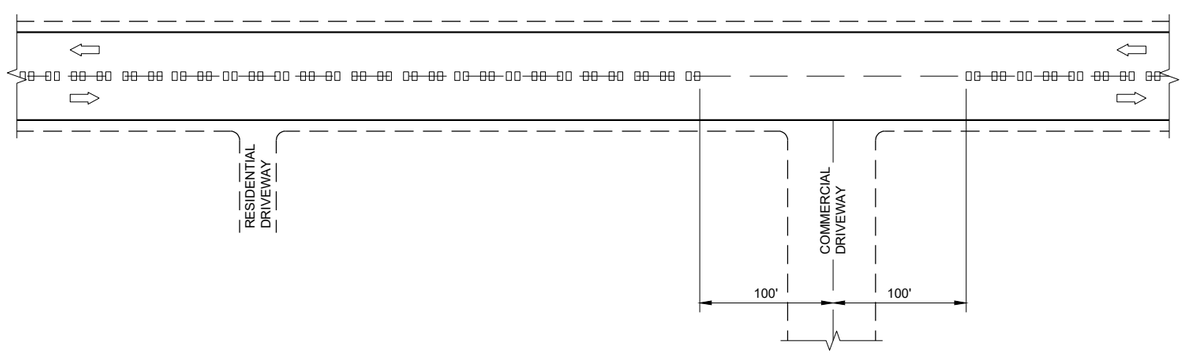
SDD 13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



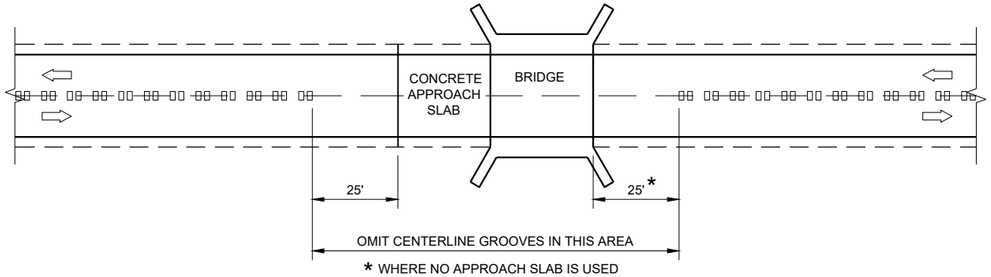
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



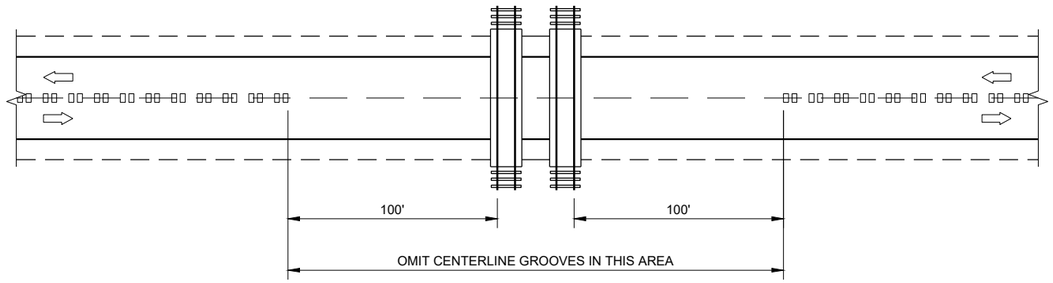
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

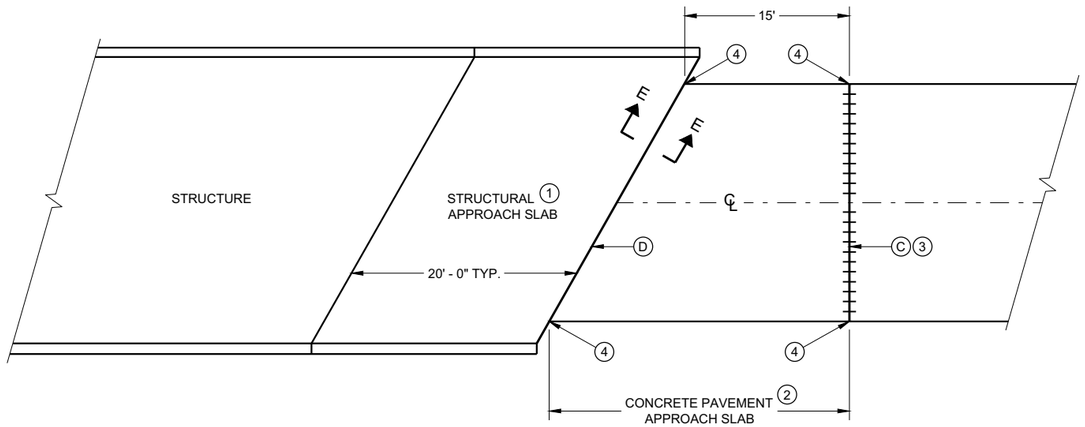
CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6
SDD 13A11 - 04d



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

(1) SEE BRIDGE PLAN.

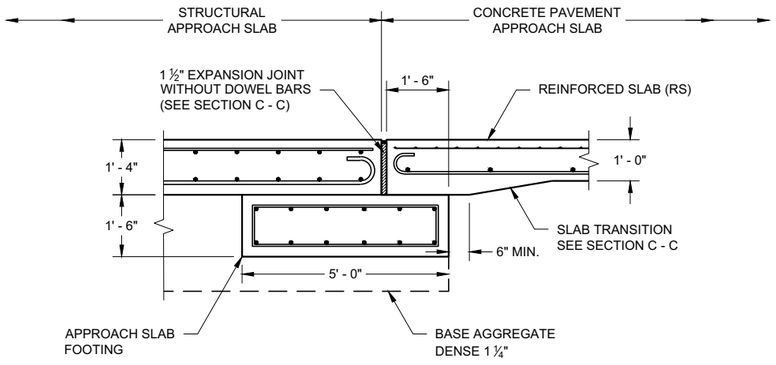
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

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

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

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

(D) 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

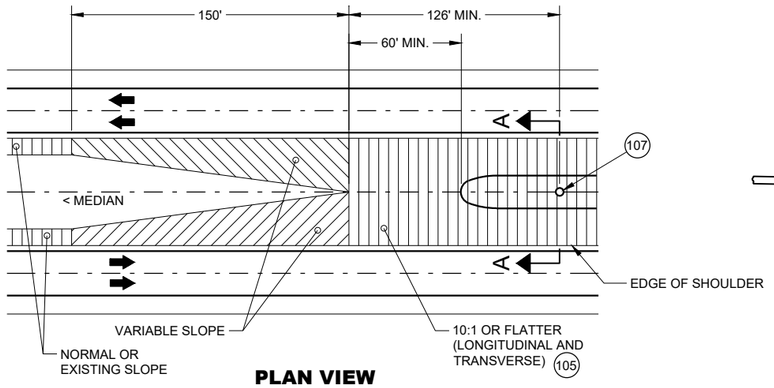
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

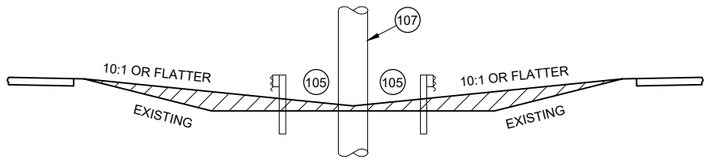
FHWA

6

SDD 13B02 - 09b



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

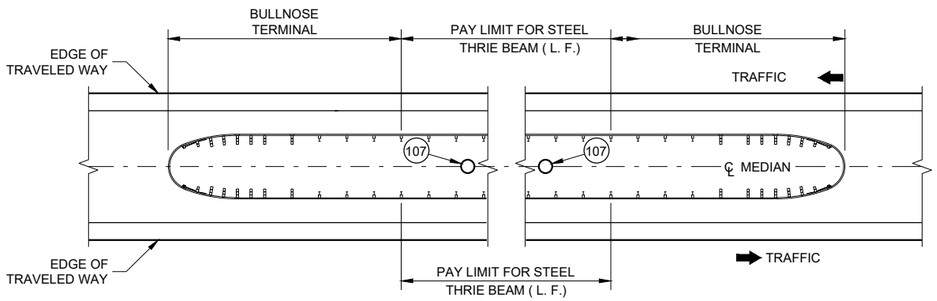
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

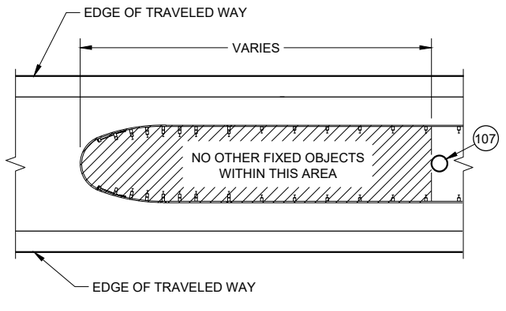
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

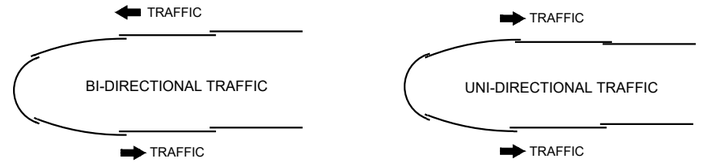
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



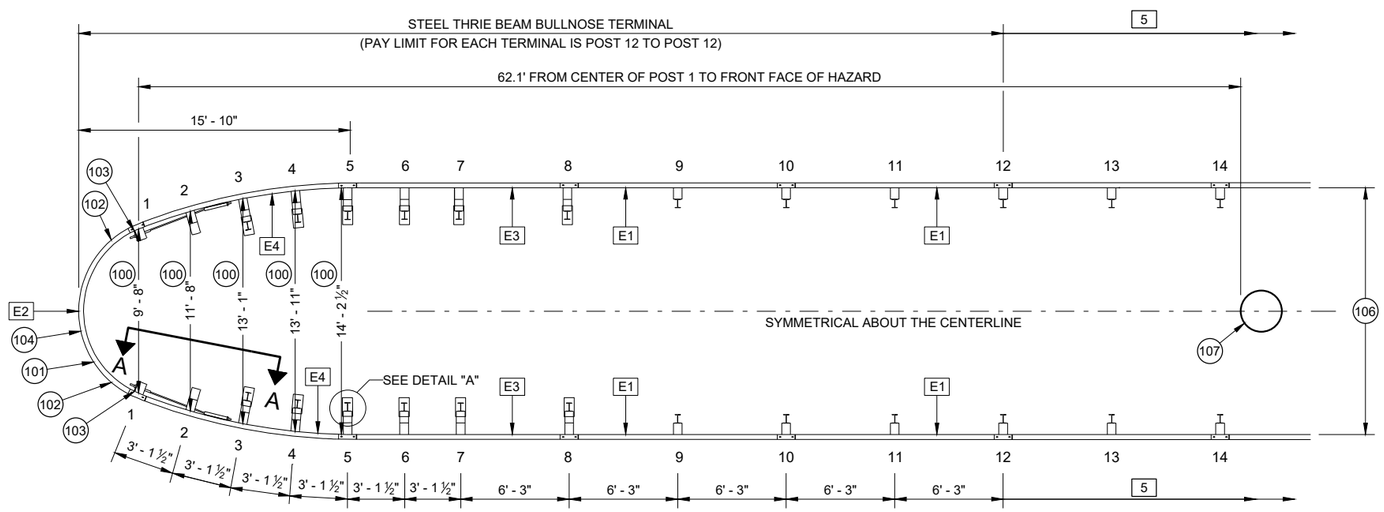
MEDIAN HAZARD PROTECTION PAY LIMITS



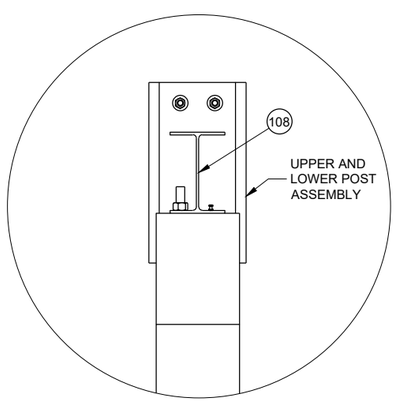
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



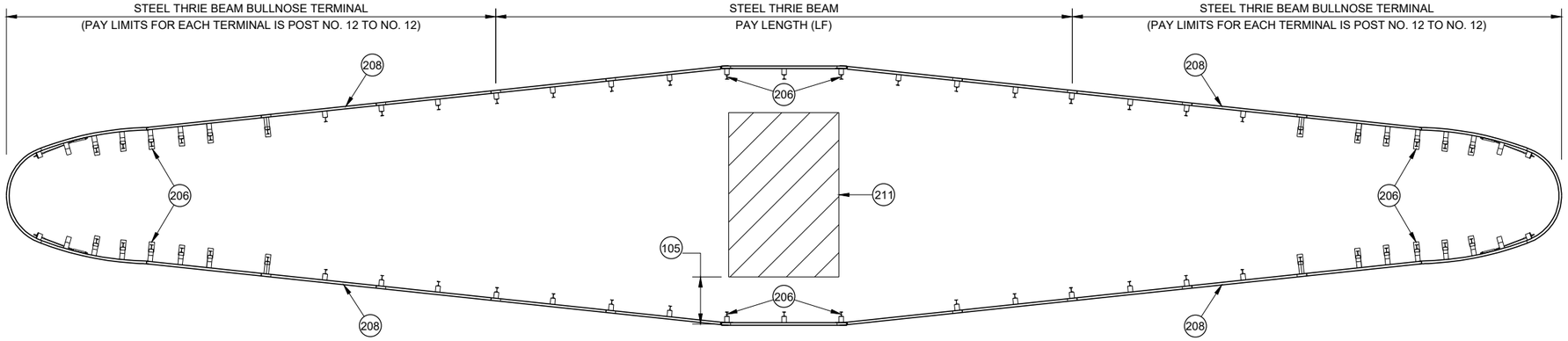
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B26 - 05a

SDD 14B26 - 05a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

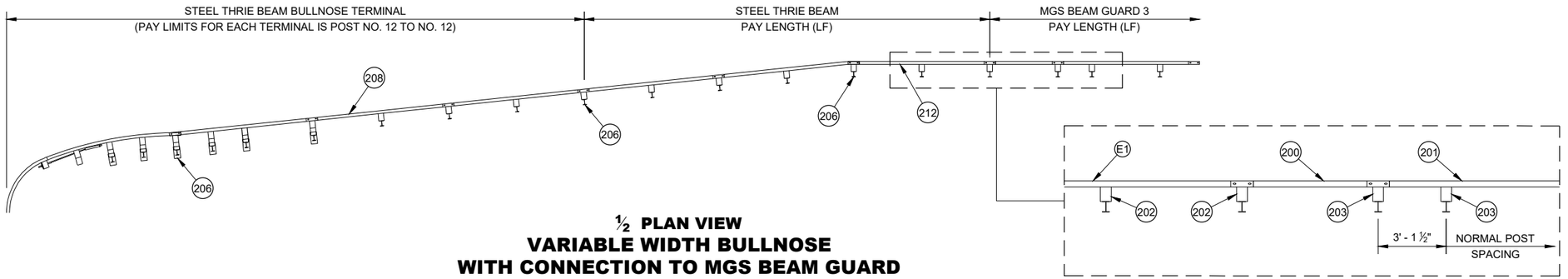
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

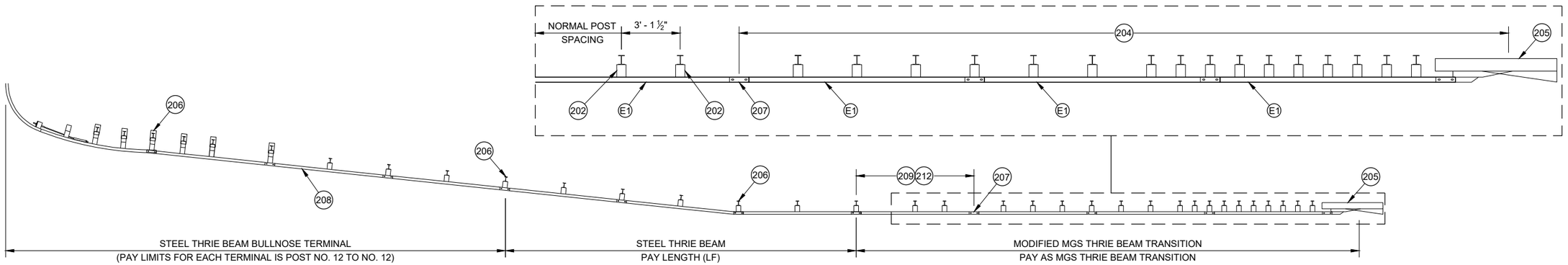
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO MGS BEAM GUARD



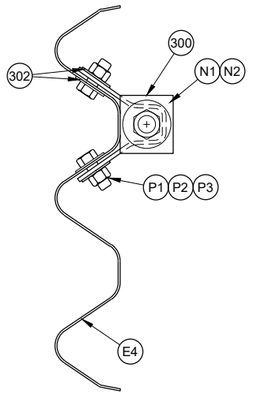
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

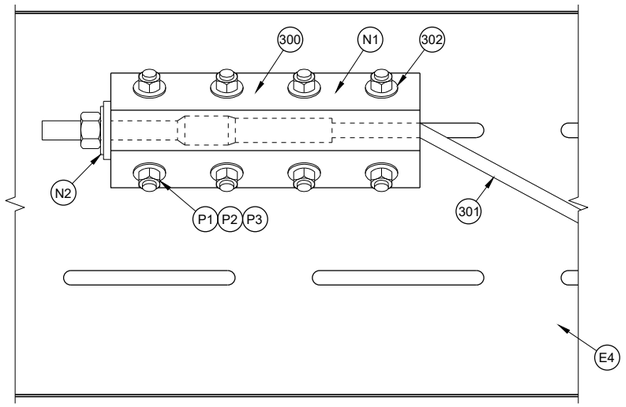
6

SDD 14B26 - 05b

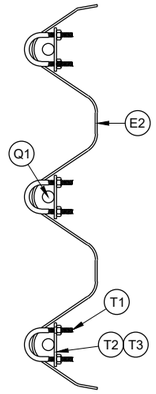


PROFILE VIEW

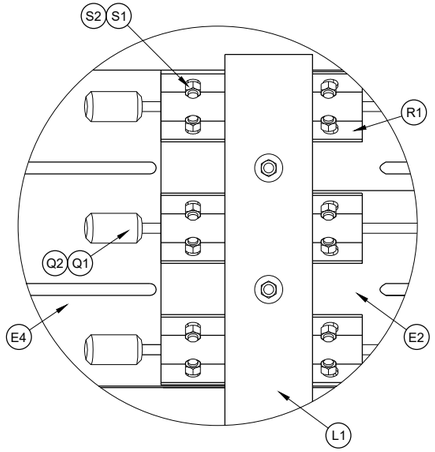
CABLE ANCHOR ASSEMBLY CONNECTION



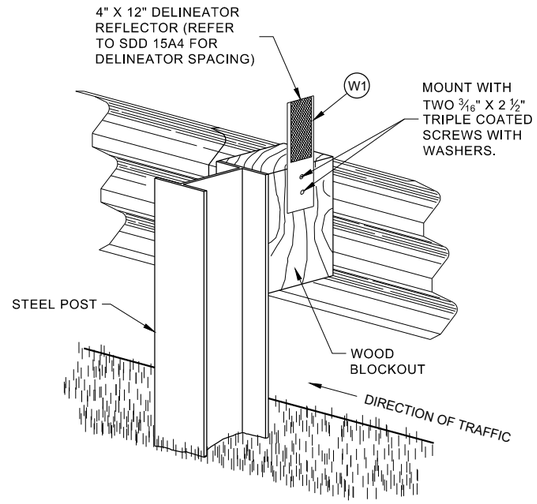
CABLE ANCHOR ASSEMBLY



NOSE CABLE RETAINING CLIP



DETAIL "A"



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

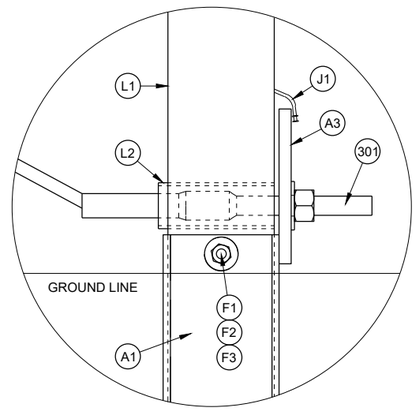
POST 8

POST 3

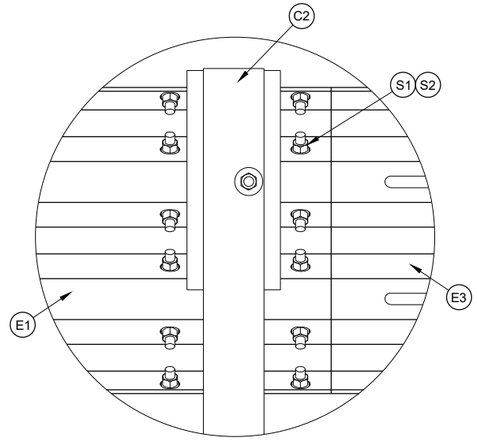
POST 2

POST 1

CROSS SECTION A - A



DETAIL "B"



DETAIL "C" THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

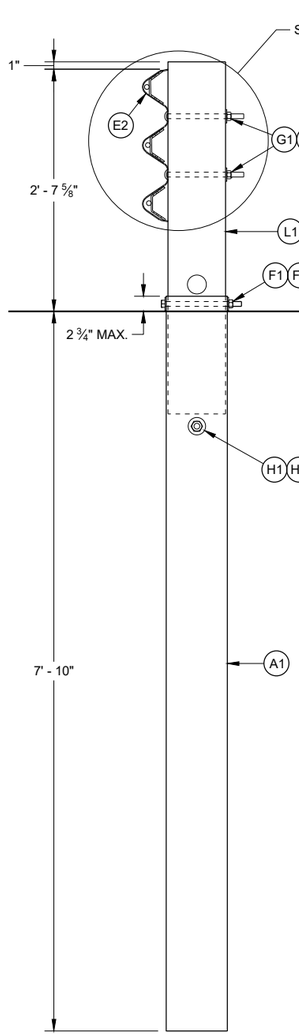
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

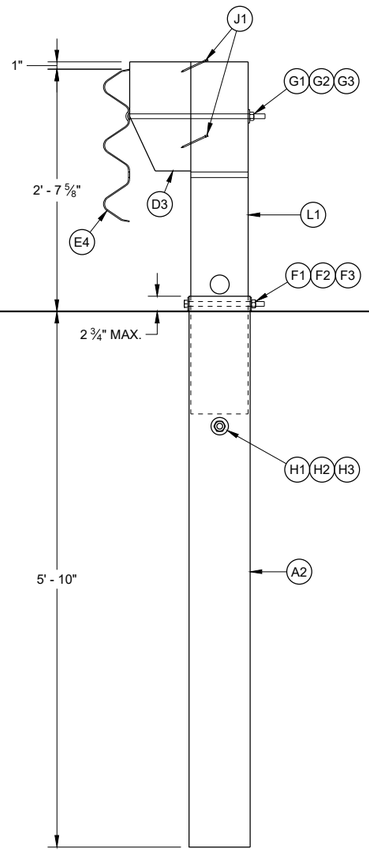
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

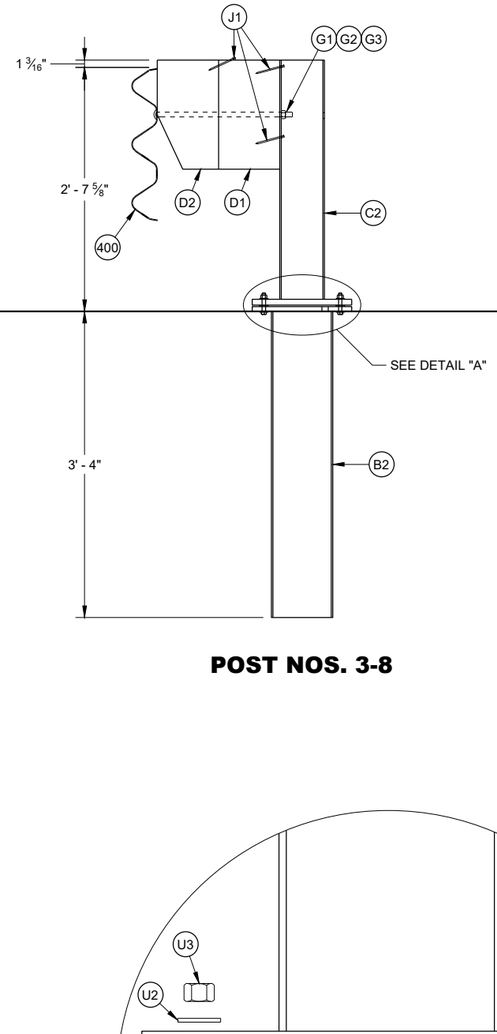
SDD 14B26 - 05c



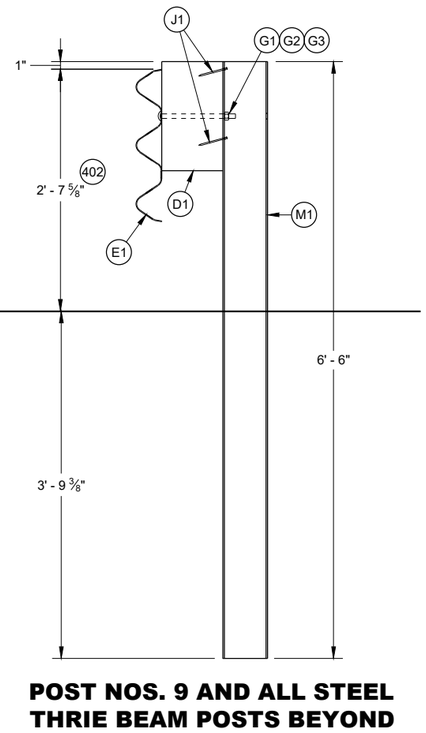
POST NO. 1



POST NO. 2



POST NOS. 3-8



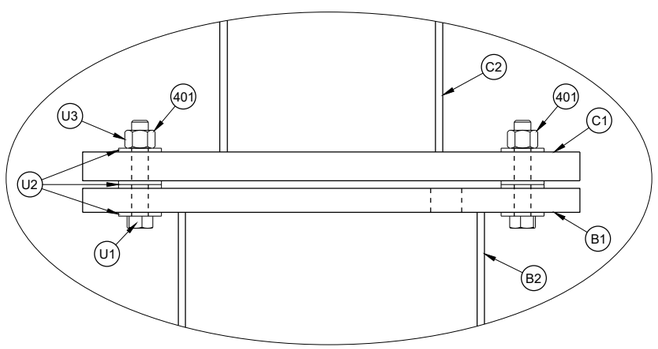
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

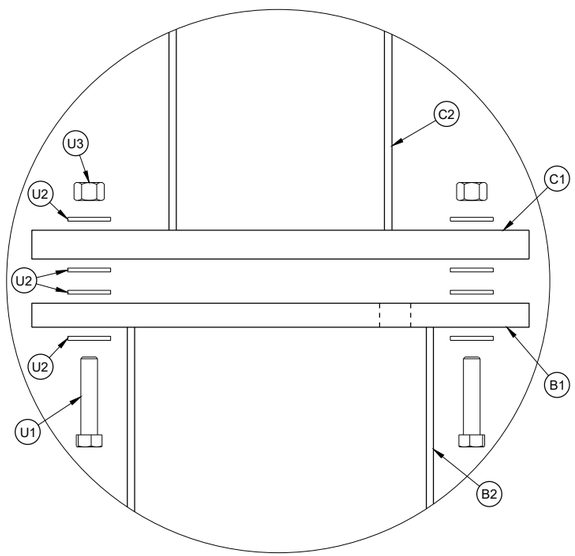
400 RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

401 TORQUE BOLD BETWEEN 60-75 FT-LB

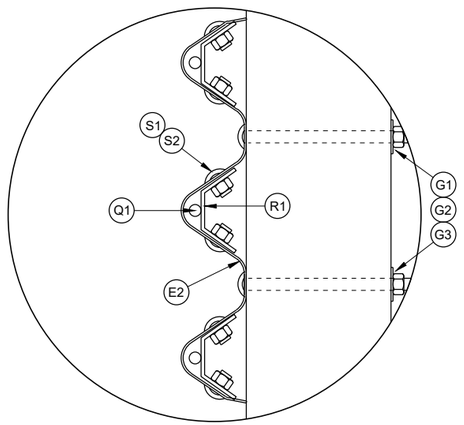
402 HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



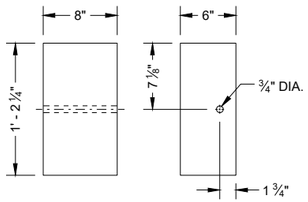
DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

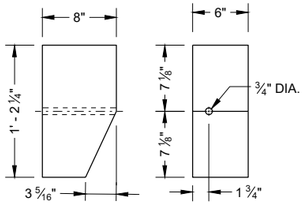
6

SDD 14B26 - 05d



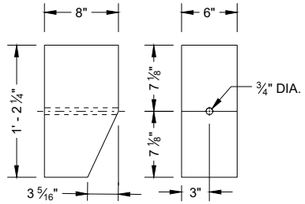
ELEVATION PROFILE

BLOCKOUT (D1)



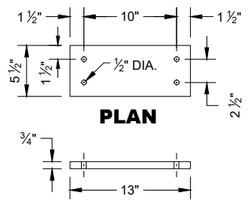
ELEVATION PROFILE

BLOCKOUT (D2)



ELEVATION PROFILE

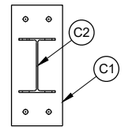
BLOCKOUT (D3)



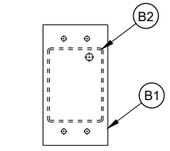
PLAN

PROFILE

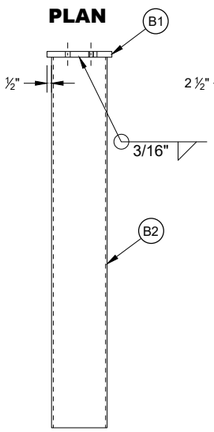
UPPER SHEAR PLATE (C1)



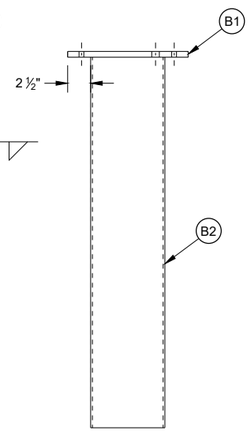
PLAN



PLAN

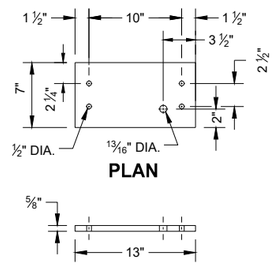


ELEVATION



PROFILE

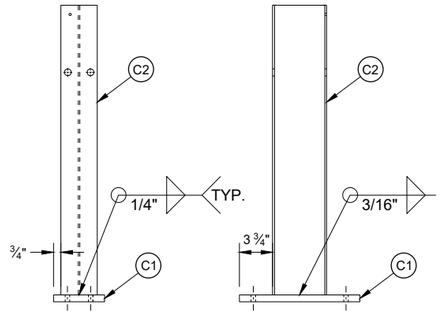
LOWER POST ASSEMBLY



PLAN

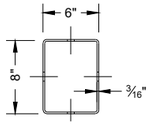
PROFILE

LOWER SHEAR PLATE (B1)



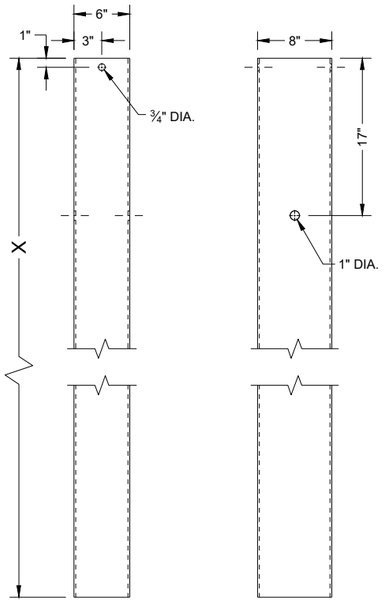
ELEVATION PROFILE

UPPER POST ASSEMBLY



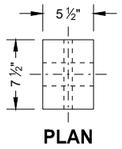
PLAN

PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 4"

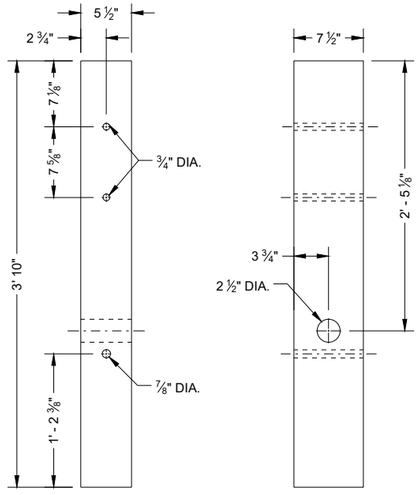


ELEVATION PROFILE

FOUNDATION TUBE

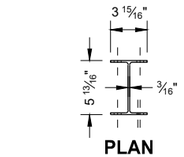


PLAN

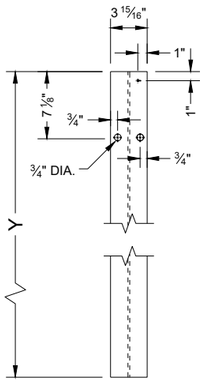


ELEVATION PROFILE

BCT POST (L1)



PLAN



ELEVATION

POST

PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 7 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

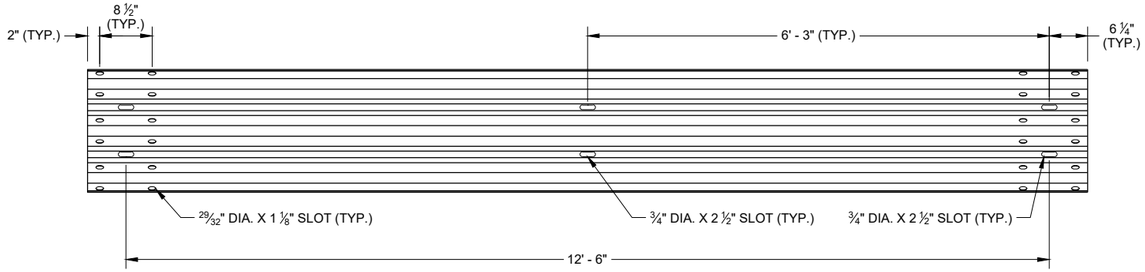
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

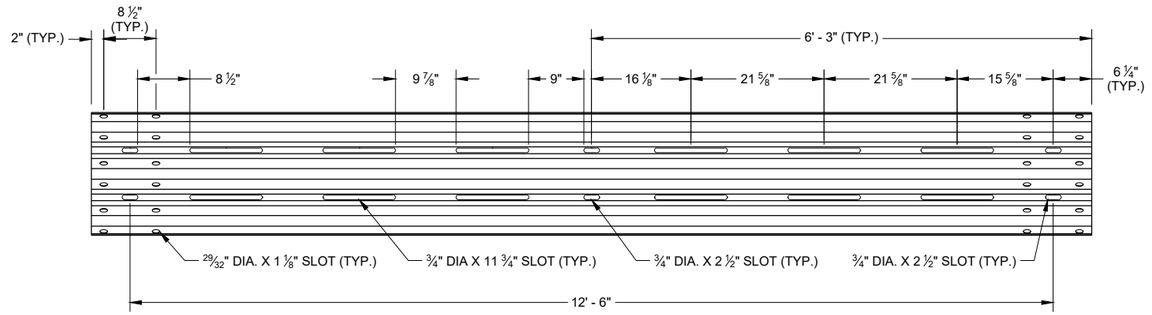
SDD 14B26 - 05e

6

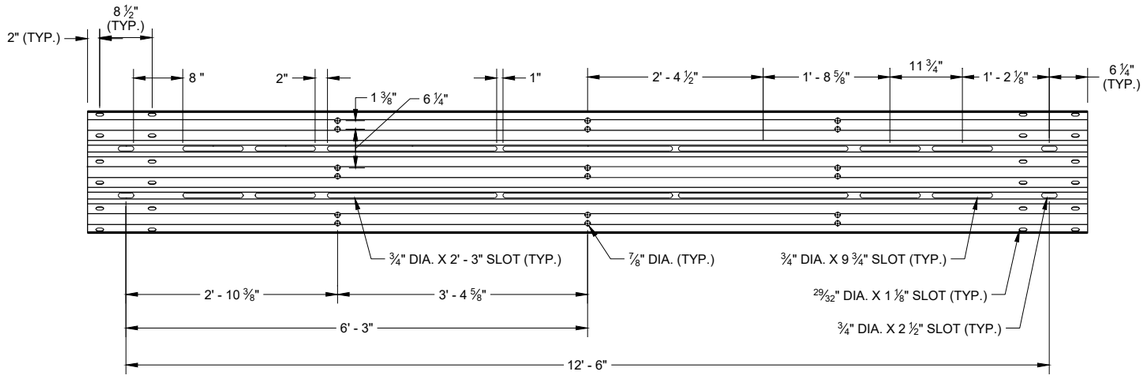
SDD 14B26 - 05e



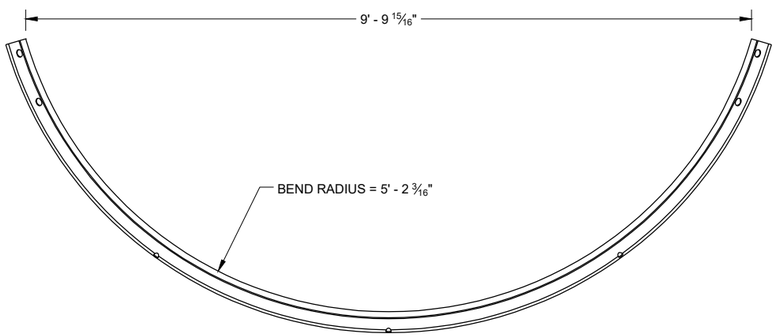
SLOTTED THRIE BEAM RAIL E1



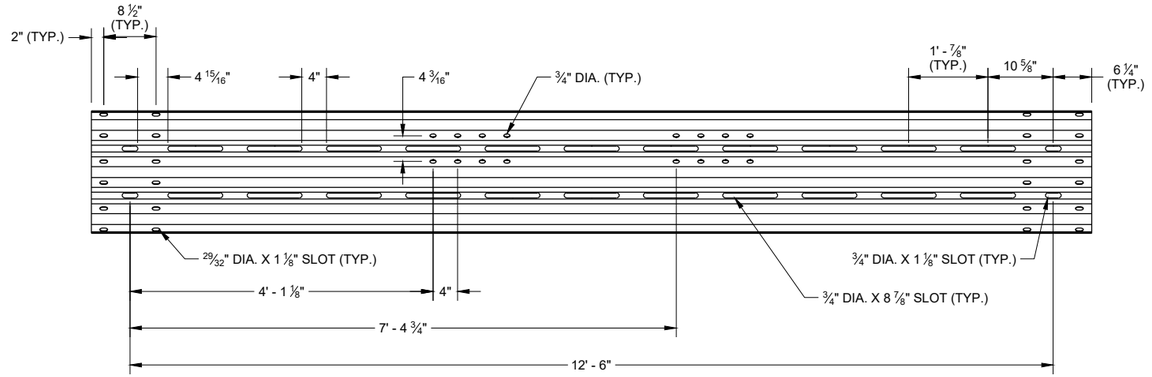
SLOTTED THRIE BEAM RAIL E3



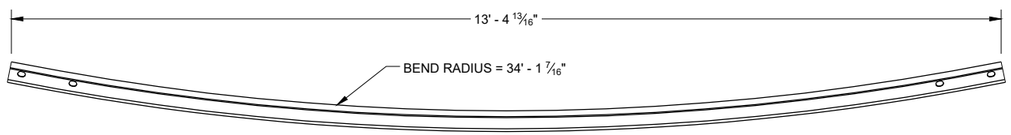
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4



PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

STEEL THRIE BEAM BULLNOSE TERMINAL

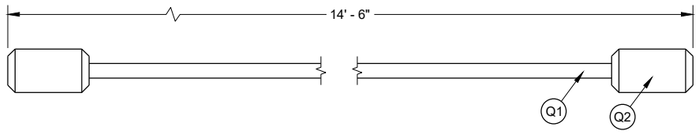
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

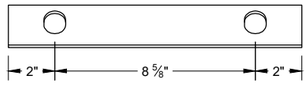
SDD 14B26 - 05f

6

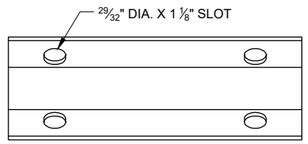
SDD 14B26 - 05f



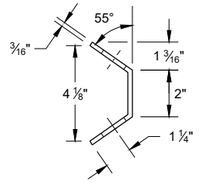
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

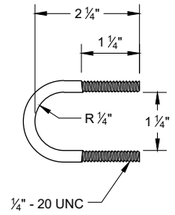


ELEVATION VIEW

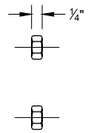


PROFILE VIEW

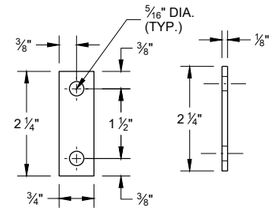
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

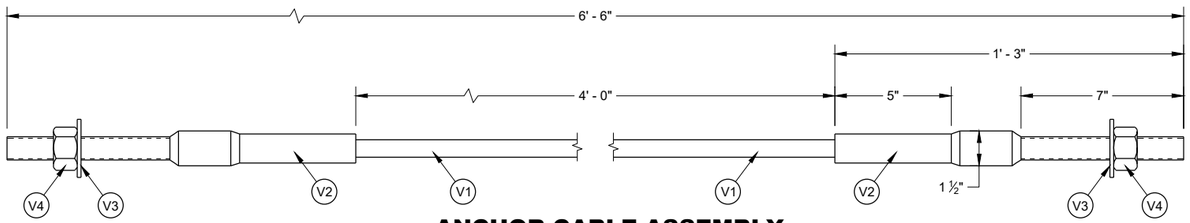


U - BOLT NUT (T3)

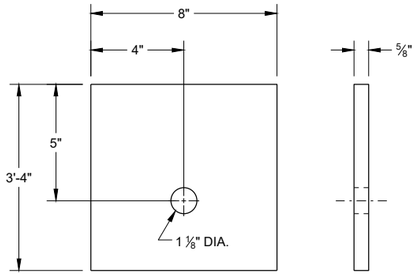


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

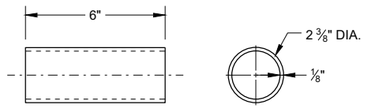


ANCHOR CABLE ASSEMBLY



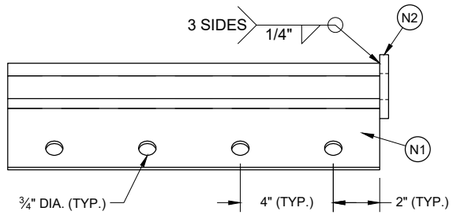
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

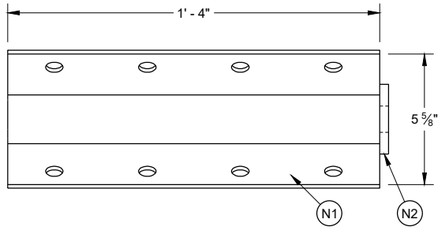


ELEVATION VIEW **PROFILE VIEW**

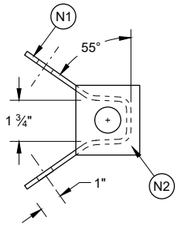
BCT POST SLEEVE (L2)



PLAN VIEW

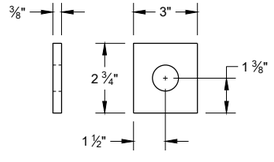


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B26 - 05g

6

SDD 14B26 - 05g

BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT POST	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B1	LOWER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
F2	5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
F3	GROUND STRUT AND YOKE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
G1	5/8 " DIA. POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	POST BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	POST BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
H1	7/8" DIA. SOIL TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
M2	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N1	ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N2	ANCHOR BRACKET - BEARING PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	ANCHOR BRACKET BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
P3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
S1	5/8" DIA. SPLICE BOLT - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
S2	SPLICE - BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
T2	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
T3	U-BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
V1	¾" DIA. BCT CABLE	AASHTO M30 / ASTM A741 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN BREAKING STRENGTH OF 42.7 KIPS
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."
V3	1" DIA. ANCHOR CABLE-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V4	1" DIA. ANCHOR CABLE-NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
W1	REFLECTOR	SEE SDD 15A4

6

SDD 14B26 - 05h

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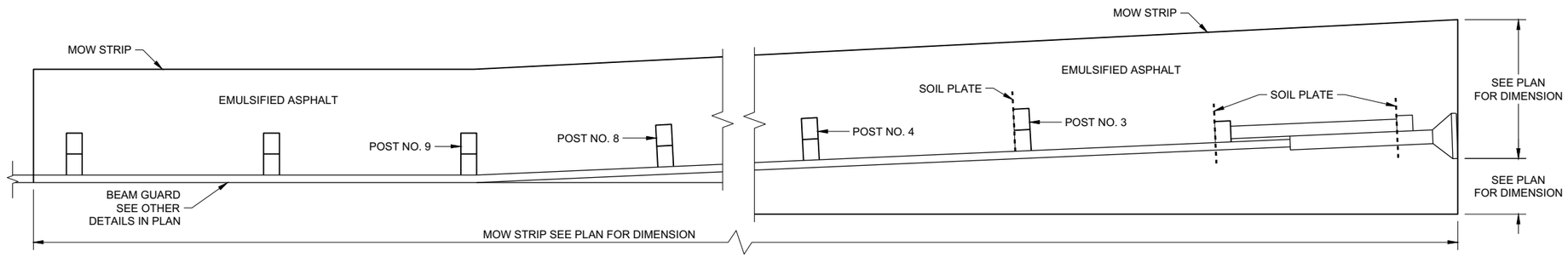
SDD 14B26 - 05h

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



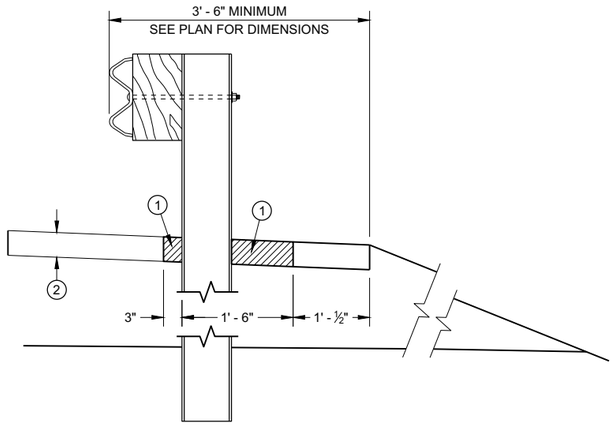
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

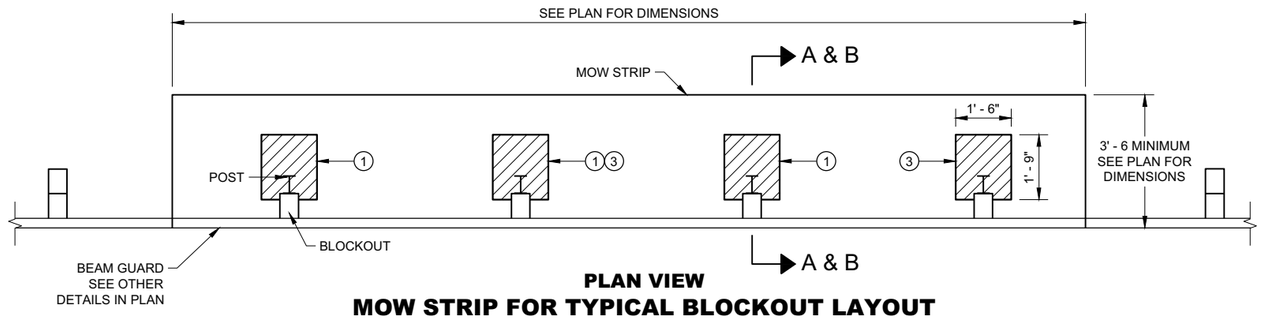
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

1. CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
2. DEPTH OF MOW STRIP:
   ASPHALT - 4"
   CONCRETE - 4"
   EMULSIFIED ASPHALT - 1" OR LESS
3. FOR EMULSIFIED ASPHALT, MOW STRIP STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS)

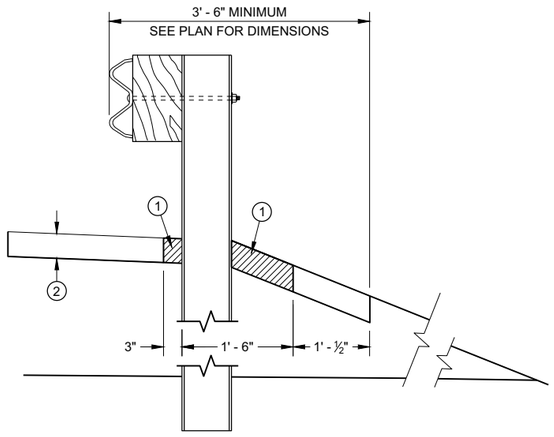


SECTION A - A

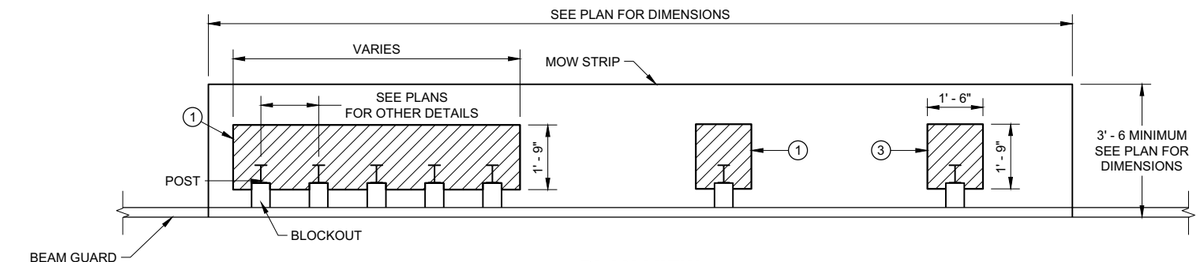


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

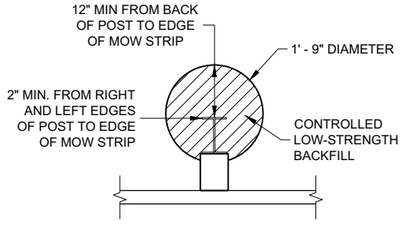


SECTION B - B

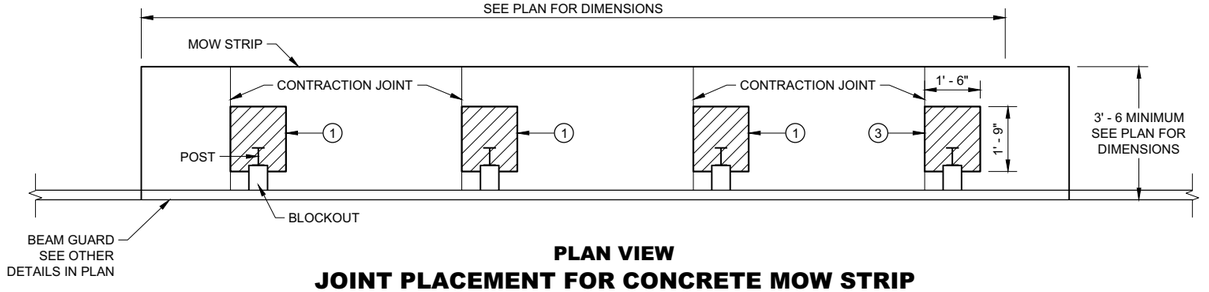


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B28 - 04a

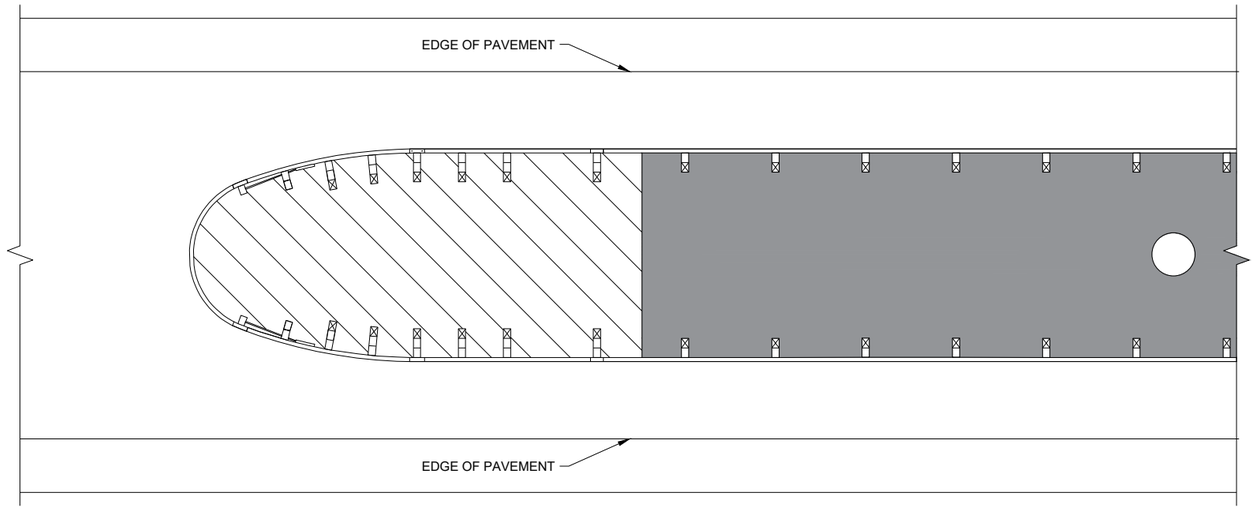
LEGEND

CONCRETE, ASPHALT, OR EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

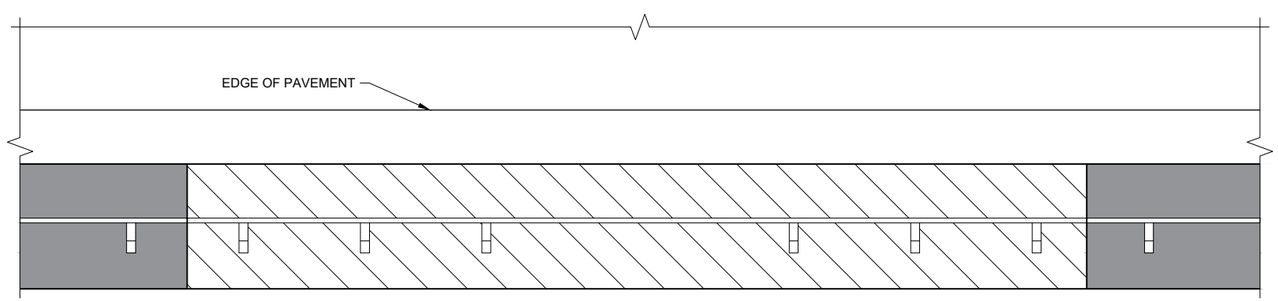
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

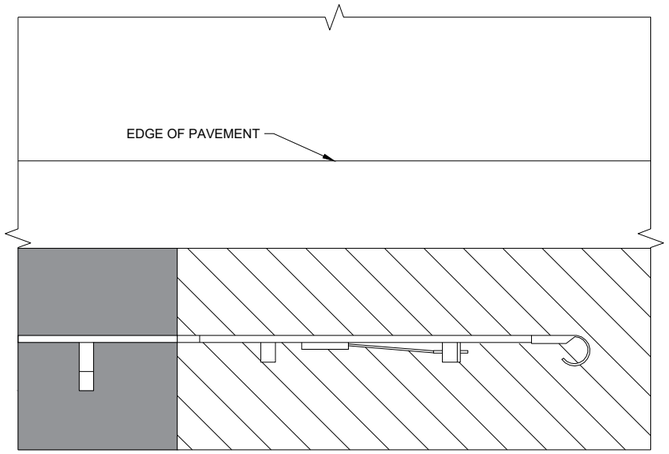
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



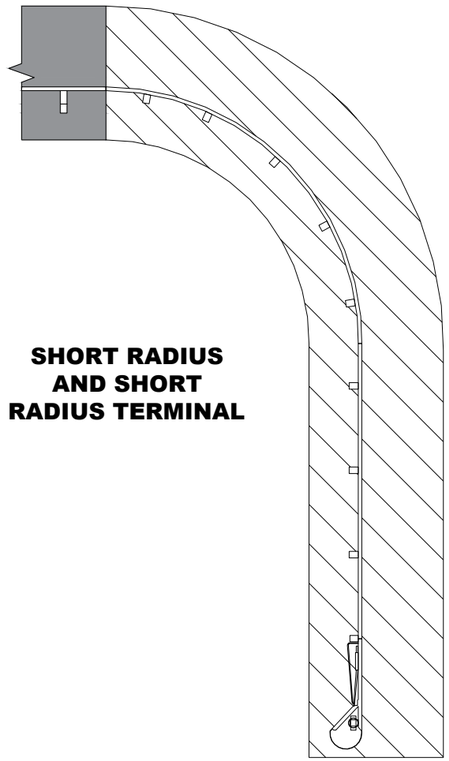
THRIE BEAM BULLNOSE



LONG - SPAN



TYPE 2 TERMINAL



SHORT RADIUS AND SHORT RADIUS TERMINAL

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 14B28 - 04b

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

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

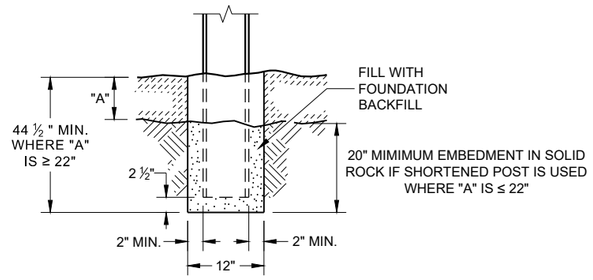
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

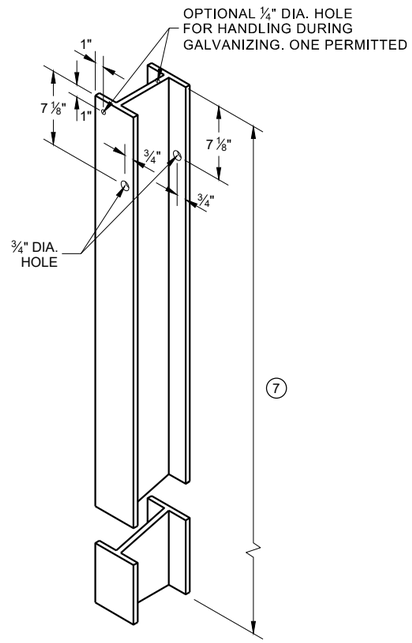
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

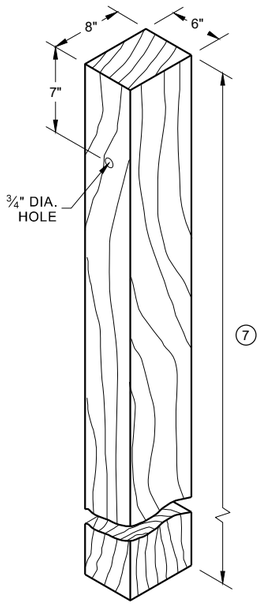
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



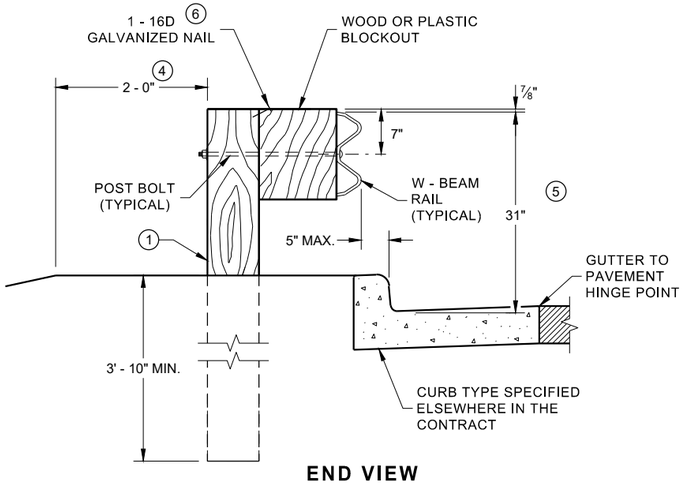
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



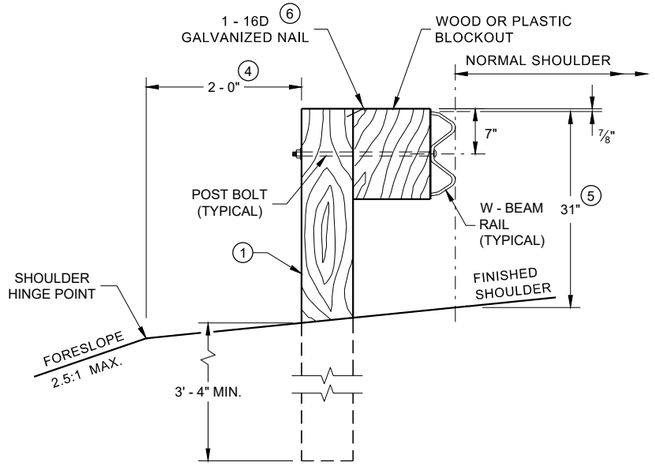
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



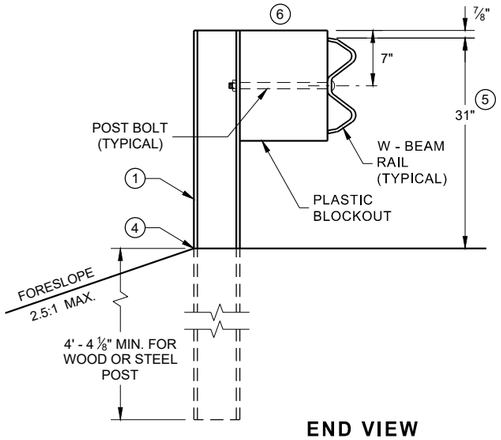
WOOD POST (6" X 8") NOMINAL (1)



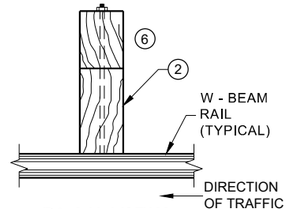
END VIEW
LOCATED ALONG A CURBED ROADWAY



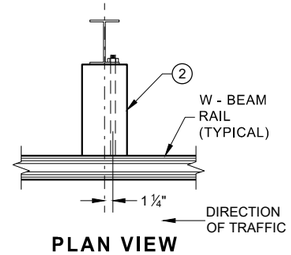
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



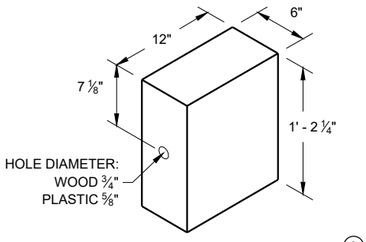
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



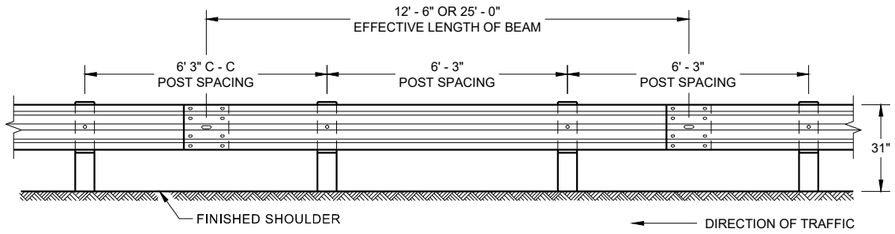
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

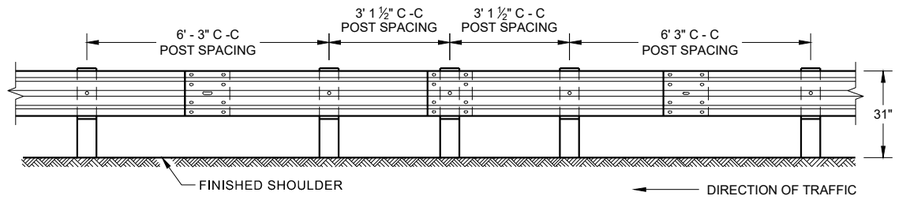
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

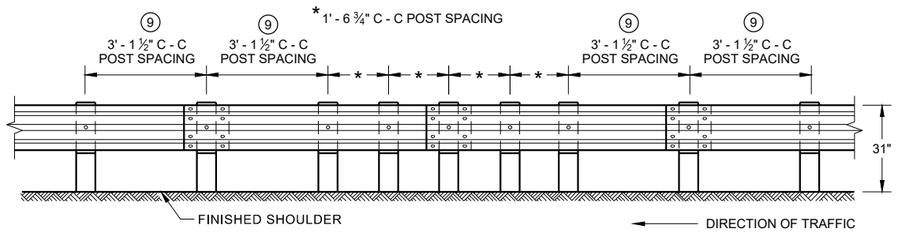
SDD 14B42 - 07a



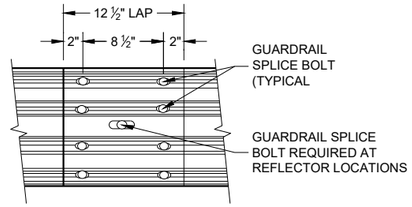
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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

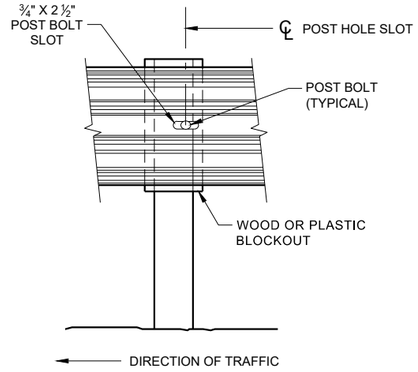
GENERAL NOTES

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

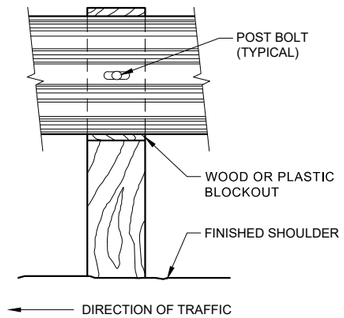
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

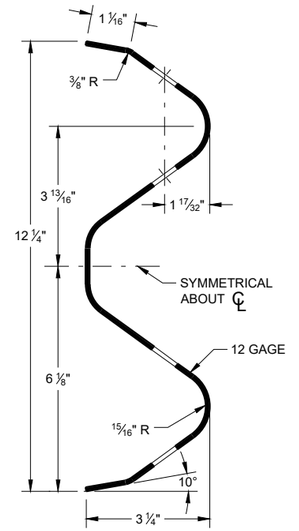
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



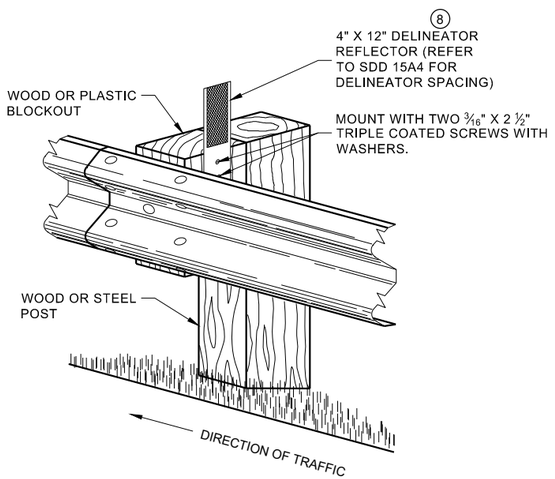
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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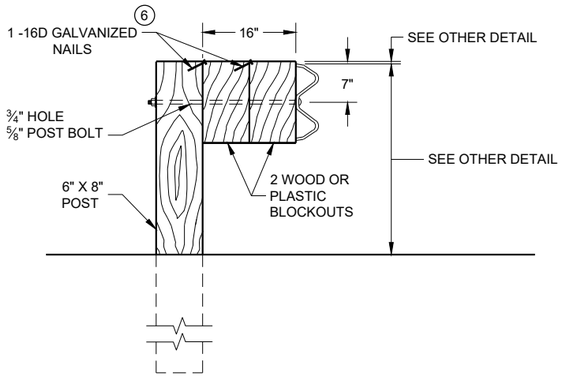
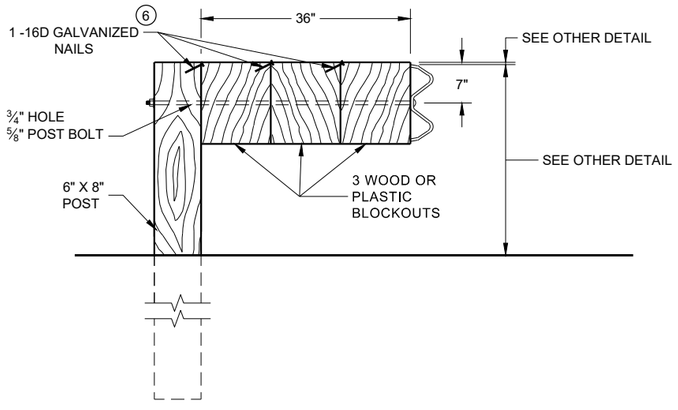
SDD 14B42 - 07b



DETAIL FOR 16" BLOCKOUT DEPTH

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



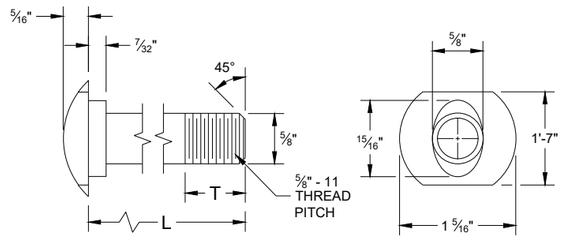
DETAIL FOR 36" BLOCKOUT DEPTH

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

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

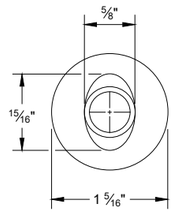
NOTE:

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

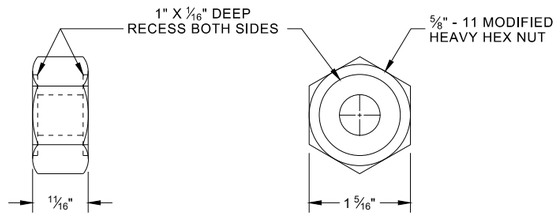


POST BOLT TABLE

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

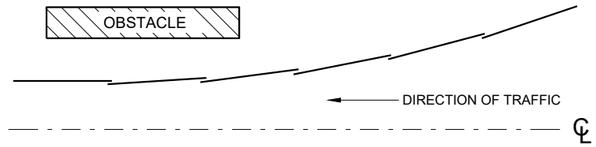


ALTERNATE BOLT HEAD

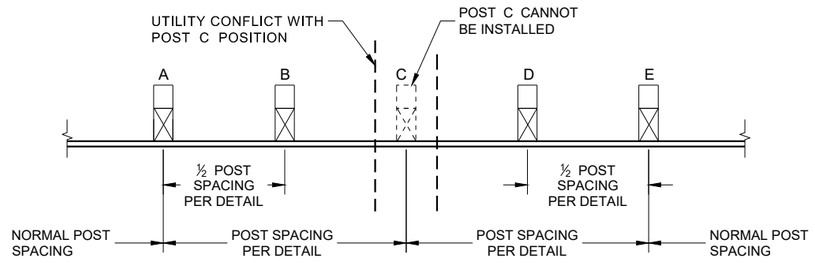


POST BOLT, SPLICE BOLT AND RECESS NUT

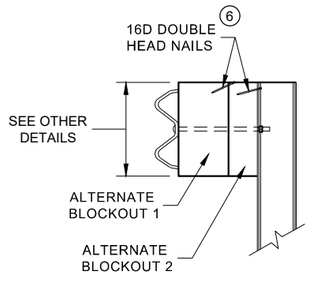
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



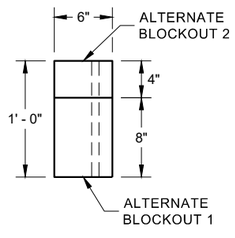
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

SDD 14B42 - 07c

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07c

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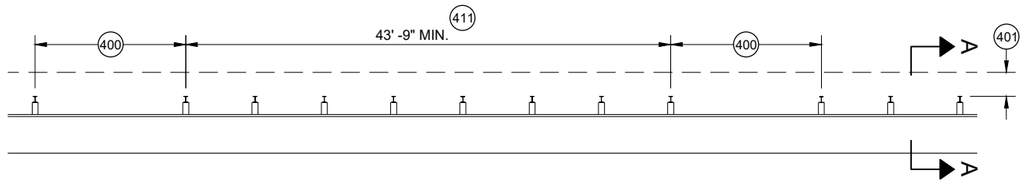
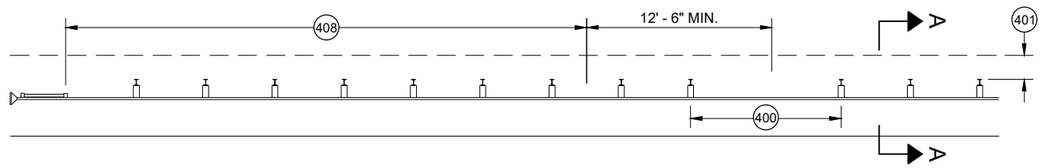
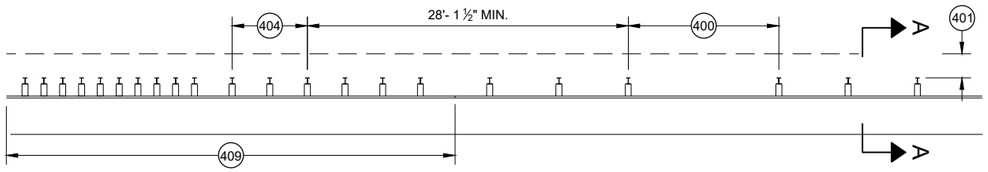


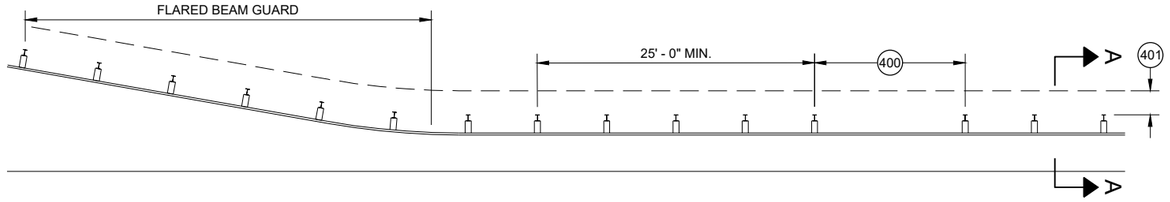
MISSING POST IN MGS GUARDRAIL



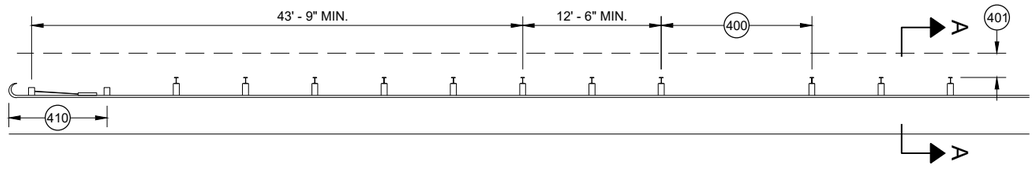
MISSING POST IN MGS GUARDRAIL NEAR EAT



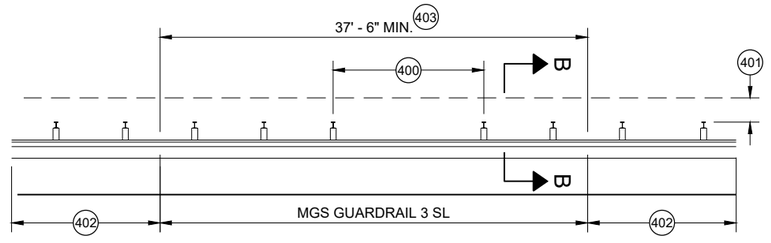
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

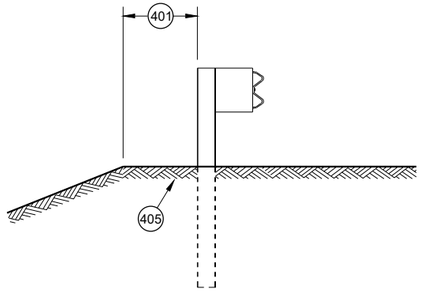


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

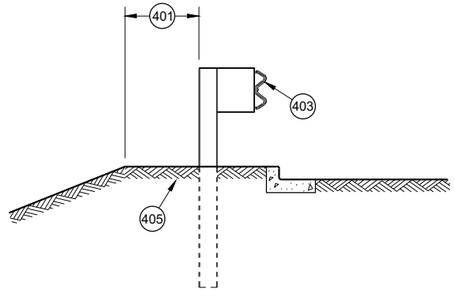


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

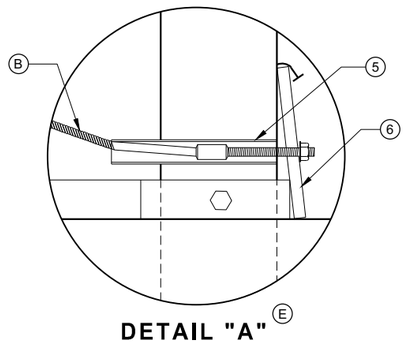
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

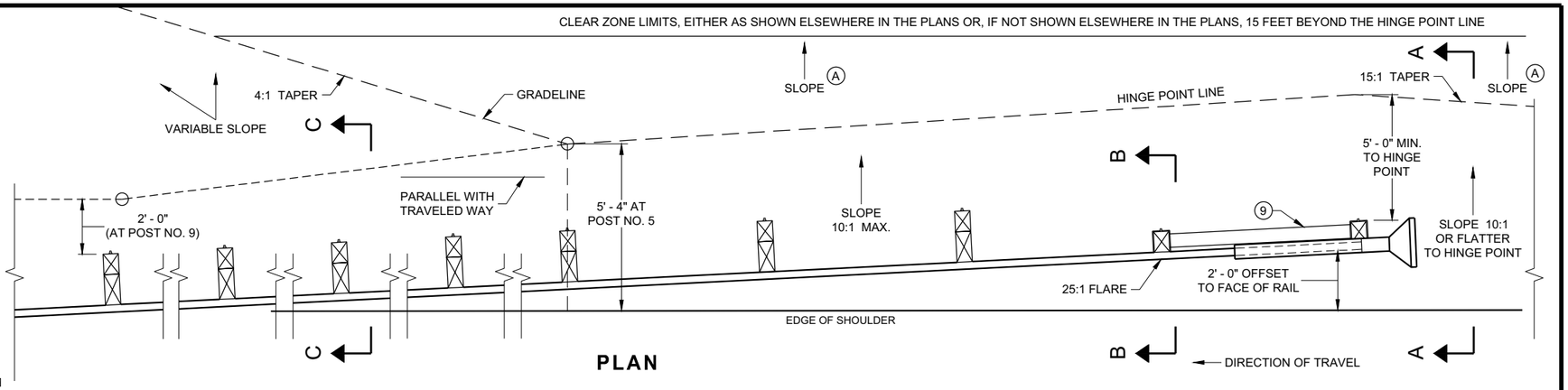
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

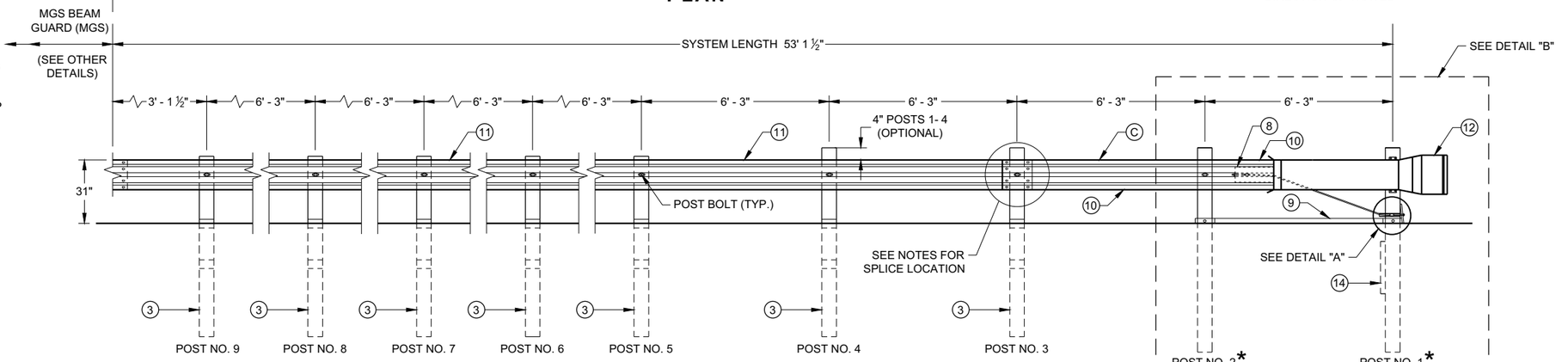
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



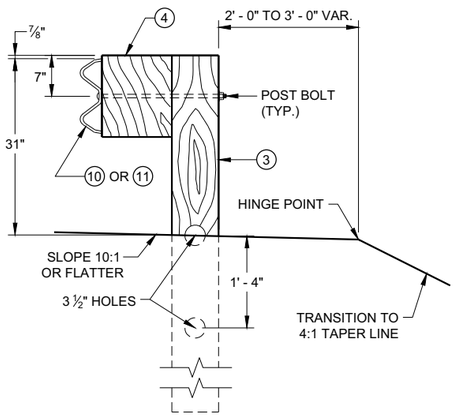
DETAIL "A" (E)



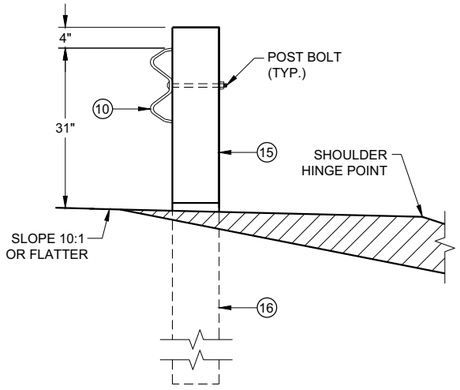
PLAN



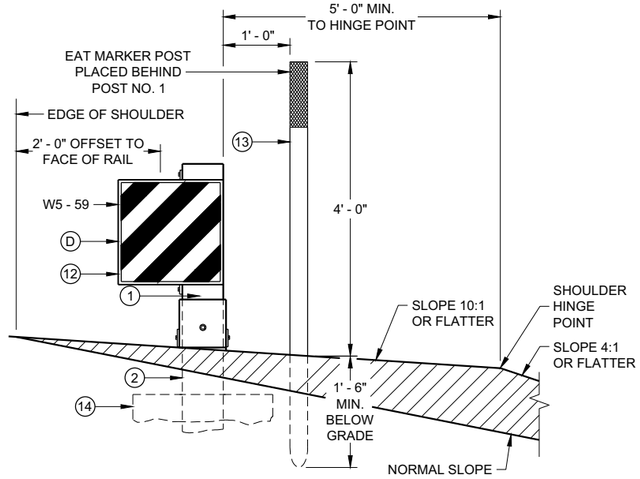
ELEVATION



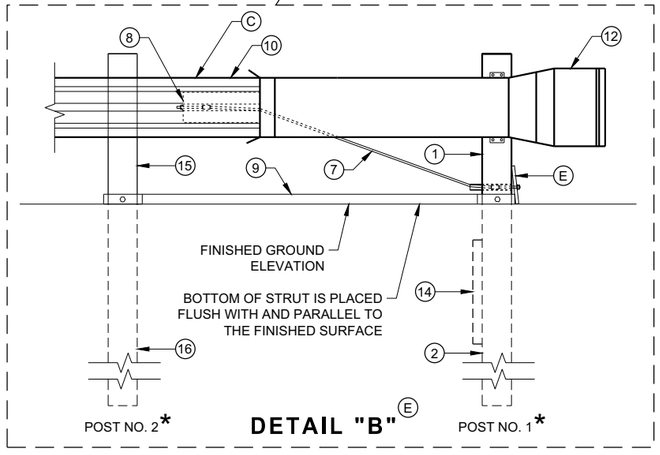
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



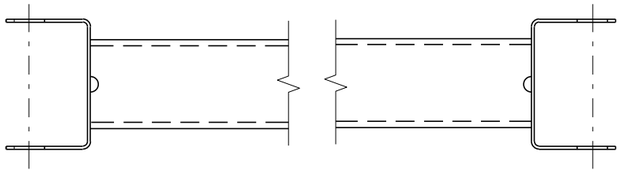
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

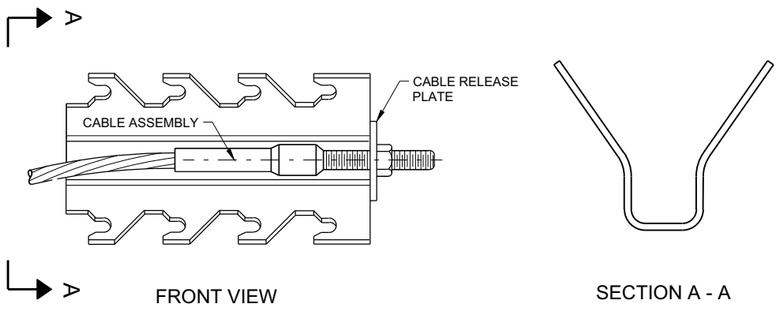
SDD 14B44 - 04a



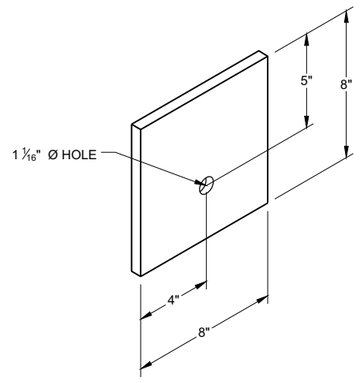
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

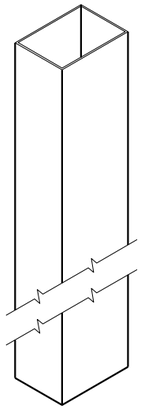
6

SDD 14B44 - 04b

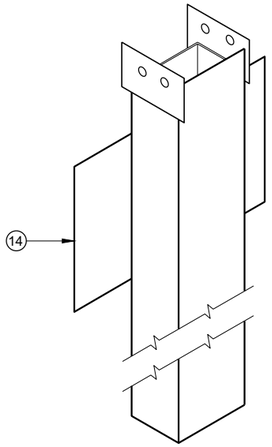
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



UPPER POST NO. 1 (1) (E)



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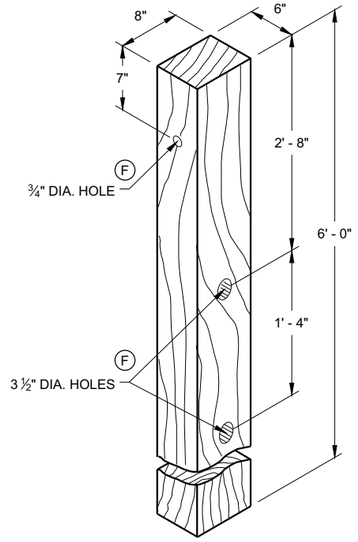
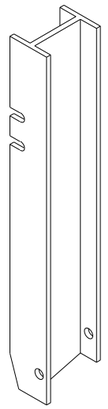


WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



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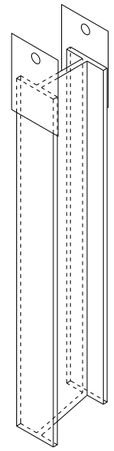

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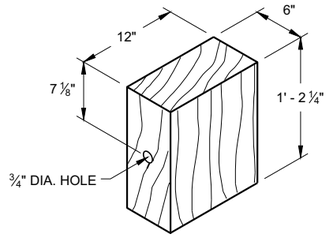
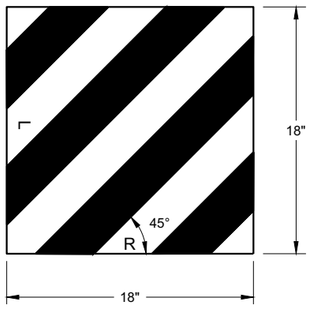
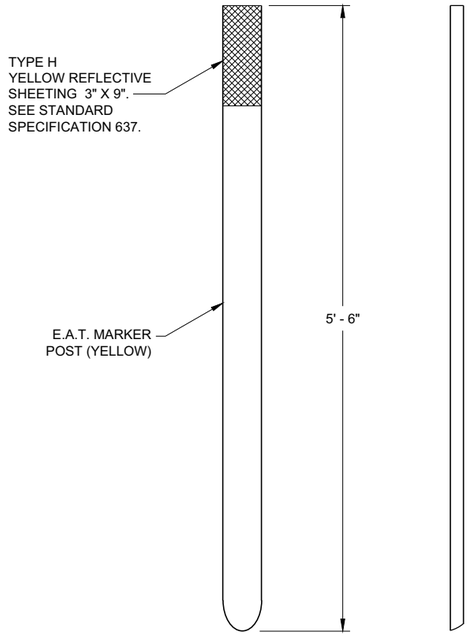


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



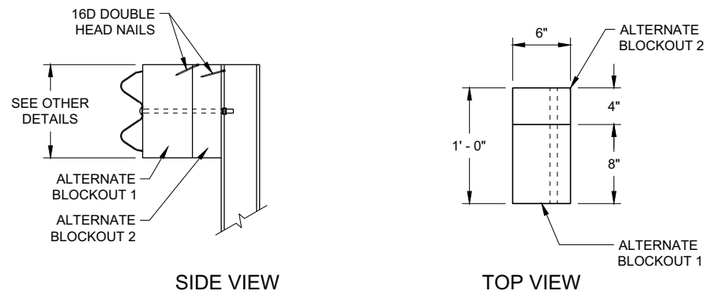
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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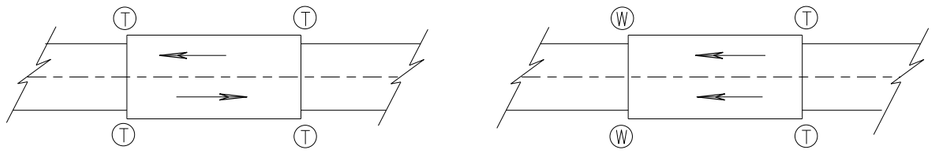
SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

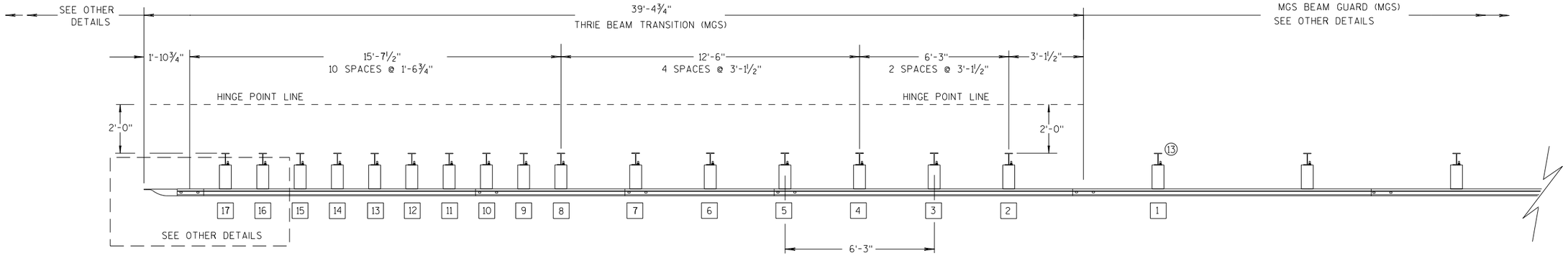
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

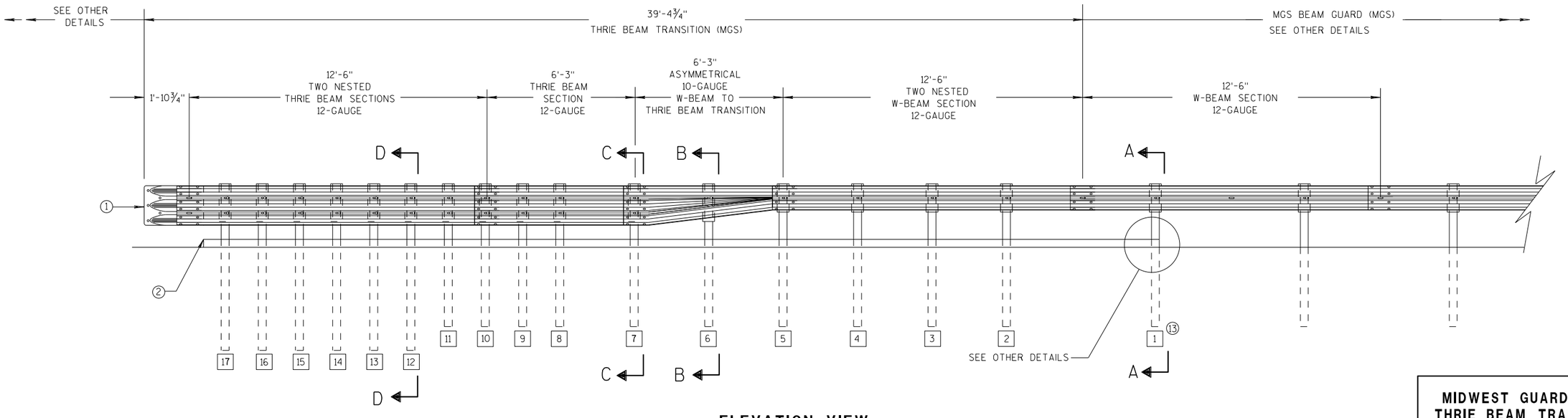
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF 355

6

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

6

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

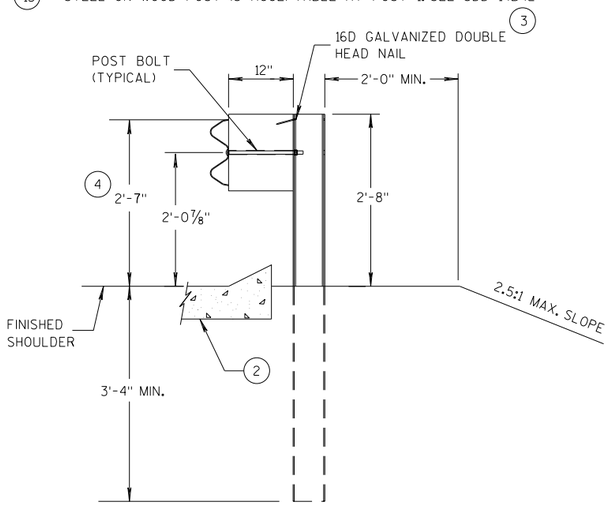
GENERAL NOTES

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

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

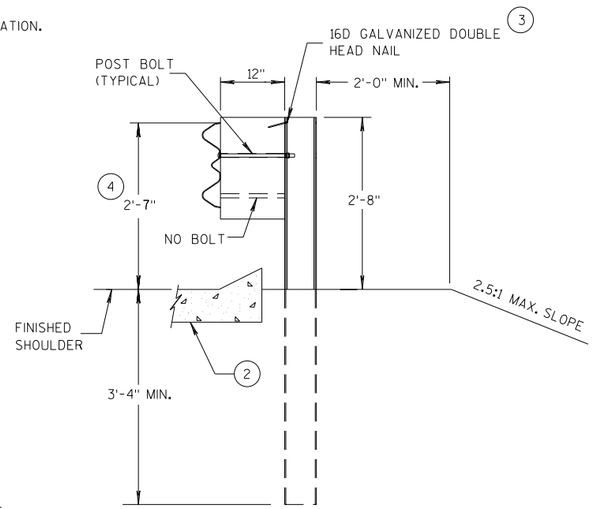
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



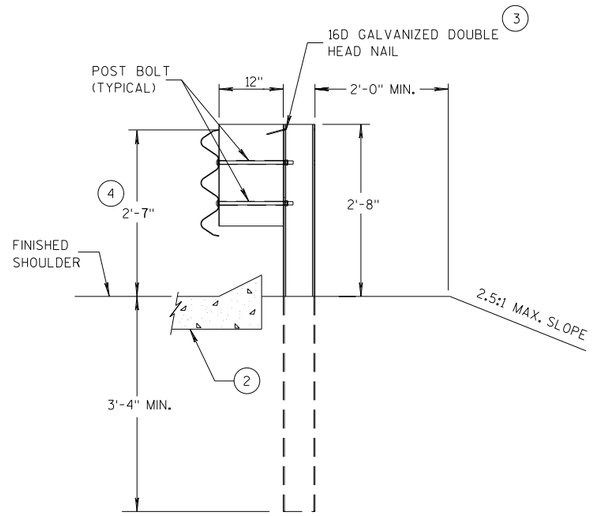
SECTION A-A (13)

POSTS 1-5



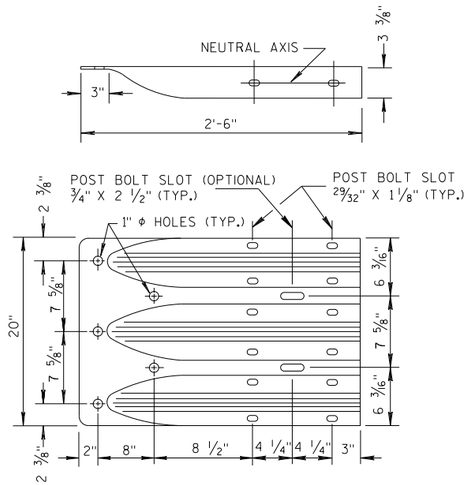
SECTION B-B

POST 6

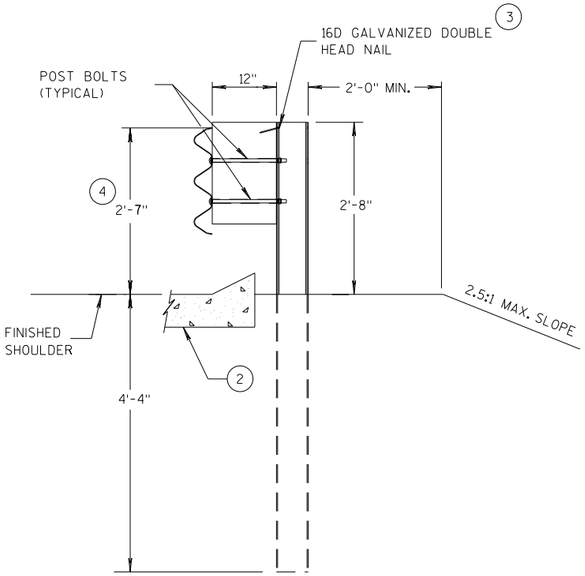


SECTION C-C

POSTS 7-11

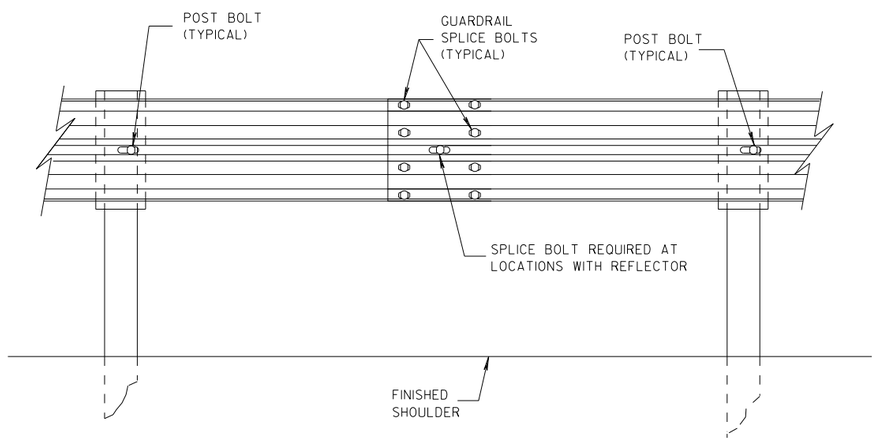


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

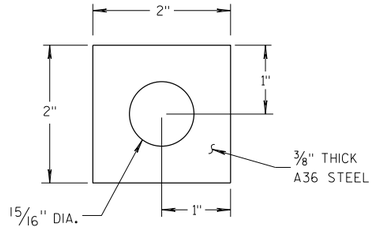
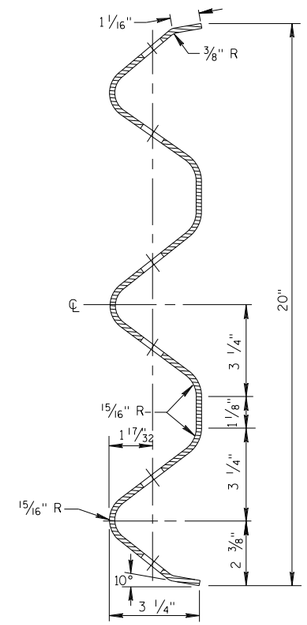


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

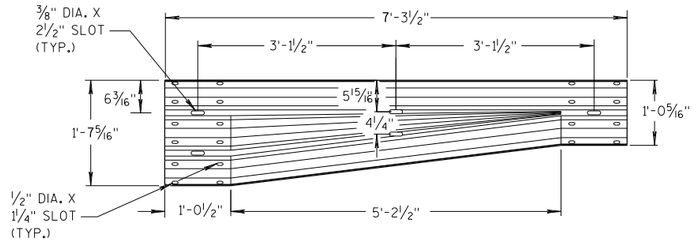
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF 356

6

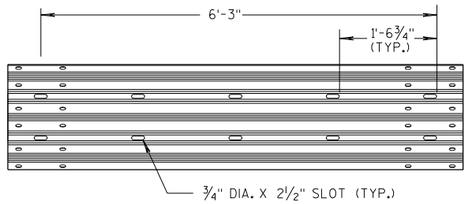
S.D.D. 14 B 45-5b

6

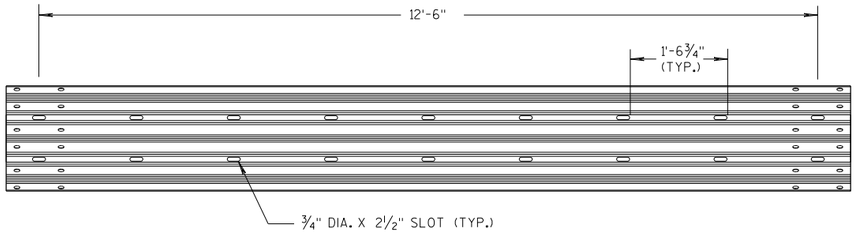
S.D.D. 14 B 45-5b



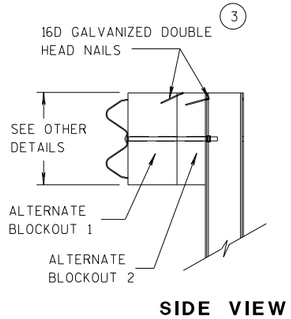
W-BEAM TO THRIE BEAM TRANSITION SECTION



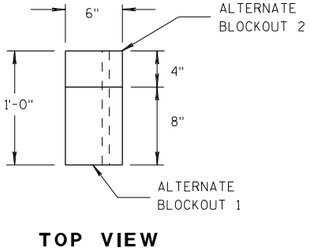
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

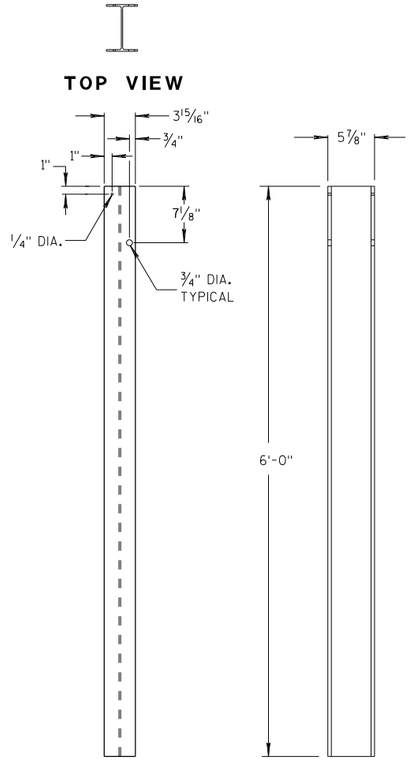


SIDE VIEW



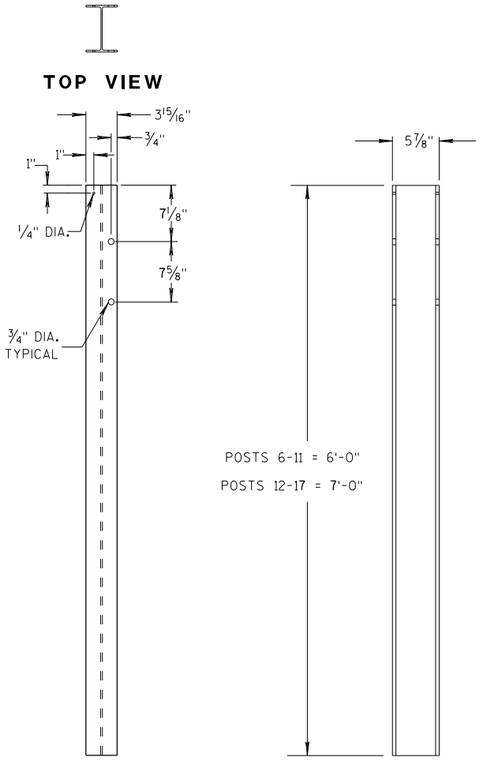
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



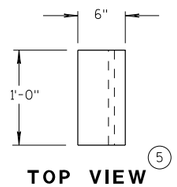
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

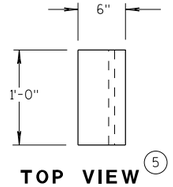


FRONT VIEW SIDE VIEW

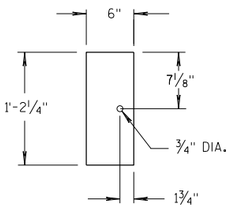
STEEL POSTS 6-17



TOP VIEW (5)

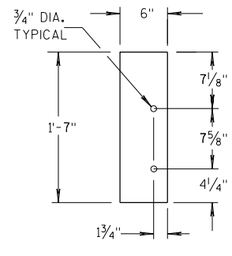


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

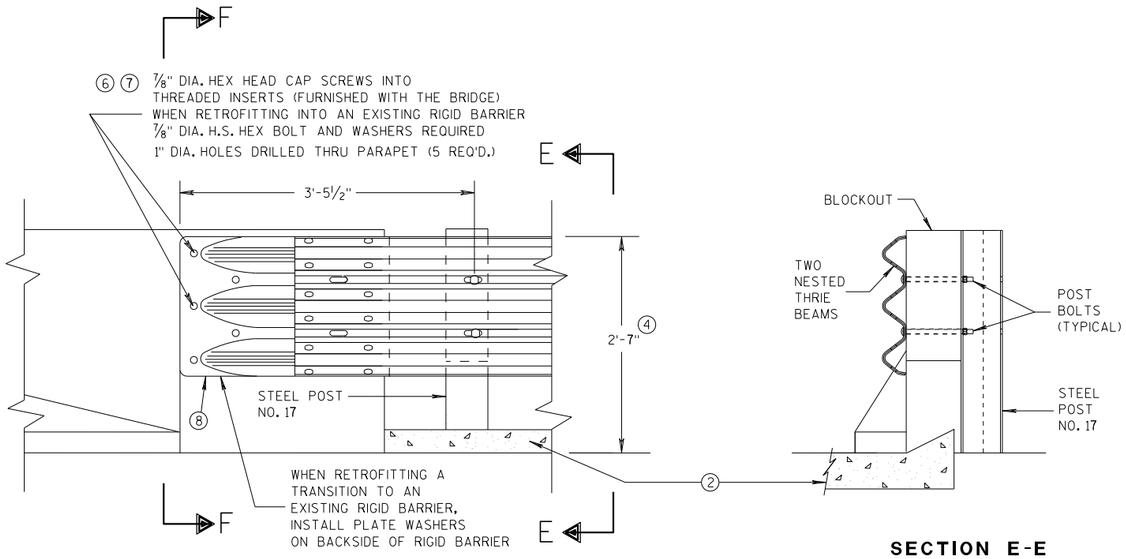
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 357

6
S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

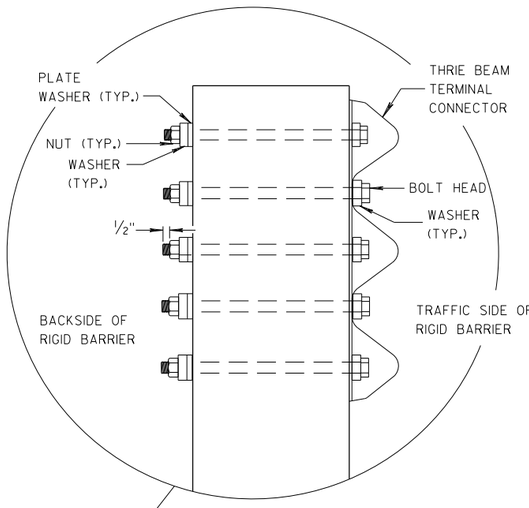
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

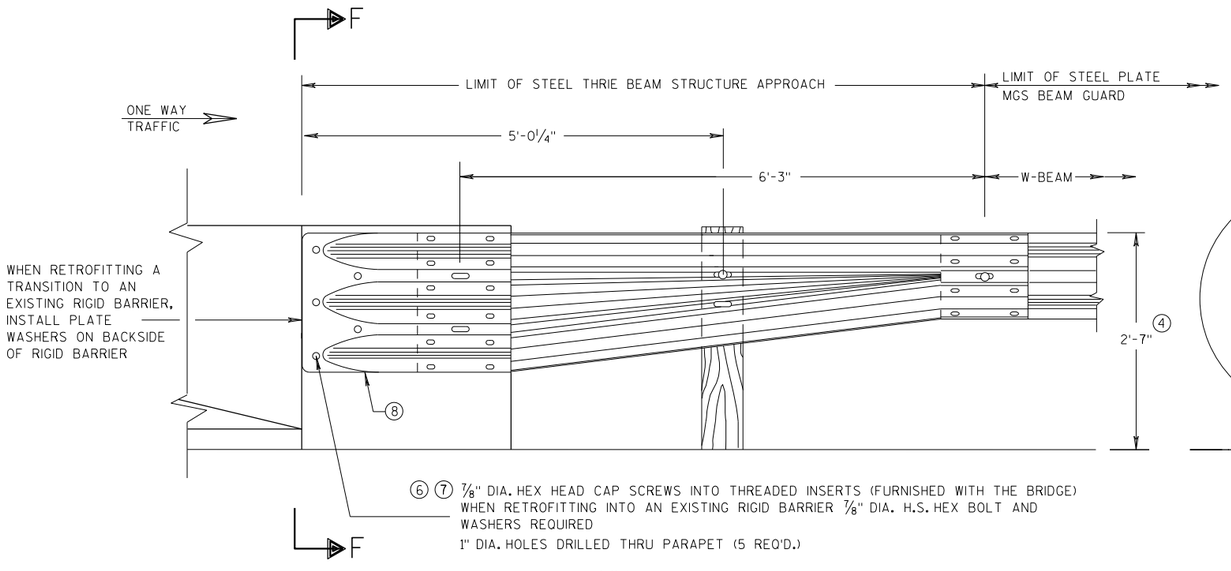
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

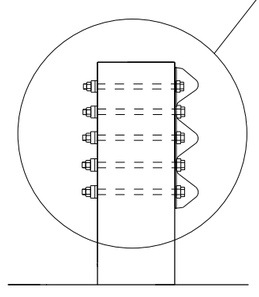
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

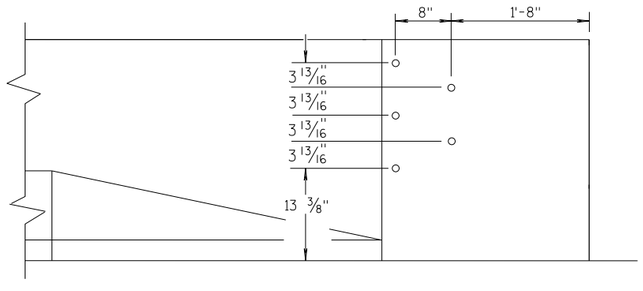




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

GENERAL NOTES

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

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

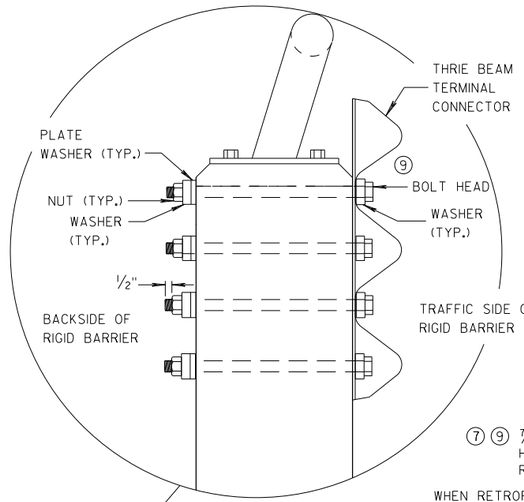
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

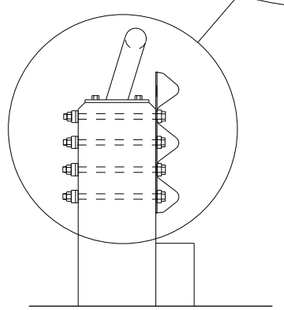
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

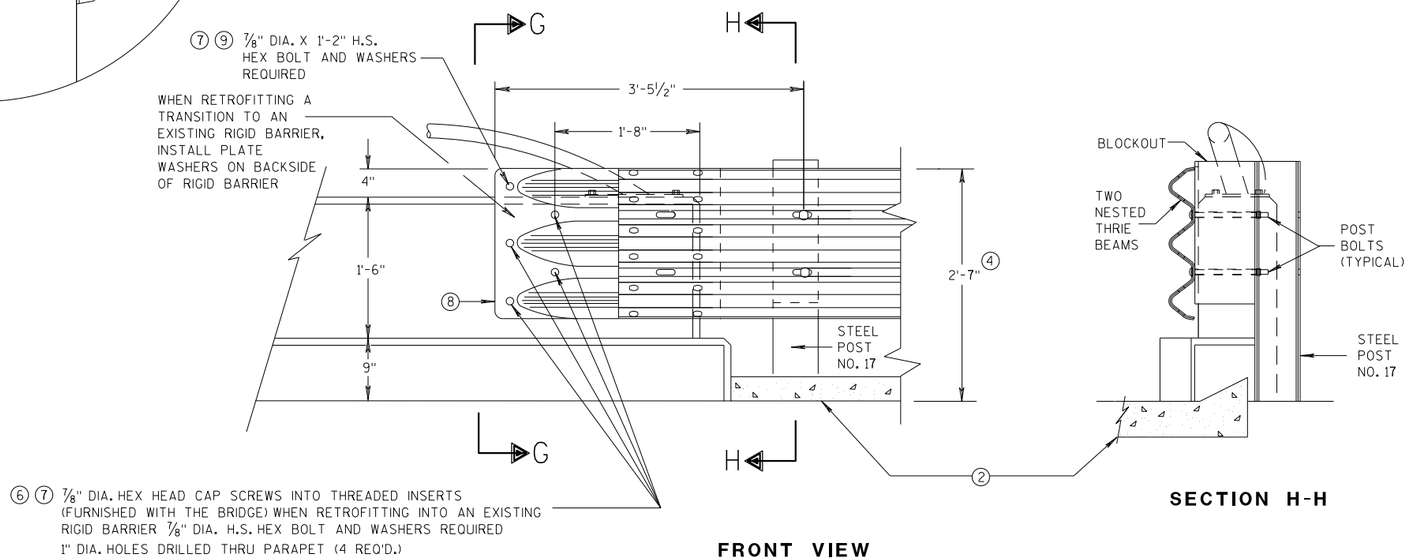
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

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





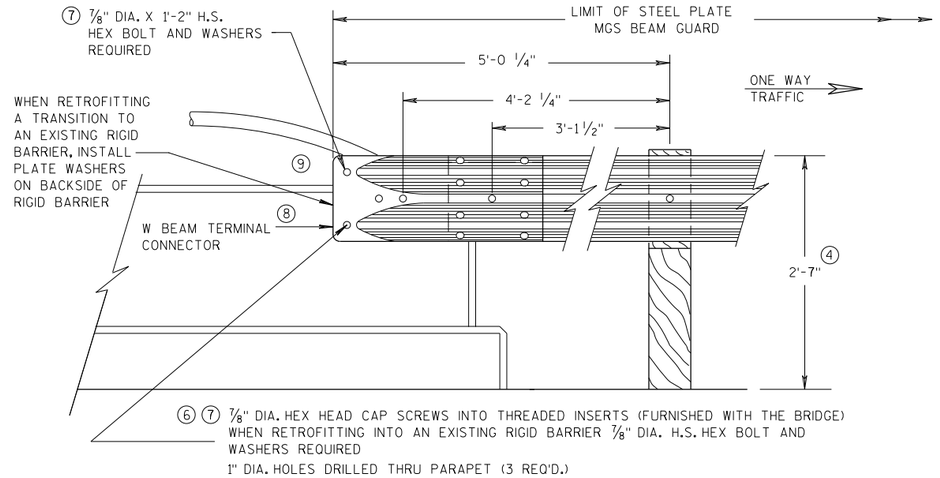
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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07/2018 — DATE
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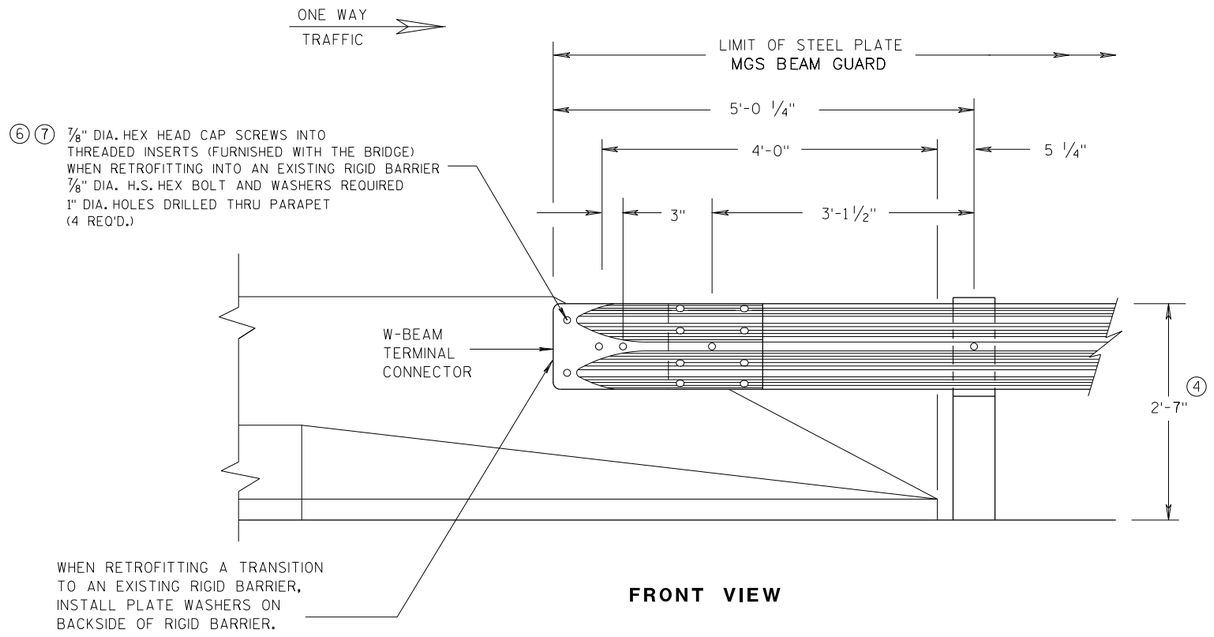


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

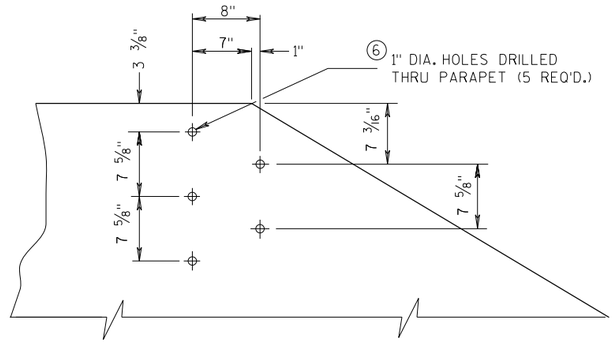
GENERAL NOTES

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

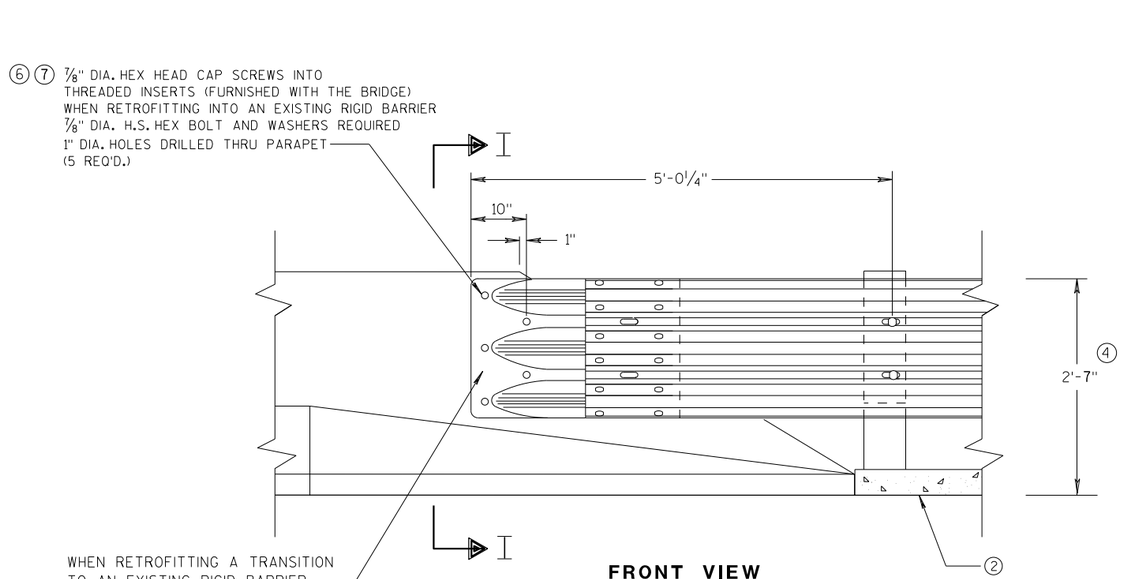
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

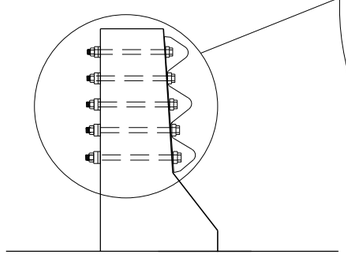
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



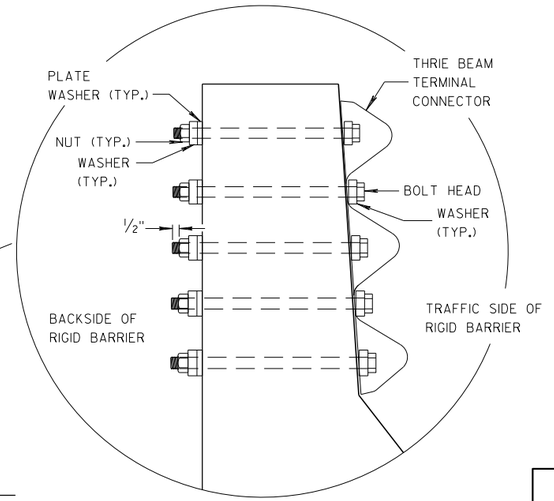
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



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
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UNIT SUPERVI 360
FHWA

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

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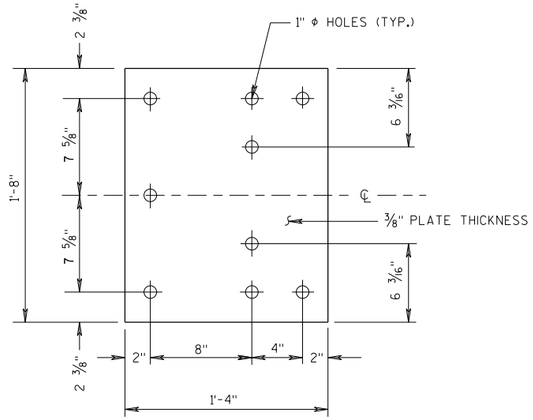
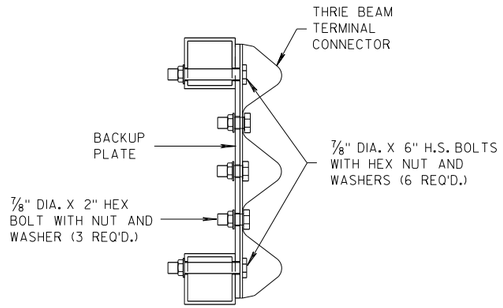
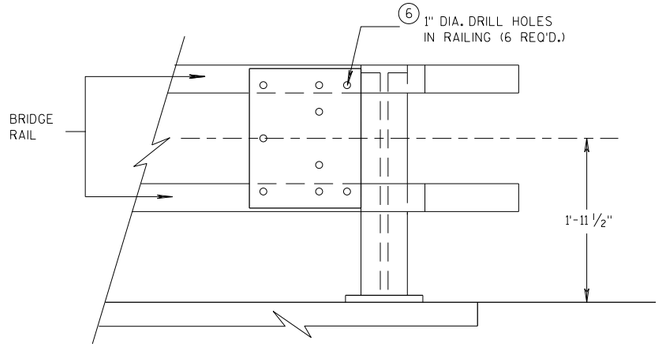
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

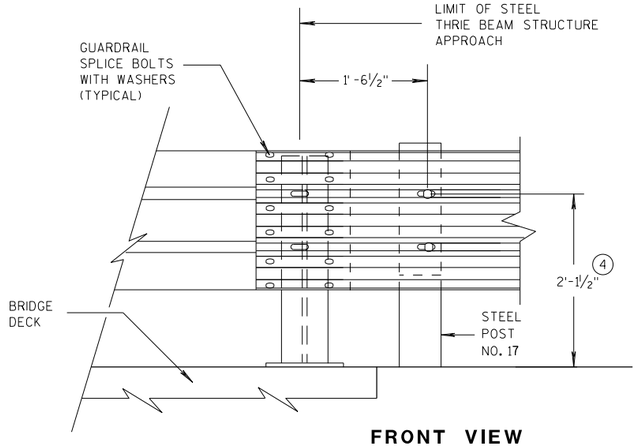


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

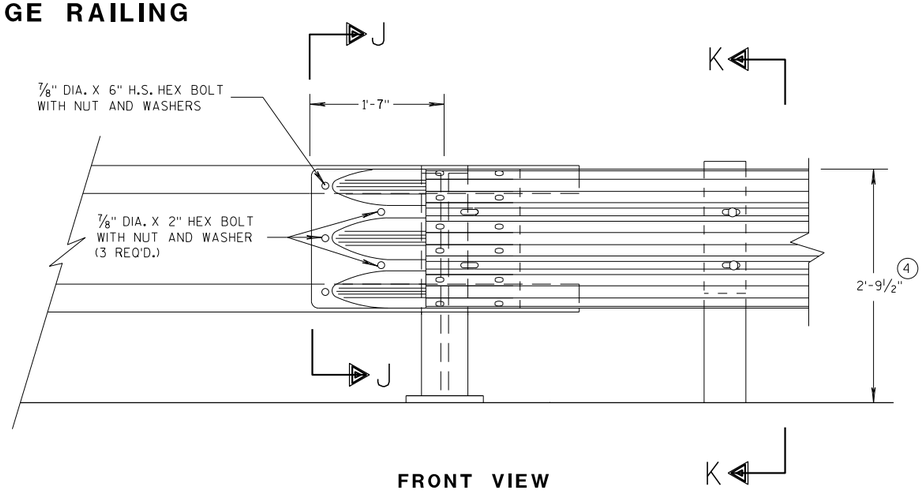
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

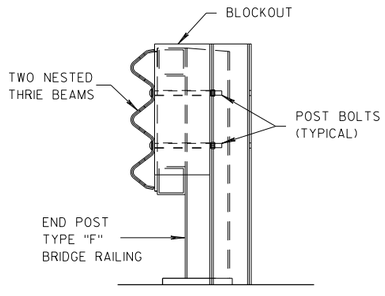


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE — FHWA

/S/ Rodney Taylor 361
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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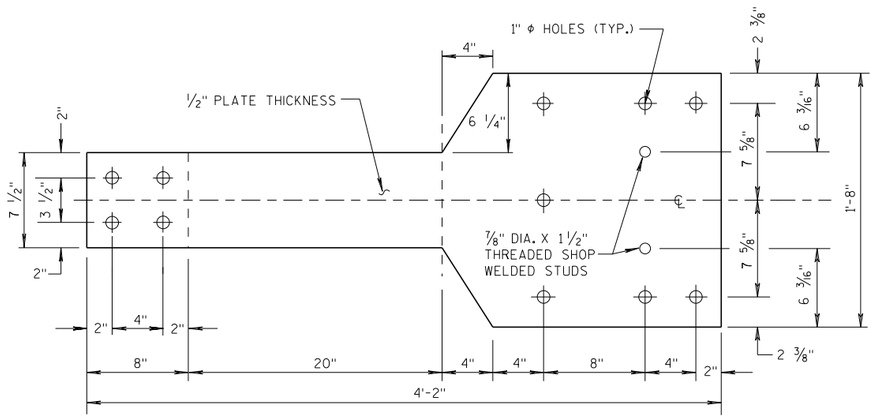
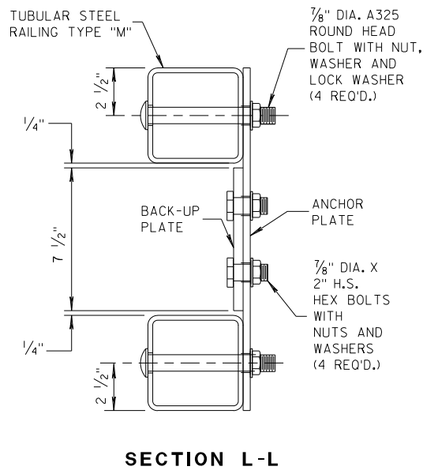
S.D.D. 14 B 45-5g

GENERAL NOTES

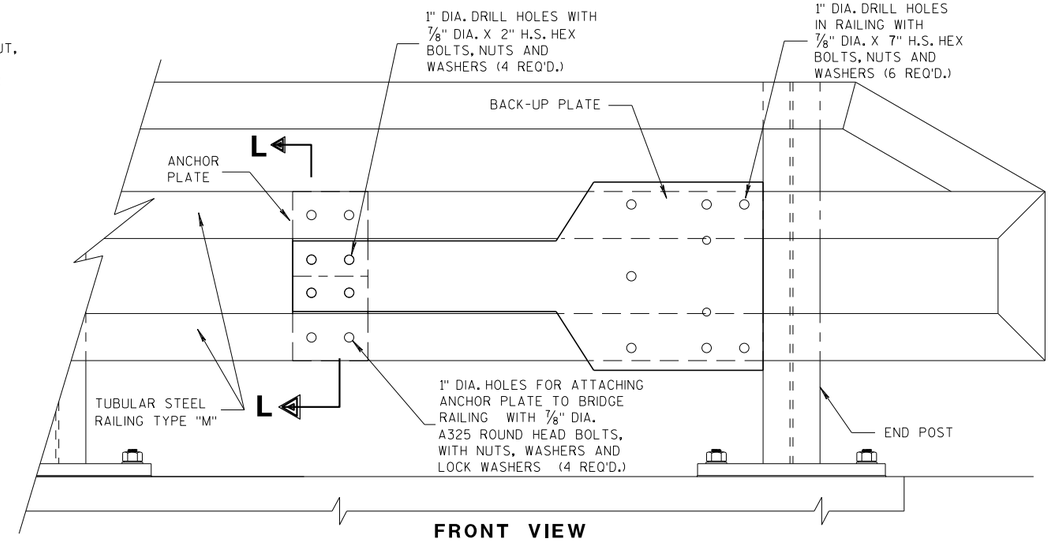
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



FRONT VIEW

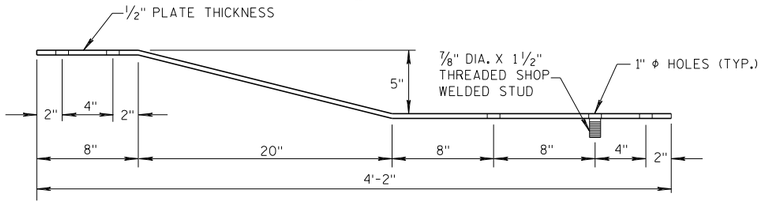


SECTION L-L



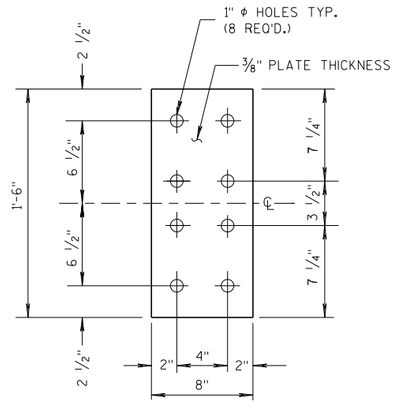
FRONT VIEW

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



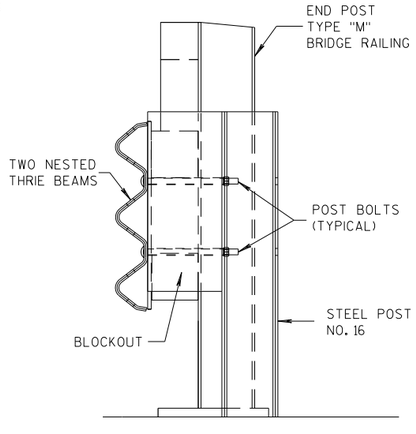
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

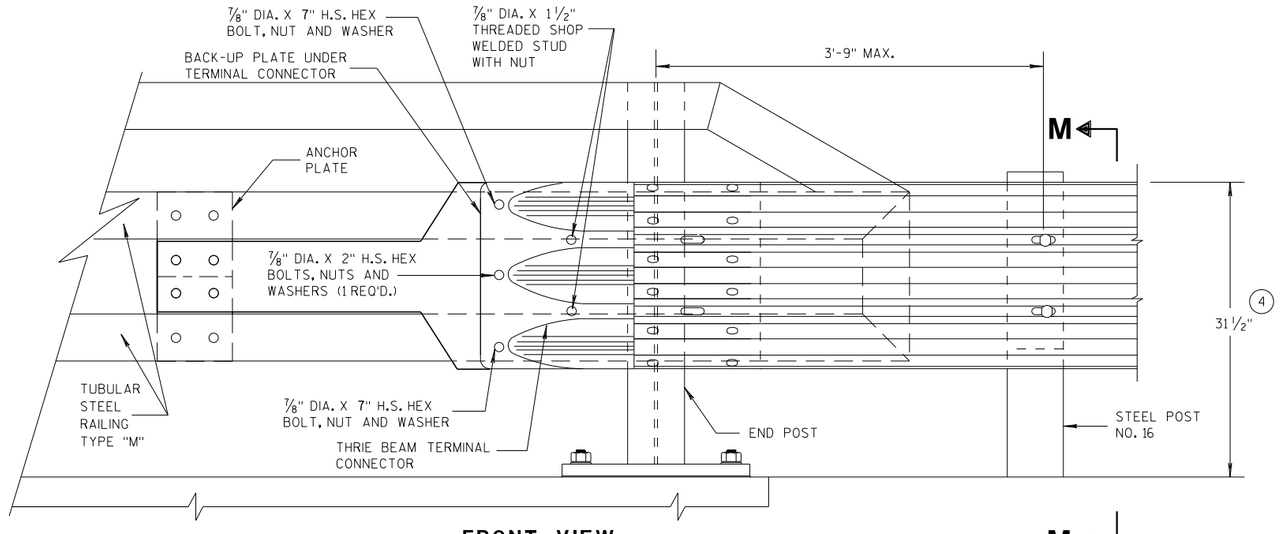


FRONT VIEW

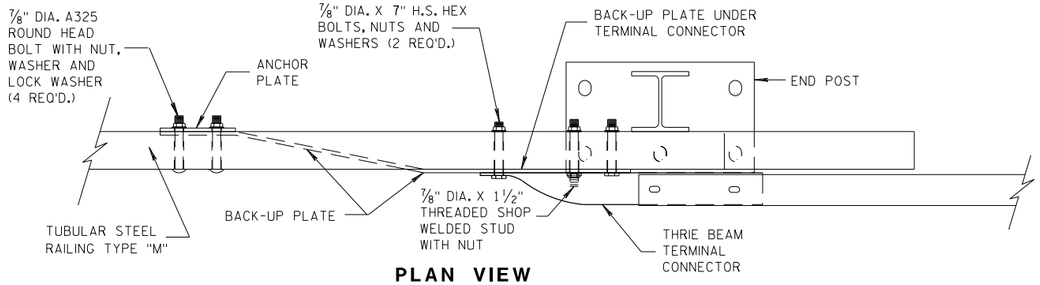
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

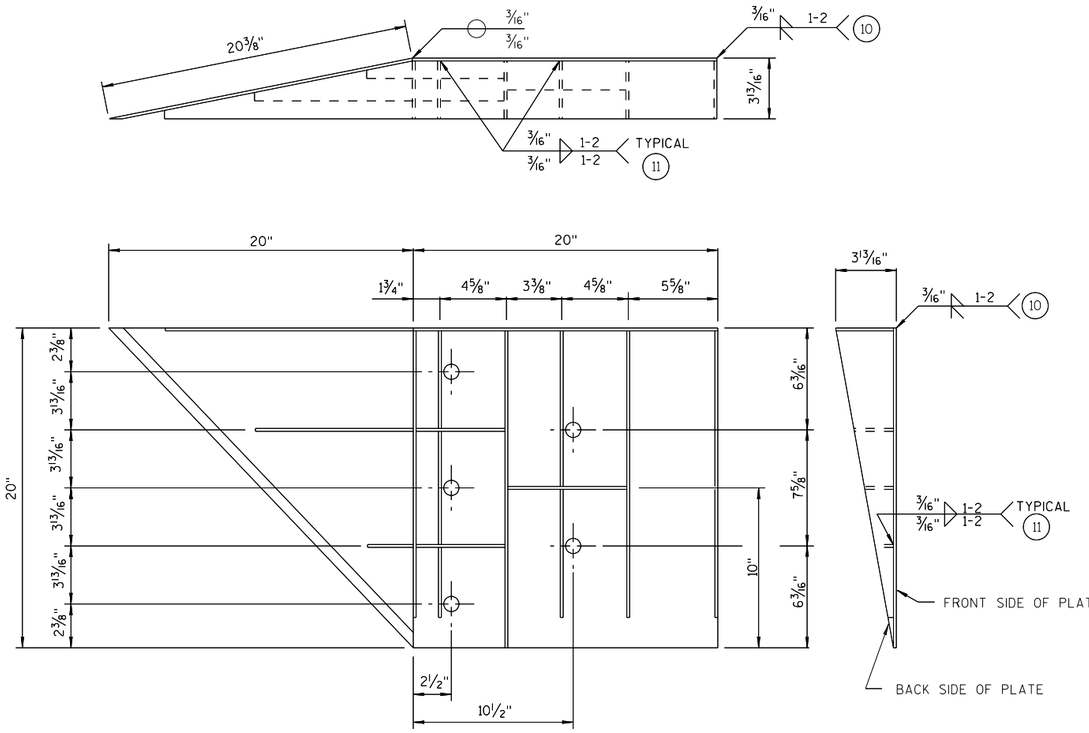
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

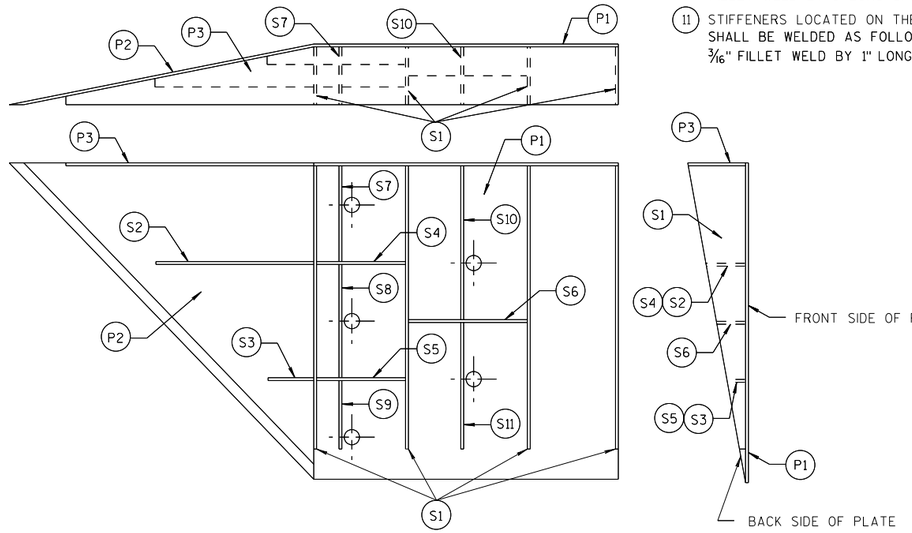


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

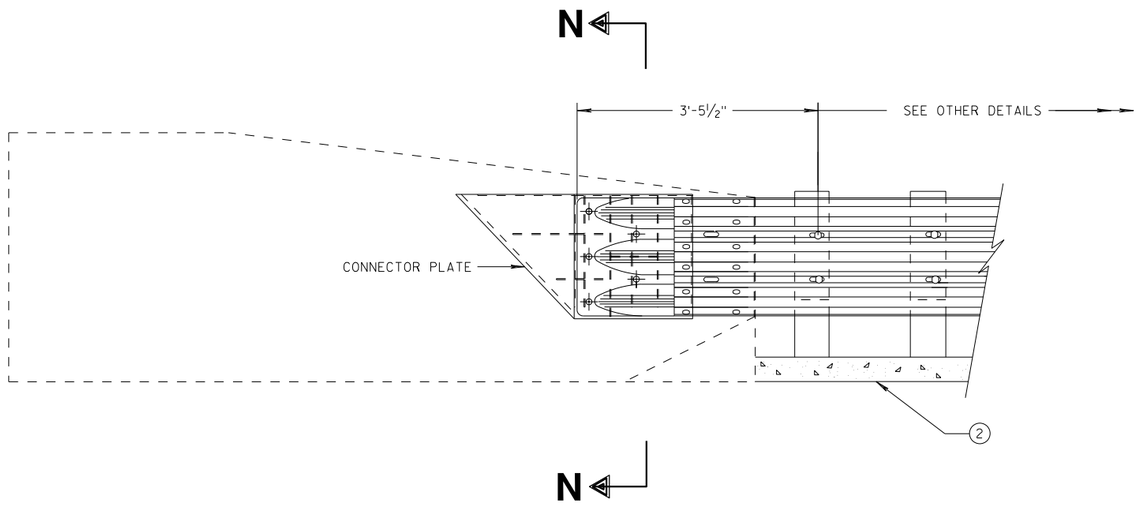
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

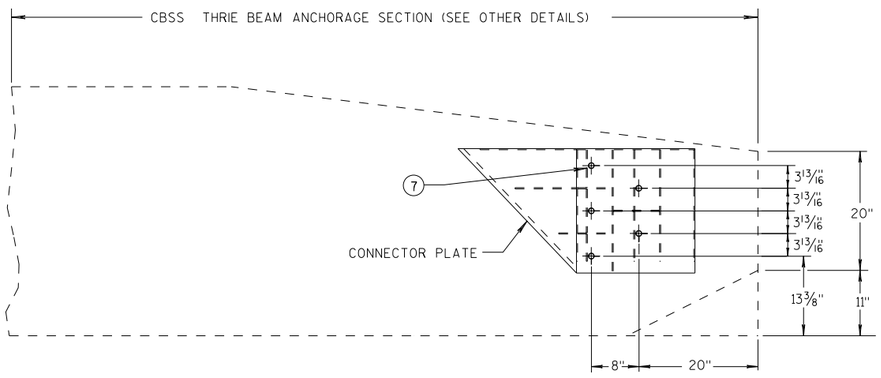
/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

6

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



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



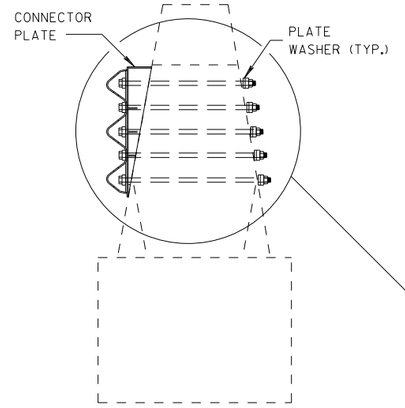
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

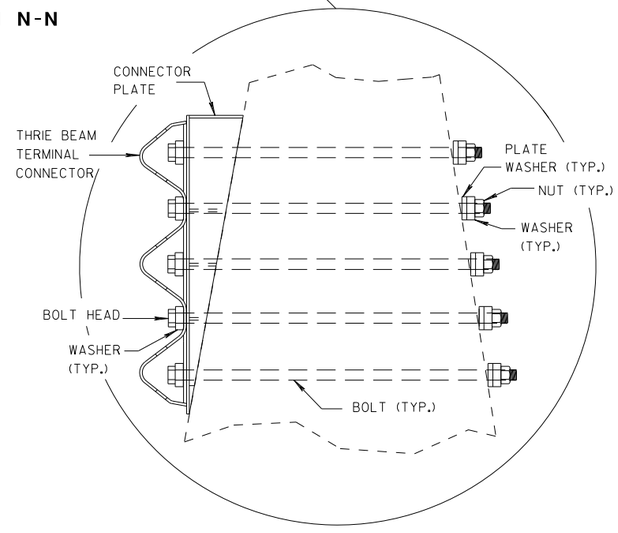
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
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FHWA

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

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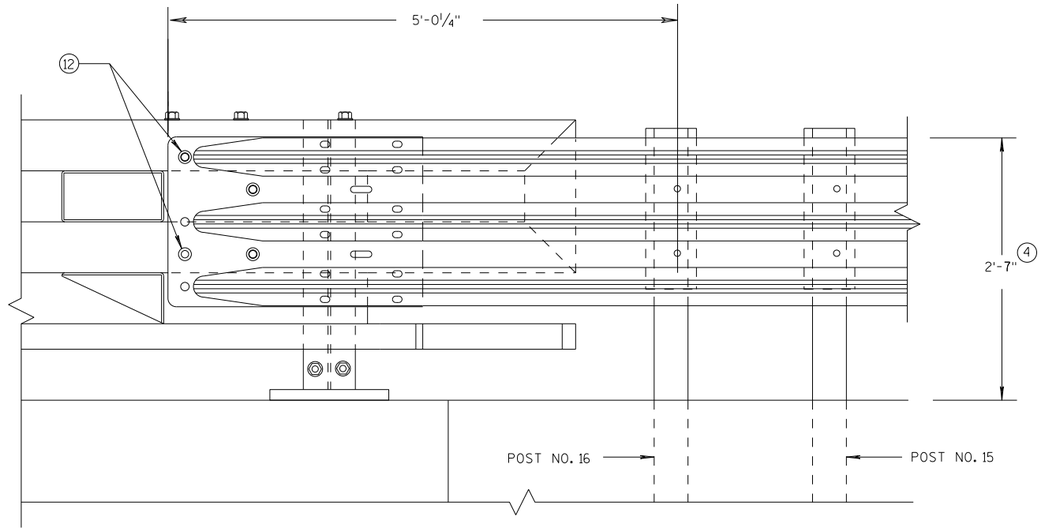
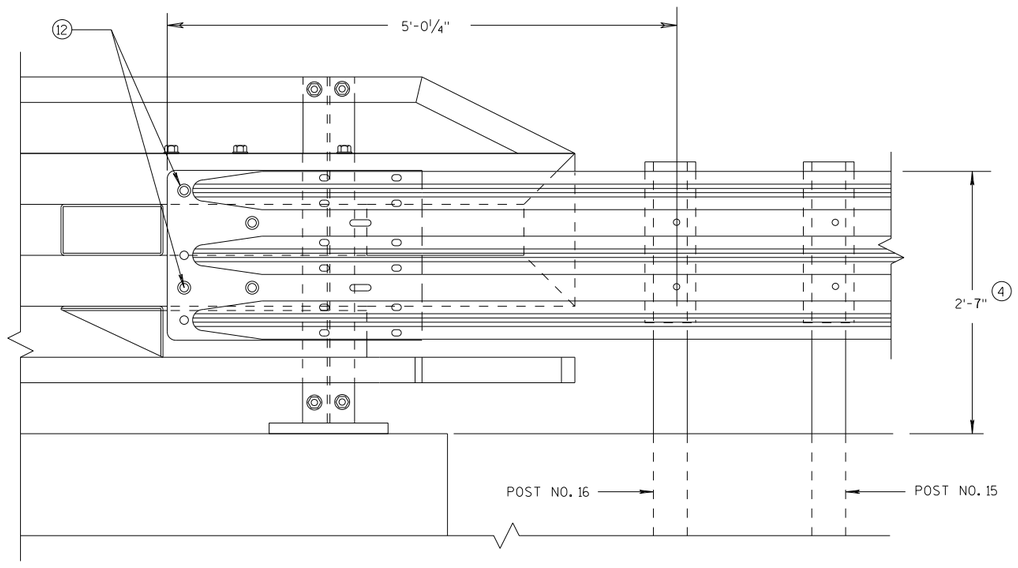
S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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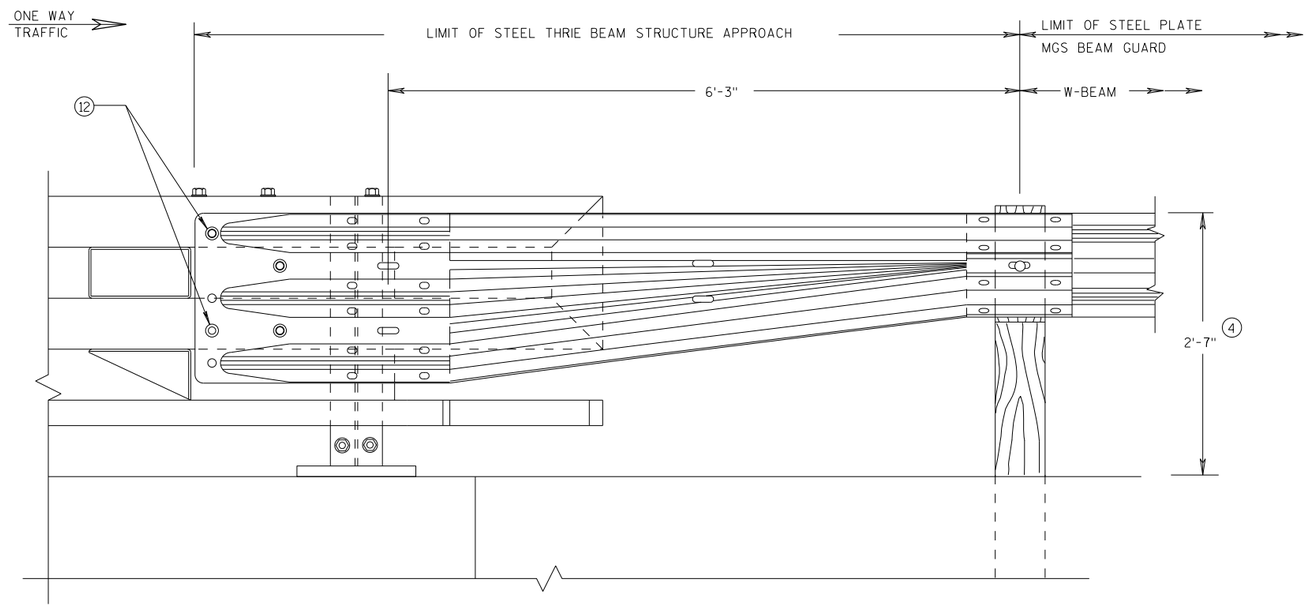
S.D.D. 14 B 45-5k



FRONT VIEW

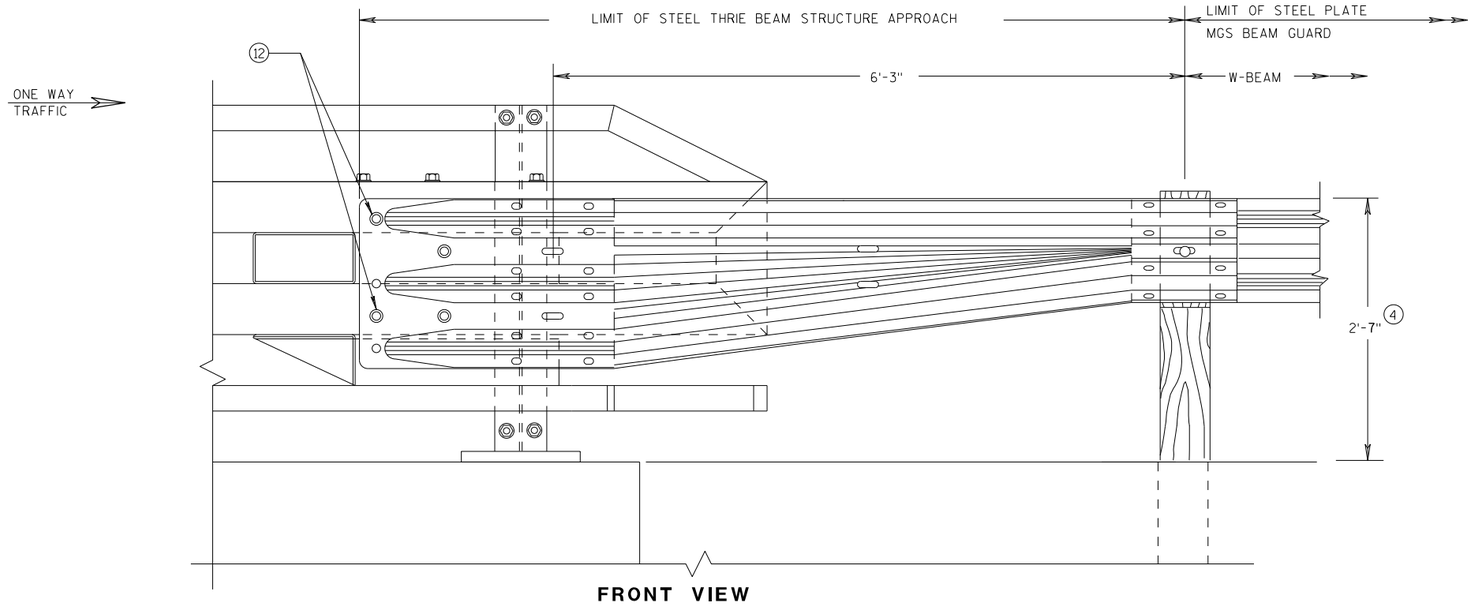
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

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



FRONT VIEW

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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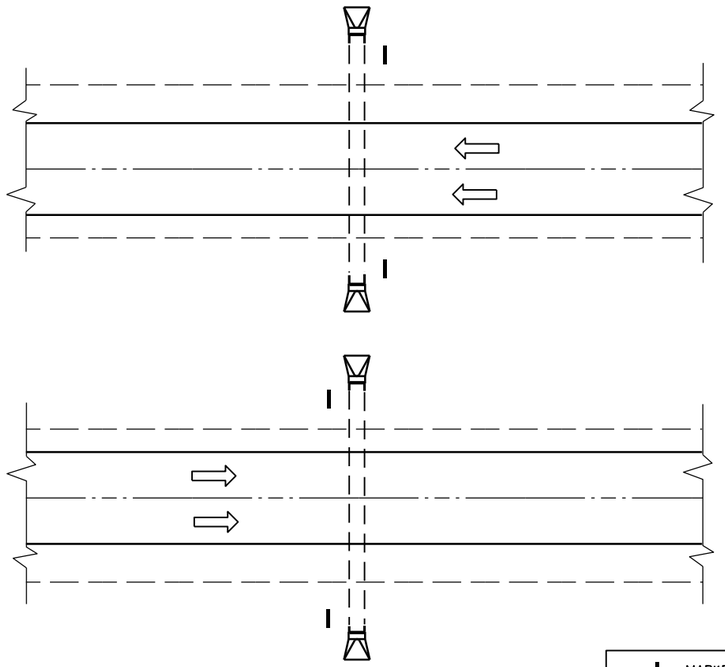
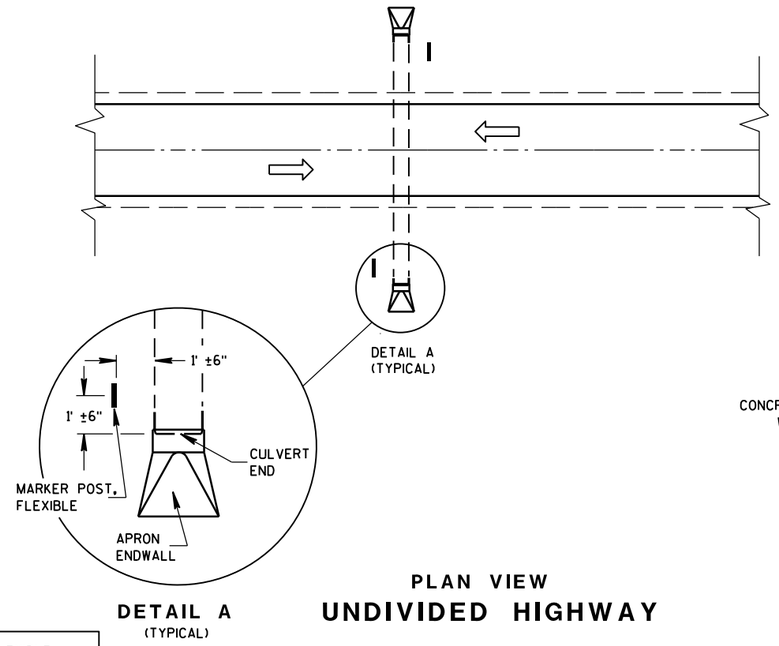
S.D.D. 14 B 45-5L



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

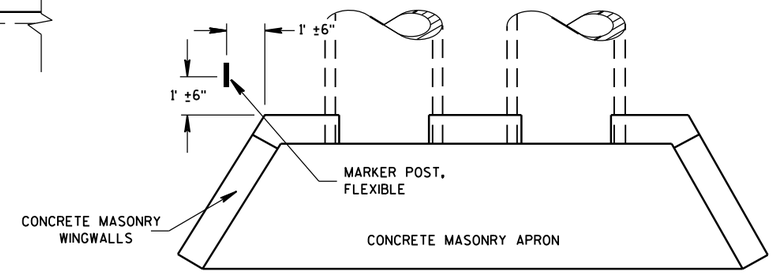
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

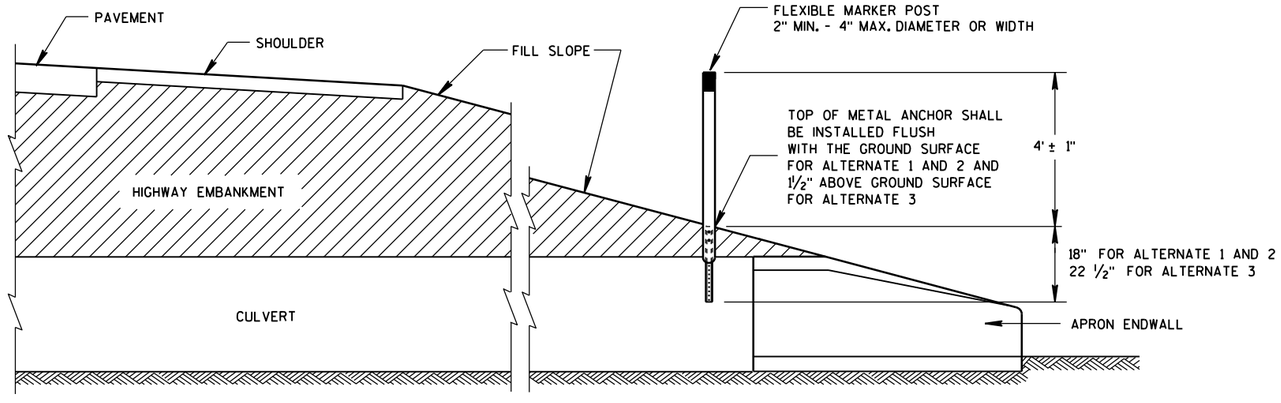
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

6

S.D.D. 15 A 3-2a

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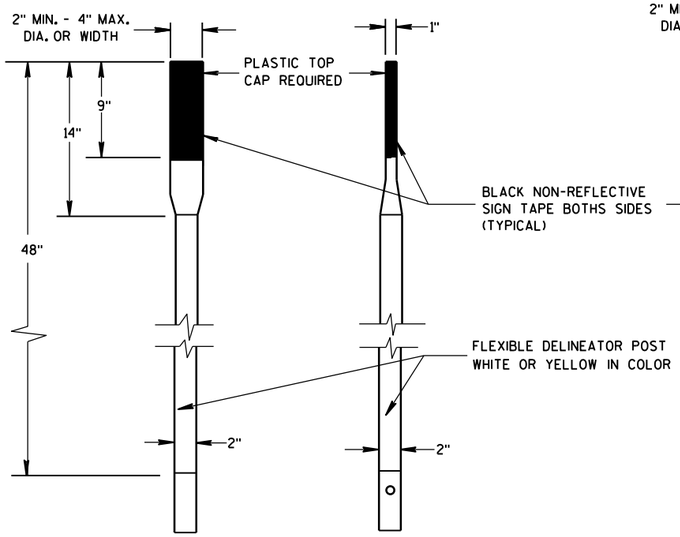
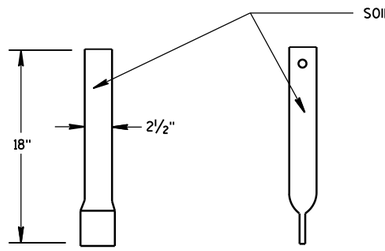
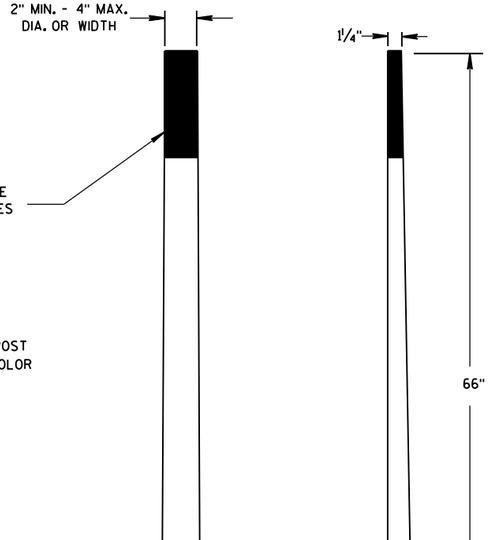
S.D.D. 15 A 3-2a





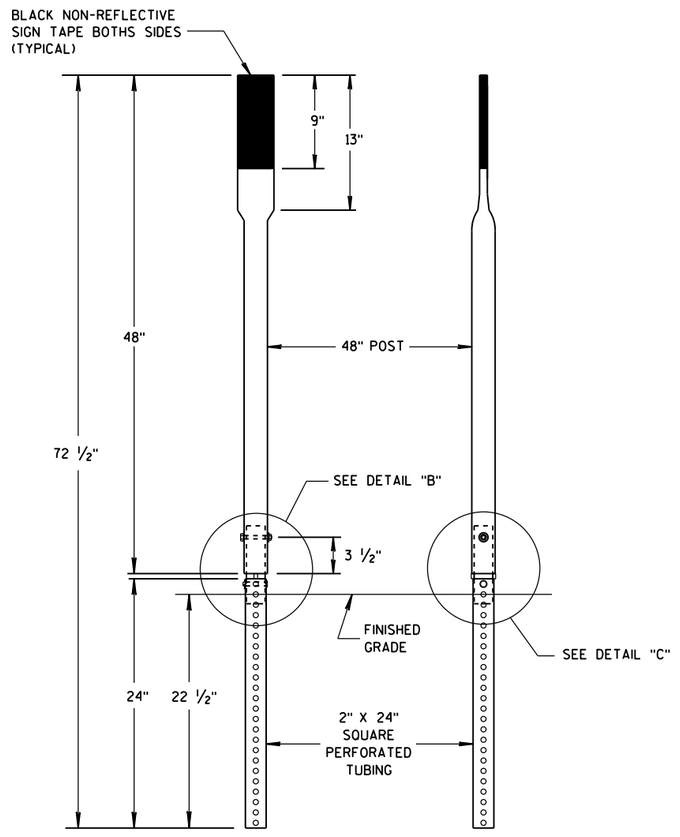
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

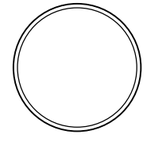
ALTERNATE 2



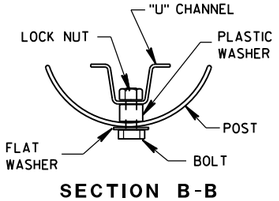
FRONT VIEW SIDE VIEW

ALTERNATE 3

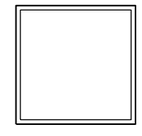
FLEXIBLE MARKER POSTS



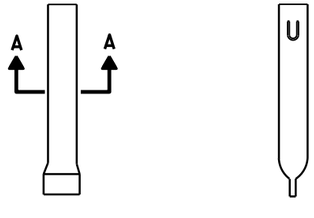
SECTION A-A



SECTION B-B

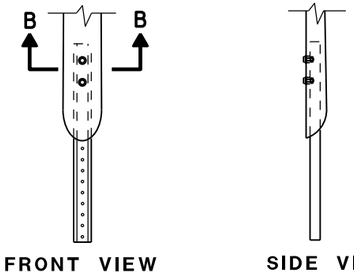


SECTION C-C



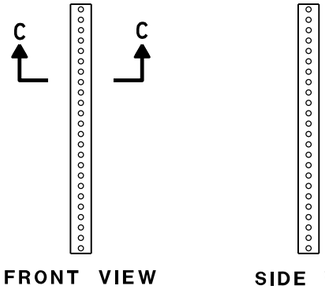
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

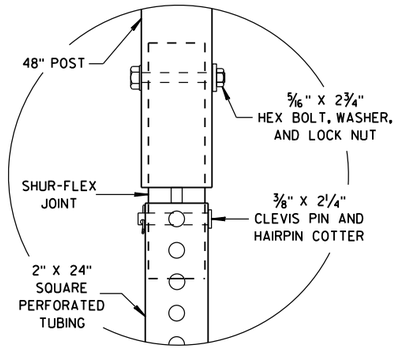
ALTERNATE 2



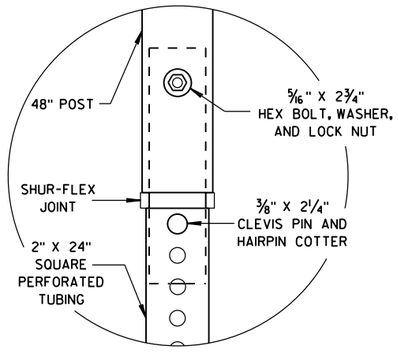
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

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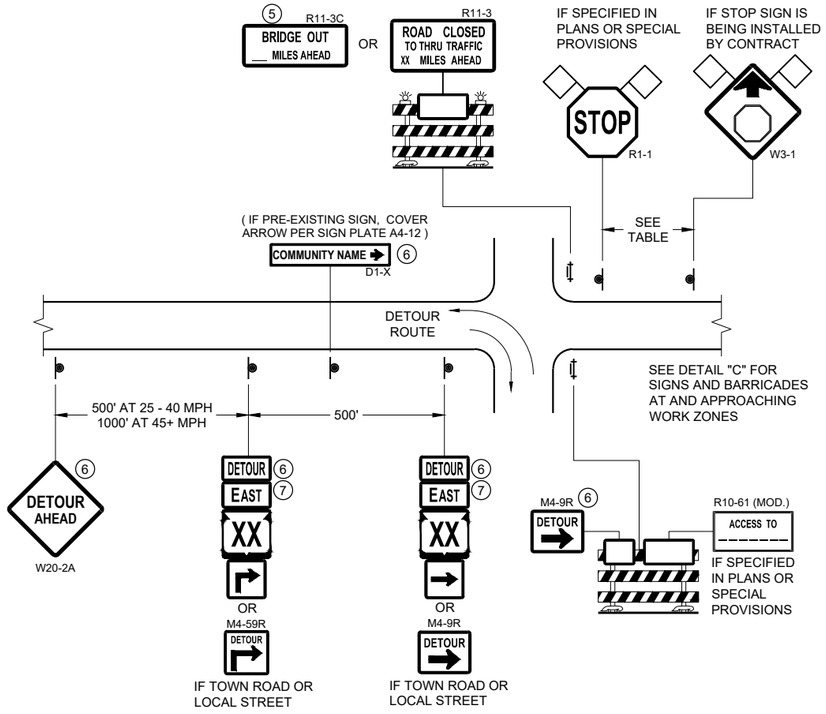
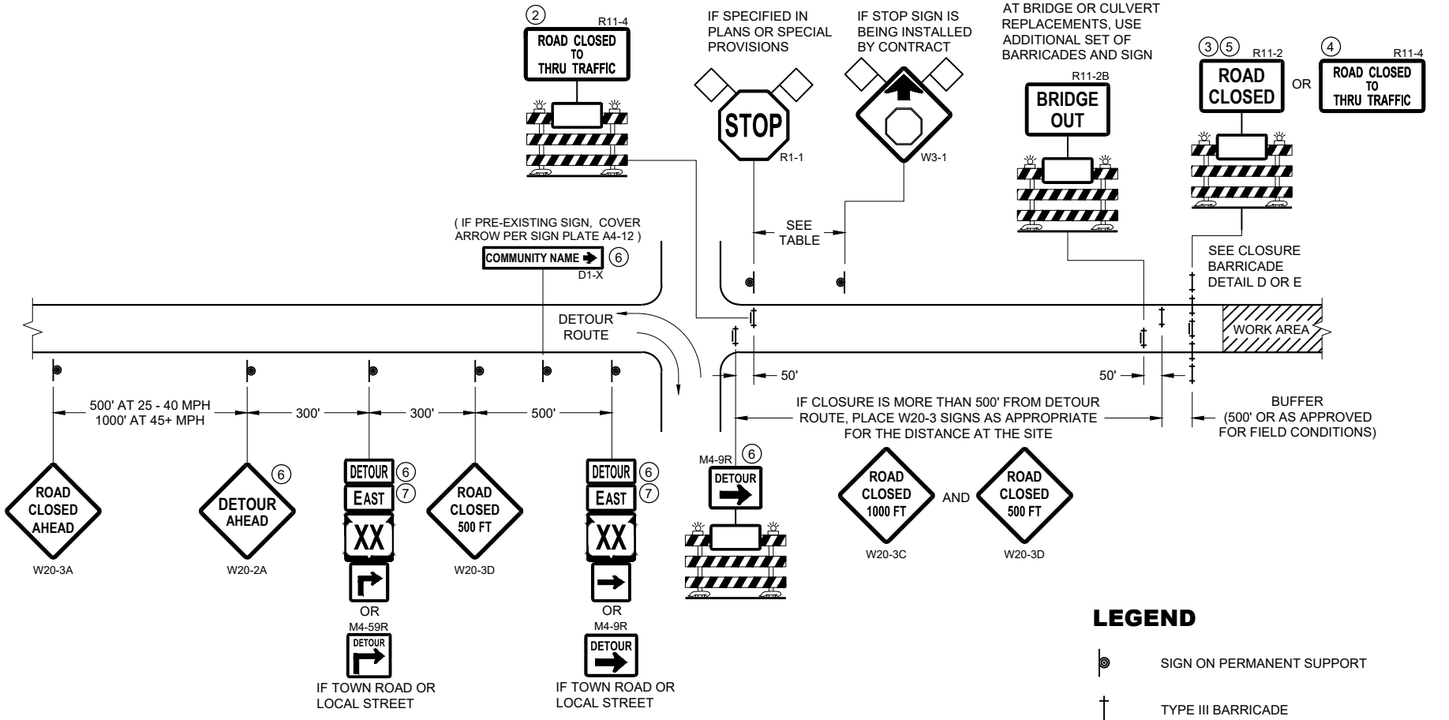
S.D.D. 15 A 3-2b



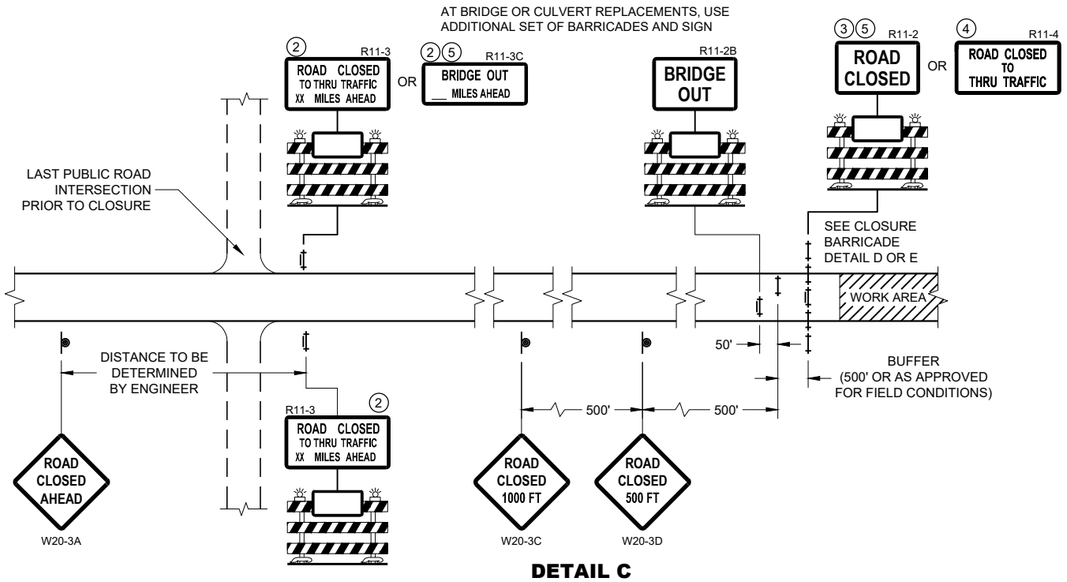
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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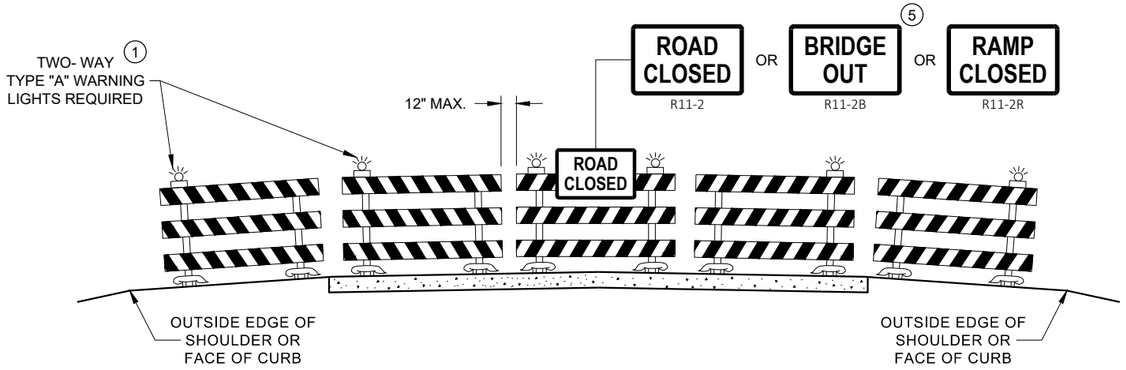
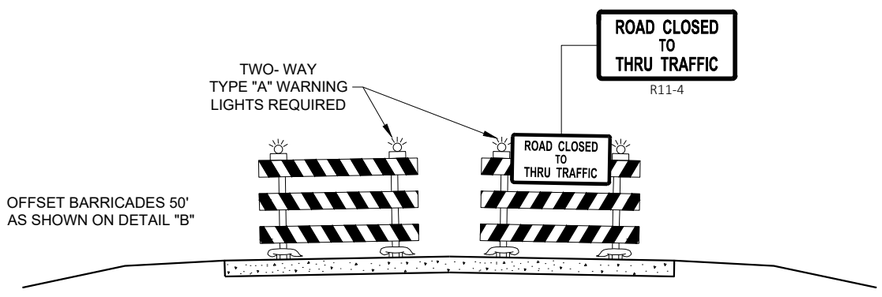
SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

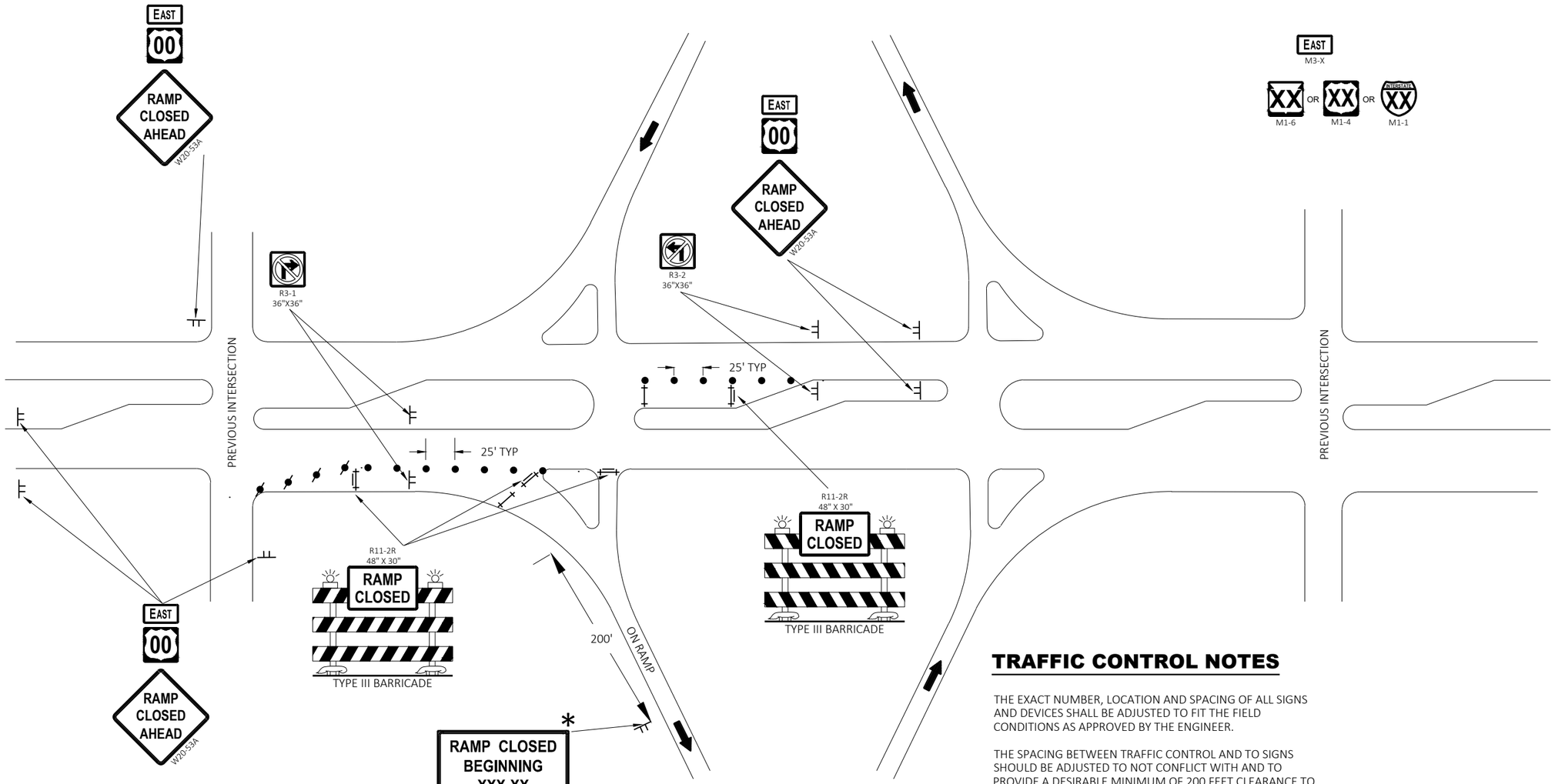
BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b



LEGEND

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

TRAFFIC CONTROL NOTES

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
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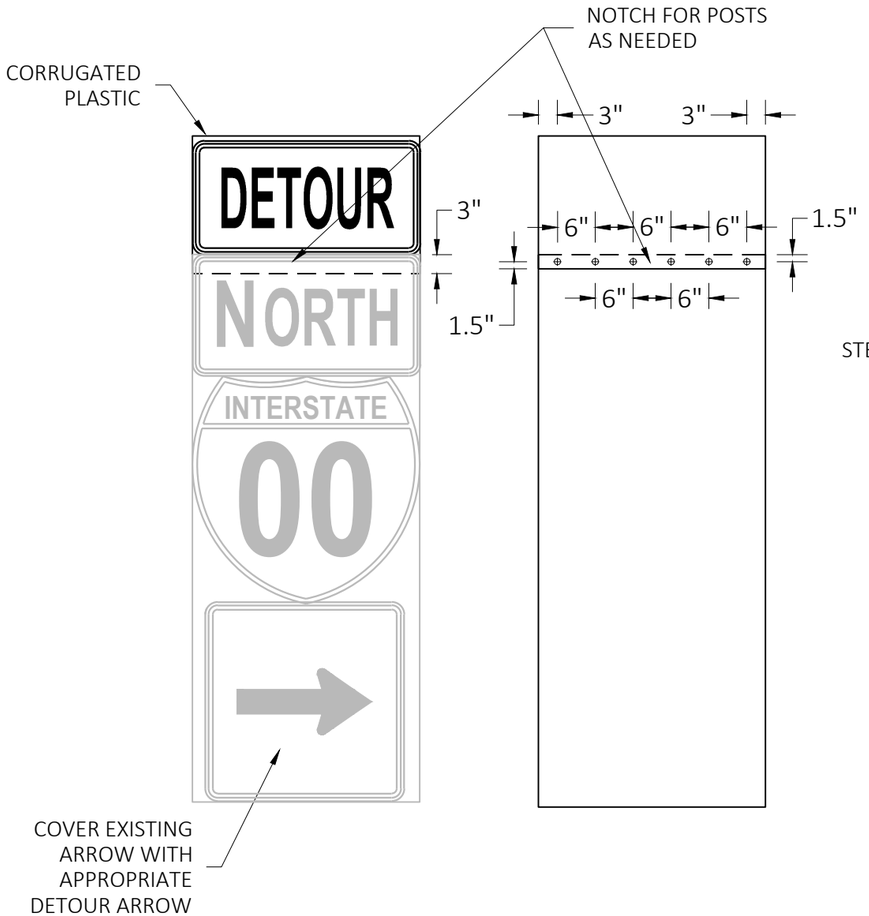
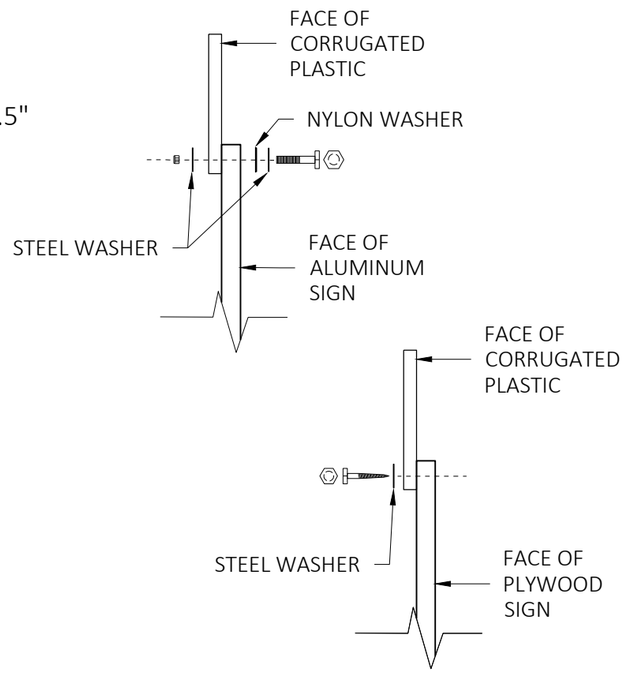
FRONT SIDE

BACK SIDE

SIDE VIEW





GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3.

