WIS DECEMBER 2023

PROJECT ID: 6420-00-72

WITH: N/A

COUNTY: WAUPACA

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control)
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 = 372

DESIGN DESIGNATION

A.A.D.T.	2024	=	2600 - 4200
A.A.D.T.	2044	=	3100 - 5000
D.H.V.	2044	=	400 - 640
D.D.		=	59/41
T.		=	6.4%
DESIGN SPEED		=	25-55 MPH
ESALS		=	912,500

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

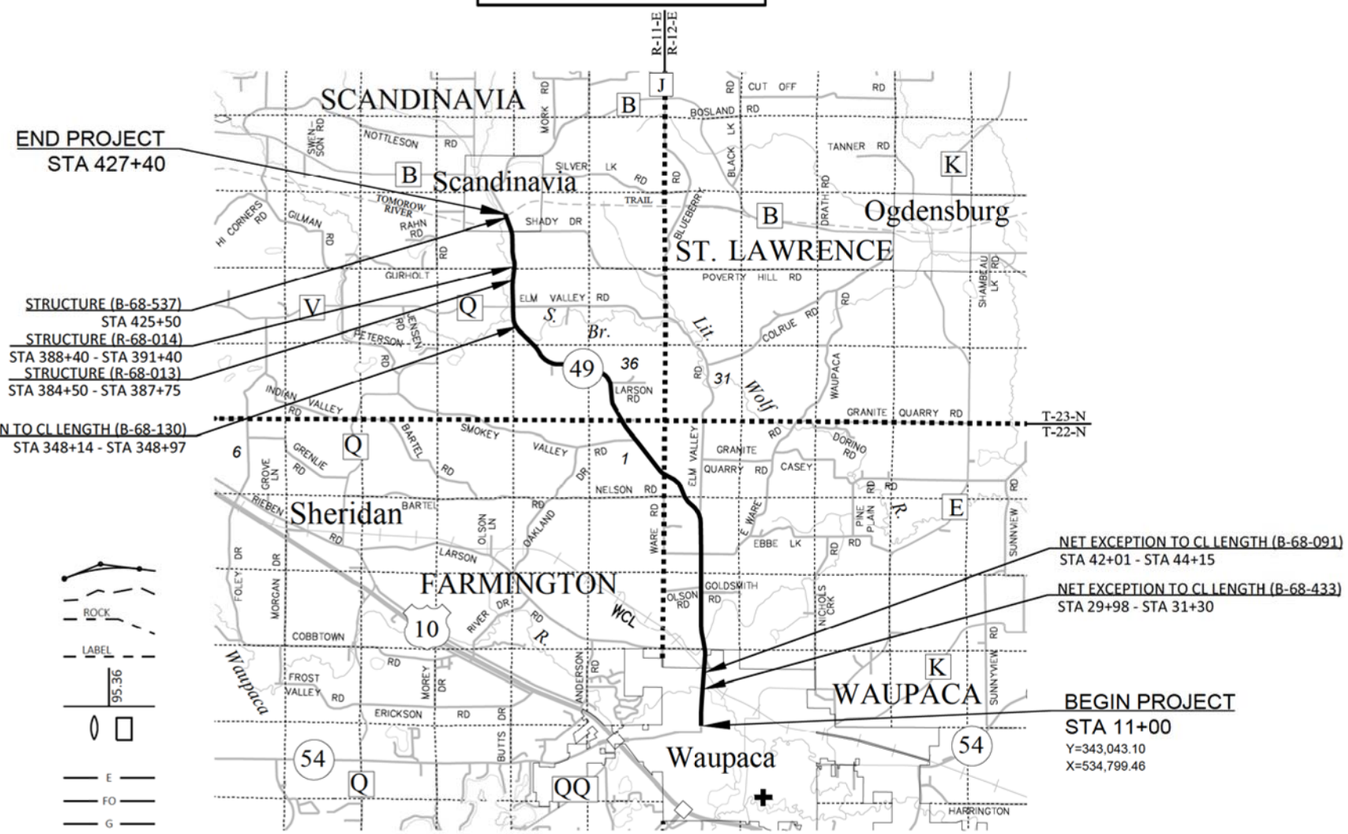
WAUPACA - NORTHLAND

NORTH STREET TO DEPOT STREET

STH 49

WAUPACA COUNTY

STATE PROJECT NUMBER
6420-00-72



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 7.805 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WAUPACA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12B.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6420-00-72	WISC 2024069	1

emcs
500 North 17th Avenue
Wausau, WI 54401
715.845.1081 Fax 715.845.1099

WISCONSIN PROFESSIONAL ENGINEER
SCOTT M. KAISER
E-41772-6
MOSINEE
WI

7/11/2023 (Date) Scott Kaiser (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	EMCS, INC.
Designer	EMCS, INC.
Project Manager	WENDY ARNESON
Regional Examiner	FRED SCHUNKE
Regional Supervisor	ELIZABETH NEMEC

APPROVED FOR THE DEPARTMENT

DATE: Digitally signed by Wendy Arneson Date: 2023.07.13 09:34:38-05'00' Wendy Arneson (Signature)

E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\6420072\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/11/2023 2:20 PM PLOT BY : SCOTT KAISER PLOT NAME :

GENERAL NOTES

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

AS-BUILTS USED FOR PLAN DEVELOPMENT

PROJECT NO: 4802, CONSTRUCTION YEAR: 1940
PROJECT NO: 113 B (2), CONSTRUCTION YEAR: 1940
PROJECT NO: 6420-04-71, CONSTRUCTION YEAR: 1999
PROJECT NO: 6420-50-67, CONSTRUCTION YEAR: 1999
PROJECT NO: 6420-04-72, CONSTRUCTION YEAR: 1999
PROJECT NO: 6420-04-73, CONSTRUCTION YEAR: 2011

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PAVING DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER PLAN
TRAFFIC CONTROL
DETOUR

UTILITIES

COMMUNICATIONS

AT&T WISCONSIN
CHUCK BARTELT
70 E. DIVISION STREET
FOND DU LAC, WI 54935
OFFICE PHONE: (920) 929-1013
MOBILE PHONE: (920) 410-5104
CB1461@ATT.COM

NSIGHT TELESERVICES
RICK VINCENT
470 SECURITY BOULEVARD
GREEN BAY, WI 54313
PHONE: (920) 617-7316
RICK.VINCENT@NSIGHT.COM

TDS TELECOM
JEFF SHAW
P.O. BOX 240, 202 OGDEN STREET
MEDFORD, WI 54451
OFFICE PHONE: (715) 748-6970
MOBILE PHONE: (715) 323-8464
JEFF.SHAW@TDSTELECOM.COM

ELECTRIC DISTRIBUTION

ALLIANT ENERGY
MATTHEW SCHMITZ
883 W SCOTT STREET
FOND DU LAC, WI 54937
PHONE: (920) 322-6683
MATTHEWSCHMITZ@ALLIANTENERGY.COM

WISCONSIN PUBLIC SERVICE CORP
DON LUTZOW
P.O. BOX 1166
WAUSAU, WI 54402
OFFICE PHONE: (715) 848-7487
MOBILE PHONE: (507) 848-4211
DONALD.LUTZOW@WISCONSINPUBLICSERVICE.COM

ELECTRIC TRANSMISSION

ATC MANAGEMENT INC.
DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: (608) 877-7650
DVOSBERG@ATCLLC.COM

GAS/PETROLEUM

ALLIANT ENERGY
MATTHEW SCHMITZ
883 W SCOTT STREET
FOND DU LAC, WI 54937
PHONE: (920) 322-6683
MATTHEWSCHMITZ@ALLIANTENERGY.COM

ANR PIPELINE CO.
KEVIN WAGER
NORTH 4956 OAKCREST DRIVE
BONDUEL, WI 54107
OFFICE PHONE: (715) 758-3342
MOBILE PHONE: (832) 954-9605
KEVIN_WAGER@TCENERGY.COM

WE ENERGIES
LARRY KOCH
1821 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
OFFICE PHONE: (715) 421-7249
MOBILE PHONE: (715) 421-9293
LARRY.KOCH@WE-ENERGIES.COM

SANITARY SEWER

CITY OF WAUPACA
JUSTIN BERRENS
111 S. MAIN STREET
WAUPACA, WI 54981
OFFICE PHONE: (715) 258-4420
MOBILE PHONE: (715) 250-3040
JBERRENS@CITYOFWAUPACA.ORG

VILLAGE OF SCANDINAVIA
DAVE MORK
375 N. MAIN STREET
SCANDINAVIA, WI 54977
MOBILE PHONE: (715) 281-9048
DKWKMORK@TDS.NET

WATER

CITY OF WAUPACA
JUSTIN BERRENS
111 S. MAIN STREET
WAUPACA, WI 54981
OFFICE PHONE: (715) 258-4420
MOBILE PHONE: (715) 250-3040
JBERRENS@CITYOFWAUPACA.ORG

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											

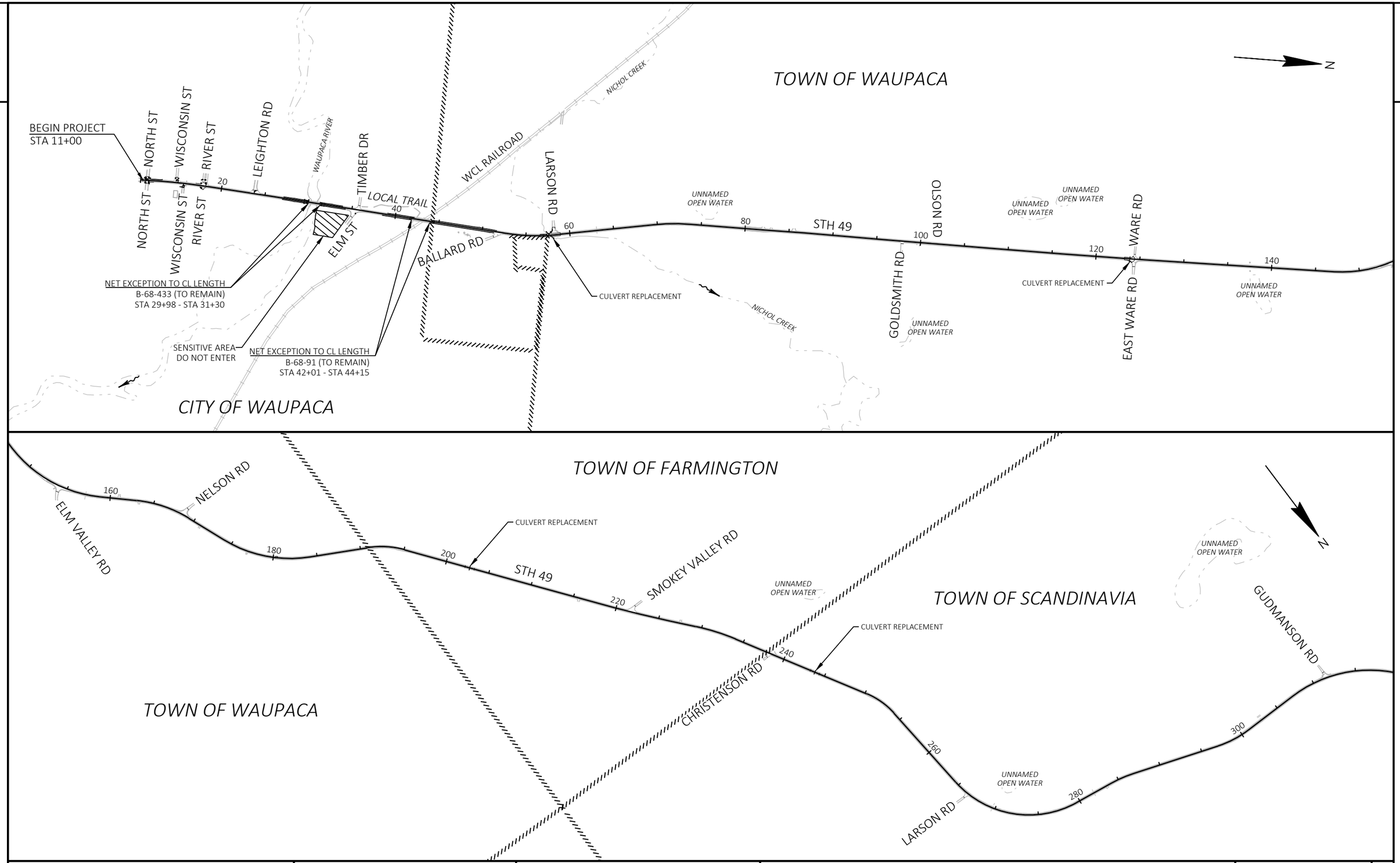
TOTAL PROJECT AREA = 91.1 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 2.4 ACRES

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

DNR LIAISON

CASEY JONES
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
625 E. CTY RD Y, SUITE 700
OSHKOSH, WI 54901-9731
(715) 213-6571
CASEY.JONES@WISCONSIN.GOV

2



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:09 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

TOWN OF SCANDINAVIA

PETERSON CREEK

UNNAMED OPEN WATER

TOMORROW RIVER STATE TRAIL

N

WINDY HILL RD

CTH Q

ELM VALLEY RD

STH 49

GUDMANSON RD

300

320

340

360

380

400

420

SOUTH BRANCH LITTLE WOLF RIVER

NET EXCEPTION TO CL LENGTH
B-68-130 (TO REMAIN)
STA 348+14 - STA 348+97

R-68-013 AND R-68-014
RETAINING WALLS
(SEE STRUCTURE PLANS)

UNNAMED
OPEN WATER

STORM SEWER REPLACEMENT

END PROJECT
STA 427+40

SHADY DR

DEPOT ST

B-68-537
(TO REMAIN)

VILLAGE OF SCANDINAVIA

SILVER LAKE

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PROJECT OVERVIEW	SHEET 4	E

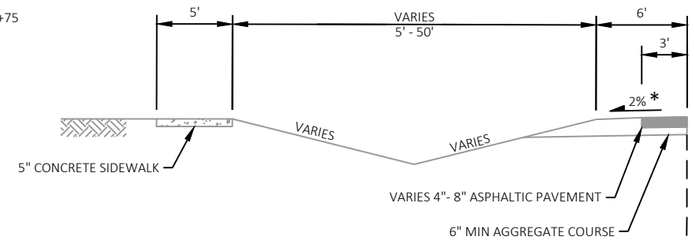
FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:09 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:1000 FT

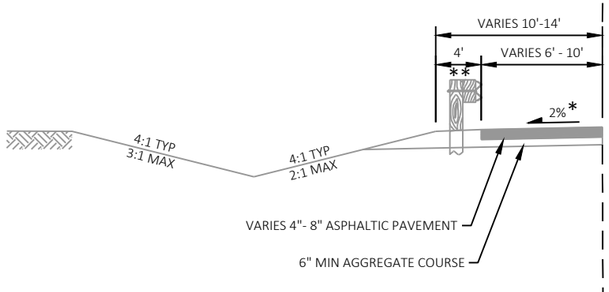
WISDOT/CADDS SHEET 42

2

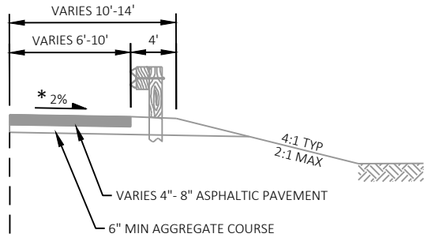
STA 11+00 - STA 17+75



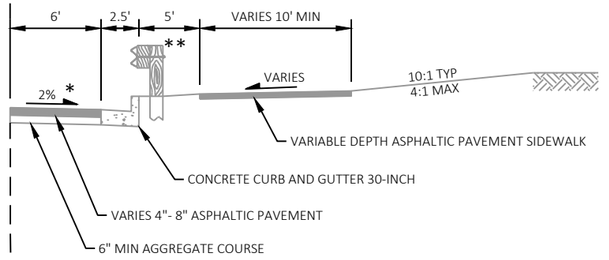
STA 28+39 - STA 29+98 (B-68-433)
STA 31+30 (B-68-433) - STA 32+63
STA 42+02 - STA 42+11 (B-68-91)
STA 44+48 (B-68-91) - STA 49+57
STA 347+35 - STA 348+09 (B-68-130)
STA 349+29 (B-68-130) - STA 350+57
STA 369+13 - STA 370+41
STA 384+38 - STA 386+66
STA 389+46 - STA 392+53

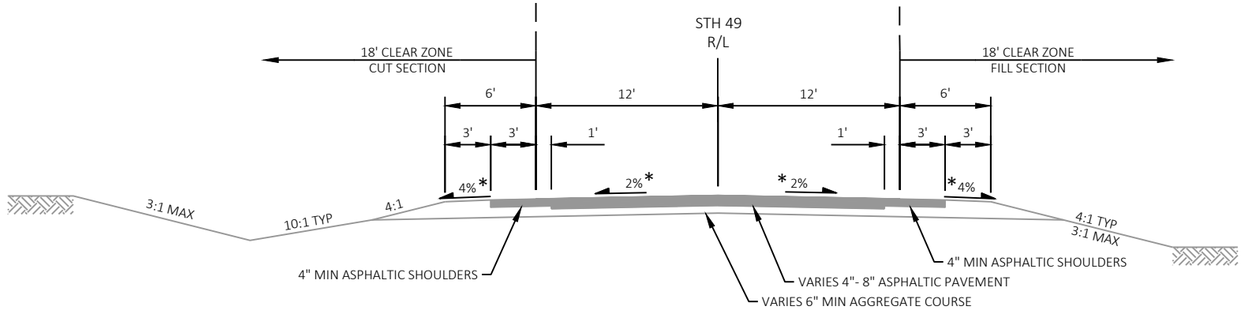


STA 28+39 - STA 29+98 (B-68-433)
STA 31+30 (B-38-433) - STA 32+63
STA 40+07 - STA 41+66 (B-68-91)
STA 44+03 (B-68-91) - STA 50+87
STA 345+93 - STA 347+88 (B-68-130)
STA 348+97 (B-68-130) - STA 349+92
STA 369+12 - STA 370+41



STA 424+61 - STA 426+51





TYPICAL EXISTING SECTION

STA 11+00 - STA 29+98 (B-68-433)
STA 31+30 (B-68-433) - STA 42+01 (B-68-91)
STA 44+15 (B-68-91) - STA 78+15
STA 82+15 - STA 144+71
STA 184+73 - STA 252+97
STA 287+14 - STA 307+19
STA 340+90 - STA 348+14 (B-68-130)
STA 348+97 (B-68-130) - STA 427+40

NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION , SEE SECTION 5 PLANS FOR SUPERELEVATION INFORMATION

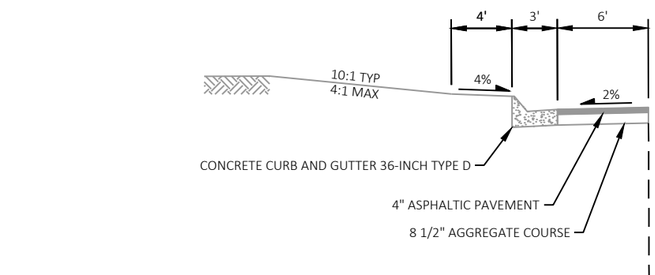
** SEE SECTION 5 PLANS FOR LOCATION OF EXISTING GUARDRAIL

CONCRETE APPROACH SLABS ARE LOCATED AT STRUCTURES B-68-433, B-68-91, AND B-68-130

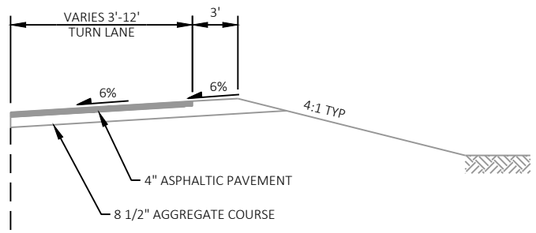
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 5	E

2

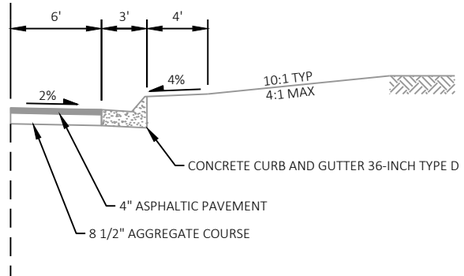
STA 80+09 - STA 81+83

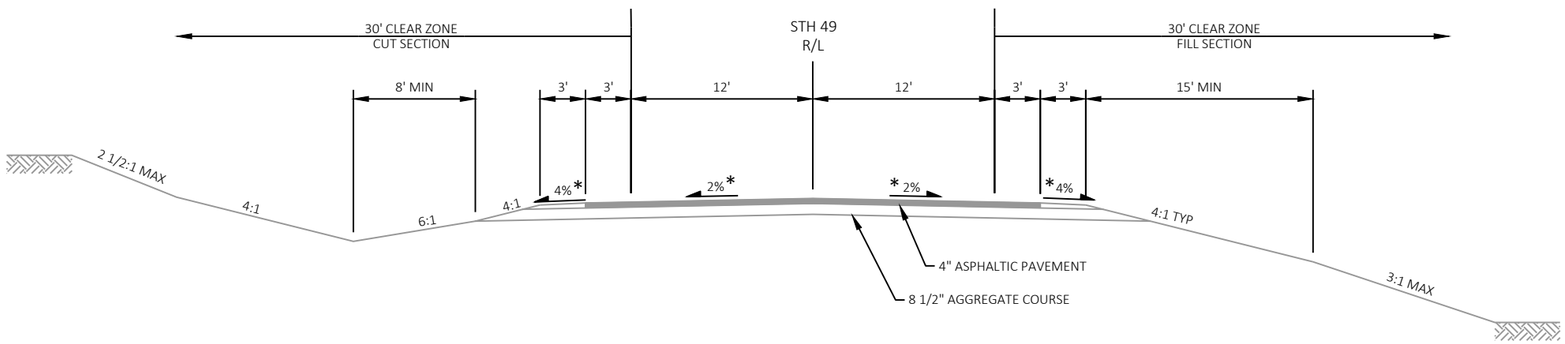


STA 151+08 - STA 153+38



STA 80+07 - STA 82+38
STA 336+21 - STA 338+94





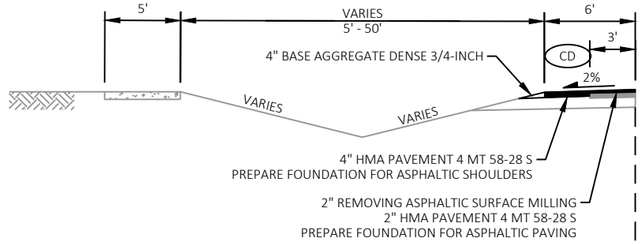
TYPICAL EXISTING SECTION

STA 78+15 - STA 82+15
STA 144+71 - STA 184+73
STA 252+97 - STA 287+14
STA 307+19 - STA 340+90

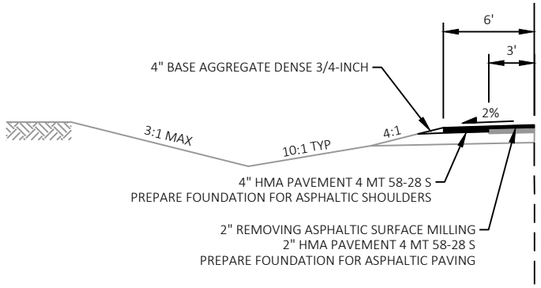
NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION , SEE SECTION 5 PLANS FOR SUPERELEVATION INFORMATION

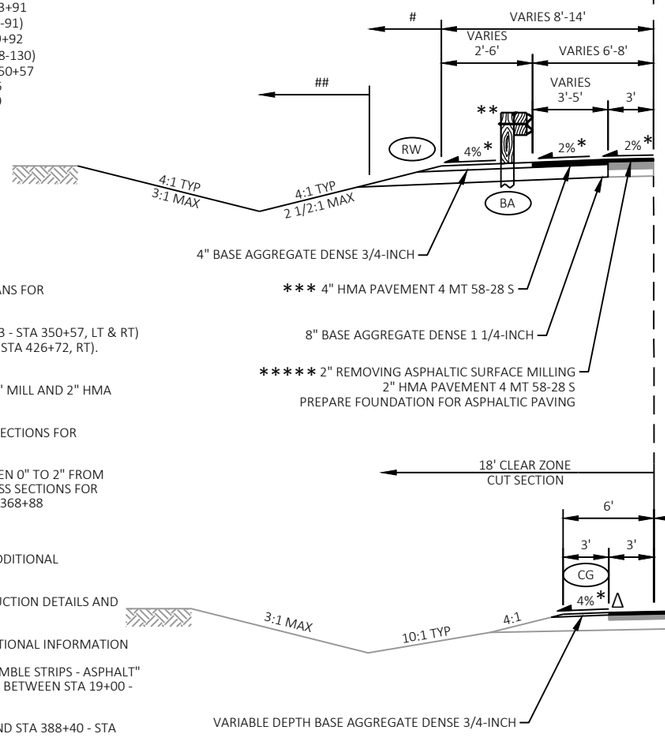
STA 11+00 - STA 17+75



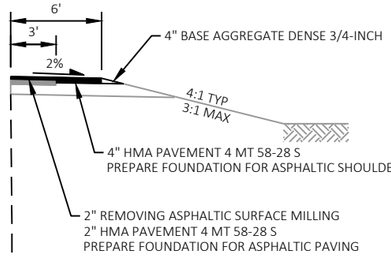
STA 17+75 - STA 27+12
STA 33+91 - STA 39+08
STA 49+92 - STA 51+64



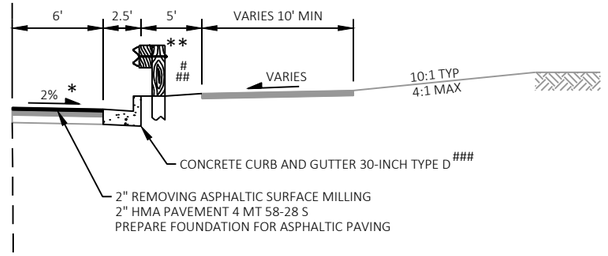
**** STA 27+12 - STA 29+98 (B-68-433)
**** STA 31+30 (B-68-433) - STA 33+91
STA 39+08 - STA 42+11 (B-68-91)
STA 44+48 (B-68-91) - STA 49+92
STA 347+35 - STA 348+14 (B-68-130)
STA 348+97 (B-68-130) - STA 350+57
STA 366+53 - STA 372+16
STA 382+32 - STA 394+39



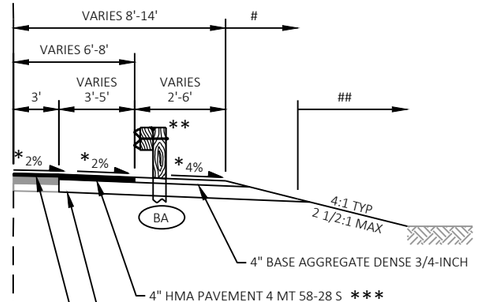
STA 11+00 - STA 27+00
STA 34+28 - STA 38+51
STA 50+98 - STA 51+36



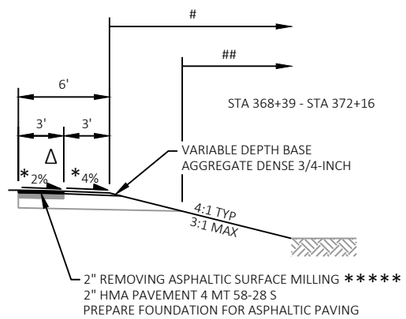
STA 423+32 - STA 427+40

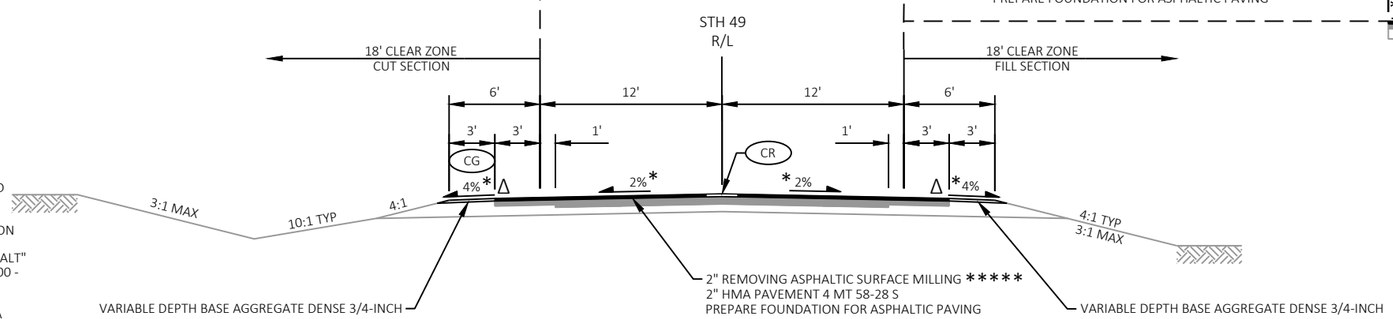


STA 27+00 - STA 29+98 (B-68-433) ****
STA 31+30 (B-38-433) - STA 34+30 ****
STA 38+51 - STA 41+67 (B-68-91)
STA 44+03 (B-68-91) - STA 50+98
STA 345+93 - STA 348+14 (B-68-130)
STA 348+97 (B-68-130) - STA 349+92



STA 368+39 - STA 372+16





TYPICAL FINISHED SECTION

STA 11+00 - STA 29+98 (B-68-433)
STA 31+30 (B-68-433) - STA 42+01 (B-68-91)
STA 44+15 (B-68-91) - STA 69+50
STA 73+88 - STA 78+15
STA 82+15 - STA 144+71
STA 184+73 - STA 252+97
STA 287+14 - STA 307+19
STA 340+90 - STA 348+14 (B-68-130)
STA 348+97 (B-68-130) - STA 427+40

NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION , SEE SECTION 5 PLANS FOR SUPERELEVATION INFORMATION

** EXISTING GUARDRAIL TO REMAIN AT B-68-130 APPROX. (STA 345+93 - STA 350+57, LT & RT) AND NORTH OF THE TOMORROW RIVER STATE TRAIL (STA 425+80 - STA 426+72, RT). SEE SECTION 5 PLANS FOR PROPOSED GUARDRAIL LOCATIONS.

*** IN AREAS WHERE EXISTING GUARDRAIL IS TO REMAIN, PROVIDE A 2" MILL AND 2" HMA OVERLAY ON THE SHOULDER

**** RECONSTRUCT FULL SHOULDER WIDTH VARIES (6' - 8'), SEE CROSS SECTIONS FOR ADDITIONAL INFORMATION

***** DEPTH OF REMOVING ASPHALTIC SURFACE MILLING VARIES BETWEEN 0" TO 2" FROM STA 365+55 TO STA 369+88. SEE CONSTRUCTION DETAILS AND CROSS SECTIONS FOR ADDITIONAL INFORMATION. DO NOT MILL FROM STA 366+55 - STA 368+88

\# SEEDING AND FERTILIZER

TOPSOIL AND EROSION MAT; SEE EROSION CONTROL PLANS FOR ADDITIONAL INFORMATION

CURB AND GUTTER REPLACEMENT LOCATION VARIES, SEE CONSTRUCTION DETAILS AND SECTION 5 PLANS FOR MORE INFORMATION

Δ PAVEMENT SAFETY EDGE REQ'D, SEE SDD "SAFETY EDGE" FOR ADDITIONAL INFORMATION

(CR) ASPHALTIC RUMBLE STRIPS, CENTERLINE, SEE SDD "CENTERLINE RUMBLE STRIPS - ASPHALT" FOR ADDITIONAL INFORMATION. PLACE CENTERLINE RUMBLE STRIP BETWEEN STA 19+00 - STA 423+32

(RW) PROPOSED RETAINING WALL FROM STA 384+50 - STA 387+75, LT AND STA 388+40 - STA 391+40, LT. SEE CONSTRUCTION DETAIL, STRUCTURE PLANS, AND SECTION 5 PLANS FOR ADDITIONAL INFORMATION.

(BA) EXISTING BASE AGGREGATE COURSE IN GOOD CONDITION TO REMAIN AS APPROVED BY THE ENGINEER

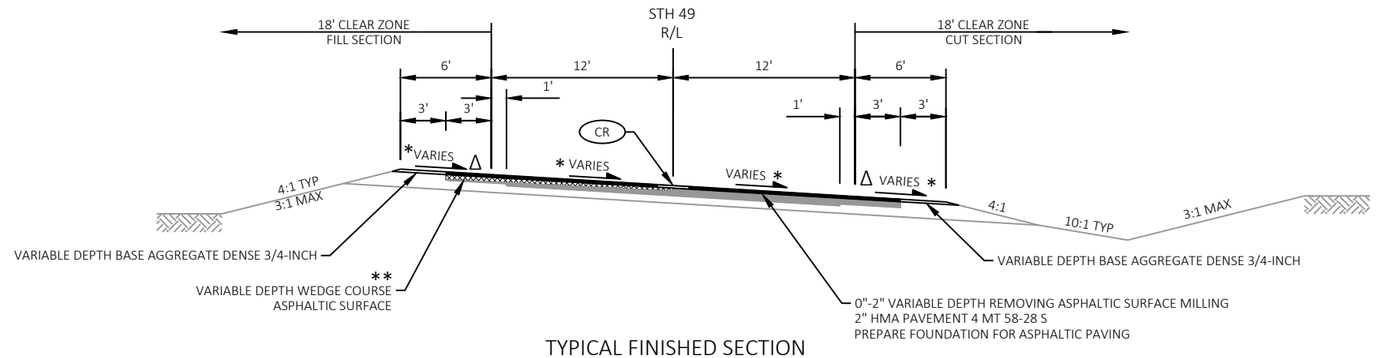
(CG) REPLACE CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE TBT FROM STA 427+06 - STA 427+40, LT WITH GUARDRAIL REPLACEMENT FROM STA 426+58 - STA 427+39, LT. SEE PAVING DETAILS FOR ADDITIONAL INFORMATION.

(CD) PLACE CONCRETE CURB AND GUTTER 30-INCH TYPE D FROM STA 11+83 - STA 13+10, LT.

EXISTING APPROACH SLABS TO REMAIN AT STRUCTURES B-68-433, B-68-91, AND B-68-130. MILL AND PAVE HMA SHOULDERS ADJACENT TO EXISTING APPROACH SLABS

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 7	E

2



TYPICAL FINISHED SECTION

STA 69+50 - STA 73+88

NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION , SEE SECTION 5 PLANS FOR SUPERELEVATION INFORMATION

** VARIABLE DEPTH WEDGE COURSE HMA PAVEMENT 5 MT 58-28 S IS ONLY NEEDED ON THE CURVE BETWEEN STA 69+50 - STA 73+88 FOR SUPERELEVATION CORRECTION.

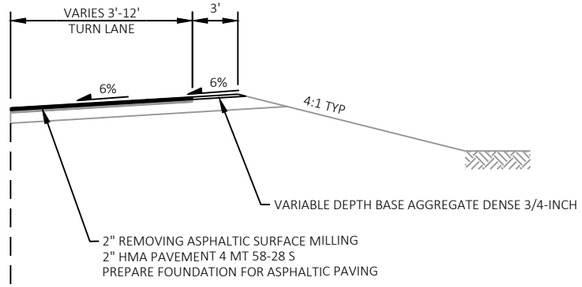
Δ PAVEMENT SAFETY EDGE REQ'D, SEE SDD "SAFETY EDGE" FOR ADDITIONAL INFORMATION

(CR) ASPHALTIC RUMBLE STRIPS, CENTERLINE, SEE SDD "CENTERLINE RUMBLE STRIPS - ASPHALT" FOR ADDITIONAL INFORMATION

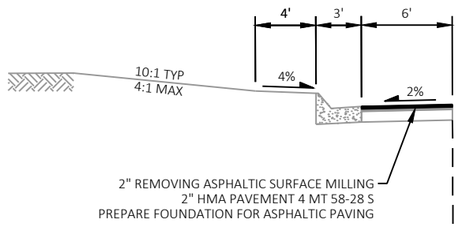
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 8	E

2

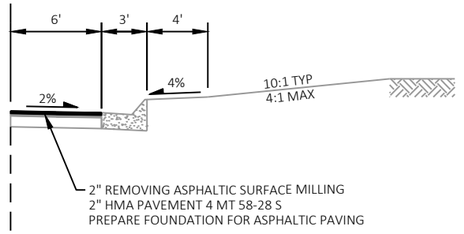
STA 151+08 - STA 153+38

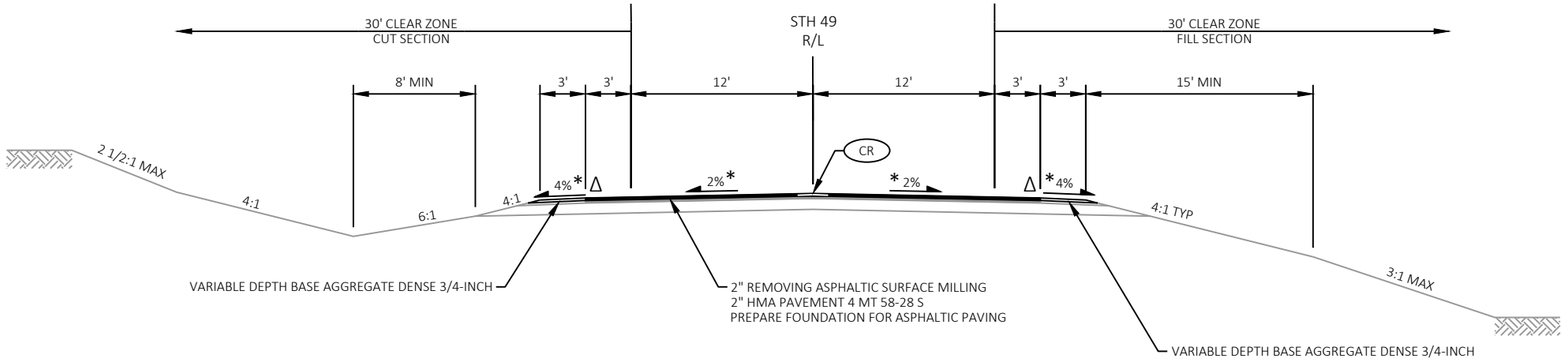


STA 80+09 - STA 81+83



STA 80+07 - STA 82+38
STA 336+21 - STA 338+94





TYPICAL FINISHED SECTION

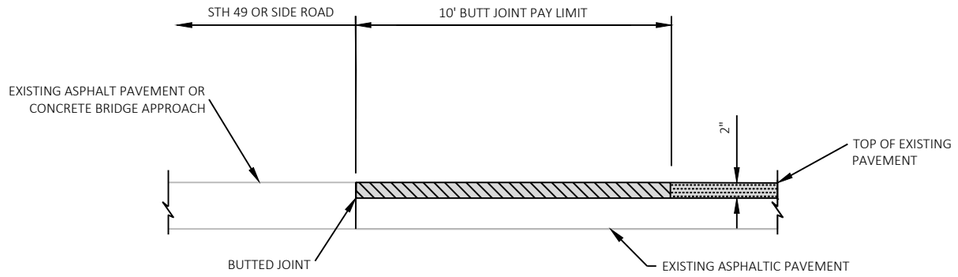
STA 78+15 - STA 82+15
STA 144+71 - STA 184+73
STA 252+97 - STA 287+14
STA 307+19 - STA 340+90

NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION , SEE SECTION 5 PLANS FOR SUPERELEVATION INFORMATION

Δ PAVEMENT SAFETY EDGE REQ'D, SEE SDD "SAFETY EDGE" FOR ADDITIONAL INFORMATION

(CR) ASPHALTIC RUMBLE STRIPS, CENTERLINE, SEE SDD "CENTERLINE RUMBLE STRIPS - ASPHALT" FOR ADDITIONAL INFORMATION



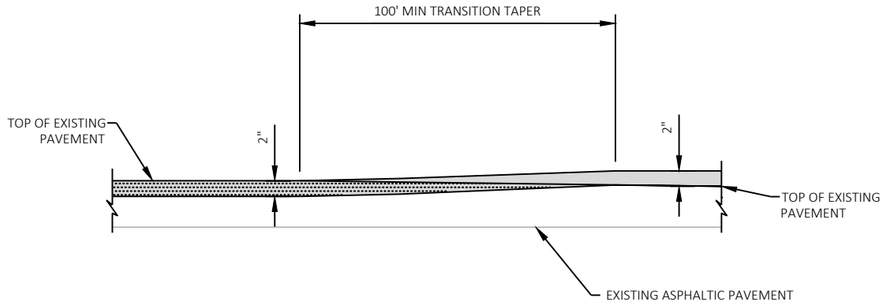
REMOVING ASPHALTIC SURFACE BUTT JOINTS
DO NOT REMOVE MATERIAL UNDER THIS ITEM UNTIL 24 HOURS BEFORE PAVING

REMOVING ASPHALTIC SURFACE MILLING

PROPOSED HMA PAVEMENT OVERLAY

MAINLINE AND SIDE ROAD BUTT JOINT DETAIL

STA 11+00 (BEGIN PROJECT)
STA 29+77 (B-68-433)
STA 31+51 (B-68-433)
STA 41+66 (B-68-91)
STA 44+48 (B-68-91)
STA 347+90 (B-68-130)
STA 349+21 (B-68-130)
STA 427+40 (END PROJECT)
SIDE ROADS (SEE SECTION 5 PLANS FOR LOCATIONS)

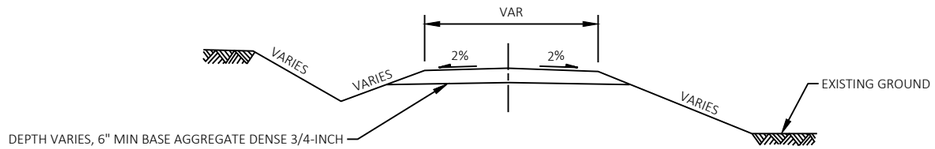


REMOVING ASPHALTIC SURFACE MILLING

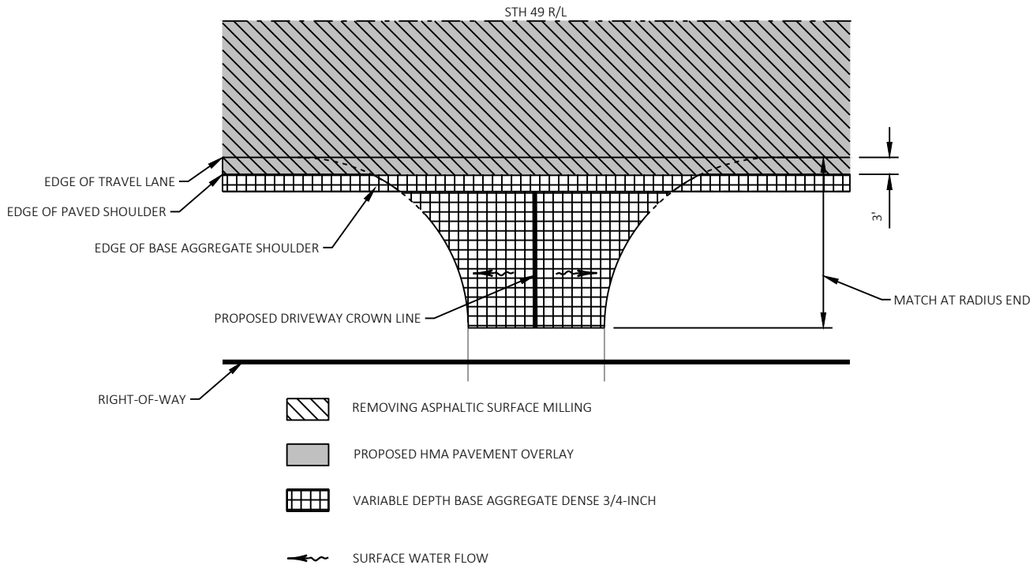
PROPOSED HMA PAVEMENT OVERLAY

REMOVING ASPHALTIC SURFACE MILLING TRANSITION DETAIL

STA 365+55 - STA 366+55
STA 368+88 - STA 369+88



TYPICAL CROSS
SECTION



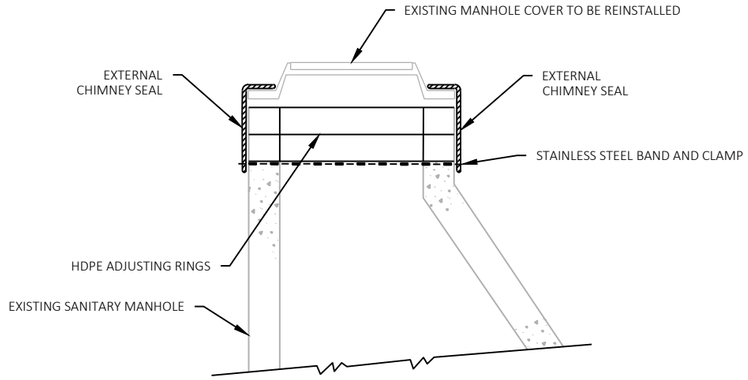
PLAN VIEW

DRIVEWAY DETAIL FOR DRAINAGE IMPROVEMENT

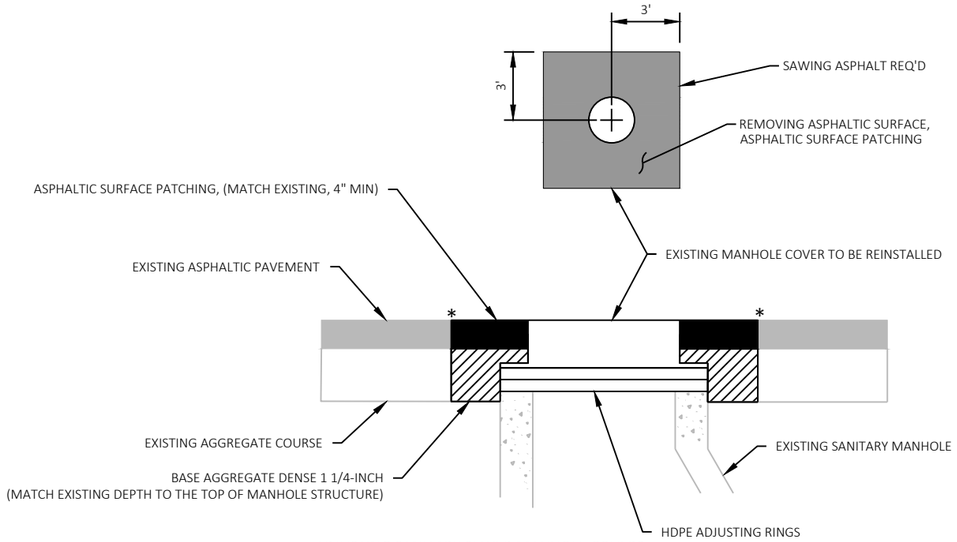
STA 389+00, RT
STA 399+10, RT
STA 404+60, RT

NOTES
CROWN DRIVEWAY TO IMPROVE DRAINAGE AND MINIMIZE AGGREGATE WASHING ONTO STH 49

SEE SDD "DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL" FOR ADDITIONAL INFORMATION.



EXTERNAL CHIMNEY SEAL DETAIL FOR SANITARY SEWER MANHOLES



ADJUSTING SANITARY SEWER MANHOLE COVERS

ADJUSTING SANITARY MANHOLE COVERS AND WATER VALVES DETAIL

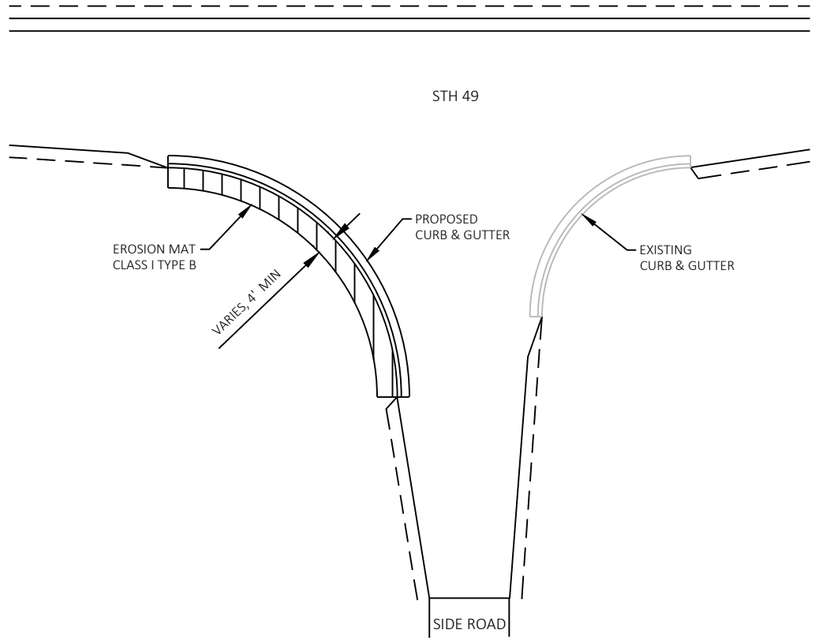
SEE SECTION 5 PLANS AND MISCELLANEOUS QUANTITIES FOR LOCATIONS

NOTES

∗ SAWCUT REQ'D

ASPHALTIC SURFACE PATCHING AND COVER PLATE TEMPORARY ARE FOR MANAGEMENT OF TRAFFIC

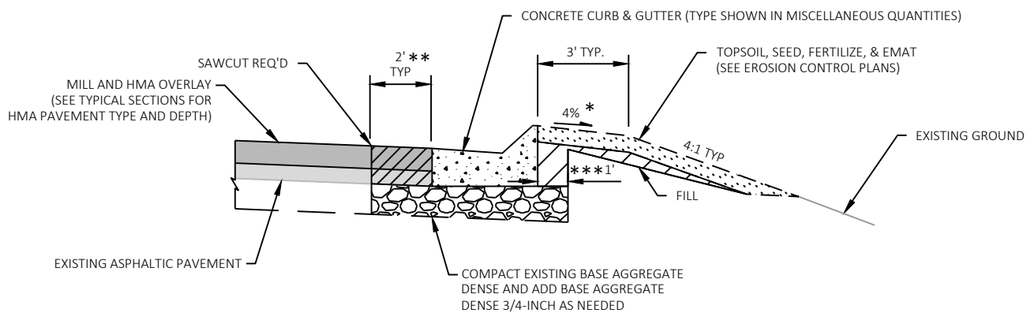
THE PATCHING FOR WATER VALVES SHOULD FOLLOW A SIMILAR DETAIL, EXCEPT THAT THE ANTICIPATED PAVEMENT REMOVALS ARE ESTIMATED AT 3' X 3'



EROSION MAT DETAIL AT RURAL INTERSECTIONS

LARSON DR
WARE RD
SHADY DR

NOTE
SEE EROSION CONTROL PLANS FOR ADDITIONAL INFORMATION.



NOTES

COMPLETE CURB & GUTTER REPLACEMENTS AND ASPHALTIC SURFACE PATCHING TO MATCH THE EXISTING SURFACE PRIOR TO THE MILL AND OVERLAY OF STH 49

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

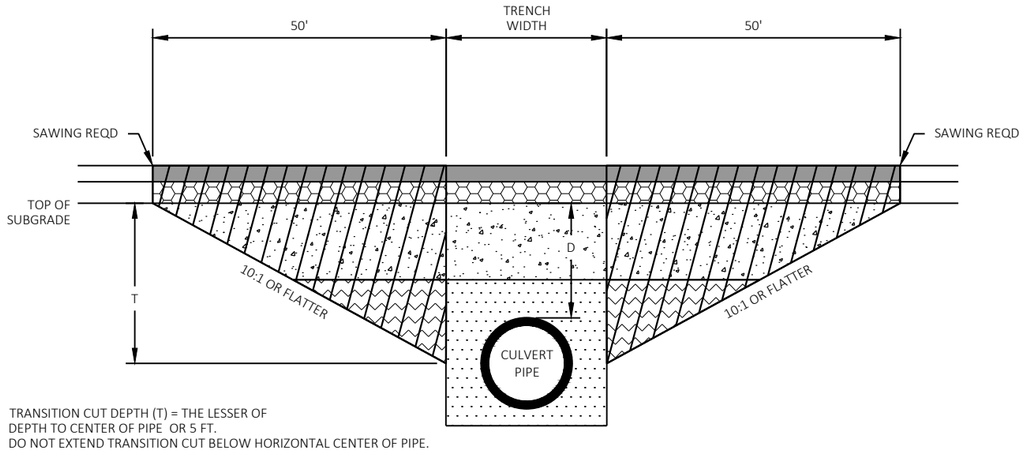
∗ CURB & GUTTER REPLACEMENT AT NORTH ST, WISCONSIN ST AND BETWEEN STA 424+21 - STA 424+60, RT, AND STA 426+22 - STA 426+57, RT, MATCH EXISTING TERRACE SLOPE

∗∗ ASPHALTIC SURFACE PATCHING WIDTH VARIES 2' - 20'. SEE INTERSECTION DETAILS, CURB RAMP DETAILS AND SECTION 5 PLAN SHEETS FOR ADDITIONAL INFORMATION

∗∗∗ BASE AGGREGATE WIDTH BEHIND CURB AND GUTTER IS 2' FROM STA 424+21 - STA 424+60 RT AND STA 426+21 - STA 427+40 RT

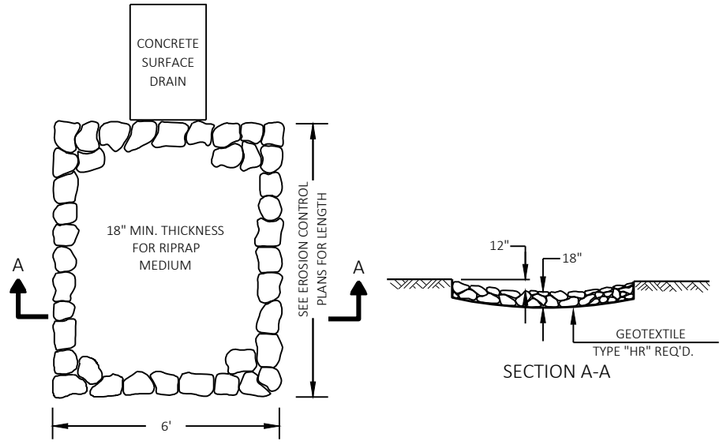
DETAIL OF CURB & GUTTER INSTALLATION

NORTH ST
WISCONSIN ST
LARSON DR
WARE RD
SHADY DR
STA 424+21 - STA 424+60, RT
STA 426+21 - STA 427+40, RT



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



SECTION A-A

RIPRAP MEDIUM TREATMENT DETAIL AT CONCRETE SURFACE DRAINS

STA 29+53, LT&RT

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 THE MILLING AND OVERLAY OPERATIONS

PLACE ASPHALTIC SURFACE AFTER CULVERT PIPE INSTALLATION AND BEFORE THE MILLING AND OVERLAY OPERATIONS

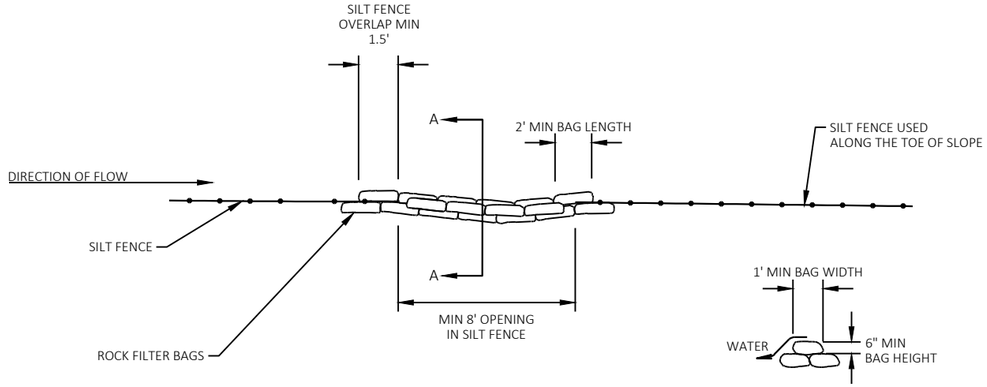
* DEPTH IS MEASURED AT THE DEEPEST PORTION OF THE PIPE WITHIN THE SUBGRADE SHOULDER POINTS

LEGEND

- PROPOSED SURFACE (4" MIN ASPHALTIC SURFACE, MATCH EXISTING PAVEMENT DEPTH)
- PROPOSED BASE (8" MIN BASE AGGREGATE DENSE 1 1/4-INCH, MATCH EXISTING BASE DEPTH)
- TRENCH BACKFILL
- TRENCH OR FOUNDATION BACKFILL
- FOUNDATION BACKFILL
- TRANSITION CUT

CULVERT PIPE TRANSITION DETAIL

ROUTE	CULVERT #	STA (AT C/L)	DEPTH D (FT)*	PIPE SIZE (IN)
STH 49	68049006495	57+75	2.2'	72"
STH 49	68049006499	123+85	0.9'	14"X23"
STH 49	68049006502	202+75	1.6'	19"X30"
STH 49	68049006503	243+82	1.1'	14"X23"



TOP VIEW

SECTION A-A

DETAIL OF ROCK BAGS USED FOR SILT FENCE RELIEF

PAID AS ROCK BAGS

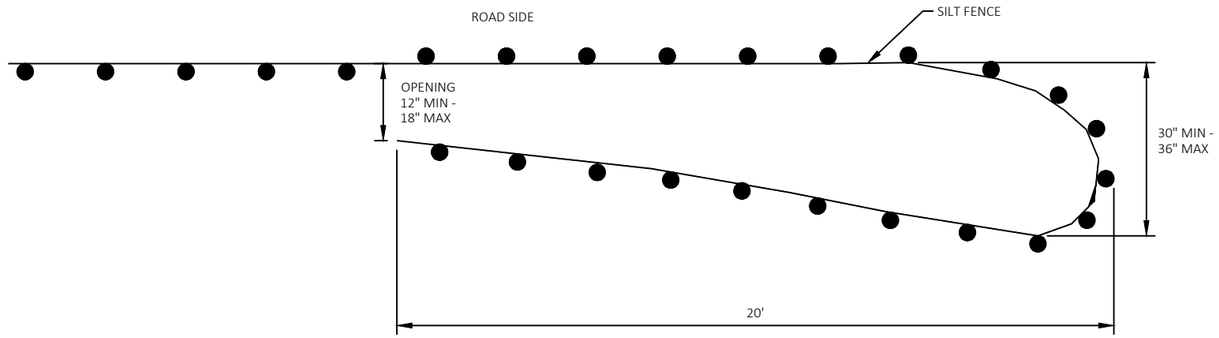
NOTE
SEE EROSION CONTROL PLANS FOR LOCATIONS

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CONSTRUCTION DETAILS	SHEET 12	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 03

PLOT DATE : 10/6/2023 7:55 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



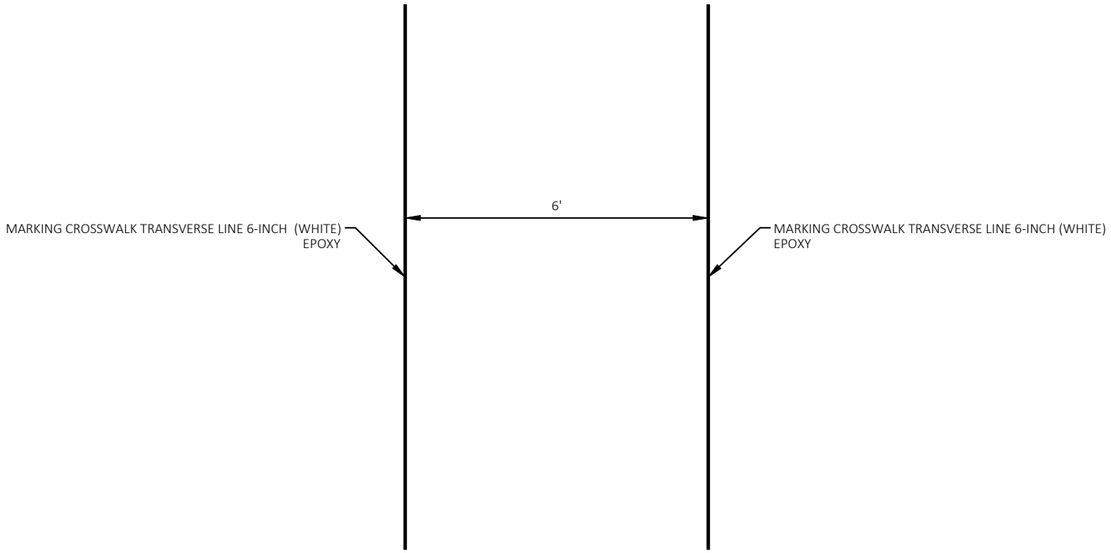
PLAN VIEW

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.

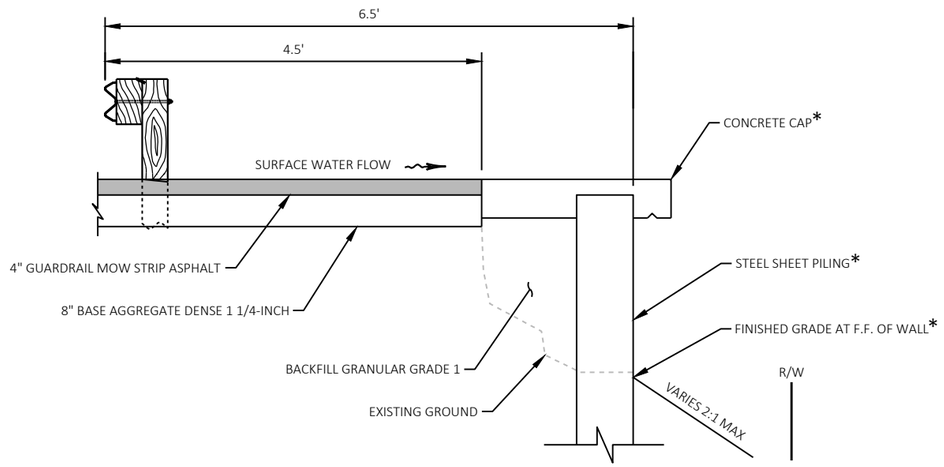
SEE EROSION CONTROL SHEETS FOR LOCATIONS.

TEMPORARY SMALL ANIMAL TURN-AROUND



CROSSWALK MARKING DETAIL

STA 11+26
STA 17+63



LOOKING SOUTH

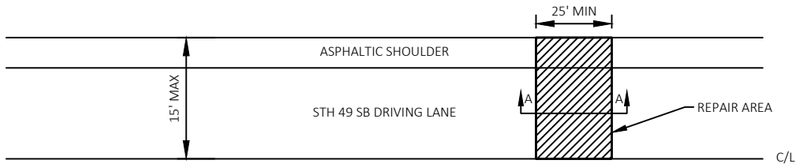
RETAINING WALL DETAIL

R-68-13
R-68-14

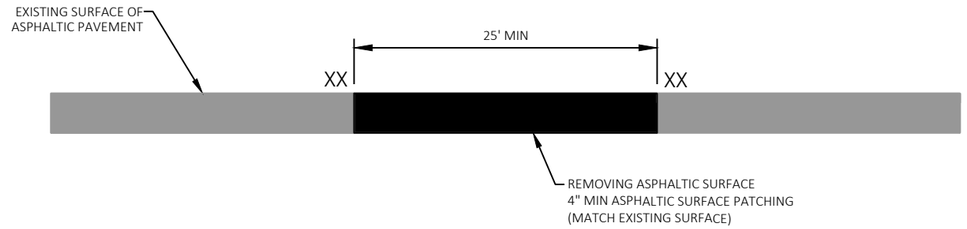
NOTE

* SEE STRUCTURE PLANS FOR INFORMATION FOR THE RETAINING WALLS.

2



PLAN VIEW



SECTION A-A

FULL DEPTH REPAIR DETAIL

STA 180+25 - STA 180+50, LT

NOTES

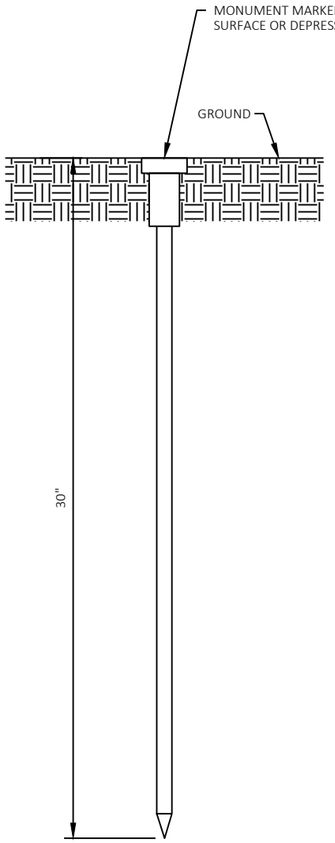
FULL DEPTH REPAIR PAVEMENT AREA SIZE IS ESTIMATED AND MAY VARY DEPENDING ON OBSERVED FIELD CONDITIONS.

THE ASPHALTIC SURFACE PATCHING SHALL BE PLACED NO GREATER THAN THE MAXIMUM ALLOWABLE THICKNESS PER STANDARD SPEC 460.

XX FULL DEPTH SAWCUT REQUIRED ON ALL EDGES OF THE PATCH

WISDOT MONUMENT CAP MARKER LOGO (SSDR130)

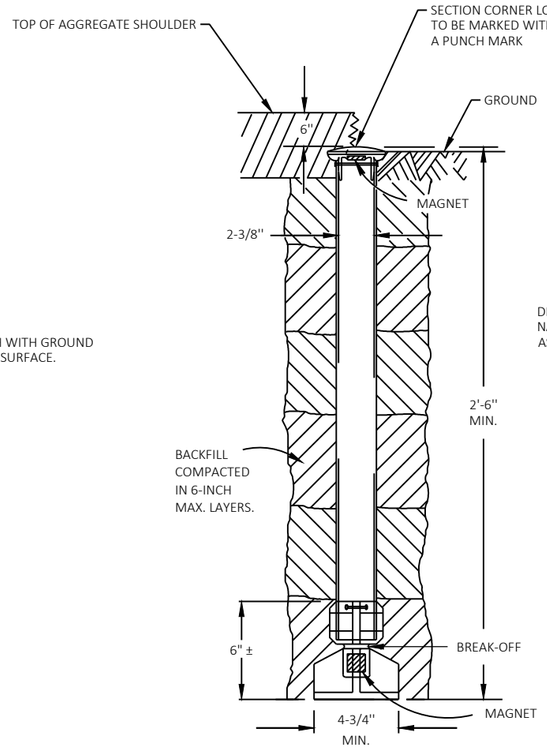
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNTSEN DRIVABLE MONUMENT SSDR130

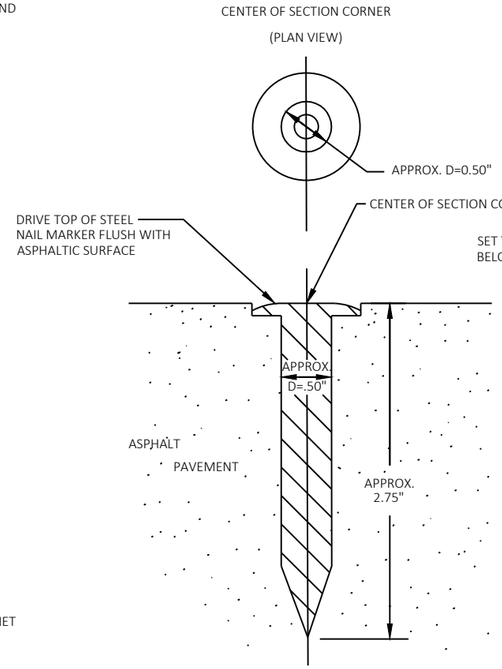
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

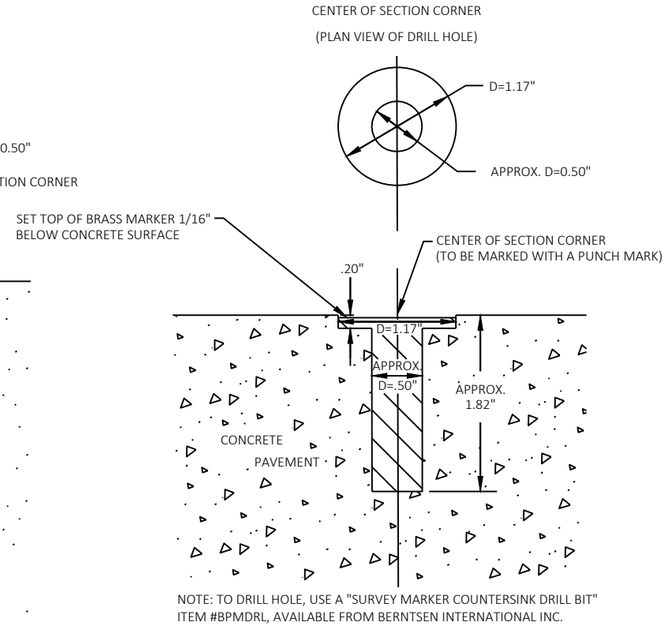
BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



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

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

BERNTSEN BP - 1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

GENERAL NOTES

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

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

CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

NOTES

TEMPORARY DIVERSION CHANNEL SHOULD BE CAPABLE OF CARRYING THE Q2 FLOW, WITH A FREEBOARD OF 6-INCHES (MIN) DURING THE CONSTRUCTION PERIOD AND MAINTAIN A SUITABLE DEPTH AND VELOCITY TO ALLOW THE PASSAGE OF MIGRATING FISH AND AQUATIC SPECIES. FISH THAT BECOME STRANDED IN DEWATERED AREAS OR TEMPORARY CHANNELS SHOULD BE CAPTURED AND RETURNED TO THE ACTIVE CHANNEL.

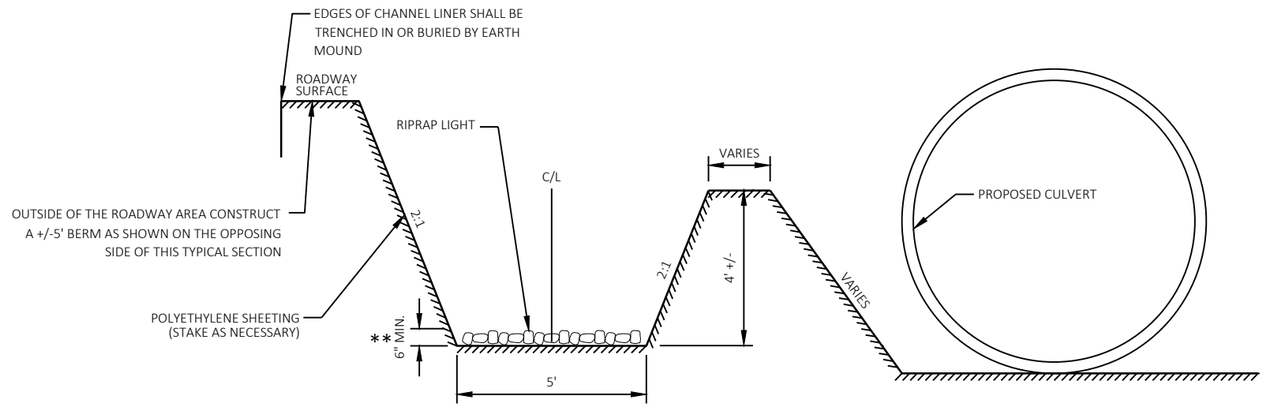
IF PERMANENT RIPRAP CONFLICTS WITH TEMPORARY DIVERSION CHANNEL, PLACE RIPRAP AFTER FLOW HAS BEEN DIVERTED TO NEW CULVERT AND TEMPORARY DIVERSION CHANNEL HAS BEEN BACKFILLED. TEMPORARY SANDBAGS AND STAGING OF RIPRAP PLACEMENT MAY BE REQUIRED.

WORK FOR TEMPORARY DIVERSION CHANNEL AND ANY TEMPORARY SANDBAGS USED AT THE BOX CULVERT OR OTHER DIVERSION TECHNIQUES IMPLEMENTED WILL BE PAID UNDER THE FOLLOWING BID ITEMS:
-"RIPRAP LIGHT" AND "POLYETHYLENE SHEETING"

NICHOL CREEK
Q2 = 50 CFS
Q2 ELEVATION = 877.32±
ESTIMATED EXCAVATION VOLUME FOR TEMPORARY DIVERSION CHANNEL = 1250 CY (FOR INFORMATION ONLY)

USE AVAILABLE EROSION CONTROL ITEMS IN THE CONTRACT TO IMPLEMENT ANY ADDITIONAL EROSION CONTROL ITEMS NECESSARY TO STABILIZE THE SITE DURING REPLACEMENT OF CULVERT.

** INCREASE HEIGHT OF LIGHT RIPRAP UP SIDES OF CHANNEL ON TIGHT CORNERS, AS REQUIRED, TO MINIMIZE EROSION AND STABLIZE POLYETHYLENE SHEETING



TYPICAL SECTION OF TEMPORARY DIVERSION CHANNEL

NICHOL CREEK

LEGEND
- SLOPE INTERCEPT
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

PERMANENT ROADWAY SLOPE INTERCEPTS
PERMANENT ROADWAY SLOPE INTERCEPT
ESTIMATED TEMPORARY DIVERSION CHANNEL
TEMPORARY DIVERSION CHANNEL AND ESTIMATED LIMITS OF IMPACTS
TEMPORARY DIVERSION CHANNEL AND ESTIMATED LIMITS OF IMPACTS
PERMANENT ROADWAY SLOPE INTERCEPTS
PERMANENT ROADWAY SLOPE INTERCEPTS
LARSON RD
STH 49
NICHOL CREEK
55+00
56+00
57+00
58+00
59+00
60+00
R/W
N

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CONSTRUCTION DETAILS	SHEET 16	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021002-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 6/29/2023 7:10 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

XXXXXXX SAWCUT

4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION

C1 CONCRETE CURB & GUTTER 30-INCH TYPE D

F1 ASPHALTIC FLUMES

Y1 REMOVING ASPHALTIC SURFACE MILLING AND HMA PAVEMENT (SEE TYPICAL SECTIONS)

SURFACE WATER FLOW DIRECTION

NOTES

RADIUS AND DIMENSIONS ARE SHOWN TO CURB & GUTTER FLANGELINE

COMPLETE ASPHALTIC SURFACE TO MATCH THE EXISTING SURFACE PRIOR TO THE MILL AND OVERLAY OF STH 49 (SEE CONSTRUCTION DETAILS)

NORTH ST

R/W

N

END CONSTRUCTION, 43' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 12+00.00
O/S 16.00' LT
ELEV = 888.57'

STA 12+50.00
O/S 16.00' LT
ELEV = 887.93'

STA 13+00.00
O/S 16.00' LT
ELEV = 887.04'

STA 13+17.54
O/S 16.00' LT

STA 13+10.00
O/S 16.00' LT
ELEV = 886.84'

SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION

14'

18'

11+00

12+00

13+00

STH 49

END CONSTRUCTION, 35' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

GUY POLE

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	INTERSECTION DETAILS	SHEET 17	E

LEGEND

xxxxxxx	SAWCUT
	4" MIN ASPHALTIC SURFACE (MATCH EXISTING PAVEMENT DEPTH), SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
B1	BASE AGGREGATE DENSE 3/4-INCH, 6" (THRU DRIVEWAY)
C1	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
F1	ASPHALTIC FLUMES
Y1	REMOVING ASPHALTIC SURFACE MILLING AND HMA PAVEMENT (SEE TYPICAL SECTIONS)
**	END SECTION REQUIRED (SEE SDD FOR CURB & GUTTER)

R/W

LARSON RD

NICHOL CREEK

END CONSTRUCTION, 87' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 58+06.83
O/S 64.75' LT
ELEV = 882.17'

STA 57+90.45
O/S 31.63' LT
ELEV = 881.80'

STA 58+09.01
O/S 66.59' LT

STA 57+55.29
O/S 68.00' LT
Y = 347,676.49
X = 534,991.93

TEMPORARY DIVERSION CHANNEL
AND ESTIMATED LIMITS OF IMPACTS

STA 57+14.58
O/S 15.00' LT

PERMANENT ROADWAY
SLOPE INTERCEPTS

R50'

C1

F1

Y1

**

STA 57+85.14
O/S 24.96' LT

STA 57+55.87
O/S 18.00' LT
ELEV = 882.17'

STA 57+85.14
O/S 18.00' LT

3'

12'

15'

18'

56+00

57+00

58+00

59+00

60+00

61+00

+61

+92

STH 49

GUY

GUY POLE

B1

PERMANENT ROADWAY
SLOPE INTERCEPTS

PERMANENT ROADWAY
SLOPE INTERCEPTS

TEMPORARY DIVERSION CHANNEL
AND ESTIMATED LIMITS OF IMPACTS

NICHOL CREEK

R/W

NOTES

RADIUS AND DIMENSIONS ARE SHOWN TO CURB & GUTTER FLANGELINE

COMPLETE ASPHALTIC SURFACE TO MATCH THE EXISTING SURFACE PRIOR TO THE MILL AND OVERLAY OF STH 49 (SEE CONSTRUCTION DETAILS)

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	INTERSECTION DETAILS	SHEET 18	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 02
PLOT DATE : 6/29/2023 7:11 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

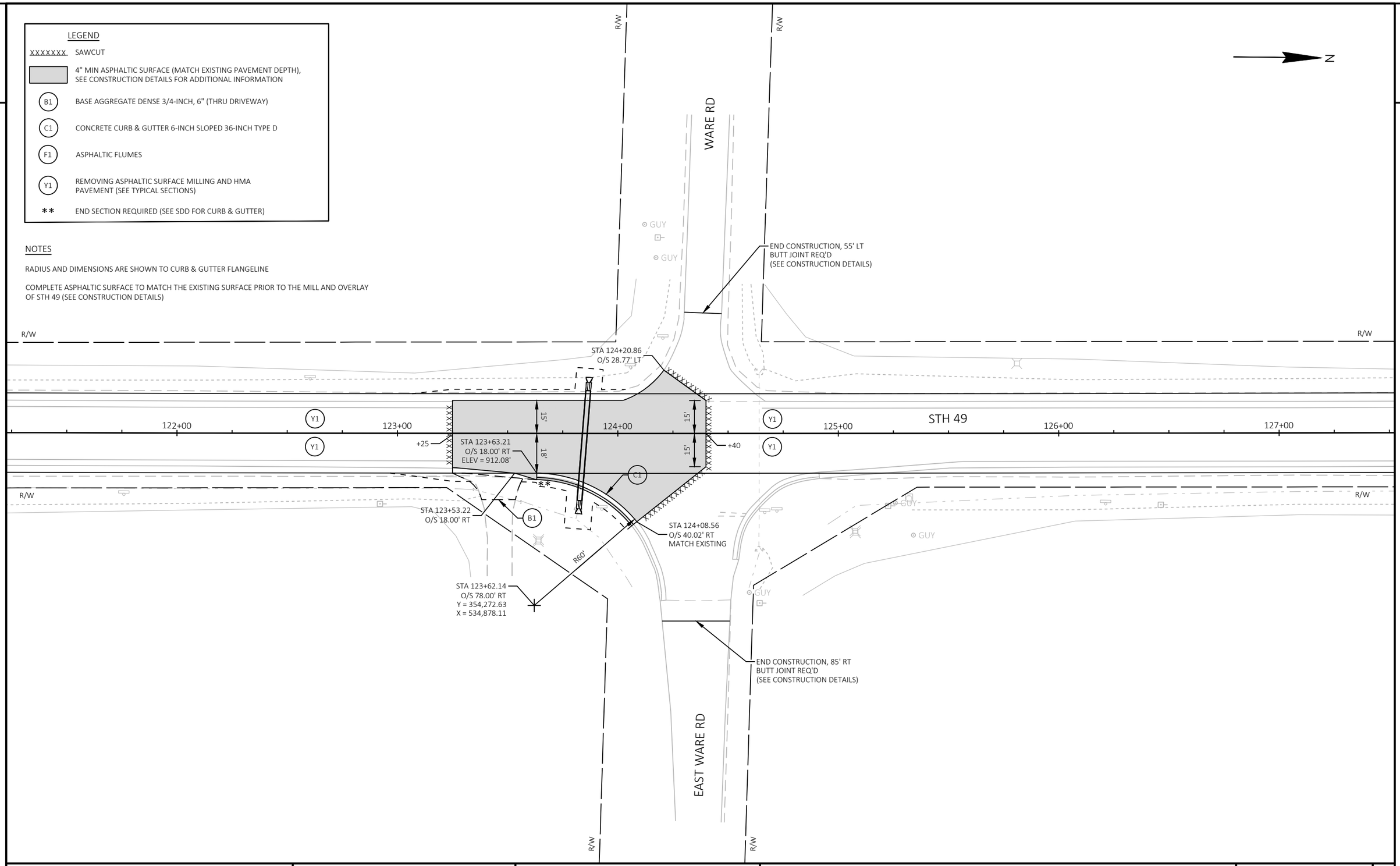
LEGEND

XXXXXXX	SAWCUT
	4" MIN ASPHALTIC SURFACE (MATCH EXISTING PAVEMENT DEPTH), SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
B1	BASE AGGREGATE DENSE 3/4-INCH, 6" (THRU DRIVEWAY)
C1	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
F1	ASPHALTIC FLUMES
Y1	REMOVING ASPHALTIC SURFACE MILLING AND HMA PAVEMENT (SEE TYPICAL SECTIONS)
**	END SECTION REQUIRED (SEE SDD FOR CURB & GUTTER)

NOTES

RADIUS AND DIMENSIONS ARE SHOWN TO CURB & GUTTER FLANGELINE

COMPLETE ASPHALTIC SURFACE TO MATCH THE EXISTING SURFACE PRIOR TO THE MILL AND OVERLAY OF STH 49 (SEE CONSTRUCTION DETAILS)



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	INTERSECTION DETAILS	SHEET 19	E

2

2

LEGEND

XXXXXX SAWCUT

4" MIN ASPHALTIC SURFACE PATCHING (MATCH EXISTING PAVEMENT DEPTH), SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION

(B1) BASE AGGREGATE DENSE 3/4-INCH, 6" (THRU DRIVEWAY)

(C1) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

(F1) ASPHALTIC FLUMES

(Y1) REMOVING ASPHALTIC SURFACE MILLING AND HMA PAVEMENT (SEE TYPICAL SECTIONS)

** END SECTION REQUIRED (SEE SDD FOR CURB & GUTTER)

NOTES

RADIUS AND DIMENSIONS ARE SHOWN TO CURB & GUTTER FLANGELINE

COMPLETE ASPHALTIC SURFACE PATCHING TO MATCH THE EXISTING SURFACE PRIOR TO THE MILL AND OVERLAY OF STH 49 (SEE CONSTRUCTION DETAILS)

N

R/W

412+00

413+00

414+00

STH 49

415+00

416+00

417+00

Y1

STA 413+92.36
O/S 15.00' RT

STA 414+36.35
O/S 15.00' RT

STA 414+27.32
O/S 34.79' RT
ELEV = 939.98'

STA 413+92.36
O/S 17.00' RT
ELEV = 940.70'

R45'

C1

F1

STA 414+53.88
O/S 47.10' RT

STA 413+92.36
O/S 62.00' RT
Y = 376,786.11
X = 521,625.57

TILE

STA 414+34.30
O/S 73.78' RT
ELEV = 940.91'

STA 414+42.74
O/S 86.70' RT

END CONSTRUCTION, 87' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

SHADY DR

GUY

GUY

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	INTERSECTION DETAILS	SHEET 20	E

2

LEGEND

XXXXXX. SAWCUT

SLOPE INTERCEPT

4" MIN ASPHALTIC SURFACE OVER 8" MIN BASE AGGREGATE DENSE 1 1/4-INCH (MATCH EXISTING PAVEMENT AND BASE AGGREGATE DEPTH), PLACE ASPHALTIC SURFACE PRIOR TO THE MILL AND OVERLAY

4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION

A1 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT

B1 BASE AGGREGATE DENSE 3/4-INCH, 6" (THRU DRIVEWAY)

C1 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT

C2 CONCRETE CURB & GUTTER 30-INCH TYPE D

D1 3" ASPHALTIC SURFACE AND DRIVEWAYS AND FIELD ENTRANCES OVER 6" BASE AGGREGATE DENSE 1 1/4-INCH

F1 ASPHALTIC FLUMES

Y1 REMOVING ASPHALTIC SURFACE MILLING AND HMA PAVEMENT (SEE TYPICAL SECTIONS)

NOTE
PLACE DRIVEWAY CURB (NO CURB HEAD) FROM STA 424+21 - STA 424+60, RT AND STA 426+40 - STA 427+34, RT.

TOMORROW RIVER STATE TRAIL

SOUTH BRANCH LITTLE WOLF RIVER

R/W

N

STA 426+88 - STA 427+00, LT
REMOVING GUARDRAIL

STA 426+58 - STA 427+40, LT
REPLACING GUARDRAIL POSTS AND BLOCKS AND
REPLACING GUARDRAIL HARDWARE
MGS GUARDRAIL 3K
MGS GUARDRAIL SHORT RADIUS
MGS GUARDRAIL SHORT RADIUS TERMINAL
GUARDRAIL MOW STRIP EMULSIFIED ASPHALT
5-CONTROLLED RELEASE TERMINAL POSTS REQ'D

STATION & OFFSET TABLE (GUARDRAIL POINTS)			
POINT	STATION	OFFSET	REMARKS
A	426+57.52	51.48' LT	END GUARDRAIL
B	426+66.62	24.83' LT	START SHORT RADIUS
C	426+76.19	18.00' LT	END SHORT RADIUS

STA 426+28.25
O/S 34.78, LT
Y=377,918.36
X=521,115.71

STA 426+76.19
O/S 28.00, LT
Y=377,964.26
X=521,101.91

STA 426+98.95
O/S 16.13' LT
ELEV = 923.41'

STA 427+06.20
O/S 16.00' LT
ELEV = 923.58'

B-68-537
17'-2" VERTICAL CLEARANCE
(TO REMAIN)

STA 426+20.00
O/S 18.00' LT
ELEV = 922.02'

STA 427+40.00
O/S 15.09' LT
MATCH EXISTING

END PROJECT
STA 427+40
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

423+00 424+00 425+00 STH 49 426+00 427+00 428+00

POST 9
+79
20' RT

STA 426+21.00
O/S 17.45' RT
MATCH EXISTING

STA 427+40.00
O/S 21.49' RT
MATCH EXISTING

STA 427+40.00
O/S 27.00' RT
MATCH EXISTING

STA 424+21.05
O/S 17.75' RT
MATCH EXISTING

POST 1
+29
22' RT

STA 424+60.12
O/S 17.64' RT
MATCH EXISTING

STA 424+50.00
O/S 17.60' RT
ELEV = 921.45'

STA 427+37.46
O/S 27.00' RT
MATCH EXISTING

STA 427+37.31
O/S 40.00' RT
MATCH EXISTING

STA 426+50.77
O/S 21.13' RT
MATCH EXISTING

STA 426+50.77
O/S 27.00' RT
MATCH EXISTING

STA 426+57.34
O/S 18.94' RT
ELEV = 922.54'

STA 426+70.00
O/S 27.00' RT
MATCH EXISTING

STA 426+70.00
O/S 40.00' RT
MATCH EXISTING

STA 426+89.10
O/S 20.89' RT
ELEV = 923.18'

STA 427+00.00
O/S 20.95' RT
ELEV = 923.45'

EXISTING CONTAMINATION
REMEDIATION BUILDING
(TO REMAIN)

RESIDUAL SOIL
CONTAMINATION
(SEE SPECIAL PROVISIONS)

DEPOT ST

STA 424+63 - STA 425+21, RT
REMOVING GUARDRAIL

STA 424+29 - STA 425+21, RT
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

STA 424+21 - STA 424+54, RT
STA 426+40 - STA 427+34, RT
DRIVEWAY CURB HEAD

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PAVING DETAILS	SHEET 21	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 01

PLOT DATE : 10/9/2023 9:27 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NORTH STREET - SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
** 1	11+20.90	16.00' LT	888.36	343063.99	534783.45
2	11+24.02	16.28' LT	888.39	343067.11	534783.17
3	11+29.04	17.96' LT	888.44	343072.14	534781.49
4	11+33.41	21.08' LT	888.50	343076.50	534778.37
5	11+36.66	25.36' LT	888.55	343079.76	534774.08
6	11+38.90	30.36' LT	888.61	343081.59	534769.07
** 7	11+38.87	33.41' LT	888.63	343081.52	534766.02
** 8	11+20.89	18.50' LT	888.80	343063.99	534780.95
9	11+24.06	18.83' LT	888.32	343067.15	534780.62
10	11+29.09	20.86' LT	888.38	343072.18	534778.59
11	11+31.11	22.37' LT	888.41	343074.21	534777.08
12	11+32.12	23.34' LT	888.43	343075.21	534776.11
13	11+33.73	25.35' LT	888.47	343076.82	534774.10
14	11+35.94	30.36' LT	888.53	343079.03	534769.09
** 15	11+36.36	33.57' LT	889.06	343079.45	534765.87
16	11+24.09	20.94' LT	888.35	343067.18	534778.51
17	11+24.16	25.32' LT	888.66	343067.25	534774.13
18	11+29.16	25.32' LT	888.59	343072.25	534774.13
19	11+33.70	30.35' LT	888.55	343076.79	534769.10
20	11+29.24	30.32' LT	888.66	343072.33	534769.13
21	11+24.24	30.32' LT	888.74	343067.33	534769.13
22	11+18.73	29.70' LT	888.95	343061.82	534769.75
** 23	11+13.31	29.09' LT	889.17	343056.40	534770.36
24	11+19.31	24.74' LT	888.88	343062.40	534774.72
** 25	11+13.15	24.47' LT	889.05	343056.25	534774.99
26	11+29.33	36.41' LT	889.02	343072.42	534763.04
** 27	11+29.33	41.52' LT	889.31	343072.42	534757.93
28	11+24.33	36.49' LT	889.09	343067.42	534762.96
** 29	11+24.56	41.49' LT	889.35	343067.64	534757.96

LEGEND

- C1 — CONCRETE CURB & GUTTER 30-INCH TYPE D
- S1 — CONCRETE SIDEWALK 5-INCH
- Y1 — REMOVING ASPHALTIC SURFACE MILLING AND HMA OVERLAY, SEE TYPICAL SECTIONS FOR HMA TYPE AND DEPTH
- SURFACE WATER FLOW
- 4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
- CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
- XXXXXXX — SAWCUT

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS

* GRADED FLARE

** MATCH EXISTING LOCATION AND ELEVATION

NORTH ST

CAUTION

MATCH EXISTING INLET ELEVATION

STA 11+20.87
O/S 34.00, LT

TYPE 2 CURB RAMP
2-CURB RAMP DETECTABLE WARNING FIELDS REQ'D

CAUTION

STA 11+83.69
O/S 34.00, LT

TYPE 4B1 CURB RAMP
1-CURB RAMP DETECTABLE WARNING FIELD REQ'D

SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION

STH 49

11+00 11+50 12+00

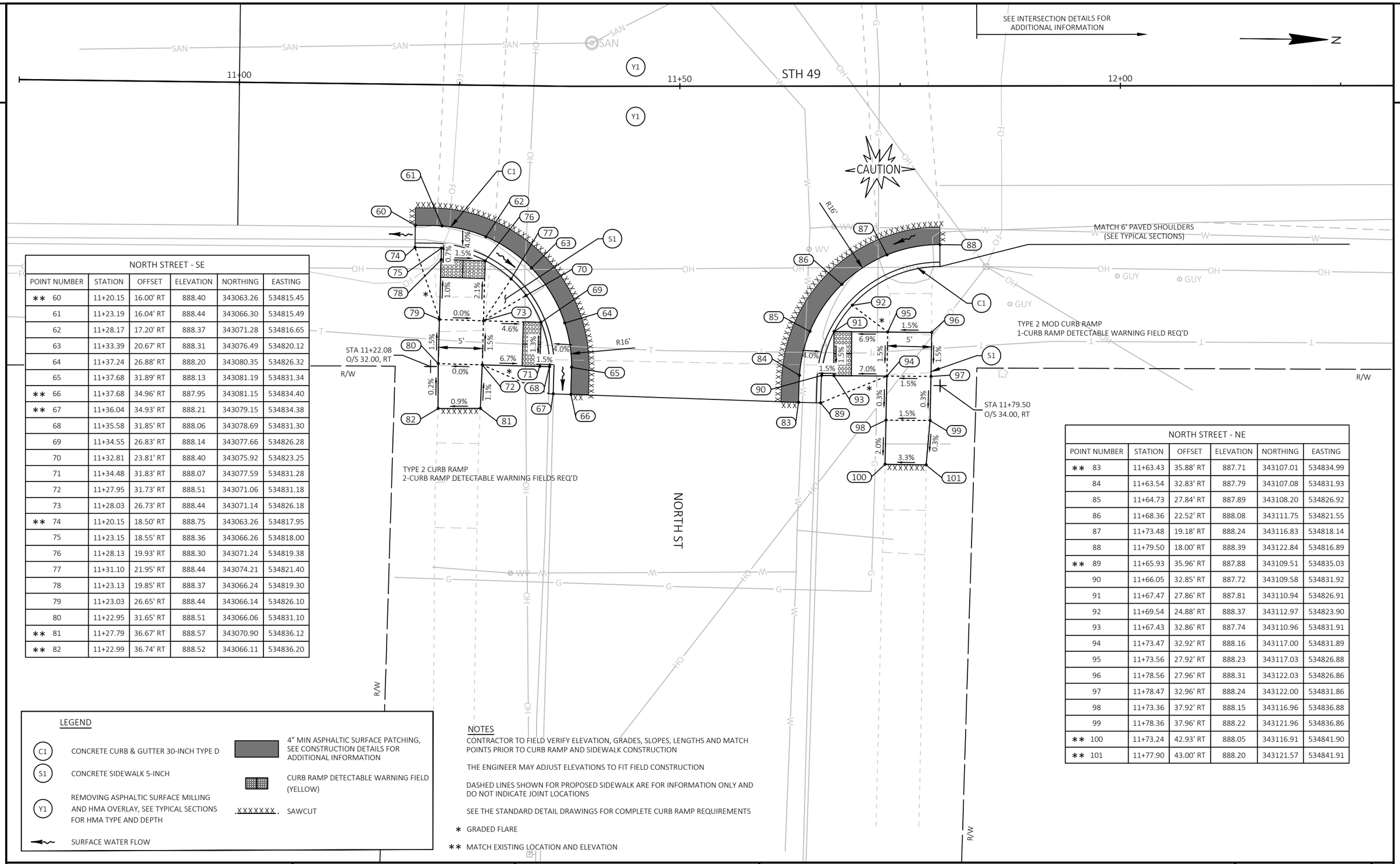
N

NORTH STREET - NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
** 30	11+66.17	42.70' LT	888.91	343108.70	534756.37
31	11+65.70	34.37' LT	888.97	343108.34	534764.70
32	11+65.85	31.66' LT	888.99	343108.52	534767.41
33	11+67.26	26.65' LT	888.87	343110.01	534772.41
34	11+71.46	20.80' LT	888.82	343114.28	534778.20
35	11+77.61	17.06' LT	888.77	343120.48	534781.86
36	11+83.69	16.00' LT	888.73	343126.58	534782.84
37	11+68.23	37.63' LT	889.45	343110.82	534761.41
38	11+68.37	31.64' LT	888.93	343111.05	534767.40
39	11+70.06	26.62' LT	888.87	343112.80	534772.39
40	11+73.85	22.02' LT	889.37	343116.66	534776.94
41	11+70.11	31.62' LT	888.94	343112.78	534767.39
42	11+76.11	31.57' LT	889.02	343118.78	534767.37
43	11+76.06	26.57' LT	888.95	343118.80	534772.37
44	11+80.11	31.53' LT	889.08	343122.78	534767.35
45	11+80.06	26.53' LT	889.01	343122.80	534772.35
46	11+84.11	31.50' LT	889.15	343126.78	534767.33
47	11+84.06	26.50' LT	889.07	343126.80	534772.33
** 48	11+89.22	31.45' LT	889.22	343131.90	534767.31
** 49	11+89.18	26.45' LT	889.14	343131.92	534772.31
50	11+83.69	18.50' LT	889.23	343126.54	534780.34

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CURB RAMP DETAILS	SHEET 22	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:12 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT



NORTH STREET - SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
** 60	11+20.15	16.00' RT	888.40	343063.26	534815.45
61	11+23.19	16.04' RT	888.44	343066.30	534815.49
62	11+28.17	17.20' RT	888.37	343071.28	534816.65
63	11+33.39	20.67' RT	888.31	343076.49	534820.12
64	11+37.24	26.88' RT	888.20	343080.35	534826.32
65	11+37.68	31.89' RT	888.13	343081.19	534831.34
** 66	11+37.68	34.96' RT	887.95	343081.15	534834.40
** 67	11+36.04	34.93' RT	888.21	343079.15	534834.38
68	11+35.58	31.85' RT	888.06	343078.69	534831.30
69	11+34.55	26.83' RT	888.14	343077.66	534826.28
70	11+32.81	23.81' RT	888.40	343075.92	534823.25
71	11+34.48	31.83' RT	888.07	343077.59	534831.28
72	11+27.95	31.73' RT	888.51	343071.06	534831.18
73	11+28.03	26.73' RT	888.44	343071.14	534826.18
** 74	11+20.15	18.50' RT	888.75	343063.26	534817.95
75	11+23.15	18.55' RT	888.36	343066.26	534818.00
76	11+28.13	19.93' RT	888.30	343071.24	534819.38
77	11+31.10	21.95' RT	888.44	343074.21	534821.40
78	11+23.13	19.85' RT	888.37	343066.24	534819.30
79	11+23.03	26.65' RT	888.44	343066.14	534826.10
80	11+22.95	31.65' RT	888.51	343066.06	534831.10
** 81	11+27.79	36.67' RT	888.57	343070.90	534836.12
** 82	11+22.99	36.74' RT	888.52	343066.11	534836.20

NORTH STREET - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
** 83	11+63.43	35.88' RT	887.71	343107.01	534834.99
84	11+63.54	32.83' RT	887.79	343107.08	534831.93
85	11+64.73	27.84' RT	887.89	343108.20	534826.92
86	11+68.36	22.52' RT	888.08	343111.75	534821.55
87	11+73.48	19.18' RT	888.24	343116.83	534818.14
88	11+79.50	18.00' RT	888.39	343122.84	534816.89
** 89	11+65.93	35.96' RT	887.88	343109.51	534835.03
90	11+66.05	32.85' RT	887.72	343109.58	534831.92
91	11+67.47	27.86' RT	887.81	343110.94	534826.91
92	11+69.54	24.88' RT	888.37	343112.97	534823.90
93	11+67.43	32.86' RT	887.74	343110.96	534831.91
94	11+73.47	32.92' RT	888.16	343117.00	534831.89
95	11+73.56	27.92' RT	888.23	343117.03	534826.88
96	11+78.56	27.96' RT	888.31	343122.03	534826.86
97	11+78.47	32.96' RT	888.24	343122.00	534831.86
98	11+73.36	37.92' RT	888.15	343116.96	534836.88
99	11+78.36	37.96' RT	888.22	343121.96	534836.86
** 100	11+73.24	42.93' RT	888.05	343116.91	534841.90
** 101	11+77.90	43.00' RT	888.20	343121.57	534841.91

LEGEND

- C1 — CONCRETE CURB & GUTTER 30-INCH TYPE D
- S1 — CONCRETE SIDEWALK 5-INCH
- Y1 — REMOVING ASPHALTIC SURFACE MILLING AND HMA OVERLAY, SEE TYPICAL SECTIONS FOR HMA TYPE AND DEPTH
- SURFACE WATER FLOW
- 4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
- CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
- XXXXXXX — SAWCUT

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS

* GRADED FLARE

** MATCH EXISTING LOCATION AND ELEVATION

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CURB RAMP DETAILS	SHEET 23	E

2

LEGEND

C1	CONCRETE CURB & GUTTER 30-INCH TYPE D		4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
S1	CONCRETE SIDEWALK 5-INCH		CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
Y1	REMOVING ASPHALTIC SURFACE MILLING AND HMA OVERLAY, SEE TYPICAL SECTIONS FOR HMA TYPE AND DEPTH	XXXXXXX	SAWCUT
	SURFACE WATER FLOW		

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS

* GRADED FLARE

** MATCH EXISTING LOCATION AND ELEVATION

WISCONSIN ST

R/W

N

TYPE 3 MOD CURB RAMP
1-CURB RAMP DETECTABLE WARNING FIELD REQ'D

TYPE 3 MOD CURB RAMP
1-CURB RAMP DETECTABLE WARNING FIELD REQ'D

STH 49

14+50 15+00 15+50

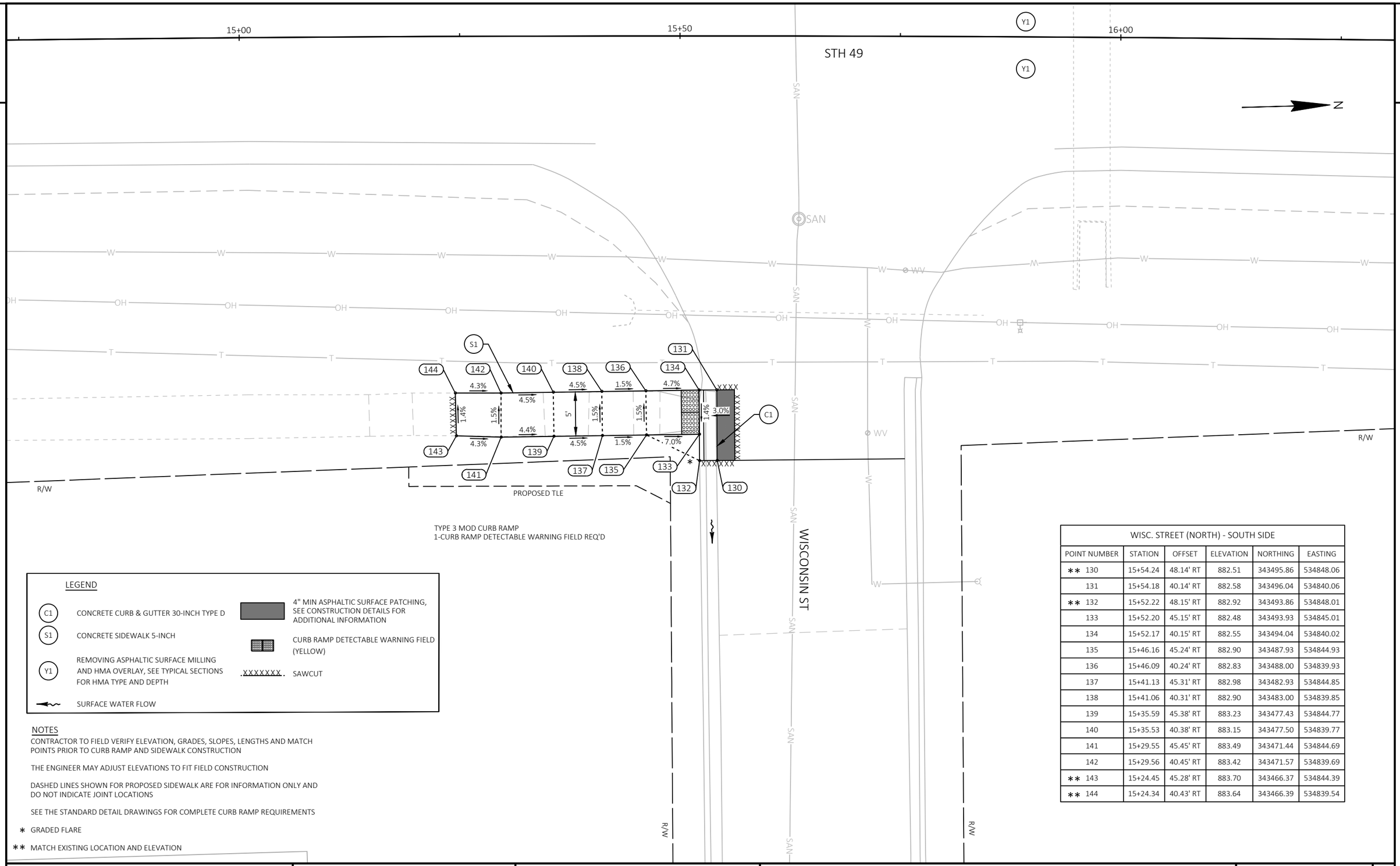
WISC. STREET (SOUTH) - SOUTH SIDE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	14+70.49	53.82' LT	883.86	343414.48	534744.17
101	14+70.39	51.82' LT	883.88	343414.35	534746.17
102	14+70.15	46.81' LT	883.89	343414.02	534751.17
103	14+69.93	44.81' LT	883.90	343413.76	534753.18
104	14+68.07	51.77' LT	883.90	343412.01	534746.18
105	14+68.17	46.77' LT	883.92	343412.03	534751.18
106	14+63.12	51.68' LT	883.99	343407.02	534746.19
107	14+63.21	46.68' LT	883.94	343407.03	534751.19
** 108	14+59.49	51.61' LT	884.04	343403.36	534746.20
** 109	14+59.40	46.61' LT	883.99	343403.19	534751.20

WISC. STREET (SOUTH) - NORTH SIDE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
110	14+94.28	54.32' LT	883.53	343438.48	534744.12
111	14+94.50	52.33' LT	883.62	343438.66	534746.12
112	14+95.05	47.34' LT	883.63	343439.11	534751.12
113	14+95.38	45.35' LT	883.62	343439.40	534753.12
114	14+97.03	47.39' LT	883.65	343441.11	534751.11
115	14+96.92	52.38' LT	883.66	343441.10	534746.11
116	15+01.50	47.49' LT	883.70	343445.61	534751.10
117	15+01.38	52.49' LT	883.72	343445.60	534746.10
118	15+04.90	47.58' LT	883.72	343449.04	534751.10
119	15+03.93	52.55' LT	883.76	343448.17	534746.10
** 120	15+09.57	50.01' LT	883.84	343453.79	534748.77
** 121	15+07.51	54.26' LT	883.90	343451.82	534744.47

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CURB RAMP DETAILS	SHEET 24	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:12 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT



LEGEND

- C1 — CONCRETE CURB & GUTTER 30-INCH TYPE D
- S1 — CONCRETE SIDEWALK 5-INCH
- Y1 — REMOVING ASPHALTIC SURFACE MILLING AND HMA OVERLAY, SEE TYPICAL SECTIONS FOR HMA TYPE AND DEPTH
- SURFACE WATER FLOW
- 4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
- CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
- .XXXXXXX. SAWCUT

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS

* GRADED FLARE

** MATCH EXISTING LOCATION AND ELEVATION

WISC. STREET (NORTH) - SOUTH SIDE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
** 130	15+54.24	48.14' RT	882.51	343495.86	534848.06
131	15+54.18	40.14' RT	882.58	343496.04	534840.06
** 132	15+52.22	48.15' RT	882.92	343493.86	534848.01
133	15+52.20	45.15' RT	882.48	343493.93	534845.01
134	15+52.17	40.15' RT	882.55	343494.04	534840.02
135	15+46.16	45.24' RT	882.90	343487.93	534844.93
136	15+46.09	40.24' RT	882.83	343488.00	534839.93
137	15+41.13	45.31' RT	882.98	343482.93	534844.85
138	15+41.06	40.31' RT	882.90	343483.00	534839.85
139	15+35.59	45.38' RT	883.23	343477.43	534844.77
140	15+35.53	40.38' RT	883.15	343477.50	534839.77
141	15+29.55	45.45' RT	883.49	343471.44	534844.69
142	15+29.56	40.45' RT	883.42	343471.57	534839.69
** 143	15+24.45	45.28' RT	883.70	343466.37	534844.39
** 144	15+24.34	40.43' RT	883.64	343466.39	534839.54

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CURB RAMP DETAILS	SHEET 25	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\6420072\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 04
PLOT DATE : 6/29/2023 7:12 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

LEGEND

- C1 — CONCRETE CURB & GUTTER 30-INCH TYPE D
- S1 — CONCRETE SIDEWALK 5-INCH
- Y1 — REMOVING ASPHALTIC SURFACE MILLING AND HMA OVERLAY, SEE TYPICAL SECTIONS FOR HMA TYPE AND DEPTH
- SURFACE WATER FLOW
- 4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
- CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
- XXXXXXX — SAWCUT

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS

* GRADED FLARE

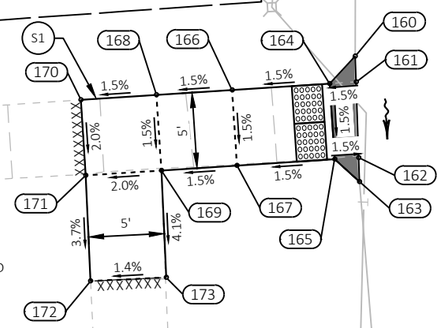
** MATCH EXISTING LOCATION AND ELEVATION

R/W

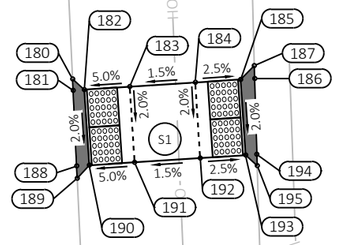
RIVER ST

N

TYPE 3 MOD CURB RAMP
1-CURB RAMP DETECTABLE WARNING FIELD REQ'D

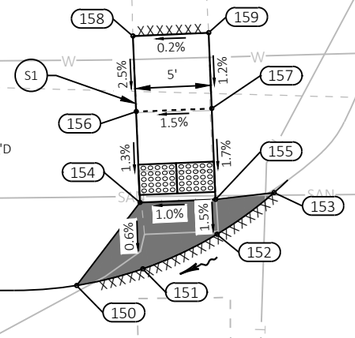


TYPE 5 MOD CURB RAMP
2-CURB RAMP DETECTABLE WARNING FIELDS REQ'D



RIVER STREET SW CORNER - MID BLOCK					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
160	17+74.88	73.15' LT	886.51	343722.36	534737.29
161	17+74.94	71.46' LT	886.45	343722.31	534738.98
162	17+75.13	66.46' LT	886.32	343722.18	534743.98
163	17+75.19	64.89' LT	886.23	343722.14	534745.56
164	17+73.22	71.34' LT	886.42	343720.57	534738.99
165	17+73.56	66.35' LT	886.34	343720.59	534743.99
166	17+66.85	70.90' LT	886.32	343714.11	534739.02
167	17+67.18	65.92' LT	886.25	343714.13	534744.02
168	17+61.91	70.57' LT	886.25	343709.11	534739.04
169	17+62.24	65.58' LT	886.17	343709.13	534744.04
** 170	17+56.98	70.24' LT	886.17	343704.11	534739.06
** 171	17+57.30	65.25' LT	886.07	343704.13	534744.06
** 172	17+57.63	58.28' LT	885.81	343704.03	534751.04
** 173	17+62.58	58.52' LT	885.89	343709.03	534751.10

TYPE 4B1 MOD CURB RAMP
1-CURB RAMP DETECTABLE WARNING FIELD REQ'D



MATCH 6' PAVED SHOULDERS
(SEE TYPICAL SECTIONS)

RIVER STREET - SW CORNER					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
150	17+54.91	18.33' LT	885.04	343698.87	534790.75
151	17+59.26	19.43' LT	885.06	343703.28	534789.92
152	17+64.14	21.72' LT	885.10	343708.32	534787.93
153	17+67.88	24.47' LT	885.14	343712.24	534785.42
154	17+59.07	23.81' LT	885.08	343703.36	534785.53
155	17+64.04	24.03' LT	885.13	343708.36	534785.62
156	17+58.81	29.80' LT	885.16	343703.47	534779.53
157	17+63.78	30.02' LT	885.24	343708.47	534779.63
** 158	17+58.59	34.80' LT	885.29	343703.56	534774.54
** 159	17+63.56	35.02' LT	885.29	343708.56	534774.63

RIVER STREET - MEDIAN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
180	17+95.58	73.68' LT	887.12	343743.28	534738.13
181	17+95.62	72.93' LT	887.09	343743.27	534738.88
182	17+96.36	72.98' LT	887.07	343744.02	534738.88
183	17+99.32	73.20' LT	887.22	343747.02	534738.86
184	18+03.59	73.51' LT	887.29	343751.35	534738.85
185	18+06.55	73.73' LT	887.21	343754.35	534738.83
186	18+07.47	73.80' LT	887.26	343755.28	534738.83
187	18+07.43	74.65' LT	887.29	343755.31	534737.98
188	17+95.89	67.94' LT	886.92	343743.21	534743.88
189	17+95.93	67.13' LT	886.84	343743.19	534744.69
190	17+96.71	68.00' LT	886.97	343744.04	534743.88
191	17+99.68	68.21' LT	887.12	343747.04	534743.86
192	18+03.95	68.53' LT	887.19	343751.38	534743.84
193	18+06.91	68.75' LT	887.11	343754.38	534743.83
194	18+07.65	68.80' LT	887.07	343755.13	534743.83
195	18+07.68	68.05' LT	887.05	343755.10	534744.58

STH 49

17+00 17+50 18+00

Y1

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CURB RAMP DETAILS	SHEET 26	E

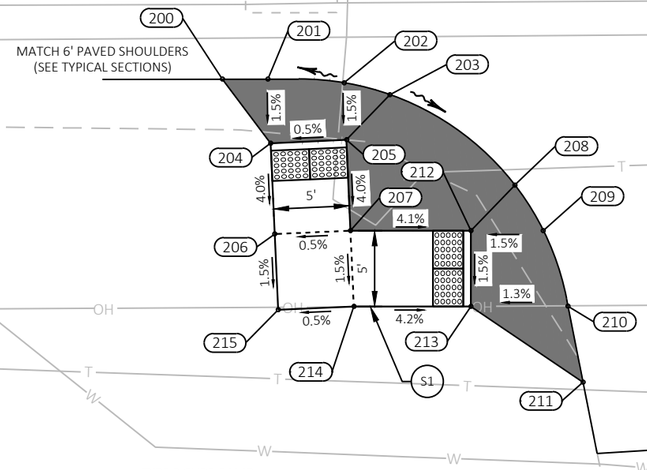
FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 05

PLOT DATE : 6/29/2023 7:12 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT

STH 49

17+00 | 17+50 | 18+00

Y1



TYPE 2 CURB RAMP
2-CURB RAMP DETECTABLE WARNING FIELDS REQ'D

MATCH 6' PAVED SHOULDERS
(SEE TYPICAL SECTIONS)

H1

RIVER ST

R/W

RIVER STREET - SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
200	17+57.95	18.00' RT	884.91	343699.68	534827.20
201	17+60.96	18.00' RT	884.92	343702.68	534827.38
202	17+66.00	18.25' RT	884.95	343707.68	534827.94
203	17+69.03	19.03' RT	884.98	343710.65	534828.91
204	17+61.14	22.22' RT	884.87	343702.60	534831.60
205	17+66.16	21.99' RT	884.89	343707.61	534831.69
206	17+61.41	28.21' RT	884.63	343702.49	534837.60
207	17+66.42	27.99' RT	884.65	343707.49	534837.69
208	17+77.31	24.98' RT	884.45	343718.50	534835.37
209	17+79.20	27.98' RT	884.40	343720.19	534838.49
210	17+80.85	32.97' RT	884.32	343721.51	534843.57
211	17+81.86	37.97' RT	884.25	343722.18	534848.63
212	17+74.40	27.99' RT	884.33	343715.42	534838.19
213	17+74.41	32.99' RT	884.26	343715.11	534843.18
214	17+66.65	32.99' RT	884.58	343707.40	534842.70
215	17+61.62	33.21' RT	884.56	343702.40	534842.60

LEGEND

- C1 — CONCRETE CURB & GUTTER 30-INCH TYPE D
- S1 — CONCRETE SIDEWALK 5-INCH
- Y1 — REMOVING ASPHALTIC SURFACE MILLING AND HMA OVERLAY, SEE TYPICAL SECTIONS FOR HMA TYPE AND DEPTH
- SURFACE WATER FLOW
- 4" MIN ASPHALTIC SURFACE PATCHING, SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION
- CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
- .XXXXXXX. SAWCUT

NOTES

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS

* GRADED FLARE

** MATCH EXISTING LOCATION AND ELEVATION

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CURB RAMP DETAILS	SHEET 27	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 06

PLOT DATE : 6/29/2023 7:12 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

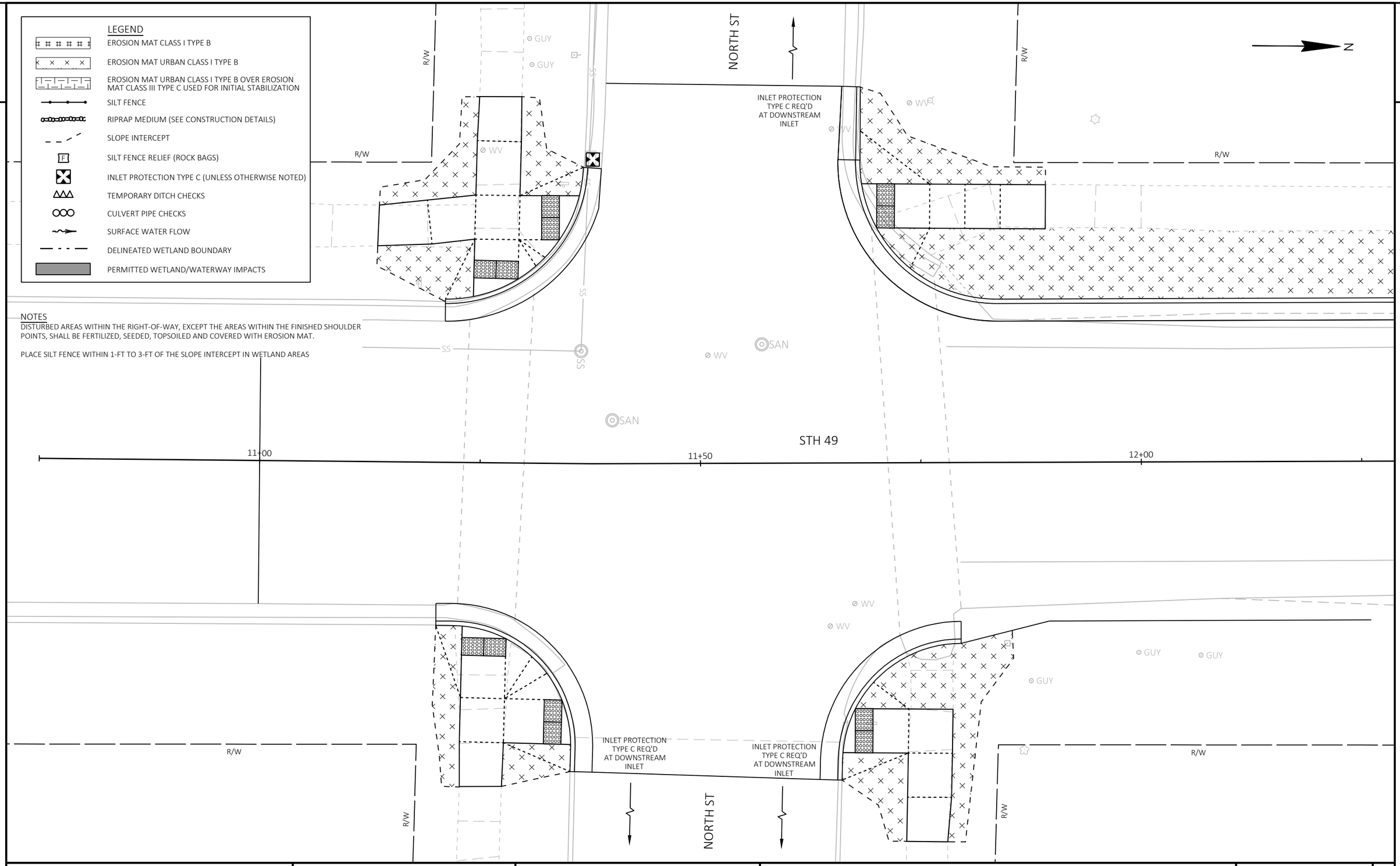
LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS



2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 28	E

2

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

N

R/W

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

R/W

GUY POLE

STH 49

12+00

12+50

13+00

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 29	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:13 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

N

R/W

WISCONSIN ST

R/W

R/W

WV

WV

WV

SAN

STH 49

14+50

15+00

15+50

2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 30	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:13 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

15+00

15+50

16+00

STH 49

N

SAN

WV

WV

R/W

PROPOSED TLE

WISCONSIN ST

R/W

R/W

R/W

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 31	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 6/29/2023 7:13 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT

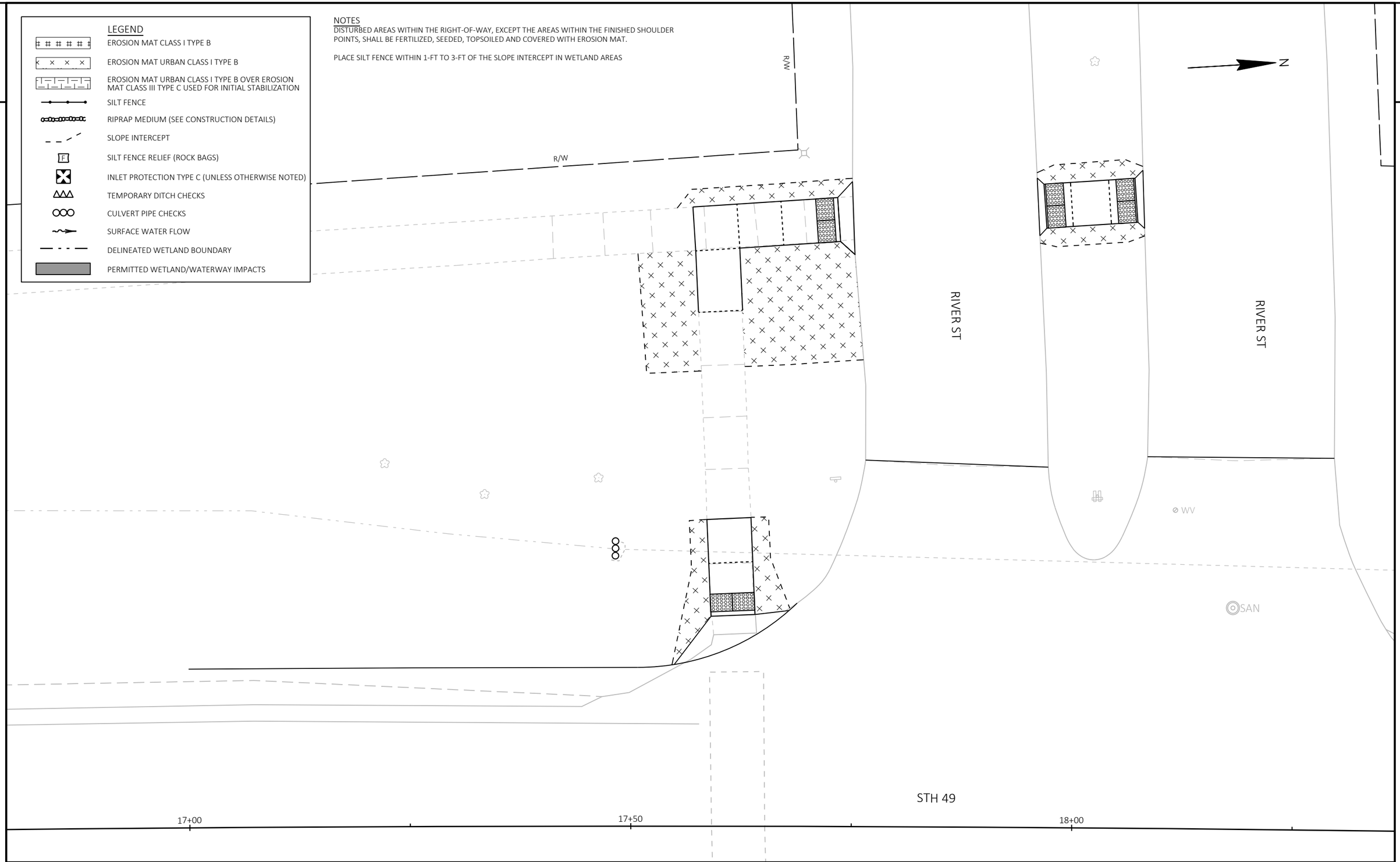
LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS



2

17+00

17+50

18+00

2

STH 49

N

GUY

GUY

RIVER ST

R/W

R/W

R/W

R/W

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 33	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 06

PLOT DATE : 6/29/2023 7:13 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT

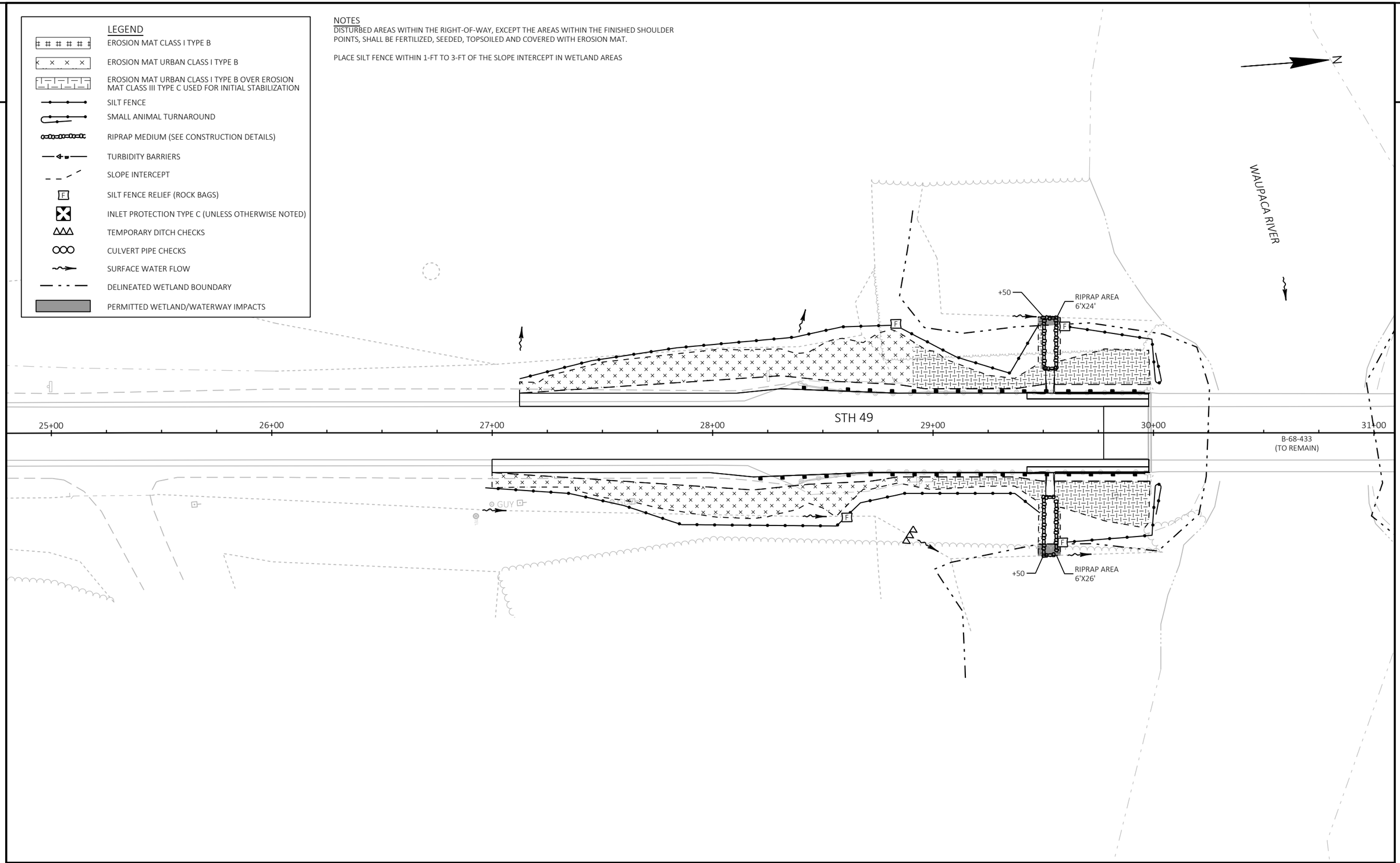
LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 34	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:14 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT.

PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

N

WAUPACA RIVER

TIMBER DR

STH 49

31+00 32+00 33+00 34+00 35+00 36+00 37+00

B-68-433
(TO REMAIN)

GUY GV GUY

ELM ST

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 35	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:14 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
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- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

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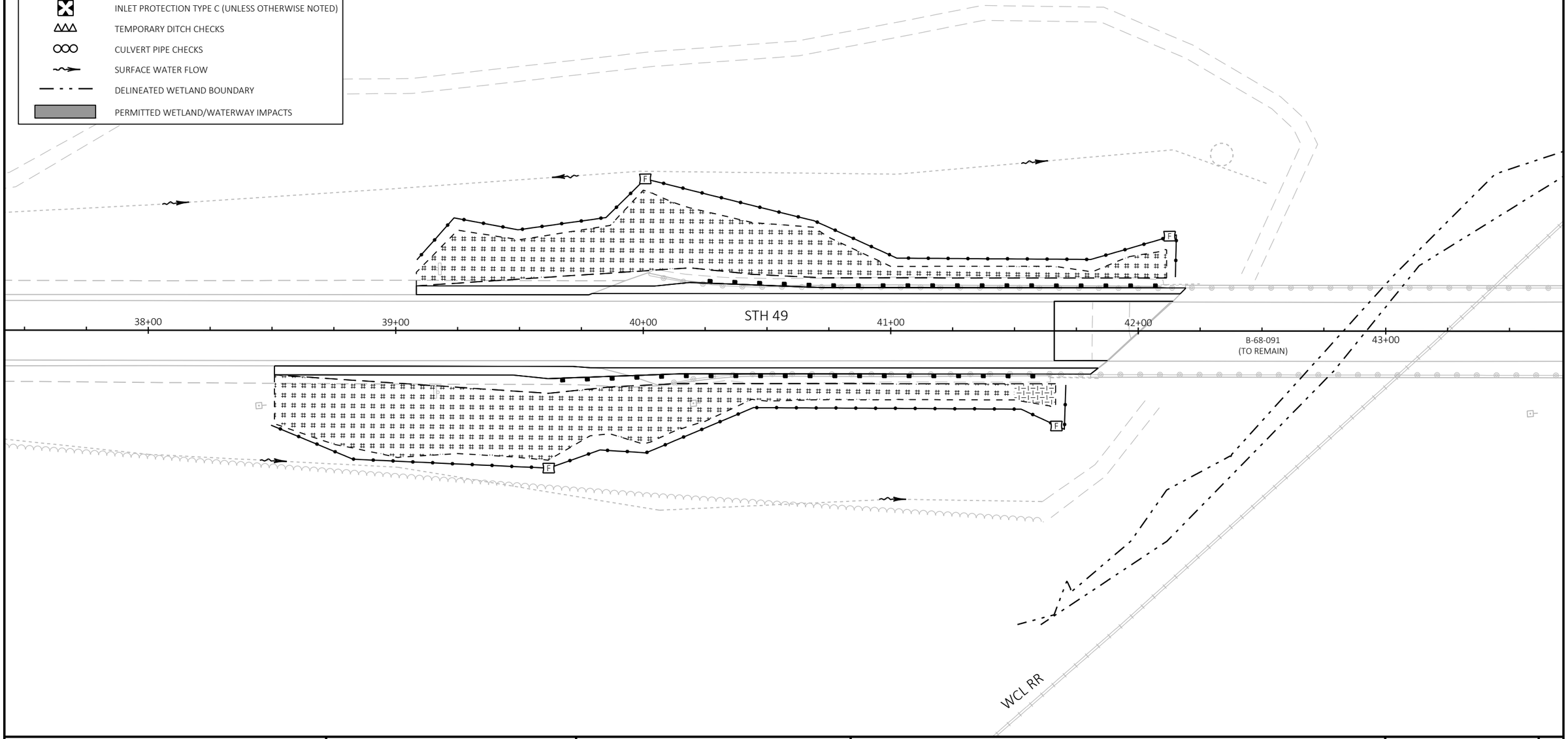
PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

N



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 36	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:14 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- DELINEATED WETLAND BOUNDARY
- PERMITTED WETLAND/WATERWAY IMPACTS

NOTES

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PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

N

WCL

STH 49

44+00 45+00 46+00 47+00 48+00 49+00

STH 4

B-68-091
(TO REMAIN)

SEPV

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 37	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 6/29/2023 7:14 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
- INLET PROTECTION TYPE C (UNLESS OTHERWISE NOTED)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
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- PERMITTED WETLAND/WATERWAY IMPACTS

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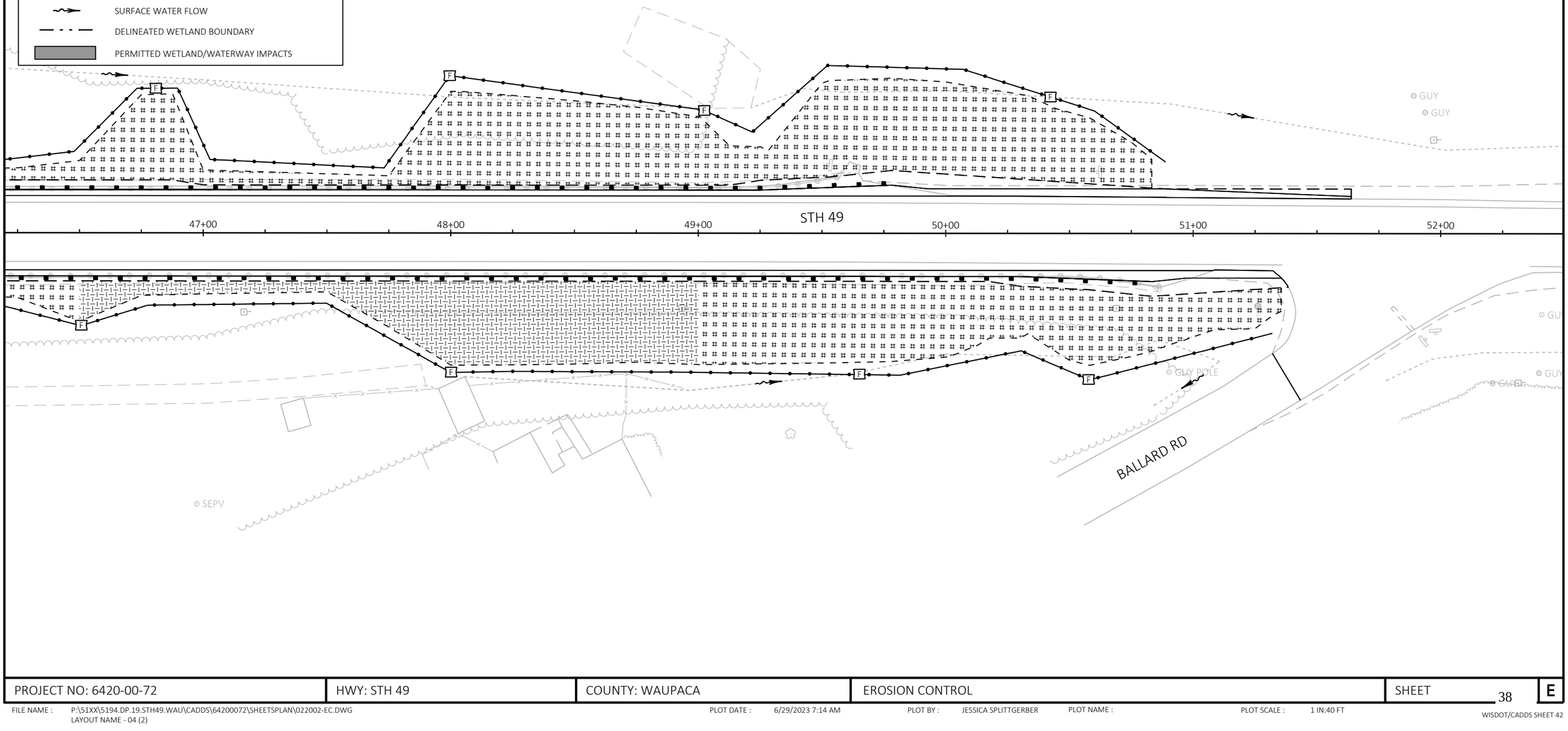
PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

N



2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 38	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 04 (2)

PLOT DATE : 6/29/2023 7:14 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
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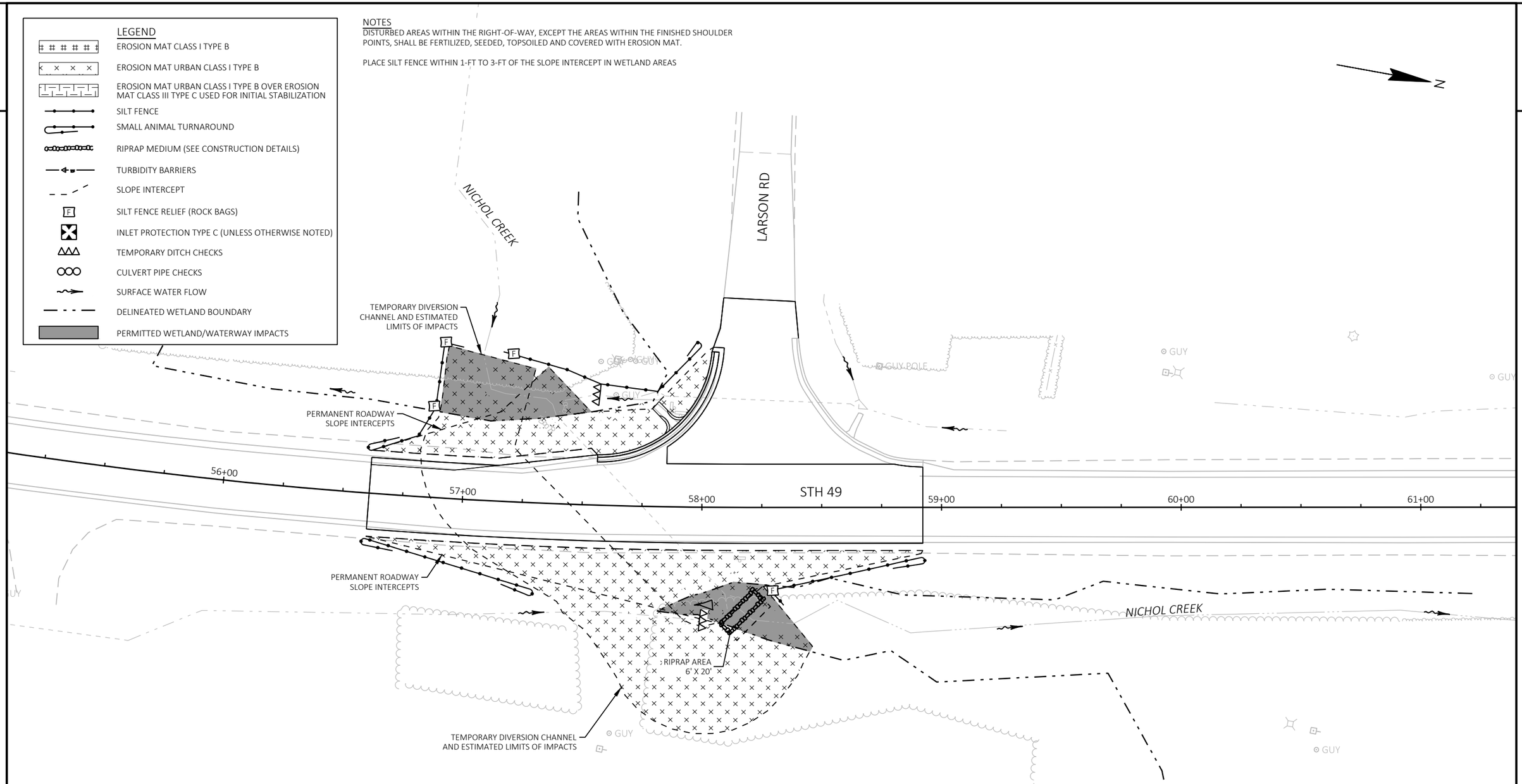
PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 39	E

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
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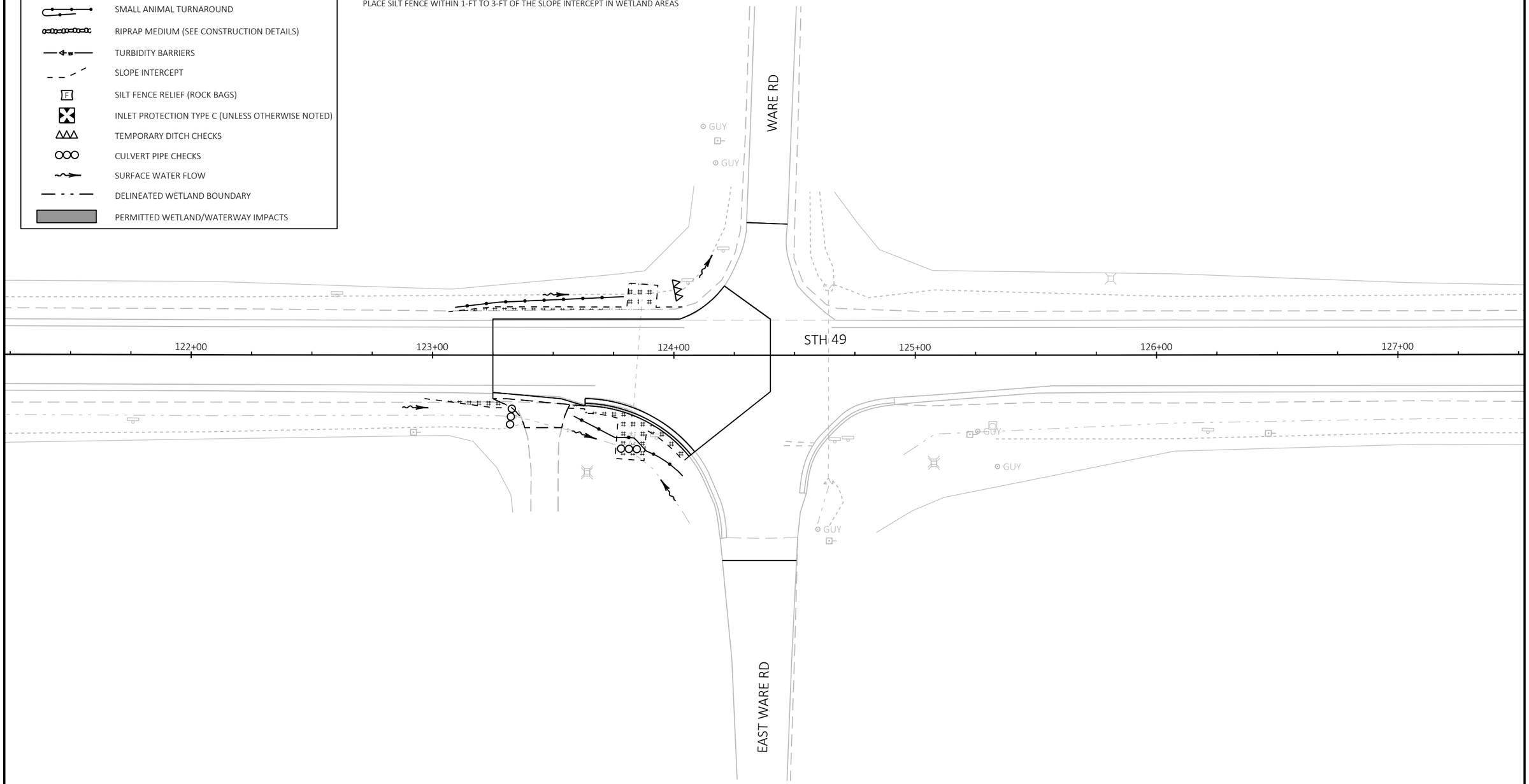
N



2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 40	E

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
- TURBIDITY BARRIERS
- SLOPE INTERCEPT
- SILT FENCE RELIEF (ROCK BAGS)
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- CULVERT PIPE CHECKS
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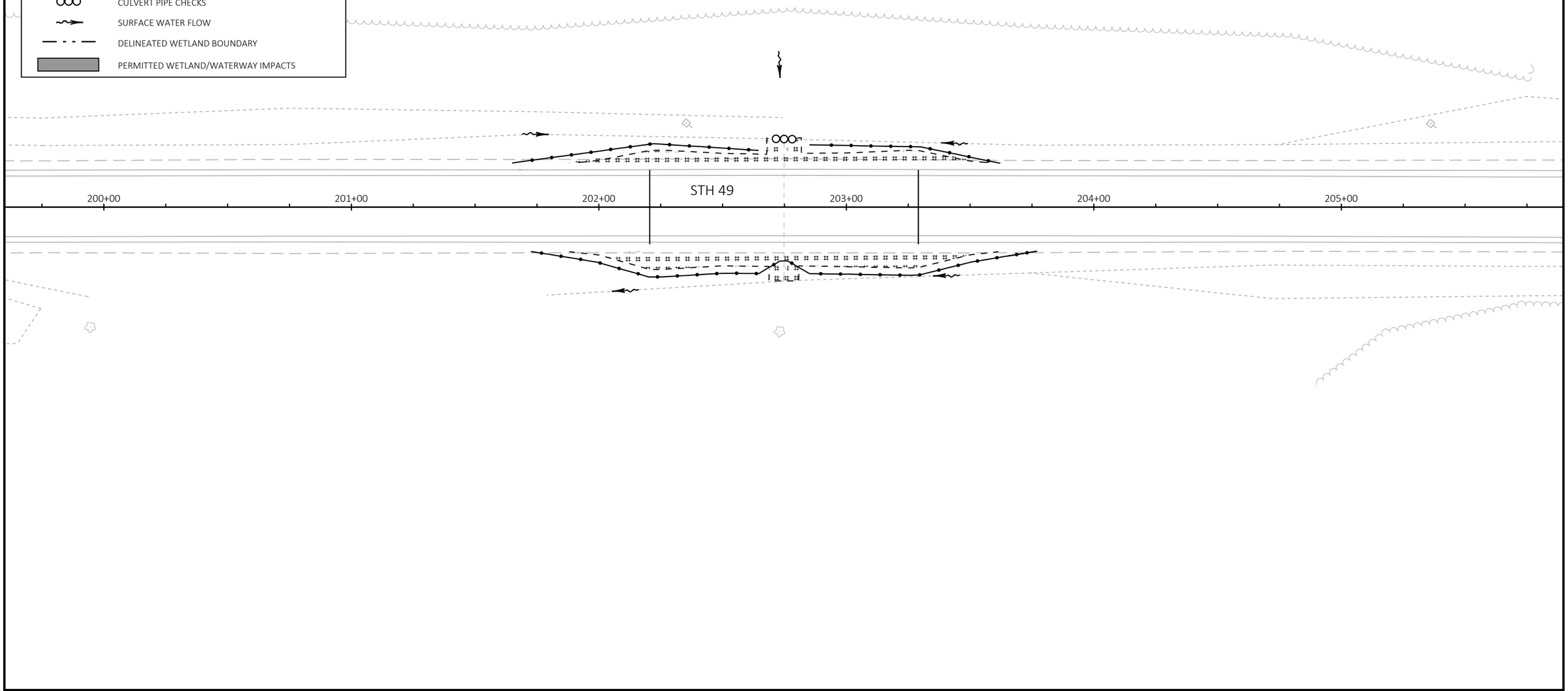
PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 41	E

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
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- TURBIDITY BARRIERS
- SLOPE INTERCEPT
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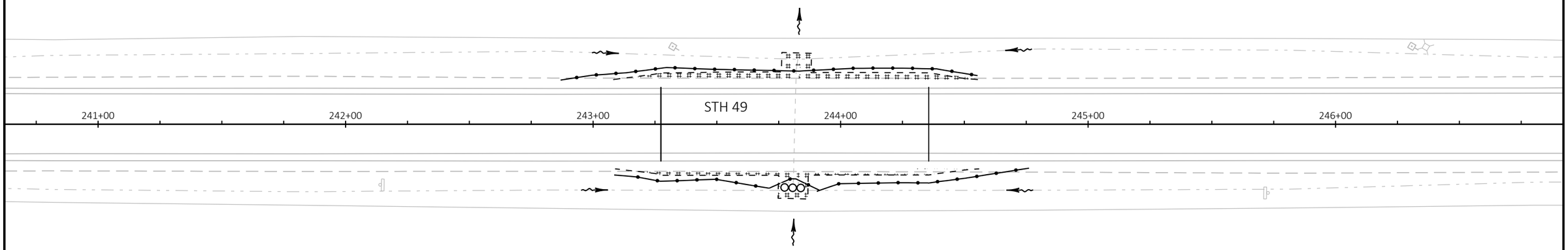

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 42	E

2

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
- SMALL ANIMAL TURNAROUND
- RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
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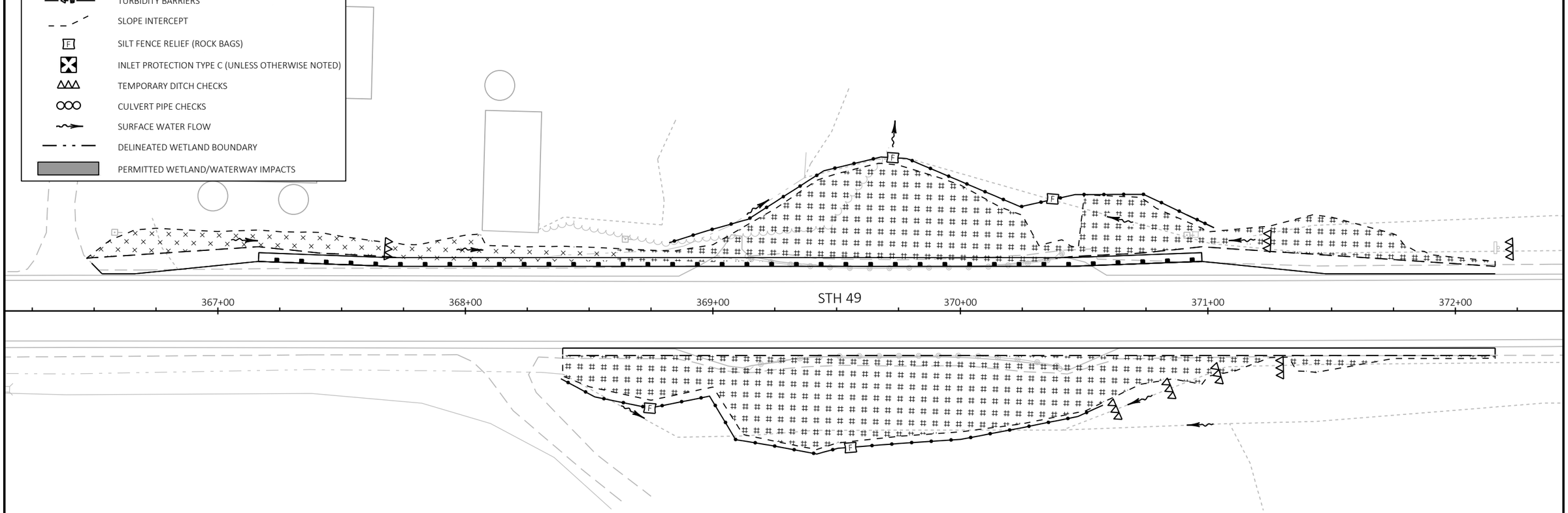
N



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 43	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 09

PLOT DATE : 6/29/2023 7:14 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
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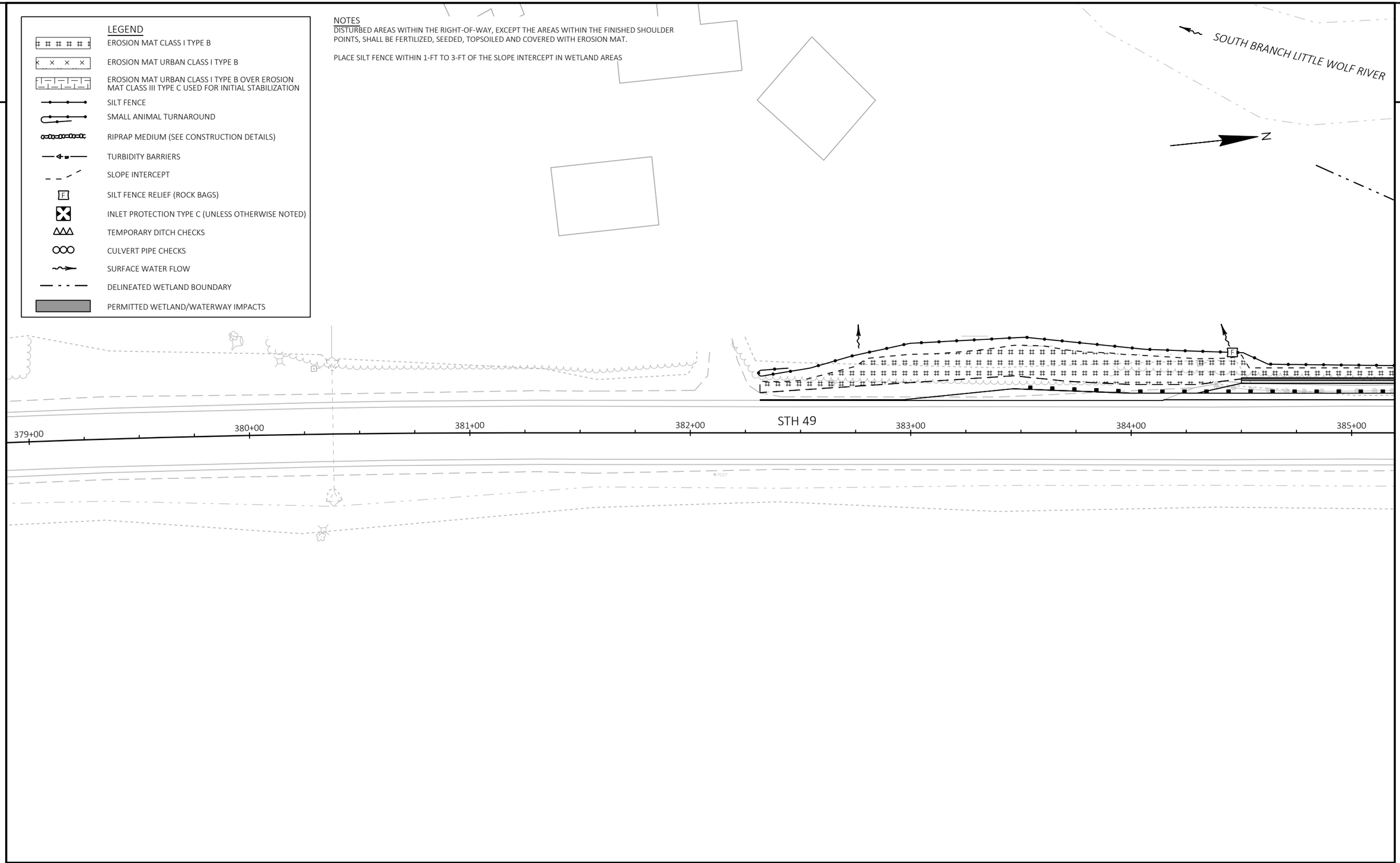

2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 44	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 10

PLOT DATE : 6/29/2023 7:14 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
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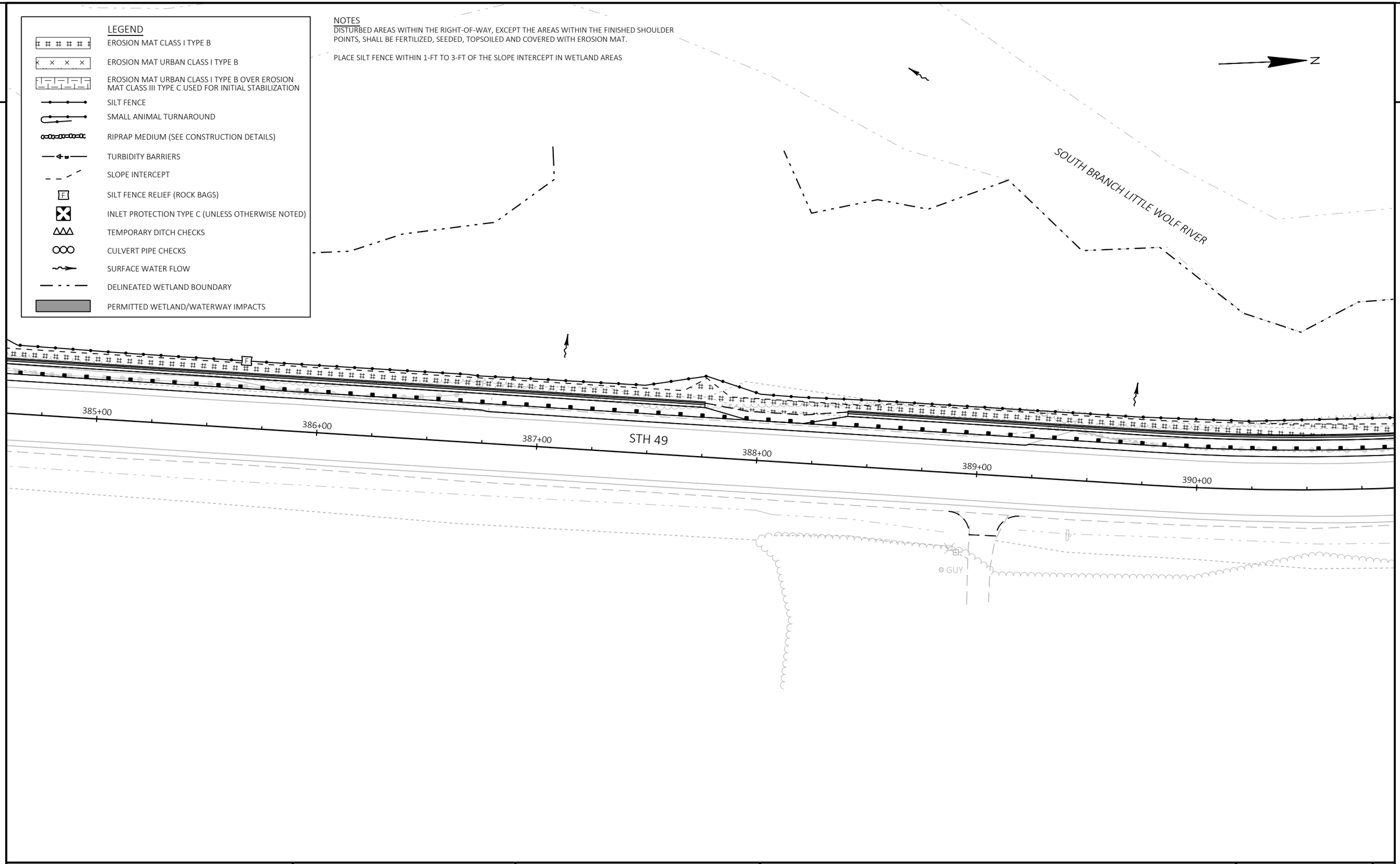

2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 45	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 11

PLOT DATE : 6/29/2023 7:15 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
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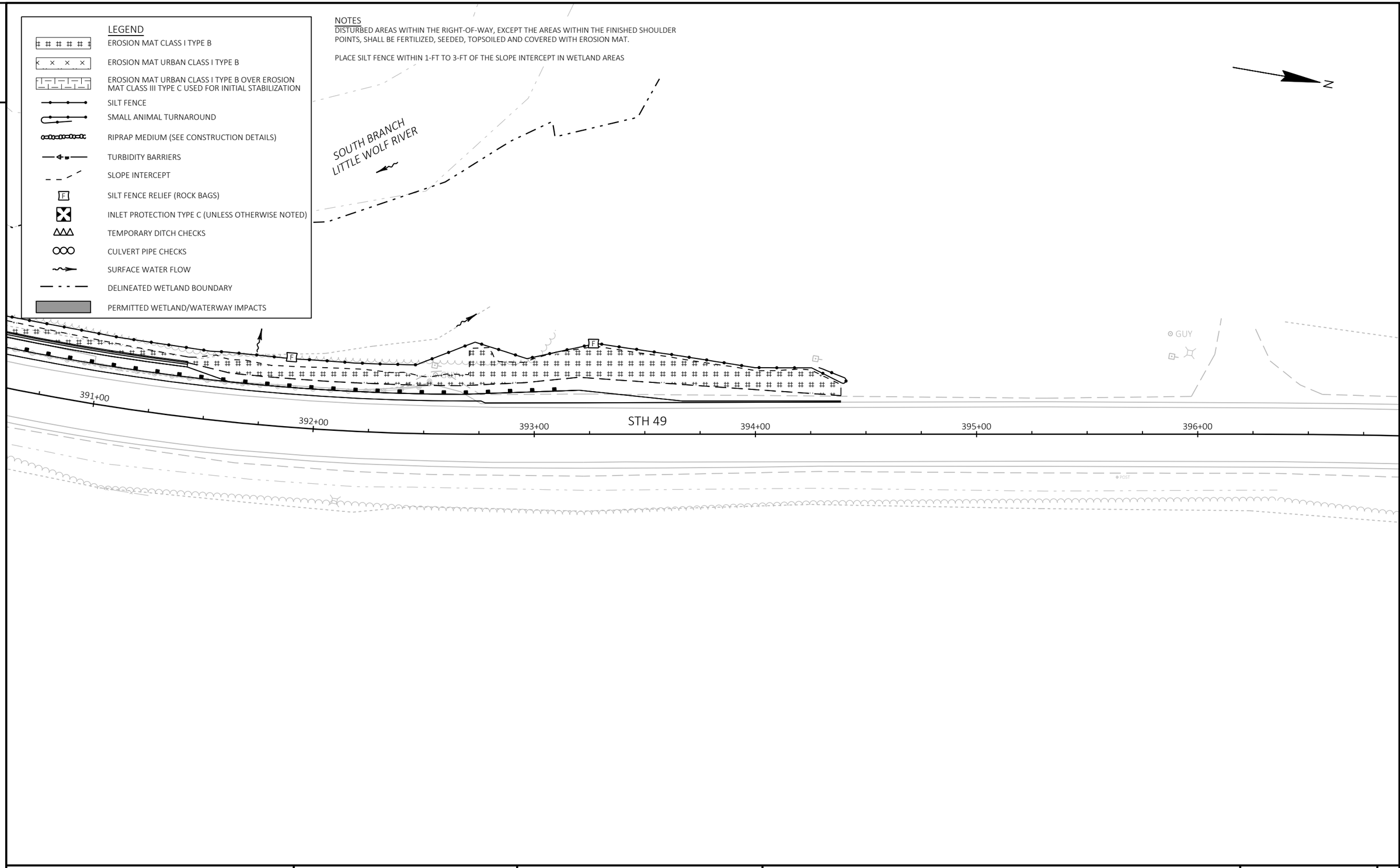

2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 46	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 12

PLOT DATE : 6/29/2023 7:15 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
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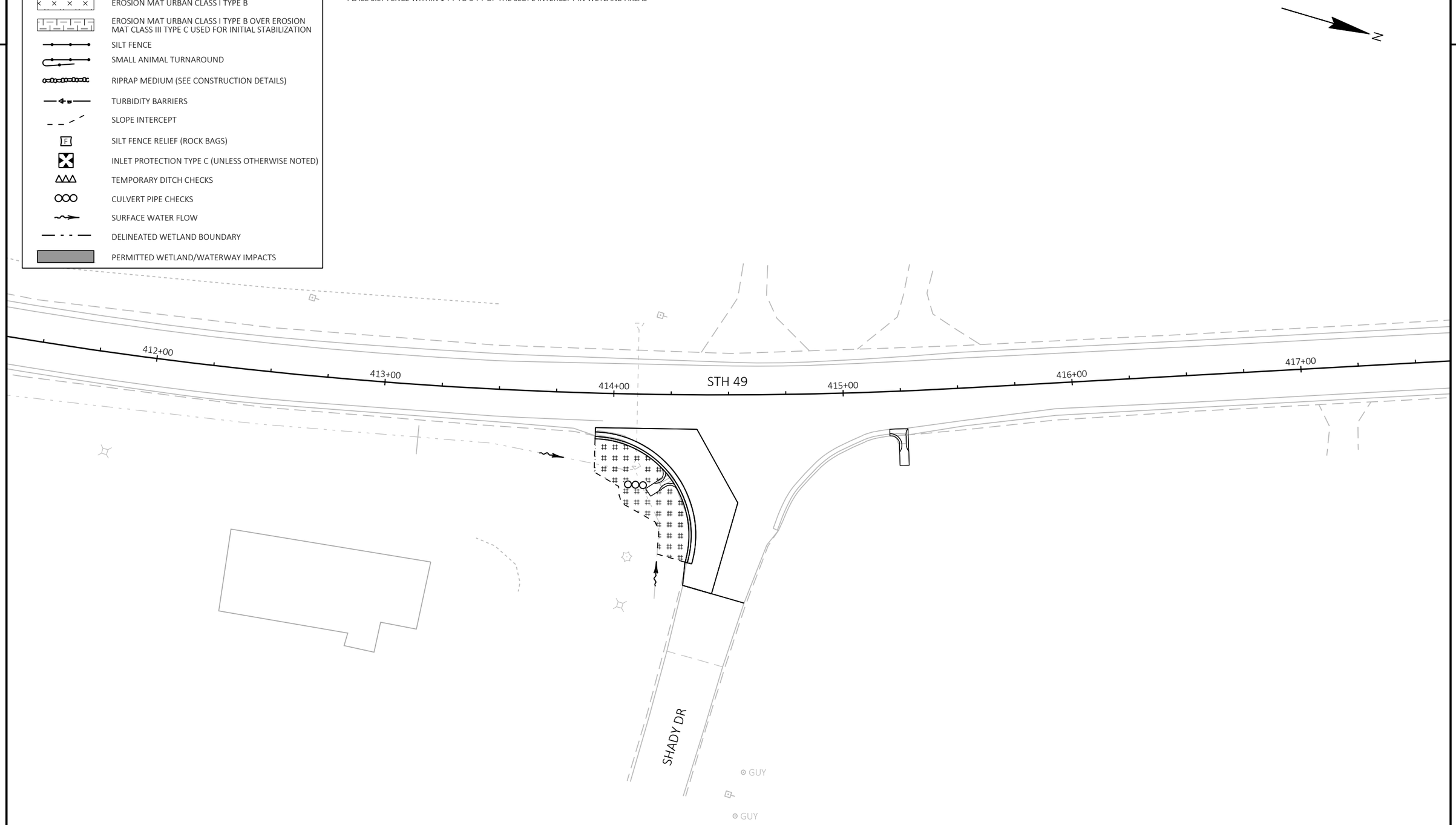

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 47	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 13

PLOT DATE : 6/29/2023 7:15 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B OVER EROSION MAT CLASS III TYPE C USED FOR INITIAL STABILIZATION
- SILT FENCE
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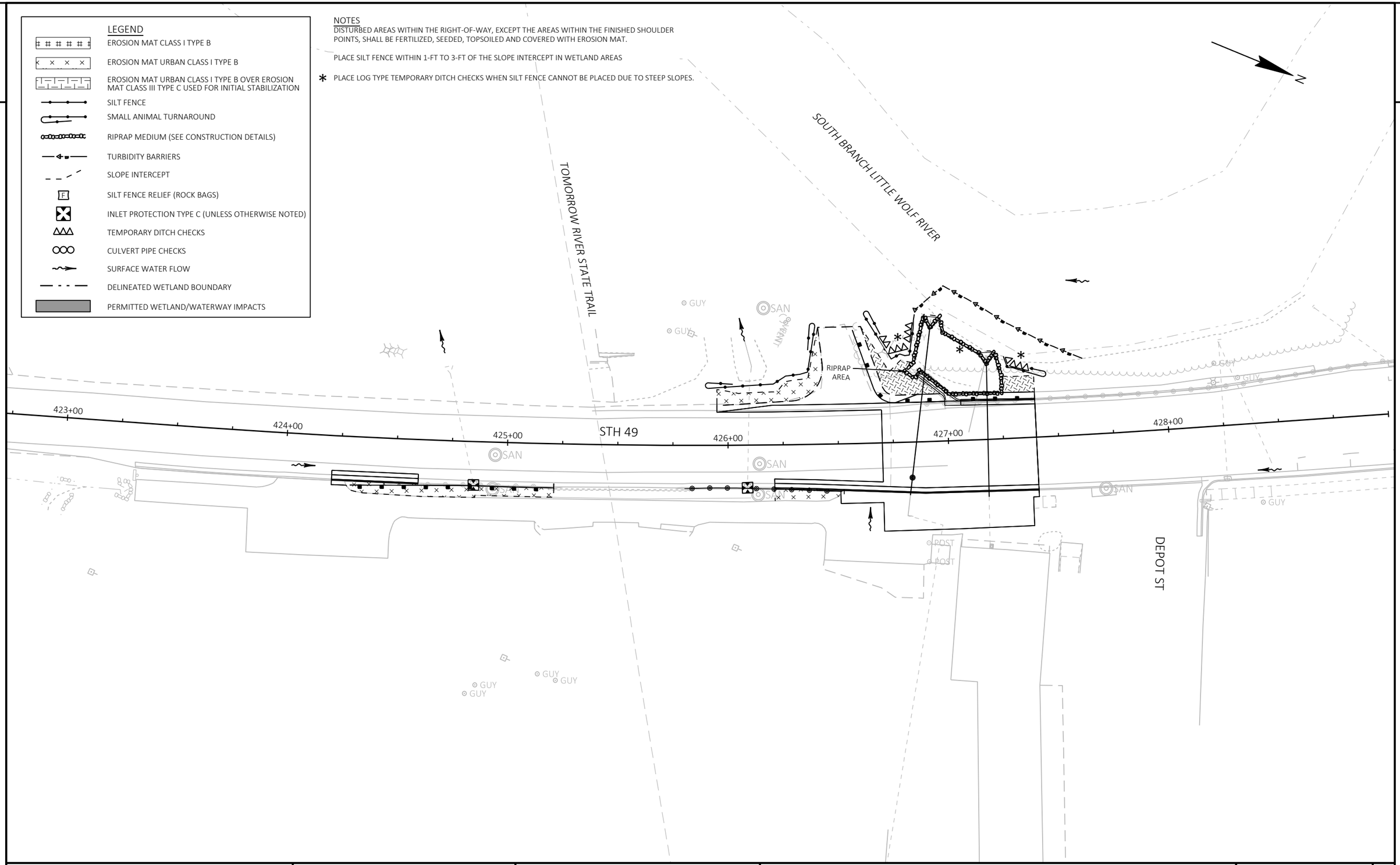
PLACE SILT FENCE WITHIN 1-FT TO 3-FT OF THE SLOPE INTERCEPT IN WETLAND AREAS

* PLACE LOG TYPE TEMPORARY DITCH CHECKS WHEN SILT FENCE CANNOT BE PLACED DUE TO STEEP SLOPES.



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	EROSION CONTROL	SHEET 48	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 14

PLOT DATE : 6/29/2023 7:15 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND
SLOPE INTERCEPT
STORM SEWER PIPE
SURFACE WATER FLOW

SOUTH BRANCH LITTLE WOLF RIVER

STRUCTURE 2
STA 426+94.14
O/S 57.20, LT

STRUCTURE 3
STA 427+18.82
O/S 40.00, LT

STRUCTURE 1
STA 426+83.18
O/S 16.10, RT

PIPE 1.1
MATCH EXISTING SSP
CONCRETE COLLAR FOR PIPE REQ'D
STA 426+82.03
O/S 24.02, RT

PIPE 3.1
MATCH EXISTING SSP
CONCRETE COLLAR FOR PIPE REQ'D
STA 427+17.40
O/S 26.00, RT

STH 49

424+00 425+00 426+00 427+00 428+00

BASE AGG PE
ASPH PE
ASPH CE
CAUTION
R/W
TLE
DEPOT ST
TOMORROW RIVER STATE TRAIL

STH 49 STRUCTURE 1 - STRUCTURE 2

STRUCTURE 1
MANHOLES 4-FT / J
923.14
FINISHED SURFACE
EXISTING GROUND
PIPE 1.1
MATCH EXISTING SSPRC
CONCRETE COLLAR FOR
PIPE REQ'D
SSP CLASS III-B 18-INCH
@1.33%
SSP CLASS III-B 24-INCH
@1.33%
EXISTING SSP
912.85
912.80
911.92
912.93+/-
MATCH
EXISTING
STRUCTURE 2
APRON ENDWALLS FOR CULVERT PIPE 24-INCH

925 920 915 910

STH 49 STRUCTURE 3

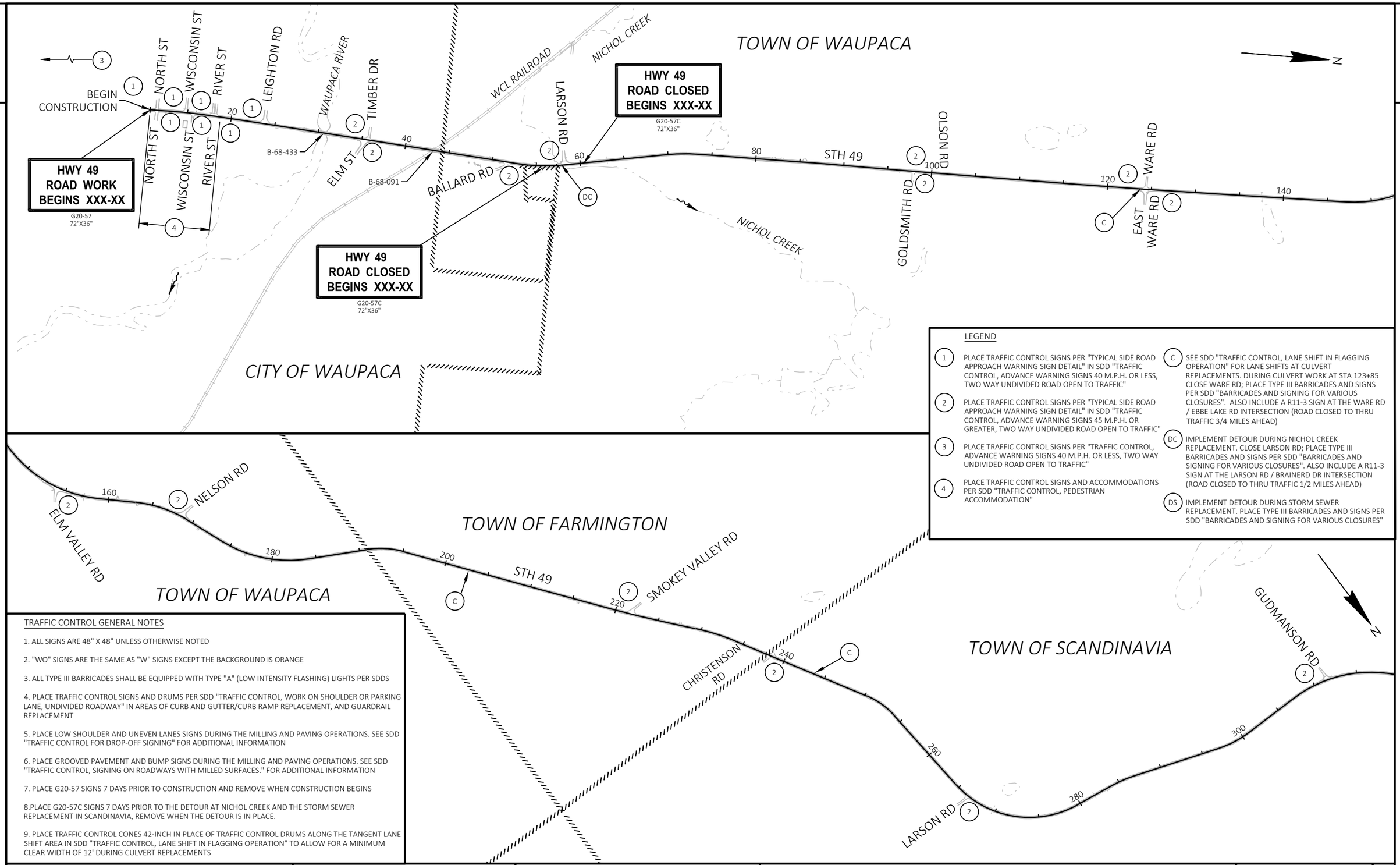
FINISHED SURFACE
EXISTING SSP
PIPE 3.1
MATCH EXISTING SSPRC
CONCRETE COLLAR FOR
PIPE REQ'D
EXISTING GROUND
917.73+/-
MATCH
EXISTING
SSP CLASS III-B 18-INCH
@ 8.00%
912.93
STRUCTURE 3
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

925 920 915 910

STORM SEWER SCHEDULE

STRUCTURE OR PIPE NO.	STATION	(1) OFFSET	C-C (FT)	TO STRUCTURE OR PIPE	MH TYPE / COVER	RIM/ GRATE ELEV.	(2) T.O.S. ELEV.	(3) DEPTH (FT)	DISCHARGE PIPE CLASS	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV. (7)	DISCHARGE PIPE DISCHARGE ELEV.	(4) LENGTH (FT)	(5) SLOPE (%)	REMARKS
1.1	426+82.03	24.02' RT	8.0	1	--	--	--	--	SSPC III-B	18	912.93	912.85	6	1.33	CONCRETE COLLARS FOR PIPE REQ'D
1	426+83.18	16.10' RT	68.0	2	4-FT DIAMETER / J	923.14	921.89	9.09	SSPC III-B	24	912.80	911.92	66	1.33	--
2	426+94.03	57.20' LT (6)	--	--	--	--	--	--	--	24	--	--	--	--	APRON ENDWALL REQ'D
3.1	427+17.40	26.04' RT	60.0	3	--	--	--	--	SSPC III-B	18	917.73	912.93	60	8.00	CONCRETE COLLARS FOR PIPE REQ'D
3	427+18.81	40.00' LT (6)	--	--	--	--	--	--	--	18	--	--	--	--	APRON ENDWALL REQ'D

(1) STRUCTURE OFFSET IS TO CENTER OF STRUCTURE
(2) TOP OF STRUCTURE ELEVATION (T.O.S.) IS DETERMINED BY SUBTRACTING THE CASTING HEIGHT AND 6-INCHES FOR ADJUSTMENT, FROM THE RIM ELEVATION. TYPE J MANHOLE CASTING IS 9-INCHES IN HEIGHT.
(3) DEPTH OF STRUCTURE IS MEASURED BY SUBTRACTING INVERT ELEVATION FROM T.O.S.
(4) PIPE LENGTH IS MEASURED FROM INSIDE WALL OF STRUCTURE TO INSIDE WALL OF STRUCTURE OR INSIDE WALL OF STRUCTURE TO THE EXISTING PIPE CONNECTION. PAYMENT IS C-C PER STANDARD SPEC.
(5) PIPE SLOPE IS CALCULATED USING ((INLET ELEVATION - DISCHARGE ELEVATION) / PIPE LENGTH)*100
(6) STATION AND OFFSET AT ENDWALL IS TO THE BEGINING OF ENDWALL/END OF NORMAL PIPE
(7) INLET ELEVATION IS APPROXIMATE WHEN CONNECTING TO EXISTING PIPE. MATCH EXISTING.