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1-1/4" O.D. x 3/8" I.D. x .080 NYLON

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA

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GENERAL NOTES

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

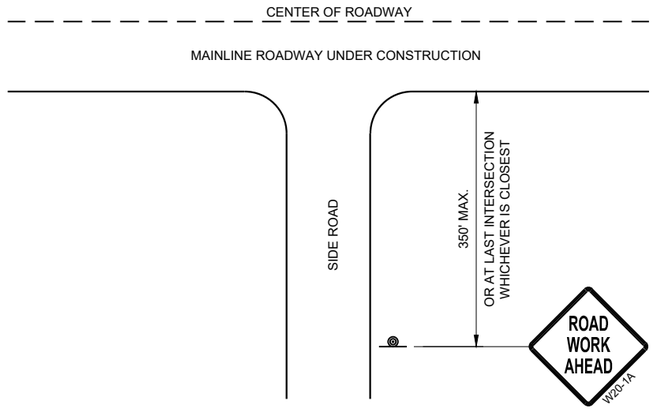
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

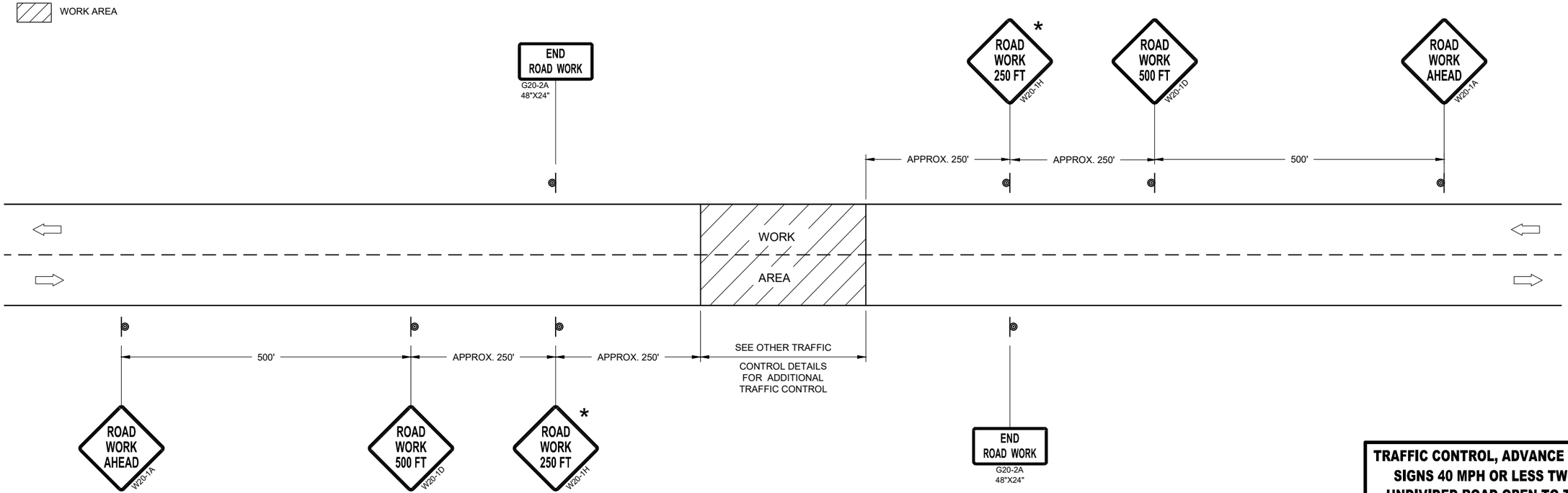
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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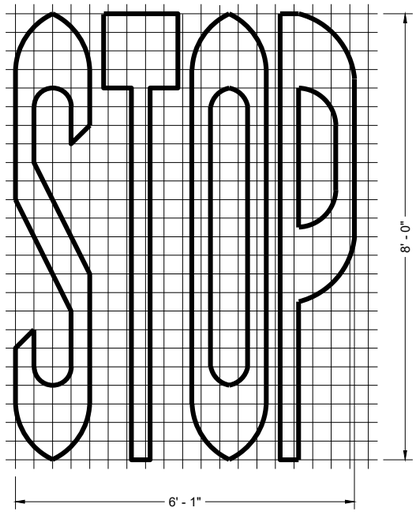
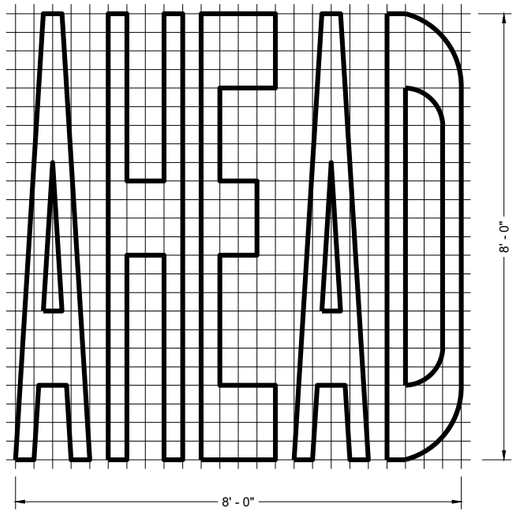
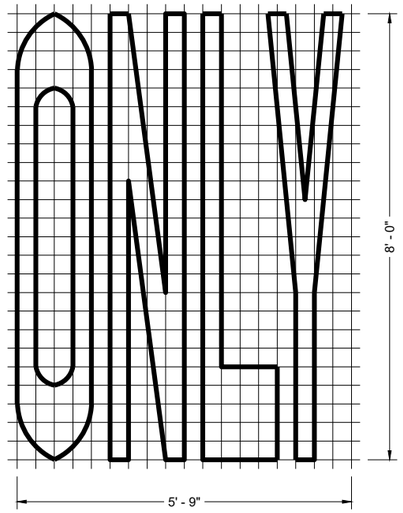
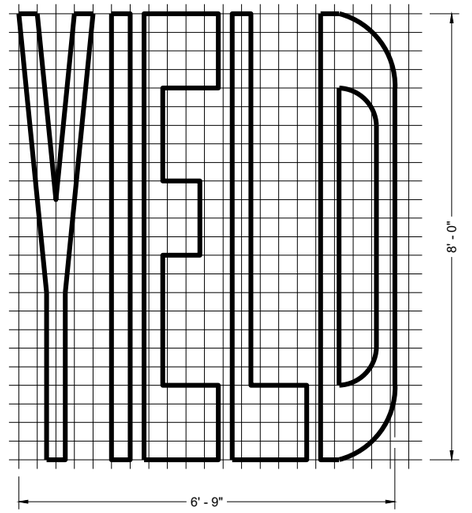
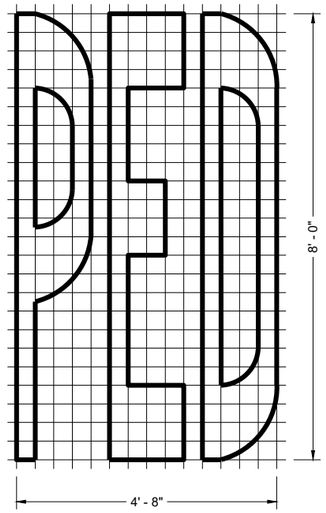
SDD 15C05 - 05

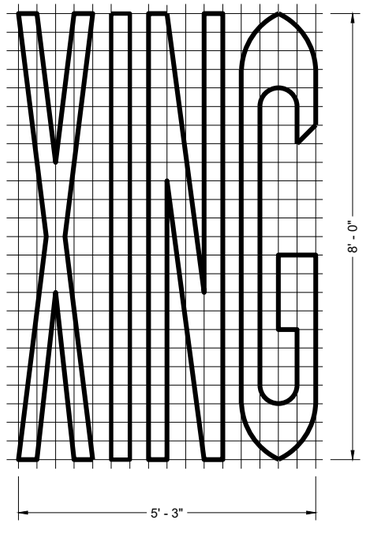


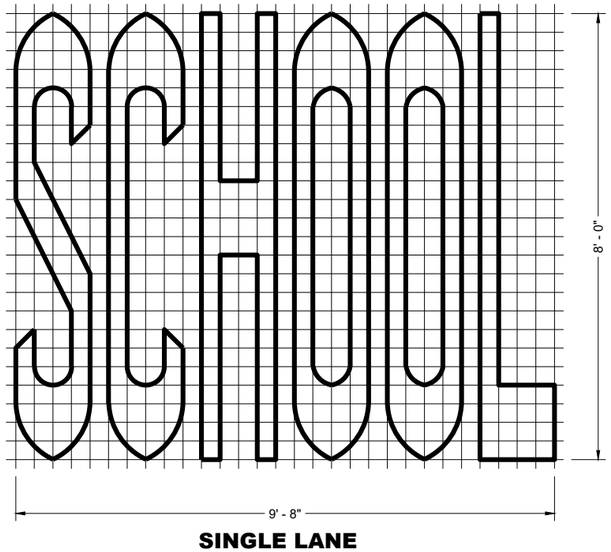




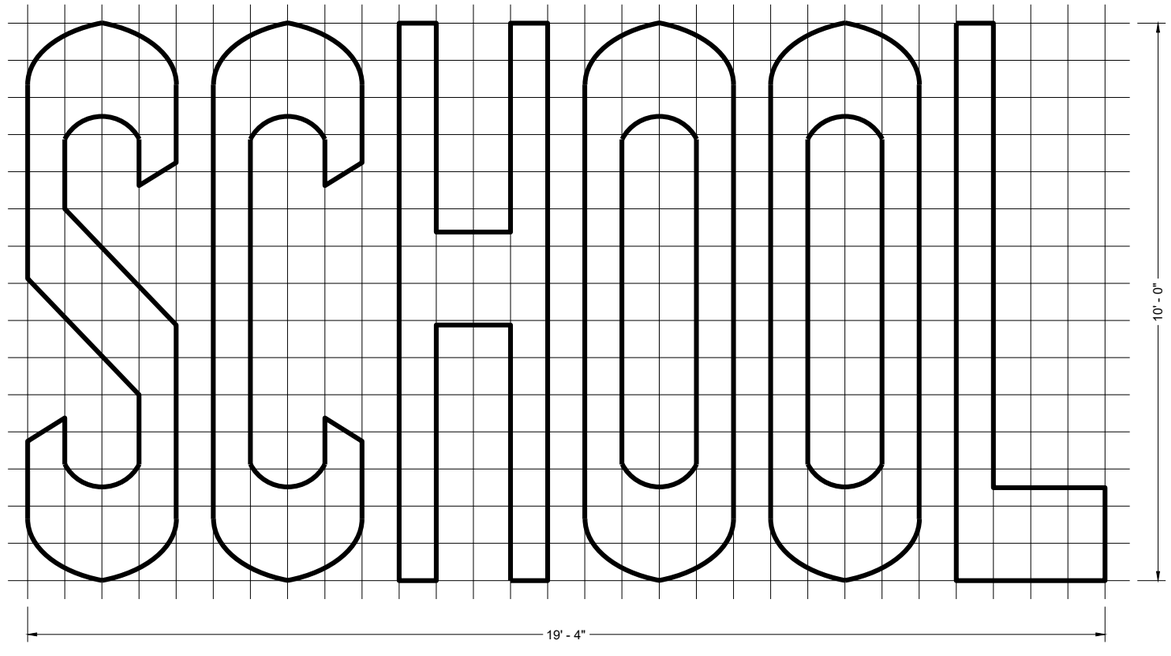








SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

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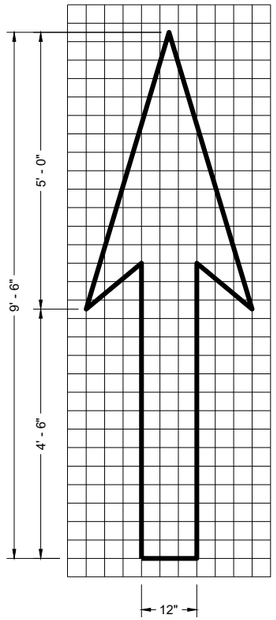
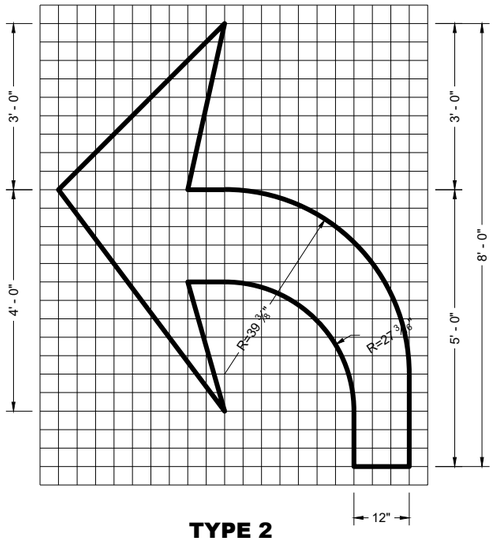
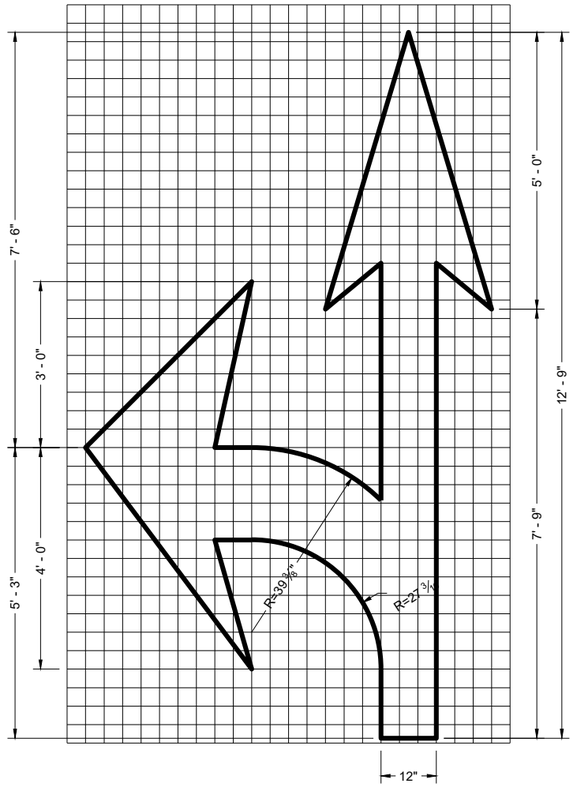


TYPE 1



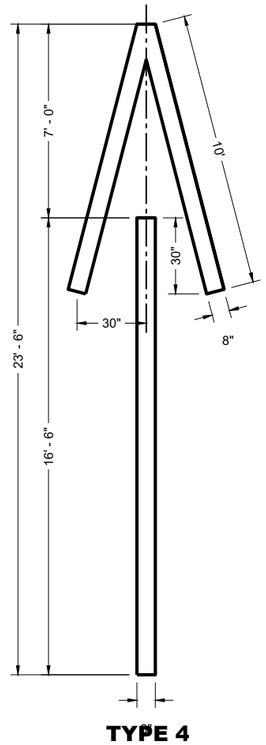
TYPE 2



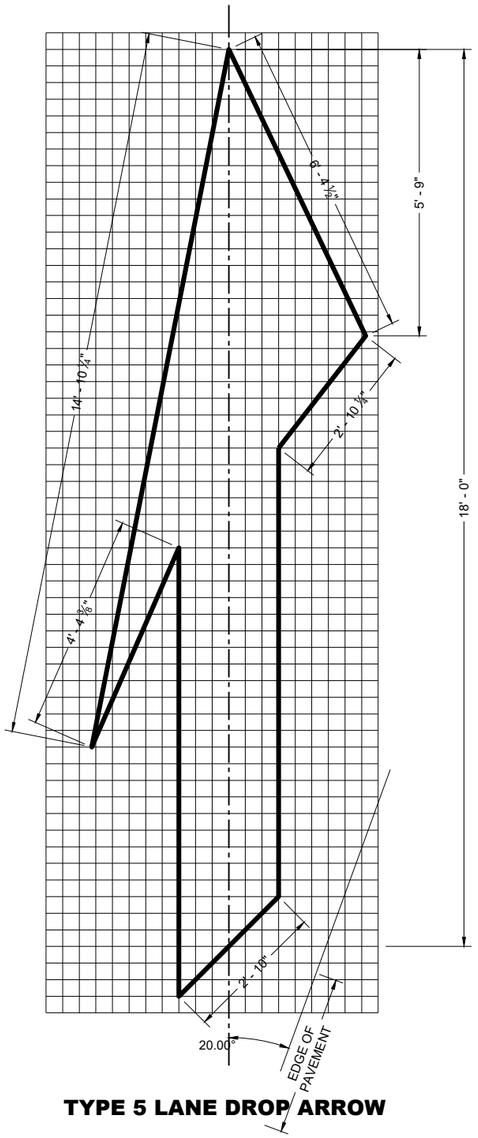
TYPE 3

GENERAL NOTES

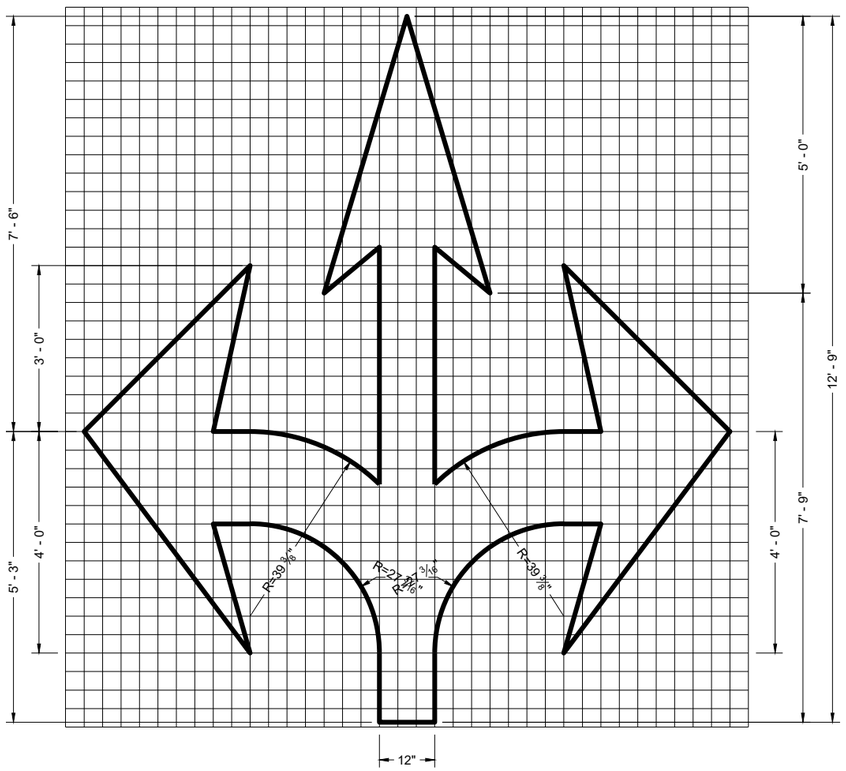
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



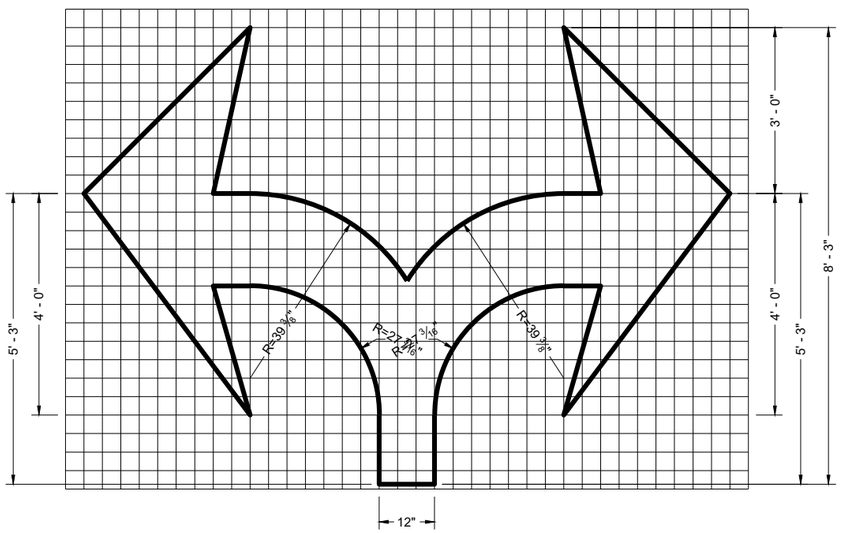
TYPE 4



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

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GENERAL NOTES

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

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

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

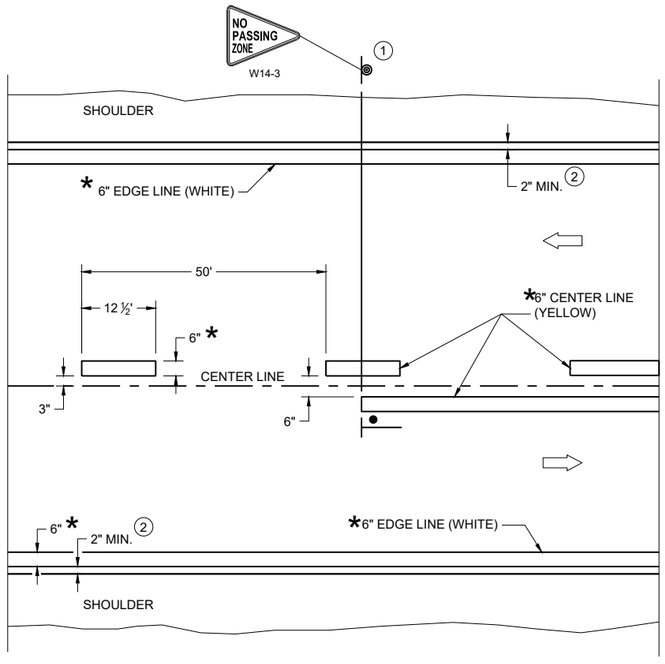
LEGEND

"T" MARKING

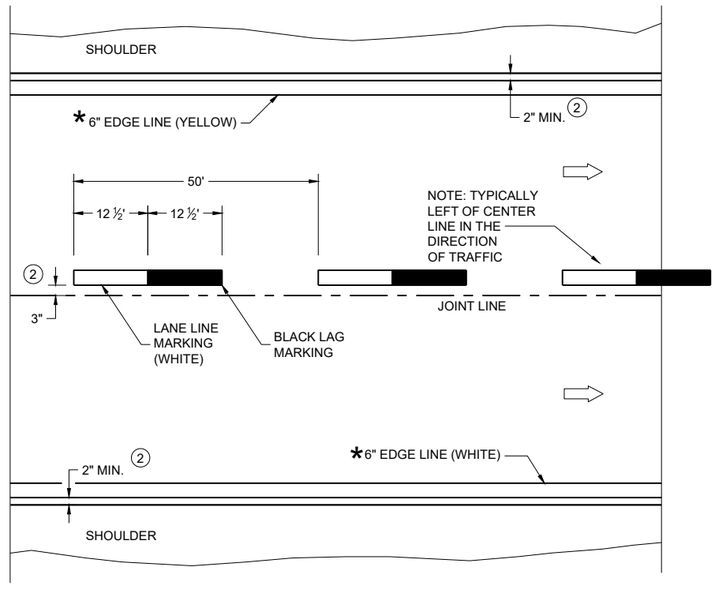
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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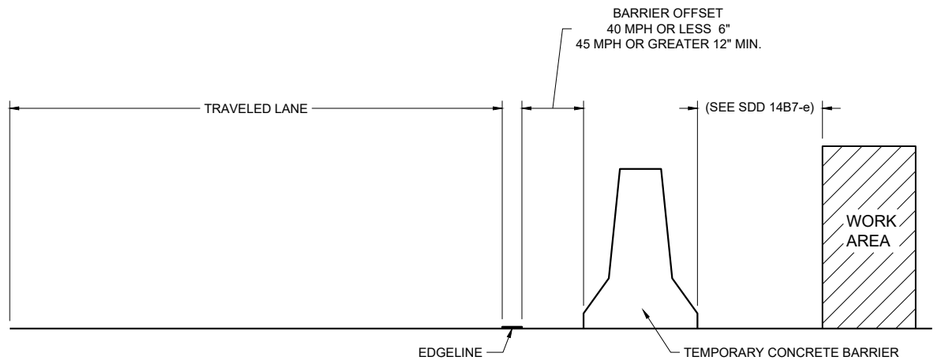


TEMPORARY BARRIER OFFSET FROM EDGELINE

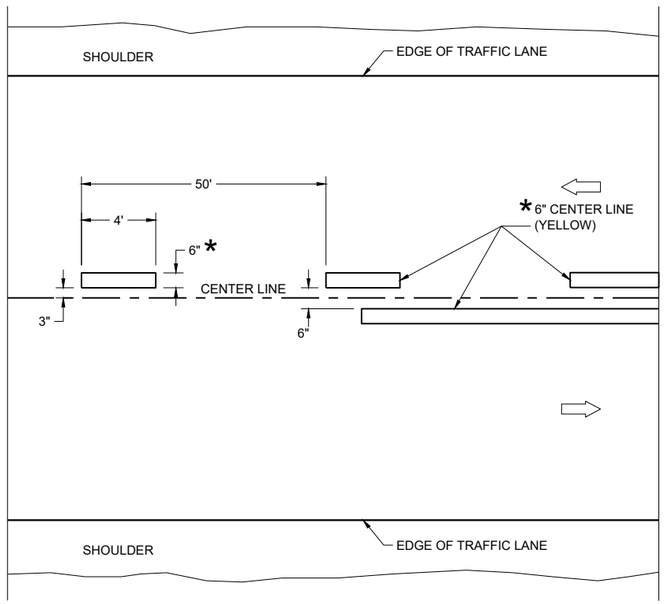
GENERAL NOTES

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

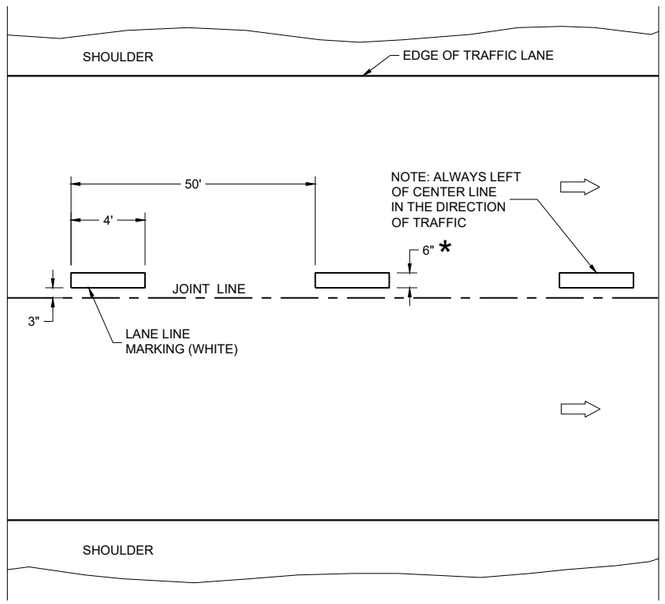
LEGEND

DIRECTION OF TRAFFIC

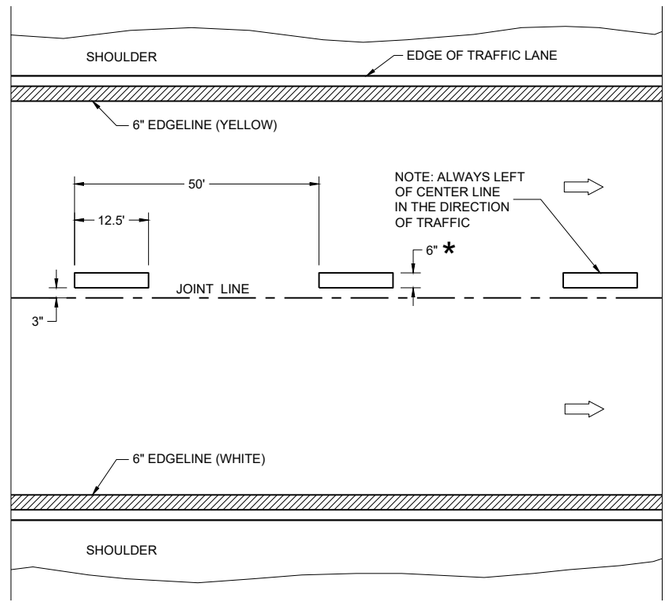
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

FHWA

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SDD 15C08-23b

6

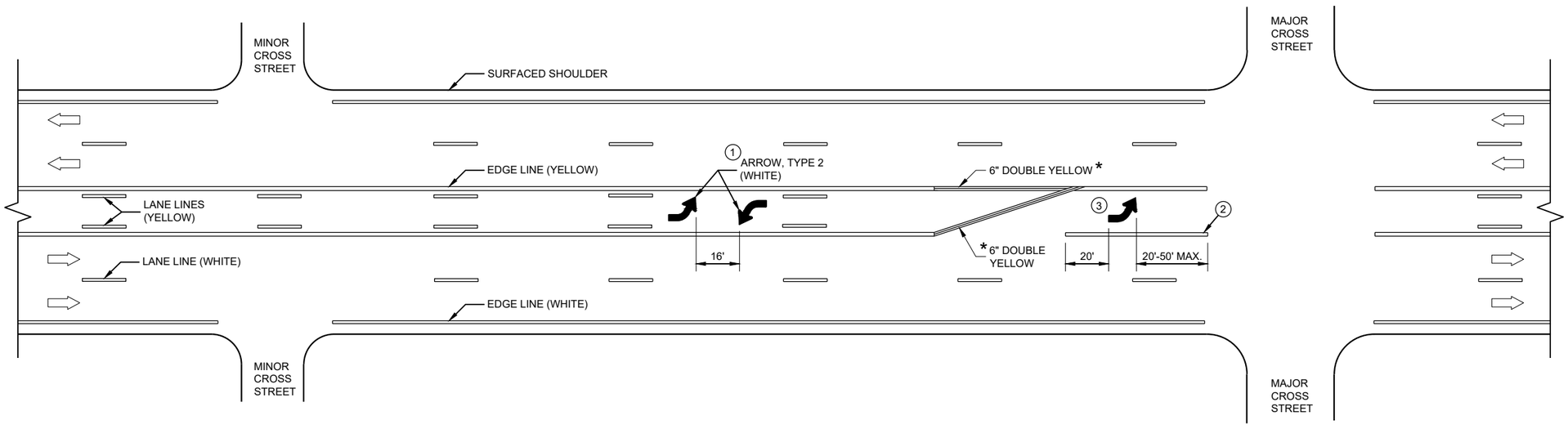
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 378

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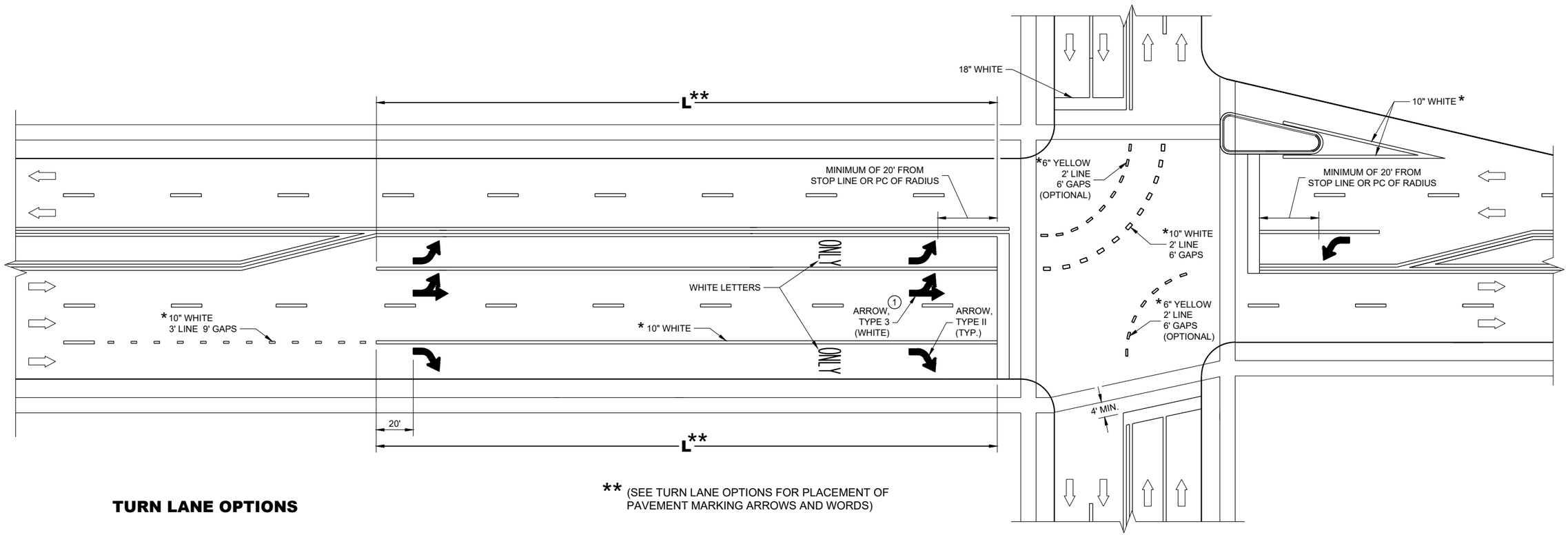
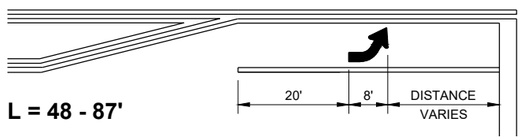
SDD 15C08-23c



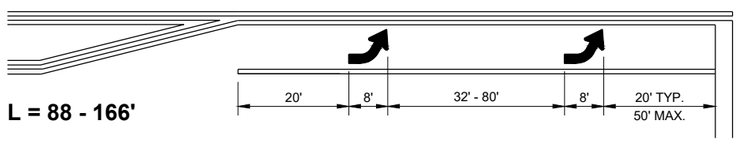
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

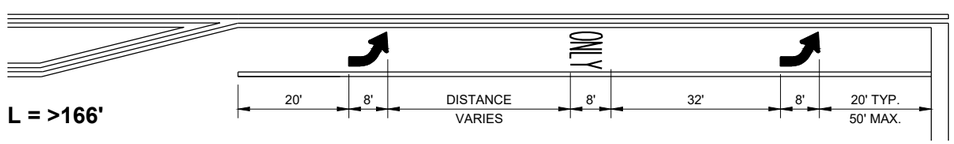
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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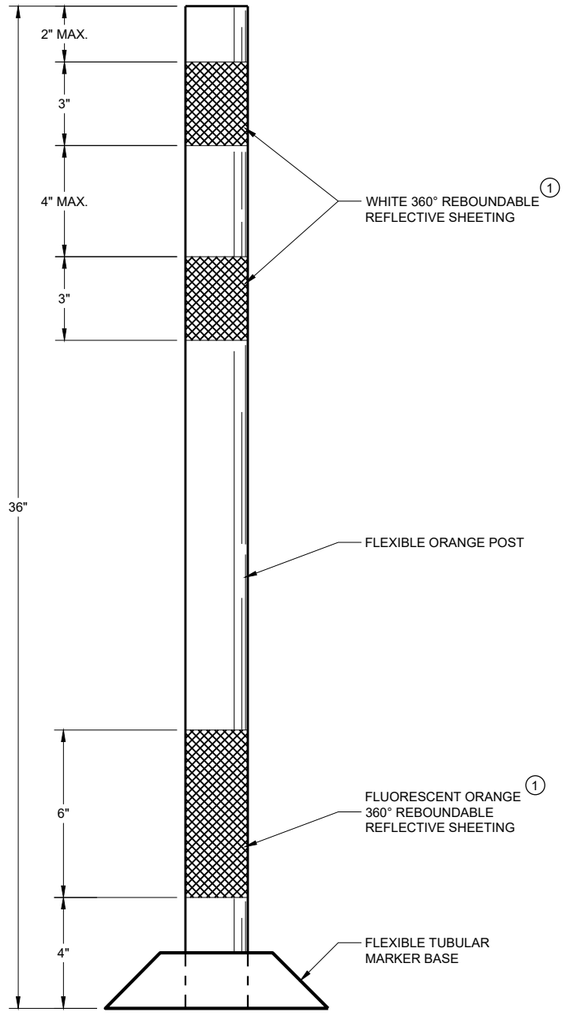
SDD 15C08-23d



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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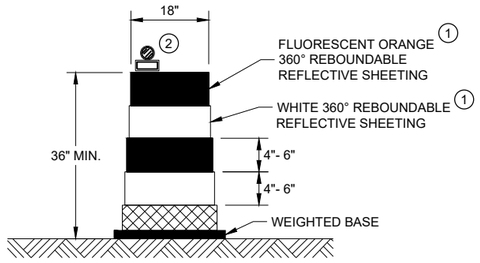
SDD 15C11 - 10a

SDD 15C11 - 10a

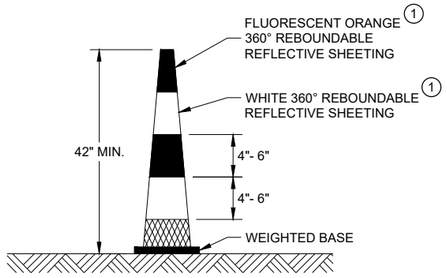
GENERAL NOTES

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

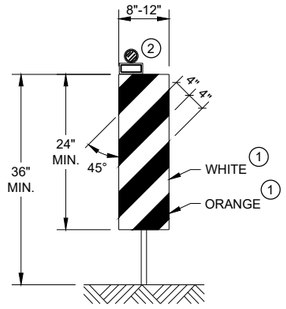
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

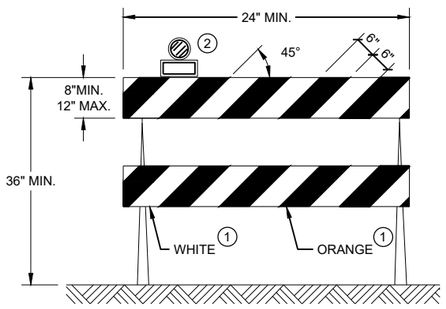
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



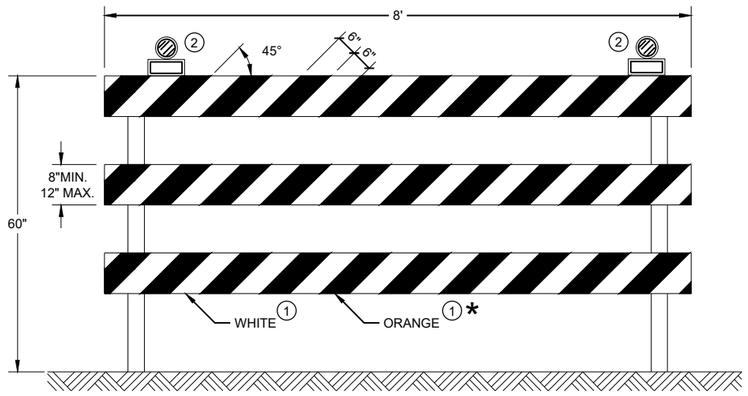
VERTICAL PANEL

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

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SDD 15C11 - 10b

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

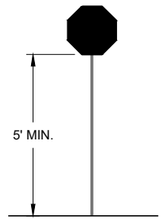
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



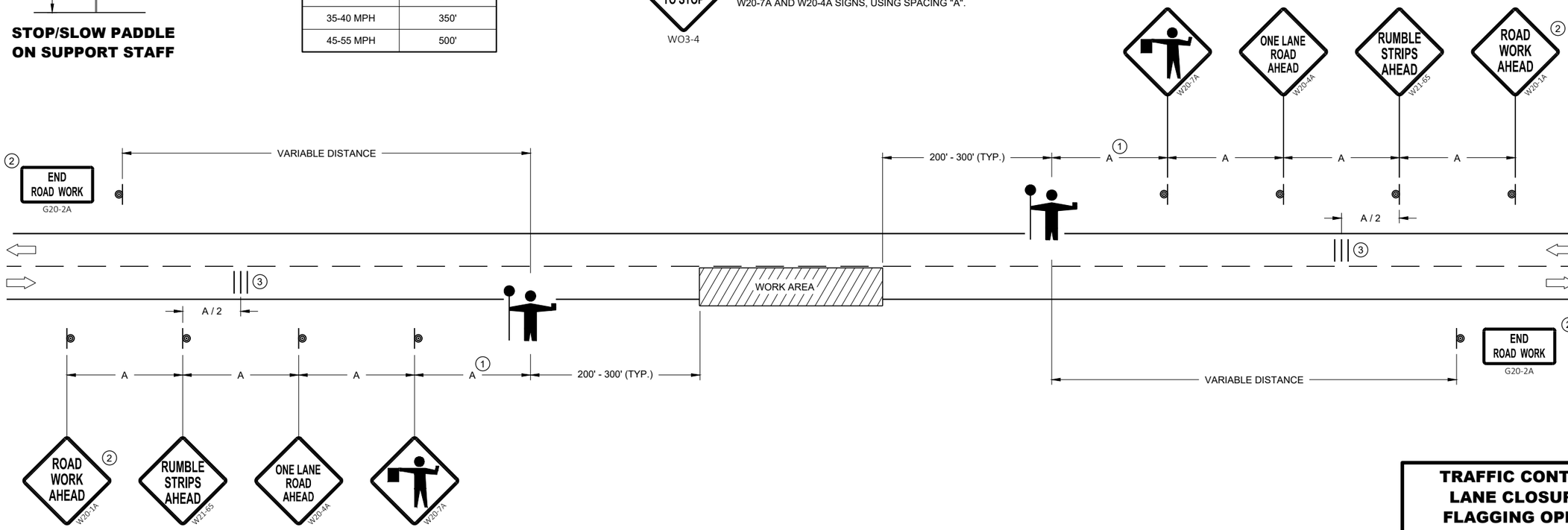
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15C12 - 09a

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GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

(1) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

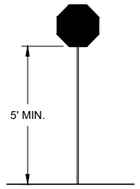
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

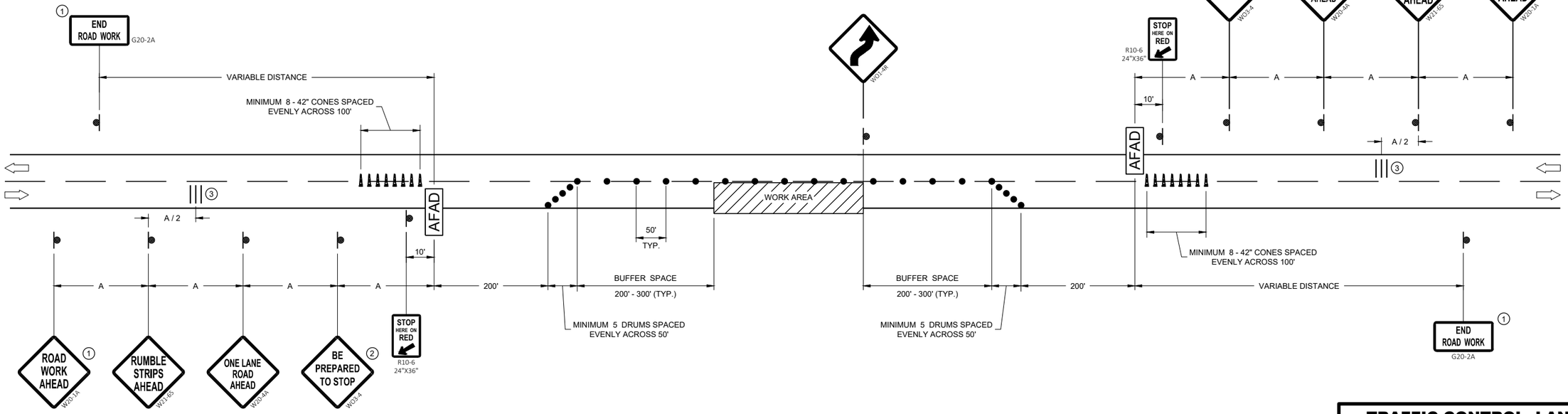
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

SDD 15C12 - 09b

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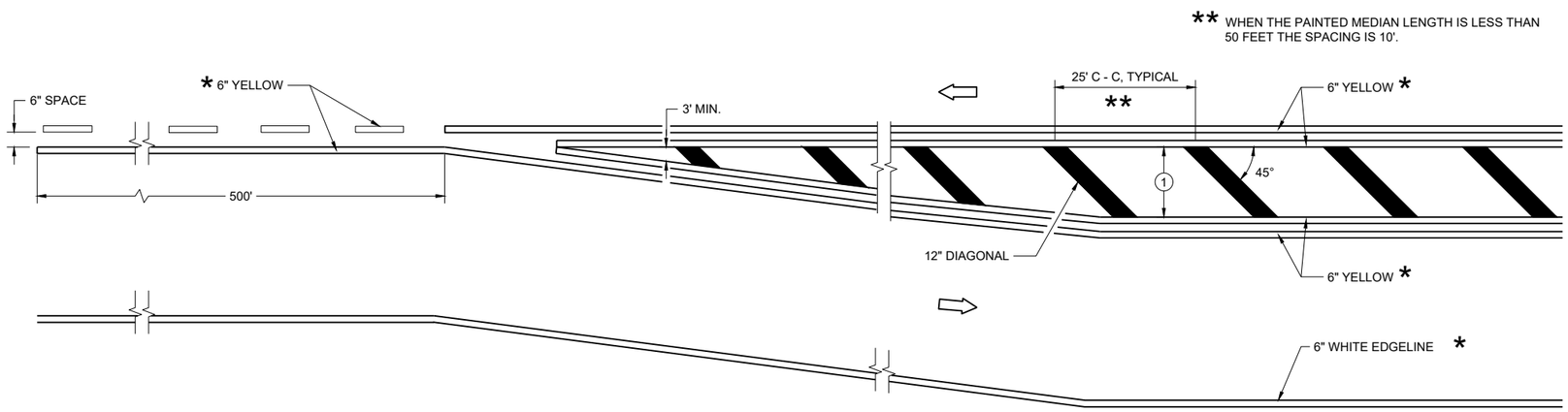


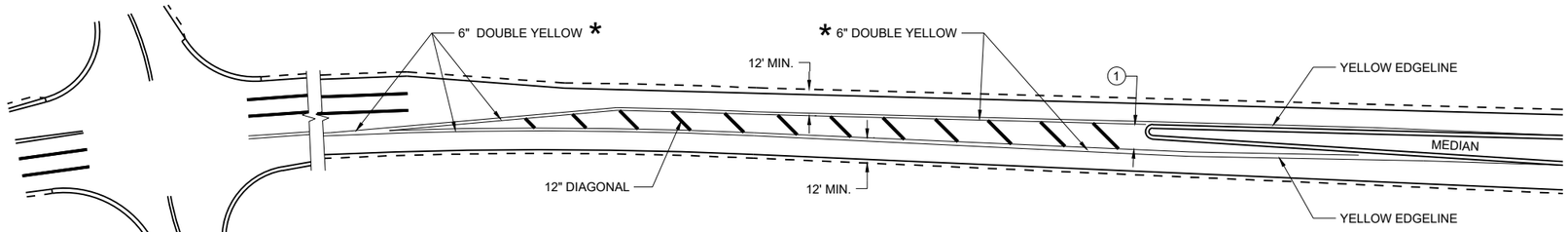
MEDIAN ISLAND DETAIL

GENERAL NOTES

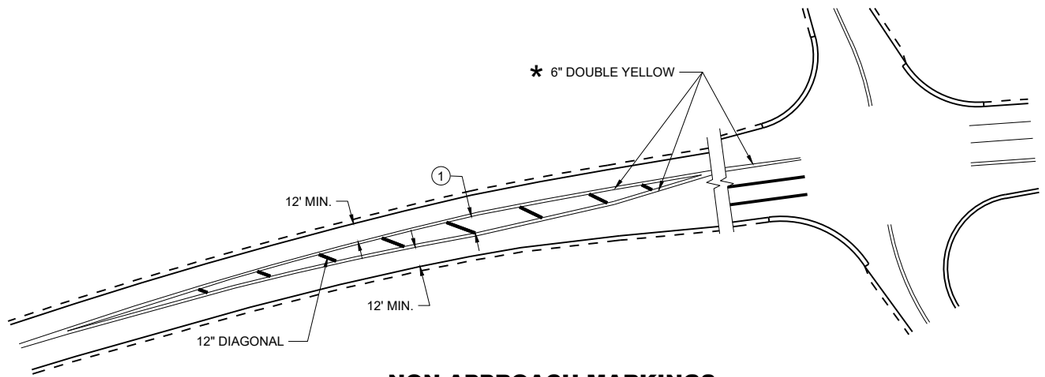
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

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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SDD 15C18-09a

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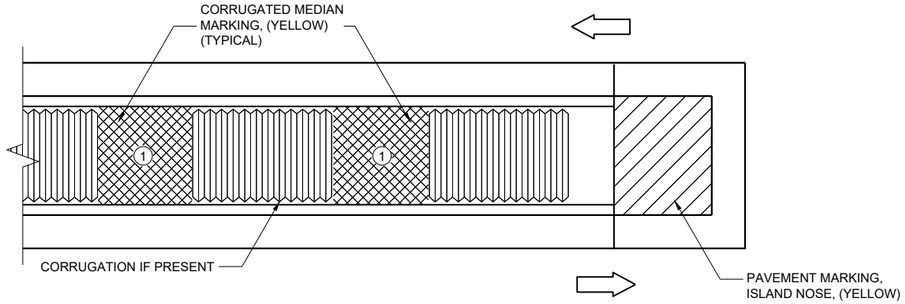
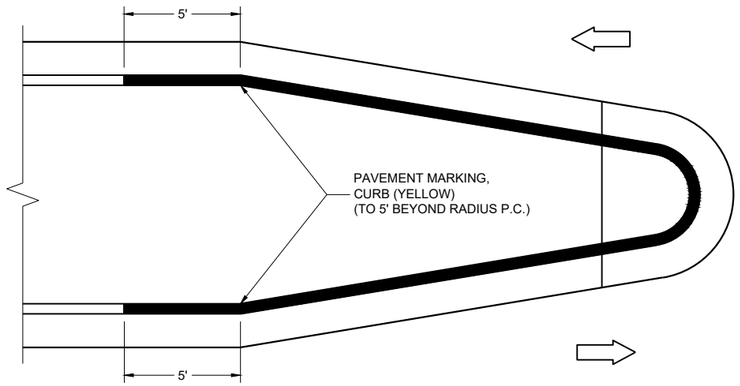
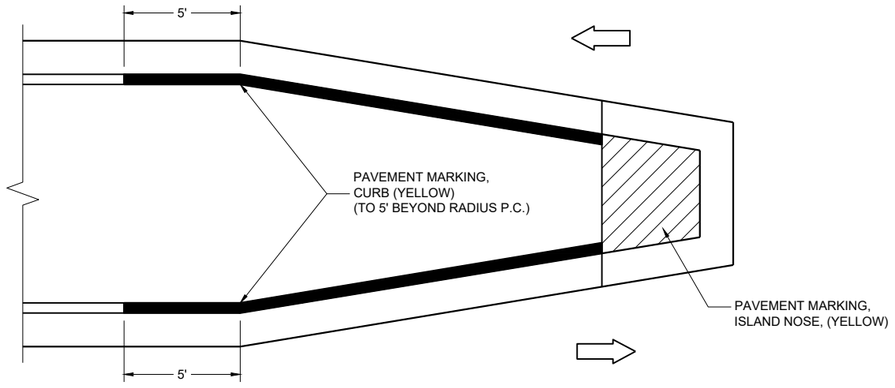


MEDIAN ISLAND WITH SQUARE BLUNT NOSE



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.

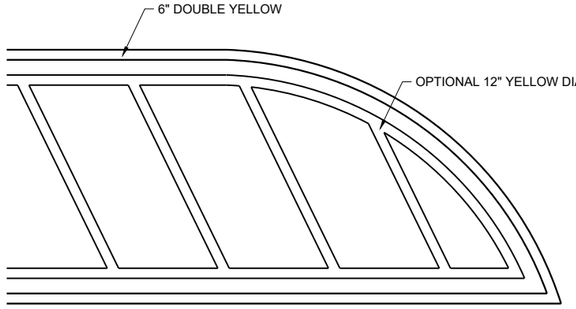
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

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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SDD 15C18-09b

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.

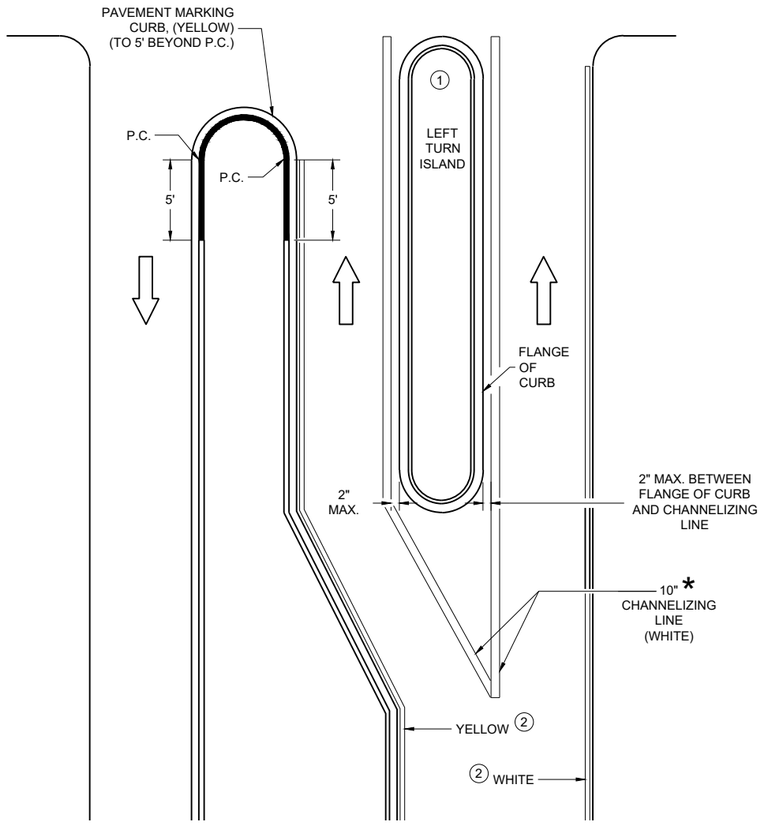
(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

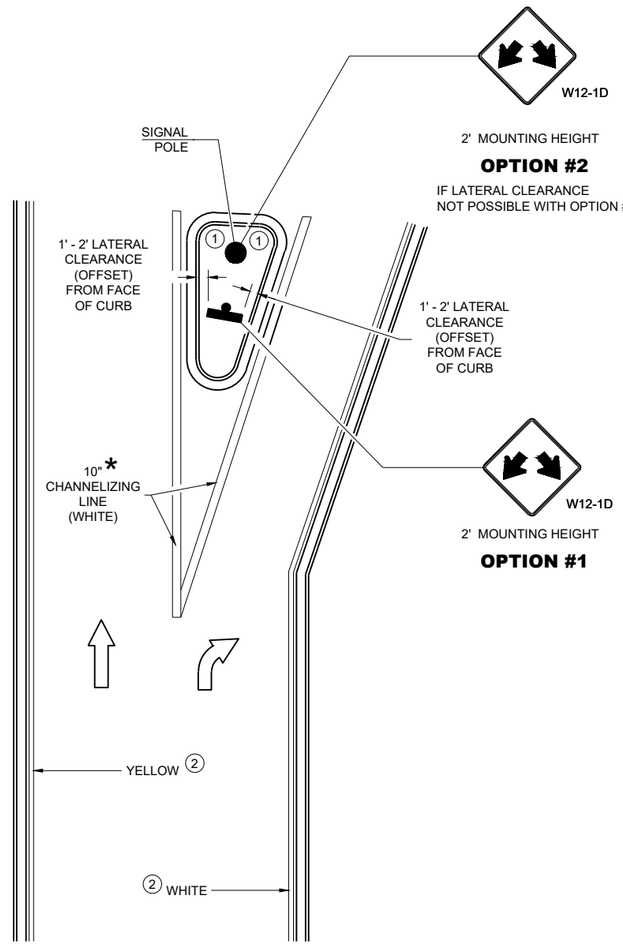
(3) CHEVRON MAY BE OMITTED IF LESS THAN 4" WIDE

DIRECTION OF TRAVEL

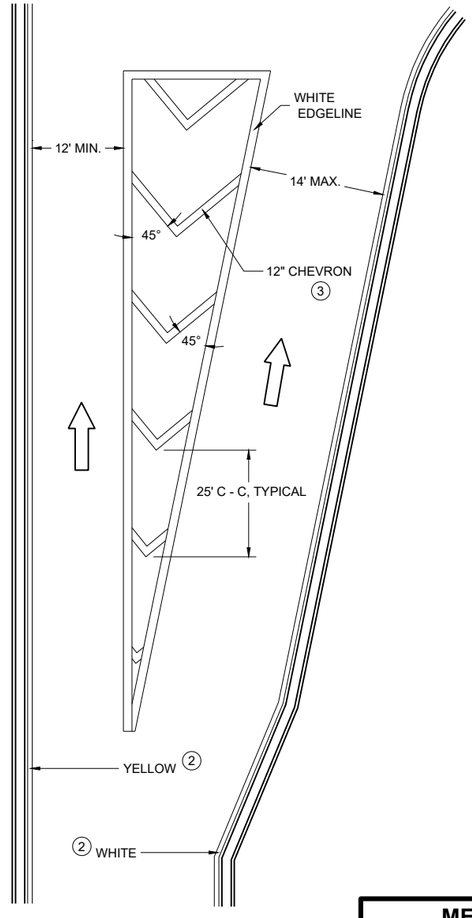
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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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SDD 15C18-09c

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SDD 15C18-09c

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

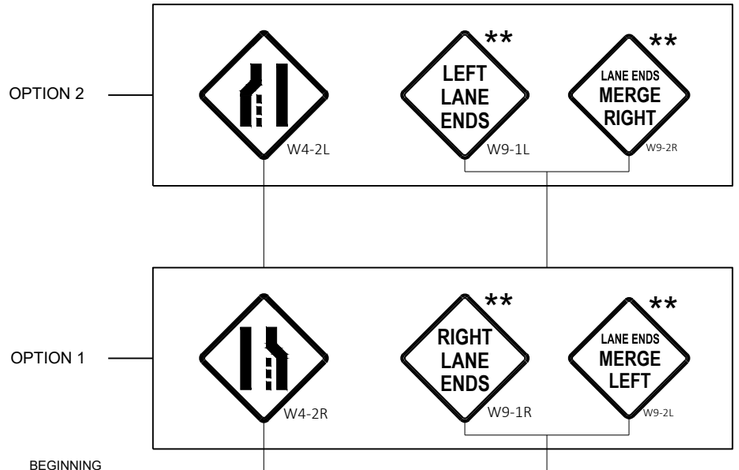
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

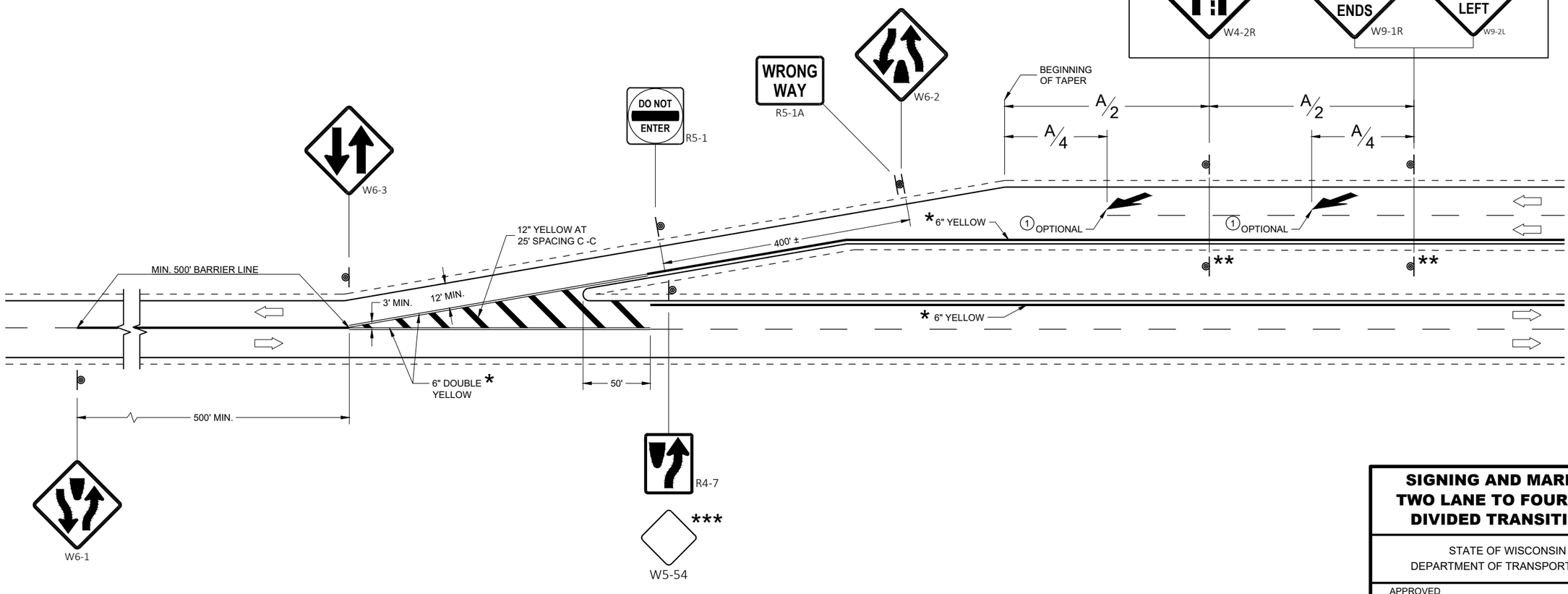
SIGN MOUNTED ON PERMANENT SUPPORT

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 MARKING ENGINEER

FHWA

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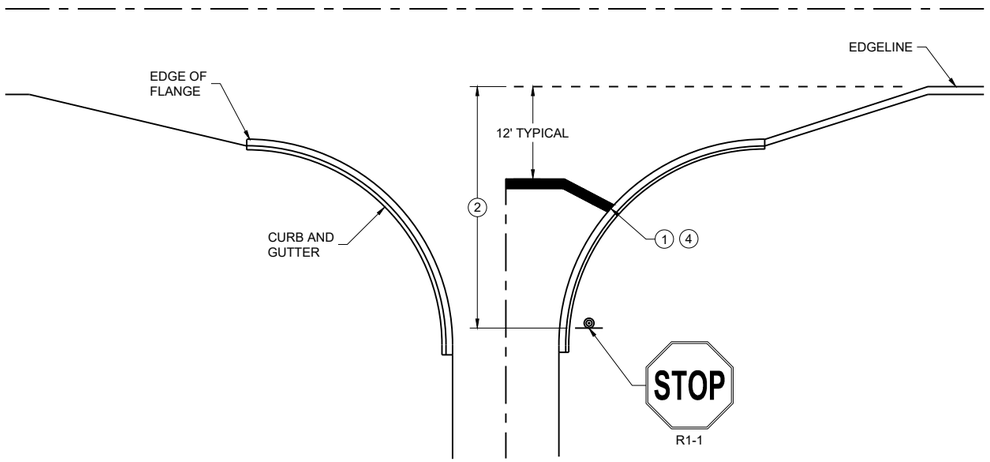
SDD 15C21-11

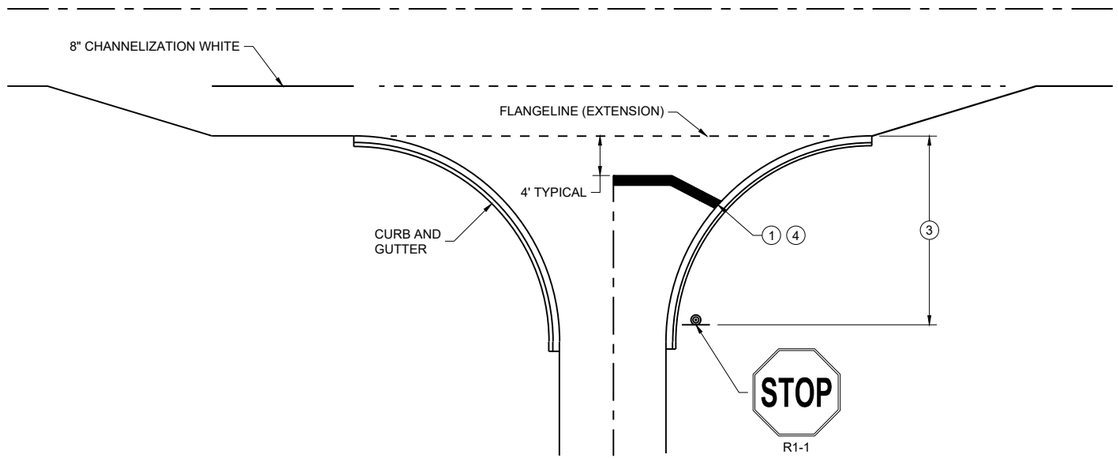
GENERAL NOTES

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

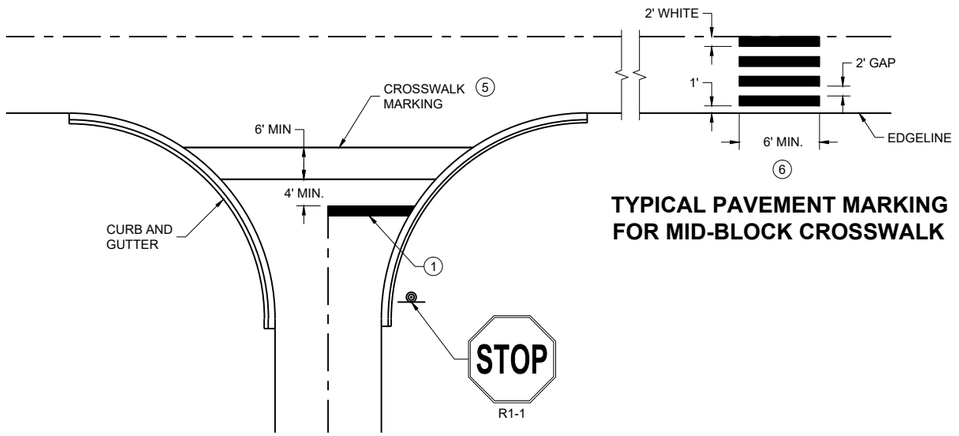
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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

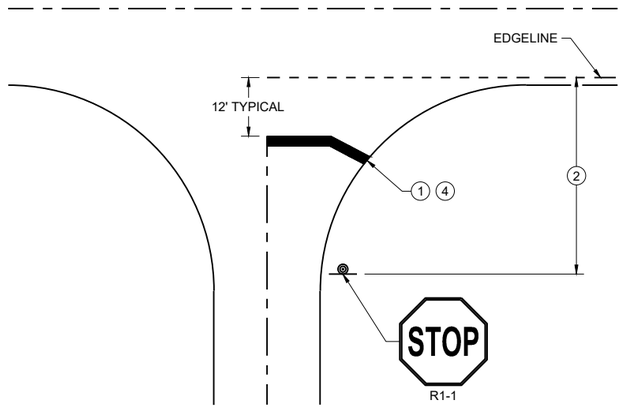


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



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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SDD 15C33-05

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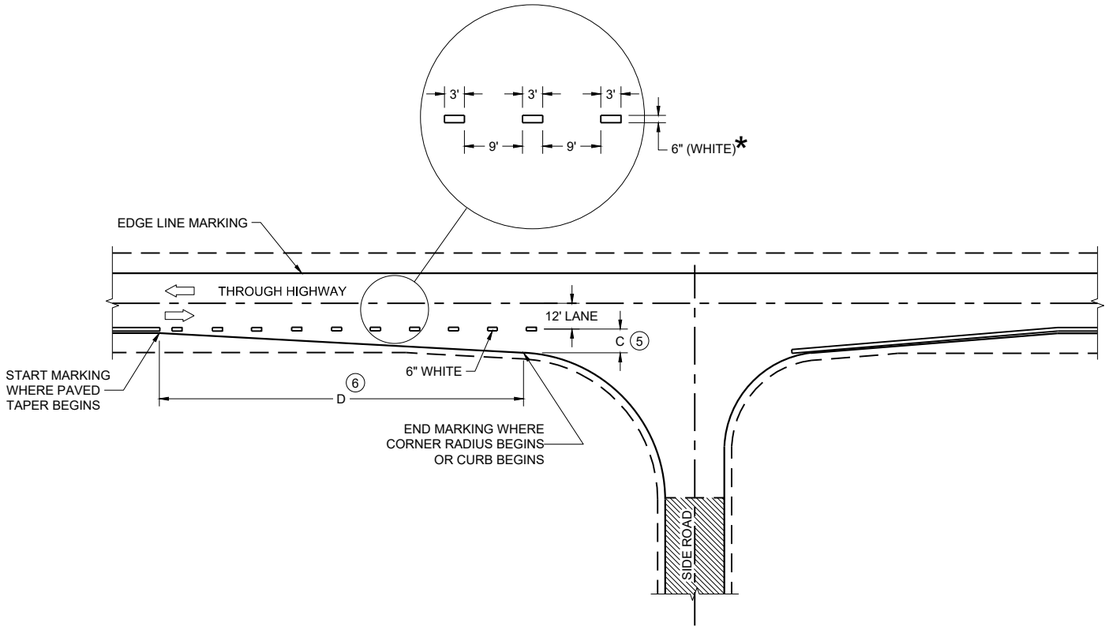
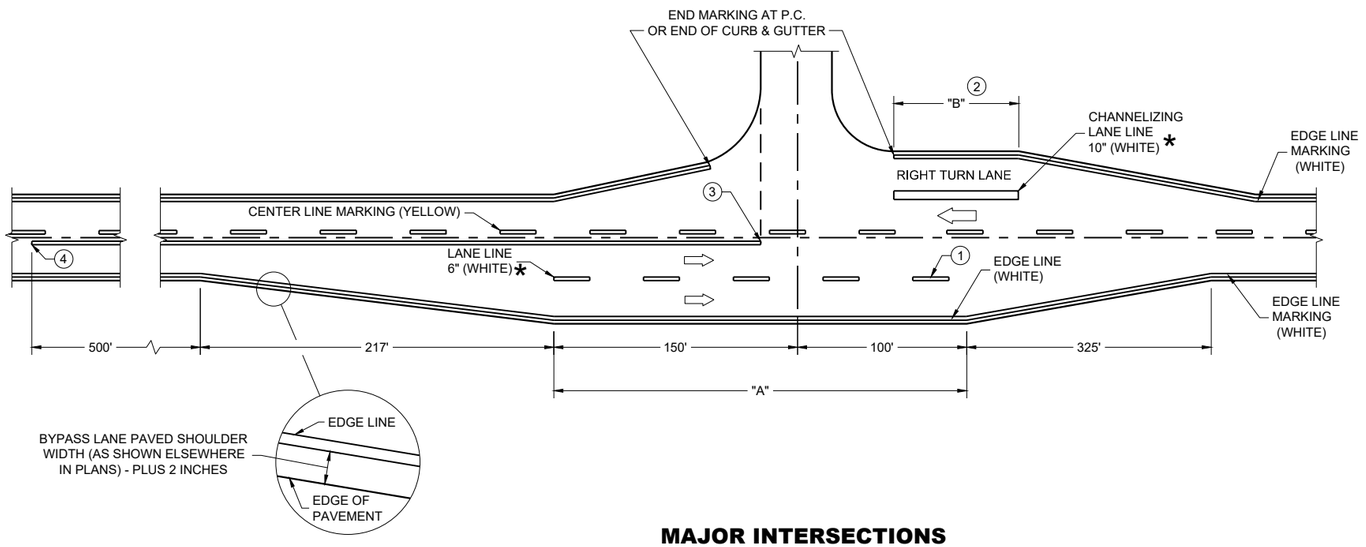
SDD 15C33-05



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

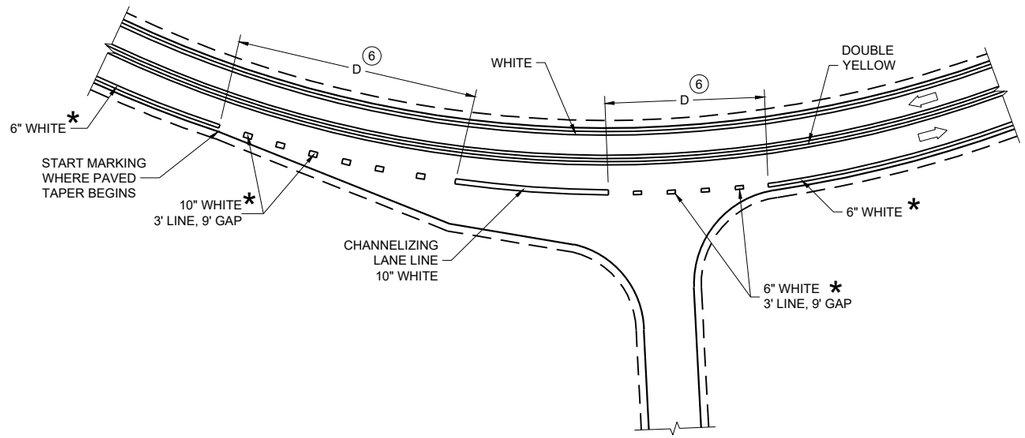
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR, FLEXIBLE/TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR)
- PORTABLE CRASH CUSHION
- CONCRETE BARRIER TEMPORARY PRECAST
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

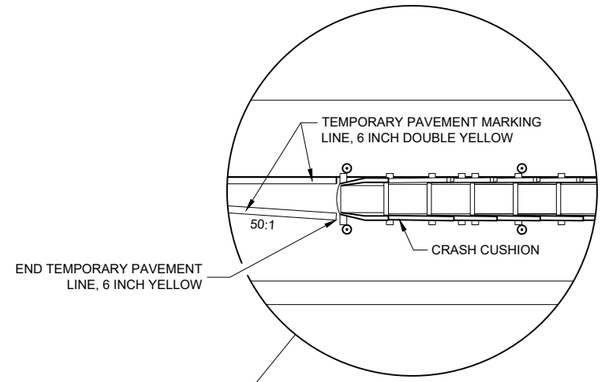
"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

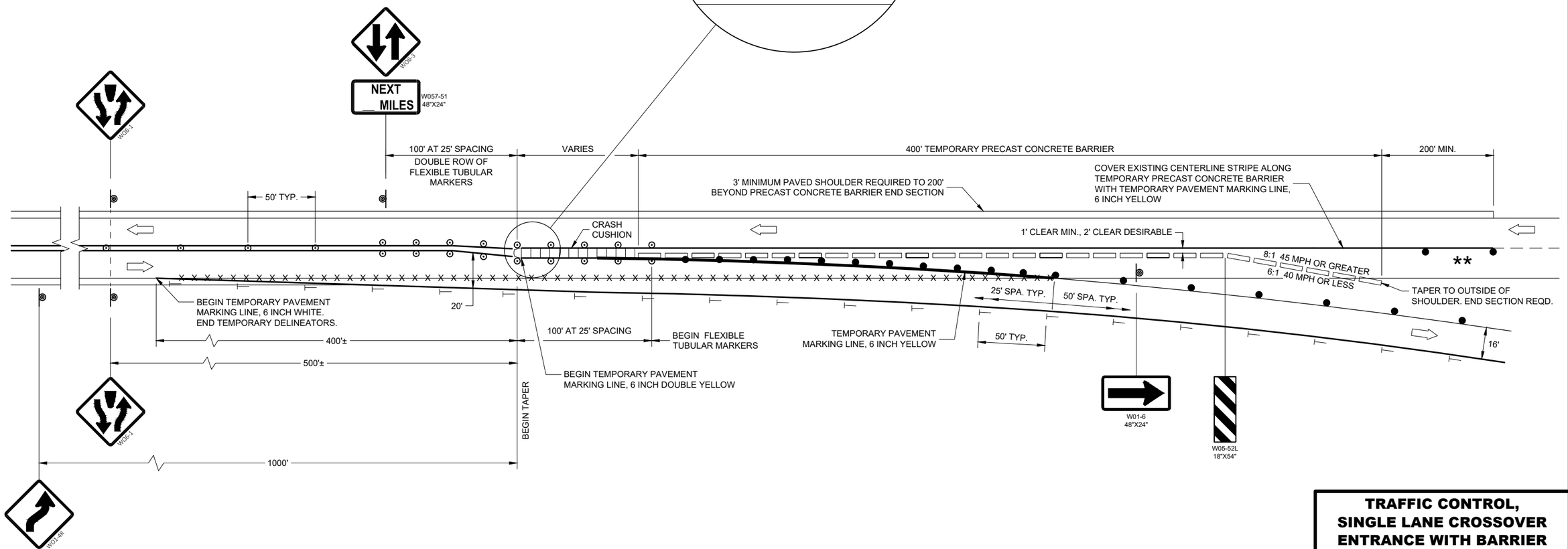
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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.

** SEE SDD 15D12 FOR LANE CLOSURE DETAILS.





TRAFFIC CONTROL, SINGLE LANE CROSSOVER ENTRANCE WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D05-06

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.

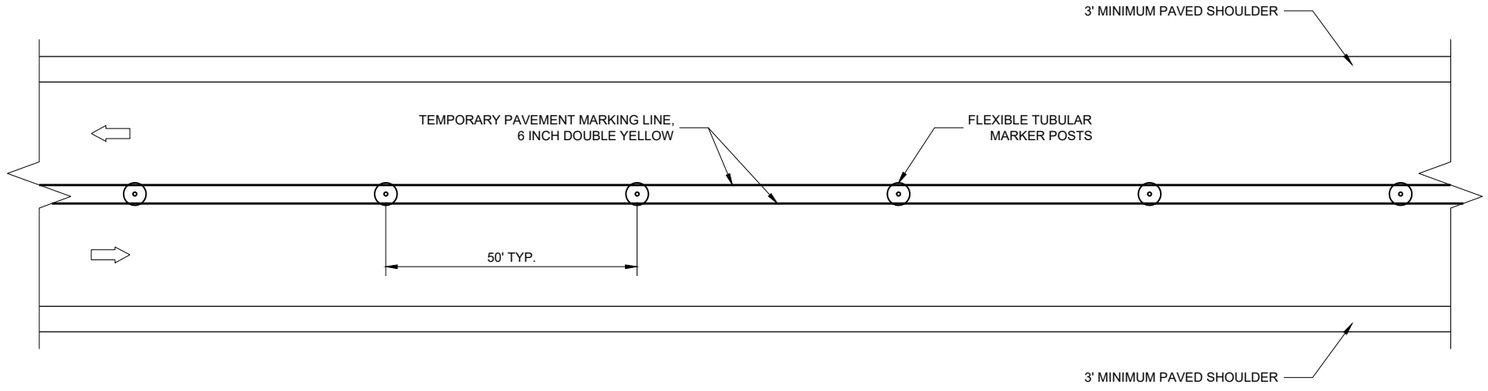
THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

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

6

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

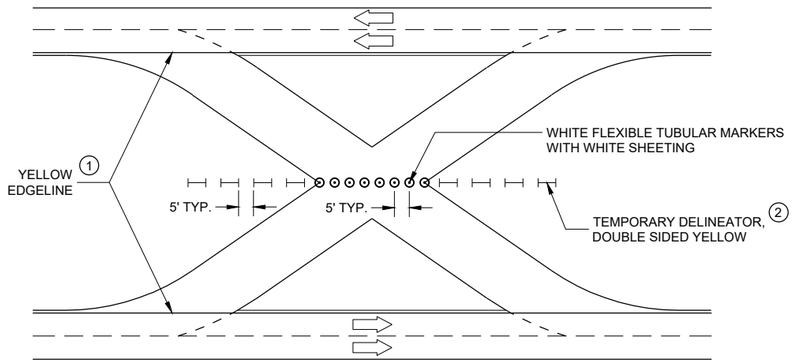
FHWA

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.

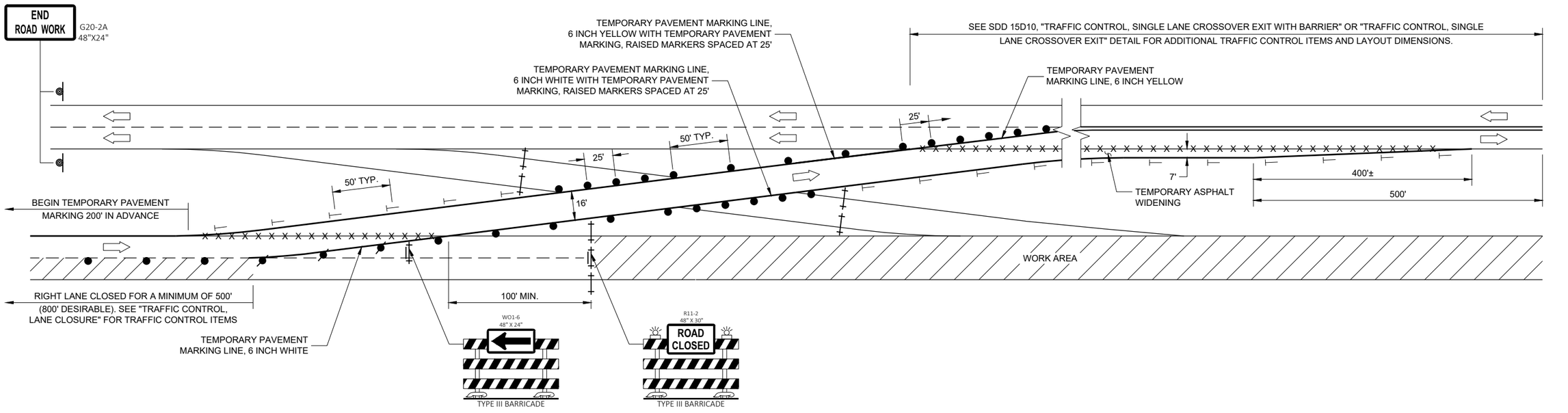
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

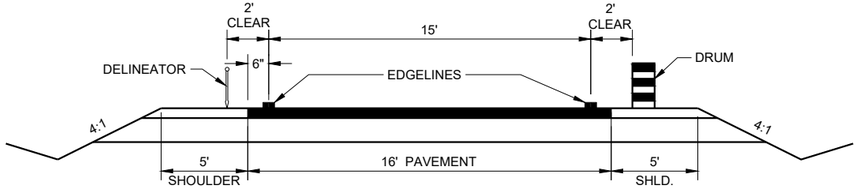
THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

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.

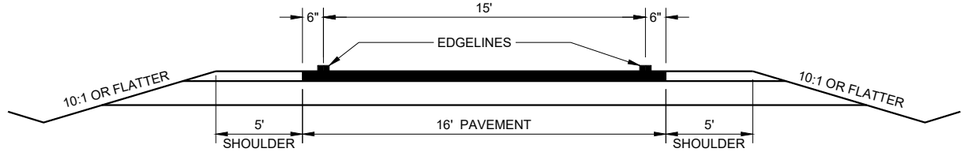
(2) FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.





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 ENGINEE

FHWA

6
SDD 15D11-09

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.

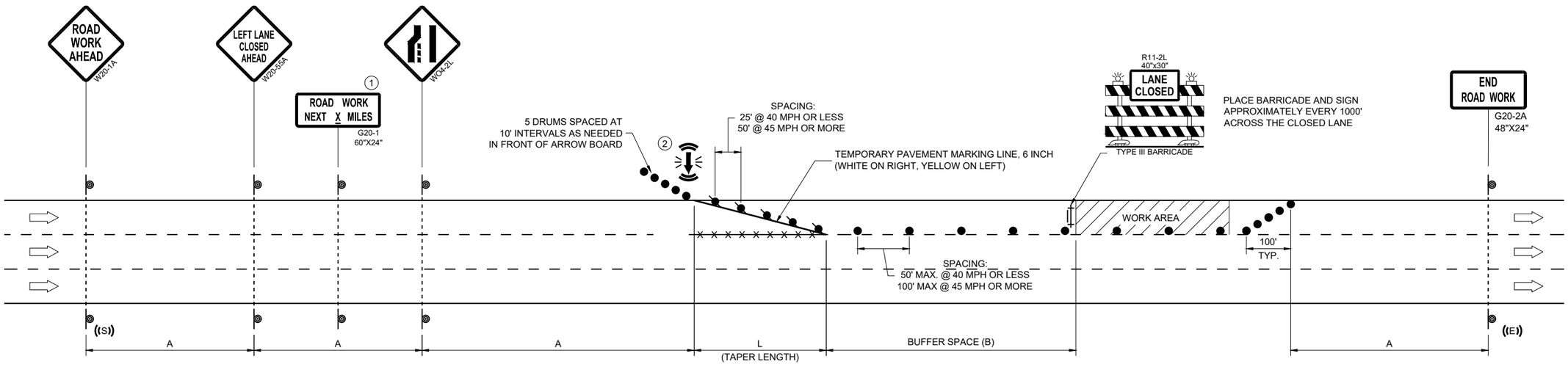
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

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

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



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-09a

6

SDD 15D20-09a

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.

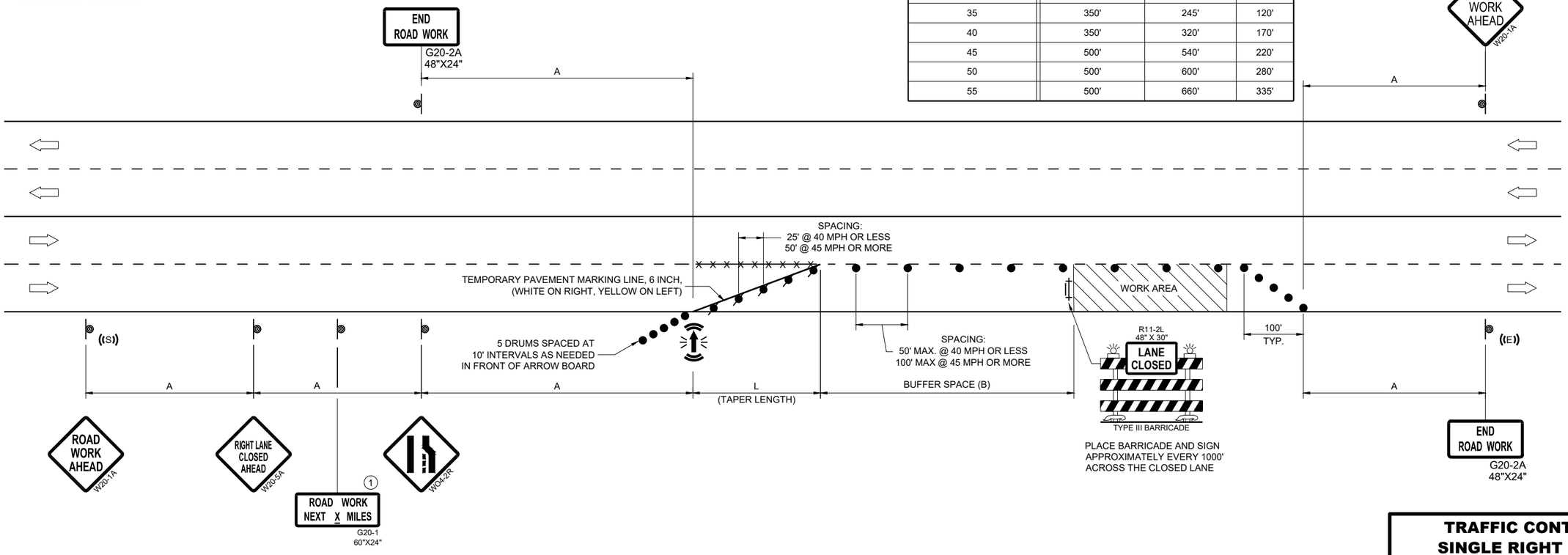
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

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

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



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-09b

6

SDD 15D20-09b

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.

DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

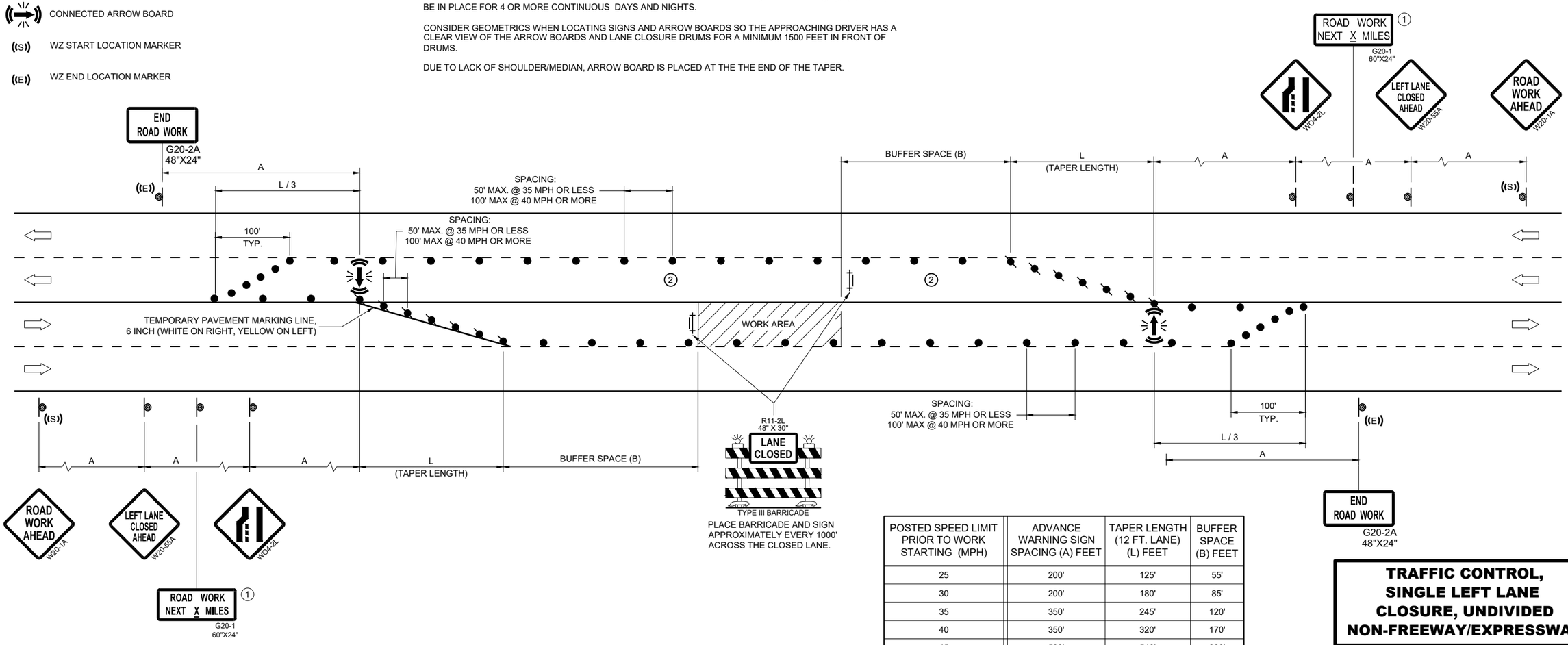
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

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

(2) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

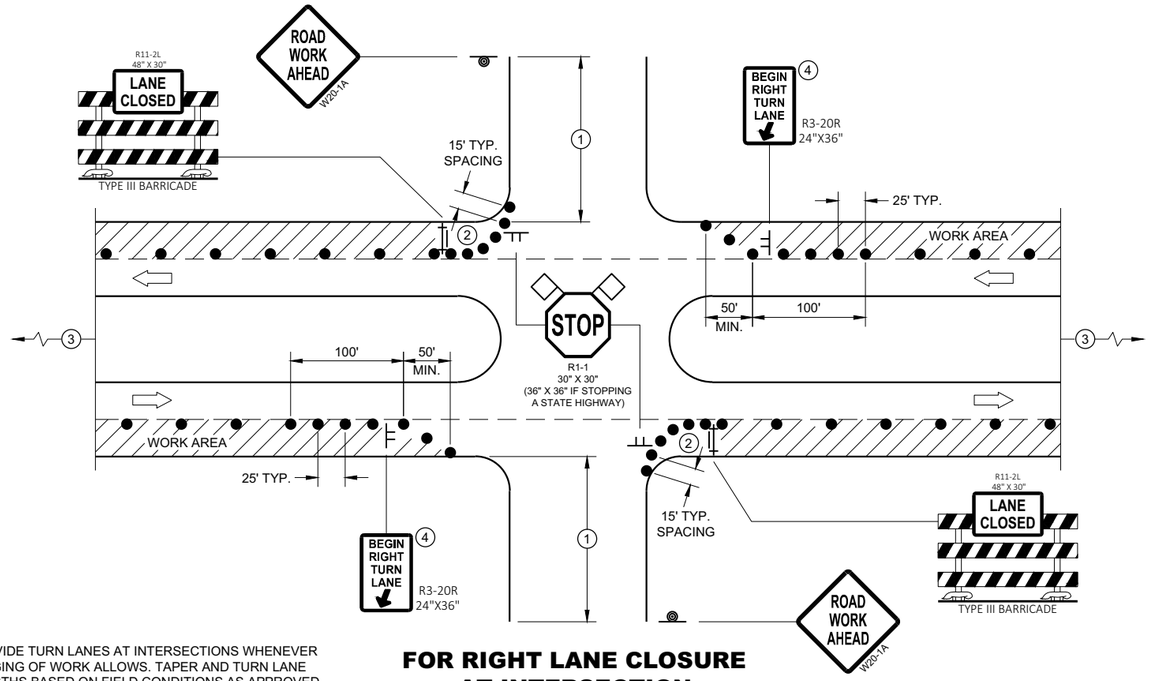
November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

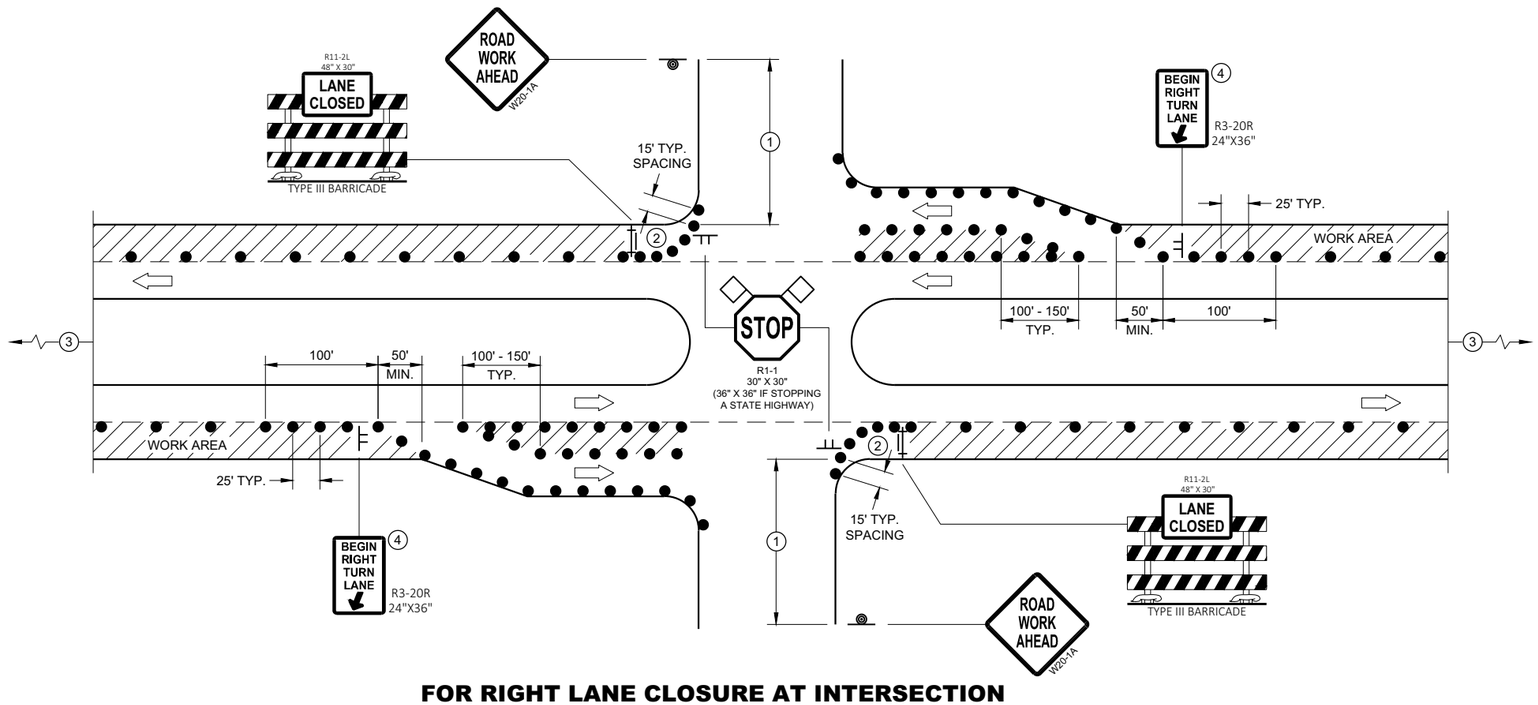
SDD 15D20-09c

SDD 15D20-09c



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

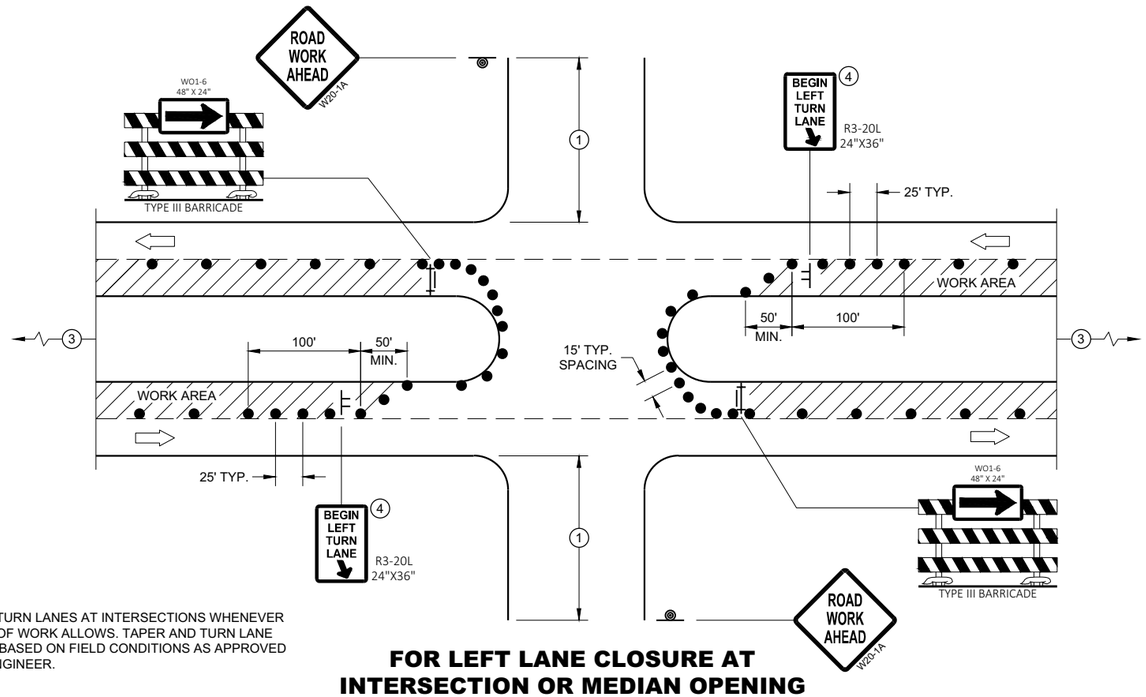
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

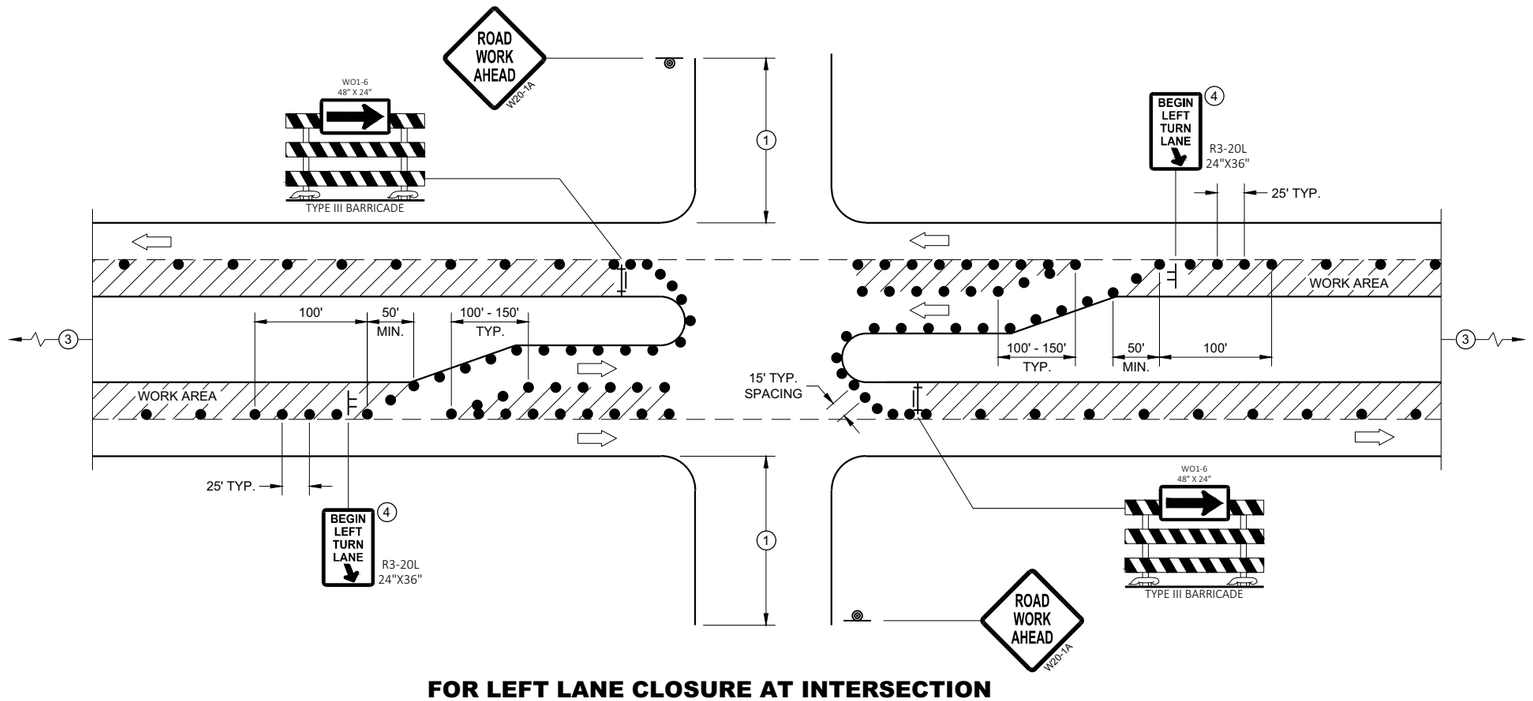
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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

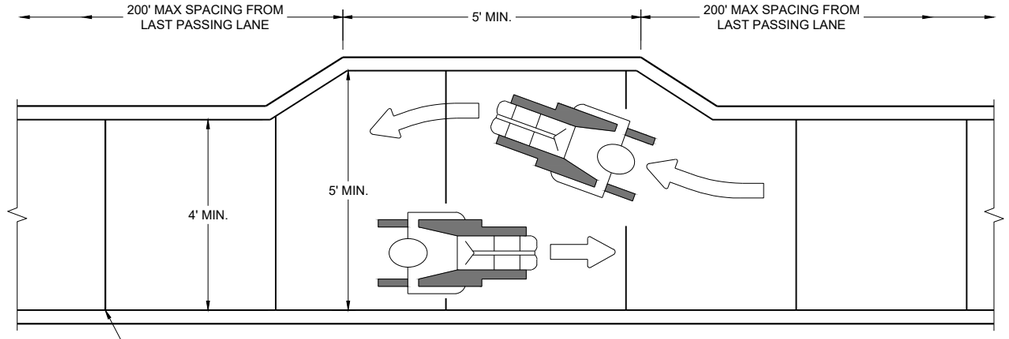
FHWA

6

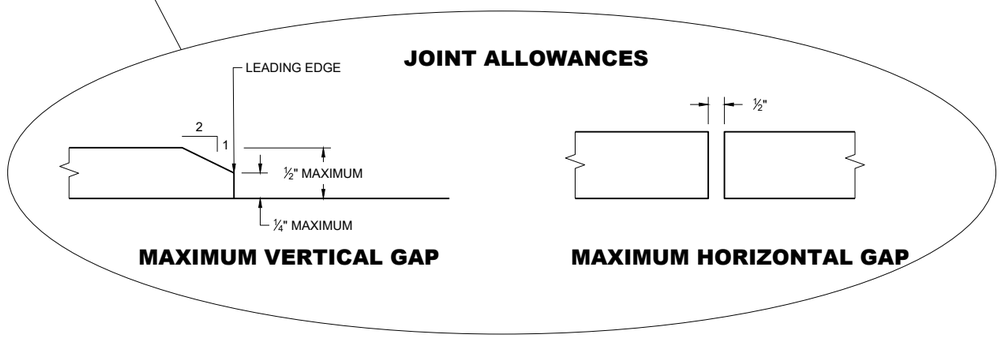
SDD 15D21 - 07b

6

SDD 15D21 - 07b



NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

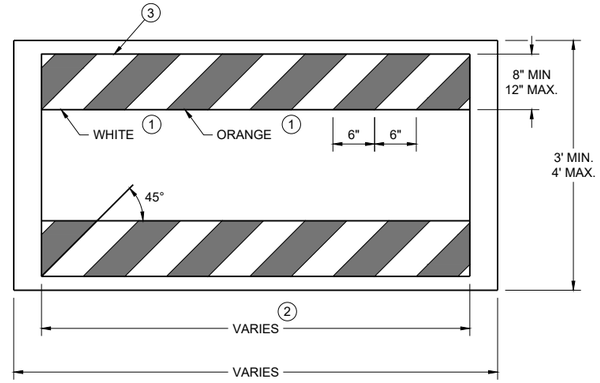
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

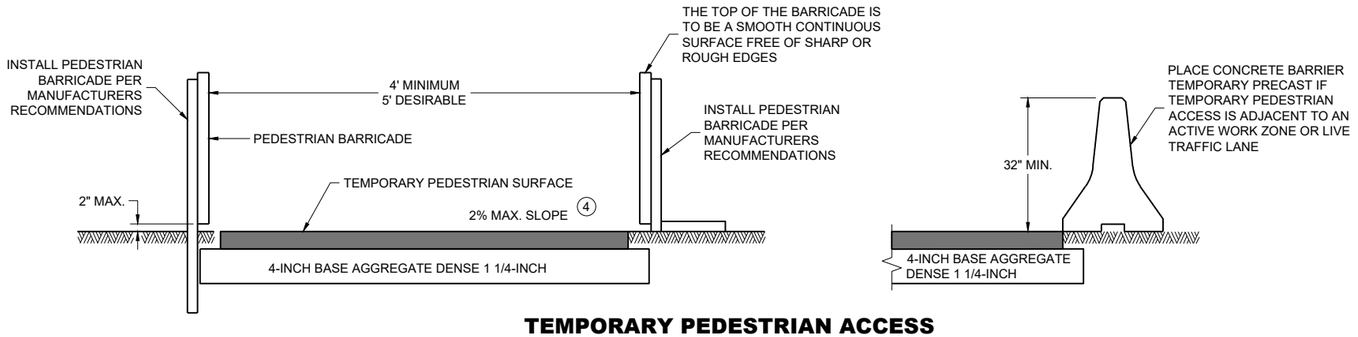
(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

(4) WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



TEMPORARY PEDESTRIAN BARRICADE *



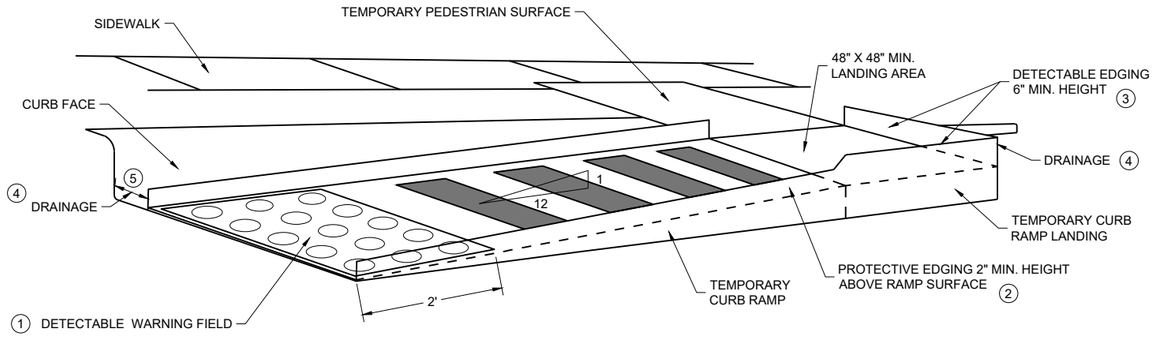
TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10a



PERSPECTIVE VIEW

GENERAL NOTES

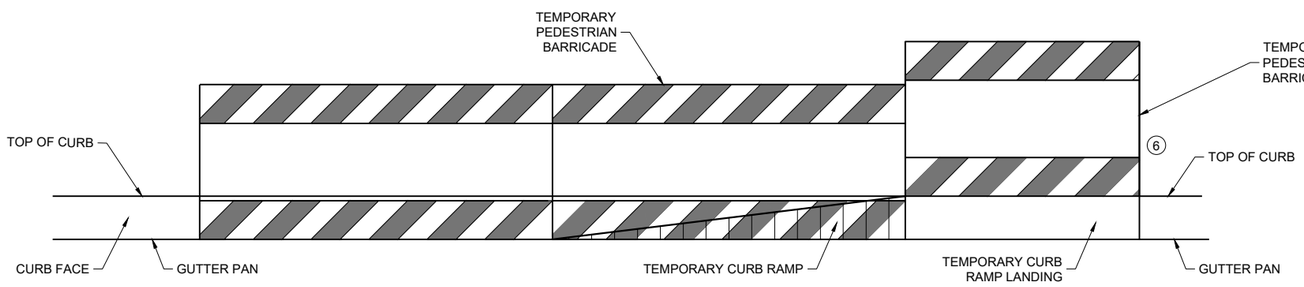
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

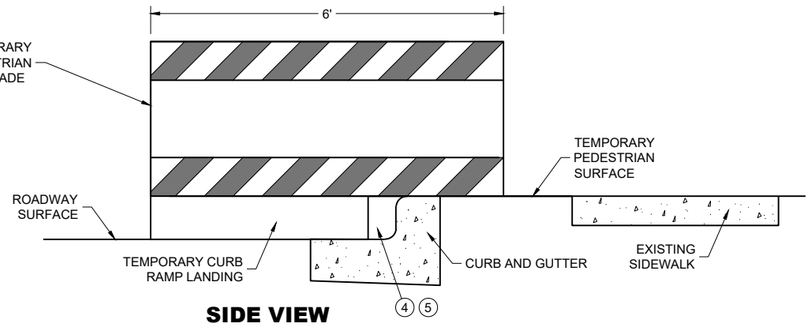
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

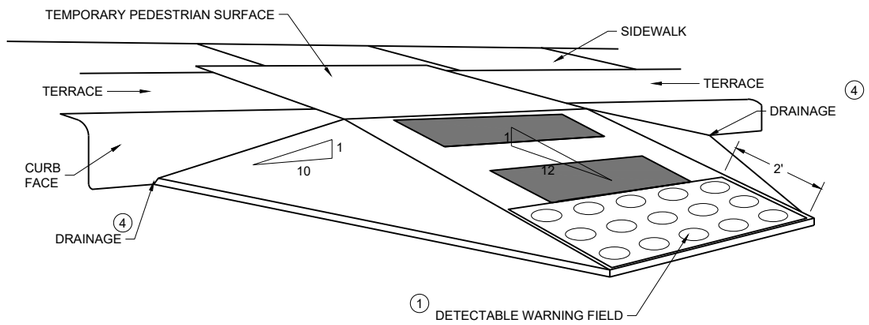
SDD 15D30-10b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

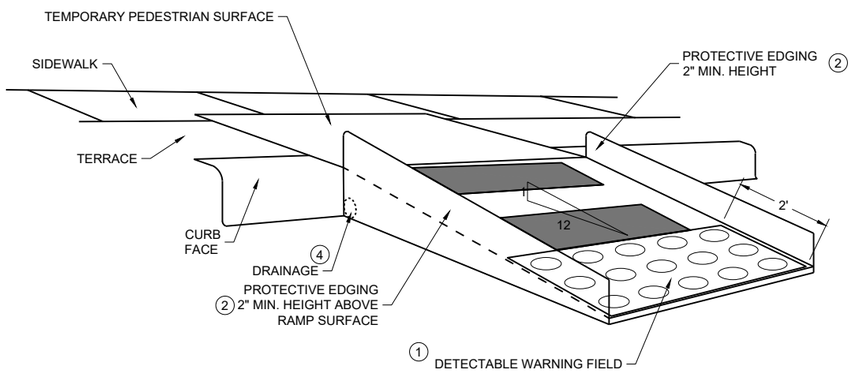
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

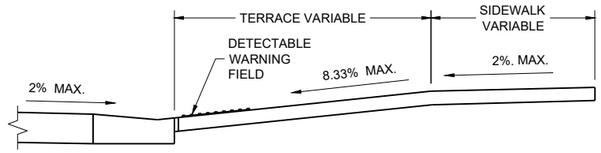
6

SDD 15D30-10c

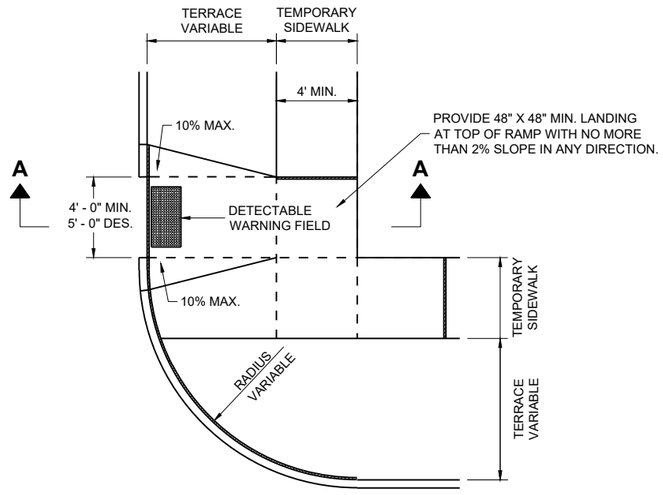
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

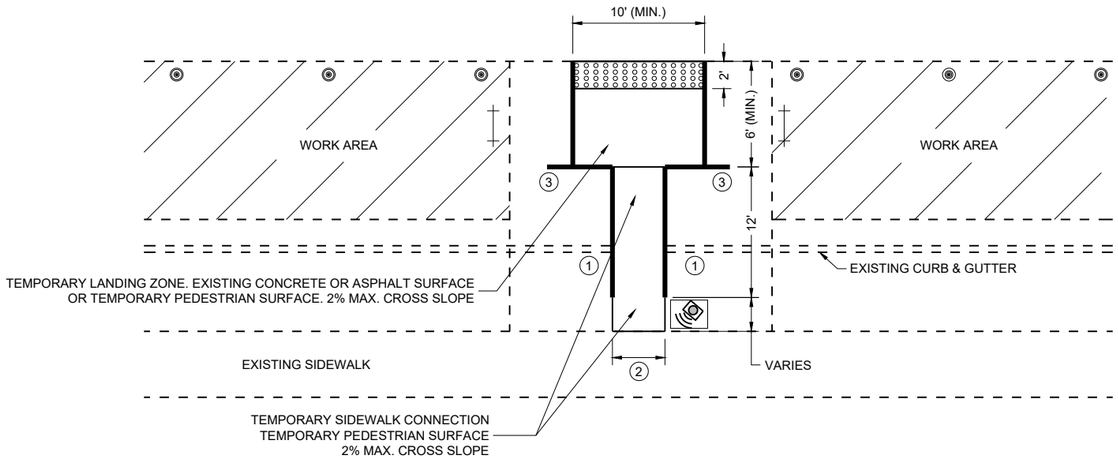
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

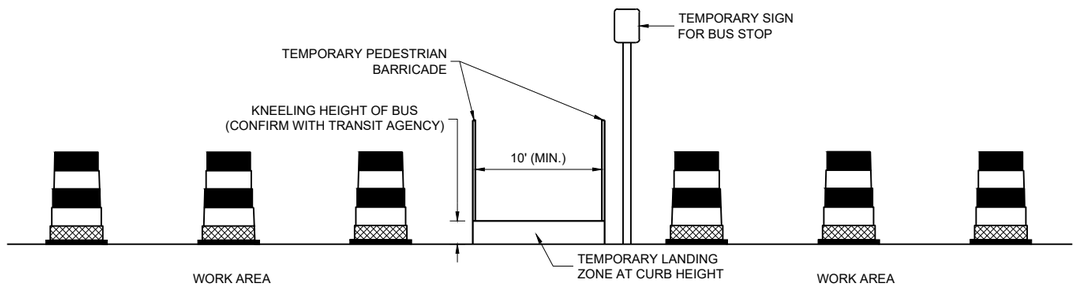
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — <position>
FHWA

6

SDD 15D30-10d



PLAN VIEW



PROFILE VIEW TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

6

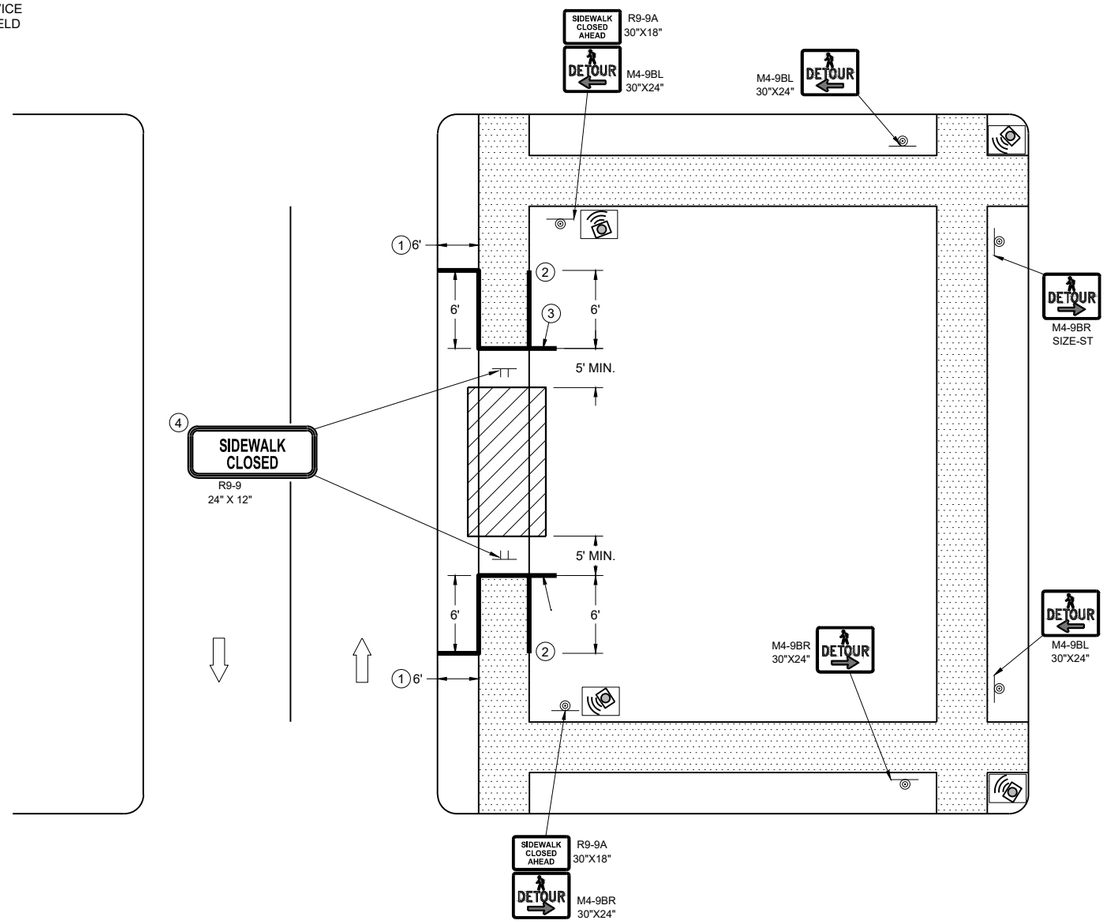
SDD 15D30-10e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



GENERAL NOTES

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

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

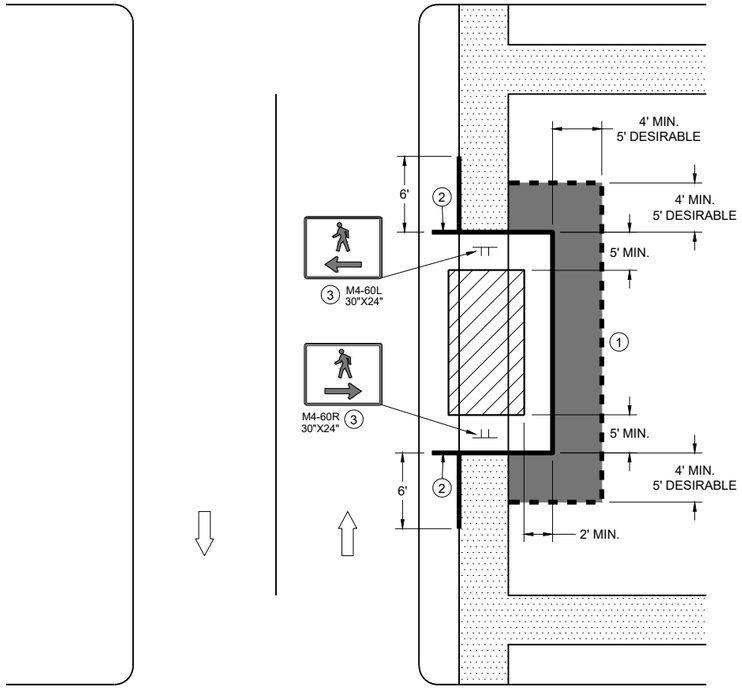
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

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

(2) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

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



SIDEWALK BYPASS
SINGLE SIDE

6

SDD 15D30-10g

6

SDD 15D30-10g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

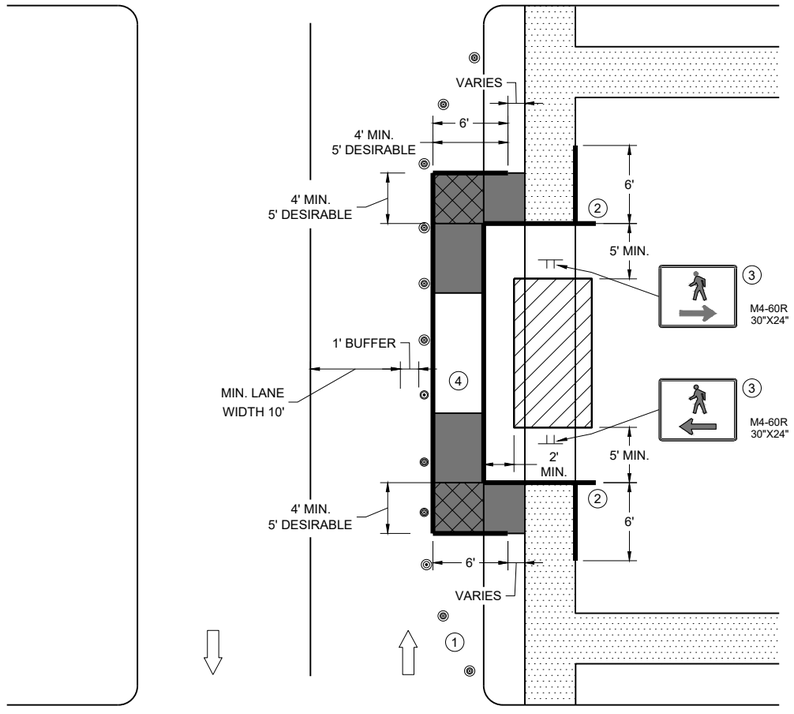
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.

(2) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.

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

(4) USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



SIDEWALK BYPASS, SINGLE SIDE

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SDD 15D30-10h

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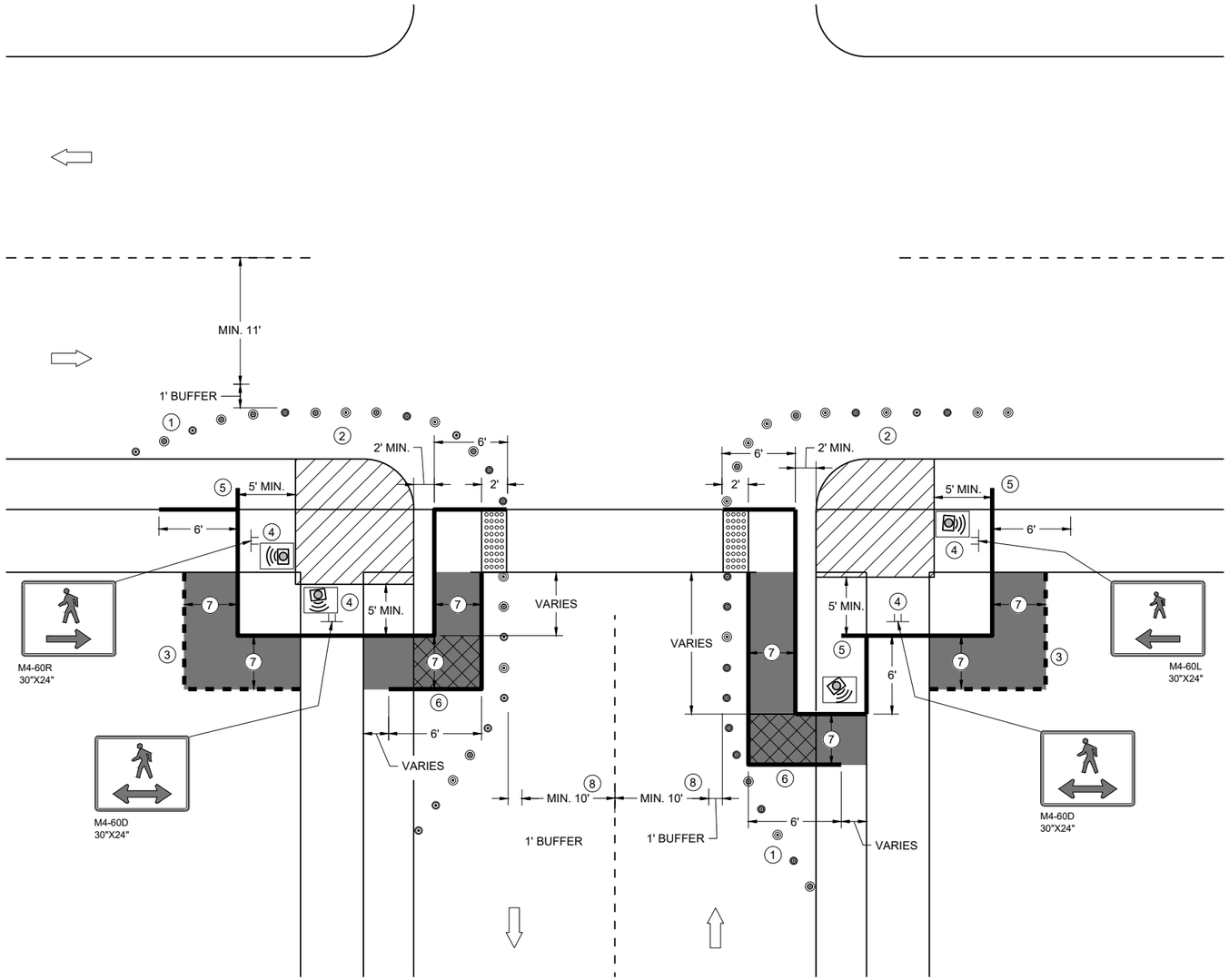
SDD 15D30-10h

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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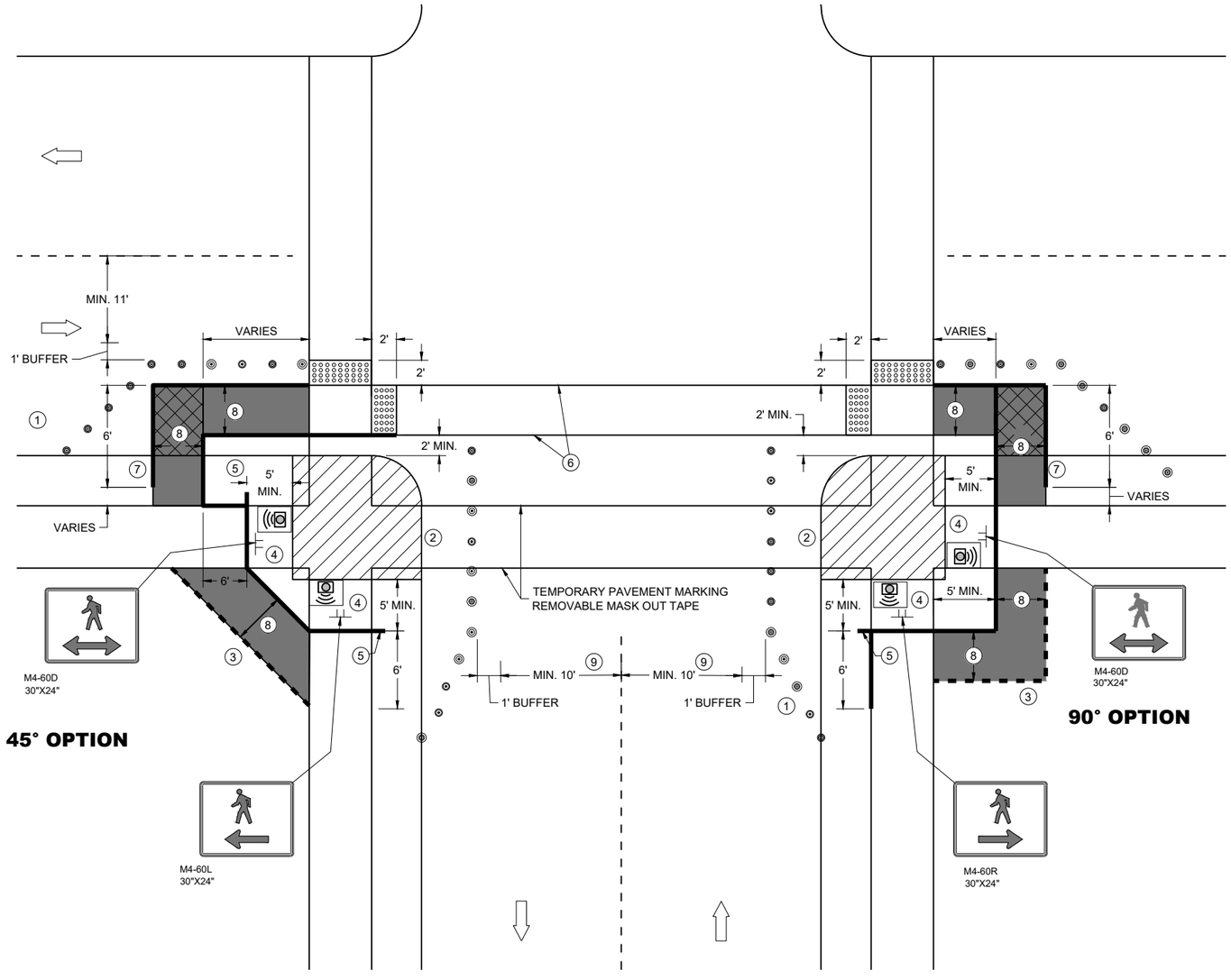
SDD 15D30-10i



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

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

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) WHITE 6" TEMPORARY PAVEMENT MARKING

(7) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(8) 4 FEET MINIMUM, 5 FEET DESIRABLE

(9) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

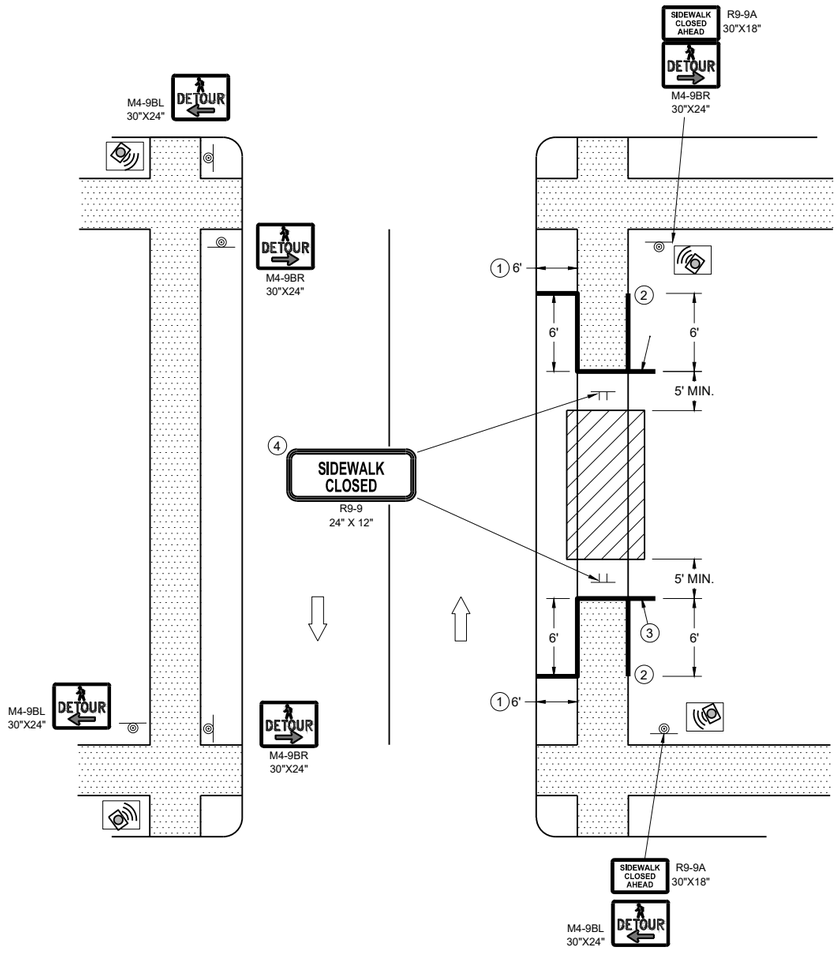
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-10j

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

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

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

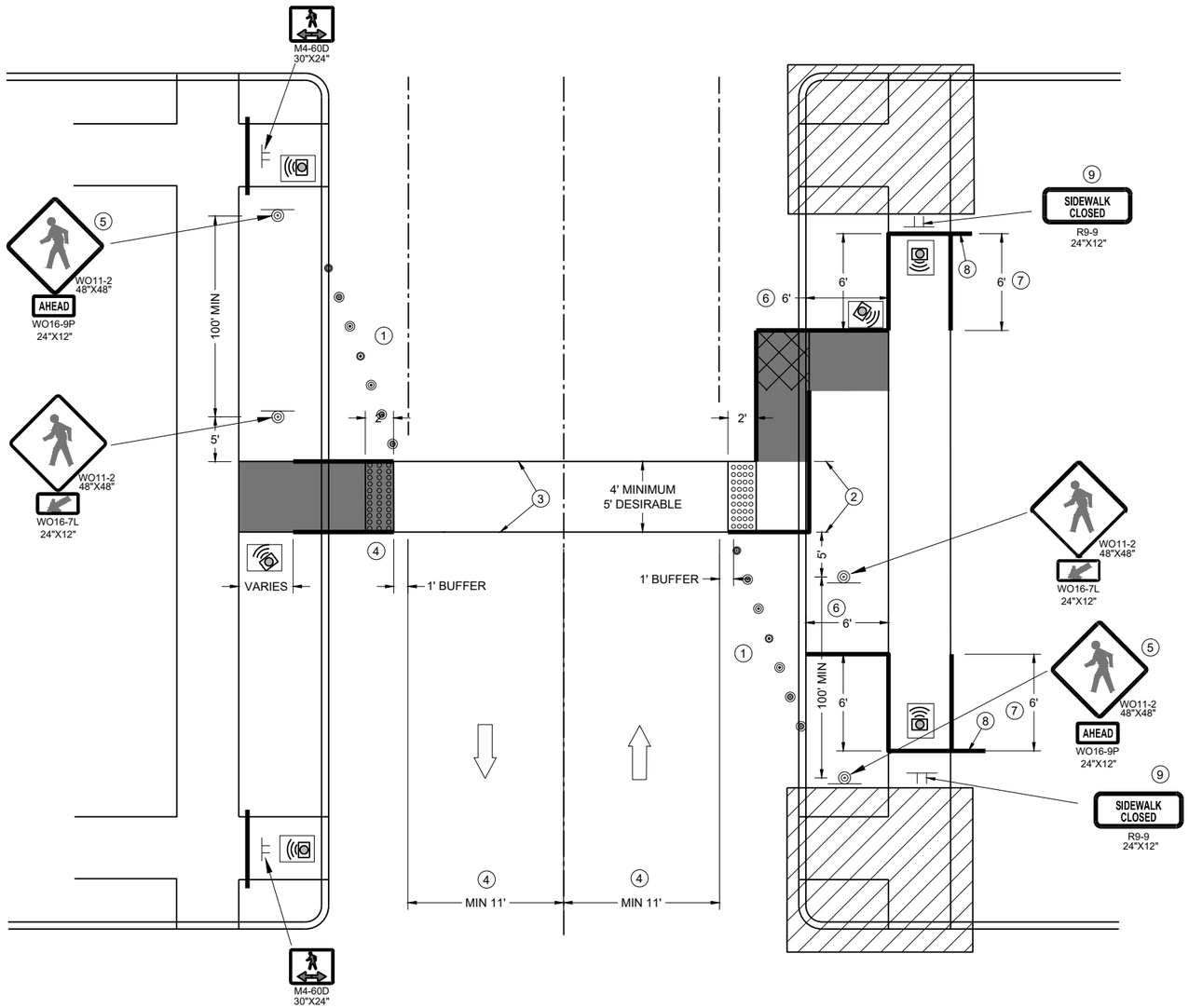
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10k



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

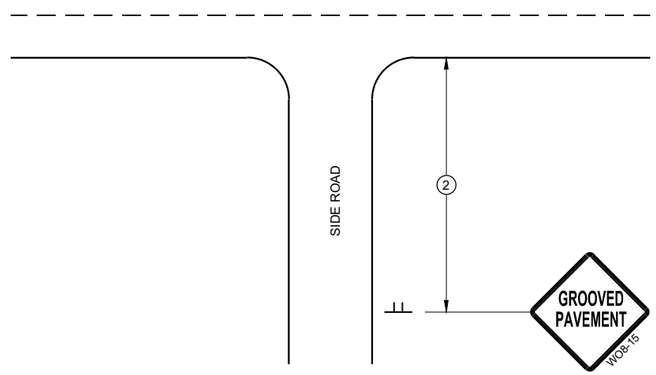
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

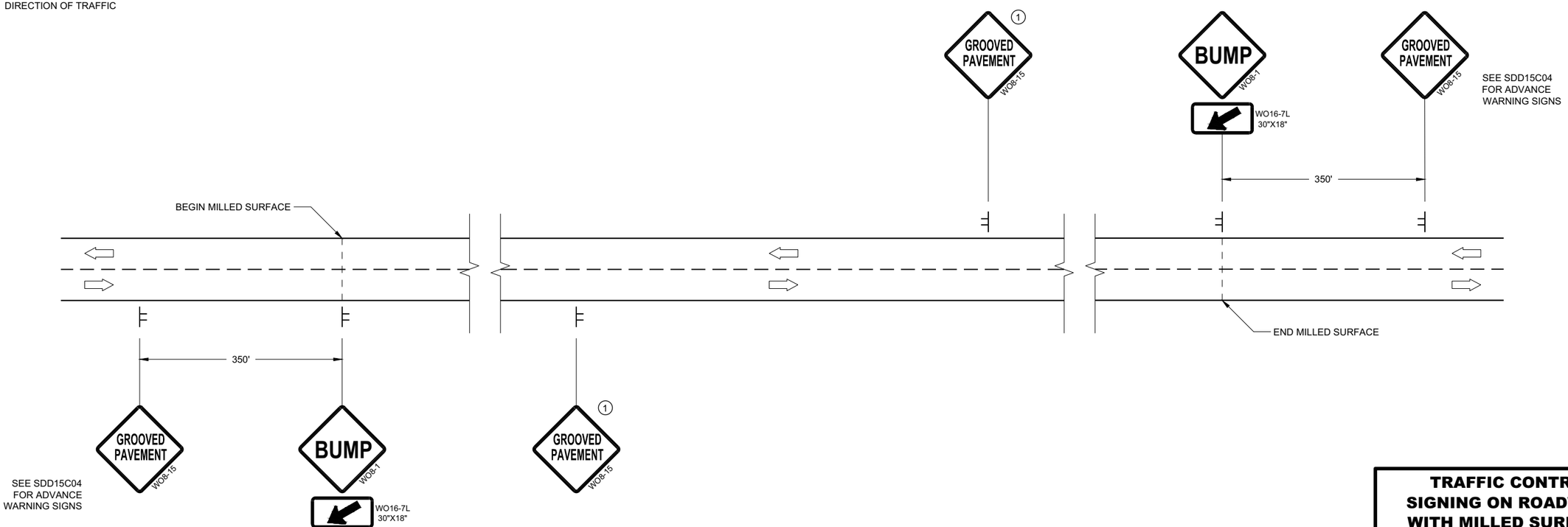
LEGEND

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

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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

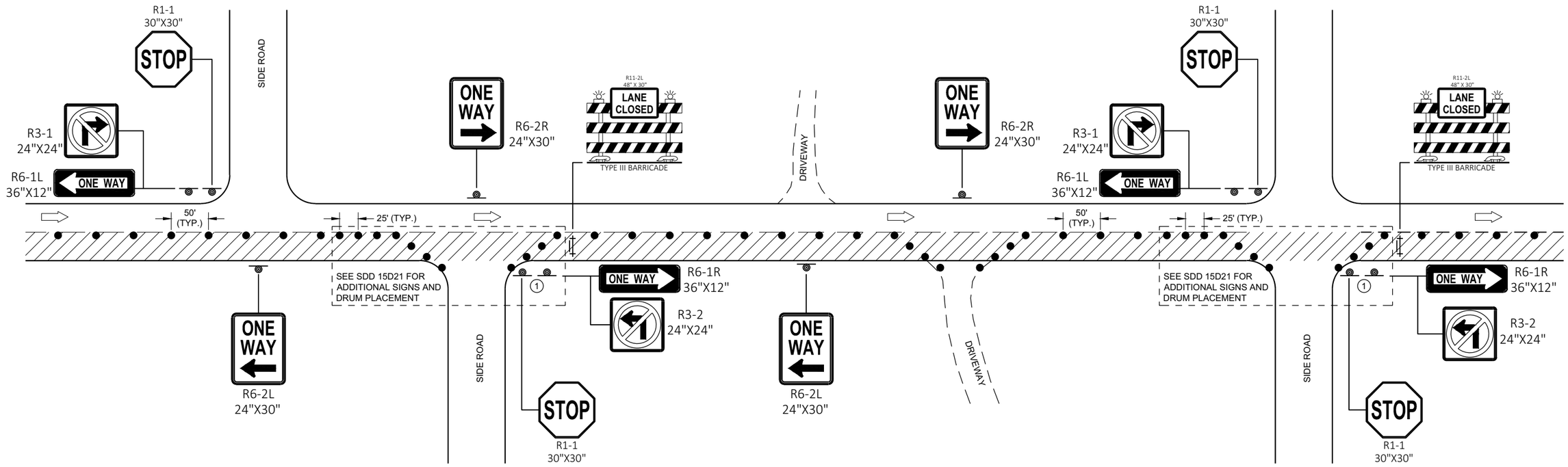
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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.

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.

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

(1) IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.



TRAFFIC CONTROL
ONE - WAY SIGNING

TRAFFIC CONTROL ONE-WAY SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEE 411
FHWA	

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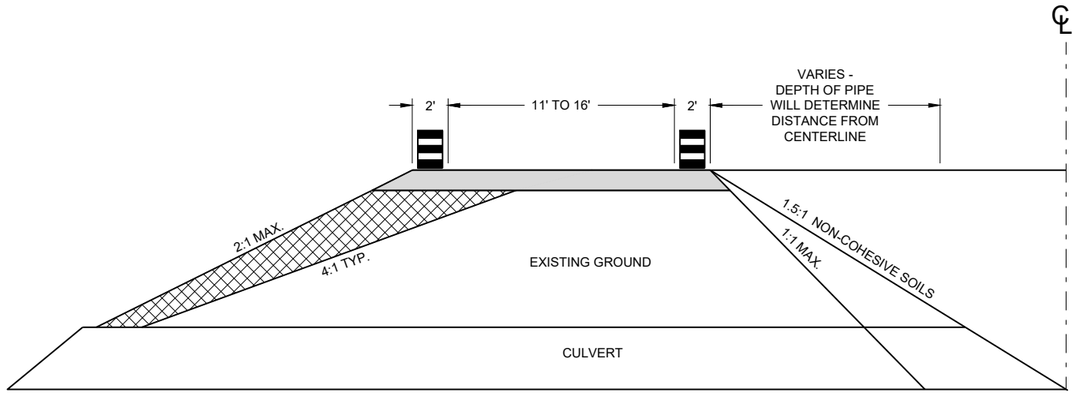
SDD 15D46 - 01



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

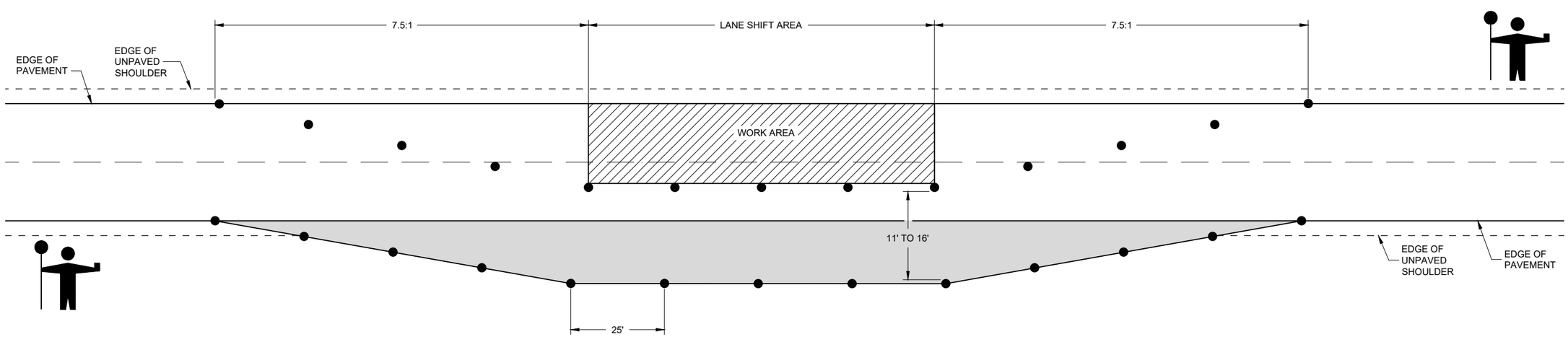
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D48 - 01

6

SDD 15D48 - 01

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

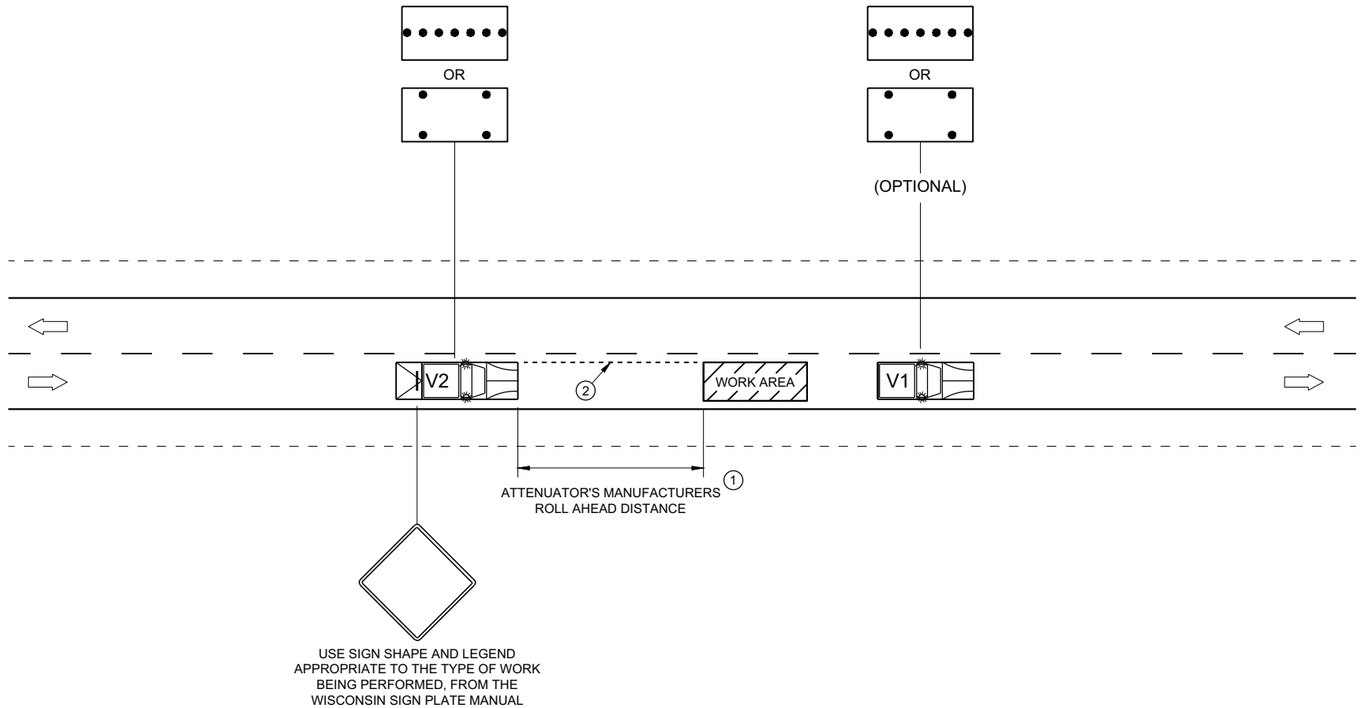
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.

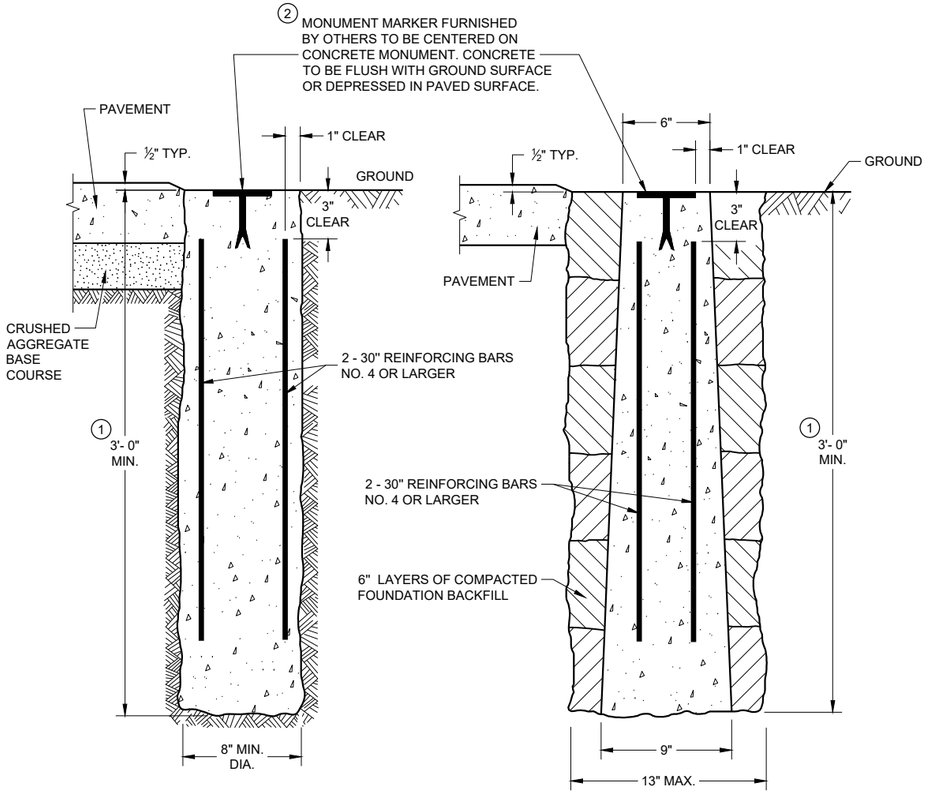


TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

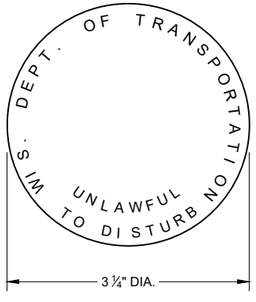
APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6
SDD 15D51 - 01



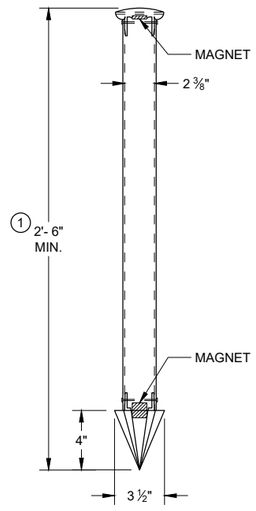
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

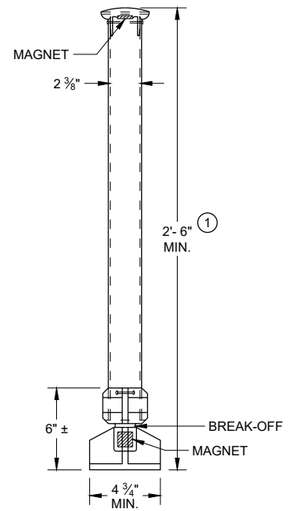


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

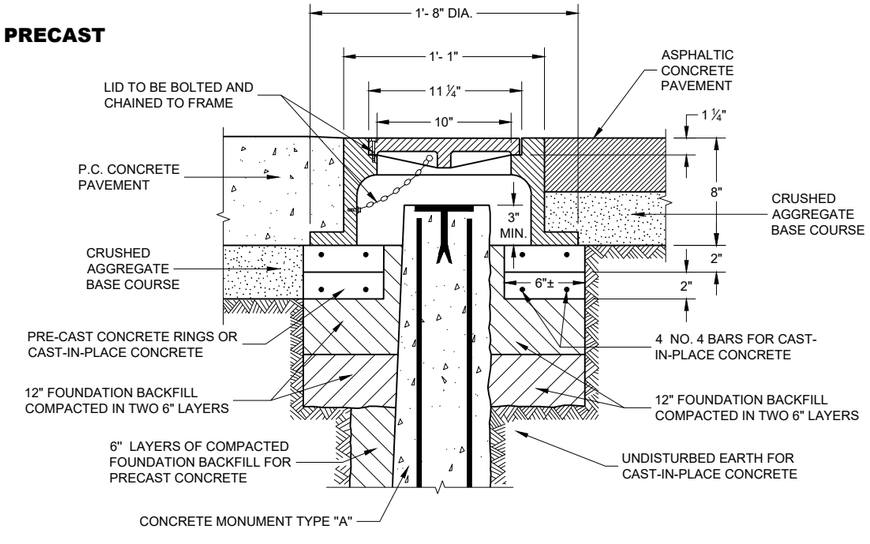


TYPE C
DRIVEN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

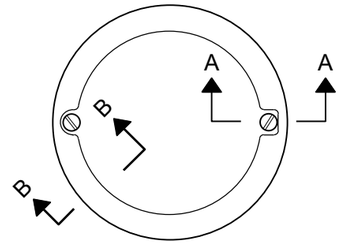
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

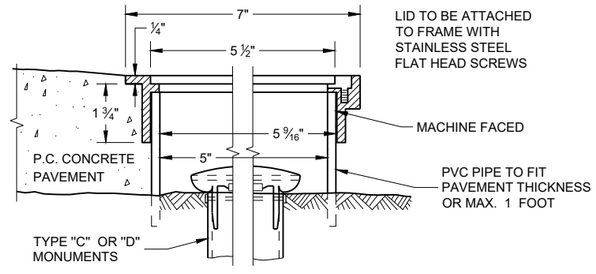
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MA
ENGINEER

FHWA

SDD 16A01 - 07

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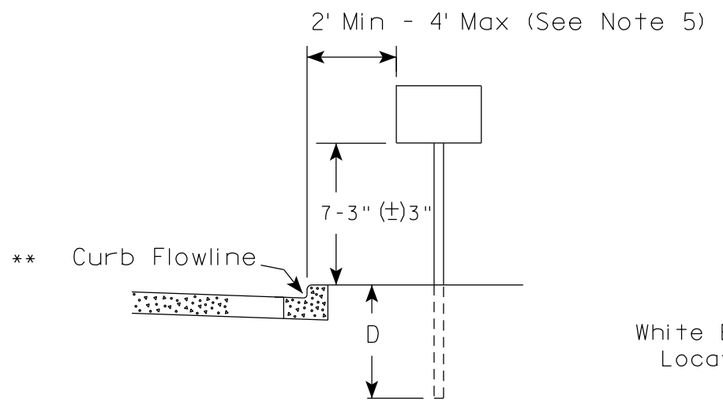
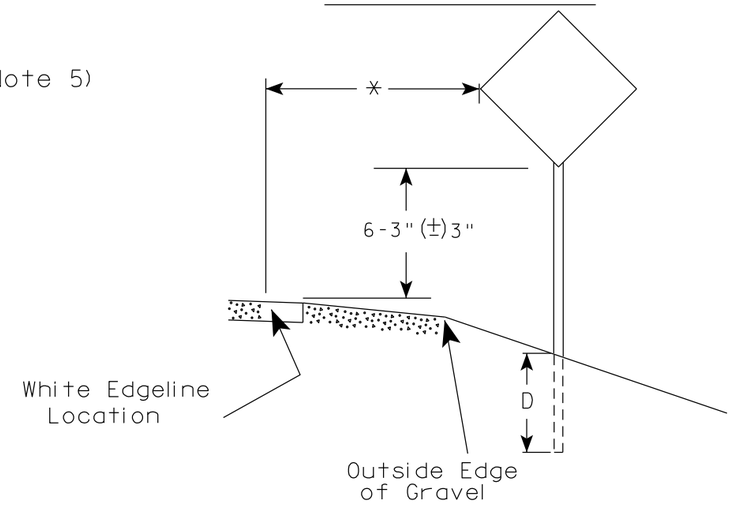
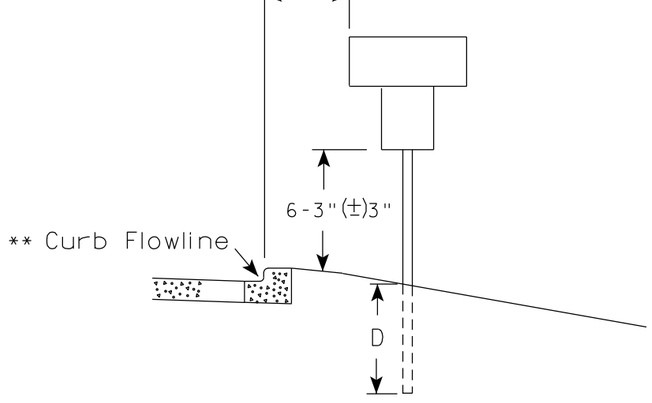
SDD 16A01 - 07

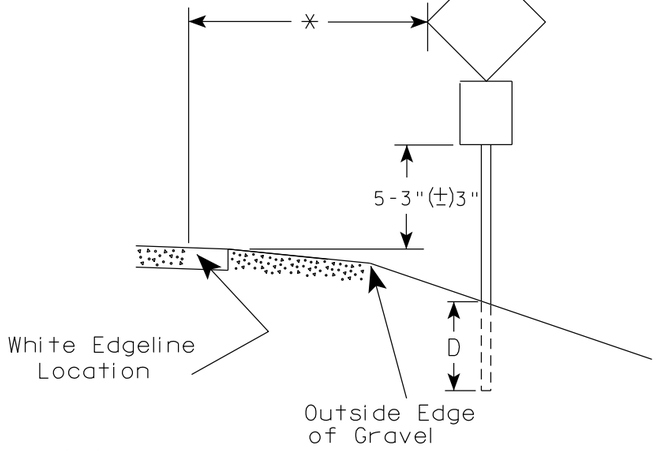
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

POST EMBEDMENT DEPTH

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

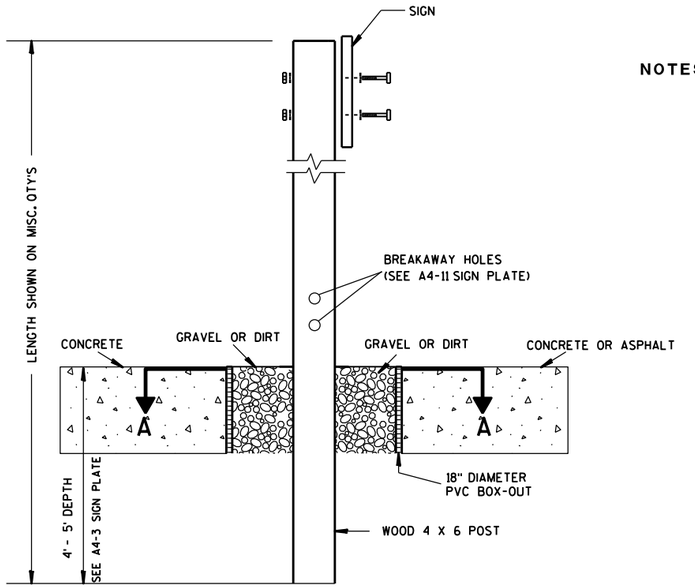
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

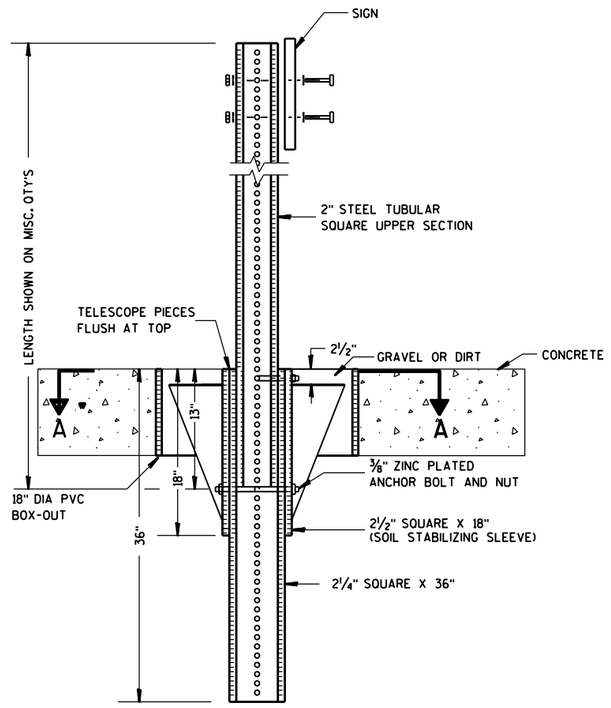
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 415	E



ELEVATION VIEW

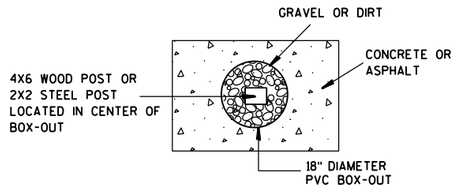
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

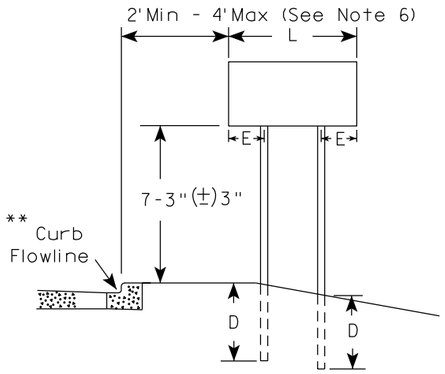
APPROVED Matthew R Rauch
for State Traffic Engineer

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

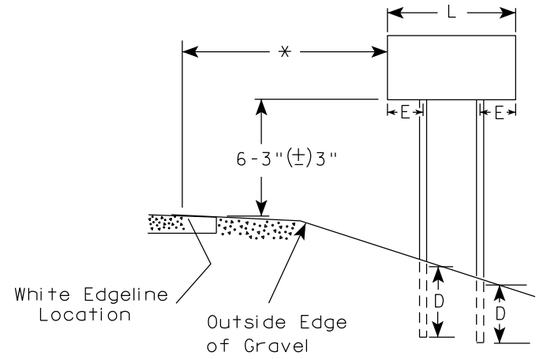
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

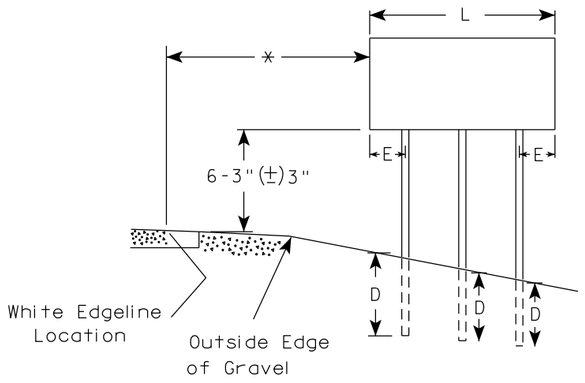
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

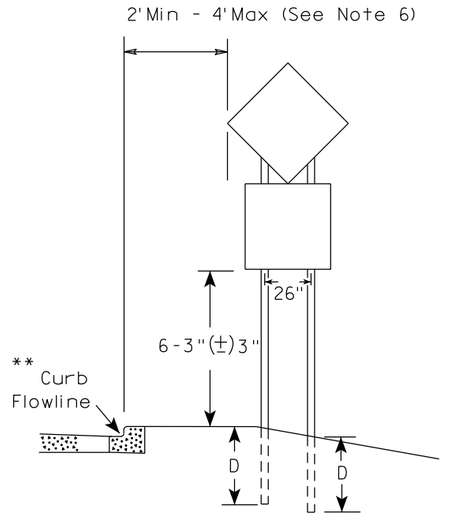
URBAN AREA



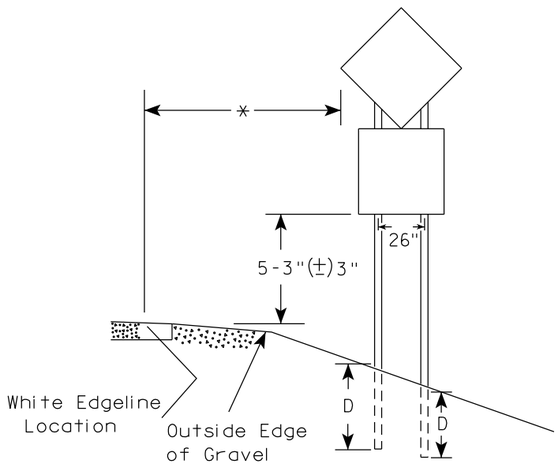
RURAL AREA (See Note 3)







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'

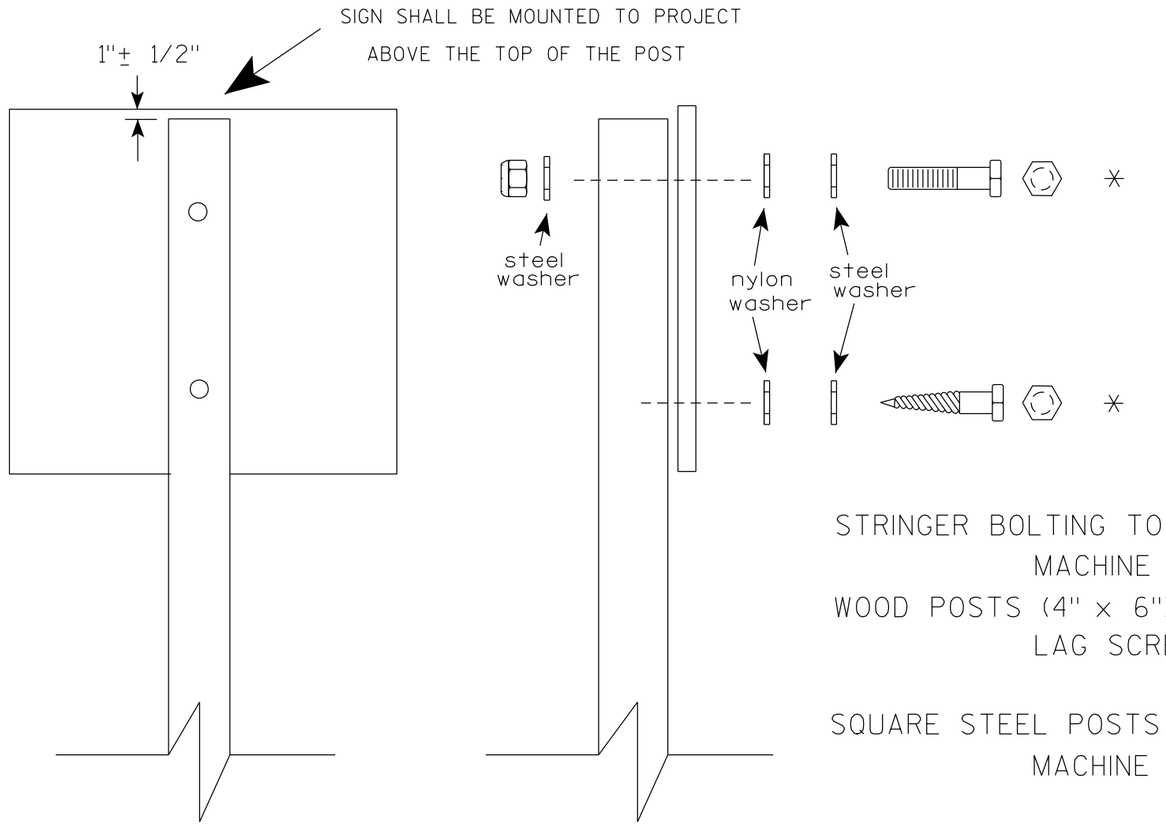
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 417	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

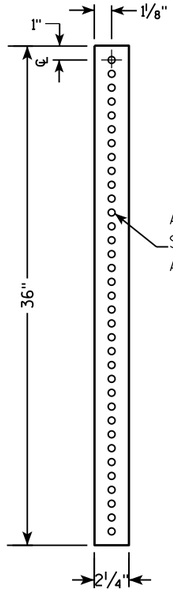
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

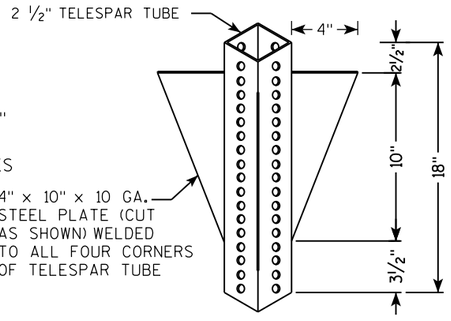
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

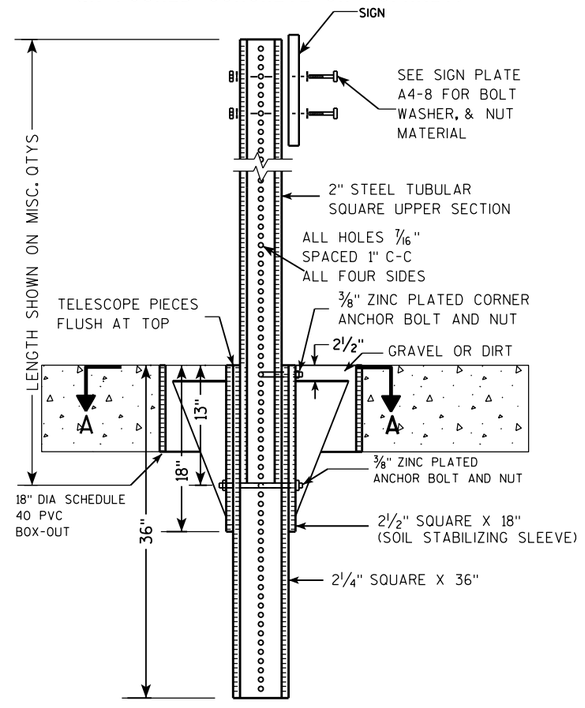
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



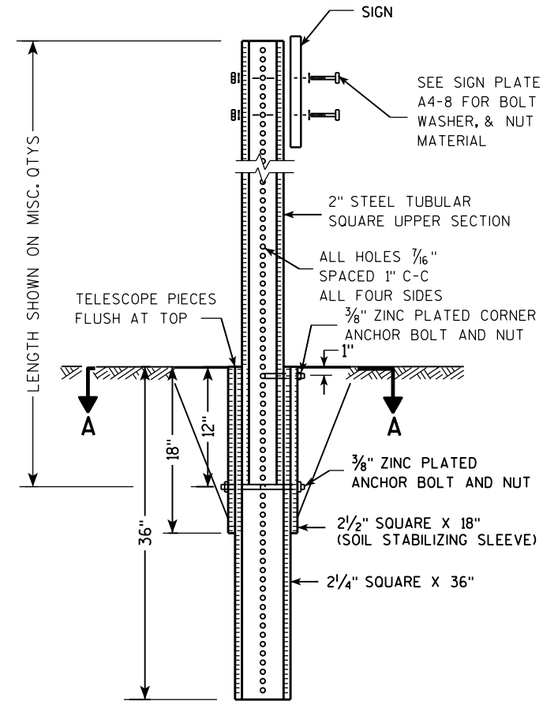
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

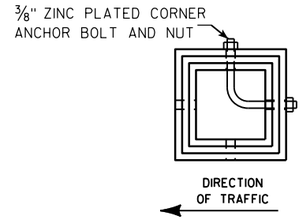


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

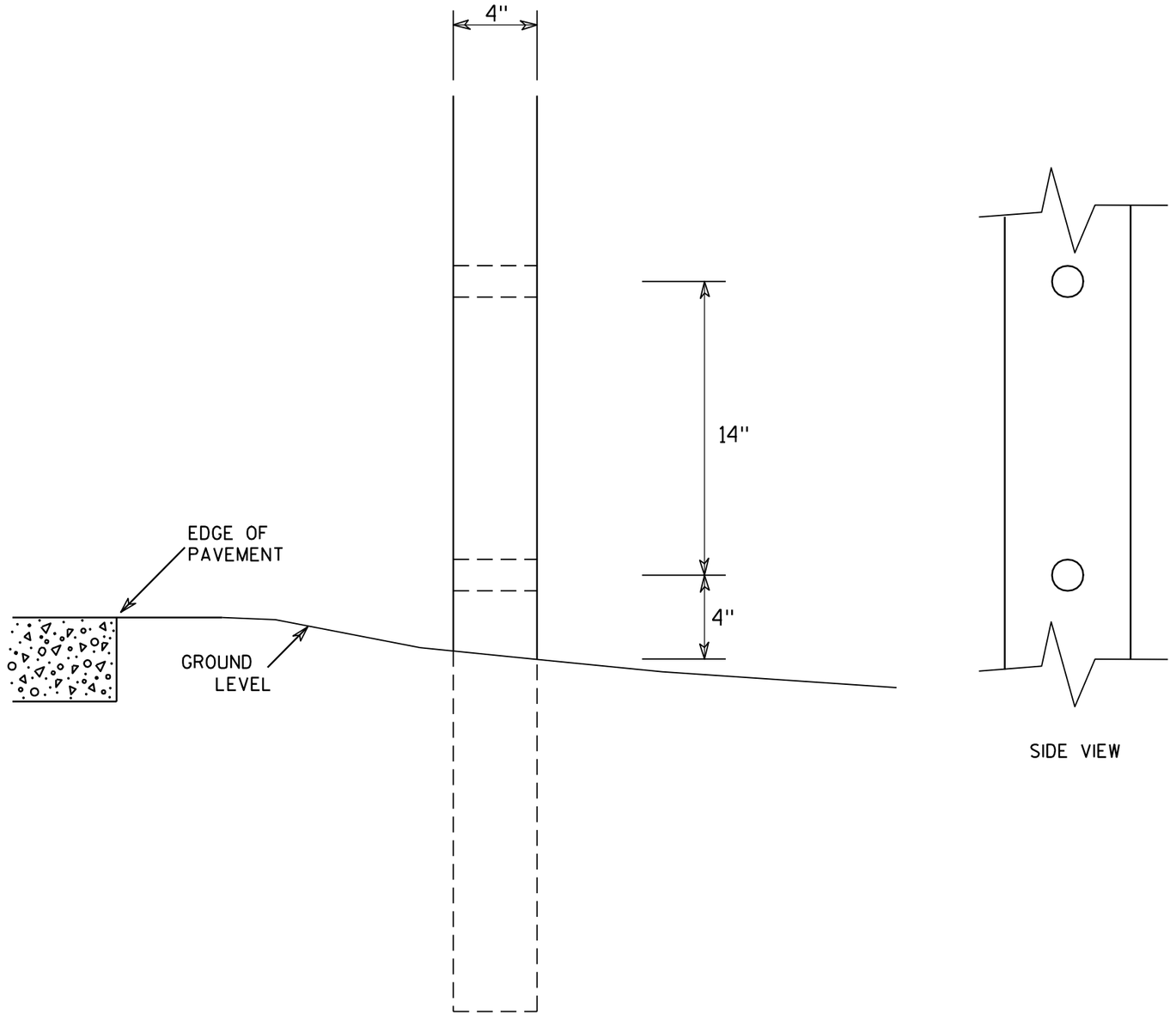
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 419 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

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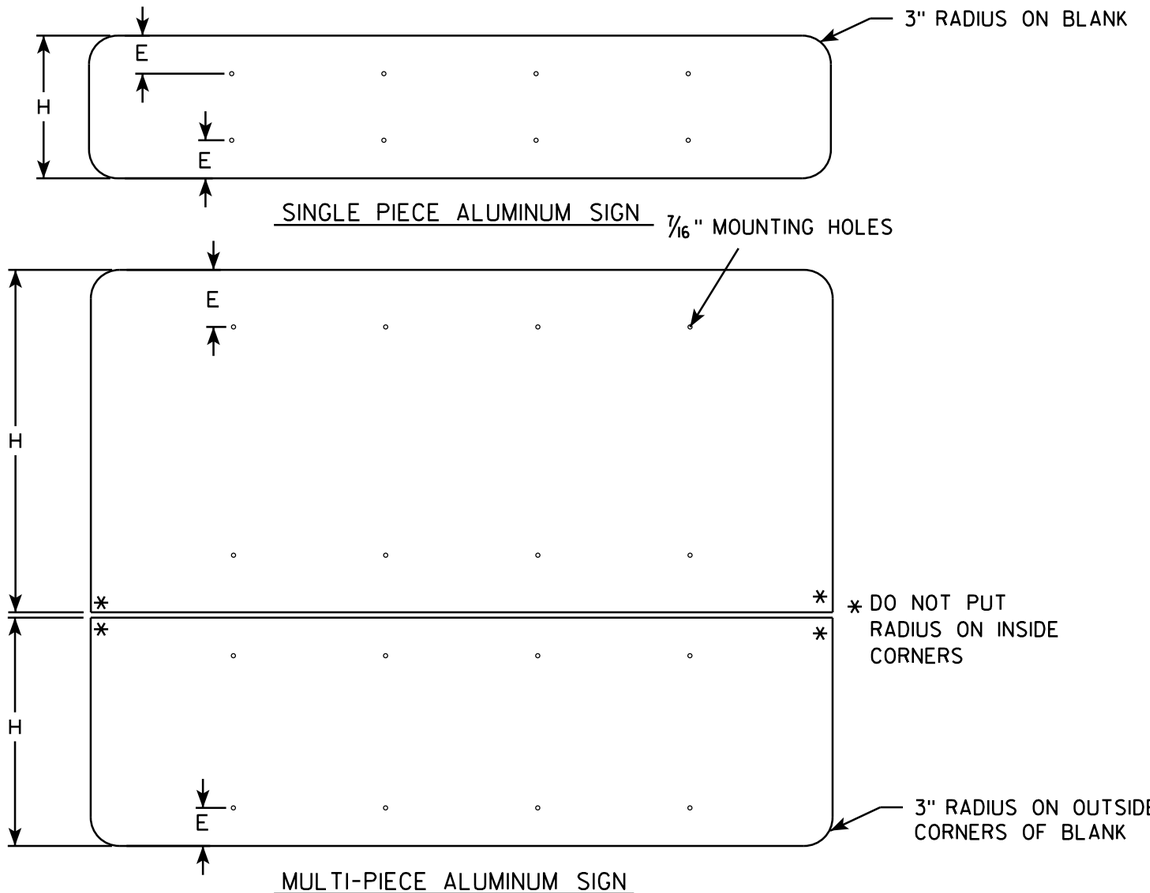
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

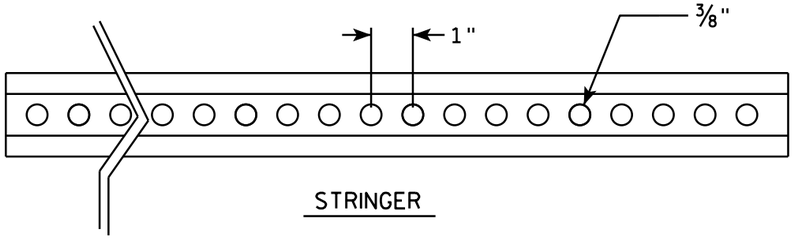
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 420	E



GENERAL NOTES

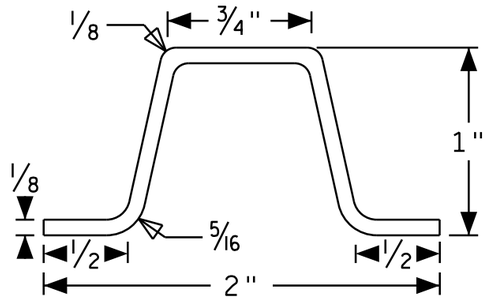
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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"

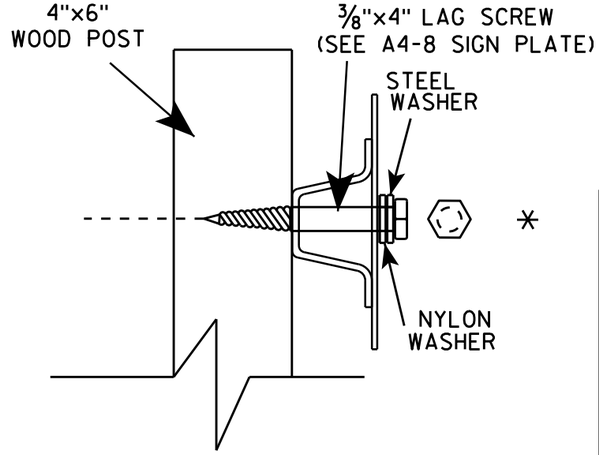


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

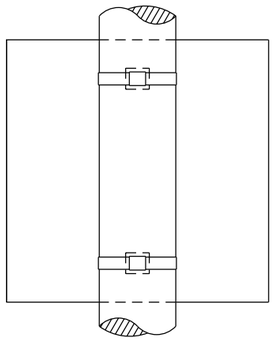
DATE 4/26/16 PLATE NO A4-18.1

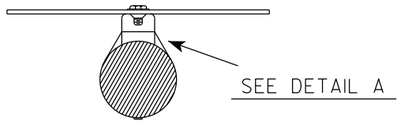
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

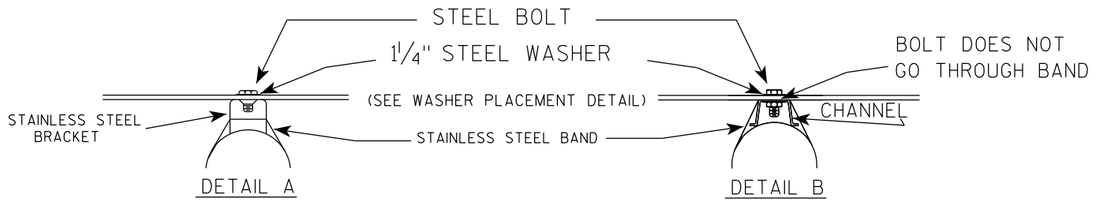
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000

BANDING

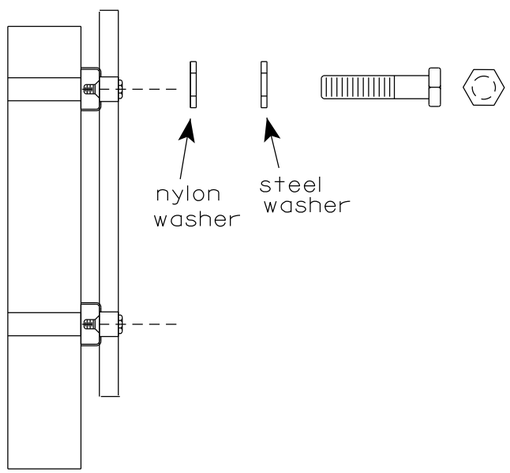
SINGLE SIGN







WASHER PLACEMENT

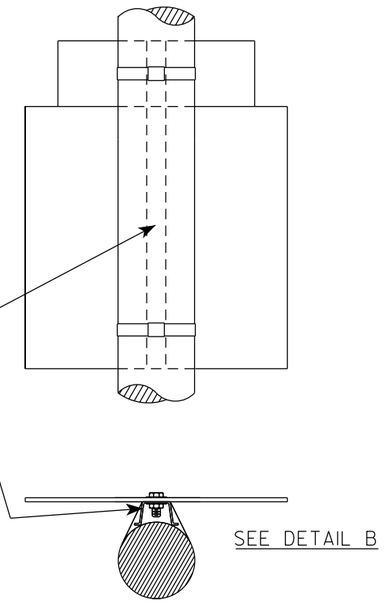


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 422	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

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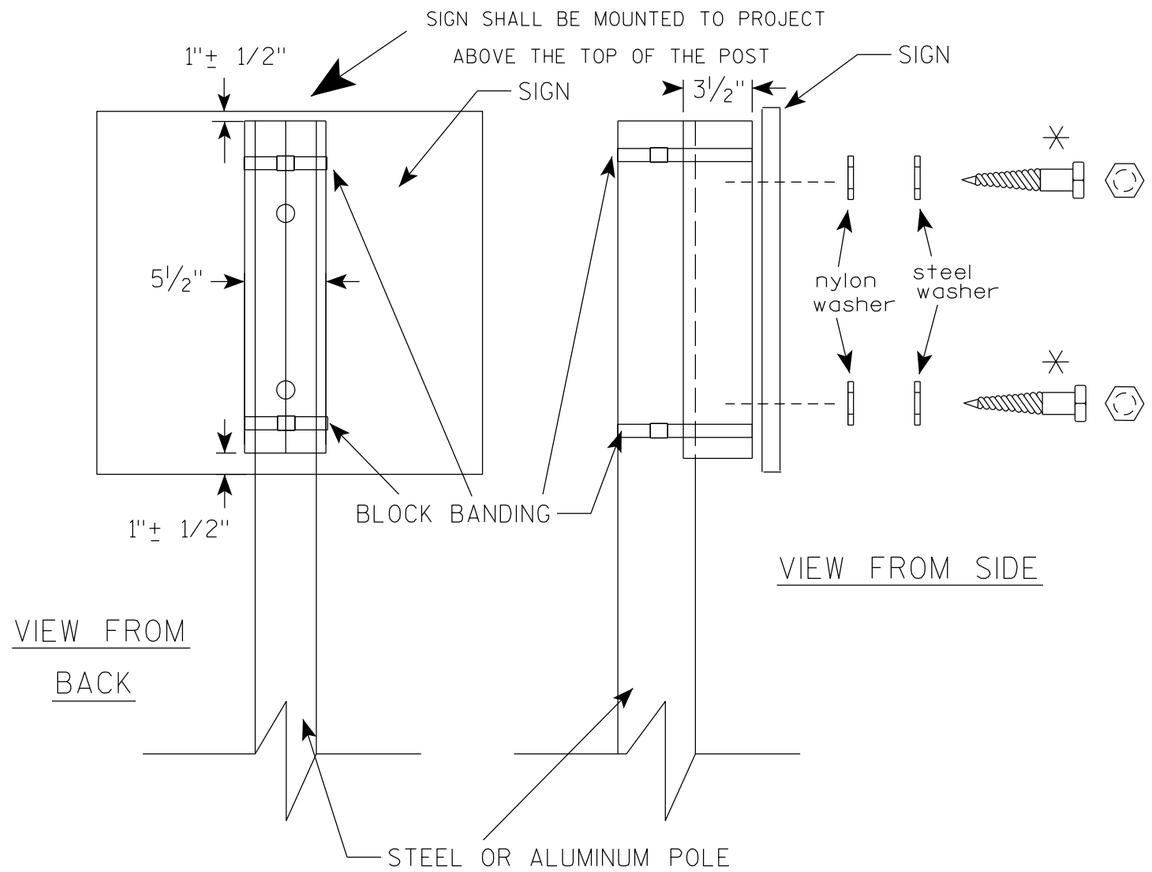
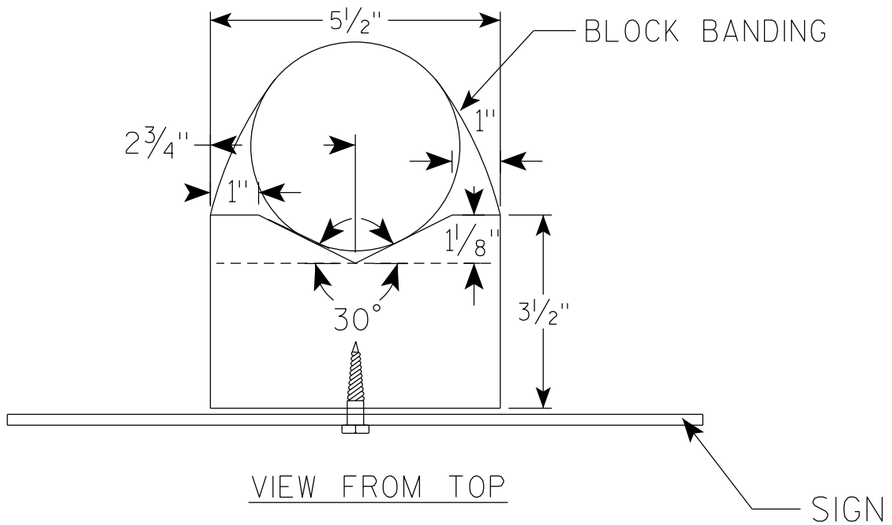




GENERAL NOTES

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)

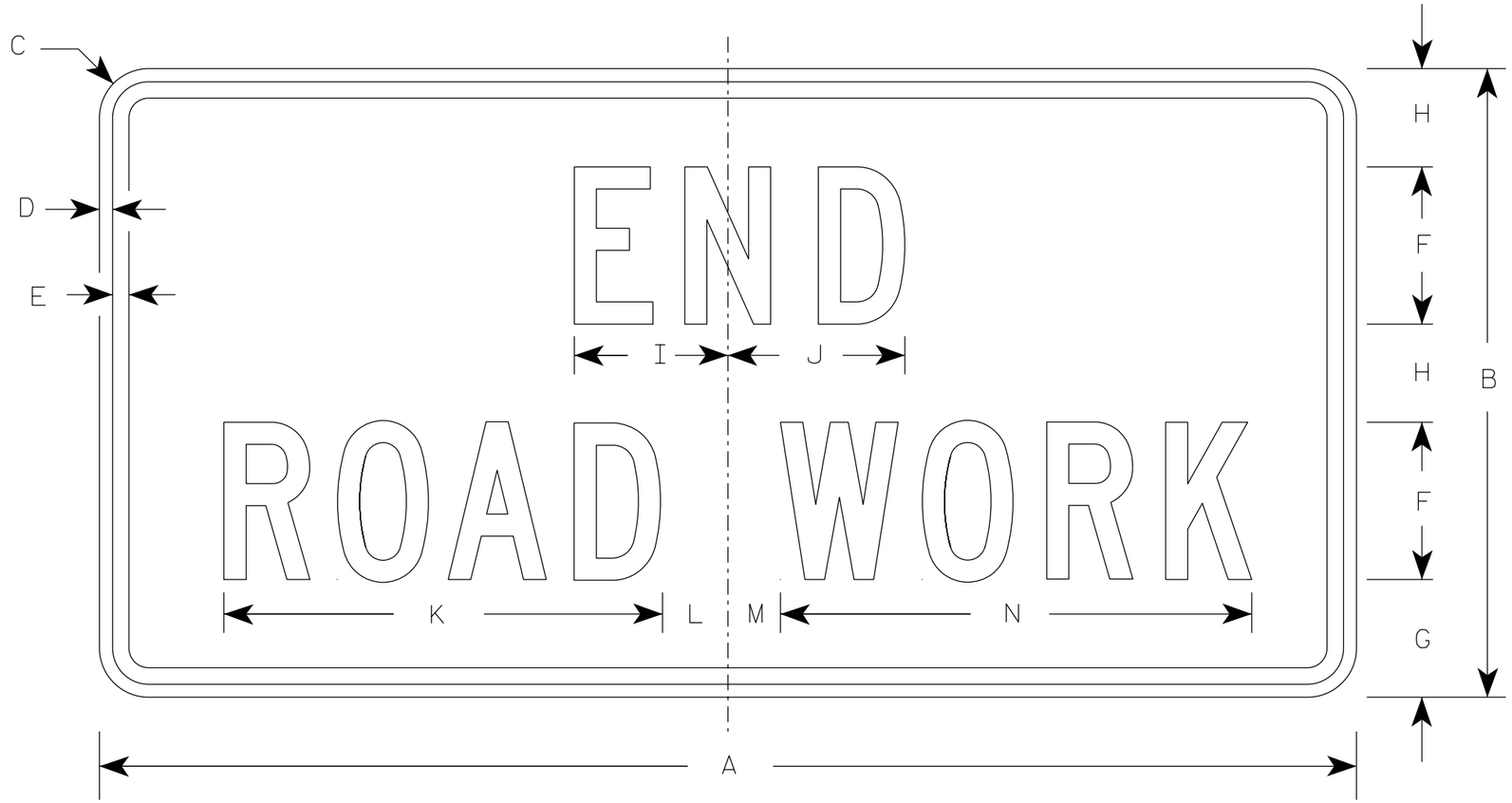
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 423 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: 424 E

7

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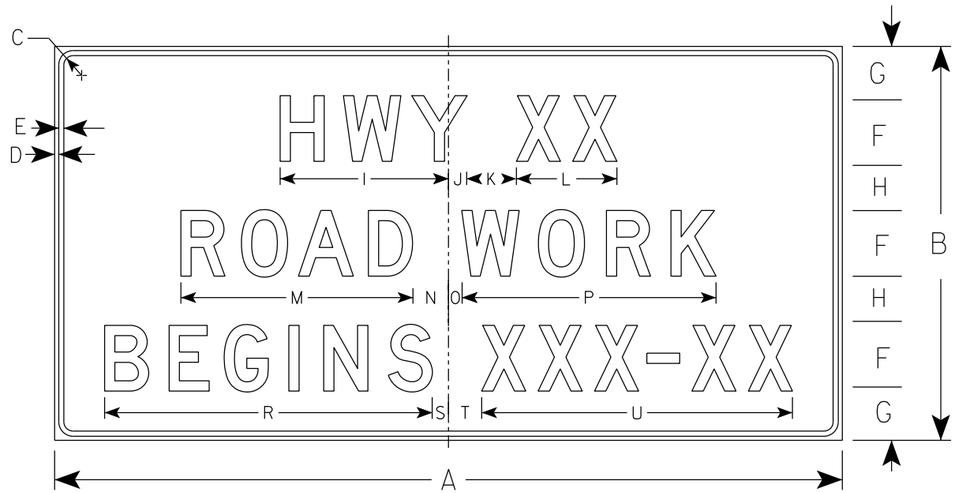
NOTES

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: 425 | E

7

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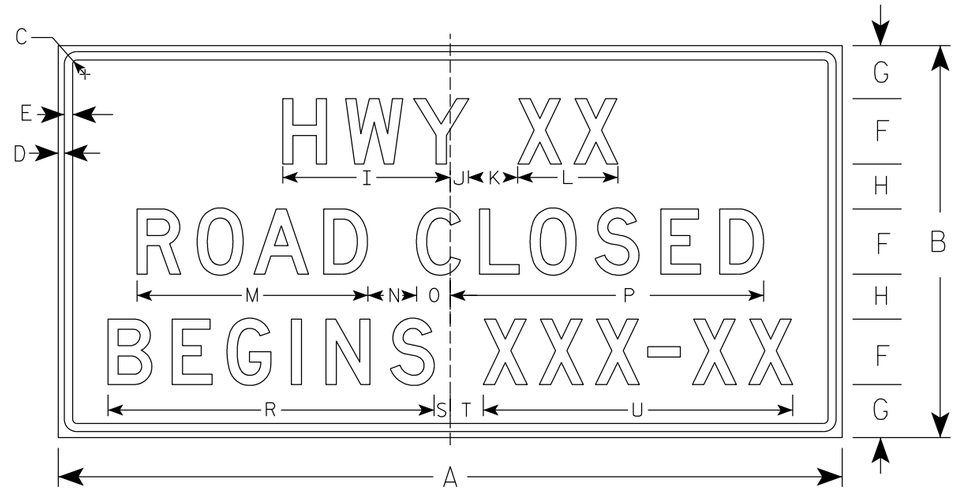
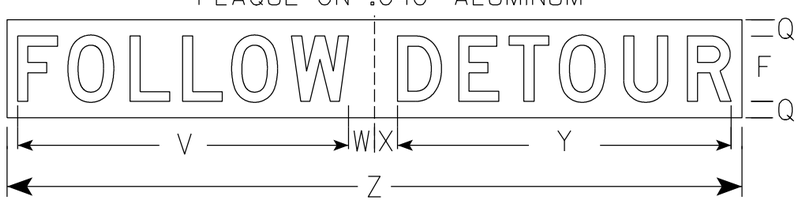


G20-57C

PLAQUE ON .040" ALUMINUM



USE ONLY ONCE WHEN ROAD IS CLOSED

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.

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 1/8	5	2 7/8	29	2	30	1 3/4	3 1/4	28 3/8	40 1/2	2	2	29 3/4	66	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	6	4 1/8	38 3/8	2	39 7/8	2	4	37 7/8	29 3/4	3 1/8	2 7/8	40 7/8	90	32.0
5																											

STANDARD SIGN

G20-57C

WISCONSIN DEPT OF TRANSPORTATION

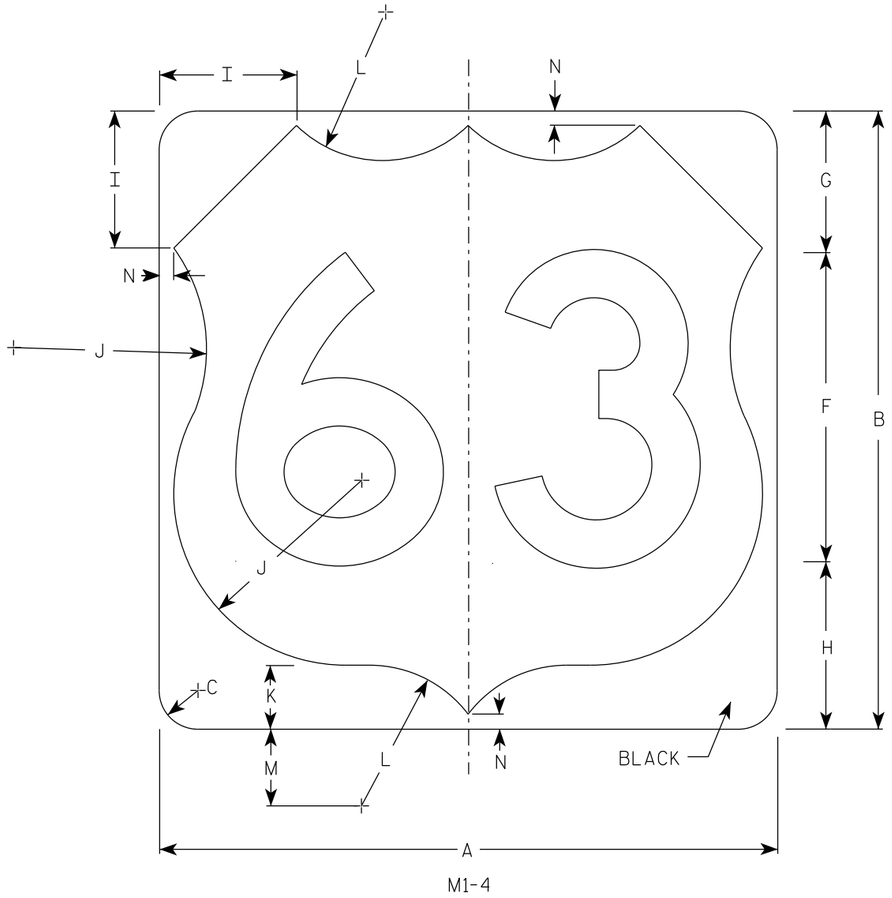
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/19 PLATE NO. G20-57C.1

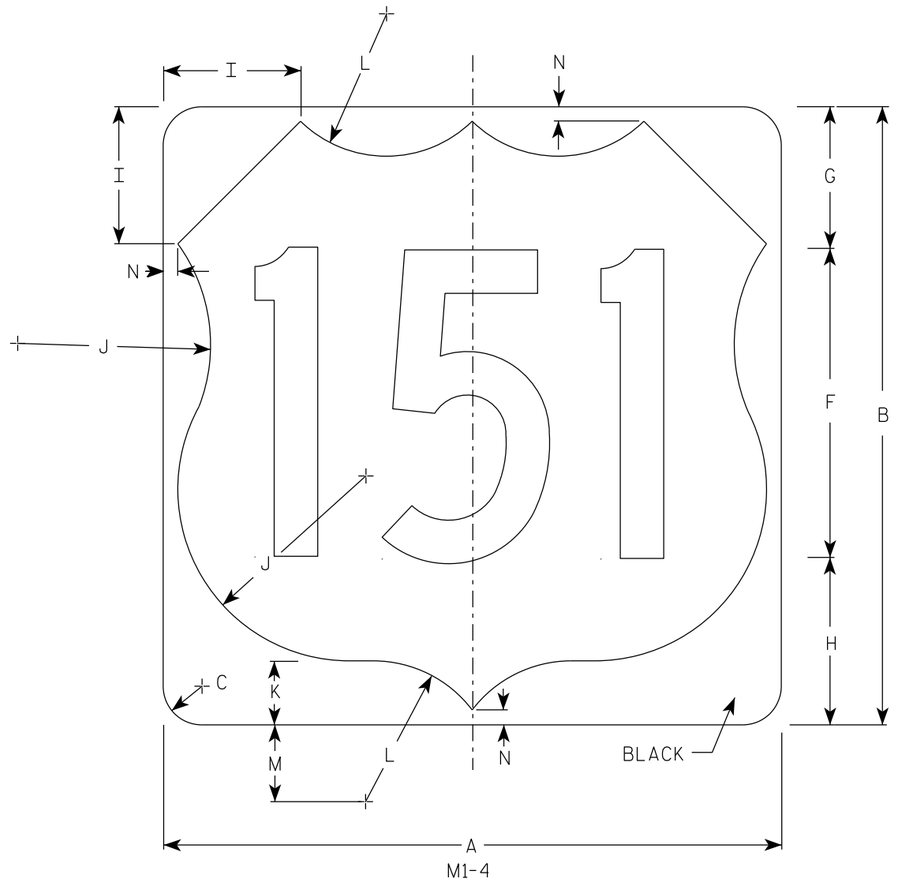
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 426 E

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

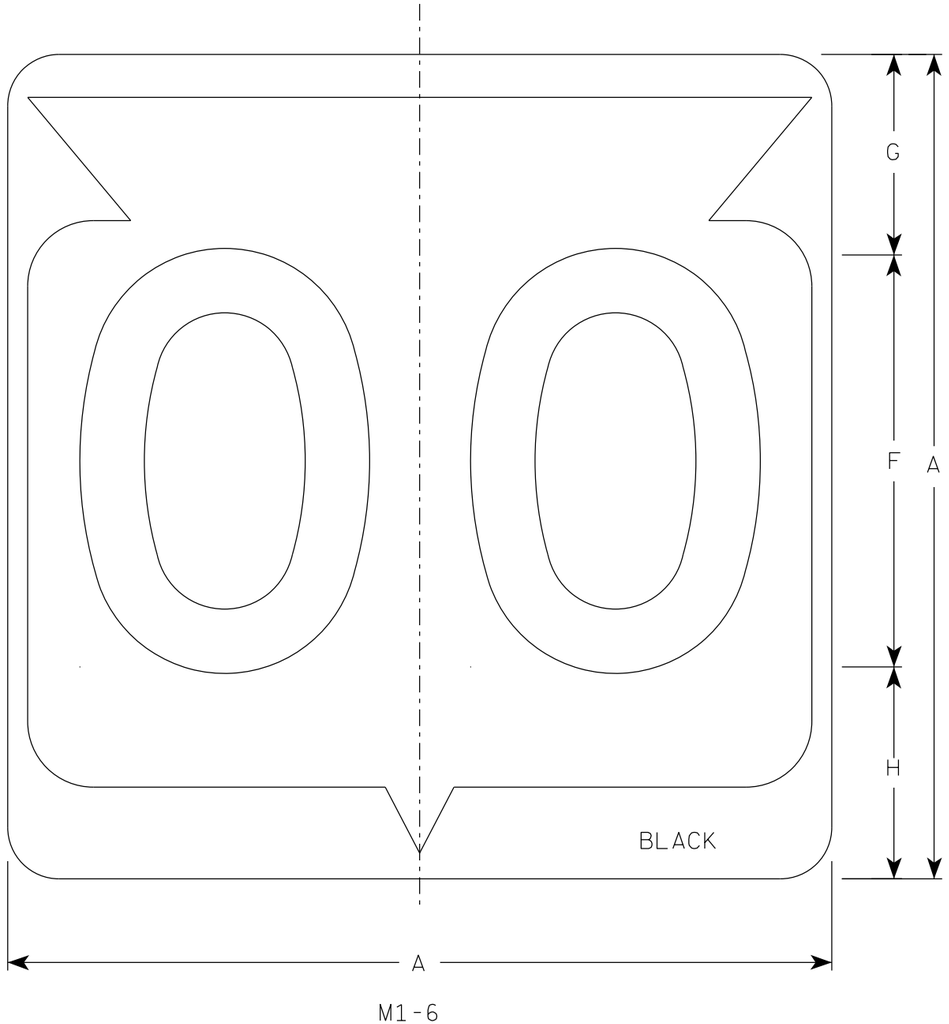
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 427 E

7

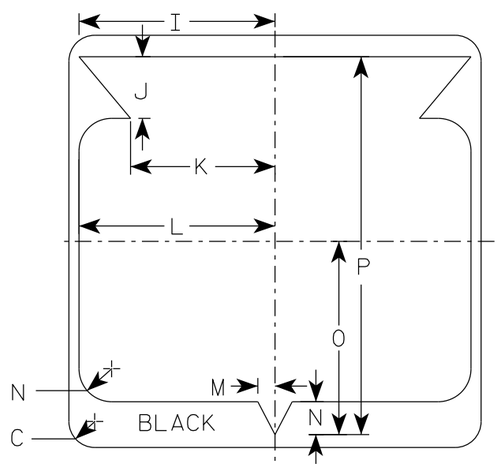
7



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

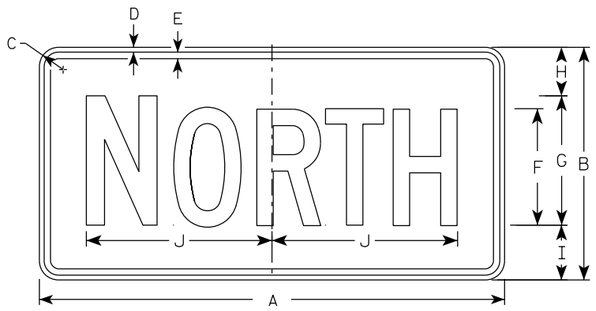
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

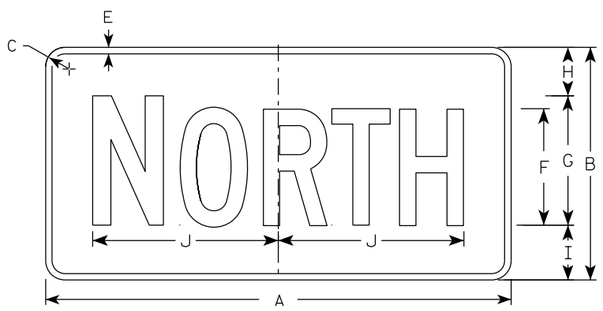
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

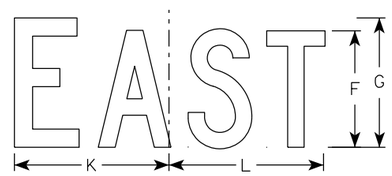
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 428	E



M3-1
MM3-1
MP3-1

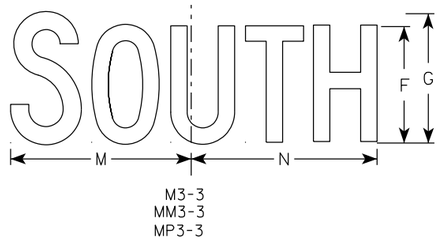


MB3-1
MK3-1
MN3-1

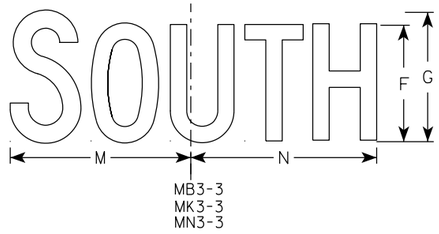


M3-2
MM3-2
MP3-2

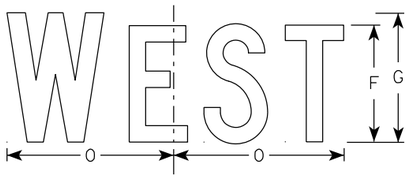
MB3-2
MK3-2
MN3-2



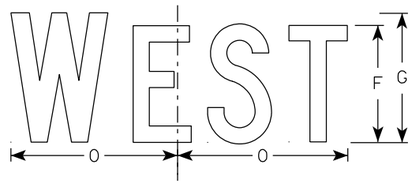
M3-3
MM3-3
MP3-3



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

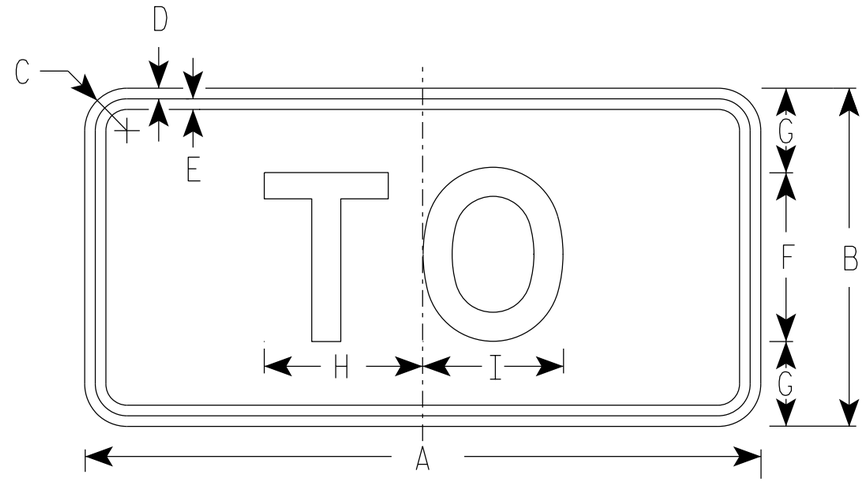
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

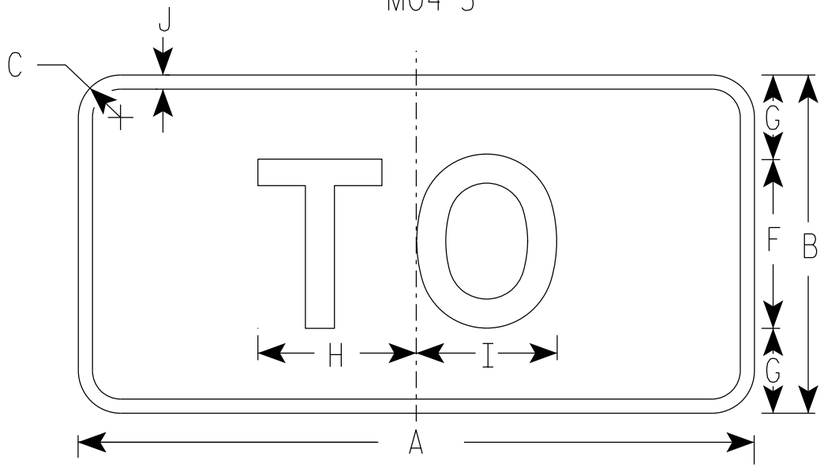
DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 429 | E

7



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
2M	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
3	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
4	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
5	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

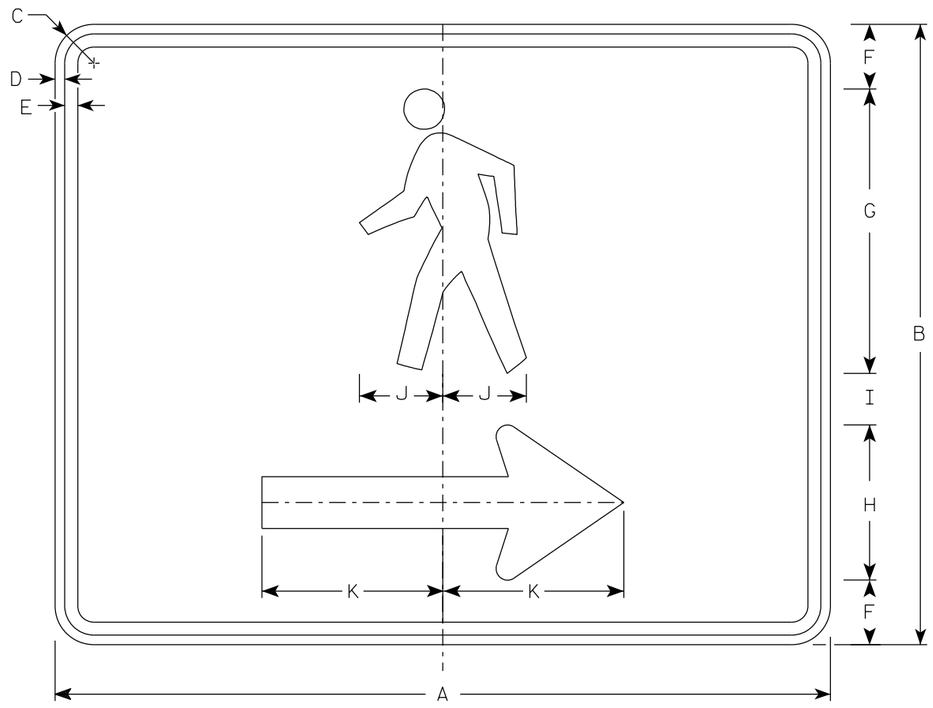
DATE 2/8/2023 PLATE NO. M4-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 430 | E

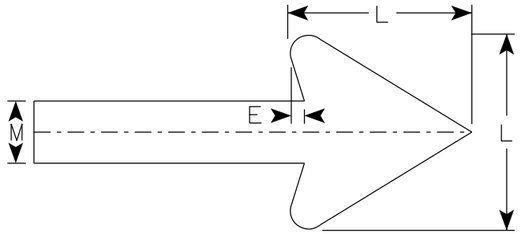
7

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

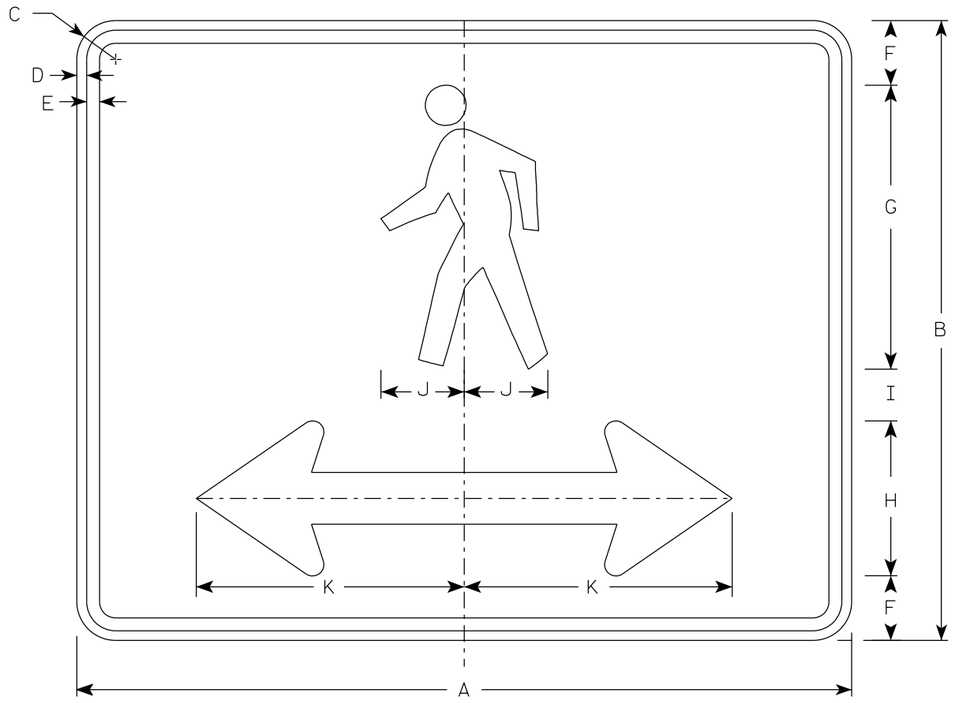
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

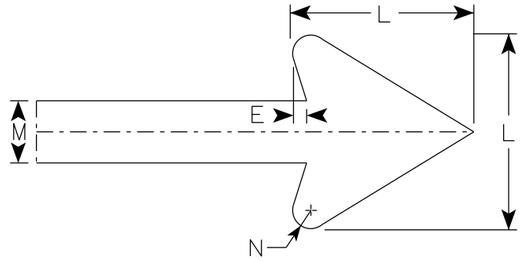
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 431 | E



M4-60D

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.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
2M	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
3																											
4																											
5																											

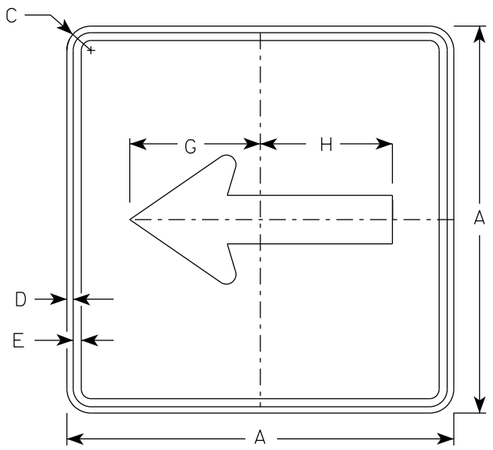
STANDARD SIGN
M4-60D

WISCONSIN DEPT OF TRANSPORTATION

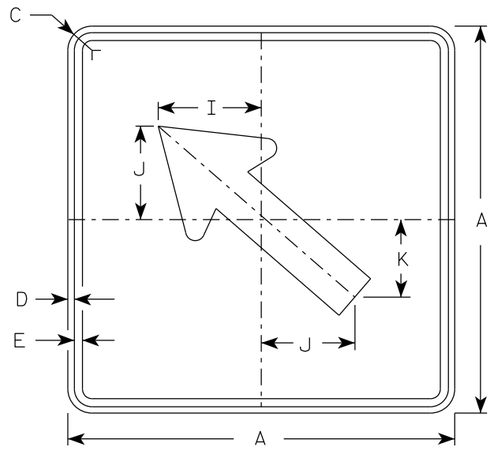
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60D.2

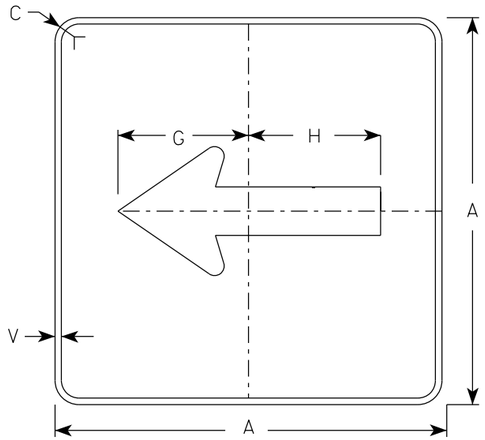
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 432 | E



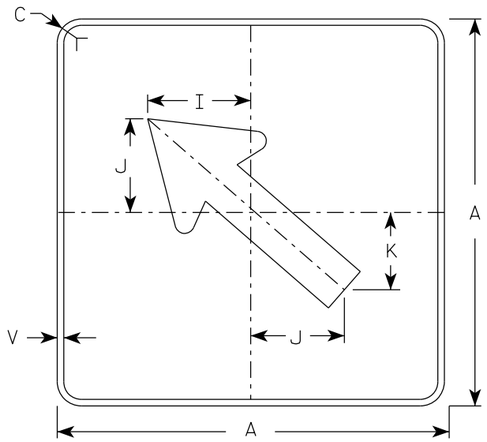
M6-1
MM6-1
MO6-1
MP6-1



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



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

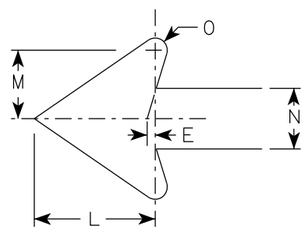


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

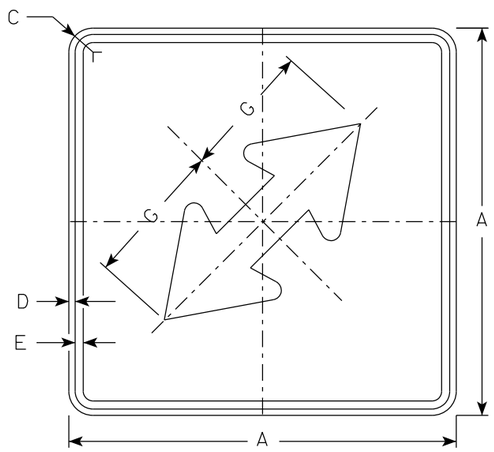
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

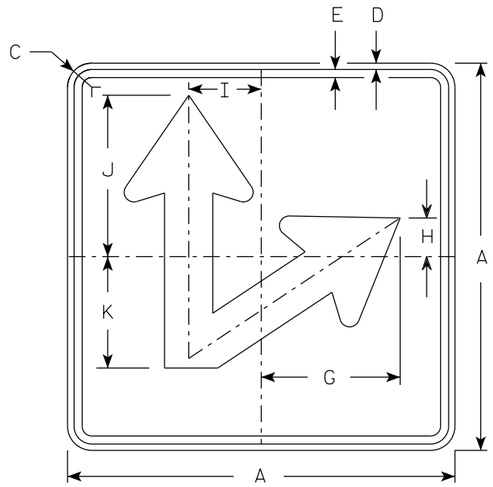
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 433 | E

7

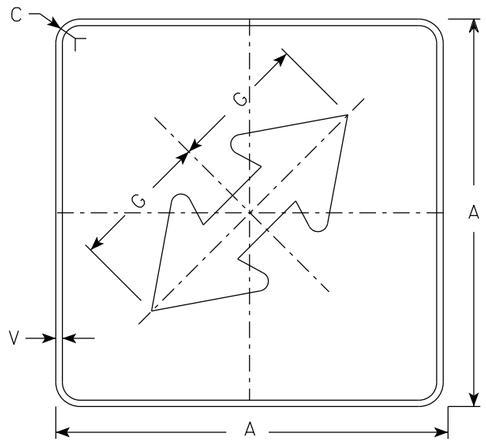
7



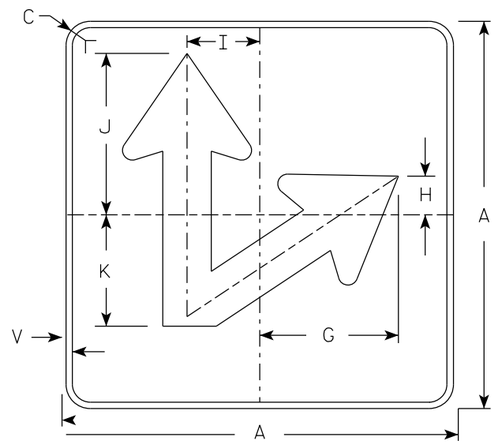
M6-5
MM6-5
MO6-5
MP6-5



M6-7R
MM6-7R
MO6-7R
MP6-7R



MB6-5
MK6-5
MN6-5
MR6-5



MB6-7R
MK6-7R
MN6-7R
MR6-7R

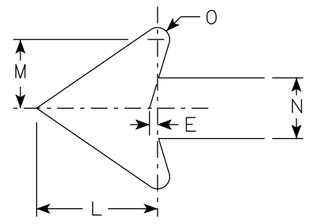
NOTES

1. Sign is Type II - Type H Reflective except as Shown
2. Color:

M6-5	and	M6-7	Background - White Message - Black
MB6-5	and	MB6-7	Background - Blue Message - White
MK6-5	and	MK6-7	Background - Green Message - White
MM6-5	and	MM6-7	Background - White Message - Green
MN6-5	and	MN6-7	Background - Brown Message - White
MO6-5	and	MO6-7	Background - Orange - Type F Reflective Message - Black
MP6-5	and	MP6-7	Background - White Message - Blue
MR6-5	and	MR6-7	Background - Brown Message - Yellow

3. M6-7L same as M6-7R except arrow points ahead and left.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	2 1/8	4 1/4	8 3/4	6	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	2 1/8	4 1/4	8 3/4	6	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	3	6 3/4	12 1/2	8 5/8	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	3	6 3/4	12 1/2	8 5/8	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	3	6 3/4	12 1/2	8 5/8	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

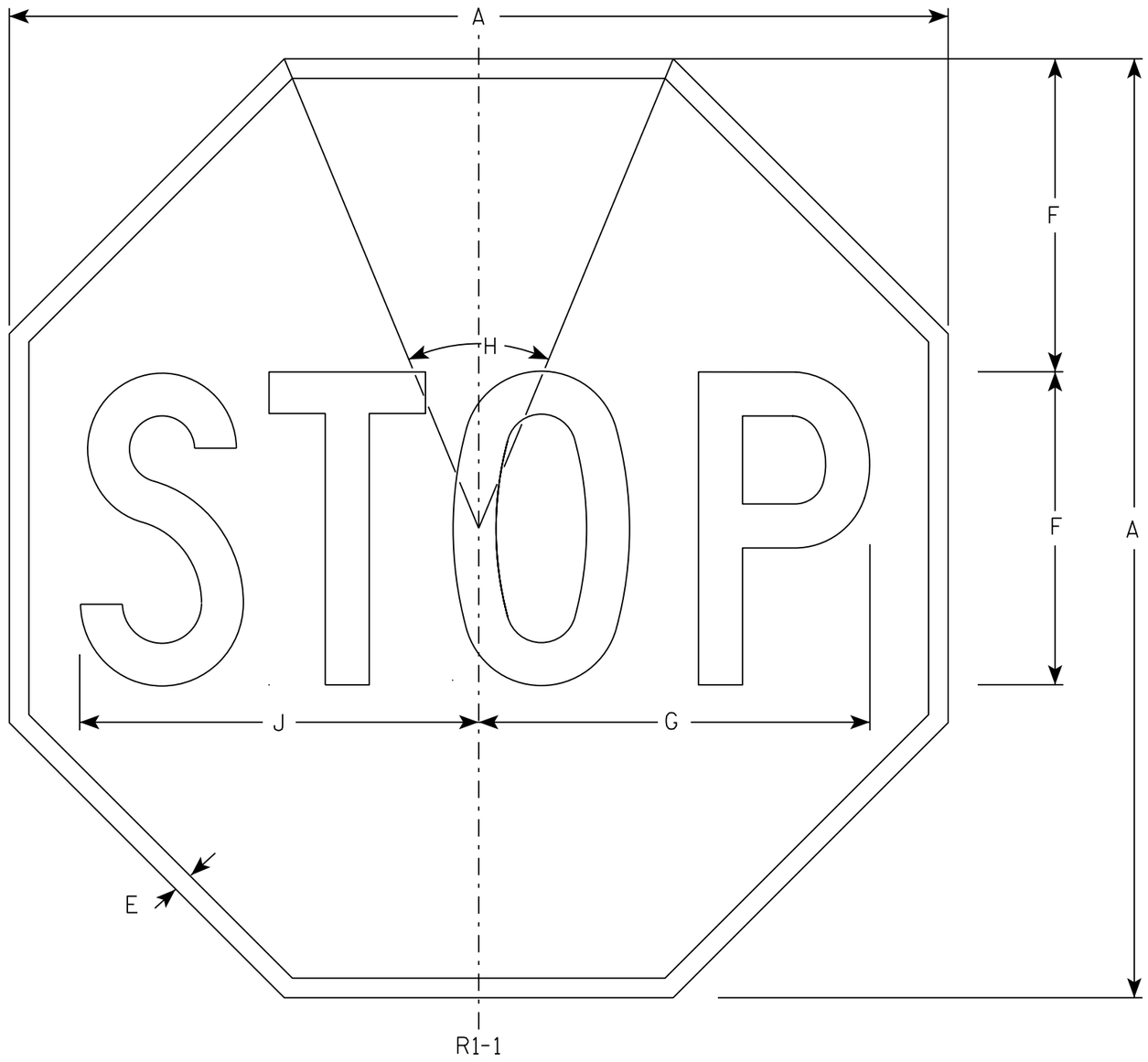
STANDARD SIGN
M6-5 & M6-7
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-7.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 434 | E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

R1-1

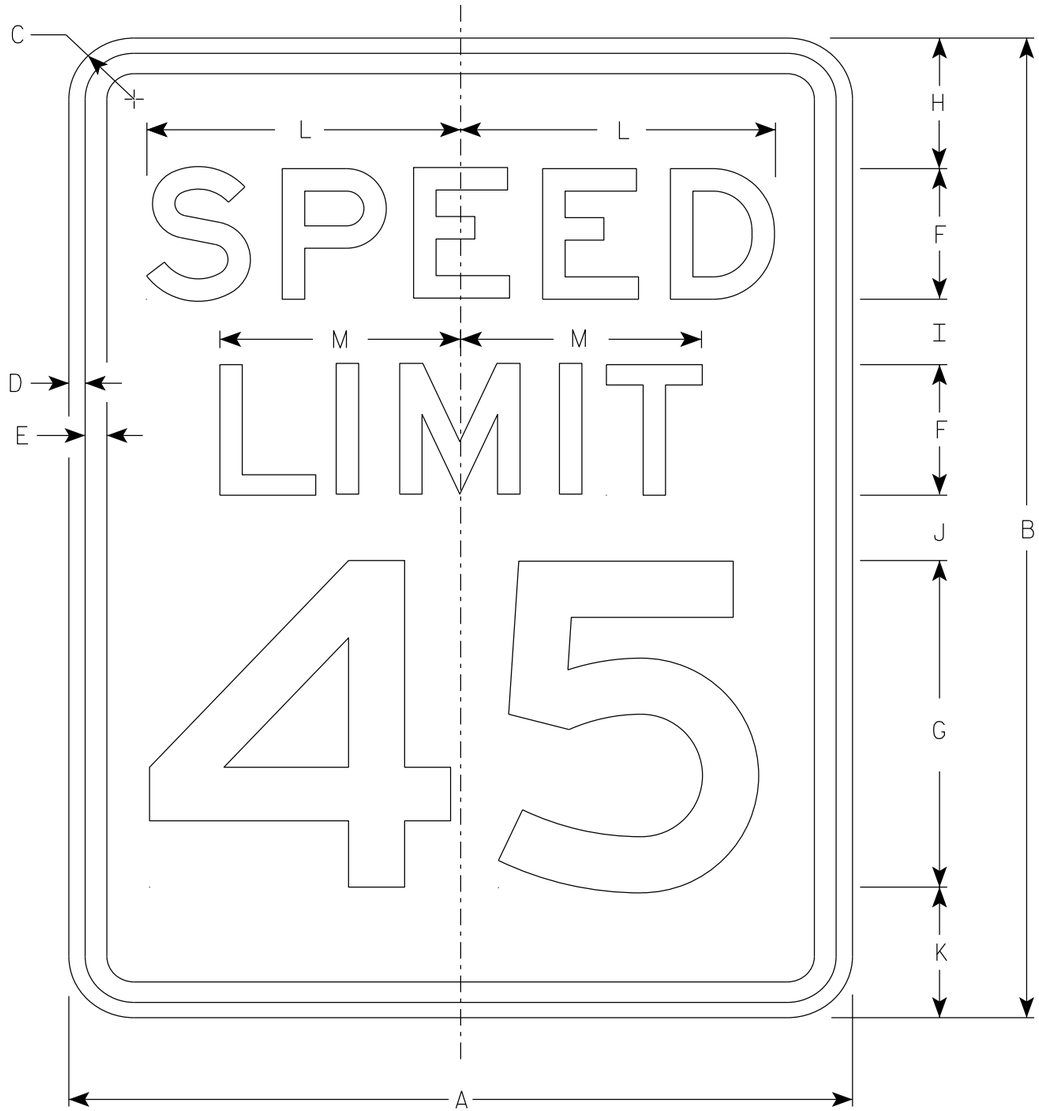
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 435	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

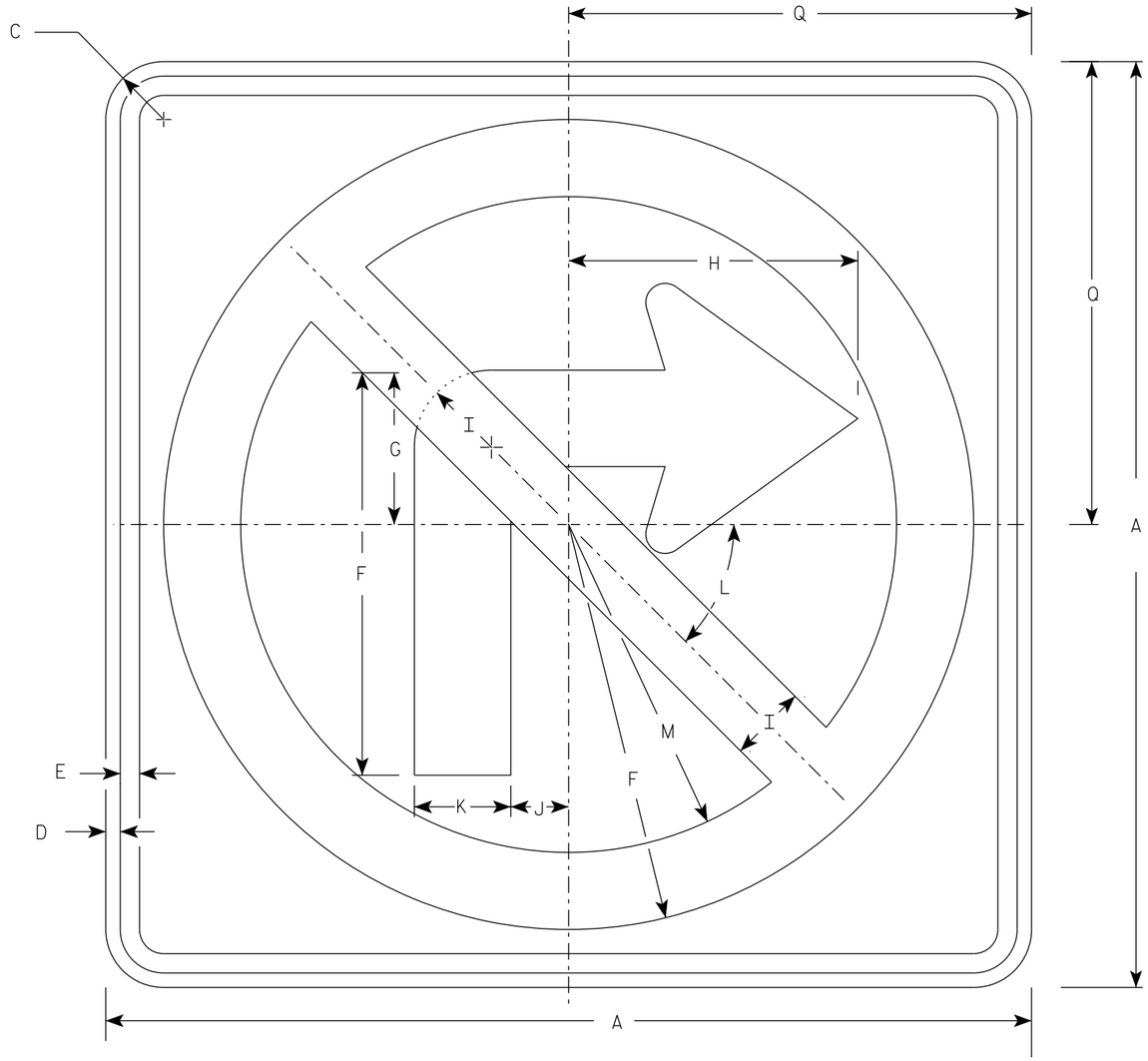
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

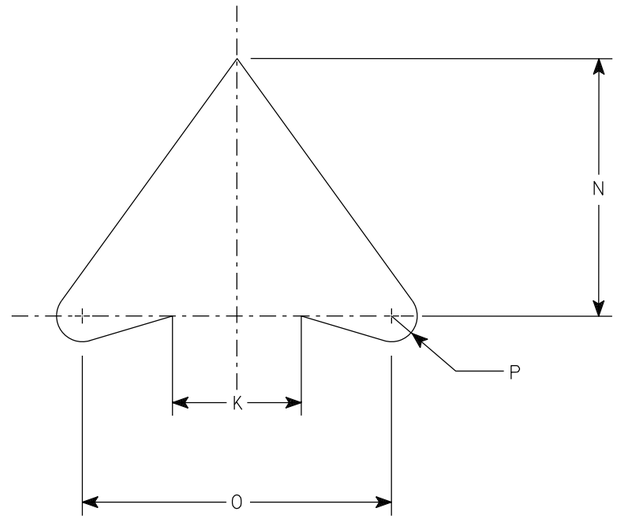
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 436 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45	8 ½	5	6	½	12										4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½	12										4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾	18										9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

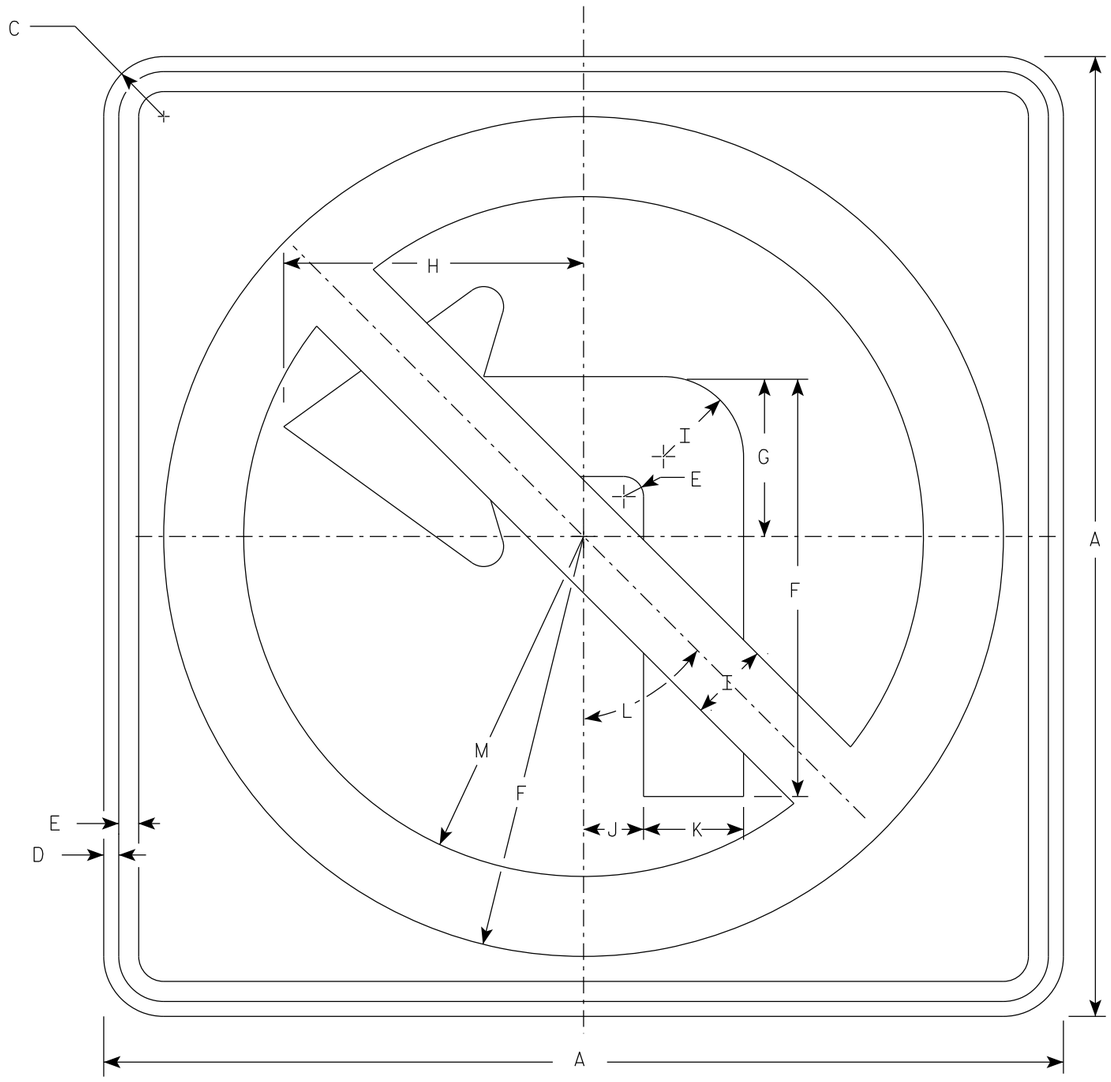
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

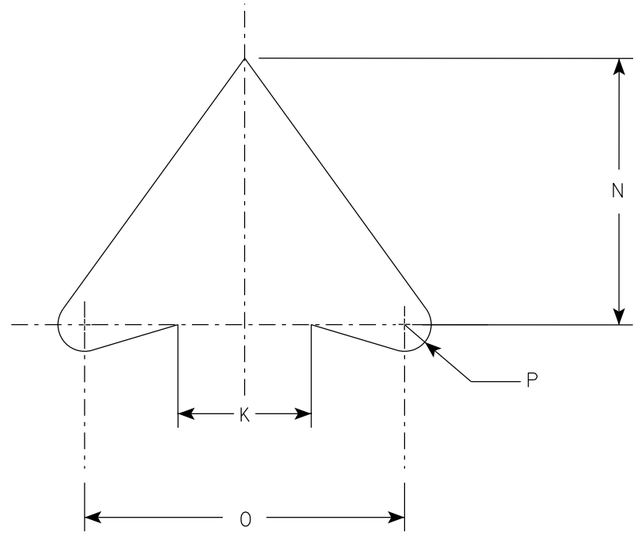
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 437 | E



R3-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

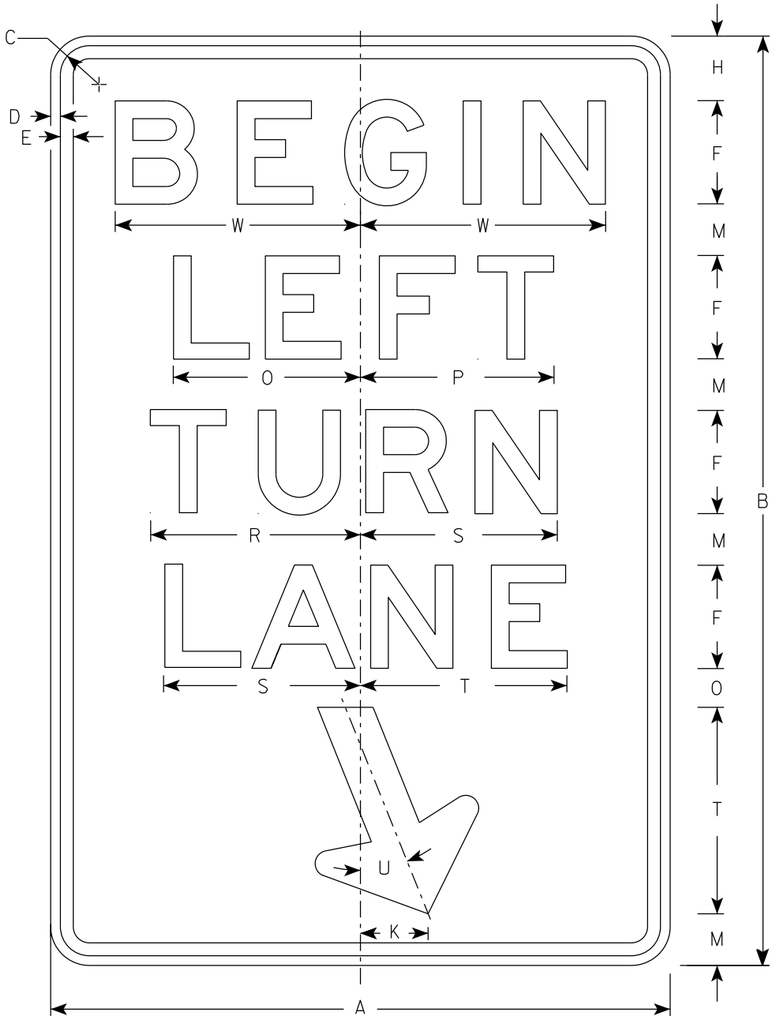
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-2.11

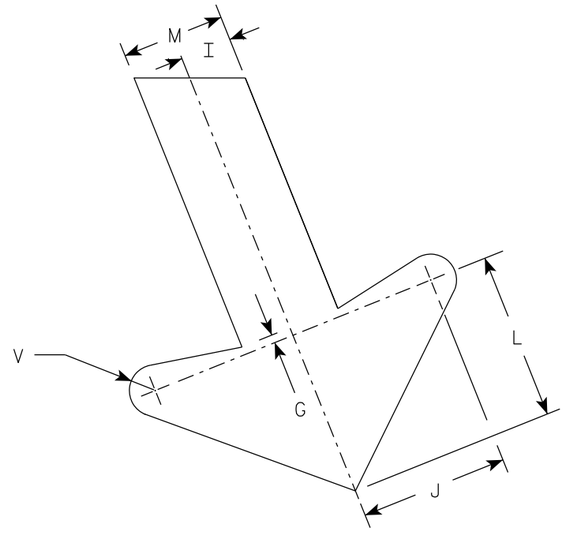
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 438 | E



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																											

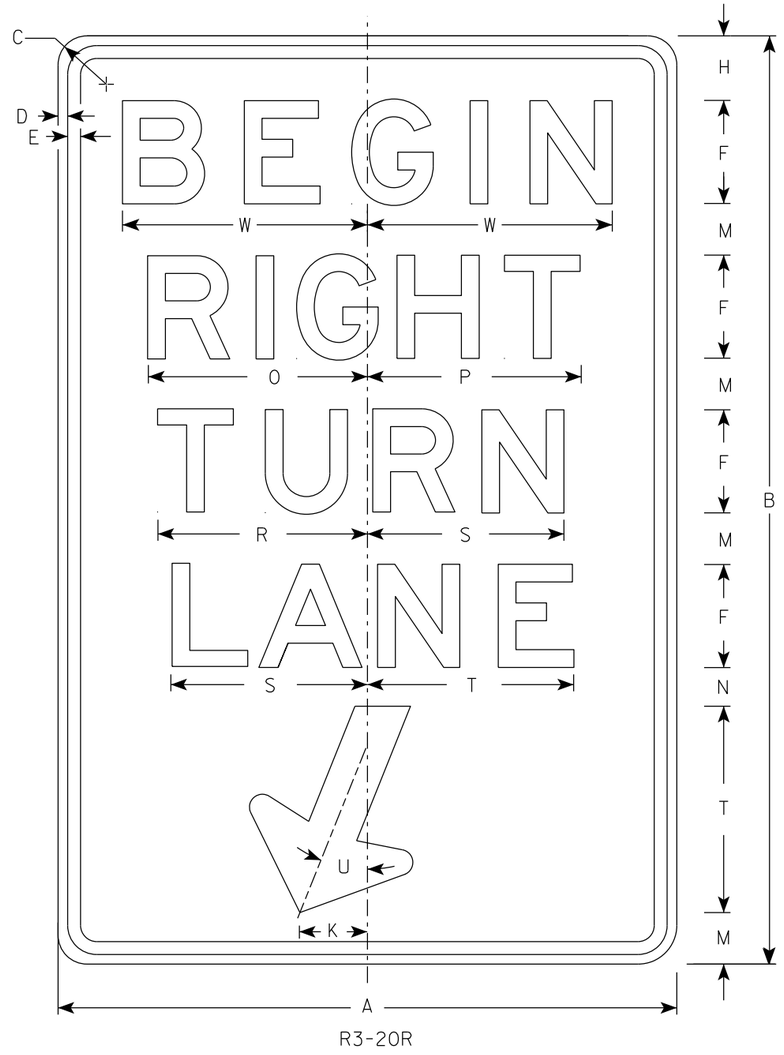
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20L.8

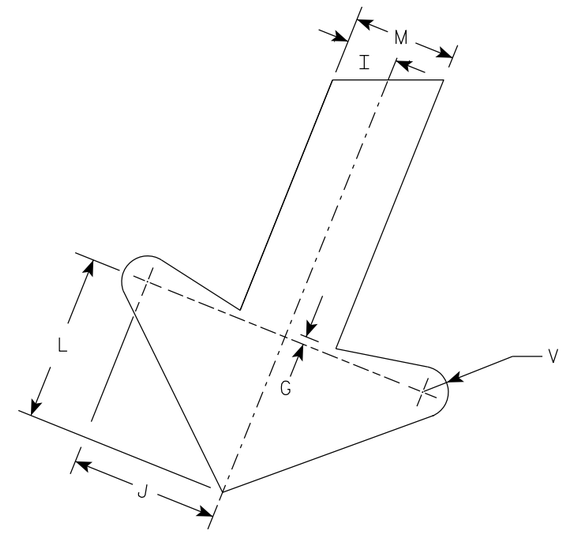
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 439	E



R3-20R

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

STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

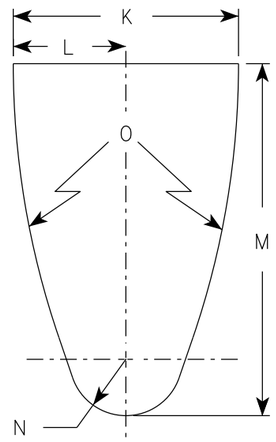
DATE 2/23/23 PLATE NO. R3-20R.7

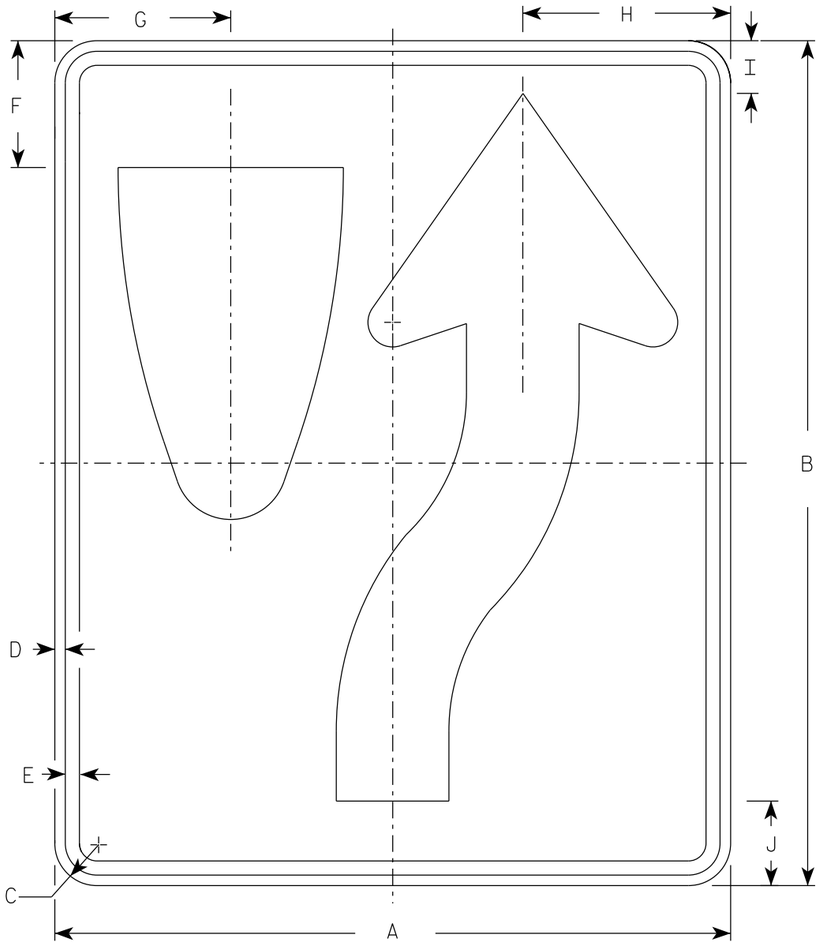
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 440 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

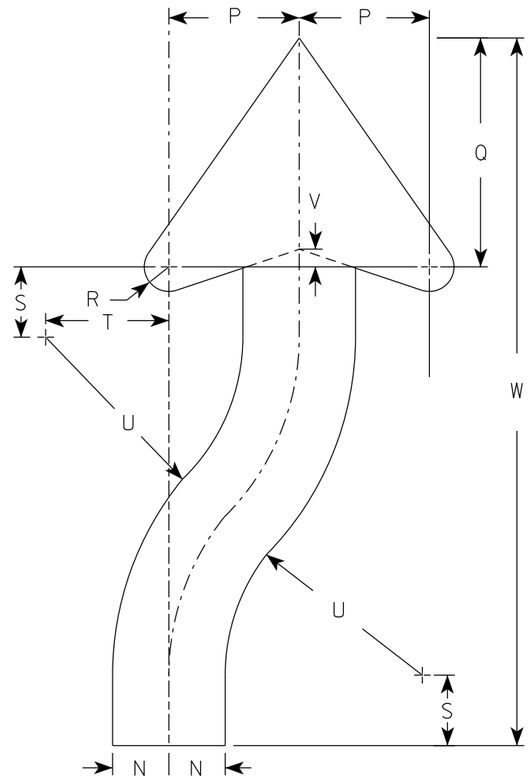
DIVIDER DETAIL





R4-7

ARROW DETAIL



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

STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

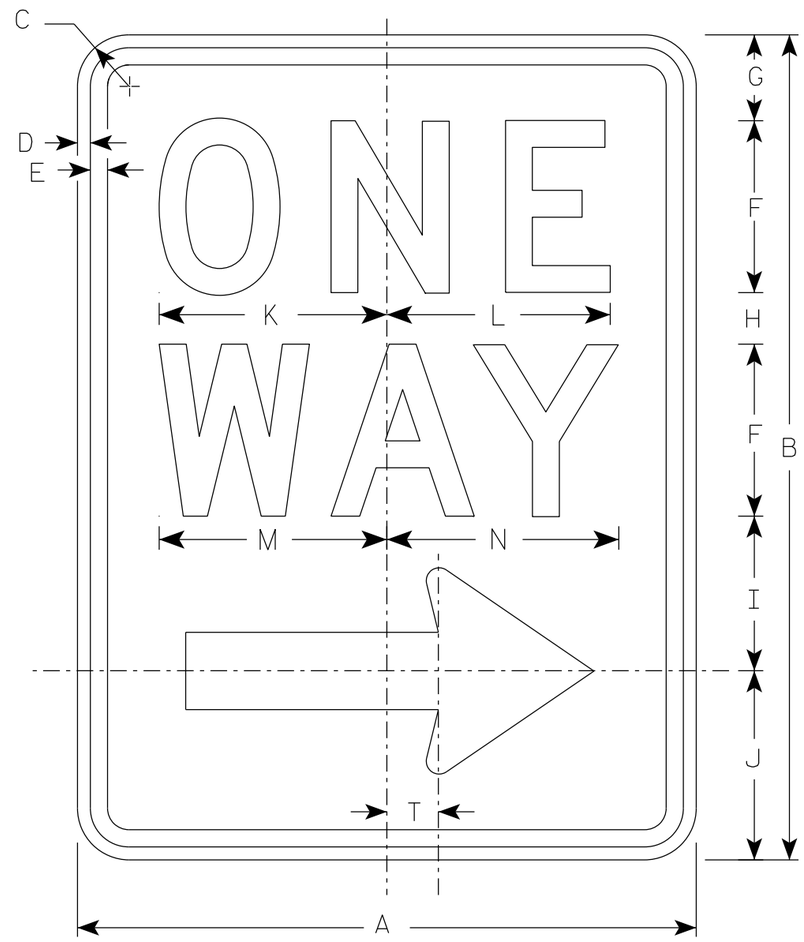
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 441	E

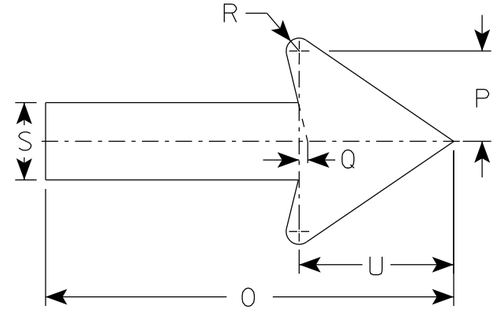
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R6-2L same as R6-2R except arrow points to the left.



R6-2R

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
1	18	24	1 1/2	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	1 1/2	1 1/2	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 7/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

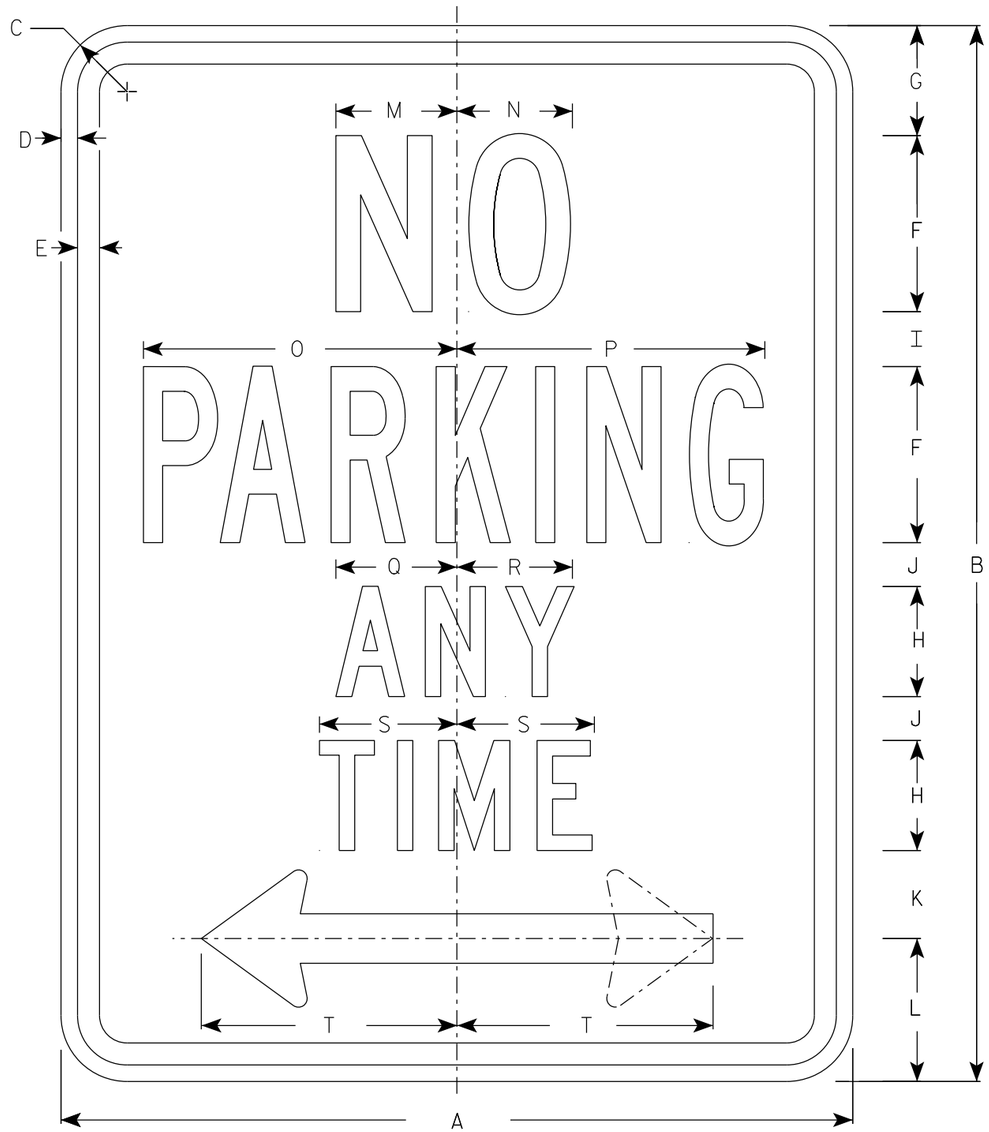
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 442	E

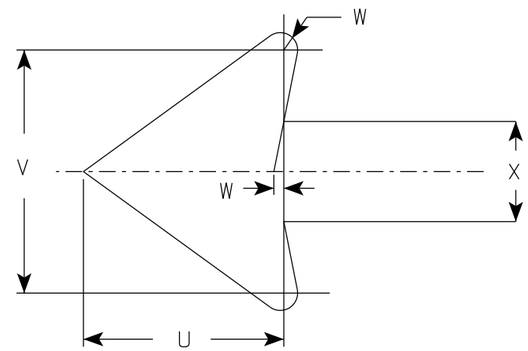


R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 4
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)

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	12	18	1 ½	⅜	⅜	3	1 ⅞	2	⅞	⅝	1 ½	2 ½	2	2	4 ⅞	4 ⅞	2 ¼	2 ⅛	2 ½	3 ⅞	1 ½	1 ¾	⅛	¾			1.5
2S	18	24	1 ½	⅜	½	4	2 ½	2 ½	1 ¼	1	2	3 ¼	2 ¾	2 ⅝	7 ⅛	7	2 ¾	2 ⅝	3 ⅛	5 ⅞	2 ¼	2 ⅝	¼	1 ⅛			3.0
2M	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
3	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
4																											
5																											

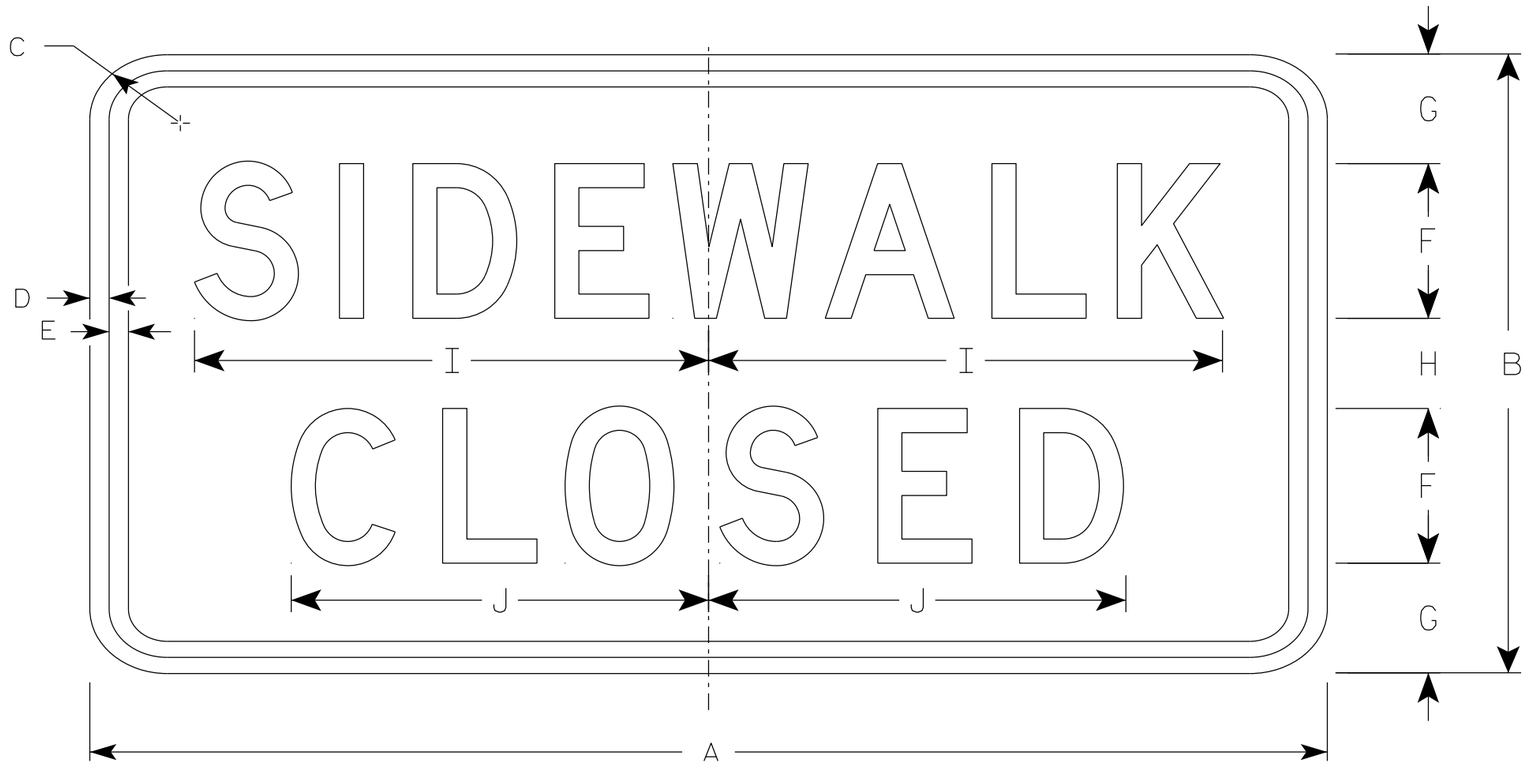
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/26/23 PLATE NO. R7-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 443 E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

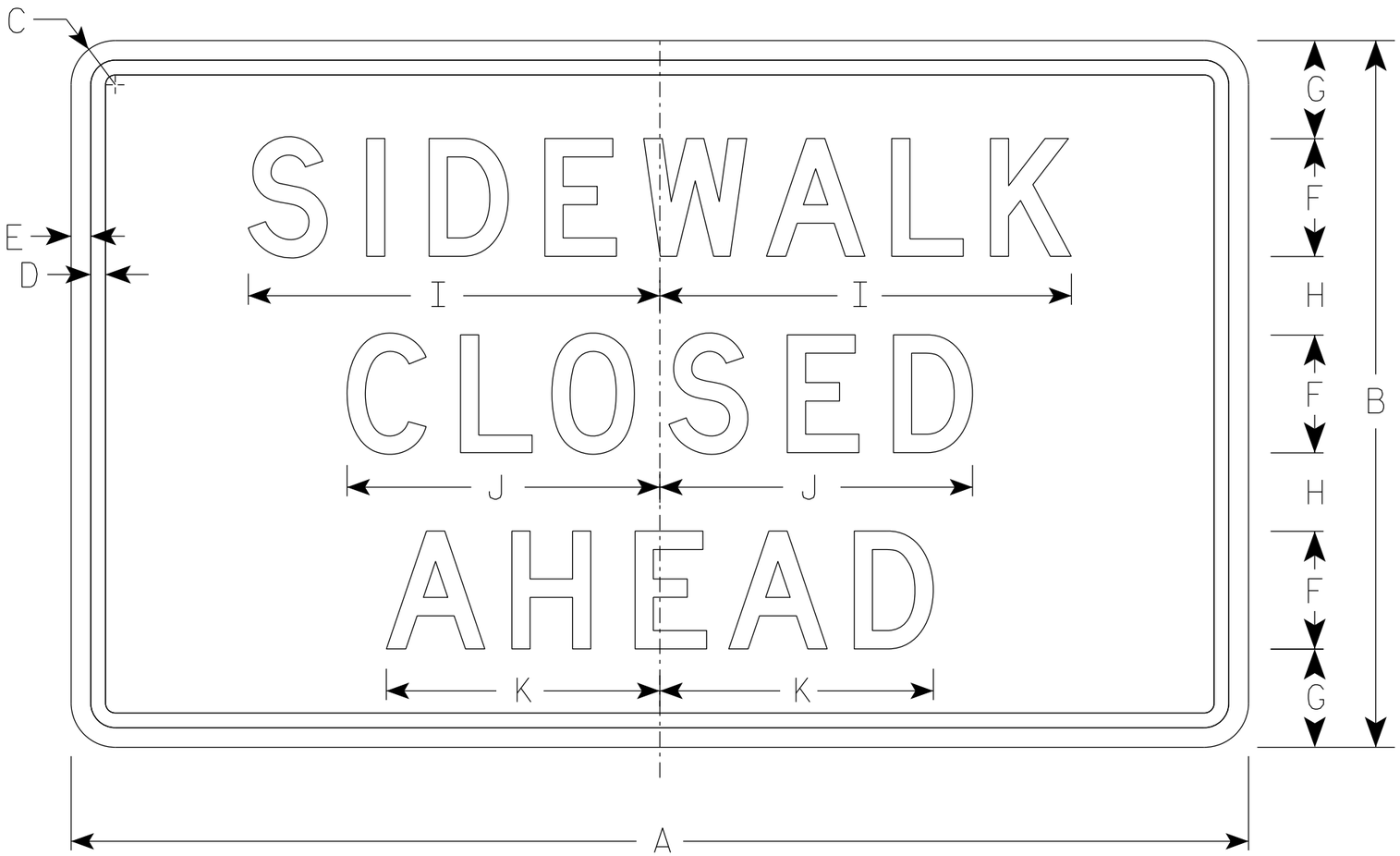
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 444 | E

NOTES

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



R9-9A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
2M	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
3																											
4																											
5																											

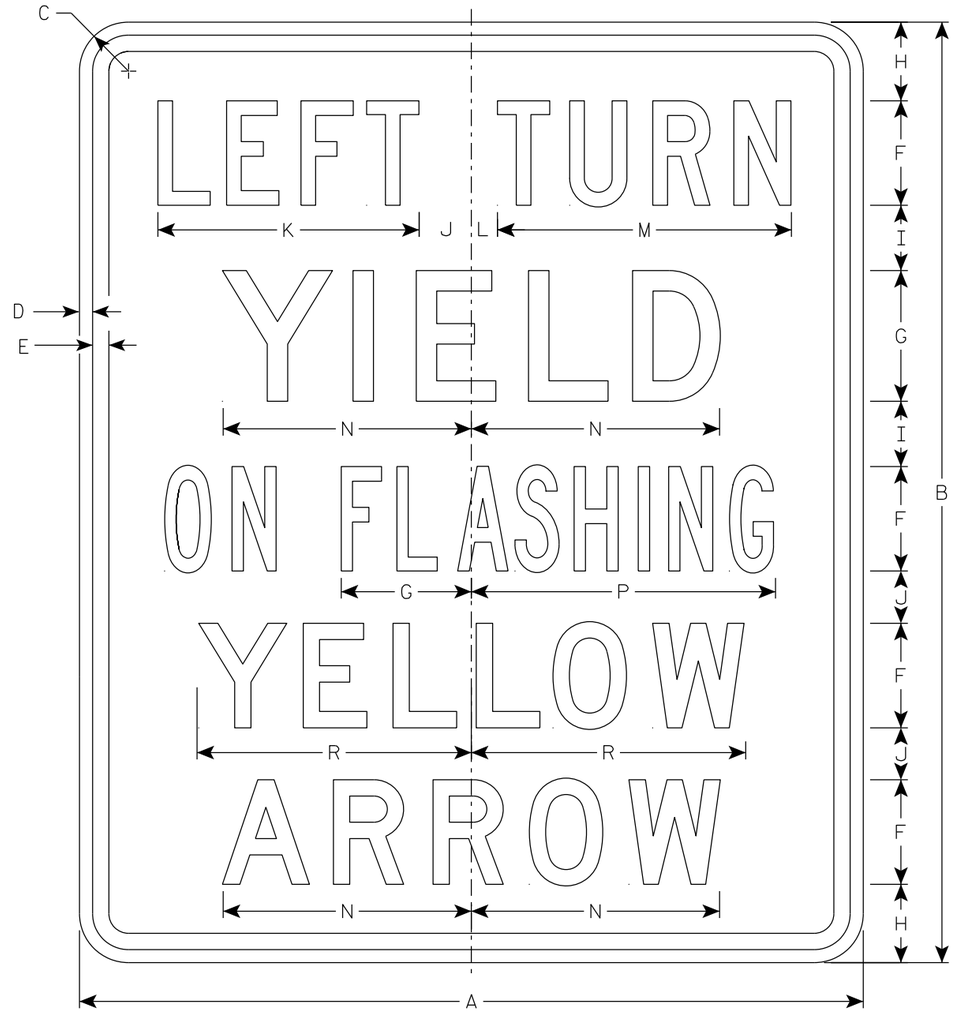
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

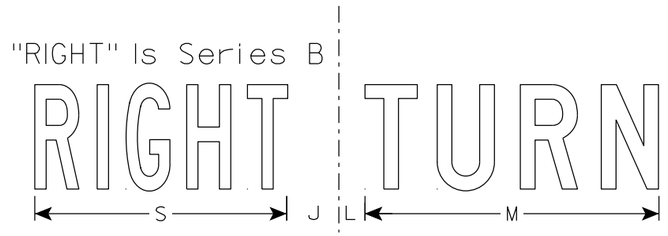
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 445 | E



R10-50L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.



R10-50R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 7/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 7/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

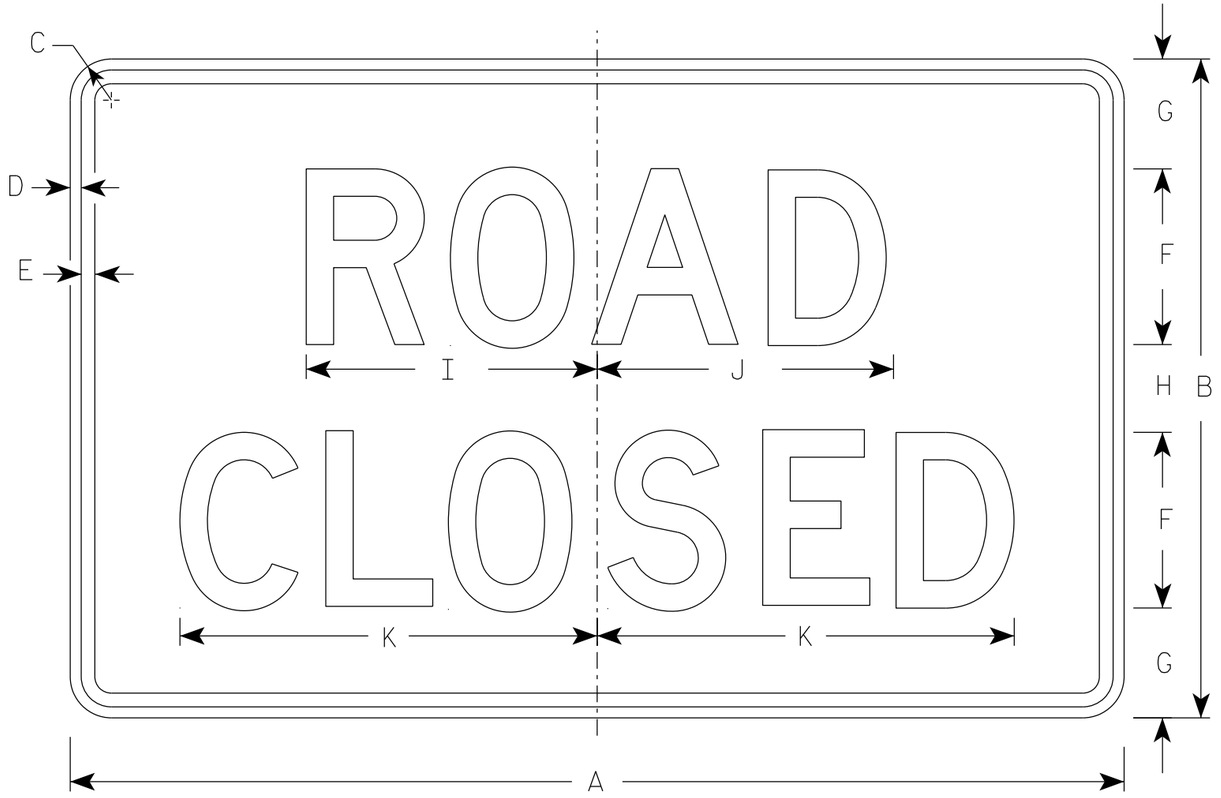
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R10-50.3

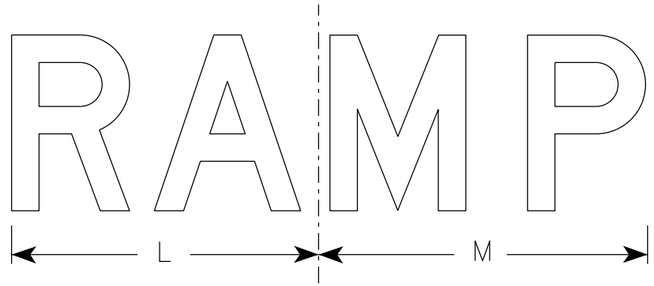
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 446 | E



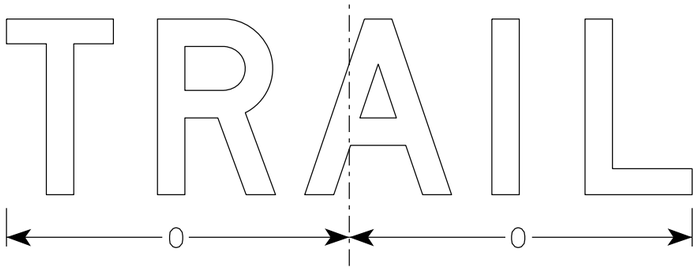
R11-2

NOTES

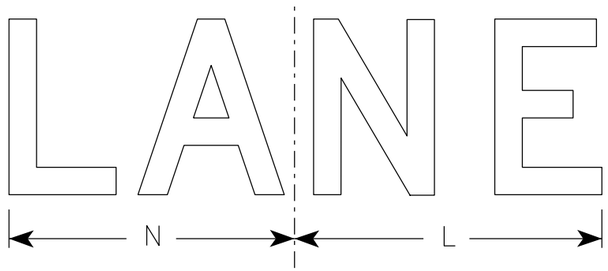
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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

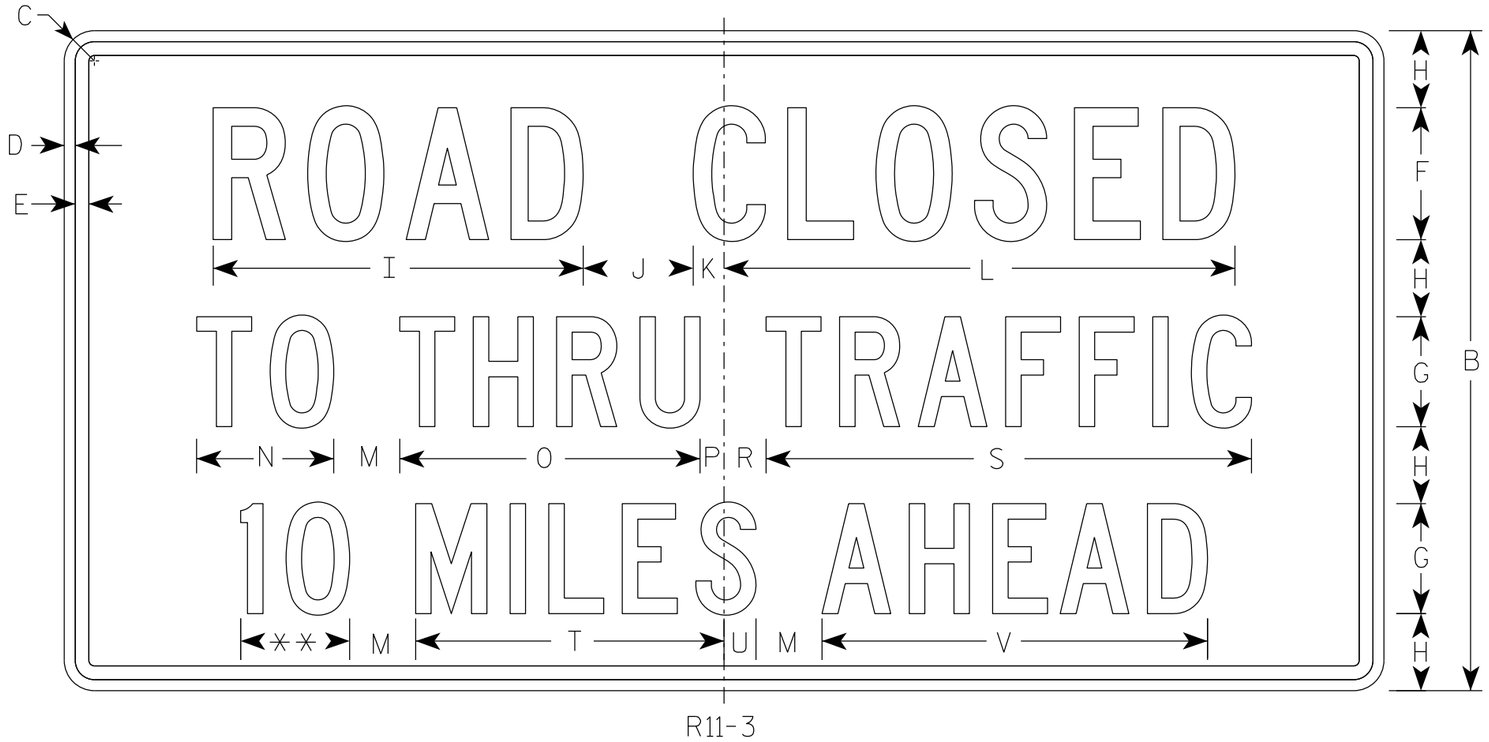
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 447 | E

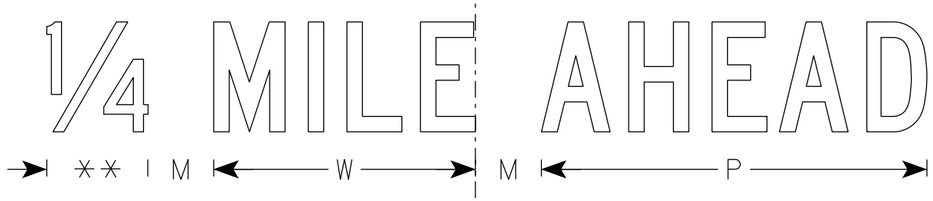
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

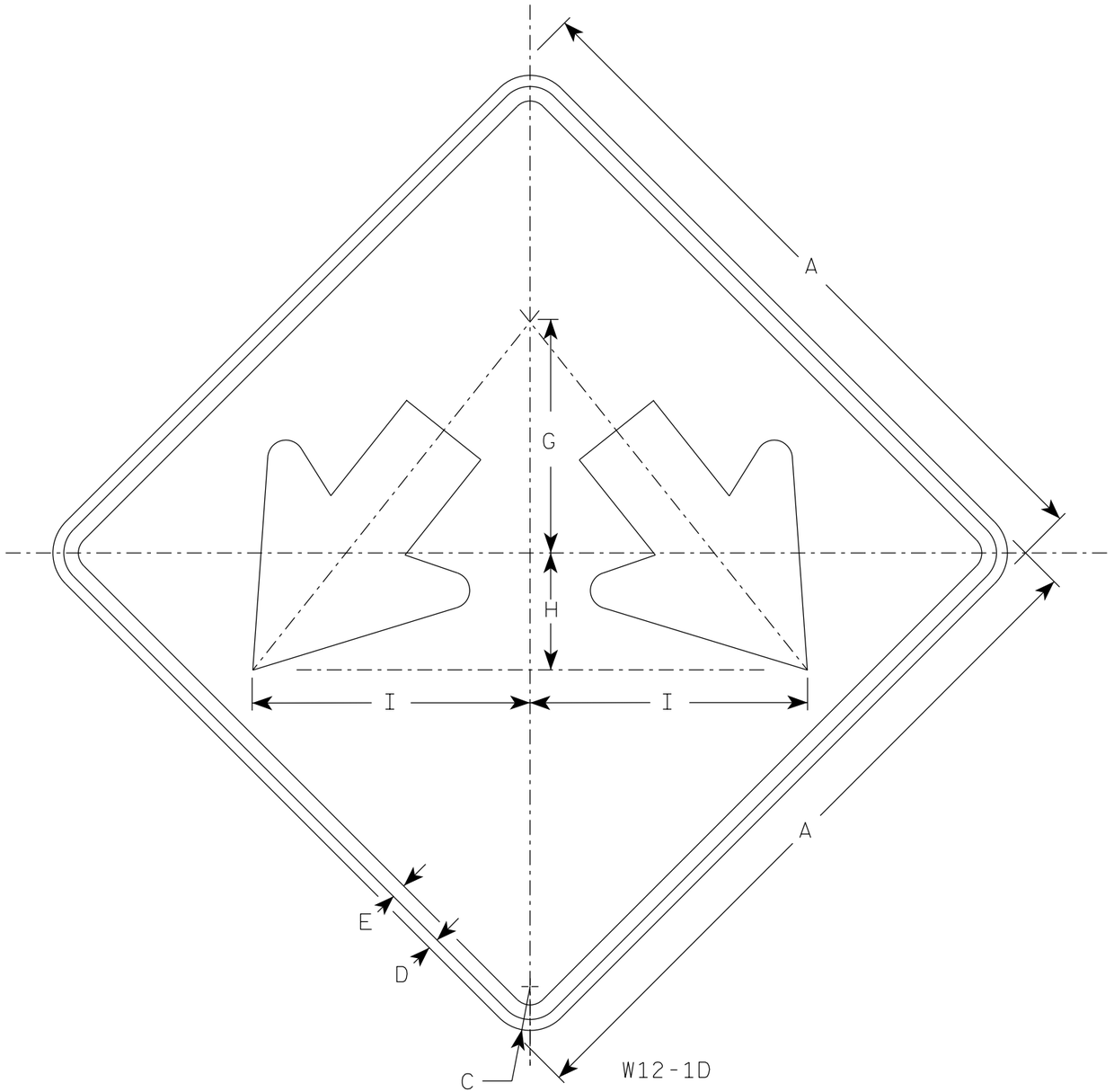
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

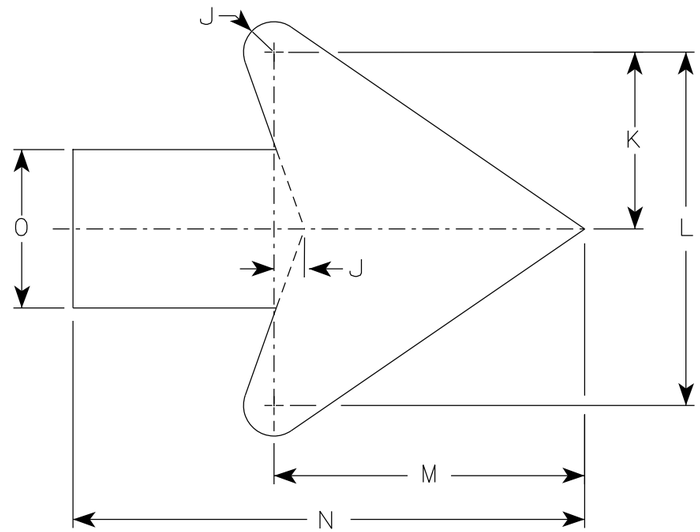
DATE 2/5/24 PLATE NO. R11-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 448 E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq. sq. ft.
1																											
2S	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
2M	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
3	30		1 ⅞	½	⅝		10	5	11 ⅞	¾	4 ½	9	7 ⅞	13	4												6.25
4	36		2 ¼	½	⅝		12	6	14 ¼	1	5 ½	10 ⅞	9 ⅝	15 ¾	4 ¾												9.0
5	48		3	¾	1		16	8	19	1 ¼	7 ¼	14 ½	12 ¾	21	6 ¼												16.0

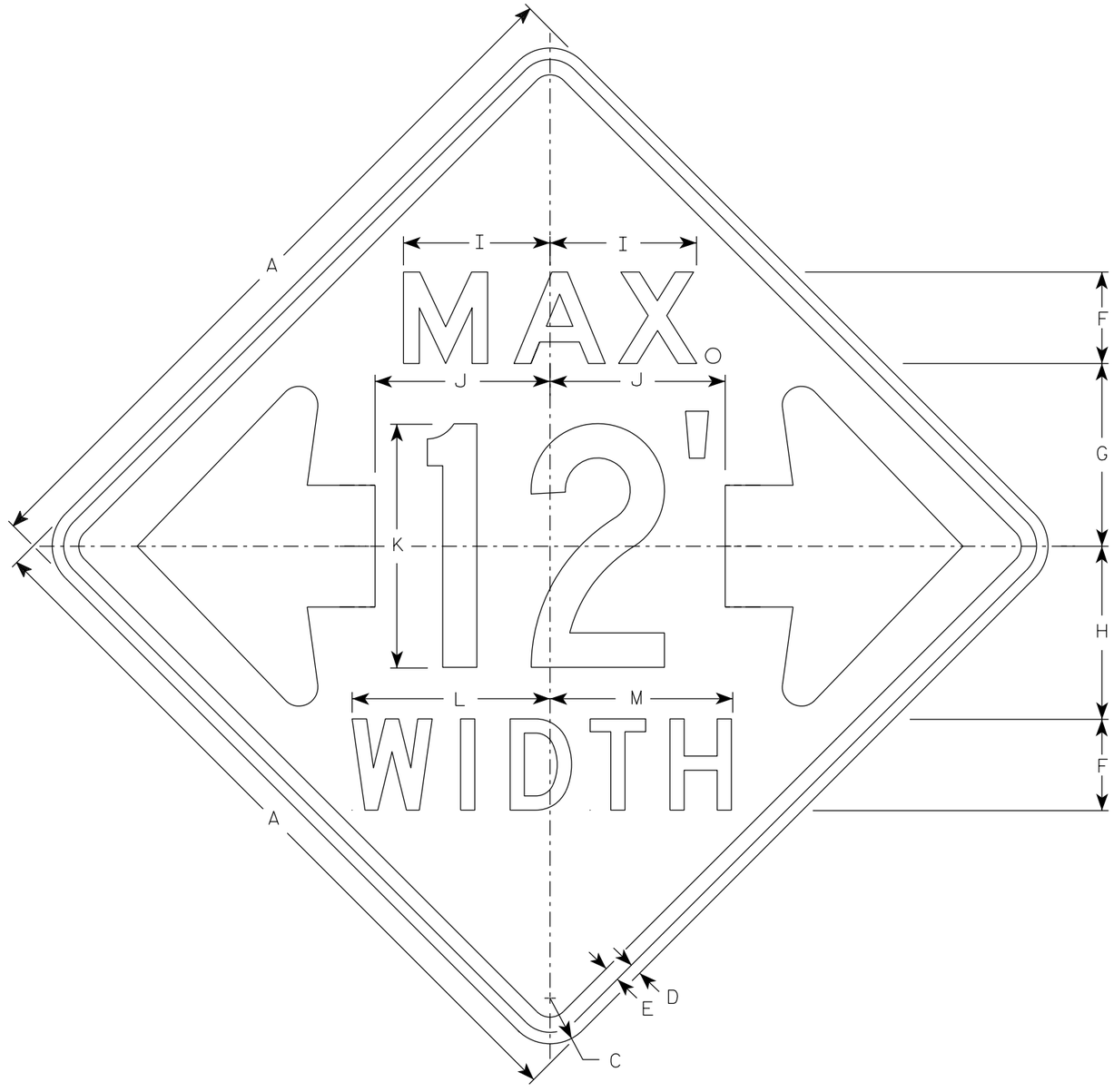
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/30/2023 PLATE NO. W12-1D.16

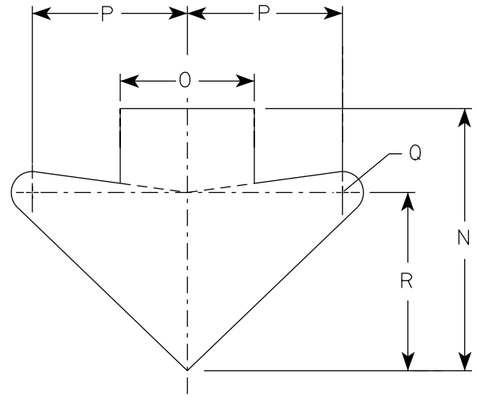
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 449 E



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																											

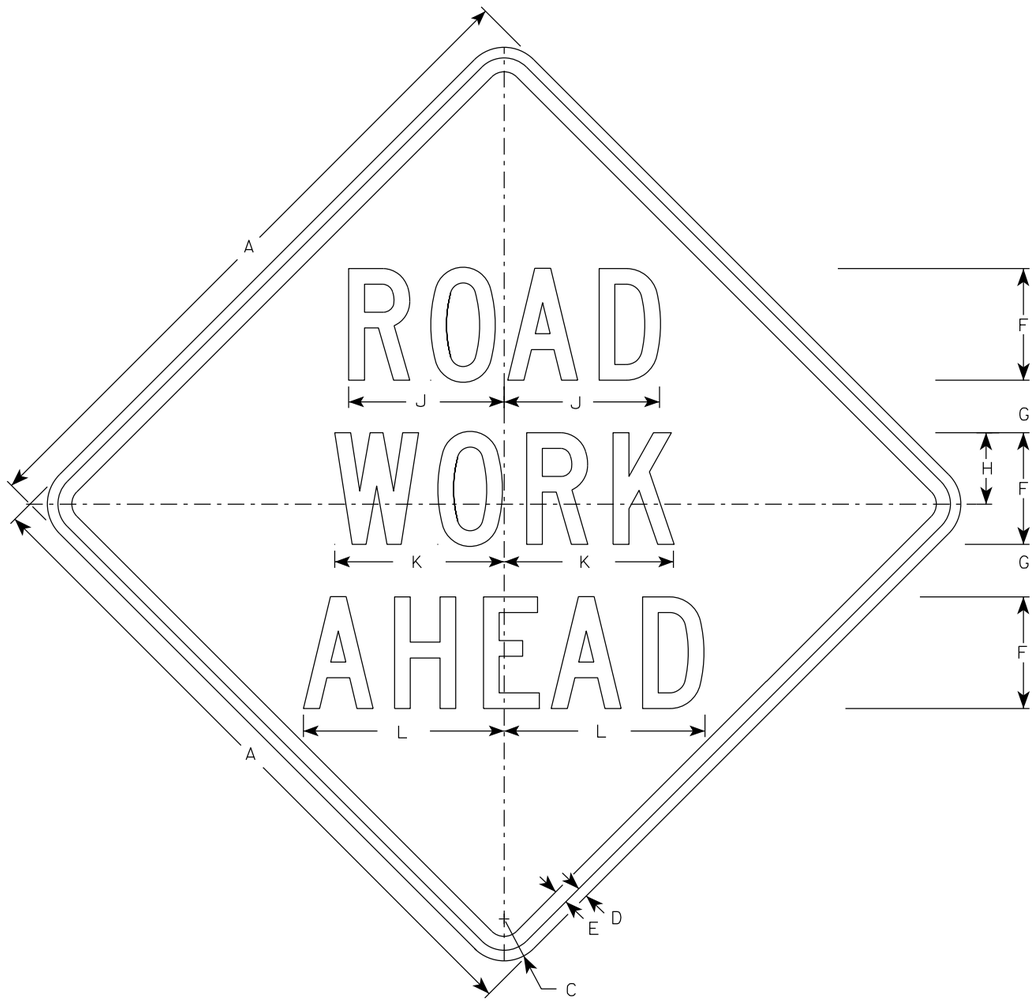
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

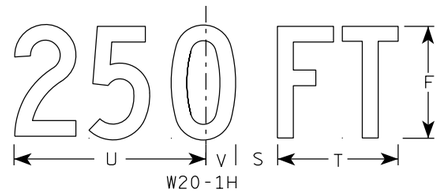
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

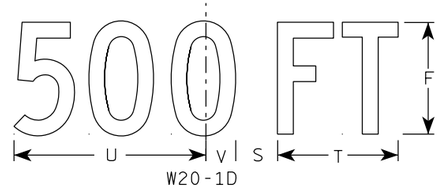
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 450 | E



W20-1A



W20-1H



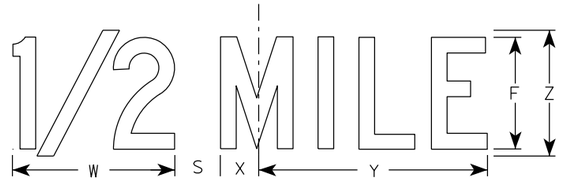
W20-1D

W20-1C

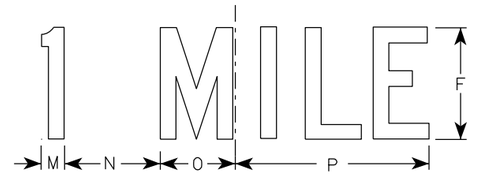
W20-1B

NOTES

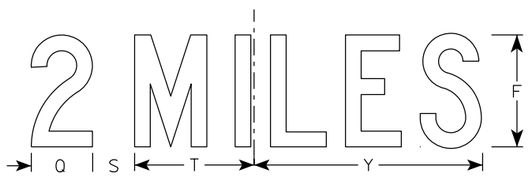
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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:

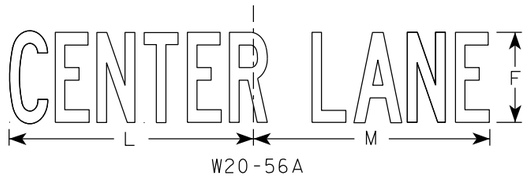
SHEET NO: 451 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

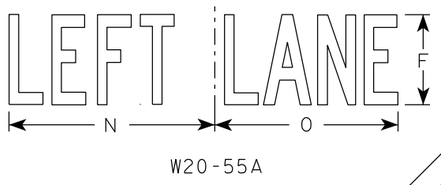
WISDOT/CADDS SHEET 42

7

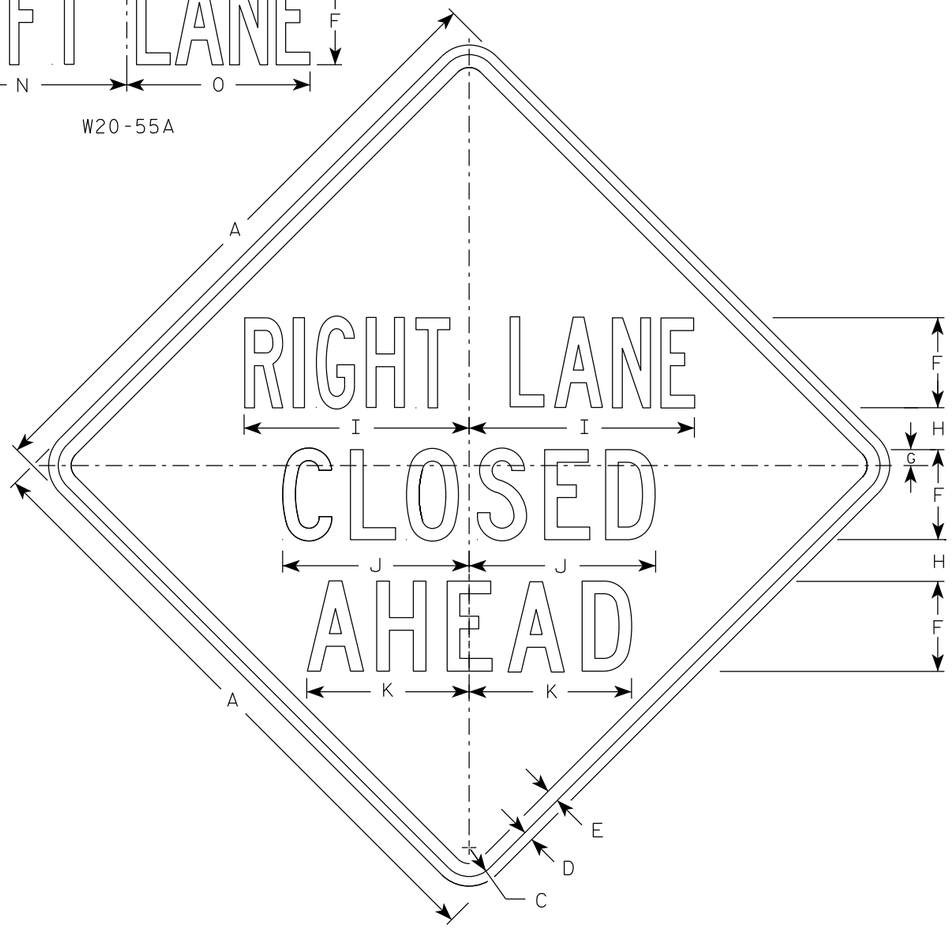
7



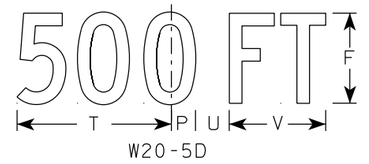
W20-56A



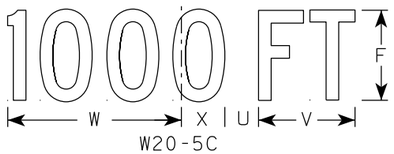
W20-55A



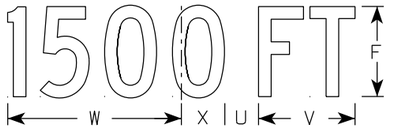
W20-5A



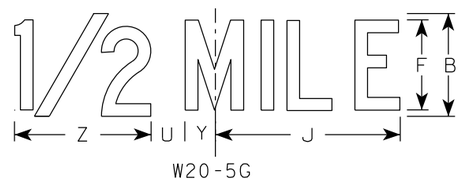
W20-5D



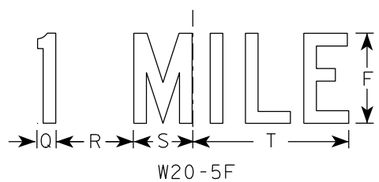
W20-5C



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

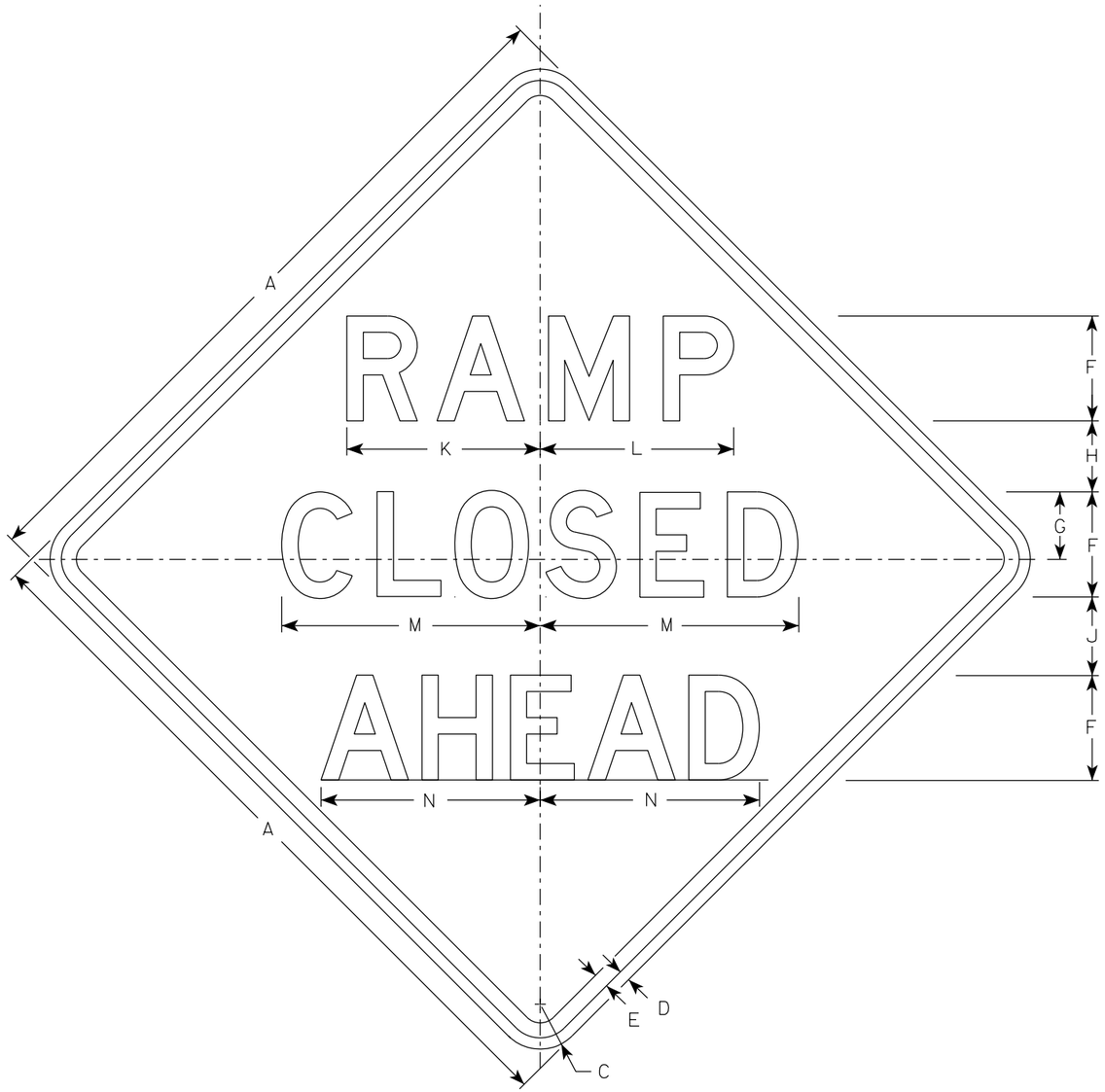
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

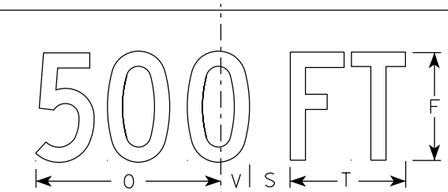
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

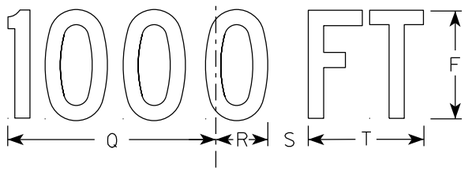
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 452	E



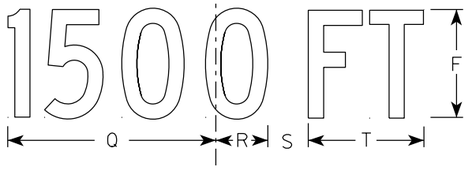
W20-53A



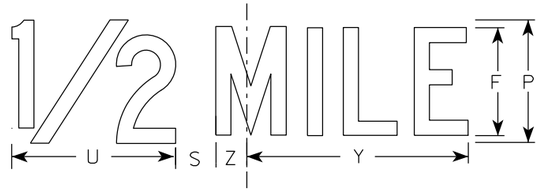
W20-53D



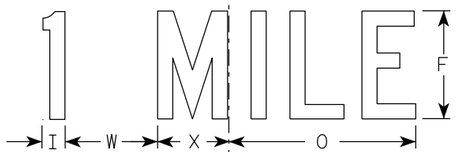
W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

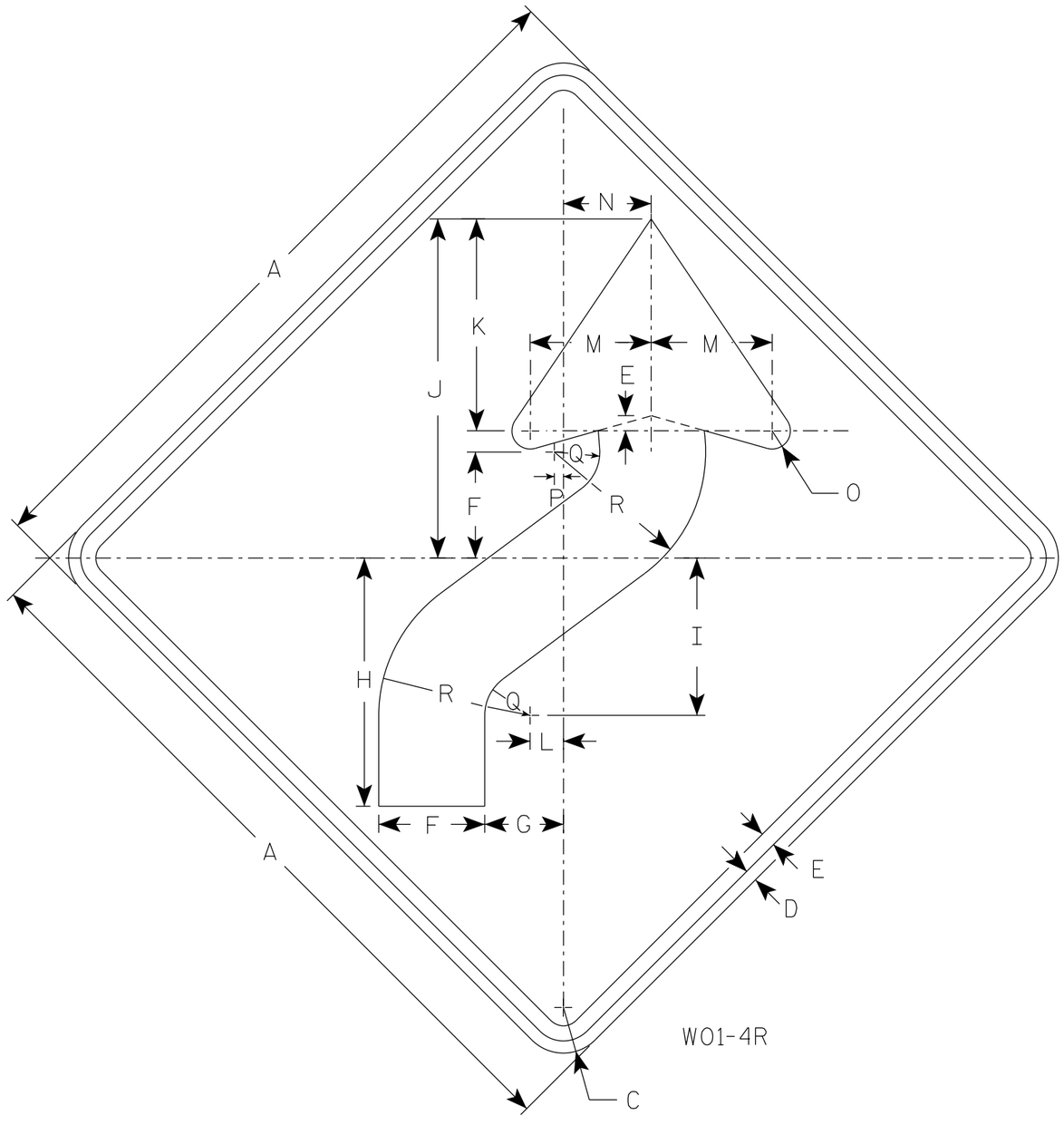
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 10-JAN 2024 2:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

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

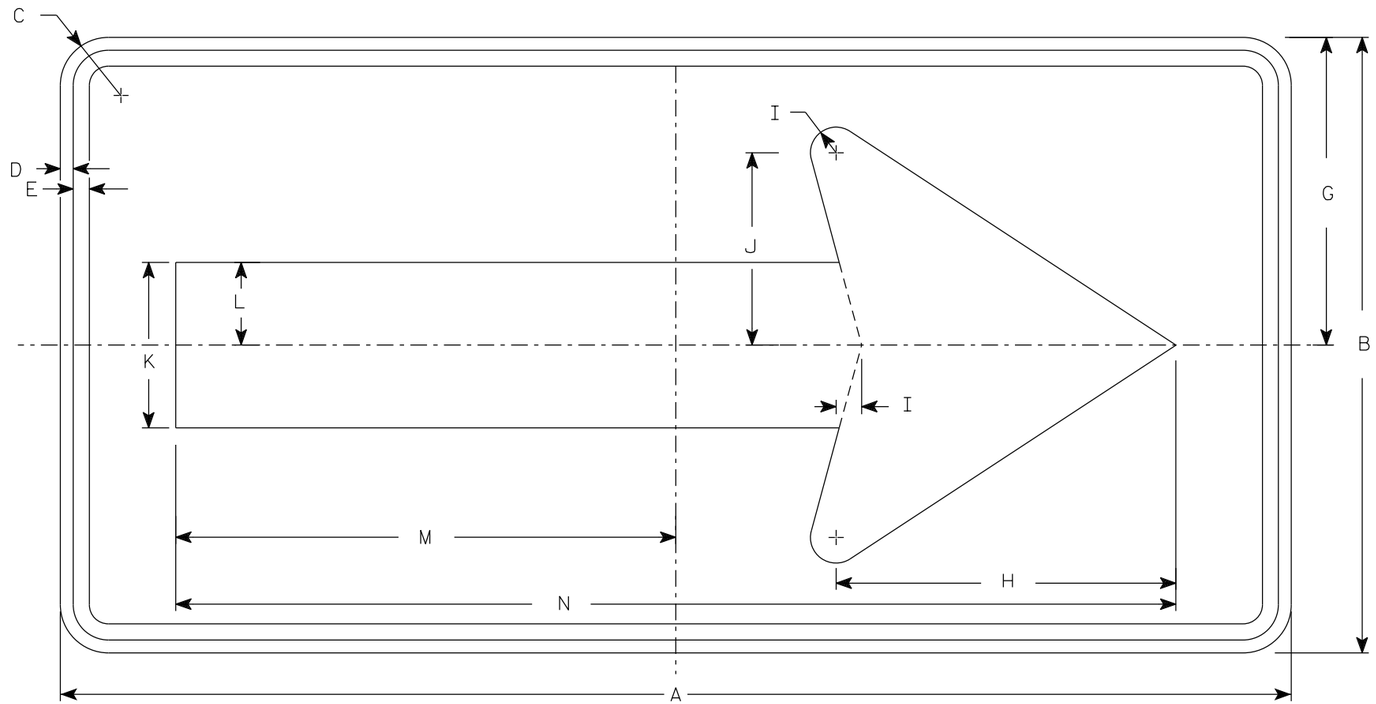
STANDARD SIGN
W01-4

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: 454 | 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

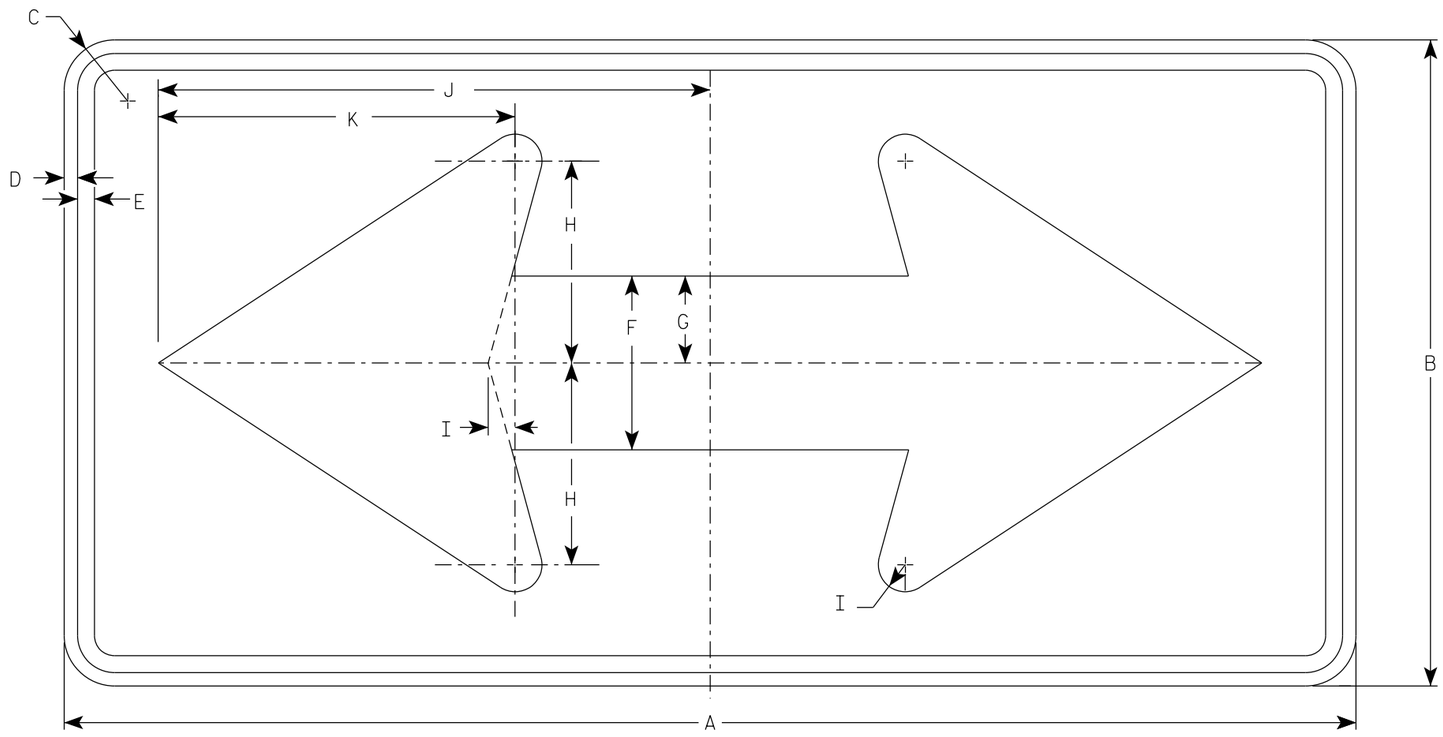
STANDARD SIGN
WO1-6

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



W01-7

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	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 7/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 7/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 7/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	60	30	1 7/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5

STANDARD SIGN
W01-7

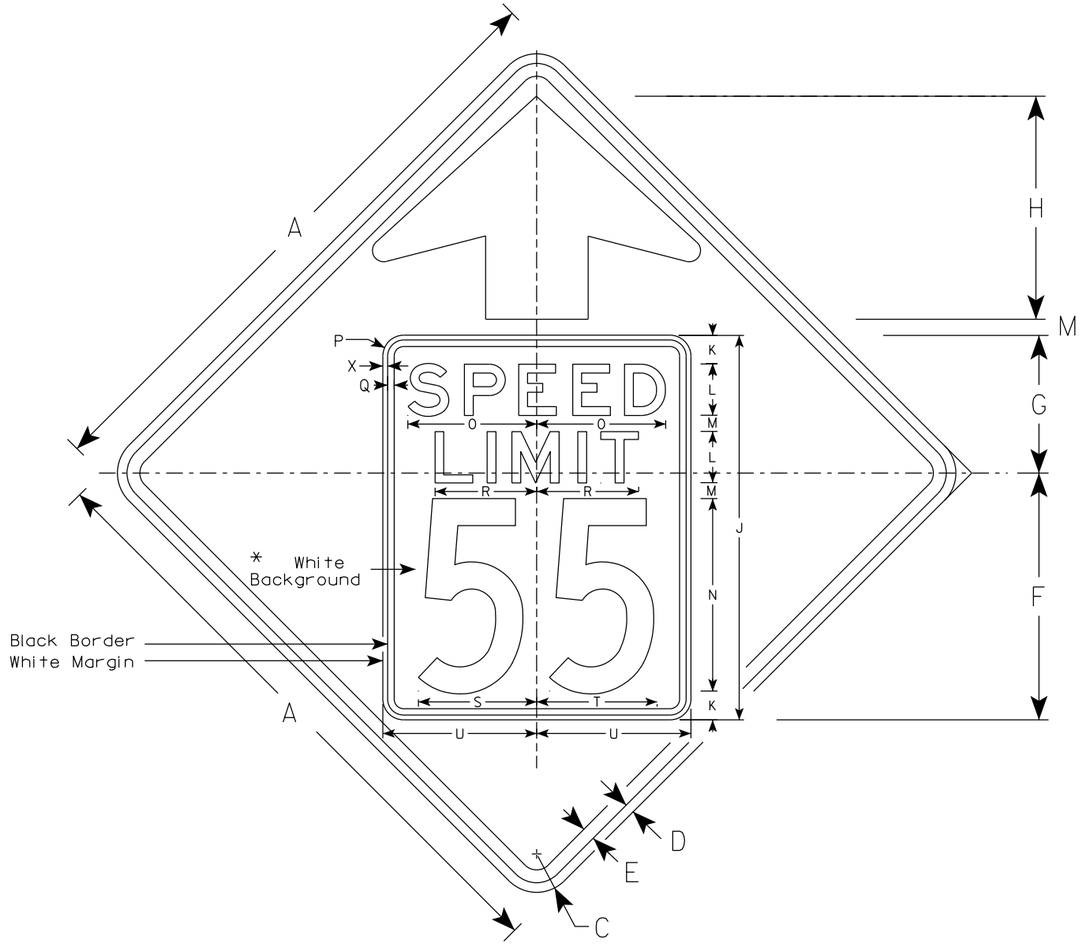
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-7.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 456 | E

7

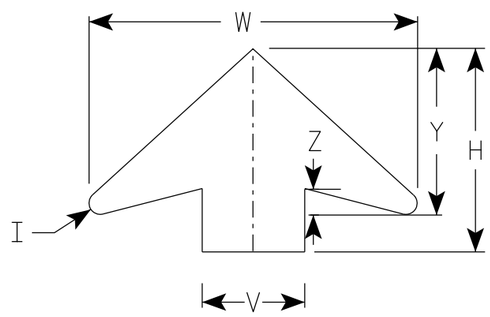


W03-5

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

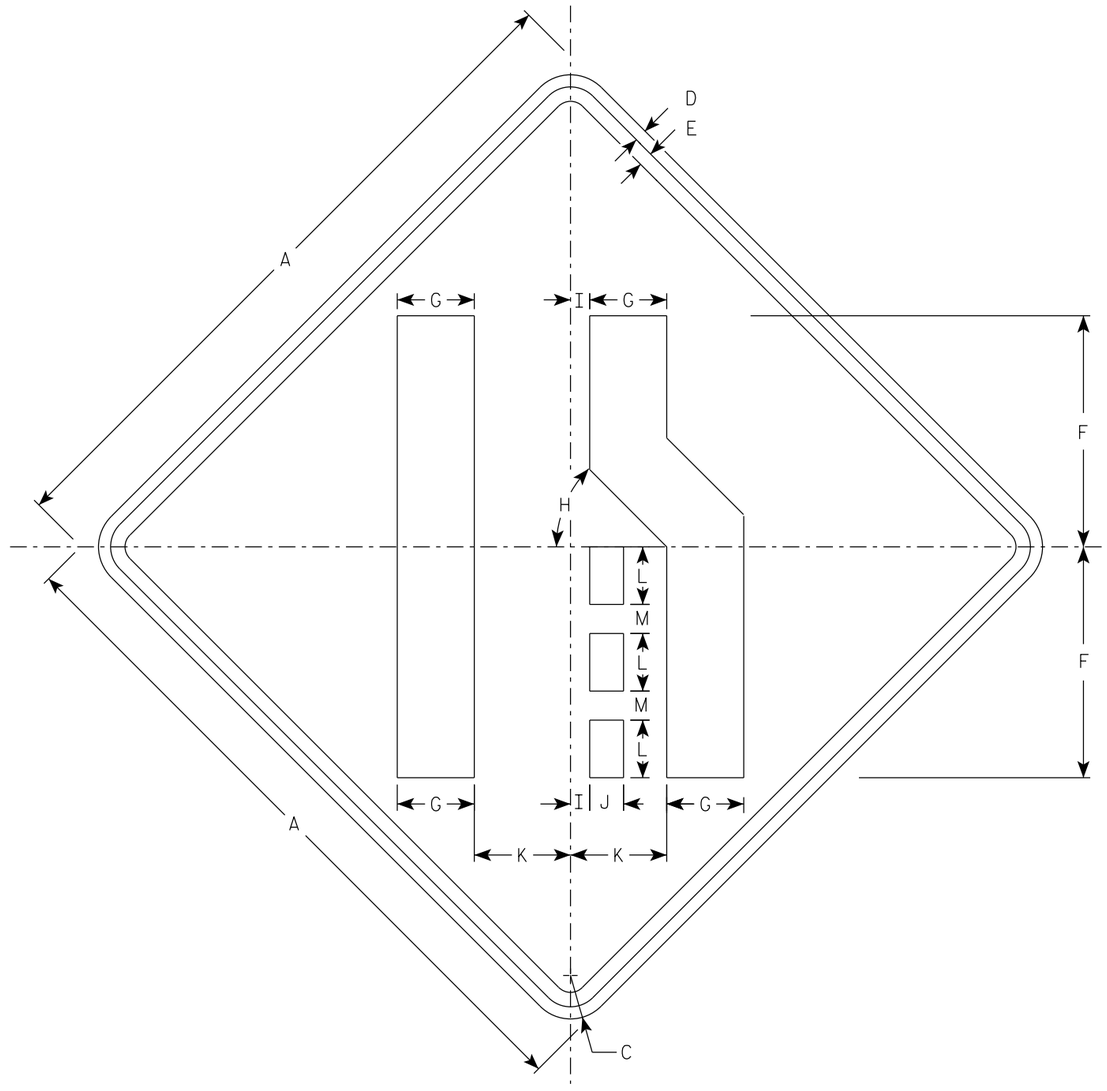
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W03-5.2

PROJECT NO:

SHEET NO: 457 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

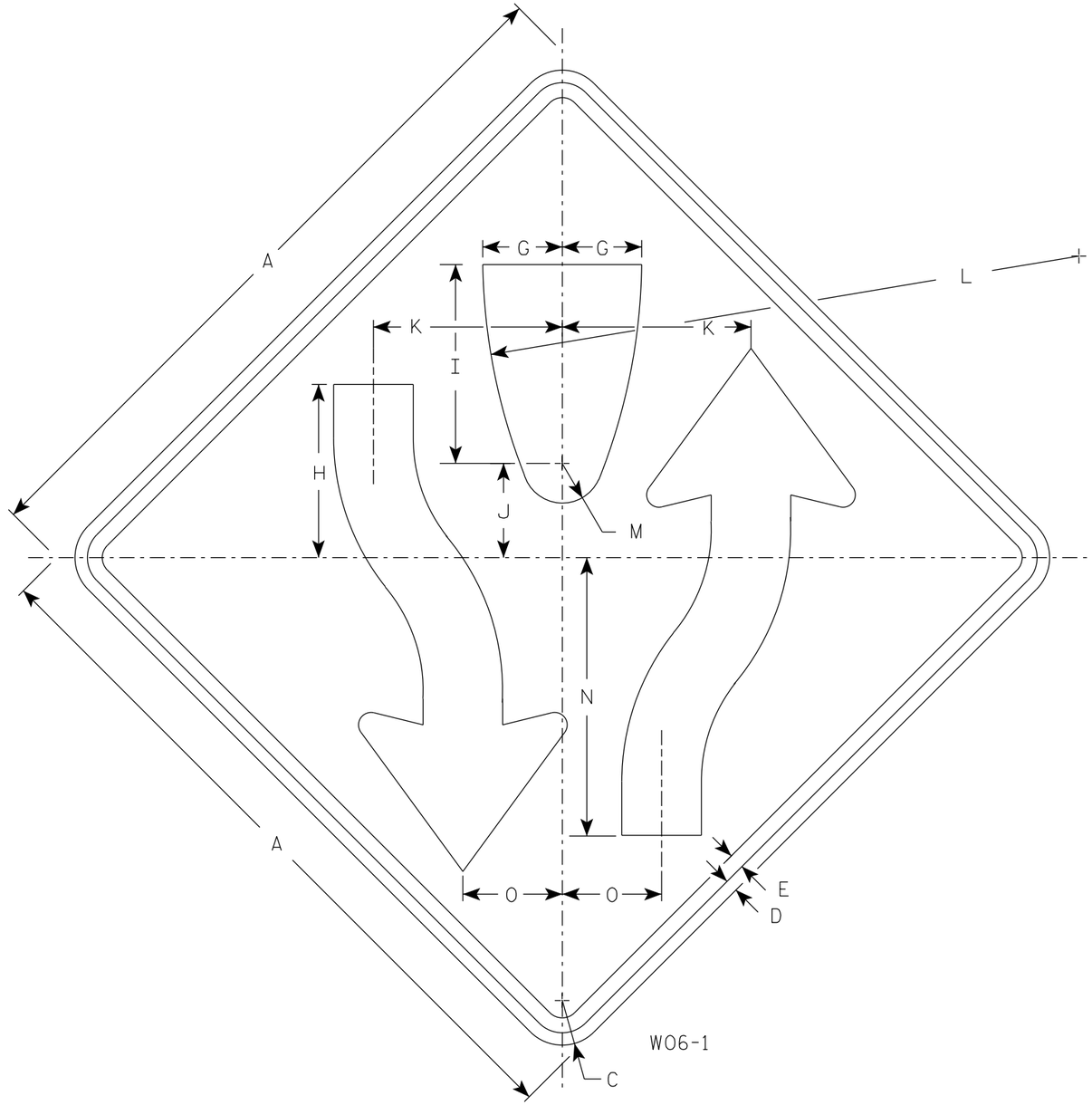
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

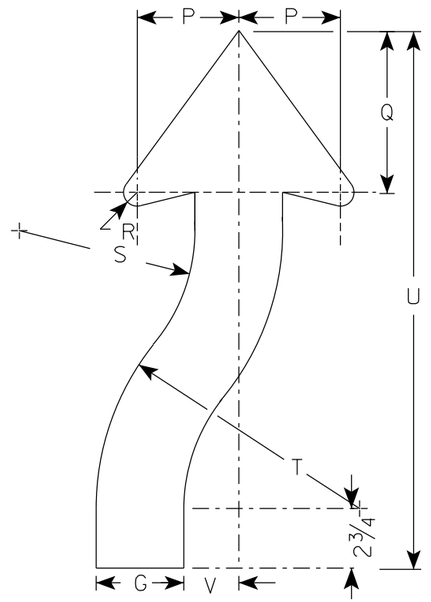
SHEET NO: 458 E



W06-1

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. W06-2 same as W06-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		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
2S	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
2M	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
3	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
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

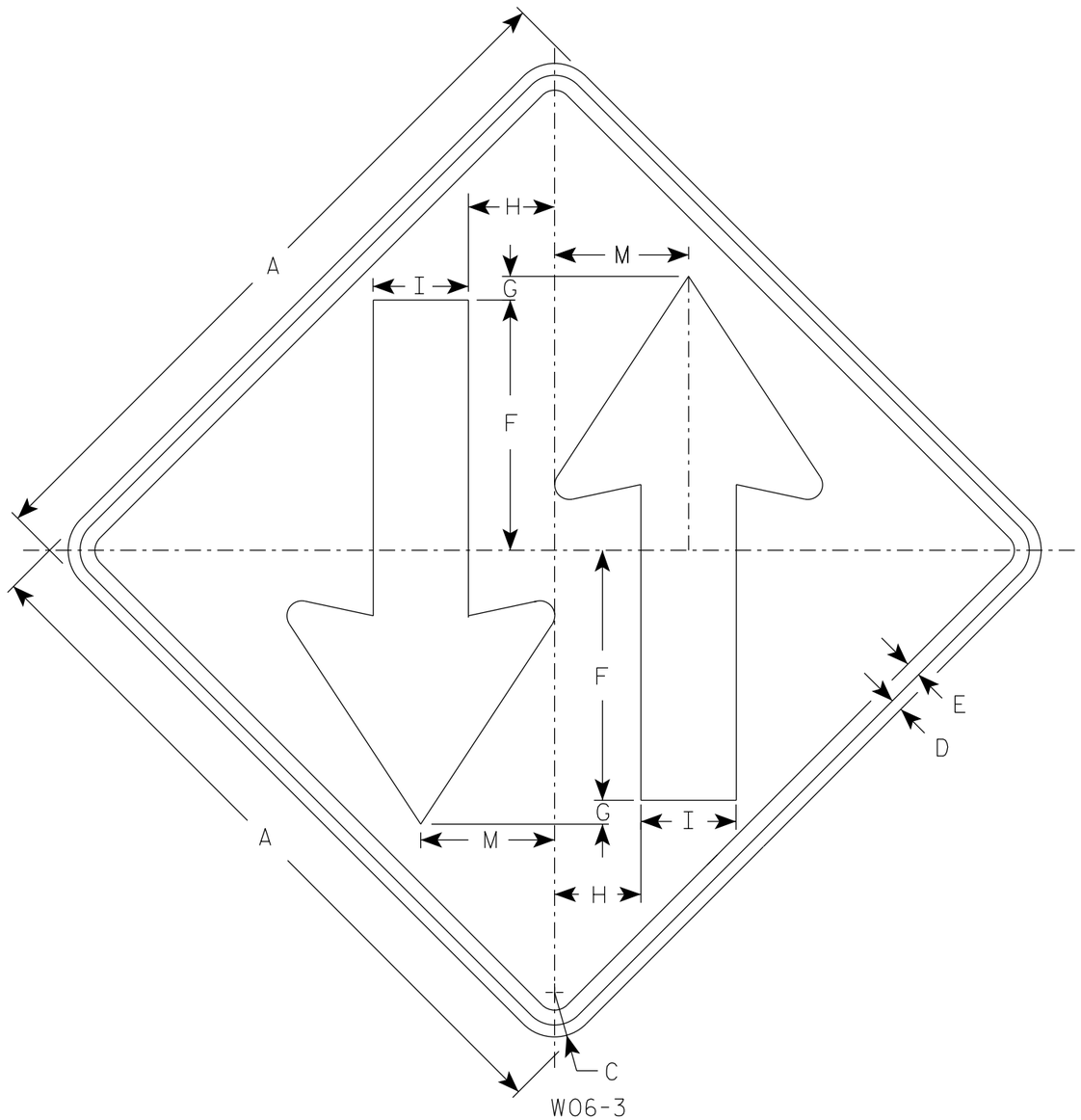
STANDARD SIGN
W06-1 & W06-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/30/2024 PLATE NO. W06-1.2

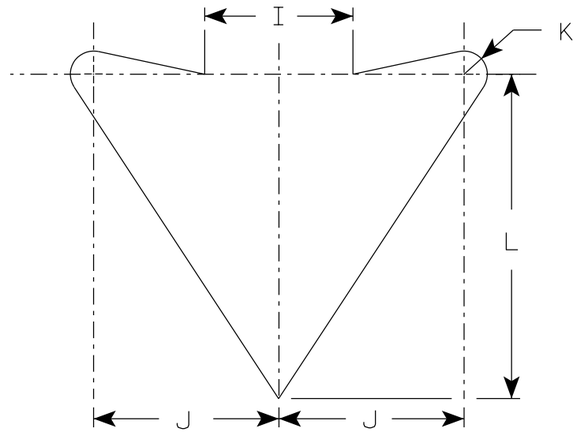
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 459	E



W06-3

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.