LEGEND

(1) PLACE TRAFFIC CONTROL SIGNS PER "TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

(2) PLACE TRAFFIC CONTROL SIGNS PER "TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

(3) PLACE TRAFFIC CONTROL SIGNS PER "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

(4) PLACE TRAFFIC CONTROL SIGNS AND ACCOMMODATIONS PER SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

(C) SEE SDD "TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION" FOR LANE SHIFTS AT CULVERT REPLACEMENTS. DURING CULVERT WORK AT STA 123+85 CLOSE WARE RD; PLACE TYPE III BARRICADES AND SIGNS PER SDD "BARRICADES AND SIGNING FOR VARIOUS CLOSURES". ALSO INCLUDE A R11-3 SIGN AT THE WARE RD / EBBE LAKE RD INTERSECTION (ROAD CLOSED TO THRU TRAFFIC 3/4 MILES AHEAD)

(DC) IMPLEMENT DETOUR DURING NICHOL CREEK REPLACEMENT. CLOSE LARSON RD; PLACE TYPE III BARRICADES AND SIGNS PER SDD "BARRICADES AND SIGNING FOR VARIOUS CLOSURES". ALSO INCLUDE A R11-3 SIGN AT THE LARSON RD / BRAINERD DR INTERSECTION (ROAD CLOSED TO THRU TRAFFIC 1/2 MILES AHEAD)

(DS) IMPLEMENT DETOUR DURING STORM SEWER REPLACEMENT. PLACE TYPE III BARRICADES AND SIGNS PER SDD "BARRICADES AND SIGNING FOR VARIOUS CLOSURES"

TRAFFIC CONTROL GENERAL NOTES

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

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

3. ALL TYPE III BARRICADES SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS PER SDDS

4. PLACE TRAFFIC CONTROL SIGNS AND DRUMS PER SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" IN AREAS OF CURB AND GUTTER/CURB RAMP REPLACEMENT, AND GUARDRAIL REPLACEMENT

5. PLACE LOW SHOULDER AND UNEVEN LANES SIGNS DURING THE MILLING AND PAVING OPERATIONS. SEE SDD "TRAFFIC CONTROL FOR DROP-OFF SIGNING" FOR ADDITIONAL INFORMATION

6. PLACE GROOVED PAVEMENT AND BUMP SIGNS DURING THE MILLING AND PAVING OPERATIONS. SEE SDD "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES." FOR ADDITIONAL INFORMATION

7. PLACE G20-57 SIGNS 7 DAYS PRIOR TO CONSTRUCTION AND REMOVE WHEN CONSTRUCTION BEGINS

8.PLACE G20-57C SIGNS 7 DAYS PRIOR TO THE DETOUR AT NICHOL CREEK AND THE STORM SEWER REPLACEMENT IN SCANDINAVIA, REMOVE WHEN THE DETOUR IS IN PLACE.

9. PLACE TRAFFIC CONTROL CONES 42-INCH IN PLACE OF TRAFFIC CONTROL DRUMS ALONG THE TANGENT LANE SHIFT AREA IN SDD "TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION" TO ALLOW FOR A MINIMUM CLEAR WIDTH OF 12' DURING CULVERT REPLACEMENTS

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - OVERVIEW	SHEET 50	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\025000-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 6/29/2023 7:16 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

TOWN OF SCANDINAVIA

PETERSON CREEK

WINDY HILL RD

GUDMANSON RD

ELM VALLEY RD

CTH Q

STH 49

SOUTH BRANCH LITTLE WOLF RIVER

TOMORROW RIVER STATE TRAIL

N

300

320

340

360

380

400

420

B-68-130

R-68-013 AND R-68-014
PROPOSED RETAINING WALL
(SEE TRAFFIC CONTROL DETAILS
FOR ONE LANE CONDITIONS)

B-68-537

SHADY DR

DEPOT ST

HWY 49
ROAD CLOSED
BEGINS XXX-XX
G20-57C
72"X36"

END
CONSTRUCTION

HWY 49
ROAD WORK
BEGINS XXX-XX
G20-57
72"X36"

HWY 49
ROAD CLOSED
BEGINS XXX-XX
G20-57C
72"X36"

VILLAGE OF SCANDINAVIA

SILVER LAKE

TRAFFIC CONTROL GENERAL NOTES

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

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

3. ALL TYPE III BARRICADES SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS PER SDDS

4. PLACE TRAFFIC CONTROL SIGNS AND DRUMS PER SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" IN AREAS OF CURB AND GUTTER/CURB RAMP REPLACEMENT, AND GUARDRAIL REPLACEMENT

5. PLACE LOW SHOULDER AND UNEVEN LANES SIGNS DURING THE MILLING AND PAVING OPERATIONS. SEE SDD "TRAFFIC CONTROL FOR DROP-OFF SIGNING" FOR ADDITIONAL INFORMATION

6. PLACE GROOVED PAVEMENT AND BUMP SIGNS DURING THE MILLING AND PAVING OPERATIONS. SEE SDD "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES." FOR ADDITIONAL INFORMATION

7. PLACE G20-57 SIGNS 7 DAYS PRIOR TO CONSTRUCTION AND REMOVE WHEN CONSTRUCTION BEGINS

8.PLACE G20-57C SIGNS 7 DAYS PRIOR TO THE DETOUR AT NICHOL CREEK AND THE STORM SEWER REPLACEMENT IN SCANDINAVIA, REMOVE WHEN THE DETOUR IS IN PLACE.

9. PLACE TRAFFIC CONTROL CONES 42-INCH IN PLACE OF TRAFFIC CONTROL DRUMS ALONG THE TANGENT LANE SHIFT AREA IN SDD "TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION" TO ALLOW FOR A MINIMUM CLEAR WIDTH OF 12' DURING CULVERT REPLACEMENTS

LEGEND

(1) PLACE TRAFFIC CONTROL SIGNS PER "TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

(2) PLACE TRAFFIC CONTROL SIGNS PER "TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

(3) PLACE TRAFFIC CONTROL SIGNS PER "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

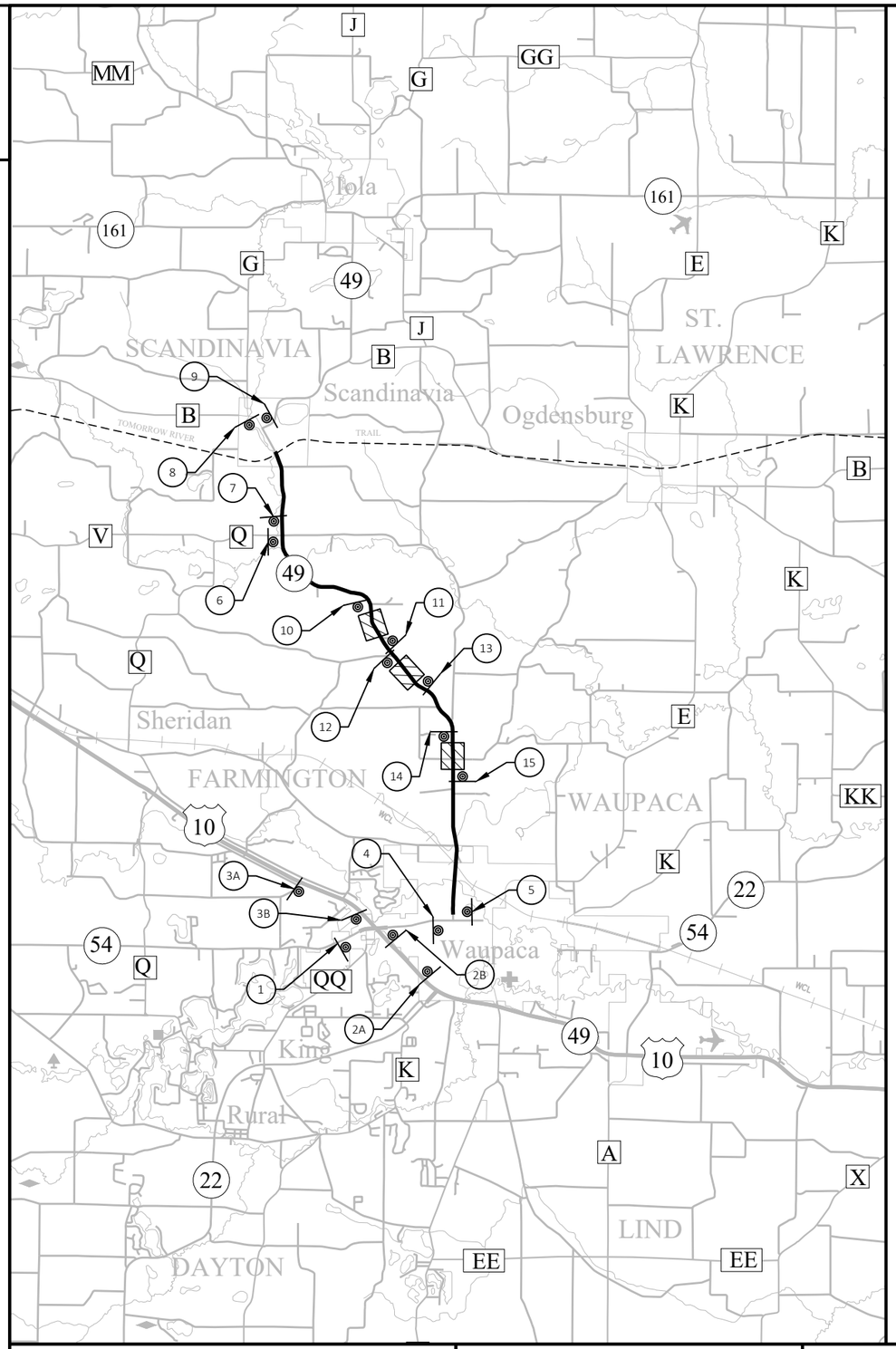
(4) PLACE TRAFFIC CONTROL SIGNS AND ACCOMMODATIONS PER SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

(C) SEE SDD "TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION" FOR LANE SHIFTS AT CULVERT REPLACEMENTS. DURING CULVERT WORK AT STA 123+85 CLOSE WARE RD; PLACE TYPE III BARRICADES AND SIGNS PER SDD "BARRICADES AND SIGNING FOR VARIOUS CLOSURES". ALSO INCLUDE A R11-3 SIGN AT THE WARE RD / EBBE LAKE RD INTERSECTION (ROAD CLOSED TO THRU TRAFFIC 3/4 MILES AHEAD)

(DC) IMPLEMENT DETOUR DURING NICHOL CREEK REPLACEMENT. CLOSE LARSON RD; PLACE TYPE III BARRICADES AND SIGNS PER SDD "BARRICADES AND SIGNING FOR VARIOUS CLOSURES". ALSO INCLUDE A R11-3 SIGN AT THE LARSON RD / BRAINERD DR INTERSECTION (ROAD CLOSED TO THRU TRAFFIC 1/2 MILES AHEAD)

(DS) IMPLEMENT DETOUR DURING STORM SEWER REPLACEMENT. PLACE TYPE III BARRICADES AND SIGNS PER SDD "BARRICADES AND SIGNING FOR VARIOUS CLOSURES"

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - OVERVIEW	SHEET 51	E



N

NOTES FOR WIDTH RESTRICTION SIGNING

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

* PLACE SIGN M1-6 AND M3-1 OR M3-3 WHEN ASSEMBLY IS MOUNTED ON ALL ROADWAYS OTHER THAN STH 49. (1) (2A) (2B) (3A) (3B) (5) (6) (8)

** PLACE SIGN M3-1 ON THE FOLLOWING ASSEMBLIES. (1) (2A) (2B) (3A) (3B) (5)

*** PLACE SIGN M3-3 ON THE FOLLOWING ASSEMBLIES. (6) (8)

**** PLACE SIGN W057-52 ON THE FOLLOWING ASSEMBLIES. (1) (2A) (2B) (3A) (3B) (4) (5) (6) (7) (8) (9)

PLACE ADJACENT TO INTERCHANGE EXIT SIGNING. (2A) (2B) (3A) (3B)

LEGEND

- SIGN SUPPORT
- PROJECT AREA
- WIDTH RESTRICTED WORK ZONE DURING CULVERT REPLACEMENTS

(1) STH 49 / USH 10 INTERCHANGE - 2 1/2 MILES AHEAD

(2A) (2B) USH 10 WB EXIT RAMP AT STH 49 - 2 1/2 MILES AHEAD

(3A) (3B) USH 10 EB EXIT RAMP AT STH 49 - 2 1/2 MILES AHEAD

(4) STH 49/FULTON ST INTERSECTION - 1 MILE AHEAD

(5) FULTON ST/STH49 INTERSECTION - 1 MILE AHEAD

(6) CTH Q / STH 49 INTERSECTION - 2 MILES AHEAD

(7) STH 49 / CTH Q INTERSECTION - 2 MILES AHEAD

(8) CTH B / STH 49 INTERSECTION - 4 MILES AHEAD

(9) STH 49 / CTH B INTERSECTION - 4 MILES AHEAD

(10) STH 49 SB PRIOR TO STA 243+82 WORK ZONE

(11) STH 49 NB PRIOR TO STH 243+82 WORK ZONE

(12) STH 49 SB PRIOR TO STA 202+75 WORK ZONE

(13) STH 49 NB PRIOR TO STH 202+75 WORK ZONE

(14) STH 49 SB PRIOR TO STA 123.85 WORK ZONE

(15) STH 49 NB PRIOR TO STH 123+85 WORK ZONE

** NORTH
M3-1
24"X12"

*** SOUTH
M3-3
24"X12"

* 49
M1-6
24"X24"

MAX. 11' WIDTH
W12-52
48"X48"

**** XX MILES AHEAD
WO57-52
48"X36"

PLACE ABOVE SIGNS DURING CULVERT REPLACEMENTS AT THE FOLLOWING LOCATIONS
STA 123+85
STA 202+75
STA 243+82

2

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - WIDTH RESTRICTIONS	SHEET 52	E

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- SIGN ON PERMANENT SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- TEMPORARY TRAILER MOUNTED TRAFFIC SIGNAL
- WORK AREA
- DIRECTION OF TRAFFIC
- MARKING REMOVAL LINE 4-INCH
- TW — TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- TTW — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- STP — TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

SIGNAL TIMING

SIGNAL TIMING PROVIDED BY NC REGION, TRAFFIC SECTION. SIGNAL TIMING ASSUMES 865' SPACING BETWEEN STOP LINES, 847' TRAVEL DISTANCE FROM EB PE THROUGH WORK ZONE, AND 748' TRAVEL DISTANCE FROM WB FE THROUGH WORK ZONE.

	Ø1	Ø2	Ø3	Ø4
	NB STH 49	EB PE	SB STH 49	WB FE
MINIMUM GREEN TIME	9 sec	5 sec	9 sec	5 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec	-
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec	-
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec	-
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec	7 sec
YELLOW	5 sec	3 sec	5 sec	3 sec
ALL-RED	2 sec	26 sec	6 sec	24 sec
RECALL MODE	MIN	MIN	MIN	MIN

PHASE 2 SHALL COME AFTER PHASE 1, PHASE 4 SHALL COME AFTER PHASE 3.

CONTRACTOR SHALL REVIEW SIGNALS AFTER PROGRAMMING TO ASSURE THERE ARE NOT CONFLICTING MOVEMENTS.

IF THERE ARE QUESTIONS REGARDING THE TIMINGS PLEASE CONTACT TRAFFIC ENGINEER

NOTES

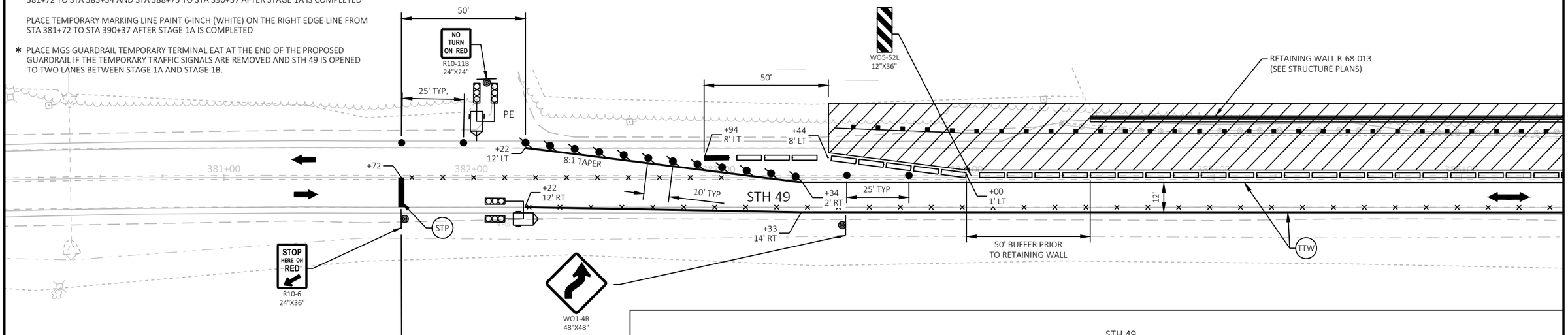
TEMPORARY MARKING, TRAFFIC CONTROL DRUMS AND TEMPORARY SIGNAL PLACEMENT ARE SHOWN ON THE PLANS, SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR ADDITIONAL INFORMATION

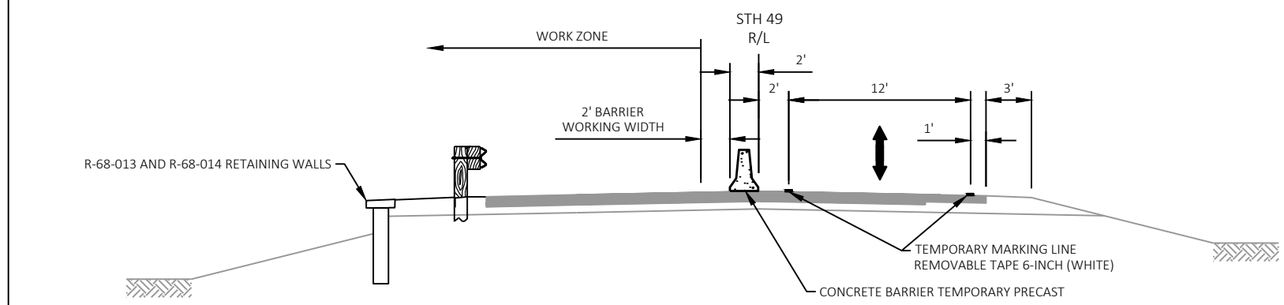
SEE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION" - SHEET C FOR ADDITIONAL INFORMATION

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) ON CENTERLINE FROM STA 381+72 TO STA 383+34 AND STA 388+75 TO STA 390+37 AFTER STAGE 1A IS COMPLETED

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) ON THE RIGHT EDGE LINE FROM STA 381+72 TO STA 390+37 AFTER STAGE 1A IS COMPLETED

* PLACE MGS GUARDRAIL TEMPORARY TERMINAL EAT AT THE END OF THE PROPOSED GUARDRAIL IF THE TEMPORARY TRAFFIC SIGNALS ARE REMOVED AND STH 49 IS OPENED TO TWO LANES BETWEEN STAGE 1A AND STAGE 1B.





NOTES

TRAFFIC WILL BE MAINTAINED WITH THE USE OF TEMPORARY TRAFFIC SIGNALS DURING THE RETAINING WALL CONSTRUCTION. SEE TRAFFIC CONTROL PLAN SHEETS.

ALL WORK OUTSIDE OF THE CONCRETE BARRIER TEMPORARY PRECAST WILL BE COMPLETED UNDER FLAGGING OPERATIONS, SEE SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR ADDITIONAL DETAILS.

STAGE 1A/1B TYPICAL SECTION
RETAINING WALL CONSTRUCTION

STA 381+72 - STA 394+32

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - RETAINING WALL - STAGE 1A (R-68-013)	SHEET 53	E

2

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- SIGN ON PERMANENT SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- TEMPORARY TRAILER MOUNTED TRAFFIC SIGNAL
- WORK AREA
- DIRECTION OF TRAFFIC
- MARKING REMOVAL LINE 4-INCH
- (TW) TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- (TTW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- (STP) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

SIGNAL TIMING

SIGNAL TIMING PROVIDED BY NC REGION, TRAFFIC SECTION. SIGNAL TIMING ASSUMES 865' SPACING BETWEEN STOP LINES, 847' TRAVEL DISTANCE FROM EB PE THROUGH WORK ZONE, AND 748' TRAVEL DISTANCE FROM WB FE THROUGH WORK ZONE.

	Ø1 NB STH 49	Ø2 EB PE	Ø3 SB STH 49	Ø4 WB FE
MINIMUM GREEN TIME	9 sec	5 sec	9 sec	5 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec	-
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec	-
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec	-
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec	7 sec
YELLOW	5 sec	3 sec	5 sec	3 sec
ALL-RED	2 sec	26 sec	6 sec	24 sec
RECALL MODE	MIN	MIN	MIN	MIN

PHASE 2 SHALL COME AFTER PHASE 1, PHASE 4 SHALL COME AFTER PHASE 3.

CONTRACTOR SHALL REVIEW SIGNALS AFTER PROGRAMMING TO ASSURE THERE ARE NOT CONFLICTING MOVEMENTS.

IF THERE ARE QUESTIONS REGARDING THE TIMINGS PLEASE CONTACT TRAFFIC ENGINEER

NOTES

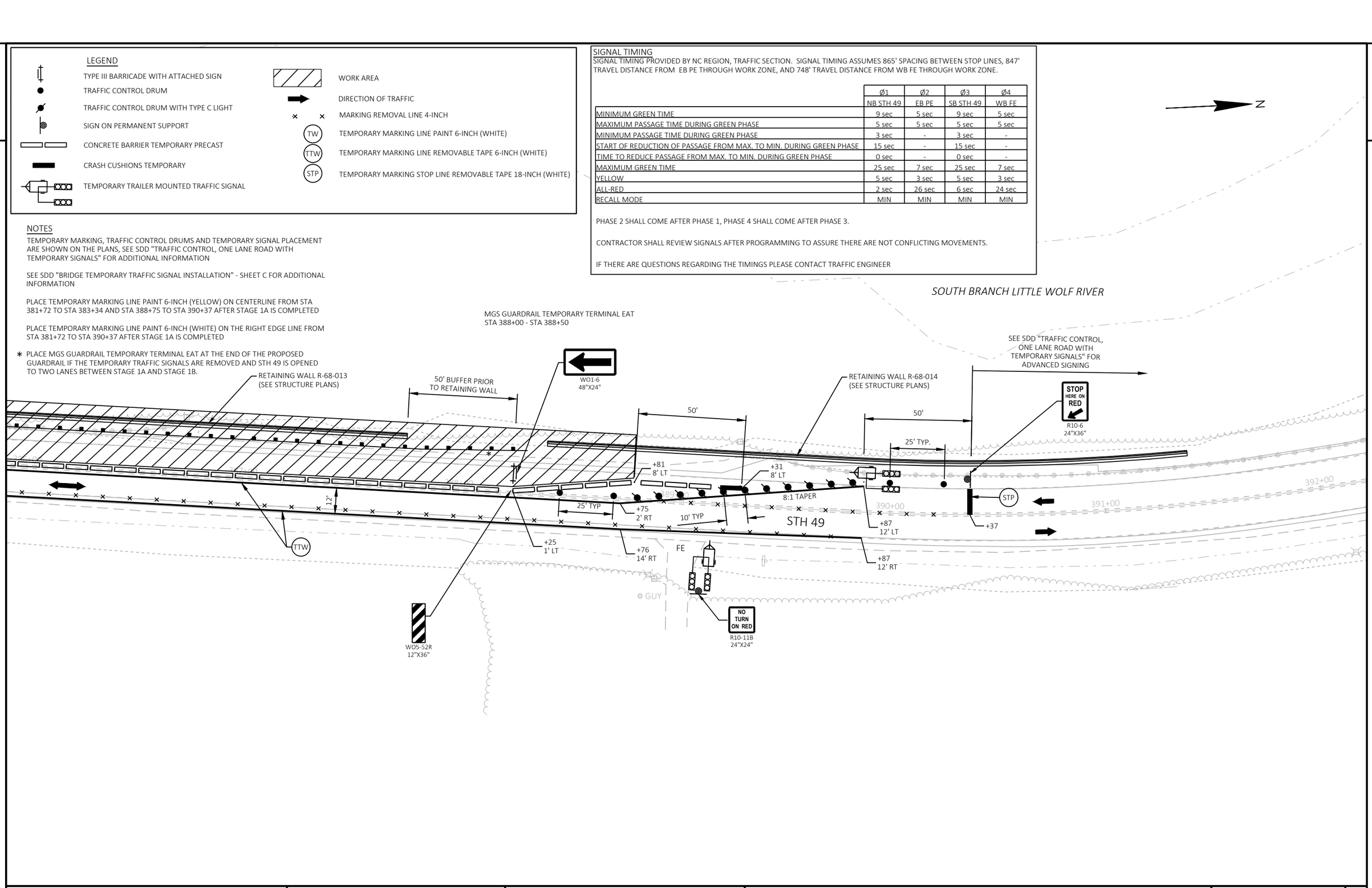
TEMPORARY MARKING, TRAFFIC CONTROL DRUMS AND TEMPORARY SIGNAL PLACEMENT ARE SHOWN ON THE PLANS, SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR ADDITIONAL INFORMATION

SEE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION" - SHEET C FOR ADDITIONAL INFORMATION

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) ON CENTERLINE FROM STA 381+72 TO STA 383+34 AND STA 388+75 TO STA 390+37 AFTER STAGE 1A IS COMPLETED

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) ON THE RIGHT EDGE LINE FROM STA 381+72 TO STA 390+37 AFTER STAGE 1A IS COMPLETED

* PLACE MGS GUARDRAIL TEMPORARY TERMINAL EAT AT THE END OF THE PROPOSED GUARDRAIL IF THE TEMPORARY TRAFFIC SIGNALS ARE REMOVED AND STH 49 IS OPENED TO TWO LANES BETWEEN STAGE 1A AND STAGE 1B.



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - RETAINING WALL - STAGE 1A (R-68-013)	SHEET 54	E

2

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- TEMPORARY TRAILER MOUNTED TRAFFIC SIGNAL
- WORK AREA
- DIRECTION OF TRAFFIC
- MARKING REMOVAL LINE 4-INCH
- (TW) TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- (TTW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- (STP) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

TEMPORARY SIGNAL TIMING

SIGNAL TIMING PROVIDED BY NC REGION, TRAFFIC SECTION. SIGNAL TIMING ASSUMES 865' SPACING BETWEEN STOP LINES AND 532' OF TRAVEL DISTANCE FROM THE WB FE THROUGH THE WORK ZONE.

	Ø1	Ø2	Ø3
	NB STH 49	WB FE	SB STH 49
MINIMUM GREEN TIME	9 sec	5 sec	9 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec
YELLOW	5 sec	3 sec	5 sec
ALL-RED	14 sec	19 sec	26 sec
RECALL MODE	MIN	MIN	MIN

PHASE 2 SHALL COME AFTER PHASE 1, PHASE 3 SHALL COME AFTER PHASE 2.

CONTRACTOR SHALL REVIEW SIGNALS AFTER PROGRAMMING TO ASSURE THERE ARE NOT CONFLICTING MOVEMENTS.

IF THERE ARE QUESTIONS REGARDING THE TIMINGS PLEASE CONTACT TRAFFIC ENGINEER

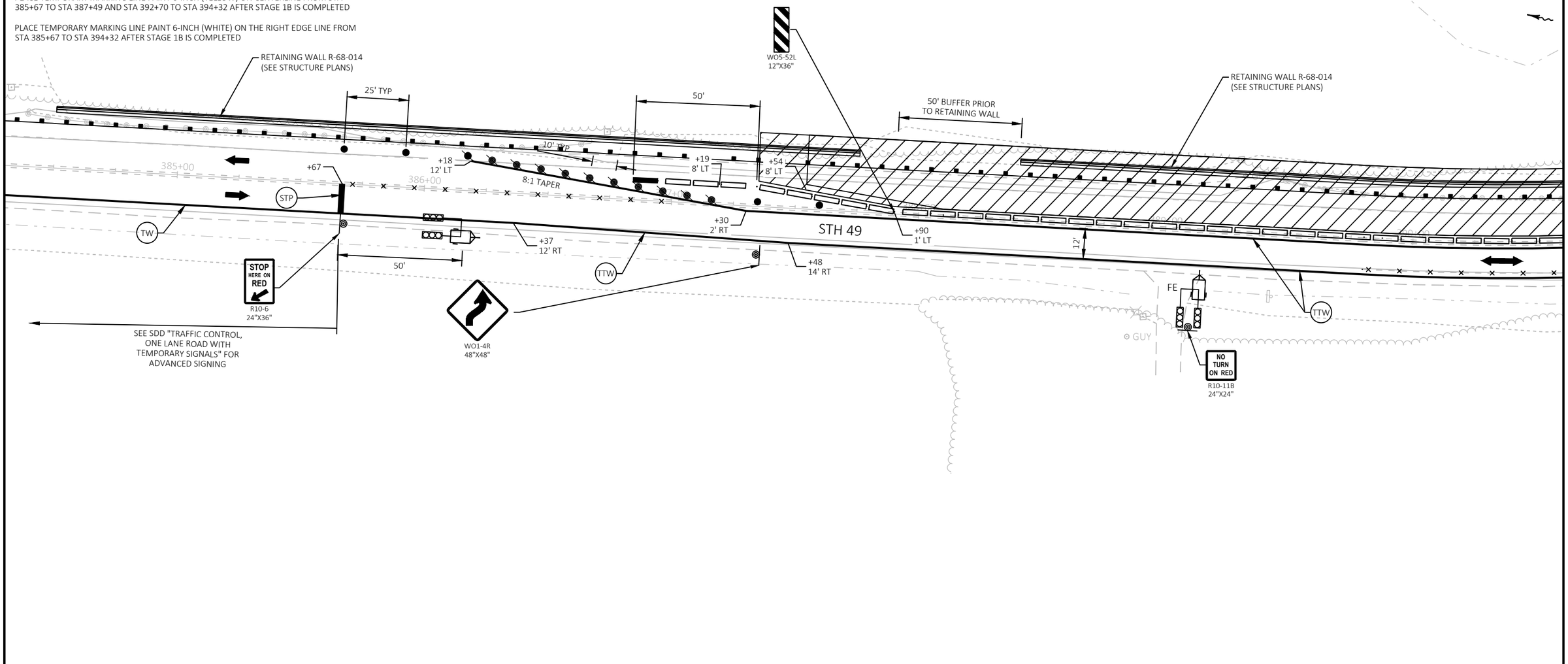
NOTES

TEMPORARY MARKING, TRAFFIC CONTROL DRUMS AND TEMPORARY SIGNAL PLACEMENT ARE SHOWN ON THE PLANS, SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR ADDITIONAL INFORMATION

SEE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION" - SHEET C FOR ADDITIONAL INFORMATION

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) ON CENTERLINE FROM STA 385+67 TO STA 387+49 AND STA 392+70 TO STA 394+32 AFTER STAGE 1B IS COMPLETED

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) ON THE RIGHT EDGE LINE FROM STA 385+67 TO STA 394+32 AFTER STAGE 1B IS COMPLETED



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - RETAINING WALL - STAGE 1B (R-68-014)	SHEET 55	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\025005-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/25/2023 6:19 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- TEMPORARY TRAILER MOUNTED TRAFFIC SIGNAL
- WORK AREA
- DIRECTION OF TRAFFIC
- MARKING REMOVAL LINE 4-INCH
- (TW) TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- (TTW) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- (STP) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

NOTES

TEMPORARY MARKING, TRAFFIC CONTROL DRUMS AND TEMPORARY SIGNAL PLACEMENT ARE SHOWN ON THE PLANS, SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR ADDITIONAL INFORMATION

SEE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION" - SHEET C FOR ADDITIONAL INFORMATION

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) ON CENTERLINE FROM STA 385+67 TO STA 387+49 AND STA 392+70 TO STA 394+32 AFTER STAGE 1B IS COMPLETED

PLACE TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) ON THE RIGHT EDGE LINE FROM STA 385+67 TO STA 394+32 AFTER STAGE 1B IS COMPLETED

TEMPORARY SIGNAL TIMING

SIGNAL TIMING PROVIDED BY NC REGION, TRAFFIC SECTION. SIGNAL TIMING ASSUMES 865' SPACING BETWEEN STOP LINES AND 532' OF TRAVEL DISTANCE FROM THE WB FE THROUGH THE WORK ZONE.

	Ø1	Ø2	Ø3
	NB STH 49	WB FE	SB STH 49
MINIMUM GREEN TIME	9 sec	5 sec	9 sec
MAXIMUM PASSAGE TIME DURING GREEN PHASE	5 sec	5 sec	5 sec
MINIMUM PASSAGE TIME DURING GREEN PHASE	3 sec	-	3 sec
START OF REDUCTION OF PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	15 sec	-	15 sec
TIME TO REDUCE PASSAGE FROM MAX. TO MIN. DURING GREEN PHASE	0 sec	-	0 sec
MAXIMUM GREEN TIME	25 sec	7 sec	25 sec
YELLOW	5 sec	3 sec	5 sec
ALL-RED	14 sec	19 sec	26 sec
RECALL MODE	MIN	MIN	MIN

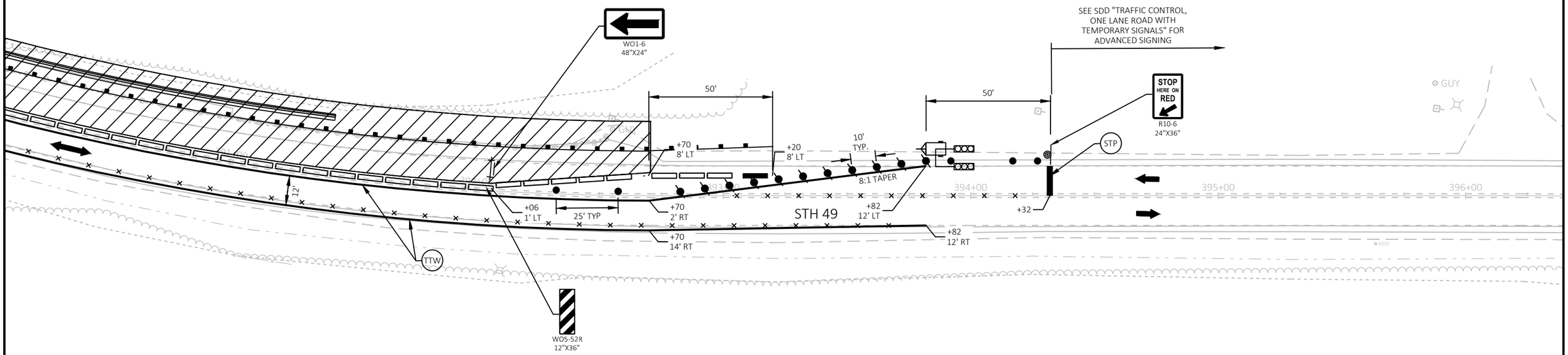
PHASE 2 SHALL COME AFTER PHASE 1, PHASE 3 SHALL COME AFTER PHASE 2.

CONTRACTOR SHALL REVIEW SIGNALS AFTER PROGRAMMING TO ASSURE THERE ARE NOT CONFLICTING MOVEMENTS.

IF THERE ARE QUESTIONS REGARDING THE TIMINGS PLEASE CONTACT TRAFFIC ENGINEER

N

SOUTH BRANCH LITTLE WOLF RIVER



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - RETAINING WALL - STAGE 1B (R-68-014)	SHEET 56	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\025005-TC.DWG
LAYOUT NAME - 02

PLOT DATE : 7/25/2023 6:19 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
- WORK ZONE STAGE 1-1
- WORK ZONE STAGE 1-2
- WORK ZONE STAGE 1-3
- WORK ZONE STAGE 1-4
- TRAFFIC CONTROL BARRICADES TYPE III W/ SIGN
- TRAFFIC CONTROL DRUMS
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY SIGN SUPPORT
- (1) TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH
- (2) TEMPORARY MARKING REMOVABLE MASK OUT TAPE 8-INCH

NOTES

DETAIL SHOWS ANTICIPATED STAGING FOR CURB RAMP REPLACEMENTS.

DURING CURB RAMP REPLACEMENTS, FOLLOW THE PEDESTRIAN STAGING OUTLINED IN THE "SIDEWALK AND CURB RAMP STAGING" TABLE OR AS DIRECTED BY ENGINEER.

PLACE TRAFFIC CONTROL SIGNS AND DRUMS PER SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" IN AREAS OF CURB AND GUTTER/CURB RAMP REPLACEMENTS.

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DEVICES AND INFORMATION.

LANES MAY BE TEMPORARILY CLOSED DURING WORKING HOURS SEE SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR ADDITIONAL INFORMATION.

ONLY CLOSE ONE QUADRANT AT A TIME AT THE NORTH ST INTERSECTION.

N

SEE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL DEVICES AND INFORMATION.

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" AND "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL DEVICES AND INFORMATION. UTILIZE CROSSING AT HILLCREST DRIVE/GRANITE STREET DURING RAMP CLOSURE.

SEE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL DEVICES AND INFORMATION.

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" AND "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL DEVICES AND INFORMATION. UTILIZE CROSSING AT SCOTT STREET DURING RAMP CLOSURES.

NORTH ST

STH 49

R/W

15' TYP.

4'

M4-60L
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

STAGE 1-1

STAGE 1-2

STAGE 1-3

STAGE 1-4

(1) (STAGE 1-4)

(2) (STAGE 1-4)

11+00 11+50 12+00 12+50 13+00

GUY SS SAN WV

SIDEWALK AND CURB RAMP STAGING	
SIDEWALK CLOSED	AVAILABLE PEDESTRIAN ROUTE INFORMATION
SOUTHEAST CORNER OF STH 49/NORTH ST (STAGE 1-1)	MAINTAIN PEDESTRIAN TRAFFIC ON THE NORTH SIDE OF NORTH ST ACROSS STH 49. NORTHEAST, SOUTHWEST, AND NORTHWEST CURB RAMPS AT STH 49/NORTH STREET ARE OPEN. UTILIZE SCOTT STREET CROSSING TO THE EAST FOR PEDESTRIANS TRAVELING WEST.
NORTHEAST CORNER OF STH 49/NORTH ST (STAGE 1-2)	MAINTAIN PEDESTRIAN TRAFFIC ON THE SOUTH SIDE OF NORTH ST ACROSS STH 49. SOUTHEAST, SOUTHWEST, AND NORTHWEST CURB RAMPS AT STH 49/NORTH STREET ARE OPEN. UTILIZE SCOTT STREET CROSSING TO THE EAST FOR PEDESTRIANS TRAVELING WEST.
SOUTHWEST CORNER OF STH 49/NORTH ST (STAGE 1-3)	PLACE TEMPORARY PEDESTRIAN CURB RAMP, TEMPORARY PEDESTRIAN SURFACE MATTING, TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD, AND TEMPORARY PEDESTRIAN SURFACE PLATE TO ALLOW ACCESS ACROSS NORTH ST. SOUTHEAST, NORTHWEST AND NORTHEAST CURB RAMPS AT STH 49/NORTH STREET ARE OPEN. UTILIZE HILLCREST DRIVE/GRANITE STREET CROSSING TO THE SOUTH FOR PEDESTRIANS TRAVELING NORTH.
NORTHWEST CORNER OF STH 49/NORTH ST (STAGE 1-4)	PLACE TEMPORARY PEDESTRIAN SURFACE MATTING, AND TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD TO ALLOW ACCESS ACROSS STH 49. NORTHEAST, SOUTHEAST AND SOUTHWEST CURB RAMPS AT STH 49/NORTH ST ARE OPEN.

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - TEMPORARY PEDESTRIAN ACCOMMODATION	SHEET 57	E

2

LEGEND

- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
- WORK ZONE STAGE 1-1 / WORK ZONE STAGE 1-2
- TRAFFIC CONTROL BARRICADES TYPE III W/ SIGN
- TRAFFIC CONTROL DRUMS
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY SIGN SUPPORT
- (1) TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH
- (2) TEMPORARY MARKING REMOVABLE MASK OUT TAPE 8-INCH

NOTES

DETAIL SHOWS ANTICIPATED STAGING FOR CURB RAMP REPLACEMENTS.

DURING CURB RAMP REPLACEMENTS, FOLLOW THE PEDESTRIAN STAGING OUTLINED IN THE "SIDEWALK AND CURB RAMP STAGING" TABLE OR AS DIRECTED BY ENGINEER.

PLACE TRAFFIC CONTROL SIGNS AND DRUMS PER SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" IN AREAS OF CURB AND GUTTER/CURB RAMP REPLACEMENTS.

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DEVICES AND INFORMATION.

LANES MAY BE TEMPORARILY CLOSED DURING WORKING HOURS SEE SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR ADDITIONAL INFORMATION.

N

R/W

SEE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL DEVICES AND INFORMATION.

WISCONSIN ST

15' TYP.

15' TYP.

M4-60R 30"X24"

(STAGE 1-2)

1

4'

STAGE 1-1

STAGE 1-2

4'

1

(STAGE 1-1)

M4-60R 30"X24"

WV

SAN

GUY

STH 49

14+00 14+50 15+00 15+50 16+00 16+50

SIDEWALK CLOSED R9-9 24"X12"

STAGE 1-1

TLE

15' TYP.

WISCONSIN ST

R/W

SIDEWALK AND CURB RAMP STAGING	
SIDEWALK CLOSED	AVAILABLE PEDESTRIAN ROUTE INFORMATION
STH 49/WISCONSIN ST INTERSECTION	PLACE TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD AND, TEMPORARY PEDESTRIAN SURFACE MATTING TO ALLOW ACCESS ACROSS WISCONSIN ST. DO NOT CONSTRUCT THE SOUTHWEST AND NORTHWEST CURB RAMPS AT THE SAME TIME TO ALLOW ROOM FOR TRAFFIC.

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - TEMPORARY PEDESTRIAN ACCOMMODATION	SHEET 58	E

2

LEGEND

- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN SURFACE PLATE
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
- WORK ZONE STAGE 1-1 / WORK ZONE STAGE 1-2
- TRAFFIC CONTROL BARRICADES TYPE III W/ SIGN
- TRAFFIC CONTROL DRUMS
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY SIGN SUPPORT
- (1) TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH
- (2) TEMPORARY MARKING REMOVABLE MASK OUT TAPE 8-INCH

NOTES

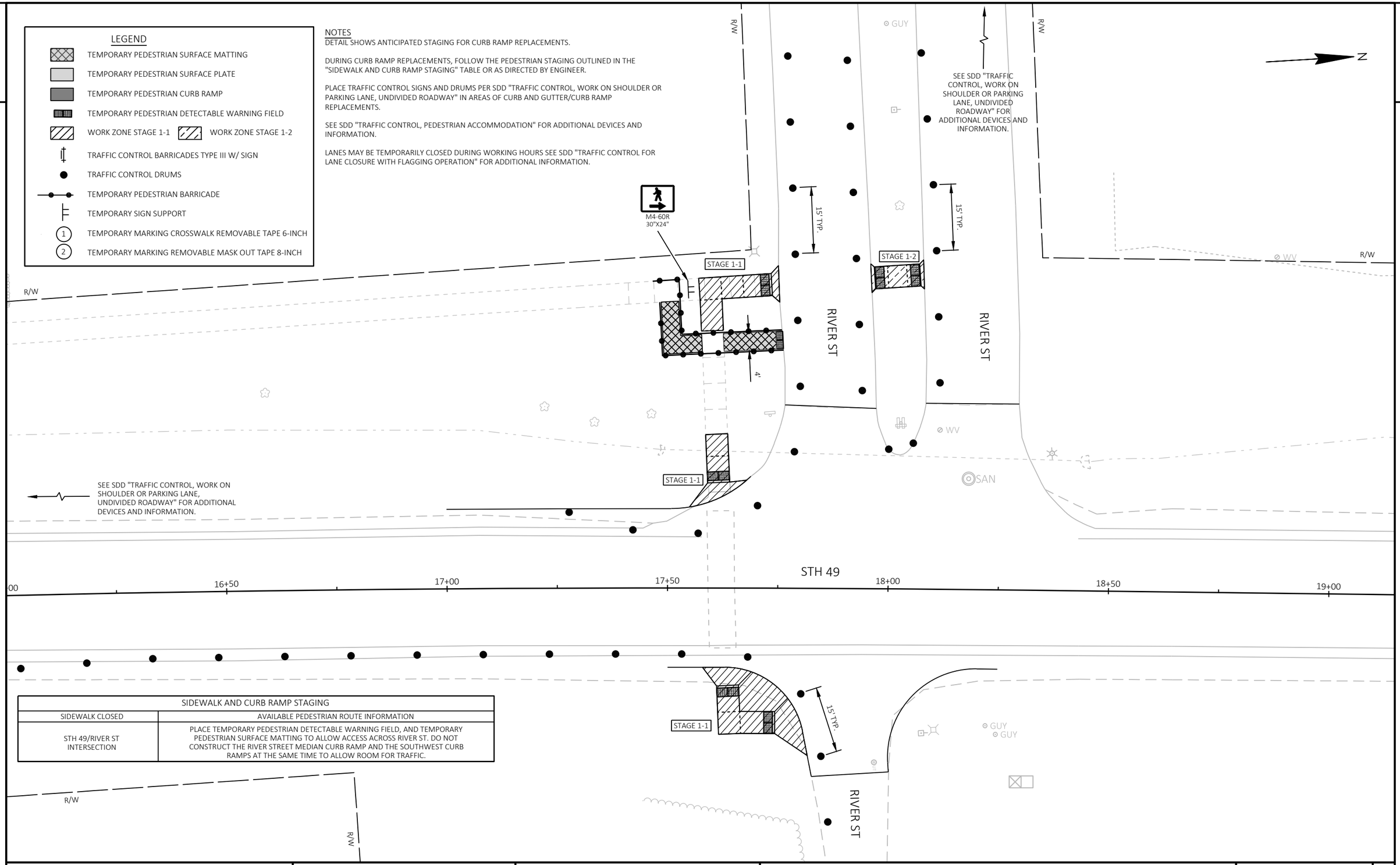
DETAIL SHOWS ANTICIPATED STAGING FOR CURB RAMP REPLACEMENTS.

DURING CURB RAMP REPLACEMENTS, FOLLOW THE PEDESTRIAN STAGING OUTLINED IN THE "SIDEWALK AND CURB RAMP STAGING" TABLE OR AS DIRECTED BY ENGINEER.

PLACE TRAFFIC CONTROL SIGNS AND DRUMS PER SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" IN AREAS OF CURB AND GUTTER/CURB RAMP REPLACEMENTS.

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DEVICES AND INFORMATION.

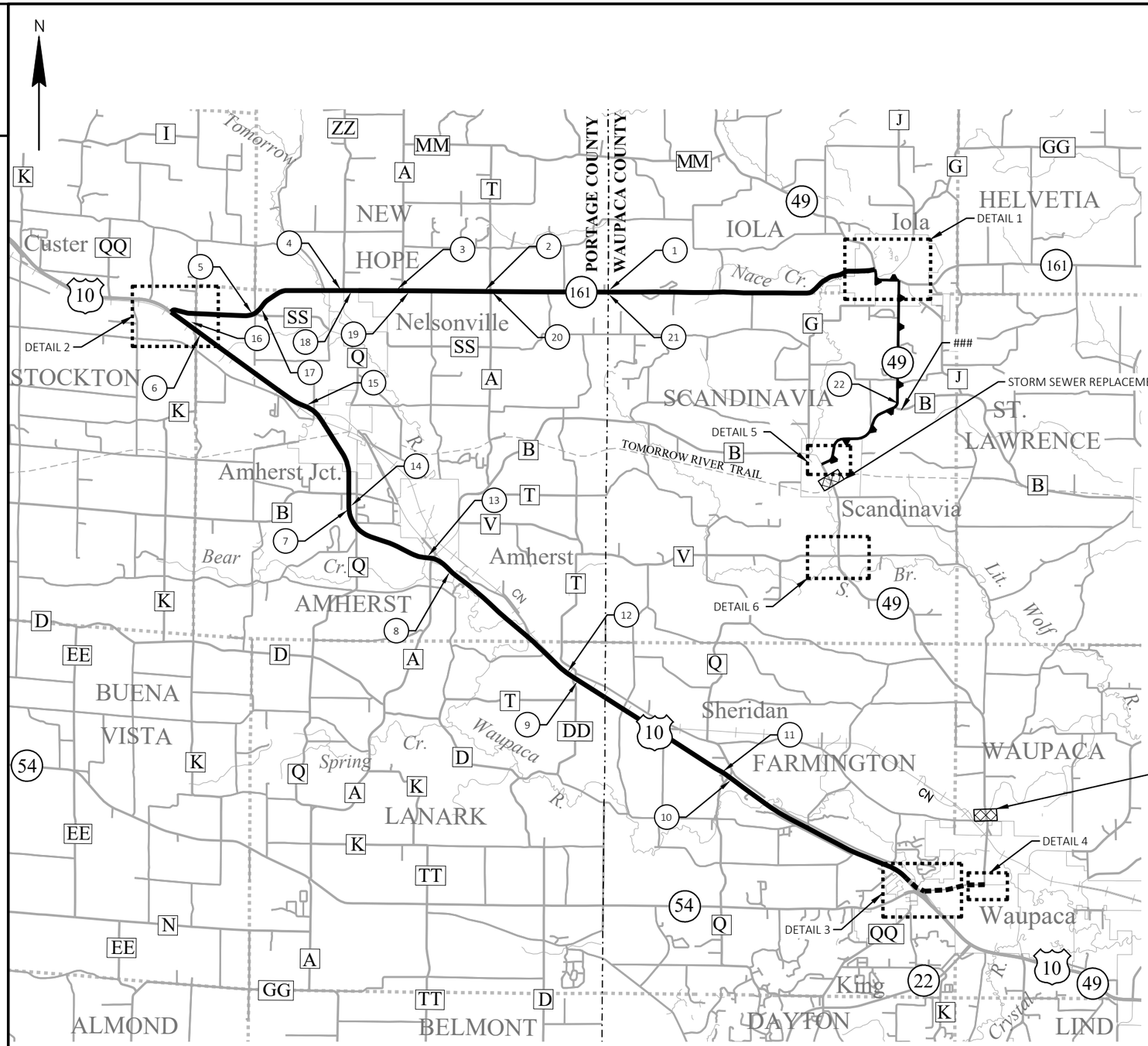
LANES MAY BE TEMPORARILY CLOSED DURING WORKING HOURS SEE SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR ADDITIONAL INFORMATION.



SIDEWALK AND CURB RAMP STAGING	
SIDEWALK CLOSED	AVAILABLE PEDESTRIAN ROUTE INFORMATION
STH 49/RIVER ST INTERSECTION	PLACE TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD, AND TEMPORARY PEDESTRIAN SURFACE MATTING TO ALLOW ACCESS ACROSS RIVER ST. DO NOT CONSTRUCT THE RIVER STREET MEDIAN CURB RAMP AND THE SOUTHWEST CURB RAMPS AT THE SAME TIME TO ALLOW ROOM FOR TRAFFIC.

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	TRAFFIC CONTROL - TEMPORARY PEDESTRIAN ACCOMMODATION	SHEET 59	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\025006-TC.DWG
LAYOUT NAME - 03
PLOT DATE : 6/29/2023 7:17 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42



LEGEND

- ROAD CLOSURE LOCATION
- DETOUR ROUTE (STH 49 NB & SB)
- DETOUR ROUTE (STH 49 NB)
- DETOUR ROUTE (STH 49 SB)

NOTES

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

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR SPACING AND PLACEMENT OF SIGNS.

PROPOSED DETOUR SIGNS ARE TO BE USED TO COVER THE EXISTING SIGNS WHERE FEASIBLE

MOUNT ALL DETOUR SIGNS ON POSTS UNLESS OTHERWISE NOTED OR USED TO COVER EXISTING SIGNS

\# SEE DETAIL B AND DETAIL E OF SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION

\## SEE DETAIL B AND DETAIL D OF SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION

SEE DETAIL F OF SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION

1 2 3 4 5

DETOUR M4-8 24"X12"
WEST 161
SOUTH M3-3 24"X12"
49 M1-6 24"X24"

6 7 8 9 10

DETOUR M4-8 36"X18"
EAST 10
SOUTH M3-3 36"X18"
49 M1-6 36"X36"

11 12 13 14 15 16

DETOUR M4-8 36"X18"
WEST 10
NORTH M3-1 36"X18"
49 M1-6 36"X36"

17 18 19 20 21

DETOUR M4-8 24"X12"
EAST 161
NORTH M3-1 24"X12"
49 M1-6 24"X24"

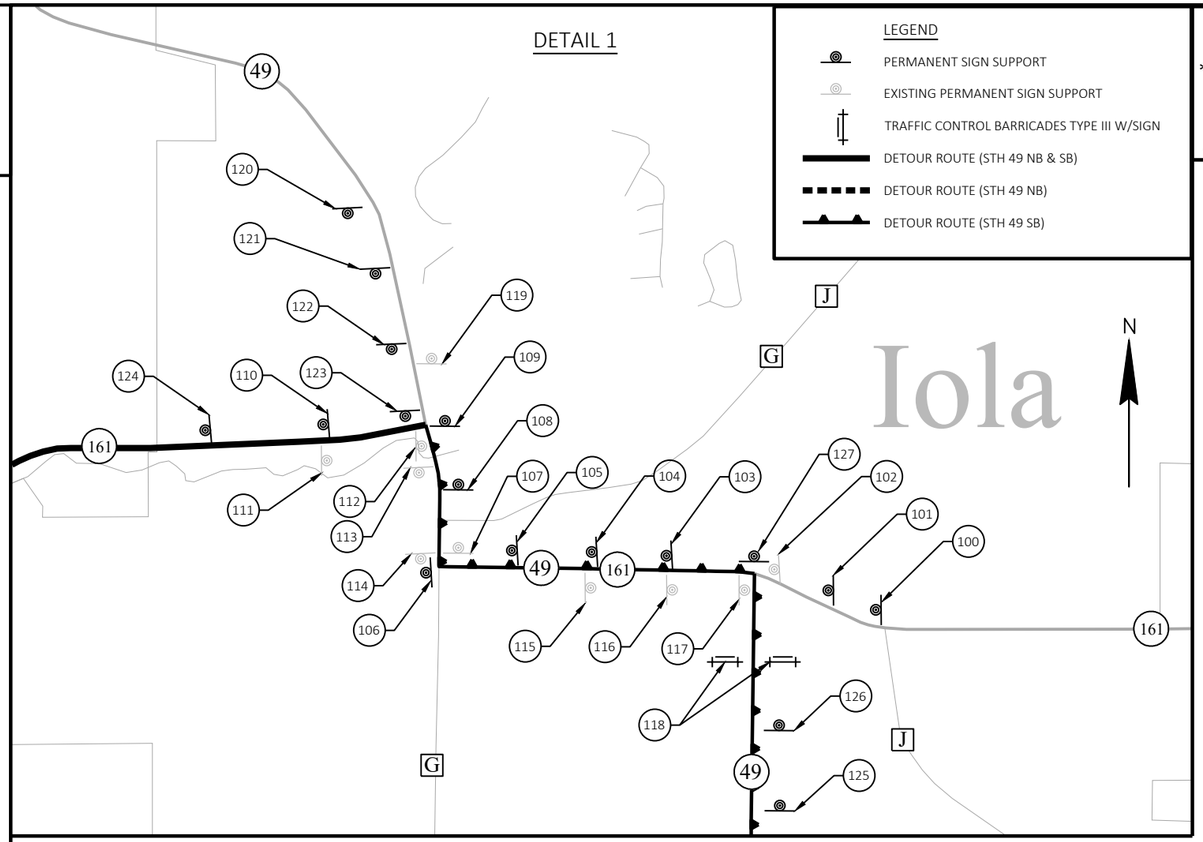
22

DETOUR M4-8 36"X18"
NORTH 49
SOUTH M3-3 36"X18"
49 M1-6 36"X36"

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	DETOUR - OVERVIEW SHEET	SHEET 60	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 6/29/2023 7:17 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN: 2 MI
WISDOT/CADDS SHEET 42

DETAIL 1



LEGEND

- PERMANENT SIGN SUPPORT
- EXISTING PERMANENT SIGN SUPPORT
- TRAFFIC CONTROL BARRICADES TYPE III W/SIGN
- DETOUR ROUTE (STH 49 NB & SB)
- DETOUR ROUTE (STH 49 NB)
- DETOUR ROUTE (STH 49 SB)

NOTES

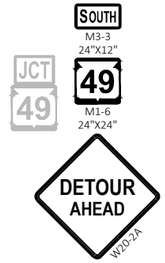
** PAID AS TRAFFIC CONTROL COVERING SIGNS TYPE II

*** PAID AS TRAFFIC CONTROL SIGNS

Δ ONLY PLACE SIGN DURING NICHOL CREEK CULVERT REPLACEMENT

ΔΔ ONLY PLACE SIGN DURING STORM SEWER REPLACEMENT IN SCANDINAVIA

100



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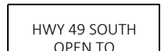
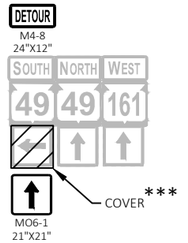


FMS
60"X 30"

102



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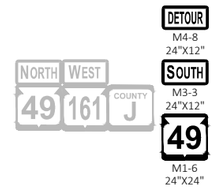
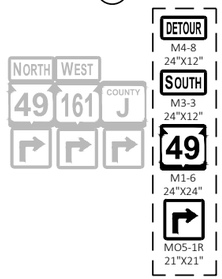


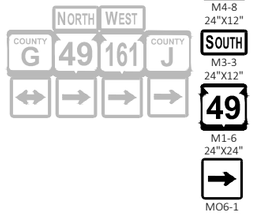
104 124

105



(PLACE 150' EAST OF THE ASSEMBLY)

106



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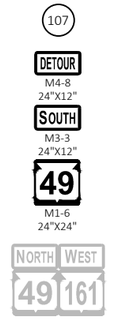


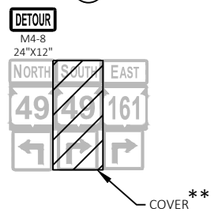
(MOUNT ON LIGHT POLE ABOVE EXISTING SIGNS)

108

109

110

111



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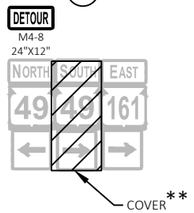
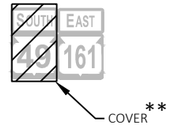


113 115



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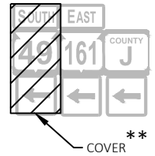

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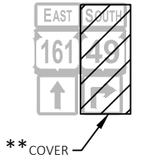

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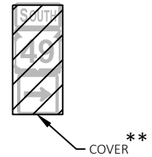

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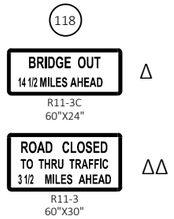
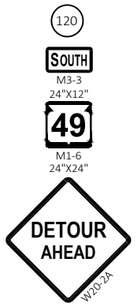


119

120



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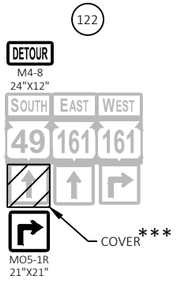

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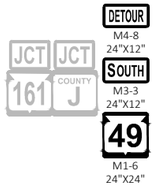

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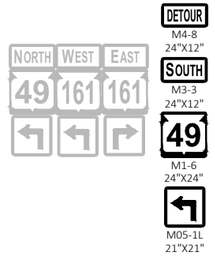

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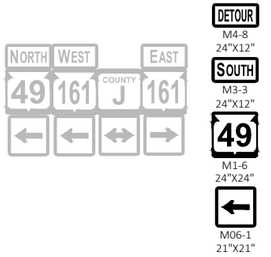


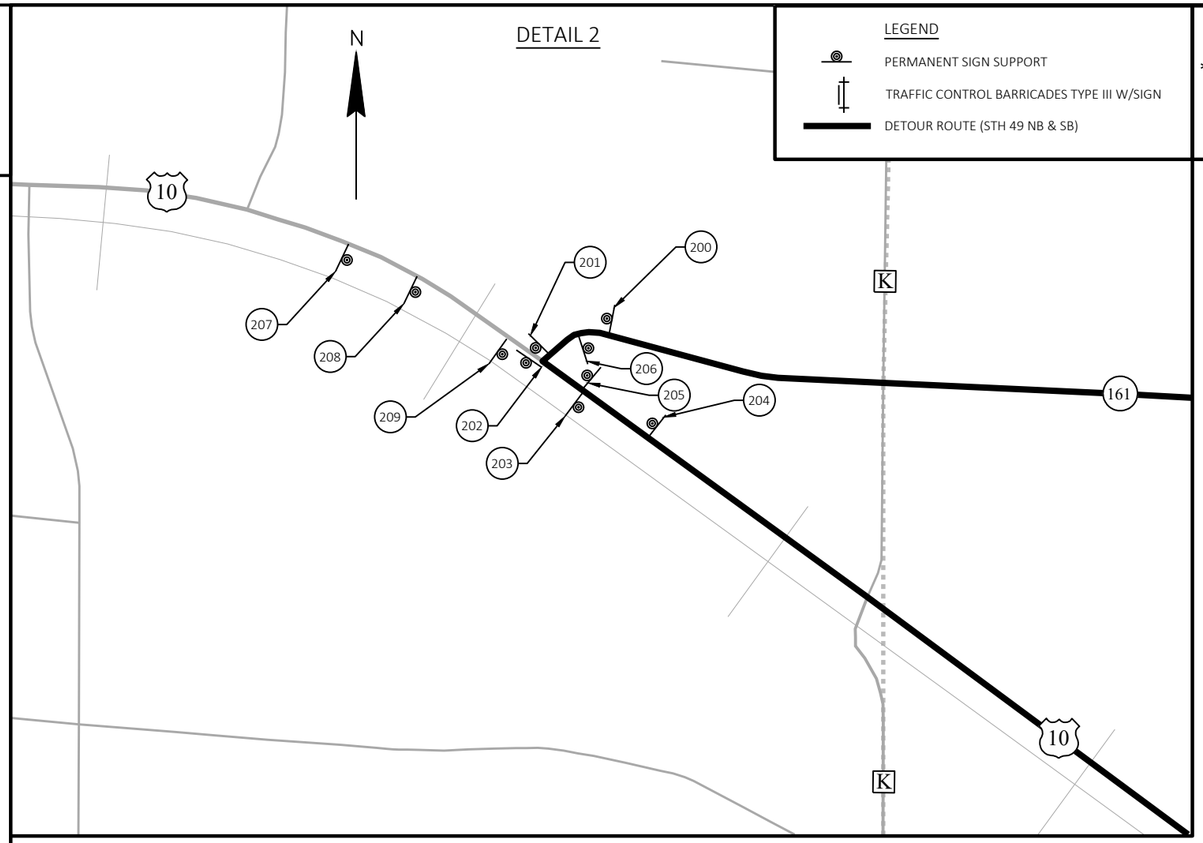
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	DETOUR - DETAIL SHEET 1	SHEET 61	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:17 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN: 1000 FT

2

DETAIL 2



LEGEND

- PERMANENT SIGN SUPPORT
- TRAFFIC CONTROL BARRICADES TYPE III W/SIGN
- DETOUR ROUTE (STH 49 NB & SB)

NOTES

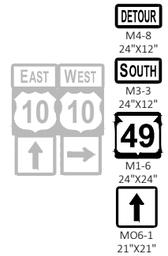
** PAID AS TRAFFIC CONTROL COVERING SIGNS TYPE II

*** PAID AS TRAFFIC CONTROL SIGNS

Δ ONLY PLACE SIGN DURING NICHOL CREEK CULVERT REPLACEMENT

ΔΔ ONLY PLACE SIGN DURING STORM SEWER REPLACEMENT IN SCANDINAVIA

200



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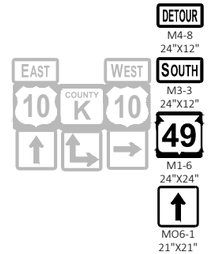

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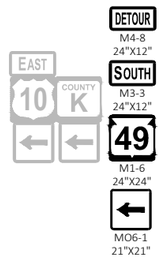

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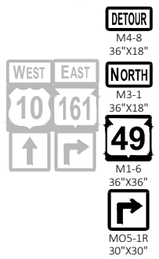
204



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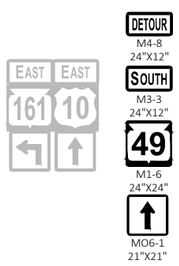
207

208



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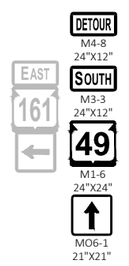


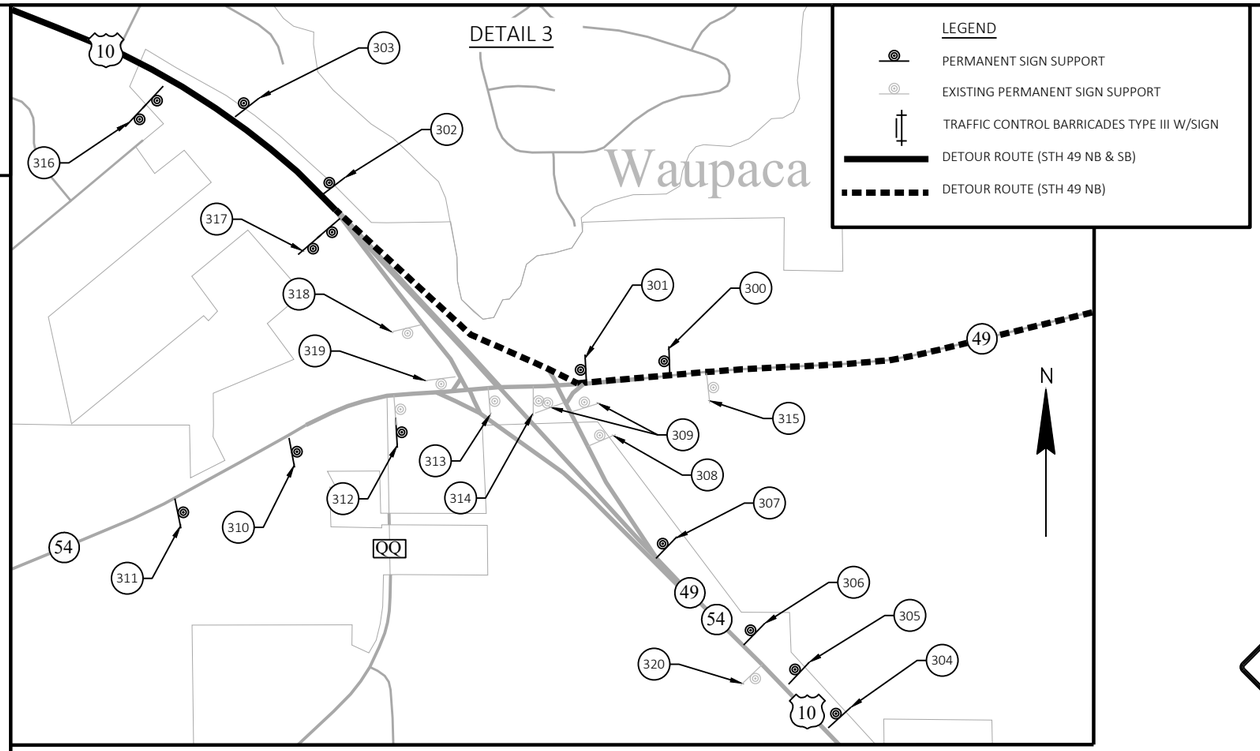
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	DETOUR - DETAIL SHEET 2	SHEET 62	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:18 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN: 1000 FT

WISDOT/CADDS SHEET 42

DETAIL 3



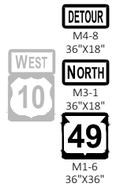
LEGEND

- PERMANENT SIGN SUPPORT
- EXISTING PERMANENT SIGN SUPPORT
- TRAFFIC CONTROL BARRICADES TYPE III W/SIGN
- DETOUR ROUTE (STH 49 NB & SB)
- DETOUR ROUTE (STH 49 NB)

300

301

302



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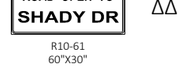
304

305 310



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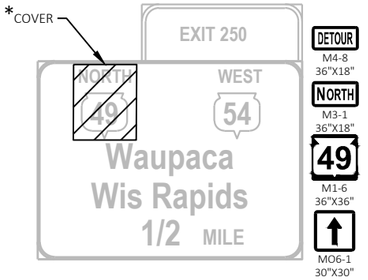

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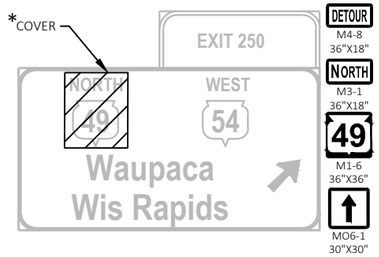

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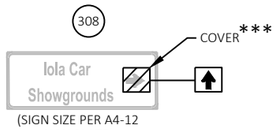

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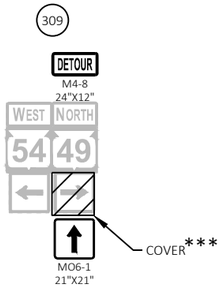

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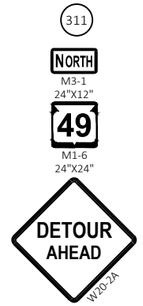

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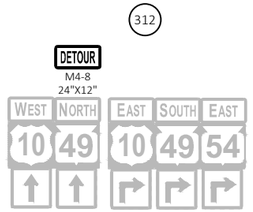

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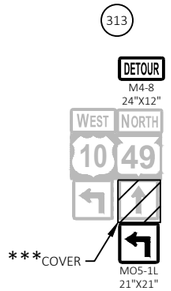

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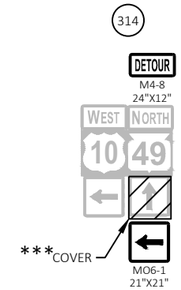

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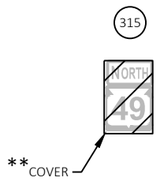

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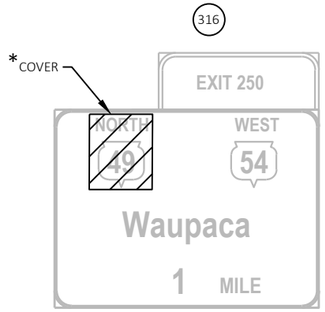

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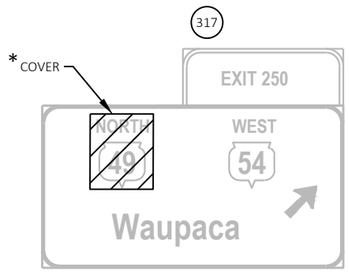

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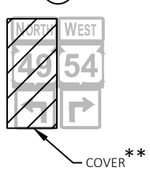

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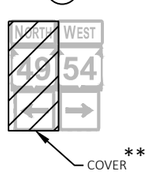

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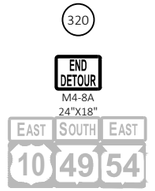
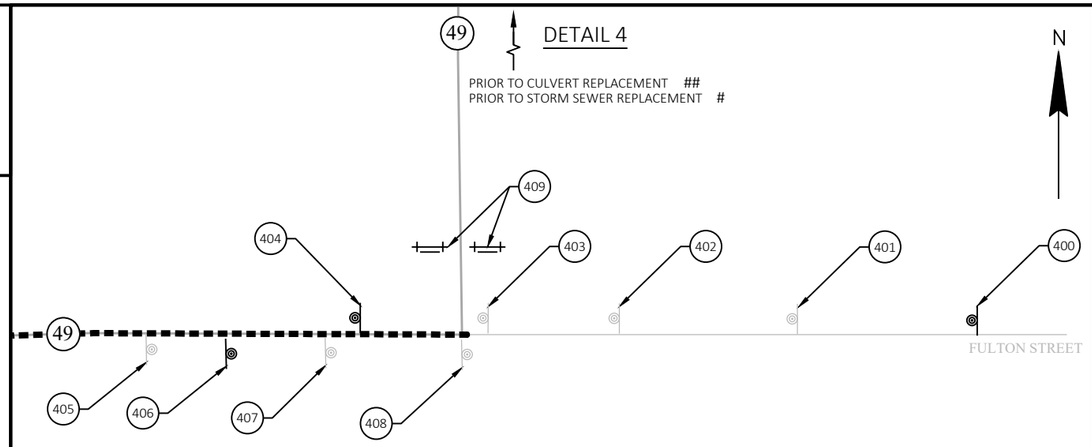


NOTES

- * PAID AS TRAFFIC CONTROL COVERING SIGNS TYPE I
- ** PAID AS TRAFFIC CONTROL COVERING SIGNS TYPE II
- *** PAID AS TRAFFIC CONTROL SIGNS
- Δ ONLY PLACE SIGN DURING NICHOL CREEK CULVERT REPLACEMENT
- ΔΔ ONLY PLACE SIGN DURING STORM SEWER REPLACEMENT IN SCANDINAVIA

DETAIL 4



Waupaca

LEGEND

- PERMANENT SIGN SUPPORT
- EXISTING PERMANENT SIGN SUPPORT
- TRAFFIC CONTROL BARRICADES TYPE III W/SIGN
- DETOUR ROUTE (STH 49 NB & SB)
- DETOUR ROUTE (STH 49 NB)
- DETOUR ROUTE (STH 49 SB)

400
NORTH
M3-1
24"X12"
49
M1-6
24"X24"
DETOUR AHEAD
W20-2A

401
DETOUR
M4-8
24"X12"
SOUTH NORTH
49 49
COVER***
MO6-1
21"X21"

402
Iola
Scandinavia
(SIGN SIZE PER A4-12 SIGN PLATE)
COVER***

403
DETOUR
M4-8
24"X12"
NORTH
49
COVER***
MO6-1
21"X21"

404
DETOUR
M4-8
24"X12"
SOUTH
49
NORTH
M3-1
24"X12"
49
M1-6
24"X24"

405
NORTH
49
COVER**

406
ROAD OPEN TO BALLARD STREET
Δ
R10-61
60"X30"
ROAD OPEN TO SHADY DR
ΔΔ
R10-61
60"X30"

407
Business District
Scandinavia
Iola
**COVER

408
NORTH
49
COVER**

409
BRIDGE OUT
1 MILES AHEAD
Δ
R11-3C
60"X24"
ROAD CLOSED TO THRU TRAFFIC
1 1/2 MILES AHEAD
ΔΔ
R11-3
60"X30"

NOTES

** PAID AS TRAFFIC CONTROL COVERING SIGNS TYPE II

*** PAID AS TRAFFIC CONTROL SIGNS

SEE DETAIL B AND DETAIL E OF SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION

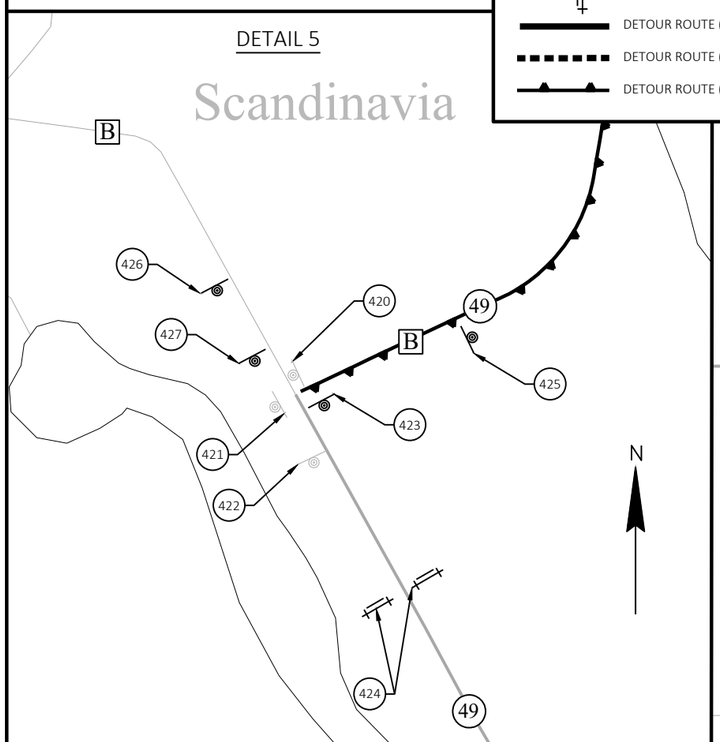
SEE DETAIL B AND DETAIL D OF SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL INFORMATION

Δ ONLY PLACE DURING NICHOL CREEK CULVERT REPLACEMENT

ΔΔ ONLY PLACE DURING STORM SEWER REPLACEMENT IN SCANDINAVIA

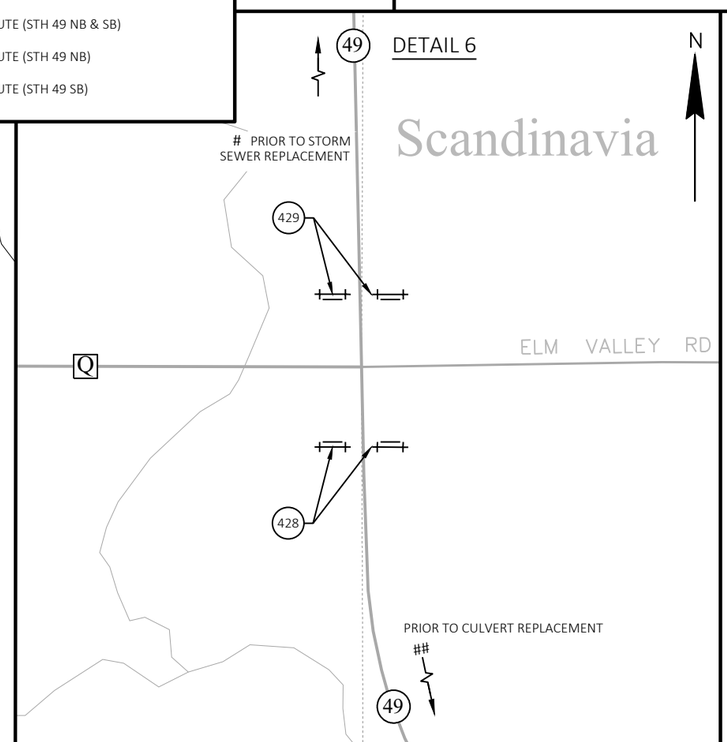
DETAIL 5

Scandinavia



DETAIL 6

Scandinavia



420
SOUTH
49
COUNTY B
COVER**

421
SOUTH
49
COUNTY B
COUNTY G
COVER**

422
SOUTH
49
**COVER

423
NORTH
M3-1
24"X12"
DETOUR
M4-8
24"X12"
COUNTY B
49
SOUTH
M3-3
24"X12"
49
M1-6
24"X24"
***COVER
MO6-1
21"X21"
MO6-1
21"X21"

424
BRIDGE OUT
7 MILES AHEAD
Δ
R11-3C
60"X24"
ROAD CLOSED TO THRU TRAFFIC
1/4 MILE AHEAD
ΔΔ
R11-3
60"X30"

425
NORTH
49
COUNTY B
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
49
M1-6
24"X24"

426
SOUTH
M3-3
24"X12"
49
M1-6
24"X24"
DETOUR AHEAD
W20-2A

427
DETOUR
M4-8
24"X12"
SOUTH
M3-3
24"X12"
49
M1-6
24"X24"
MO6-1
21"X21"

428
BRIDGE OUT
5 1/2 MILES AHEAD
Δ
R11-3C
60"X24"

429
ROAD CLOSED TO THRU TRAFFIC
1 1/4 MILES AHEAD
ΔΔ
R11-3
60"X30"

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	DETOUR - DETAIL SHEETS 4, 5, AND 6	SHEET 64	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 05
PLOT DATE : 6/29/2023 7:18 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN: 500 FT
WISDOT/CADDS SHEET 42

6420-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	23.000	23.000
0004	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0006	203.0220	Removing Structure (structure) 01. STA 57+75	EACH	1.000	1.000
0008	204.0110	Removing Asphaltic Surface	SY	315.000	315.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	990.000	990.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	144,140.000	144,140.000
0014	204.0150	Removing Curb & Gutter	LF	493.000	493.000
0016	204.0155	Removing Concrete Sidewalk	SY	105.000	105.000
0018	204.0165	Removing Guardrail	LF	3,000.000	3,000.000
0020	204.0180	Removing Delineators and Markers	EACH	40.000	40.000
0022	204.0245	Removing Storm Sewer (size) 01. 18-Inch	LF	144.000	144.000
0024	204.9060.S	Removing (item description) 01. Apron Endwalls	EACH	1.000	1.000
0026	205.0100	Excavation Common	CY	2,750.000	2,750.000
0028	208.0100	Borrow	CY	1,058.000	1,058.000
0030	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	6.000	6.000
0032	209.1100	Backfill Granular Grade 1	CY	56.000	56.000
0034	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 6420-00-72	EACH	1.000	1.000
0036	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	36.000	36.000
0038	213.0100	Finishing Roadway (project) 01. 6420-00-72	EACH	1.000	1.000
0040	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,960.000	2,960.000
0042	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3,845.000	3,845.000
0044	305.0504.S	Hauling Excess Shoulder Material	CY	115.000	115.000
0046	450.4000	HMA Cold Weather Paving	TON	1,700.000	1,700.000
0048	455.0605	Tack Coat	GAL	10,370.000	10,370.000
0050	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0052	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0054	460.2005	Incentive Density PWL HMA Pavement	DOL	12,130.000	12,130.000
0056	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	20,300.000	20,300.000
0058	460.2010	Incentive Air Voids HMA Pavement	DOL	16,990.000	16,990.000
0060	460.6224	HMA Pavement 4 MT 58-28 S	TON	16,990.000	16,990.000
0062	465.0105	Asphaltic Surface	TON	543.000	543.000
0064	465.0110	Asphaltic Surface Patching	TON	136.000	136.000
0066	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	25.000	25.000
0068	465.0315	Asphaltic Flumes	SY	39.000	39.000
0070	465.0560	Asphaltic Rumble Strips, Centerline	LF	33,750.000	33,750.000
0072	504.0500	Concrete Masonry Retaining Walls	CY	59.000	59.000
0074	506.3005	Welded Stud Shear Connectors 7/8x4-Inch	EACH	338.000	338.000
0076	512.0500	Piling Steel Sheet Permanent Delivered	SF	10,840.000	10,840.000
0078	512.0600	Piling Steel Sheet Permanent Driven	SF	10,840.000	10,840.000
0080	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	1.000	1.000
0082	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	1.000	1.000
0084	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0086	521.1072	Apron Endwalls for Culvert Pipe Steel 72-Inch	EACH	2.000	2.000
0088	521.5172	Culvert Pipe Corrugated Steel Polymer Coated 72-Inch	LF	102.000	102.000
0090	522.2414	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	LF	86.000	86.000
0092	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	48.000	48.000
0094	522.2614	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	4.000	4.000
0096	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	3.000	3.000
0098	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	405.000	405.000

6420-00-72

Line	Item	Item Description	Unit	Total	Qty
0100	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	202.000	202.000
0102	601.0584	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBT	LF	35.000	35.000
0104	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	220.000	220.000
0106	602.0410	Concrete Sidewalk 5-Inch	SF	1,125.000	1,125.000
0108	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	150.000	150.000
0110	602.3010	Concrete Surface Drains	CY	2.500	2.500
0112	603.8000	Concrete Barrier Temporary Precast Delivered	LF	1,000.000	1,000.000
0114	603.8125	Concrete Barrier Temporary Precast Installed	LF	1,200.000	1,200.000
0116	606.0100	Riprap Light	CY	25.000	25.000
0118	606.0200	Riprap Medium	CY	70.000	70.000
0120	608.3618	Storm Sewer Pipe Class III-B 18-Inch	LF	66.000	66.000
0122	608.3624	Storm Sewer Pipe Class III-B 24-Inch	LF	68.000	68.000
0124	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0126	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0128	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0130	611.8120.S	Cover Plates Temporary	EACH	9.000	9.000
0132	614.0396	Guardrail Mow Strip Asphalt	SY	483.000	483.000
0134	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	20.000	20.000
0136	614.0400	Adjusting Steel Plate Beam Guard	LF	195.000	195.000
0138	614.0905	Crash Cushions Temporary	EACH	4.000	4.000
0140	614.1200	MGS Guardrail Temporary Terminal EAT	EACH	1.000	1.000
0142	614.2300	MGS Guardrail 3	LF	537.500	537.500
0144	614.2330	MGS Guardrail 3 K	LF	2,215.500	2,215.500
0146	614.2350	MGS Guardrail Short Radius	LF	12.500	12.500
0148	614.2500	MGS Thrie Beam Transition	LF	355.000	355.000
0150	614.2610	MGS Guardrail Terminal EAT	EACH	13.000	13.000
0152	614.2630	MGS Guardrail Short Radius Terminal	EACH	1.000	1.000
0154	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6420-00-72	EACH	1.000	1.000
0156	619.1000	Mobilization	EACH	1.000	1.000
0158	621.0100	Landmark Reference Monuments	EACH	20.000	20.000
0160	624.0100	Water	MGAL	80.000	80.000
0162	625.0100	Topsoil	SY	12,900.000	12,900.000
0164	628.1504	Silt Fence	LF	8,060.000	8,060.000
0166	628.1520	Silt Fence Maintenance	LF	8,060.000	8,060.000
0168	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0170	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0172	628.2004	Erosion Mat Class I Type B	SY	7,550.000	7,550.000
0174	628.2008	Erosion Mat Urban Class I Type B	SY	5,325.000	5,325.000
0176	628.2037	Erosion Mat Class III Type C	SY	1,790.000	1,790.000
0178	628.5505	Polyethylene Sheeting	SY	610.000	610.000
0180	628.6005	Turbidity Barriers	SY	40.000	40.000
0182	628.7015	Inlet Protection Type C	EACH	7.000	7.000
0184	628.7504	Temporary Ditch Checks	LF	366.000	366.000
0186	628.7555	Culvert Pipe Checks	EACH	160.000	160.000
0188	628.7570	Rock Bags	EACH	680.000	680.000
0190	629.0210	Fertilizer Type B	CWT	8.000	8.000
0192	630.0130	Seeding Mixture No. 30	LB	225.000	225.000
0194	630.0140	Seeding Mixture No. 40	LB	8.000	8.000
0196	630.0500	Seed Water	MGAL	290.000	290.000

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Line	Item	Item Description	Unit	Total	Qty
0198	633.5200	Markers Culvert End	EACH	42.000	42.000
0200	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	4.000	4.000
0202	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0204	638.2102	Moving Signs Type II	EACH	9.000	9.000
0206	638.2602	Removing Signs Type II	EACH	5.000	5.000
0208	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0210	638.4000	Moving Small Sign Supports	EACH	9.000	9.000
0212	642.5001	Field Office Type B	EACH	1.000	1.000
0214	643.0300	Traffic Control Drums	DAY	3,122.000	3,122.000
0216	643.0420	Traffic Control Barricades Type III	DAY	309.000	309.000
0218	643.0705	Traffic Control Warning Lights Type A	DAY	558.000	558.000
0220	643.0715	Traffic Control Warning Lights Type C	DAY	1,764.000	1,764.000
0222	643.0900	Traffic Control Signs	DAY	7,833.000	7,833.000
0224	643.0910	Traffic Control Covering Signs Type I	EACH	8.000	8.000
0226	643.0920	Traffic Control Covering Signs Type II	EACH	30.000	30.000
0228	643.1000	Traffic Control Signs Fixed Message	SF	133.000	133.000
0230	643.1070	Traffic Control Cones 42-Inch	DAY	33.000	33.000
0232	643.3165	Temporary Marking Line Paint 6-Inch	LF	76,025.000	76,025.000
0234	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	3,046.000	3,046.000
0236	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	146.000	146.000
0238	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	48.000	48.000
0240	643.3980	Temporary Marking Removable Mask Out Tape 8-Inch	LF	45.000	45.000
0242	643.5000	Traffic Control	EACH	1.000	1.000
0244	644.1430	Temporary Pedestrian Surface Plate	SF	25.000	25.000
0246	644.1440	Temporary Pedestrian Surface Matting	SF	370.000	370.000
0248	644.1601	Temporary Pedestrian Curb Ramp	DAY	5.000	5.000
0250	644.1605	Temporary Pedestrian Detectable Warning Field	SF	60.000	60.000
0252	644.1810	Temporary Pedestrian Barricade	LF	545.000	545.000
0254	645.0120	Geotextile Type HR	SY	190.000	190.000
0256	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	150,625.000	150,625.000
0258	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	130.000	130.000
0260	646.6120	Marking Stop Line Epoxy 18-Inch	LF	40.000	40.000
0262	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	15,000.000	15,000.000
0264	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	160.000	160.000
0266	646.9000	Marking Removal Line 4-Inch	LF	1,733.000	1,733.000
0268	650.4000	Construction Staking Storm Sewer	EACH	3.000	3.000
0270	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	900.000	900.000
0272	650.6000	Construction Staking Pipe Culverts	EACH	5.000	5.000
0274	650.8000	Construction Staking Resurfacing Reference	LF	41,187.000	41,187.000
0276	650.9000	Construction Staking Curb Ramps	EACH	15.000	15.000
0278	650.9500	Construction Staking Sidewalk (project) 01. 6420-00-72	EACH	1.000	1.000
0280	650.9911	Construction Staking Supplemental Control (project) 01. 6420-00-72	EACH	1.000	1.000
0282	650.9920	Construction Staking Slope Stakes	LF	4,195.000	4,195.000
0284	661.0101	Temporary Traffic Signals for Bridges (structure) 01. R-68-013	EACH	1.000	1.000
0286	661.0101	Temporary Traffic Signals for Bridges (structure) 02. R-68-014	EACH	1.000	1.000
0288	690.0150	Sawing Asphalt	LF	5,415.000	5,415.000
0290	690.0250	Sawing Concrete	LF	80.000	80.000
0292	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0294	740.0440	Incentive IRI Ride	DOL	31,510.000	31,510.000

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Line	Item	Item Description	Unit	Total	Qty
0296	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0298	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,260.000	1,260.000
0300	SPV.0030	Special 01. Fertilizer for Lawn Type Turf	CWT	0.600	0.600
0302	SPV.0060	Special 01. Reestablish Section Corner Monuments	EACH	5.000	5.000
0304	SPV.0060	Special 02. Research and Locate Existing Land Parcel Monuments	EACH	12.000	12.000
0306	SPV.0060	Special 03. Verify and Replace Existing Land Parcel Monuments	EACH	12.000	12.000
0308	SPV.0060	Special 04. Adjusting Sanitary Manhole Covers	EACH	8.000	8.000
0310	SPV.0060	Special 05. Adjusting Water Valve Boxes	EACH	11.000	11.000
0312	SPV.0180	Special 01. Preparing Topsoil for Lawn Type Turf	SY	565.000	565.000

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GRUBBING ITEM

CATEGORY	STATION	TO	STATION	OFFSET	201.0205 GRUBBING STA
0010	28+77	-	29+96	LT&RT	2
	31+29	-	31+44	RT	1
	44+02	-	44+22	RT	1
	47+65	-	50+81	LT&RT	4
	57+25	-	58+29	LT&RT	2
	369+07	-	369+66	LT	1
	382+56	-	390+21	LT	9
	392+71	-	393+00	LT	1
	426+60	-	427+40	LT	2
TOTAL					23

REMOVING SMALL PIPE CULVERT ITEMS

CATEGORY	STATION	OFFSET	203.0100 REMOVING SMALL PIPE CULVERTS EACH	203.0220.01 REMOVING STRUCTURE STA 57+75 EACH	204.0180 REMOVING DELINEATORS AND MARKERS EACH	204.0245.01 REMOVING STORM SEWER (18-INCH) LF	204.9060.S.01 REMOVING APRON ENDWALLS EACH	COMMENTS
0010	15+97	LT&RT	--	--	2	--	--	CULVERT REMAINS
	57+75	LT&RT	--	1	2	--	--	60" CMCP
	63+08	LT&RT	--	--	2	--	--	CULVERT REMAINS
	96+37	LT&RT	--	--	1	--	--	CULVERT REMAINS
	115+25	LT&RT	--	--	2	--	--	CULVERT REMAINS
	123+85	LT&RT	1	--	2	--	--	18" CMCP
	124+64	LT&RT	--	--	1	--	--	CULVERT REMAINS
	137+54	LT&RT	--	--	2	--	--	CULVERT REMAINS
	157+18	LT&RT	--	--	2	--	--	CULVERT REMAINS
	202+75	LT&RT	1	--	2	--	--	24" CMCP
	243+82	LT&RT	1	--	2	--	--	18" CMCP
	269+97	LT&RT	--	--	2	--	--	CULVERT REMAINS
	281+85	LT&RT	--	--	2	--	--	CULVERT REMAINS
	302+76	LT&RT	--	--	2	--	--	CULVERT REMAINS
	333+43	LT&RT	--	--	2	--	--	CULVERT REMAINS
	340+71	LT&RT	--	--	2	--	--	CULVERT REMAINS
	380+38	LT&RT	--	--	2	--	--	CULVERT REMAINS
	414+10	LT&RT	--	--	2	--	1	CULVERT REMAINS
	418+21	LT&RT	--	--	2	--	--	CULVERT REMAINS
	424+80	LT&RT	--	--	2	--	--	CULVERT REMAINS
	426+09	LT&RT	--	--	2	--	--	CULVERT REMAINS
	426+94	LT&RT	--	--	--	80	--	18" SS
	427+19	LT&RT	--	--	--	64	--	18" SS
TOTALS			3	1	40	144	1	

REMOVAL ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	COMMENTS
0010	11+00	-	29+98	LT&RT	281	--	7,180	--	--	
	11+20	-	11+39	LT&RT	--	18	--	52	34	NORTH ST INTERSECTION (SOUTH HALF)
		11+36		LT	--	4	--	--	--	STORM SEWER MANHOLE
	11+62	-	1318	LT&RT	--	25	--	31	21	NORTH ST INTERSECTION (NORTH HALF)
	14+59	-	15+10	LT	--	--	--	--	13	WISCONSIN ST INTERSECTION (WEST HALF)
		15+54		RT	--	2	--	8	15	WISCONSIN ST INTERSECTION (EAST HALF)
	17+57	-	17+75	LT	--	2	--	--	22	RIVER ST INTERSECTION (WEST HALF)
	31+30	-	42+01	LT&RT	122	--	4,070	--	--	
	44+15	-	221+00	LT&RT	240	--	61,450	--	--	
	57+56	-	57+85	LT	--	--	--	74	--	LARSON RD INTERSECTION
	123+63	-	124+09	RT	--	--	--	50	--	WARE RD INTERSECTION
	180+25	-	180+50	LT&RT	--	42	--	0	--	FULL DEPTH REPAIR
	221+00	-	348+14	LT&RT	168	--	43,800	--	--	
	348+97	-	427+40	LT&RT	179	--	27,640	--	--	
	413+93	-	414+34	RT	--	153	--	78	--	SHADY DR INTERSECTION
	424+21	-	424+60	RT	--	9	--	39	--	
	425+95	-	427+40	LT&RT	--	22	--	161	--	
CATEGORY 0010 SUBTOTALS					990	277	144,140	493	105	
0030	11+20	-	11+80	LT&RT	--	12	--	--	--	SANITARY MANHOLES/WATER VALVES
	14+50	-	15+90	LT&RT	--	11	--	--	--	SANITARY MANHOLES/WATER VALVES
	17+50	-	18+40	LT	--	5	--	--	--	SANITARY MANHOLES/WATER VALVES
	23+30	-	24+40	LT	--	5	--	--	--	SANITARY MANHOLES/WATER VALVES
	34+50	-	36+00	RT	--	1	--	--	--	WATER VALVE
CATEGORY 0030 SUBTOTALS					--	34	--	--	--	
0040	424+95	-	426+15	RT	--	4	--	--	--	SANITARY MANHOLES
CATEGORY 0040 SUBTOTALS					--	4	--	--	--	
TOTALS					990	315	144,140	493	105	

BACKFILL GRANULAR GRADE 1

CATEGORY	STATION	TO	STATION	OFFSET	209.1100 CY	COMMENTS
0010						
	384+50	-	387+75	LT	43	R-68-13
	388+40	-	391+40	LT	13	R-68-14
TOTAL					56	

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EARTHWORK

DIVISION	LOCATION	205.0100 EXCAVATION COMMON (NOTE 1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (NOTE 2)	AVAILABLE MATERIAL (NOTE 3)	UNEXPANDED FILL	EXPANDED FILL (NOTE 4)	MASS ORDINATE +/- (NOTE 5)	208.0100 BORROW
CATEGORY 0010		CY	CY	CY	CY	FACTOR CY 1.25	CY	CY
1	STA 11+84 - STA 13+10 - STH 49 CURB AND GUTTER REPLACEMENT - LEFT	26	0	26	7	9	17	0
SUBTOTALS		26	0	26	7	9	17	0
2	STA 27+12 - STA 29+98 - STH 49 GUARDRAIL (B-68-433) - LEFT	84	36	48	90	113	-65	65
2	STA 31+30 - STA 33+91 - STH 49 GUARDRAIL (B-68-433) - LEFT	133	33	100	163	204	-104	104
SUBTOTALS		217	69	148	253	317	-169	169
3	STA 27+00 - STA 29+98 - STH 49 GUARDRAIL (B-68-433) - RIGHT	79	39	40	37	47	-7	7
3	STA 31+30 - STA 34+30 - STH 49 GUARDRAIL (B-68-433) - RIGHT	89	38	51	47	59	-8	8
SUBTOTALS		168	77	91	84	106	-15	15
4	STA 39+08 - STA 42+11 - STH 49 GUARDRAIL (B-68-091) - LEFT	70	21	49	81	102	-53	53
4	STA 44+48 - STA 50+83 - STH 49 GUARDRAIL (B-68-091) - LEFT	122	54	68	302	378	-310	310
SUBTOTALS		192	75	117	383	480	-363	363
5	STA 38+51 - STA 41+67 - STH 49 GUARDRAIL (B-68-091) - RIGHT	58	18	40	103	129	-89	89
5	STA 44+03 - STA 51+36 - STH 49 GUARDRAIL (B-68-091) - RIGHT	122	54	68	245	307	-239	239
SUBTOTALS		180	72	108	348	436	-328	328
6	STA 57+75 - CULVERT REPLACEMENT	505	56	449	0	0	449	0
SUBTOTALS		505	56	449	0	0	449	0
7	STA 123+85 - CULVERT REPLACEMENT	289	56	233	0	0	233	0
SUBTOTALS		289	56	233	0	0	233	0
8	STA 202+75 - CULVERT REPLACEMENT	315	56	259	0	0	259	0
SUBTOTALS		315	56	259	0	0	259	0
9	STA 243+82 - CULVERT REPLACEMENT	269	56	213	0	0	213	0
SUBTOTALS		269	56	213	0	0	213	0
10	STA 366+53 - STA 372+16 - STH 49 GUARDRAIL - LEFT	155	19	136	123	154	-18	18
SUBTOTALS		155	19	136	123	154	-18	18
11	STA 366+53 - STA 372+16 - STH 49 GUARDRAIL - RIGHT	11	11	0	124	155	-155	155
SUBTOTALS		11	11	0	124	155	-155	155
12	STA 382+32 - STA 394+39 - STH 49 GUARDRAIL - LEFT	196	74	122	105	132	-10	10
SUBTOTALS		196	74	122	105	132	-10	10
13	STA 425+95 - STA 427+40 - STH 49 GUARDRAIL - LEFT & RIGHT	227	40	187	0	0	187	0
SUBTOTALS		227	40	187	0	0	187	0
PROJECT TOTALS		2,750	661	2,089	1,427	1,789	300	1,058

NOTES:
1) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL = (AREA OF PROJECT PAVEMENT) * (TYPICAL DEPTH)
3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
4) EXPANDED FILL FACTOR = (UNEXPANDED FILL) * (FILL FACTOR)
5) MASS ORDINATE = AVAILABLE MATERIAL - (EXPANDED FILL); POSITIVE INDICATES AN EXCESS OF MATERIAL

ASPHALTIC ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	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	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF	COMMENTS
0010	11+00	-	29+98	LT&RT	27	--	580	1,120	--	20	--	4	650	MAINLINE PAVING
	31+30	-	42+01	LT&RT	8	--	310	630	--	--	--	--	550	MAINLINE PAVING
	44+15	-	221+00	LT&RT	1	--	4,320	6,970	4	--	--	--	14,620	MAINLINE PAVING
	56+61	-	58+92	LT&RT	--	--	40	--	188	--	--	11	--	CULVERT REPLACEMENT
	123+25	-	124+40	LT&RT	--	--	30	--	114	--	--	--	--	CULVERT REPLACEMENT
	180+25	-	180+50	LT&RT	--	--	--	--	--	19	--	--	--	FULL DEPTH REPAIR
	202+20	-	203+29	LT&RT	--	--	20	--	79	--	--	--	--	CULVERT REPLACEMENT
	221+00	-	347+90	LT&RT	--	--	3,060	4,900	--	--	--	--	10,960	MAINLINE PAVING
	243+27	-	244+36	LT&RT	--	--	20	--	78	--	--	--	--	CULVERT REPLACEMENT
	348+97	-	427+40	LT&RT	--	--	1,980	3,370	--	--	--	16	6,970	MAINLINE PAVING
	413+93	-	414+54	RT	--	--	10	--	--	33	--	--	--	CULVERT EXTENSION
	424+21	-	424+60	RT	--	--	--	--	--	2	2	--	--	CURB AND GUTTER REPLACEMENT
	425+95	-	427+40	LT&RT	--	--	--	--	80	2	23	8	--	GUARDRAIL/STORM SEWER REPLACEMENT
	UNDISTRIBUTED				--	1,700	--	--	--	50	--	--	--	
CATEGORY 0010 SUBTOTALS					36	1,700	10,370	16,990	543	126	25	39	33,750	
0030	11+20	-	11+80	LT&RT	--	--	--	--	--	3	--	--	--	SANITARY MANHOLES/WATER VALVES
	14+50	-	15+90	LT&RT	--	--	--	--	--	2	--	--	--	SANITARY MANHOLES/WATER VALVES
	17+50	-	18+40	LT	--	--	--	--	--	1	--	--	--	SANITARY MANHOLES/WATER VALVES
	23+30	-	24+40	LT	--	--	--	--	--	1	--	--	--	SANITARY MANHOLES/WATER VALVES
	34+50	-	36+00	RT	--	--	--	--	--	1	--	--	--	WATER VALVE
CATEGORY 0030 SUBTOTALS					--	--	--	--	--	8	--	--	--	
0040	424+95	-	426+15	RT	--	--	--	--	--	2	--	--	--	SANITARY MANHOLES
CATEGORY 0040 SUBTOTALS					--	--	--	--	--	2	--	--	--	
TOTALS					36	1,700	10,370	16,990	543	136	25	39	33,750	

NOTE:
UNDISTRIBUTED ASPHALTIC SURFACE PATCHING QUANTITY USED FOR ANY REPAIRS REQURED AFTER MILLING IS COMPLETE

PWL MIXTURE USE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT							QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
LOCATION	STA TO STA	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	11+00 - 427+40	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28S	12,130	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	69+50 - 73+88	LOWER LAYER (WEDGING)	MILLED EXISTING HMA SURFACE	ASPHALTIC SURFACE	4	VARIES	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS, BYPASS LANES, TURN LANES	VARIOUS	UPPER LAYER	MILLED EXISTING HMA SURFACE / BASE AGGREGATE	4 MT 58-28S	4,860	VARIES 2" - 4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
CULVERT AND STORM SEWER REPLACEMENTS	56+61 - 58+92 123+25 - 124+40 202+20 - 203+29 243+27 - 244+36 426+70 - 427+40	PATCHING AFTER REPLACEMENTS	BASE AGGREGATE	ASPHALTIC SURFACE	540	4"	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
CURB RAMPS AND CURB & GUTTER REPLACEMENTS	VARIOUS	PATCHING AFTER REPLACEMENTS	BASE AGGREGATE	ASPHALTIC SURFACE PATCHING	50	4"	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
MANHOLE & WATER VALVE ADJUSTMENTS	VARIOUS	PATCHING AFTER ADJUSTMENTS	BASE AGGREGATE	ASPHALTIC SURFACE PATCHING	10	4"	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION
ASPHALT DRIVEWAYS	424+21 - 426+57	REPAIRS AFTER CURB AND GUTTER REPLACMENT	BASE AGGREGATE	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	25	3"	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

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BASE AGGREGATE ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0504.S HAULING EXCESS SHOULDER MATERIAL CY	COMMENTS
0010	11+00	-	29+98	LT&RT	99	340	88	MAINLINE SHOULDERS/GUARDRAILS
	11+20	-	11+39	LT&RT	8	--	--	CURB/SIDEWALK
	11+36	-	11+42	LT	--	5	--	STORM SEWER MANHOLE
	11+62	-	13+18	LT&RT	64	--	--	CURB/SIDEWALK
	14+59	-	15+10	LT	2	--	--	CURB/SIDEWALK
	15+54	-	15+54	RT	2	--	--	CURB/SIDEWALK
	17+57	-	17+75	LT	6	--	--	CURB/SIDEWALK
	31+30	-	42+01	LT&RT	133	580	27	MAINLINE SHOULDERS/GUARDRAILS
	44+15	-	221+00	LT&RT	1,178	480	--	MAINLINE SHOULDERS/GUARDRAILS
	56+61	-	58+92	LT&RT	--	480	--	CULVERT REPLACEMENT
	123+25	-	124+40	LT&RT	--	270	--	CULVERT REPLACEMENT
	180+25	-	180+50	LT&RT	1	--	--	FULL DEPTH REPAIR
	202+20	-	203+29	LT&RT	--	210	--	CULVERT REPLACEMENT
	221+00	-	348+14	LT&RT	803	--	--	MAINLINE
	243+27	-	244+36	LT&RT	--	210	--	CULVERT REPLACEMENT
	348+97	-	427+40	LT&RT	652	850	--	MAINLINE SHOULDERS/GUARDRAILS
	413+93	-	414+54	RT	--	90	--	CULVERT EXTENSION
	424+21	-	424+60	RT	2	20	--	CURB/DRIVEWAY
	425+95	-	427+40	LT	10	290	--	GUARDRAIL/STORM SEWER REPLACEMENT
CATEGORY 0010 SUBTOTALS					2,960	3,825	115	
0030	11+20	-	11+80	LT&RT	--	5	--	SANITARY MANHOLES/WATER VALVES
	14+50	-	15+90	LT&RT	--	5	--	SANITARY MANHOLES/WATER VALVES
	17+50	-	18+40	LT	--	2	--	SANITARY MANHOLE/WATER VALVE
	23+30	-	24+40	LT	--	2	--	SANITARY MANHOLE/WATER VALVE
	34+50	-	36+00	RT	--	1	--	WATER VALVE
CATEGORY 0030 SUBTOTALS					--	15	--	
0040	424+95	-	426+15	RT	--	5	--	SANITARY MANHOLES
CATEGORY 0040 SUBTOTALS					--	5	--	
TOTALS					2,960	3,845	115	

CONCRETE CURB & GUTTER AND SIDEWALK ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0584 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT LF	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.3010 CONCRETE SURFACE DRAINS CY	COMMENTS
0010	11+13	-	13+18	LT	185	--	--	--	304	30	--	NORTH ST
	11+20	-	11+80	RT	50	--	--	--	260	30	--	NORTH ST
	14+59	-	15+10	LT	--	--	--	--	104	20	--	WISCONSIN ST
	15+24	-	15+56	RT	10	--	--	--	138	10	--	WISCONSIN ST
	17+59	-	18+07	LT	--	--	--	--	224	40	--	RIVER ST
	17+62	-	17+75	RT	--	--	--	--	95	20	--	RIVER ST
	29+43	-	29+98	LT&RT	--	--	--	110	--	--	2.5	B-68-433
	31+30	-	31+85	LT&RT	--	--	--	110	--	--	--	B-68-433
	57+56	-	58+09	LT	--	72	--	--	--	--	--	LARSON RD
	123+63	-	124+09	RT	--	50	--	--	--	--	--	WARE RD
	413+92	-	414+34	RT	--	80	--	--	--	--	--	SHADY DR
	424+21	-	424+60	RT	40	--	--	--	--	--	--	TOMORROW RIVER STATE TRAIL
	425+95	-	427+40	LT&RT	120	--	35	--	--	--	--	TOMORROW RIVER STATE TRAIL
TOTALS					405	202	35	220	1,125	150	2.5	

3

DRAINAGE ITEMS

CATEGORY	STATION	OFFSET	521.1072 APRON ENDWALLS FOR CULVERT PIPE STEEL 72-INCH EACH	521.5172 CULVERT PIPE CORRUGATED STEEL POLYMER COATED 72-INCH LF	522.2414 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 14X23-INCH LF	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	522.2614 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14X23-INCH EACH	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH EACH	606.0100 RIPRAP LIGHT CY	606.0200 RIPRAP MEDIUM CY	628.5505 POLYETHYLENE SHEETING SY	633.5200 MARKERS CULVERT END EACH	645.0120 GEOTEXTILE TYPE HR SY	JOINT TIES EACH
0010	15+97	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	29+53	LT&RT	--	--	--	--	--	--	--	17	--	--	54	--
	57+75	LT&RT	2	102 **	--	--	--	--	25	7	610	2	22	--
	63+08	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	96+37	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	115+25	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	123+85	LT&RT	--	--	50	--	2	--	--	--	--	2	--	16
	124+64	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	137+54	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	157+18	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	202+75	LT&RT	--	--	--	42	--	2	--	--	--	2	--	14
	243+82	LT&RT	--	--	36	--	2	--	--	--	--	2	--	12
	269+97	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	281+85	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	302+76	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	333+43	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	340+71	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	380+38	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	414+10	RT	--	--	--	6	--	1	--	--	--	2	--	4
	418+21	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	424+80	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	426+09	LT&RT	--	--	--	--	--	--	--	--	--	2	--	--
	427+00	LT	--	--	--	--	--	--	--	46	--	--	114	--
TOTALS			2	102	86	48	4	3	25	70	610	42	190	46

NOTES:
JOINT TIES ARE NOT A PAY ITEM AND ARE LISTED FOR INFORMATION ONLY
** MINIMUM THICKNESS FOR CORRUGATED STEEL CULVERT IS .138-INCH

TEMPORARY CRASH CUSHION AND CONCRETE BARRIER ITEMS

CATEGORY	STAGE	STATION	TO	STATION	OFFSET	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 INSTALLED LF	614.0905 CRASH CUSHIONS TEMPORARY EACH	FOR INFORMATION ONLY BACK WIDTH (FT)	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
0010	1A	382+93	-	389+32	LT	600	600	--	--	--	--	--	--	--
		382+93			LT	--	--	1	2	OM-3L	TL-3	BIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER
		389+32			LT	--	--	1	2	OM-3R	TL-3	BIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER
	1B	387+03	-	393+37	LT	400	600	--	--	--	--	--	--	--
		387+03			LT	--	--	1	2	OM-3L	TL-3	BIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER
		393+37			LT	--	--	1	2	OM-3R	TL-3	BIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER
TOTALS						1,000	1,200	4						

STORM SEWER ITEMS

CATEGORY	STATION	OFFSET	STRUCTURE NUMBER	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.8000 CONCRETE COLLARS FOR PIPE EACH	608.3618 STORM SEWER PIPE CLASS III-B 18-INCH LF	608.3624 STORM SEWER PIPE CLASS III-B 24-INCH LF	611.0530 MANHOLE COVERS TYPE J EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	JOINT TIES EACH
0010	426+83	RT	1	--	--	1	6	--	1	1	4
	426+94	LT&RT	2	--	1	--	--	68	--	--	20
	427+19	LT&RT	3	1	--	1	60	--	--	--	18
TOTALS				1	1	2	66	68	1	1	42

NOTE:
JOINT TIES ARE NOT A PAY ITEM AND ARE LISTED FOR INFORMATION ONLY

ADJUSTING ITEMS

CATEGORY	STATION	OFFSET	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8120.S COVER PLATES TEMPORARY EACH	SPV.0060.04 ADJUSTING SANITARY MANHOLE COVERS EACH	SPV.0060.05 ADJUSTING WATER VALVE BOXES EACH
0010	11+36	LT	1	1	--	--
CATEGORY 0010 SUBTOTALS			1	1	--	--
0030	11+25	LT	--	--	--	1
	11+40	LT	--	1	1	--
	11+51	LT	--	--	--	1
	11+57	LT	--	1	1	--
	11+64	RT	--	--	--	1
	11+65	LT	--	--	--	1
	11+68	RT	--	--	--	1
	14+81	LT	--	1	1	--
	14+92	LT	--	--	--	1
	15+63	RT	--	1	1	--
	15+71	RT	--	--	--	1
	15+76	RT	--	--	--	1
	18+12	LT	--	--	--	1
	18+18	LT	--	1	1	--
	23+75	LT	--	1	1	--
	23+88	LT	--	--	--	1
	35+46	RT	--	--	--	1
CATEGORY 0030 SUBTOTALS			--	6	6	11
0040	424+94	RT	--	1	1	--
	426+14	RT	--	1	1	--
CATEGORY 0040 SUBTOTALS			--	2	2	--
TOTALS			1	9	8	11

GUARDRAIL ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT SY	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	614.1200 MGS GUARDRAIL TEMPORARY TERMINAL EAT EACH	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2350 MGS GUARDRAIL SHORT RADIUS LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH
0010	28+18	-	29+98	RT	160	--	--	--	--	--	87.5	--	39.4	1	--
	28+31	-	29+98	LT	160	--	--	--	--	--	75.0	--	39.4	1	--
	31+30	-	33+09	RT	135	--	--	--	--	--	87.5	--	39.4	1	--
	31+30	-	32+72	LT	135	--	--	--	--	--	50.0	--	39.4	1	--
	39+62	-	41+67	RT	160	--	--	--	--	112.5	--	--	39.4	1	--
	40+19	-	42+11	LT	210	--	--	--	--	100.0	--	--	39.4	1	--
	44+03	-	50+83	RT	685	--	--	--	--	--	587.5	--	39.4	1	--
	44+48	-	49+78	LT	510	--	--	--	--	200.0	237.5	--	39.4	1	--
	347+27	-	348+09	LT	--	--	--	120	--	--	--	--	--	--	--
	367+16	-	370+98	LT	130	148	--	--	--	--	275.0	--	--	2	--
	369+13	-	370+41	RT	130	--	--	--	--	--	--	--	--	--	--
	383+47	-	393+20	LT	535	335	--	--	1	100.0	762.5	--	--	2	--
	424+29	-	425+21	RT	--	--	--	--	--	--	--	--	39.4	1	--
	425+80	-	426+52	RT	--	--	--	75	--	--	--	--	--	--	--
	426+58	-	427+40	LT	50	--	20	--	--	25.0	53.0	12.5	--	--	1
TOTALS					3,000	483	20	195	1	537.5	2,215.5	12.5	355	13	1

WATER

CATEGORY	LOCATION	624.0100 MGAL
0010	PROJECT	20
TOTAL		20

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EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2037 EROSION MAT CLASS III TYPE C SY	628.6005 TURBIDITY BARRIERS SY	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	COMMENTS
0010	11+13	-	12+02	LT&RT	20	20	--	170	--	--	4	--	--	17	NORTH ST
	14+49	-	15+52	LT&RT	10	10	--	60	--	--	--	--	18	--	WISCONSIN ST
	17+49	-	18+07	LT&RT	40	40	--	70	--	--	--	--	6	--	RIVER ST
	27+00	-	30+06	LT&RT	670	670	--	730	270	--	--	13	--	68	B-68-433 (SOUTH)
	31+21	-	34+30	LT&RT	380	380	--	1,140	380	--	--	100	--	--	B-68-433 (NORTH)
	38+51	-	42+17	LT&RT	690	690	1,050	10	10	--	--	--	--	68	B-68-091 (SOUTH)
	43+96	-	51+36	LT&RT	1,540	1,540	2,190	740	740	--	--	--	--	170	B-68-091 (NORTH)
	56+59	-	58+93	LT&RT	290	290	--	1,040	--	--	--	25	--	85	LARSON RD
	123+03	-	124+06	LT&RT	120	120	70	--	--	--	--	12	36	--	WARE RD
	201+64	-	203+78	LT&RT	390	390	170	--	--	--	--	--	24	--	CULVERT REPLACEMENT
	242+85	-	243+07	LT&RT	340	340	100	--	--	--	--	--	18	--	CULVERT REPLACEMENT
	366+47	-	372+23	LT&RT	470	470	1,380	170	--	--	--	88	--	68	GUARDRAIL REPLACMENT
	382+31	-	394+41	LT	1,260	1,260	970	--	--	--	--	--	--	68	R-68-13
	413+92	-	414+32	RT	--	--	110	--	--	--	--	--	24	--	SHADY DR
	424+27	-	425+21	RT	--	--	--	50	--	--	1	--	--	--	TOMORROW RIVER STATE TRAIL
	425+95	-	427+40	LT&RT	270	270	--	100	40	40	1	70	--	--	GUARDRAIL/STORM SEWER REPLACEMENTS
	UNDISTRIBUTED				1,570	1,570	1,510	1,045	350	--	1	60	34	136	
TOTALS					8,060	8,060	7,550	5,325	1,790	40	7	366	160	680	

NOTE:
APPROXIMATE TURBIDITY BARRIER HEIGHT IS 4'

EROSION CONTROL MOBILIZATION

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	PROJECT	6	4
TOTALS		6	4

RESTORATION ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0500 SEED WATER MGAL	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY	COMMENTS
0010	11+13	-	11+89	LT&RT	170	--	--	1	4	0.1	170	NORTH ST
	14+59	-	15+52	LT&RT	60	--	--	1	1	0.1	60	WISCONSIN ST
	17+53	-	18+07	LT&RT	70	--	--	1	1	0.1	70	RIVER ST
	27+00	-	30+06	LT&RT	730	0.5	13	--	16	--	--	B-68-433 (SOUTH)
	31+21	-	34+30	LT&RT	1,140	0.7	21	--	26	--	--	B-68-433 (NORTH)
	38+51	-	42+17	LT&RT	1,060	0.7	19	--	24	--	--	B-68-091 (SOUTH)
	43+96	-	51+36	LT&RT	2,930	1.8	53	--	66	--	--	B-68-091 (NORTH)
	56+59	-	58+93	LT&RT	1,040	0.7	19	--	23	--	--	LARSON RD
	123+03	-	124+06	LT&RT	70	0.1	1	--	1	--	--	WARE RD
	201+64	-	203+78	LT&RT	170	0.1	3	--	4	--	--	CULVERT REPLACEMENT
	242+85	-	243+07	LT&RT	100	0.1	2	--	2	--	--	CULVERT REPLACEMENT
	366+47	-	372+23	LT&RT	1,550	1.0	28	--	35	--	--	GUARDRAIL REPLACMENT
	382+31	-	394+41	LT	970	0.6	17	--	22	--	--	R-68-13
	413+92	-	414+32	RT	110	0.1	2	--	2	--	--	SHADY DR
	424+27	-	425+21	RT	50	--	--	1	1	0.1	50	TOMORROW RIVER STATE TRAIL
	425+95	-	427+40	LT&RT	100	--	--	3	2	0.1	100	GUARDRAIL/STORM SEWER REPLACEMENT
	UNDISTRIBUTED				2,580	1.6	47	1	60	0.1	115	
TOTALS					12,900	8.0	225	8	290	0.6	565	

TYPE II SIGNS AND SUPPORTS

CATEGORY	SIGN NUMBER	SIGN CODE	SIGN DIMENSION W X H IN	X	IN	DESCRIPTION	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF
0010	3-1	W5-52R	12	X	36	BRIDGE HASH MARKS	1	3.00
	3-2	W5-52L	12	X	36	BRIDGE HASH MARKS	1	3.00
	3-3	W5-52L	12	X	36	BRIDGE HASH MARKS	1	3.00
	3-4	W5-52R	12	X	36	BRIDGE HASH MARKS	1	3.00
TOTALS							4	12.00

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REMOVING AND MOVING SIGNS

CATEGORY	STATION	OFFSET	SIGN NUMBER	SIGN MESSAGE	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
0010	11+34	LT	1-1	STOP	1	--	--	1
	11+69	RT	1-2	STOP	1	--	--	1
	28+26	LT	2-1	NO PASSING ZONE / WAUPACA RIVER	1	--	--	1
	32+85	LT	2-2	SPEED LIMIT 45 MPH	1	--	--	1
	39+17	RT	2-3	SPEED LIMIT 55 MPH	1	--	--	1
	39+17	LT	2-4	SPEED LIMIT 45 MPH	1	--	--	1
	49+51	LT	3-5	WAUPACA / NO PARKING	1	--	--	1
	50+61	LT	3-6	SPEED LIMIT 45 MPH AHEAD	1	--	--	1
	58+16	RT	4-1	TWO-DIRECTION LARGE ARROW	1	--	--	1
	UNDISTRIBUTED				--	5	5	--
TOTALS					9	5	5	9

TRAFFIC CONTROL SIGNS FIXED MESSAGE

CATEGORY	LOCATION	NUMBER REQUIRED	SIGN CODE	SIGN SIZE W X H IN X IN	643.1000 SF	SIGN MESSAGE
0010	SOUTH PROJECT LIMIT (PRIOR TO CONSTRUCTION)	1	G20-57	72"X36"	18.00	HWY 49 / ROAD WORK / BEGINS XX-XX
	LARSON RD (PRIOR TO DETOUR)	2	G20-57C	72"X36"	36.00	HWY 49 / ROAD CLOSED / BEGINS XX-XX
	SCANDINAVIA STORM SEWER (PRIOR TO DETOUR)	2	G20-57C	72"X36"	36.00	HWY 49 / ROAD CLOSED / BEGINS XX-XX
	NORTH PROJECT LIMITS (PRIOR TO CONSTRUCTION)	1	G20-57	72"X36"	18.00	HWY 49 / ROAD WORK / BEGINS XX-XX
	NORTH DETOUR LIMIT (DURING DETOUR)	2	--	60"X30"	25.00	HWY 49 SOUTH OPEN TO SCANDINAVIA
TOTAL					133.00	

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TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	LOCATION	STAGE DURATION DAYS	208.1500.S TEMPORARY LANE SHIFT DURING CULVERT WORK EACH	643.0300* TRAFFIC CONTROL DRUMS NO.	643.0300* TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900* TRAFFIC CONTROL SIGNS NO.	643.0900* TRAFFIC CONTROL SIGNS DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I NO.	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I CYCLES	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NO.	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II CYCLE	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1070 TRAFFIC CONTROL CONES 42-INCH NO.	643.1070 TRAFFIC CONTROL CONES 42-INCH DAY
0010		PROJECT - ADVANCED WARNING	102	--	--	--	--	--	--	--	--	--	36	3,672	--	--	--	--	--	--	--	--	--
	1A	RETAINING WALL (R-68-13)	30	--	32	960	1	30	2	60	28	840	16	480	--	--	--	--	--	--	--	--	--
	1B	RETAINING WALL (R-68-14)	30	--	32	960	1	30	2	60	28	840	15	450	--	--	--	--	--	--	--	--	--
		PROJECT - WIDTH RESTRICTIONS	3	--	--	--	--	--	--	--	--	--	48	144	--	--	--	--	--	--	--	--	--
		CULVERT REPLACEMENTS	3	6	39	117	3	9	6	18	28	84	1	3	--	--	--	--	--	--	11	33
		NICHOL CREEK CULVERT REPLACEMENT (DETOUR)	5	--	--	--	24	120	42	210	--	--	237	1,185	4	1	4	15	1	15	--	--
		GUARDRAIL REPLACEMENTS	14	--	15	210	--	--	--	--	--	--	1	14	--	--	--	--	--	--	--	--
		MILL AND OVERLAY	25	--	--	--	--	--	--	--	--	--	8	200	--	--	--	--	--	--	--	--
		STORM SEWER REPLACEMENT (DETOUR)	5	--	--	--	24	120	42	210	--	--	237	1,185	4	1	4	15	1	15	--	--
TOTALS				6		2,247		309		558		1,764		7,333			8			30		33

NOTE:
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL PEDESTRIAN ITEMS

CATEGORY	LOCATION	WORK DURATION DAYS	643.0300* TRAFFIC CONTROL DRUMS NO.	643.0300* TRAFFIC CONTROL DRUMS DAY	643.0900* TRAFFIC CONTROL SIGNS NO.	643.0900* TRAFFIC CONTROL SIGNS DAY	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP NO.	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
0010	SE CORNER OF STH 49/NORTH ST	5	27	135	21	105	--	--	--	--	--	17
	NE CORNER OF STH 49/NORTH ST	5	27	135	21	105	--	41	--	--	10	50
	SW CORNER OF STH 49/NORTH ST	5	27	135	25	125	25	30	1	5	10	108
	NW CORNER OF STH 49/NORTH ST	5	27	135	9	45	--	43	--	--	10	100
	STH 49/WISCONSIN ST AND STH 49/RIVER ST	5	67	335	24	120	--	256	--	--	30	270
TOTALS				875		500	25	370		5	60	545

NOTE:
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

LONG LINE PAVEMENT PERMANENT MARKING ITEMS

				646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH				646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH		646.6120 MARKING STOP LINE EPOXY 18-INCH	646.6466 COLD WEATHER MARKING EPOXY 6-INCH	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
				SOLID WHITE	3' LINE 9' SKIP WHITE	SOLID YELLOW	12.5' LINE 37.5' SKIP YELLOW	SOLID WHITE	3' LINE 9' SKIP WHITE	SOLID WHITE	SOLID WHITE	SOLID WHITE
CATEGORY	STATION	TO	STATION	LF	LF	LF	LF	LF	LF	LF	LF	LF
0010	11+00	-	19+00	1,100	--	500	200	--	--	--	--	--
	11+23	-	11+30	--	--	--	--	--	--	--	--	70
	17+59	-	17+67	--	--	--	--	--	--	--	--	90
	19+00	-	427+40	79,200	260	66,352	3,013	--	--	--	--	--
	51+76	-	51+89	--	--	--	--	--	--	20	--	--
	151+08	-	155+61	--	--	--	--	94	36	--	--	--
	361+42	-	361+62	--	--	--	--	--	--	20	--	--
	UNDISTRIBUTED			--	--	--	--	--	--	--	15,000	--
TOTALS				80,300	260	66,852	3,213	94	36	40	15,000	160
				150,625				130				

TEMPORARY MARKING ITEMS

					643.3165 TEMPORARY MARKING LINE PAINT 6-INCH			643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH	643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH	643.3980 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 8-INCH	646.9000 MARKING REMOVAL LINE 4-INCH
					SOLID WHITE	SOLID YELLOW	12.5' LINE 37.5' SKIP YELLOW	SOLID WHITE	SOLID WHITE	SOLID WHITE	SOLID WHITE	SOLID WHITE
CATEGORY	STAGE	STATION	TO	STATION	LF	LF	LF	LF	LF	LF	LF	LF
0010	--	11+69	-	11+85	30	--	--	--	29	--	45	--
	--	14+67	-	14+97	--	--	--	--	117	--	--	--
	--	19+00	-	427+40	--	--	--	--	--	--	--	--
	1A	381+72	-	390+37	--	66,352	3,013	1,531	--	24	--	1,059
	1B	385+86	-	394+32	--	--	--	1,515	--	24	--	674
	--	CULVERT REPLACEMENTS			--	935	50	--	--	--	--	--
	--	RETAINING WALL CONSTRUCTION			2,910	2,415	--	--	--	--	--	--
	--	STORM SEWER REPLACEMENTS			140	150	30	--	--	--	--	--
TOTALS					3,080	69,852	3,093	3,046	146	48	45	1,733
						76,025						

MONUMENT ITEMS

		621.0100 LANDMARK REFERENCE MONUMENTS	SPV.0060.01 REESTABLISH SECTION CORNER MONUMENTS	
CATEGORY	LOCATION	EACH	EACH	COMMENTS
0010	SEC 18, T22N, R12E	4	1	CENTER
	SEC 7 / 18, T22N, R12E	4	1	QUARTER CORNER
	SEC 7, T22N, R12E	4	1	CENTER
	SEC 26 / 27, T23N, R11E	4	1	QUARTER CORNER
	SEC 22 / 23, T23N, R11E	4	1	QUARTER CORNER
TOTALS		20	5	

EXISTING LAND PARCEL MONUMENT ITEMS

					SPV.0060.02 RESEARCH AND LOCATE EXISTING LAND PARCEL MONUMENTS	SPV.0060.03 VERIFY AND REPLACE EXISTING LAND PARCEL MONUMENTS
CATEGORY	STATION	TO	STATION	OFFSET	EACH	EACH
0010	361+90	-	372+00	LT&RT	12	12
TOTALS					12	12

SAWING ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
0010	11+13	-	13+18	LT	212	20	NORTH ST INTERSECTION
	11+20	-	11+80	RT	72	17	NORTH ST INTERSECTION
		11+36		LT	24	--	STORM SEWER MANHOLE
	14+59	-	15+10	LT	--	10	WISCONSIN ST INTERSECTION
	15+52	-	15+56	RT	12	2	WISCONSIN ST INTERSECTION
	17+57	-	17+69	LT	15	15	RIVER ST INTERSECTION
	27+00	-	29+77	LT&RT	547	--	GUARDRAIL REPLACEMENT
	31+50	-	34+28	LT&RT	527	--	GUARDRAIL REPLACEMENT
	39+79	-	42+17	LT&RT	443	--	GUARDRAIL REPLACEMENT
	43+98	-	51+08	LT&RT	1,308	--	GUARDRAIL REPLACEMENT
	56+61	-	58+92	LT&RT	188	--	CULVERT REPLACEMENT
	123+25	-	124+40	LT&RT	124	3	CULVERT REPLACEMENT
	180+25	-	180+50	LT	54	--	FULL DEPTH REPAIR
	202+21	-	203+29	LT&RT	59	--	CULVERT REPLACEMENT
	243+27	-	244+36	LT&RT	59	--	CULVERT REPLACEMENT
	368+84	-	370+64	LT&RT	350	--	GUARDRAIL REPLACEMENT
	384+15	-	392+76	LT	608	--	RETAINING WALL CONSTRUCTION
	413+92	-	414+54	RT	139	--	CULVERT EXTENSION
	424+21	-	424+60	RT	52	5	TOMORROW RIVER STATE TRAIL
	425+95	-	427+40	LT&RT	310	8	GUARDRAIL/STORM SEWER REPLACEMENT
CATEGORY 0010 SUBTOTALS					5,103	80	
0030	NORTH ST INTERSECTION			LT&RT	96	--	SANITARY MANHOLE/WATER VALVES
	WISCONSIN ST INTERSECTION			LT&RT	84	--	SANITARY MANHOLE/WATER VALVES
	RIVER ST INTERSECTION			LT	36	--	SANITARY MANHOLE/WATER VALVES
	LEIGHTON RD INTERSECTION			LT	36	--	SANITARY MANHOLE/WATER VALVES
	ELM ST INTERSECTION			RT	12	--	WATER VALVE
CATEGORY 0030 SUBTOTALS					264	--	
0040	TOMORROW RIVER STATE TRAIL			RT	48	--	SANITARY MANHOLES
CATEGORY 0040 SUBTOTALS					48	--	
TOTALS					5,415	80	

STAKING ITEMS

CATEGORY	STATION	TO	STATION	OFFSET	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	COMMENTS
0010	11+00	-	29+98	LT&RT	--	435	--	1,898	15	--	MAINLINE PAVING
	27+00	-	29+98	LT&RT	--	--	--	--	--	298	GUARDRAIL REPLACEMENT
	31+30	-	42+01	LT&RT	--	110	--	1,071	--	--	MAINLINE PAVING
	31+30	-	34+30	LT&RT	--	--	--	--	--	300	GUARDRAIL REPLACEMENT
	38+51	-	42+12	LT&RT	--	--	--	--	--	361	GUARDRAIL REPLACEMENT
	44+15	-	221+00	LT&RT	--	80	--	17,685	--	--	MAINLINE PAVING
	44+03	-	51+36	LT&RT	--	--	--	--	--	733	GUARDRAIL REPLACEMENT
	56+61	-	58+92	LT&RT	--	--	1	--	--	231	CULVERT REPLACEMENT
	123+25	-	124+40	LT&RT	--	--	1	--	--	115	CULVERT REPLACEMENT
	202+21	-	203+29	LT&RT	--	--	1	--	--	108	CULVERT REPLACEMENT
	221+00	-	347+90	LT&RT	--	--	--	12,690	--	--	MAINLINE PAVING
	243+27	-	244+36	LT&RT	--	--	1	--	--	109	CULVERT REPLACEMENT
	348+97	-	427+40	LT&RT	--	275	--	7,843	--	--	MAINLINE PAVING
	366+47	-	372+16	LT&RT	--	--	--	--	--	569	GUARDRAIL REPLACEMENT
	382+32	-	394+39	LT&RT	--	--	--	--	--	1,186	GUARDRAIL/RETAINING WALL
	413+92	-	414+32	LT&RT	--	--	1	--	--	40	CULVERT EXTENSION
	425+95	-	427+40	LT&RT	3	--	--	--	--	145	GUARDRAIL/STORM SEWER REPLACEMENT
	PROJECT			LT&RT	--	--	--	--	--	--	
TOTALS					3	900	5	41,187	15	4,195	

COMPOSITE DRAWING, THE ORIGINAL IS ON FILE AT THE WAUPACA COUNTY REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 6420-00-22 - 4.01

THAT PART OF THE SW 1/4 OF THE NW 1/4 OF SECTION 26, AND PART OF LOT 1 OF CSM 6610, BEING PART OF THE SE 1/4 OF THE NE 1/4 OF SECTION 27, ALSO PART OF THE SE 1/4 OF THE NE 1/4 OF SECTION 27, ALL LOCATED IN TOWNSHIP 23 NORTH, RANGE 11 EAST, TOWN OF SCANDINAVIA, WAUPACA COUNTY, WISCONSIN

RELOCATION ORDER - STH 49, WAUPACA - NORTHLAND (NORTH STREET TO DEPOT STREET), WAUPACA COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

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

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

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, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

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

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

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. 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, WI

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

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 49: R/W PLAT 6420-04-21, CSM 1918, CSM 6610 AND EXISTING CENTERLINE.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR CTH Q: R/W PLAT 6420-04-21, CSM 1918, AND EXISTING CENTERLINE.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR ELM VALLEY RD: R/W PLAT 6420-04-21 AND EXISTING CENTERLINE.

PER TIES
Y = 374197.775
X = 521692.289

LOCATION SKETCH NOT TO SCALE

Document #: 896582
Date: 07-14-2021 Time: 12:59 PM Pages: 1
Fee: $25.00 County: WAUPACA State: WI
MICHAEL MACEMKE - REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6420-00-22-4.01
AMENDMENT NO:___

ALL TLES ARE FOR SLOPE GRADING PURPOSES.

SCALE, FEET
0 50 100

N00°51'46"E
1319.48'
SIXTEENTH LINE TO MON

SIXTEENTH LINE

109-110
LCB=N00°55'48"W
LCH=129.36'
L=129.36'
R=5894.54'

112-113
LCB=S00°56'07"E
LCH=126.81'
L=126.82'
R=5828.54'

PC-111
LCB=N00°57'14"W
LCH=111.07'
L=111.07'
R=5729.65'

N00°51'46"E
155.85'
114 TO SIXTEENTH LINE

PC: 373+69.80

CURVE 1
PI STA = 377+43.84
Y = 373141.734
X = 521626.475
DELTA = 7°28'13", RT
D = 1°00'00"
T = 374.05'
L = 747.03'
R = 5729.65'
PC STA = 373+69.80
PT STA = 381+16.83
DB = S01°30'34"E
DA = N05°57'39"E

GN

TLE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE140	366+57.95	-32.88'
TLE141	366+66.98	-37.00'
TLE142	368+05.46	-35.00'
TLE143	368+08.97	-33.01'
TLE144	368+99.95	-33.09'
TLE145	369+39.00	-59.00'
TLE146	369+66.00	-66.00'
TLE147	369+76.98	-65.00'
TLE148	370+10.00	-53.00'
TLE149	370+71.00	-53.00'
TLE150	370+82.00	-45.99'
TLE151	371+29.00	-40.73'
TLE152	371+43.00	-46.00'
TLE153	372+00.97	-33.35'
TLE154	371+60.00	32.68'
TLE155	369+41.00	64.00'
TLE156	368+36.01	32.96'

COURSE TABLE		
COURSE	BEARING	DISTANCE
E 1/4 SEC. 27 - 100	N89° 36' 26"W	70.07'
100 - 101	N00° 00' 00"E	32.97'
101 - 102	N36° 37' 02"E	84.62'
102 - PRW103	N01° 33' 31"W	648.03'
PRW103 - PRW104	N36° 20' 40"W	36.58'
PRW104 - PRW105	N18° 36' 43"W	27.20'
PRW105 - PRW106	N16° 00' 41"E	39.87'
PRW106 - PRW107	N01° 00' 53"E	68.07'
PRW107 - PRW108	N04° 52' 39"E	122.73'
PRW108 - 109	N01° 33' 31"W	157.79'
109 - 110	SEE CURVE DATA	
110 - 111	S89° 21' 09"E	33.28'
111 - 112	S89° 21' 09"E	32.73'
112 - 113	SEE CURVE DATA	
113 - 114	S01° 33' 31"E	29.10'
114 - PRW115	S01° 33' 31"E	187.69'
PRW115 - PRW116	S08° 56' 14"E	195.67'
PRW116 - PRW117	S14° 44' 07"W	89.57'
PRW117 - 118	S01° 33' 31"E	662.74'
118 - 119	S00° 00' 00"W	32.97'
119 - 120	S89° 23' 25"W	32.65'
120 - E 1/4 SEC. 27	S89° 23' 25"W	15.62'

STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	361+63.40	-85.66'
101	361+96.36	-84.79'
102	362+62.92	-32.54'
PRW103	369+10.95	-33.10'
PRW104	369+40.98	-54.00'
PRW105	369+66.98	-62.00'
PRW106	370+05.00	-50.00'
PRW107	370+73.00	-47.00'
PRW108	371+94.97	-33.35'
109	373+52.76	-33.48'
110	374+81.47	-33.27'
111	374+80.87	0.00'
112	374+80.26	32.73'
113	373+52.82	32.52'
114	373+23.72	32.54'
PRW115	371+36.03	32.70'
PRW116	369+42.00	58.00'
PRW117	368+56.01	32.95'
118	361+93.27	33.52'
119	361+60.32	32.65'
120	361+60.83	0.00'
E 1/4 SEC. 27	361+61.08	-15.62'

TOWN OF SCANDINAVIA

LOT 1
CSM 6610
V. 24, P. 36-37
DOC. 729085

LOT 1
CSM 1918
V. 6, P. 151-152
DOC. 1232231

SOUTH BRANCH LITTLE WOLF RIVER

SE/NE

SW/NW

STH 49

SECTION LINE

N1°30'34"W

N00°51'46"E
786.21'
R/L TO 114

R/L 365+38.17

BUILDING ENCROACHMENT EASEMENT
DOC. 728630
DOC. 729085

BLDG IS 8' FROM FEE

TLE
264 SF

TLE
905 SF

TLE
4

TLE
6

TLE
3

CONVENTIONAL UTILITY SYMBOLS

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

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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

CONVENTIONAL SYMBOLS

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

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)

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

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

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
201	TDS TELECOM (COMMUNICATION)	RELEASE OF RIGHTS

201 TDS TELECOM (COMMUNICATION)
VOL 461 PG 609 DOC 345775 - PAR 6

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S 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	INTERESTS REQUIRED	R/W SF REQUIRED NEW	EXISTING	TOTAL	TLE SF
3	WILLIAM J. KIZEWSKI	TLE	---	---	---	444
4	JASON R. KUBISIAK AND FAYE M. KUBISIAK	FEE/TLE	3706	37939	41645	1169
6	PAMELA F. MADSON	FEE/TLE	3518	28585	32103	1524

FOUND PK NAIL
Y = 371577.055
X = 519034.413

FOUND PK NAIL
Y = 371559.106
X = 521652.548

FOUND RR SPIKE
Y = 371587.287
X = 524301.208

QUARTER LINE
CTH Q
S89°36'26"E
2548.12'
MON TO 100

N00°51'46"E
377.42'
MON TO R/L

S89°23'26"W
2600.53'
MON TO 119

ELM VALLEY RD

emcs.inc

I, KEVIN C. BOYER 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 KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

SIGNATURE: Kevin C. Boyer DATE: 07/13/2021
PRINT NAME: KEVIN C. BOYER
REGISTRATION NUMBER: S-2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE NORTH CENTRAL-WISCONSIN RAPIDS

SIGNATURE: Brent L Stella DATE: 7-13-21
PRINT NAME: Brent L Stella

6420-00-22-4.01
78
1 IN:100 FT
PLOT SCALE :
PLOT NAME :
Drew Nelson
PLOT BY :
7/3/2021 9:48 AM
PLOT DATE :
PLOT DATE :
FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN(TPP)\040101-RP.DWG
APPRAISAL PLAT DATE : 06/03/2021

R/W PROJECT NUMBER: 6420-00-22	SHEET NUMBER: 1

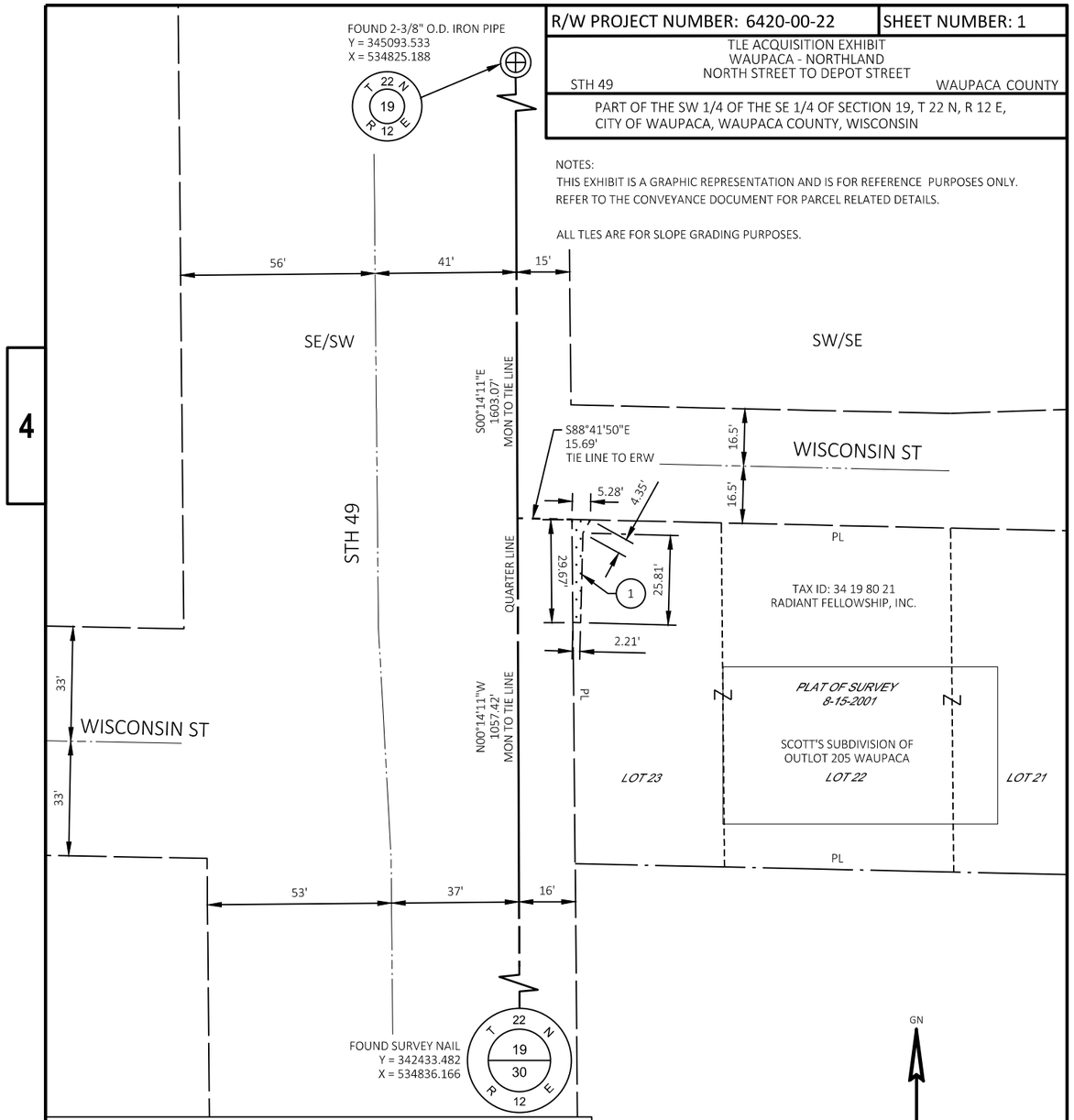
TLE ACQUISITION EXHIBIT
WAUPACA - NORTHLAND
NORTH STREET TO DEPOT STREET

STH 49 — WAUPACA COUNTY

PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 19, T 22 N, R 12 E,
CITY OF WAUPACA, 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.

ALL TLES ARE FOR SLOPE GRADING PURPOSES.



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	RADIANT FELLOWSHIP, INC.	TLE	85

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 - WISCONSIN RAPIDS

SIGNATURE: Brent L Stella DATE: 7-13-21

PRINT NAME: Brent L Stella

FILE NAME : TLE EXHIBIT.DWG PLOT DATE : 1/4/2023 9:31 AM R/W PROJECT: 6420-00-22

4

R/W PROJECT NUMBER: 6420-00-22	SHEET NUMBER: 2

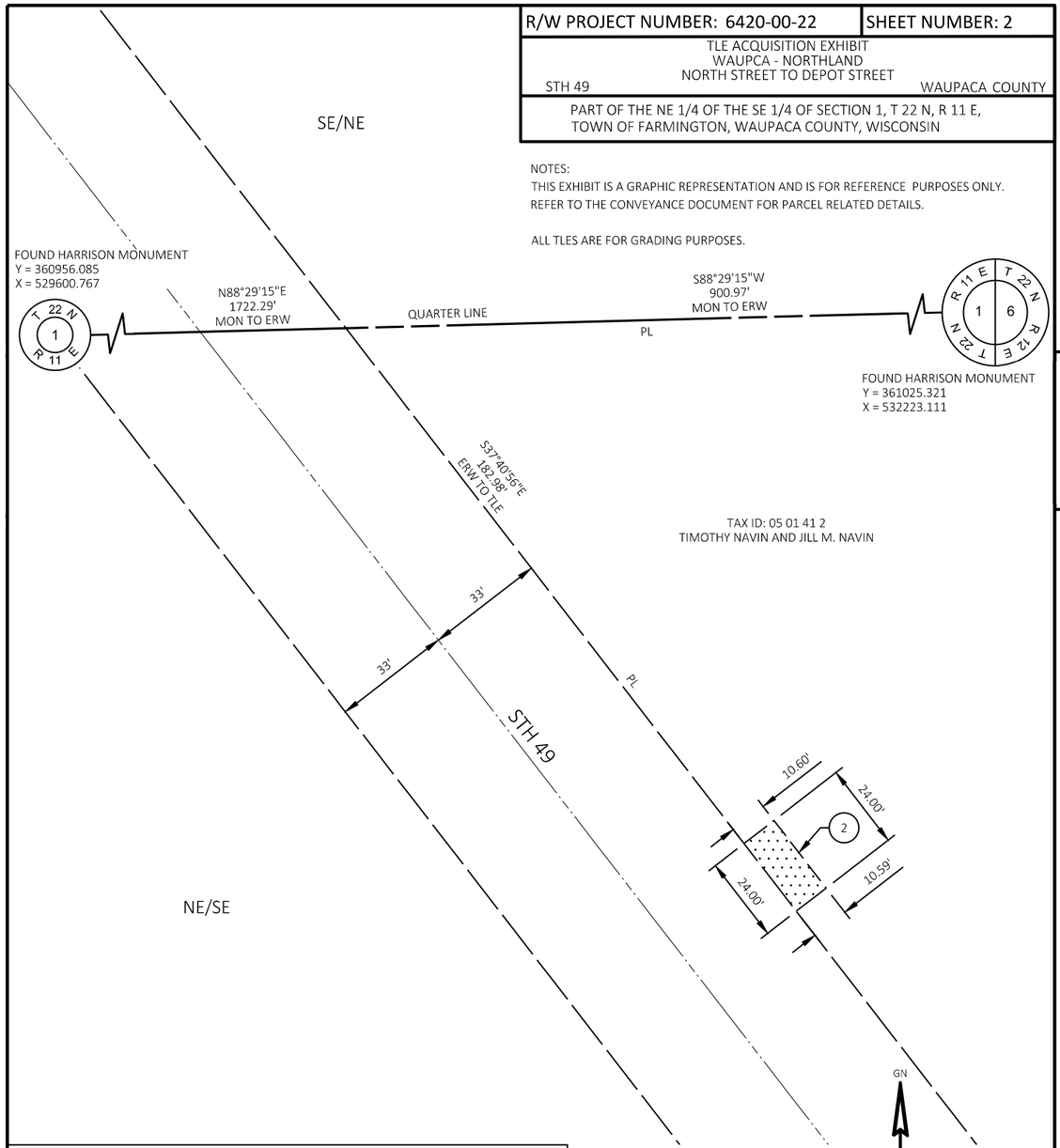
TLE ACQUISITION EXHIBIT
WAUPCA - NORTHLAND
NORTH STREET TO DEPOT STREET

STH 49 — WAUPACA COUNTY

PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 1, T 22 N, R 11 E,
TOWN OF FARMINGTON, 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.

ALL TLES ARE FOR GRADING PURPOSES.



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.
2	TIMOTHY NAVIN AND JILL M. NAVIN	TLE	254

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 - WISCONSIN RAPIDS

SIGNATURE: Brent L Stella DATE: 7-13-21

PRINT NAME: Brent L Stella

FILE NAME : TLE EXHIBIT.DWG PLOT DATE : 1/4/2023 9:31 AM R/W PROJECT: 6420-00-22

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

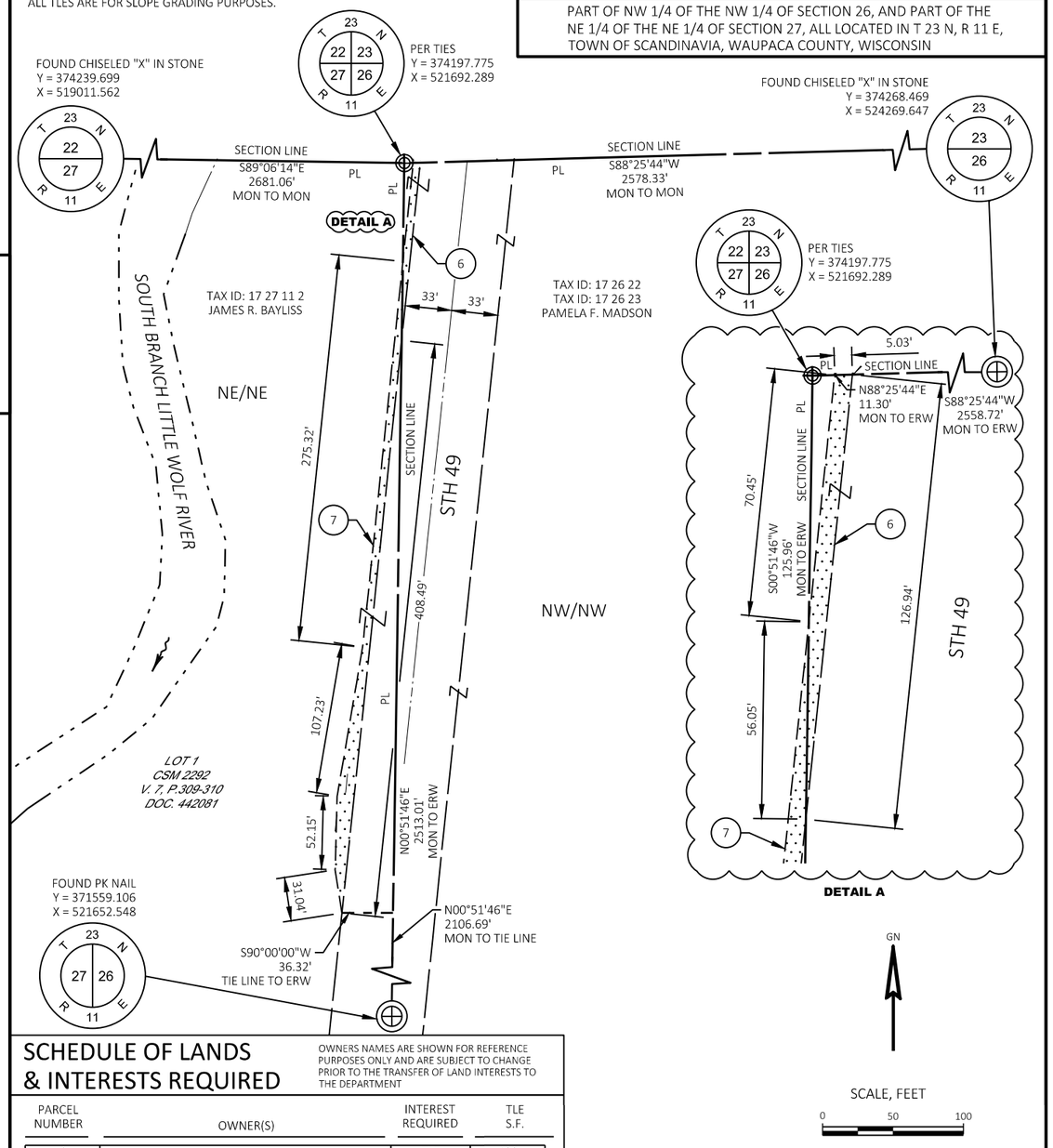
ALL TLES ARE FOR SLOPE GRADING PURPOSES.

R/W PROJECT NUMBER: 6420-00-22	SHEET NUMBER: 3

TLE ACQUISITION EXHIBIT
WAUPACA - NORTHLAND
NORTH STREET TO DEPOT STREET

STH 49 — WAUPACA COUNTY

PART OF NW 1/4 OF THE NW 1/4 OF SECTION 26, AND PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 27, ALL LOCATED IN T 23 N, R 11 E, TOWN OF SCANDINAVIA, WAUPACA 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.
6	PAMELA F. MADSON	TLE	492
7	JAMES R. BAYLISS	TLE	2775

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 - WISCONSIN RAPIDS

SIGNATURE: Brent L Stella DATE: 7-13-21

PRINT NAME: Brent L Stella

R/W PROJECT NUMBER: 6420-00-22	SHEET NUMBER: 4

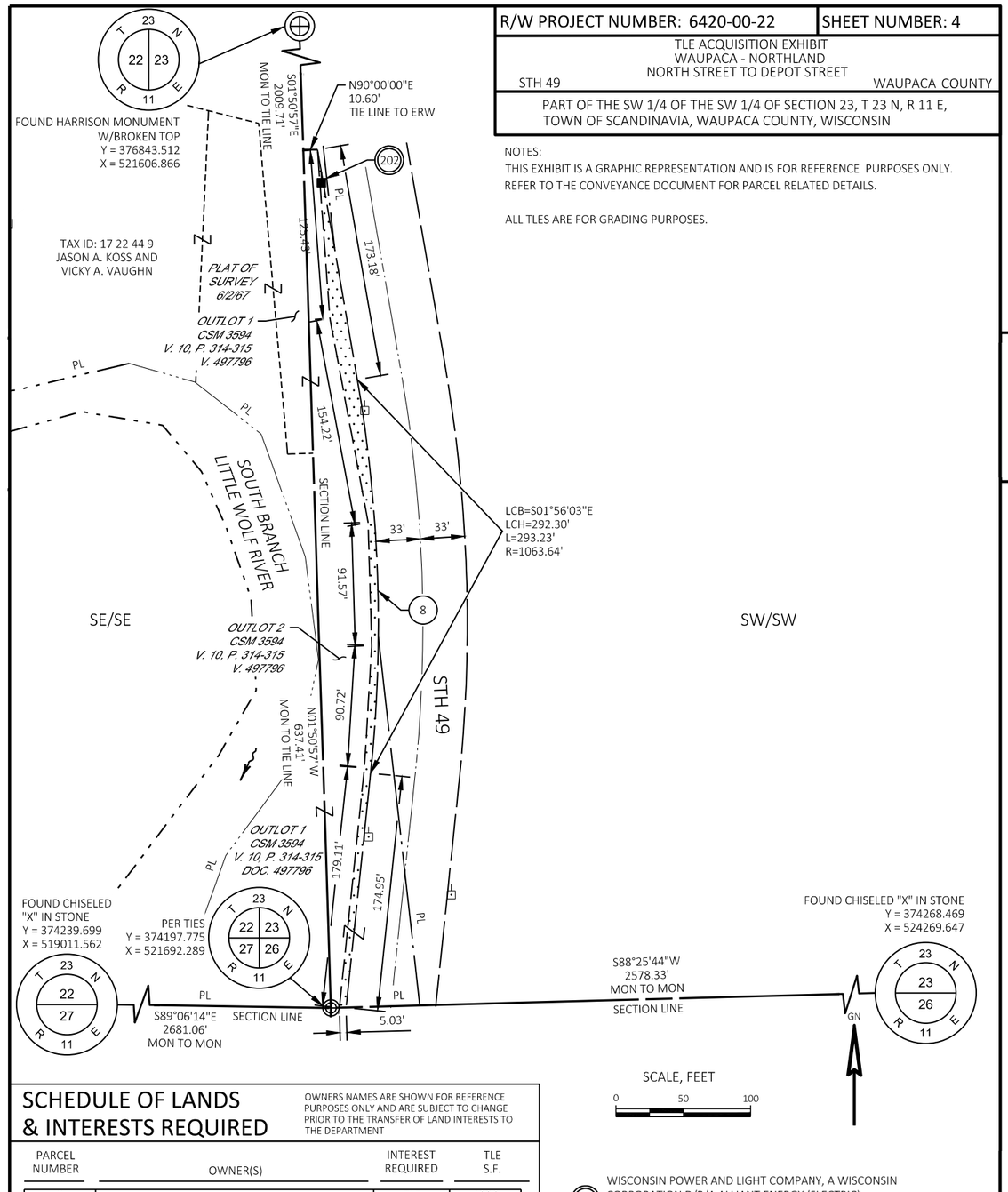
TLE ACQUISITION EXHIBIT
WAUPACA - NORTHLAND
NORTH STREET TO DEPOT STREET

STH 49 — WAUPACA COUNTY

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 23, T 23 N, R 11 E, TOWN OF SCANDINAVIA, 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.

ALL TLES ARE FOR GRADING PURPOSES.



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.
8	JASON A. KOSS AND VICKY A. VAUGHN	TLE	4226

(202) WISCONSIN POWER AND LIGHT COMPANY, A WISCONSIN CORPORATION D/B/A ALLIANT ENERGY (ELECTRIC)
NO RECORD OF EASEMENT - PAR 8

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	WISCONSIN POWER AND LIGHT COMPANY, A WISCONSIN CORPORATION D/B/A ALLIANT ENERGY (ELECTRIC)	RELEASE OF RIGHTS

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTH CENTRAL - WISCONSIN RAPIDS

SIGNATURE: Brent L Stella DATE: 7-13-21

PRINT NAME: Brent L Stella

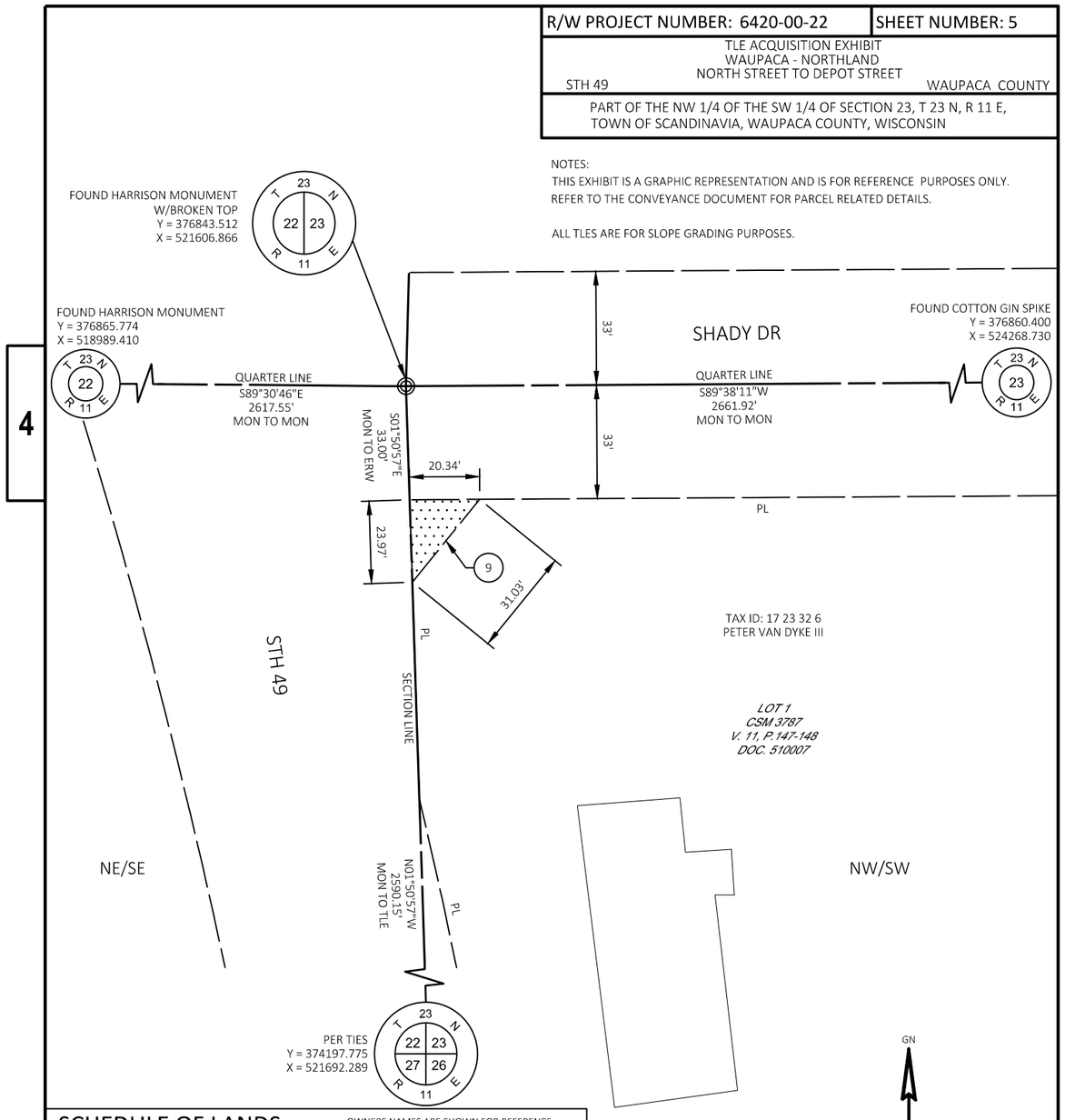
R/W PROJECT NUMBER: 6420-00-22	SHEET NUMBER: 5

TLE ACQUISITION EXHIBIT
WAUPACA - NORTHLAND
NORTH STREET TO DEPOT STREET
STH 49 WAUPACA COUNTY

PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 23, T 23 N, R 11 E,
TOWN OF SCANDINAVIA, 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.

ALL TLES ARE FOR SLOPE GRADING PURPOSES.



4

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.
9	PETER VAN DYKE III	TLE	244

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 - WISCONSIN RAPIDS

SIGNATURE: Brent L Stella DATE: 7-13-21

PRINT NAME: Brent L Stella

R/W PROJECT NUMBER: 6420-00-22	SHEET NUMBER: 6

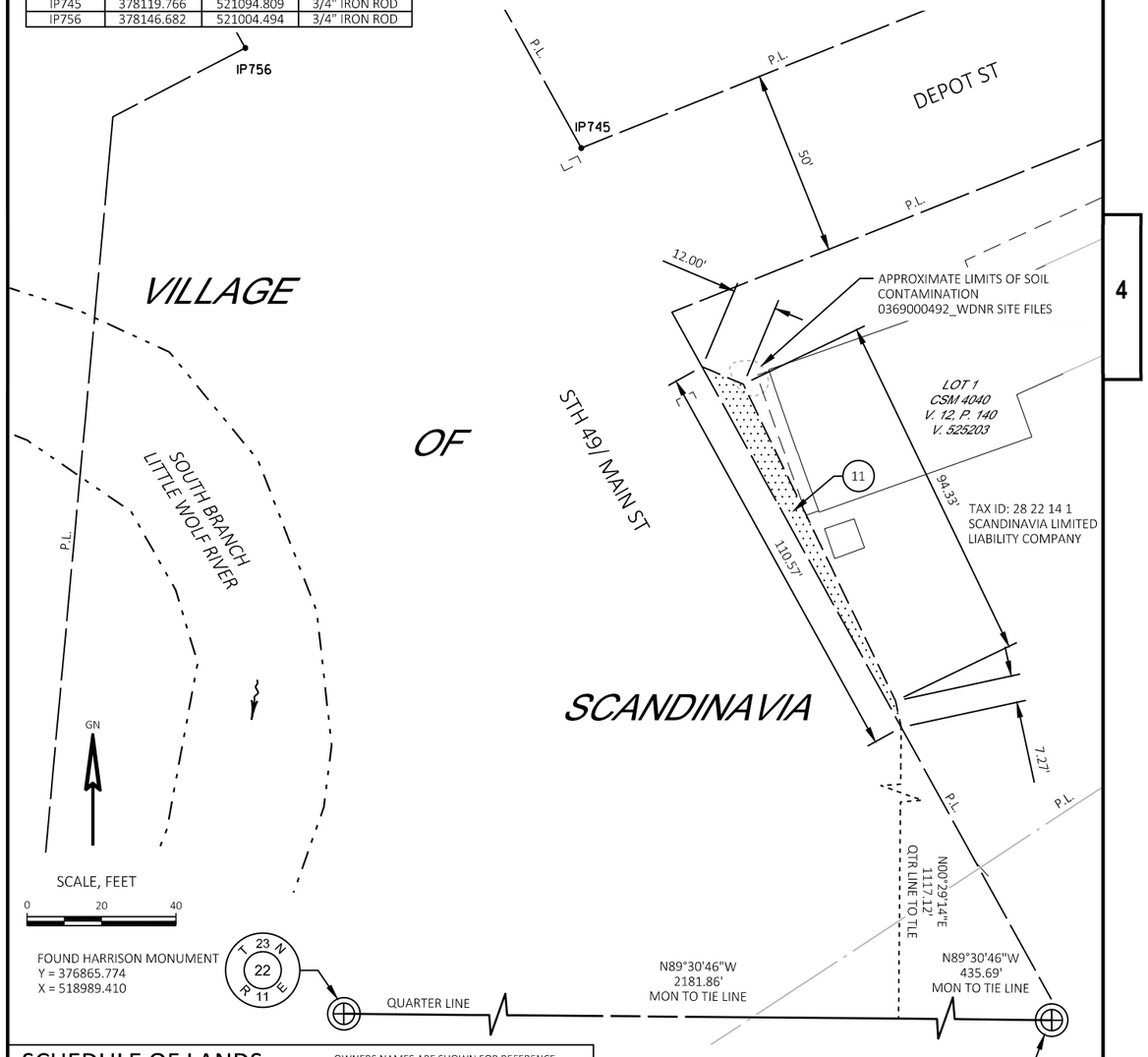
TLE ACQUISITION EXHIBIT
WAUPACA - NORTHLAND
NORTH STREET TO DEPOT STREET
STH 49 WAUPACA COUNTY

PART OF THE SE 1/4 OF THE NE 1/4 OF SECTION 22, T 23 N, R 11 E,
VILLAGE OF SCANDINAVIA, 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.

ALL TLES ARE FOR STORM SEWER AND SLOPE GRADING PURPOSES.

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP745	378119.766	521094.809	3/4" IRON ROD
IP756	378146.682	521004.494	3/4" IRON ROD



4

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.
11	SCANDINAVIA LIMITED LIABILITY COMPANY	TLE	490

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 - WISCONSIN RAPIDS

SIGNATURE: Brent L Stella DATE: 12/27/22

PRINT NAME: Brent L Stella

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- X GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- X SIGN - NEW
- X SIGN - MOVE

NOTES

SEE CURB RAMP DETAILS FOR ADDITIONAL INFORMATION.

SEE TYPICAL SECTIONS FOR SHOULDER PAVING FROM NORTH ST TO BALLARD RD.

ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

5

5

1-1 STOP MOVE

NORTH ST

WISCONSIN ST

RIVER ST

LEIGHTON RD

R/W

CP/BM # 514
Y = 343,061.68
X = 534,767.57
ELEV = 889.56
FENO 1000 W/ALUMINUM CAP SET

BP: 10+75.00

PI: 11+37.68

PC: 12+74.37

PT: 18+31.14

REX BOWEN

REX H & NANCY A BOWEN

WTKD PROPERTIES LLC

UFH LLC

KAM REAL ESTATE LLC

SCOTT & JEANETTE NEWELL

DAVID R DRESIA

BONNIE HETZEL

END CONSTRUCTION, 43' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

END CONSTRUCTION, 61' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

CITY OF WAUPACA
(SEWER)

WISCONSIN PUBLIC SERVICE
(ELECTRIC)

END CONSTRUCTION, 41' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

REMOVING CONCRETE
SIDEWALK

END CONSTRUCTION, 42' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

CITY OF WAUPACA
(WATER)

WE ENERGIES
(GAS)

CITY OF WAUPACA
(SEWER)

END CONSTRUCTION, 40' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

REMOVING CURB &
GUTTER AND
REMOVING
CONCRETE
SIDEWALK

REMOVING CONCRETE SIDEWALK

STH 49

CURVE 1

N0° 01' 06"W

N0° 45' 46"W

N4° 09' 37"E

12 14 16 18 20 22 24

REMOVING CONCRETE SIDEWALK

BEGIN PROJECT
STA 11+00
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)
Y=343,043.10
X=534,799.46

SEAN MURPHY

CONC PE

DANIEL B & GLENNA M PETERS REV LIV TRUST

STOP MOVE 1-2

CAUTION

WE ENERGIES
(GAS)
Y = 343,080.78
X = 534,799.45

TLE

REMOVING
CURB & GUTTED AND
REMOVING CONCRETE
SIDEWALK

WISCONSIN PUBLIC SERVICE
(ELECTRIC)
NSIGHT TELSERVICES
(COMMUNICATION)

END CONSTRUCTION, 48' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

CITY OF WAUPACA
(WATER)

AT&T WISCONSIN
(COMMUNICATION)

REID J MURRAY

STA 15+97, LT&RT
CULVERT 68049005
EXISTING 36"X 36" RCBC TO REMAIN
MARKERS FOR CULVERT END REQ'D

END CONSTRUCTION, 42' RT
MATCH EXISTING AGGREGATE

REMOVING CURB &
GUTTER AND
REMOVING
CONCRETE
SIDEWALK

END CONSTRUCTION, 35' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

RADIANT FELLOWSHIP INC

CURVE NO. 1
PI STA = 15+52.93
Y = 343,495.99
X = 534,793.92
PC STA = 12+74.37
Y=343,217.46
X=534,797.63
PT STA = 18+31.14
Y=343,773.82
X=534,814.13
DELTA = 4°55'23"
D = 0°53'03"
T = 278.56'
L = 556.77'
R = 6,480.00'
EXISTING SE =NC
PROPOSED SE =NC

WISCONSIN PUBLIC SERVICE

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 82	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 01

PLOT DATE : 10/9/2023 8:21 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTES

MILL & OVERLAY ASPHALT SHOULDER ADJACENT TO CONCRETE APPROACH SLAB (USE SAME DEPTH AND HMA TYPE AS MAINLINE, SEE TYPICAL SECTIONS).

SEE TYPICAL SECTIONS FOR SHOULDER PAVING FROM NORTH ST TO BALLARD RD.

ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

CONCRETE SURFACE DRAIN LAYOUT INFORMATION IS PROVED ALONG THE FLAG LINE OF THE CUR & GUTTER.

CONCRETE SURFACE DRAIN LAYOUT TABLE			
POINT	STATION	OFFSET	ELEVATION
I	31+30.19	15.40', LT	888.88
J	31+50.00	15.40', LT	889.22
K	31+85.38	15.40', LT	890.22
L	31+30.13	15.40', RT	888.88
M	31+50.00	15.40', RT	889.22
N	31+85.22	15.40', RT	890.21

BENCH MARKS			
NO.	STATION/OFFSET	DESCRIPTION	ELEV.
600	30+00.66, 18.66' RT	BM ALUMINUM CAP IN CONCRETE	889.65'

CONCRETE SURFACE DRAIN LAYOUT TABLE			
POINT	STATION	OFFSET	ELEVATION
A	29+42.64	15.40', LT	886.66
B	29+50.00	15.40', LT	886.68
C	29+53.14	15.40', LT	886.69
D	29+97.81	12.00', LT	886.89
E	29+42.66	15.40', RT	886.66
F	29+50.00	15.40', RT	886.68
G	29+53.16	15.40', RT	886.69
H	29+97.89	15.40', RT	886.89

WAUPACA RIVER

T 22 N R 12 E 19

DO NOT DISTURB

STA 28+39 - STA 29+98, LT
REMOVING GUARDRAIL

STA 28+31 - STA 29+98, LT
MGS GUARDRAIL 3 K
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

STA 31+30 - STA 32+64, LT
REMOVING GUARDRAIL

STA 31+30 - STA 32+72, LT
MGS GUARDRAIL 3 K
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

STA 29+43 - STA 29+98, LT
STA 31+30 - STA 31+85, LT
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT

STA 29+53, LT
CONCRETE SURFACE DRAINS

STA 40+02 - STA 42+11, LT
REMOVING GUARDRAIL

STA 40+19 - STA 42+11, LT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

TIMBER DR

HABITAT FOR HUMANITY INC GREATER FOX CITIES AREA

RICARDO M & JULIE L GARZA

DAVID R DRESIA

CITY OF WAUPACA

LENTRY & MALINDA VANCE

ANDREW C & DANA M WIDDEL

EXCEPTION TO NET ℄ LENGTH (B-68-433)
STA 29+98 - STA 31+30

STA 29+77
END MILL & OVERLAY
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 31+51
BEGIN MILL & OVERLAY
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

END CONSTRUCTION, 51' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

2-1 NO PASSING ZONE MOVE

2-2 SPEED LIMIT 45 MOVE

2-4 SPEED LIMIT 45 MOVE

2-3 SPEED LIMIT 55 MOVE

CITY OF WAUPACA (WATER)

PI: 25+37.28

Y = 344,478.09
X = 534,865.35

N4° 22' 58"E

N4° 09' 37"E

BASE AGG CE

AT&T WISCONSIN (COMMUNICATION)

ATC MANAGMENT, INC (ELECTRIC)

WISCONSIN PUBLIC SERVICE (ELECTRIC)

WISCONSIN PUBLIC SERVICE (ELECTRIC)
AT&T WISCONSIN (COMMUNICATIONS)
NSIGHT TELSERVICES (COMMUNICATION)

B-68-433 (TO REMAIN)

STH 49

POST 1 +31 20' LT
POST 9 +81 18' LT
POST 1 +18 20' RT
POST 9 +68 18' RT
POST 9 +22 18' LT
POST 1 +72 20' LT
POST 9 +59 18' RT
POST 1 +09 20' RT

10:1 TAPER
15:1 TAPER

BM 600

PI: 34+93.96

Y = 345,432.00
X = 534,938.17

WISCONSIN PUBLIC SERVICE (ELECTRIC)

WE ENERGIES (GAS)

END CONSTRUCTION, 89' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

AT&T WISCONSIN (COMMUNICATIONS)

AT&T WISCONSIN (COMMUNICATIONS)
NSIGHT TELSERVICES (COMMUNICATION)

LOCAL TRAIL

ATC MANAGMENT, INC (ELECTRIC)

N4° 25' 23"E

POST 1 +19 19' LT
POST 9 +12 17' RT
POST 1 +62 19' RT

SENSITIVE AREA
DO NOT ENTER

DEPT NAT RESOURCES STATE OF WISCONSIN

WISCONSIN PUBLIC SERVICE

STA 29+43 - STA 29+98, RT
STA 31+30 - STA 31+85, RT
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT

STA 29+53, RT
CONCRETE SURFACE DRAINS

STA 28+39 - STA 29+98, RT
REMOVING GUARDRAIL

STA 28+18 - STA 29+98, RT
MGS GUARDRAIL 3 K
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

STA 31+30 - STA 32+64, RT
REMOVING GUARDRAIL

STA 31+30 - STA 33+09, RT
MGS GUARDRAIL 3 K
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

ELM ST

HAROLD J JR STIEBS

STA 40+07 - STA 41+67, RT
REMOVING GUARDRAIL

STA 39+62 - STA 41+67, RT
MGS GUARDRAIL 3
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

WCL RR

CANADIAN NATL RAILROAD WISCONSIN CENTRAL LTD

R/W

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 83	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 02

PLOT DATE : 10/9/2023 8:21 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTES

MILL & OVERLAY ASPHALT SHOULDER ADJACENT TO CONCRETE APPROACH SLAB (USE SAME DEPTH AND HMA TYPE AS MAINLINE, SEE TYPICAL SECTIONS).

SEE TYPICAL SECTIONS FOR SHOULDER PAVING FROM NORTH ST TO BALLARD RD.

ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

CURVE NO. 2
PI STA = 55+51.93
Y = 347,483.81
X = 535,097.17
PC STA = 52+81.94
Y=347,214.63
X=535,076.35
PT STA = 58+18.92
Y=347,749.41
X=535,048.70
DELTA = 14°46'00"
D = 2°45'00"
T = 269.98'
L = 536.97'
R = 2,083.51'
EXISTING SE = 4.8%
PROPOSED SE = 4.8%
SE TRANSITION (T) = 174'
RO (RUNOFF) = 123'

WCL RR
JAMES L & JUDY A PESKIE
CITY OF WAUPACA
CANADIAN NATL RAILROAD
WISCONSIN CENTRAL LTD
JOHN T SR & THERESA A HERREID
JOSEPH D SHANAK
BARBARA A MUMBRUE
BROOKE LARSEN & BRENT WITTIG
LLC ABRAHAMSON/ABRAHAMSON

STA 41+66
END MILL & OVERLAY
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

EXCEPTION TO NET ℄ LENGTH (B-68-091)
STA 42+01 - STA 44+15

STA 44+48 - STA 49+58, LT
REMOVING GUARDRAIL

STA 44+48 - STA 49+78, LT
MGS GUARDRAIL 3
MGS GUARDRAIL 3 K
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

STA 44+03 - STA 50+87, RT
REMOVING GUARDRAIL

STA 44+03 - STA 50+83, RT
MGS GUARDRAIL 3 K
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

STA 44+48
BEGIN MILL & OVERLAY
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

END CONSTRUCTION, 58' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

ATC MANAGMENT, INC
(ELECTRIC)

LOCAL TRAIL

B-68-091
(TO REMAIN)

CP/BM #508
Y = 346,117.11
X = 535,009.79
ELEV = 917.88
BM ALUMINUM CAP IN CONCRETE

AT&T WISCONSIN
(COMMUNICATION)

AT&T WISCONSIN
(COMMUNICATION)
NSIGHT TELSERVICES
(COMMUNICATION)

WISCONSIN PUBLIC SERVICE
(ELECTRIC)
AT&T WISCONSIN
(COMMUNICATION)
NSIGHT TELSERVICES
(COMMUNICATION)

WISCONSIN PUBLIC SERVICE
(ELECTRIC)

BM 603

PC: 52+81.94

STH 49
BALLARD RD
N4° 25' 23"E
CURVE 2

MGS GUARDRAIL 3
MGS GUARDRAIL 3K

POST 9 +69 17' LT
POST 9 +28 17' LT
POST 1 +78 19' LT
POST 9 +33 17' RT
POST 1 +83 19' RT

10:1 TAPER
15:1 TAPER
BASE AGG PE
BASE AGG FE

3-1 W5-52R 12"X36"
3-2 W5-52L 12"X36"
3-3 W5-52L 12"X36"
3-4 W5-52R 12"X36"
3-5 MOVE
3-6 MOVE

BENCH MARKS			
NO.	STATION/OFFSET	DESCRIPTION	ELEV.
603	55+12.30, 52.66' RT	BM BENCH TIE PPOL 2212 19E7	885.79'

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 84	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 03
PLOT DATE : 10/9/2023 8:21 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- X GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- X SIGN - NEW
- X SIGN - MOVE

NOTES

SEE INTERSECTION DETAIL FOR WORK AT LARSON ROAD.

ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

BENCH MARKS			
NO.	STATION/OFFSET	DESCRIPTION	ELEV.
602	59+93.00, 56.25' LT	BM BENCHTIE IN PPOL 2212 18R1	885.78'

NICHOL CREEK

LARSON RD

R/W

LLC ABRAHAMSON/ABRAHAMSON

MARSHA A PARSE

END CONSTRUCTION, 87' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 58+19, LT
EXISTING 24" RCCP TO REMAIN
(LARSON RD)

CP/BM # 516
Y = 347,685.30
X = 534,979.15
ELEV = 879.45
FENO 1000 W/ALUMINUM CAP SET

AT&T WISCONSIN
(COMMUNICATION)
NSIGHT TELSERVICES
(COMMUNICATION)

WISCONSIN PUBLIC SERVICE
(ELECTRIC)

REMOVING CURB & GUTTER

PERMANENT ROADWAY
SLOPE INTERCEPTS

BM 602

STH 49

N10° 20' 37"W

BASE AGG
PE

BASE AGG
FE

CURVE 2

CURVE 3

TEMPORARY DIVERSION CHANNEL
AND ESTIMATED LIMITS OF IMPACTS

PERMANENT ROADWAY
SLOPE INTERCEPTS

NICHOL CREEK

PT: 58+18.92

PC: 69+50.24

WISCONSIN PUBLIC SERVICE
(ELECTRIC)

WISCONSIN PUBLIC SERVICE
(ELECTRIC)

AT&T WISCONSIN
(COMMUNICATION)

MOVE
4-1

CURVE NO. 2
PI STA = 55+51.93
Y = 347,483.81
X = 535,097.17
PC STA = 52+81.94
Y=347,214.63
X=535,076.35
PT STA = 58+18.92
Y=347,749.41
X=535,048.70
DELTA = 14°46'00"
D = 2°45'00"
T = 269.98'
L = 536.97'
R = 2,083.51'
EXISTING SE = 4.8%
PROPOSED SE = 4.8%
SE TRANSITION (T) = 174'
RO (RUNOFF) = 123'

STA 57+75, LT&RT
CULVERT 68049006495
REMOVING OLD STRUCTURE - 60" CMCP
45° SKEW RHF
1- CPCS POLYMER COATED 72-INCH REQ'D
2-APRON ENDWALLS FOR CPCS 72-INCH REQ'D
INVERT UPSTREAM: 874.00'
INVERT DOWNSTREAM: 873.24'
MARKERS FOR CULVERT END REQ'D

STA 63+08, LT&RT
CULVERT 68049006496
EXISTING 24" RCCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

CURVE NO. 3
PI STA = 71+69.92
Y = 349,078.46
X = 534,806.12
PC STA = 69+50.24
Y=348,862.34
X=534,845.57
PT STA = 73+88.44
Y=349,298.14
X=534,805.76
DELTA = 10°14'52"
D = 2°20'19"
T = 219.69'
L = 438.20'
R = 2,450.00'
EXISTING SE = 3.7%
PROPOSED SE = 4.4%
SE TRANSITION (T) = 163'
RO (RUNOFF) = 112'

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 85	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 04

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

LLC ABRAHAMSON/ABRAHAMSON

LUKE R & JOANNA K HAMANN

WILLIAM E & MARJORIE SARNOWSKI

UNNAMED OPEN WATER

5

5

R/W

PT: 73+88.44

PI: 82+31.01

BASE AGG PE

ASPH PE

ASPH PE

R/W

ASPH PE

CURVE 3

72

74

76

N0° 05' 45"W

78

STH 49

80

82

N0° 27' 05"W

84

86

BASE AGG PE

R/W

Y = 350,140.72
X = 534,804.35

R/W

T 22 N
18
R 12 E

LANDMARK REFERENCE MONUMENTS

CURVE NO. 3
PI STA = 71+69.92
Y = 349,078.46
X = 534,806.12
PC STA = 69+50.24
Y=348,862.34
X=534,845.57
PT STA = 73+88.44
Y=349,298.14
X=534,805.76
DELTA = 10°14'52"
D = 2°20'19"
T = 219.69'
L = 438.20'
R = 2,450.00'
EXISTING SE = 3.7%
PROPOSED SE = 4.4%
SE TRANSITION (T) = 163'
RO (RUNOFF) = 112'

ROBERT L MONTGOMERY

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 86	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 05

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

5

5

DANIEL TRZEBIATOWSKI

DANIEL TRZEBIATOWSKI

CP/BM #507
Y = 351,849.23
X = 534,777.38
ELEV = 902.47
NGS BRASS CAP IN CONC 4V54
(DO NOT DISTURB)

NGS

PI: 86+74.81

Y = 350,584.50
X = 534,800.85

PI: 95+79.24

R/W

ASPH PE

86

88

N0° 16' 41"E

90

92

STH 49

94

96

N0° 05' 45"E

98

100

N0° 27' 05"W

R/W

BASE AGG PE

BASE AGG CE

Y = 351,488.93
X = 534,805.24

STA 96+37, LT&RT
CULVERT 68049006497
EXISTING 30" CMCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

ASPH CE

R/W

END CONSTRUCTION, 29' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

TLL REAL ESTATE LLC

RICHARD BRODNAN

GOLDSMITH RD

R/W

R/W

DELMONT H TYSDAL

TLL REAL ESTATE LLC

DARRELL KENOWSKI

LLC ABRAHAMSON/ABRAHAMSON

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 87	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- X GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- X SIGN - NEW
- X SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

UNNAMED
OPEN WATER

N

DANIEL TRZEBIATOWSKI

DANIEL TRZEBIATOWSKI

OLSON RD

R/W

R/W

R/W

SPECIAL NEEDS REV TRUST TRZEBIATOWSKI FAMILY

SPECIAL NEEDS REV TRUST TRZEBIATOWSKI FAMILY

STA 115+25, LT&RT
CULVERT 68049006498
EXISTING 15" CMCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

5

5

BASE AGG PE

BASE AGG PE

R/W

102 N0° 05' 45"E 104 106 108 STH 49 110 112 CURVE 4 114 116

R/W

R/W

BASE AGG PE

PC: 107+97.95

JAMES T & KAREN ANDERSEN

T 22 N
7
18
R 12 E

LANDMARK
REFERENCE
MONUMENTS

CURVE NO. 4
PI STA = 120+46.69
Y = 353,956.36
X = 534,809.37
PC STA = 107+97.95
Y=352,707.63
X=534,807.28
PT STA = 132+95.34
Y=355,204.89
X=534,786.53
DELTA = 1°08'38"
D = 0°02'45"
T = 1,248.74'
L = 2,497.39'
R = 125,100.00'
EXISTING SE = NC
PROPOSED SE = NC

LLC ABRAHAMSON/ABRAHAMSON

LLC ABRAHAMSON/ABRAHAMSON

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 88	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 07

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTES

SEE INTERSECTION DETAIL FOR WORK AT WARE ROAD

ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

DANIEL TRZEBIATOWSKI

NICKEL ACRES LLC

WARE RD

R/W

STA 123+85, LT&RT
CULVERT 68049006499
REMOVE 1-18" CMCP
1-CPRCHE CLASS HE-IV 14X23-INCH
2-APRON ENDWALLS FOR CPRCHE 14X23-INCH
5° SKEW LHF
INVERT UPSTREAM: 910.09'
INVERT DOWNSTREAM: 909.37'
MARKERS FOR CULVERT END REQ'D

WISCONSIN PUBLIC SERVICE CORP
(ELECTRIC)

END CONSTRUCTION, 55' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

AT&T WISCONSIN
(COMMUNICATION)

BASE AGG
PE

116 118 120 CURVE 4 122 124 STH 49 126 128 130

+25 +40

AT&T WISCONSIN
(COMMUNICATION)

BASE AGG
FE

REMOVING CURB & GUTTER

AT&T WISCONSIN
(COMMUNICATION)

WISCONSIN PUBLIC SERVICE CORP
(ELECTRIC)

END CONSTRUCTION, 85' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

EAST WARE RD

CURVE NO. 4
PI STA = 120+46.69
Y = 353,956.36
X = 534,809.37
PC STA = 107+97.95
Y=352,707.63
X=534,807.28
PT STA = 132+95.34
Y=355,204.89
X=534,786.53
DELTA = 1°08'38"
D = 0°02'45"
T = 1,248.74'
L = 2,497.39'
R = 125,100.00'
EXISTING SE = NC
PROPOSED SE = NC

LLC ABRAHAMSON/ABRAHAMSON

ANDREW D FLETCHER

5 5

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 89	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 08

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

NICKEL ACRES LLC

HOWARD HAZEN & SARAH FRONCZAK

NICKEL ACRES LLC

T 22 N
R 12 E
7

LANDMARK REFERENCE MONUMENTS

STA 137+54, LT&RT
CULVERT 68049006500
CATTLE PASS W/ CONC MASORY AEW'S
EXISTING 72" CMCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

5

PT: 132+95.34

R/W

BASE AGG
PE

R/W

CURVE 4

132 134 N1° 02' 53"W 136 138 STH 49 140 142 144 146

5

R/W

BASE AGG
PE

R/W

CURVE NO. 4
PI STA = 120+46.69
Y = 353,956.36
X = 534,809.37
PC STA = 107+97.95
Y=352,707.63
X=534,807.28
PT STA = 132+95.34
Y=355,204.89
X=534,786.53
DELTA = 1°08'38"
D = 0°02'45"
T = 1,248.74'
L = 2,497.39'
R = 125,100.00'
EXISTING SE = NC
PROPOSED SE = NC

ANDREW D FLETCHER

UNNAMED
OPEN WATER

JAMES II & WENDY WAGNER BARBEAU

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 90	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 09

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

CURVE NO. 5
PI STA = 153+29.41
Y = 357,238.62
X = 534,749.32
PC STA = 147+13.52
Y=356,622.83
X=534,760.59
PT STA = 158+77.80
Y=357,656.62
X=534,296.99
DELTA = 46°12'38"
D = 3°58'09"
T = 615.89'
L = 1,164.28'
R = 1,443.57'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 213'
RO (RUNOFF) =160'

STA 157+18, LT&RT
CULVERT 68049006501
EXISTING 24" RCCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

END CONSTRUCTION, 72' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

CP/BM # 515
Y = 357,356.39
X = 534,724.95
ELEV = 937.76
FENO 1000 W/ALUMINUM CAP SET

NICKEL ACRES LLC
BURNELL C & JULIE K LIPKE
JENSON INVESTMENTS LLC
WAUPACA FOUNDRY INC
WAUPACA FOUNDRY INC
WAUPACA FOUNDRY INC
DOUGLAS L POHL
ELM VALLEY RD
STH 49
CURVE 5
PC: 147+13.52
PT: 158+77.80
BASE AGG PE
BASE AGG FE
ASPH PE
R/W
N1° 02' 53"W
N47° 15' 31"W
146
148
150
152
154
156
158
160

5

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 91	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 10
PLOT DATE : 10/9/2023 8:22 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

JENSON INVESTMENTS LLC

JENSON INVESTMENTS LLC

RONALD K & PAMELA J KOLB

NELSON RD

R/W

R/W

LISA MALLASCH & KURT WESTLEY

END CONSTRUCTION, 88' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

CURVE NO. 7
PI STA = 179+34.25
Y = 359,391.44
X = 533,262.82
PC STA = 174+00.65
Y=358,895.38
X=533,459.44
PT STA = 184+22.88
Y=359,640.34
X=532,790.82
DELTA = 40°34'22"
D = 3°58'09"
T = 533.60'
L = 1,022.23'
R = 1,443.57'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 213'
RO (RUNOFF) = 160'

5

5

P.C. 163+03.83

166

CURVE 6

168

STH 49

170

N21° 37' 21"W

172

174

CURVE 7

176

R/W

ASPH PE

164

162

N47° 15' 31"W

ASPH PE

R/W

P.T. 169+30.24

P.C. 174+00.65

R/W

CURVE NO. 6
PI STA = 166+22.37
Y = 358,161.96
X = 533,750.16
PC STA = 163+03.83
Y=357,945.77
X=533,984.10
PT STA = 169+30.24
Y=358,458.08
X=533,632.78
DELTA = 25°38'10"
D = 4°05'33"
T = 318.54'
L = 626.41'
R = 1,400.00'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 213'
RO (RUNOFF) = 160'

DOUGLAS L POHL

LISA MALLASCH & KURT WESTLEY

JAMES W & JANE M DAMRAU

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 92	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 11

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW (X)
- SIGN - MOVE (X)

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

LAKE W LLC

BERNADETTE RADLER

N

CURVE NO. 7
PI STA = 179+34.25
Y = 359,391.44
X = 533,262.82
PC STA = 174+00.65
Y=358,895.38
X=533,459.44
PT STA = 184+22.88
Y=359,640.34
X=532,790.82
DELTA = 40°34'22"
D = 3°58'09"
T = 533.60'
L = 1,022.23'
R = 1,443.57'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 213'
RO (RUNOFF) = 160'

SCOTT ET AL KRUG

STA 180+25 - STA 180+50, LT
FULL DEPTH REPAIR REQ'D
(SEE CONSTRUCTION DETAILS)

MARK L & DEBRA L GEHRKE

PC: 190+82.21

PT: 184+22.88

R/W

ASPH PE

176 178 180 CURVE 7 182 184 186 188 190 CURVE 8

N62° 11' 43"W

STH 49

CURVE NO. 8
PI STA = 192+97.53
Y = 360,048.33
X = 532,017.16
PC STA = 190+82.21
Y=359,947.89
X=532,207.62
PT STA = 195+06.24
Y=360,218.80
X=531,885.62
DELTA = 24°32'27"
D = 5°47'15"
T = 215.32'
L = 424.04'
R = 990.00'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 204'
RO (RUNOFF) = 153'

JAMES W & JANE M DAMRAU

TIMOTHY P & JILL M NAVIN

5 5

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 93	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 12

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

CURVE NO. 8
PI STA = 192+97.53
Y = 360,048.33
X = 532,017.16
PC STA = 190+82.21
Y=359,947.89
X=532,207.62
PT STA = 195+06.24
Y=360,218.80
X=531,885.62
DELTA = 24°32'27"
D = 5°47'15"
T = 215.32'
L = 424.04'
R = 990.00'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 204'
RO (RUNOFF) = 153'

STA 202+75, LT&RT
CULVERT 68049006502
REMOVE 1-24" CMCP
CPRCHE CLASS HE-IV 19X30-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 19X30-INCH REQ'D
0° SKEW
INVERT UPSTREAM: 957.75'
INVERT DOWNSTREAM: 957.30'
MARKERS FOR CULVERT END REQ'D

CP/BM # 510
Y = 360,496.45
X = 531,623.78
ELEV = 968.74
FENO 1000 W/ALUMINUM CAP SET

MARK L & DEBRA L GEHRKE

MARK L & DEBRA L GEHRKE

LAKE W LLC

ALLIANT ENERGY (ELECTRIC)

TDS TELECOM (COMMUNICATION)

BASE AGG PE

BASE AGG PE

PC: 190+82.21

PT: 195+06.24

CURVE 8

N37° 39' 15"W

STH 49

BM 607

BM 606

TLE

R/W

N62° 11' 43"W

192 194 196 198 200 202 +20 204 +29 206

BENCH MARKS			
NO.	STATION/OFFSET	DESCRIPTION	ELEV.
606	202+35.50, 33.87' LT	BM BENCHTIE PPOL 22-11-1 45/24	961.99
607	199+37.83, 34.36' LT	BM BENCHTIE PPOL 22-11-1 45/22	968.88

TIMOTHY P & JILL M NAVIN

TREE F LLC

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 94	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 13

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

CURVE NO. 9
PI STA = 221+33.78
Y = 362,296.90
X = 530,277.70
PC STA = 219+80.40
Y=362,175.80
X=530,371.82
PT STA = 222+87.11
Y=362,414.12
X=530,178.80
DELTA = 2°18'01"
D = 0°45'00"
T = 153.37'
L = 306.71'
R = 7,639.53'
EXISTING SE = RC
PROPOSED SE = RC
SE TRANSITION (T) = 102'
RO (RUNOFF) = 51'

LAKE W LLC

LAKE W LLC

ALLIANT ENERGY (ELECTRIC)

TDS TELECOM (COMMUNICATION)

PI: 211+27.36

PC: 219+80.40

BASE AGG FE

ASPH FE

R/W

206 N37° 39' 15"W 208 210 212 STH 49 214 N37° 51' 15"W 216 218 220 CURVE 9

Y = 361,502.26
X = 530,895.29

BASE AGG PE

ASPH PE

TREE F LLC

DAVID A & LAUREL L LEDER

RICHARD E & BERTHA TOWNSEND FAMILY TRUST

DAVID G & RENEE L MEIHAK

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 95	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 14

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW (X)
- SIGN - MOVE (X)

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

GEOFFREY G WILLIAMS

MARSHALL C LARSON

MARSHALL C LARSON

PAUL R SCHROEDER

5

5

END CONSTRUCTION, 77' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

SMOKEY VALLEY RD

R/W

R/W

BASE AGG
CE

R/W

CURVE 9

222

224

N40° 09' 16"W

226

PI: 226+21.41

STH 49

ASPH
PE

228

PC: 229+28.75

230

CURVE 10

232

234

N30° 20' 48"W

236

R/W

N41° 02' 35"W

BASE AGG
FE

R/W

BASE AGG
PE

PT: 222+87.11

Y = 362,669.64
X = 529,963.22

PT: 234+04.15

R/W

CURVE NO. 9
PI STA = 221+33.78
Y = 362,296.90
X = 530,277.70
PC STA = 219+80.40
Y=362,175.80
X=530,371.82
PT STA = 222+87.11
Y=362,414.12
X=530,178.80
DELTA = 2°18'01"
D = 0°45'00"
T = 153.37'
L = 306.71'
R = 7,639.53'
EXISTING SE = RC
PROPOSED SE = RC
SE TRANSITION (T) = 102'
RO (RUNOFF) = 51'

CURVE NO. 10
PI STA = 231+67.14
Y = 363,081.23
X = 529,604.88
PC STA = 229+28.75
Y=362,901.44
X=529,761.42
PT STA = 234+04.15
Y=363,286.96
X=529,484.44
DELTA = 10°41'46"
D = 2°15'00"
T = 238.39'
L = 475.39'
R = 2,546.51'
EXISTING SE = 3.9%
PROPOSED SE = 4.3%
SE TRANSITION (T) = 161'
RO (RUNOFF) = 110'

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 96	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 15

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- X GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- X SIGN - NEW
- X SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
604	246+30.80, 31.42' LT	BM BENCH TIE PPOL	963.25'
605	243+32.16, 31.22' LT	BM BENCH TIE PPOL 23-11-36 20/4	965.77'

NORMAN R & ELVA J LARSON REV LIV TRUST

MARSHALL C LARSON

CP/BM # 509
Y = 363,641.79
X = 529,231.94
ELEV = 967.03
FENO 1000 W/ALUMINUM CAP SET

PI: 237+58.17

BASE AGG PE

TDS TELECOM (COMMINICATION)

ALLIANT ENERGY (ELECTRIC)

BM 605

BM 604

PC: 250+22.47

R/W

236 N30° 20' 48"W 238 240 N30° 29' 19"W 242 244 246 248 250

+27 +36

STH 49

CURVE 11

R/W

Y = 363,592.48
X = 529,305.58

TDS TELECOM (COMMINICATION)

R/W

CHRISTENSON RD

R/W

END CONSTRUCTION, 48' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 243+82, LT&RT
CULVERT 68049006503
REMOVE 1-18" CMCP
CPRCHE CLASS HE-IV 14X23-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 14X23-INCH REQ'D
1° SKEW LHF
INVERT UPSTREAM: 964.10'
INVERT DOWNSTREAM: 963.97'
MARKERS FOR CULVERT END REQ'D

CURVE NO. 11
PI STA = 252+14.85
Y = 364,847.74
X = 528,566.51
PC STA = 250+22.47
Y=364,681.97
X=528,664.11
PT STA = 254+00.84
Y=365,039.39
X=528,549.80
DELTA = 25°30'18"
D = 6°44'26"
T = 192.37'
L = 378.37'
R = 850.00'
EXISTING SE = 5.8%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 192'
RO (RUNOFF) = 144'

NORMAN R & ELVA J LARSON REV LIV TRUST

5 5

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 97	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 16

PLOT DATE : 10/9/2023 8:22 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- X GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- X SIGN - NEW
- X SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

NORMAN R & ELVA J LARSON REV LIV TRUST

NORMAN R & ELVA J LARSON REV LIV TRUST

NORMAN R & ELVA J LARSON REV LIV TRUST

NORMAN R & ELVA J LARSON REV LIV TRUST

N

5

5

R/W

CURVE 11

252

254

256

N4° 59' 01"W

258

STH 49

260

BASE AGG PE

262

264

PC: 264+55.91

R/W

CURVE 12

266

R/W

PT: 254+00.84

R/W

R/W

CURVE NO. 11
PI STA = 252+14.85
Y = 364,847.74
X = 528,566.51
PC STA = 250+22.47
Y=364,681.97
X=528,664.11
PT STA = 254+00.84
Y=365,039.39
X=528,549.80
DELTA = 25°30'18"
D = 6°44'26"
T = 192.37'
L = 378.37'
R = 850.00'
EXISTING SE = 5.8%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 192'
RO (RUNOFF) = 144'

CURVE NO. 12
PI STA = 273+47.85
Y = 366,979.04
X = 528,380.66
PC STA = 264+55.91
Y=366,090.47
X=528,458.14
PT STA = 279+60.69
Y=367,098.93
X=527,496.82
DELTA = 77°17'29"
D = 5°08'11"
T = 891.94'
L = 1,504.78'
R = 1,115.49'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 204'
RO (RUNOFF) = 153'

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 98	E

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

CURVE NO. 12
PI STA = 273+47.85
Y = 366,979.04
X = 528,380.66
PC STA = 264+55.91
Y=366,090.47
X=528,458.14
PT STA = 279+60.69
Y=367,098.93
X=527,496.82
DELTA = 77°17'29"
D = 5°08'11"
T = 891.94'
L = 1,504.78'
R = 1,115.49'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 204'
RO (RUNOFF) = 153'

STA 269+67, LT&RT
CULVERT 68049006504
EXISTING 24" RCCP TO REMAIN
3° SKEW LHF
MARKERS FOR CULVERT END REQ'D

END CONSTRUCTION, 59' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

PC: 264+55.91
PT: 279+60.69
N82° 16' 30"W
CURVE 12
STH 49
LARSON RD
R/W
266
268
270
272
274
276
278
280
BASE AGG FE
BASE AGG PE

UNNAMED OPEN WATER
NORMAN R & ELVA J LARSON REV LIV TRUST
KEVIN T SCHMOLDT
SUSAN ET AL PLAGEMAN
RONALD D MASLOWSKI & T A JOLE
MICHAEL P & JEAN M DEGEN

5

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 99	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 18
PLOT DATE : 10/9/2023 8:23 AM
PLOT BY : JESSICA SPLITTGERBER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

5

5

N

JACK & LOIS WEBIE

MELBY INVESTMENTS LLC

PT: 286+90.48

BASE AGG PE

R/W

282

N82° 16' 30"W

284

CURVE 13

286

288

N71° 07' 00"W

290

STH 49

292

294

296

R/W

ASPH PE

PC: 284+09.34

BASE AGG PE

BASE AGG PE

R/W

R/W

CP/BM # 512
Y = 367,535.77
X = 525,956.10
ELEV = 952.78
FENO 1000 W/ALUMINUM CAP SET

STA 281+85, LT&RT
CULVERT 68049006505
EXISTING 24" RCCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

CURVE NO. 13
PI STA = 285+50.36
Y = 367,178.19
X = 526,912.51
PC STA = 284+09.34
Y=367,159.23
X=527,052.24
PT STA = 286+90.48
Y=367,223.83
X=526,779.08
DELTA = 11°09'30"
D = 3°58'09"
T = 141.01'
L = 281.13'
R = 1,443.57'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 213'
RO (RUNOFF) = 160'

MELBY INVESTMENTS LLC

GARY O MELBY

JASON M KARPINSKI

MELBY INVESTMENTS LLC

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 100	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 19

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW (X)
- SIGN - MOVE (X)

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

MELBY INVESTMENTS LLC

4 PEKAR KIDS LLC

CURVE NO. 14
PI STA = 298+93.41
Y = 367,613.14
X = 525,640.89
PC STA = 296+97.29
Y=367,549.67
X=525,826.46
PT STA = 300+85.78
Y=367,611.29
X=525,444.77
DELTA = 19°25'28"
D = 5°00'00"
T = 196.13'
L = 388.49'
R = 1,145.93'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 213'
RO (RUNOFF) = 160'

STA 302+76, LT&RT
CULVERT 68049006506
EXISTING 24" RCCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

5

R/W

PC: 296+97.29

296

N71° 07' 00"W

298

CURVE 14

300

PT: 300+85.78

302

STH 49

304

S89° 27' 32"W

306

PC: 307+20.23

308

CURVE 15

310

R/W

R/W

BASE AGG
PE

P/BM # 512
Y = 367,535.77
X = 525,956.10
ELEV = 952.78
FENO 1000 W/ALUMINUM CAP SET

MELBY INVESTMENTS LLC

MELBY INVESTMENTS LLC

MELBY INVESTMENTS LLC

CURVE NO. 15
PI STA = 315+64.73
Y = 367,597.32
X = 523,965.88
PC STA = 307+20.23
Y=367,605.30
X=524,810.34
PT STA = 322+48.46
Y=368,329.53
X=523,545.10
DELTA = 60°39'22"
D = 3°58'09"
T = 844.50'
L = 1,528.23'
R = 1,443.57'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION
STA 305+60 = NC
STA 306+67 = RC
STA 307+74 = 6.0%
STA 321+70 = 6.0%
STA 322+72 = RC
STA 323+74 = NC

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 101	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 20

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

KENNETH J SR & PAMELA J VANDYKE

4 PEKAR KIDS LLC

4 PEKAR KIDS LLC

5

5

R/W

GUDMANSON RD

END CONSTRUCTION, 70' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

312

314

316

CURVE 15

318

STH 49

320

322

BASE AGG
PE

BASE AGG
PE

N29° 53' 06"W

324

PC: 325+02.18

PT: 322+48.46

326

CURVE 16

R/W

R/W

R/W

CURVE NO.15
PI STA = 315+64.73
Y = 367,597.32
X = 523,965.88
PC STA = 307+20.23
Y=367,605.30
X=524,810.34
PT STA = 322+48.46
Y=368,329.53
X=523,545.10
DELTA = 60°39'22"
D = 3°58'09"
T = 844.50'
L = 1,528.23'
R = 1,443.57'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION
STA 305+60 = NC
STA 306+67 = RC
STA 307+74 = 6.0%
STA 321+70 = 6.0%
STA 322+72 = RC
STA 323+74 = NC

MELBY INVESTMENTS LLC

TANGIE M & MICHAEL A KARPINSKI

TANGIE M & MICHAEL A KARPINSKI

MICHAEL A KARPINSKI

CURVE NO. 16
PI STA = 327+04.71
Y = 368,725.11
X = 523,317.76
PC STA = 325+02.18
Y=368,549.51
X=523,418.68
PT STA = 329+04.62
Y=368,866.17
X=523,172.42
DELTA = 15°58'24"
D = 3°58'09"
T = 202.54'
L = 402.45'
R = 1,443.57'
EXISTING SE = 5.8%
PROPOSED SE = 6.0%
SE TRANSITION
STA 323+75 = NC
STA 324+77 = RC
STA 325+79 = 6.0%
STA 328+51 = 6.0%
STA 329+58 = RC
STA 330+65 = NC

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 102	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 21

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- X GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- X SIGN - NEW
- X SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

CURVE NO. 16
PI STA = 327+04.71
Y = 368,725.11
X = 523,317.76
PC STA = 325+02.18
Y=368,549.51
X=523,418.68
PT STA = 329+04.62
Y=368,866.17
X=523,172.42
DELTA = 15°58'24"
D = 3°58'09"
T = 202.54'
L = 402.45'
R = 1,443.57'
EXISTING SE = 5.8%
PROPOSED SE = 6.0%
SE TRANSITION
STA 323+75 = NC
STA 324+77 = RC
STA 325+79 = 6.0%
STA 328+51 = 6.0%
STA 329+58 = RC
STA 330+65 = NC

NANCY S MELUM

NANCY S MELUM

KENNETH J SR & PAMELA J VANDYKE

DAWN M BAKER

STA 340+71, LT&RT
CULVERT 68049006508
EXISTING 24" RCCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

N

5

5

R/W

PT: 329+04.62

BASE AGG FE

BASE AGG PE

326 328 330 332 334 336 338 340

CURVE 16

N45° 51' 30"W

STH 49

R/W

R/W

BASE AGG FE

BASE AGG PE

R/W

RANDY M & DENICE K KERSWILL

STA 333+43, LT&RT
CULVERT 68049006507
EXISTING 36" RCCP TO REMAIN
MARKERS FOR CULVERT END REQ'D

SOUTH BRANCH LITTLE WOLF RIVER

TIMOTHY R RHODES & C BECKER

RANDY M & DENICE K KERSWILL

DANIEL C ET AL PETERSON

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 103	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 22

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

ROBERT A JORGENS REVOC TRUST

ROBERT A JORGENS REVOC TRUST

RANDALL L TIMM

NANCY S MELUM

STA 349+27 - STA 350+57, LT
EXISTING MGS GUARDRAIL TO REMAIN
PAVE TO FACE OF RAIL

EXCEPTION TO NET ℄ LENGTH (B-68-130)
STA 348+14 - STA 348+97

SOUTH BRANCH LITTLE WOLF RIVER

N

WINDY HILL RD

TDS TELECOM
(COMMUNICATION)

END CONSTRUCTION, 53' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 349+21
BEGIN MILL & OVERLAY
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 347+27 - STA 348+09, LT
ADJUSTING STEEL PLATE BEAM GUARD REQ'D
PAVE TO FACE OF RAIL

ALLIANT ENERGY
(ELECTRIC)

PC: 343+68.18

348

CURVE 17

346

350

STH 49

352

344

BASE AGG
PE

ASPH
PE

B-68-130
(TO REMAIN)

BASE AGG
PE

BASE AGG
FE

354

PT: 354+72.79

R/W

N45° 51' 30"W

342

STA 347+90
END MILL & OVERLAY
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

STA 345+93 - STA 347+90, RT
EXISTING MGS GUARDRAIL TO REMAIN
PAVE TO FACE OF RAIL

STA 348+96 - STA 349+92, RT
EXISTING MGS GUARDRAIL TO REMAIN
PAVE TO FACE OF RAIL

N1° 40' 28"W

356

R/W

R/W

CURVE NO. 17
PI STA = 349+49.58
Y = 370,290.35
X = 521,704.92
PC STA = 343+68.18
Y=369,885.44
X=522,122.15
PT STA = 354+72.79
Y=370,871.51
X=521,687.93
DELTA = 44°11'02"
D = 4°00'00"
T = 581.41'
L = 1,104.61'
R = 1,432.41'
EXISTING SE = 6.0%
PROPOSED SE = 6.0%
SE TRANSITION (T) = 213'
RO (RUNOFF) = 160'

GRACE FAMILY TRUST

JOSEPH JANSSEN

DANIEL C ET AL PETERSON

DANIEL C ET AL PETERSON

5

5

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 104	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 23

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

SOUTH BRANCH LITTLE WOLF RIVER

N

STA 365+55 - STA 369+88
VARIABLE DEPTH REMOVING ASPHALTIC SURFACE MILLING
SEE CONSTRUCTION DETAILS

STA 369+13 - STA 370+41, LT
REMOVING GUARDRAIL

STA 367+16 - STA 370+98, LT
MGS GUARDRAIL 3 K
MGS GUARDRAIL TERMINAL EAT
GUARDRAIL MOW STRIP ASPHALT

DANNY P & JOANN K RASMUSSEN

ROBERT A JORGENS REVOC TRUST

PAMELA F MADSON

WILLIAM J KIZEWSKI

JASON R & FAYE M KUBISIAK

T 23 N
R 27 26 E
11

CTH Q

R/W

LANDMARK REFERENCE MONUMENTS

PI: 360+42.18

END CONSTRUCTION, 74' LT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

EDGE OF EXISTING BUILDING

ALLIANT ENERGY (ELECTRIC)

POST 1 +16 20' LT

POST 9 +66 18' LT

15:1 TAPER

10:1 TAPER

BASE AGG PE

TLE

+53

+66

PROPOSED R/W

POST 9 +48 18' LT

POST 1 +98 20' LT

356 358 N1° 40' 28"W 360 362 N1° 30' 34"W 364 STH 49 366 368 370

+39

Y = 371,440.66
X = 521,671.30

END CONSTRUCTION, 73' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

P/BM # 513
Y = 371,638.66
X = 521,697.36
ELEV = 923.91
FENO 1000 W/ALUMINUM CAP SET

TDS TELECOM (COMMUNICATION)

BASE AGG FE

PROPOSED R/W

STA 369+13 - STA 370+41, RT
REMOVING GUARDRAIL

ELM VALLEY RD

DANIEL C ET AL PETERSON

PAMELA F MADSON

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 105	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 24

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- X GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- X SIGN - NEW
- X SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

SOUTH BRANCH LITTLE WOLF RIVER

JAMES R BAYLISS

DALE R WOLLER

JASON R & FAYE M KUBISIAK

STA 384+38 - STA 386+67, LT
REMOVING GUARDRAIL

STA 383+47 - STA 393+20, LT
MGS GUARDRAIL 3
MGS GUARDRAIL 3K
MGS GUARDRAIL TERMINAL EAT
GUARDRAIL MOW STRIP ASPHALT

5

5

POST 1
+98
20' LT

10:1 TAPER

PROPOSED R/W

15:1 TAPER

BASE AGG
PE

PC: 373+69.80

ALLIANT ENERGY
(ELECTRIC)

TDS TELECOM
(COMMUNICATION)

GRASS
PE

EXISTING PLE

PT: 381+16.83

POST 9
+97
18' LT

POST 1
+47
20' LT

15:1 TAPER

BASE AGG
PE

10:1 TAPER

RETAINING WALL R-68-013
(SEE STRUCTURE PLANS)

MGS GUARDRAIL 3K

TLE

+48

372

+16

374

376

CURVE 18

378

STH 49

380

382

+32

+97

384

+50

386

N1° 30' 34"W

N5° 57' 39"E

R/W

GRASS
PE

EXISTING PLE

TDS TELECOM
(COMMUNICATION)

PROPOSED R/W

CURVE NO. 18
PI STA = 377+43.84
Y = 373,141.73
X = 521,626.47
PC STA = 373+69.80
Y=372,767.82
X=521,636.33
PT STA = 381+16.83
Y=373,513.76
X=521,665.32
DELTA = 7°28'13"
D = 1°00'00"
T = 374.05'
L = 747.03'
R = 5,729.65'
EXISTING SE = 2.6%
PROPOSED SE = 2.7%
SE TRANSITION (T) = 125'
RO (RUNOFF) = 72'

STA 380+38, LT&RT
CULVERT 68049006509
EXISTING 24" X 38" RCHECP TO REMAIN
MARKERS FOR CULVERT END REQ'D

PAMELA F MADSON

PAMELA F MADSON

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 106	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 25

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTE
ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

STA 389+45 - STA 392+53, LT
REMOVING GUARDRAIL

STA 383+47 - STA 393+20, LT
MGS GUARDRAIL 3
MGS GUARDRAIL 3K
MGS GUARDRAIL TERMINAL EAT
GUARDRAIL MOW STRIP ASPHALT

JAMES R BAYLISS

JASON A KOSS & VICKY VAUGHN

MJK INCOME TRUST

T 27 N
22 23
27 26
R 11 E

DO NOT DISTURB

SOUTH BRANCH LITTLE WOLF RIVER

RETAINING WALL R-68-013
(SEE STRUCTURE PLANS)

RETAINING WALL R-68-014
(SEE STRUCTURE PLANS)

TLE

+75

+40

386

N5° 57' 39"E

388

390

CURVE 19

+40

+67

392

MGS GUARDRAIL 3K

MGS GUARDRAIL 3

POST 9
+70
18' LT

POST 1
+20
20' LT

10:1 TAPER

15:1 TAPER

TLE

+39

+67

394

396

N9° 44' 46"W

398

CURVE 20

400

ALLIANT ENERGY
(ELECTRIC)

TDS TELECOM
(COMMUNICATION)

BASE AGG
PE

R/W

R/W

STH 49

DRIVEWAY DRAINAGE
IMPROVEMENT
(SEE CONSTRUCTION DETAIL)

BASE AGG
PE

DRIVEWAY DRAINAGE
IMPROVEMENT
(SEE CONSTRUCTION DETAIL)

BASE AGG
FE

PC: 389+80.06

PT: 392+70.65

PC: 396+22.04

TDS TELECOM
(COMMUNICATION)

CURVE NO. 19
PI STA = 391+26.27
Y = 374,517.74
X = 521,770.15
PC STA = 389+80.06
Y=374,372.32
X=521,754.97
PT STA = 392+70.65
Y=374,661.84
X=521,745.40
DELTA = 15°42'25"
D = 5°24'19"
T = 146.21'
L = 290.59'
R = 1,060.00'
EXISTING SE = 5.8%
PROPOSED SE = 6.0%
SE TRANSITION
STA 388+00 = NC
STA 389+06 = RC
STA 390+40 = 6.0%
STA 392+20 = 6.0%
STA 393+99 = RC
STA 395+01 = NC

CURVE NO. 20
PI STA = 398+79.47
Y = 375,261.88
X = 521,642.34
PC STA = 396+22.04
Y=375,008.16
X=521,685.92
PT STA = 401+35.85
Y=375,519.29
X=521,638.95
DELTA = 8°59'29"
D = 1°45'00"
T = 257.43'
L = 513.81'
R = 3,274.08'
EXISTING SE = 3.7%
PROPOSED SE = 3.7%
SE TRANSITION (T) = 145'
RO (RUNOFF) =94'

KEVIN P & JACQUELINE L MOORE

CARLO I LANTZ

PAMELA F MADSON

5

5

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 107	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 26

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTES

SEE INTERSECTION DETAIL FOR WORK AT SHADY DR.

ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

N

CURVE NO. 21
PI STA = 412+41.87
Y = 376,625.22
X = 521,624.38
PC STA = 409+25.24
Y=376,308.61
X=521,628.55
PT STA = 415+52.80
Y=376,923.54
X=521,518.26
DELTA = 18°49'35"
D = 3°00'00"
T = 316.63'
L = 627.56'
R = 1,909.88'
EXISTING SE = 4.9%
PROPOSED SE = 5.0%
SE TRANSITION (T) = 179'
RO (RUNOFF) = 128'

STA 414+24, LT&RT
CULVERT 68049006510
EXISTING CPRCHE 19X30-INCH TO REMAIN
1-REMOVING APRON ENDWALLS REQ'D
CPRCHE CLASS HE-IV 19X30-INCH EXTENSION REQ'D
1-APRON ENDWALLS FOR CPRCHE 19X30-INCH REQ'D
0° SKEW
INVERT UPSTREAM: 937.44'
MARKERS FOR CULVERT END REQ'D

CURVE NO. 20
PI STA = 398+79.47
Y = 375,261.88
X = 521,642.34
PC STA = 396+22.04
Y=375,008.16
X=521,685.92
PT STA = 401+35.85
Y=375,519.29
X=521,638.95
DELTA = 8°59'29"
D = 1°45'00"
T = 257.43'
L = 513.81'
R = 3,274.08'
EXISTING SE = 3.7%
PROPOSED SE = 3.7%
SE TRANSITION (T) = 145'
RO (RUNOFF) = 94'

MJK INCOME TRUST

DAVID L BUTALA

PETER III VANDYKE

PT: 401+35.85

PC: 409+25.24

PT: 415+52.80

TDS TELECOM (COMMUNICATION)

ALLIANT ENERGY (ELECTRIC)

CURVE 20

CURVE 21

STH 49

N0° 45' 17"W

N19° 34' 52"W

402 404 406 408 410 412 414 416

R/W

BASE AGG PE

DRIVEWAY DRAINAGE IMPROVEMENT (SEE CONSTRUCTION DETAIL)

REMOVING CURB & GUTTER

ASPHALTIC FLUMES

TLE

TDS TELECOM (COMMUNICATION)

LANDMARK REFERENCE MONUMENTS

END CONSTRUCTION, 87' RT
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

SHADY DR

OH T GUY VENT

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 108	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 27

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- ADJUSTING STEEL PLATE BEAM GUARD
- GRUBBING
- ADJUSTING SANITARY MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- PROPOSED SIGN MOUNTED ON SINGLE POST
- MOVE EXISTING SIGN MOUNTED ON SINGLE POST
- EXISTING SIGN MOUNTED ON SINGLE POST
- SIGN - NEW
- SIGN - MOVE

NOTES

SEE CONSTRUCTION DETAILS FOR CURB & GUTTER REPLACEMENT.

SEE STORM SEWER DETAILS FOR ADDITIONAL STORM SEWER INFORMATION.

ALL EXISTING SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

SEE PAVING DETAILS FOR GUARDRAIL AND CURB AND GUTTER INFORMATION FROM STA 424+21, RT - STA 427+40, RT AND STA 426+99, LT - STA 427+40, LT.

DOREEN BONNO

DOROTHY A INDERDAHL

KIMBERLY B BOUTWELL & JEFFREY OLSON

SOUTH BRANCH LITTLE WOLF RIVER

DEPT NAT RESOURCES STATE OF WISCONSIN

VILLAGE OF SCANDINAVIA

PATRICIA L RECKREY

MICHAEL D STOCKWELL

JOHN D & SUSAN R WENDLANDT

GWENDOLYN M HARRIS

VIRGINIA E NOWAK

JOEL INDERDAHL

DEBRA A INDERDAHL

DEBRA A INDERDAHL

TOWN & VILL SCANDINAVIA

JON J & LINDA G DURRANT

WAUPACA COUNTY PARKS & RECREATION DEPT

DEPT NAT RESOURCES STATE OF WISCONSIN

TOMORROW RIVER STATE TRAIL

DEPOT ST

CURVE NO. 22
PI STA = 425+85.26
Y = 377,896.29
X = 521,172.24
PC STA = 423+63.29
Y=377,687.16
X=521,246.63
PT STA = 428+06.49
Y=378,092.84
X=521,069.08
DELTA = 8°06'47"
D = 1°49'50"
T = 221.97'
L = 443.20'
R = 3,130.00'
EXISTING SE = NC
PROPOSED SE = NC

STA 426+88 - STA 427+00, LT
REMOVING GUARDRAIL

STA 426+57 - STA 427+40, LT
REPLACING GUARDRAIL POSTS AND BLOCKS
AND REPLACING GUARDRAIL HARDWARE
MGS GUARDRAIL 3K
MGS GUARDRAIL SHORT RADIUS
MGS GUARDRAIL SHORT RADIUS TERMINAL
GUARDRAIL MOW STRIP EMULSIFIED ASPHALT

STA 418+21, LT&RT
CULVERT 68049006511
EXISTING 24" X 38" RCHECP TO REMAIN
MARKERS FOR CULVERT END REQ'D

STA 424+21 - STA 424+60, RT
REMOVING CURB & GUTTER

B-68-537
17'-2" VERTICAL CLEARANCE
(TO REMAIN)

STA 426+99 - STA 427+40
REMOVING CURB & GUTTER

END PROJECT
STA 427+40
BUTT JOINT REQ'D
(SEE CONSTRUCTION DETAILS)

TDS TELECOM
(COMMUNICATION)

ALLIANT ENERGY
(GAS)

ALLIANT ENERGY
(ELECTRIC)

ASPHALTIC
FLUMES

PT: 415+52.80

PC: 423+63.29

PT: 428+06.49

EP: 429+00.00

STH 49

N19° 34' 52"W

N27° 41' 39"W

CURVE 22

BM 608

BM 609

POST 1
+29
22' RT

POST 9
+79
20' RT

ALLIANT ENERGY
(ELECTRIC)

CP/BM # 511
Y = 377,741.34
X = 521,287.77
ELEV = 923.59
FENO 1000 W/ALUMINUM CAP SET

REMOVING
STORM SEWER
(18-INCH)

STA 426+22 - STA 427+40
REMOVING CURB & GUTTER

RESIDUAL SOIL
CONTAMINATION
(SEE SPECIAL PROVISIONS)

VILLAGE OF SCANDINAVIA
(SEWER)

STA 425+80 - STA 426+52, RT
ADJUSTING STEEL PLATE BEAM GUARD

STA 424+80, LT&RT
CULVERT 68049006512
EXISTING 36" RCCP TO REMAIN
MARKERS CULVERT END REQ'D, LT

STA 424+63 - STA 425+21, RT
REMOVING GUARDRAIL

STA 424+29 - STA 425+21, RT
MGS THRIE BEAM TRANSITION
MGS GUARDRAIL TERMINAL EAT

STA 426+09, LT&RT
CULVERT 68049006513
EXISTING 36" RCSS TO REMAIN
MARKERS FOR CULVERT END REQ'D, LT

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
608	426+03.10, 46.47' RT	BM BENCHTIE IN POWERPOLE	924.70'
609	428+15.10, 36.05' RT	BM BENCHTIE IN POWERPOLE	927.68'

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	PLAN	SHEET 109 E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 28

PLOT DATE : 10/9/2023 8:23 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

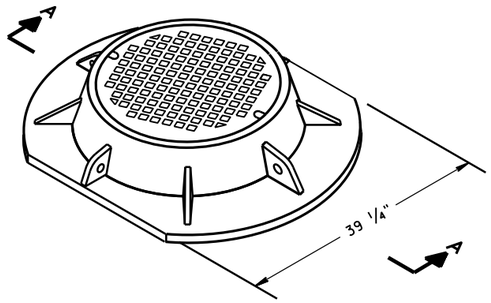
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
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
08E11-02	TURBIDITY BARRIER
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
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
12A03-10	NAME PLATE (STRUCTURES)
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
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)

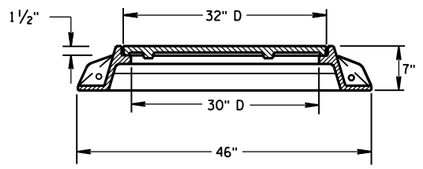
6

Standard Detail Drawing List

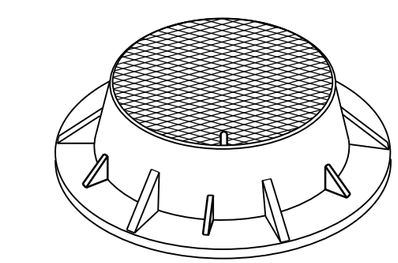
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B53-02A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D33-09	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

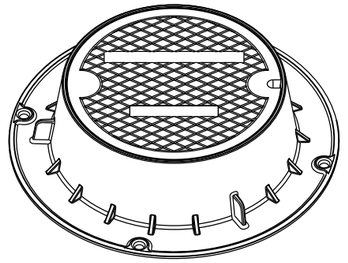
6

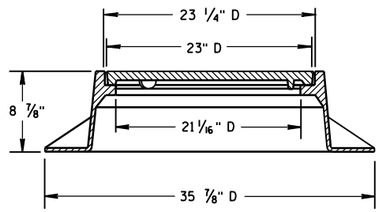


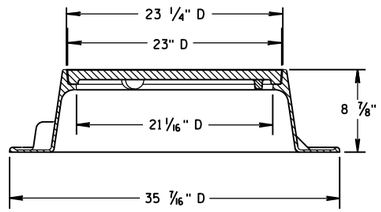


SECTION A-A
TYPE "K"









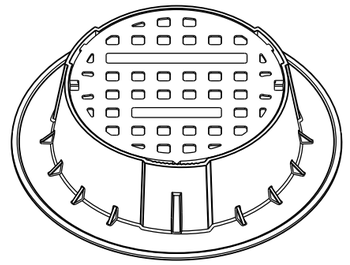
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

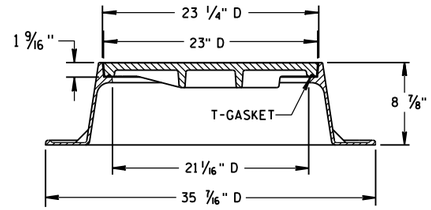
GENERAL NOTES

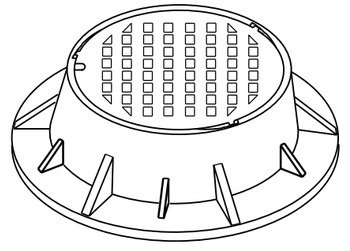
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

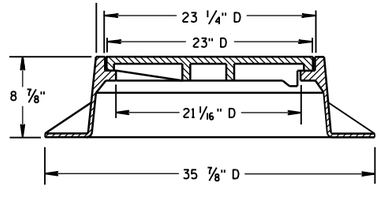
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

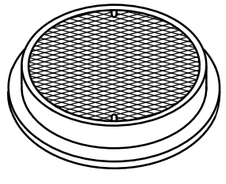


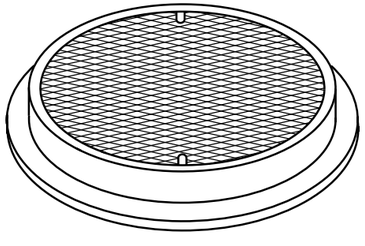


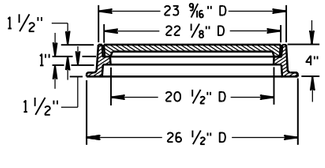




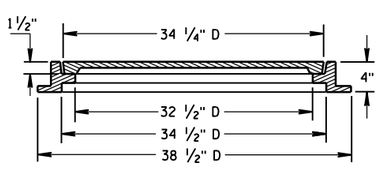
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



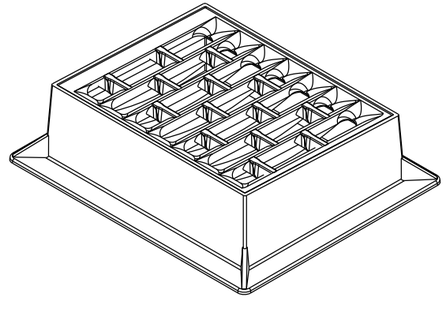


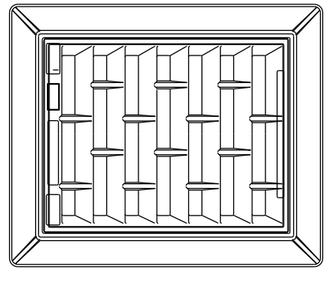


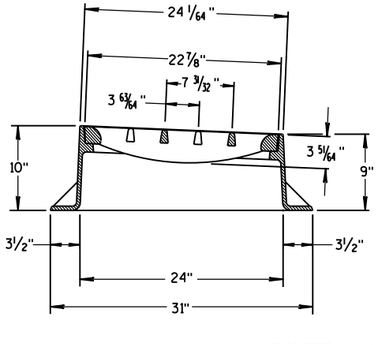
TYPE "L"

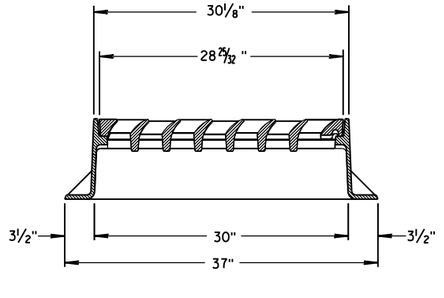


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

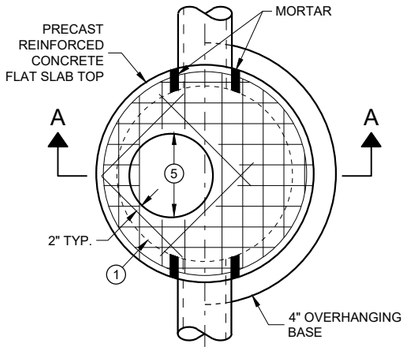
APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

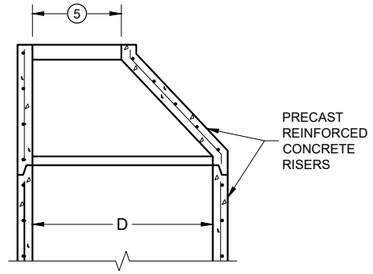
S.D.D. 8 A 5-19d

6

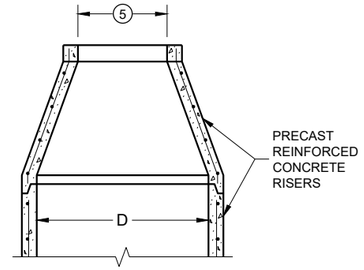
S.D.D. 8 A 5-19d



PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) \ 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 DIMENSION 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".

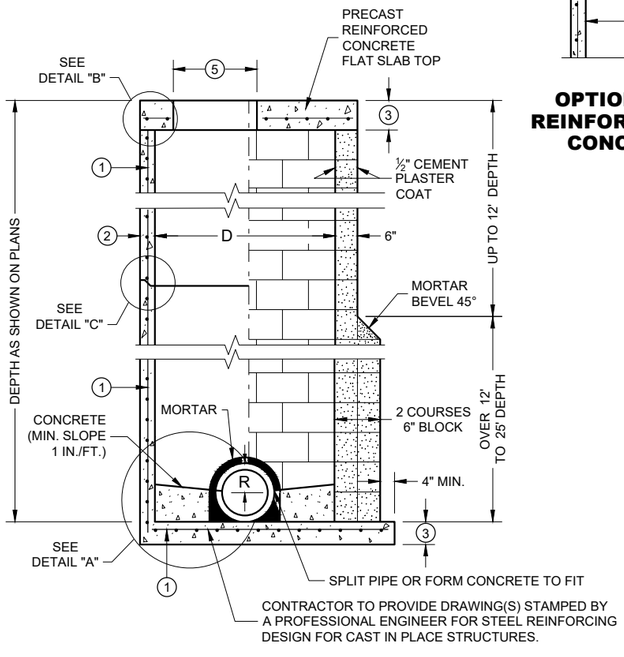
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(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 (TYP.).

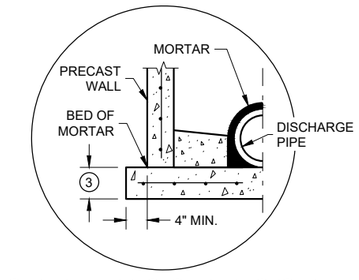
(5) SEE MANHOLE COVER OPENING MATRIX.



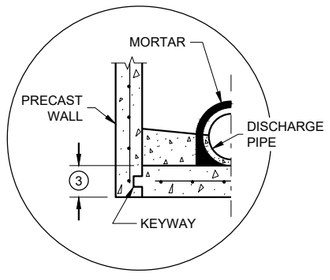
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

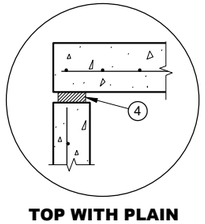


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

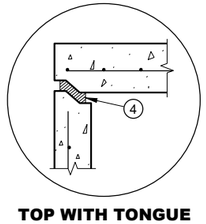


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

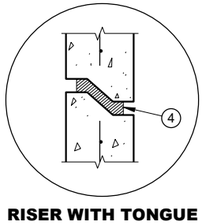


TOP WITH PLAIN END JOINT



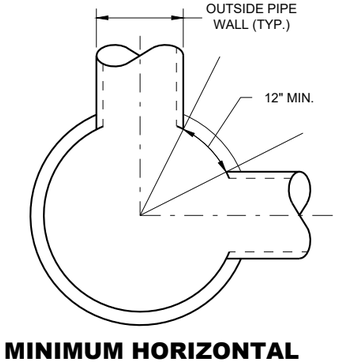
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"



MINIMUM HORIZONTAL PIPE SEPARATION

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

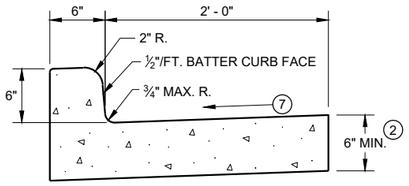
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

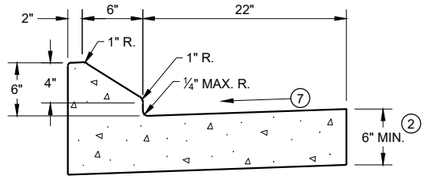
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

6

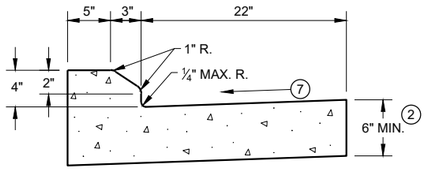
SDD 08B09 - 03



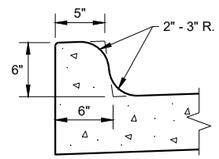
TYPES A (1) & D



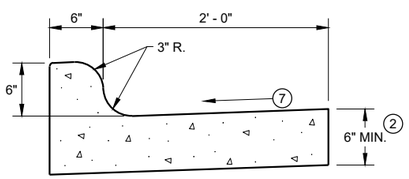
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

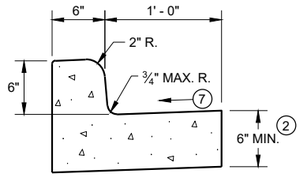


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



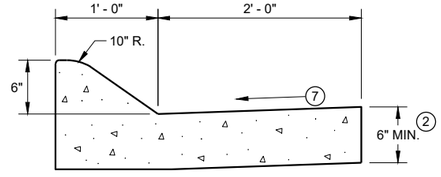
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

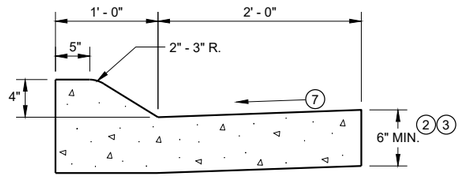


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

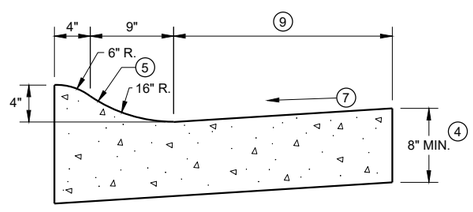


6" SLOPED CURB TYPES A (1) & D



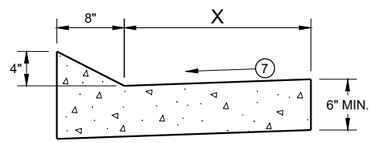
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

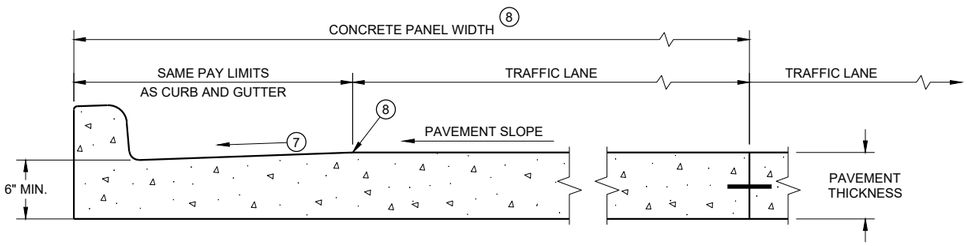


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

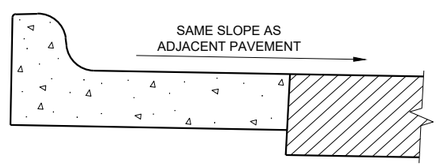
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

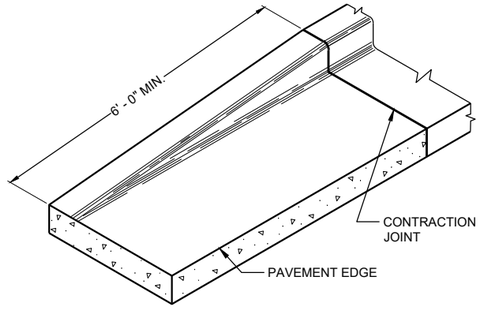
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(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

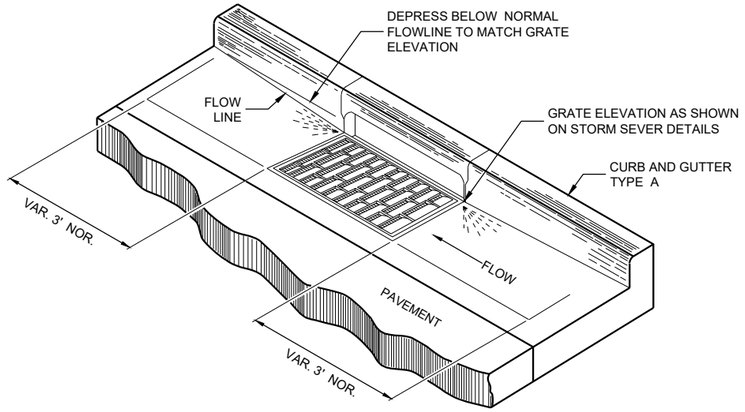
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 23a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

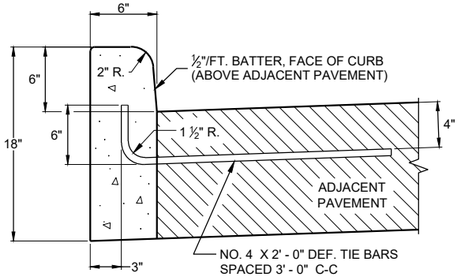
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

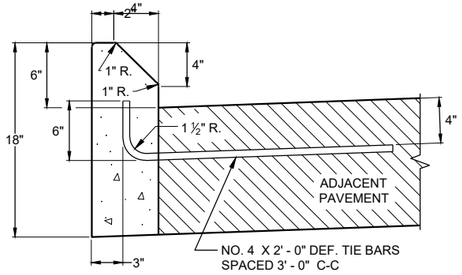
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

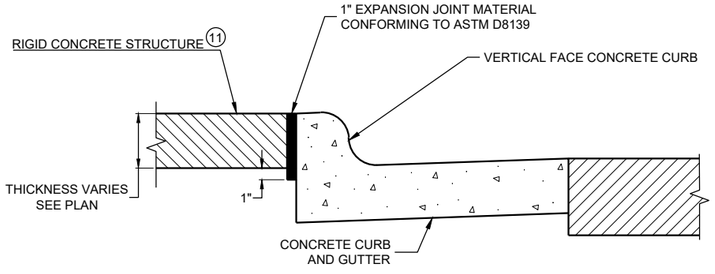


TYPES A (1) & D

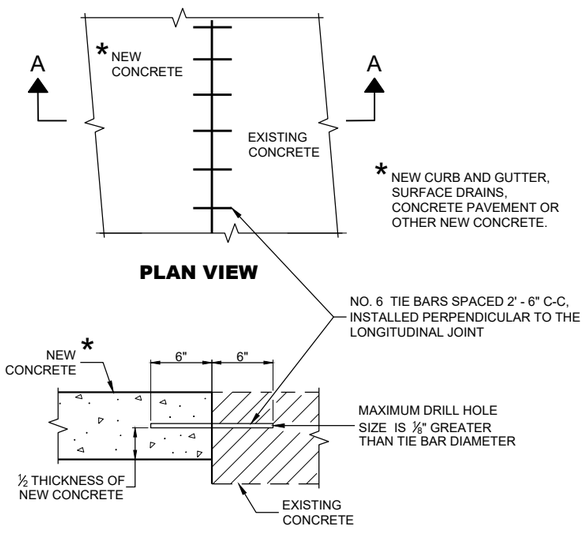


TYPES G (1) & J

CONCRETE CURB



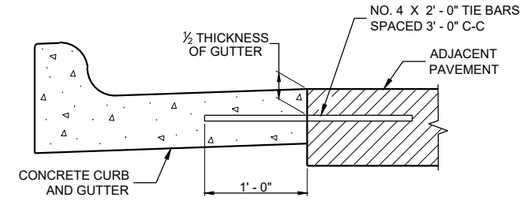
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



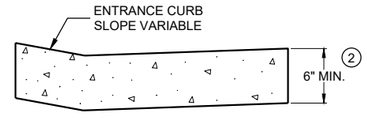
PLAN VIEW

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 DEVE ENGINEER

FHWA

6

SDD08D01 - 23b

GENERAL NOTES

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

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

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

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

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

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

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

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

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

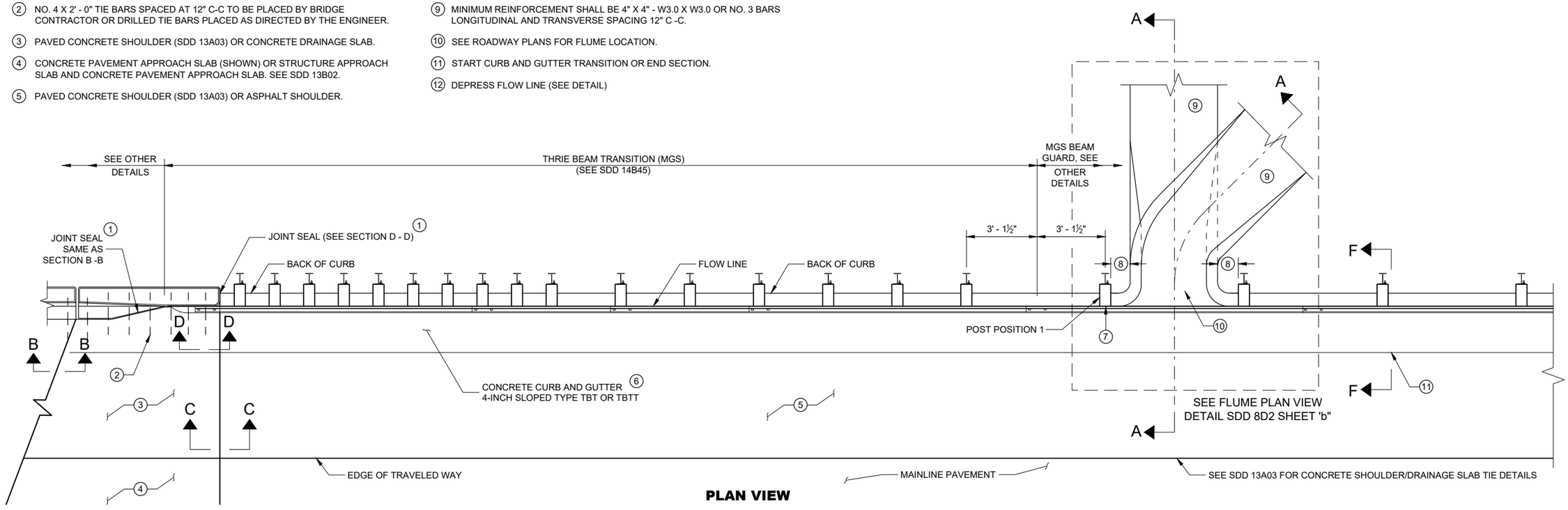
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

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

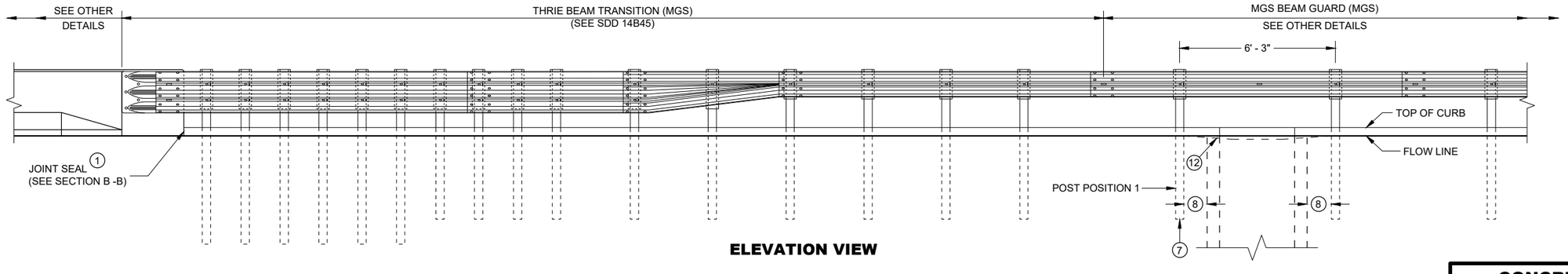
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

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

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



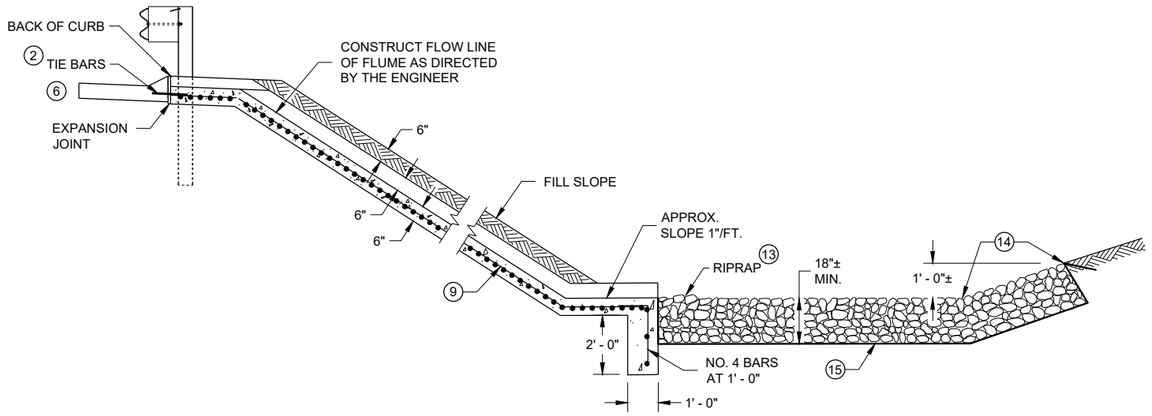
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

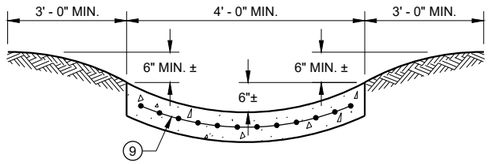
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

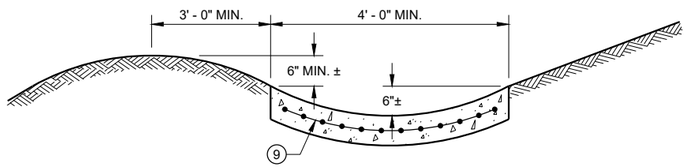
SDD 08D02 - 08a



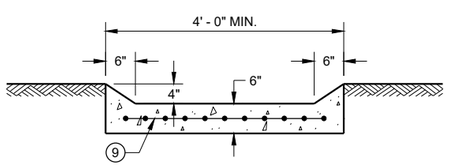
SECTION A - A



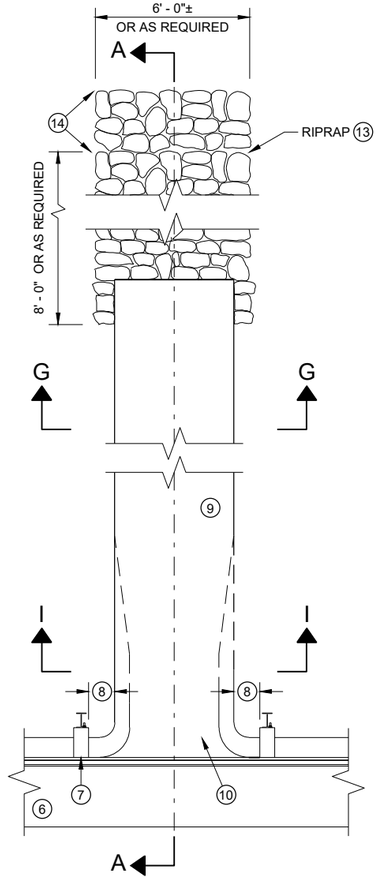
SECTION G - G



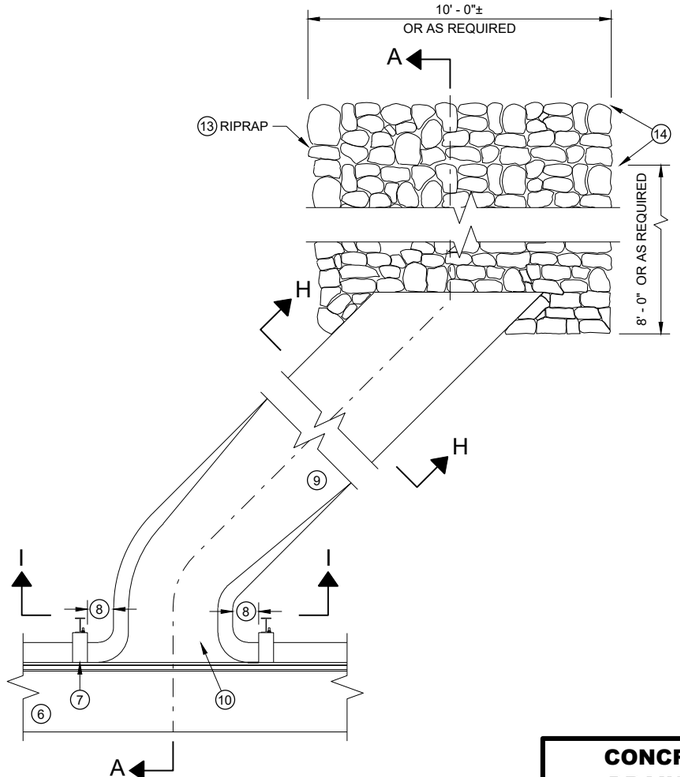
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

GENERAL NOTES

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

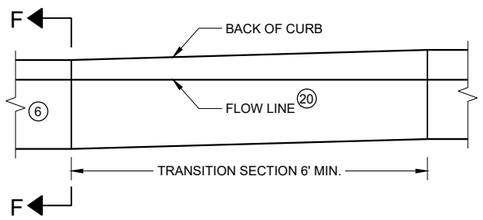
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

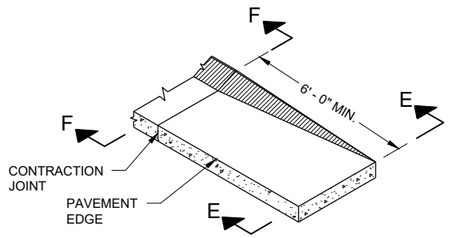
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

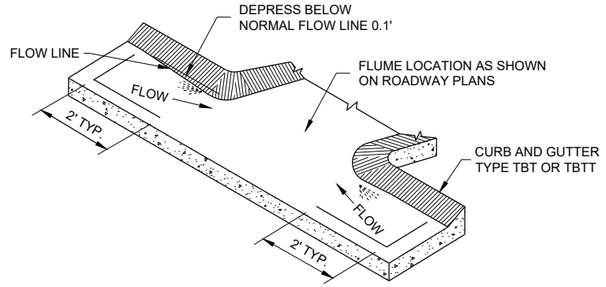
6
SDD 08D02 - 08b



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

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

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

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

(15) GEOTEXTILE TYPE HR.

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

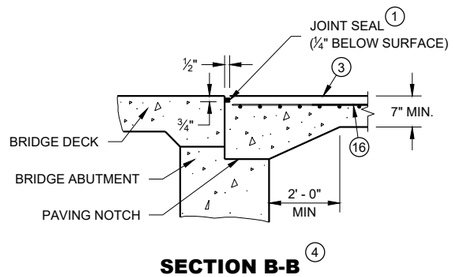
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

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

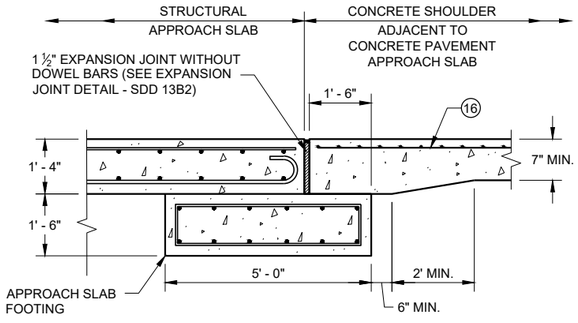
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

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

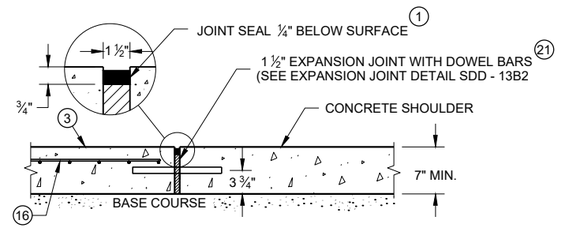
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



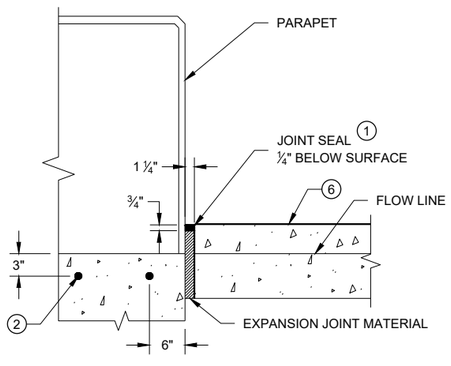
SECTION B-B (4)



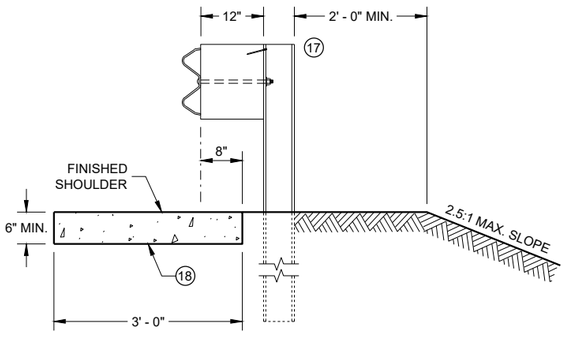
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



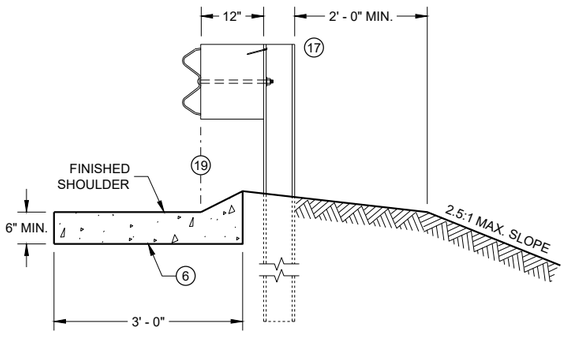
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

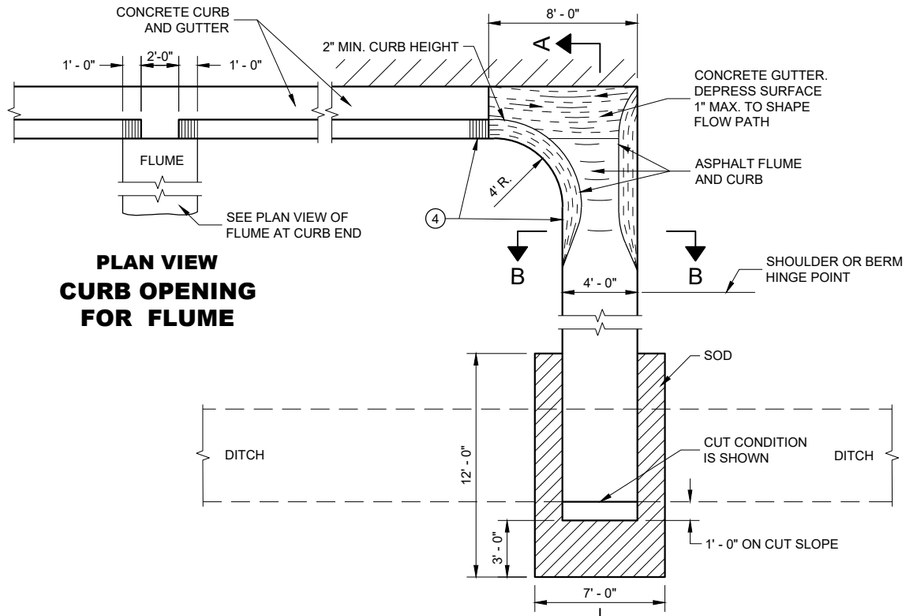
APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 08D02 - 08c

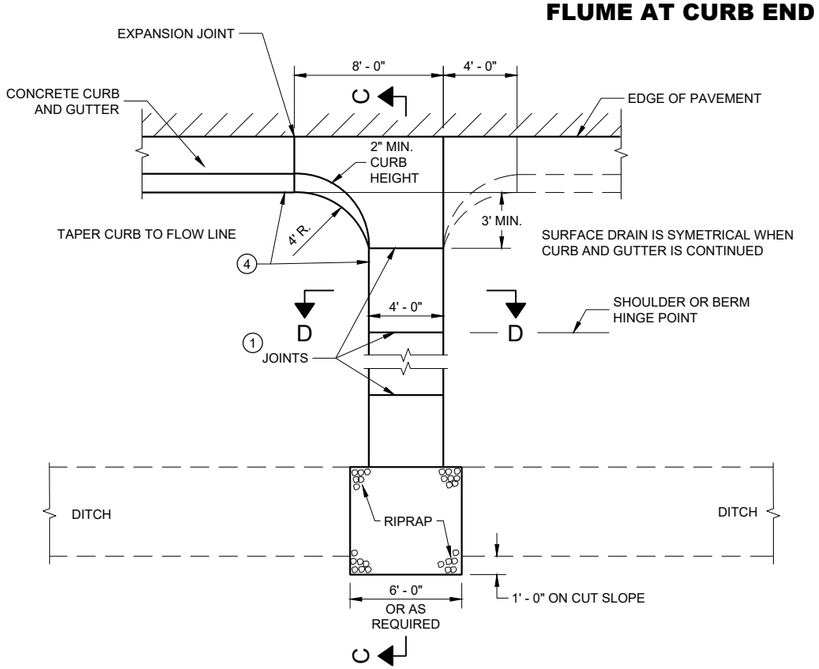
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



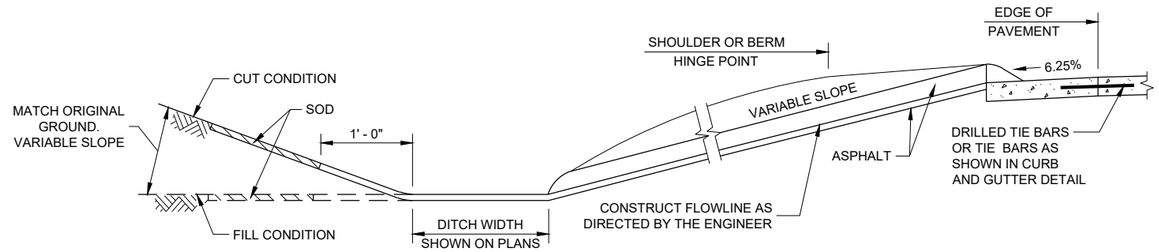
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

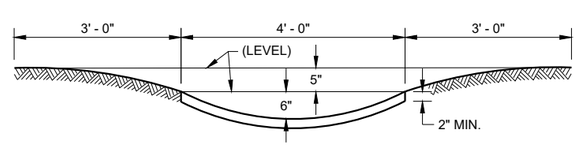
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

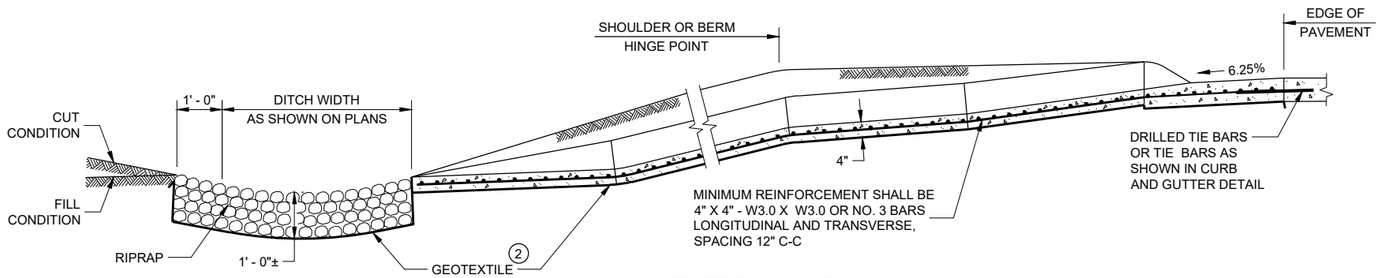
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4.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



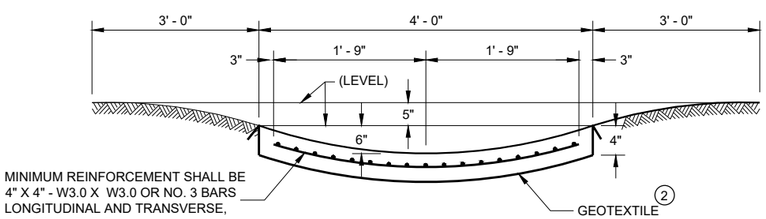
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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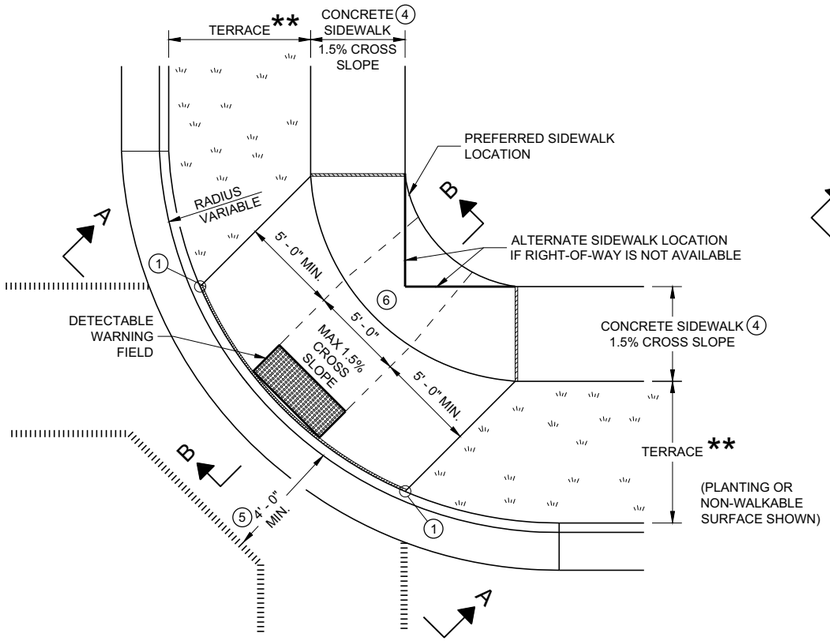
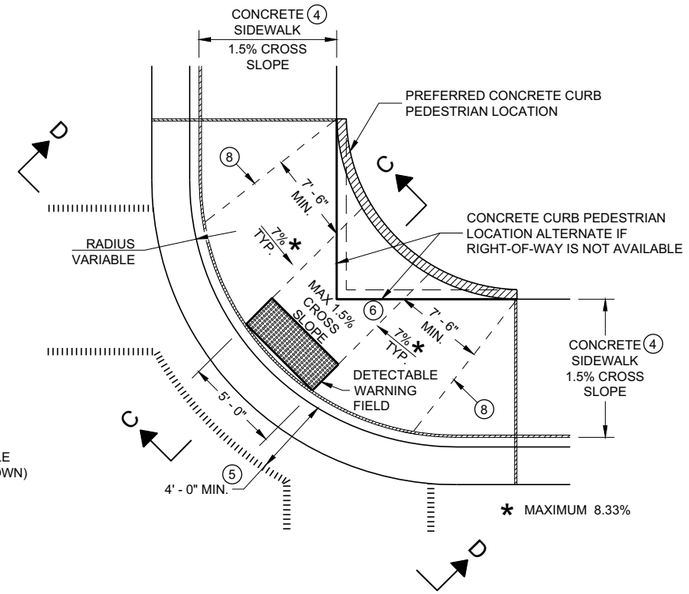
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

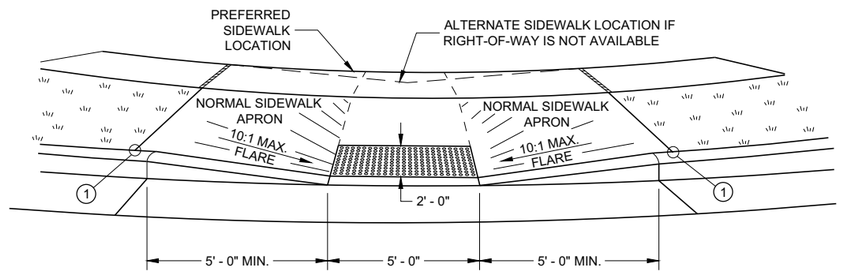
(CENTER OF CORNER RADIUS)



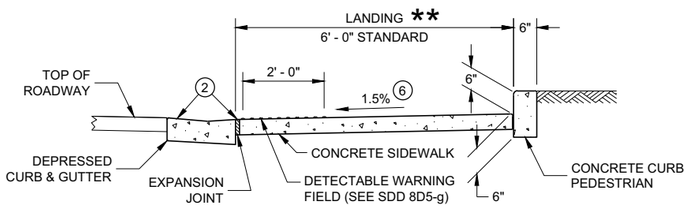
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

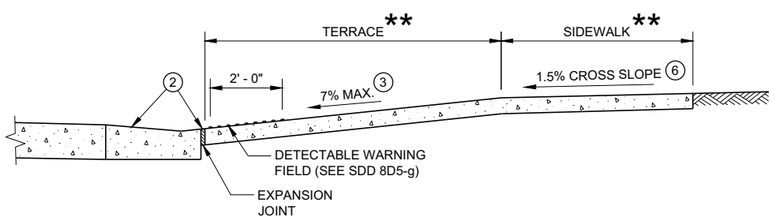


VIEW A - A FOR TYPE 1

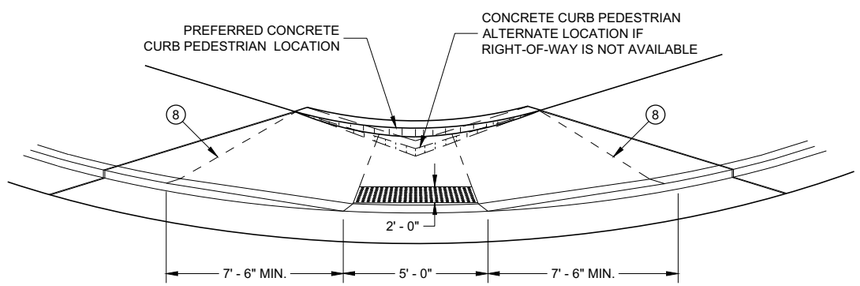


SECTION C - C FOR TYPE 1 - A

** 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 ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

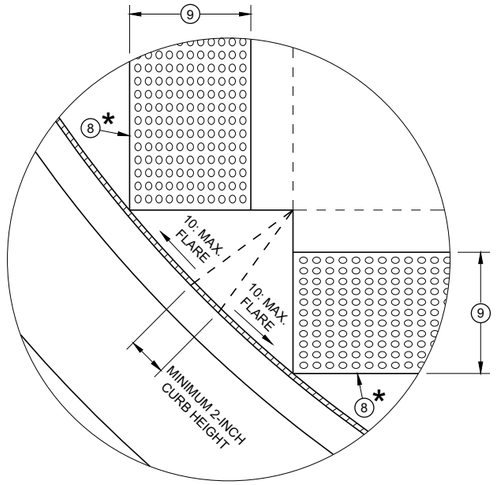
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

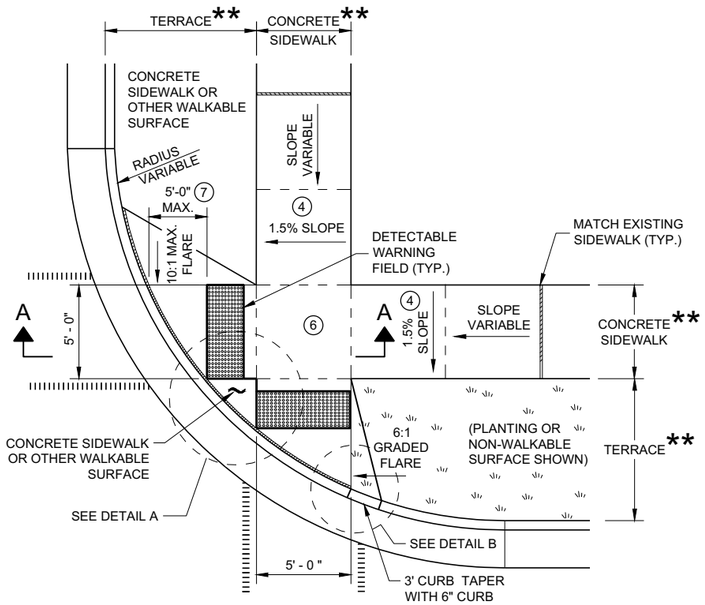
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

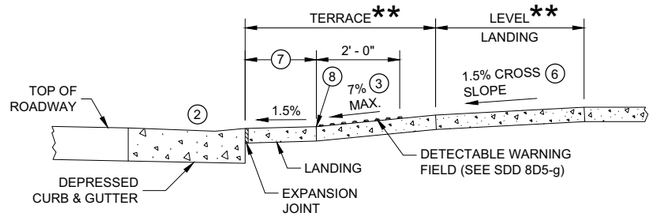
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

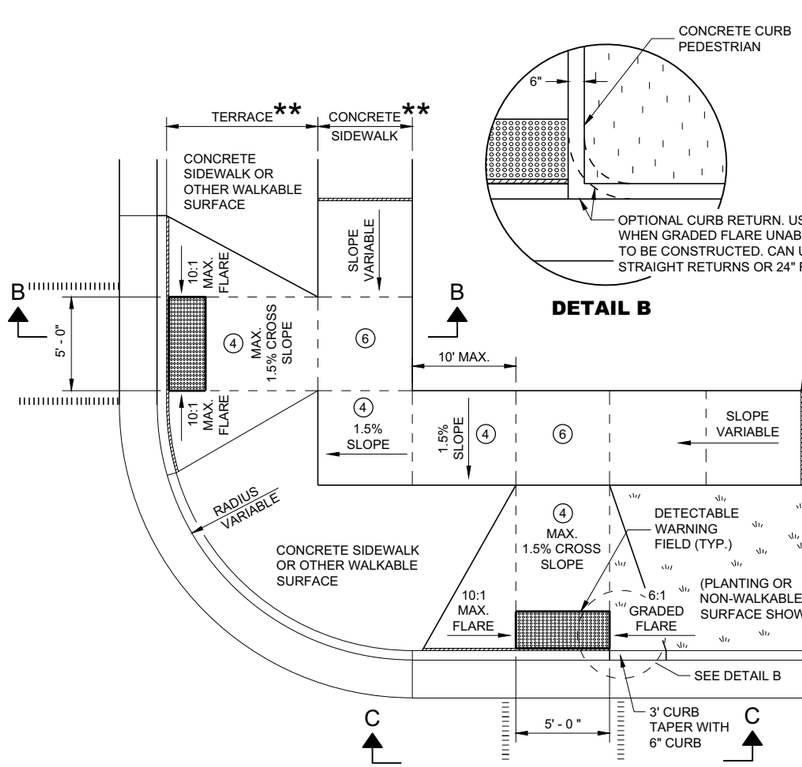
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

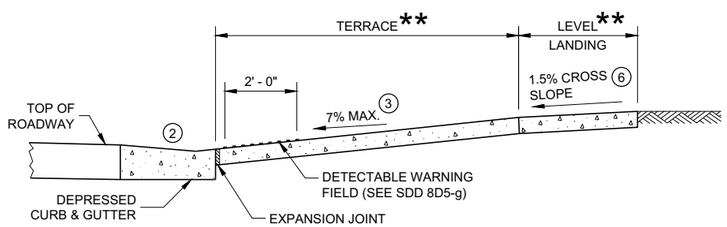
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

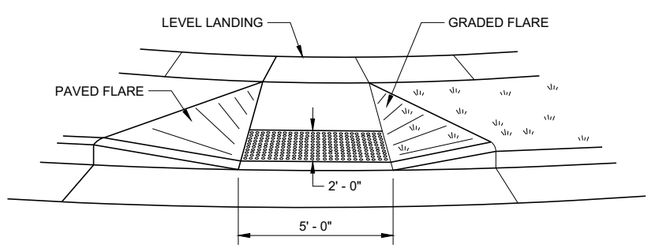
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



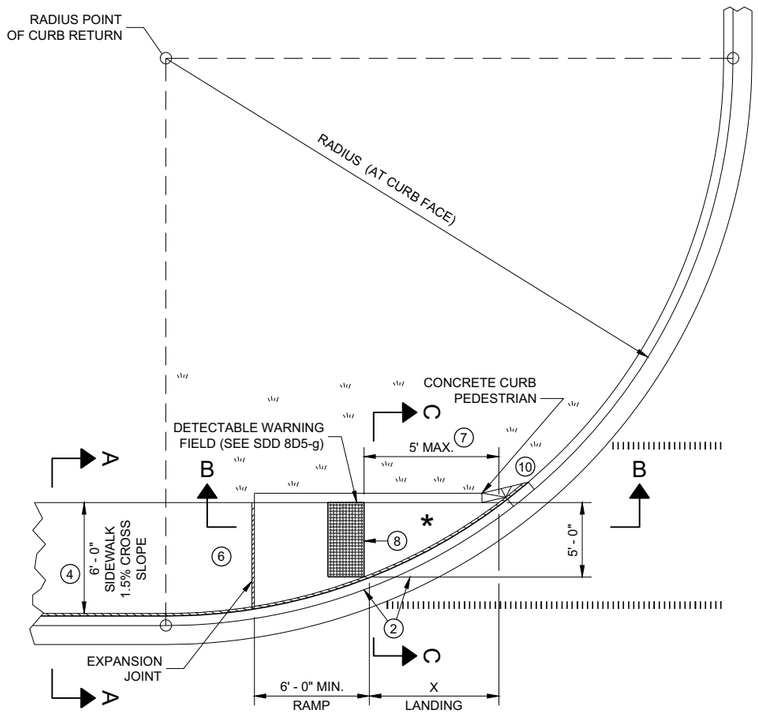
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

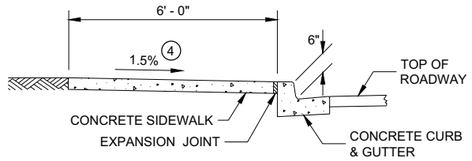


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

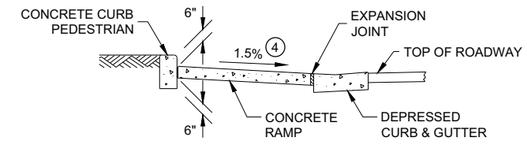
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

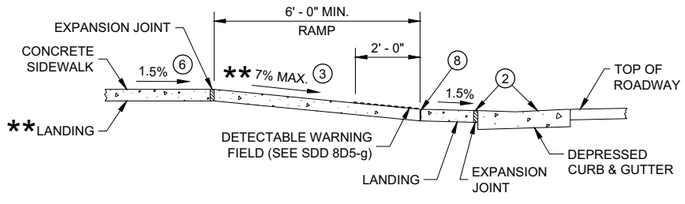
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



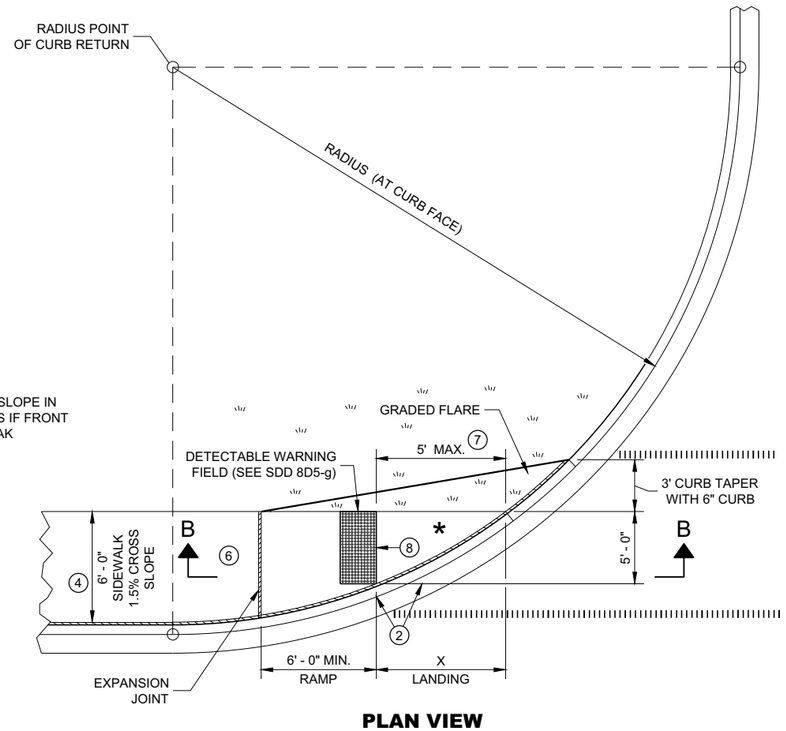
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

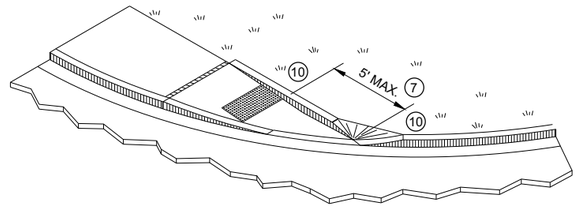
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

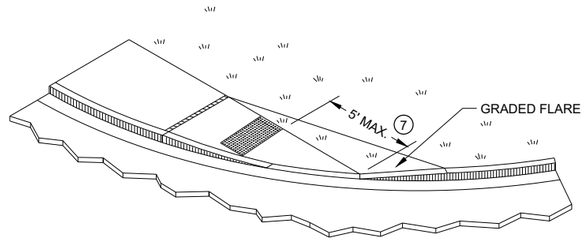


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



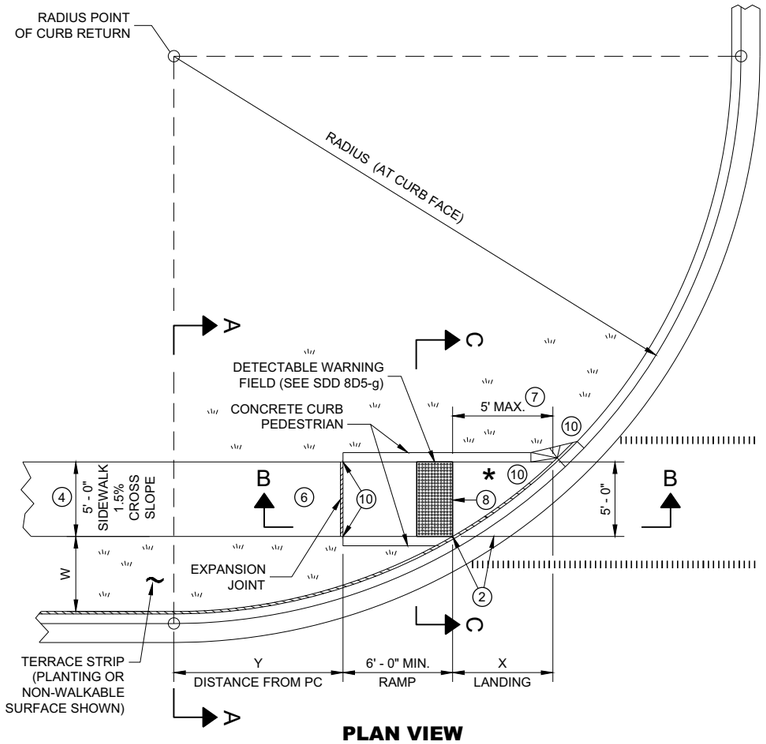
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

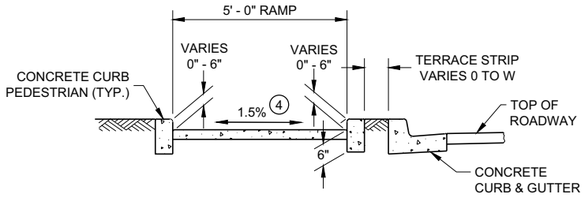


PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

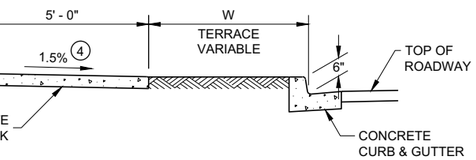
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

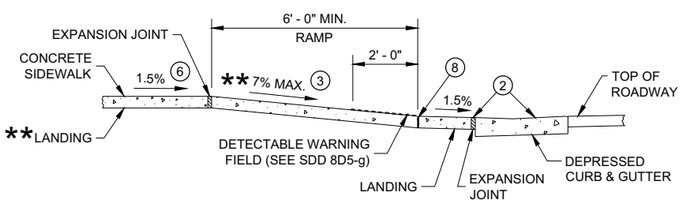
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

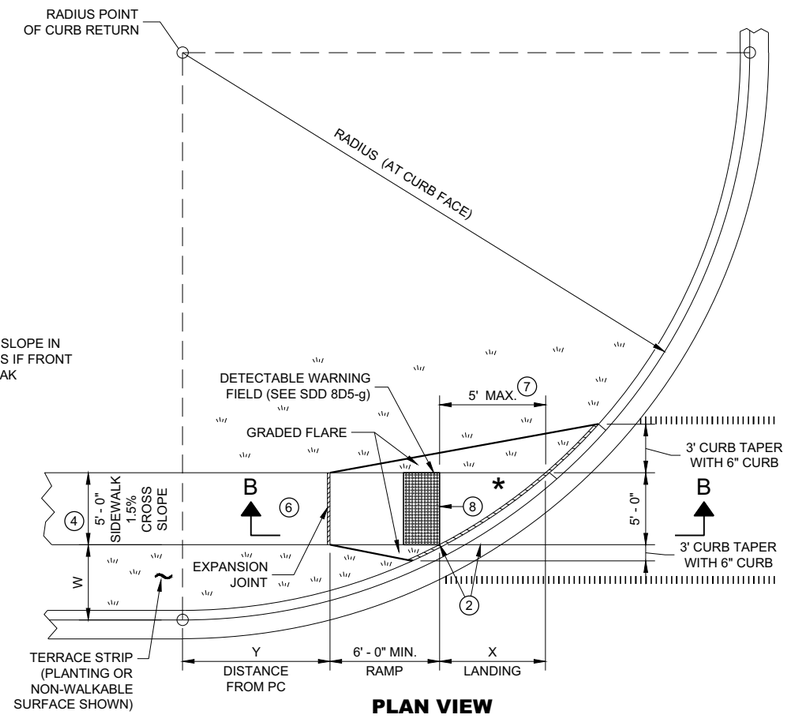


SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

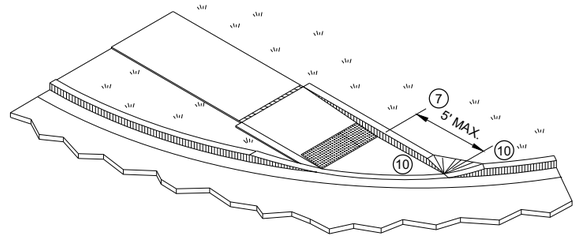
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



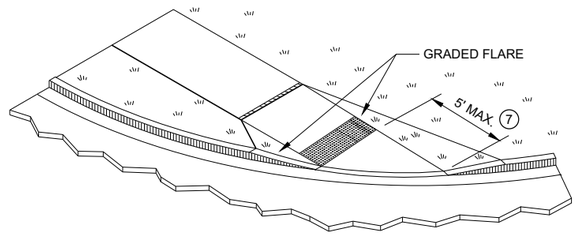
PLAN VIEW

CURB RAMP TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK



ISOMETRIC VIEW FOR TYPE 4B



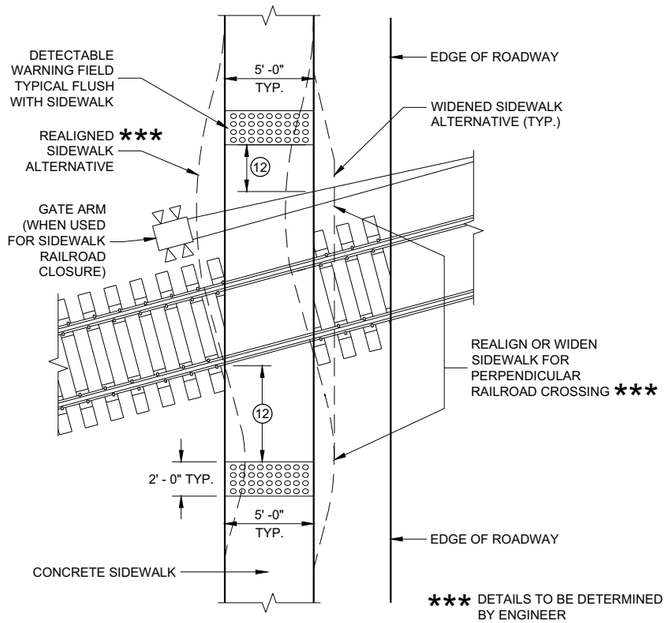
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

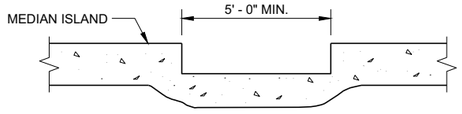
6

SDD 08D05 - 20d

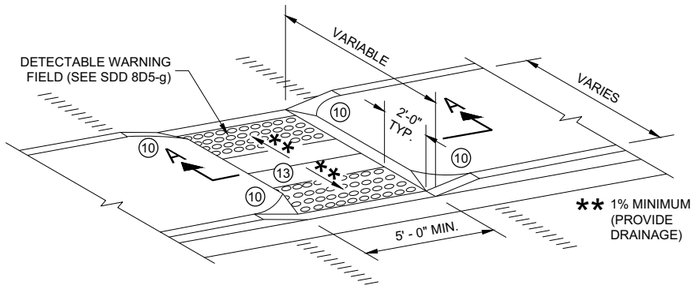


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

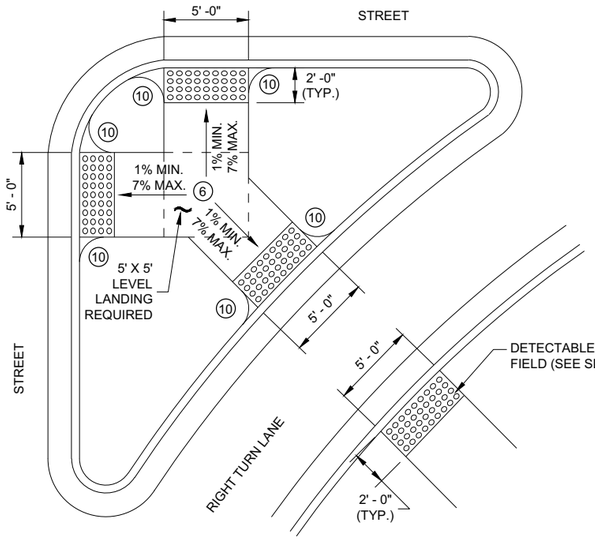
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

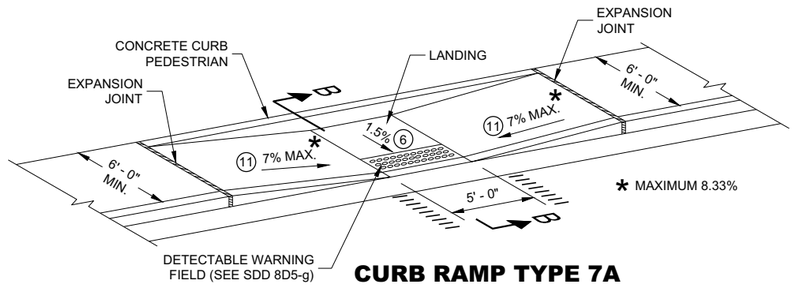
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

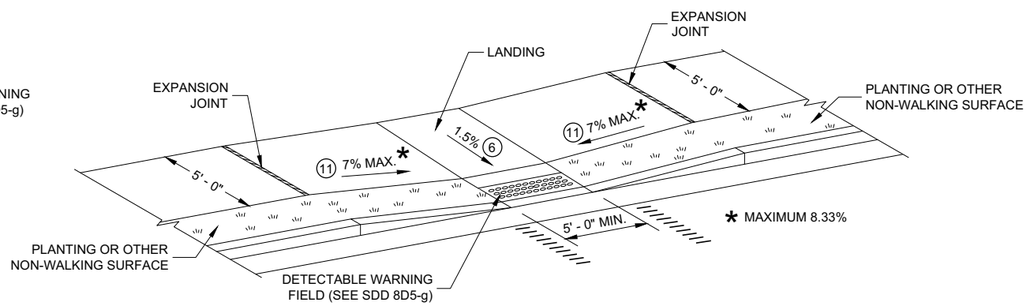
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

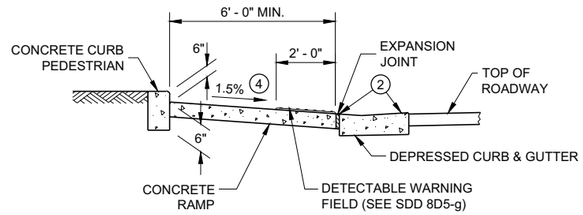
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

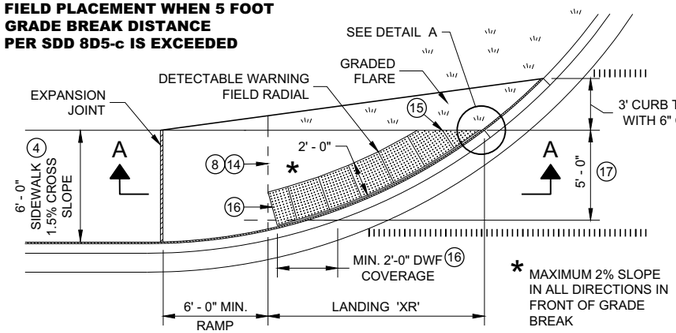
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20e

SDD 08D05 - 20e

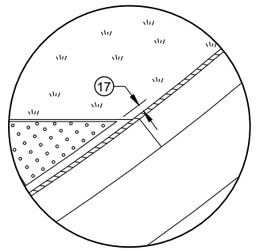
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



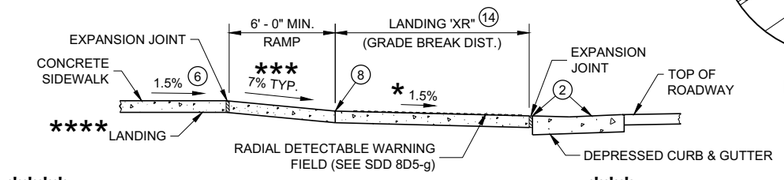
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

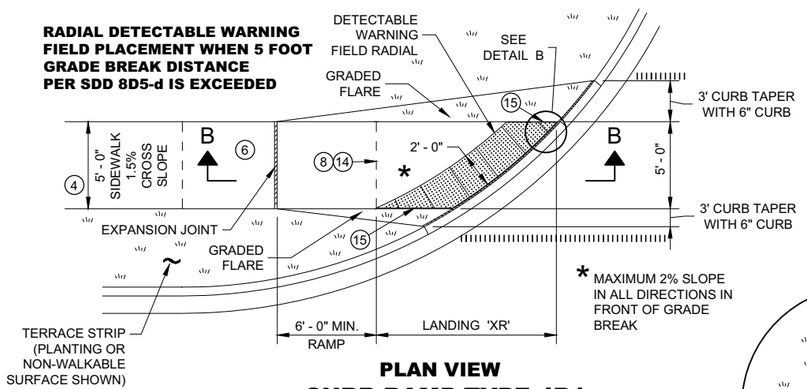


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

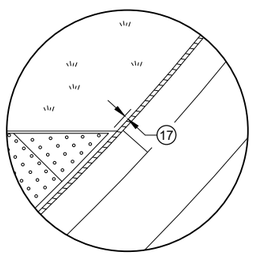
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



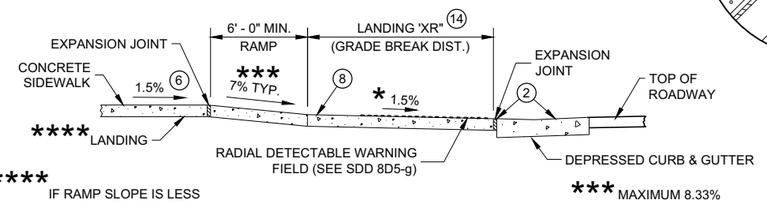
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

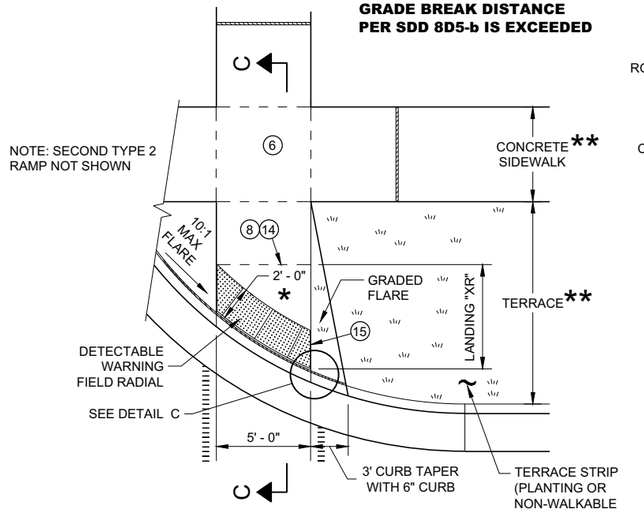
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

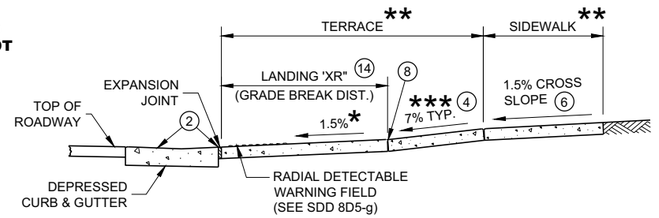


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

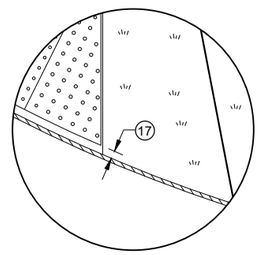


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

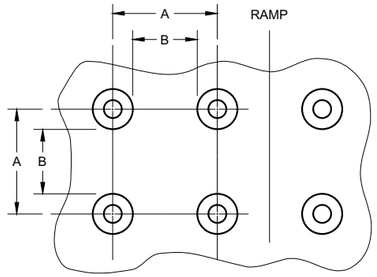
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20f

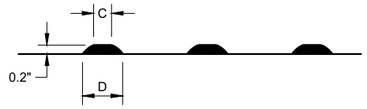
SDD 08D05 - 20f

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

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

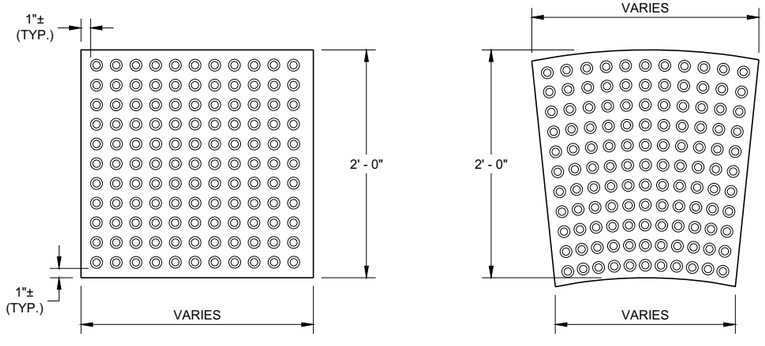


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

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

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

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

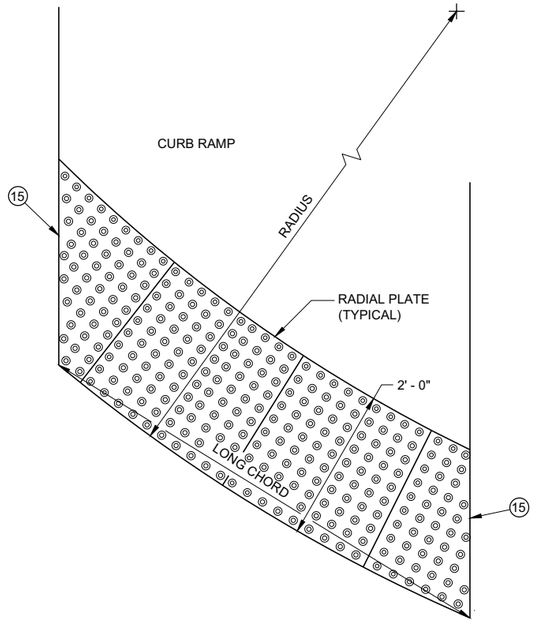
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

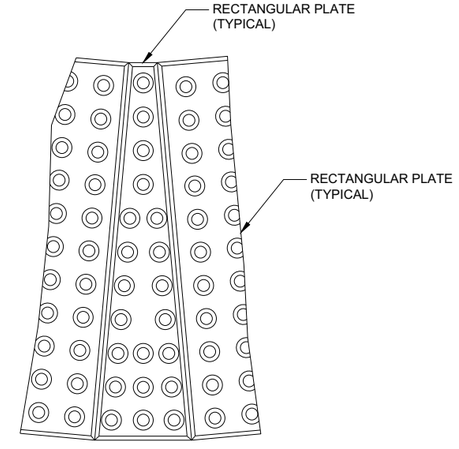
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

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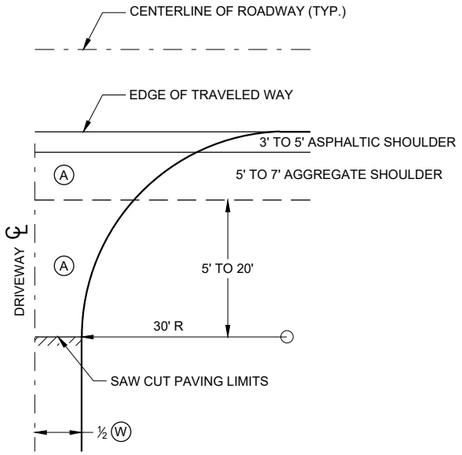
SDD 08D05 - 20g

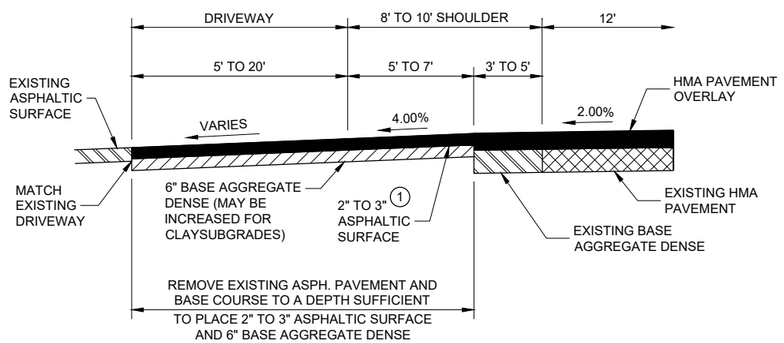
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



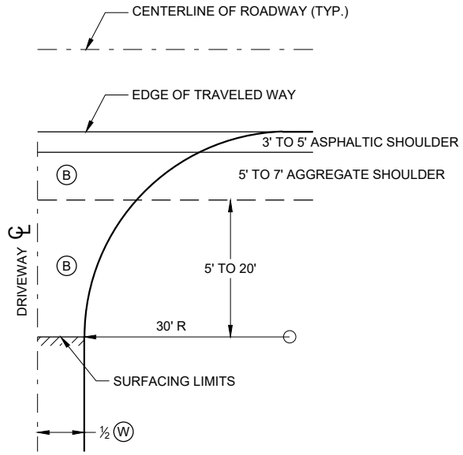
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

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

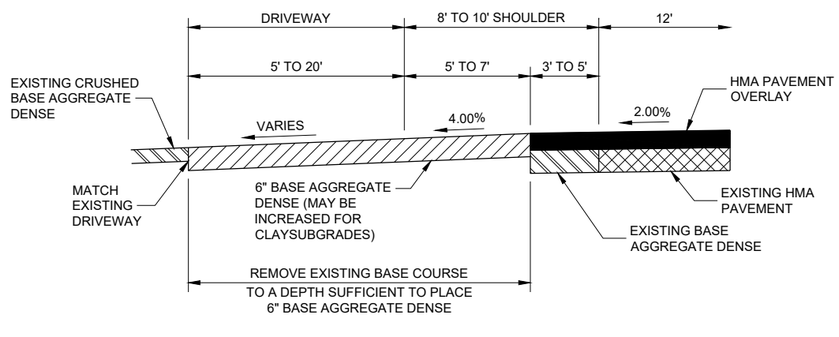
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(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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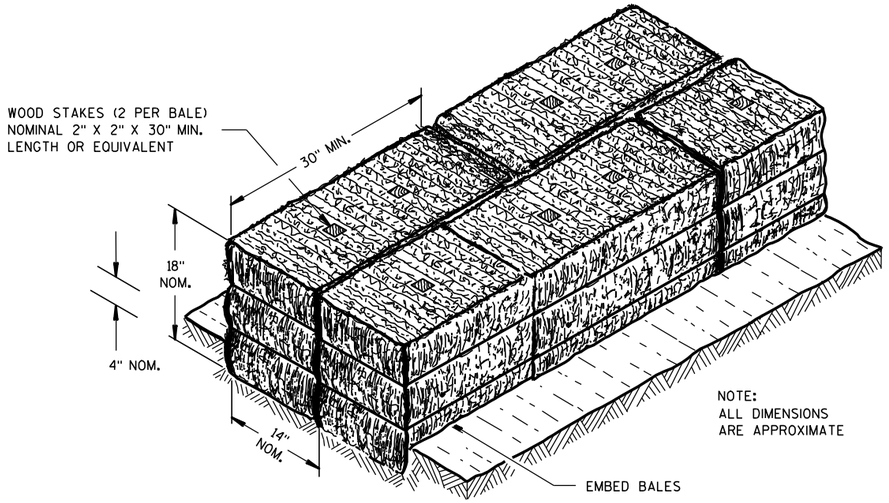
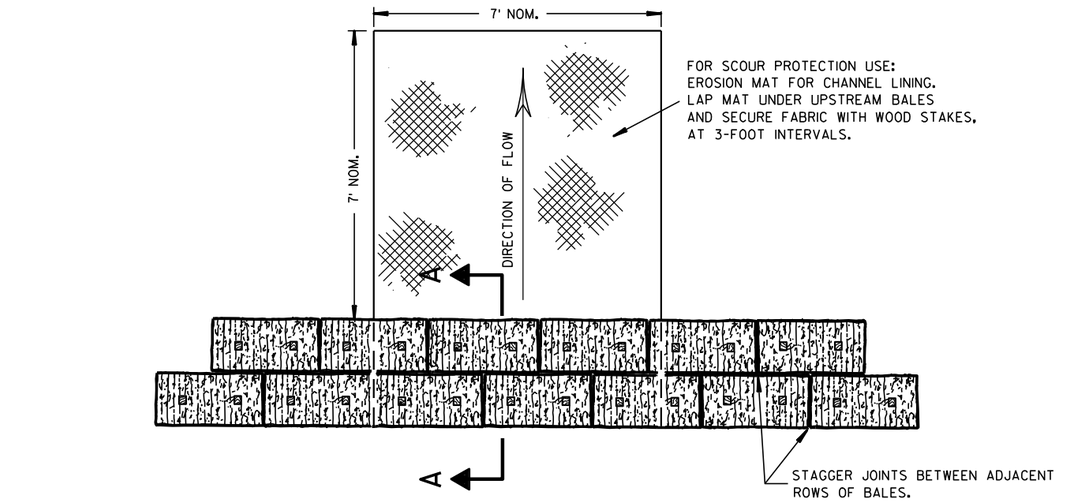
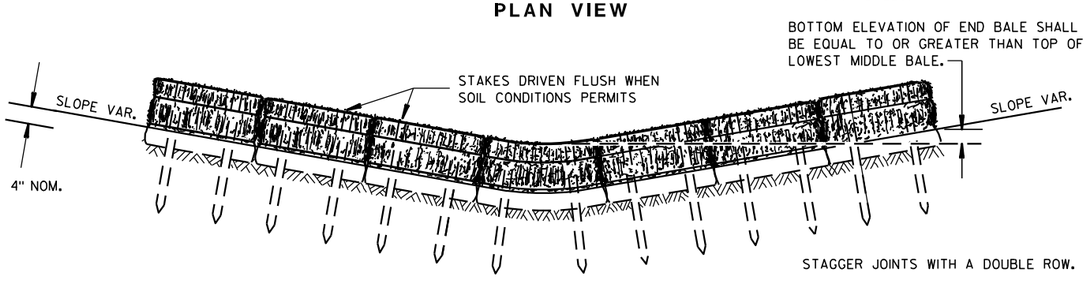
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



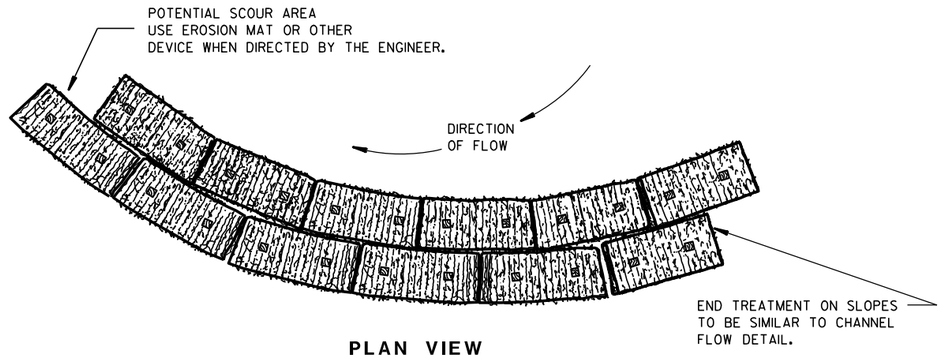
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

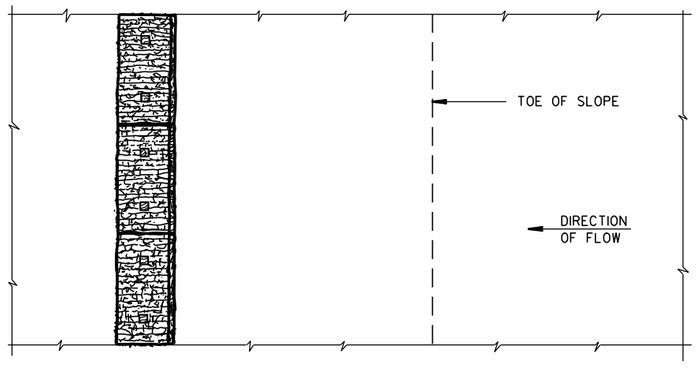
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

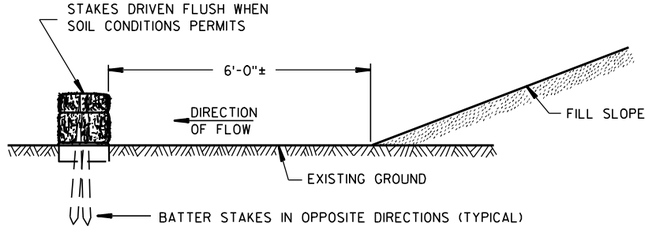


PLAN VIEW

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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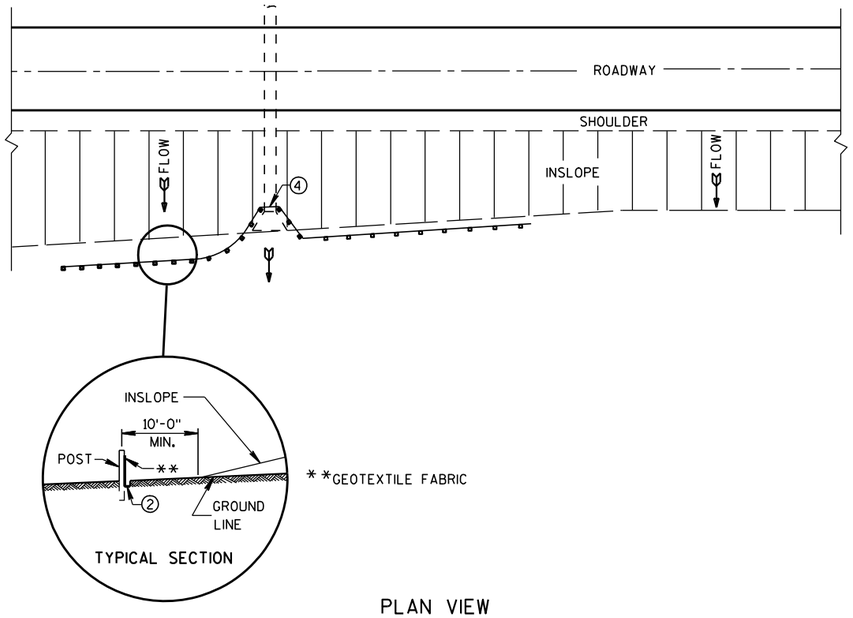
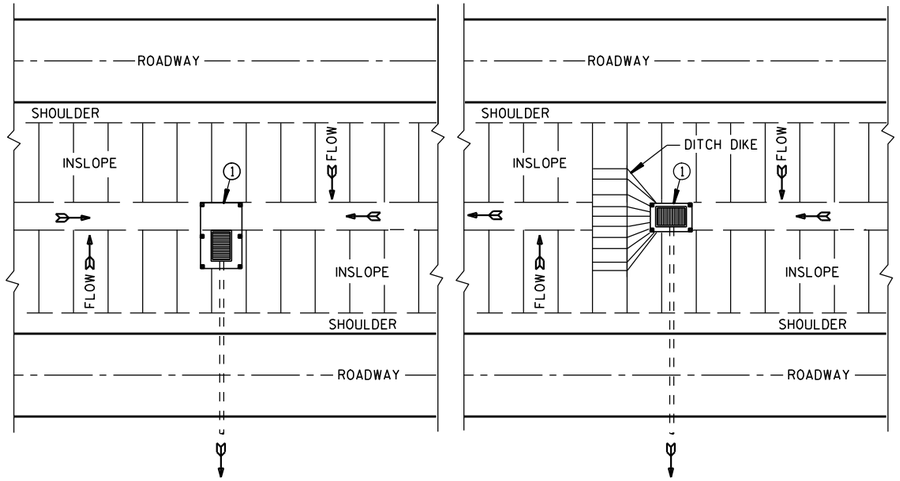
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



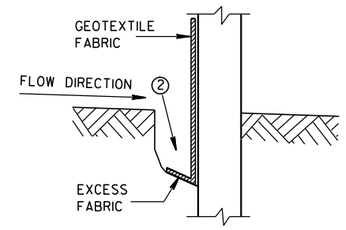
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

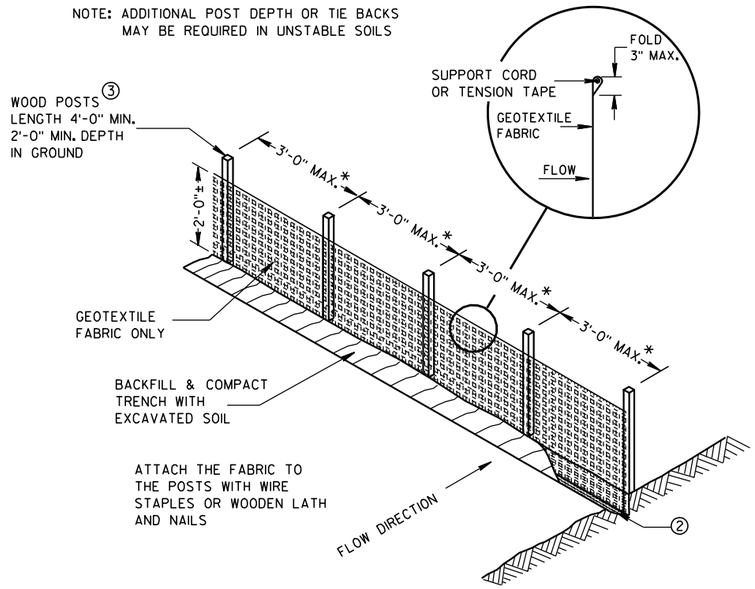
GENERAL NOTES

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.

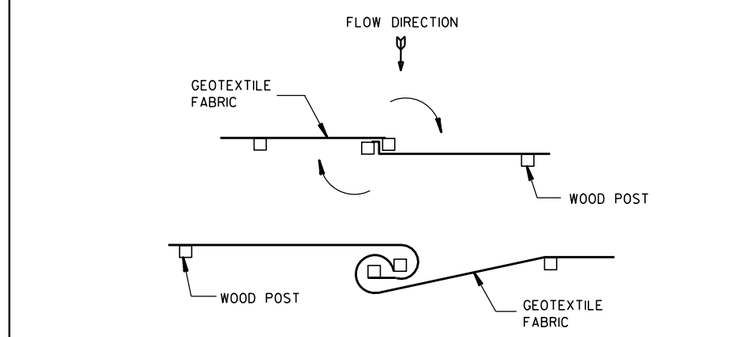


TRENCH DETAIL

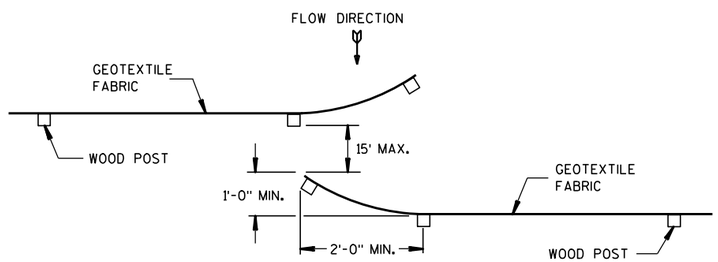


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

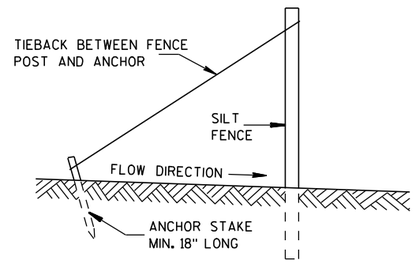


TWIST METHOD



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

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S.D.D. 8 E 9-6

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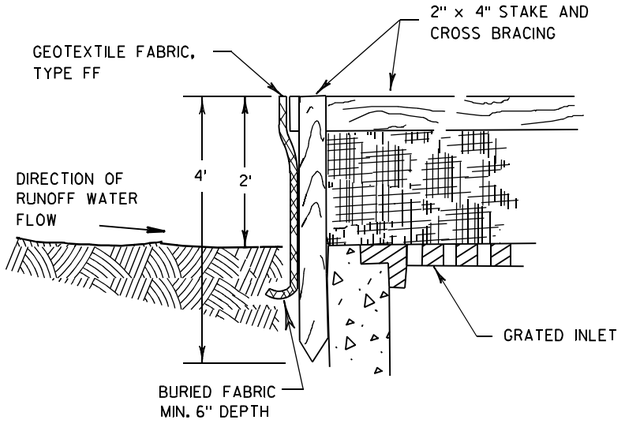
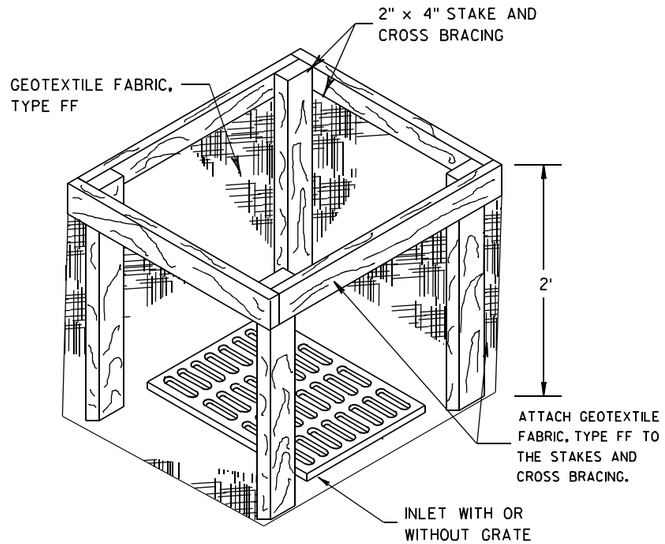
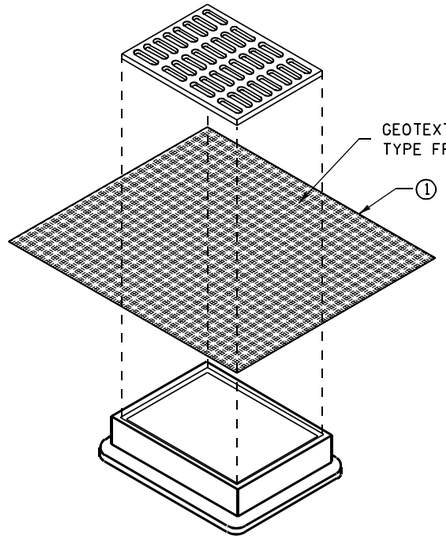
S.D.D. 8 E 9-6



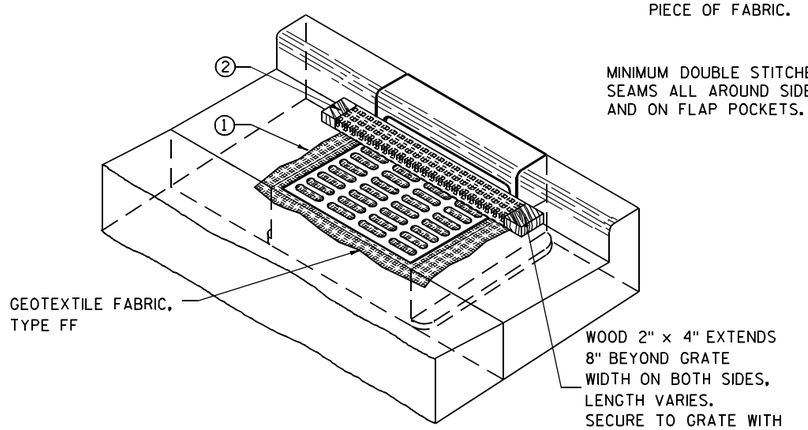


INLET PROTECTION, TYPE A

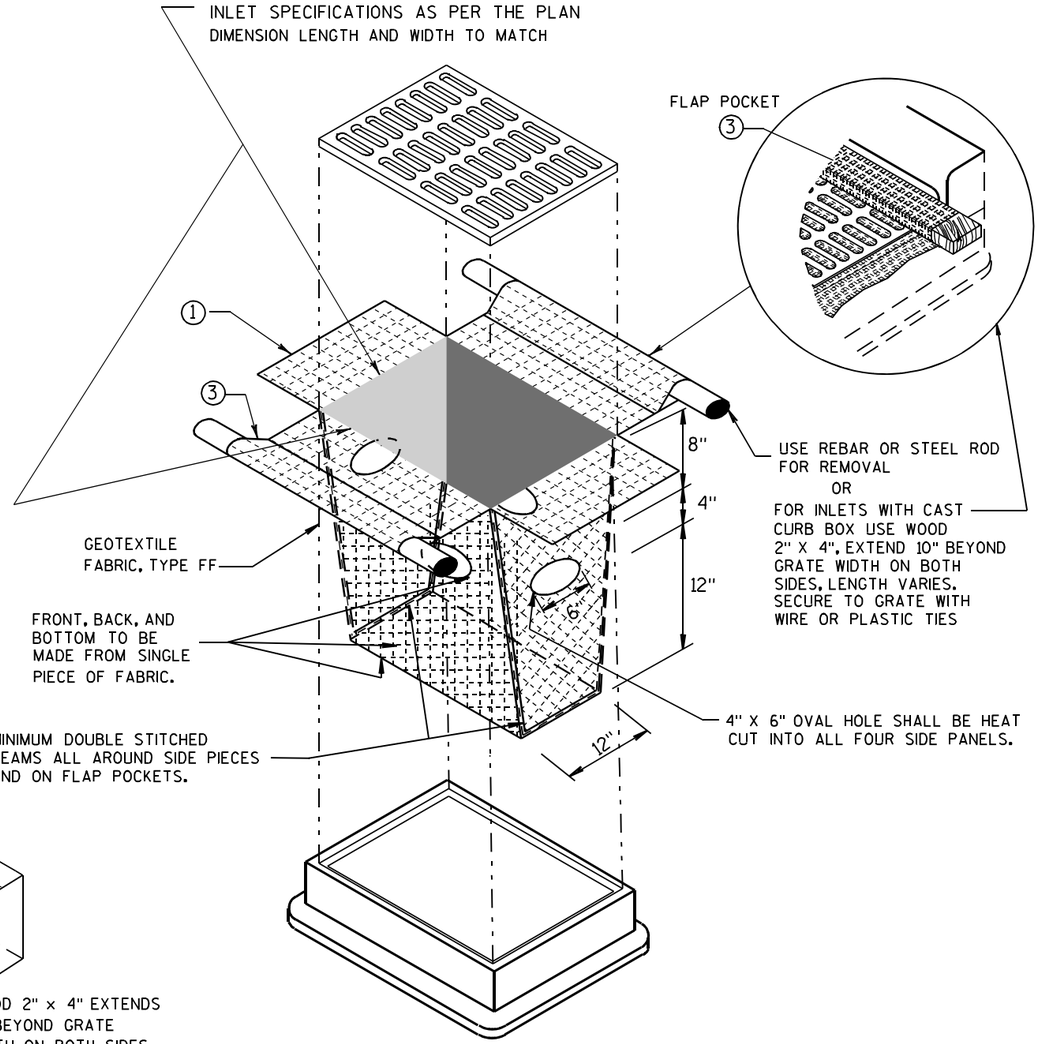


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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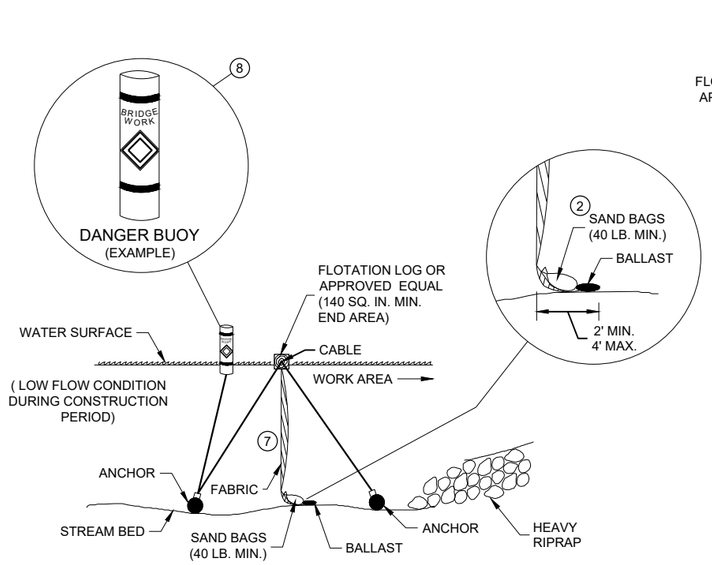
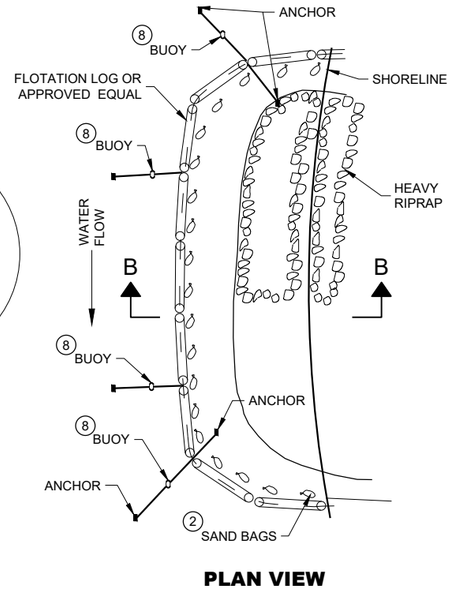
S.D.D. 8 E 10-2

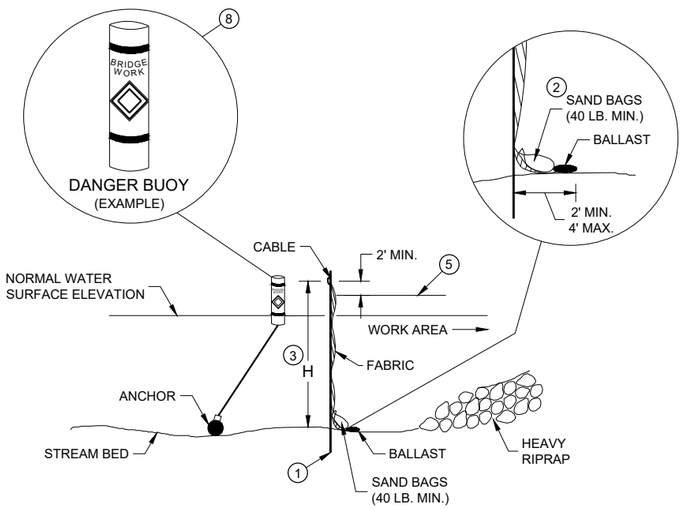


SECTION B - B

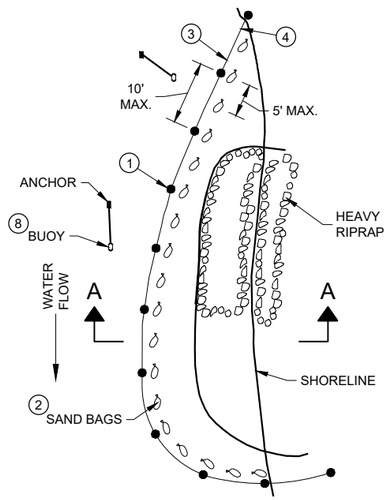


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT 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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

(1) DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

(2) SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

(3) WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.

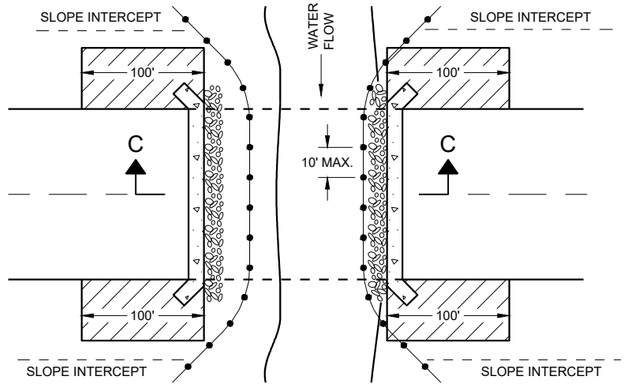
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

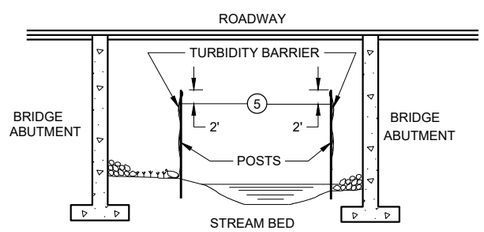
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(7) ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

(8) USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOI
ENGINEER

FHWA

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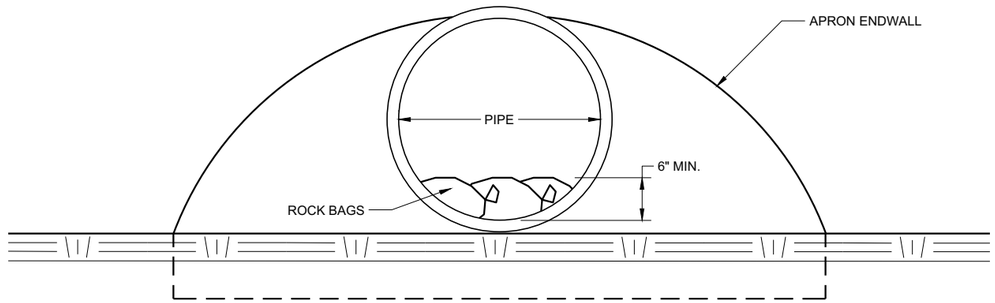
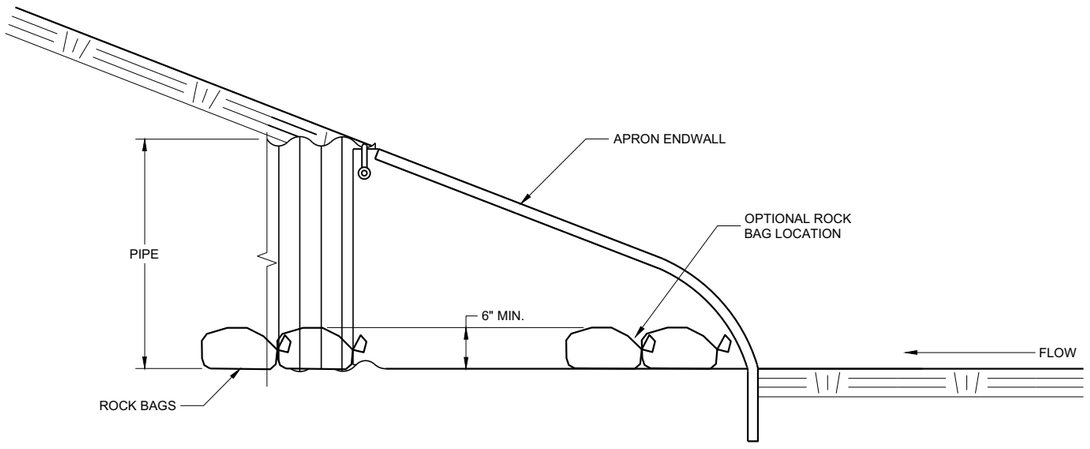
SDD 08E11 - 02



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Daniel Schave — EROSION CONTROL ENGI
FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

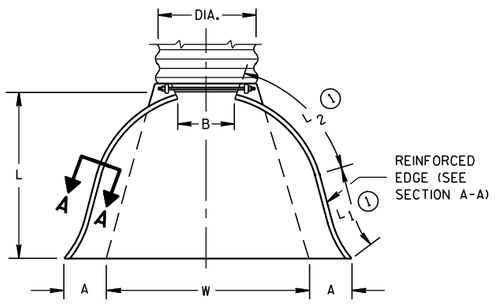
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

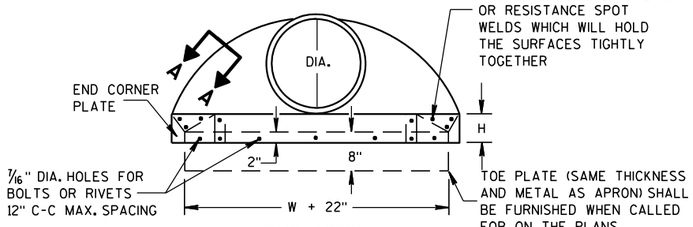
REINFORCED CONCRETE APRON ENDWALLS

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

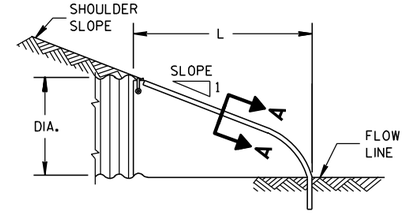
*MINIMUM
**MAXIMUM



PLAN VIEW

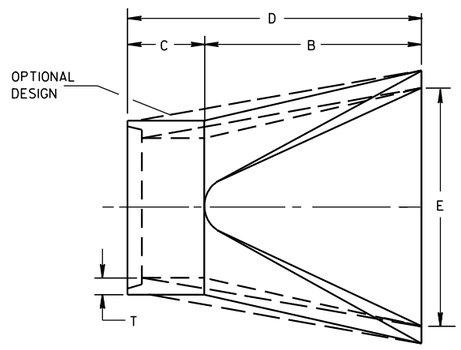


END VIEW

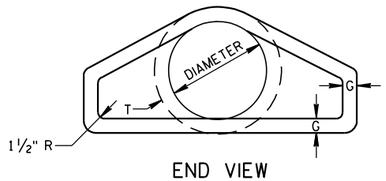


SIDE ELEVATION

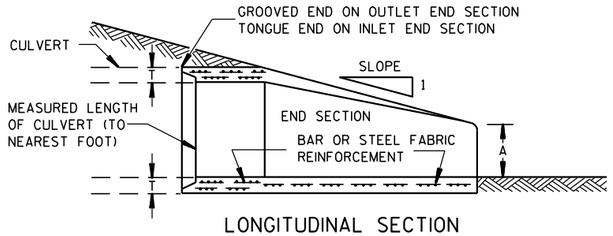
METAL ENDWALLS



PLAN

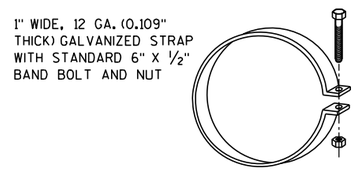


END VIEW



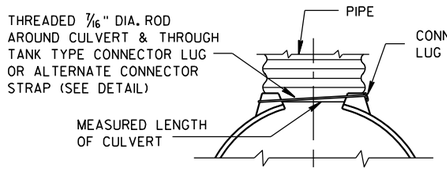
LONGITUDINAL SECTION

CONCRETE ENDWALLS

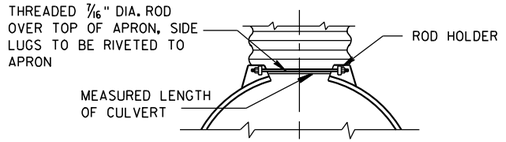


ALTERNATE FOR TYPE 1 CONNECTION

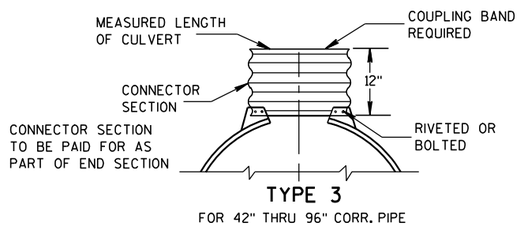
END SECTION CONNECTOR STRAP



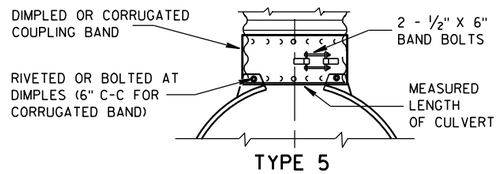
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

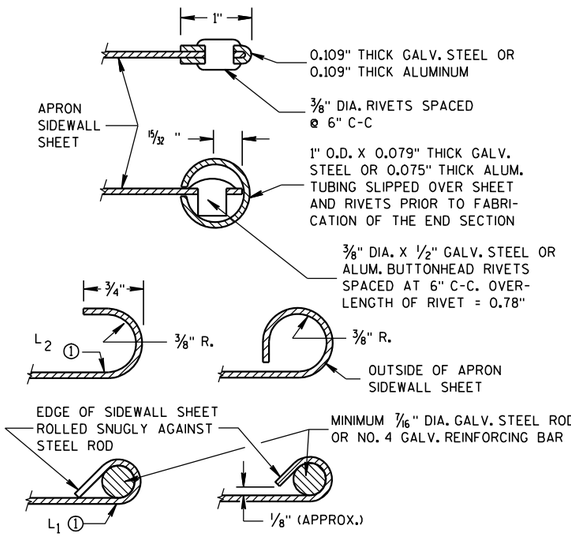
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

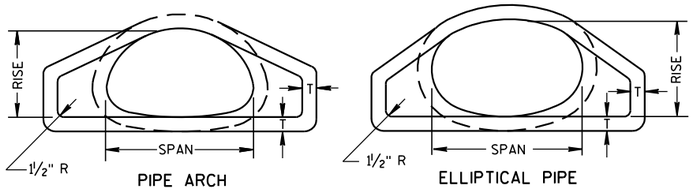
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

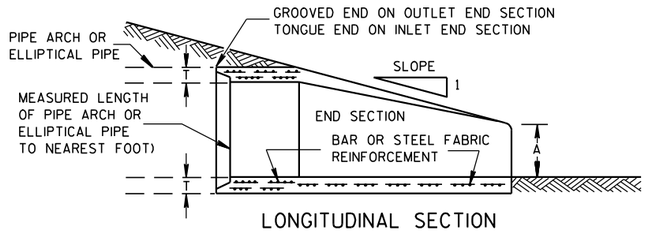
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

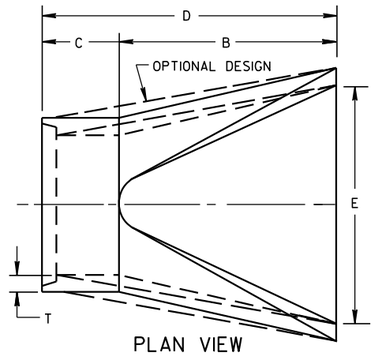
S.D.D. 8 F 1-11



END VIEW

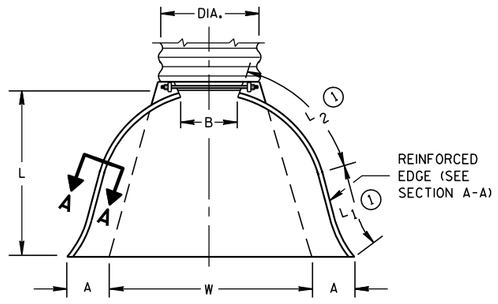


LONGITUDINAL SECTION

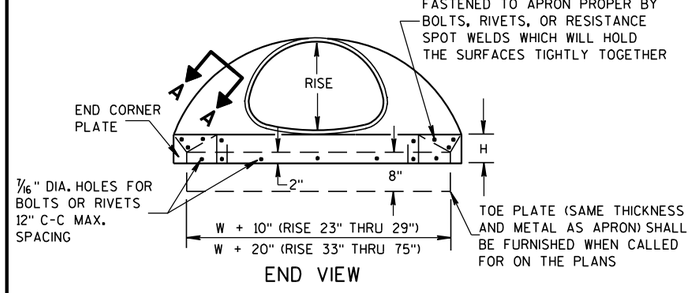


PLAN VIEW

CONCRETE ENDWALLS

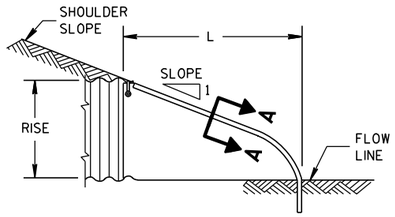


PLAN VIEW



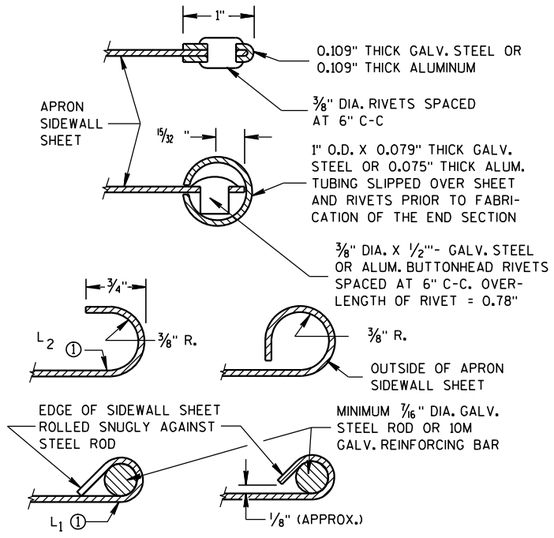
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

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

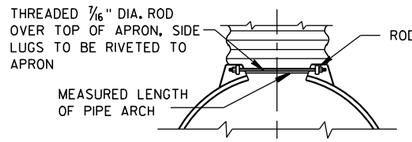
REINFORCED CONCRETE PIPE ARCH

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

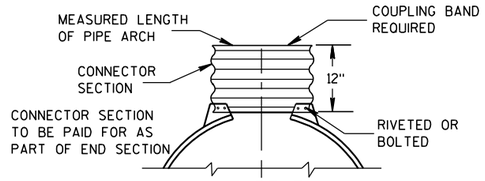
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



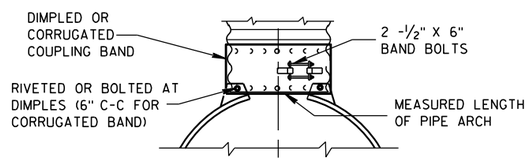
TYPE 2

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

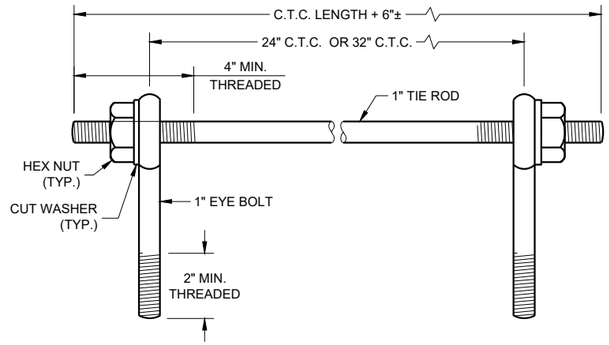
FHWA

6

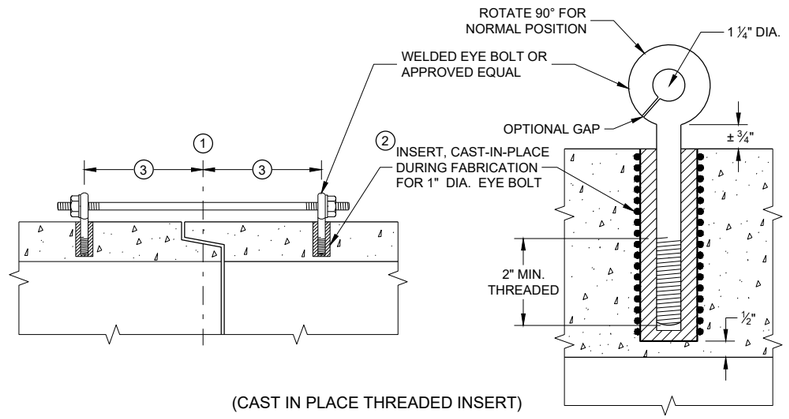
S.D.D. 8 F 2-1

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.