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

STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

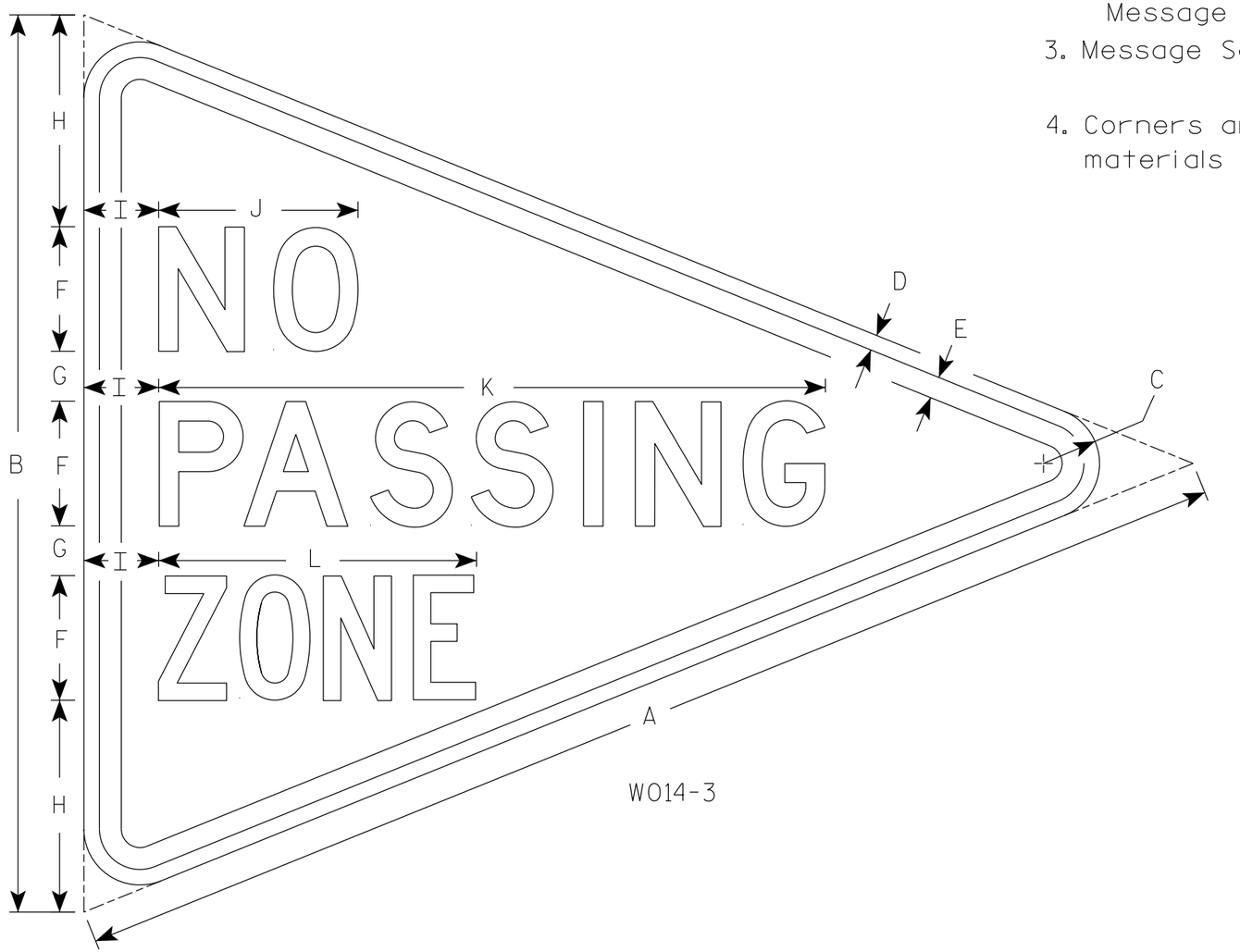
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/30/2024 PLATE NO. W06-3.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 460 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W014-3

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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

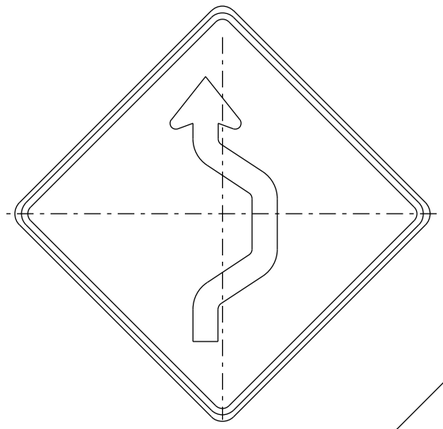
STANDARD SIGN
W014-3

WISCONSIN DEPT OF TRANSPORTATION

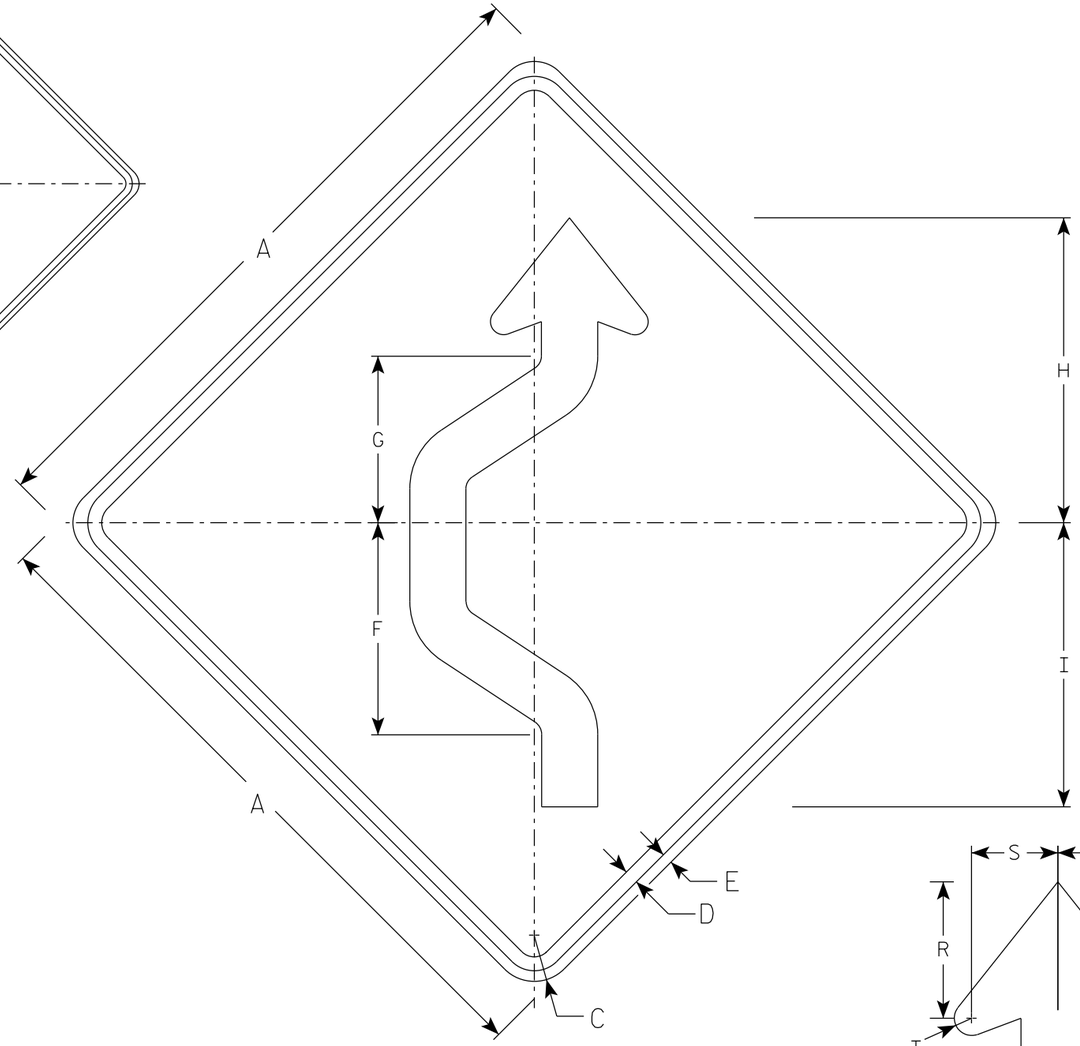
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/7/21 PLATE NO. W014-3.1

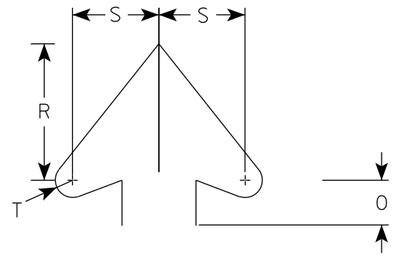
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 461 | E



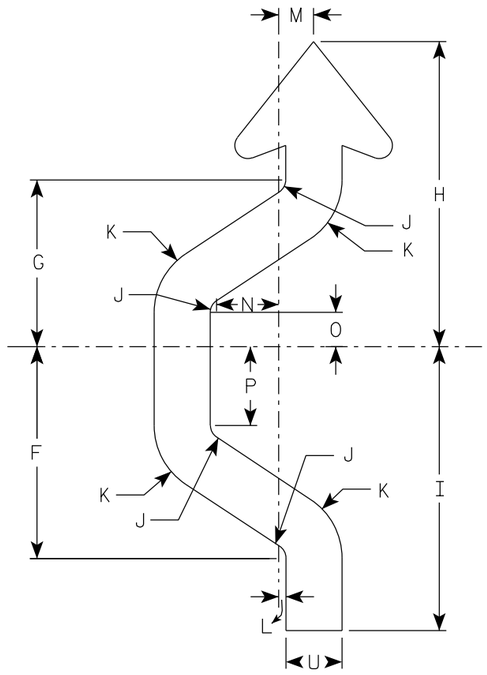
W024-1R



W024-1L



Arrowhead Detail



Arrow Detail

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. W024-1R is the same as W024-1L except 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	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9.0
2S	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
2M	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
3	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
4	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
5	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0

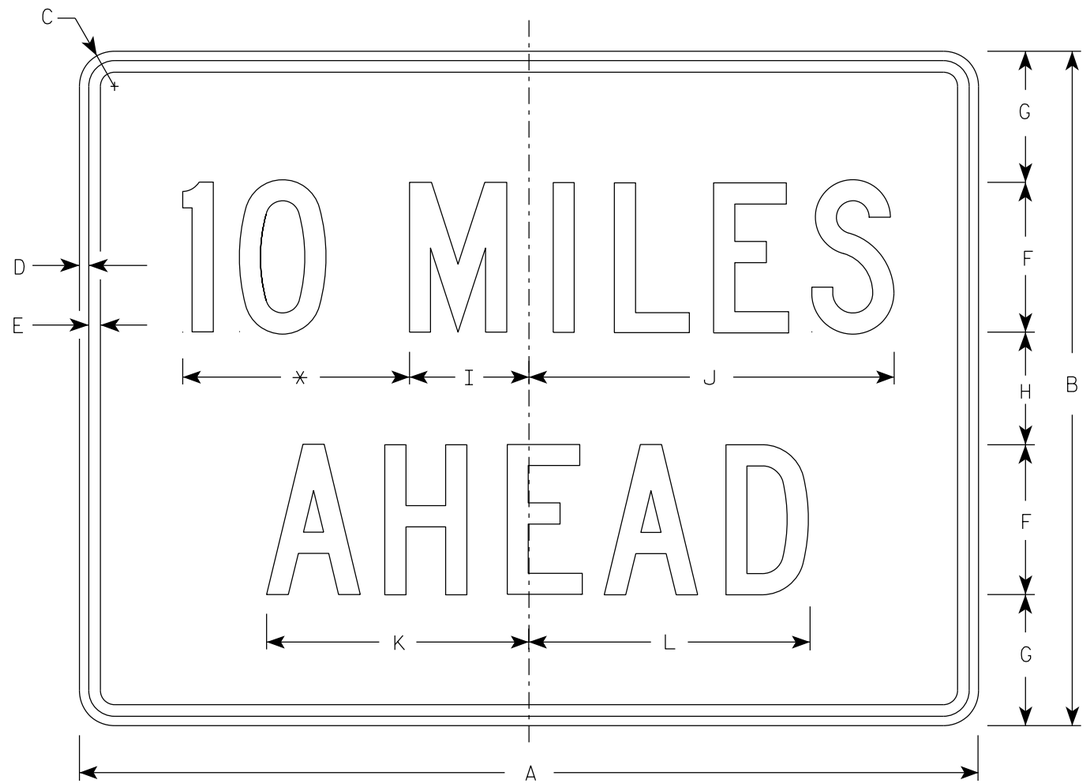
STANDARD SIGN
W024-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

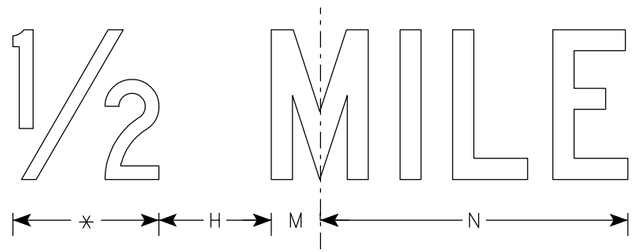
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W024-1.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	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: 463 E

DIVISION 1 - STAGE 1 - TEMPORARY WIDENING 'X' - STH 54 EB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
59+60.94	0.00	1.82	0.74	0.00	0	0	0	0	0	0
60+00.00	39.06	1.78	0.74	0.00	3	1	0	3	0	2
60+50.00	50.00	1.71	0.74	0.00	3	1	0	6	0	4
60+58.09	8.09	1.71	0.74	0.00	1	0	0	7	0	5
61+00.00	41.91	1.93	0.74	0.00	3	1	0	10	0	7
61+35.48	35.48	1.88	0.74	0.00	3	1	0	13	0	9
61+50.00	14.52	1.83	0.74	0.04	1	0	0	14	0	10
61+68.74	18.74	8.18	0.74	0.00	3	1	0	17	0	12
62+00.00	31.26	7.66	0.74	1.04	9	1	1	26	1	19
62+10.33	10.33	8.65	0.74	0.88	3	0	0	29	1	22
62+50.00	39.67	9.66	0.74	7.46	13	1	6	42	9	26
62+60.13	10.13	9.29	0.74	14.31	4	0	4	46	14	25
63+00.00	39.87	7.96	0.74	2.32	13	1	12	59	29	22
63+15.00	15.00	8.80	0.74	4.23	5	0	2	64	31	25
63+50.00	35.00	8.29	0.74	5.81	11	1	7	75	40	26
64+00.00	50.00	8.25	0.74	8.57	15	1	13	90	56	24
64+50.00	50.00	7.90	0.74	13.21	15	1	20	105	81	13
65+00.00	50.00	8.43	0.73	15.97	15	1	27	120	115	-7
65+48.56	48.56	9.34	0.66	17.14	16	1	30	136	153	-30
65+50.00	1.44	9.36	0.66	17.06	0	0	1	136	154	-31
65+90.21	40.21	9.90	0.65	17.50	14	1	26	150	186	-50
66+00.00	9.79	10.07	0.69	16.94	4	0	6	154	194	-54
66+50.00	50.00	10.19	0.81	21.64	19	1	36	173	239	-81
67+00.00	50.00	9.94	0.71	30.02	19	1	48	192	299	-123
67+50.00	50.00	9.54	0.90	21.32	18	1	48	210	359	-166
68+00.00	50.00	9.68	0.94	20.04	18	2	38	228	406	-197
68+50.00	50.00	10.10	0.76	14.13	18	2	32	246	446	-221
69+00.00	50.00	9.86	0.95	13.87	18	2	26	264	479	-238
69+49.52	49.52	9.13	0.99	15.25	17	2	27	281	513	-257
69+50.00	0.48	9.13	0.99	15.25	0	0	0	281	513	-257
70+00.00	50.00	9.29	0.79	14.62	17	2	28	298	548	-277
70+50.00	50.00	9.43	0.90	13.43	17	2	26	315	580	-294
71+00.00	50.00	9.16	0.88	14.86	17	2	26	332	613	-312
71+50.00	50.00	8.29	0.69	16.94	16	1	29	348	649	-333
72+00.00	50.00	7.54	0.91	16.46	15	1	31	363	688	-358
72+50.00	50.00	7.55	0.90	18.42	14	2	32	377	728	-386
73+00.00	50.00	9.32	0.85	12.90	16	2	29	393	764	-408
73+08.83	8.83	9.73	0.81	10.47	3	0	4	396	769	-410
73+50.00	41.17	11.65	0.81	4.59	16	1	11	412	783	-409
74+00.00	50.00	15.31	0.82	0.69	25	2	5	437	789	-392

DIVISION 1 - STAGE 1 - TEMPORARY WIDENING 'X' - STH 54 EB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
74+50.00	50.00	18.56	0.83	0.01	31	2	1	468	790	-364
75+00.00	50.00	17.37	0.79	0.16	33	2	0	501	790	-333
75+20.00	20.00	17.23	0.77	0.23	13	1	0	514	790	-321
75+50.00	30.00	15.34	0.00	0.02	18	0	0	532	790	-303
76+00.00	50.00	13.06	0.00	0.00	26	0	0	558	790	-277
76+50.00	50.00	10.40	0.00	0.03	22	0	0	580	790	-255
77+00.00	50.00	9.28	0.00	0.20	18	0	0	598	790	-237
77+50.00	50.00	9.55	0.00	0.00	17	0	0	615	790	-220
78+00.00	50.00	9.19	0.00	0.00	17	0	0	632	790	-203
78+50.00	50.00	8.76	0.00	0.00	17	0	0	649	790	-186
78+62.96	12.96	8.65	0.00	0.00	4	0	0	653	790	-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	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 2 - STAGE 2 - STA 221'WB'+75 TO B-44-0146

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
221+75.00	0.00	17.06	12.88	0.00	0	0	0	0	0	0
222+00.00	25.00	17.37	11.98	0.00	16	12	0	16	0	4
222+12.32	12.32	17.64	11.32	0.00	8	5	0	24	0	7
222+25.10	12.78	17.15	11.30	0.00	8	5	0	32	0	10
222+50.00	24.90	16.61	11.26	0.00	16	10	0	48	0	16
223+00.00	50.00	16.14	11.24	0.00	30	21	0	78	0	25
223+18.20	18.20	15.79	11.23	0.00	11	8	0	89	0	28
223+50.00	31.80	14.17	11.17	0.00	18	13	0	107	0	33
224+00.00	50.00	16.27	11.36	0.00	28	21	0	135	0	40
224+50.00	50.00	17.99	11.85	0.00	32	21	0	167	0	51
224+90.51	40.51	18.62	11.82	0.00	27	18	0	194	0	60
224+95.61	5.10	19.64	11.81	0.00	4	2	0	198	0	62
225+00.00	4.39	19.58	11.81	0.00	3	2	0	201	0	63
225+50.00	50.00	17.72	11.83	0.00	35	22	0	236	0	76
226+00.00	50.00	16.34	11.77	0.00	32	22	0	268	0	86
226+07.69	7.69	16.11	11.76	0.00	5	3	0	273	0	88
226+07.89	0.20	12.86	11.76	0.00	0	0	0	273	0	88
226+50.00	42.11	12.86	11.74	0.00	20	18	0	293	0	90
226+94.62	44.62	12.84	11.76	0.00	21	19	0	314	0	92
226+96.62	2.00	13.76	11.77	0.00	1	1	0	315	0	92
227+00.00	3.38	13.63	11.77	0.00	2	1	0	317	0	93
227+29.74	29.74	12.48	11.63	0.00	14	13	0	331	0	94
227+50.00	20.26	14.54	13.62	0.00	10	9	0	341	0	95
227+95.67	45.67	23.38	17.84	0.00	32	27	0	373	0	100
227+95.87	0.20	19.53	15.30	0.00	0	0	0	373	0	100
228+00.00	4.13	19.54	15.29	0.00	3	2	0	376	0	101
228+46.19	46.19	18.34	15.30	0.00	32	26	0	408	0	107
228+50.00	3.81	18.08	15.30	0.00	3	2	0	411	0	108
229+00.00	50.00	16.36	15.55	0.00	32	29	0	443	0	111
229+10.55	10.55	18.31	16.51	0.00	7	6	0	450	0	112
229+50.00	39.45	20.56	18.12	0.00	28	25	0	478	0	115
229+67.41	17.41	20.77	18.09	0.00	13	12	0	491	0	116
229+73.25	5.84	25.29	15.43	0.00	5	4	0	496	0	117
229+74.15	0.90	22.19	15.42	0.00	1	1	0	497	0	117
230+04.12	29.97	20.17	15.34	0.00	24	17	0	521	0	124
230+04.32	0.20	16.91	15.34	0.00	0	0	0	521	0	124
230+23.36	19.04	17.41	15.71	0.00	12	11	0	533	0	125
230+50.00	26.64	17.12	16.04	0.00	17	16	0	550	0	126
231+00.00	50.00	16.65	16.15	0.00	31	30	0	581	0	127
231+23.36	23.36	16.20	15.95	0.00	14	14	0	595	0	127

DIVISION 2 - STAGE 2 - STA 221'WB'+75 TO B-44-0146

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
231+50.00	26.64	15.79	15.53	0.00	16	16	0	611	0	127
231+73.36	23.36	15.99	15.13	0.00	14	13	0	625	0	128
232+00.00	26.64	16.78	14.67	0.00	16	15	0	641	0	129
232+49.90	49.90	16.10	13.60	0.00	30	26	0	671	0	133
232+50.10	0.20	19.43	13.59	0.00	0	0	0	671	0	133
232+58.39	8.29	19.36	13.41	0.00	6	4	0	677	0	135
232+65.61	7.22	30.15	13.26	0.00	7	4	0	684	0	138
233+00.00	34.39	27.20	12.60	0.01	37	16	0	721	0	159
233+38.09	38.09	24.36	11.91	2.49	36	17	2	757	3	176
233+50.00	11.91	23.15	12.27	3.35	10	5	1	767	4	179
233+73.36	23.36	22.62	13.06	1.86	20	11	2	787	6	186
233+77.47	4.11	22.58	13.21	1.66	3	2	0	790	6	187
234+00.00	22.53	26.06	14.02	0.00	20	11	1	810	8	195
234+02.45	2.45	26.40	14.11	0.00	2	1	0	812	8	196
234+10.00	7.55	27.42	14.39	0.00	8	4	0	820	8	200
234+27.43	17.43	26.89	14.03	0.00	18	9	0	838	8	209
234+30.55	3.12	22.76	13.94	0.00	3	2	0	841	8	210
234+50.00	19.45	24.36	13.45	2.95	17	10	1	858	9	215
234+56.69	6.69	26.42	13.43	1.74	6	3	1	864	10	217
234+56.89	0.20	33.49	13.43	1.70	0	0	0	864	10	217
234+70.45	13.56	33.32	13.42	0.43	17	7	1	881	11	226
234+80.55	10.10	16.90	7.56	0.99	9	4	0	890	11	231
234+94.51	13.96	0.00	0.00	0.00	4	2	0	894	11	233

DIVISION 2 - STAGE 2 - B-44-0146 TO STA 265'WB'+00 - STH 54 WB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
237+34.22	0.00	1.23	0.00	0.00	0	0	0	0	0	0	249+00.00	12.46	25.38	16.97	0.00	12	8	0	1,025	44	412
237+58.23	24.01	34.72	14.93	0.00	16	7	0	16	0	9	249+50.00	50.00	23.08	16.97	0.00	45	31	0	1,070	44	426
237+61.52	3.29	36.38	15.60	0.00	4	2	0	20	0	11	249+58.30	8.30	22.82	16.84	0.00	7	5	0	1,077	44	428
237+66.51	4.99	33.66	16.83	0.00	6	3	0	26	0	14	250+00.00	41.70	19.59	15.36	0.00	33	25	0	1,110	44	436
237+75.00	8.49	27.93	17.88	3.47	10	5	1	36	1	18	250+50.00	50.00	16.52	13.57	0.00	33	27	0	1,143	44	442
238+00.00	25.00	30.33	17.93	9.19	27	17	6	63	9	20	251+00.00	50.00	13.45	11.91	0.00	28	24	0	1,171	44	446
238+15.00	15.00	30.20	17.96	6.90	17	10	4	80	14	22	251+08.30	8.30	13.04	11.64	0.00	4	4	0	1,175	44	446
238+21.50	6.50	31.29	18.00	10.60	7	4	2	87	16	23	251+50.00	41.70	13.51	11.59	0.00	20	18	0	1,195	44	448
238+29.02	7.52	36.59	17.96	9.19	9	5	3	96	20	23	252+00.00	50.00	14.16	11.56	0.00	26	21	0	1,221	44	453
238+50.00	20.98	40.11	18.01	6.09	30	14	6	126	28	32	252+50.00	50.00	14.33	11.52	0.00	26	21	0	1,247	44	458
238+71.29	21.29	42.63	17.97	4.90	33	14	4	159	33	46	253+00.00	50.00	14.05	11.49	0.00	26	21	0	1,273	44	463
239+00.00	28.71	41.83	16.94	2.88	45	19	4	204	38	67	253+50.00	50.00	13.53	10.62	0.00	26	20	0	1,299	44	469
239+34.50	34.50	39.49	15.73	0.00	52	21	2	256	40	95	254+00.00	50.00	14.01	6.11	0.00	26	15	0	1,325	44	480
239+37.62	3.12	41.90	15.65	0.00	5	2	0	261	40	98	254+18.65	18.65	14.60	4.65	0.00	10	4	0	1,335	44	486
239+50.00	12.38	40.68	15.33	0.00	19	7	0	280	40	110	254+19.47	0.82	18.38	4.58	0.00	1	0	0	1,336	44	487
239+62.60	12.60	39.33	15.01	0.00	19	7	0	299	40	122	254+36.73	17.26	23.42	6.12	0.00	13	3	0	1,349	44	497
239+83.16	20.56	36.99	14.60	2.21	29	11	1	328	41	139	254+50.00	13.27	22.95	9.63	0.00	11	4	0	1,360	44	504
239+87.59	4.43	37.00	14.70	3.60	6	2	0	334	41	143	255+00.00	50.00	26.58	18.49	0.00	46	26	0	1,406	44	524
240+00.00	12.41	38.65	14.33	0.57	17	7	1	351	43	152	255+14.07	14.07	26.47	23.62	0.00	14	11	0	1,420	44	527
240+50.00	50.00	40.95	12.77	0.00	74	25	1	425	44	199	255+50.00	35.93	20.79	17.14	0.00	31	27	0	1,451	44	531
241+00.00	50.00	41.00	11.58	0.00	76	23	0	501	44	252	255+58.39	8.39	20.62	17.60	0.00	6	5	0	1,457	44	532
241+06.66	6.66	41.38	11.58	0.00	10	3	0	511	44	259	255+58.86	0.47	21.84	17.62	0.00	0	0	0	1,457	44	532
241+07.49	0.83	17.69	11.58	0.00	1	0	0	512	44	260	256+00.00	41.14	22.33	17.72	0.00	34	27	0	1,491	44	539
241+50.00	42.51	17.81	11.58	0.00	28	18	0	540	44	270	256+07.71	7.71	22.23	17.64	0.00	6	5	0	1,497	44	540
242+00.00	50.00	17.92	11.57	0.00	33	21	0	573	44	282	256+08.54	0.83	20.65	17.63	0.00	1	1	0	1,498	44	540
242+50.00	50.00	18.23	11.56	0.00	33	21	0	606	44	294	256+50.00	41.46	19.75	17.17	0.00	31	27	0	1,529	44	544
242+76.79	26.79	18.31	11.56	0.00	18	11	0	624	44	301	256+54.76	4.76	19.63	17.00	0.00	3	3	0	1,532	44	544
242+77.46	0.67	18.31	11.56	0.00	0	0	0	624	44	301	257+00.00	45.24	16.34	14.58	0.00	30	26	0	1,562	44	548
243+00.00	22.54	14.55	11.55	0.00	14	10	0	638	44	305	257+50.00	50.00	13.45	12.19	0.00	28	25	0	1,590	44	551
243+50.00	50.00	14.36	11.53	0.00	27	21	0	665	44	311	257+63.09	13.09	12.73	11.56	0.00	6	6	0	1,596	44	551
244+00.00	50.00	14.60	11.50	0.00	27	21	0	692	44	317	258+00.00	36.91	12.62	11.56	0.00	17	16	0	1,613	44	552
244+50.00	50.00	14.77	11.53	0.00	27	21	0	719	44	323	258+50.00	50.00	12.49	11.56	0.00	23	21	0	1,636	44	554
245+00.00	50.00	14.58	11.57	0.00	27	21	0	746	44	329	258+76.79	26.79	12.71	11.56	0.00	13	11	0	1,649	44	556
245+50.00	50.00	14.68	11.56	0.00	27	21	0	773	44	335	259+00.00	23.21	12.93	11.56	0.00	11	10	0	1,660	44	557
246+00.00	50.00	14.37	11.52	0.00	27	21	0	800	44	341	259+50.00	50.00	12.83	11.56	0.00	24	21	0	1,684	44	560
246+50.00	50.00	14.48	11.50	0.00	27	21	0	827	44	347	259+71.00	21.00	12.79	11.55	0.00	10	9	0	1,694	44	561
247+00.00	50.00	15.96	11.53	0.00	28	21	0	855	44	354	260+00.00	29.00	14.54	11.54	0.00	15	12	0	1,709	44	564
247+50.00	50.00	17.12	11.69	0.00	31	22	0	886	44	363	260+36.91	36.91	15.34	11.52	0.00	20	16	0	1,729	44	568
247+94.72	44.72	27.67	16.94	0.00	37	24	0	923	44	376	260+37.45	0.54	16.91	11.52	0.00	0	0	0	1,729	44	568
248+00.00	5.28	27.74	16.95	0.00	5	3	0	928	44	378	260+50.00	12.55	17.45	11.54	0.00	8	5	0	1,737	44	571
248+50.00	50.00	25.49	17.01	0.00	49	31	0	977	44	396	260+76.41	26.41	18.18	11.59	0.00	17	11	0	1,754	44	577
248+62.30	12.30	25.25	17.03	0.00	12	8	0	989	44	400	260+76.79	0.38	14.63	9.83	0.00	0	0	0	1,754	44	577
248+65.30	3.00	24.61	17.00	0.00	3	2	0	992	44	401	261+00.00	23.21	15.22	9.59	0.00	13	8	0	1,767	44	582
248+87.08	21.78	27.21	16.97	0.00	21	14	0	1,013	44	408	261+44.00	44.00	18.82	9.01	0.00	28	15	0	1,795	44	595
248+87.54	0.46	25.79	16.97	0.00	0	0	0	1,013	44	408	261+50.00	6.00	18.51	8.93	0.00	4	2	0	1,799	44	597

DIVISION 2 - STAGE 2 - B-44-0146 TO STA 265'WB'+00 - STH 54 WB

DIVISION 2 - STAGE 2 - B-44-0146 TO STA 265'WB'+00 - STH 54 WB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
261+62.95	12.95	17.91	8.75	0.00	9	4	0	1,808	44	602
262+00.00	37.05	25.14	8.63	0.27	30	12	0	1,838	44	620
262+50.00	50.00	25.22	8.34	0.24	47	16	0	1,885	44	651
262+88.73	38.73	25.96	7.92	0.49	37	12	1	1,922	45	675
263+00.00	11.27	25.41	7.79	0.60	11	3	0	1,933	45	683
263+11.94	11.94	25.00	7.66	0.89	11	3	0	1,944	45	691
263+50.00	38.06	22.81	7.41	2.85	34	11	3	1,978	49	710
264+00.00	50.00	22.58	7.13	0.22	42	13	3	2,020	53	736
264+50.00	50.00	22.75	6.49	0.56	42	13	1	2,062	54	763
265+00.00	50.00	19.01	6.33	1.43	39	12	2	2,101	56	788

DIVISION 2 - STAGE 2 - DITCH 'L' CLEANING

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
0+05.00	0.00	6.85	0.00	0.00	0	0	0	0	0	0
0+25.00	20.00	40.53	0.00	0.00	18	0	0	18	0	18
0+50.00	25.00	32.64	0.00	0.00	34	0	0	52	0	52
1+00.00	50.00	21.45	0.00	0.00	50	0	0	102	0	102
1+50.00	50.00	8.97	0.00	0.00	28	0	0	130	0	130
2+00.00	50.00	6.43	0.00	0.00	14	0	0	144	0	144
2+50.00	50.00	2.68	0.00	0.00	8	0	0	152	0	152
3+00.00	50.00	4.43	0.00	0.00	7	0	0	159	0	159
3+50.00	50.00	2.53	0.00	0.00	6	0	0	165	0	165
4+00.00	50.00	2.72	0.00	0.00	5	0	0	170	0	170
4+50.00	50.00	1.37	0.00	0.13	4	0	0	174	0	174
5+00.00	50.00	2.45	0.00	0.00	4	0	0	178	0	178
5+50.00	50.00	1.62	0.00	0.00	4	0	0	182	0	182
6+00.00	50.00	0.01	0.00	0.05	2	0	0	184	0	184

DIVISION 2 - STAGE 2 - DITCH 'M' CLEANING

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
0+00.00	0.00	1.06	0.00	0.00	0	0	0	0	0	0
0+12.52	12.52	7.56	0.00	0.29	2	0	0	2	0	2
0+50.00	37.48	0.60	0.00	1.80	6	0	1	8	1	7
1+00.00	50.00	4.25	0.00	0.01	4	0	2	12	4	8
1+50.00	50.00	10.93	0.00	0.00	14	0	0	26	4	22
2+00.00	50.00	12.76	0.00	0.00	22	0	0	48	4	44
2+25.00	25.00	1.21	0.00	3.72	6	0	2	54	6	48

DIVISION 2 - STAGE 2 - STA 65'EB'+00 - EAST PROJECT LIMIT - STH 54 WB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
65+01.47	0.00	19.02	6.33	1.42	0	0	0	0	0	0
65+50.00	48.53	17.75	6.48	3.73	33	12	5	33	6	15
65+90.21	40.21	16.41	6.39	5.77	25	10	7	58	15	21
66+00.00	9.79	16.01	6.28	6.28	6	2	2	64	18	23
66+50.00	50.00	15.35	5.86	10.24	29	11	15	93	36	22
67+00.00	50.00	14.06	5.82	22.66	27	11	30	120	74	0
67+50.00	50.00	14.72	6.21	10.20	27	11	30	147	111	-21
68+00.00	50.00	14.91	5.90	10.48	27	11	19	174	135	-29
68+50.00	50.00	14.49	5.84	14.95	27	11	24	201	165	-43
69+00.00	50.00	13.17	6.08	18.77	26	11	31	227	204	-67
69+49.52	49.52	11.57	5.74	15.82	23	11	32	250	244	-95
69+50.00	0.48	11.54	5.73	15.84	0	0	0	250	244	-95
70+00.00	50.00	13.88	5.67	13.85	24	11	27	274	278	-116
70+50.00	50.00	16.23	5.97	13.24	28	11	25	302	309	-130
71+00.00	50.00	16.64	5.82	9.99	30	11	22	332	336	-138
71+50.00	50.00	16.03	5.86	9.08	30	11	18	362	359	-142
72+00.00	50.00	14.75	6.01	4.44	29	11	13	391	375	-140
72+50.00	50.00	18.29	5.96	3.00	31	11	7	422	384	-129
72+68.83	18.83	19.19	5.96	3.32	13	4	2	435	386	-122
73+00.00	31.17	16.37	6.00	7.88	21	7	6	456	394	-116
73+08.83	8.83	15.77	6.04	8.74	5	2	3	461	398	-117
73+35.50	26.67	15.03	6.02	11.44	15	6	10	476	410	-120
73+50.00	14.50	16.81	6.01	10.32	9	3	6	485	418	-122
74+00.00	50.00	17.97	5.99	7.46	32	11	16	517	438	-121
74+50.00	50.00	19.35	5.97	4.21	35	11	11	552	451	-110
75+00.00	50.00	20.97	6.00	1.36	37	11	5	589	458	-91
75+20.00	20.00	22.25	0.74	0.81	16	2	1	605	459	-78
75+50.00	30.00	9.59	0.00	0.35	18	0	1	623	460	-61
76+00.00	50.00	11.82	0.00	0.00	20	0	0	643	460	-41
76+50.00	50.00	10.08	11.70	0.00	20	11	0	663	460	-32
77+00.00	50.00	11.04	0.00	0.00	20	11	0	683	460	-23
77+50.00	50.00	7.82	0.00	0.00	17	0	0	700	460	-6
78+00.00	50.00	6.91	0.00	0.00	14	0	0	714	460	8
78+50.00	50.00	6.16	0.00	0.00	12	0	0	726	460	20
78+62.96	12.96	5.92	0.00	0.00	3	0	0	729	460	23

DIVISION 3 - STAGE 3 - STA 21'EB'+75 TO MILLING LIMIT - STH 54 EB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
21+75.00	0.00	18.22	10.79	0.00	0	0	0	0	0	0
22+00.00	25.00	18.43	10.84	0.00	17	10	0	17	0	7
22+50.00	50.00	16.11	10.95	0.00	32	20	0	49	0	19
23+00.00	50.00	14.35	10.97	0.00	28	20	0	77	0	27
23+19.43	19.43	13.21	10.97	0.00	10	8	0	87	0	29
23+30.87	11.44	13.10	11.59	0.00	6	5	0	93	0	30
23+50.00	19.13	12.33	11.60	0.00	9	8	0	102	0	31
24+00.00	50.00	14.68	11.55	0.00	25	21	0	127	0	35
24+50.00	50.00	19.18	13.40	0.00	31	23	0	158	0	43
24+62.66	12.66	19.15	13.41	0.00	9	6	0	167	0	46
25+00.00	37.34	15.26	11.57	0.00	24	17	0	191	0	53

DIVISION 3 - STAGE 3 - GUARDRAIL SHOULDER RECONSTRUCT - STH 54 EB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
31+14.03	0.00	8.22	0.00	0.00	0	0	0	0	0	0
31+42.18	28.15	18.77	0.03	0.00	14	0	0	14	0	14
31+50.00	7.82	18.20	0.25	0.00	5	0	0	19	0	19
32+00.00	50.00	12.03	1.61	0.61	28	2	1	47	1	44
32+34.03	34.03	11.20	2.52	0.03	15	3	0	62	1	56
32+50.00	15.97	9.99	2.47	0.00	6	1	0	68	1	61
32+59.01	9.01	9.03	2.30	0.00	3	1	0	71	1	63
32+84.00	24.99	11.70	2.05	0.00	10	2	0	81	1	71
33+00.00	16.00	12.32	2.01	0.00	7	1	0	88	1	77
33+50.00	50.00	12.23	1.93	0.00	23	4	0	111	1	96
33+74.62	24.62	8.55	1.90	3.20	9	2	1	120	3	102
33+85.00	10.38	8.42	1.90	3.44	3	1	1	123	4	102
34+00.00	15.00	7.93	1.90	3.54	5	1	2	128	6	104
34+25.00	25.00	5.20	1.96	0.00	6	2	2	134	9	105
34+35.73	10.73	0.00	0.00	0.00	1	0	0	135	9	106

DIVISION 3 - STAGE 3 - MILLING LIMIT TO EAST PROJECT LIMIT - STH 54 EB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
61+40.00	0.00	17.17	14.60	0.00	0	0	0	0	0	0
61+50.00	10.00	20.04	14.56	0.00	7	5	0	7	0	2
62+00.00	50.00	19.77	14.34	0.00	37	27	0	44	0	12
62+12.56	12.56	19.51	14.27	0.00	9	7	0	53	0	14
62+50.00	37.44	32.16	14.06	0.00	36	20	0	89	0	30
62+90.00	40.00	25.73	12.99	0.00	43	20	0	132	0	53
63+00.00	10.00	23.08	12.78	0.00	9	5	0	141	0	57
63+10.00	10.00	19.75	12.67	0.00	8	5	0	149	0	60
63+16.20	6.20	19.38	12.60	0.00	4	3	0	153	0	61
63+50.00	33.80	26.45	12.21	0.00	29	16	0	182	0	74
64+00.00	50.00	28.21	11.62	0.00	51	22	0	233	0	103
64+50.00	50.00	30.88	10.97	0.00	55	21	0	288	0	137
65+00.00	50.00	35.93	10.87	0.00	62	20	0	350	0	179
65+48.56	48.56	37.06	10.66	0.00	66	19	0	416	0	226
65+50.00	1.44	37.54	10.66	0.00	2	1	0	418	0	227
65+90.21	40.21	38.54	10.66	0.00	57	16	0	475	0	268
66+00.00	9.79	38.67	10.67	0.00	14	4	0	489	0	278
66+50.00	50.00	44.98	10.71	0.00	77	20	0	566	0	335
67+00.00	50.00	55.02	10.75	0.00	93	20	0	659	0	408
67+50.00	50.00	42.70	10.58	0.00	90	20	0	749	0	478
68+00.00	50.00	40.74	10.66	0.00	77	20	0	826	0	535
68+50.00	50.00	37.25	10.75	0.00	72	20	0	898	0	587
69+00.00	50.00	35.21	10.57	0.00	67	20	0	965	0	634
69+49.52	49.52	33.65	10.66	0.00	63	19	0	1,028	0	678
69+50.00	0.48	33.63	10.66	0.00	1	0	0	1,029	0	679
70+00.00	50.00	34.48	10.75	0.00	63	20	0	1,092	0	722
70+50.00	50.00	34.49	10.56	0.00	64	20	0	1,156	0	766
71+00.00	50.00	36.36	10.66	0.00	66	20	0	1,222	0	812
71+50.00	50.00	36.71	10.75	0.00	68	20	0	1,290	0	860
72+00.00	50.00	33.31	10.56	0.00	65	20	0	1,355	0	905
72+50.00	50.00	32.52	10.60	0.00	61	20	0	1,416	0	946
72+68.83	18.83	31.75	10.62	0.00	22	7	0	1,438	0	961
73+00.00	31.17	30.93	10.65	0.00	36	12	0	1,474	0	985
73+08.83	8.83	29.89	10.66	0.00	10	3	0	1,484	0	992
73+50.00	41.17	27.16	10.66	0.00	43	16	0	1,527	0	1,019
74+00.00	50.00	23.33	10.66	0.00	47	20	0	1,574	0	1,046
74+40.67	40.67	22.27	10.66	0.00	34	16	0	1,608	0	1,064
74+42.17	1.50	22.30	10.66	0.00	1	1	0	1,609	0	1,064
74+50.00	7.83	22.26	10.66	0.00	6	3	0	1,615	0	1,067
75+00.00	50.00	21.43	10.66	0.00	40	20	0	1,655	0	1,087
75+20.00	20.00	19.47	10.66	0.00	15	8	0	1,670	0	1,094
75+50.00	30.00	8.01	4.95	0.00	15	9	0	1,685	0	1,100
76+00.00	50.00	6.58	4.42	0.00	14	9	0	1,699	0	1,105
76+50.00	50.00	5.39	3.89	0.00	11	8	0	1,710	0	1,108
77+00.00	50.00	4.35	3.36	0.00	9	7	0	1,719	0	1,110
77+50.00	50.00	2.30	2.30	0.10	6	5	0	1,725	0	1,111
78+00.00	50.00	1.85	1.85	0.34	4	4	0	1,729	0	1,111
78+50.00	50.00	1.78	1.78	0.18	3	3	0	1,732	0	1,111
78+62.96	12.96	1.76	1.64	0.14	1	1	0	1,733	0	1,111

DIVISION 3 - STAGE 3 - EB OUTER SHOULDER THRU RIVER RD - STH 54 EB

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
36+99.54	0.00	0.00	0.00	0.00	0	0	0	0	0	0
37+00.00	0.46	0.25	0.20	0.00	0	0	0	0	0	0
37+05.00	5.00	2.38	1.76	0.41	0	0	0	0	0	0
37+10.00	5.00	2.56	1.84	1.84	0	0	0	0	0	0
37+15.00	5.00	3.21	1.76	2.73	1	0	0	1	0	1
37+20.00	5.00	4.49	2.00	1.27	1	0	0	2	0	2
37+25.00	5.00	5.98	2.38	0.82	1	0	0	3	0	3
37+30.00	5.00	7.68	3.01	0.37	1	0	0	4	0	4
37+35.00	5.00	8.79	4.00	0.00	2	1	0	6	0	5
37+40.00	5.00	10.72	5.27	0.00	2	1	0	8	0	6
37+45.00	5.00	13.00	6.37	0.00	2	1	0	10	0	7
37+50.00	5.00	12.14	5.56	0.00	2	1	0	12	0	8
37+55.00	5.00	10.26	4.76	0.00	2	1	0	14	0	9
37+60.00	5.00	8.37	3.95	0.00	2	1	0	16	0	10
37+65.00	5.00	5.97	3.15	0.00	1	1	0	17	0	10
37+70.00	5.00	3.71	2.34	0.00	1	1	0	18	0	10
37+75.00	5.00	1.95	1.54	0.00	1	0	0	19	0	11
37+80.00	5.00	0.69	0.69	0.00	0	0	0	19	0	11
37+85.00	5.00	1.18	1.18	0.00	0	0	0	19	0	11
37+90.00	5.00	4.84	4.84	0.00	1	1	0	20	0	11
37+95.00	5.00	9.59	7.85	0.00	1	1	0	21	0	11
38+00.00	5.00	8.49	5.63	0.29	2	1	0	23	0	12
38+05.00	5.00	5.04	4.45	1.86	1	1	0	24	0	12
38+10.00	5.00	3.48	3.48	2.82	1	1	0	25	0	12
38+15.00	5.00	2.42	2.42	3.14	1	1	1	26	1	11
38+20.00	5.00	1.48	1.48	3.36	0	0	1	26	3	10
38+25.00	5.00	0.74	0.74	3.22	0	0	1	26	4	8
38+30.00	5.00	0.22	0.22	2.48	0	0	1	26	5	7
38+35.00	5.00	0.06	0.06	0.87	0	0	0	26	5	7
38+35.91	0.91	0.38	0.00	0.55	0	0	0	26	5	7

DIVISION 3 - STAGE 3 - RIVER RD INTERSECTION

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
28+87.49	0.00	7.32	5.52	0.00	0	0	0	0	0	0
28+90.00	2.51	7.43	5.55	0.00	1	1	0	1	0	0
28+95.00	5.00	8.06	5.61	0.00	1	1	0	2	0	0
29+00.00	5.00	9.07	5.78	0.00	2	1	0	4	0	1
29+05.00	5.00	10.15	6.11	0.00	2	1	0	6	0	2
29+10.00	5.00	11.16	6.57	0.00	2	1	0	8	0	3
29+15.00	5.00	12.19	7.07	0.00	2	1	0	10	0	4
29+20.00	5.00	13.34	7.67	0.00	2	1	0	12	0	5
29+25.00	5.00	14.11	8.28	0.00	3	1	0	15	0	7
29+30.00	5.00	14.62	8.99	0.00	3	2	0	18	0	8
29+35.00	5.00	15.09	9.77	0.00	3	2	0	21	0	9
29+40.00	5.00	15.79	10.64	0.00	3	2	0	24	0	10
29+45.00	5.00	16.79	11.65	0.00	3	2	0	27	0	11
29+50.00	5.00	19.12	13.01	0.00	3	2	0	30	0	12
29+55.00	5.00	20.01	11.60	0.00	4	2	0	34	0	14
29+60.00	5.00	17.40	9.93	0.00	3	2	0	37	0	15
29+65.00	5.00	11.02	8.21	0.00	3	2	0	40	0	16
29+70.00	5.00	9.95	6.36	0.00	2	1	0	42	0	17
29+75.00	5.00	4.18	4.18	0.00	1	1	0	43	0	17
29+80.00	5.00	1.46	1.46	0.00	1	1	0	44	0	17
29+83.90	3.90	0.03	0.03	0.00	0	0	0	44	0	17

DIVISION 3 - STAGE 3 - EB OUTER SHOULDER THRU CTH S - STH 54 EB

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
54+22.37	0.00	1.22	1.22	0.09	0	0	0	0	0	0
54+25.00	2.63	0.68	0.68	1.12	0	0	0	0	0	0
54+30.00	5.00	0.72	0.72	2.43	0	0	0	0	0	0
54+35.00	5.00	1.24	1.24	2.01	0	0	0	0	0	0
54+40.00	5.00	2.03	2.03	1.49	0	0	0	0	0	0
54+45.00	5.00	3.10	2.83	1.10	0	0	0	0	0	0
54+50.00	5.00	4.65	3.07	0.62	1	1	0	1	0	0
54+55.00	5.00	6.22	3.58	4.06	1	1	0	2	0	0
54+60.00	5.00	8.60	4.56	7.61	1	1	1	3	1	-1
54+65.00	5.00	10.71	6.05	6.75	2	1	1	5	3	-2
54+70.00	5.00	14.44	7.97	1.68	2	1	1	7	4	-2
54+75.00	5.00	13.51	10.30	0.00	3	2	0	10	4	-1
54+80.00	5.00	11.21	9.89	0.00	2	2	0	12	4	-1
54+85.00	5.00	8.96	8.17	0.00	2	2	0	14	4	-1
54+90.00	5.00	6.89	6.46	0.00	1	1	0	15	4	-1
54+95.00	5.00	4.96	4.75	0.00	1	1	0	16	4	-1
55+00.00	5.00	3.11	3.04	0.00	1	1	0	17	4	-1
55+05.00	5.00	1.33	1.33	0.00	0	0	0	17	4	-1
55+07.56	2.56	0.44	0.44	0.00	0	0	0	17	4	-1
55+10.00	2.44	1.78	1.75	0.00	0	0	0	17	4	-1
55+15.00	5.00	4.74	4.40	0.00	1	1	0	18	4	-1
55+20.00	5.00	8.02	7.06	0.00	1	1	0	19	4	-1
55+25.00	5.00	11.62	9.71	0.00	2	2	0	21	4	-1
55+30.00	5.00	14.34	12.37	0.80	2	2	0	23	4	-1
55+35.00	5.00	9.19	9.19	5.12	2	2	1	25	5	-2
55+40.00	5.00	6.53	6.53	4.55	1	1	1	26	6	-3
55+45.00	5.00	4.56	4.56	4.06	1	1	1	27	8	-5
55+50.00	5.00	2.91	2.91	3.37	1	1	1	28	9	-6
55+55.00	5.00	1.73	1.73	2.65	0	0	1	28	10	-7
55+60.00	5.00	1.01	1.01	2.47	0	0	0	28	10	-7
55+64.81	4.81	1.55	1.55	0.00	0	0	0	28	10	-7

DIVISION 3 - STAGE 3 - CTH S INTERSECTION

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
6+06.56	0.00	24.96	20.18	0.00	0	0	0	0	0	0
6+10.00	3.44	25.22	20.73	0.00	3	3	0	3	0	0
6+15.00	5.00	28.66	27.22	0.18	5	4	0	8	0	1
6+20.00	5.00	29.66	24.48	1.67	5	5	0	13	0	1
6+25.00	5.00	28.77	18.63	4.00	5	4	1	18	1	1
6+30.00	5.00	29.74	19.02	2.77	5	3	1	23	3	2
6+35.00	5.00	30.62	19.86	3.53	6	4	1	29	4	2
6+40.00	5.00	31.88	21.36	4.48	6	4	1	35	5	3
6+45.00	5.00	33.41	23.71	1.11	6	4	1	41	6	4
6+50.00	5.00	27.25	22.17	0.00	6	4	0	47	6	6
6+55.00	5.00	19.89	17.35	0.00	4	4	0	51	6	6
6+60.00	5.00	13.44	12.53	0.00	3	3	0	54	6	6
6+65.00	5.00	8.02	7.71	0.00	2	2	0	56	6	6
6+70.00	5.00	2.91	2.89	0.00	1	1	0	57	6	6
6+72.89	2.89	0.10	0.10	0.00	0	0	0	57	6	6

DIVISION 3 - STAGE 3 - TEMPORARY WIDENING 'W' - STH 54 EB

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
3+75.39	0.00	1.69	1.69	0.00	0	0	0	0	0	0
4+00.00	24.61	1.69	1.69	0.00	2	2	0	2	0	0
4+50.00	50.00	1.69	1.69	0.00	3	3	0	5	0	0
5+00.00	50.00	1.66	1.66	0.00	3	3	0	8	0	0
5+15.90	15.90	1.66	1.66	0.00	1	1	0	9	0	0
5+50.00	34.10	2.04	1.77	0.00	2	2	0	11	0	0
5+99.91	49.91	2.72	1.79	0.00	4	3	0	15	0	1
6+00.00	0.09	4.68	1.79	0.00	0	0	0	15	0	1
6+50.00	50.00	10.23	1.80	6.00	14	3	6	29	8	5
7+00.00	50.00	10.35	1.81	11.70	19	3	16	48	28	1
7+50.00	50.00	12.26	1.78	10.79	21	3	21	69	54	-8
8+00.00	50.00	14.07	1.73	7.08	24	3	17	93	75	-8
8+25.02	25.02	14.80	1.70	6.86	13	2	6	106	83	-5
8+50.00	24.98	14.50	1.68	5.41	14	2	6	120	90	0
8+75.85	25.85	14.75	1.07	0.64	14	1	3	134	94	9
8+76.04	0.19	14.33	0.66	0.64	0	0	0	134	94	9
9+00.00	23.96	14.82	0.76	0.41	13	1	0	147	94	21
9+04.15	4.15	14.91	0.78	0.37	2	0	0	149	94	23
9+50.00	45.85	15.44	0.96	0.00	26	1	0	175	94	48
10+00.00	50.00	15.23	1.09	0.00	28	2	0	203	94	74
10+50.00	50.00	14.55	1.29	0.00	28	2	0	231	94	100
10+87.30	37.30	11.83	1.95	0.00	18	2	0	249	94	116
10+88.98	1.68	4.12	1.98	0.00	0	0	0	249	94	116
11+00.00	11.02	2.51	2.18	0.00	1	1	0	250	94	116
11+07.81	7.81	2.59	2.32	0.00	1	1	0	251	94	116

DIVISION 3 - STAGE 3 - STH 54 TEMPORARY MEDIAN WEST - STH 54 EB

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
15+36.37	0.00	9.00	5.13	0.00	0	0	0	0	0	0
15+50.00	13.63	8.68	5.13	0.00	4	3	0	4	0	1
15+62.17	12.17	5.55	5.13	0.00	3	2	0	7	0	2

DIVISION 3 - STAGE 3 - CTH D TEMPORARY MEDIAN SOUTH

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
106+46.79	0.00	4.63	4.08	0.00	0	0	0	0	0	0
106+50.00	3.21	5.44	4.08	0.00	1	0	0	1	0	1
106+71.61	21.61	5.19	4.08	0.00	4	3	0	5	0	2
106+96.60	24.99	4.14	4.08	0.00	4	4	0	9	0	2

DIVISION 3 - STAGE 3 - CTH TEMPORARY MEDIAN NORTH

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
107+96.56	0.00	4.81	4.50	0.00	0	0	0	0	0	0
108+30.00	33.44	6.28	4.50	0.00	7	6	0	7	0	1
108+50.59	20.59	6.40	4.50	0.00	5	3	0	12	0	3
108+56.28	5.69	6.07	4.50	0.00	1	1	0	13	0	3
108+73.02	16.74	5.92	4.50	0.00	4	3	0	17	0	4

DIVISION 4 - STAGE 4 - TEMPORARY WIDENING 'Y' - STH 54 WB

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
3+75.49	0.00	1.69	1.68	0.00	0	0	0	0	0	0
4+00.00	24.51	1.69	1.67	0.00	2	2	0	2	0	0
4+50.00	50.00	1.69	1.66	0.00	3	3	0	5	0	0
5+00.00	50.00	1.63	1.63	0.00	3	3	0	8	0	0
5+33.90	33.90	1.63	1.63	0.00	2	2	0	10	0	0
5+50.00	16.10	1.84	1.66	0.00	1	1	0	11	0	0
6+00.00	50.00	2.57	1.67	0.00	4	3	0	15	0	1
6+50.00	50.00	3.83	2.17	0.02	6	4	0	21	0	3
7+00.00	50.00	4.87	3.69	0.56	8	5	1	29	1	5
7+18.00	18.00	4.55	2.59	0.16	3	2	0	32	1	6
7+18.67	0.67	1.04	0.17	0.27	0	0	0	32	1	6
7+42.86	24.19	2.80	1.65	0.00	2	1	0	34	1	7

DIVISION 4 - STAGE 4 - TEMPORARY WIDENING 'Y' - STH 54 WB

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
8+36.82	0.00	23.59	2.64	0.14	0	0	0	0	0	0
8+50.00	13.18	14.48	2.64	3.26	9	1	1	9	1	7
8+72.97	22.97	10.63	2.64	1.29	11	2	2	20	4	13

DIVISION 4 - STAGE 4 - STH 54 WB MAINLINE

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
208+71.80	0.00	23.72	11.63	1.26	0	0	0	0	0	0
209+00.00	28.20	25.21	11.05	1.55	26	12	1	26	1	13
209+50.00	50.00	26.78	9.57	1.31	48	19	3	74	5	38
210+00.00	50.00	22.76	9.43	2.18	46	18	3	120	9	62
210+01.79	1.79	22.70	9.42	2.18	2	1	0	122	9	63
210+50.00	48.21	21.73	9.22	2.18	40	17	4	162	14	81
211+00.00	50.00	26.71	7.69	0.72	45	16	3	207	18	107
211+21.15	21.15	29.58	7.84	3.94	22	6	2	229	20	120
211+23.36	2.21	28.66	7.86	0.00	2	1	0	231	20	121
211+47.11	23.75	30.96	6.91	0.00	26	6	0	257	20	141
211+50.00	2.89	27.97	6.99	1.14	3	1	0	260	20	143
212+00.00	50.00	28.85	7.98	0.32	53	14	1	313	21	181
212+50.00	50.00	26.80	8.79	0.26	52	16	1	365	23	216
212+91.54	41.54	25.28	9.16	0.31	40	14	0	405	23	242
213+00.00	8.46	25.88	9.18	0.23	8	3	0	413	23	247
213+45.20	45.20	29.48	9.10	0.00	46	15	0	459	23	278
213+50.00	4.80	29.54	9.15	0.00	5	2	0	464	23	281
214+00.00	50.00	25.69	9.53	0.00	51	17	0	515	23	315
214+35.97	35.97	25.82	9.94	0.00	34	13	0	549	23	336
214+40.00	4.03	23.81	9.99	0.00	4	1	0	553	23	339
214+50.00	10.00	20.78	10.08	0.00	8	4	0	561	23	343
214+80.64	30.64	19.89	10.30	0.03	23	12	0	584	23	354
215+00.00	19.36	15.82	10.24	0.31	13	7	0	597	23	360
215+05.00	5.00	13.93	10.24	0.40	3	2	0	600	23	361
215+15.00	10.00	13.95	10.28	0.80	5	4	0	605	23	362
215+22.88	7.88	14.66	10.40	0.68	4	3	0	609	23	363
215+25.00	2.12	14.70	10.44	0.74	1	1	0	610	23	363
215+30.00	5.00	14.54	10.52	0.92	3	2	0	613	23	364
215+35.00	5.00	11.61	10.63	0.96	2	2	0	615	23	364
215+40.00	5.00	11.21	10.83	0.15	2	2	0	617	23	364
215+45.00	5.00	11.11	11.03	0.00	2	2	0	619	23	364
215+50.00	5.00	10.85	10.87	0.75	2	2	0	621	23	364
215+55.00	5.00	10.96	10.98	0.98	2	2	0	623	23	364
215+60.00	5.00	11.47	11.49	1.21	2	2	0	625	23	364
215+61.93	1.93	68.72	31.12	1.22	3	2	0	628	23	365
215+65.00	3.07	68.45	31.29	1.23	8	4	0	636	23	369
215+70.00	5.00	69.62	31.79	1.16	13	6	0	649	23	376
215+75.00	5.00	71.50	32.88	1.26	13	6	0	662	23	383
215+80.00	5.00	73.88	34.68	1.88	13	6	0	675	23	390
215+85.00	5.00	79.21	37.23	1.74	14	7	0	689	23	397
215+90.00	5.00	89.94	40.90	2.12	16	7	0	705	23	406
215+95.00	5.00	100.53	45.74	0.00	18	8	0	723	23	416
216+00.00	5.00	92.54	43.31	0.00	18	8	0	741	23	426
216+05.00	5.00	82.58	37.11	0.00	16	7	0	757	23	435
216+10.00	5.00	69.83	30.91	0.00	14	6	0	771	23	443

DIVISION 4 - STAGE 4 - STH 54 WB MAINLINE

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
216+15.00	5.00	65.68	29.14	0.00	13	6	0	784	23	450
216+20.00	5.00	68.38	30.64	0.00	12	6	0	796	23	456
216+25.00	5.00	71.29	32.14	0.00	13	6	0	809	23	463
216+30.00	5.00	74.10	33.64	0.00	13	6	0	822	23	470
216+35.00	5.00	76.93	35.14	0.00	14	6	0	836	23	478
216+40.00	5.00	79.21	36.64	0.00	14	7	0	850	23	485
216+45.00	5.00	81.43	38.14	0.00	15	7	0	865	23	493
216+50.00	5.00	83.59	39.64	0.00	15	7	0	880	23	501
216+55.00	5.00	85.35	41.14	0.00	16	7	0	896	23	510
216+58.91	3.91	86.29	42.31	0.00	12	6	0	908	23	516
216+60.00	1.09	43.84	42.64	0.00	3	2	0	911	23	517
216+65.00	5.00	30.55	26.28	0.00	7	6	0	918	23	518
216+70.00	5.00	27.25	25.38	0.00	5	5	0	923	23	518
216+75.00	5.00	35.48	26.19	0.00	6	5	0	929	23	519
216+80.00	5.00	37.19	27.00	0.00	7	5	0	936	23	521
216+85.00	5.00	36.02	27.81	0.00	7	5	0	943	23	523
216+90.00	5.00	33.83	28.63	0.01	6	5	0	949	23	524
216+95.00	5.00	31.35	29.44	0.01	6	5	0	955	23	525
217+00.00	5.00	29.92	30.03	0.00	6	6	0	961	23	525
217+05.00	5.00	29.57	29.67	0.00	6	6	0	967	23	525
217+10.00	5.00	29.31	29.40	0.00	5	5	0	972	23	525
217+15.00	5.00	29.21	29.29	0.00	5	5	0	977	23	525
217+20.00	5.00	24.91	24.97	0.98	5	5	0	982	23	525
217+25.00	5.00	23.23	23.29	1.95	4	4	0	986	23	525
217+30.00	5.00	23.00	23.06	1.26	4	4	0	990	23	525
217+35.00	5.00	22.76	22.72	0.70	4	4	0	994	23	525
217+40.00	5.00	22.40	22.30	0.57	4	4	0	998	23	525
217+42.60	2.60	22.43	22.17	0.38	2	2	0	1,000	23	525
217+50.00	7.40	22.60	21.89	0.25	6	6	0	1,006	23	525
217+53.01	3.01	22.89	21.77	0.17	3	2	0	1,009	23	526
217+60.00	6.99	24.09	21.51	0.13	6	6	0	1,015	23	526
217+81.48	21.48	27.53	20.70	0.15	21	17	0	1,036	23	530
217+90.21	8.73	29.05	20.37	0.00	9	7	0	1,045	23	532
218+00.00	9.79	29.92	20.00	0.00	11	7	0	1,056	23	536
218+42.94	42.94	30.12	18.37	0.00	48	31	0	1,104	23	553
218+50.00	7.06	25.83	18.10	0.00	7	5	0	1,111	23	555
219+00.00	50.00	24.19	16.46	0.00	46	32	0	1,157	23	569
219+05.71	5.71	23.93	16.37	0.00	5	3	0	1,162	23	571
219+27.78	22.07	20.21	15.77	0.00	18	13	0	1,180	23	576
219+50.00	22.22	20.65	14.85	0.00	17	13	0	1,197	23	580
220+00.00	50.00	18.97	12.90	0.00	37	26	0	1,234	23	591
220+50.00	50.00	15.72	11.17	0.00	32	22	0	1,266	23	601
220+85.61	35.61	15.72	11.08	0.00	21	15	0	1,287	23	607
221+00.00	14.39	16.77	11.17	0.00	9	6	0	1,296	23	610
221+50.00	50.00	19.40	12.43	0.00	33	22	0	1,329	23	621
221+75.00	25.00	21.72	13.09	0.00	19	12	0	1,348	23	628

DIVISION 4 - STAGE 4 - CTH D INTERSECTION

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
107+82.78	0.00	1.00	0.00	0.00	0	0	0	0	0	0
107+85.00	2.22	11.87	5.19	0.00	1	0	0	1	0	1
107+90.00	5.00	36.06	15.91	0.00	4	2	0	5	0	3
107+95.00	5.00	59.46	26.63	0.00	9	4	0	14	0	8
108+00.00	5.00	82.39	35.04	0.00	13	6	0	27	0	15
108+05.00	5.00	94.89	39.44	0.95	16	7	0	43	0	24
108+10.00	5.00	104.16	44.20	0.50	18	8	0	61	0	34
108+15.00	5.00	113.31	48.87	0.03	20	9	0	81	0	45
108+20.00	5.00	122.75	53.54	0.95	22	9	0	103	0	58
108+25.00	5.00	127.85	56.60	1.12	23	10	0	126	0	71
108+30.00	5.00	133.48	59.12	1.01	24	11	0	150	0	84
108+35.00	5.00	134.00	61.64	0.86	25	11	0	175	0	98
108+40.00	5.00	137.43	64.16	0.76	25	12	0	200	0	111
108+45.00	5.00	140.59	66.67	0.62	26	12	0	226	0	125
108+50.00	5.00	143.55	69.19	0.47	26	13	0	252	0	138
108+55.00	5.00	147.03	68.75	0.46	27	13	0	279	0	152
108+60.00	5.00	145.50	67.03	1.06	27	13	0	306	0	166
108+65.00	5.00	144.61	65.74	1.15	27	12	0	333	0	181
108+70.00	5.00	143.62	64.80	0.78	27	12	0	360	0	196

DIVISION 4 - STAGE 4 - STEEL THRIE BEAM AT B-44-0144 - STH 54 EB & WB

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
38+29.00	0.00	11.37	0.00	0.00	0	0	0	0	0	0
38+50.00	21.00	15.33	0.00	0.00	10	0	0	10	0	10
38+71.41	21.41	15.34	0.00	0.00	12	0	0	22	0	22
38+83.63	12.22	15.29	0.00	0.00	7	0	0	29	0	29
39+00.00	16.37	14.97	0.00	0.00	9	0	0	38	0	38
39+50.00	50.00	13.85	0.00	0.00	27	0	0	65	0	65
40+00.00	50.00	13.70	0.00	0.00	26	0	0	91	0	91
40+45.86	45.86	14.62	0.00	0.00	24	0	0	115	0	115
40+54.28	8.42	14.67	0.00	0.00	5	0	0	120	0	120
40+66.49	12.21	14.69	0.00	0.00	7	0	0	127	0	127
40+73.32	6.83	14.71	0.00	0.00	4	0	0	131	0	131

DIVISION 4 - STAGE 4 - REMOVE TEMPORARY WIDENING 'Z' - STH 54 WB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
258+76.79	0.00	0.00	0.00	0.00	0	0	0	0	0	0
259+00.00	23.21	0.31	0.31	0.00	0	0	0	0	0	0
259+50.00	50.00	0.98	0.97	0.00	1	1	0	1	0	0
260+00.00	50.00	1.64	1.63	0.00	2	2	0	3	0	0
260+50.00	50.00	2.31	2.29	0.00	4	4	0	7	0	0
260+76.79	26.79	2.67	0.00	0.00	2	1	0	9	0	1
261+00.00	23.21	2.67	2.67	0.00	2	1	0	11	0	2
261+50.00	50.00	2.72	2.72	0.00	5	5	0	16	0	2
261+60.83	10.83	2.78	2.76	0.00	1	1	0	17	0	2
262+00.00	39.17	5.67	2.80	0.00	6	4	0	23	0	4
262+50.00	50.00	8.26	3.27	0.00	13	6	0	36	0	11
262+88.73	38.73	11.72	3.95	0.00	14	5	0	50	0	20
263+00.00	11.27	11.87	3.90	0.00	5	2	0	55	0	23
263+11.94	11.94	12.53	3.85	0.00	5	2	0	60	0	26
263+50.00	38.06	14.85	3.69	0.00	19	5	0	79	0	40
264+00.00	50.00	10.43	3.71	0.00	23	7	0	102	0	56
264+50.00	50.00	3.02	3.02	0.00	12	6	0	114	0	62
265+00.00	50.00	10.52	3.58	0.00	13	6	0	127	0	69

DIVISION 4 - STAGE 4 - REMOVE TEMPORARY WIDENING 'Z' - STH 54 WB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
65+01.47	0.00	10.51	3.58	0.00	0	0	0	0	0	0
65+50.00	48.53	12.84	3.63	0.00	21	6	0	21	0	15
65+90.21	40.21	15.50	3.63	0.00	21	5	0	42	0	31
66+00.00	9.79	16.26	3.65	0.00	6	1	0	48	0	36
66+50.00	50.00	21.44	3.77	0.00	35	7	0	83	0	64
67+00.00	50.00	26.25	3.89	0.00	44	7	0	127	0	101
67+50.00	50.00	19.65	3.41	0.00	43	7	0	170	0	137
68+00.00	50.00	20.18	3.65	0.00	37	7	0	207	0	167
68+50.00	50.00	23.40	3.88	0.00	40	7	0	247	0	200
69+00.00	50.00	26.75	3.40	0.00	46	7	0	293	0	239
69+49.52	49.52	24.21	3.64	0.00	47	6	0	340	0	280
69+50.00	0.48	24.19	3.64	0.00	0	0	0	340	0	280
70+00.00	50.00	23.07	3.88	0.00	44	7	0	384	0	317
70+50.00	50.00	22.77	3.39	0.00	42	7	0	426	0	352
71+00.00	50.00	20.45	3.63	0.00	40	6	0	466	0	386
71+50.00	50.00	18.52	3.87	0.00	36	7	0	502	0	415
72+00.00	50.00	14.50	3.37	0.00	31	7	0	533	0	439
72+50.00	50.00	13.78	3.49	0.00	26	6	0	559	0	459
73+00.00	50.00	18.41	3.61	0.00	30	7	0	589	0	482
73+08.83	8.83	19.20	3.63	0.00	6	1	0	595	0	487
73+50.00	41.17	20.97	3.63	0.00	31	6	0	626	0	512
74+00.00	50.00	18.25	3.63	0.00	36	7	0	662	0	541
74+50.00	50.00	15.71	3.63	0.00	31	7	0	693	0	565
75+00.00	50.00	12.67	3.63	0.00	26	7	0	719	0	584
75+20.00	20.00	11.70	3.63	0.00	9	3	0	728	0	590
75+50.00	30.00	9.09	3.31	0.00	12	4	0	740	0	598
76+00.00	50.00	6.36	2.78	0.01	14	6	0	754	0	606
76+25.70	25.70	3.18	2.51	3.52	5	3	2	759	3	606
76+67.93	42.23	2.33	2.06	2.48	4	4	5	763	9	599
77+00.00	32.07	3.42	1.72	0.15	3	2	2	766	11	598
77+50.00	50.00	2.34	1.20	0.10	5	3	0	771	11	600
78+00.00	50.00	1.52	0.67	0.77	4	2	1	775	13	601
78+50.00	50.00	0.99	0.14	1.73	2	1	2	777	15	599
78+62.96	12.96	0.85	0.00	1.94	0	0	1	777	16	598

DIVISION 5 - STAGE 5 - REMOVE TEMPORARY WIDENING 'W' - STH 54 EB

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
5+17.83	0.00	1.09	0.00	0.46	0	0	0	0	0	0
5+50.00	32.17	1.63	0.29	0.01	2	0	0	2	0	2
6+00.00	50.00	1.96	0.90	0.22	3	1	0	5	0	4
6+50.00	50.00	9.38	1.50	0.00	10	2	0	15	0	12
7+00.00	50.00	16.55	2.10	0.00	24	3	0	39	0	33
7+50.00	50.00	20.15	2.71	0.00	34	4	0	73	0	63
8+00.00	50.00	19.91	3.31	0.00	37	6	0	110	0	94
8+25.02	25.02	19.76	3.61	0.00	18	3	0	128	0	109
8+50.00	24.98	15.92	3.62	0.00	17	3	0	145	0	123
8+72.76	22.76	11.20	3.63	0.00	11	3	0	156	0	131

DIVISION 5 - STAGE 5 - STH 54 EB MAINLINE

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
8+75.31	0.00	19.55	3.63	0.00	0	0	0	0	0	0
9+00.00	24.69	19.57	11.02	0.00	18	7	0	18	0	11
9+50.00	50.00	17.03	11.48	0.00	34	21	0	52	0	24
10+00.00	50.00	17.55	12.02	0.23	32	22	0	84	0	34
10+16.81	16.81	17.82	12.20	0.35	11	8	0	95	0	37
10+50.00	33.19	18.12	12.55	0.59	22	15	1	117	1	43
10+79.10	29.10	19.65	12.86	0.32	20	14	0	137	1	49
10+91.13	12.03	20.72	13.20	0.61	9	6	0	146	1	52
11+00.00	8.87	21.16	13.58	1.01	7	4	0	153	1	55
11+25.96	25.96	22.01	14.58	0.00	21	14	0	174	1	62
11+31.78	5.82	22.19	11.69	0.00	5	3	0	179	1	64
11+50.00	18.22	18.97	11.88	0.00	14	8	0	193	1	70
11+70.45	20.45	19.13	12.30	0.00	14	9	0	207	1	75
11+97.35	26.90	21.98	17.14	1.10	20	15	1	227	3	79
12+00.00	2.65	24.18	18.29	0.79	2	2	0	229	3	79
12+06.30	6.30	25.44	21.62	0.00	6	5	0	235	3	80
12+40.94	34.64	27.85	22.16	0.00	34	28	0	269	3	86
12+50.00	9.06	25.49	22.30	0.00	9	7	0	278	3	88
12+59.75	9.75	24.42	18.17	0.36	9	7	0	287	3	90
12+86.66	26.91	20.52	13.88	0.00	22	16	0	309	3	96
13+00.00	13.34	21.60	14.10	0.00	10	7	0	319	3	99
13+50.00	50.00	26.34	14.86	0.00	44	27	0	363	3	116
13+73.37	23.37	27.50	14.94	0.00	23	13	0	386	3	126
14+00.00	26.63	32.28	16.83	0.00	29	16	0	415	3	139
14+03.30	3.30	32.72	17.06	0.00	4	2	0	419	3	141
14+08.99	5.69	33.35	17.47	0.00	7	4	0	426	3	144
14+50.00	41.01	33.88	20.73	0.54	51	29	0	477	3	166
14+86.91	36.91	28.72	23.73	0.63	43	30	1	520	4	177
14+89.00	2.09	34.30	23.90	0.69	2	2	0	522	4	177
14+90.00	1.00	34.47	23.98	0.70	1	1	0	523	4	177
14+95.00	5.00	36.90	24.33	0.69	7	4	0	530	4	180
15+00.00	5.00	42.27	24.61	0.59	7	5	0	537	4	182
15+05.00	5.00	50.08	25.15	0.72	9	5	0	546	4	186
15+10.00	5.00	59.20	26.15	0.00	10	5	0	556	4	191
15+15.00	5.00	51.79	27.72	0.00	10	5	0	566	4	196
15+20.00	5.00	39.72	29.51	0.00	8	5	0	574	4	199
15+25.00	5.00	38.54	29.14	0.00	7	5	0	581	4	201
15+30.00	5.00	40.79	28.07	0.00	7	5	0	588	4	203
15+35.00	5.00	42.63	27.00	0.00	8	5	0	596	4	206
15+40.00	5.00	37.88	25.92	0.00	7	5	0	603	4	208
15+45.00	5.00	39.16	24.85	0.00	7	5	0	610	4	210
15+50.00	5.00	36.09	23.78	0.00	7	5	0	617	4	212
15+55.00	5.00	28.39	22.59	0.00	6	4	0	623	4	214
15+60.00	5.00	34.21	34.06	0.00	6	5	0	629	4	215
15+62.75	2.75	40.07	37.95	0.00	4	4	0	633	4	215
15+63.75	1.00	81.59	37.52	0.00	2	1	0	635	4	216
15+65.00	1.25	80.46	37.01	0.00	4	2	0	639	4	218

DIVISION 5 - STAGE 5 - STH 54 EB MAINLINE

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
15+70.00	5.00	76.06	35.00	0.00	14	7	0	653	4	225
15+75.00	5.00	71.90	32.99	0.00	14	6	0	667	4	233
15+80.00	5.00	68.02	30.98	0.00	13	6	0	680	4	240
15+85.00	5.00	64.03	28.97	0.00	12	6	0	692	4	246
15+90.00	5.00	78.35	34.81	0.00	13	6	0	705	4	253
15+95.00	5.00	102.55	45.32	0.00	17	7	0	722	4	263
16+00.00	5.00	124.48	55.82	0.00	21	9	0	743	4	275
16+05.00	5.00	143.99	66.33	0.00	25	11	0	768	4	289
16+10.00	5.00	162.23	76.84	0.00	28	13	0	796	4	304
16+15.00	5.00	164.14	69.43	1.79	30	14	0	826	4	320
16+20.00	5.00	139.04	59.69	2.31	28	12	0	854	4	336
16+25.00	5.00	118.48	52.63	0.34	24	10	0	878	4	350
16+30.00	5.00	101.94	47.76	2.13	20	9	0	898	4	361
16+35.00	5.00	90.29	43.35	3.01	18	8	0	916	4	371
16+40.00	5.00	81.01	39.98	3.37	16	8	1	932	5	378
16+45.00	5.00	76.01	37.31	2.80	15	7	1	947	6	385
16+50.00	5.00	70.92	34.80	1.43	14	7	0	961	6	392
16+55.00	5.00	65.69	32.71	1.27	13	6	0	974	6	399
16+60.00	5.00	61.36	31.12	1.21	12	6	0	986	6	405
16+60.63	0.63	60.94	30.97	1.22	1	1	0	987	6	405
16+61.63	1.00	10.55	10.55	1.27	1	1	0	988	6	405
16+65.00	3.37	6.36	6.36	1.40	1	1	0	989	6	405
16+70.00	5.00	5.55	5.55	1.34	1	1	0	990	6	405
16+75.00	5.00	6.18	6.18	1.09	1	1	0	991	6	405
16+80.00	5.00	5.90	5.90	0.37	1	1	0	992	6	405
16+81.74	1.74	5.91	5.91	0.38	0	0	0	992	6	405
17+00.00	18.26	7.07	7.07	1.33	4	4	1	996	8	404
17+04.58	4.58	8.28	8.28	1.30	1	1	0	997	8	404
17+05.01	0.43	9.80	9.80	1.30	0	0	0	997	8	404
17+40.00	34.99	13.73	10.90	0.74	15	13	1	1,012	9	404
17+50.00	10.00	15.12	10.88	0.58	5	4	0	1,017	9	405
17+55.00	5.00	15.76	10.88	0.45	3	2	0	1,020	9	406
17+80.00	25.00	18.76	10.89	0.63	16	10	1	1,036	10	411
17+91.14	11.14	19.63	10.87	0.58	8	4	0	1,044	10	415
18+00.00	8.86	19.98	10.87	0.53	6	4	0	1,050	10	417
18+04.00	4.00	20.04	10.86	0.52	3	2	0	1,053	10	418
18+04.34	0.34	16.53	10.86	0.00	0	0	0	1,053	10	418
18+50.00	45.66	16.72	10.91	0.00	28	18	0	1,081	10	428
19+00.00	50.00	16.53	10.90	0.00	31	20	0	1,112	10	439
19+29.28	29.28	16.24	10.87	0.00	18	12	0	1,130	10	445
19+29.63	0.35	14.59	10.87	0.00	0	0	0	1,130	10	445
19+50.00	20.37	14.80	10.83	0.00	11	8	0	1,141	10	448
20+00.00	50.00	15.76	10.76	0.00	28	20	0	1,169	10	456
20+50.00	50.00	15.69	10.80	0.00	29	20	0	1,198	10	465
21+00.00	50.00	16.59	10.82	0.00	30	20	0	1,228	10	475
21+50.00	50.00	17.37	10.78	0.00	31	20	0	1,259	10	486
21+75.00	25.00	16.49	10.79	0.00	16	10	0	1,275	10	492

DIVISION 5 - STAGE 5 - CTH D INTERSECTION

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
105+22.68	0.00	1.63	0.00	0.18	0	0	0	0	0	0
105+30.00	7.32	11.13	0.09	0.15	2	0	0	2	0	2
105+40.00	10.00	13.64	0.21	0.08	5	0	0	7	0	7
105+50.00	10.00	16.15	0.49	0.02	6	0	0	13	0	13
105+60.00	10.00	18.73	0.78	0.00	6	0	0	19	0	19
105+70.00	10.00	21.33	1.06	0.00	7	0	0	26	0	26
105+80.00	10.00	23.92	1.35	0.00	8	0	0	34	0	34
105+90.00	10.00	26.47	1.63	0.00	9	1	0	43	0	42
106+00.00	10.00	29.02	1.92	0.00	10	1	0	53	0	51
106+10.00	10.00	31.62	2.20	0.00	11	1	0	64	0	61
106+20.00	10.00	162.67	57.53	0.00	36	11	0	100	0	86
106+30.00	10.00	165.47	57.99	0.16	61	21	0	161	0	126
106+40.00	10.00	172.20	59.70	0.27	63	22	0	224	0	167
106+50.00	10.00	163.73	63.63	0.48	62	23	0	286	0	206
106+60.00	10.00	138.84	65.56	0.00	56	24	0	342	0	238
106+70.00	10.00	118.84	55.26	0.00	48	22	0	390	0	264
106+80.00	10.00	97.29	43.34	0.00	40	18	0	430	0	286
106+90.00	10.00	69.72	29.91	0.00	31	14	0	461	0	303
107+00.00	10.00	33.88	14.51	0.00	19	8	0	480	0	314
107+09.30	9.30	0.45	0.19	0.00	6	3	0	486	0	317

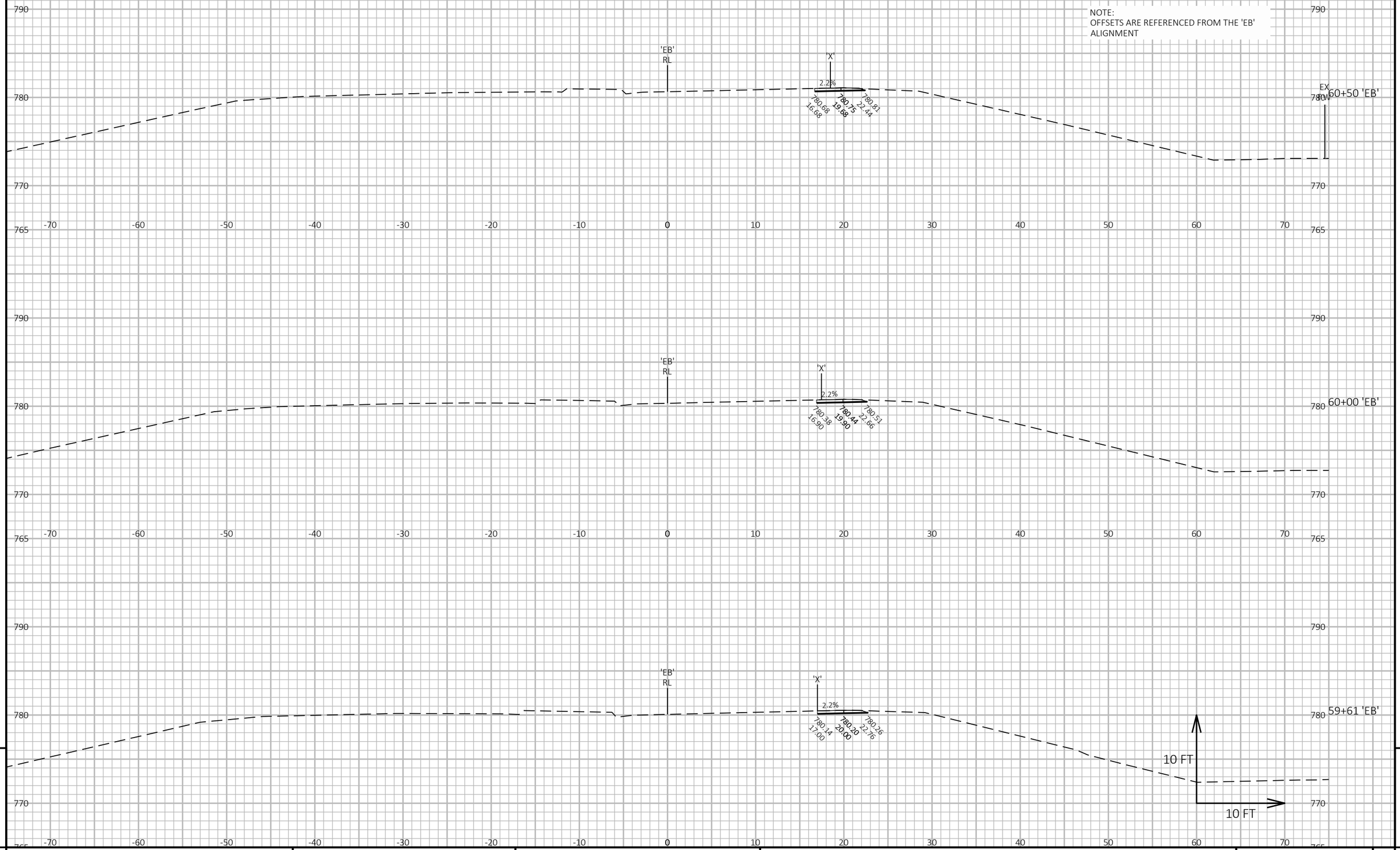
DIVISION 6 - STAGE 6 - REMOVE TEMPORARY WIDENING 'Y' - STH 54 WB

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
208+51.80	0.00	8.25	0.07	0.00	0	0	0	0	0	0
209+00.00	48.20	8.24	1.56	0.00	15	1	0	15	0	14
209+50.00	50.00	7.44	1.38	0.00	15	3	0	30	0	26
210+00.00	50.00	6.49	1.19	0.00	13	2	0	43	0	37
210+50.00	50.00	4.28	0.79	0.00	10	2	0	53	0	45
211+00.00	50.00	2.06	0.38	0.00	6	1	0	59	0	50
211+37.09	37.09	0.93	0.08	1.78	2	0	1	61	1	51

DIVISION 6 - STAGE 6 - STH 54 WEST MEDIAN - STH 54 EB & WB

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
211+28.39	0.00	4.25	0.00	0.00	0	0	0	0	0	0
211+50.00	21.61	5.43	0.00	0.00	4	0	0	4	0	4
212+00.00	50.00	7.80	0.00	0.00	12	0	0	16	0	16
212+37.76	37.76	9.50	0.00	0.00	12	0	0	28	0	28
212+50.00	12.24	9.46	0.00	0.00	4	0	0	32	0	32
213+00.00	50.00	8.68	0.00	0.00	17	0	0	49	0	49
213+50.00	50.00	7.29	0.00	0.00	15	0	0	64	0	64
214+00.00	50.00	5.06	0.00	0.00	11	0	0	75	0	75
214+07.16	7.16	4.88	0.00	0.00	1	0	0	76	0	76
214+50.00	42.84	4.81	0.00	0.00	8	0	0	84	0	84
215+00.00	50.00	4.80	0.00	0.00	9	0	0	93	0	93
215+34.65	34.65	7.09	0.00	0.00	8	0	0	101	0	101

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



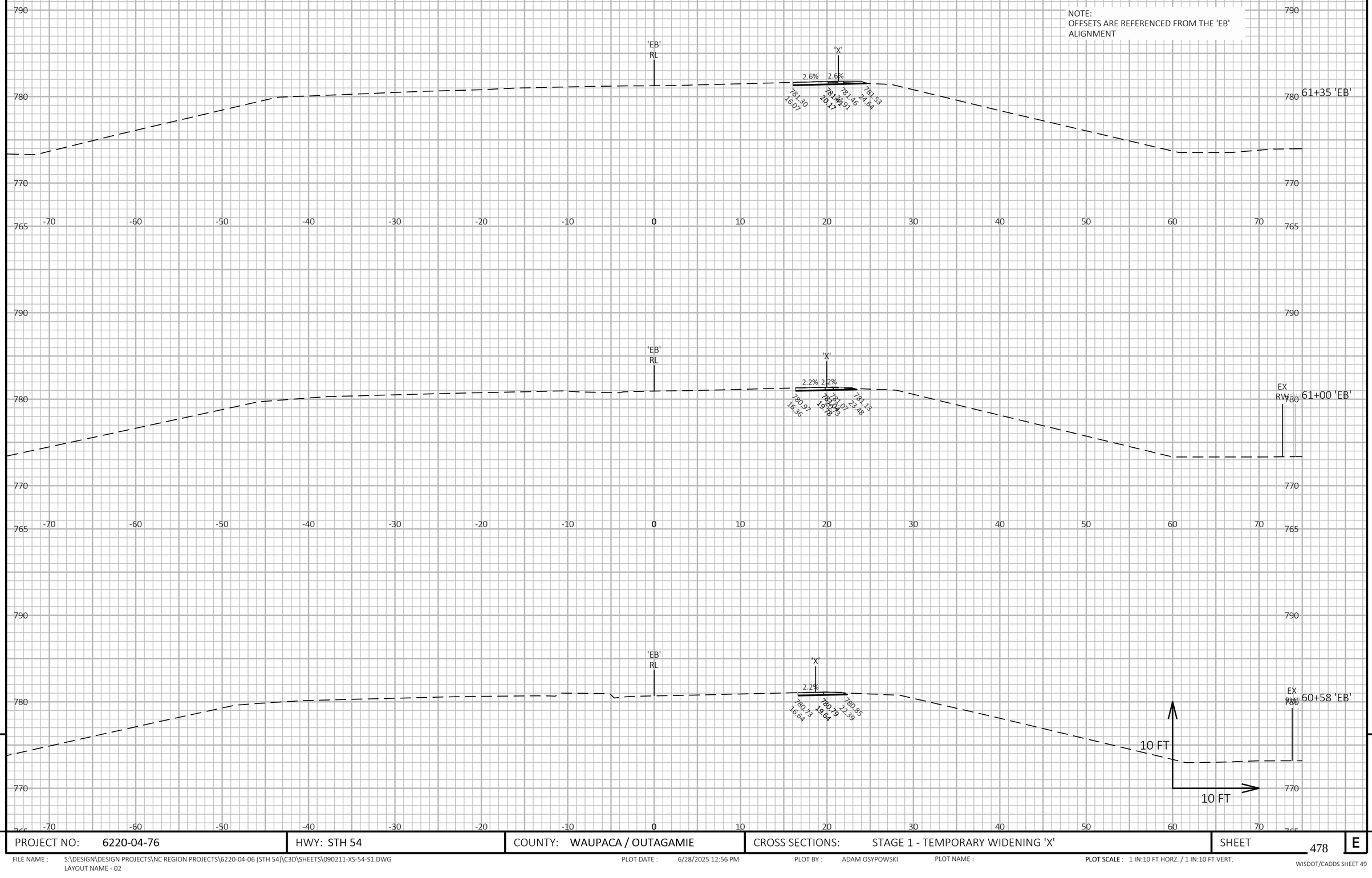
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 477 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



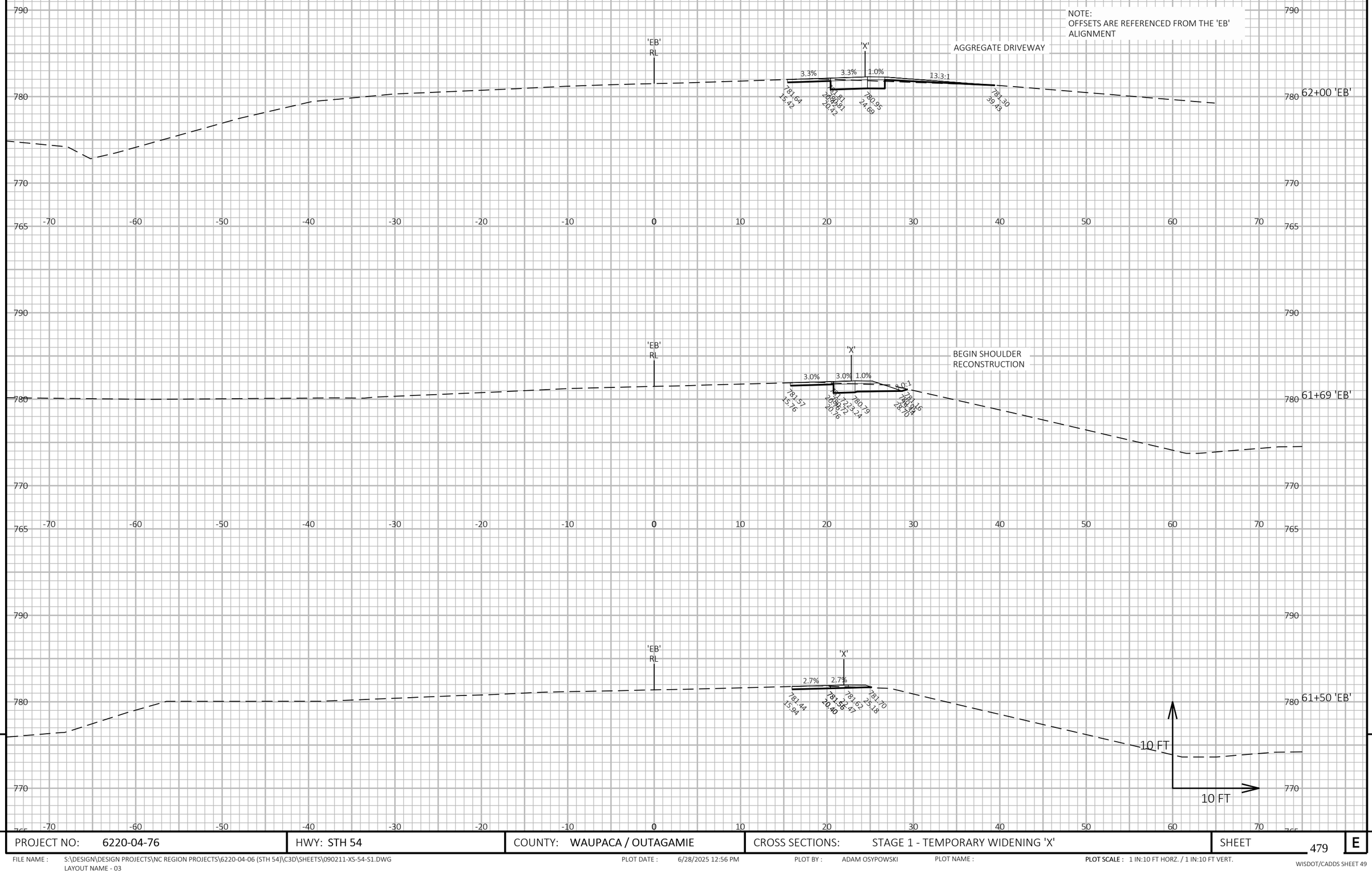
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 478	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



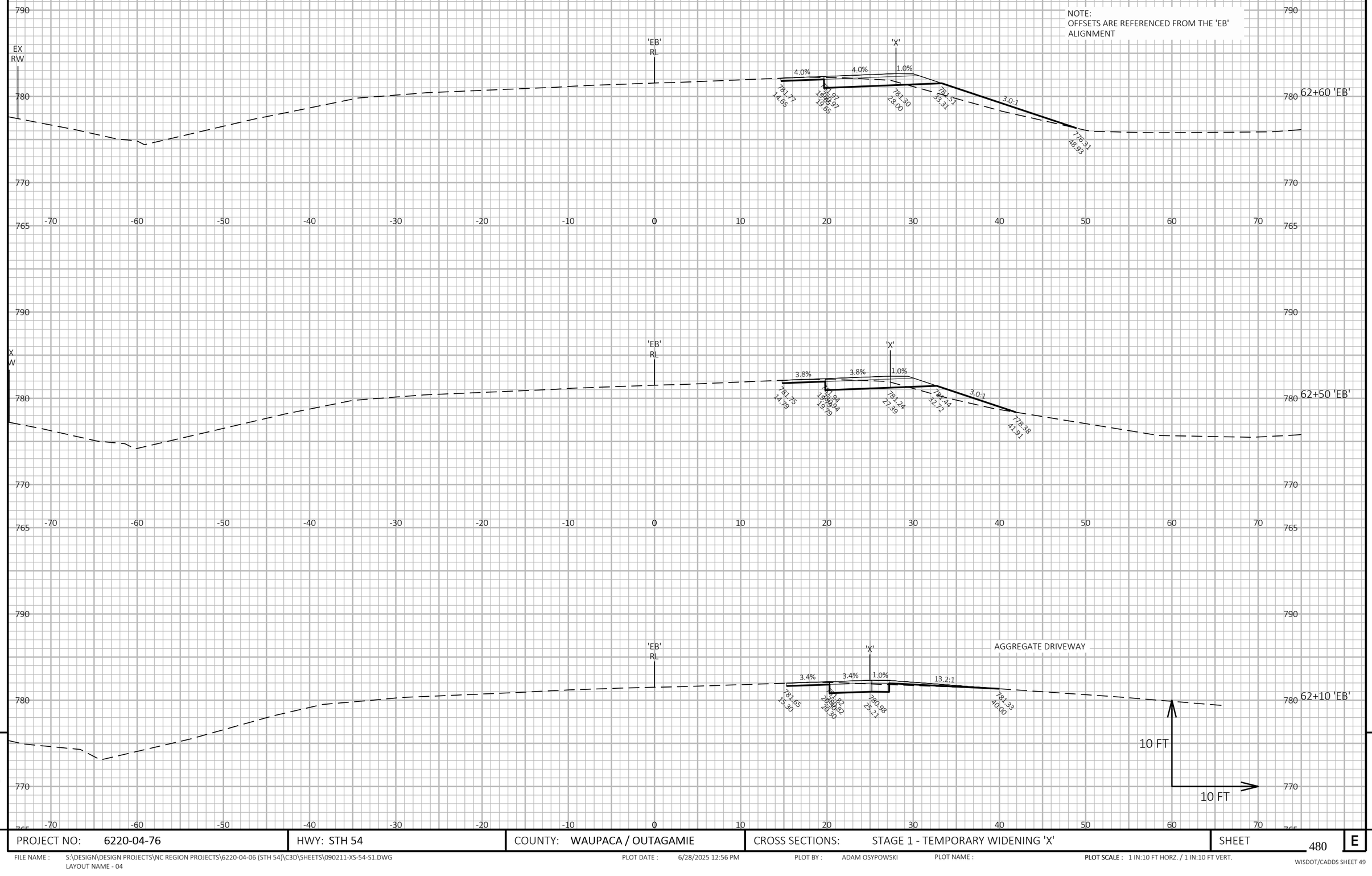
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 479	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



9

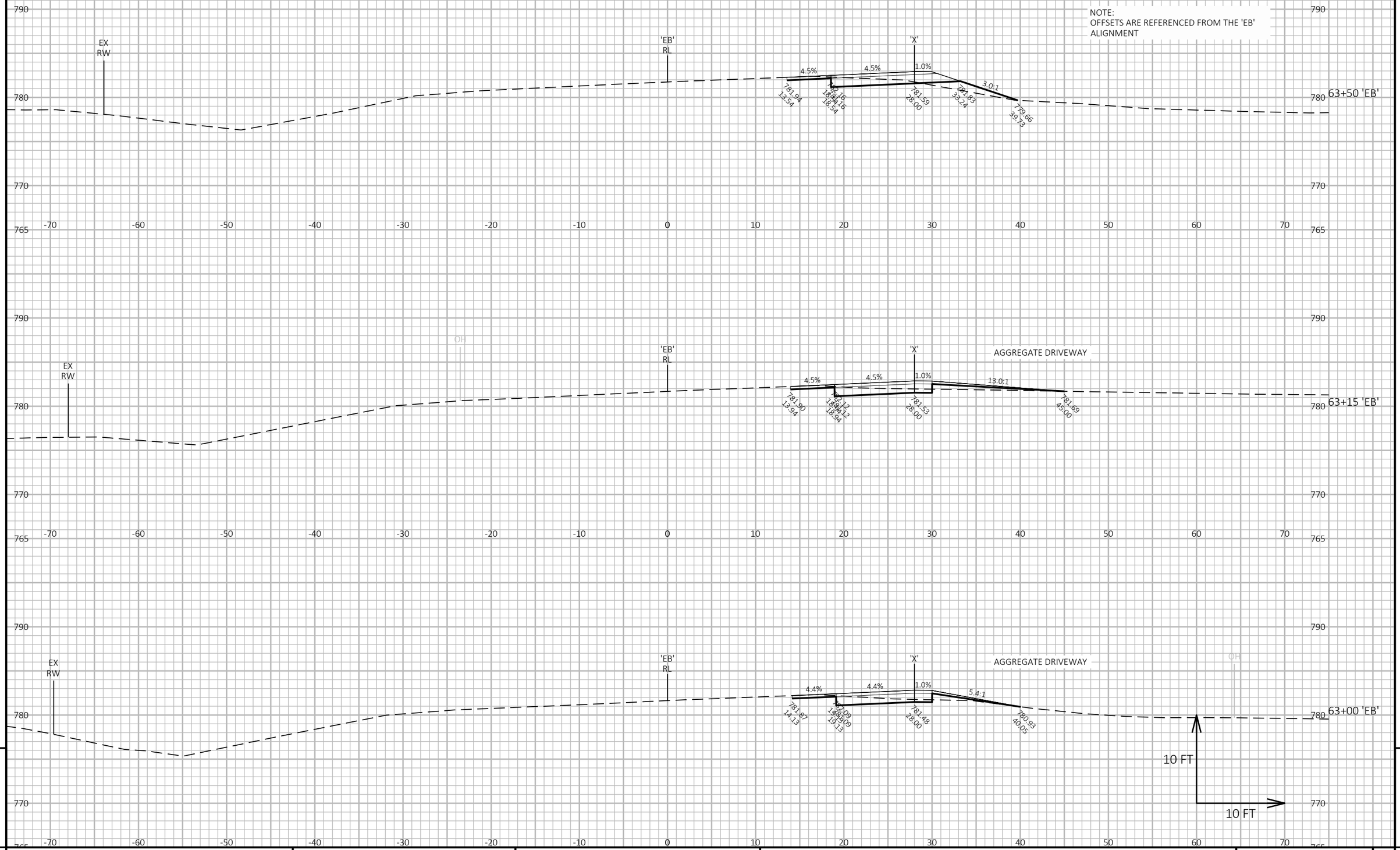
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 480	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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9

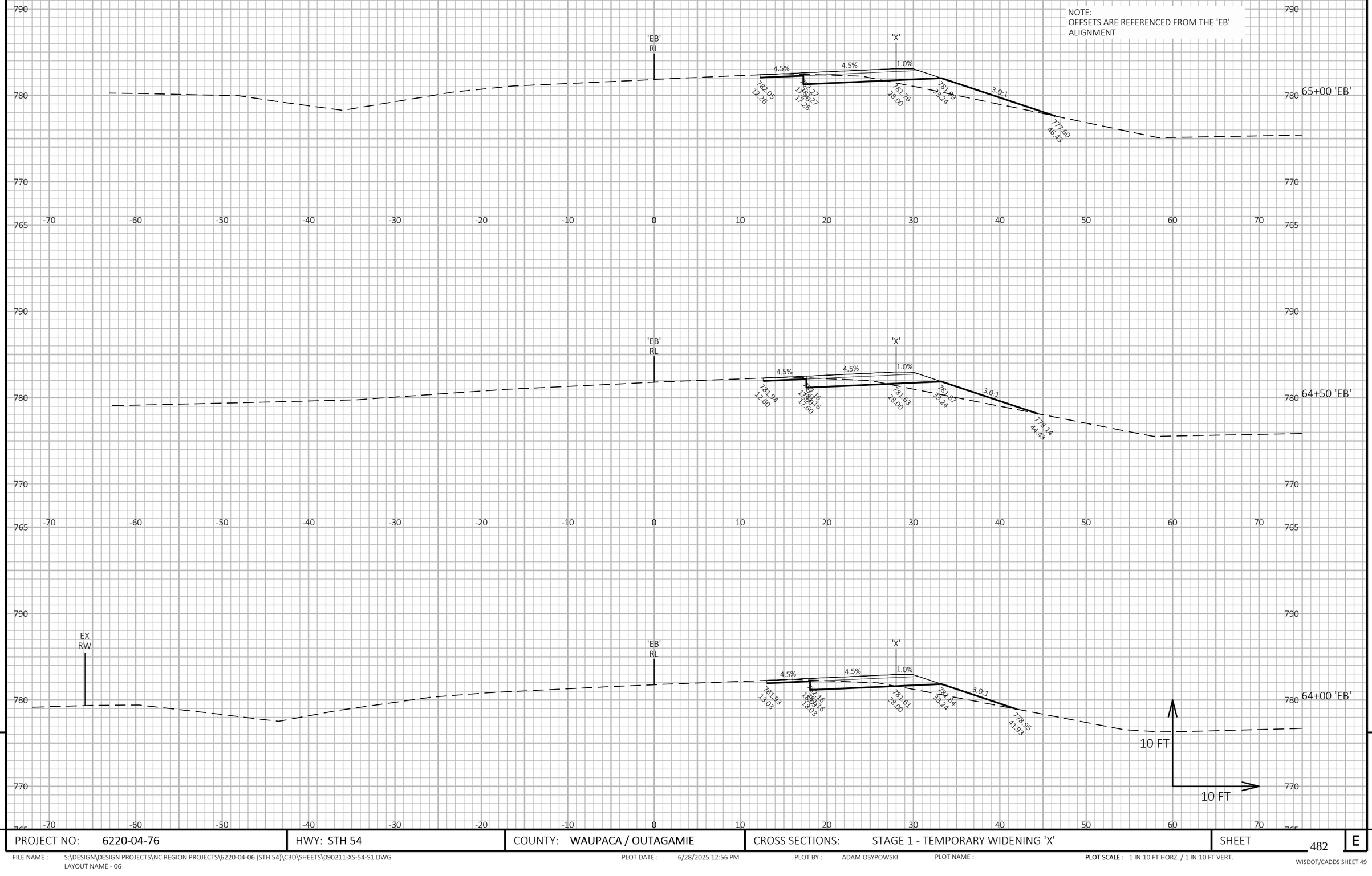
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 481	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



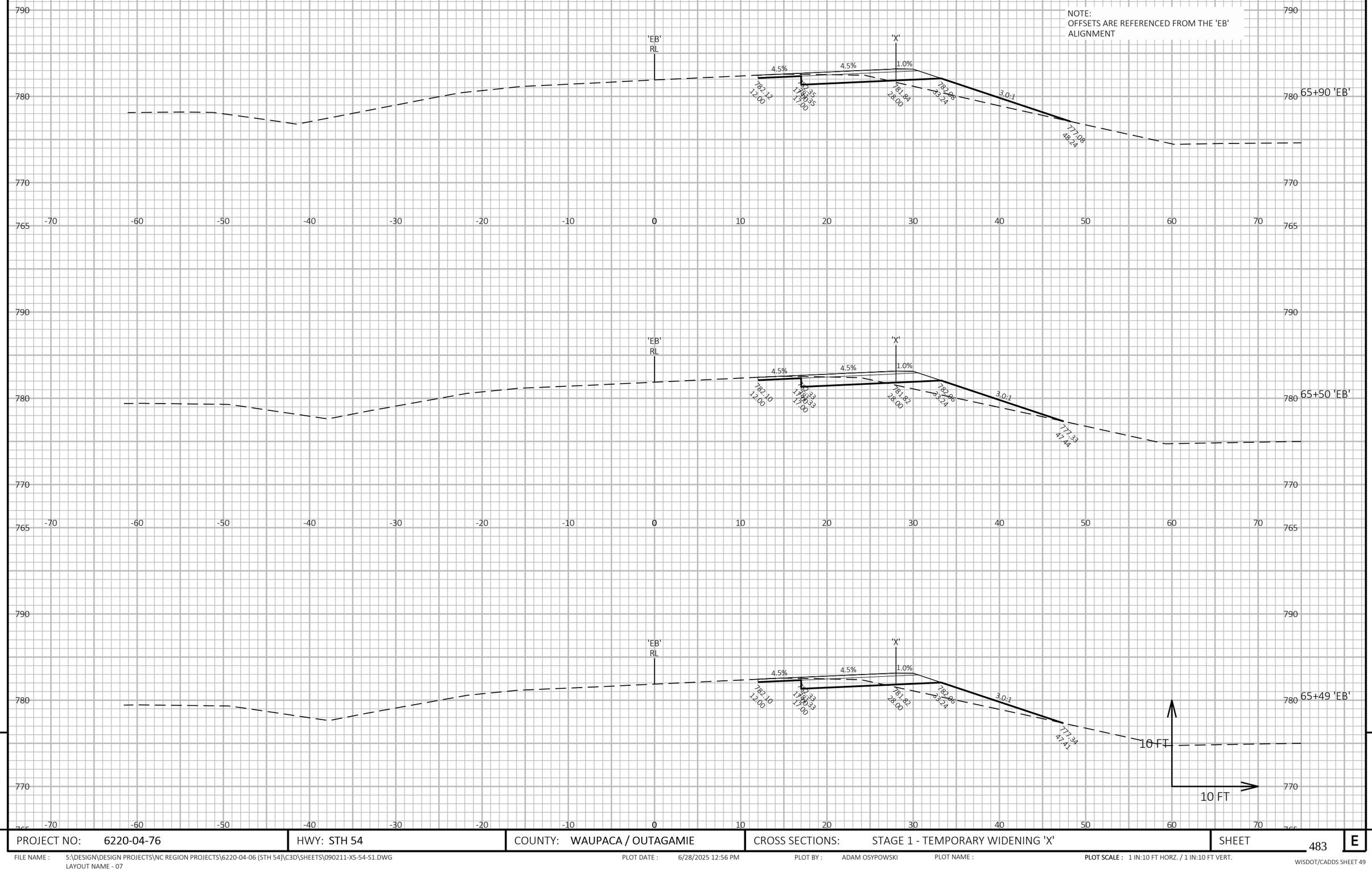
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 482 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 483	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT

9

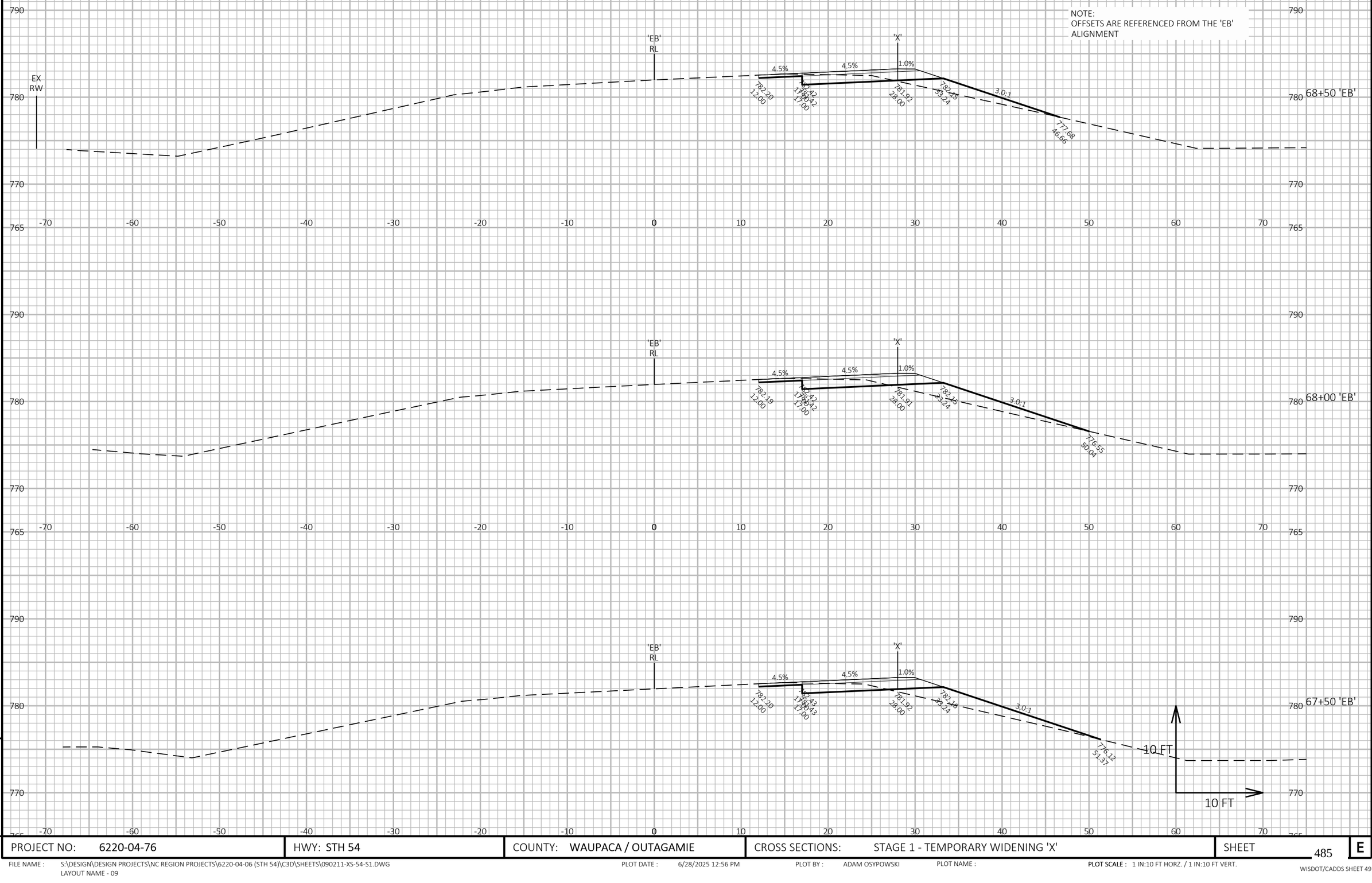
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 484	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 08

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



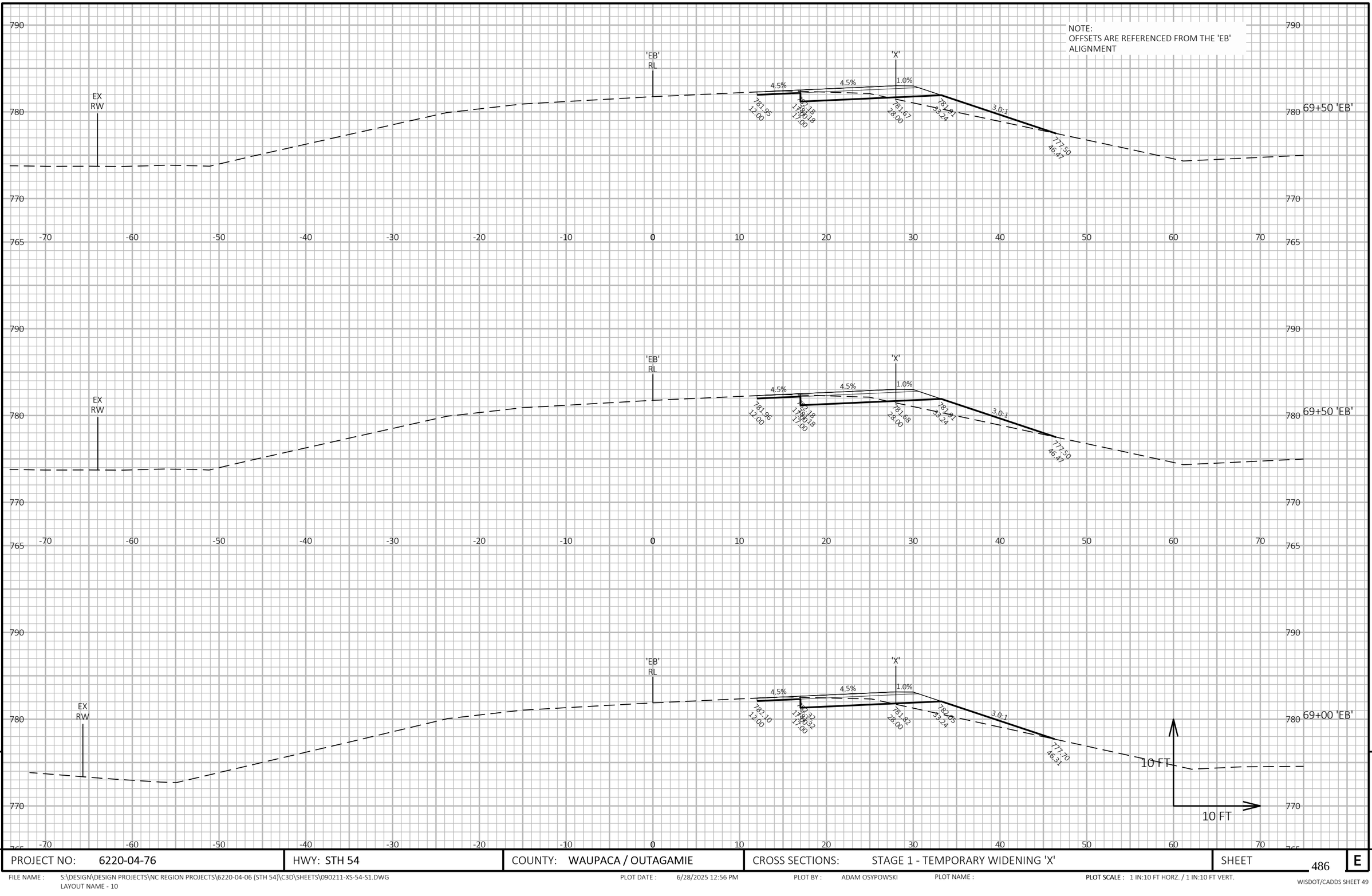
9

9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 485	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 09

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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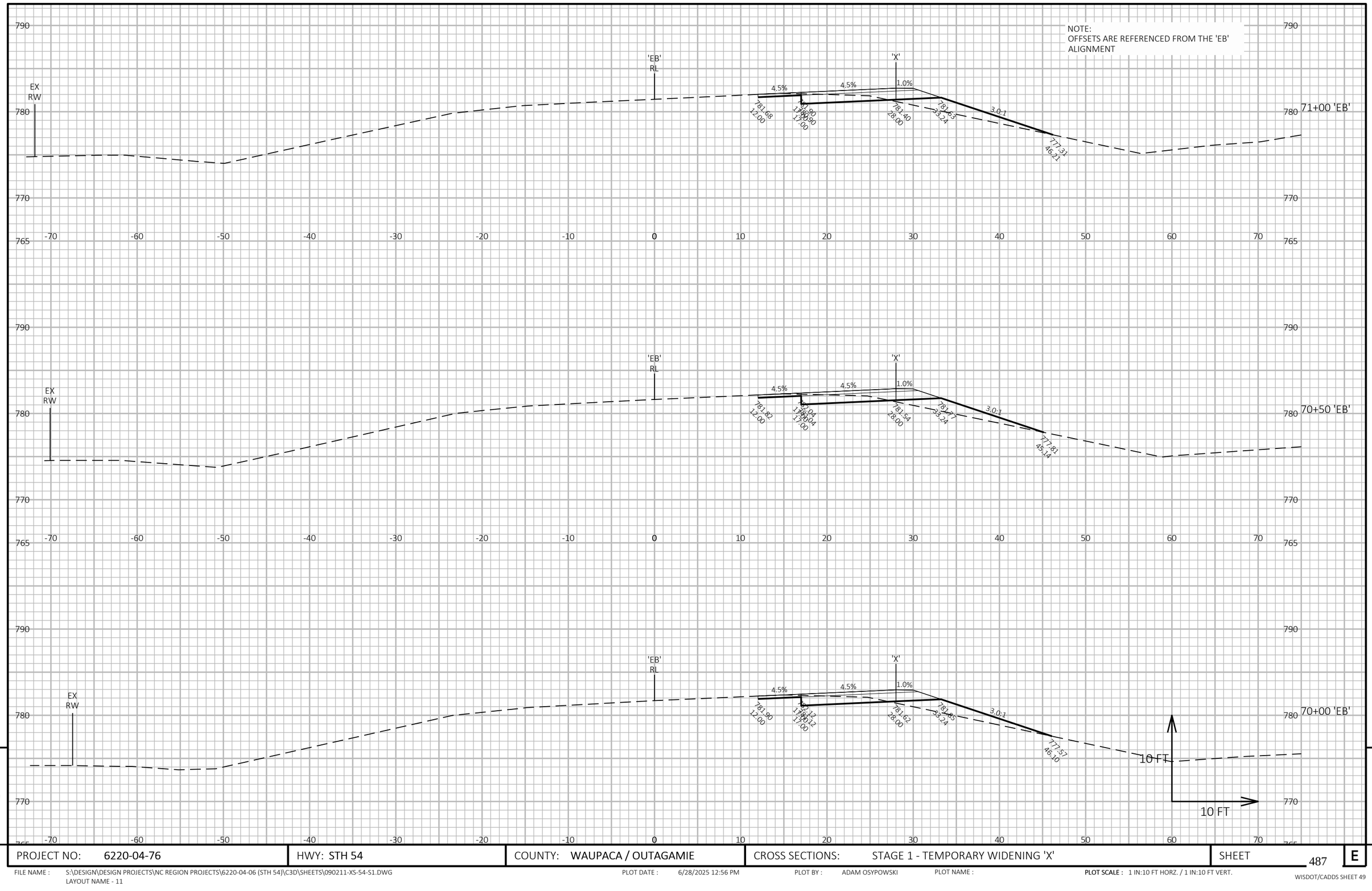
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 486	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 487 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 11

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT

9

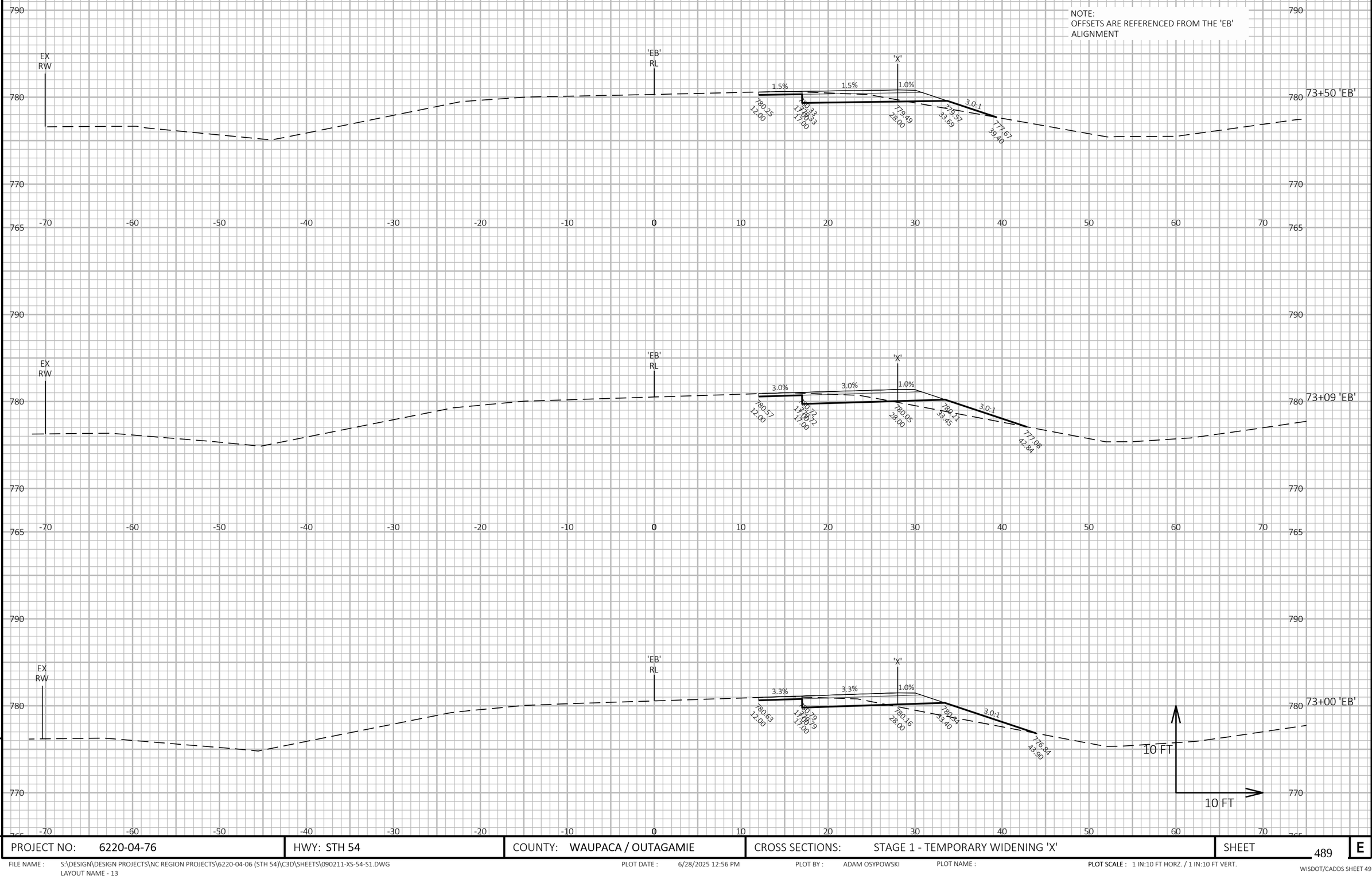
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 488	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 12

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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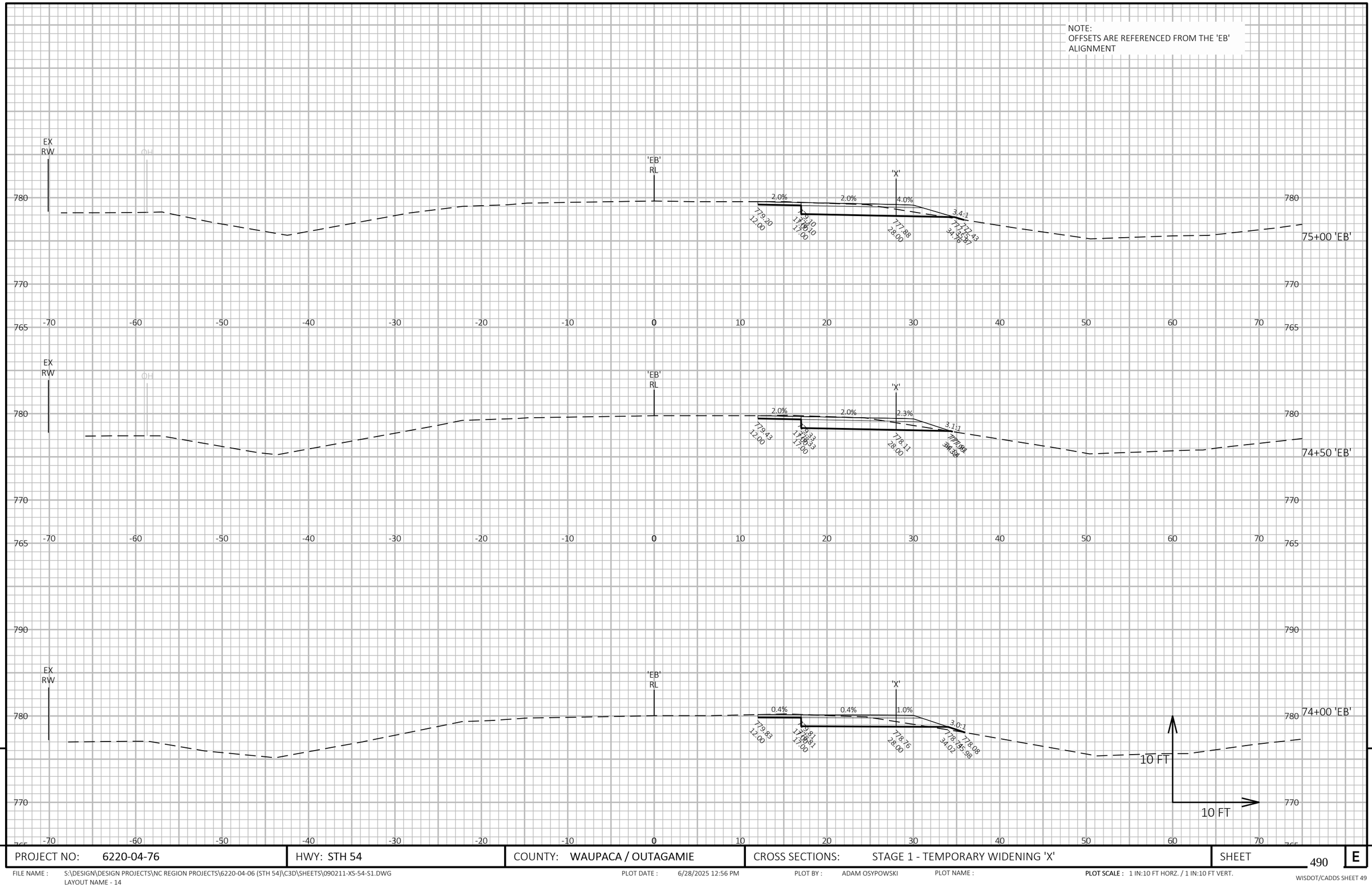
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 489	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 13

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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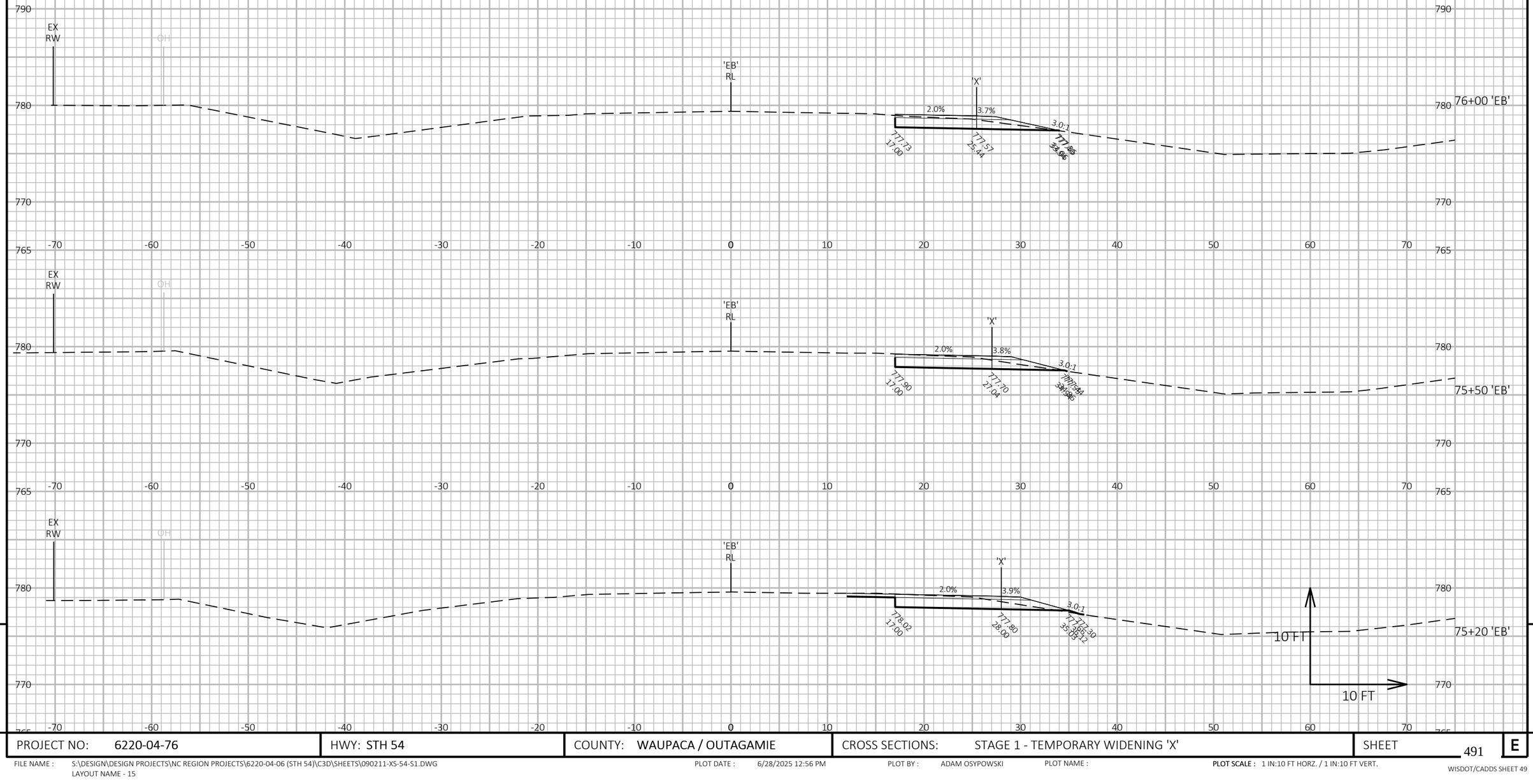
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 490	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 14

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT

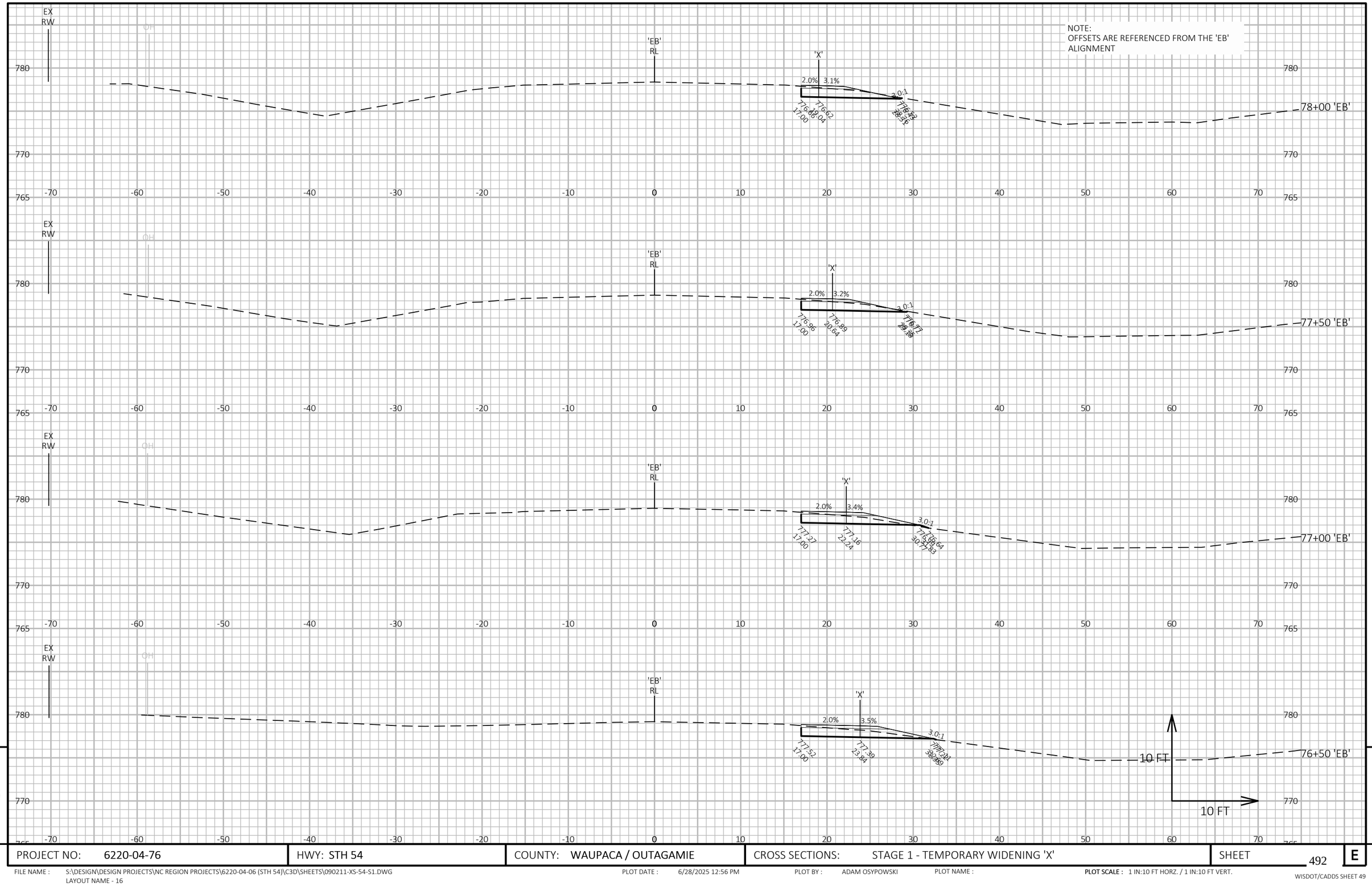


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 491	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 15

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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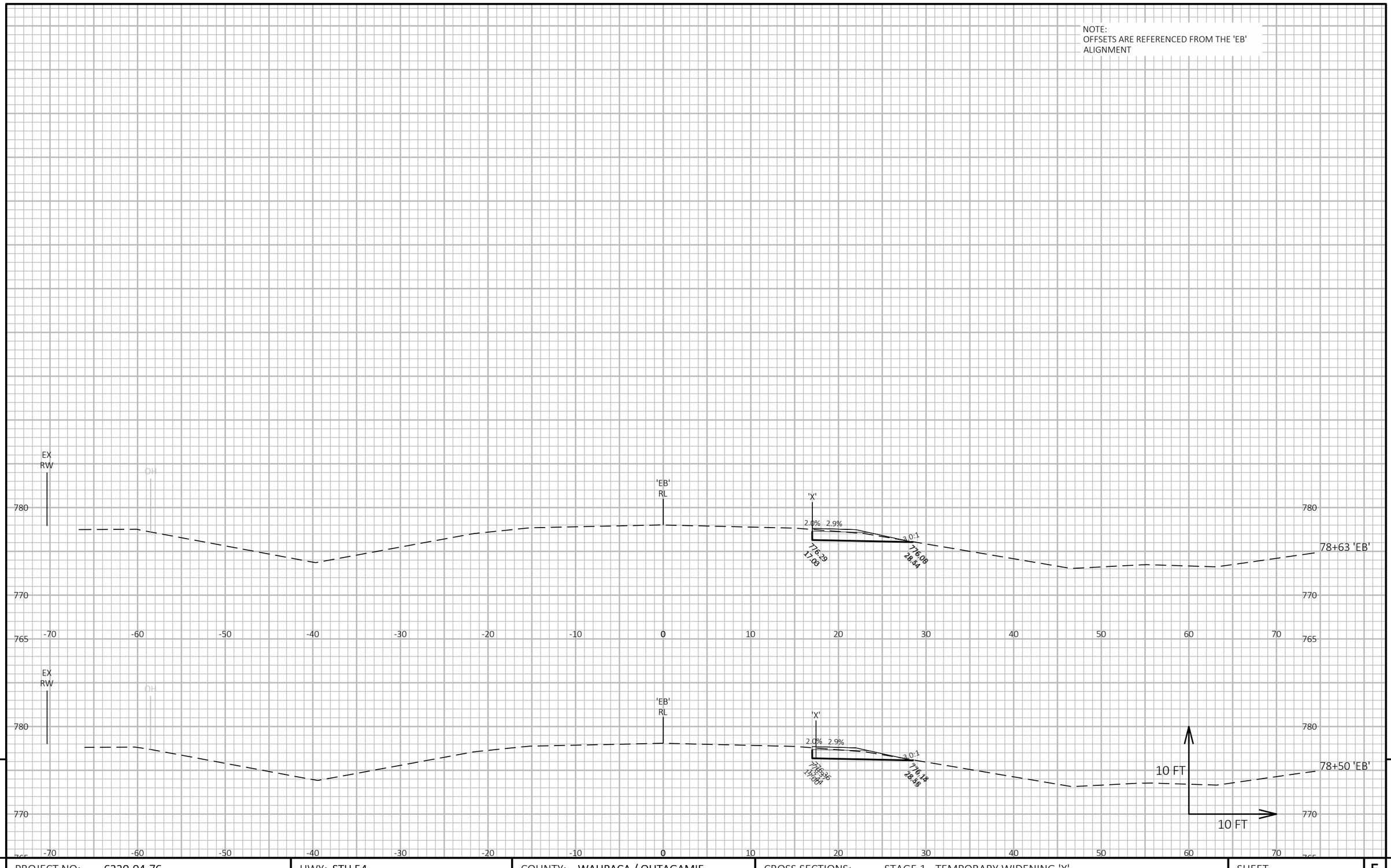
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 492	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 16

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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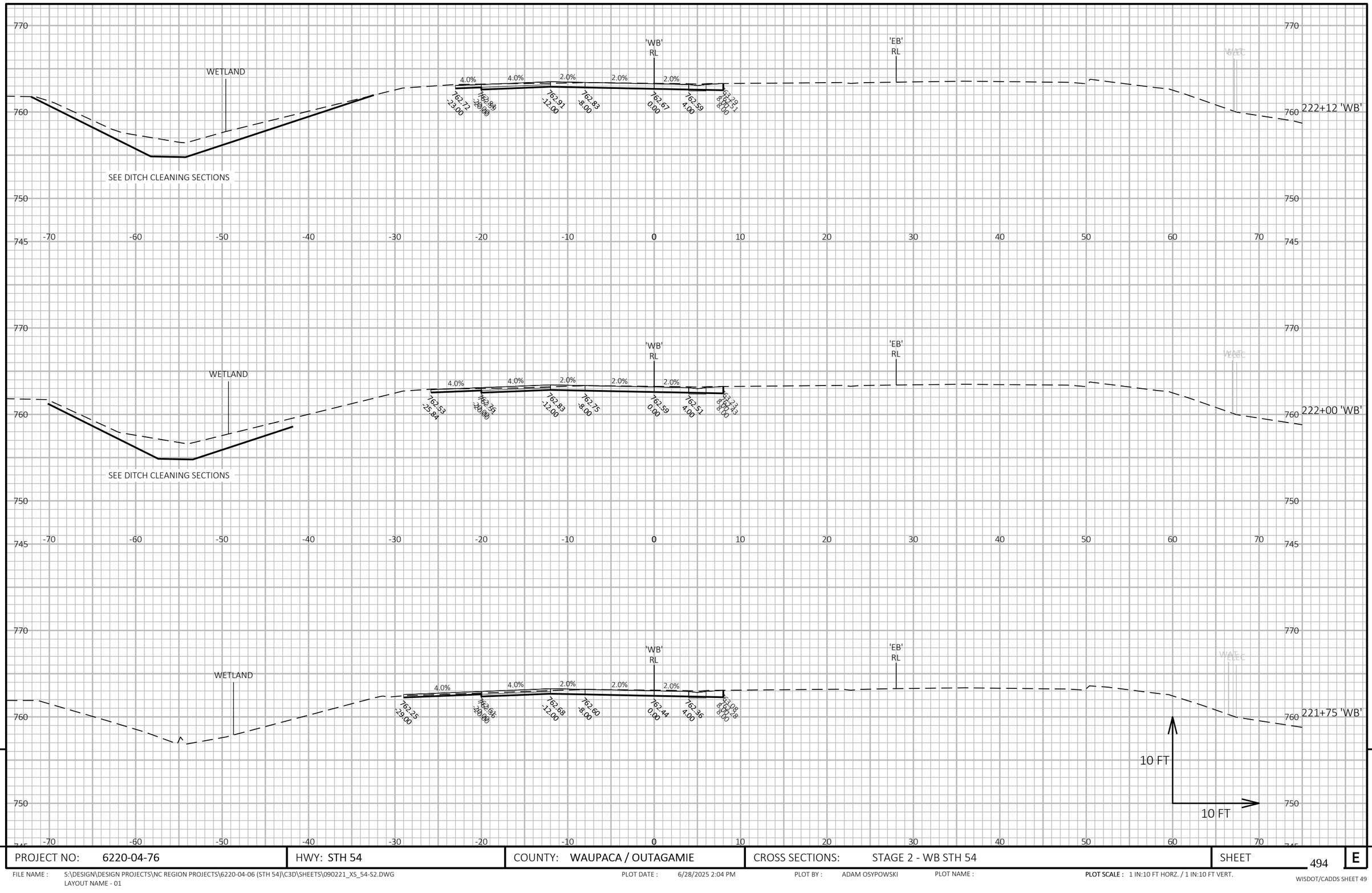
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 1 - TEMPORARY WIDENING 'X'	SHEET 493	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090211-XS-54-S1.DWG
LAYOUT NAME - 17

PLOT DATE : 6/28/2025 12:56 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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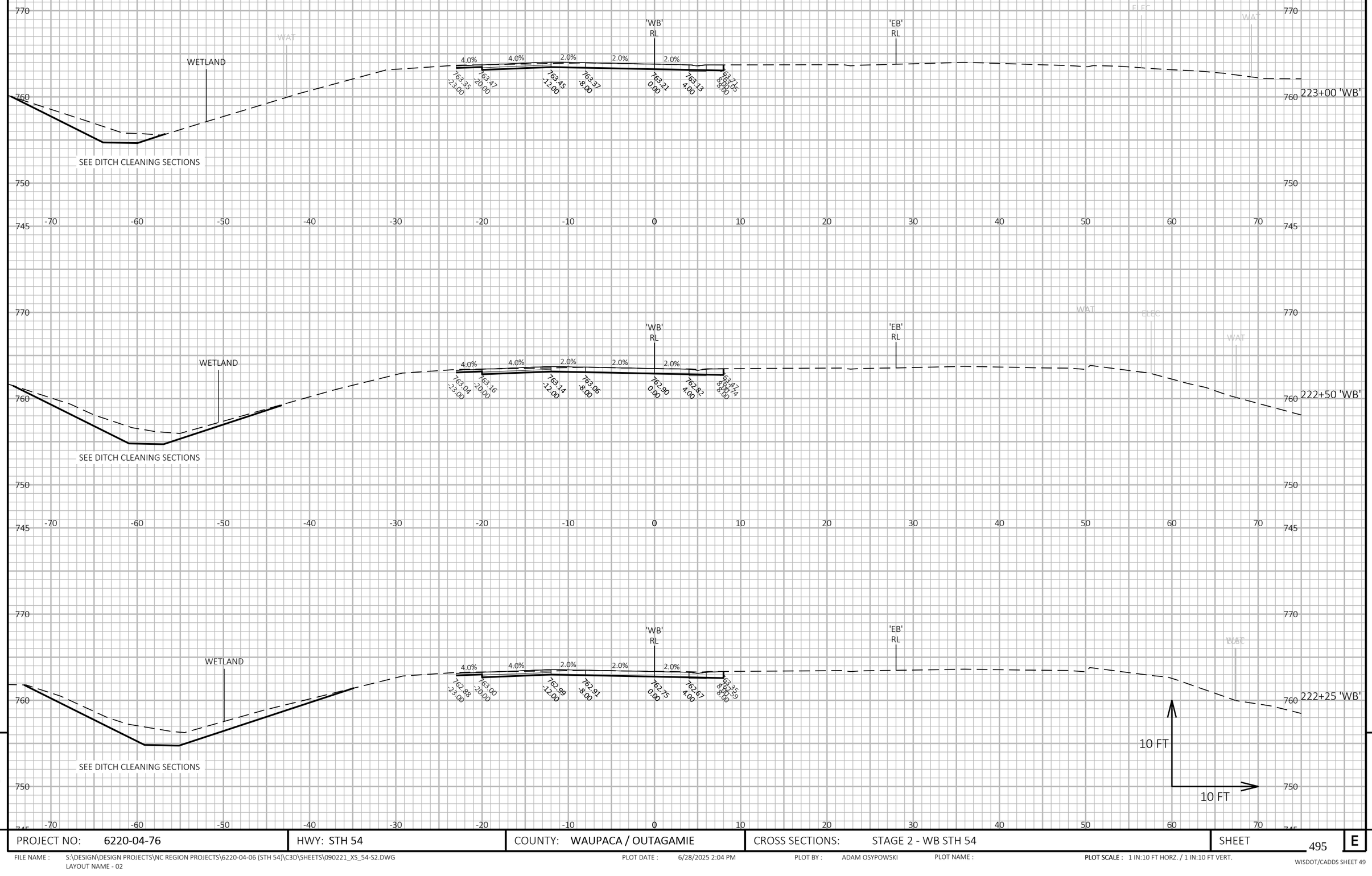
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 494	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 2:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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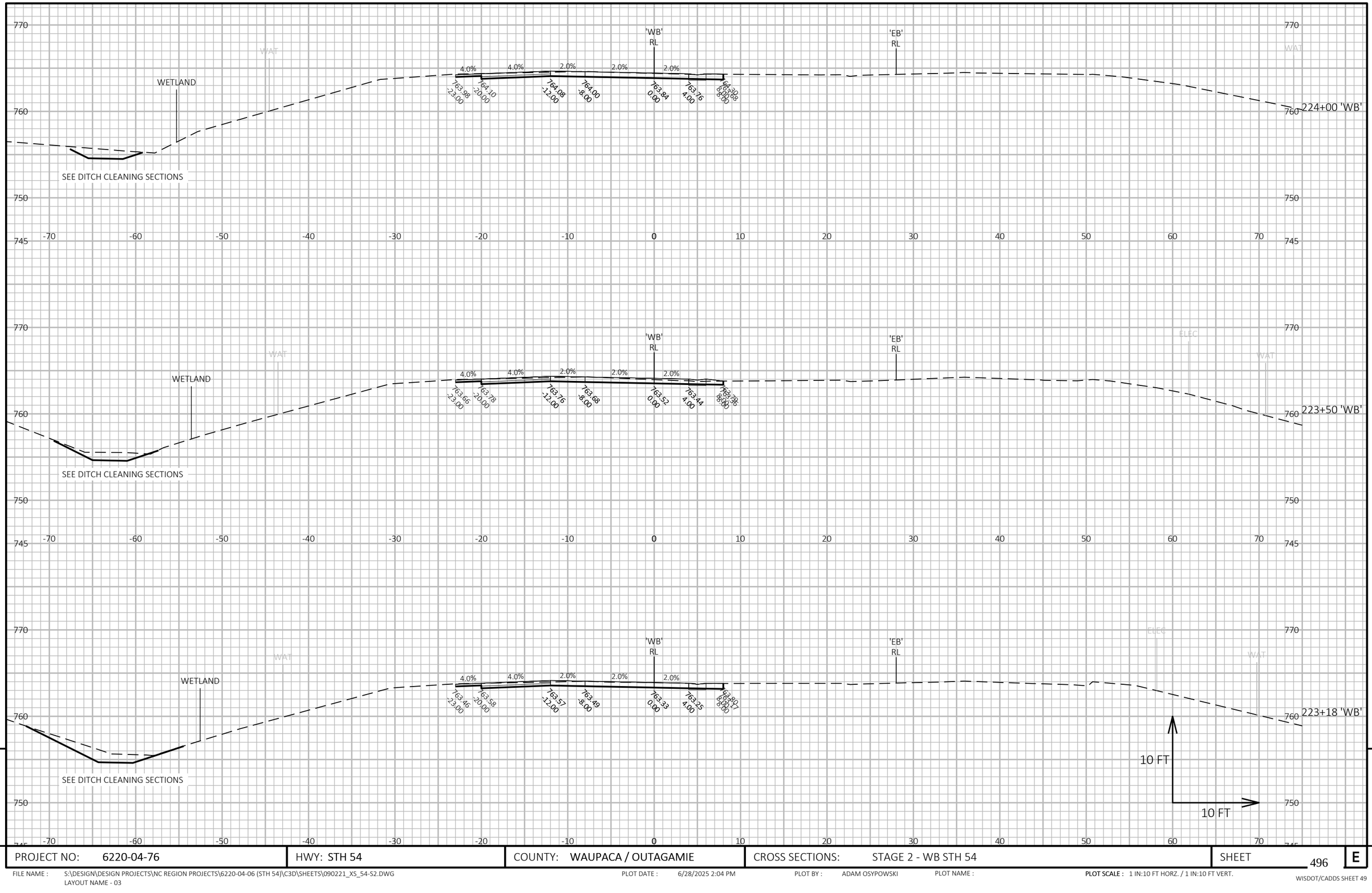
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 495	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 2:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 496	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 03

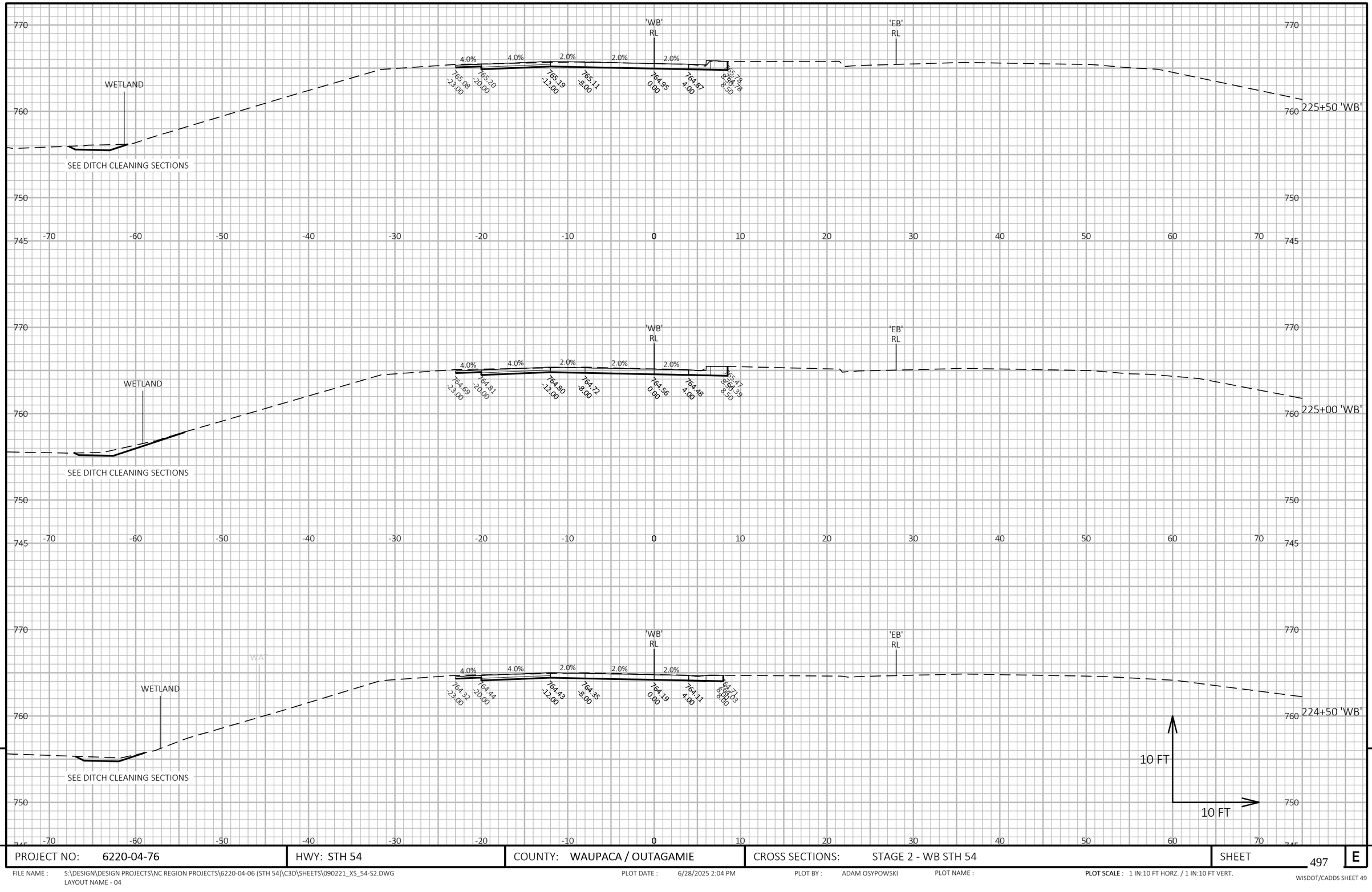
PLOT DATE : 6/28/2025 2:04 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 497	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 2:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN FULL DEPTH PAVEMENT OUTSIDE OF TRAVEL LANE FOR USH 45 SB RAMPS

'WB' RL

'EB' RL

WETLAND

SEE DITCH CLEANING SECTIONS

4.0% 4.0% 2.0% 2.0% 2.0% 2.0%

765.92 -22.00 | 766.04 -20.00 | 766.36 -12.00 | 766.28 -8.00 | 766.12 0.00 | 766.04 4.00

226+96 'WB'

4.0% 4.0% 2.0% 2.0% 2.0%

765.89 -22.00 | 766.01 -20.00 | 765.99 -12.00 | 765.91 -8.00 | 765.75 0.00 | 765.67 4.00

226+50 'WB'

4.0% 4.0% 2.0% 2.0% 2.0%

765.48 -23.00 | 765.60 -20.00 | 765.59 -12.00 | 765.51 -8.00 | 765.35 0.00 | 765.27 4.00 | 766.15 8.60 | 766.18 8.20

226+00 'WB'

10 FT

10 FT

770 760 750 745

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9

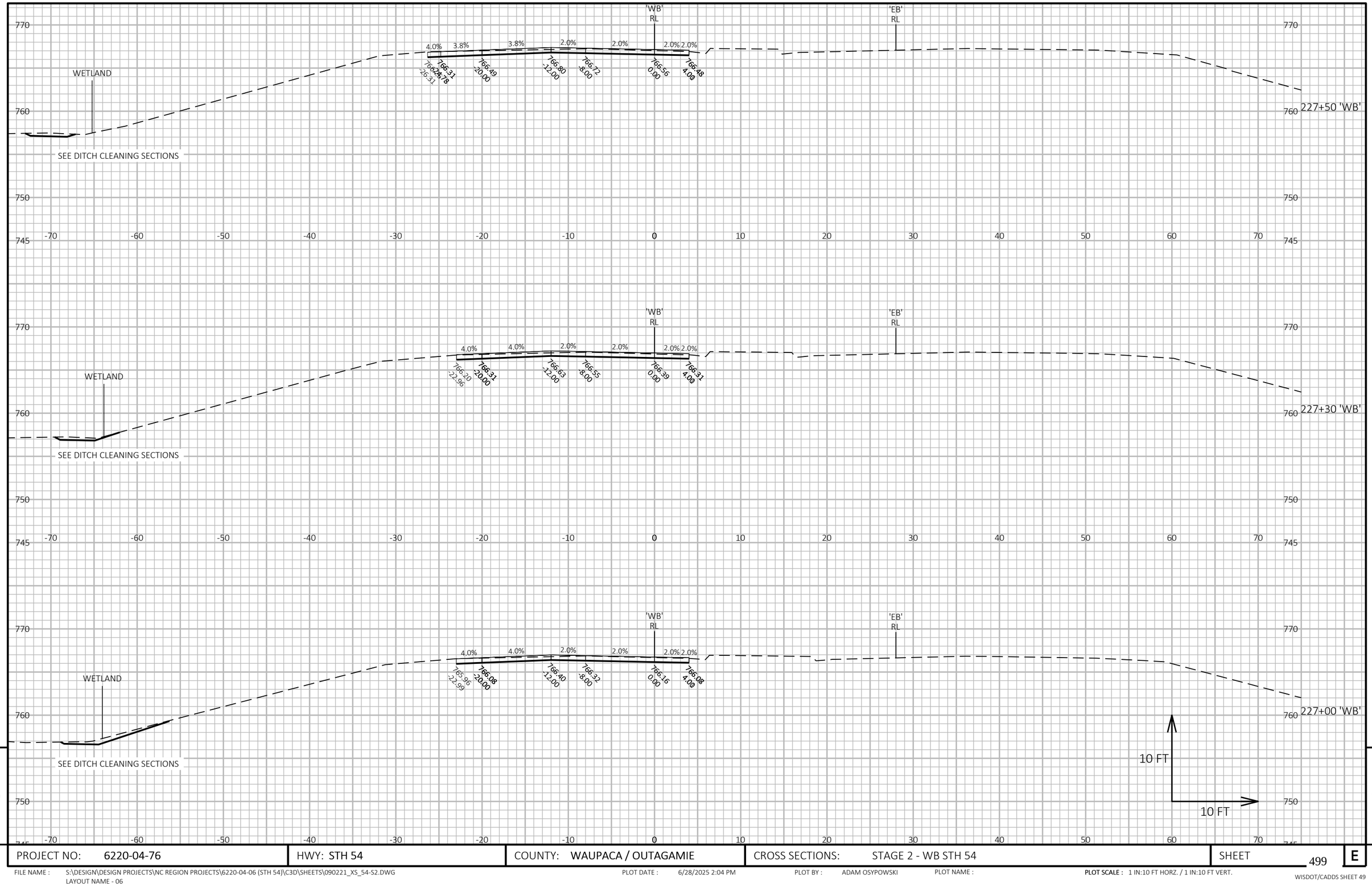
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 498	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 2:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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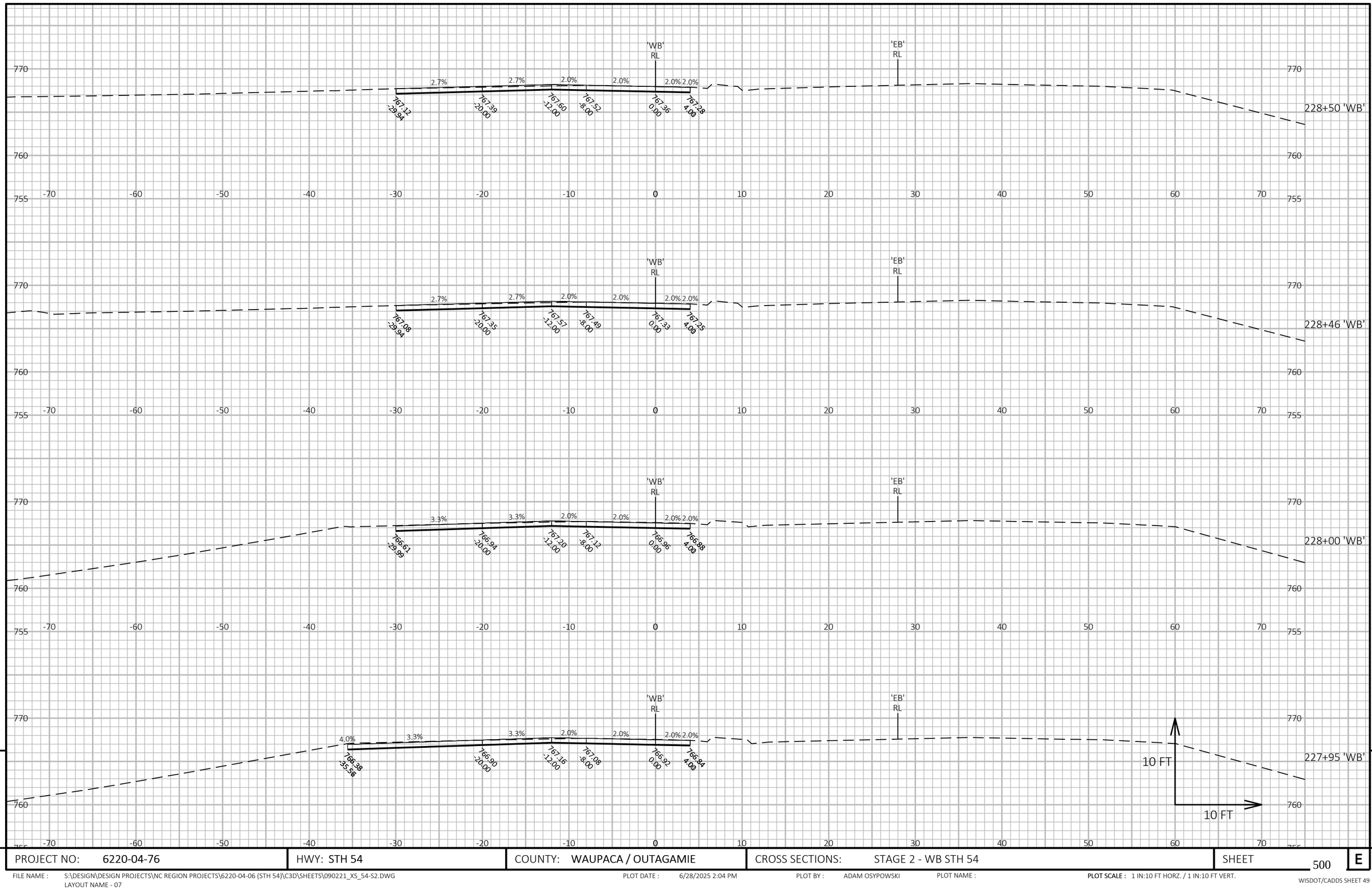
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 499	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 2:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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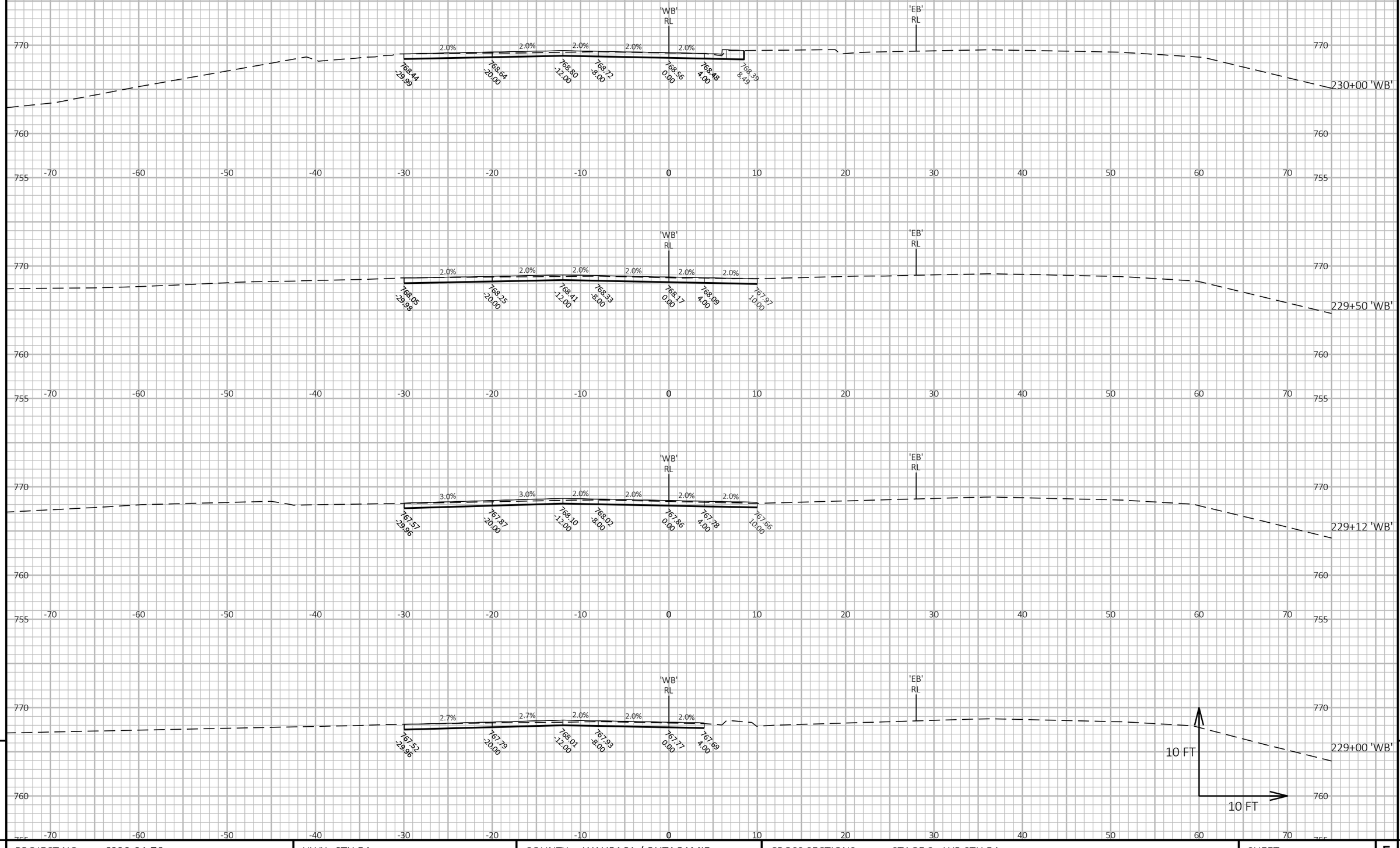
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 500	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 2:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 501	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 08

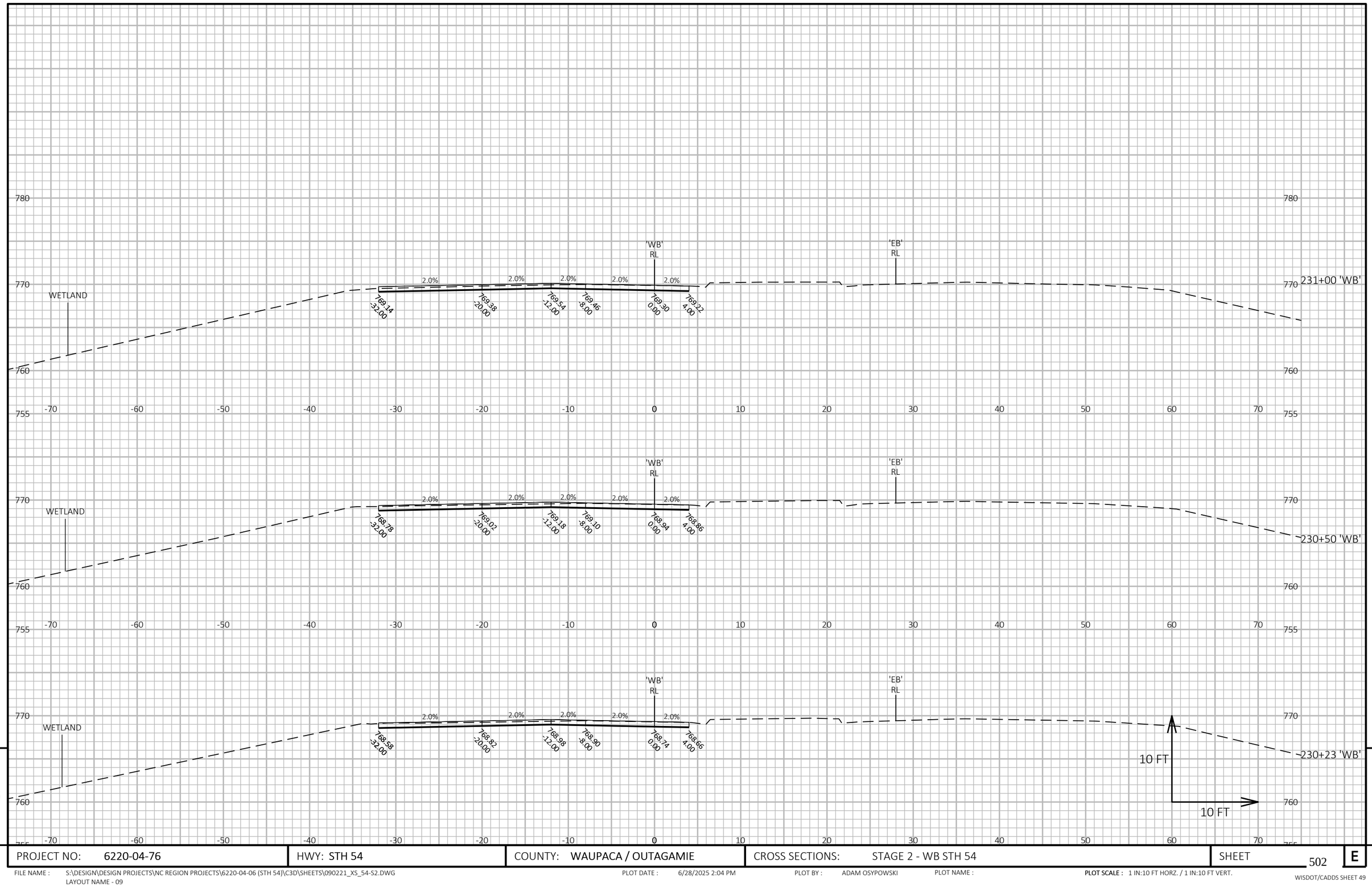
PLOT DATE : 6/28/2025 2:04 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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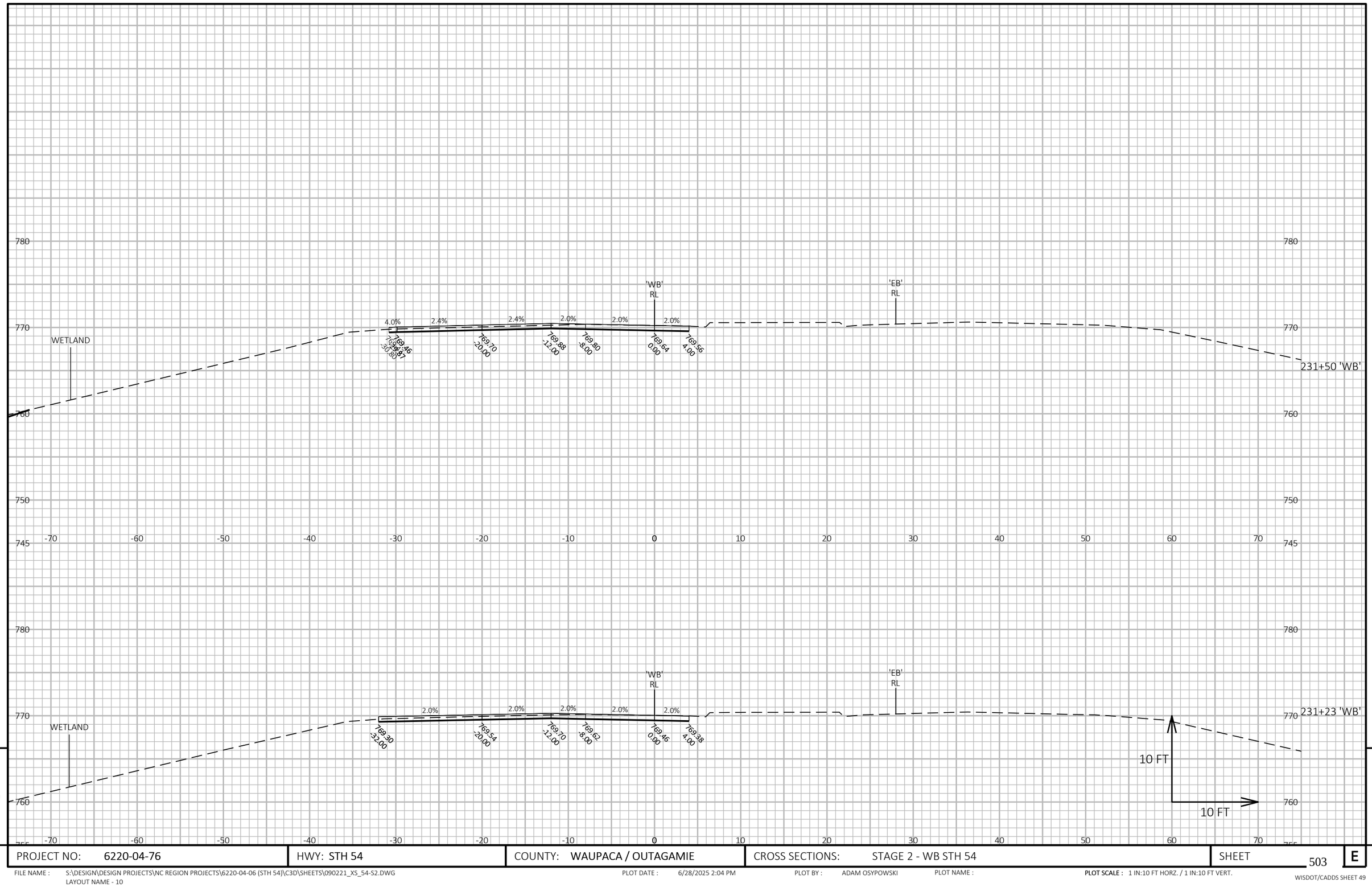
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 502	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 09

PLOT DATE : 6/28/2025 2:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 503	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 10

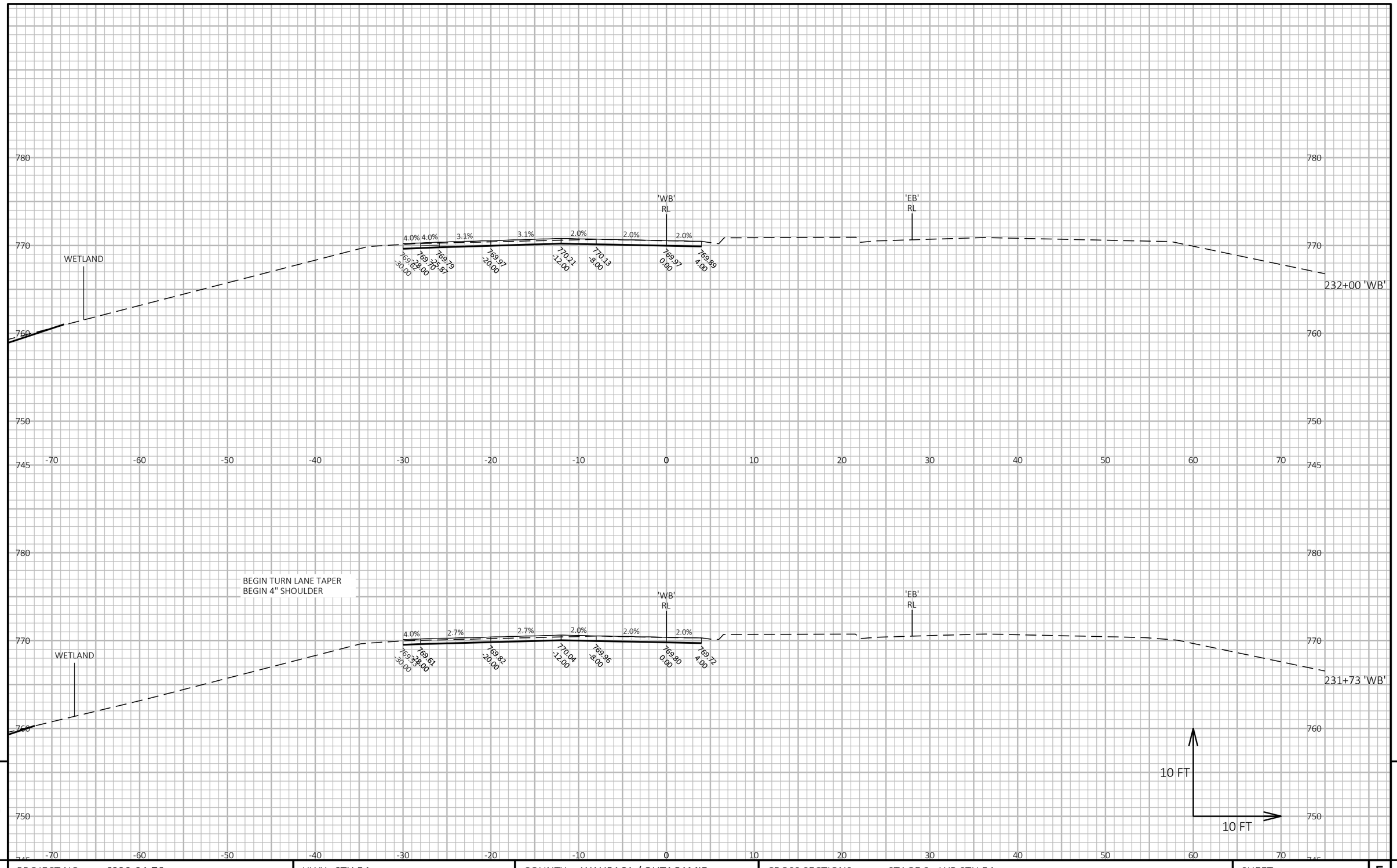
PLOT DATE : 6/28/2025 2:04 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 504	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 11

PLOT DATE : 6/28/2025 2:04 PM

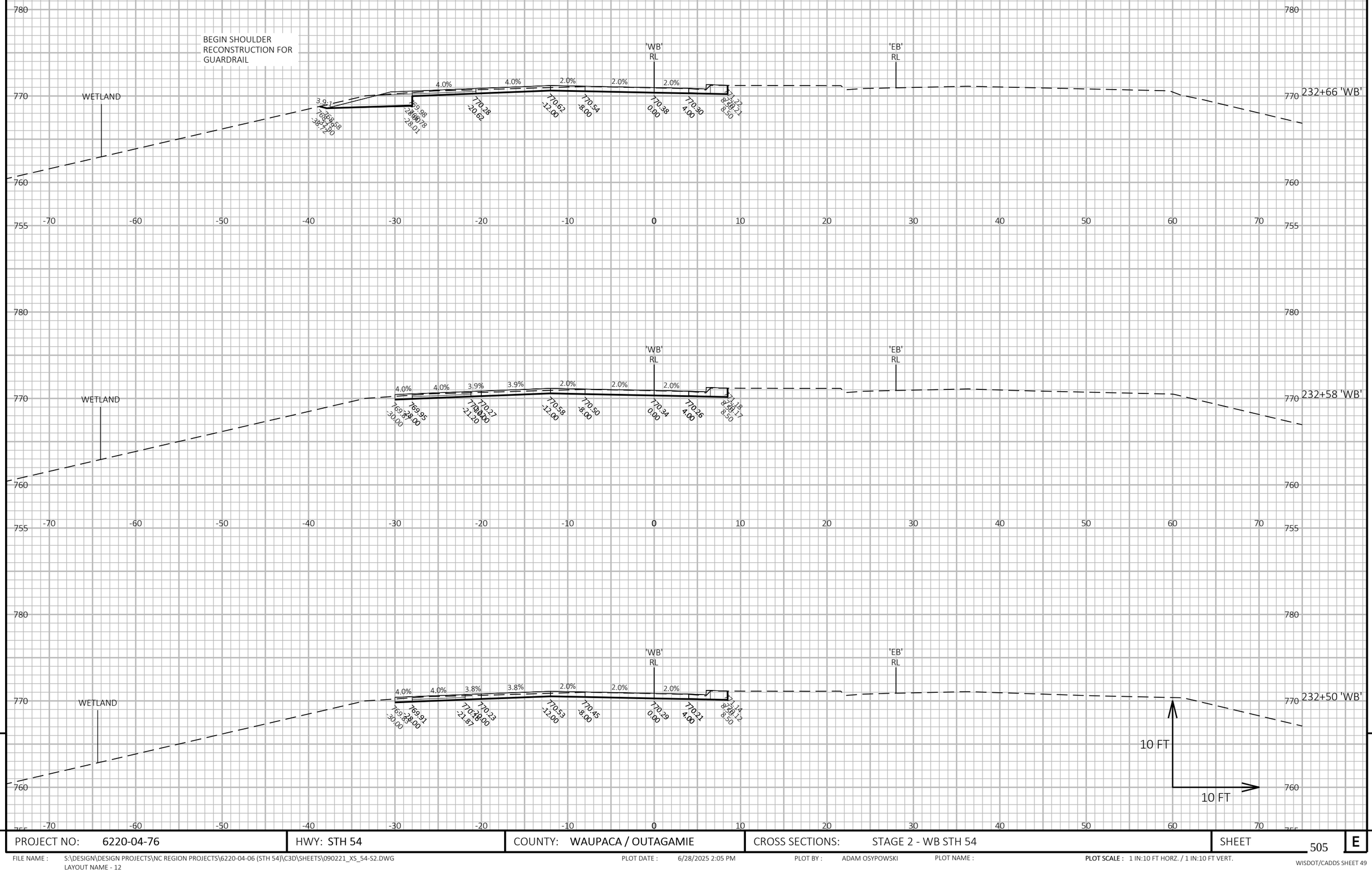
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49

BEGIN SHOULDER
RECONSTRUCTION FOR
GUARDRAIL



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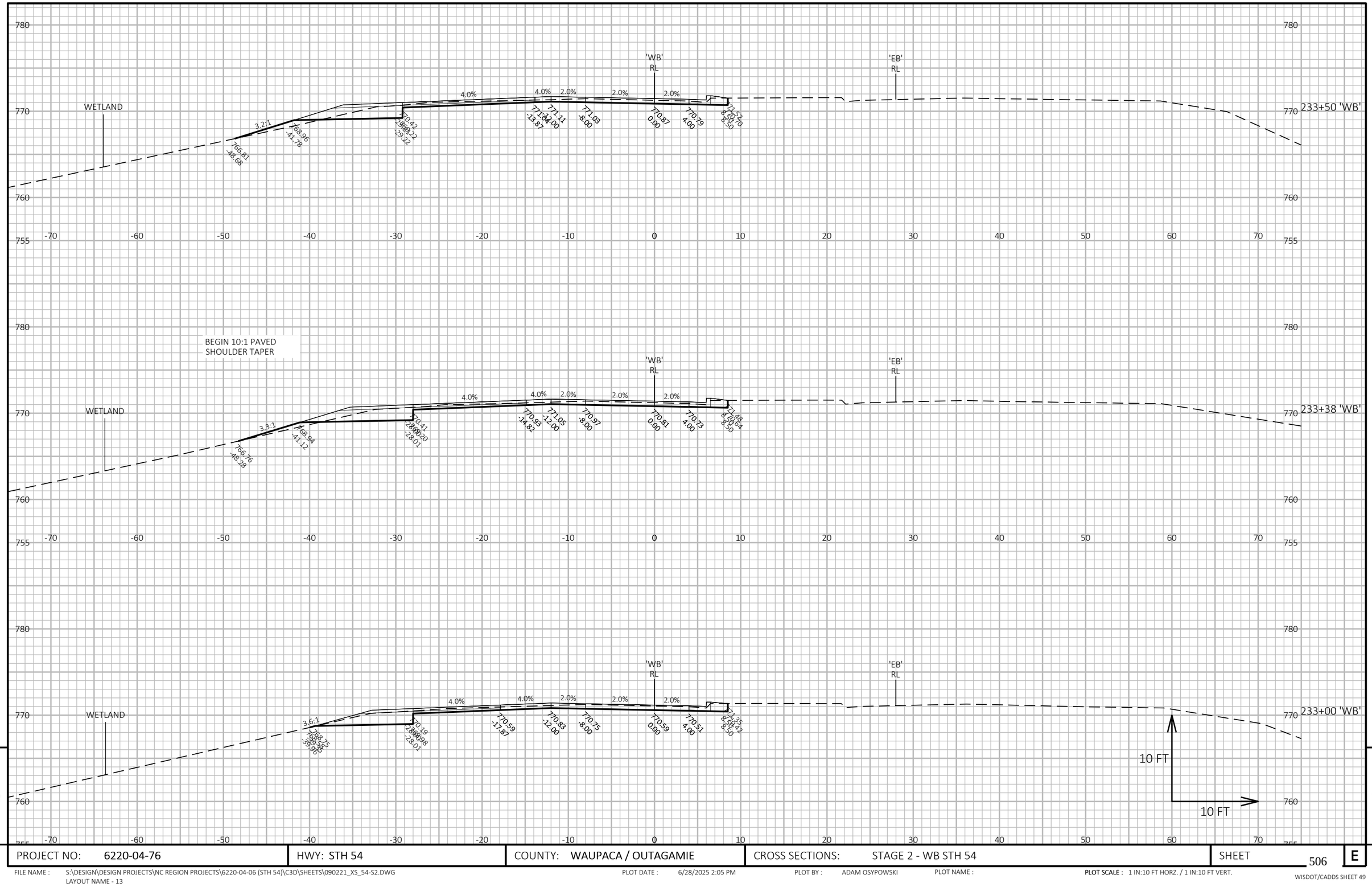
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 505	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 12

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 506	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 13

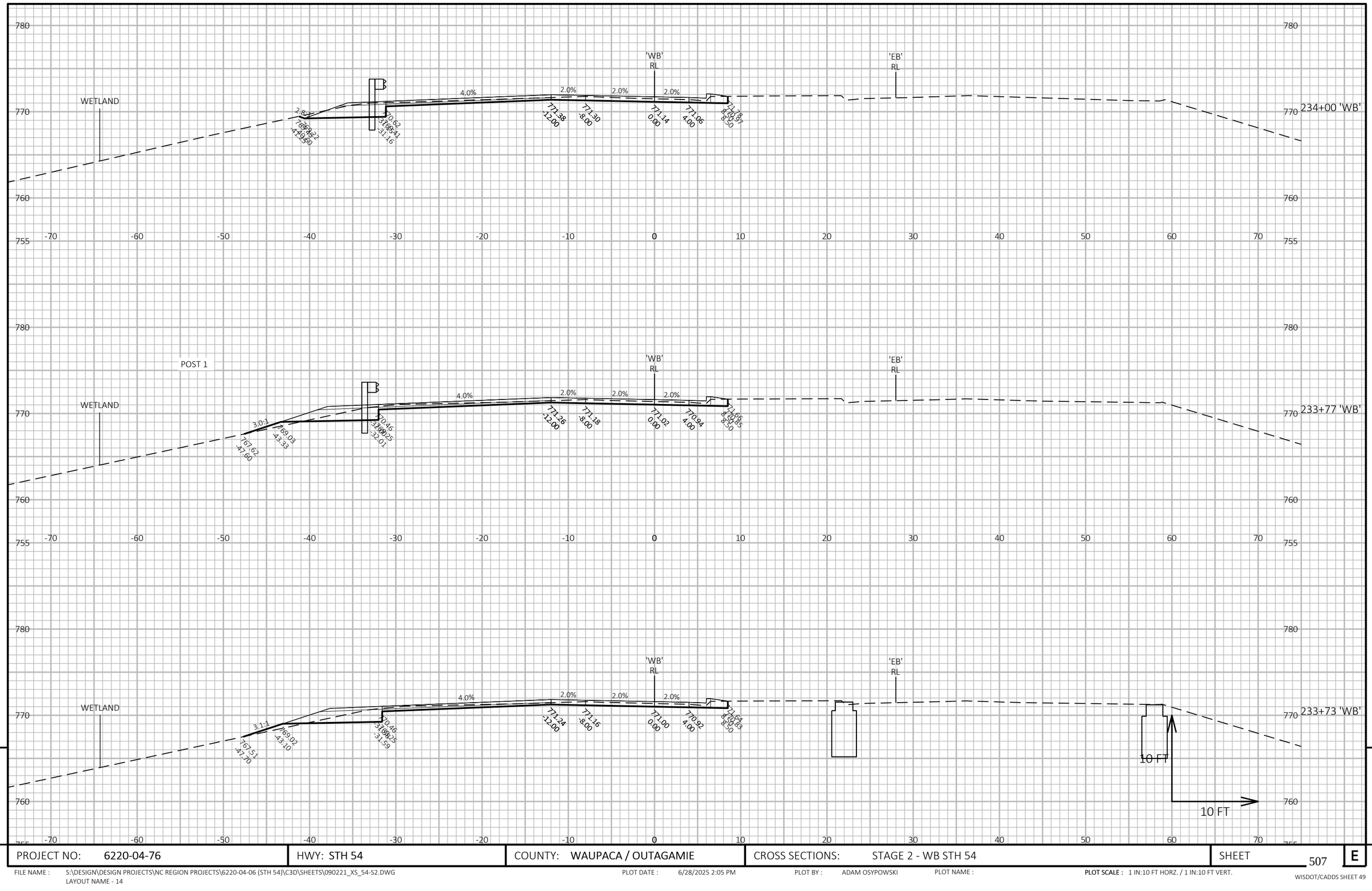
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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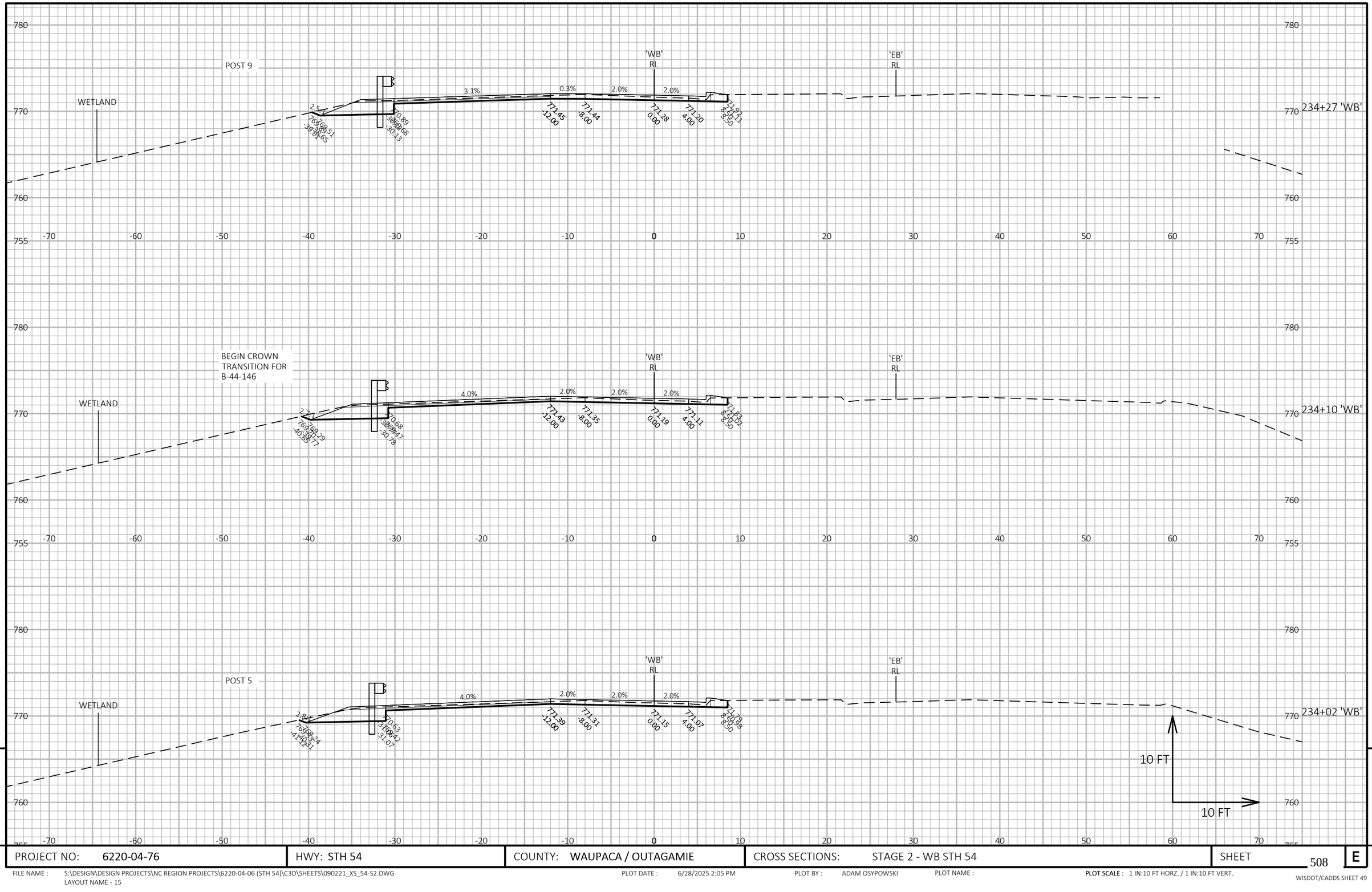
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 507	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 14

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 508	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 15

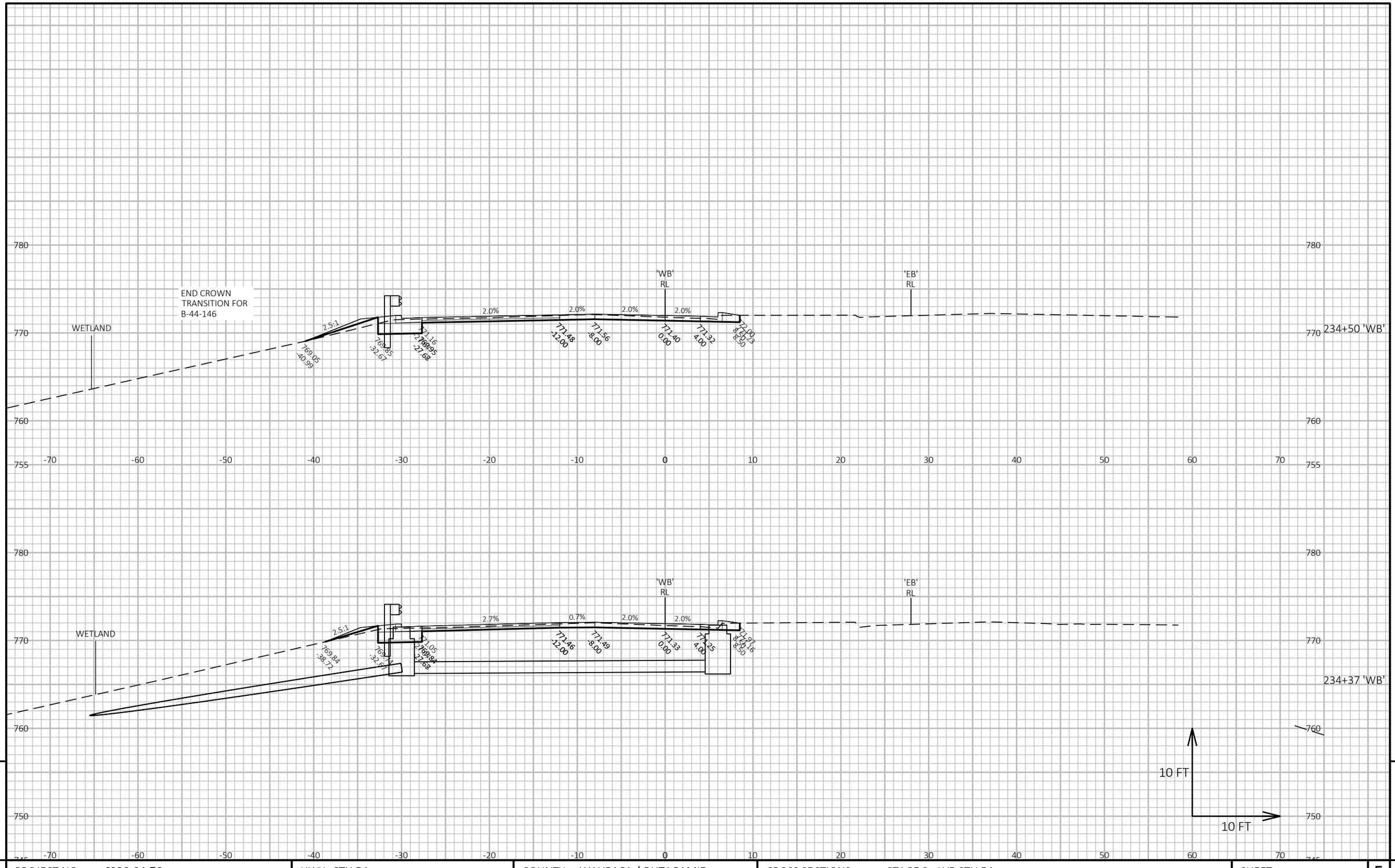
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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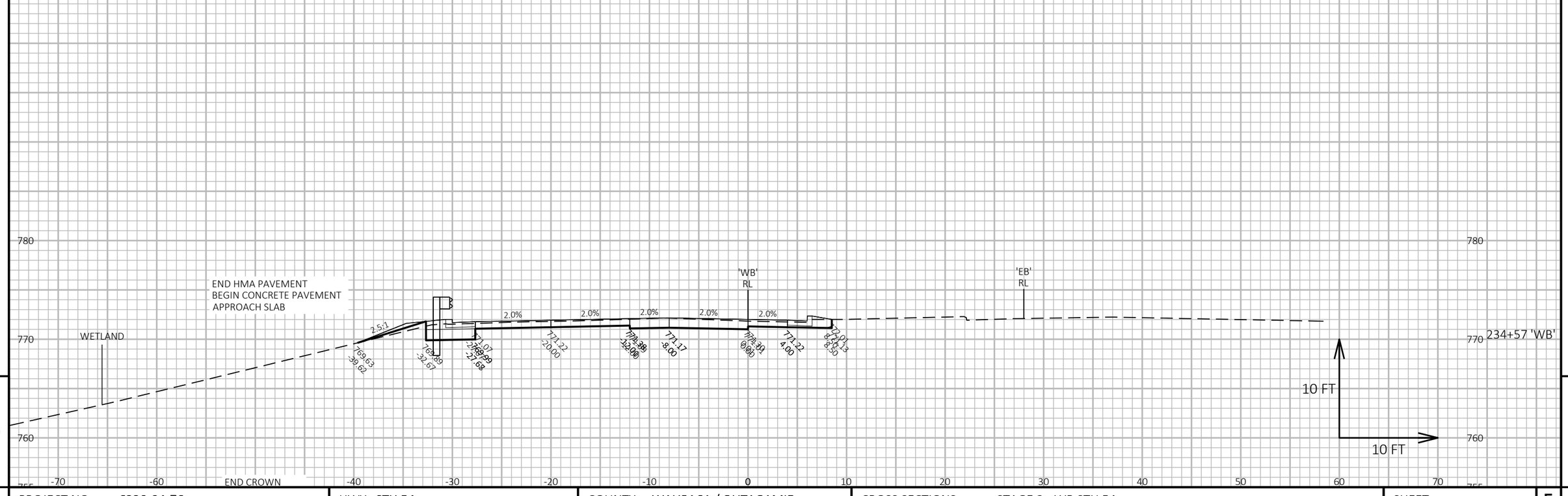
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 509	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 16

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 510	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 17

PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49

END CONCRETE PAVEMENT
APPROACH SLAB
BEGIN HMA PAVEMENT

WETLAND

'WB'
RL

'EB'
RL

2.0% 2.0% 2.0% 2.0% 2.0% 1.5%

772.24 30.00
772.44 20.00
772.50 12.00
772.39 8.00
772.52 0.00
772.44 4.00
772.59 13.99

237+67 'WB'

780 770 760 750 745

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

780 770 760 750 745

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

'WB'
RL

'EB'
RL

2.0% 2.0% 2.0% 2.0% 2.0% 1.5%

772.22 30.00
772.42 20.00
772.58 12.00
772.37 8.00
772.50 0.00
772.42 4.00
772.53 11.53
772.51 13.73
772.48 17.01

237+62 'WB'

10 FT
10 FT

9

9

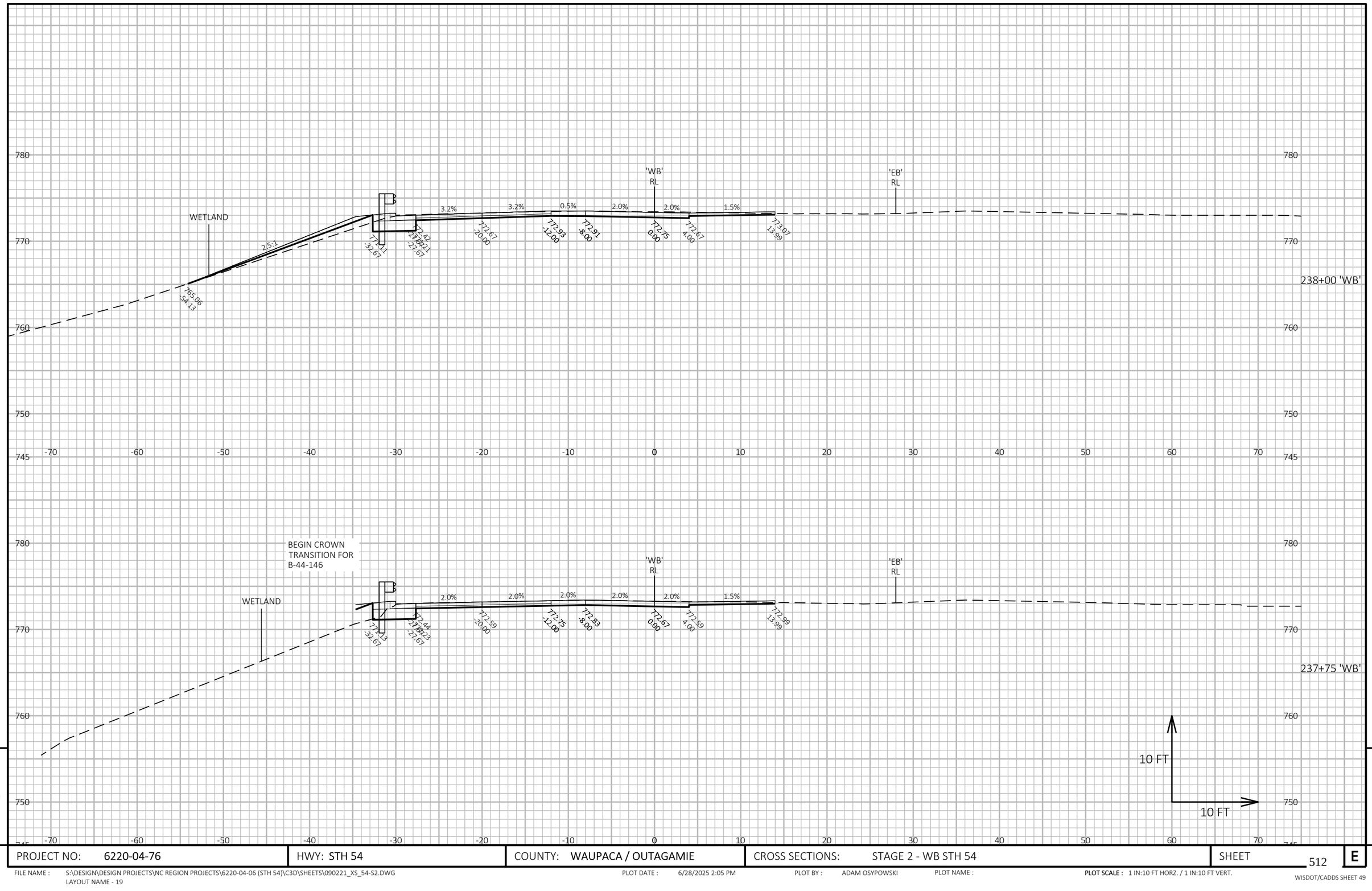
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 511	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 18

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

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

WISDOT/CADDS SHEET 49



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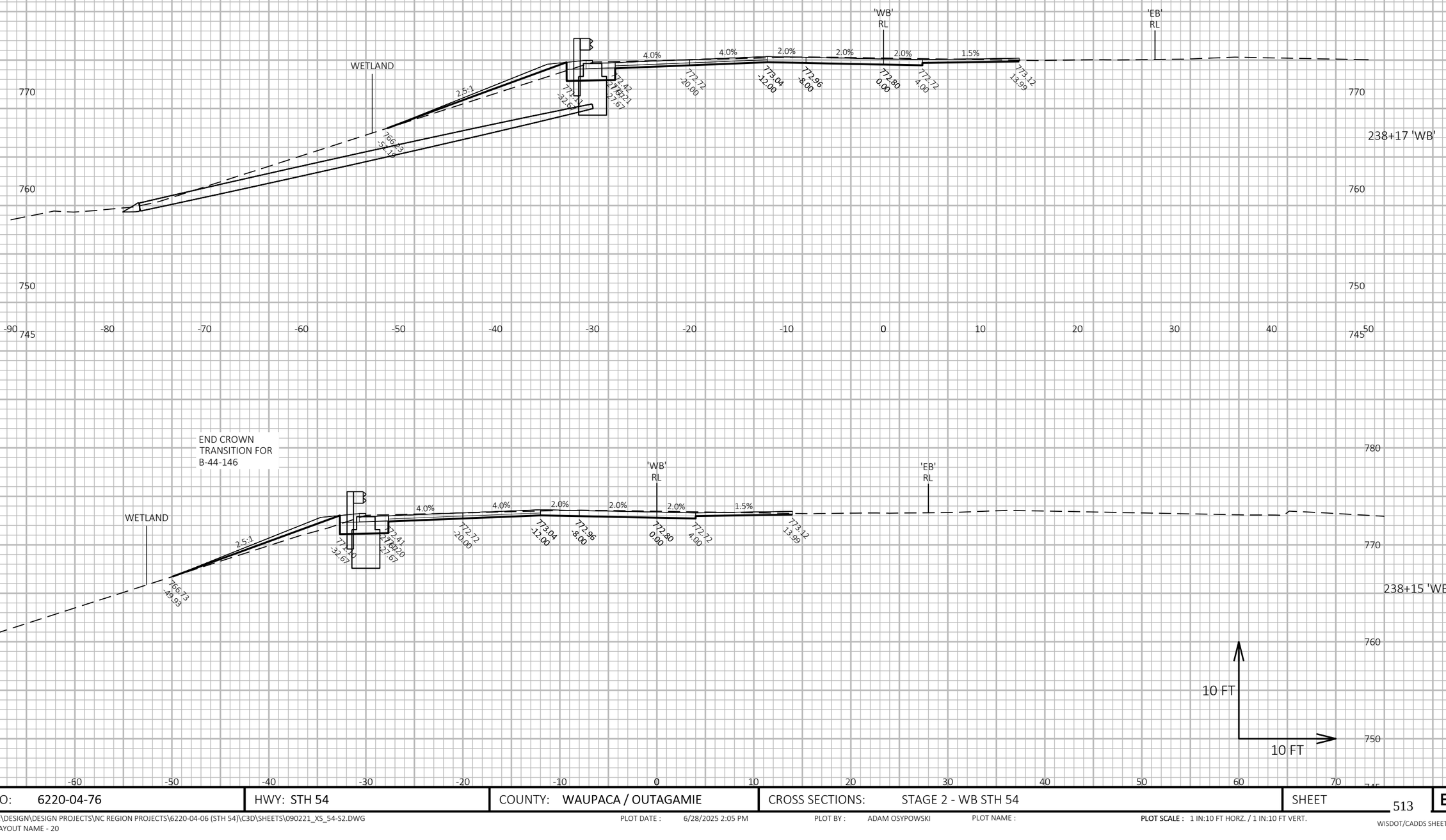
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 512	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 19

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

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

WISDOT/CADDS SHEET 49

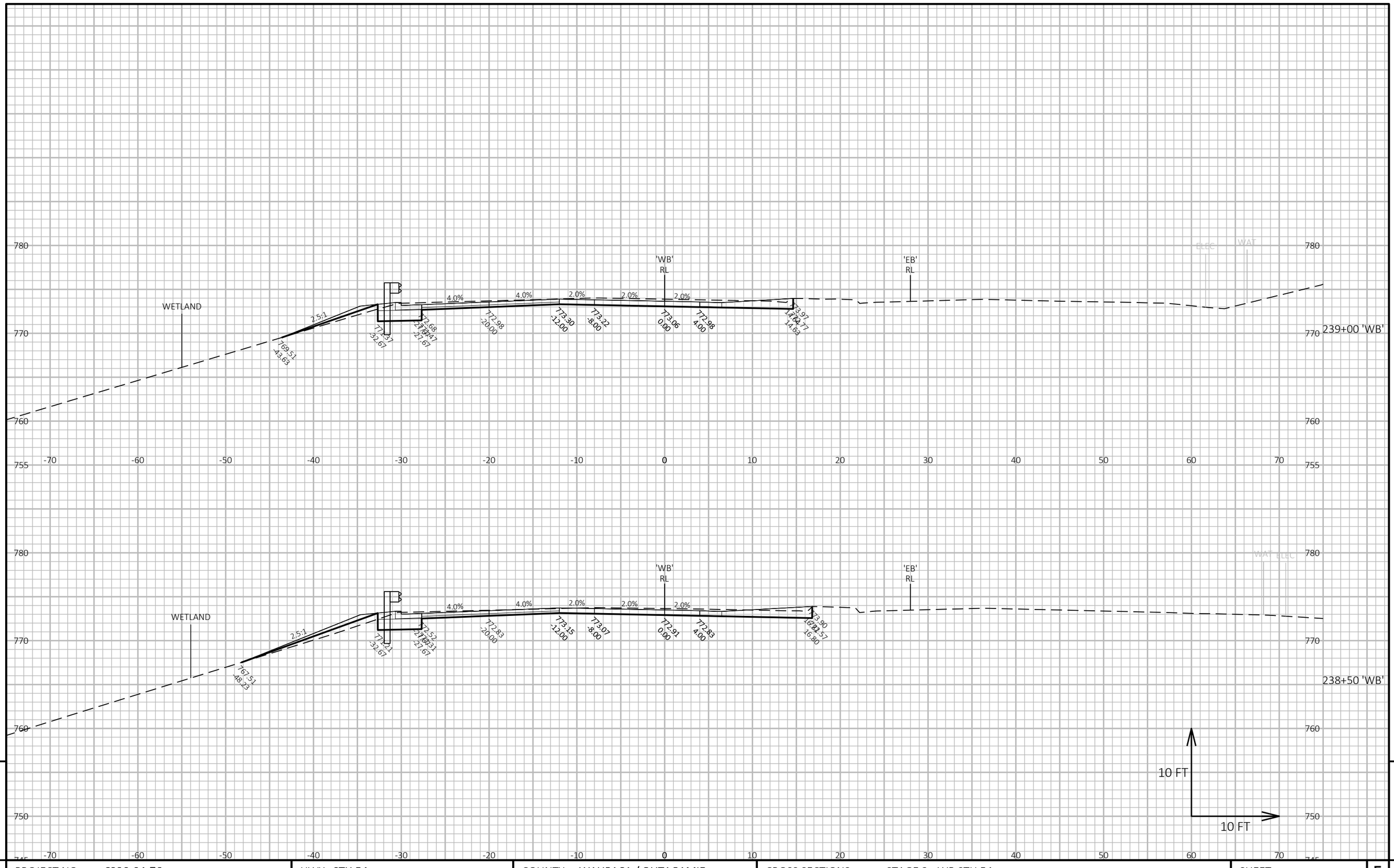


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 513 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 20

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 514	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 21

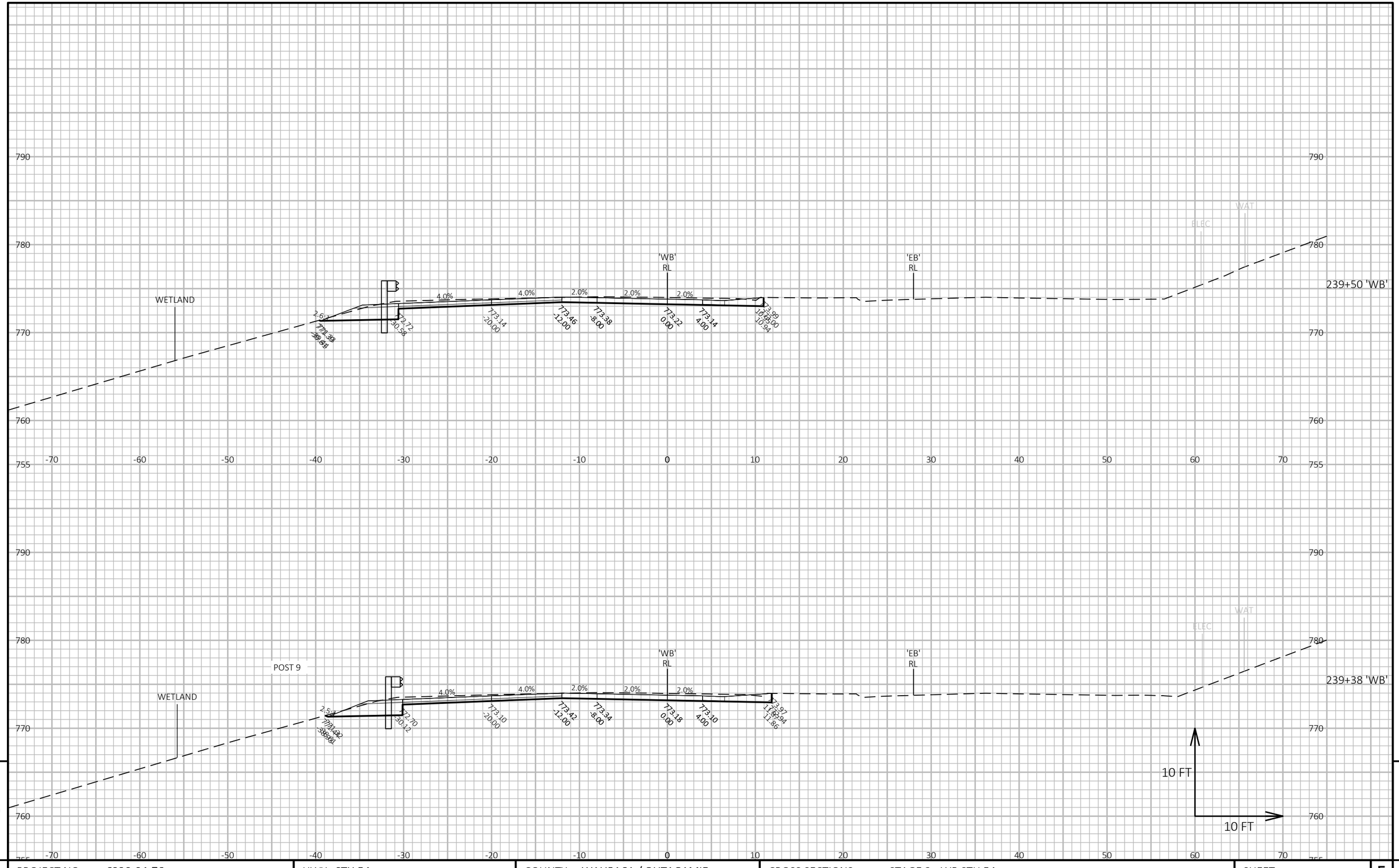
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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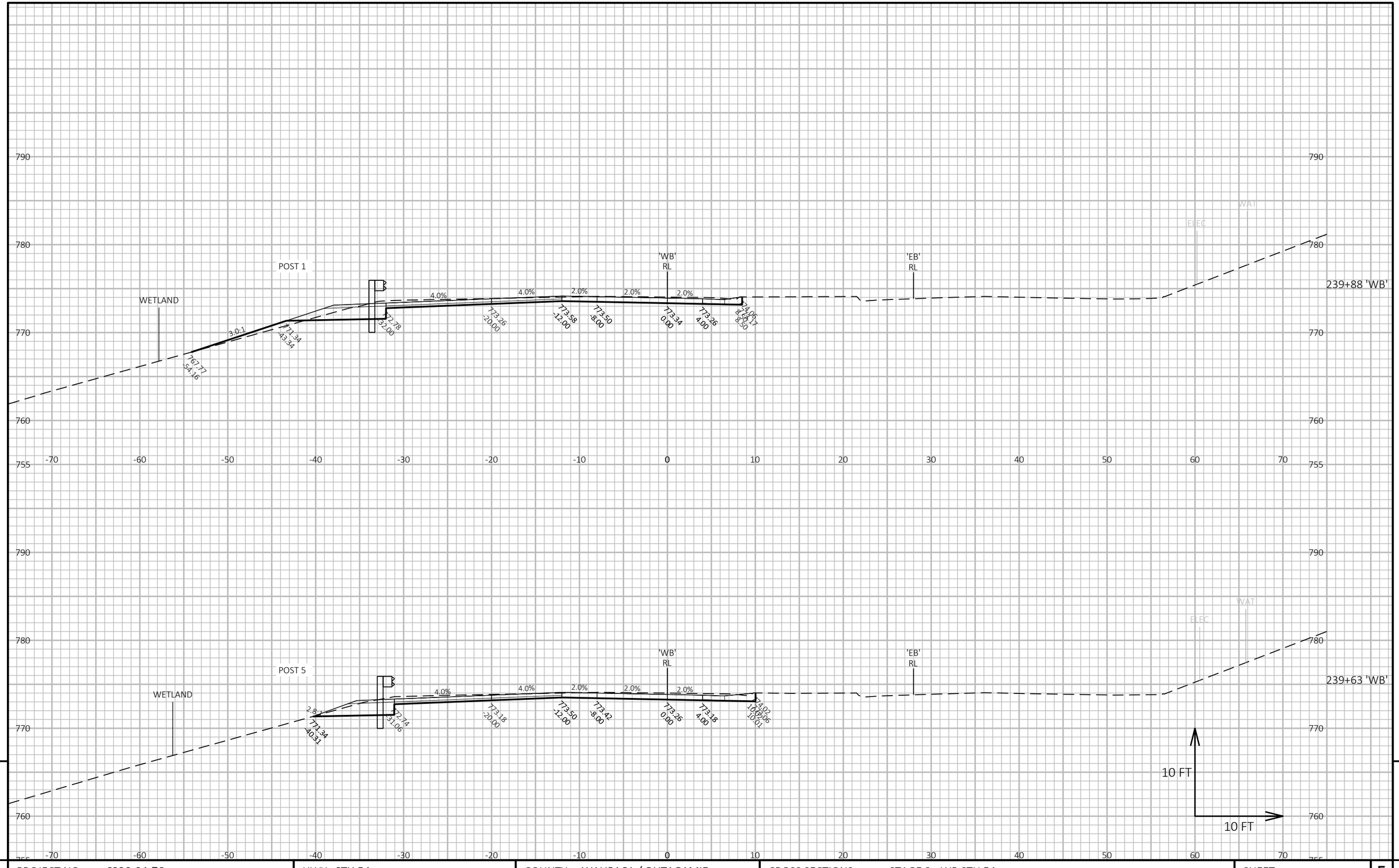
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 515	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 22

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 516	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 23

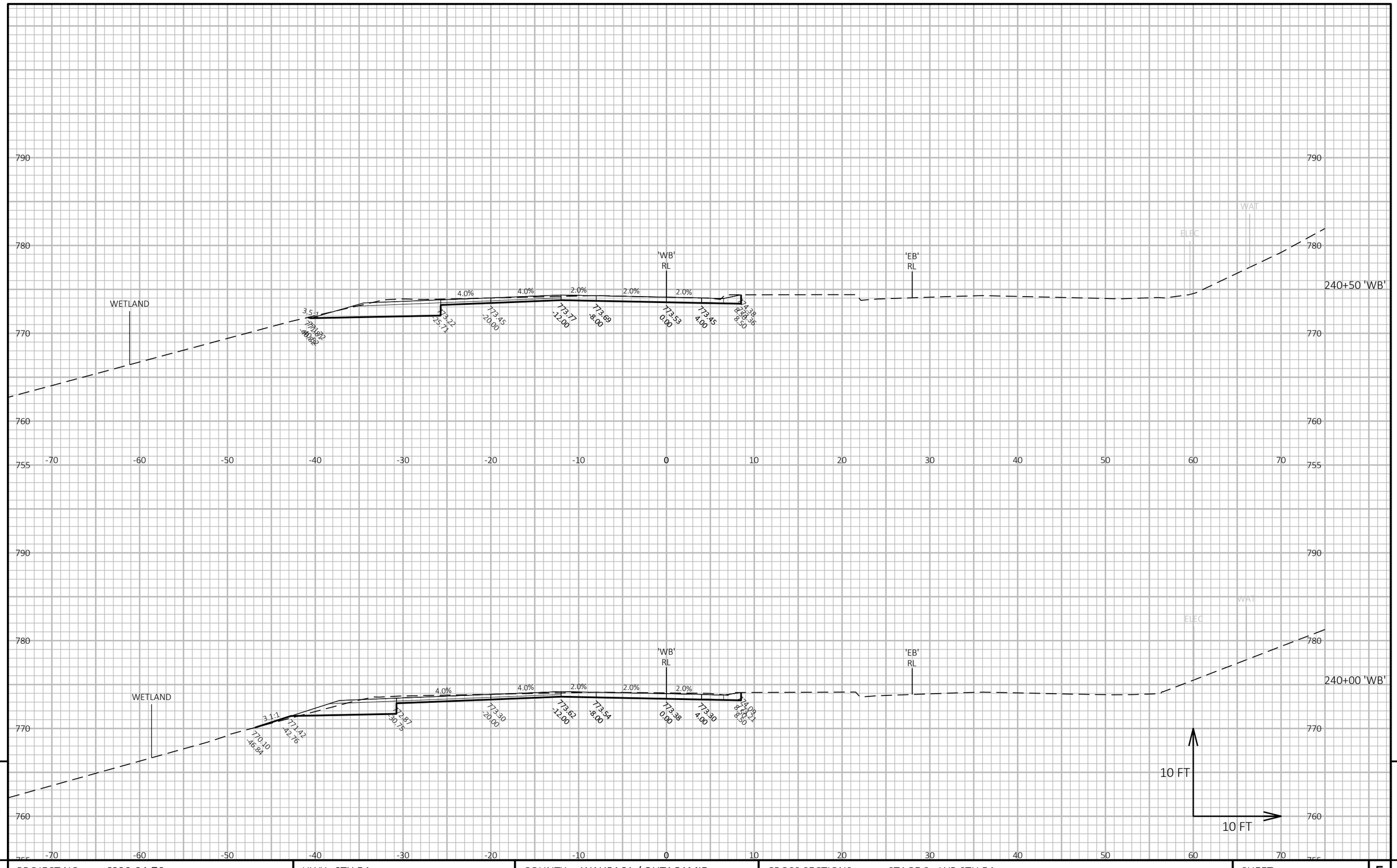
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 517	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 24

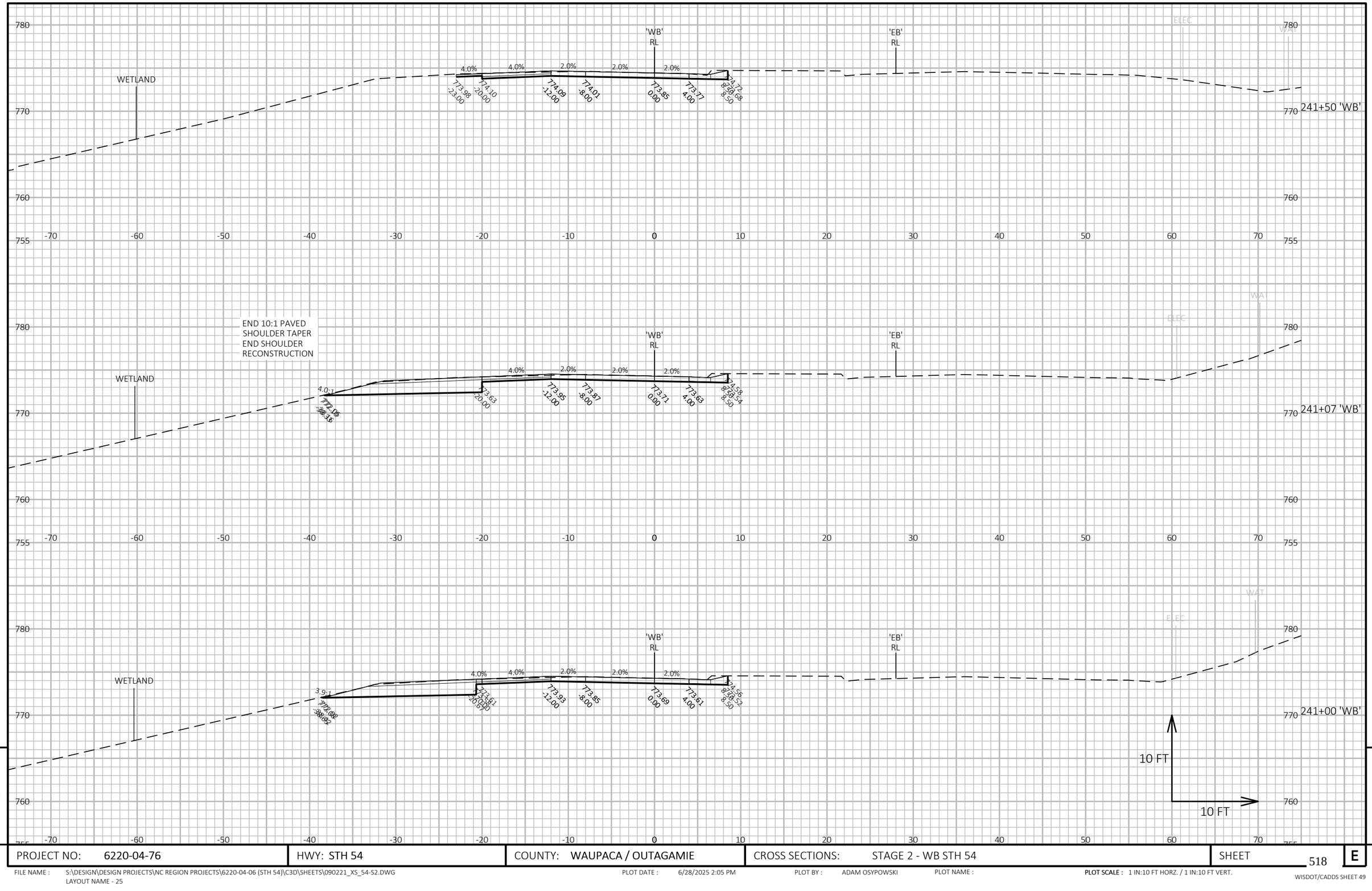
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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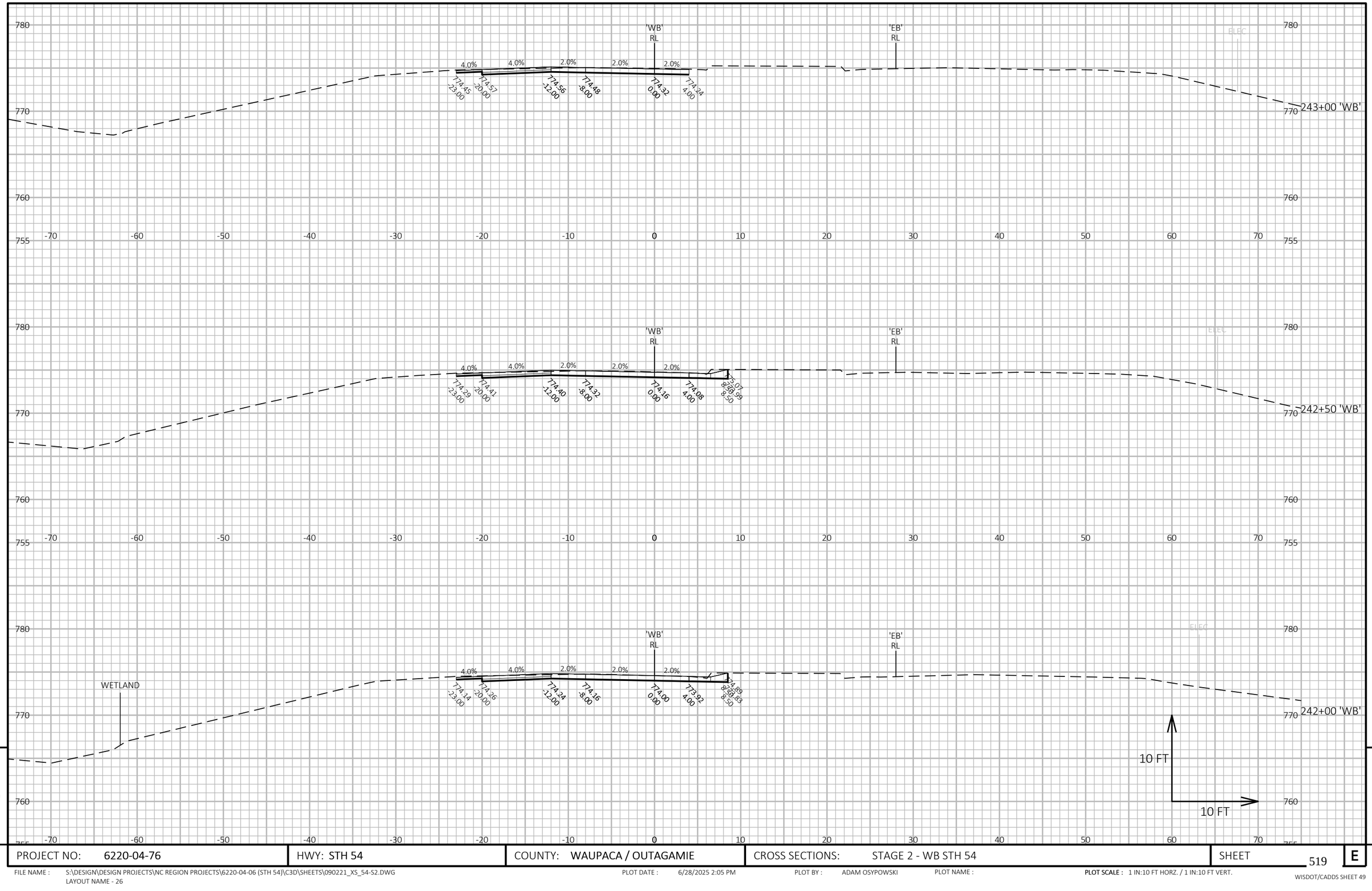
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 518	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 25

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

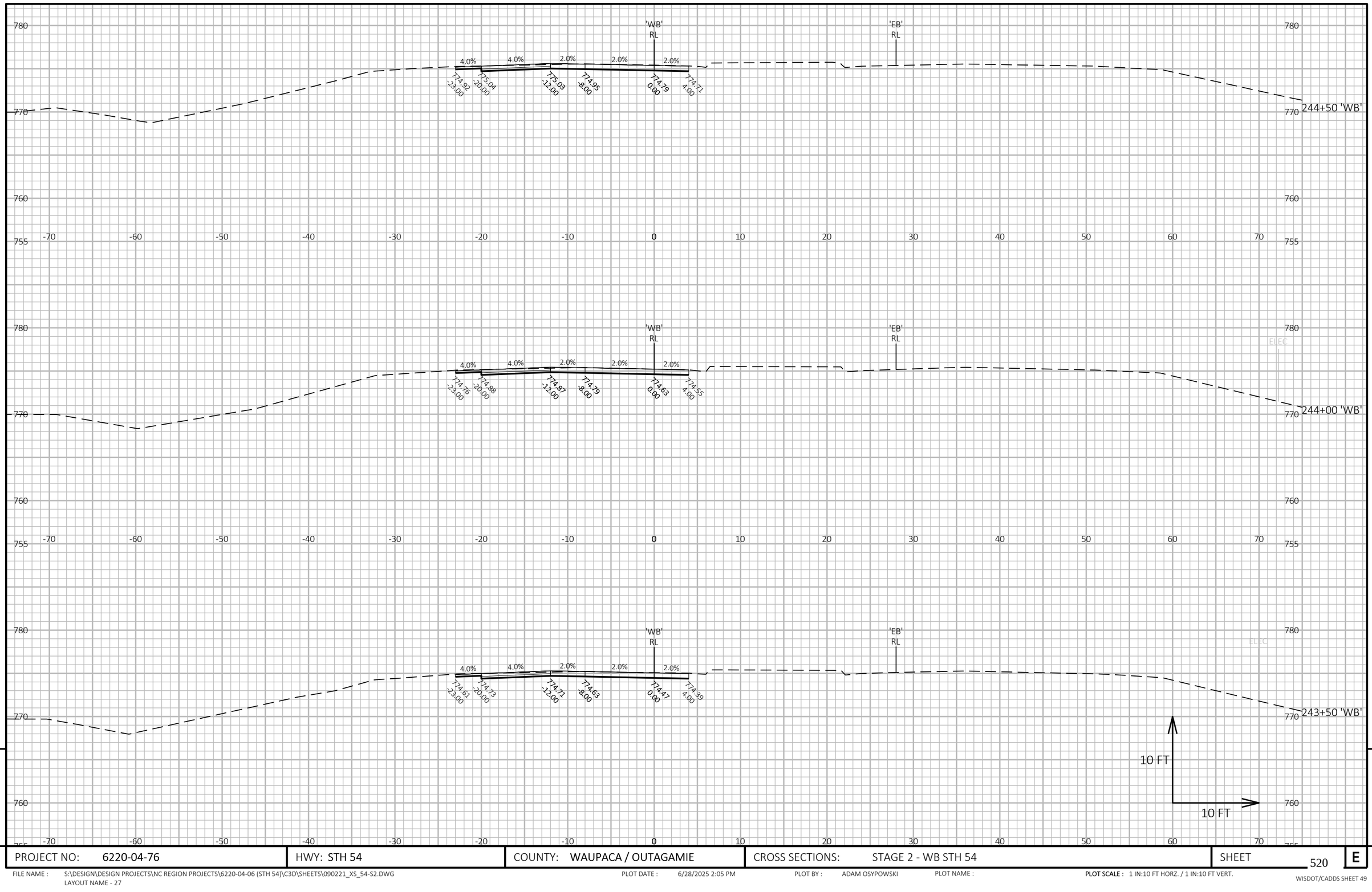


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 519	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 26

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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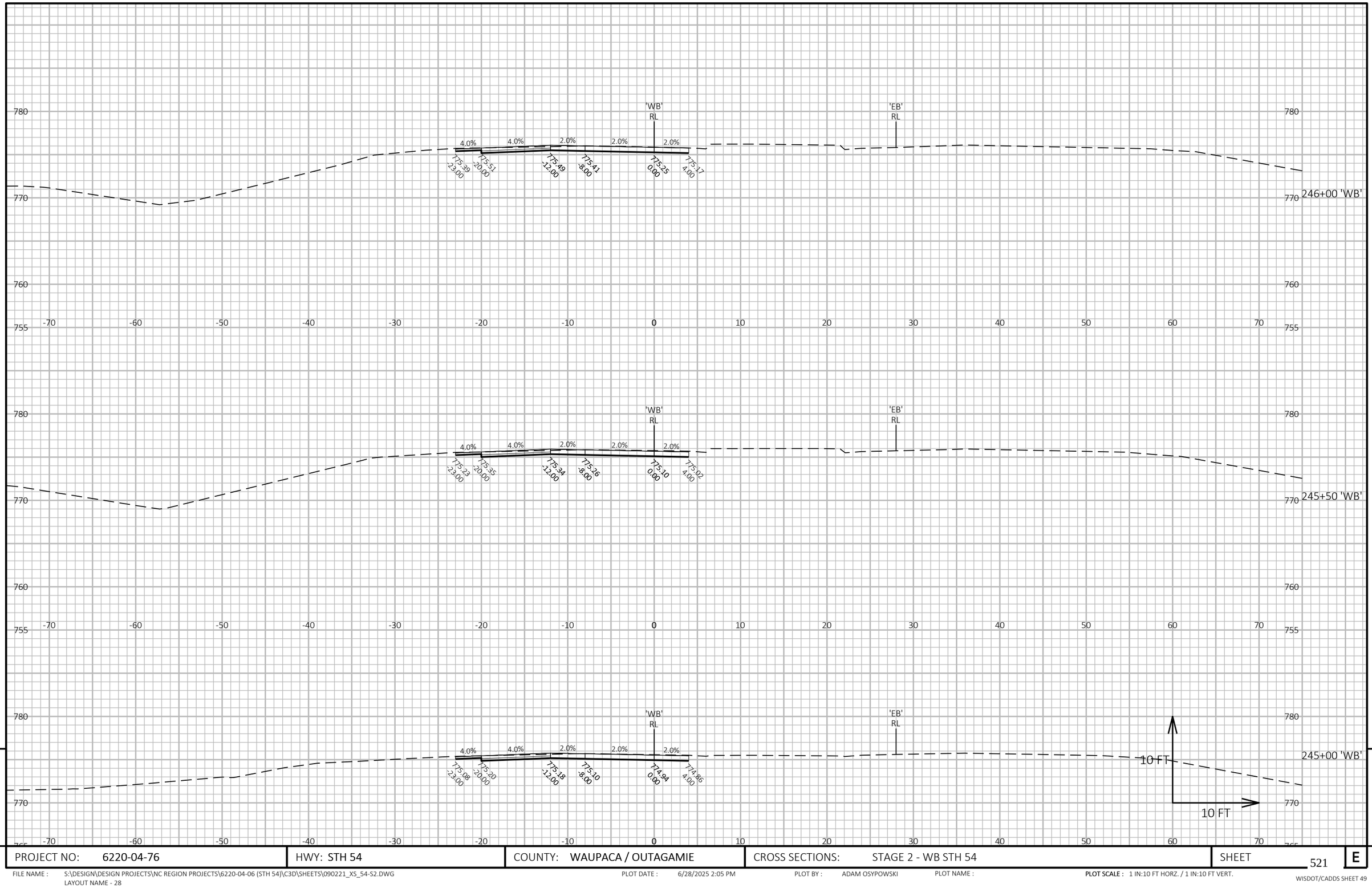
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 520	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 27

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

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

WISDOT/CADDS SHEET 49

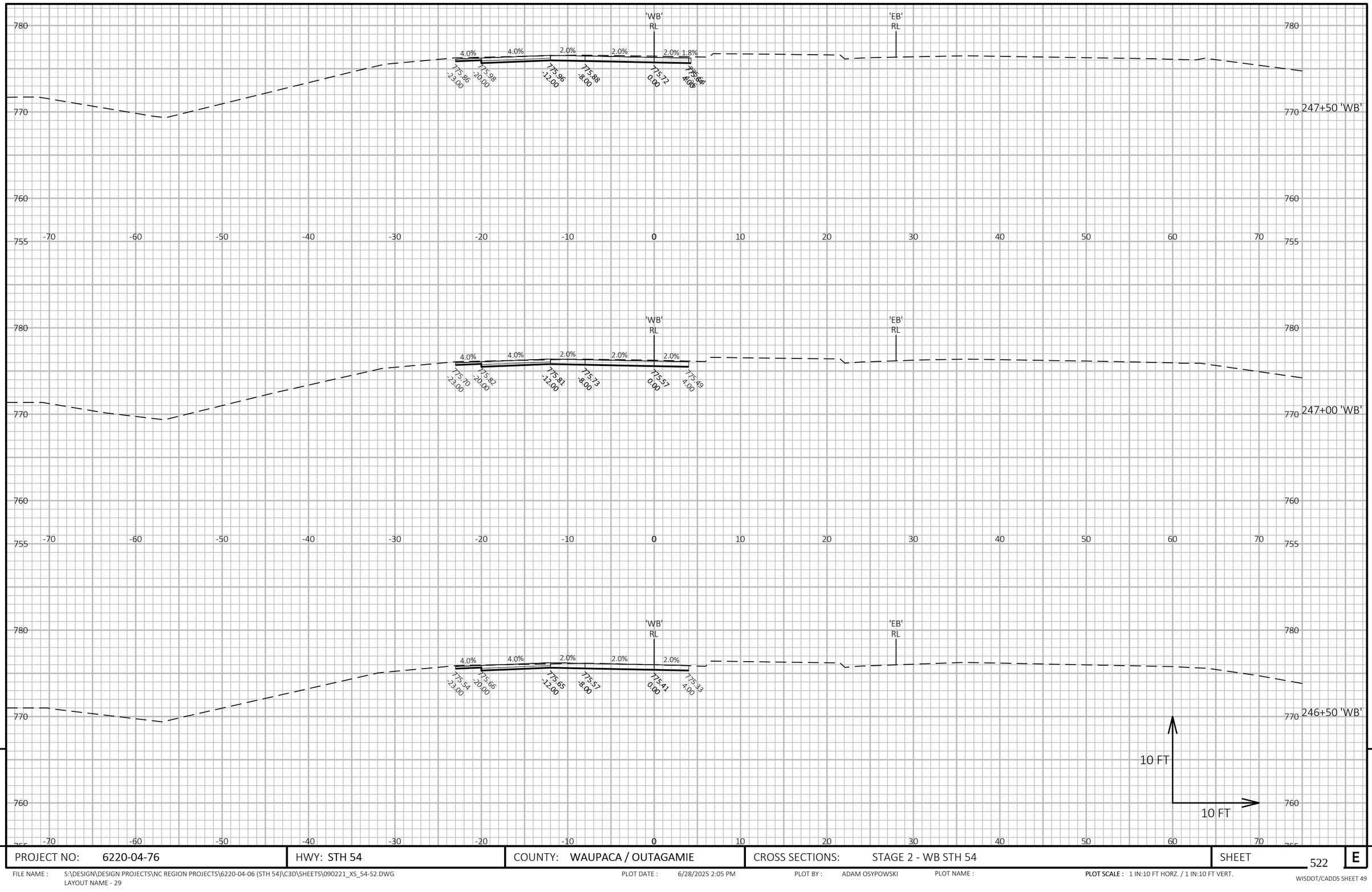


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 521	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 28

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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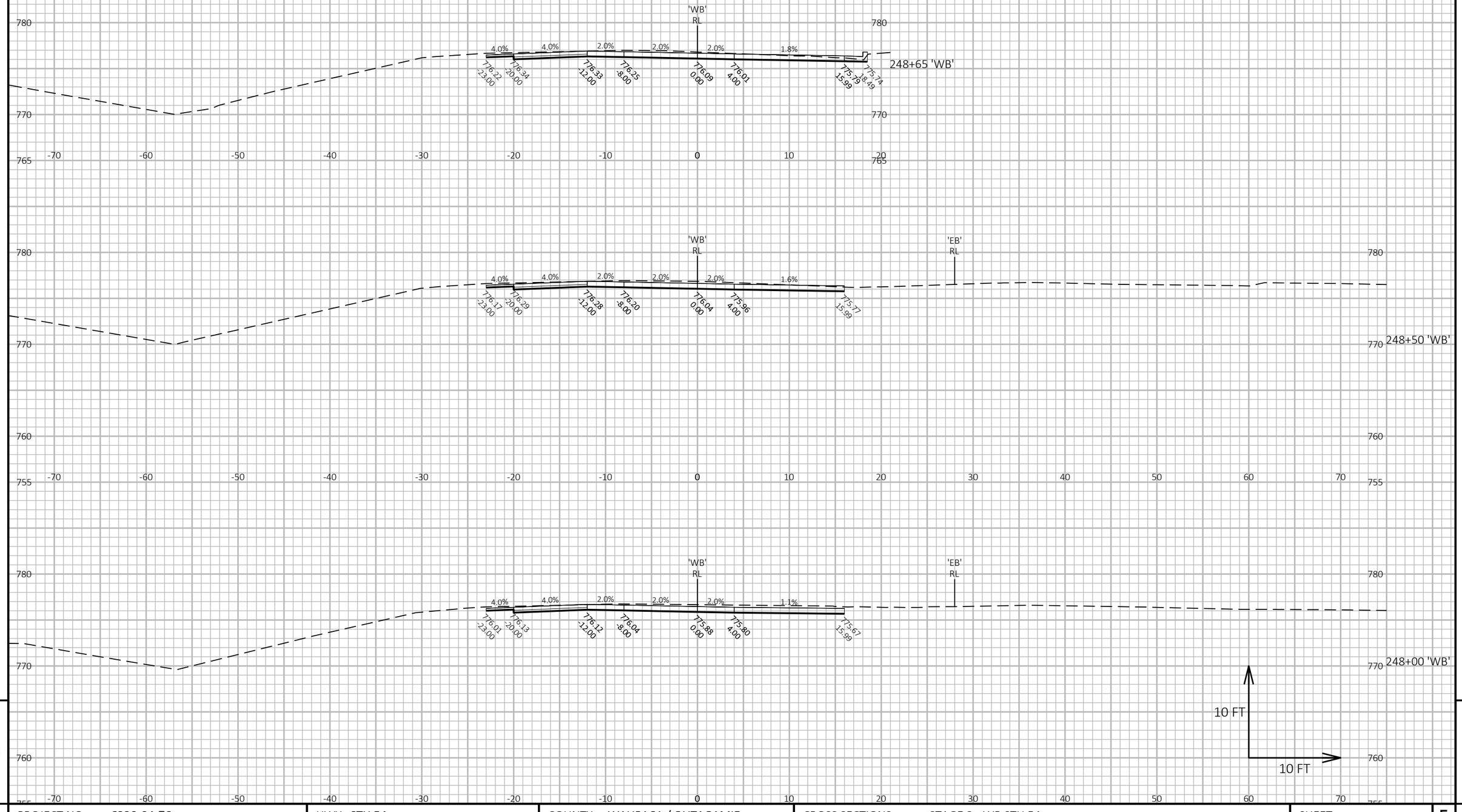
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 522	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 29

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI 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: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 523	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 30

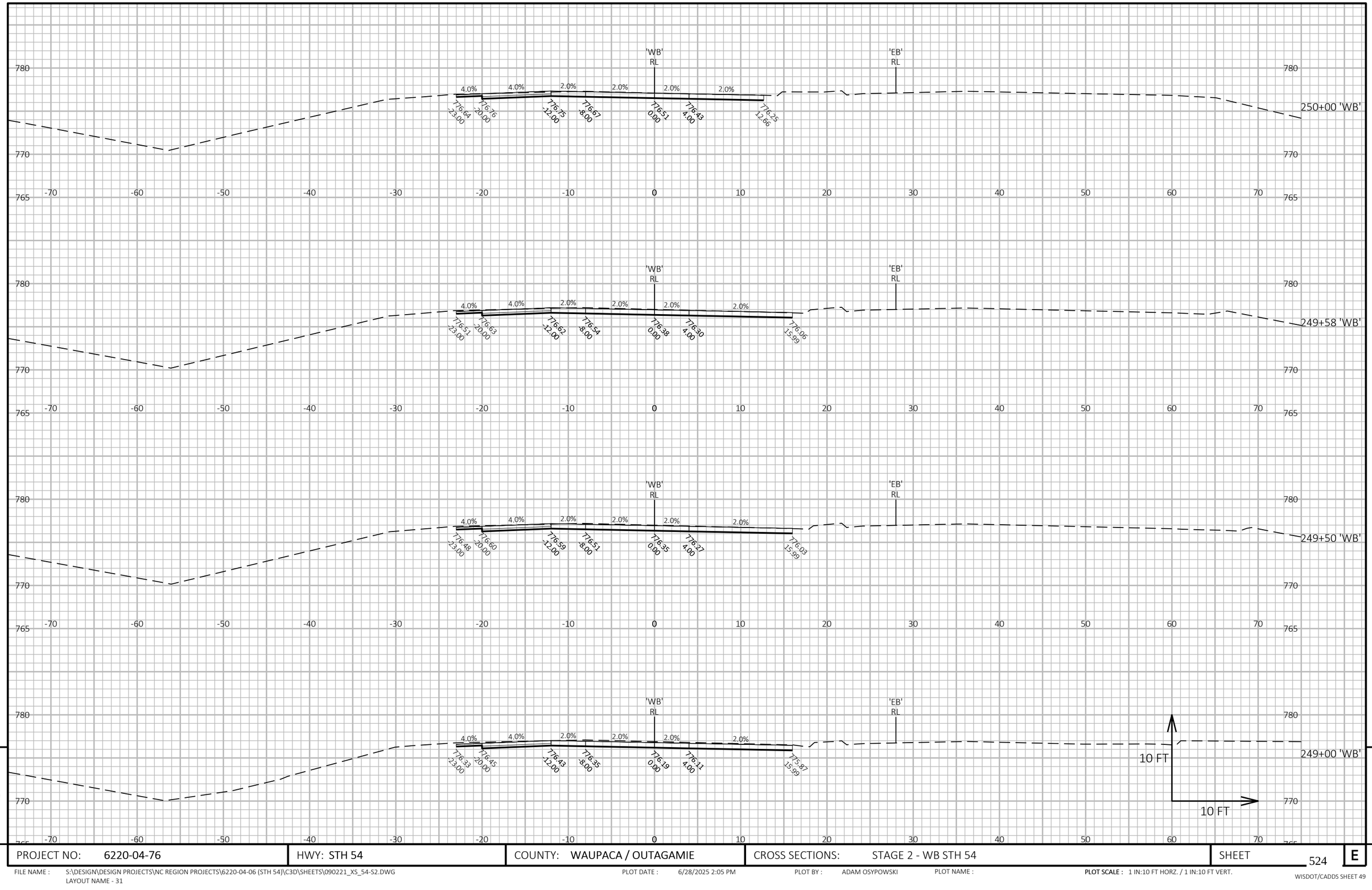
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 524	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 31

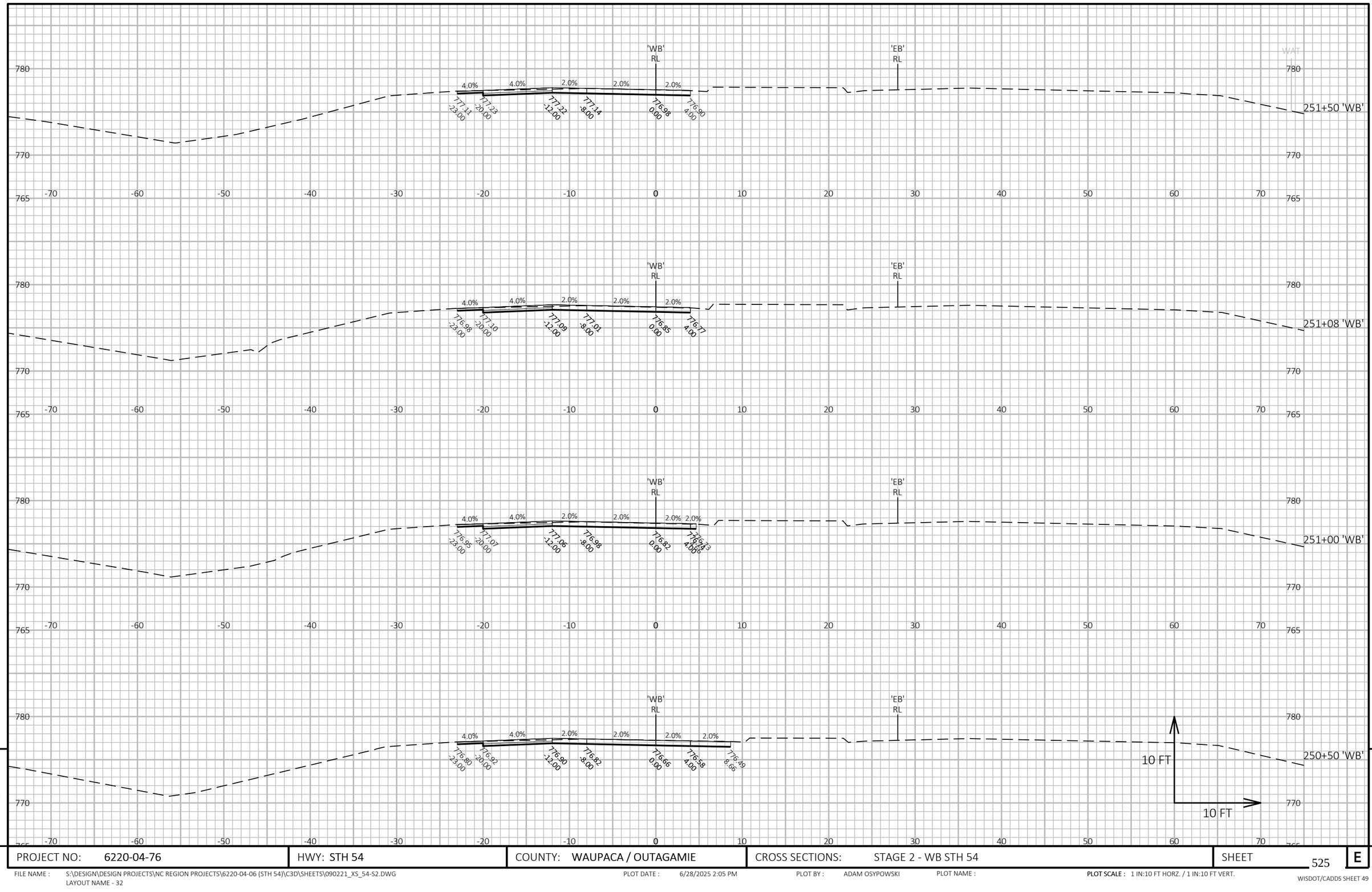
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 525	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 32

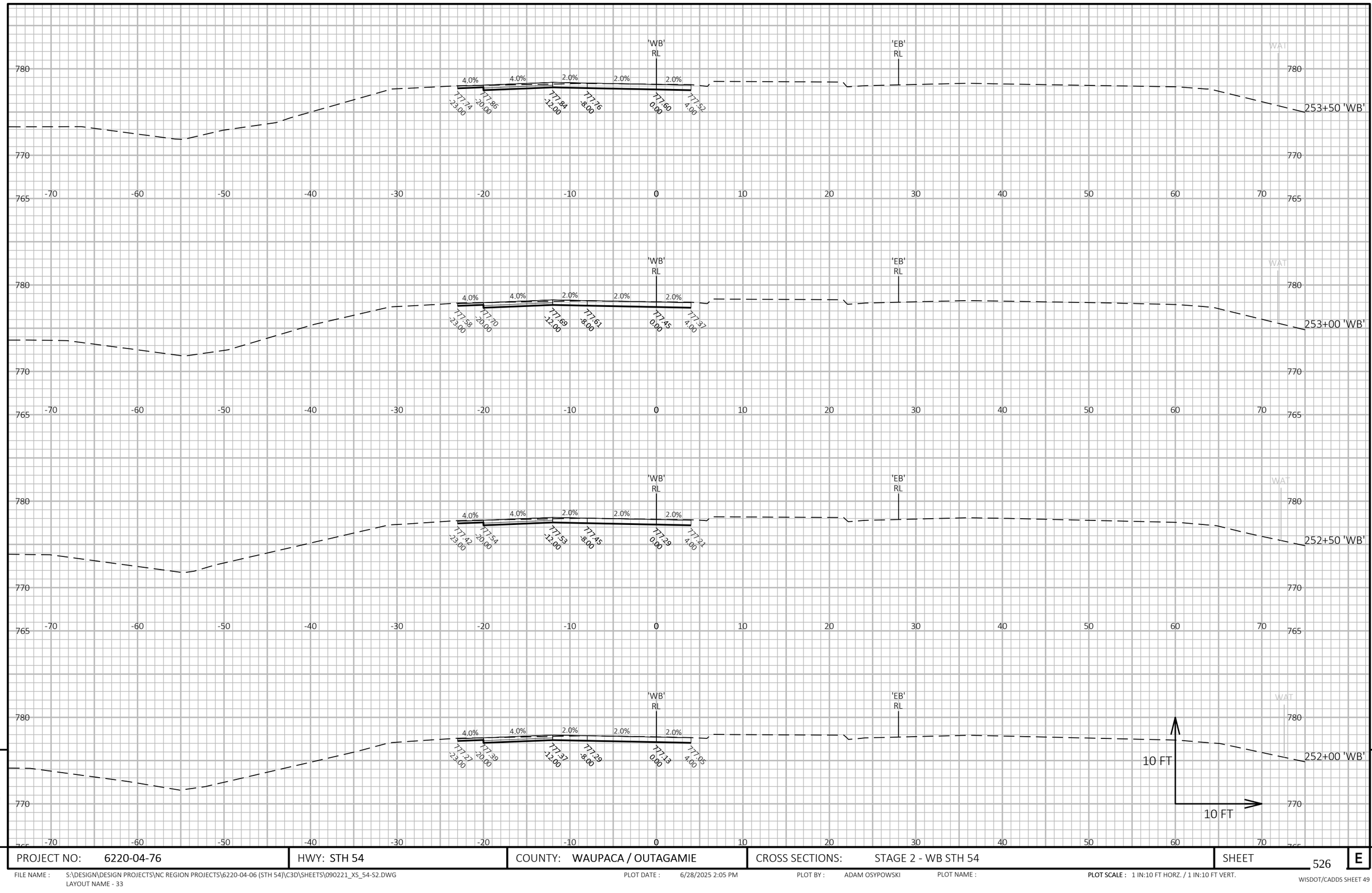
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 526	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 33

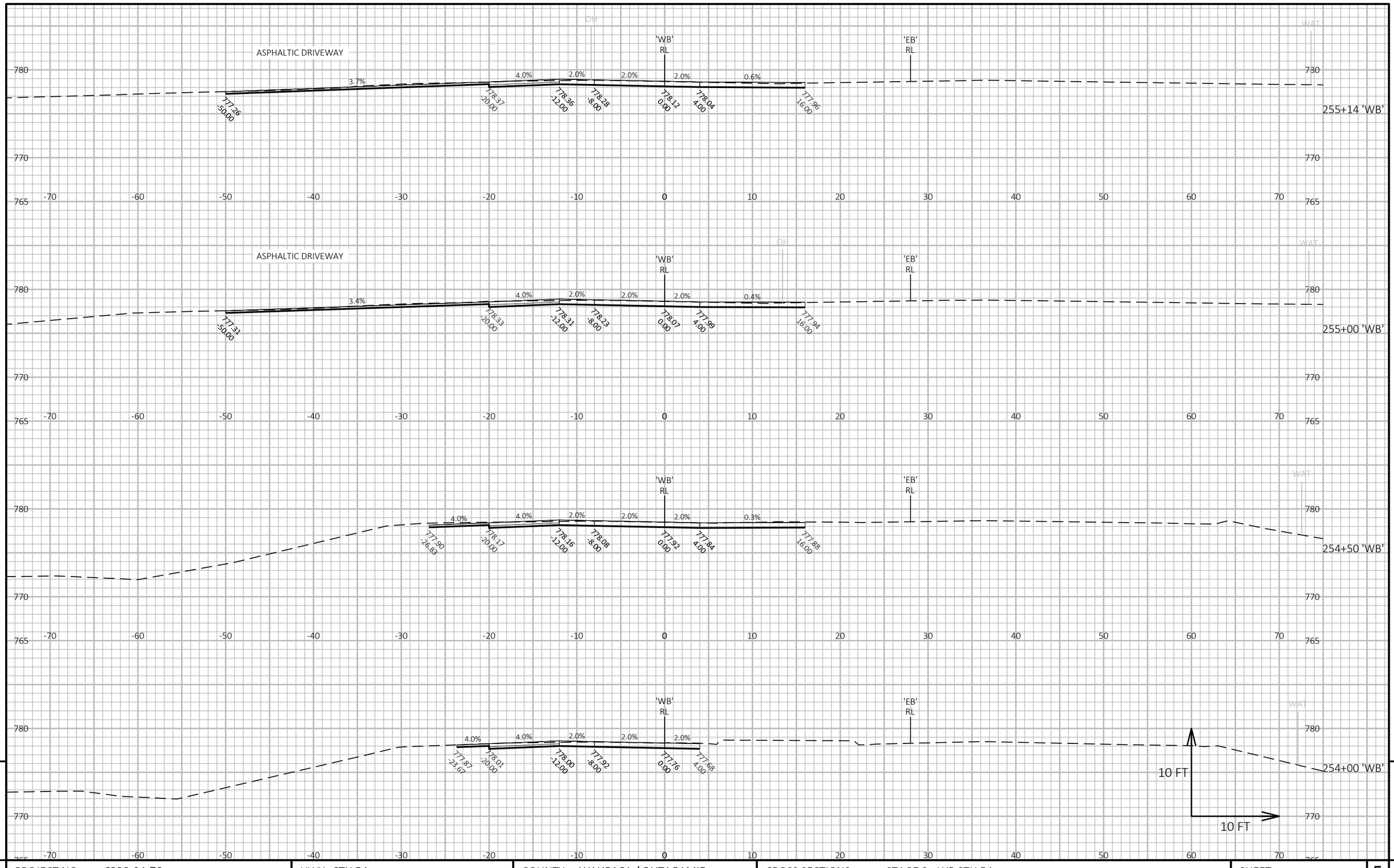
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

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: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 527	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 34

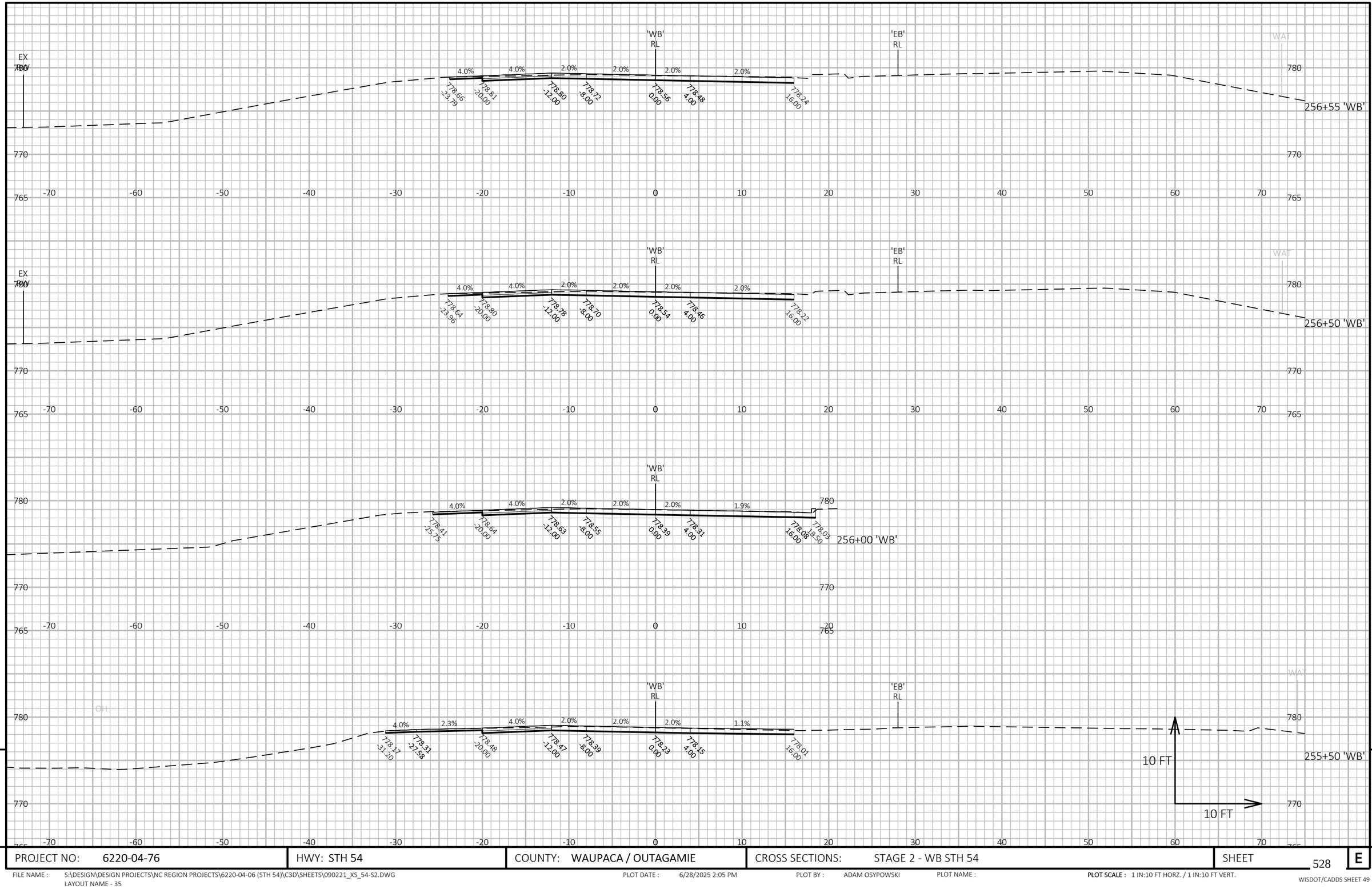
PLOT DATE : 6/28/2025 2:05 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



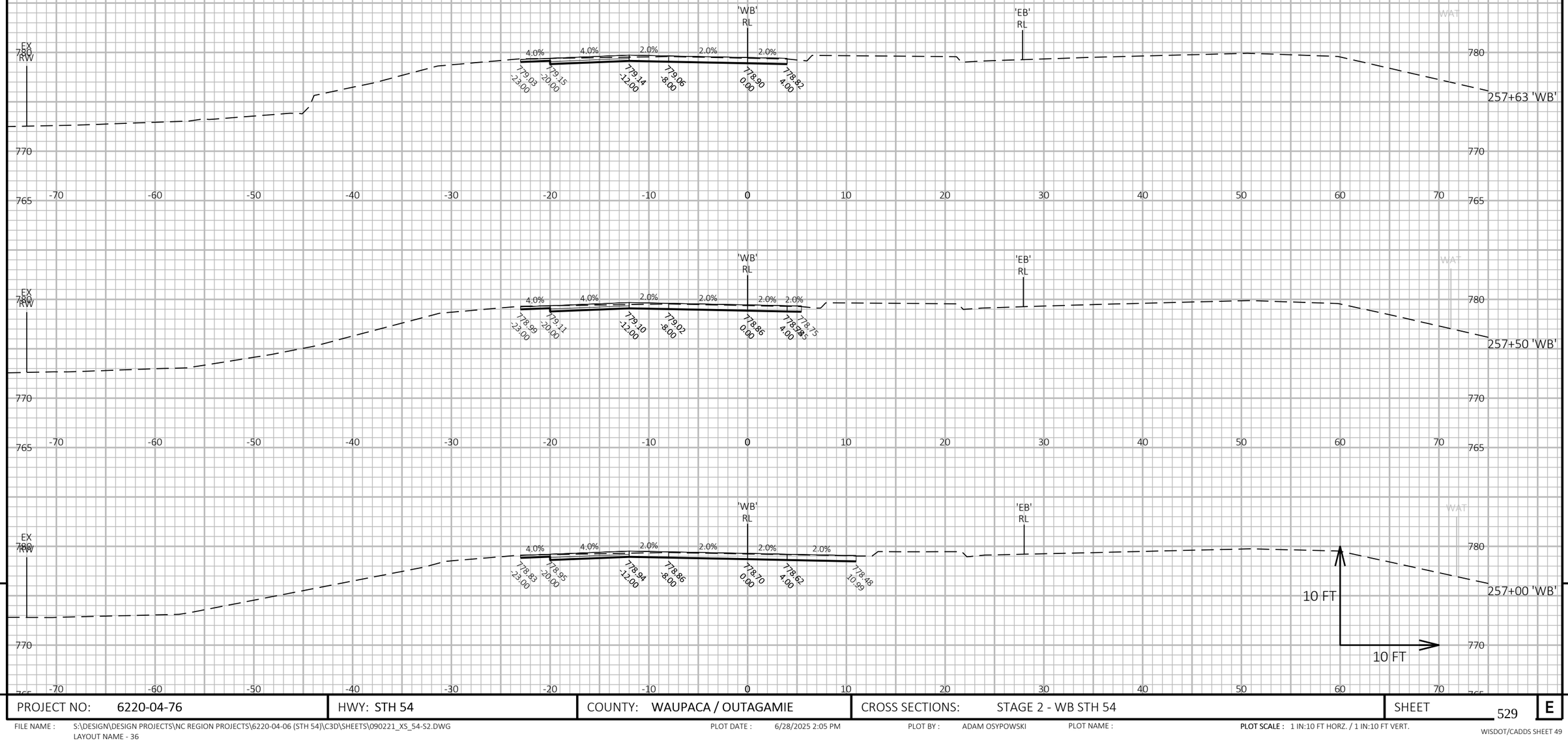
9

9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 528	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 35

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

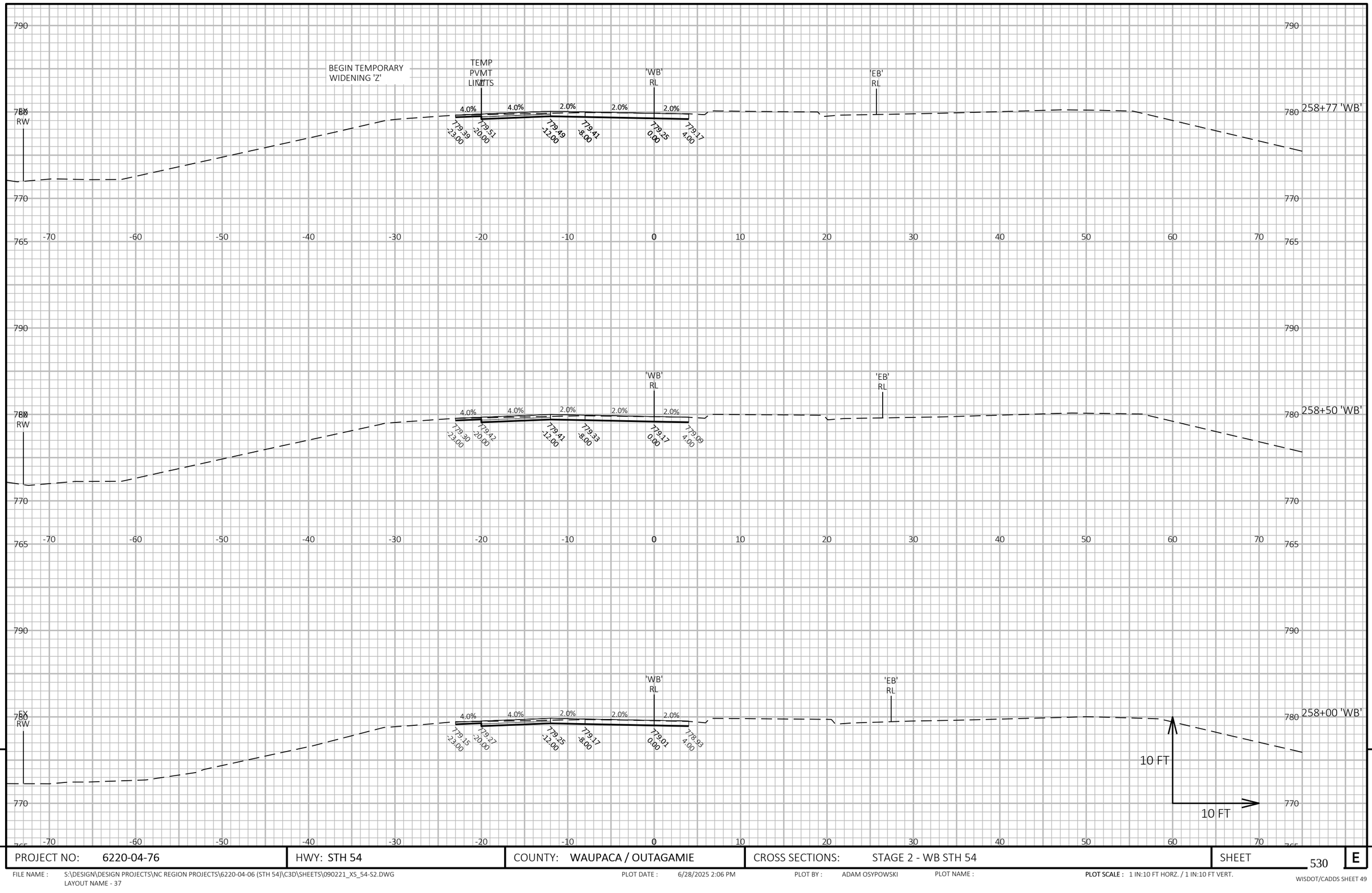
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 529	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 36

PLOT DATE : 6/28/2025 2:05 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



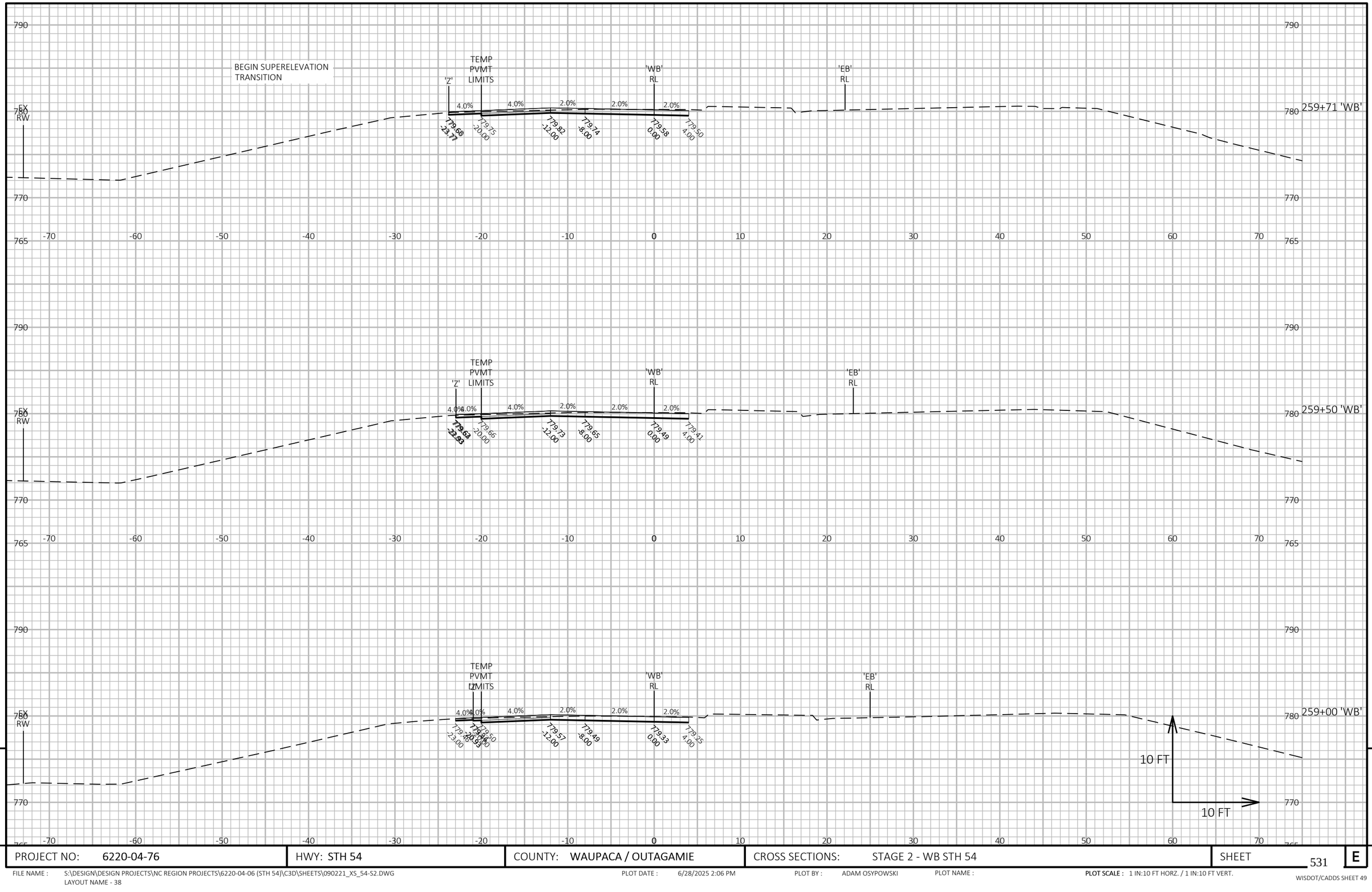
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 530 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 37

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9 9



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 531	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 38

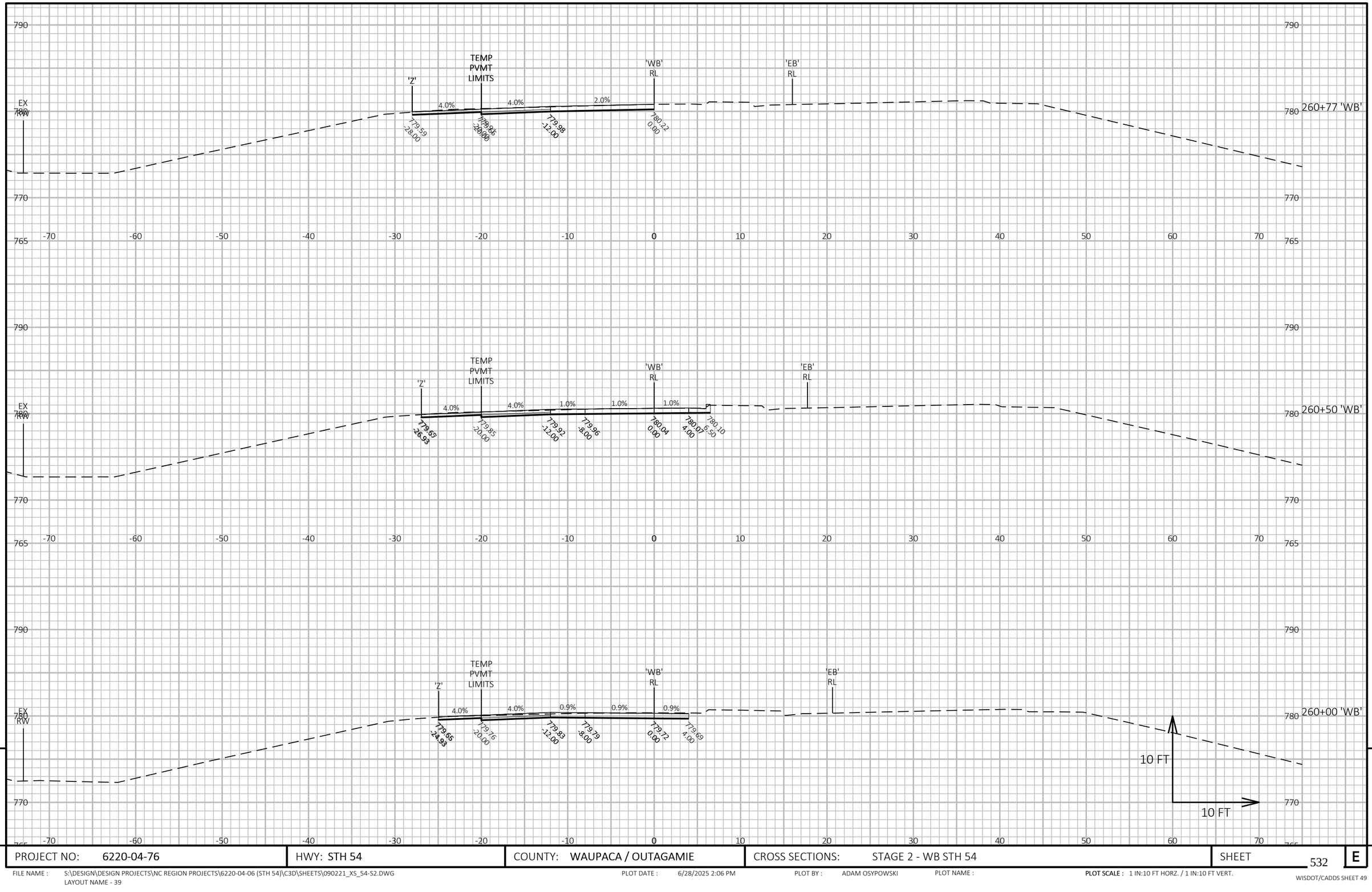
PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49

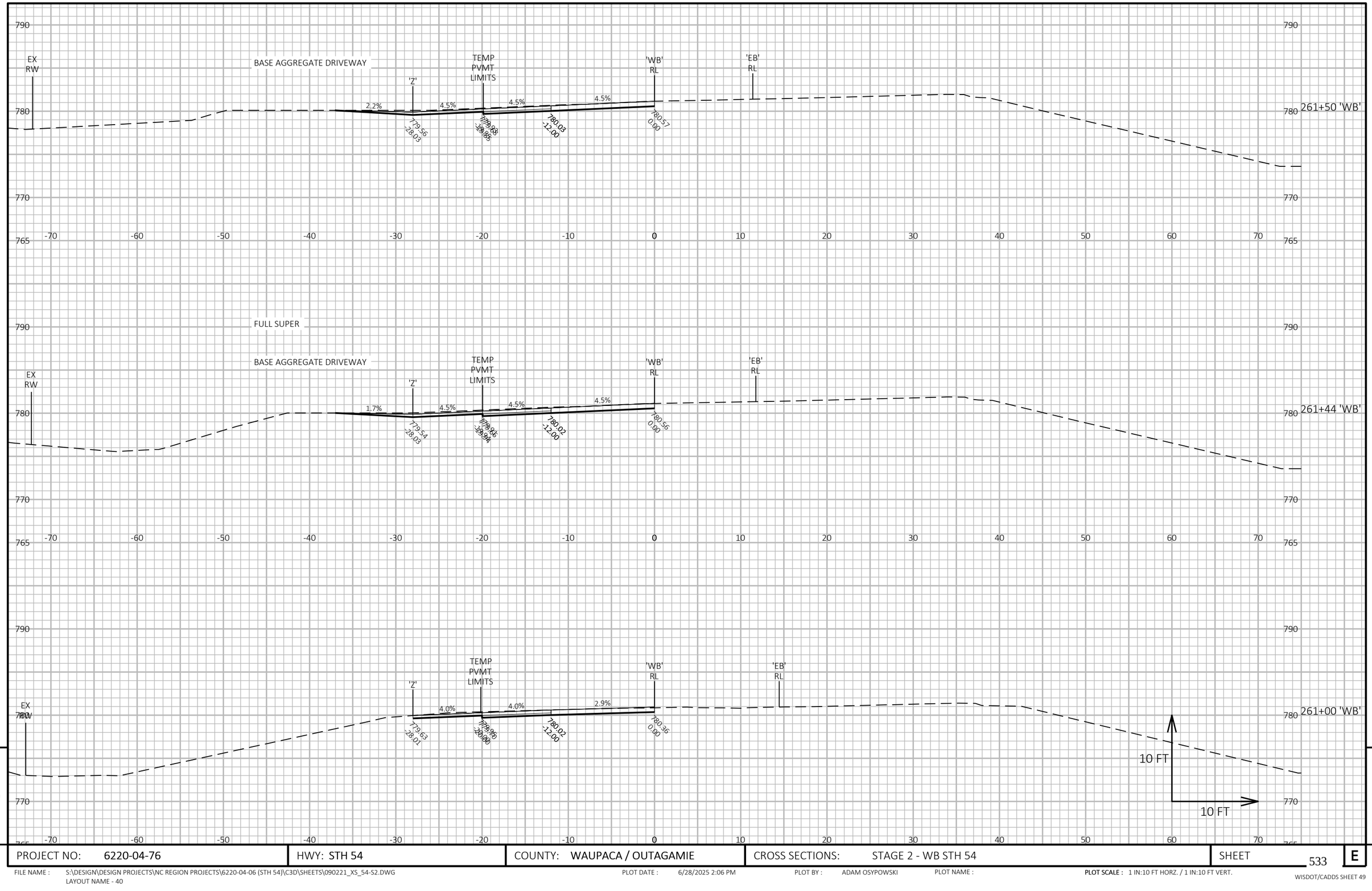


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 532	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 39

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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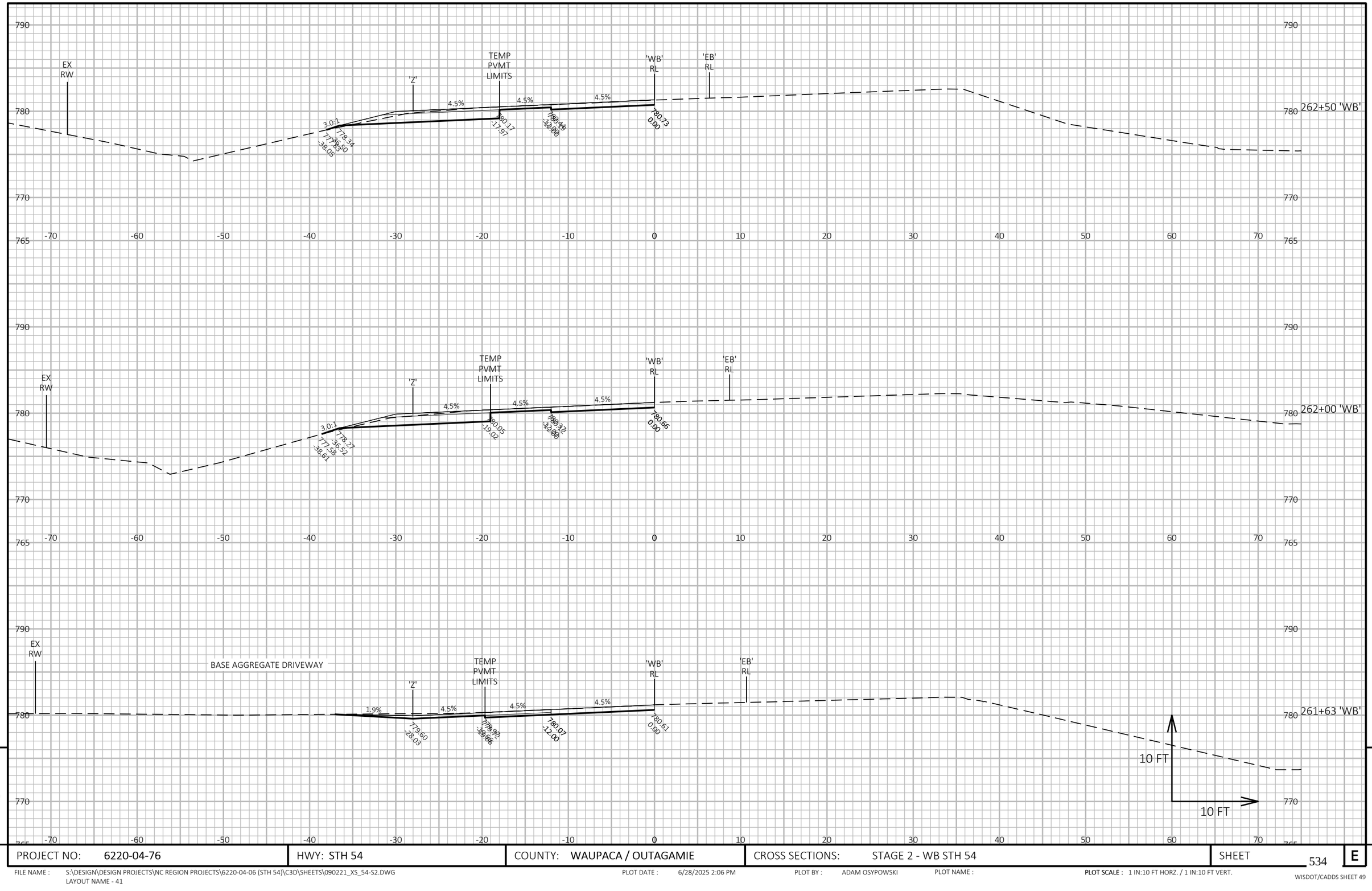
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 533	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 40

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 534	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 41

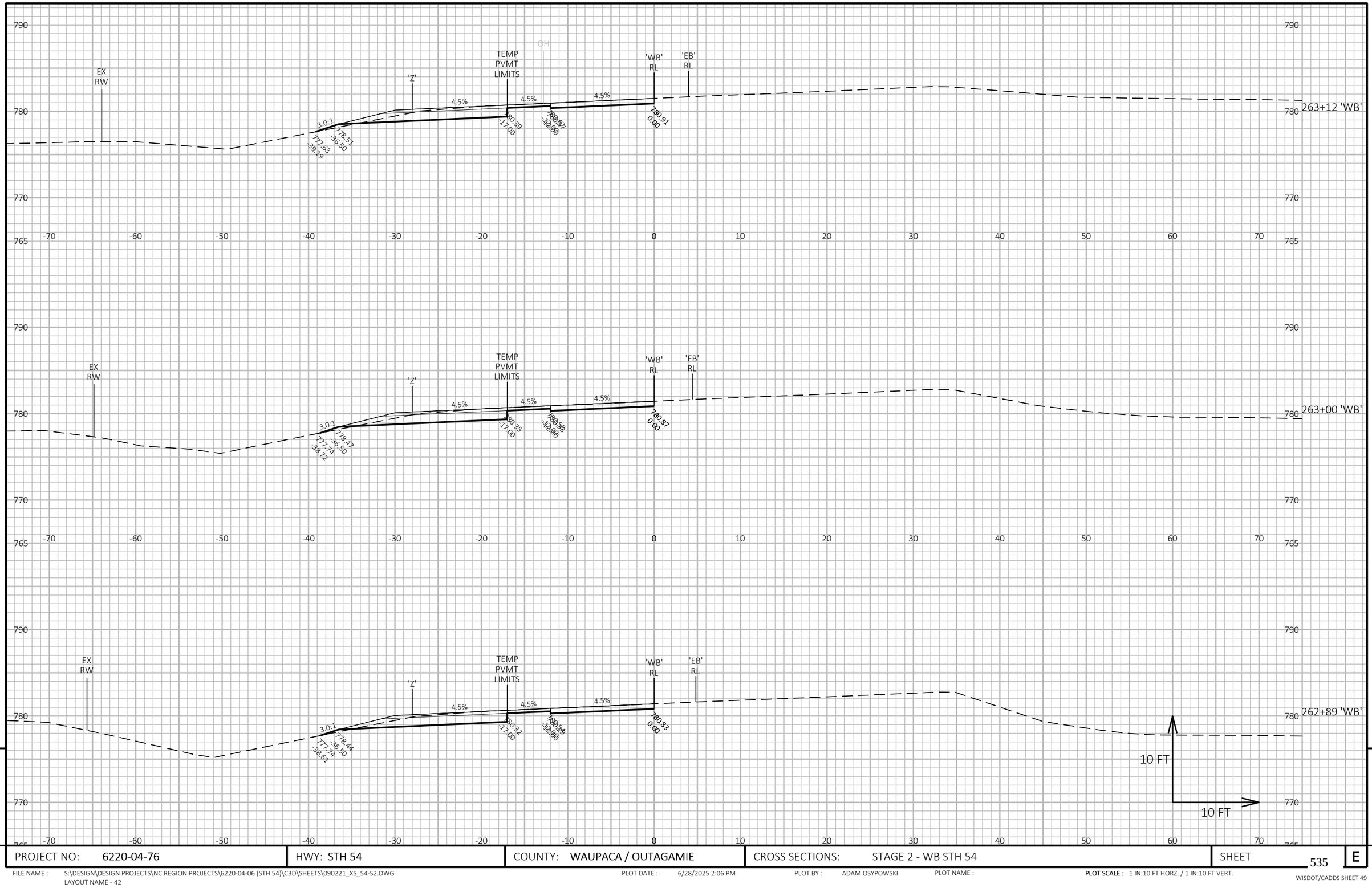
PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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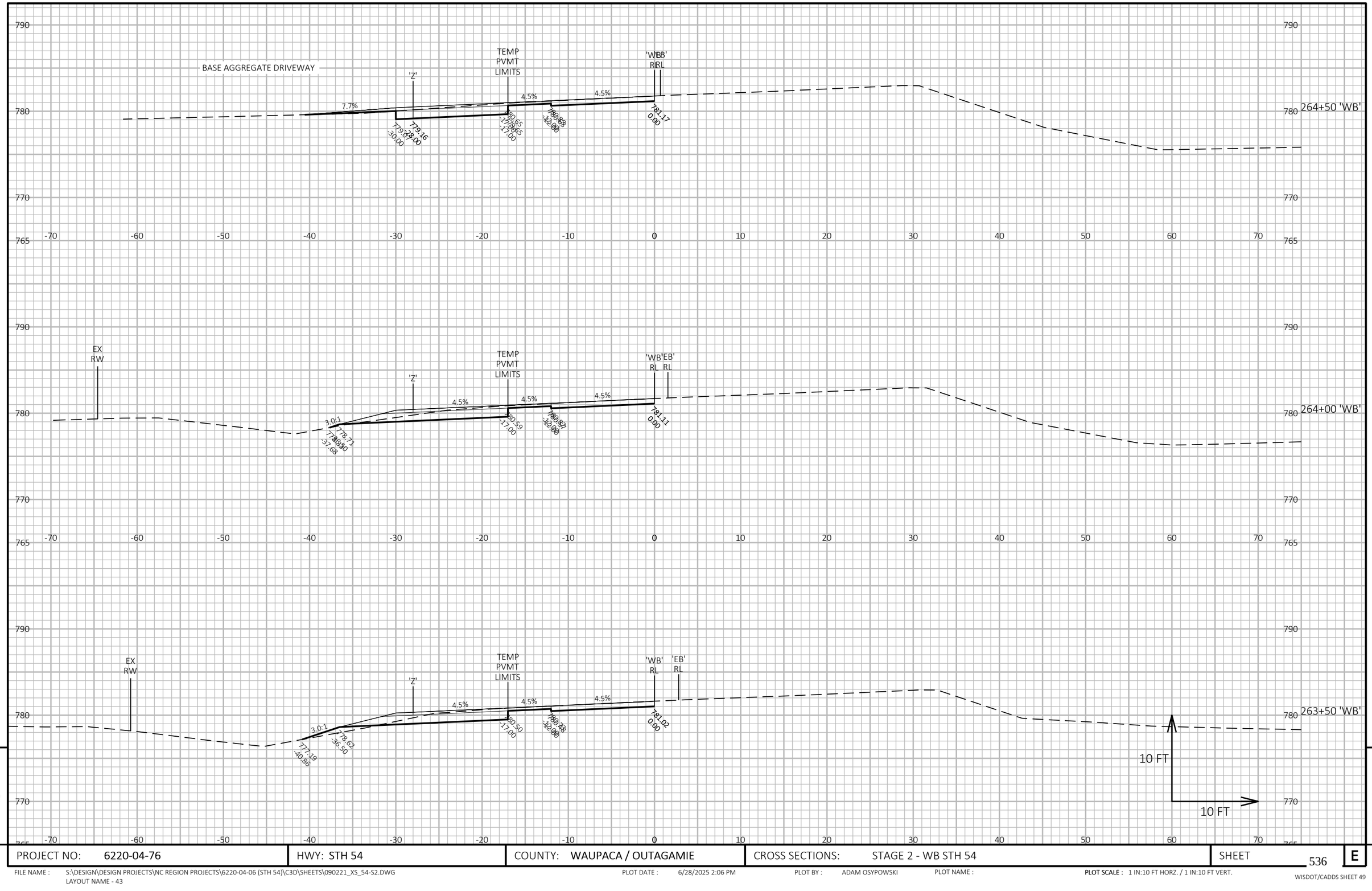
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 535 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 42

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

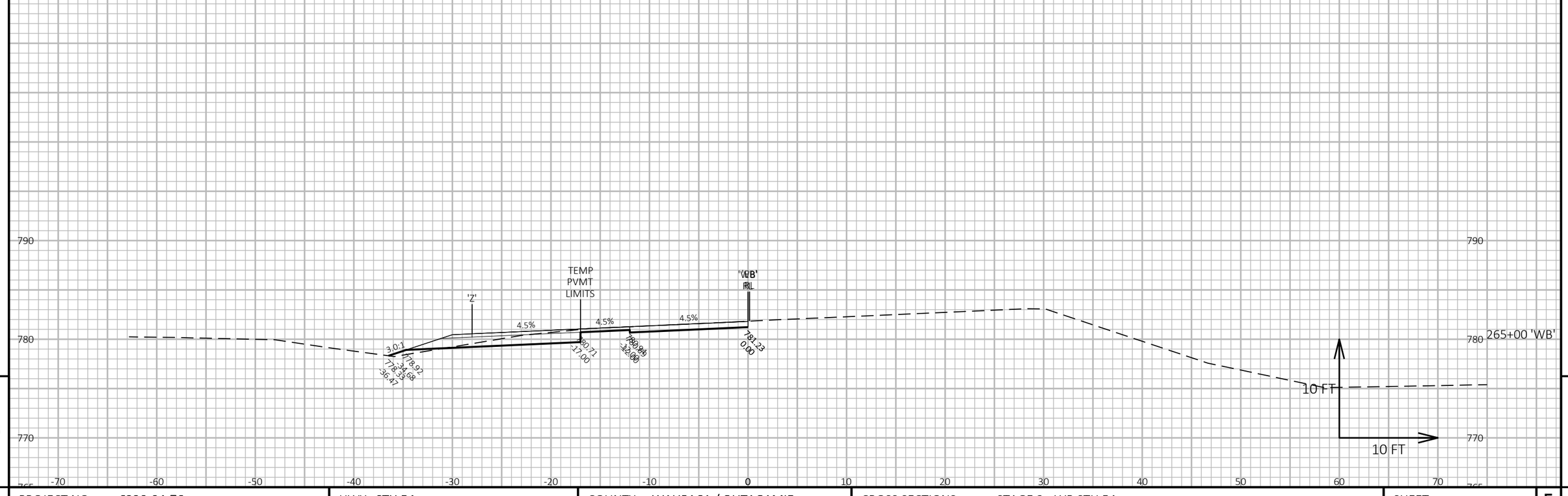


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 536	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 43

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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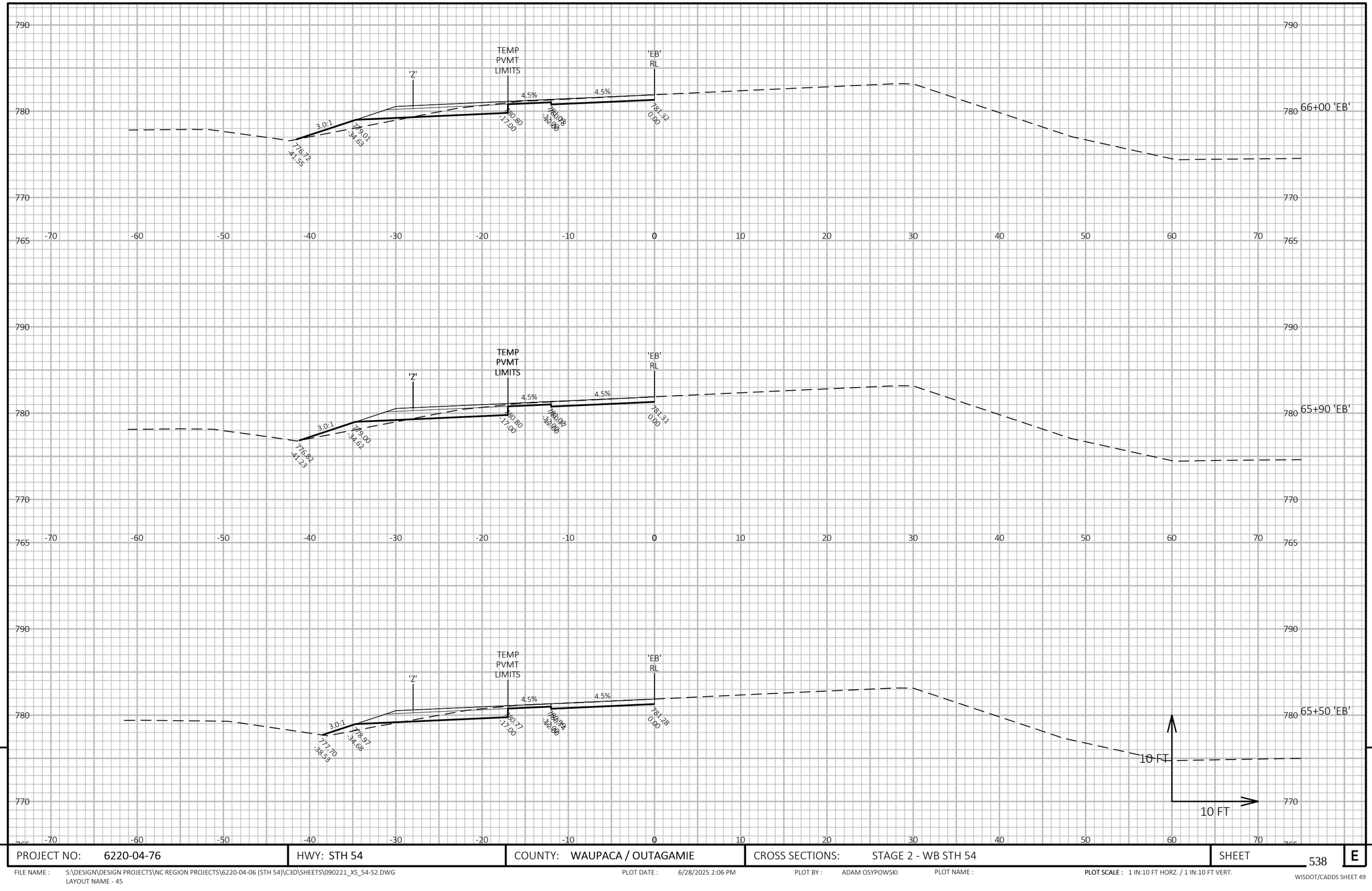
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 537	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 44

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 538	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 45

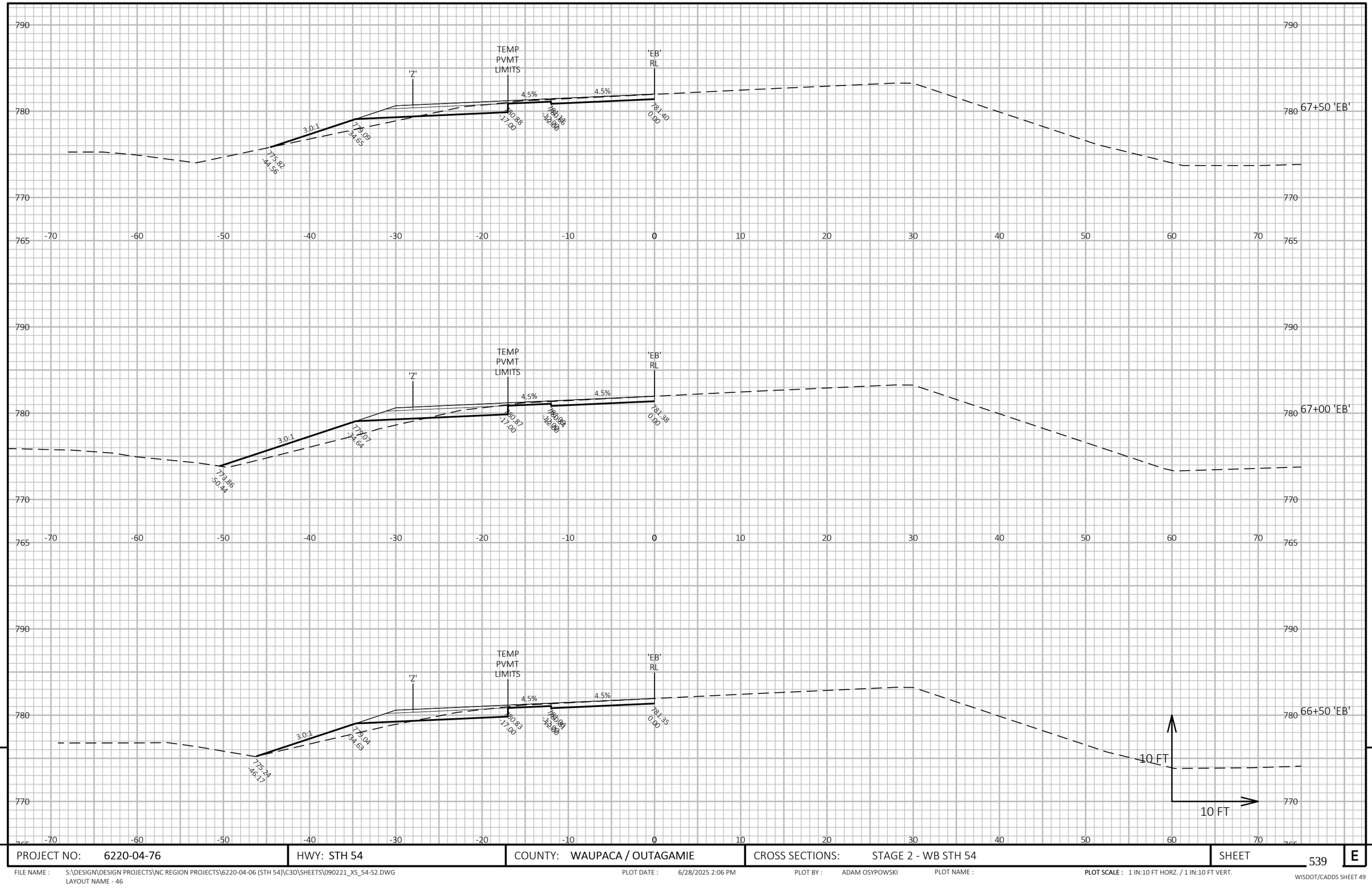
PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 539	E

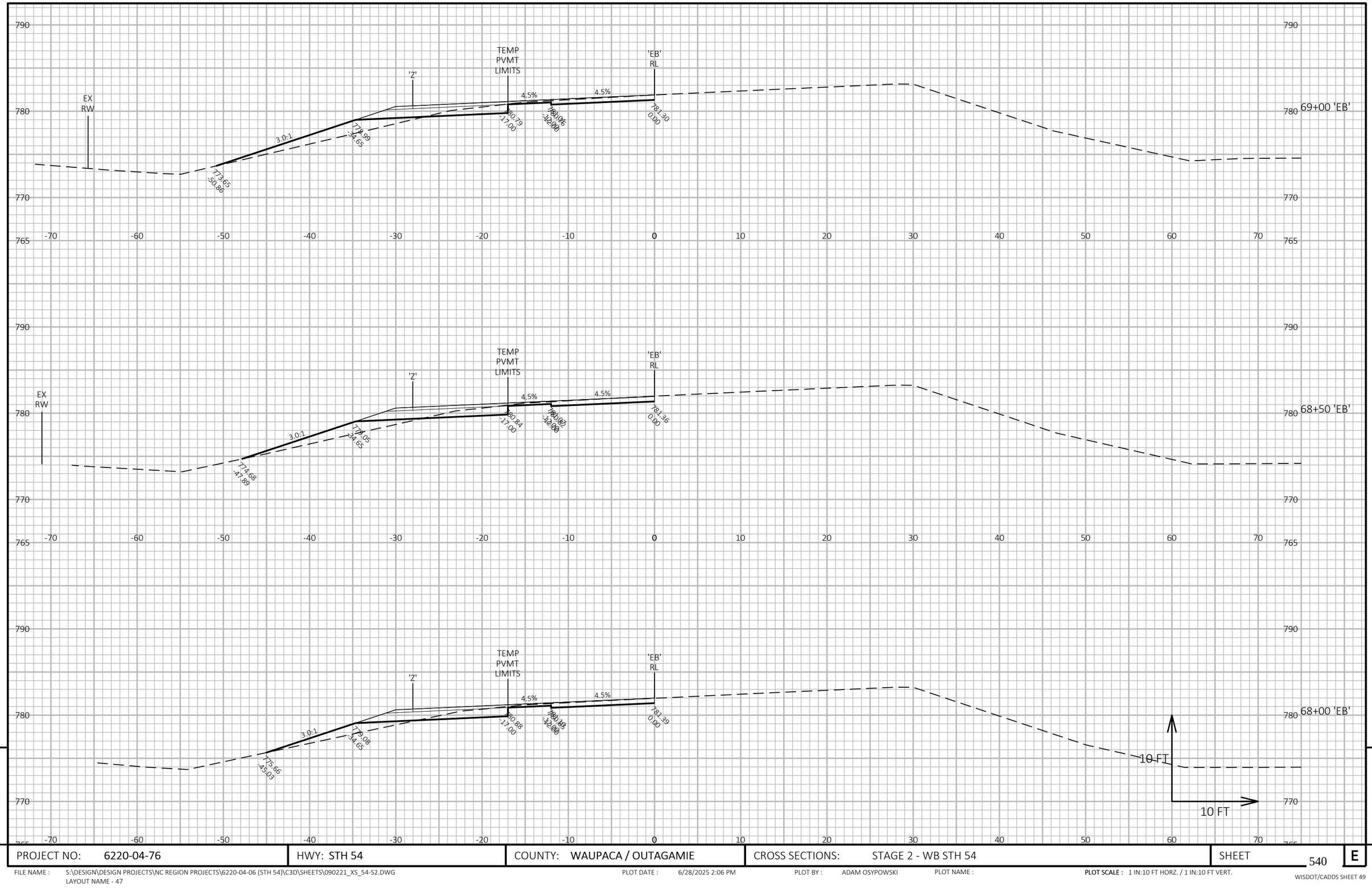
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 46

PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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



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9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 540	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 47

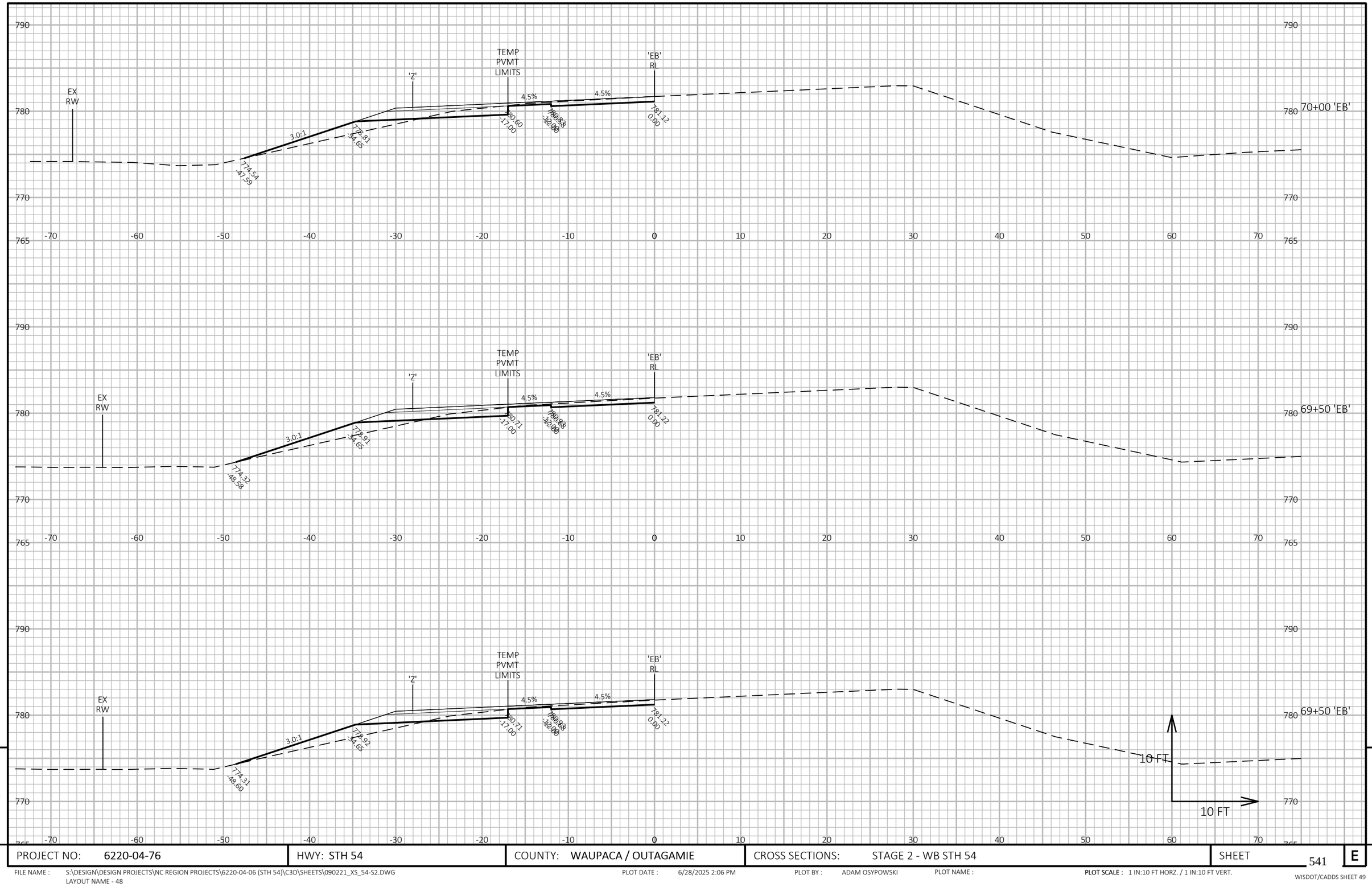
PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

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: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 541	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 48

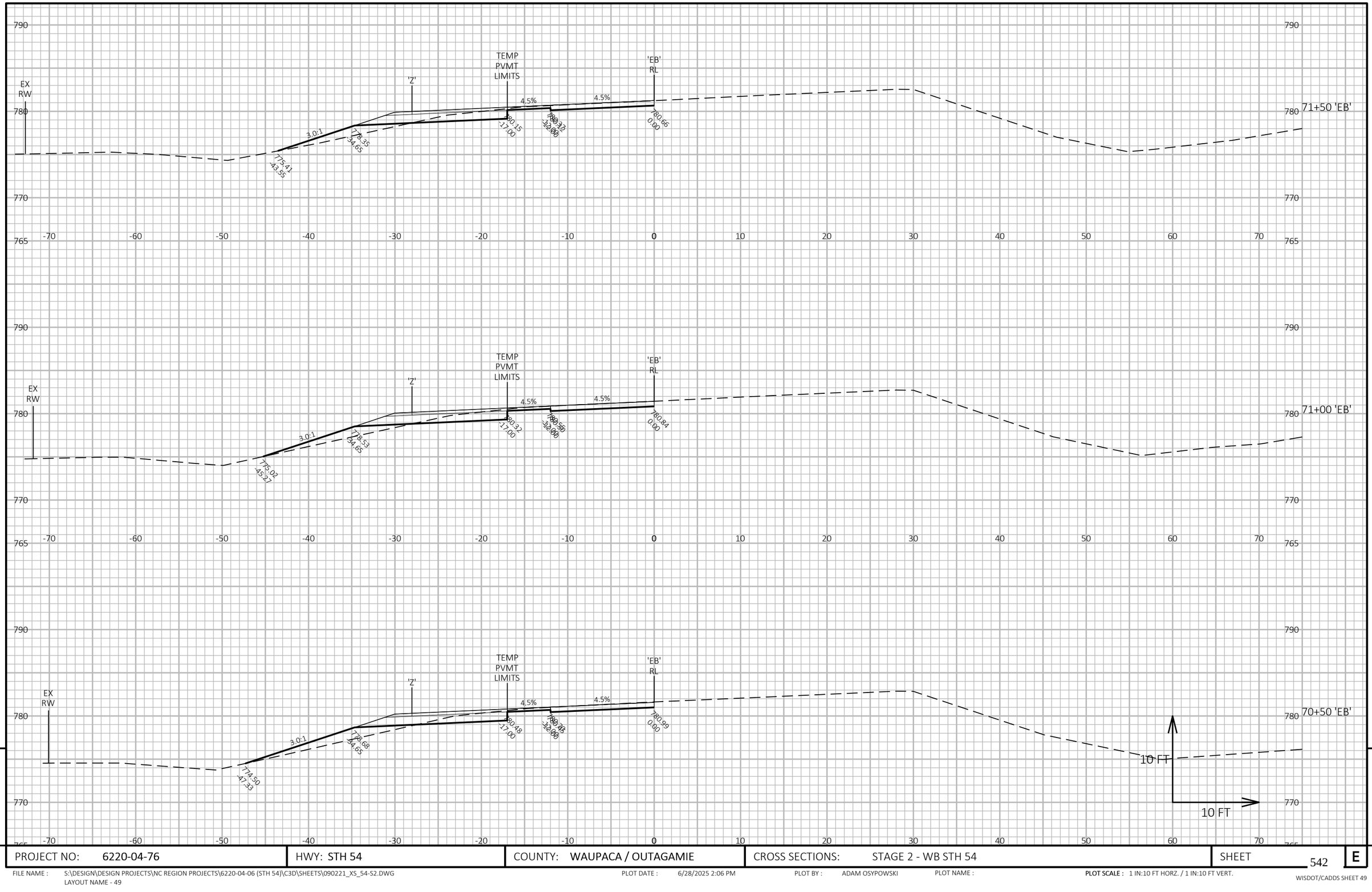
PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 542	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 49

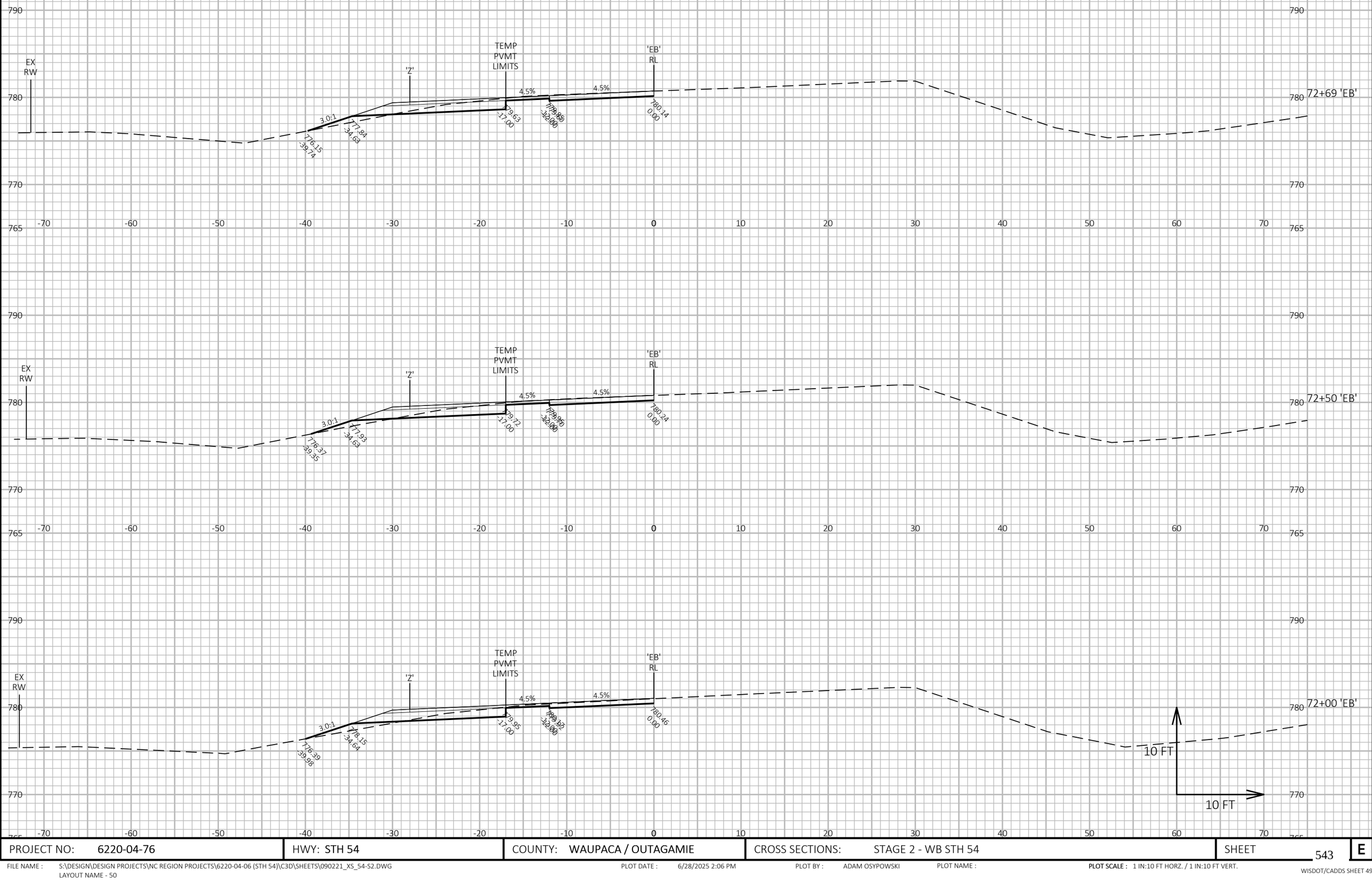
PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 543	E

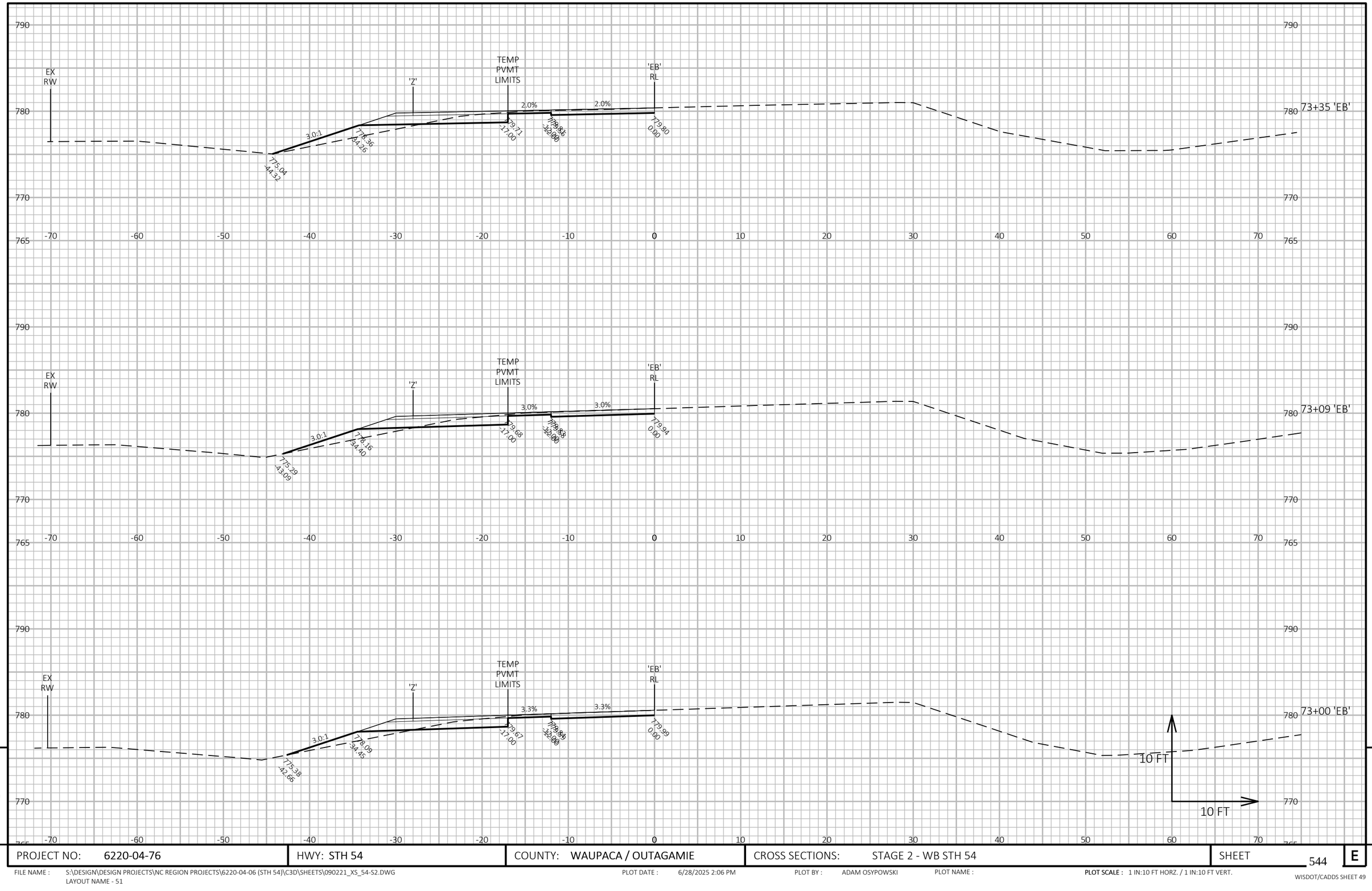
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 50

PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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



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9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 544	E

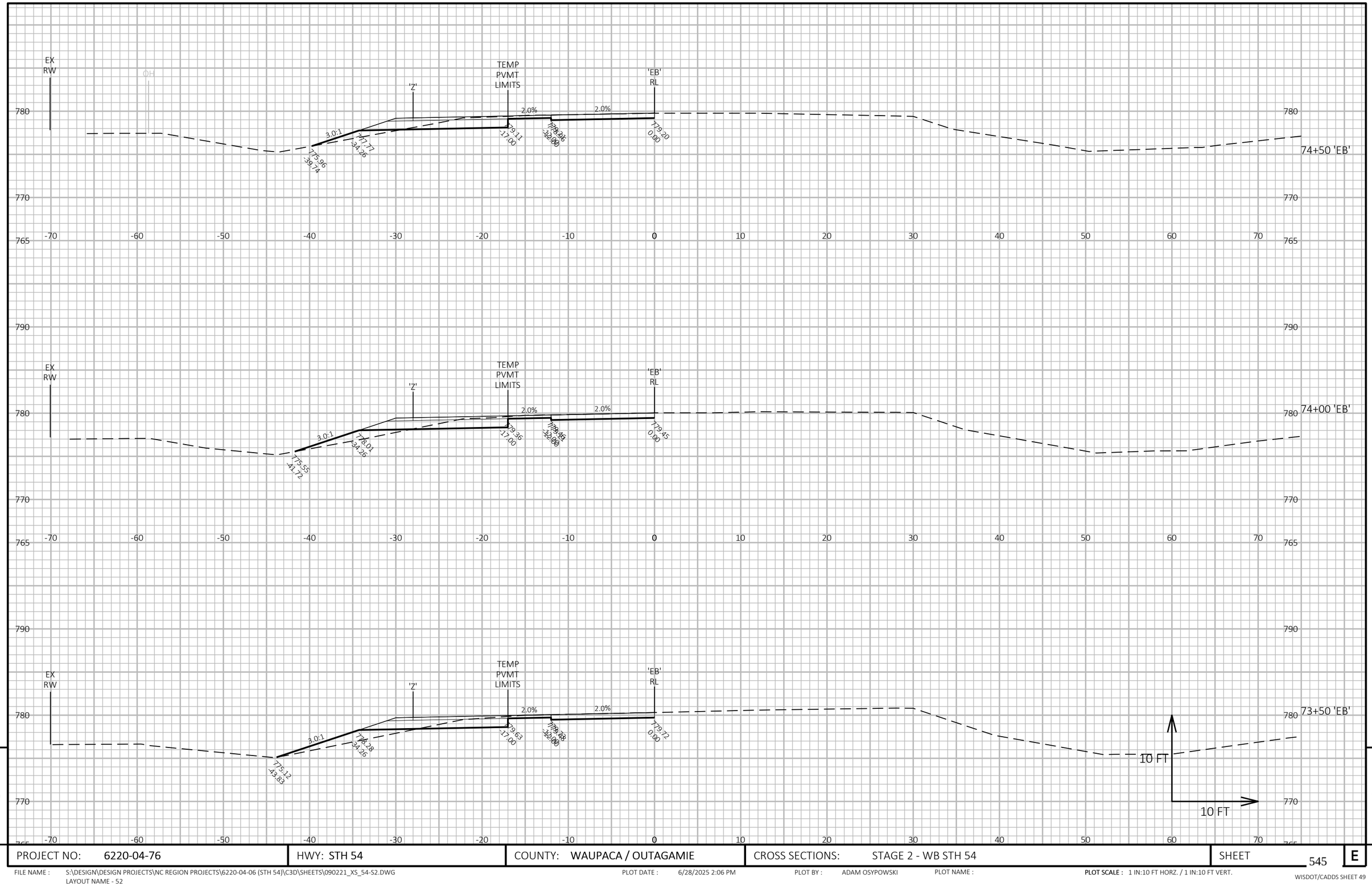
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 51

PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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



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9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 545	E

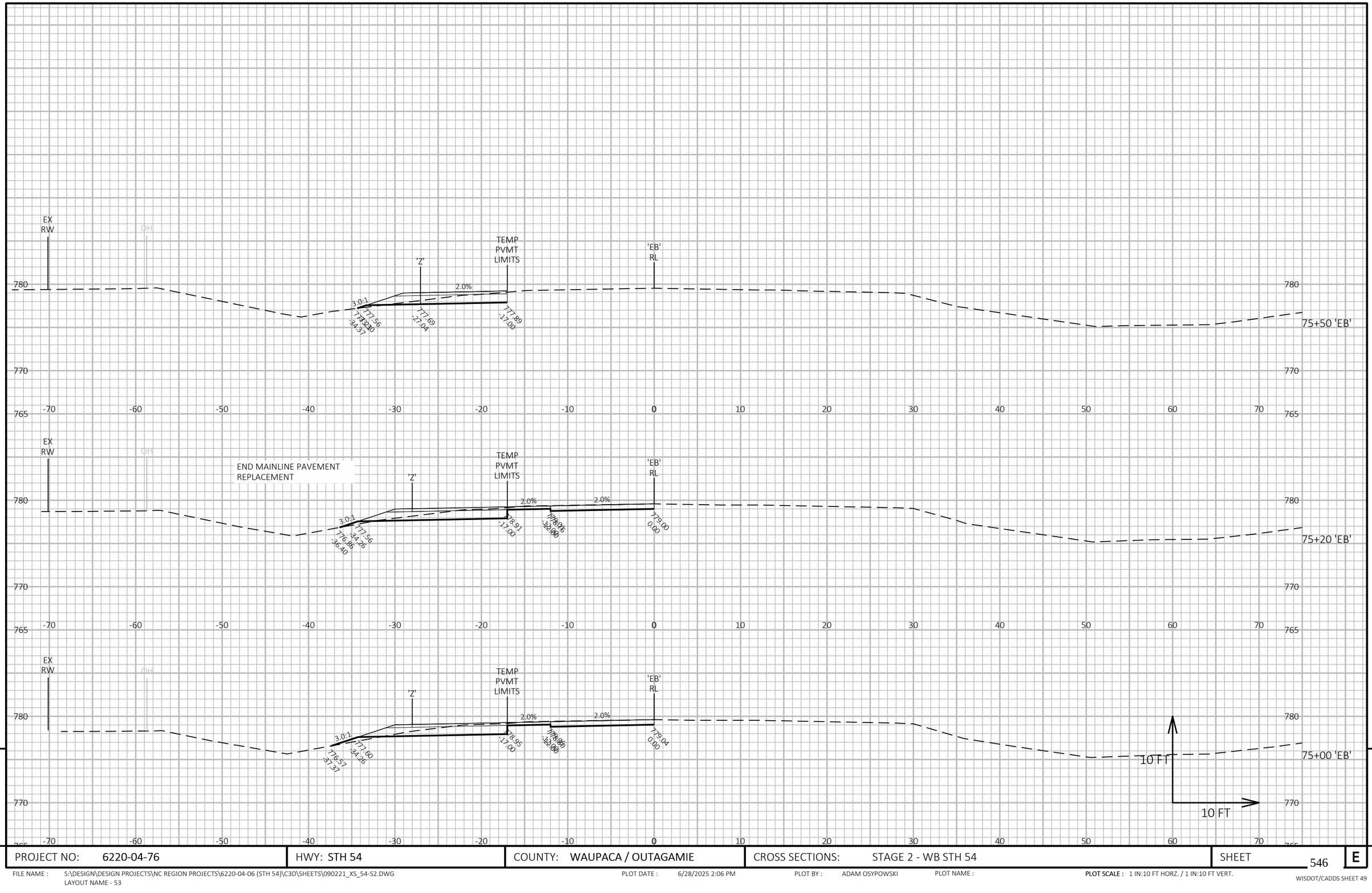
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 52

PLOT DATE : 6/28/2025 2:06 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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



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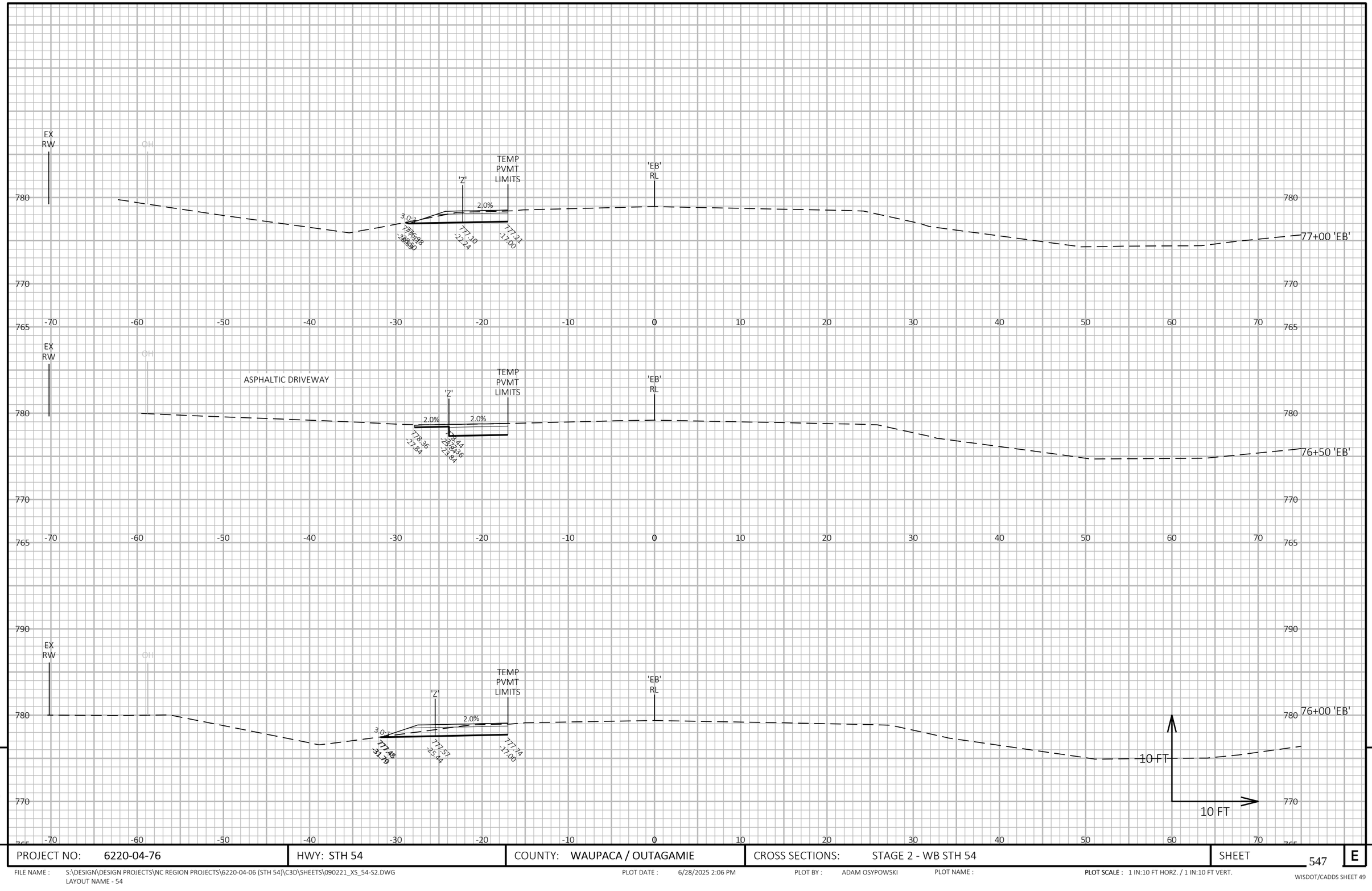
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 546	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 53

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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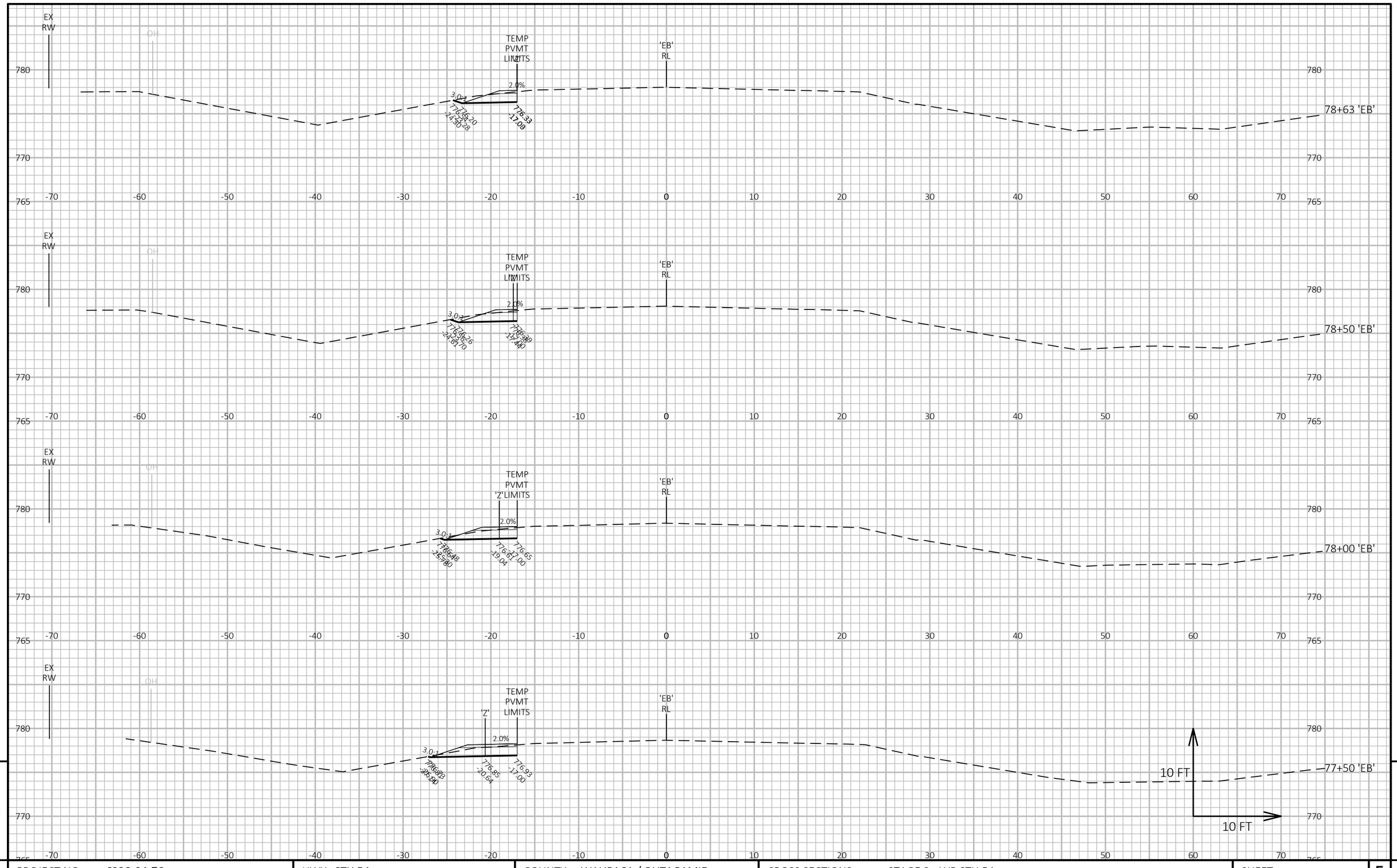
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 547	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 54

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - WB STH 54	SHEET 548	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090221_XS_54-S2.DWG
LAYOUT NAME - 55

PLOT DATE : 6/28/2025 2:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

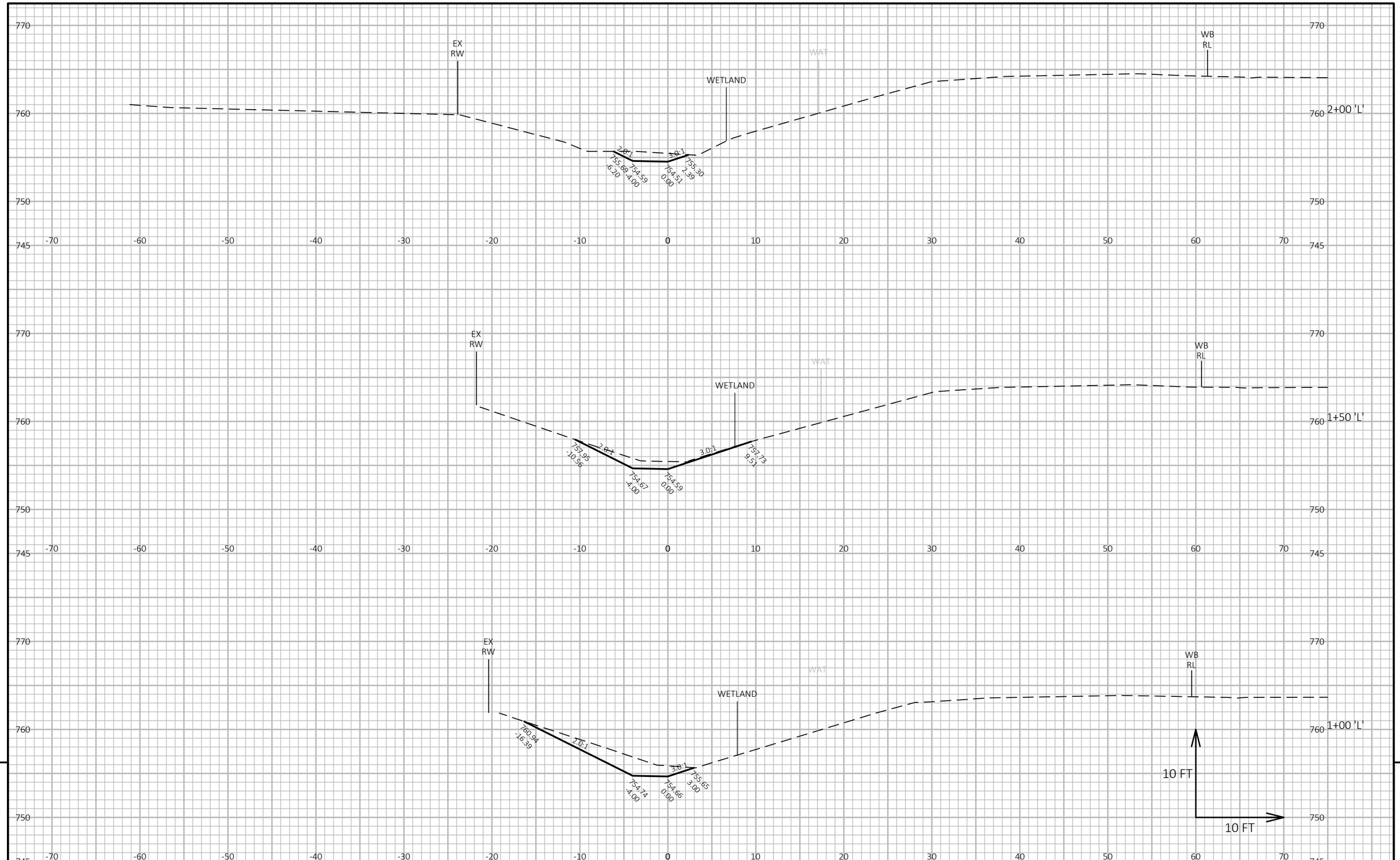
9

9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'L'	SHEET 549	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 01

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

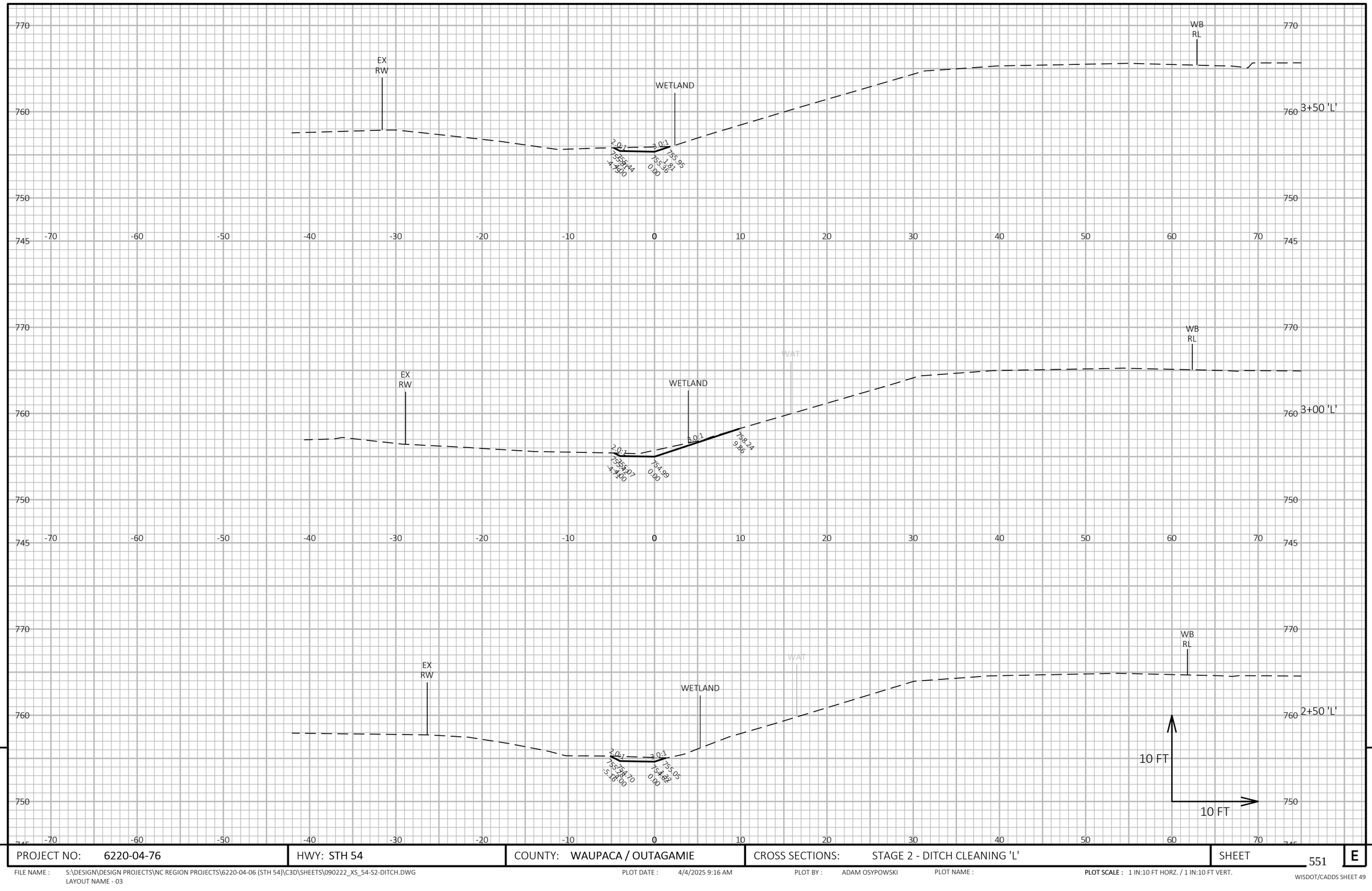


PROJECT NO: 6220-04-76 | HWY: STH 54 | COUNTY: WAUPACA / OUTAGAMIE | CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'L' | SHEET 550 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 02