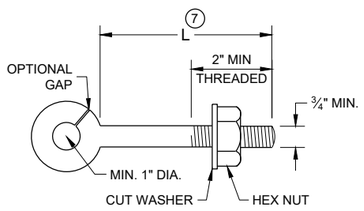
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

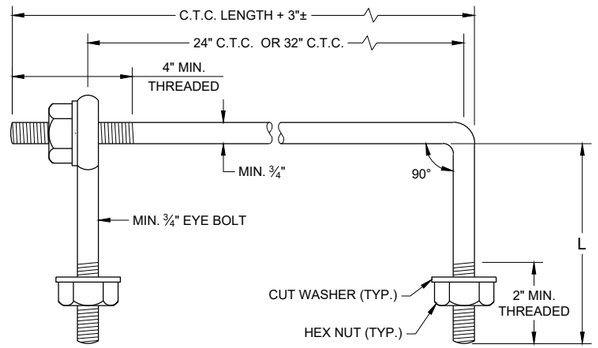
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

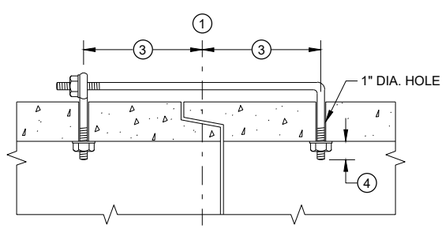


EYE BOLT (7)

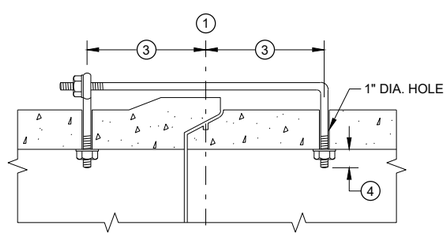
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

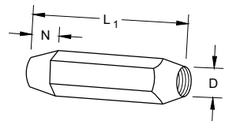
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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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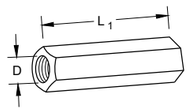
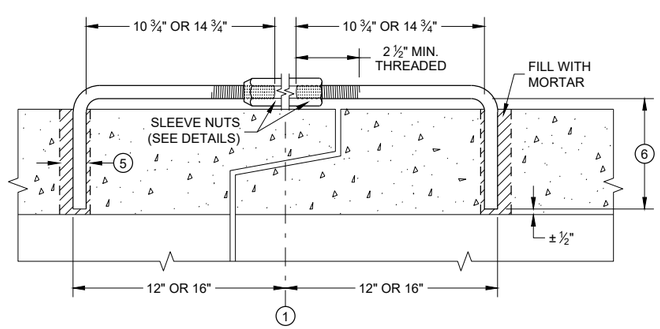


PLAIN

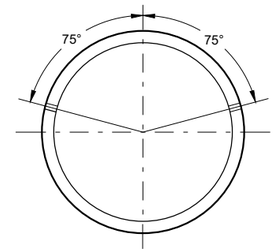
RIGHT AND LEFT THREADS

SLEEVE NUTS



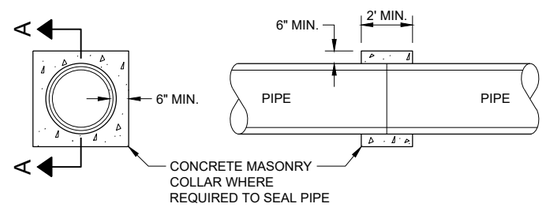
LONGITUDINAL SECTION

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

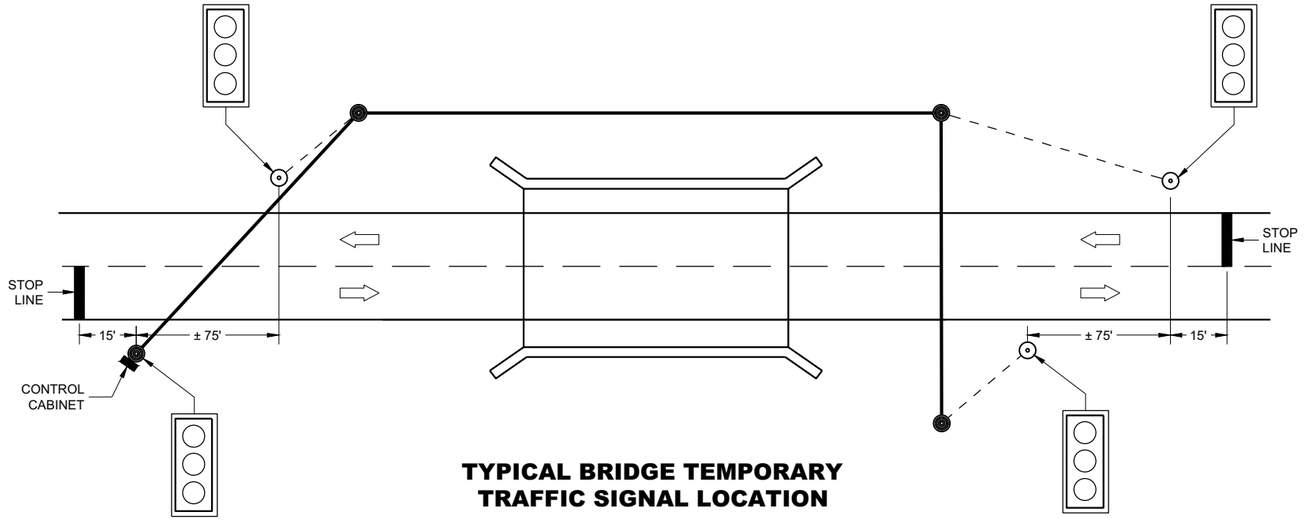
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

SDD 08F04 - 08

SDD 08F04 - 08



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

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

GENERAL NOTES

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

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

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

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

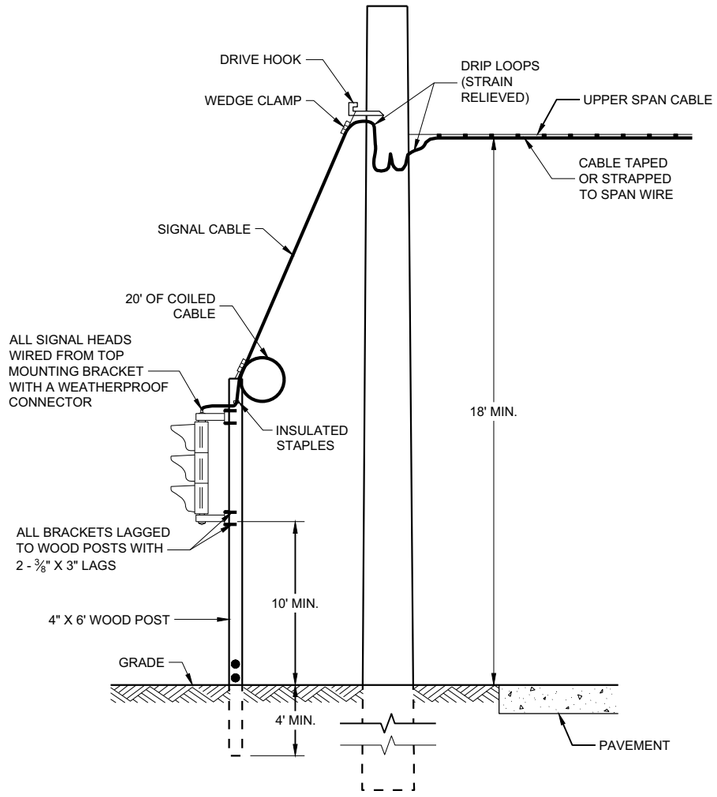
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

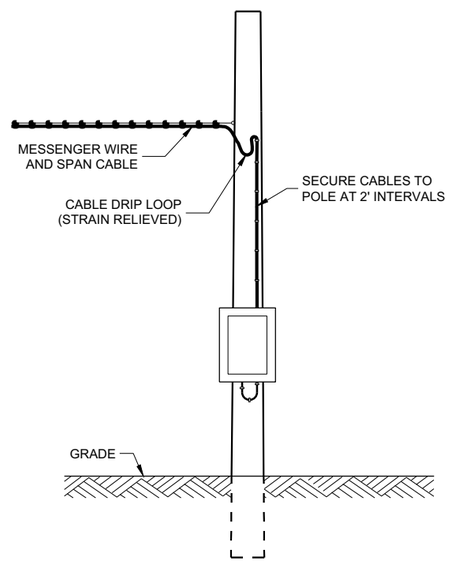
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

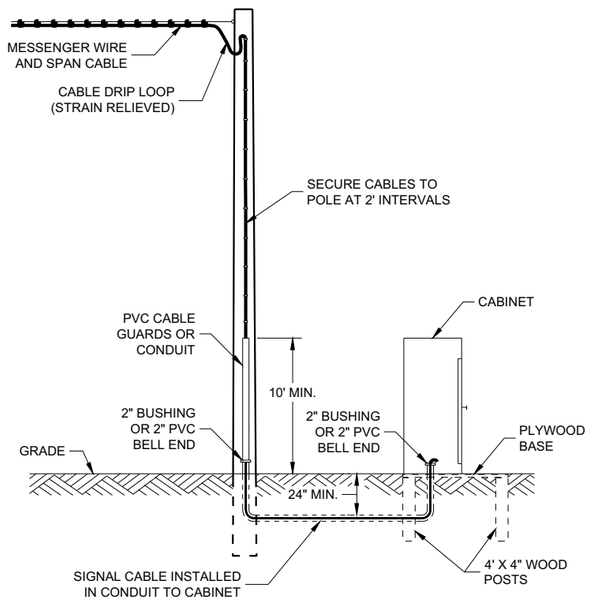
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

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

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

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

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

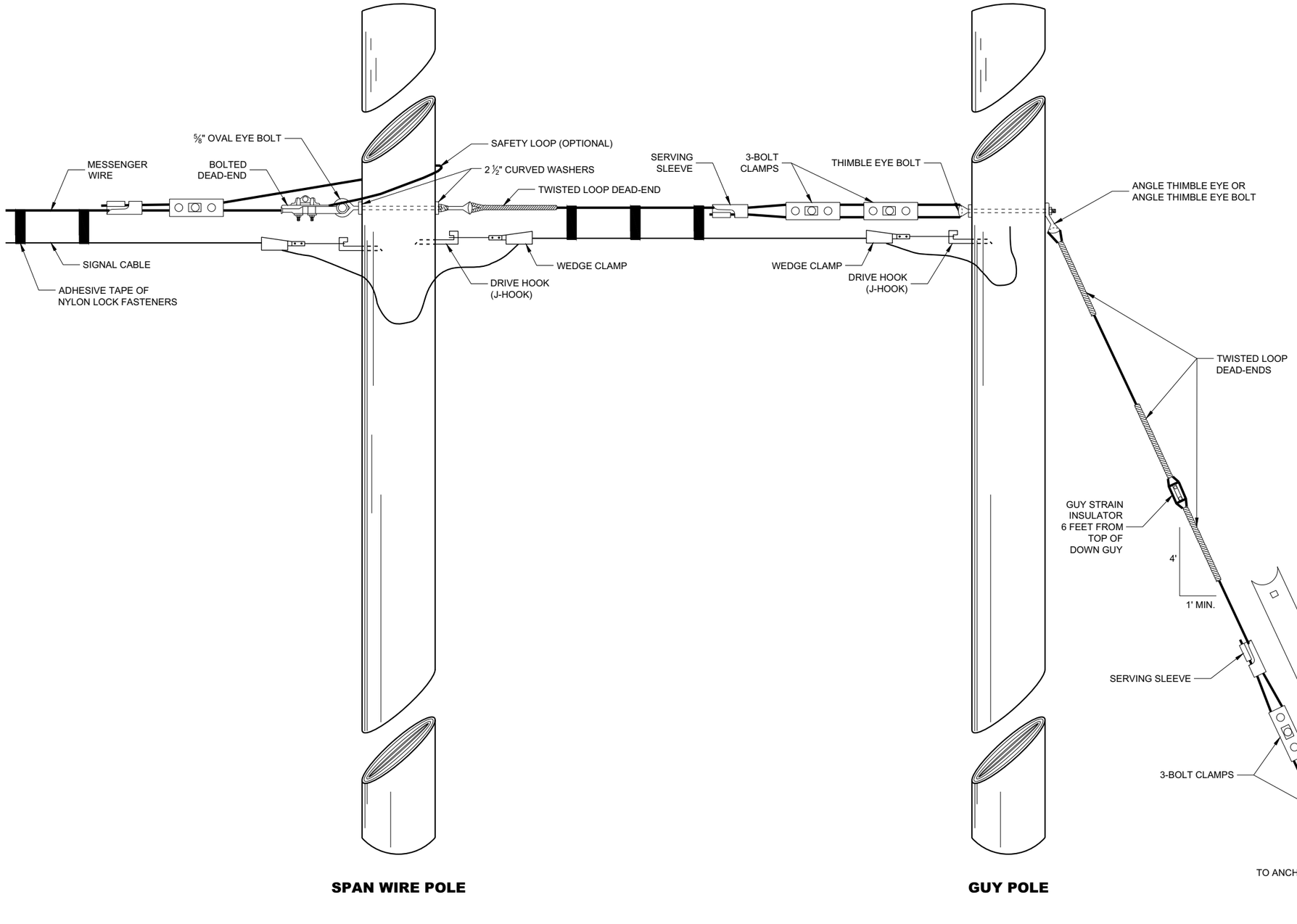
SDD09G02 - 05a

6

SDD09G02 - 05a

GENERAL NOTES

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



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER

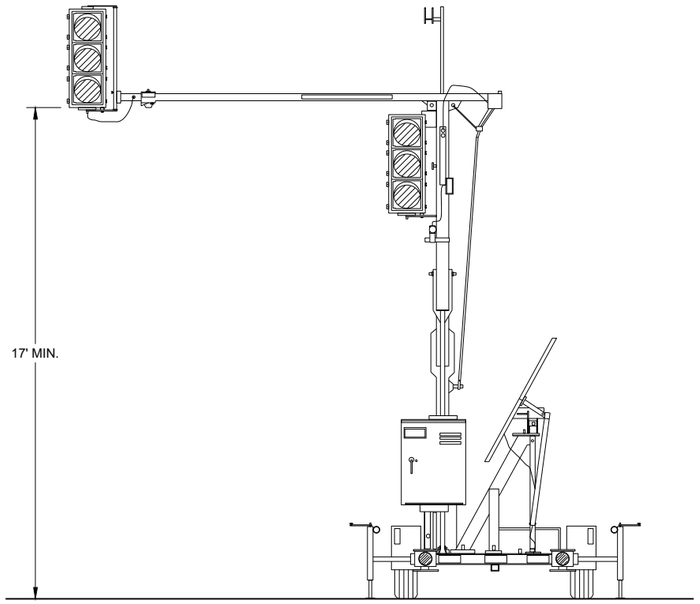
FHWA

6

SDD09G02 - 05b

6

SDD09G02 - 05b

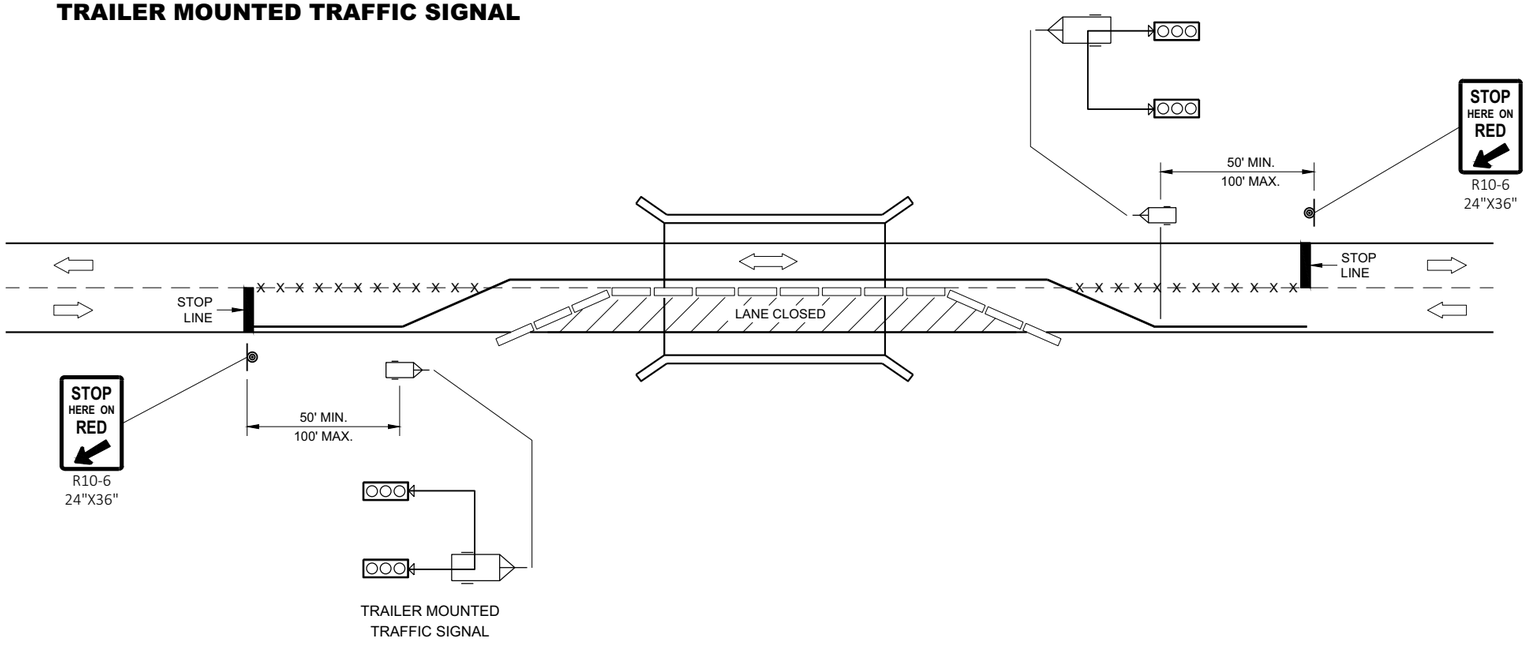


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

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



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

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

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD09G02 - 05c

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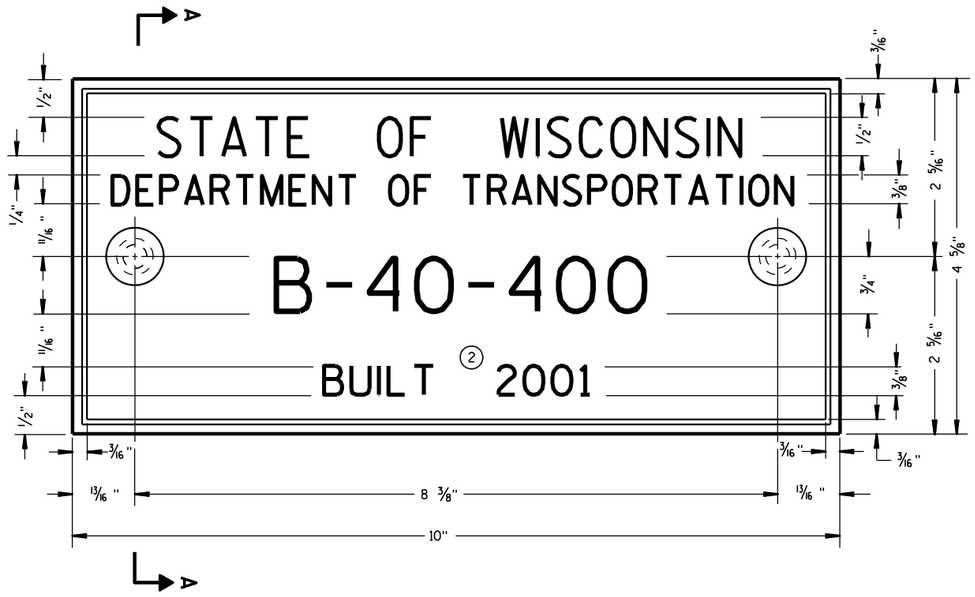
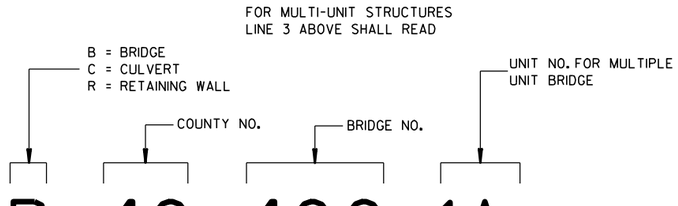
SDD09G02 - 05c



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

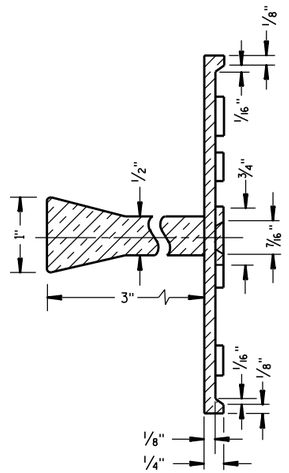
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

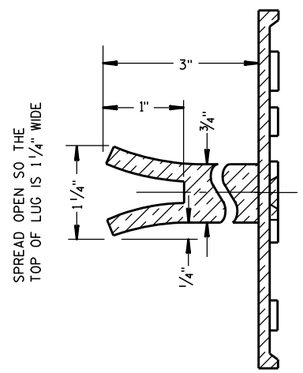
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

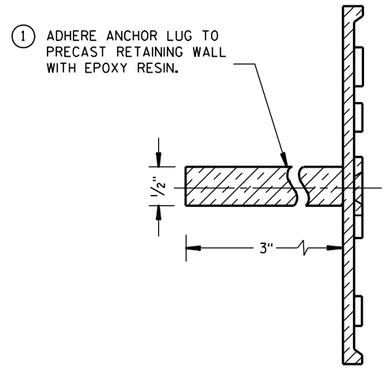
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE — /S/ Scot Beck — CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

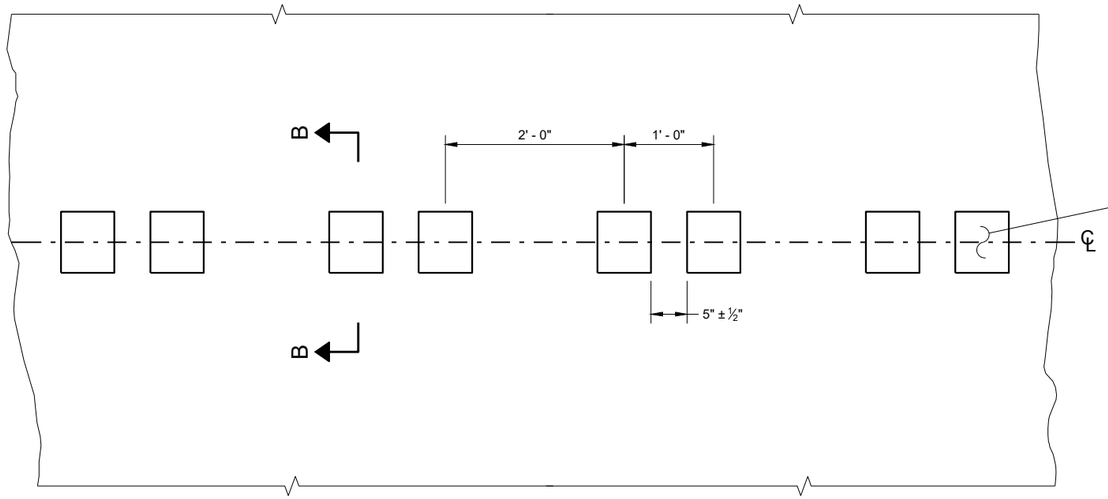
6

S.D.D. 12 A 3-10

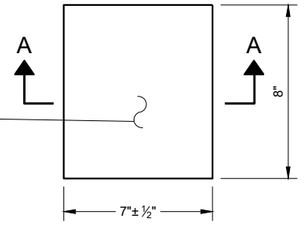
GENERAL NOTES

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

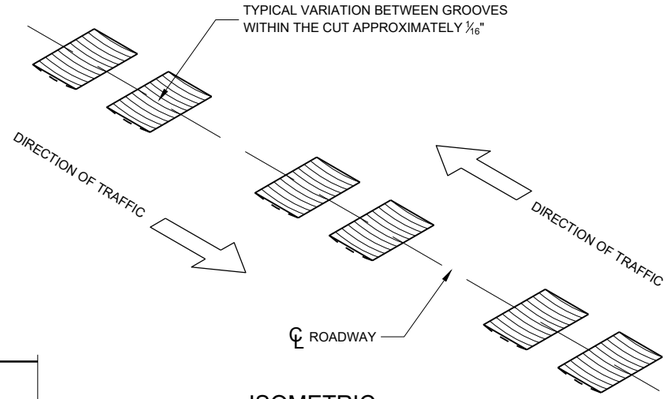
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



PLAN DETAIL VIEW



PLAN VIEW
(SINGLE GROOVE)



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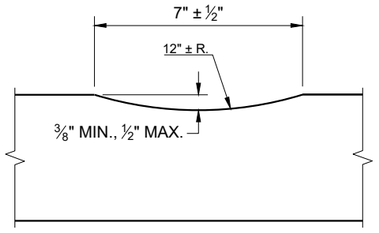
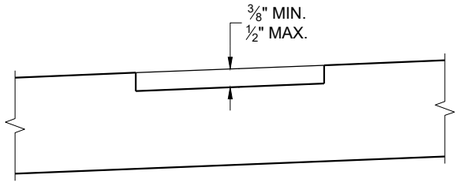
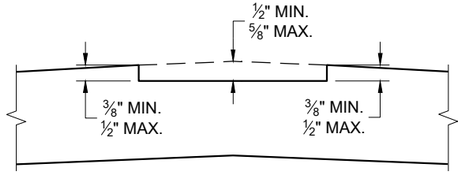


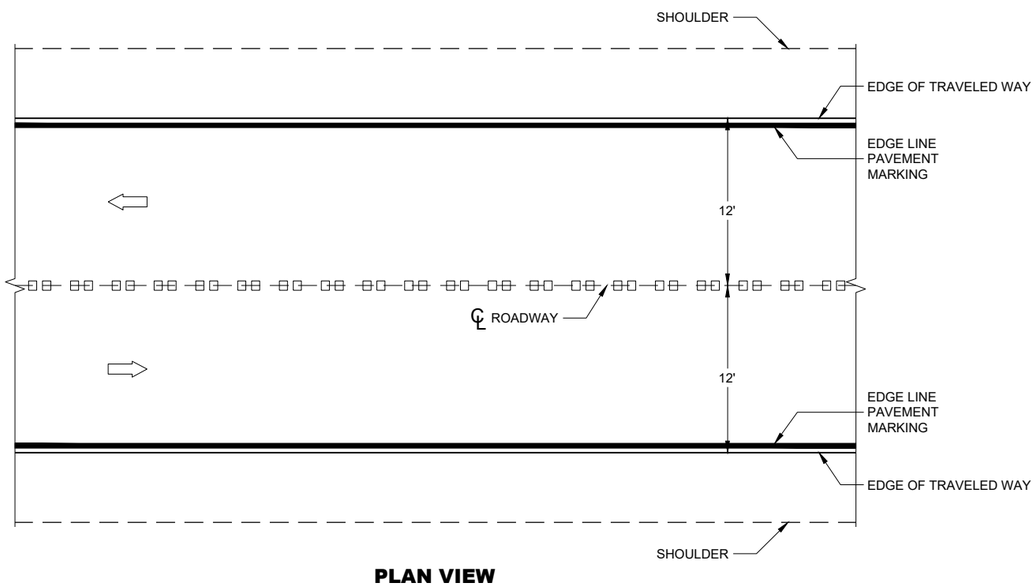
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

CENTERLINE RUMBLE STRIPS - ASPHALT

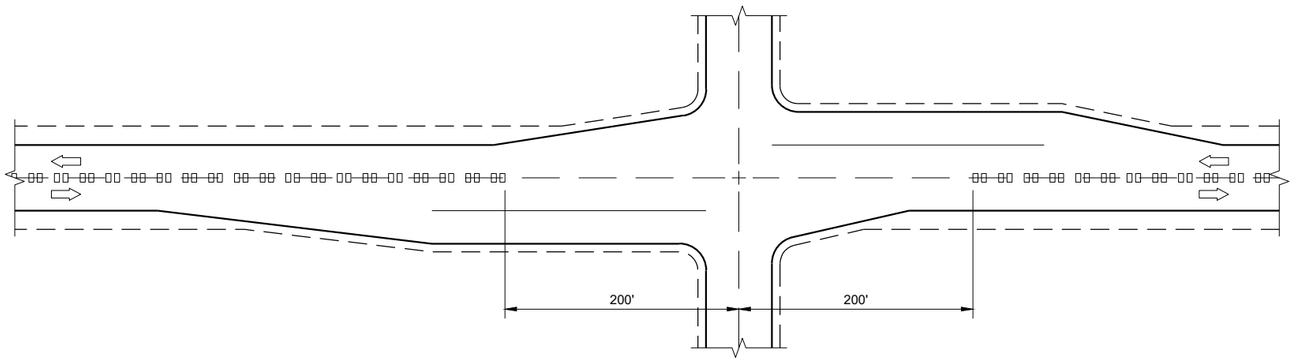
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

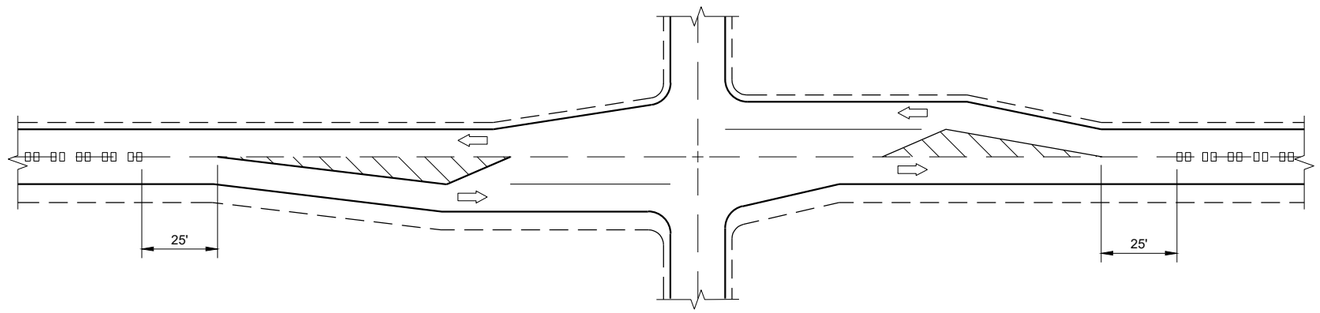
SDD 13A11 - 04a

6

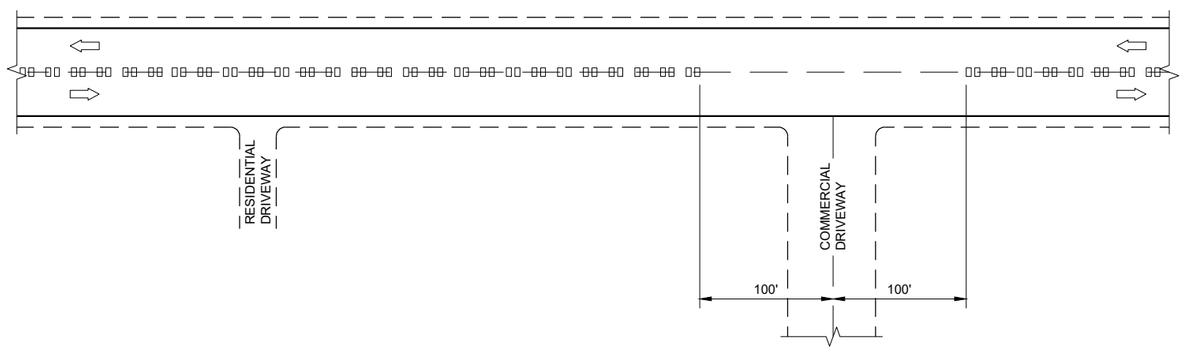
SDD 13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



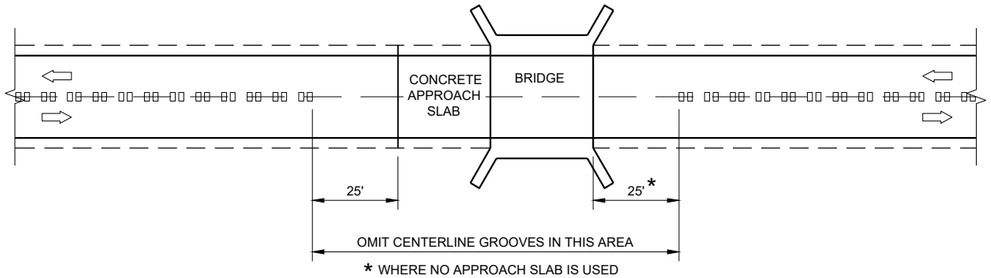
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



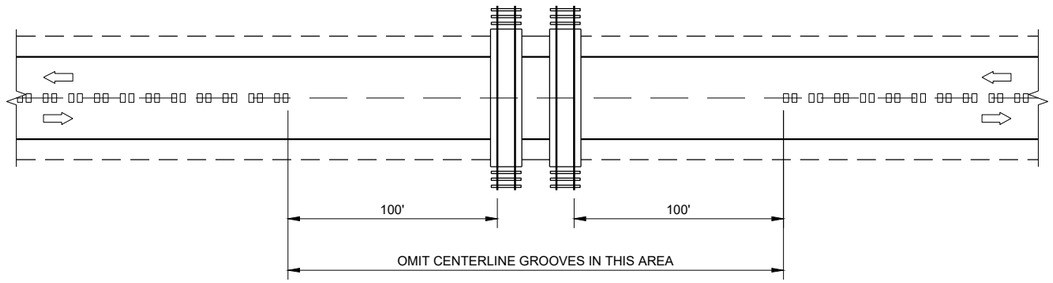
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

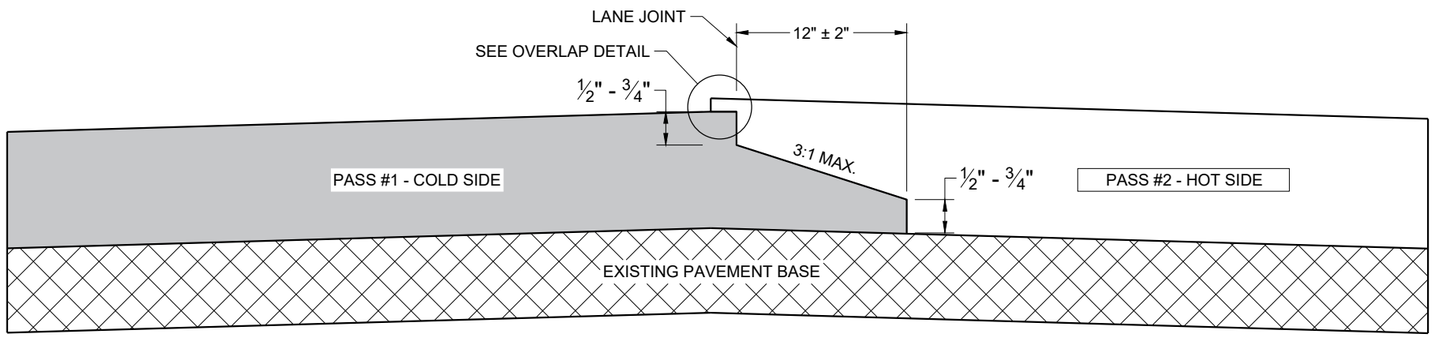
FHWA

6

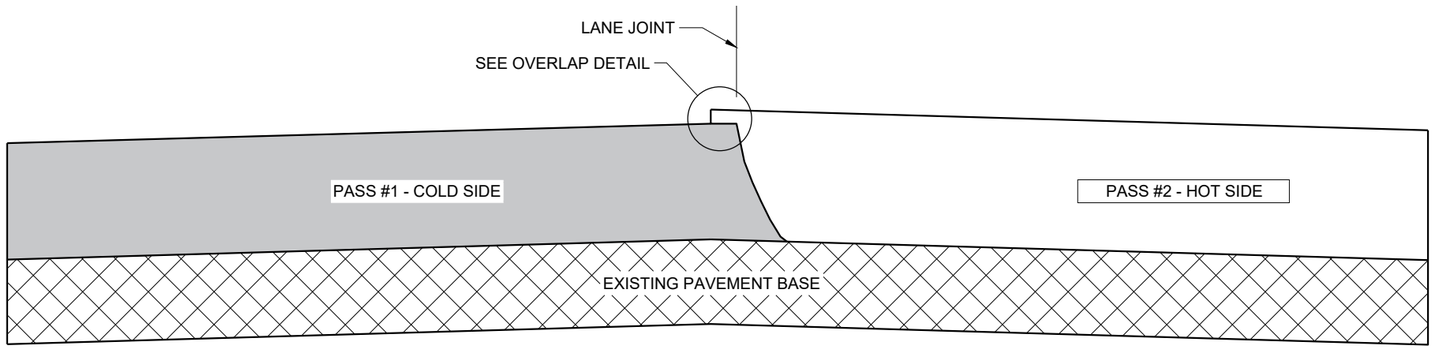
SDD 13A11 - 04d

6

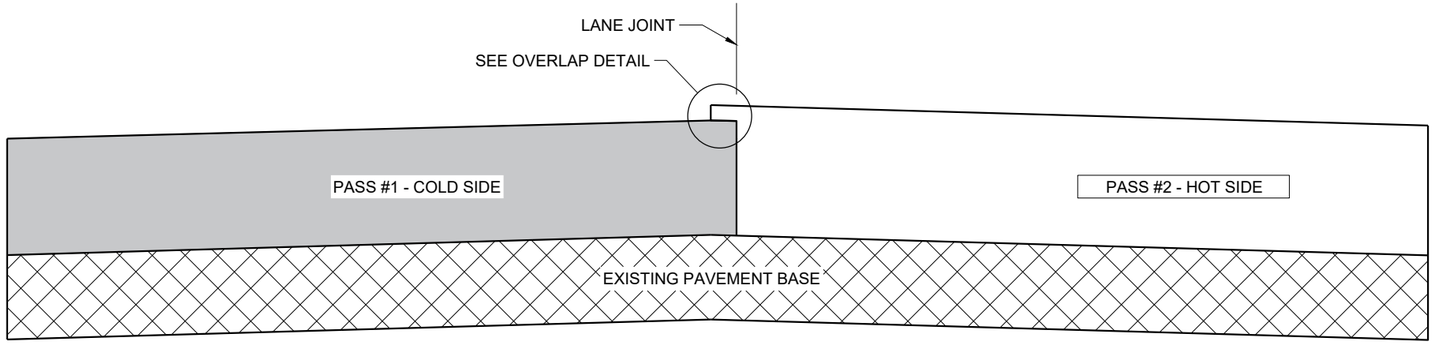
SDD 13A11 - 04d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

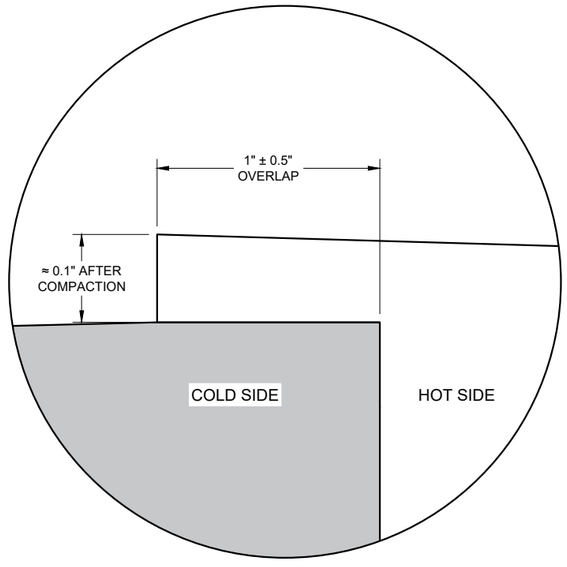
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

6

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SDD 13C19 - 03

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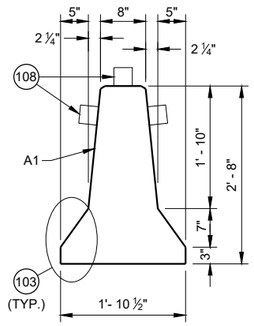
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

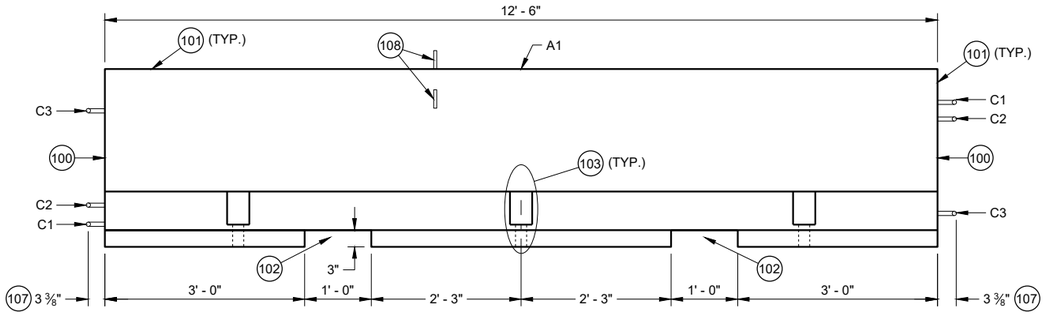
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



CROSS SECTION



PROFILE VIEW

GENERAL NOTES

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

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

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

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

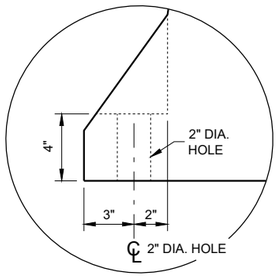
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

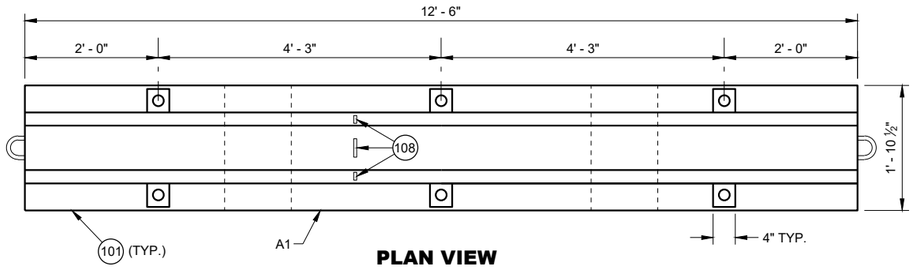
(106) 1" MIN. CLEAR COVER

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

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

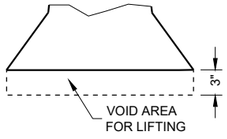


ANCHOR BLOCK DETAIL

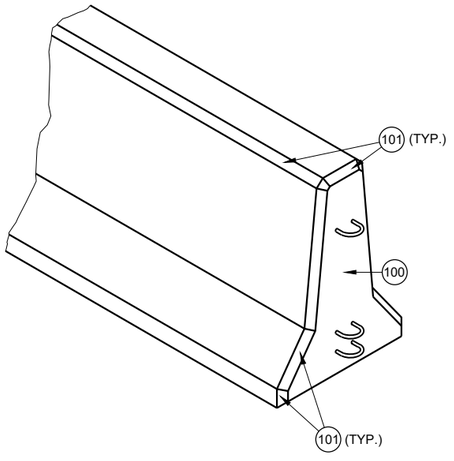


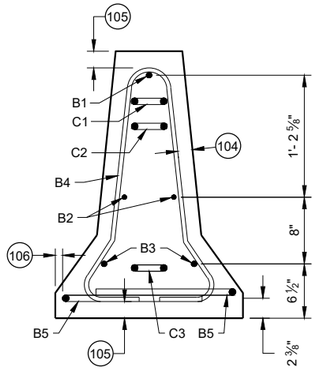
PLAN VIEW

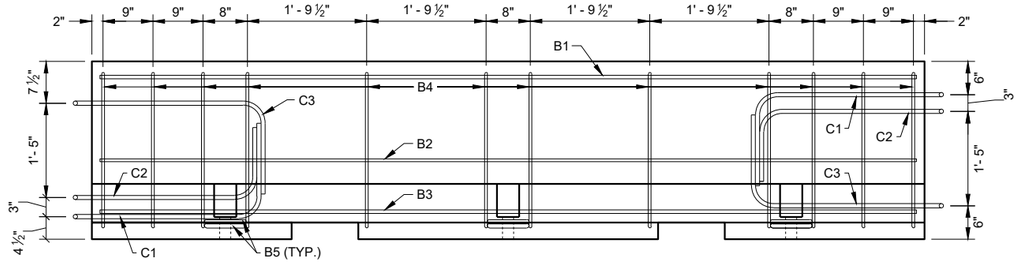
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)







PROFILE VIEW

TEMPORARY BARRIER REINFORCEMENT

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 14B07-16a

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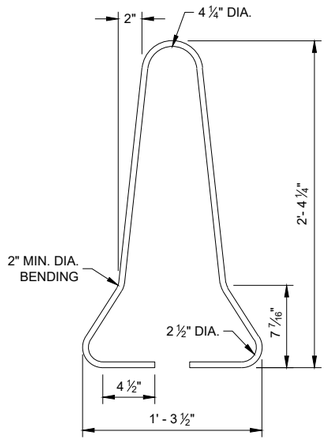
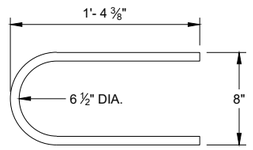
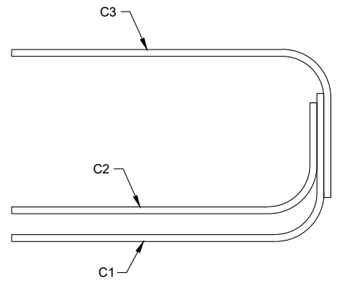


B4 BAR DETAIL

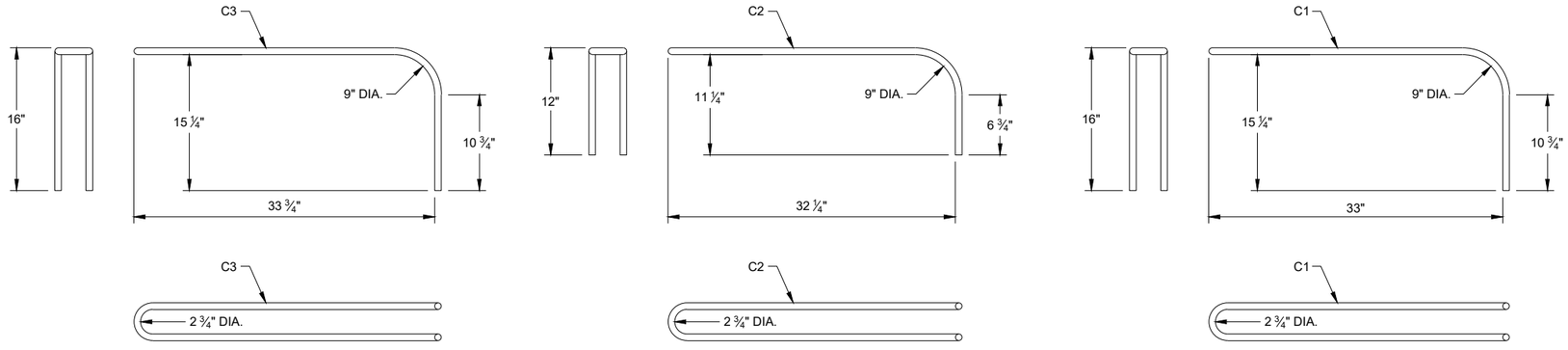


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY

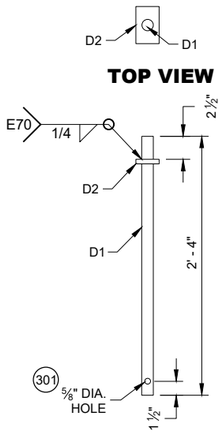


C BAR DETAILS

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

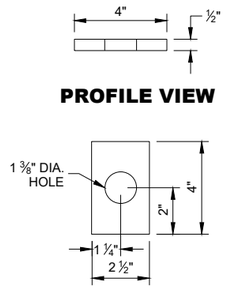
6
SDD 14B07-16b



TOP VIEW

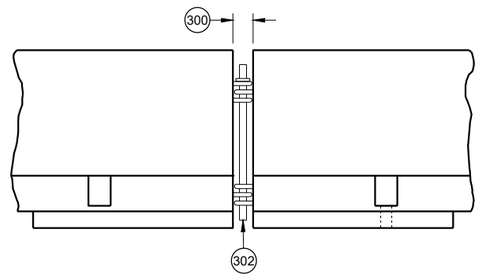
PROFILE VIEW

CONNECTOR PIN ASSEMBLY



PROFILE VIEW

TOP VIEW D2



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

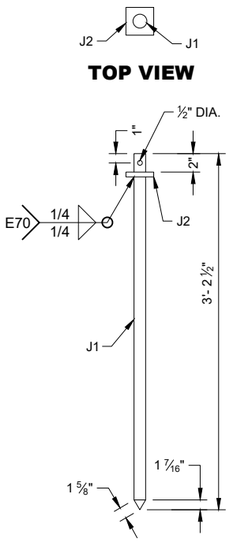
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

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

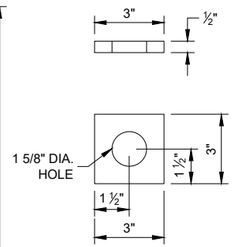
309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



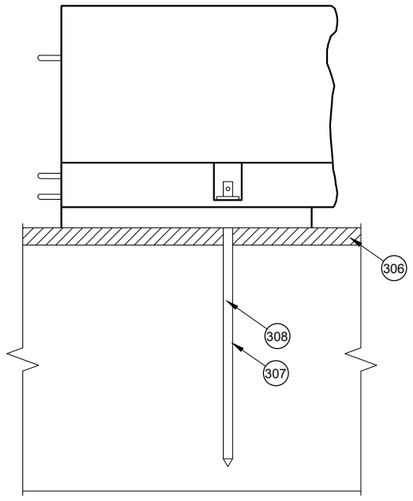
TOP VIEW

PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY

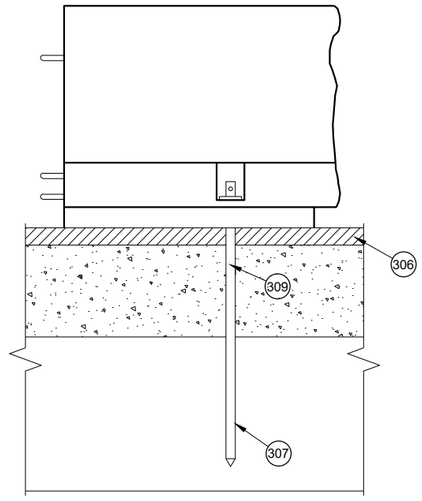


TOP VIEW J2



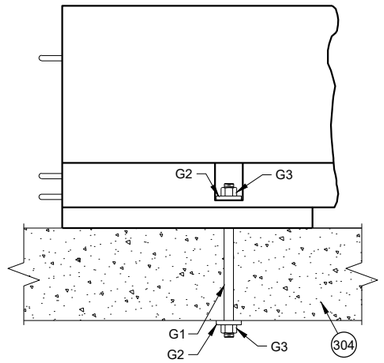
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



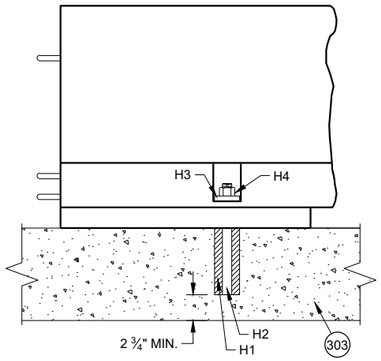
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

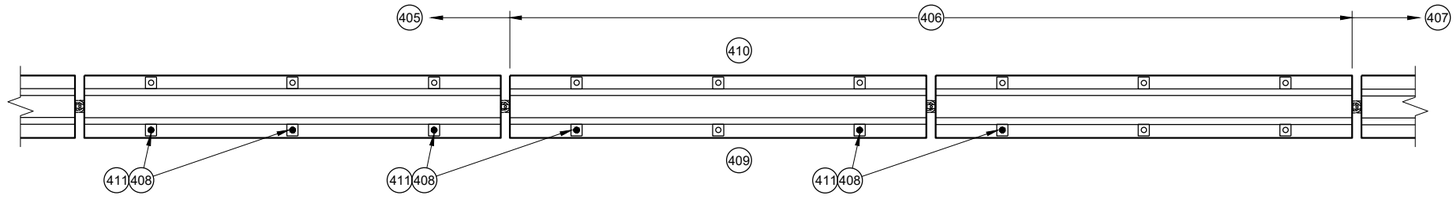
THROUGH BOLT ANCHOR INSTALLATION (305)



SIDE VIEW

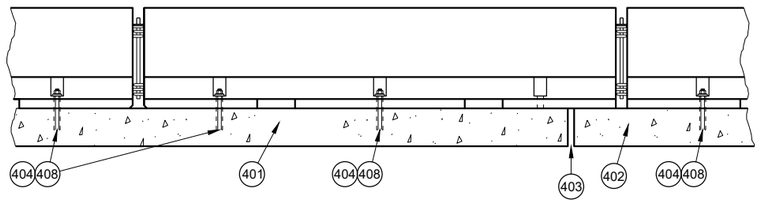
ADHESIVE ANCHOR INSTALLATION (305)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"



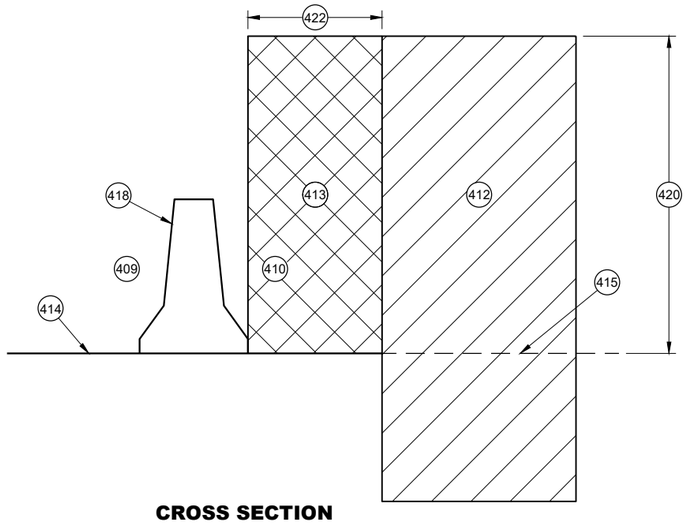
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



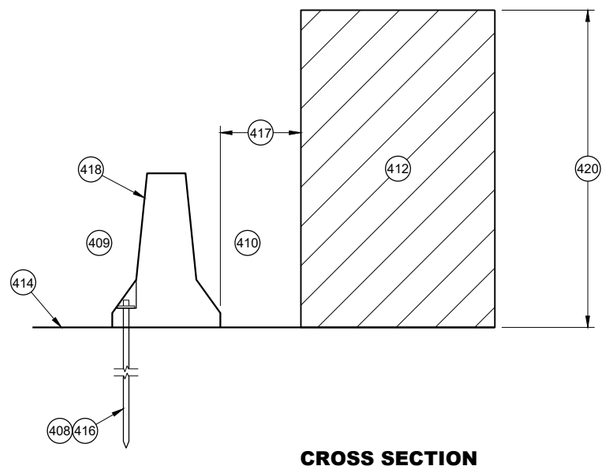
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



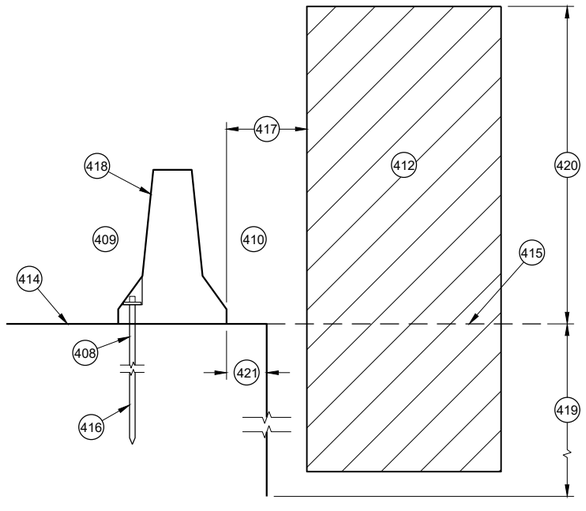
CROSS SECTION

FREE STANDING BARRIER



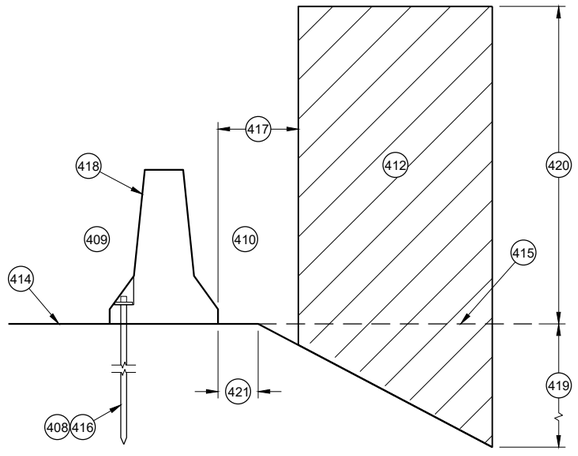
CROSS SECTION

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



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

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

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

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

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

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

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

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

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B07-16d

GENERAL NOTES

(500) EXISTING RIGID BARRIERS (VARIES)

(501) TEMPORARY BARRIER

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

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

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

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

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

(507) VERTICAL BARRIER

(508) SAFETY SHAPE BARRIER

(509) SINGLE SLOPE BARRIER

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

(511) BENT THRIE BEAM TO FIT.

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

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

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

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

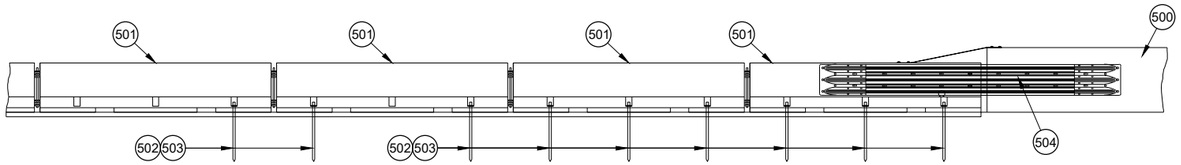
(516) CUT WOOD BLOCK TO FIT.

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

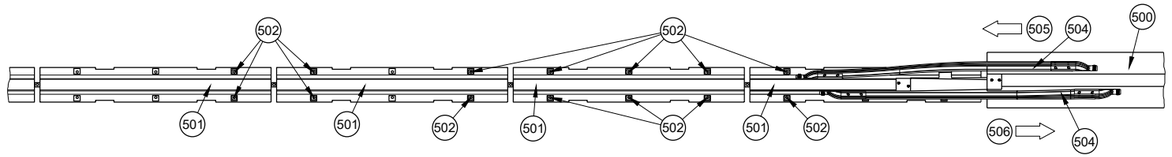
(518) CAP ASSEMBLY

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

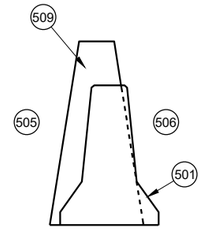
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



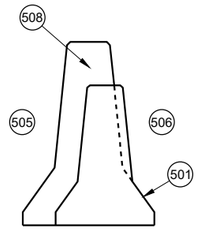
PROFILE VIEW



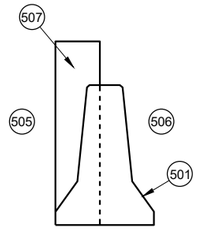
PLAN VIEW
TRANSITION TO RIGID BARRIER



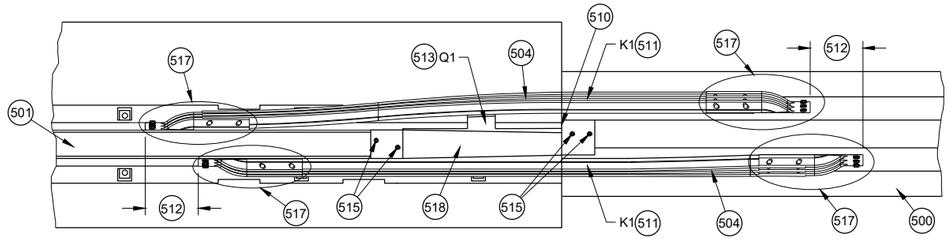
CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE



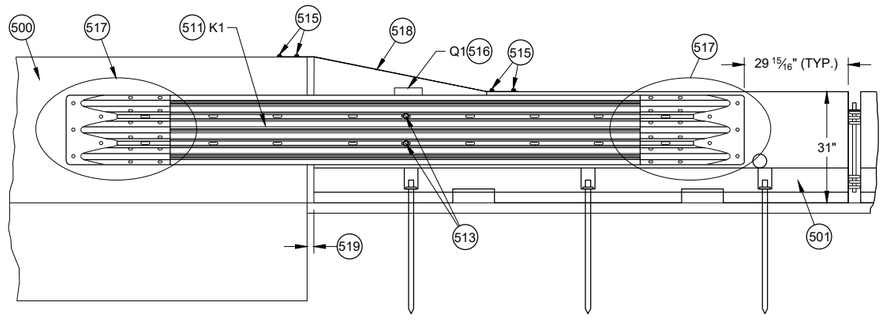
CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE



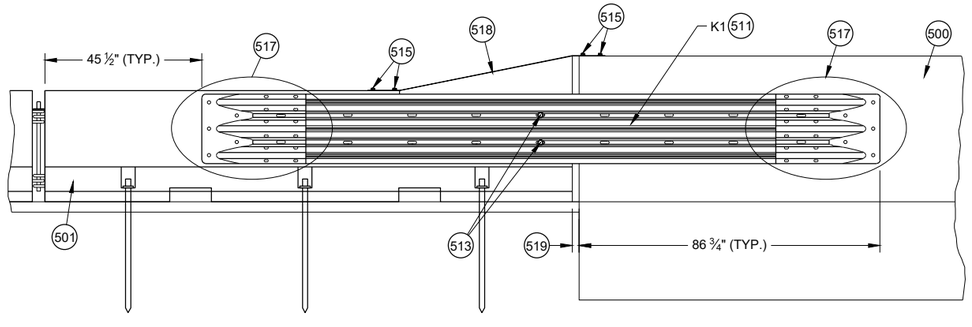
CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL



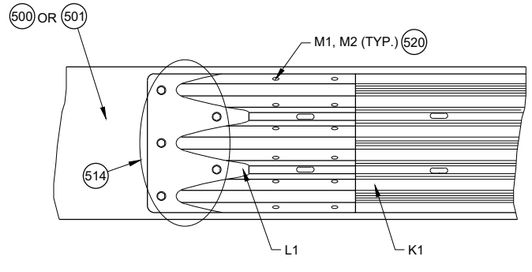
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER



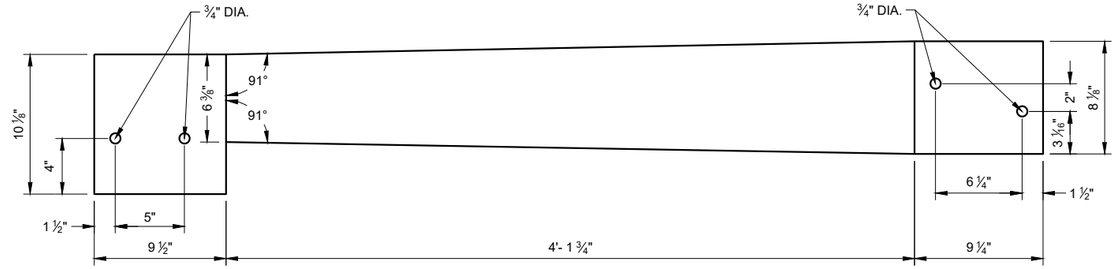
517 DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

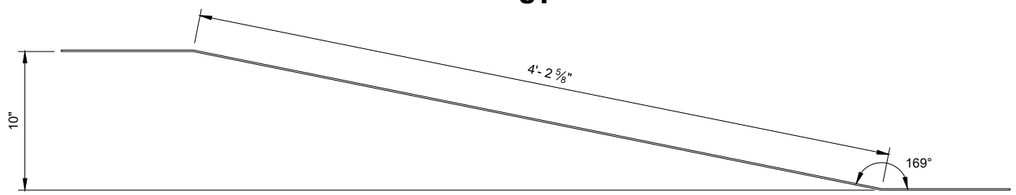
6

SDD 14B07-16e



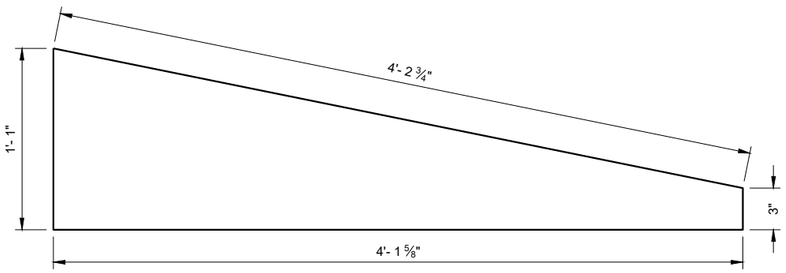
TOP VIEW

S1



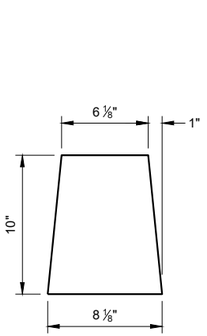
ELEVATION VIEW

S1



SIDE VIEW

S3



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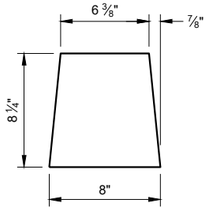

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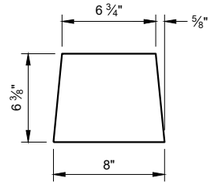

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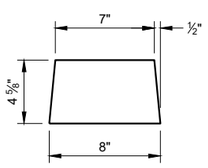

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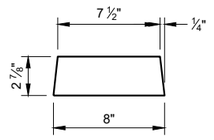

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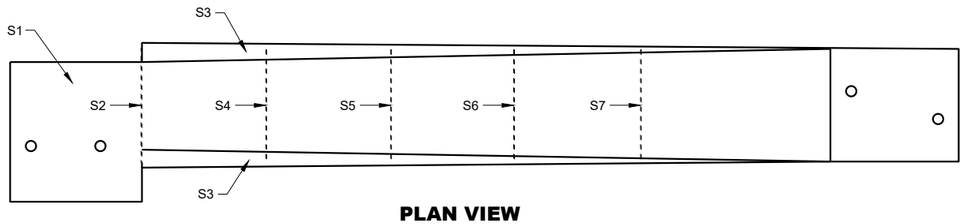
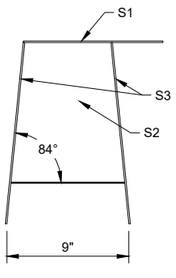
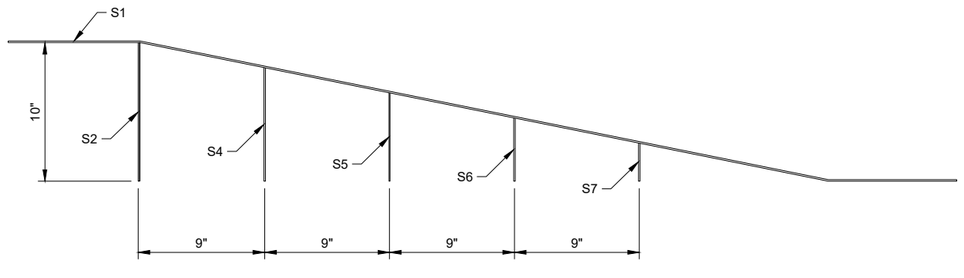


PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

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

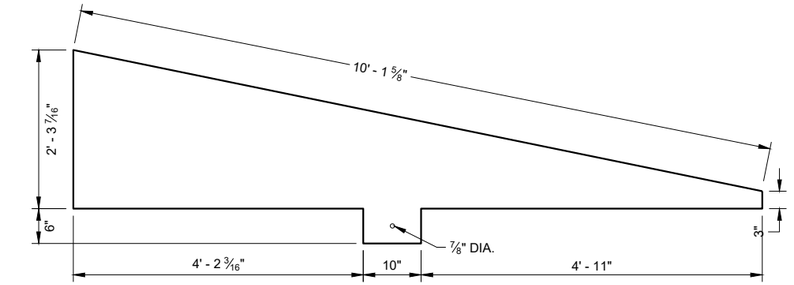
(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

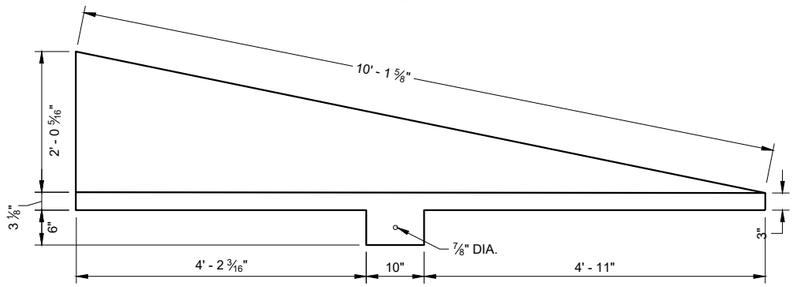
6

SDD 14B07-16f



SIDE VIEW
T4

END VIEW



SIDE VIEW
T3

END VIEW

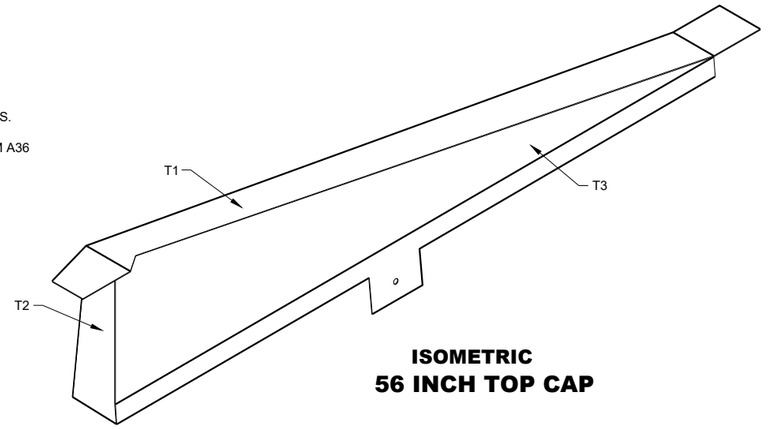
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

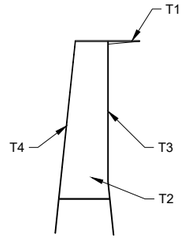
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

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

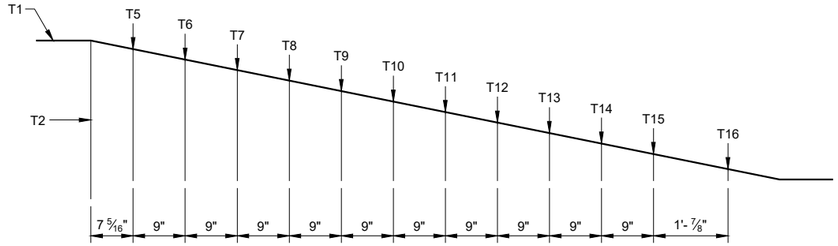
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



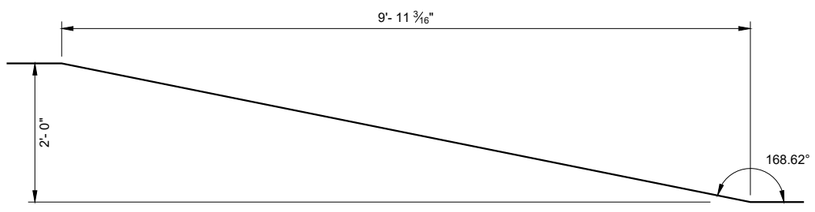
ISOMETRIC
56 INCH TOP CAP



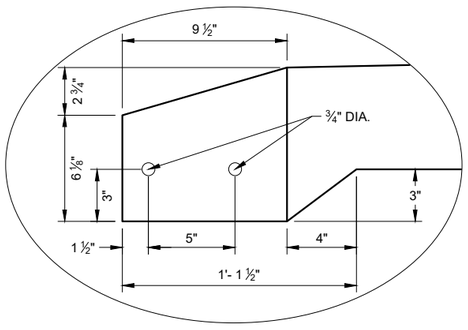
END VIEW
56 INCH TOP CAP



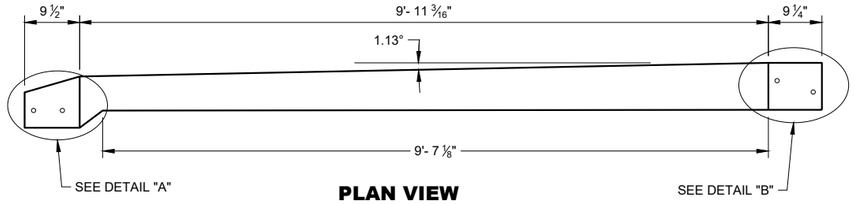
SIDE VIEW (700)
56 INCH TOP CAP



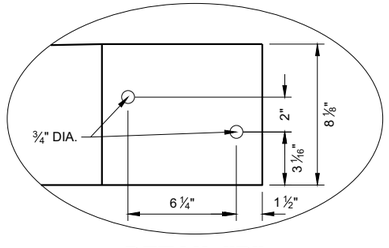
SIDE VIEW
TOP PLATE T1



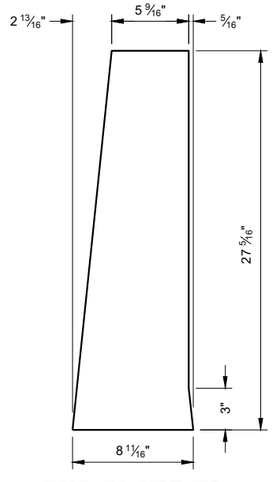
DETAIL "A"



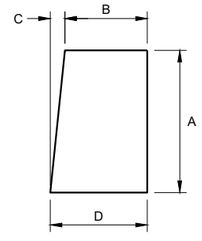
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2



GUSSET PLATES
T5 - T16

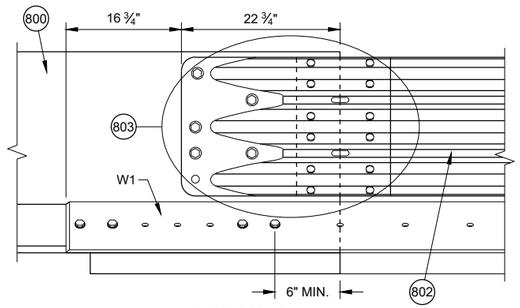
GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"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

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

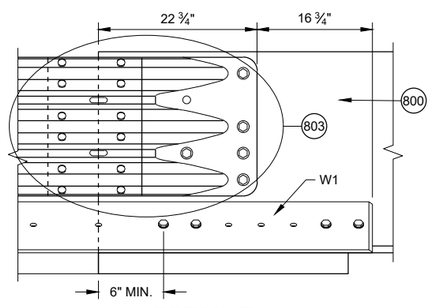
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16g



DETAIL D



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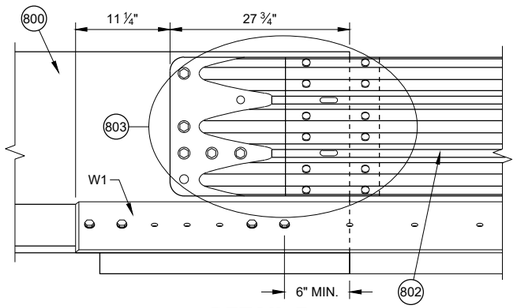

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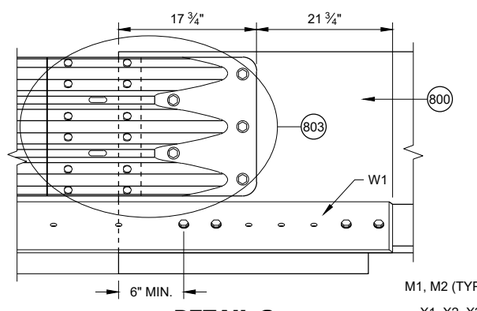
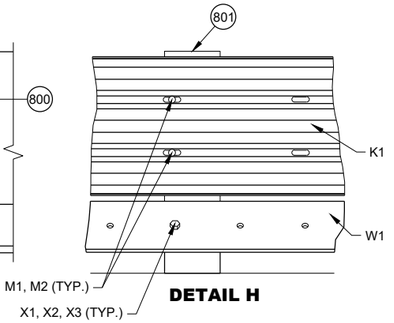
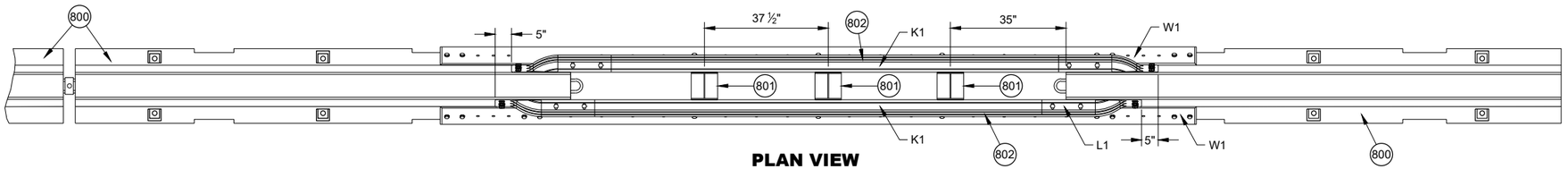


DETAIL G



DETAIL H



PLAN VIEW

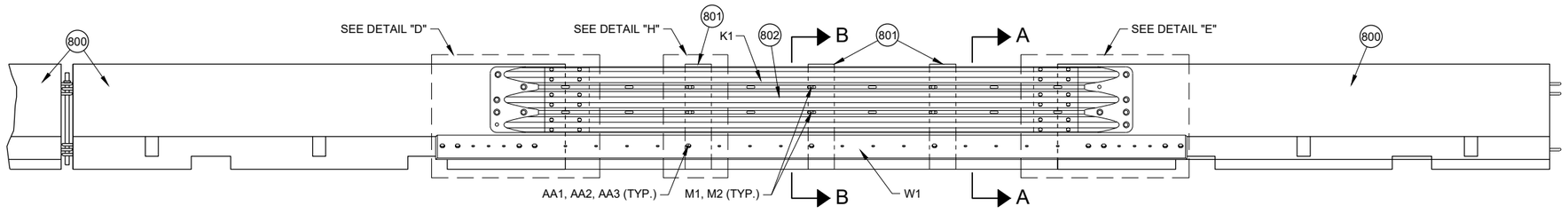
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

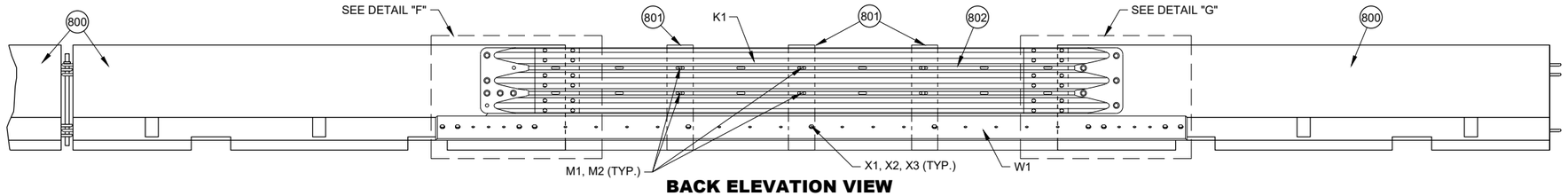
(801) GAP STIFFENER ASSEMBLY

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

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



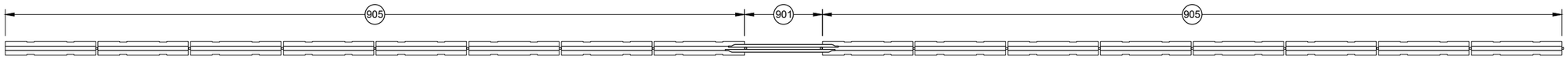
BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

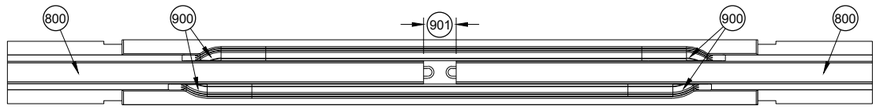
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16h



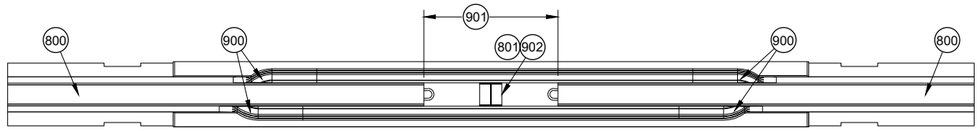
PLAN VIEW
GAP WITHIN SPACING



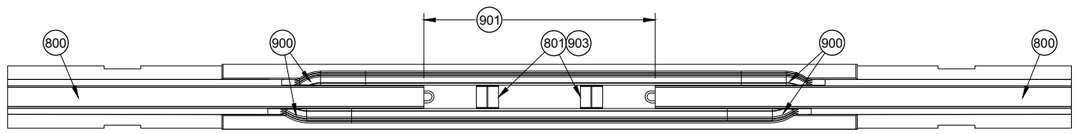
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

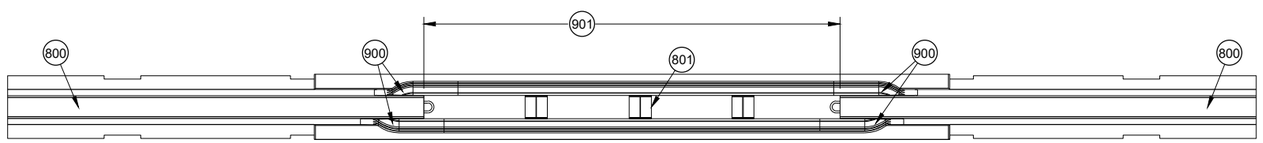
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING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



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



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



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

6

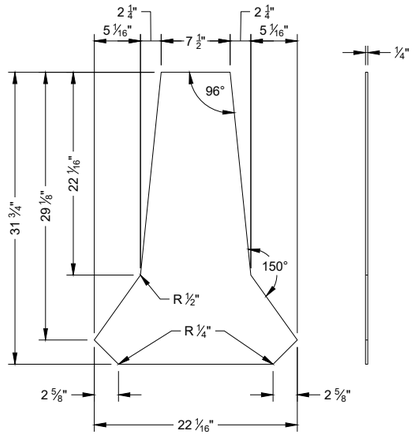
SDD 14B07-16i

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

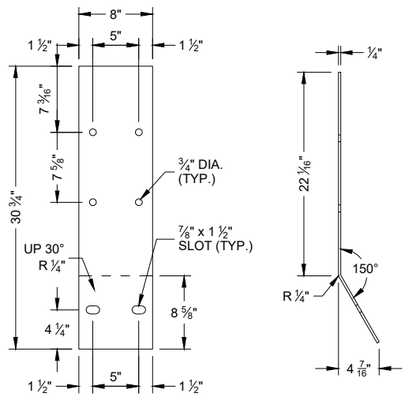
6

SDD 14B07-16i



PROFILE VIEW SIDE VIEW

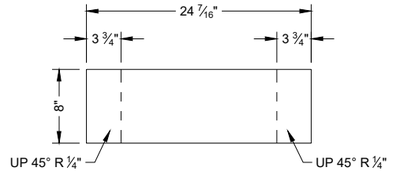
STIFFENER ASSEMBLY CENTER PANEL U1



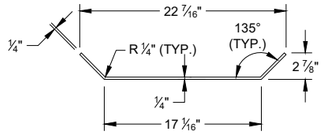
FLAT PATTERN

SIDE VIEW

STIFFENER ASSEMBLY SIDE PANEL U2

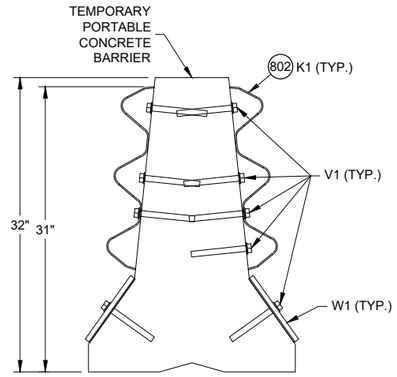


FLAT PATTERN

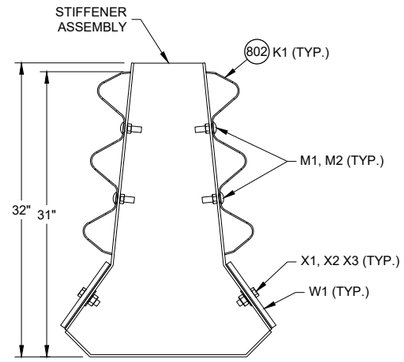


PROFILE VIEW

STIFFENER ASSEMBLY BOTTOM PANEL U3

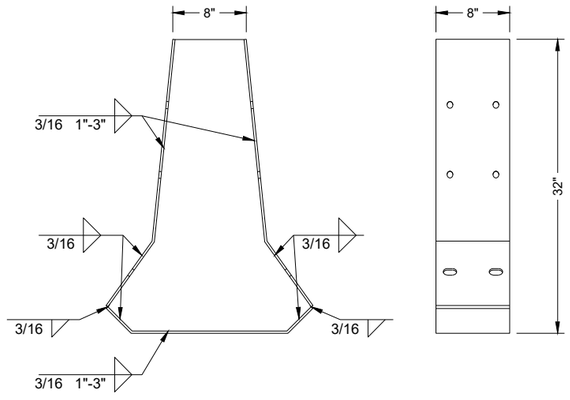


SECTION A - A



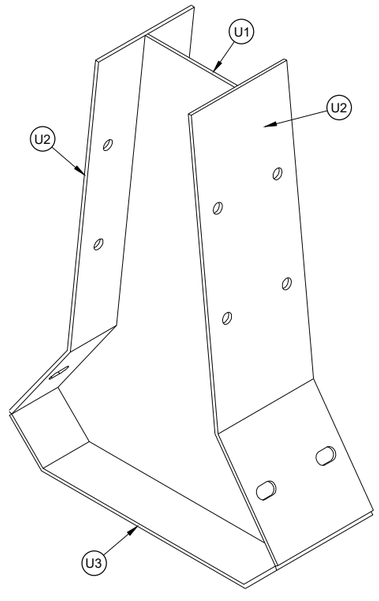
SECTION B - B

PLAN VIEW



PROFILE VIEW

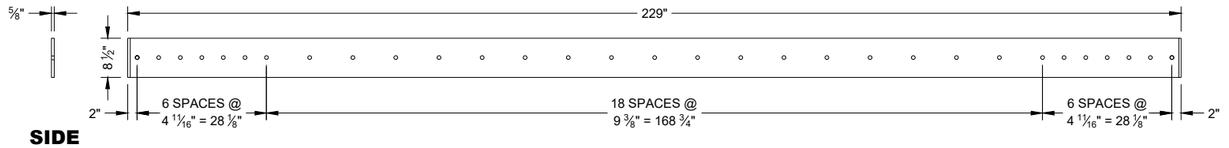
SIDE VIEW



ISOMETRIC

GAP STIFFENER ASSEMBLY

PLAN VIEW



SIDE VIEW

ELEVATION VIEW

W1 TOE PLATE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

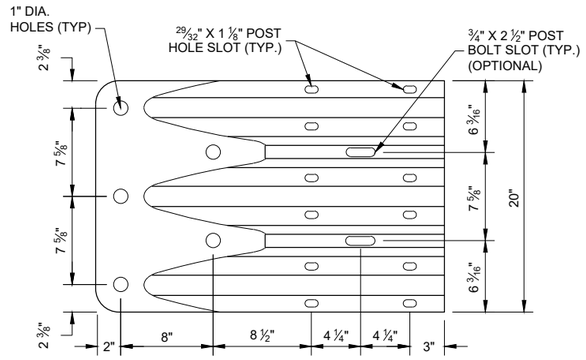
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16j

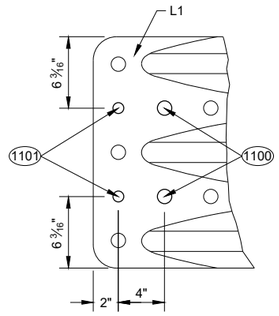
6

SDD 14B07-16j



ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

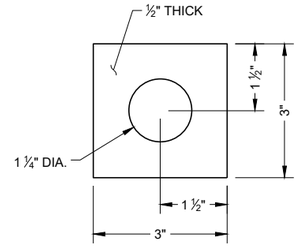


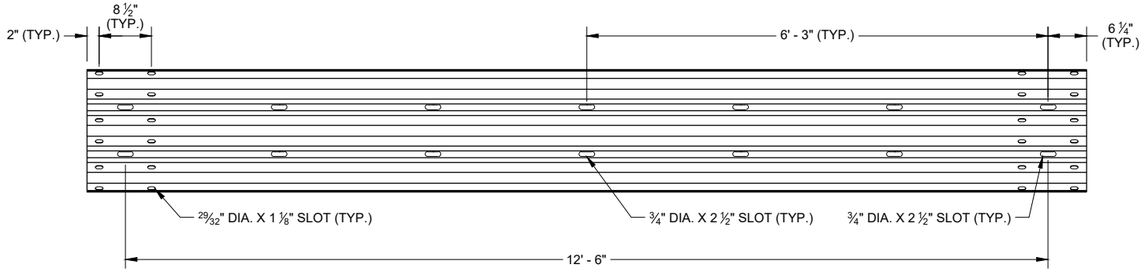
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

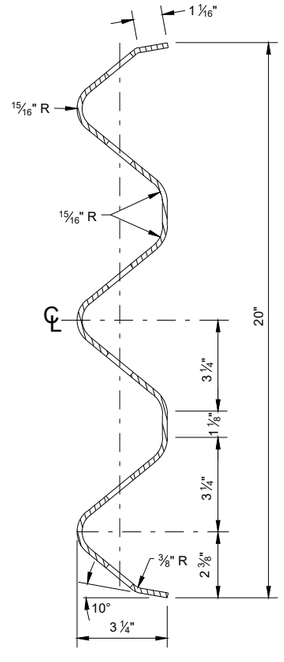
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

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



SLOTTED THRIE BEAM RAIL K1



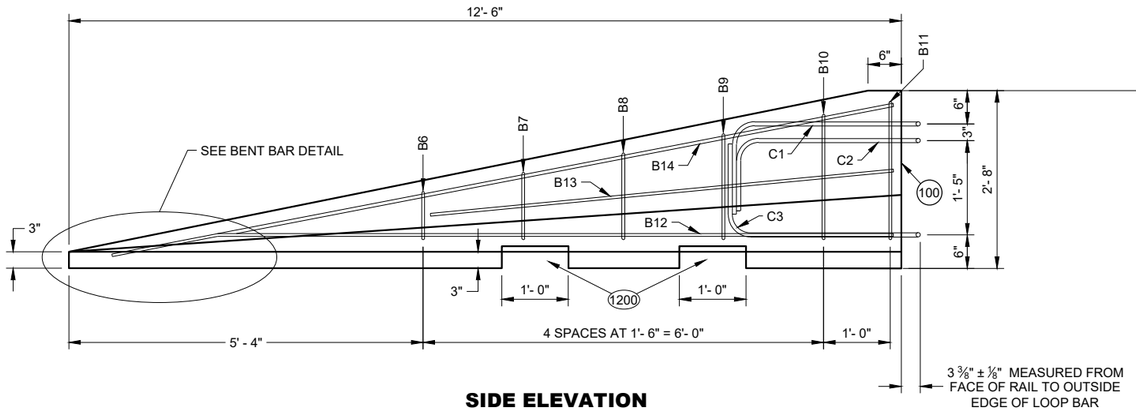
SECTION THROUGH BEAM K1

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

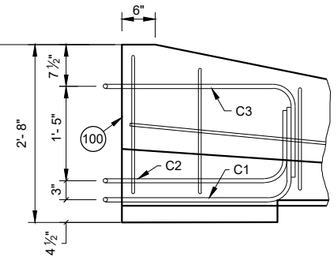
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16k



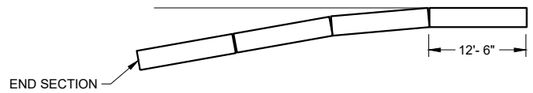
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



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

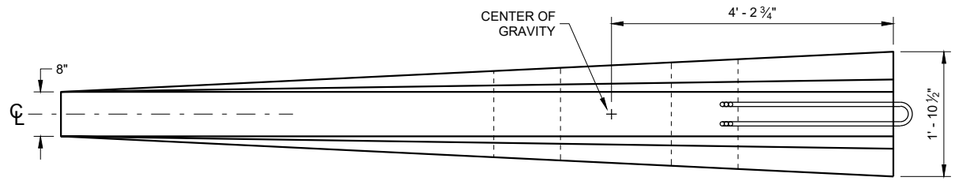
GENERAL NOTES

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

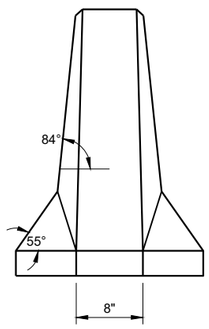


FLARE AT BARRIER END

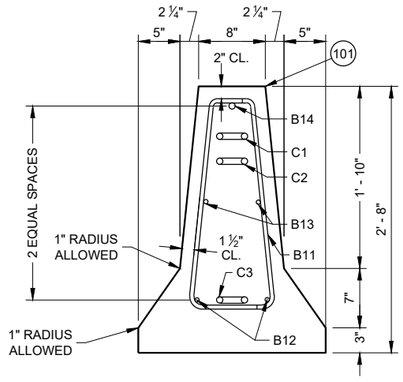
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



PLAN VIEW

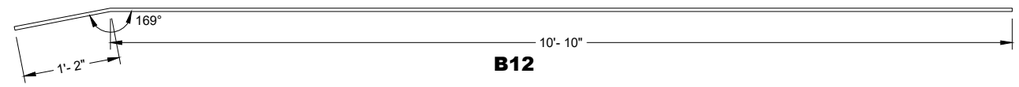


FRONT ELEVATION

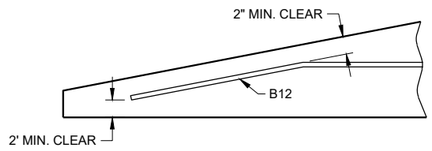


END SECTION

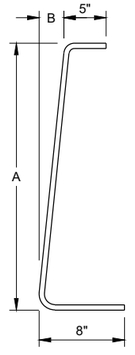
DETAILS OF BARRIER TAPER SECTION



B12



BENT BAR DETAIL



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

B BARS

2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

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

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

6

SDD 14B07-16m

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

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

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

6

SDD 14B07-16n

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

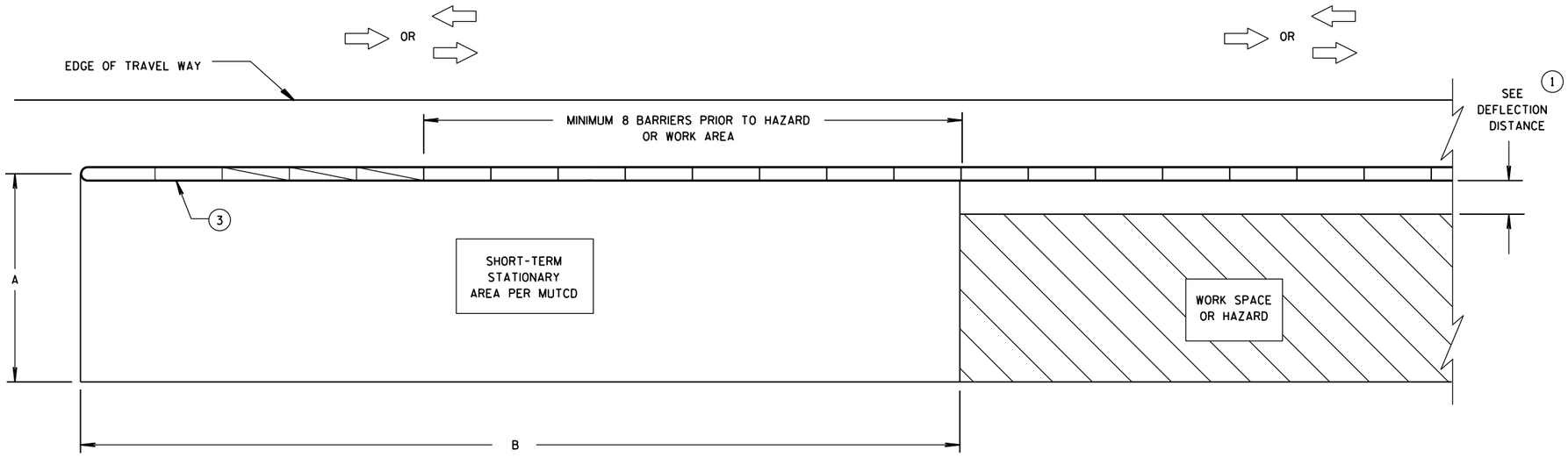
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B07-16n



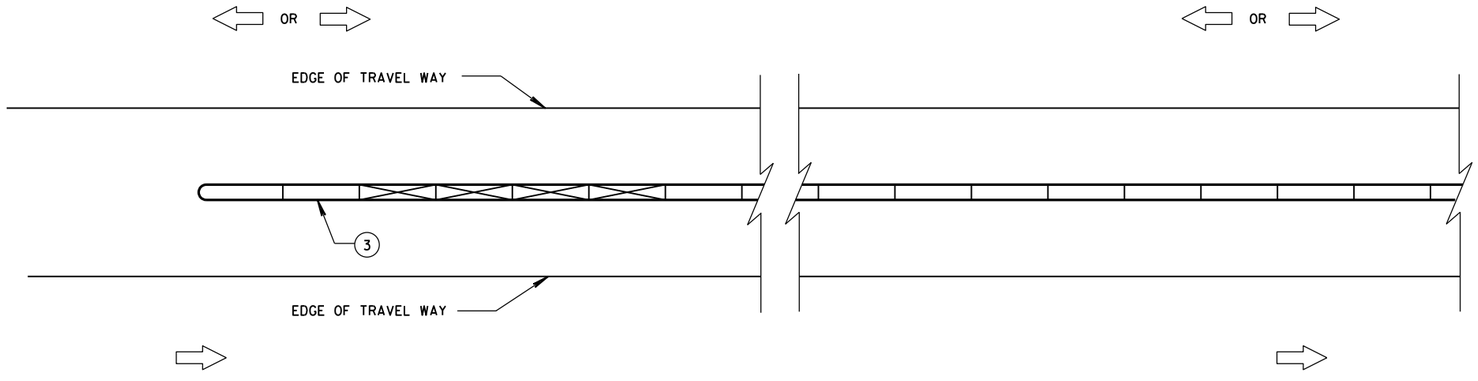
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

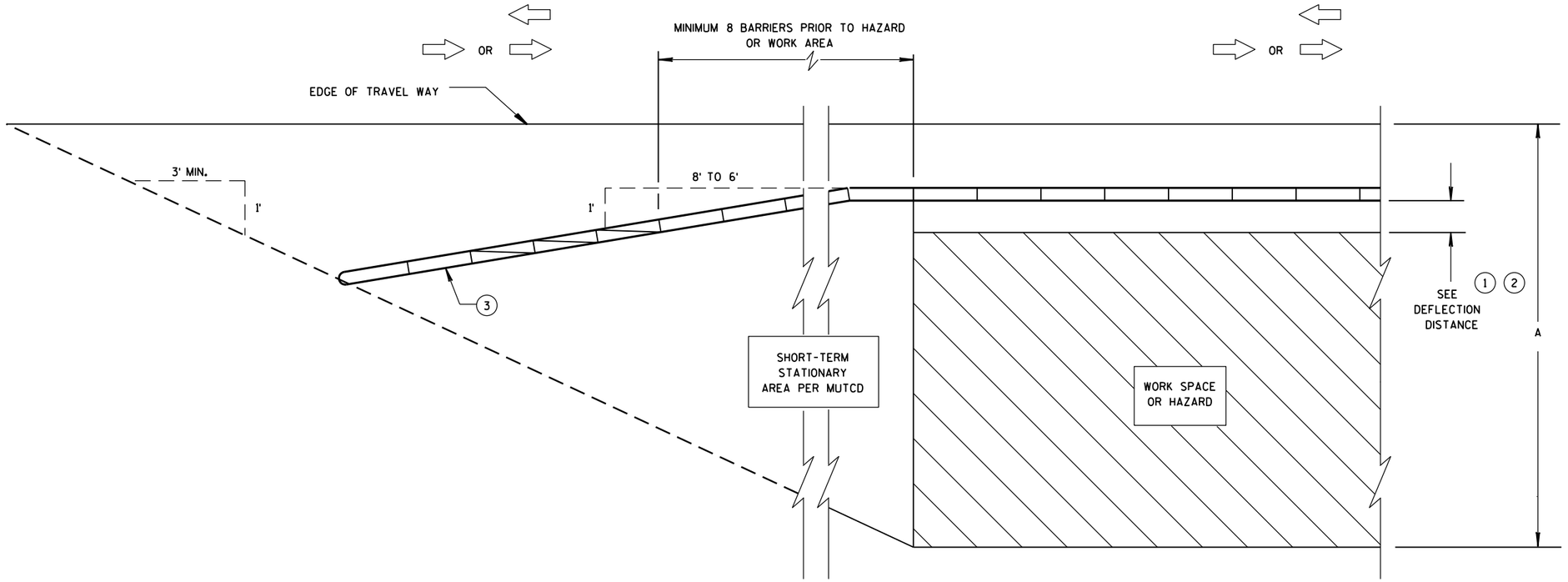
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

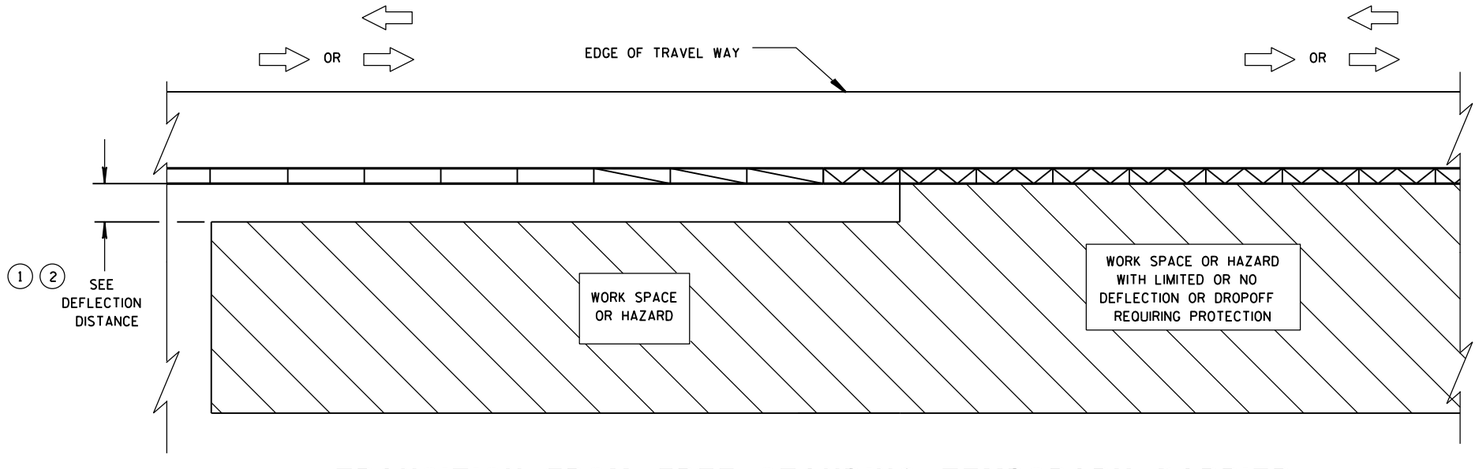
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

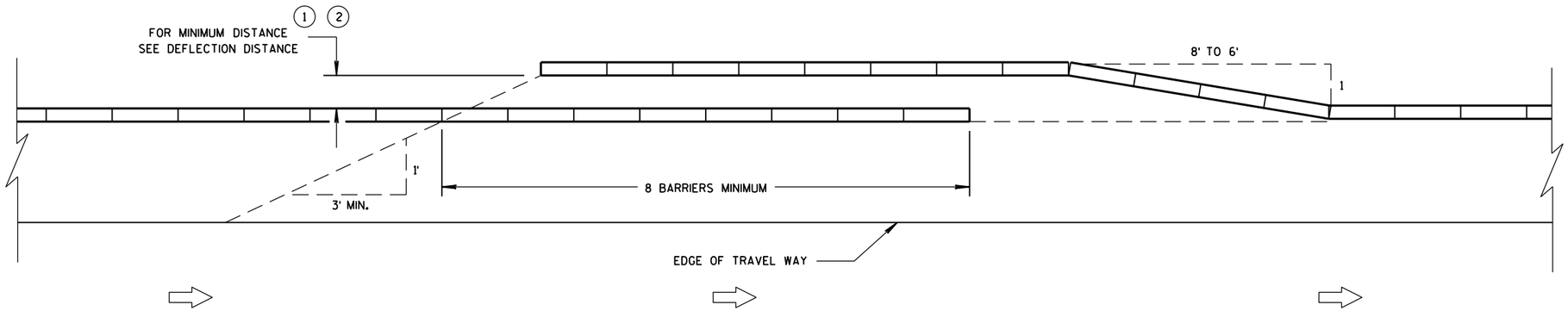
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

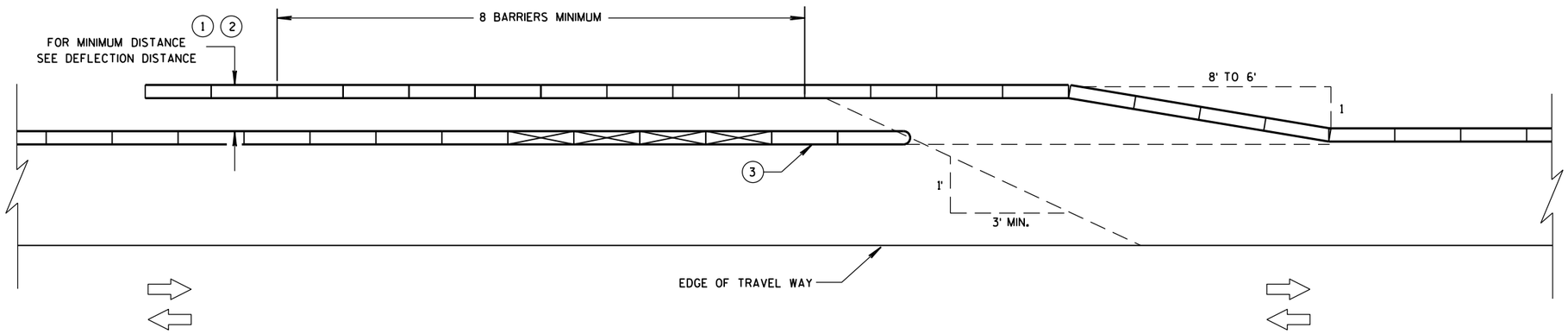
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

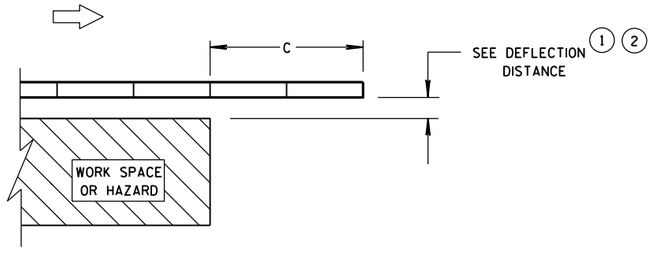
S.D.D. 14 B 8-2b



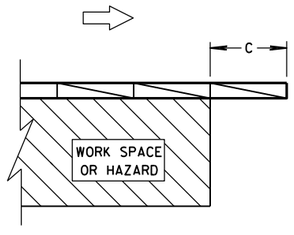
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

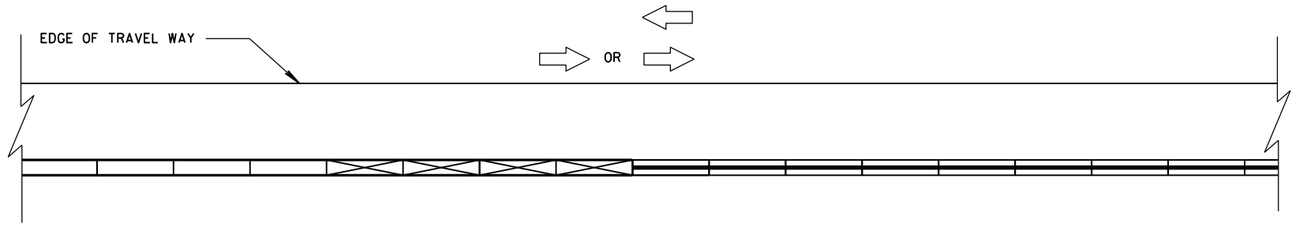
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

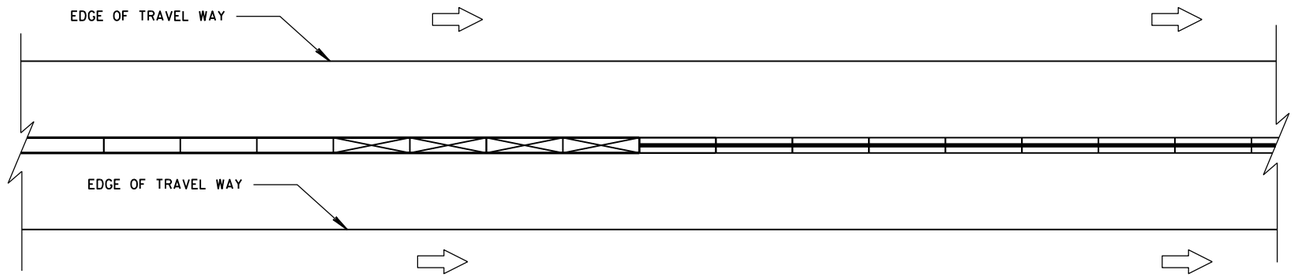
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



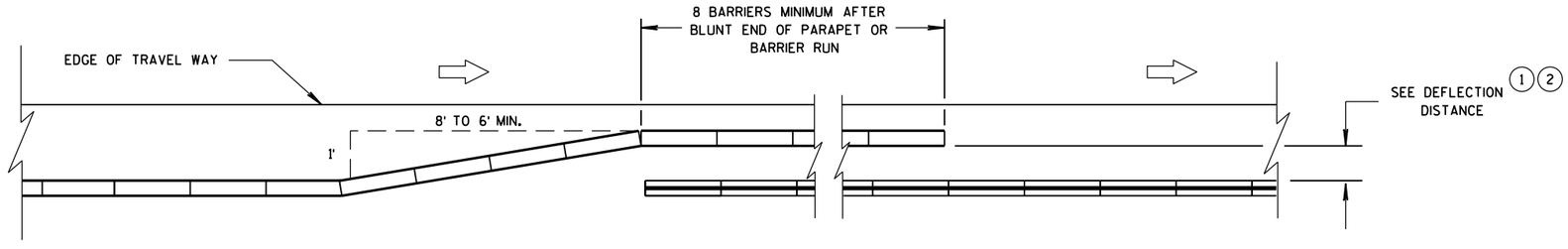
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



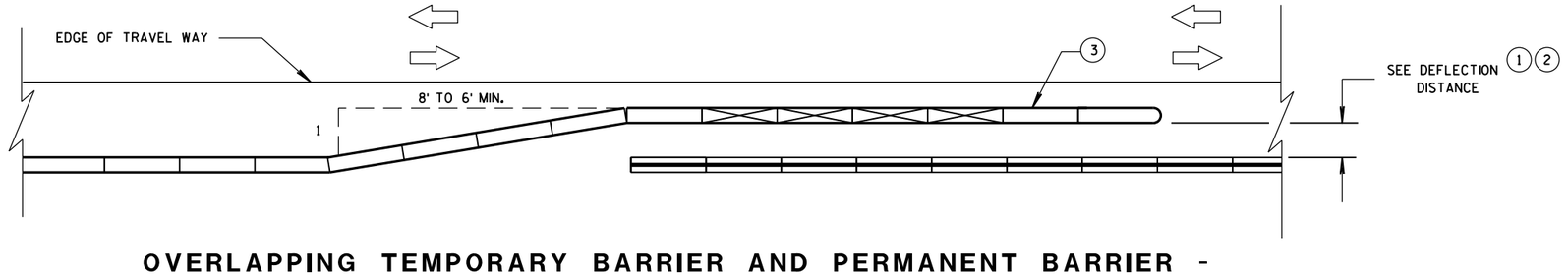
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

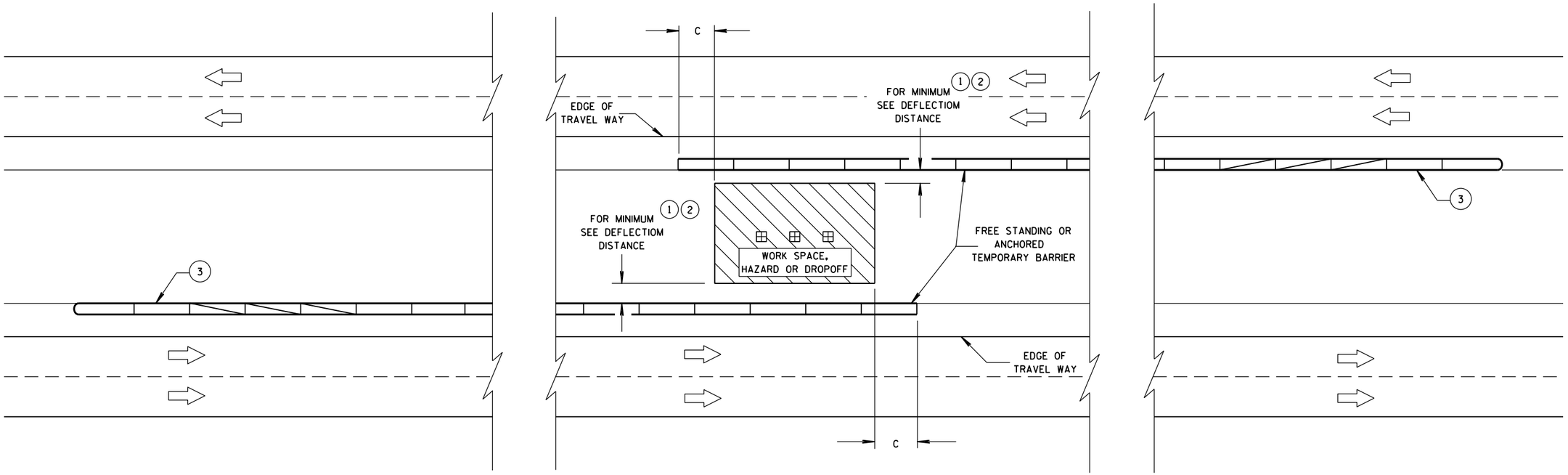
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

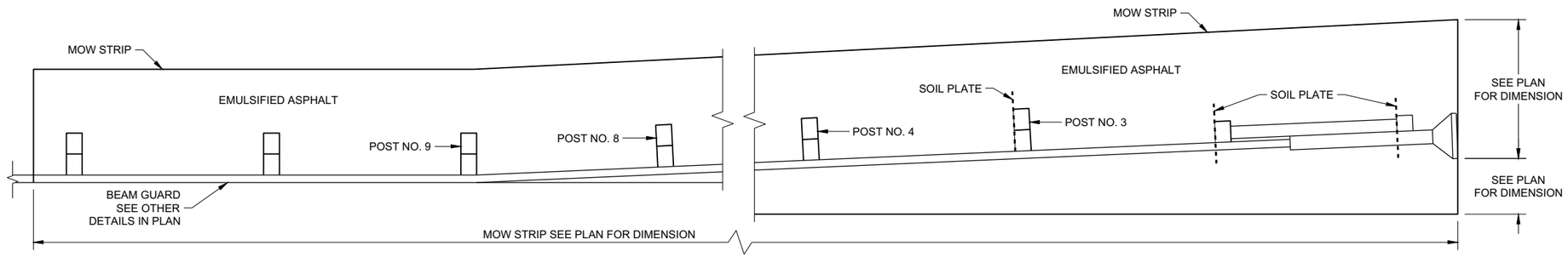
APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER
FHWA

6

S.D.D. 14 B 8-2e

6

S.D.D. 14 B 8-2e



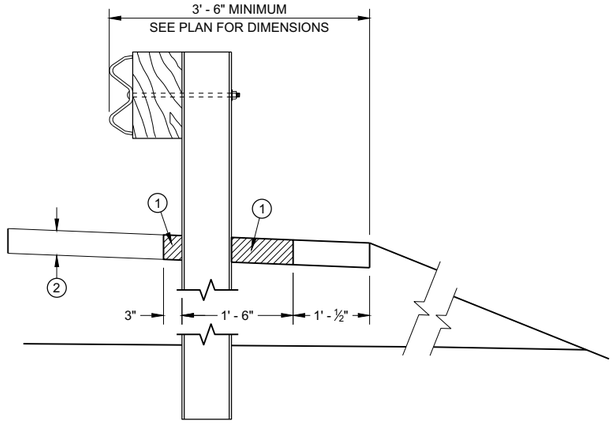
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

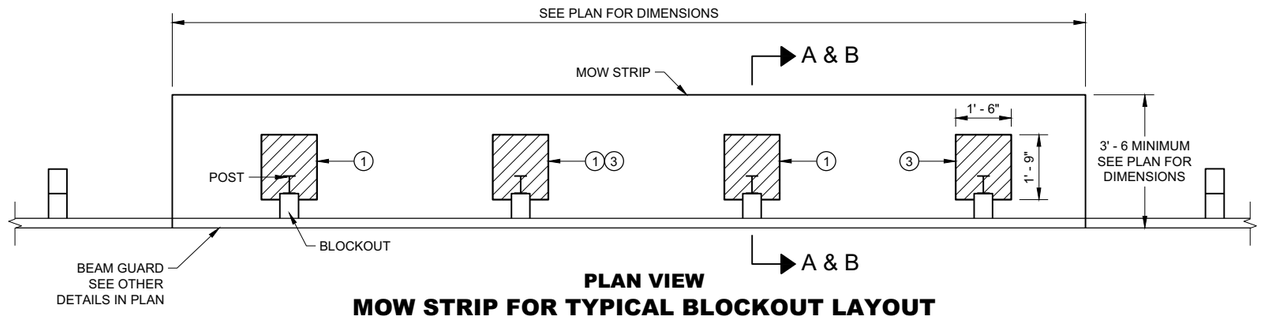
GENERAL NOTES

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)

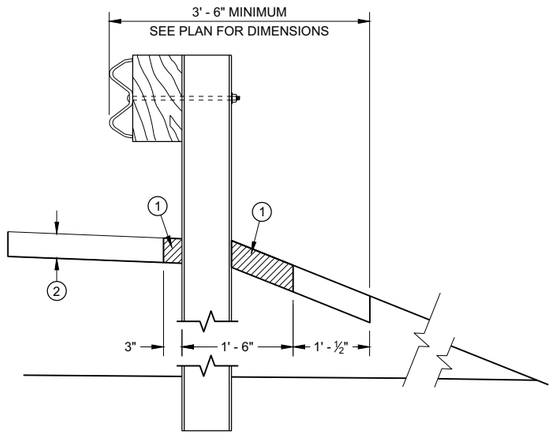


SECTION A - A

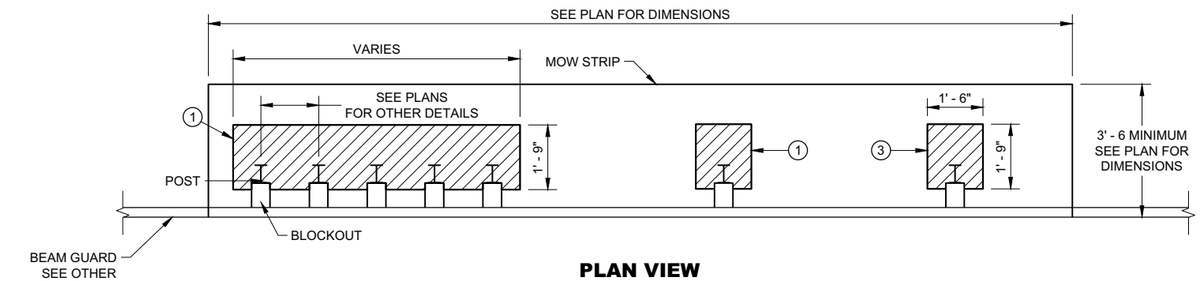


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

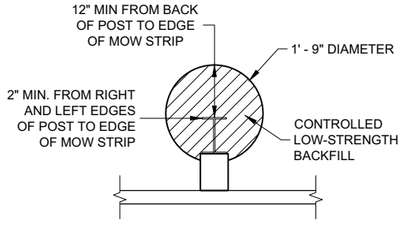


SECTION B - B

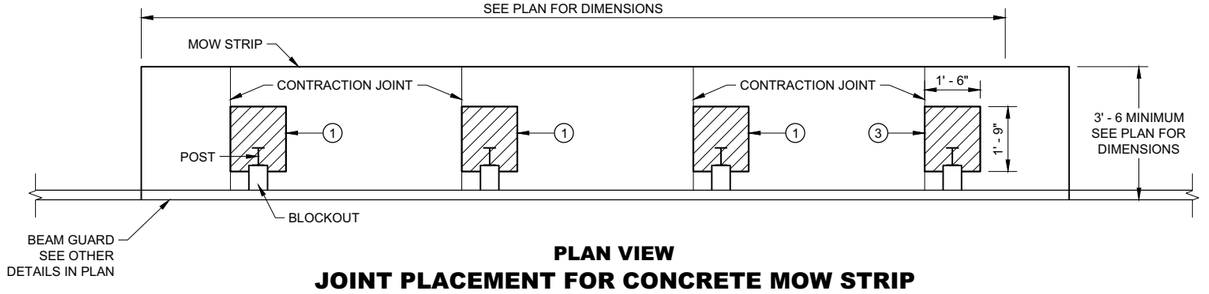


PLAN VIEW

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 TRANSPORTA

6

SDD 14B28 - 04a

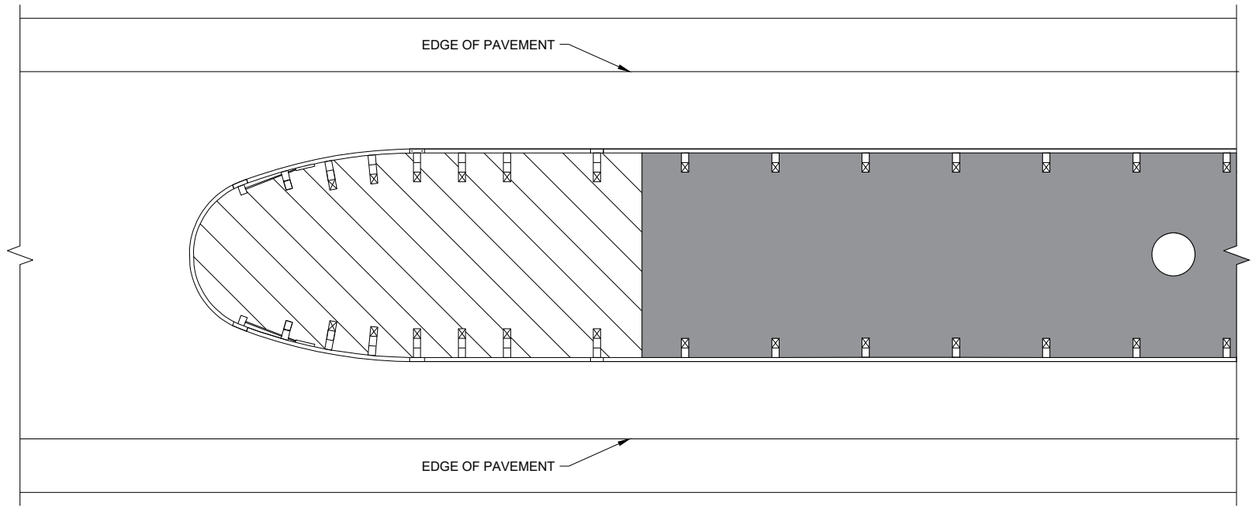
LEGEND

CONCRETE, ASPHALT, OR EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

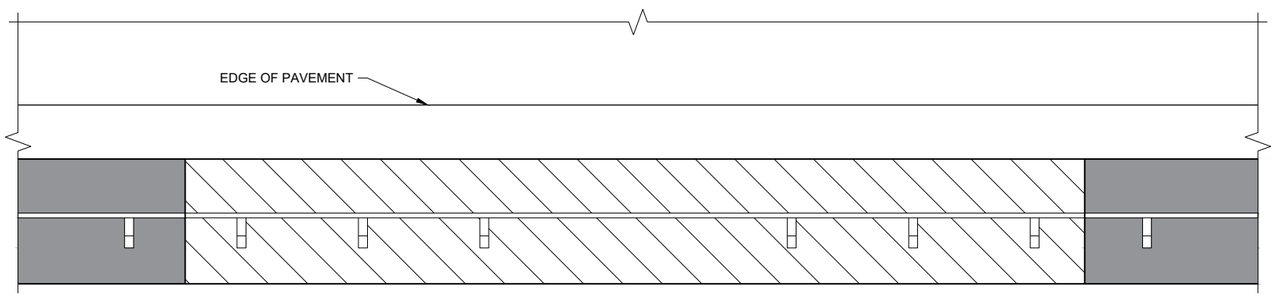
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

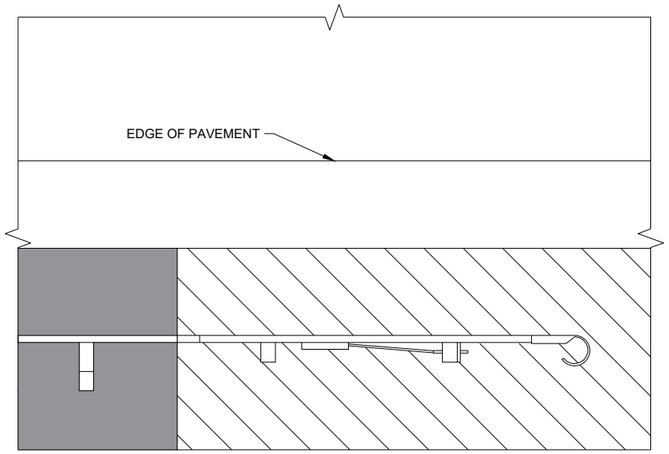
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



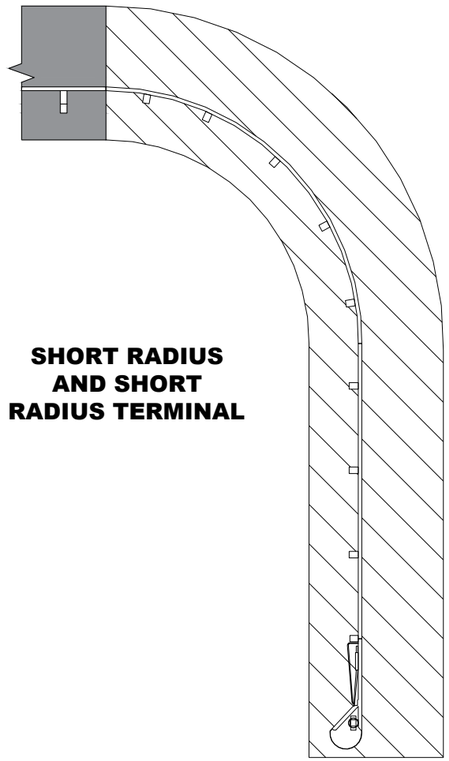
THRIE BEAM BULLNOSE



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

6

SDD 14B28 - 04b

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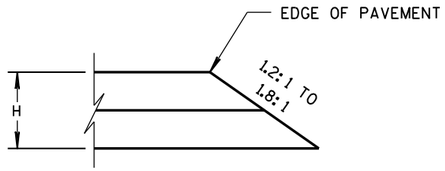
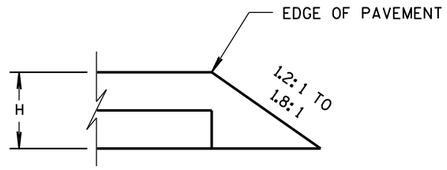
SDD 14B28 - 04b



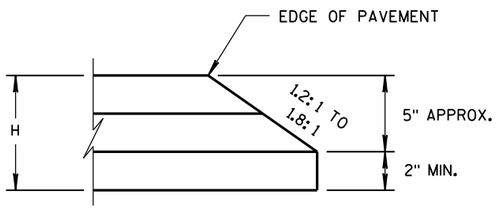
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



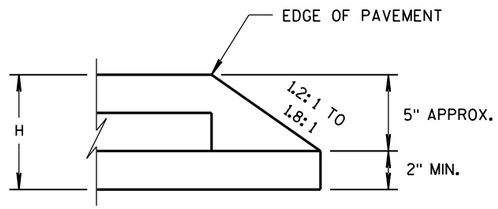
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

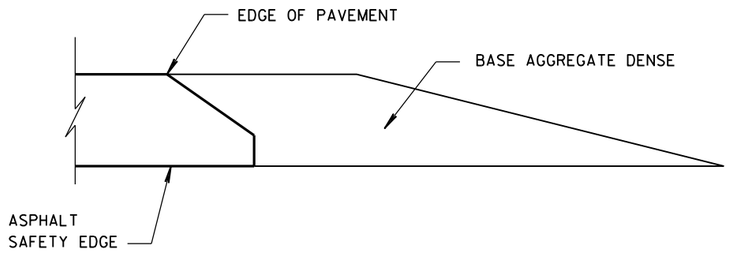
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

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

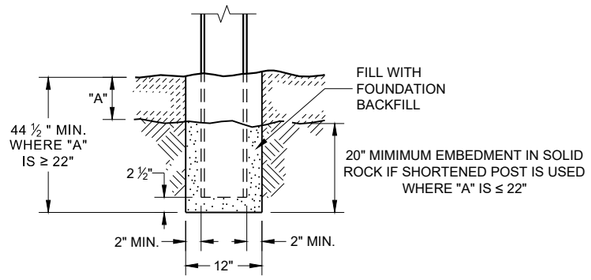
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

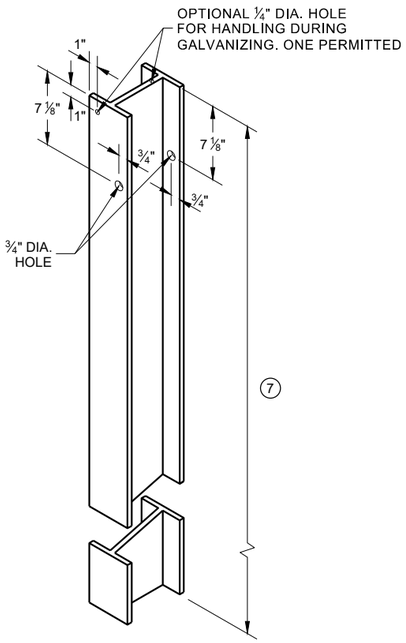
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

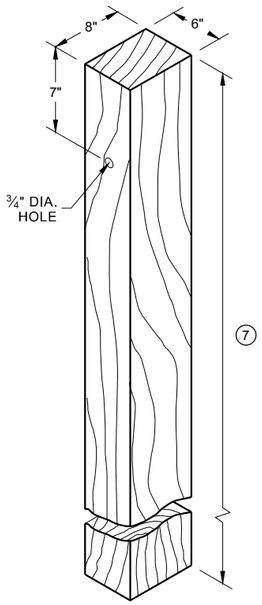
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



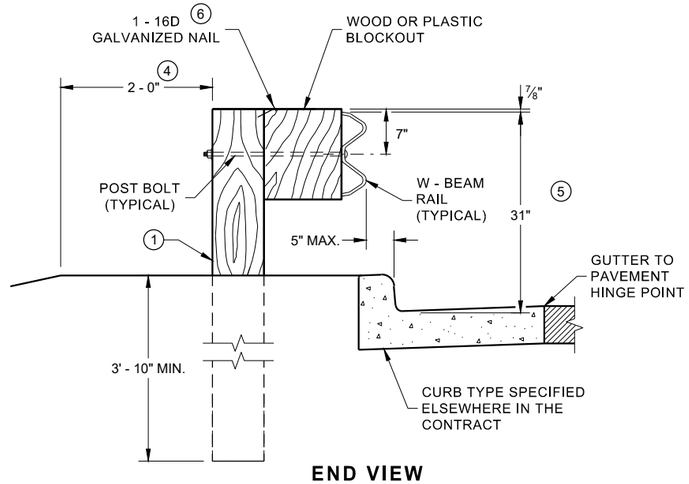
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



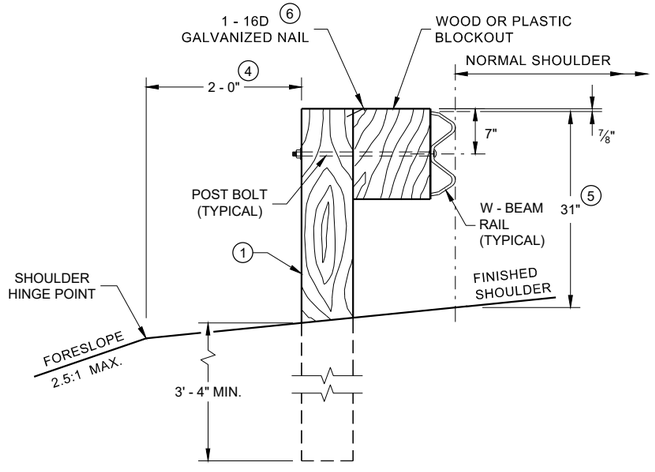
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



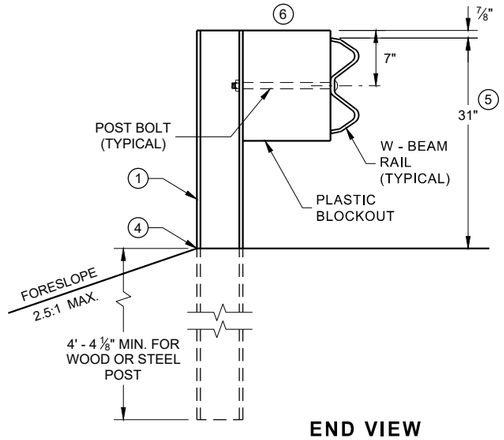
WOOD POST (6" X 8") NOMINAL (1)



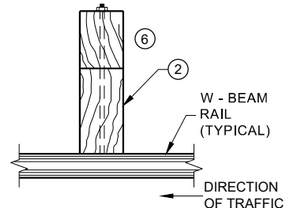
END VIEW
LOCATED ALONG A CURBED ROADWAY



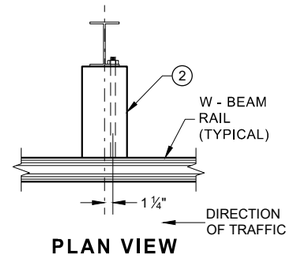
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



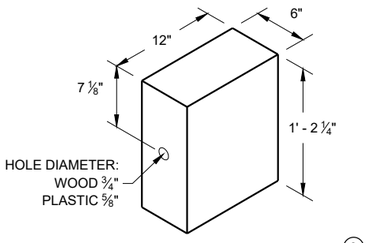
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM

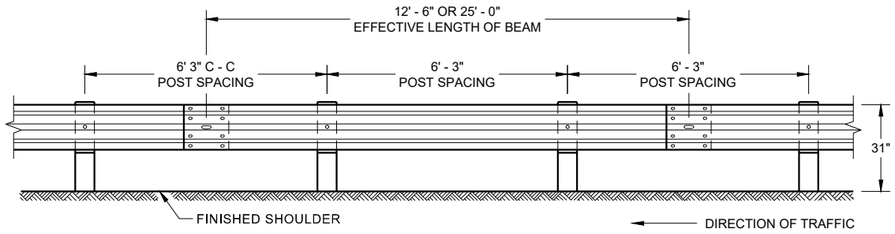


WOOD OR PLASTIC BLOCKOUT (2)

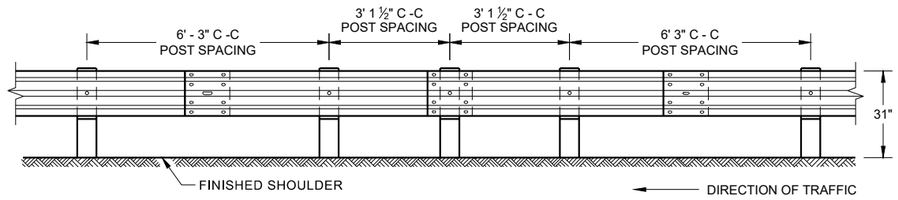
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

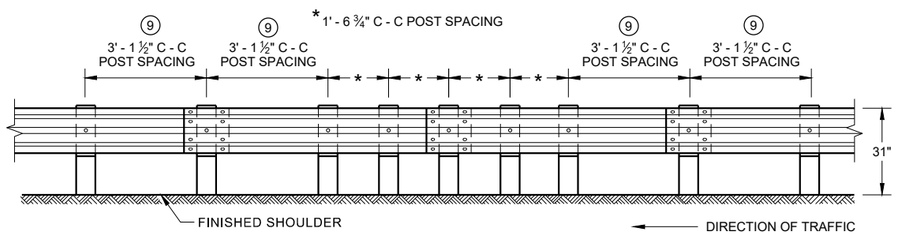
6
SDD 14B42 - 07a



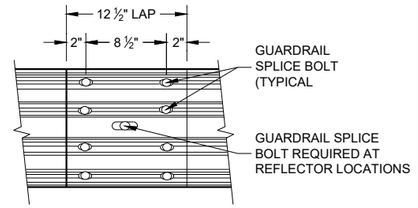
FRONT VIEW
POST SPACING STANDARD INSTALLATION



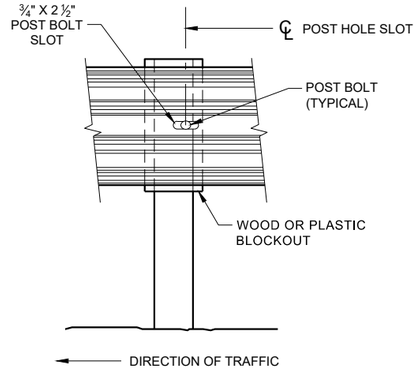
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



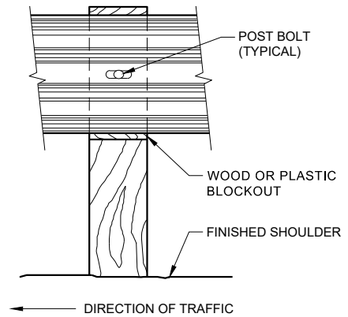
FRONT VIEW
QUARTER POST SPACING (QS)



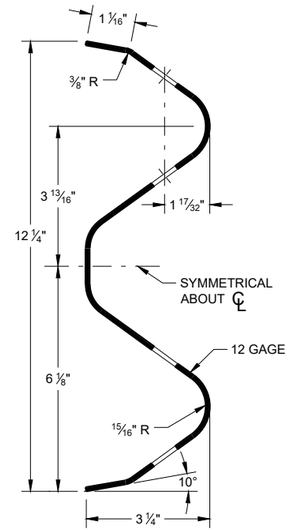
FRONT VIEW
MID-SPAN BEAM SPLICE



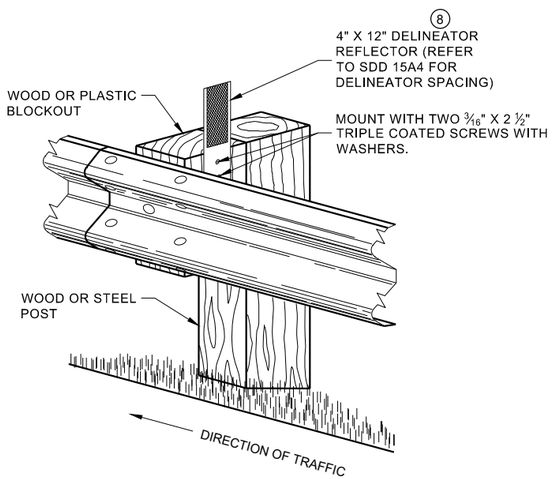
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

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

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

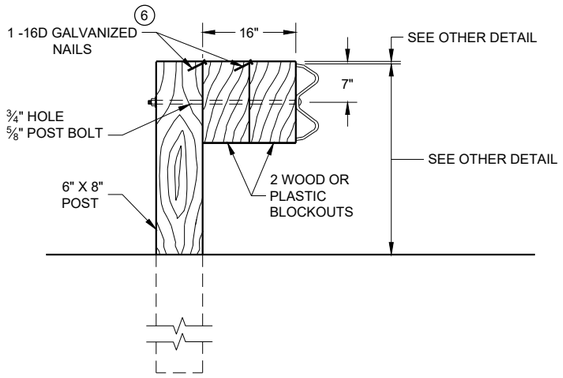
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B42 - 07b

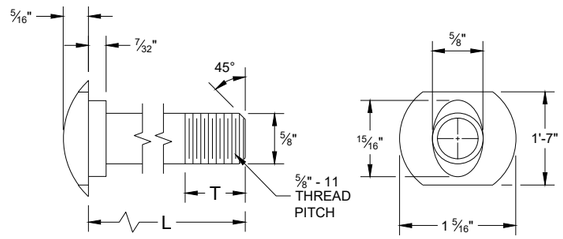


DETAIL FOR 16" BLOCKOUT DEPTH

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

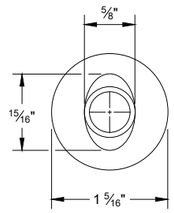
NOTE:

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

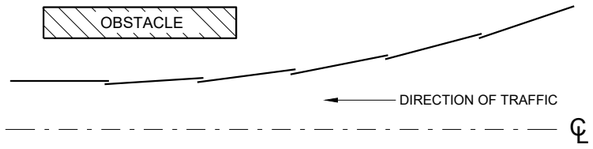


POST BOLT TABLE

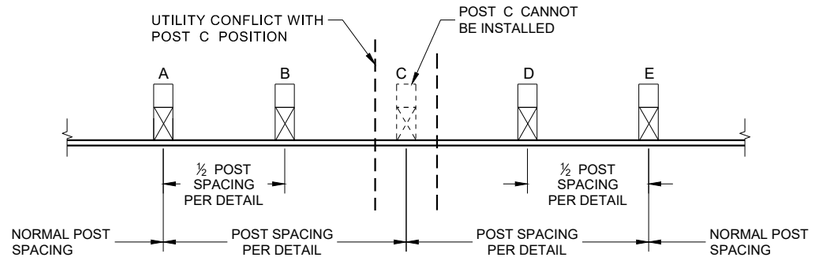
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



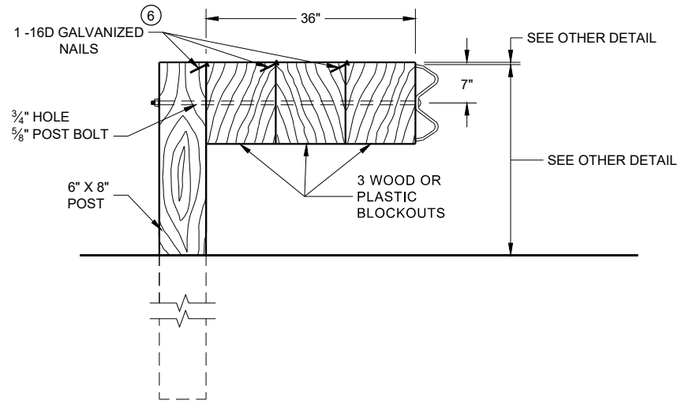
ALTERNATE BOLT HEAD



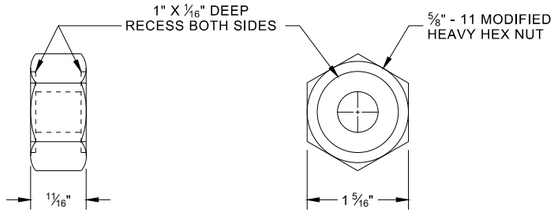
PLAN VIEW
BEAM LAPPING DETAIL



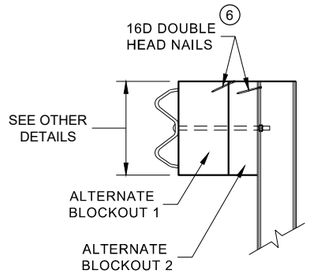
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



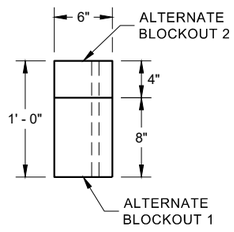
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

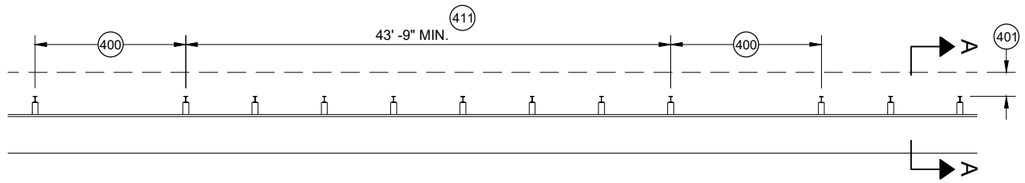
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

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

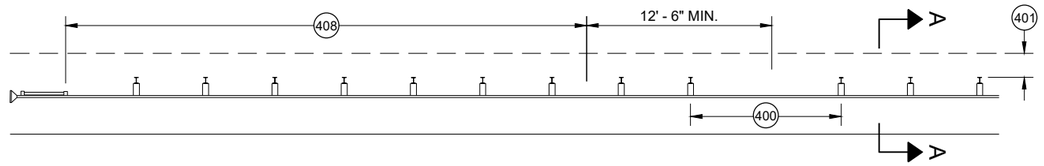
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

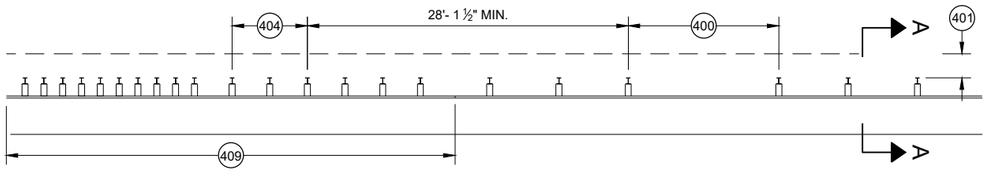
6
SDD 14B42 - 07c



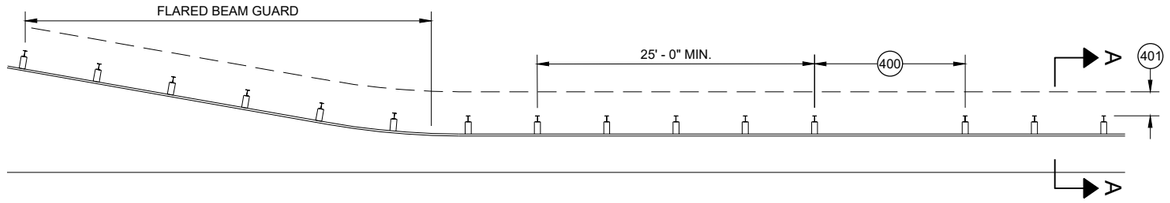
MISSING POST IN MGS GUARDRAIL



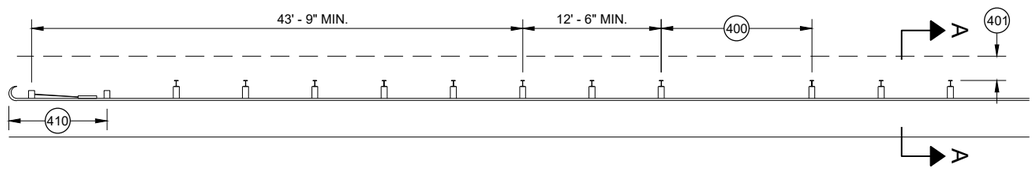
MISSING POST IN MGS GUARDRAIL NEAR EAT



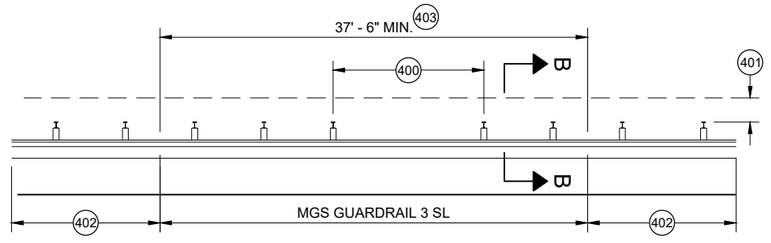
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

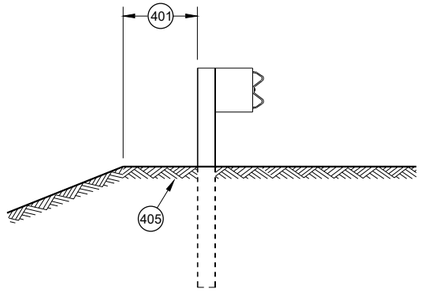


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

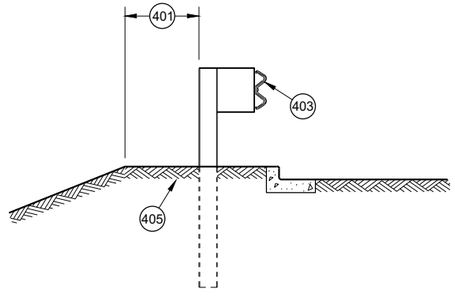


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

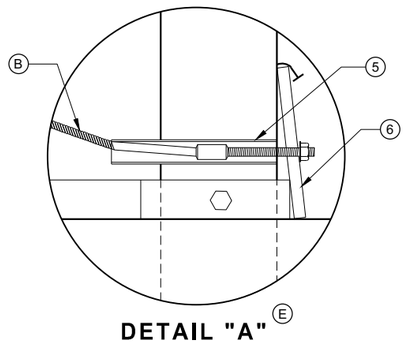
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

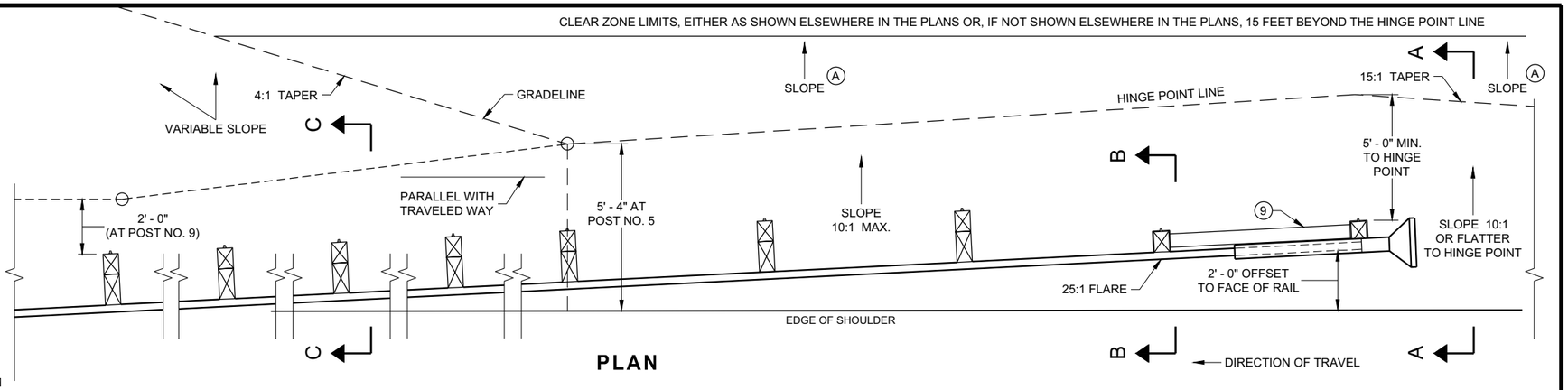
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

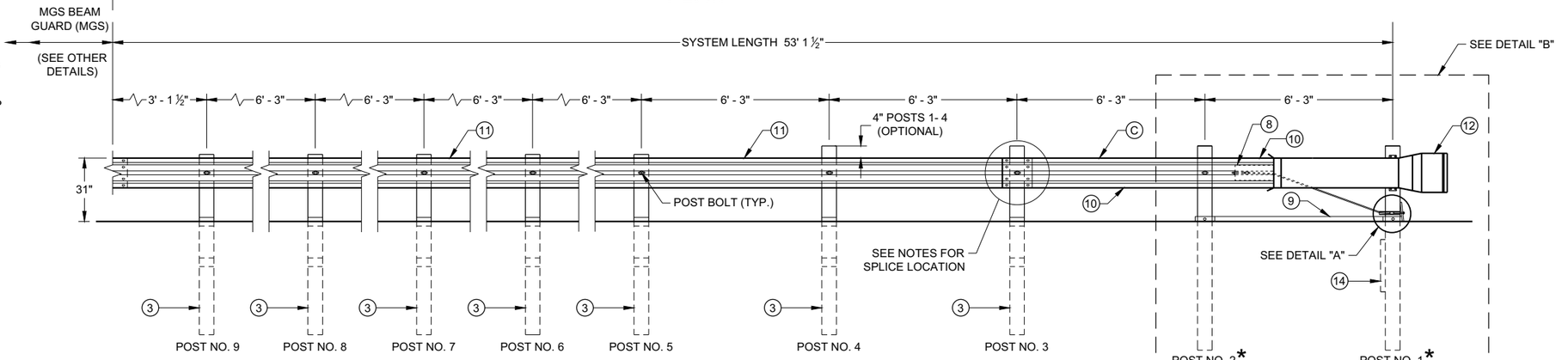
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



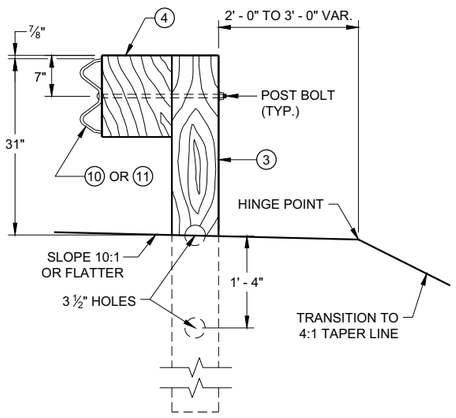
DETAIL "A" (E)



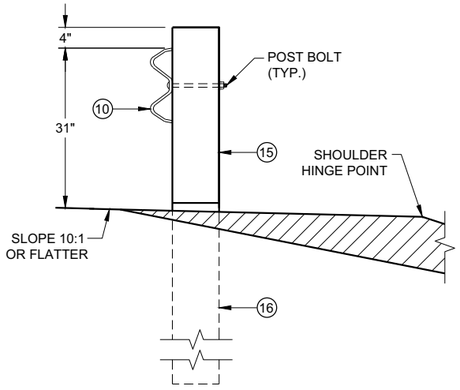
PLAN



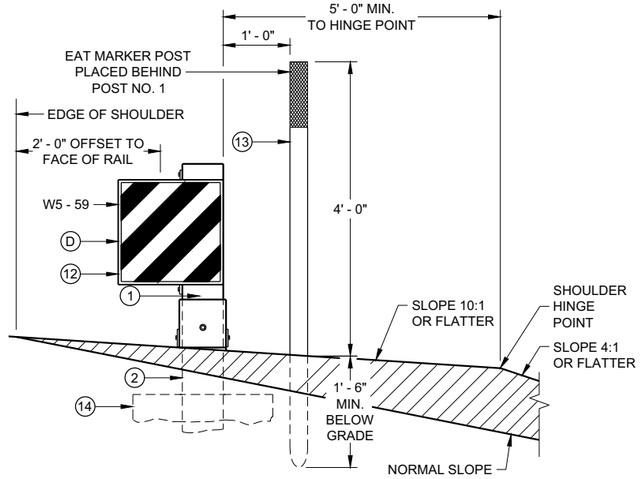
ELEVATION



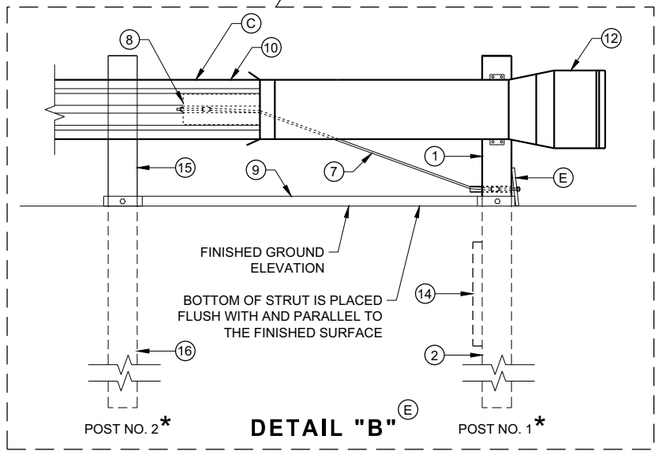
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



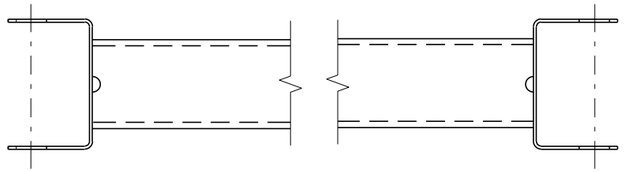
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

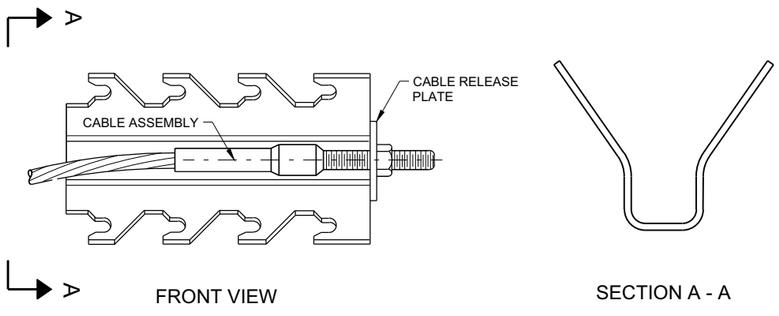
SDD 14B44 - 04a



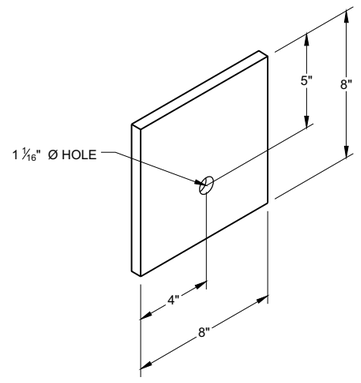
GENERIC GROUND STRUT (9) (E)

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

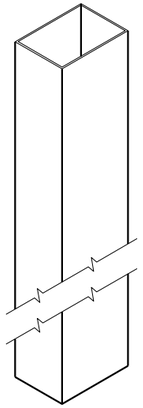
6

SDD 14B44 - 04b

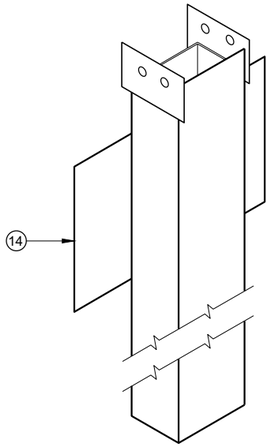
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



UPPER POST NO. 1 (1) (E)



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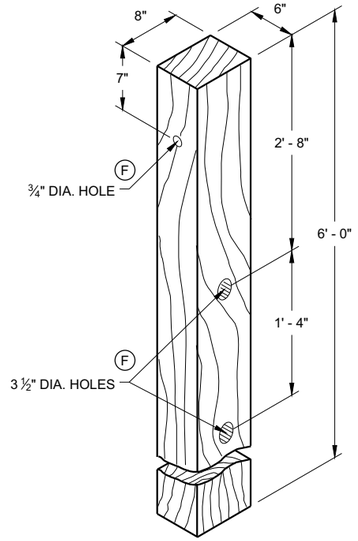
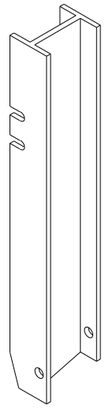


WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



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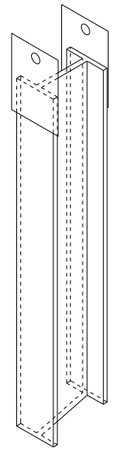

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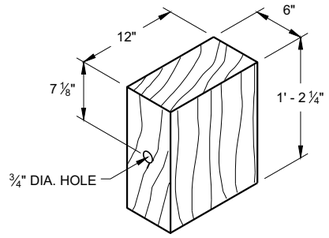
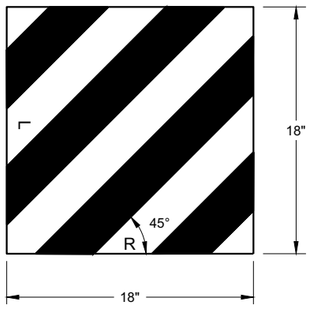
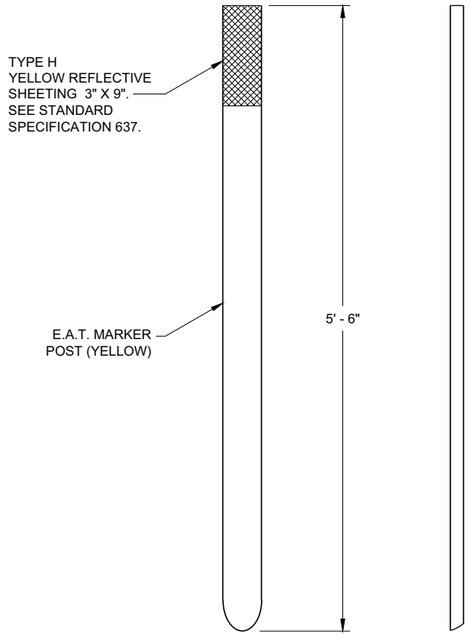


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



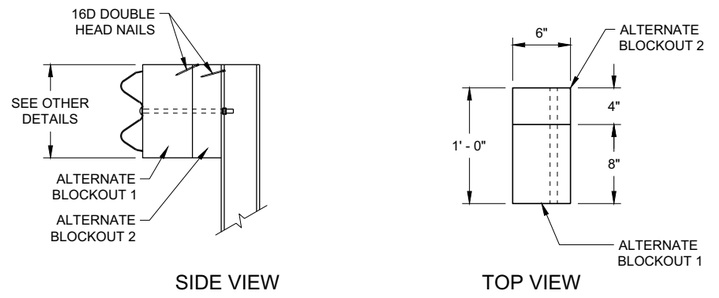
W5 - 59

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)

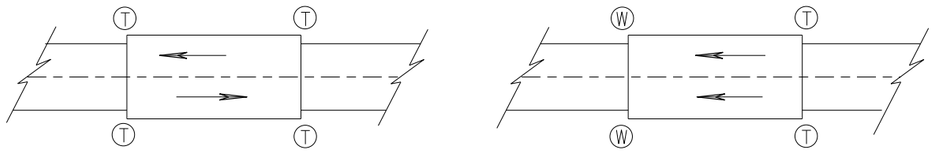
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

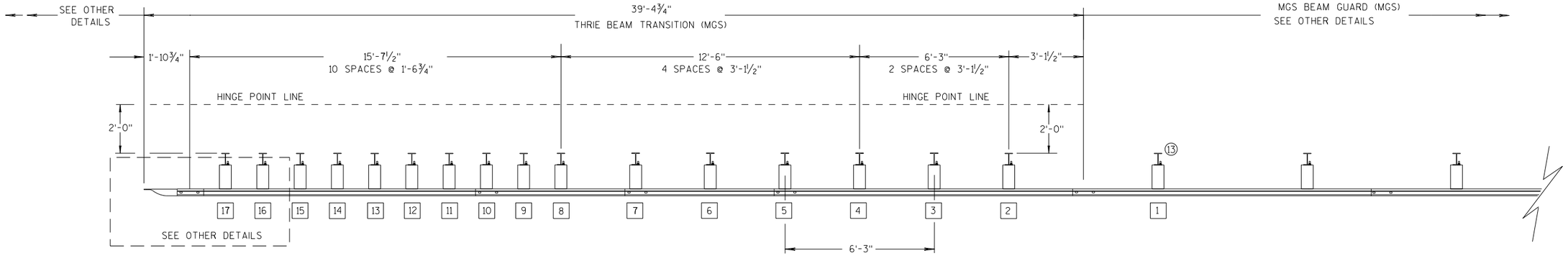
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

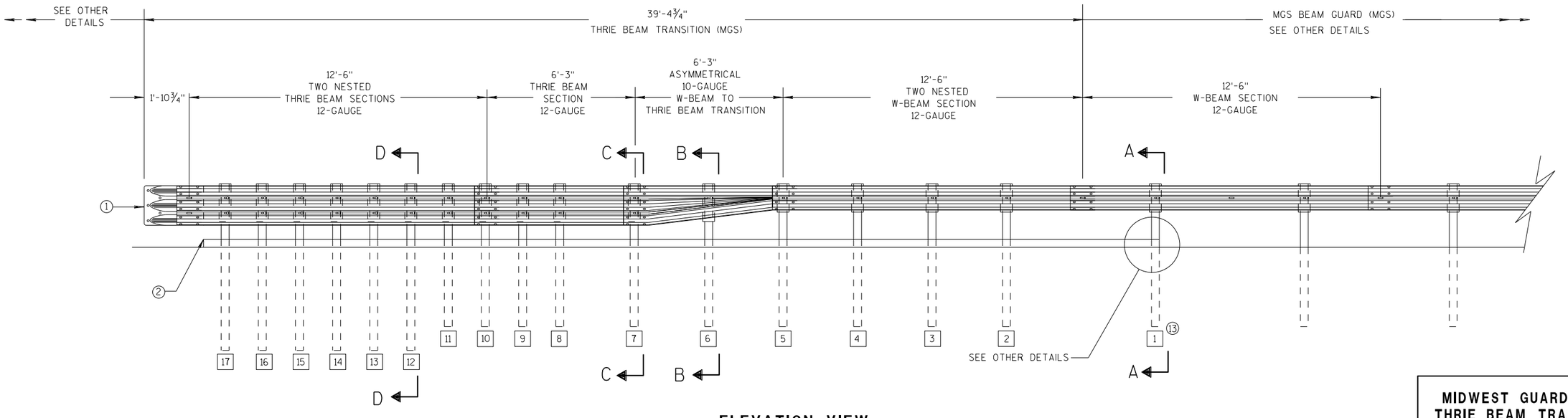
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

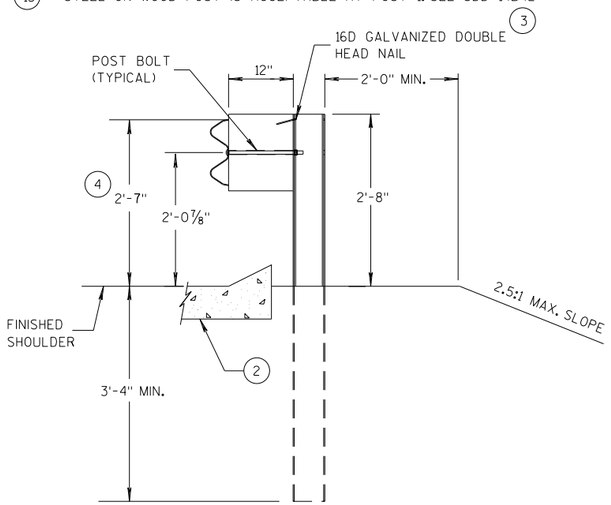
GENERAL NOTES

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

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

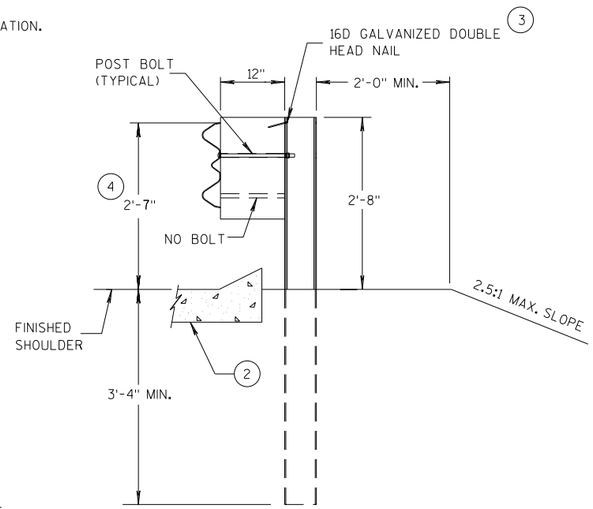
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



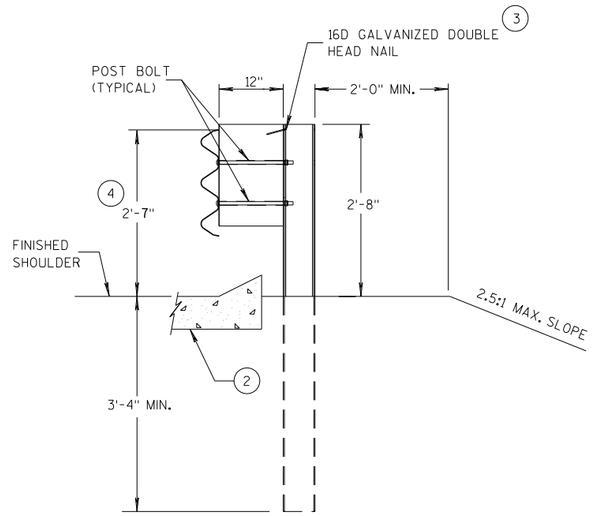
SECTION A-A (13)

POSTS 1-5



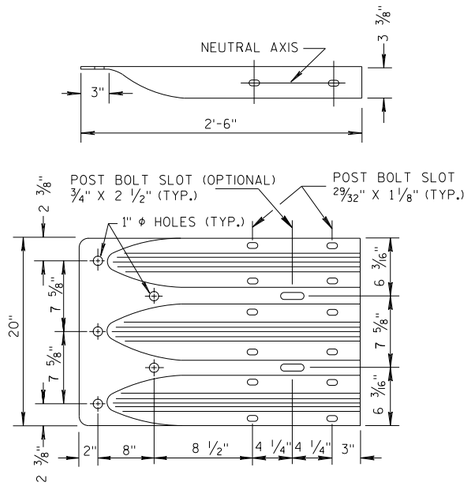
SECTION B-B

POST 6

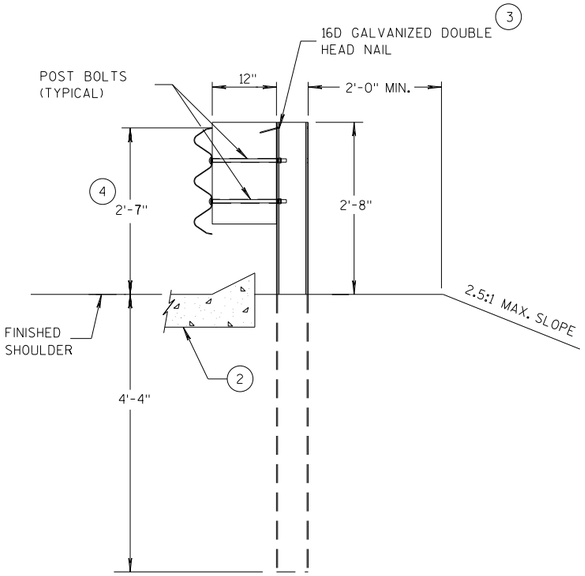


SECTION C-C

POSTS 7-11

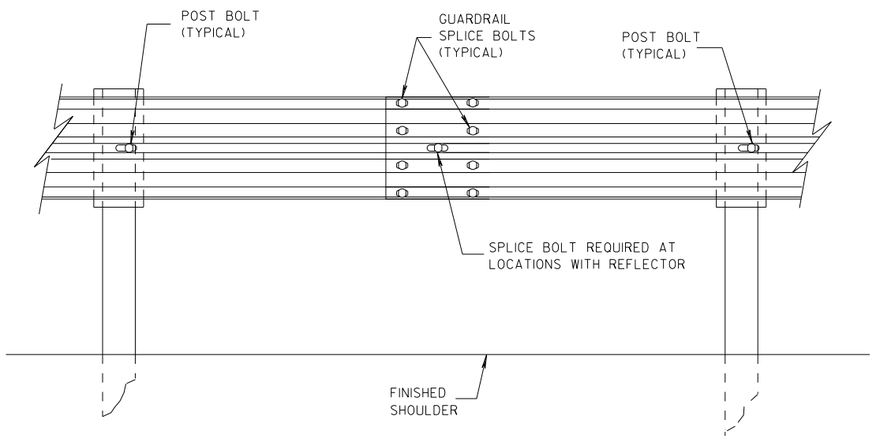


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

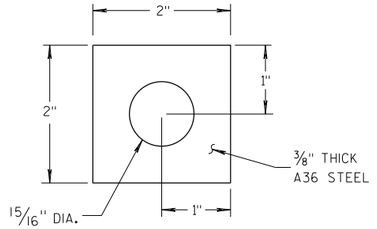
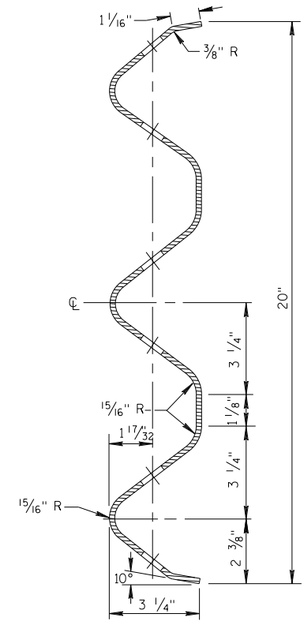


PLATE WASHER DETAIL



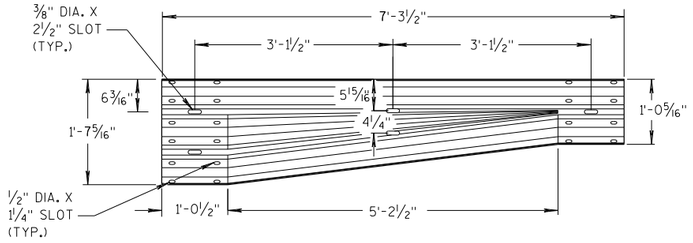
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

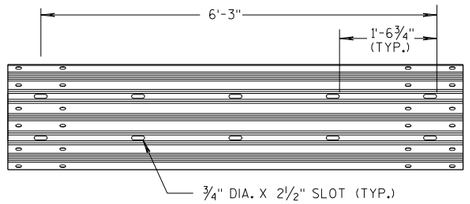
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

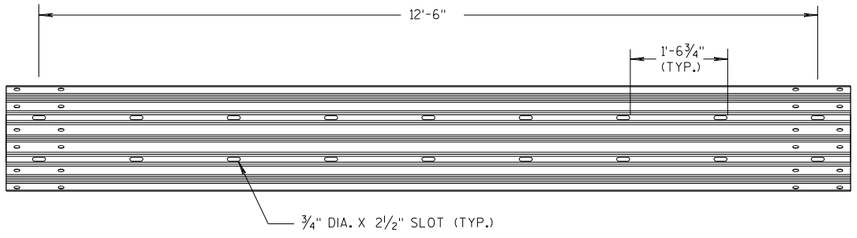
S.D.D. 14 B 45-5b



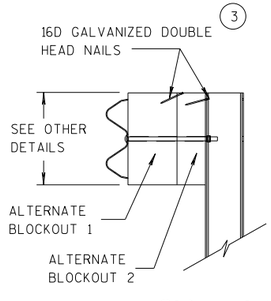
W-BEAM TO THRIE BEAM TRANSITION SECTION



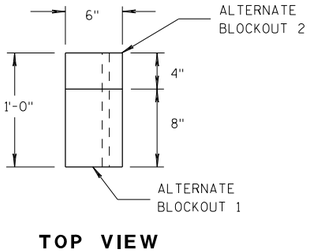
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

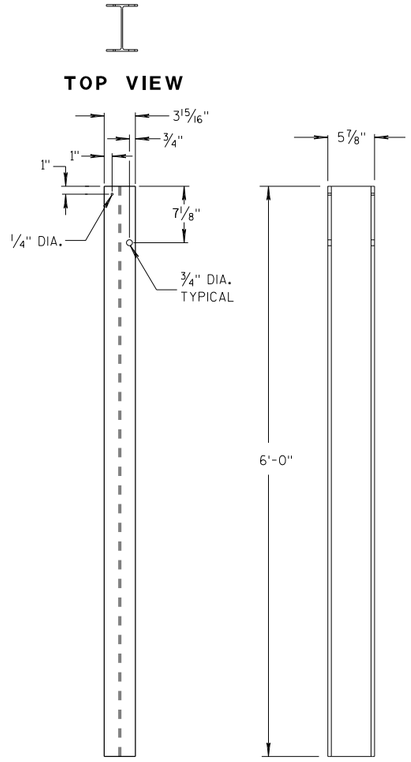


SIDE VIEW



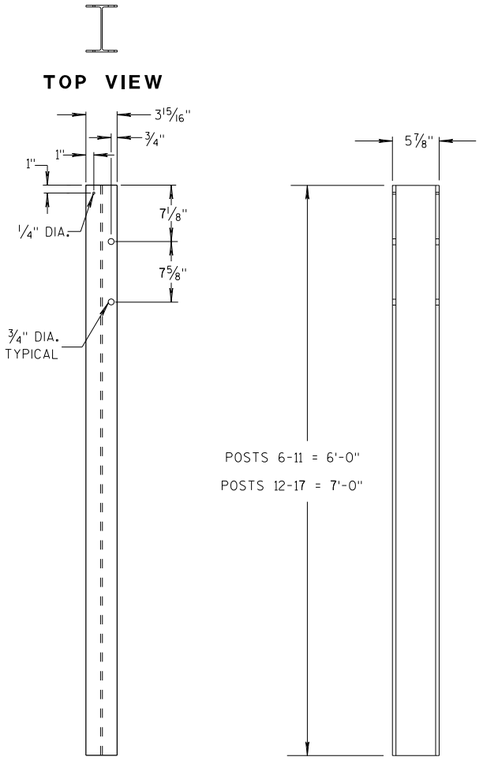
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



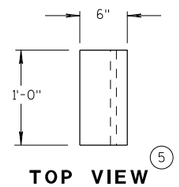
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

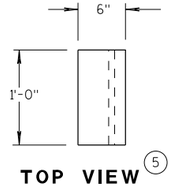


FRONT VIEW SIDE VIEW

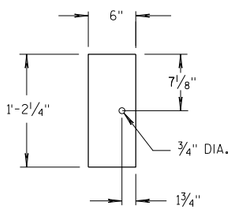
STEEL POSTS 6-17



TOP VIEW (5)

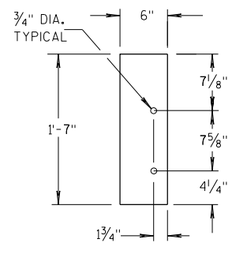


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

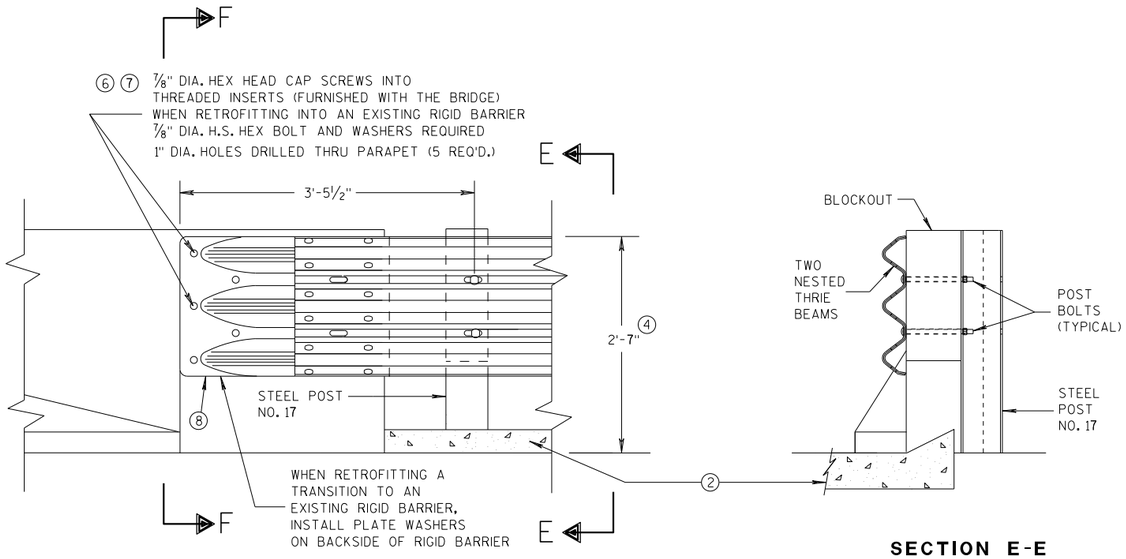
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

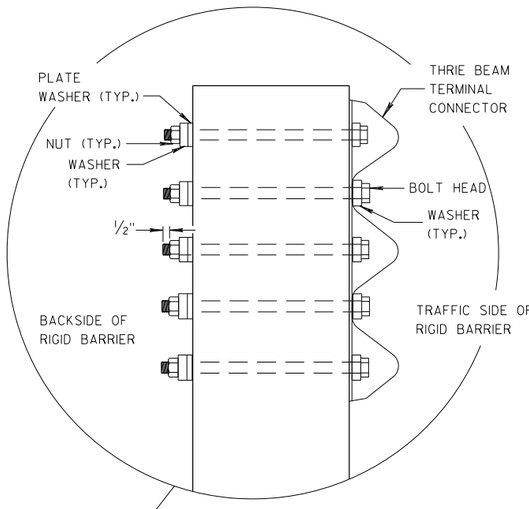
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

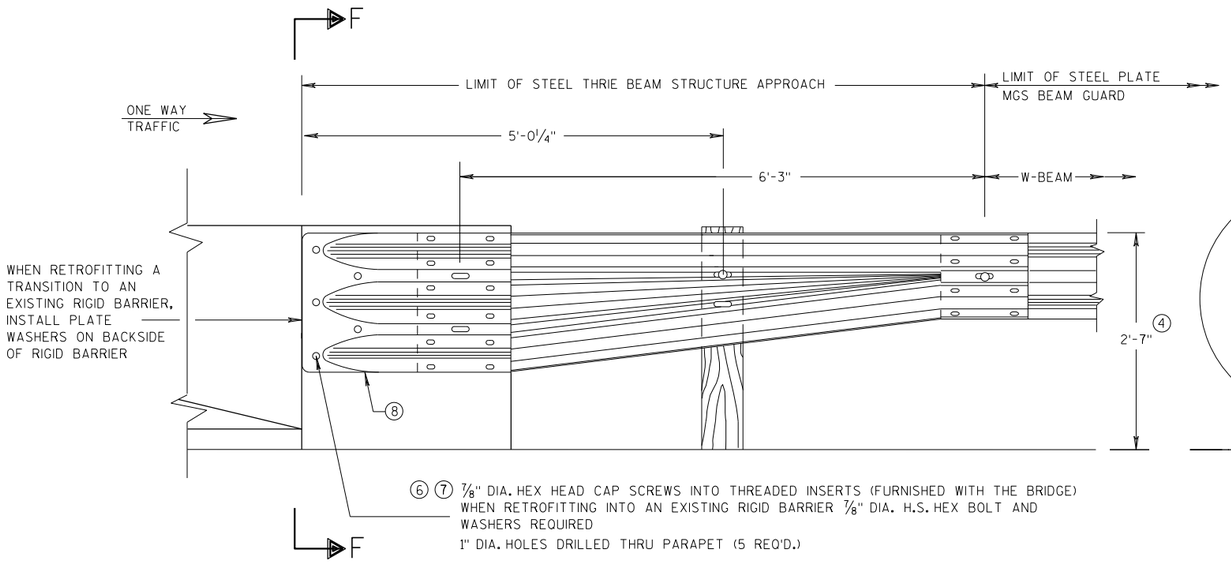
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

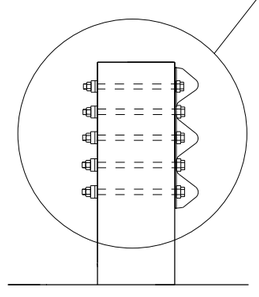
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

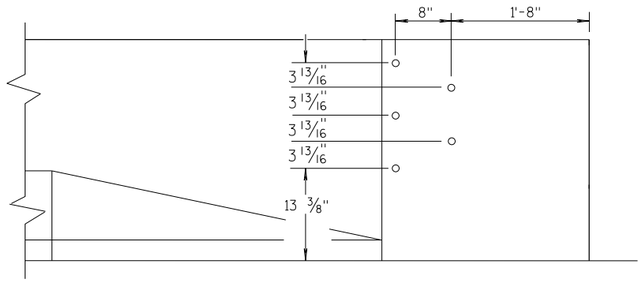




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS NT
FHWA

6

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

6

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.

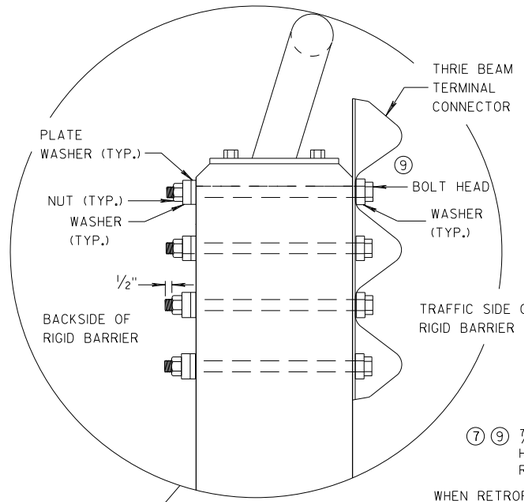
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

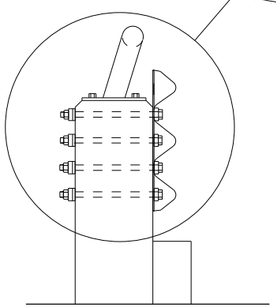
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

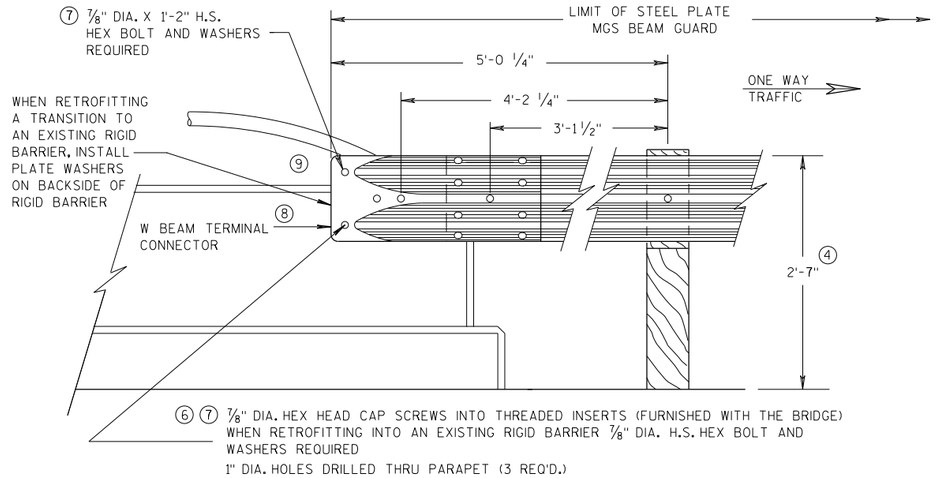
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





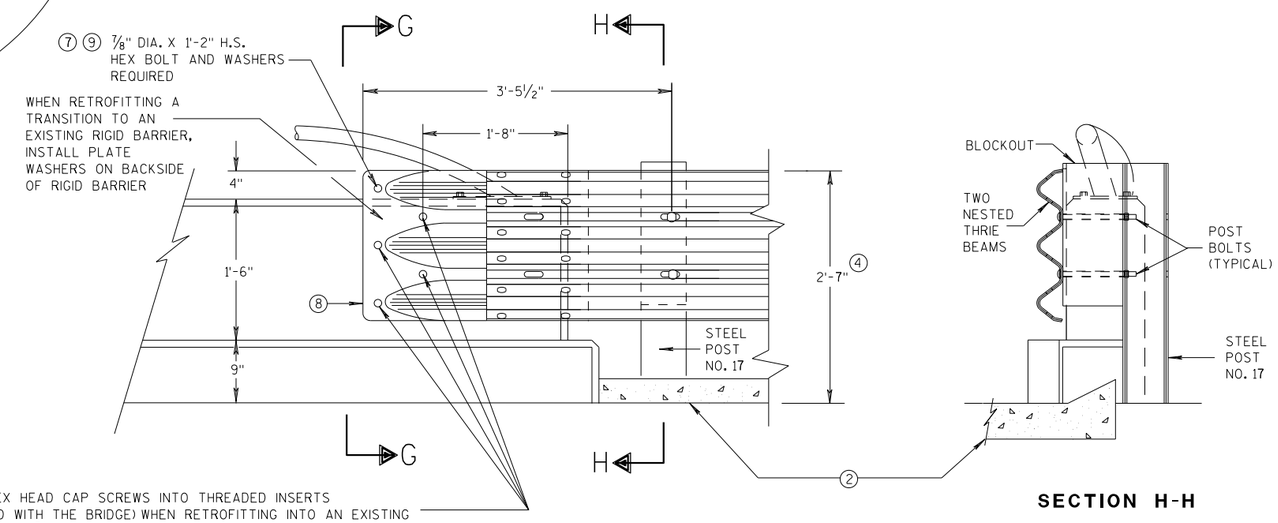
SECTION G-G



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

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07/2018 — DATE
/S/ Rodney Taylor
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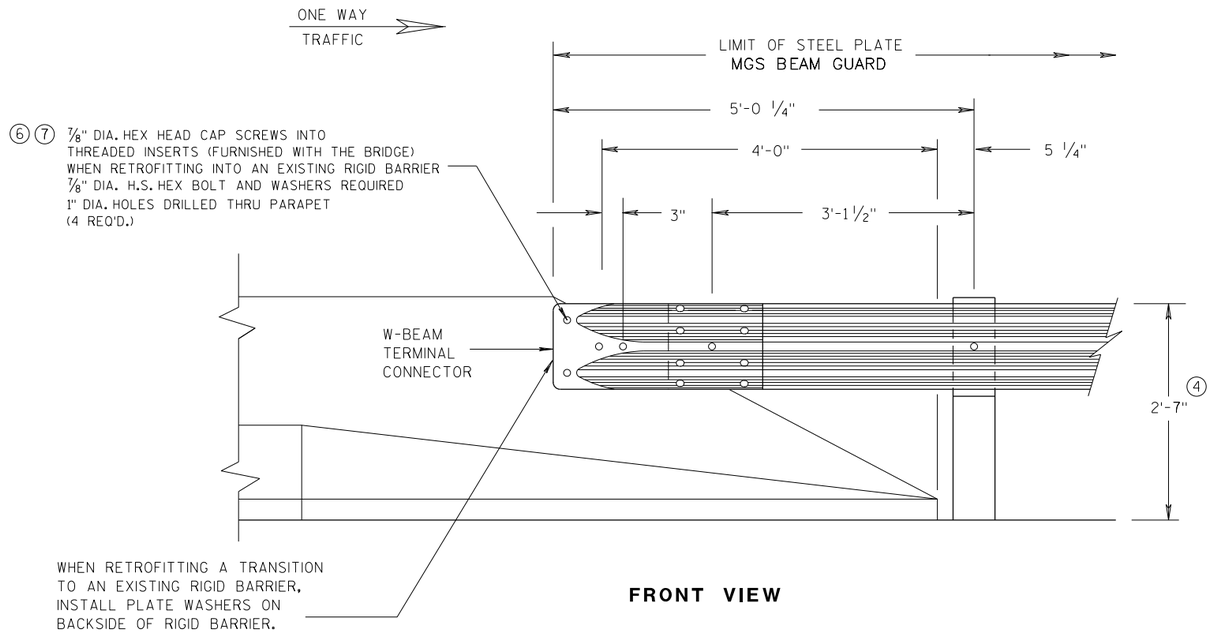


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

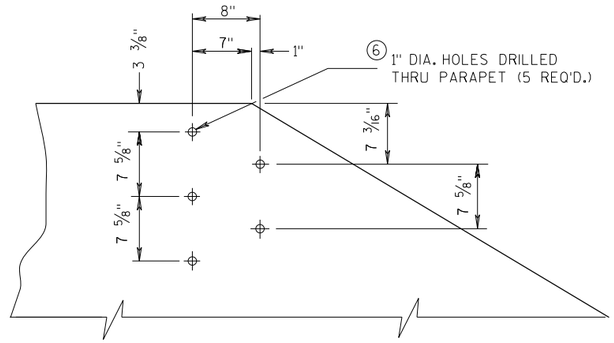
GENERAL NOTES

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

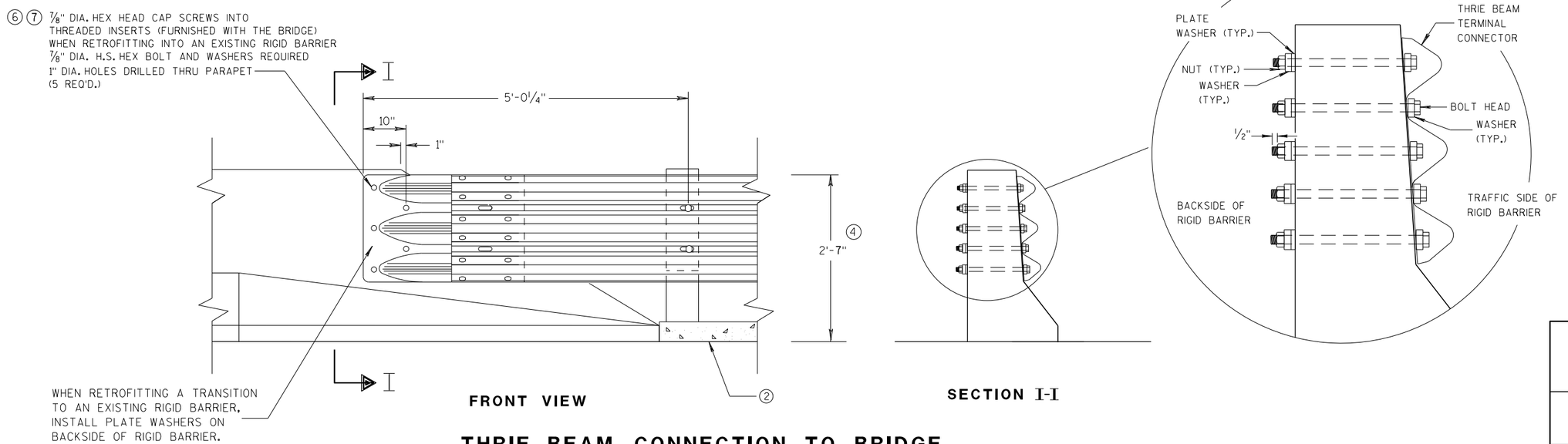
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

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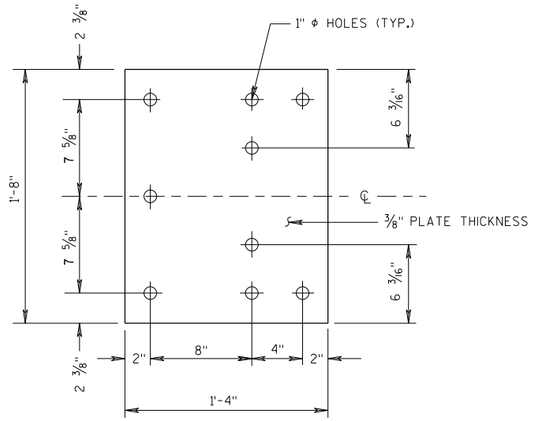
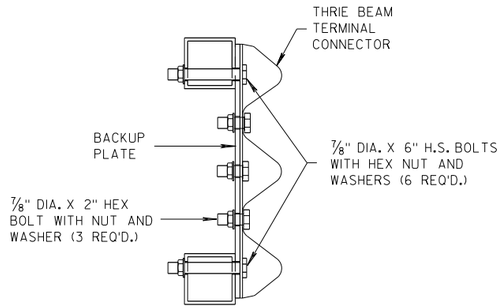
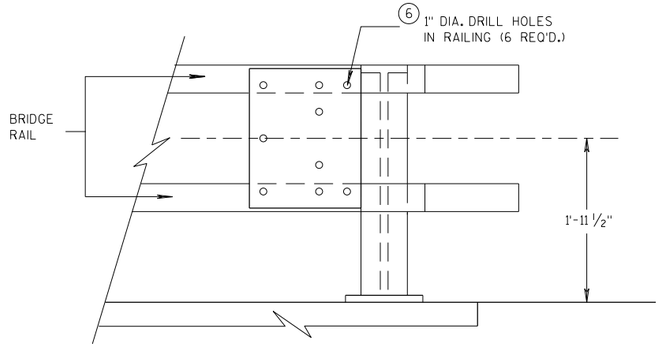


BACK-UP PLATE DETAIL



SECTION J-J

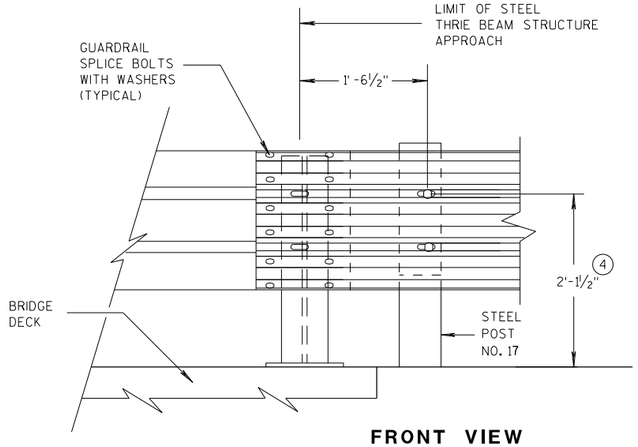


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

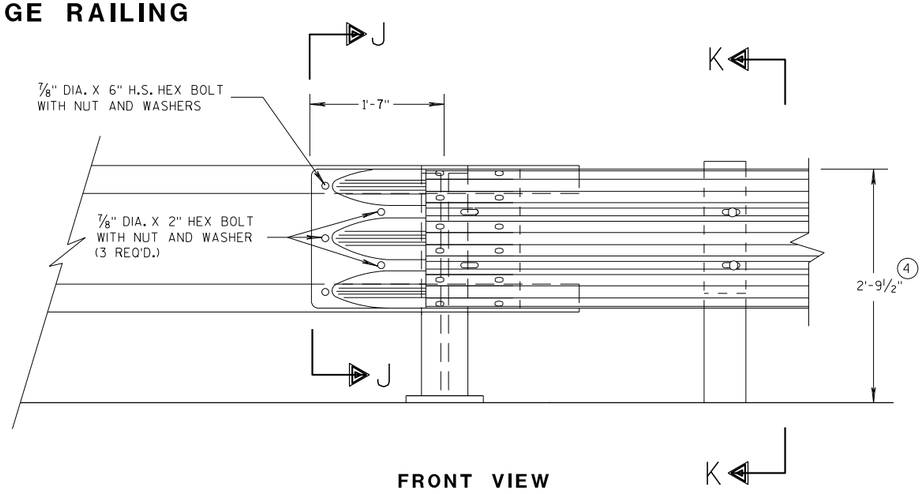
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

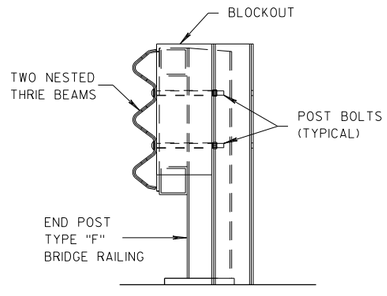


FRONT VIEW

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
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/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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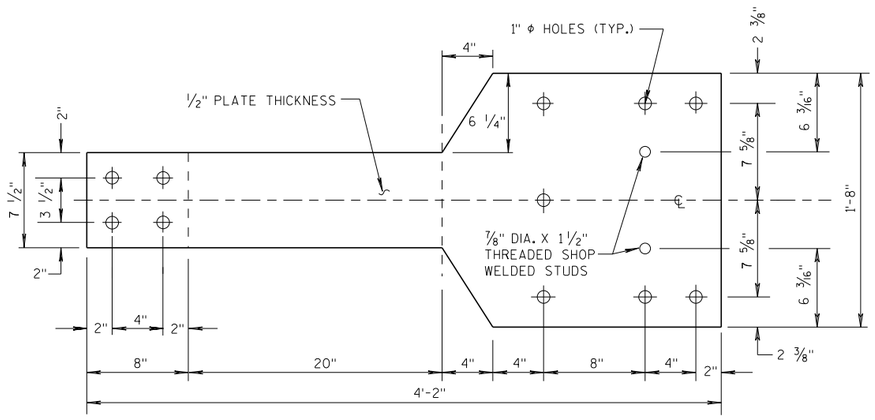
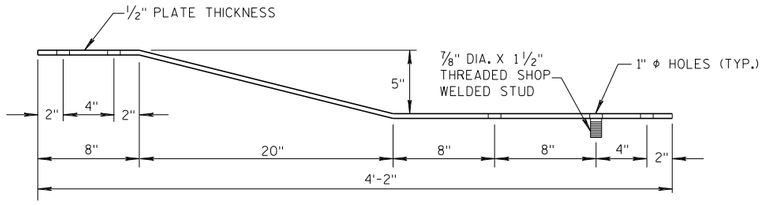
GENERAL NOTES

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

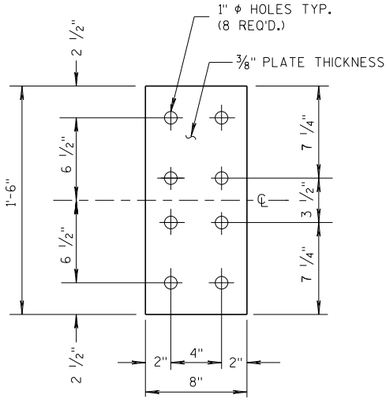


FRONT VIEW



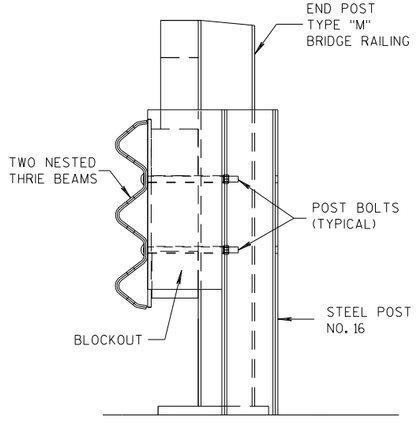
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

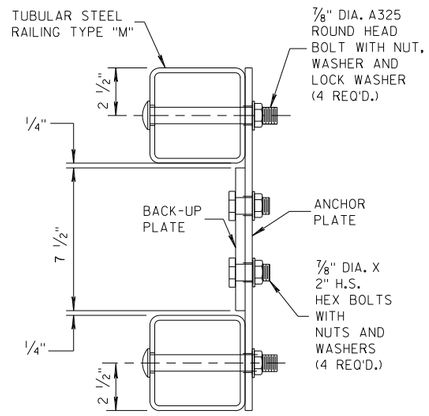


FRONT VIEW

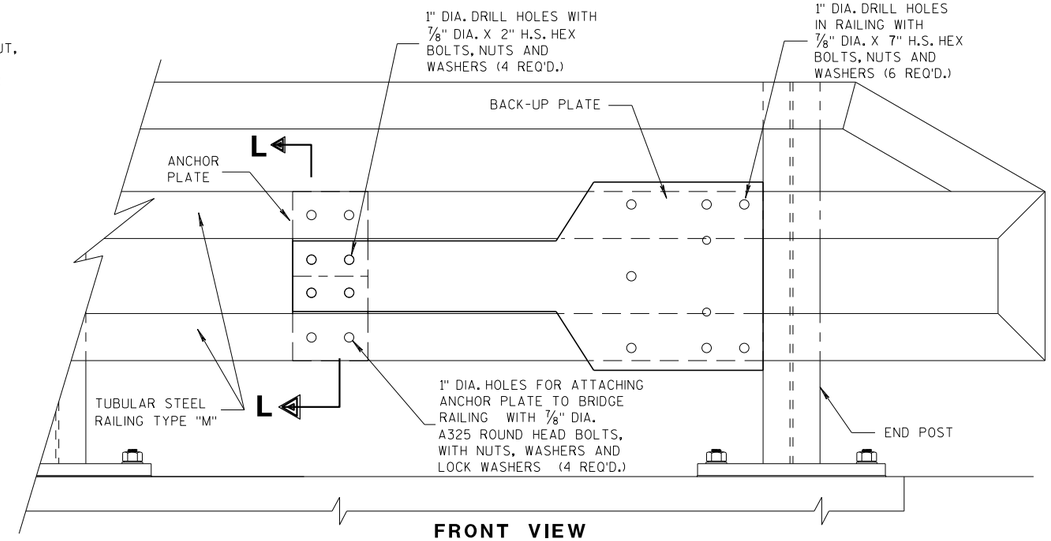
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

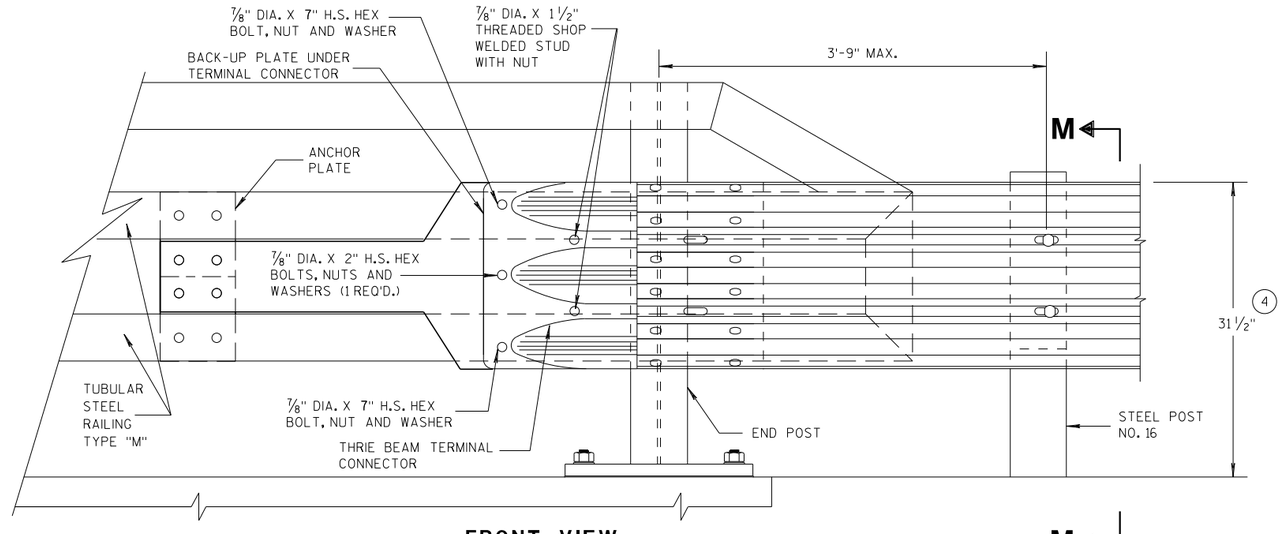


SECTION L-L

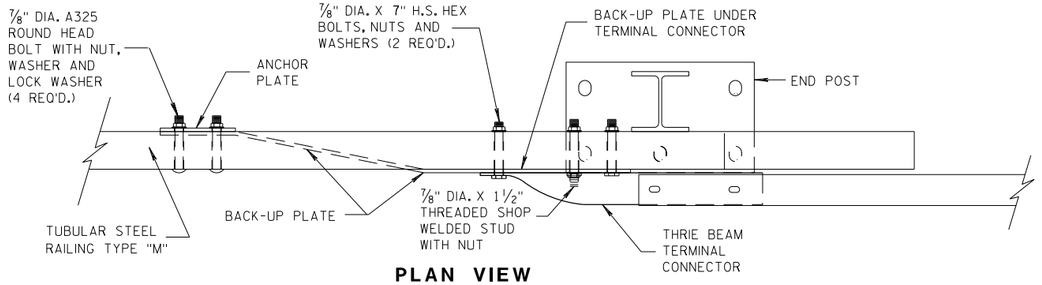


FRONT VIEW

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
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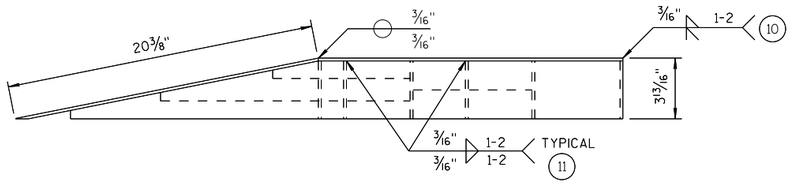

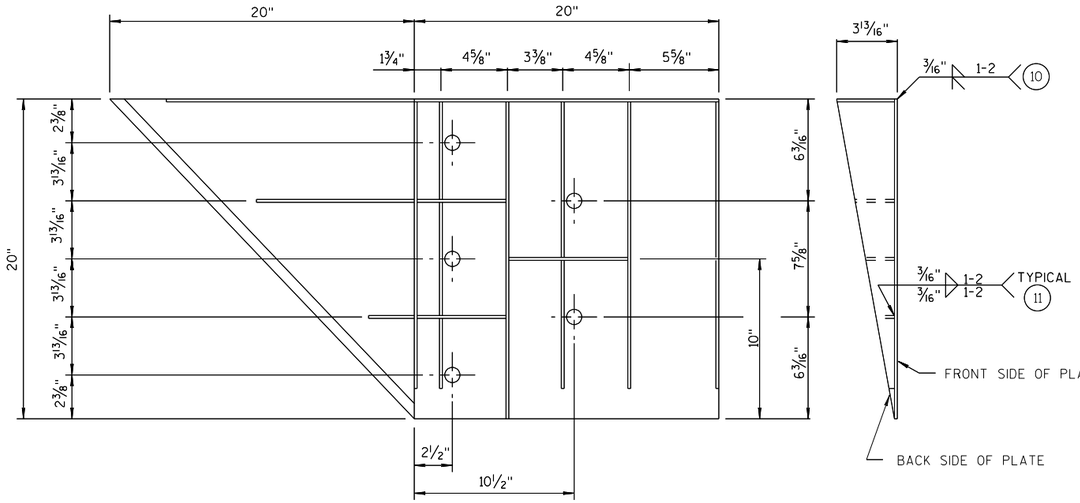

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

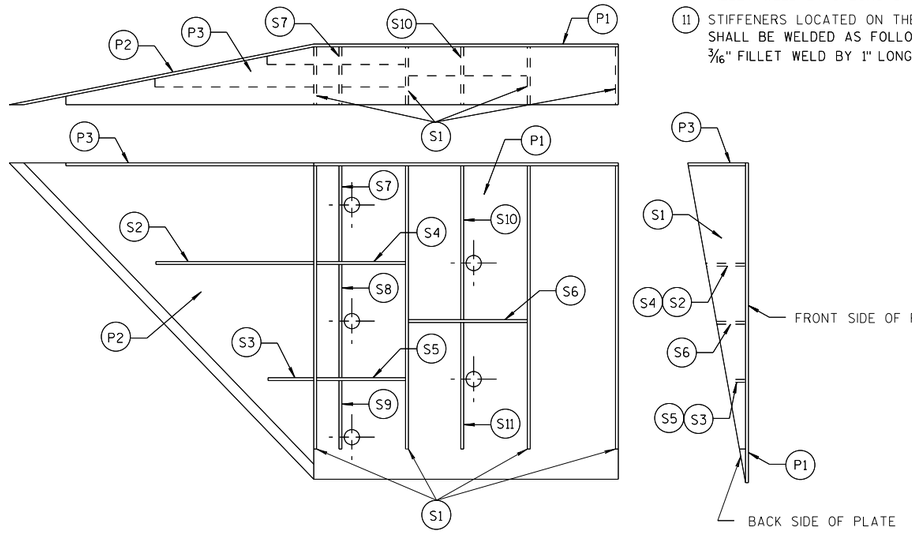

PLATE AND STIFFENER IDENTIFICATION

(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
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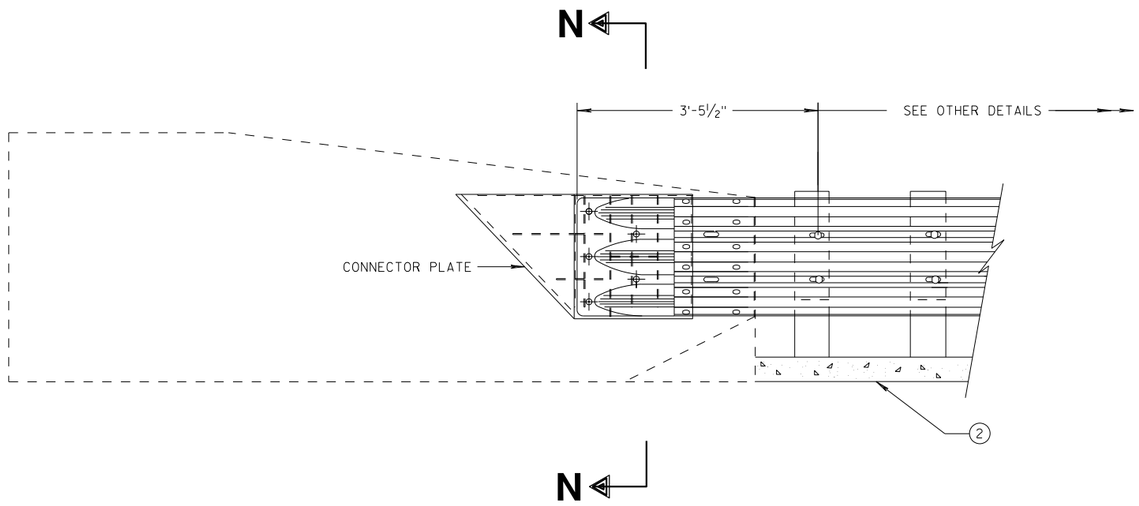
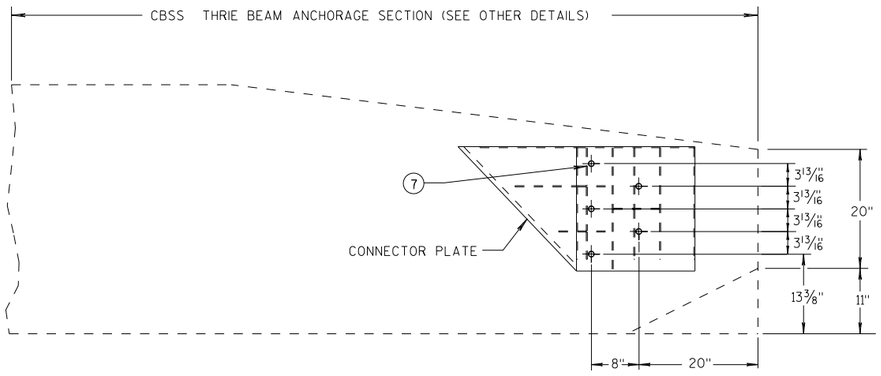


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



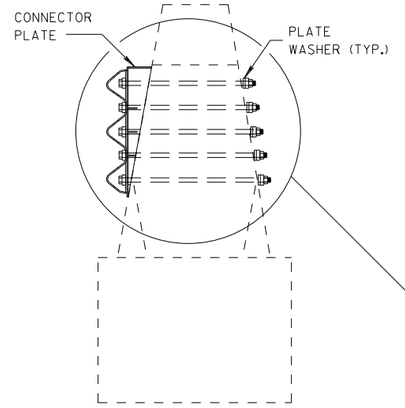
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

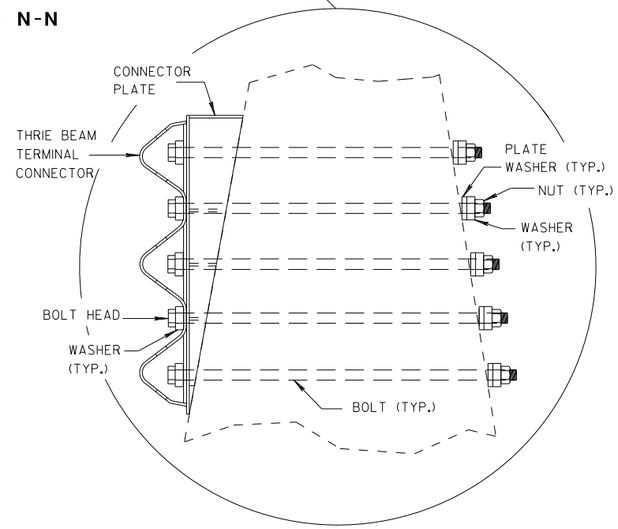
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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
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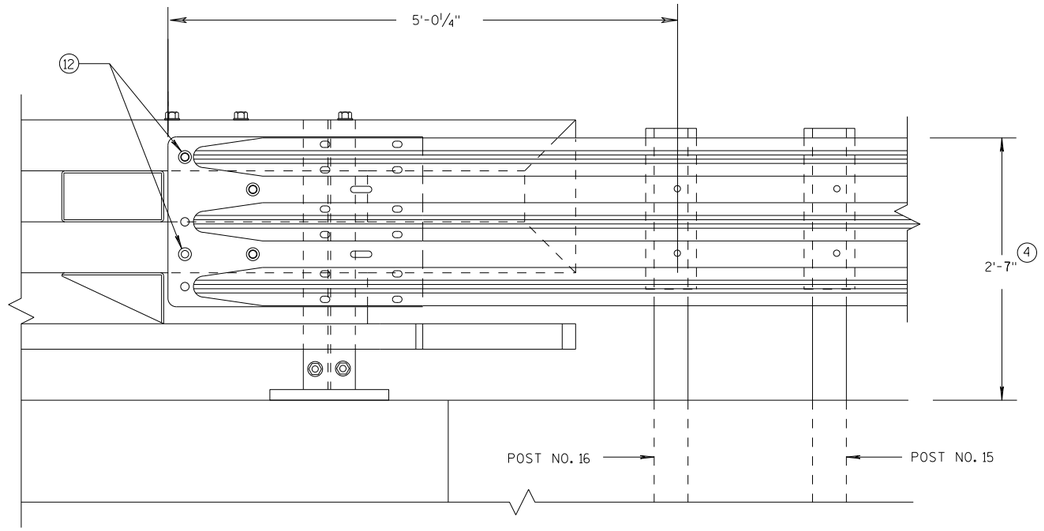
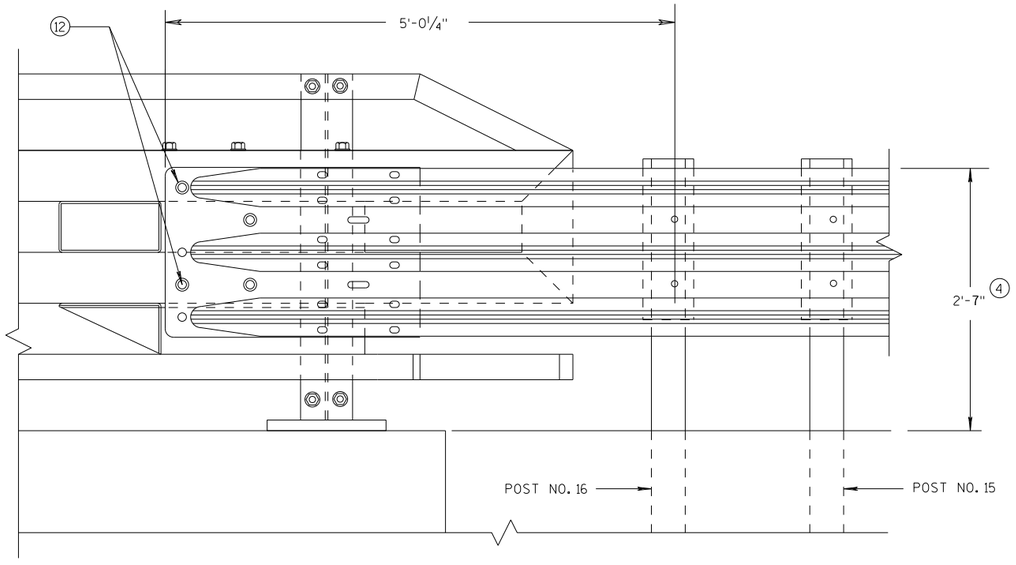


ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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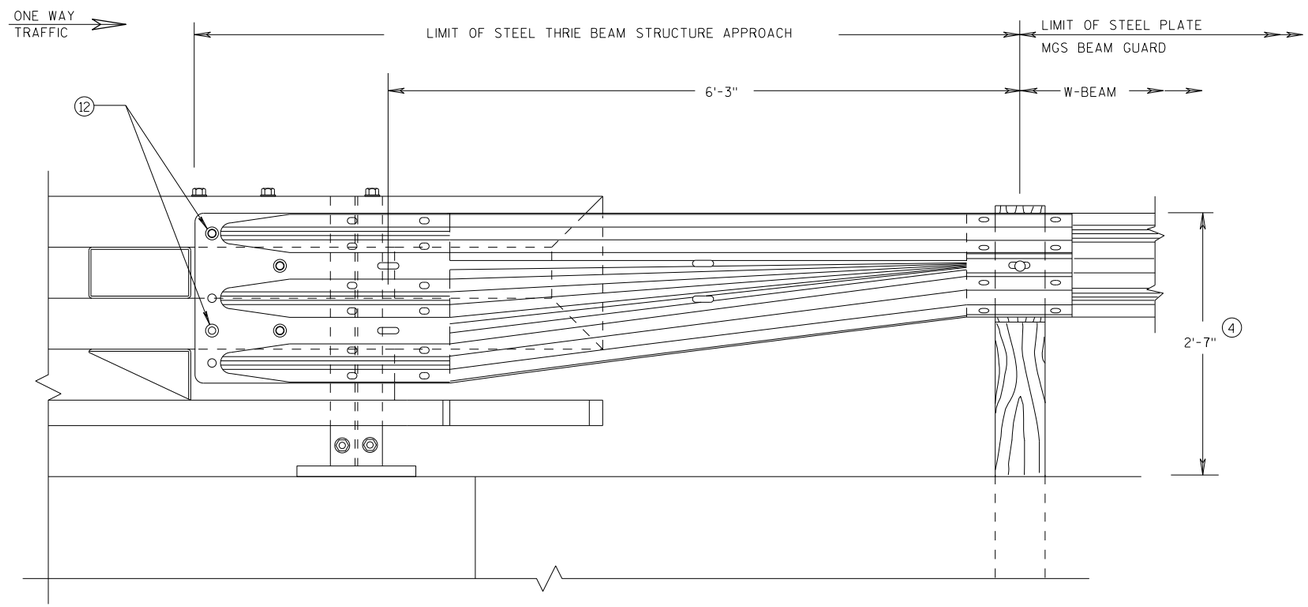


FRONT VIEW

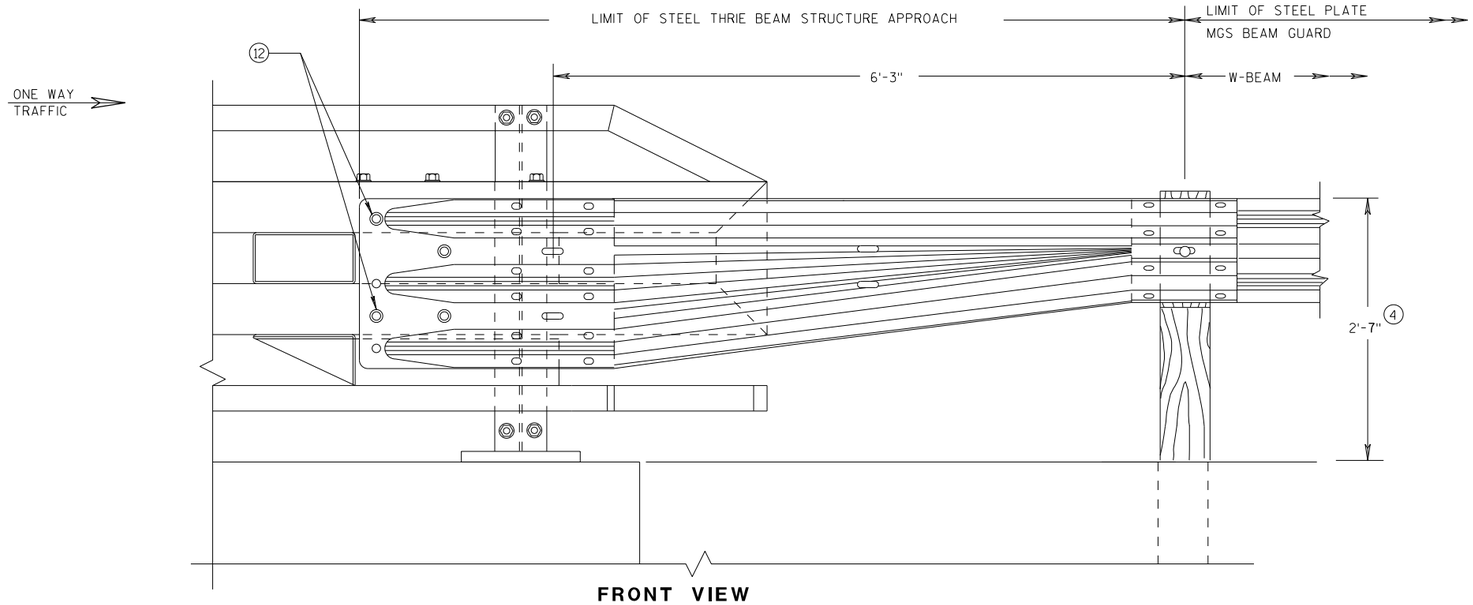
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(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
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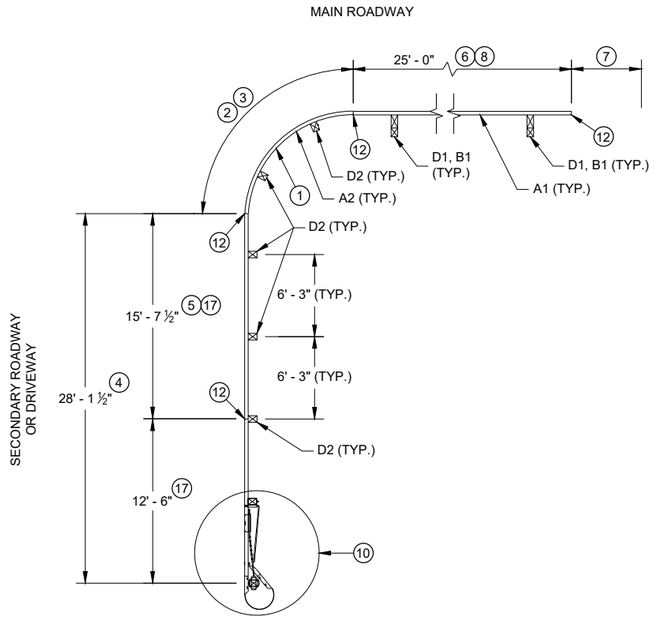
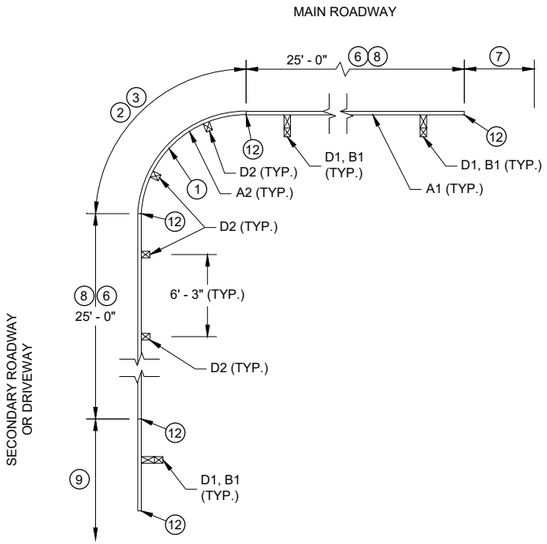


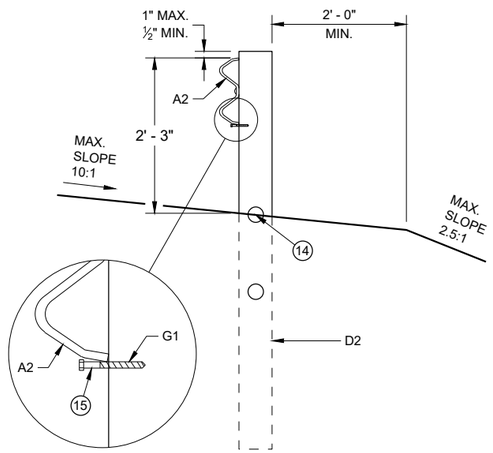
PLAN VIEW

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

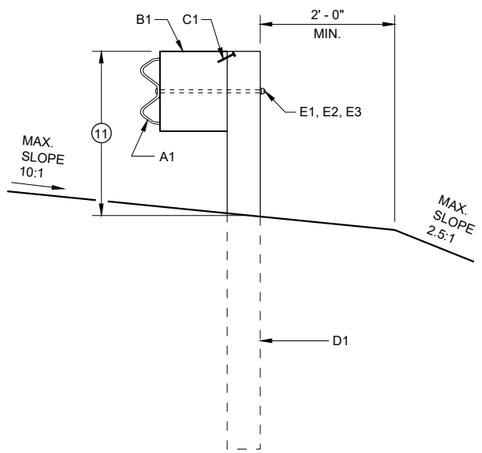


PLAN VIEW

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



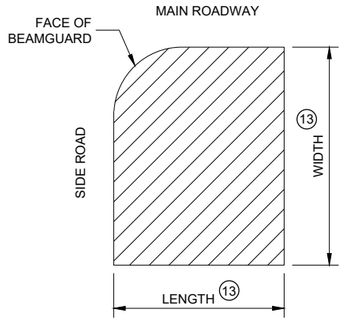
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



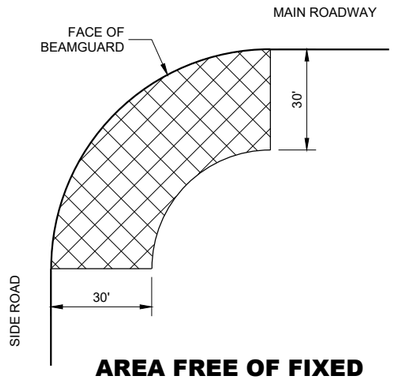
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

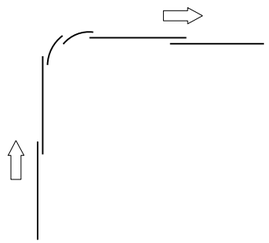
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



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



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

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

GALVANIZE PARTS AFTER FABRICATION.

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

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

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

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

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

DRAWINGS ARE NOT TO SCALE.

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

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

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

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

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

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

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

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

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

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

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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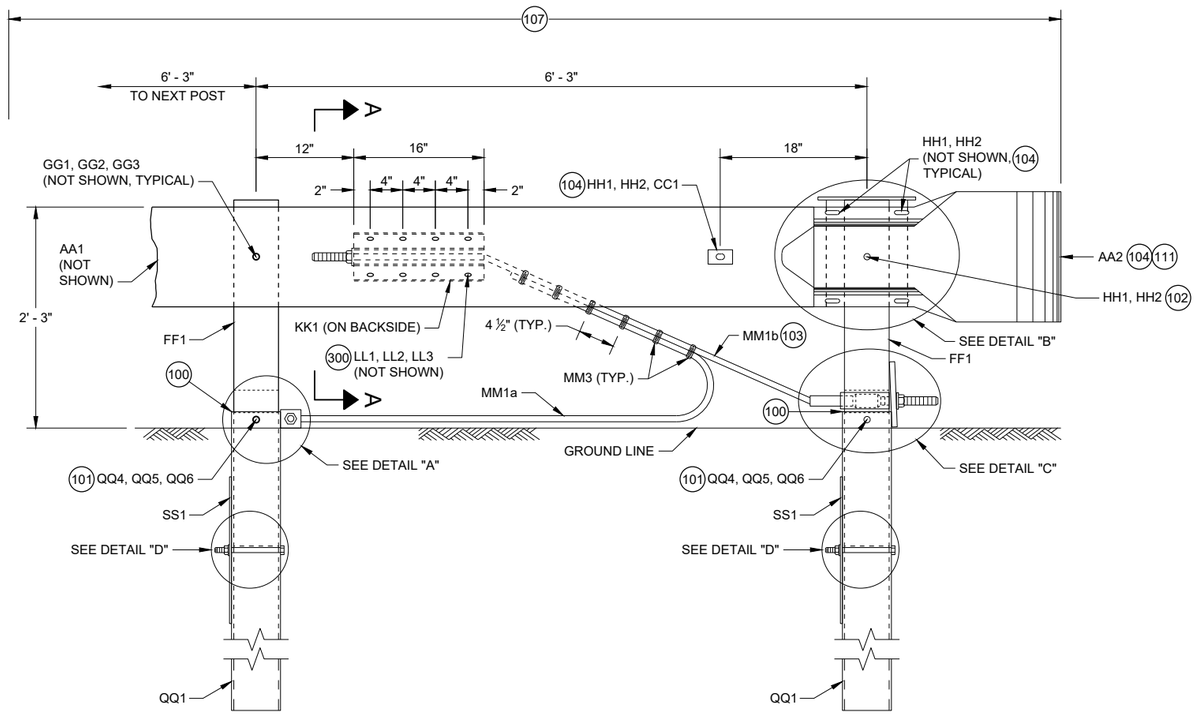
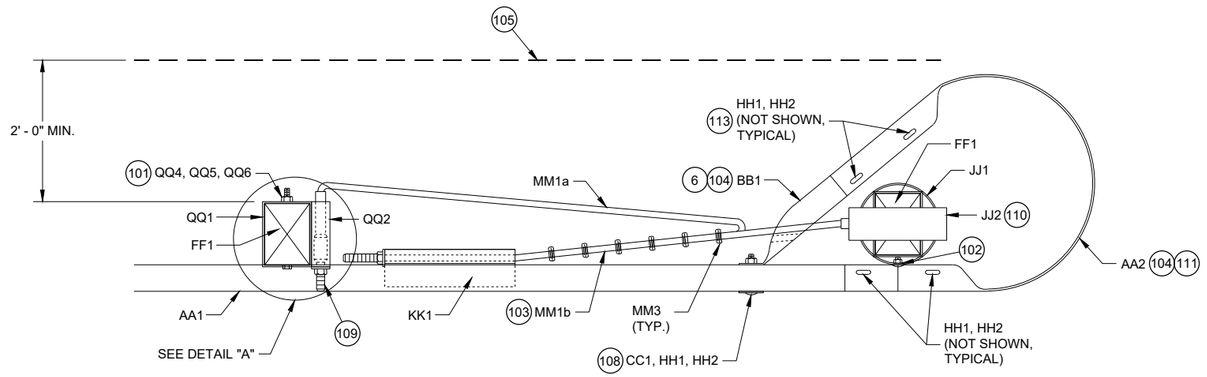


PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

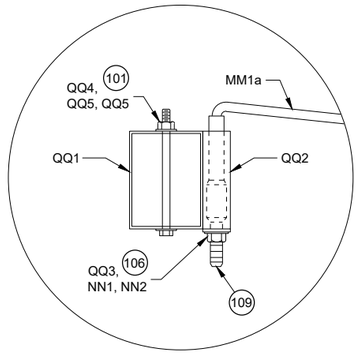
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

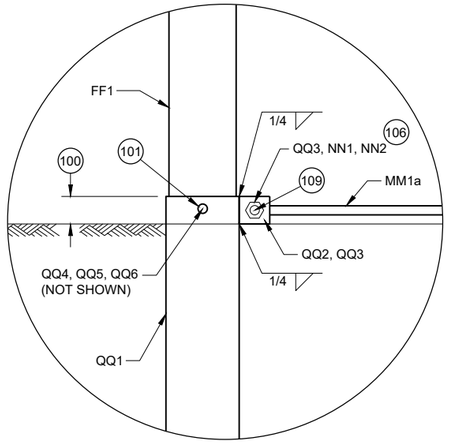
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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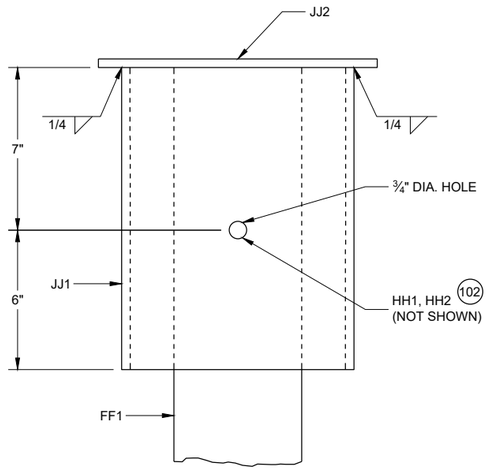
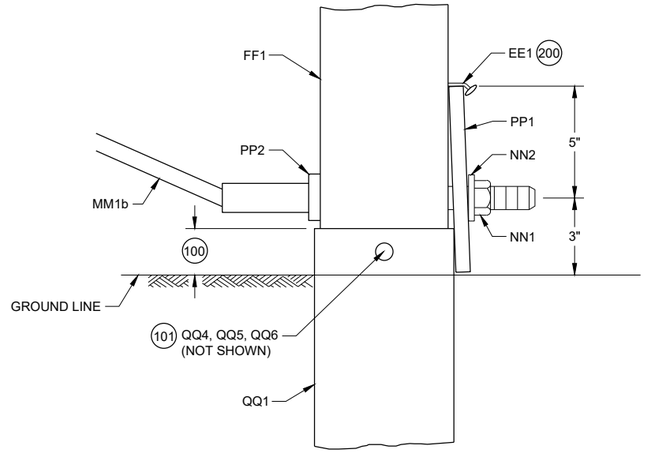
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



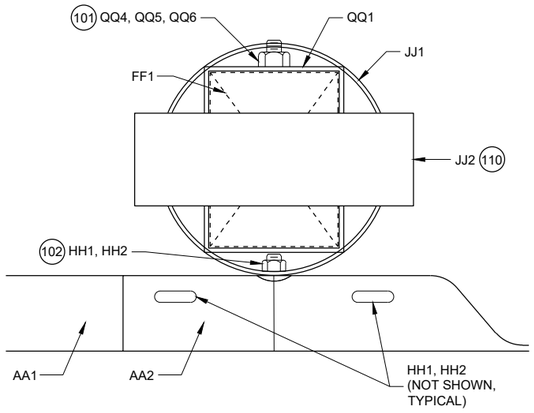
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



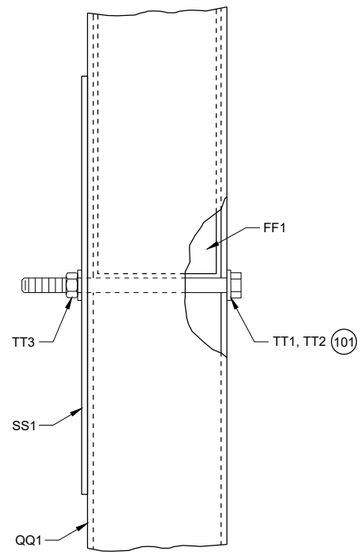
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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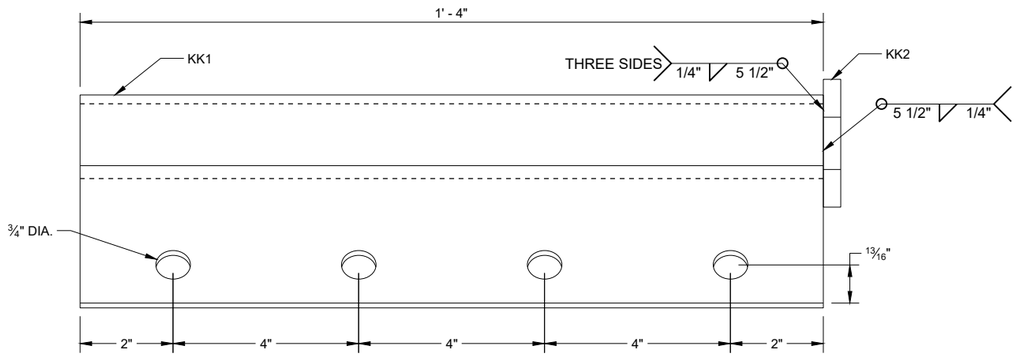
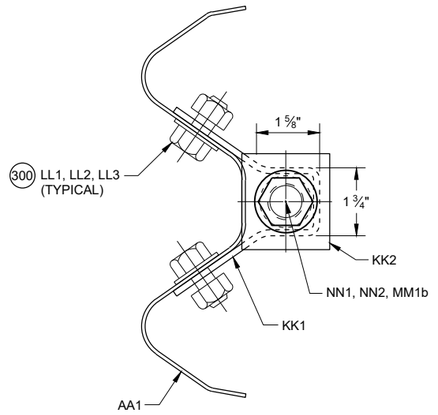
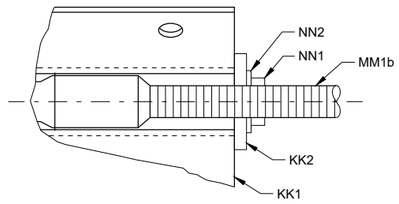
GENERAL NOTES

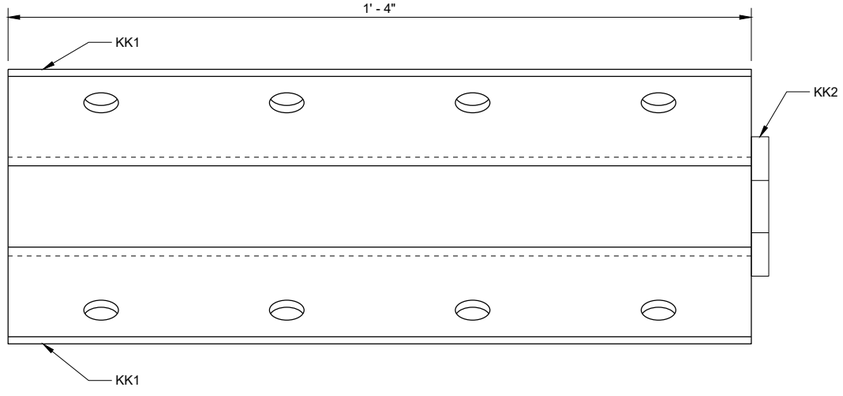
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

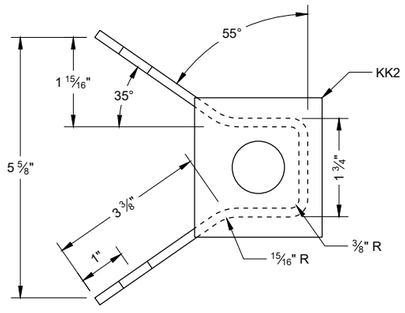




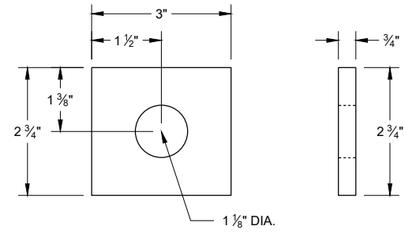


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

6

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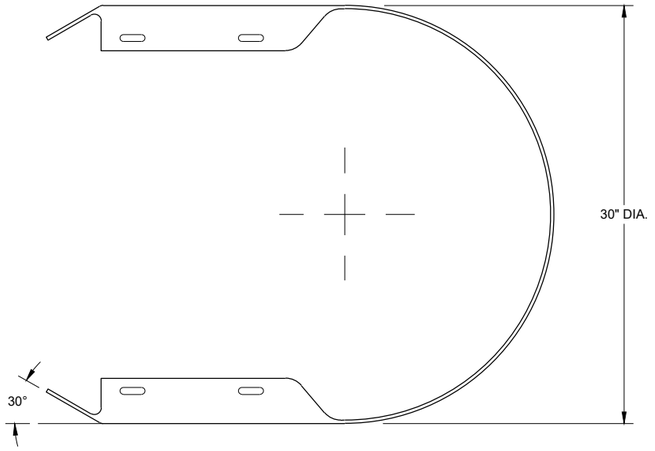
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

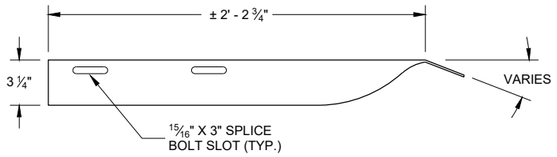
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

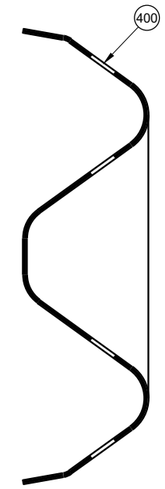
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



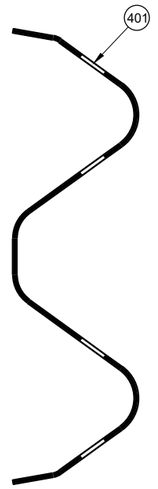
TOP VIEW



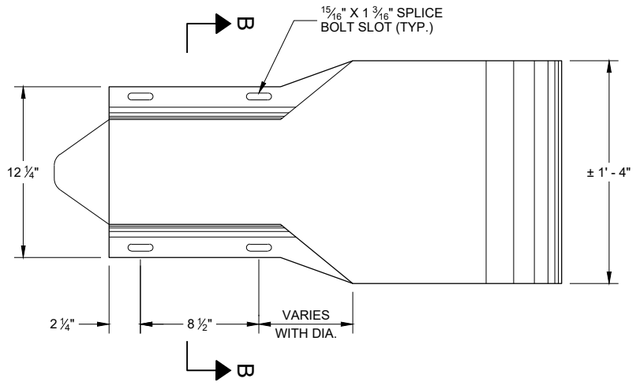
TOP VIEW



SECTION B -B

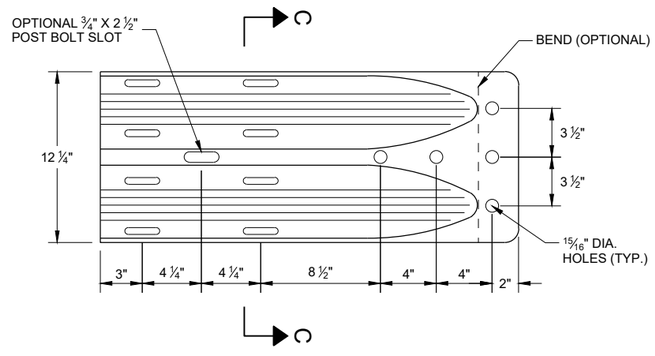


SECTION C -C



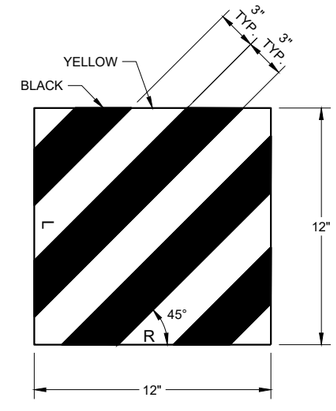
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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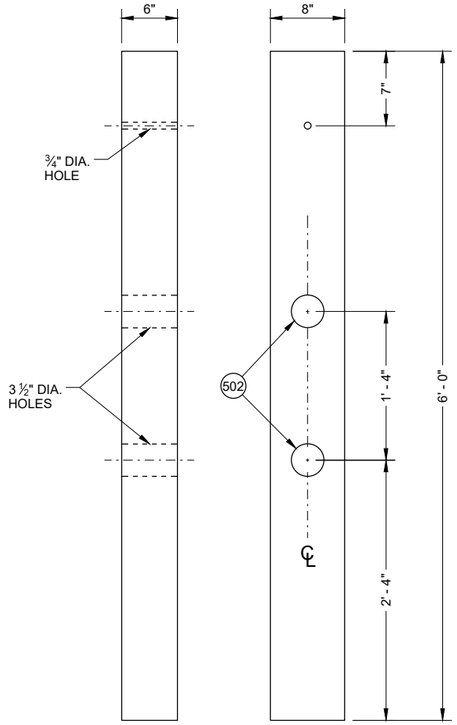
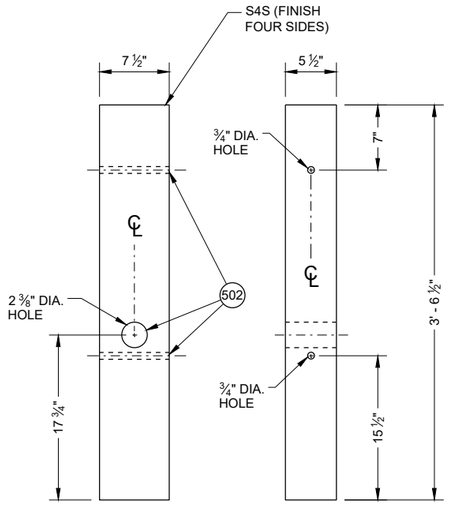


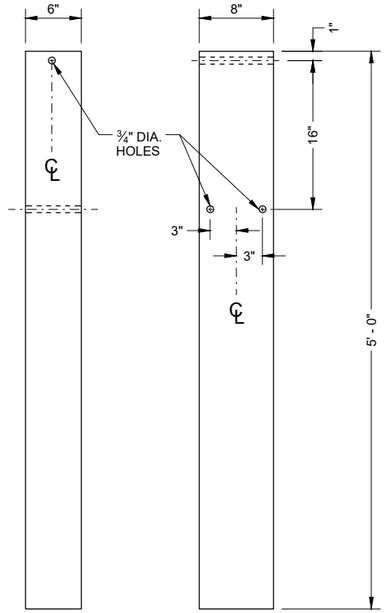
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) (500)

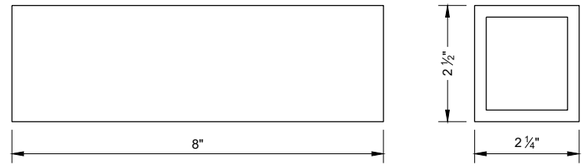
GENERAL NOTES

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

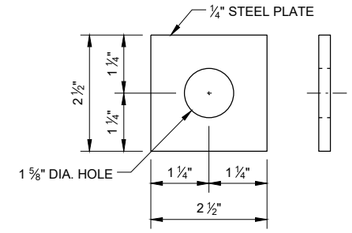
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

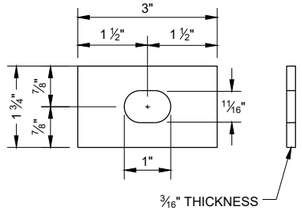
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



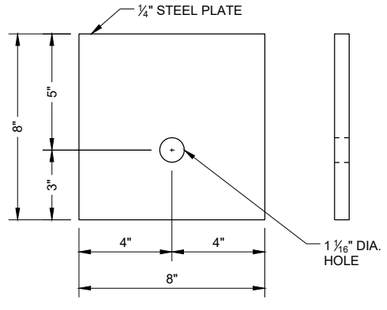
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



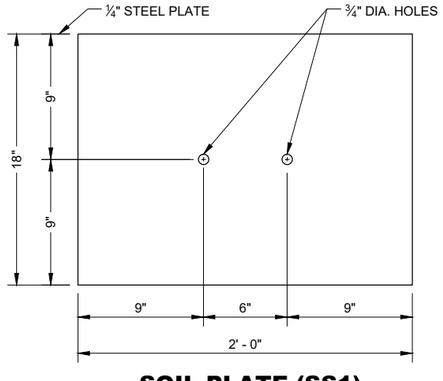
ANCHOR CABLE TUBE END PLATE (QQ3)



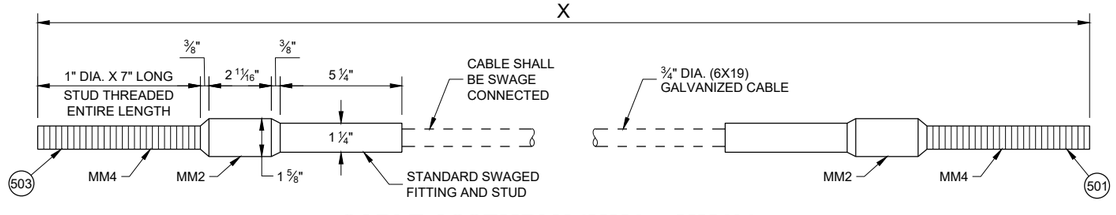
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 14B53 - 02g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

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SDD 14B53 - 02i

SDD 14B53 - 02i

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

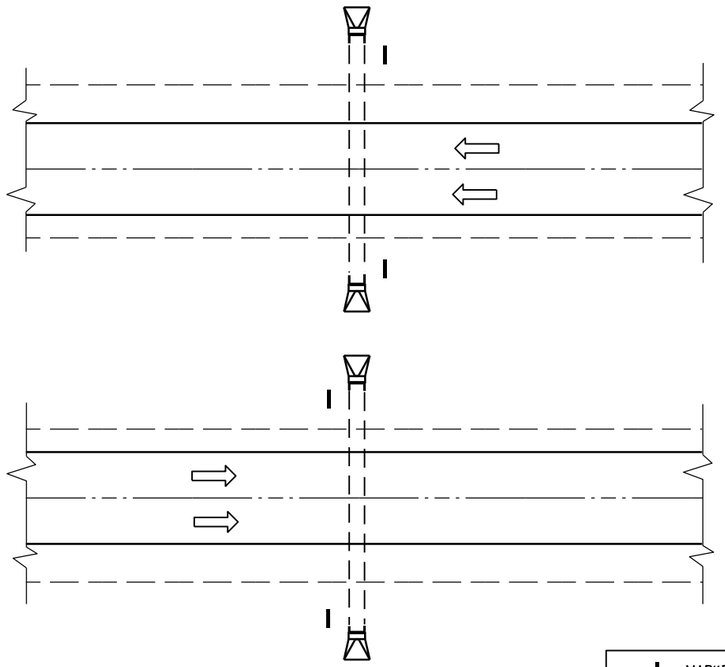
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

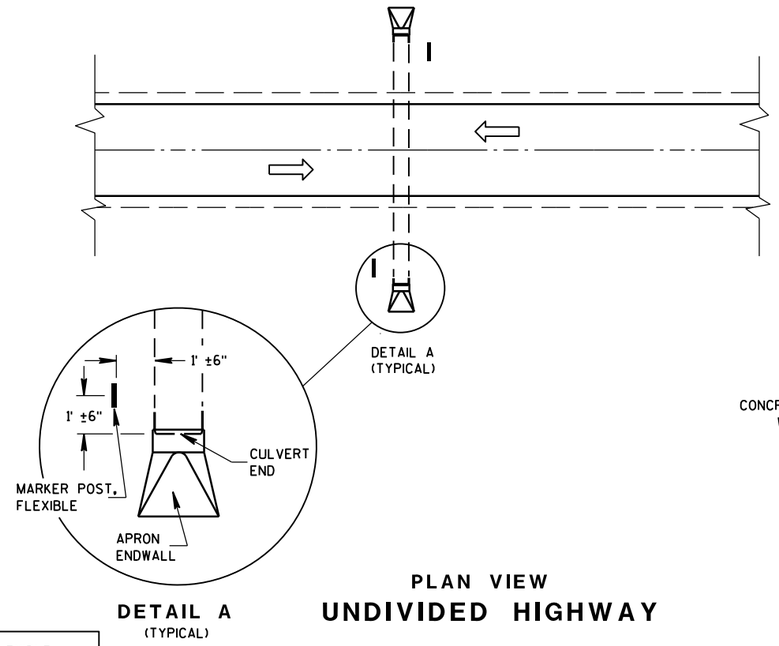
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

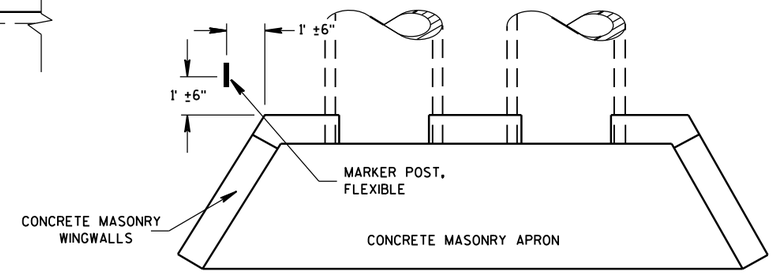
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

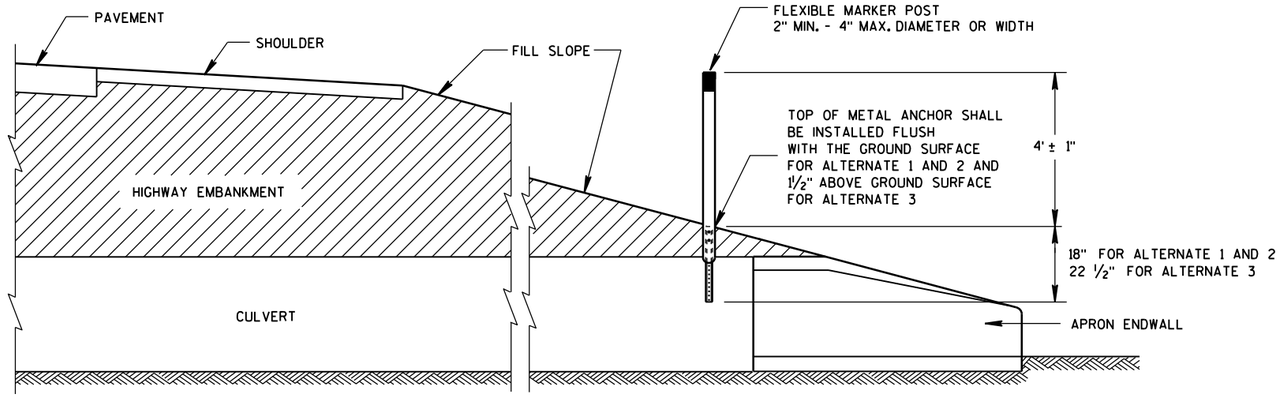
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 A 3-2a

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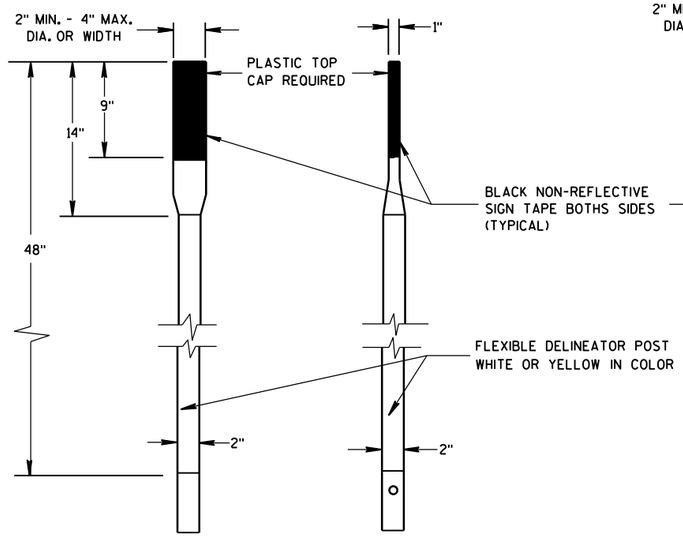
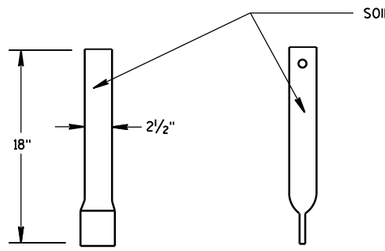
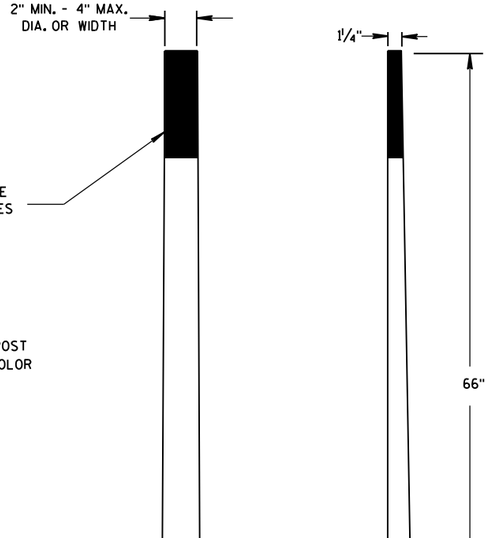
S.D.D. 15 A 3-2a





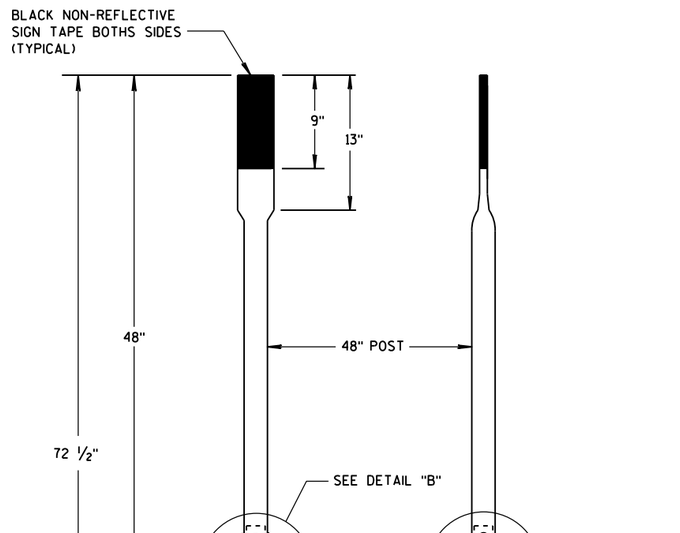
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

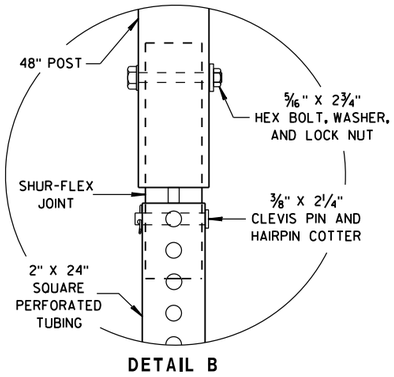
ALTERNATE 2



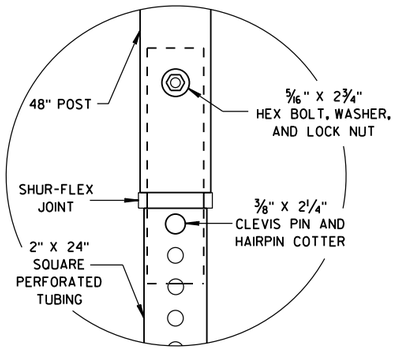
FRONT VIEW SIDE VIEW

ALTERNATE 3

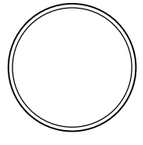
FLEXIBLE MARKER POSTS



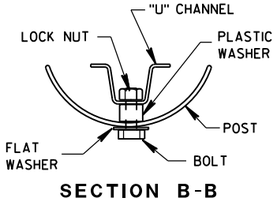
DETAIL B



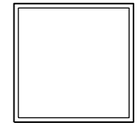
DETAIL C



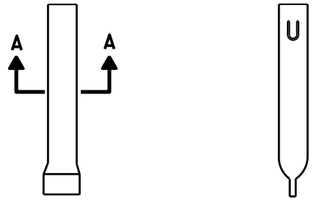
SECTION A-A



SECTION B-B

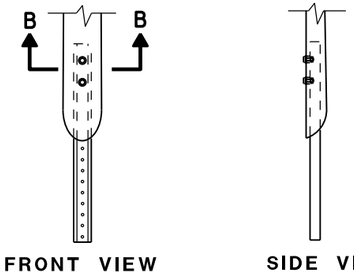


SECTION C-C



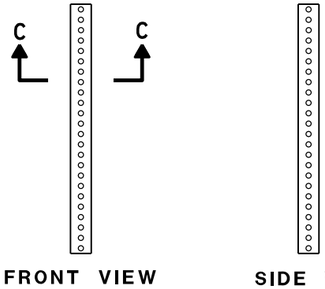
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 A 3-2b

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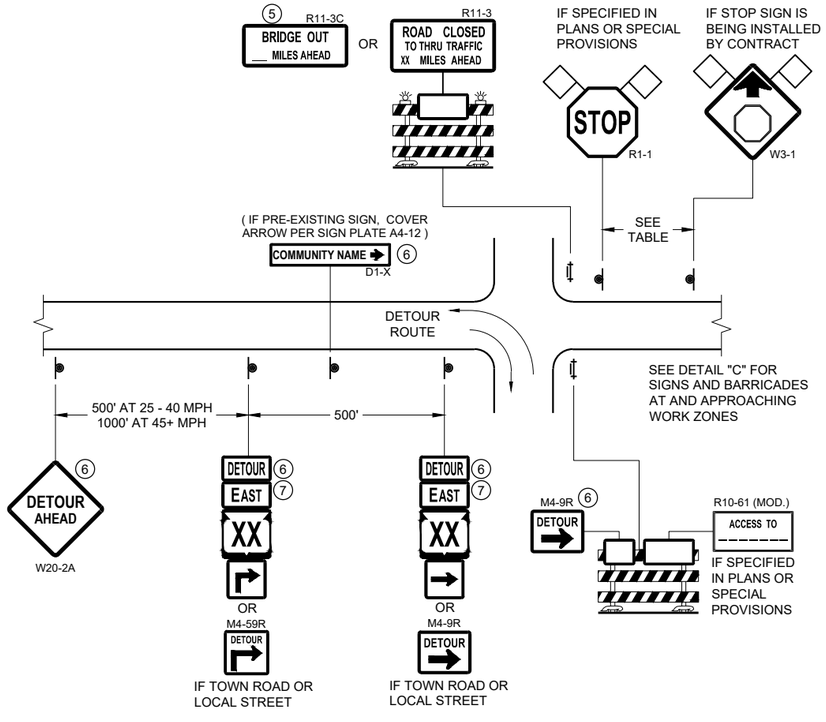
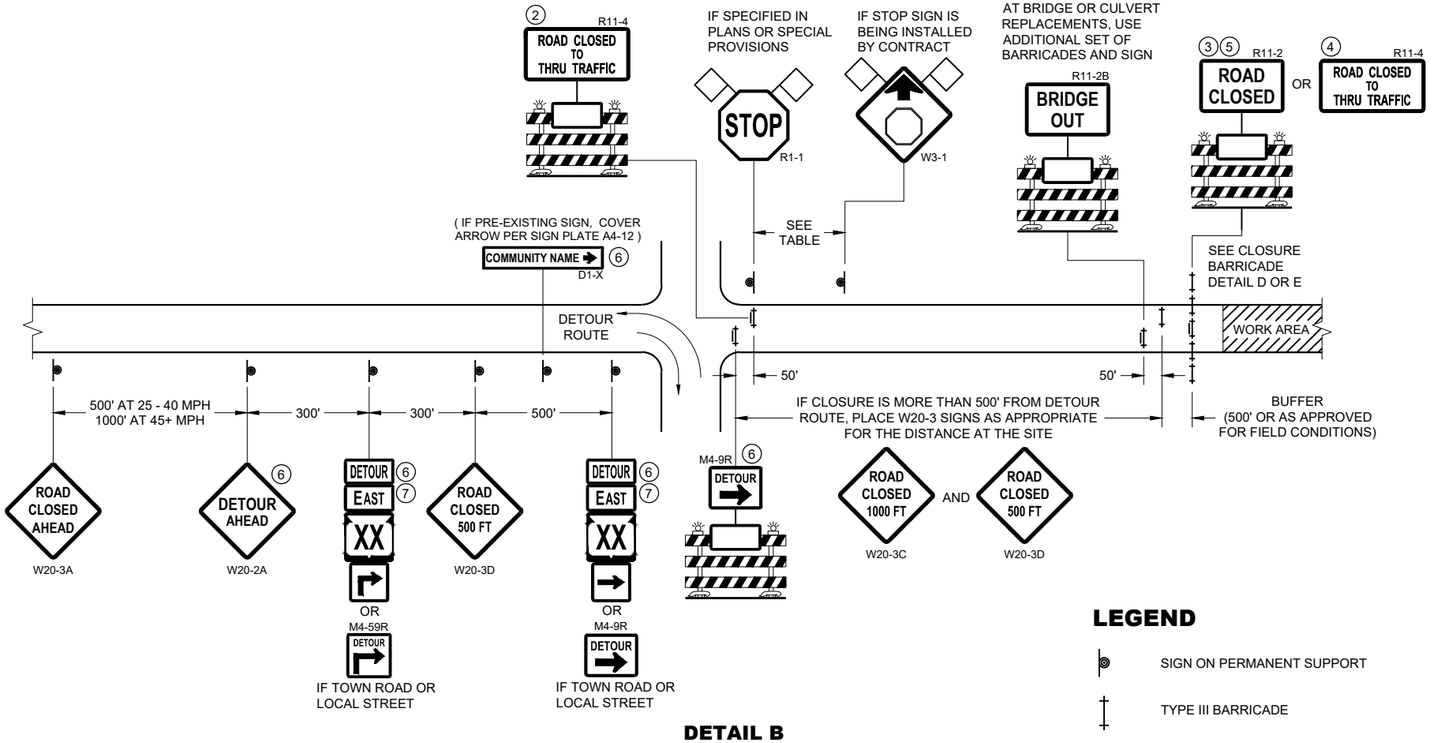
S.D.D. 15 A 3-2b



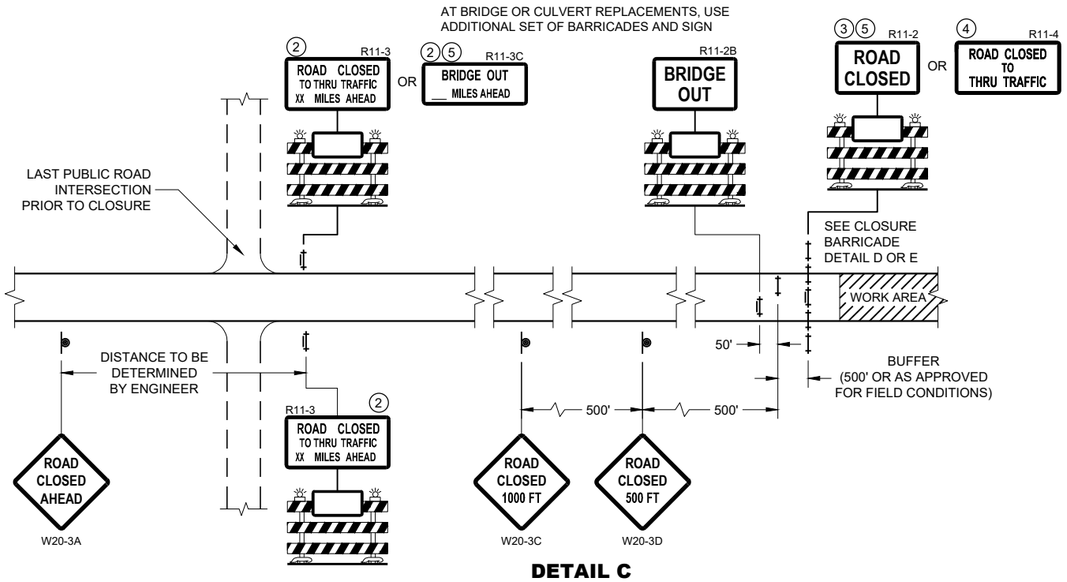
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

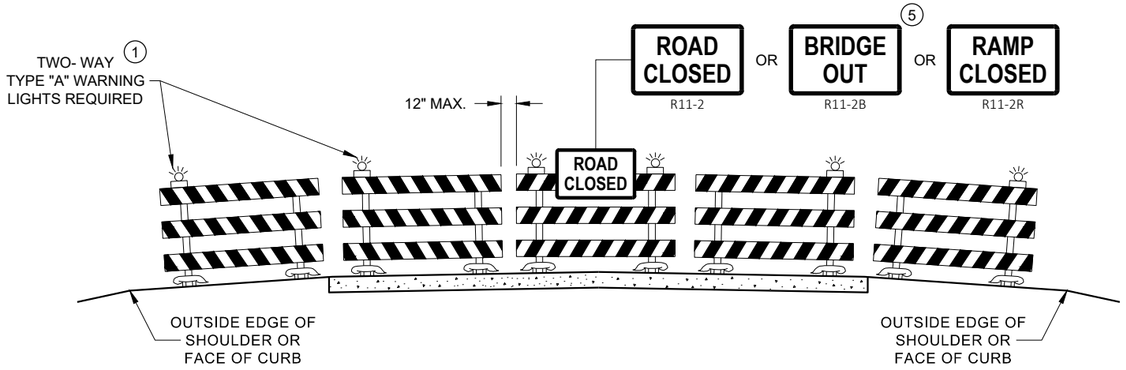
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

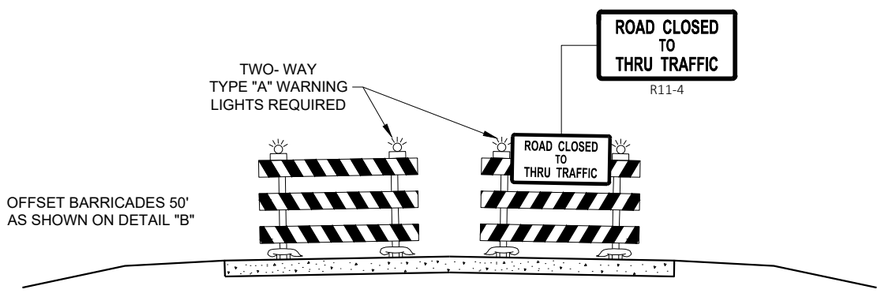
FHWA

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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SDD 15C02 - 09b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4; OR XX — M1 - 6; OR COUNTY X — M1 - 5A
- M05 - 1; OR M06 - 1; OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

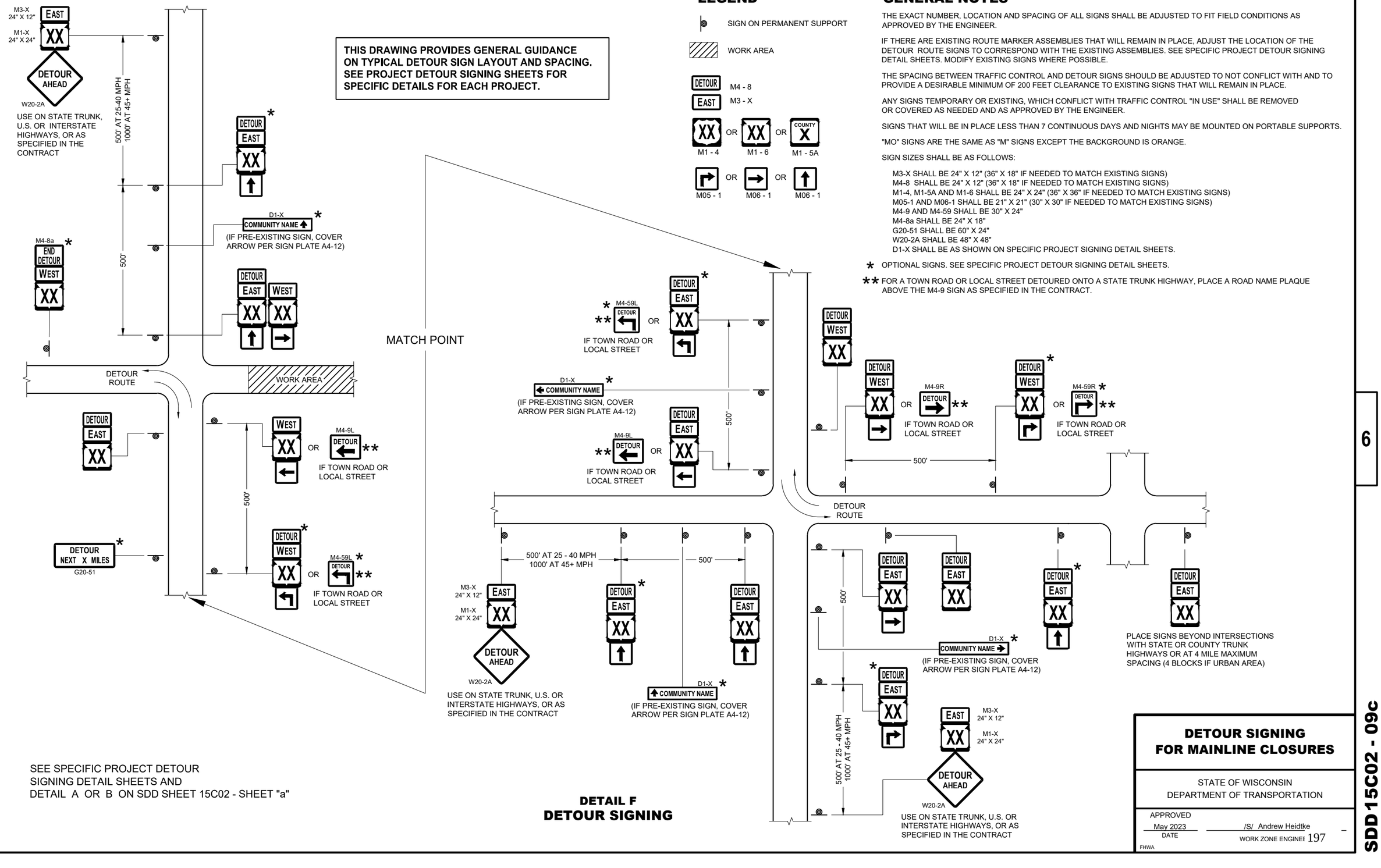
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



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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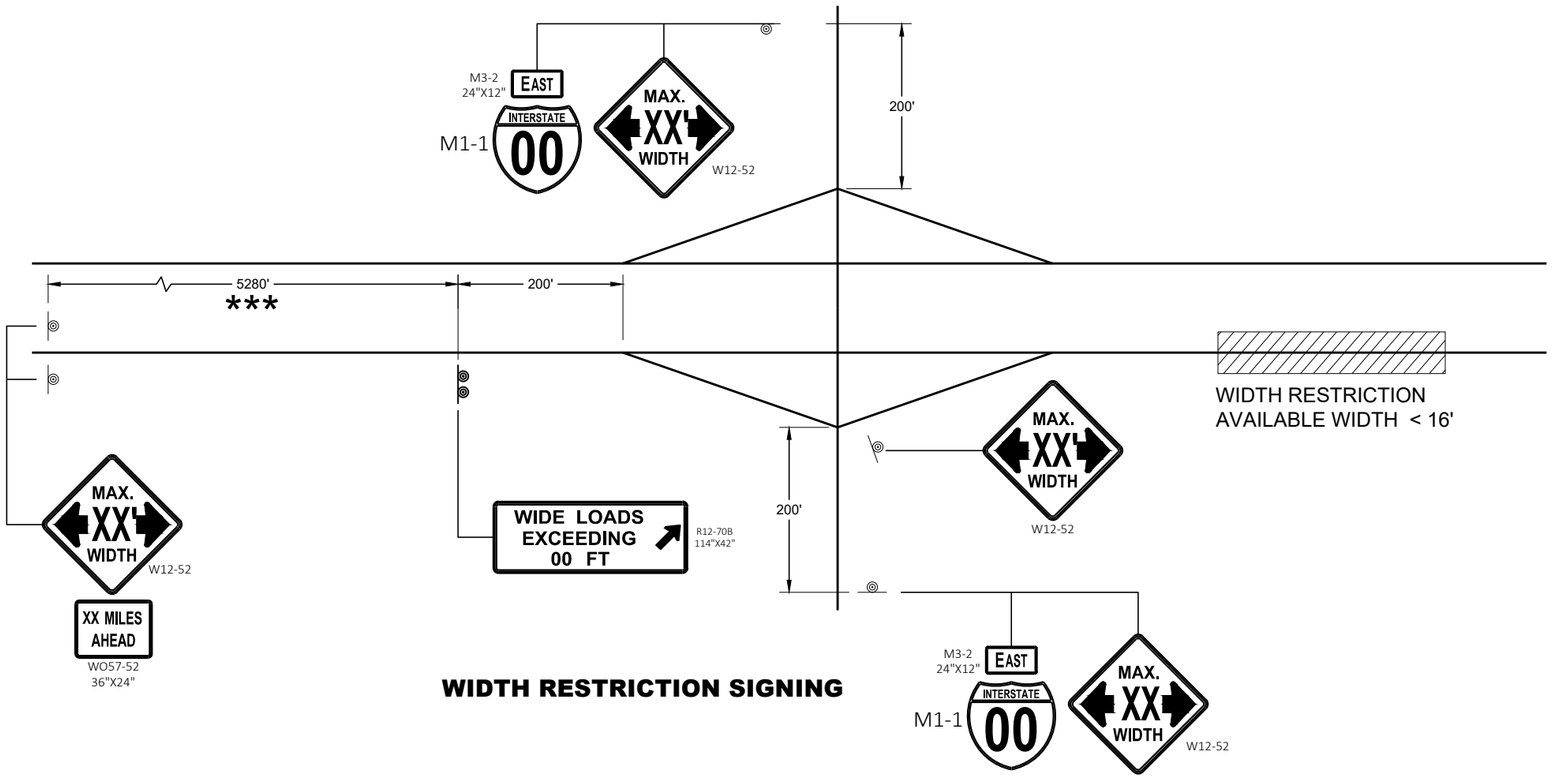
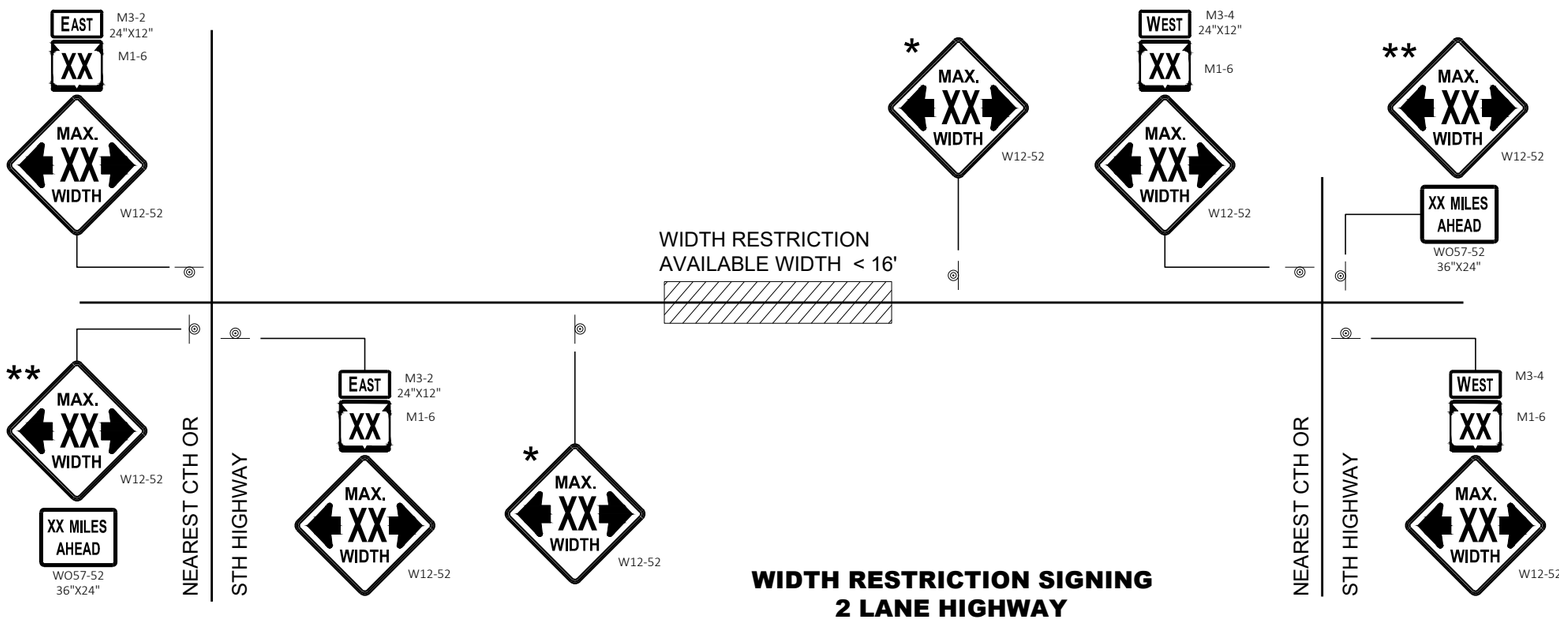
SDD 15C02 - 09c



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

◎ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

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

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

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SDD 15C02 - 09f

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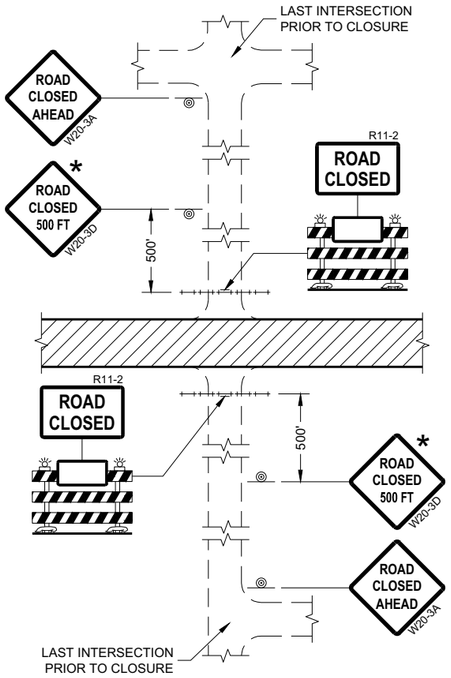
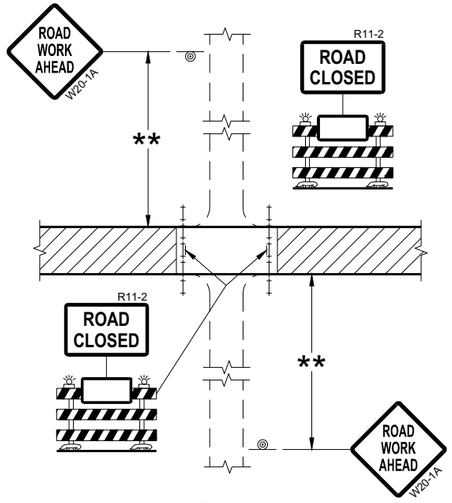
SDD 15C02 - 09f



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

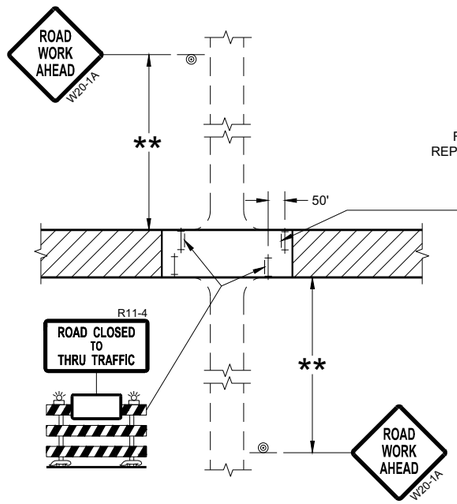
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

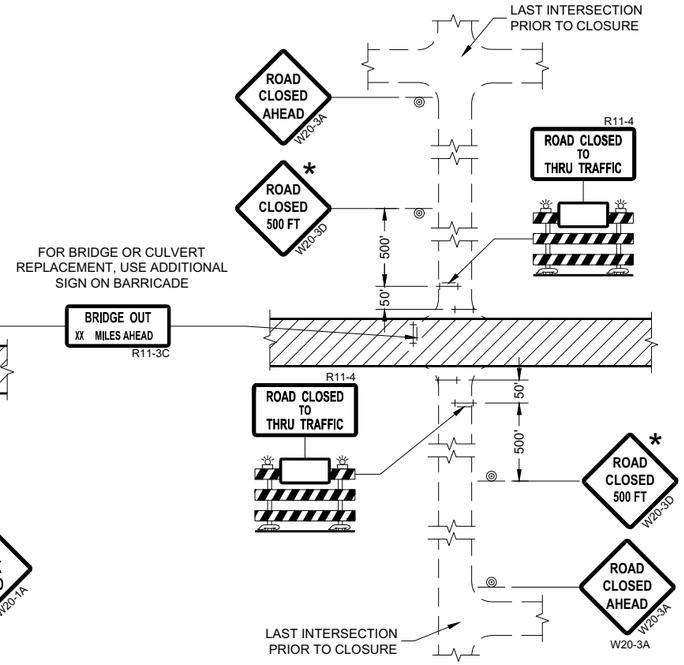
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

SDD 15C03 - 05

GENERAL NOTES

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

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

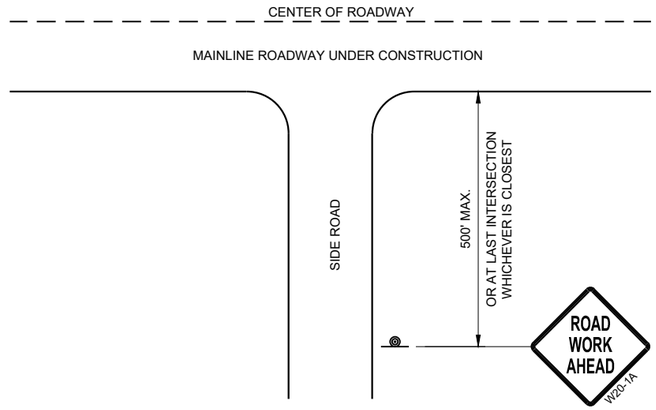
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



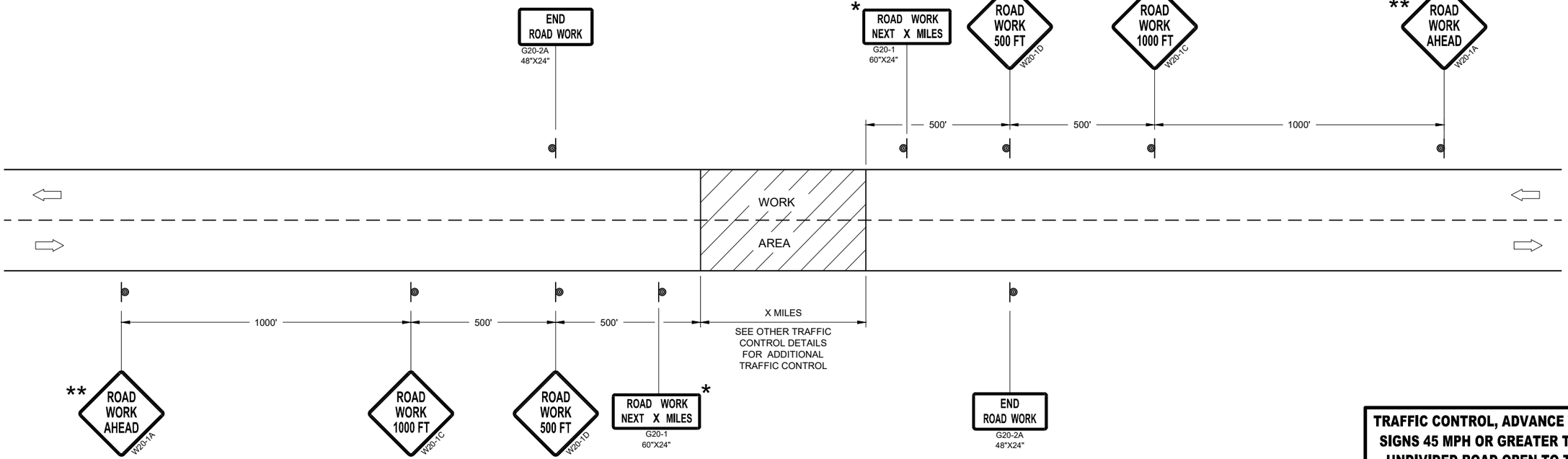
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C04 - 05

GENERAL NOTES

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

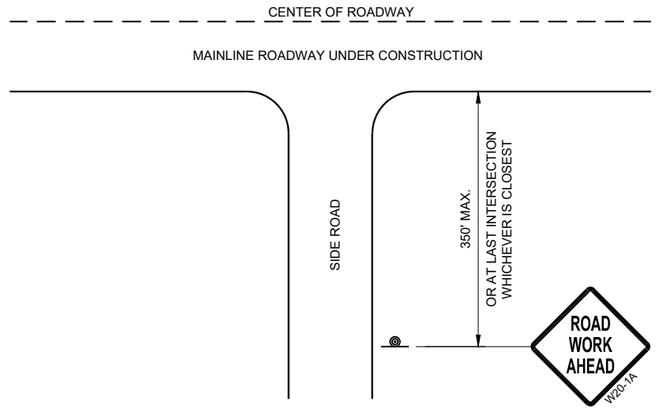
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



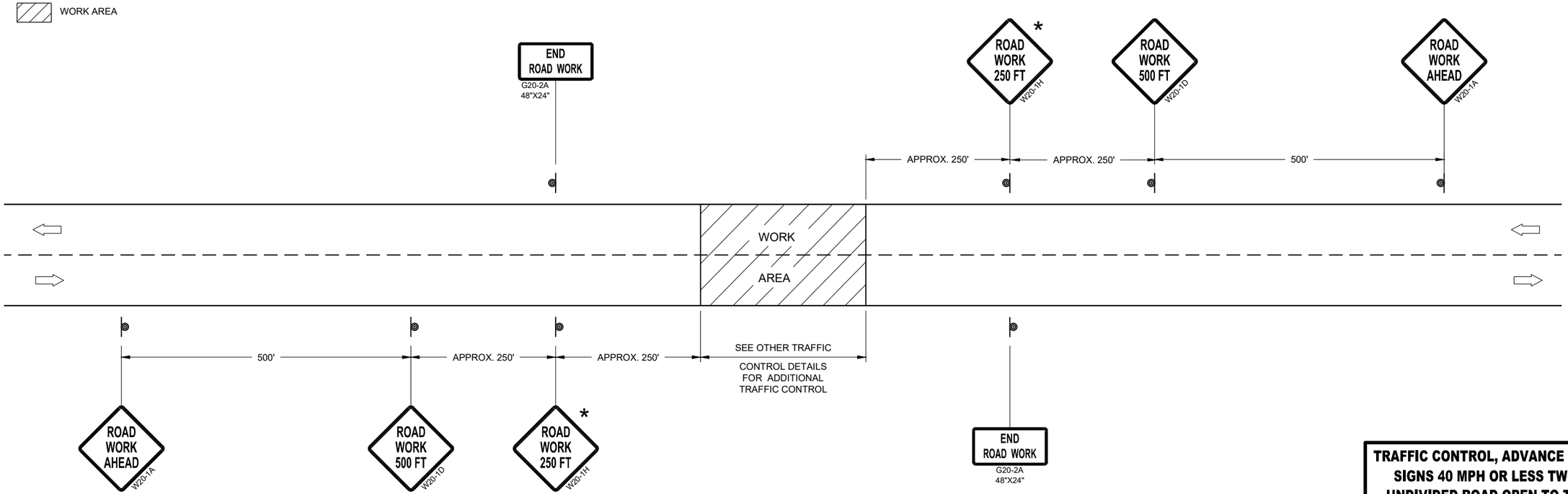
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
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July 2018
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SDD 15C05 - 05

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

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

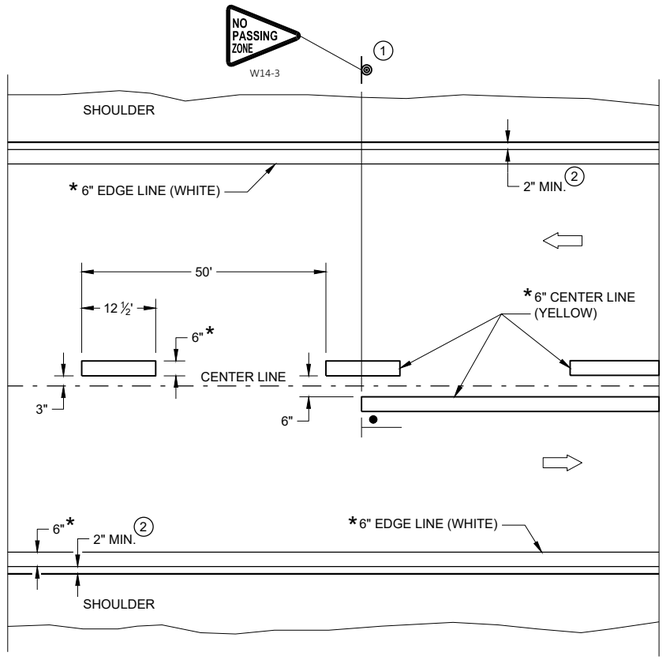
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

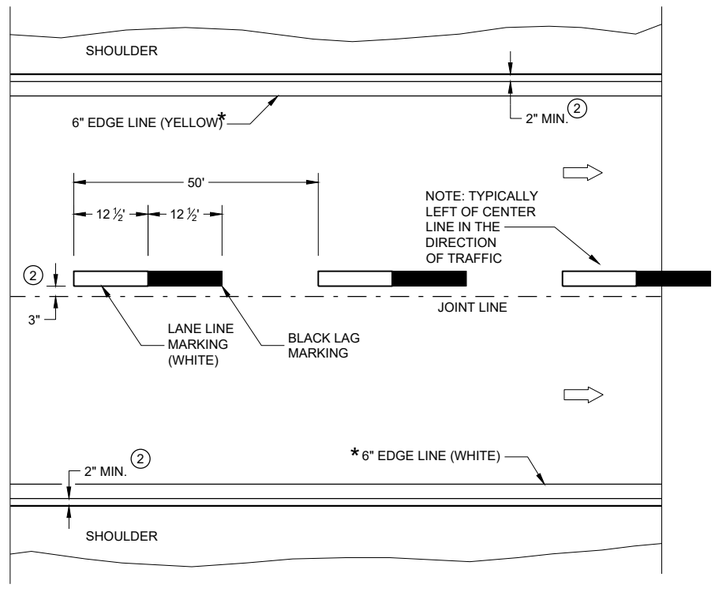
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER
FHWA

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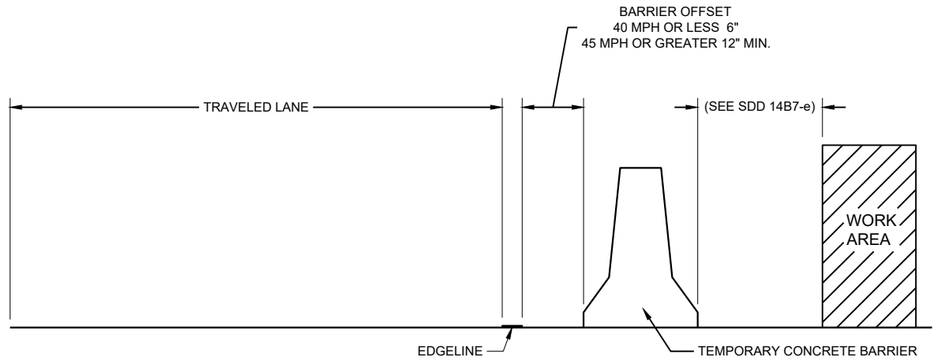
SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

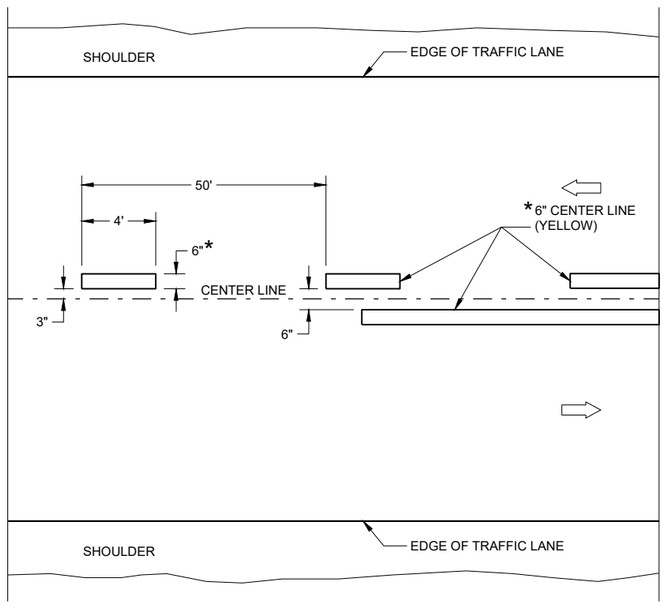
GENERAL NOTES

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

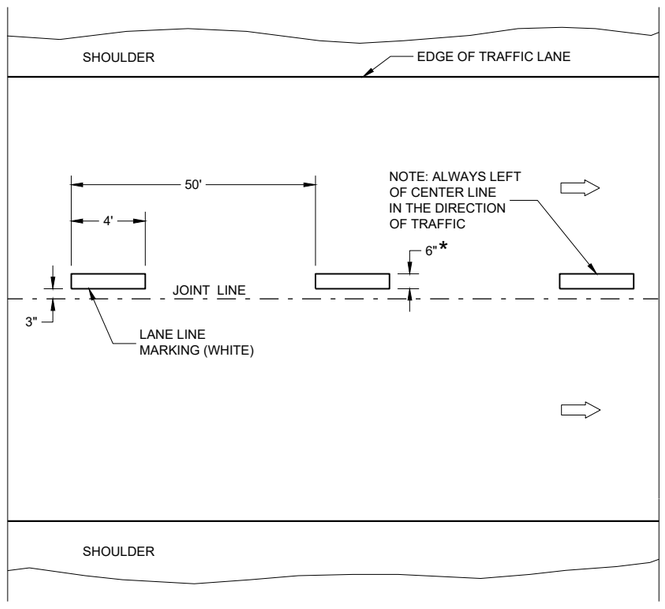
LEGEND

⇨ DIRECTION OF TRAFFIC

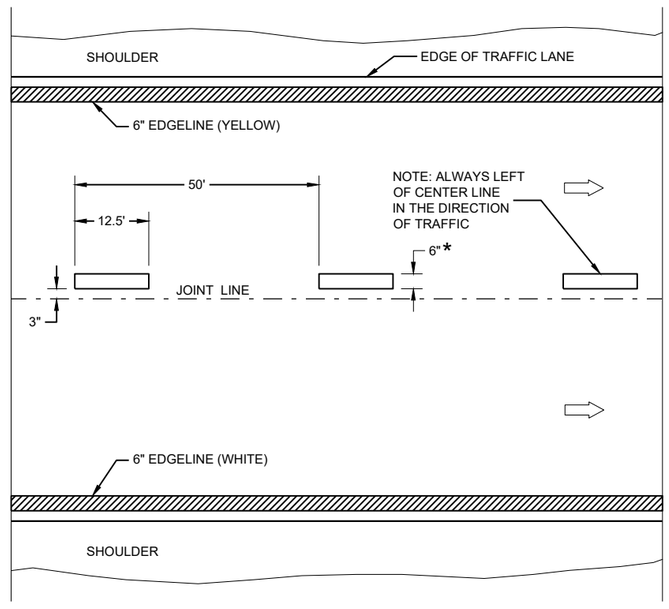
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

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SDD 15C08-23b

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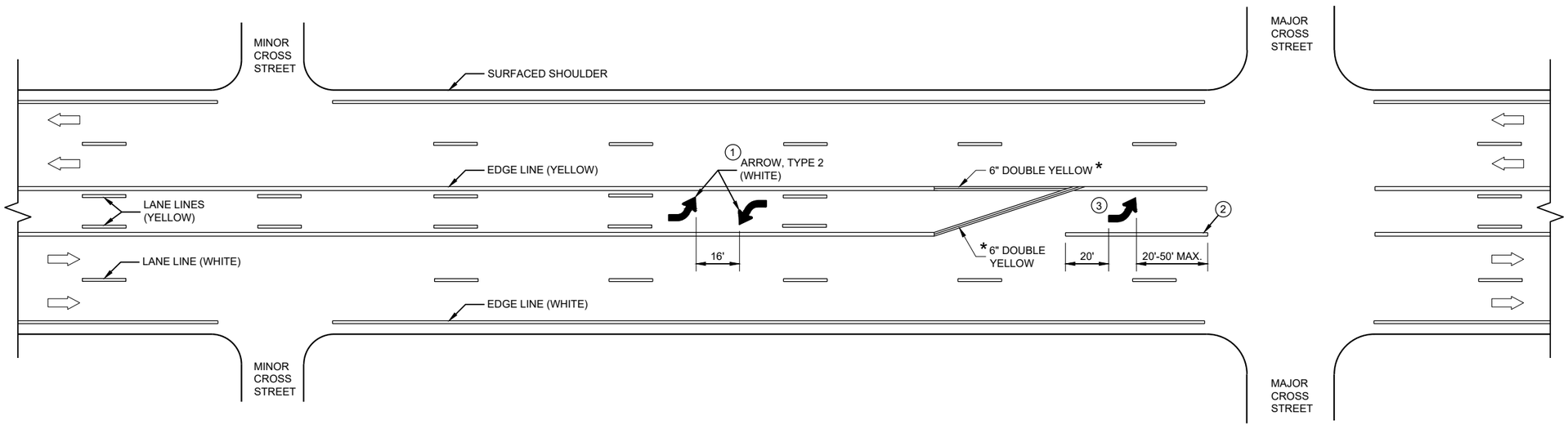
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 204

SDD 15C08-23c

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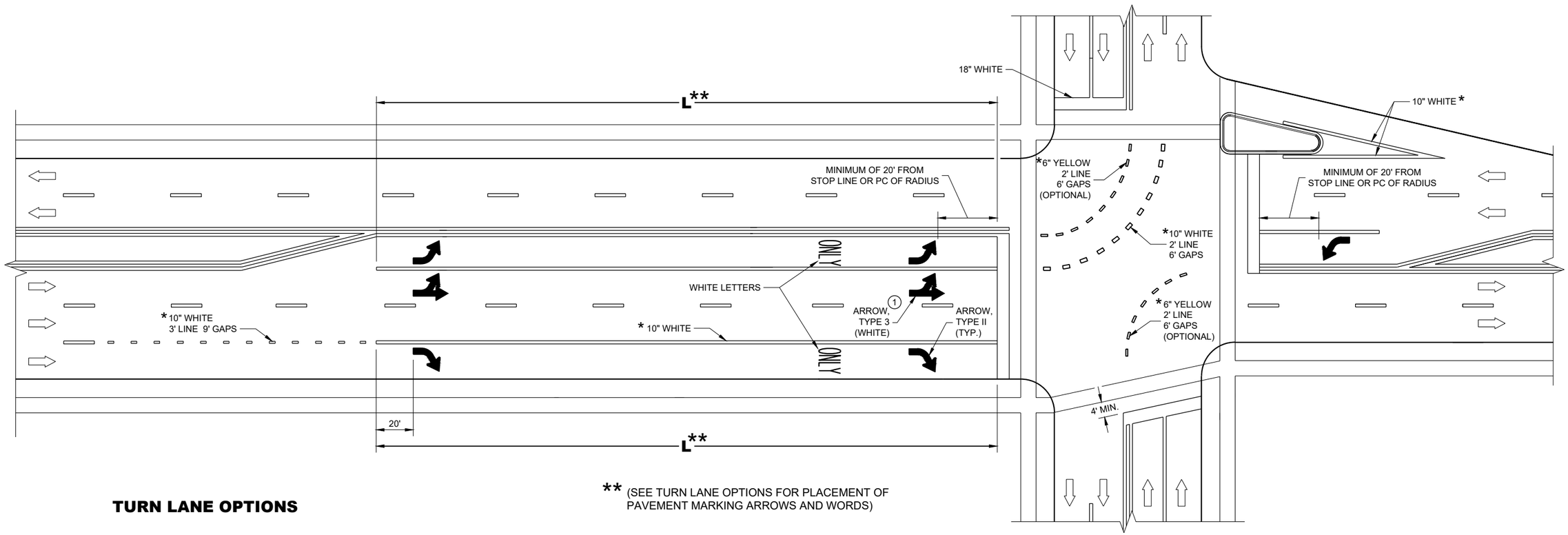
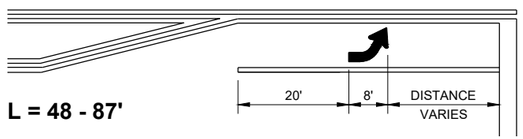


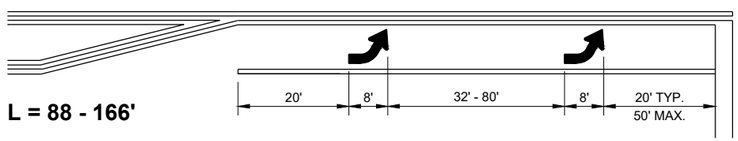
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

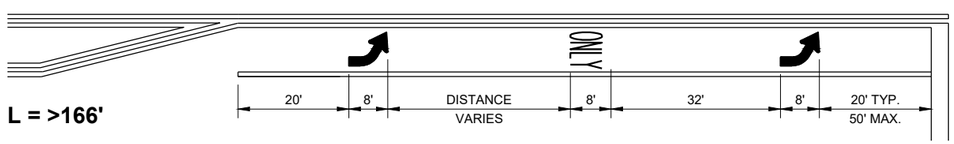
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



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

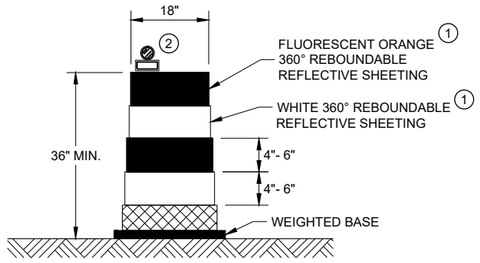
6

SDD 15C08-23d

SDD 15C08-23d

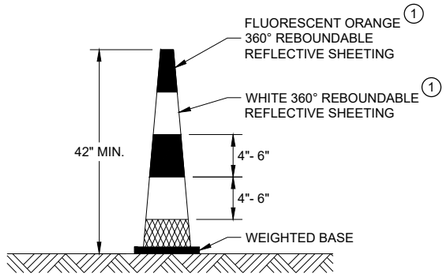
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

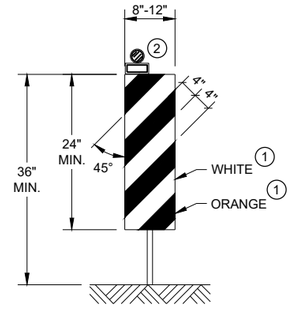
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

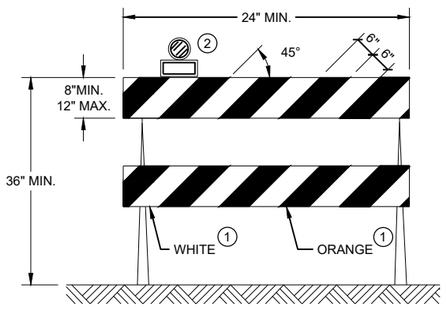
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



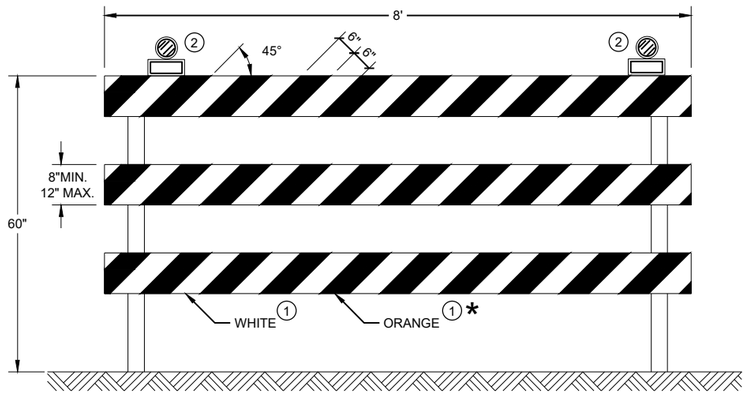
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 10b

6

SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

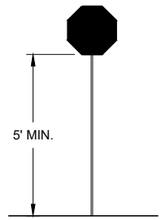
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



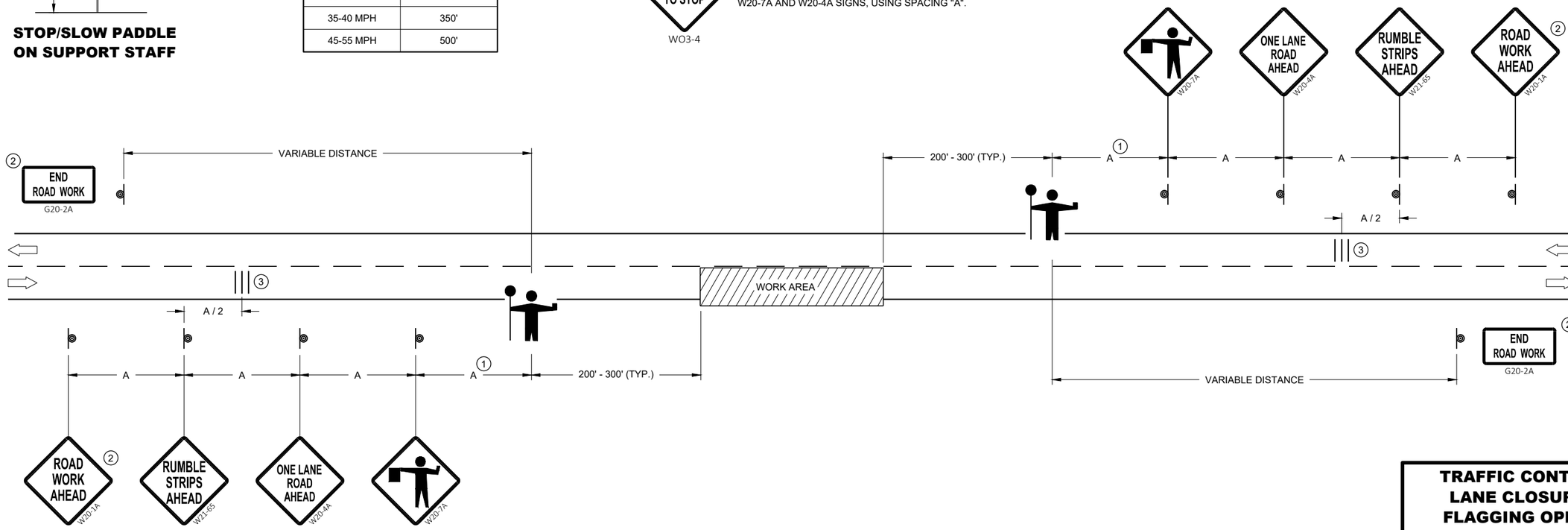
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C12 - 09a

SDD 15C12 - 09a

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

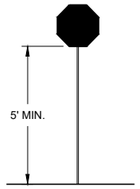
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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.

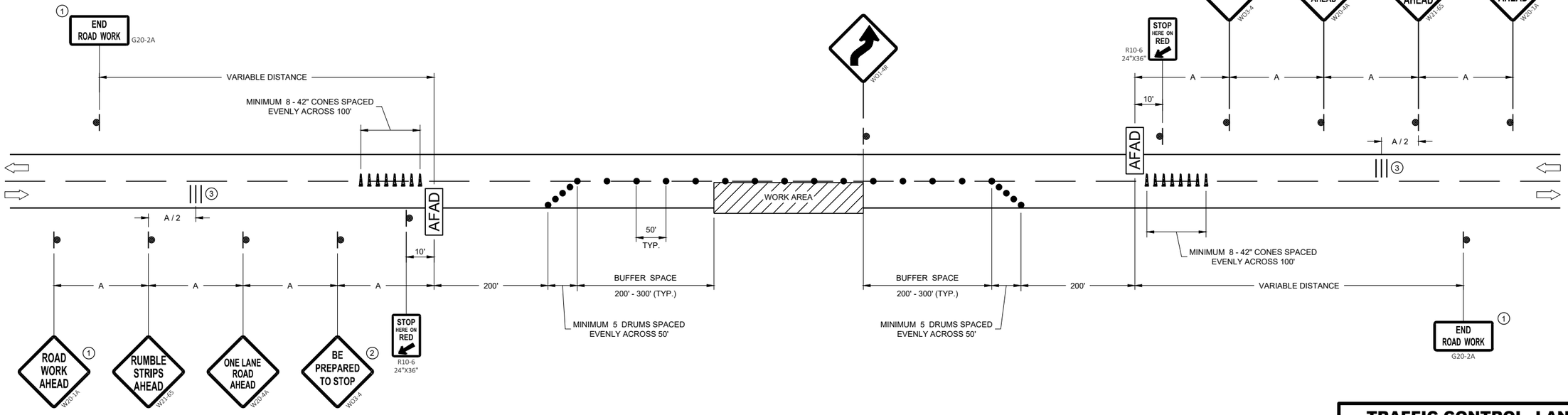
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



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'



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SDD 15C12 - 09b

SDD 15C12 - 09b

TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 208

FHWA

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

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

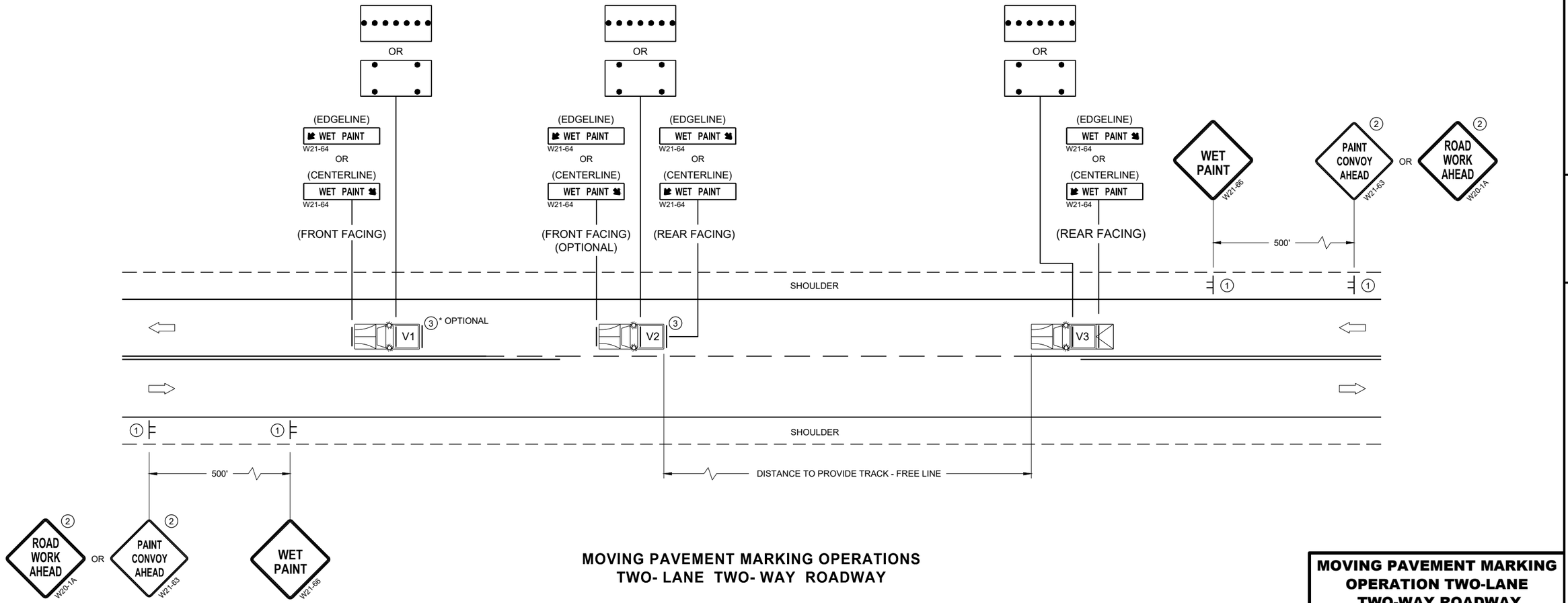
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

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

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

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



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

FHWA

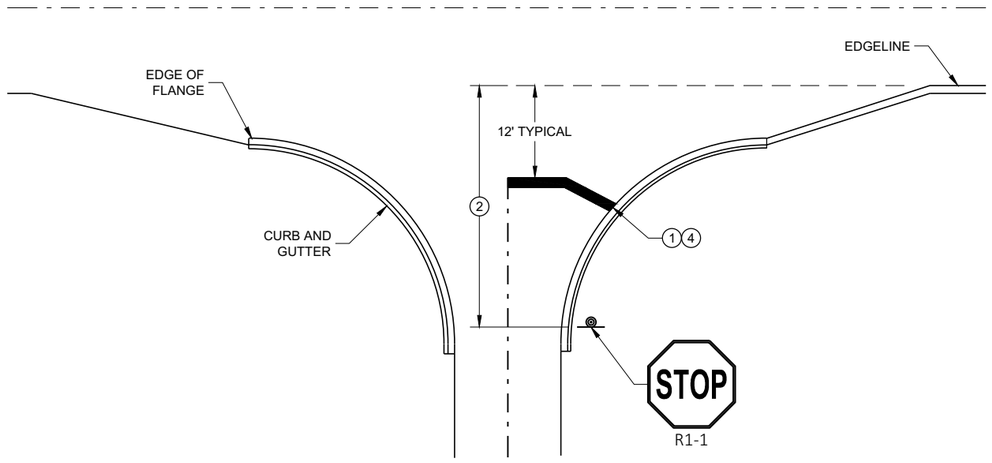
SDD 15C19-08a

SDD 15C19-08a

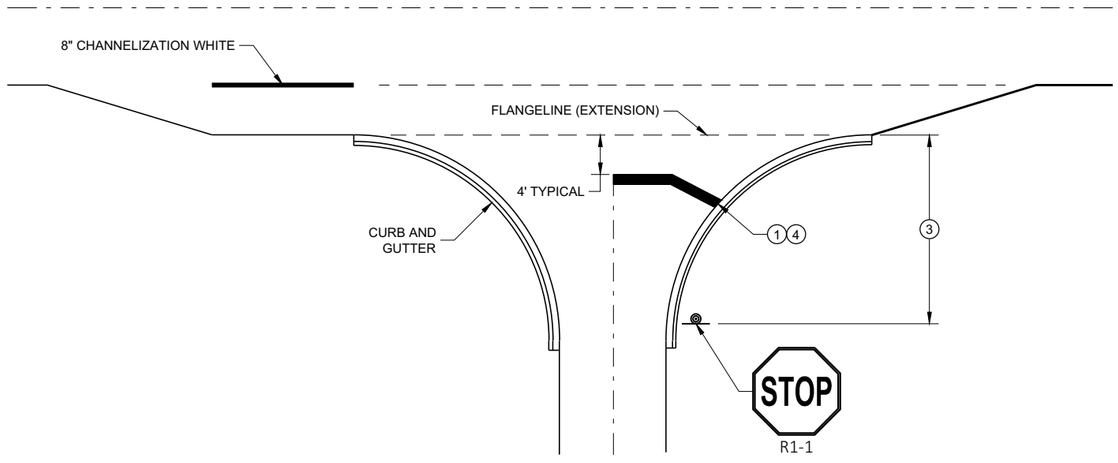
GENERAL NOTES

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

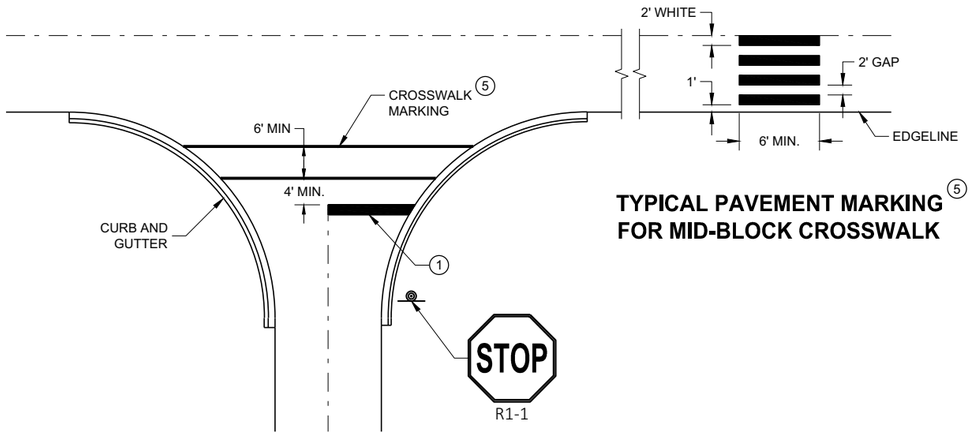
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

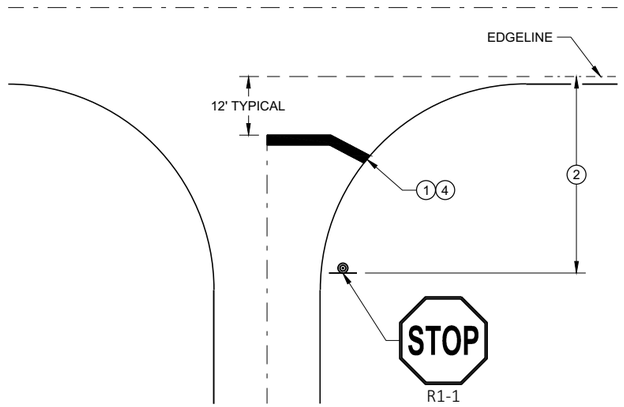


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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SDD 15C33 - 04

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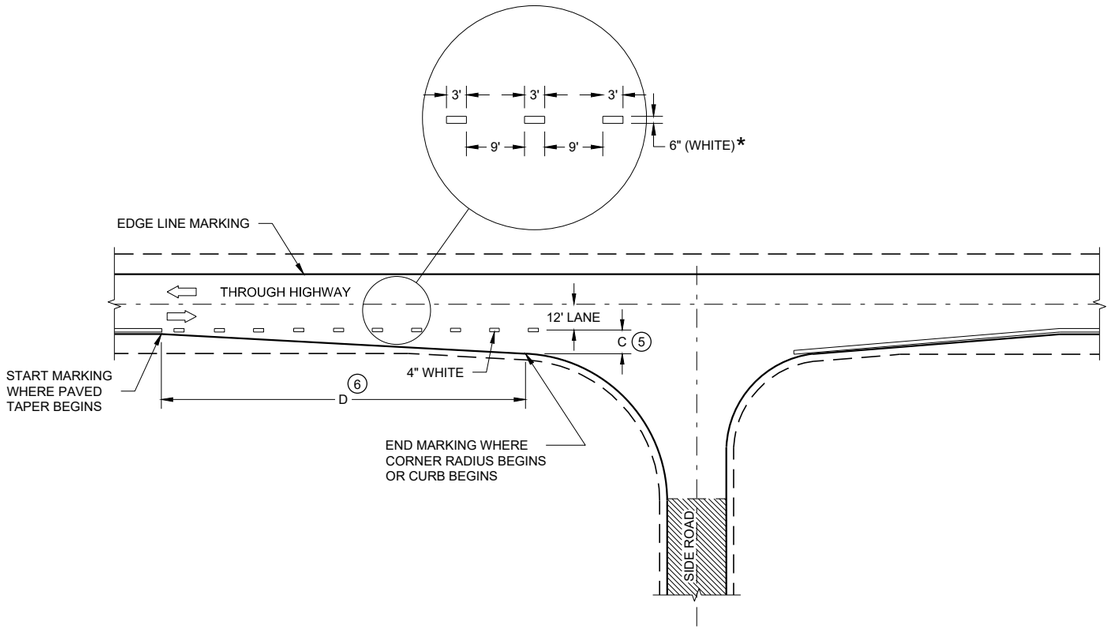
SDD 15C33 - 04



MINOR INTERSECTION

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

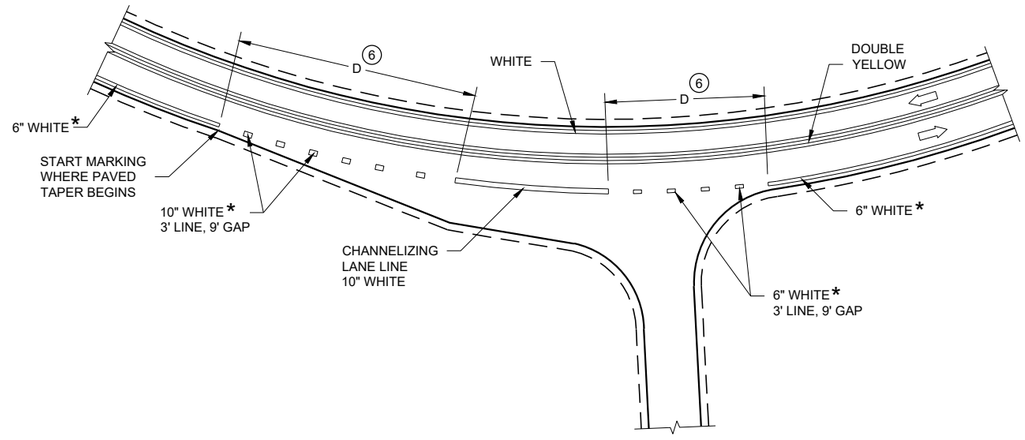
GENERAL NOTES

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

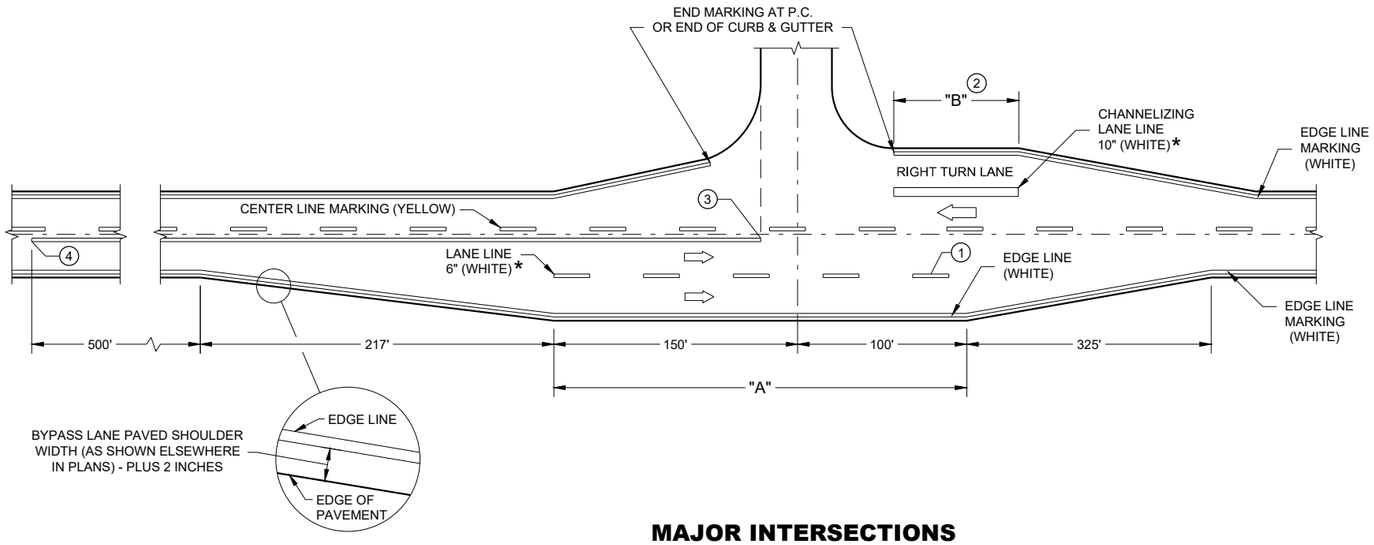
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET,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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

SDD 15C35-06a

6

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

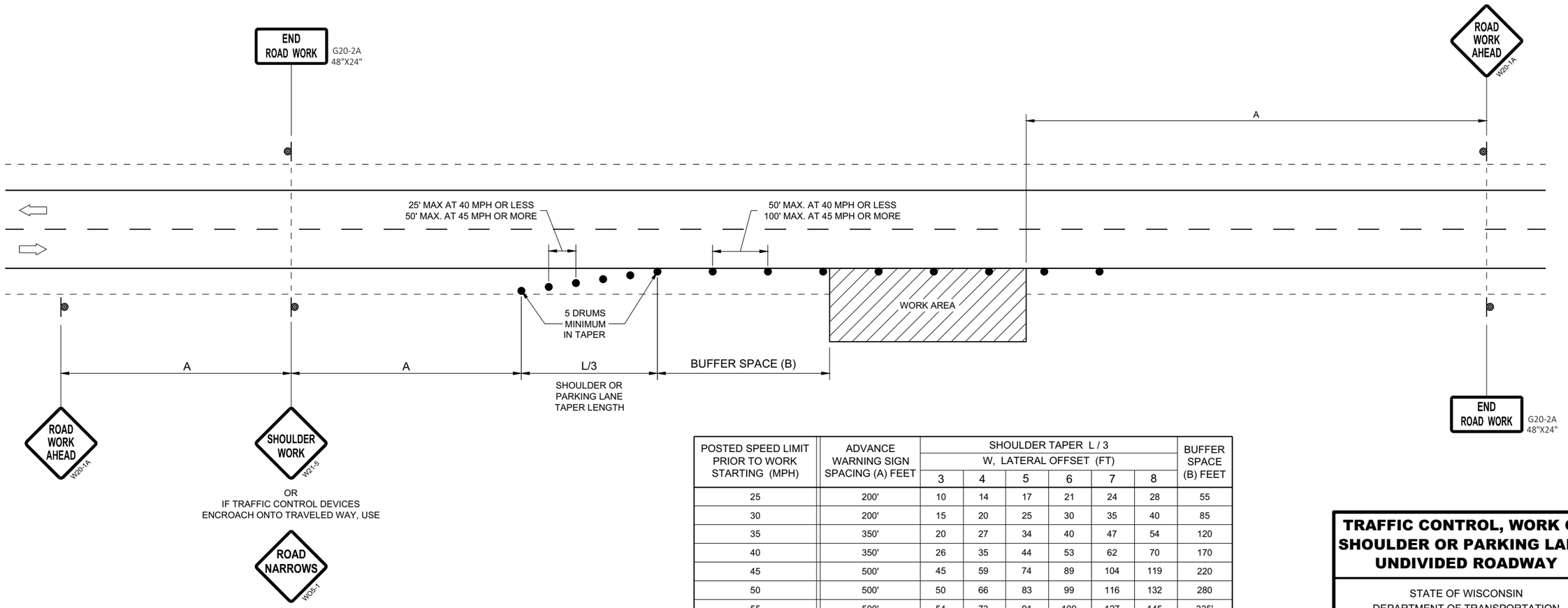
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D28 - 04

SDD 15D28 - 04

GENERAL NOTES

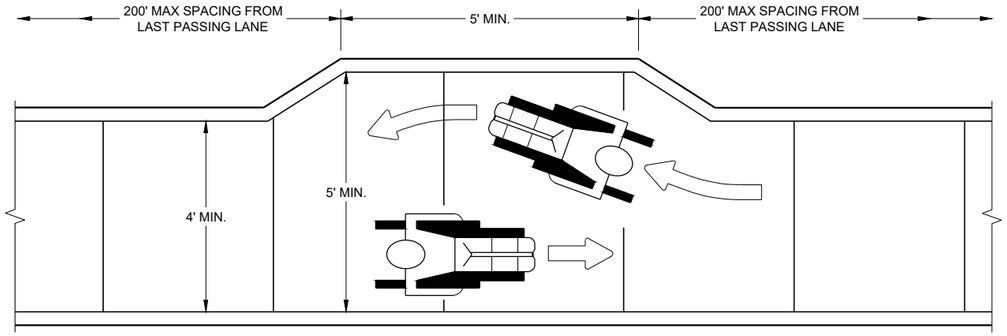
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

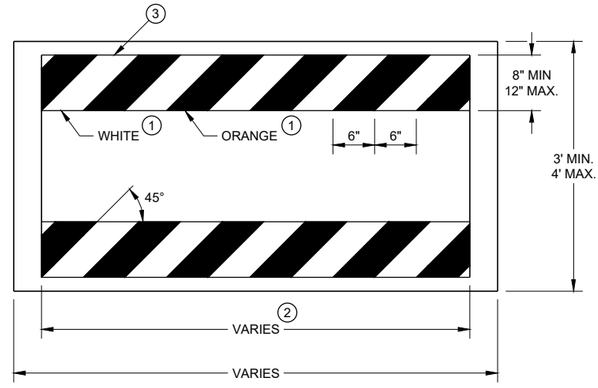
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

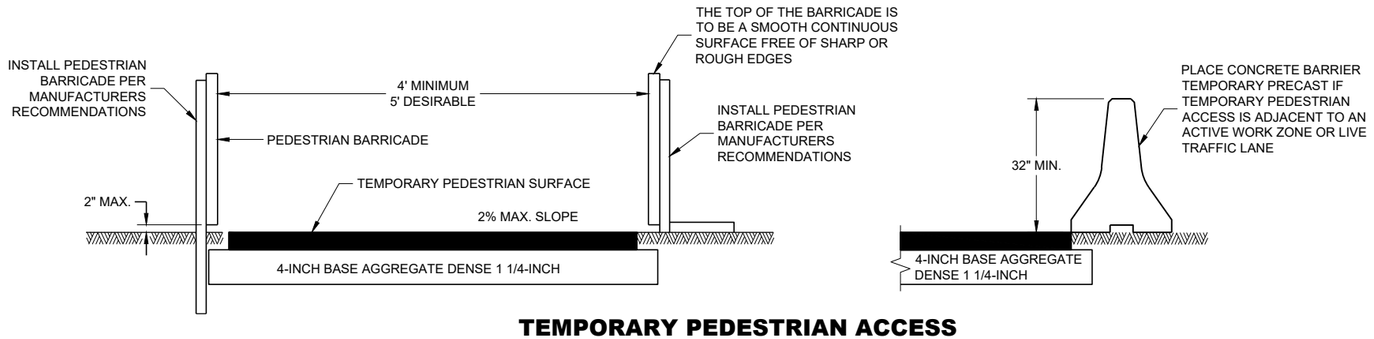
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

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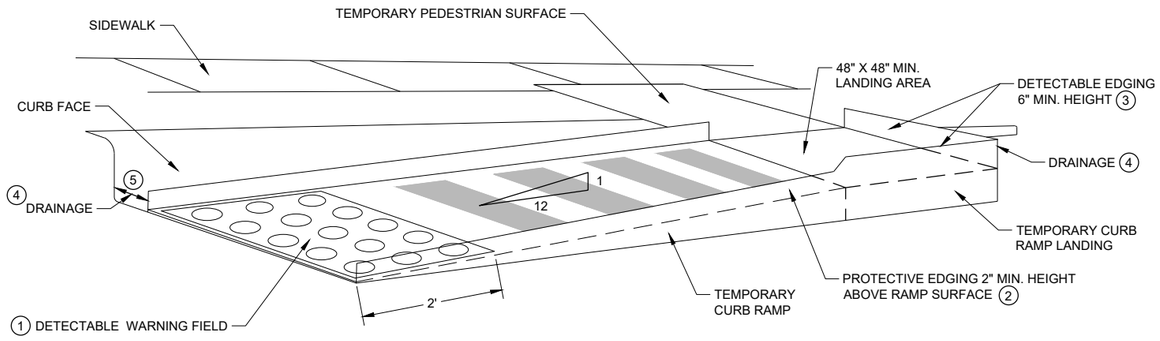
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

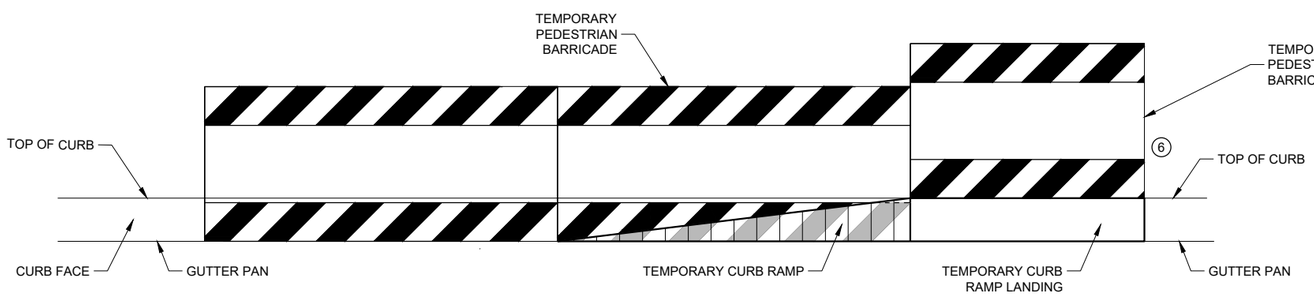
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

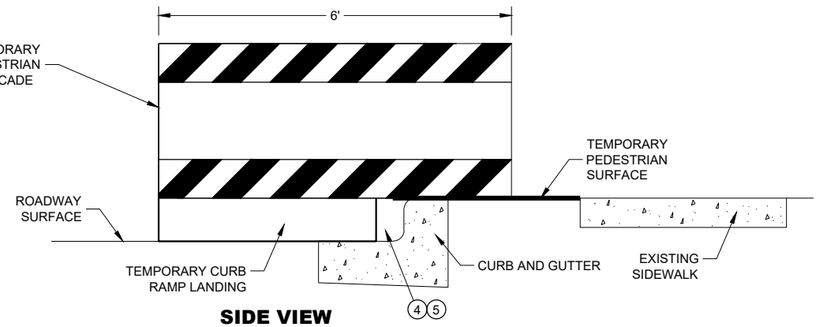
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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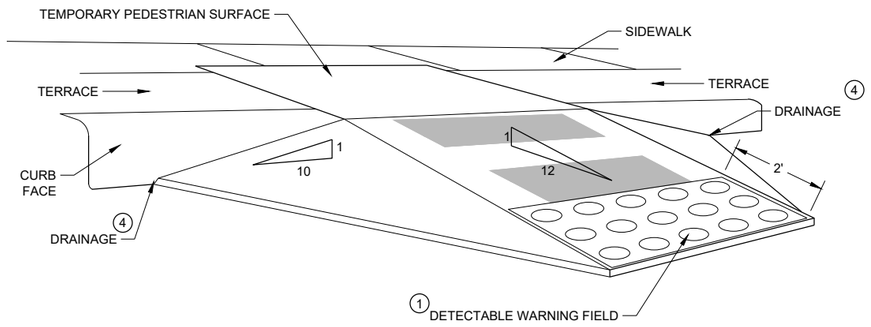
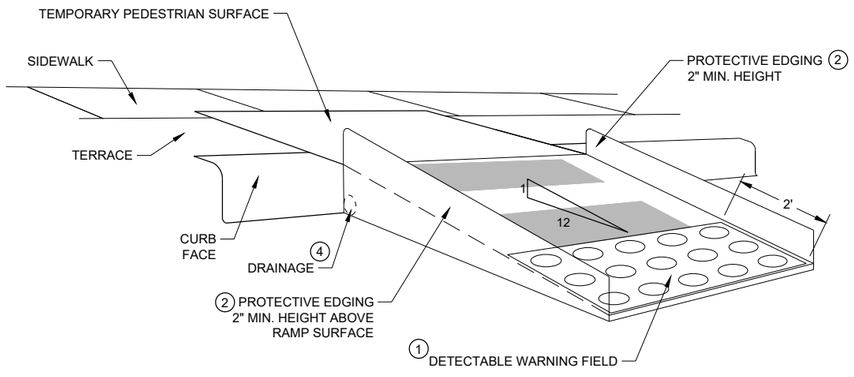


WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

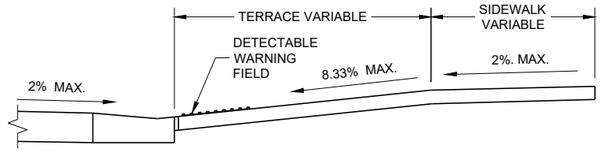
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

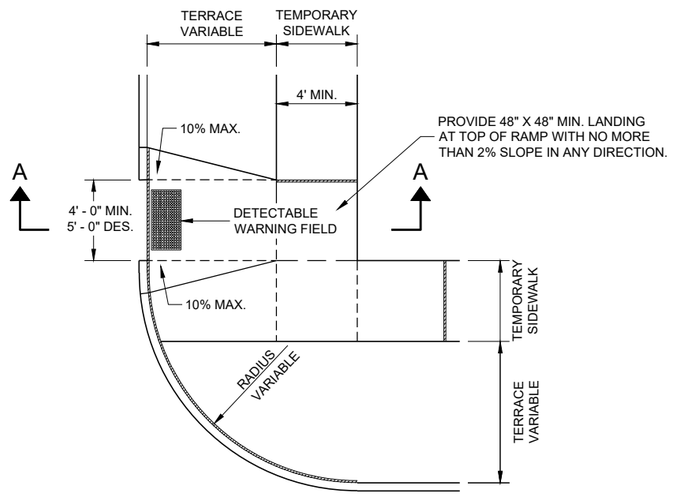
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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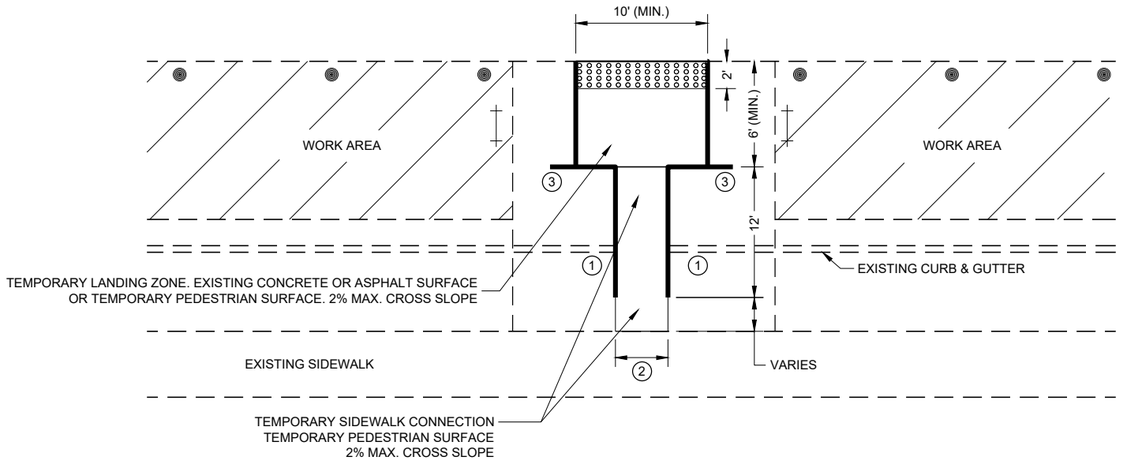
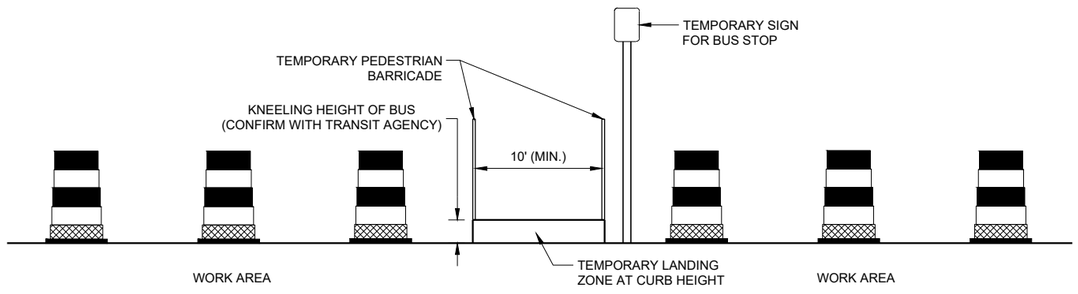
SDD 15D30-09d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

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TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

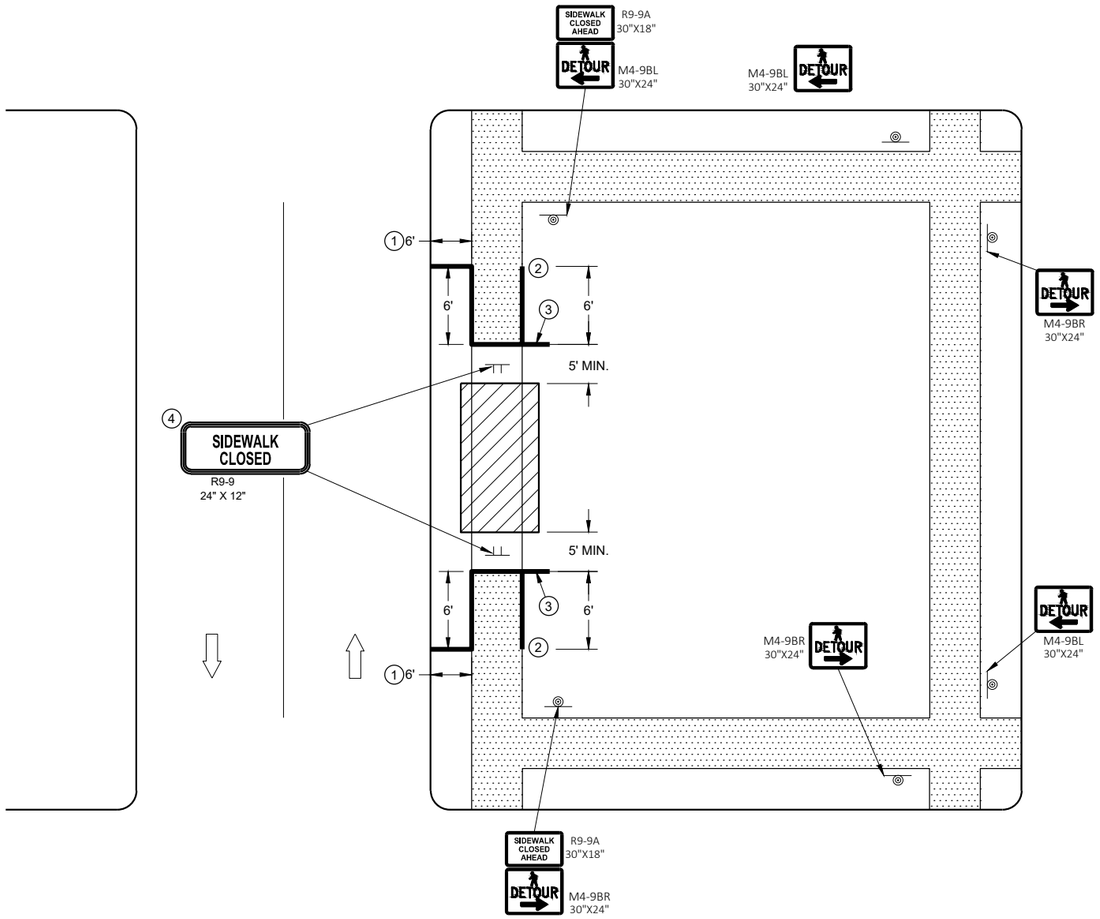
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09e

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

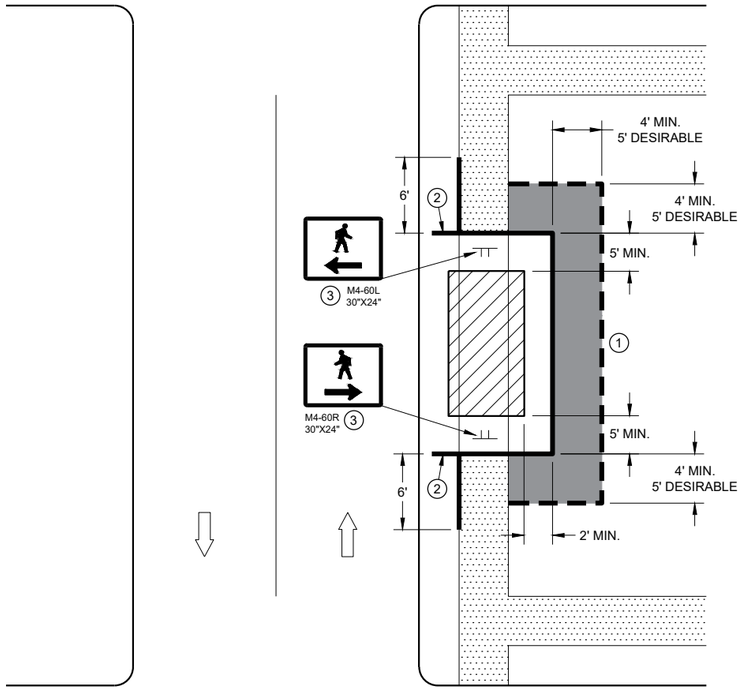
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 09g

6

SDD15D30 - 09g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

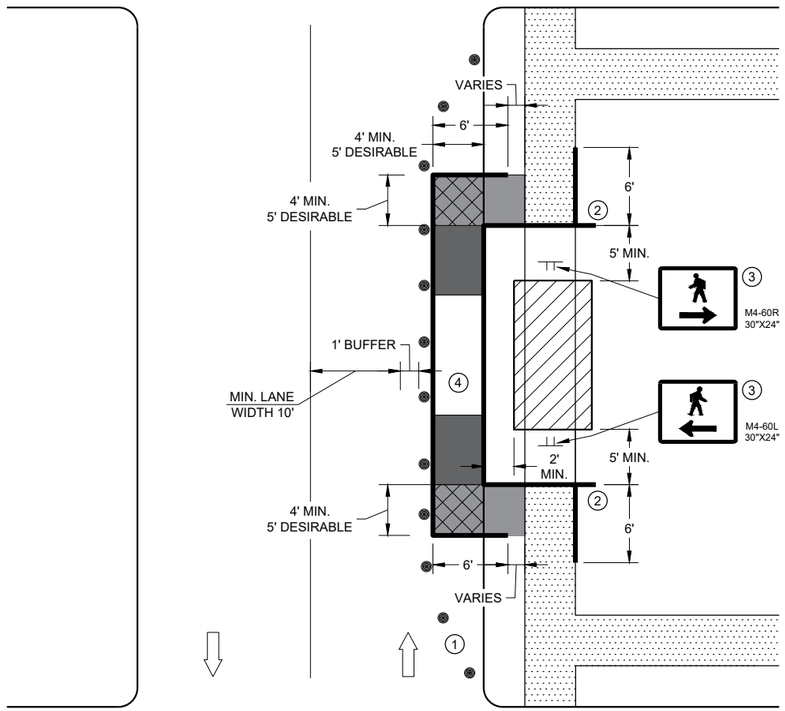
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



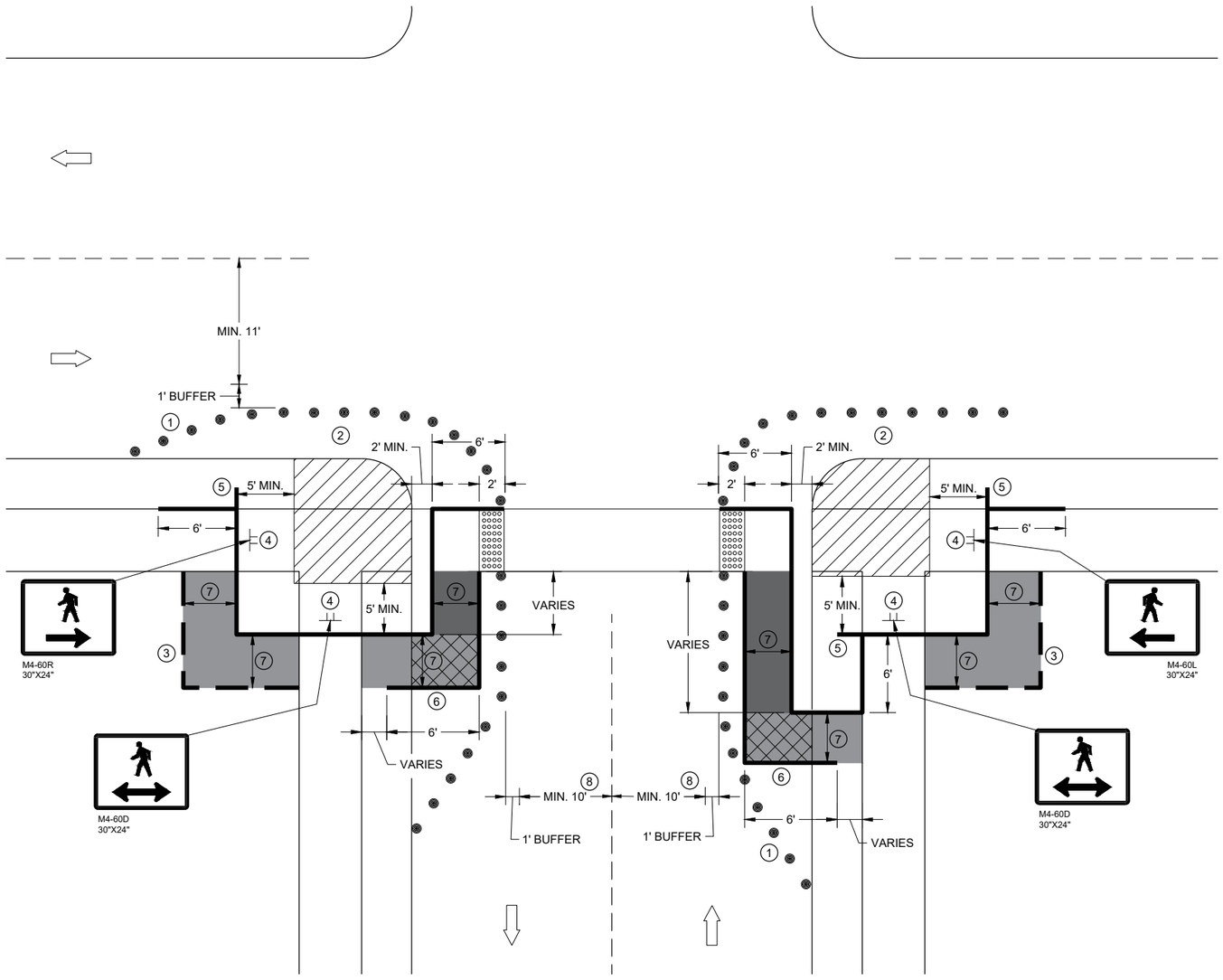
SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

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

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(7) 4 FEET MINIMUM, 5 FEET DESIRABLE

(8) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

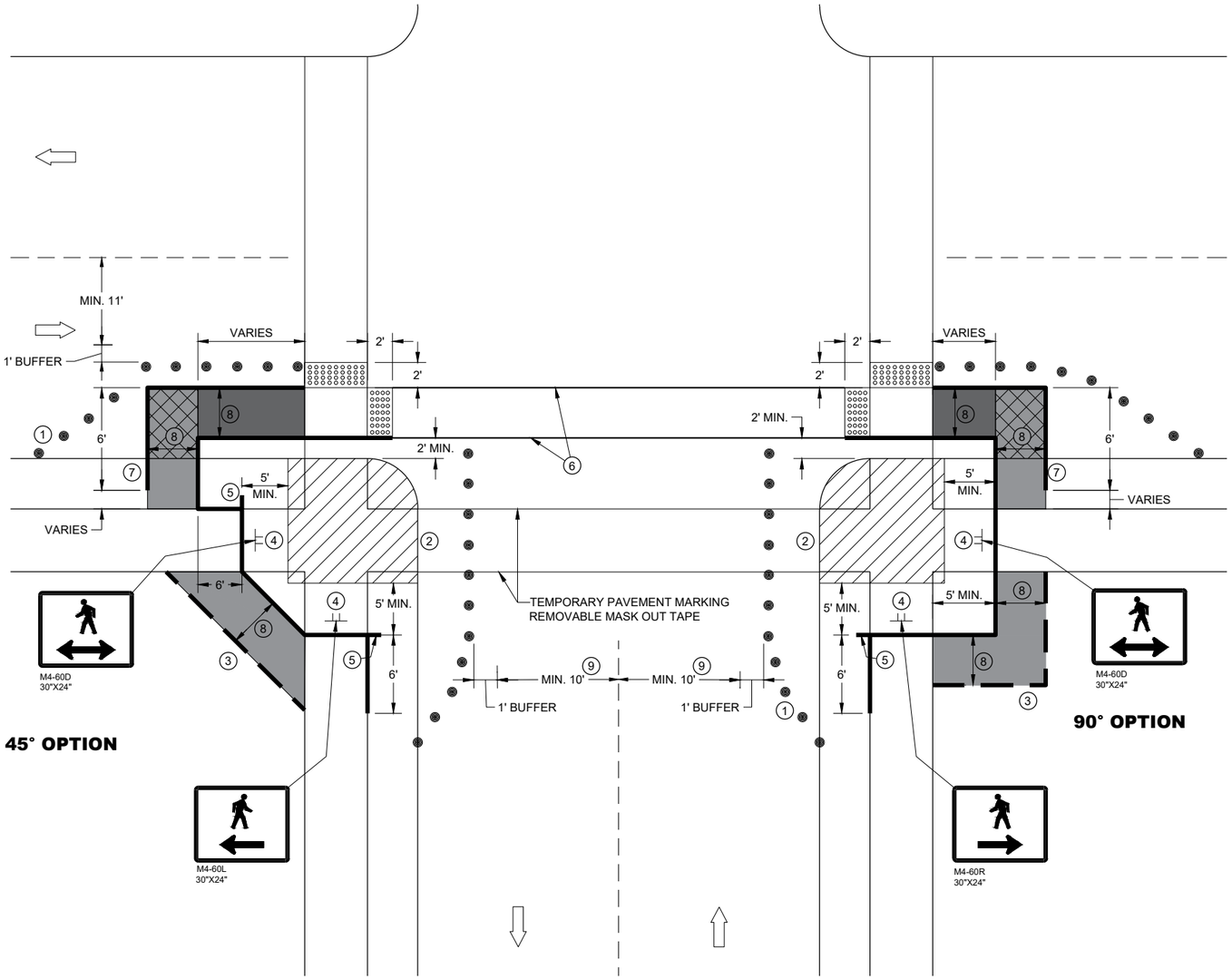
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

6

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09i



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09j

6

LEGEND

SIGN ON PERMANENT SUPPORT

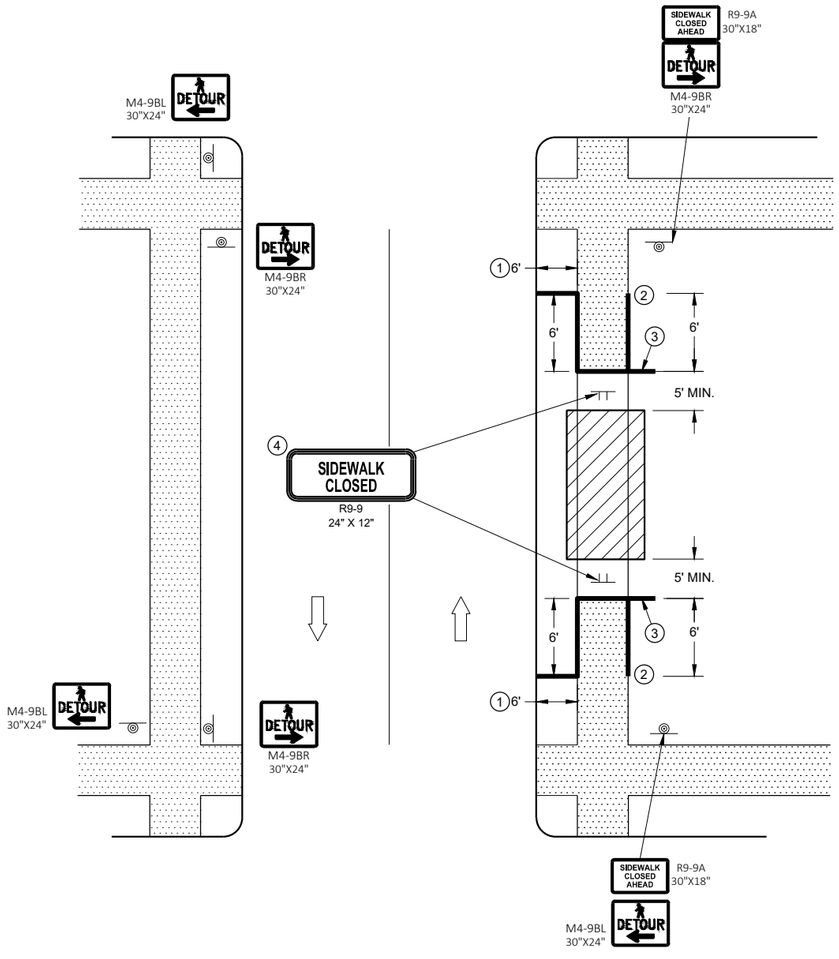
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

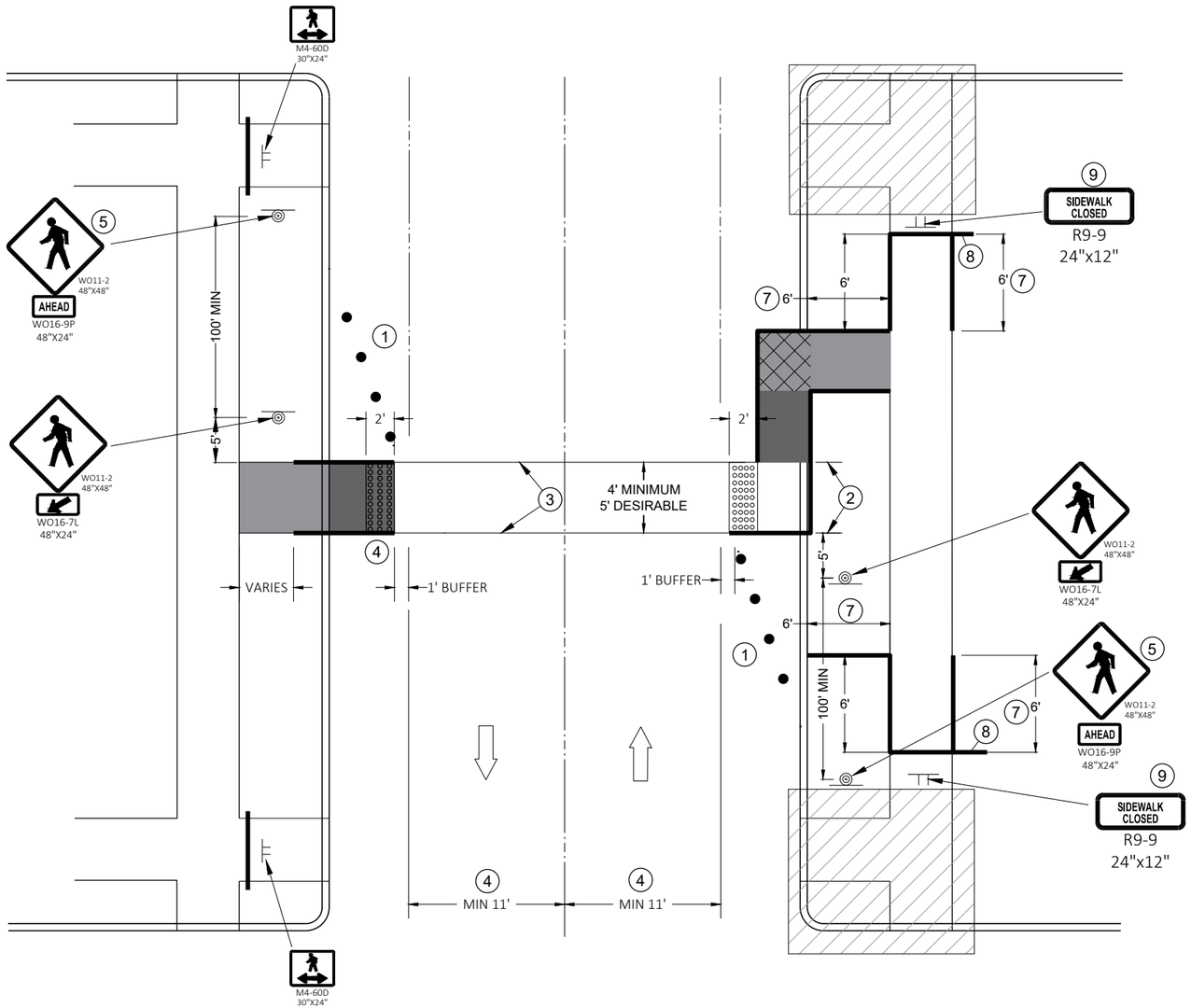
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

(1) SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) 4 FEET MINIMUM, 5 FEET DESIRABLE.

(3) WHITE 6" TEMPORARY PAVEMENT MARKING.

(4) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.

(5) IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.

(6) IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.

(7) PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.

(8) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

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

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

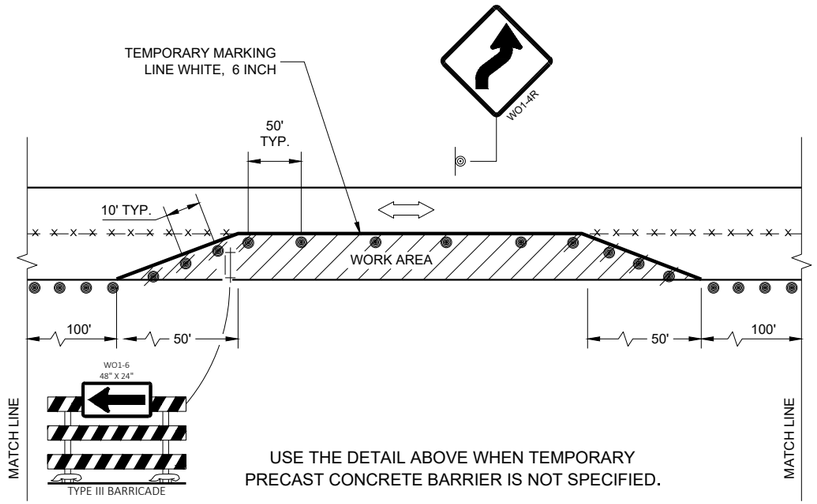
6

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09L

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST
- TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT



USE THE DETAIL ABOVE WHEN TEMPORARY PRECAST CONCRETE BARRIER IS NOT SPECIFIED.