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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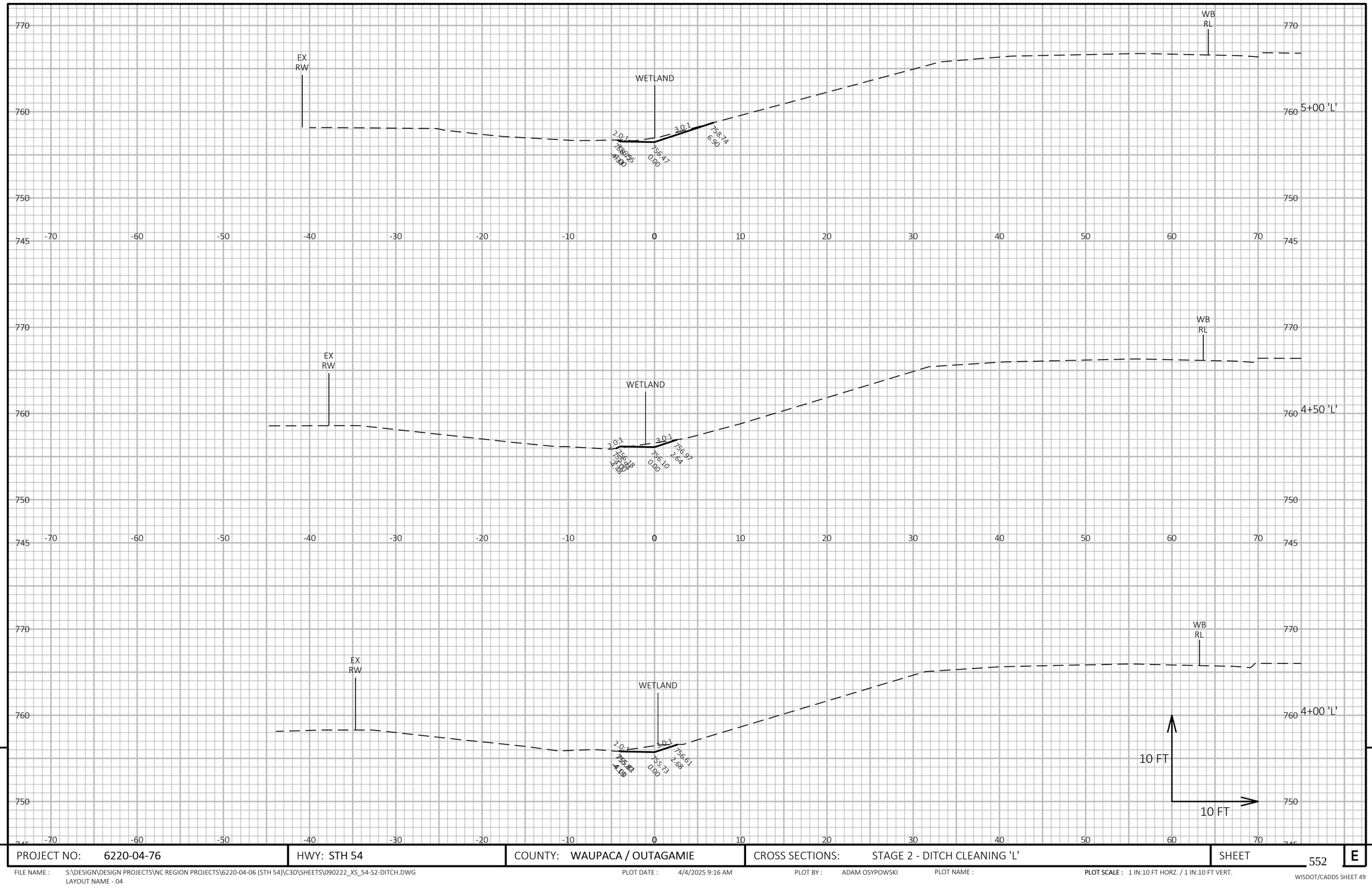
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'L'	SHEET 551	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 03

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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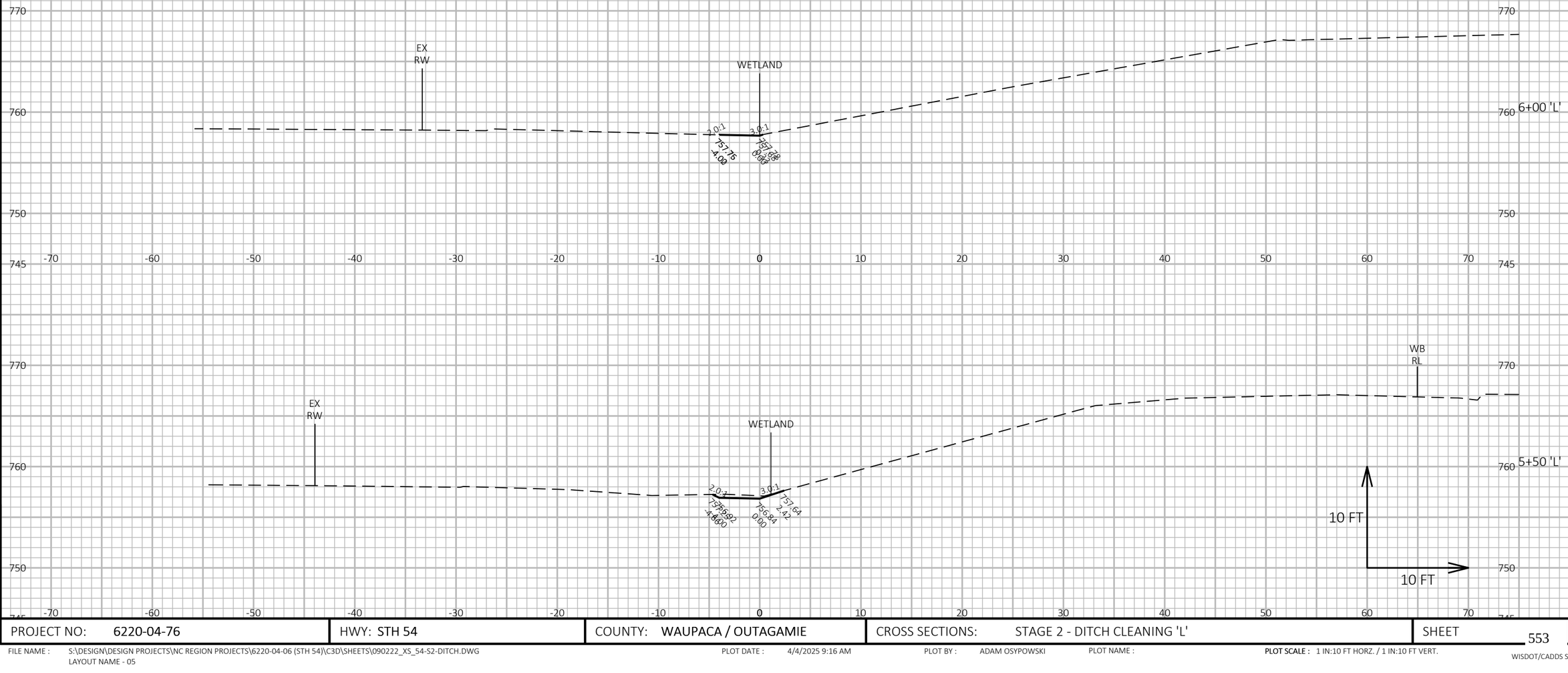
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'L'	SHEET 552	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 04

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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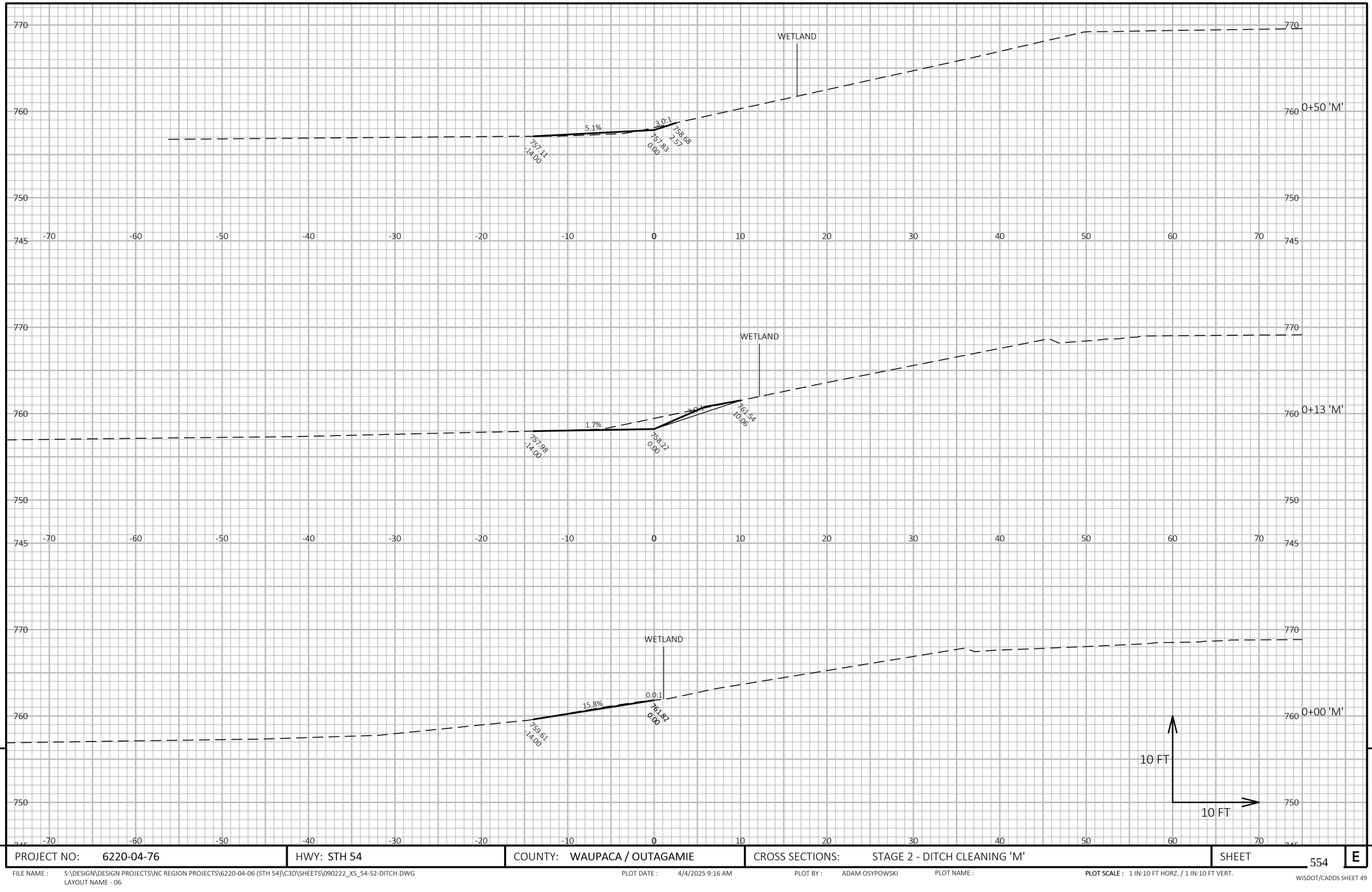
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'L'	SHEET 553	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 05

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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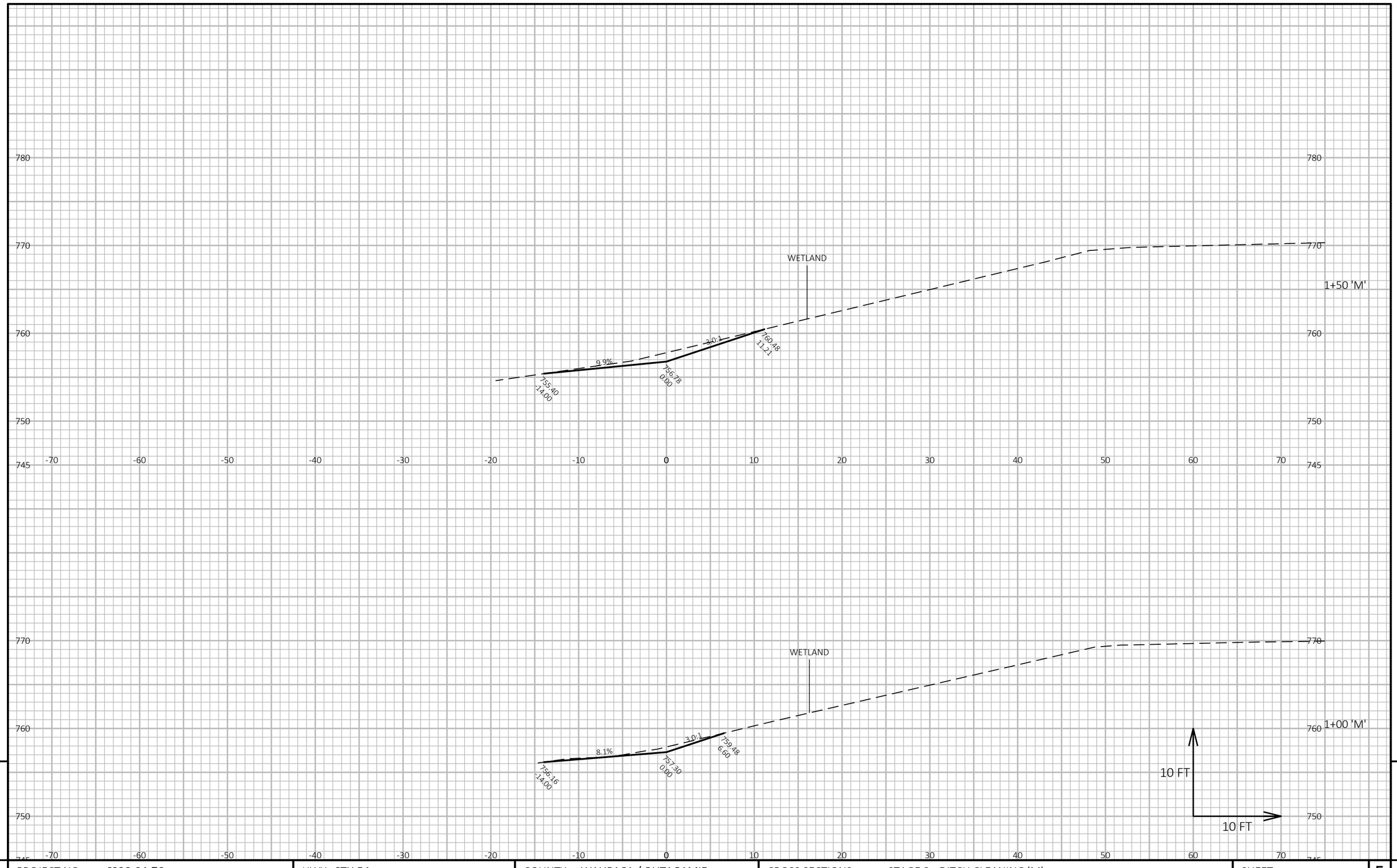
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'M'	SHEET 554	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 06

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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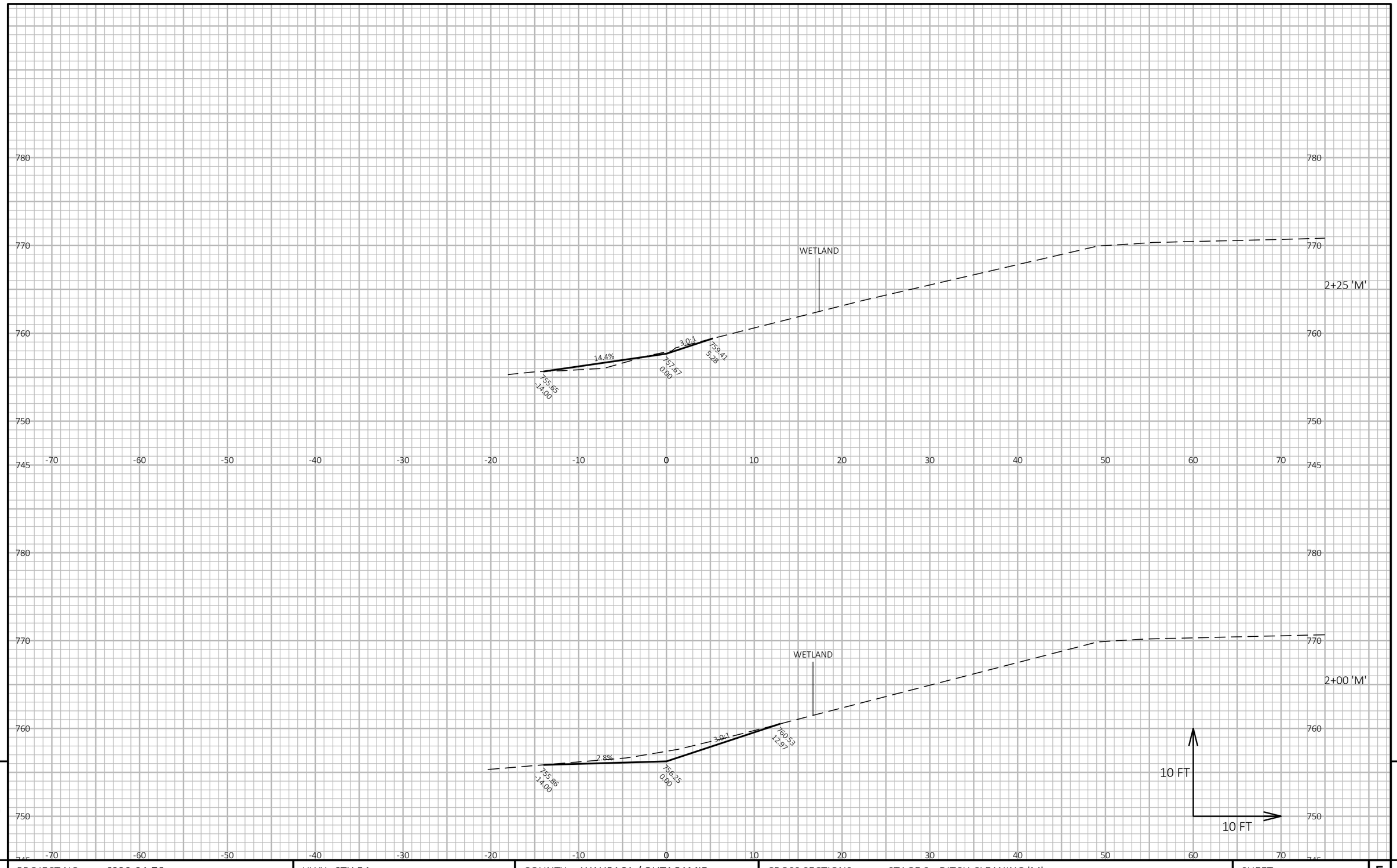
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'M'	SHEET 555	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 07

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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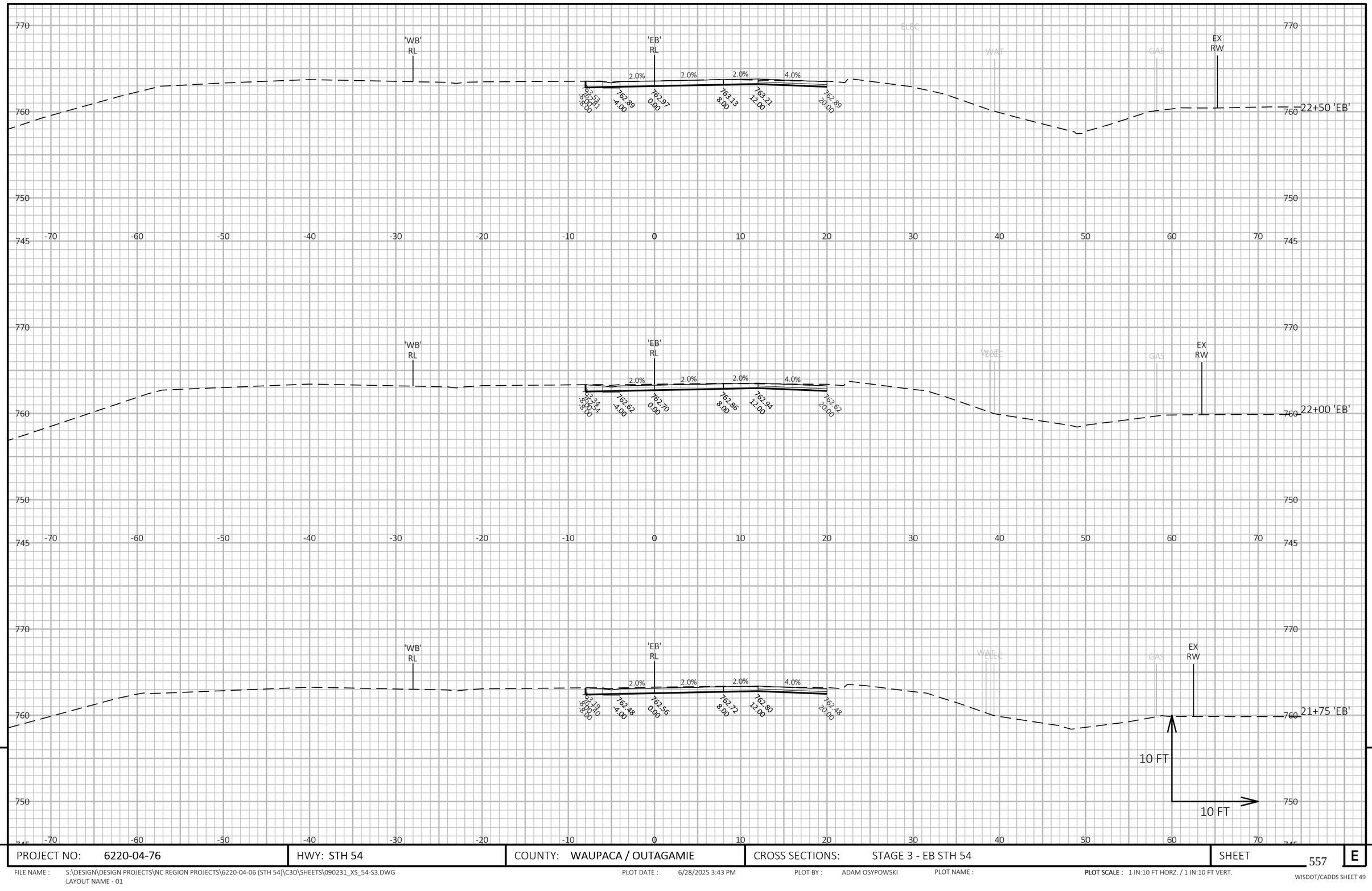
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 2 - DITCH CLEANING 'M'	SHEET 556	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090222_XS_54-S2-DITCH.DWG
LAYOUT NAME - 08

PLOT DATE : 4/4/2025 9:16 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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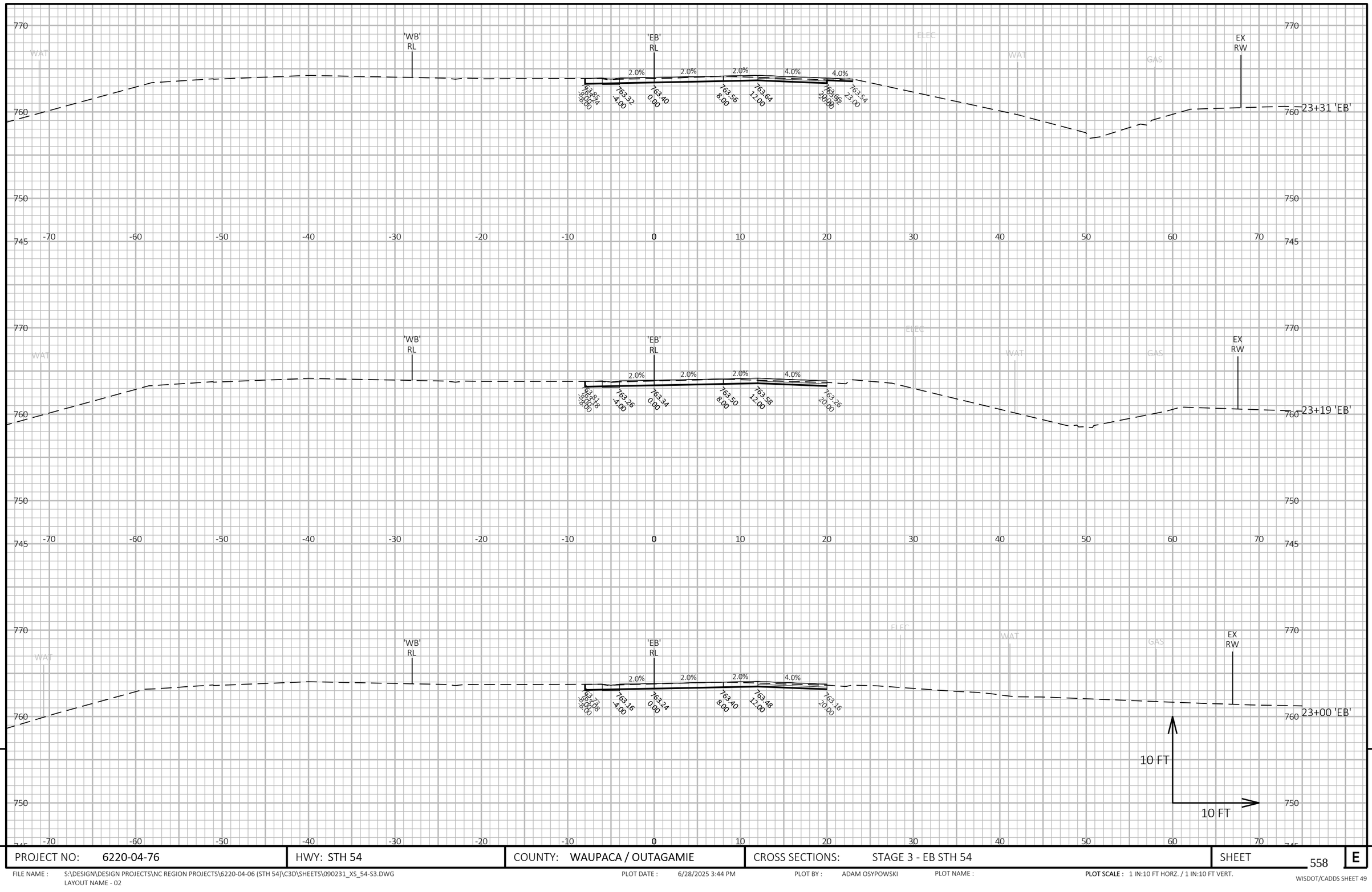
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 557	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 3:43 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 558	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 02

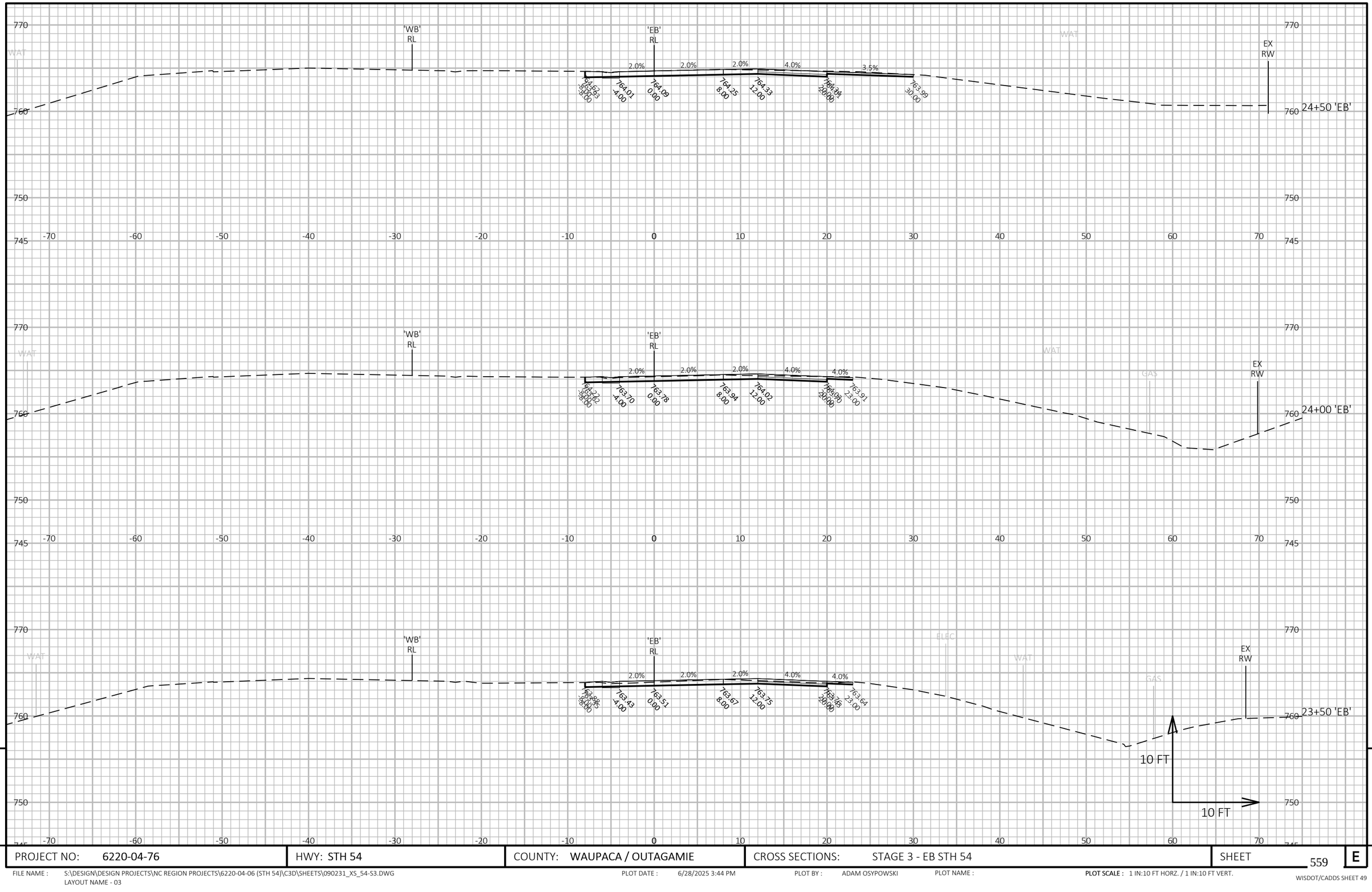
PLOT DATE : 6/28/2025 3:44 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 559	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 03

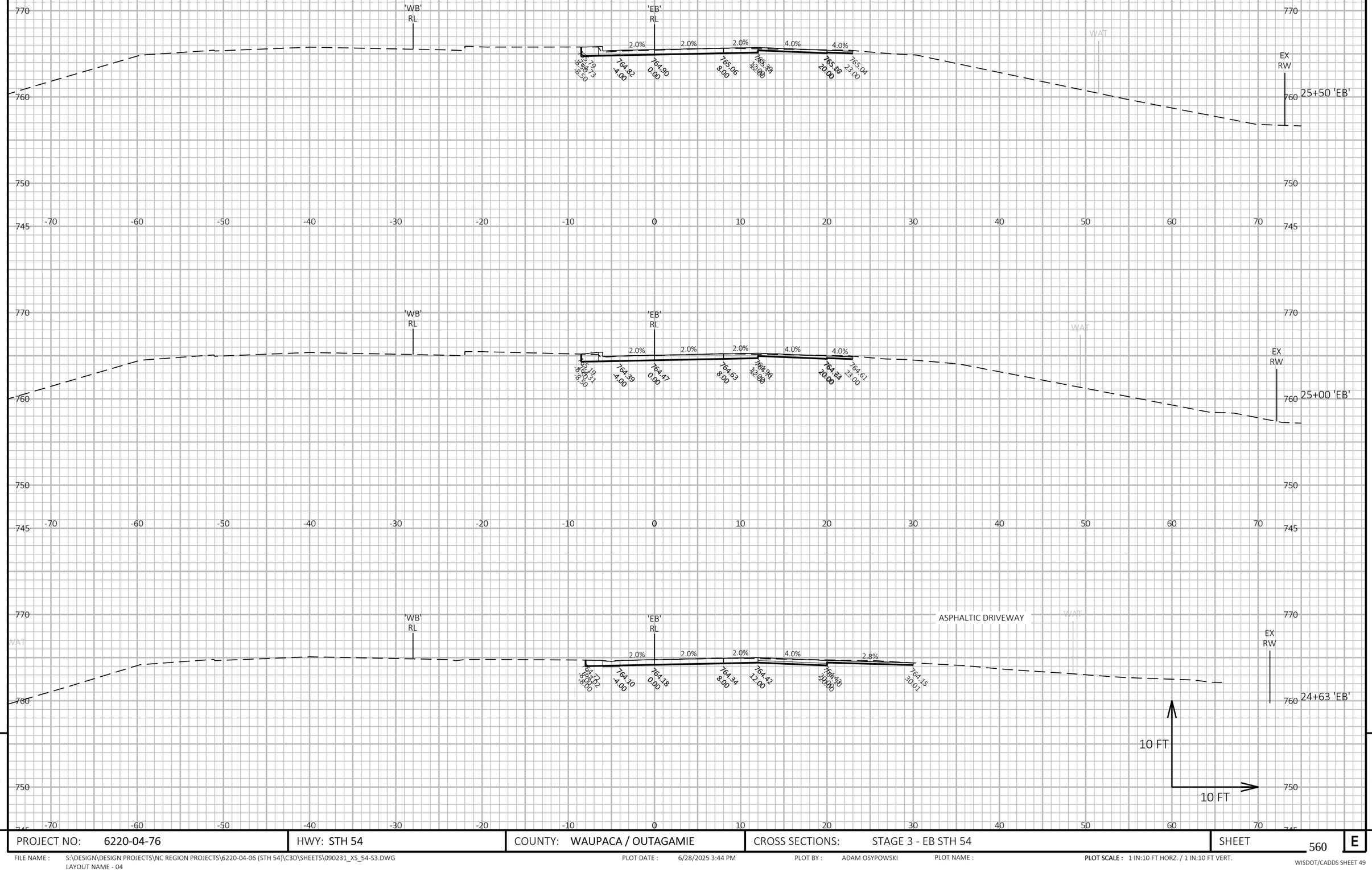
PLOT DATE : 6/28/2025 3:44 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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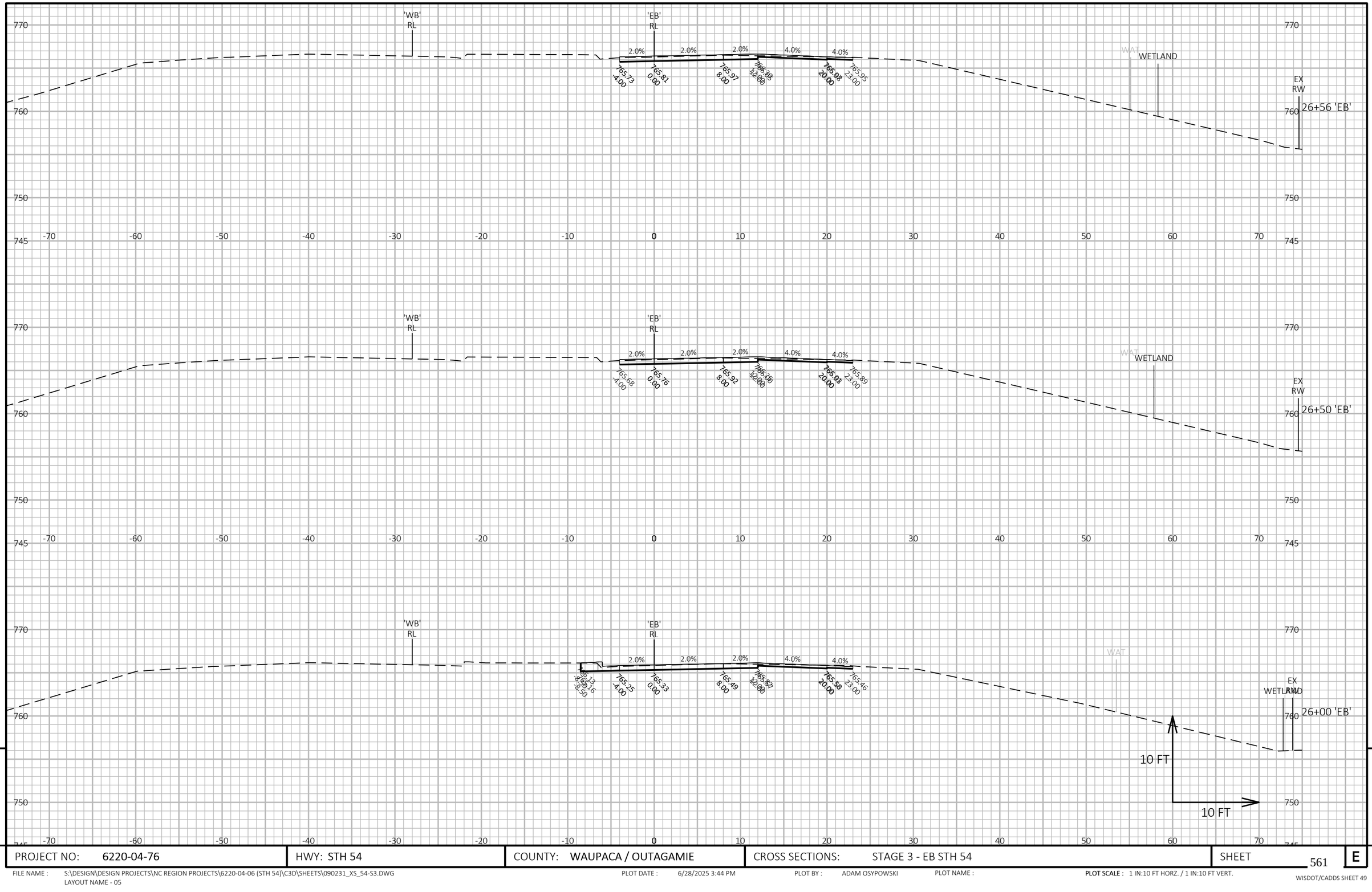
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 560	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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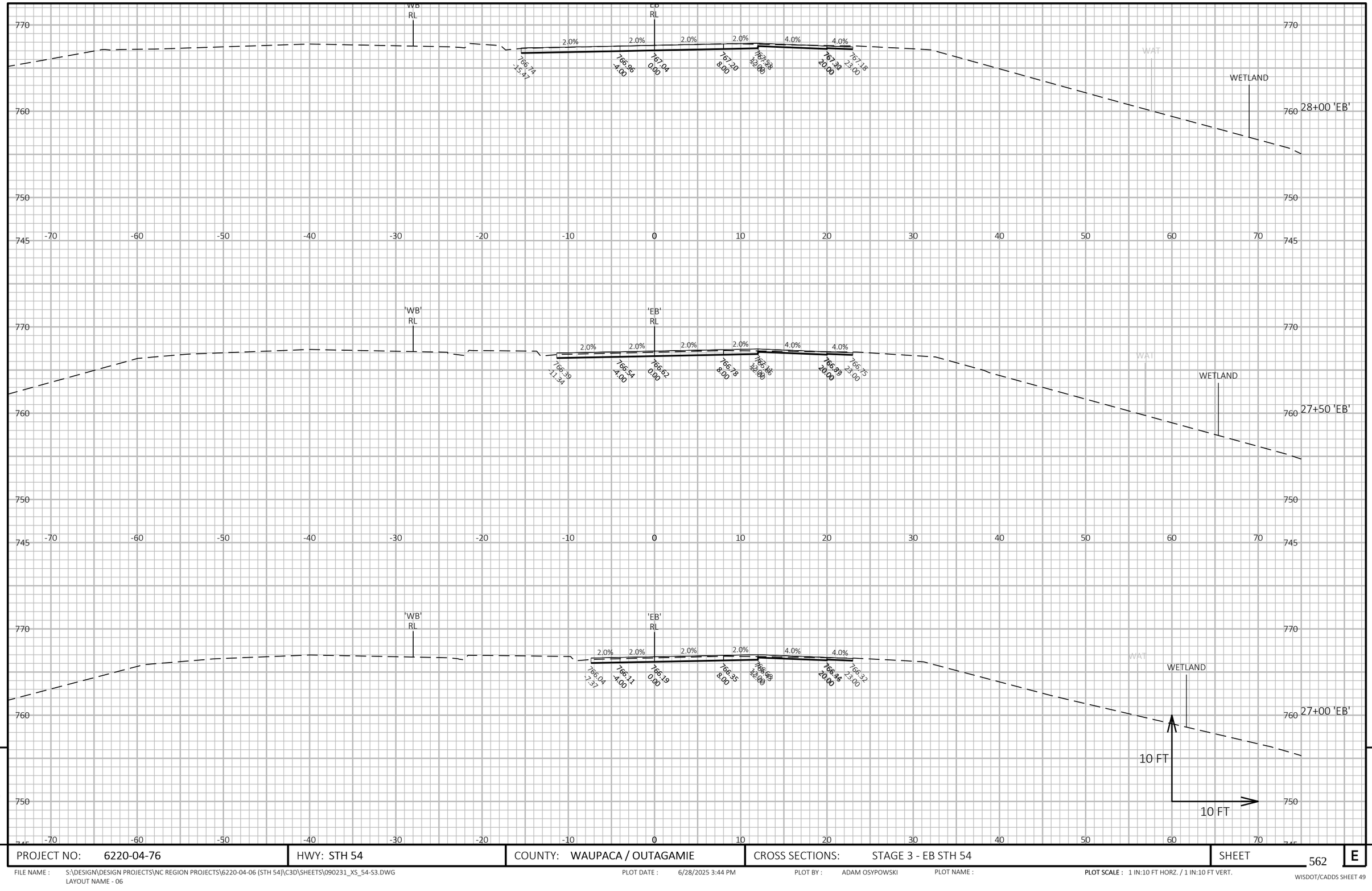
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 561	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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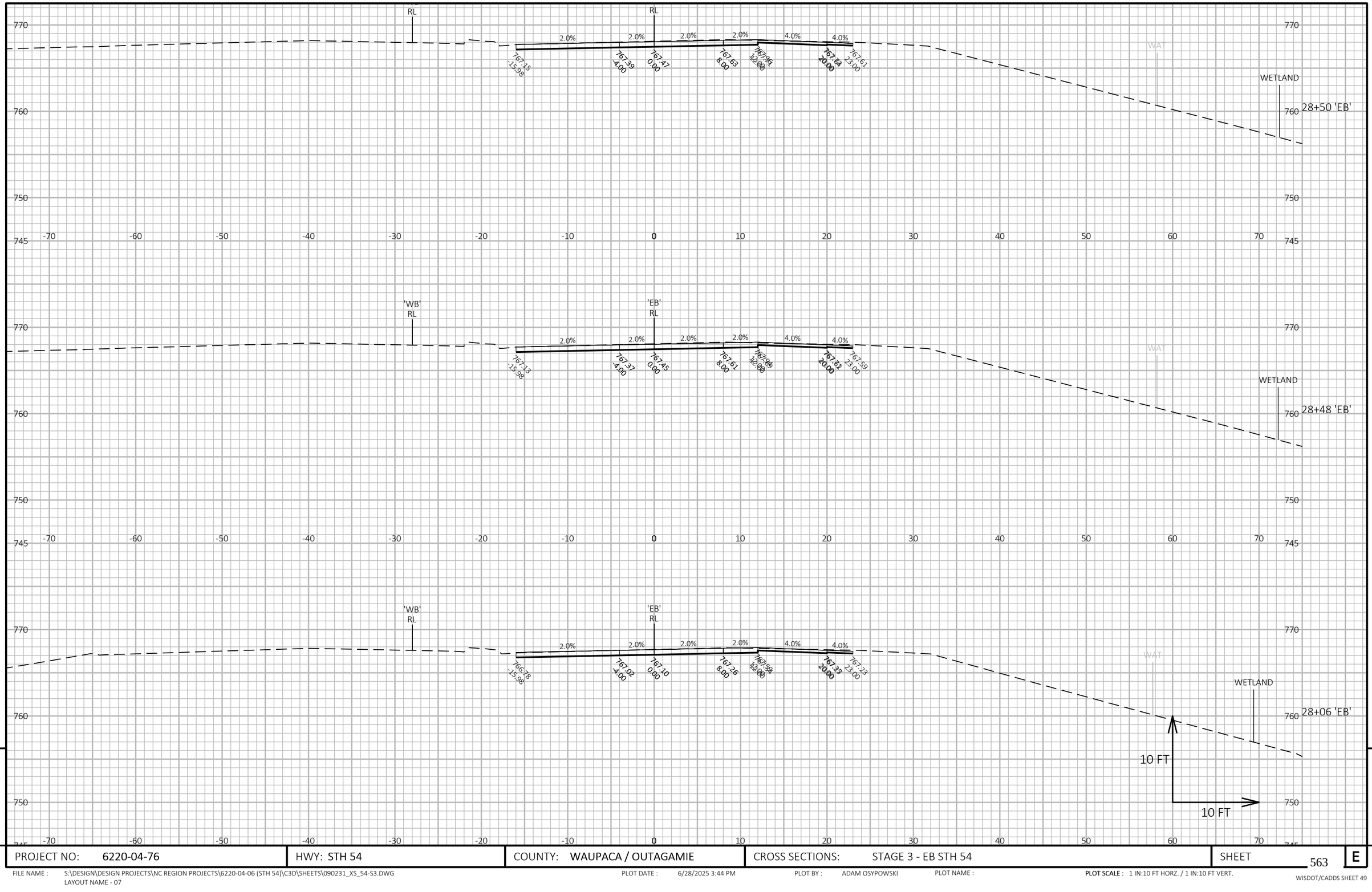
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 562	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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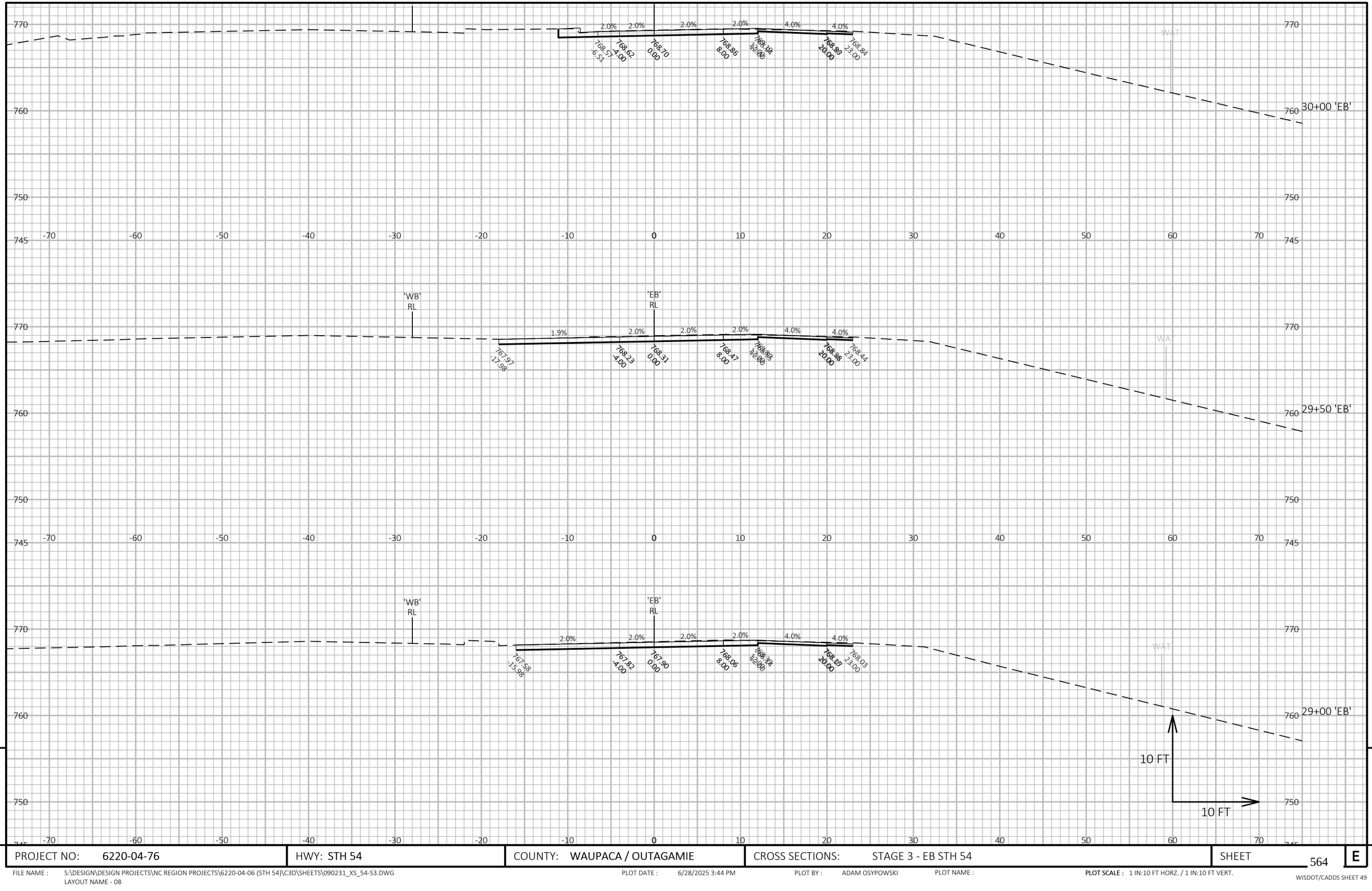
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 563	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 564	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 08

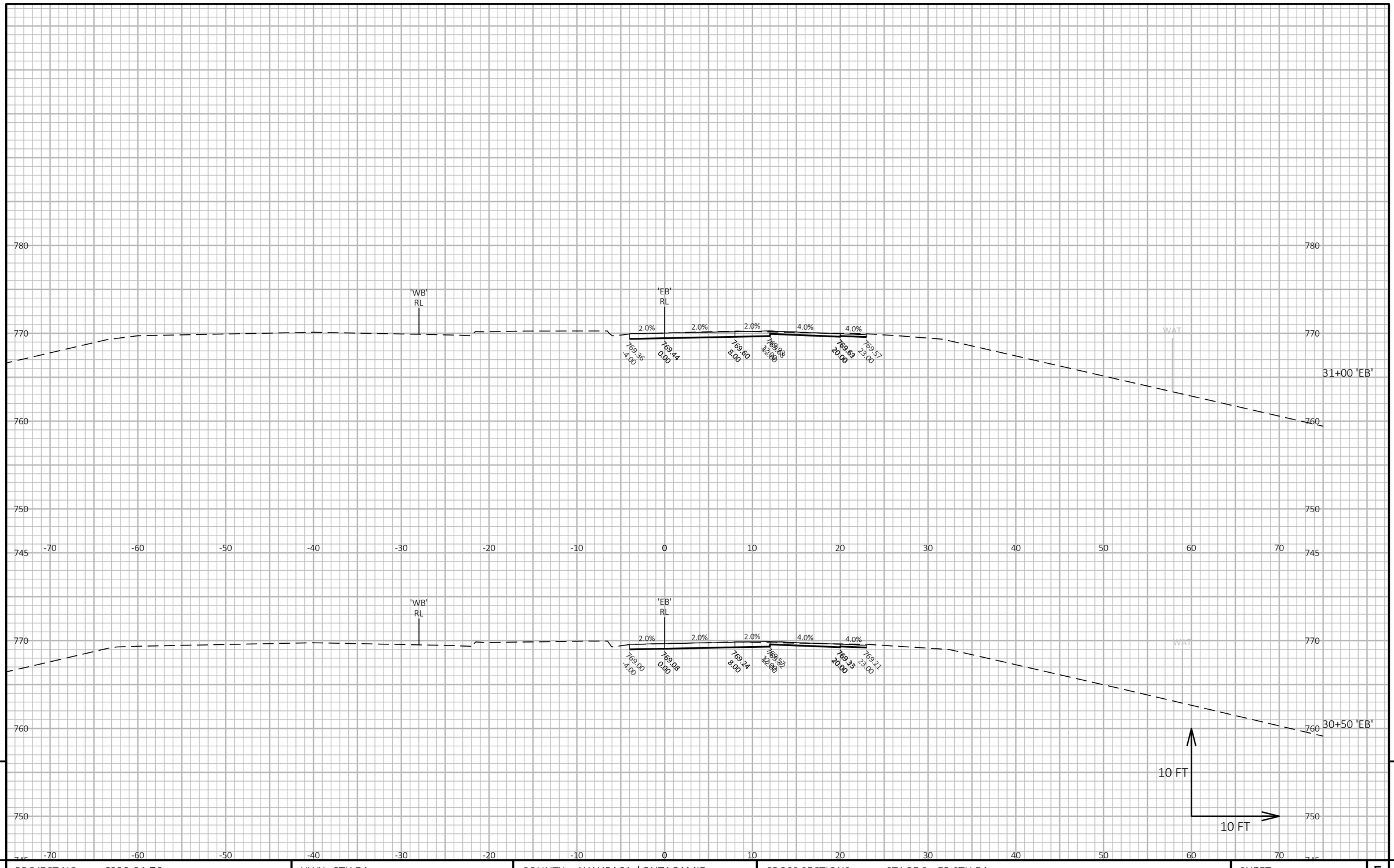
PLOT DATE : 6/28/2025 3:44 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 565	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 09

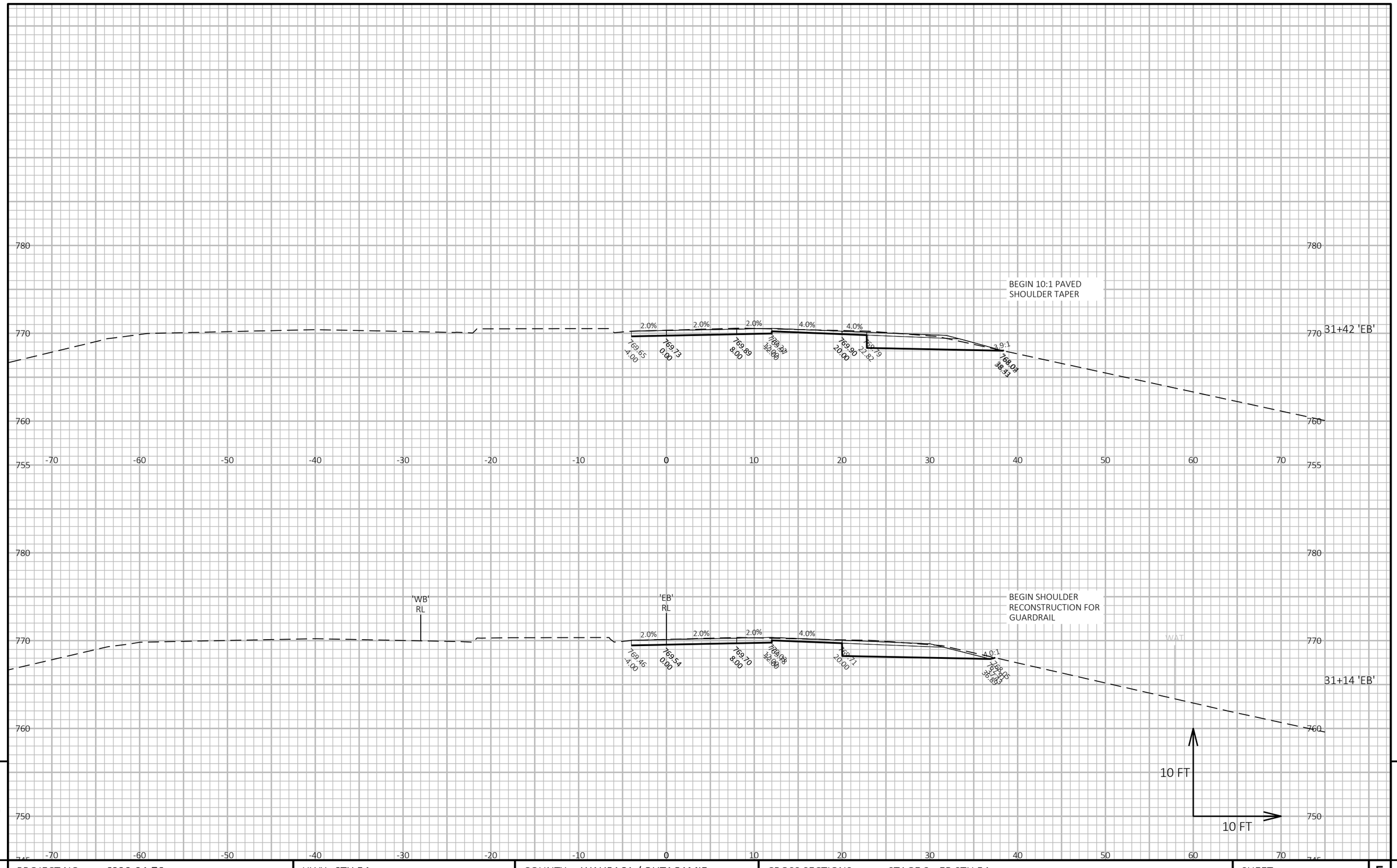
PLOT DATE : 6/28/2025 3:44 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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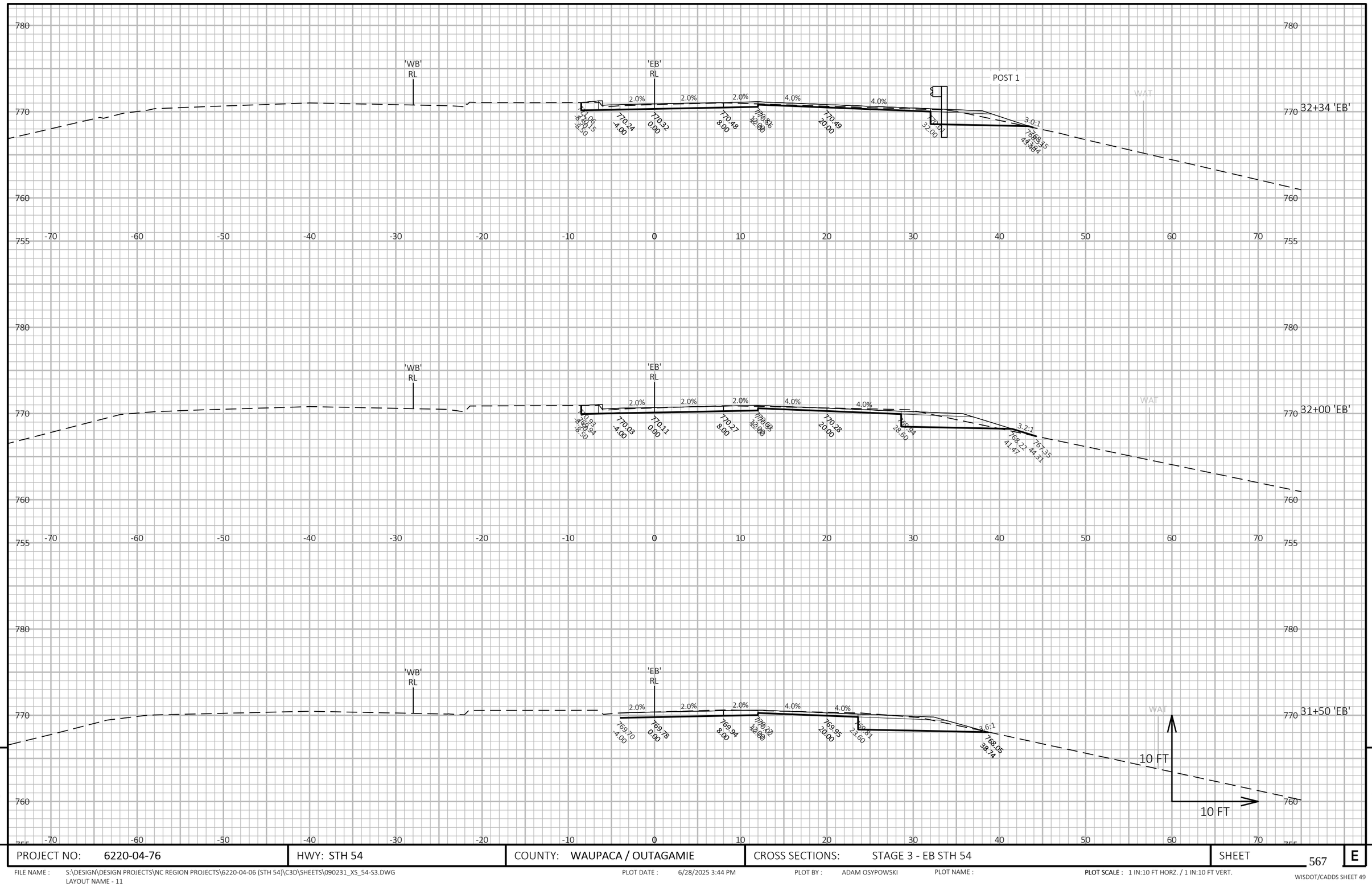
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 566	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 567	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 11

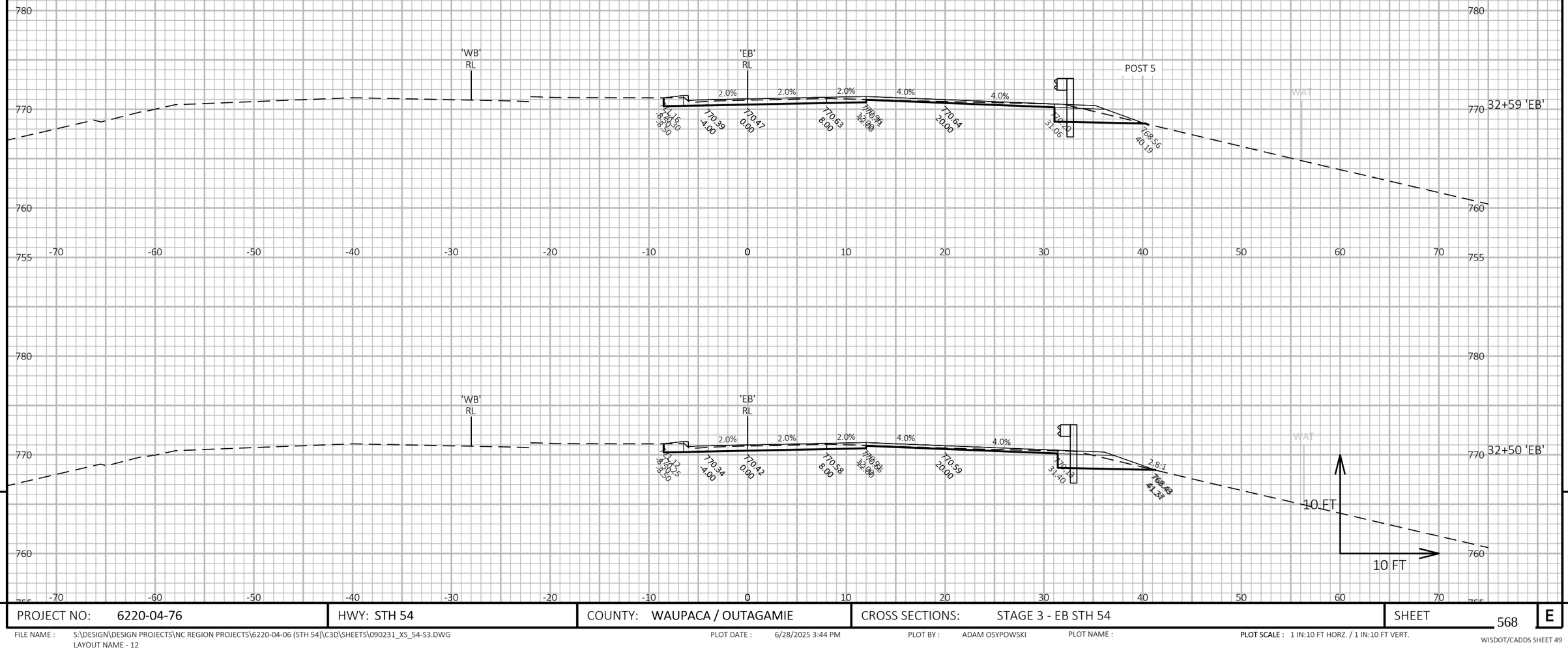
PLOT DATE : 6/28/2025 3:44 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 568	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 12

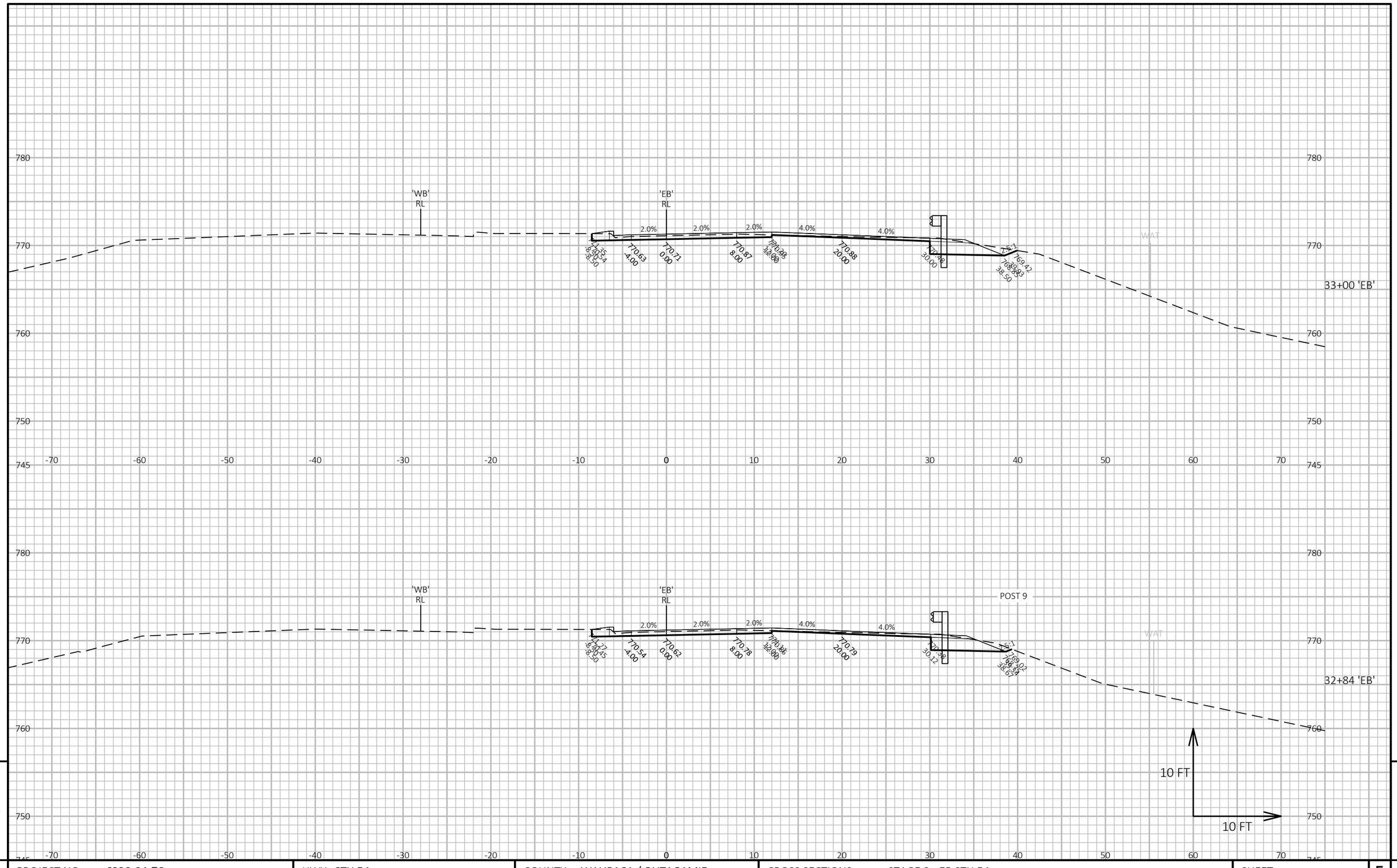
PLOT DATE : 6/28/2025 3:44 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

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

WISDOT/CADDS SHEET 49

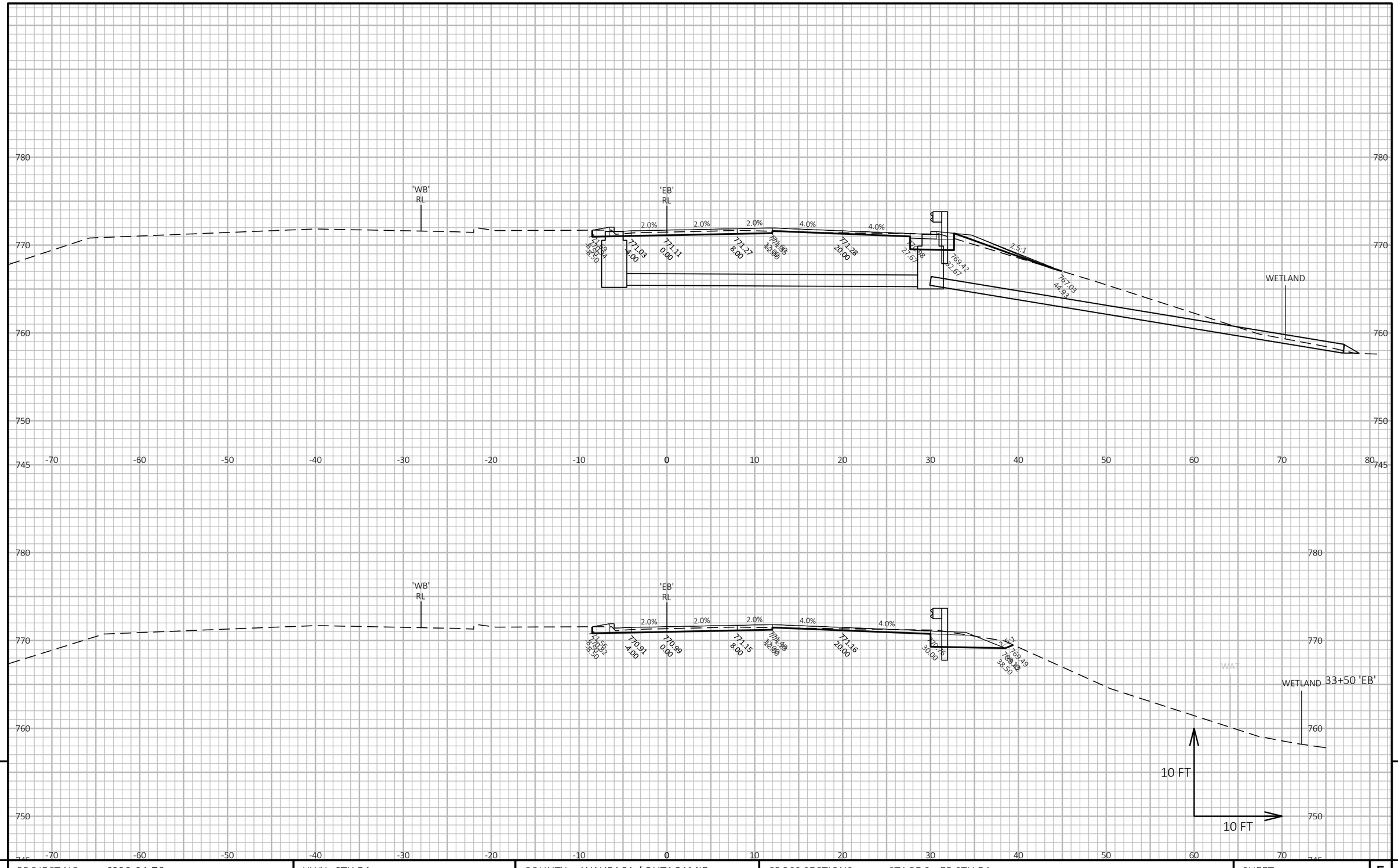


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 569	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 13

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

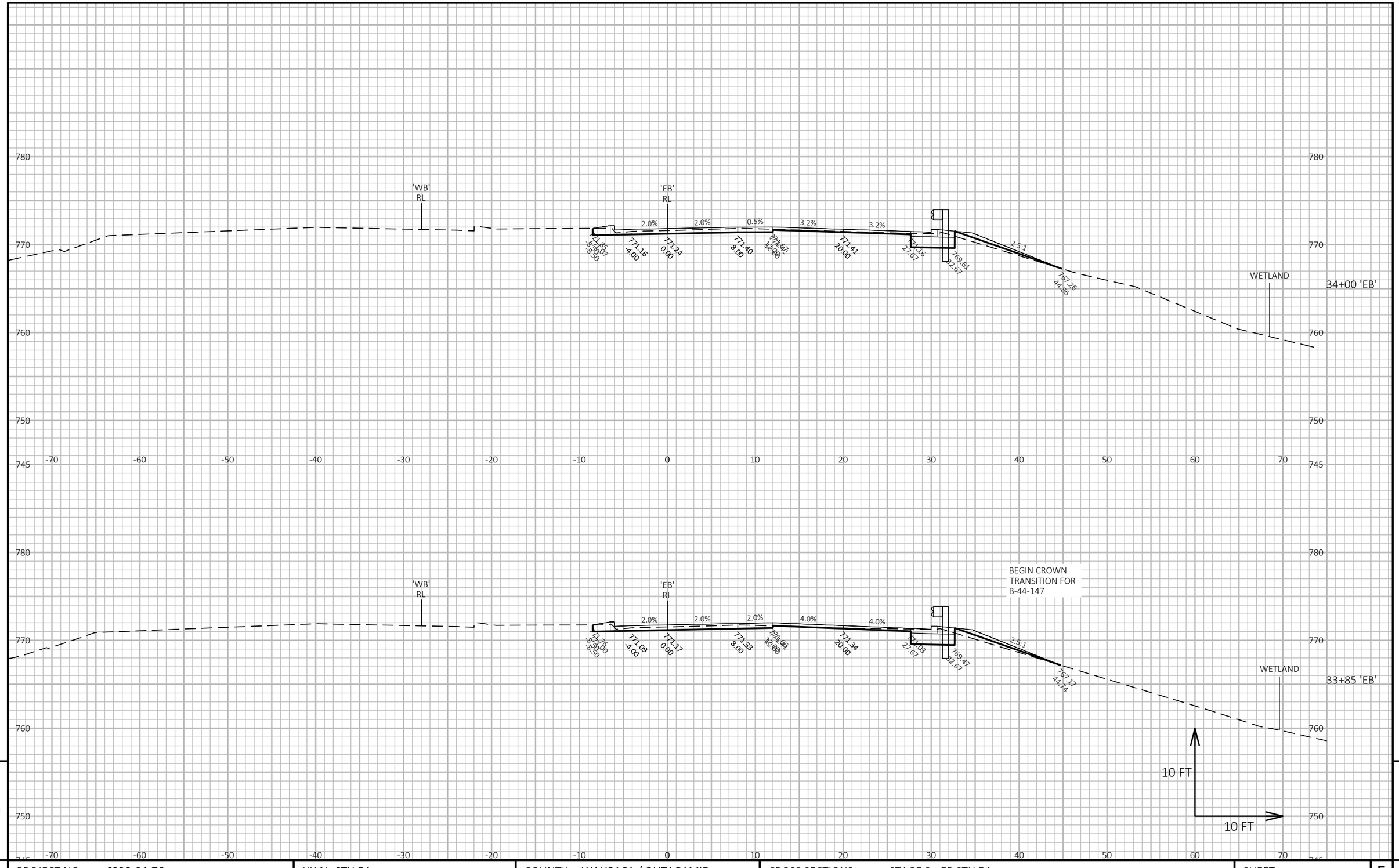


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 570	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 14

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

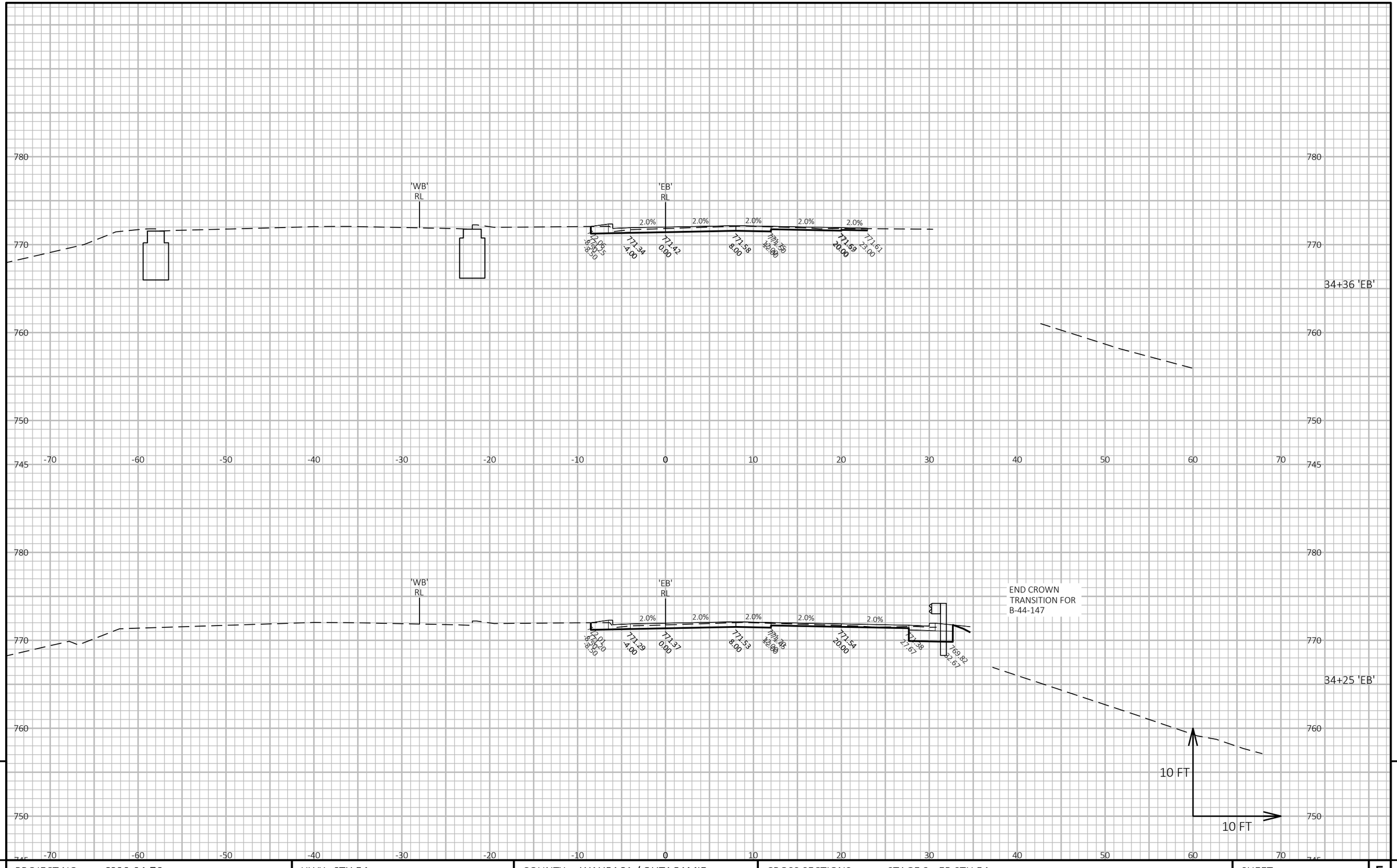


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 571	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 15

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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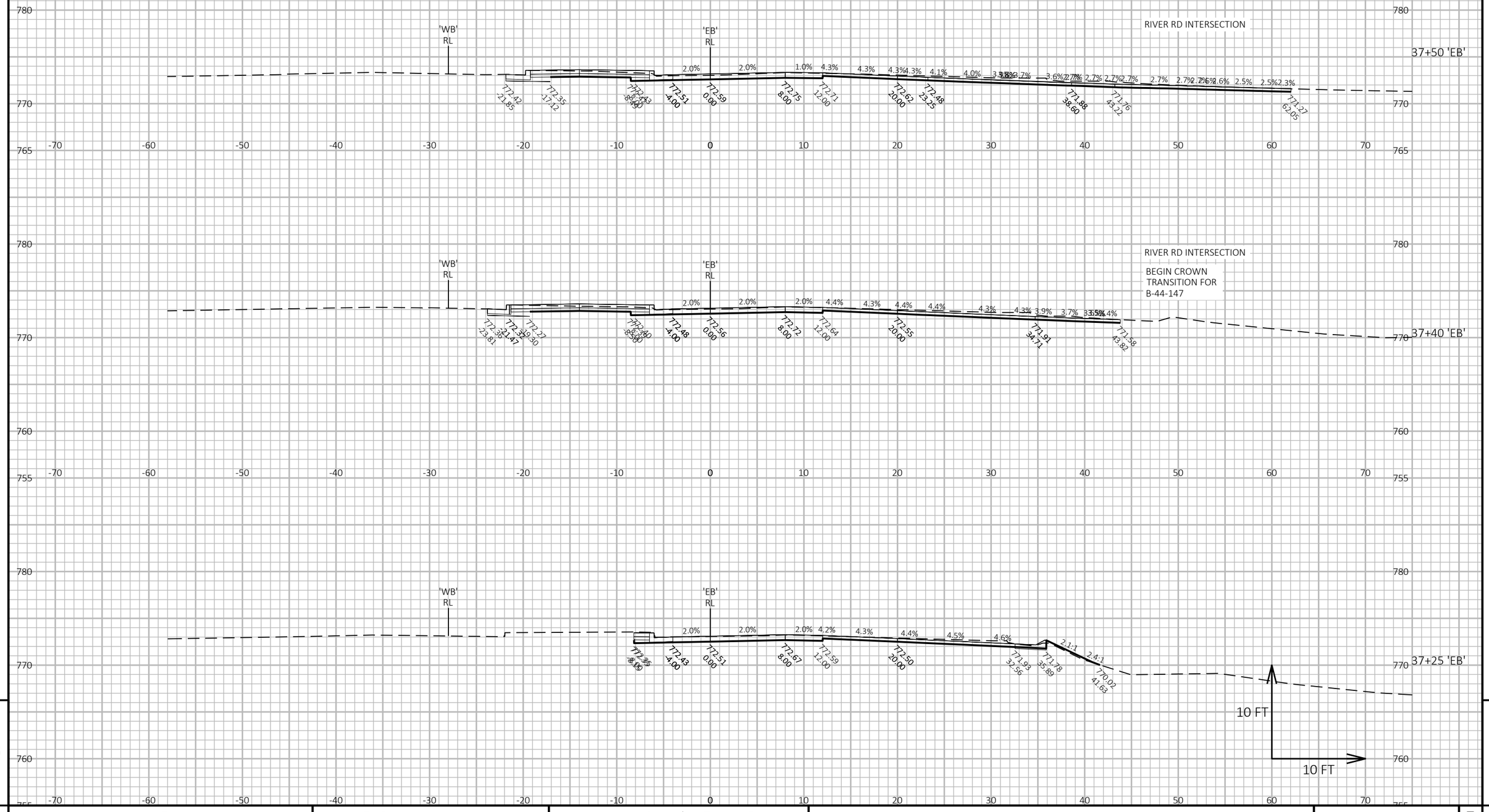
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 572	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 16

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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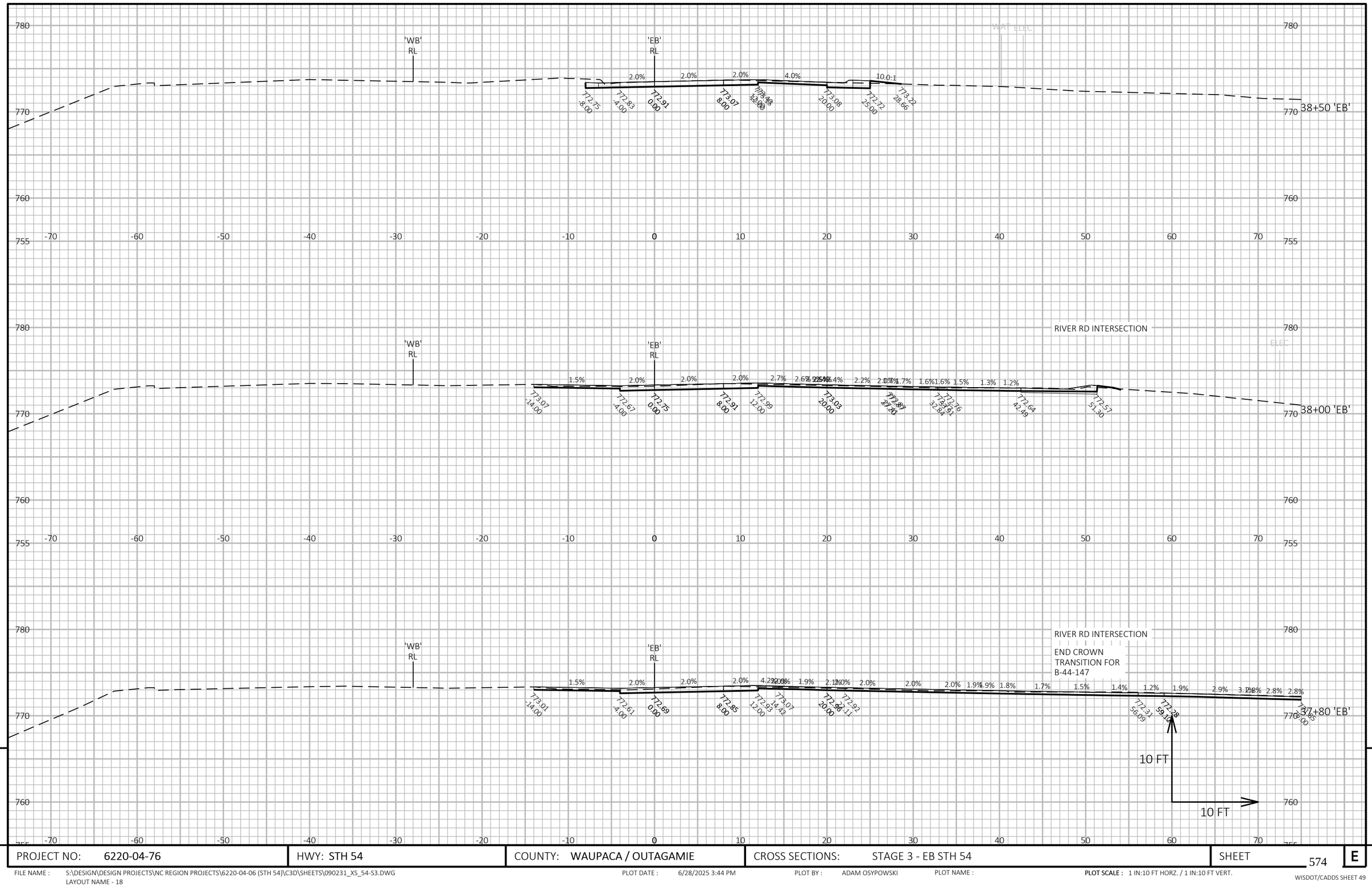
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 573	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 17

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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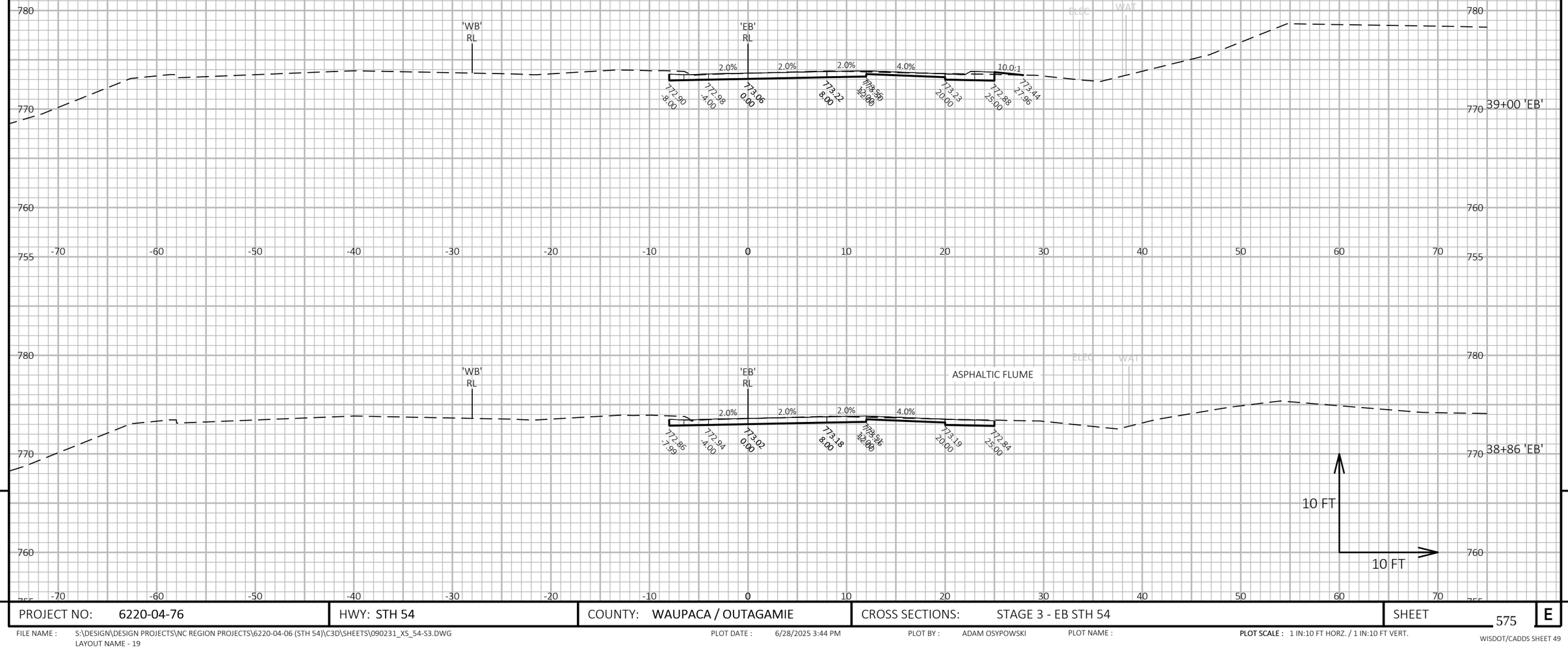
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 574	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 18

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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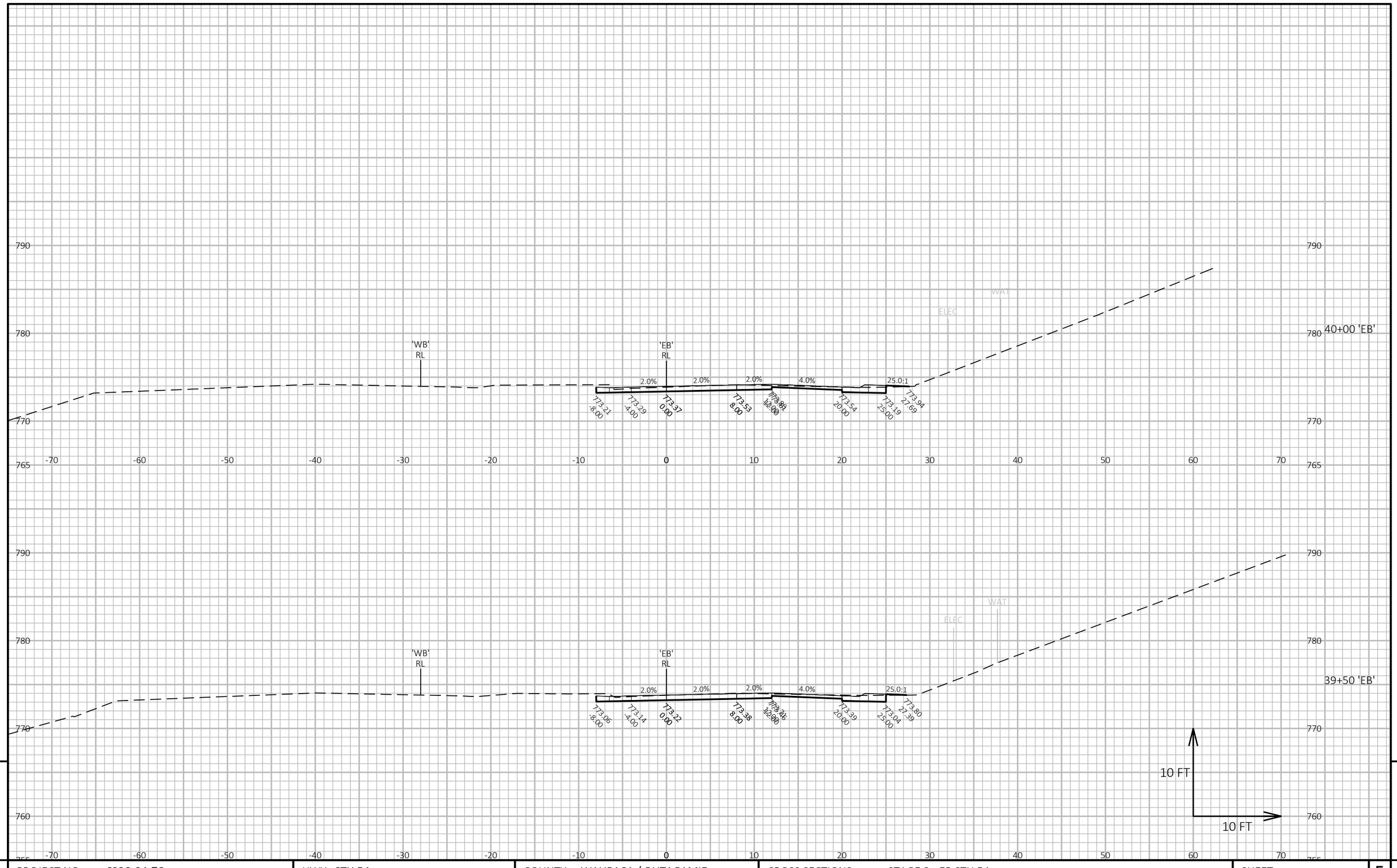
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 575	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 19

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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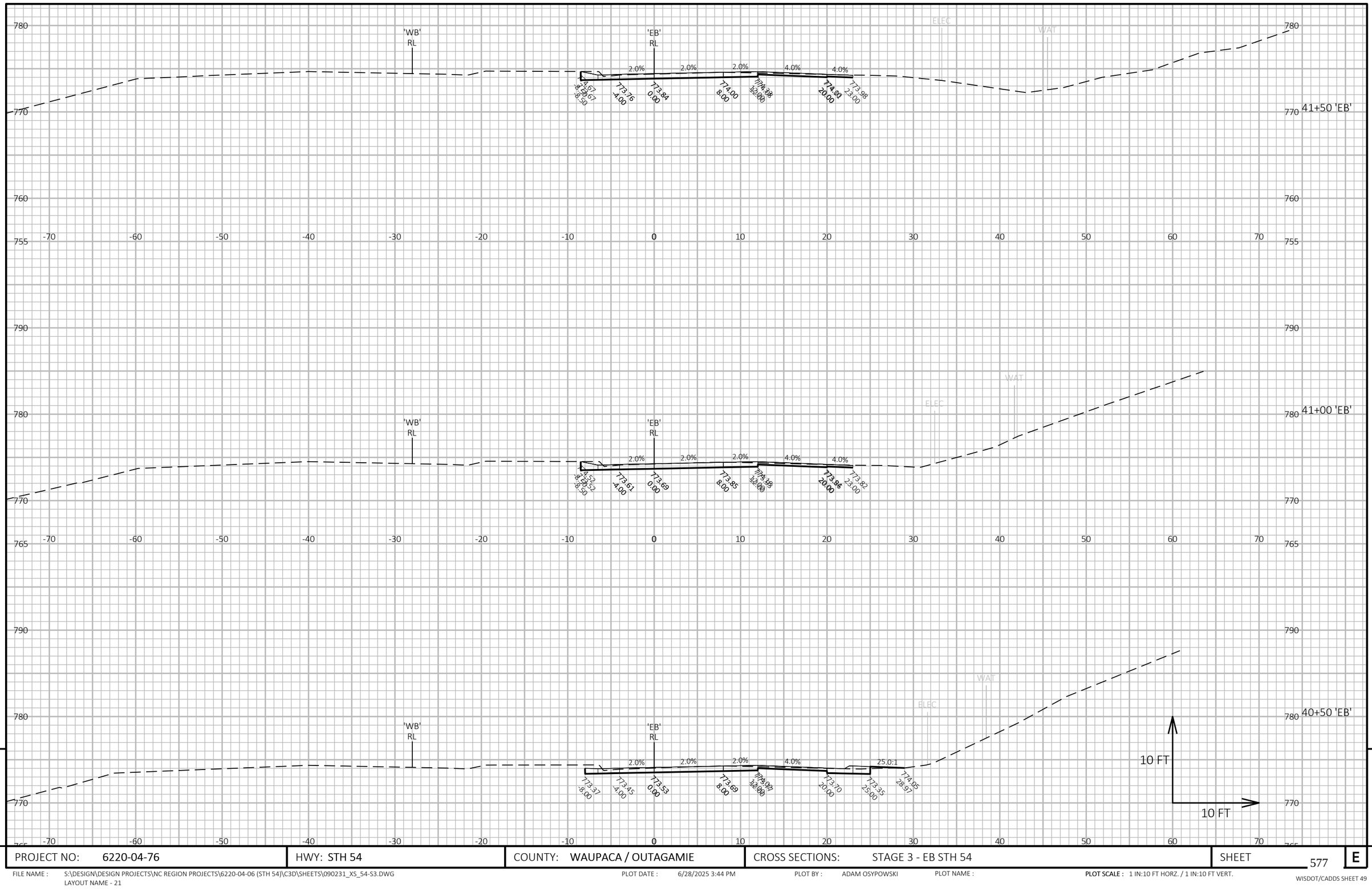
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 576	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 20

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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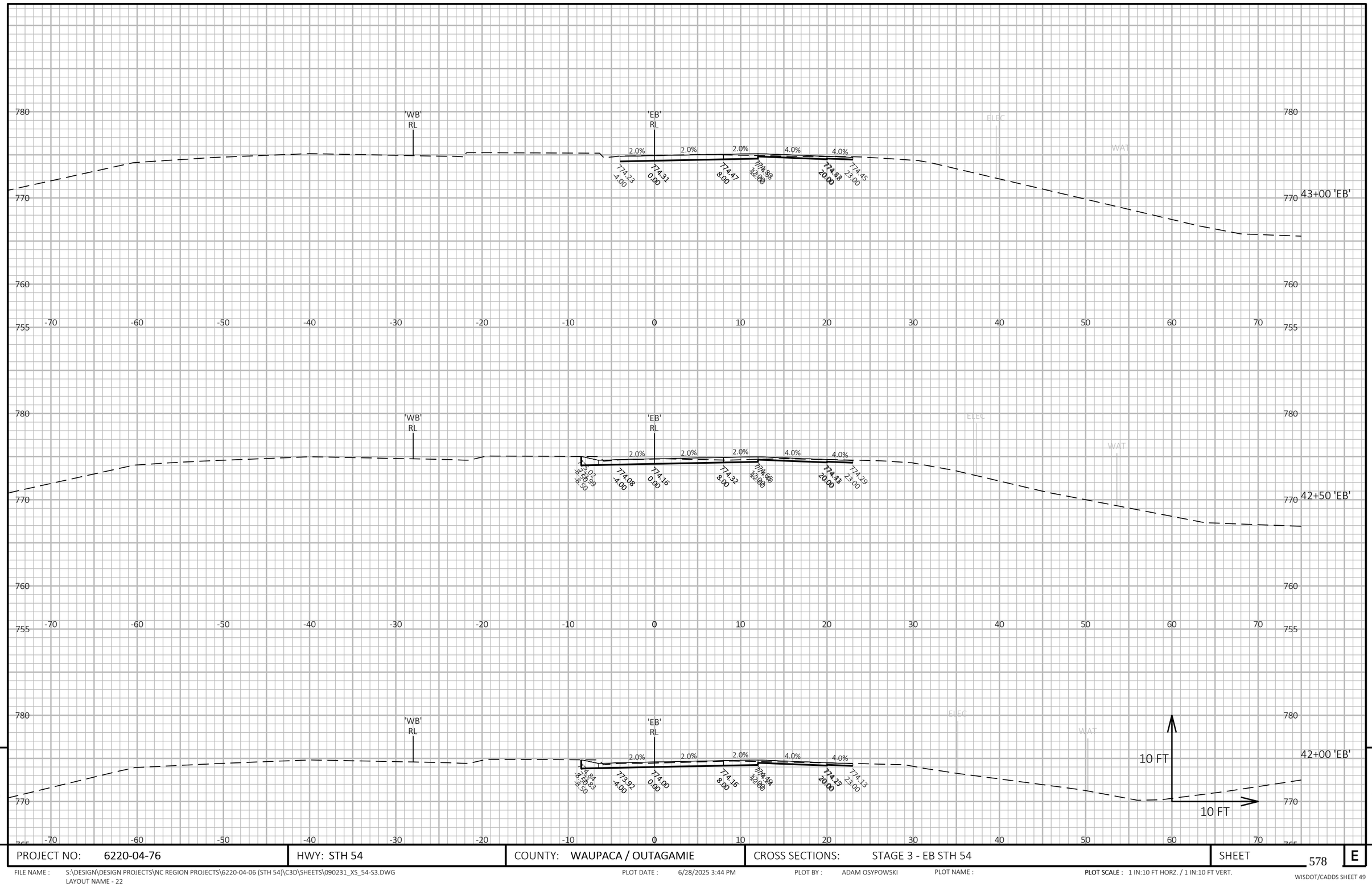
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 577	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 21

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 578	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 22

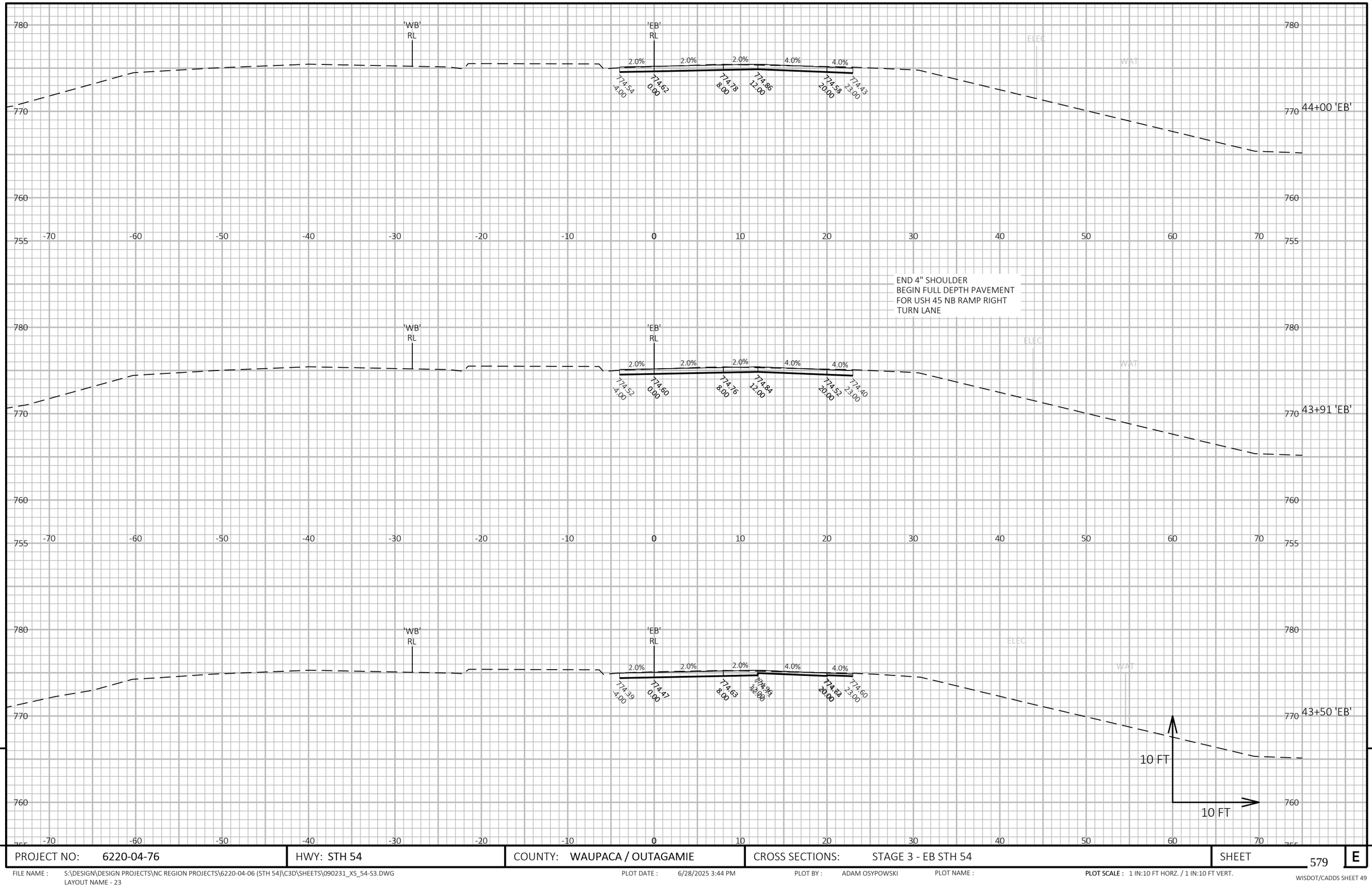
PLOT DATE : 6/28/2025 3:44 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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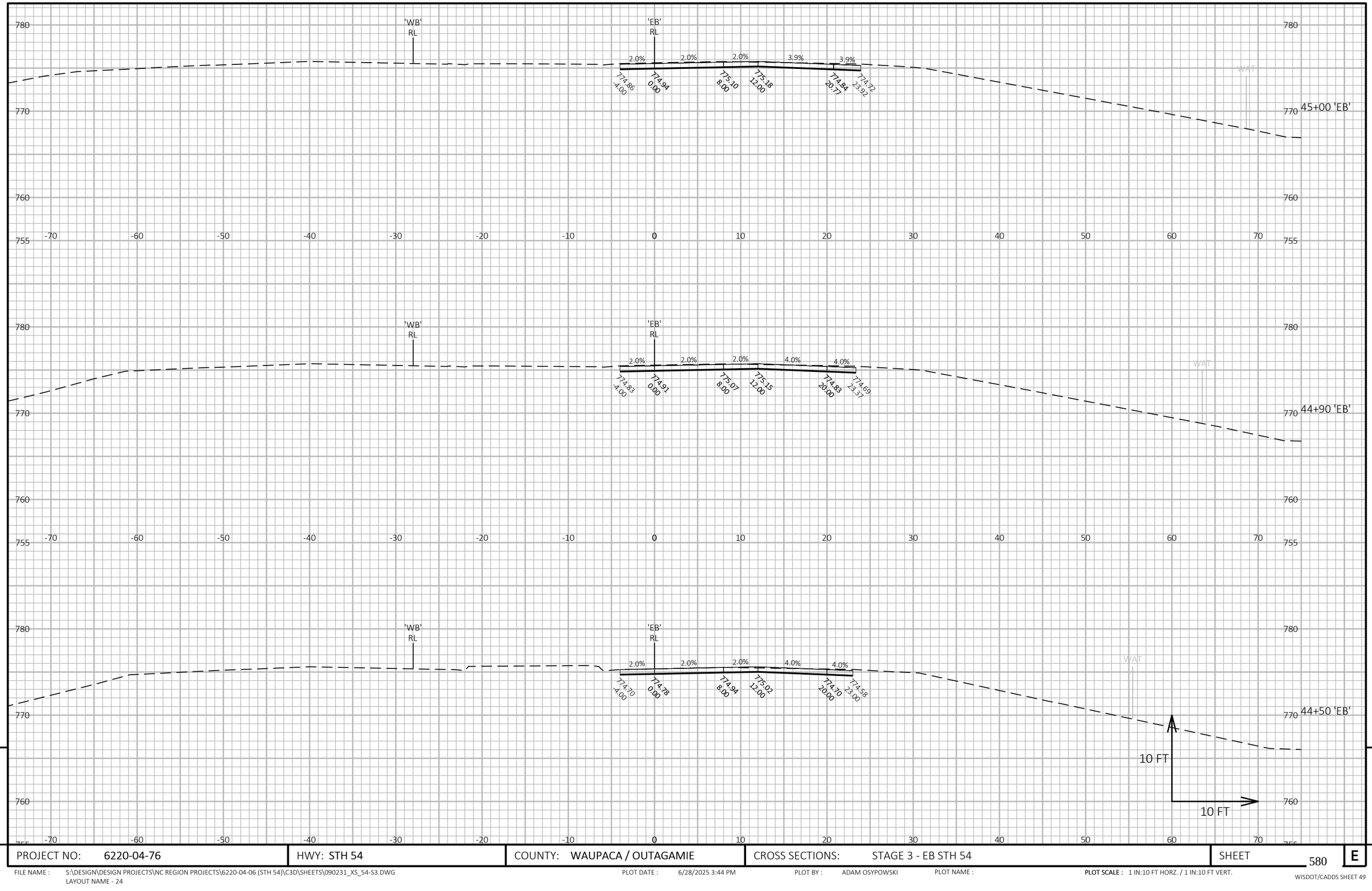
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 579	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 23

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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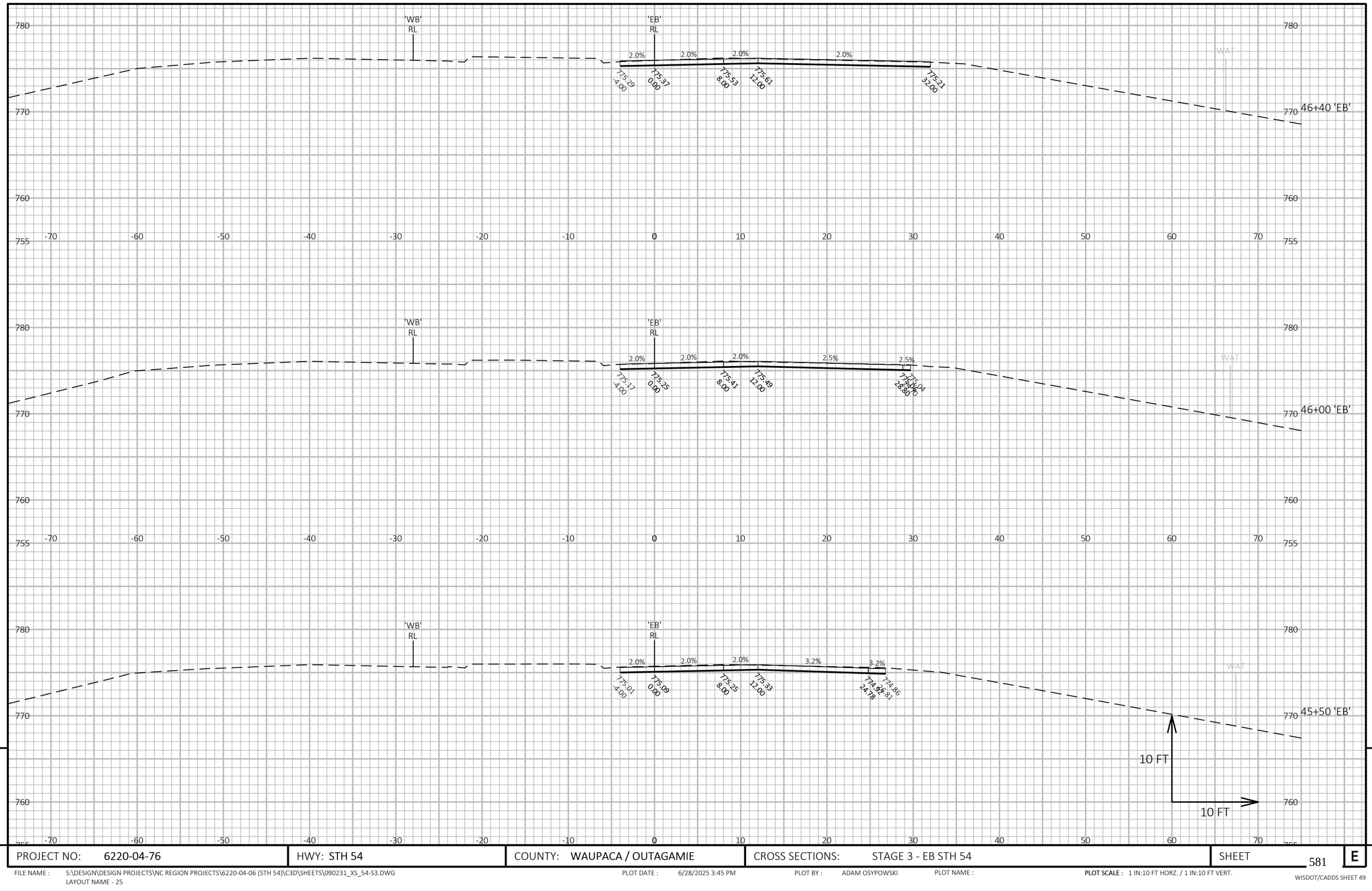
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 580	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 24

PLOT DATE : 6/28/2025 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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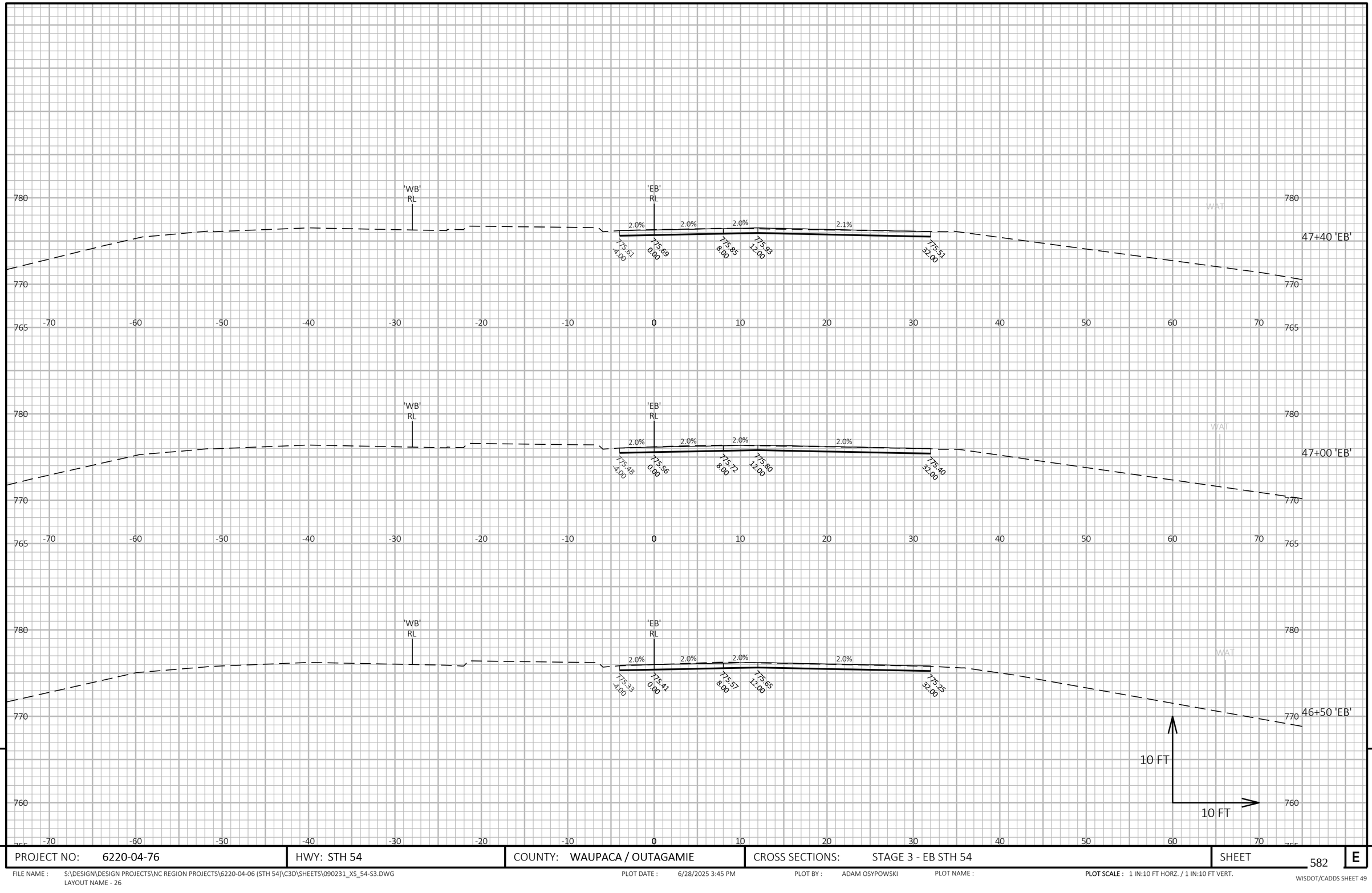
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 581	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 25

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 582	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 26

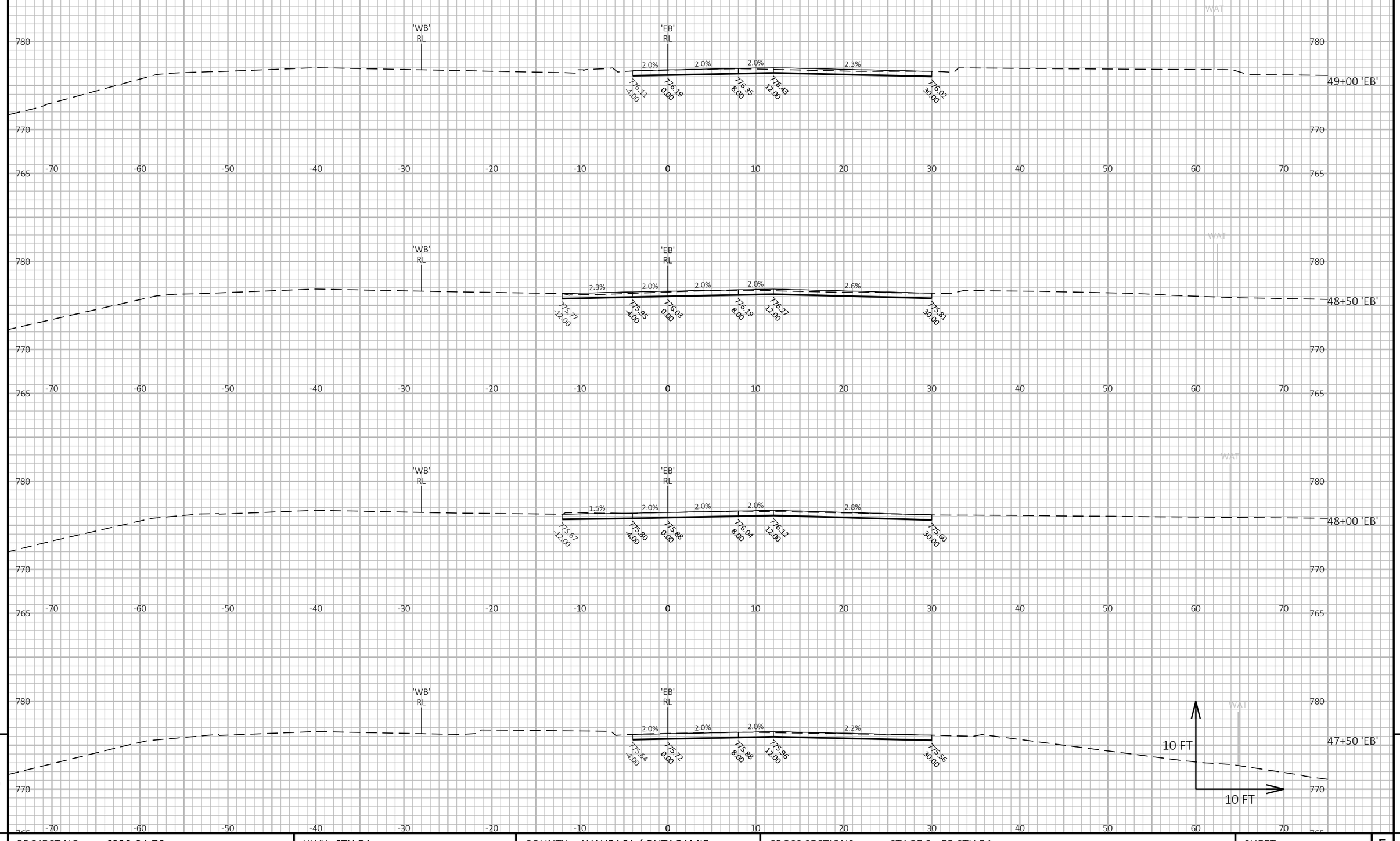
PLOT DATE : 6/28/2025 3:45 PM

PLOT BY : ADAM OSYPOWSKI

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: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 583	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 27

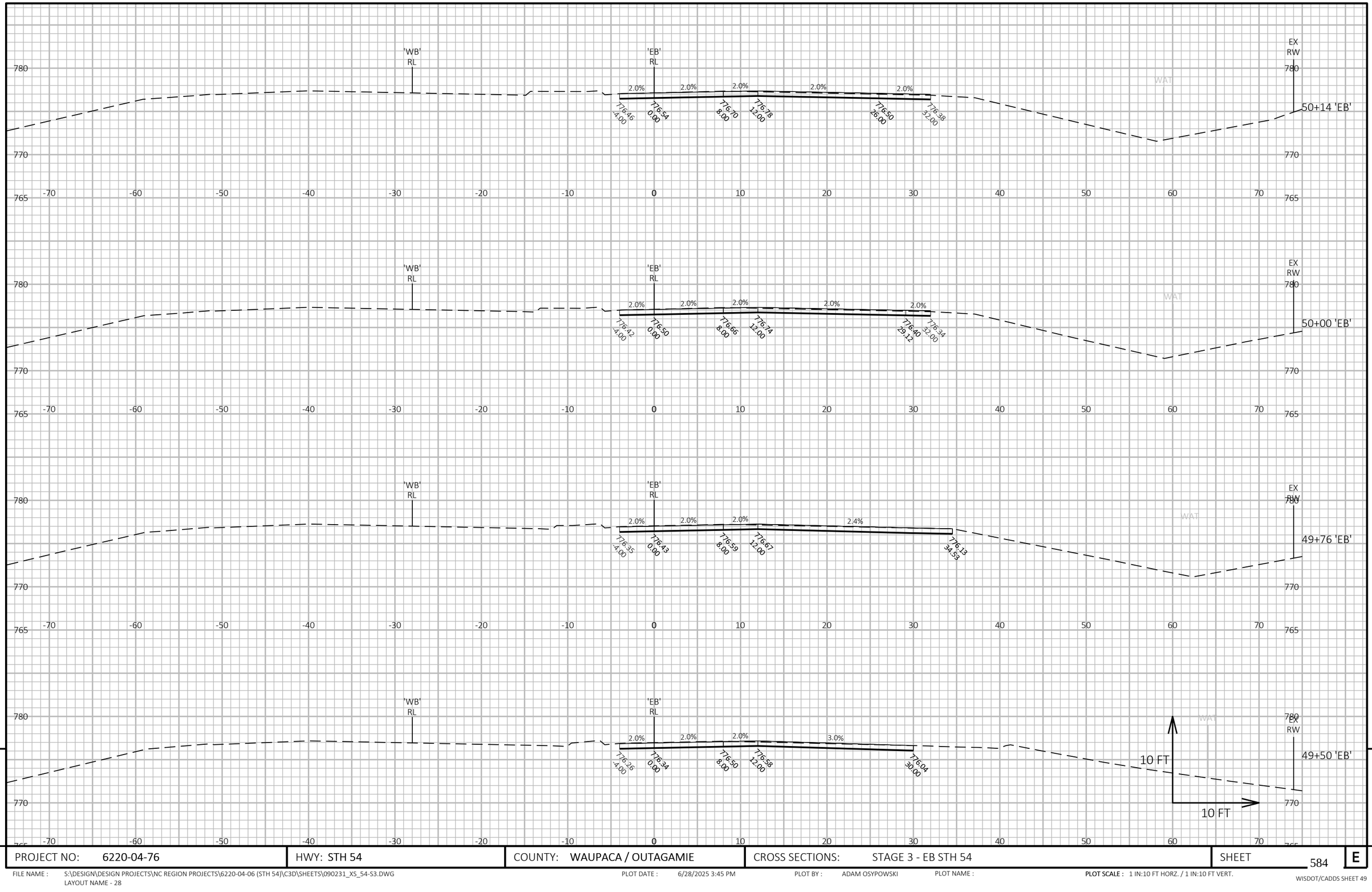
PLOT DATE : 6/28/2025 3:45 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 584	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 28

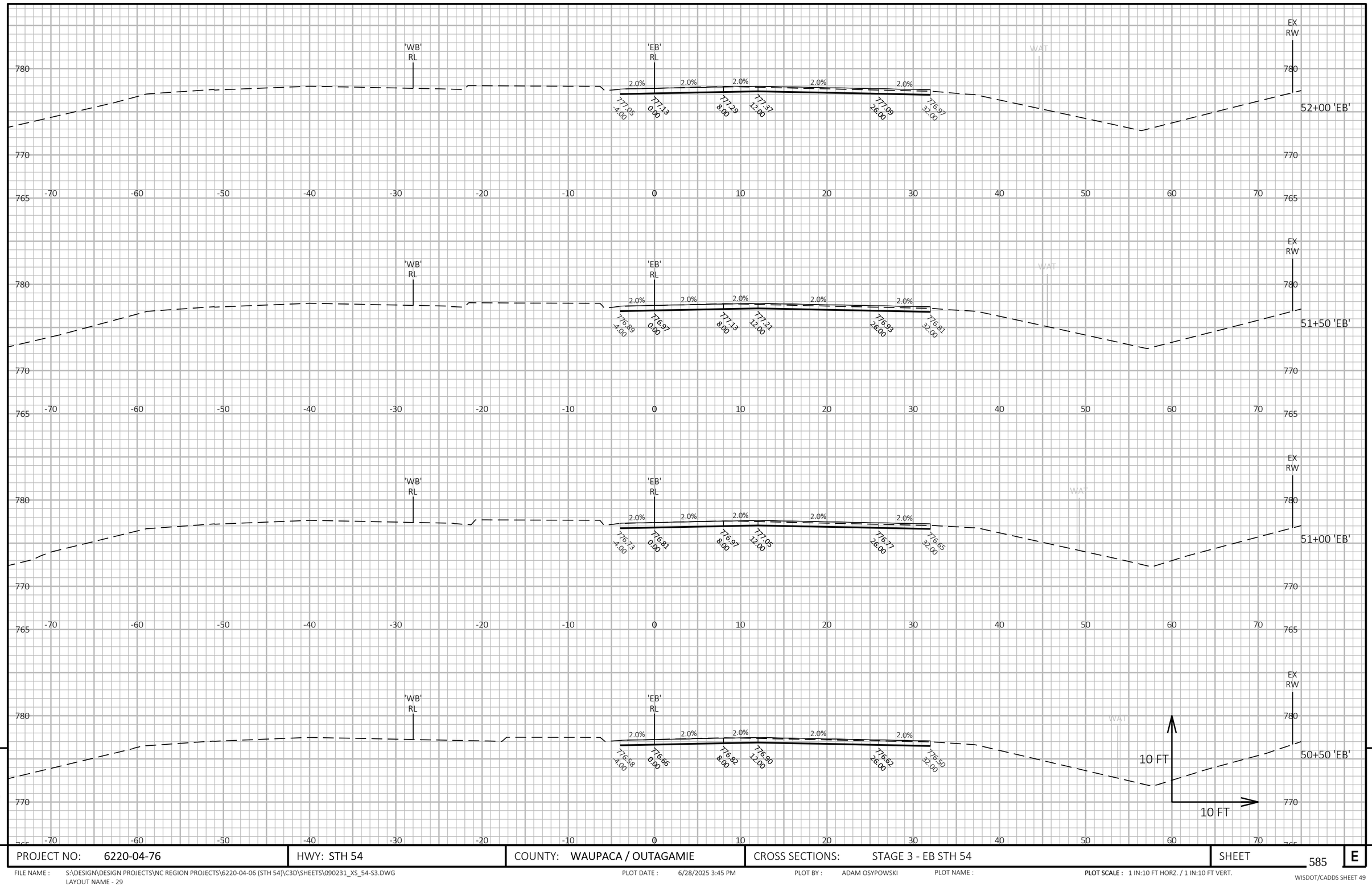
PLOT DATE : 6/28/2025 3:45 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

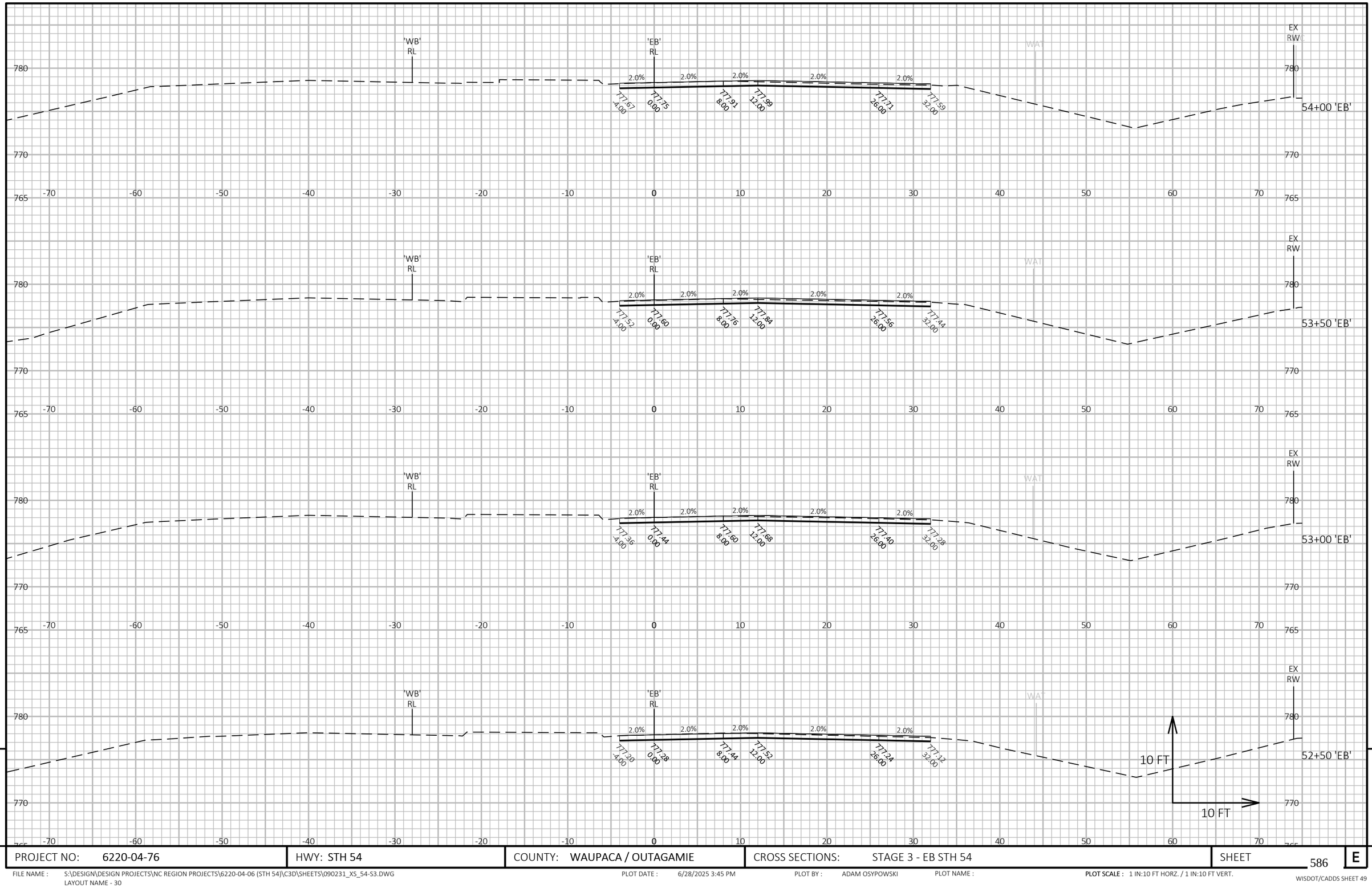
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 585	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 29

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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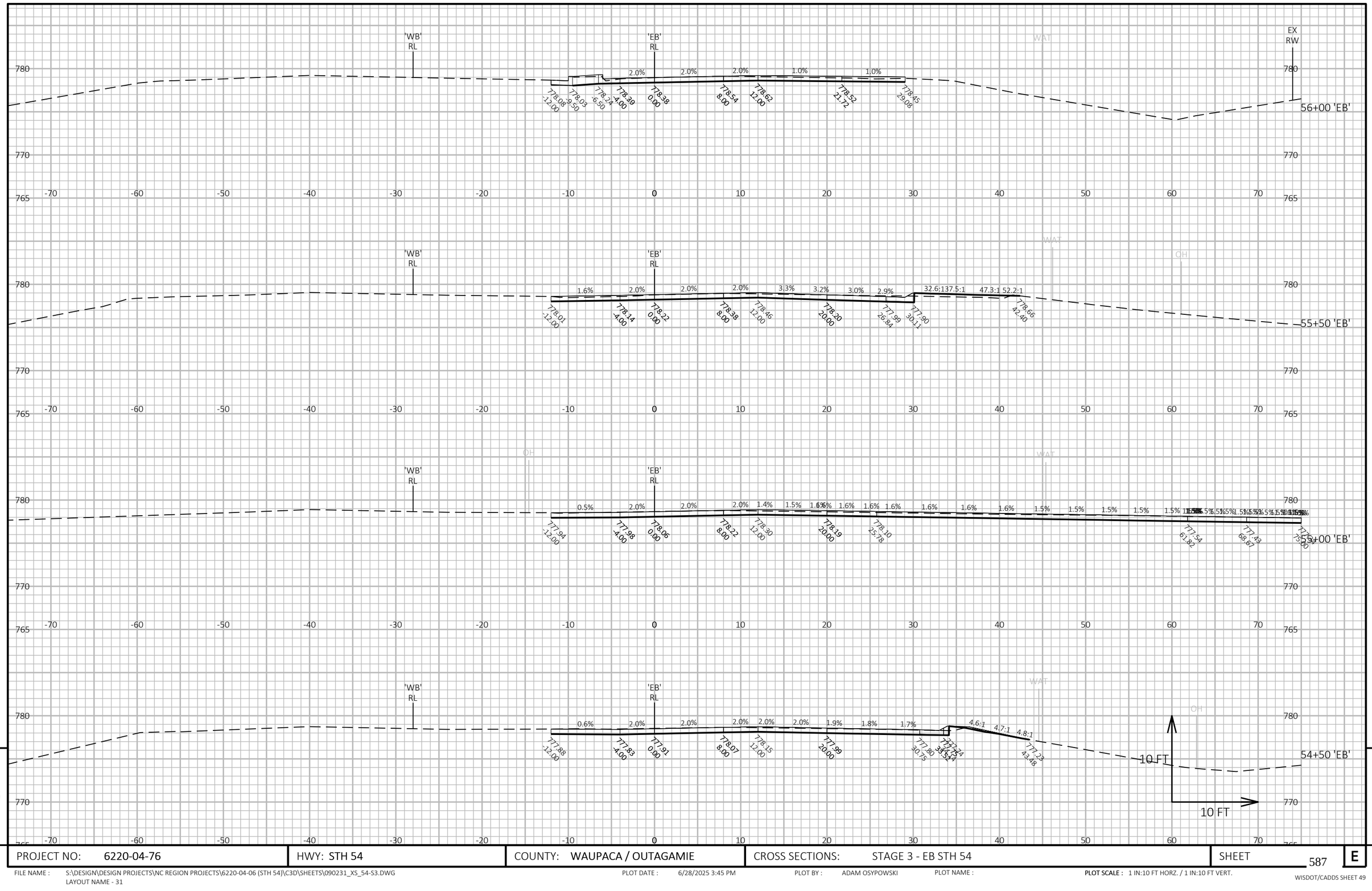
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 586	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 30

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 587	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 31

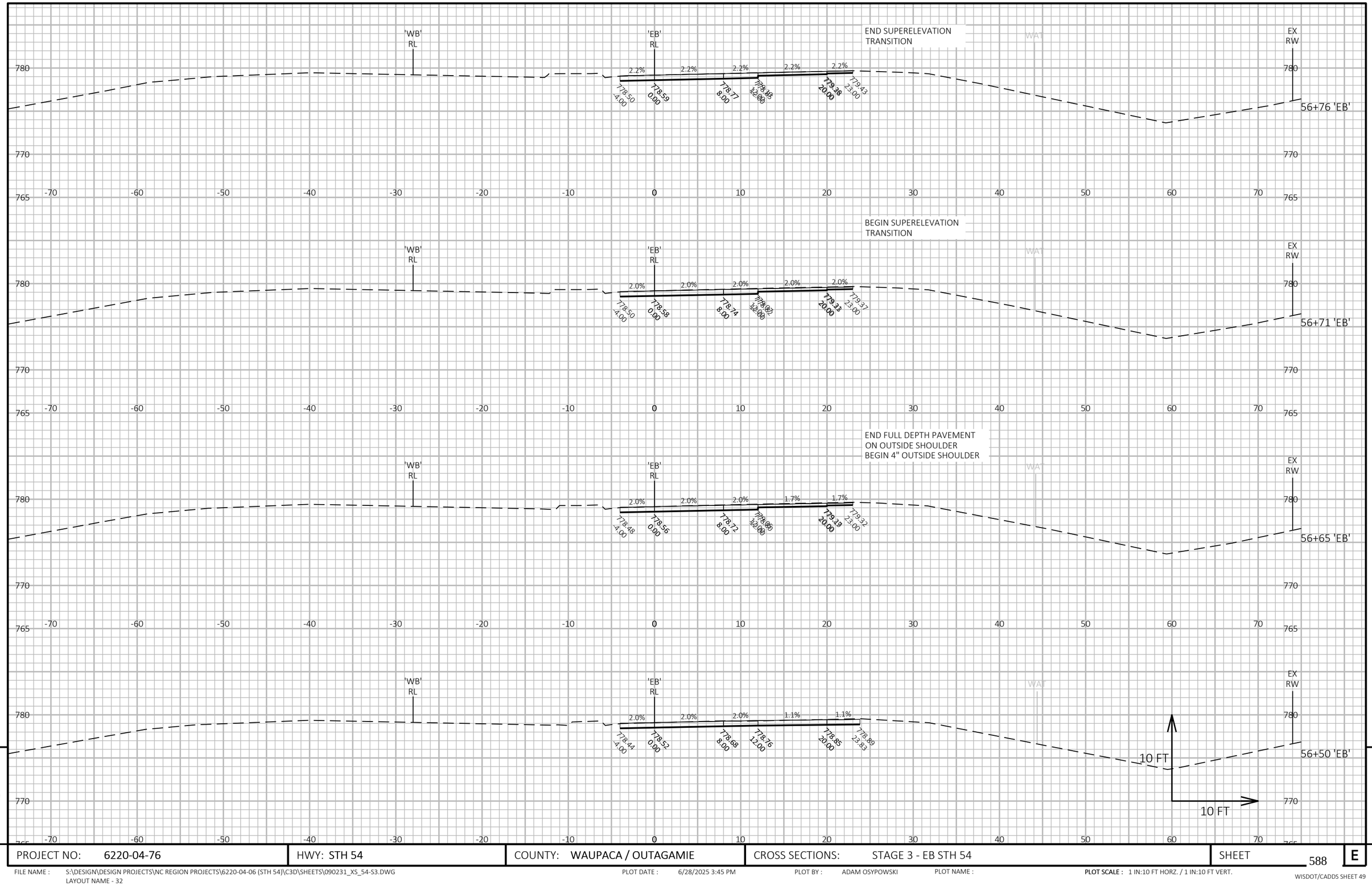
PLOT DATE : 6/28/2025 3:45 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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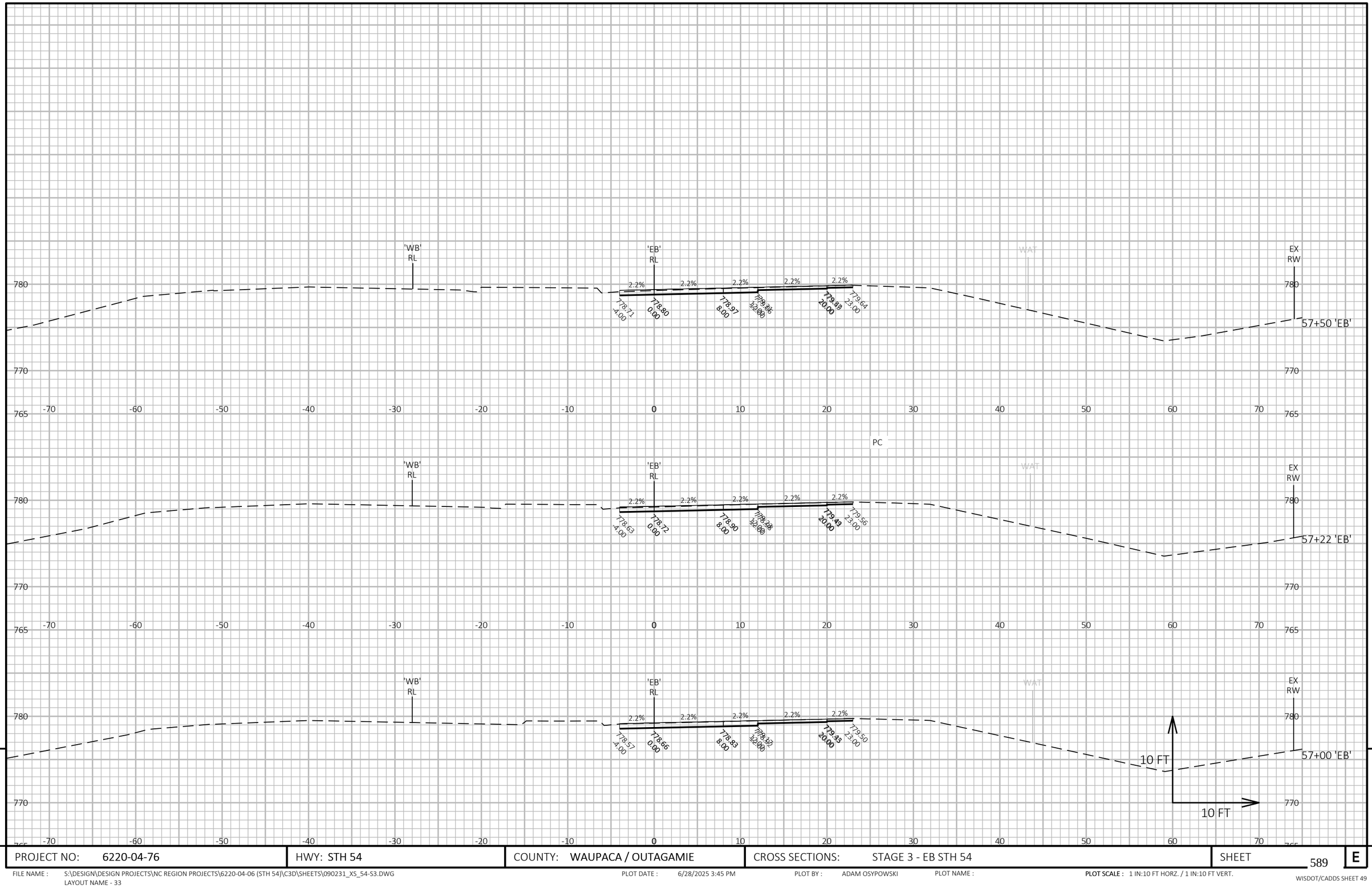
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 588	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 32

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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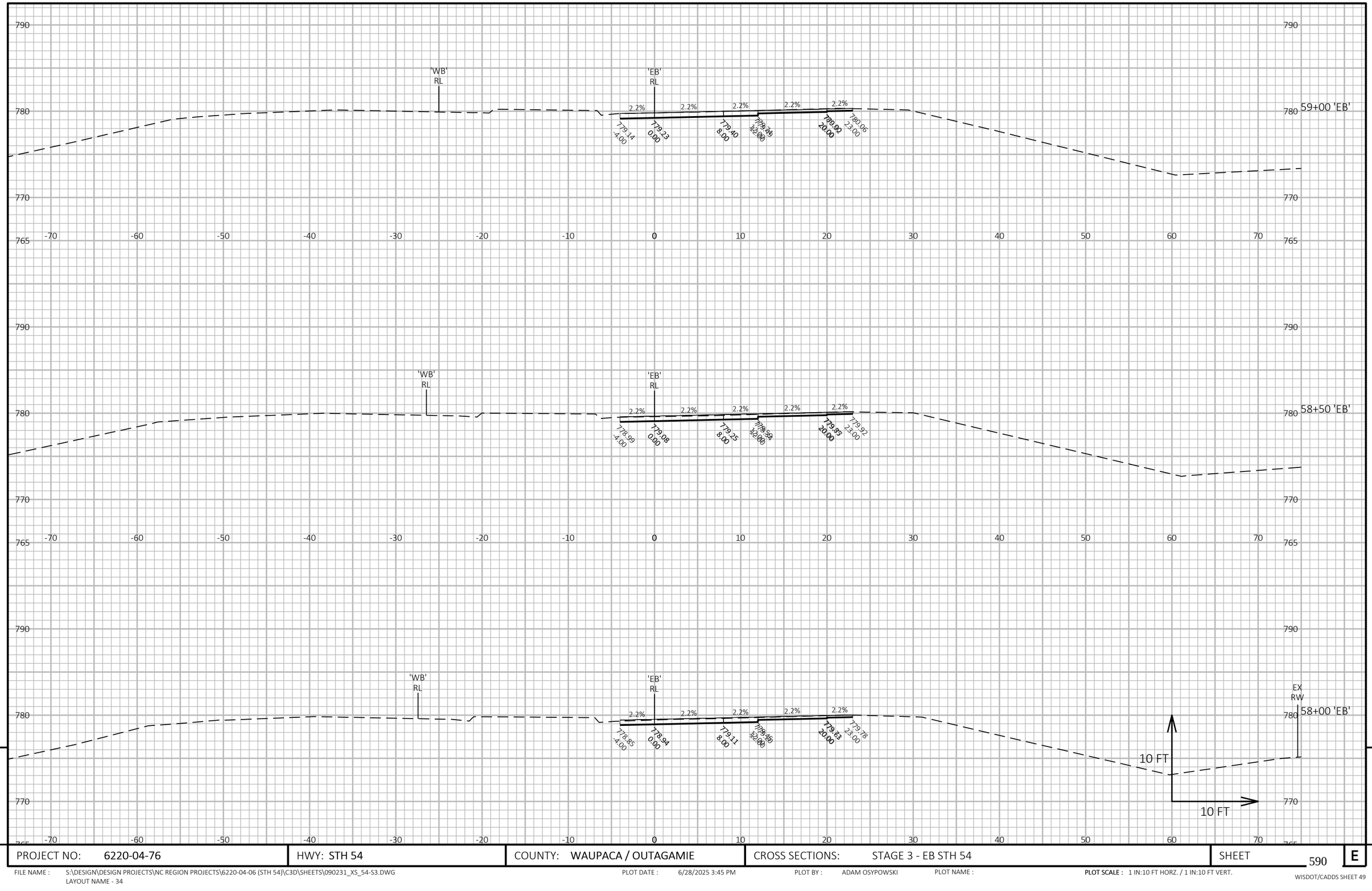
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 589	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 33

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 590	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 34

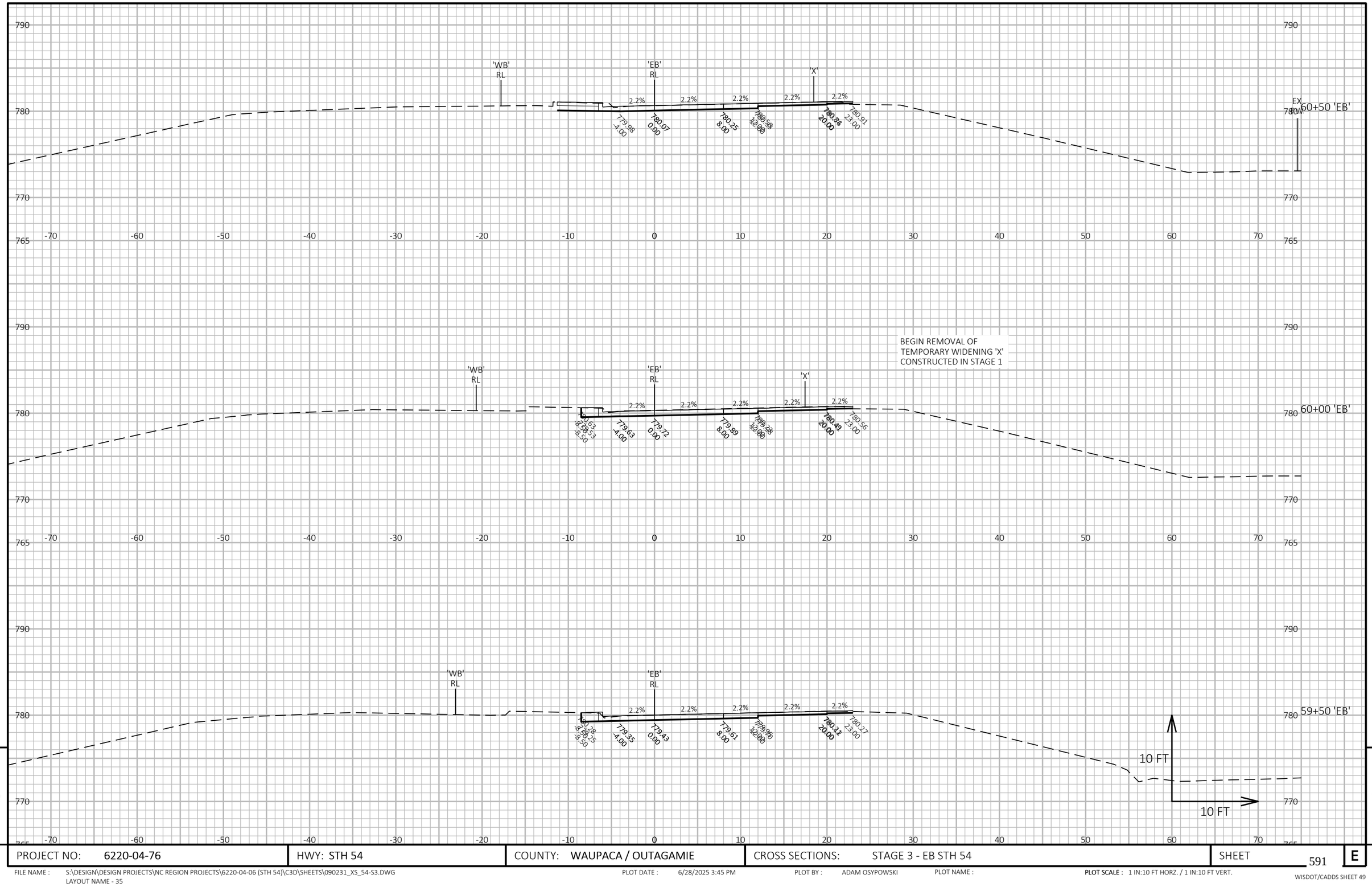
PLOT DATE : 6/28/2025 3:45 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

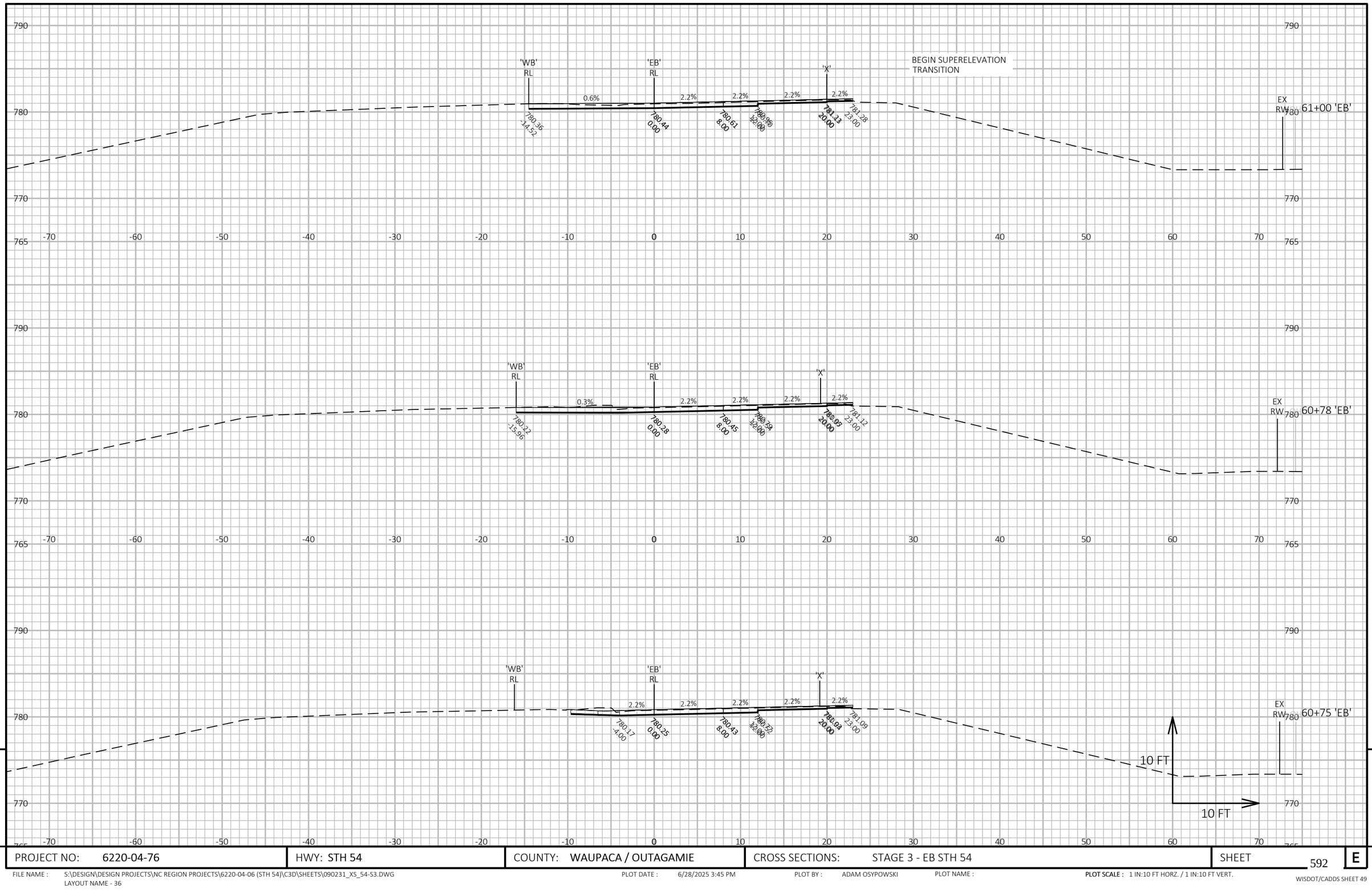


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 591	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 35

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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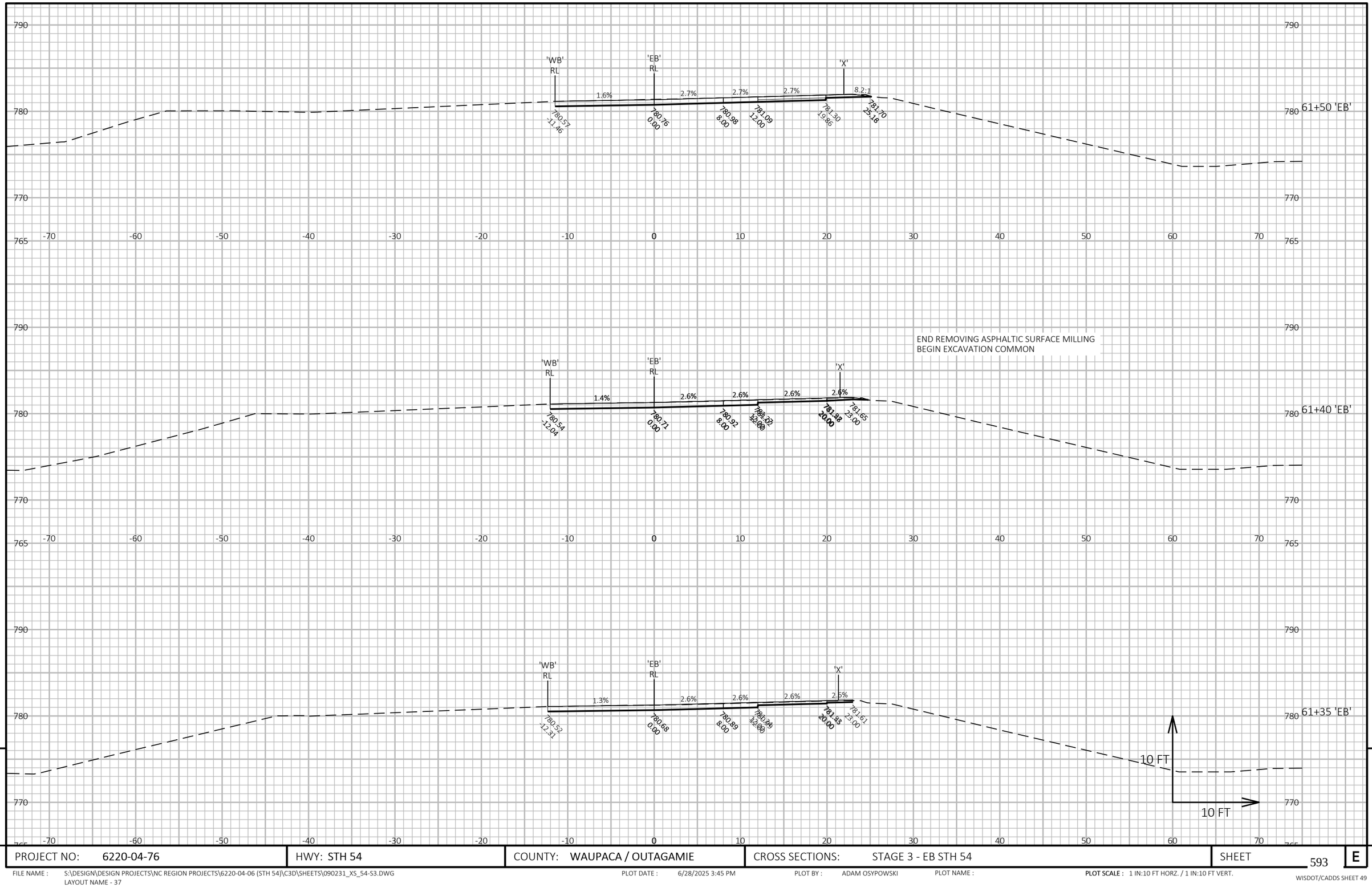
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 592	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 36

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

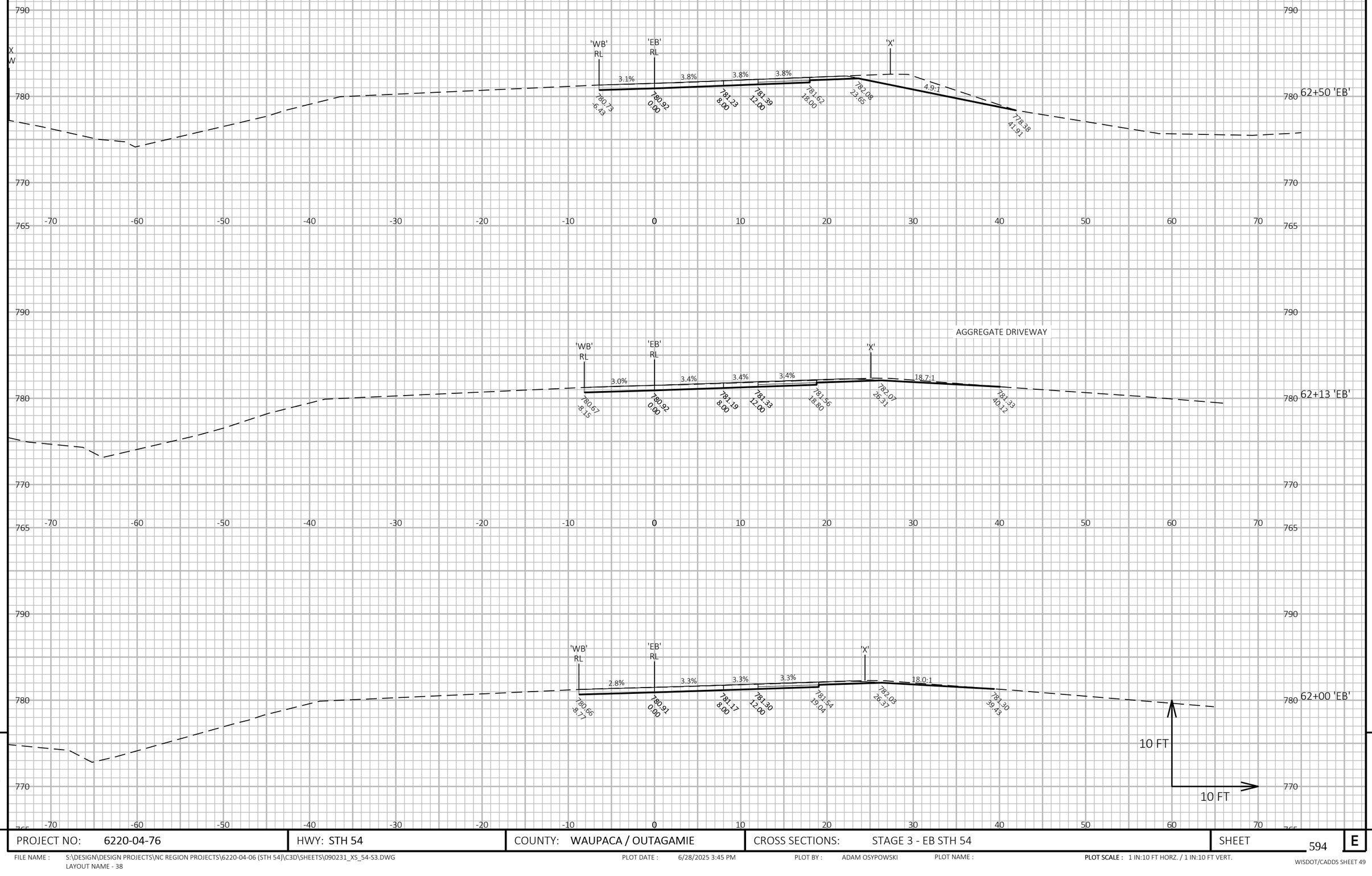


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 593	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 37

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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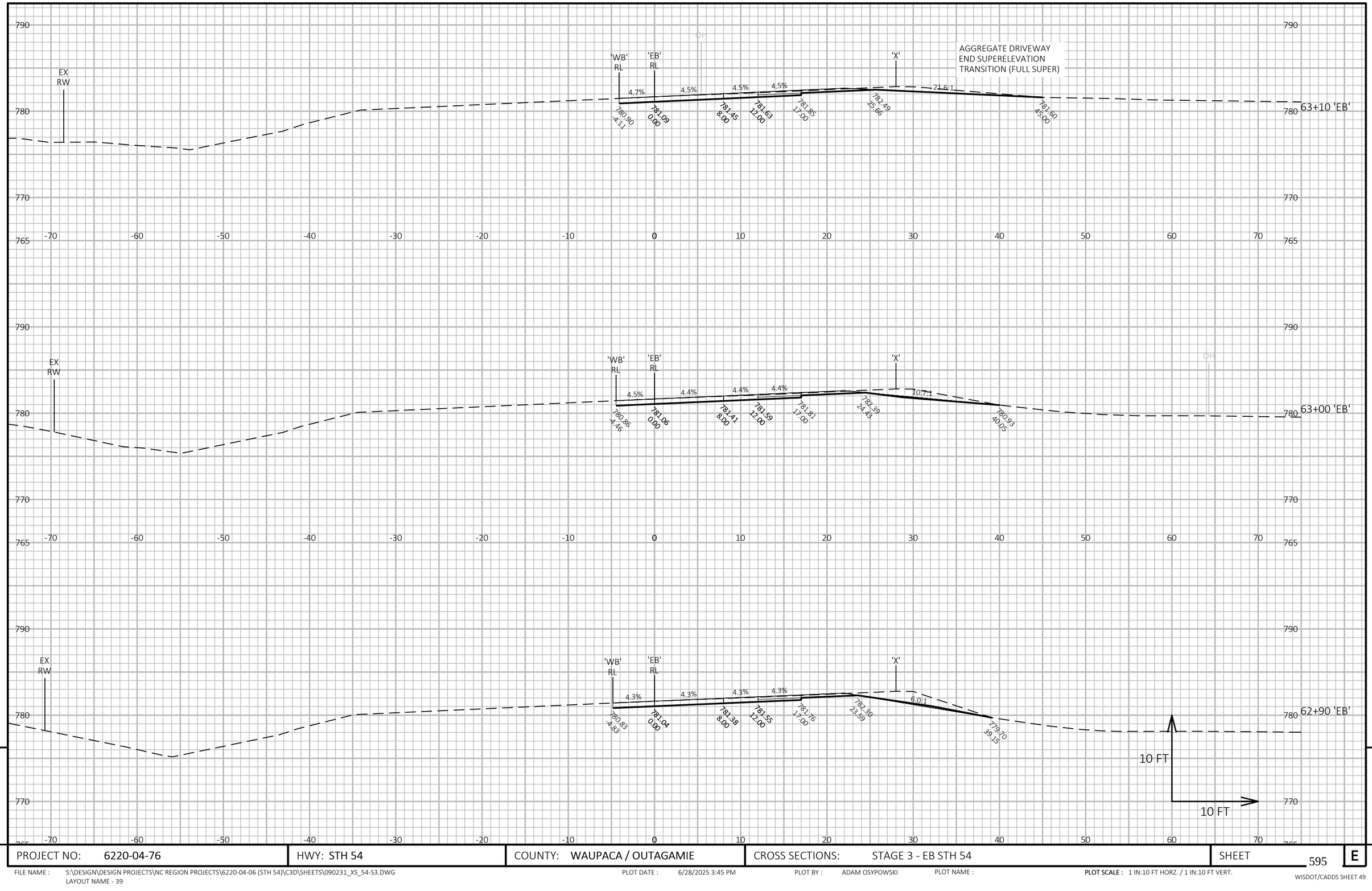
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 594	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 38

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 595	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 39

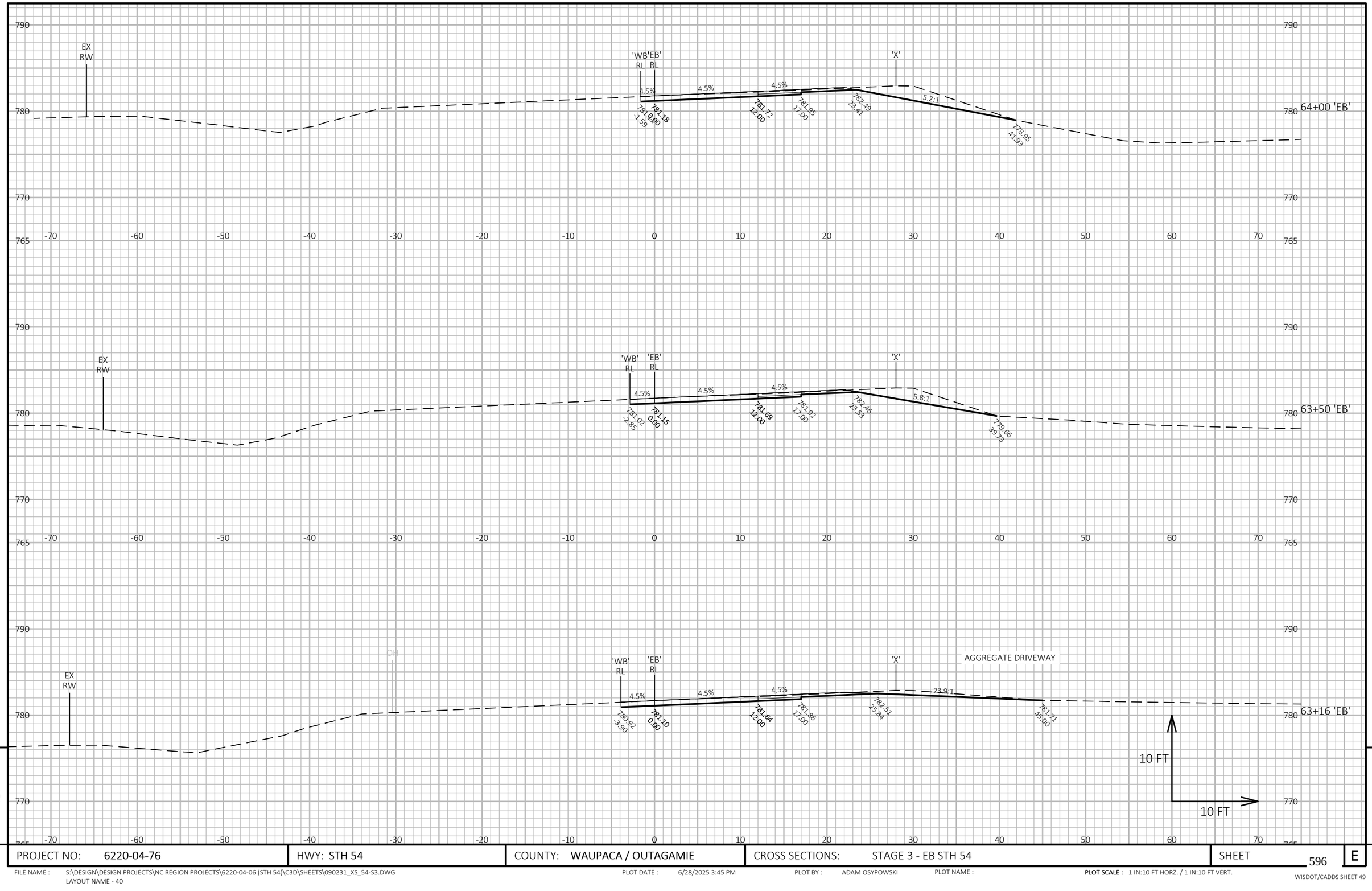
PLOT DATE : 6/28/2025 3:45 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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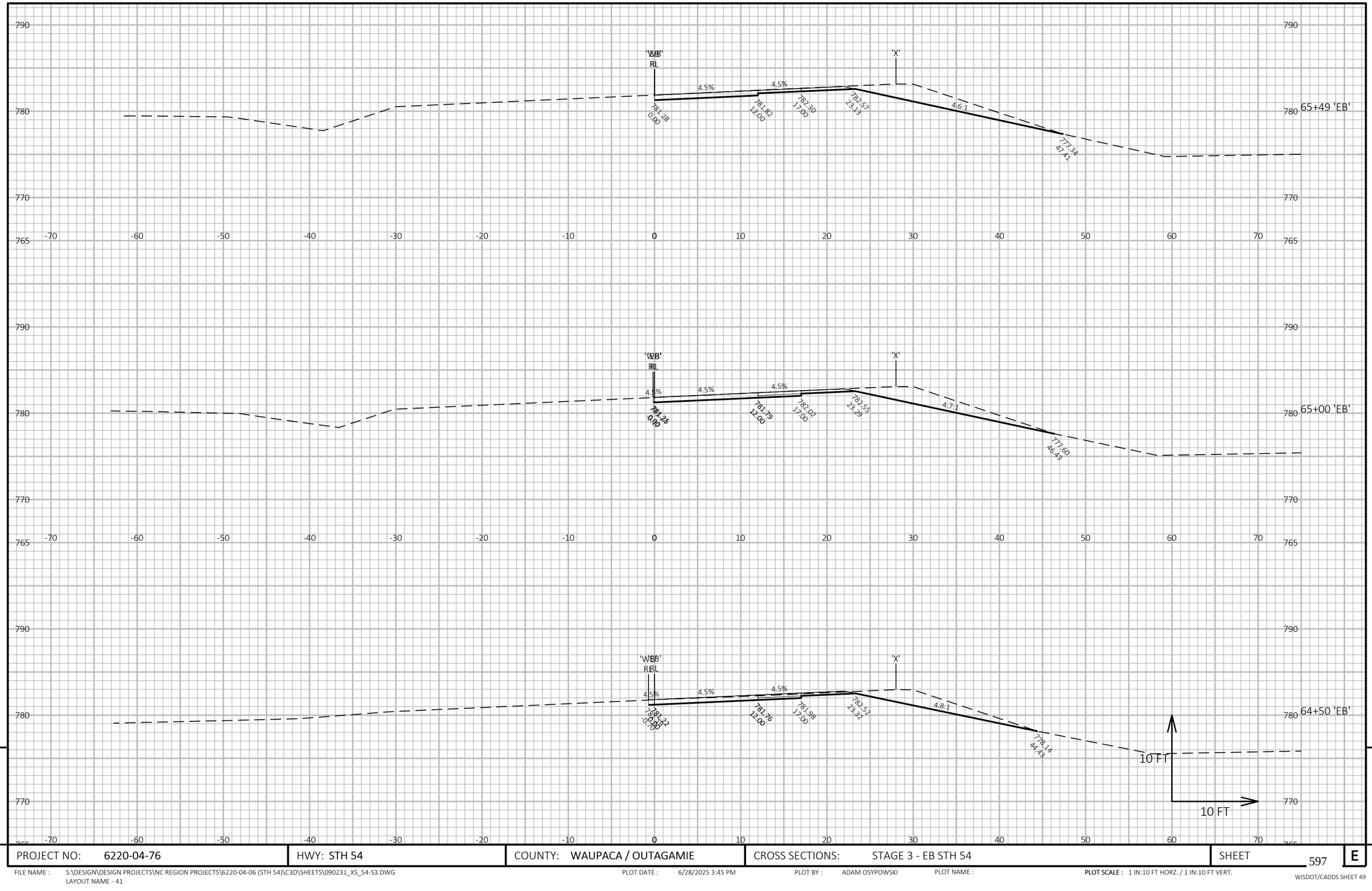
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 596	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 40