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

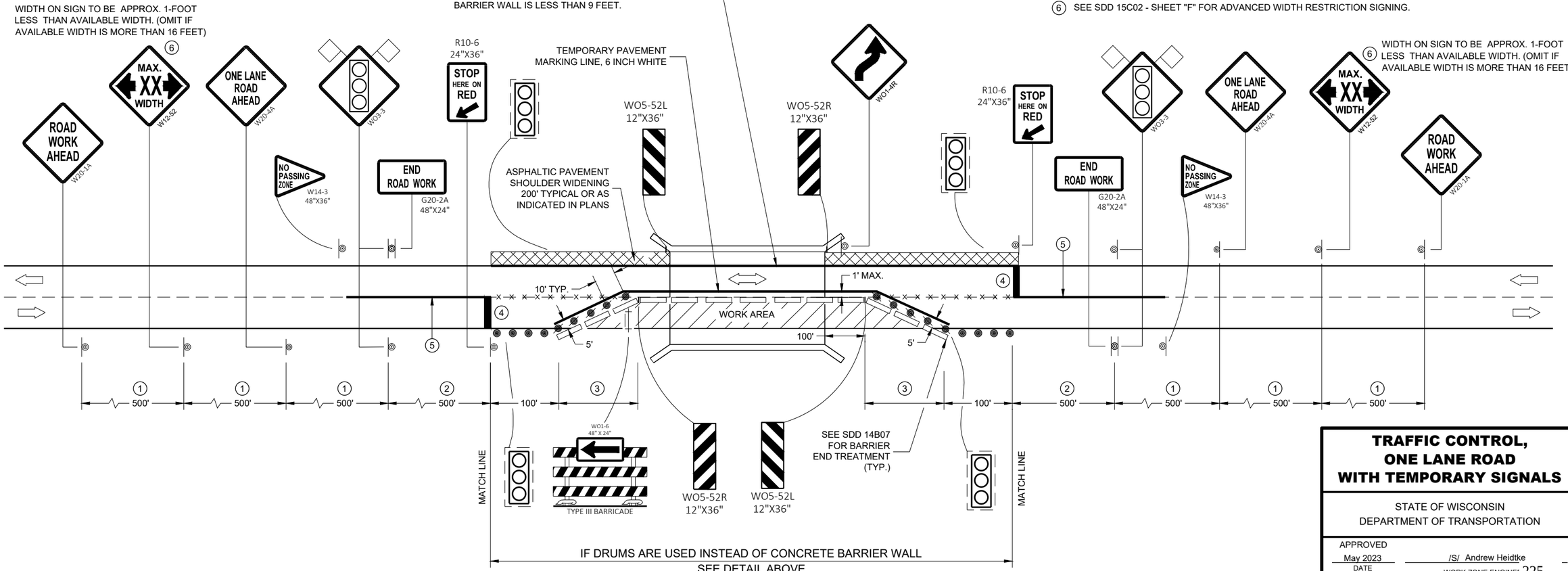
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

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

INSTALL OVERHEAD TEMPORARY SIGNAL HEADS ABOVE THE MIDDLE OF THE TRAVEL LANE THEY ARE CONTROLLING.

1. 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
2. USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
3. DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
4. TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.
5. 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
6. SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

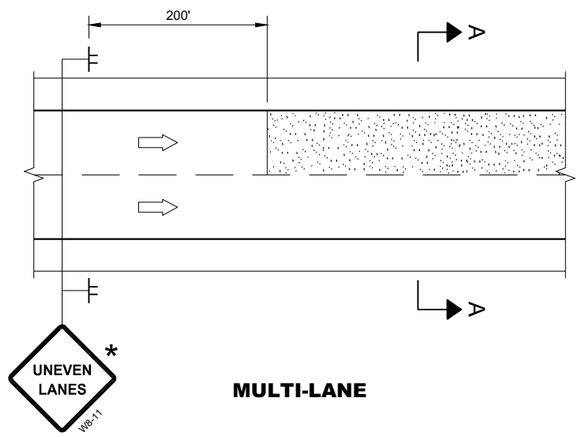
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

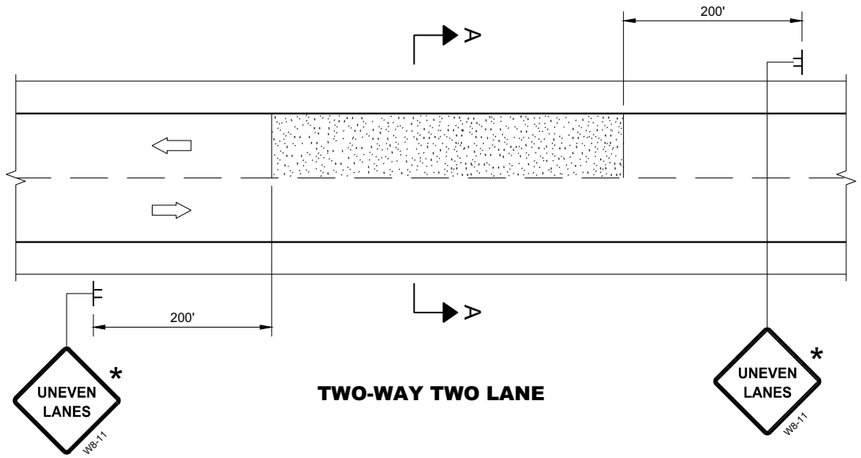
FHWA

SDD 15D33-09

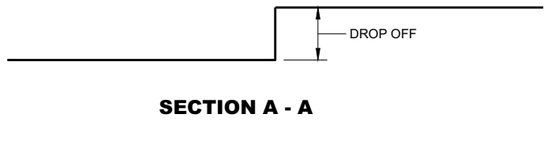
SDD 15D33-09



MULTI-LANE

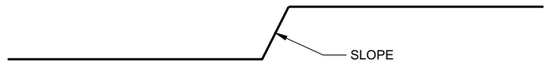


TWO-WAY TWO LANE

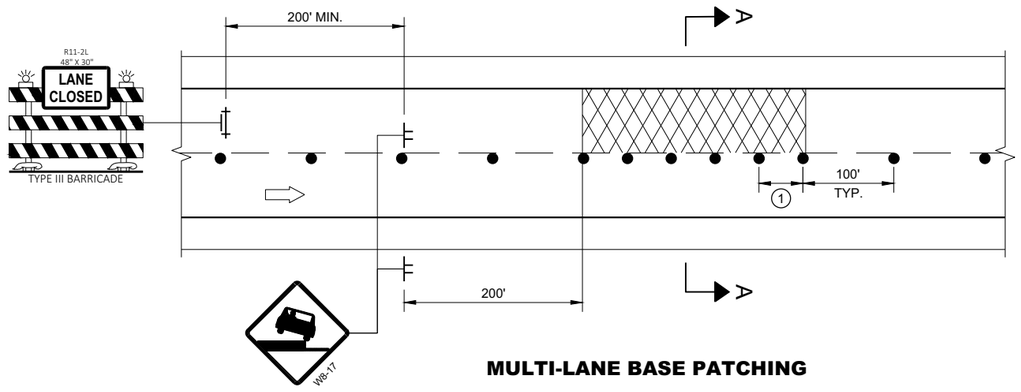


SECTION A - A

OR

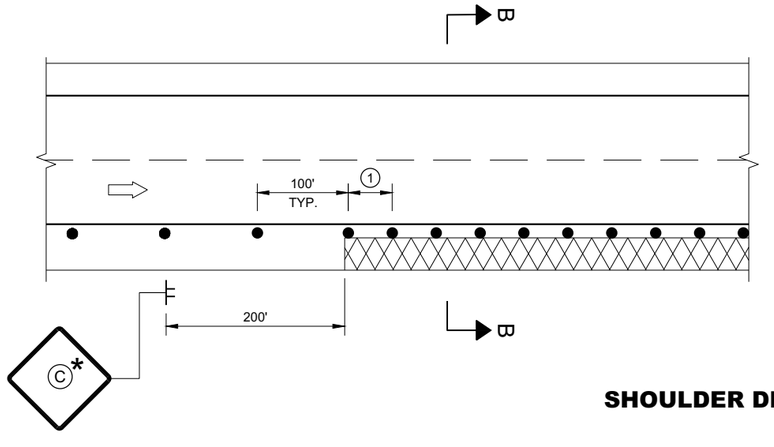


SECTION A - A

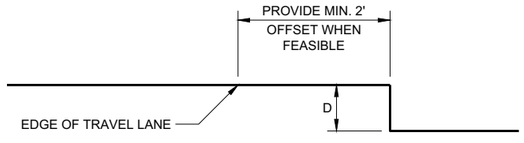


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

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

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

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

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

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

LEGEND

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

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE
FHWA

6
SDD 15D39 - 02

GENERAL NOTES

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

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

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

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

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

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

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

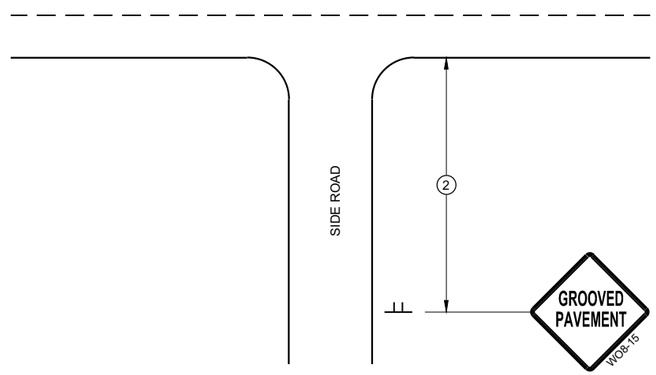
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

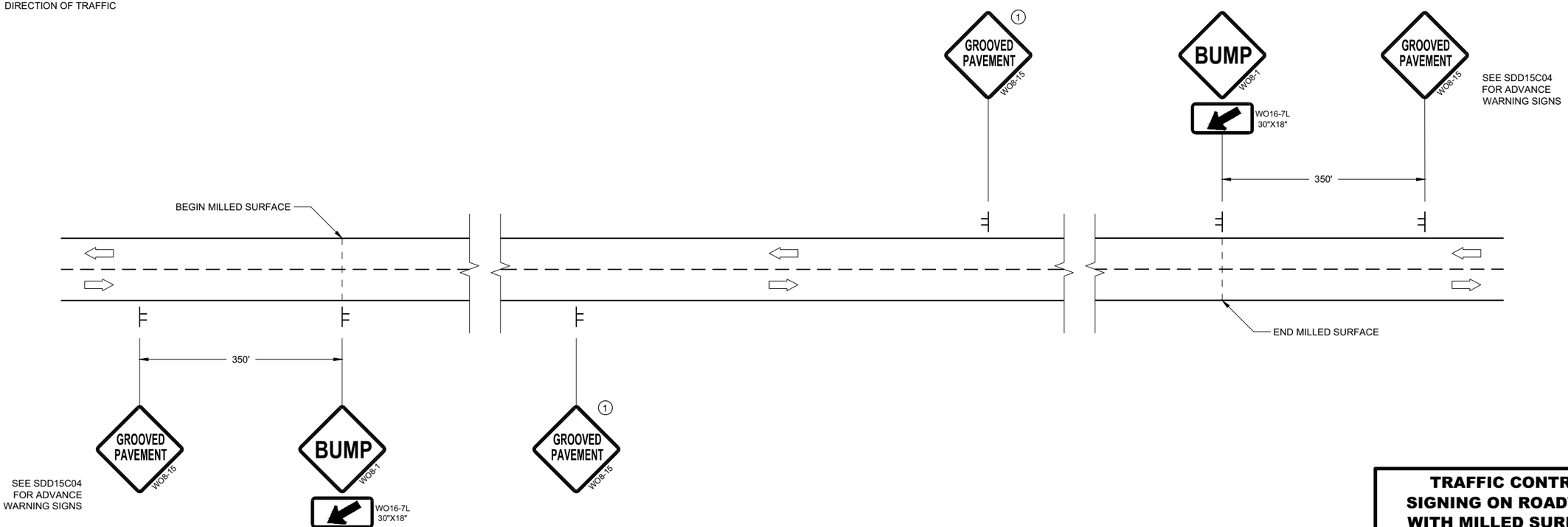
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D44 - 02

SDD 15D44 - 02

GENERAL NOTES

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

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

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

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

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

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

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

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

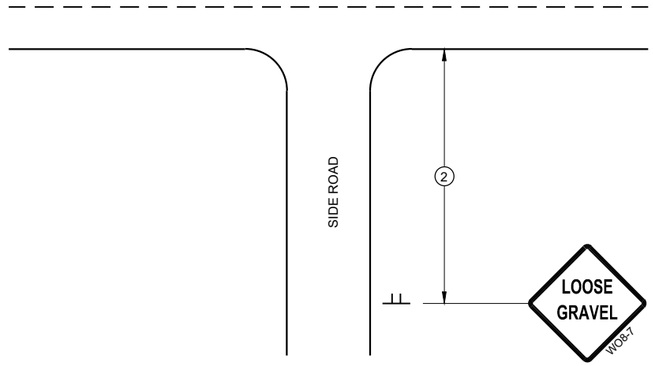
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

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

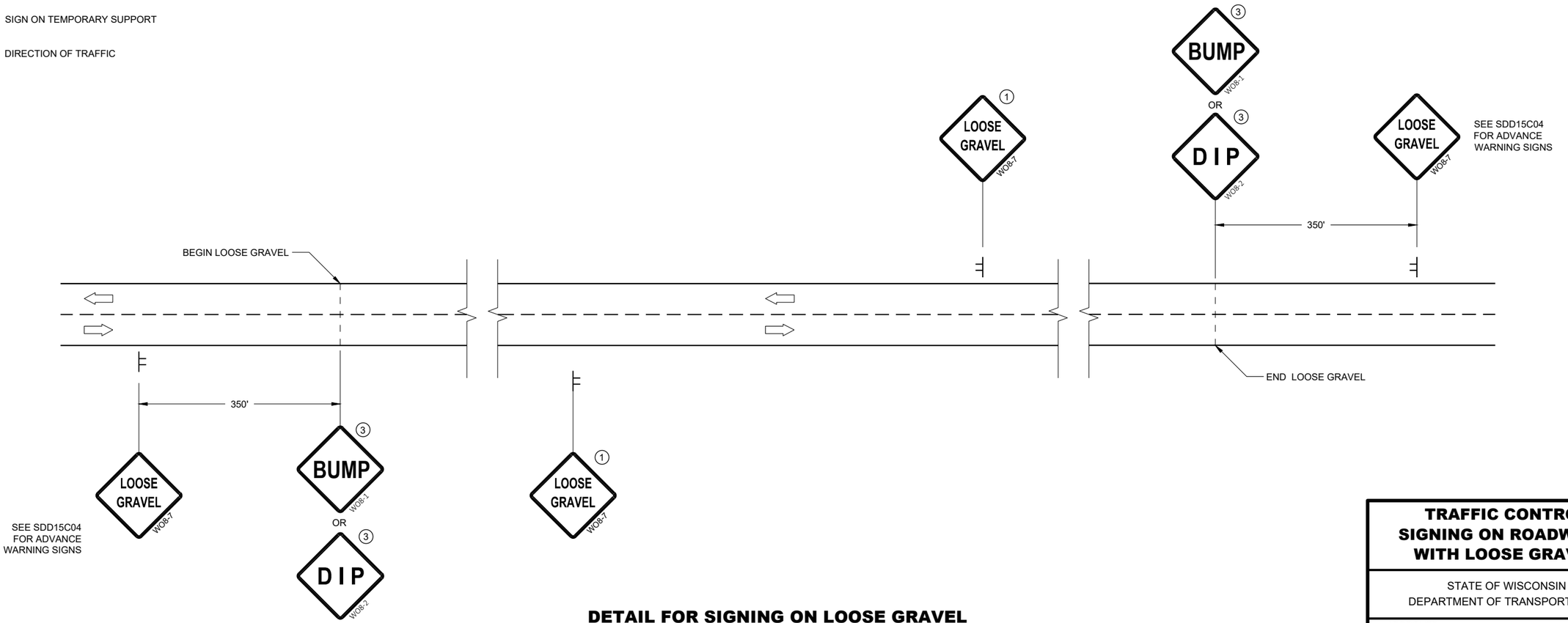
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

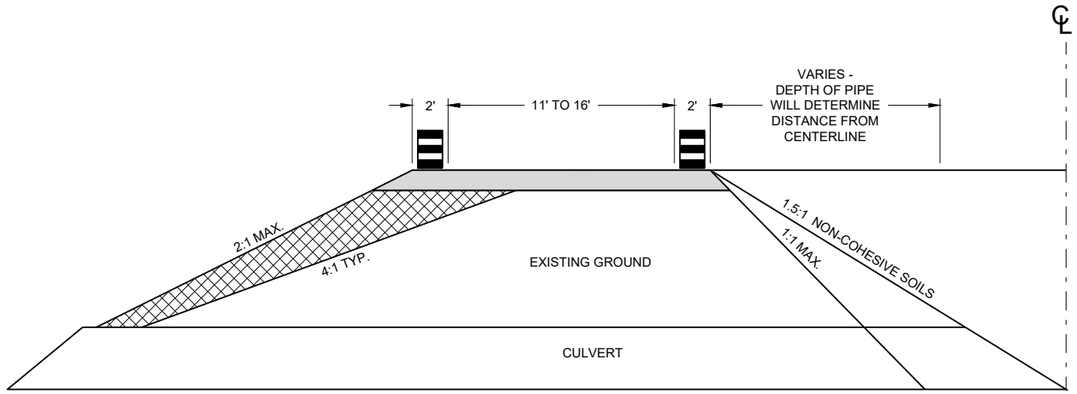
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D45 - 03



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.

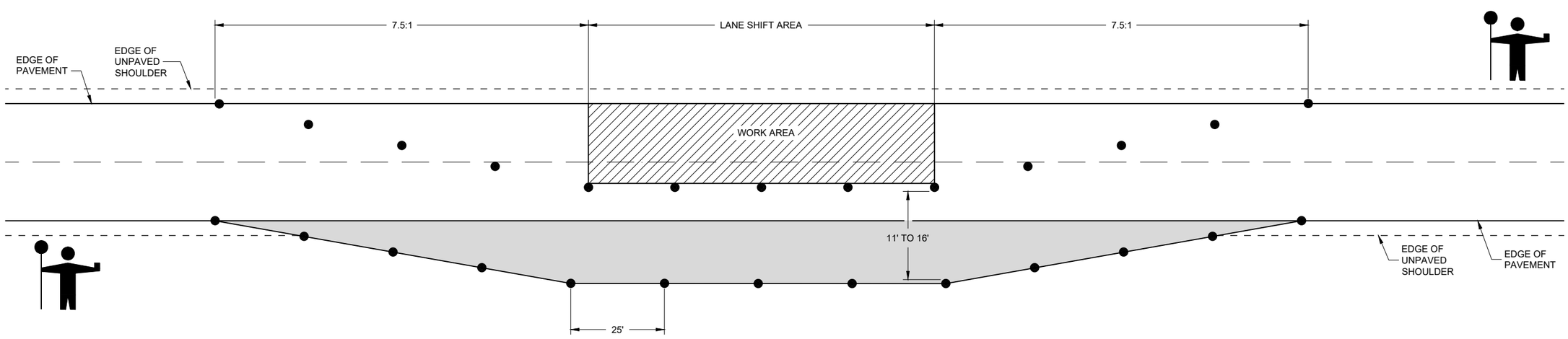
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

6

6

SDD 15D48 - 01

SDD 15D48 - 01

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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.

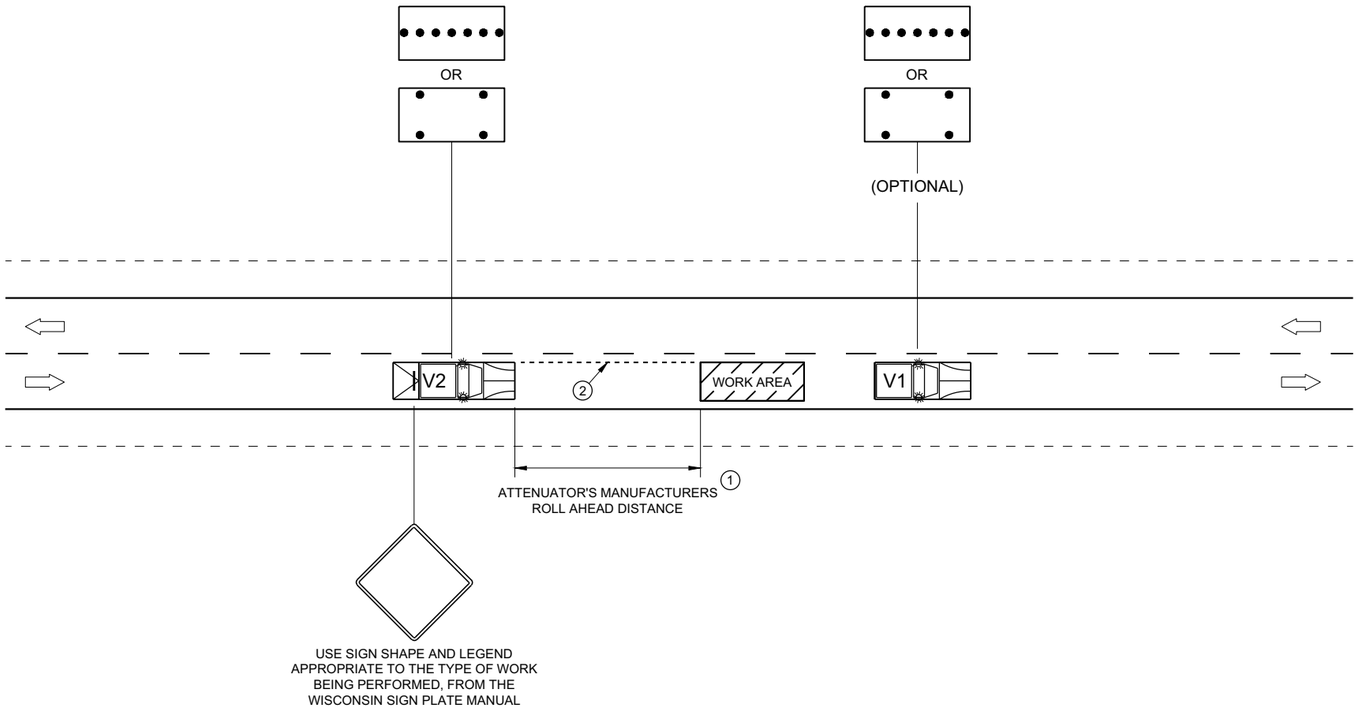
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

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.



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SDD 15D51 - 01

TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

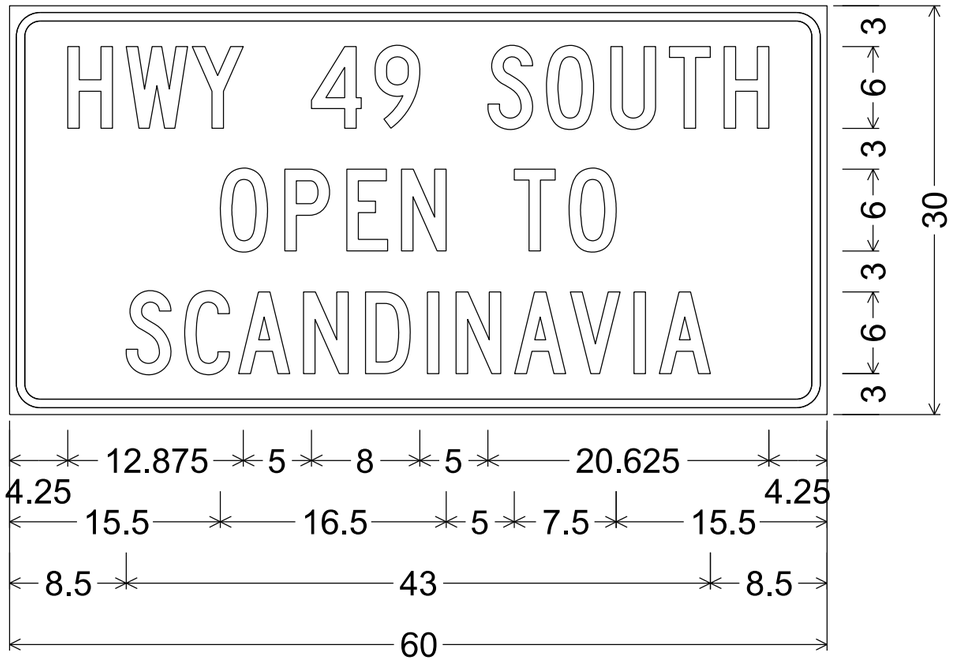
FHWA

6

SDD 15D51 - 01

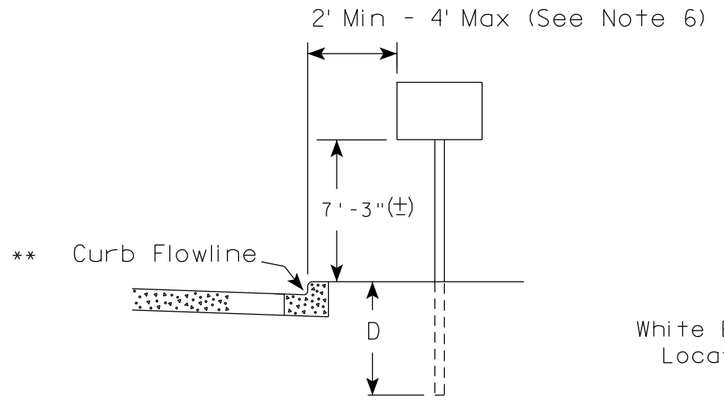
NOTES

1. Fixed Message sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C

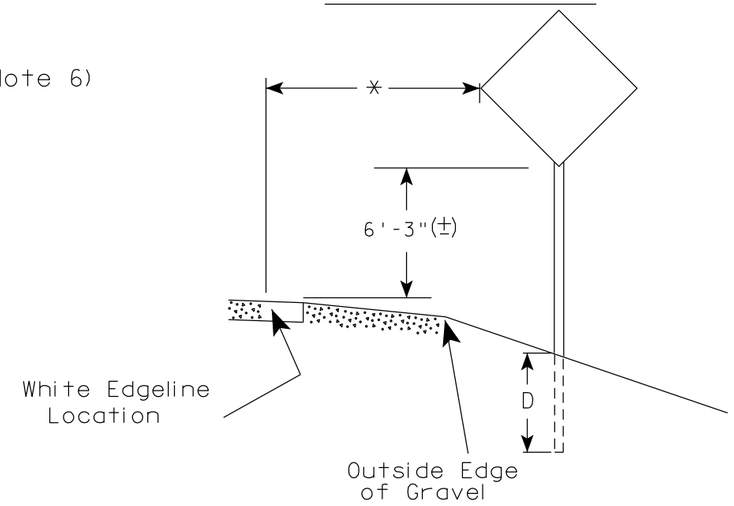


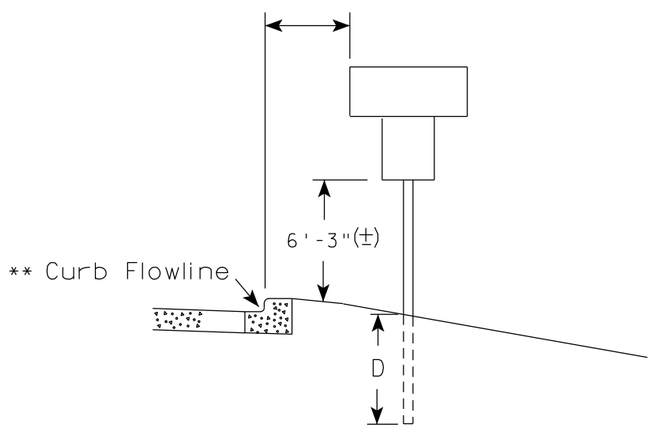
2.250" Radius, 0.625" Border, 0.500" Indent

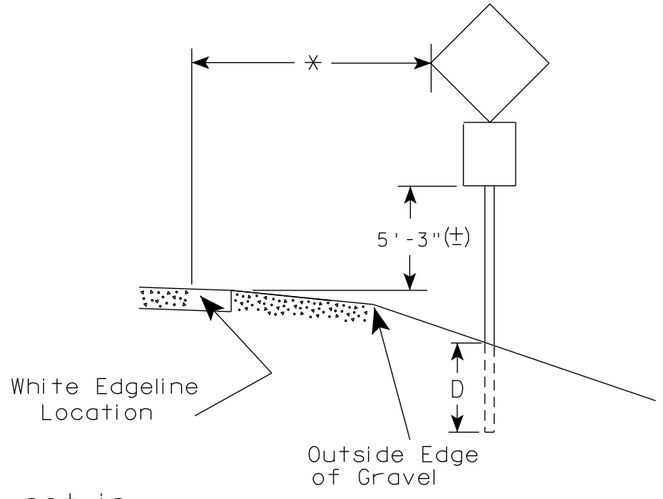
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

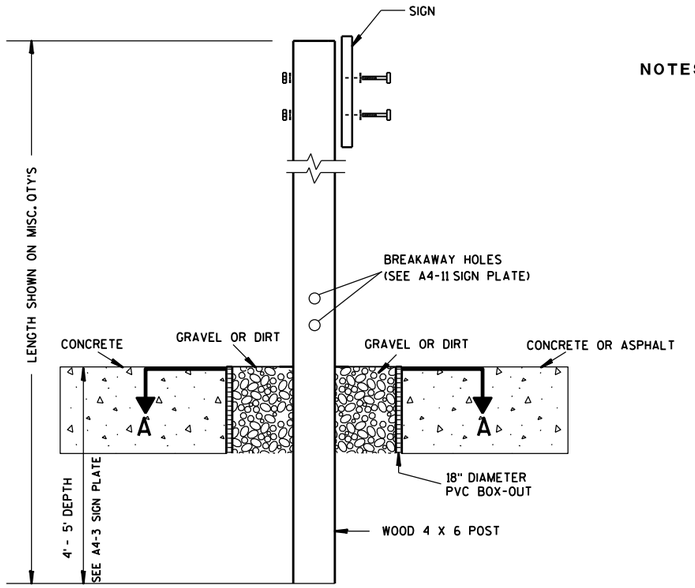
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

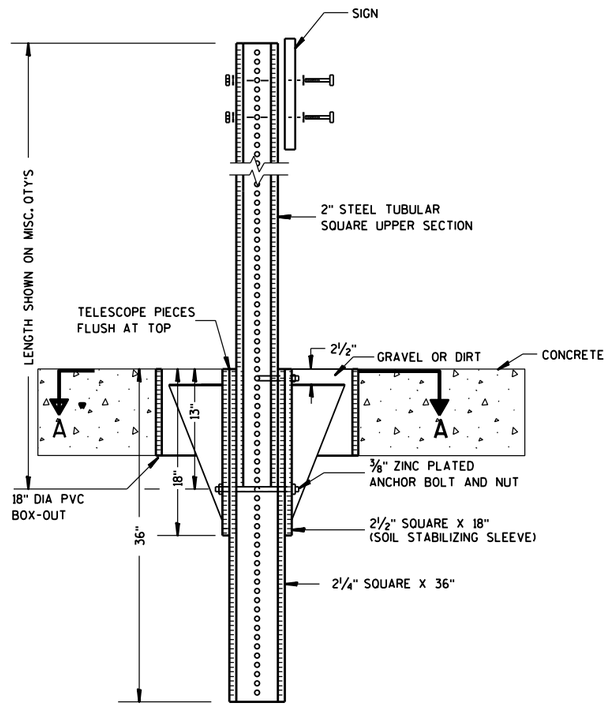
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 232	E



ELEVATION VIEW

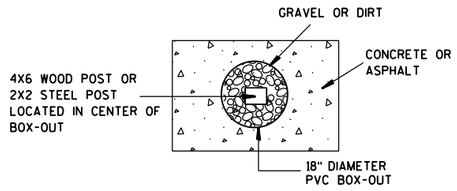
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

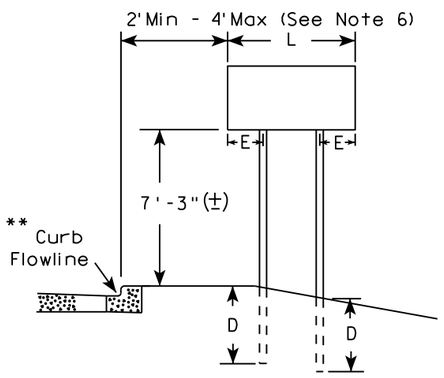
APPROVED Matthew R Rauch
for State Traffic Engineer

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

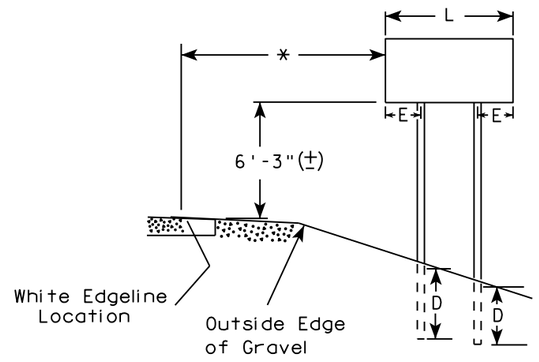
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

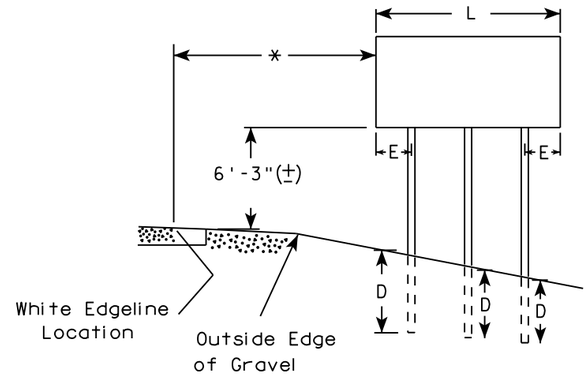
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

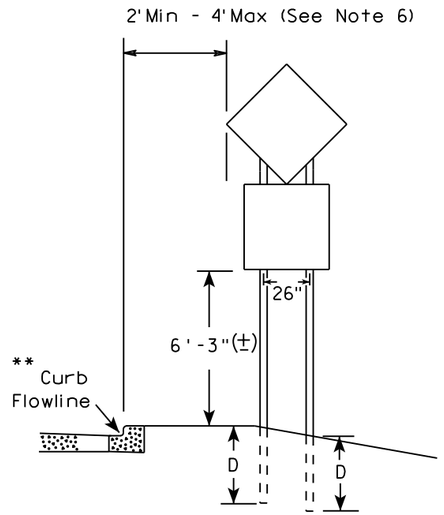
URBAN AREA



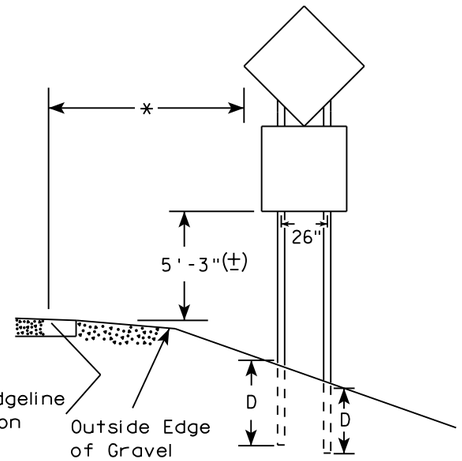
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

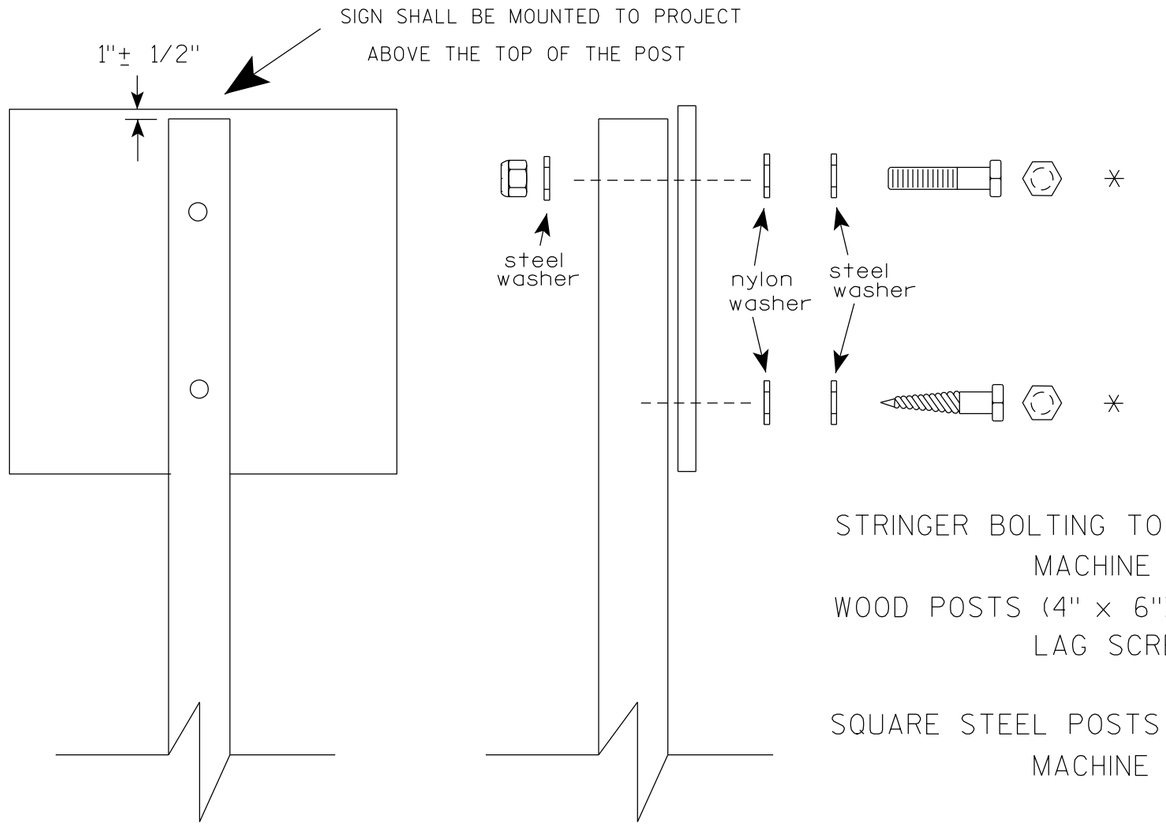
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 234	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

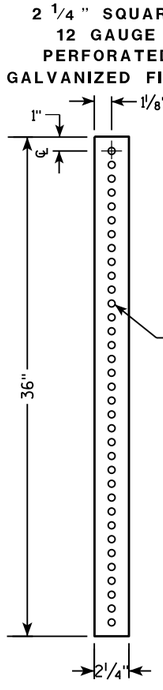
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

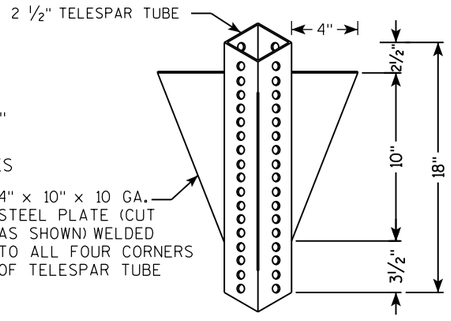
SHEET NO: 235 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

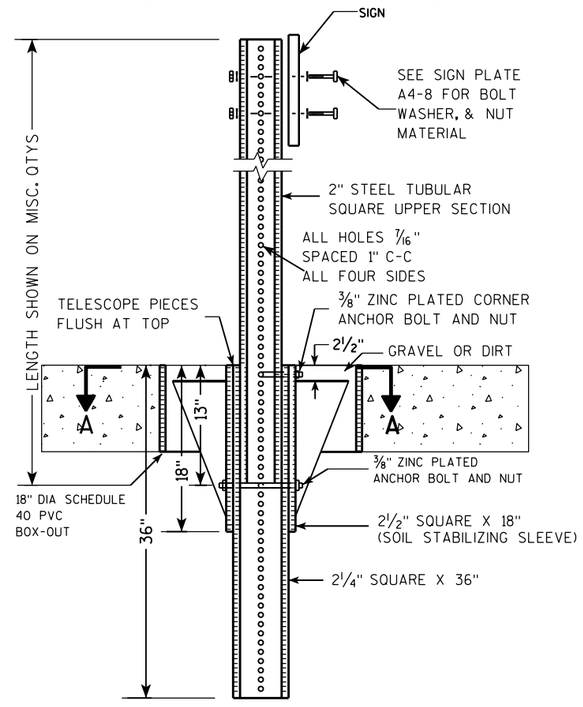
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



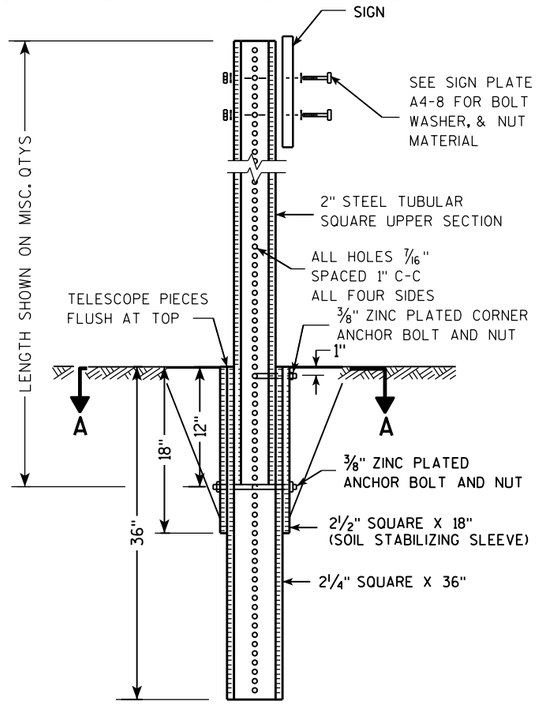
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

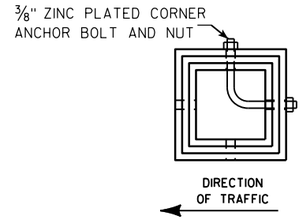


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

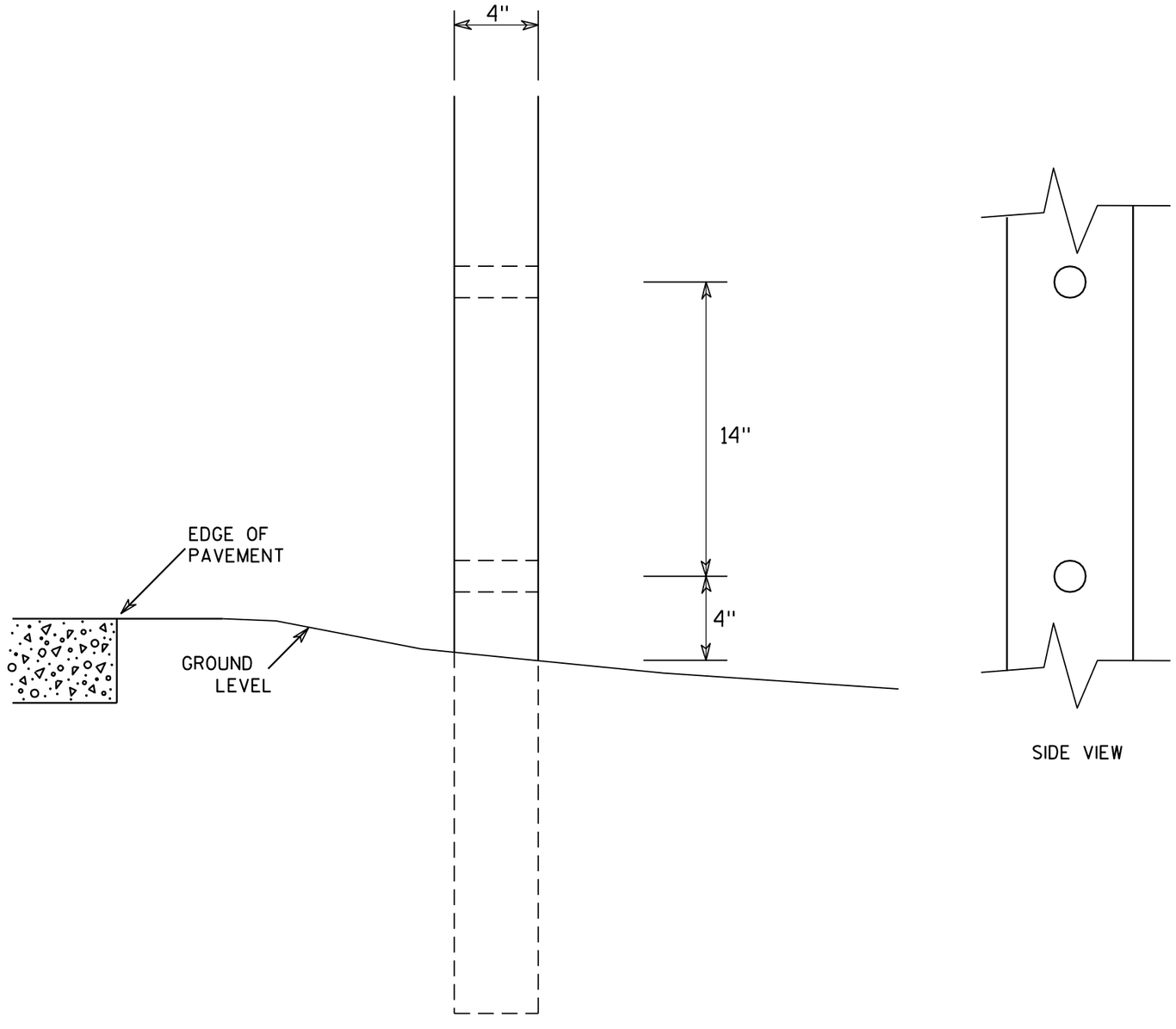
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

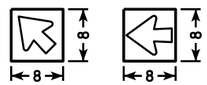
WISCONSIN DEPT OF TRANSPORTATION

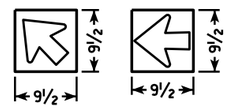
APPROVED Chester J Spang for State Traffic Engineer

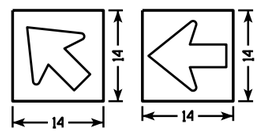
DATE 3/27/97 PLATE NO. A4-11.2

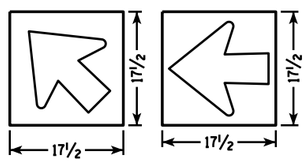
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 237	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES







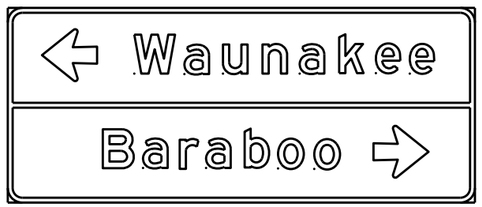


GENERAL NOTES

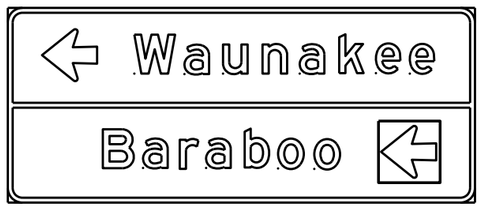
1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. There shall be a minmum of 2 fasteners used per arrow sign.
3. There shall be a spacer consisting of a 0.08" nylon washer between the back of the arrow sign and the face of the permanent sign.
4. Arrows are per standard plate A1-2
5. Use separate arrow sign for each destination
6. Tilt arrow is always at 45 degrees
7. Arrow is centered on arrow sign

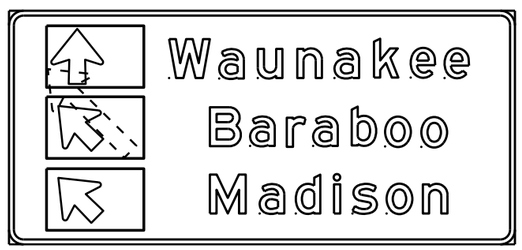
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

BEFORE



AFTER





DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

A4-12.2

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A412.DGN PLOT DATE : 08-OCT-2014 11:50 PLOT BY : mscsja

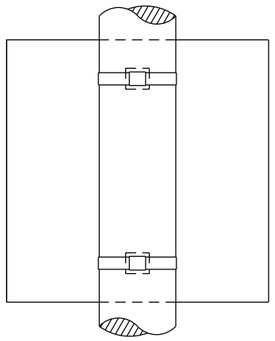
WISDOT/CADDS SHEET 42

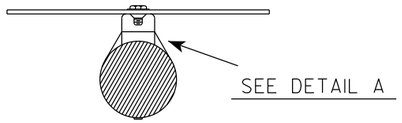
7

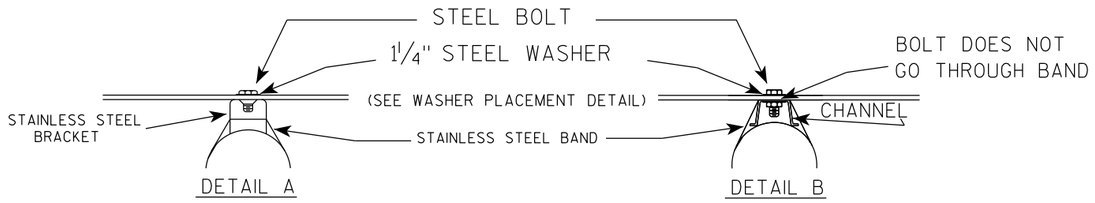
7

BANDING

SINGLE SIGN



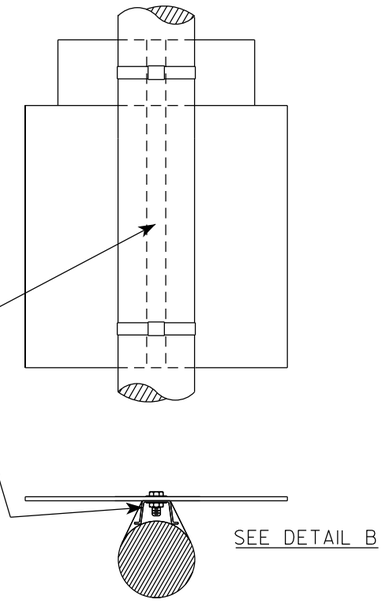




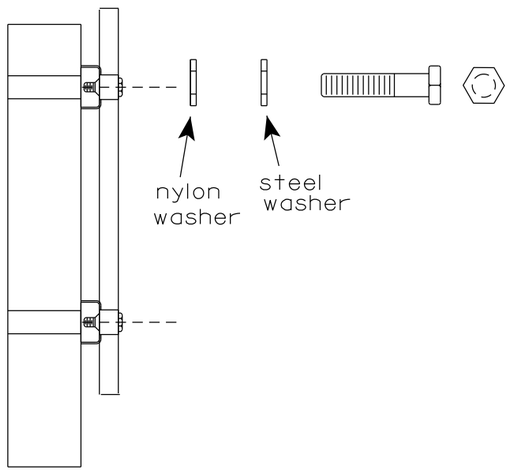
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

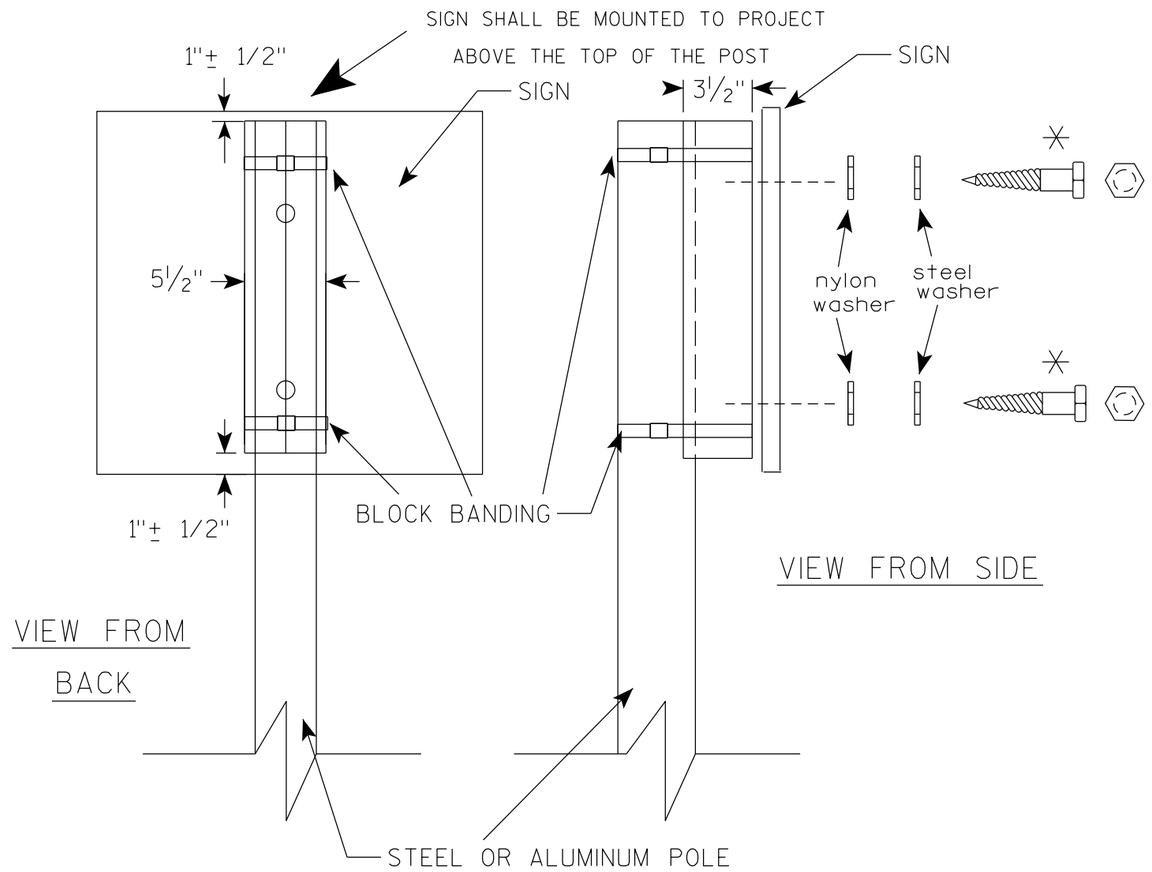
WISCONSIN DEPT OF TRANSPORTATION

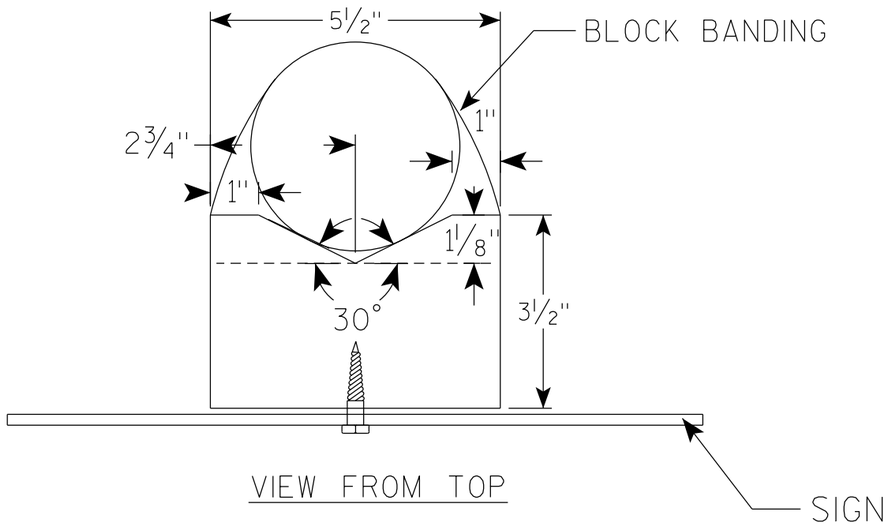
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 239	E

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





GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

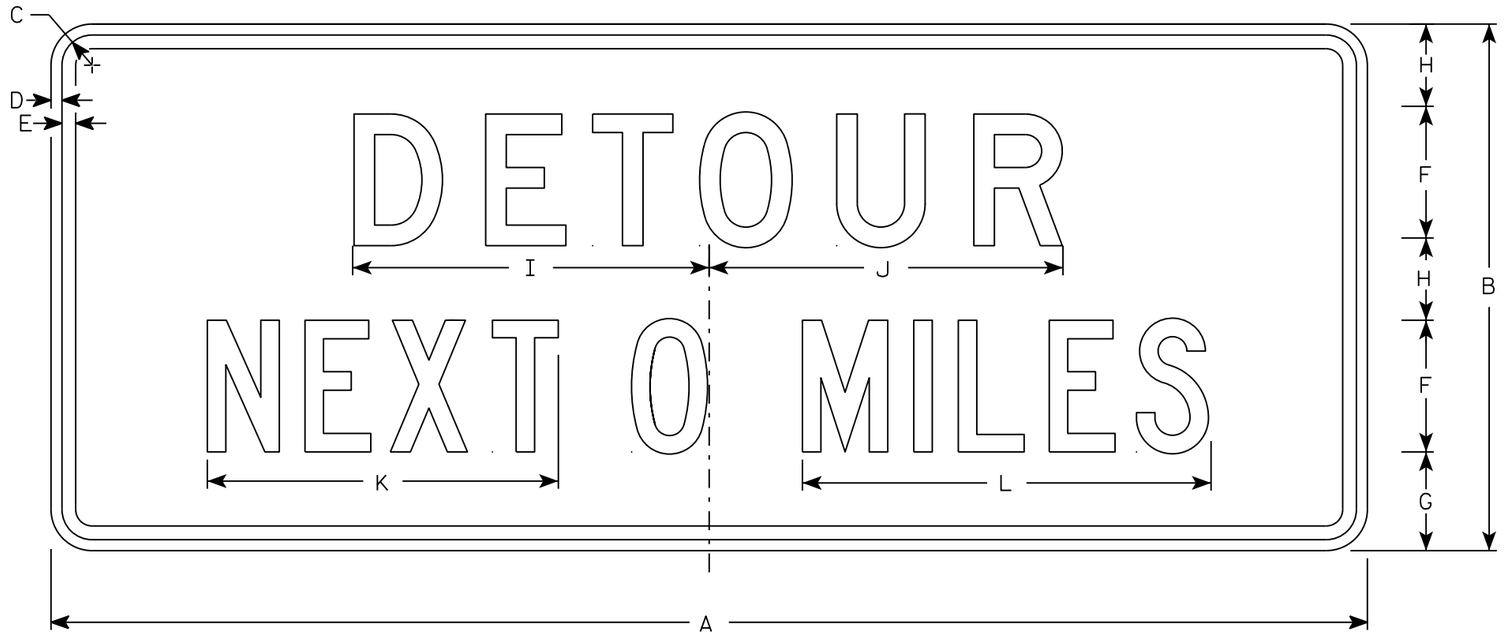
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 240 E



G20-51

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - Line 1 is D and Line 2 is C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
5																											

STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

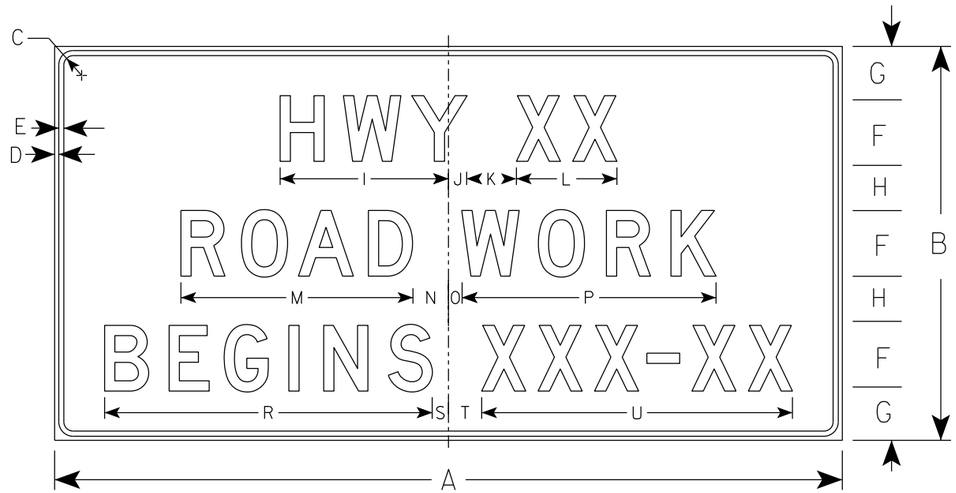
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-51.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 241 | E

NOTES

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



G20-57

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

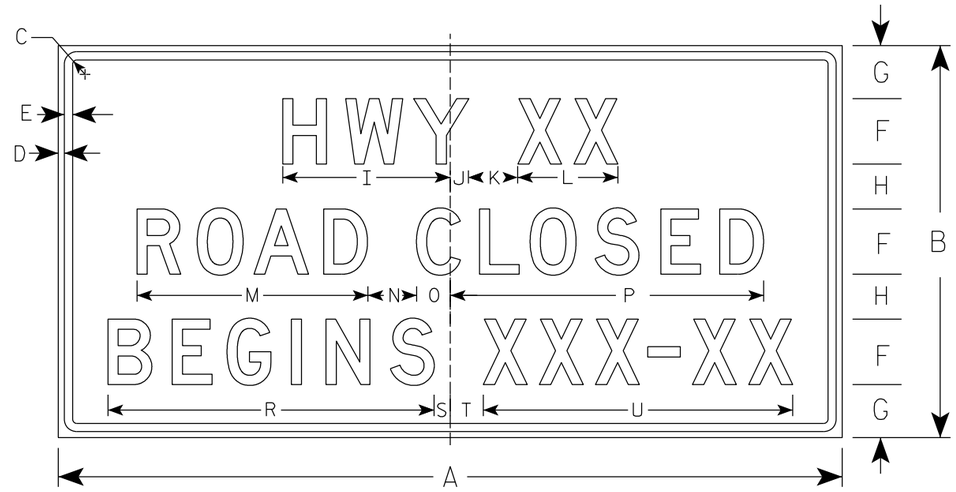
STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

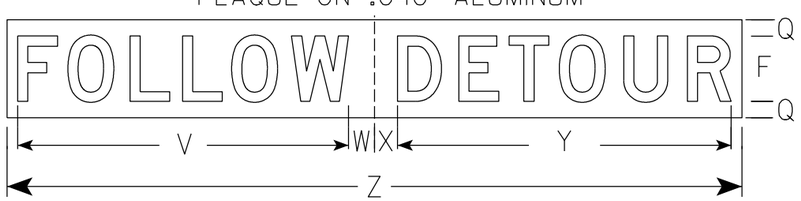
DATE 1/22/19 PLATE NO. G20-57.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 242 | 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																											

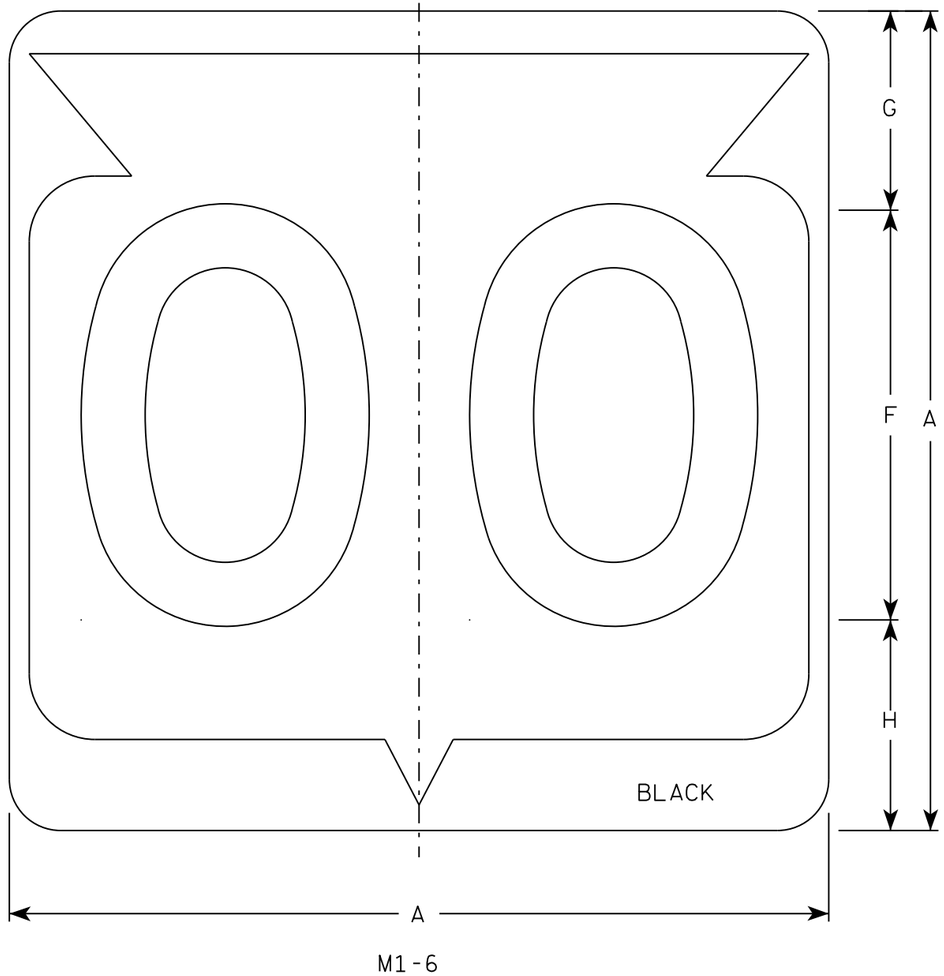
STANDARD SIGN
G20-57C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/19 PLATE NO. G20-57C.1

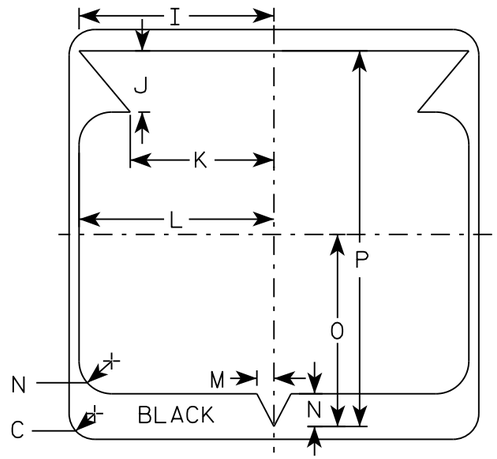
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 243 E



M1-6

NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

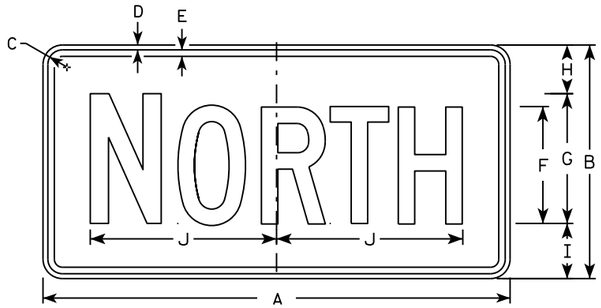
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

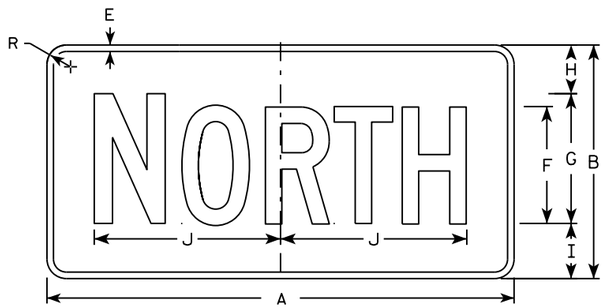
APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 244 E



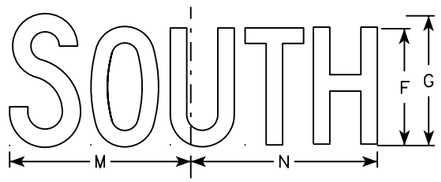
M3-1
MM3-1
MP3-1



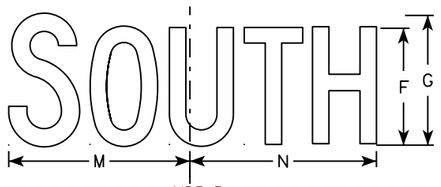
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

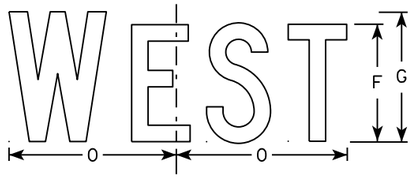
MB3-2
MK3-2
MN3-2



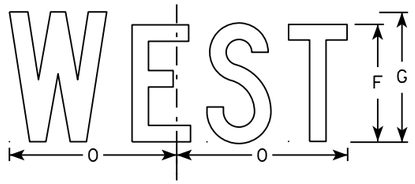
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

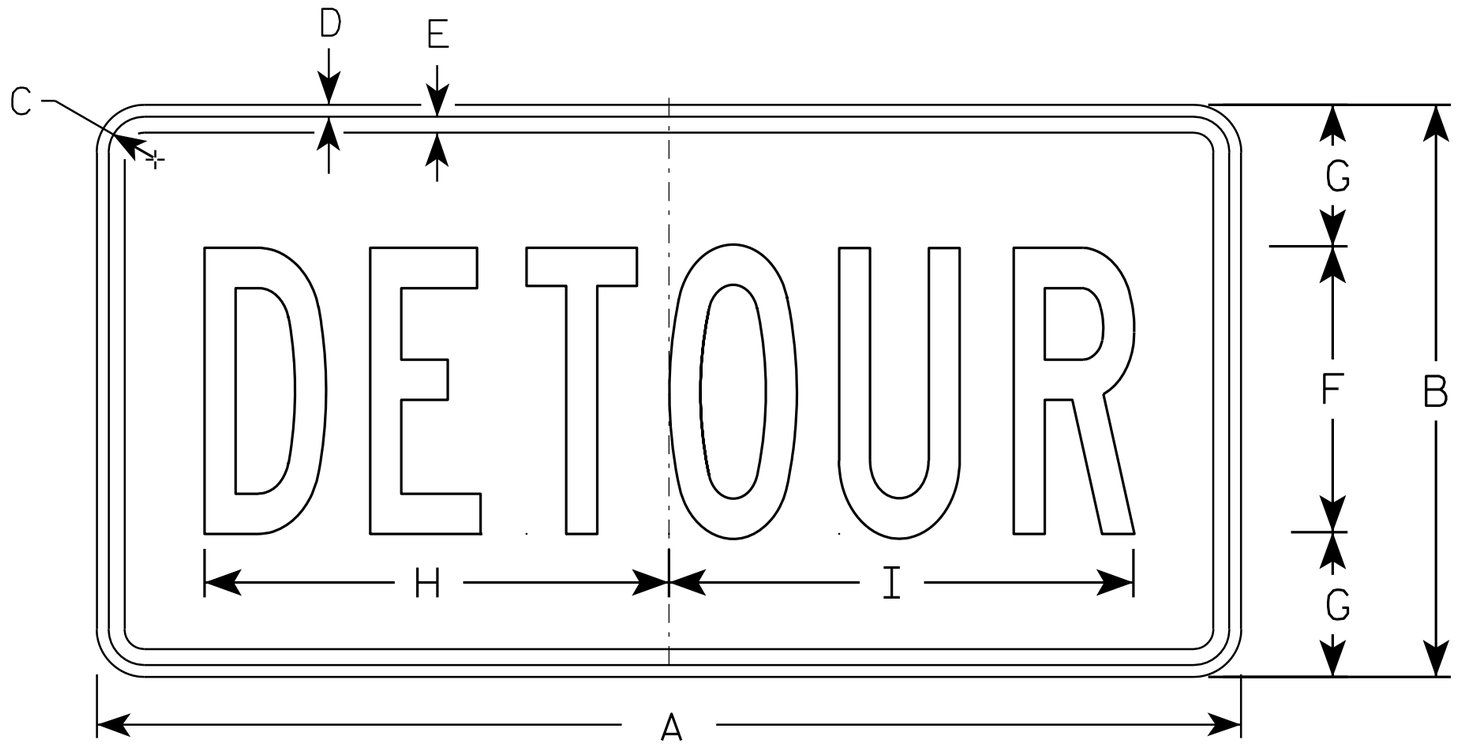
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

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



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - 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	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

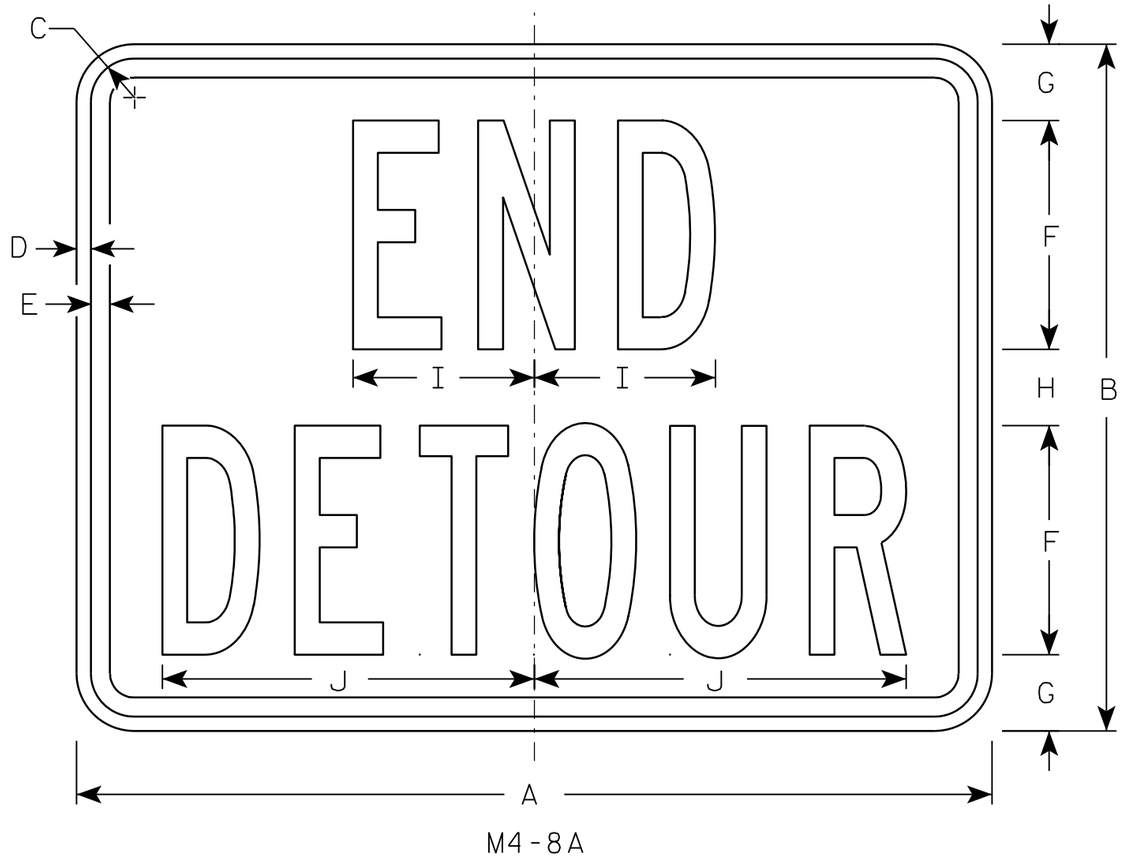
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 246	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - 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 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

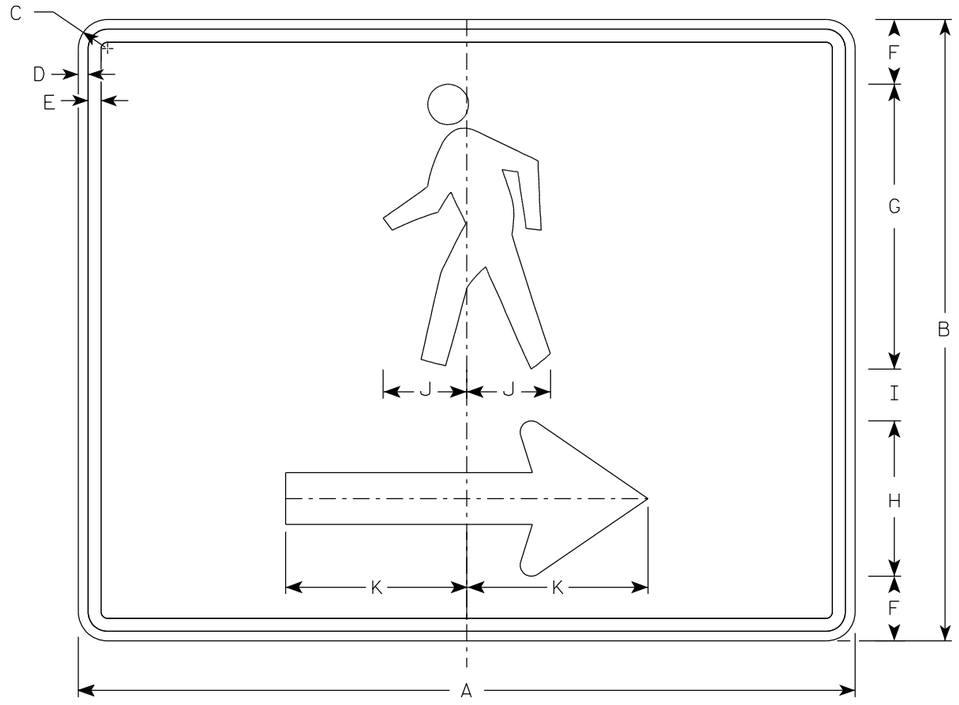
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

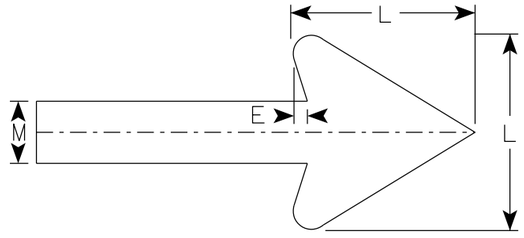
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 247	E



M4-60R

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	2 1/2	11	6	2	3 1/4	7	6	2														5.00
3																											
4																											
5																											

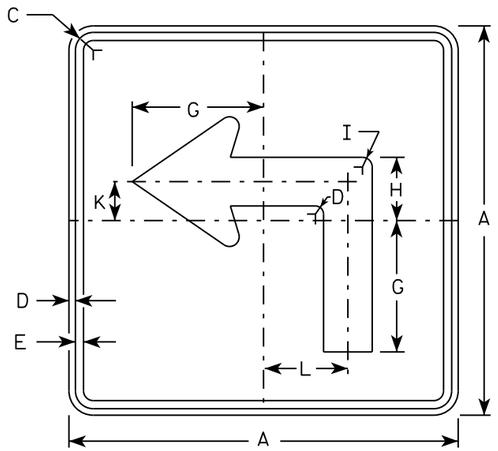
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

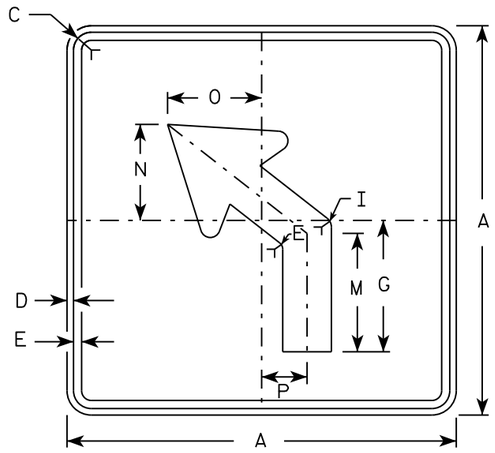
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/16/2021 PLATE NO. M4-60.1

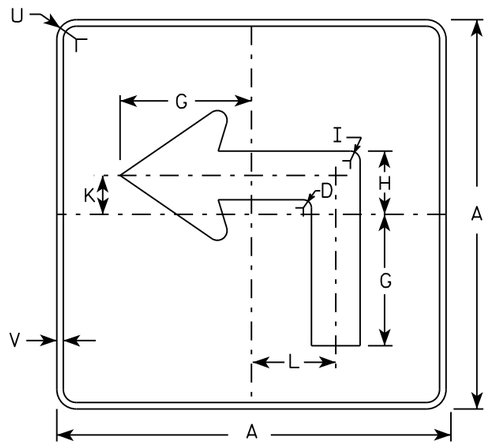
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 248 | E



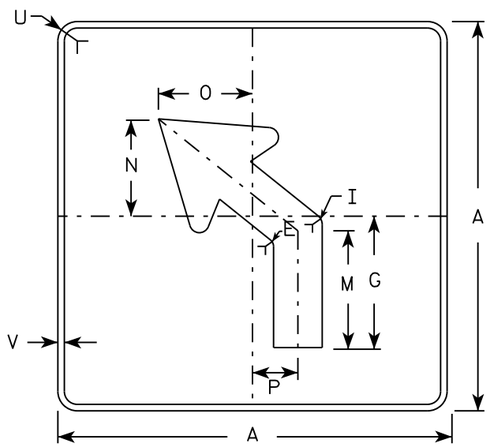
M5-1L
MM5-1L
MO5-1L
MP5-1L



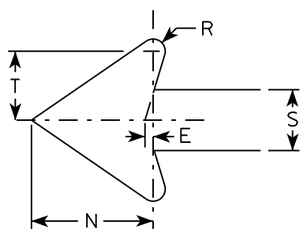
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

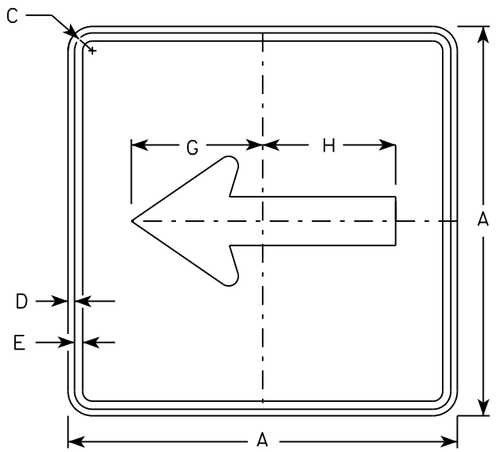
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

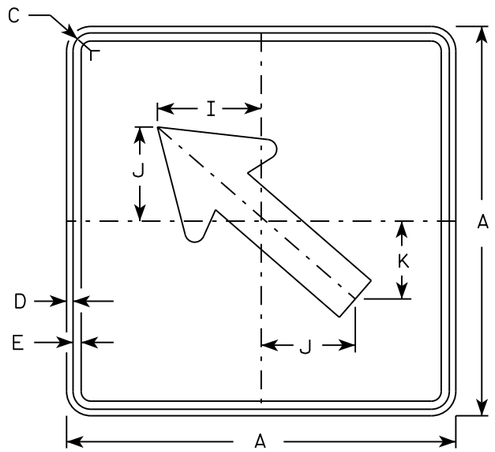
DATE 10/15/15 PLATE NO. M5-1.13

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

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



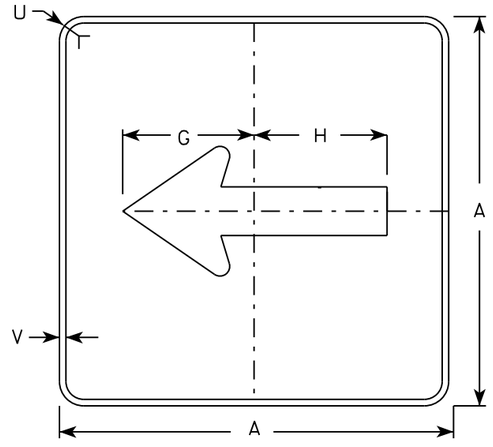
M6-1
MM6-1
MO6-1
MP6-1



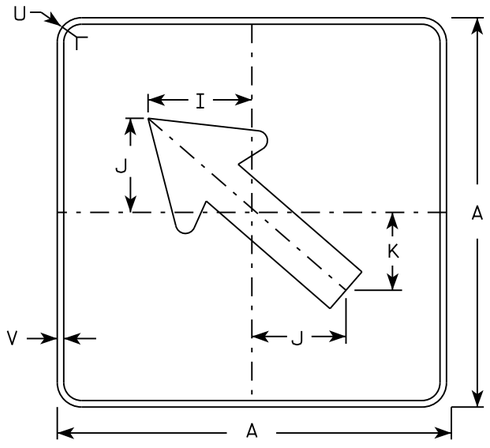
M6-2
MM6-2
MO6-2
MP6-2

NOTES

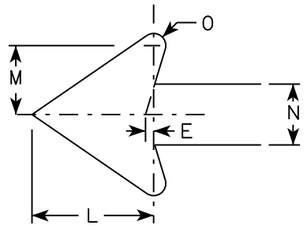
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



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



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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

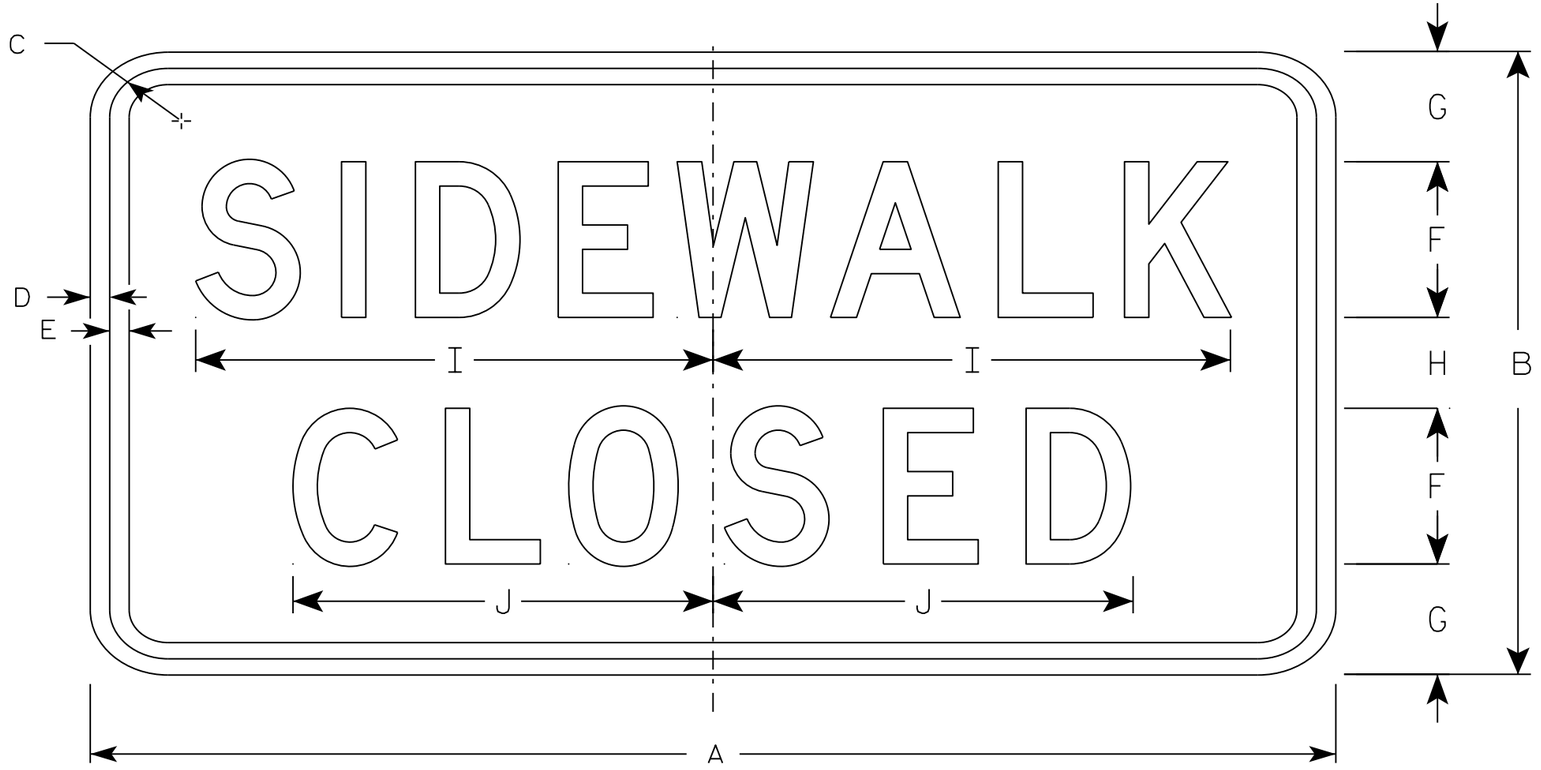
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATI 250 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

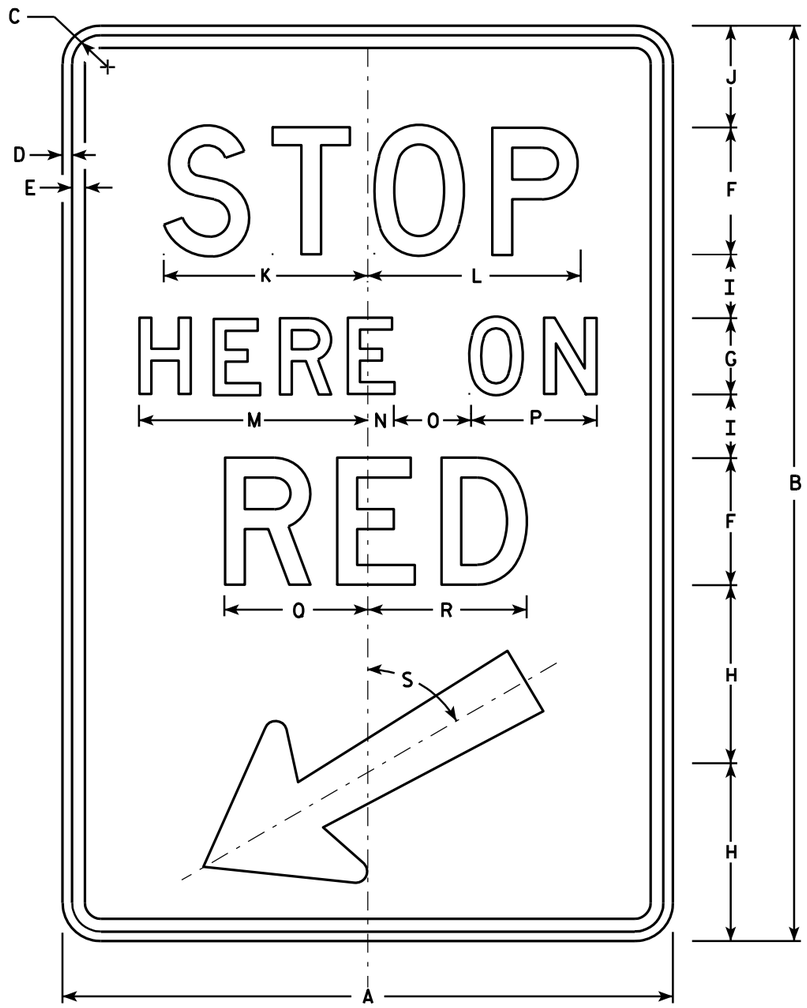
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 251 R9-9.6

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

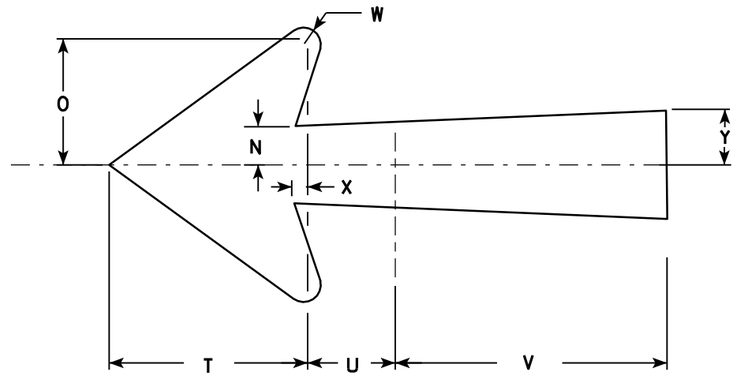
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R10-6

NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

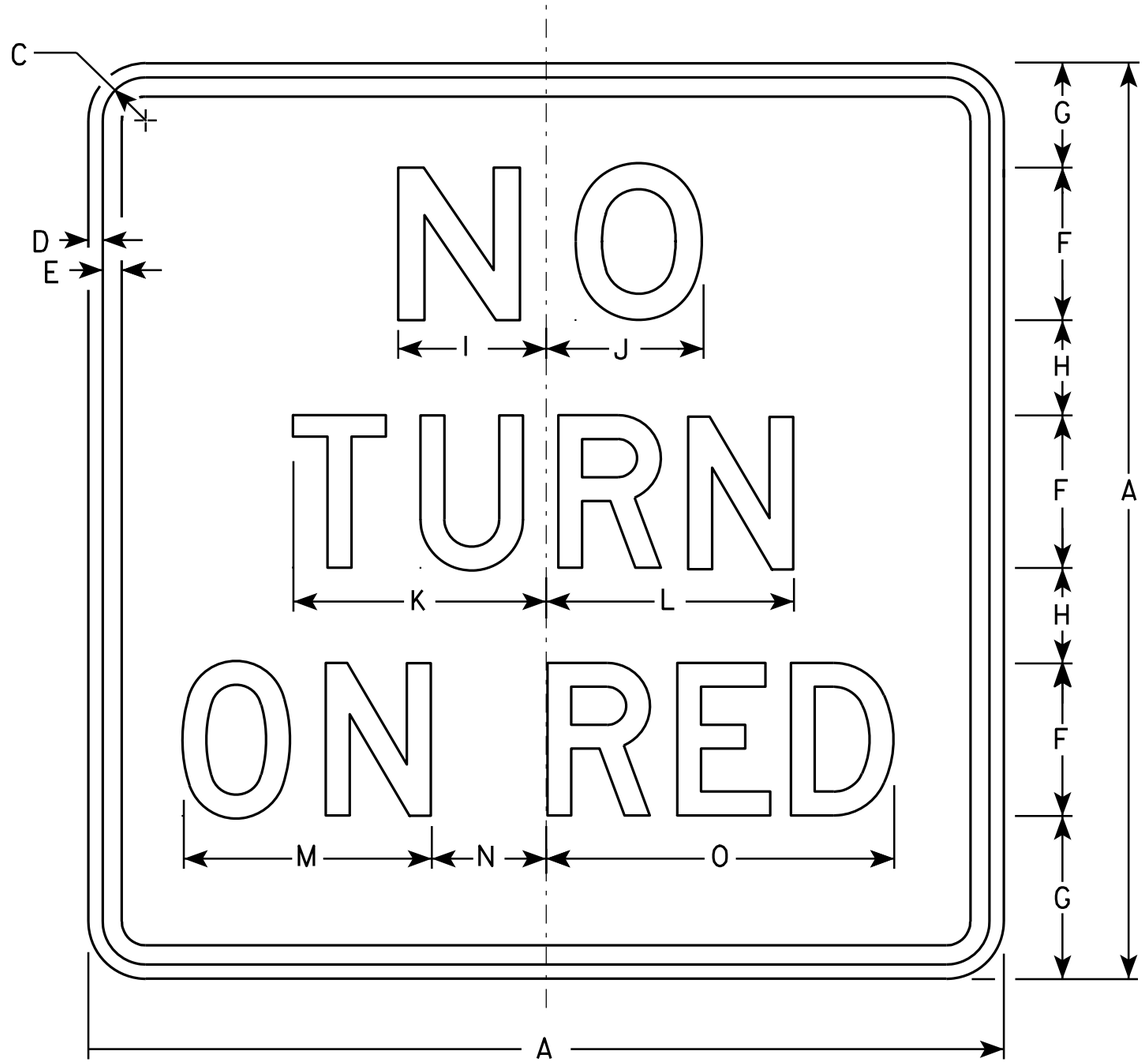
STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-6.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 252	E



R10-11B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - 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 E.
   Lines 2 and 3 are Series D.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	3	2 3/4	1 3/4	3	3 1/8	5	4 7/8	5 1/4	1 7/8	7 1/8												2.25
2S	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
2M	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
3	30		1 3/8	1/2	5/8	5	4 1/2	3	4 7/8	5 1/4	8 1/4	8 1/8	7 3/4	4 1/8	11 7/8												6.25
4																											
5																											

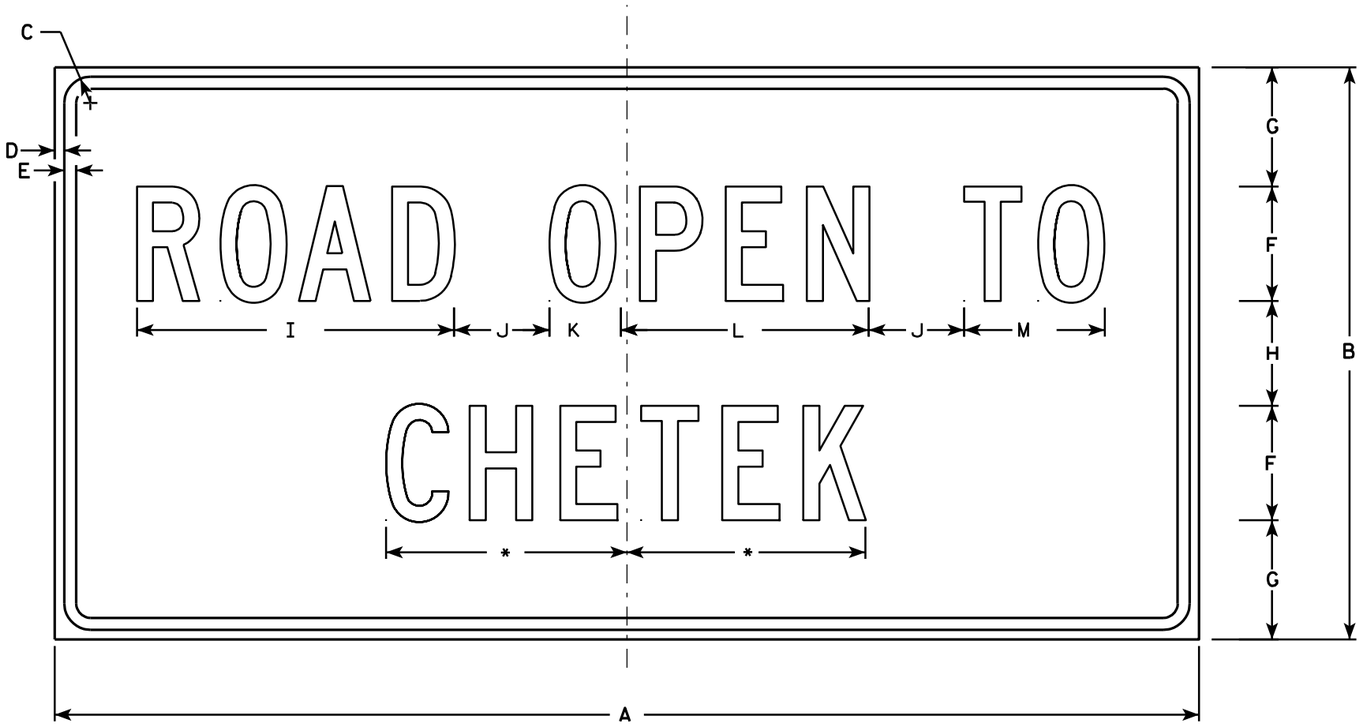
STANDARD SIGN
R10-11B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-11B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 253 | E



R10-61

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate message and optically 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 3/8	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-61.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 254	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R1061.DGN PLOT DATE : 04-APR-2011 15:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 7.945391:1.000000

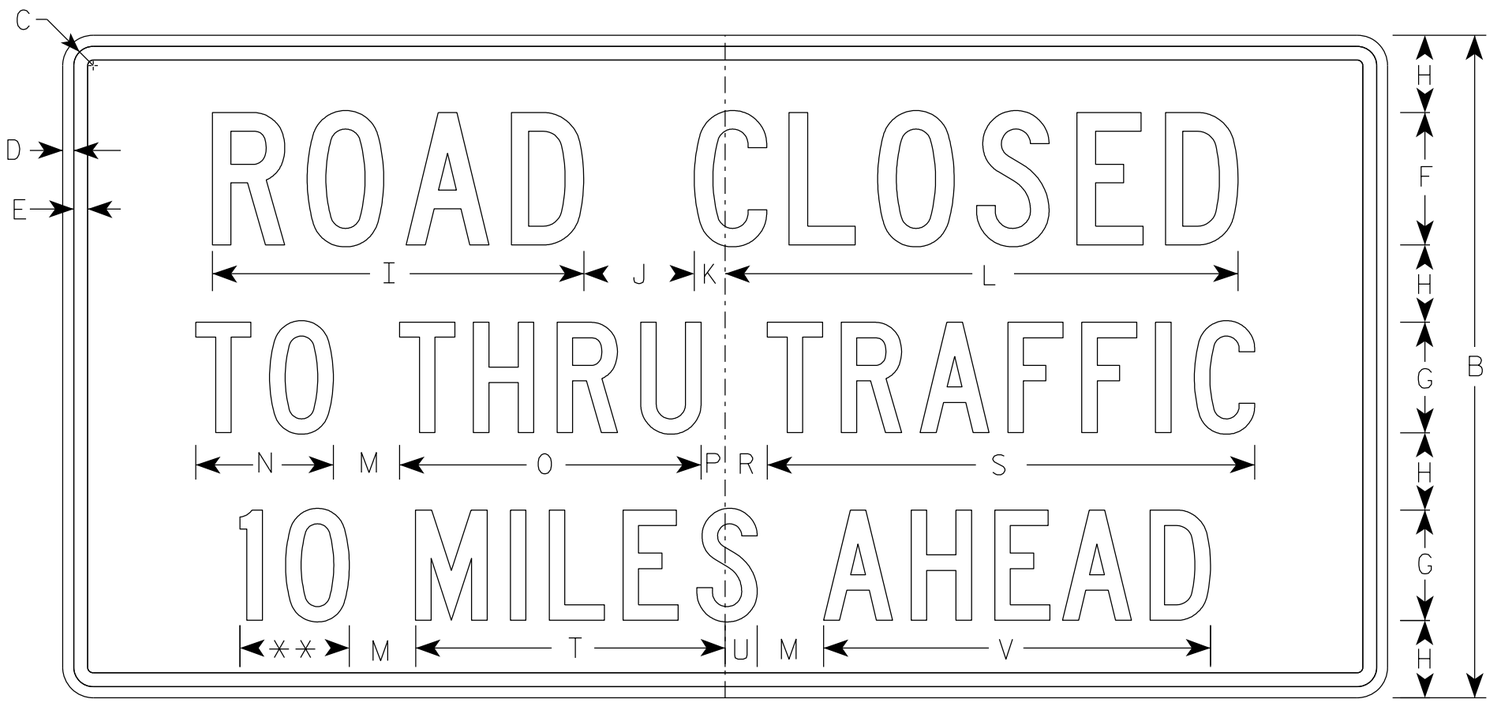
WISDOT/CADDS SHEET 42

7

7

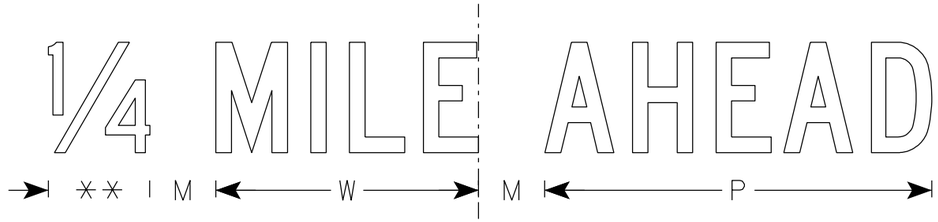
NOTES

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 1/4	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 3/8	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 3/8	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

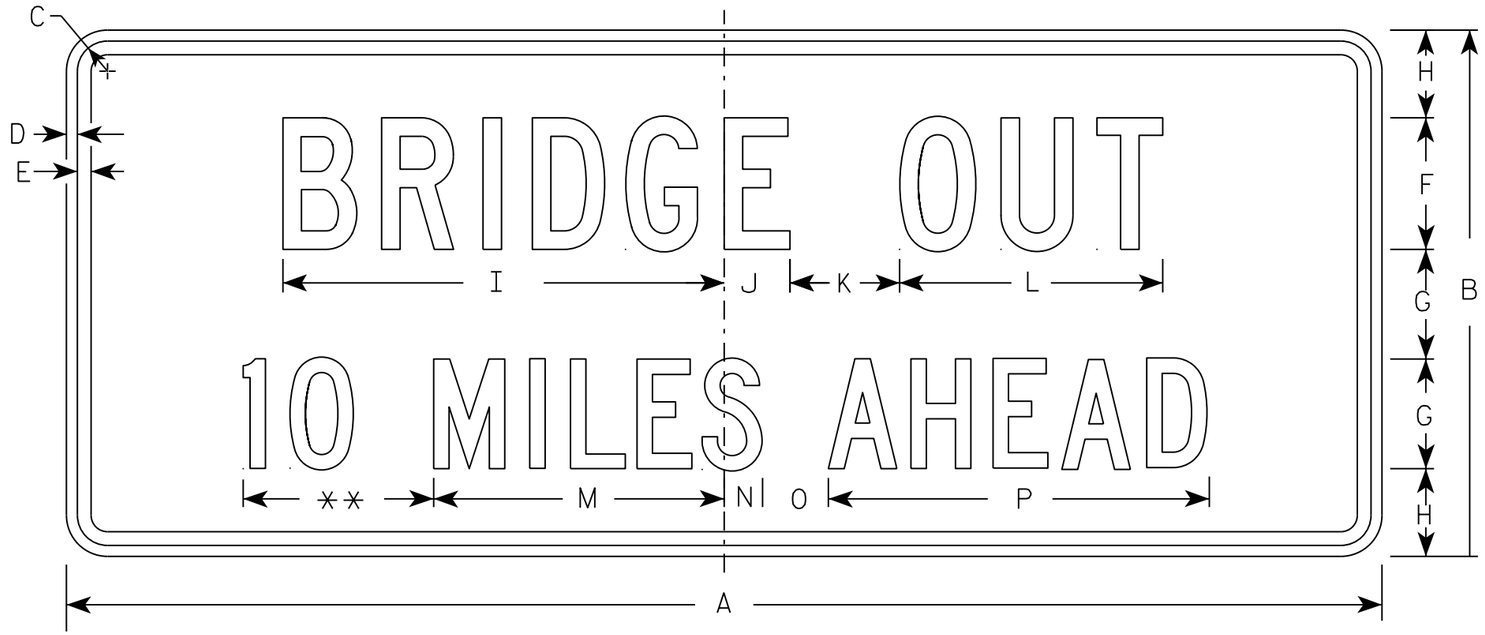
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 255	E

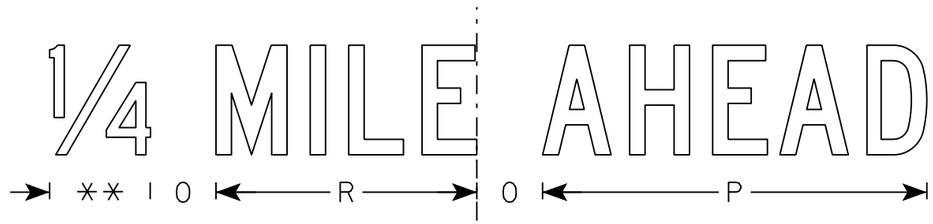
NOTES

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.



R11-3C

** 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	15	1 3/8	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

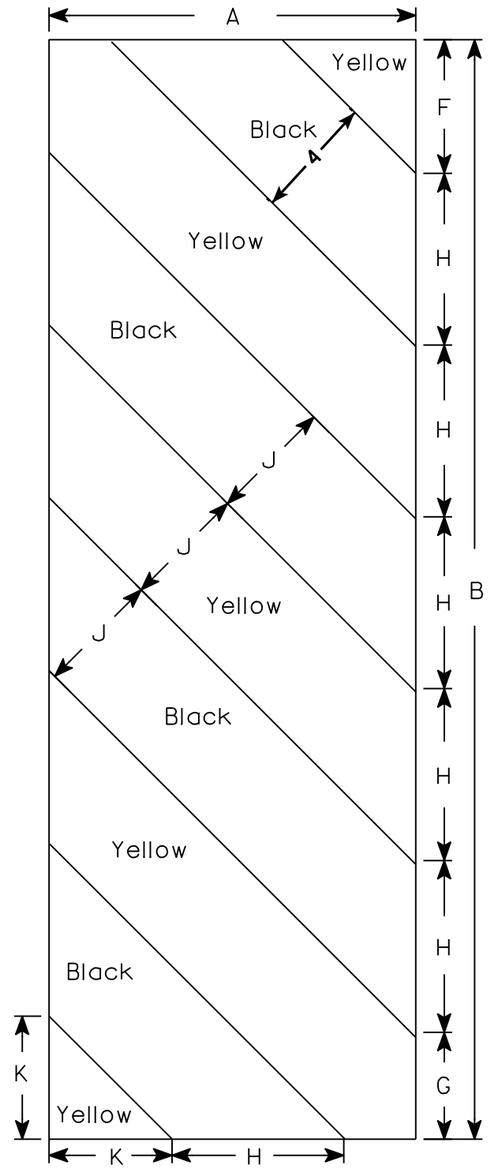
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

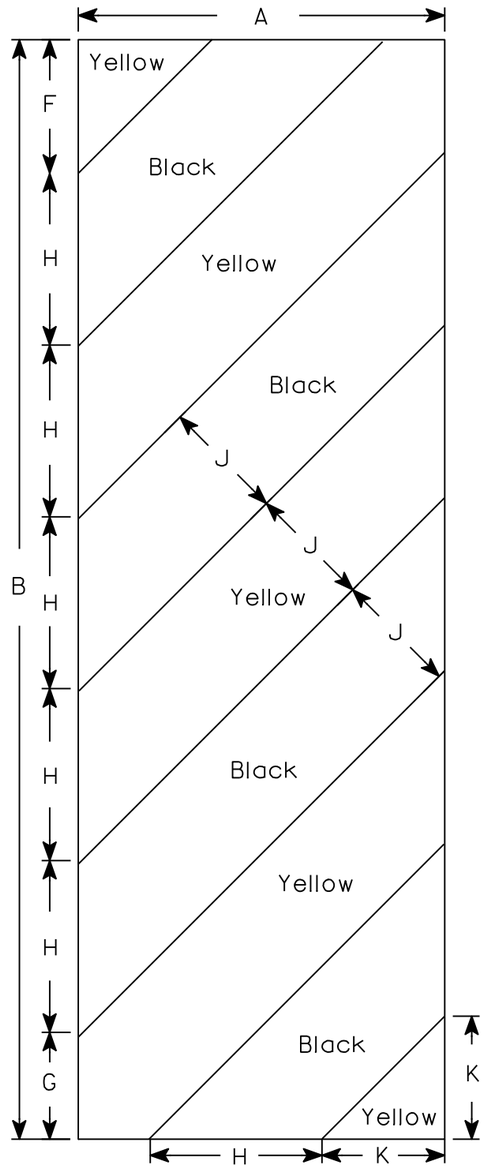
DATE 7/28/16 PLATE NO. R11-3C.3

PROJECT NO:

SHEET NO: 256 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

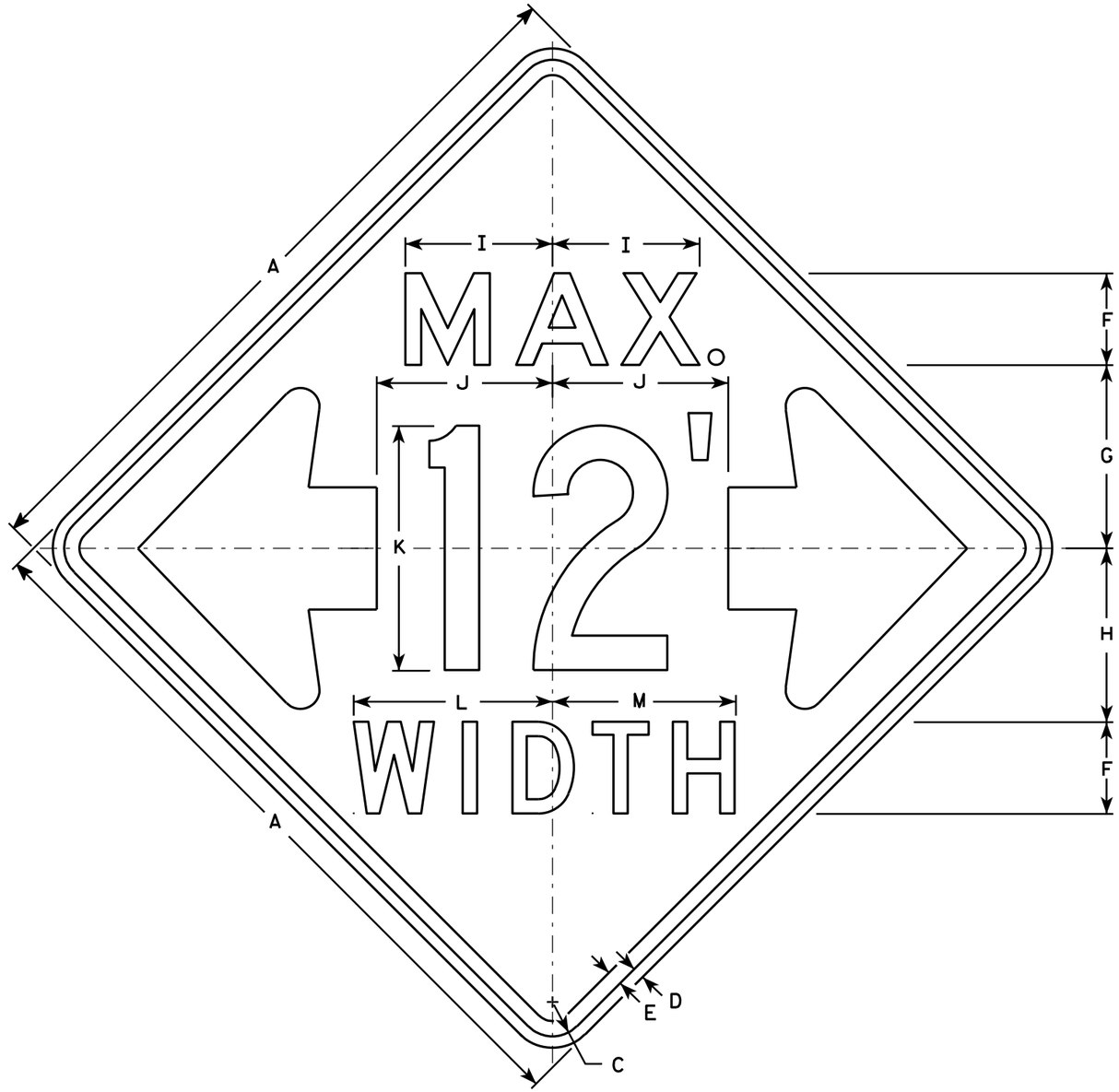
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

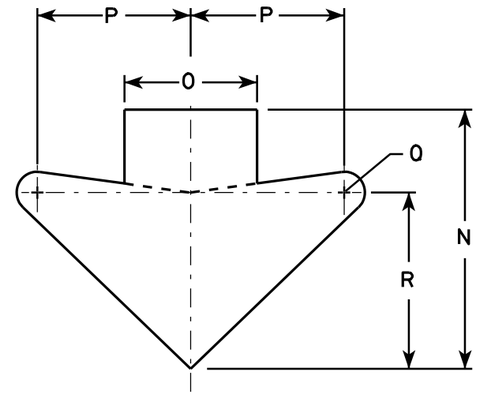
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 257 | E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

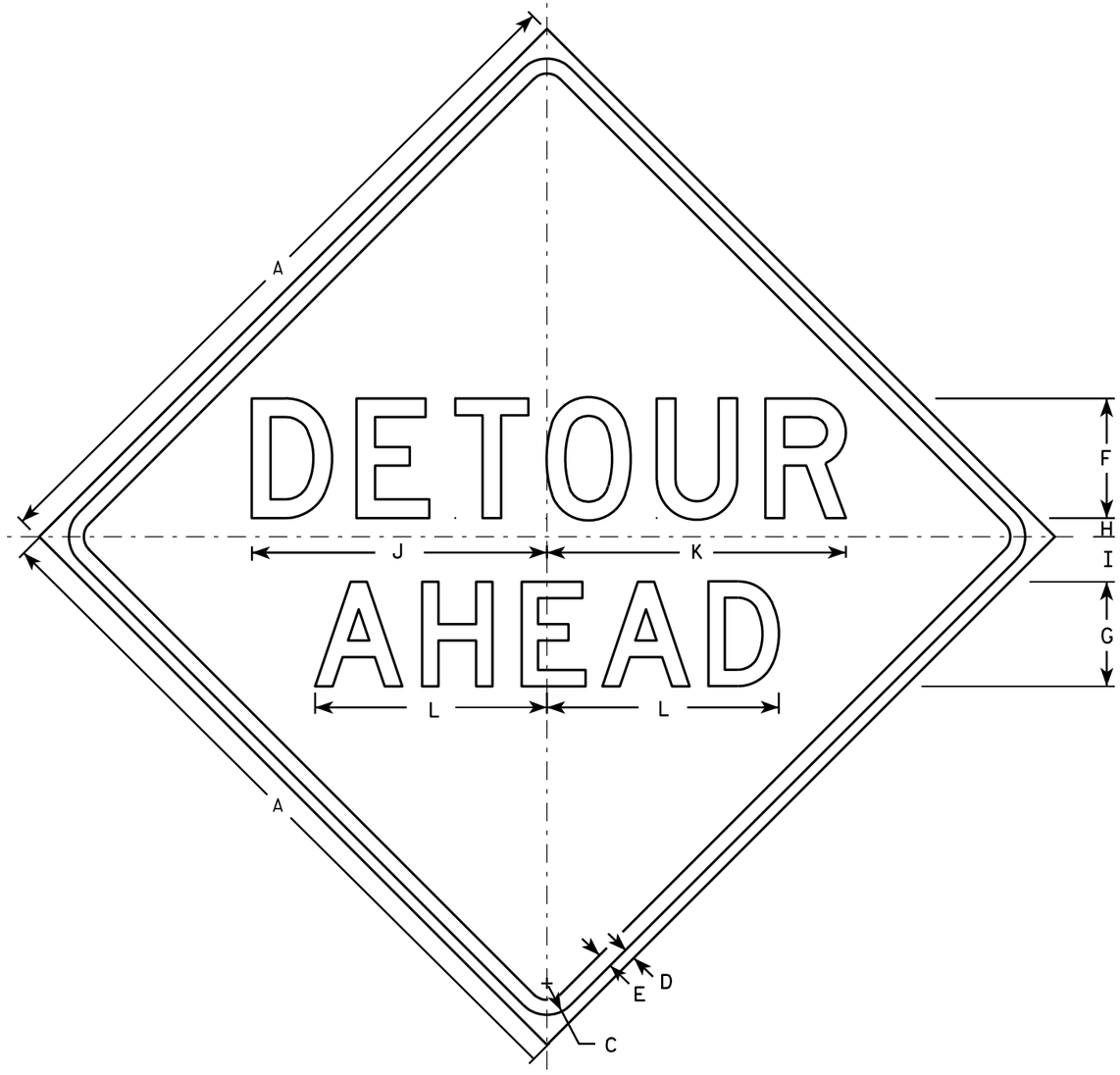
APPROVED Matthew R Rauch
for State Traffic Engineer

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

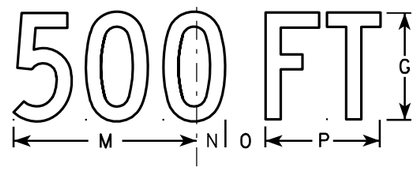
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 258 | E

7

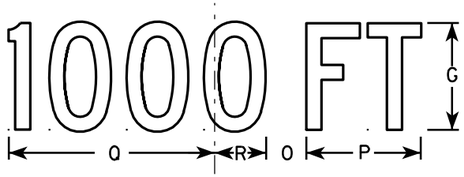
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



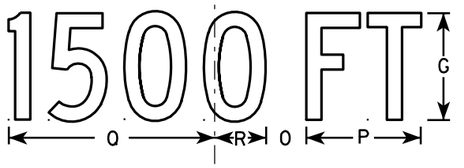
W20-2A



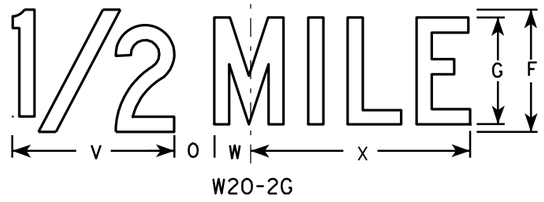
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. 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	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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

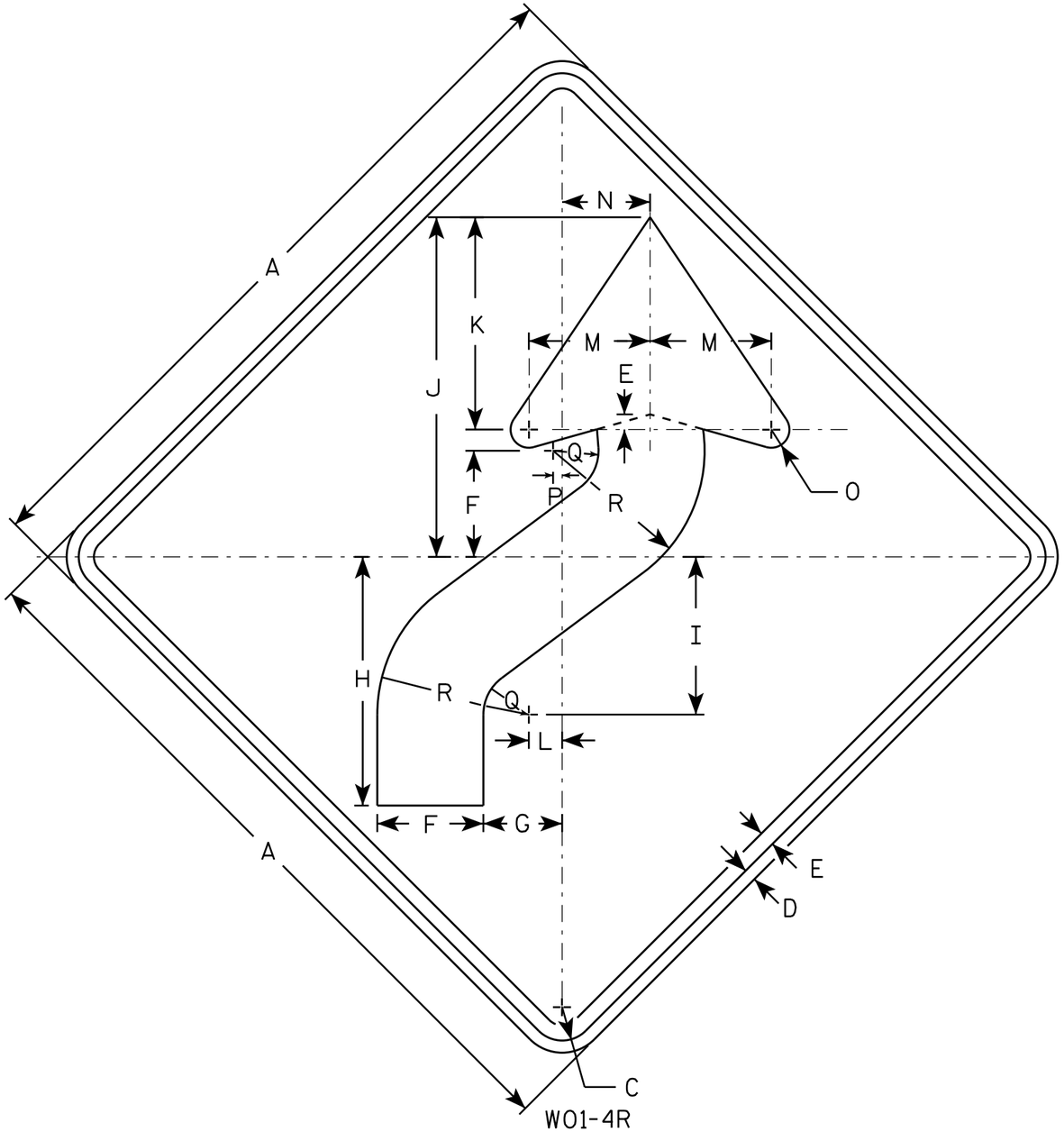
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 259	E



W01-4R

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

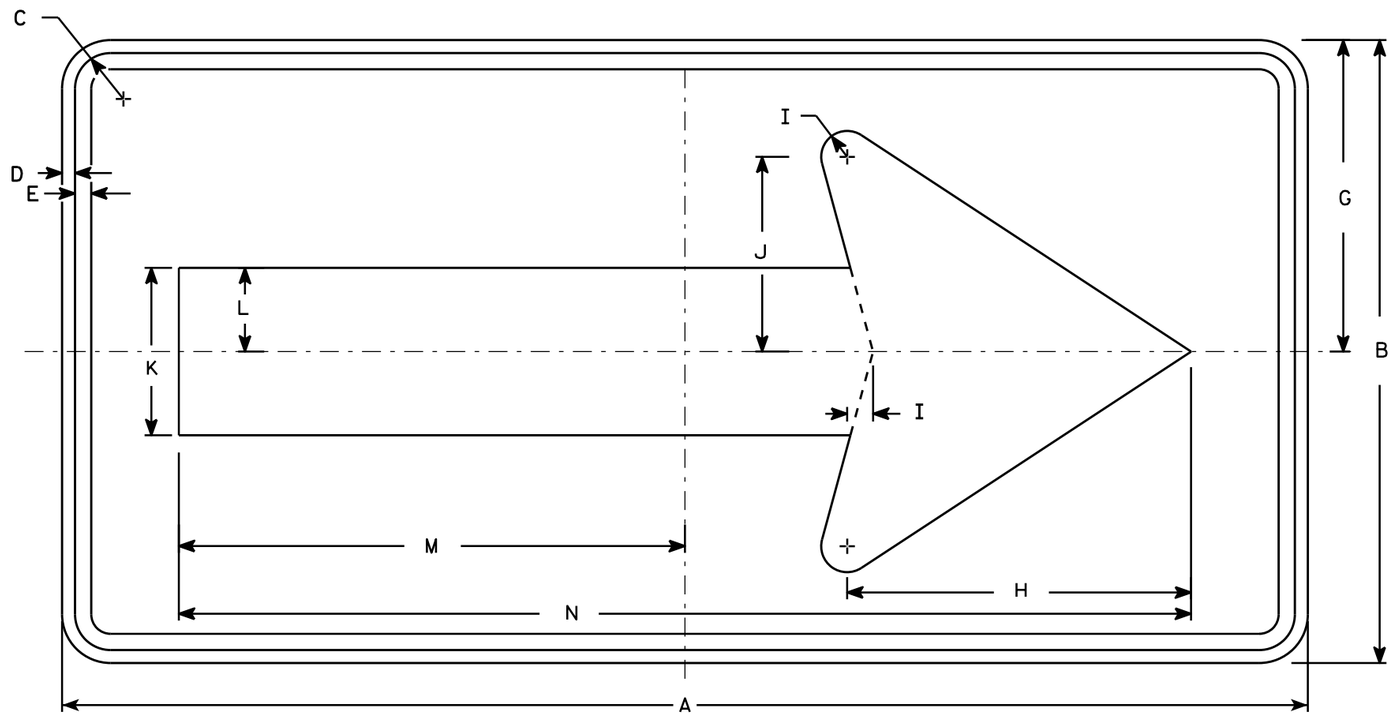
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

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

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



W01-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

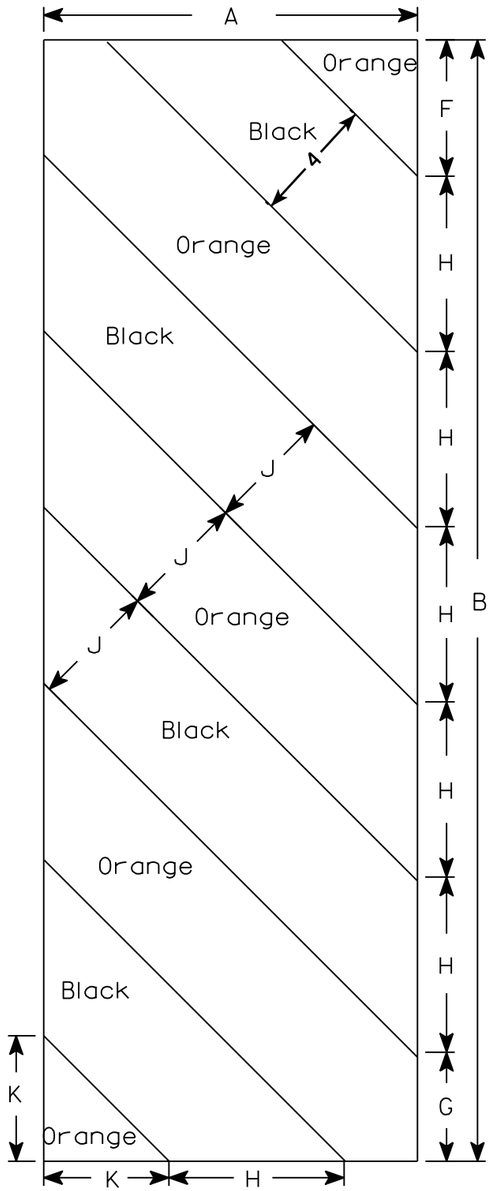
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

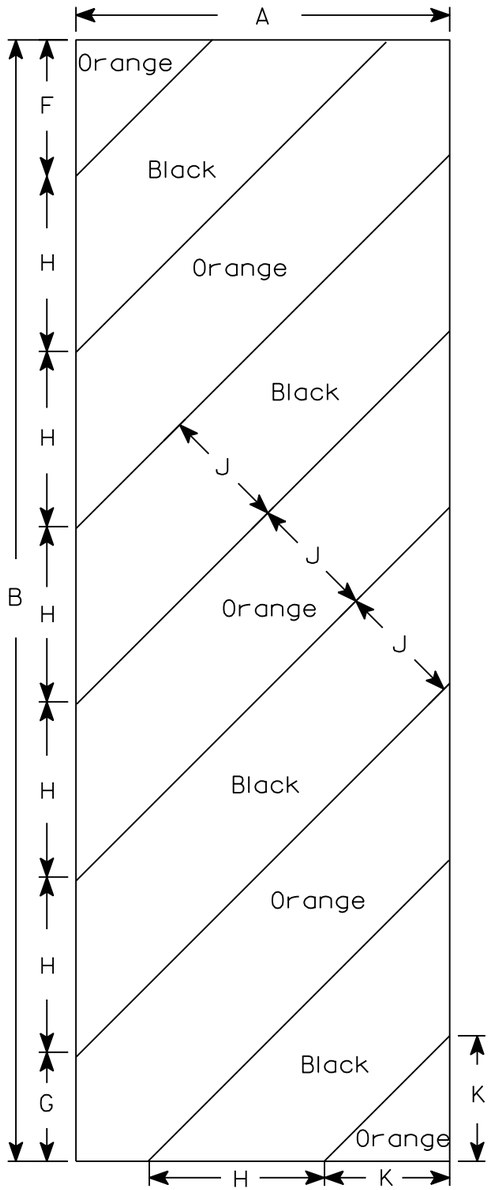
DATE 11/18/13 PLATE NO. W01-6.1

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

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



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

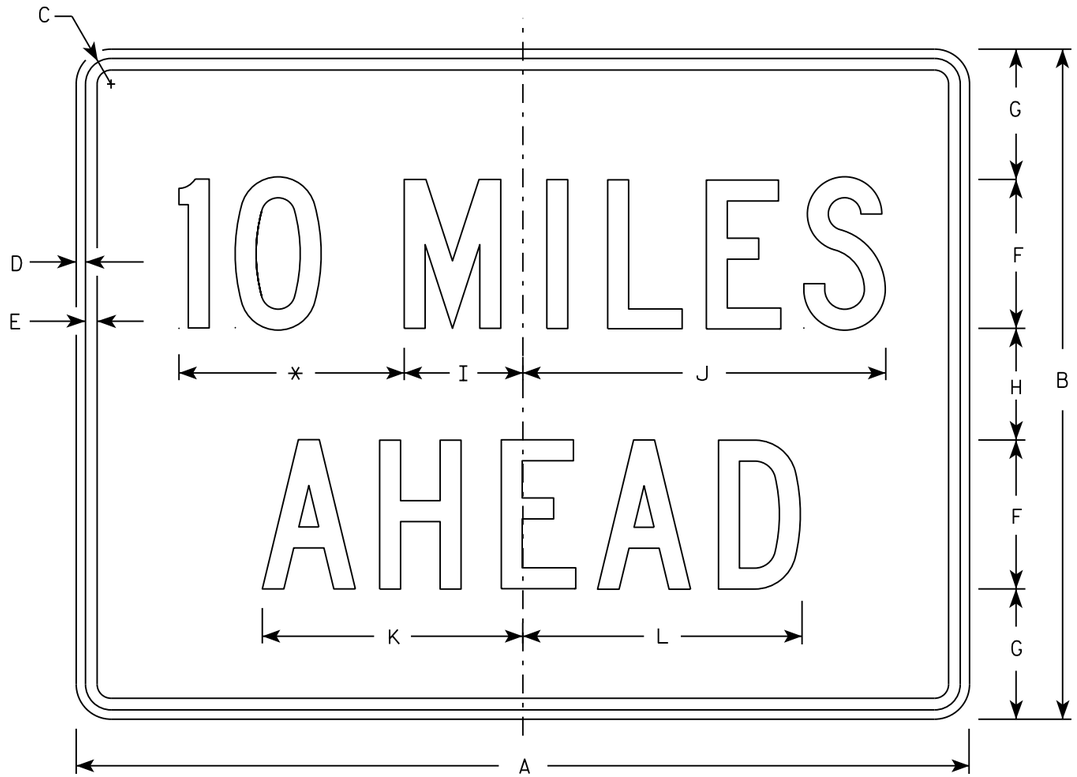
STANDARD SIGN
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

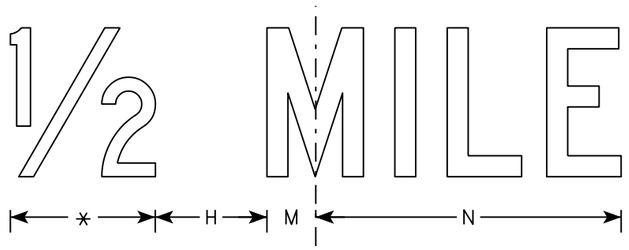
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W05-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

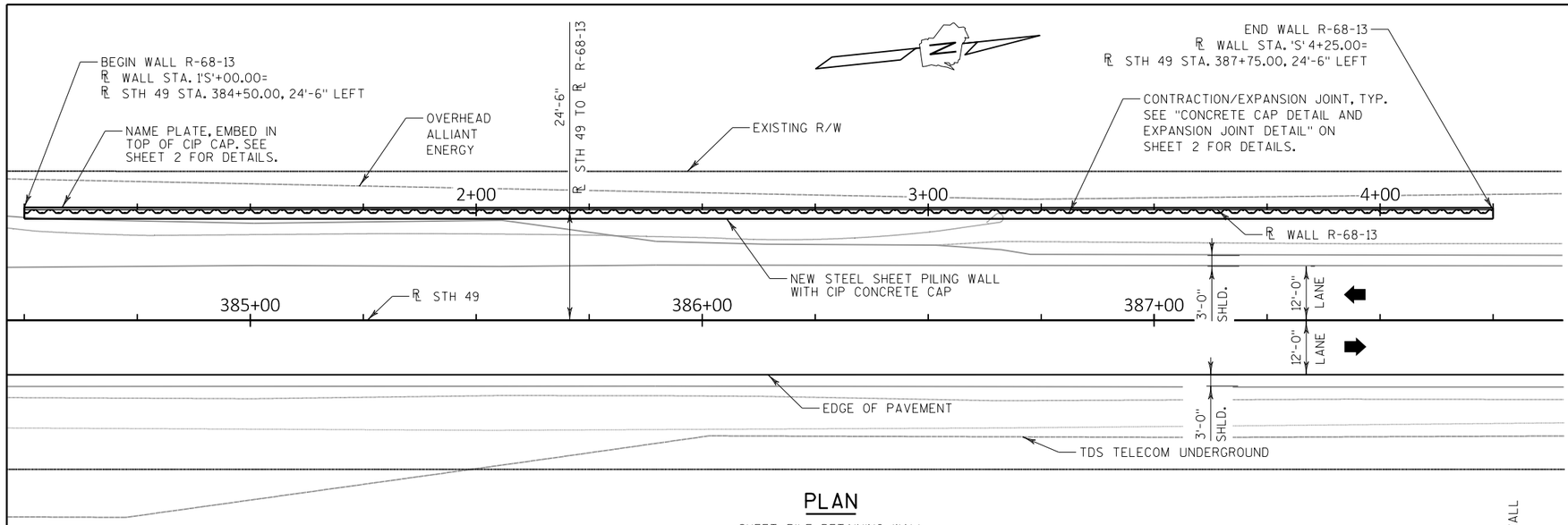
STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

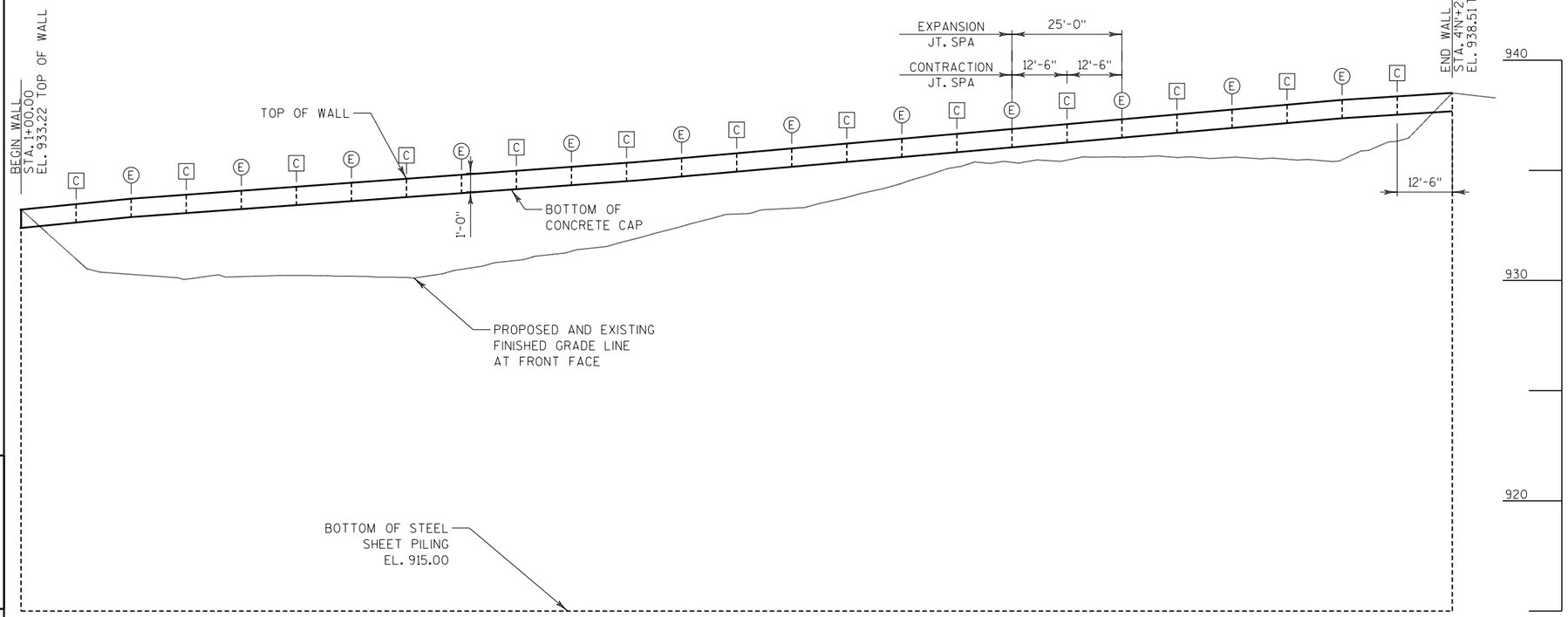
DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 263	E



PLAN

SHEET PILE RETAINING WALL



BENCH MARK

NO.	NORTHING	EASTING	DESCRIPTION	ELEV.
511	377741.337	521287.77	CP FENO SET	923.591
513	371638.657	521697.364	CP FENO SET	923.911

ELEVATION

(LOOKING WEST)

LEGEND

(E) EXPANSION JOINT

[C] CONTRACTION JOINT

DESIGN DATA

STATE PROJECT NUMBER

6420-00-72

LIVE LOAD:
STRUCTURE IS DESIGNED FOR A LIVE LOAD SURCHARGE 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALLS ..... f'c = 3.5 ksi

BAR STEEL REINFORCEMENT, HIGH STRENGTH, GRADE 60 .... fy = 60 ksi
STEEL SHEET PILING (ASTM A328) ..... fy= 39 ksi
WELDED WIRE FABRIC (ASTM A497) ..... fy= 70 ksi

SOIL DATA:
γ = 125 PCF
Φ = 28°
C = 0 PSF

TRAFFIC DATA:
STH 49:
ADT = 3148 (2022)
ADT = 3478 (2042)
RDS = 50 MPH

WISCONSIN
JOSHUA R. MITCHELL
E-46242-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER
5/4/2023

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS SECTION AND QUANTITIES
3. SUBSURFACE EXPLORATION

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE: AARON BONK (608) 261-0261
CONSULTANT: TONY CASTLE (414) 347-1607

NO.	DATE	REVISION	BY

emcs inc
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/09/23
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-68-13

STH 49 RETAINING WALL

COUNTY	WAUPACA	TOWN	SCANDINAVIA
DESIGN SPEC.	AASHTO LRFD BRIDGE DESIGN SPEC.		
DESIGNED BY	JRM	DESIGN CK'D.	AJC
DRAWN BY	JRM	PLANS CK'D.	AJC

GENERAL PLAN & ELEVATION

SHEET 1 OF 3
264

8

8

STATE PROJECT NUMBER

6420-00-72

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NAVD 88 DATUM (2012 ADJUSTMENT).

ALL STATIONS AND OFFSETS GIVEN ARE FROM THE FRONT FACE OF THE WALL UNLESS SHOWN OTHERWISE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ANY EXCAVATION REQUIRED TO PLACE CONCRETE CAP WORK TO BE PAID FOR UNDER BID ITEM "CONCRETE MASONRY RETAINING WALLS".

DO NOT RUN REINFORCEMENT THRU CONTRACTION JOINTS. LOCATE CONTRACTION JOINTS AT INTERLOCK OF SHEET PILE.

STEEL SHEET PILING TO BE PAINTED PER STANDARD SPECIFICATION 512. PAINT FRONT FACE OF WALL. COLOR TO BE AMS STANDARD COLOR # 20059, BROWN. PAINTING INCLUDED IN BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED".

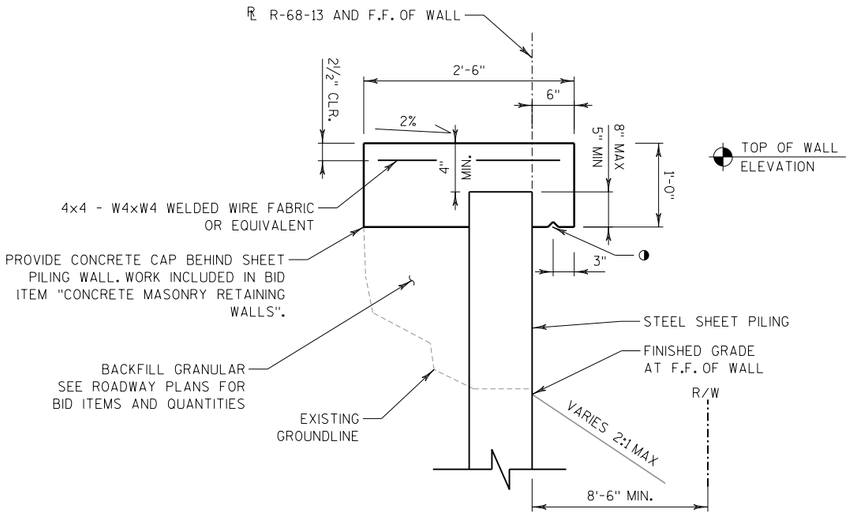
STEEL SHEET PILING SHALL BE THE PZ22 OR EQUIVALENT WITH A MINIMUM SECTION MODULUS OF 18.1 in^3.

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	TOTAL
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	31
506.3005	WELDED STUD SHEAR CONNECTORS 7/8X4-INCH	EACH	178
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	6780
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	6780

LOCATION	WALL STATION	STH 49 STATION	OFFSET TO F.F. OF WALL	TOP OF WALL EL.	FINISHED GRADE EL.	BOTTOM OF SHEET PILE EL.
BEGIN WALL	1+00.00	384+50.00	24.5	933.22	933.22	915.00
EXP. JT.	1+25.00	384+75.00	24.5	933.71	930.29	915.00
EXP. JT.	1+50.00	385+00.00	24.5	934.07	930.19	915.00
EXP. JT.	1+75.00	385+25.00	24.5	934.44	930.19	915.00
EXP. JT.	2+00.00	385+50.00	24.5	934.80	930.51	915.00
EXP. JT.	2+25.00	385+75.00	24.5	935.16	931.33	915.00
EXP. JT.	2+50.00	386+00.00	24.5	935.55	932.47	915.00
EXP. JT.	2+75.00	386+25.00	24.5	935.99	933.28	915.00
EXP. JT.	3+00.00	386+50.00	24.5	936.43	934.44	915.00
EXP. JT.	3+25.00	386+75.00	24.5	936.88	935.36	915.00
EXP. JT.	3+50.00	387+00.00	24.5	937.32	935.60	915.00
EXP. JT.	3+75.00	387+25.00	24.5	937.76	935.59	915.00
EXP. JT.	4+00.00	387+50.00	24.5	938.20	935.48	915.00
END WALL	4+25.00	387+75.00	24.5	938.51	938.51	915.00

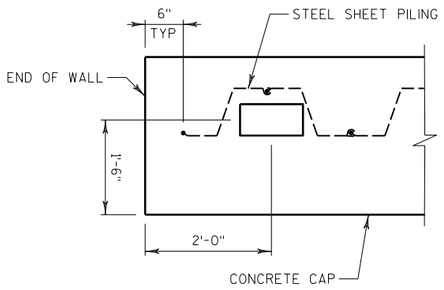


TYPICAL WALL SECTION

(LOOKING SOUTH)

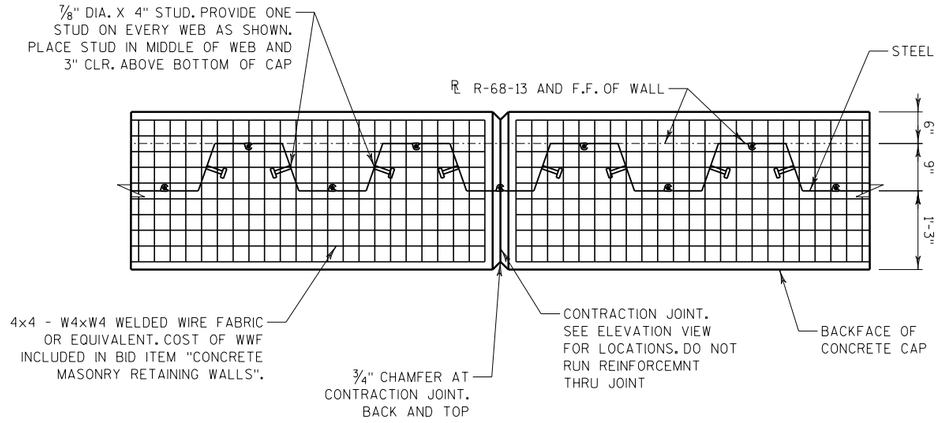
LEGEND

◑ ¾" V-GROOVE REQUIRED AT EDGE OF CONCRETE CAP



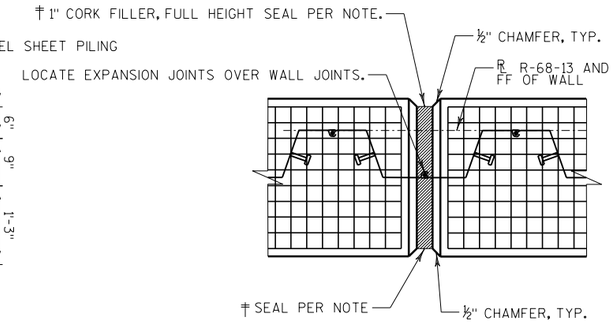
NAME PLATE DETAIL

(PLAN VIEW OF CAP)



CONCRETE CAP DETAIL

(PLAN VIEW OF CAP)



EXPANSION JOINT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-68-13

DRAWN BY JRM | PLANS CK'D. AJC

CROSS SECTION AND QUANTITIES

SHEET 2 OF 3

265

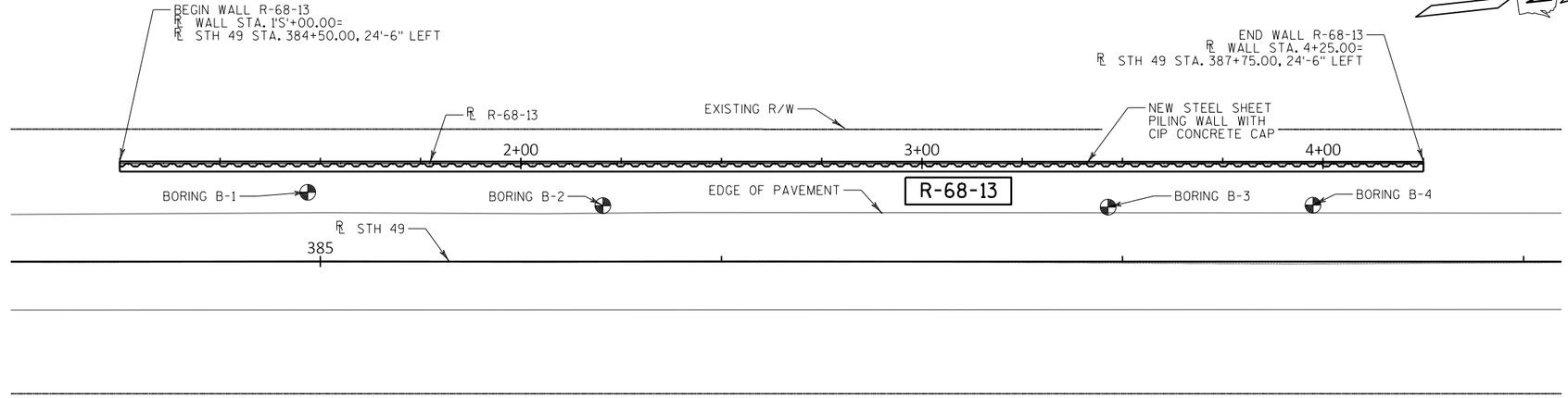
8

8

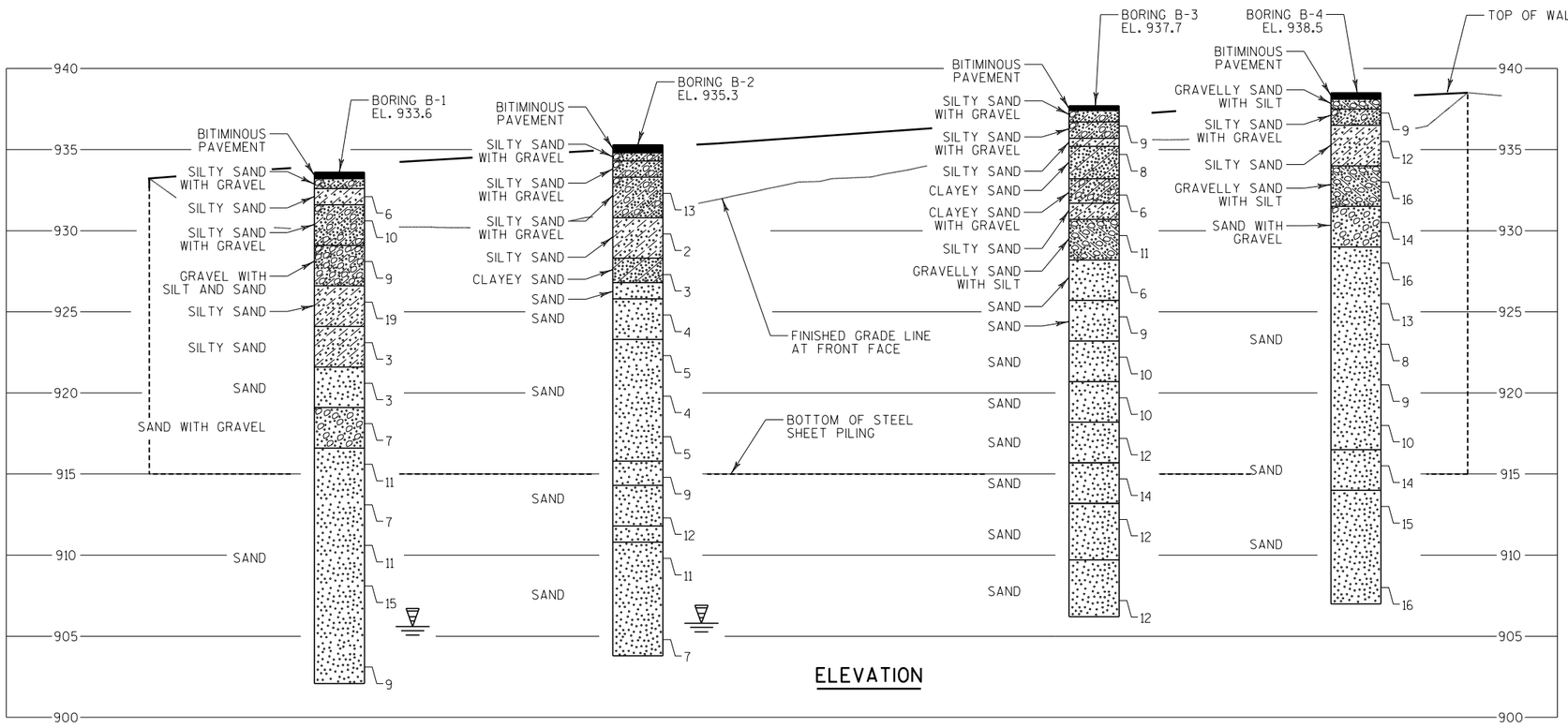
FILE NAME : N:±51xx±5194.DP.19.STH49.WAU±09 STRUCTURES±R-68-13±Plan±080102_typSxn.dgn

PLOT DATE : 5/4/2023

PLOT BY : jrm



PLAN



ELEVATION

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	03/18/2021	373893.53	521687.56
B-2	03/18/2021	373966.36	521698.51
B-3	03/18/2021	374091.59	521711.95
B-4	03/12/2021	374142.45	521716.78
BORINGS AND REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
4203 SCHOFIELD AVE, SCHOFIELD, WI 54476			
ALL COORDINATES REFERENCED TO WCCS - WAUPACA NAD83 (2011) USF			

STATE PROJECT NUMBER

6420-00-72

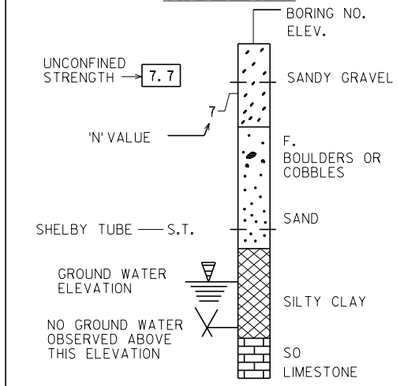
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

BITIMINOUS PAVEMENT; SILTY SAND; GRAVEL WITH SAND AND SILT; SAND; SILTY SAND WITH GRAVEL; GRAVELLY SAND WITH SILT; SAND WITH GRAVEL; CLAYEY SAND; CLAYEY SAND WITH GRAVEL

LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OF HAMMER EFFICIENCY.

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

SOIL BORINGS

DENOTES SOIL BORING LOCATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-68-13

DRAWN BY JRM | PLANS CK'D. AJC

SUBSURFACE EXPLORATION

SHEET 3 OF 3

266

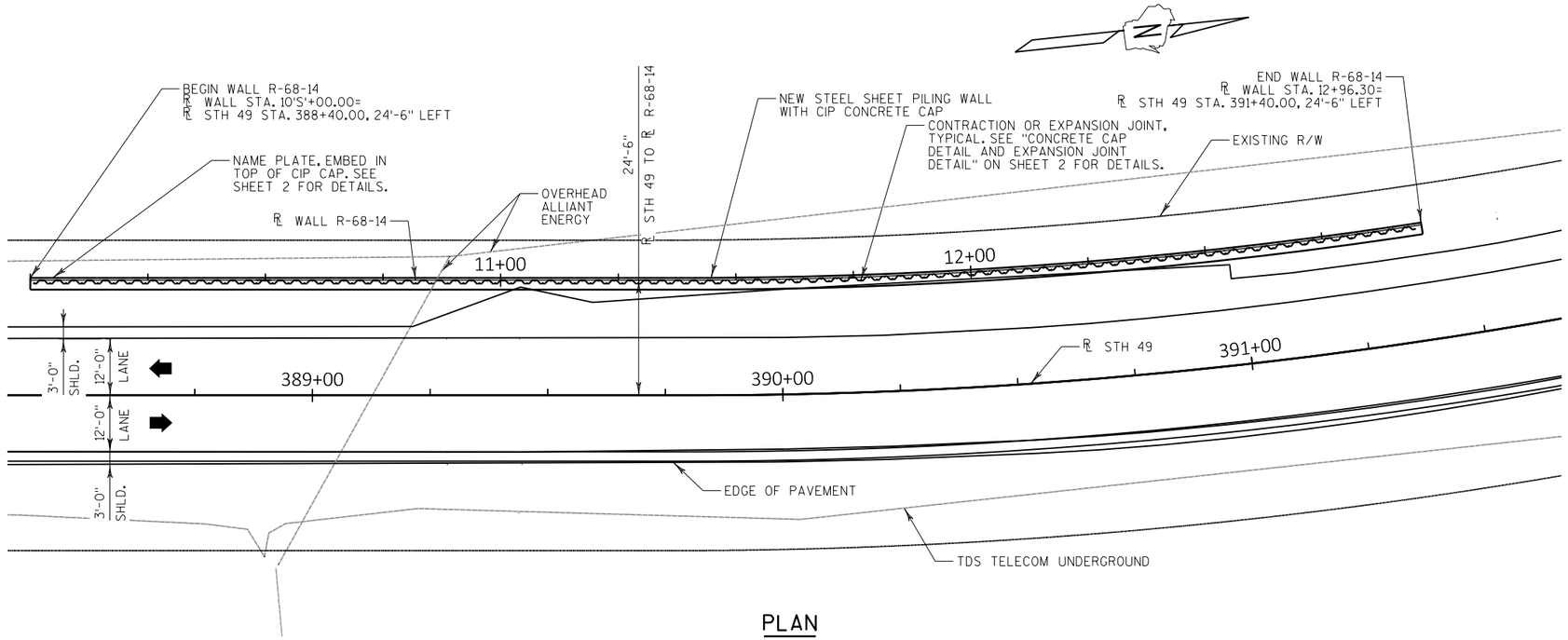
8

8

FILE NAME : N:±51xx±5194.DP.19.STH49.WAU±09 STRUCTURES±R-68-13±Plan±080103_SubEx.dgn PLOT DATE : 5/4/2023 PLOT BY : jrm

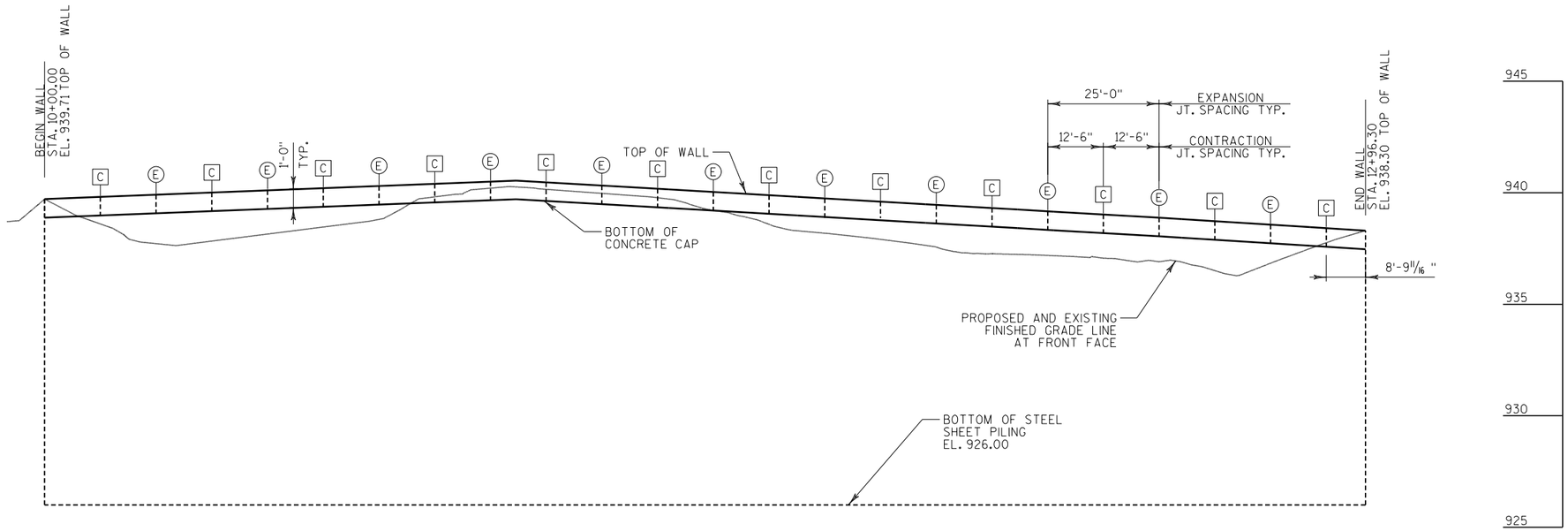
STATE PROJECT NUMBER

6420-00-72



PLAN

SHEET PILE RETAINING WALL



ELEVATION

BENCH MARK

NO.	NORTHING	EASTING	DESCRIPTION	ELEV.
511	377741.337	521287.77	CP FENO SET	923.591
513	371638.657	521697.364	CP FENO SET	923.911

LEGEND

(E) EXPANSION JOINT

[C] CONTRACTION JOINT

DESIGN DATA

LIVE LOAD:
STRUCTURE IS DESIGNED FOR A LIVE LOAD SURCHARGE 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALLS ..... f'c = 3.5 ksi

BAR STEEL REINFORCEMENT, HIGH STRENGTH, GRADE 60 .... fy = 60 ksi
STEEL SHEET PILING (ASTM A328) ..... fy= 39 ksi
WELDED WIRE FABRIC (ASTM A497) ..... fy= 70 ksi

SOIL DATA:
γ = 125 PCF
φ = 31°
C = 0 PSF

TRAFFIC DATA:
STH 49:
ADT = 3148 (2022)
ADT = 3478 (2042)
RDS = 50 MPH

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS SECTION AND QUANTITIES
3. SUBSURFACE EXPLORATION

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE: AARON BONK (608) 261-0261
CONSULTANT: TONY CASTLE (414) 347-1607

WISCONSIN PROFESSIONAL ENGINEER
JOSHUA R. MITCHELL
E-46242-6
MILWAUKEE, WI
5/4/2023

NO.	DATE	REVISION	BY

emcs inc
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/09/23
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-68-14

STH 49 RETAINING WALL

COUNTY	TOWN
WAUPACA	SCANDINAVIA

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JRM	AJC	JRM	AJC

GENERAL PLAN & ELEVATION

SHEET 1 OF 3
267

8

8

FILE NAME : N:±51xx±5194.DP.19.STH49.WAU±09 STRUCTURES±R-68-14±Plan±080201_GPE.dgn PLOT DATE : 5/4/2023 PLOT BY : jrm

STATE PROJECT NUMBER

6420-00-72

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NAVD 88 DATUM (2012 ADJUSTMENT).

ALL STATIONS AND OFFSETS GIVEN ARE FROM THE FRONT FACE OF THE WALL UNLESS SHOWN OTHERWISE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ANY EXCAVATION REQUIRED TO PLACE CONCRETE CAP WORK TO BE PAID FOR UNDER BID ITEM "CONCRETE MASONRY RETAINING WALLS".

DO NOT RUN REINFORCEMENT THRU CONTRACTION JOINTS. LOCATE CONTRACTION JOINTS AT INTERLOCK OF SHEET PILE.

STEEL SHEET PILING TO BE PAINTED PER STANDARD SPECIFICATION 512. PAINT FRONT FACE OF WALL. COLOR TO BE FEDERAL STANDARD # 20059, BROWN. PAINTING INCLUDED IN BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED".

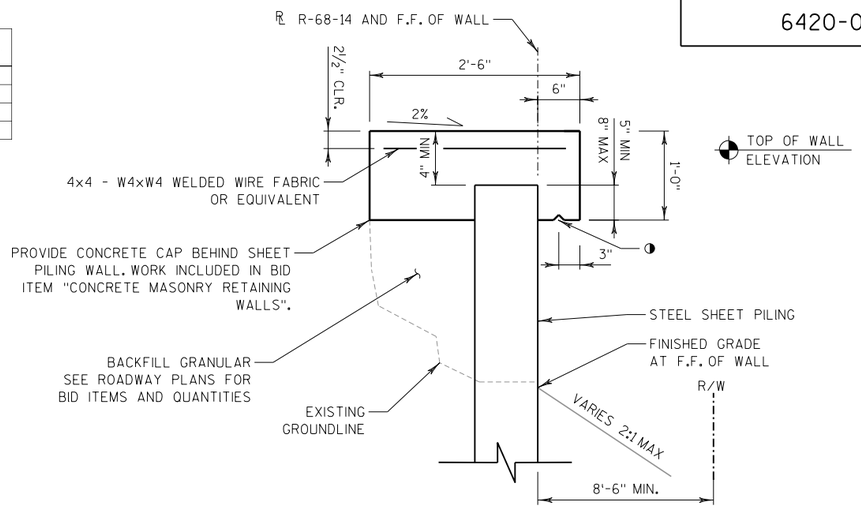
STEEL SHEET PILING SHALL BE THE PZ22 OR EQUIVALENT WITH A MINIMUM SECTION MODULUS OF 18.1 in^3.

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	TOTAL
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	28
506.3005	WELDED STUD SHEAR CONNECTORS 7/8X4-INCH	EACH	160
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	4060
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	4060

LOCATION	WALL STATION	STH 49 STATION	OFFSET TO F.F. OF WALL	TOP OF WALL EL.	FINISHED GRADE EL.	BOTTOM OF SHEET PILE EL.
BEGIN WALL	10+00.00	388+40.00	24.5	939.71	939.71	926.00
EXP. JT.	10+25.00	388+65.00	24.5	939.91	937.72	926.00
EXP. JT.	10+50.00	388+90.00	24.5	940.10	938.15	926.00
EXP. JT.	10+75.00	389+15.00	24.5	940.30	938.80	926.00
EXP. JT.	11+00.00	389+40.00	24.5	940.50	940.20	926.00
EXP. JT.	11+25.00	389+65.00	24.5	940.32	939.97	926.00
EXP. JT.	11+50.00	389+90.00	24.5	940.03	939.20	926.00
EXP. JT.	11+75.00	390+15.00	24.5	939.74	938.18	926.00
EXP. JT.	12+00.00	390+40.00	24.5	939.45	937.56	926.00
EXP. JT.	12+25.00	390+65.00	24.5	939.17	937.19	926.00
EXP. JT.	12+50.00	390+90.00	24.5	938.88	936.91	926.00
EXP. JT.	12+75.00	391+15.00	24.5	938.57	936.84	926.00
END WALL	12+96.30	391+40.00	24.5	938.30	938.30	926.00

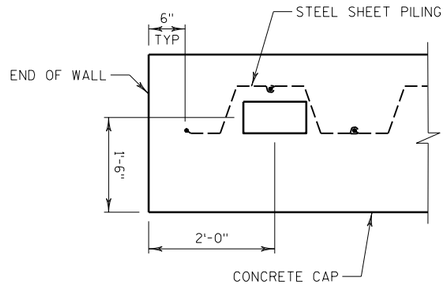


TYPICAL WALL SECTION

(LOOKING SOUTH)

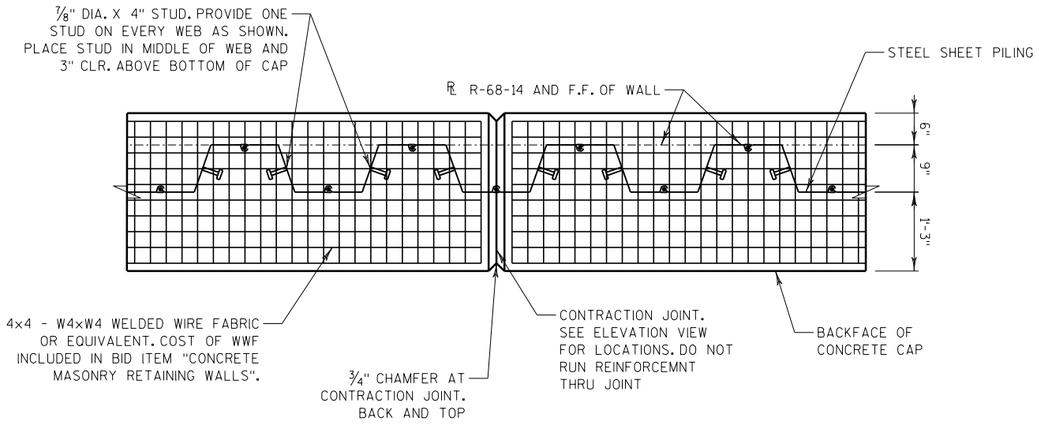
LEGEND

◑ ¾" V-GROOVE REQUIRED AT EDGE OF CONCRETE CAP



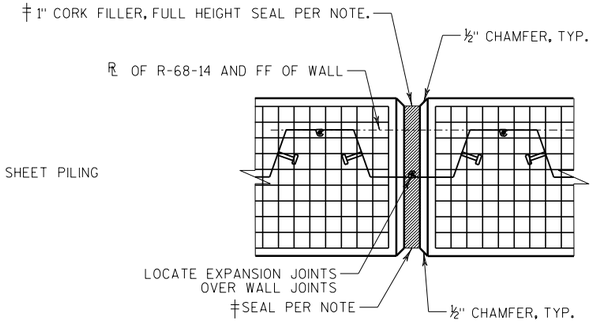
NAME PLATE DETAIL

(PLAN VIEW OF CAP)



CONCRETE CAP DETAIL

(PLAN VIEW OF CAP)



EXPANSION JOINT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-68-14

DRAWN BY JRM | PLANS CK'D. AJC

CROSS SECTION AND QUANTITIES

SHEET 2 OF 3

268

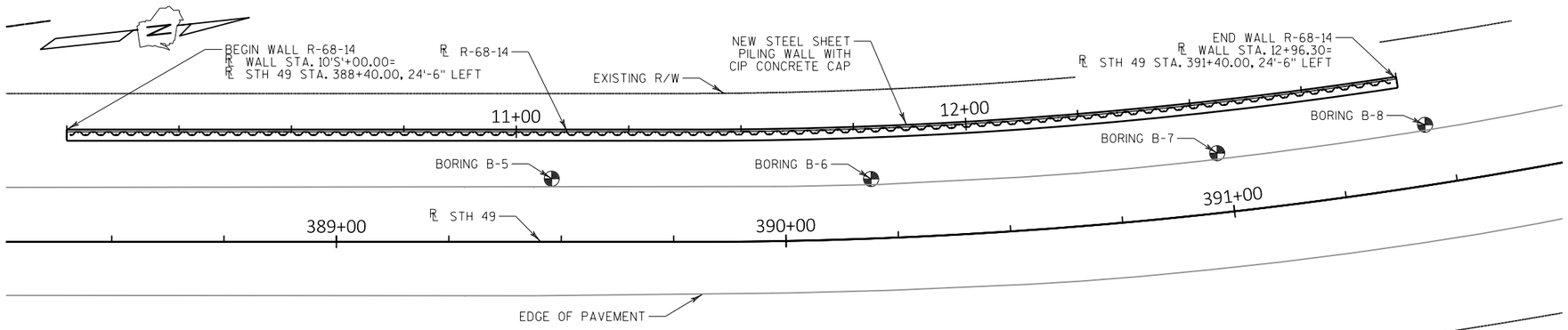
8

8

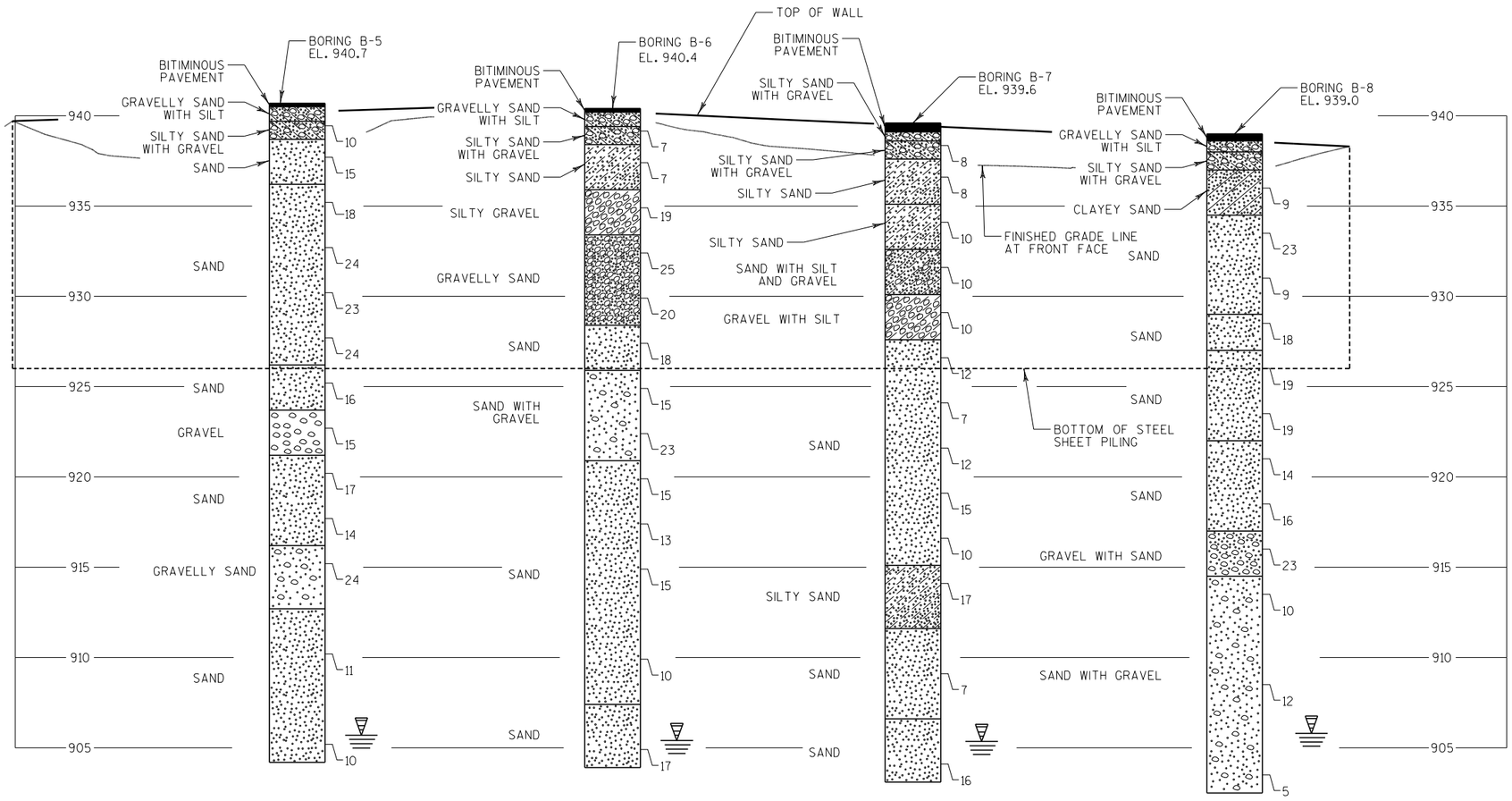
FILE NAME : N:±51xx±5194.DP.19.STH49.WAU±09 STRUCTURES±R-68-14±Plan±080202_TS.dgn

PLOT DATE : 5/4/2023

PLOT BY : jrm



PLAN



ELEVATION

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-5	03/12/2021	374341.74	521737.65
B-6	03/18/2021	374412.39	521745.08
B-7	03/12/2021	374489.55	521747.36
B-8	03/18/2021	374536.18	521745.89

BORINGS AND REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
4203 SCHOFIELD AVE, SCHOFIELD, WI 54476
ALL COORDINATES REFERENCED TO WCCS - WAUPACA NAD83 (2011) USF

STATE PROJECT NUMBER

6420-00-72

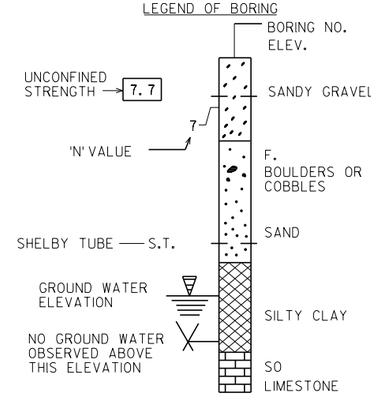
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

BITIMINOUS PAVEMENT; GRAVEL; SAND; CLAYEY SAND; GRAVELLY SAND; SILTY SAND; GRAVELLY SAND WITH SILT; GRAVEL WITH SAND; SAND WITH GRAVEL; SILTY SAND WITH GRAVEL; GRAVEL WITH SILT; SAND WITH SILT AND GRAVEL

LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OF HAMMER EFFICIENCY.

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

SOIL BORINGS

DENOTES SOIL BORING LOCATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-68-14

DRAWN BY JRM | PLANS CK'D. AJC

SUBSURFACE EXPLORATION

SHEET 3 OF 3

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8

8

FILE NAME : N:±51xx±5194.DP.19.STH49.WAU±09 STRUCTURES±R-68-14±Plan±080203_SubEx.dgn

PLOT DATE : 5/4/2023

PLOT BY : jrm

DIVISION 1 - STH 49 CURB AND GUTTER REPLACEMENT - STA 11+84 TO STA 13+10 - LEFT								
		AREA (SF)		INCREMENTAL VOLUME (CY) (UNADJUSTED)		CUMULATIVE VOLUME (CY)		
STATION	DISTANCE	CUT NOTE 1	FILL NOTE 2	CUT NOTE 1	FILL NOTE 2	CUT NOTE 1 1.00	EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
11+84	0	6	0	0	0	0	0	0
11+93	10	6	1	2	0	2	0	2
12+00	7	6	1	2	0	4	0	4
12+50	50	5	2	10	3	14	4	10
13+00	50	6	1	10	3	24	8	17
13+10	10	5	2	2	1	26	9	17
			TOTALS	26	7			

DIVISION 2 - STH 49 GUARDRAIL (B-68-433) - STA 27+12 TO STA 29+98 - LEFT								
		AREA (SF)		INCREMENTAL VOLUME (CY) (UNADJUSTED)		CUMULATIVE VOLUME (CY)		
STATION	DISTANCE	CUT NOTE 1	FILL NOTE 2	CUT NOTE 1	FILL NOTE 2	CUT NOTE 1 1.00	EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
27+12	0	8	0	0	0	0	0	0
27+50	38	8	3	11	2	11	3	9
28+00	50	8	11	15	13	26	19	7
28+18	18	9	7	6	6	32	26	6
28+31	12	11	7	4	3	36	30	6
28+43	13	11	5	5	3	41	34	7
28+50	7	10	8	3	2	44	36	8
28+56	6	9	13	2	2	46	39	7
28+68	13	9	10	4	6	50	46	4
28+72	3	9	17	1	2	51	49	2
28+81	9	8	25	3	7	54	58	-4
28+84	3	8	26	1	3	55	61	-6
28+97	12	7	9	3	8	58	71	-13
29+00	3	7	10	1	1	59	73	-14
29+37	37	6	1	9	8	68	83	-15
29+50	13	6	8	3	2	71	85	-14
29+98	48	9	17	13	22	84	113	-29
			TOTALS	84	90			

DIVISION 2 - STH 49 GUARDRAIL (B-68-433) - STA 31+30 TO STA 33+91 - LEFT								
		AREA (SF)		INCREMENTAL VOLUME (CY) (UNADJUSTED)		CUMULATIVE VOLUME (CY)		
STATION	DISTANCE	CUT NOTE 1	FILL NOTE 2	CUT NOTE 1	FILL NOTE 2	CUT NOTE 1 1.00	EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
31+30	0	11	76	0	0	0	0	0
31+50	20	7	38	7	42	7	53	-46
31+82	32	8	7	9	27	16	86	-70
32+00	18	8	17	5	8	21	96	-75
32+07	7	8	14	2	4	23	101	-78
32+19	13	7	16	4	7	27	110	-83
32+22	3	7	15	1	2	28	113	-85
32+31	9	8	27	3	7	31	121	-90
32+47	16	8	38	5	19	36	145	-109
32+50	3	8	33	1	4	37	150	-113
32+56	6	13	21	2	6	39	158	-119
32+59	3	19	17	2	2	41	160	-119
32+72	13	18	10	9	7	50	169	-119
32+84	12	21	8	9	4	59	174	-115
33+00	16	25	8	14	5	73	180	-107
33+09	9	24	7	8	3	81	184	-103
33+50	41	18	6	32	10	113	196	-83
33+91	41	8	2	20	6	133	204	-71
			TOTALS	133	163			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
2 - FILL	FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT AREA/VOLUME. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
3 - EXPANDED MATERIAL	(UNEXPANDED MATERIAL)*(EXPANSION FACTOR)
4 - MASS ORDINATE	CUT - (EXPANDED FILL); POSITIVE INDICATES AN EXCESS OF MATERIAL

9

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PROJECT NO: 6420-00-72 | HWY: STH 49 | COUNTY: WAUPACA | EARTHWORK | SHEET 270 | E

DIVISION 3 - STH 49 GUARDRAIL (B-68-433) - STA 27+00 TO STA 29+98 - RIGHT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
27+00	0	9	0	0	0	0	0	0
27+12	12	9	0	4	0	4	0	4
27+50	1	10	1	0	0	4	0	4
28+00	50	11	7	19	7	23	9	14
28+18	2	11	8	1	1	24	10	14
28+31	12	13	4	5	3	29	14	15
28+43	3	12	1	1	0	30	14	16
28+50	7	11	0	3	0	33	14	19
28+56	4	10	2	2	0	35	14	21
28+68	13	9	0	5	0	40	14	26
28+72	5	9	0	2	0	42	14	28
28+81	9	8	0	3	0	45	14	31
28+84	6	8	0	2	0	47	14	33
28+97	12	8	1	4	0	51	14	37
29+00	7	8	1	2	0	53	14	39
29+37	37	7	0	10	1	63	15	48
29+50	8	7	7	2	1	65	16	49
29+98	48	9	20	14	24	79	47	32
			TOTALS	79	37			

DIVISION 3 - STH 49 GUARDRAIL (B-68-433) - STA 31+30 TO STA 34+30 - RIGHT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
31+30	0	12	33	0	0	0	0	0
31+50	20	8	10	7	16	7	20	-13
31+82	10	7	1	3	2	10	23	-13
32+00	18	7	0	5	0	15	23	-8
32+07	11	7	0	3	0	18	23	-5
32+19	12	7	0	3	0	21	23	-2
32+22	12	7	0	3	0	24	23	2
32+31	9	8	0	3	0	27	23	5
32+47	13	9	2	4	0	31	23	9
32+50	3	9	0	1	0	32	23	10
32+56	14	9	1	5	0	37	23	15
32+59	3	9	1	1	0	38	23	16
32+72	15	9	3	5	1	43	24	19
32+84	12	8	4	4	2	47	26	21
33+00	16	7	8	4	4	51	31	20
33+09	9	7	9	2	3	53	35	18
33+50	17	8	7	5	5	58	41	17
33+91	41	9	5	13	9	71	53	19
34+00	18	9	4	6	3	77	56	21
34+30	30	12	0	12	2	89	59	30
			TOTALS	89	47			

DIVISION 4 - STH 49 GUARDRAIL (B-68-091) - STA 39+08 TO STA 42+11 - LEFT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
39+08	0	6	0	0	0	0	0	0
39+50	42	6	6	9	5	9	6	3
39+62	12	6	7	3	3	12	10	2
39+87	25	6	14	6	10	18	23	-5
40+00	13	9	24	4	9	22	34	-12
40+05	5	9	24	2	4	24	39	-15
40+12	7	8	29	2	6	26	46	-20
40+15	3	8	30	1	3	27	50	-23
40+19	4	7	30	1	5	28	56	-28
40+44	25	6	12	6	19	34	80	-46
40+50	6	6	10	1	2	35	83	-48
40+69	19	6	10	4	7	39	91	-52
40+72	3	6	7	1	1	40	93	-53
41+00	28	7	0	7	4	47	98	-51
41+50	50	5	0	11	0	58	98	-40
41+67	17	5	0	3	0	61	98	-37
42+00	33	6	0	7	0	68	98	-30
42+11	11	4	14	2	3	70	102	-32
			TOTALS	70	81			

DIVISION 4 - STH 49 GUARDRAIL (B-68-091) - STA 44+48 TO STA 50+83 - LEFT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
44+48	0	3	13	0	0	0	0	0
44+50	2	3	8	0	1	0	1	-1
44+68	18	3	3	2	4	2	6	-4
45+00	32	7	0	6	2	8	9	-1
45+50	50	7	1	13	1	21	10	11
46+00	50	7	4	13	5	34	16	18
46+50	50	5	2	11	6	45	24	21
47+00	50	5	0	9	2	54	26	28
47+50	50	5	0	9	0	63	26	37
48+00	50	5	22	9	20	72	51	21
48+50	50	4	19	8	38	80	99	-19
49+00	50	3	6	6	23	86	128	-42
49+25	25	4	4	3	5	89	134	-45
49+28	3	4	4	0	0	89	134	-45
49+50	22	7	39	4	17	93	155	-62
49+53	3	7	49	1	5	94	161	-67
49+78	25	7	68	6	54	100	229	-129
50+00	22	6	57	5	50	105	291	-186
50+18	18	5	39	4	31	109	330	-221
50+30	13	5	28	2	16	111	350	-239
50+33	3	5	25	1	3	112	354	-242
50+50	17	5	13	3	12	115	369	-254
50+58	8	5	9	2	3	117	373	-256
50+83	25	6	0	5	4	122	378	-256
			TOTALS	122	302			

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
2 - FILL	FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT AREA/VOLUME. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
3 - EXPANDED MATERIAL	(UNEXPANDED MATERIAL)*(EXPANSION FACTOR)
4 - MASS ORDINATE	CUT - (EXPANDED FILL); POSITIVE INDICATES AN EXCESS OF MATERIAL

DIVISION 5 - STH 49 GUARDRAIL (B-68-091) - STA 38+51 TO STA 41+67- RIGHT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
38+51	0	4	2	0	0	0	0	0
39+00	49	4	22	7	22	7	28	-21
39+08	8	5	22	1	7	8	36	-28
39+50	42	7	18	9	31	17	75	-58
39+62	12	7	19	3	8	20	85	-65
39+87	25	7	10	6	13	26	101	-75
40+00	13	7	6	3	4	29	106	-77
40+05	5	7	5	1	1	30	108	-78
40+12	7	6	4	2	1	32	109	-77
40+15	3	6	4	1	0	33	109	-76
40+19	4	5	4	1	1	34	110	-76
40+44	25	5	1	5	2	39	113	-74
40+50	6	5	1	1	0	40	113	-73
40+69	19	5	1	4	1	44	114	-70
40+72	3	5	1	1	0	45	114	-69
41+00	28	5	1	5	1	50	115	-65
41+50	50	2	4	6	5	56	121	-65
41+67	17	3	17	2	6	58	129	-71
			TOTALS	58	103			

DIVISION 5 - STH 49 GUARDRAIL (B-68-091) - STA 44+03 TO STA 51+36- RIGHT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
44+03	0	4	75	0	0	0	0	0
44+48	45	7	3	9	65	9	81	-72
44+50	2	6	3	0	0	9	81	-72
44+68	18	6	3	4	2	13	84	-71
45+00	32	4	0	6	2	19	86	-67
45+50	50	5	0	8	0	27	86	-59
46+00	50	6	0	10	0	37	86	-49
46+50	50	4	1	9	1	46	88	-42
47+00	50	3	1	6	2	52	90	-38
47+50	50	4	1	6	2	58	93	-35
48+00	50	4	6	7	6	65	100	-35
48+50	50	4	12	7	17	72	121	-49
49+00	50	4	18	7	28	79	156	-77
49+25	25	5	16	4	16	83	176	-93
49+28	3	5	15	1	2	84	179	-95
49+50	22	5	11	4	10	88	191	-103
49+53	3	5	11	1	1	89	193	-104
49+78	25	5	9	5	9	94	204	-110
50+00	22	6	15	4	10	98	216	-118
50+18	18	5	9	4	8	102	226	-124
50+30	13	4	16	2	6	104	234	-130
50+33	3	4	15	0	2	104	236	-132
50+50	17	4	23	2	12	106	251	-145
50+58	8	4	27	1	8	107	261	-154
50+83	25	7	20	5	22	112	289	-177
50+89	6	8	12	2	3	114	293	-179
51+00	11	6	9	3	4	117	298	-181
51+36	36	2	2	5	7	122	307	-185
			TOTALS	122	245			

DIVISION 10 - STH 49 GUARDRAIL - STA 366+53 TO STA 372+16 - LEFT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
366+53	0	3	0	0	0	0	0	0
367+00	47	9	0	10	0	10	0	10
367+16	16	7	0	5	0	15	0	15
367+41	25	10	0	8	0	23	0	23
367+66	25	10	0	9	0	32	0	32
367+69	3	10	0	1	0	33	0	33
367+81	11	10	0	4	0	37	0	37
368+00	19	13	0	8	0	45	0	45
368+19	19	6	0	7	0	52	0	52
368+39	20	4	0	4	0	56	0	56
368+50	11	3	0	1	0	57	0	57
368+78	28	4	0	4	0	61	0	61
369+00	22	6	0	4	0	65	0	65
369+50	50	2	32	7	30	72	38	35
370+00	50	2	23	4	51	76	101	-25
370+32	32	5	0	4	14	80	119	-39
370+44	12	7	0	3	0	83	119	-36
370+48	3	7	14	1	1	84	120	-36
370+50	2	7	15	1	1	85	121	-36
370+73	23	8	18	6	14	91	139	-48
370+98	25	7	3	7	10	98	151	-53
371+00	2	7	2	1	0	99	151	-52
371+50	50	22	0	27	2	126	154	-28
372+00	50	6	0	26	0	152	154	-2
372+16	16	5	0	3	0	155	154	1
			TOTALS	155	123			

DIVISION 11 - STH 49 GUARDRAIL - STA 368+39 TO STA 371+00 - RIGHT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
368+39	0	0	2	0	0	0	0	0
368+50	11	0	4	0	1	0	1	-1
368+78	28	0	10	0	7	0	10	-10
369+00	22	5	0	2	4	2	15	-13
369+50	50	0	41	5	38	7	63	-56
370+00	50	0	21	0	57	7	134	-127
370+32	32	2	3	1	14	8	151	-143
370+44	12	4	2	1	1	9	153	-144
370+48	3	3	3	0	0	9	153	-144
370+50	2	2	4	0	0	9	153	-144
370+73	23	1	0	1	2	10	155	-145
370+98	25	2	0	1	0	11	155	-144
371+00	2	2	0	0	0	11	155	-144
			TOTALS	11	124			

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
2 - FILL	FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT AREA/VOLUME. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
3 - EXPANDED MATERIAL	(UNEXPANDED MATERIAL)*(EXPANSION FACTOR)
4 - MASS ORDINATE	CUT - (EXPANDED FILL); POSITIVE INDICATES AN EXCESS OF MATERIAL

DIVISION 12 - STH 49 GUARDRAIL - STA 382+32 TO STA 394+39 - LEFT

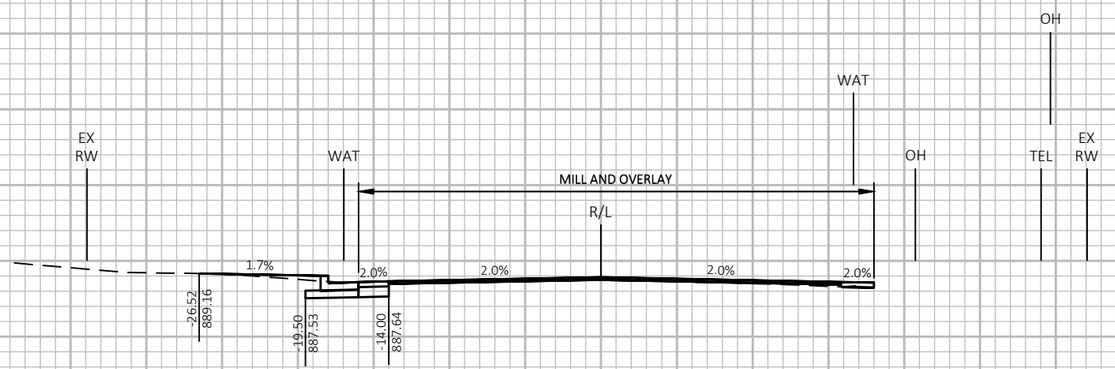
STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
382+32	0	8	0	0	0	0	0	0
382+50	18	7	0	5	0	5	0	5
383+00	50	5	9	11	8	16	10	6
383+47	47	3	20	7	25	23	41	-18
383+50	3	3	20	0	2	23	44	-21
383+72	22	4	16	3	15	26	63	-37
383+97	25	4	8	4	11	30	76	-46
384+00	3	4	7	0	1	30	78	-48
384+30	30	4	5	4	7	34	86	-52
384+50	20	5	0	3	2	37	89	-52
385+00	50	1	3	6	3	43	93	-50
385+50	50	1	4	2	6	45	100	-55
386+00	50	2	1	3	5	48	106	-58
386+50	50	4	0	6	1	54	108	-54
387+00	50	3	0	6	0	60	108	-48
387+50	50	2	1	5	1	65	109	-44
387+75	25	2	0	2	0	67	109	-42
387+95	20	3	1	2	0	69	109	-40
388+00	5	3	1	1	0	70	109	-39
388+20	20	4	1	3	1	73	110	-37
388+27	7	4	1	1	0	74	110	-36
388+40	13	3	1	2	0	76	110	-34
388+50	10	2	0	1	0	77	110	-33
389+00	50	2	0	4	0	81	110	-29
389+50	50	7	0	8	0	89	110	-21
389+80	30	7	0	8	0	97	110	-13
390+00	20	6	0	5	0	102	110	-8
390+50	50	2	1	7	1	109	111	-2
391+00	50	3	0	5	1	114	113	2
391+40	40	8	0	8	0	122	113	10
391+50	10	9	0	3	0	125	113	13
391+60	10	9	0	3	0	128	113	16
392+00	40	10	0	14	0	142	113	30
392+20	20	10	0	7	0	149	113	37
392+50	30	8	0	10	0	159	113	47
392+67	17	8	0	5	0	164	113	52
392+70	3	8	0	1	0	165	113	53
392+95	25	7	1	7	0	172	113	60
393+00	5	7	2	1	0	173	113	61
393+20	20	6	5	5	3	178	116	62
393+48	28	5	5	6	5	184	123	62
393+50	2	5	5	0	0	184	123	62
393+99	49	3	2	7	6	191	130	61
394+00	1	3	2	0	0	191	130	61
394+39	39	4	0	5	1	196	132	64
			TOTALS	196	105			

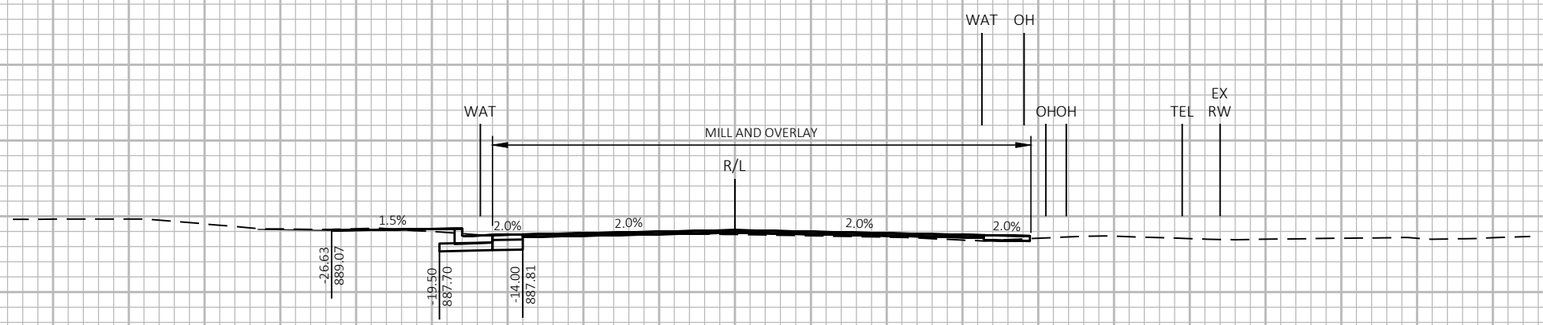
DIVISION 13 - STH 49 GUARDRAIL - STA 425+95 - STA 427+40 - LEFT & RIGHT

STATION	DISTANCE	AREA (SF) CUT NOTE 1	AREA (SF) FILL NOTE 2	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOLUME (CY) CUT NOTE 1 1.00	CUMULATIVE VOLUME (CY) EXPANDED FILL NOTE 3 1.25	MASS ORDINATE NOTE 4
425+95	0	9	0	0	0	0	0	0
426+00	5	9	0	2	0	2	0	2
426+20	20	9	0	7	0	9	0	9
426+21	1	17	0	0	0	9	0	9
426+50	29	21	0	20	0	29	0	29
426+58	8	27	0	7	0	36	0	36
426+70	13	67	0	23	0	59	0	59
426+76	6	71	0	15	0	74	0	74
426+93	17	72	0	45	0	119	0	119
427+00	7	64	0	18	0	137	0	137
427+06	6	68	0	15	0	152	0	152
427+19	12	65	0	30	0	182	0	182
427+40	21	50	0	45	0	227	0	227
			TOTALS	227	0			

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
2 - FILL	FILL DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT AREA/VOLUME. SALVAGED/UNUSABLE PAVEMENT MATERIAL IS CALCULATED ON THE SECTION 3 SUMMARY SHEET.
3 - EXPANDED MATERIAL	(UNEXPANDED MATERIAL)*(EXPANSION FACTOR)
4 - MASS ORDINATE	CUT - (EXPANDED FILL); POSITIVE INDICATES AN EXCESS OF MATERIAL





9

9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: CURB AND GUTTER EXTENSION (STA 11+84 - STA 13+10)	SHEET 274	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090200-XS_NORTH ST.DWG
LAYOUT NAME - 01

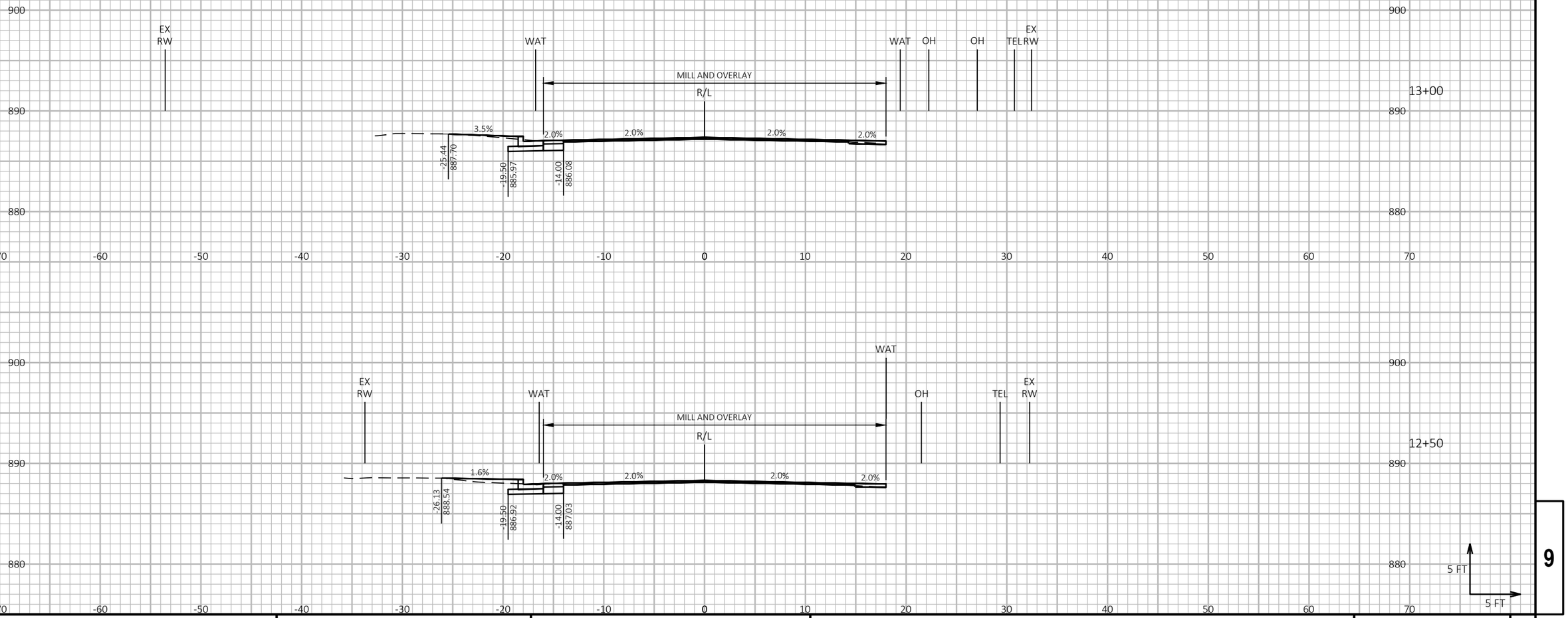
PLOT DATE : 6/29/2023 7:44 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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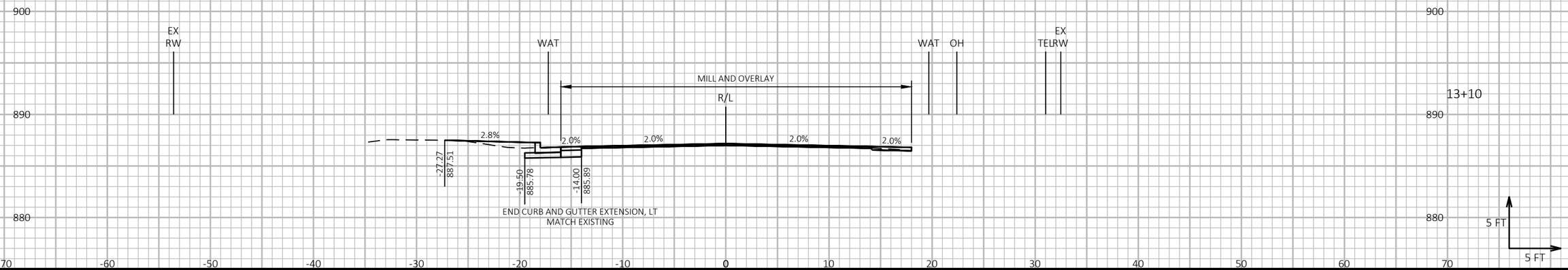
9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: CURB AND GUTTER EXTENSION (STA 11+84 - STA 13+10)	SHEET 275	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090200-XS_NORTH ST.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:44 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

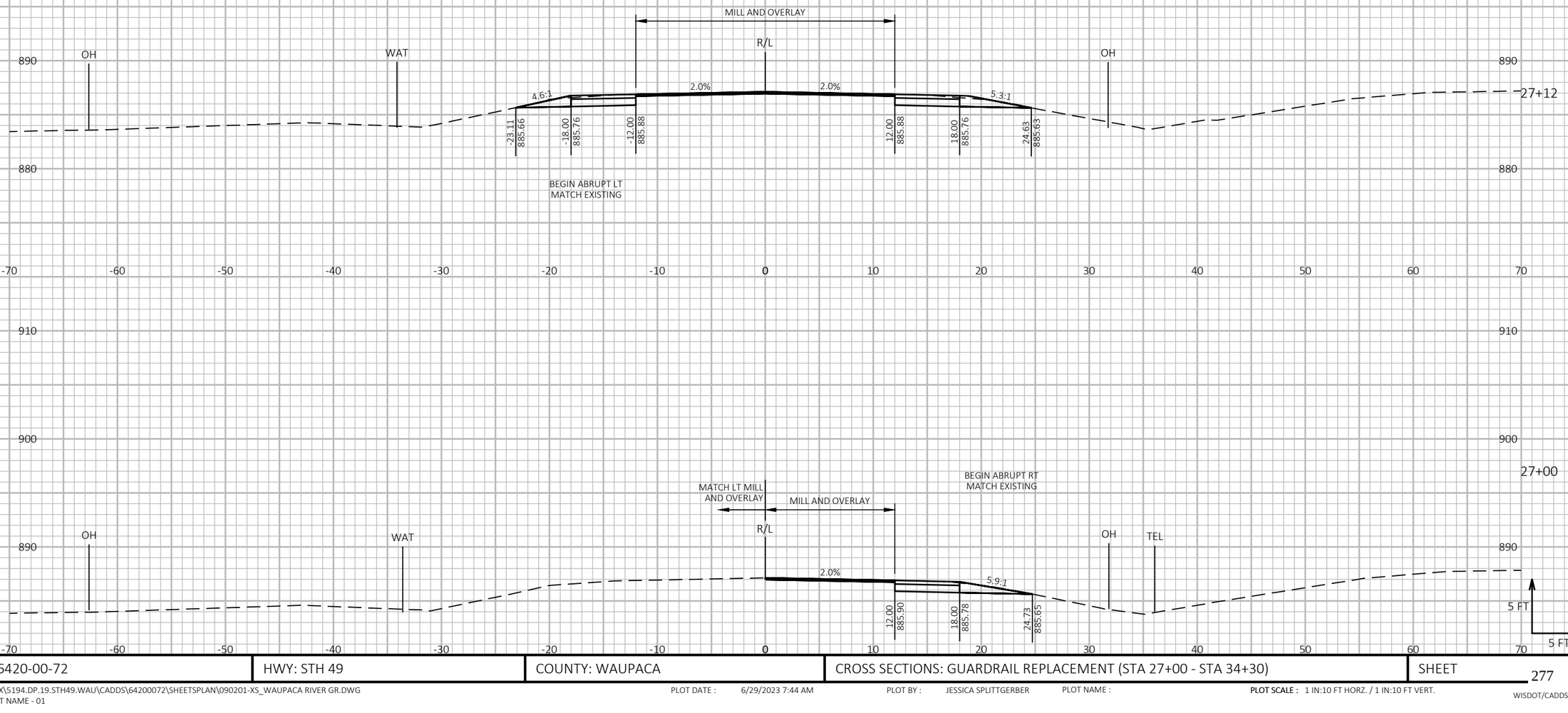
9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: CURB AND GUTTER EXTENSION (STA 11+84 - STA 13+10)	SHEET 276	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090200-XS_NORTH ST.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:44 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

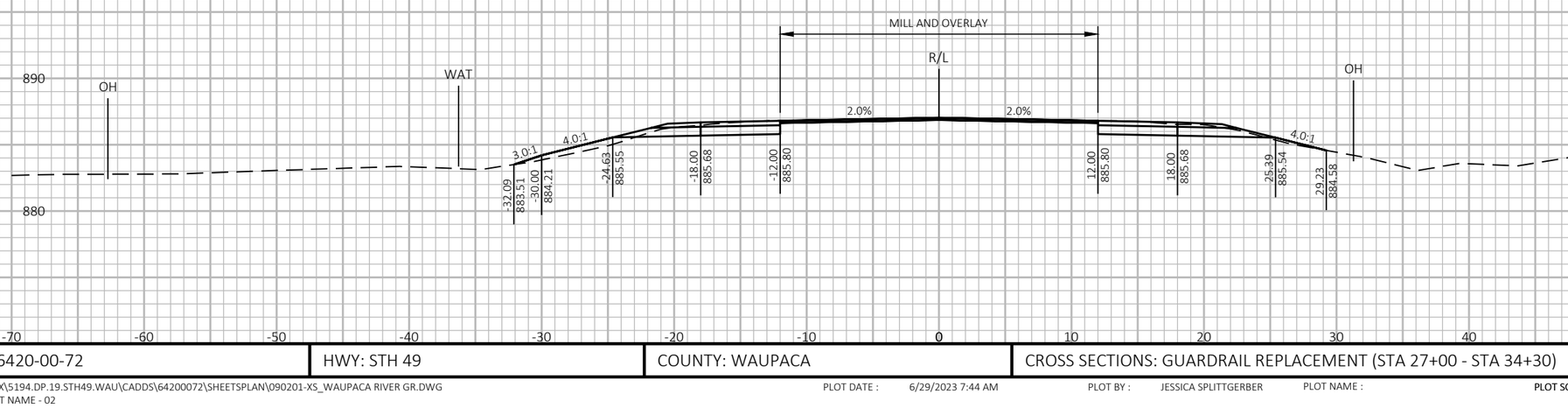
9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 277	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:44 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



900 890 880 — -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 — 28+00 — 27+50

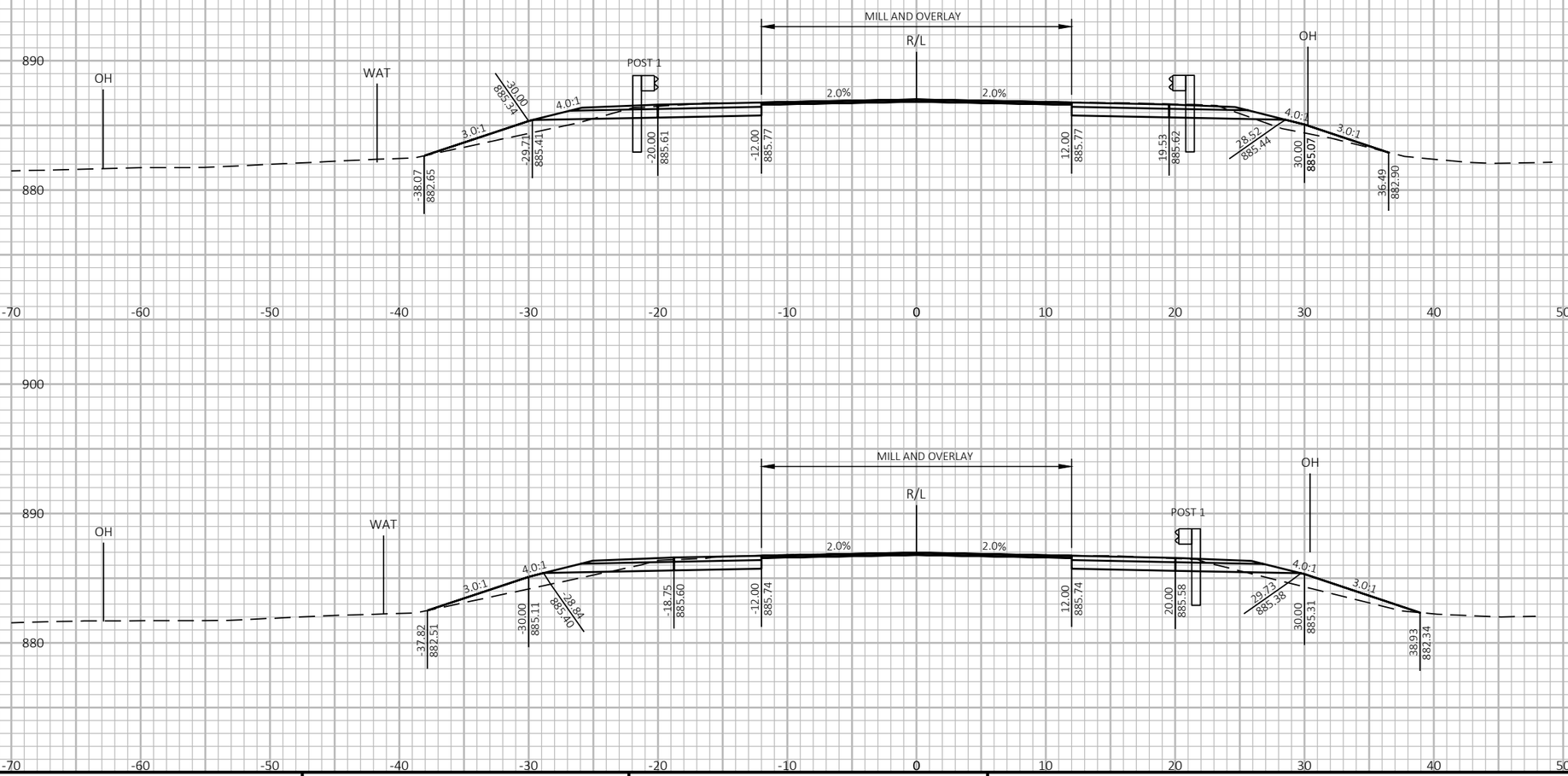
9 9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 278	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:44 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



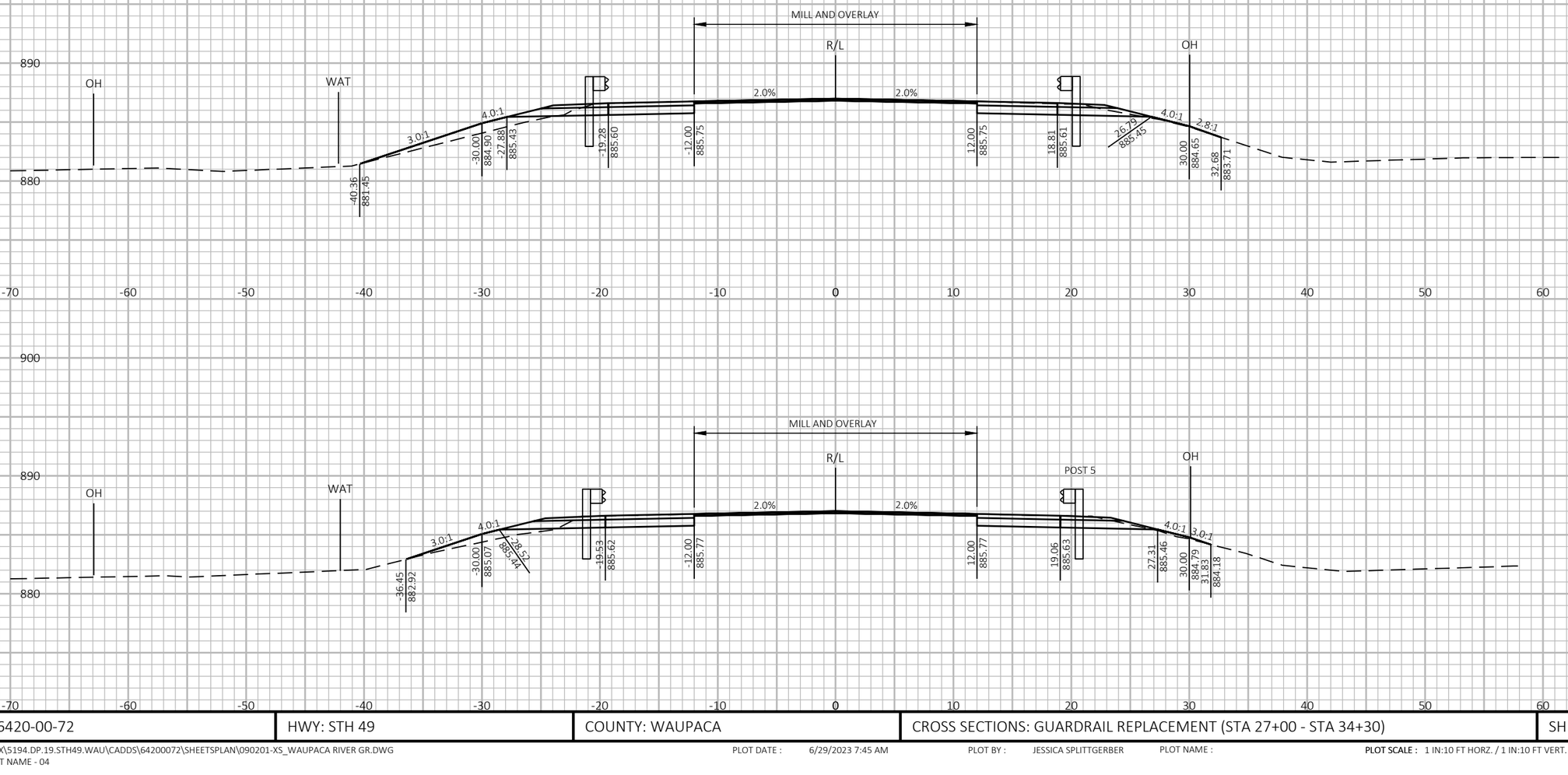
9 9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 279	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

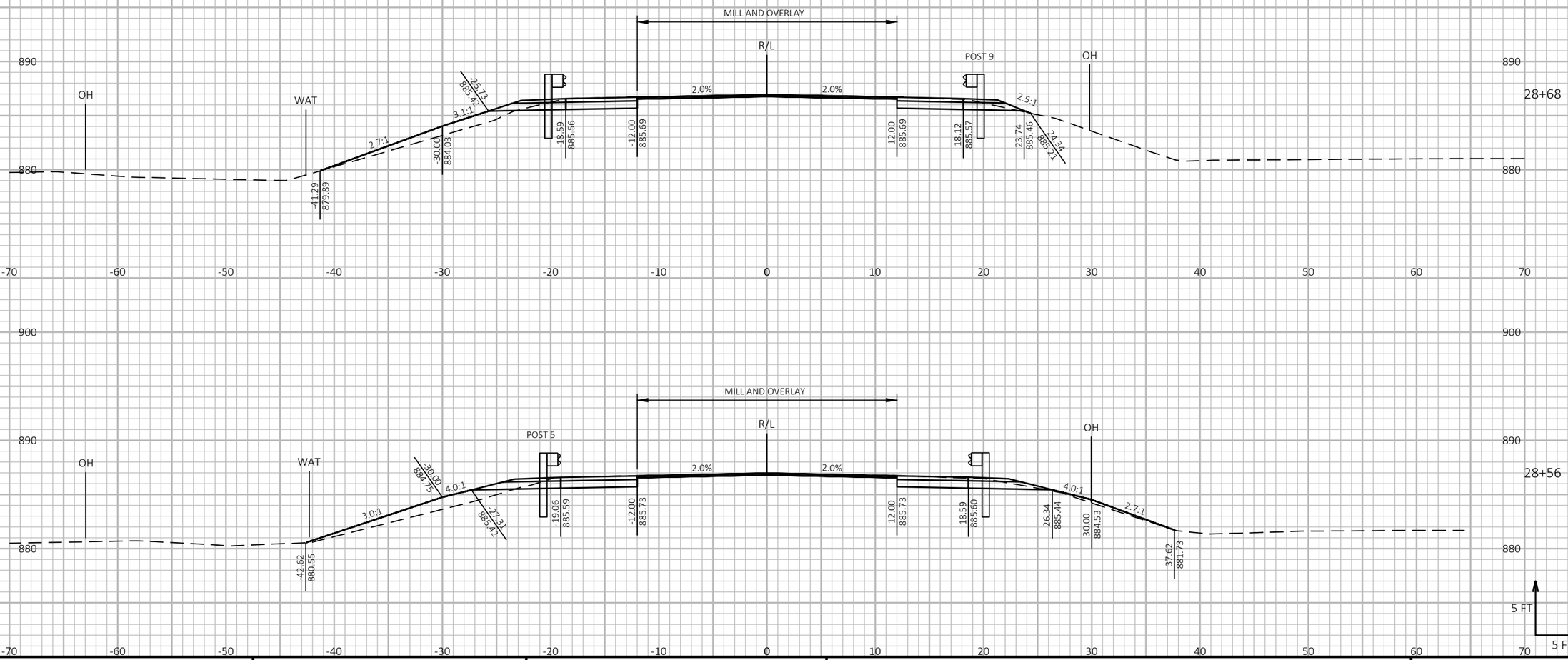


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 280	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 04

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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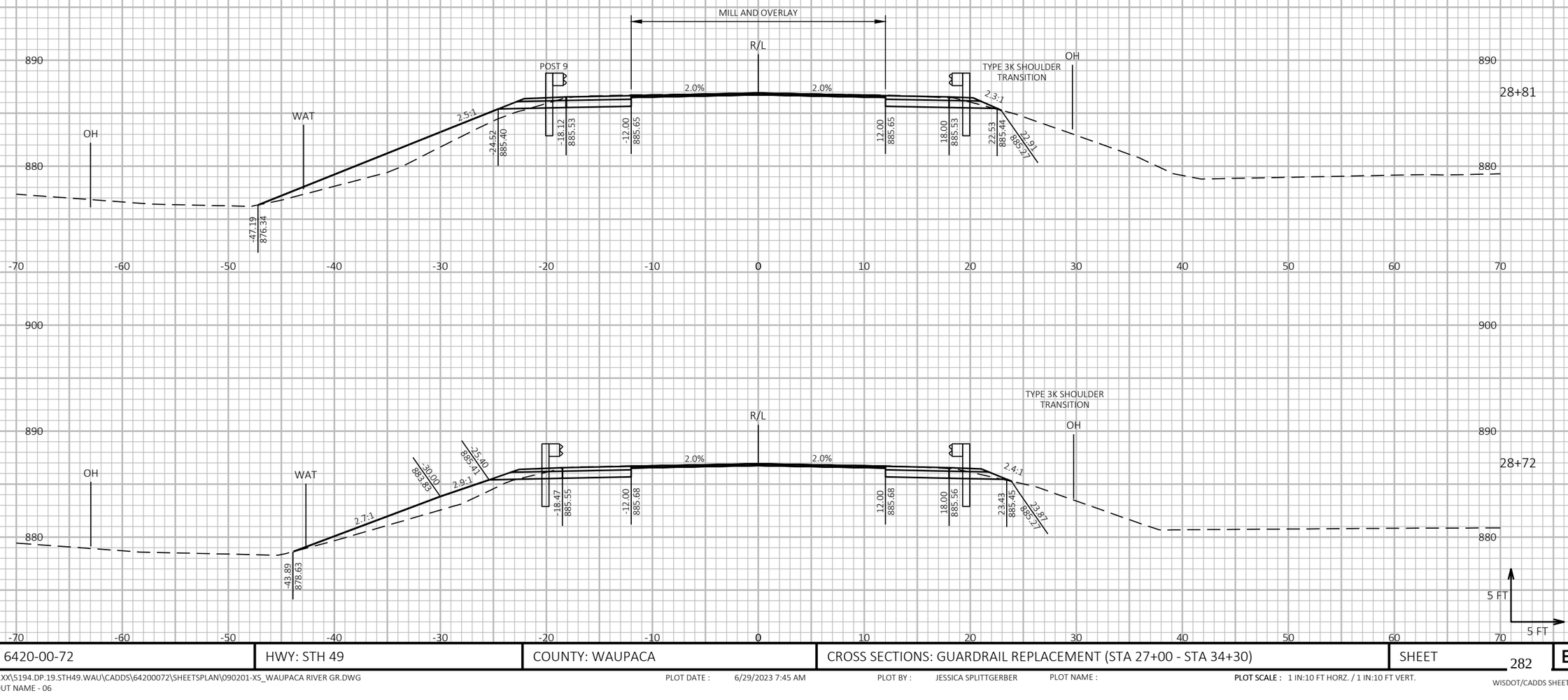
9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 281	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 05

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

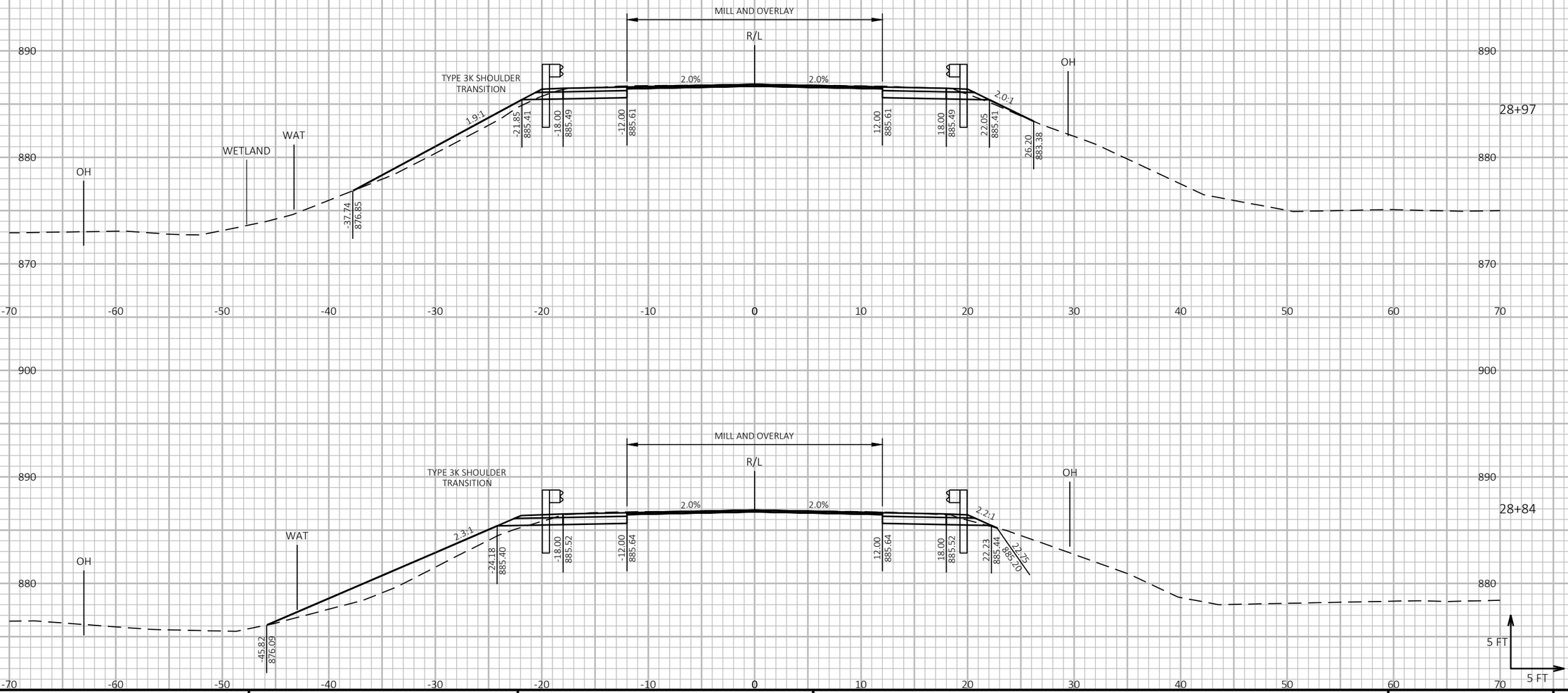


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 282	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 06

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

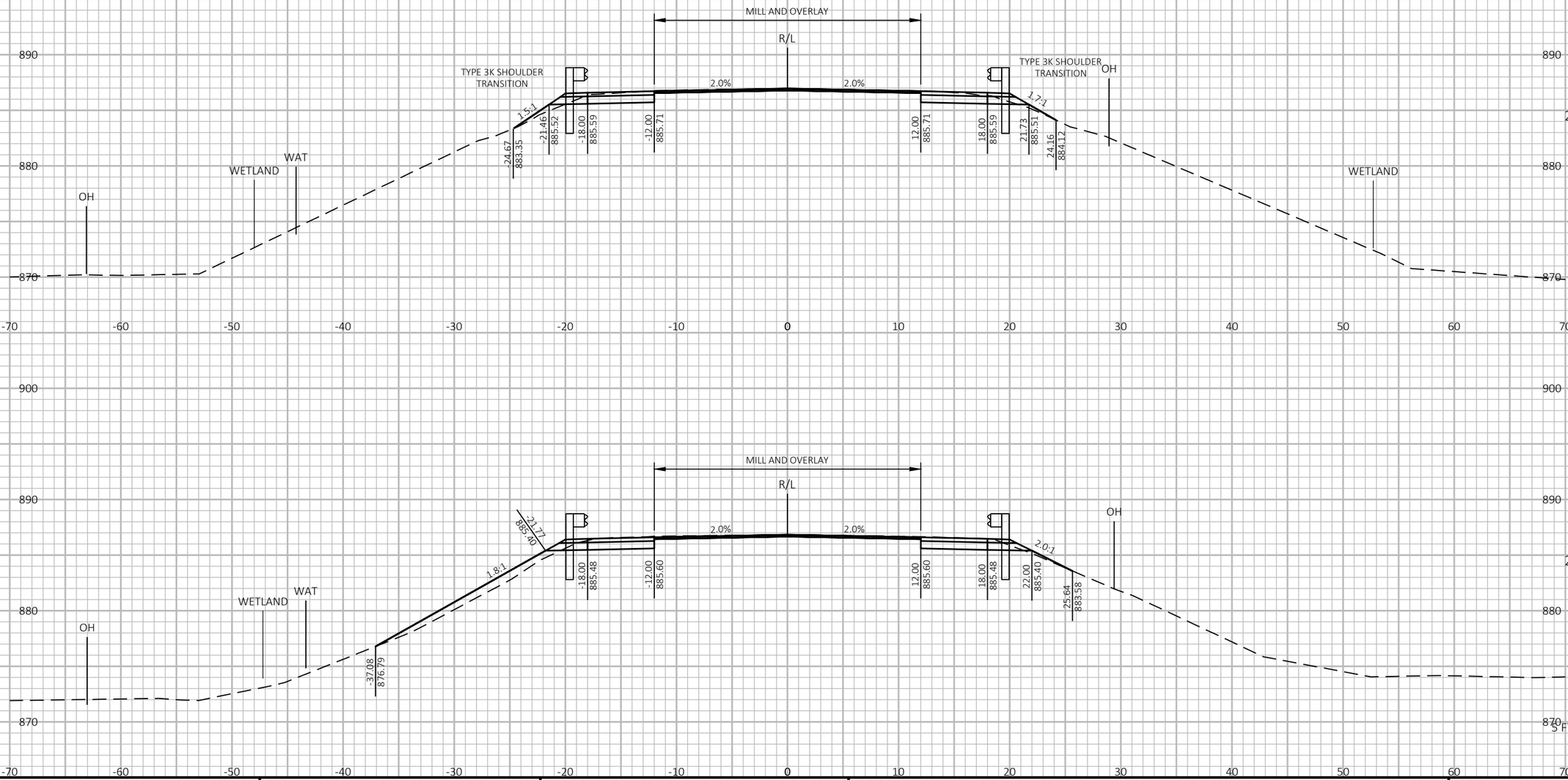


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 283	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 07

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

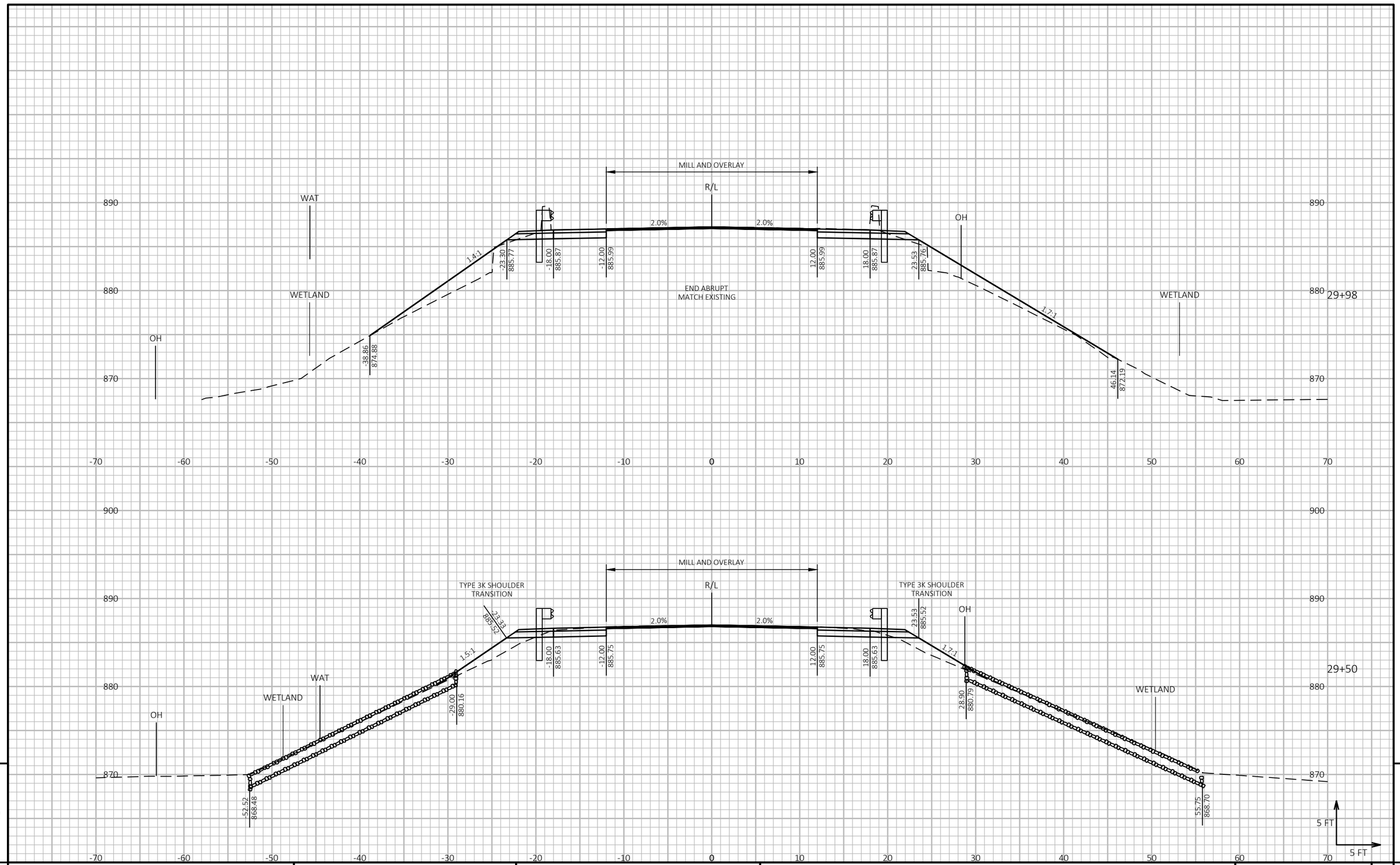


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 284	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 08

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

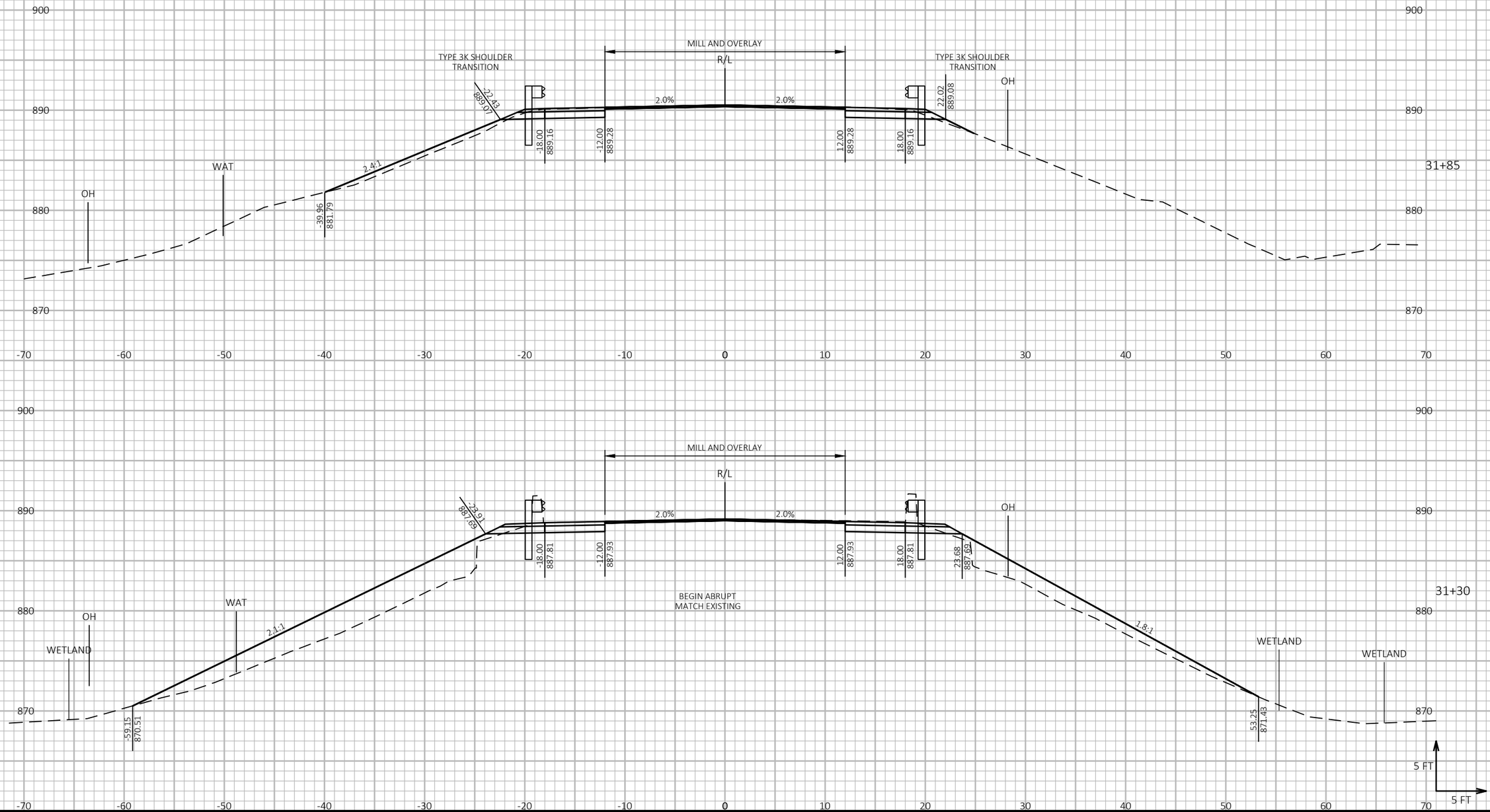


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 285	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 09

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

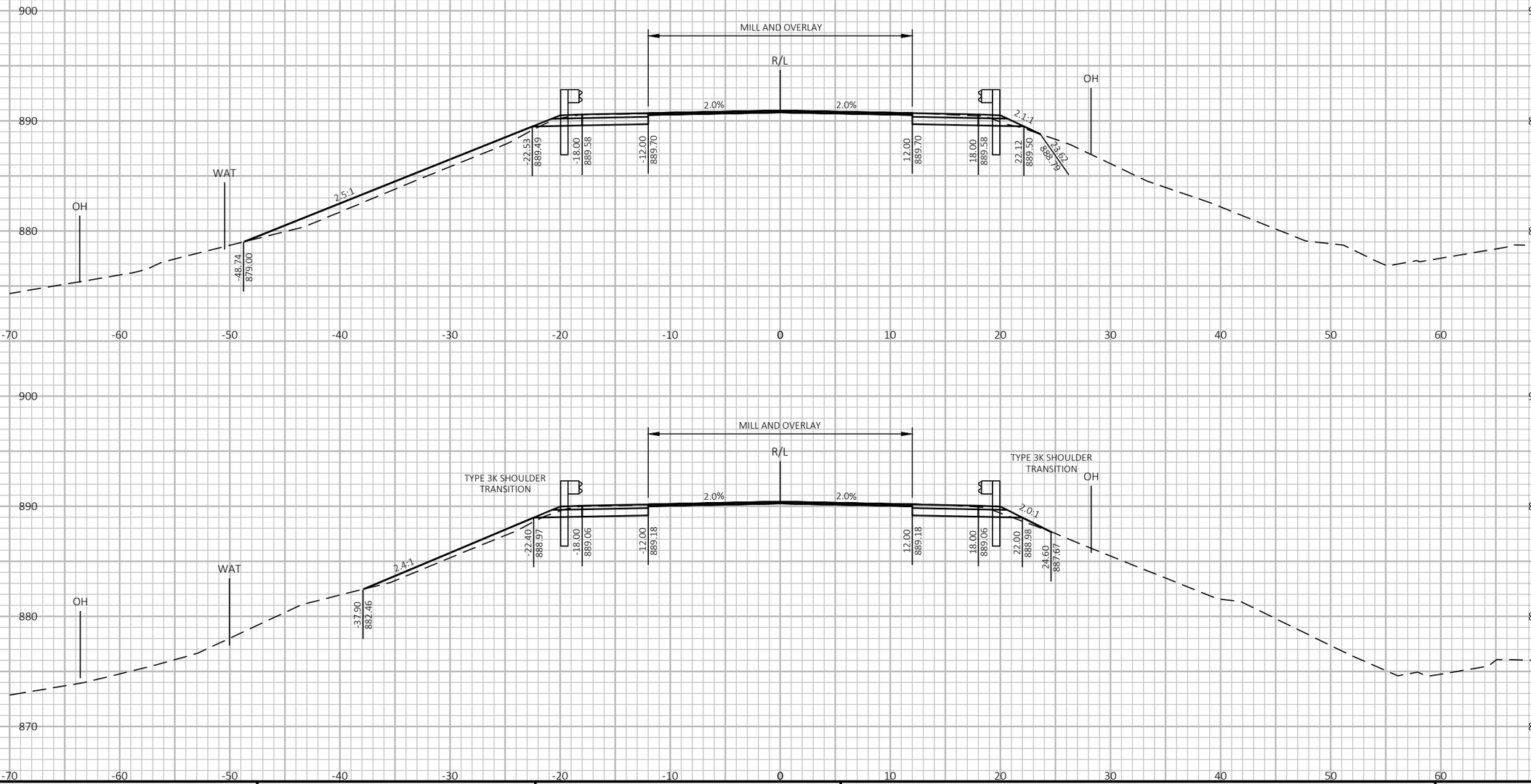


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 286 E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 10

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

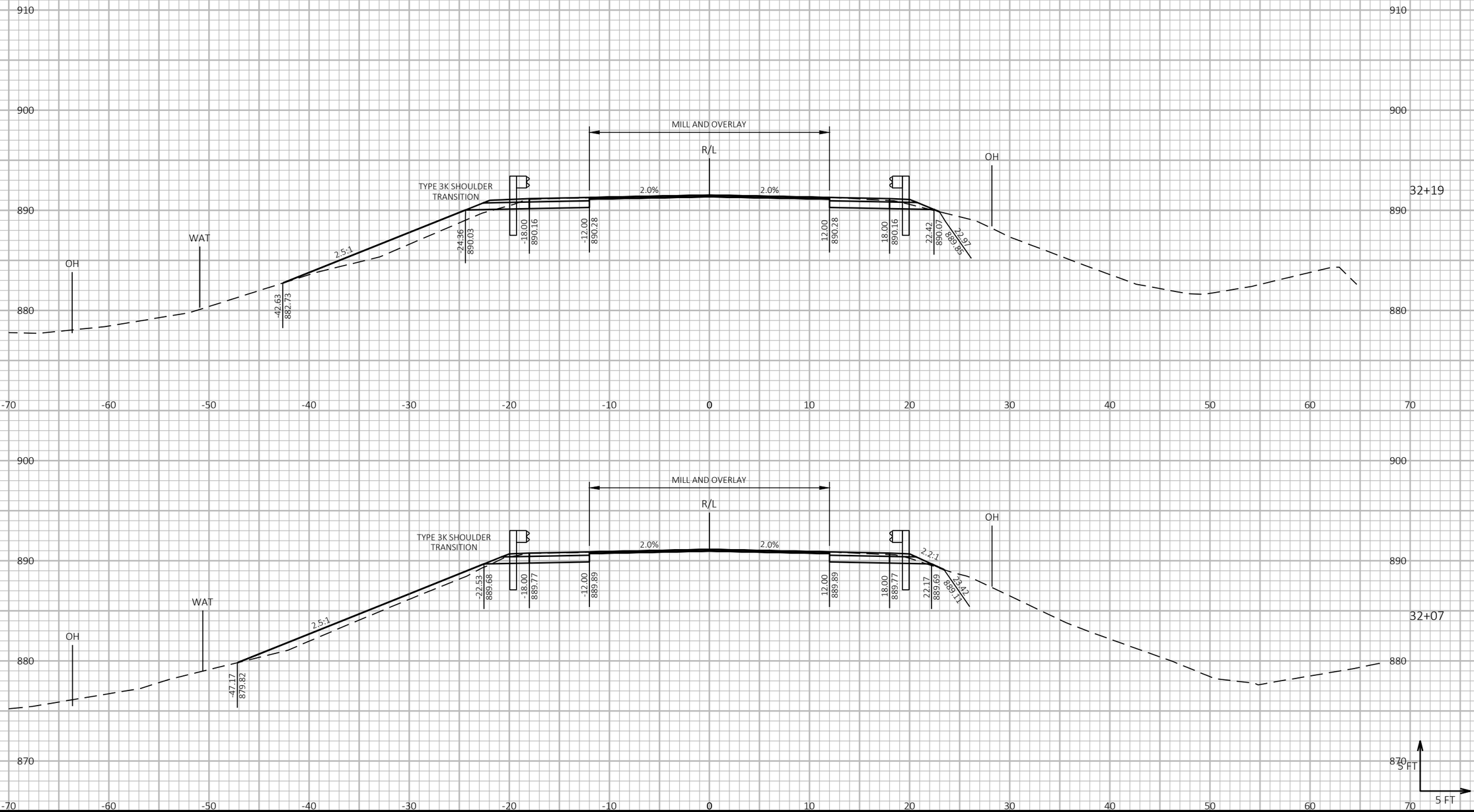


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 287	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 11

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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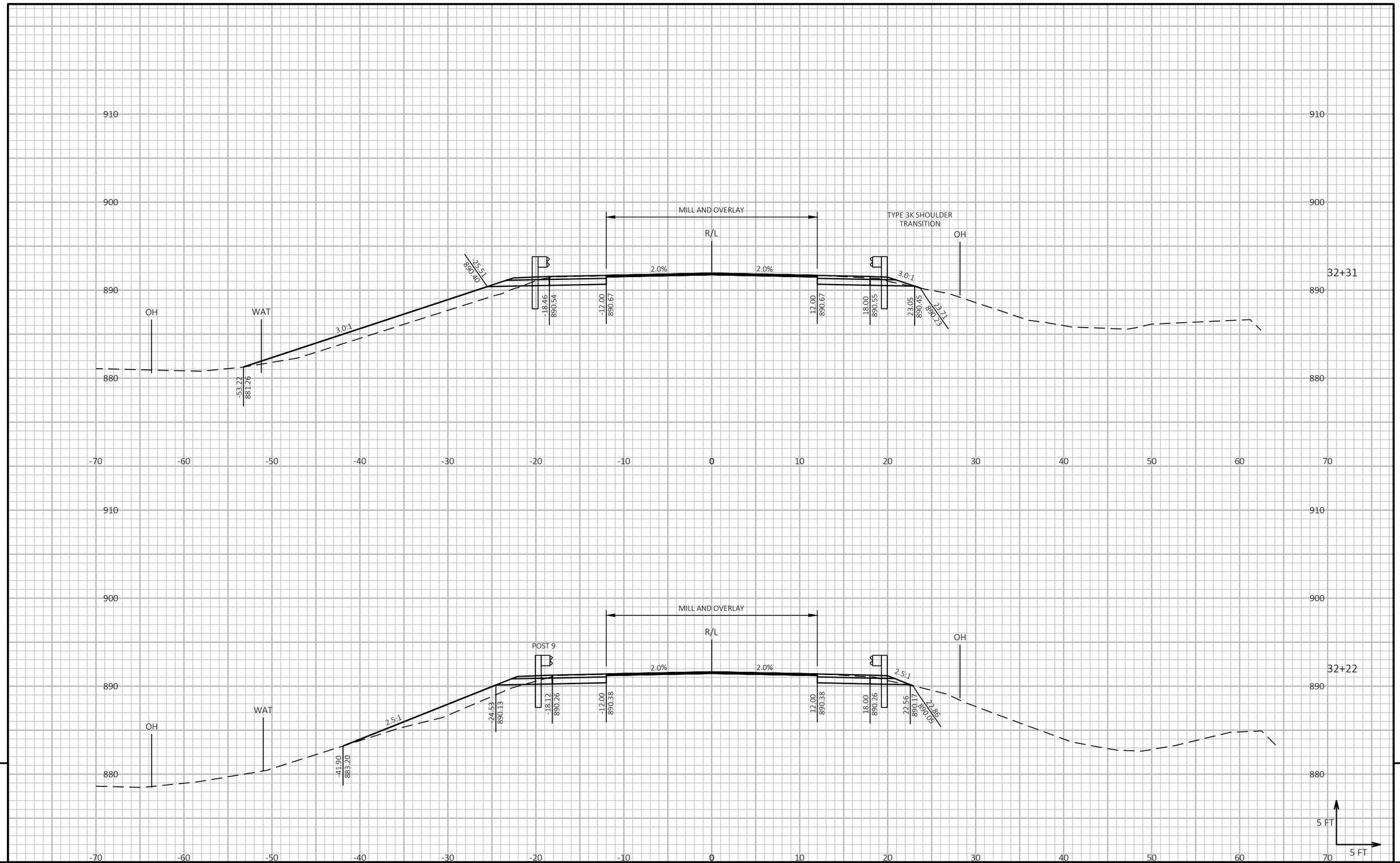
9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 288	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 12

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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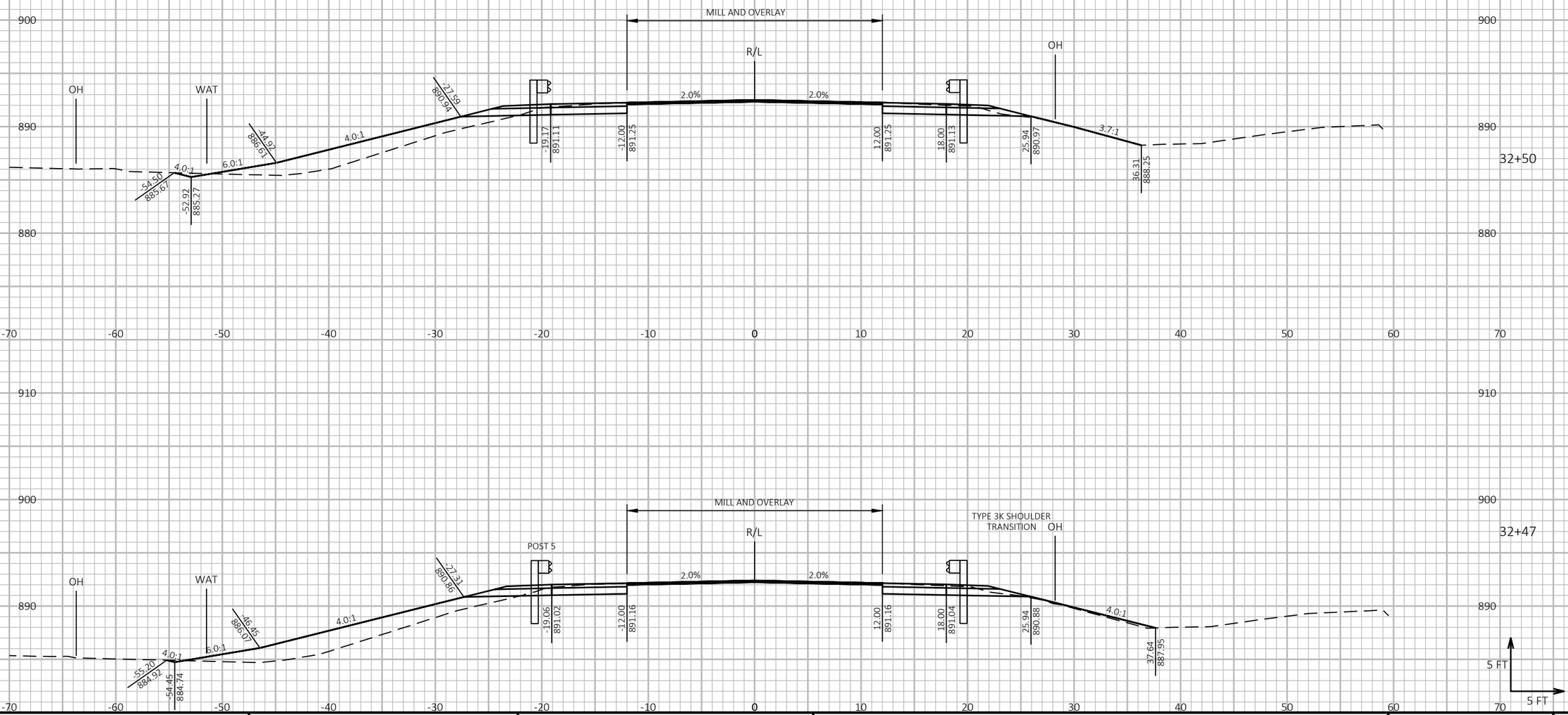
9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 289	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 13

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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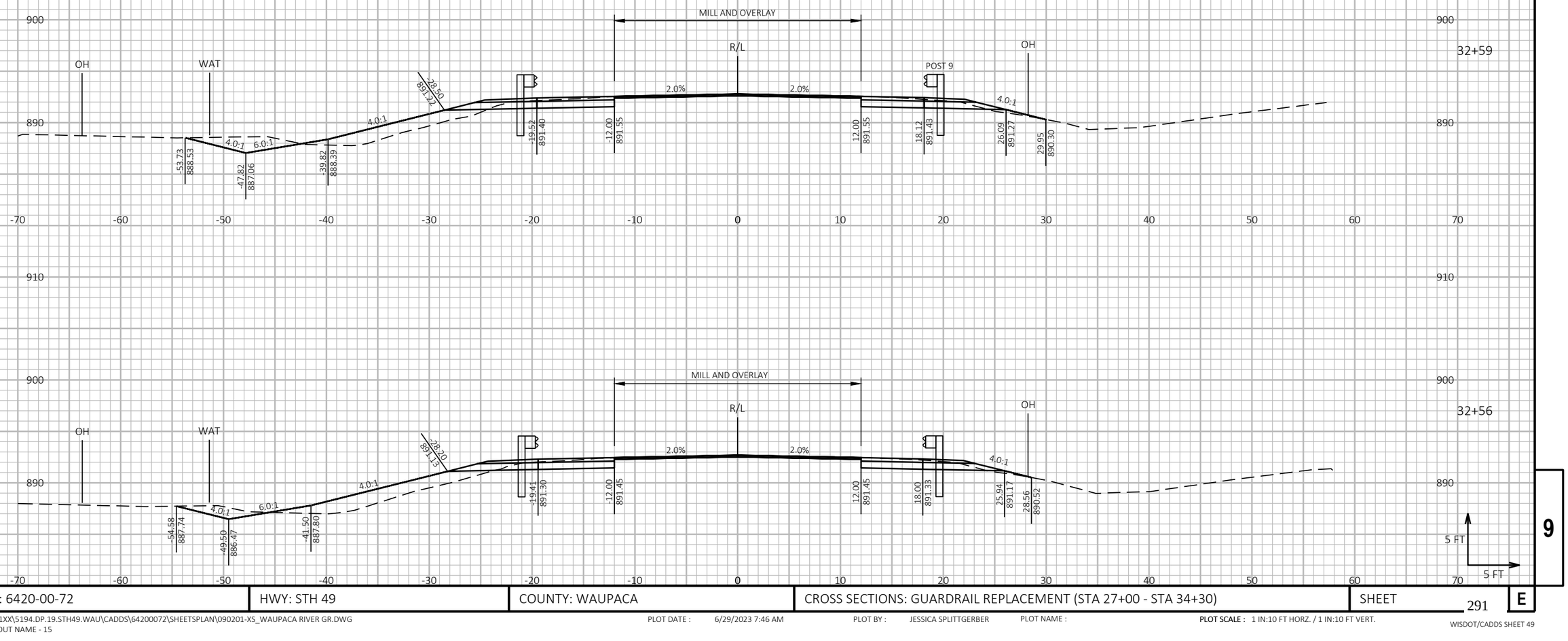
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 290	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 14

PLOT DATE : 6/29/2023 7:45 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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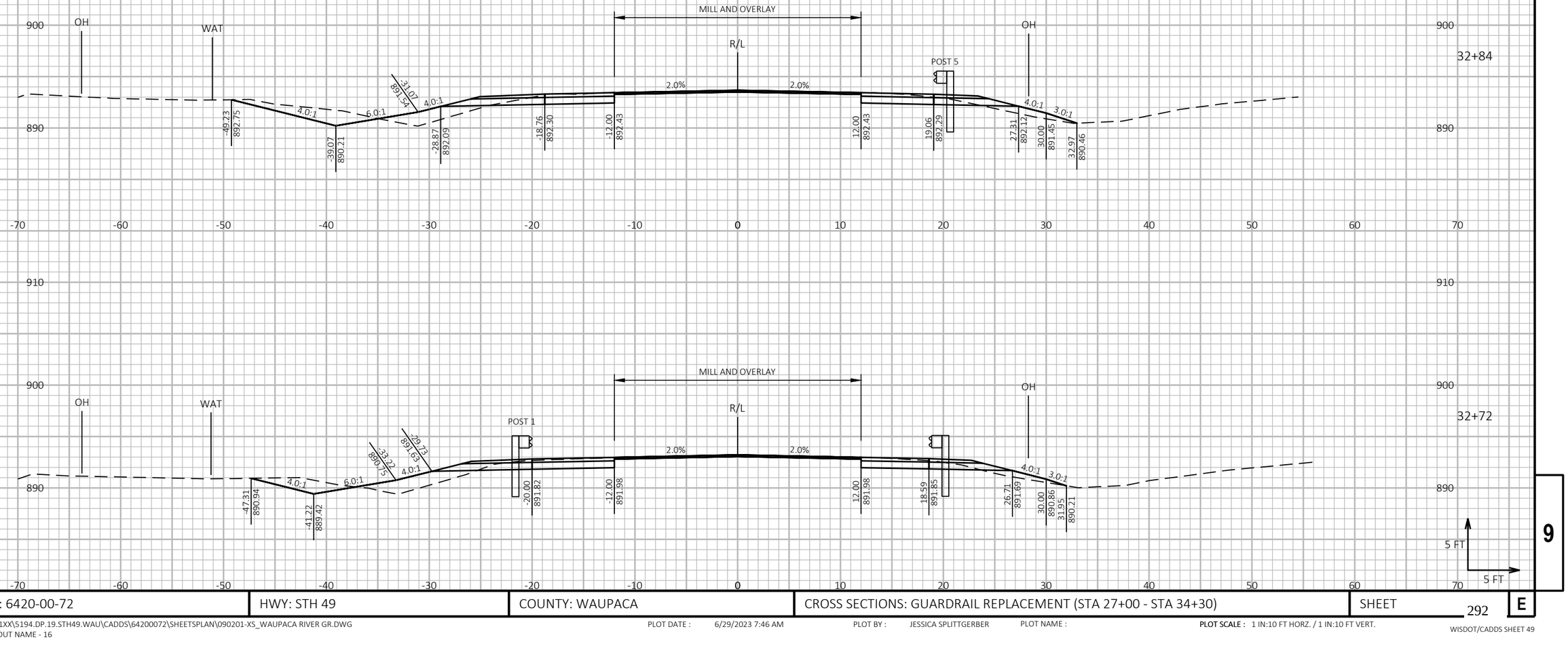
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 291	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 15

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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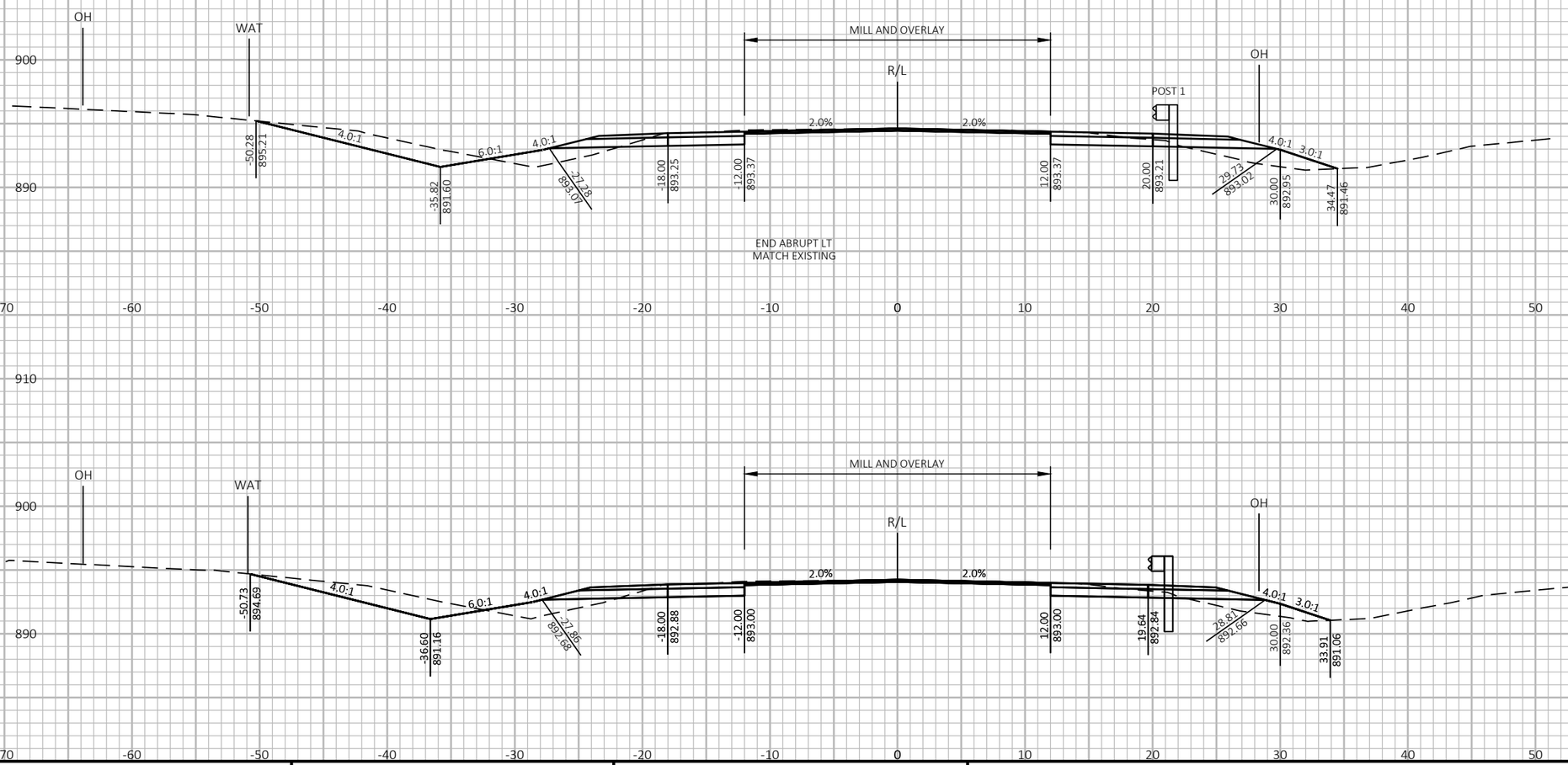
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 292	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 16

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



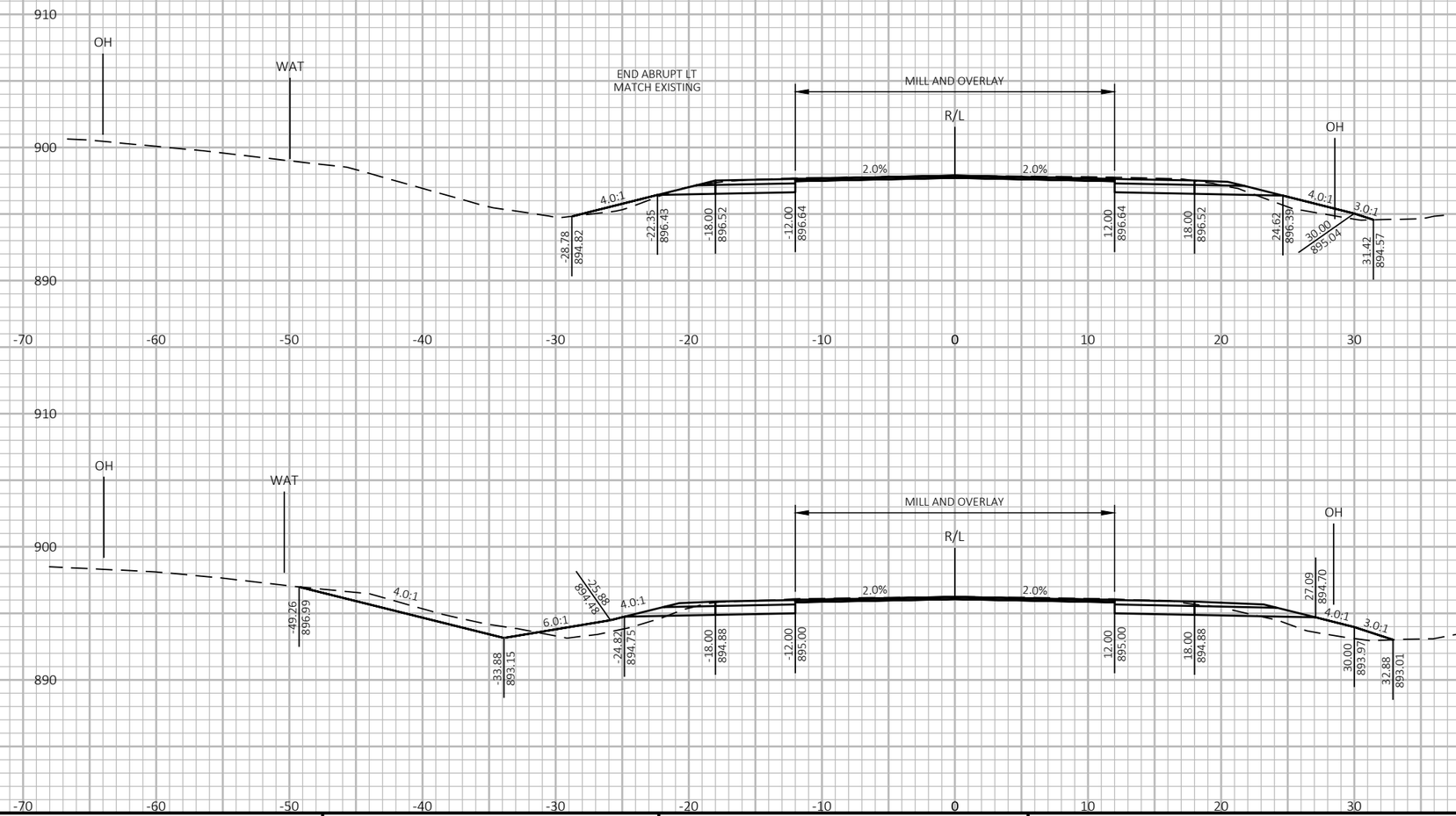
9 9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 293	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 17

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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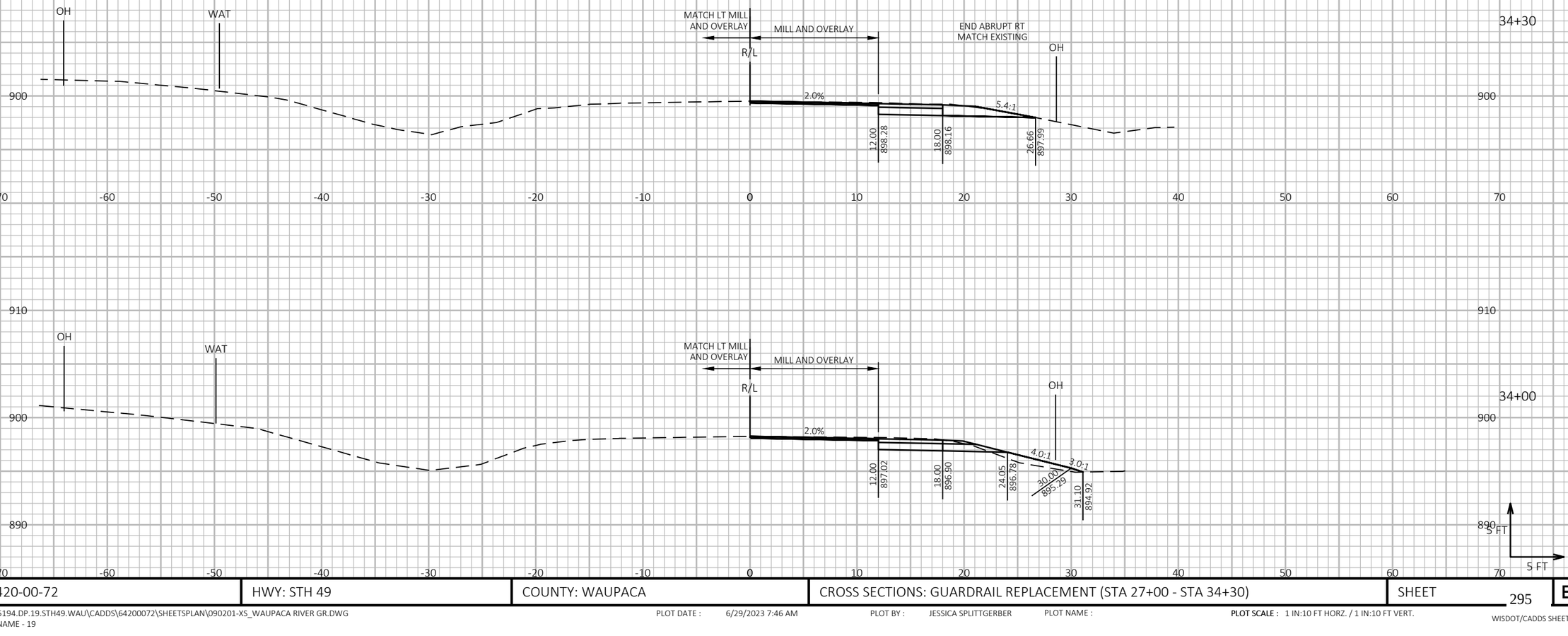
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 294	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 18

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 27+00 - STA 34+30)	SHEET 295	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090201-XS_WAUPACA RIVER GR.DWG
LAYOUT NAME - 19

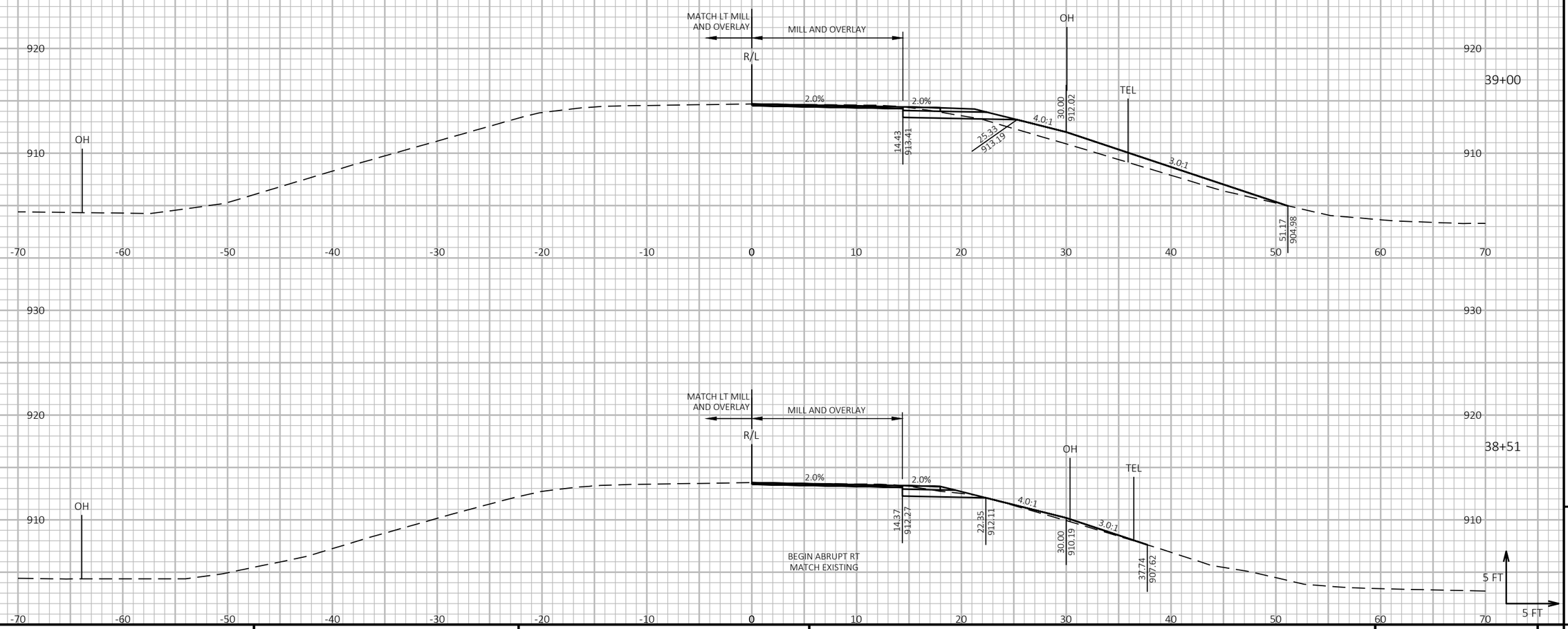
PLOT DATE : 6/29/2023 7:46 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49

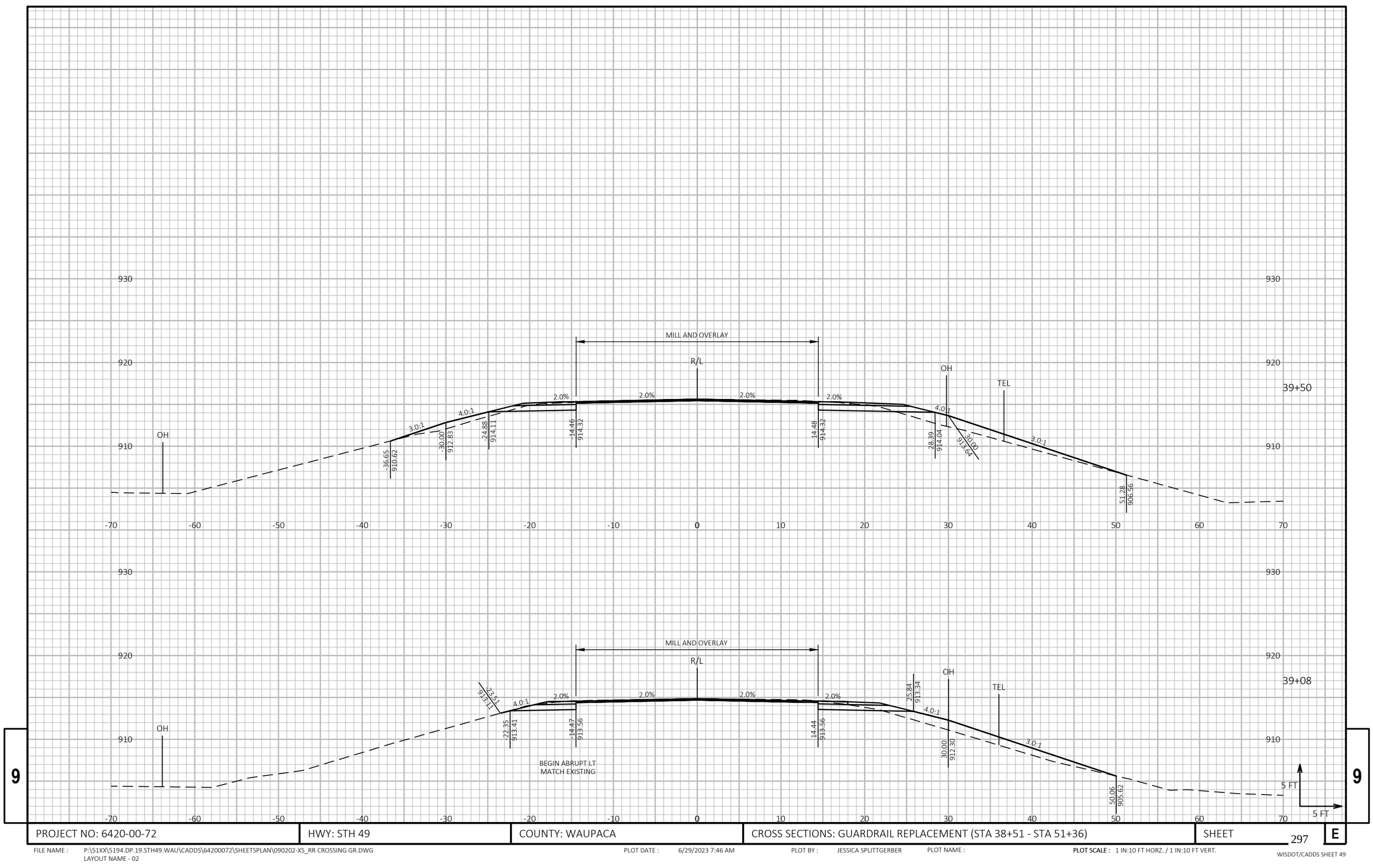


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 296	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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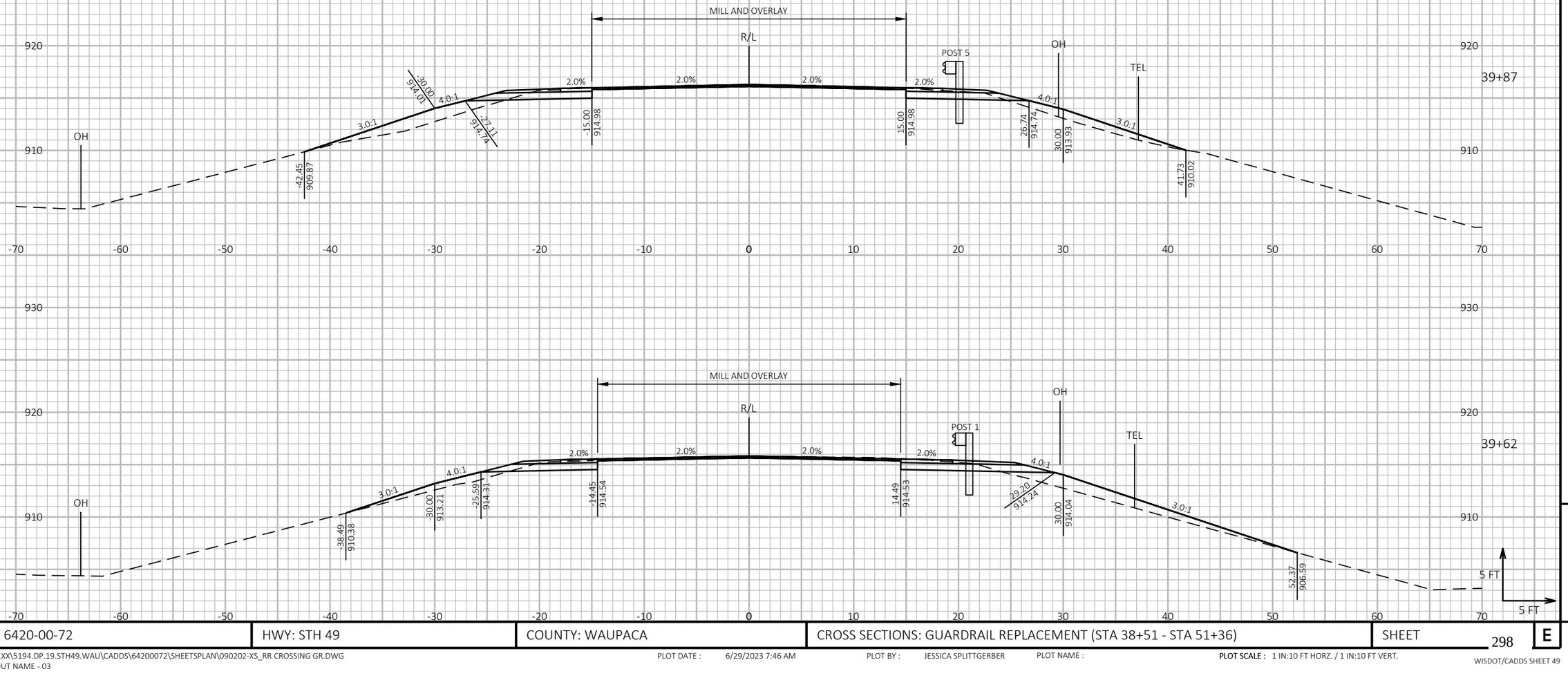
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 297	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

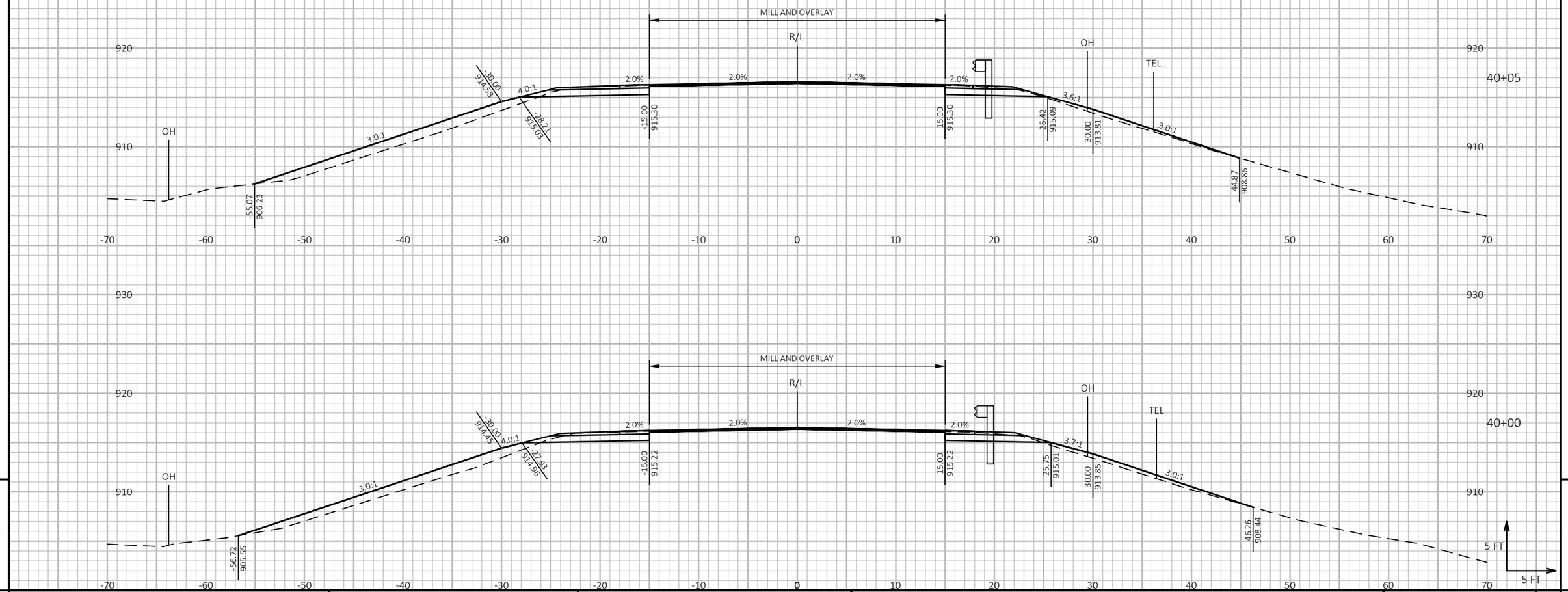


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 298	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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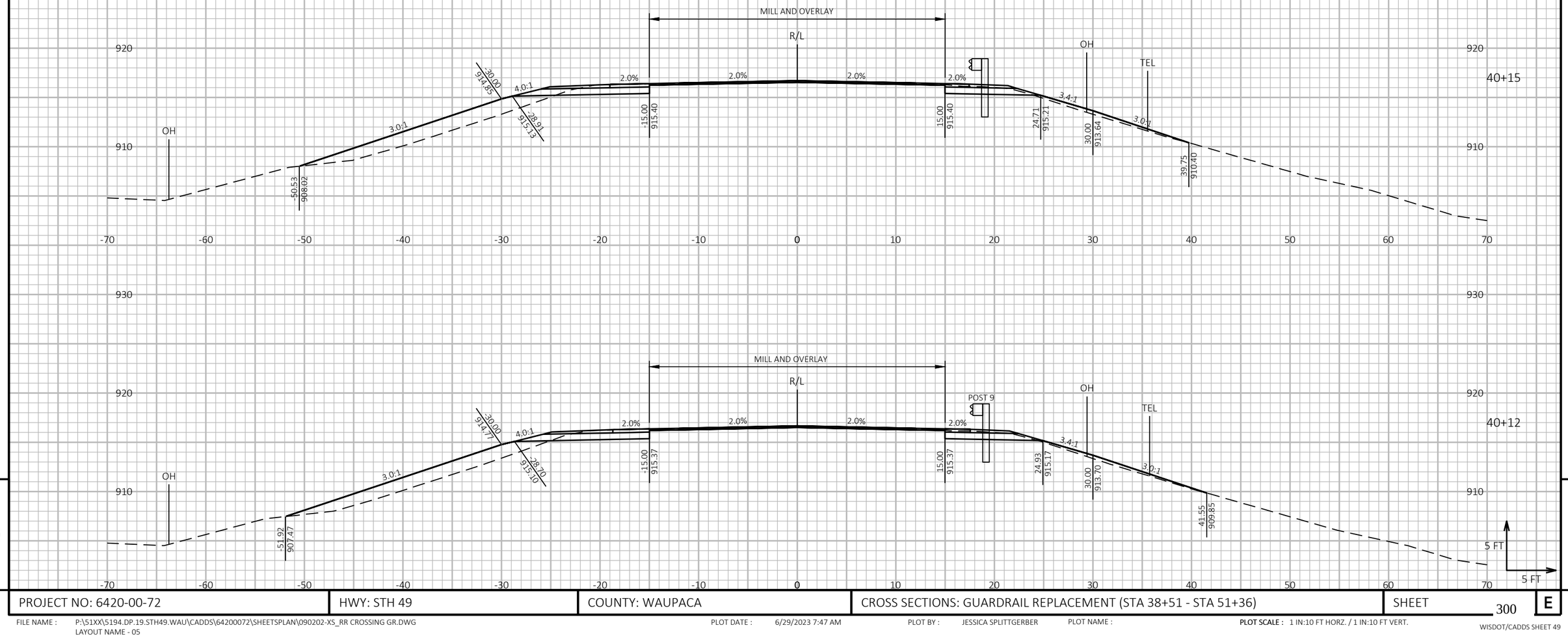
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 299	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 04

PLOT DATE : 6/29/2023 7:46 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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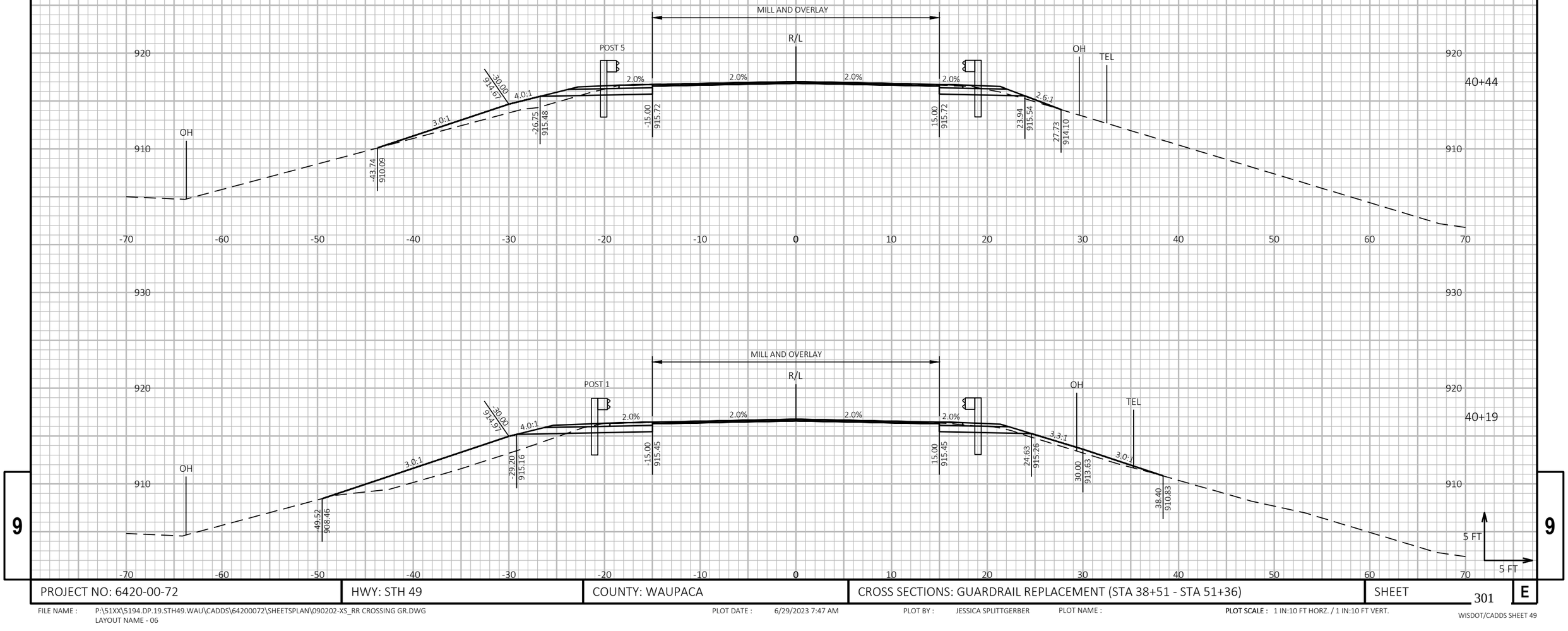
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 300	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 05

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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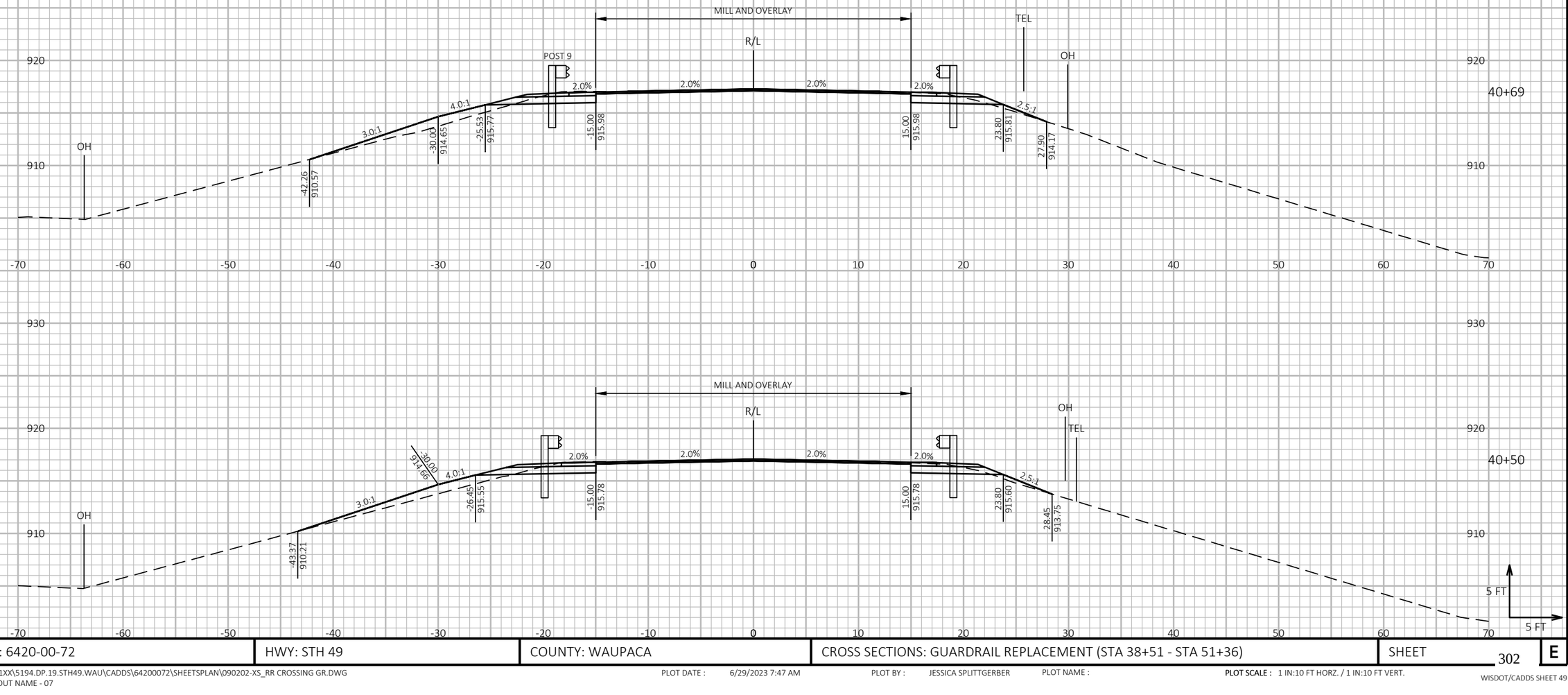
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 301	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 06

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

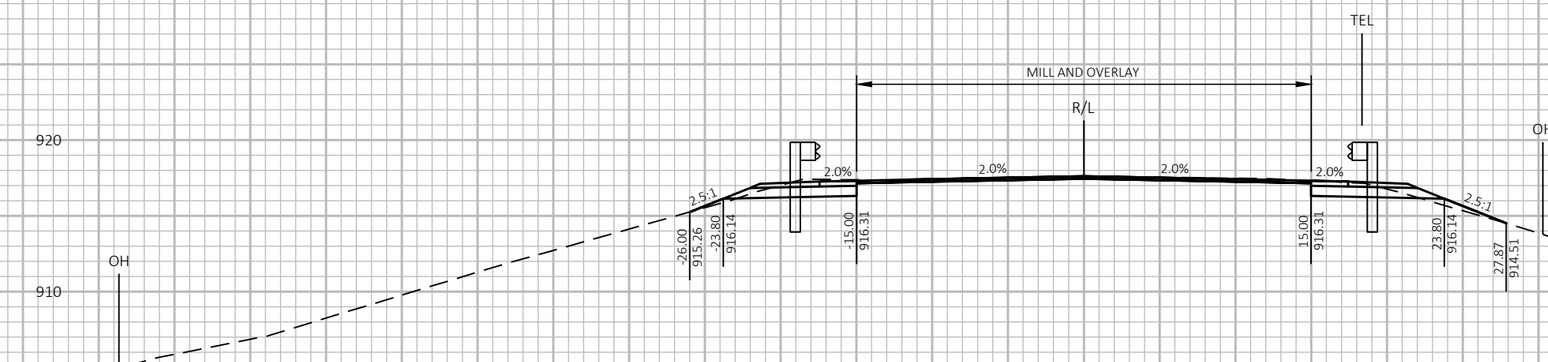


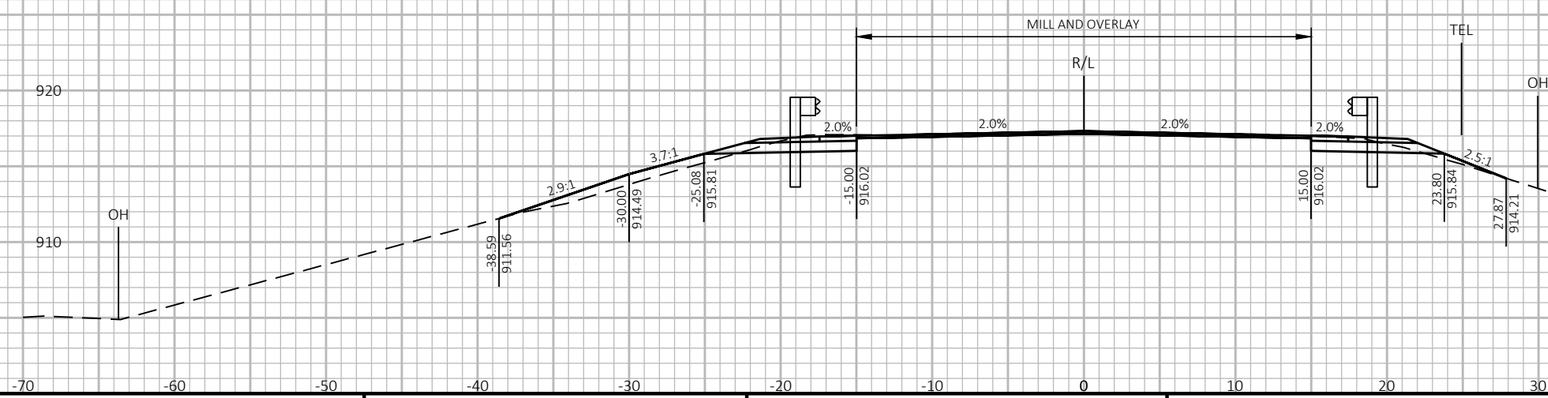
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 302	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 07

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





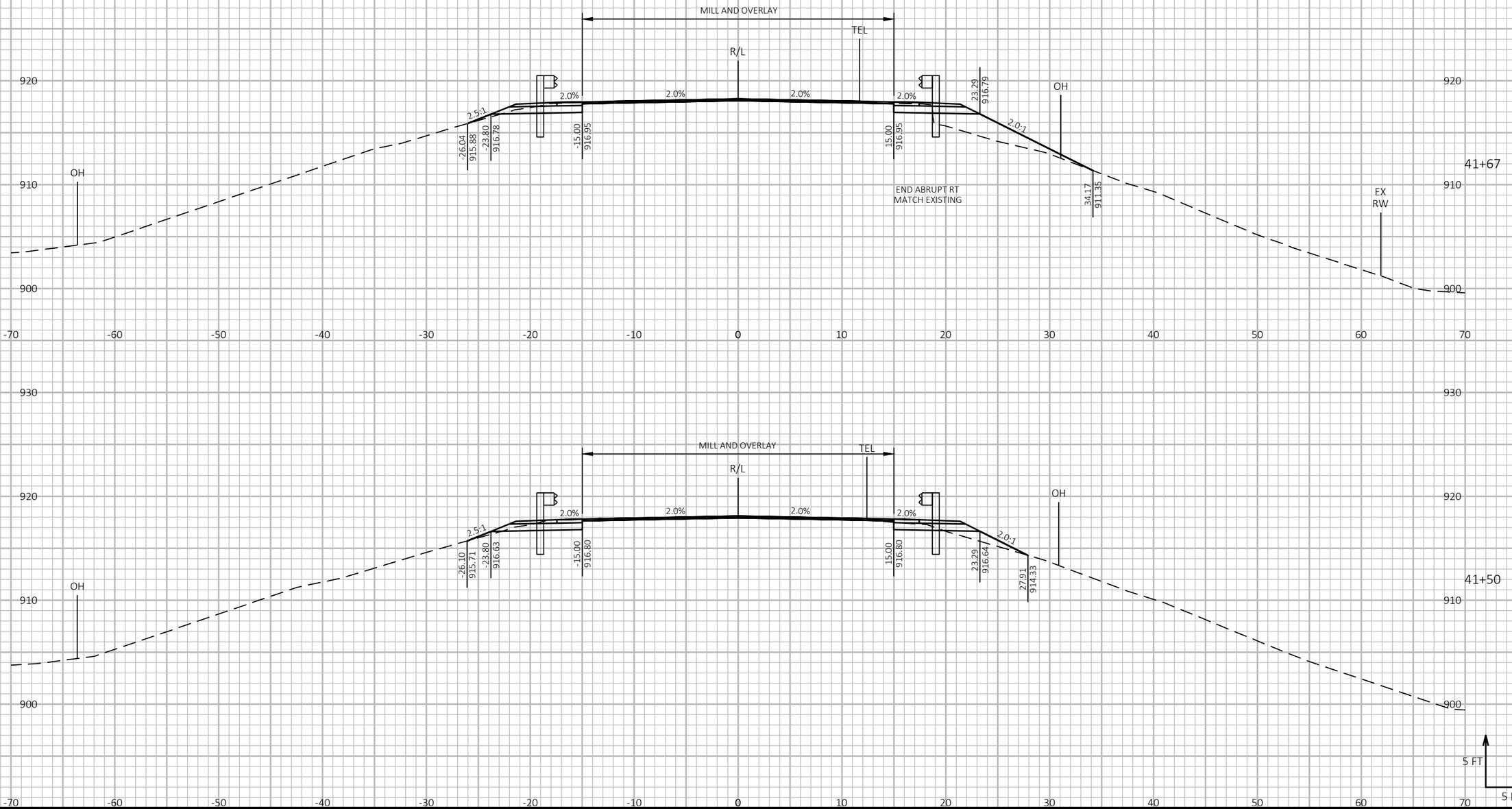
9 9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 303	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 08

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 304	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 09

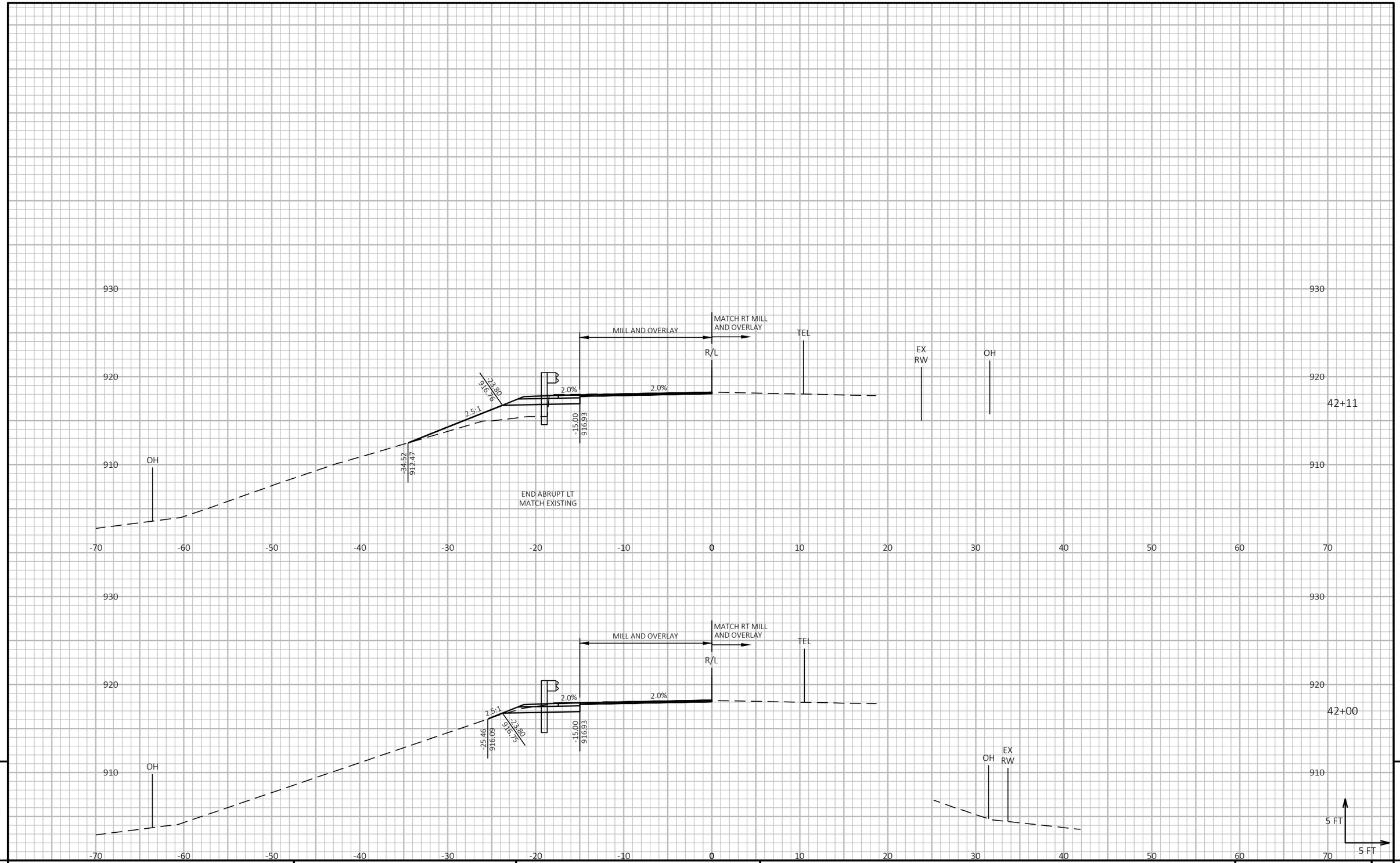
PLOT DATE : 6/29/2023 7:47 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 305	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 10

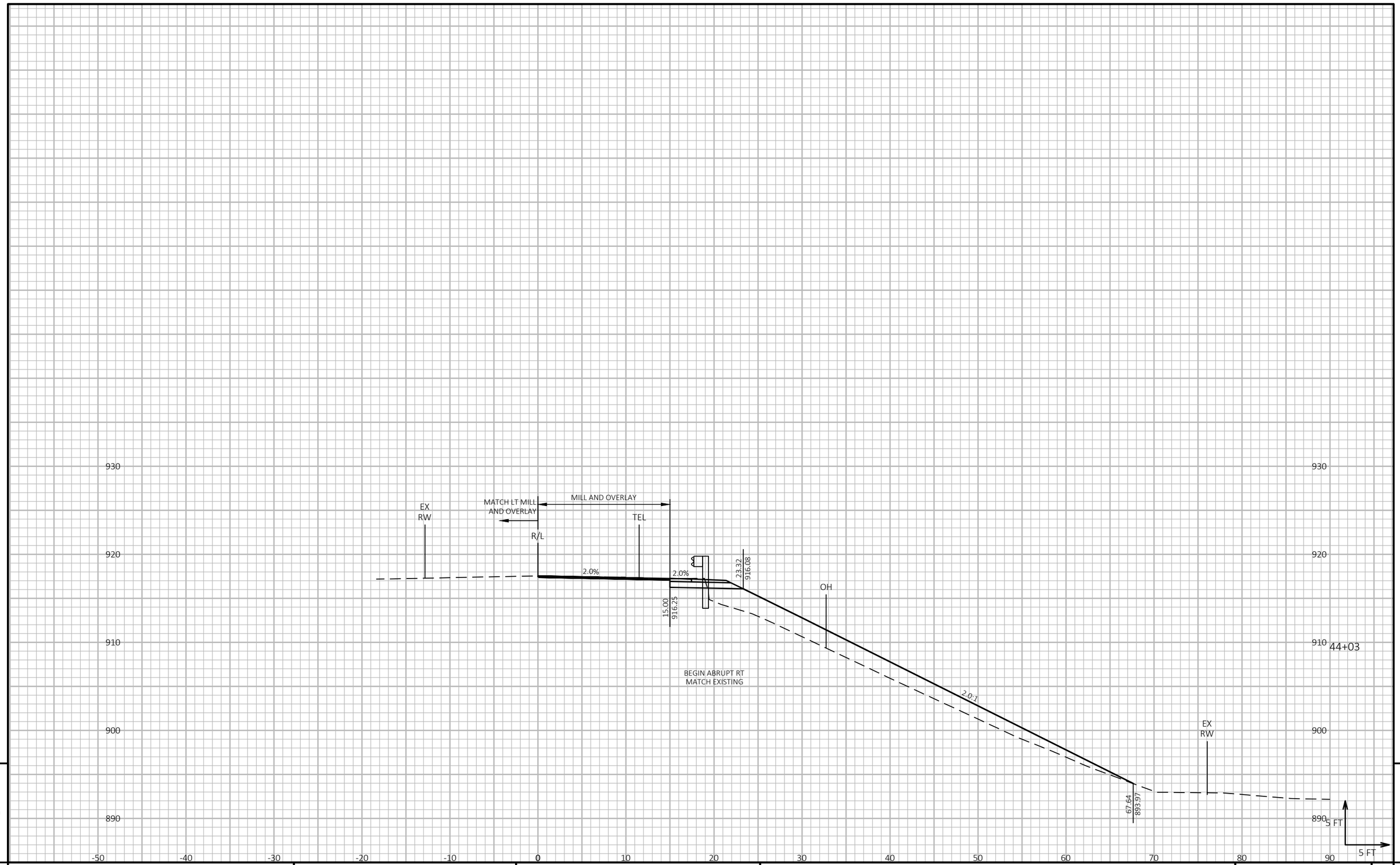
PLOT DATE : 6/29/2023 7:47 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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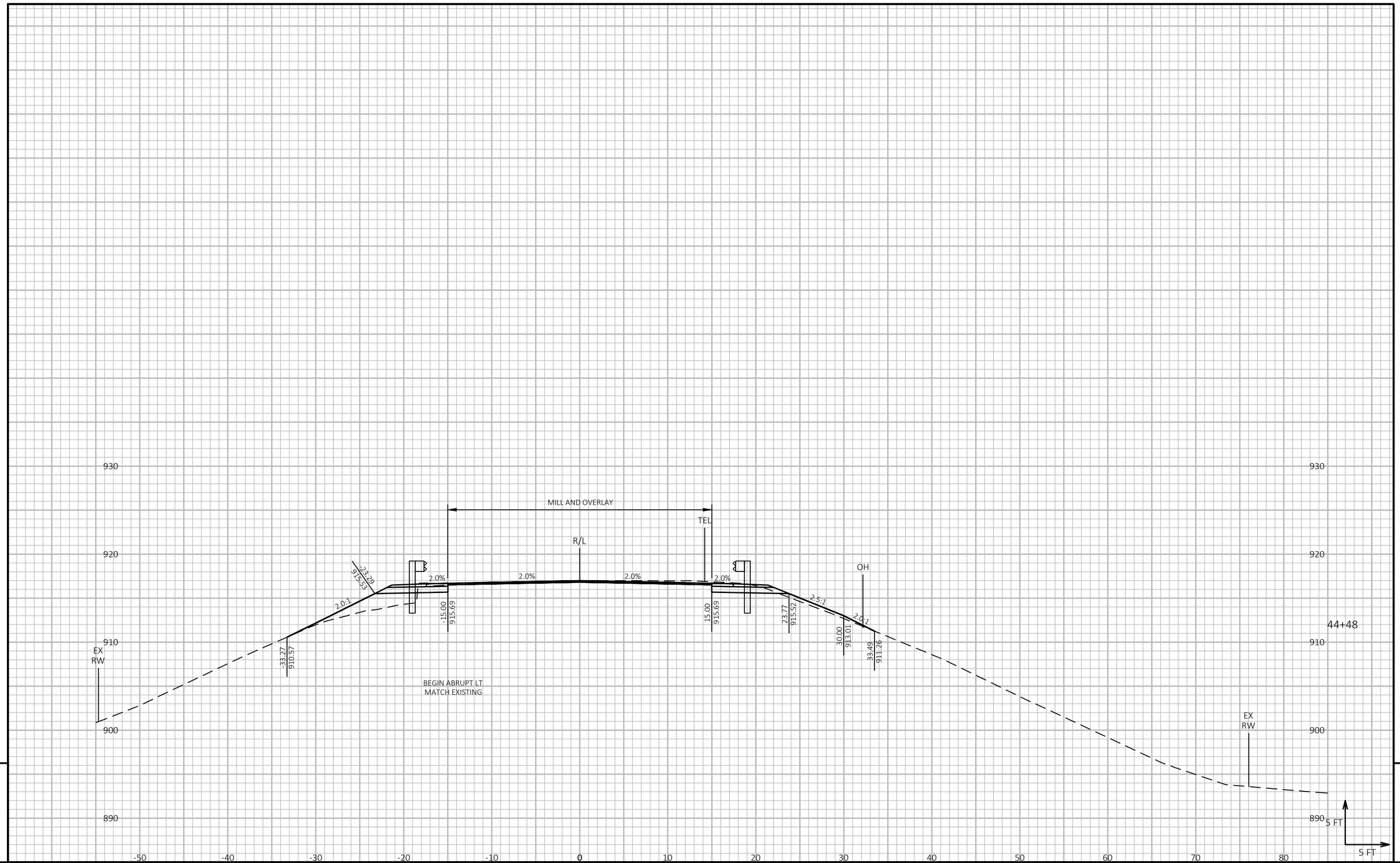
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 306	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 11

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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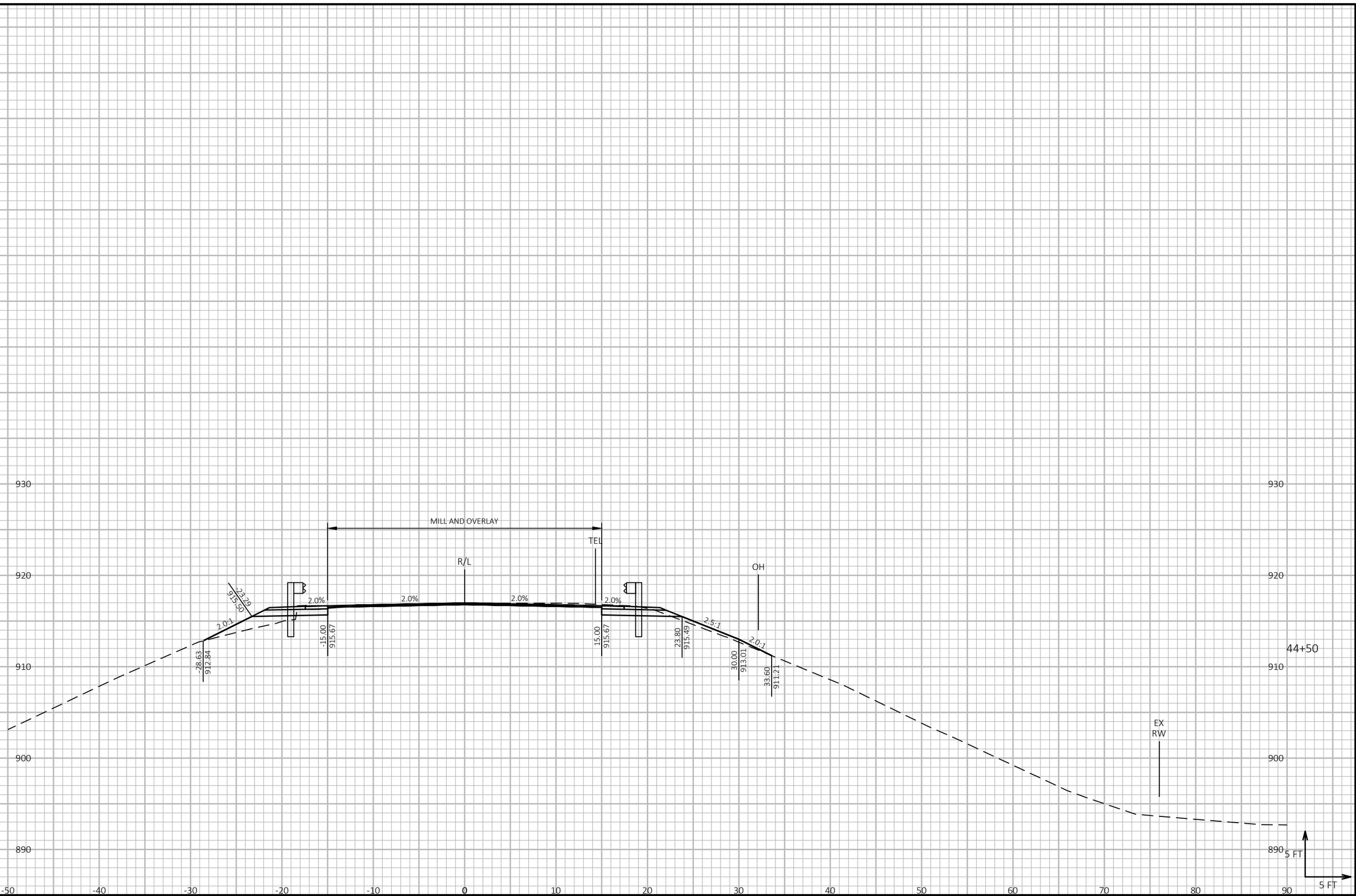
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 307	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 12

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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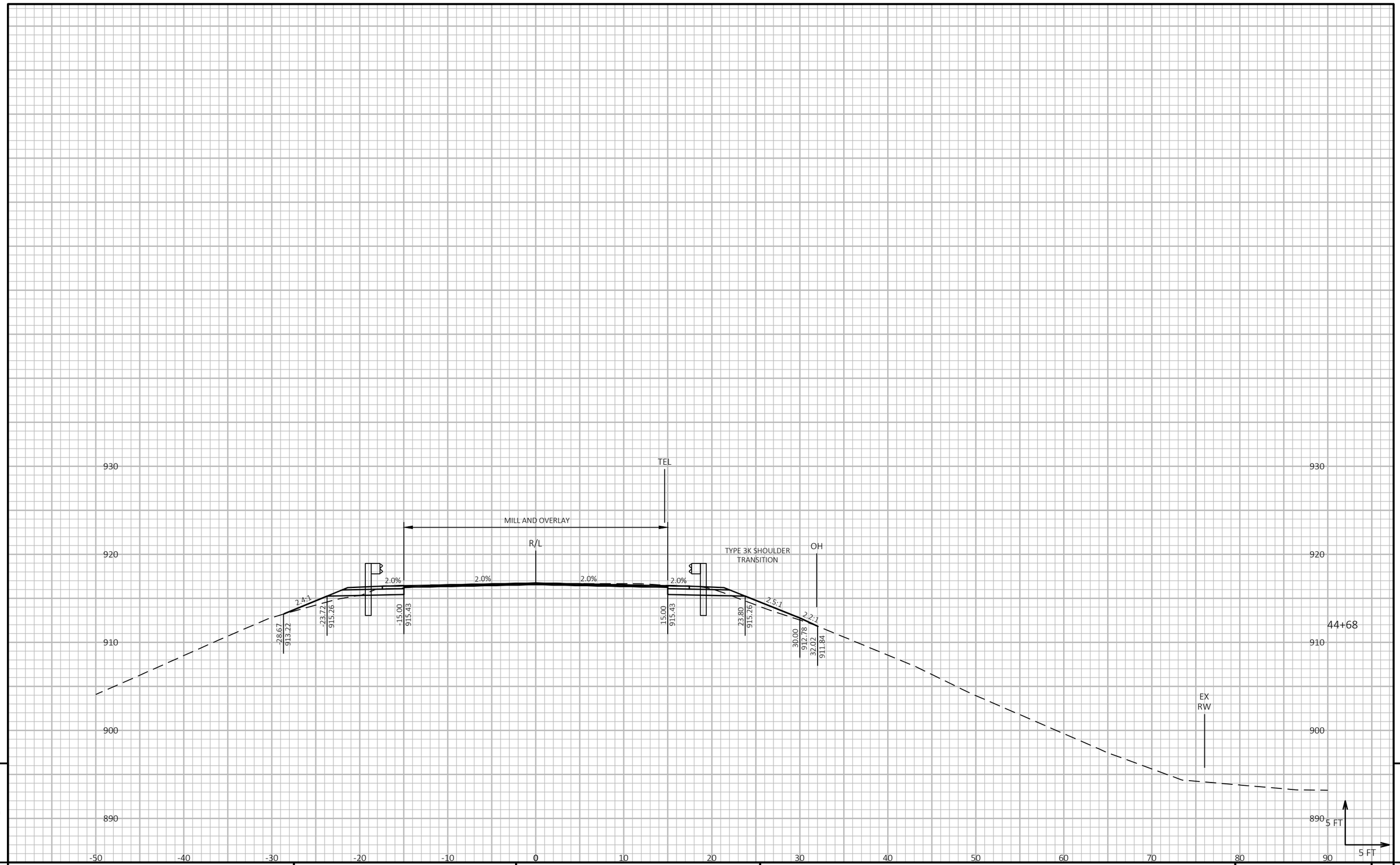
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 308	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 13

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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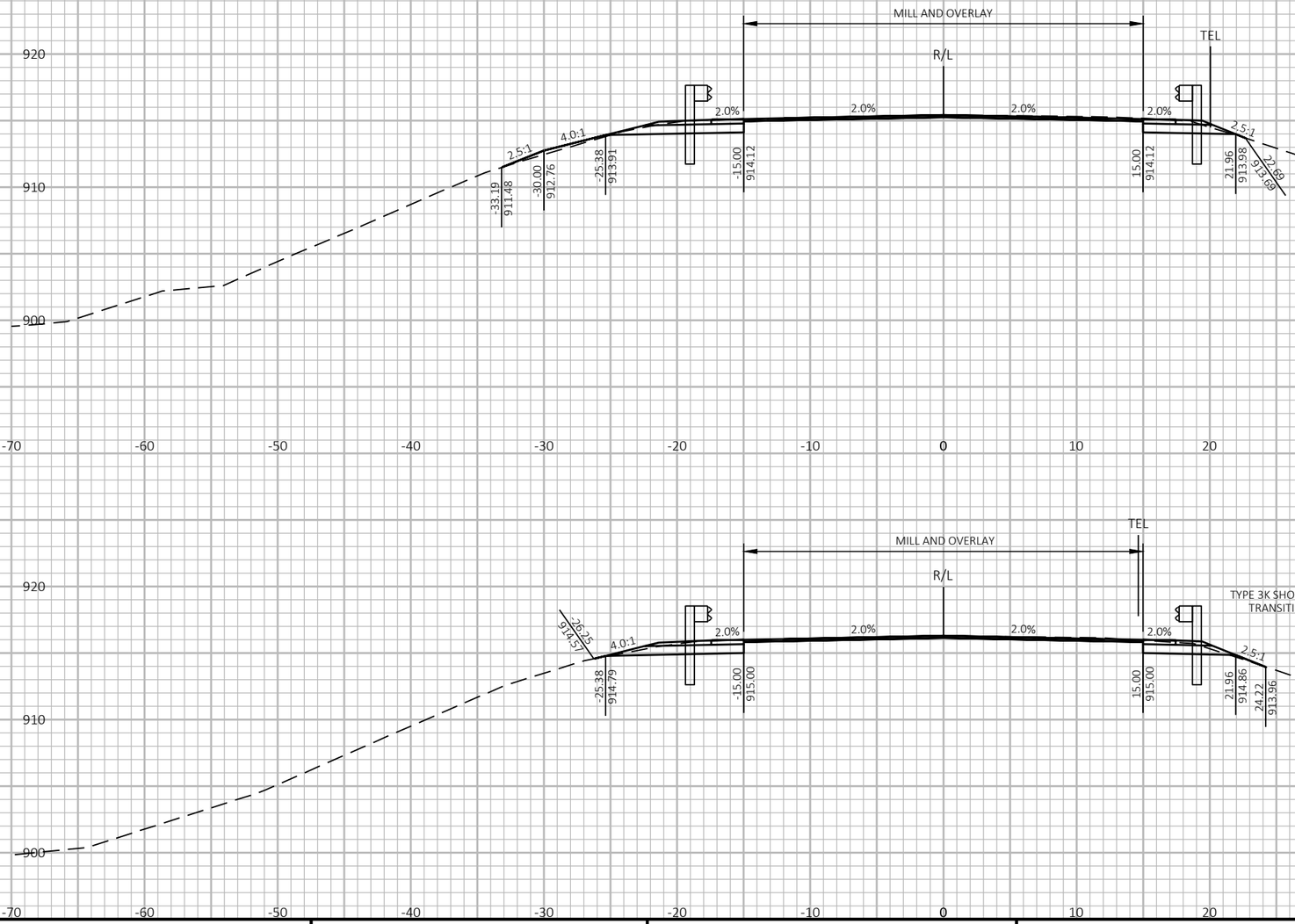
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 309	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 14

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

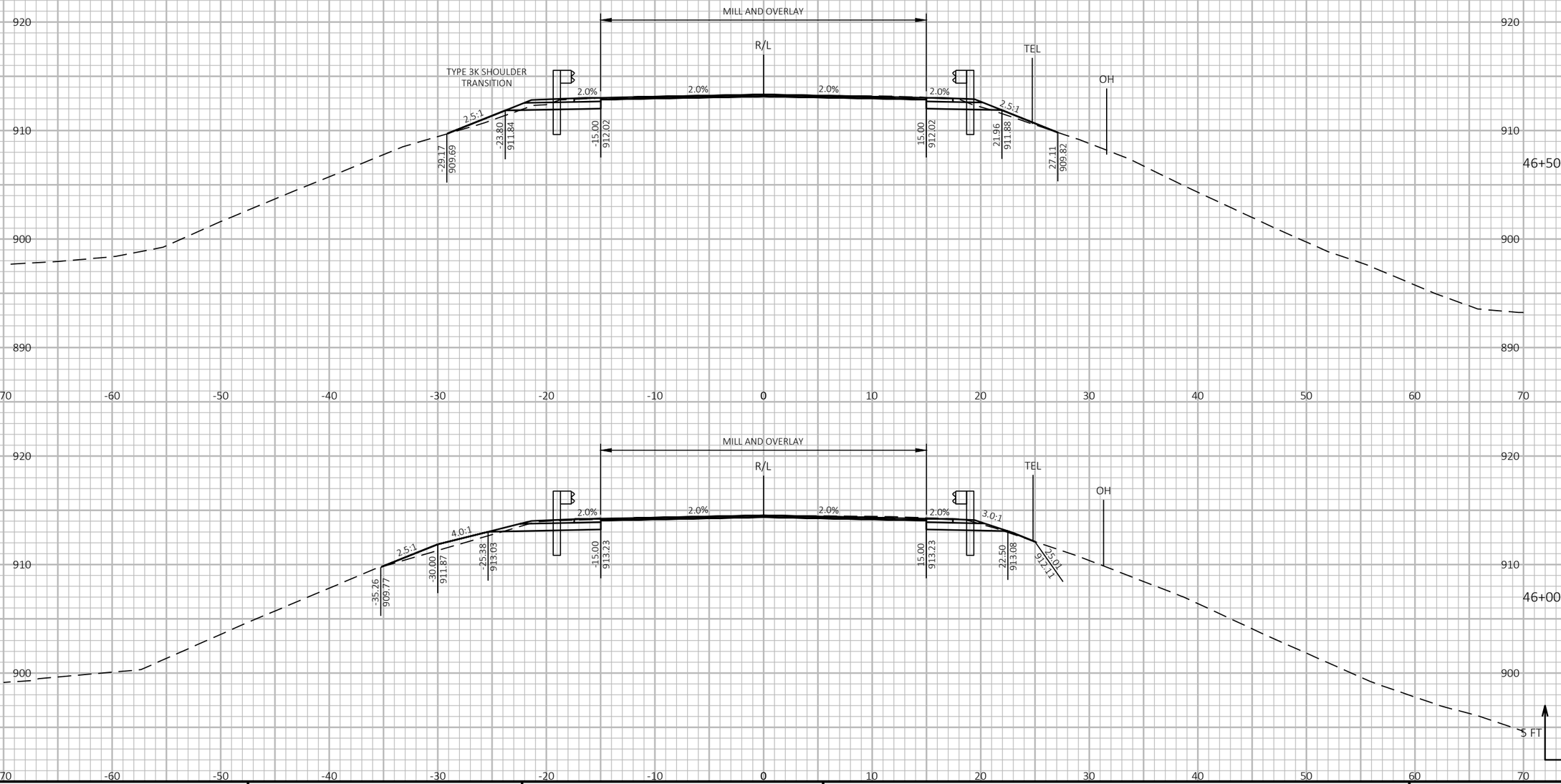
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 310	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 15

PLOT DATE : 6/29/2023 7:47 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49



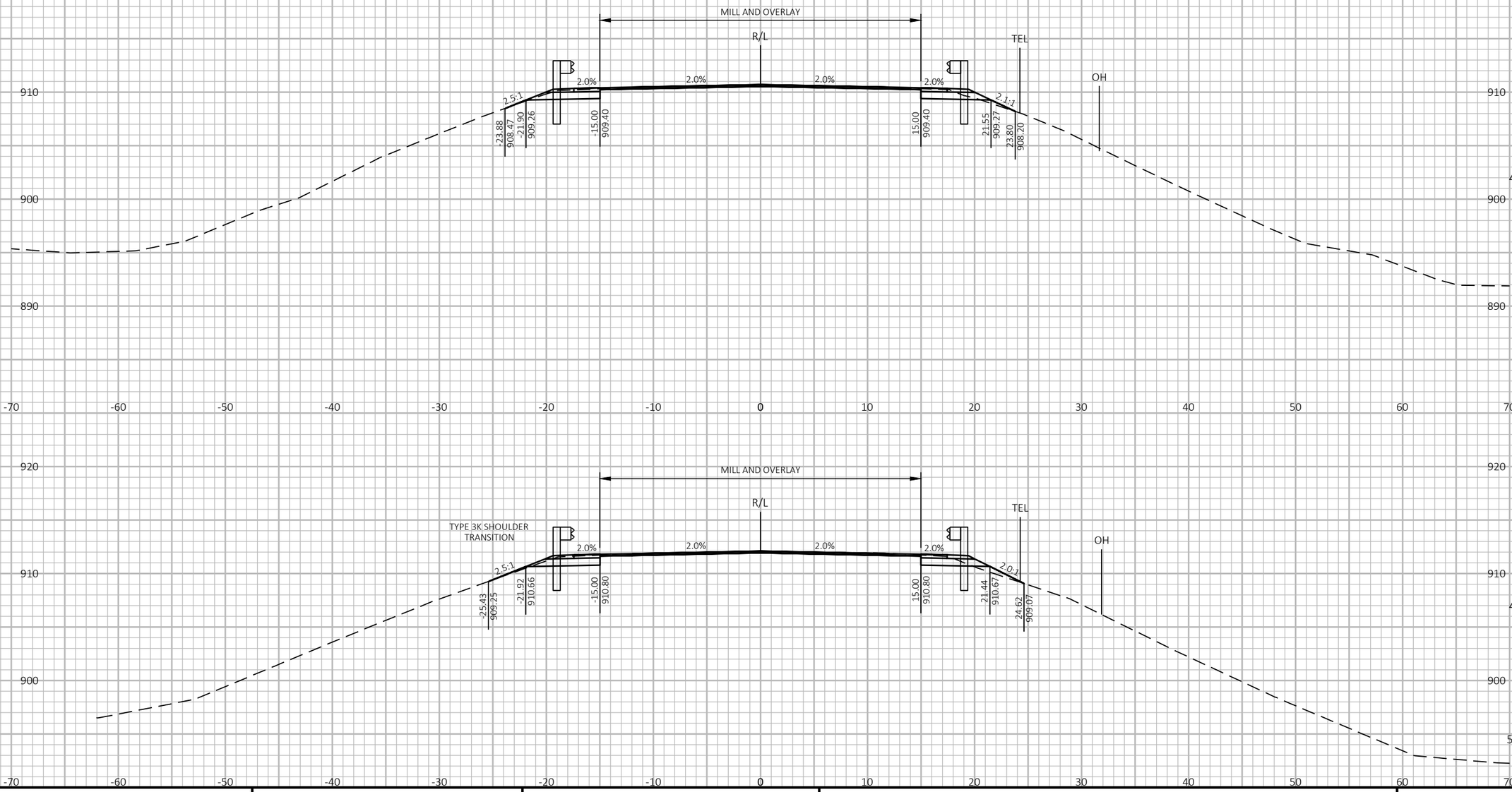
9 9

PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 311	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 16

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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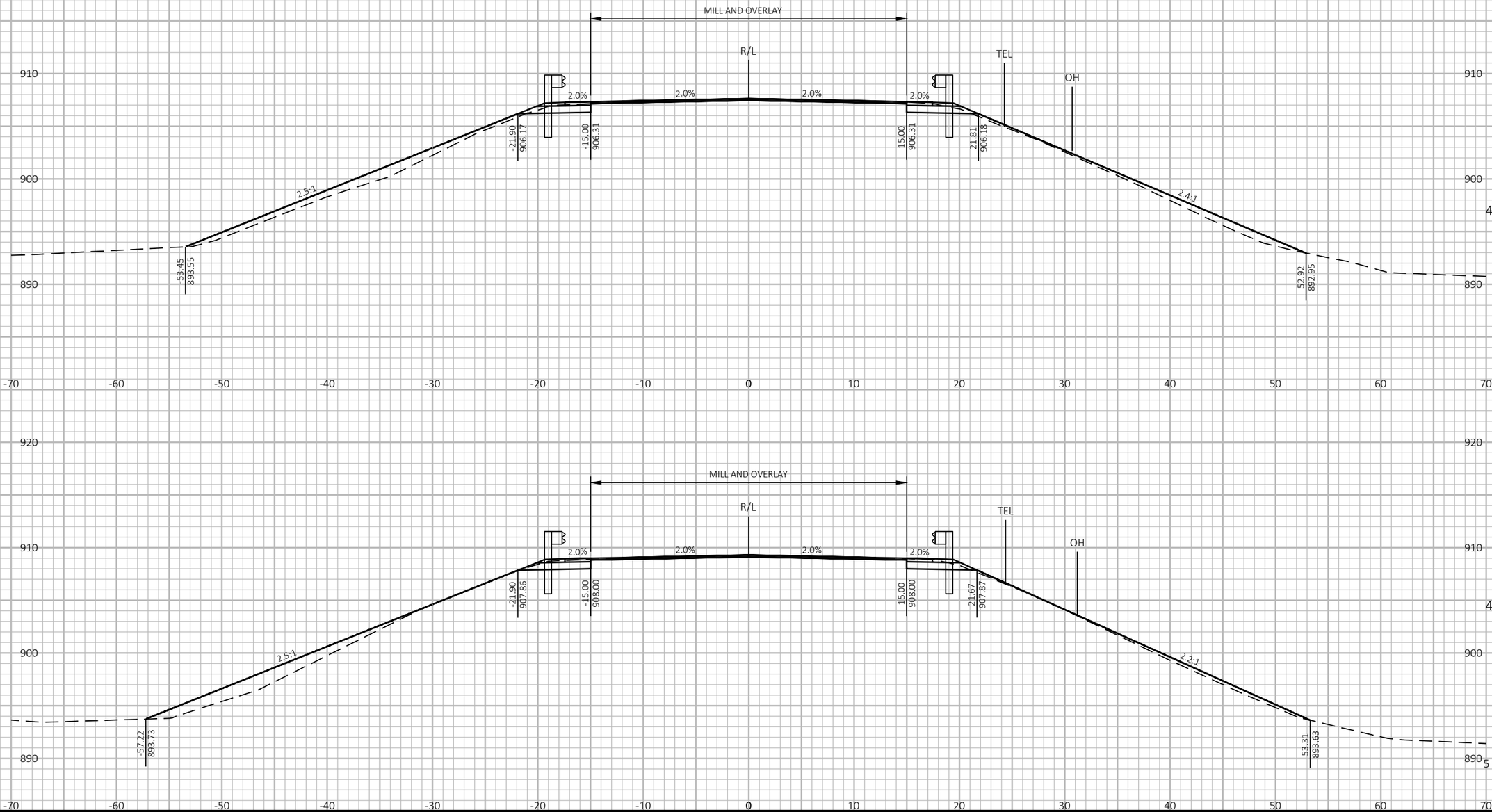
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 312	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 17

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 313	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 18

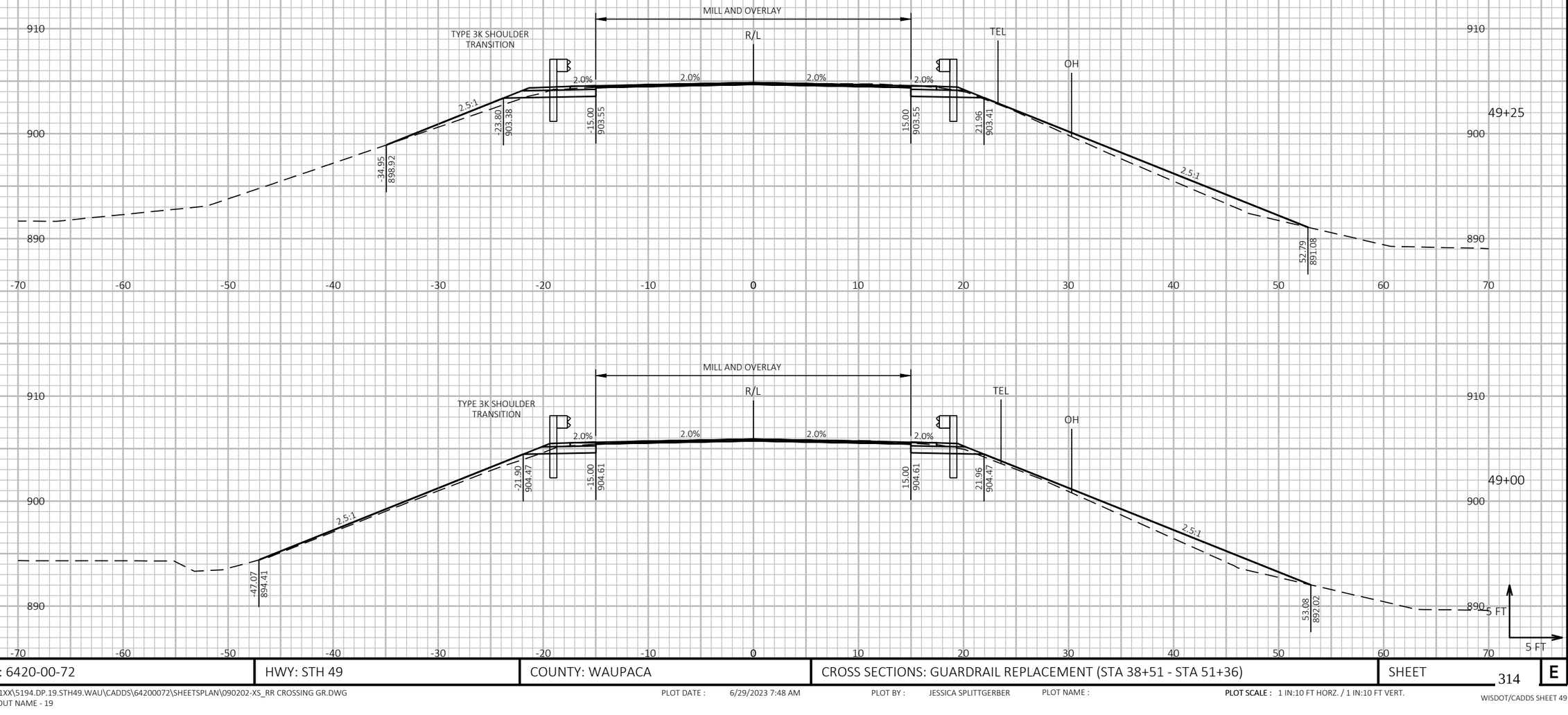
PLOT DATE : 6/29/2023 7:48 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49

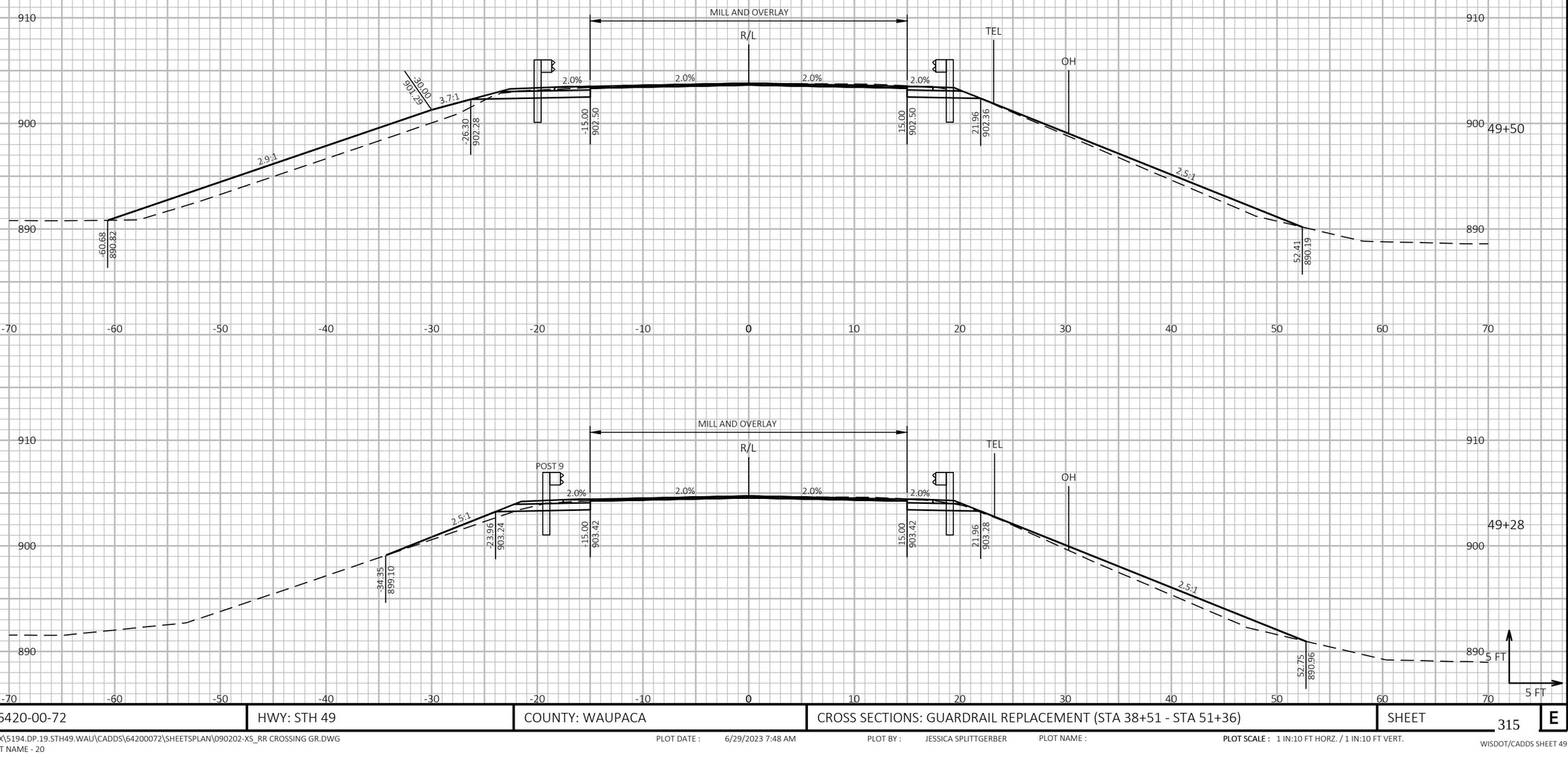


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 314	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 19

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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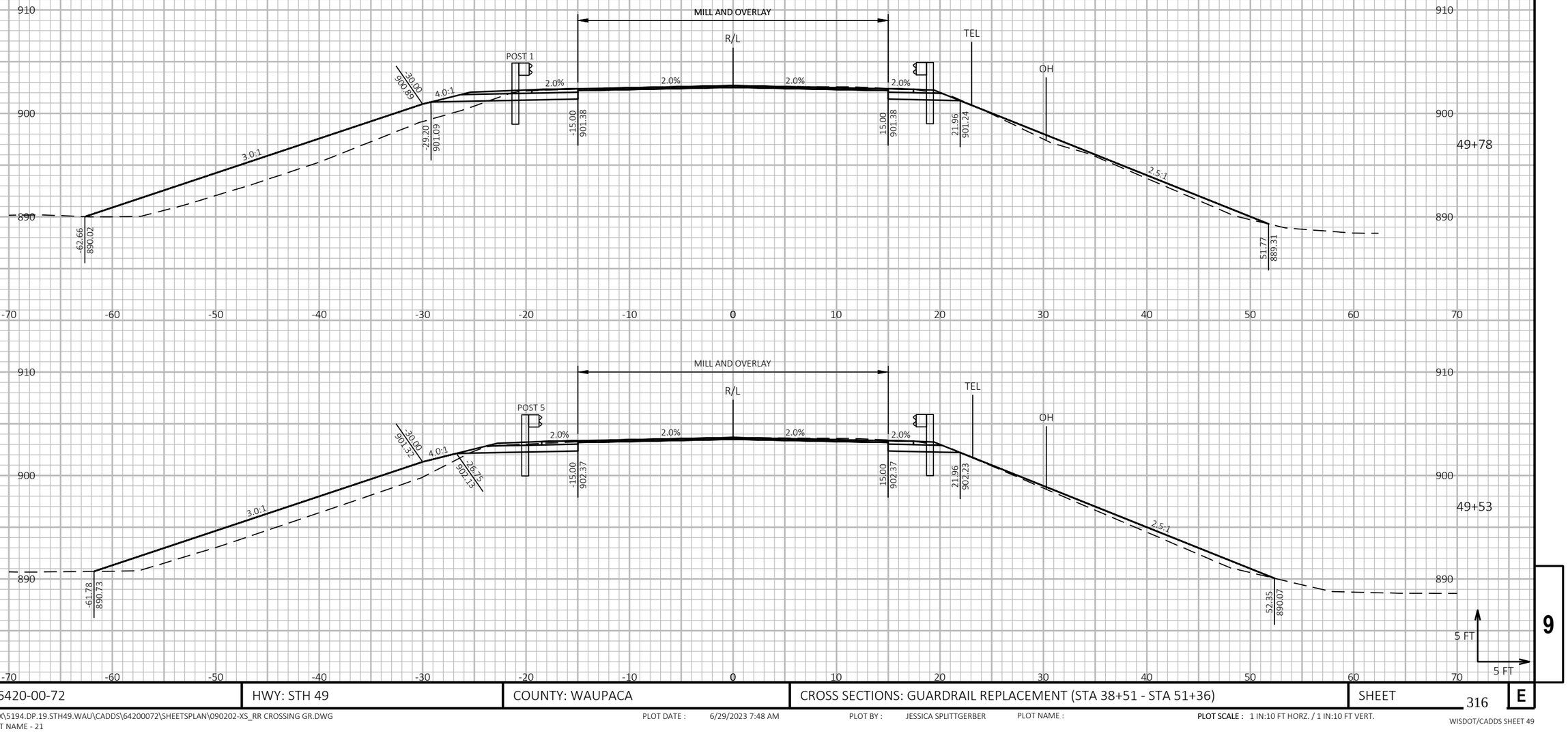
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 315	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 20

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

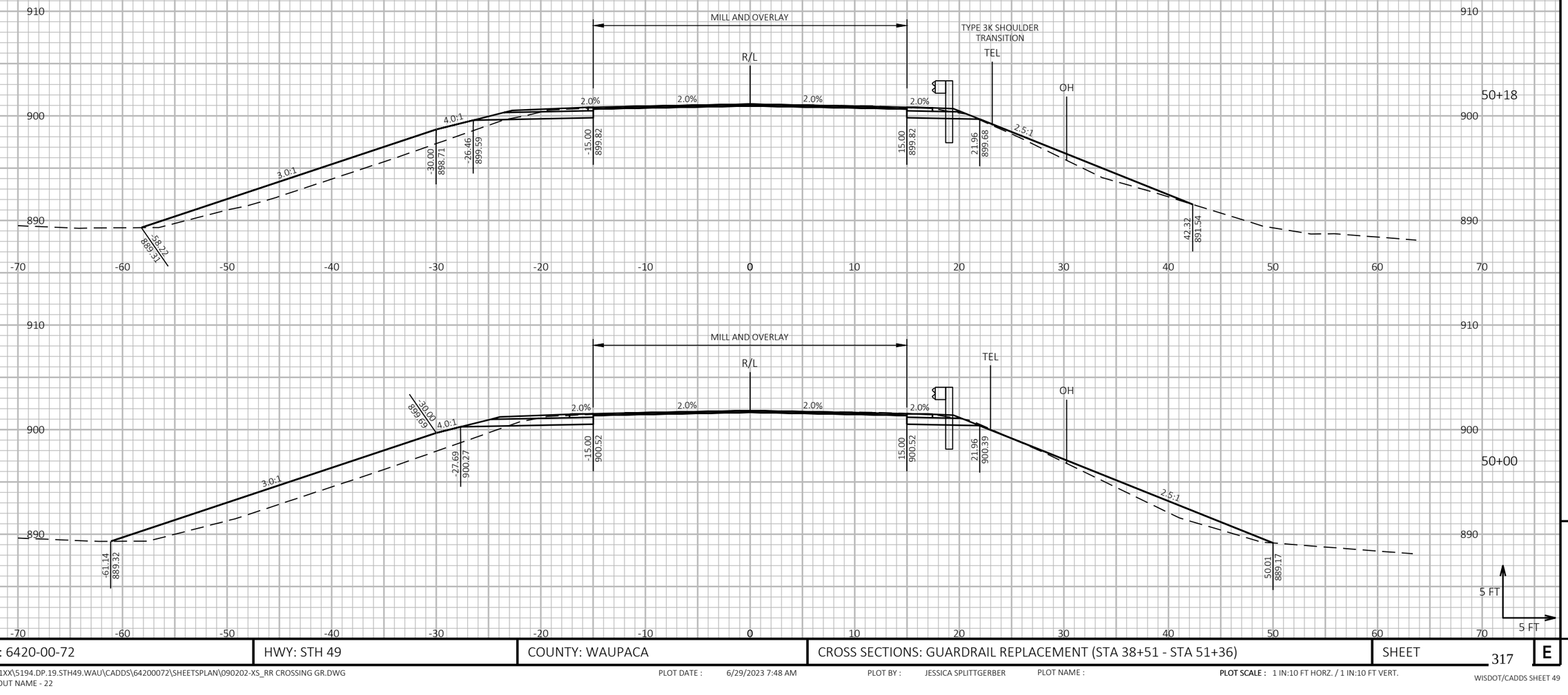


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 316	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 21

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

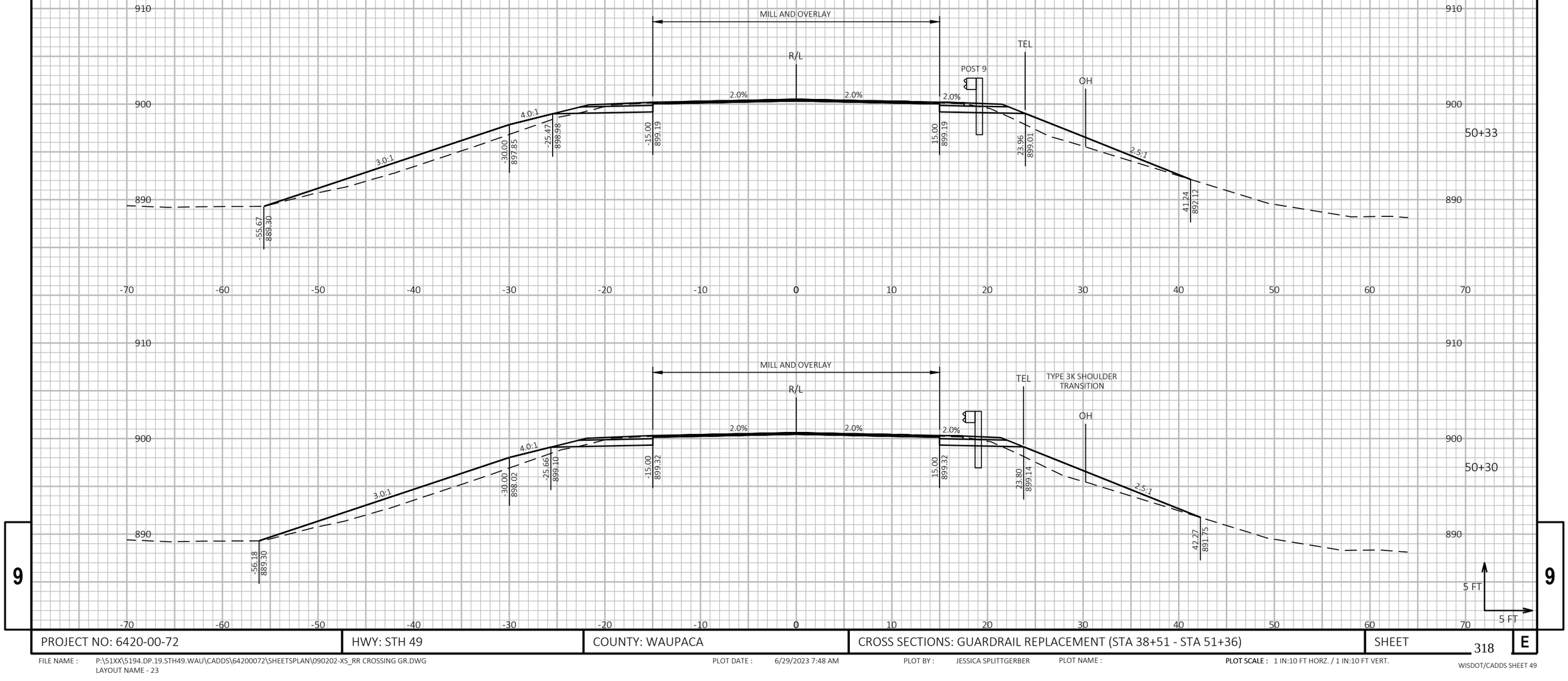


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 317	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 22

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

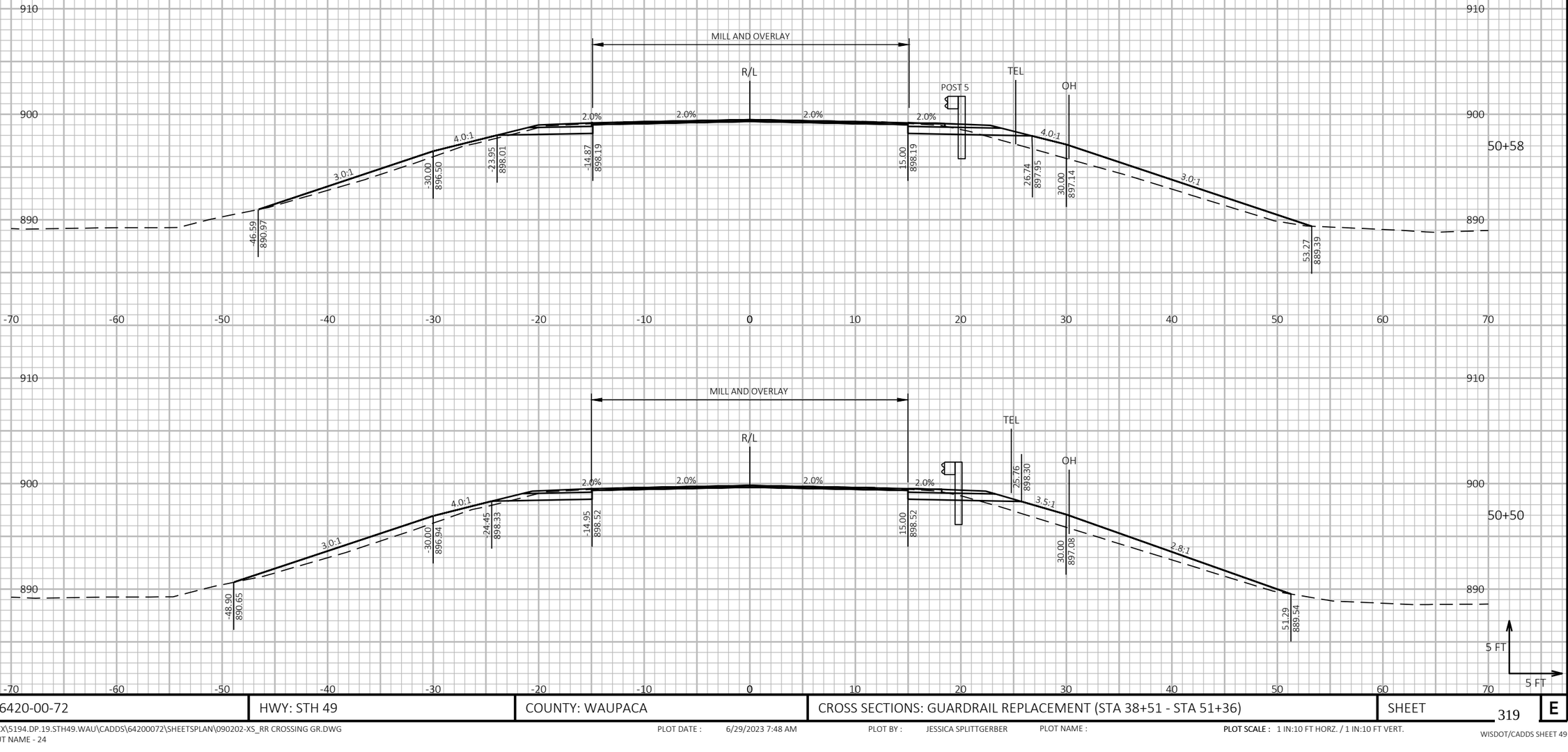


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 318	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 23

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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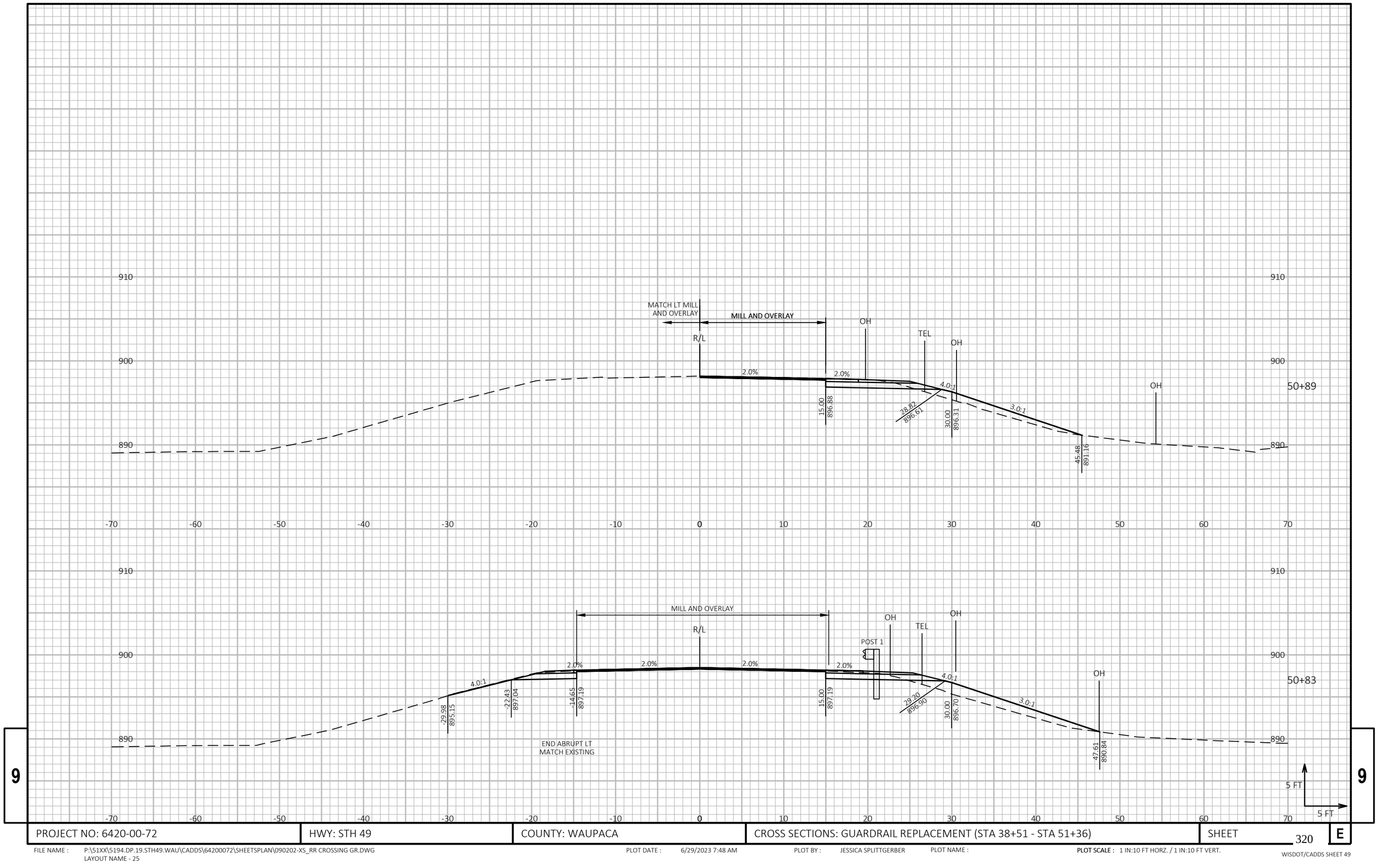
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 319	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 24