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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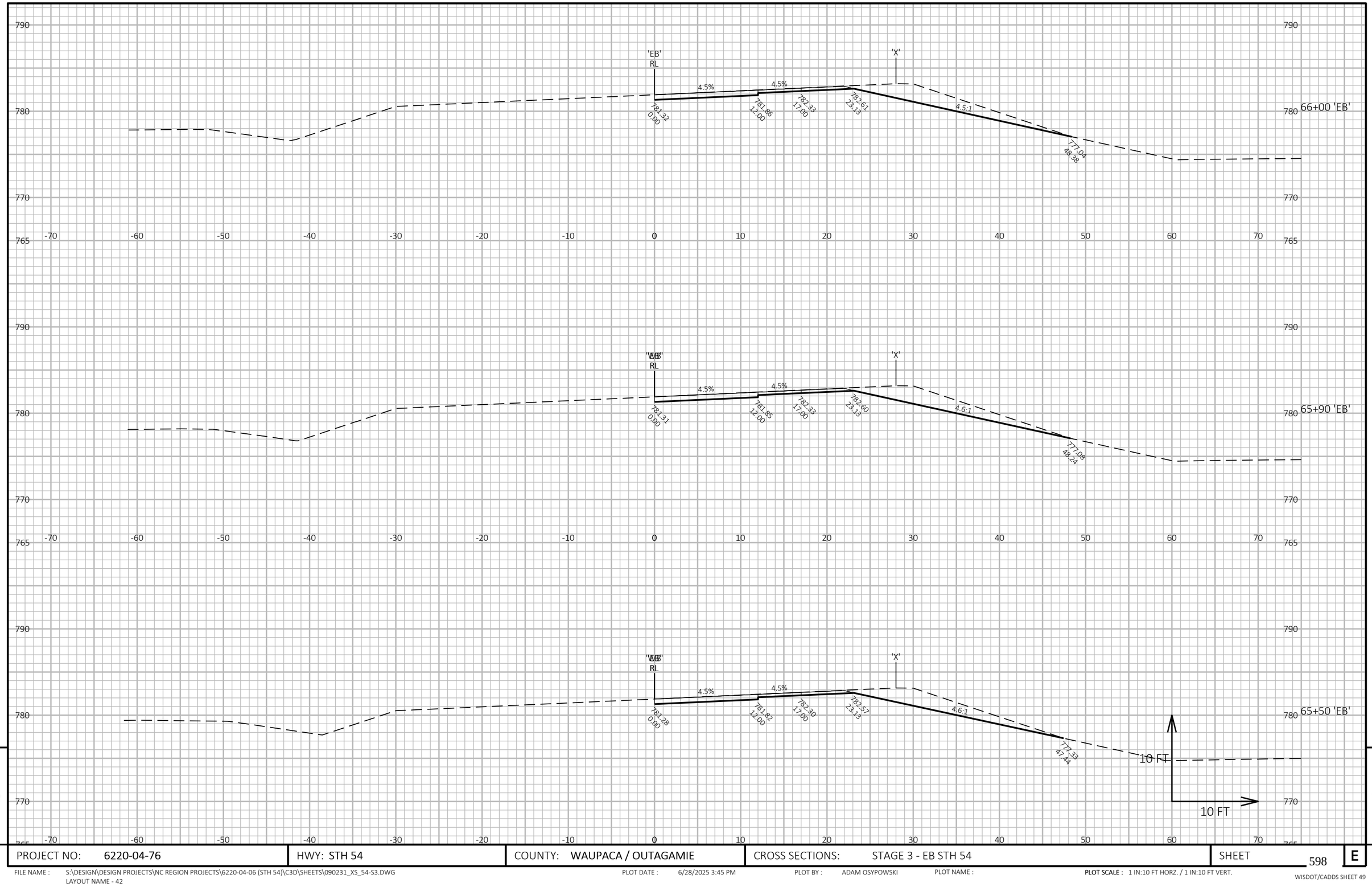
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 597	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 41

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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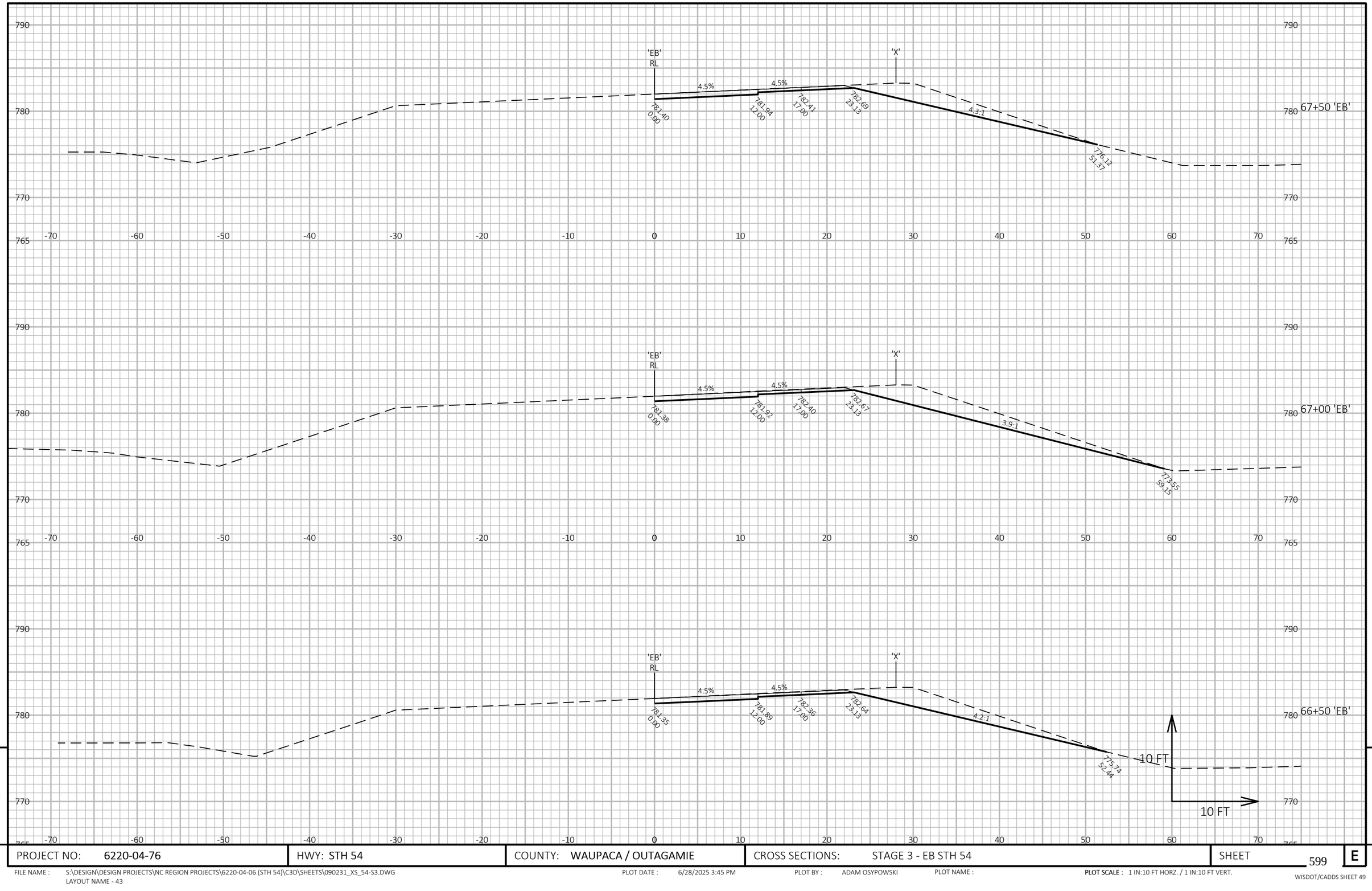
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 598	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 42

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 599	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 43

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

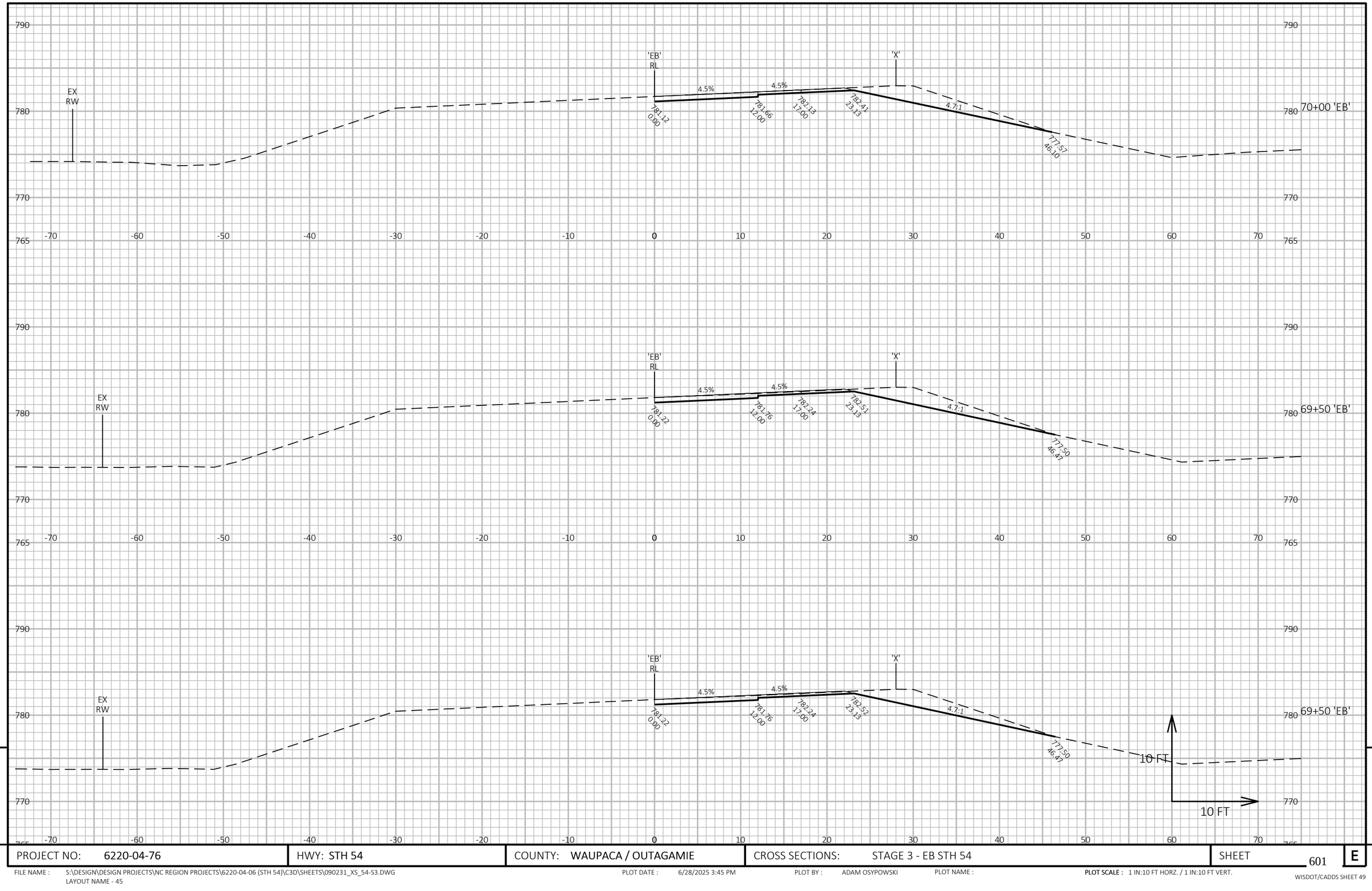
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 600	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 44

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI 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: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 601	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 45

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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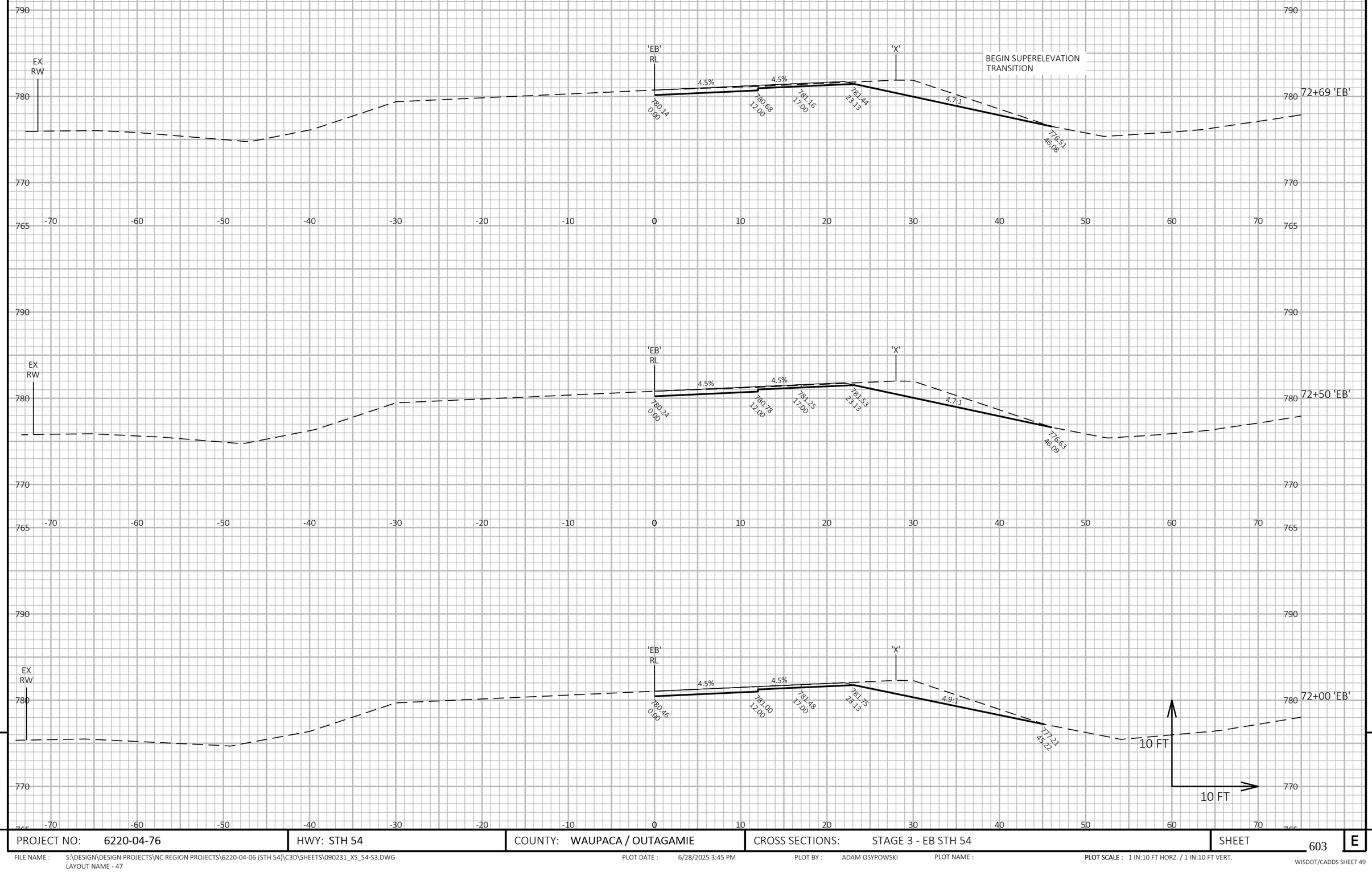
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 602	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 46

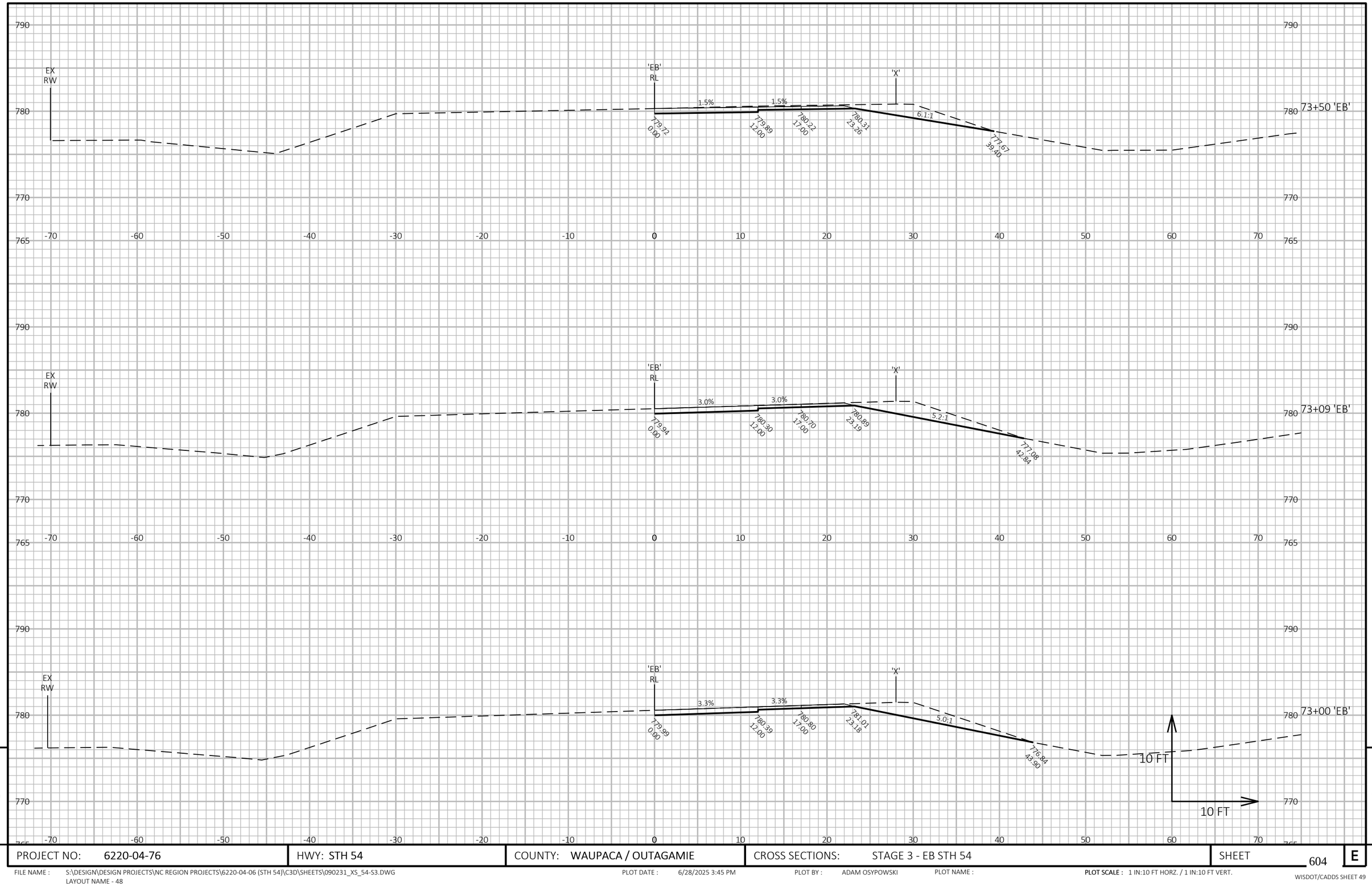
PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 603 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 47

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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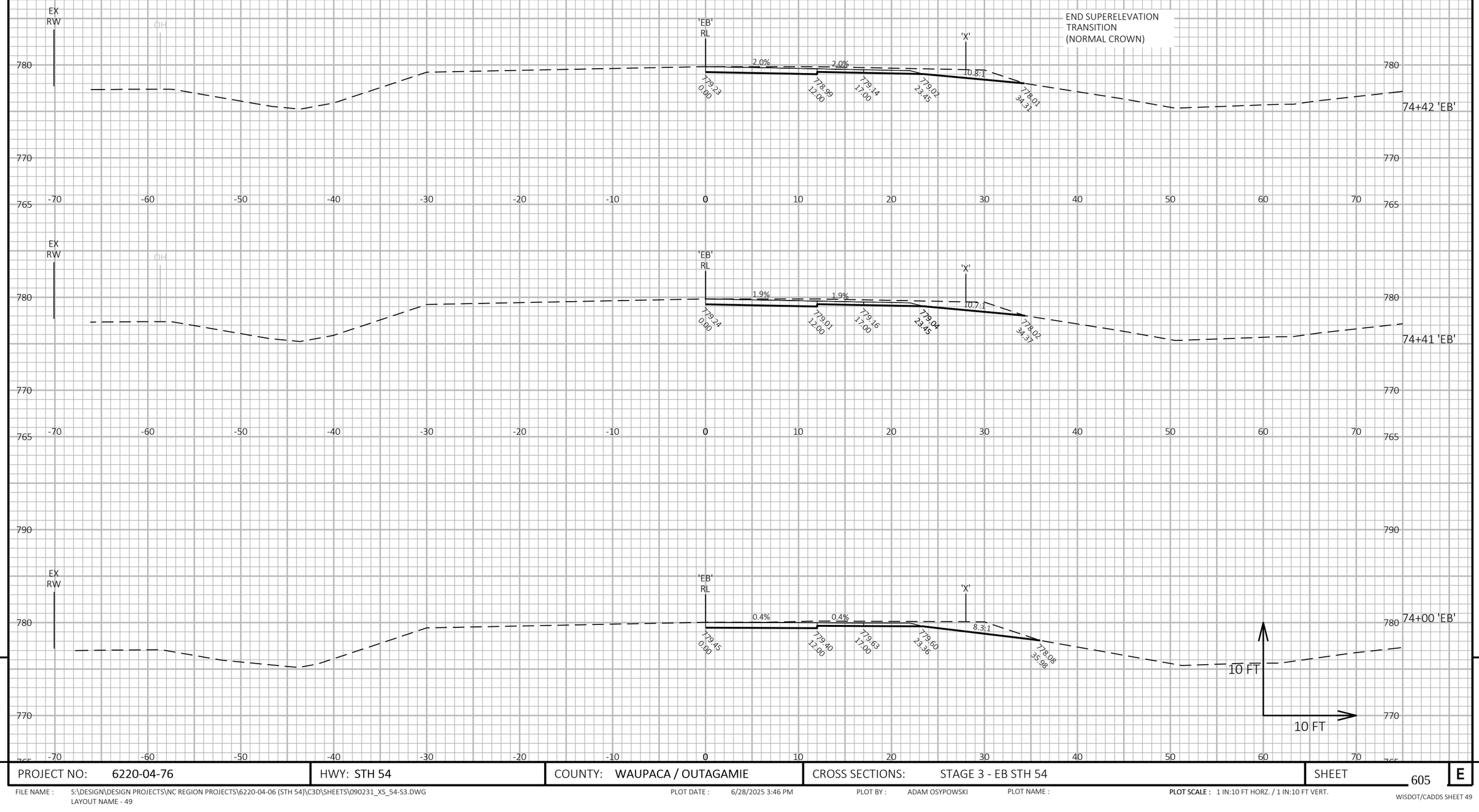
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 604	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 48

PLOT DATE : 6/28/2025 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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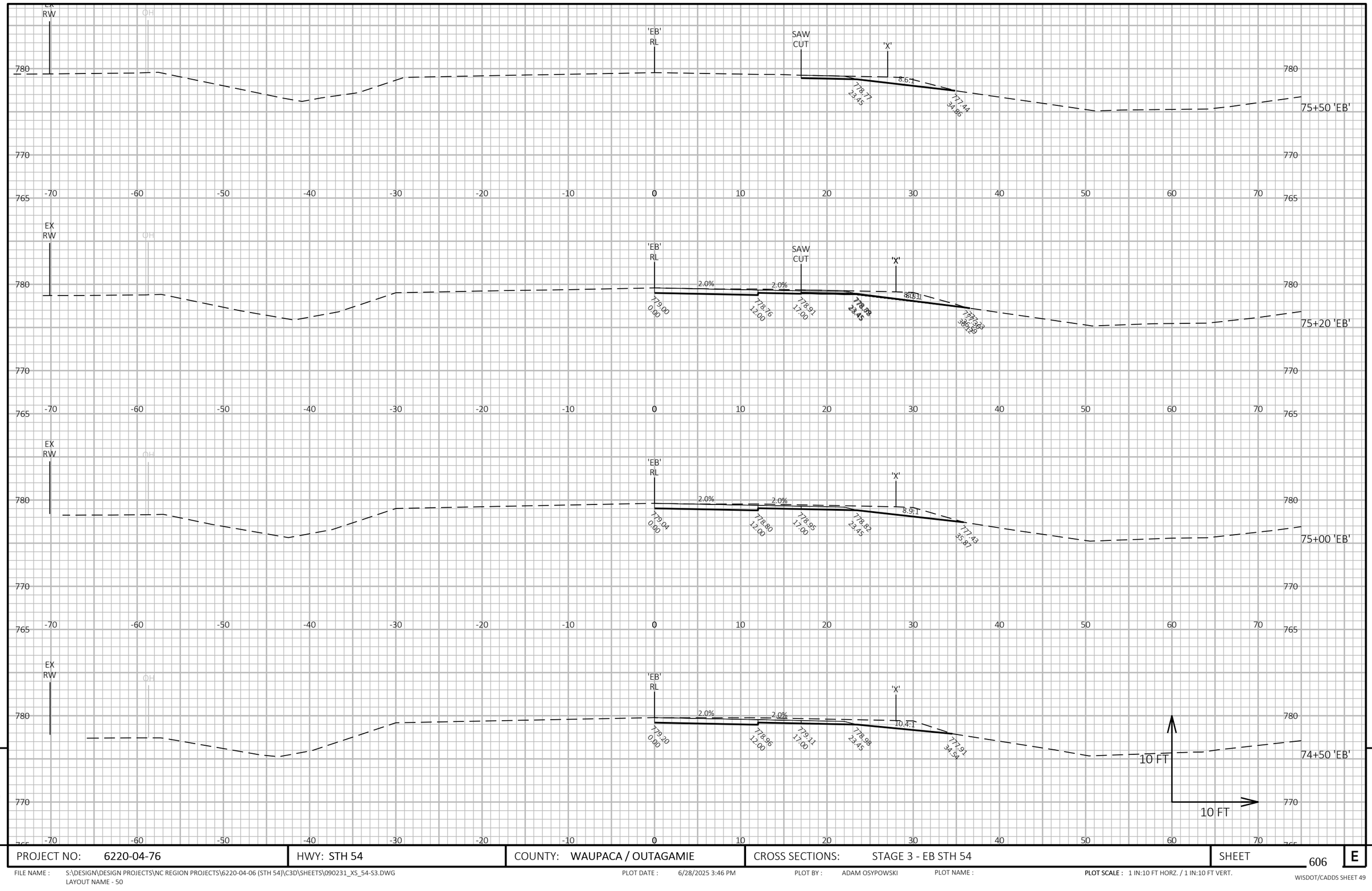
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 605	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 49

PLOT DATE : 6/28/2025 3:46 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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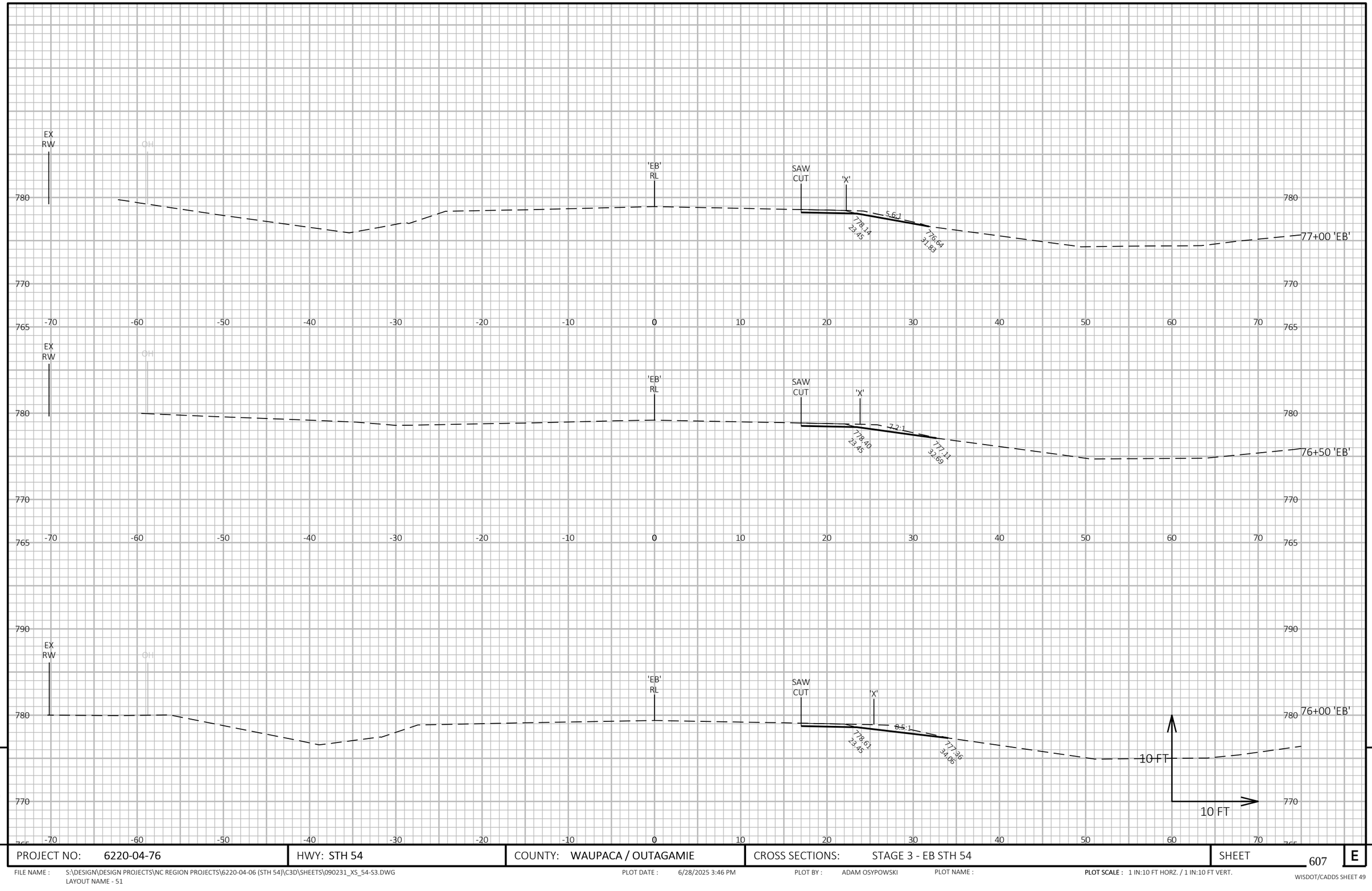
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 606	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 50

PLOT DATE : 6/28/2025 3:46 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 607	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 51

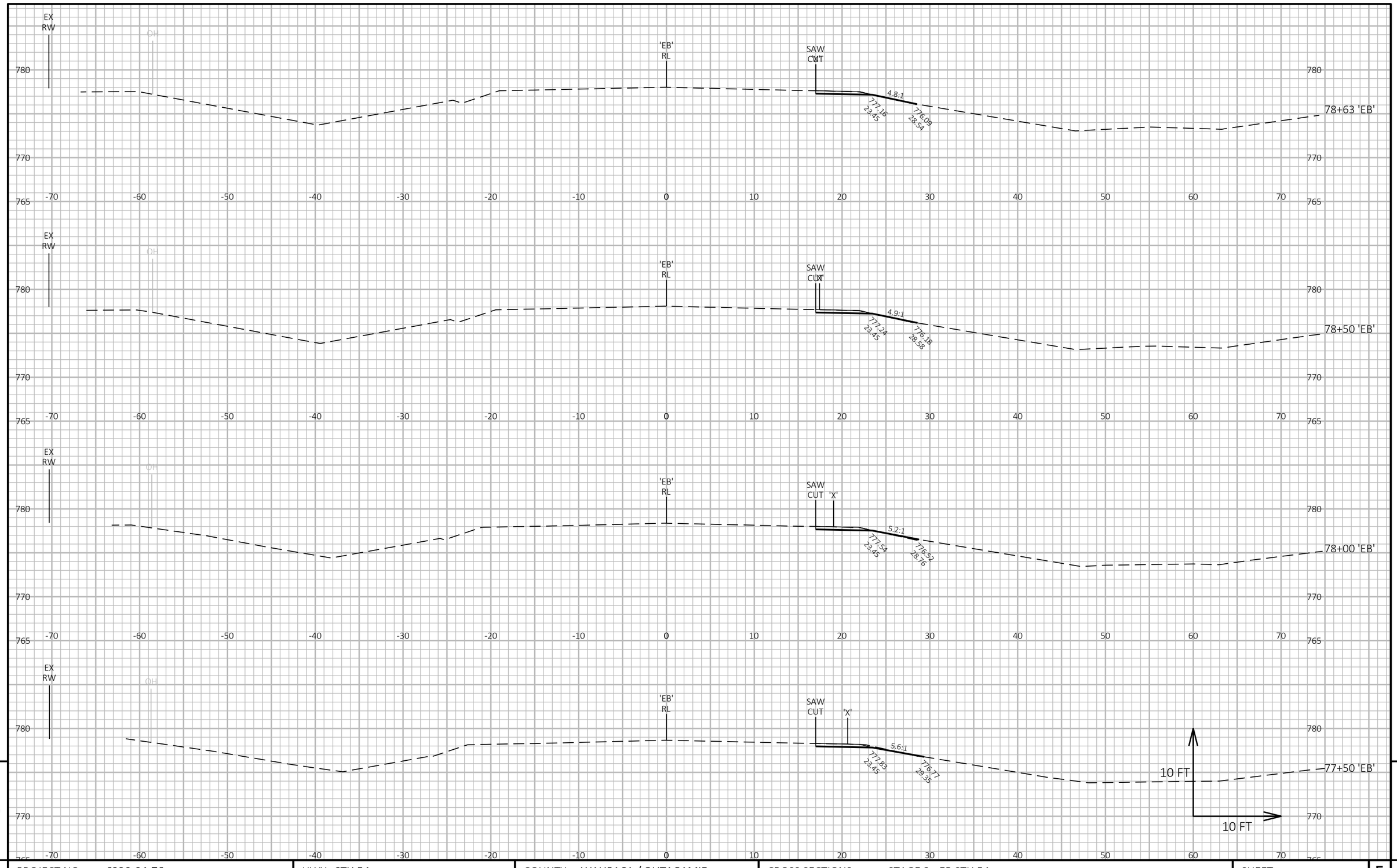
PLOT DATE : 6/28/2025 3:46 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - EB STH 54	SHEET 608	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090231_XS_54-S3.DWG
LAYOUT NAME - 52

PLOT DATE : 6/28/2025 3:46 PM

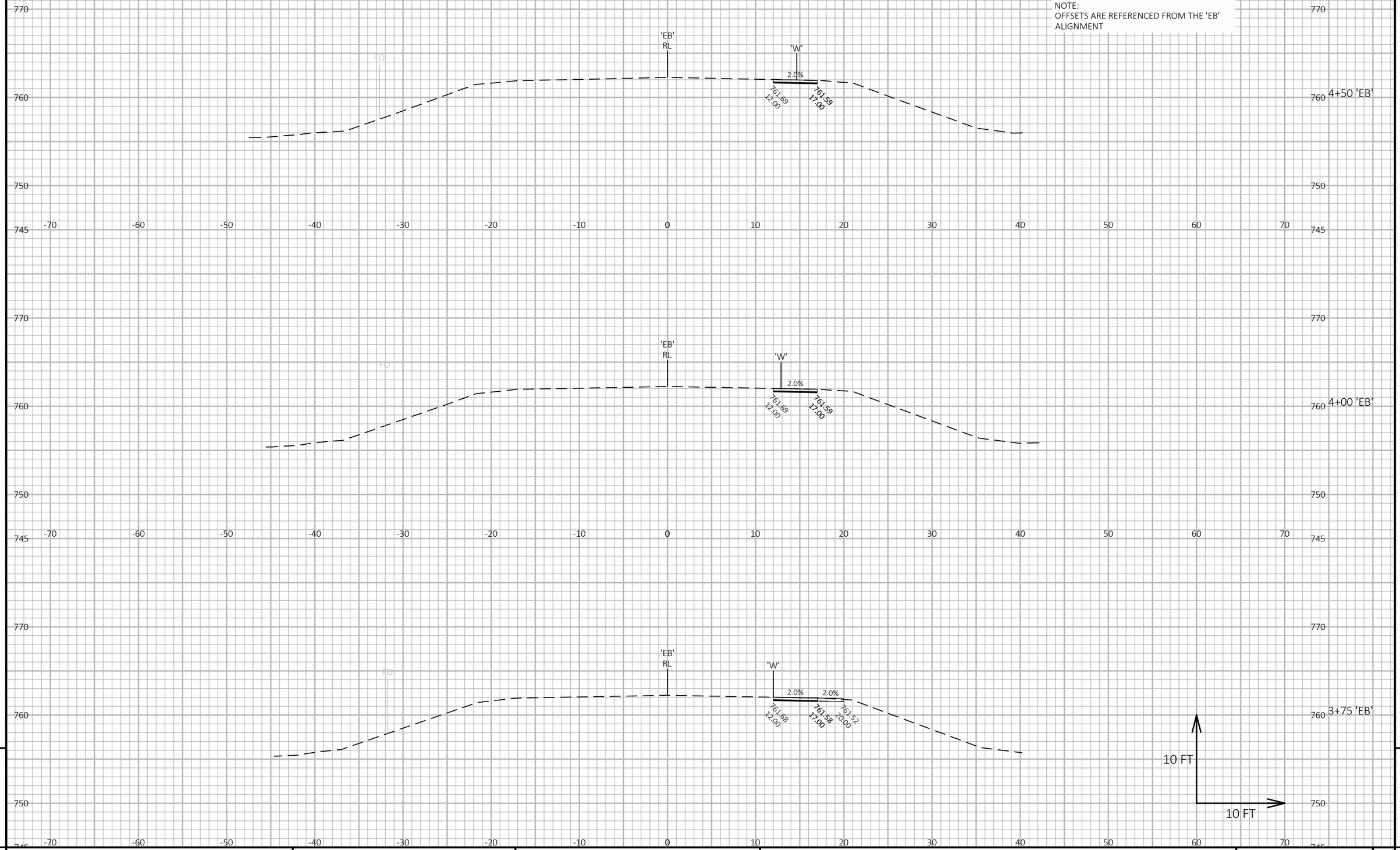
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 609	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 3:09 PM

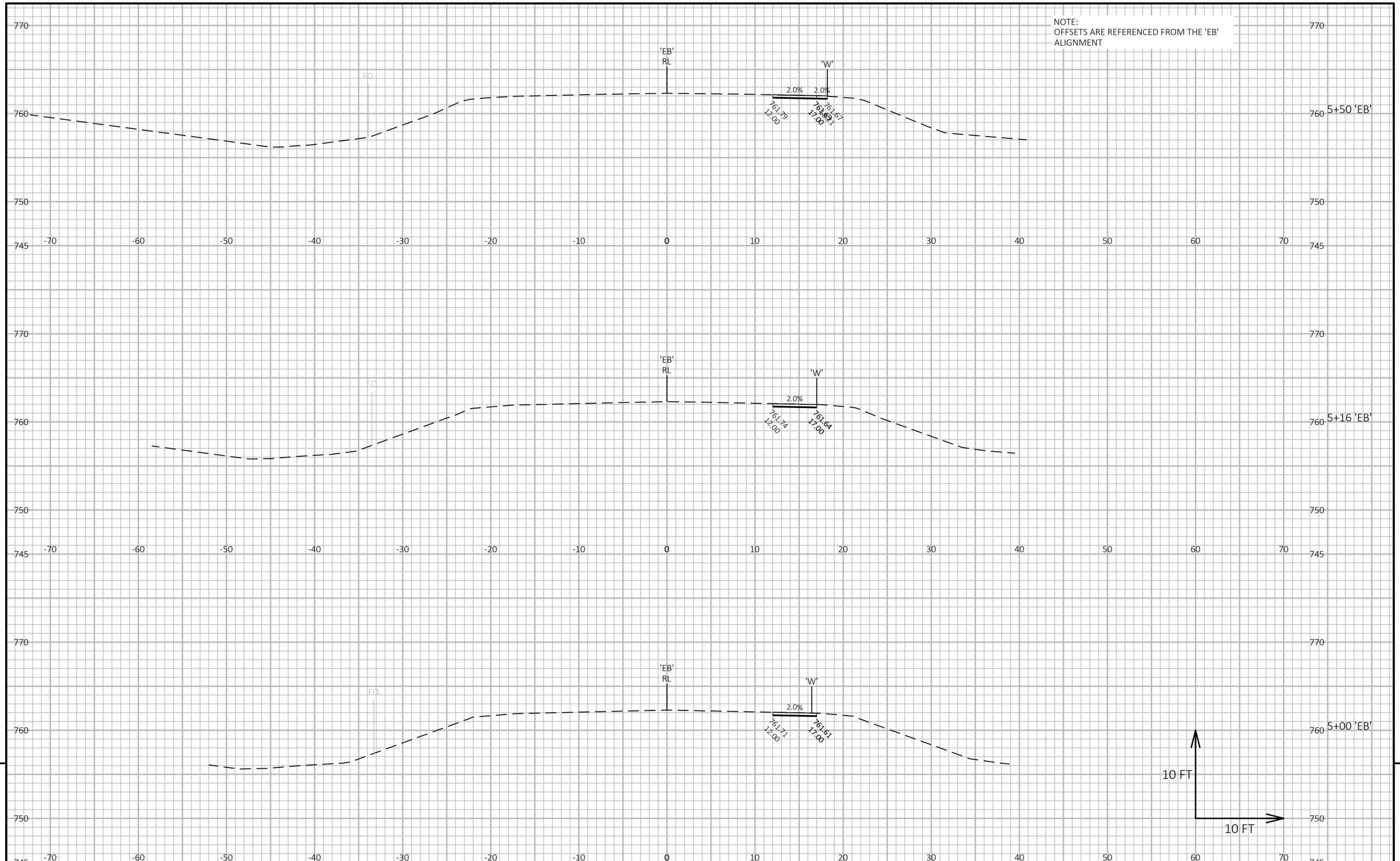
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT

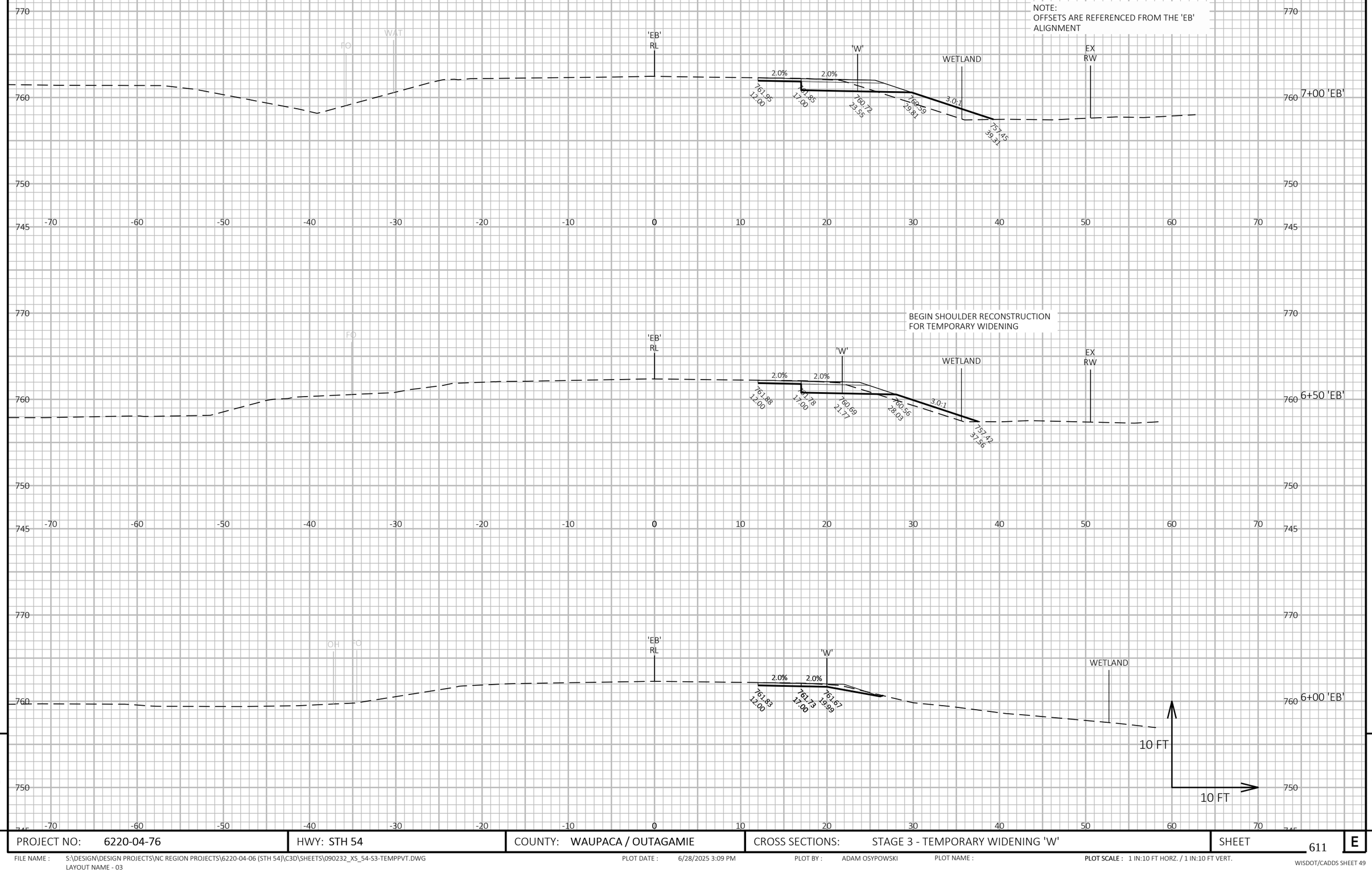


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 610 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 611	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 03

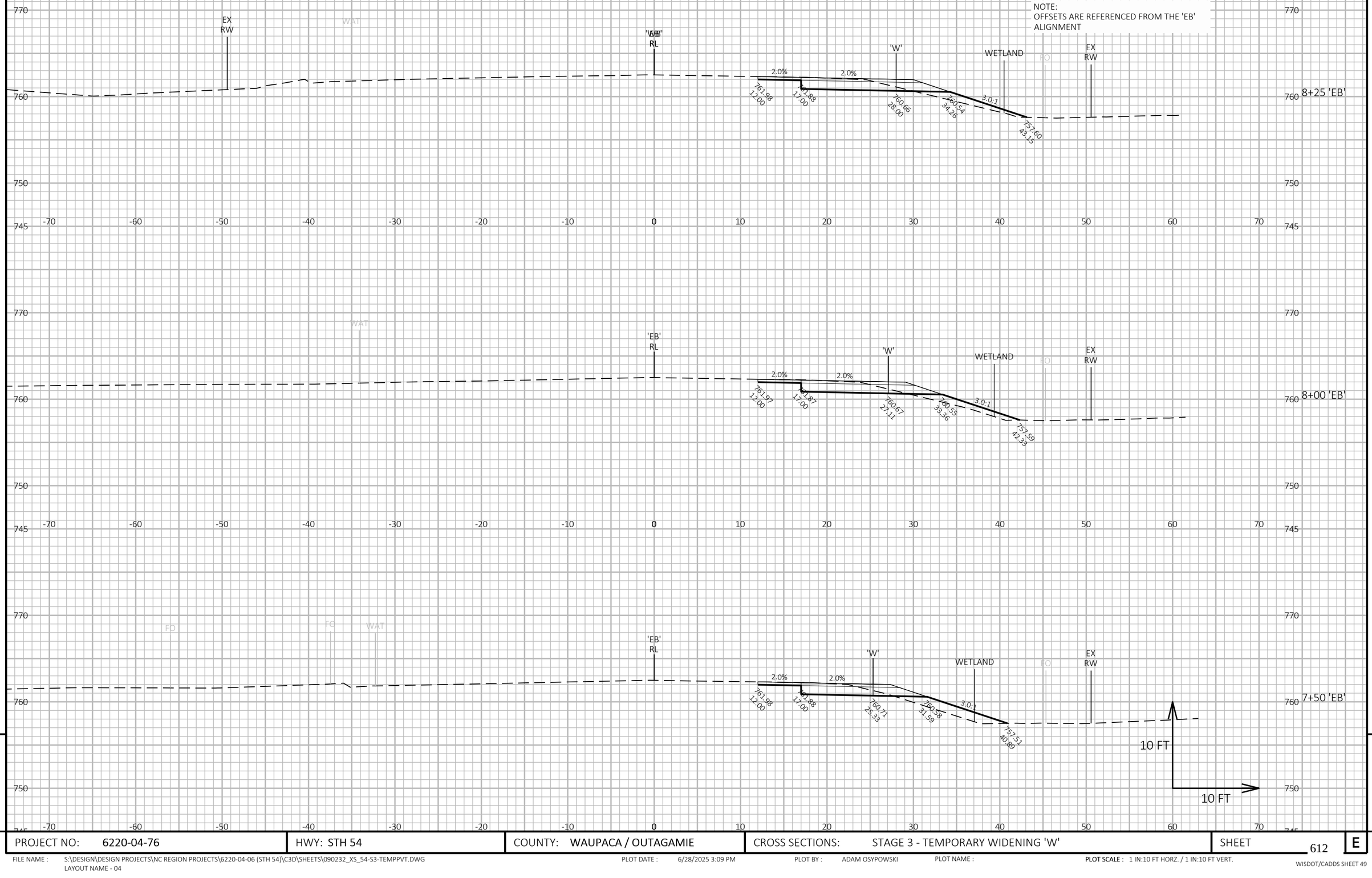
PLOT DATE : 6/28/2025 3:09 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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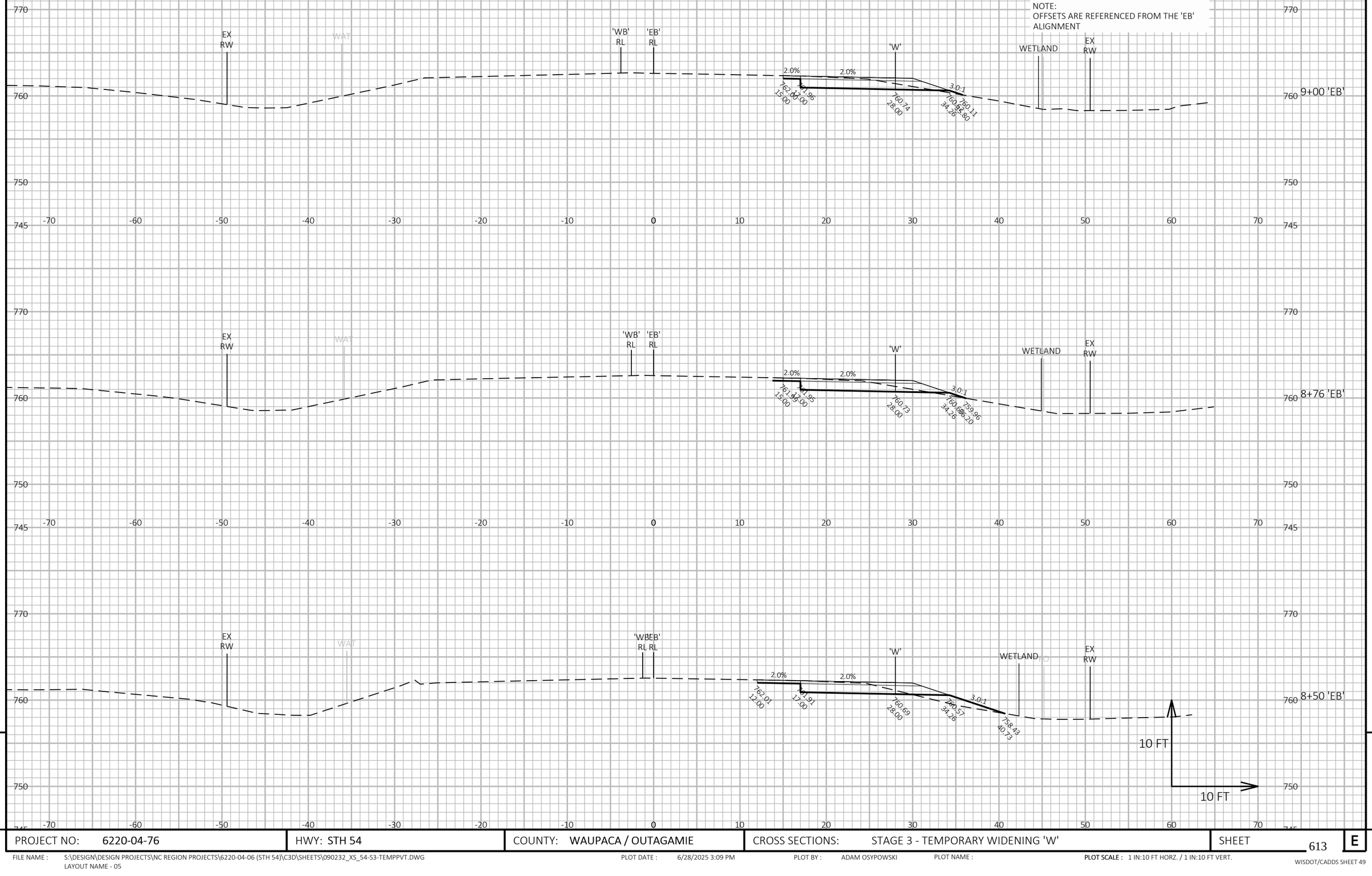
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 612	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



10 FT

10 FT

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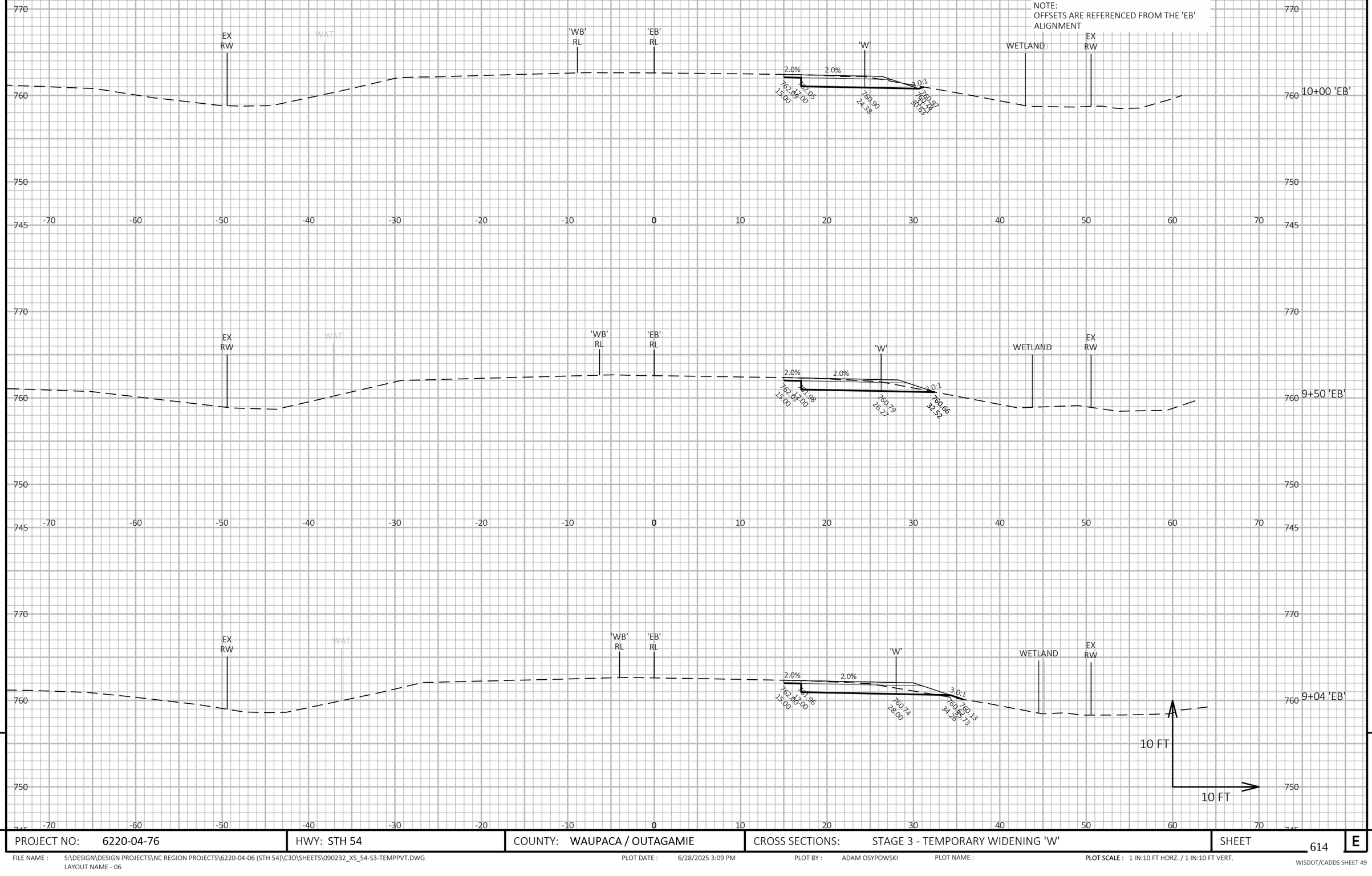
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 613	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



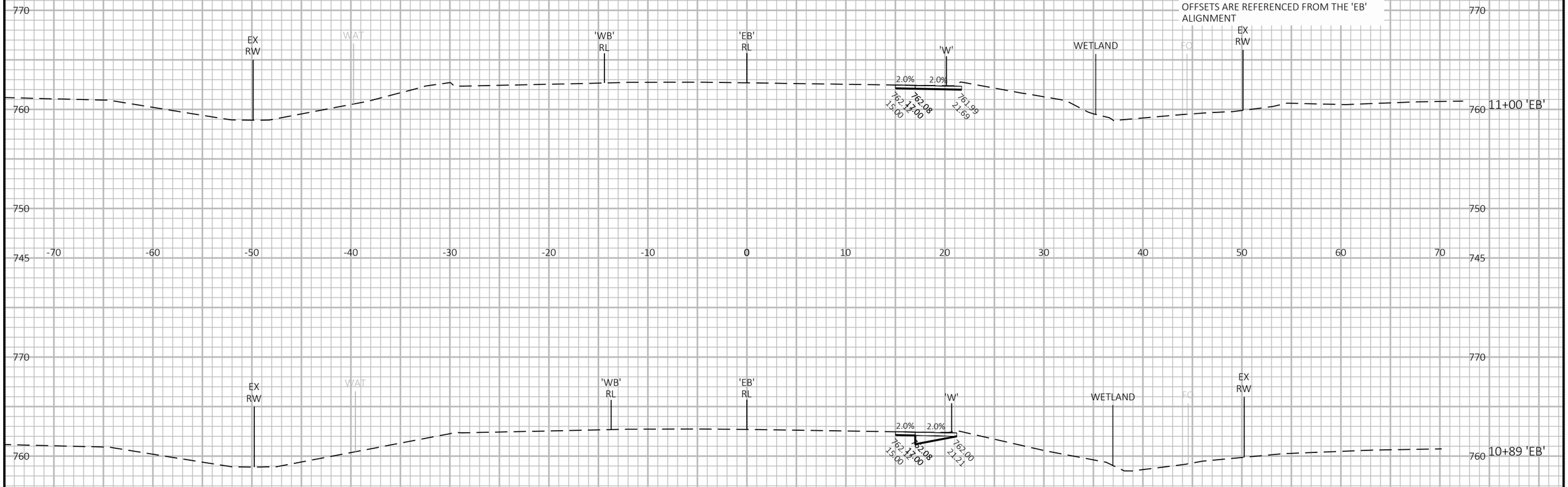
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 614 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 615	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 3:09 PM

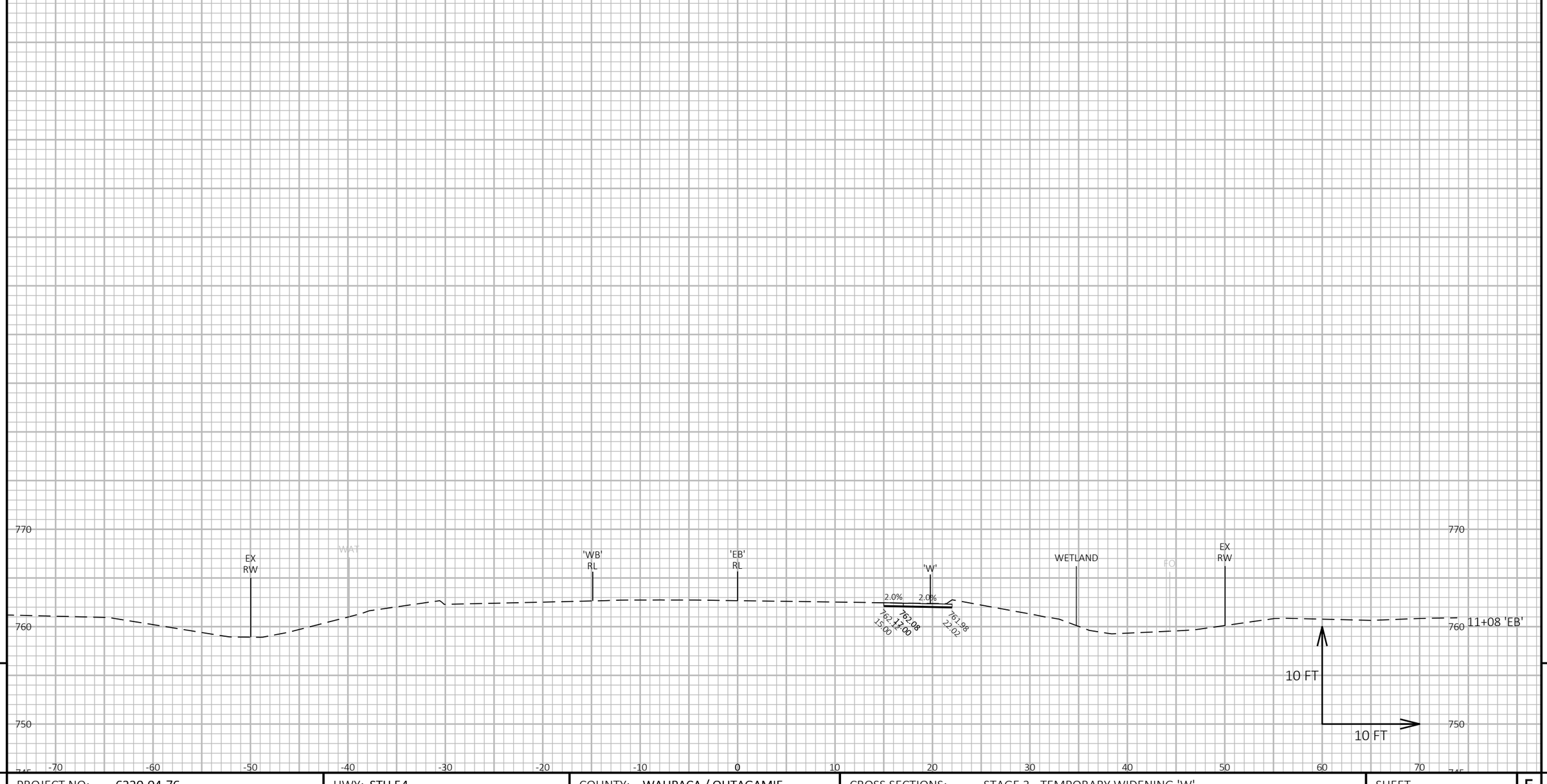
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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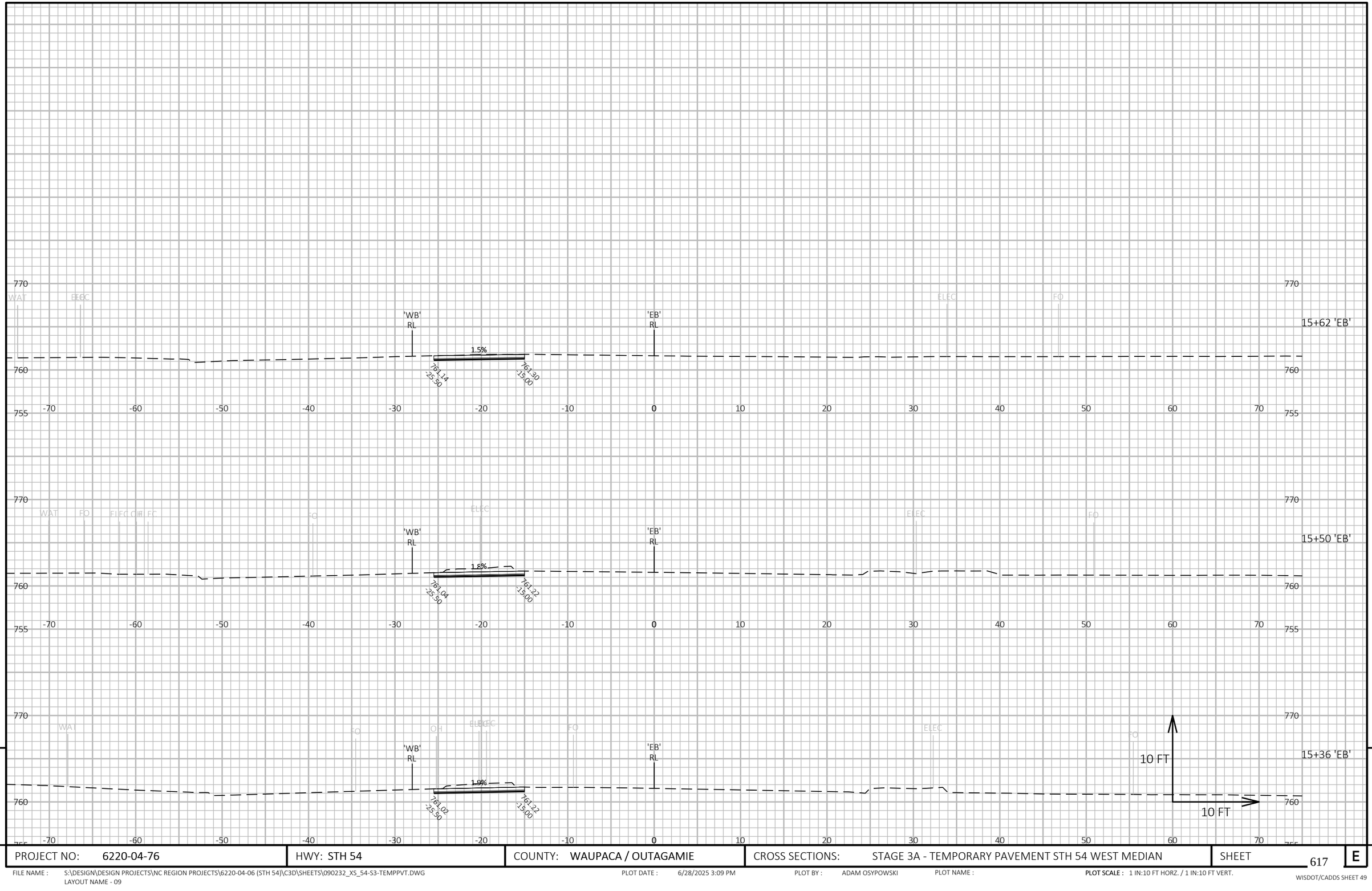
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3 - TEMPORARY WIDENING 'W'	SHEET 616	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 08

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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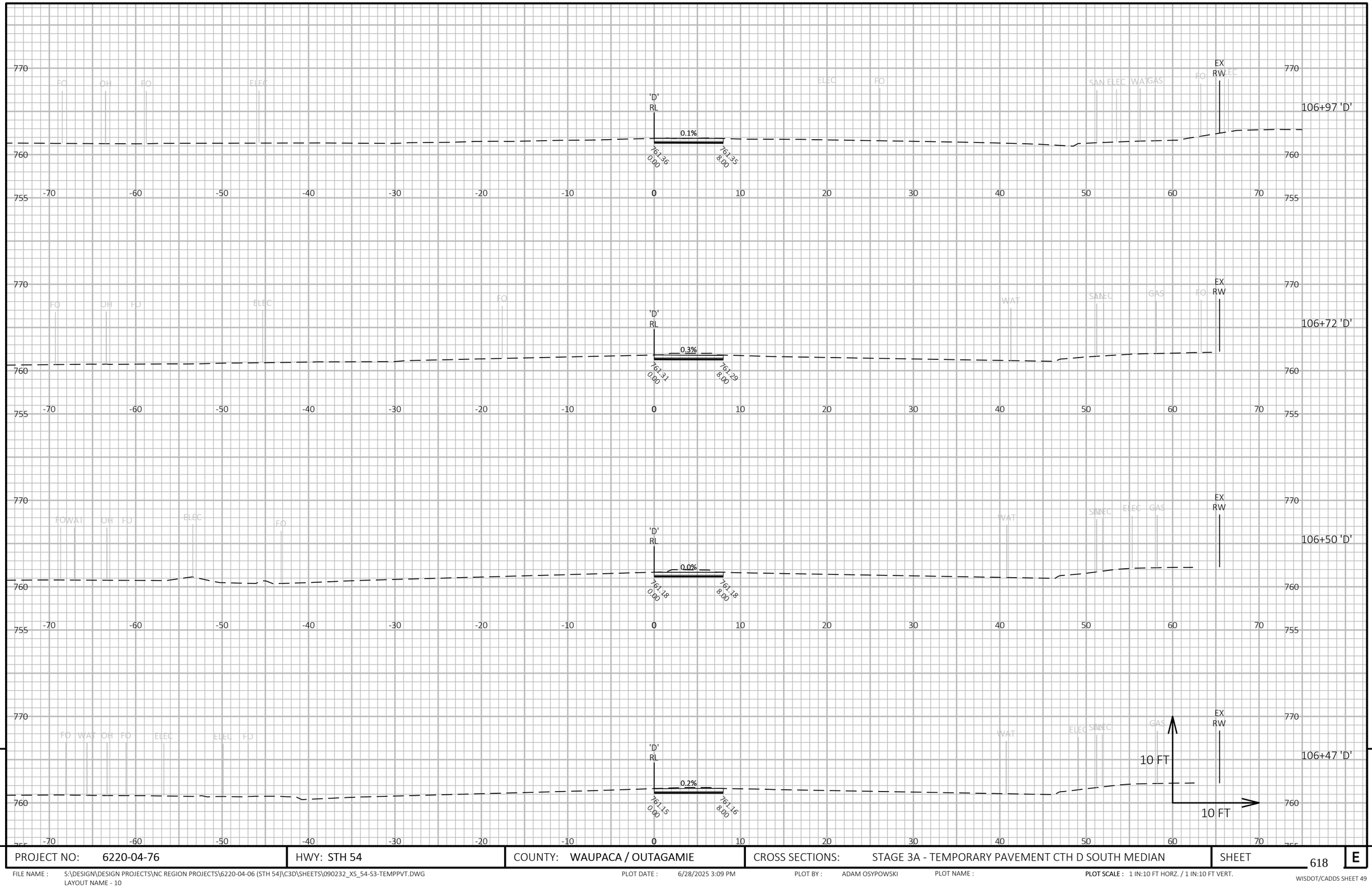
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3A - TEMPORARY PAVEMENT STH 54 WEST MEDIAN	SHEET 617	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 09

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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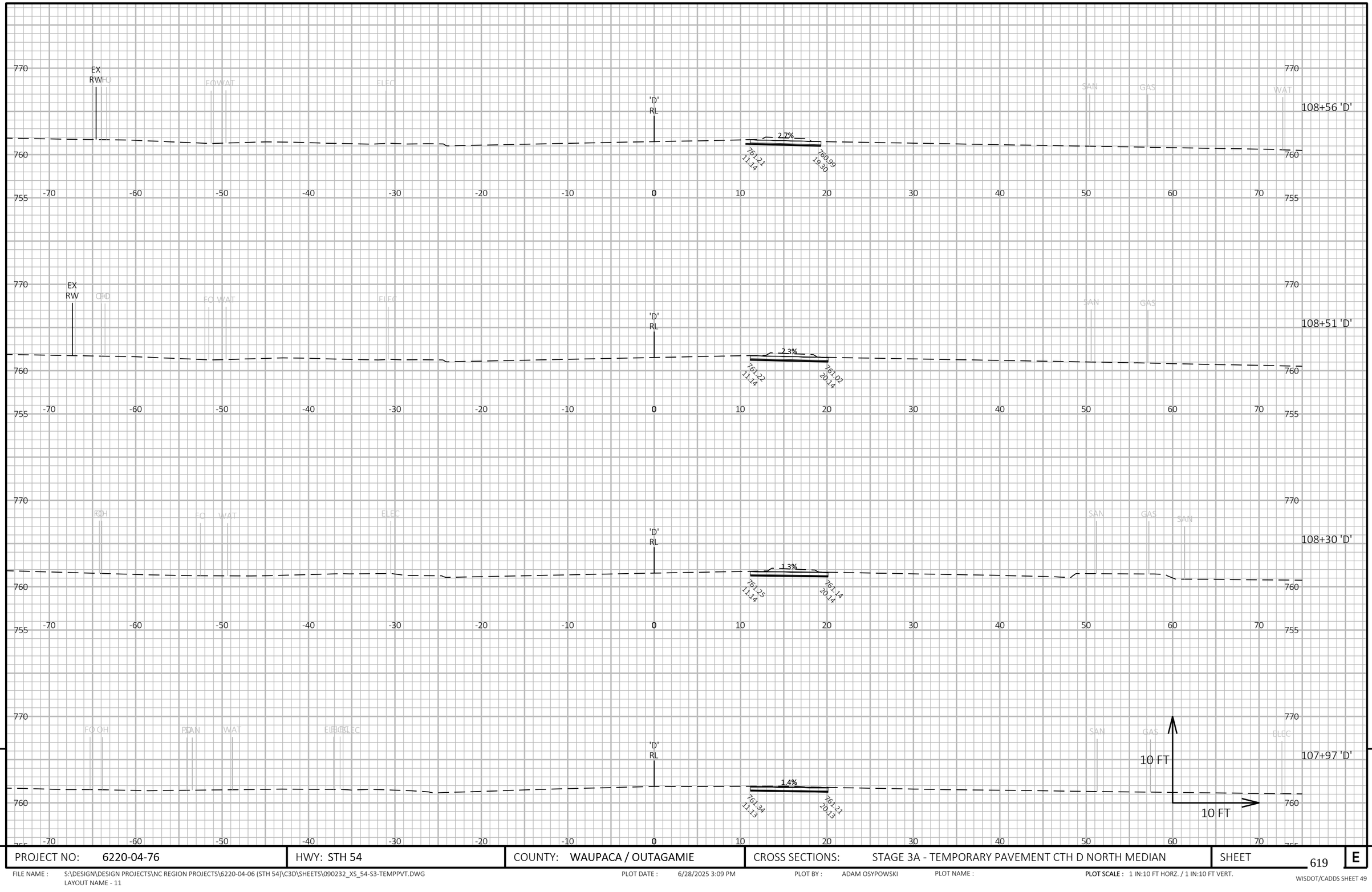
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3A - TEMPORARY PAVEMENT CTH D SOUTH MEDIAN	SHEET 618	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3A - TEMPORARY PAVEMENT CTH D NORTH MEDIAN	SHEET 619	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 11

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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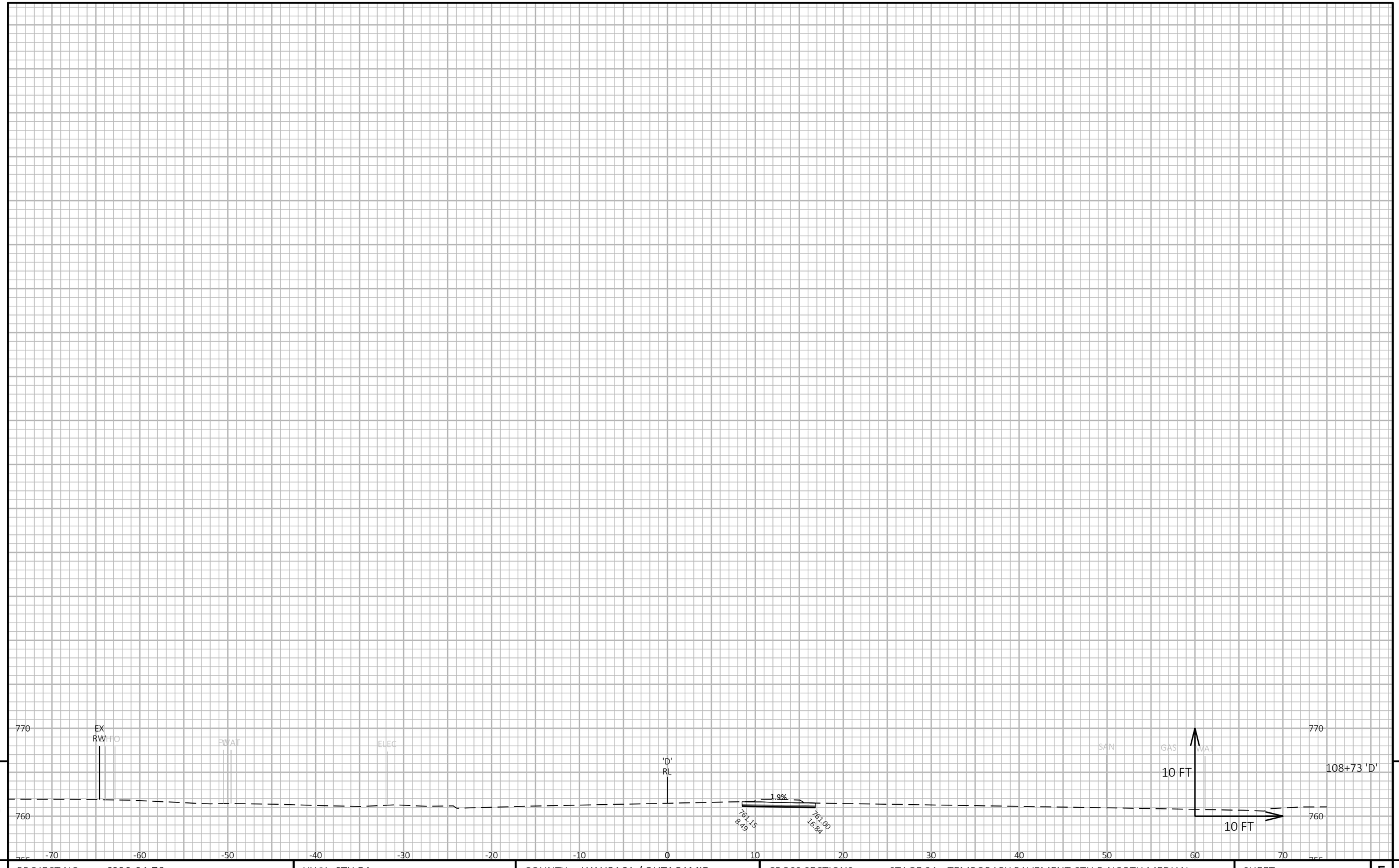

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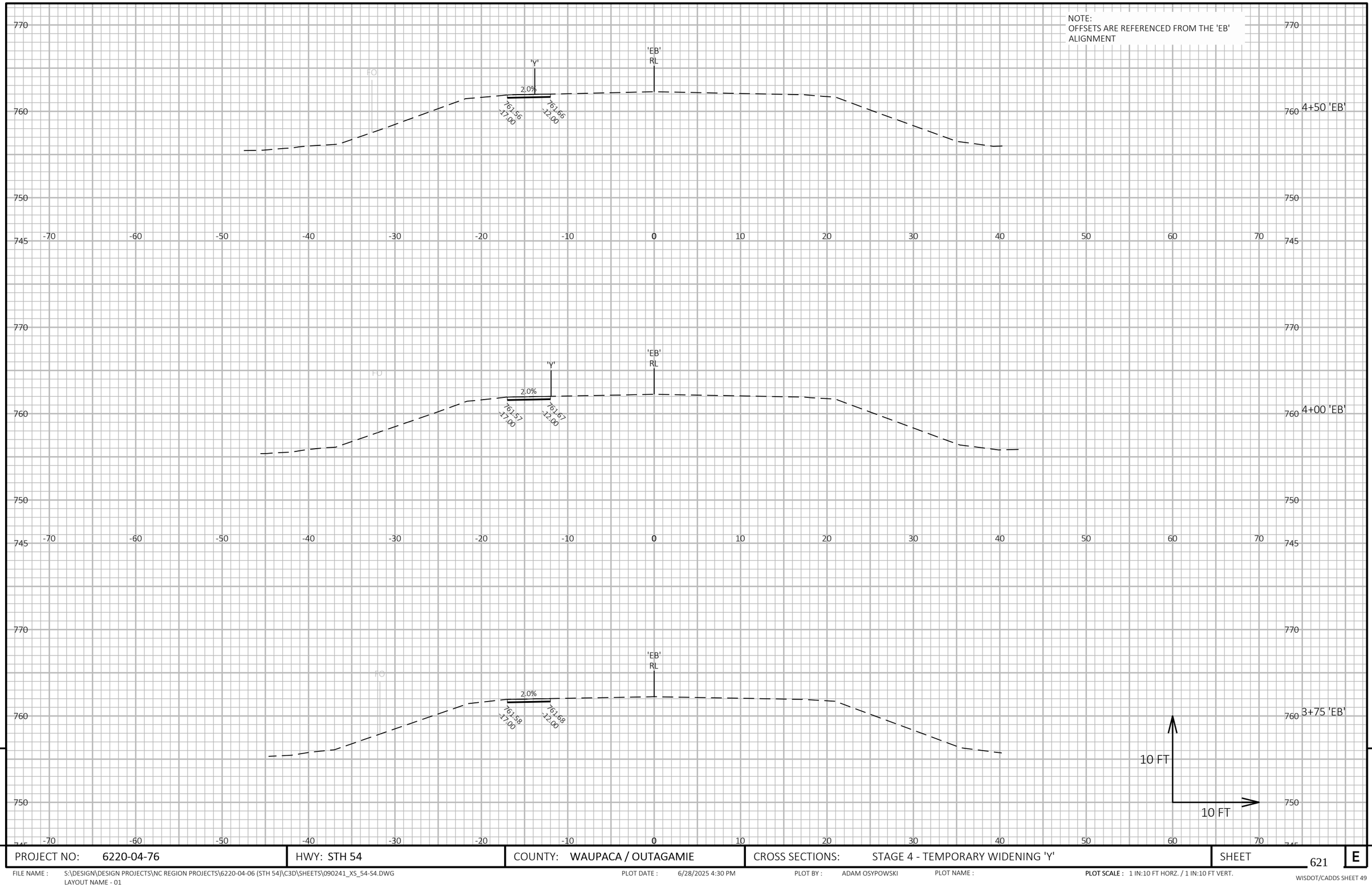
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 3A - TEMPORARY PAVEMENT CTH D NORTH MEDIAN	SHEET 620	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090232_XS_54-S3-TEMPPVT.DWG
LAYOUT NAME - 12

PLOT DATE : 6/28/2025 3:09 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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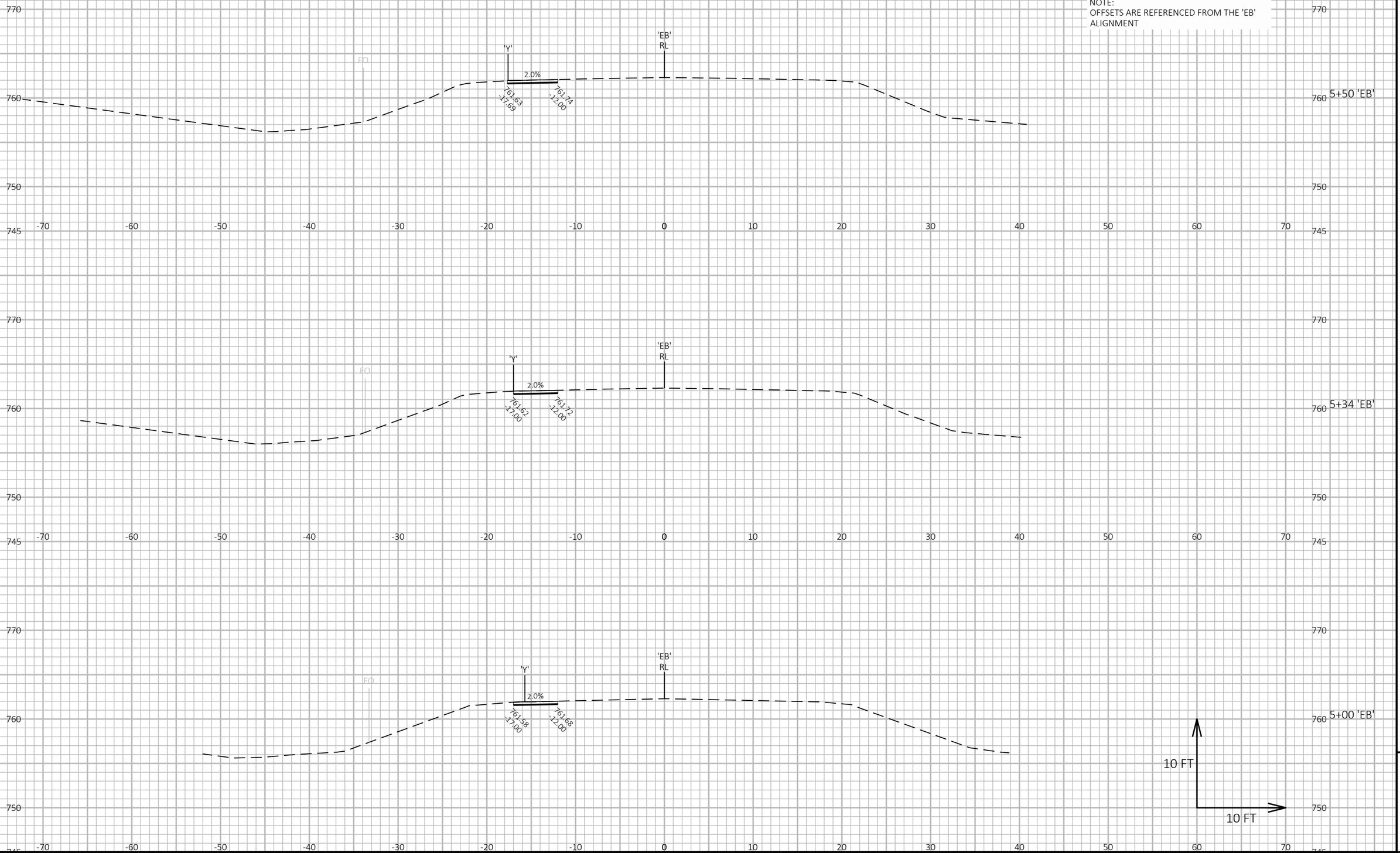
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - TEMPORARY WIDENING 'Y'	SHEET 621	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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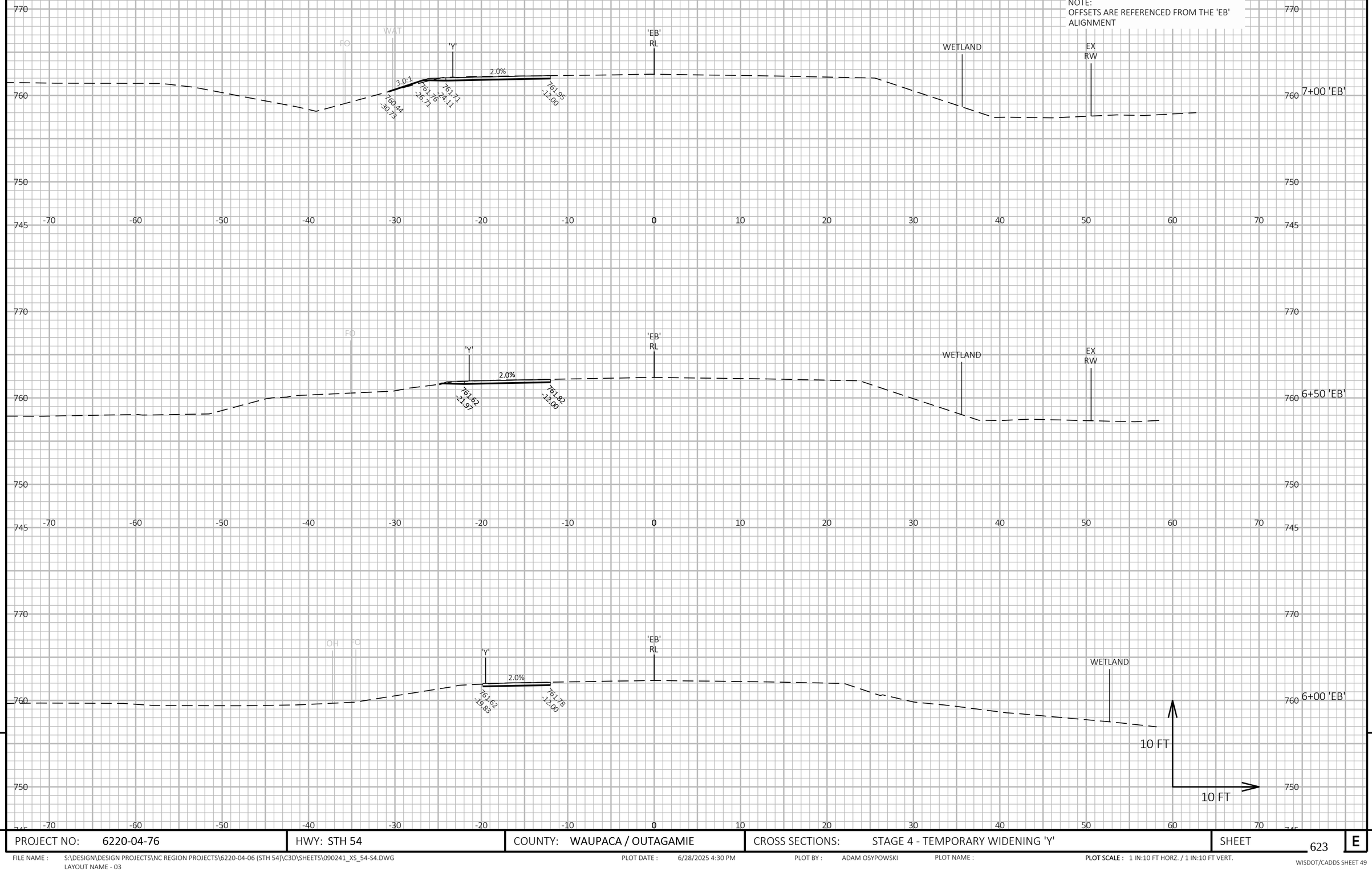
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - TEMPORARY WIDENING 'Y'	SHEET 622	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - TEMPORARY WIDENING 'Y'	SHEET 623	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 4:30 PM

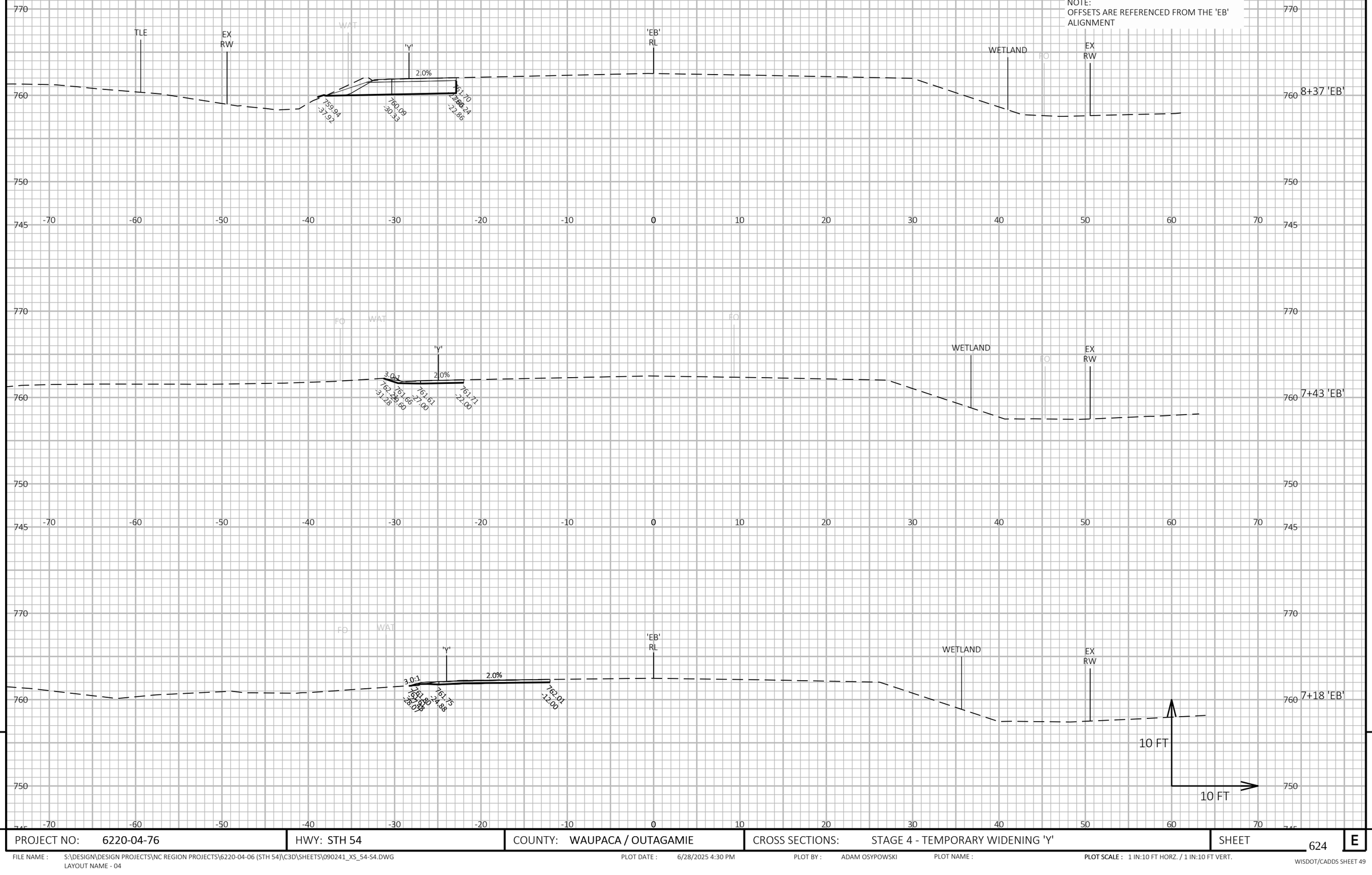
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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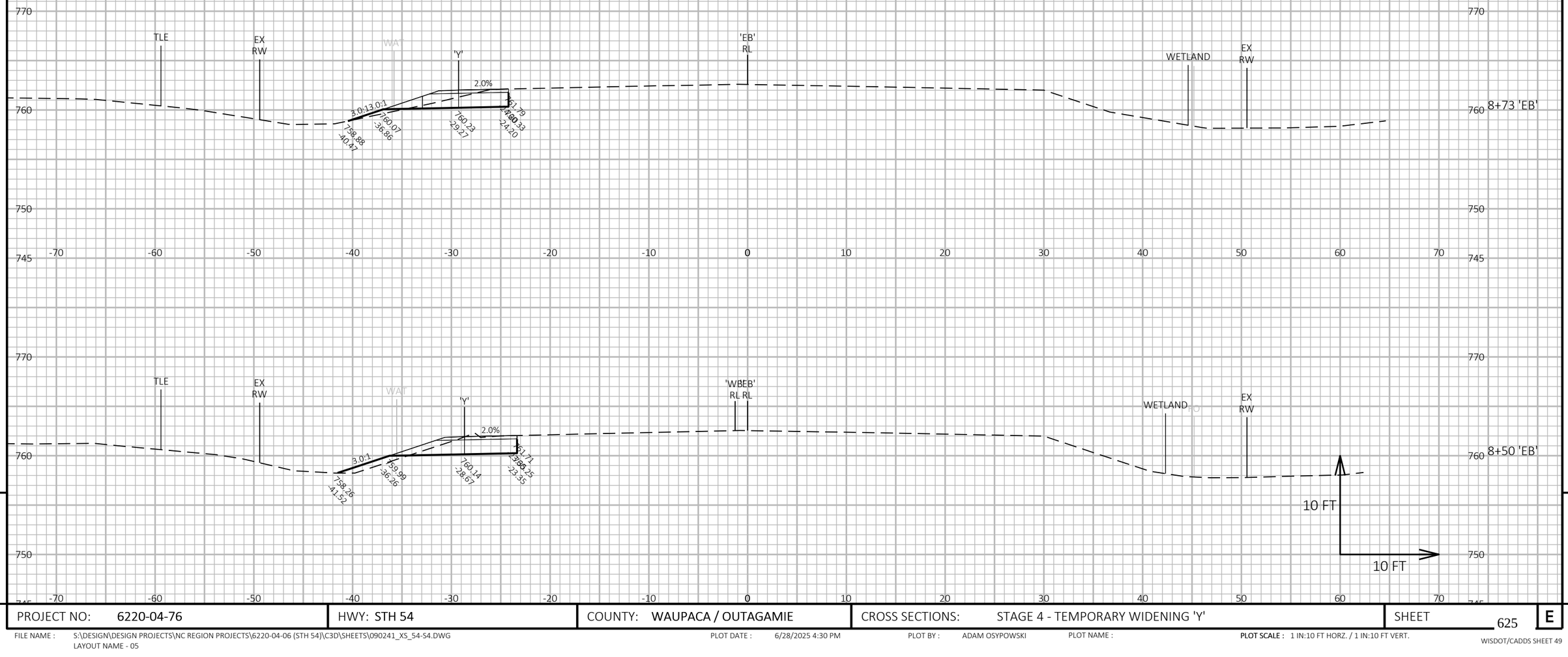
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - TEMPORARY WIDENING 'Y'	SHEET 624	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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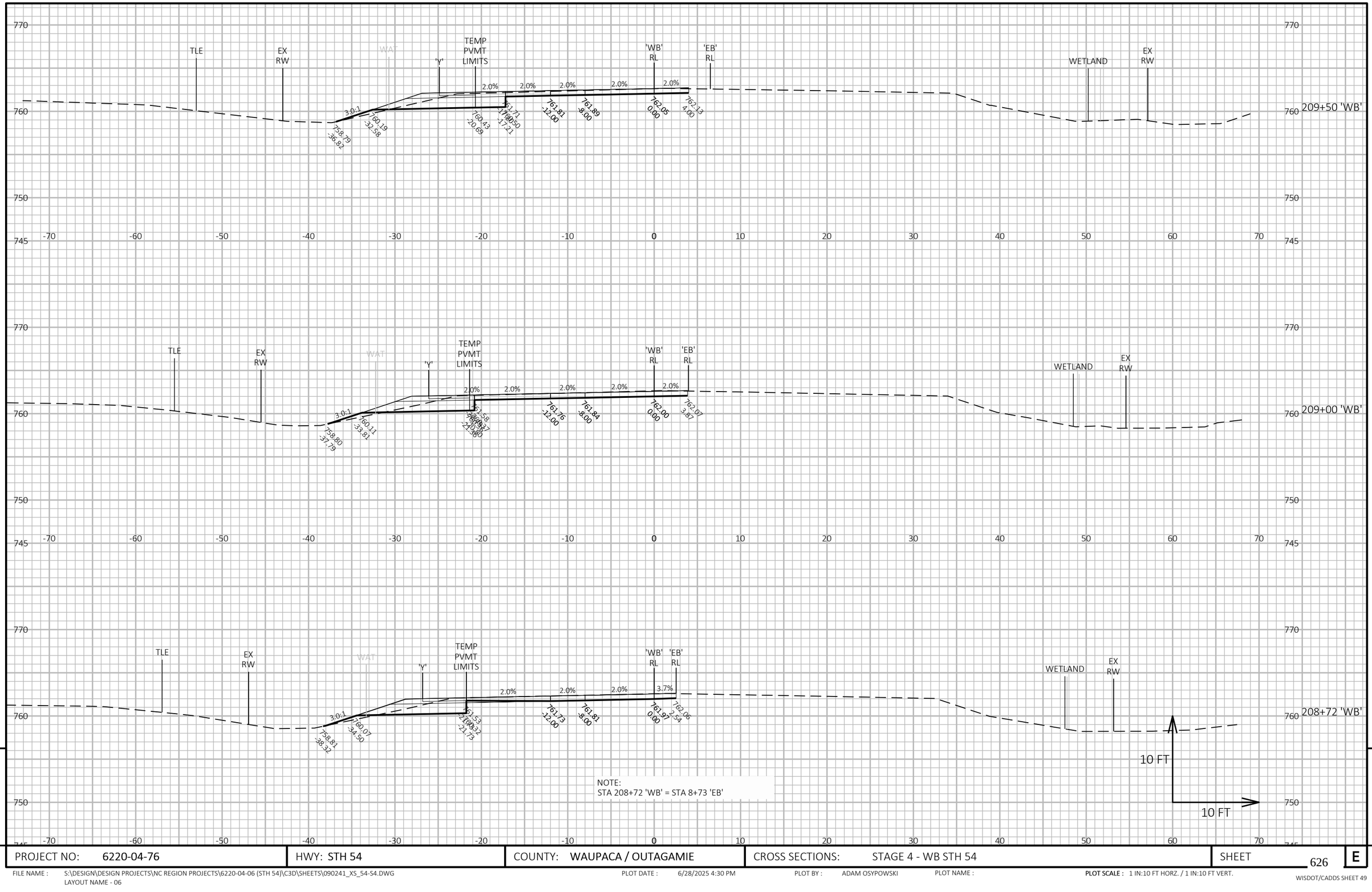
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - TEMPORARY WIDENING 'Y'	SHEET 625	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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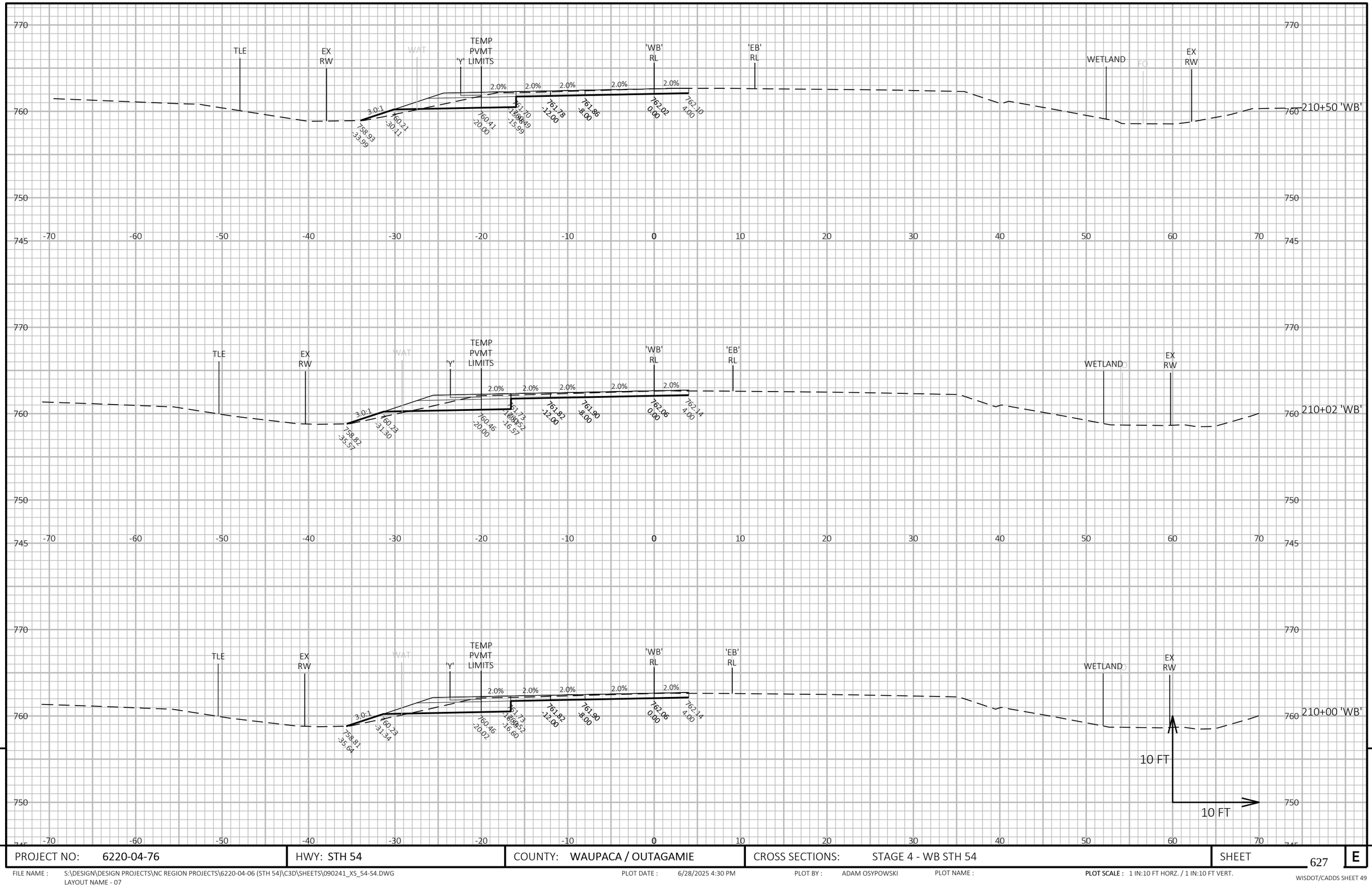
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 626	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 627	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 07

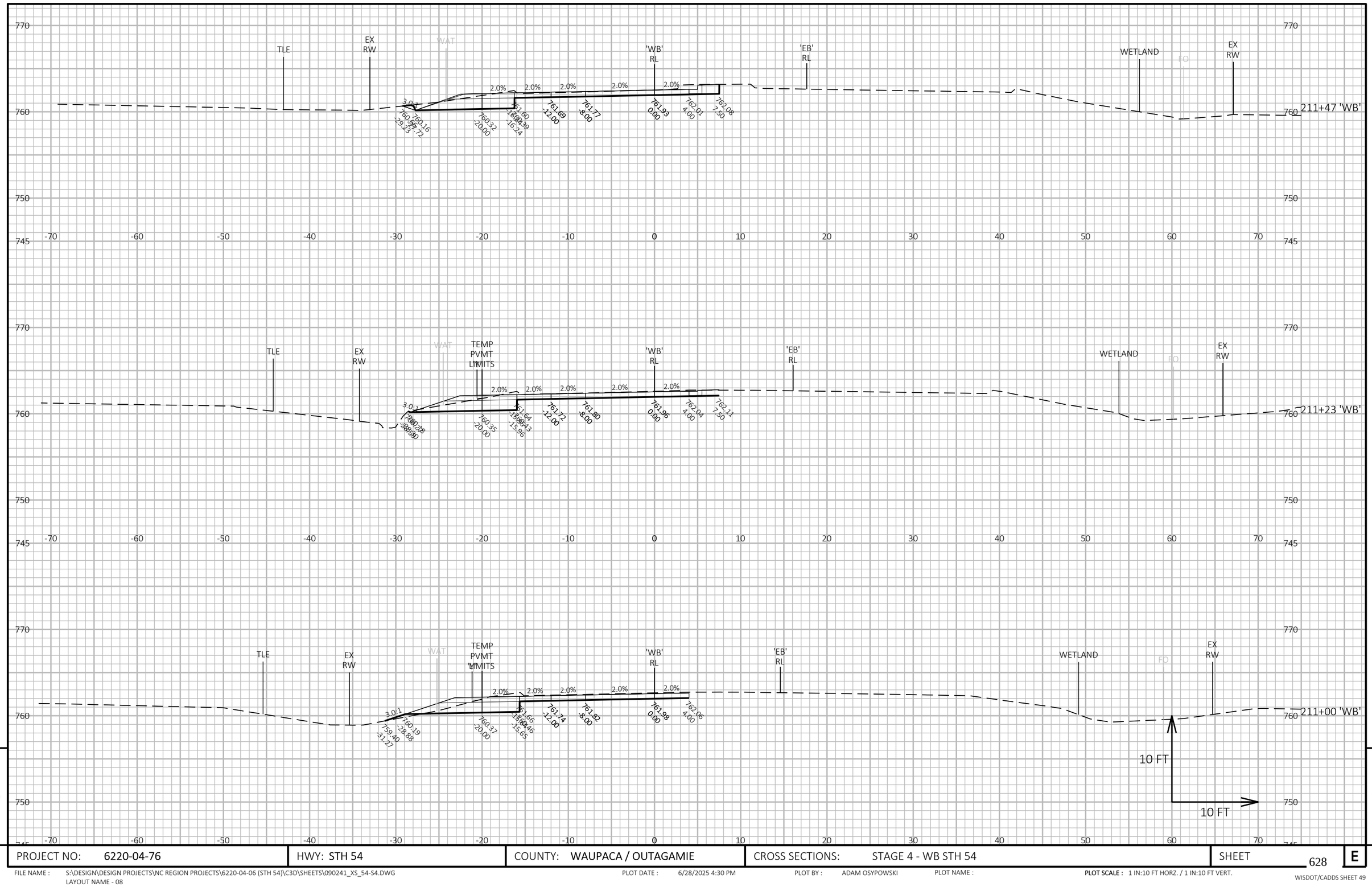
PLOT DATE : 6/28/2025 4:30 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 628	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 08

PLOT DATE : 6/28/2025 4:30 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

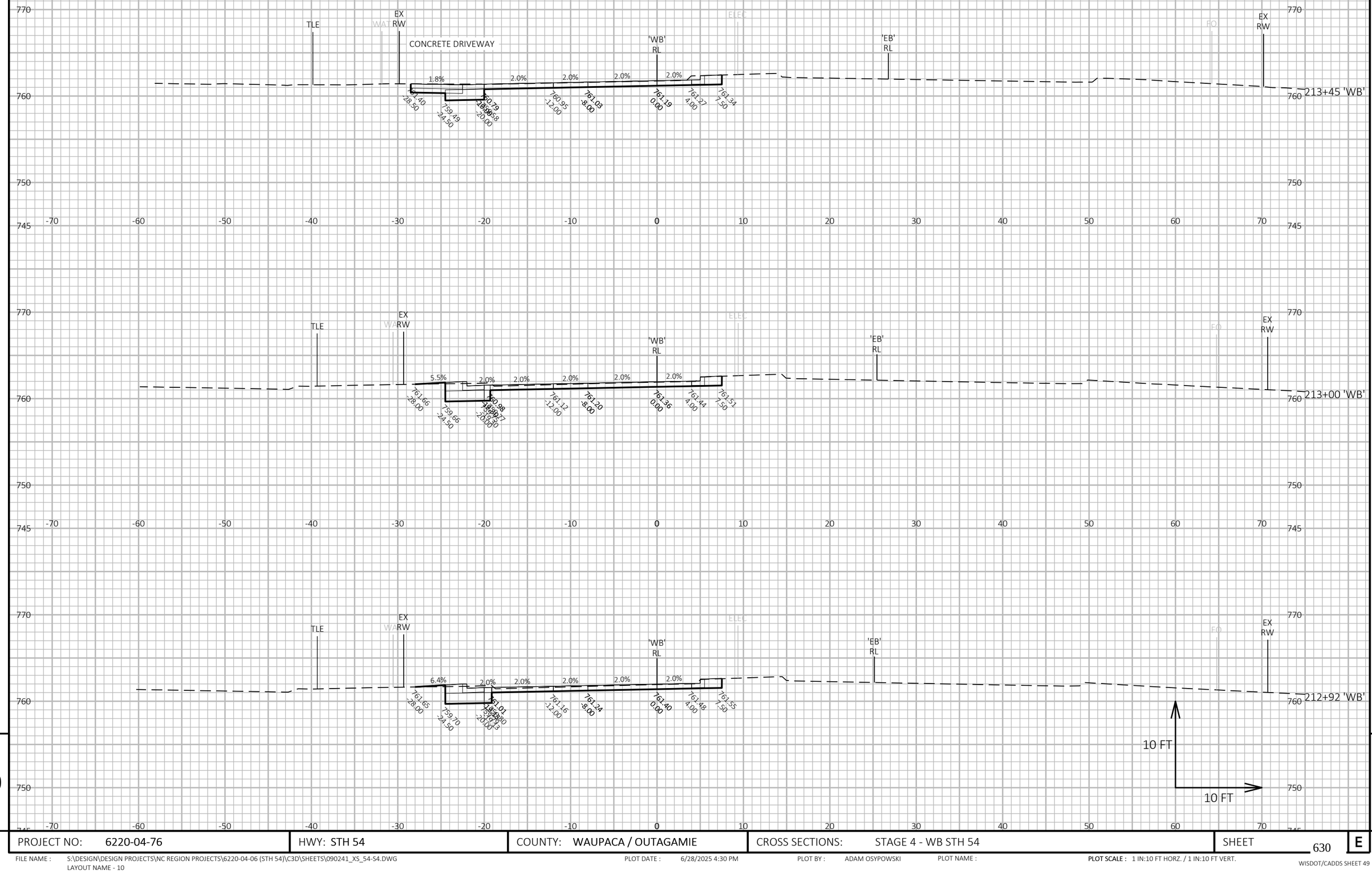
WISDOT/CADDS SHEET 49

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 629	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 09

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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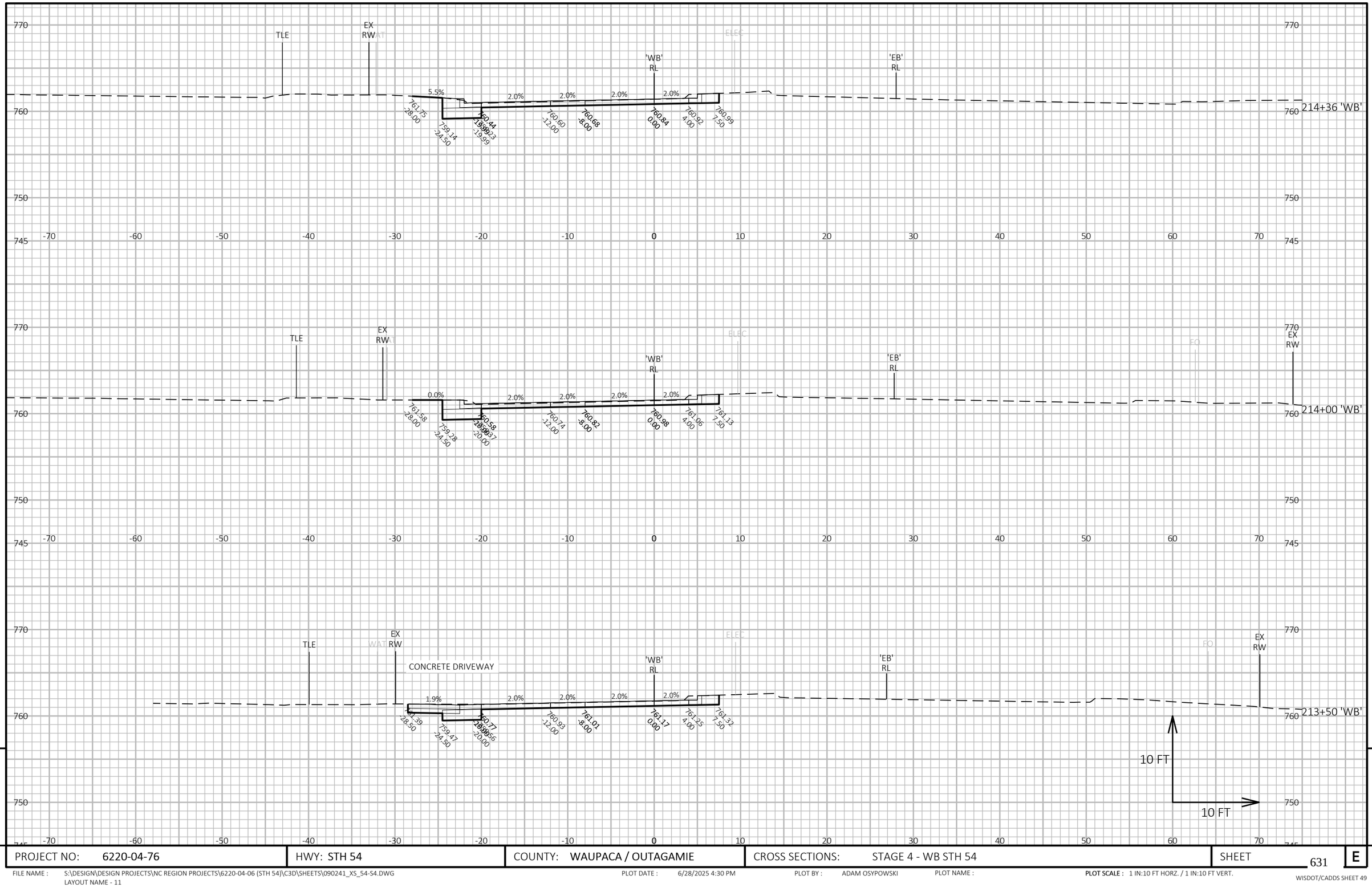
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 630	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 631	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 11

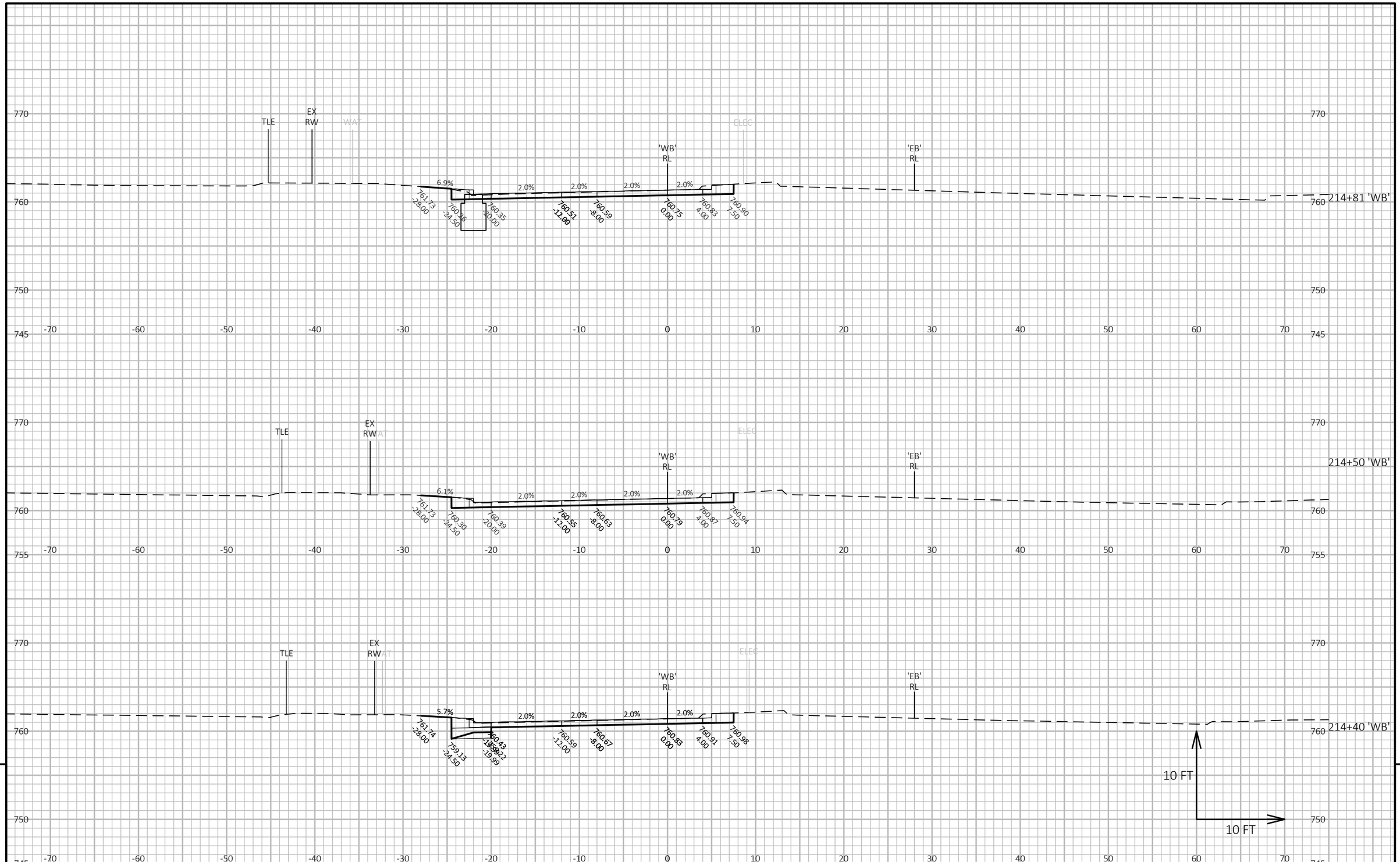
PLOT DATE : 6/28/2025 4:30 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 632	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 12

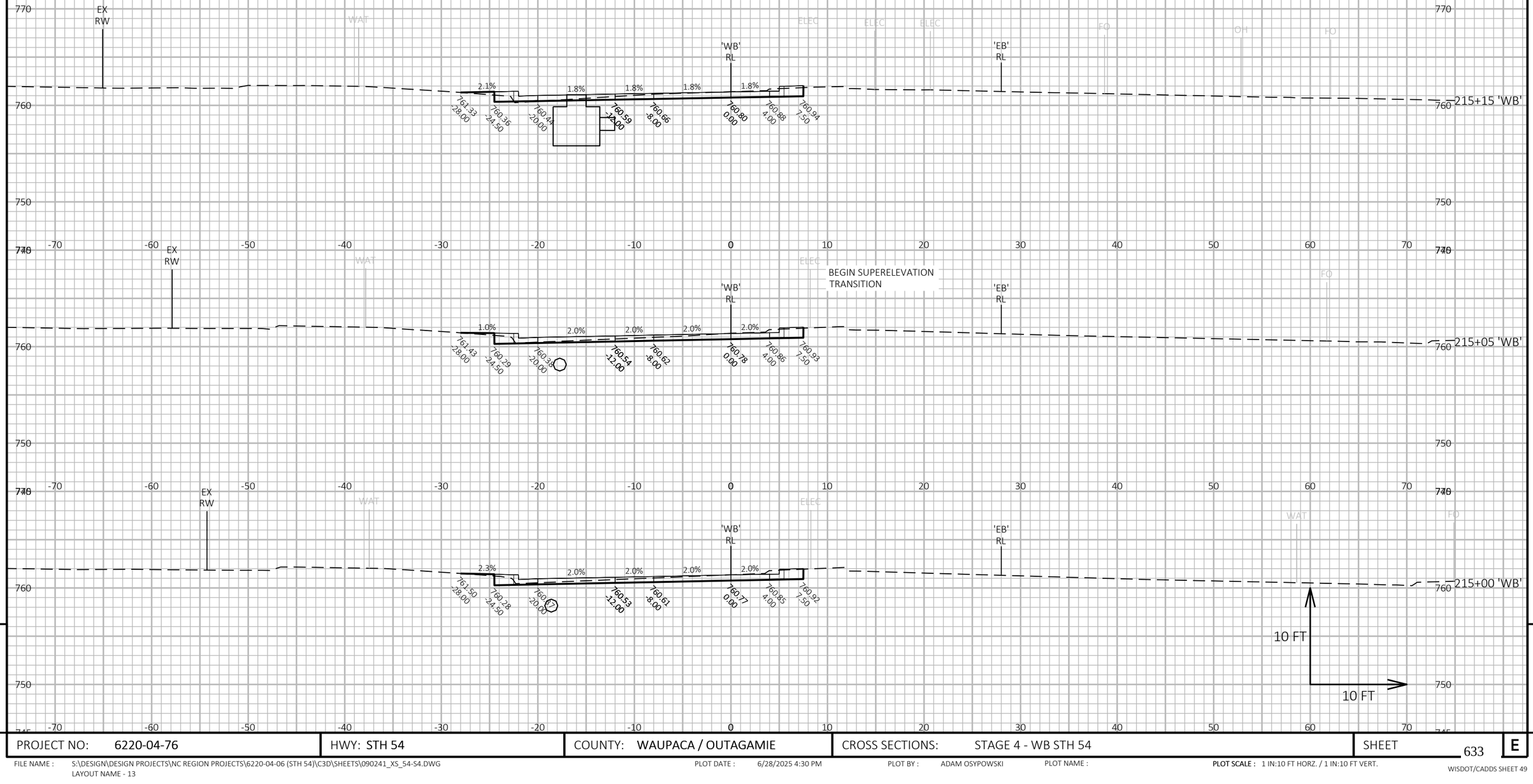
PLOT DATE : 6/28/2025 4:30 PM

PLOT BY : ADAM OSYPOWSKI

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: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 633	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 13

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END SUPERELEVATION TRANSITION

'WB' RL

'EB' RL

215+80 'WB'

END PAVEMENT REPLACEMENT
BEGIN RECONSTRUCTION

'WB' RL

'EB' RL

215+61 'WB'

'WB' RL

'EB' RL

215+50 'WB'

10 FT

10 FT

9

9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 634	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 14

PLOT DATE : 6/28/2025 4:30 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END RECONSTRUCTION
BEGIN PAVEMENT REPLACEMENT

'WB' RL

'EB' RL

216+59 'WB'

759.61 -52.41 | 759.61 -20.00 | 759.65 -12.00 | 759.67 -8.00 | 759.71 0.00 | 759.73 4.00 | 759.78 14.00

216+50 'WB'

759.74 -61.22 | 759.71 -28.68 | 759.71 -20.00 | 759.75 -12.00 | 759.77 -8.00 | 759.81 0.00 | 759.83 4.00 | 759.88 14.00

216+00 'WB'

759.96 -61.29 | 759.90 -49.09 | 759.97 -21.97 | 760.01 -12.00 | 760.03 -8.00 | 760.07 0.00 | 760.09 4.00 | 760.14 14.00

10 FT

10 FT

9

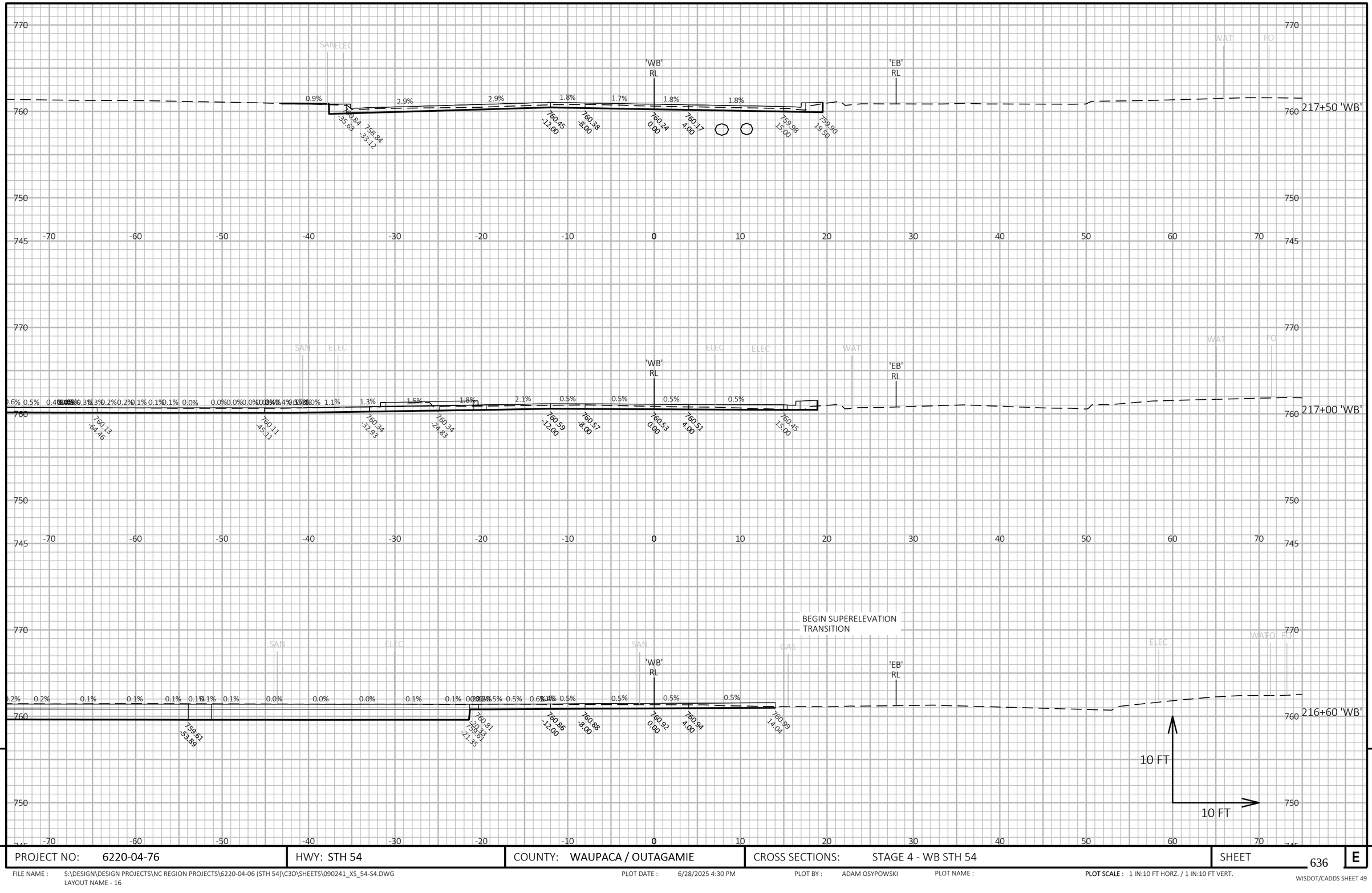
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 635	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 15

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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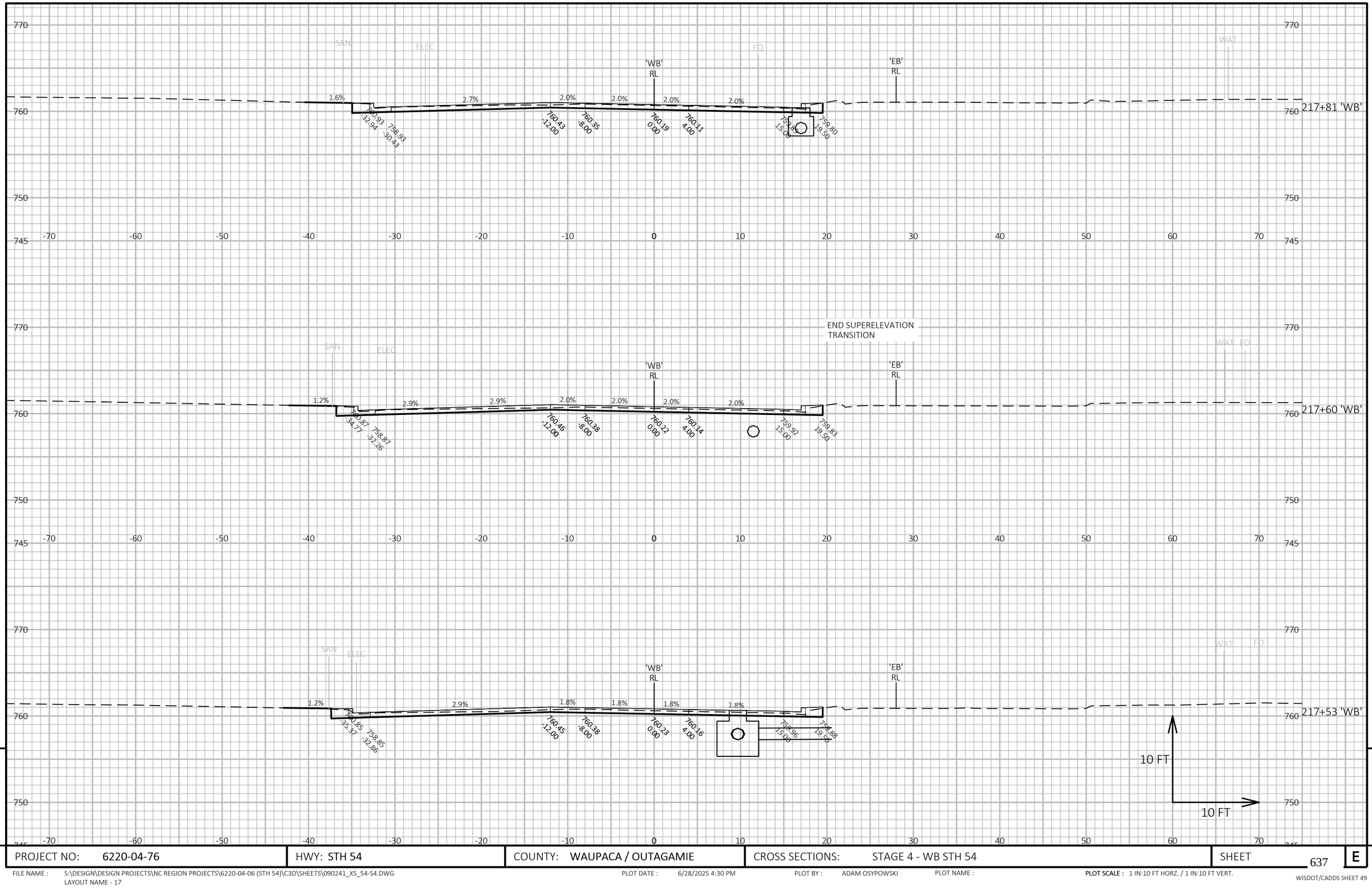
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 636	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 16

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 637	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 17

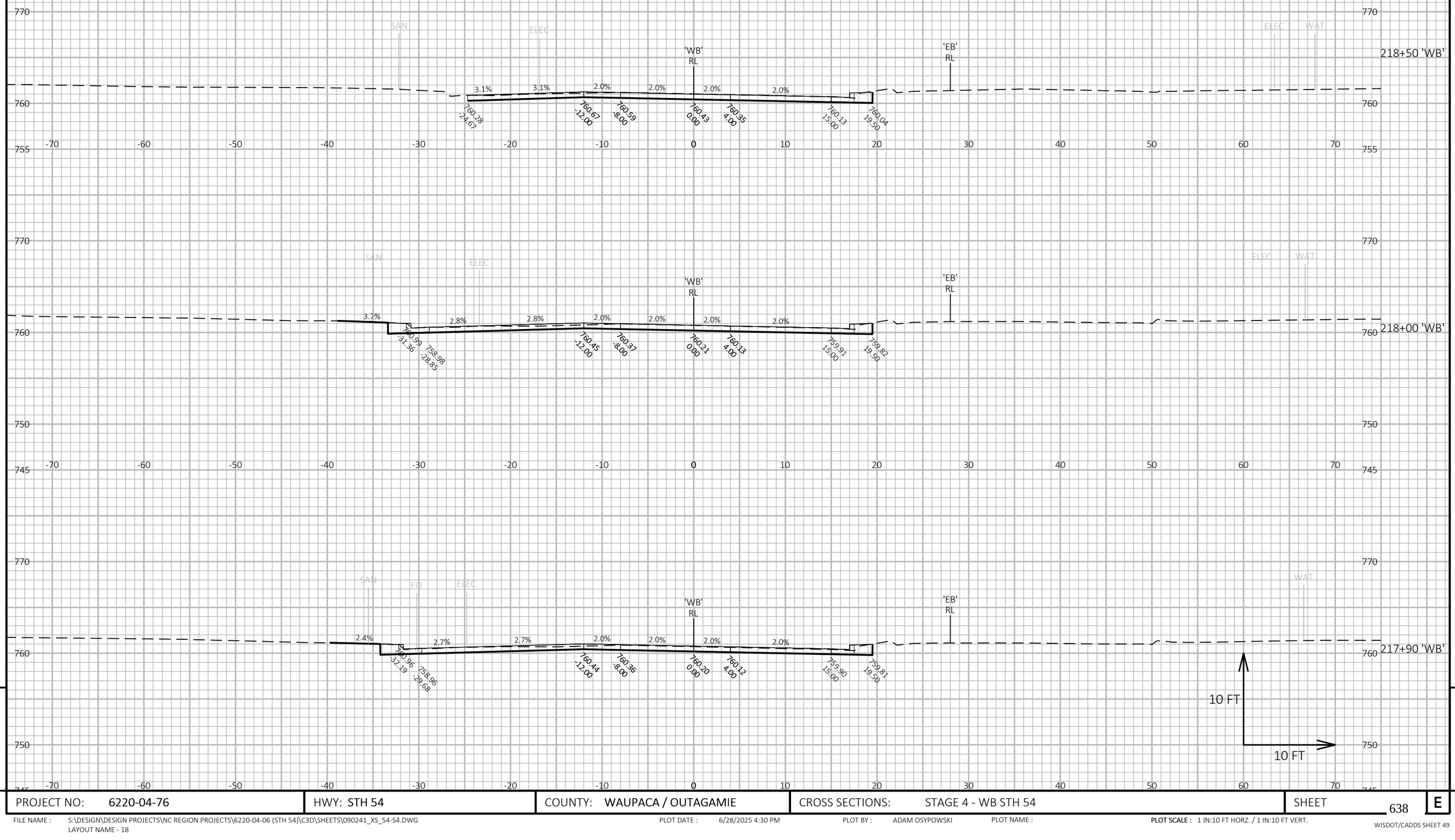
PLOT DATE : 6/28/2025 4:30 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 638	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 18

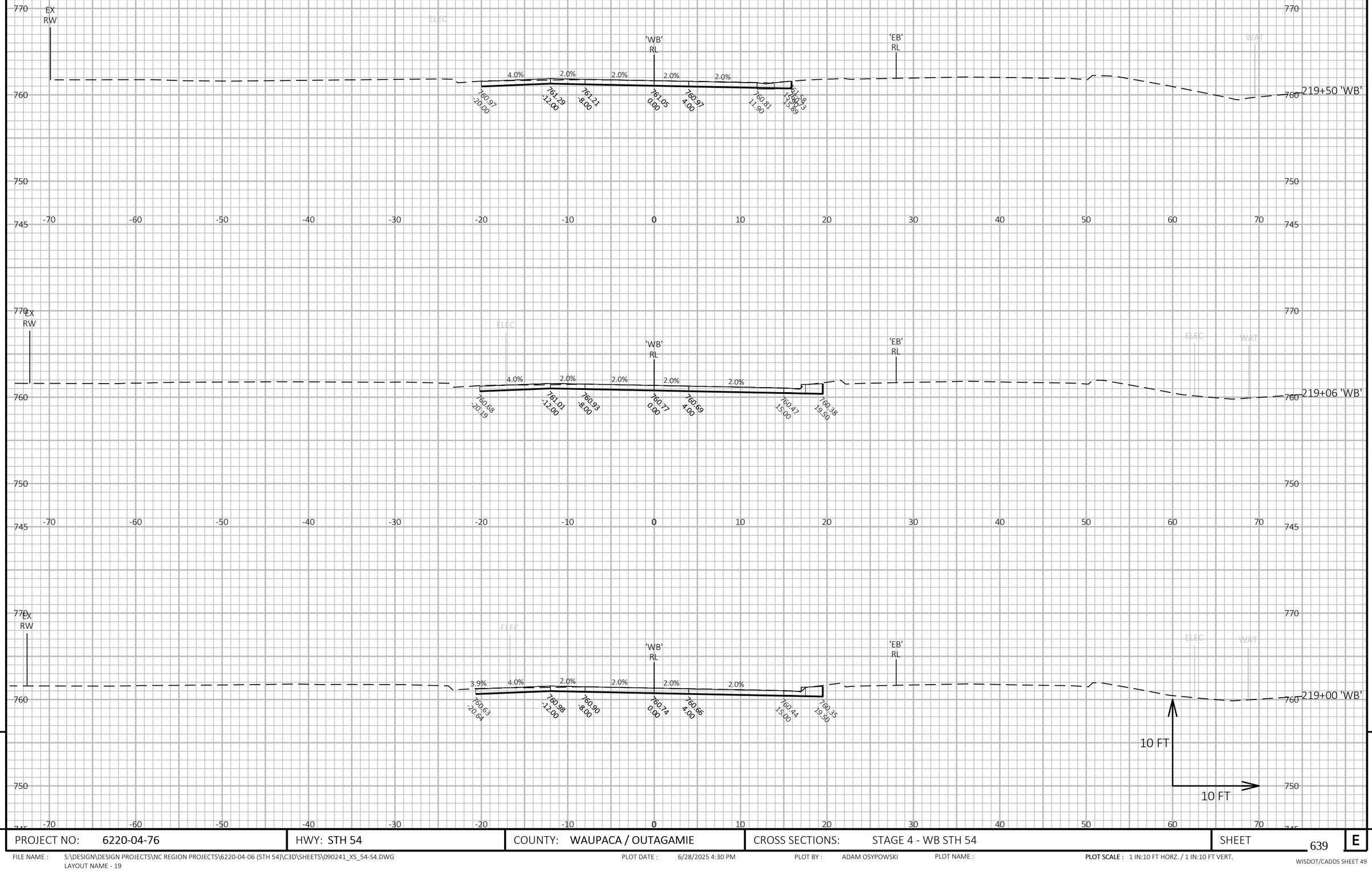
PLOT DATE : 6/28/2025 4:30 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

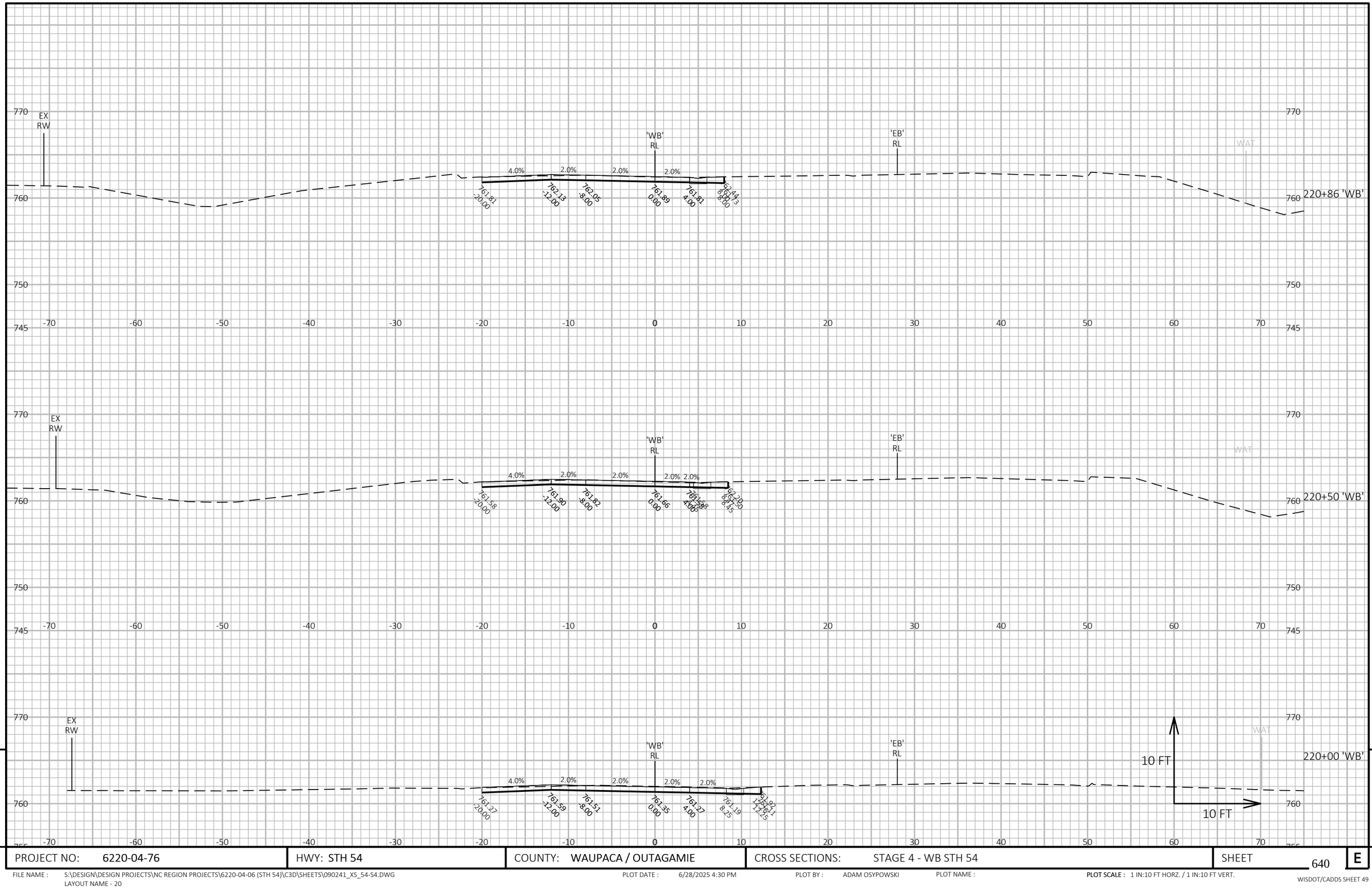


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 639 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 19

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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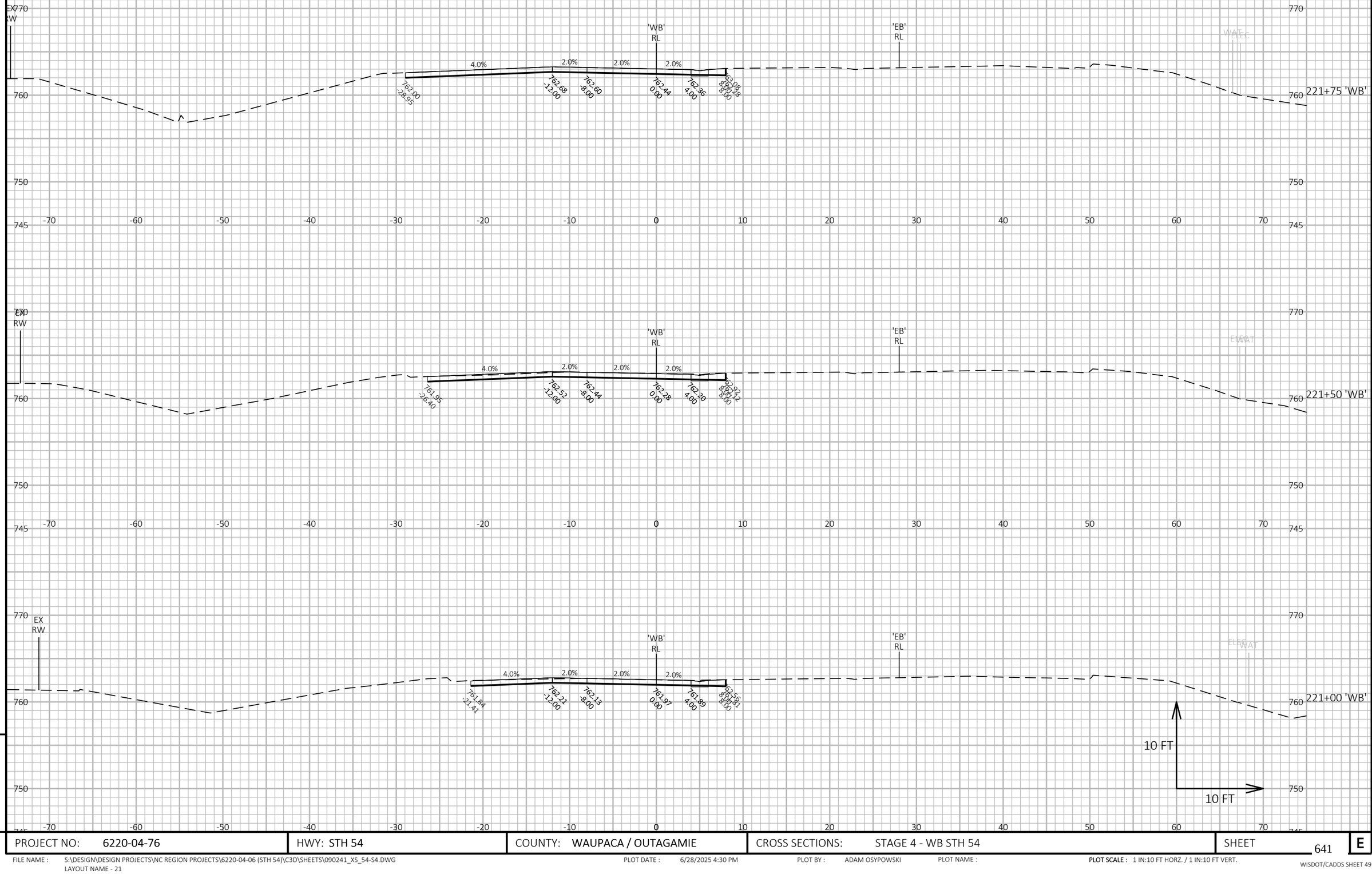
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 640	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 20

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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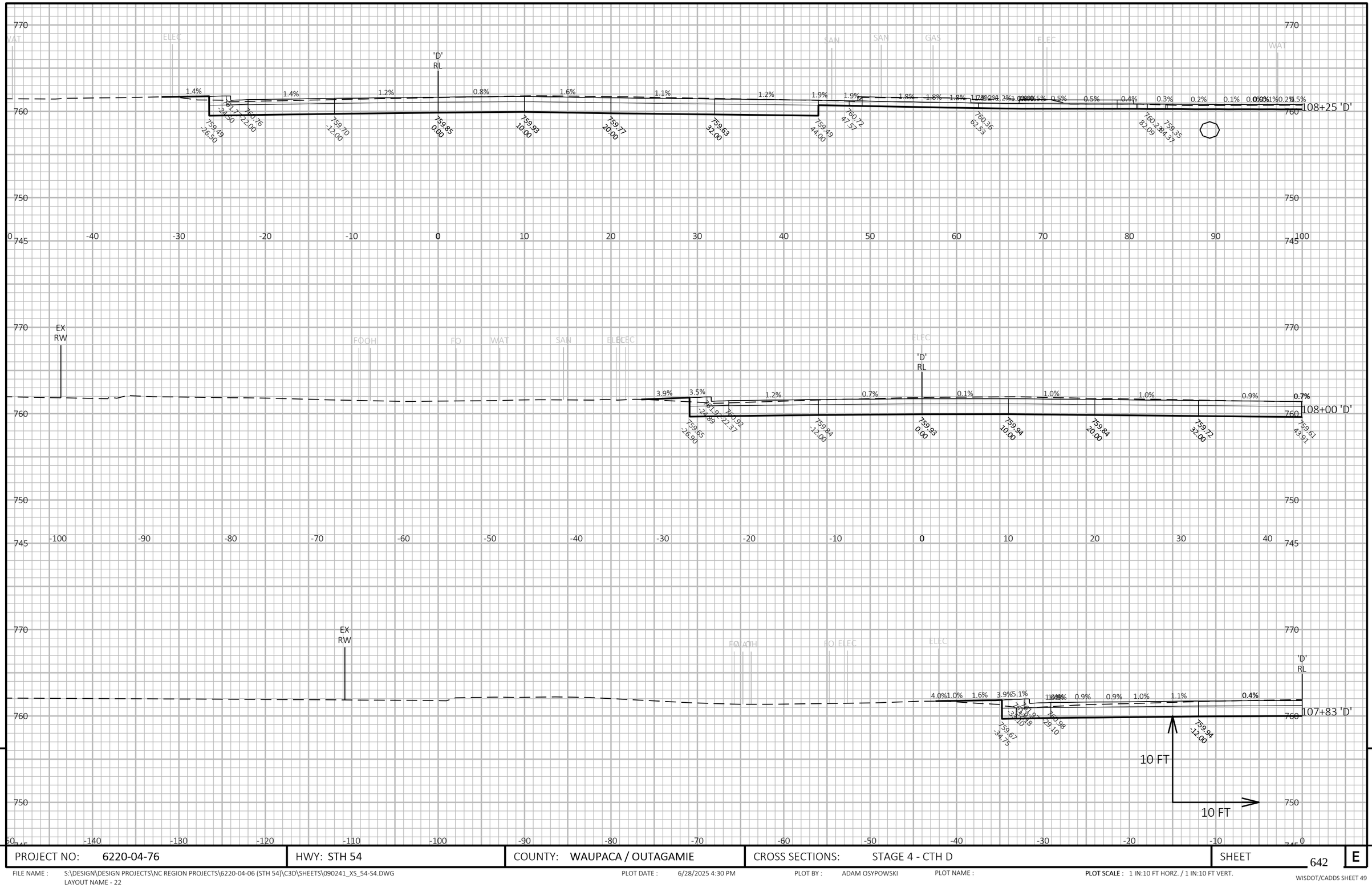
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - WB STH 54	SHEET 641	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 21

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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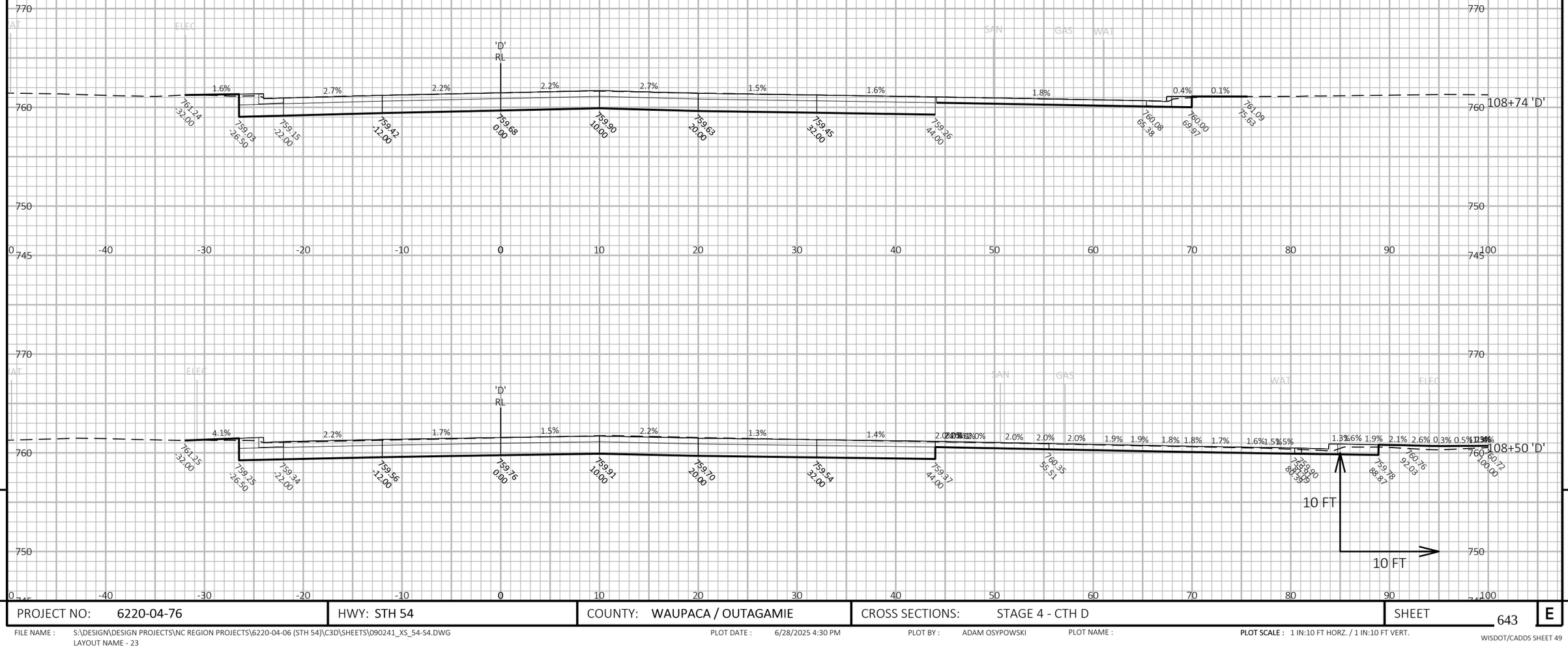
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - CTH D	SHEET 642	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 22

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

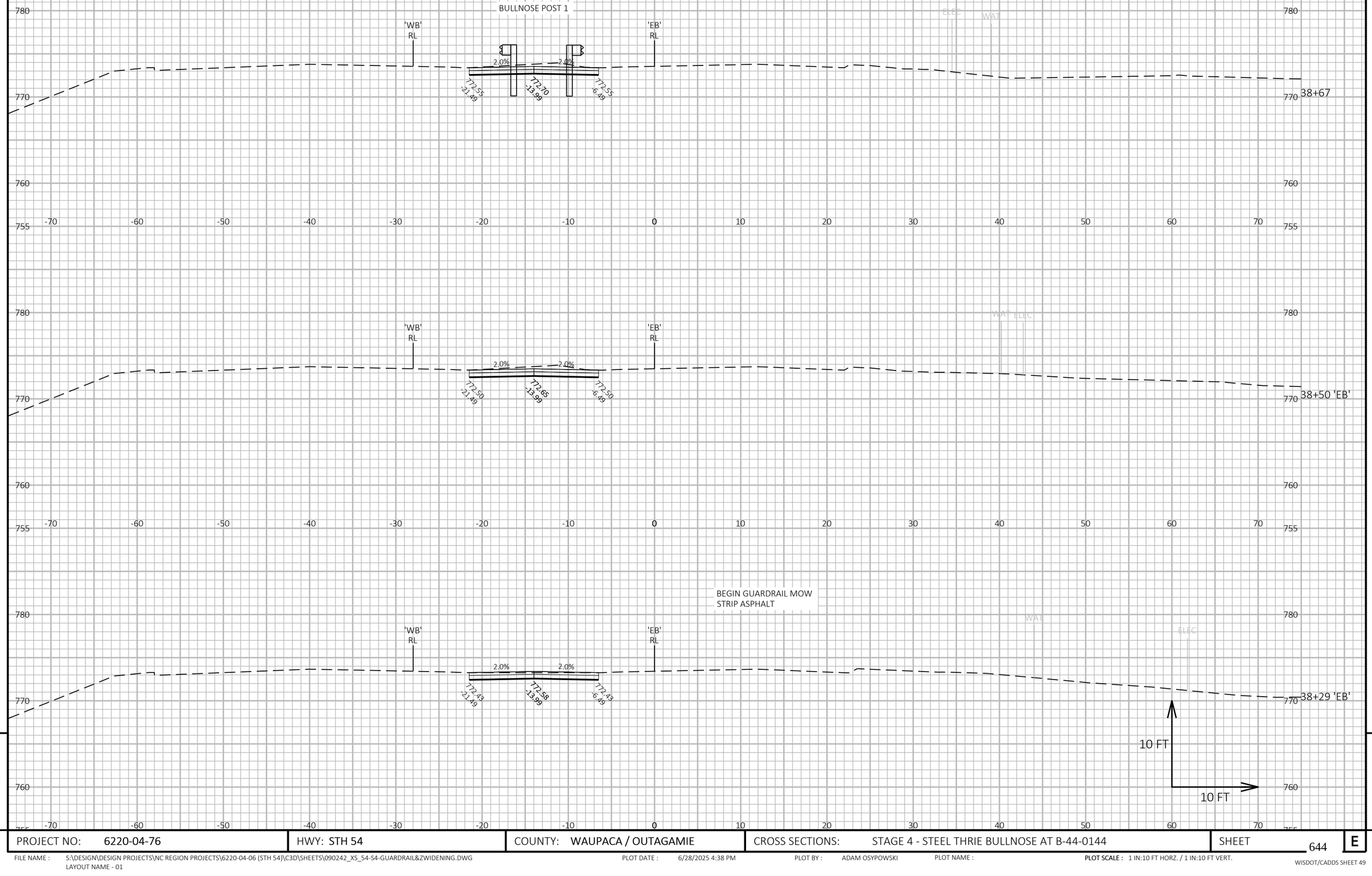


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - CTH D	SHEET 643	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090241_XS_54-S4.DWG
LAYOUT NAME - 23

PLOT DATE : 6/28/2025 4:30 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

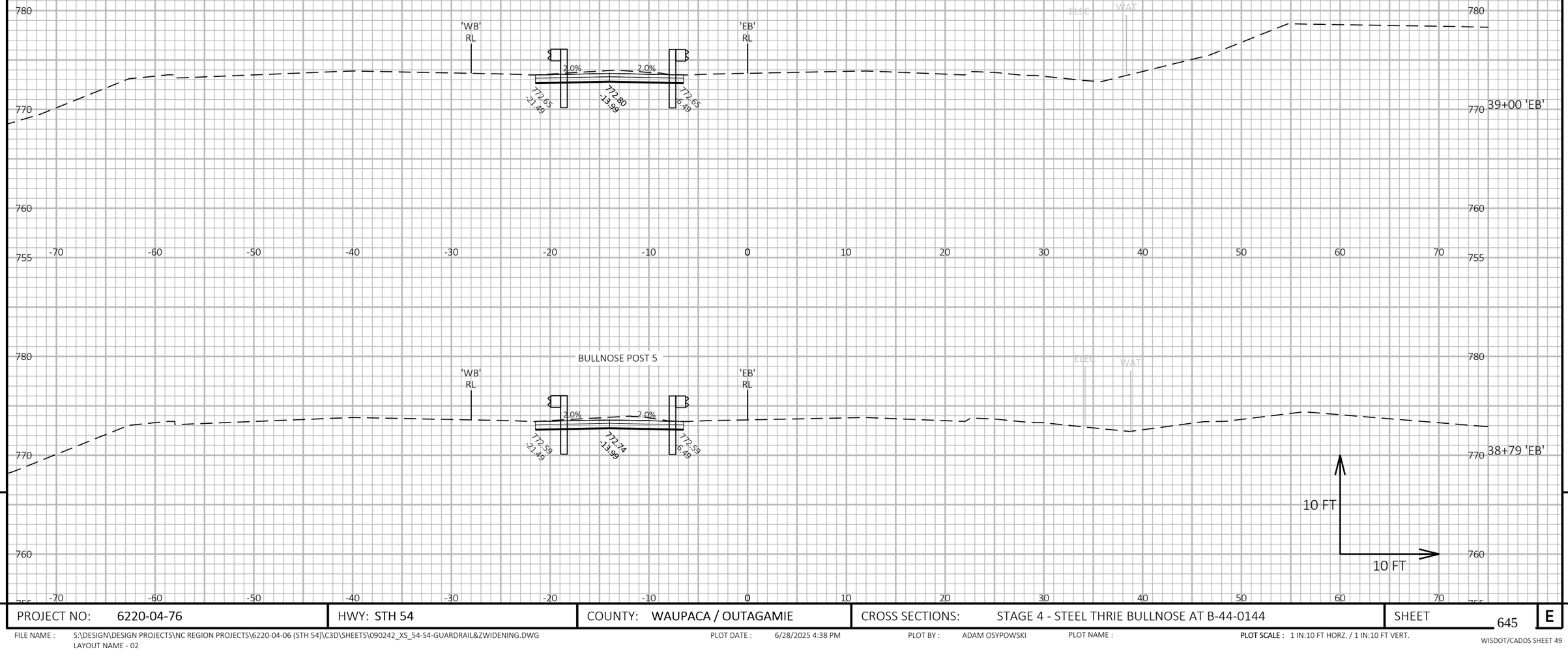


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - STEEL THRIE BULLNOSE AT B-44-0144	SHEET 644	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

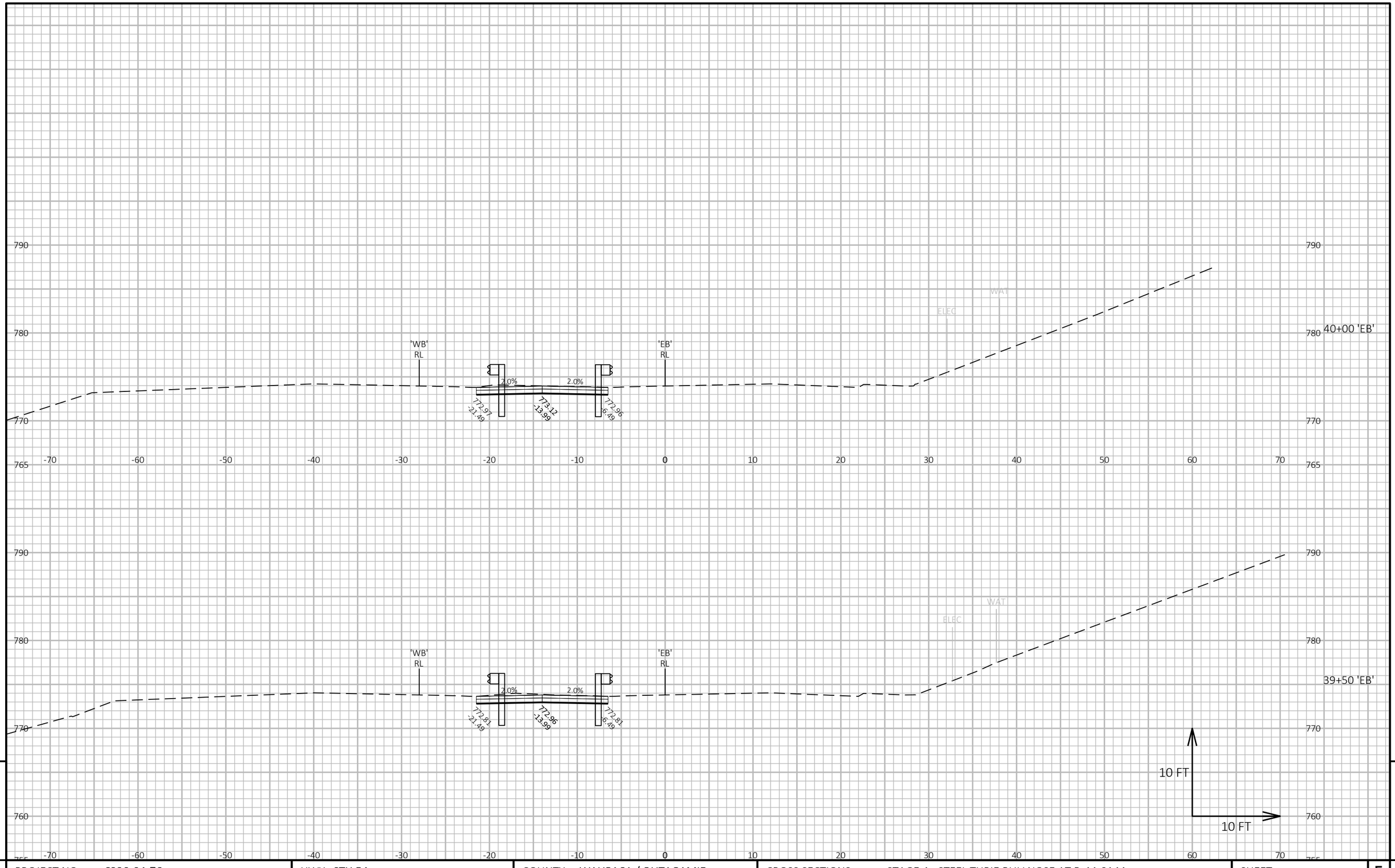


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - STEEL THRIE BULLNOSE AT B-44-0144	SHEET 645	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - STEEL THRIE BULLNOSE AT B-44-0144	SHEET 646	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 03

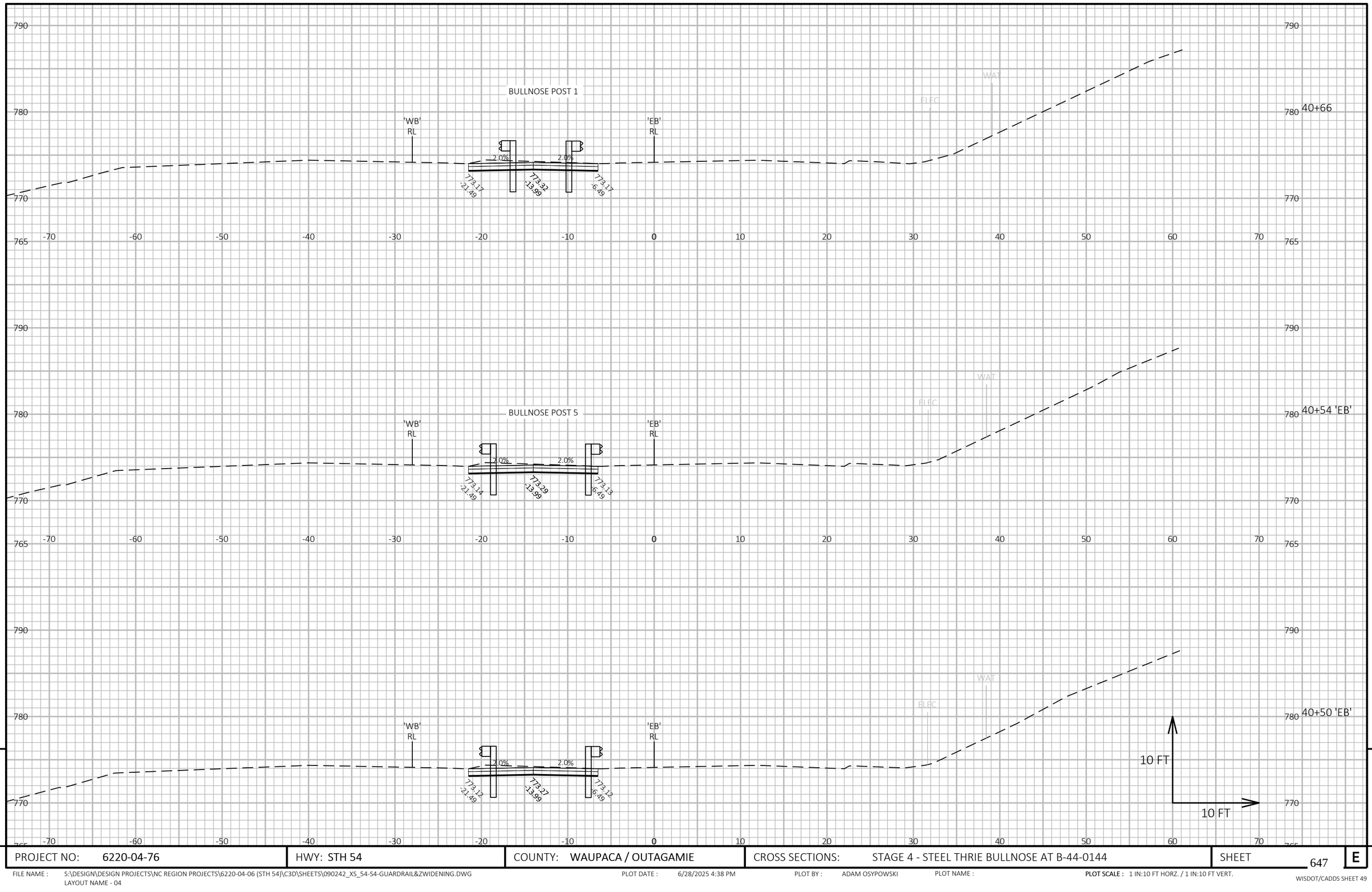
PLOT DATE : 6/28/2025 4:38 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

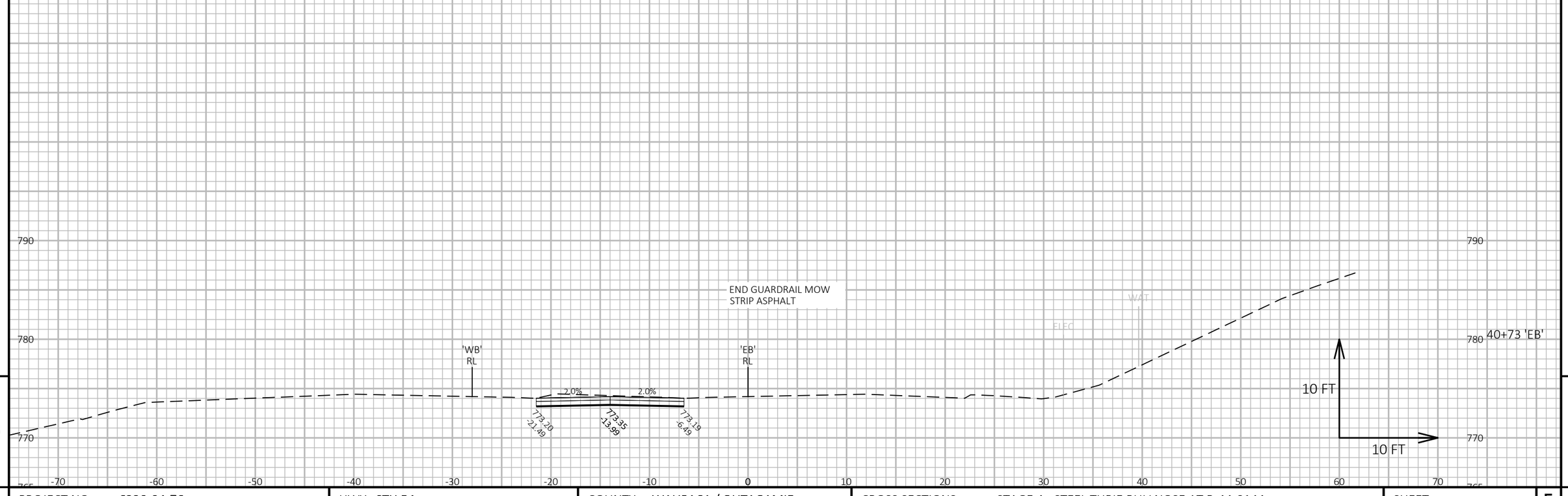


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - STEEL THRIE BULLNOSE AT B-44-0144	SHEET 647	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - STEEL THRIE BULLNOSE AT B-44-0144	SHEET 648	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 4:38 PM

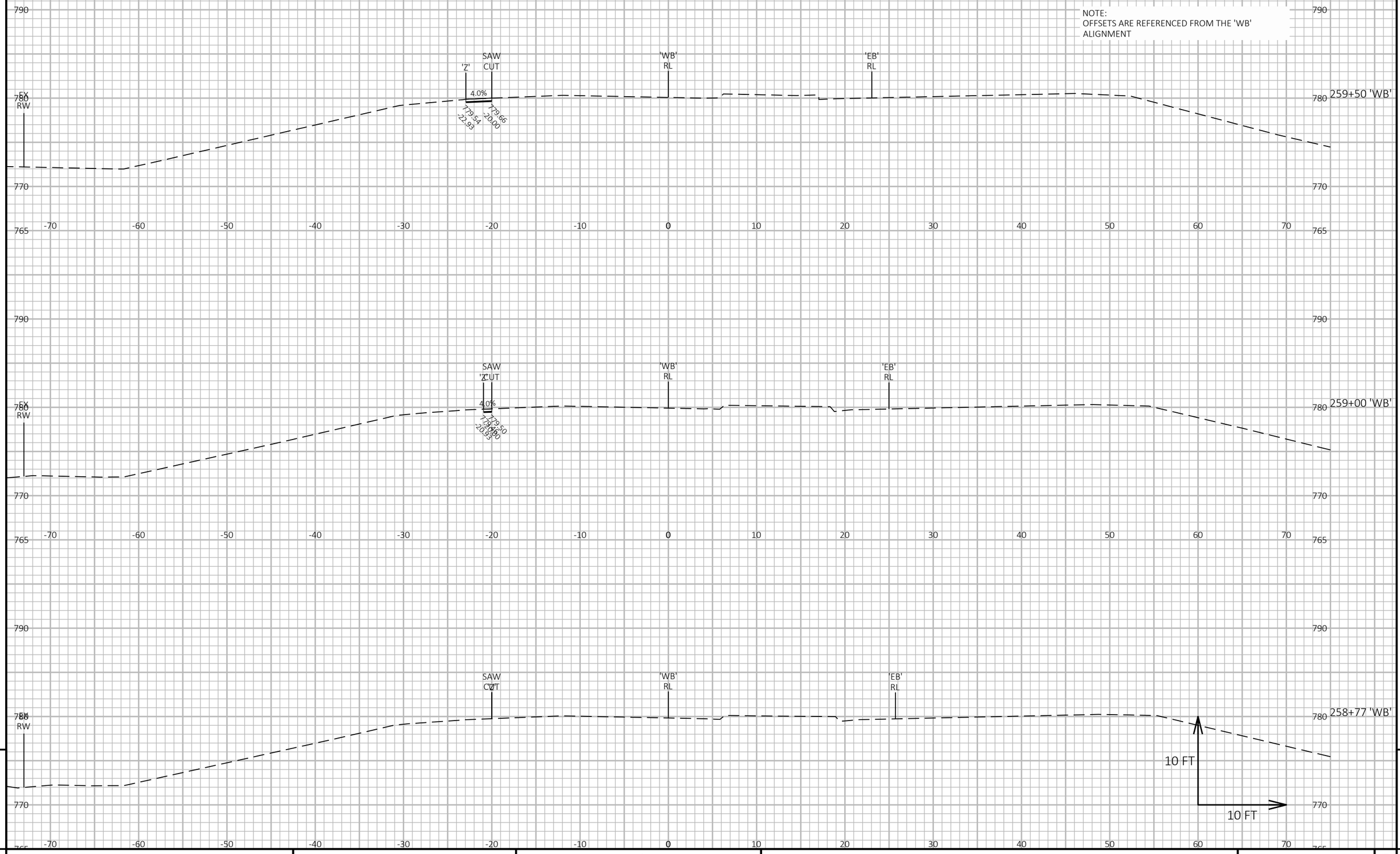
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

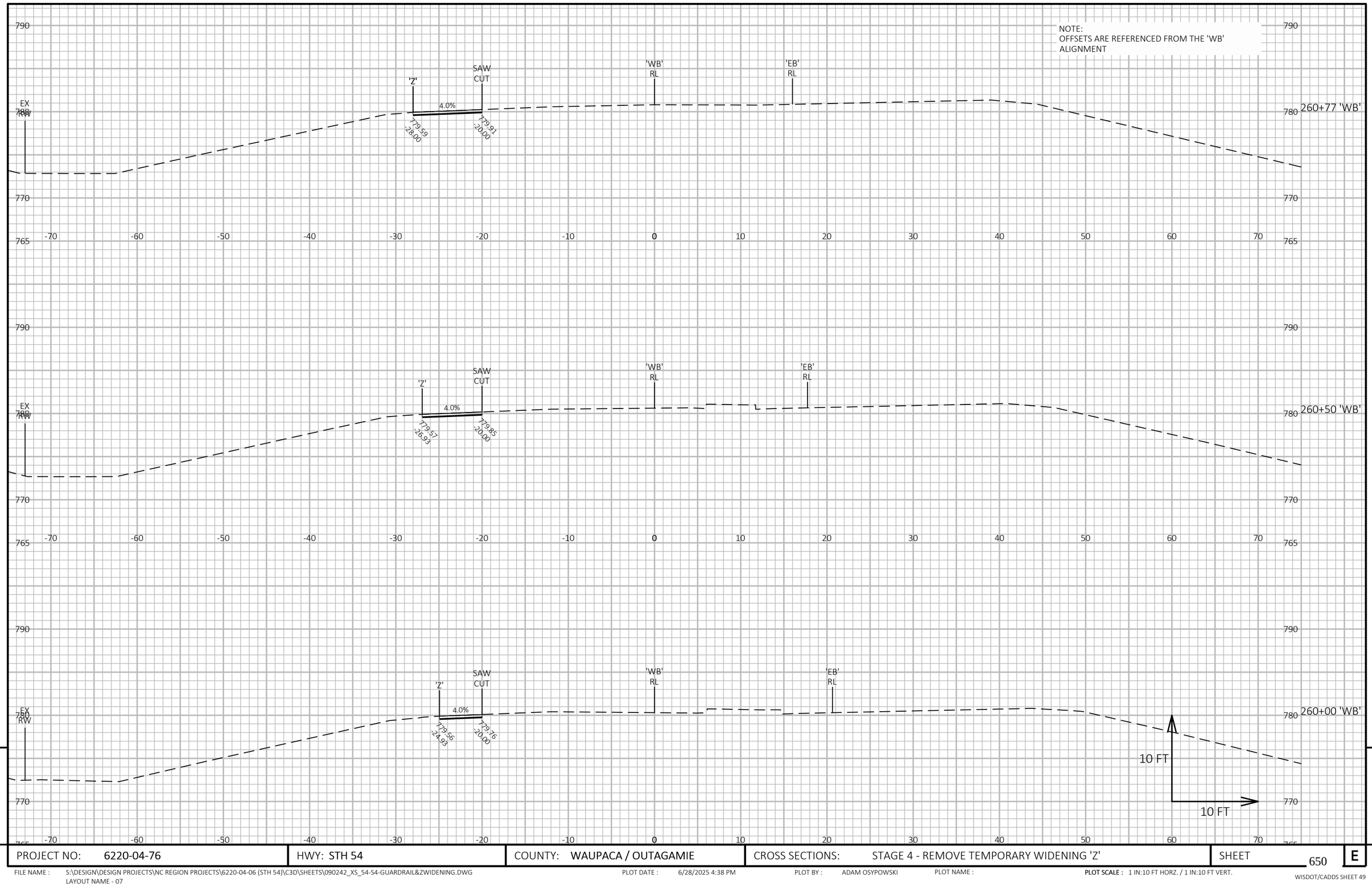
NOTE:
OFFSETS ARE REFERENCED FROM THE 'WB' ALIGNMENT



9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 649	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 06
PLOT DATE : 6/28/2025 4:38 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 650	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 4:38 PM

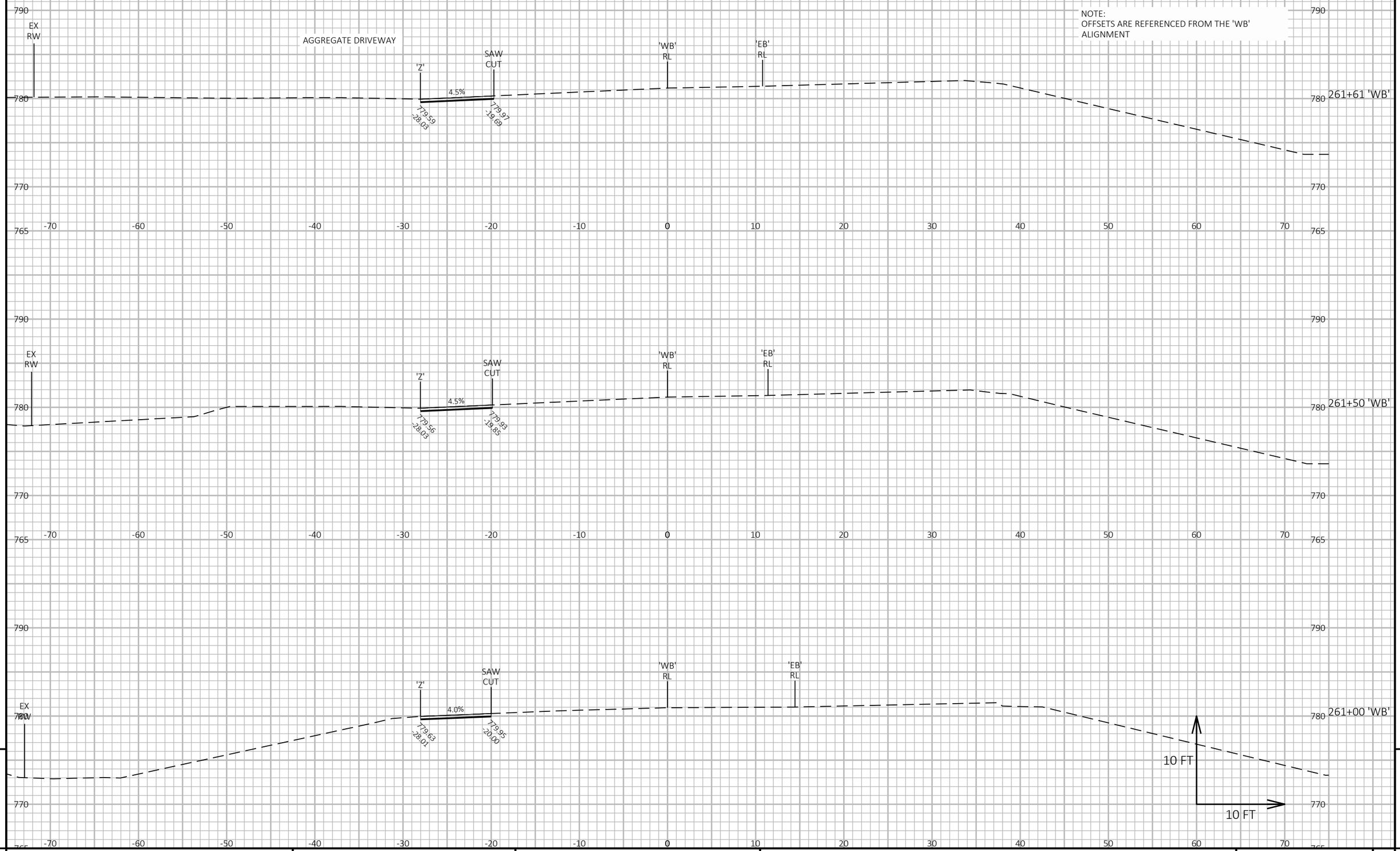
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'WB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 651	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 08

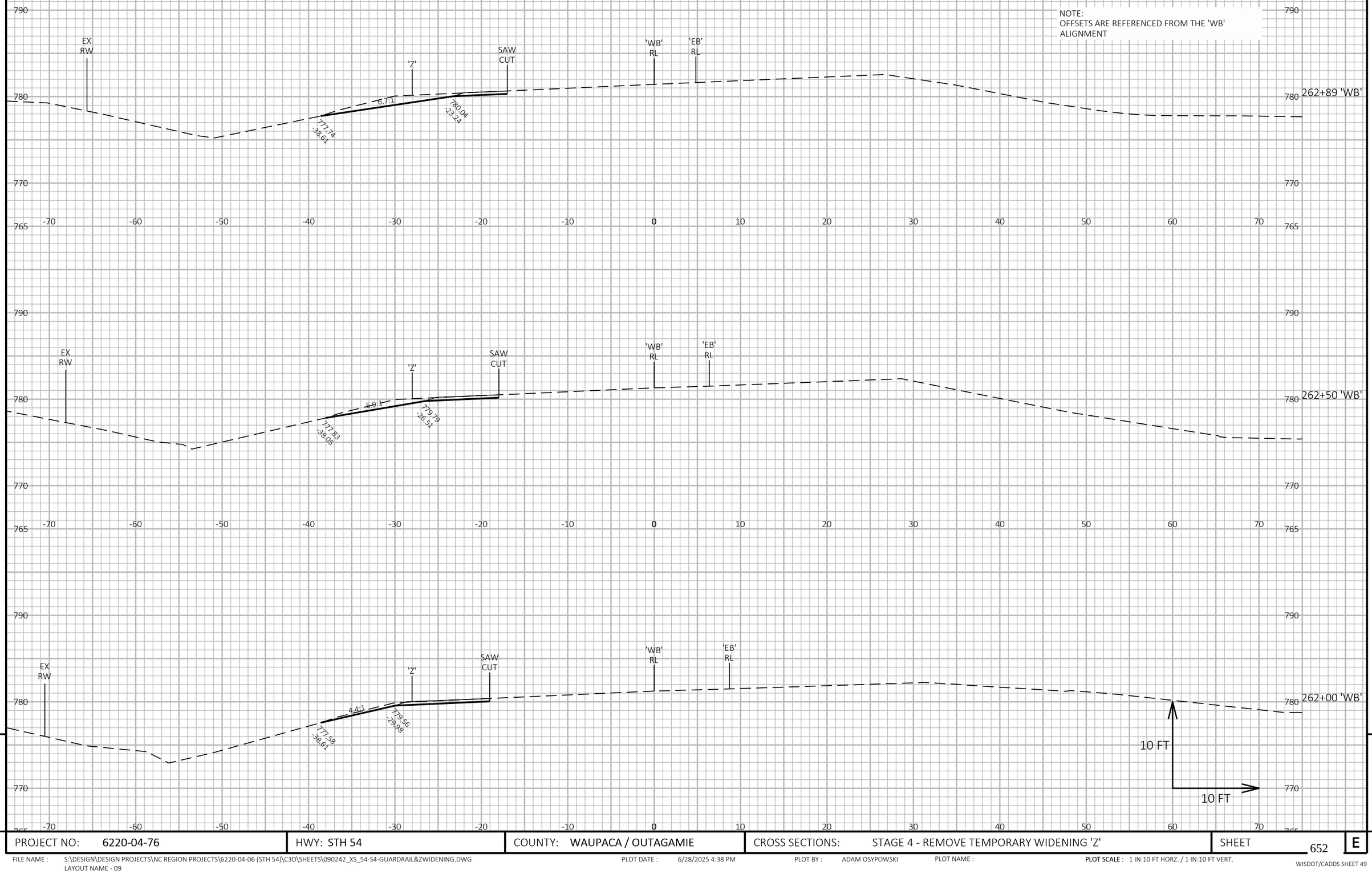
PLOT DATE : 6/28/2025 4:38 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'WB' ALIGNMENT



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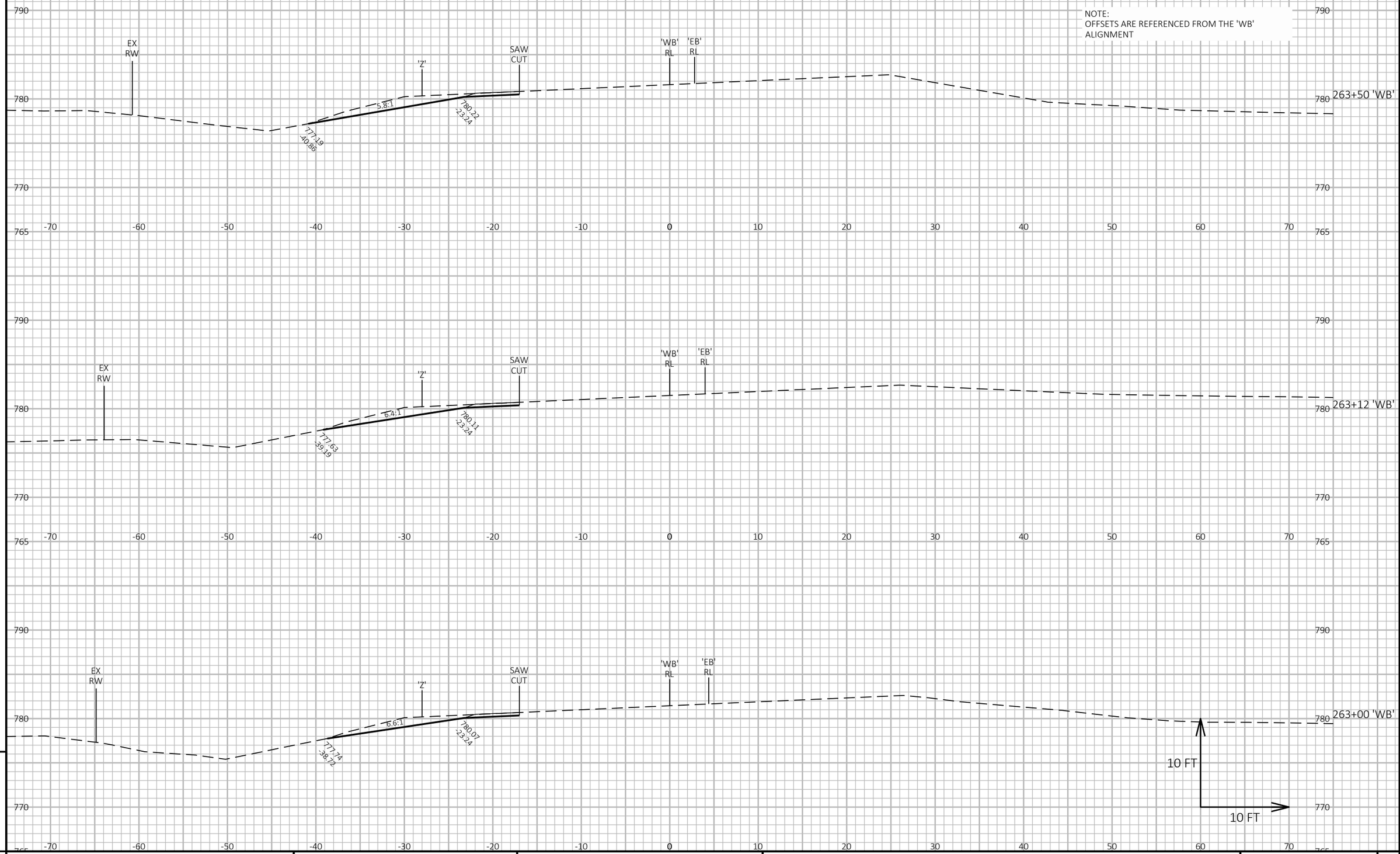
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 652	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 09
PLOT DATE : 6/28/2025 4:38 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'WB' ALIGNMENT

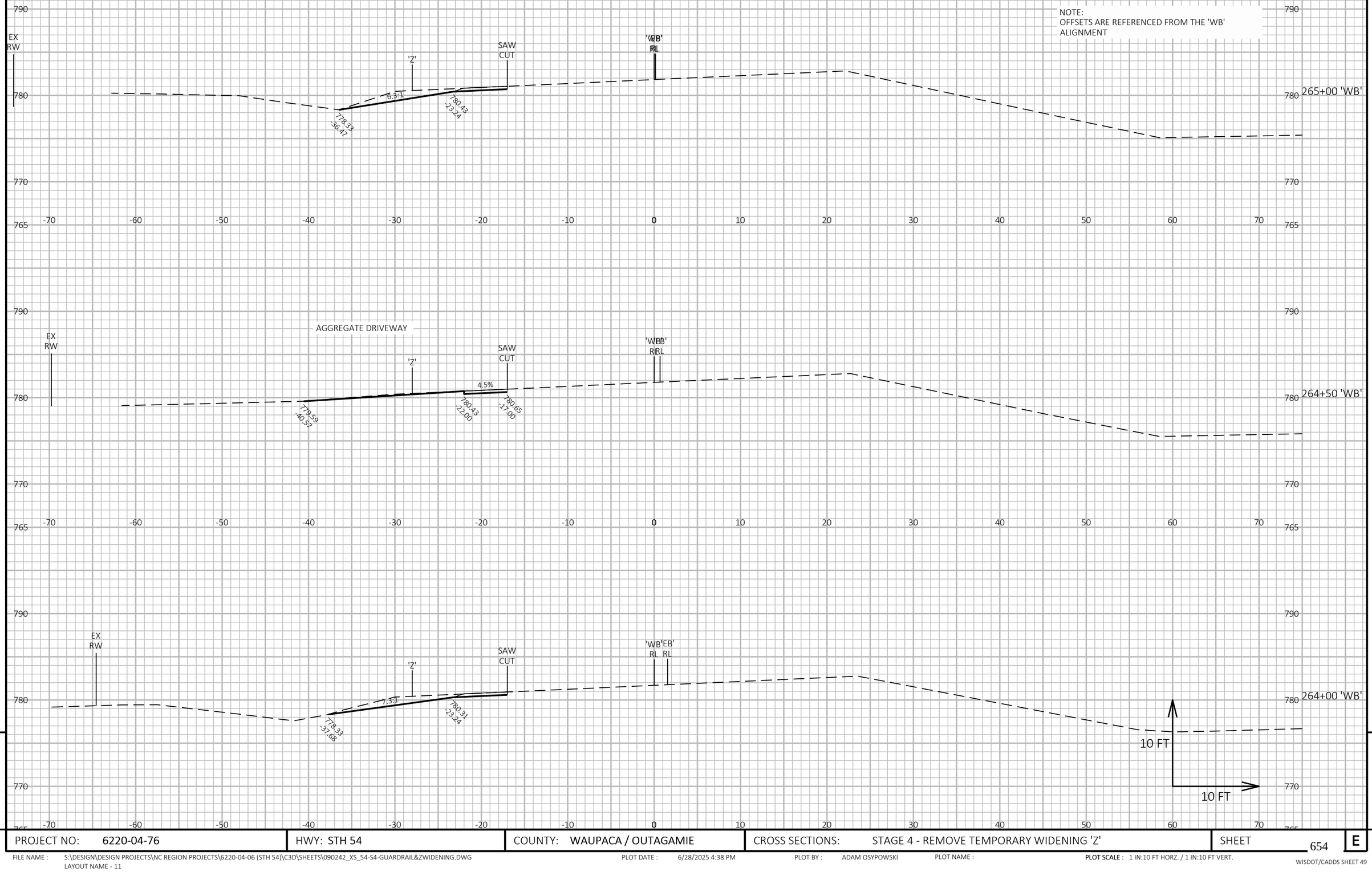


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 653	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'WB' ALIGNMENT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 654	E

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT

9

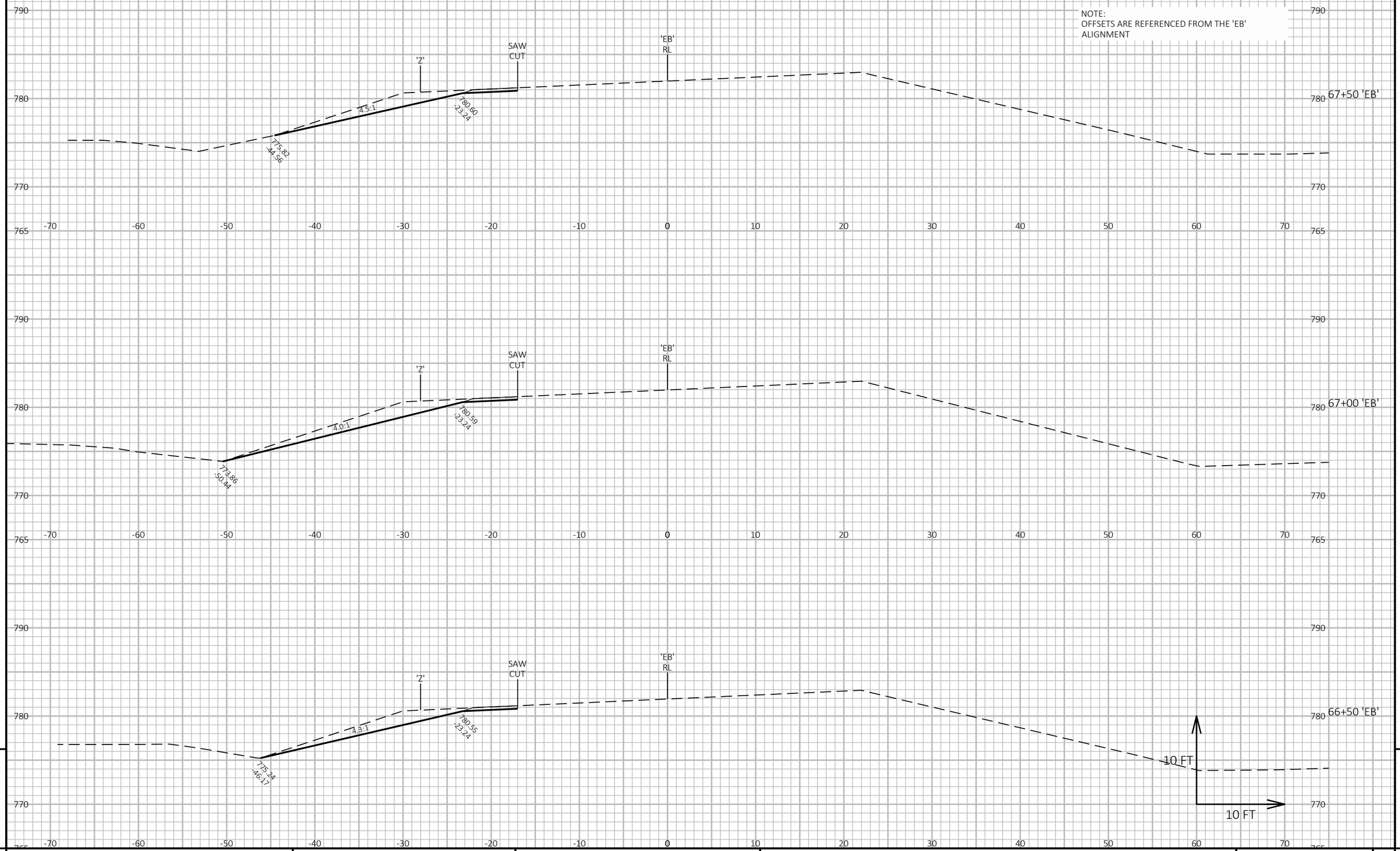
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 655	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 12

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 656	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 13

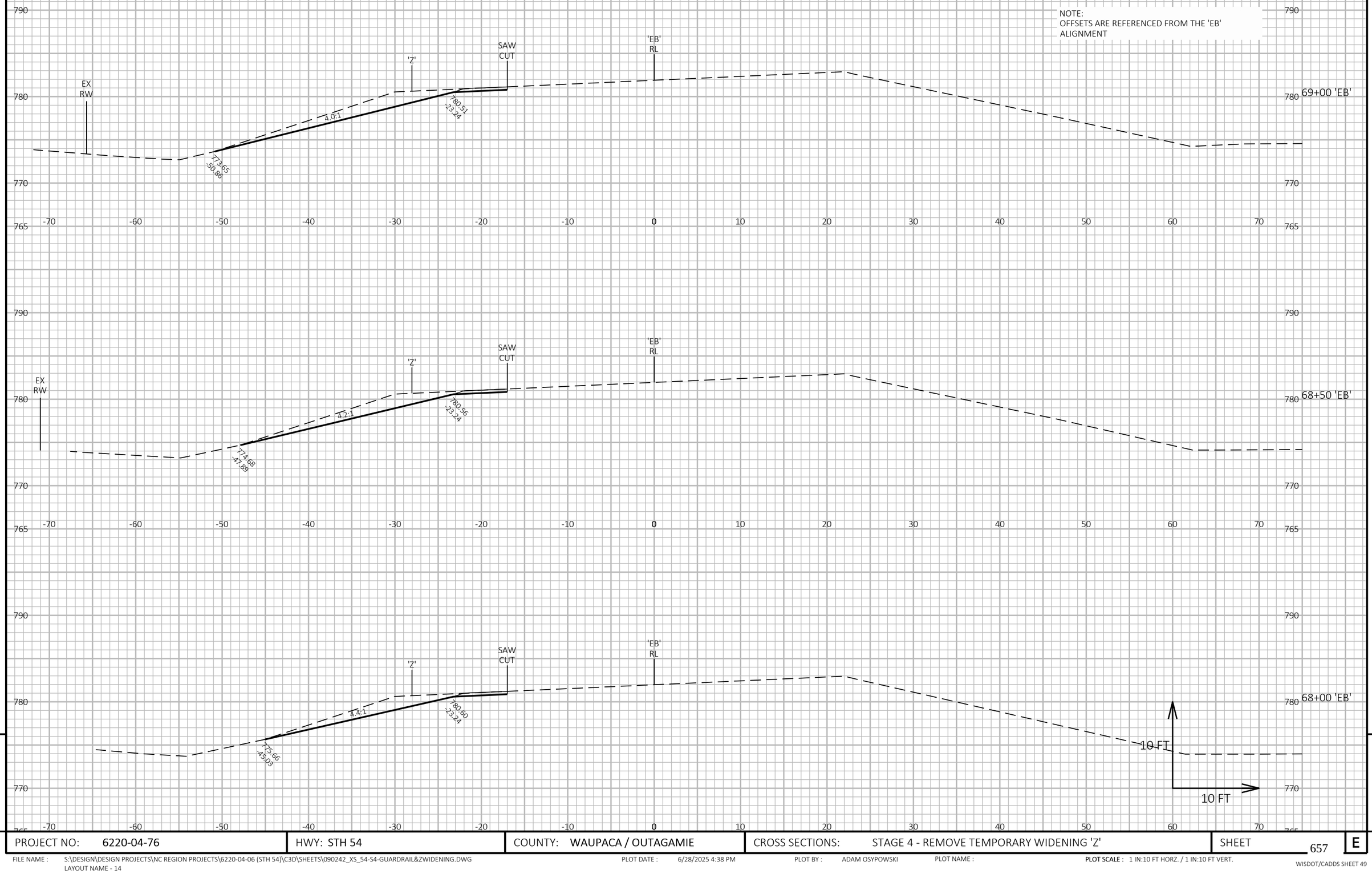
PLOT DATE : 6/28/2025 4:38 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 657	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 14

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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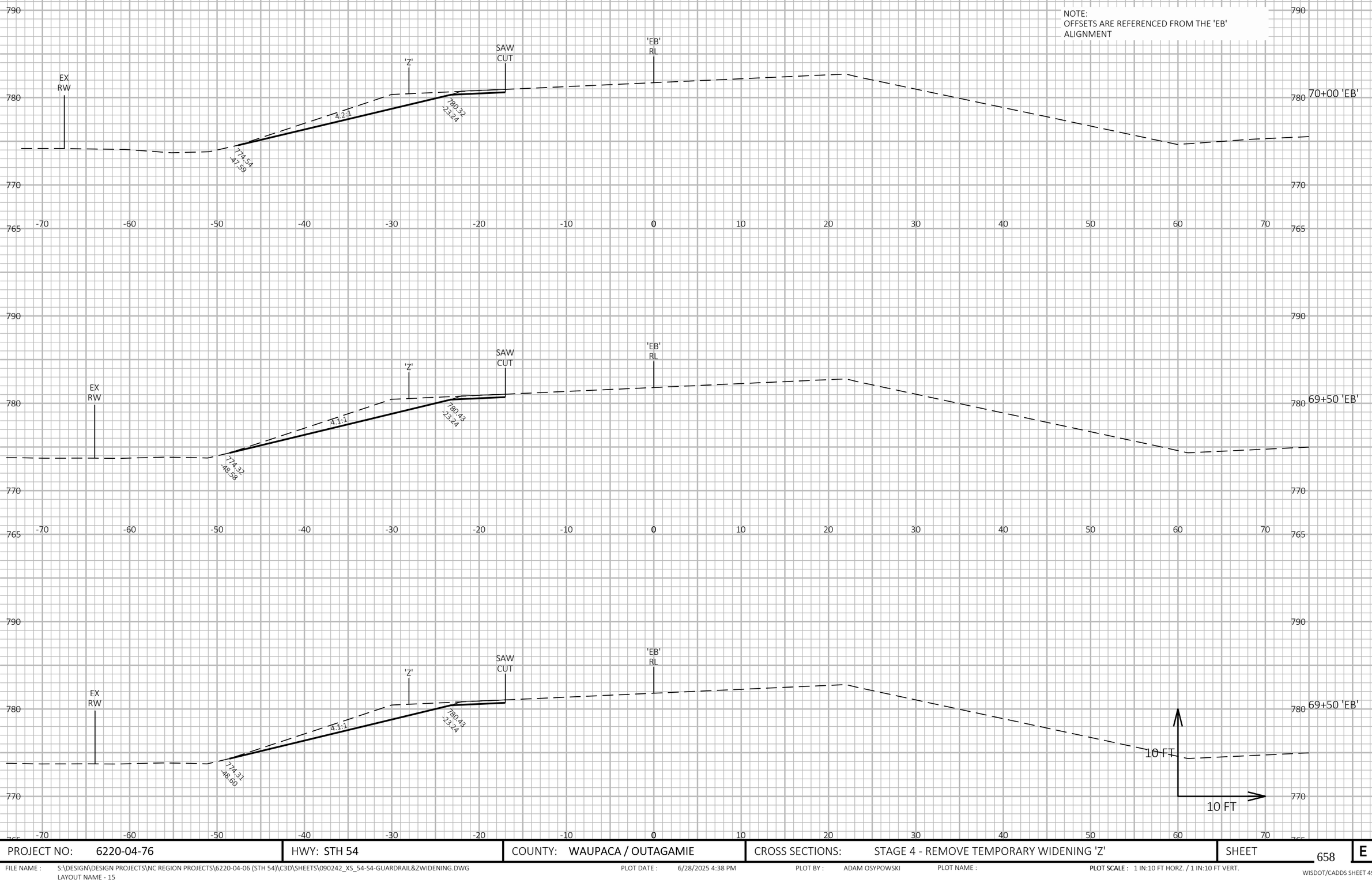
NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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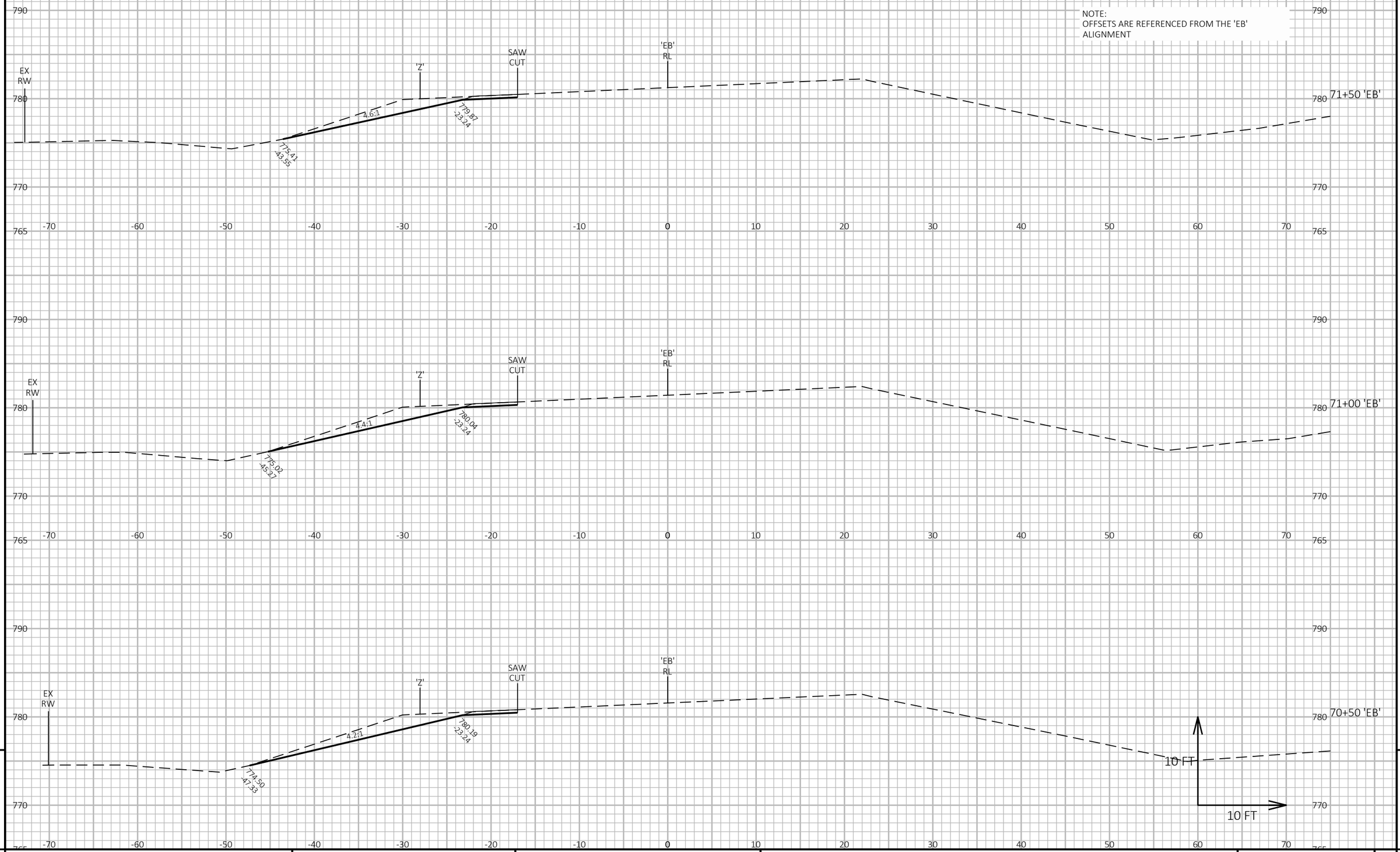
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 658	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 15

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 659	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 16

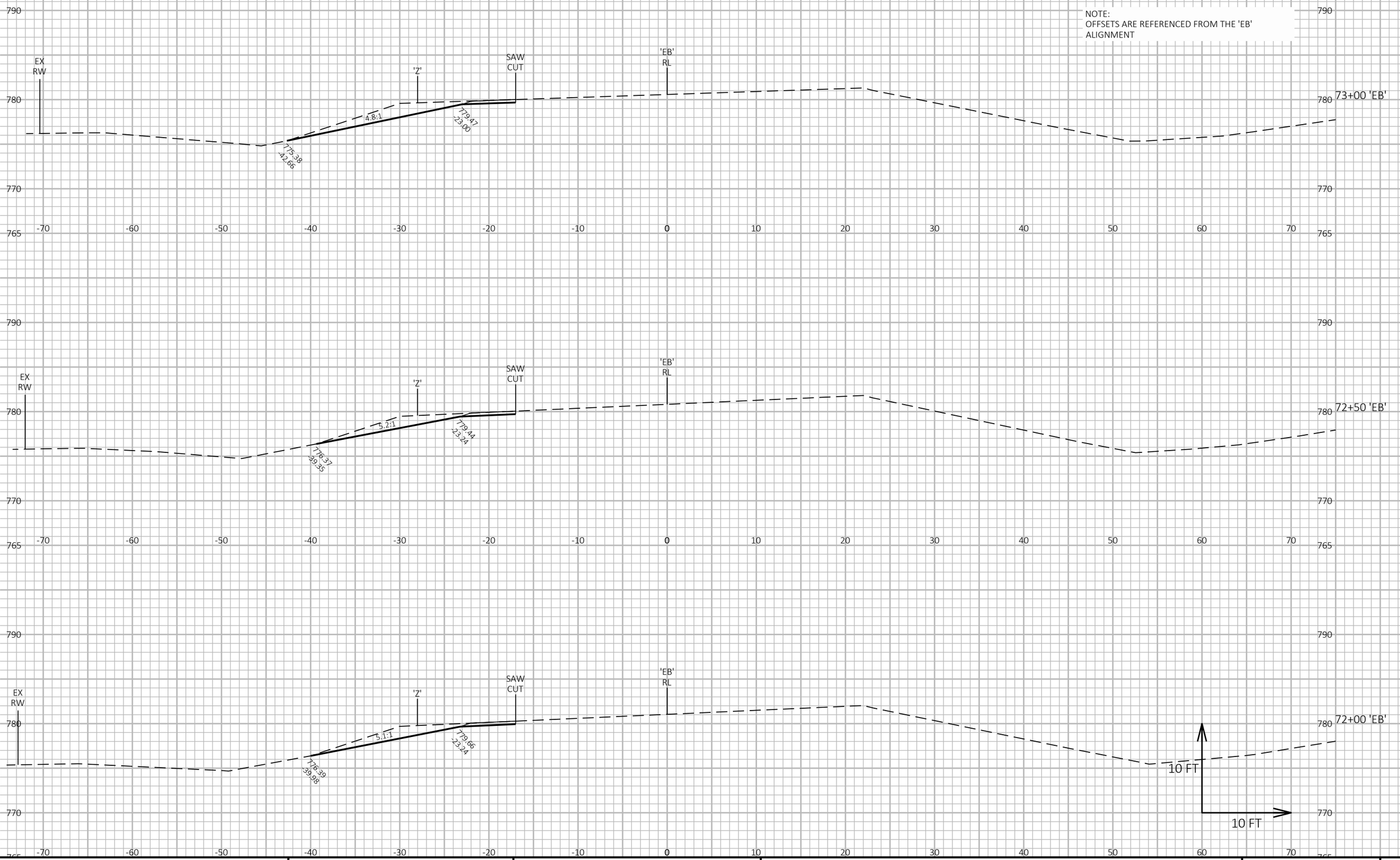
PLOT DATE : 6/28/2025 4:38 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 660	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 17

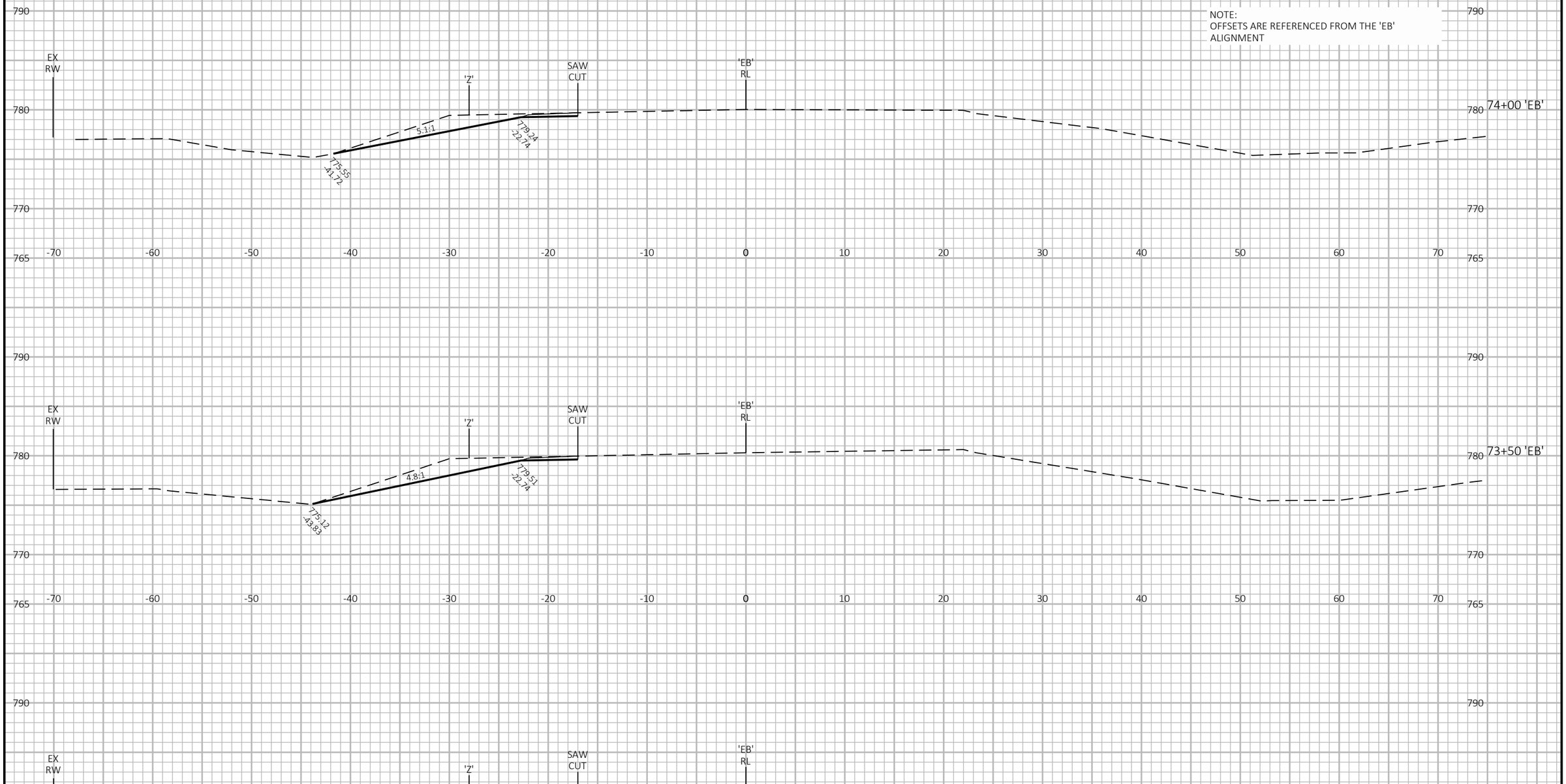
PLOT DATE : 6/28/2025 4:38 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 661	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 18

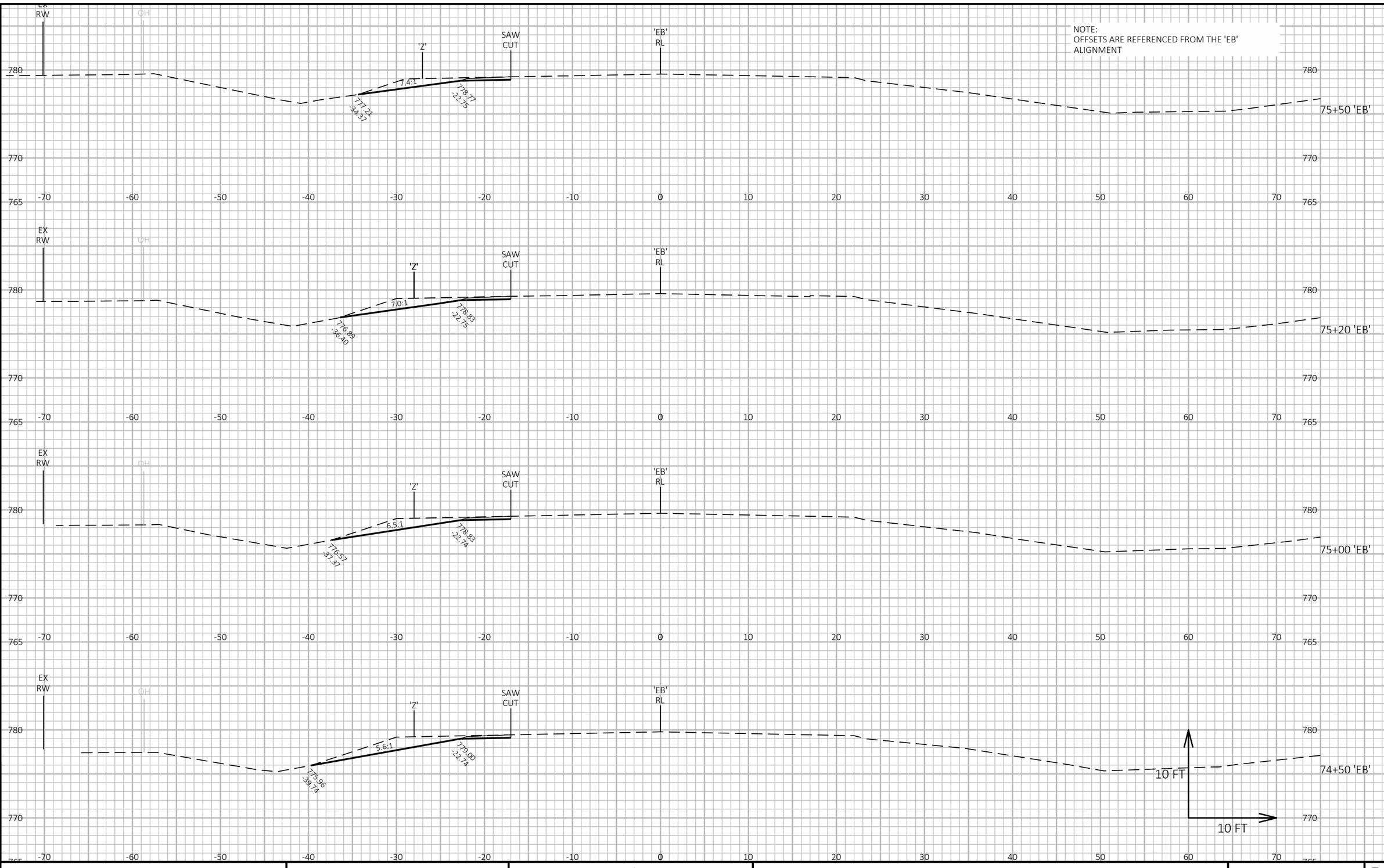
PLOT DATE : 6/28/2025 4:38 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

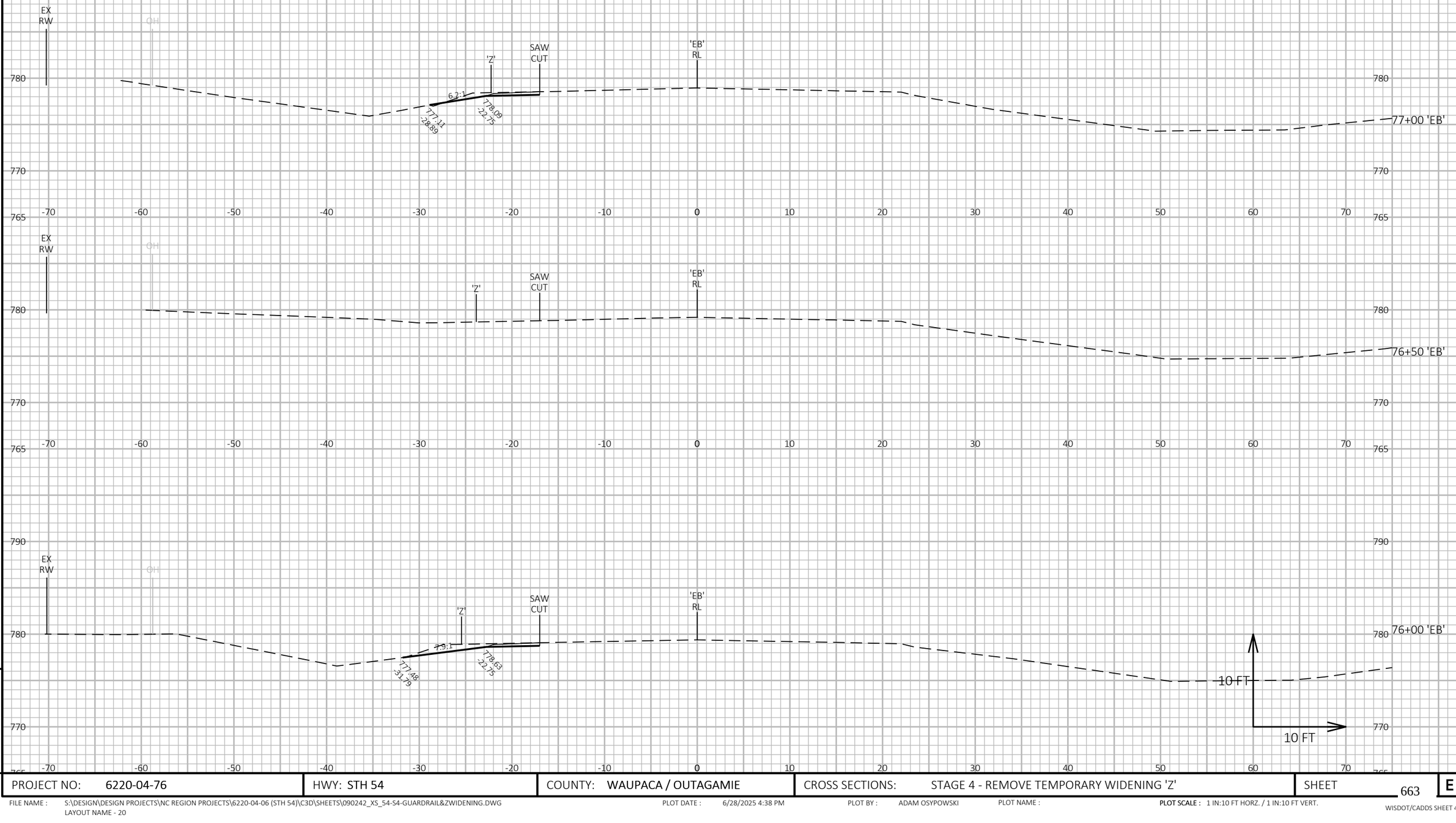
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 662	E

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



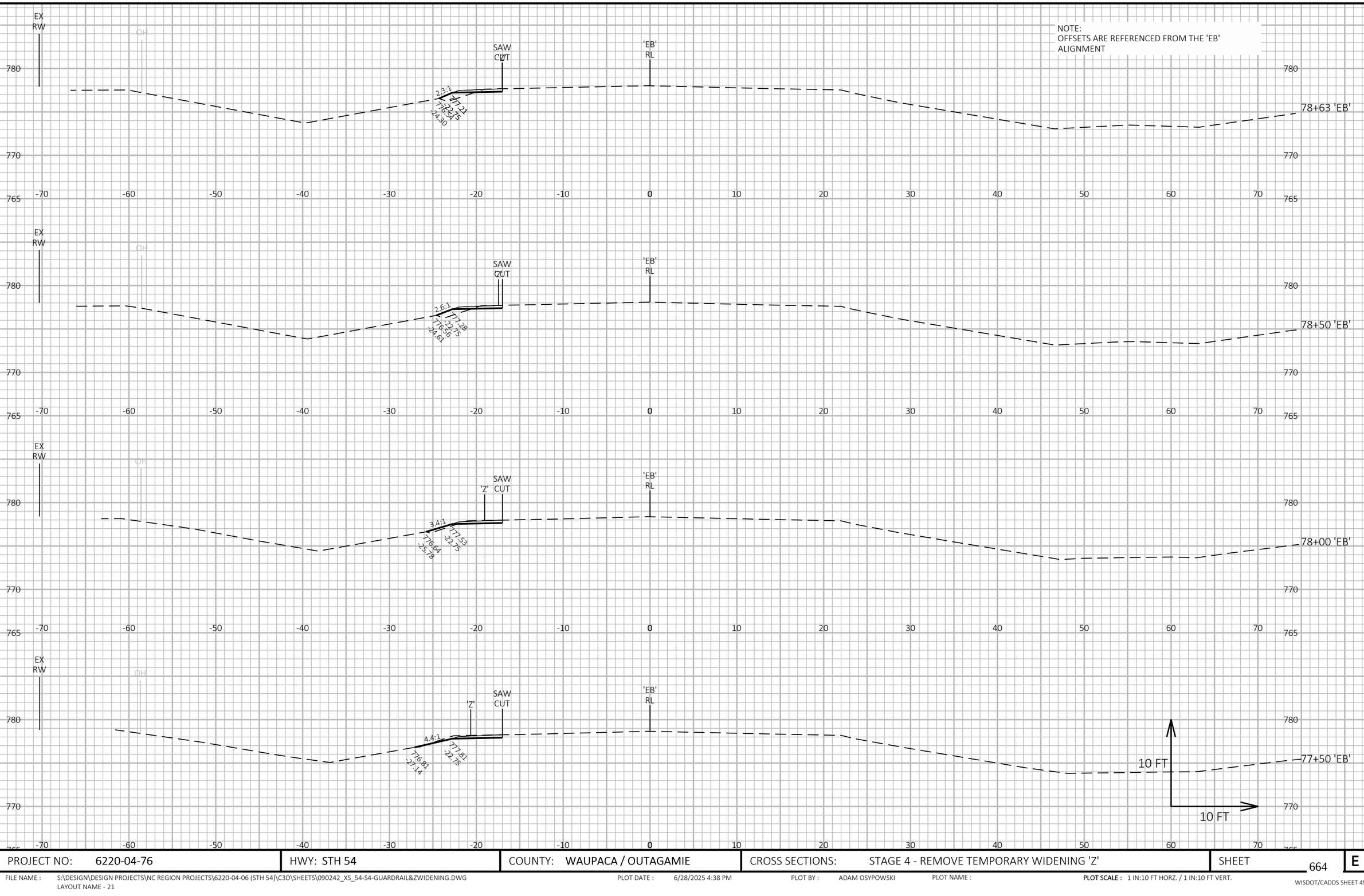
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 663	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 20

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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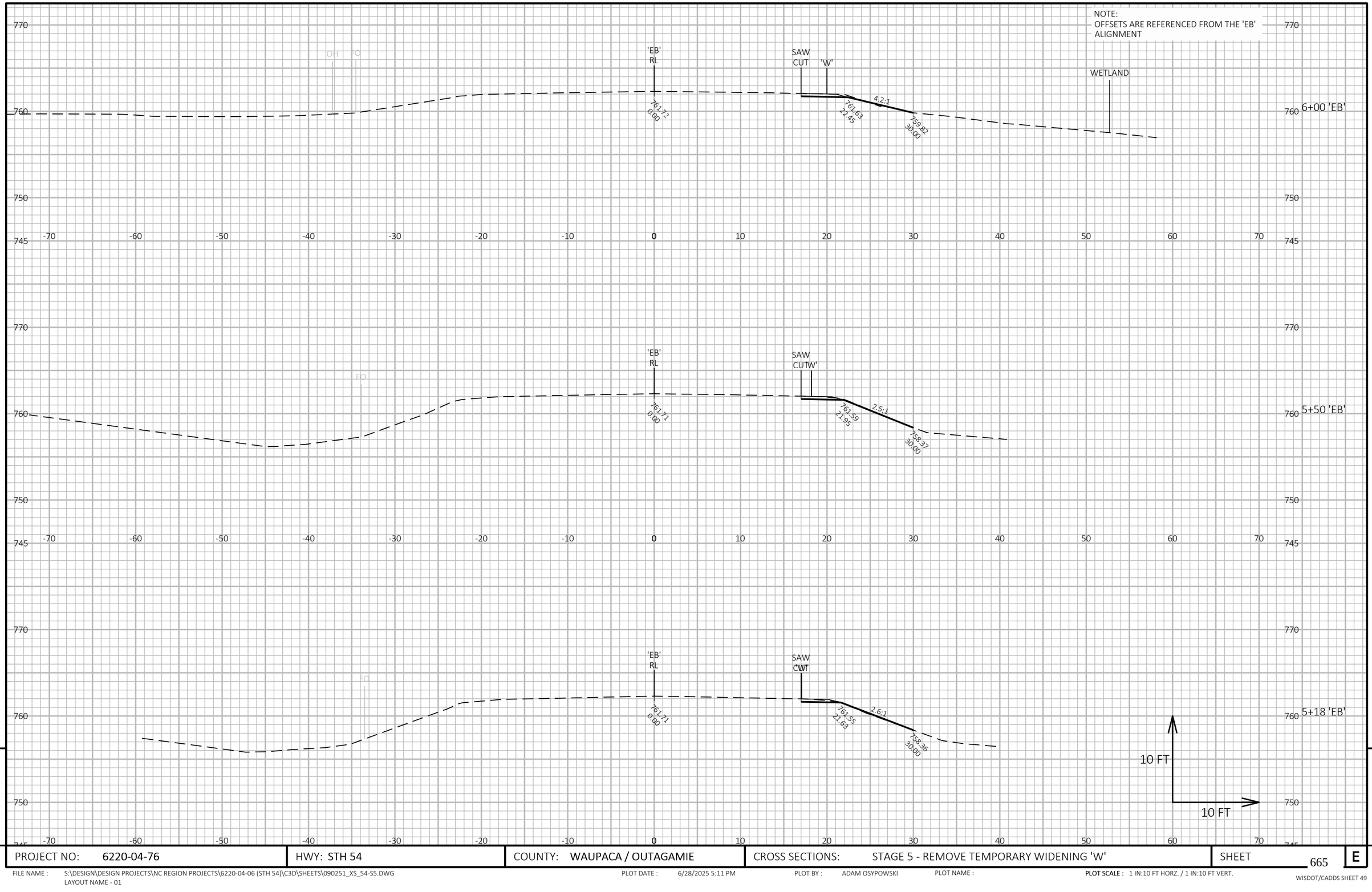
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 4 - REMOVE TEMPORARY WIDENING 'Z'	SHEET 664	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090242_XS_54-S4-GUARDRAIL&ZWIDENING.DWG
LAYOUT NAME - 21

PLOT DATE : 6/28/2025 4:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



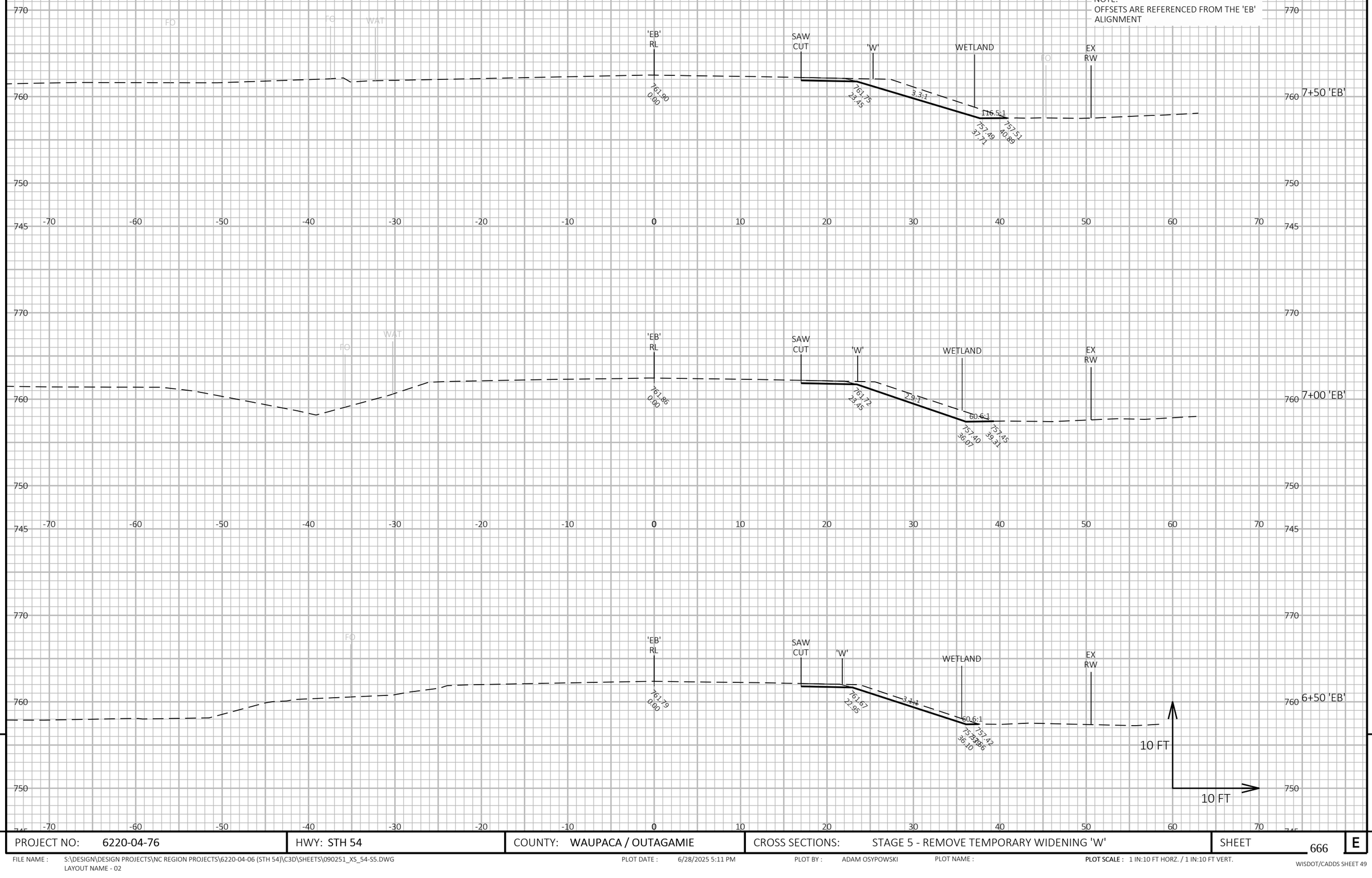
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - REMOVE TEMPORARY WIDENING 'W'	SHEET 665	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-55.DWG
LAYOUT NAME - 01

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



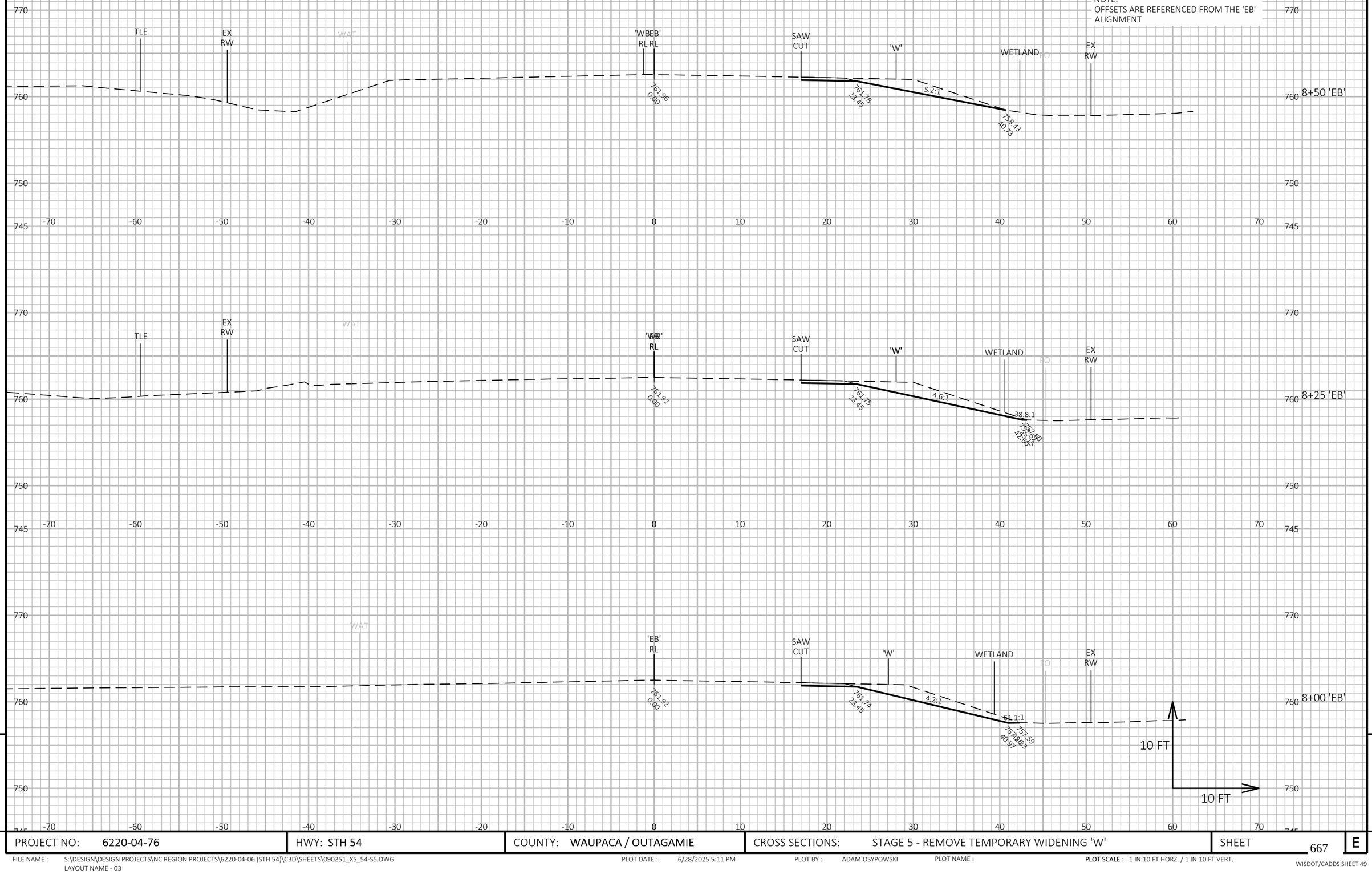
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - REMOVE TEMPORARY WIDENING 'W'	SHEET 666	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - REMOVE TEMPORARY WIDENING 'W'	SHEET 667	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 03

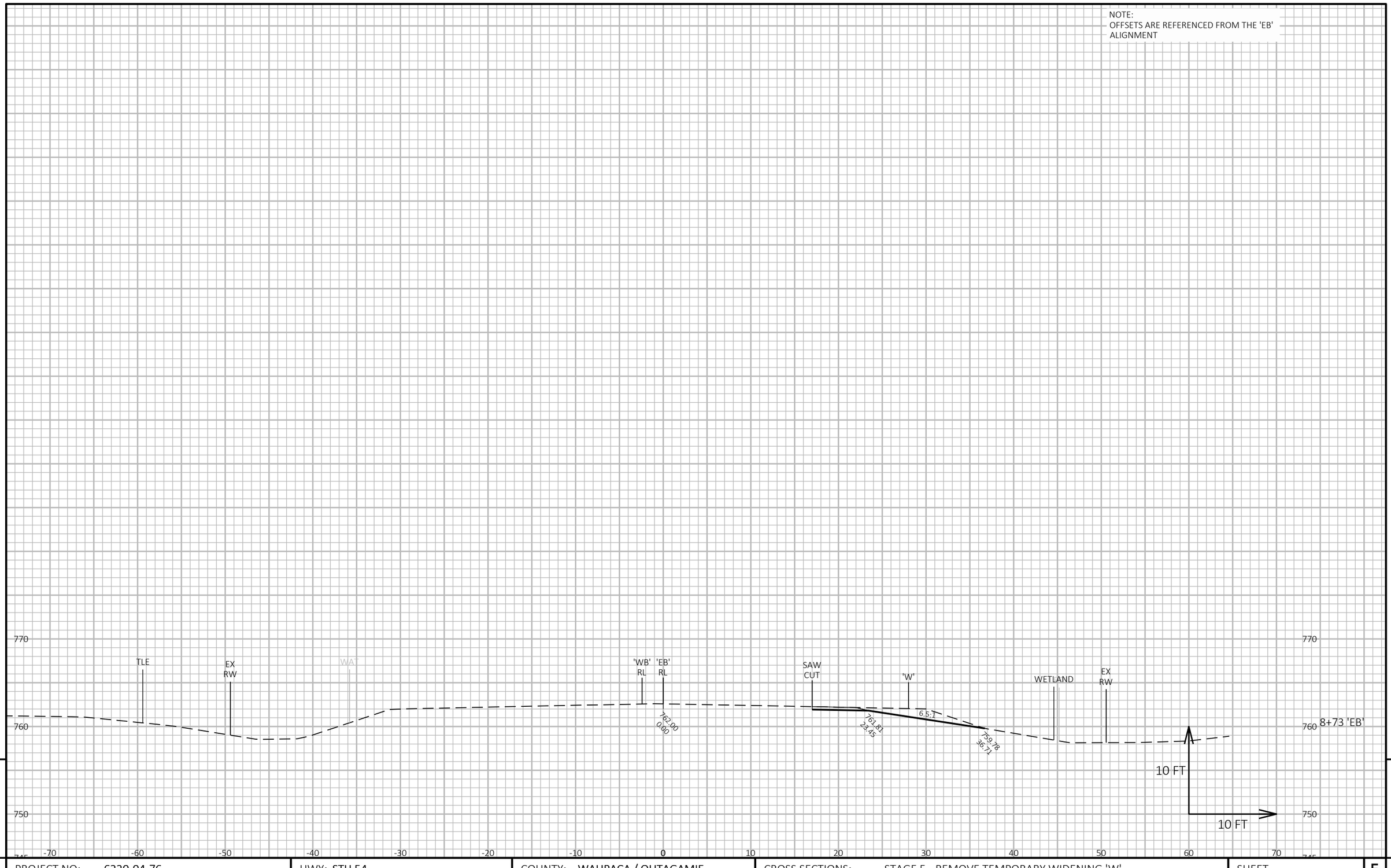
PLOT DATE : 6/28/2025 5:11 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NOTE:
OFFSETS ARE REFERENCED FROM THE 'EB' ALIGNMENT



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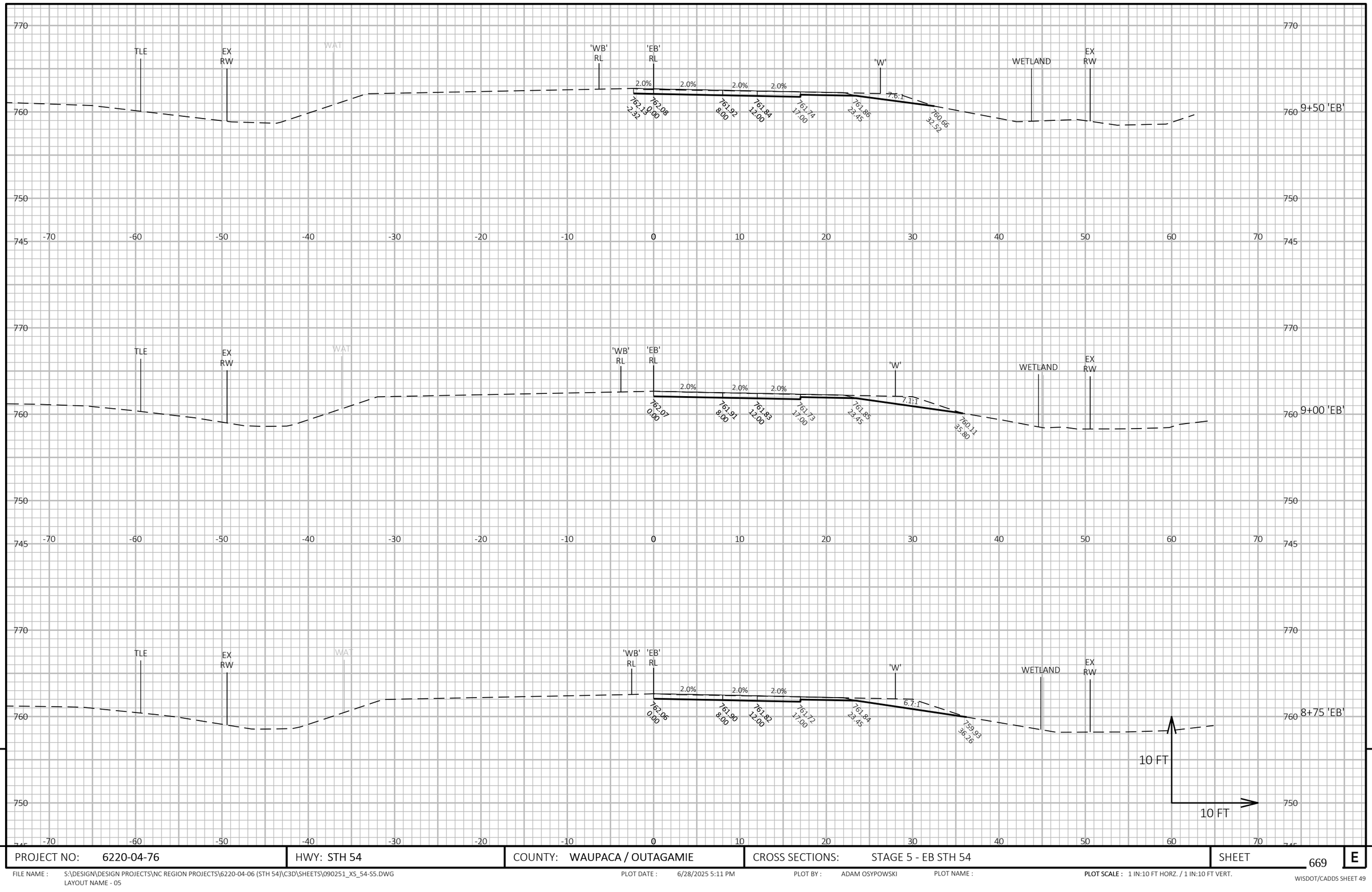
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - REMOVE TEMPORARY WIDENING 'W'	SHEET 668	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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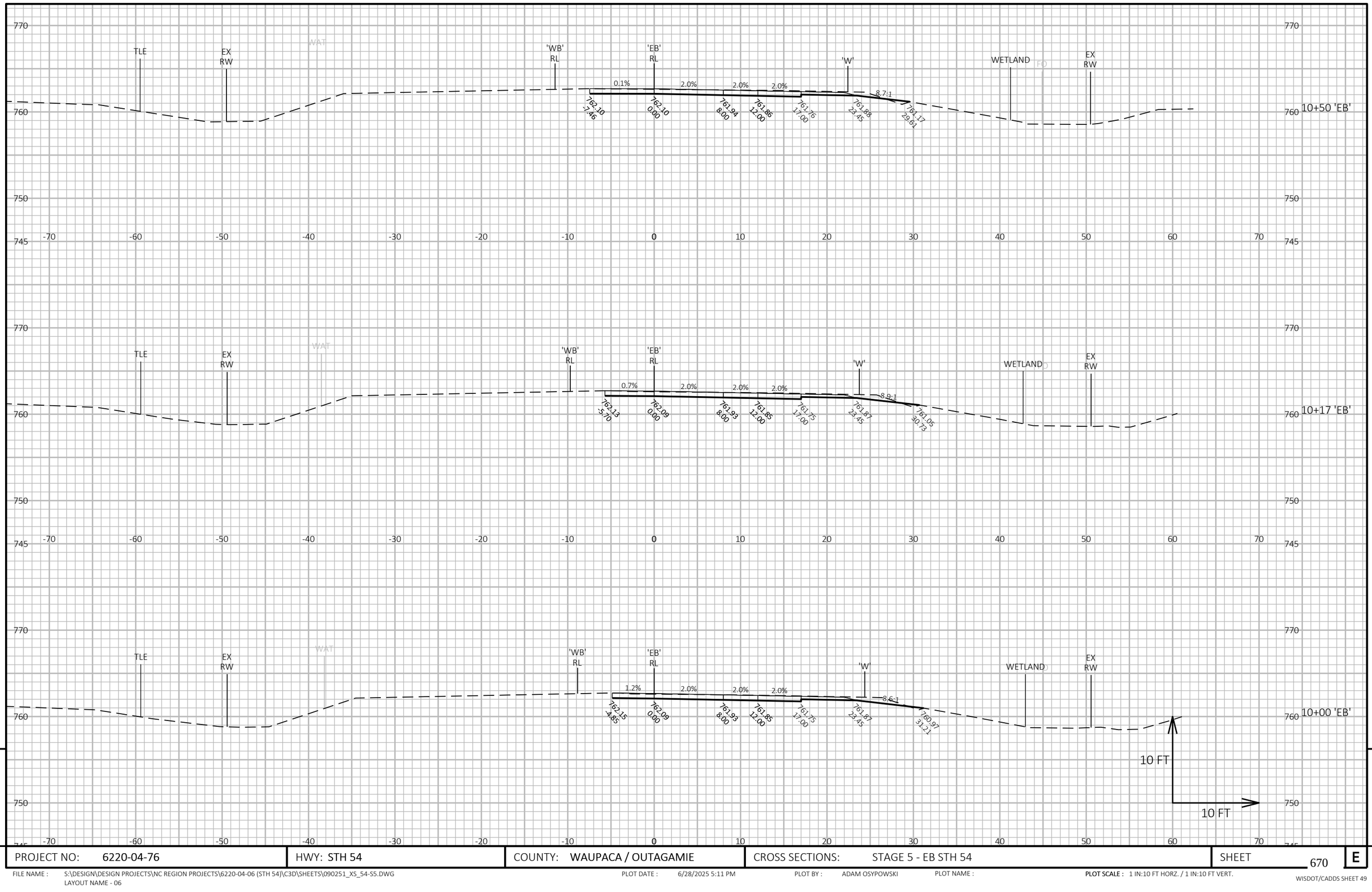
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 669	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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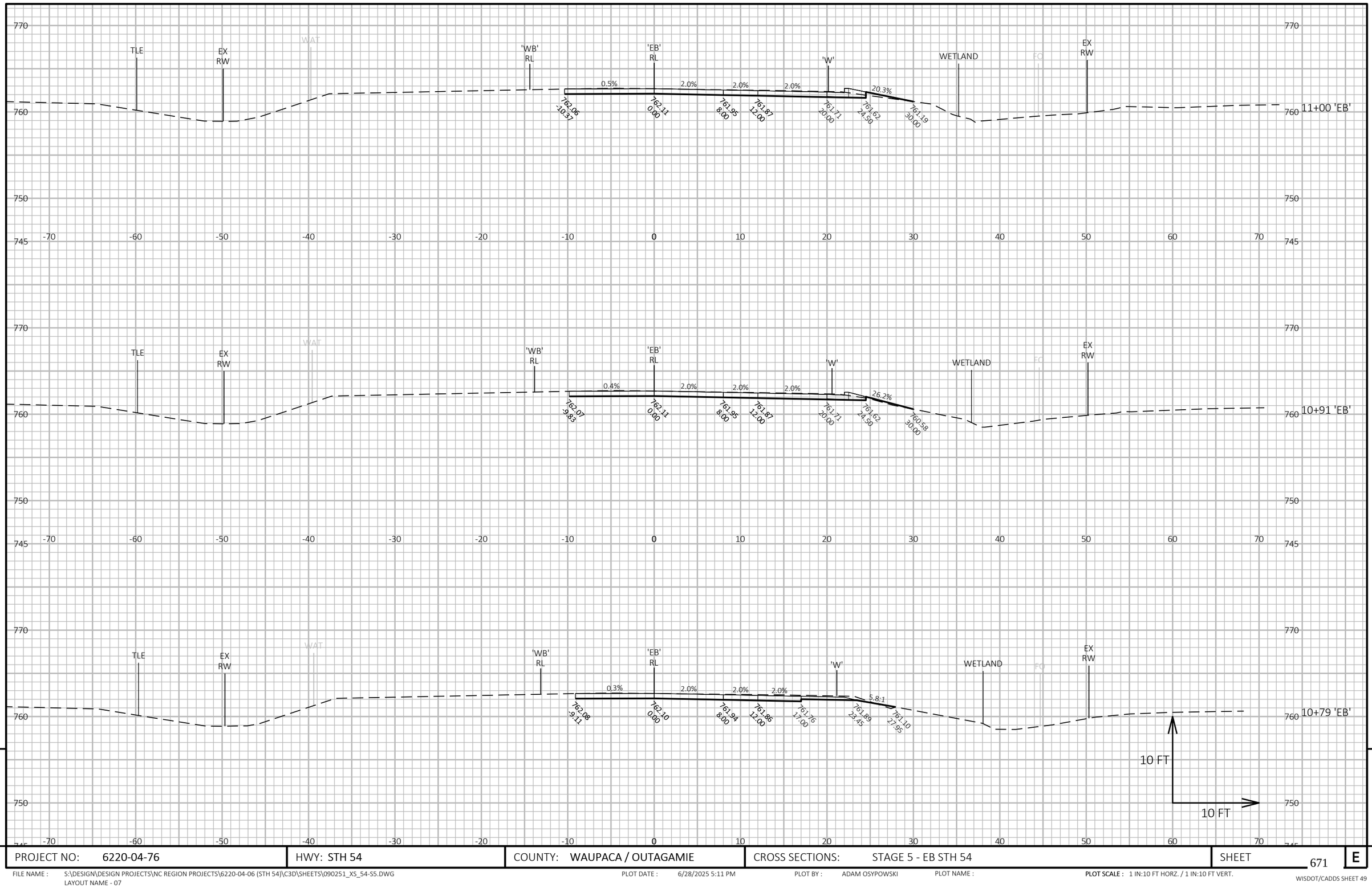
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 670	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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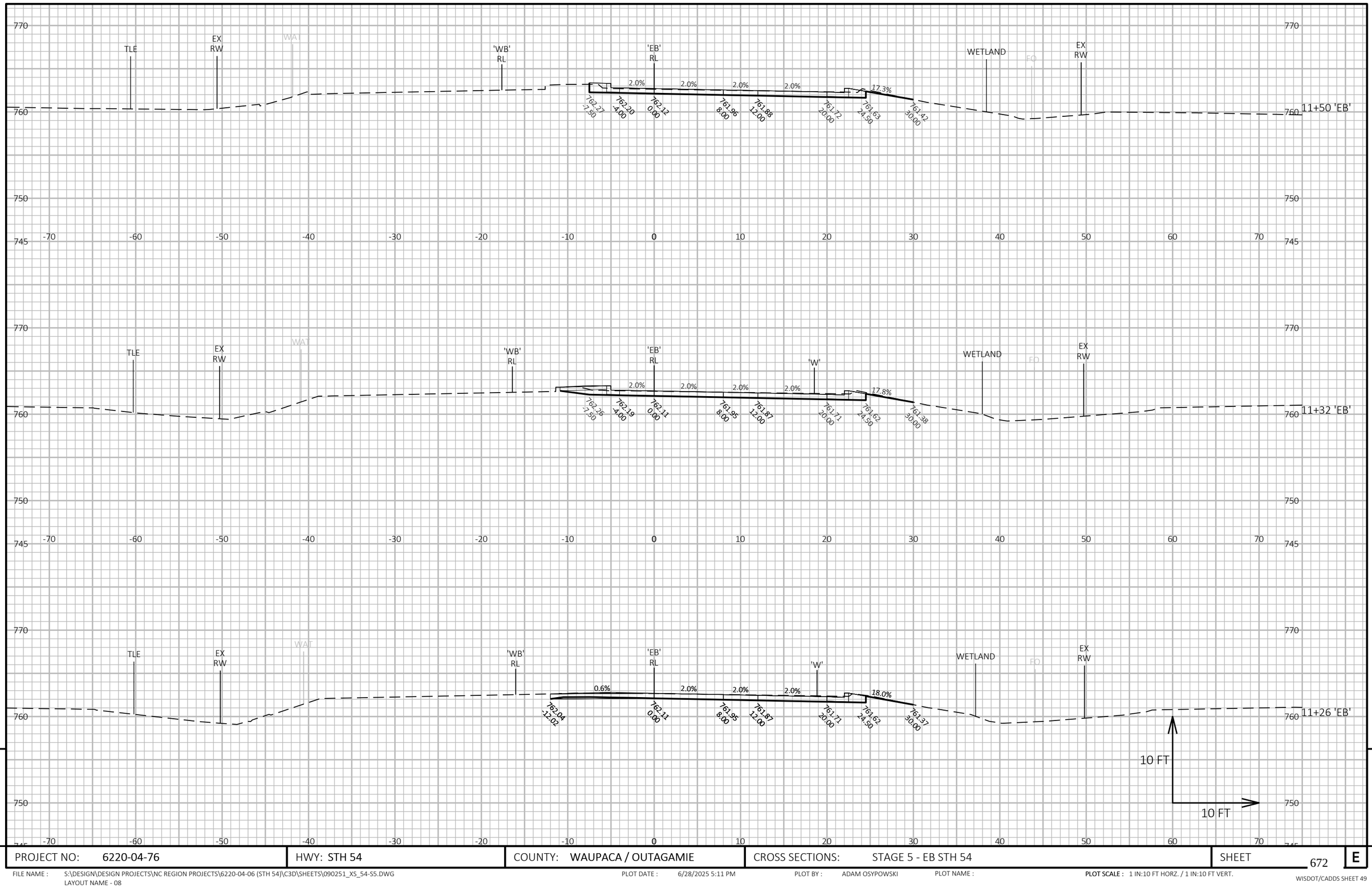
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 671	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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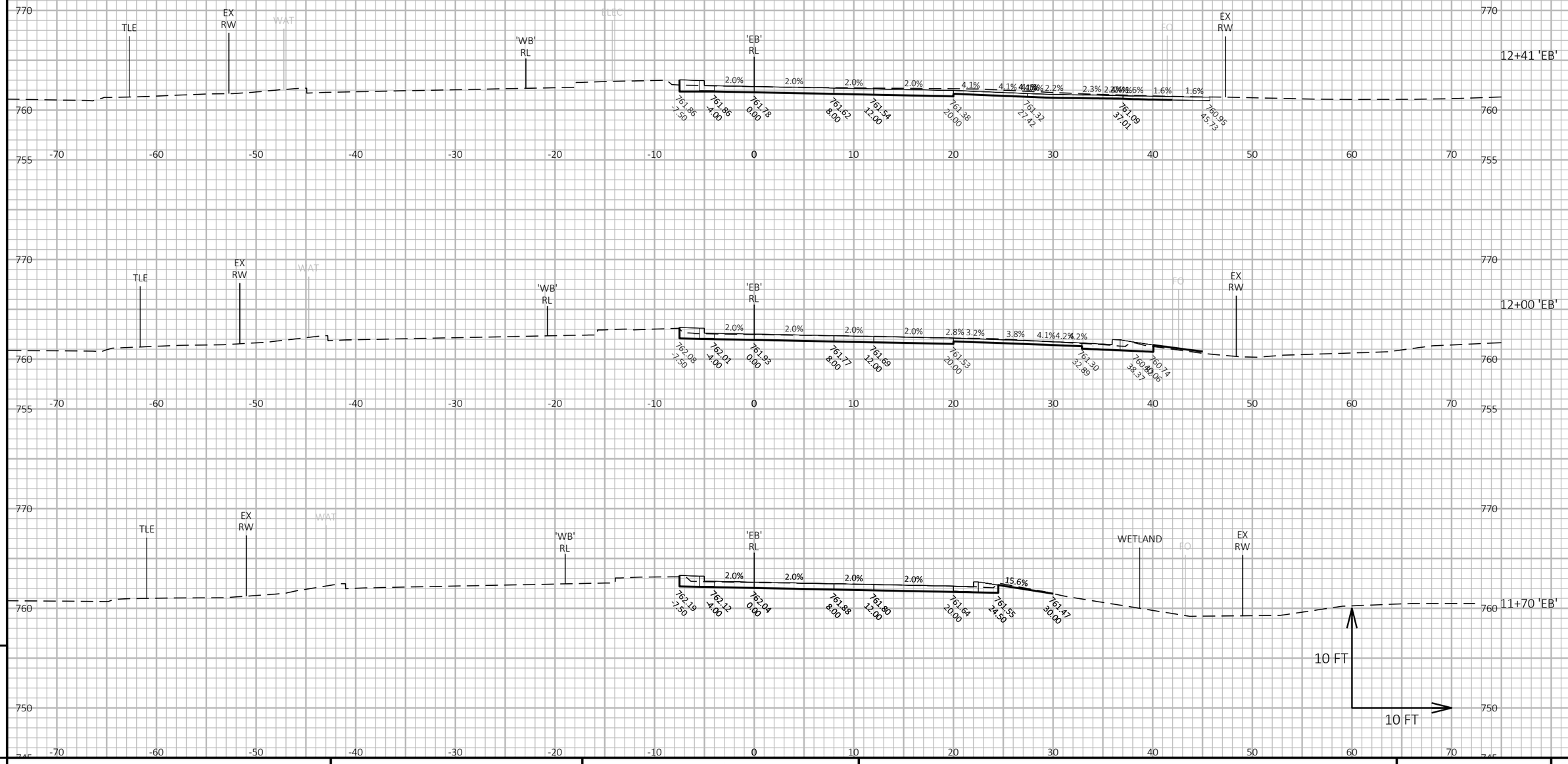
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 672	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 08

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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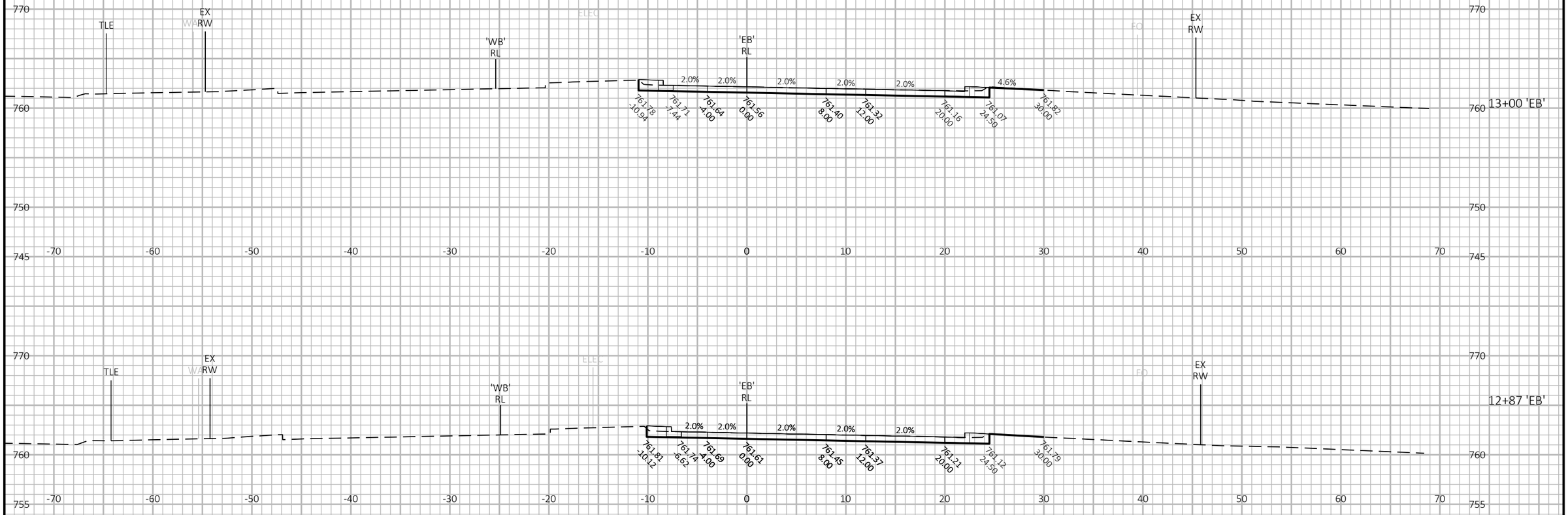
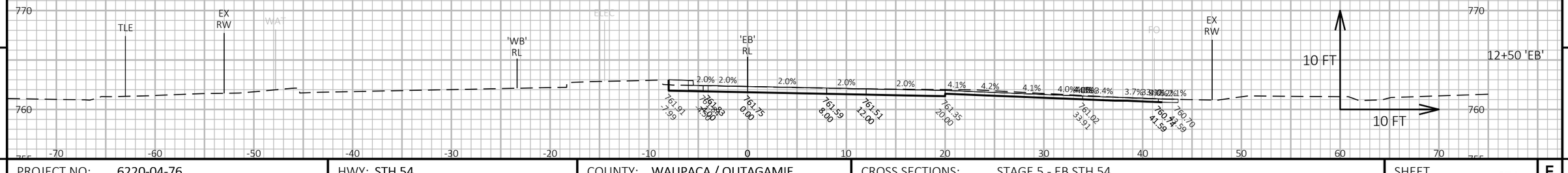
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 673	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-55.DWG
LAYOUT NAME - 09

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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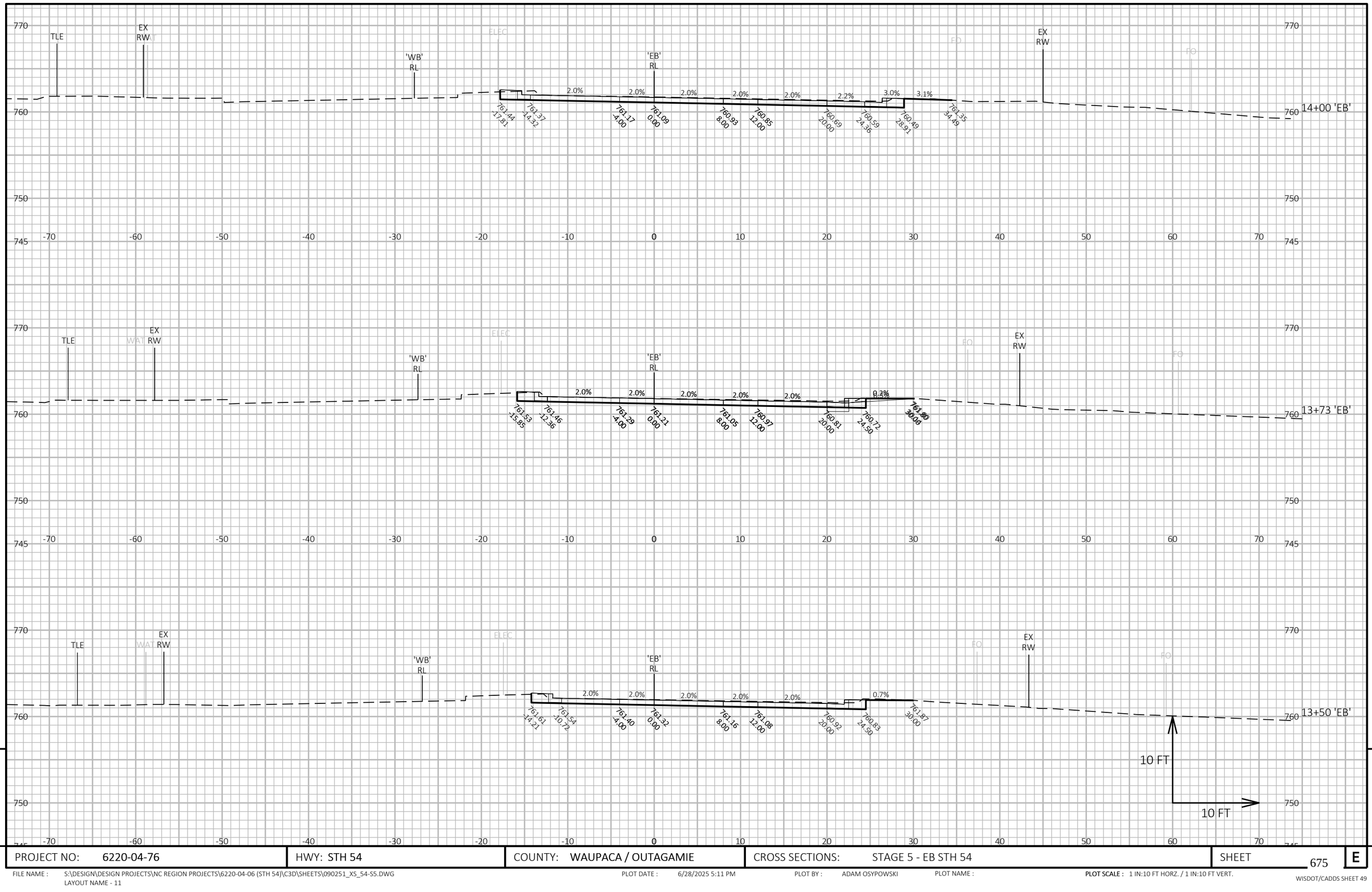
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 674	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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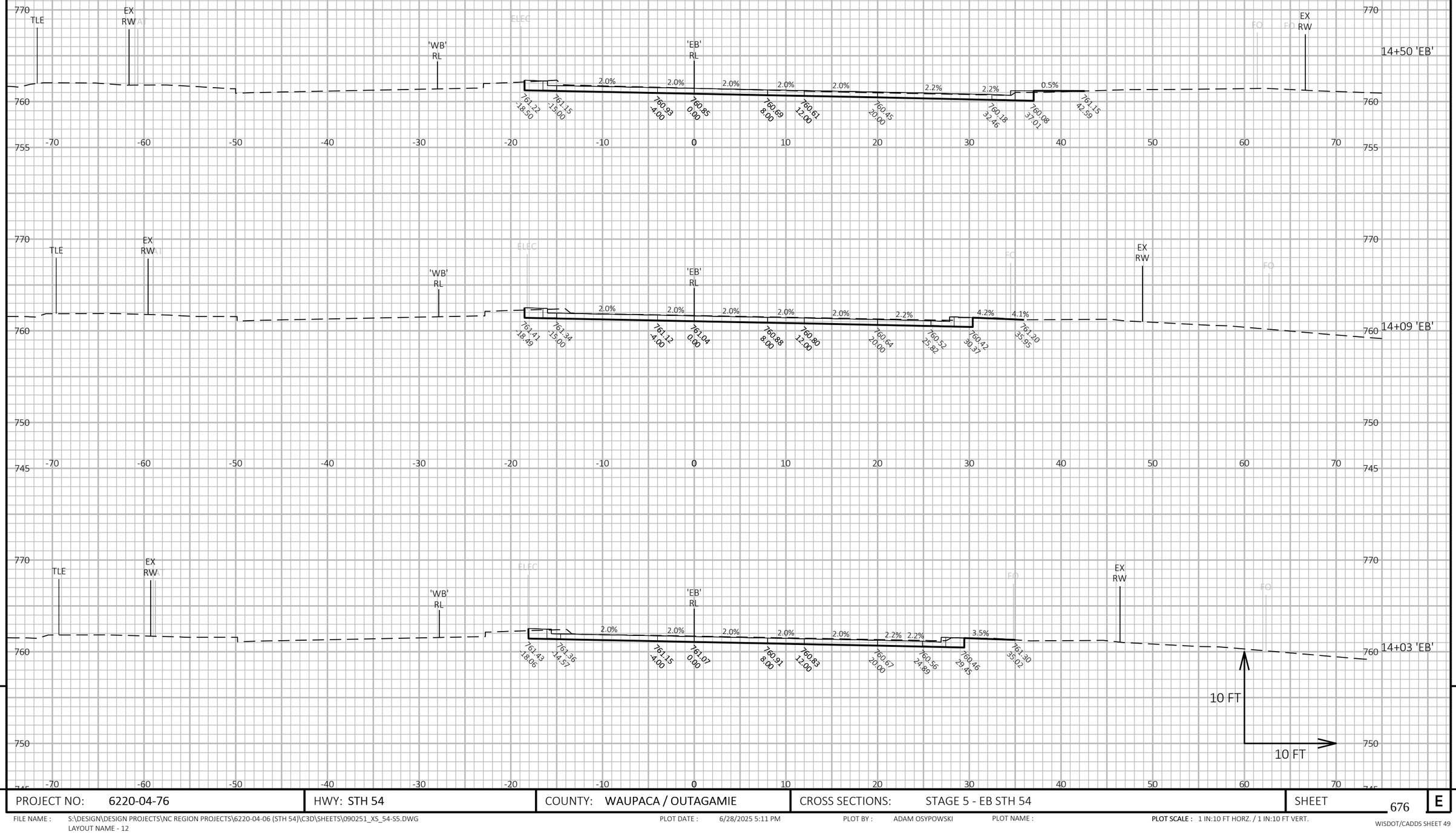
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 675	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 11

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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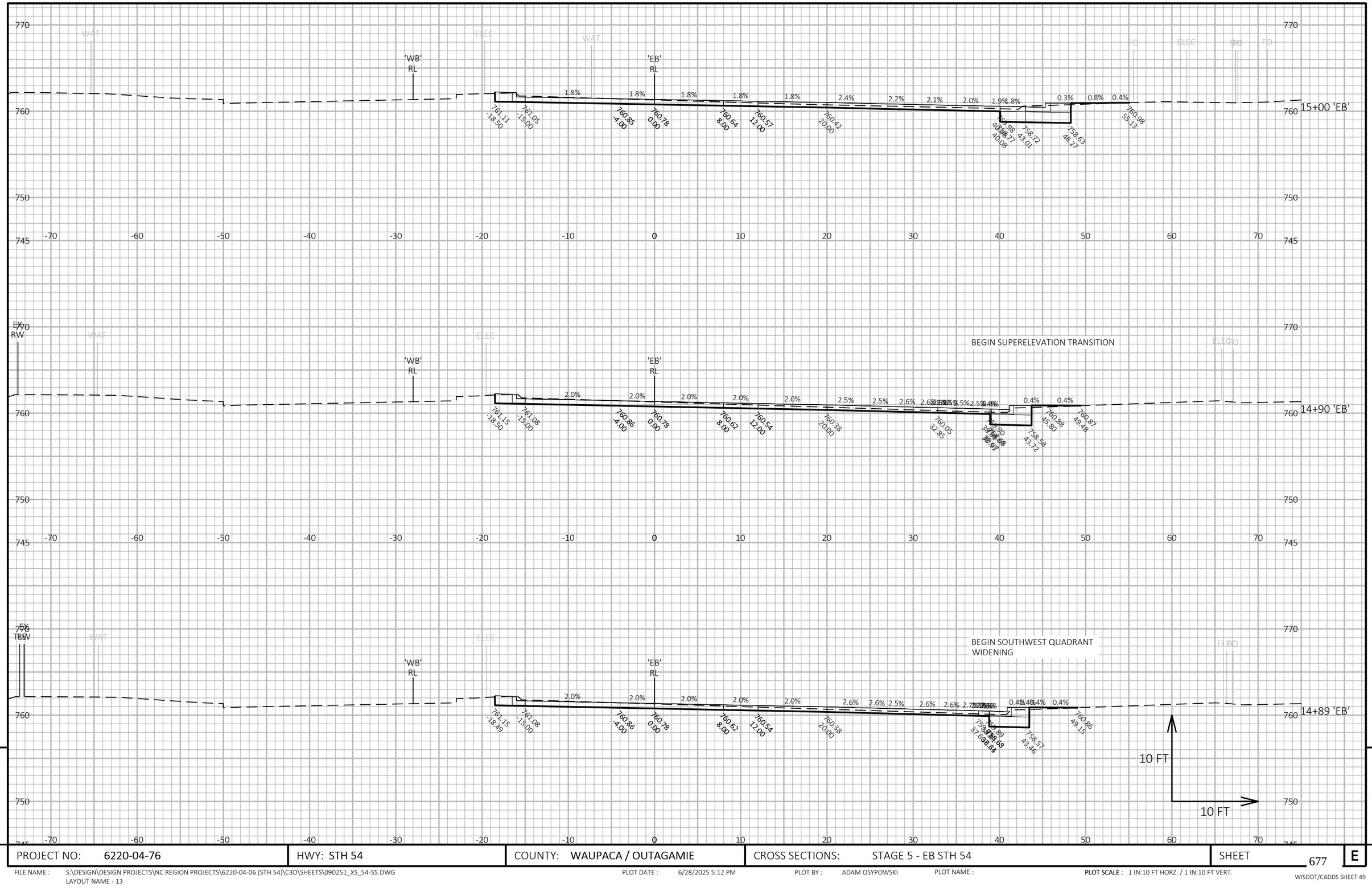
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 676	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 12

PLOT DATE : 6/28/2025 5:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 677	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-55.DWG
LAYOUT NAME - 13

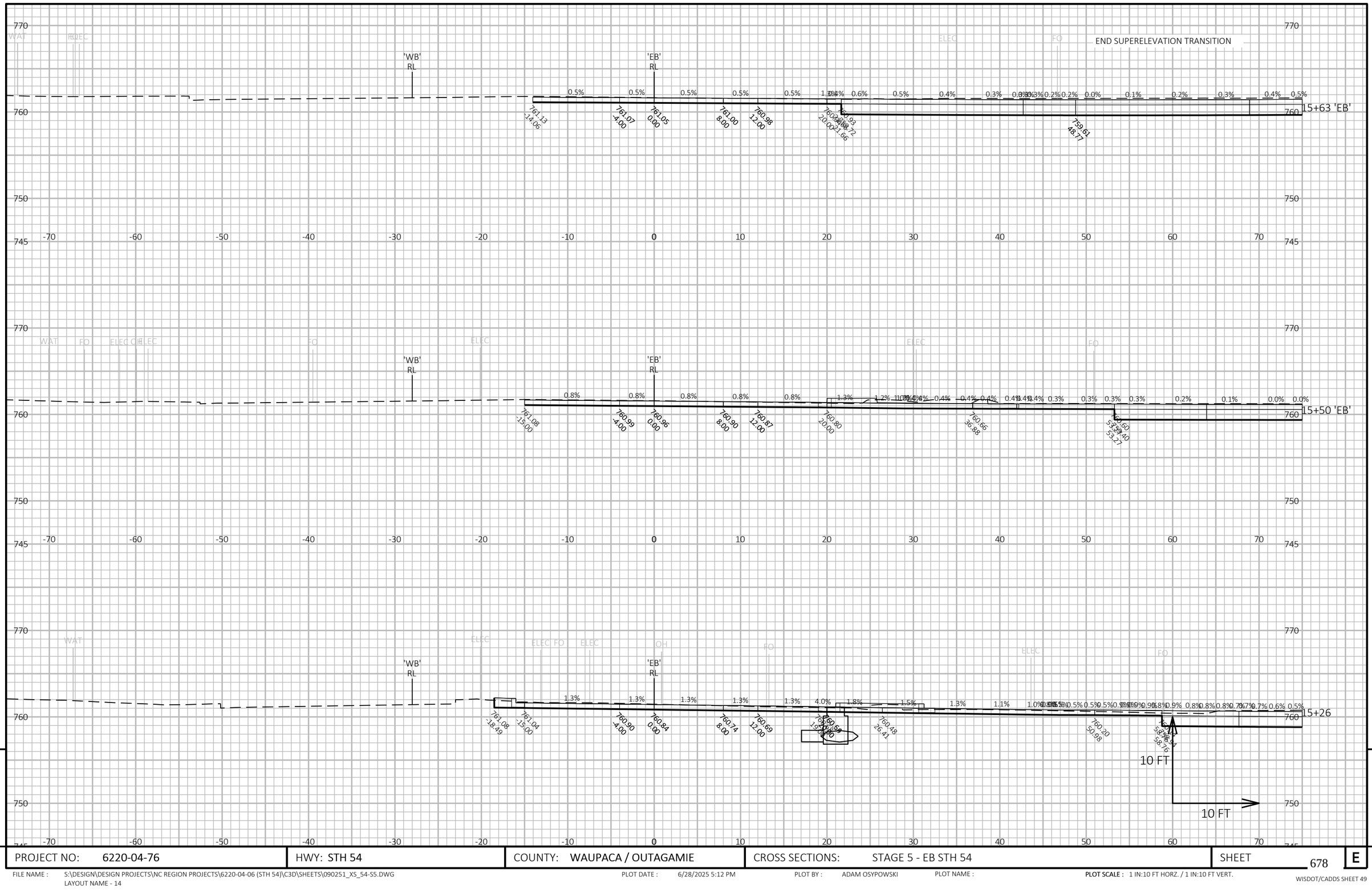
PLOT DATE : 6/28/2025 5:12 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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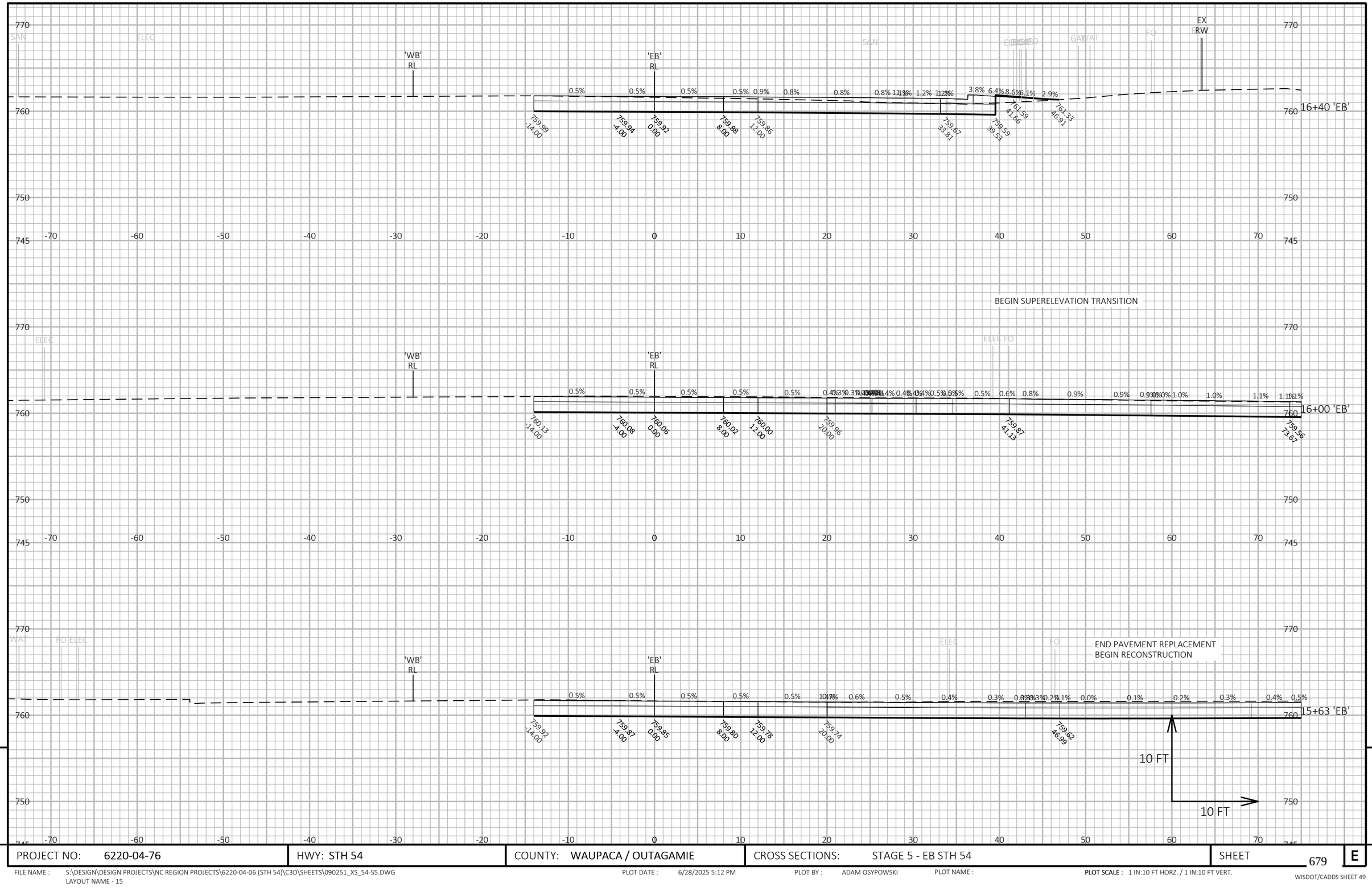
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 678	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 14

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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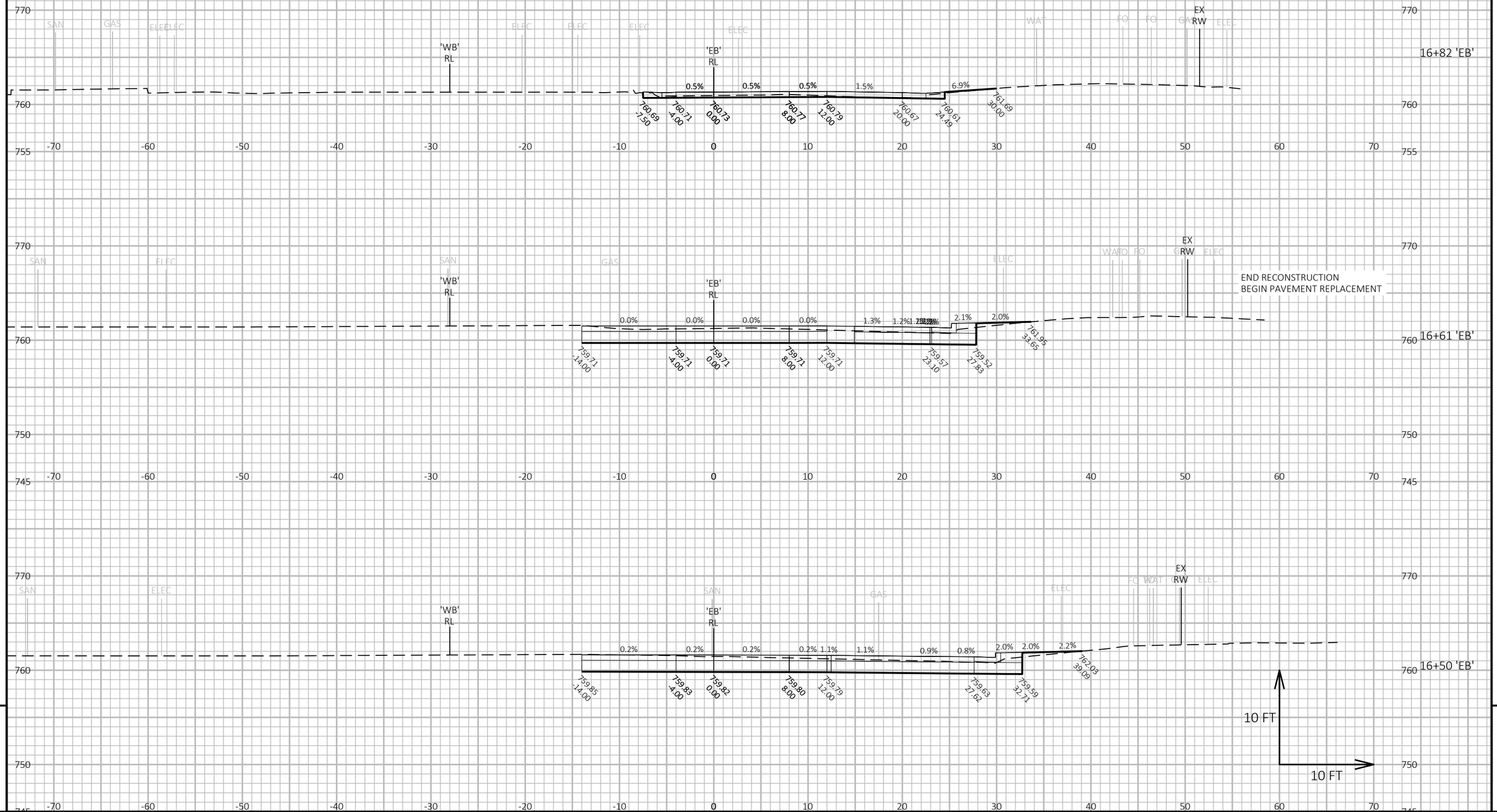
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 679	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 15

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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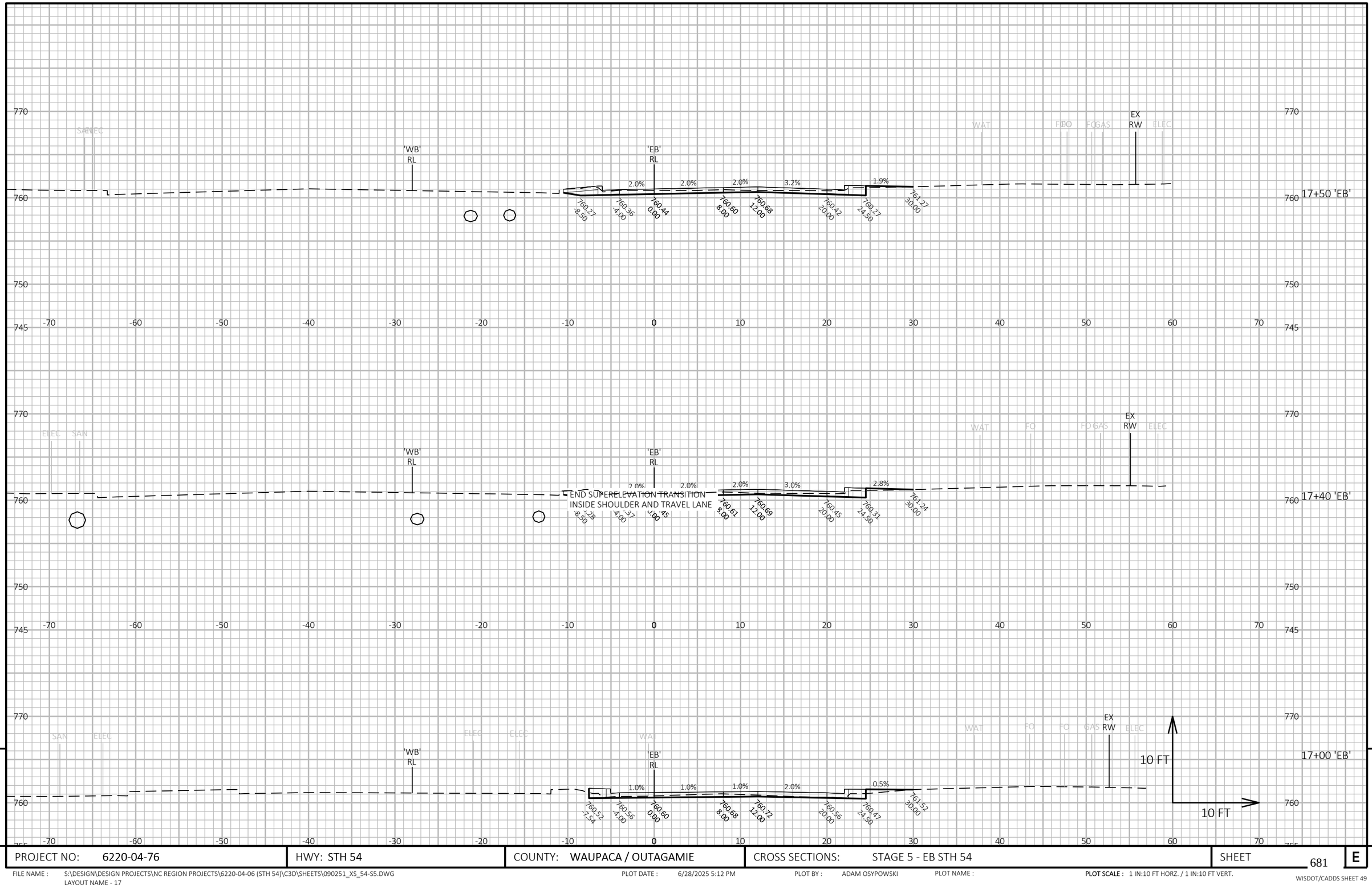
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 680	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 16

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 681	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 17

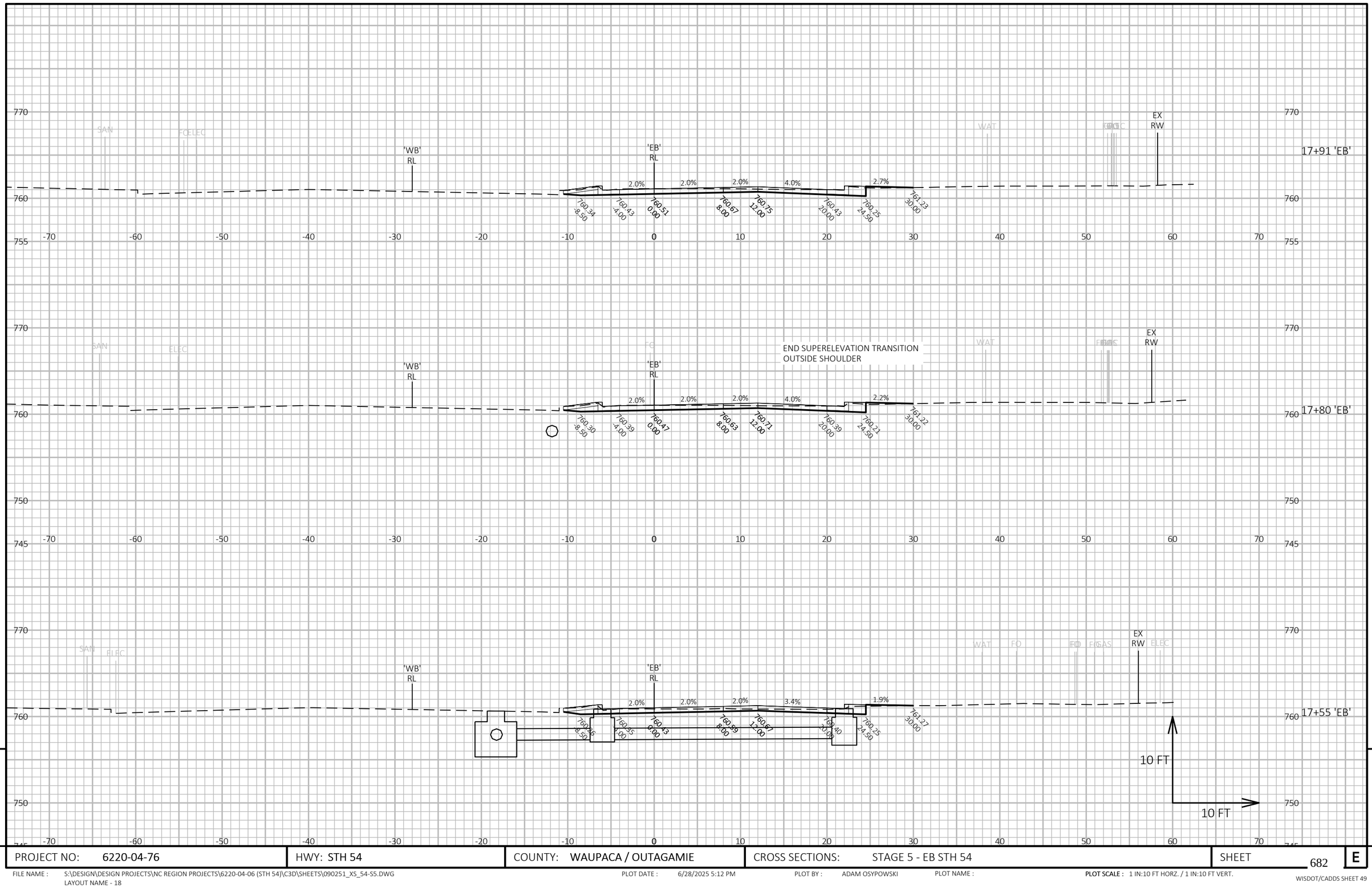
PLOT DATE : 6/28/2025 5:12 PM

PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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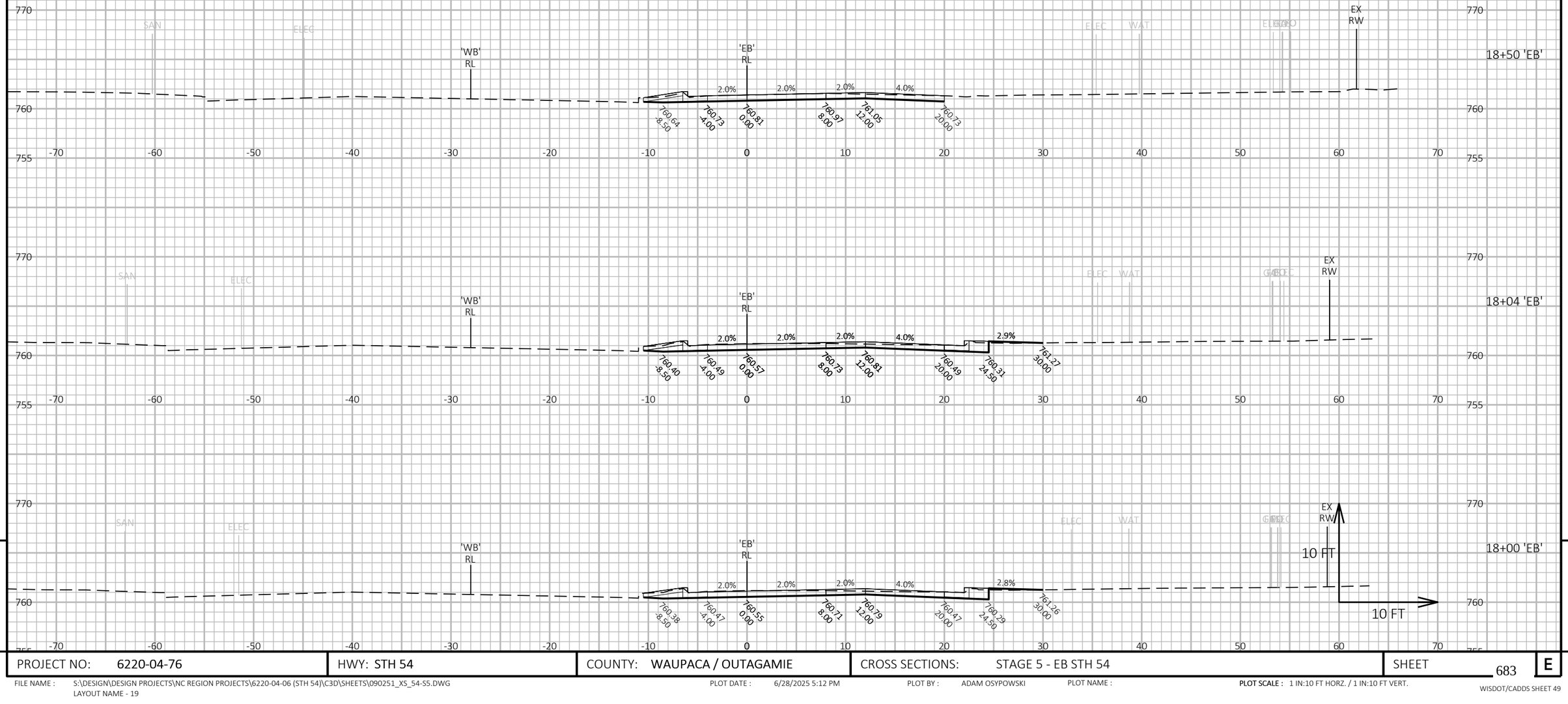
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 682	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 18

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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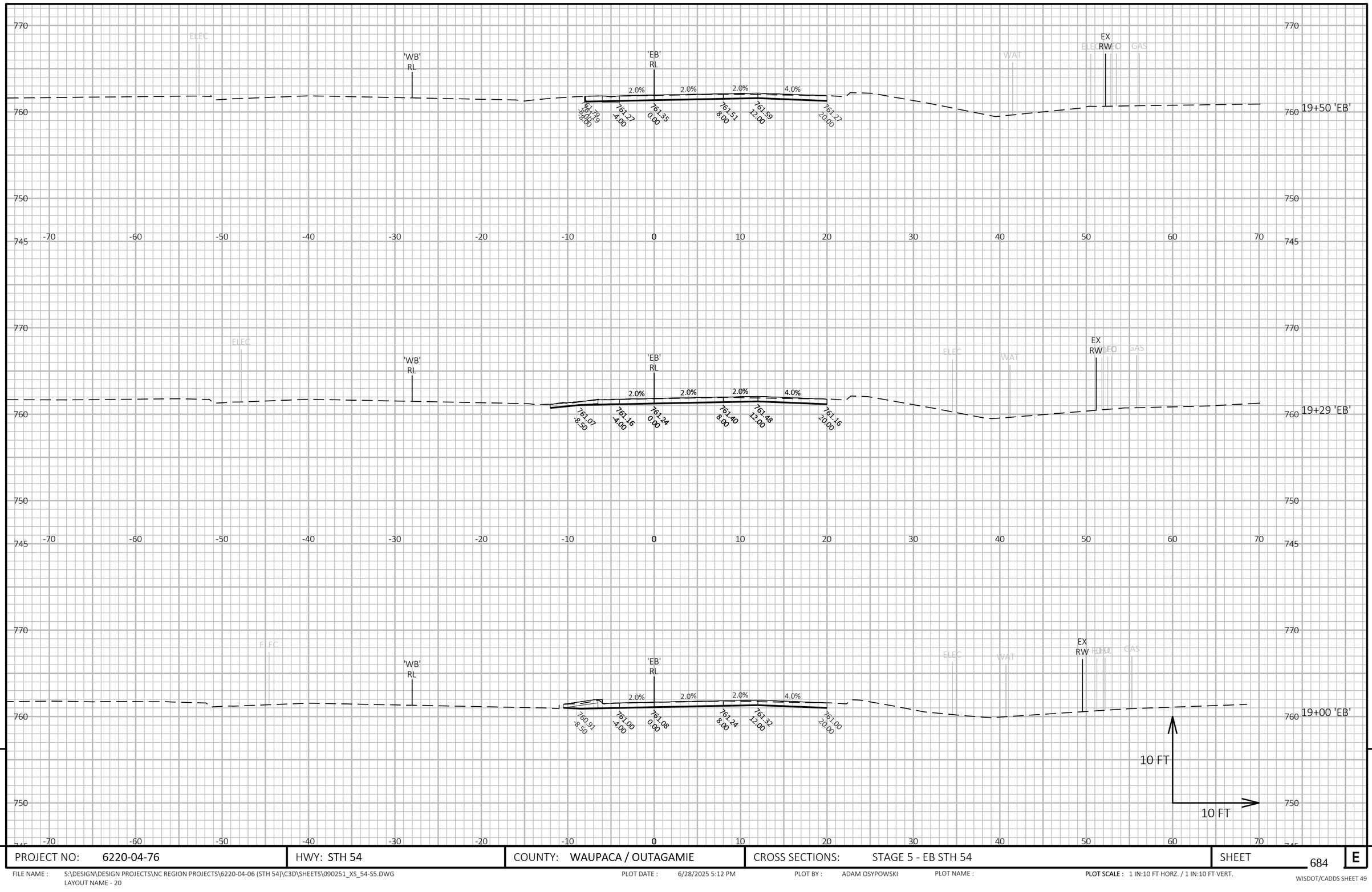
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 683	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 19

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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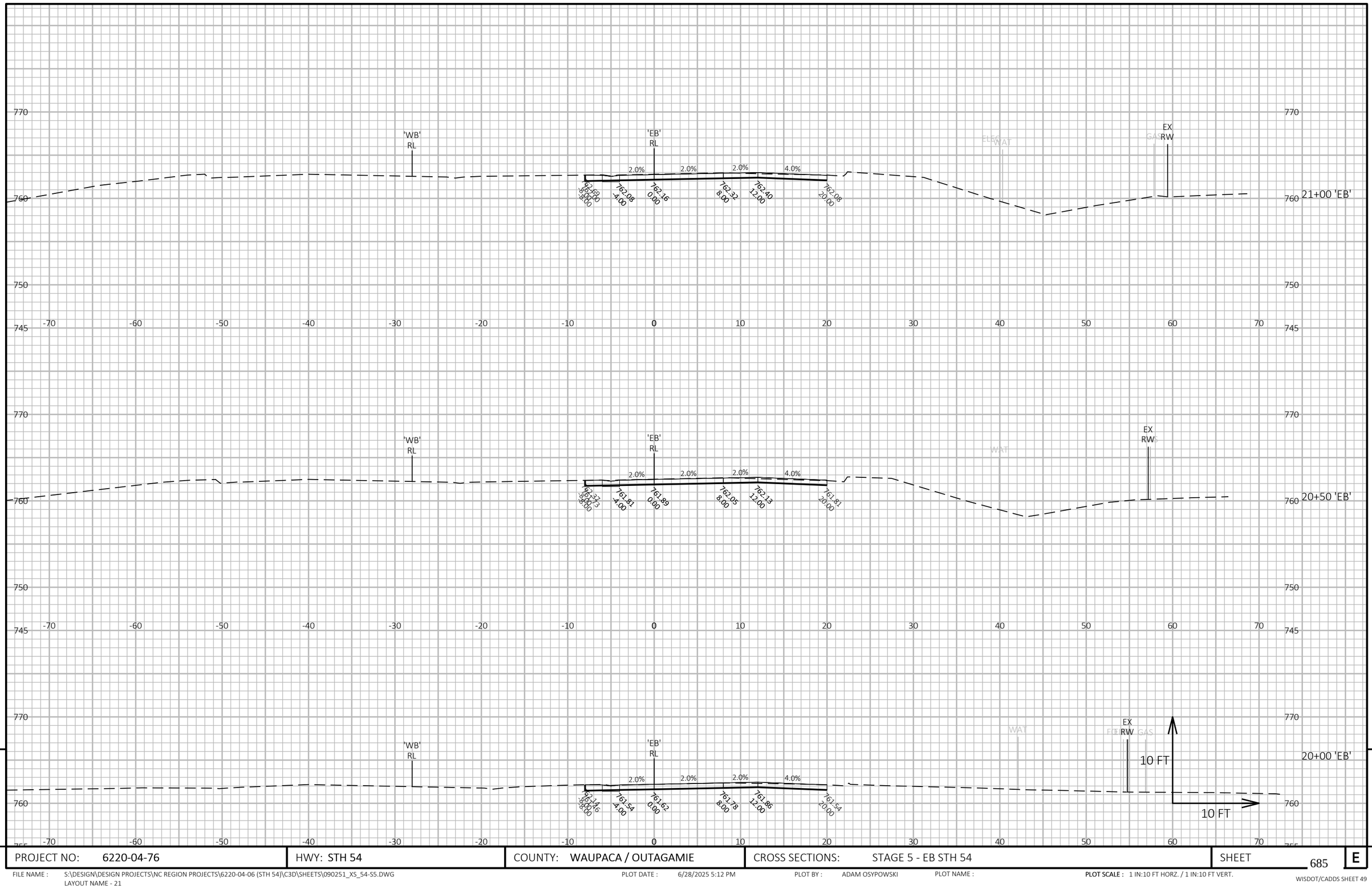
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 684	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 20

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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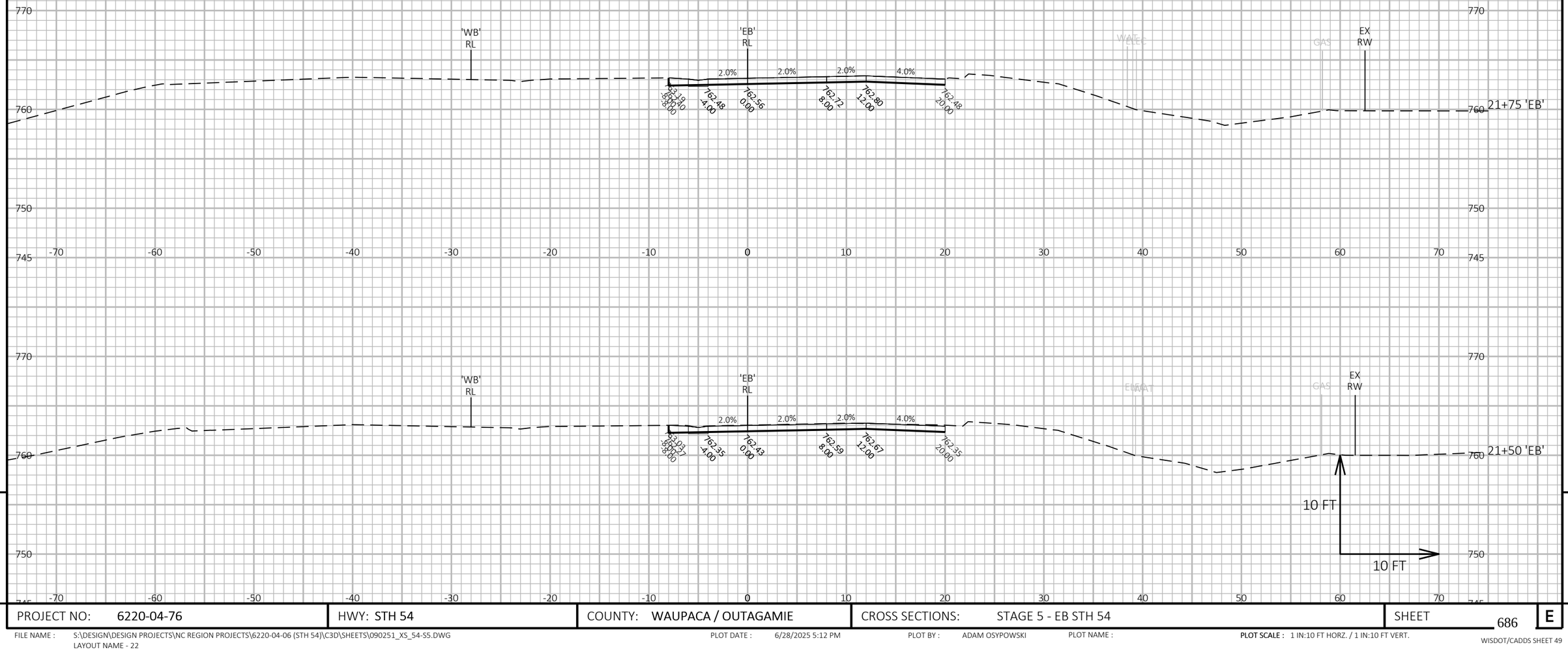
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 685	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 21

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

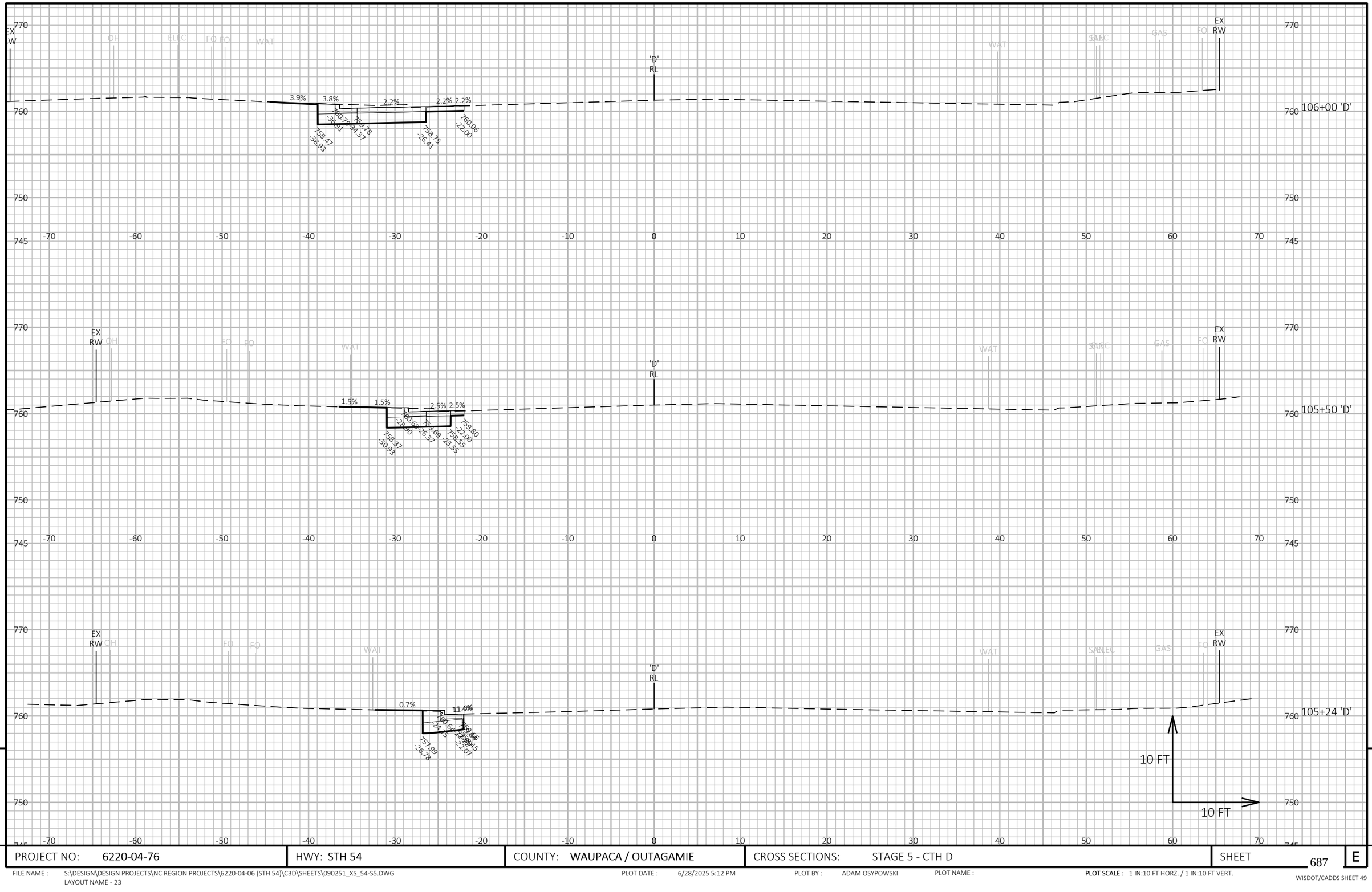


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - EB STH 54	SHEET 686 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 22

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

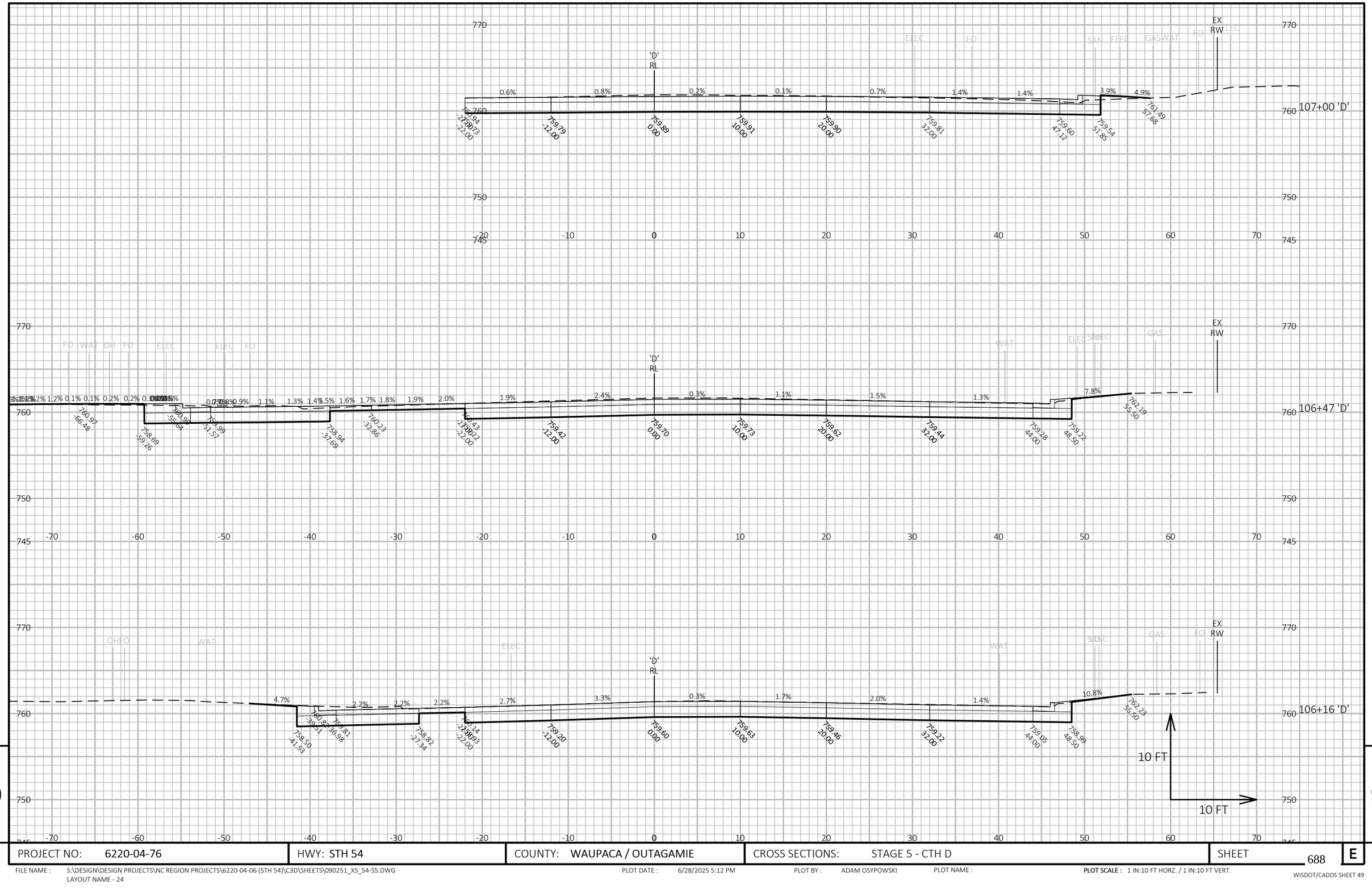


PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - CTH D	SHEET 687 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 23

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - CTH D	SHEET 688	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-55.DWG
LAYOUT NAME - 24

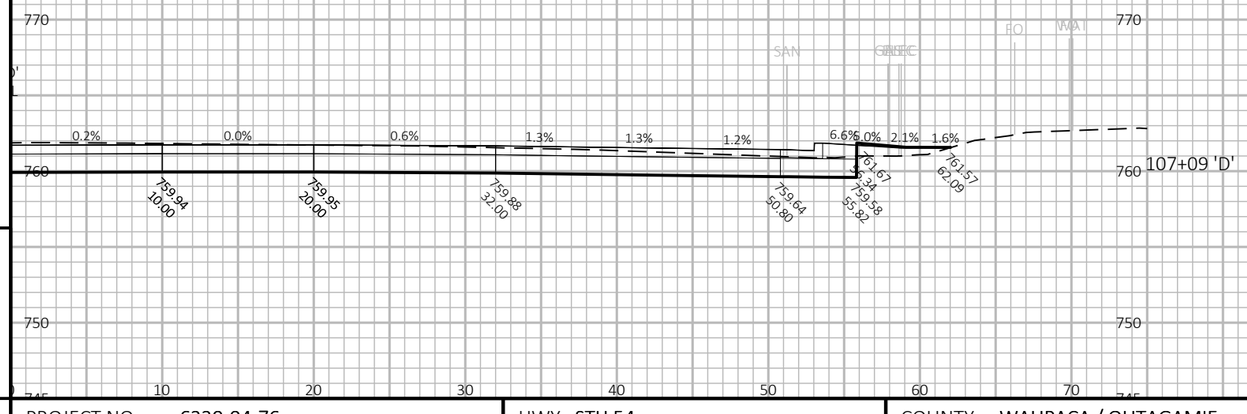
PLOT DATE : 6/28/2025 5:12 PM

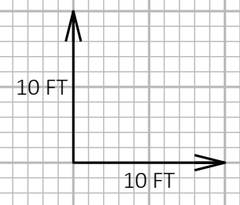
PLOT BY : ADAM OSYPOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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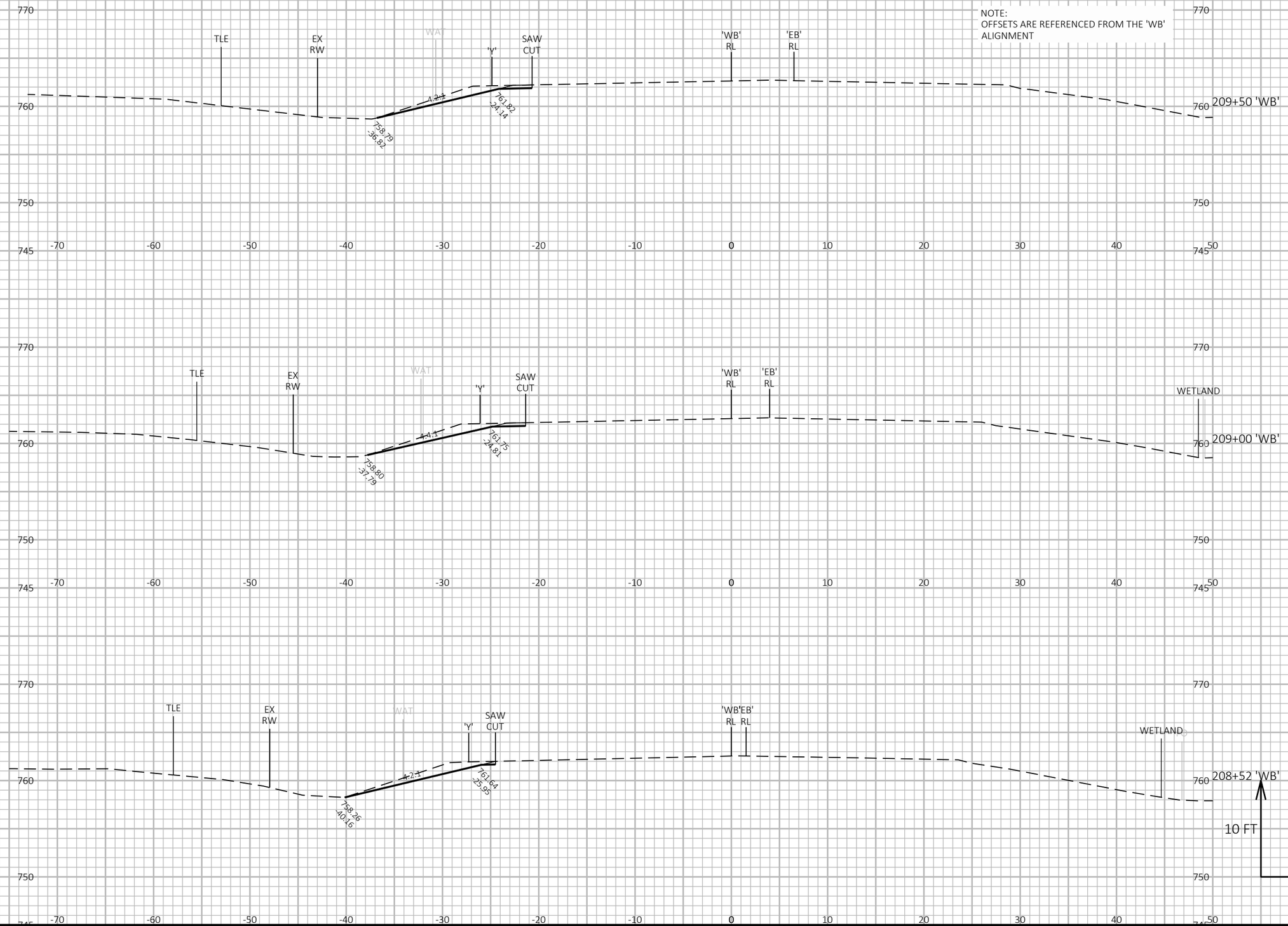
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 5 - CTH D	SHEET 689	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090251_XS_54-S5.DWG
LAYOUT NAME - 25

PLOT DATE : 6/28/2025 5:12 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

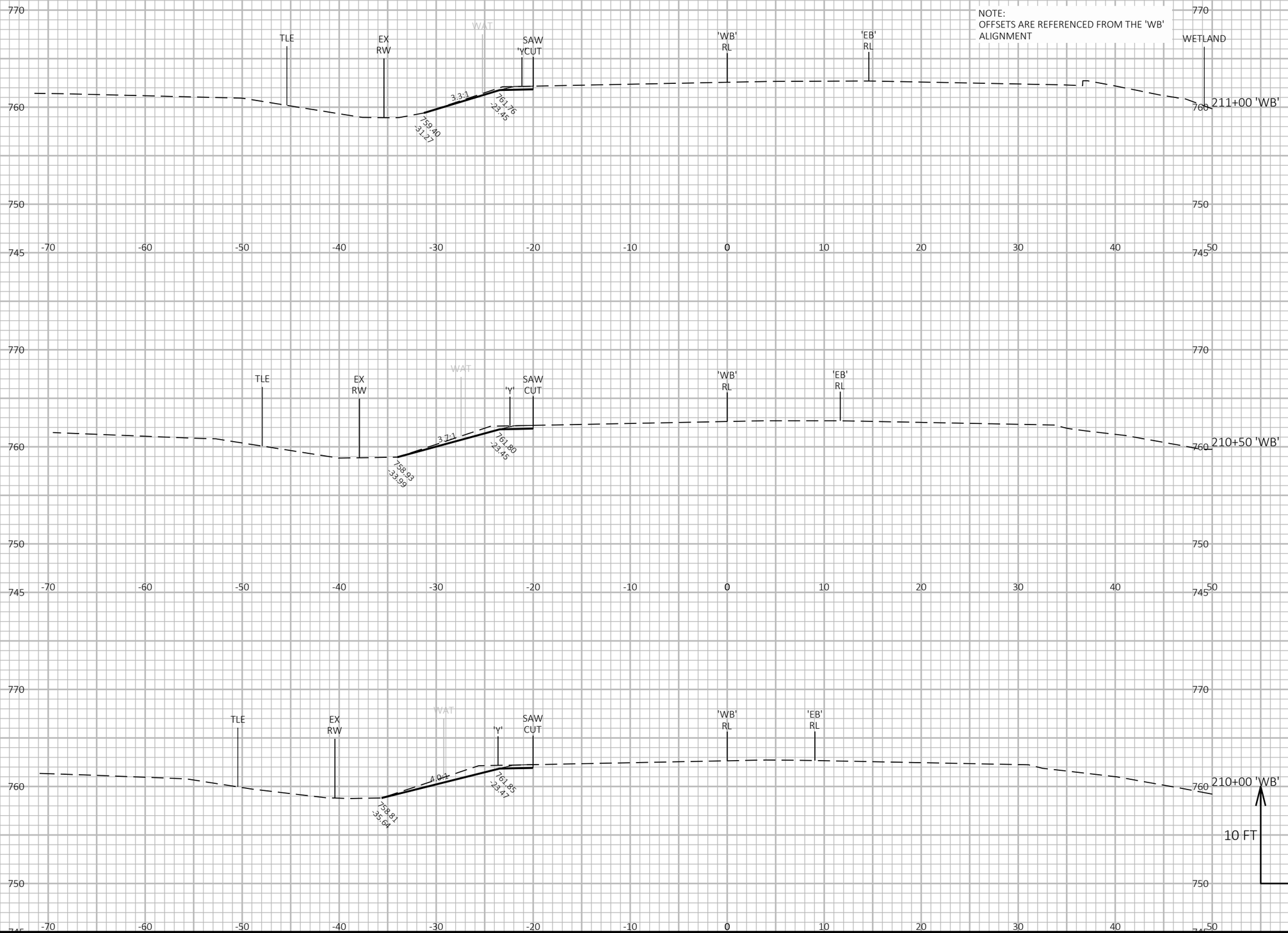
WISDOT/CADDS SHEET 49



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 6 - REMOVE TEMPORARY WIDENING 'Y'	SHEET 690	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090261_XS_54-S6.DWG
LAYOUT NAME - 01
PLOT DATE : 6/28/2025 5:31 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

NOTE:
OFFSETS ARE REFERENCED FROM THE 'WB' ALIGNMENT



PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 6 - REMOVE TEMPORARY WIDENING 'Y'	SHEET 691	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090261_XS_54-S6.DWG
LAYOUT NAME - 02

PLOT DATE : 6/28/2025 5:31 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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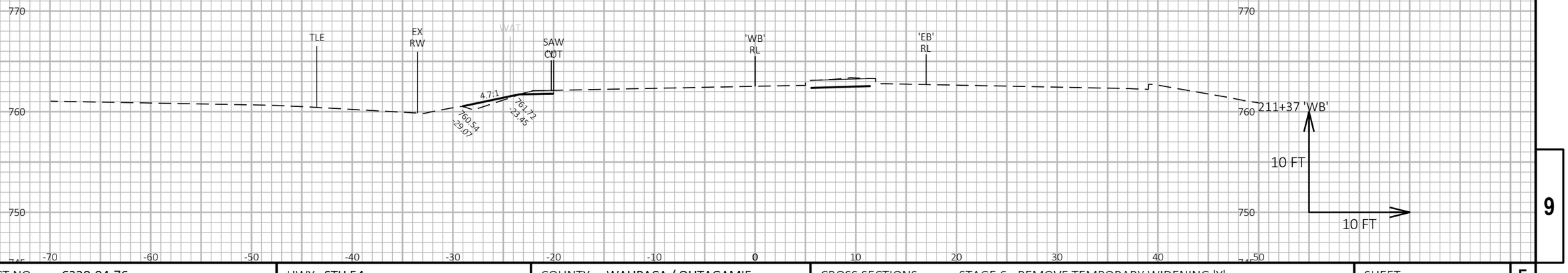
NOTE:
OFFSETS ARE REFERENCED FROM THE 'WB' ALIGNMENT



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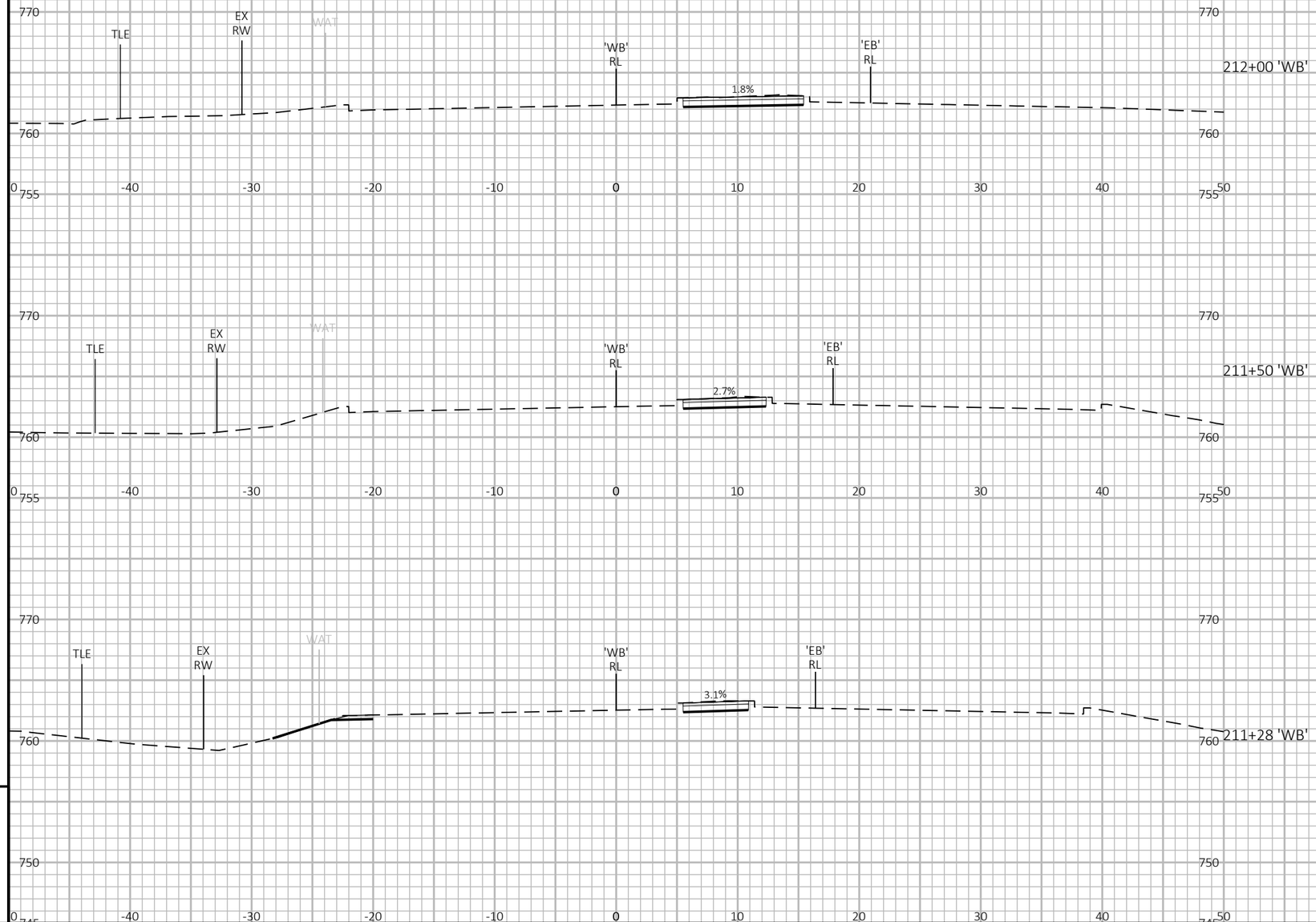
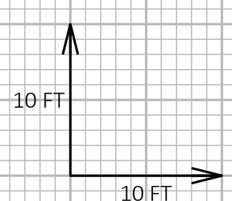
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 6 - REMOVE TEMPORARY WIDENING 'Y'	SHEET 692	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090261_XS_54-S6.DWG
LAYOUT NAME - 03

PLOT DATE : 6/28/2025 5:31 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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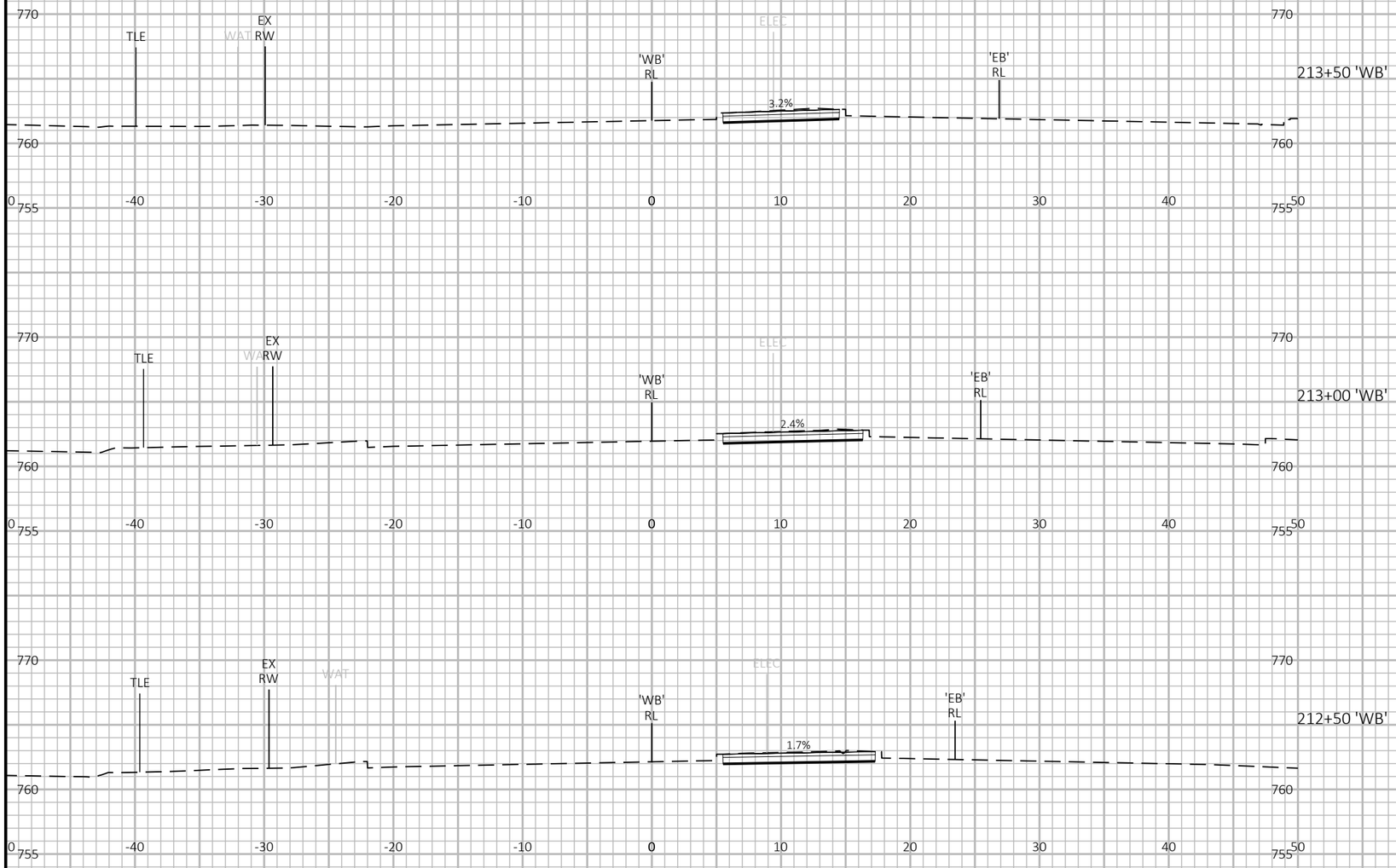
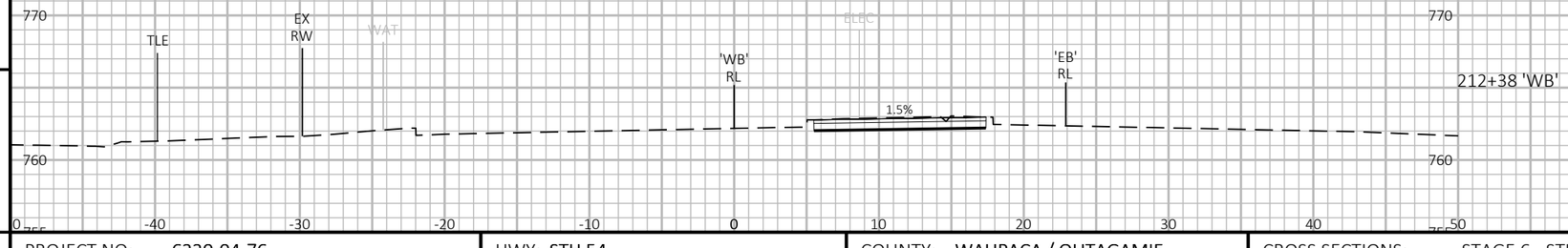
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 6 - STH 54 WEST MEDIAN ISLAND	SHEET 693	E

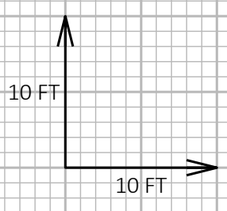
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090261_XS_54-S6.DWG
LAYOUT NAME - 04

PLOT DATE : 6/28/2025 5:31 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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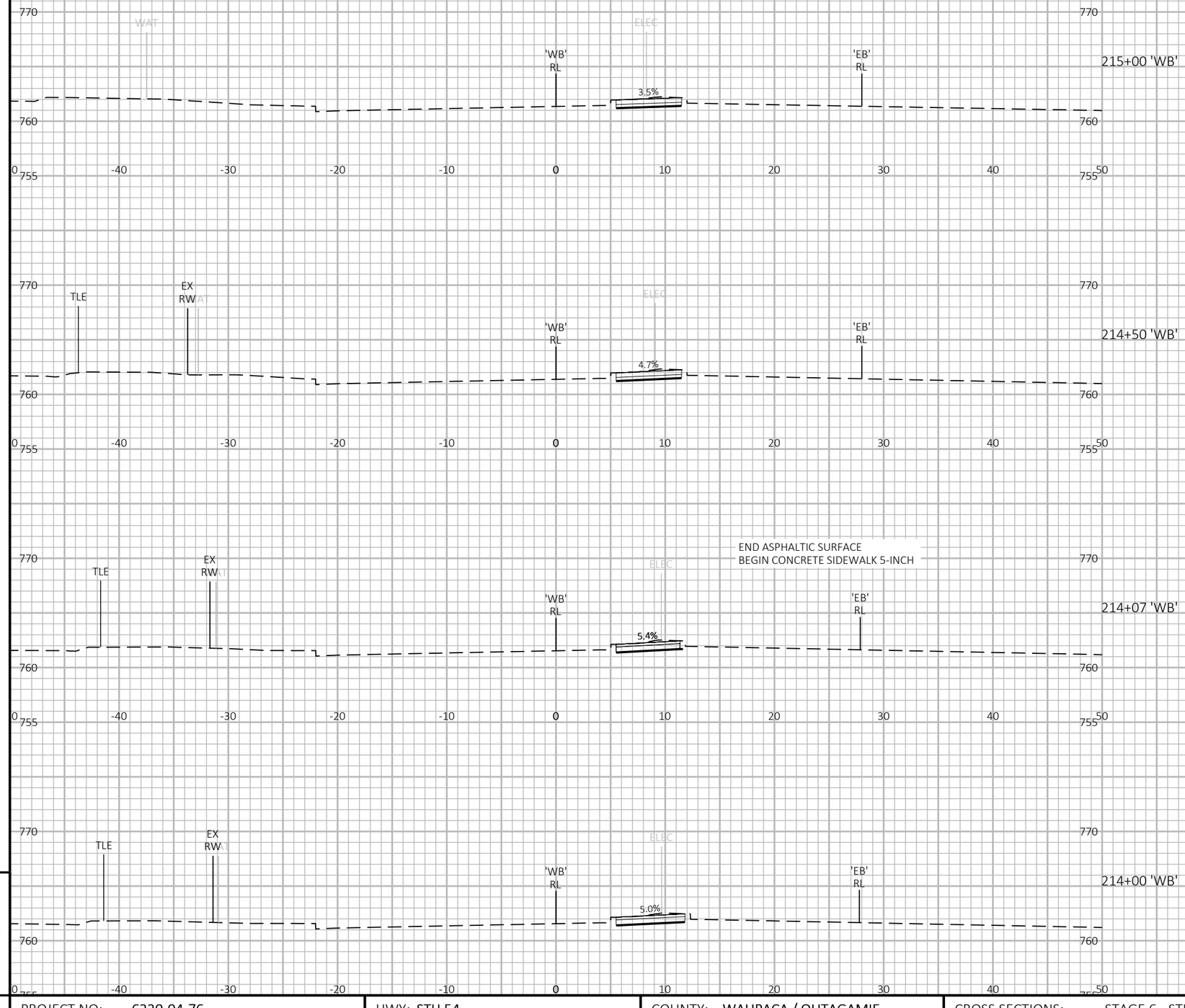
9

PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 6 - STH 54 WEST MEDIAN ISLAND	SHEET 694	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090261_XS_54-S6.DWG
LAYOUT NAME - 05

PLOT DATE : 6/28/2025 5:31 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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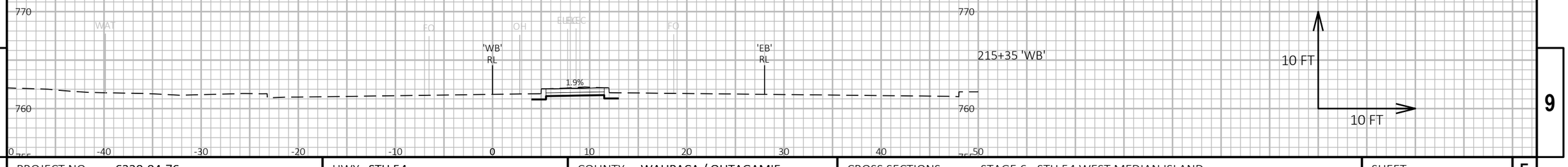
PROJECT NO: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 6 - STH 54 WEST MEDIAN ISLAND	SHEET 695	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090261_XS_54-S6.DWG
LAYOUT NAME - 06

PLOT DATE : 6/28/2025 5:31 PM PLOT BY : ADAM OSYPOWSKI 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: 6220-04-76	HWY: STH 54	COUNTY: WAUPACA / OUTAGAMIE	CROSS SECTIONS: STAGE 6 - STH 54 WEST MEDIAN ISLAND	SHEET 696	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6220-04-06 (STH 54)\C3D\SHEETS\090261_XS_54-S6.DWG
LAYOUT NAME - 07

PLOT DATE : 6/28/2025 5:31 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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