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

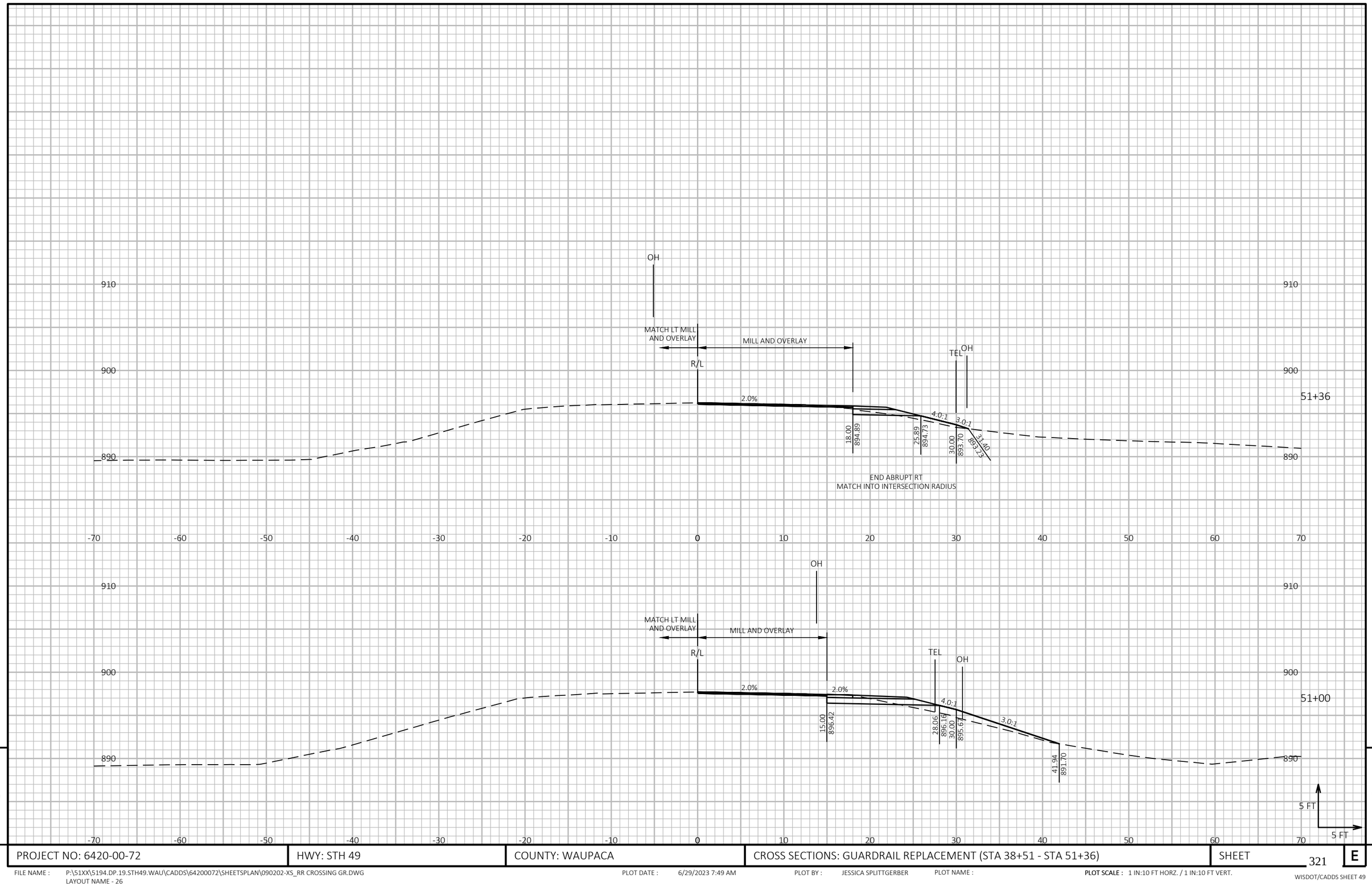


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 320	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 25

PLOT DATE : 6/29/2023 7:48 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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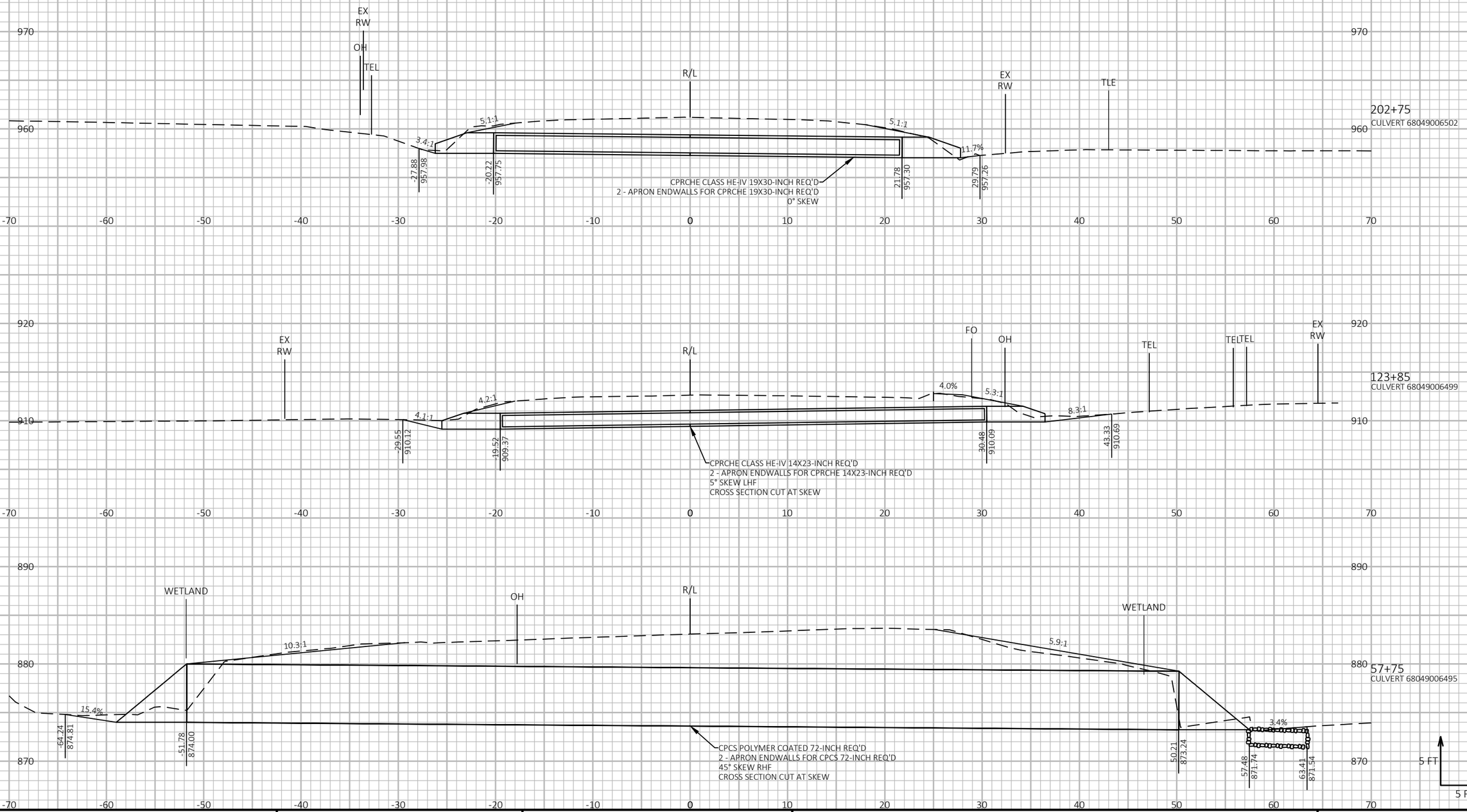
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 38+51 - STA 51+36)	SHEET 321	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090202-XS_RR CROSSING GR.DWG
LAYOUT NAME - 26

PLOT DATE : 6/29/2023 7:49 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



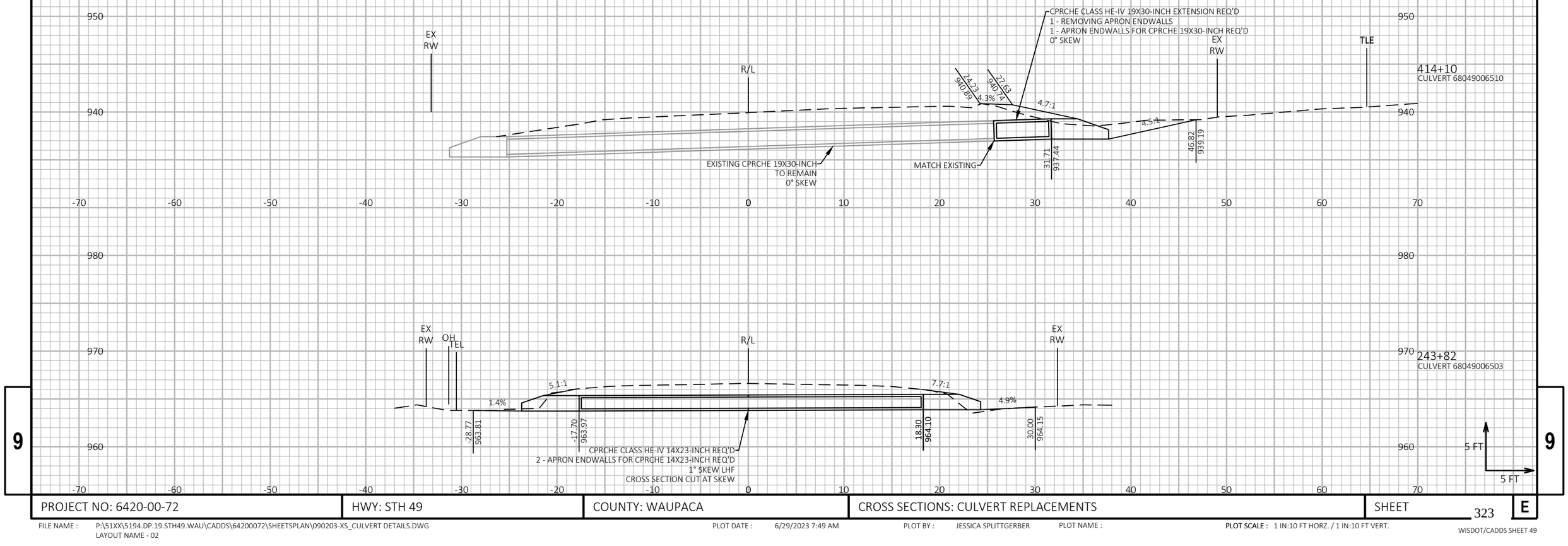
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: CULVERT REPLACEMENTS	SHEET 322	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090203-XS_CULVERT DETAILS.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:49 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49



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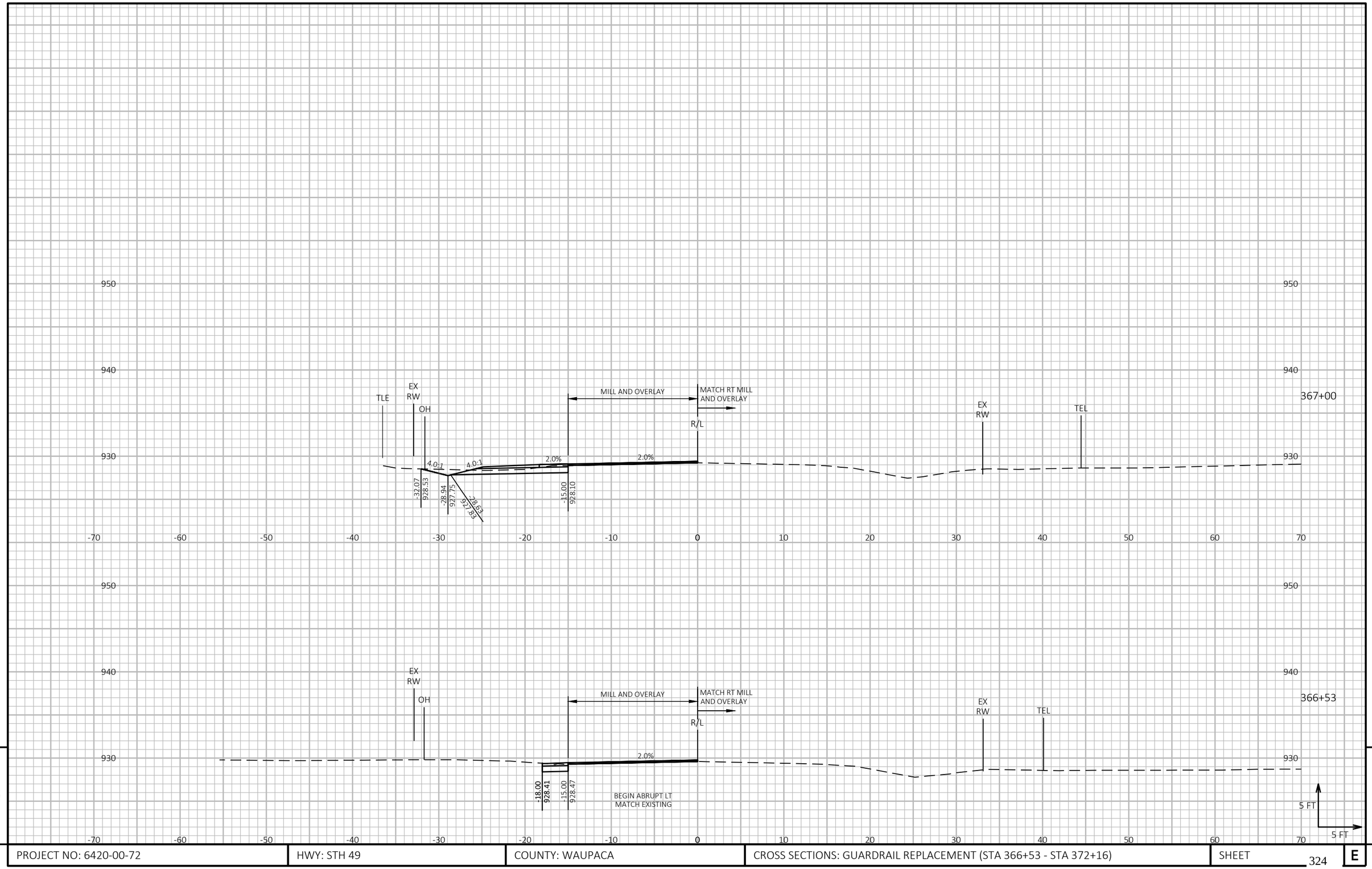
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: CULVERT REPLACEMENTS	SHEET 323	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090203-XS_CULVERT DETAILS.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:49 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49



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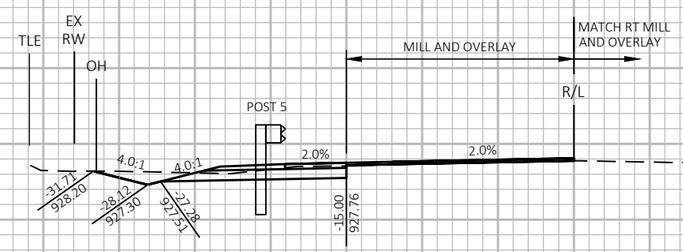
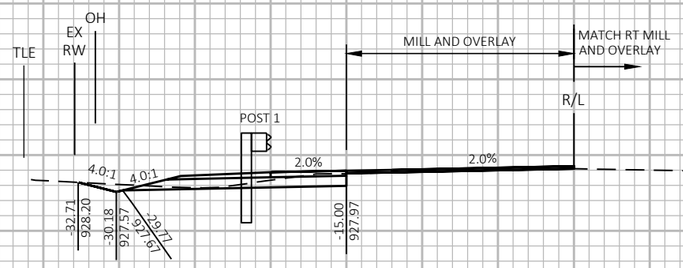
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 324	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:49 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 325	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 02

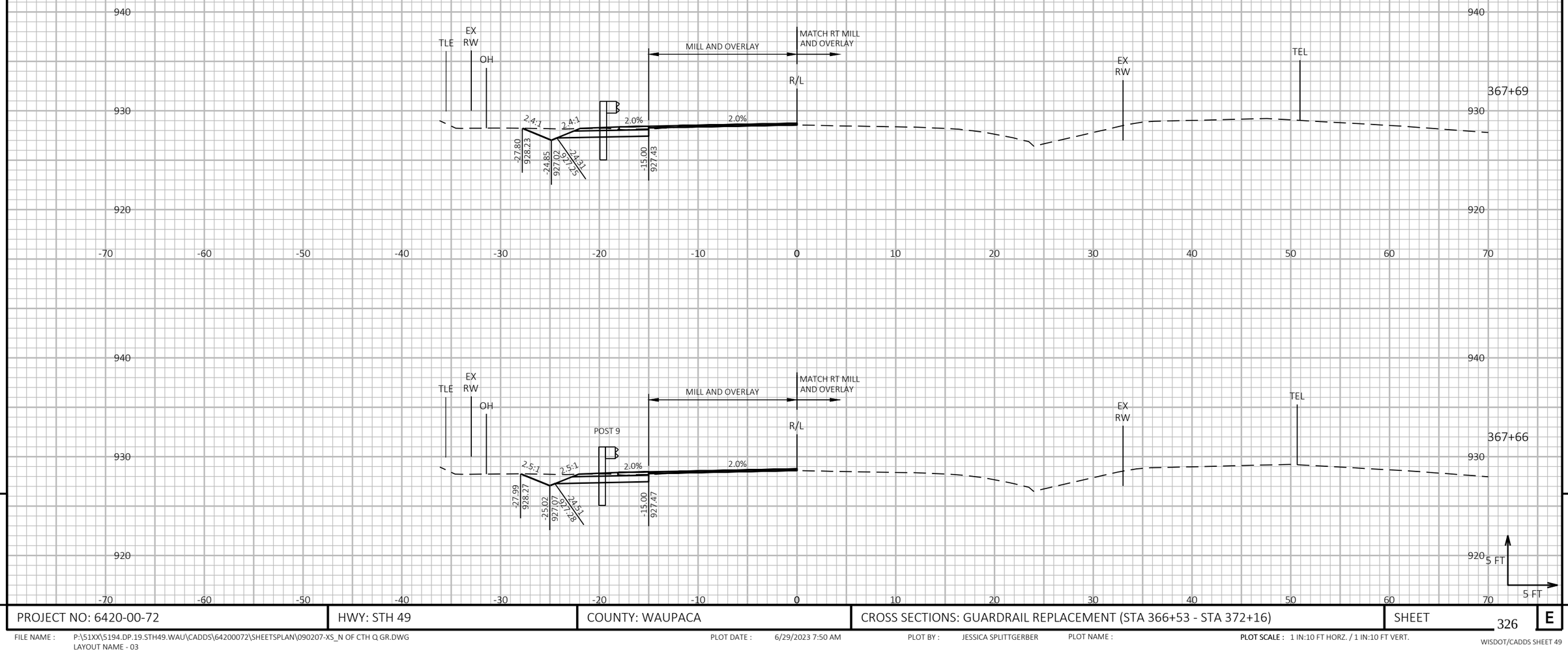
PLOT DATE : 6/29/2023 7:49 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49

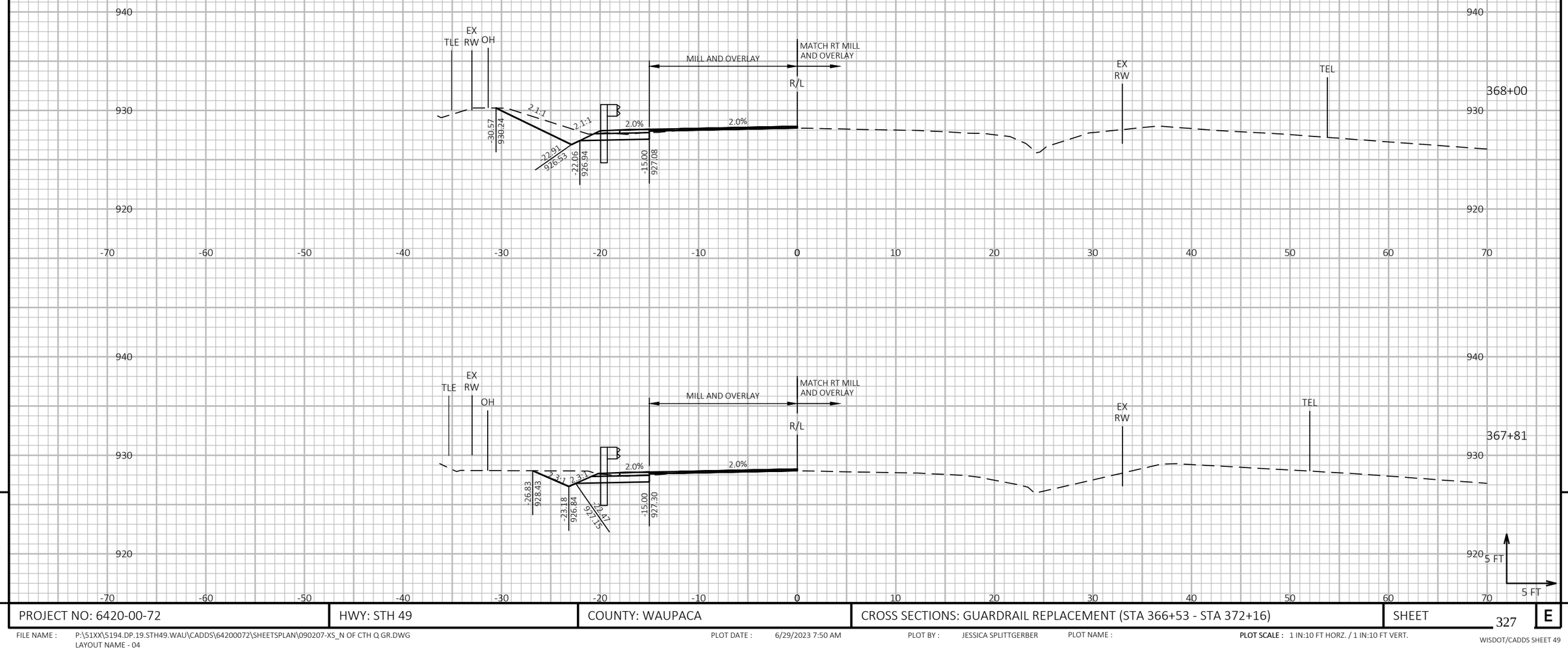


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 326	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:50 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

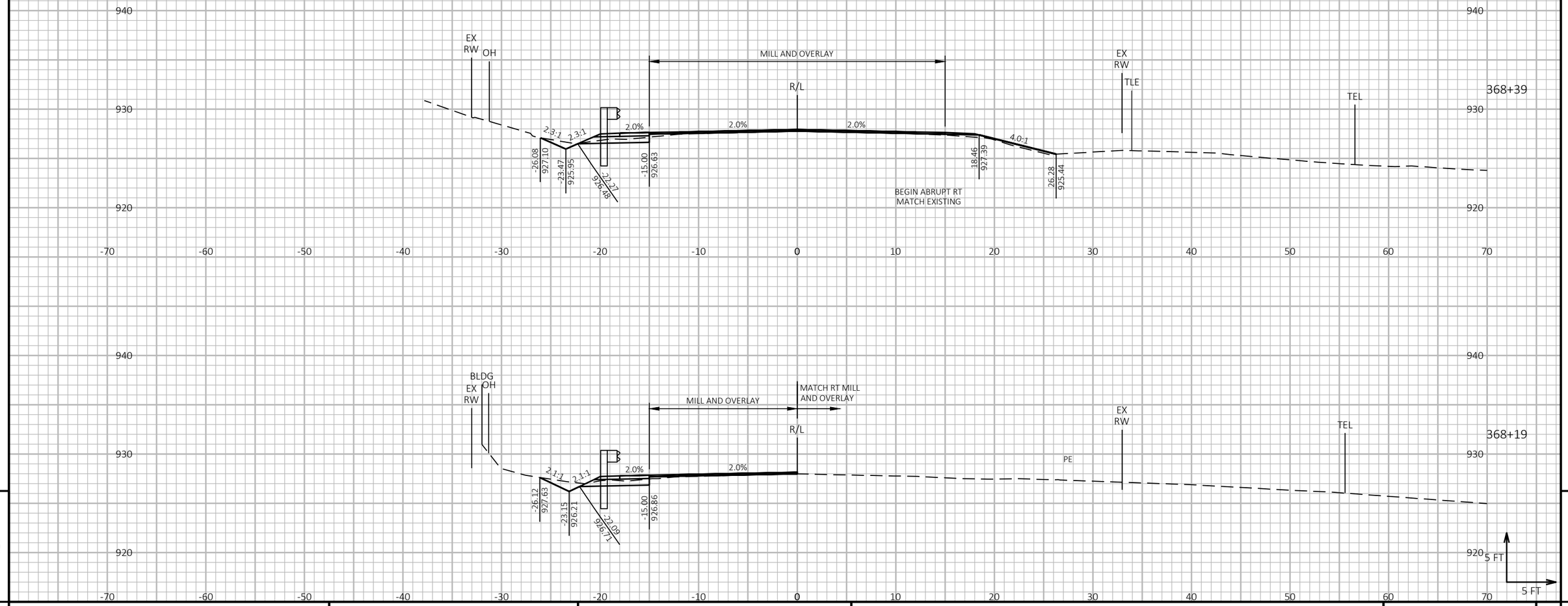


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 327	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 04

PLOT DATE : 6/29/2023 7:50 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 328	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 05

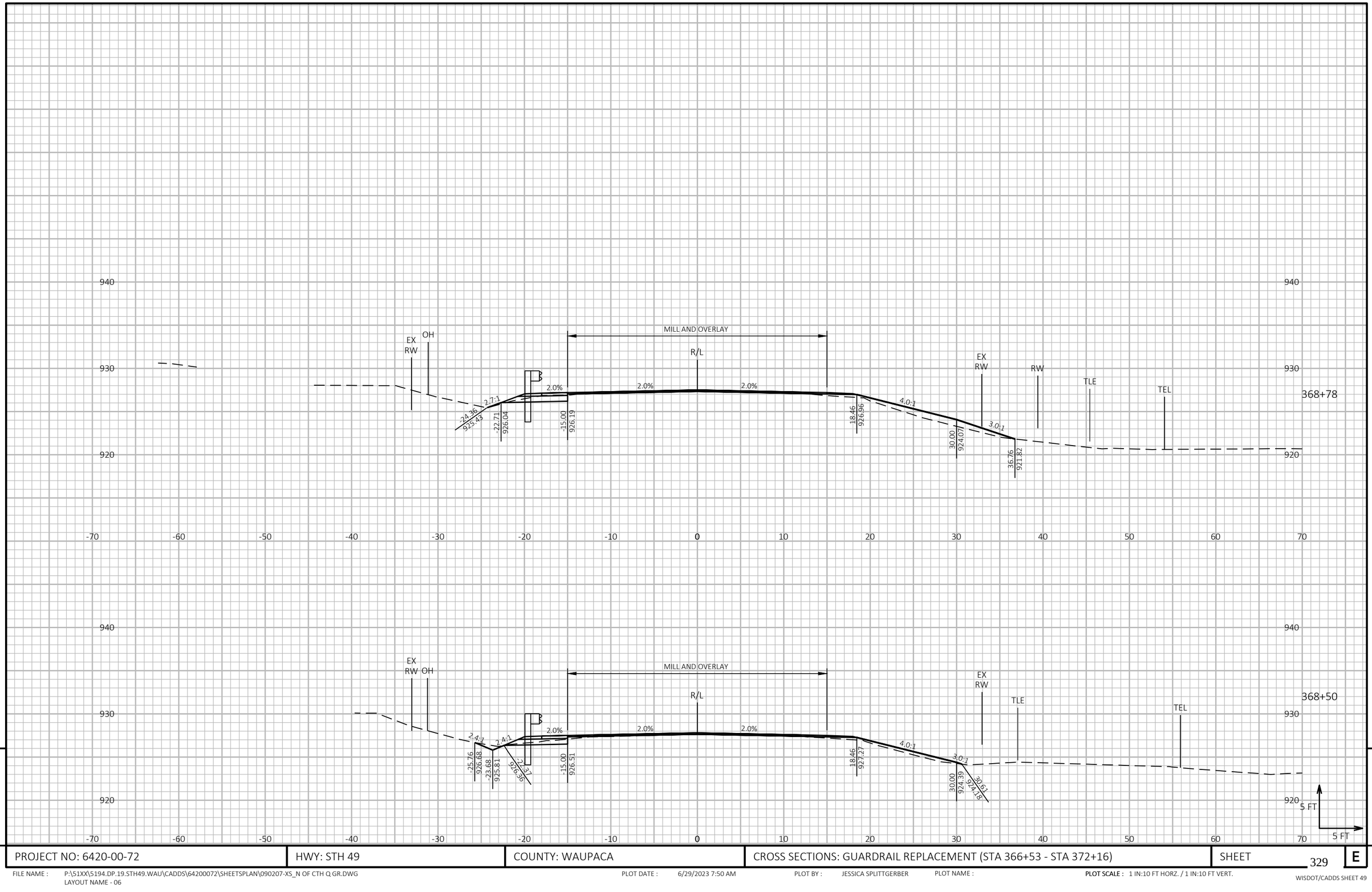
PLOT DATE : 6/29/2023 7:50 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49

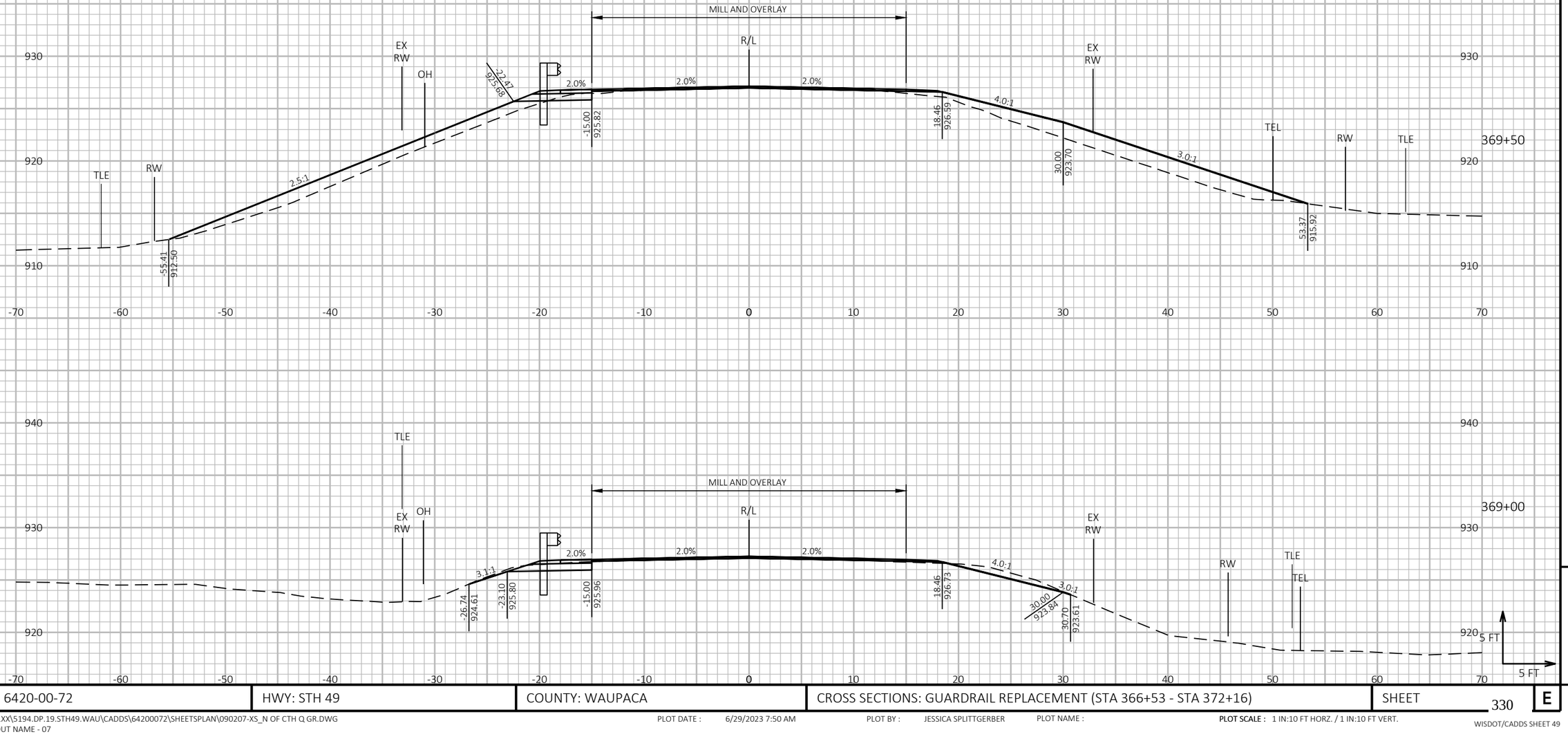


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 329	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 06

PLOT DATE : 6/29/2023 7:50 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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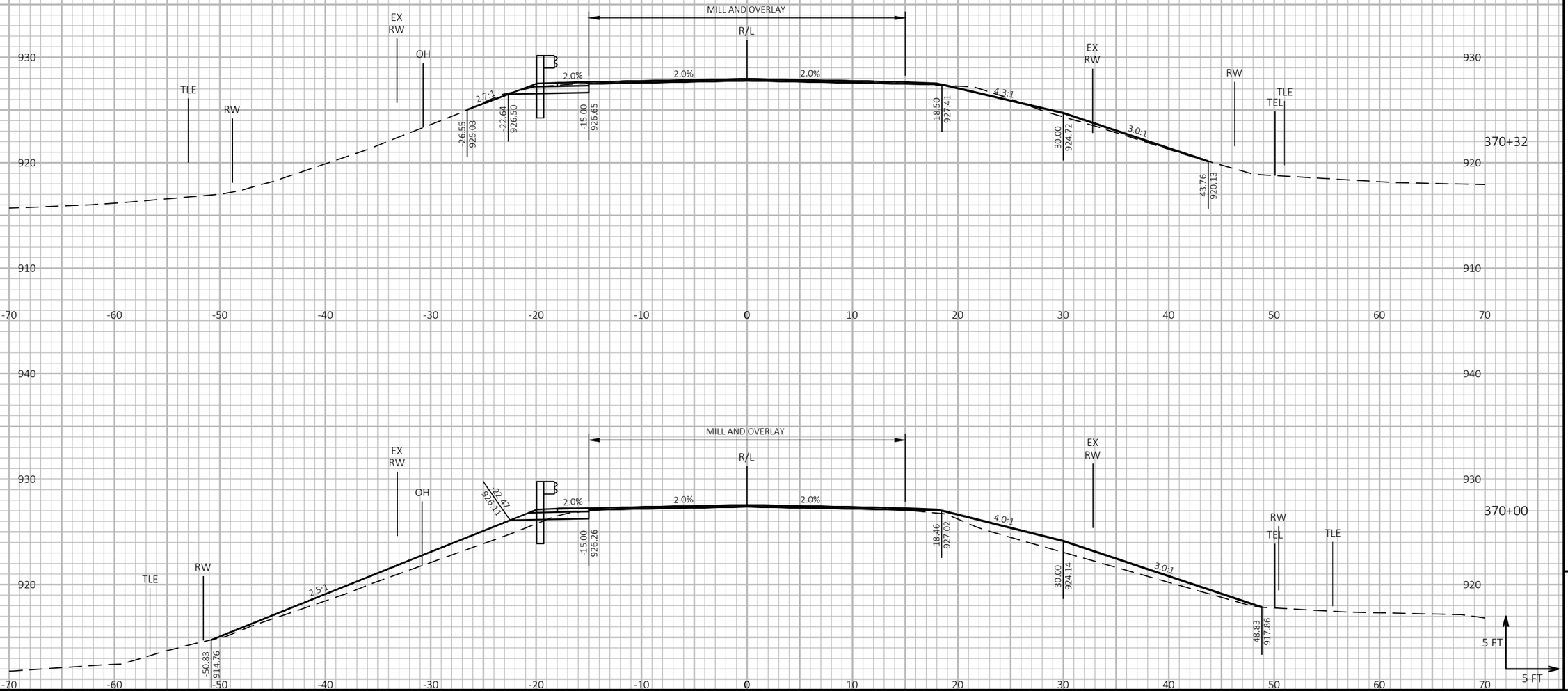
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 330	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 07

PLOT DATE : 6/29/2023 7:50 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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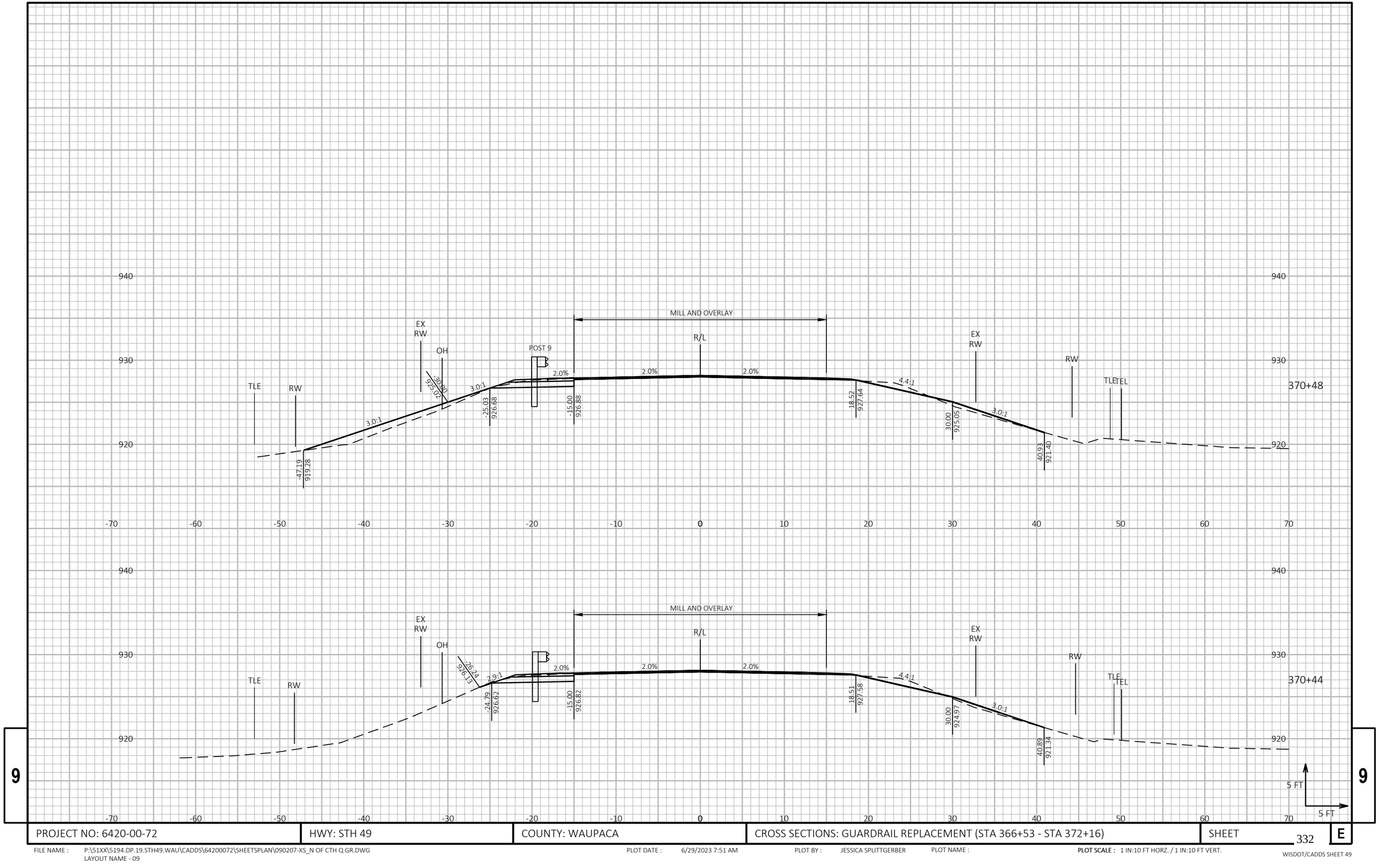
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 331	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 08

PLOT DATE : 6/29/2023 7:50 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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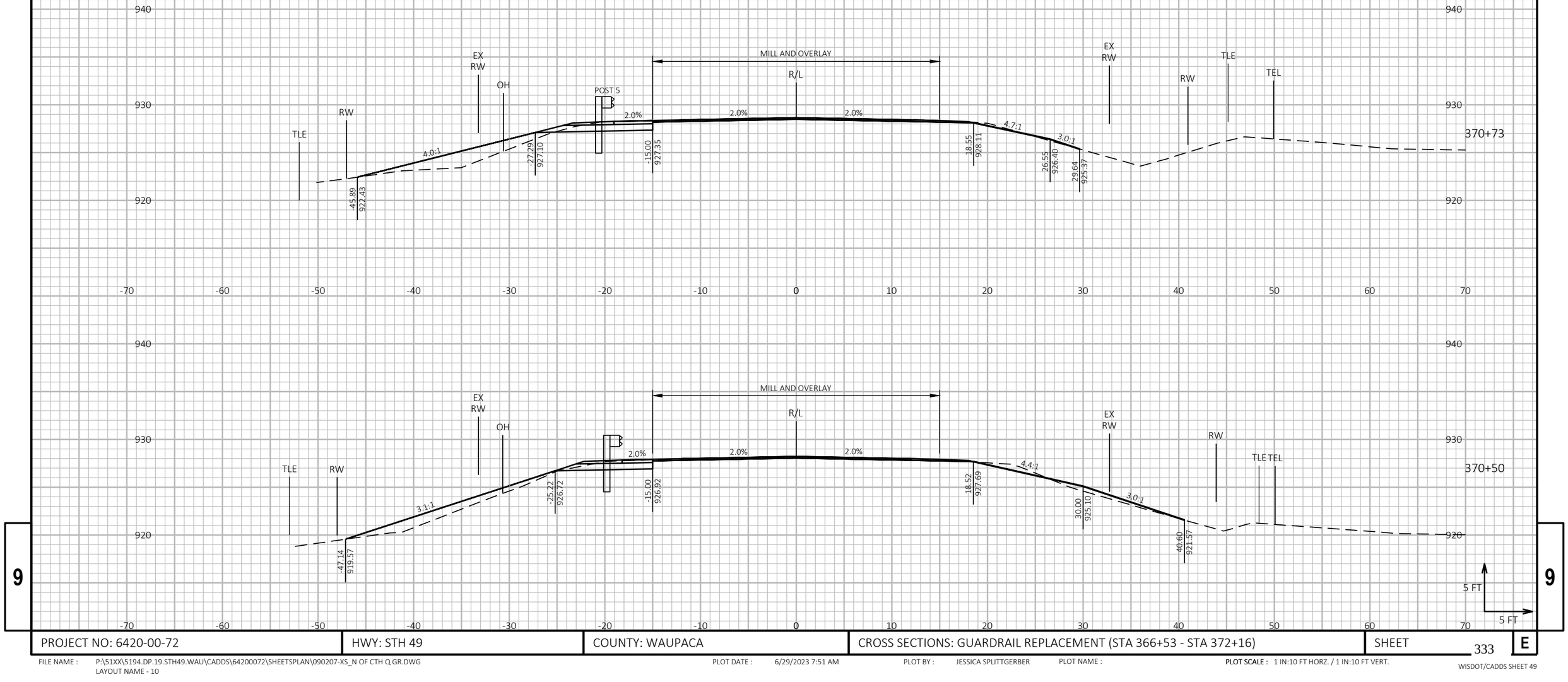
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 332	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 09

PLOT DATE : 6/29/2023 7:51 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

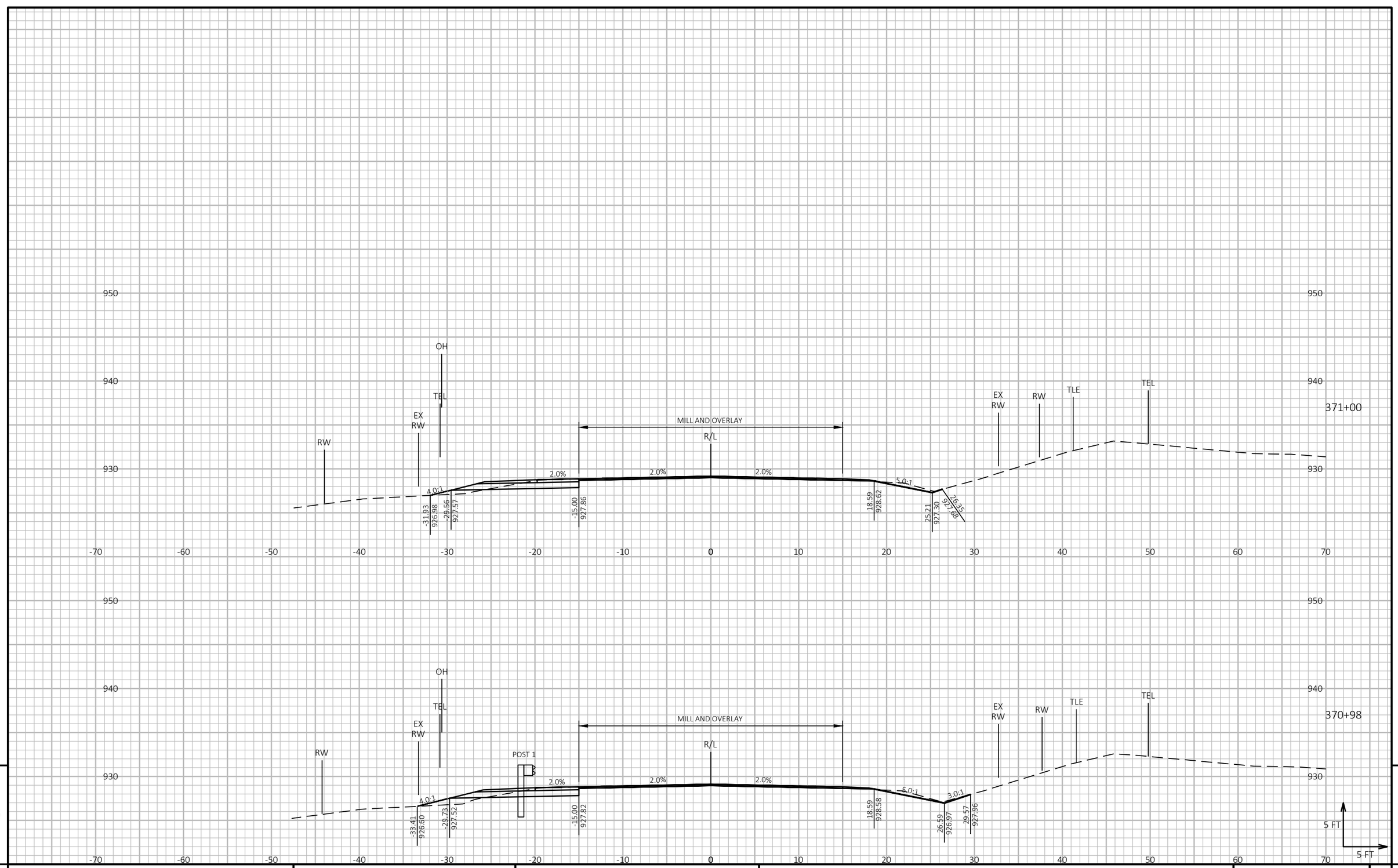


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 333	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 10

PLOT DATE : 6/29/2023 7:51 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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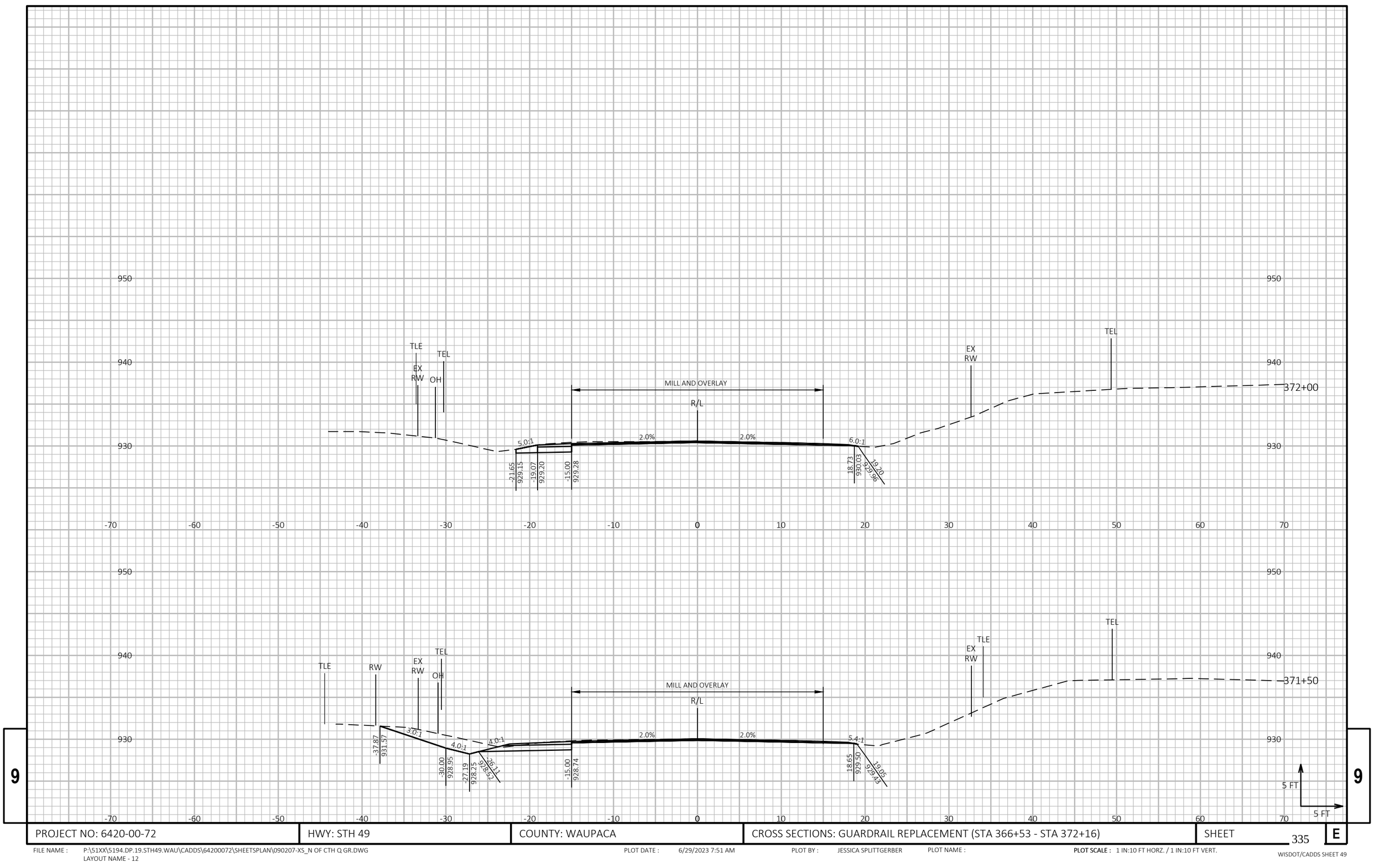
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 334	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 11

PLOT DATE : 6/29/2023 7:51 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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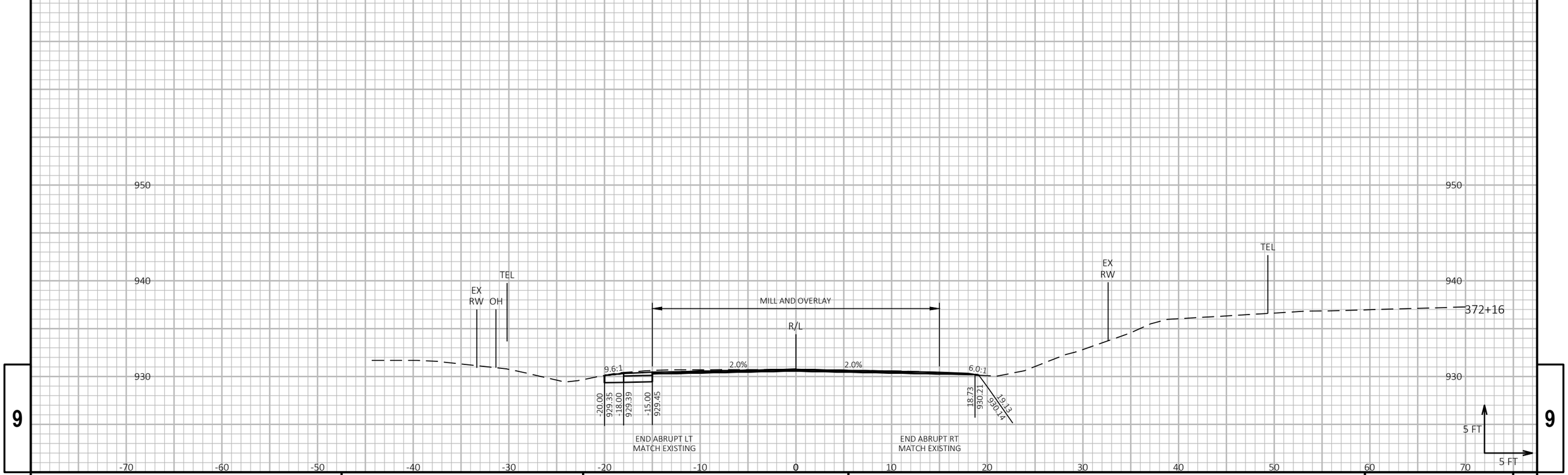
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 335	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 12

PLOT DATE : 6/29/2023 7:51 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 366+53 - STA 372+16)	SHEET 336	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090207-XS_N OF CTH Q GR.DWG
LAYOUT NAME - 13

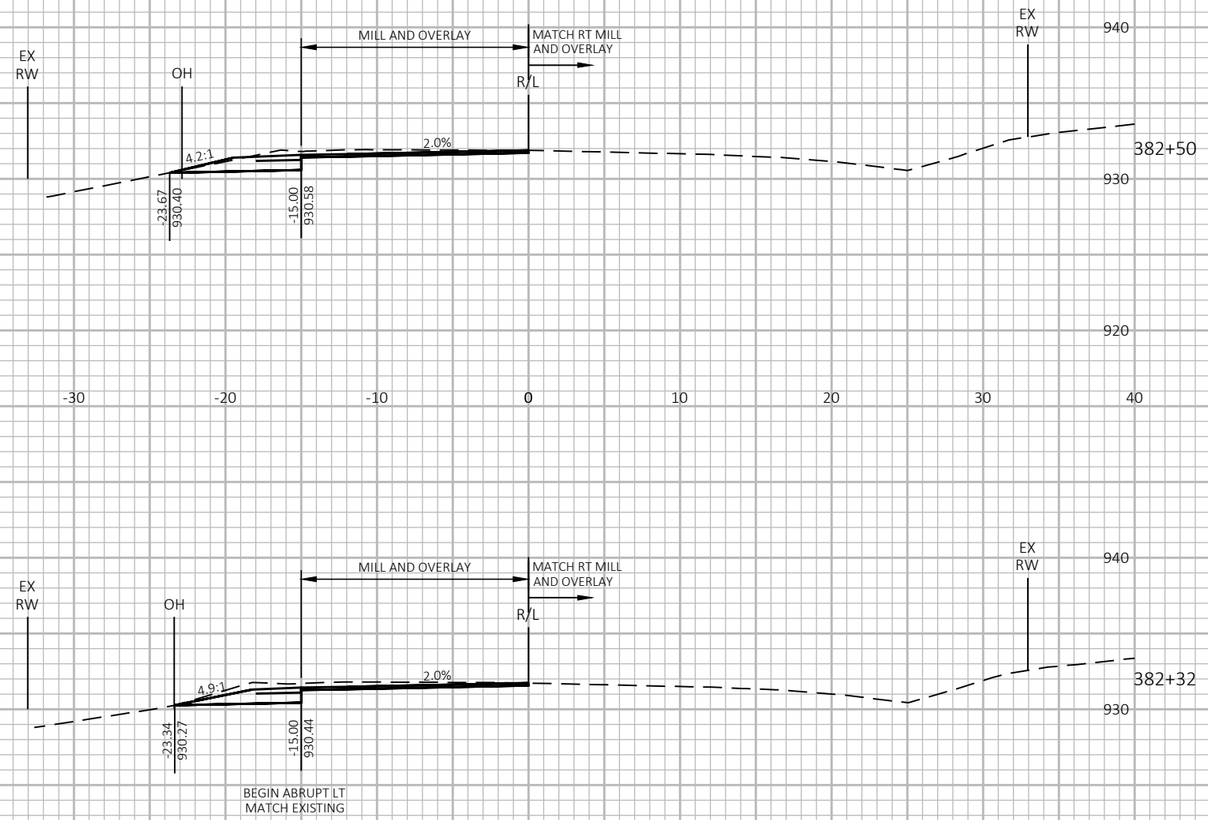
PLOT DATE : 6/29/2023 7:51 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



940 930 920

-100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40

940 930 920

-100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40

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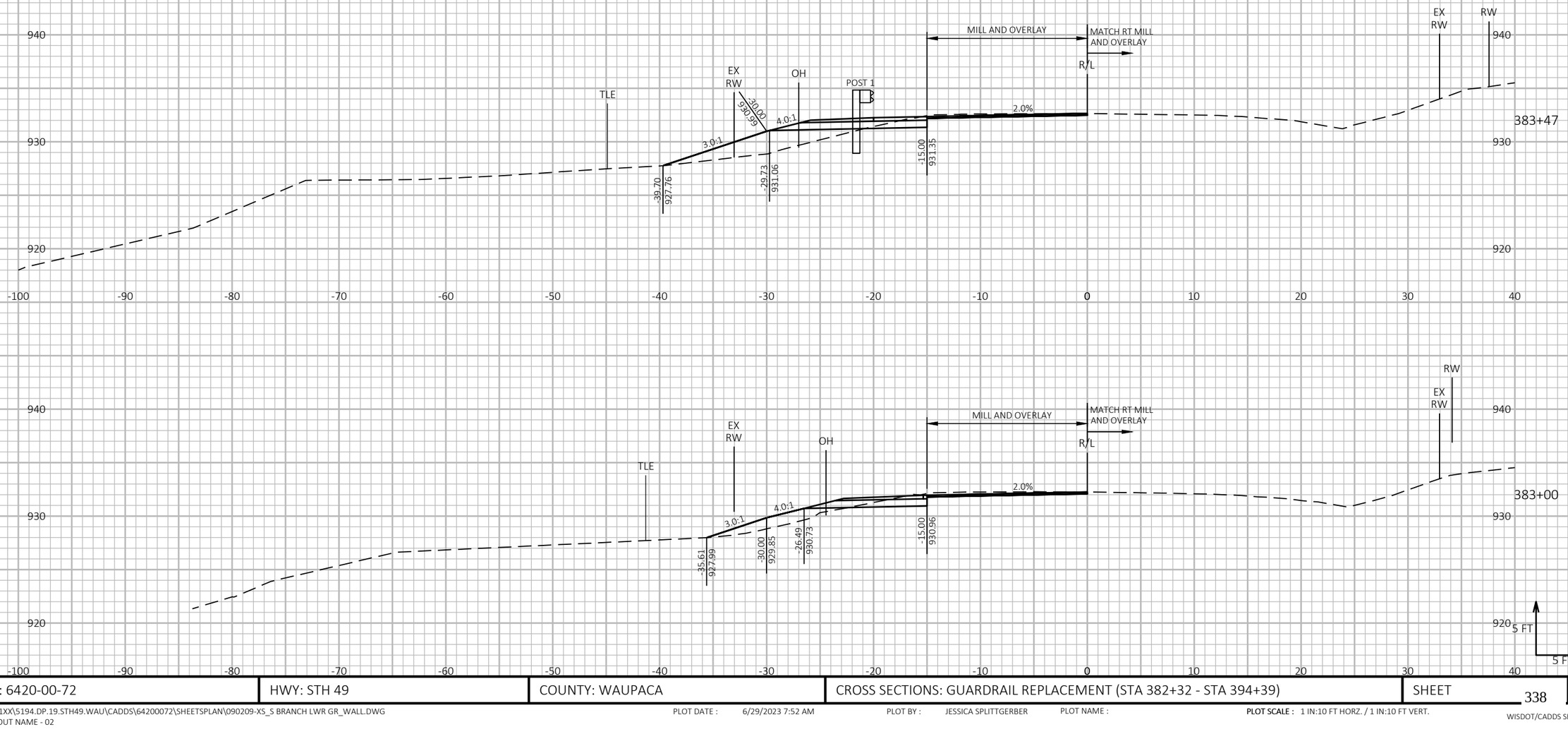
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 337	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:52 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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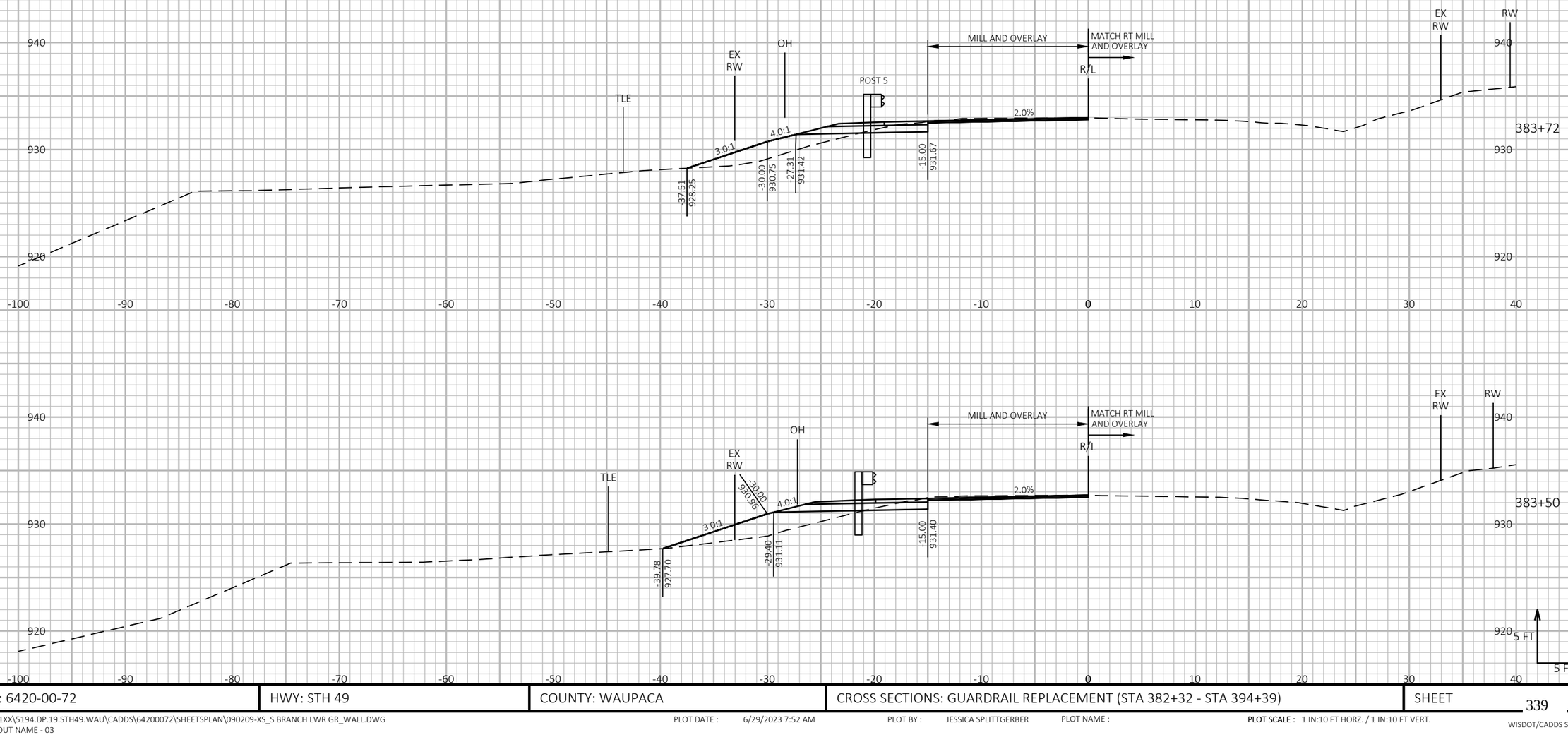
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 338	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:52 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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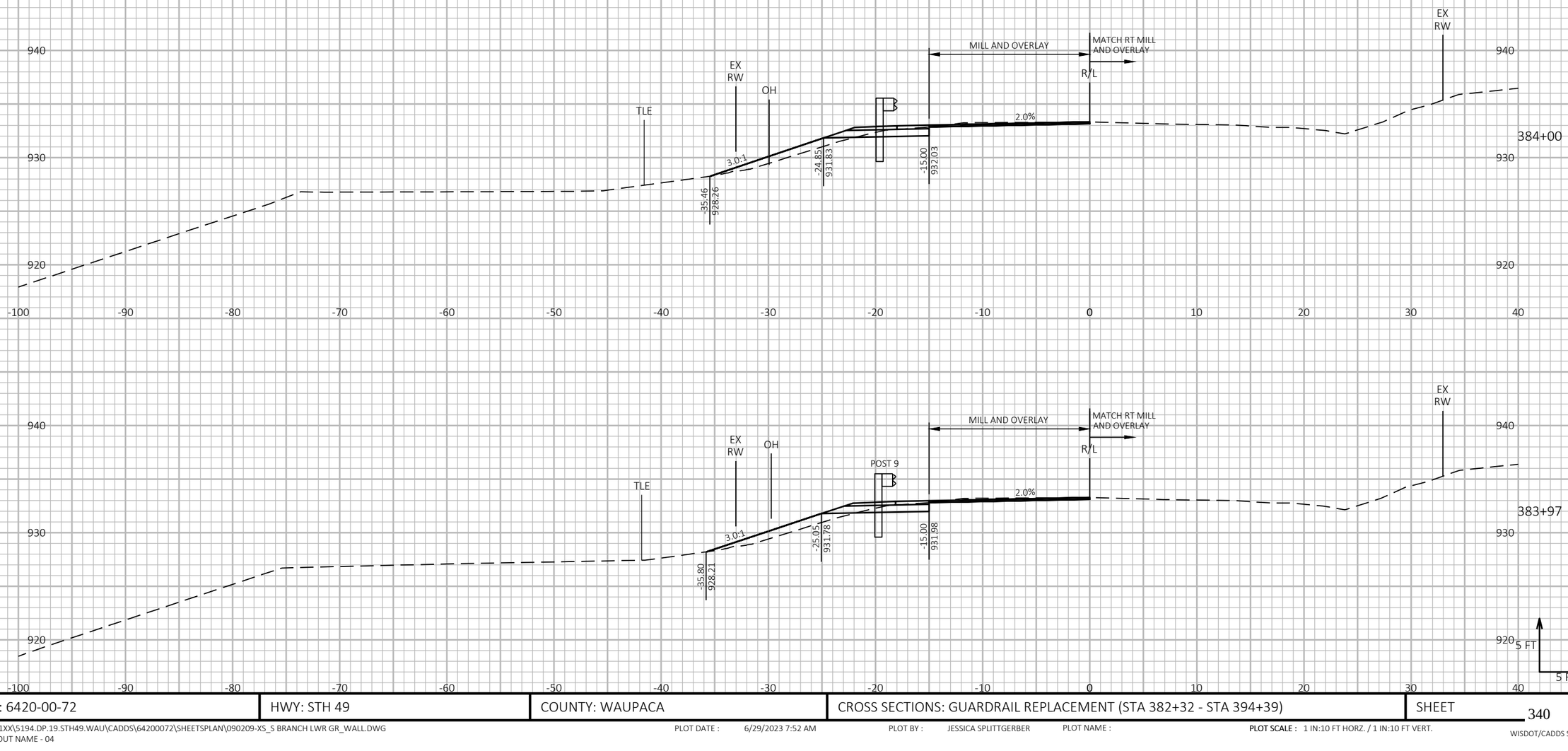
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 339	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:52 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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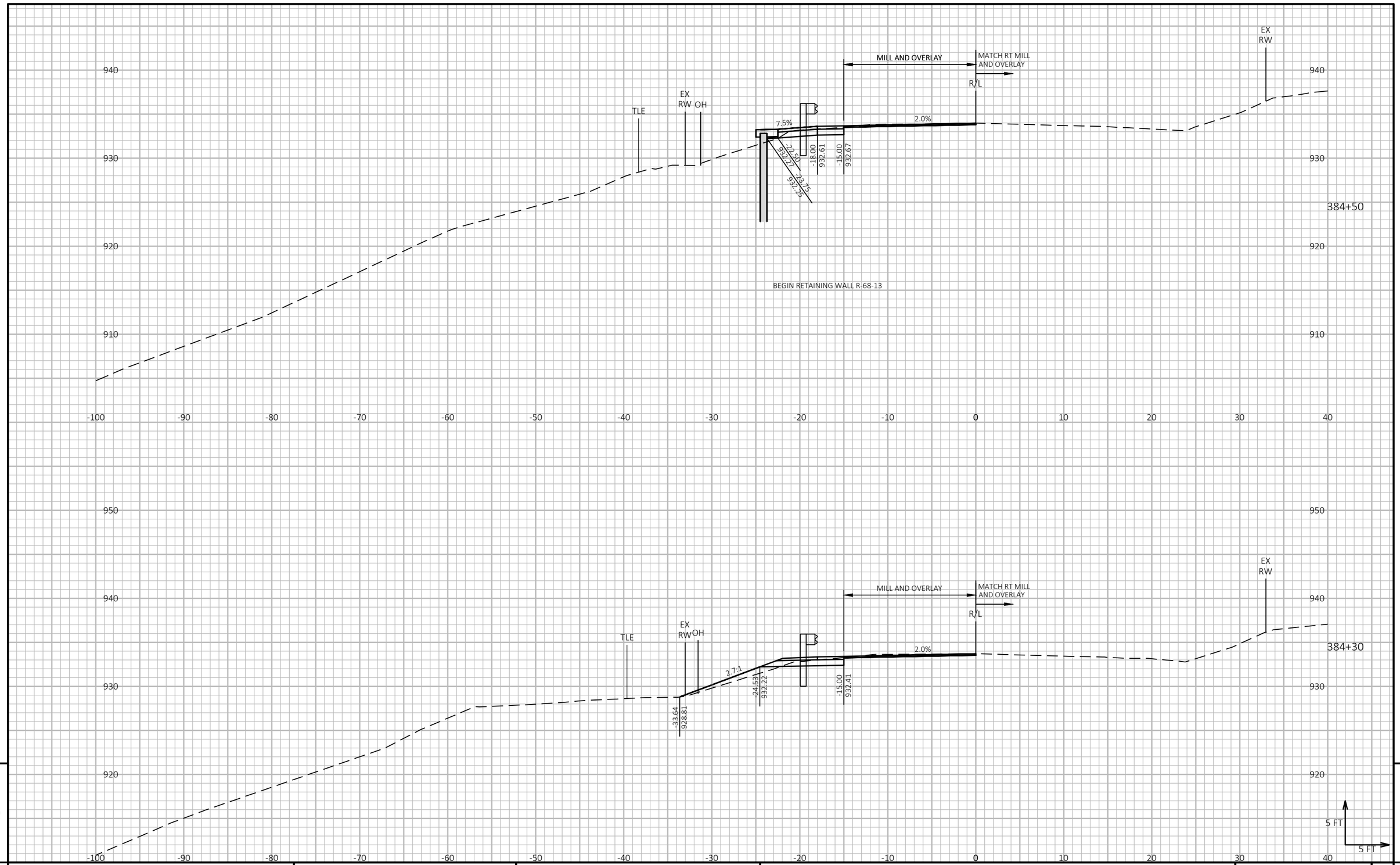
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 340	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 04

PLOT DATE : 6/29/2023 7:52 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

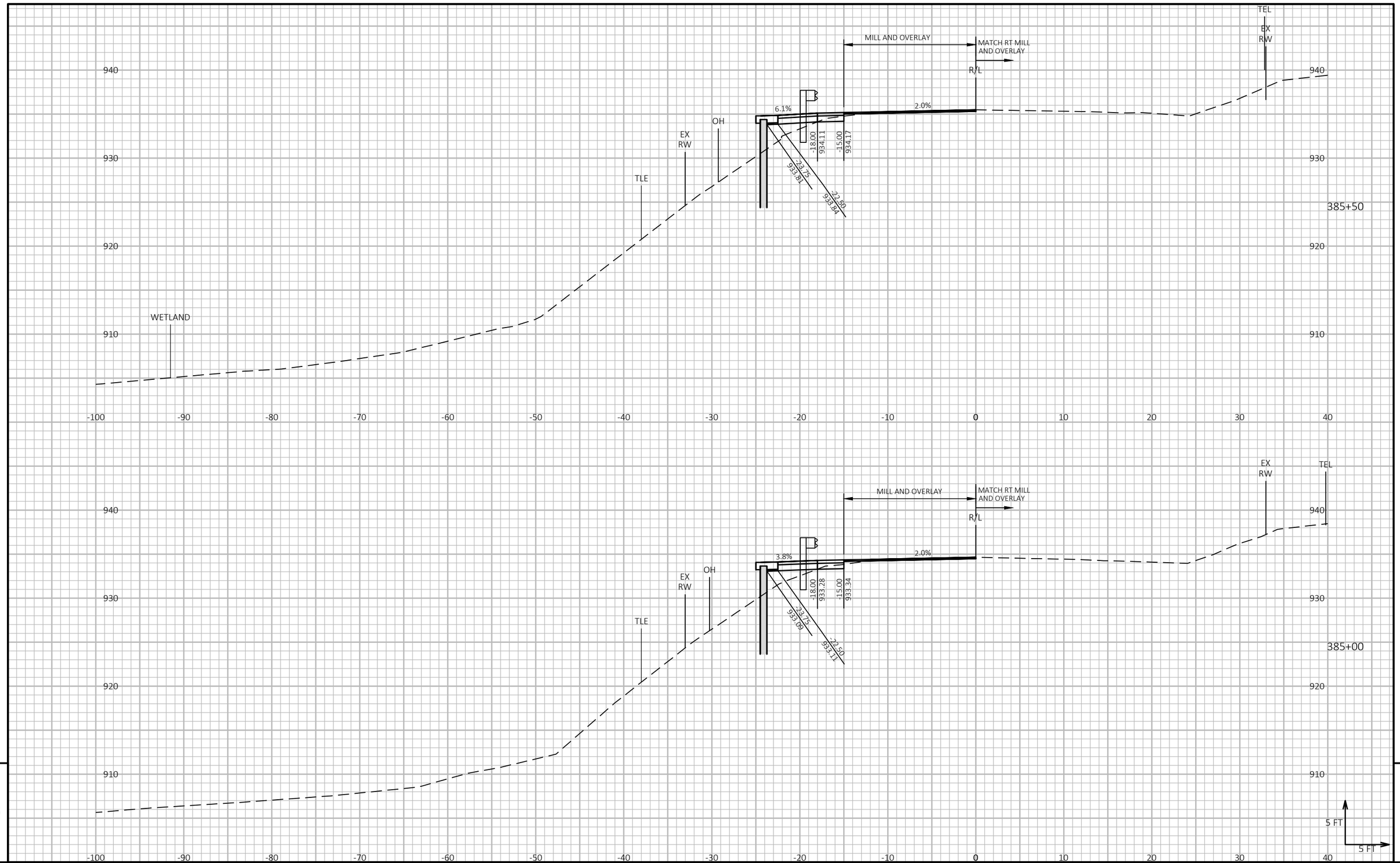


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 341 E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 05

PLOT DATE : 6/29/2023 7:52 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

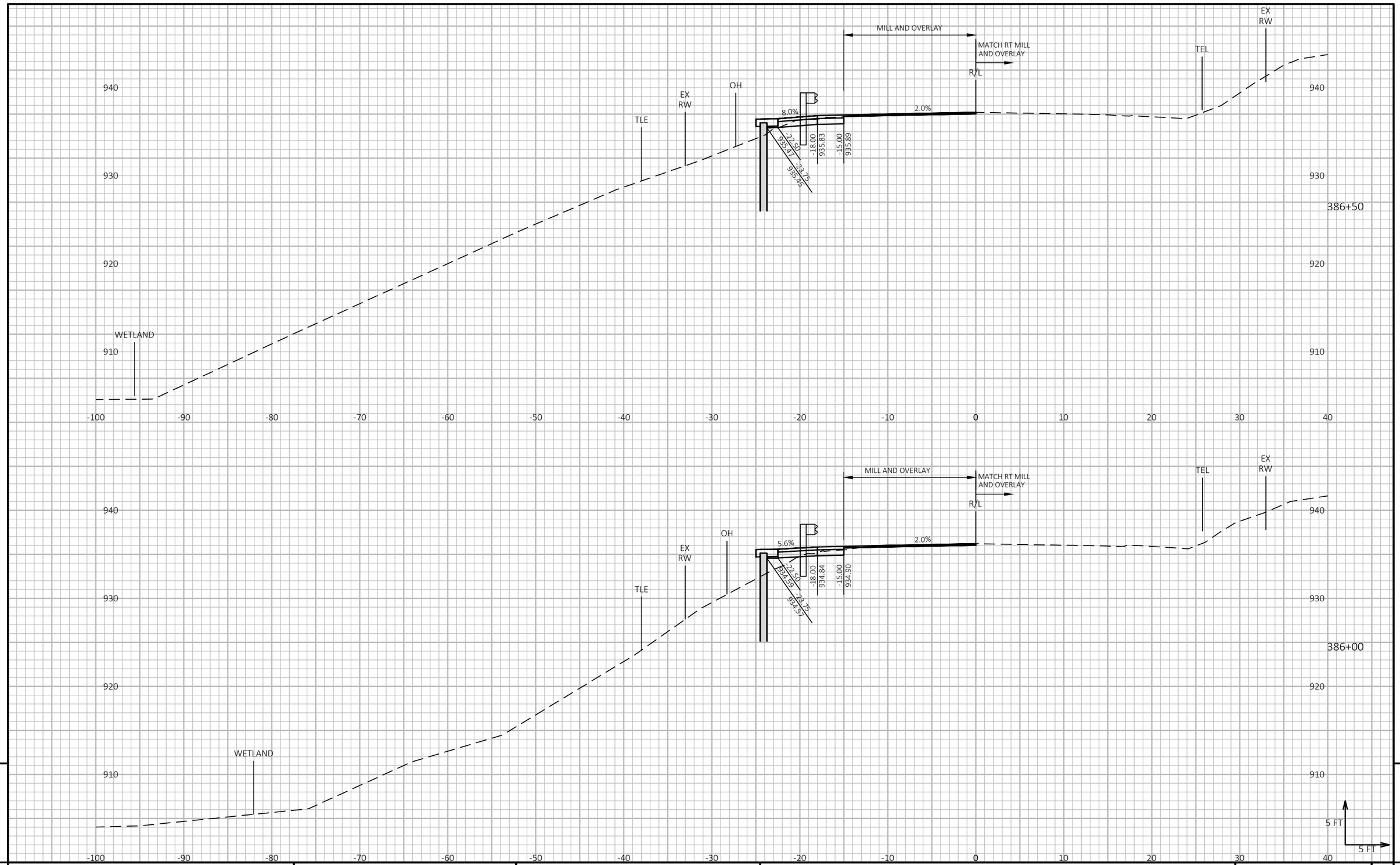


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 342	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 06

PLOT DATE : 6/29/2023 7:52 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 343	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 07

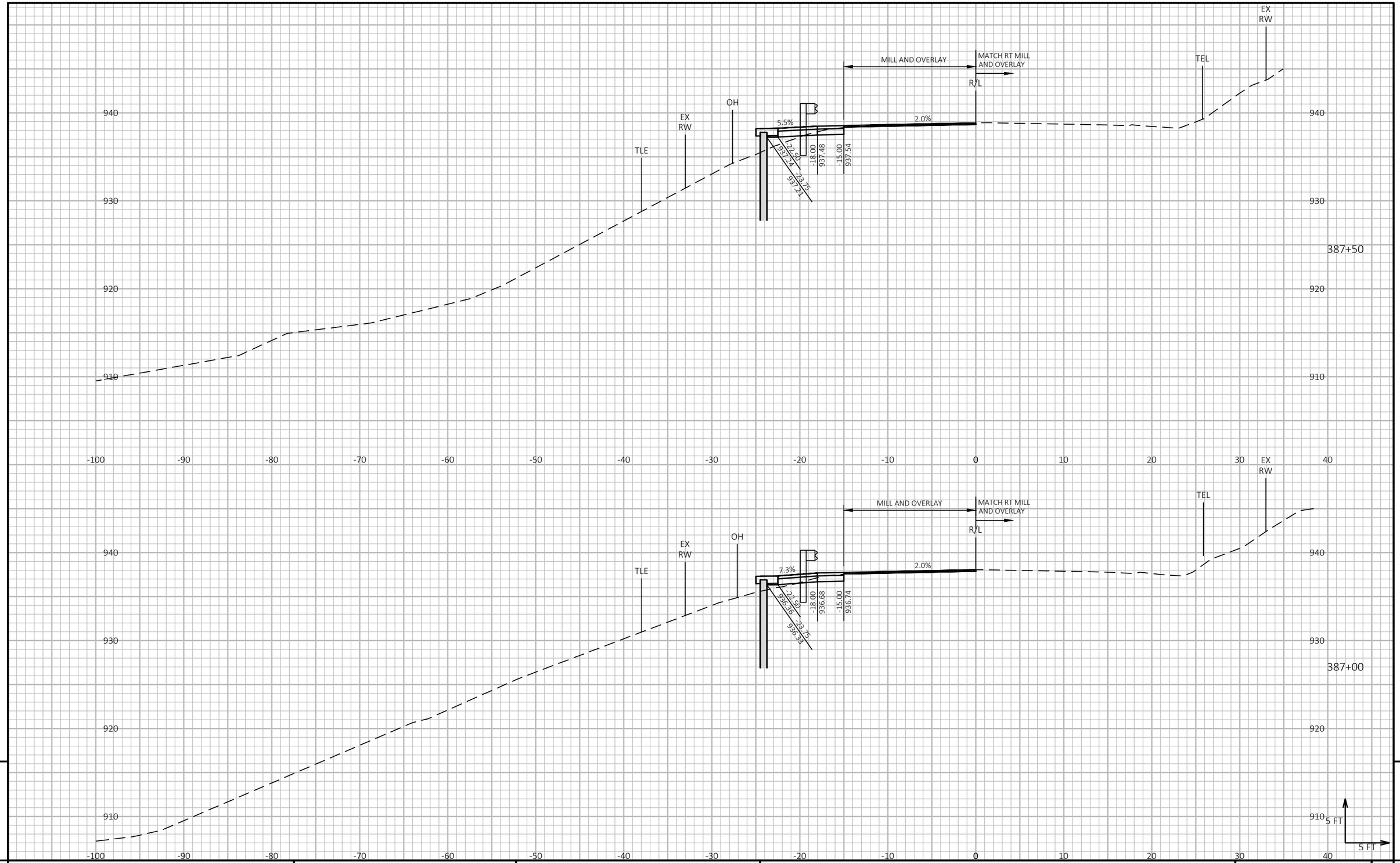
PLOT DATE : 6/29/2023 7:53 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 344	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 08

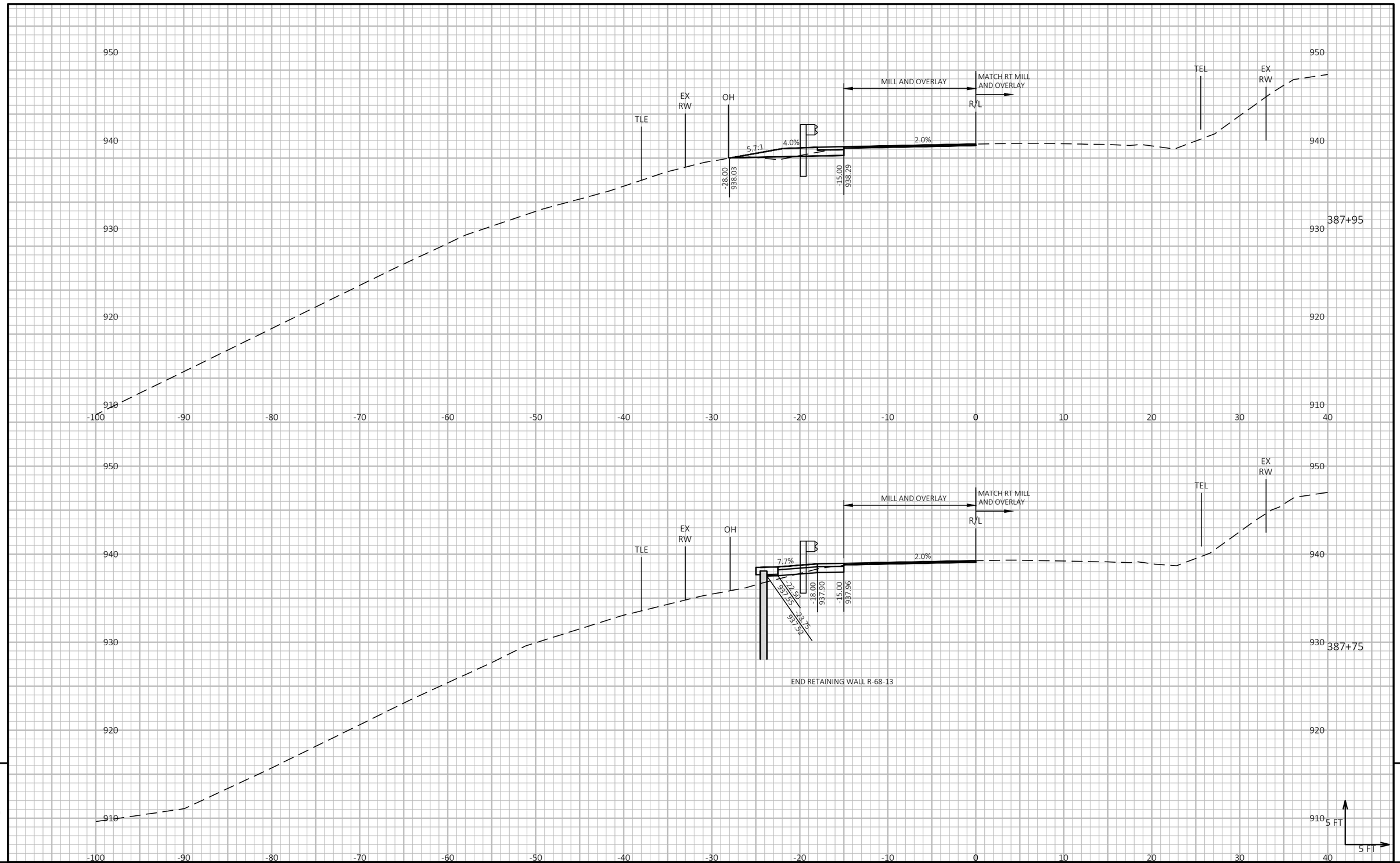
PLOT DATE : 6/29/2023 7:53 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 345	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 09

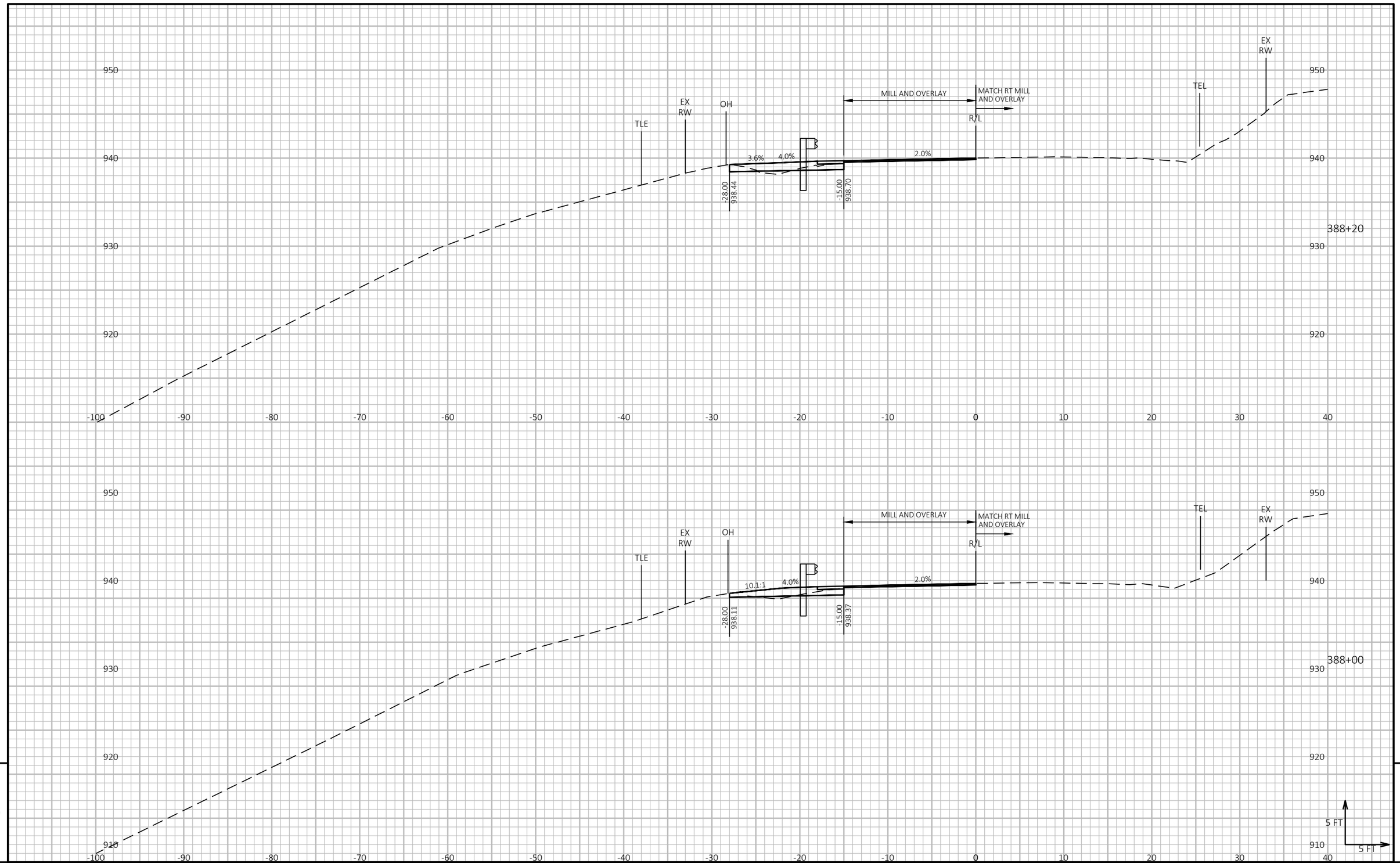
PLOT DATE : 6/29/2023 7:53 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 346	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 10

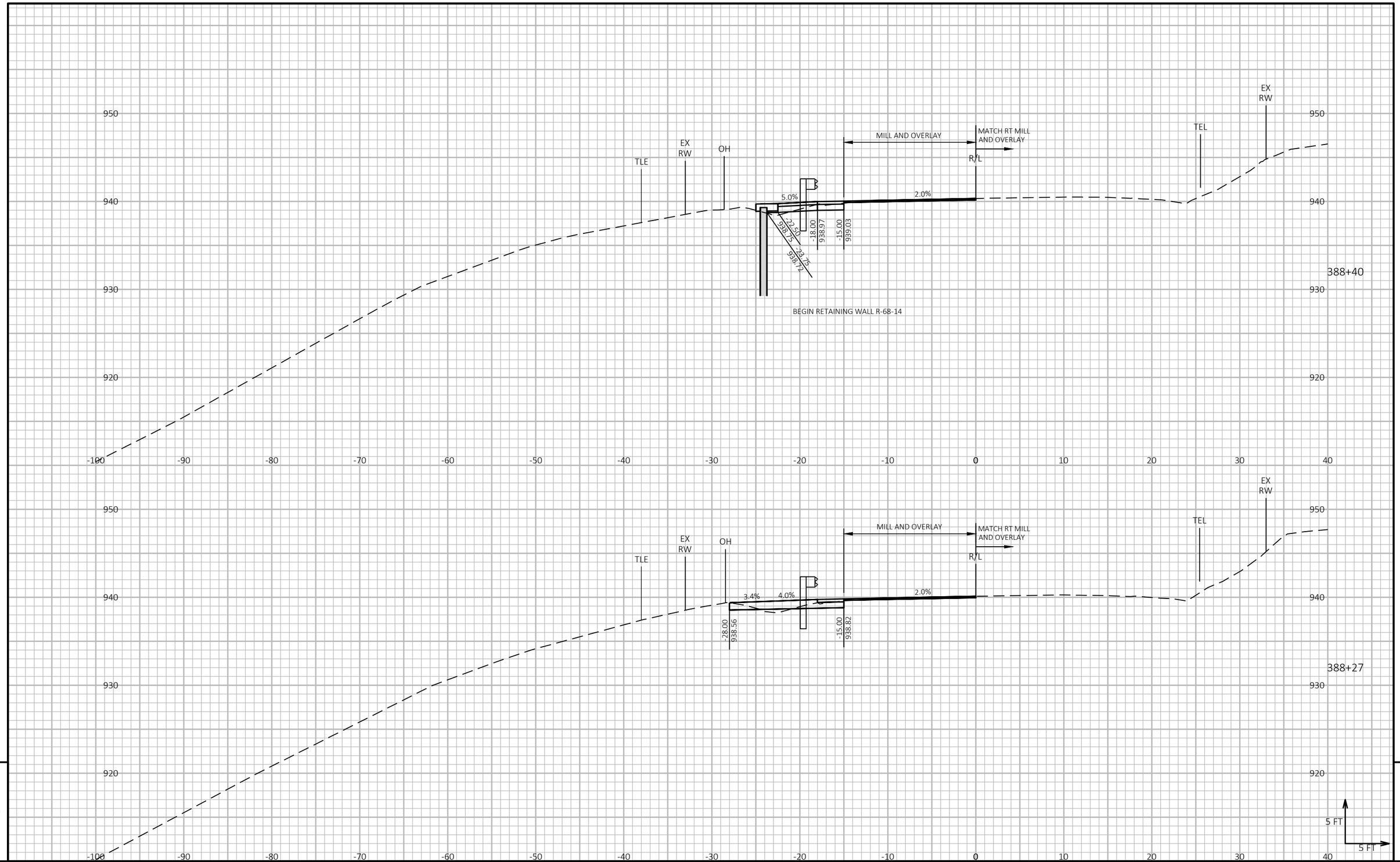
PLOT DATE : 6/29/2023 7:53 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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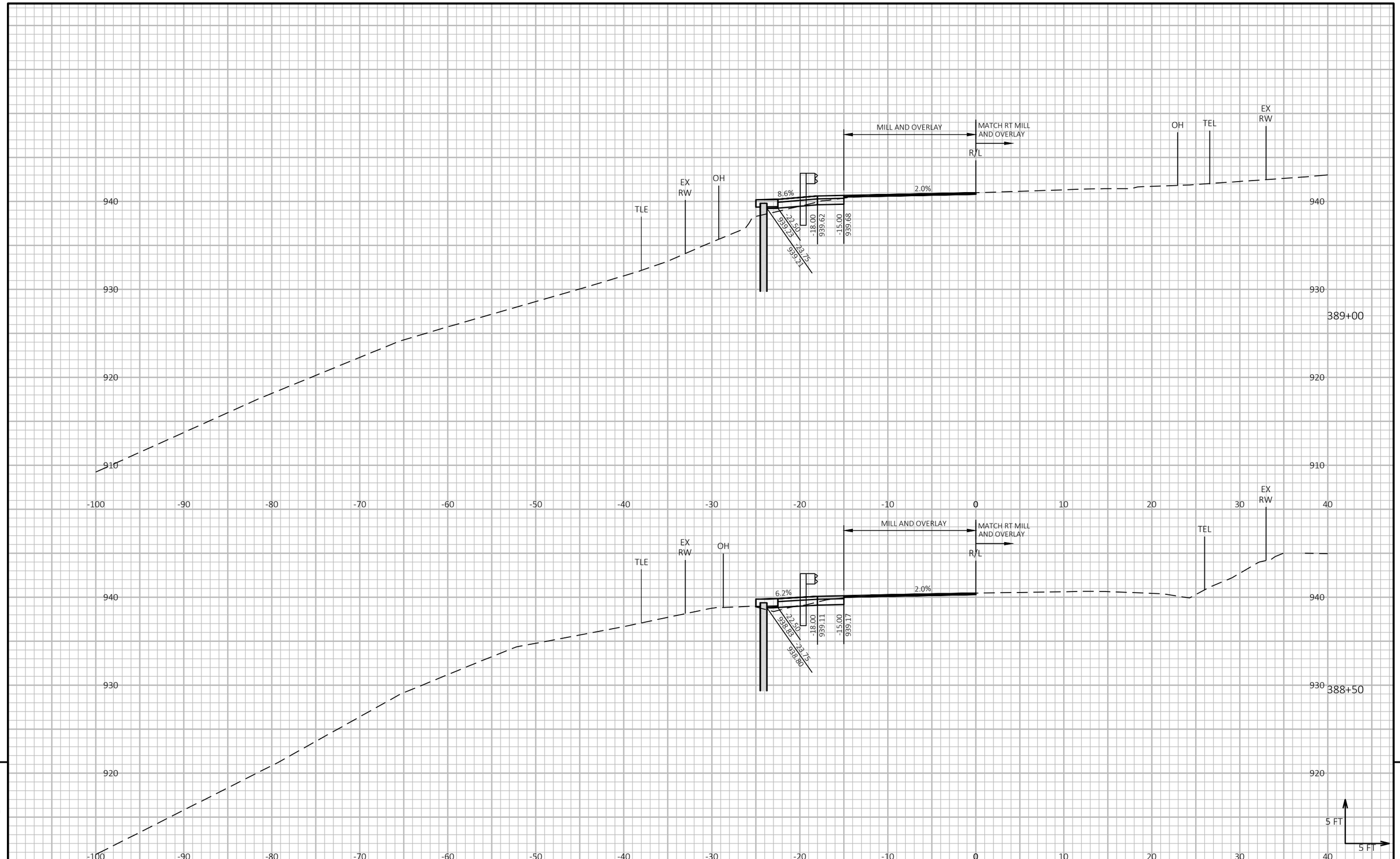
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 347	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 11

PLOT DATE : 6/29/2023 7:53 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

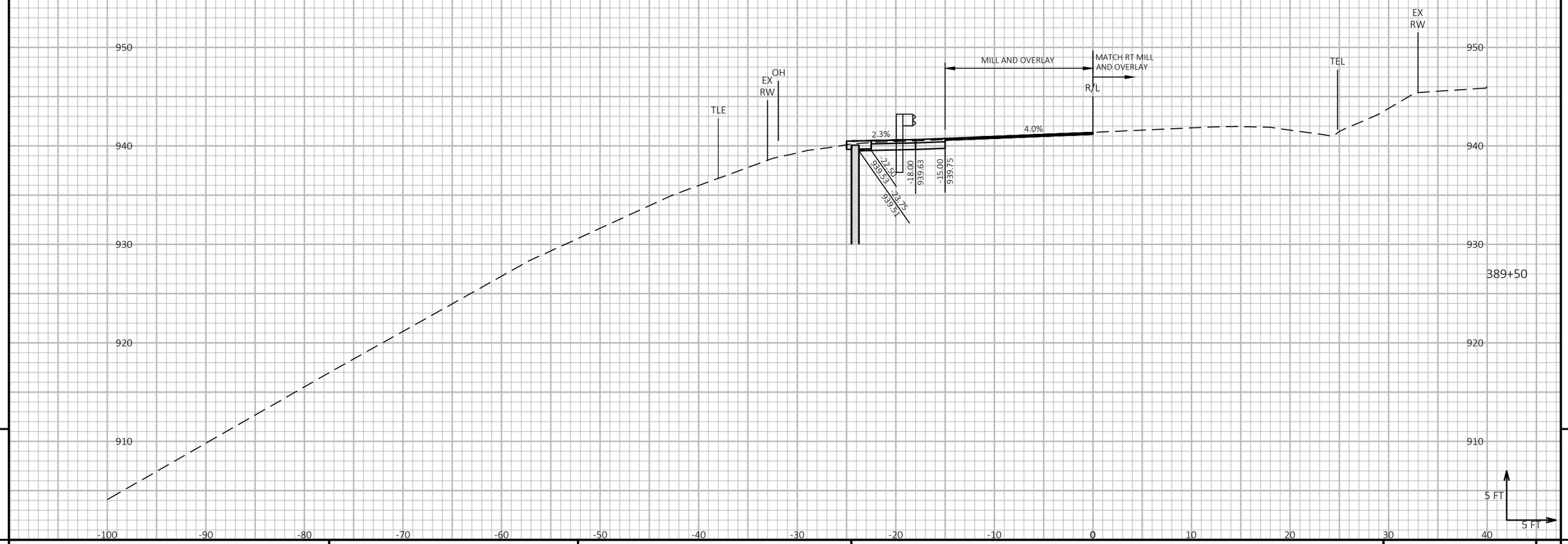


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 348	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 12

PLOT DATE : 6/29/2023 7:53 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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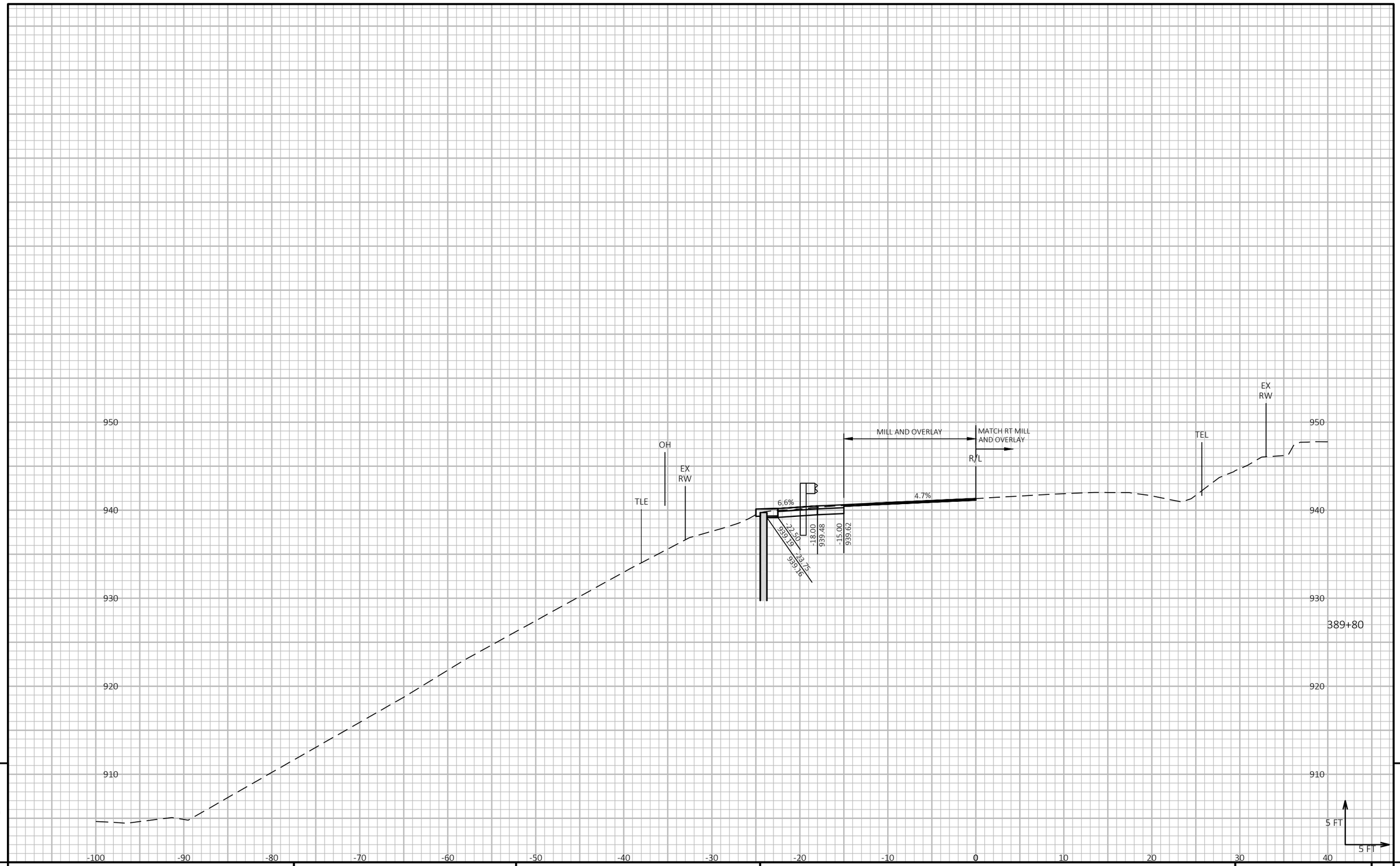
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 349	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 13

PLOT DATE : 6/29/2023 7:54 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49



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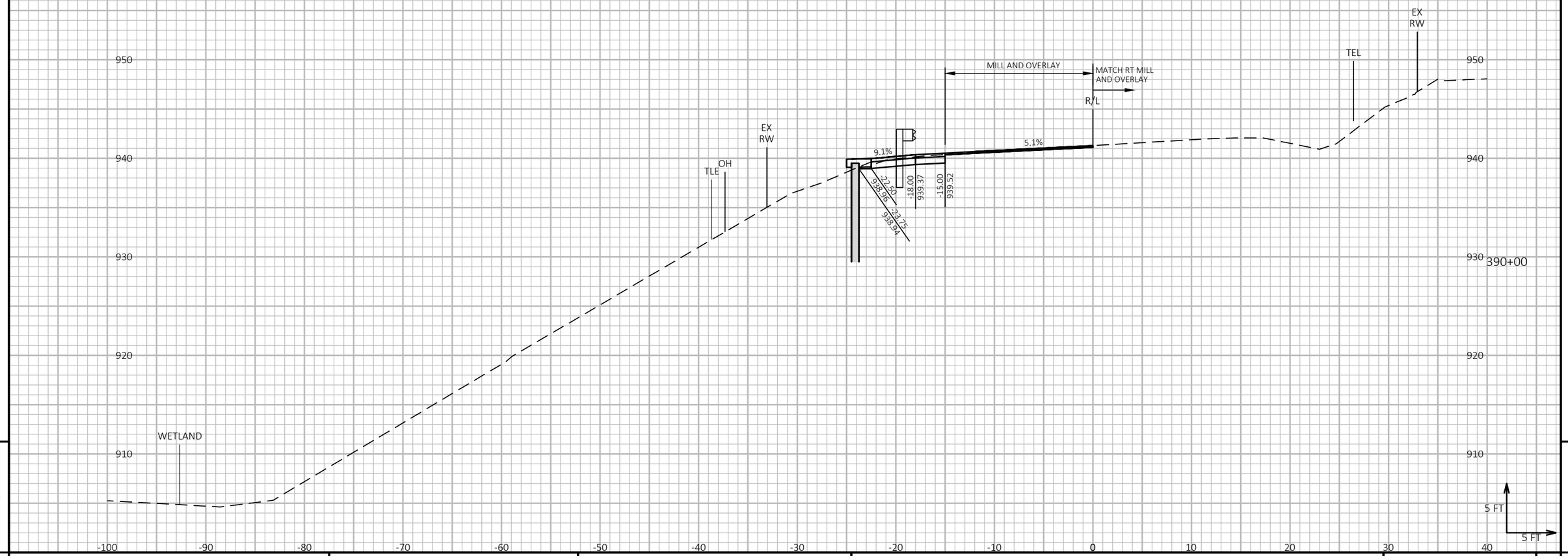
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 350	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 14

PLOT DATE : 6/29/2023 7:54 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49



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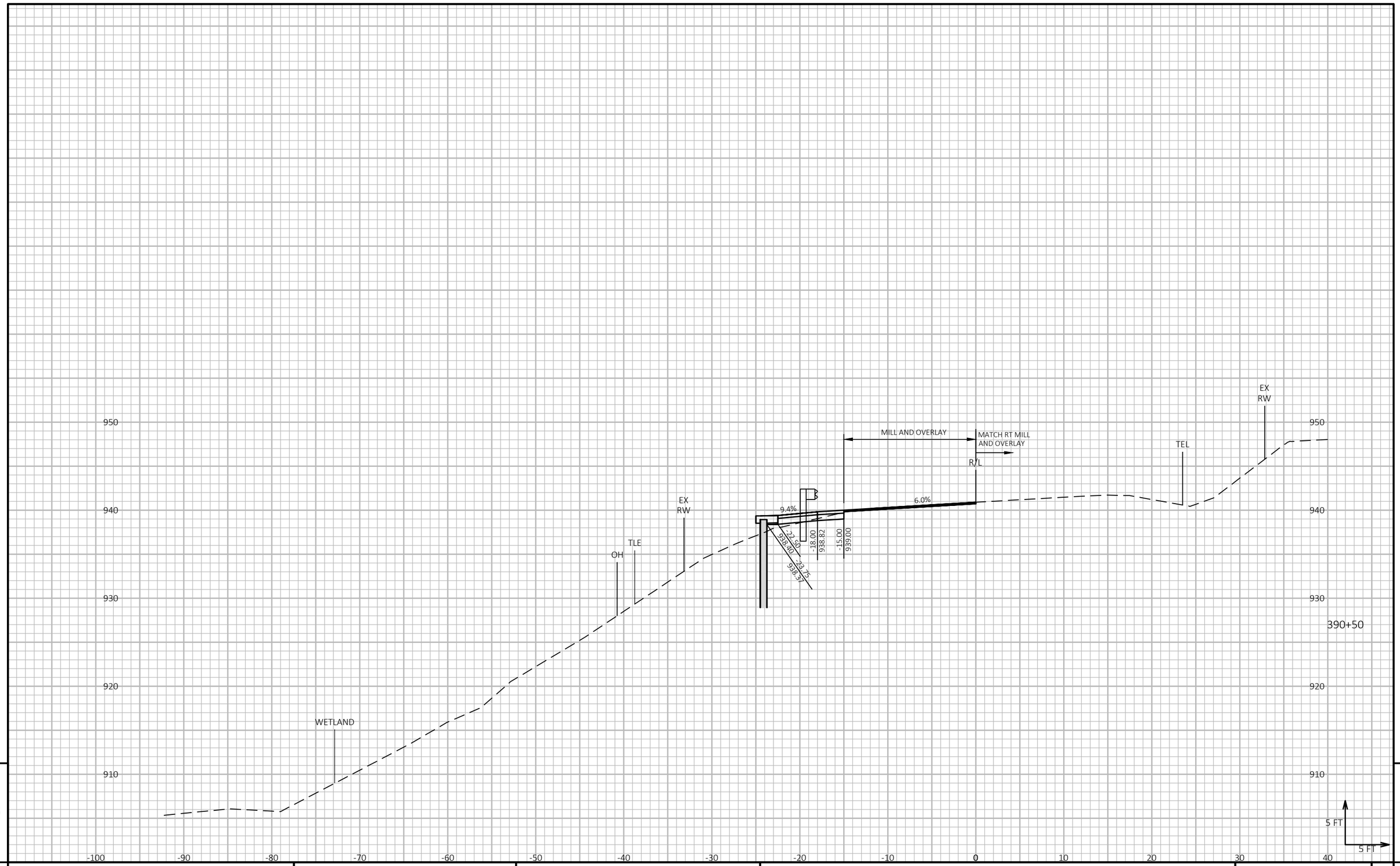
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 351	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 15

PLOT DATE : 6/29/2023 7:54 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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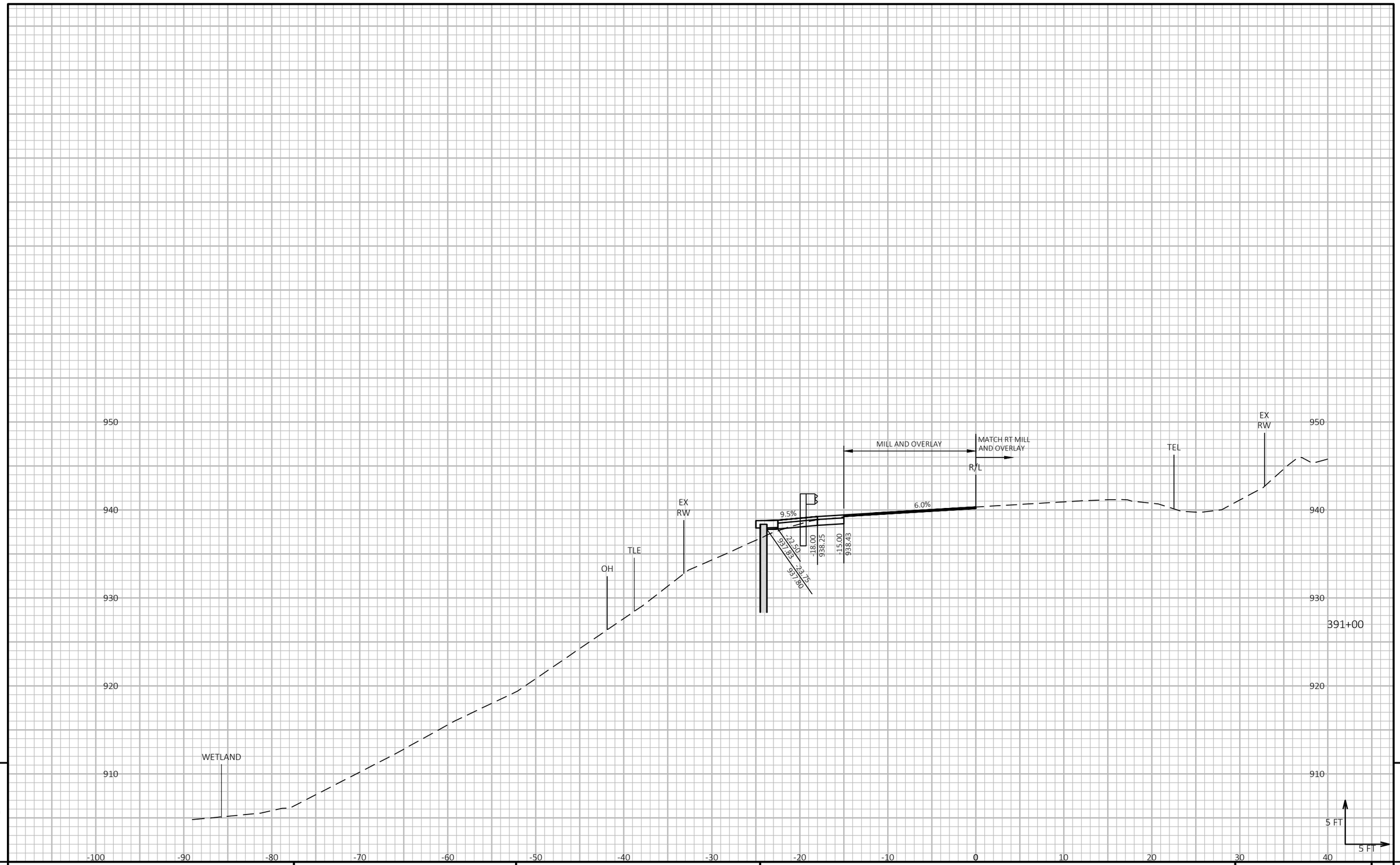
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 352	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 16

PLOT DATE : 6/29/2023 7:54 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

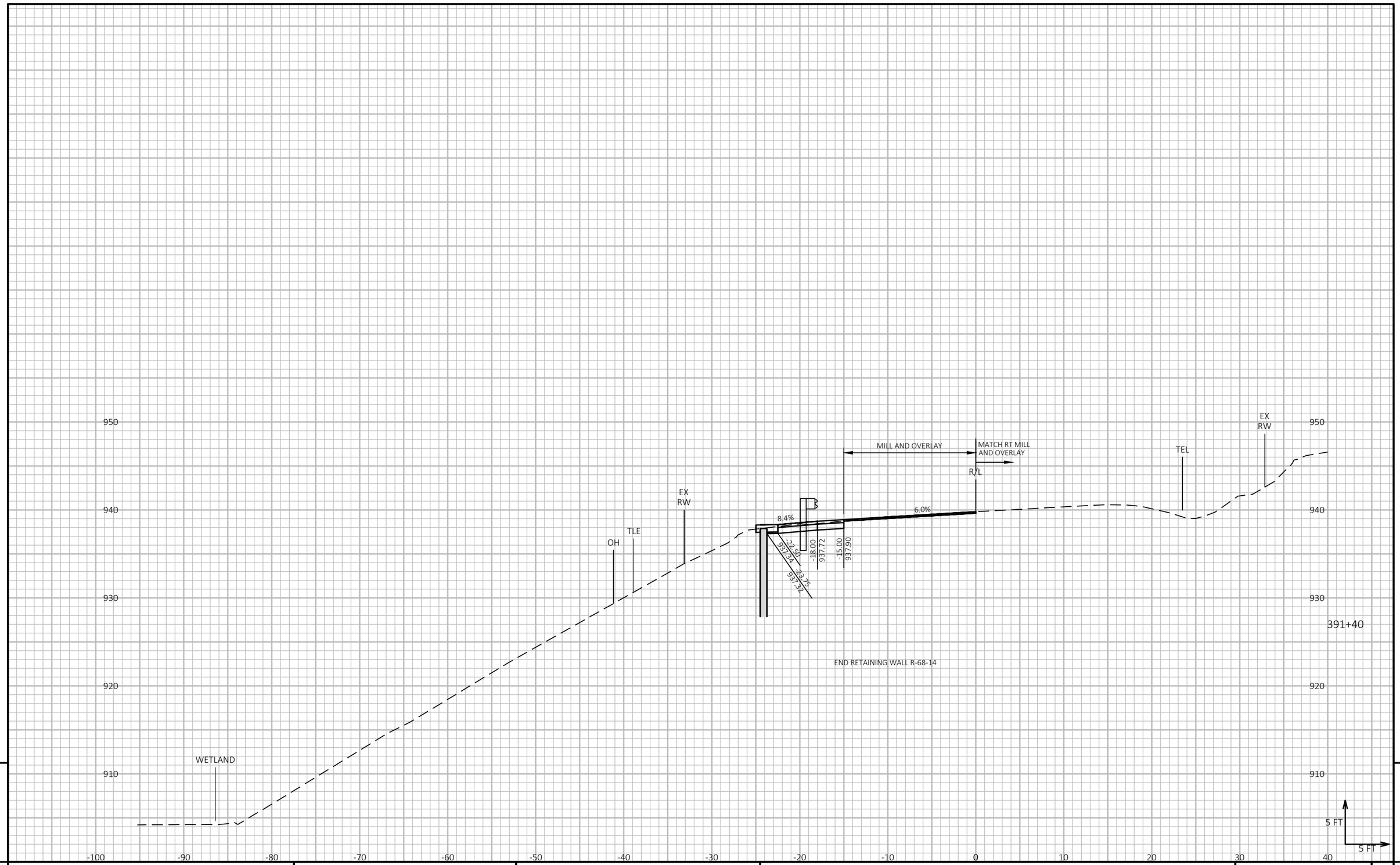


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 353	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 17

PLOT DATE : 6/29/2023 7:54 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

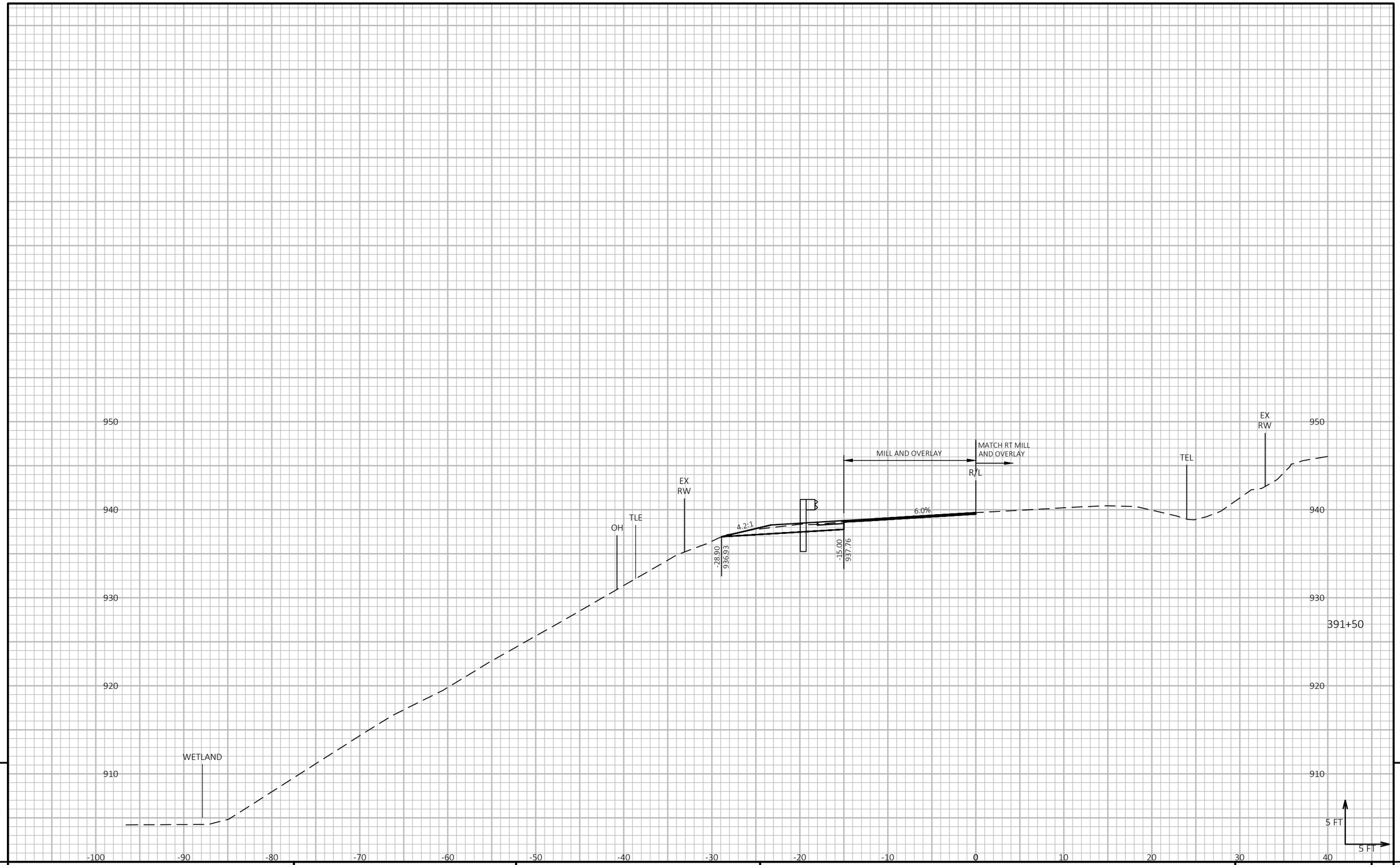


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 354	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 18

PLOT DATE : 6/29/2023 7:54 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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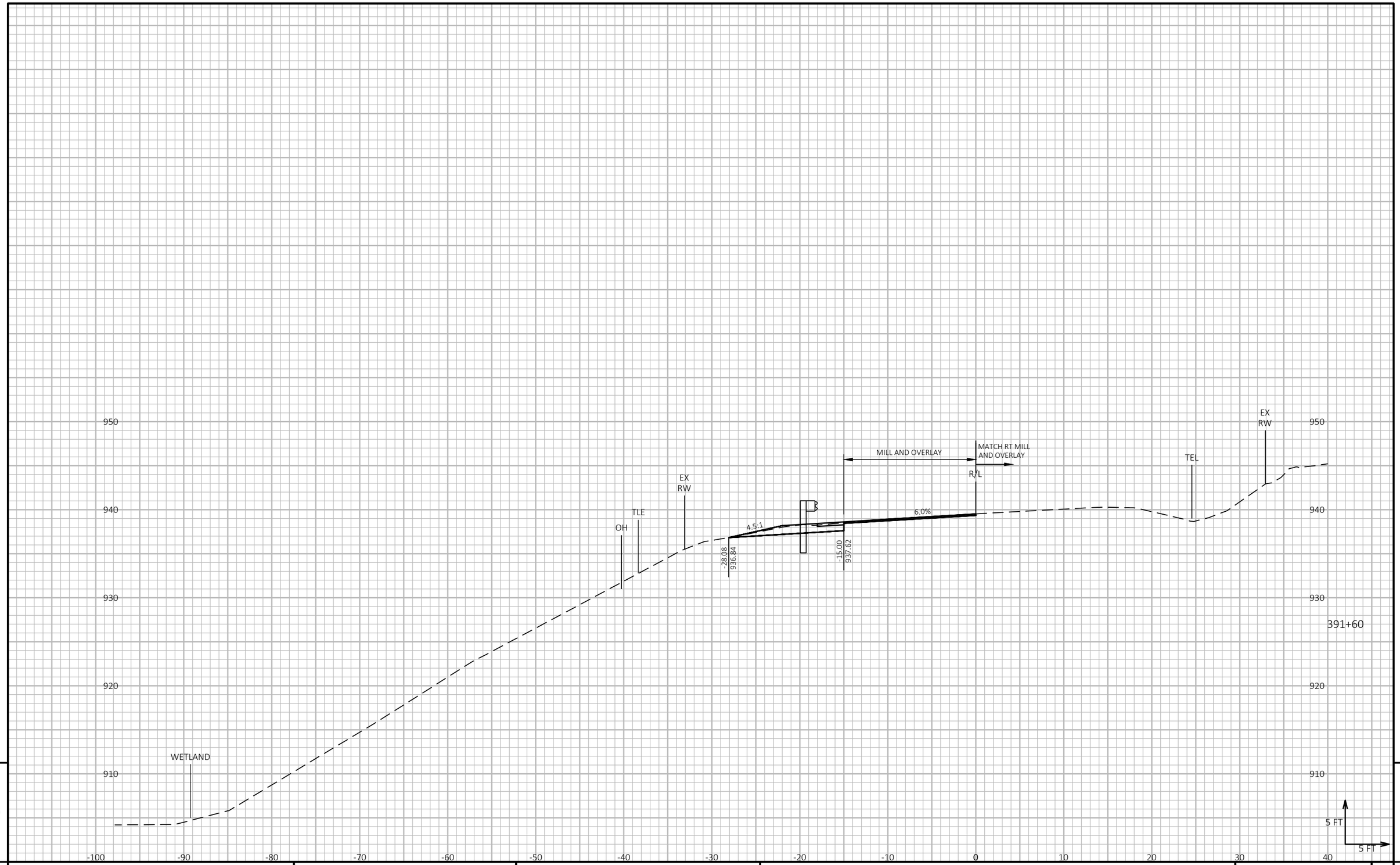
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 355	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 19

PLOT DATE : 6/29/2023 7:55 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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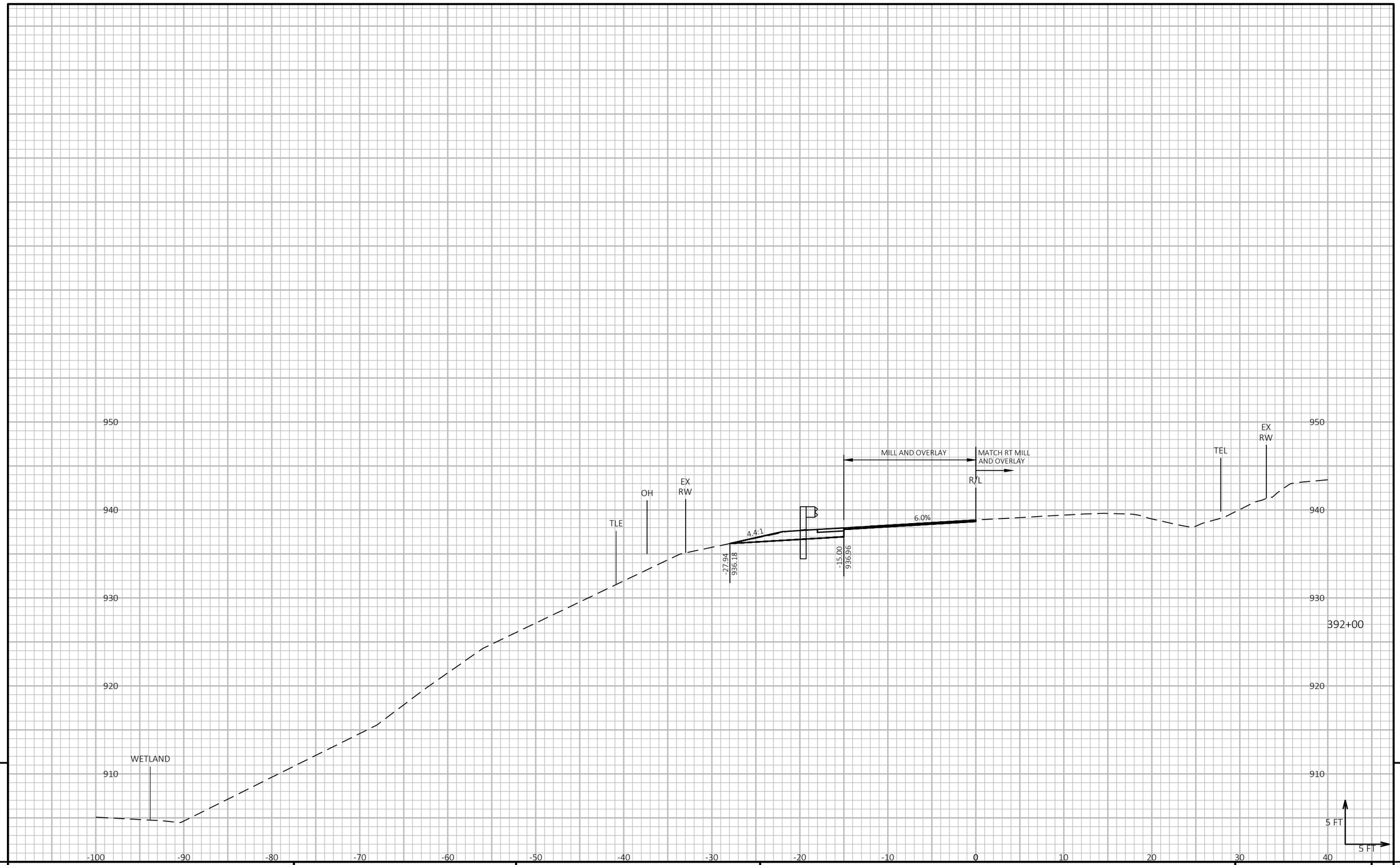
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 356	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 20

PLOT DATE : 6/29/2023 7:55 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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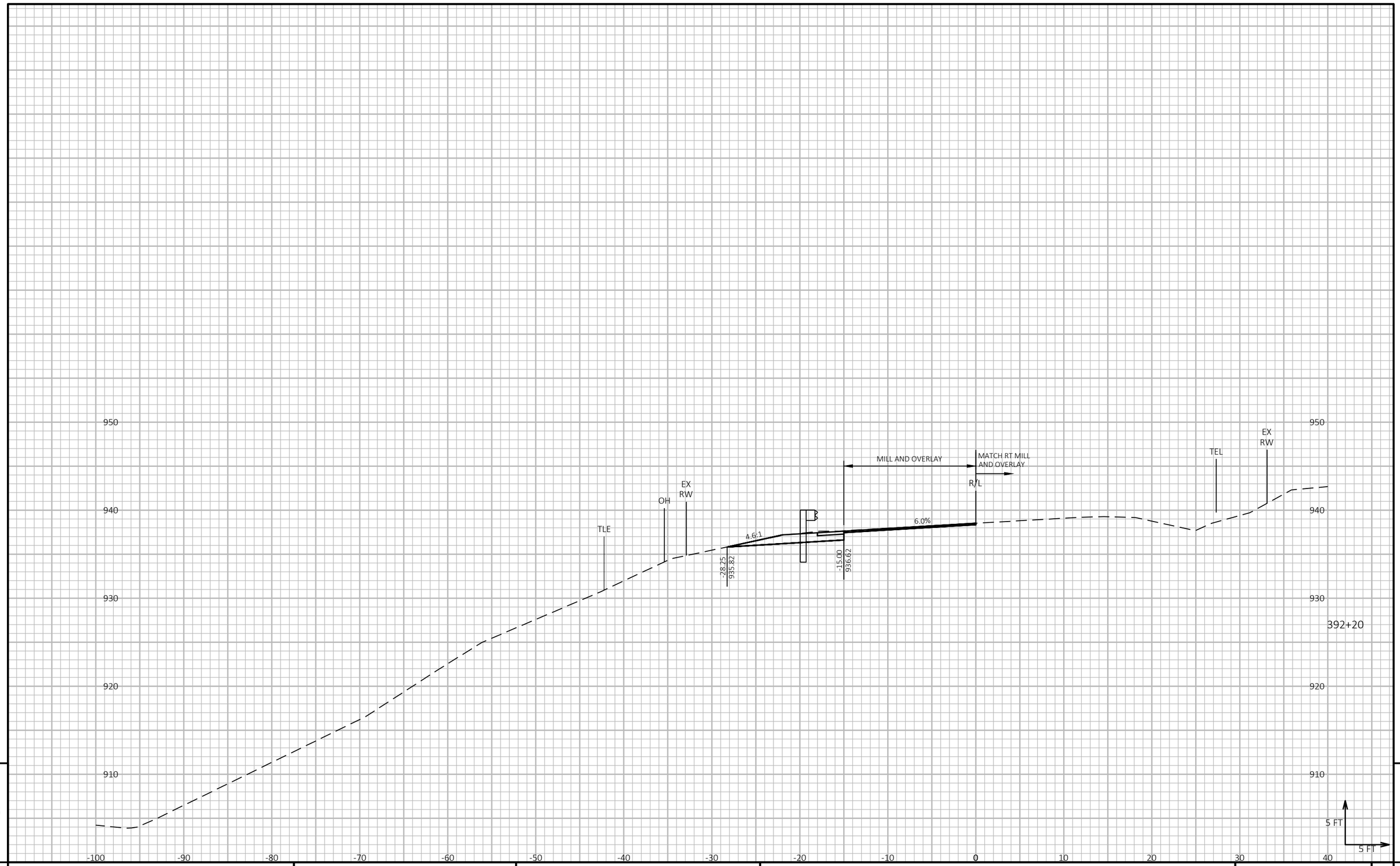
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 357	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 21

PLOT DATE : 6/29/2023 7:55 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49



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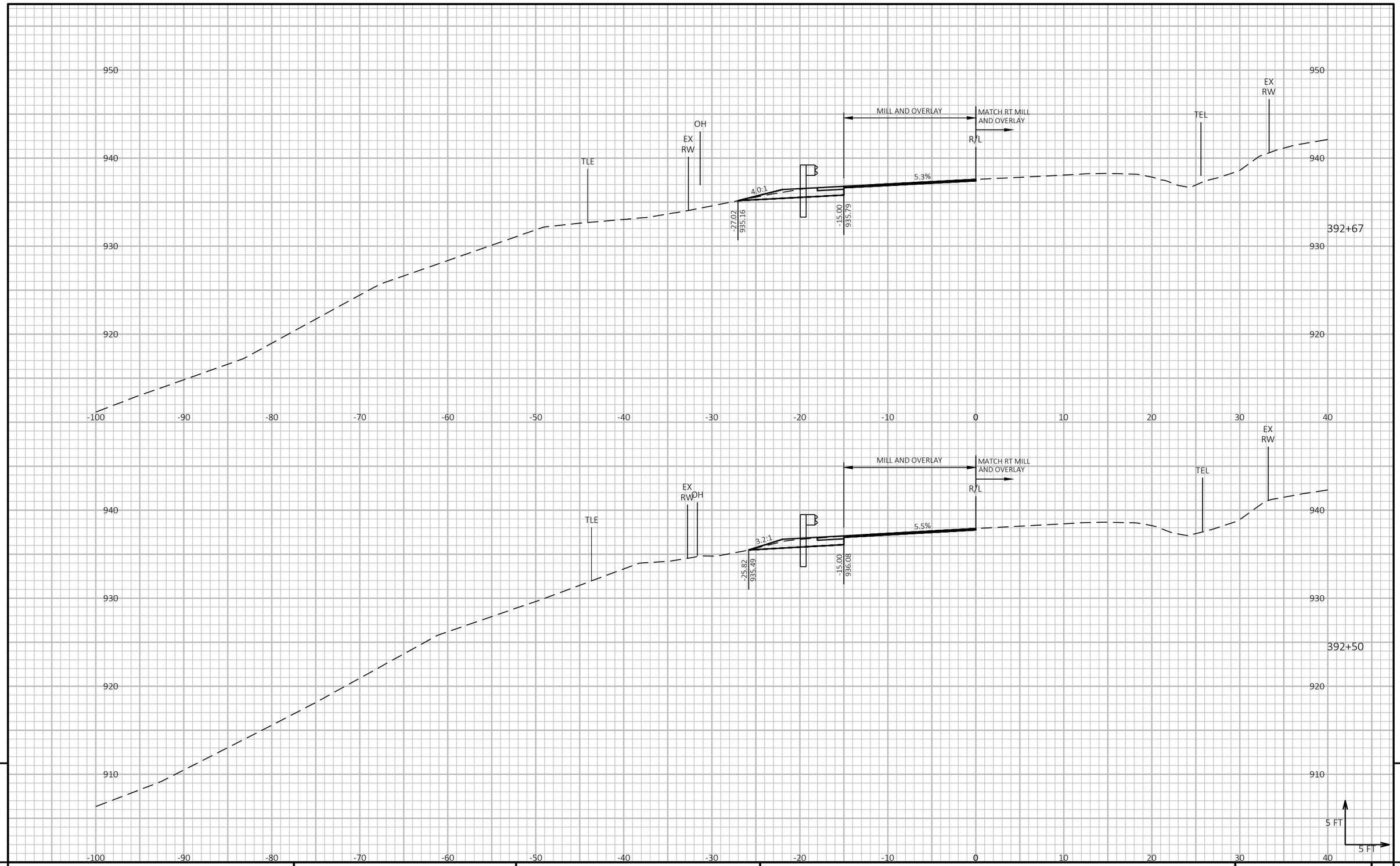
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 358	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 22

PLOT DATE : 6/29/2023 7:55 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49



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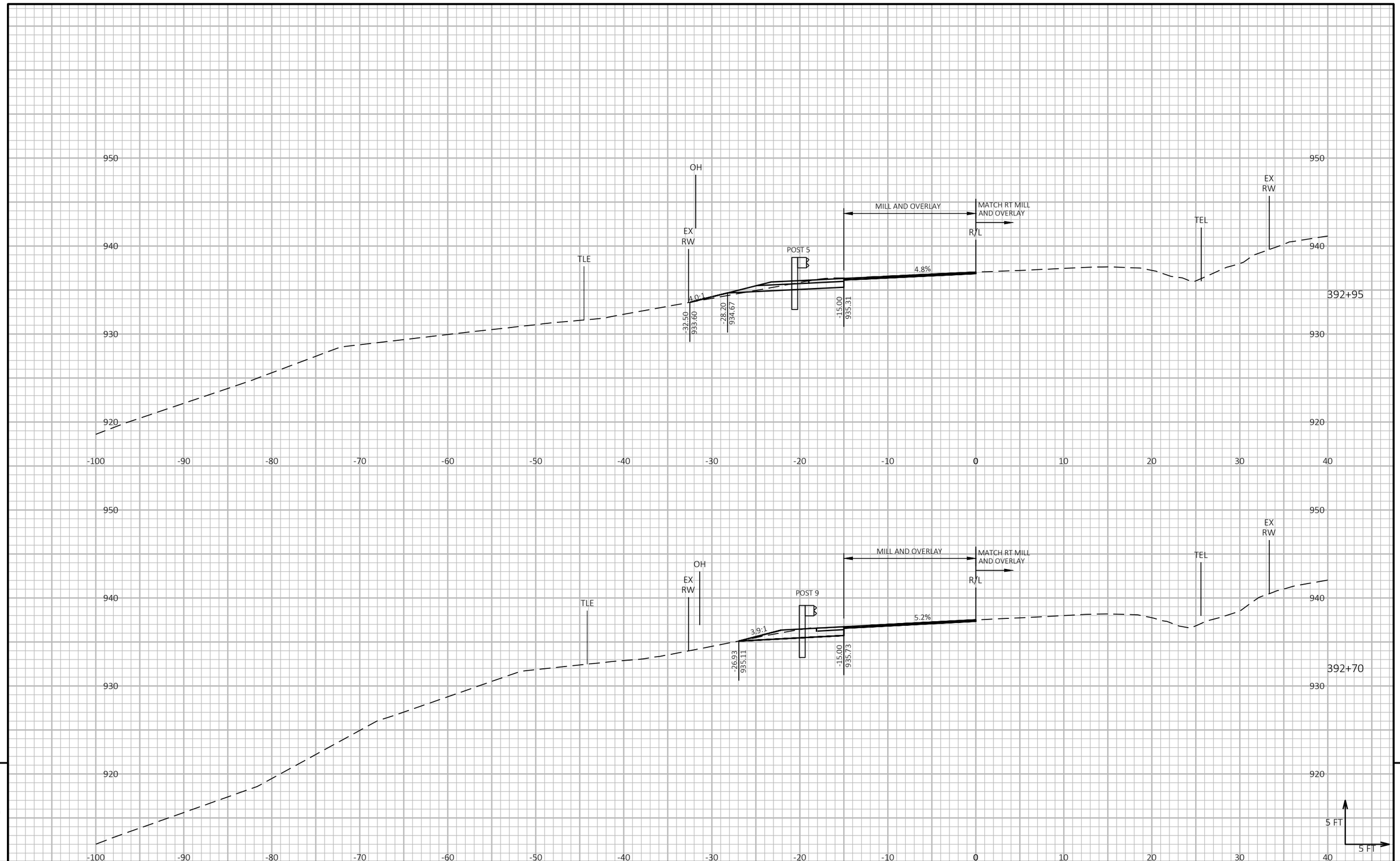
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 359	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 23

PLOT DATE : 6/29/2023 7:55 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 360	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 24

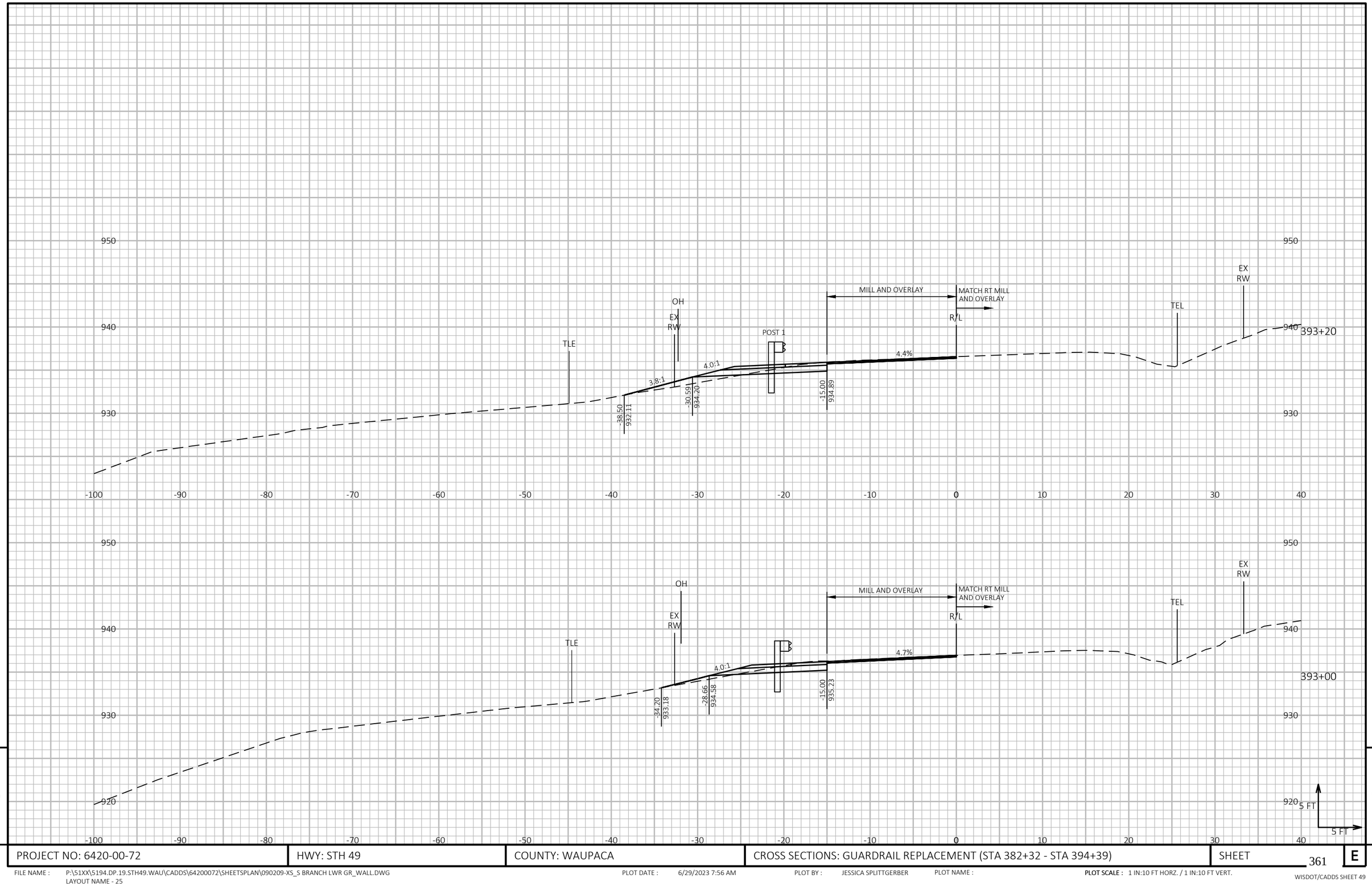
PLOT DATE : 6/29/2023 7:55 AM

PLOT BY : JESSICA SPLITTGERBER

PLOT NAME :

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

WISDOT/CADDS SHEET 49

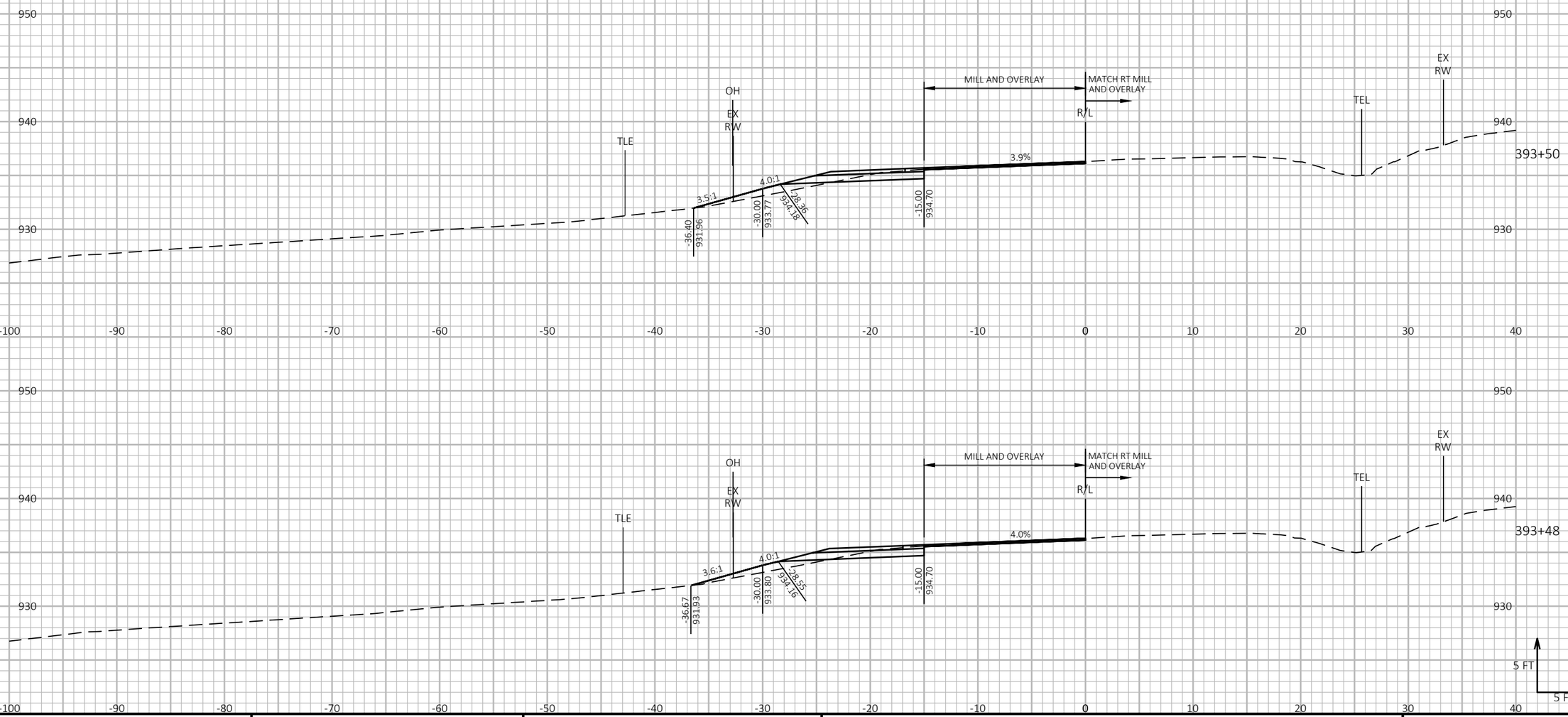


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 361	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 25

PLOT DATE : 6/29/2023 7:56 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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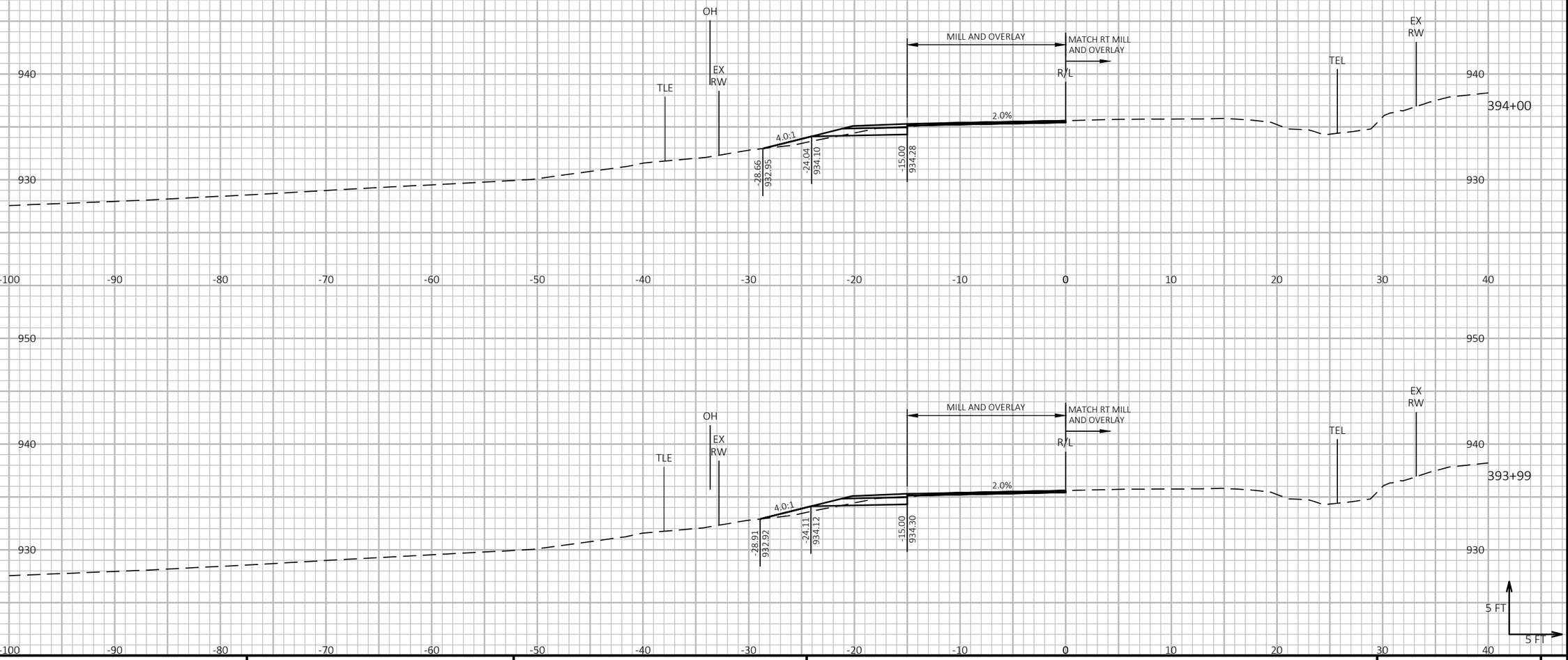
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 362	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 26

PLOT DATE : 6/29/2023 7:56 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

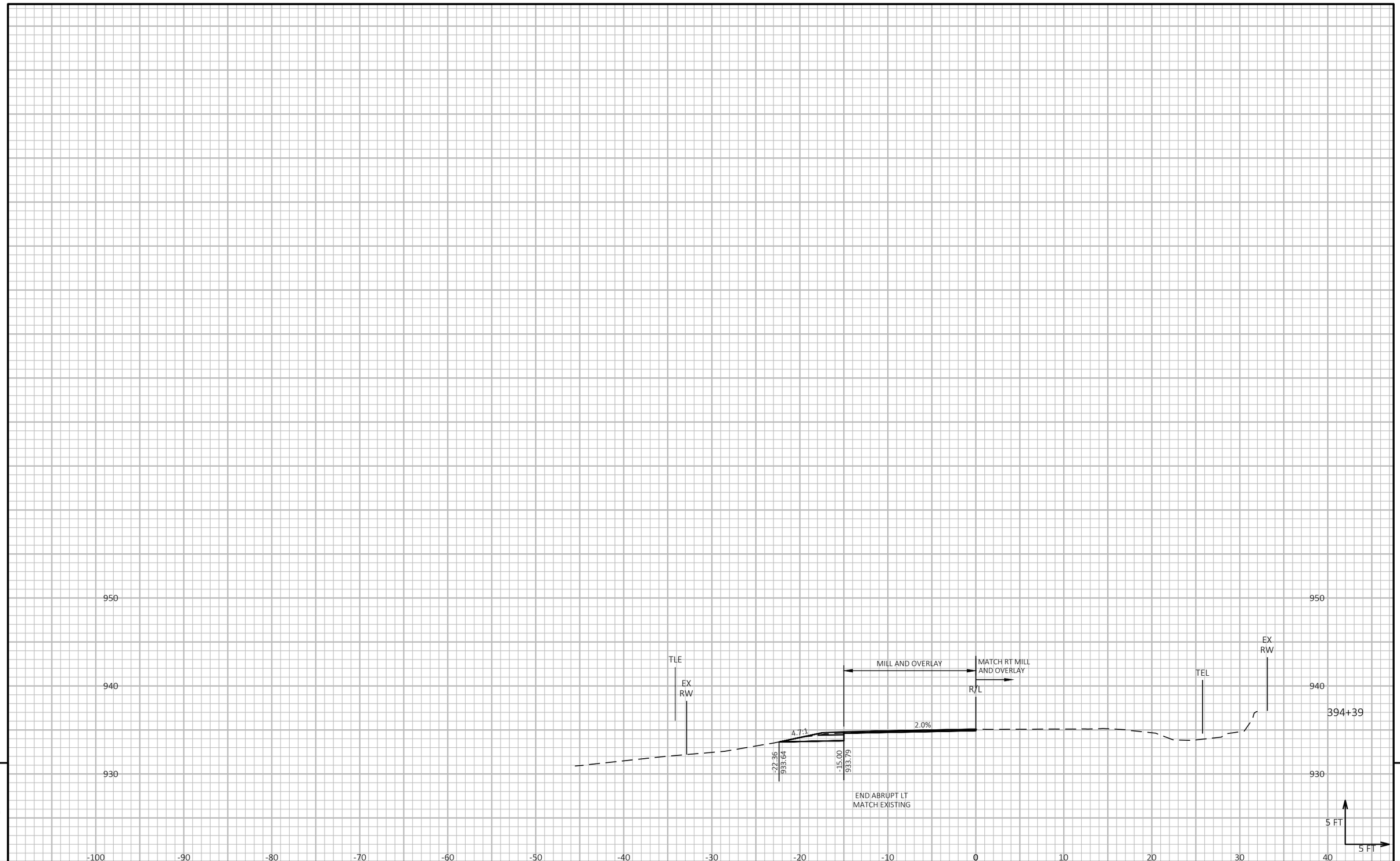


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 363	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 27

PLOT DATE : 6/29/2023 7:56 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

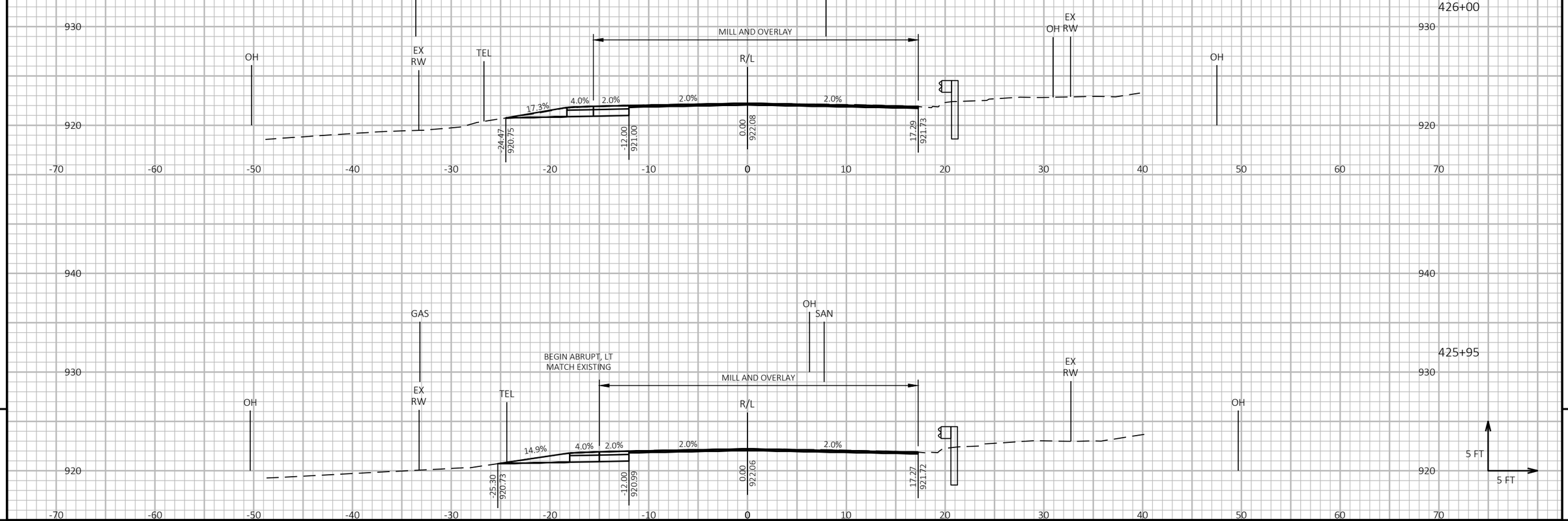


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 382+32 - STA 394+39)	SHEET 364	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090209-XS_S BRANCH LWR GR_WALL.DWG
LAYOUT NAME - 28

PLOT DATE : 6/29/2023 7:56 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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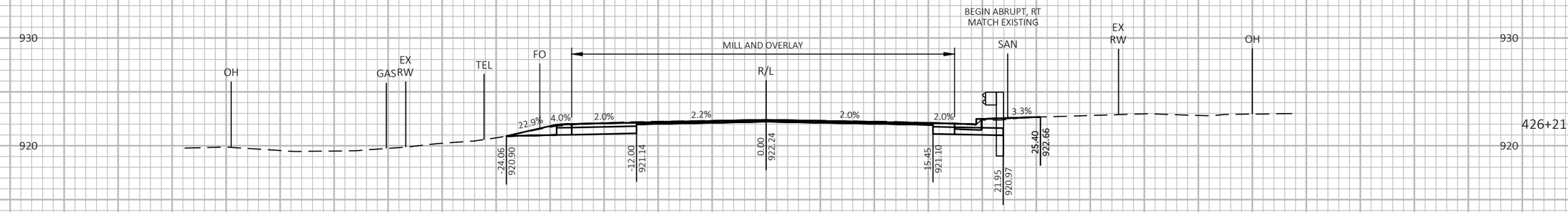
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 425+95 - STA 427+40)	SHEET 365	E

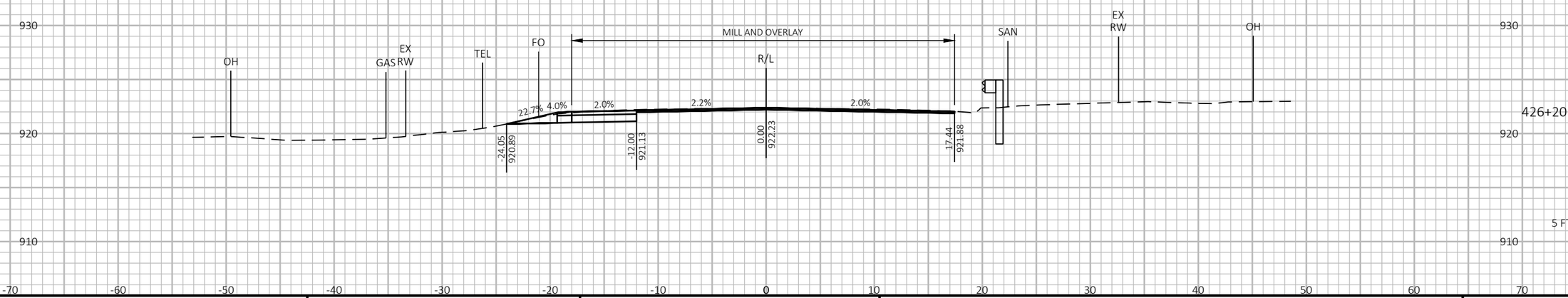
FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090210-XS_SCANDINAVIA.DWG
LAYOUT NAME - 01

PLOT DATE : 6/29/2023 7:56 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49





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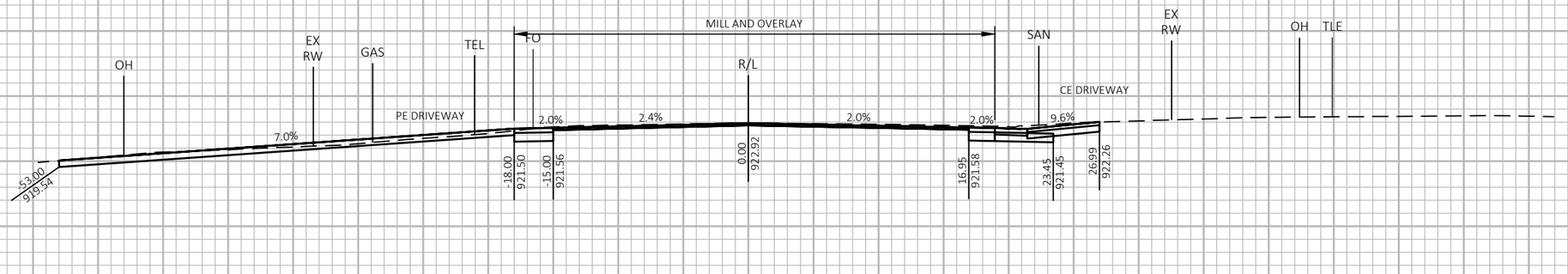
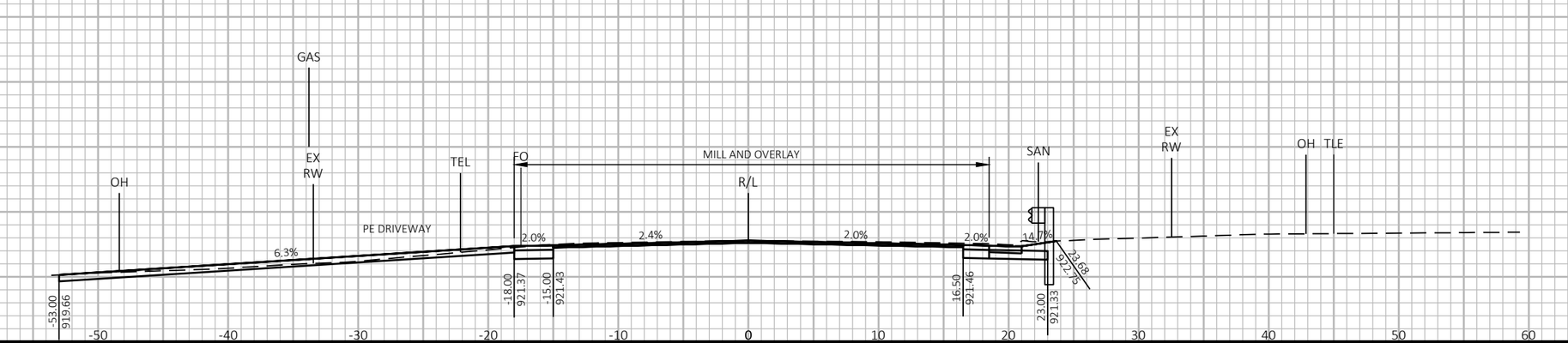
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 425+95 - STA 427+40)	SHEET 366	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090210-XS_SCANDINAVIA.DWG
LAYOUT NAME - 02

PLOT DATE : 6/29/2023 7:57 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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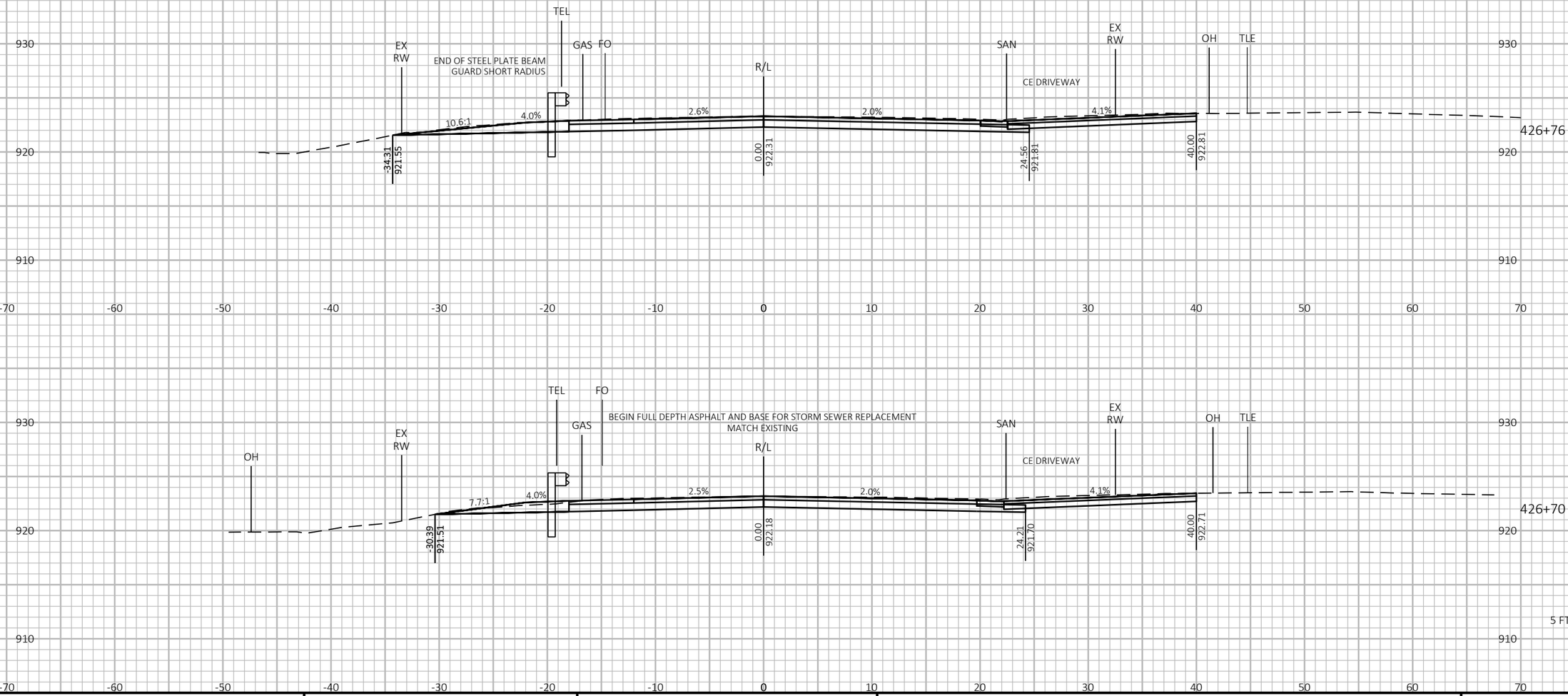
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 425+95 - STA 427+40)	SHEET 367	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090210-XS_SCANDINAVIA.DWG
LAYOUT NAME - 03

PLOT DATE : 6/29/2023 7:57 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME :

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

WISDOT/CADDS SHEET 49

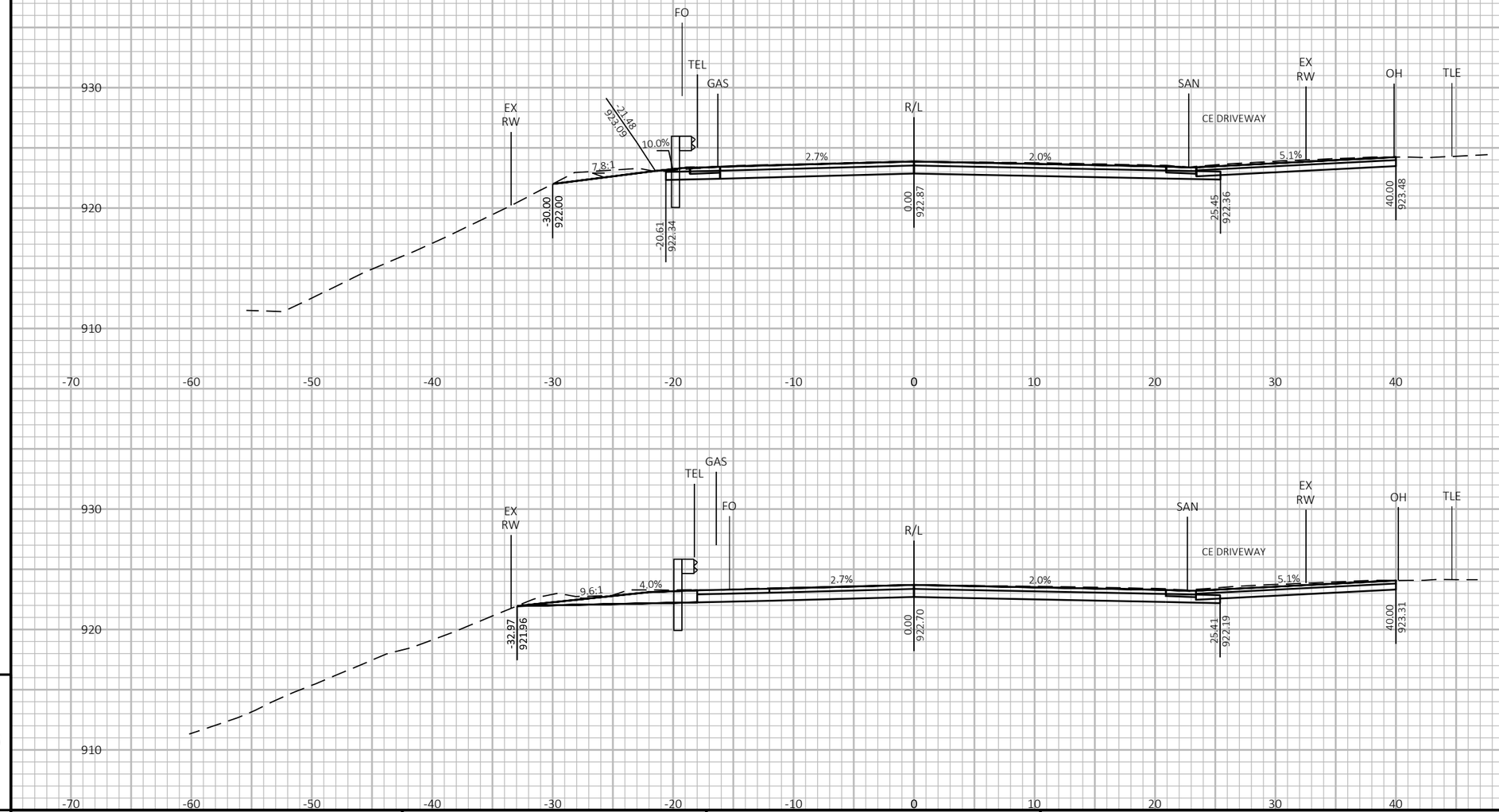


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 425+95 - STA 427+40)	SHEET 368	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090210-XS_SCANDINAVIA.DWG
LAYOUT NAME - 04

PLOT DATE : 6/29/2023 7:57 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

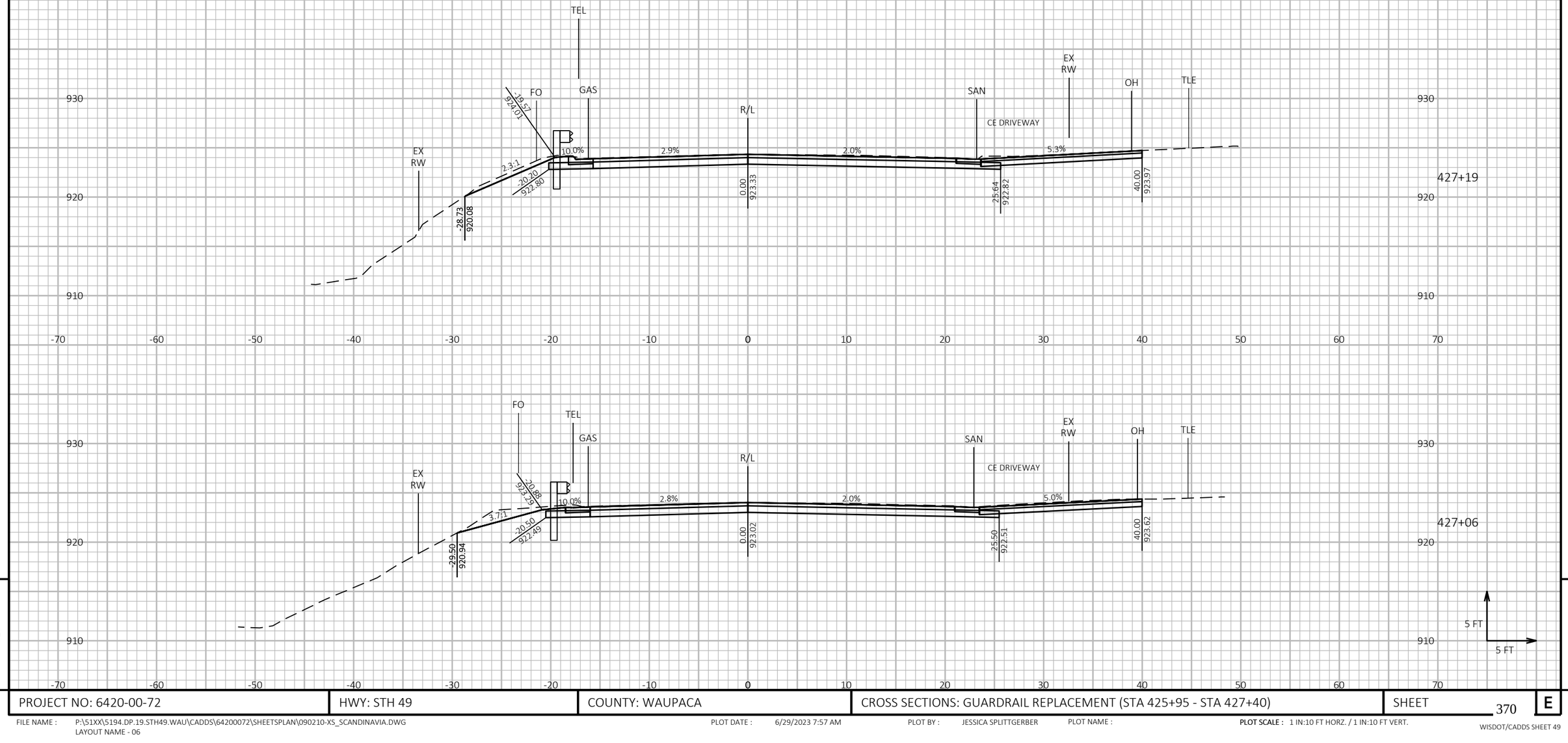


PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 425+95 - STA 427+40)	SHEET 369	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090210-XS_SCANDINAVIA.DWG
LAYOUT NAME - 05

PLOT DATE : 6/29/2023 7:57 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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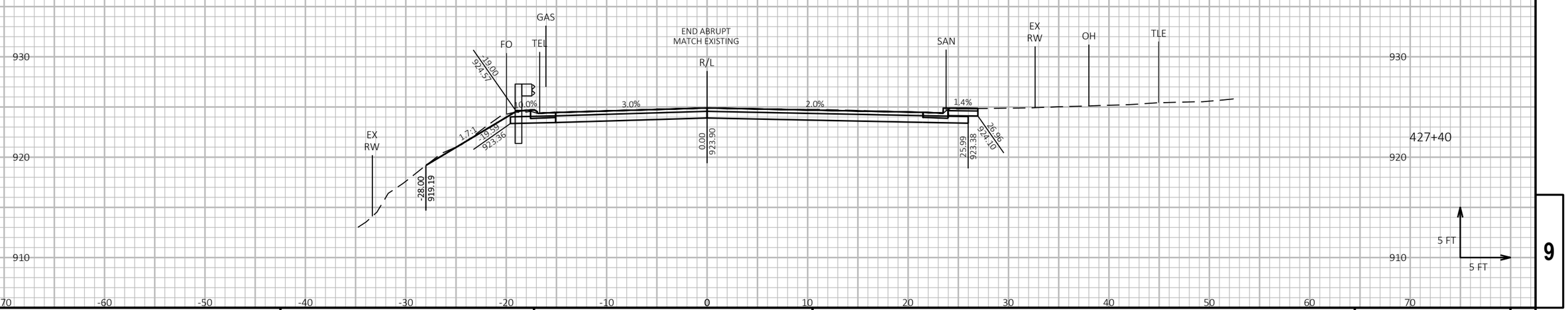
PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 425+95 - STA 427+40)	SHEET 370	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090210-XS_SCANDINAVIA.DWG
LAYOUT NAME - 06

PLOT DATE : 6/29/2023 7:57 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6420-00-72	HWY: STH 49	COUNTY: WAUPACA	CROSS SECTIONS: GUARDRAIL REPLACEMENT (STA 425+95 - STA 427+40)	SHEET 371	E

FILE NAME : P:\51XX\5194.DP.19.STH49.WAU\CADDS\64200072\SHEETSPLAN\090210-XS_SCANDINAVIA.DWG
LAYOUT NAME - 07

PLOT DATE : 6/29/2023 7:57 AM PLOT BY : JESSICA SPLITTGERBER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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